



UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

Precision Bridge Cranes and Safety Trolleys



**Enclosed Track
Crane Systems**



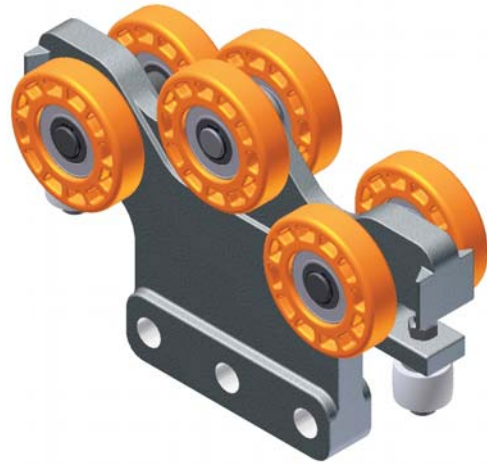
**Patented Rail
Crane Systems**

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www.unified-ind.com

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**WHEN ORDERING OVERHEAD MATERIAL HANDLING EQUIPMENT,
THE FOLLOWING INFORMATION MUST ACCOMPANY YOUR ORDER:**

TROLLEYS

- WHAT TYPE (SIZE) OF RAIL TROLLEYS WILL OPERATE ON

RUNWAYS

- PREP FOR EACH END (IE. SPLICE OR STOP)
- NUMBER OF SPLICES
- NUMBER OF HANGERS AND HANGING CENTERS
- NUMBER AND TYPE OF STOPS
- PAINT COLOR (YELLOW & ORANGE ARE STANDARD COLORS)
- CEILING SUPPORTED OR FREE STANDING FLOOR SUPPORTED

BRIDGE CRANES

- OVERALL LENGTH
- BRIDGE SPAN (BETWEEN RUNWAY CENTERS)
- OVERHANG (BEYOND RUNWAY CENTERS) FOR EACH END
- BRIDGE CAPACITY
- BRIDGE BEAM SIZE
- WHAT TYPE (SIZE) OF RAIL TROLLEYS WILL OPERATE ON
- WHAT TYPE OF BRIDGE END TRUCKS ARE REQUIRED
- NUMBER AND TYPE OF END STOPS
- PAINT COLOR (YELLOW & ORANGE ARE STANDARD COLORS)

AIR FESTOON OR ELECTRICAL PACKAGES

- MUST BE TOTALLY BROKEN DOWN WITH INDIVIDUAL REQUIREMENTS FOR EACH PACKAGE

ADDITIONAL ORDERING INFORMATION REQUIRED

- PURCHASE ORDER NUMBER
- REQUIRED SHIP DATE
- CONTACT PERSON & PHONE NUMBER
- BILL TO AND SHIP TO ADDRESSES
- SHIPPING INSTRUCTIONS (IE. PREFERRED METHOD OF SHIPPING)

PLEASE NOTE: UNIFIED INDUSTRIES MUST RECEIVE AN EMAILED, FAXED OR MAILED COPY OF THE PURCHASE ORDER BEFORE SHIPMENTS CAN BE MADE

PLEASE BE ASSURED THAT SHOULD YOU NEED ANY HELP WITH THE ABOVE INFORMATION, YOU CAN RECEIVE ASSISTANCE BY CALLING UNIFIED INDUSTRIES INC. AT THE HOWELL LOCATION



UNIFIED

OUR MISSION AND QUALITY POLICY



It is the mission of **Unified Industries, Inc.** to provide its customers with people, business practices, and Material Handling Equipment of the highest **Integrity**

INTEGRITY

- | | |
|--------------------|----------------------------------------------------------|
| PEOPLE | 1: the quality of being undivided: UNITY |
| BUSINESS PRACTICES | 2: the firm adherence to a code of value: HONESTY |
| PRODUCTS | 3: an unimpaired condition: SOUNDNESS |

QUALITY = CONDITION

Our people are united, our business practices are honest,
and our material handling systems are sound.



UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

**ETA-4 , ETA-5 AND ETA-8
ENGINEERING DATA**

**FOR TOOL RAIL
AND
BRIDGE CRANE
APPLICATIONS**



UNIFIED INDUSTRIES, INC. -
ETA-4, ETA-5, ETA-8 SERIES

1. All track and hangers shall be installed in accordance with the manufacturer's detailed layout drawings. Which can be supplied at an additional cost.
2. Track and bridge beam provided is Series 6000 extruded aluminum alloy track.
3. The track or bridge beam provided shall be modular design, weld free application, and self-aligning with complete bolt-together capability at all splice joints and hangers.
4. All track sections provided shall be sawcut square to required length by the manufacturer. All joints shall be subjected to tensile stress and all track joints shall be flush when complete.
5. The rated load of the runway, monorail or bridge crane shall be determined so that deflection under rated load shall not exceed 1/450 of the span. Lateral deflection will not be accepted.
6. The allowable stresses applied shall not exceed 20% of the minimum yield strength of the materials used.
7. For bridge crane or hoist application(s), the maximum overhang of the bridge girder to the center of a runway rail shall not exceed the following requirements unless approved by the owner and manufacturer:
 - a. ETA-4, ETA-5 & ETA-8 the maximum overhang shall be 12" (304.8mm) not including the end cap and end stop.
 - b. For larger overhangs, consult factory.
8. All bridge cranes, hoists, runways, monorail, and track shall be installed straight, parallel, level and at the same elevation. Installation tolerance shall not exceed the values specified below:
 - a. Longitudinal leveling, multiple runways and single rail systems .250" (6.35mm) in overall length, with a maximum rate of change of no more than .125" (3.17mm) on twenty-foot centers (6m).
 - b. Elevation runway-to-runway .250" (6.35mm) in span, maximum rate of change .125" (3.17mm) on twenty-foot centers (6m).
 - c. Centering runway-to-runway +/- .188" (4.77mm) in overall length, maximum rate of change .125" (3.17mm) on twenty-foot centers (6m).
 - d. Centering for single rail to a parallel conveyor or workstation shall be +/- .188" (4.77mm) in overall length of the system, maximum rate of change .125" (3.17mm) on twenty-foot centers (6m).
9. All sway bracing and thrust bracing required shall be provided by the contractor, all connections shall be torsional - by design. Compression-type connections will not be accepted.
10. One month after system buyoff, the enclosed track shall be thoroughly inspected and releveled by the contractor. All bolts at the splice connections' hangers and support structure shall be rechecked for proper torque. Abnormalities noted by the contractor shall be brought to the attention of the manufacturer immediately.
11. All trolley running surfaces shall be aligned flush in accordance with this specification and shall present no shock loading at a splice connection. Transverse tilt will not be accepted.



12. Joint modification or holes required in track section(s) shall be by drilling or saw cutting only. The flame cutting of holes or splice joints will not be permitted.
13. The allowable stress shall not exceed 20% of the minimum yield strength of the material provided.
14. All hangers shall be installed true and vertical. All suspension fittings shall bear the load equally.
15. All bolts, nuts, fasteners, attachments, etc., required for rail for enclosed track assembly shall be provided by the equipment manufacturer.
16. All double girder bridge cranes provided shall incorporate diagonal bracing for parallel stabilization.
17. All painted rail is for indoor use only and must be stored inside. Exposure to elements will affect the paint finish.
6. The maximum overhang of straight track to the tangent point of a horizontal turn shall not exceed 12" (305mm).
7. A minimum of one (1) hanger shall be used in the radius of each 90-degree curve, the one (1) hanger shall be in addition to one (1) hanger at each splice joint. If required, additional hangers shall be provided in accordance with the design and calculated distance based on the trolley or carrier loading.
8. Curved track section shall be installed with uniform bolt tension to insure that load trolleys do not bind at splice joint.
9. A straight section of track shall be provided between each horizontal turn.
10. All hangers provided shall be installed true to the vertical plane.

TURNS

1. Enclosed track turns shall be factory formed by the manufacturer. All tension tubes shall be aligned and installed at the manufacturer's facility.
2. The radius of all enclosed track turns shall be designed to allow the carriers or trolleys to freely negotiate each horizontal turn without binding.
3. The standard radius for enclosed track turns in the ETA-4 series shall be minimum 4'0" (1219mm), unless approved by the manufacturer.
4. The standard radius for enclosed track turns in the ETA-8 series shall be minimum 6'0" (1829mm), unless approved by the manufacturer.
5. Short radius turns with a radii that is less than the standard specified above shall be pre-approved.



1. All trolleys shall be as manufactured by Unified Industries, Inc.
2. All trolleys shall consist of one (1) high-tensile aluminum-magnesium alloy.
3. All trolley wheels provided for hoists, bridge cranes, and related equipment shall conform to the manufacturer's standards for monorail hand trolleys.
4. Trolley wheels shall be hard nylon, machined symmetrically true with the axis. All trolley wheels shall be the retainer type, designed for a single row of high quality, precision-ground ball bearings. All trolley wheels shall have a stud that is press-fitted into the trolley body.
5. Trolley side guide rollers shall be hard nylon machined symmetrically true with the axis. All trolley side guide rollers shall be designed for double row, full compliment, precision-ground ball bearings.
6. All trolleys shall be equipped with safety lugs so, in the event of a wheel failure, the trolley cannot come out of the enclosed track.
7. All bearings shall be protected by grease and dust seals.
8. Load links and load straps shall be provided by the manufacturer's recommendation.
9. Under no condition shall the contractor provide light capacity trolleys for use on heavy flange track.

***All dimensions are reference only
and need to be verified with factory.**

ETA-4 RAIL SECTION PROPERTIES:

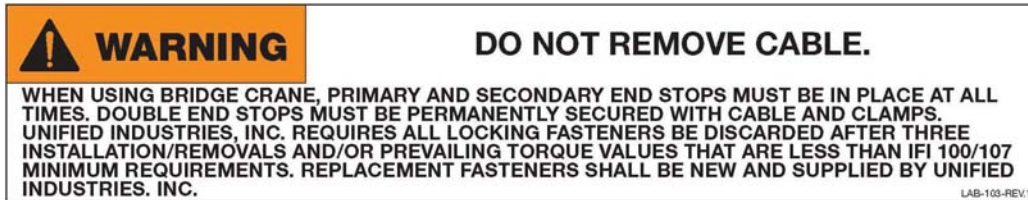
Material 6005-T5
Weight per foot=3.74 lb (5.57kg/m)
Cross sectional area=3.20 in² (2065 mm²)
Moment of inertia lxx=5.80 in⁴ (2,414,142 mm⁴)
lyy=4.49 in⁴ (1,868,879 mm⁴)

ETA-5 RAIL SECTION PROPERTIES:

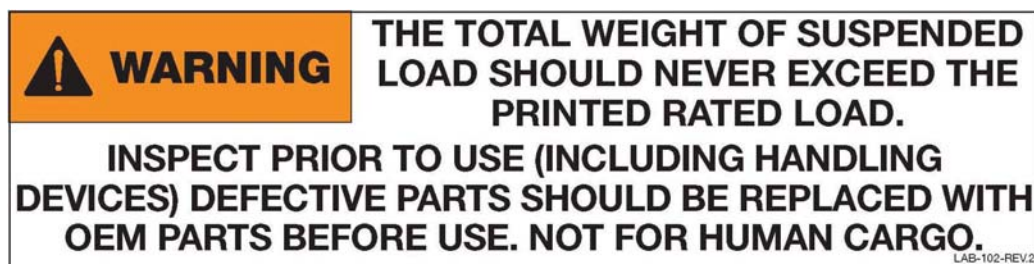
Material 6005-T5
Weight per foot=4.67 lb (6.95kg/m)
Cross sectional area=3.99 in² (2574 mm²)
Moment of inertia lxx=11.28 in⁴ (4,695,090 mm⁴)
lyy=5.69 in⁴ (2,368,357 mm⁴)

ETA-8 RAIL SECTION PROPERTIES:

Material 6005-T5
Weight per foot=8.16 lb (12.14kg/m)
Cross sectional area=6.98 in² (4,503 mm²)
Moment of inertia lxx=47.26 in⁴ (19,671,097 mm⁴)
lyy=19.75 in⁴ (8,220,571 mm⁴)



Double end stop cable Warning sticker



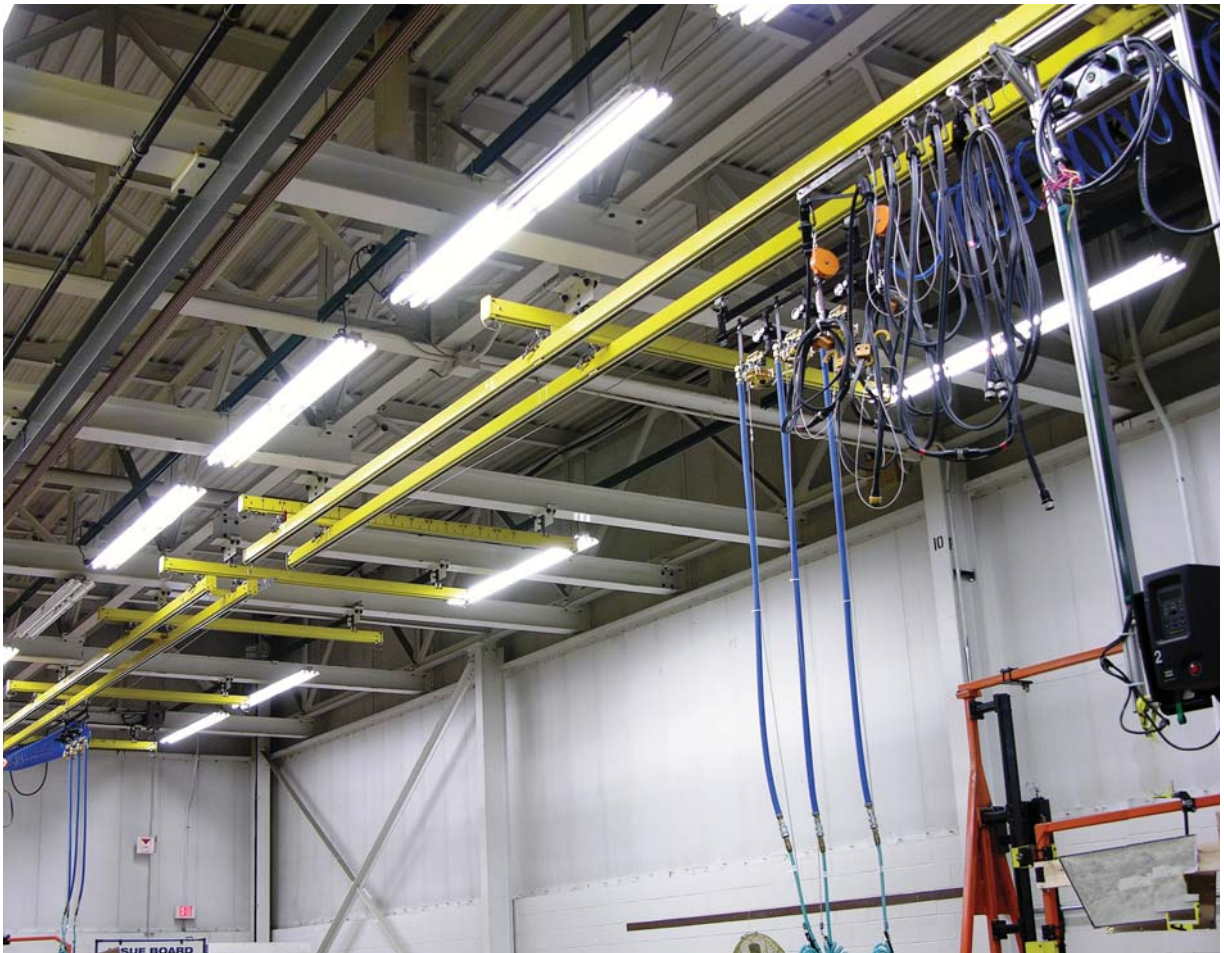
Rated load Warning sticker



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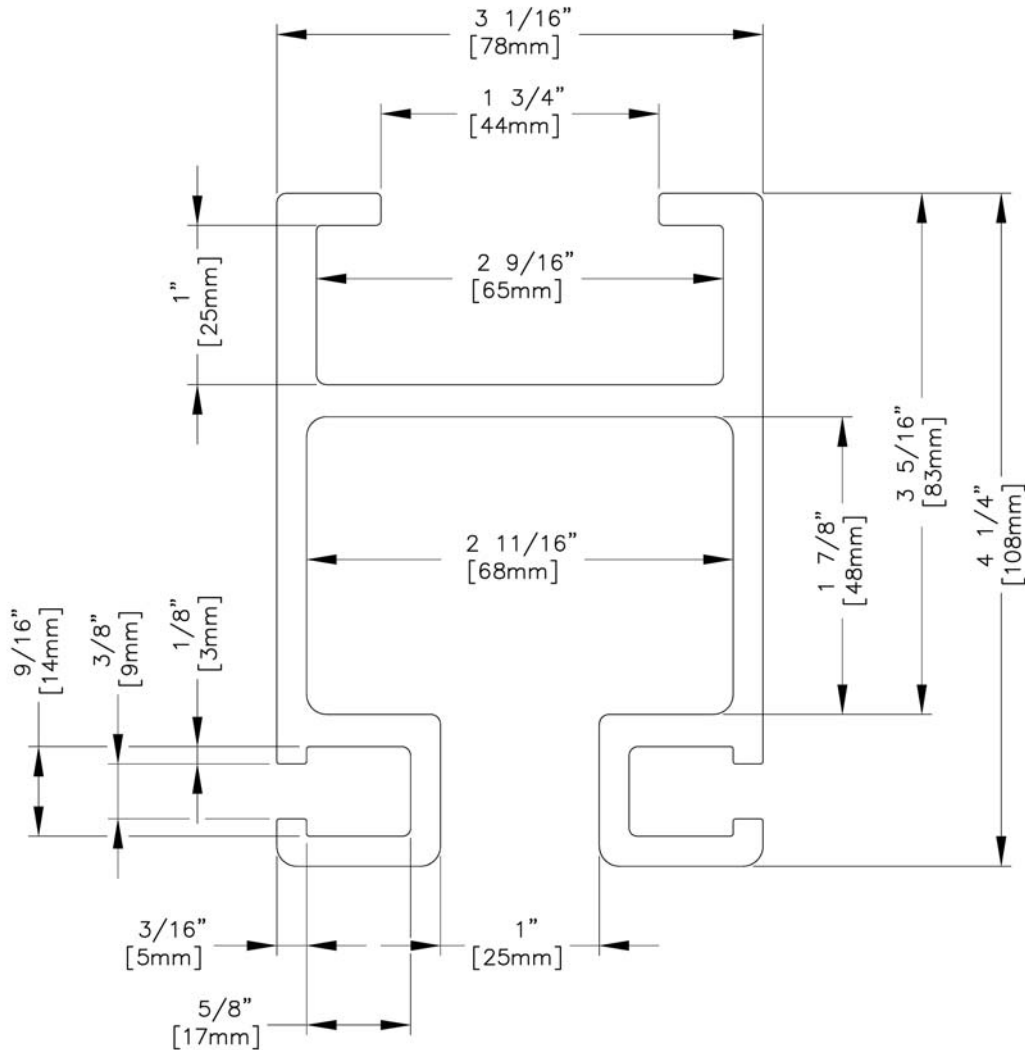
ETA-4 RAIL SYSTEMS





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***All dimensions are reference only
and need to be verified with factory.**



**ETA-4 RAIL PROFILE
(87022)**

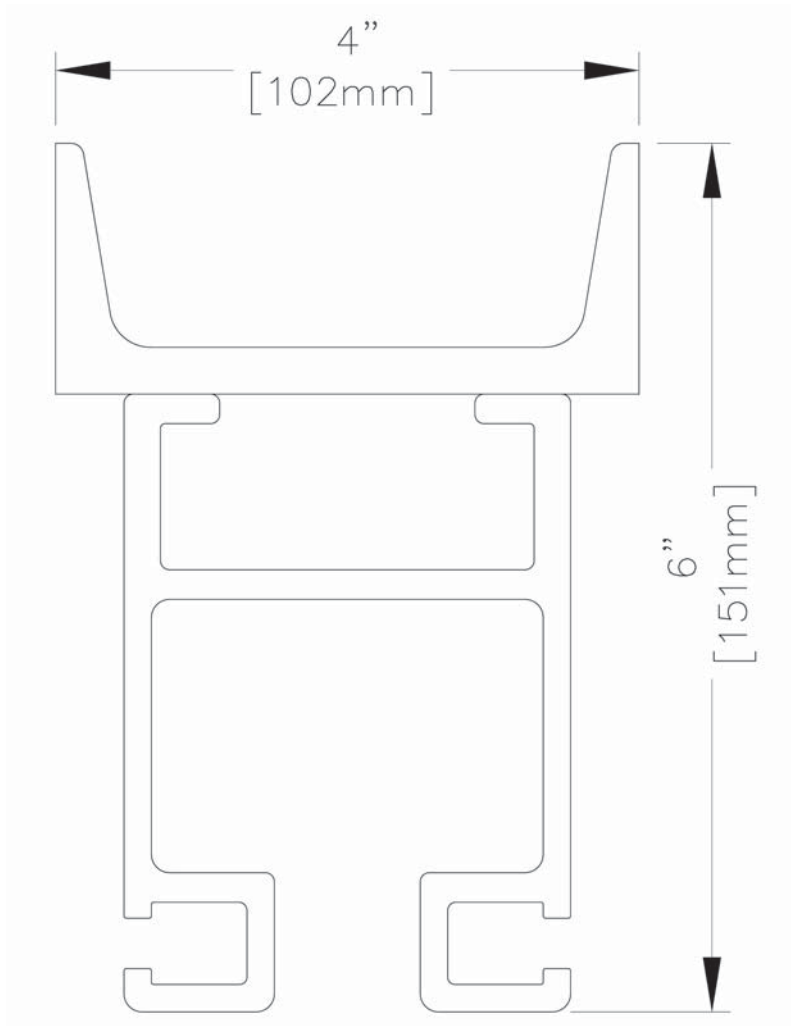
Part Number:

ETA4RW 08

Length of Rail in Feet (08 = 8 Feet)

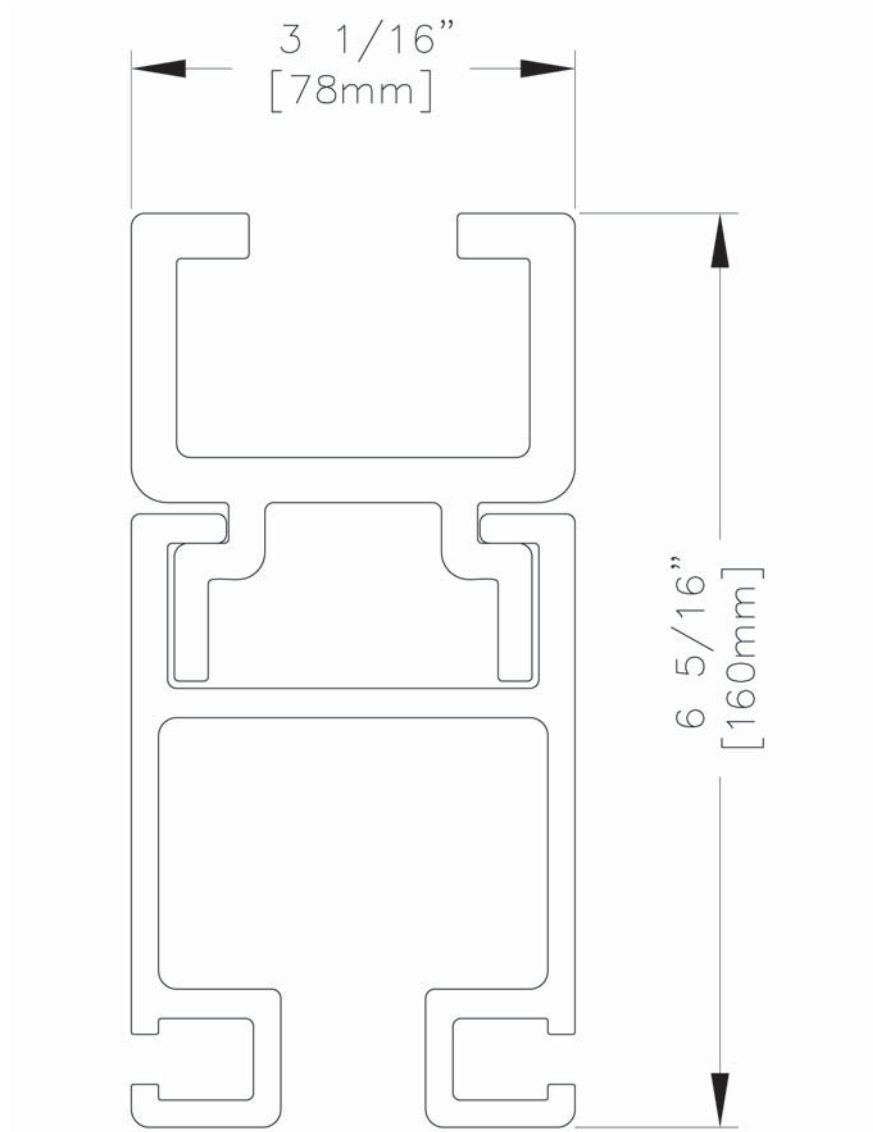
Rail Profile

- All Runways are Drilled for End Stops and Splice Holes.
- Round up to the nearest foot (Cut to 8'-6" = ETA4RW09)
- Maximum Length: 33'-0" (10m)
- Weight: 3.74 lbs./ft. (5.57kg/m)
- Standard Color Unified Safety Yellow
- Other Colors Specify when Ordering



ETA-4 RAIL WITH C4 X 2.5 CHANNEL CAP PROFILE

- Weight: 6.24 lbs./ft. (9.29kg/m)



ETA-4 RAIL WITH ETA STRONG BACK PROFILE

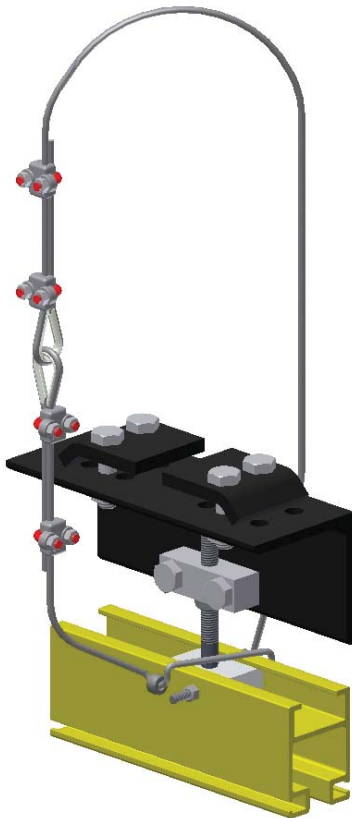
- Weight: 7.32 lbs./ft. (10.88kg/m)



| Span Ft. (in) | Deflection Limit (in) L/450 | Point Load @ Center of Span (lbs) | | |
|------------------|-----------------------------------|-----------------------------------|------------------------|----------------------------|
| | | ETA-4 | ETA-4 + CHANNEL CAP | ETA-4 + ETA STRONG BACK |
| | | L/450 | L/450 | L/450 |
| 5 (60) | .1333 | 1736 | 4000 | 4000 |
| 6 (72) | .1600 | 1205 | 3148 | 4000 |
| 7 (84) | .1867 | 886 | 2313 | 3046 |
| 8 (96) | .2133 | 678 | 1771 | 2332 |
| 9 (108) | .2400 | 536 | 1399 | 1843 |
| 10 (120) | .2667 | 434 | 1133 | 1493 |
| 11 (132) | .2933 | 359 | 937 | 1234 |
| 12 (144) | .3200 | 301 | 787 | 1036 |
| 13 (156) | .3467 | 256 | 671 | 883 |
| 14 (168) | .3733 | 221 | 578 | 762 |
| 15 (180) | .4000 | 193 | 504 | 663 |
| 16 (192) | .4267 | 169 | 443 | 583 |
| 17 (204) | .4533 | 150 | 392 | 516 |
| 18 (216) | .4800 | 134 | 350 | 461 |
| 19 (228) | .5067 | 120 | 314 | 413 |
| 20 (240) | .5333 | 108 | 283 | 373 |
| 21 (252) | .5600 | 98 | 257 | 338 |
| 22 (264) | .5867 | 89 | 234 | 308 |
| 23 (276) | .6133 | 82 | 214 | 282 |
| 24 (288) | .6400 | 75 | 197 | 259 |
| 25 (300) | .6667 | 69 | 181 | 239 |
| 26 (312) | .6933 | 64 | 168 | 221 |
| 27 (324) | .7200 | 59 | 155 | 205 |
| 28 (336) | .7467 | 55 | 145 | 190 |
| 29 (348) | .7733 | 52 | 135 | 177 |
| 30 (360) | .8000 | 48 | 126 | 166 |
| 31 (372) | .8267 | 45 | 118 | 155 |
| 32 (384) | .8533 | 42 | 111 | 146 |
| 33 (396) | .8800 | 40 | 104 | 137 |

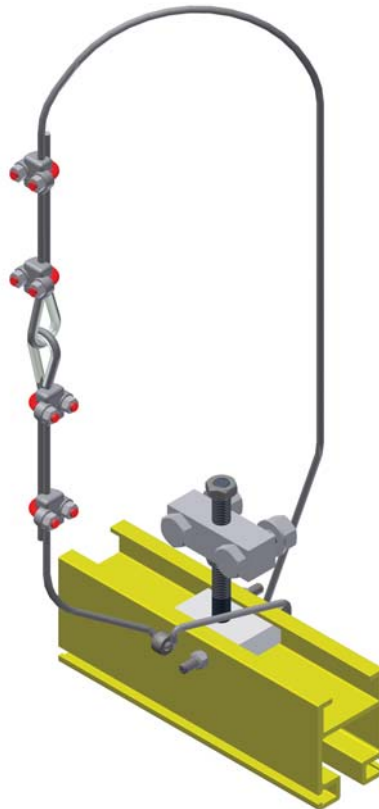


| Span M (mm) | Deflection Limit (mm) | Point Load @ Center of Span (kg) | | |
|----------------|--------------------------|----------------------------------|------------------------|---------------------------|
| | | ETA-4 | ETA-4 + CHANNEL CAP | ETA-4 + ETA STRONGBACK |
| | | L/450 | L/450 | L/450 |
| 1.50 (1500) | 3.3 | 813 | 1814 | 1814 |
| 1.75 (1750) | 3.9 | 597 | 1560 | 1814 |
| 2.00 (2000) | 4.4 | 547 | 1194 | 1572 |
| 2.25 (2250) | 5.0 | 361 | 943 | 1242 |
| 2.50 (2500) | 5.6 | 293 | 764 | 1006 |
| 2.75 (2750) | 6.1 | 242 | 632 | 832 |
| 3.00 (3000) | 6.7 | 203 | 531 | 699 |
| 3.25 (3250) | 7.2 | 173 | 452 | 595 |
| 3.50 (3500) | 7.8 | 149 | 390 | 513 |
| 3.75 (3750) | 8.3 | 130 | 340 | 447 |
| 4.00 (4000) | 8.9 | 114 | 299 | 393 |
| 4.25 (4250) | 9.4 | 101 | 264 | 348 |
| 4.50 (4500) | 10.0 | 90 | 236 | 311 |
| 4.75 (4750) | 10.6 | 81 | 212 | 279 |
| 5.00 (5000) | 11.1 | 73 | 191 | 252 |
| 5.25 (5250) | 11.7 | 66 | 173 | 228 |
| 5.50 (5500) | 12.2 | 60 | 158 | 208 |
| 5.75 (5750) | 12.8 | 55 | 144 | 190 |
| 6.00 (6000) | 13.3 | 51 | 133 | 175 |
| 6.25 (6250) | 13.9 | 47 | 122 | 161 |
| 6.50 (6500) | 14.4 | 43 | 113 | 149 |
| 6.75 (6750) | 15.0 | 40 | 105 | 138 |
| 7.00 (7000) | 15.6 | 37 | 97 | 128 |
| 7.25 (7250) | 16.1 | 35 | 91 | 120 |
| 7.50 (7500) | 16.7 | 33 | 85 | 112 |
| 7.75 (7750) | 17.2 | 30 | 80 | 105 |
| 8.00 (8000) | 17.8 | 29 | 75 | 98 |
| 8.25 (8250) | 18.3 | 27 | 70 | 92 |
| 8.50 (8500) | 18.9 | 25 | 66 | 87 |
| 8.75 (8750) | 19.4 | 24 | 62 | 82 |
| 9.00 (9000) | 20.0 | 23 | 59 | 78 |
| 9.25 (9250) | 20.6 | 21 | 56 | 74 |
| 9.50 (9500) | 21.1 | 20 | 53 | 70 |
| 9.75 (9750) | 21.7 | 19 | 50 | 66 |
| 10.00 (10000) | 22.2 | 18 | 48 | 63 |



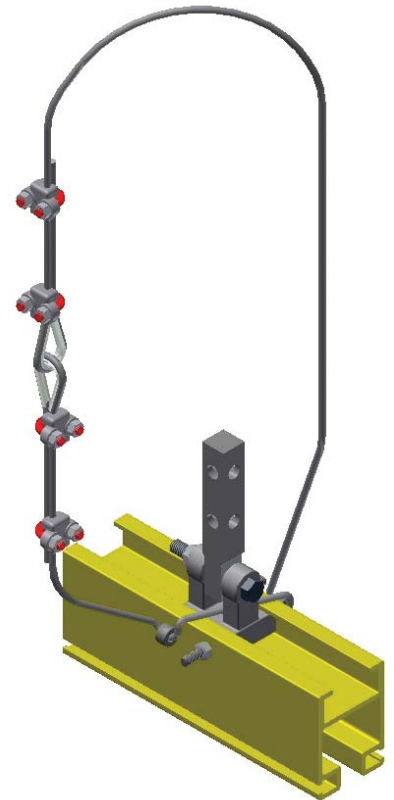
CLOSED ADJUSTABLE HANGER*

25473 FOR BEAMS 2.33" (59mm)
TO 3.33" (85mm) wide
25474 FOR BEAMS 4" (102mm)
TO 8" (203mm) wide



25467 ADJUSTABLE BLOCK HANGER

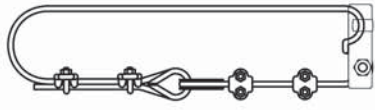
Allows for 2" (50mm) of vertical
adjustment in the field



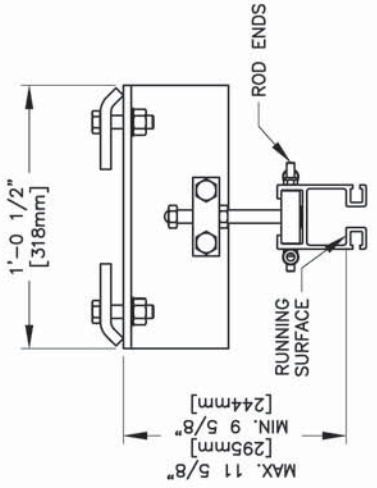
25286 BLOCK HANGER

- **All hangers must be bolted through rail.**
- **All hangers include a 6'-0" (1.82m) safety cable 78287.**

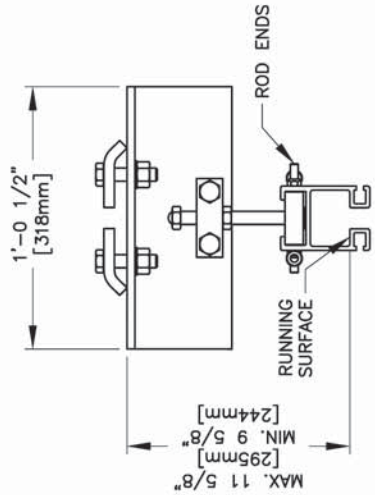
*Note: Grip range 1/4" (6mm) to 9/16" (15mm) thick flange.



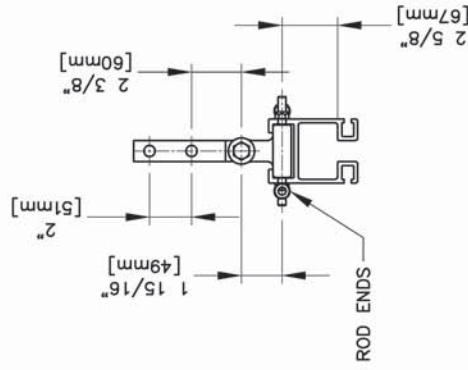
SAFETY CABLE ASSEMBLY VIEW
ALL HANGERS COME WITH A SAFETY CABLE 78287



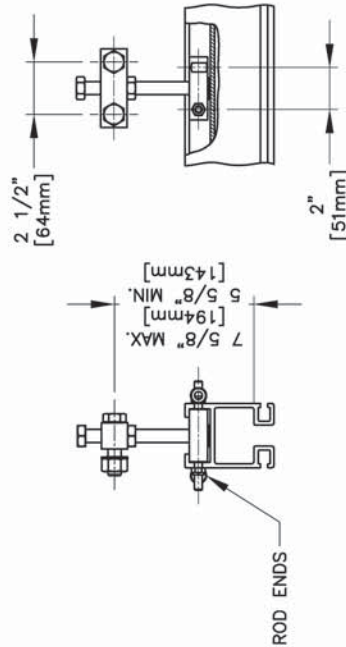
25474 CLOSED ADJUSTABLE HANGER
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 1500 lbs. [680 Kg.]
WEIGHT 23 lbs. [10.43 Kg.]



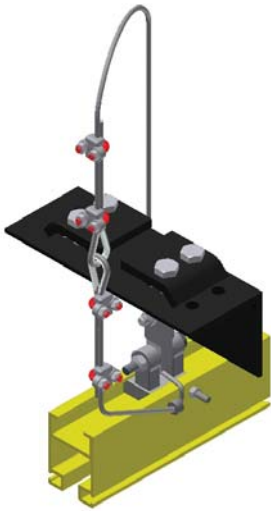
25473 CLOSED ADJUSTABLE HANGER
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 1500 lbs. [680 Kg.]
WEIGHT 22 lbs. [9.98 Kg.]



25286 BLOCK HANGER
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 4 lbs. [1.81 Kg.]

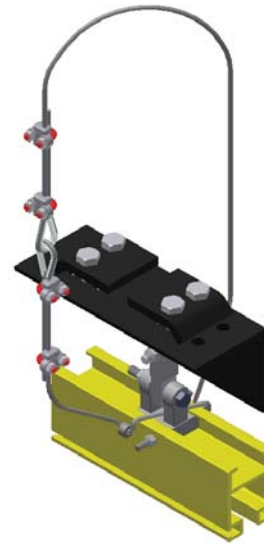


25467 ADJUSTABLE BLOCK HANGER
RATED LOAD 1500 lbs. [680 Kg.]
WEIGHT 6 lbs. [2.72 Kg.]



BEAM HANGER*
PARALLEL MOUNT

27055 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27057 FOR BEAMS 4" (102mm) TO 8" (203mm)



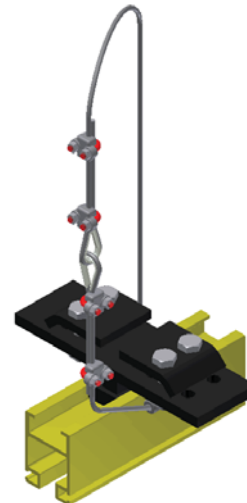
BEAM HANGER*

PERPENDICULAR MOUNT

27055 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27057 FOR BEAMS 4" (102mm) TO 8" (203mm)



27070 ETA RIGID MOUNT HANGER**



RIGID MOUNT HANGER*

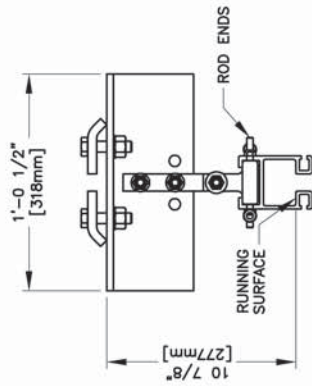
PARALLEL MOUNT

27073 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27071 FOR BEAMS 4" (102mm) TO 8" (203mm)

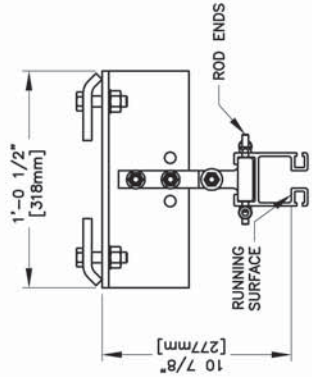
- **All hangers must be bolted through rail.**
- **All hangers include a 6'-0" (1.82m) safety cable 78287.**

*Grip range 1/4" (6mm) to 9/16" (15mm) thick flange.

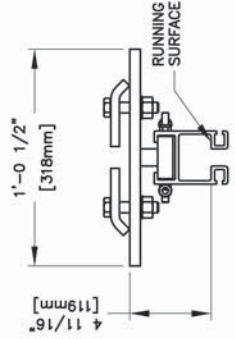
**For use on W-Shape beams only.



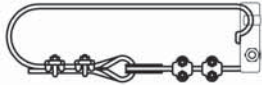
27055 BEAM HANGER PARALLEL MOUNT
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 23 lbs. [10.43 Kg.]



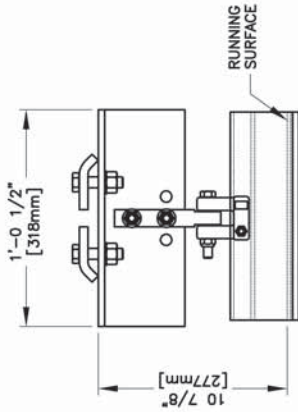
27057 BEAM HANGER PARALLEL MOUNT
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 24 lbs. [10.89 Kg.]



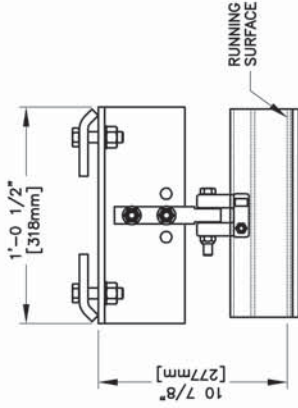
27071 PARALLEL RIGID MOUNT HANGER
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 18 lbs. [8.16 Kg.]



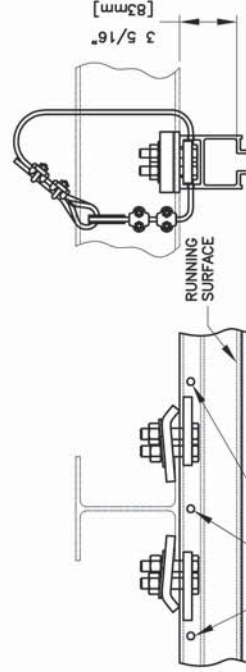
SAFETY CABLE ASSEMBLY VIEW
ALL HANGERS COME WITH A SAFETY CABLE 78287



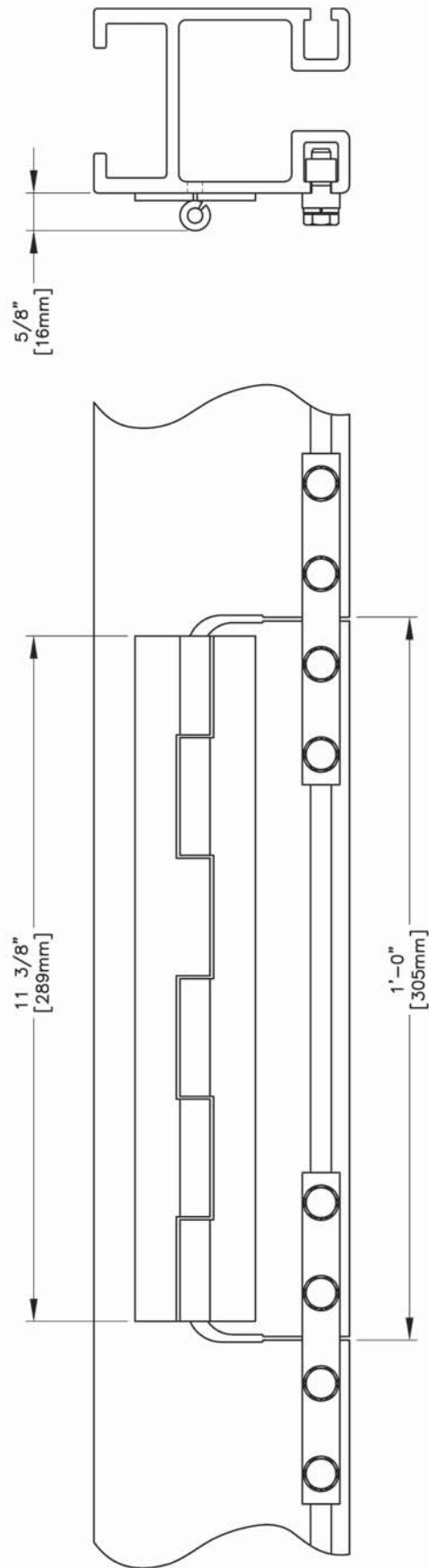
27055 BEAM HANGER PERPENDICULAR MOUNT
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 23 lbs. [10.43 Kg.]



27057 BEAM HANGER PERPENDICULAR MOUNT
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE AND
FLANGE THICKNESS FROM 1/4" [6mm] TO 9/16" [15mm]
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 24 lbs. [10.89 Kg.]

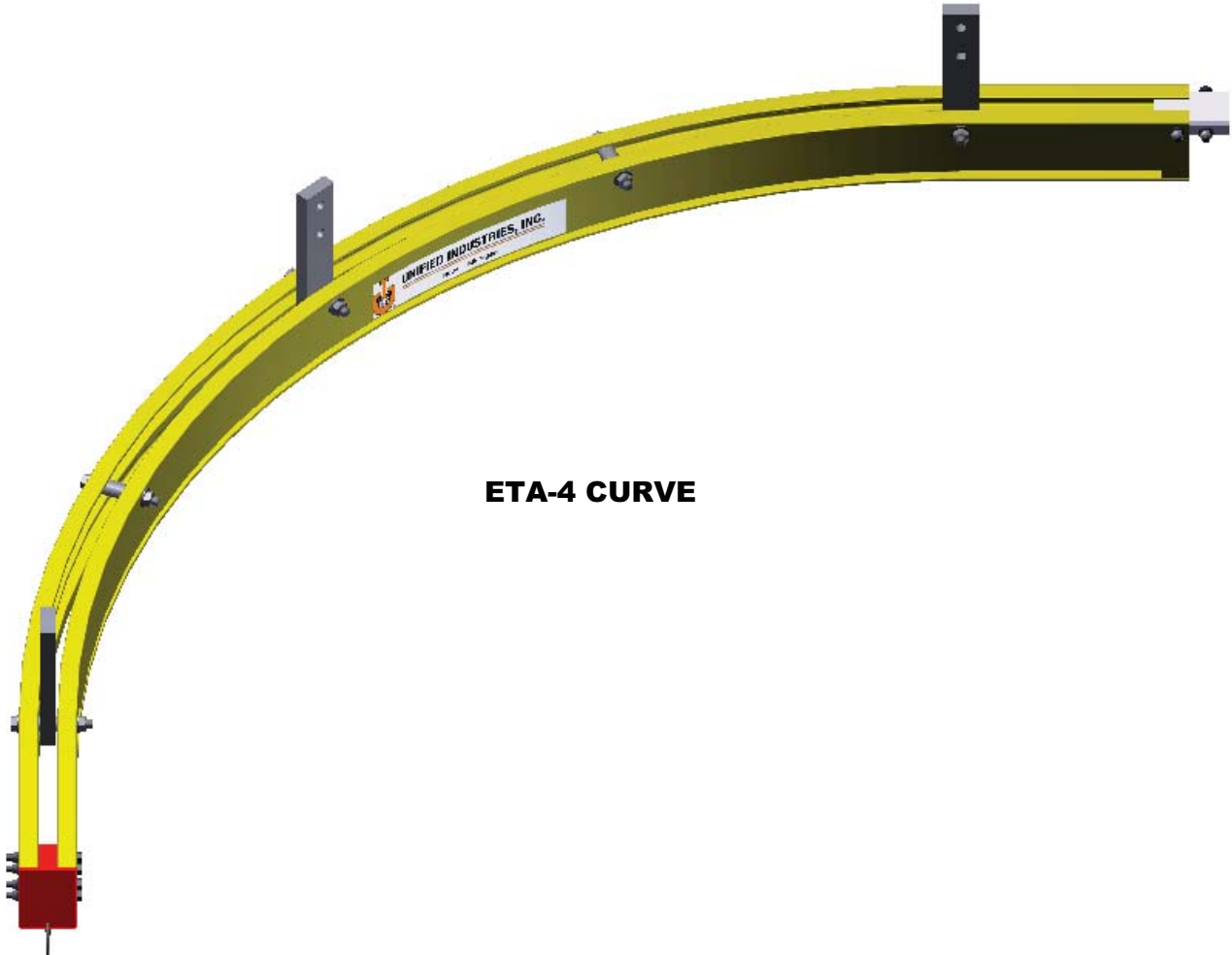


27070 ETA RIGID MOUNT HANGER
RATED LOAD 4000 lbs. [1588 Kg.]
FLANGE THICKNESS FROM
1/4" [6mm] TO 9/16" [15mm]
FOR W-SHAPE BEAMS ONLY
WEIGHT 10 lbs. [4.54 Kg.]



25790 INSPECTION GATE
FOR INSERTION AND REMOVAL OF TROLLEYS

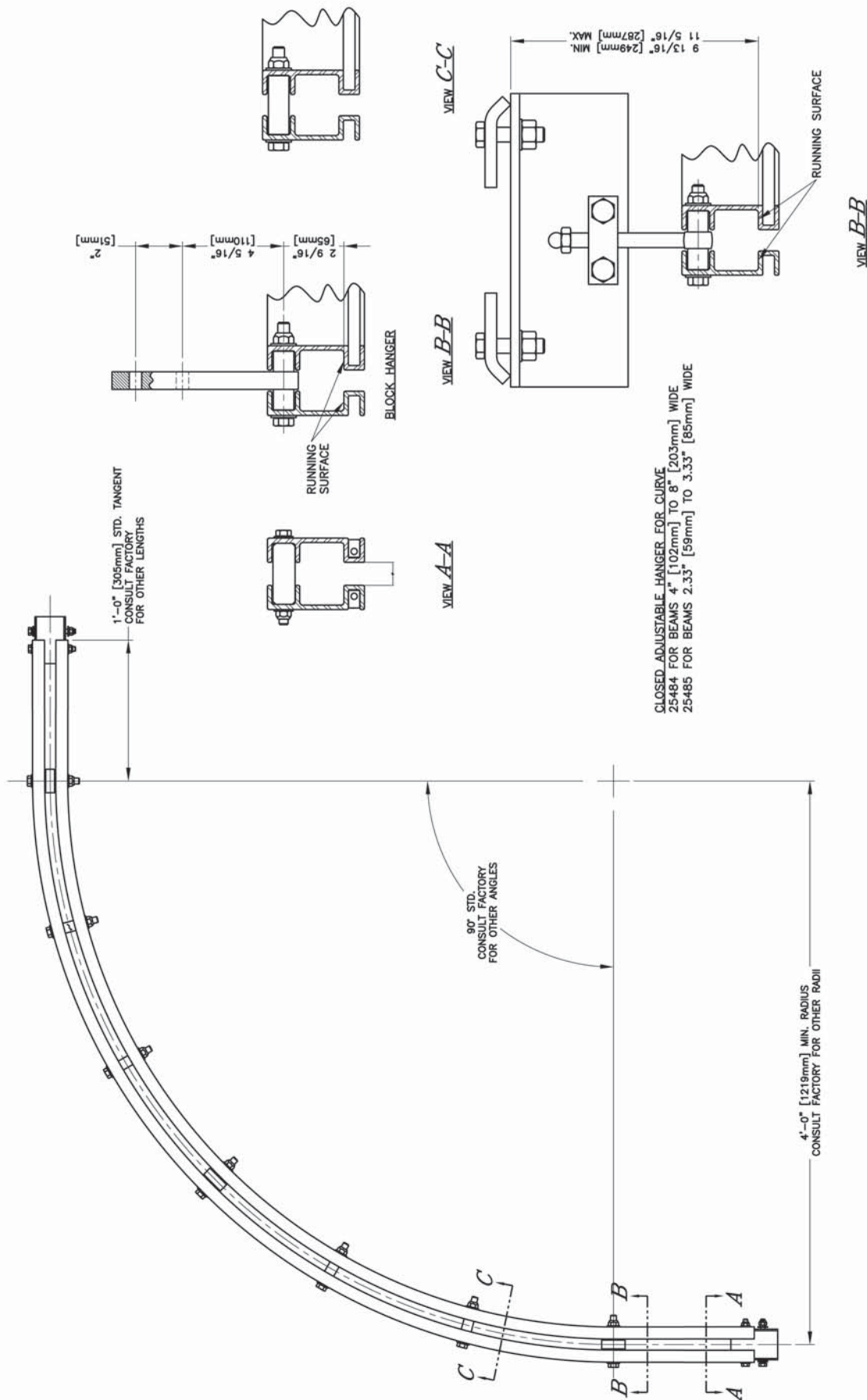
Inspection Gate must be within 1'-0" (305 mm) of a hanger.



ETA-4 CURVE

Features

- 4'-0" (1219mm) minimum radius
- Consult factory for additional information
- **87051** up to 6'-0" (1829mm) radius x 90°
- **87052** up to 6'-0" (1829mm) radius x 90° with Closed Adjustable Hangers
- **87056** up to 6'-0" (1829mm) radius x 45°
- **87057** up to 6'-0" (1829mm) radius x 45° with Closed Adjustable Hangers
- **87061** 6'-1" (1855mm) to 14'-0" (4267mm) radius x 90°
- **87062** 6'-1" (1855mm) to 14'-0" (4267mm) radius x 90° with Closed Adjustable Hangers



UNIFIED ETA-4 & ETA-5 RAIL TROLLEYS



20100



20110



20115



28070



20130



20125



20116



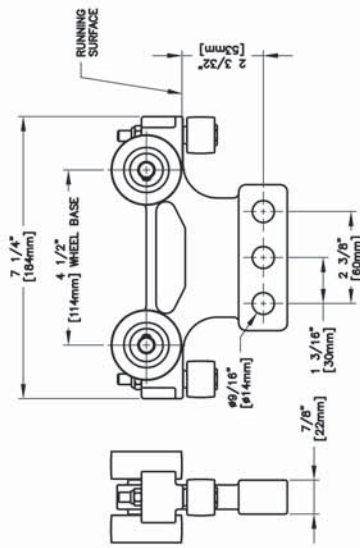
20117

Part Number

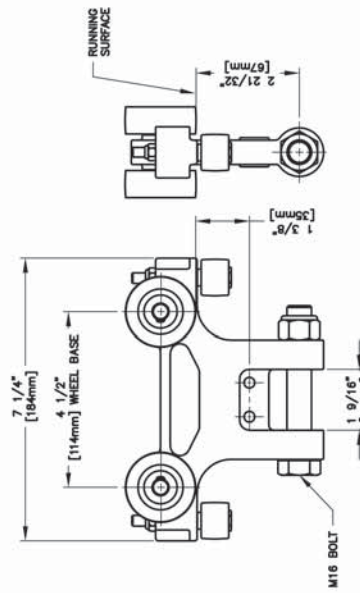
- **20100** ETA-4/5 Short Body Load Trolley with 550 lb. (250kg) Rated Load
- **20110** ETA-4/5 Long Body Load Trolley with 550 lb. (250kg) Rated Load
- **20115** ETA-4/5 Three Hole Mount Load Trolley with 550 lb (250kg) Rated Load
- **28070** ETA-4/5 Unified Balancer Trolley with 550 lb. (250kg) Rated Load
- **20130** ETA-4/5 Single Hoist Trolley with 550 lb. (250kg) Rated Load
- **20125** ETA-4/5 Pin Mount Trolley with 550 lb. (250kg) Rated Load
- **20116** ETA-4/5 Trolley for IR 6" Balancer with 550 lb. (250kg) Rated Load
- **20117** ETA-4/5 Trolley for IR 10" Balancer with 550 lb. (250kg) Rated Load

Features

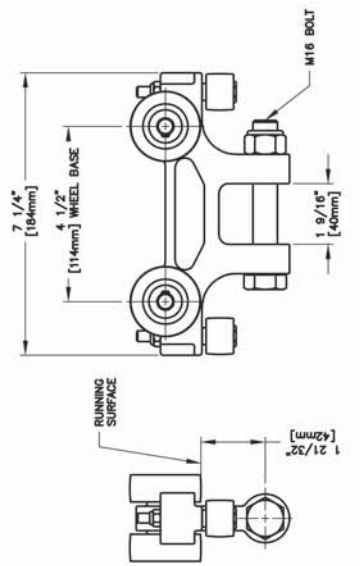
- High tensile almag alloy frame
- 1.8"(46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High impact nylon guide rollers with dual race ball bearings for smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



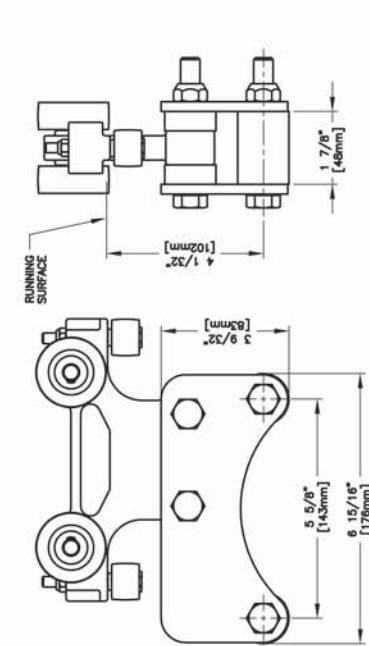
20115 ETA-4/5 THREE-HOLE MOUNT LOAD TROLLEY



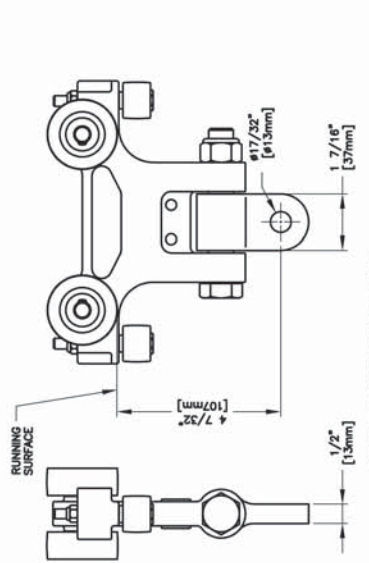
20110 ETA-4/5 LONG BODY LOAD TROLLEY



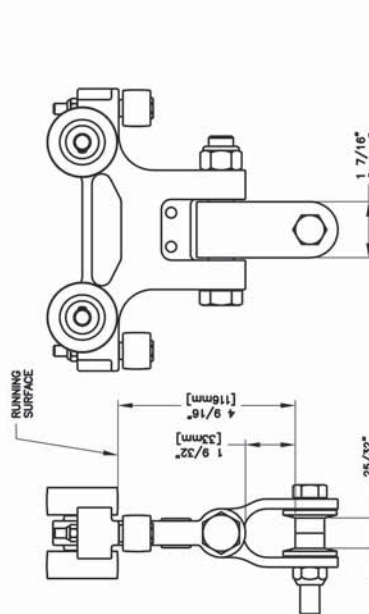
20100 ETA-4/5 SHORT BODY LOAD TROLLEY



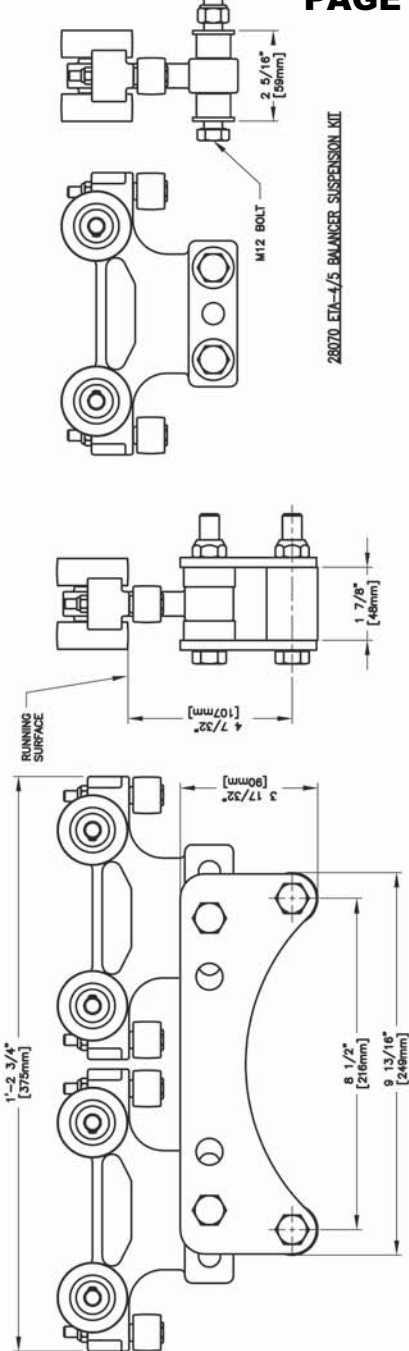
20116 ETA-4/5 IR 6\"/>



20125 ETA-4/5 PIN MOUNT TROLLEY



20130 ETA-4/5 SINGLE HOIST TROLLEY

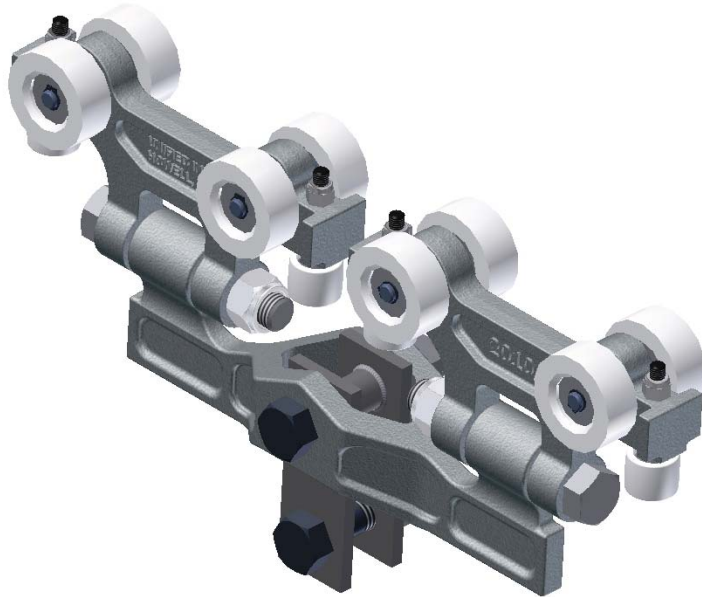


20117 ETA-4/5 IR 10\"/>

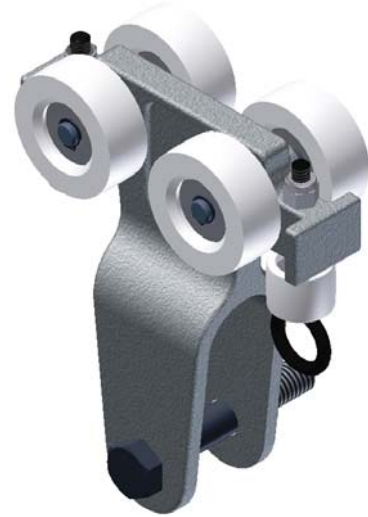
| SPECIFICATIONS | | RATED LOAD | |
|-----------------------------------------------------------------------|----------------------|---------------------|--|
| WEIGHT OF 20100: | 2.15 lbs. [.98 Kg.] | 550 lbs. [250 Kg.] | |
| WEIGHT OF 20110: | 2.23 lbs. [1.01 Kg.] | 550 lbs. [250 Kg.] | |
| WEIGHT OF 20115: | 2.00 lbs. [.91 Kg.] | 550 lbs. [250 Kg.] | |
| WEIGHT OF 20130: | 2.92 lbs. [1.32 Kg.] | 550 lbs. [250 Kg.] | |
| WEIGHT OF 20125: | 2.45 lbs. [1.11 Kg.] | 550 lbs. [250 Kg.] | |
| WEIGHT OF 20116: | 7.08 lbs. [3.20 Kg.] | 550 lbs. [250 Kg.] | |
| WEIGHT OF 20117: | 9.80 lbs. [4.45 Kg.] | 1100 lbs. [500 Kg.] | |
| WEIGHT OF 28070: | 2.10 lbs. [.95 Kg.] | 550 lbs. [250 Kg.] | |
| BODY : HIGH TENSILE ALMAG | | | |
| WHEELS : 1.825 DIA. [46.4mm DIA.] GLASS REINFORCED NYLON | | | |
| BEARINGS : BALL PERMANENTLY LUBRICATED STUDS : .50 DIA. [12.7mm DIA.] | | | |
| GUIDE ROLLERS : .94 DIA. [23.9mm DIA.] HIGH IMPACT NYLON | | | |

28070 ETA-4/5 BALANCER SUSPENSION KIT

UNIFIED ETA-4 & ETA-5 RAIL TROLLEYS



25330



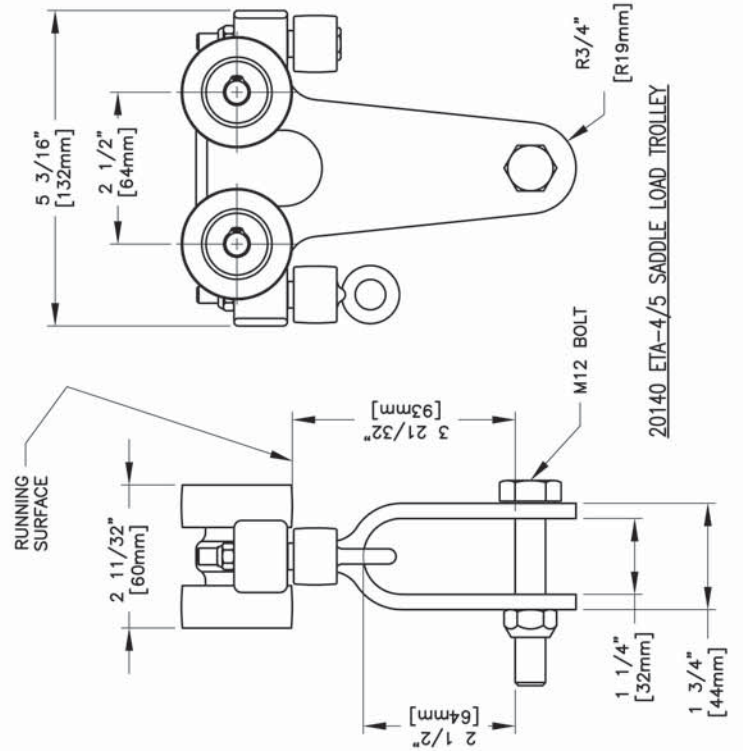
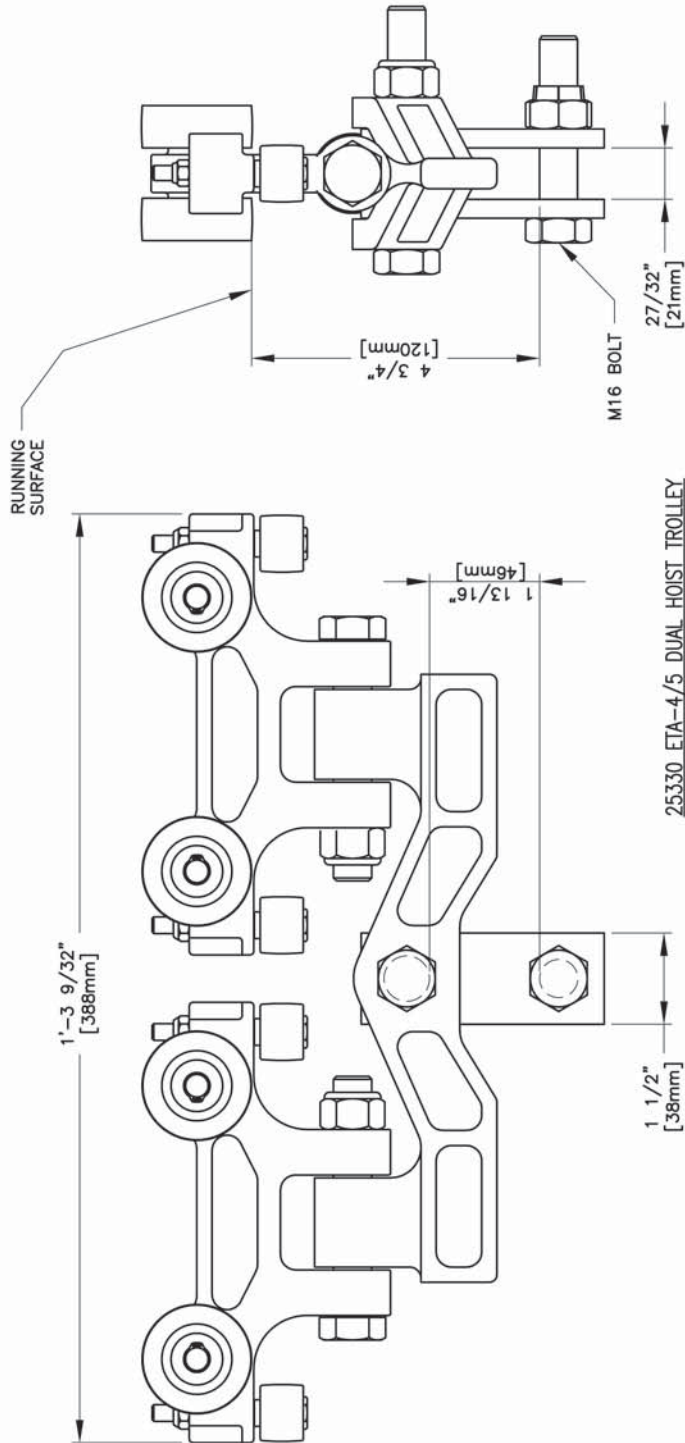
20140

Part Number

- **25330** ETA-4/5 Dual Hoist Trolley with 1100 lb. (500kg) Rated Load
- **20140** ETA-4/5 Saddle Load Trolley with 550 lb. (250kg) Rated Load

Features

- High tensile almag alloy frame
- 1.8"(46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High impact nylon guide rollers with dual race ball bearings for smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



| SPECIFICATIONS | RATED LOAD |
|----------------------------------------------------------|---------------------|
| WEIGHT OF 25330: 7.08 lbs. [3.21 Kg.] | 1100 lbs. [500 Kg.] |
| WEIGHT OF 20140: 1.83 lbs. [.83 Kg.] | 550 lbs. [250 Kg.] |
| BODY : HIGH TENSILE ALMAG | |
| WHEELS : 1.825 DIA. [46.4mm DIA.] GLASS REINFORCED NYLON | |
| BEARINGS : BALL PERMANENTLY LUBRICATED | |
| STUDS : .50 DIA. [12.7mm DIA.] | |
| GUIDE ROLLERS : .94 DIA. [23.9mm DIA.] HIGH IMPACT NYLON | |

UNIFIED ETA-4 & ETA-5 FESTOON TROLLEY



20150



20155



20160



20165



20180



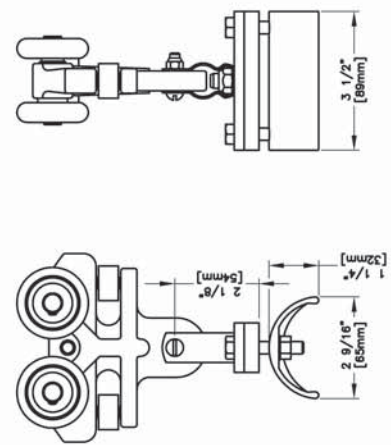
20185

Part Number

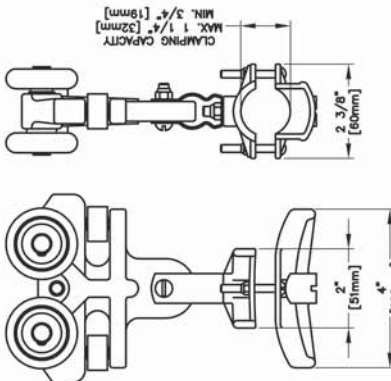
- **20150** ETA-4/5 Festoon Trolley with 100 lb. (45kg) Rated Load
- **20155** ETA-4/5 Festoon Trolley and Small Saddle with 100 lb. (45kg) Rated Load
- **20160** ETA-4/5 Festoon Trolley and Large Saddle with 100 lb. (45kg) Rated Load
- **20165** ETA-4/5 Festoon Trolley and Flatwire Saddle with 100 lb. (45kg) Rated Load
- **20180** ETA-4/5 Festoon Trolley and UII Saddle with 100 lb. (45kg) Rated Load
- **20185** ETA-4/5 Festoon Trolley with 12" Saddle 100 lb. (45kg) Rated Load

Features

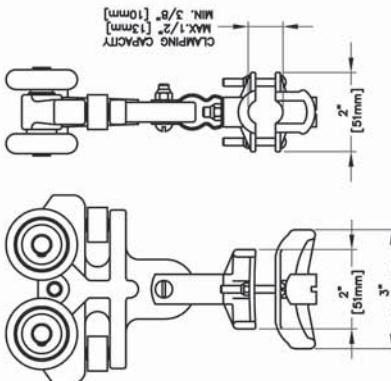
- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



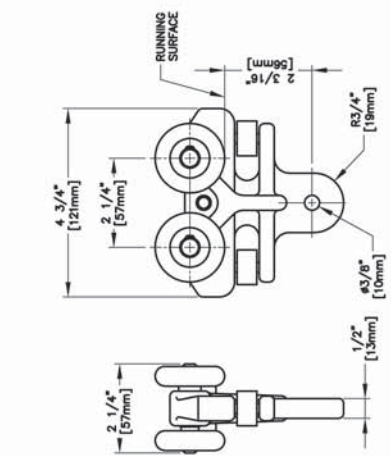
20165 ETA-4/5 FESTOON TROLLEY WITH FLATWIRE SADDLE



20160 ETA-4/5 FESTOON TROLLEY WITH LARGE SADDLE



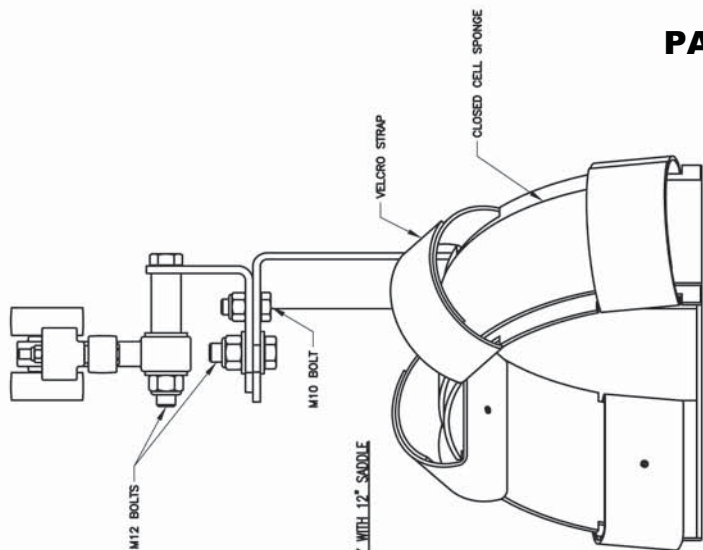
20155 ETA-4/5 FESTOON TROLLEY WITH SMALL SADDLE



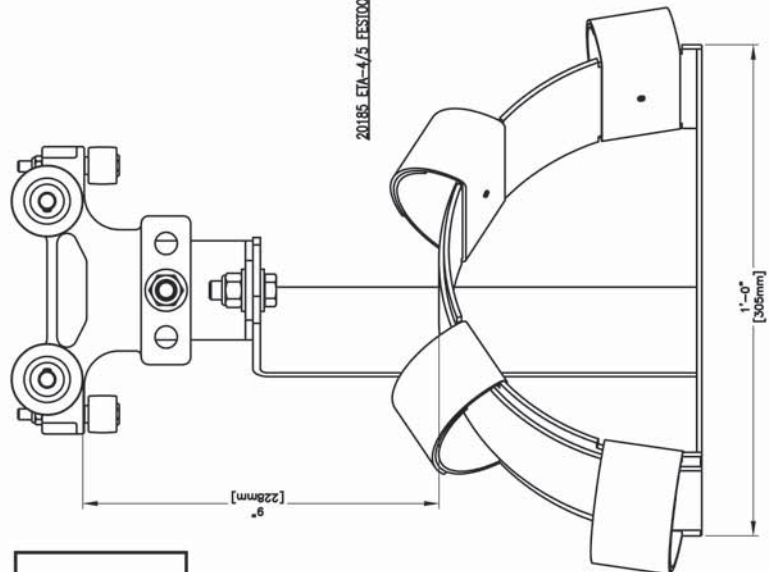
20150 ETA-4/5 FESTOON TROLLEY

SPECIFICATIONS:
 WHEELS: 1.312 DIA. (46mm DIA.) HIGH IMPACT NYLON
 BODY: ALUM. 35.
 BEARINGS: BALL TYPE PERMANENTLY LUBRICATED
 GUSKETS: 2.020 DIA. (51mm DIA.)
 CONTACT ROLLERS: 1.312 DIA. (33mm DIA.) HIGH IMPACT NYLON
 OPERATING TEMP. AT 100% LOAD: -107 TO +110°F [-210 TO +43°C]
 ROLLING FRICTION: .25 TO .75 % OF LOAD
 MAX. LOAD PER WHEEL: 25 Lbs. [11.2 Kg.]

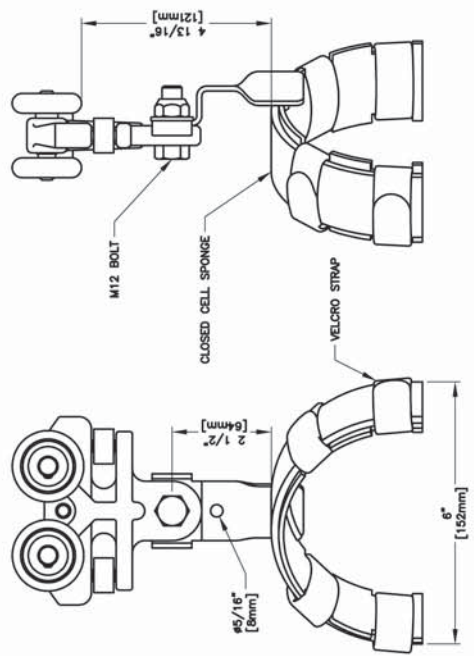
| TROLLEY | WEIGHT |
|---------|----------------------|
| 20150: | 1.50 lbs. [68 Kg.] |
| 20155: | 1.69 lbs. [77 Kg.] |
| 20160: | 1.71 lbs. [78 Kg.] |
| 20165: | 2.12 lbs. [96 Kg.] |
| 20180: | 2.69 lbs. [1.22 Kg.] |
| 20185: | 9.50 lbs. [4.31 Kg.] |



20185 ETA-4/5 FESTOON TROLLEY WITH 12" SADDLE



20180 ETA-4/5 FESTOON TROLLEY WITH 18" SADDLE





UNIFIED ETA-4 & ETA-5 FESTOON TROLLEY



20170



20175



78260



78184



78190



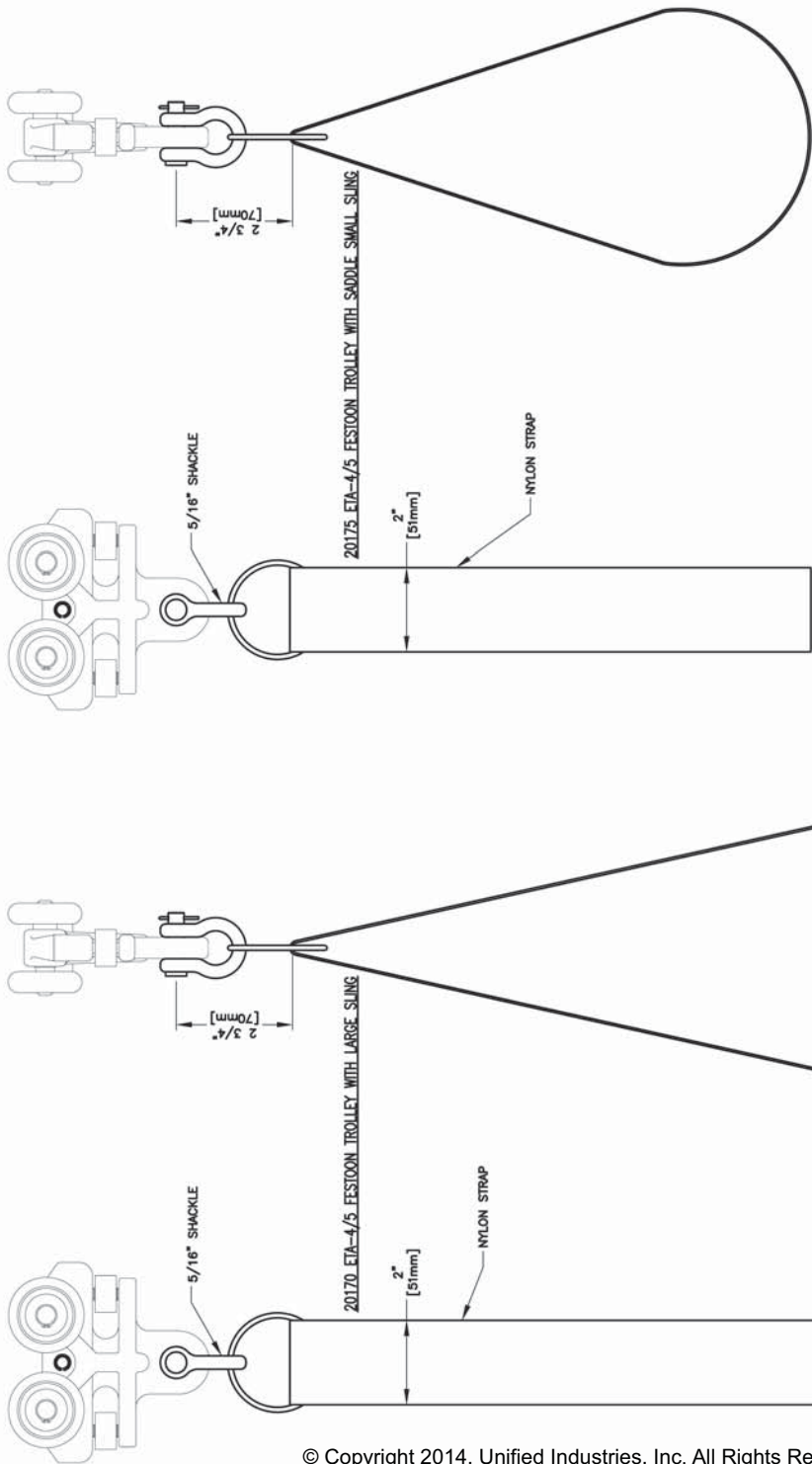
78170

Part Number

- **20170*** ETA-4/5 Festoon Trolley and 24" Large Sling with 100 lb. (45kg) Rated Load
- **20175*** ETA-4/5 Festoon Trolley and 12" Small Sling with 100 lb. (45kg) Rated Load
- **78260** ETA-4/5 Festoon Slider
- **78184** Cable Trolley with Small Saddle
- **78190** Cable Trolley with Large Saddle
- **78170** Cable Trolley Flatwire Saddle

Features

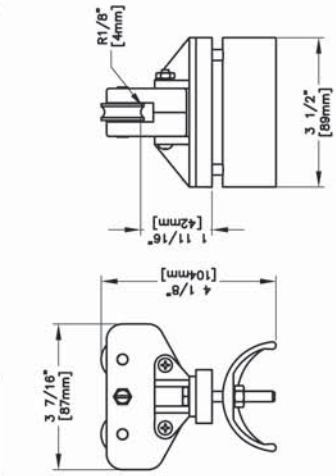
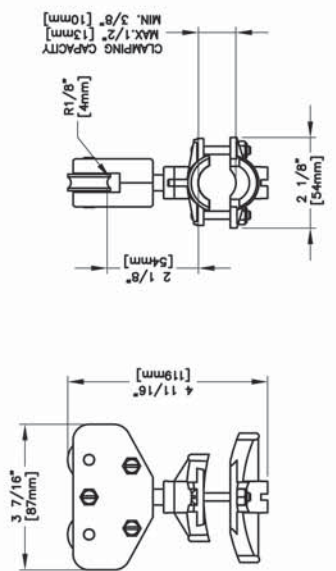
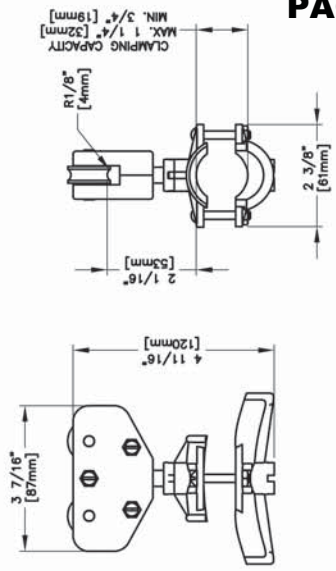
- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)

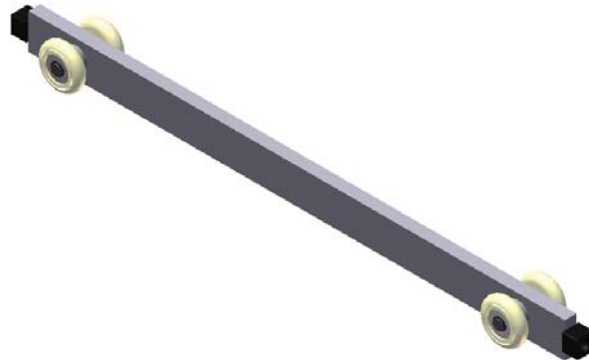


FESTOON TROLLEY SPECIFICATIONS :

WHEELS : 1 1/2" DIA. [40mm DIA.] HIGH IMPACT NYLON
 BEARINGS : BALL TYPE PERMANENTLY LUBRICATED
 STUDS : 5/16" DIA. [13mm DIA.]
 GUIDE ROLLERS : 3/4" DIA. [20mm DIA.] HIGH IMPACT NYLON
 OPERATING TEMP. AT 100% LOAD : -10°F TO +110°F [-23°C TO +43°C]
 ROLLING FRICTION : 2% TO 1% OF LOAD
 MAX. LOAD PER WHEEL : 25 lbs. [11.2 Kg.]

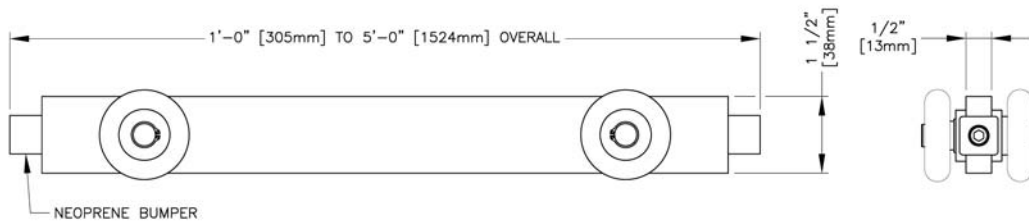
| TROLLEY | WEIGHT |
|---------|---------------------|
| 20170: | 2.00 lbs. [.91 Kg.] |
| 20175: | 1.83 lbs. [.83 Kg.] |
| 78260: | .07 lbs. [.03 Kg.] |
| 78170: | .46 lbs. [.21 Kg.] |
| 78184: | .37 lbs. [.17 Kg.] |
| 78190: | .41 lbs. [.19 Kg.] |





ETA-4/ETA-5 BUMPER TROLLEY

| BUMPER TROLLEY | |
|------------------------------|----------------------|
| CARRIER SPECIFICATIONS : | |
| BODY : 6061 ALUMINUM | |
| STUDS : .50 DIA. [13mm DIA.] | |
| WEIGHT OF 20190: | 1.63 lbs. [.74 Kg.] |
| WEIGHT OF 20191: | 2.51 lbs. [1.14 Kg.] |
| WEIGHT OF 20192: | 3.39 lbs. [1.54 Kg.] |
| WEIGHT OF 20193: | 4.27 lbs. [1.94 Kg.] |
| WEIGHT OF 20194: | 5.15 lbs. [2.34 Kg.] |



Part Number

- **20190** 1'-0" (305mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20191** 2'-0" (610mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20192** 3'-0" (914mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20193** 4'-0" (1219mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20194** 5'-0" (1524mm) Bumper trolley to operate on Unified ETA-4 and ETA-5

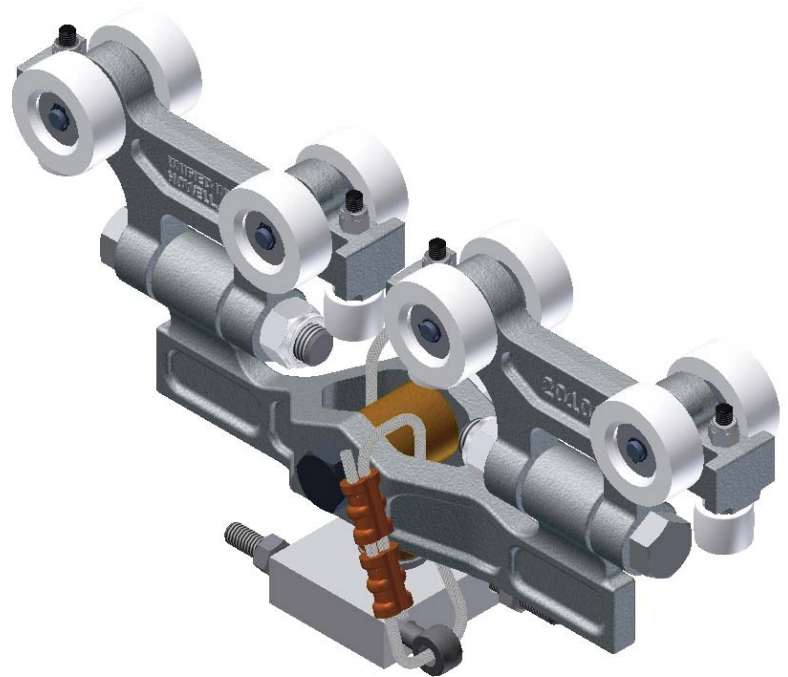
Features

- Aluminum trolley body
- 1.8" (46mm) High-impact nylon wheels, with permanently sealed precision ball bearings
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



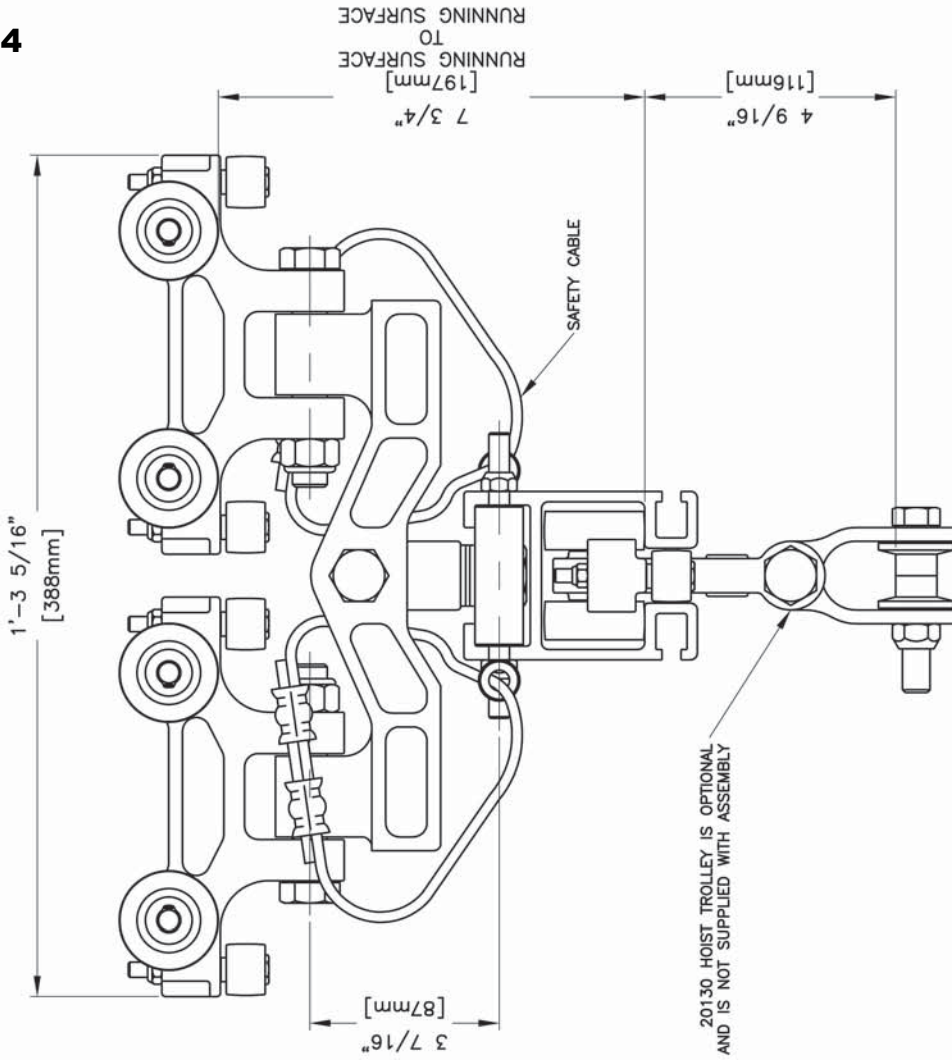
22521 ETA-4/5 SINGLE END TRUCK

- To operate on ETA-4 and ETA-5.
- Rated Load 550 lbs. (250kg)

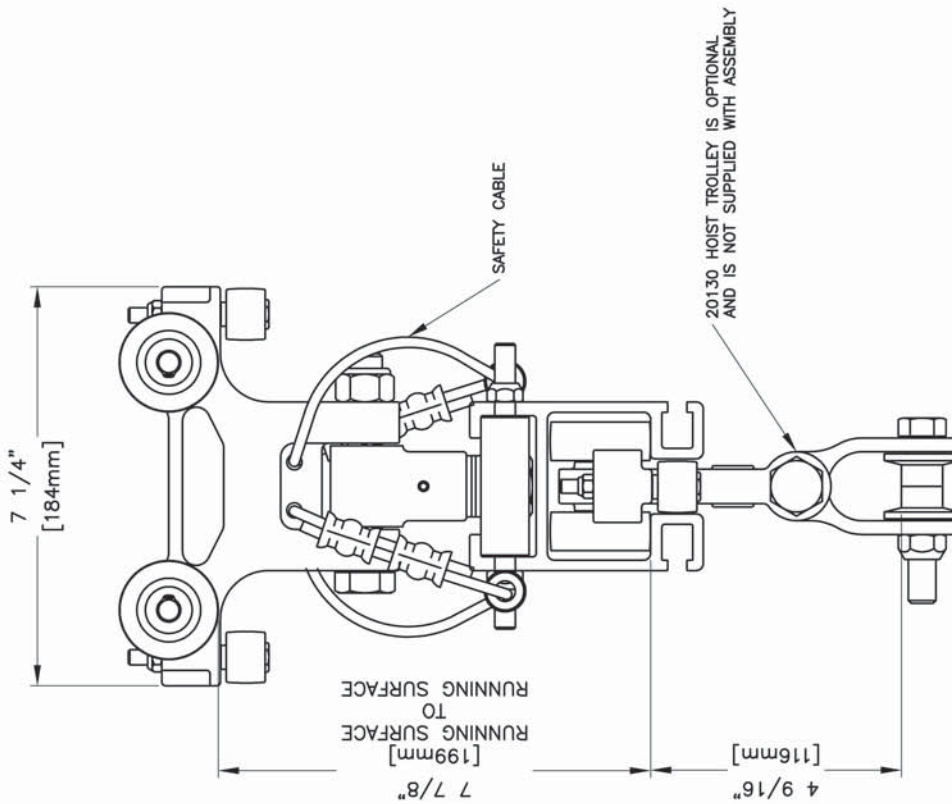


22540 ETA-4/5 DUAL END TRUCK

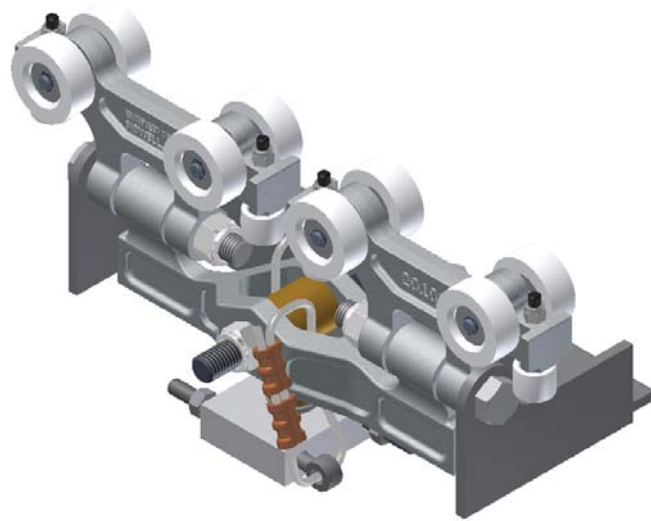
- To operate on ETA-4 and ETA-5.
- Rated Load 1100 lbs. (500 kg)



22540 DUAL END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GRIDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 WEIGHT: 9 lbs. [4.1 Kg.]



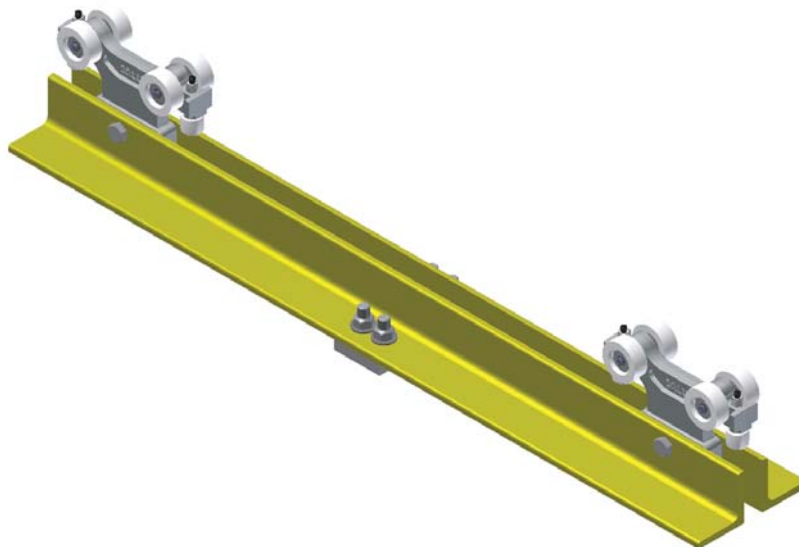
22521 SINGLE END TRUCK
 SINGLE TROLLEY END TRUCK AT EACH END OF CRANE GRIDER.
 RATED LOAD: 550 lbs. [250 Kg.]
 WEIGHT: 5 lbs. [2.3 Kg.]



- **22545** ETA-4/5 Rigid End Truck for Spans up to 18' (5.5m)
- Rated Load 1100 lbs (500kg)

Weight

15 lbs. (6.8kg)



ETA-4 RIGID END TRUCK

- End truck assemblies for single girder bridge cranes to run on ETA4/5 runways.
- Attaches to ETA-4, ETA-5 and ETA-8.
- **22546** 1'-6" (457mm) wheelbase for spans 2'-0" (609mm) to 5'-0" (1524mm)
- **22547** 2'-0" (609mm) wheelbase for spans 6'-0" (1829mm) to 9'-0" (2743mm)
- **22548** 2'-6" (762mm) wheelbase for spans 10'-0" (3048mm) to 13'-0" (3962mm)
- **22549** 3'-0" (914mm) wheelbase for spans 14'-0" (4267mm) to 17'-0" (5182mm)
- **22550** 3'-6" (1066mm) wheelbase for spans 18'-0" (5486mm) to 20'-0" (6096mm)
- **22551** 4'-0" (1219mm) wheelbase for spans 21'-0" (6400mm) to 25'-0" (7620mm)
- No safety cable included
- Rated Load 1100 lbs (500kg)

Weight

24 lbs. (10.8kg)

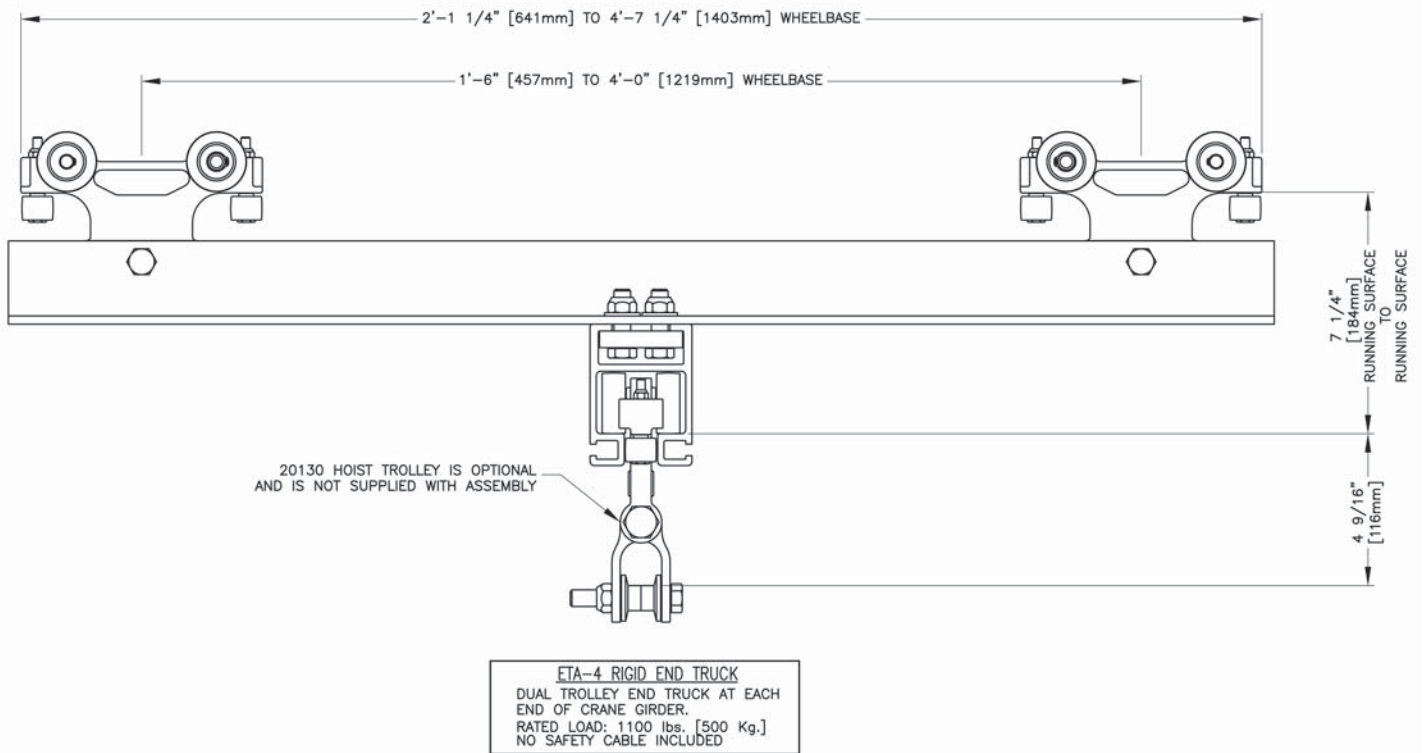
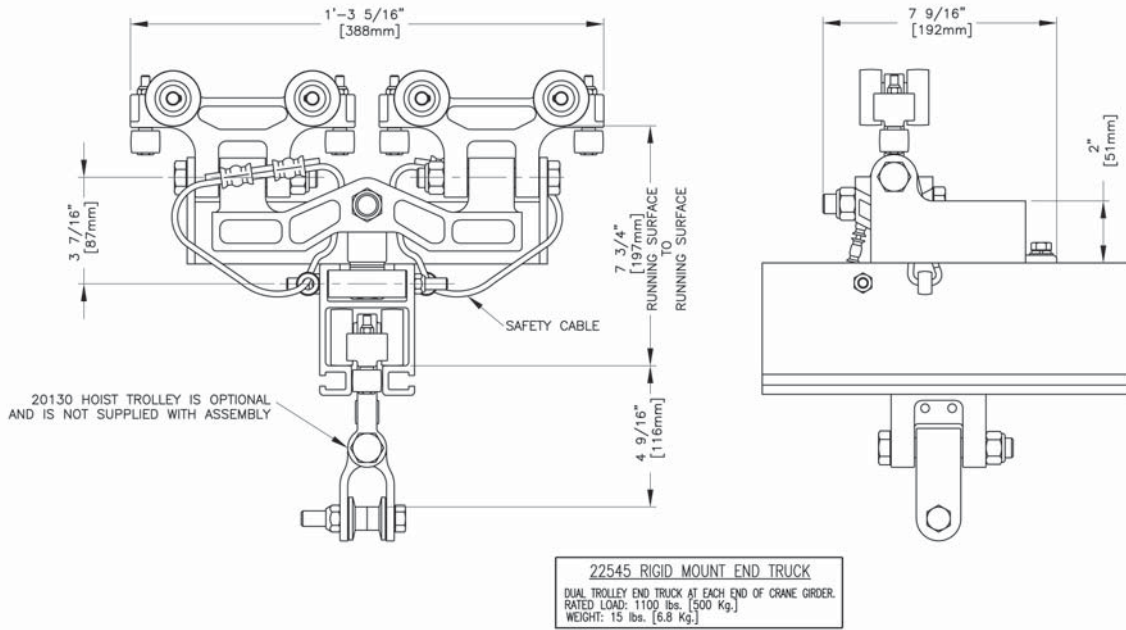
28 lbs. (12.7kg)

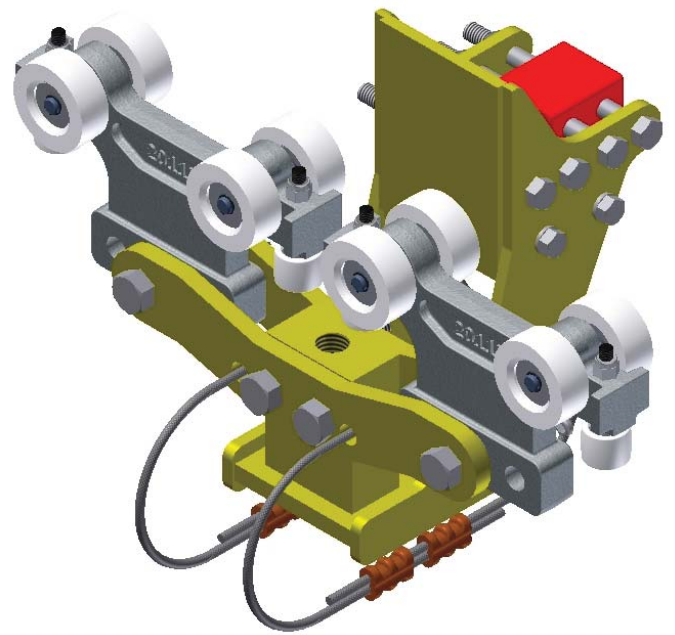
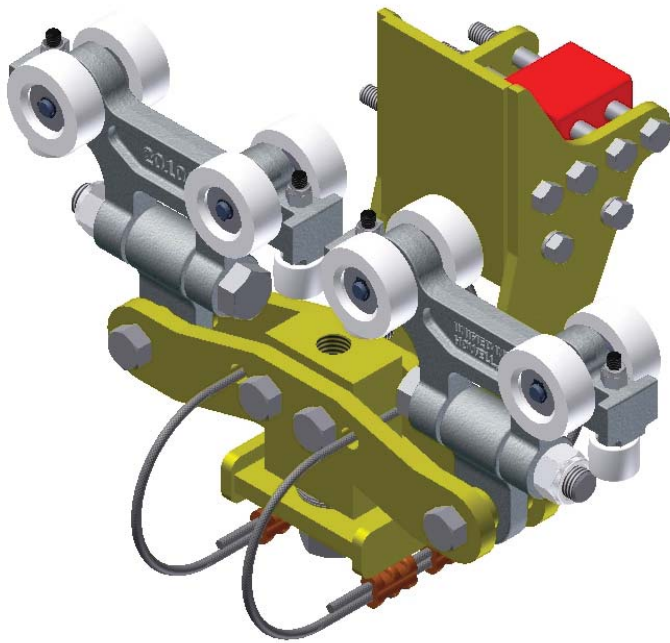
32 lbs. (14.5kg)

36 lbs. (16.3kg)

40 lbs. (18.1kg)

44 lbs. (20kg)



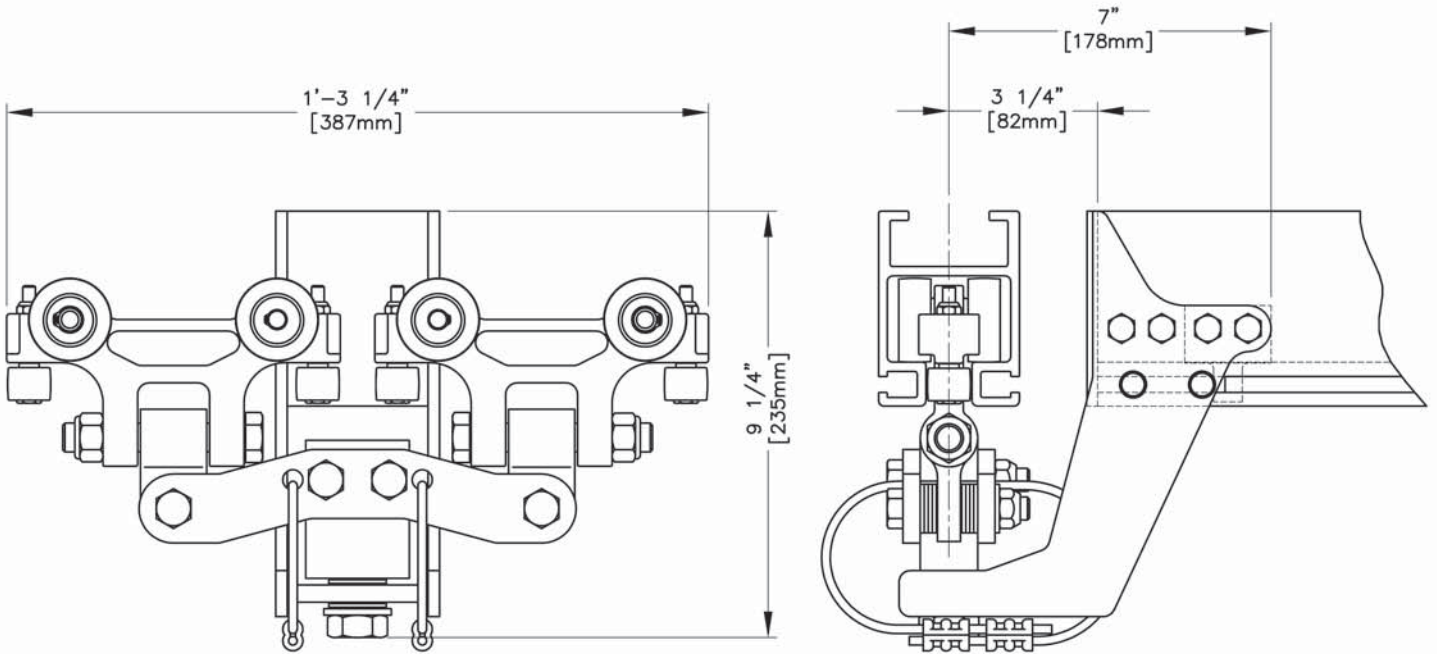


22600 ETA-4/5 Articulating Low Headroom End Truck

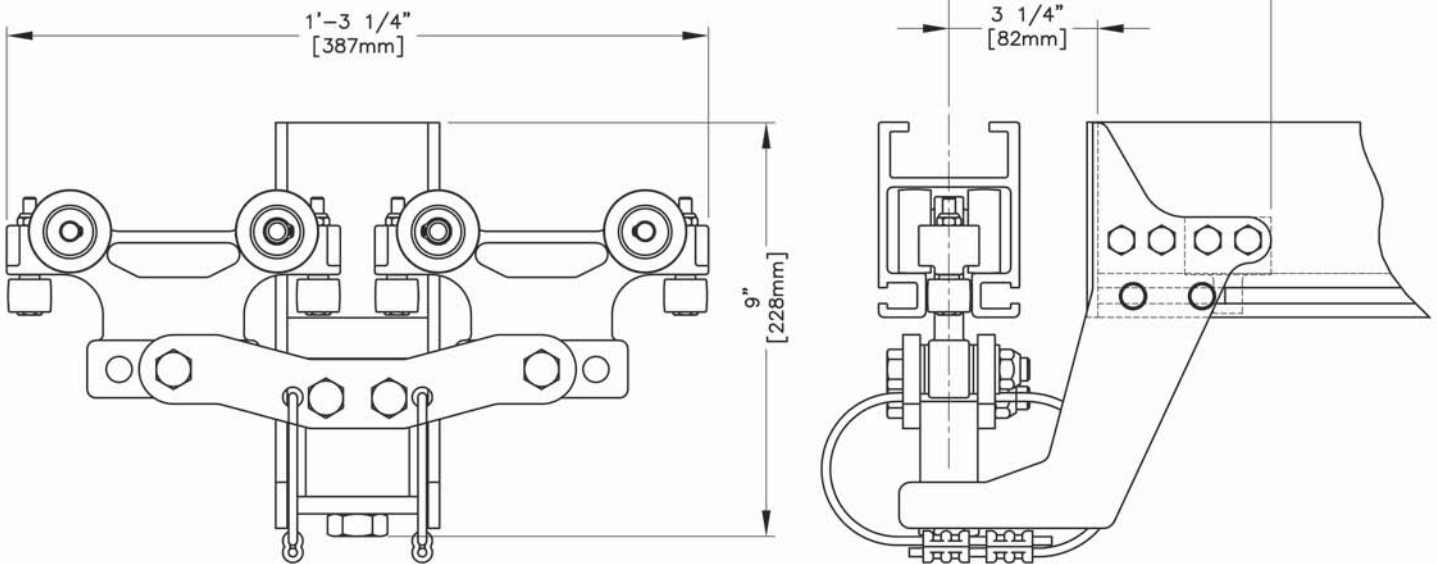
- To operate on ETA-4/5.
- Rated Load 1100 lbs. (500kg)

22605 ETA-4/5 Rigid Low Headroom End Truck

- To operate on ETA-4/5.
- Rated Load 1100 lbs. (500kg)



22600 ETA-4/5 ARTICULATING LOW HEAD ROOM END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 WEIGHT: 16 lbs. [7.3 Kg.]



22605 ETA-4/5 RIGID LOW HEAD ROOM END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 WEIGHT: 13 lbs. [5.9 Kg.]



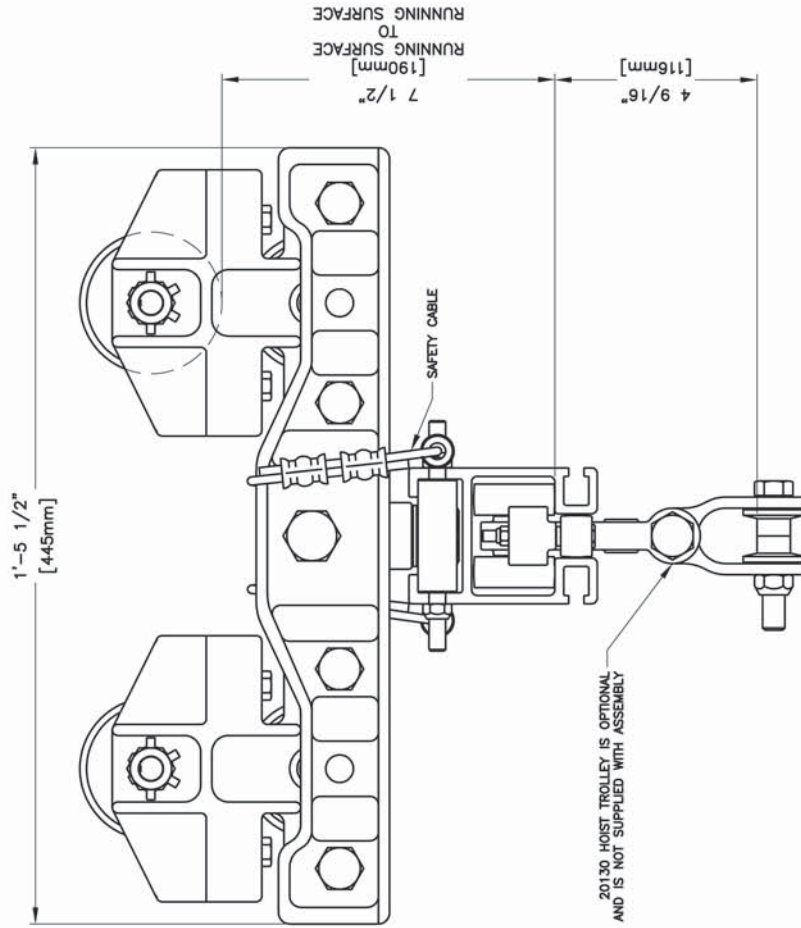
STANDARD RAIL END TRUCKS (WITHOUT KICKUP WHEELS)

- End truck assemblies for bridge cranes.
Rated Load 1100 lbs. (500kg)
- **22557** MBC-500-3-325 End Truck to run on 3.25 Patent Track.
- **22558** MBC-500-3-333 End Truck to run on S6x12.5.
- **22559** MBC-500-3-4-266 End Truck to run on S4x7.7.

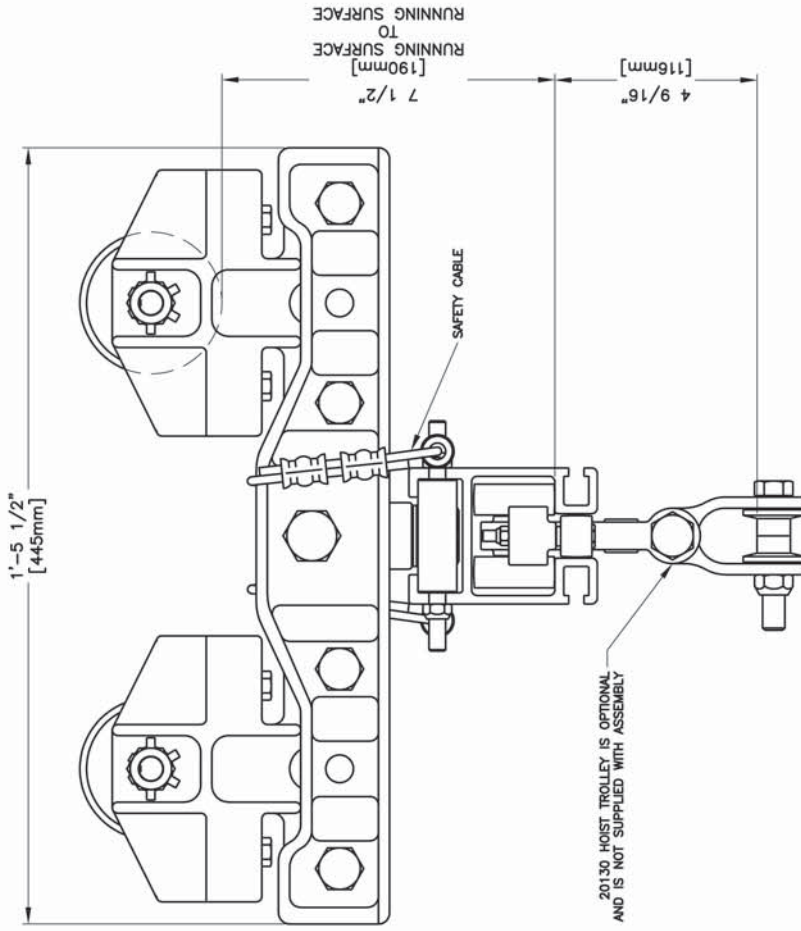
STANDARD RAIL END TRUCKS (WITH KICKUP WHEELS)

- End truck assemblies for bridge cranes.
Rated Load 1100 lbs. (500kg)
- **22574** MBC-500-3-325 End Truck to run on 3.25 Patent Track.
- **22575** MBC-500-3-333 End Truck to run on S6x12.5.
- **22576** MBC-500-3-4-266 End Truck to run on S4x7.7.

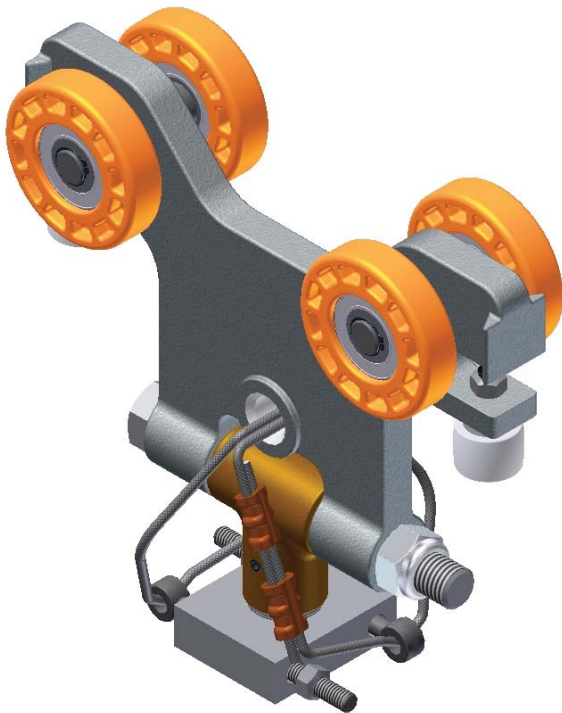
■ Note: Consult factory for end trucks that need to ride on metric beams.



END TRUCKS (WITH KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 22574 MBC-500-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22575 MBC-500-3-333 END TRUCK TO RUN ON S6x12.5.
 22576 MBC-500-3-4-2.66 END TRUCK TO RUN ON S4x7.7.
 WEIGHT: 35 LBS. [15.9 Kg.]

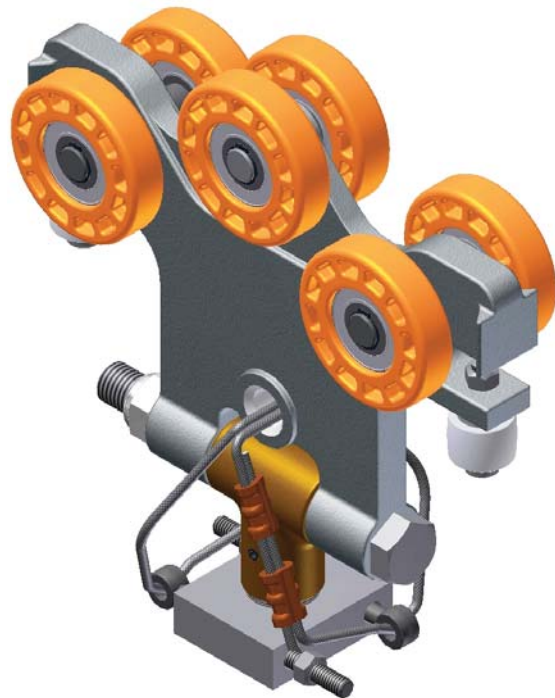


END TRUCKS (WITHOUT KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 22557 MBC-500-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22558 MBC-500-3-333 END TRUCK TO RUN ON S6x12.5.
 22559 MBC-500-3-4-2.66 END TRUCK TO RUN ON S4x7.7.
 WEIGHT: 32 LBS. [14.5 Kg.]



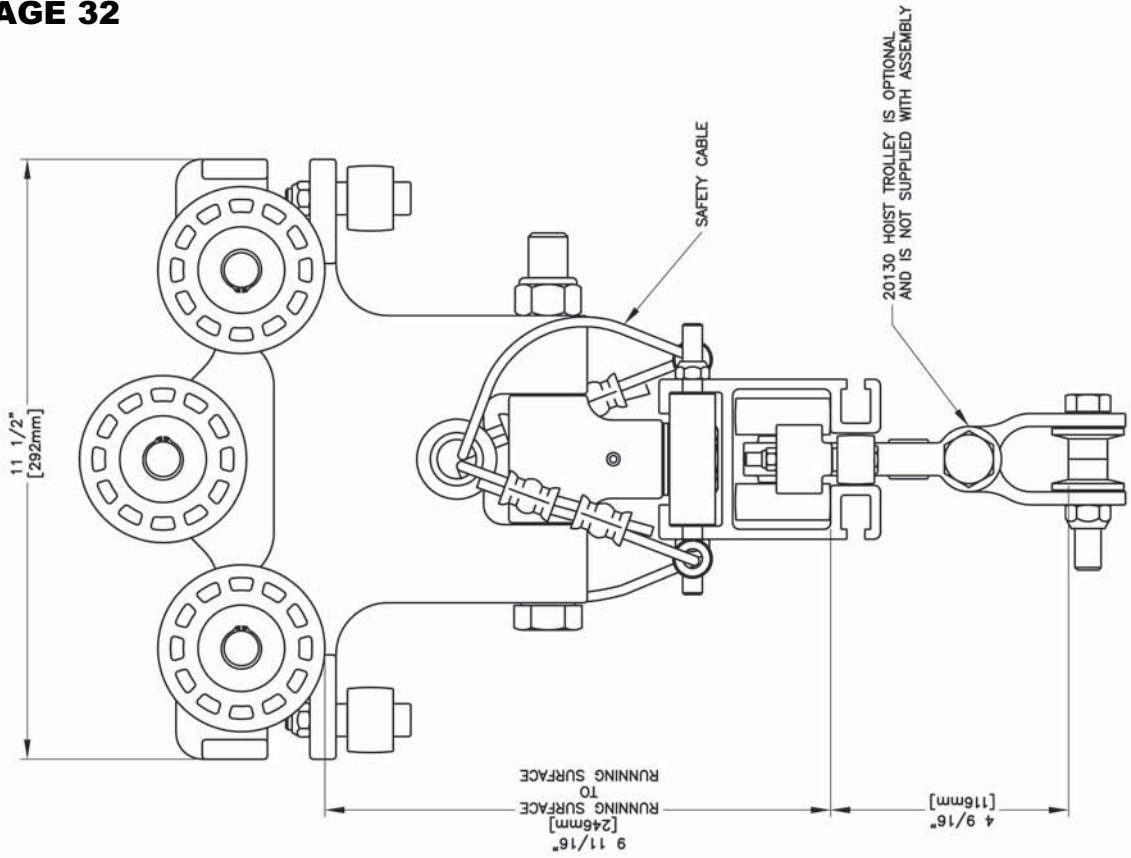
**22039 ETA-4/5 SINGLE END TRUCK
(WITHOUT KICKUP WHEELS)**

- To run on ETA-8 runway.
- Rated Load 1100 lbs. (500kg)

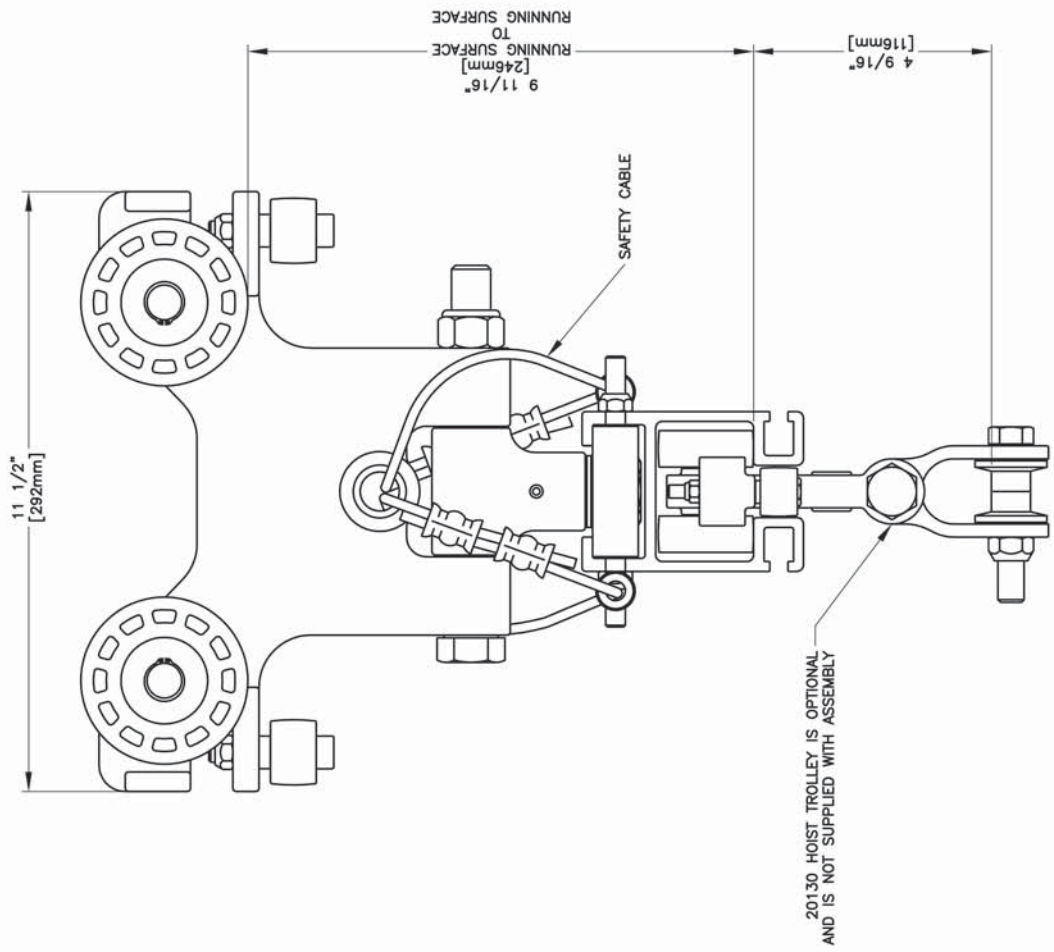


**22047 ETA-4/5 SINGLE END TRUCK
(WITH KICKUP WHEELS)**

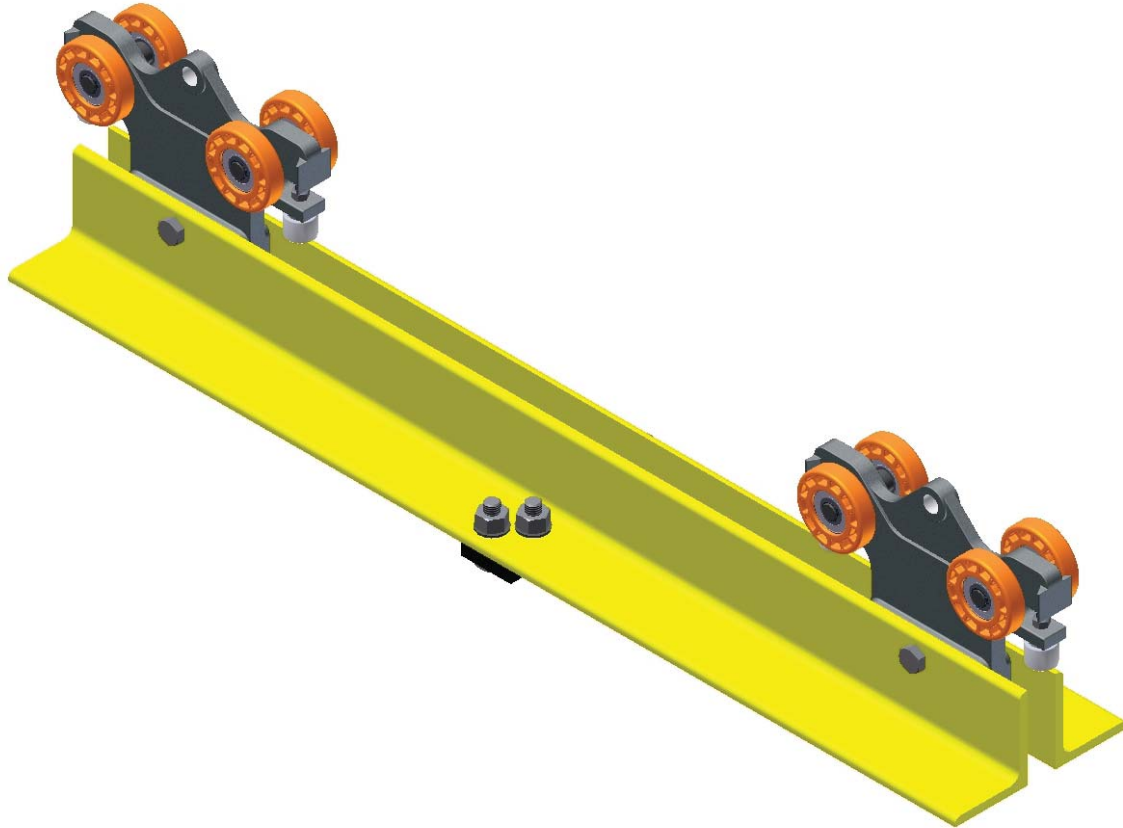
- To run on ETA-8 runway.
- Rated Load 1100 lbs. (500kg)



22047 SINGLE END TRUCK (WITH KICKUP WHEELS)
 RATED LOAD: 1100 lbs. [500 Kg.]
 SINGLE END TRUCK AT EACH END OF AN ETA-4 CRANE ORDER TO RUN ON ETA-8 RUNWAY.
 WEIGHT: 14 LBS. [6.4 Kg.]



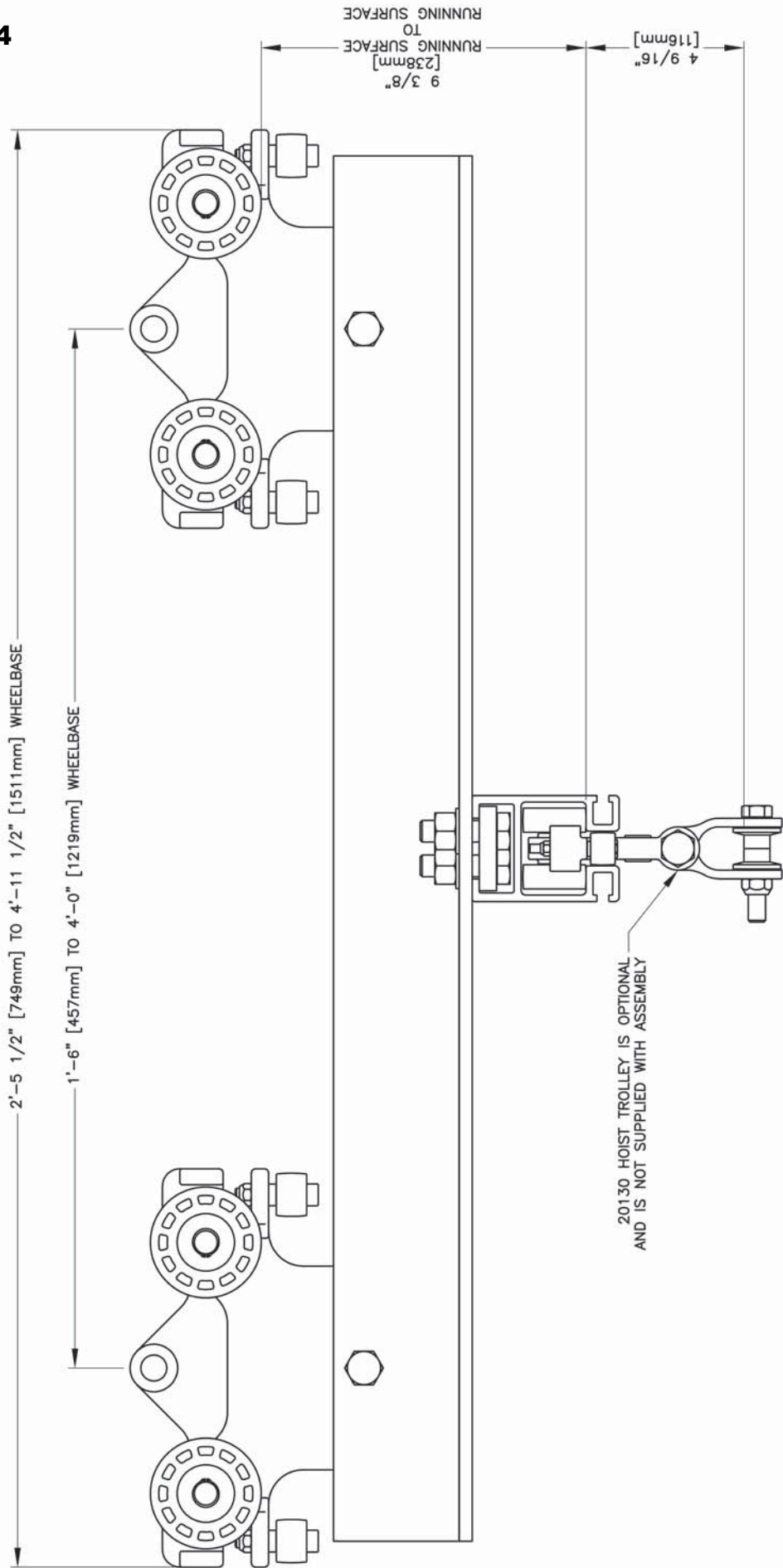
22039 SINGLE END TRUCK (WITHOUT KICKUP WHEELS)
 RATED LOAD: 1100 lbs. [500 Kg.]
 SINGLE END TRUCK AT EACH END OF AN ETA-4 CRANE ORDER TO RUN ON ETA-8 RUNWAY.
 WEIGHT: 12 LBS. [5.4 Kg.]



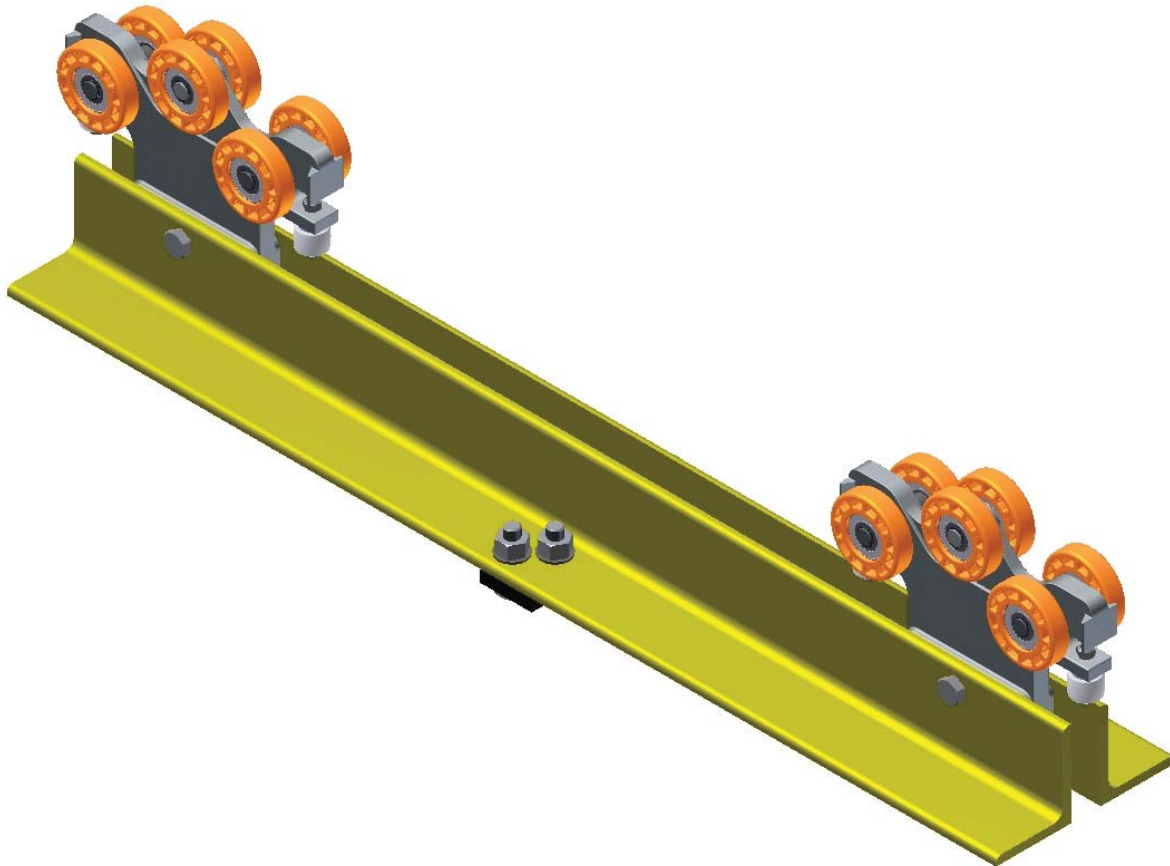
ETA-8 RIGID END TRUCKS WITHOUT KICKUP

- End truck assemblies for single girder bridge cranes to run on ETA-8 Runway.
- Attaches to ETA-4, ETA-5, and ETA-8 Bridges.

| | Weight |
|--------------------------------------------------------------------------------------|-------------------|
| ■ 22221 1'-6" (457mm) wheelbase for spans 3'-0" (914mm) to 6'-0" (1829mm) | 61 lbs. (27.6kg) |
| ■ 22222 2'-0" (609mm) wheelbase for spans 7'-0" (2133mm) to 10'-0" (3048mm) | 70 lbs. (32kg) |
| ■ 22223 2'-6" (762mm) wheelbase for spans 11'-0" (3353mm) to 14'-0" (4267mm) | 79 lbs. (35.8kg) |
| ■ 22224 3'-0" (914mm) wheelbase for spans 15'-0" (4572mm) to 18'-0" (5486mm) | 88 lbs. (40kg) |
| ■ 22225 3'-6" (1066mm) wheelbase for spans 19'-0" (5791mm) to 21'-0" (6400mm) | 98 lbs. (44.5kg) |
| ■ 22226 4'-0" (1219mm) wheelbase for spans 22'-0" (6705mm) to 25'-0" (7620mm) | 107 lbs. (48.5kg) |
| ■ Rated Load 2200 lbs. (1000kg) | |
| ■ No safety cable included | |



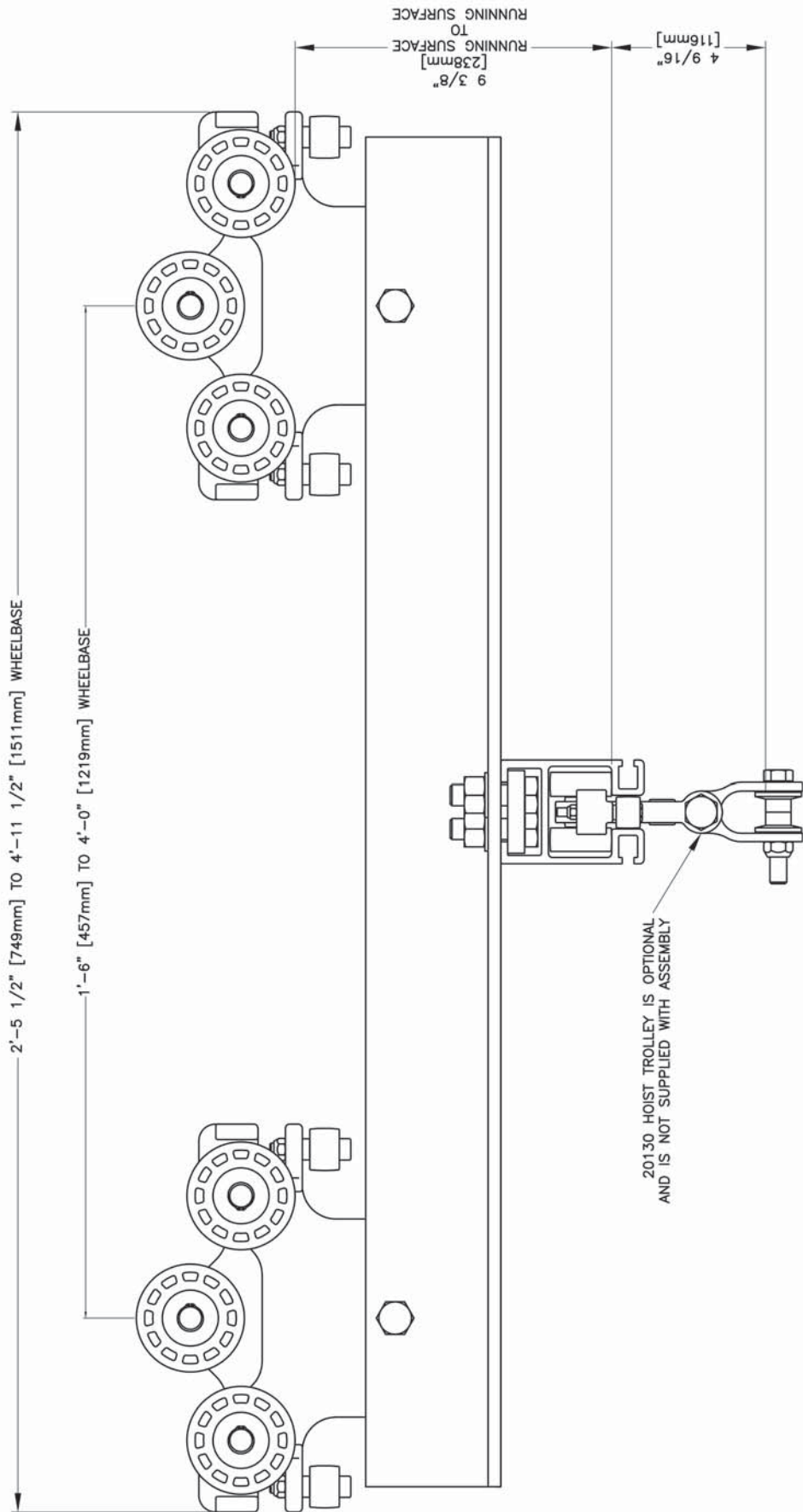
ETA-8 RIGID END TRUCK WITHOUT KICKUP
 DUAL TROLLEY END TRUCK AT EACH
 END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 NO SAFETY CABLE INCLUDED



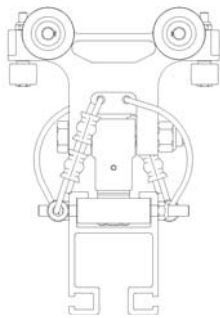
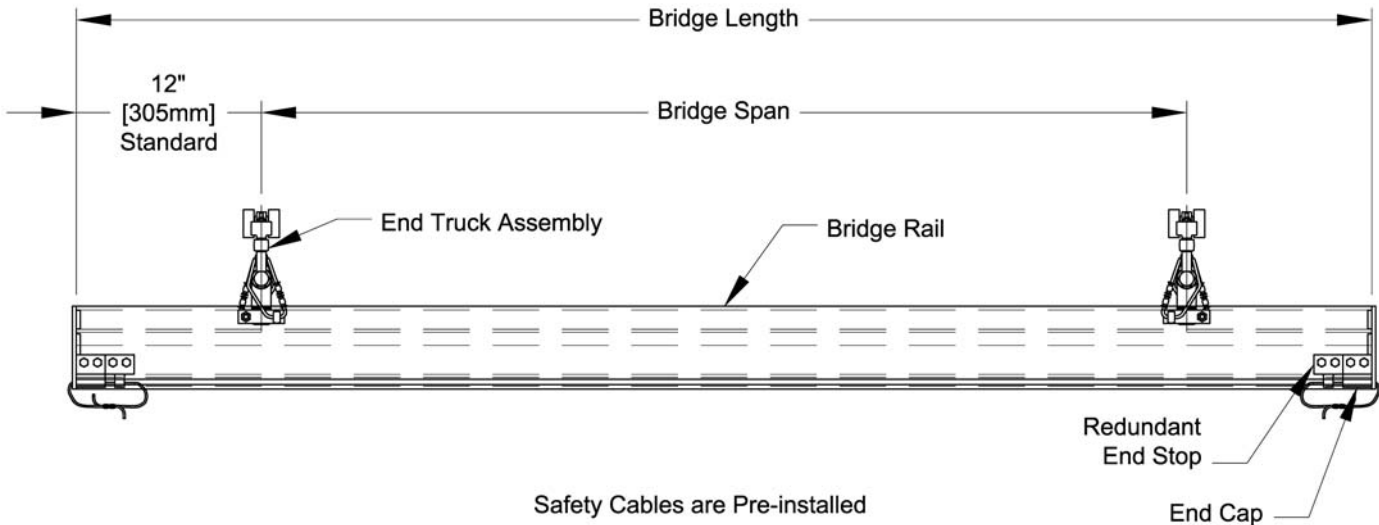
ETA-8 RIGID END TRUCKS WITH KICKUP

- End truck assemblies for single girder bridge cranes to run on ETA-8 Runway.
- Attaches to ETA-4, ETA-5, and ETA-8 Bridges.

| | Weight |
|--------------------------------------------------------------------------------------|------------------|
| ■ 22227 1'-6" (457mm) wheelbase for spans 3'-0" (914mm) to 6'-0" (1829mm) | 63 lbs. (28.5kg) |
| ■ 22228 2'-0" (609mm) wheelbase for spans 7'-0" (2133mm) to 10'-0" (3048mm) | 72 lbs. (32.6kg) |
| ■ 22229 2'-6" (762mm) wheelbase for spans 11'-0" (3353mm) to 14'-0" (4267mm) | 81 lbs. (36.7kg) |
| ■ 22230 3'-0" (914mm) wheelbase for spans 15'-0" (4572mm) to 18'-0" (5486mm) | 90 lbs. (40.8kg) |
| ■ 22231 3'-6" (1066mm) wheelbase for spans 19'-0" (5791mm) to 21'-0" (6400mm) | 99 lbs. (45kg) |
| ■ 22232 4'-0" (1219mm) wheelbase for spans 22'-0" (6705mm) to 25'-0" (7620mm) | 108 lbs. (49kg) |
| ■ Rated Load 2200 lbs. (1000kg) | |
| ■ No safety cable included | |



ETA-8 RIGID END TRUCK WITH KICKUP
DUAL TROLLEY END TRUCK AT EACH
END OF CRANE GIRDER.
RATED LOAD: 2200 lbs. [1000 Kg.]
NO SAFETY CABLE INCLUDED



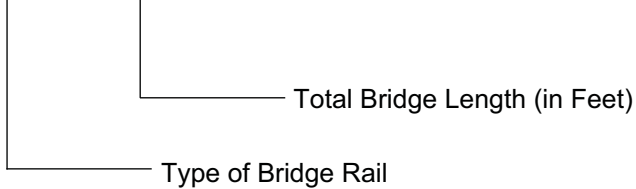
The Bridge Crane Assembly Consists of:

- One bridge beam (section of rail)
- Two end truck assemblies (mounted to the bridge with a trolley to roll inside of the runway, safety cables are pre-installed)
- Double end stop Assembly (U11 Standard)

Example (Bridge Rail only)

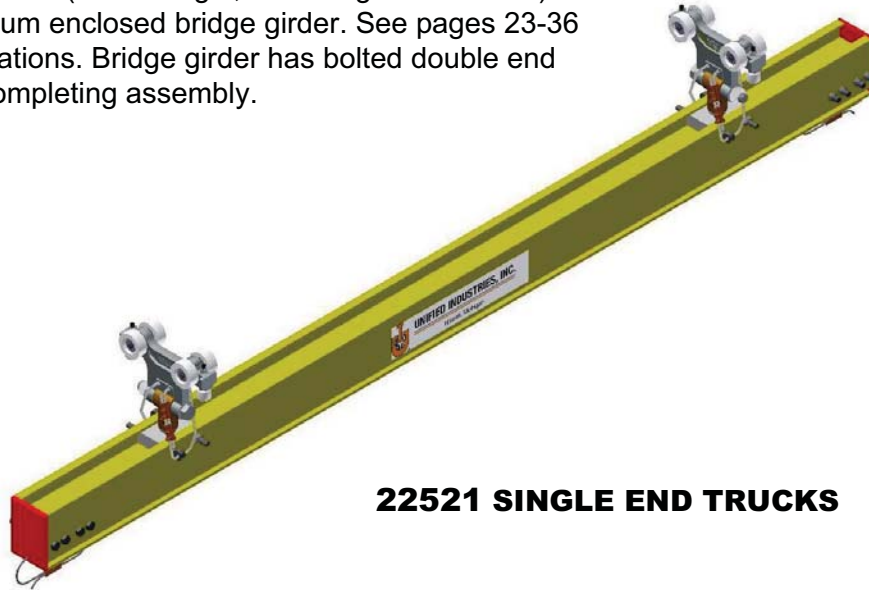
Order Number:

ETA4|BR|08

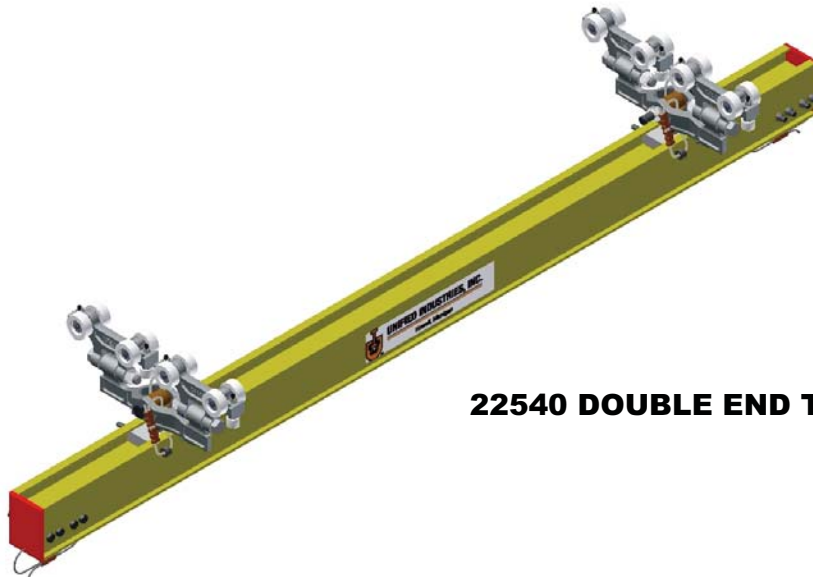


- Round up to the nearest foot (Cut to 8'-6" = ETA4BR09)

Unified ETA-4 single girder bridge crane consists of two end truck assemblies (either single, dual or rigid end trucks) supporting an aluminum enclosed bridge girder. See pages 23-36 for end truck specifications. Bridge girder has bolted double end stops at each end, completing assembly.

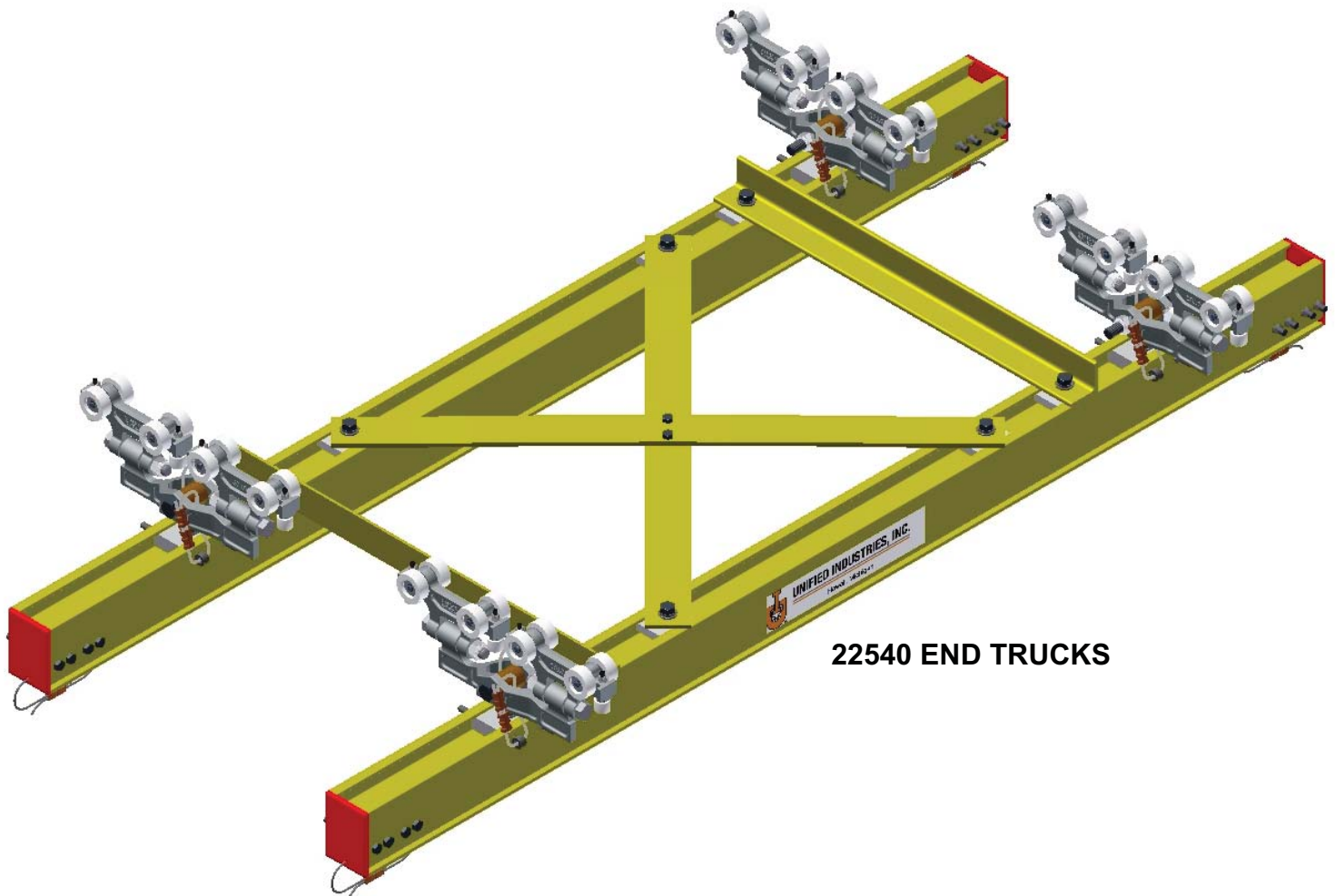


22521 SINGLE END TRUCKS



22540 DOUBLE END TRUCKS

- Standard overhang each end 12" (305mm)
- Longer overhangs consult Factory
- Paint color-specify when ordering
- Standard double end stops

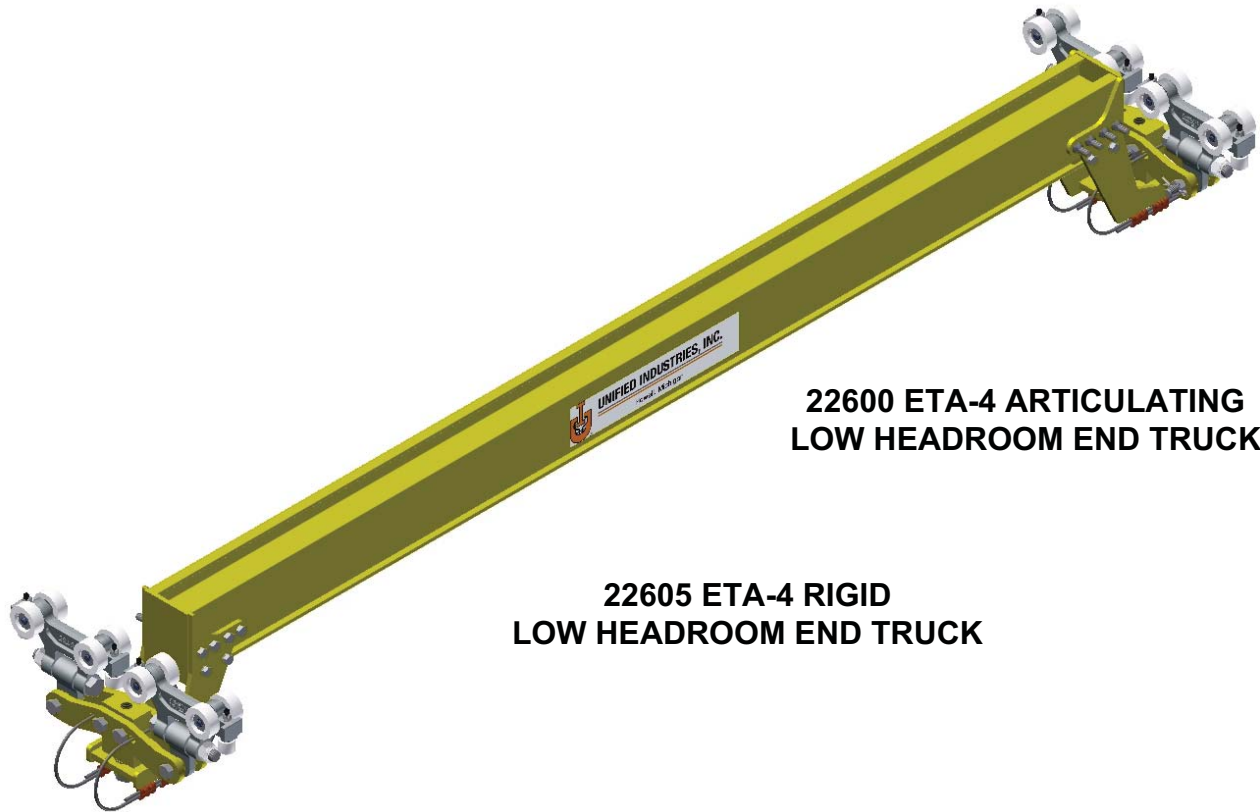


22540 END TRUCKS

ETA-4 double girder bridge cranes consist of four single or dual trolley end truck assemblies supporting ETA-4 extruded aluminum bridge girders. See page 23-36 for end truck specifications. Bridge girder has bolted polyurethane end caps at each end, completing assembly.

Used for suspending hoists, nut runners, indexing fixtures, mechanical grabs, etc.

- Diagonal bracing to prohibit articulation
- 12" (305mm) standard overhang
- Air line festoon kits available. See page 48 for specifications
- Festoon trolley available, see page 18 & 19
- Paint color - specify when ordering
- Double end stops standard
- Longer overhangs consult factory

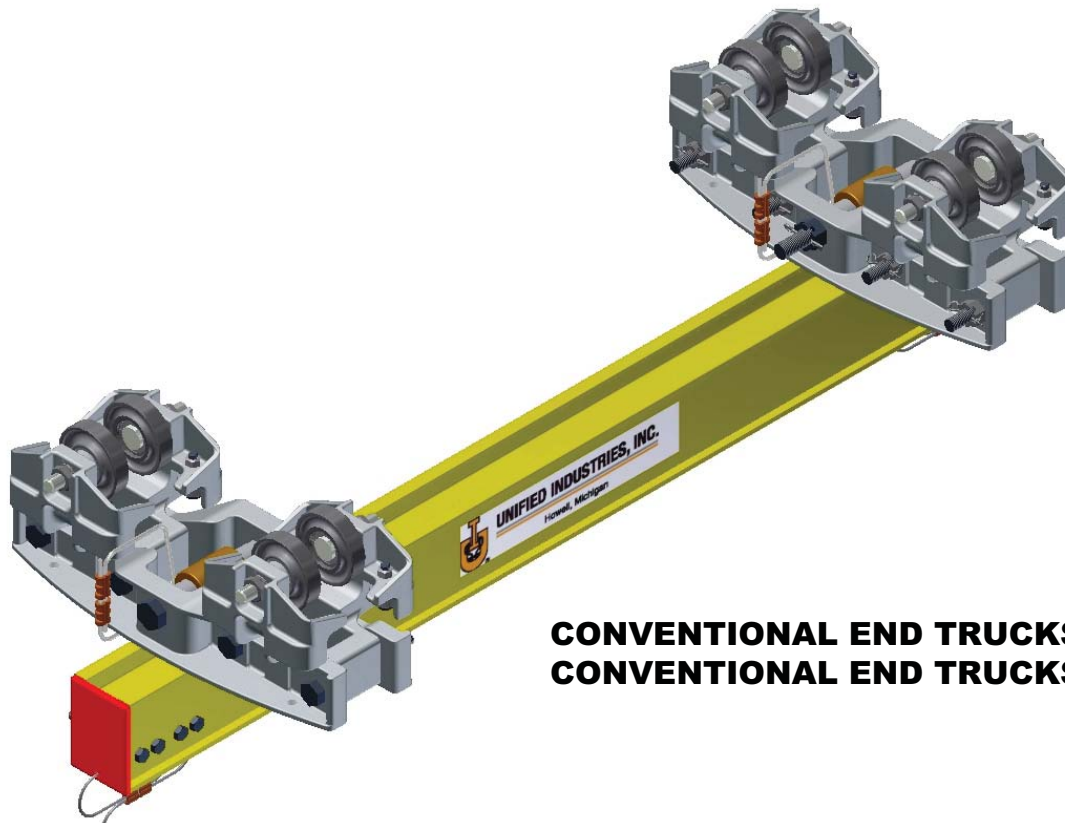


**22600 ETA-4 ARTICULATING
LOW HEADROOM END TRUCK**

**22605 ETA-4 RIGID
LOW HEADROOM END TRUCK**

Unified ETA-4 single girder low headroom bridge crane consists of two end truck assemblies supporting an aluminum enclosed bridge girder. Bridge girder and runway girder are held at the same elevation with bolted construction and a neoprene bumper at each end completing the assembly.

- Increased headroom in low areas
- Paint color - specify when ordering
- Air festooning brackets and kits are available
- Small tool, festoon trolley or tag line slider available.
- Overhangs are not available



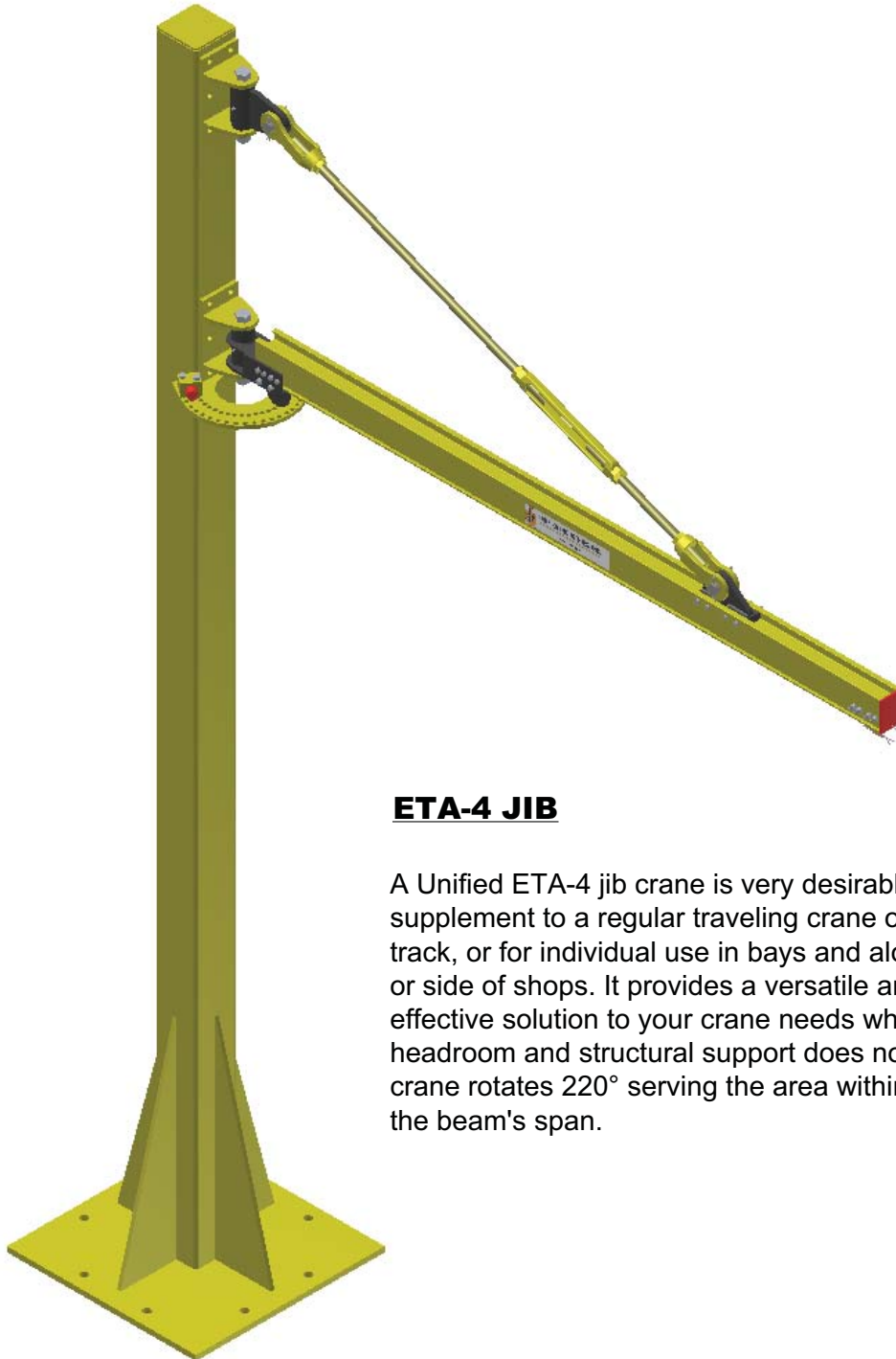
CONVENTIONAL END TRUCKS (W/O KICK-UP)
CONVENTIONAL END TRUCKS (KICK-UP)

Designed Specifically For Existing Runway Systems

- **22557** end truck assembly MBC-500-3-325 without kickup wheel for operation on 3.25 or 3.33 flat rail. Rated Load 1100 lbs. (500kg)
- **22558** end truck assembly MBC-500-3-333 without kickup wheel for operation on S6x12.5. Rated Load 1100 lbs. (500kg)
- **22559** end truck assembly MBC-500-3-4-266 without kickup wheel for operation on S4x7.7. Rated Load 1100 lbs. (500kg)
- **22574** end truck assembly MBC-500-3-325 with kickup wheel for operation on 3.25 or 3.33 flat rail. Rated Load 1100 lbs. (500kg)

Note: For Metric size beams consult factory.

- **22575** end truck assembly MBC-500-3-333 with kickup wheel for operation on S6x12.5. Rated Load 1100 lbs. (500kg)
- **22576** end truck assembly MBC-500-3-4-266 without kickup wheel for operation on S4x7.7. Rated Load 1100 lbs. (500kg)
- Self aligning end trucks
- High tensile almag alloy castings make up end truck assembly
- Counter thrust trolleys for countering extended loads are available
- Low inertia: 1-2% of load
- Paint color-specify when ordering
- Double end stops standard
- Optional rigid mount bracket
- Longer overhangs consult factory

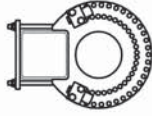


ETA-4 JIB

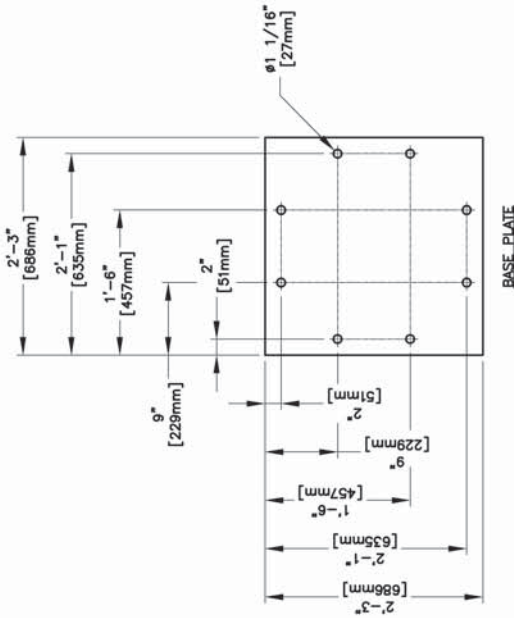
A Unified ETA-4 jib crane is very desirable as a supplement to a regular traveling crane or monorail track, or for individual use in bays and along the walls or side of shops. It provides a versatile and cost-effective solution to your crane needs where adequate headroom and structural support does not exist. The jib crane rotates 220° serving the area within the radius of the beam's span.



98535 6" JIB COLUMN INDEX_STOP_ASSEMBLY

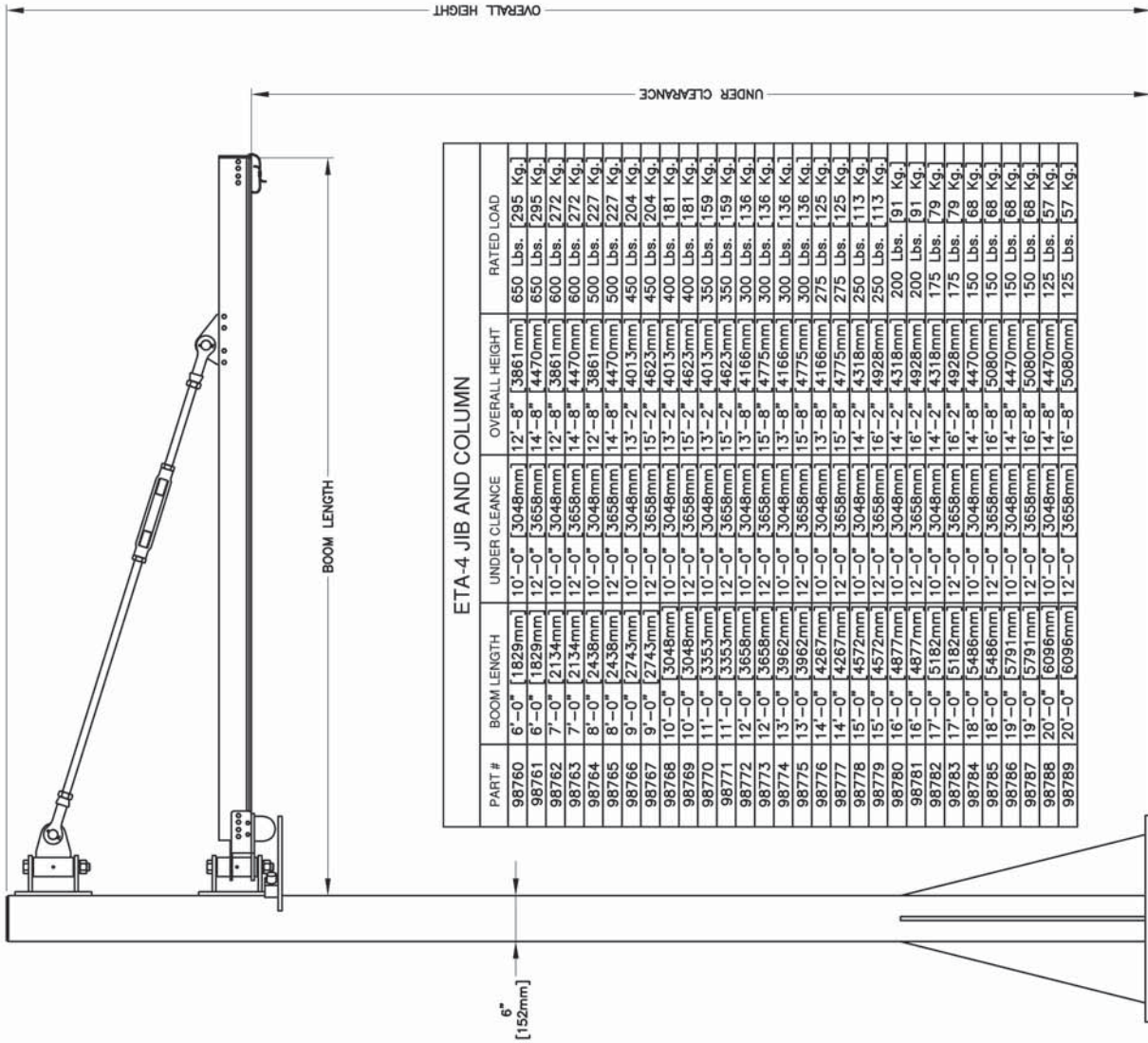


98536 6" BOLTED JIB COLUMN INDEX_STOP_ASSEMBLY



TEST LOAD SHALL NOT BE MORE THAN 120% OF THE RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER. COLUMN SHALL NOT BE LOADED BEYOND IT'S RATED LOAD CAPACITY EXCEPT FOR TEST PURPOSES.

NOTES:
 1. CONSULT FACTORY FOR UNDERCLEARANCES MORE THAN 12'-0" (3683mm).
 2. THE MINIMUM ANCHOR REQUIREMENT IS A #5/8" (20mm) WEDGE TYPE ANCHOR BOLT WITH 3 1/4" (80mm) STANDARD EMBEDMENT IN 6" (152mm) 3000 PSI (2070 N/cm²) CONCRETE.



ETA-4 JIB AND COLUMN

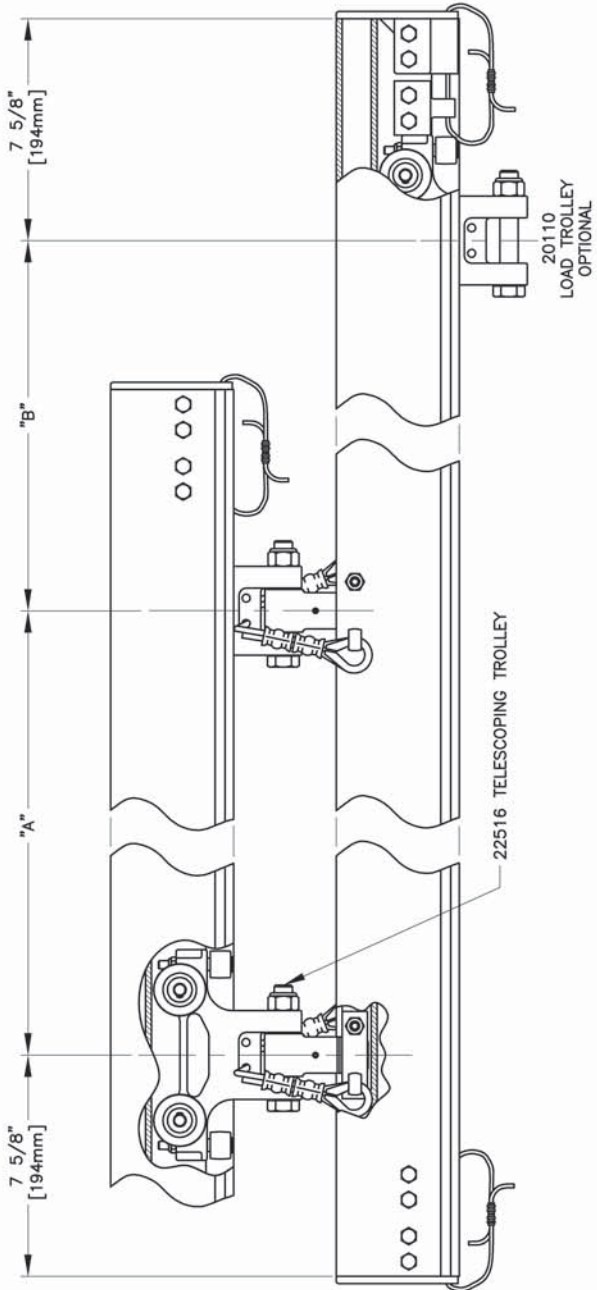
| PART # | BOOM LENGTH | UNDER CLEARANCE | OVERALL HEIGHT | RATED LOAD |
|--------|-----------------|-----------------|-----------------|------------------|
| 98760 | 6'-0" [1829mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 650 Lbs. 295 Kg. |
| 98761 | 6'-0" [1829mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 650 Lbs. 295 Kg. |
| 98762 | 7'-0" [2134mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 600 Lbs. 272 Kg. |
| 98763 | 7'-0" [2134mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 600 Lbs. 272 Kg. |
| 98764 | 8'-0" [2438mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 500 Lbs. 227 Kg. |
| 98765 | 8'-0" [2438mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 500 Lbs. 227 Kg. |
| 98766 | 9'-0" [2743mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 450 Lbs. 204 Kg. |
| 98767 | 9'-0" [2743mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 450 Lbs. 204 Kg. |
| 98768 | 10'-0" [3048mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 400 Lbs. 181 Kg. |
| 98769 | 10'-0" [3048mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 400 Lbs. 181 Kg. |
| 98770 | 11'-0" [3353mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 350 Lbs. 159 Kg. |
| 98771 | 11'-0" [3353mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 350 Lbs. 159 Kg. |
| 98772 | 12'-0" [3658mm] | 10'-0" [3048mm] | 13'-8" [4166mm] | 300 Lbs. 136 Kg. |
| 98773 | 12'-0" [3658mm] | 12'-0" [3658mm] | 15'-8" [4775mm] | 300 Lbs. 136 Kg. |
| 98774 | 13'-0" [3962mm] | 10'-0" [3048mm] | 13'-8" [4166mm] | 300 Lbs. 136 Kg. |
| 98775 | 13'-0" [3962mm] | 12'-0" [3658mm] | 15'-8" [4775mm] | 300 Lbs. 136 Kg. |
| 98776 | 14'-0" [4267mm] | 10'-0" [3048mm] | 13'-8" [4166mm] | 275 Lbs. 125 Kg. |
| 98777 | 14'-0" [4267mm] | 12'-0" [3658mm] | 15'-8" [4775mm] | 275 Lbs. 125 Kg. |
| 98778 | 15'-0" [4572mm] | 10'-0" [3048mm] | 14'-2" [4318mm] | 250 Lbs. 113 Kg. |
| 98779 | 15'-0" [4572mm] | 12'-0" [3658mm] | 16'-2" [4928mm] | 250 Lbs. 113 Kg. |
| 98780 | 16'-0" [4877mm] | 10'-0" [3048mm] | 14'-2" [4318mm] | 200 Lbs. 91 Kg. |
| 98781 | 16'-0" [4877mm] | 12'-0" [3658mm] | 16'-2" [4928mm] | 200 Lbs. 91 Kg. |
| 98782 | 17'-0" [5182mm] | 10'-0" [3048mm] | 14'-2" [4318mm] | 175 Lbs. 79 Kg. |
| 98783 | 17'-0" [5182mm] | 12'-0" [3658mm] | 16'-2" [4928mm] | 175 Lbs. 79 Kg. |
| 98784 | 18'-0" [5486mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 150 Lbs. 68 Kg. |
| 98785 | 18'-0" [5486mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 150 Lbs. 68 Kg. |
| 98786 | 19'-0" [5791mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 150 Lbs. 68 Kg. |
| 98787 | 19'-0" [5791mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 150 Lbs. 68 Kg. |
| 98788 | 20'-0" [6096mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 125 Lbs. 57 Kg. |
| 98789 | 20'-0" [6096mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 125 Lbs. 57 Kg. |

Note: Rated Loads above 550lbs require a Dual Hoist Trolley

ETA-4 TELESCOPING UNITS

RATED LOAD: BASED UPON STATIC LOAD TESTING AND CARRYING CAPACITY OF HIGH IMPACT WHEELS. TEST LOAD SHALL NOT BE MORE THAN 125% OF THE RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER. CRANE SHALL NOT BE LOADED BEYOND IT'S RATED LOAD CAPACITY EXCEPT FOR TEST PURPOSES.

NOTE:
FOR CONFIGURATIONS AND LOADS NOT SHOWN CONSULT FACTORY.

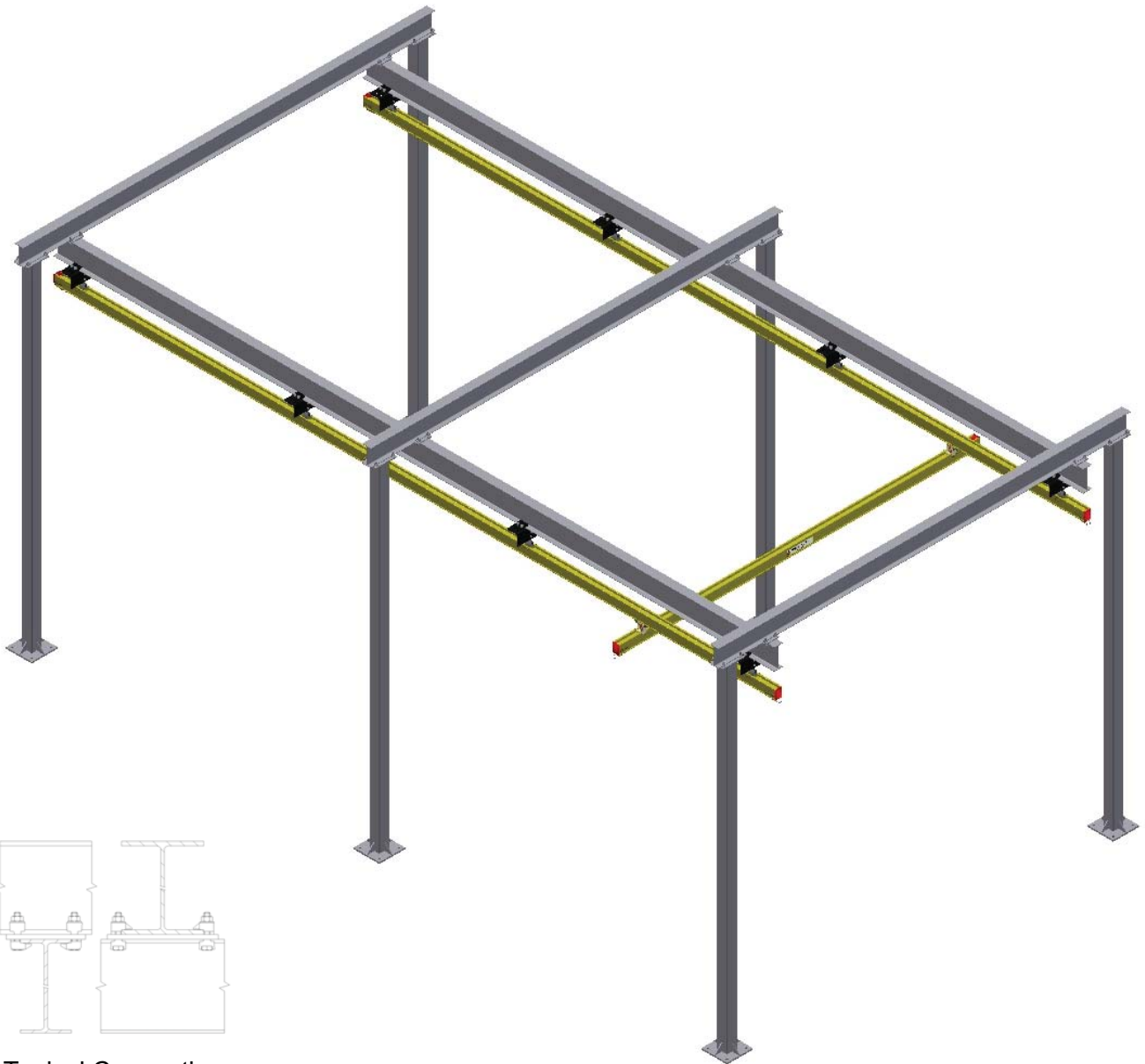


ETA-4 TELESCOPE UNIT

| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|----------|------|--------|------------|----------|------|--------|------------|----------|
| | | L/250 | L/450 | | | L/250 | L/450 | | | L/250 | L/450 |
| 18 | 24 in. | 200 lbs. | 200 lbs. | 30 | 24 in. | 265 lbs. | 265 lbs. | 36 | 24 in. | 285 lbs. | 250 lbs. |
| | 36 in. | 150 lbs. | 150 lbs. | 36 | 36 in. | 210 lbs. | 150 lbs. | 36 | 36 in. | 230 lbs. | 135 lbs. |
| | 48 in. | 120 lbs. | 105 lbs. | 48 | 48 in. | 170 lbs. | 90 lbs. | 48 | 48 in. | 155 lbs. | 85 lbs. |
| | | | | INCH | | | | INCH | | | |

ETA-4 TELESCOPE UNIT

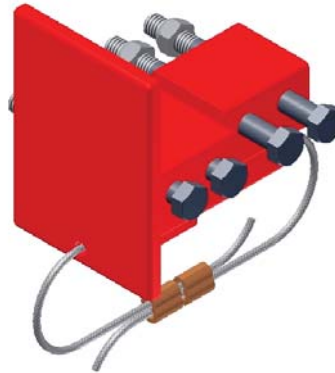
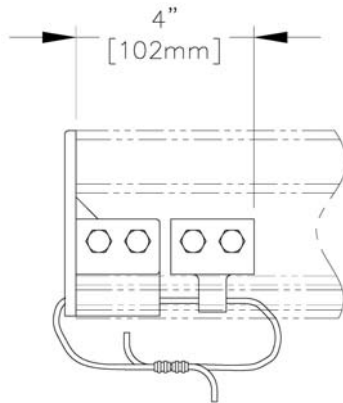
| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|--------|------|--------|------------|---------|------|--------|------------|---------|
| | | L/250 | L/450 | | | L/250 | L/450 | | | L/250 | L/450 |
| 457 | 610mm | 91 Kg. | 91 Kg. | 762 | 610mm | 120 Kg. | 120 Kg. | 914 | 610mm | 129 Kg. | 113 Kg. |
| | 914mm | 68 Kg. | 68 Kg. | 914 | 914mm | 95 Kg. | 68 Kg. | 914 | 914mm | 104 Kg. | 61 Kg. |
| | 1219mm | 54 Kg. | 48 Kg. | 1219 | 1219mm | 77 Kg. | 41 Kg. | 1219 | 1219mm | 70 Kg. | 39 Kg. |
| | | | | mm | | | | mm | | | |



Typical Connection

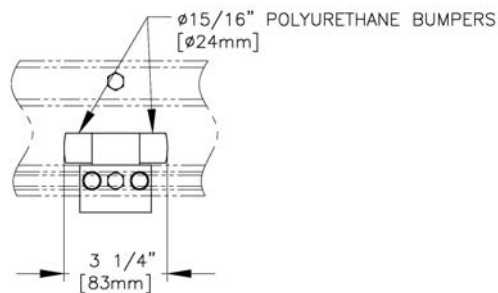
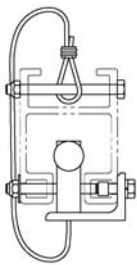
FREE STANDING FLOOR SUPPORT STRUCTURES

- Designed & engineered to each application.
- Floor supports do not require bracing to existing structures.
- P.E. certification optional.
- Paint to customer color specification.

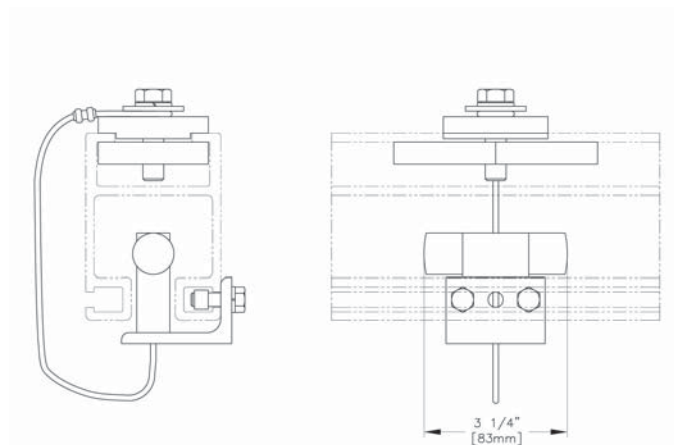


24900 ETA-4 POLY DOUBLE END CAP ASSEMBLY Weight 1 lb (.45kg)

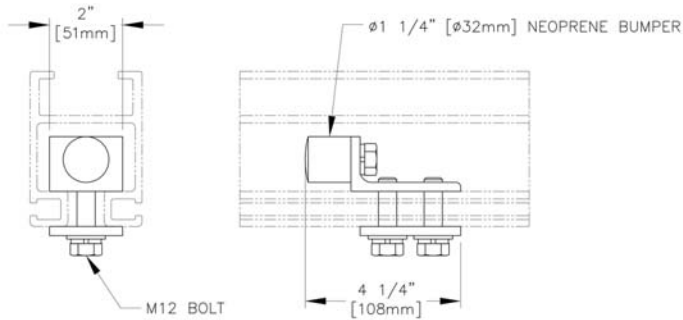
- Double End Stops for added safety are standard
- For Single End Stop replacement parts see ETA Parts Manual



25575 ETA-4/5 INSERTABLE MID-RAIL STOP ASSEMBLY Weight: 1 lb (.45 kg)

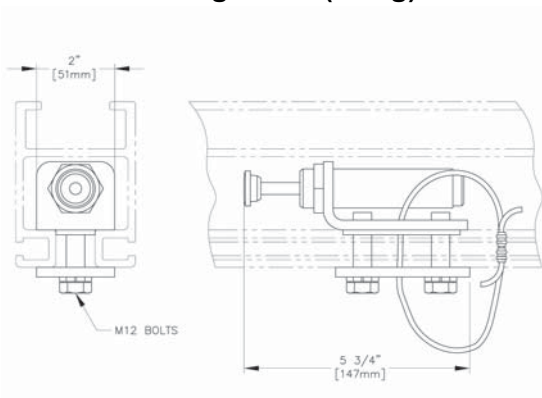


25577 ETA-4/5 ADJUSTABLE INSERTABLE MID-RAIL STOP ASSEMBLY
Weight: 2 lbs. (.90 kg)



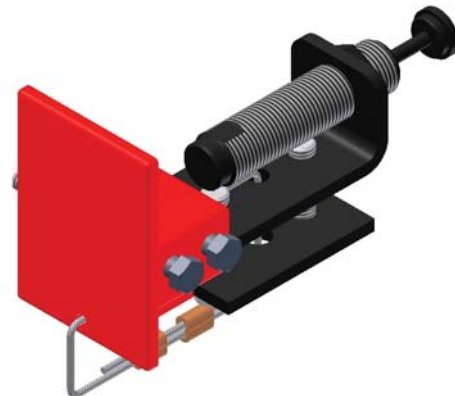
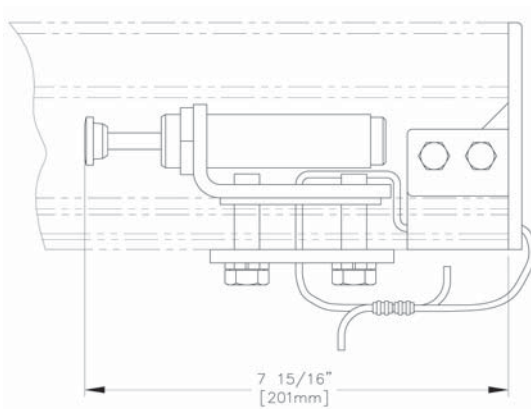
25580 ETA-4/5 MID-STOP ASSEMBLY

■ Weight 1 lb (0.4kg)



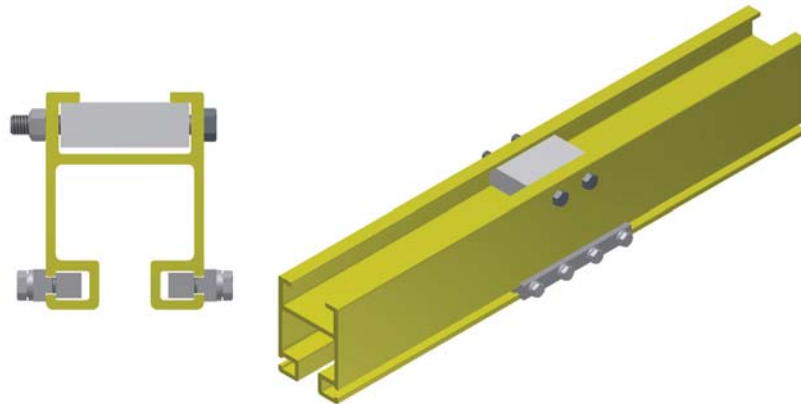
25185 ETA-4/5 POSITION STOP SHOCK ABSORBER ASSEMBLY

■ Weight: 2 lbs. (0.9kg)

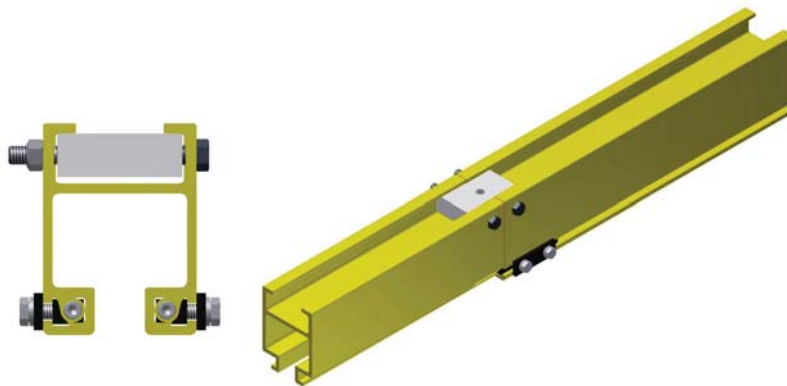


25133 ETA-4 END STOP SHOCK ABSORBER ASSEMBLY

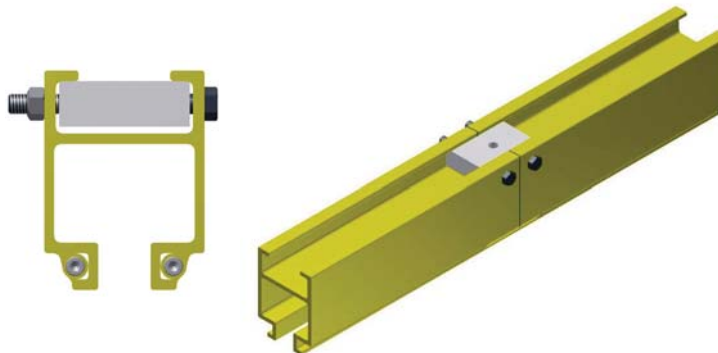
■ Weight: 3 lbs. (1.3kg)



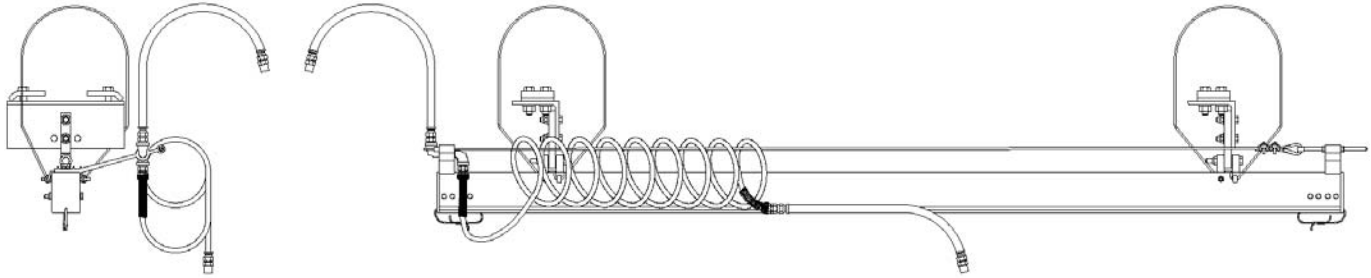
25514 ETA-4/5 BOLTED SPLICE ASSEMBLY
28050 ETA-4/5 BOLTED SPLICE BAR KIT (DOES NOT INCLUDE TOP BLOCK)



25559 ETA-4 TRANSITION SPLICE ASSEMBLY
FOR OLD RAIL TO NEW RAIL



25530 ETA-4 OLD RAIL SPLICE ASSEMBLY



RUNWAY AIR FESTOONING

RUNWAY AIR FESTOON KIT

Features

- Two Blue Whip Hoses x 36" (914mm)
- Blue Coiled Hose
- Two ETA Festoon Brackets
- 1/4" Nylon Coated Cable Assembly

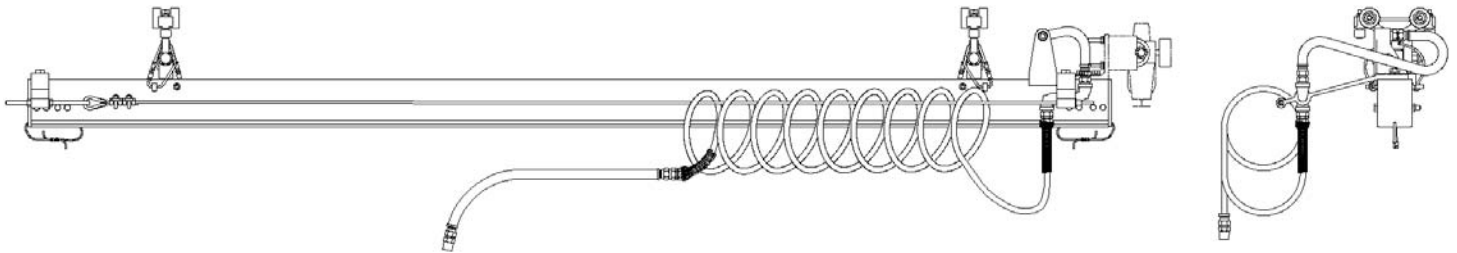
Part Number

■ 1/2" Hose Kits

- **29105** 5'-0" (1.5m) Long Runway Air Festoon Kit
- **29110** 10'-0" (3.0m) Long Runway Air Festoon Kit
- **29115** 15'-0" (4.5m) Long Runway Air Festoon Kit
- **29120** 20'-0" (6.0m) Long Runway Air Festoon Kit
- **29125** 25'-0" (7.6m) Long Runway Air Festoon Kit
- **29130** 30'-0" (9.1m) Long Runway Air Festoon Kit
- **29135** 35'-0" (10.6m) Long Runway Air Festoon Kit
- **29140** 40'-0" (12.1m) Long Runway Air Festoon Kit
- **29145** 45'-0" (13.7m) Long Runway Air Festoon Kit
- **29150** 50'-0" (15.2m) Long Runway Air Festoon Kit
- **29155** 55'-0" (16.7m) Long Runway Air Festoon Kit
- **29160** 60'-0" (18.2m) Long Runway Air Festoon Kit
- **29165** 65'-0" (19.8m) Long Runway Air Festoon Kit
- **29170** 70'-0" (21.3m) Long Runway Air Festoon Kit
- **29175** 75'-0" (22.8m) Long Runway Air Festoon Kit
- **29180** 80'-0" (24.3m) Long Runway Air Festoon Kit
- **29185** 85'-0" (25.9m) Long Runway Air Festoon Kit
- **29190** 90'-0" (27.4m) Long Runway Air Festoon Kit
- **29195** 95'-0" (28.9m) Long Runway Air Festoon Kit
- **29200** 100'-0" (30.4m) Long Runway Air Festoon Kit

■ 3/4" Hose Kits

- **29205** 5'-0" (1.5m) Long Runway Air Festoon Kit
- **29210** 10'-0" (3.0m) Long Runway Air Festoon Kit
- **29215** 15'-0" (4.5m) Long Runway Air Festoon Kit
- **29220** 20'-0" (6.0m) Long Runway Air Festoon Kit
- **29225** 25'-0" (7.6m) Long Runway Air Festoon Kit
- **29230** 30'-0" (9.1m) Long Runway Air Festoon Kit
- **29235** 35'-0" (10.6m) Long Runway Air Festoon Kit
- **29240** 40'-0" (12.1m) Long Runway Air Festoon Kit
- **29245** 45'-0" (13.7m) Long Runway Air Festoon Kit
- **29250** 50'-0" (15.2m) Long Runway Air Festoon Kit
- **29255** 55'-0" (16.7m) Long Runway Air Festoon Kit
- **29260** 60'-0" (18.2m) Long Runway Air Festoon Kit
- **29265** 65'-0" (19.8m) Long Runway Air Festoon Kit
- **29270** 70'-0" (21.3m) Long Runway Air Festoon Kit
- **29275** 75'-0" (22.8m) Long Runway Air Festoon Kit
- **29280** 80'-0" (24.3m) Long Runway Air Festoon Kit
- **29285** 85'-0" (25.9m) Long Runway Air Festoon Kit
- **29290** 90'-0" (27.4m) Long Runway Air Festoon Kit
- **29295** 95'-0" (28.9m) Long Runway Air Festoon Kit
- **29300** 100'-0" (30.4m) Long Runway Air Festoon Kit



BRIDGE AIR FESTOONING

BRIDGE AIR FESTOON KIT

Features

- Two Blue Whip Hoses x 36" (914mm)
- Blue Coiled Hose
- Two ETA Festoon Brackets
- One Air Hose Connector Bracket
- 1/4" Nylon Coated Cable with Hardware

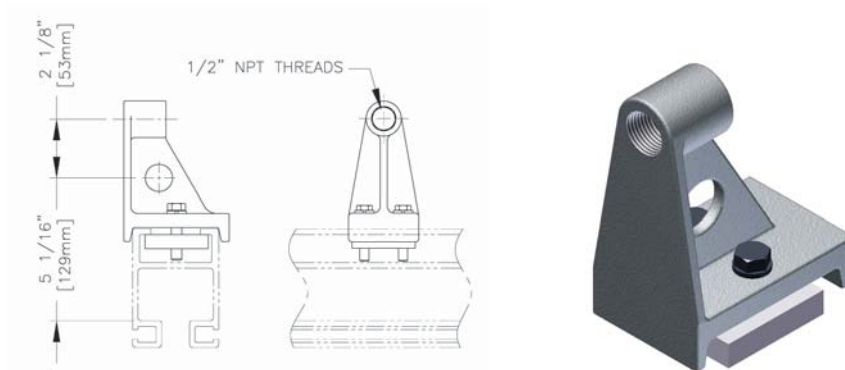
Options

- FR Assembly
- FRL Assembly
- Lockout

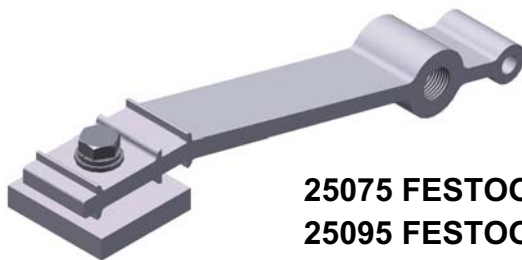
Part Number

- **29305** 5'-0" (1.5m) Long 1/2" Bridge Air Festoon Kit
- **29310** 10'-0" (3.0m) Long 1/2" Bridge Air Festoon Kit
- **29315** 15'-0" (4.5m) Long 1/2" Bridge Air Festoon Kit
- **29320** 20'-0" (6.0m) Long 1/2" Bridge Air Festoon Kit
- **29325** 25'-0" (7.6m) Long 1/2" Bridge Air Festoon Kit
- **29330** 30'-0" (9.1m) Long 1/2" Bridge Air Festoon Kit
- **29335** 35'-0" (10.6m) Long 1/2" Bridge Air Festoon Kit
- **29340** 40'-0" (12.1m) Long 1/2" Bridge Air Festoon Kit

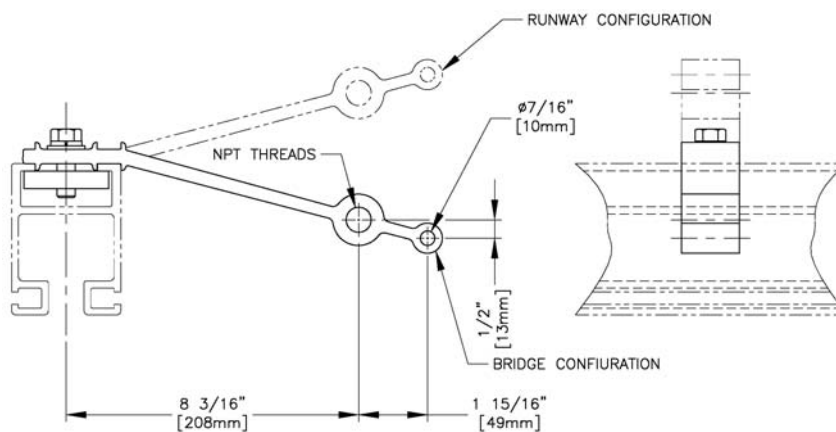
- **29405** 5'-0" (1.5m) Long 3/4" Bridge Air Festoon Kit
- **29410** 10'-0" (3.0m) Long 3/4" Bridge Air Festoon Kit
- **29415** 15'-0" (4.5m) Long 3/4" Bridge Air Festoon Kit
- **29420** 20'-0" (6.0m) Long 3/4" Bridge Air Festoon Kit
- **29425** 25'-0" (7.6m) Long 3/4" Bridge Air Festoon Kit
- **29430** 30'-0" (9.1m) Long 3/4" Bridge Air Festoon Kit
- **29435** 35'-0" (10.6m) Long 3/4" Bridge Air Festoon Kit
- **29440** 40'-0" (12.1m) Long 3/4" Bridge Air Festoon Kit



25290 1/2" AIR HOSE CONNECTOR BRACKET ASSEMBLY
25065 3/4" AIR HOSE CONNECTOR BRACKET ASSEMBLY



25075 FESTOON BRACKET ASSEMBLY 1/2" NPT
25095 FESTOON BRACKET ASSEMBLY 3/4" NPT



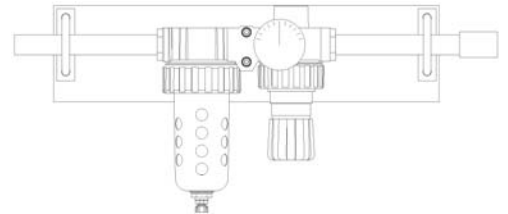
25815 ETA ELECTRIC FESTOON ANCHOR PLATE





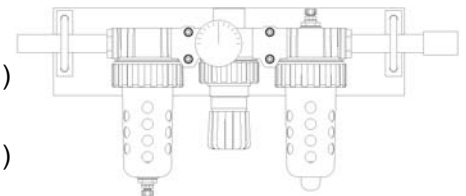
FILTER REGULATORS

- **25503** FR Assembly 1/2" Air Supply (Parker Standard)
- **25516** FR Assembly 1/2" Air Supply includes Manual Lockout (SMC Optional)
- **25517** FR Assembly 3/4" Air Supply (Parker Standard)
- **25518** FR Assembly 3/4" Air Supply includes Manual Lockout (SMC Optional)



FILTER REGULATOR LUBRICATORS

- **25500** FRL Assembly 1/2" Air Supply (Parker Standard)
- **25519** FRL Assembly 1/2" Air Supply includes Manual Lockout (SMC Optional)
- **25521** FRL Assembly 3/4" Air Supply (Parker Standard)
- **25522** FRL Assembly 3/4" Air Supply includes Manual Lockout (SMC Optional)



MANUAL LOCKOUTS

- **25523** Manual Lockout 1/2" Air Supply (Parker Standard)
- **25524** Manual Lockout 1/2" Air Supply (SMC Optional)
- **78107** Manual Lockout 3/4" Air Supply (Parker Standard)
- **78108** Manual Lockout 3/4" Air Supply (SMC Optional)



(Parker Standard)

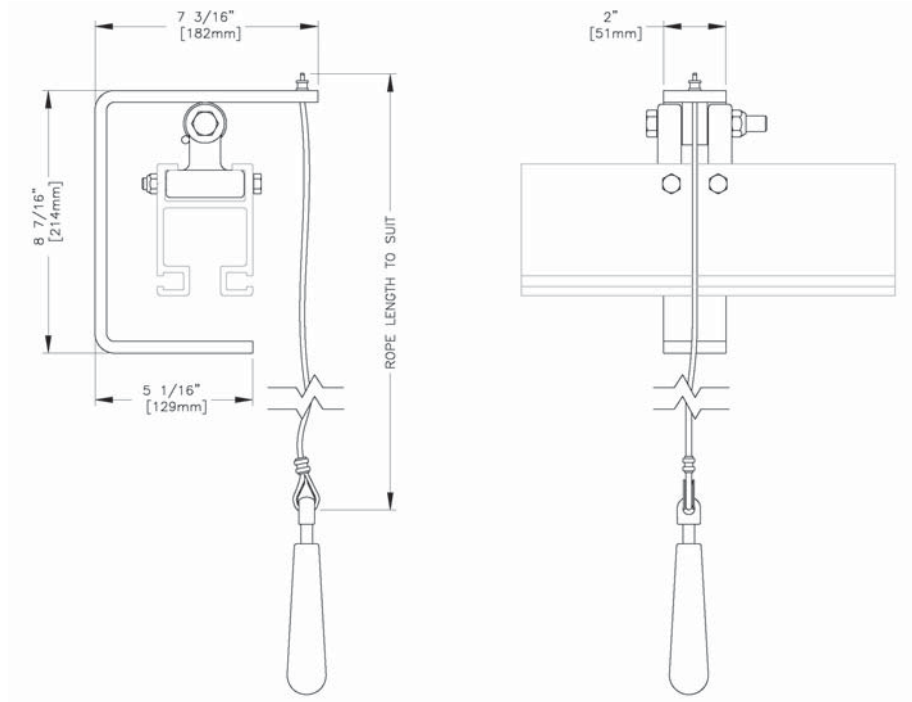
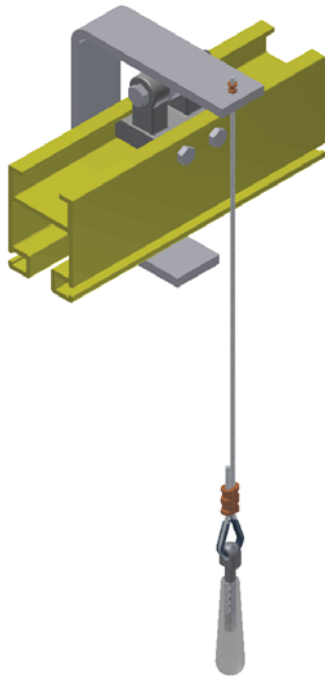


(SMC Optional)

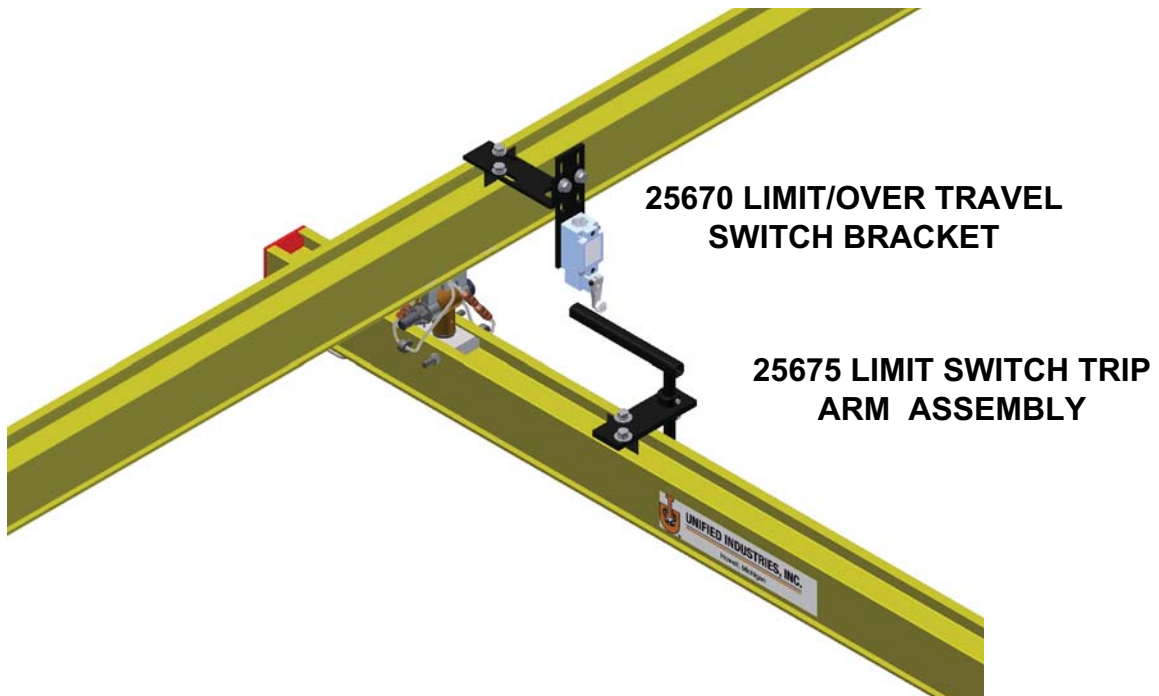
ELECTRIC JUNCTION BOX

- **25665** Electric Junction Box
- **67000** 4-Wire 12 ga. Flatwire Electric Cable (per foot)





27066 BY-PASS ASSEMBLY



25677 OVER TRAVEL SWITCH ASSEMBLY

- Limit switch not included

UNIFIED DROP ANGLE KITS



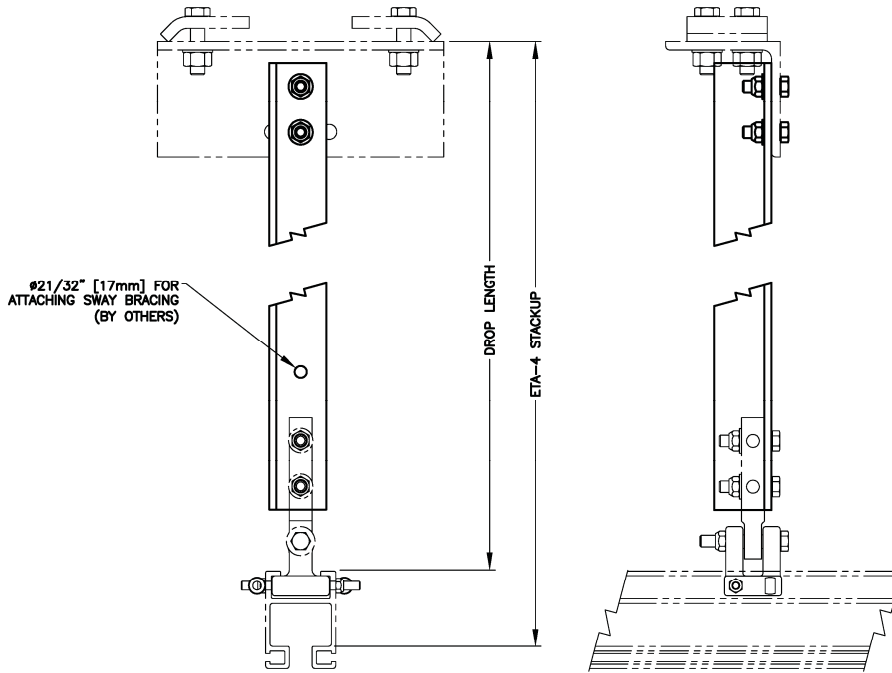
Beam Hanger

- Rated Load 2,000lbs (908kg)
- Beam Hanger sold separately
- Drop Angle Lengths 1'-2" (355mm) to 6'-0" (1829mm) require a cable hole
- Drop Angle Lengths 2'-0" (610mm) to 6'-0" (1829mm) require knee braces in both directions
- Knee Bracing by others
- Drops of 8" (203mm) to 11" (280mm) Consult Engineering



Adjustable Hanger

- Rated Load 1,500lbs (680kg)
- Adjustable Hanger sold separately
- Drop Angle Lengths 1'-2" (355mm) to 6'-0" (1829mm) require a cable hole
- Drop Angle Lengths 2'-0" (610mm) to 6'-0" (1829mm) require knee braces in both directions
- Knee Bracing by others
- Drops of 8" (203mm) to 11" (280mm) Consult Engineering

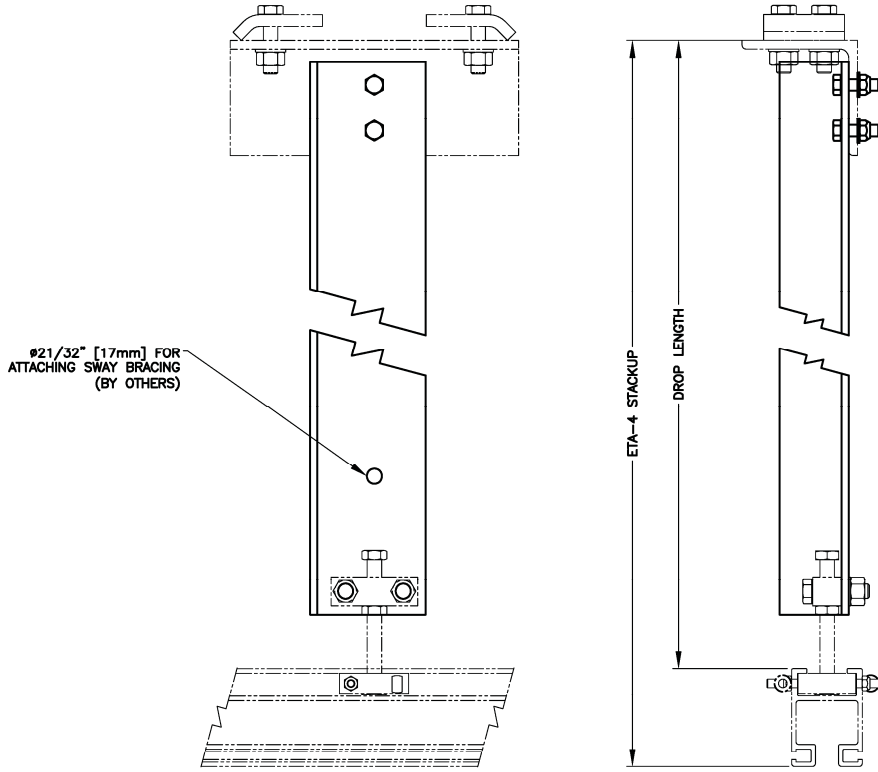


NOTE:
RATED LOAD 2000 LBS [907 Kg].

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-4 STACKUP | |
|------------|-------------------|-------------|--------|---------------|--------|
| 28700 | 75101 | 1'-0" | 305mm | 1'-3 5/16" | 389mm |
| | | 1'-1" | 330mm | 1'-4 5/16" | 414mm |
| | | 1'-2" | 356mm | 1'-5 5/16" | 440mm |
| | | 1'-3" | 381mm | 1'-6 5/16" | 465mm |
| | | 1'-4" | 406mm | 1'-7 5/16" | 491mm |
| | | 1'-5" | 432mm | 1'-8 5/16" | 516mm |
| | | 1'-6" | 457mm | 1'-9 5/16" | 542mm |
| | | 1'-7" | 483mm | 1'-10 5/16" | 567mm |
| | | 1'-8" | 508mm | 1'-11 5/16" | 593mm |
| | | 1'-9" | 533mm | 2'-0 5/16" | 618mm |
| | | 1'-10" | 559mm | 2'-1 5/16" | 643mm |
| | | 1'-11" | 584mm | 2'-2 5/16" | 668mm |
| 28701 | 75102 | 2'-0" | 610mm | 2'-3 5/16" | 694mm |
| | | 2'-1" | 635mm | 2'-4 5/16" | 719mm |
| | | 2'-2" | 660mm | 2'-5 5/16" | 745mm |
| | | 2'-3" | 686mm | 2'-6 5/16" | 770mm |
| | | 2'-4" | 711mm | 2'-7 5/16" | 795mm |
| | | 2'-5" | 737mm | 2'-8 5/16" | 821mm |
| | | 2'-6" | 762mm | 2'-9 5/16" | 846mm |
| | | 2'-7" | 787mm | 2'-10 5/16" | 872mm |
| | | 2'-8" | 813mm | 2'-11 5/16" | 897mm |
| | | 2'-9" | 838mm | 3'-0 5/16" | 922mm |
| | | 2'-10" | 864mm | 3'-1 5/16" | 948mm |
| | | 2'-11" | 889mm | 3'-2 5/16" | 973mm |
| 28702 | 75103 | 3'-0" | 914mm | 3'-3 5/16" | 999mm |
| | | 3'-1" | 940mm | 3'-4 5/16" | 1024mm |
| | | 3'-2" | 965mm | 3'-5 5/16" | 1049mm |
| | | 3'-3" | 991mm | 3'-6 5/16" | 1075mm |
| | | 3'-4" | 1016mm | 3'-7 5/16" | 1100mm |
| | | 3'-5" | 1041mm | 3'-8 5/16" | 1126mm |
| | | 3'-6" | 1067mm | 3'-9 5/16" | 1151mm |

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-4 STACKUP | |
|------------|-------------------|-------------|--------|---------------|--------|
| 28702 | 75103 | 3'-7" | 1092mm | 3'-10 5/16" | 1176mm |
| | | 3'-8" | 1118mm | 3'-11 5/16" | 1202mm |
| | | 3'-9" | 1143mm | 4'-0 5/16" | 1227mm |
| | | 3'-10" | 1168mm | 4'-1 5/16" | 1253mm |
| | | 3'-11" | 1194mm | 4'-2 5/16" | 1278mm |
| | | 4'-0" | 1219mm | 4'-3 5/16" | 1303mm |
| 28703 | 75104 | 4'-1" | 1245mm | 4'-4 5/16" | 1329mm |
| | | 4'-2" | 1270mm | 4'-5 5/16" | 1354mm |
| | | 4'-3" | 1295mm | 4'-6 5/16" | 1380mm |
| | | 4'-4" | 1321mm | 4'-7 5/16" | 1405mm |
| | | 4'-5" | 1346mm | 4'-8 5/16" | 1430mm |
| | | 4'-6" | 1372mm | 4'-9 5/16" | 1456mm |
| | | 4'-7" | 1397mm | 4'-10 5/16" | 1481mm |
| | | 4'-8" | 1422mm | 4'-11 5/16" | 1507mm |
| | | 4'-9" | 1448mm | 5'-0 5/16" | 1532mm |
| | | 4'-10" | 1473mm | 5'-1 5/16" | 1557mm |
| | | 4'-11" | 1499mm | 5'-2 5/16" | 1583mm |
| | | 5'-0" | 1524mm | 5'-3 5/16" | 1608mm |
| 28704 | 75105 | 5'-1" | 1549mm | 5'-4 5/16" | 1634mm |
| | | 5'-2" | 1575mm | 5'-5 5/16" | 1659mm |
| | | 5'-3" | 1600mm | 5'-6 5/16" | 1684mm |
| | | 5'-4" | 1626mm | 5'-7 5/16" | 1708mm |
| | | 5'-5" | 1651mm | 5'-8 5/16" | 1735mm |
| | | 5'-6" | 1676mm | 5'-9 5/16" | 1761mm |
| | | 5'-7" | 1702mm | 5'-10 5/16" | 1786mm |
| | | 5'-8" | 1727mm | 5'-11 5/16" | 1811mm |
| | | 5'-9" | 1753mm | 6'-0 5/16" | 1837mm |
| | | 5'-10" | 1778mm | 6'-1 5/16" | 1862mm |
| | | 5'-11" | 1803mm | 6'-2 5/16" | 1888mm |
| | | 6'-0" | 1829mm | 6'-3 5/16" | 1913mm |

*Beam Hanger with safety cable sold separately



NOTES:
 RATED LOAD 1500 LBS [680 Kg].

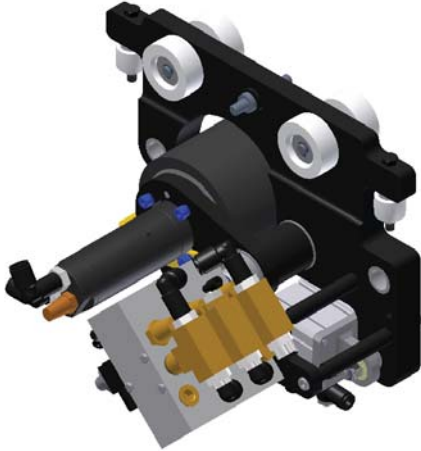
| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-4 STACKUP | |
|------------|-------------------|-------------|-------------|---------------|-------------|
| | | Drop Length | Drop Length | Drop Length | Drop Length |
| 28710 | 75111 | 9" | 229mm | 1'-0 5/16" | 313mm |
| | | 10" | 254mm | 1'-1 5/16" | 338mm |
| | | 11" | 279mm | 1'-2 5/16" | 364mm |
| 28711 | 75112 | 1'-0" | 305mm | 1'-3 5/16" | 389mm |
| | | 1'-1" | 330mm | 1'-4 5/16" | 414mm |
| | | 1'-2" | 356mm | 1'-5 5/16" | 440mm |
| | | 1'-3" | 381mm | 1'-6 5/16" | 465mm |
| | | 1'-4" | 406mm | 1'-7 5/16" | 491mm |
| | | 1'-5" | 432mm | 1'-8 5/16" | 516mm |
| | | 1'-6" | 457mm | 1'-9 5/16" | 542mm |
| | | 1'-7" | 483mm | 1'-10 5/16" | 567mm |
| | | 1'-8" | 508mm | 1'-11 5/16" | 593mm |
| | | 1'-9" | 533mm | 2'-0 5/16" | 618mm |
| | | 1'-10" | 559mm | 2'-1 5/16" | 643mm |
| | | 1'-11" | 584mm | 2'-2 5/16" | 668mm |
| | | 2'-0" | 610mm | 2'-3 5/16" | 694mm |
| | | 2'-1" | 635mm | 2'-4 5/16" | 719mm |
| | | 2'-2" | 660mm | 2'-5 5/16" | 745mm |
| | | 2'-3" | 686mm | 2'-6 5/16" | 770mm |
| | | 2'-4" | 711mm | 2'-7 5/16" | 795mm |
| | | 28712 | 75113 | 2'-5" | 737mm |
| 2'-6" | 762mm | | | 2'-9 5/16" | 846mm |
| 2'-7" | 787mm | | | 2'-10 5/16" | 872mm |
| 2'-8" | 813mm | | | 2'-11 5/16" | 897mm |
| 2'-9" | 838mm | | | 3'-0 5/16" | 922mm |
| 2'-10" | 864mm | | | 3'-1 5/16" | 948mm |
| 2'-11" | 889mm | | | 3'-2 5/16" | 973mm |
| 3'-0" | 914mm | | | 3'-3 5/16" | 999mm |
| 3'-1" | 940mm | | | 3'-4 5/16" | 1024mm |
| 3'-2" | 965mm | | | 3'-5 5/16" | 1049mm |
| 3'-3" | 991mm | | | 3'-6 5/16" | 1075mm |
| 28713 | 75114 | 3'-4" | 1016mm | 3'-7 5/16" | 1100mm |

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-4 STACKUP | |
|------------|-------------------|-------------|-------------|---------------|-------------|
| | | Drop Length | Drop Length | Drop Length | Drop Length |
| 28713 | 75114 | 3'-5" | 1041mm | 3'-8 5/16" | 1126mm |
| | | 3'-6" | 1067mm | 3'-9 5/16" | 1151mm |
| | | 3'-7" | 1092mm | 3'-10 5/16" | 1176mm |
| | | 3'-8" | 1118mm | 3'-11 5/16" | 1202mm |
| | | 3'-9" | 1143mm | 4'-0 5/16" | 1227mm |
| | | 3'-10" | 1168mm | 4'-1 5/16" | 1253mm |
| | | 3'-11" | 1194mm | 4'-2 5/16" | 1278mm |
| | | 4'-0" | 1219mm | 4'-3 5/16" | 1303mm |
| | | 4'-1" | 1245mm | 4'-4 5/16" | 1329mm |
| | | 4'-2" | 1270mm | 4'-5 5/16" | 1354mm |
| 28714 | 75115 | 4'-3" | 1295mm | 4'-6 5/16" | 1380mm |
| | | 4'-4" | 1321mm | 4'-7 5/16" | 1405mm |
| | | 4'-5" | 1346mm | 4'-8 5/16" | 1430mm |
| | | 4'-6" | 1372mm | 4'-9 5/16" | 1456mm |
| | | 4'-7" | 1397mm | 4'-10 5/16" | 1481mm |
| | | 4'-8" | 1422mm | 4'-11 5/16" | 1507mm |
| | | 4'-9" | 1448mm | 5'-0 5/16" | 1532mm |
| | | 4'-10" | 1473mm | 5'-1 5/16" | 1557mm |
| | | 4'-11" | 1499mm | 5'-2 5/16" | 1583mm |
| | | 5'-0" | 1524mm | 5'-3 5/16" | 1608mm |
| 28715 | 75116 | 5'-1" | 1549mm | 5'-4 5/16" | 1634mm |
| | | 5'-2" | 1575mm | 5'-5 5/16" | 1659mm |
| | | 5'-3" | 1600mm | 5'-6 5/16" | 1684mm |
| | | 5'-4" | 1626mm | 5'-7 5/16" | 1708mm |
| | | 5'-5" | 1651mm | 5'-8 5/16" | 1735mm |
| | | 5'-6" | 1676mm | 5'-9 5/16" | 1761mm |
| | | 5'-7" | 1702mm | 5'-10 5/16" | 1786mm |
| | | 5'-8" | 1727mm | 5'-11 5/16" | 1811mm |
| | | 5'-9" | 1753mm | 6'-0 5/16" | 1837mm |
| | | 5'-10" | 1778mm | 6'-1 5/16" | 1862mm |
| 5'-11" | 1803mm | 6'-2 5/16" | 1888mm | | |
| 6'-0" | 1829mm | 6'-3 5/16" | 1913mm | | |

*Adjustable Hanger with safety cable sold separately

UNIFIED AIR TRACTOR

The lube free air tractor was developed to be a compact, and reliable alternative to those large air tractors most companies are familiar with.



Features

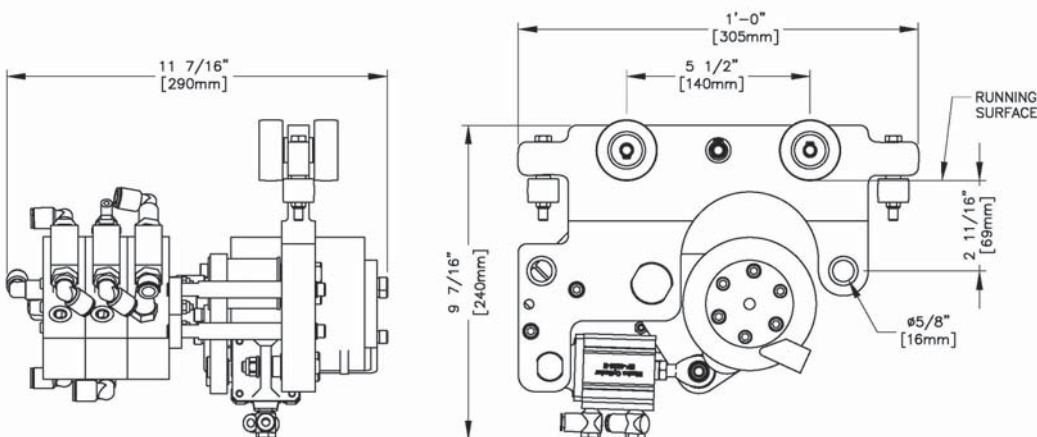
- Lightweight and Compact
- Lube Free Air Motor
- Maintenance Friendly Design
- Quick Delivery, Excellent Pricing

Control Package Options:

- C1 = SMC Control Pack w/Fwd/Rev 2-Button Control Pendant.
- C2 = SMC Control Pack Only. (Requires main air connection + Fwd/Rev signals)
- C3 = Base Tractor Only. No Control valves.
- C4 = SMC Control Pack w/4-Button Control Pendant (Fwd/Rev + ?/?)

Part Number

- **UAT-NB-C(x)-ETA4** Air Tractor to run on ETA-4/5 rail. Specify control pack above. Weight 30 lbs (15kg)
- **25682** ETA-4/5 Tractor Tow Bar-Hitch
- **60315** Replacement Drive Wheel



Proper Tractor Operation: Tractor must come to a complete stop before it can be engaged in the opposite direction. If this process is not followed, damage to the Tractor will occur and the warranty will be void.

Designed for a working plant air pressure of: 87-102psi (600-700kPA)

***NB = No Brake**



UNIFIED AIR BALANCER

A proven ergonomic lifting and positioning device



- **Capacities** up to 485lbs. (220kg) single reeve - 1940lbs. (880kg) tandem reeved.
- **Safety** overload limit and check valve in case of loss of air supply.
- **Energy Efficient** only a fraction of a CFM per cycle required when compared to a pneumatic hoist.
- **Robust** precision mechanical design & powder coated housing ensures trouble free extended service life.
- Uses non-lubricated air, assures clean environment.
- Ideal for ergonomic handling applications and suspension of tools, weld guns & fixtures.
- All Non-Reeved balancers come equipped with a 25'-6" (9m) cable.

Control Styles

UBB = Basic Balancer with no controls

UAB = Balancer with Up/Down controls

UZB = Balancer with Zero G

| Model # | Weight Capacity/Lift | Air Consumption |
|---------|-------------------------------|-------------------|
| U_B-132 | 132lbs (60kg)/79in (2000mm) | .5 CFM(.85CMH) |
| U_B-220 | 220lbs (100kg)/118in (3000mm) | 1.3 CFM(2.21CMH) |
| U_B-331 | 331lbs (150kg)/79in (2000mm) | 1.3 CFM(2.21CMH) |
| U_B-485 | 485lbs (220kg)/79in (2000mm) | 1.9 CFM(3.23 CMH) |

- Wire Rope Units (Air Pressure 7kgf/cm²) (100 PSI)

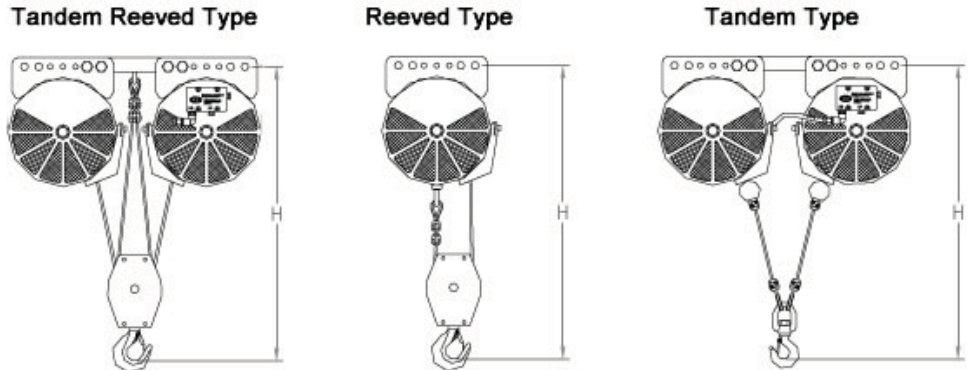
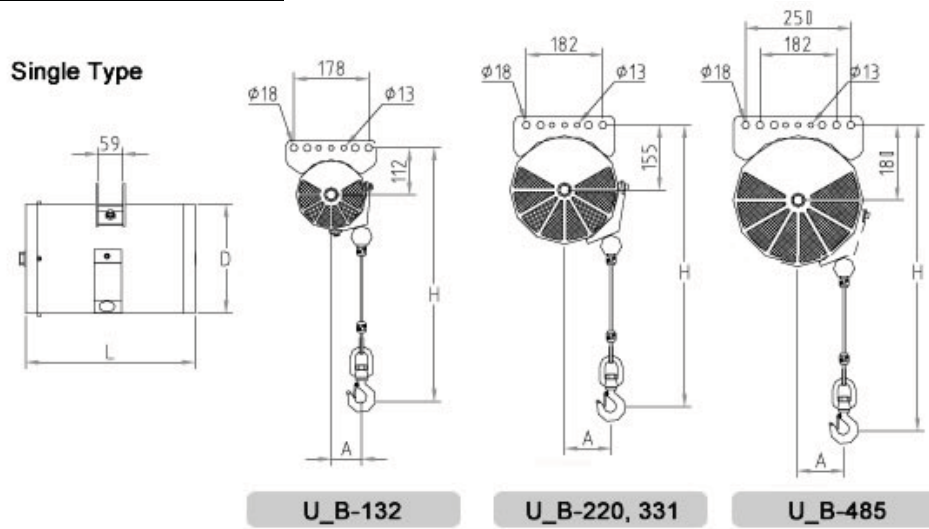
Optional Accessories

| Part # | Description |
|--------|-------------------------------------------------------------------------------|
| 99025 | Up/Down Manifold |
| 99026 | Up/Down Control Kit—Includes Manifold, 12ft (3.65m) Hose and 2-button pendant |
| 99100 | Top Hook Assembly |



Single Type

| Model | "A" Dimension |
|---------|---------------------|
| U_B-132 | 2.83 inch (72mm) |
| U_B-220 | 4.35 inch (110.5mm) |
| U_B-331 | 2.83 inch (72mm) |
| U_B-485 | 2.83 inch (72mm) |



Single Balancer

| Model # | Capacity | | Lift | | D x L | | H | | Net Weight | | CFM (per cycle) |
|-------------|----------|-----|------|------|---------------|-----------|----|-----|------------|------|--------------------|
| | lbs | kg | in | mm | in | mm | in | mm | lbs | kg | |
| U_B-132-079 | 132 | 60 | 79 | 2000 | 6.1 x 15.43 | 155 x 392 | 23 | 600 | 51 | 23 | .5 |
| U_B-220-118 | 220 | 100 | 118 | 3000 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 94 | 42.5 | 1.3 |
| U_B-331-079 | 331 | 150 | 79 | 2000 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 105 | 47 | 1.3 |
| U_B-485-079 | 485 | 220 | 79 | 2000 | 12.21 x 15.75 | 310 x 400 | 30 | 750 | 110 | 50 | 1.9 |

Reeved Balancer (R) Tandem Balancer (T) Tandem-Reeved Balancer (TR)

| Model # | Capacity | | Lift | | D x L | | H | | Net Weight | |
|---------------|----------|-----|------|------|-----------------|-----------|----|-----|------------|-----|
| | lbs | kg | in | mm | in | mm | in | mm | lbs | kg |
| U_B-440-59R | 440 | 200 | 59 | 1500 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 104 | 47 |
| U_B-440-118T | 440 | 200 | 118 | 3000 | 2-10.24 x 15.76 | 260 x 400 | 28 | 700 | 203 | 92 |
| U_B-662-39R | 662 | 300 | 39 | 1000 | 10.24 x 15.77 | 260 x 400 | 28 | 700 | 99 | 45 |
| U_B-661-79T | 662 | 300 | 79 | 2000 | 2-10.24 x 15.78 | 260 x 400 | 28 | 700 | 198 | 90 |
| U_B-970-39R | 970 | 440 | 39 | 1000 | 12.21 x 15.75 | 310 x 400 | 30 | 750 | 124 | 56 |
| U_B-970-79T | 970 | 440 | 79 | 2000 | 2-12.21 x 15.75 | 310 x 400 | 30 | 750 | 243 | 110 |
| U_B-882-59TR | 882 | 400 | 59 | 1500 | 2-10.24 x 15.78 | 260 x 400 | 28 | 700 | 209 | 95 |
| U_B-1323-39TR | 1323 | 600 | 39 | 1000 | 2-10.24 x 15.79 | 260 x 400 | 28 | 700 | 203 | 92 |
| U_B-1940-39TR | 1940 | 880 | 39 | 1000 | 2-12.21 x 15.75 | 310 x 400 | 30 | 750 | 254 | 115 |

CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 125% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

***All dimensions are reference only
and need to be verified with factory.**





UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

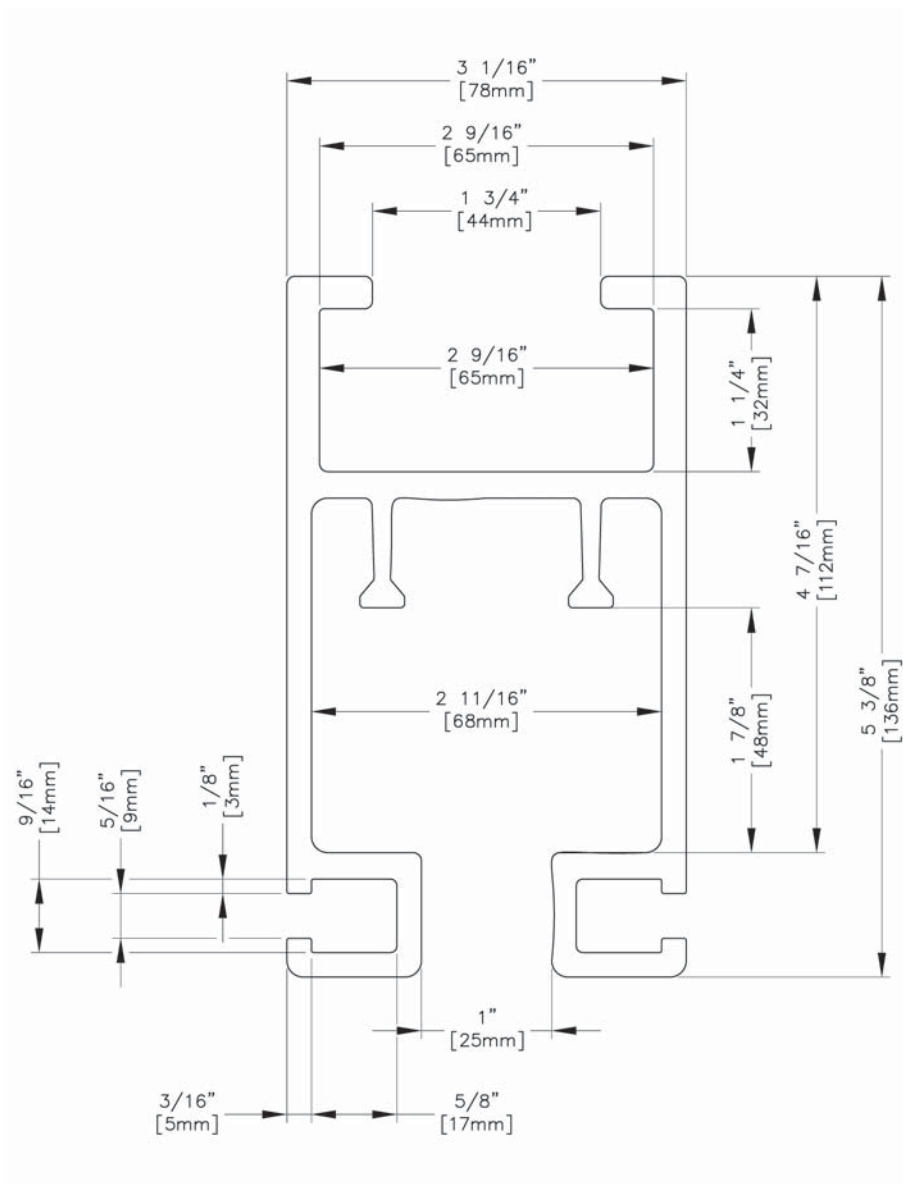
ETA-5 RAIL SYSTEMS





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| ETA-5 Rail Load Charts..... | 5-6 |
| ETA-4 & ETA-5 Hangers..... | 7-10 |
| ETA-5 Inspection Gate | 11 |
| ETA-4 & ETA-5 Load Trolleys..... | 12-15 |
| ETA-4 & ETA-5 Festoon Trolley..... | 16-19 |
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***All dimensions are reference only
and need to be verified with factory.**



**ETA-5 RAIL PROFILE
(87025)**

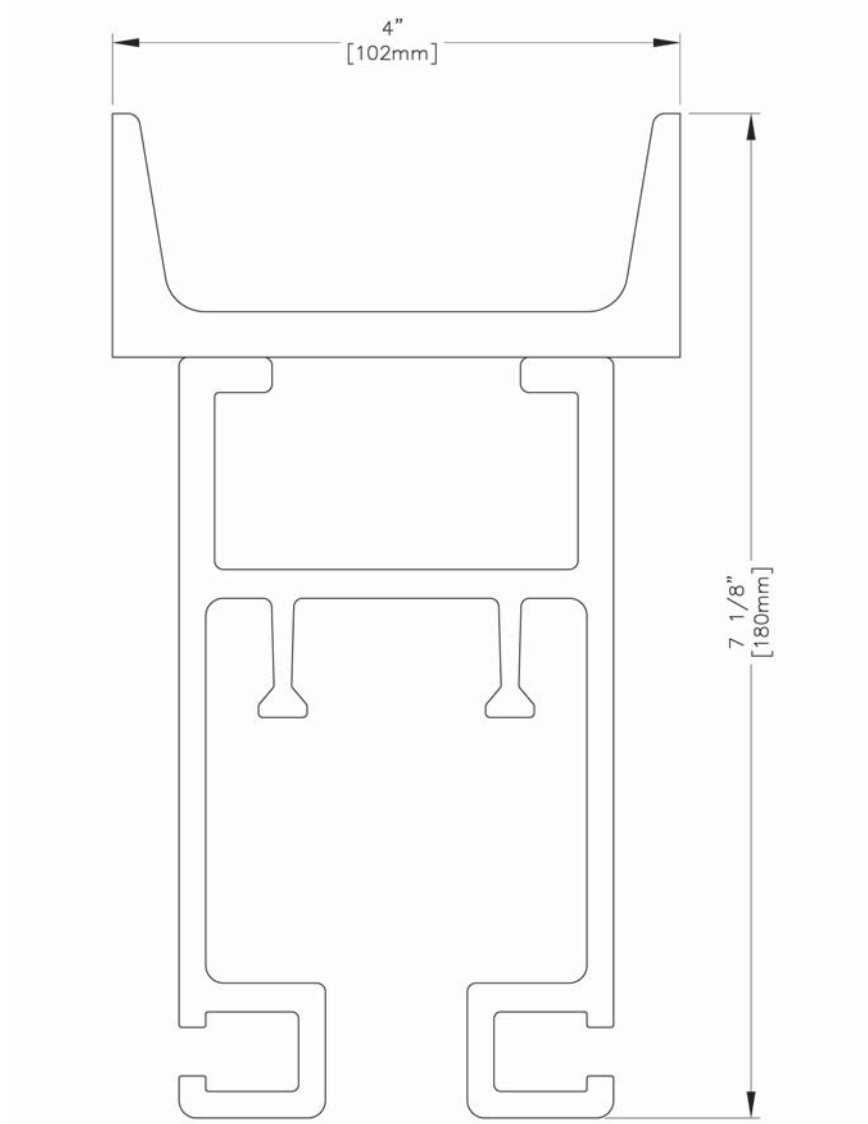
Part Number:

ETA5RW 08

Length of Rail in Feet (08 = 8 Feet)

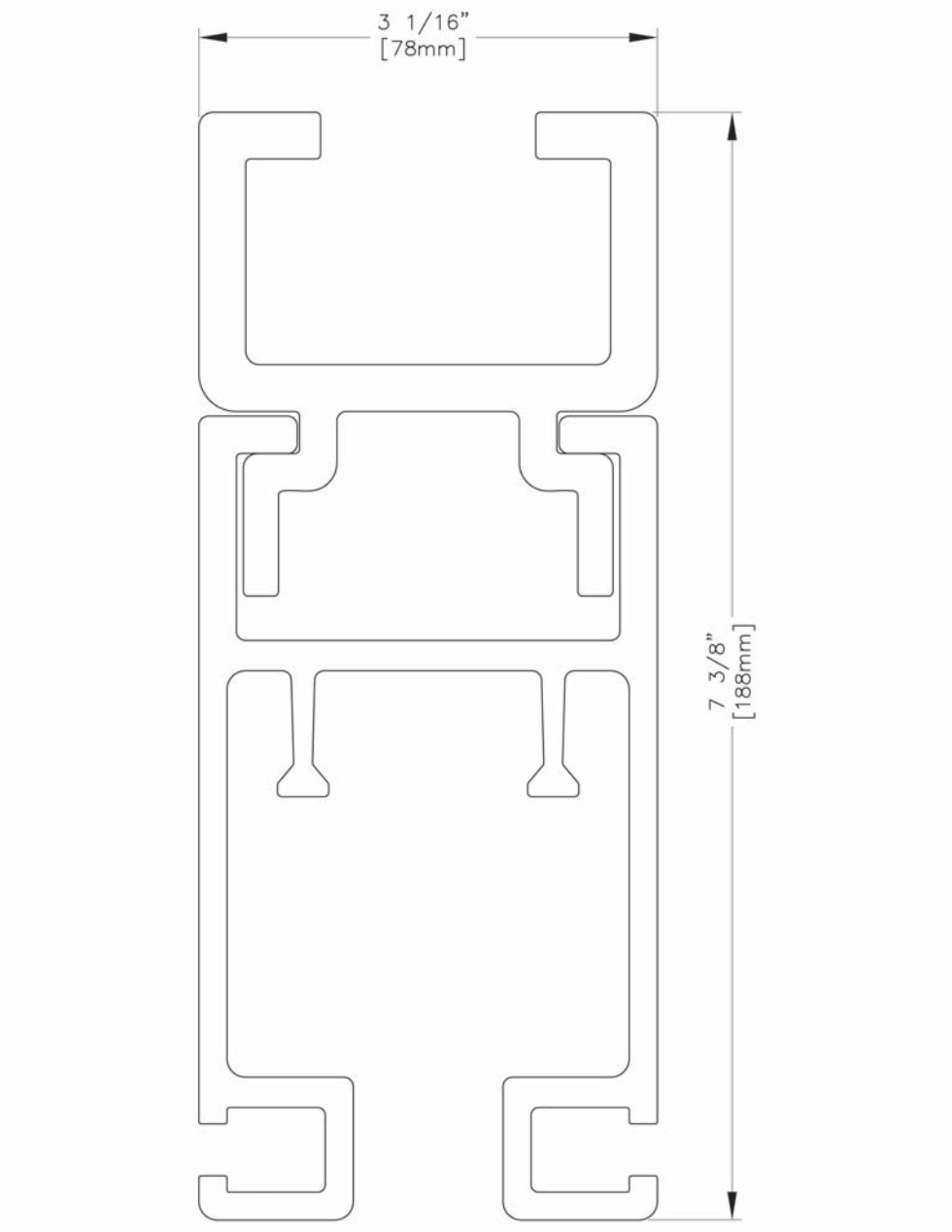
Rail Profile

- All Runways are Drilled for End Stops and Splice Holes.
- Round up to the nearest foot (Cut to 8'-6" = ETA5RW09)
- Maximum Length: 42'-0" (12.8m)
- Weight: 4.67lbs./ft. (6.95kg/m)
- Standard color Unified Safety Yellow
- Other Colors Specify when Ordering



ETA-5 RAIL WITH C4 X 2.5 CHANNEL CAP PROFILE

- Weight: 7.18lbs./ft. (10.69kg/m)



ETA-5 RAIL WITH ETA STRONG BACK PROFILE

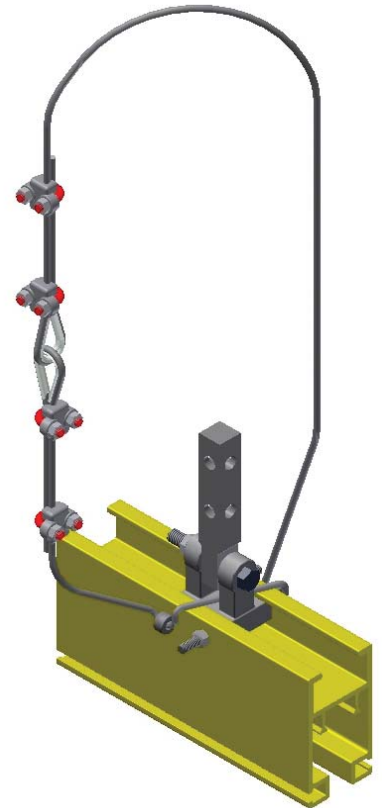
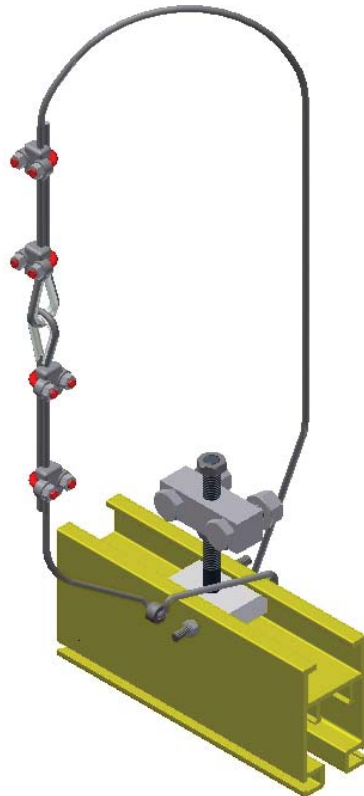
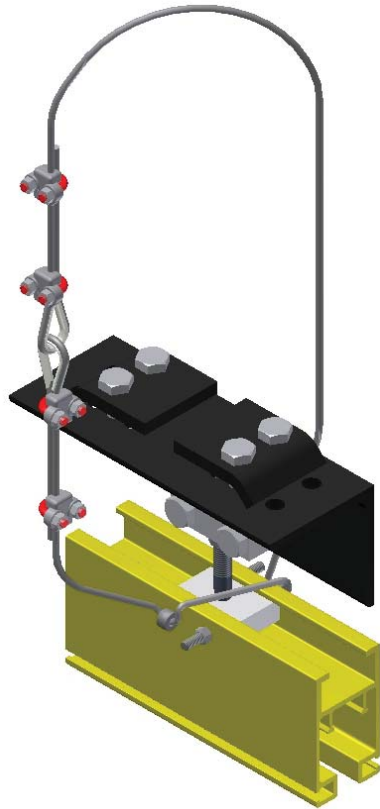
- Weight: 8.25lbs./ft. (12.27kg/m)



| Span | Deflection Limit (in.) | Point Load @ Center of Span (lbs) | | |
|----------|------------------------|-----------------------------------|---------------------|------------------------|
| | | ETA-5 | ETA-5 + CHANNEL CAP | ETA-5 + ETA STRONGBACK |
| Ft. (in) | L/450 | L/450 | L/450 | L/450 |
| 5 (60) | .1333 | 3376 | 4000 | 4000 |
| 6 (72) | .1600 | 2344 | 4000 | 4000 |
| 7 (84) | .1867 | 1722 | 3887 | 4000 |
| 8 (96) | .2133 | 1319 | 2976 | 3674 |
| 9 (108) | .2400 | 1042 | 2352 | 2903 |
| 10 (120) | .2667 | 844 | 1905 | 2351 |
| 11 (132) | .2933 | 697 | 1574 | 1943 |
| 12 (144) | .3200 | 586 | 1323 | 1633 |
| 13 (156) | .3467 | 499 | 1127 | 1391 |
| 14 (168) | .3733 | 431 | 972 | 1200 |
| 15 (180) | .4000 | 375 | 847 | 1045 |
| 16 (192) | .4267 | 330 | 744 | 919 |
| 17 (204) | .4533 | 292 | 659 | 814 |
| 18 (216) | .4800 | 260 | 588 | 726 |
| 19 (228) | .5067 | 234 | 528 | 651 |
| 20 (240) | .5333 | 211 | 476 | 588 |
| 21 (252) | .5600 | 191 | 432 | 533 |
| 22 (264) | .5867 | 174 | 394 | 486 |
| 23 (276) | .6133 | 160 | 360 | 445 |
| 24 (288) | .6400 | 147 | 331 | 408 |
| 25 (300) | .6667 | 135 | 305 | 376 |
| 26 (312) | .6933 | 125 | 282 | 348 |
| 27 (324) | .7200 | 116 | 261 | 323 |
| 28 (336) | .7467 | 108 | 243 | 300 |
| 29 (348) | .7733 | 100 | 226 | 280 |
| 30 (360) | .8000 | 94 | 212 | 261 |
| 31 (372) | .8267 | 88 | 198 | 245 |
| 32 (384) | .8533 | 82 | 186 | 230 |
| 33 (396) | .8800 | 77 | 175 | 216 |
| 34 (408) | .9067 | 73 | 165 | 203 |
| 35 (420) | .9333 | 69 | 155 | 192 |
| 36 (432) | .9600 | 65 | 147 | 181 |
| 37 (444) | .9867 | 62 | 139 | 172 |
| 38 (456) | 1.013 | 58 | 132 | 163 |
| 39 (468) | 1.040 | 55 | 125 | 155 |
| 40 (480) | 1.067 | 53 | 119 | 147 |



| Span M (mm) | Deflection Limit (mm) | Point Load @ Center of Span (kg) | | |
|----------------|--------------------------|----------------------------------|------------------------|---------------------------|
| | | ETA-5 | ETA-5 + CHANNEL CAP | ETA-5 + ETA STRONGBACK |
| | | L/450 | L/450 | L/450 |
| 1.50 (1500) | 3.3 | 1581 | 1814 | 1814 |
| 1.75 (1750) | 3.9 | 1161 | 1814 | 1814 |
| 2.00 (2000) | 4.4 | 889 | 1814 | 1814 |
| 2.25 (2250) | 5.0 | 702 | 1586 | 1814 |
| 2.50 (2500) | 5.6 | 569 | 1284 | 1585 |
| 2.75 (2750) | 6.1 | 470 | 1061 | 1310 |
| 3.00 (3000) | 6.7 | 395 | 892 | 1101 |
| 3.25 (3250) | 7.2 | 337 | 760 | 938 |
| 3.50 (3500) | 7.8 | 290 | 655 | 809 |
| 3.75 (3750) | 8.3 | 253 | 571 | 705 |
| 4.00 (4000) | 8.9 | 222 | 502 | 619 |
| 4.25 (4250) | 9.4 | 197 | 444 | 549 |
| 4.50 (4500) | 10.0 | 176 | 396 | 489 |
| 4.75 (4750) | 10.6 | 158 | 356 | 439 |
| 5.00 (5000) | 11.1 | 142 | 321 | 396 |
| 5.25 (5250) | 11.7 | 129 | 291 | 360 |
| 5.50 (5500) | 12.2 | 118 | 265 | 328 |
| 5.75 (5750) | 12.8 | 108 | 243 | 300 |
| 6.00 (6000) | 13.3 | 99 | 223 | 275 |
| 6.25 (6250) | 13.9 | 91 | 205 | 254 |
| 6.50 (6500) | 14.4 | 84 | 190 | 235 |
| 6.75 (6750) | 15.0 | 78 | 176 | 217 |
| 7.00 (7000) | 15.6 | 73 | 164 | 202 |
| 7.25 (7250) | 16.1 | 68 | 153 | 189 |
| 7.50 (7500) | 16.7 | 63 | 143 | 176 |
| 7.75 (7750) | 17.2 | 59 | 134 | 165 |
| 8.00 (8000) | 17.8 | 56 | 125 | 155 |
| 8.25 (8250) | 18.3 | 52 | 118 | 146 |
| 8.50 (8500) | 18.9 | 49 | 111 | 137 |
| 8.75 (8750) | 19.4 | 46 | 105 | 129 |
| 9.00 (9000) | 20.0 | 44 | 99 | 122 |
| 9.25 (9250) | 20.6 | 42 | 94 | 116 |
| 9.50 (9500) | 21.1 | 39 | 89 | 110 |
| 9.75 (9750) | 21.7 | 37 | 84 | 104 |
| 10.00 (10000) | 22.2 | 36 | 80 | 99 |
| 10.25 (10250) | 22.8 | 34 | 76 | 94 |
| 10.50 (10500) | 23.3 | 32 | 73 | 90 |
| 10.75 (10750) | 23.9 | 31 | 69 | 86 |
| 11.00 (11000) | 24.4 | 29 | 66 | 82 |
| 11.25 (11250) | 25.0 | 28 | 63 | 78 |
| 11.50 (11500) | 25.6 | 27 | 61 | 75 |
| 11.75 (11750) | 26.1 | 26 | 58 | 72 |
| 12.00 (12000) | 26.7 | 25 | 56 | 69 |
| 12.25 (12500) | 27.2 | 24 | 53 | 66 |



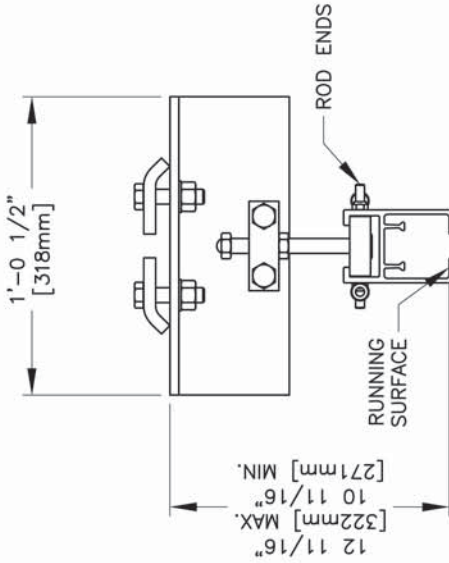
CLOSED ADJUSTABLE HANGER*
25473 FOR BEAMS 2.33" (59mm)
TO 3.33" (85mm) wide
25474 FOR BEAMS 4" (102mm)
TO 8" (203mm) wide

25467 ADJUSTABLE BLOCK HANGER
Allows for 2" (50mm) of vertical
adjustment in the field

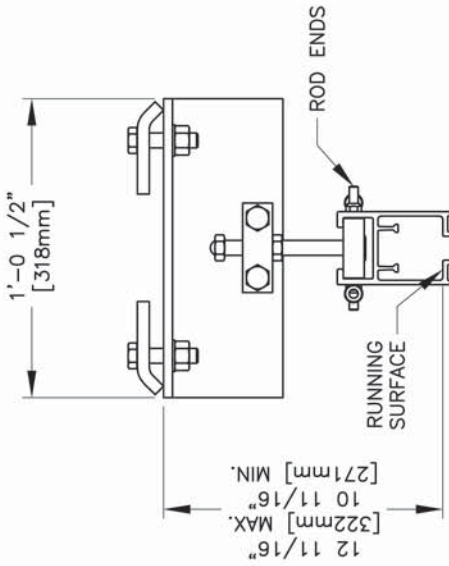
25286 BLOCK HANGER

- **All hangers must be bolted through rail.**
- **All hangers include a 6'-0" (1.82m) safety cable 78287.**

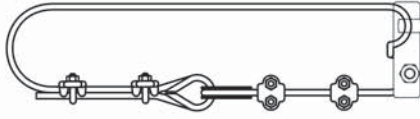
*Grip range 1/4" (6mm) to 9/16" (15mm) thick flange.



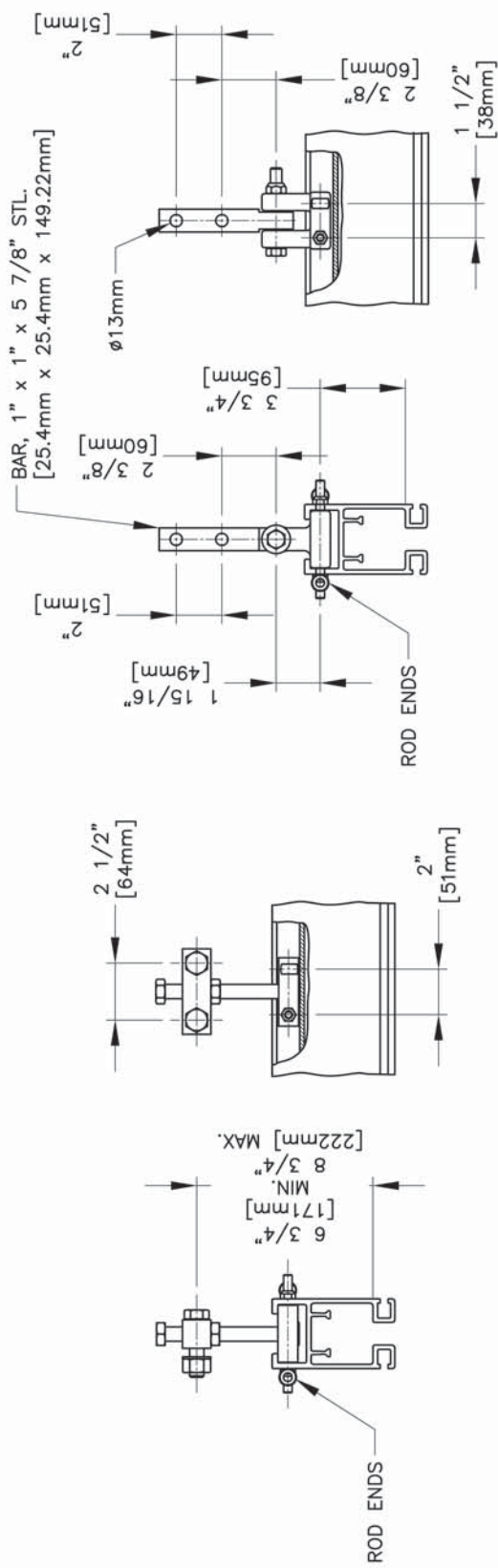
25473 CLOSED ADJUSTABLE HANGER
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE
RATED LOAD 1500 LBS. [680 Kg.]
WEIGHT 22 LBS. [9.98 Kg.]



25474 CLOSED ADJUSTABLE HANGER
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
RATED LOAD 1500 LBS. [680 Kg.]
WEIGHT 23 LBS. [10.43 Kg.]

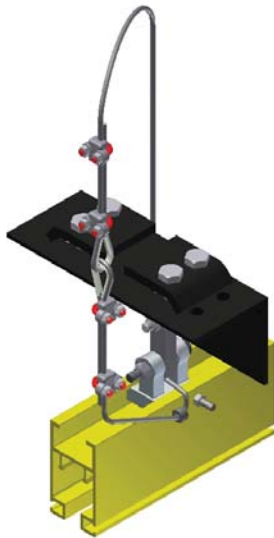


SAFETY CABLE ASSEMBLY VIEW
ALL HANGERS COME WITH A SAFETY CABLE 78287



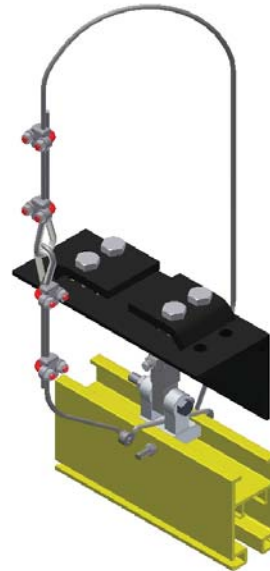
25467 ADJUSTABLE BLOCK HANGER
RATED LOAD 1500 LBS. [680 Kg.]
WEIGHT 6 LBS. [2.72 Kg.]

25286 BLOCK HANGER
RATED LOAD 2000 lbs. [907 Kg.]
WEIGHT 4 LBS. [1.81 Kg.]



BEAM HANGER*
PARALLEL MOUNT

27055 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27057 FOR BEAMS 4" (102mm) TO 8" (203mm)

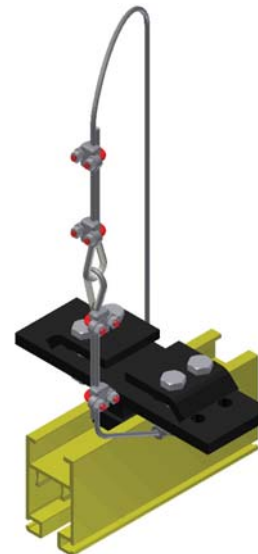


BEAM HANGER*
PERPENDICULAR MOUNT

27055 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27057 FOR BEAMS 4" (102mm) TO 8" (203mm)



27070 ETA RIGID MOUNT HANGER**



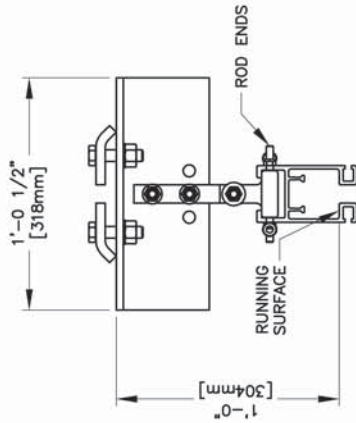
RIGID MOUNT HANGER*
PARALLEL MOUNT

27073 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27071 FOR BEAMS 4" (102mm) TO 8" (203mm)

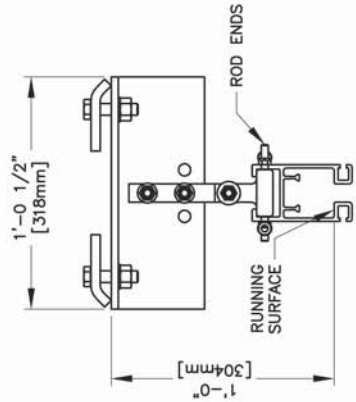
- **All hangers must be bolted through rail.**
- **All hangers include a 6'-0" (1.82m) safety cable 78287.**

*Grip range 1/4" (6mm) to 9/16" (15mm) thick flange.

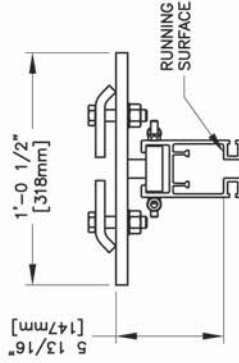
**For use on W-Shape beams only.



27055 BEAM HANGER PARALLEL MOUNT
 FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE
 RATED LOAD 2000 lbs. [907 Kg.]
 WEIGHT 23 lbs. [10.43 Kg.]



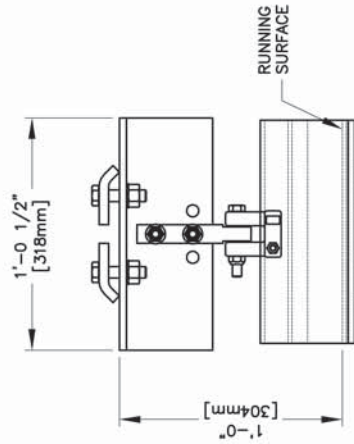
27057 BEAM HANGER PARALLEL MOUNT
 FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
 RATED LOAD 2000 lbs. [907 Kg.]
 WEIGHT 24 lbs. [10.89 Kg.]



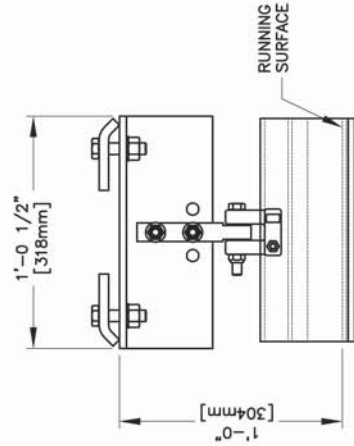
27071 PARALLEL RIGID MOUNT HANGER
 FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
 RATED LOAD 2000 lbs. [907 Kg.]
 WEIGHT 18 lbs. [8.16 Kg.]



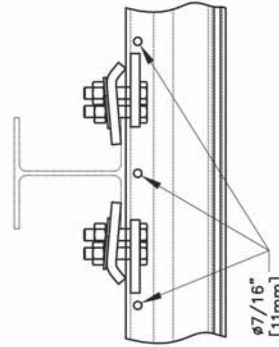
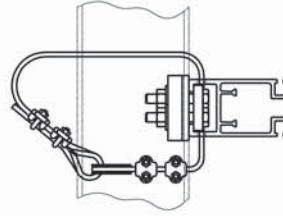
SAFETY CABLE ASSEMBLY VIEW
 ALL HANGERS COME WITH A SAFETY CABLE 78287



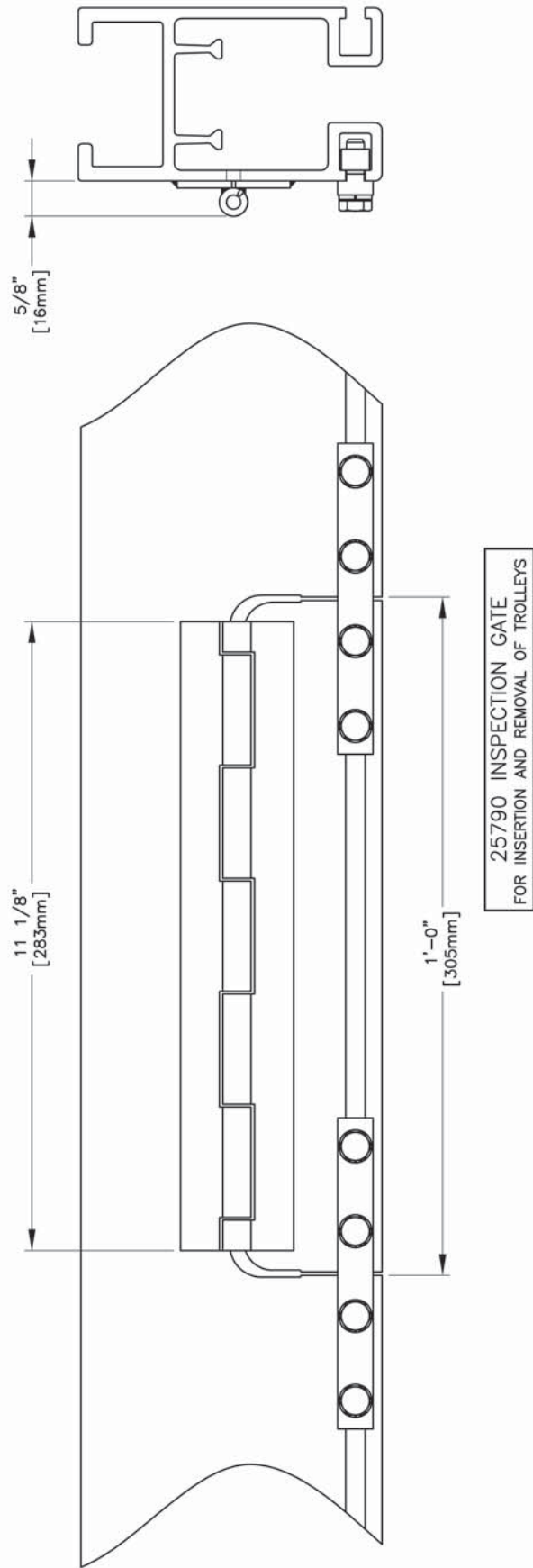
27055 BEAM HANGER PERPENDICULAR MOUNT
 FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE
 RATED LOAD 2000 lbs. [907 Kg.]
 WEIGHT 23 lbs. [10.43 Kg.]



27057 BEAM HANGER PERPENDICULAR MOUNT
 FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
 RATED LOAD 2000 lbs. [907 Kg.]
 WEIGHT 24 lbs. [10.89 Kg.]



27070 ETA RIGID MOUNT HANGER
 SAFETY CABLE
 RATED LOAD 3500 LBS. [1588 Kg.]
 HOLE OPTIONS
 WEIGHT 10 LBS. [4.54 Kg.]



Inspection Gate must be 1'-0" (304.8mm) from a hanger.

UNIFIED ETA-4 & ETA-5 RAIL TROLLEYS



20100



20110



20115



28070



20130



20125



20116



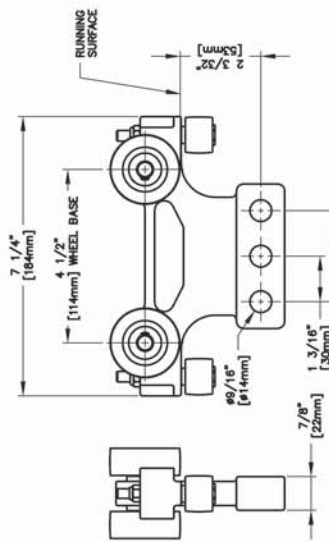
20117

Part Number

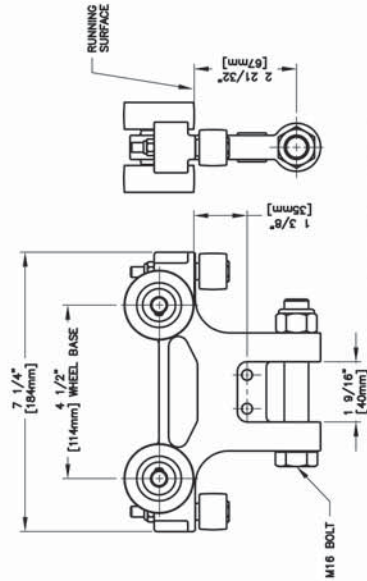
- **20100** ETA-4/5 Short Body Load Trolley with 550 lb (250kg) Rated Load
- **20110** ETA-4/5 Long Body Load Trolley with 550 lb (250kg) Rated Load
- **20115** ETA-4/5 Three Hole Mount Load Trolley with 550 lb (250kg) Rated Load
- **28070** ETA-4/5 Unified Balancer Trolley with 550 lb (250kg) Rated Load
- **20130** ETA-4/5 Single Hoist Trolley with 550 lb (250kg) Rated Load
- **20125** ETA-4/5 Pin Mount Trolley with 550 lb (250kg) Rated Load
- **20116** ETA-4/5 IR 6" Balancer Trolley with 550 lb (250kg) Rated Load
- **20117** ETA-4/5 IR 10" Balancer Trolley with 550 lb (250kg) Rated Load

Features

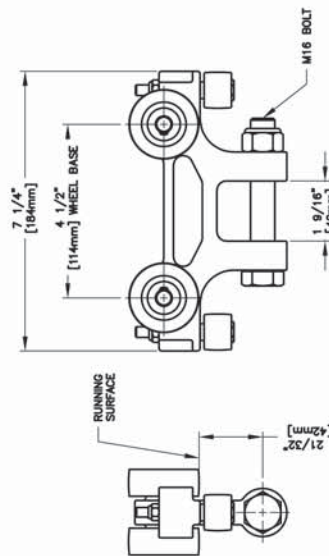
- High tensile almag alloy frame
- 1.8"(46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High impact nylon guide rollers with dual race ball bearings for smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



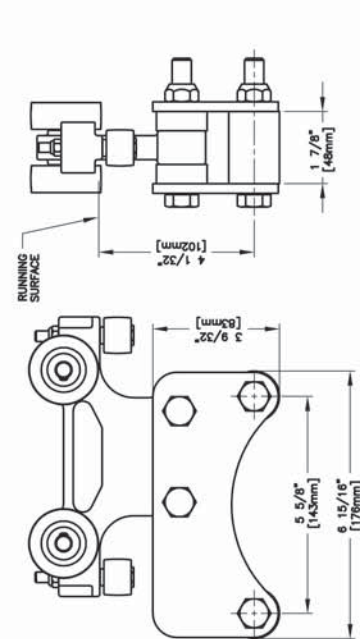
20115 ETA-4/5 THREE HOLE MOUNT LOAD TROLLEY



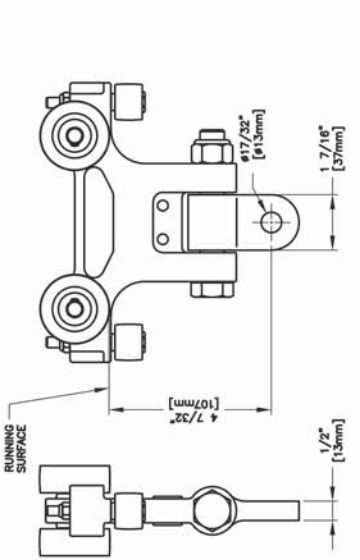
20110 ETA-4/5 LONG BODY LOAD TROLLEY



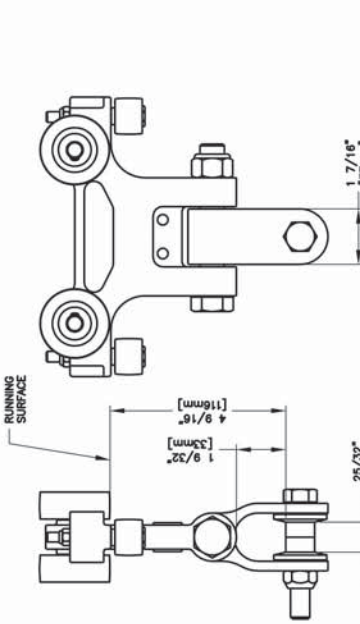
20100 ETA-4/5 SHORT BODY LOAD TROLLEY



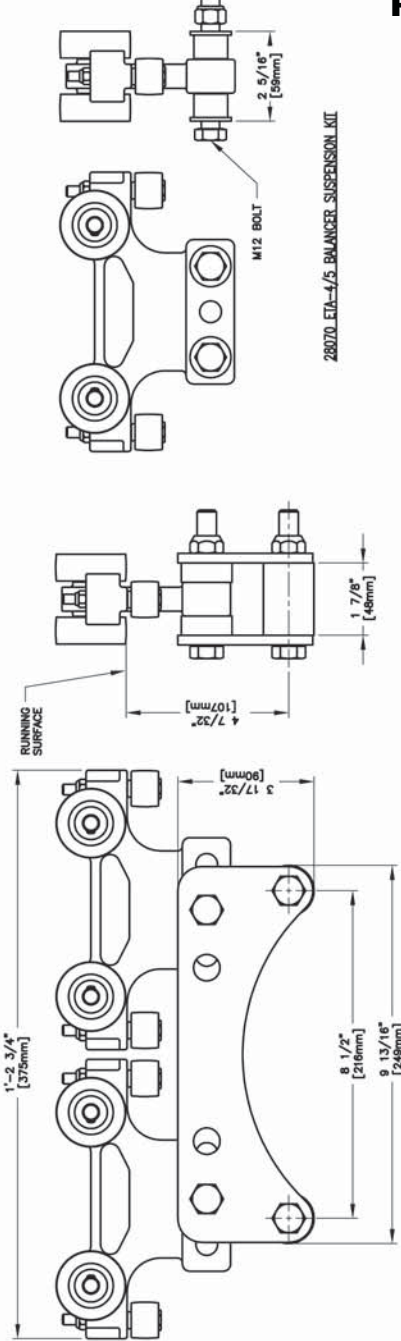
20116 ETA-4/5 IR. 6\"/>



20125 ETA-4/5 PIN MOUNT TROLLEY



20130 ETA-4/5 SINGLE HOIST TROLLEY



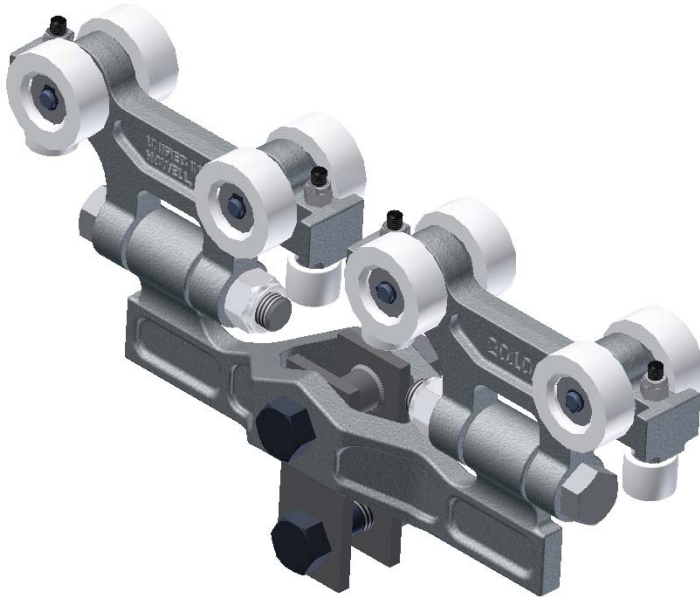
20117 ETA-4/5 IR. 10\"/>

| SPECIFICATIONS | |
|------------------|------------------------------------------------------------|
| WEIGHT OF 20100: | 2.15 lbs. [.98 Kg.] |
| WEIGHT OF 20110: | 2.23 lbs. [1.01 Kg.] |
| WEIGHT OF 20115: | 2.00 lbs. [.91 Kg.] |
| WEIGHT OF 20130: | 2.92 lbs. [1.32 Kg.] |
| WEIGHT OF 20125: | 2.45 lbs. [1.11 Kg.] |
| WEIGHT OF 20116: | 7.06 lbs. [3.20 Kg.] |
| WEIGHT OF 20117: | 9.80 lbs. [4.45 Kg.] |
| WEIGHT OF 28070: | 2.10 lbs. [.95 Kg.] |
| BODY : | HIGH TENSILE ALUMG |
| WHEELS : | 1.825 DIA. [46.4mm DIA.] GLASS REINFORCED NYLON |
| BEARINGS : | BALL PERMANENTLY LUBRICATED STUDS : .50 DIA. [12.7mm DIA.] |
| GUIDE ROLLERS : | .84 DIA. [23.9mm DIA.] HIGH IMPACT NYLON |

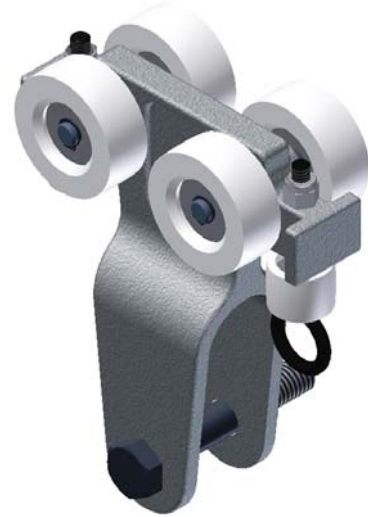
RATED LOAD

- 550 lbs. [250 Kg.]
- 550 lbs. [250 Kg.]
- 550 lbs. [250 Kg.]
- 550 lbs. [250 Kg.]
- 550 lbs. [250 Kg.]
- 550 lbs. [250 Kg.]
- 1100 lbs. [500 Kg.]
- 550 lbs. [250 Kg.]

UNIFIED ETA-4 & ETA-5 RAIL TROLLEYS



25330



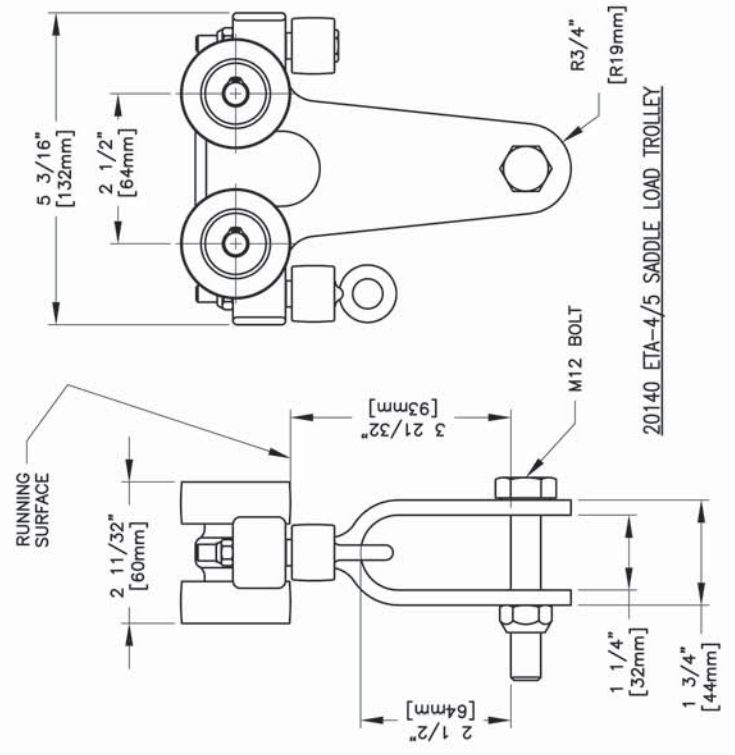
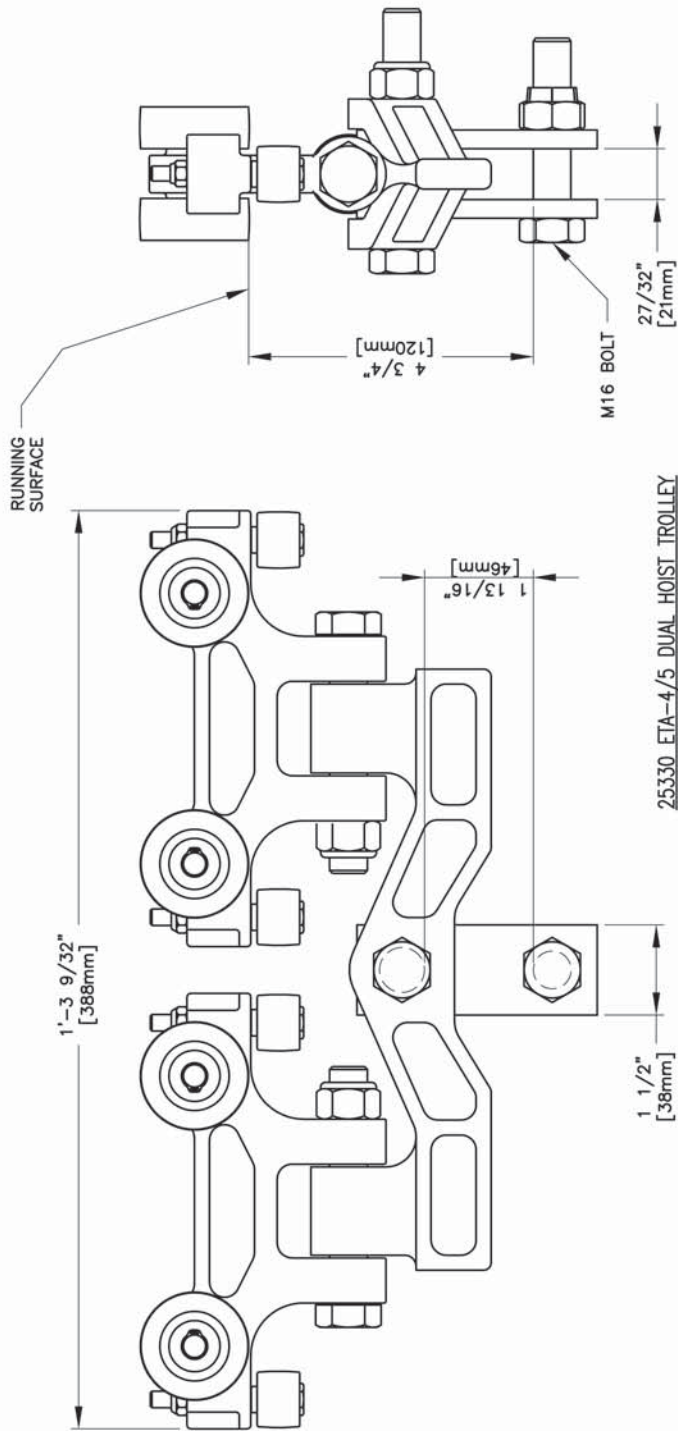
20140

Part Number

- **25330** ETA-4/5 Dual Hoist Trolley with 1100 lb (500kg) Rated Load
- **20140** ETA-4/5 Saddle Load Trolley with 550 lb (250kg) Rated Load

Features

- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



| SPECIFICATIONS | | RATED LOAD | |
|------------------|-------------------------------------------------|------------|-----------|
| WEIGHT OF 25330: | 7.08 lbs. [3.21 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20140: | 1.83 lbs. [.83 Kg.] | 550 lbs. | [250 Kg.] |
| BODY : | HIGH TENSILE ALMAG | | |
| WHEELS : | 1.825 DIA. [46.4mm DIA.] GLASS REINFORCED NYLON | | |
| BEARINGS : | BALL PERMANENTLY LUBRICATED | | |
| STUDS : | .50 DIA. [12.7mm DIA.] | | |
| GUIDE ROLLERS : | .94 DIA. [23.9mm DIA.] HIGH IMPACT NYLON | | |

UNIFIED ETA-4 & ETA-5 FESTOON TROLLEY



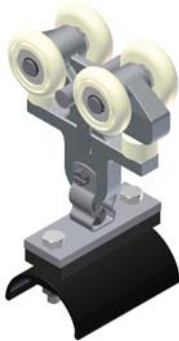
20150



20155



20160



20165



20180



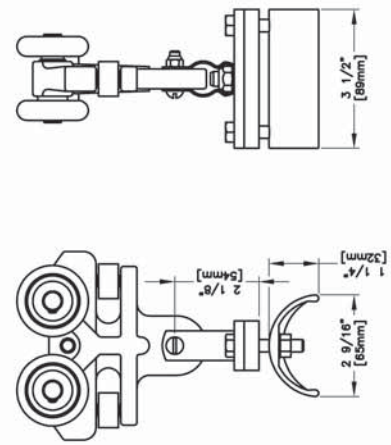
20185

Part Number

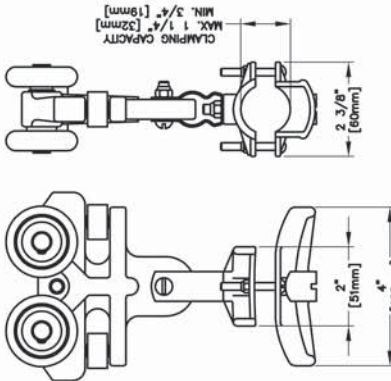
- **20150** ETA-4/5 Festoon Trolley with 100 lb (45kg) Rated Load
- **20155** ETA-4/5 Festoon Trolley and Small Saddle with 100 lb (45kg) Rated Load
- **20160** ETA-4/5 Festoon Trolley and Large Saddle with 100 lb (45kg) Rated Load
- **20165** ETA-4/5 Festoon Trolley and Flatwire Saddle with 100 lb (45kg) Rated Load
- **20180** ETA-4/5 Festoon Trolley and UII Saddle with 100 lb (45kg) Rated Load
- **20185** ETA-4/5 Festoon Trolley with 12" Saddle 100 lb (45kg) Rated Load

Features

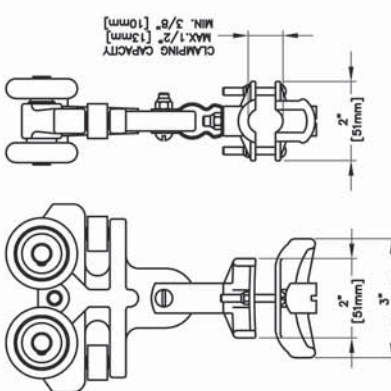
- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



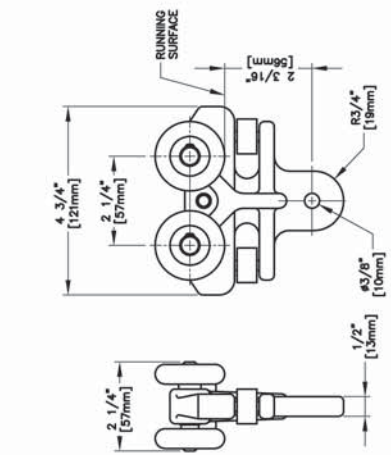
20185 ETA-4/5 FESTOON TROLLEY WITH FLATWIRE SADDLE



20180 ETA-4/5 FESTOON TROLLEY WITH LARGE SADDLE



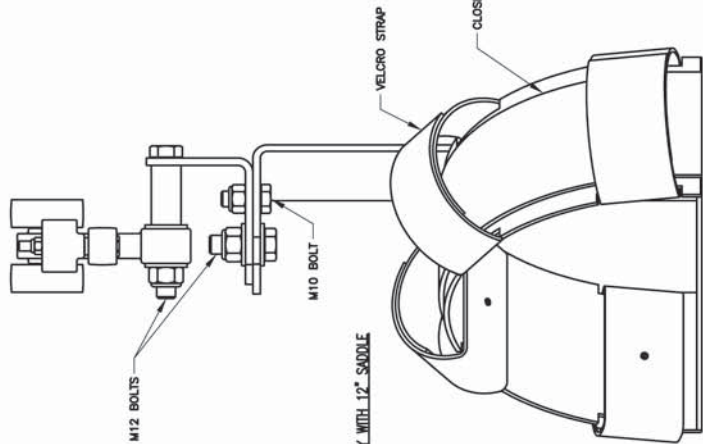
20155 ETA-4/5 FESTOON TROLLEY WITH SMALL SADDLE



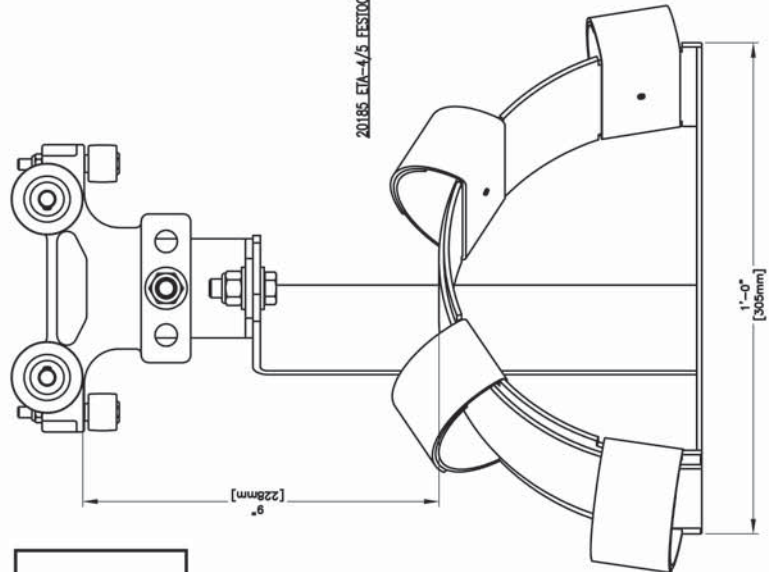
20150 ETA-4/5 FESTOON TROLLEY

| TROLLEY | WEIGHT |
|---------|----------------------|
| 20150: | 1.50 lbs. [.68 Kg.] |
| 20155: | 1.69 lbs. [.77 Kg.] |
| 20160: | 1.71 lbs. [.78 Kg.] |
| 20165: | 2.12 lbs. [.96 Kg.] |
| 20180: | 2.69 lbs. [1.22 Kg.] |
| 20185: | 9.50 lbs. [4.31 Kg.] |

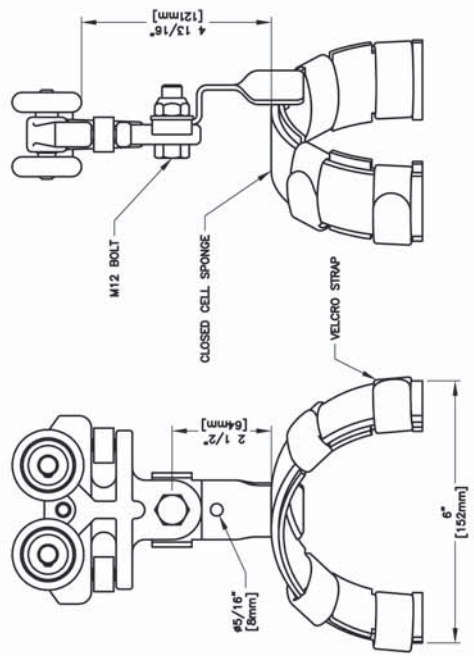
| SPECIFICATIONS : |
|-----------------------------------------------------------------|
| WHEELS : 1.812 DIA. (46mm DIA) HIGH IMPACT NYLON |
| BODY : ALUM. 35 |
| BEARINGS : BALL TYPE PERMANENTLY LUBRICATED |
| SLIDES : 20 DIA. (50mm DIA) |
| SLIDE RAILS : 20 DIA. (50mm DIA) HIGH IMPACT NYLON |
| OPERATING TEMP. AT 100% LOAD : -10°F TO +110°F [-23°C TO +43°C] |
| ROLLING FRICTION : .2% TO 1% OF LOAD |
| MAX. LOAD PER WHEEL : 2.5 lbs. [11.2 Kg.] |



20185 ETA-4/5 FESTOON TROLLEY WITH 12\"/>



20180 ETA-4/5 FESTOON TROLLEY WITH UI SADDLE





UNIFIED ETA-4 & ETA-5 FESTOON TROLLEY



20170



20175



78260



78184



78190



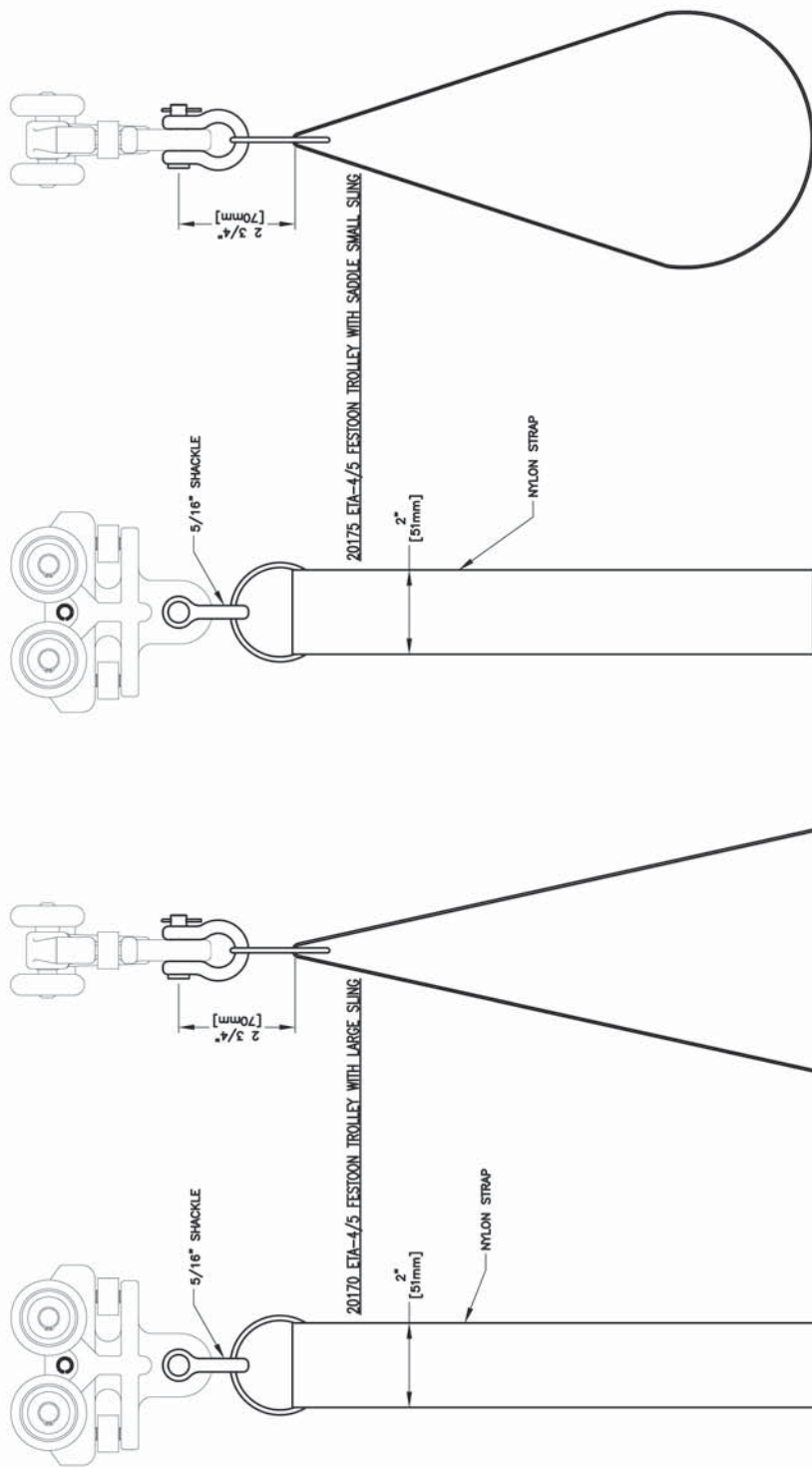
78170

Part Number

- **20170*** ETA-4/5 Festoon Trolley and 24" Large Sling with 100 lb (45kg) Rated Load
- **20175*** ETA-4/5 Festoon Trolley and 12" Small Sling with 100 lb (45kg) Rated Load
- **78260** ETA-4/5 Festoon Slider
- **78184** Cable Trolley with Small Saddle
- **78190** Cable Trolley with Large Saddle
- **78170** Cable Trolley Flatwire Saddle

Features*

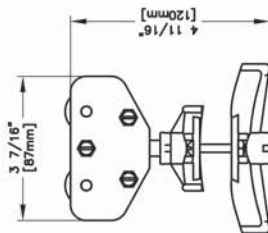
- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



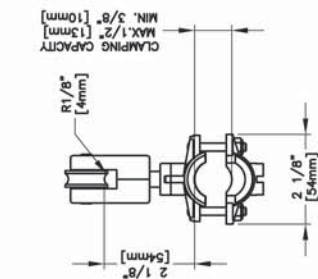
FESTOON TROLLEY SPECIFICATIONS:

WHEELS: 1.812 DIA. (46mm DIA.) HIGH IMPACT NYLON
 BEARINGS: BALL TYPE PERMANENTLY LUBRICATED
 STUDS: .50 DIA. (.13mm DIA.)
 GUIDE ROLLERS: .94 DIA. (24mm DIA.) HIGH IMPACT NYLON
 OPERATING TEMP. AT 100% LOAD: -0°F TO +110°F [-23°C TO +43°C]
 ROLLING FRICTION: .25% TO 1% OF LOAD
 MAX. LOAD PER WHEEL: 25 lbs. [11.2 Kg.]

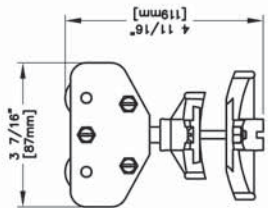
| TROLLEY | WEIGHT |
|---------|---------------------|
| 20170: | 2.00 lbs. [.91 Kg.] |
| 20175: | 1.83 lbs. [.83 Kg.] |
| 78260: | .07 lbs. [.03 Kg.] |
| 78170: | .46 lbs. [.21 Kg.] |
| 78184: | .37 lbs. [.17 Kg.] |
| 78190: | .41 lbs. [.19 Kg.] |



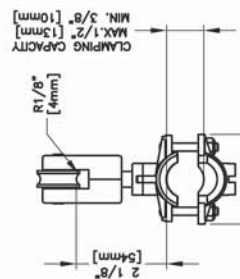
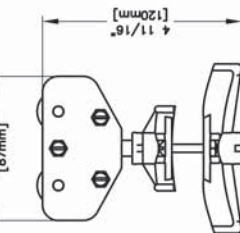
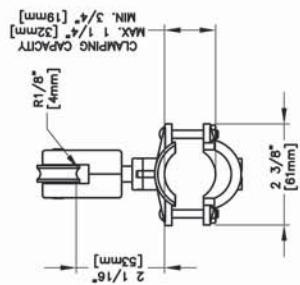
78190_CABLE TROLLEY WITH LARGE SADDLE

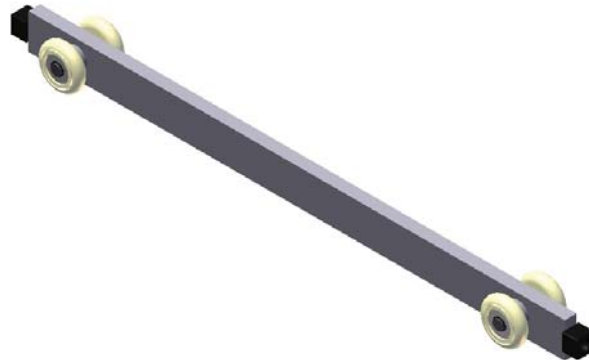


78184_CABLE TROLLEY WITH SMALL SADDLE

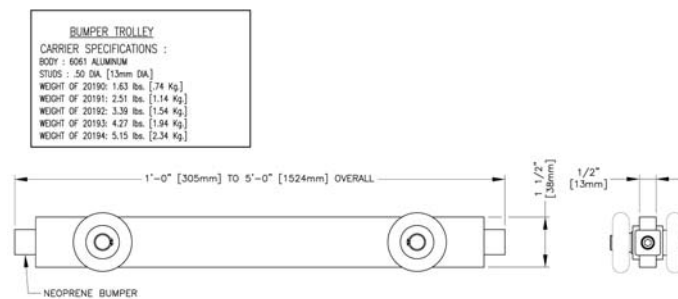


78170_CABLE TROLLEY WITH FLATWIRE SADDLE





ETA-4/ETA-5 BUMPER TROLLEY



Part Number

- **20190** 1'-0" (305mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20191** 2'-0" (610mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20192** 3'-0" (914mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20193** 4'-0" (1219mm) Bumper trolley to operate on Unified ETA-4 and ETA-5
- **20194** 5'-0" (1524mm) Bumper trolley to operate on Unified ETA-4 and ETA-5

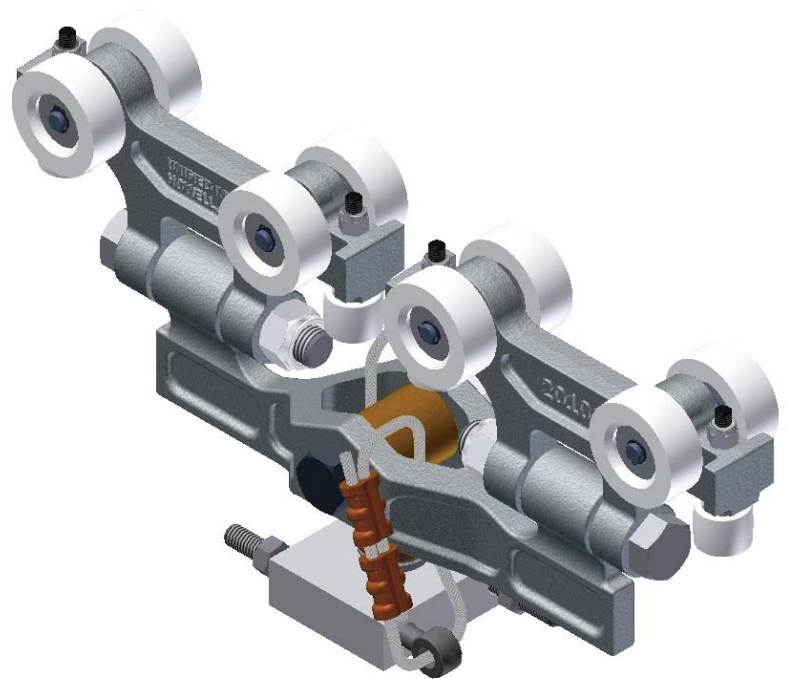
Features

- Aluminum trolley body
- 1.8" (46mm) High-impact nylon wheels, with permanently sealed precision ball bearings
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



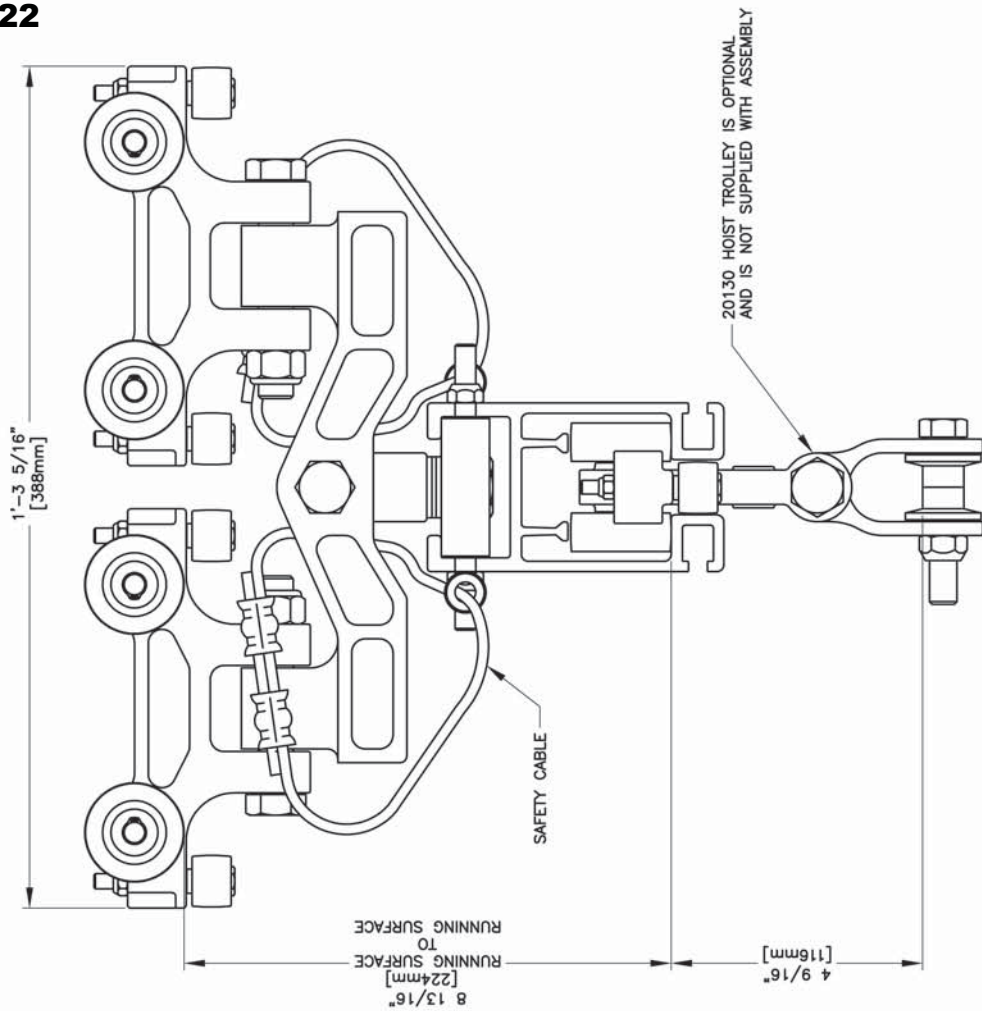
22521 ETA-4/5 SINGLE END TRUCK

- To operate on ETA-4 and ETA-5
- Rated Load 550 lbs. (250kg)

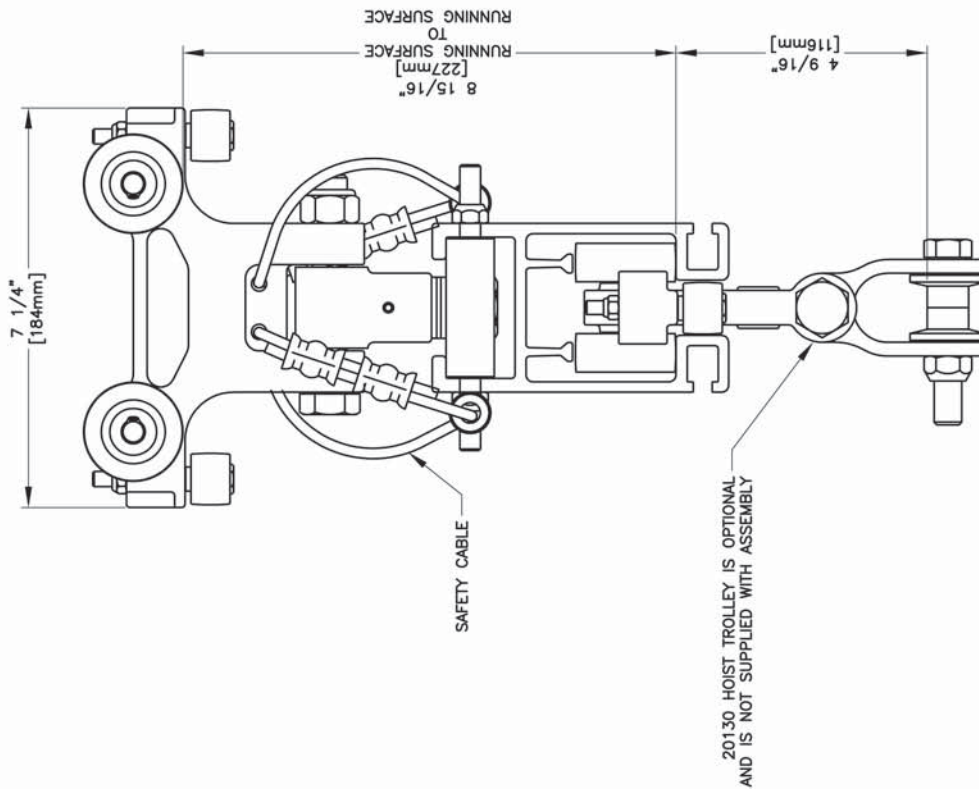


22540 ETA-4/5 DUAL END TRUCK

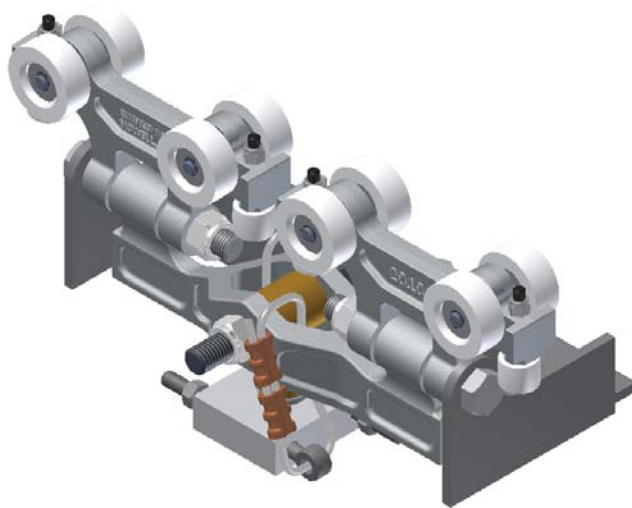
- To operate on ETA-4 and ETA-5
- Rated Load 1100 lbs. (500kg)



22540 DUAL END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE ORDER.
 RATED LOAD: 1100 lbs. [500 KG.]
 WEIGHT: 9 lbs. [4.08 KG.]

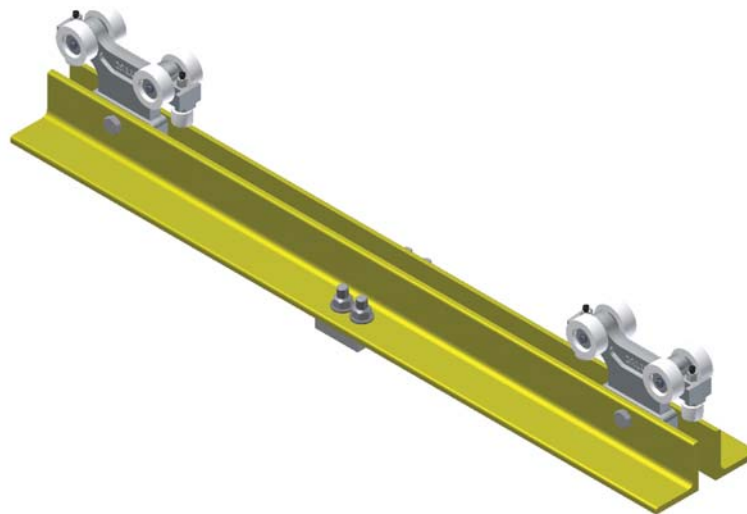


22521 SINGLE END TRUCK
 SINGLE TROLLEY END TRUCK AT EACH END OF CRANE ORDER.
 RATED LOAD: 550 lbs. [250 KG.]
 WEIGHT: 5 lbs. [2.27 KG.]



- **22545** ETA-4/5 Rigid End Truck for Spans up to 18' (5.5m)
- Rated Load 1100 lbs. (500kg)

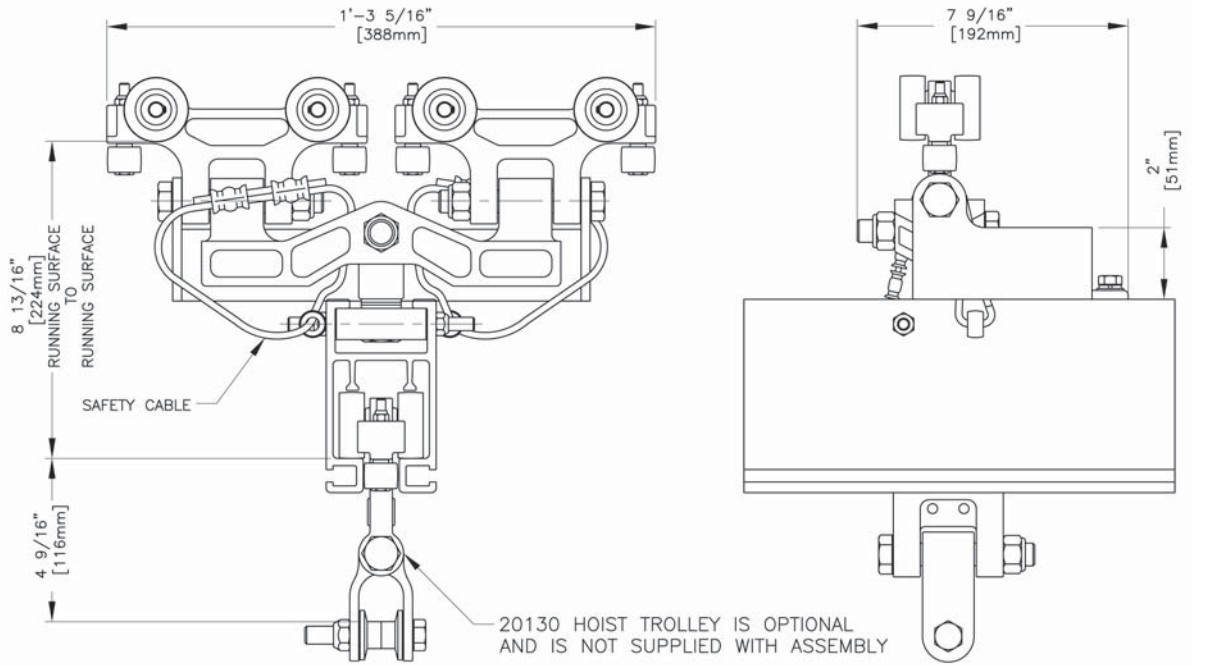
Weight
15 lbs (6.8kg)



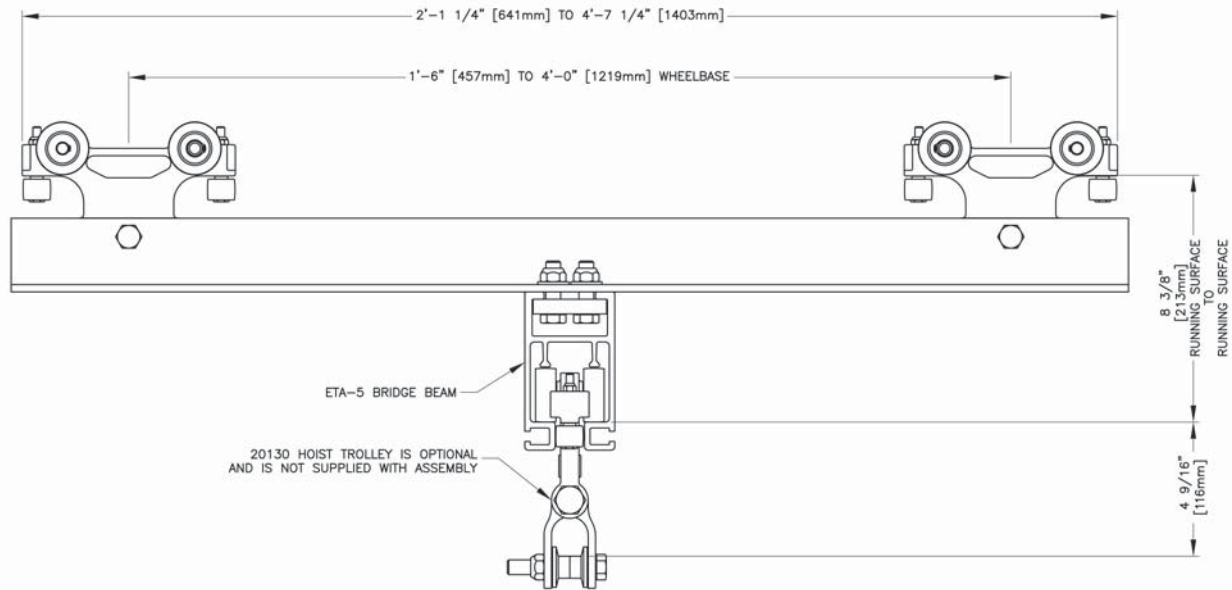
ETA-4/5 RIGID END TRUCK

- End truck assemblies for single girder bridge cranes to run on ETA-4/5 Runway.
- Attaches to ETA-4, ETA-5 and ETA-8 Bridges.

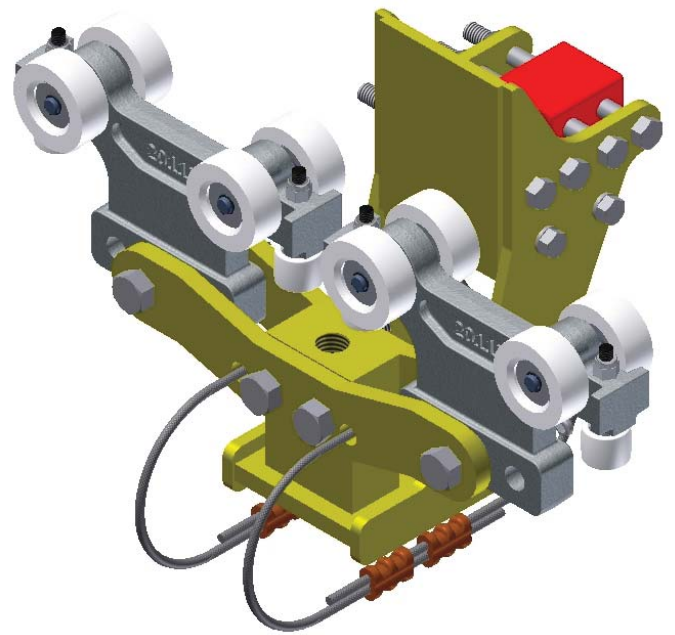
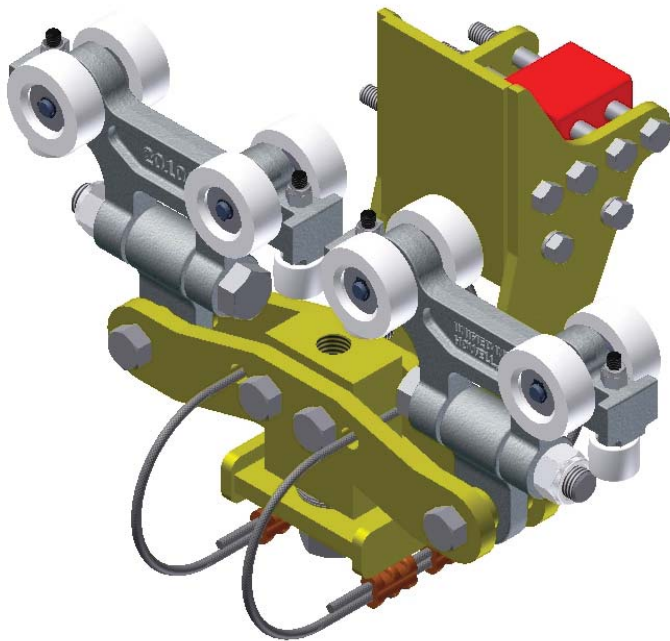
- | | |
|--------------------------------------------------------------------------------------|-----------------------------------|
| ■ 22546 1'-6" (457mm) wheelbase for spans 2'-0" (609mm) to 5'-0" (1524mm) | Weight 24 lbs. (10.8kg) |
| ■ 22547 2'-0" (609mm) wheelbase for spans 6'-0" (1829mm) to 9'-0" (2743mm) | 28 lbs. (12.7kg) |
| ■ 22548 2'-6" (762mm) wheelbase for spans 10'-0" (3048mm) to 13'-0" (3962mm) | 32 lbs. (14.5kg) |
| ■ 22549 3'-0" (914mm) wheelbase for spans 14'-0" (4267mm) to 17'-0" (5182mm) | 36 lbs. (16.3kg) |
| ■ 22550 3'-6" (1066mm) wheelbase for spans 18'-0" (5486mm) to 20'-0" (6096mm) | 40 lbs. (18.1kg) |
| ■ 22551 4'-0" (1219mm) wheelbase for spans 21'-0" (6400mm) to 25'-0" (7620mm) | 44 lbs. (20kg) |
- No safety cable included
 - Rated Load 1100 lbs. (500kg)



22545 RIGID MOUNT END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 WEIGHT: 15 lbs. [6.8 Kg.]



ETA-4 RIGID END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 NO SAFETY CABLE INCLUDED

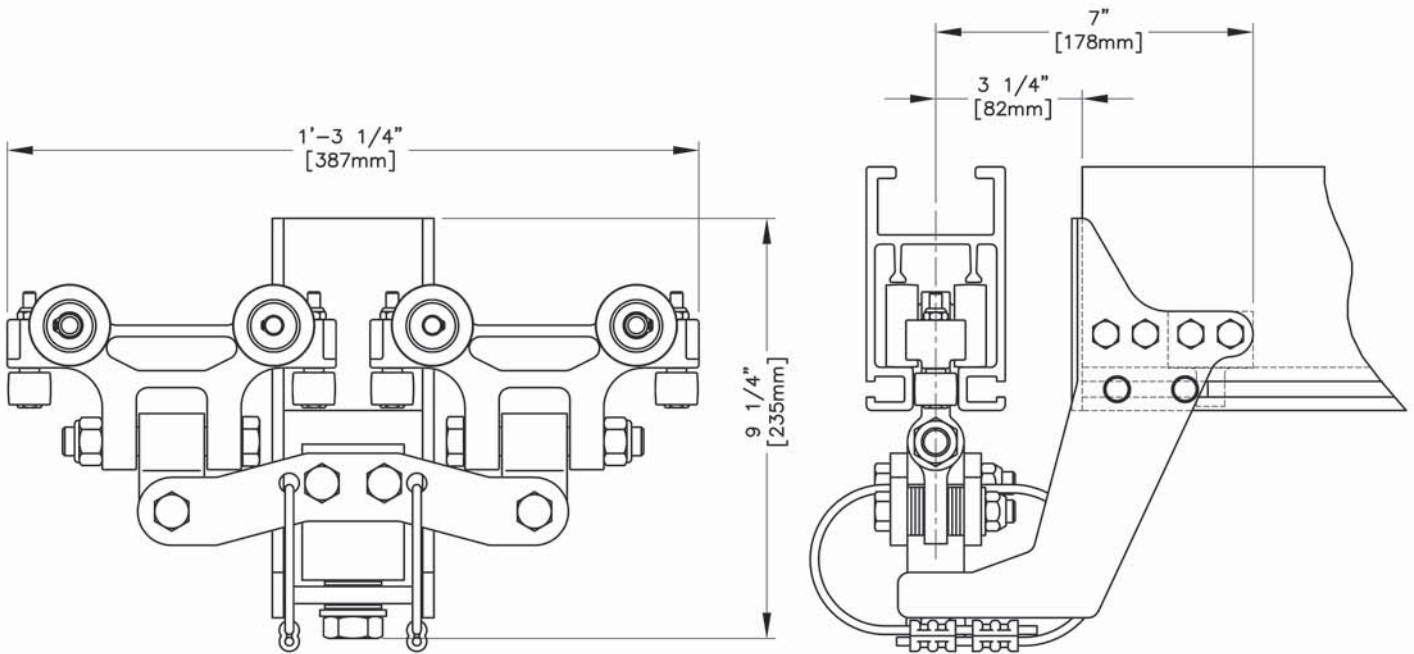


22600 ETA-4/5 Articulating Low Headroom End Truck

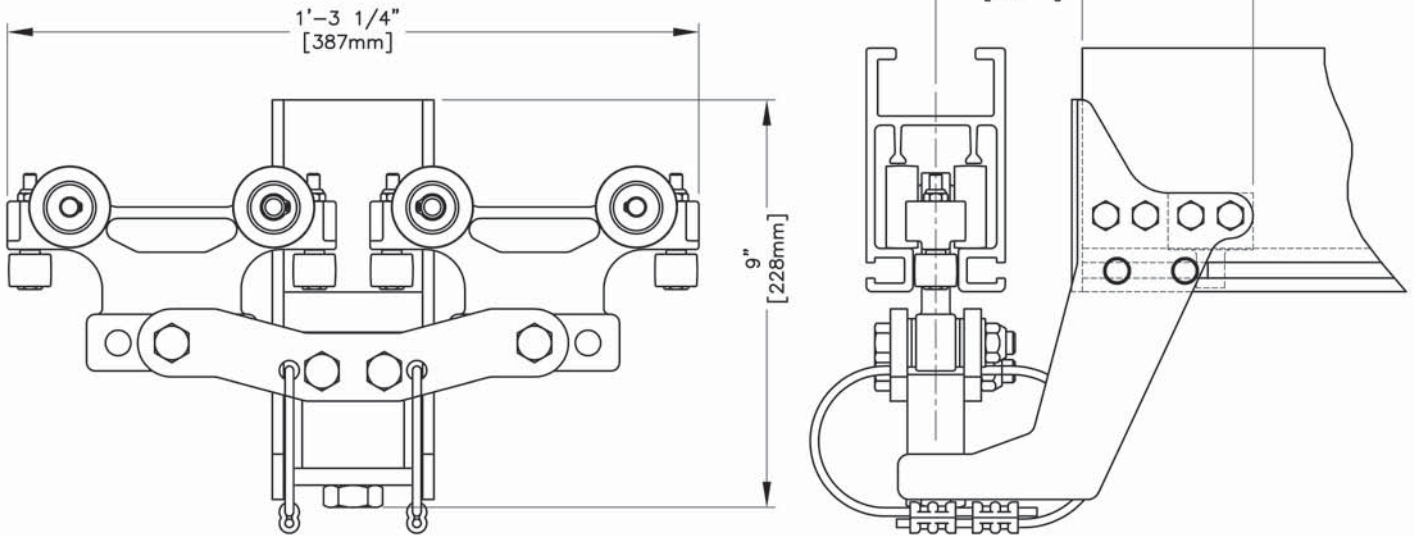
- To operate on ETA-4/5
- Rated Load 1100 lbs. (500kg)

22605 ETA-4/5 Rigid Low Headroom End Truck

- To operate on ETA-4/5
- Rated Load 1100 lbs. (500kg)



22600 ETA-4/5 ARTICULATING LOW HEAD ROOM END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE ORDER.
 RATED LOAD: 1100 lbs. [500 KG.]
 WEIGHT: 16 lbs. [7.26 KG.]



22605 ETA-4/5 RIGID LOW HEAD ROOM END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE ORDER.
 RATED LOAD: 1100 lbs. [500 KG.]
 WEIGHT: 13 lbs. [5.90 KG.]



STANDARD RAIL END TRUCKS (WITHOUT KICKUP WHEELS)

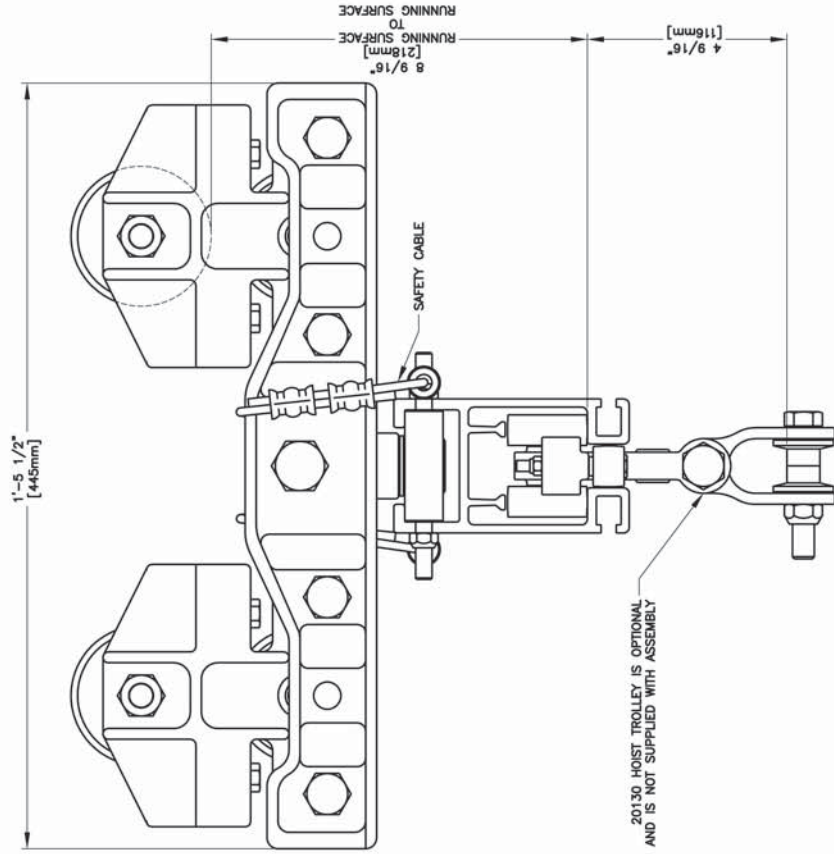
- End truck assemblies for bridge cranes.
Rated Load 1100 lbs. (500kg)
- **22557** MBC-500-3-325 End Truck to run on 3.25 Patent Track.
- **22558** MBC-500-3-333 End Truck to run on S6x12.5.
- **22559** MBC-500-3-4-266 End Truck to run on S4x7.7.

- Consult Factory to run on Metric Beams.

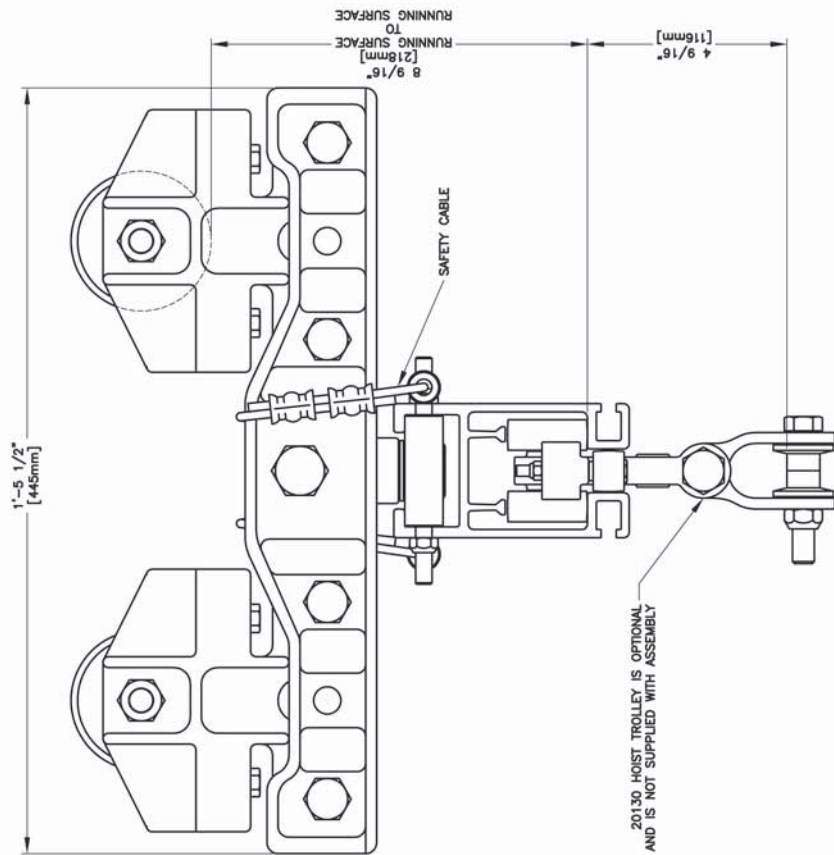


STANDARD RAIL END TRUCKS (WITH KICKUP WHEELS)

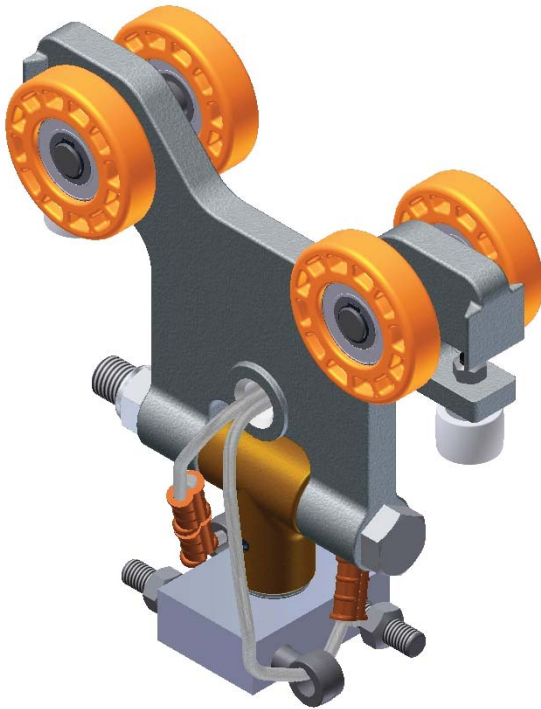
- End truck assemblies for bridge cranes.
Rated Load 1100 lbs. (500kg)
- **22574** MBC-500-3-325 End Truck to run on 3.25 Patent Track.
- **22575** MBC-500-3-333 End Truck to run on S6x12.5.
- **22576** MBC-500-3-4-266 End Truck to run on S4x7.7.



END TRUCKS (WITH KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 KG.]
 22574 MBC-500-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22575 MBC-500-3-333 END TRUCK TO RUN ON S6x12.5.
 22576 MBC-500-3-4-2.66 END TRUCK TO RUN ON S4x7.7.
 WEIGHT: 35 LBS. [15.88 KG.]

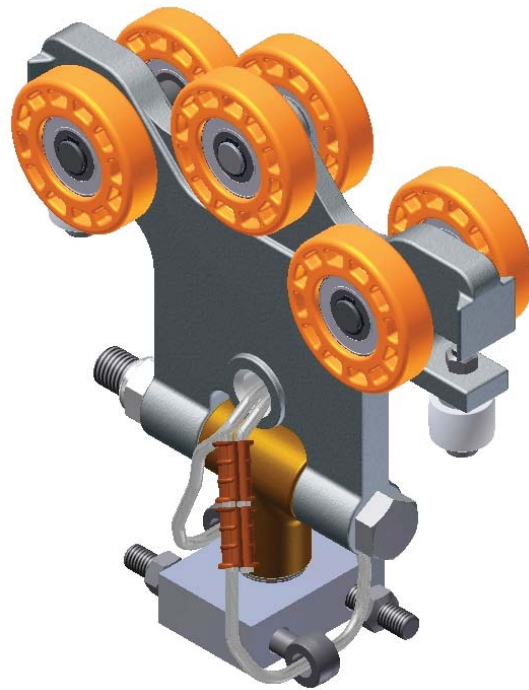


END TRUCKS (WITHOUT KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 KG.]
 22557 MBC-500-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22558 MBC-500-3-333 END TRUCK TO RUN ON S6x12.5.
 22559 MBC-500-3-4-2.66 END TRUCK TO RUN ON S4x7.7.
 WEIGHT: 32 LBS. [14.51 KG.]



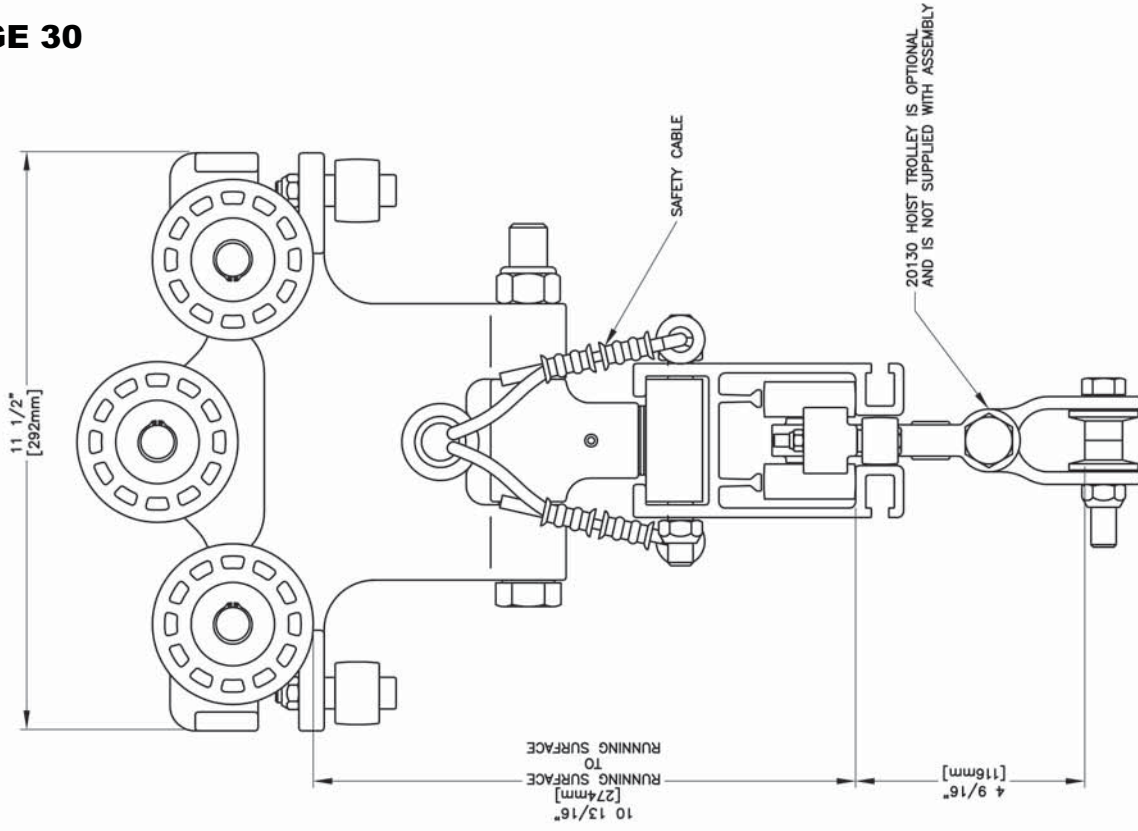
**22041 SINGLE END TRUCK
(WITHOUT KICKUP WHEELS)**

- For ETA-5 bridge to run ETA-8 runway
- Rated Load 1100 lbs. (500kg)

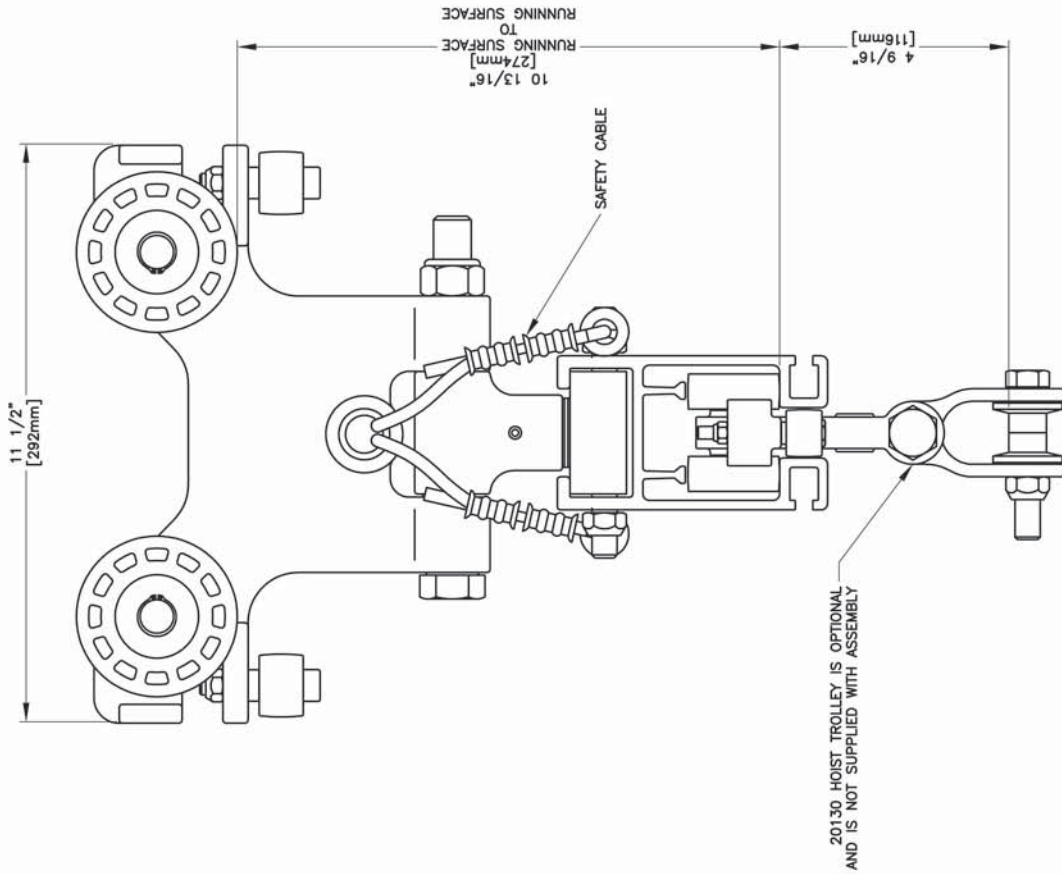


**22046 SINGLE END TRUCK
(WITH KICKUP WHEELS)**

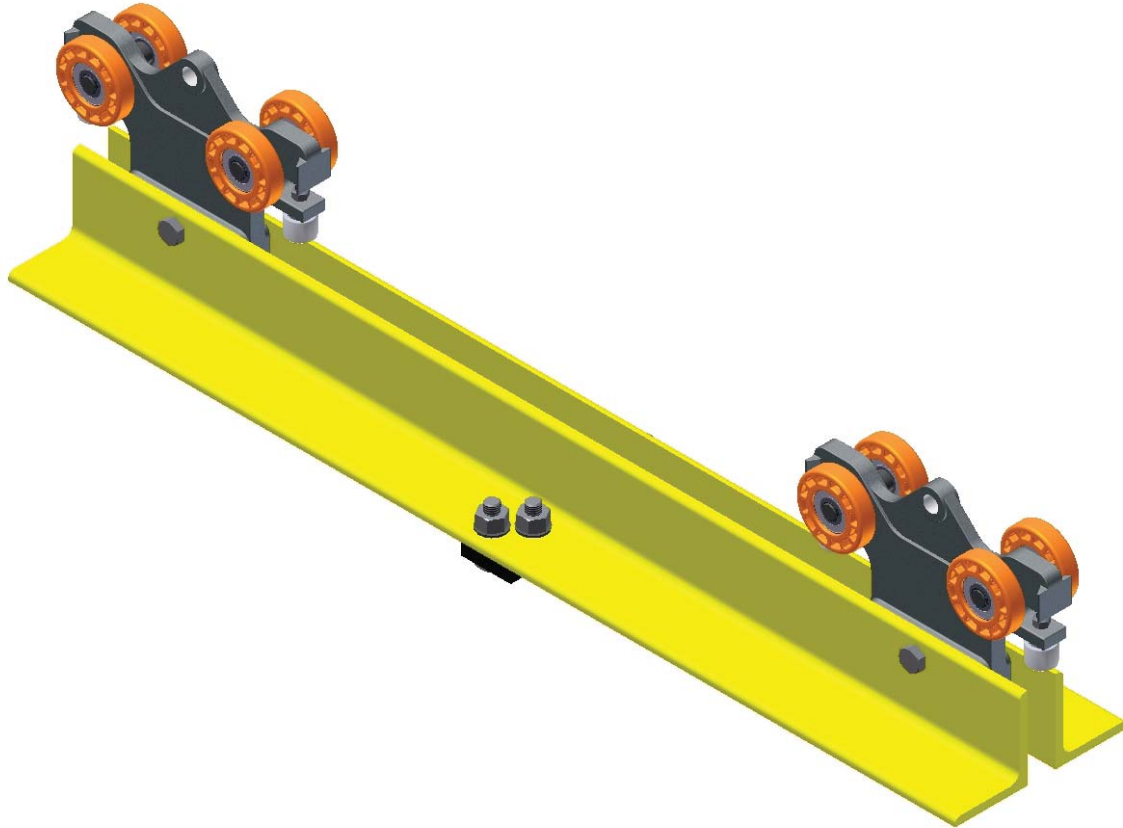
- For ETA-5 bridge to run ETA-8 runway
- Rated Load 1100 lbs. (500kg)



22046 SINGLE END TRUCK (WITH KICKUP WHEELS)
 RATED LOAD: 1100 lbs. [500 KG.]
 SINGLE END TRUCK AT EACH END OF AN ET4-5 CRANE GIBBER TO RUN ON ET4-5 RUNWAY.
 WEIGHT: 14 LBS. [6.35 KG.]

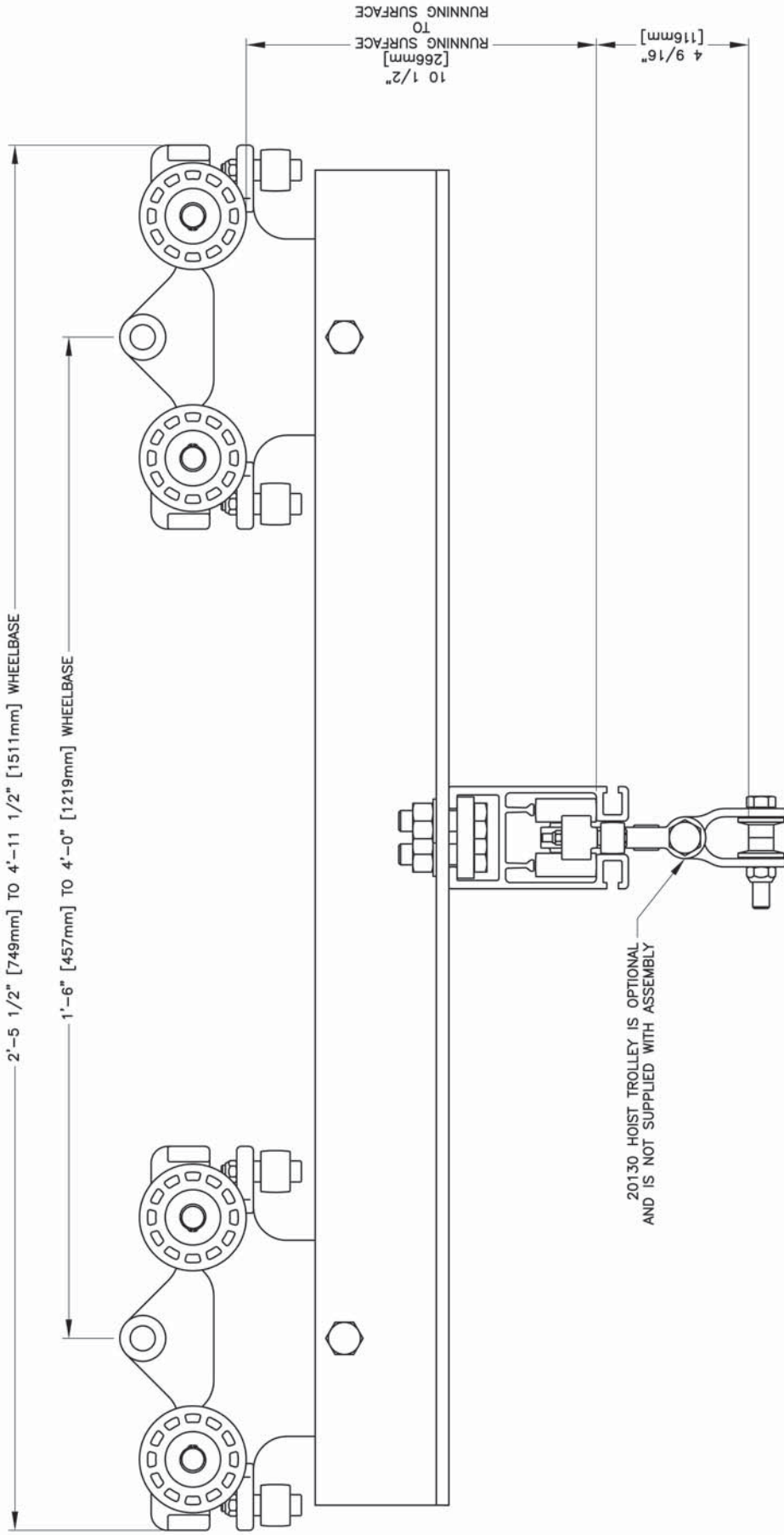


22041 SINGLE END TRUCK (WITHOUT KICKUP WHEELS)
 RATED LOAD: 1100 lbs. [500 KG.]
 SINGLE END TRUCK AT EACH END OF AN ET4-5 CRANE GIBBER TO RUN ON ET4-5 RUNWAY.
 WEIGHT: 12 LBS. [5.44 KG.]

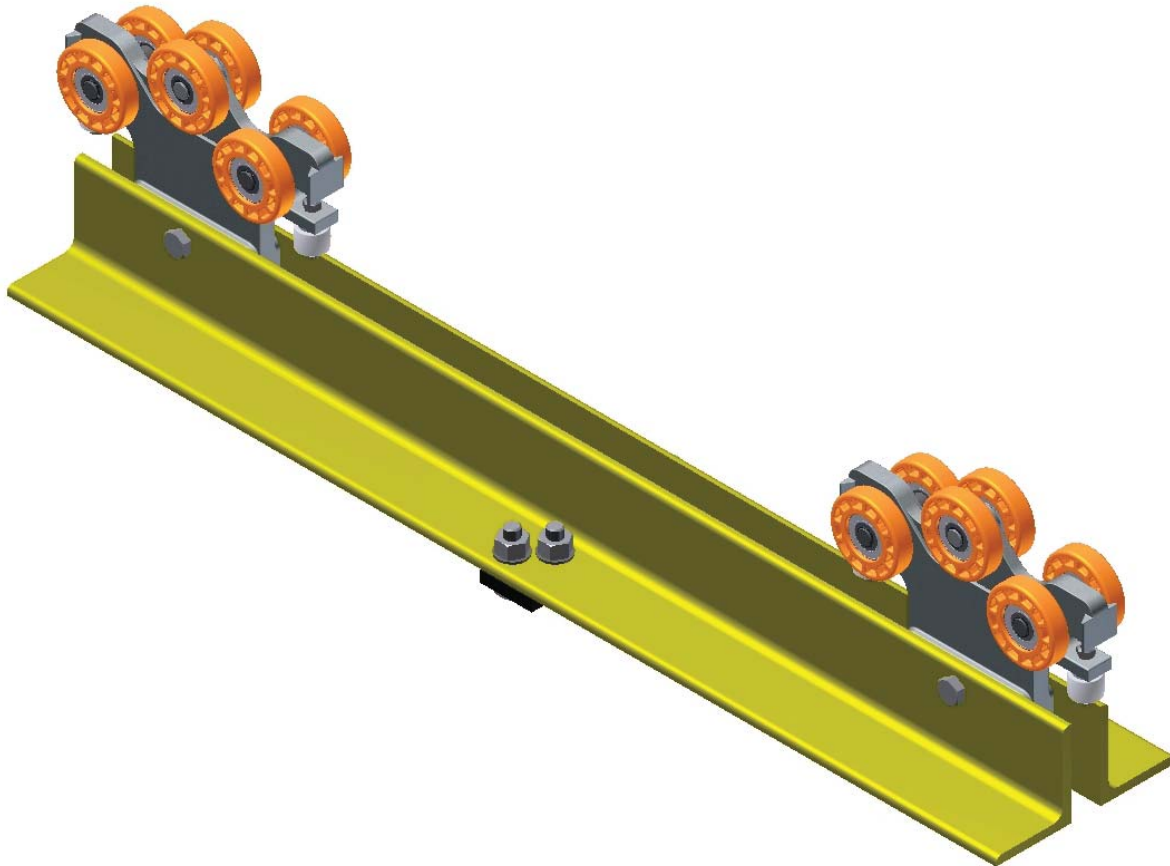


ETA-8 RIGID END TRUCKS WITHOUT KICKUP

- End truck assemblies for single girder bridge cranes to run on ETA-8 Runway.
- Attaches to ETA-4, ETA-5 and ETA-8 Bridges.
- **22221** 1'-6" (457mm) wheelbase for spans 3'-0" (914mm) to 6'-0" (1829mm) **Weight** 61 lbs. (27.6kg)
- **22222** 2'-0" (609mm) wheelbase for spans 7'-0" (2133mm) to 10'-0" (3048mm) 70 lbs. (32kg)
- **22223** 2'-6" (762mm) wheelbase for spans 11'-0" (3353mm) to 14'-0" (4267mm) 79 lbs. (35.8kg)
- **22224** 3'-0" (914mm) wheelbase for spans 15'-0" (4572mm) to 18'-0" (5486mm) 88 lbs. (40kg)
- **22225** 3'-6" (1066mm) wheelbase for spans 19'-0" (5791mm) to 21'-0" (6400mm) 98 lbs. (44.5kg)
- **22226** 4'-0" (1219mm) wheelbase for spans 22'-0" (6705mm) to 25'-0" (7620mm) 107 lbs. (48.5kg)
- Rated Load 2200 lbs. (1000kg)
- No safety cable included



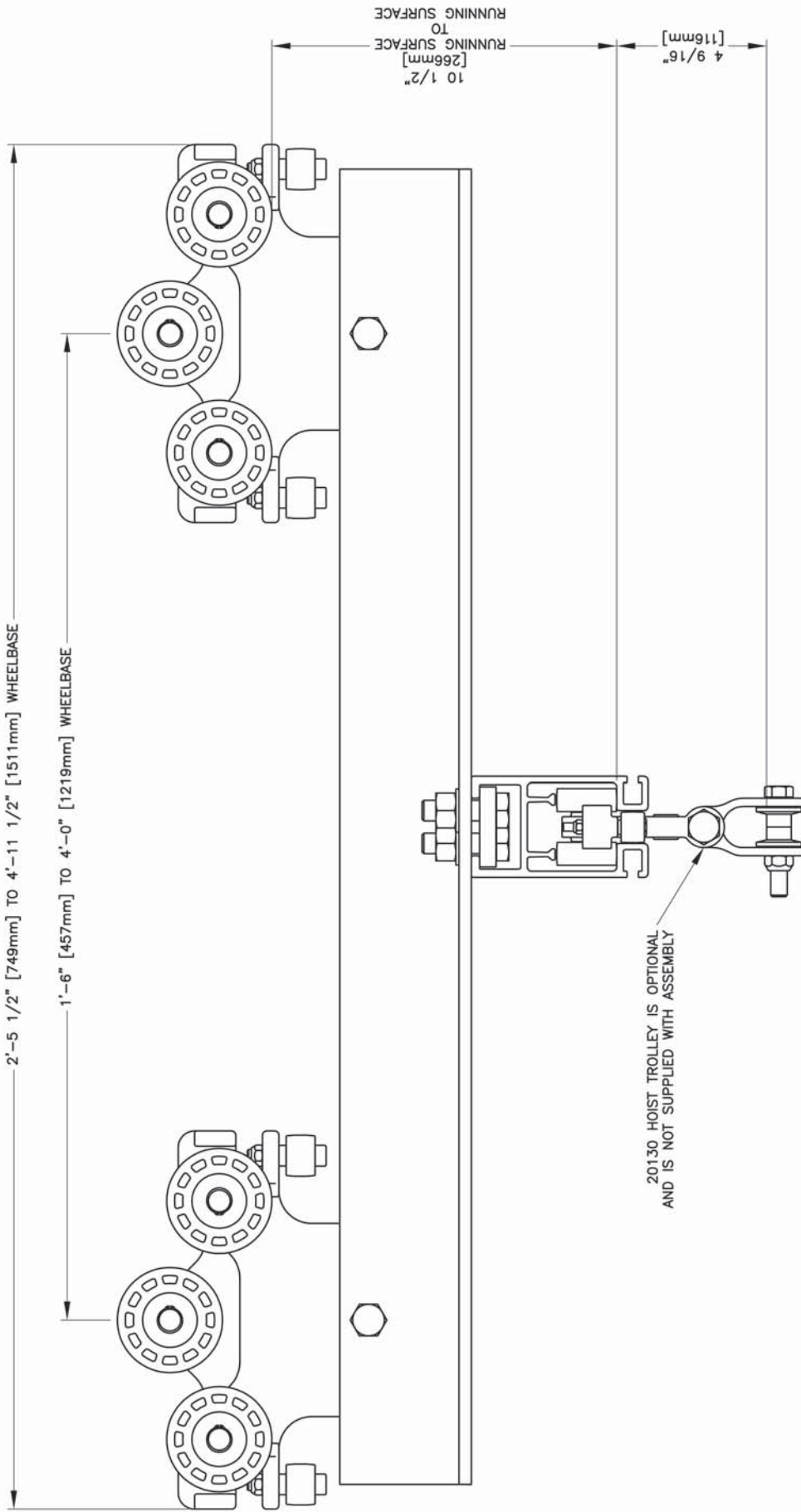
ETA-8 RIGID END TRUCK WITHOUT KICKUP
 DUAL TROLLEY END TRUCK AT EACH
 END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 NO SAFETY CABLE INCLUDED



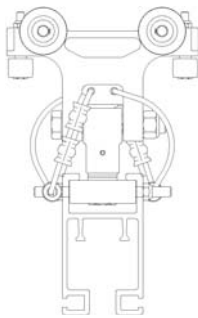
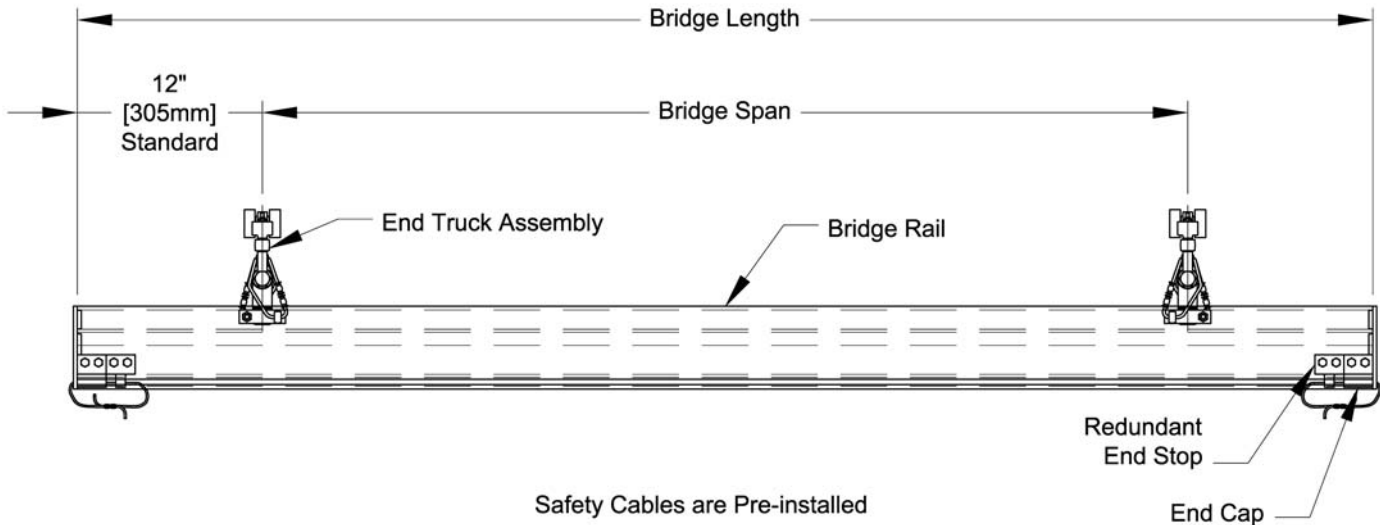
ETA-8 RIGID END TRUCKS WITH KICKUP

- End truck assemblies for single girder bridge cranes to run on ETA-8 Runway.
- Attaches to ETA-4, ETA-5 and ETA-8 Bridges.

| | Weight |
|--------------------------------------------------------------------------------------|------------------|
| ■ 22227 1'-6" (457mm) wheelbase for spans 3'-0" (914mm) to 6'-0" (1829mm) | 63 lbs. (28.5kg) |
| ■ 22228 2'-0" (609mm) wheelbase for spans 7'-0" (2133mm) to 10'-0" (3048mm) | 72 lbs. (32.6kg) |
| ■ 22229 2'-6" (762mm) wheelbase for spans 11'-0" (3353mm) to 14'-0" (4267mm) | 81 lbs. (36.7kg) |
| ■ 22230 3'-0" (914mm) wheelbase for spans 15'-0" (4572mm) to 18'-0" (5486mm) | 90 lbs. (40.8kg) |
| ■ 22231 3'-6" (1066mm) wheelbase for spans 19'-0" (5791mm) to 21'-0" (6400mm) | 99 lbs. (45kg) |
| ■ 22232 4'-0" (1219mm) wheelbase for spans 22'-0" (6705mm) to 25'-0" (7620mm) | 108 lbs. (49kg) |
| ■ Rated Load 2200 lbs. (1000kg) | |
| ■ No safety cable included | |



ETA-8 RIGID END TRUCK WITH KICKUP
 DUAL TROLLEY END TRUCK AT EACH
 END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 NO SAFETY CABLE INCLUDED



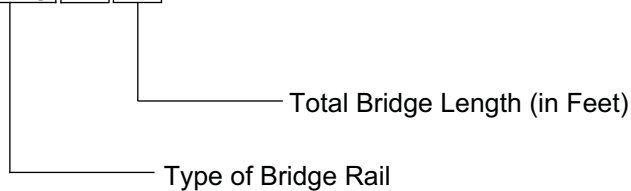
The Bridge Crane Assembly Consists of:

- One bridge beam (section of rail)
- Two end truck assemblies (mounted to the bridge with a trolley to roll inside of the runway, safety cables are pre-installed)
- Double end stop Assembly (Ull Standard)

Example (Bridge Rail only)

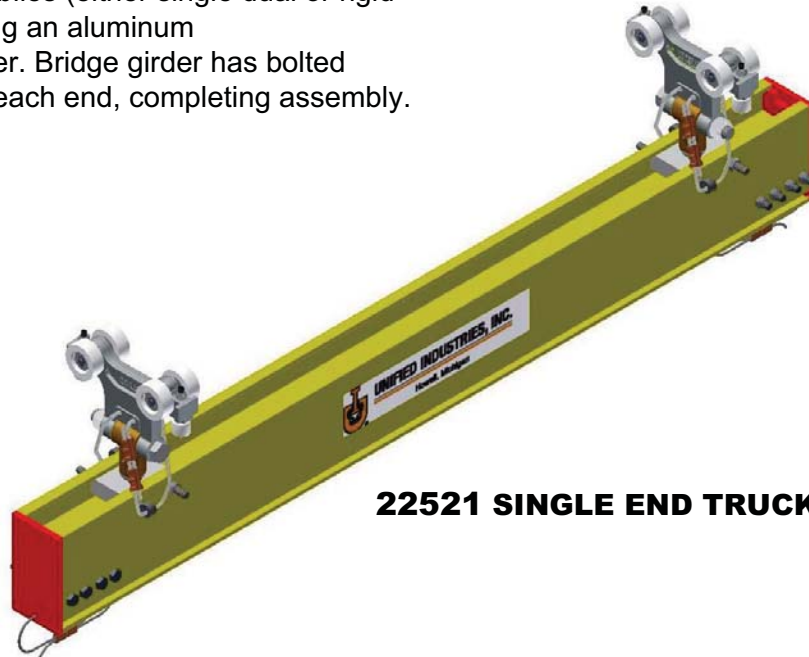
Order Number:

ETA5|BR|08

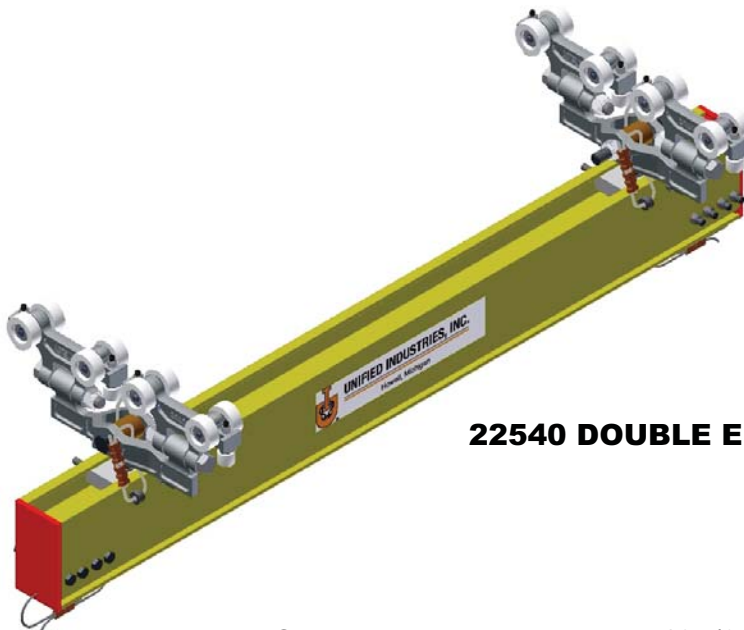


- Round up to the nearest foot (Cut to 8'-6" = ETA5BR09)

Unified ETA-5 single girder bridge crane consists of two end truck assemblies (either single dual or rigid end trucks) supporting an aluminum enclosed bridge girder. Bridge girder has bolted double end stops at each end, completing assembly.

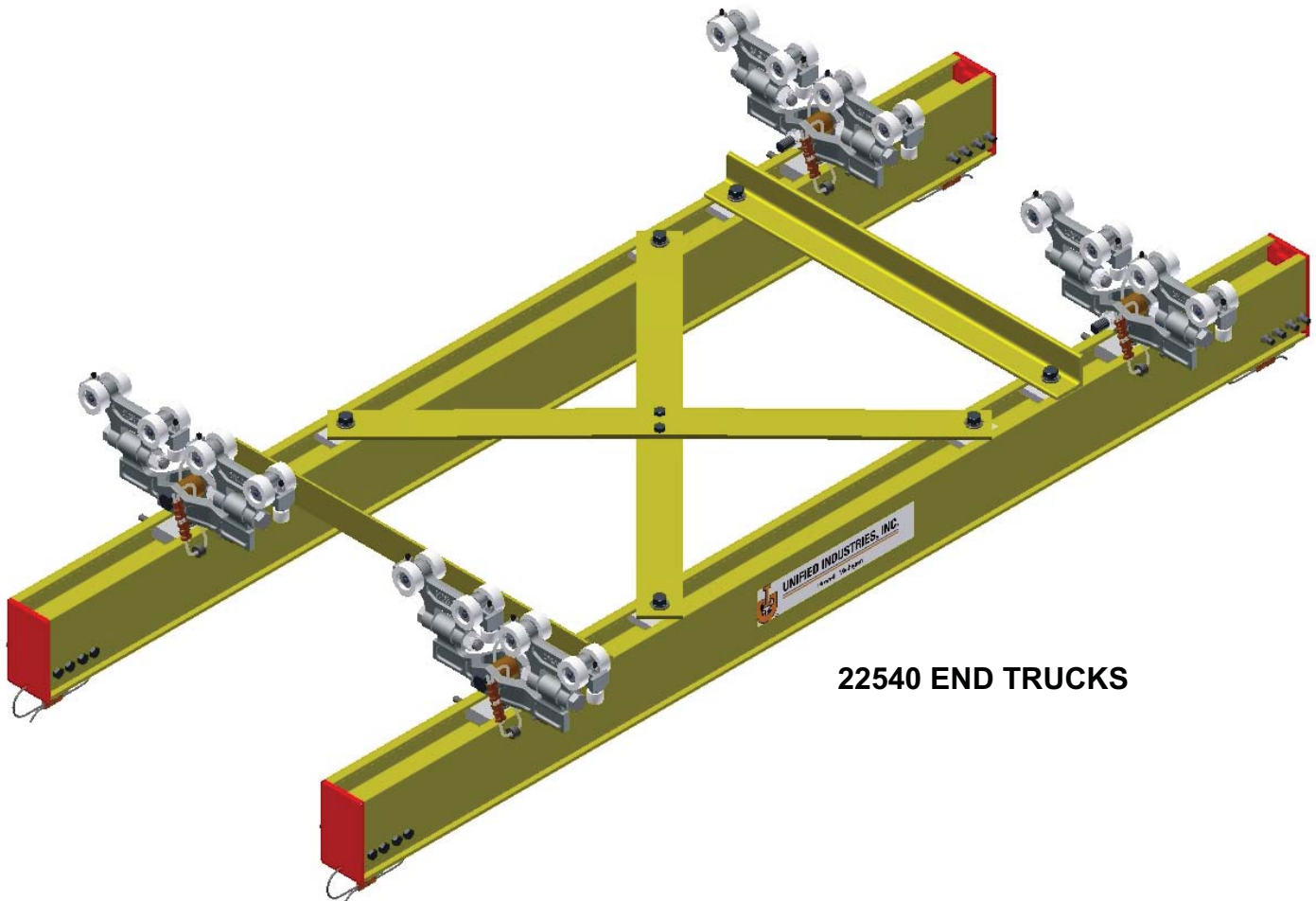


22521 SINGLE END TRUCK



22540 DOUBLE END TRUCK

- Standard overhang each end 12" (305mm)
- Longer overhangs consult Factory
- Paint color-specify when ordering
- Standard double end stops

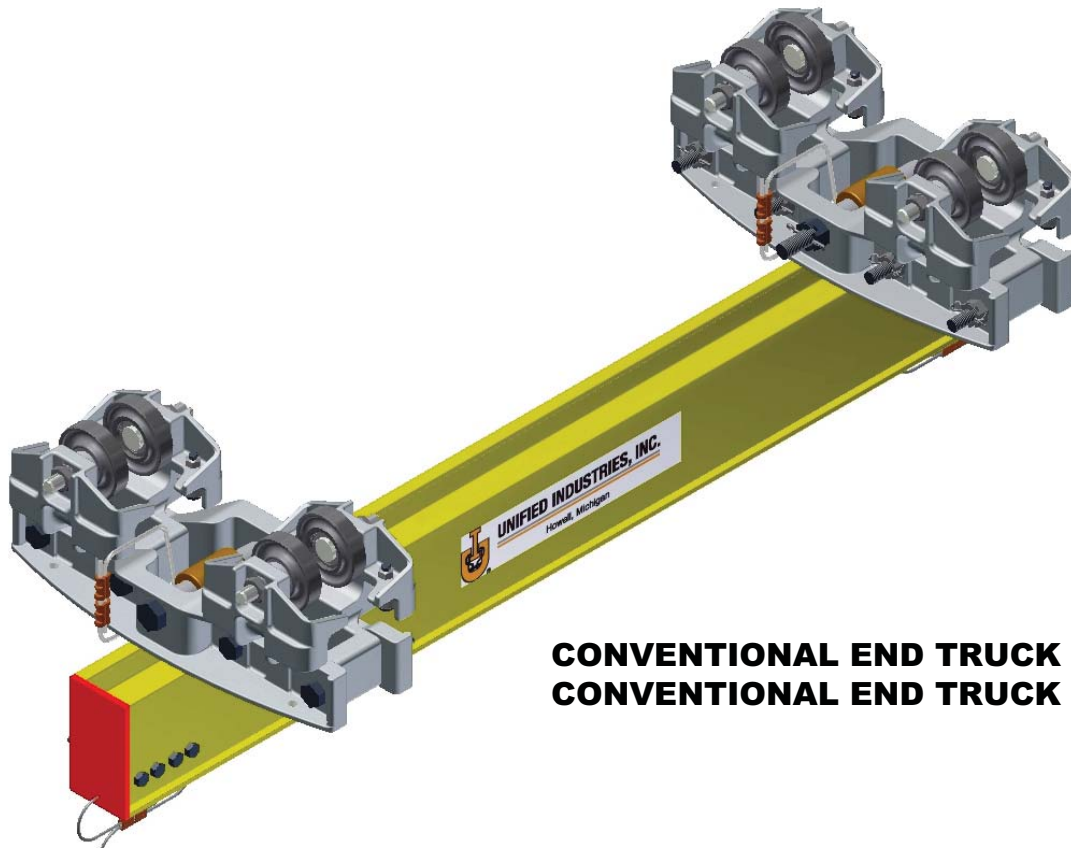


22540 END TRUCKS

Unified ETA-5 double girder bridge cranes are used for suspending hoists, nut runners, indexing fixtures, mechanical grabs, etc.

ETA-5 double girder bridge cranes consist of four single or dual trolley end truck assemblies supporting ETA-5 extruded aluminum bridge girders. Bridge girder has bolted polyurethane end caps at each end, completing assembly.

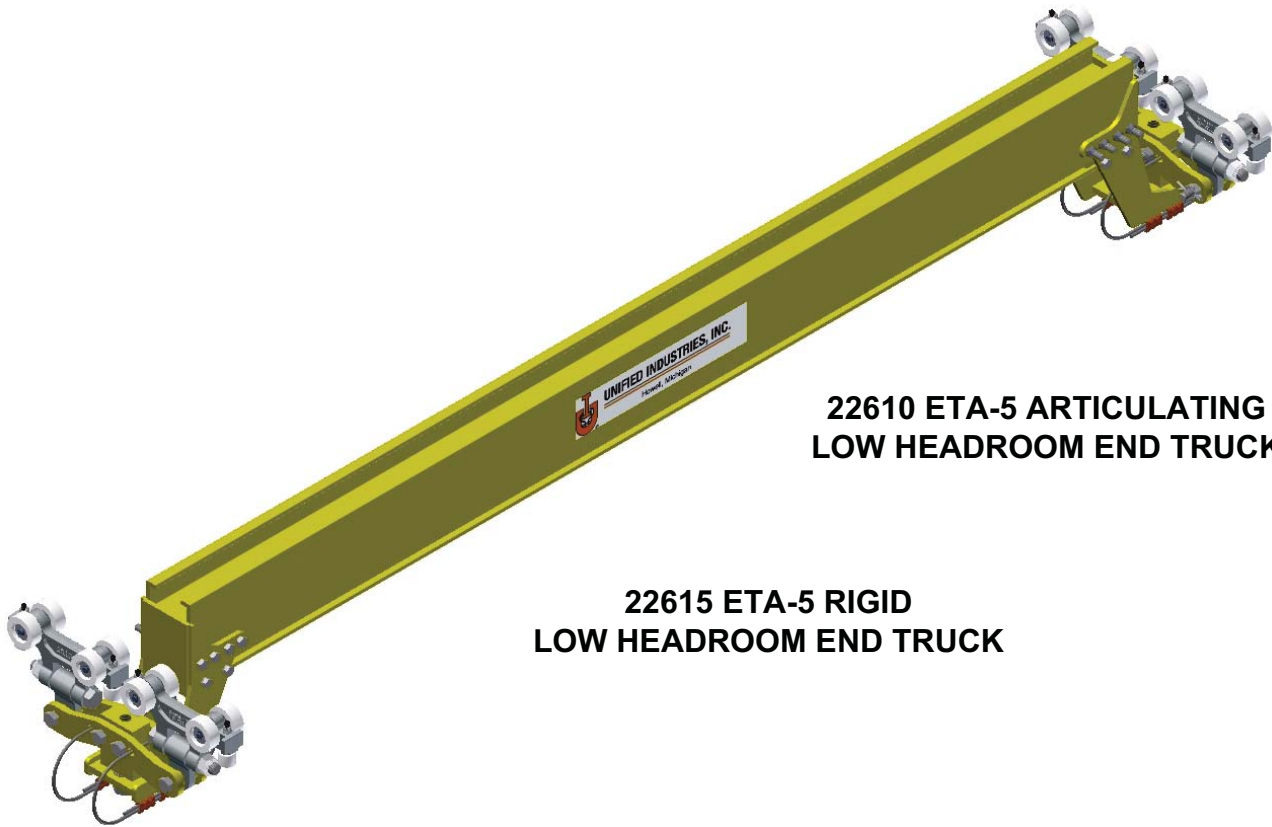
- Diagonal bracing to prohibit articulation
- 12" (305mm) standard overhang
- Air line festoon brackets and kits available.
- Festoon trolleys available
- Paint color - specify when ordering
- Double end stops standard
- Longer overhangs consult factory



CONVENTIONAL END TRUCK (W/O KICK-UP)
CONVENTIONAL END TRUCK (KICK-UP)

Designed Specifically For Existing Runway Systems

- **22557** end truck assembly MBC-500-3-325 without kickup wheel for operation on 3.25 or 3.33 flat rail. Rated Load 1100 lbs. (500kg)
- **22558** end truck assembly MBC-500-3-333 without kickup wheel for operation on S6x12.5. Rated Load 1100 lbs. (500kg)
- **22559** end truck assembly MBC-500-3-4-266 without kickup wheel for operation on S4x7.7. Rated Load 1100 lbs. (500kg)
- **22574** end truck assembly MBC-500-3-325 with kickup wheel for operation on 3.25 or 3.33 flat rail. Rated Load 1100 lbs. (500kg)
- **22575** end truck assembly MBC-500-3-333 with kickup wheel for operation on S6x12.5. Rated Load 1100 lbs. (500kg)
- **22576** end truck assembly MBC-500-3-4-266 without kickup wheel for operation on S4x7.7. Rated Load 1100 lbs. (500kg)
- Self aligning end trucks
- High tensile almag alloy castings make up end truck assembly
- Counter thrust trolleys for countering extended loads are available
- Low inertia: 1-2% of load
- Paint color-specify when ordering
- Double end stops standard
- Optional rigid mount bracket
- Longer overhangs consult factory



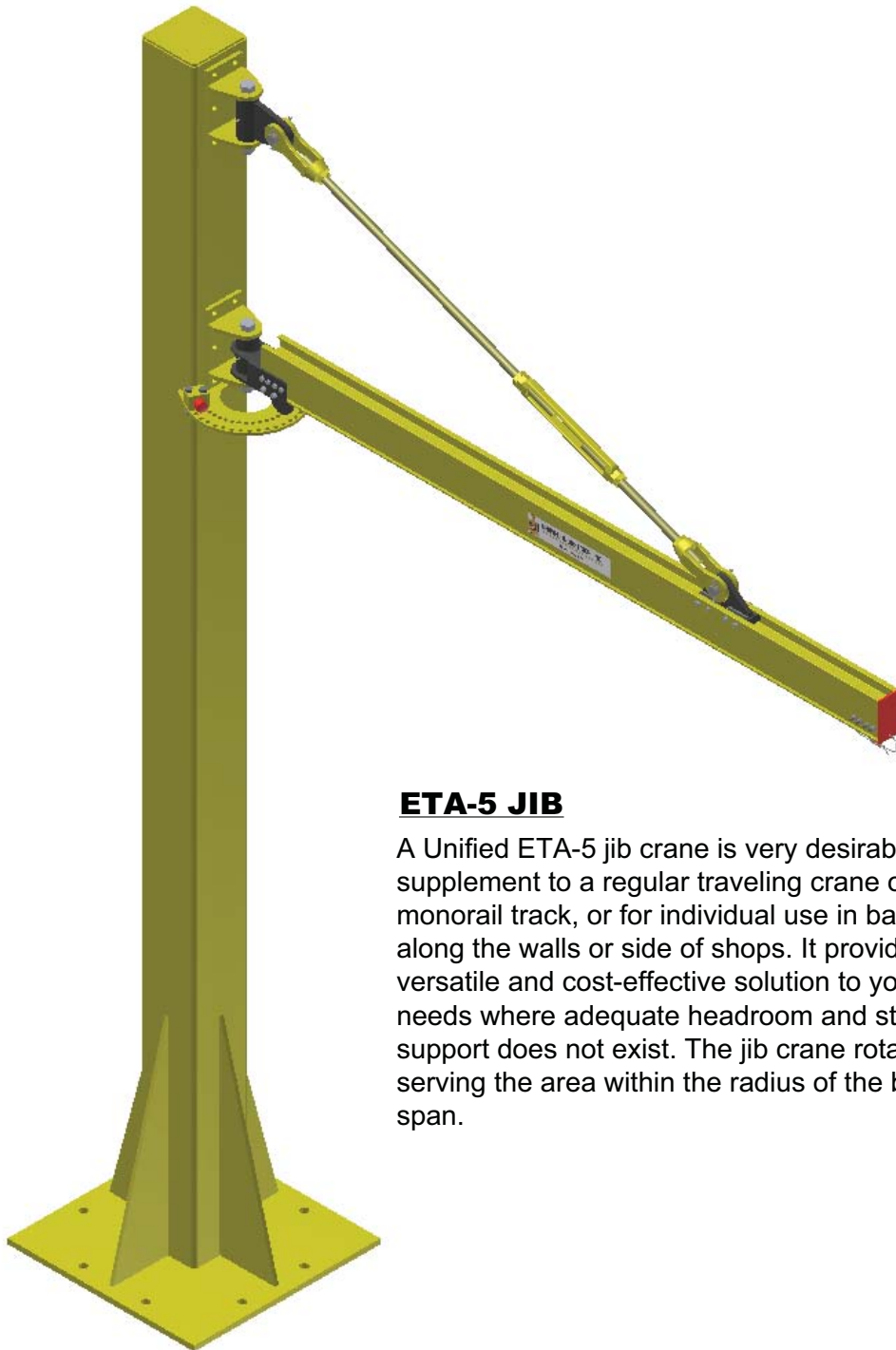
**22610 ETA-5 ARTICULATING
LOW HEADROOM END TRUCK**

**22615 ETA-5 RIGID
LOW HEADROOM END TRUCK**

Unified ETA-5 single girder low headroom bridge crane consists of two end truck assemblies supporting an aluminum enclosed bridge girder. Bridge girder and runway girder are held at the same elevation with bolted construction and a neoprene bumper at each end completing the assembly.

Unified ETA-5 single girder bridge cranes for rated loads to 1100 lbs. (500kg)

- Increased headroom in low areas
- Paint color - specify when ordering
- Air brackets and kits available
- Small tool, festoon trolley or tag line slider available.
- Overhangs are not available

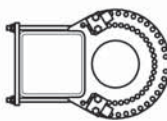


ETA-5 JIB

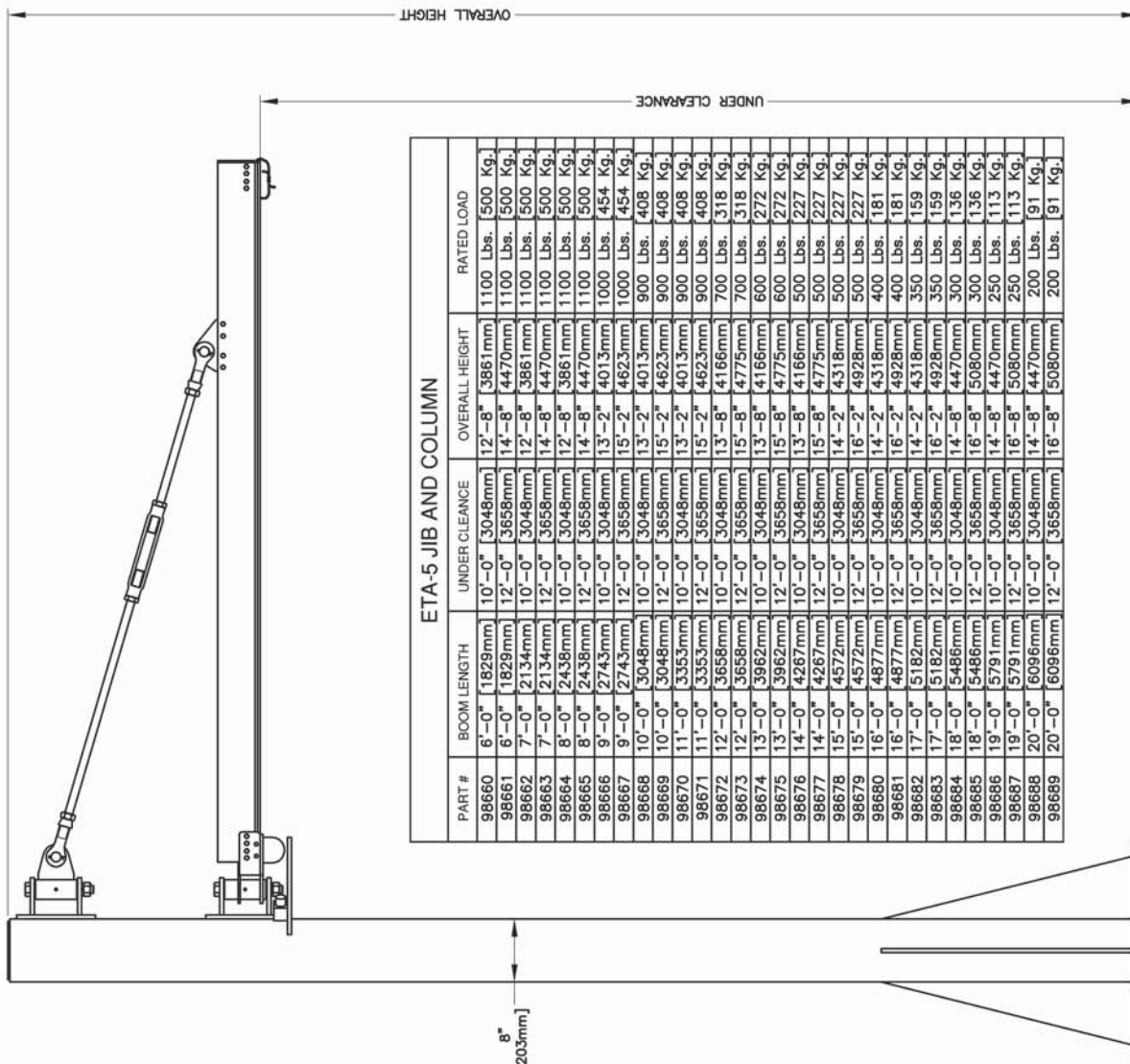
A Unified ETA-5 jib crane is very desirable as a supplement to a regular traveling crane or monorail track, or for individual use in bays and along the walls or side of shops. It provides a versatile and cost-effective solution to your crane needs where adequate headroom and structural support does not exist. The jib crane rotates 220° serving the area within the radius of the beam's span.



98540 8" JIB COLUMN INDEX STOP ASSEMBLY

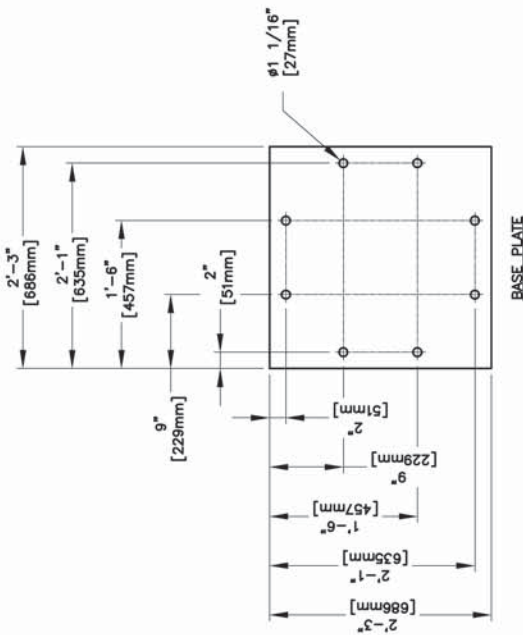


98541 8" BOLTED JIB COLUMN INDEX STOP ASSEMBLY



ETA-5 JIB AND COLUMN

| PART # | BOOM LENGTH | UNDER CLEARANCE | OVERALL HEIGHT | RATED LOAD |
|--------|-----------------|-----------------|-----------------|-------------------|
| 98660 | 6'-0" [1829mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 1100 Lbs. 500 Kg. |
| 98661 | 6'-0" [1829mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 1100 Lbs. 500 Kg. |
| 98662 | 7'-0" [2134mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 1100 Lbs. 500 Kg. |
| 98663 | 7'-0" [2134mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 1100 Lbs. 500 Kg. |
| 98664 | 8'-0" [2438mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 1100 Lbs. 500 Kg. |
| 98665 | 8'-0" [2438mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 1100 Lbs. 500 Kg. |
| 98666 | 9'-0" [2743mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 1000 Lbs. 454 Kg. |
| 98667 | 9'-0" [2743mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 1000 Lbs. 454 Kg. |
| 98668 | 10'-0" [3048mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 900 Lbs. 408 Kg. |
| 98669 | 10'-0" [3048mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 900 Lbs. 408 Kg. |
| 98670 | 11'-0" [3353mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 900 Lbs. 408 Kg. |
| 98671 | 11'-0" [3353mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 900 Lbs. 408 Kg. |
| 98672 | 12'-0" [3658mm] | 10'-0" [3048mm] | 13'-8" [4166mm] | 700 Lbs. 318 Kg. |
| 98673 | 12'-0" [3658mm] | 12'-0" [3658mm] | 15'-8" [4775mm] | 700 Lbs. 318 Kg. |
| 98674 | 13'-0" [3962mm] | 10'-0" [3048mm] | 13'-8" [4166mm] | 600 Lbs. 272 Kg. |
| 98675 | 13'-0" [3962mm] | 12'-0" [3658mm] | 15'-8" [4775mm] | 600 Lbs. 272 Kg. |
| 98676 | 14'-0" [4267mm] | 10'-0" [3048mm] | 13'-8" [4166mm] | 500 Lbs. 227 Kg. |
| 98677 | 14'-0" [4267mm] | 12'-0" [3658mm] | 15'-8" [4775mm] | 500 Lbs. 227 Kg. |
| 98678 | 15'-0" [4572mm] | 10'-0" [3048mm] | 14'-2" [4318mm] | 500 Lbs. 227 Kg. |
| 98679 | 15'-0" [4572mm] | 12'-0" [3658mm] | 16'-2" [4928mm] | 500 Lbs. 227 Kg. |
| 98680 | 16'-0" [4877mm] | 10'-0" [3048mm] | 14'-2" [4318mm] | 400 Lbs. 181 Kg. |
| 98681 | 16'-0" [4877mm] | 12'-0" [3658mm] | 16'-2" [4928mm] | 400 Lbs. 181 Kg. |
| 98682 | 17'-0" [5182mm] | 10'-0" [3048mm] | 14'-2" [4318mm] | 350 Lbs. 159 Kg. |
| 98683 | 17'-0" [5182mm] | 12'-0" [3658mm] | 16'-2" [4928mm] | 350 Lbs. 159 Kg. |
| 98684 | 18'-0" [5486mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 300 Lbs. 136 Kg. |
| 98685 | 18'-0" [5486mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 300 Lbs. 136 Kg. |
| 98686 | 19'-0" [5791mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 250 Lbs. 113 Kg. |
| 98687 | 19'-0" [5791mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 250 Lbs. 113 Kg. |
| 98688 | 20'-0" [6096mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 200 Lbs. 91 Kg. |
| 98689 | 20'-0" [6096mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 200 Lbs. 91 Kg. |



TEST LOAD SHALL NOT BE MORE THAN 125% OF THE RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER. COLUMN SHALL NOT BE LOADED BEYOND ITS RATED LOAD CAPACITY EXCEPT FOR TEST PURPOSES.

NOTES:
 1. CONSULT FACTORY FOR UNDERCLEARANCE MORE THAN 12'-0" [3658mm].
 2. THE MINIMUM ANCHOR REQUIREMENT IS A 43/4" [20mm] WEDGE TYPE ANCHOR BOLT WITH 3 1/4" [83mm] STANDARD EMBEDMENT IN 6" [152mm] 3000 PSI [2070 N/cm²] CONCRETE.

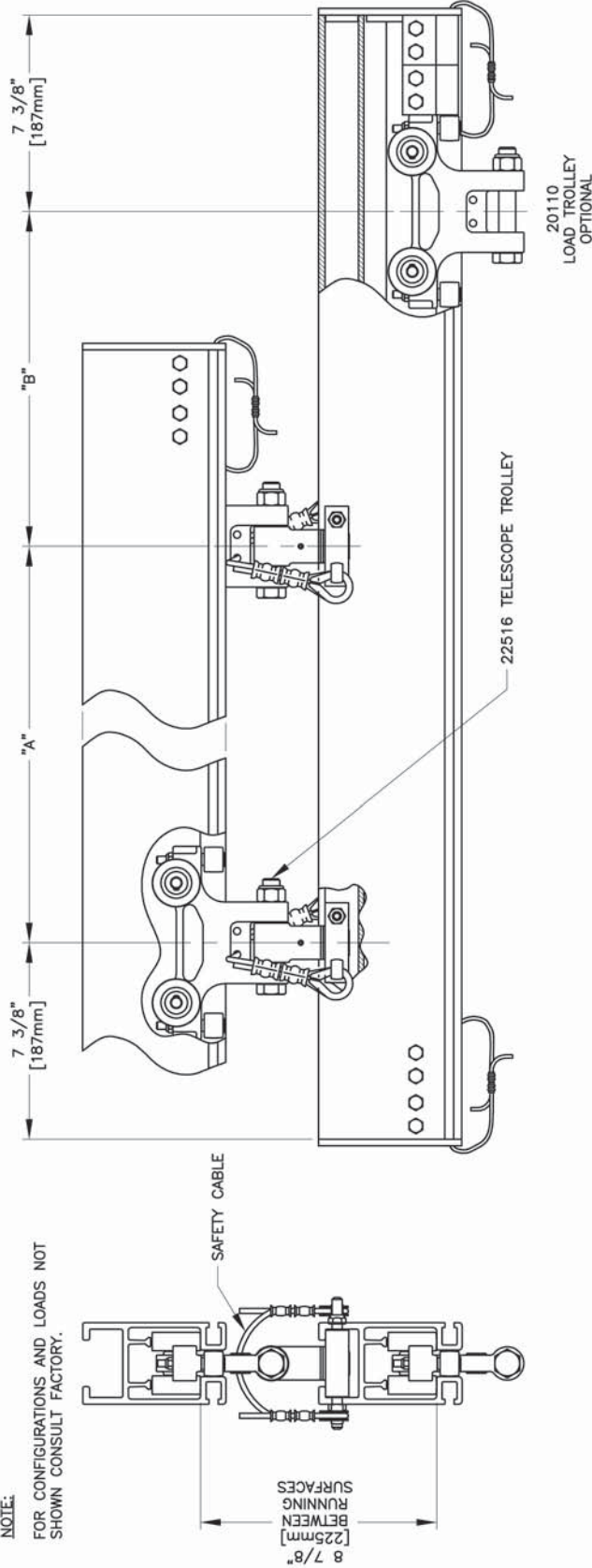
Note: Rated Loads above 550lbs require a Dual Hoist Trolley

ETA-5 TELESCOPING UNITS WITH ETA-4/5 TROLLEYS

RATED LOAD: BASED UPON STATIC LOAD TESTING AND CARRYING CAPACITY OF HIGH IMPACT WHEELS.
 TEST LOAD: SHALL NOT BE MORE THAN 125% OF THE RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER.
 CRANE SHALL NOT BE LOADED BEYOND ITS' RATED LOAD CAPACITY EXCEPT FOR TEST PURPOSES.

NOTE:

FOR CONFIGURATIONS AND LOADS NOT SHOWN CONSULT FACTORY.



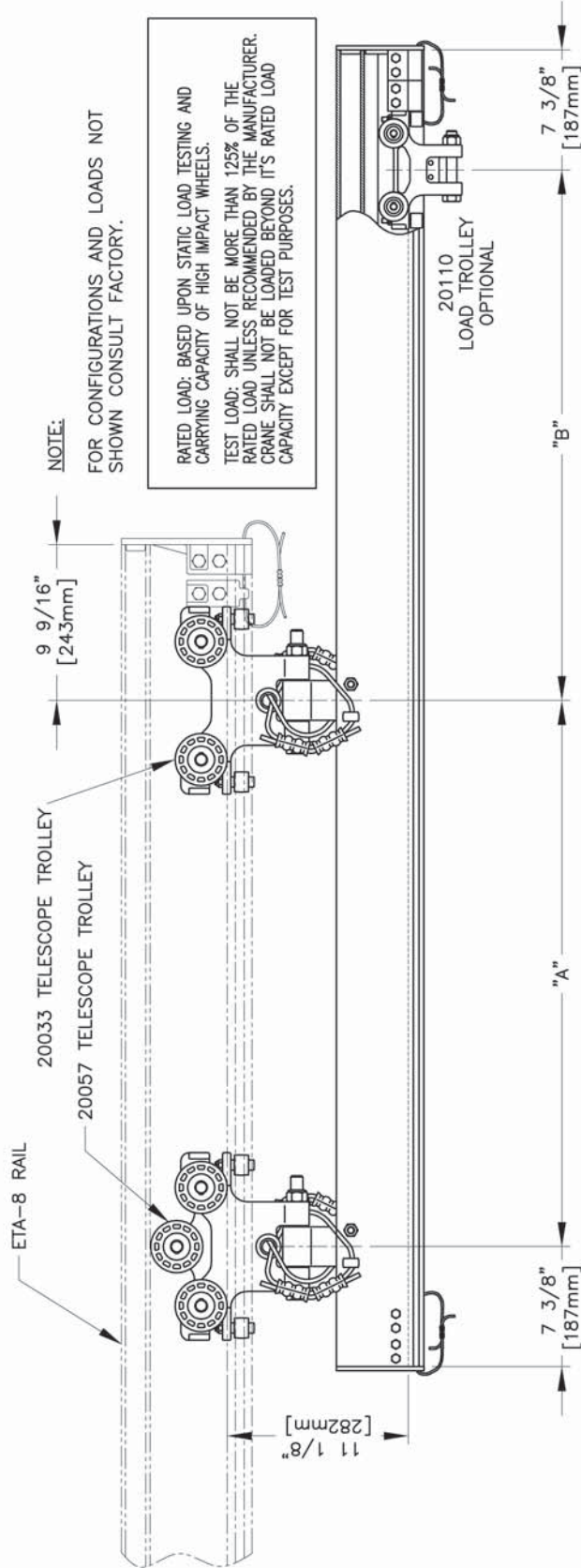
ETA-5 TELESCOPE UNIT WITH 22516 TELESCOPE TROLLEYS

| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|----------|-----|--------|------------|----------|-----|--------|------------|----------|
| | | 1/250 | 1/450 | | | 1/250 | 1/450 | | | 1/250 | 1/450 |
| 18 | 24 in. | 200 lbs. | 200 lbs. | 30 | 24 in. | 265 lbs. | 285 lbs. | 36 | 24 in. | 285 lbs. | 285 lbs. |
| | 36 in. | 150 lbs. | 150 lbs. | | 36 in. | 210 lbs. | 230 lbs. | | 36 in. | 230 lbs. | 230 lbs. |
| | 48 in. | 120 lbs. | 120 lbs. | | 48 in. | 175 lbs. | 175 lbs. | | 48 in. | 195 lbs. | 170 lbs. |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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ETA-5 TELESCOPE UNIT WITH 22516 TELESCOPE TROLLEYS

| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|--------|-----|--------|------------|---------|-----|--------|------------|---------|
| | | L/250 | L/450 | | | L/250 | L/450 | | | L/250 | L/450 |
| 457 | 610mm | 91 Kg. | 91 Kg. | 762 | 610mm | 120 Kg. | 120 Kg. | 914 | 610mm | 129 Kg. | 129 Kg. |
| | 914mm | 68 Kg. | 68 Kg. | | 914mm | 95 Kg. | 95 Kg. | | 914mm | 104 Kg. | 104 Kg. |
| | 1219mm | 54 Kg. | 54 Kg. | | 1219mm | 79 Kg. | 79 Kg. | | 1219mm | 88 Kg. | 77 Kg. |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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ETA-5 TELESCOPING UNITS WITH ETA-8 TROLLEYS

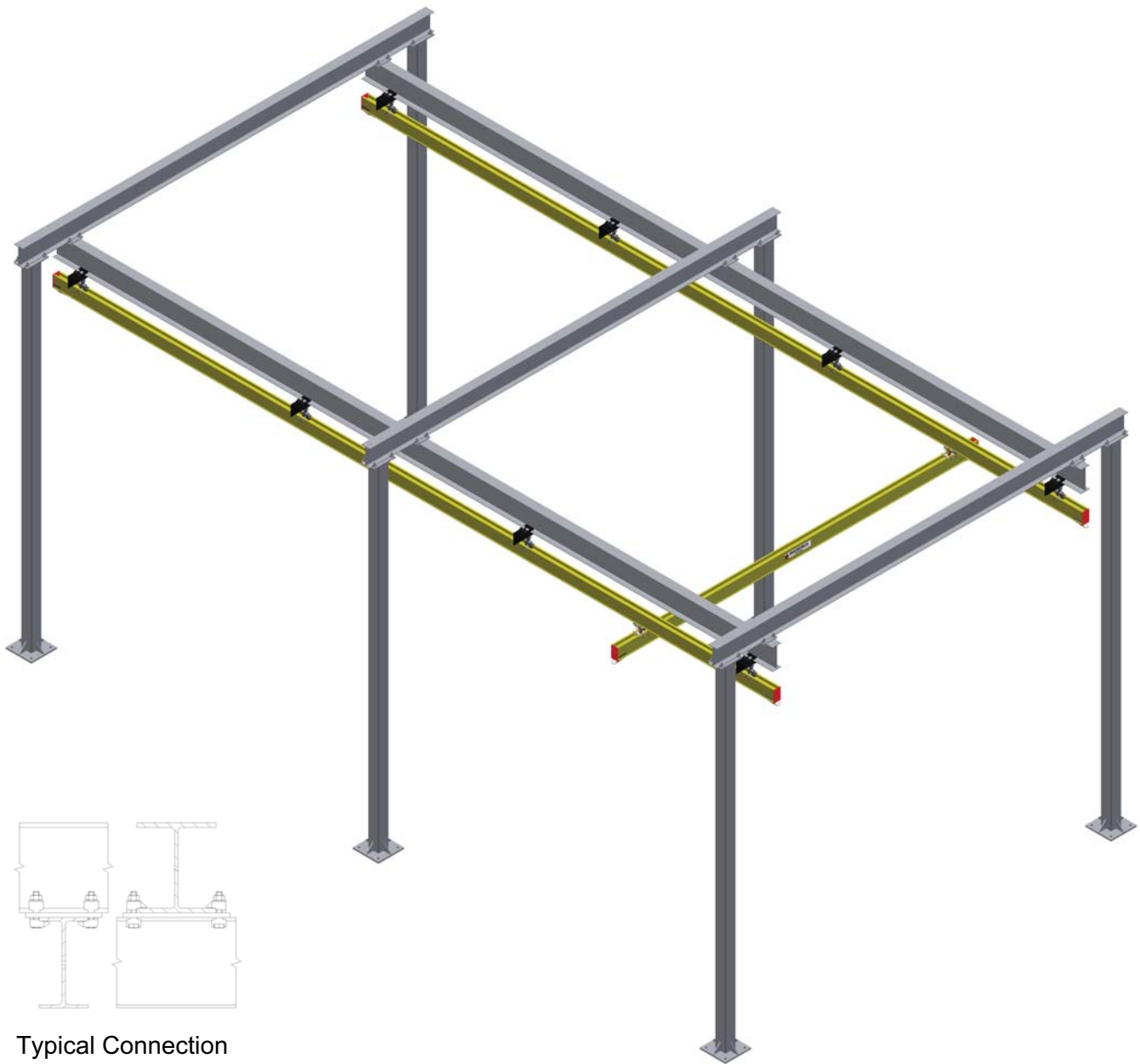


ETA-5 TELESCOPE UNIT WITH ETA-8 TROLLEYS

| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|------|--------|------------|----------|------|--------|------------|----------|------|--------|------------|----------|
| | | 1/250 | 1/450 | | | 1/250 | 1/450 | | | 1/250 | 1/450 |
| 18 | 24 in. | 370 lbs. | 370 lbs. | 30 | 24 in. | 540 lbs. | 540 lbs. | 36 | 24 in. | 585 lbs. | 500 lbs. |
| | 36 in. | 240 lbs. | 240 lbs. | | 36 in. | 435 lbs. | 300 lbs. | | 36 in. | 480 lbs. | 275 lbs. |
| INCH | 48 in. | 175 lbs. | 175 lbs. | INCH | 48 in. | 340 lbs. | 185 lbs. | INCH | 48 in. | 315 lbs. | 170 lbs. |

ETA-5 TELESCOPE UNIT WITH ETA-8 TROLLEYS

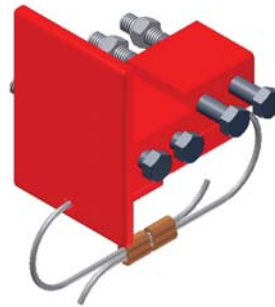
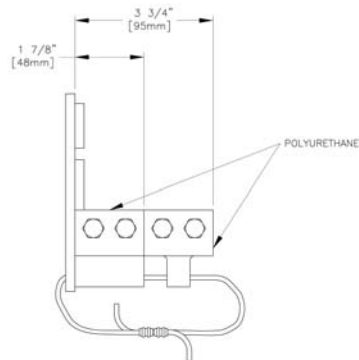
| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|---------|-----|--------|------------|---------|-----|--------|------------|---------|
| | | L/250 | L/450 | | | L/250 | L/450 | | | L/250 | L/450 |
| 457 | 610mm | 168 Kg. | 168 Kg. | 762 | 610mm | 245 Kg. | 245 Kg. | 914 | 610mm | 265 Kg. | 227 Kg. |
| | 914mm | 109 Kg. | 109 Kg. | | 914mm | 197 Kg. | 136 Kg. | | 914mm | 218 Kg. | 125 Kg. |
| mm | 1219mm | 79 Kg. | 79 Kg. | mm | 1219mm | 154 Kg. | 84 Kg. | mm | 1219mm | 143 Kg. | 77 Kg. |



Typical Connection

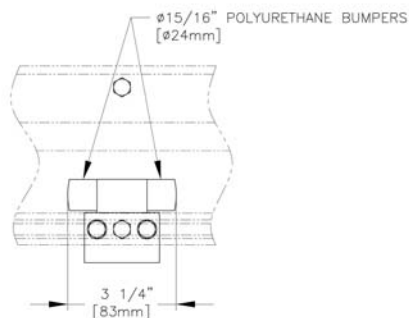
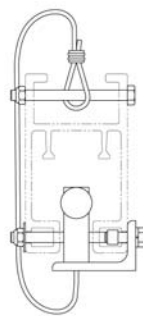
FREE STANDING FLOOR SUPPORT STRUCTURES

- Designed & engineered to each application.
- Floor supports do not require bracing to existing structures.
- P.E. certification optional.
- Paint to customer color specification.



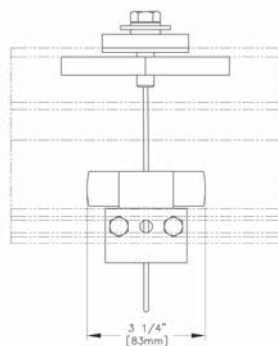
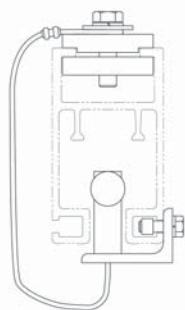
25194 ETA-5 POLY DOUBLE END CAP ASSEMBLY

- **Double End Stops for added safety are standard**
- **For Single Stop replacement parts see ETA Parts Manual**
- **Weight: 1 lb (.45kg)**



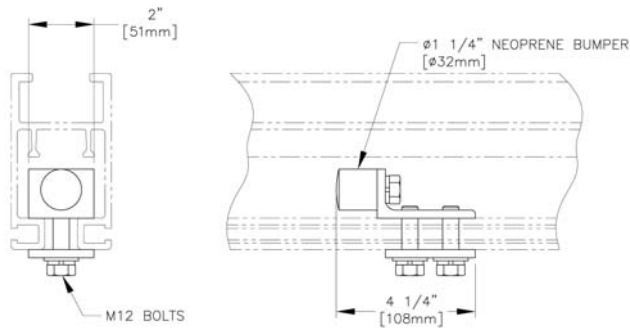
25575 ETA-4/5 INSERTABLE MID-RAIL STOP ASSEMBLY

- **Weight: 1 lb (.45kg)**



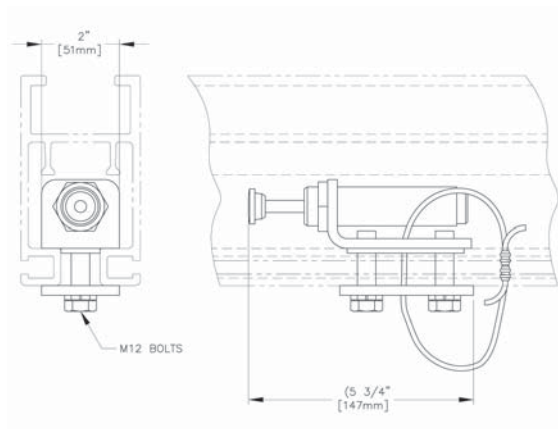
25577 ETA-4/5 ADJUSTABLE INSERTABLE MID-RAIL STOP ASSEMBLY

- **Weight: 2 lbs. (.90kg)**



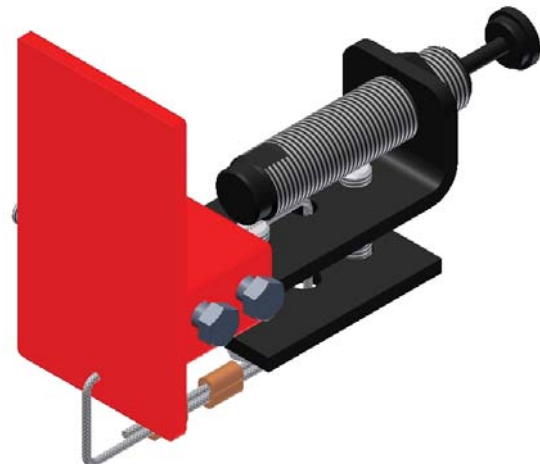
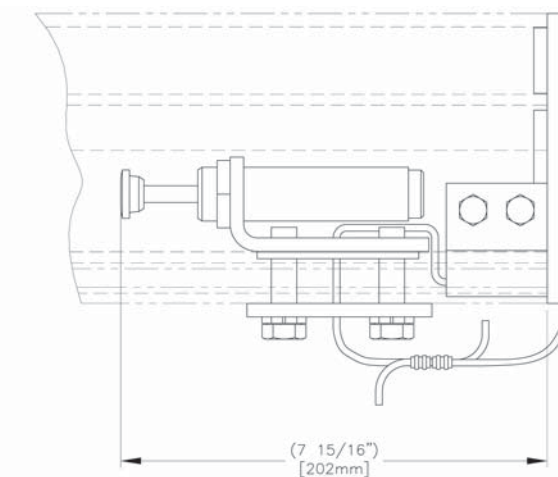
25580 ETA-4/5 MID-STOP ASSEMBLY

■ **Weight: 1 lb. (.45kg)**



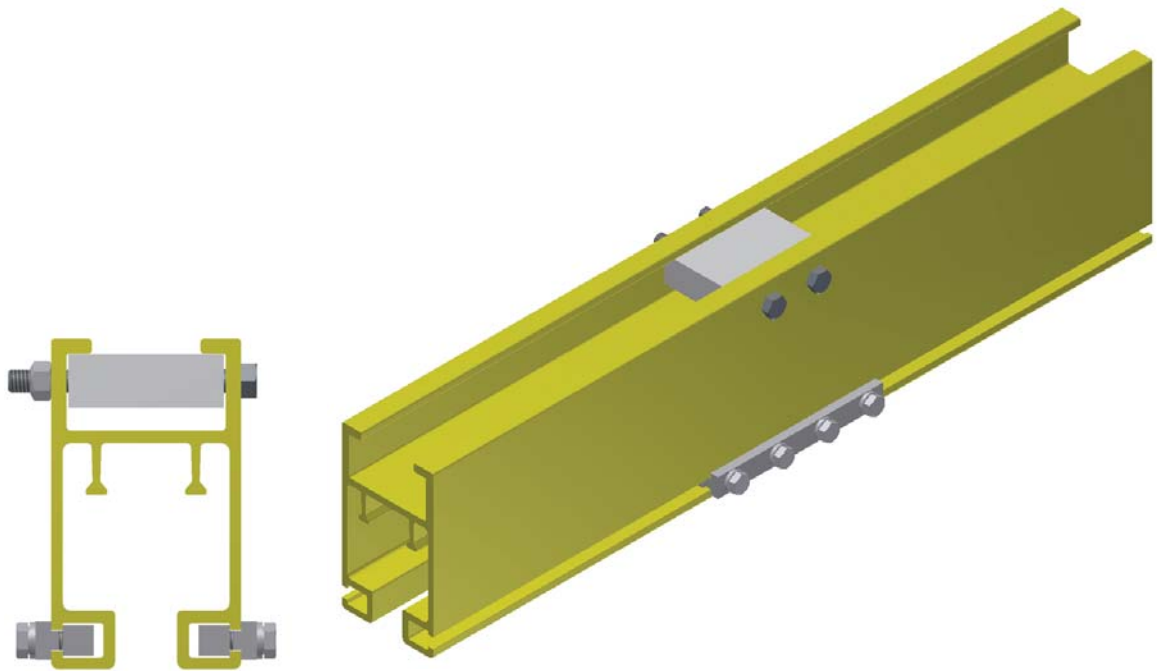
25185 ETA-4/5 POSITION STOP SHOCK ABSORBER ASSEMBLY

■ **Weight: 2 lbs. (.90kg)**



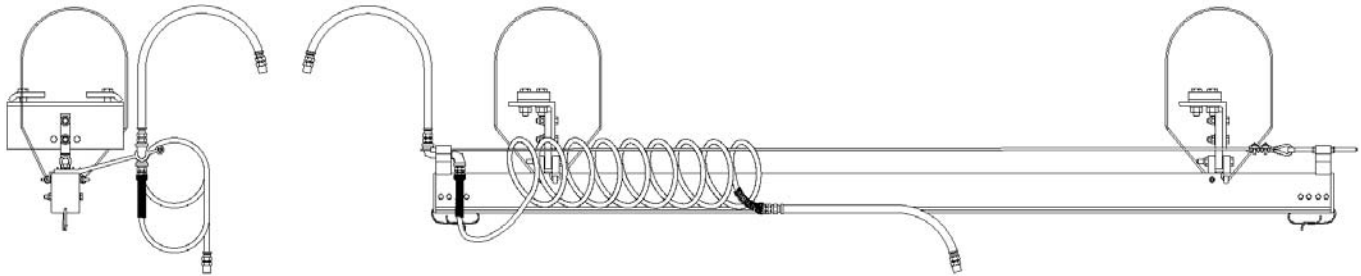
25134 ETA-5 END STOP SHOCK ABSORBER ASSEMBLY

■ **Weight: 3 lbs. (1.3kg)**



25514 ETA-4/5 SPLICE ASSEMBLY

28050 ETA-4/5 BOLTED SPLICE BAR KIT (DOES NOT INCLUDE TOP BLOCK)



RUNWAY AIR FESTOONING

RUNWAY AIR FESTOON KIT

Features

- Two Blue Whip Hoses x 36" (914mm)
- Blue Coiled Hose
- Two ETA Festoon Brackets
- 1/4" Nylon Coated Cable Assembly

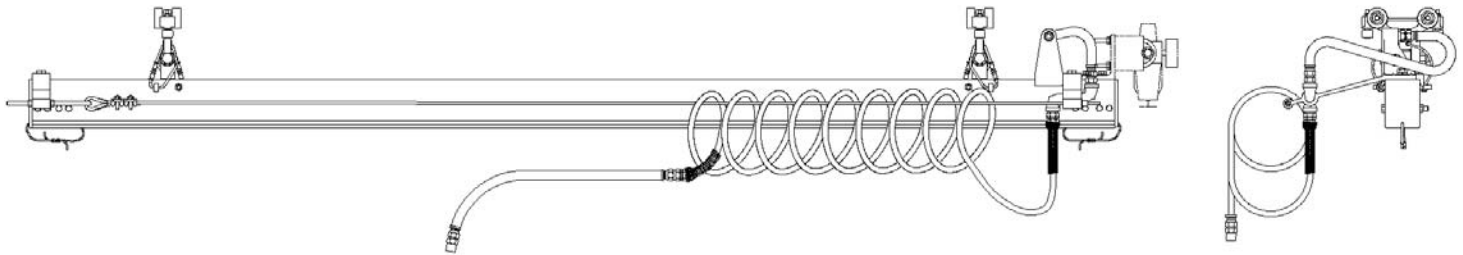
Part Number

■ 1/2" Hose Kits

- **29105** 5'-0" (1.5m) Long Runway Air Festoon Kit
- **29110** 10'-0" (3.0m) Long Runway Air Festoon Kit
- **29115** 15'-0" (4.5m) Long Runway Air Festoon Kit
- **29120** 20'-0" (6.0m) Long Runway Air Festoon Kit
- **29125** 25'-0" (7.6m) Long Runway Air Festoon Kit
- **29130** 30'-0" (9.1m) Long Runway Air Festoon Kit
- **29135** 35'-0" (10.6m) Long Runway Air Festoon Kit
- **29140** 40'-0" (12.1m) Long Runway Air Festoon Kit
- **29145** 45'-0" (13.7m) Long Runway Air Festoon Kit
- **29150** 50'-0" (15.2m) Long Runway Air Festoon Kit
- **29155** 55'-0" (16.7m) Long Runway Air Festoon Kit
- **29160** 60'-0" (18.2m) Long Runway Air Festoon Kit
- **29165** 65'-0" (19.8m) Long Runway Air Festoon Kit
- **29170** 70'-0" (21.3m) Long Runway Air Festoon Kit
- **29175** 75'-0" (22.8m) Long Runway Air Festoon Kit
- **29180** 80'-0" (24.3m) Long Runway Air Festoon Kit
- **29185** 85'-0" (25.9m) Long Runway Air Festoon Kit
- **29190** 90'-0" (27.4m) Long Runway Air Festoon Kit
- **29195** 95'-0" (28.9m) Long Runway Air Festoon Kit
- **29200** 100'-0" (30.4m) Long Runway Air Festoon Kit

■ 3/4" Hose Kits

- **29205** 5'-0" (1.5m) Long Runway Air Festoon Kit
- **29210** 10'-0" (3.0m) Long Runway Air Festoon Kit
- **29215** 15'-0" (4.5m) Long Runway Air Festoon Kit
- **29220** 20'-0" (6.0m) Long Runway Air Festoon Kit
- **29225** 25'-0" (7.6m) Long Runway Air Festoon Kit
- **29230** 30'-0" (9.1m) Long Runway Air Festoon Kit
- **29235** 35'-0" (10.6m) Long Runway Air Festoon Kit
- **29240** 40'-0" (12.1m) Long Runway Air Festoon Kit
- **29245** 45'-0" (13.7m) Long Runway Air Festoon Kit
- **29250** 50'-0" (15.2m) Long Runway Air Festoon Kit
- **29255** 55'-0" (16.7m) Long Runway Air Festoon Kit
- **29260** 60'-0" (18.2m) Long Runway Air Festoon Kit
- **29265** 65'-0" (19.8m) Long Runway Air Festoon Kit
- **29270** 70'-0" (21.3m) Long Runway Air Festoon Kit
- **29275** 75'-0" (22.8m) Long Runway Air Festoon Kit
- **29280** 80'-0" (24.3m) Long Runway Air Festoon Kit
- **29285** 85'-0" (25.9m) Long Runway Air Festoon Kit
- **29290** 90'-0" (27.4m) Long Runway Air Festoon Kit
- **29295** 95'-0" (28.9m) Long Runway Air Festoon Kit
- **29300** 100'-0" (30.4m) Long Runway Air Festoon Kit



BRIDGE AIR FESTOONING

BRIDGE AIR FESTOON KIT

Features

- Two Blue Whip Hoses x 36" (914mm)
- Blue Coiled Hose
- Two ETA Festoon Brackets
- One Air Hose Connector Bracket
- 1/4" Nylon Coated Cable with Hardware

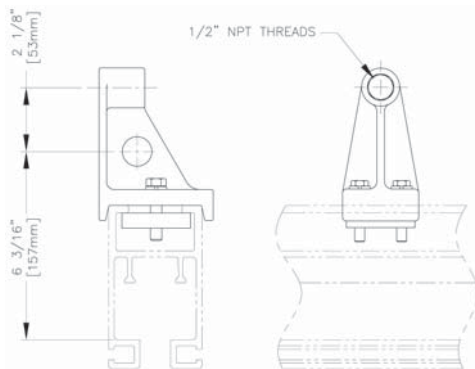
Options

- FR Assembly
- FRL Assembly
- Lockout

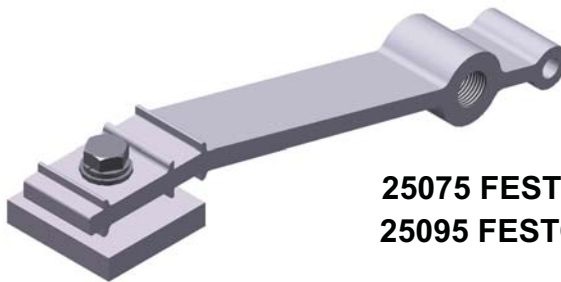
Part Number

- **29305** 5'-0" (1.5m) Long 1/2" Bridge Air Festoon Kit
- **29310** 10'-0" (3.0m) Long 1/2" Bridge Air Festoon Kit
- **29315** 15'-0" (4.5m) Long 1/2" Bridge Air Festoon Kit
- **29320** 20'-0" (6.0m) Long 1/2" Bridge Air Festoon Kit
- **29325** 25'-0" (7.6m) Long 1/2" Bridge Air Festoon Kit
- **29330** 30'-0" (9.1m) Long 1/2" Bridge Air Festoon Kit
- **29335** 35'-0" (10.6m) Long 1/2" Bridge Air Festoon Kit
- **29340** 40'-0" (12.1m) Long 1/2" Bridge Air Festoon Kit

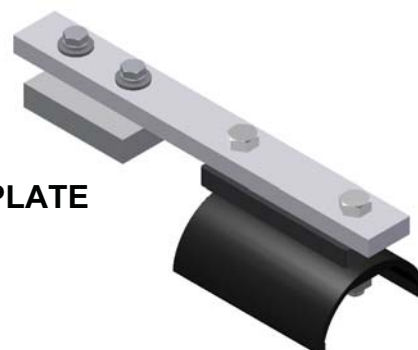
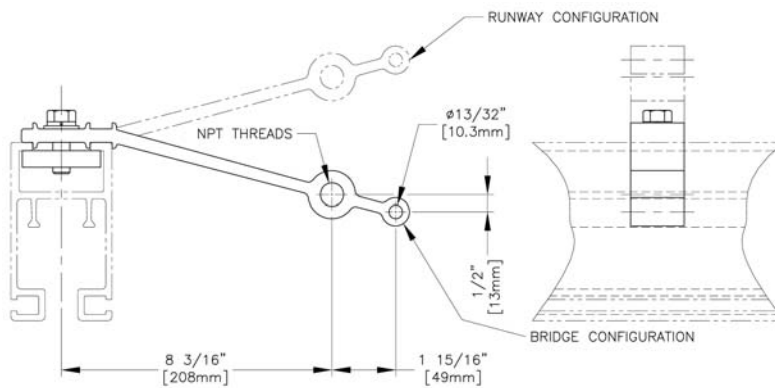
- **29405** 5'-0" (1.5m) Long 3/4" Bridge Air Festoon Kit
- **29410** 10'-0" (3.0m) Long 3/4" Bridge Air Festoon Kit
- **29415** 15'-0" (4.5m) Long 3/4" Bridge Air Festoon Kit
- **29420** 20'-0" (6.0m) Long 3/4" Bridge Air Festoon Kit
- **29425** 25'-0" (7.6m) Long 3/4" Bridge Air Festoon Kit
- **29430** 30'-0" (9.1m) Long 3/4" Bridge Air Festoon Kit
- **29435** 35'-0" (10.6m) Long 3/4" Bridge Air Festoon Kit
- **29440** 40'-0" (12.1m) Long 3/4" Bridge Air Festoon Kit



25070 AIR HOSE CONNECTOR BRACKET ASSEMBLY 1/2"
25065 AIR HOSE CONNECTOR BRACKET ASSEMBLY 3/4"



25075 FESTOON BRACKET ASSEMBLY 1/2" NPT
25095 FESTOON BRACKET ASSEMBLY 3/4" NPT

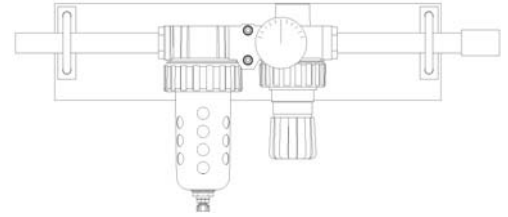


25815 ETA ELECTRIC FESTOON PLATE



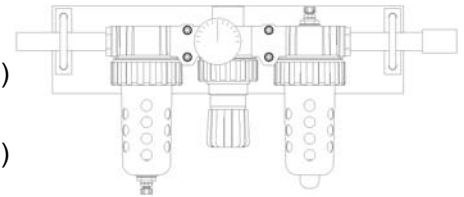
FILTER REGULATORS

- **25503** FR Assembly 1/2" Air Supply (Parker Standard)
- **25516** FR Assembly 1/2" Air Supply includes Manual Lockout (SMC Optional)
- **25517** FR Assembly 3/4" Air Supply (Parker Standard)
- **25518** FR Assembly 3/4" Air Supply includes Manual Lockout (SMC Optional)



FILTER REGULATOR LUBRICATORS

- **25500** FRL Assembly 1/2" Air Supply (Parker Standard)
- **25519** FRL Assembly 1/2" Air Supply includes Manual Lockout (SMC Optional)
- **25521** FRL Assembly 3/4" Air Supply (Parker Standard)
- **25522** FRL Assembly 3/4" Air Supply includes Manual Lockout (SMC Optional)



MANUAL LOCKOUTS

- **25523** Manual Lockout 1/2" Air Supply (Parker Standard)
- **25524** Manual Lockout 1/2" Air Supply (SMC Optional)
- **78107** Manual Lockout 3/4" Air Supply (Parker Standard)
- **78108** Manual Lockout 3/4" Air Supply (SMC Optional)



(Parker Standard)

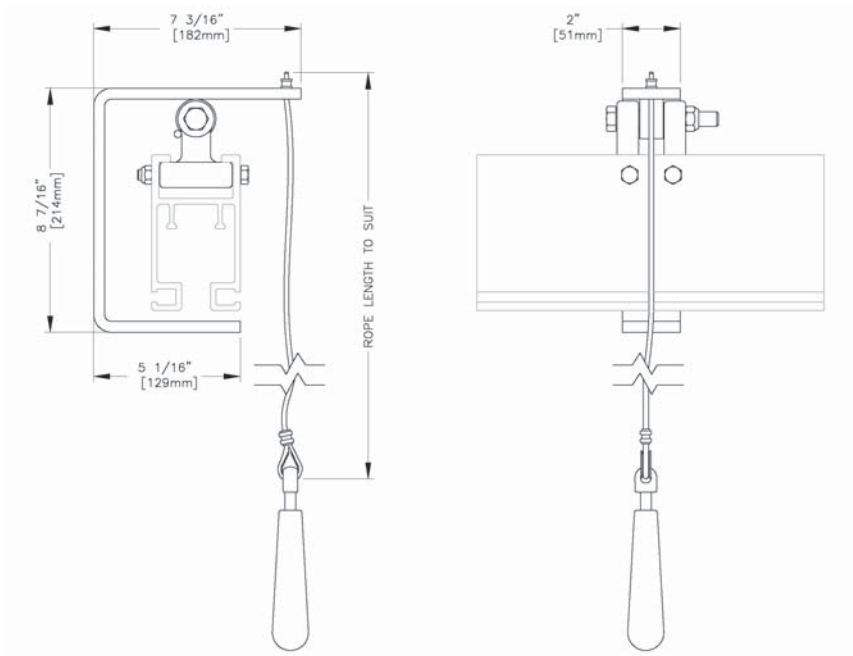
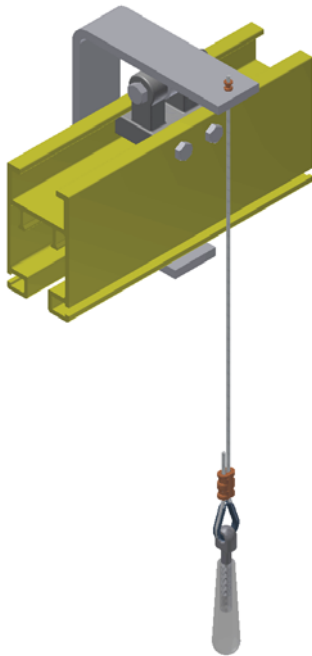


(SMC Optional)

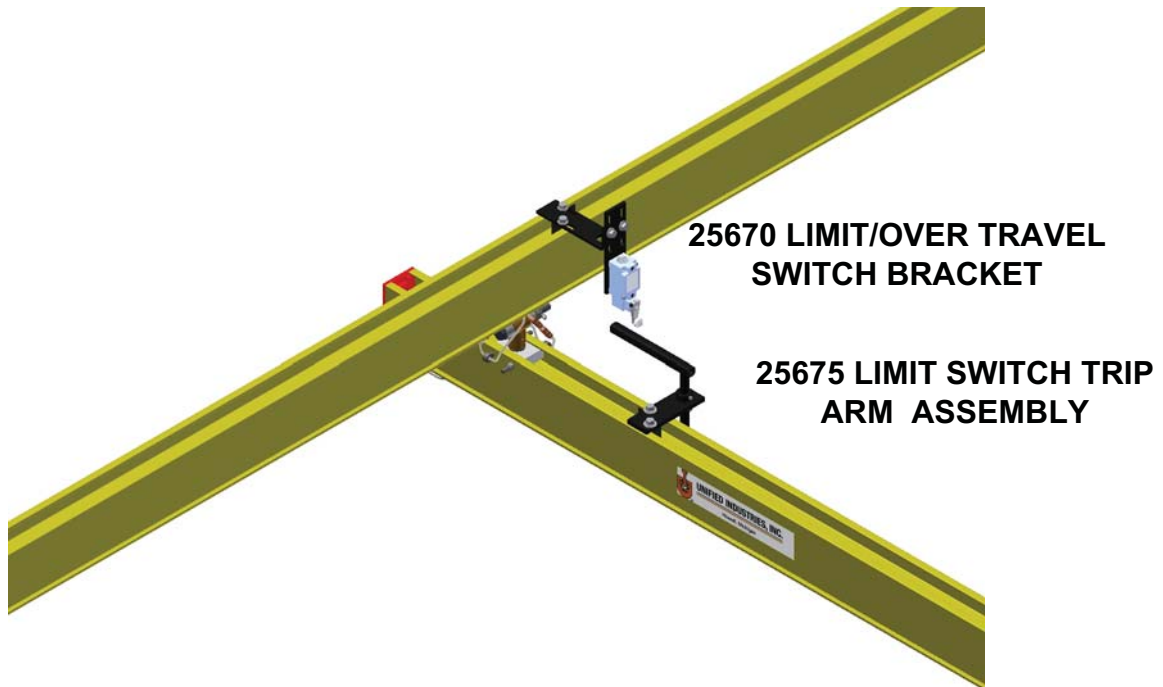
ELECTRIC JUNCTION BOX

- **25665** Electric Junction Box
- **67000** 4-Wire 12 ga. Flatwire Electric Cable (per foot)





27066 BYPASS ASSEMBLY



25677 OVER TRAVEL SWITCH ASSEMBLY

- Limit switch not included

UNIFIED DROP ANGLE KITS



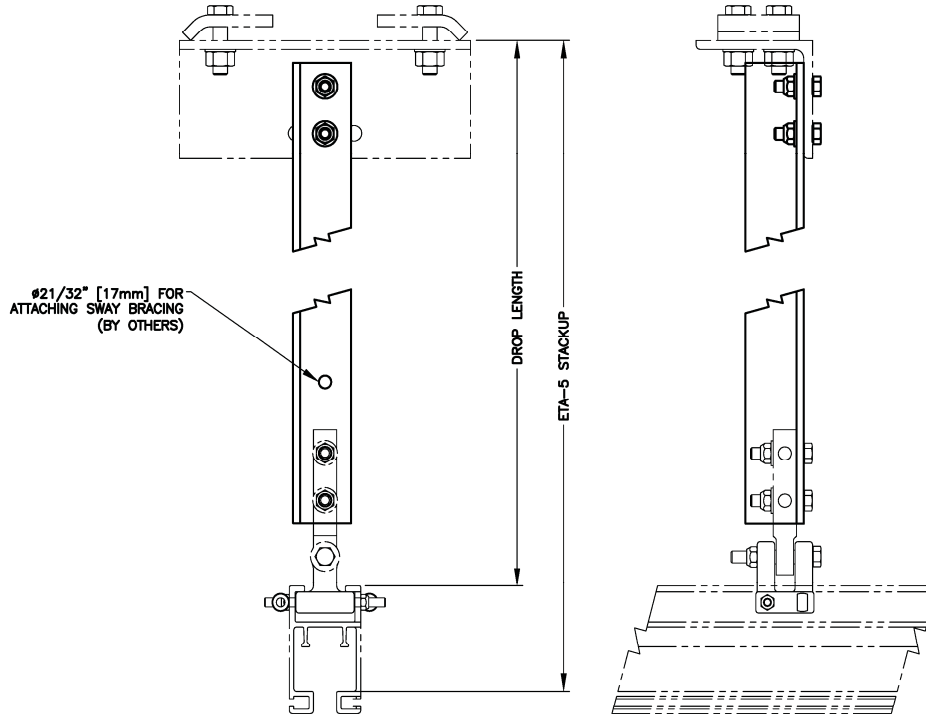
Beam Hanger

- Rated Load 2,000lbs (908kg)
- Beam Hanger sold separately
- Drop Angle Lengths 1'-2" (355mm) to 6'-0" (1829mm) require a cable hole
- Drop Angle Lengths 2'-0" (610mm) to 6'-0" (1829mm) require knee braces in both directions
- Knee Bracing by others
- Drops of 8" (203mm) to 11" (280mm) Consult Engineering



Adjustable Hanger

- Rated Load 1,500lbs (680kg)
- Adjustable Hanger sold separately
- Drop Angle Lengths 1'-2" (355mm) to 6'-0" (1829mm) require a cable hole
- Drop Angle Lengths 2'-0" (610mm) to 6'-0" (1829mm) require knee braces in both directions
- Knee Bracing by others
- Drops of 8" (203mm) to 11" (280mm) Consult Engineering

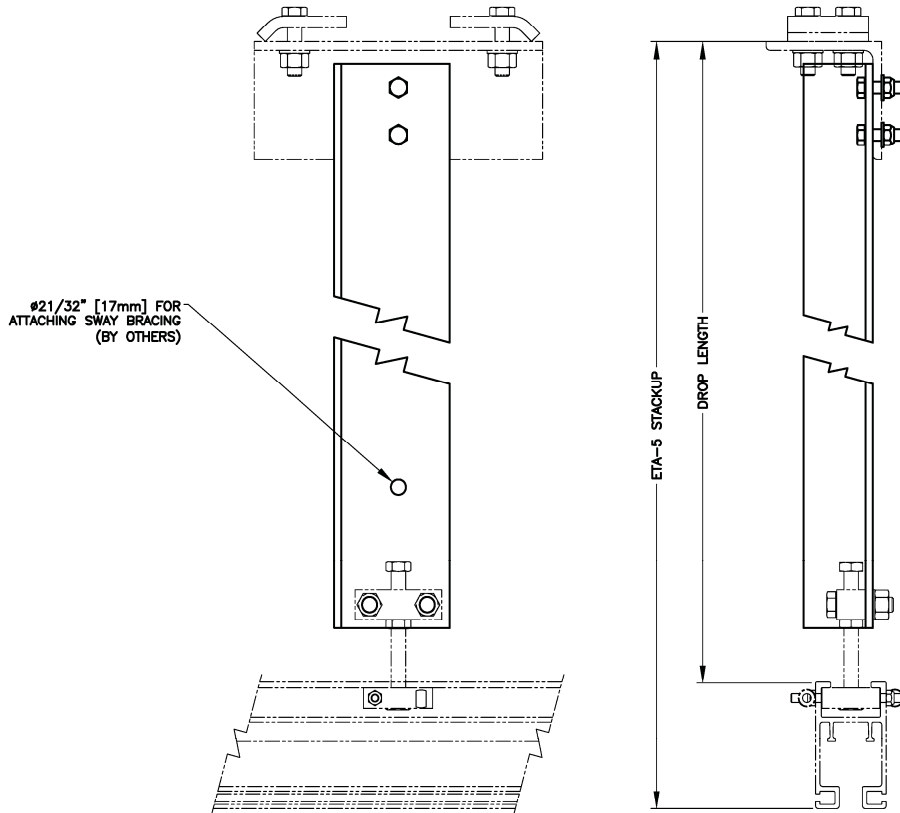


NOTE:
RATED LOAD 2000 LBS [907 Kg].

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-5 STACKUP | |
|------------|-------------------|-------------|--------|---------------|--------|
| 28700 | 75101 | 1'-0" | 305mm | 1'-4 7/16" | 418mm |
| | | 1'-1" | 330mm | 1'-5 7/16" | 443mm |
| | | 1'-2" | 356mm | 1'-6 7/16" | 468mm |
| | | 1'-3" | 381mm | 1'-7 7/16" | 494mm |
| | | 1'-4" | 406mm | 1'-8 7/16" | 519mm |
| | | 1'-5" | 432mm | 1'-9 7/16" | 545mm |
| | | 1'-6" | 457mm | 1'-10 7/16" | 570mm |
| | | 1'-7" | 483mm | 1'-11 7/16" | 595mm |
| | | 1'-8" | 508mm | 2'-0 7/16" | 621mm |
| | | 1'-9" | 533mm | 2'-1 7/16" | 646mm |
| | | 1'-10" | 559mm | 2'-2 7/16" | 672mm |
| | | 1'-11" | 584mm | 2'-3 7/16" | 697mm |
| | | 2'-0" | 610mm | 2'-4 7/16" | 722mm |
| | | 2'-1" | 635mm | 2'-5 7/16" | 748mm |
| 28701 | 75102 | 2'-2" | 660mm | 2'-6 7/16" | 773mm |
| | | 2'-3" | 686mm | 2'-7 7/16" | 799mm |
| | | 2'-4" | 711mm | 2'-8 7/16" | 824mm |
| | | 2'-5" | 737mm | 2'-9 7/16" | 849mm |
| | | 2'-6" | 762mm | 2'-10 7/16" | 875mm |
| | | 2'-7" | 787mm | 2'-11 7/16" | 900mm |
| | | 2'-8" | 813mm | 3'-0 7/16" | 926mm |
| | | 2'-9" | 838mm | 3'-1 7/16" | 951mm |
| | | 2'-10" | 864mm | 3'-2 7/16" | 976mm |
| | | 2'-11" | 889mm | 3'-3 7/16" | 1002mm |
| | | 3'-0" | 914mm | 3'-4 7/16" | 1027mm |
| | | 3'-1" | 940mm | 3'-5 7/16" | 1053mm |
| | | 3'-2" | 965mm | 3'-6 7/16" | 1078mm |
| | | 3'-3" | 991mm | 3'-7 7/16" | 1103mm |
| 28702 | 75103 | 3'-4" | 1016mm | 3'-8 7/16" | 1129mm |
| | | 3'-5" | 1041mm | 3'-9 7/16" | 1154mm |
| | | 3'-6" | 1067mm | 3'-10 7/16" | 1180mm |

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-5 STACKUP | | | |
|------------|-------------------|-------------|--------|---------------|--------|------------|--------|
| 28702 | 75103 | 3'-7" | 1092mm | 3'-11 7/16" | 1205mm | | |
| | | 3'-8" | 1118mm | 4'-0 7/16" | 1230mm | | |
| | | 3'-9" | 1143mm | 4'-1 7/16" | 1256mm | | |
| | | 3'-10" | 1168mm | 4'-2 7/16" | 1281mm | | |
| | | 3'-11" | 1194mm | 4'-3 7/16" | 1307mm | | |
| | | 4'-0" | 1219mm | 4'-4 7/16" | 1332mm | | |
| 28703 | 75104 | 4'-1" | 1245mm | 4'-5 7/16" | 1357mm | | |
| | | 4'-2" | 1270mm | 4'-6 7/16" | 1383mm | | |
| | | 4'-3" | 1295mm | 4'-7 7/16" | 1408mm | | |
| | | 4'-4" | 1321mm | 4'-8 7/16" | 1434mm | | |
| | | 4'-5" | 1346mm | 4'-9 7/16" | 1459mm | | |
| | | 4'-6" | 1372mm | 4'-10 7/16" | 1484mm | | |
| | | 4'-7" | 1397mm | 4'-11 7/16" | 1508mm | | |
| | | 4'-8" | 1422mm | 5'-0 7/16" | 1535mm | | |
| | | 4'-9" | 1448mm | 5'-1 7/16" | 1561mm | | |
| | | 4'-10" | 1473mm | 5'-2 7/16" | 1586mm | | |
| | | 4'-11" | 1499mm | 5'-3 7/16" | 1611mm | | |
| | | 5'-0" | 1524mm | 5'-4 7/16" | 1637mm | | |
| | | 28704 | 75105 | 5'-1" | 1549mm | 5'-5 7/16" | 1662mm |
| | | | | 5'-2" | 1575mm | 5'-6 7/16" | 1688mm |
| 5'-3" | 1600mm | | | 5'-7 7/16" | 1713mm | | |
| 5'-4" | 1626mm | | | 5'-8 7/16" | 1738mm | | |
| 5'-5" | 1651mm | | | 5'-9 7/16" | 1764mm | | |
| 5'-6" | 1676mm | | | 5'-10 7/16" | 1789mm | | |
| 5'-7" | 1702mm | | | 5'-11 7/16" | 1815mm | | |
| 5'-8" | 1727mm | | | 6'-0 7/16" | 1840mm | | |
| 5'-9" | 1753mm | | | 6'-1 7/16" | 1865mm | | |
| 5'-10" | 1778mm | | | 6'-2 7/16" | 1891mm | | |
| 5'-11" | 1803mm | | | 6'-3 7/16" | 1916mm | | |
| 6'-0" | 1829mm | | | 6'-4 7/16" | 1942mm | | |

*Beam Hanger with safety cable sold separately



NOTES:

RATED LOAD 1500 LBS [680 Kg].

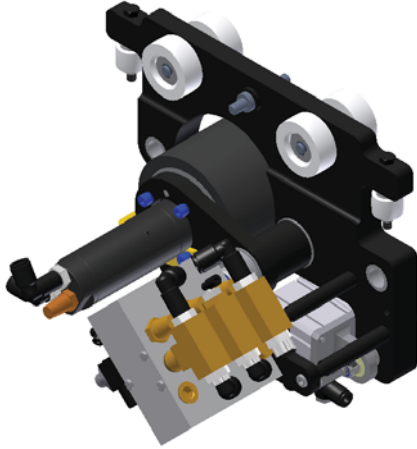
| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-5 STACKUP | | | |
|------------|-------------------|-------------|-------------|---------------|---------------|------------|--------|
| | | Drop Length | Drop Length | ETA-5 Stackup | ETA-5 Stackup | | |
| 28710 | 75111 | 9° | 229mm | 1'-1 7/16" | 341mm | | |
| | | 10° | 254mm | 1'-2 7/16" | 367mm | | |
| | | 11° | 279mm | 1'-3 7/16" | 392mm | | |
| | | 1'-0" | 305mm | 1'-4 7/16" | 418mm | | |
| 28711 | 75112 | 1'-1" | 330mm | 1'-5 7/16" | 443mm | | |
| | | 1'-2" | 356mm | 1'-6 7/16" | 468mm | | |
| | | 1'-3" | 381mm | 1'-7 7/16" | 494mm | | |
| | | 1'-4" | 406mm | 1'-8 7/16" | 519mm | | |
| | | 1'-5" | 432mm | 1'-9 7/16" | 545mm | | |
| | | 1'-6" | 457mm | 1'-10 7/16" | 570mm | | |
| | | 1'-7" | 483mm | 1'-11 7/16" | 595mm | | |
| | | 1'-8" | 508mm | 2'-0 7/16" | 621mm | | |
| | | 1'-9" | 533mm | 2'-1 7/16" | 646mm | | |
| | | 1'-10" | 559mm | 2'-2 7/16" | 672mm | | |
| | | 1'-11" | 584mm | 2'-3 7/16" | 697mm | | |
| | | 2'-0" | 610mm | 2'-4 7/16" | 722mm | | |
| | | 28712 | 75113 | 2'-1" | 635mm | 2'-5 7/16" | 748mm |
| | | | | 2'-2" | 660mm | 2'-6 7/16" | 773mm |
| 2'-3" | 686mm | | | 2'-7 7/16" | 799mm | | |
| 2'-4" | 711mm | | | 2'-8 7/16" | 824mm | | |
| 2'-5" | 737mm | | | 2'-9 7/16" | 849mm | | |
| 2'-6" | 762mm | | | 2'-10 7/16" | 875mm | | |
| 2'-7" | 787mm | | | 2'-11 7/16" | 900mm | | |
| 2'-8" | 813mm | | | 3'-0 7/16" | 926mm | | |
| 2'-9" | 838mm | | | 3'-1 7/16" | 951mm | | |
| 2'-10" | 864mm | | | 3'-2 7/16" | 976mm | | |
| 2'-11" | 889mm | | | 3'-3 7/16" | 1002mm | | |
| 3'-0" | 914mm | | | 3'-4 7/16" | 1027mm | | |
| 28713 | 75114 | | | 3'-1" | 940mm | 3'-5 7/16" | 1053mm |
| | | | | 3'-2" | 965mm | 3'-6 7/16" | 1078mm |
| | | 3'-3" | 991mm | 3'-7 7/16" | 1103mm | | |
| | | 3'-4" | 1016mm | 3'-8 7/16" | 1129mm | | |

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | ETA-5 STACKUP | |
|------------|-------------------|-------------|-------------|---------------|---------------|
| | | Drop Length | Drop Length | ETA-5 Stackup | ETA-5 Stackup |
| 28713 | 75114 | 3'-5" | 1041mm | 3'-9 7/16" | 1154mm |
| | | 3'-6" | 1067mm | 3'-10 7/16" | 1180mm |
| | | 3'-7" | 1092mm | 3'-11 7/16" | 1205mm |
| | | 3'-8" | 1118mm | 4'-0 7/16" | 1230mm |
| | | 3'-9" | 1143mm | 4'-1 7/16" | 1256mm |
| | | 3'-10" | 1168mm | 4'-2 7/16" | 1281mm |
| | | 3'-11" | 1194mm | 4'-3 7/16" | 1307mm |
| | | 4'-0" | 1219mm | 4'-4 7/16" | 1332mm |
| | | 4'-1" | 1245mm | 4'-5 7/16" | 1357mm |
| | | 4'-2" | 1270mm | 4'-6 7/16" | 1383mm |
| 28714 | 75115 | 4'-3" | 1295mm | 4'-7 7/16" | 1408mm |
| | | 4'-4" | 1321mm | 4'-8 7/16" | 1434mm |
| | | 4'-5" | 1346mm | 4'-9 7/16" | 1459mm |
| | | 4'-6" | 1372mm | 4'-10 7/16" | 1484mm |
| | | 4'-7" | 1397mm | 4'-11 7/16" | 1508mm |
| | | 4'-8" | 1422mm | 5'-0 7/16" | 1535mm |
| | | 4'-9" | 1448mm | 5'-1 7/16" | 1561mm |
| | | 4'-10" | 1473mm | 5'-2 7/16" | 1586mm |
| | | 4'-11" | 1499mm | 5'-3 7/16" | 1611mm |
| | | 5'-0" | 1524mm | 5'-4 7/16" | 1637mm |
| 28715 | 75116 | 5'-1" | 1549mm | 5'-5 7/16" | 1662mm |
| | | 5'-2" | 1575mm | 5'-6 7/16" | 1688mm |
| | | 5'-3" | 1600mm | 5'-7 7/16" | 1713mm |
| | | 5'-4" | 1626mm | 5'-8 7/16" | 1738mm |
| | | 5'-5" | 1651mm | 5'-9 7/16" | 1764mm |
| | | 5'-6" | 1676mm | 5'-10 7/16" | 1789mm |
| | | 5'-7" | 1702mm | 5'-11 7/16" | 1815mm |
| | | 5'-8" | 1727mm | 6'-0 7/16" | 1840mm |
| | | 5'-9" | 1753mm | 6'-1 7/16" | 1865mm |
| | | 5'-10" | 1778mm | 6'-2 7/16" | 1891mm |
| 5'-11" | 1803mm | 6'-3 7/16" | 1916mm | | |
| 6'-0" | 1829mm | 6'-4 7/16" | 1942mm | | |

*Adjustable Hanger with safety cable sold separately

UNIFIED AIR TRACTOR

The lube free air tractor was developed to be a compact, and reliable alternative to those large air tractors most companies are familiar with.



Features

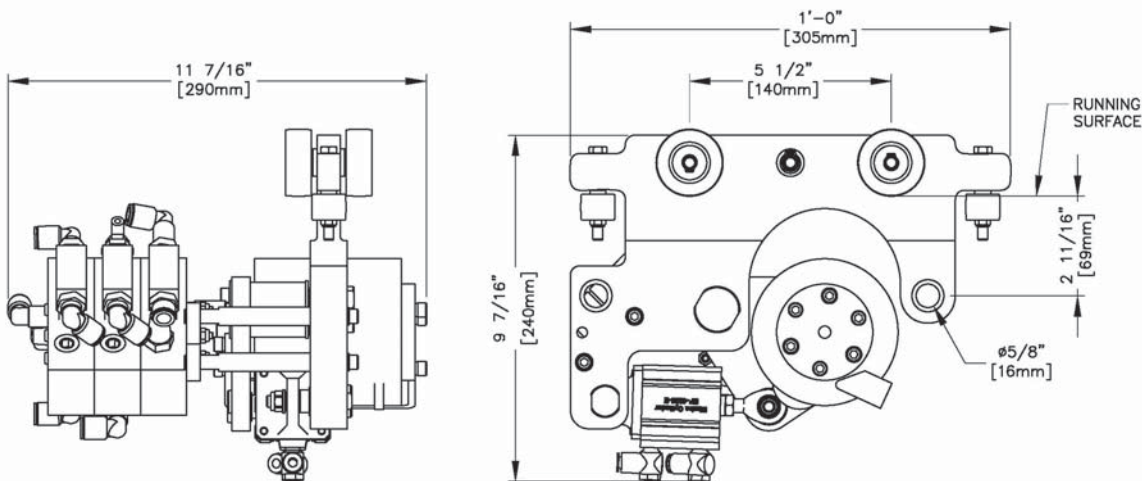
- **Lightweight and Compact**
- **Lube Free Air Motor**
- **Maintenance Friendly Design**
- **Quick Delivery, Excellent Pricing**

Control Package Options:

- C1 = SMC Control Pack w/Fwd/Rev 2-Button Control Pendant.
- C2 = SMC Control Pack Only. (Requires main air connection + Fwd/Rev signals)
- C3 = Base Tractor Only. No Control valves.
- C4 = SMC Control Pack w/4-Button Control Pendant (Fwd/Rev + ?/?)

Part Number

- **UAT-NB-C(x)-ETA4** Air Tractor to run on ETA-4/5 rail. Specify control pack above. Weight 30 lbs. (15kg)
- **25682** ETA-4/5 Tractor Tow Bar-Hitch
- **60315** Replacement Drive Wheel



Proper Tractor Operation: Tractor must come to a complete stop before it can be engaged in the opposite direction. If this process is not followed, damage to the Tractor will occur and the warranty will be void.

Designed for a working plant air pressure of: 87-102psi (600-700kPA)

***NB = No Brake**



UNIFIED AIR BALANCER

A proven ergonomic lifting and positioning device



- **Capacities** up to 485lbs. (220kg) single reeve - 1940lbs. (880kg) tandem reeved.
- **Safety** overload limit and check valve in case of loss of air supply.
- **Energy Efficient** only a fraction of a CFM per cycle required when compared to a pneumatic hoist.
- **Robust** precision mechanical design & powder coated housing ensures trouble free extended service life.
- Uses non-lubricated air, assures clean environment.
- Ideal for ergonomic handling applications and suspension of tools, weld guns & fixtures.
- All Non-Reeved balancers come equipped with a 25'-6" (9m) cable.

Control Styles

UBB = Basic Balancer with no controls

UAB = Balancer with Up/Down controls

UZB = Balancer with Zero G

| Model # | Weight Capacity/Lift | Air Consumption |
|---------|-------------------------------|-------------------|
| U_B-132 | 132lbs (60kg)/79in (2000mm) | .5 CFM(.85CMH) |
| U_B-220 | 220lbs (100kg)/118in (3000mm) | 1.3 CFM(2.21CMH) |
| U_B-331 | 331lbs (150kg)/79in (2000mm) | 1.3 CFM(2.21CMH) |
| U_B-485 | 485lbs (220kg)/79in (2000mm) | 1.9 CFM(3.23 CMH) |

- Wire Rope Units (Air Pressure 7kgf/cm²) (100 PSI)

Optional Accessories

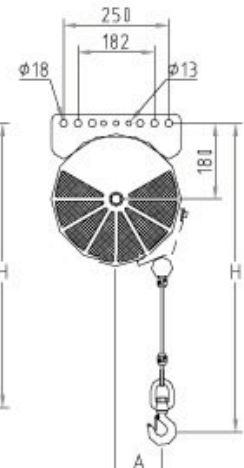
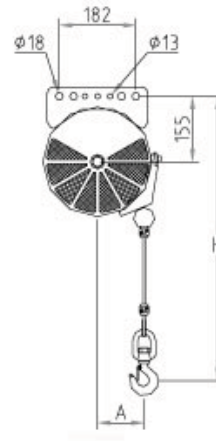
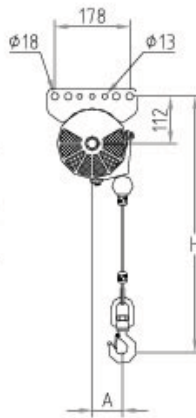
| Part # | Description |
|--------|-------------------------------------------------------------------------------|
| 99025 | Up/Down Manifold |
| 99026 | Up/Down Control Kit—Includes Manifold, 12ft (3.65m) Hose and 2-button pendant |
| 99100 | Top Hook Assembly |



Single Type

| Model | "A" Dimension |
|---------|---------------------|
| U_B-132 | 2.83 inch (72mm) |
| U_B-220 | 4.35 inch (110.5mm) |
| U_B-331 | 2.83 inch (72mm) |
| U_B-485 | 2.83 inch (72mm) |

Single Type

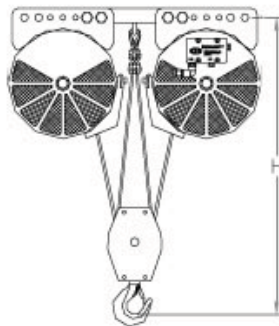


U_B-132

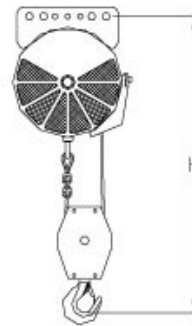
U_B-220, 331

U_B-485

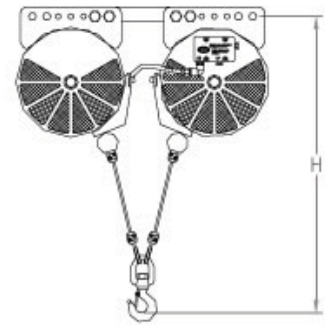
Tandem Reeved Type



Reeved Type



Tandem Type



Single Balancer

| Model # | Capacity | | Lift | | D x L | | H | | Net Weight | | CFM (per cycle) |
|-------------|----------|-----|------|------|---------------|-----------|----|-----|------------|------|--------------------|
| | lbs | kg | in | mm | in | mm | in | mm | lbs | kg | |
| U_B-132-079 | 132 | 60 | 79 | 2000 | 6.1 x 15.43 | 155 x 392 | 23 | 600 | 51 | 23 | .5 |
| U_B-220-118 | 220 | 100 | 118 | 3000 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 94 | 42.5 | 1.3 |
| U_B-331-079 | 331 | 150 | 79 | 2000 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 105 | 47 | 1.3 |
| U_B-485-079 | 485 | 220 | 79 | 2000 | 12.21 x 15.75 | 310 x 400 | 30 | 750 | 110 | 50 | 1.9 |

Reeved Balancer (R) Tandem Balancer (T) Tandem-Reeved Balancer (TR)

| Model # | Capacity | | Lift | | D x L | | H | | Net Weight | |
|---------------|----------|-----|------|------|-----------------|-----------|----|-----|------------|-----|
| | lbs | kg | in | mm | in | mm | in | mm | lbs | kg |
| U_B-440-59R | 440 | 200 | 59 | 1500 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 104 | 47 |
| U_B-440-118T | 440 | 200 | 118 | 3000 | 2-10.24 x 15.76 | 260 x 400 | 28 | 700 | 203 | 92 |
| U_B-662-39R | 662 | 300 | 39 | 1000 | 10.24 x 15.77 | 260 x 400 | 28 | 700 | 99 | 45 |
| U_B-661-79T | 662 | 300 | 79 | 2000 | 2-10.24 x 15.78 | 260 x 400 | 28 | 700 | 198 | 90 |
| U_B-970-39R | 970 | 440 | 39 | 1000 | 12.21 x 15.75 | 310 x 400 | 30 | 750 | 124 | 56 |
| U_B-970-79T | 970 | 440 | 79 | 2000 | 2-12.21 x 15.75 | 310 x 400 | 30 | 750 | 243 | 110 |
| U_B-882-59TR | 882 | 400 | 59 | 1500 | 2-10.24 x 15.78 | 260 x 400 | 28 | 700 | 209 | 95 |
| U_B-1323-39TR | 1323 | 600 | 39 | 1000 | 2-10.24 x 15.79 | 260 x 400 | 28 | 700 | 203 | 92 |
| U_B-1940-39TR | 1940 | 880 | 39 | 1000 | 2-12.21 x 15.75 | 310 x 400 | 30 | 750 | 254 | 115 |

CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 125% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

***All dimensions are reference only and need to be verified with factory.**

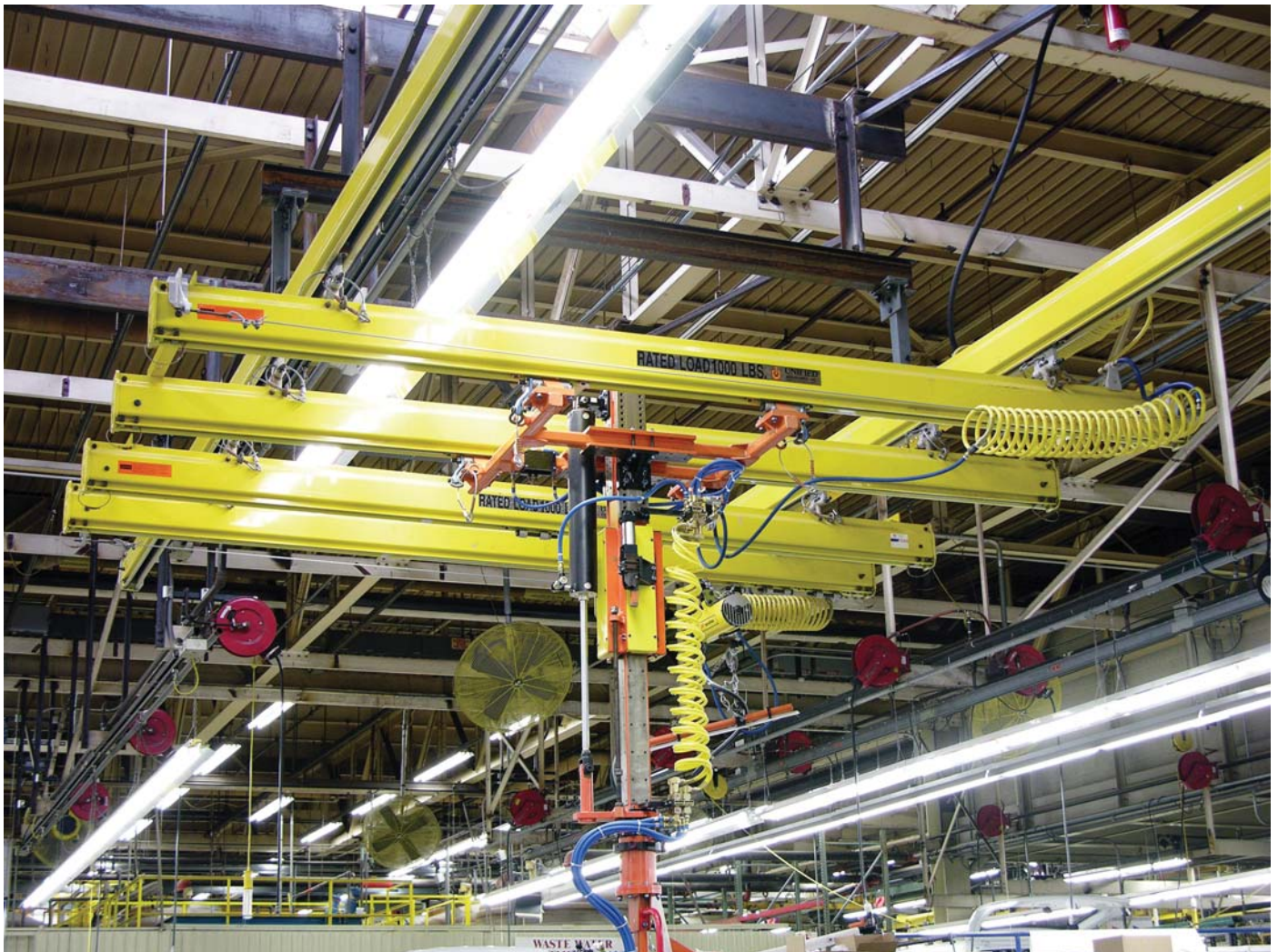




UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

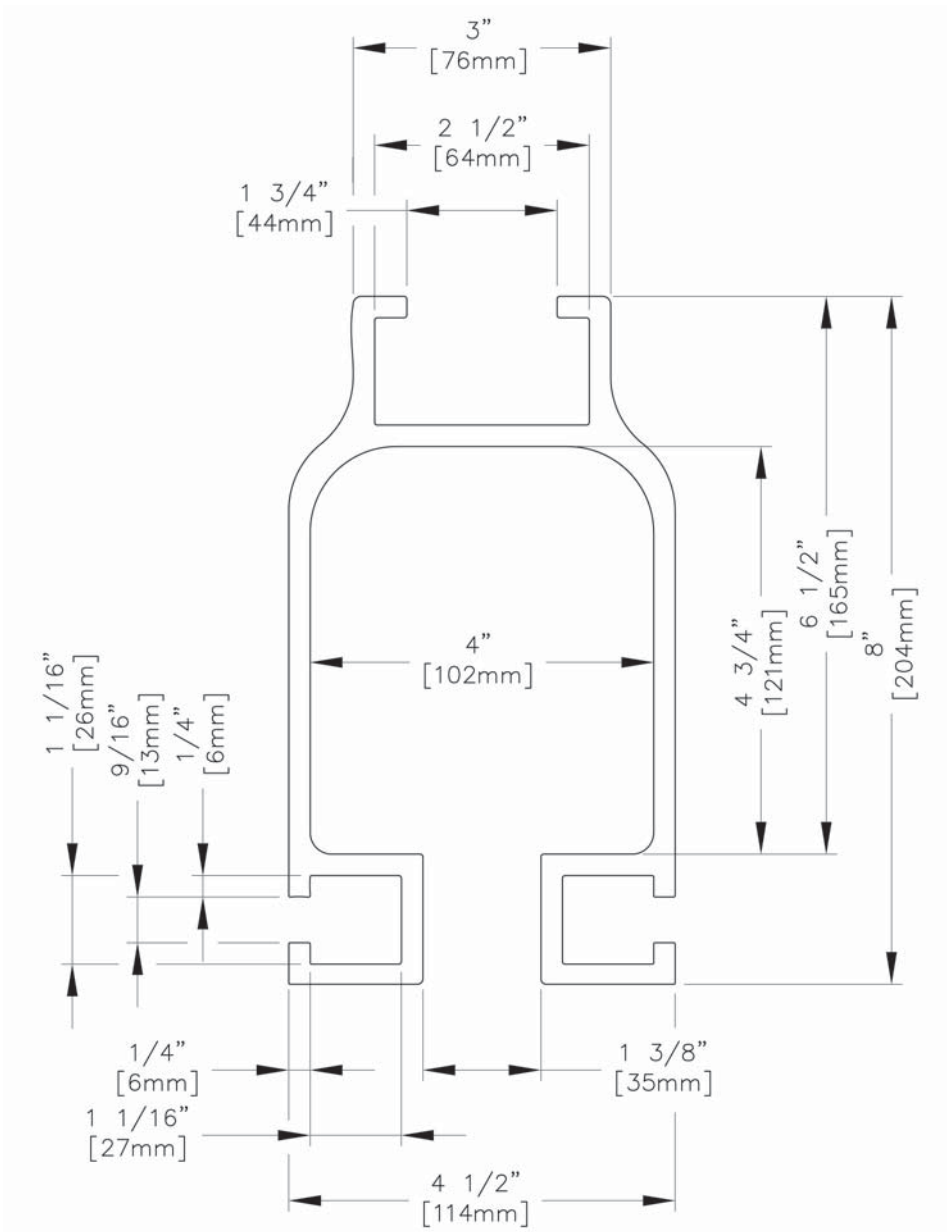
ETA-8 RAIL SYSTEMS





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***All dimensions are reference only
and need to be verified with factory.**



**ETA-8 RAIL PROFILE
(87015)**

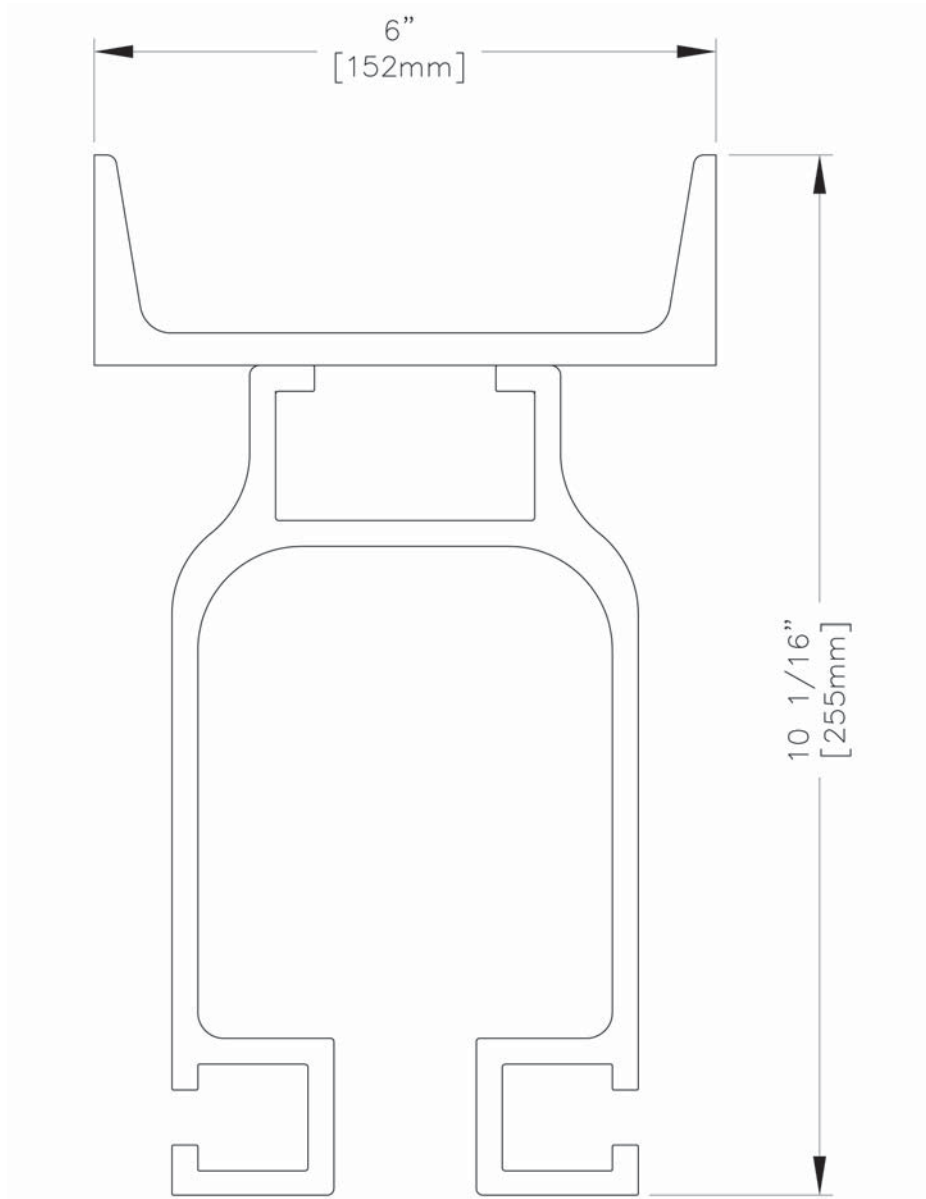
Part Number:

ETA8RW 08

Length of Rail in Feet (08 = 8 Feet)

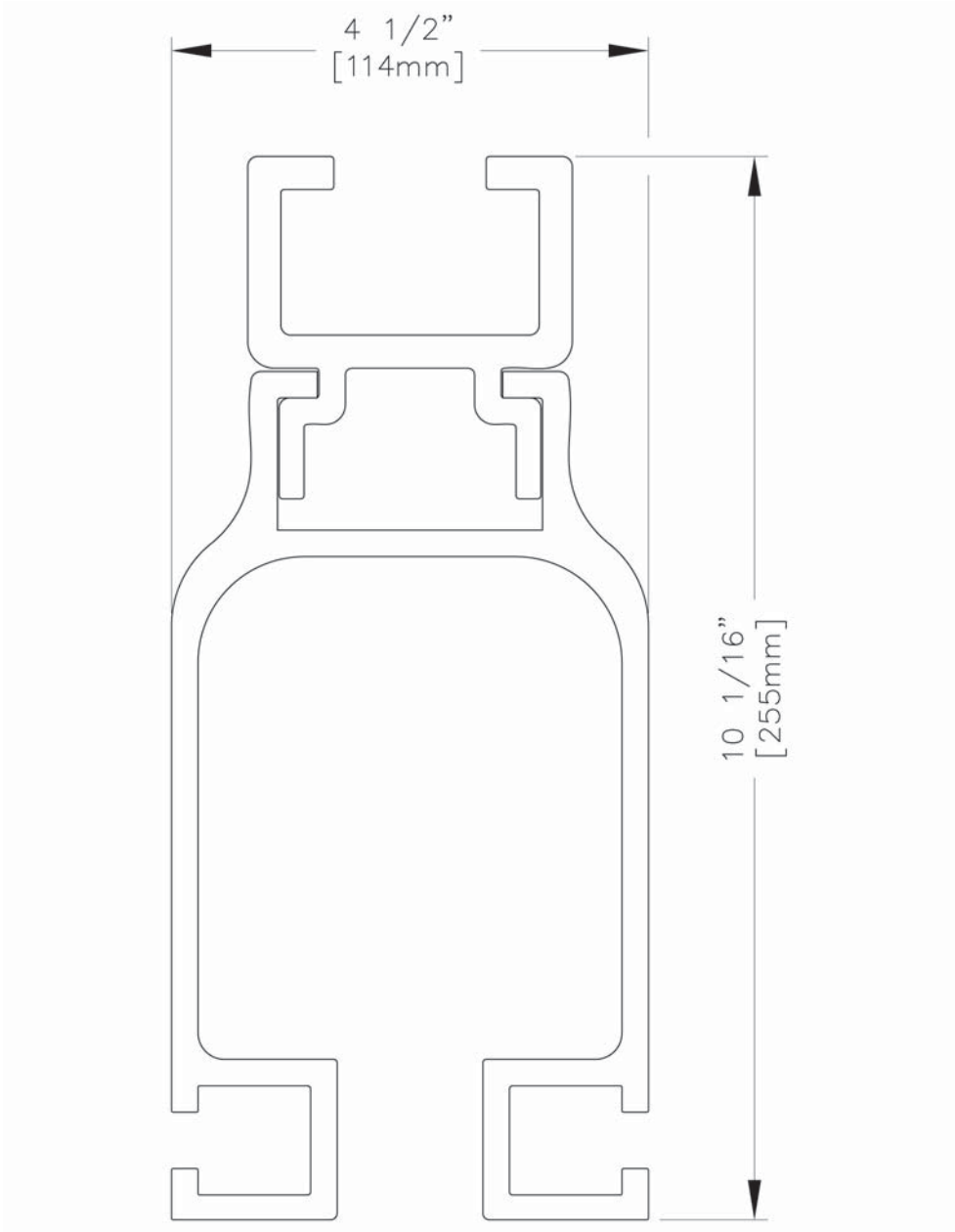
Rail Profile

- All Runways are Drilled for End Stops and Splice Holes.
- Round up to the nearest foot (Cut to 8'-6" = ETA8RW09)
- Maximum Length: 42'-0" (12.8m)
- Weight: 8.16lbs./ft. (12.14kg/m)
- Standard Color Unified Safety Yellow
- Other Colors Specify when Ordering



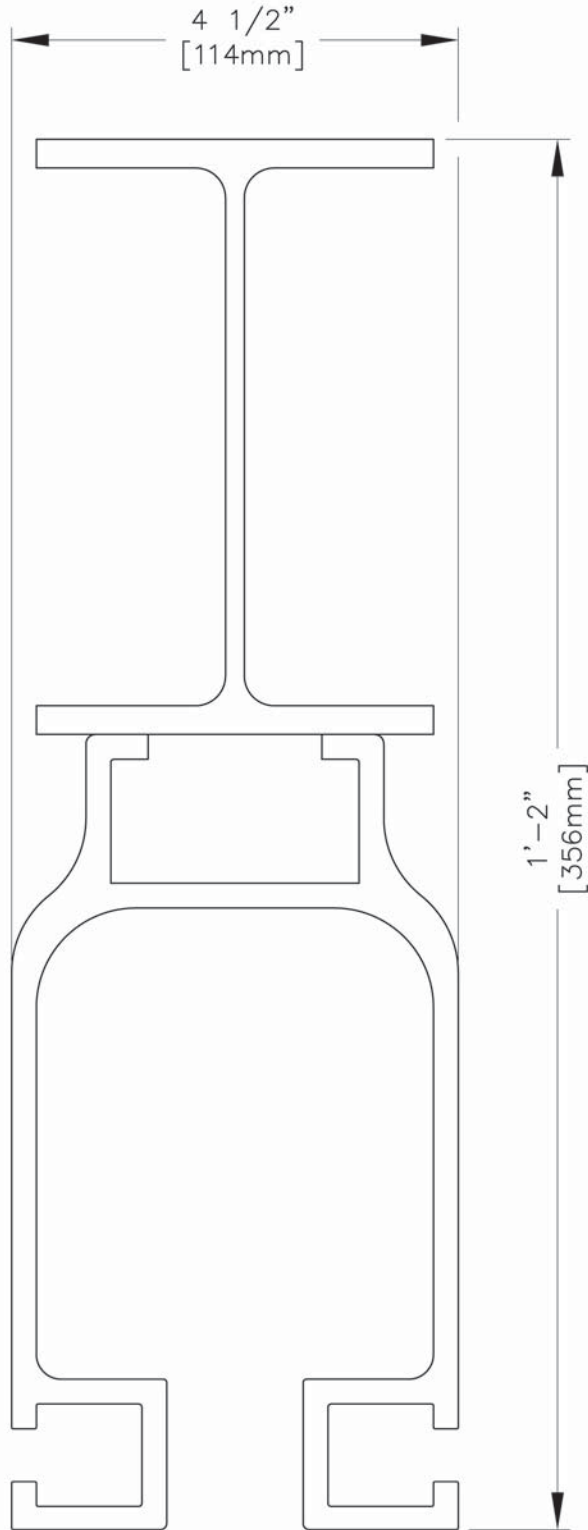
ETA-8 RAIL WITH C6 X 3.63 CHANNEL CAP PROFILE

- Weight: 11.79 lbs./ft. (17.5kg/m)



ETA-8 RAIL WITH ETA STRONG BACK PROFILE

- Weight: 11.74 lbs./ft. (17.5kg/m)



ETA-8 RAIL WITH W6 X 4 I-BEAM CAP PROFILE

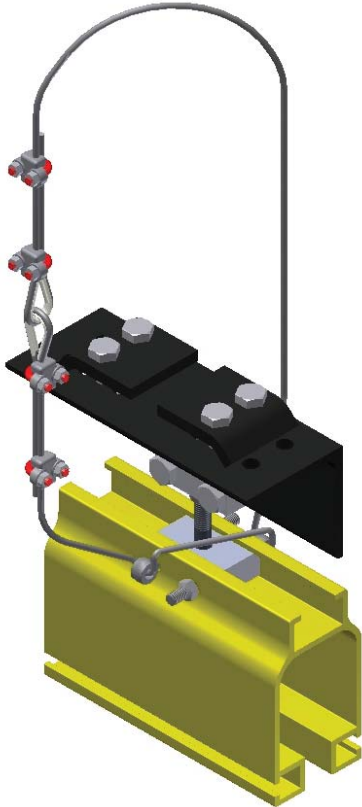
- Weight: 12.32 lbs./ft. (18.3kg/m)



| Span Ft. (in) | Deflection Limit (in) | Point Load @ Center of Span (lbs) | | | |
|------------------|--------------------------|-----------------------------------|------------------------|---------------------------|-----------------------|
| | | ETA-8 | ETA-8 + CHANNEL CAP | ETA-8 + ETA STRONGBACK | ETA-8 + I-BEAM CAP |
| | | L/450 | L/450 | L/450 | L/450 |
| 5 (60) | .1333 | 4000 | 4000 | 4000 | 4000 |
| 6 (72) | .1600 | 4000 | 4000 | 4000 | 4000 |
| 7 (84) | .1867 | 4000 | 4000 | 4000 | 4000 |
| 8 (96) | .2133 | 4000 | 4000 | 4000 | 4000 |
| 9 (108) | .2400 | 4000 | 4000 | 4000 | 4000 |
| 10 (120) | .2667 | 3536 | 4000 | 4000 | 4000 |
| 11 (132) | .2933 | 2922 | 4000 | 4000 | 4000 |
| 12 (144) | .3200 | 2455 | 4000 | 4000 | 4000 |
| 13 (156) | .3467 | 2092 | 4000 | 4000 | 4000 |
| 14 (168) | .3733 | 1804 | 3651 | 3713 | 4000 |
| 15 (180) | .4000 | 1571 | 3180 | 3234 | 4000 |
| 16 (192) | .4267 | 1381 | 2795 | 2843 | 4000 |
| 17 (204) | .4533 | 1223 | 2476 | 2518 | 4000 |
| 18 (216) | .4800 | 1091 | 2208 | 2246 | 4000 |
| 19 (228) | .5067 | 979 | 1982 | 2016 | 3911 |
| 20 (240) | .5333 | 884 | 1789 | 1819 | 3530 |
| 21 (252) | .5600 | 802 | 1623 | 1650 | 3202 |
| 22 (264) | .5867 | 731 | 1478 | 1504 | 2917 |
| 23 (276) | .6133 | 668 | 1353 | 1376 | 2669 |
| 24 (288) | .6400 | 614 | 1242 | 1263 | 2451 |
| 25 (300) | .6667 | 566 | 1145 | 1164 | 2259 |
| 26 (312) | .6933 | 523 | 1058 | 1077 | 2089 |
| 27 (324) | .7200 | 485 | 982 | 998 | 1937 |
| 28 (336) | .7467 | 451 | 913 | 928 | 1801 |
| 29 (348) | .7733 | 420 | 851 | 865 | 1679 |
| 30 (360) | .8000 | 393 | 795 | 809 | 1569 |
| 31 (372) | .8267 | 368 | 745 | 757 | 1469 |
| 32 (384) | .8533 | 345 | 699 | 711 | 1379 |
| 33 (396) | .8800 | 325 | 657 | 668 | 1297 |
| 34 (408) | .9067 | 306 | 619 | 630 | 1221 |
| 35 (420) | .9333 | 289 | 584 | 594 | 1153 |
| 36 (432) | .9600 | 273 | 552 | 562 | 1089 |
| 37 (444) | .9867 | 258 | 523 | 532 | 1031 |
| 38 (456) | 1.013 | 245 | 496 | 504 | 978 |
| 39 (468) | 1.040 | 232 | 470 | 478 | 928 |
| 40 (480) | 1.067 | 221 | 447 | 455 | 882 |

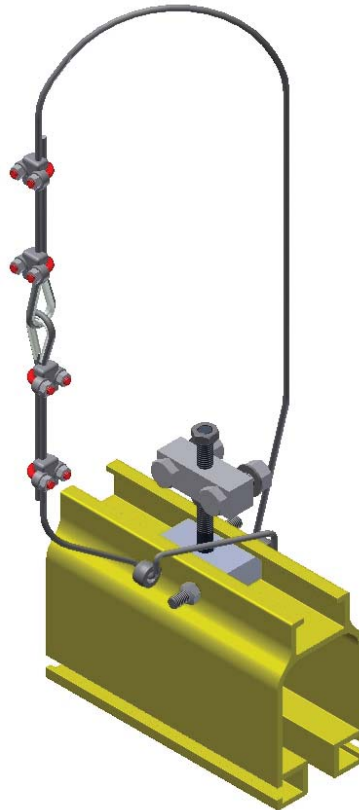


| Span M (mm) | Deflection Limit (mm) L/450 | Point Load @ Center of Span (kg) | | | |
|----------------|-----------------------------------|----------------------------------|------------------------|---------------------------|-----------------------|
| | | ETA-8 | ETA-8 + CHANNEL CAP | ETA-8 + ETA STRONGBACK | ETA-8 + I-BEAM CAP |
| | | L/450 | L/450 | L/450 | L/450 |
| 1.50 (1500) | 3.3 | 1814 | 1814 | 1814 | 1814 |
| 1.75 (1750) | 3.9 | 1814 | 1814 | 1814 | 1814 |
| 2.00 (2000) | 4.4 | 1814 | 1814 | 1814 | 1814 |
| 2.25 (2250) | 5.0 | 1814 | 1814 | 1814 | 1814 |
| 2.50 (2500) | 5.6 | 1814 | 1814 | 1814 | 1814 |
| 2.75 (2750) | 6.1 | 1814 | 1814 | 1814 | 1814 |
| 3.00 (3000) | 6.7 | 1656 | 1814 | 1814 | 1814 |
| 3.25 (3250) | 7.2 | 1411 | 1814 | 1814 | 1814 |
| 3.50 (3500) | 7.8 | 1216 | 1814 | 1814 | 1814 |
| 3.75 (3750) | 8.3 | 1060 | 1814 | 1814 | 1814 |
| 4.00 (4000) | 8.9 | 931 | 1814 | 1814 | 1814 |
| 4.25 (4250) | 9.4 | 825 | 1669 | 1698 | 1814 |
| 4.50 (4500) | 10.0 | 736 | 1489 | 1514 | 1814 |
| 4.75 (4750) | 10.6 | 660 | 1336 | 1359 | 1814 |
| 5.00 (5000) | 11.1 | 596 | 1206 | 1227 | 1814 |
| 5.25 (5250) | 11.7 | 541 | 1094 | 1113 | 1814 |
| 5.50 (5500) | 12.2 | 493 | 997 | 1014 | 1814 |
| 5.75 (5750) | 12.8 | 451 | 912 | 928 | 1800 |
| 6.00 (6000) | 13.3 | 414 | 838 | 852 | 1653 |
| 6.25 (6250) | 13.9 | 381 | 772 | 785 | 1523 |
| 6.50 (6500) | 14.4 | 353 | 714 | 726 | 1408 |
| 6.75 (6750) | 15.0 | 327 | 662 | 673 | 1306 |
| 7.00 (7000) | 15.6 | 304 | 615 | 626 | 1214 |
| 7.25 (7250) | 16.1 | 283 | 574 | 583 | 1132 |
| 7.50 (7500) | 16.7 | 265 | 536 | 545 | 1058 |
| 7.75 (7750) | 17.2 | 248 | 502 | 511 | 991 |
| 8.00 (8000) | 17.8 | 233 | 471 | 479 | 930 |
| 8.25 (8250) | 18.3 | 219 | 443 | 451 | 874 |
| 8.50 (8500) | 18.9 | 206 | 417 | 424 | 824 |
| 8.75 (8750) | 19.4 | 195 | 394 | 401 | 777 |
| 9.00 (9000) | 20.0 | 184 | 372 | 379 | 735 |
| 9.25 (9250) | 20.6 | 174 | 352 | 358 | 695 |
| 9.50 (9500) | 21.1 | 165 | 334 | 340 | 659 |
| 9.75 (9750) | 21.7 | 157 | 317 | 323 | 626 |
| 10.00 (10000) | 22.2 | 149 | 302 | 307 | 595 |
| 10.25 (10250) | 22.8 | 142 | 287 | 292 | 566 |
| 10.50 (10500) | 23.3 | 135 | 273 | 278 | 540 |
| 10.75 (10750) | 23.9 | 129 | 261 | 265 | 515 |
| 11.00 (11000) | 24.4 | 123 | 249 | 253 | 492 |
| 11.25 (11250) | 25.0 | 118 | 238 | 242 | 470 |
| 11.50 (11500) | 25.6 | 113 | 228 | 232 | 450 |
| 11.75 (11750) | 26.1 | 108 | 218 | 222 | 431 |
| 12.00 (12000) | 26.7 | 103 | 209 | 213 | 413 |
| 12.25 (12500) | 27.2 | 99 | 201 | 204 | 396 |



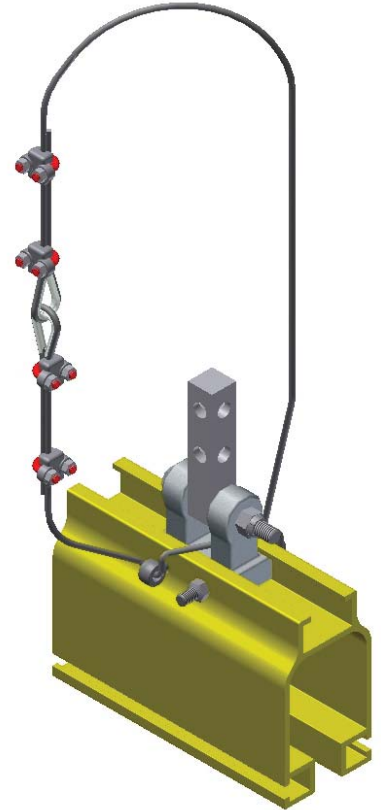
CLOSED ADJUSTABLE HANGER*

25471 FOR BEAMS 2.33" (59mm)
TO 3.33" (85mm) wide
25472 FOR BEAMS 4" (102mm)
TO 8" (203mm) wide



25465 ADJUSTABLE BLOCK HANGER

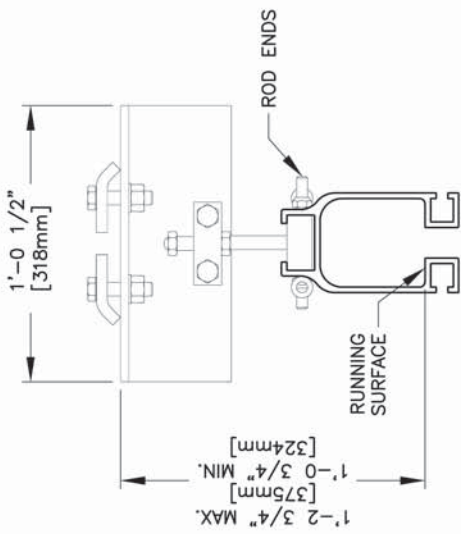
Allows for 2" (50mm) of vertical adjustment
in the field



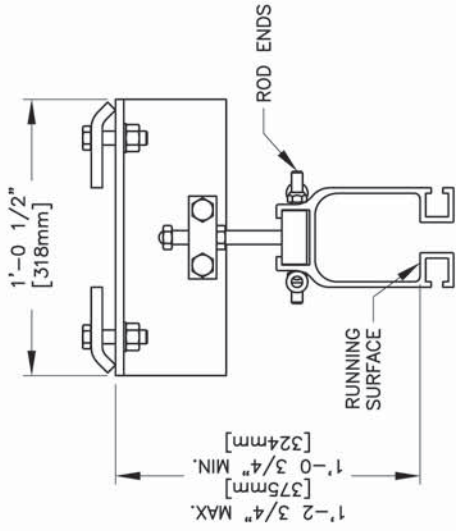
25170 BLOCK HANGER

- **All hangers must be bolted through rail.**
- **All hangers include a 6'-0" (1.82m) safety cable 78287.**

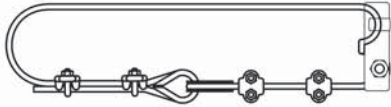
*Note: Grip range 1/4" (6mm) to 9/16" (15mm) thick flange.



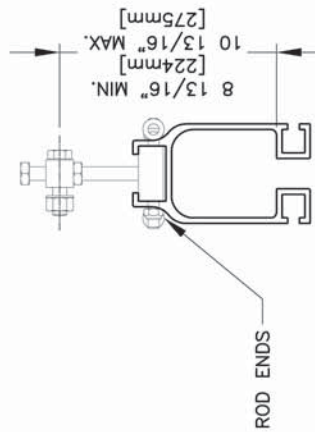
25471 CLOSED ADJUSTABLE HANGER
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE
RATED LOAD 3000 LBS. [1361 Kg.]
WEIGHT 25 LBS. [11.34 Kg.]



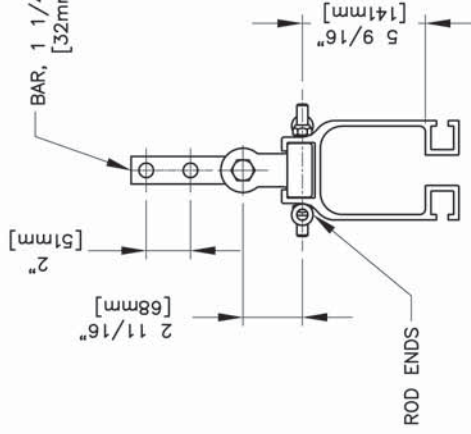
25472 CLOSED ADJUSTABLE HANGER
FOR BEAMS 4" [102 Kg.] TO 8" [203mm] WIDE
RATED LOAD 3000 LBS. [1361 Kg.]
WEIGHT 25 LBS. [11.34 Kg.]



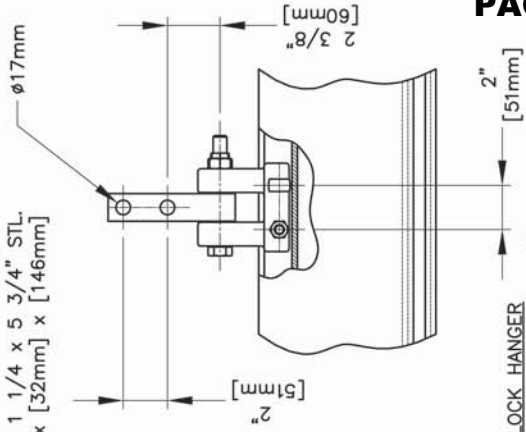
SAFETY_CABLE_ASSEMBLY_VIEW
ALL HANGERS COME WITH A SAFETY CABLE 78287

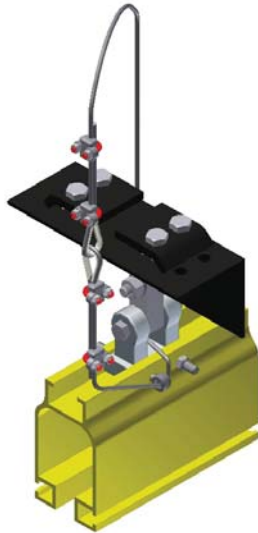


25465 ADJUSTABLE BLOCK HANGER
RATED LOAD 3000 LBS. [1361 Kg.]
WEIGHT 7 LBS. [3.18 Kg.]



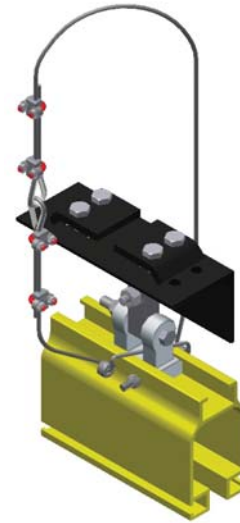
25170 BLOCK HANGER
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 7 LBS. [3.18 Kg.]





BEAM HANGER*
PARALLEL MOUNT

27059 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27061 FOR BEAMS 4" (102mm) TO 8" (203mm)

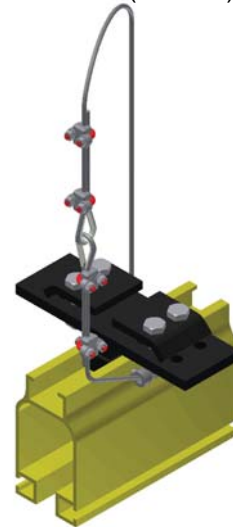


BEAM HANGER*
PERPENDICULAR MOUNT

27059 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27061 FOR BEAMS 4" (102mm) TO 8" (203mm)



27070 ETA RIGID MOUNT HANGER**



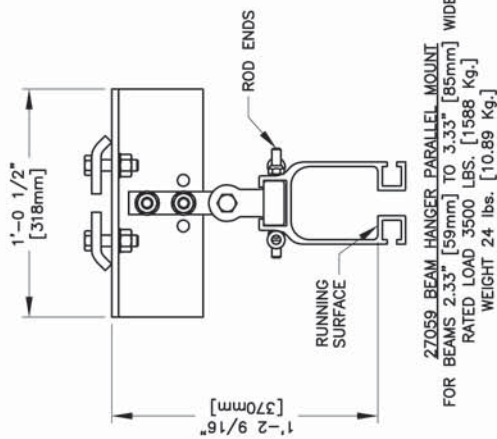
RIGID MOUNT HANGER*
PARALLEL MOUNT

27074 FOR BEAMS 2.33" (59mm) TO 3.33" (85mm)
27072 FOR BEAMS 4" (102mm) TO 8" (203mm)

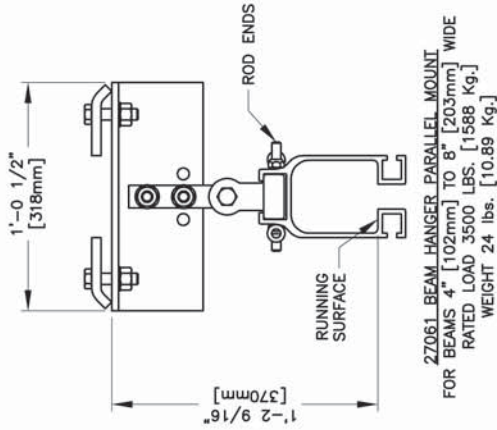
- **All hangers must be bolted through rail.**
- **All hangers include a 6'-0" (1.82m) safety cable 78287.**

*Grip range 1/4" (6mm) to 9/16" (15mm) thick flange.

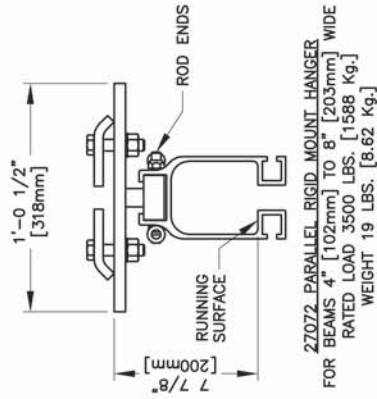
**For use on W-Shape beams only.



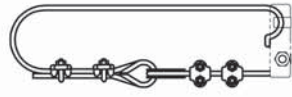
27059 BEAM HANGER PARALLEL MOUNT
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 24 lbs. [10.89 Kg.]



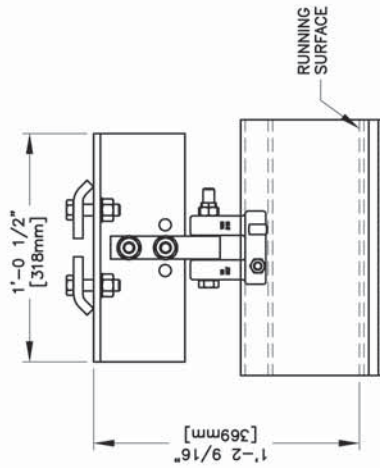
27061 BEAM HANGER PERPENDICULAR MOUNT
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 24 lbs. [10.89 Kg.]



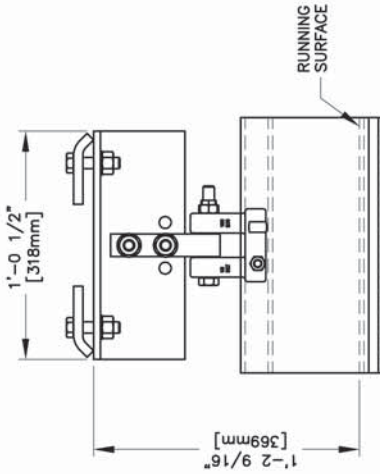
27072 PARALLEL RIGID MOUNT HANGER
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 19 LBS. [8.62 Kg.]



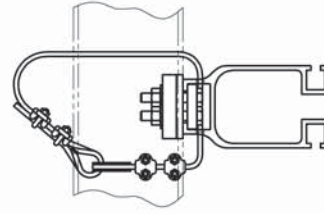
SAFETY CABLE ASSEMBLY VIEW
ALL HANGERS COME WITH A SAFETY CABLE 78287



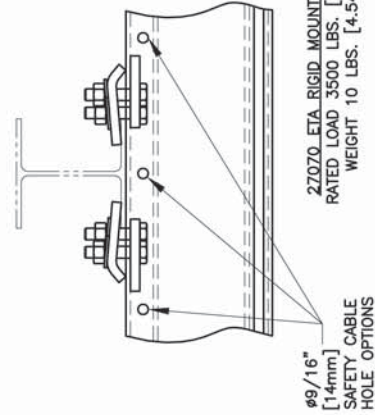
27059 BEAM HANGER PERPENDICULAR MOUNT
FOR BEAMS 2.33" [59mm] TO 3.33" [85mm] WIDE
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 24 lbs. [10.89 Kg.]

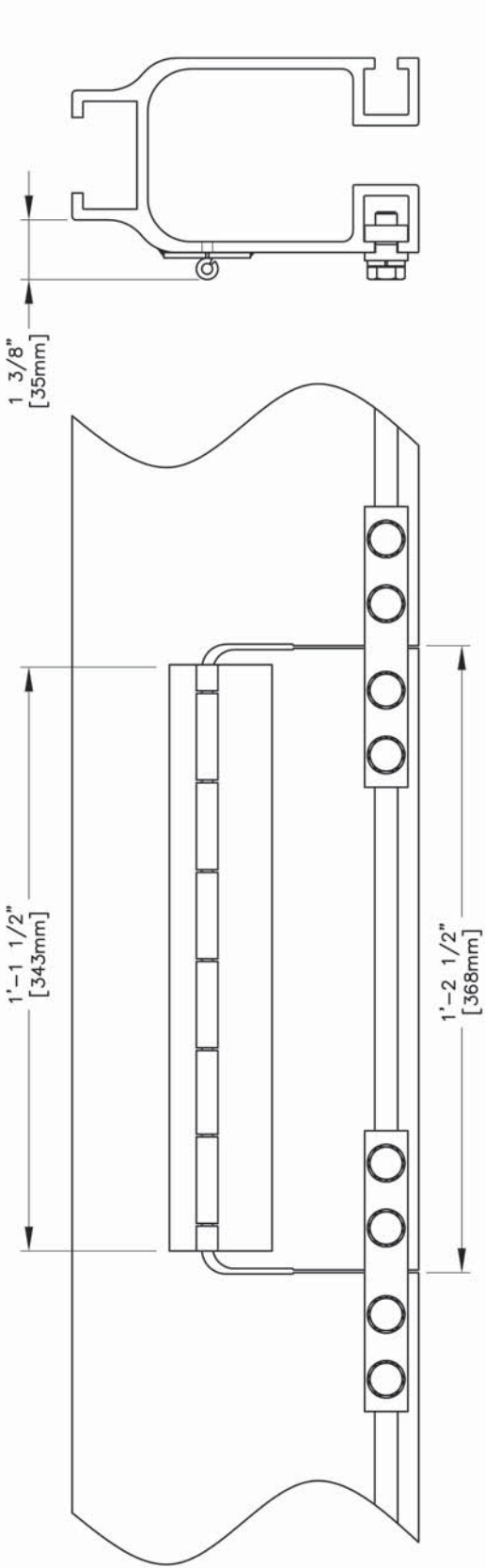


27061 BEAM HANGER PERPENDICULAR MOUNT
FOR BEAMS 4" [102mm] TO 8" [203mm] WIDE
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 24 lbs. [10.89 Kg.]

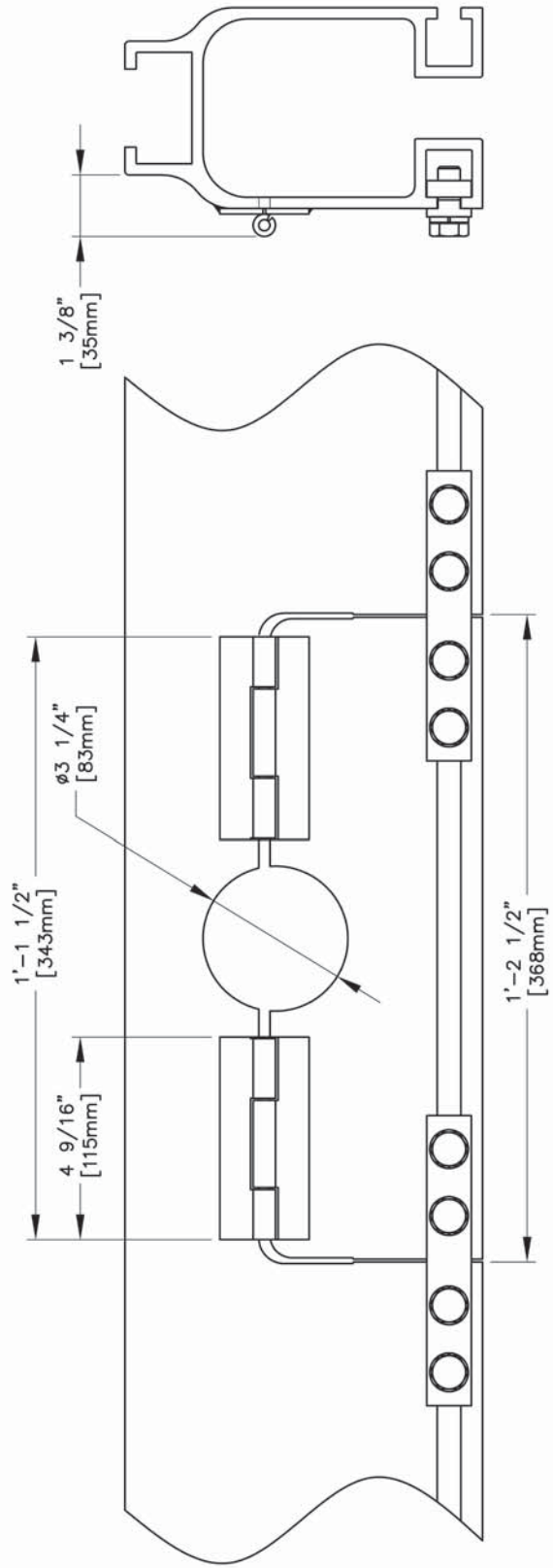


27070 ETA RIGID MOUNT HANGER
RATED LOAD 3500 LBS. [1588 Kg.]
WEIGHT 10 LBS. [4.54 Kg.]



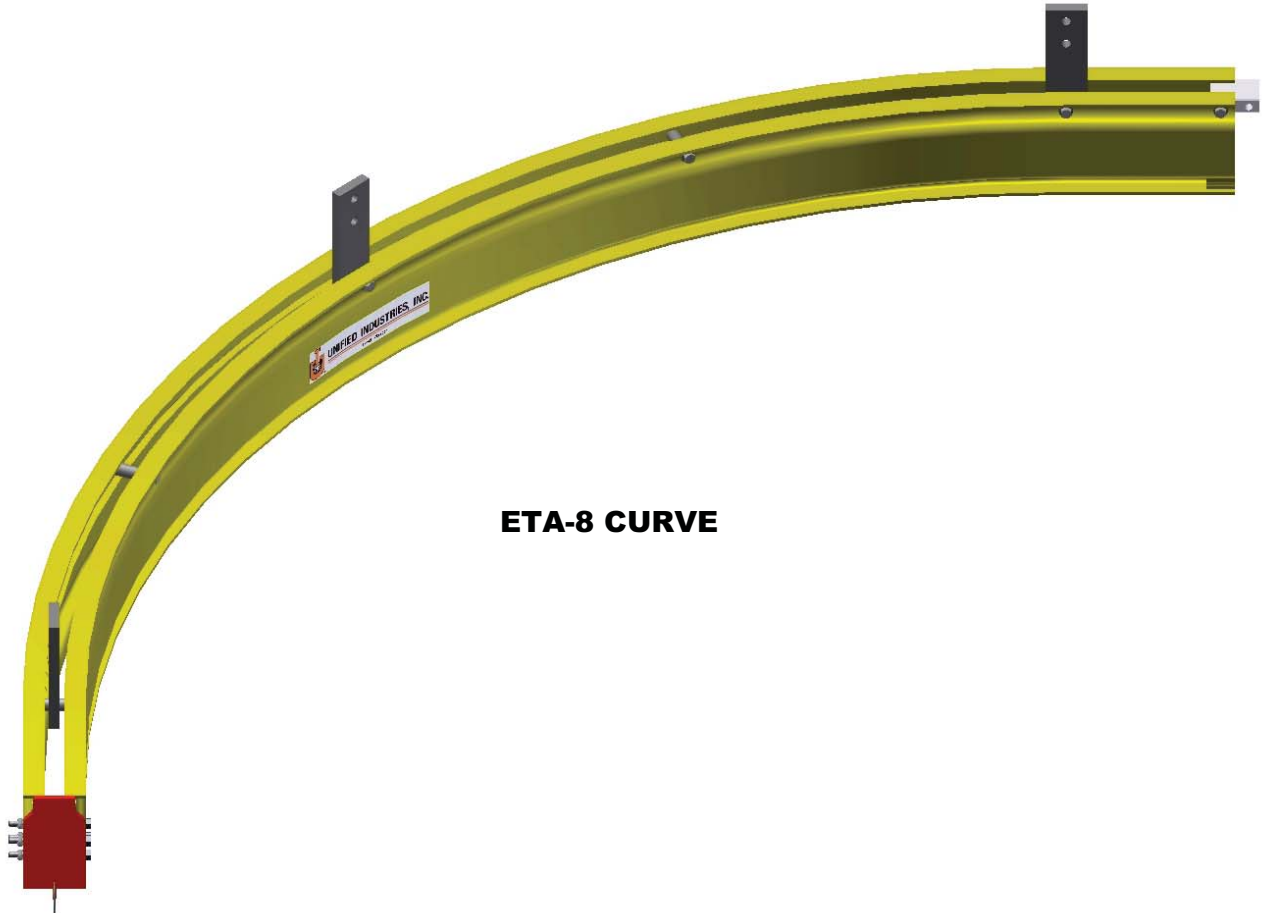


25785 ETA-8 TROLLEY INSPECTION GATE
FOR INSERTION AND REMOVAL OF TROLLEYS



25786 ETA-8 KICKUP TROLLEY INSPECTION GATE
FOR INSERTION AND REMOVAL OF KICK UP TROLLEYS

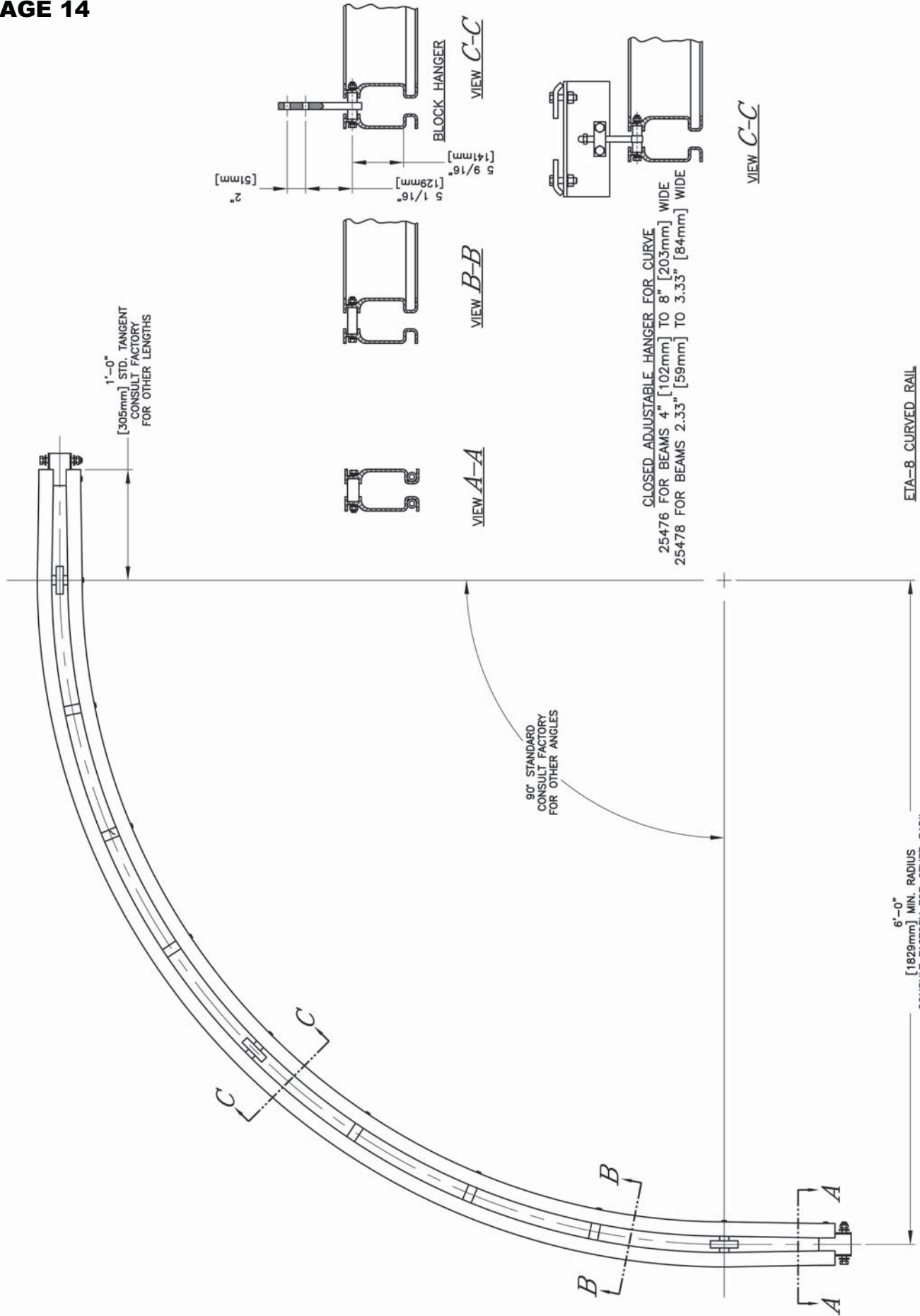
Inspection Gates must be 1'-0" from a hanger



ETA-8 CURVE

Features

- 6'-0" (1829mm) minimum radius
- Consult factory for additional information
- **87049** up to 6'-0" (1829mm) radius x 90° with Closed Adjustable Hangers
- **87050** up to 6'-0" (1829mm) radius x 90°
- **87054** up to 6'-0" (1829mm) radius x 45° with Closed Adjustable Hangers
- **87055** up to 6'-0" (1829mm) radius x 45°
- **87059** 6'-1" (1855mm) to 14'-0" (4267mm) radius x 90° with Closed Adjustable Hangers
- **87060** 6'-1" (1855mm) to 14'-0" (4267mm) radius x 90°



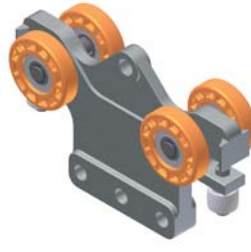
UNIFIED ETA-8 RAIL TROLLEYS



20011



20019



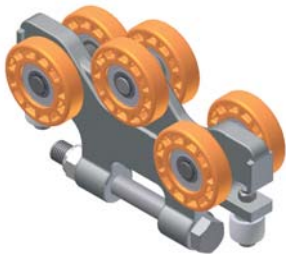
20024



20052



20070



20068



20069



20071



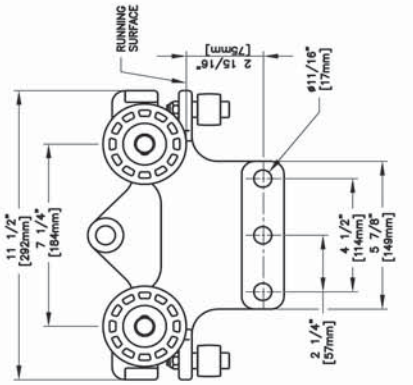
28080

Part Number

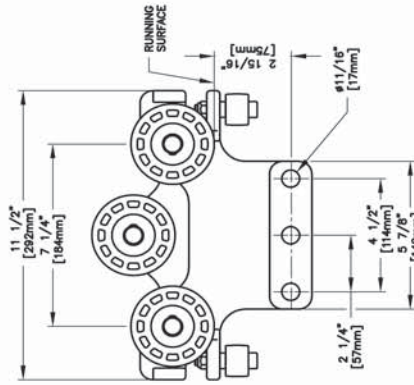
- **20011** ETA-8 Short Body Load Trolley with 1100 lb (500kg) Rated Load
- **20019** ETA-8 Long Body Load Trolley with 1100 lb (500kg) Rated Load
- **20024** ETA-8 Three Hole Mount Load Trolley with 1100 lb (500kg) Rated Load
- **20052** ETA-8 Saddle Load Trolley with 1100 lb (500kg) Rated Load
- **20070** ETA-8 Pin Load Trolley with 1100 lb (500kg) Rated Load
- **20068** ETA-8 Short Body Kickup Trolley with 1100 lb (500kg) Rated Load
- **20069** ETA-8 Long Body Kickup Trolley with 1100 lb (500kg) Rated Load
- **20071** ETA-8 Three Hole Mount Kickup Trolley with 1100 lb (500kg) Rated Load
- **28080** ETA-8 Unified Balancer Trolley with 1100 lb (500kg) Rated Load

Features

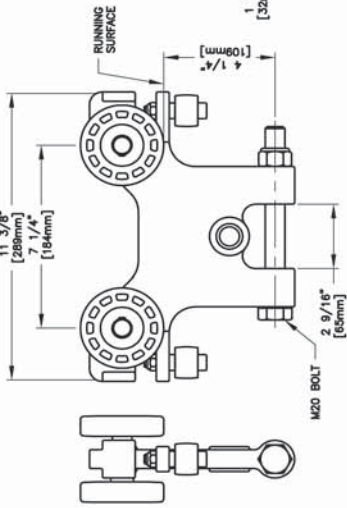
- High tensile almag alloy frame
- 3.2" (82mm) glass filled nylon wheels, with permanently sealed precision ball bearings
- High impact nylon guide rollers with dual race ball bearings for smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)



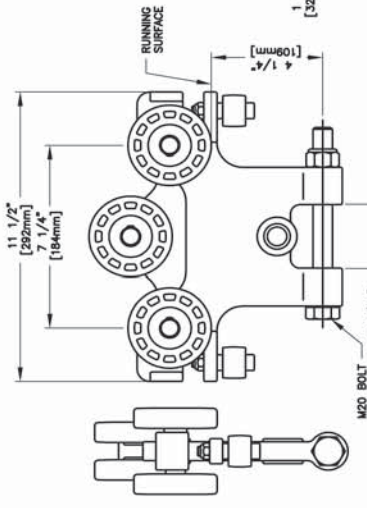
20024 ETA-8 THREE HOLE MOUNT LOAD TROLLEY



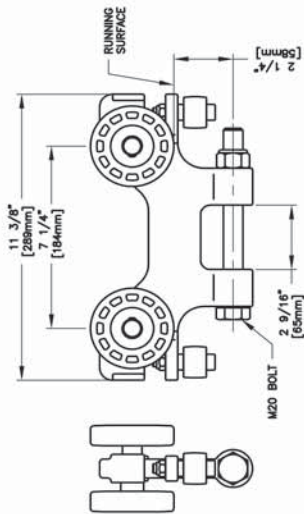
20071 ETA-8 THREE HOLE MOUNT KICKUP TROLLEY



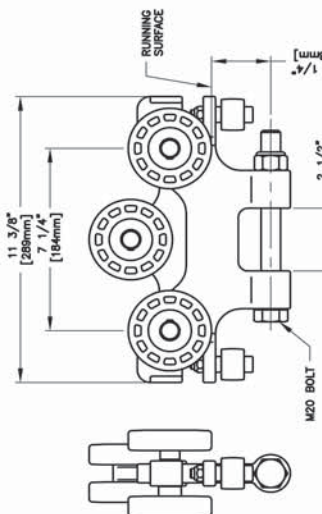
20019 ETA-8 LONG BODY LOAD TROLLEY



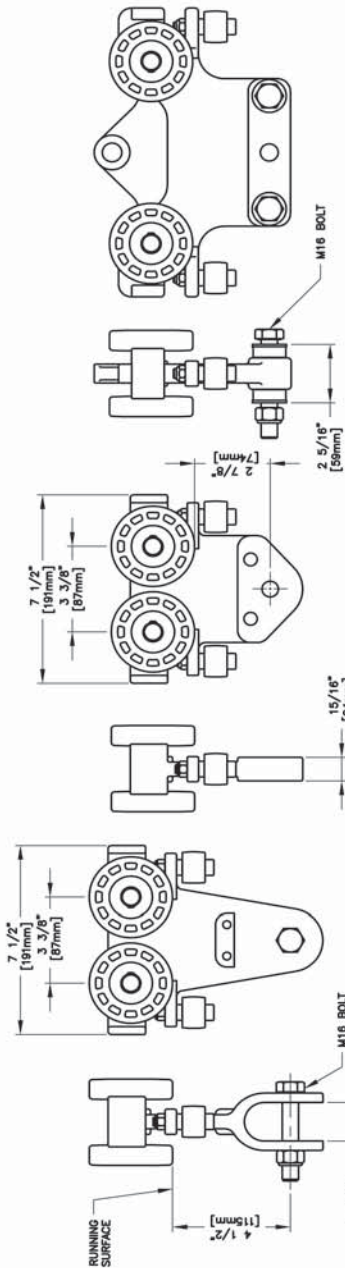
20069 ETA-8 LONG BODY KICKUP TROLLEY



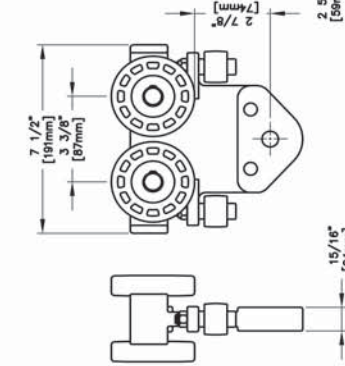
20011 ETA-8 SHORT BODY LOAD TROLLEY



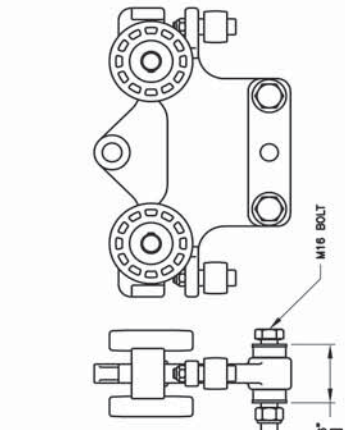
20068 ETA-8 SHORT BODY KICKUP TROLLEY



20052 ETA-8 SADDLE LOAD TROLLEY



20070 ETA-8 PIN LOAD TROLLEY



28080 ETA-8 BALANCER SUSPENSION KIT

| SPECIFICATIONS | | RATED LOAD | |
|--------------------------------------------------------|----------------------|------------|-----------|
| WEIGHT OF 20011: | 6.29 lbs. [2.85 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20019: | 7.14 lbs. [3.23 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20024: | 6.68 lbs. [3.03 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20052: | 5.66 lbs. [2.57 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20068: | 7.67 lbs. [3.48 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20069: | 8.38 lbs. [3.80 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 20071: | 7.53 lbs. [3.42 Kg.] | 1100 lbs. | [500 Kg.] |
| WEIGHT OF 28080: | 5.11 lbs. [2.32 Kg.] | 1100 lbs. | [500 Kg.] |
| BODY : HIGH TENSILE ALUMG | | | |
| WHEELS : 3.2 DIA. [81.3mm DIA.] GLASS REINFORCED NYLON | | | |
| BEARINGS : BALL PERMANENTLY LUBRICATED | | | |
| STUDS : .75 DIA. [19.1mm DIA.] | | | |
| GUIDE ROLLERS : 1.25 DIA. [31.8mm] HIGH IMPACT NYLON | | | |



UNIFIED ETA-8 RAIL TROLLEYS



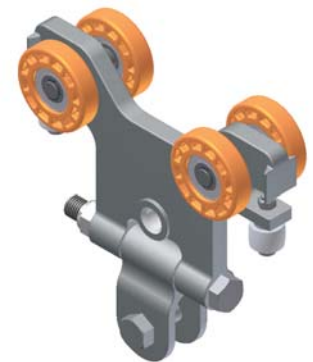
20022



20023



20040



20041



20066



20067



25120



25125

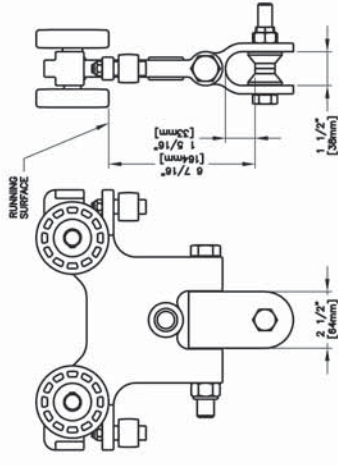
Part Number

- **20022** ETA-8 IR 6" Balancer Trolley with 1100 lb (500kg) Rated Load
- **20023** ETA-8 IR 10" Balancer Trolley with 1100 lb (500kg) Rated Load
- **20040** ETA-8 Single Hoist Trolley with 1100 lb (500kg) Rated Load
- **20041** ETA-8 Single Carriage Trolley with 1100 lb (500kg) Rated Load
- **20066** ETA-8 IR 6" Balancer Kickup Trolley with 1100 lb (500kg) Rated Load
- **20067** ETA-8 IR 10" Balancer Kickup Trolley with 1100 lb (500kg) Rated Load
- **25120** ETA-8 Dual Hoist Trolley with 2200 lb (1000kg) Rated Load
- **25125** ETA-8 Dual Hoist Kickup Trolley with 2200 lb (1000kg) Rated Load

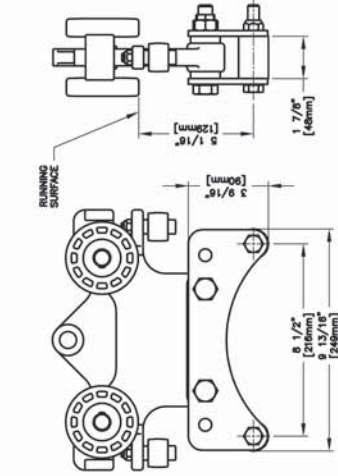
Features

- High tensile almag alloy frame
- 3.2" (82mm) glass filled nylon wheels, with permanently sealed precision ball bearings
- High impact nylon guide rollers with dual race ball bearings for smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to +100 degrees C)

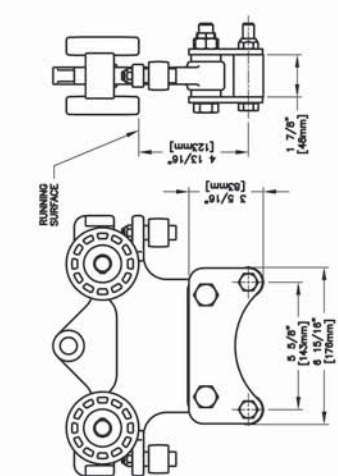
| SPECIFICATIONS | | RATED LOAD | |
|----------------------------------------------------|----------------------|---------------------|--|
| WEIGHT OF 200203: | 11.56 lbs. [5.24 Kg] | 1100 lbs. [500 Kg] | |
| WEIGHT OF 20023: | 12.83 lbs. [5.73 Kg] | 1100 lbs. [500 Kg] | |
| WEIGHT OF 20040: | 8.83 lbs. [4.00 Kg] | 1100 lbs. [500 Kg] | |
| WEIGHT OF 20041: | 8.82 lbs. [3.91 Kg] | 1100 lbs. [500 Kg] | |
| WEIGHT OF 20066: | 12.46 lbs. [5.65 Kg] | 2200 LBS. [1000 Kg] | |
| WEIGHT OF 20067: | 13.53 lbs. [6.14 Kg] | 2200 LBS. [1000 Kg] | |
| WEIGHT OF 25120: | 18.88 lbs. [8.56 Kg] | | |
| WEIGHT OF 25125: | 21.64 lbs. [9.82 Kg] | | |
| BODY : HIGH TENSILE ALMAG | | | |
| WHEELS : 3.2 DIA. [81mm] GLASS REINFORCED NYLON | | | |
| BEARINGS : BALL PERMANENTLY LUBRICATED | | | |
| STUDS : .75 DIA. [19mm] | | | |
| GUIDE ROLLERS : 1.25 DIA. [32mm] HIGH IMPACT NYLON | | | |



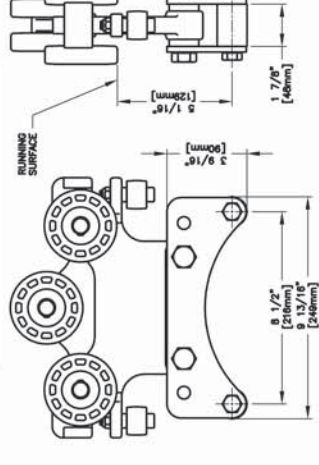
20040 ETA-8 SINGLE HOIST TROLLEY



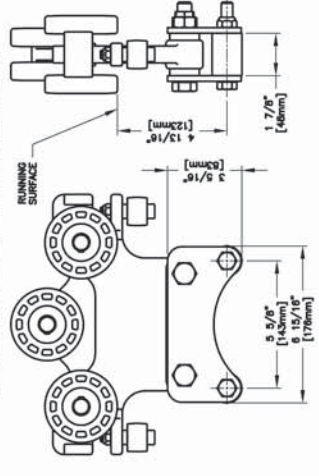
20023 ETA-8 IR 10 BALANCER TROLLEY



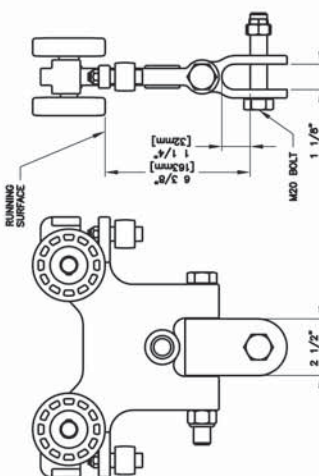
20022 ETA-8 IR 6 BALANCER TROLLEY



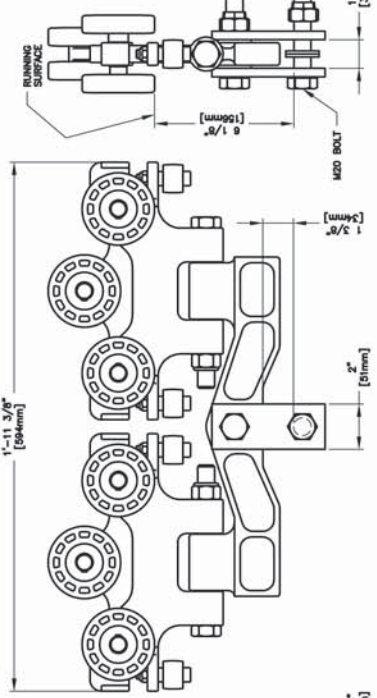
20067 ETA-8 IR 10 BALANCER KICKUP TROLLEY



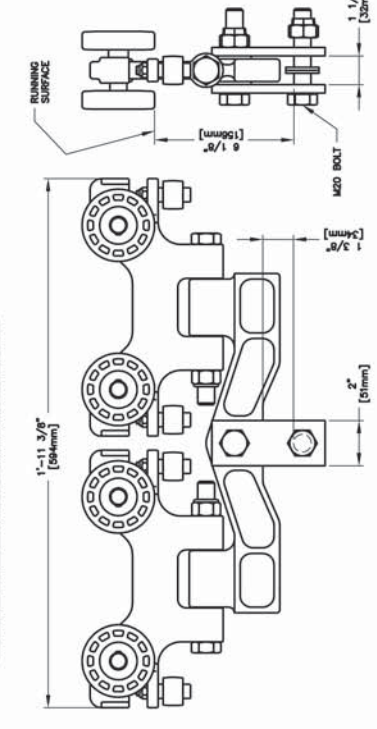
20066 ETA-8 IR 6 BALANCER KICKUP TROLLEY



20041 ETA-8 SINGLE CARRIAGE TROLLEY



25125 ETA-8 DUAL HOIST KICKUP TROLLEY



25120 ETA-8 DUAL HOIST TROLLEY

UNIFIED ETA-8 FESTOON TROLLEY



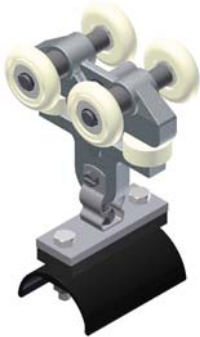
20090



20091



20092



20093



20096



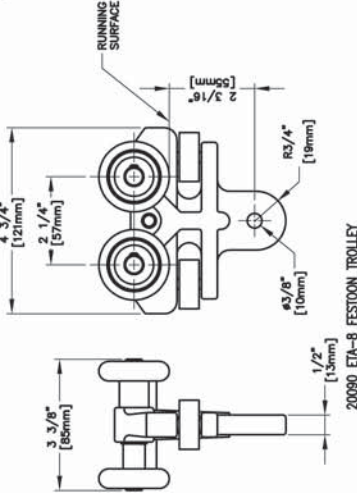
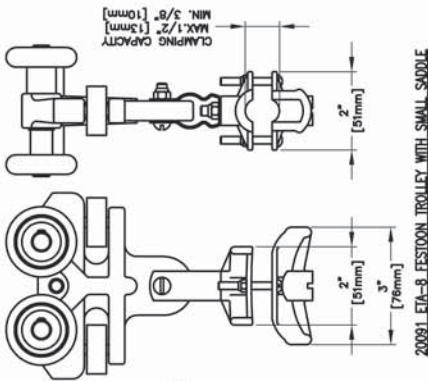
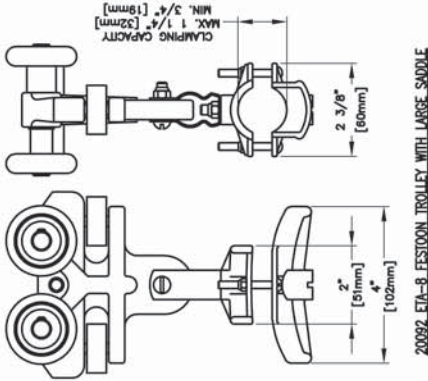
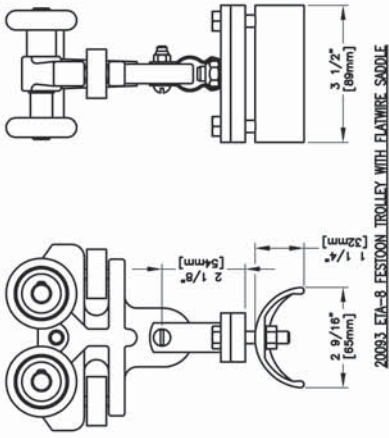
20097

Part Number

- **20090** ETA-8 Festoon Trolley with 100 lb (45kg) Rated Load
- **20091** ETA-8 Festoon Trolley and Small Saddle with 100 lb (45kg) Rated Load
- **20092** ETA-8 Festoon Trolley and Large Saddle with 100 lb (45kg) Rated Load
- **20093** ETA-8 Festoon Trolley and Flatwire Saddle with 100 lb (45kg) Rated Load
- **20096** ETA-8 Festoon Trolley and U/I Saddle with 100 lb (45kg) Rated Load
- **20097** ETA-8 Festoon Trolley with 12" Saddle 100 lb (45kg) Rated Load

Features

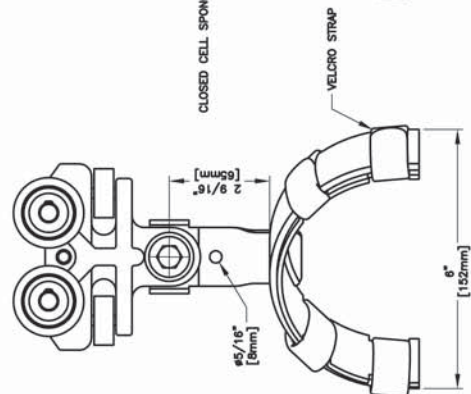
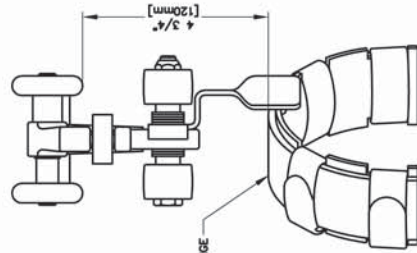
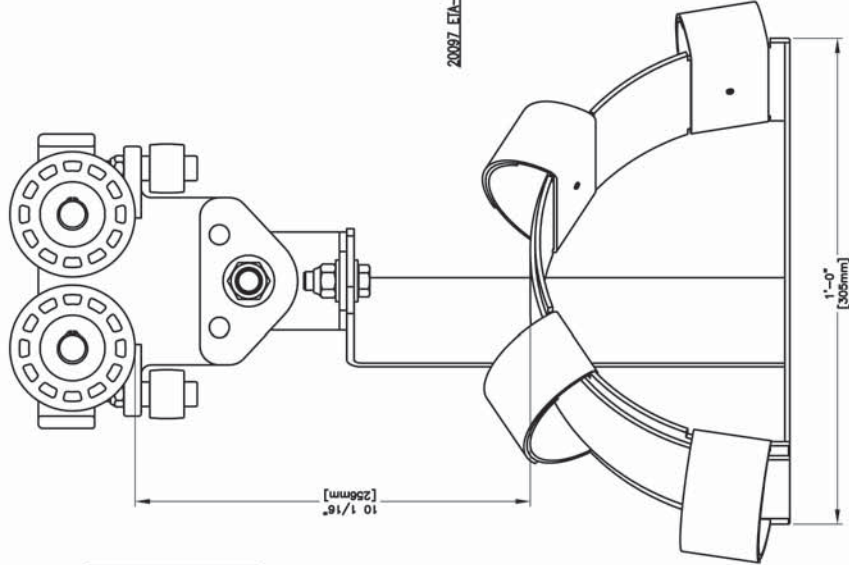
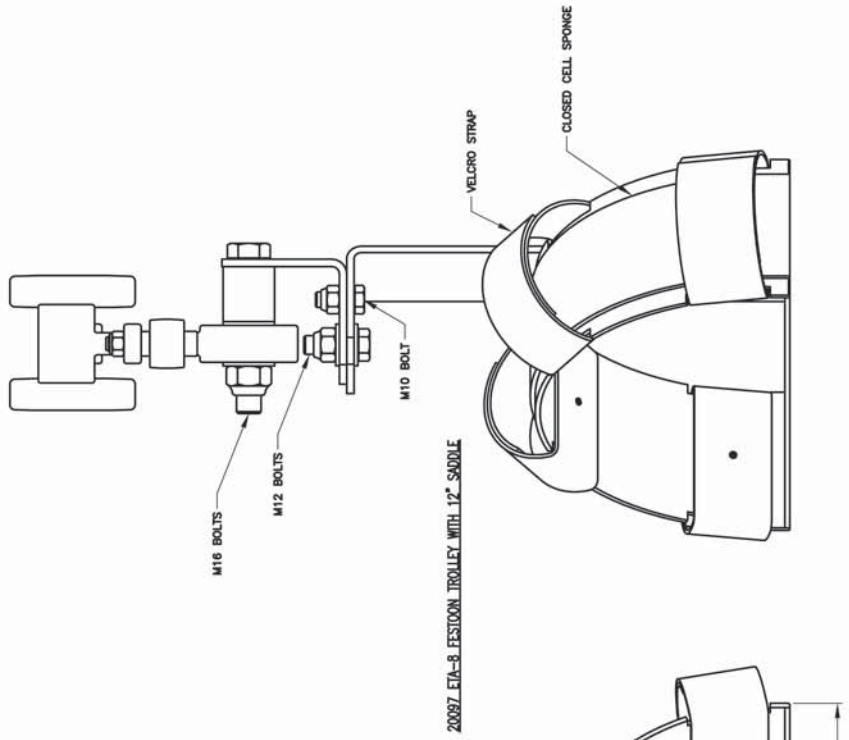
- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to 100 degrees C)



SPECIFICATIONS:

WHEELS: 1.812 DIA. [46mm] HIGH IMPACT NYLON
 BODY : ALMAG 35
 BEARINGS : BALL TYPE PERMANENTLY LUBRICATED
 STUDS : .50 DIA. [13mm]
 GUIDE ROLLERS : .94 DIA. [24mm] HIGH IMPACT NYLON
 OPERATING TEMP. AT 100% LOAD : -10°F TO +110°F
 ROLLING FRICTION : .2% TO 1% OF LOAD
 MAX. LOAD PER WHEEL : 25 lbs. [11.2 kgs]

| TROLLEY | WEIGHT |
|---------|-----------------------|
| 20090: | 1.55 lbs. [70 kg.] |
| 20091: | 1.74 lbs. [79 kg.] |
| 20092: | 1.76 lbs. [80 kg.] |
| 20093: | 2.17 lbs. [98 kg.] |
| 20096: | 3.21 lbs. [1.46 kg.] |
| 20097: | 12.61 lbs. [5.72 kg.] |



UNIFIED ETA-8 FESTOON TROLLEY



20094



20095



78270



78184



78190



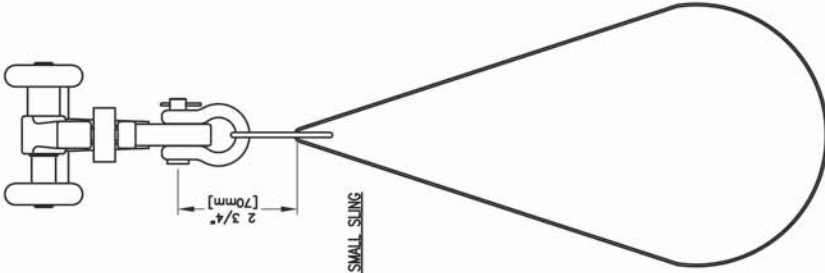
78170

Part Number

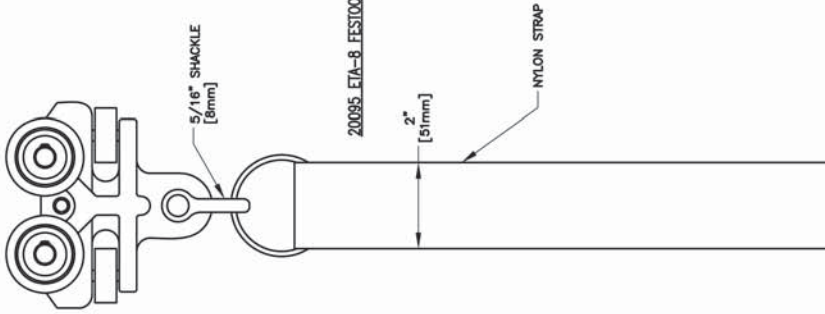
- **20094*** ETA-8 Festoon Trolley and 24" Large Sling with 100 lb (45kg) Rated Load
- **20095*** ETA-8 Festoon Trolley and 12" Small Sling with 100 lb (45kg) Rated Load
- **78270** ETA-8 Festoon Slider
- **78184** Cable Trolley with Small Saddle
- **78190** Cable Trolley with Large Saddle
- **78170** Cable Trolley with Flatwire Saddle

Features*

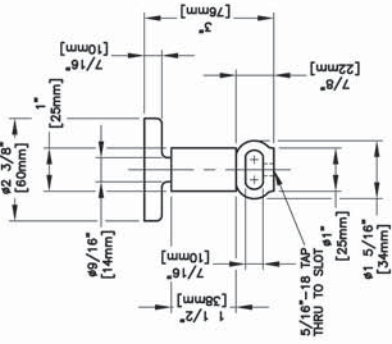
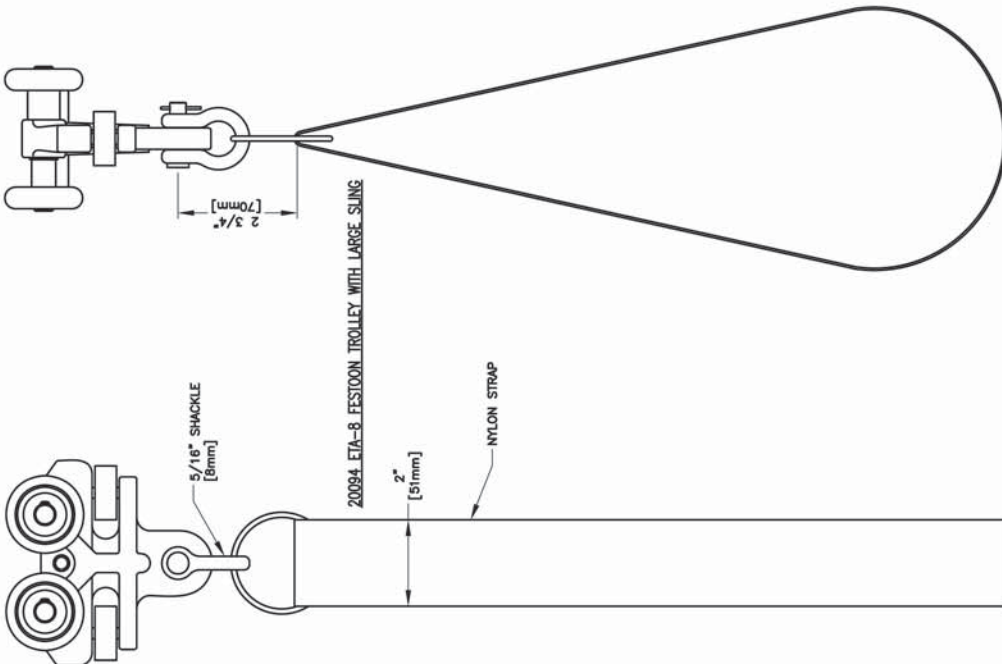
- High tensile almag alloy frame
- 1.8" (46mm) Nylon glass reinforced wheels, with permanently sealed precision ball bearings
- High-impact nylon guide rollers with smooth, quiet operation
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Low inertia: less than 1% of load
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to 100 degrees C)



20095 ETA-8 FESTOON TROLLEY WITH SMALL SLING



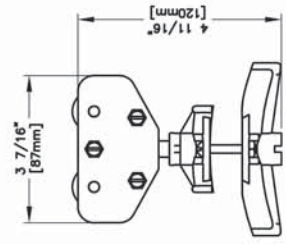
20094 ETA-8 FESTOON TROLLEY WITH LARGE SLING



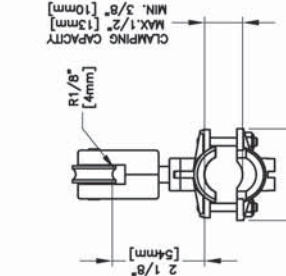
78270 ETA-8 FESTOON SLIDER FOR AIR HOSE OR ELECTRIC FESTOON

FESTOON TROLLEY SPECIFICATIONS:
 WHEELS: 1.812 DIA. [46mm DIA.] HIGH IMPACT NYLON
 BODY: ALUM. 35
 BEARINGS: BALL TYPE PERMANENTLY LUBRICATED
 STUDS: ALUM. 35
 DIA. [12mm DIA.]
 DIA. [12mm DIA.] HIGH IMPACT NYLON
 OPERATING TEMP. AT 100% LOAD: -10°F TO +110°F [-20°C TO +45°C]
 ROLLING FRICTION: 5% TO 1% OF LOAD
 MAX. LOAD PER WHEEL: 25 lbs. [11.2 kg.]

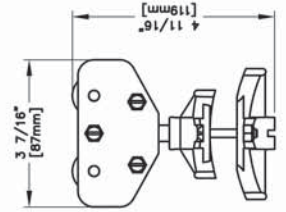
| TROLLEY | WEIGHT |
|---------|---------------------|
| 20094: | 2.05 lbs. [.93 Kg.] |
| 20095: | 1.88 lbs. [.85 Kg.] |
| 78270: | .10 lbs. [.05 Kg.] |
| 78170: | .46 lbs. [.21 Kg.] |
| 78184: | .37 lbs. [.17 Kg.] |
| 78190: | .41 lbs. [.19 Kg.] |



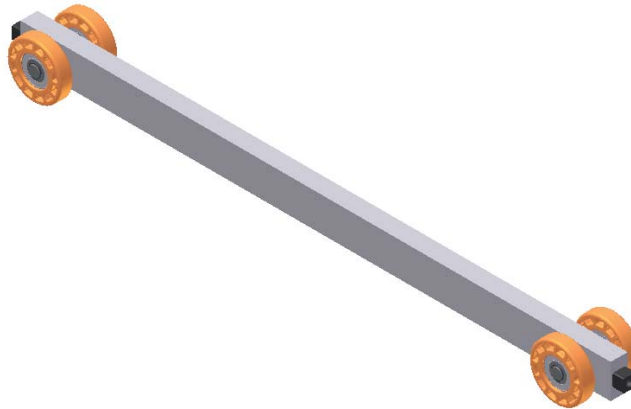
78190 CABLE TROLLEY WITH LARGE SADDLE



78184 CABLE TROLLEY WITH SMALL SADDLE

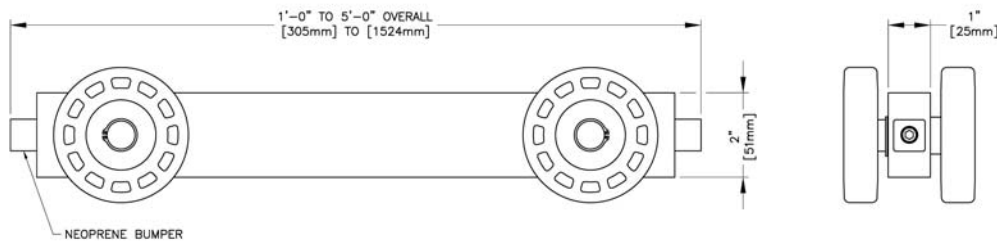


78170 CABLE TROLLEY WITH FLATWIRE SADDLE



ETA-8 BUMPER TROLLEY

| SPECIFICATIONS: | |
|------------------|-----------------------|
| BODY : | 6061 ALUMINUM |
| STUDS : | .75 DIA. [19mm] DIA. |
| WEIGHT OF 20080: | 4.38 lbs. [1.99 Kg.] |
| WEIGHT OF 20081: | 6.73 lbs. [3.05 Kg.] |
| WEIGHT OF 20082: | 9.08 lbs. [4.12 Kg.] |
| WEIGHT OF 20083: | 11.43 lbs. [5.18 Kg.] |
| WEIGHT OF 20084: | 13.78 lbs. [6.25 Kg.] |



Part Number

- **20080** 1'-0" (305mm) Bumper trolley to operate on Unified ETA-8
- **20081** 2'-0" (610mm) Bumper trolley to operate on Unified ETA-8
- **20082** 3'-0" (914mm) Bumper trolley to operate on Unified ETA-8
- **20083** 4'-0" (1219mm) Bumper trolley to operate on Unified ETA-8
- **20084** 5'-0" (1524mm) Bumper trolley to operate on Unified ETA-8

Features

- Aluminum trolley body
- 3.2" (82mm) glass filled nylon wheels, with permanently sealed precision ball bearings
- Operates within enclosed rail free from obstructing material
- Dielectrically insulated
- Operating temperature range: +32 degrees to +212 degrees F (0 degrees to 100 degrees C)

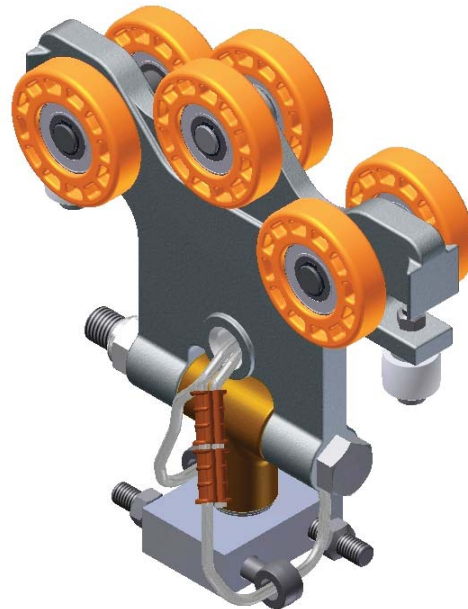
22041 SINGLE END TRUCK (WITHOUT KICKUP WHEELS)

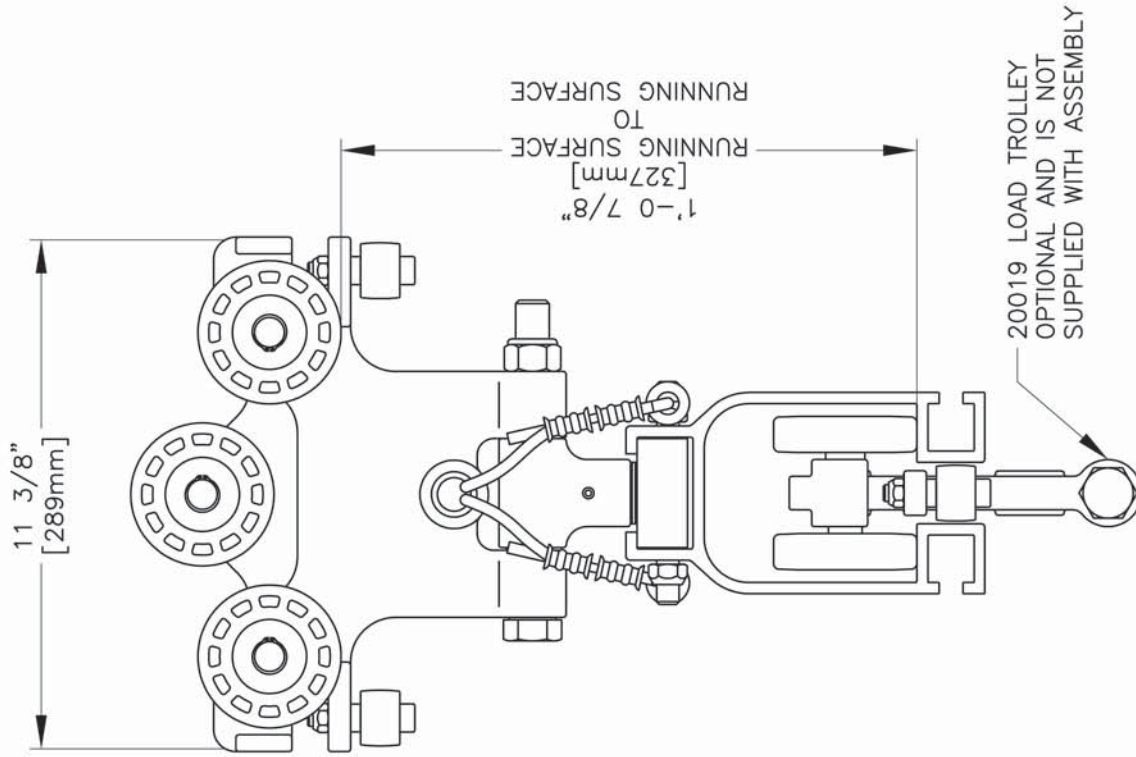
- End truck assembly for single girder bridge cranes.
- To operate on ETA-8 Bridge and Runway.
- Rated Load 1100 lbs. (500kg)



22046 SINGLE END TRUCK (WITH KICKUP WHEELS)

- End truck assembly for single girder bridge cranes.
- To operate on ETA-8 Bridge and Runway.
- Rated Load 1100 lbs. (500kg)



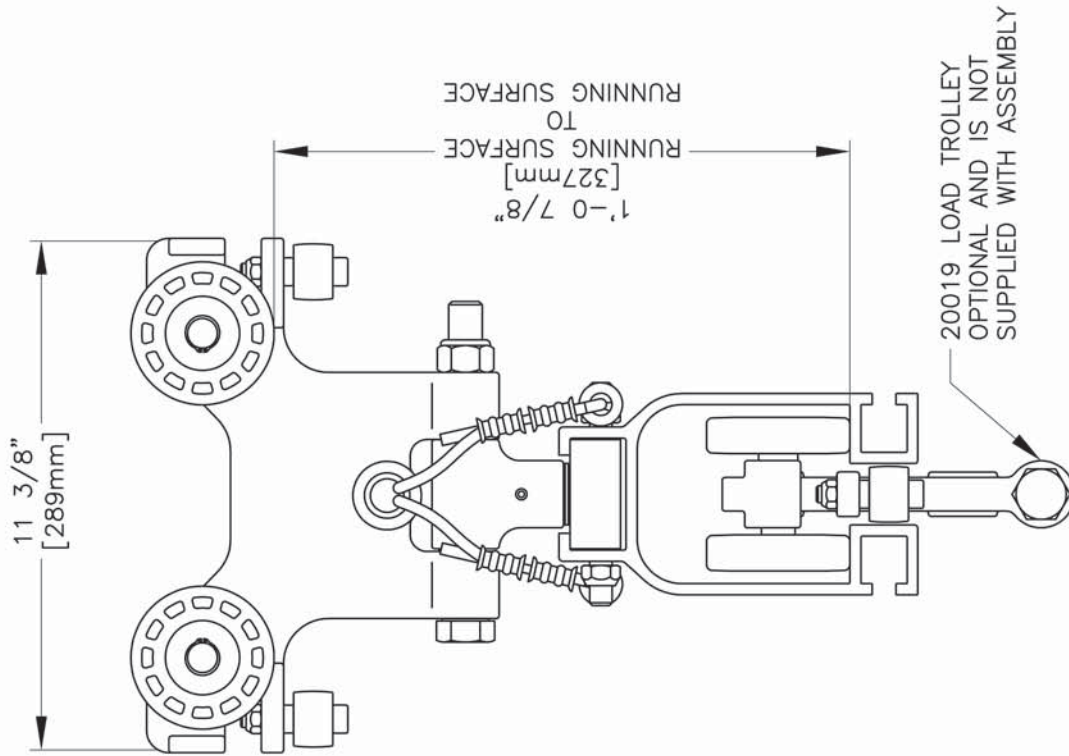


22046 ETA-8 SINGLE END TRUCK

WITH KICKUP

RATED LOADS OF 1100 LBS. [500 Kg.]

WEIGHT: 14 LBS. [6.35 Kg.]



22041 ETA-8 SINGLE END TRUCK

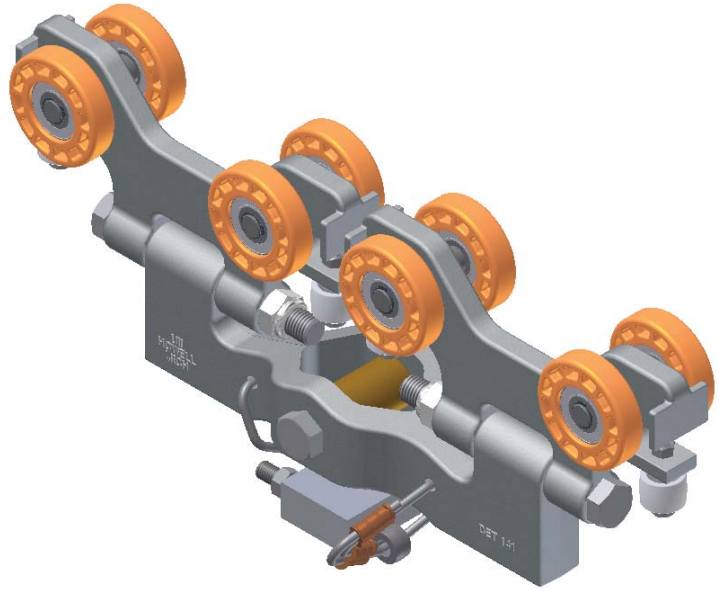
WITHOUT KICKUP

RATED LOADS OF 1100 LBS. [500 Kg.]

WEIGHT: 12 LBS. [5.44 Kg.]

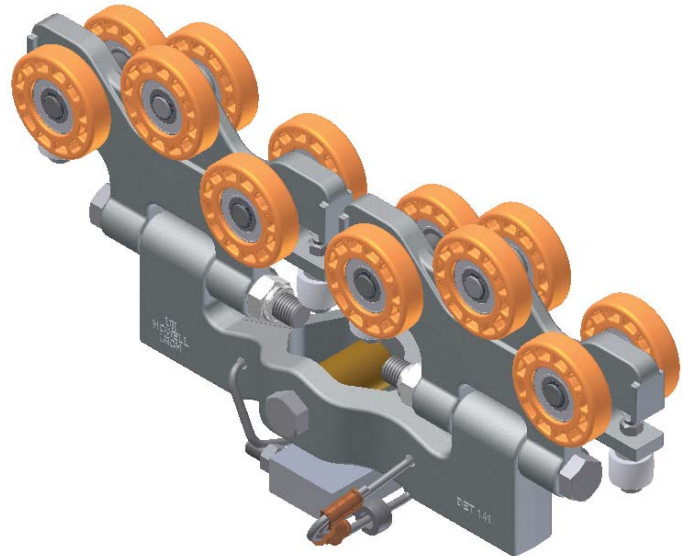
22051 ETA-8 DUAL END TRUCK (WITHOUT KICKUP WHEELS)

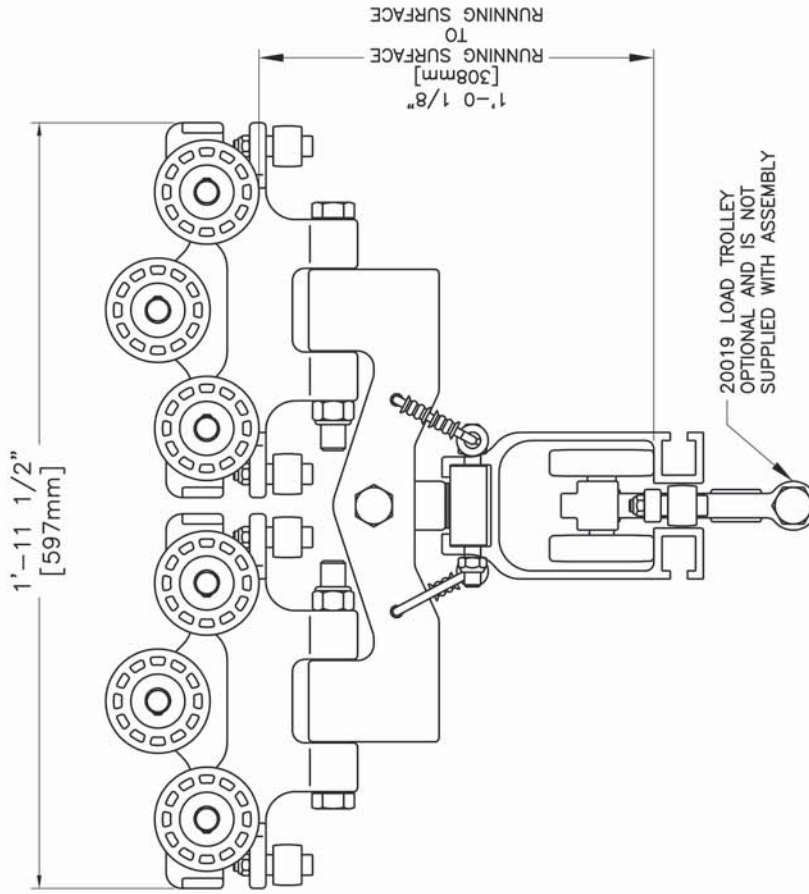
- End truck assembly for single girder bridge cranes.
- To operate on ETA-8.
- Rated Load 2200 lbs. (1000kg)



22131 ETA-8 DUAL END TRUCK (WITH KICKUP WHEELS)

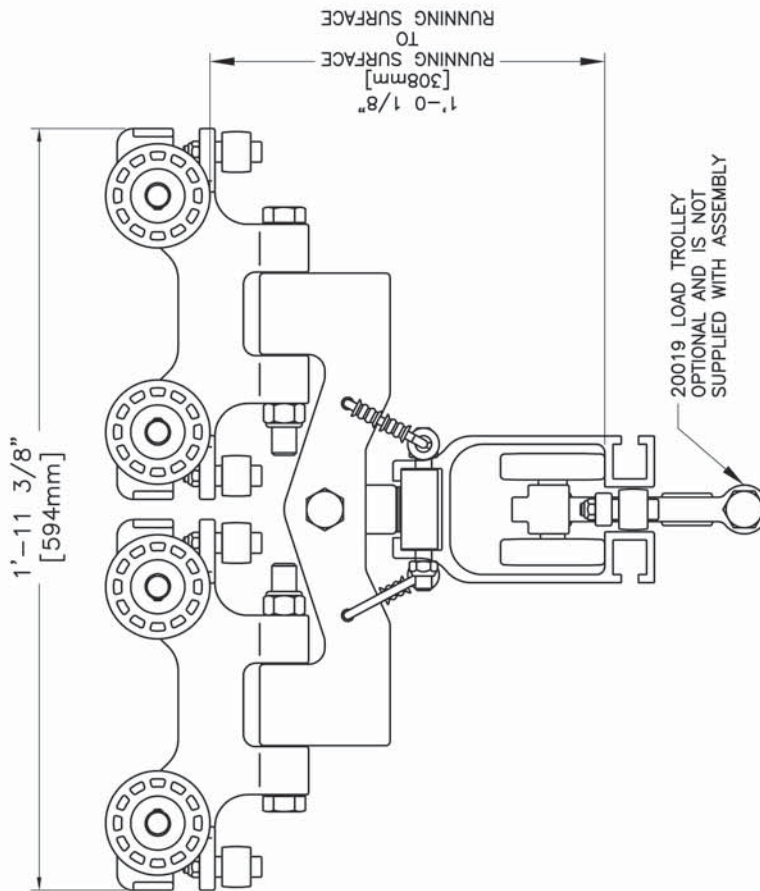
- End truck assembly with counter thrust wheels for single girder bridge cranes.
- To operate on ETA-8.
- Rated Load 2200 lbs. (1000kg)





22131 ETA-8 DUAL END TRUCK
WITH KICKUP

RATED LOADS OF 2200 LBS. [1000 Kg.]
WEIGHT: 27 LBS. [12.25 Kg.]

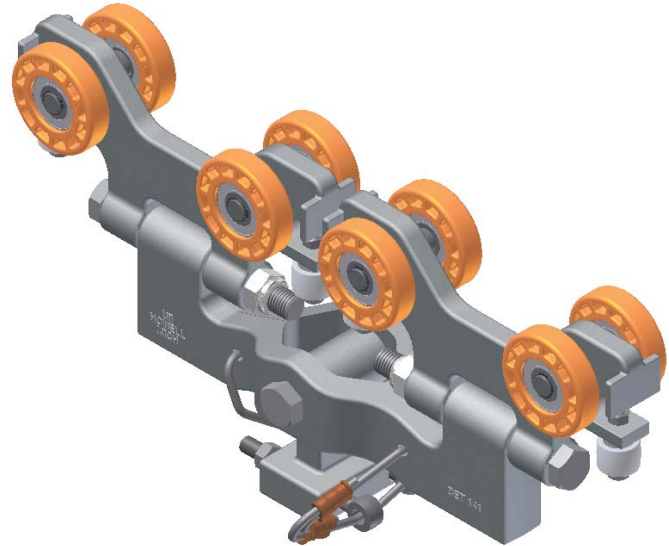


22051 ETA-8 DUAL END TRUCK
WITHOUT KICKUP

RATED LOADS OF 2200 LBS. [1000 Kg.]
WEIGHT: 24 LBS. [10.89 Kg.]

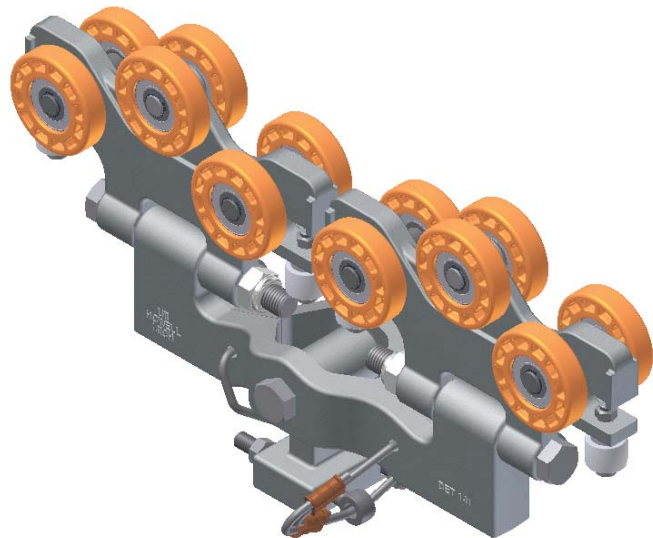
22052 RIGID DUAL END TRUCK (WITHOUT KICKUP WHEELS)

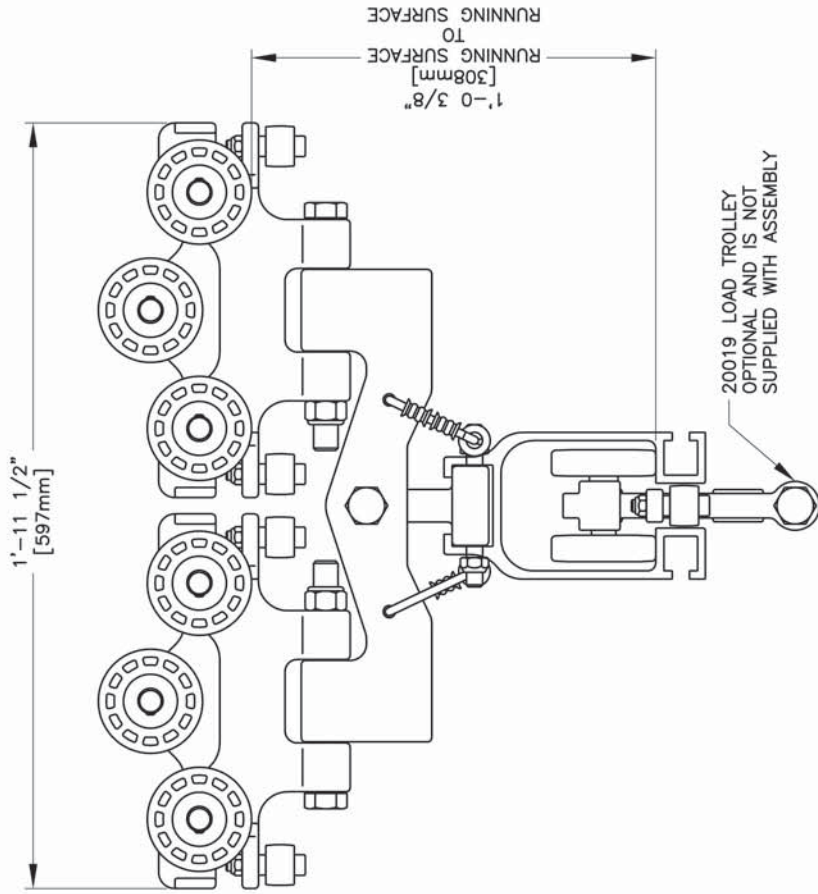
- End truck assembly for double girder bridge cranes.
- To operate on ETA-8.
- Rated Load 2200 lbs. (1000kg)



22068 RIGID DUAL END TRUCK (WITH KICKUP WHEELS)

- End truck assembly with counter thrust wheels for double girder bridge cranes.
- To operate on ETA-8.
- Rated Load 2200 lbs. (1000kg)



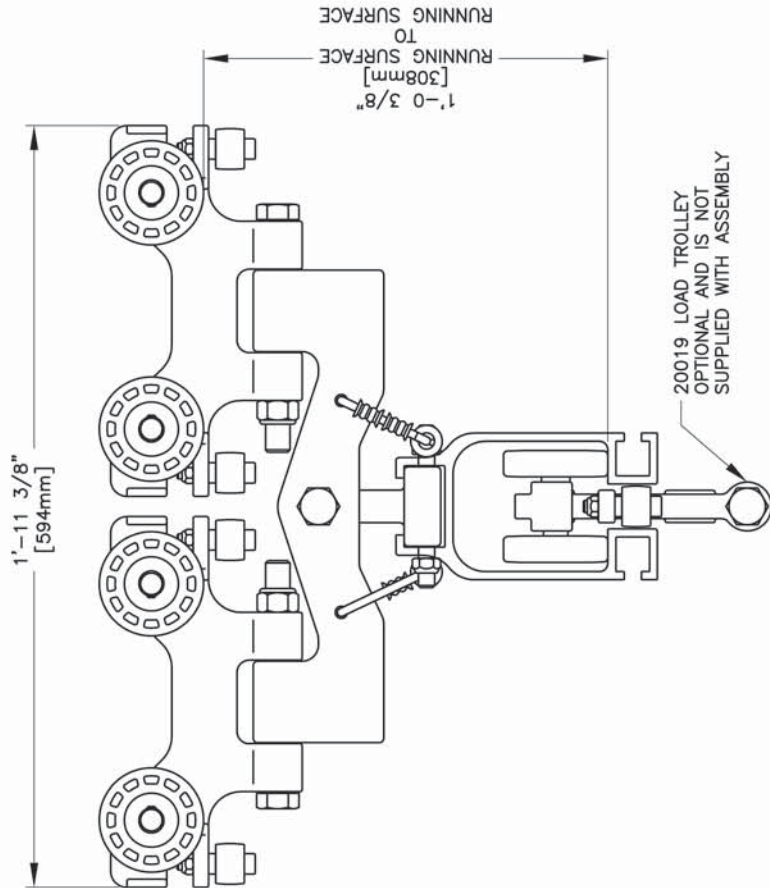


22068 ETA-8RIGID DUAL END TRUCK

WITH KICKUP

RATED LOADS OF 2200 LBS. [1000 Kg.]

WEIGHT: 25 LBS. [11.34 Kg.]

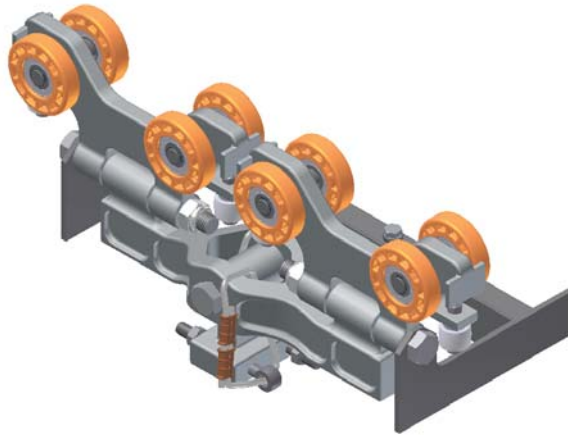


22052 ETA-8 RIGID DUAL END TRUCK

WITHOUT KICKUP

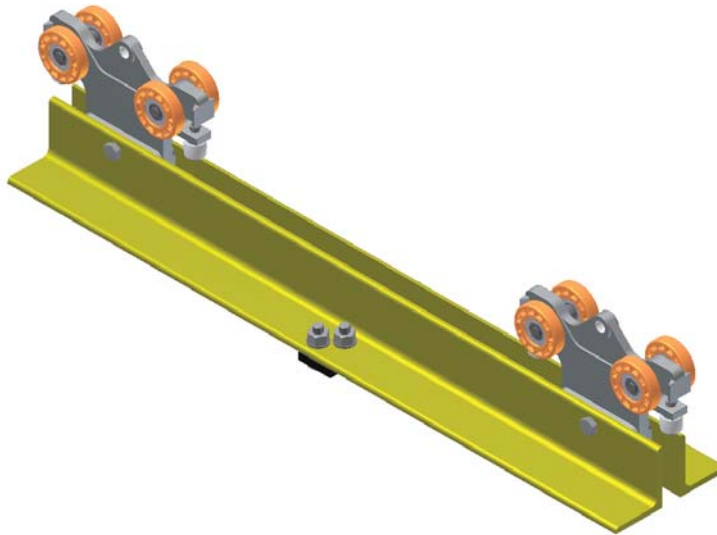
RATED LOADS OF 2200 LBS. [1000 Kg.]

WEIGHT: 22 LBS. [9.98 Kg.]



- **22055** Rigid Mount End Truck for Spans up to 18' (5.5m). Kickup version available, please consult factory
- Rated Load 2200 lbs. (1000kg)

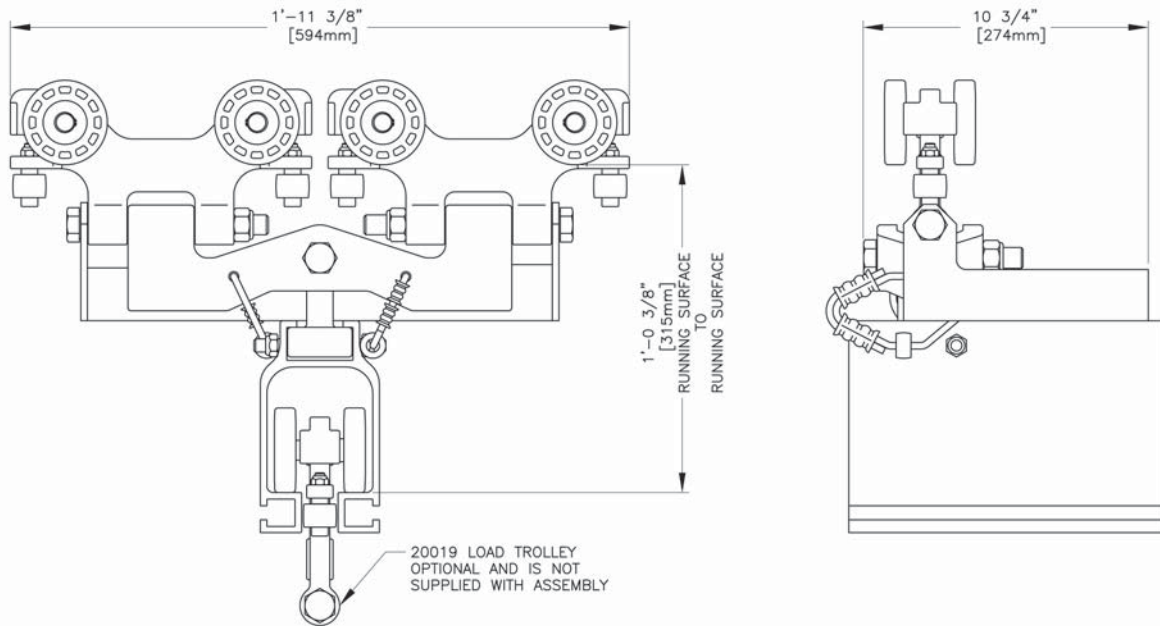
Weight
30 lbs. (13.6kg)



ETA-8 RIGID END TRUCKS WITHOUT KICKUP

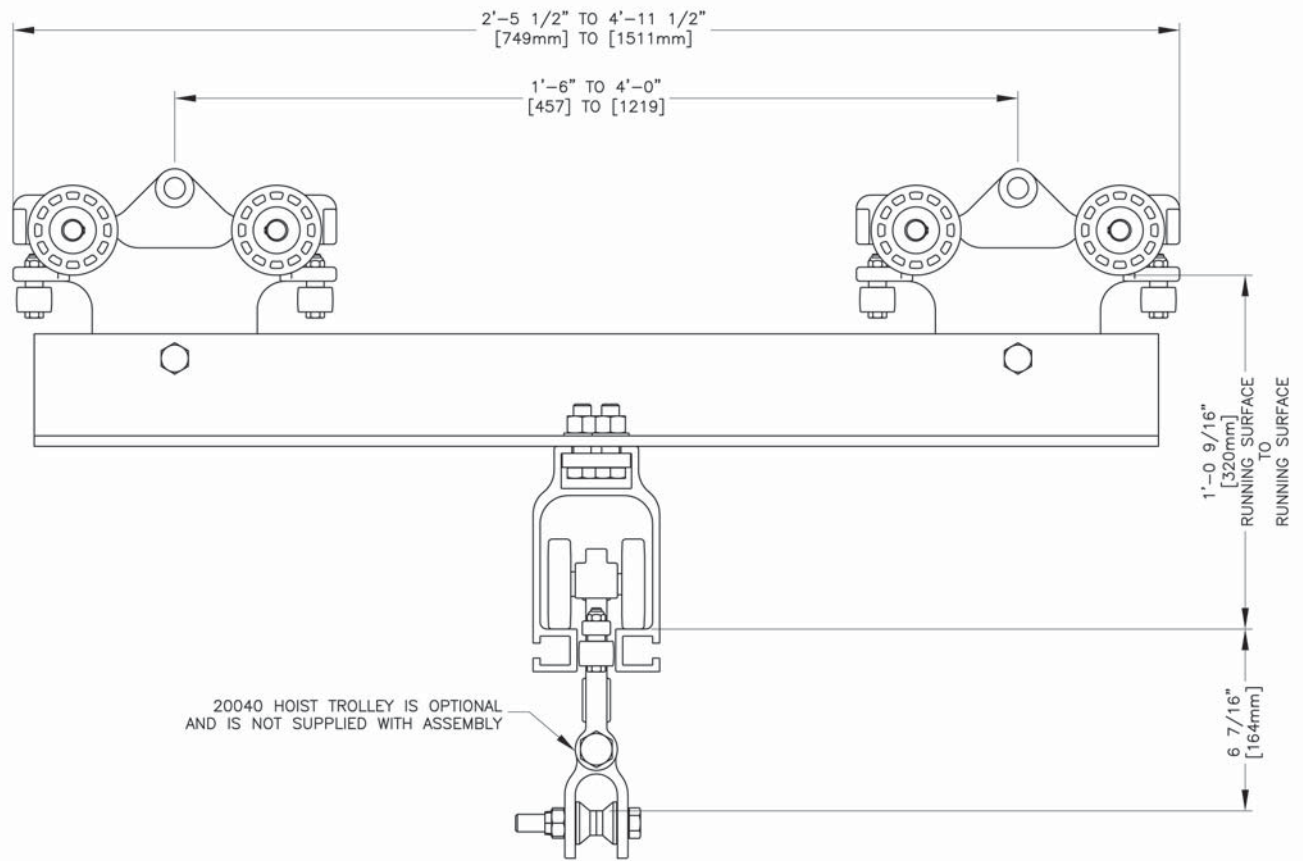
- End truck assemblies for single girder bridge cranes to run on ETA-8 Runway
- Attaches to ETA-4, ETA-5 and ETA-8 Bridges.

- | | Weight |
|--------------------------------------------------------------------------------------|-------------------|
| ■ 22221 1'-6" (457mm) wheelbase for spans 3'-0" (914mm) to 6'-0" (1829mm) | 61 lbs. (27.6kg) |
| ■ 22222 2'-0" (609mm) wheelbase for spans 7'-0" (2133mm) to 10'-0" (3048mm) | 70 lbs. (32kg) |
| ■ 22223 2'-6" (762mm) wheelbase for spans 11'-0" (3353mm) to 14'-0" (4267mm) | 79 lbs. (35.8kg) |
| ■ 22224 3'-0" (914mm) wheelbase for spans 15'-0" (4572mm) to 18'-0" (5486mm) | 88 lbs. (40kg) |
| ■ 22225 3'-6" (1066mm) wheelbase for spans 19'-0" (5791mm) to 21'-0" (6400mm) | 98 lbs. (44.5kg) |
| ■ 22226 4'-0" (1219mm) wheelbase for spans 22'-0" (6705mm) to 25'-0" (7620mm) | 107 lbs. (48.5kg) |
- Rated Load 2200 lbs. (1000kg)
 - No safety cable included

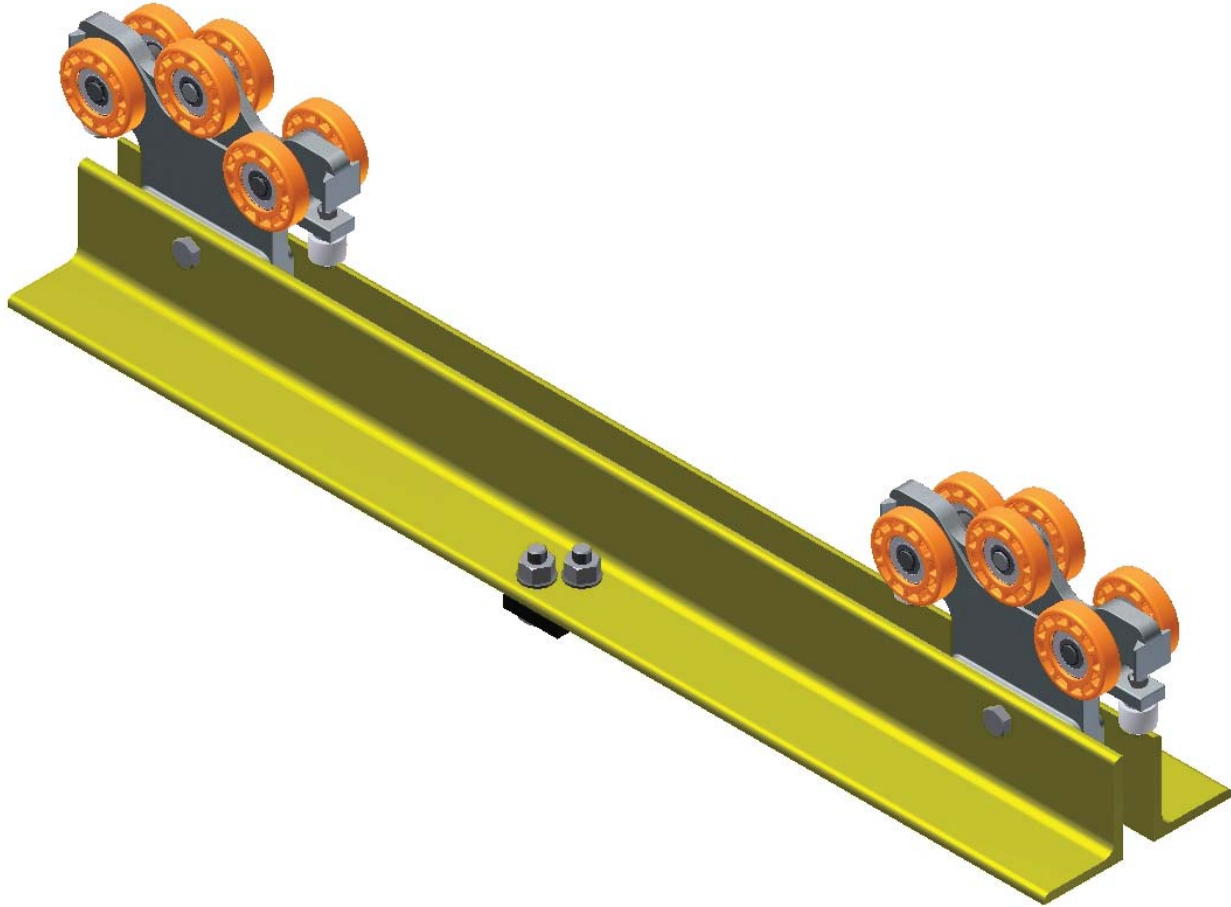


22055 ETA-8 DUAL RIGID MOUNT END TRUCK

WITHOUT KICKUP
 RATED LOADS OF 2200 LBS. [1000 Kg.]
 WEIGHT: 30 LBS. [13.6 Kg.]



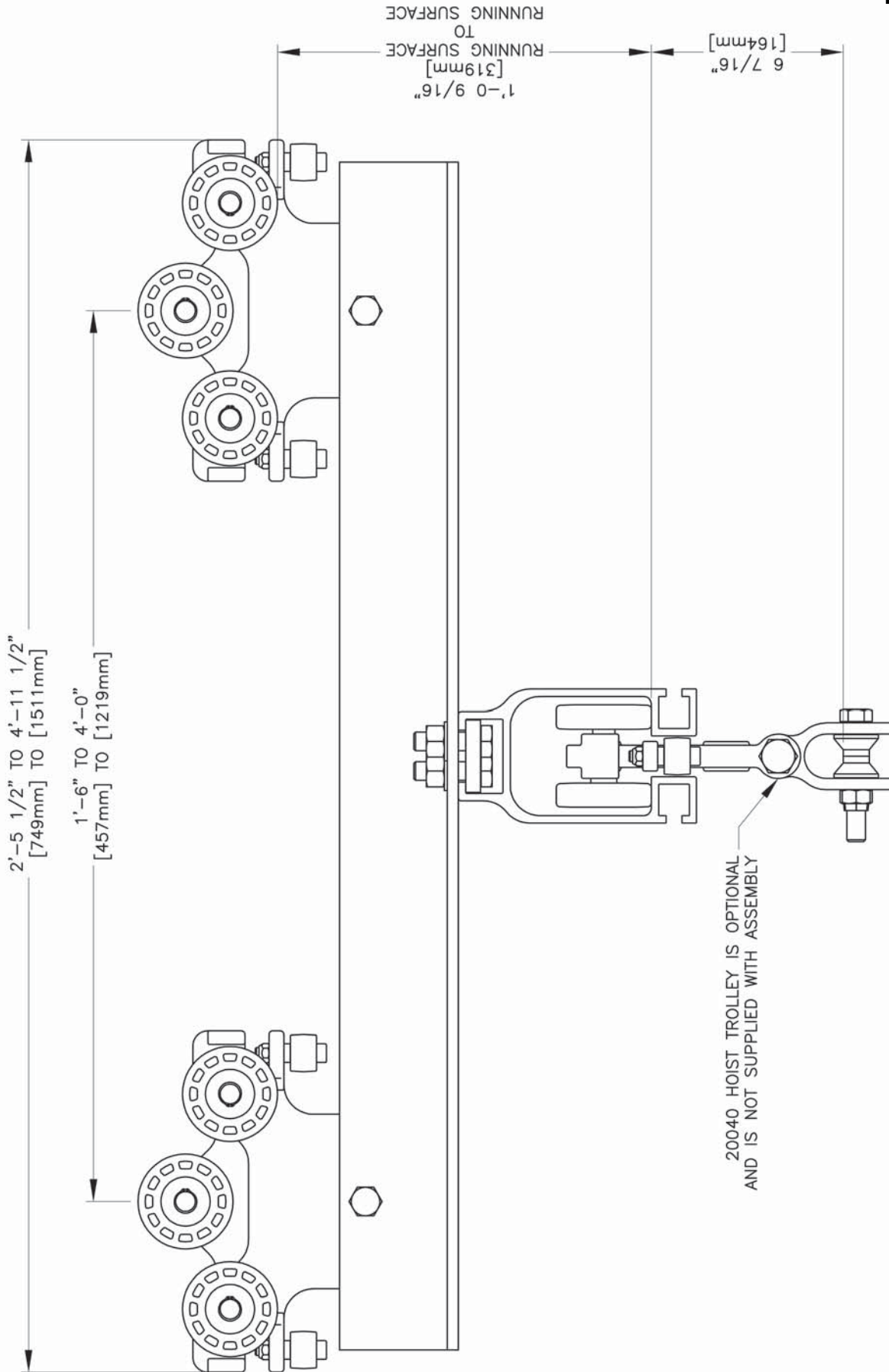
ETA-8 RIGID END TRUCKS WITHOUT KICKUP
 DUAL TROLLEY END TRUCK AT EACH
 END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 NO SAFETY CABLE INCLUDED



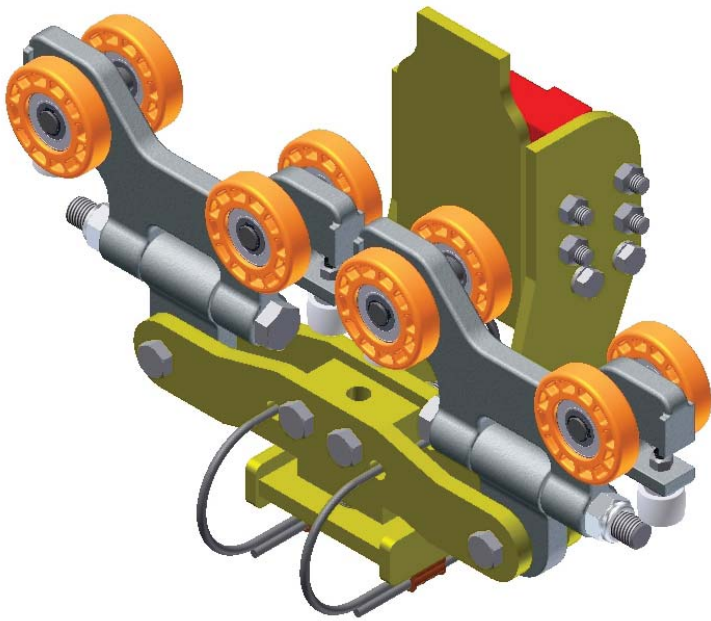
ETA-8 RIGID END TRUCKS WITH KICKUP

- End truck assemblies for single girder bridge cranes to run on ETA-8 Runway
- Attaches to ETA-4, ETA-5 and ETA-8 Bridges.

| | Weight |
|--------------------------------------------------------------------------------------|------------------|
| ■ 22227 1'-6" (457mm) wheelbase for spans 3'-0" (914mm) to 6'-0" (1829mm) | 63 lbs. (28.5kg) |
| ■ 22228 2'-0" (609mm) wheelbase for spans 7'-0" (2133mm) to 10'-0" (3048mm) | 72 lbs. (32.6kg) |
| ■ 22229 2'-6" (762mm) wheelbase for spans 11'-0" (3353mm) to 14'-0" (4267mm) | 81 lbs. (36.7kg) |
| ■ 22230 3'-0" (914mm) wheelbase for spans 15'-0" (4572mm) to 18'-0" (5486mm) | 90 lbs. (40.8kg) |
| ■ 22231 3'-6" (1066mm) wheelbase for spans 19'-0" (5791mm) to 21'-0" (6400mm) | 99 lbs. (45kg) |
| ■ 22232 4'-0" (1219mm) wheelbase for spans 22'-0" (6705mm) to 25'-0" (7620mm) | 108 lbs. (49kg) |
| ■ Rated Load 2200 lbs. (1000kg) | |
| ■ No safety cable included | |

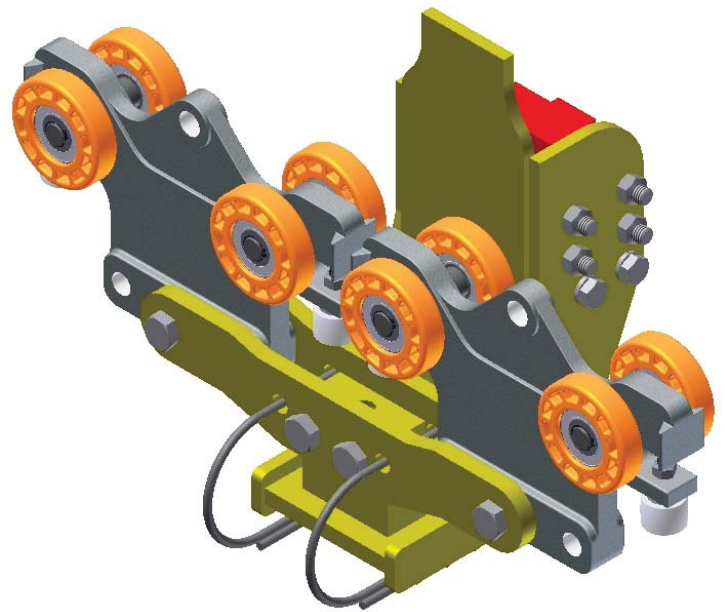


ETA-8 RIGID END TRUCKS WITH KICKUP
DUAL TROLLEY END TRUCK AT EACH
END OF CRANE GIRDER.
RATED LOAD: 2000 lbs. [907 Kg.]
NO SAFETY CABLE INCLUDED



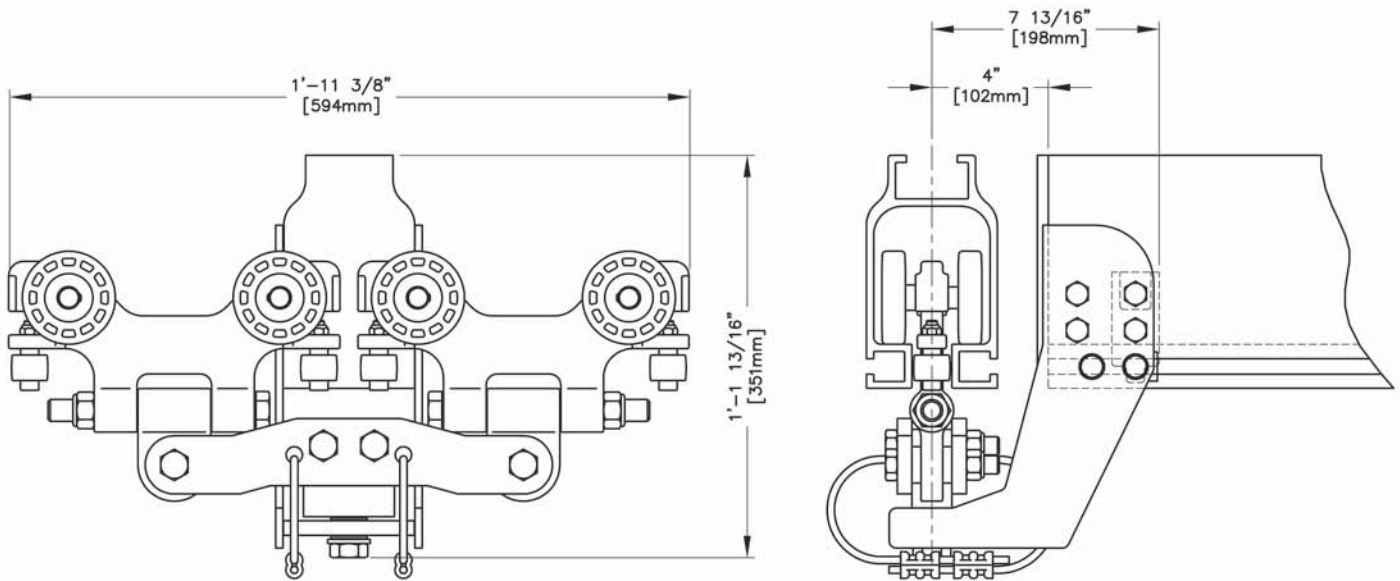
22620 ETA-8 Articulating Low Headroom End Truck

- To operate on ETA-8.
- Rated Load 2200 lbs. (1000kg)

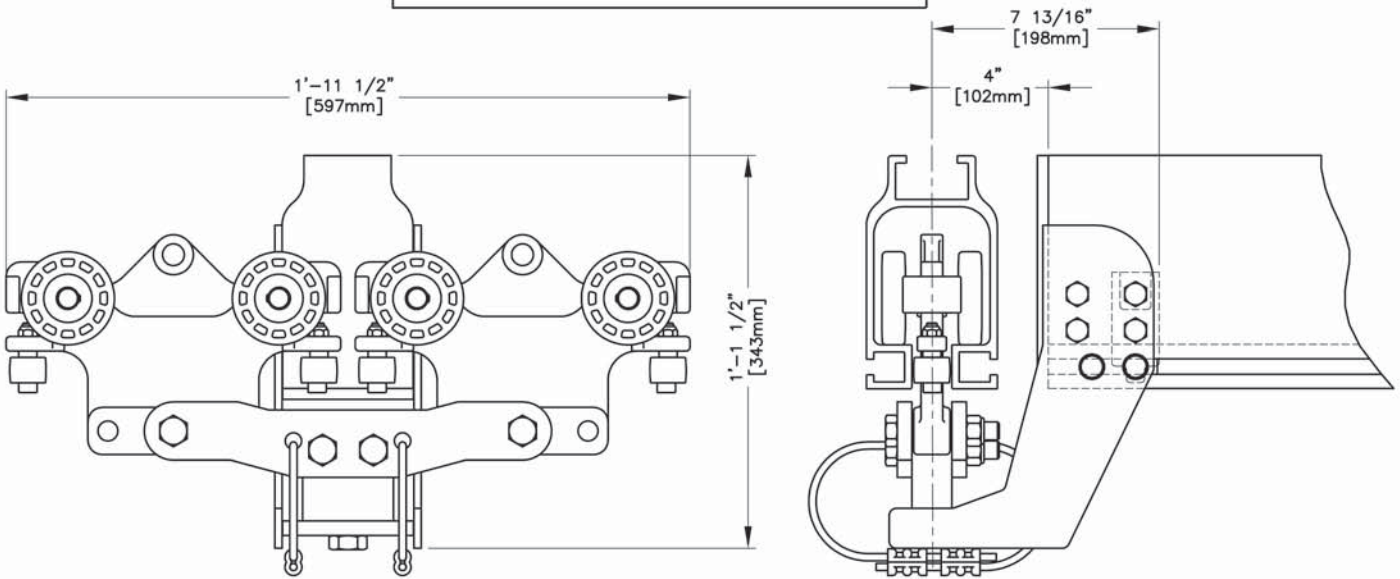


22625 ETA-8 Rigid Low Headroom End Truck

- To operate on ETA-8.
- Rated Load 2200 lbs. (1000kg)



22620 ETA-8 ARTICULATING LOW HEAD ROOM END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 WEIGHT: 45 lbs. [20.41 Kg.]



22625 ETA-8 RIGID LOW HEAD ROOM END TRUCK
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 WEIGHT: 45 lbs. [20.41 Kg.]



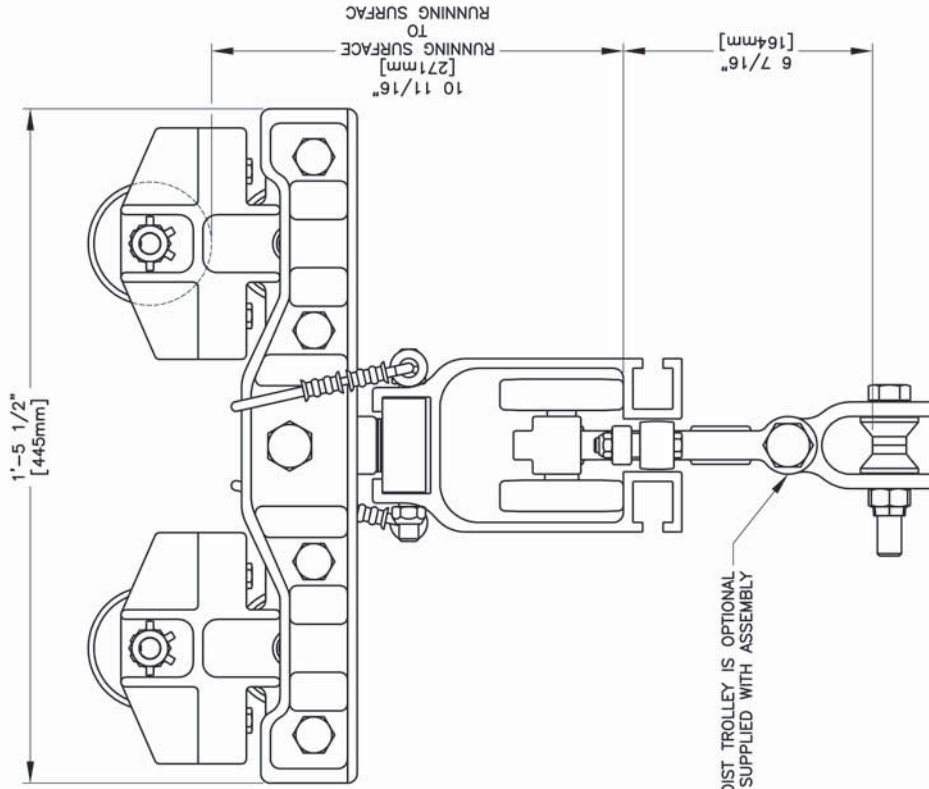
**STANDARD RAIL END TRUCKS
(WITHOUT KICKUP WHEELS)**

- End truck assemblies for bridge cranes.
Rated Load 1100 lbs. (500kg)
 - **22199** MBC-500-3-325 End Truck to run on 3.25 Patent Track. Rated Load 1100 lbs. (500kg)
 - **22200** MBC-500-3-333 End Truck to run on S6x12.5. Rated Load 1100 lbs. (500kg)
 - **22201** MBC-500-3-4-266 End Truck to run on S4x7.7. Rated Load 1100 lbs. (500kg)
- Please consult factory for end trucks to ride on Metric Beams.



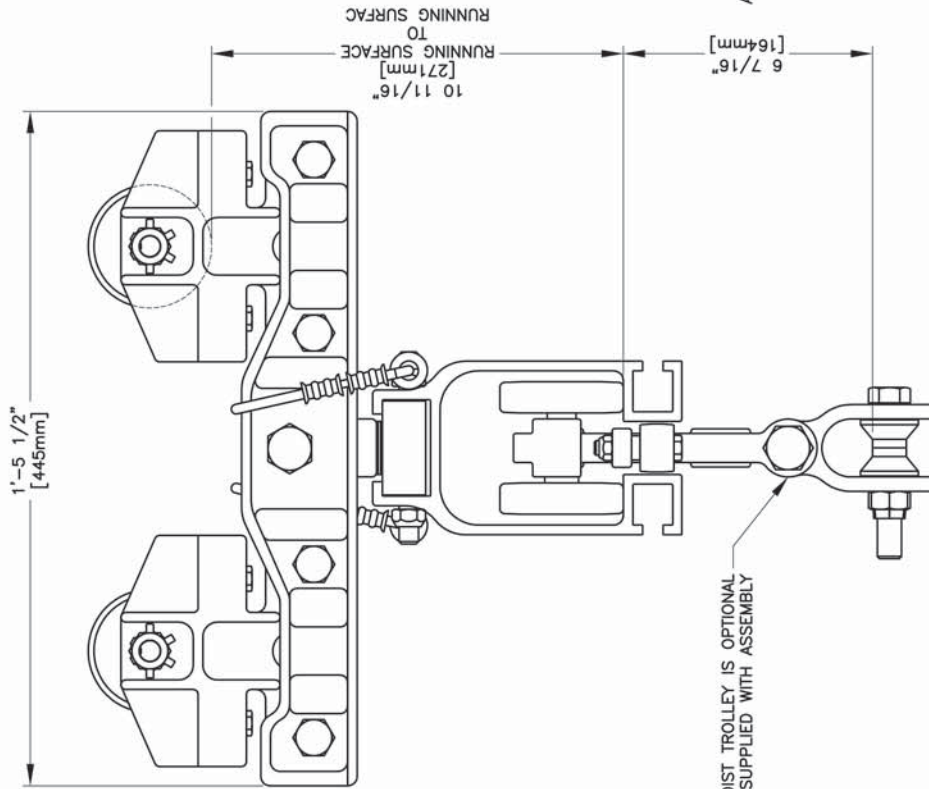
**STANDARD RAIL END TRUCKS
(WITH KICKUP WHEELS)**

- End truck assemblies for bridge cranes.
Rated Load 1100 lbs. (500kg)
- **22208** MBC-500-3-325 End Truck to run on 3.25 Patent Track. Rated Load 1100 lbs. (500kg)
- **22210** MBC-500-3-333 End Truck to run on S6x12.5. Rated Load 1100 lbs. (500kg)
- **22212** MBC-500-3-4-266 End Truck to run on S4x7.7. Rated Load 1100 lbs. (500kg)



20040 HOIST TROLLEY IS OPTIONAL
AND IS NOT SUPPLIED WITH ASSEMBLY

STANDARD RAIL END TRUCKS (WITH KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 22208 MBC-500-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22210 MBC-500-3-333 END TRUCK TO RUN ON S6x12.5.
 22212 MBC-500-3-4-2.66 END TRUCK TO RUN ON S4x7.7.
 WEIGHT: 36 LBS. [16.33 Kg.]



20040 HOIST TROLLEY IS OPTIONAL
AND IS NOT SUPPLIED WITH ASSEMBLY

STANDARD RAIL END TRUCKS (WITHOUT KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 22198 MBC-500-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22200 MBC-500-3-333 END TRUCK TO RUN ON S6x12.5.
 22201 MBC-500-3-4-2.66 END TRUCK TO RUN ON S4x7.7.
 WEIGHT: 33 LBS. [14.96 Kg.]



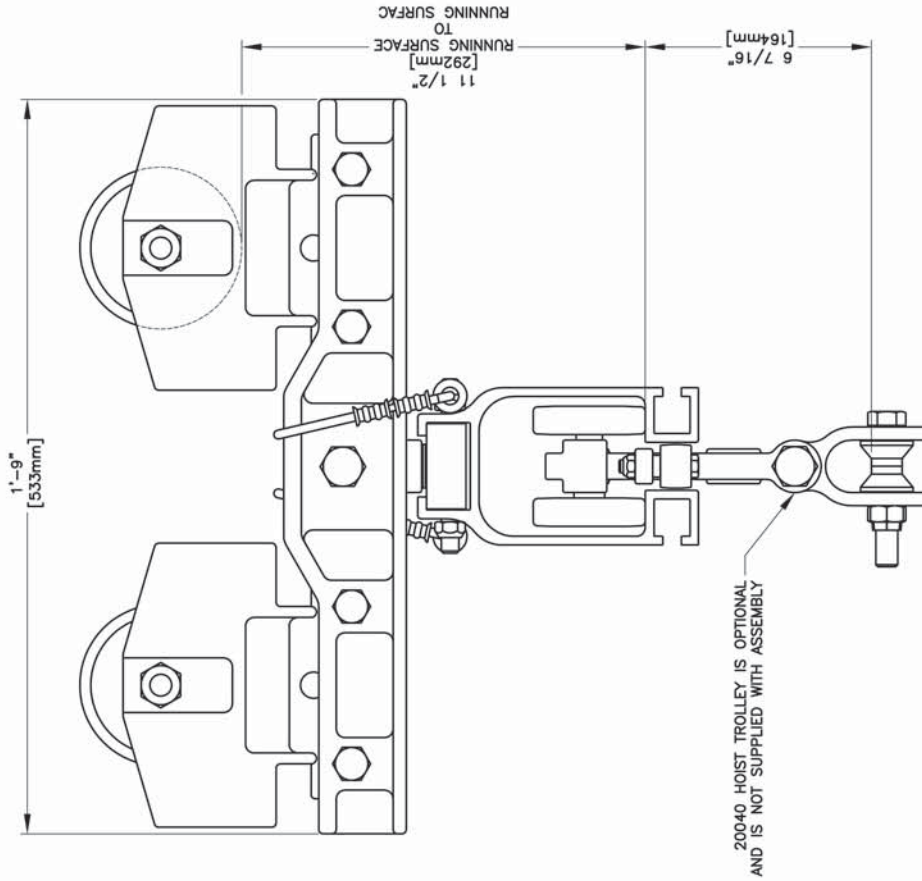
STANDARD RAIL END TRUCKS (WITHOUT KICKUP WHEELS)

- End truck assemblies for bridge cranes. Rated Load 2200 lbs. (1000kg)
- **22214** MBC-1000-3-325 End Truck to run on 3.25 Patent Track. Rated Load 2200 lbs. (1000kg)
- **22216** MBC-1000-3-333 End Truck to run on S6x12.5. Rated Load 2200 lbs. (1000kg)

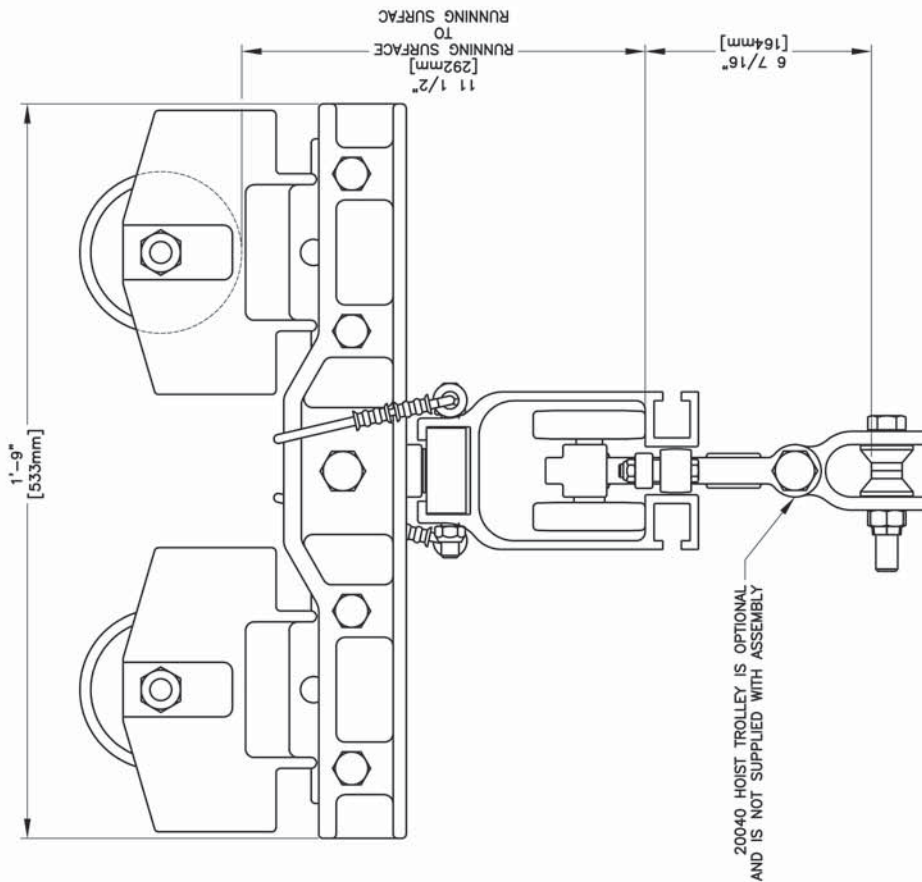
- Please consult the factory for end trucks to ride on metric beams.

STANDARD RAIL END TRUCKS (WITH KICKUP WHEELS)

- End truck assemblies for bridge cranes. Rated Load 2200 lbs. (1000kg)
- **22218** MBC-1000-3-325 End Truck to run on 3.25 Patent Track. Rated Load 2200 lbs. (1000kg)
- **22220** MBC-1000-3-333 End Truck to run on S6x12.5. Rated Load 2200 lbs. (1000kg)



STANDARD RAIL END TRUCKS (WITH KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 22218 MBC-1000-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22220 MBC-1000-3-333 END TRUCK TO RUN ON 56x12.5.
 WEIGHT: 54 LBS. [24.49 Kg.]

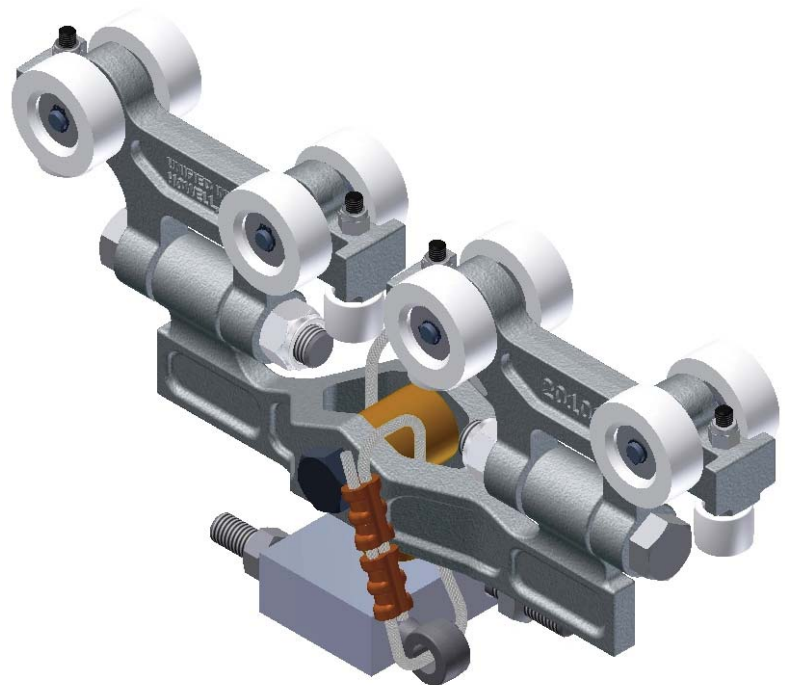


STANDARD RAIL END TRUCKS (WITHOUT KICKUP WHEELS)
 DUAL TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 2200 lbs. [1000 Kg.]
 22214 MBC-1000-3-325 END TRUCK TO RUN ON 3.25 PATENT TRACK.
 22216 MBC-1000-3-333 END TRUCK TO RUN ON 56x12.5.
 WEIGHT: 50 LBS. [22.68 Kg.]



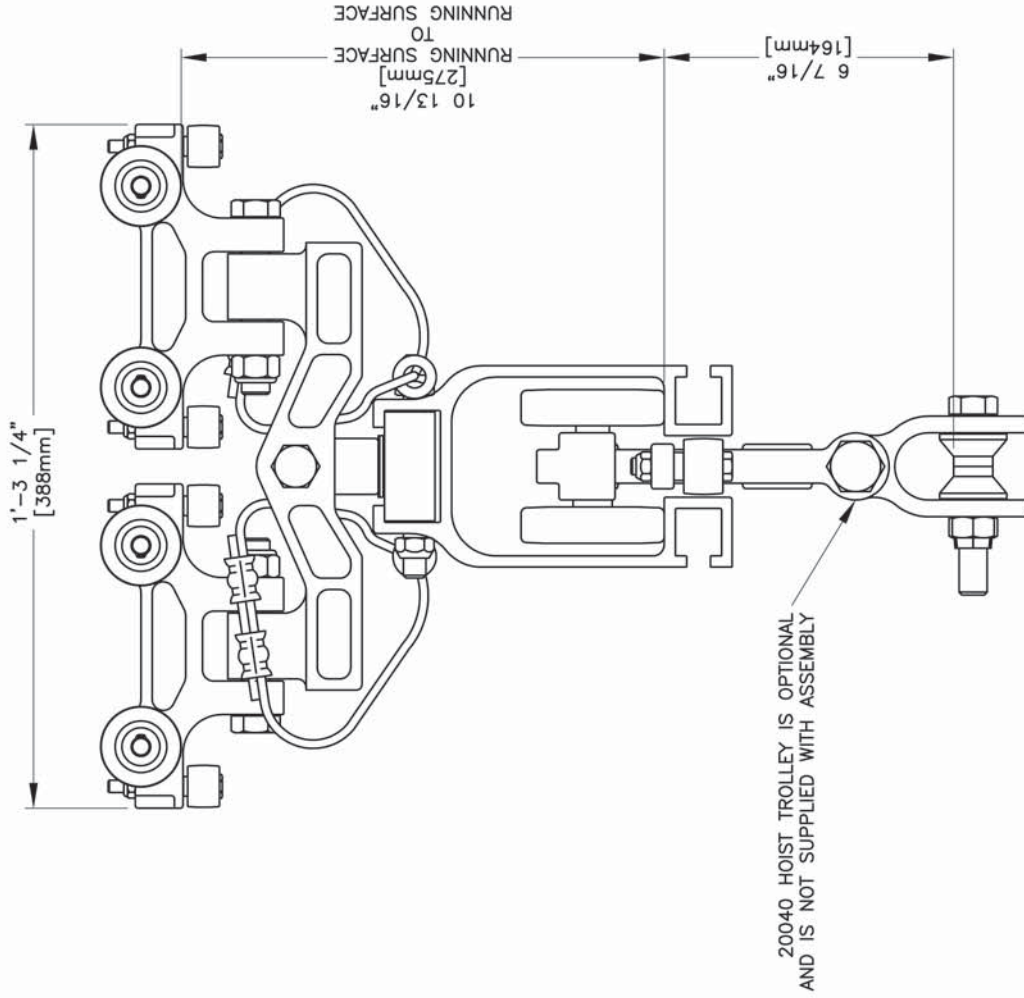
22519 ETA-8 SINGLE END TRUCK

- To operate on ETA-4 and ETA-5 Runway
- Rated Load 550 lbs. (250kg)

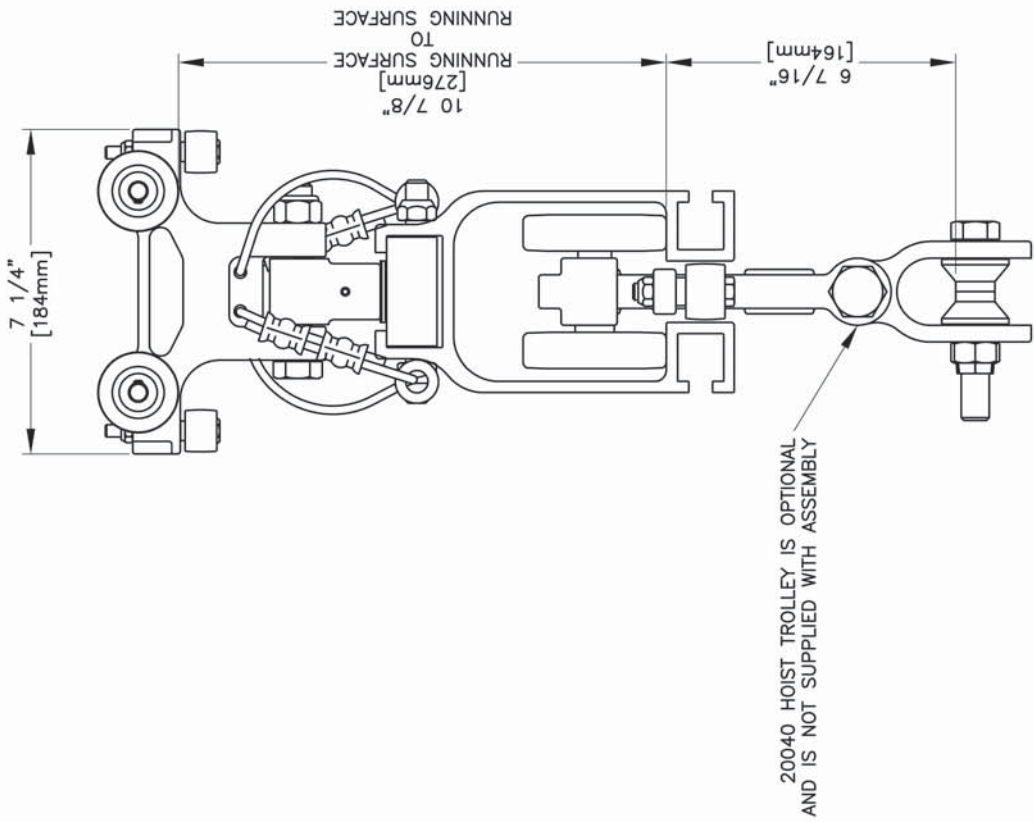


22528 ETA-8 DUAL END TRUCK

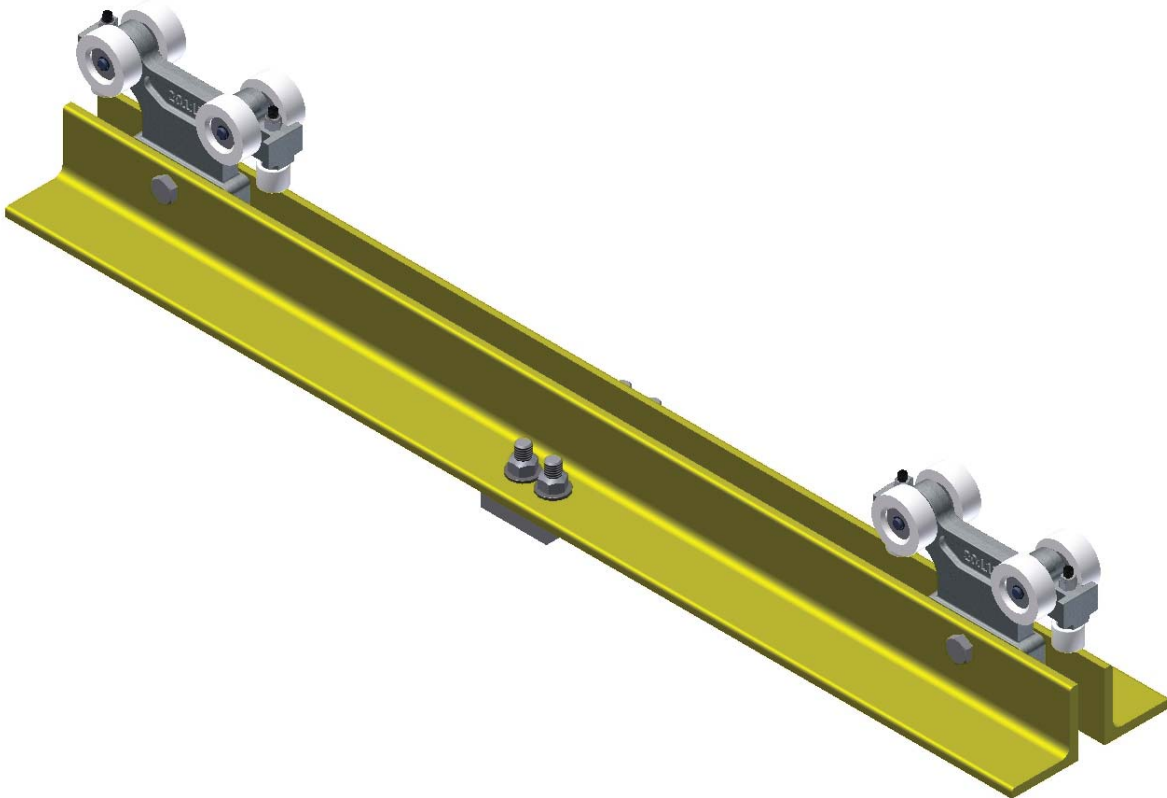
- To operate on ETA-4 and ETA-5 Runway
- Rated Load 1100 lbs. (500kg)



22528 DUAL END TRUCK
 SINGLE TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 WEIGHT: 10 lbs. [4.54 Kg.]



22519 SINGLE END TRUCK
 SINGLE TROLLEY END TRUCK AT EACH END OF CRANE GIRDER.
 RATED LOAD: 550 lbs. [250 Kg.]
 WEIGHT: 7 lbs. [3.18 Kg.]

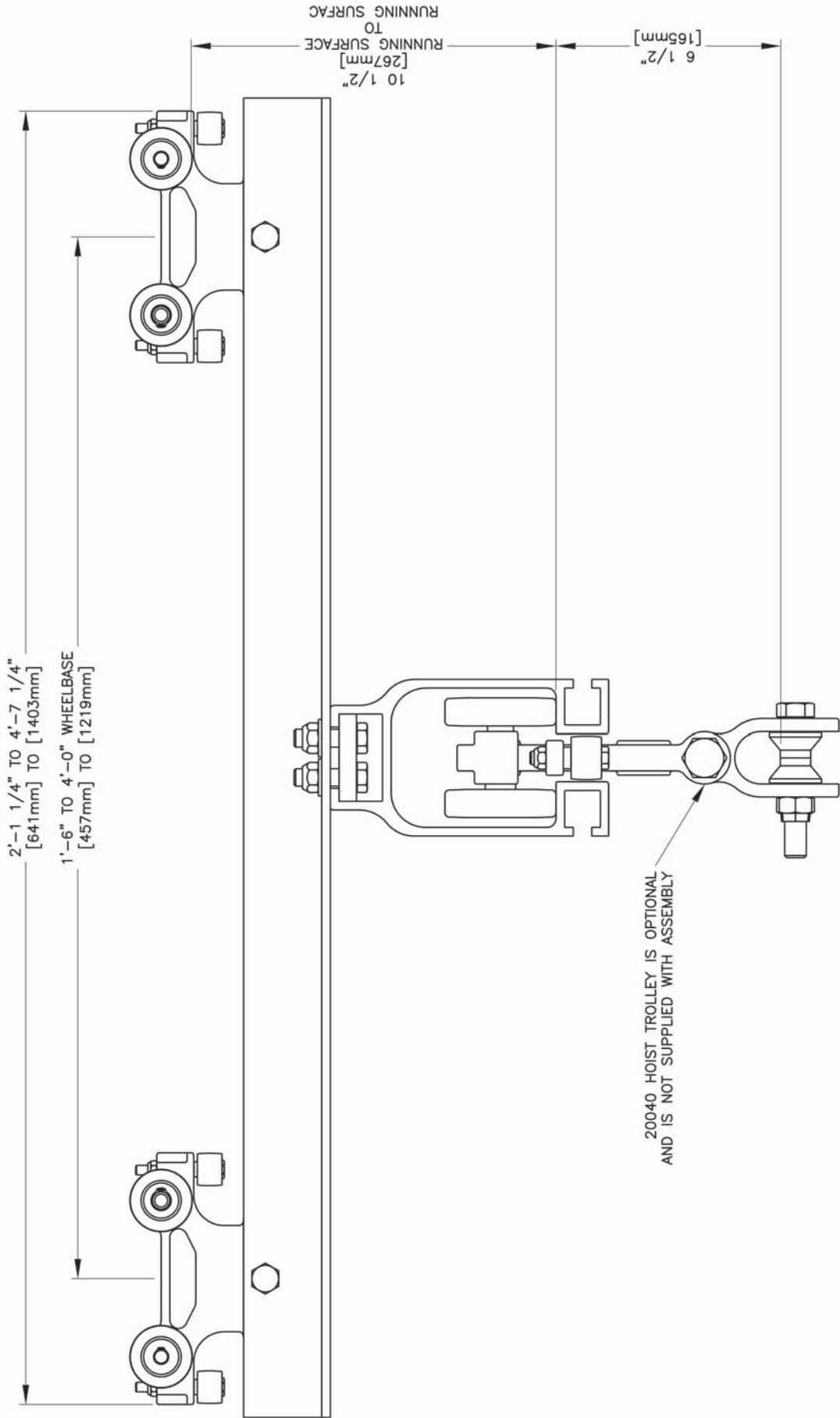


ETA-4/5 RIGID END TRUCK

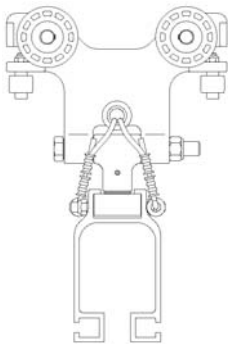
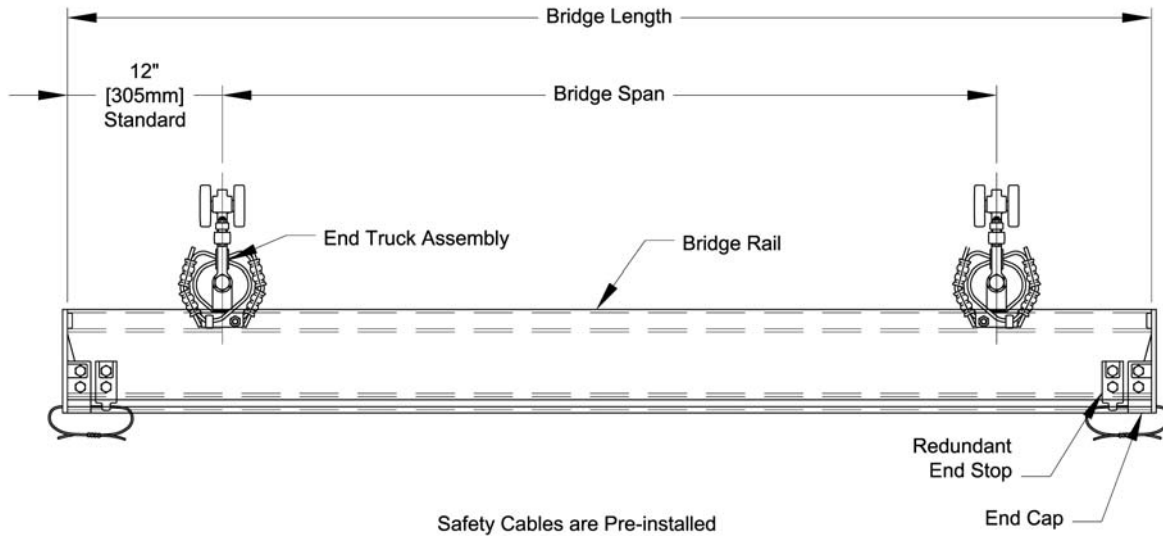
- End truck assemblies for single girder bridge cranes to run on ETA-4/5 Runways.
- Attaches to ETA-4, ETA-5 and ETA-8 Bridges.
- **22546** 1'-6" (457mm) wheelbase for spans 2'-0" (609mm) to 5'-0" (1524mm)
- **22547** 2'-0" (609mm) wheelbase for spans 6'-0" (1829mm) to 9'-0" (2743mm)
- **22548** 2'-6" (762mm) wheelbase for spans 10'-0" (3048mm) to 13'-0" (3962mm)
- **22549** 3'-0" (914mm) wheelbase for spans 14'-0" (4267mm) to 17'-0" (5182mm)
- **22550** 3'-6" (1066mm) wheelbase for spans 18'-0" (5486mm) to 20'-0" (6096mm)
- **22551** 4'-0" (1219mm) wheelbase for spans 21'-0" (6400mm) to 25'-0" (7620mm)
- No safety cable included
- Rated Load 1100 lbs. (500kg)

Weight

| |
|------------------|
| 24 lbs. (10.8kg) |
| 28 lbs. (12.7kg) |
| 32 lbs. (14.5kg) |
| 36 lbs. (16.3kg) |
| 40 lbs. (18.1kg) |
| 44 lbs. (20kg) |



ETA-4 RIGID END TRUCK
 DUAL TROLLEY END TRUCK AT EACH
 END OF AN ETA-8 CRANE GIRDER.
 RATED LOAD: 1100 lbs. [500 Kg.]
 NO SAFETY CABLE INCLUDED



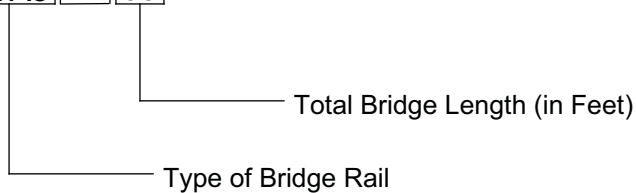
The Bridge Crane Assembly Consists of:

- One bridge beam (section of rail)
- Two end truck assemblies (mounted to the bridge with a trolley to roll inside of the runway, safety cables are pre-installed)
- Double end stops (Ull Standard)

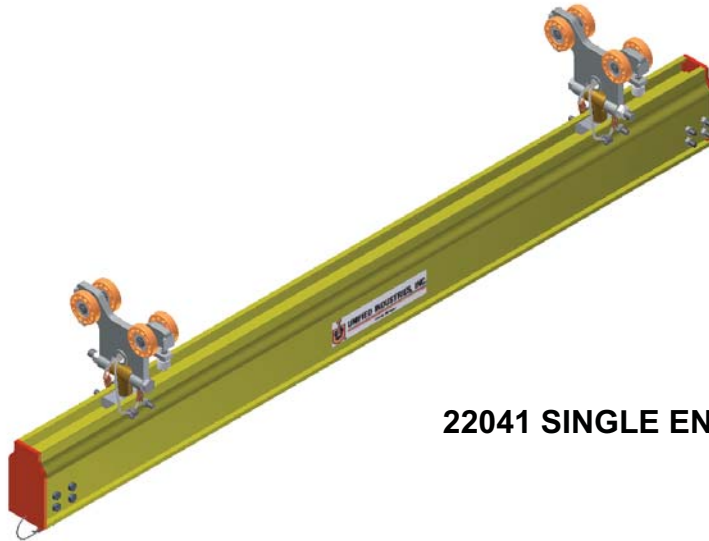
Example (Bridge Rail only)

Order Number:

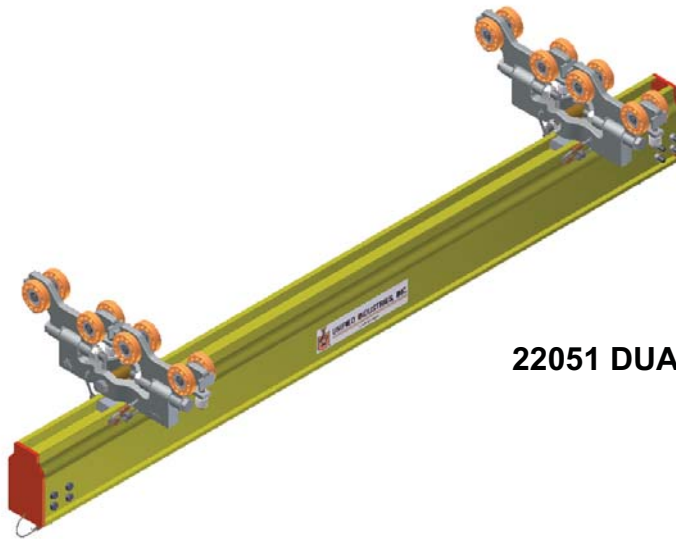
ETA8|BR|08



- Round up to the nearest foot (Cut to 8'-6" = ETA8BR09)



22041 SINGLE END TRUCK

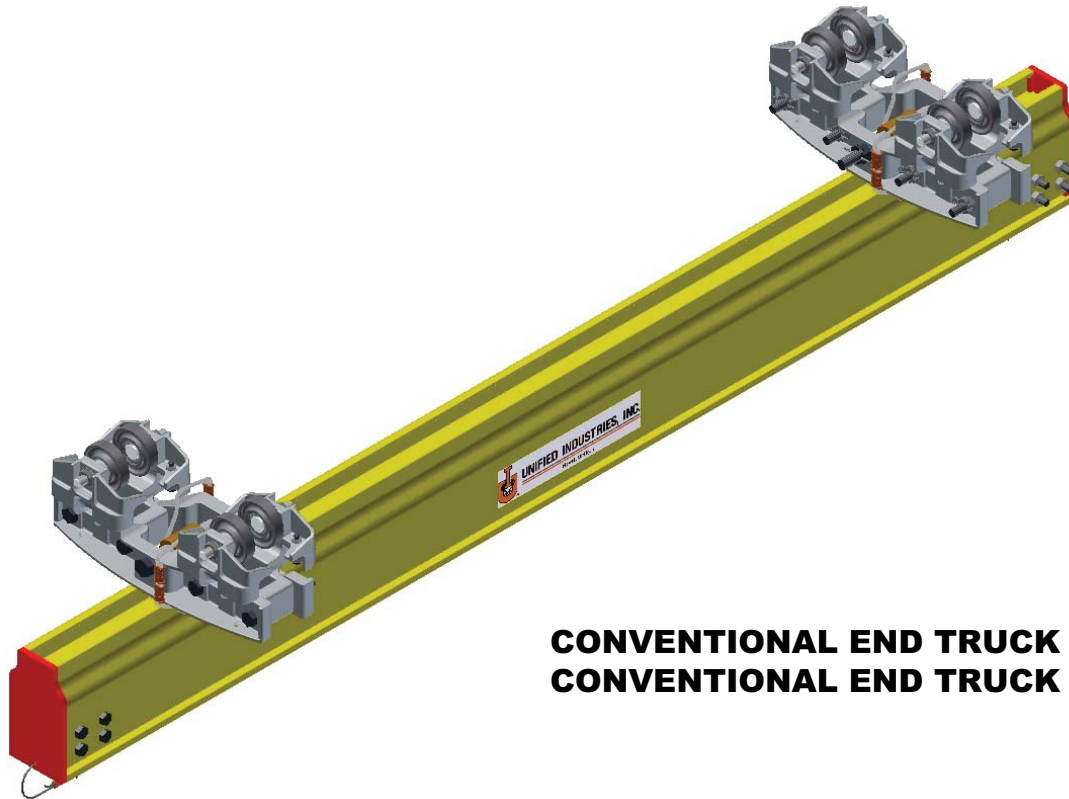


22051 DUAL END TRUCK

Unified ETA-8 single girder bridge cranes consist of two end truck assemblies (either single, dual or rigid carrier trolleys) supporting an aluminum enclosed bridge girder. Bridge girder has bolted polyurethane end caps at each end, completing assembly.

Unified ETA-8 single girder bridge cranes for rated loads to 2200 lbs. (1000kg)

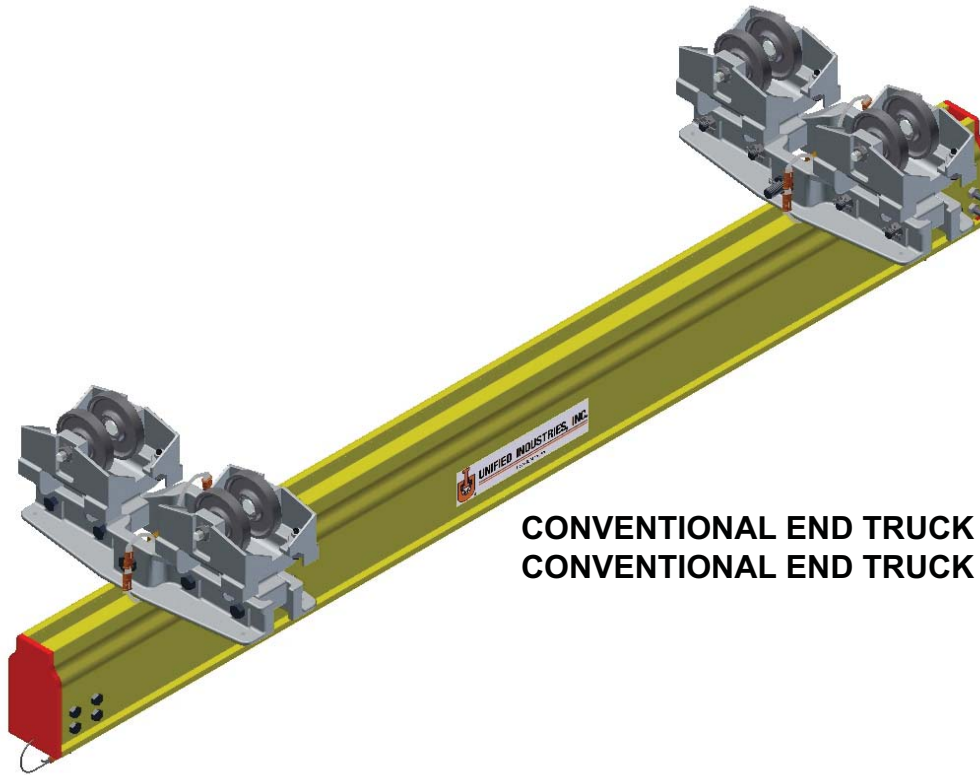
- Standard overhang each end 12 inches (305mm)
- Overhangs up to 48 inches (1219mm), consult factory for application review
- Counter thrust trolleys for countering extended loads are available
- Paint color - specify when ordering
- Air festooning brackets and assemblies are available
- Small tool or messenger cable trolleys available.
- Standard redundant end stops



CONVENTIONAL END TRUCK (W/O KICK-UP)
CONVENTIONAL END TRUCK (KICK-UP)

Designed Specifically For Existing Runway Systems

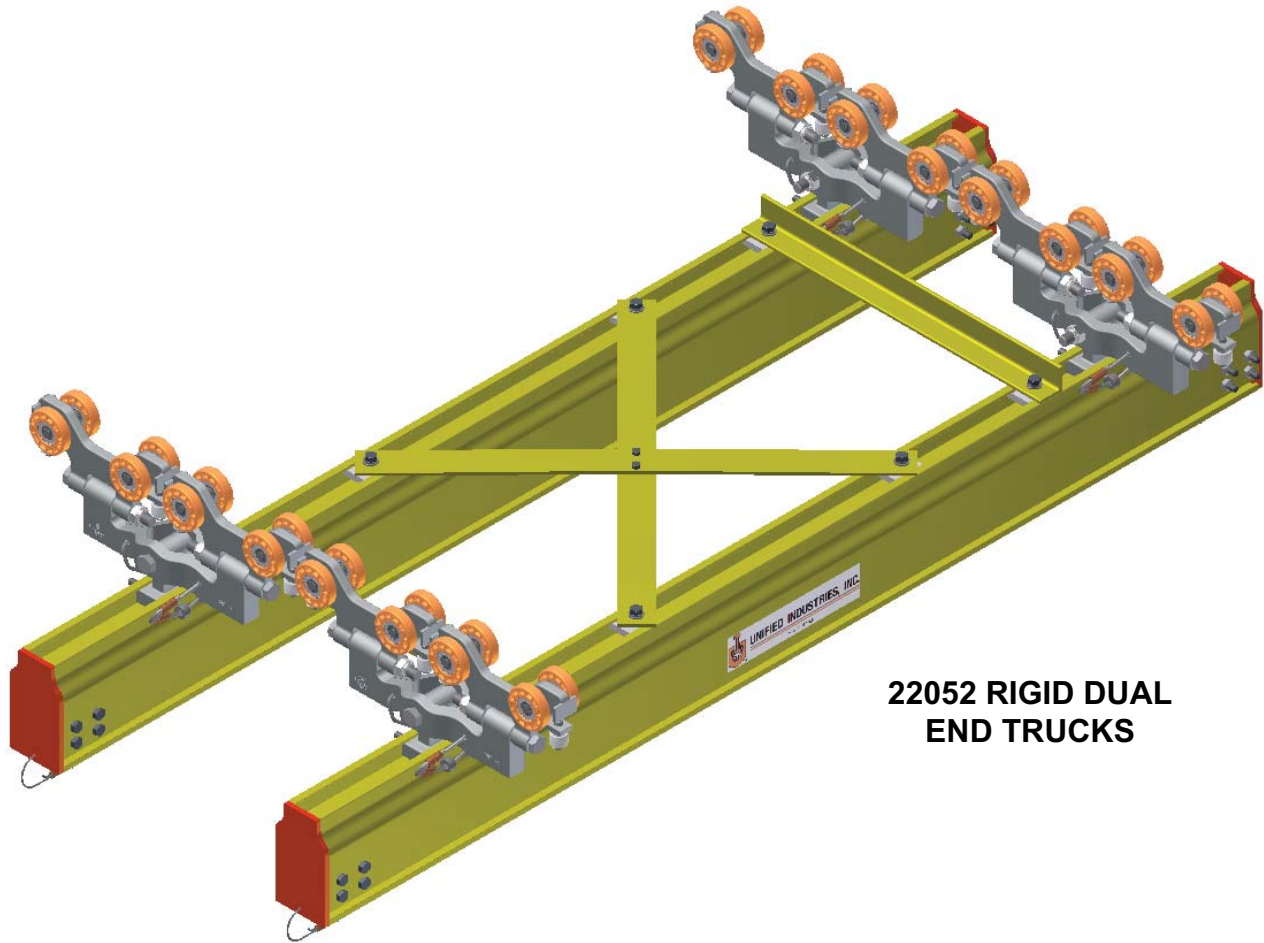
- **22199** end truck assembly MBC-500-3-325 without kickup wheel for operation on 3.25 patent track.
- **22200** end truck assembly MBC-500-3-333 without kickup wheel for operation on S6x12.5.
- **22201** end truck assembly MBC-500-3-4-266 without kickup wheel for operation on S4x7.7.
- **22208** end truck assembly MBC-500-3-325 with kickup wheel for operation on 3.25 patent track.
- Consult the factory for end trucks to ride on metric beams.
- **22210** end truck assembly MBC-500-3-333 with kickup wheel for operation on S6x12.5.
- **22212** end truck assembly MBC-500-3-4-266 without kickup wheel for operation on S4x7.7.
- Self aligning end trucks
- High tensile almag alloy castings make up end truck assembly
- Counter thrust trolleys for countering extended loads are available
- Low inertia: 1-2% of load
- Paint color-specify when ordering
- Double end stops standard
- End Trucks are equipped with 3.2" (82mm) steel wheels with permanently sealed precision ball bearings
- Optional Rigid Mount



CONVENTIONAL END TRUCK (W/O KICK-UP)
CONVENTIONAL END TRUCK (WITH KICK-UP)

Designed Specifically For Existing Runway Systems

- **22214** end truck assembly MBC-1000-3-325 without kickup wheel for operation on 3.25 patent track.
 - **22216** end truck assembly MBC-1000-3-333 without kickup wheel for operation on S6x12.5.
 - **22218** end truck assembly MBC-1000-3-325 with kickup wheel for operation on 3.25 patent track.
 - **22220** end truck assembly MBC-1000-3-333 with kickup wheel for operation on S6x12.5.
 - Consult factory for end trucks to ride on metric beams.
- Self aligning end trucks
 - High tensile almag alloy casting make up end truck assembly
 - Counter thrust trolleys for countering extended loads are available
 - End truck carriers are equipped with 4.6" (117mm) steel wheels with permanently sealed precision ball bearings
 - Steel side guide rollers with dual race ball bearings for smooth, quiet operation
 - Low inertia: 1-2% of load
 - Paint color-specify when ordering
 - Standard redundant end stops
 - Optional Rigid Mount

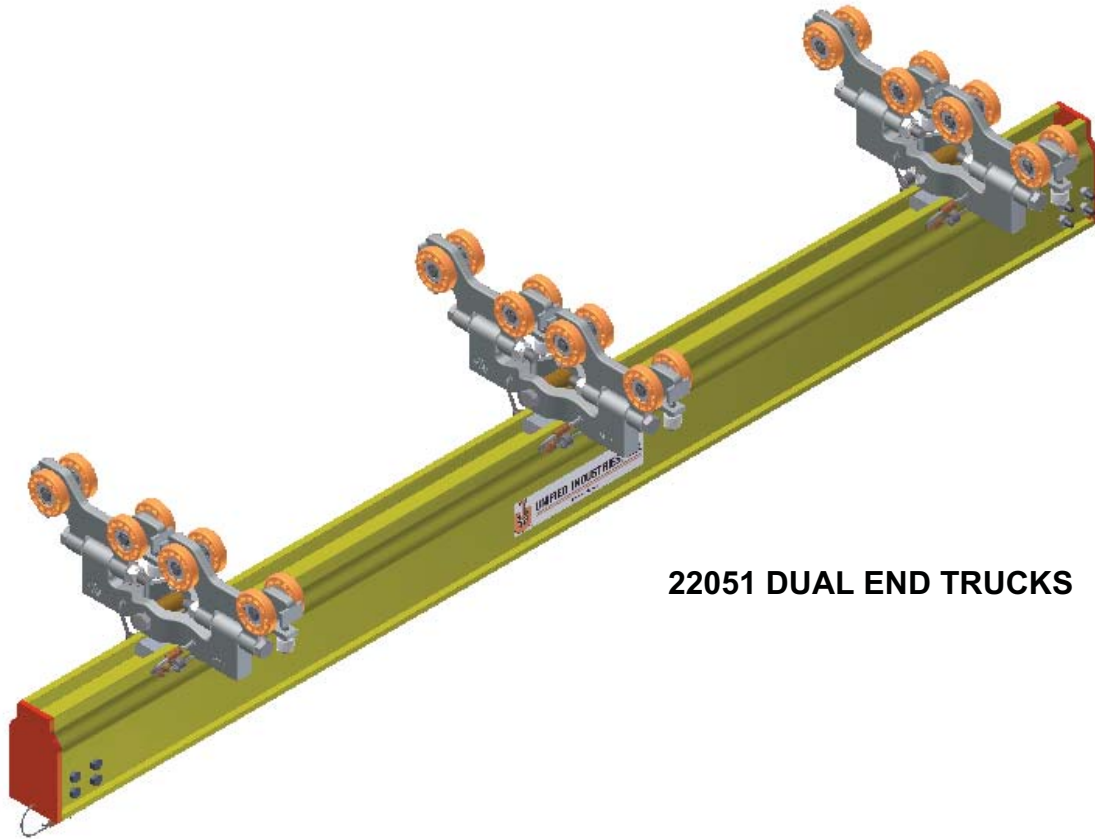


**22052 RIGID DUAL
END TRUCKS**

Unified ETA-8 double girder bridge cranes are used for suspending hoists, nut runners, indexing fixtures, mechanical grabs, etc.

ETA-8 double girder bridge cranes consist of four dual trolley end trucks supporting ETA-8 extruded aluminum bridge girders. Bridge girder has bolted polyurethane end caps at each end, completing assembly.

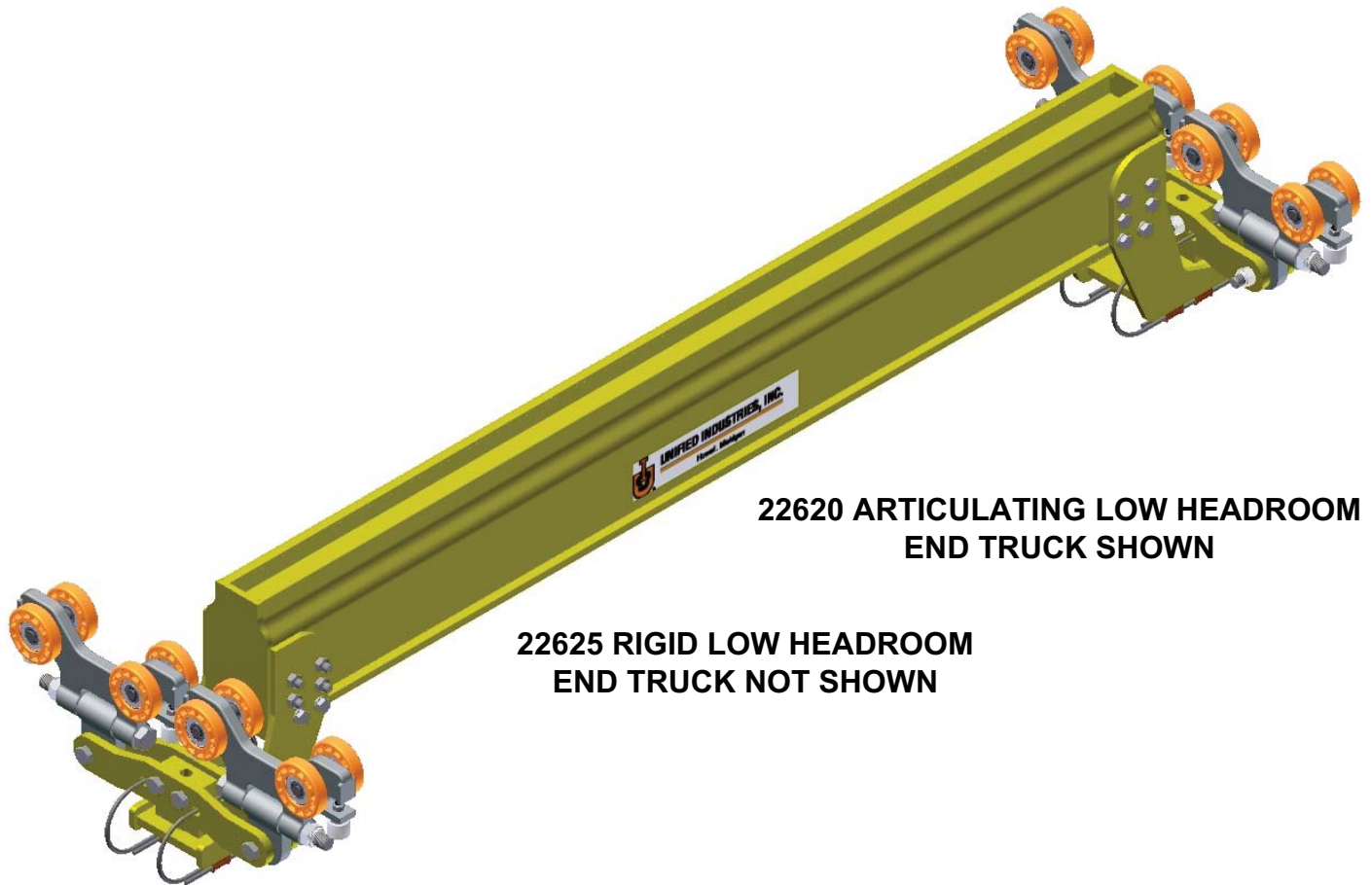
- Diagonal bracing to prohibit articulation
- 12" (305mm) standard overhang; specify when ordering
- Air line festoon brackets, trolleys and assemblies are available
- Paint color - specify when ordering
- Standard redundant end stops
- Longer overhangs consult factory



22051 DUAL END TRUCKS

Unified ETA-8 single girder tri-rail bridge crane equipped with three end truck assemblies **22051** dual end truck assemblies increases rated loads carrying when third rail is added. Bridge girder has bolted polyurethane end caps at each end, completing assembly. Tri-rail bridge cranes are used for hoist transfer of component parts or assemblies between stations.

- 12" (305mm) standard overhang at each end standard
- Anti-kick-up trolley available for end trucks
- Air line festooning brackets and assemblies available
- Festoon trolley or tag line slider available
- Paint color - specify when ordering
- Standard redundant end stops
- Longer overhangs consult factory

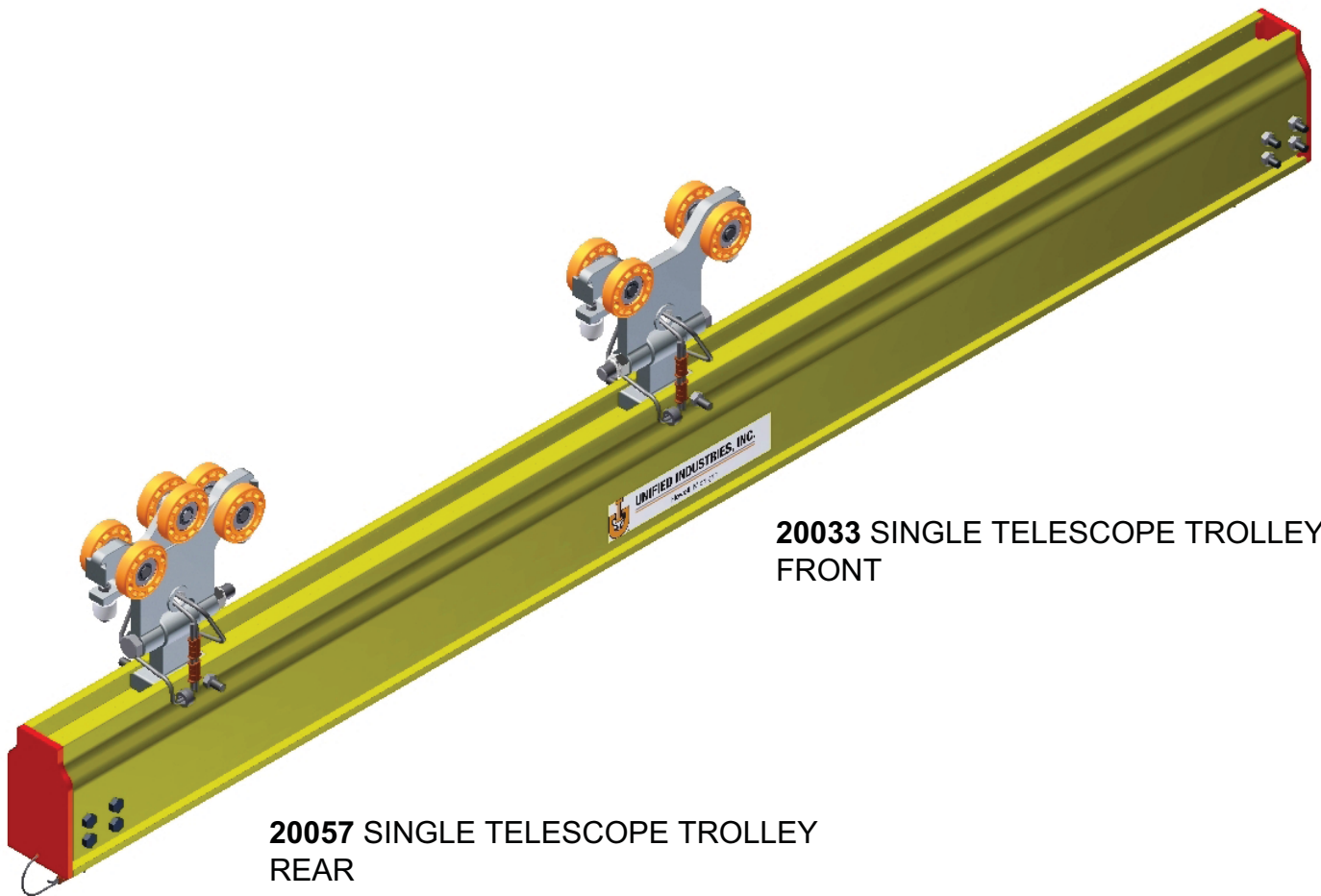


**22620 ARTICULATING LOW HEADROOM
END TRUCK SHOWN**

**22625 RIGID LOW HEADROOM
END TRUCK NOT SHOWN**

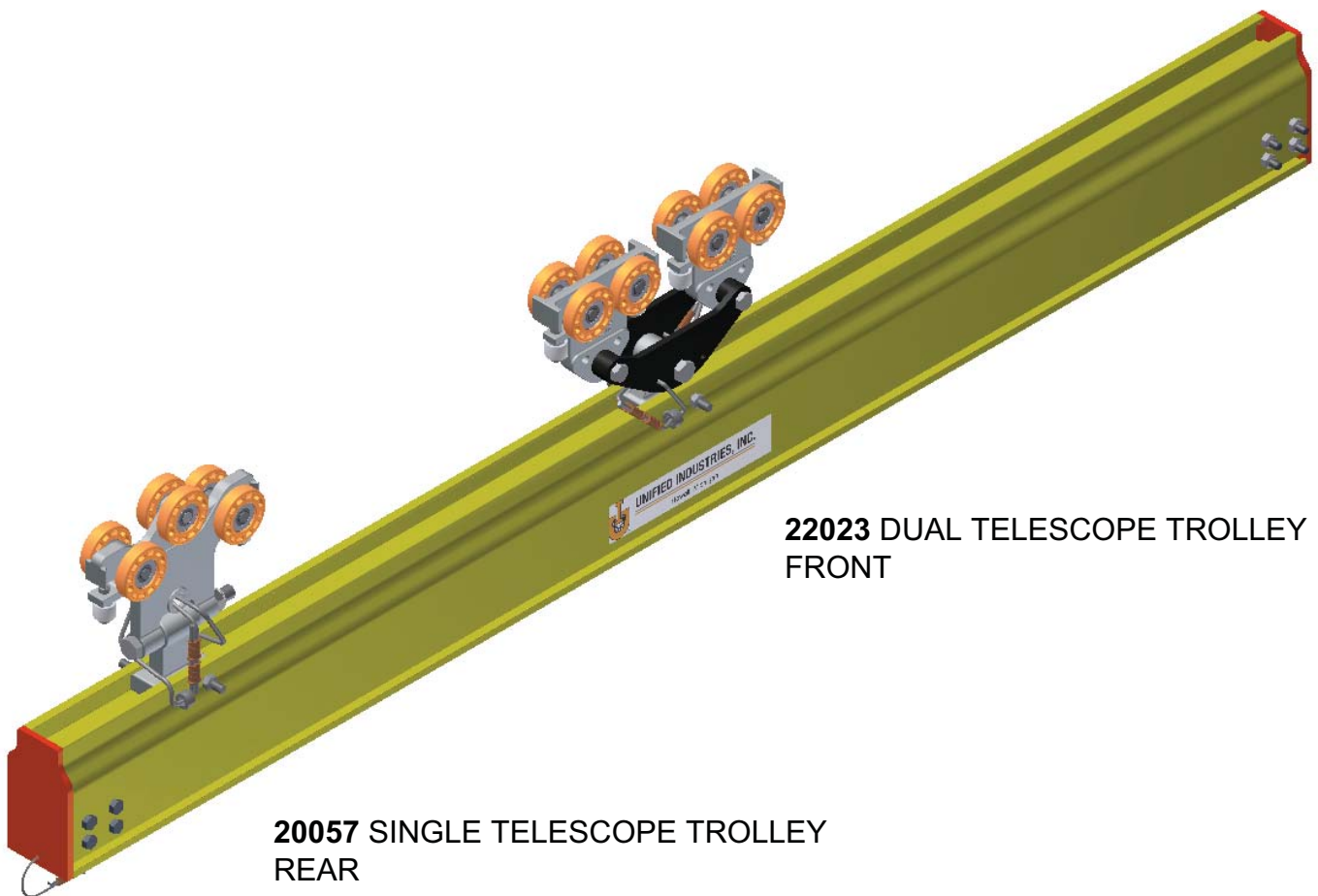
Unified ETA-8 single girder low headroom bridge crane consists of two end truck assemblies supporting an aluminum enclosed bridge girder. Bridge girder and runway girder are held at the same elevation with bolted construction and a urethane bumper at each end completing the assembly.

- Increased headroom in low areas
- Paint color - specify when ordering
- Air festooning brackets and assemblies available
- Small tool, festoon trolley or tag line slider available.
- Overhangs are not available



**20033 SINGLE TELESCOPE TROLLEY
FRONT**

**20057 SINGLE TELESCOPE TROLLEY
REAR**



**2203 DUAL TELESCOPE TROLLEY
FRONT**

**2057 SINGLE TELESCOPE TROLLEY
REAR**

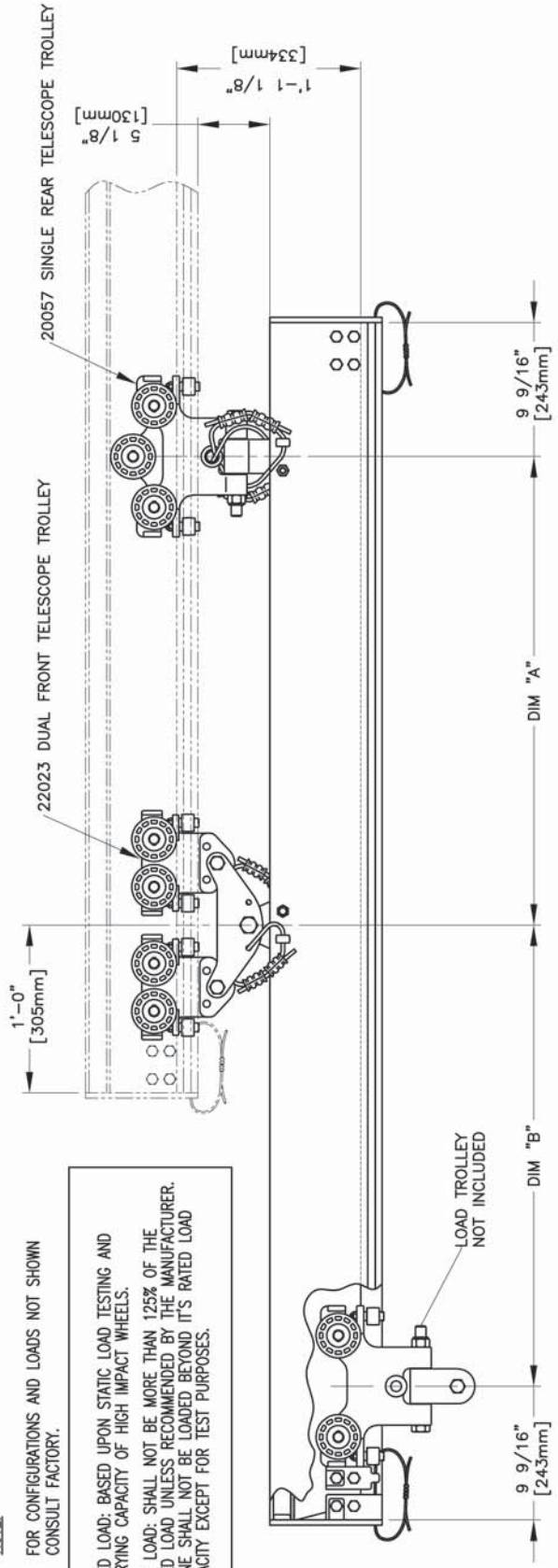
ETA-8 TELESCOPING UNITS

ETA-8 TELESCOPE UNIT WITH DUAL FRONT AND SINGLE REAR TROLLEYS

| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|----------|-----|--------|------------|-----------|-----|--------|------------|-----------|
| | | 1/250 | 1/450 | | | 1/250 | 1/450 | | | 1/250 | 1/450 |
| 24 | 24 in. | 475 lbs. | 475 lbs. | 60 | 24 in. | 1000 lbs. | 1000 lbs. | 72 | 24 in. | 1000 lbs. | 1000 lbs. |
| | 36 in. | 320 lbs. | 320 lbs. | | 36 in. | 855 lbs. | 855 lbs. | | 36 in. | 1000 lbs. | 780 lbs. |
| | 48 in. | 230 lbs. | 230 lbs. | | 48 in. | 630 lbs. | 580 lbs. | | 48 in. | 770 lbs. | 520 lbs. |
| | 60 in. | 175 lbs. | 175 lbs. | | 60 in. | 495 lbs. | 410 lbs. | | 60 in. | 610 lbs. | 370 lbs. |
| | 72 in. | 140 lbs. | 140 lbs. | | 72 in. | 405 lbs. | 300 lbs. | | 72 in. | 500 lbs. | 275 lbs. |

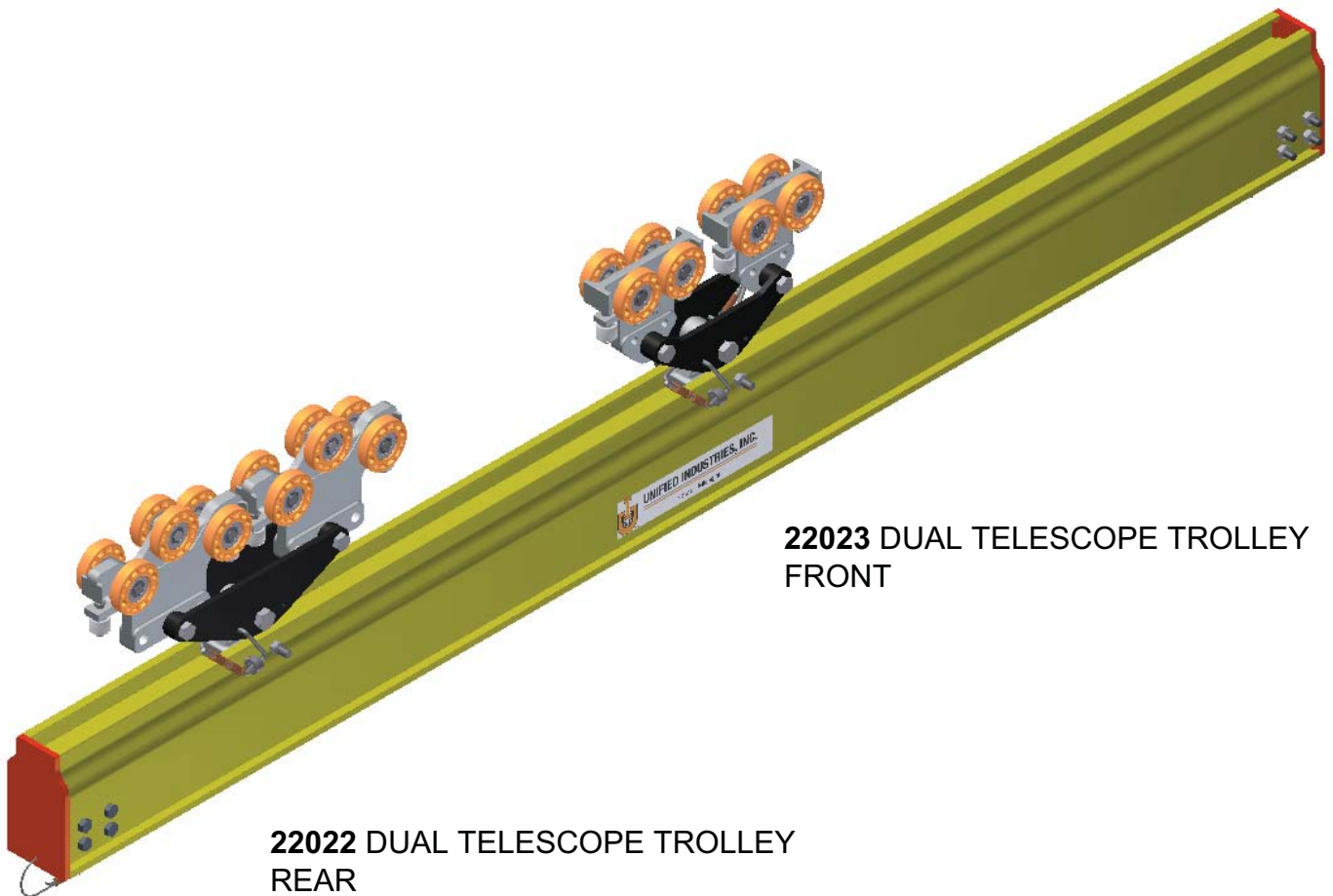
NOTE:
 FOR CONFIGURATIONS AND LOADS NOT SHOWN
 CONSULT FACTORY.

RATED LOAD: BASED UPON STATIC LOAD TESTING AND
 CARRYING CAPACITY OF HIGH IMPACT WHEELS.
 TEST LOAD SHALL NOT BE MORE THAN 125% OF THE
 RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER.
 CRANE SHALL NOT BE LOADED BEYOND IT'S RATED LOAD
 CAPACITY EXCEPT FOR TEST PURPOSES.



ETA-8 TELESCOPE UNIT WITH DUAL FRONT AND SINGLE REAR TROLLEYS

| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
|-----|--------|------------|---------|------|--------|------------|---------|------|--------|------------|---------|
| | | 1/250 | 1/450 | | | 1/250 | 1/450 | | | 1/250 | 1/450 |
| 610 | 610mm | 215 Kg. | 215 Kg. | 1524 | 610mm | 454 Kg. | 454 Kg. | 1829 | 610mm | 454 Kg. | 454 Kg. |
| | 914mm | 145 Kg. | 145 Kg. | | 914mm | 388 Kg. | 368 Kg. | | 914mm | 454 Kg. | 354 Kg. |
| | 1219mm | 104 Kg. | 104 Kg. | | 1219mm | 285 Kg. | 263 Kg. | | 1219mm | 349 Kg. | 236 Kg. |
| | 1524mm | 79 Kg. | 79 Kg. | | 1524mm | 204 Kg. | 186 Kg. | | 1524mm | 277 Kg. | 168 Kg. |
| | 1829mm | 64 Kg. | 64 Kg. | | 1829mm | 181 Kg. | 136 Kg. | | 1829mm | 227 Kg. | 125 Kg. |



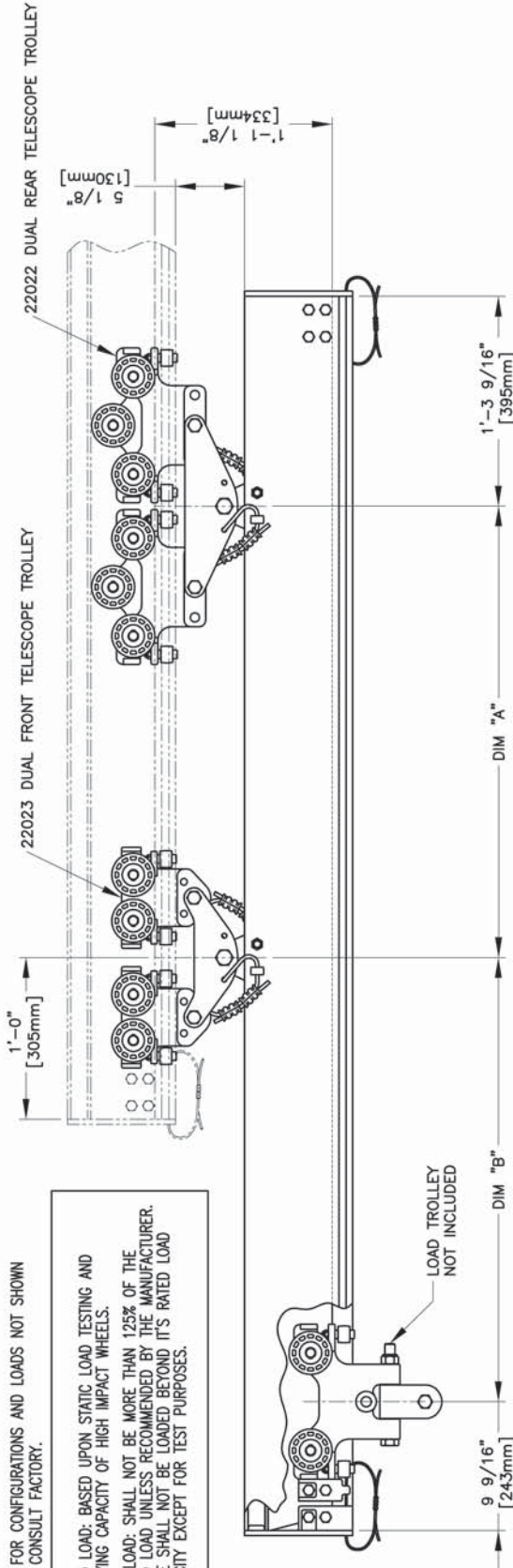
ETA-8 TELESCOPING UNITS

| ETA-8 TELESCOPE UNIT WITH DUAL TROLLEYS FRONT AND REAR | | | | | | | | | | | |
|--------------------------------------------------------|--------|------------|----------|-----------|--------|------------|-----------|-----------|--------|------------|-----------|
| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
| | | 1/250 | 1/450 | | | 1/250 | 1/450 | | | 1/250 | 1/450 |
| 24 | 24 in. | 975 lbs. | 975 lbs. | 36 | 24 in. | 1170 lbs. | 1170 lbs. | 48 | 24 in. | 1300 lbs. | 1300 lbs. |
| | 36 in. | 655 lbs. | 655 lbs. | | 36 in. | 955 lbs. | 955 lbs. | | 36 in. | 1105 lbs. | 1105 lbs. |
| | 48 in. | 480 lbs. | 480 lbs. | | 48 in. | 740 lbs. | 740 lbs. | | 48 in. | 960 lbs. | 960 lbs. |
| | 60 in. | 375 lbs. | 375 lbs. | | 60 in. | 580 lbs. | 510 lbs. | | 60 in. | 790 lbs. | 455 lbs. |
| | 72 in. | 305 lbs. | 305 lbs. | | 72 in. | 475 lbs. | 370 lbs. | | 72 in. | 615 lbs. | 330 lbs. |
| | | | | INCH | | | | INCH | | | |
| | | | | 60 | | | | 60 | | | |
| | | | | 72 | | | | 72 | | | |
| | | | | INCH | | | | INCH | | | |
| | | | | 1460 lbs. | | | | 1390 lbs. | | | |
| | | | | 1290 lbs. | | | | 1210 lbs. | | | |
| | | | | 950 lbs. | | | | 1050 lbs. | | | |
| | | | | 680 lbs. | | | | 750 lbs. | | | |
| | | | | 515 lbs. | | | | 560 lbs. | | | |
| | | | | 1/450 | | | | 1/450 | | | |
| | | | | 1/250 | | | | 1/250 | | | |

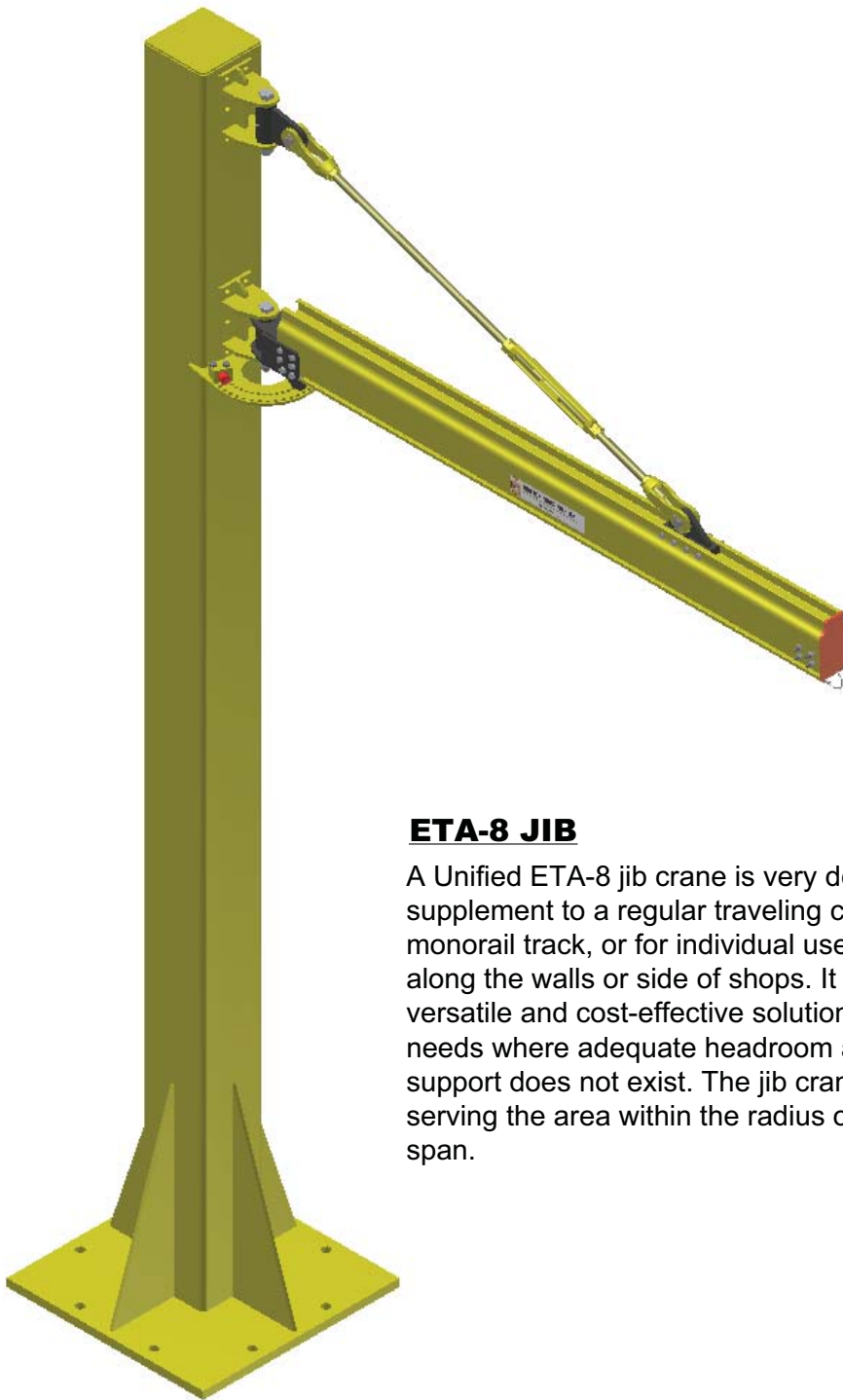
NOTE:

FOR CONFIGURATIONS AND LOADS NOT SHOWN CONSULT FACTORY.

RATED LOAD: BASED UPON STATIC LOAD TESTING AND CARRYING CAPACITY OF HIGH IMPACT WHEELS.
 TEST LOAD: SHALL NOT BE MORE THAN 125% OF THE RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER. CRANE SHALL NOT BE LOADED BEYOND IT'S RATED LOAD CAPACITY EXCEPT FOR TEST PURPOSES.



| ETA-8 TELESCOPE UNIT WITH DUAL TROLLEY FRONT AND REAR | | | | | | | | | | | |
|-------------------------------------------------------|--------|------------|---------|---------|--------|------------|---------|---------|--------|------------|---------|
| "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | | "A" | "B" | RATED LOAD | |
| | | 1/250 | 1/450 | | | 1/250 | 1/450 | | | 1/250 | 1/450 |
| 610 | 610mm | 442 Kg. | 442 Kg. | 914 | 610mm | 531 Kg. | 531 Kg. | 1219 | 610mm | 590 Kg. | 590 Kg. |
| | 914mm | 297 Kg. | 297 Kg. | | 914mm | 433 Kg. | 433 Kg. | | 914mm | 501 Kg. | 449 Kg. |
| | 1219mm | 218 Kg. | 218 Kg. | | 1219mm | 336 Kg. | 336 Kg. | | 1219mm | 435 Kg. | 295 Kg. |
| | 1524mm | 170 Kg. | 170 Kg. | | 1524mm | 263 Kg. | 231 Kg. | | 1524mm | 368 Kg. | 206 Kg. |
| | 1829mm | 138 Kg. | 138 Kg. | | 1829mm | 215 Kg. | 168 Kg. | | 1829mm | 279 Kg. | 150 Kg. |
| | | | | mm | | | | mm | | | |
| | | | | 442 Kg. | | | | 590 Kg. | | | |
| | | | | 297 Kg. | | | | 501 Kg. | | | |
| | | | | 218 Kg. | | | | 435 Kg. | | | |
| | | | | 170 Kg. | | | | 368 Kg. | | | |
| | | | | 138 Kg. | | | | 279 Kg. | | | |
| | | | | 1/450 | | | | 1/450 | | | |
| | | | | 1/250 | | | | 1/250 | | | |

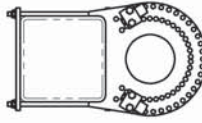


ETA-8 JIB

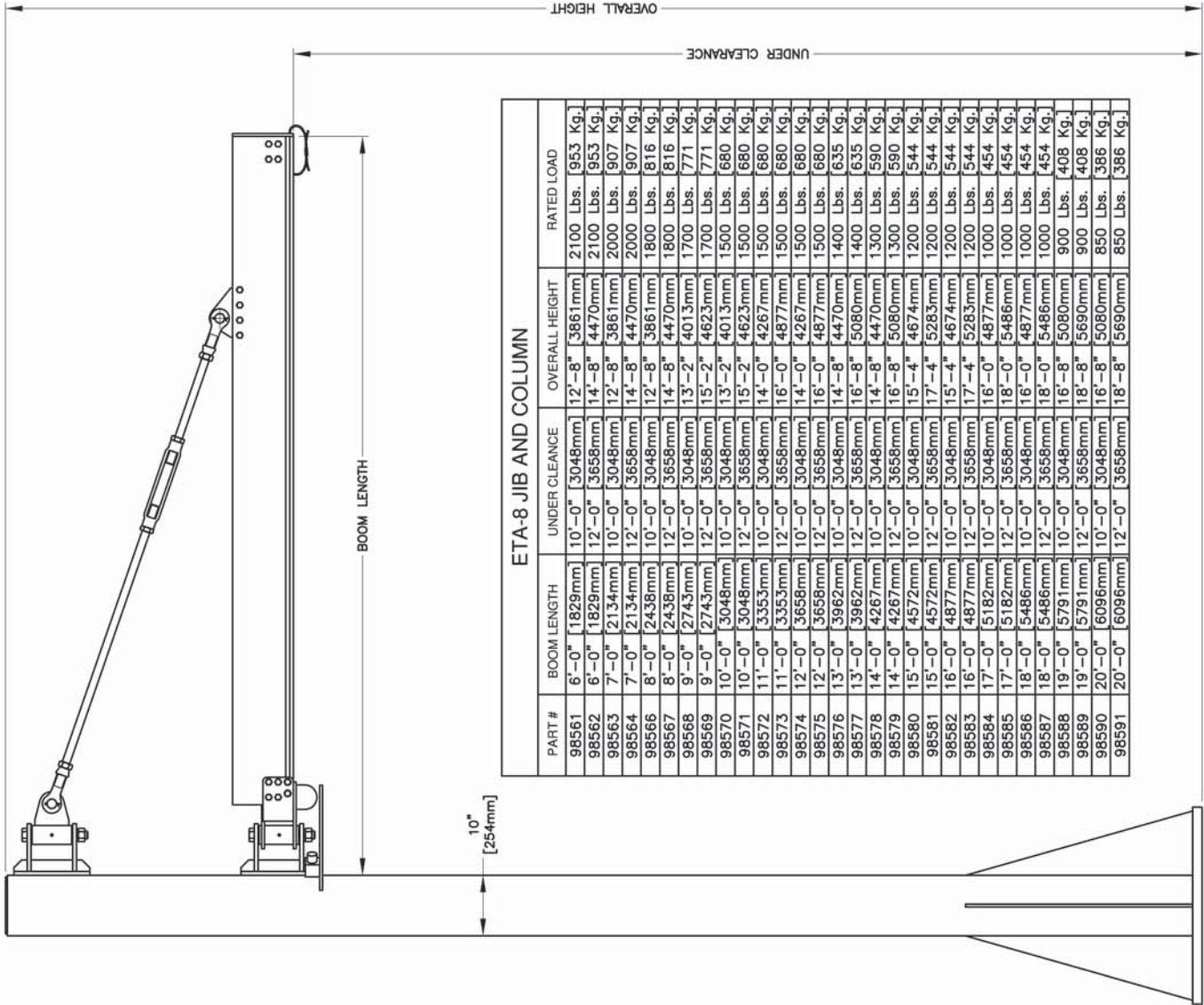
A Unified ETA-8 jib crane is very desirable as a supplement to a regular traveling crane or monorail track, or for individual use in bays and along the walls or side of shops. It provides a versatile and cost-effective solution to your crane needs where adequate headroom and structural support does not exist. The jib crane rotates 220° serving the area within the radius of the beam's span.



98545 10" JIB COLUMN INDEX STOP ASSEMBLY

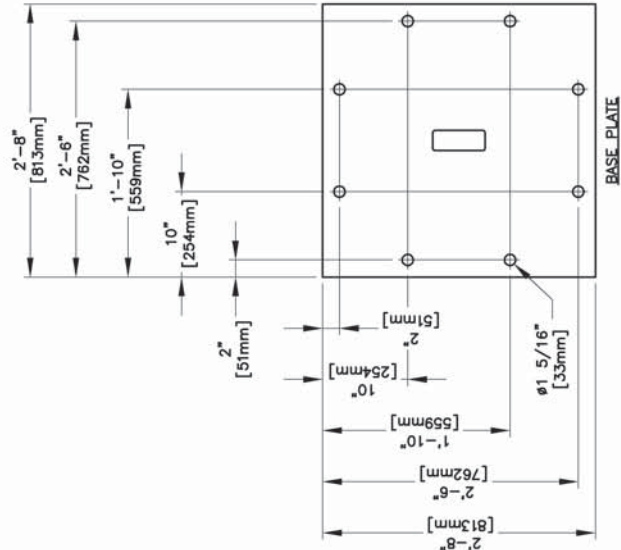


98546 10" BOLTED JIB COLUMN INDEX STOP ASSEMBLY



ETA-8 JIB AND COLUMN

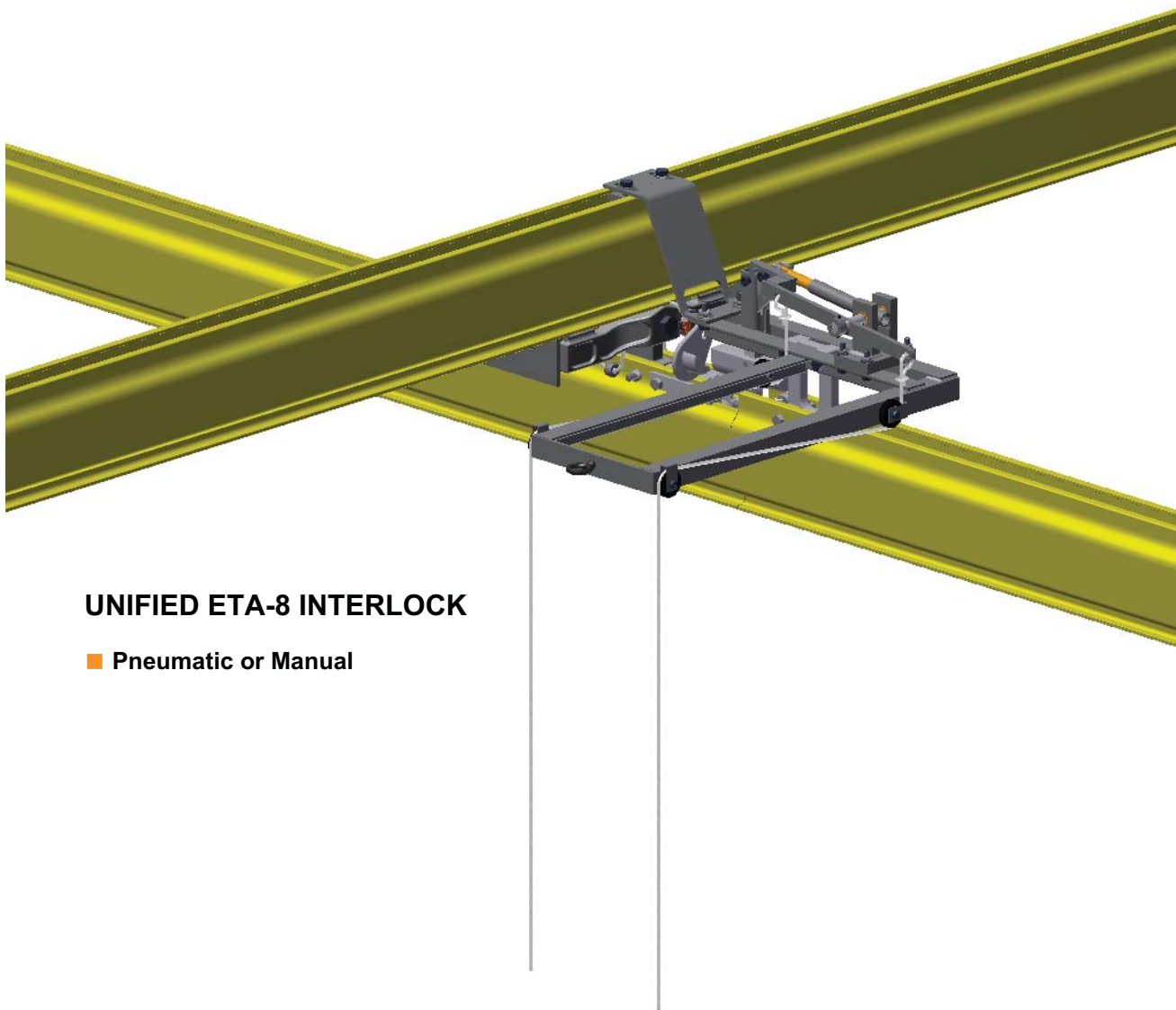
| PART # | BOOM LENGTH | UNDER CLEARANCE | OVERALL HEIGHT | RATED LOAD |
|--------|-----------------|-----------------|-----------------|-------------------|
| 98561 | 6'-0" [1829mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 2100 Lbs. 953 Kg. |
| 98562 | 6'-0" [1829mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 2100 Lbs. 953 Kg. |
| 98563 | 7'-0" [2134mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 2000 Lbs. 907 Kg. |
| 98564 | 7'-0" [2134mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 2000 Lbs. 907 Kg. |
| 98566 | 8'-0" [2438mm] | 10'-0" [3048mm] | 12'-8" [3861mm] | 1800 Lbs. 816 Kg. |
| 98567 | 8'-0" [2438mm] | 12'-0" [3658mm] | 14'-8" [4470mm] | 1800 Lbs. 816 Kg. |
| 98568 | 9'-0" [2743mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 1700 Lbs. 771 Kg. |
| 98569 | 9'-0" [2743mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 1700 Lbs. 771 Kg. |
| 98570 | 10'-0" [3048mm] | 10'-0" [3048mm] | 13'-2" [4013mm] | 1500 Lbs. 680 Kg. |
| 98571 | 10'-0" [3048mm] | 12'-0" [3658mm] | 15'-2" [4623mm] | 1500 Lbs. 680 Kg. |
| 98572 | 11'-0" [3353mm] | 10'-0" [3048mm] | 14'-0" [4267mm] | 1500 Lbs. 680 Kg. |
| 98573 | 11'-0" [3353mm] | 12'-0" [3658mm] | 16'-0" [4877mm] | 1500 Lbs. 680 Kg. |
| 98574 | 12'-0" [3658mm] | 10'-0" [3048mm] | 14'-0" [4267mm] | 1500 Lbs. 680 Kg. |
| 98575 | 12'-0" [3658mm] | 12'-0" [3658mm] | 16'-0" [4877mm] | 1500 Lbs. 680 Kg. |
| 98576 | 13'-0" [3962mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 1400 Lbs. 635 Kg. |
| 98577 | 13'-0" [3962mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 1400 Lbs. 635 Kg. |
| 98578 | 14'-0" [4267mm] | 10'-0" [3048mm] | 14'-8" [4470mm] | 1300 Lbs. 590 Kg. |
| 98579 | 14'-0" [4267mm] | 12'-0" [3658mm] | 16'-8" [5080mm] | 1300 Lbs. 590 Kg. |
| 98580 | 15'-0" [4572mm] | 10'-0" [3048mm] | 15'-4" [4674mm] | 1200 Lbs. 544 Kg. |
| 98581 | 15'-0" [4572mm] | 12'-0" [3658mm] | 17'-4" [5283mm] | 1200 Lbs. 544 Kg. |
| 98582 | 16'-0" [4877mm] | 10'-0" [3048mm] | 15'-4" [4674mm] | 1200 Lbs. 544 Kg. |
| 98583 | 16'-0" [4877mm] | 12'-0" [3658mm] | 17'-4" [5283mm] | 1200 Lbs. 544 Kg. |
| 98584 | 17'-0" [5182mm] | 10'-0" [3048mm] | 16'-0" [4877mm] | 1000 Lbs. 454 Kg. |
| 98585 | 17'-0" [5182mm] | 12'-0" [3658mm] | 18'-0" [5486mm] | 1000 Lbs. 454 Kg. |
| 98586 | 18'-0" [5486mm] | 10'-0" [3048mm] | 16'-0" [4877mm] | 1000 Lbs. 454 Kg. |
| 98587 | 18'-0" [5486mm] | 12'-0" [3658mm] | 18'-0" [5486mm] | 1000 Lbs. 454 Kg. |
| 98588 | 19'-0" [5791mm] | 10'-0" [3048mm] | 16'-8" [5080mm] | 900 Lbs. 408 Kg. |
| 98589 | 19'-0" [5791mm] | 12'-0" [3658mm] | 18'-8" [5690mm] | 900 Lbs. 408 Kg. |
| 98590 | 20'-0" [6096mm] | 10'-0" [3048mm] | 16'-8" [5080mm] | 850 Lbs. 386 Kg. |
| 98591 | 20'-0" [6096mm] | 12'-0" [3658mm] | 18'-8" [5690mm] | 850 Lbs. 386 Kg. |



TEST LOADS SHALL NOT BE MORE THAN 125% OF THE RATED LOAD UNLESS RECOMMENDED BY THE MANUFACTURER. COLUMN SHALL NOT BE LOADED BEYOND IT'S RATED LOAD CAPACITY EXCEPT FOR TEST PURPOSES.

NOTES:
 1. CONSULT FACTORY FOR UNDERCLEARANCES MORE THAN 12'-0" [3658mm].
 2. THE MINIMUM ANCHOR REQUIREMENT IS A #1" [25mm] WEDGE TYPE ANCHOR BOLT WITH 6" [152mm] STANDARD EMBEDMENT IN 3" [76mm] 3000 PSI [2070 N/cm²] CONCRETE.

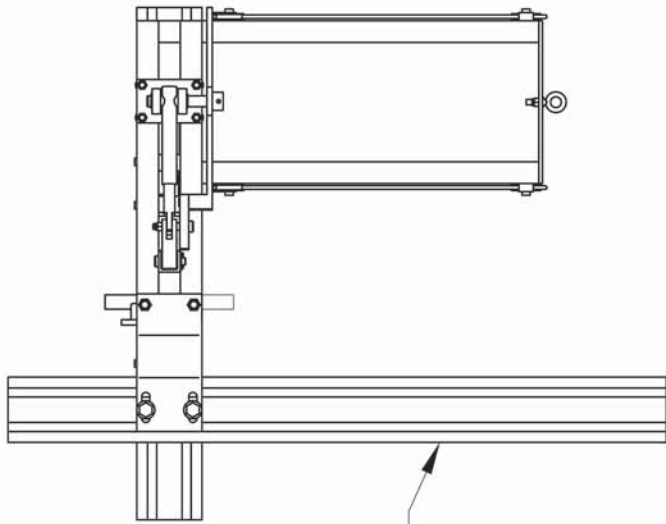
Note: Rated Loads above 1100lbs require a Dual Hoist Trolley



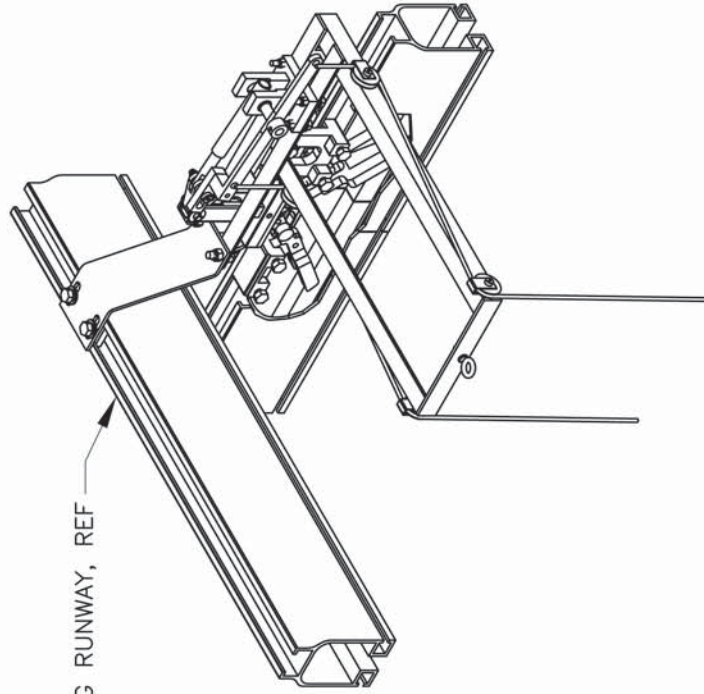
UNIFIED ETA-8 INTERLOCK

■ Pneumatic or Manual

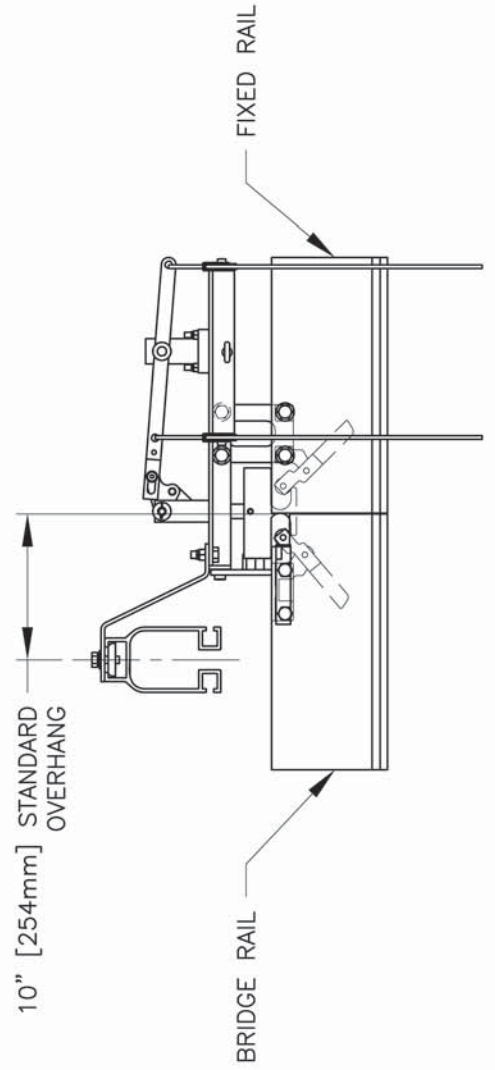
PNEUMATIC OR MANUAL INTERLOCK



EXISTING RUNWAY, REF



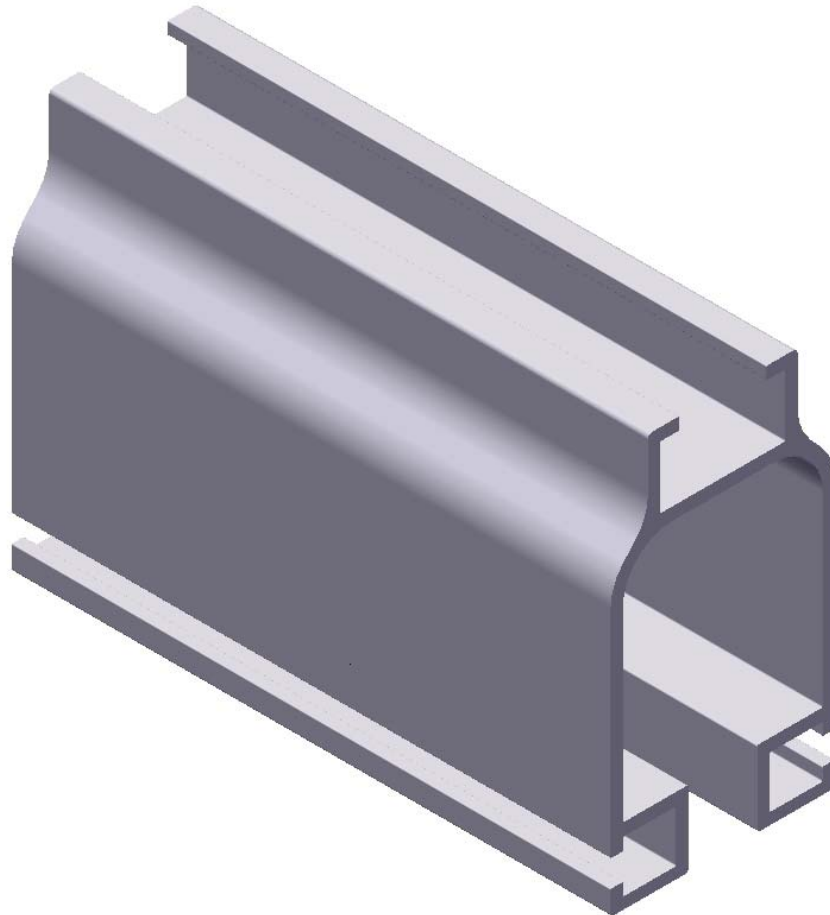
EXISTING RUNWAY, REF



10" [254mm] STANDARD OVERHANG

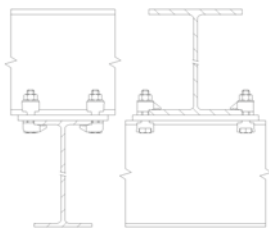
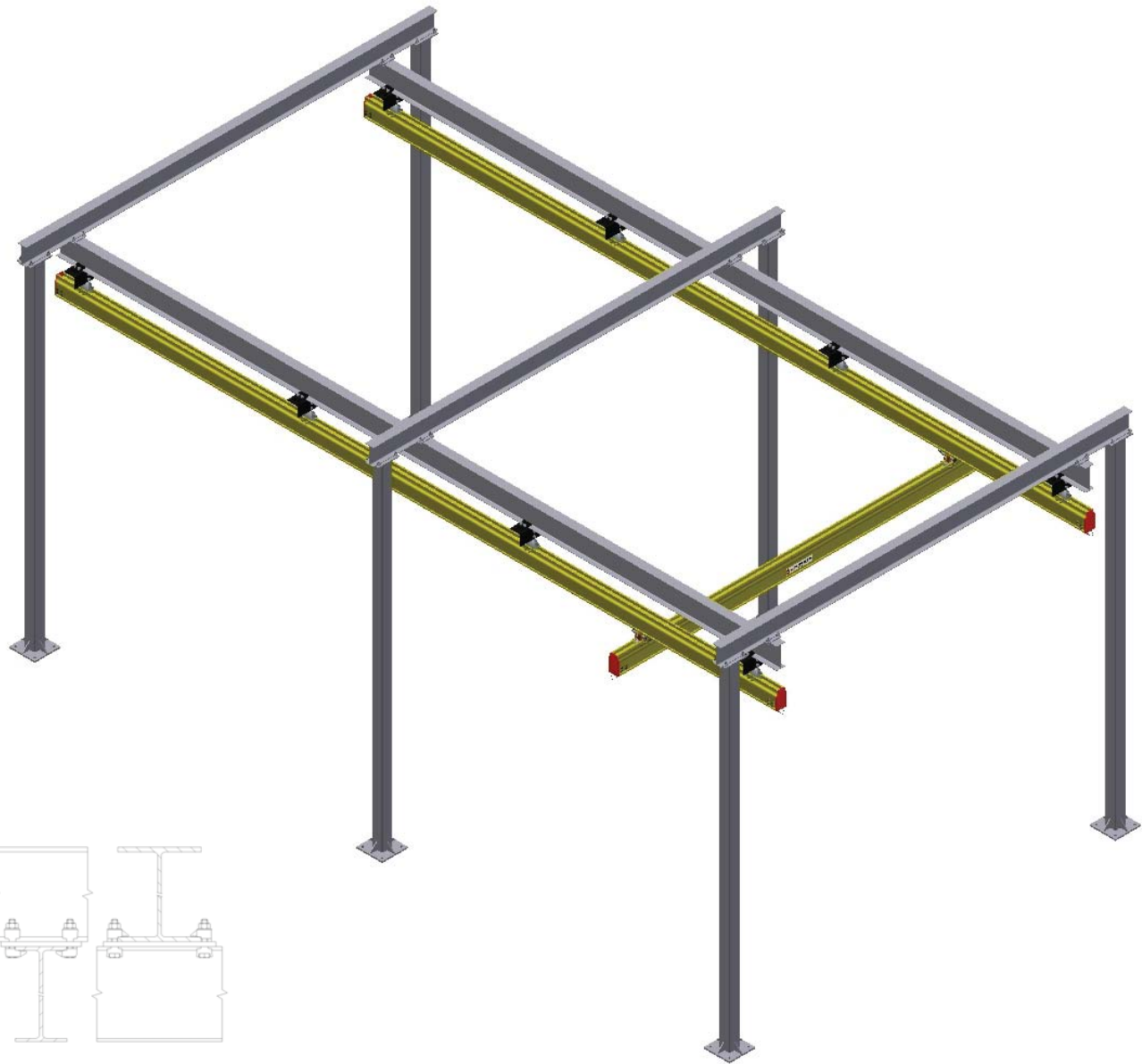
BRIDGE RAIL

FIXED RAIL



ETA-8 CLEAN ROOM APPLICATIONS

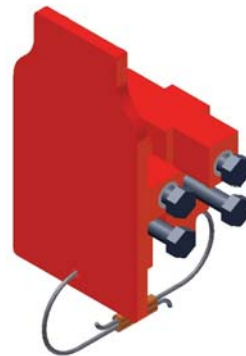
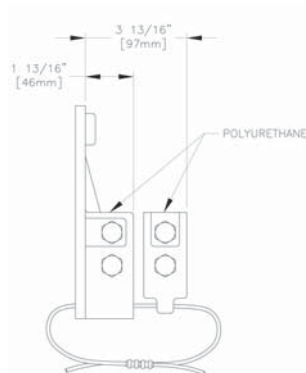
No paint, sealed bearings and stainless steel hardware.
Optional: Anodized Rail



Typical Connection

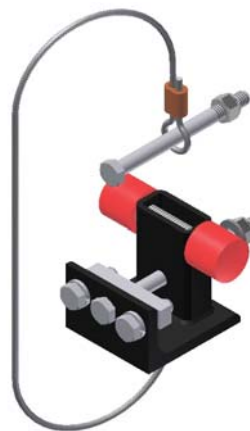
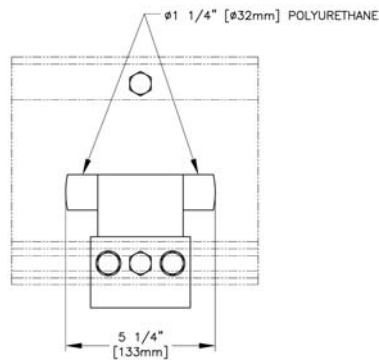
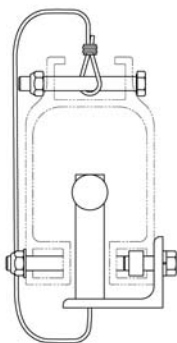
FREE STANDING FLOOR SUPPORT STRUCTURES

- Designed & engineered to each application.
- Floor supports do not require bracing to existing structures.
- P.E. certification optional.
- Paint to customer color specification.



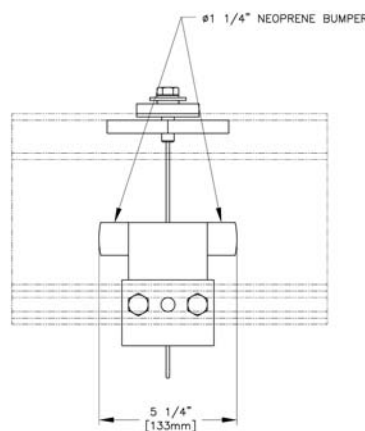
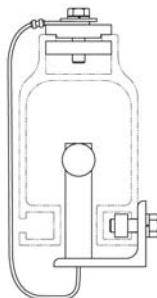
24950 ETA-8 POLY DOUBLE END CAP ASSEMBLY

- Double End Stops for added safety are standard
- For Single End Stop replacement parts see ETA Parts Manual
- Weight: 3 lbs. (1.4kg)



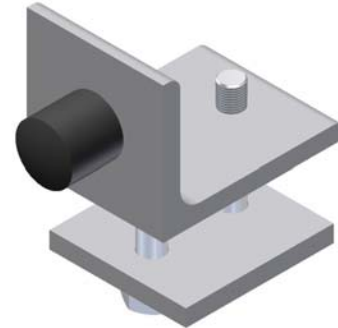
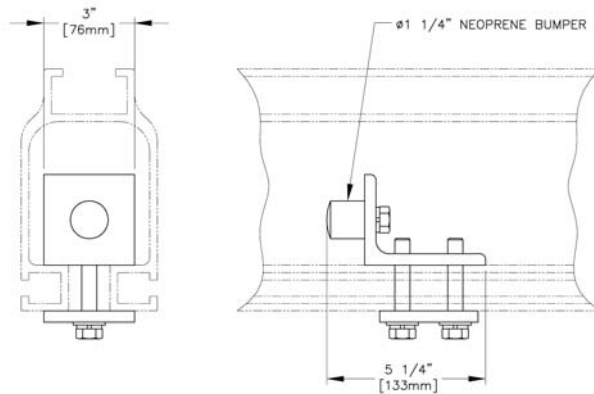
25576 ETA-8 INSERTABLE MID-RAIL STOP ASSEMBLY

- Weight: 4 lbs. (1.8kg)



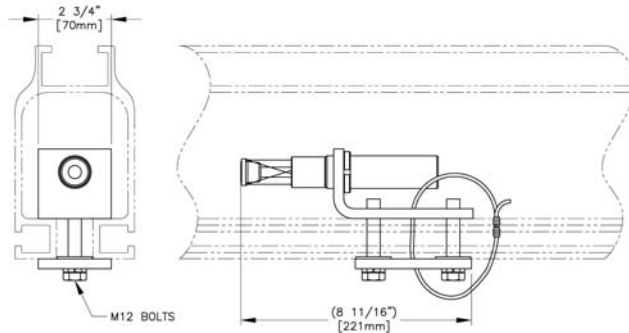
25578 ETA-8 ADJUSTABLE INSERTABLE MID-RAIL STOP ASSEMBLY

- Weight: 5 lbs. (2.3kg)



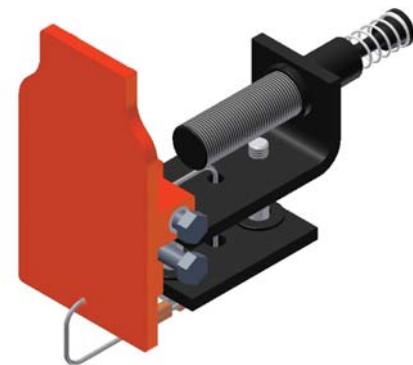
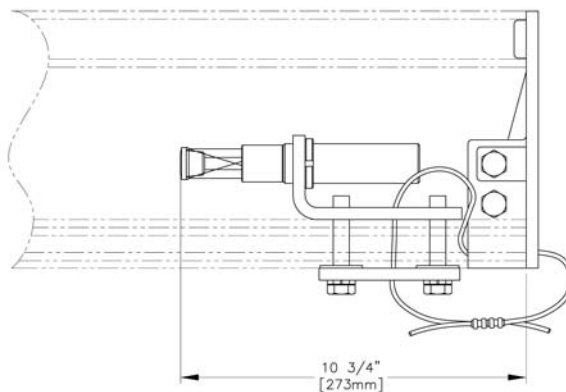
25570 ETA-8 MID-STOP ASSEMBLY

■ **Weight: 2 lbs. (.91kg)**



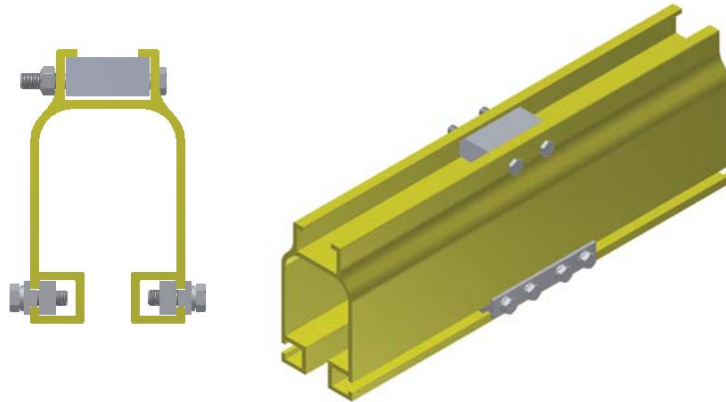
25179 ETA-8 POSITION STOP SHOCK ABSORBER ASSEMBLY

■ **Weight: 5 lbs. (2.3kg)**

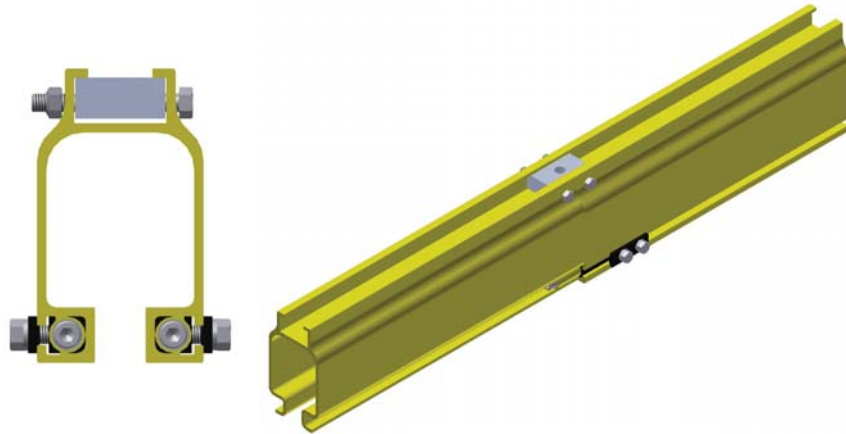


25135 ETA-8 END STOP SHOCK ABSORBER ASSEMBLY

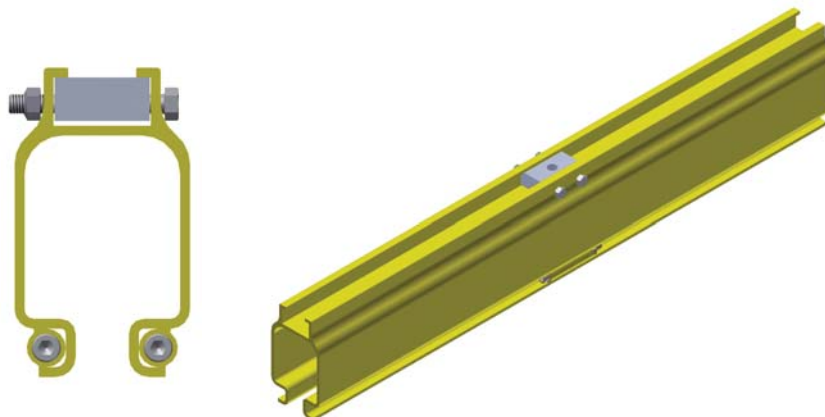
■ **Weight: 7 lbs. (3.2kg)**



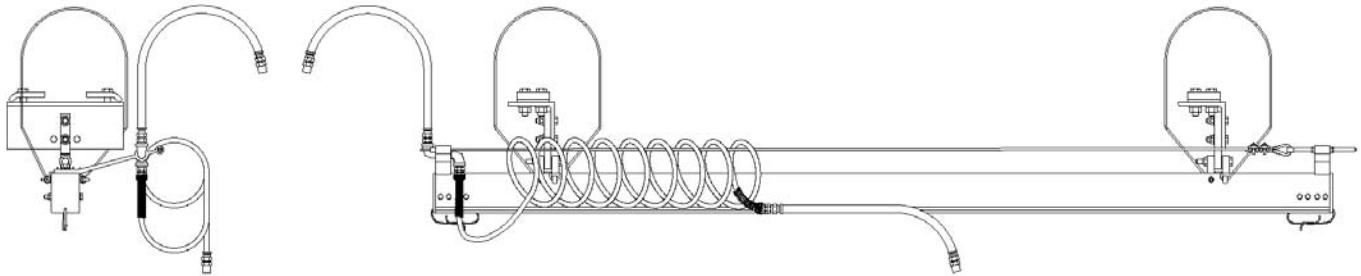
25552 ETA-8 BOLTED SPLICE ASSEMBLY
28010 BOLTED SPLICE BAR KIT (DOES NOT INCLUDE TOP BLOCK)



25557 ETA-8 TRANSITION SPLICE ASSEMBLY
FOR OLD RAIL TO NEW RAIL



25550 ETA-8 OLD RAIL SPLICE ASSEMBLY



RUNWAY AIR FESTOONING

RUNWAY AIR FESTOON KIT

Features

- Two Blue Whip Hoses x 36" (914mm)
- Blue Coiled Hose
- Two ETA Festoon Brackets
- 1/4" Nylon Coated Cable Assembly

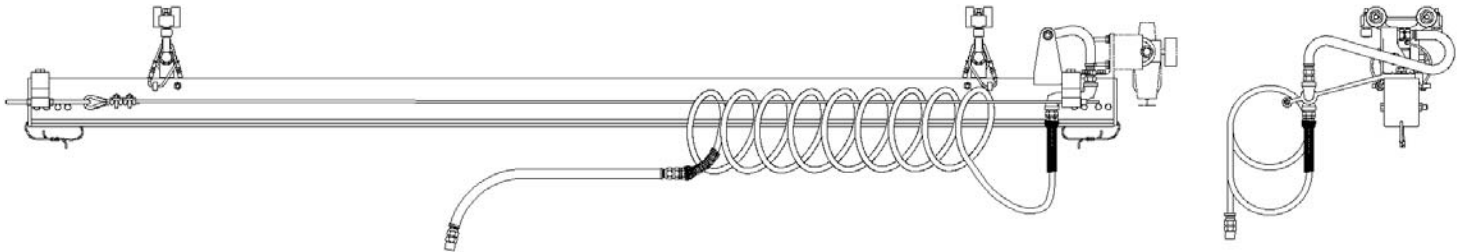
Part Number

■ **1/2" Hose Kits**

- **29105** 5'-0" (1.5m) Long Runway Air Festoon Kit
- **29110** 10'-0" (3.0m) Long Runway Air Festoon Kit
- **29115** 15'-0" (4.5m) Long Runway Air Festoon Kit
- **29120** 20'-0" (6.0m) Long Runway Air Festoon Kit
- **29125** 25'-0" (7.6m) Long Runway Air Festoon Kit
- **29130** 30'-0" (9.1m) Long Runway Air Festoon Kit
- **29135** 35'-0" (10.6m) Long Runway Air Festoon Kit
- **29140** 40'-0" (12.1m) Long Runway Air Festoon Kit
- **29145** 45'-0" (13.7m) Long Runway Air Festoon Kit
- **29150** 50'-0" (15.2m) Long Runway Air Festoon Kit
- **29155** 55'-0" (16.7m) Long Runway Air Festoon Kit
- **29160** 60'-0" (18.2m) Long Runway Air Festoon Kit
- **29165** 65'-0" (19.8m) Long Runway Air Festoon Kit
- **29170** 70'-0" (21.3m) Long Runway Air Festoon Kit
- **29175** 75'-0" (22.8m) Long Runway Air Festoon Kit
- **29180** 80'-0" (24.3m) Long Runway Air Festoon Kit
- **29185** 85'-0" (25.9m) Long Runway Air Festoon Kit
- **29190** 90'-0" (27.4m) Long Runway Air Festoon Kit
- **29195** 95'-0" (28.9m) Long Runway Air Festoon Kit
- **29200** 100'-0" (30.4m) Long Runway Air Festoon Kit

■ **3/4" Hose Kits**

- **29205** 5'-0" (1.5m) Long Runway Air Festoon Kit
- **29210** 10'-0" (3.0m) Long Runway Air Festoon Kit
- **29215** 15'-0" (4.5m) Long Runway Air Festoon Kit
- **29220** 20'-0" (6.0m) Long Runway Air Festoon Kit
- **29225** 25'-0" (7.6m) Long Runway Air Festoon Kit
- **29230** 30'-0" (9.1m) Long Runway Air Festoon Kit
- **29235** 35'-0" (10.6m) Long Runway Air Festoon Kit
- **29240** 40'-0" (12.1m) Long Runway Air Festoon Kit
- **29245** 45'-0" (13.7m) Long Runway Air Festoon Kit
- **29250** 50'-0" (15.2m) Long Runway Air Festoon Kit
- **29255** 55'-0" (16.7m) Long Runway Air Festoon Kit
- **29260** 60'-0" (18.2m) Long Runway Air Festoon Kit
- **29265** 65'-0" (19.8m) Long Runway Air Festoon Kit
- **29270** 70'-0" (21.3m) Long Runway Air Festoon Kit
- **29275** 75'-0" (22.8m) Long Runway Air Festoon Kit
- **29280** 80'-0" (24.3m) Long Runway Air Festoon Kit
- **29285** 85'-0" (25.9m) Long Runway Air Festoon Kit
- **29290** 90'-0" (27.4m) Long Runway Air Festoon Kit
- **29295** 95'-0" (28.9m) Long Runway Air Festoon Kit
- **29300** 100'-0" (30.4m) Long Runway Air Festoon Kit



BRIDGE AIR FESTOONING

BRIDGE AIR FESTOON KIT

Features

- Two Blue Whip Hoses x 36" (914mm)
- Blue Coiled Hose
- Two ETA Festoon Brackets
- One Air Hose Connector Bracket
- 1/4" Nylon Coated Cable with Hardware

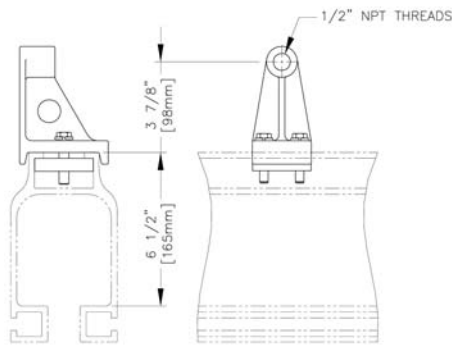
Options

- FR Assembly
- FRL Assembly
- Lockout

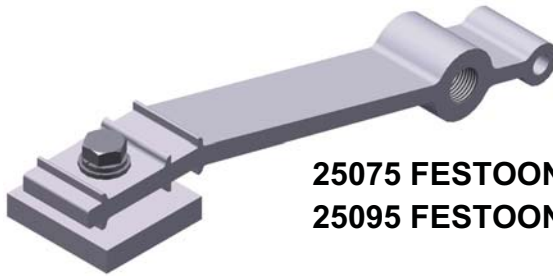
Part Number

- **29305** 5'-0" (1.5m) Long 1/2" Bridge Air Festoon Kit
- **29310** 10'-0" (3.0m) Long 1/2" Bridge Air Festoon Kit
- **29315** 15'-0" (4.5m) Long 1/2" Bridge Air Festoon Kit
- **29320** 20'-0" (6.0m) Long 1/2" Bridge Air Festoon Kit
- **29325** 25'-0" (7.6m) Long 1/2" Bridge Air Festoon Kit
- **29330** 30'-0" (9.1m) Long 1/2" Bridge Air Festoon Kit
- **29335** 35'-0" (10.6m) Long 1/2" Bridge Air Festoon Kit
- **29340** 40'-0" (12.1m) Long 1/2" Bridge Air Festoon Kit

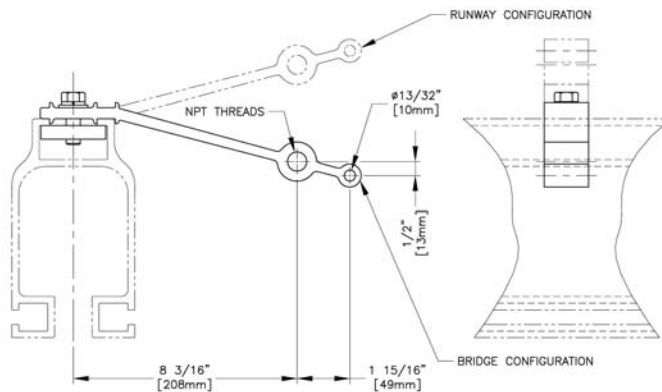
- **29405** 5'-0" (1.5m) Long 3/4" Bridge Air Festoon Kit
- **29410** 10'-0" (3.0m) Long 3/4" Bridge Air Festoon Kit
- **29415** 15'-0" (4.5m) Long 3/4" Bridge Air Festoon Kit
- **29420** 20'-0" (6.0m) Long 3/4" Bridge Air Festoon Kit
- **29425** 25'-0" (7.6m) Long 3/4" Bridge Air Festoon Kit
- **29430** 30'-0" (9.1m) Long 3/4" Bridge Air Festoon Kit
- **29435** 35'-0" (10.6m) Long 3/4" Bridge Air Festoon Kit
- **29440** 40'-0" (12.1m) Long 3/4" Bridge Air Festoon Kit



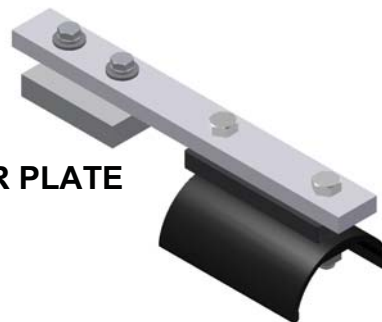
25070 AIR HOSE CONNECTOR BRACKET ASSEMBLY 1/2"
25065 AIR HOSE CONNECTOR BRACKET ASSEMBLY 3/4"



25075 FESTOON BRACKET ASSEMBLY 1/2" NPT
25095 FESTOON BRACKET ASSEMBLY 3/4" NPT



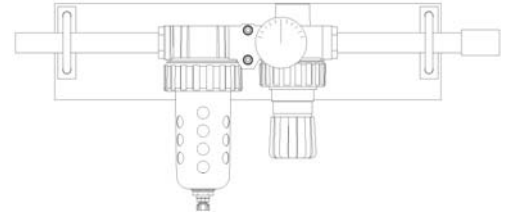
25815 ETA ELECTRIC FESTOON ANCHOR PLATE





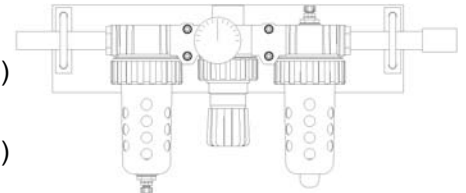
FILTER REGULATORS

- **25503** FR Assembly 1/2" Air Supply (Parker Standard)
- **25516** FR Assembly 1/2" Air Supply includes Manual Lockout (SMC Optional)
- **25517** FR Assembly 3/4" Air Supply (Parker Standard)
- **25518** FR Assembly 3/4" Air Supply includes Manual Lockout (SMC Optional)



FILTER REGULATOR LUBRICATORS

- **25500** FRL Assembly 1/2" Air Supply (Parker Standard)
- **25519** FRL Assembly 1/2" Air Supply includes Manual Lockout (SMC Optional)
- **25521** FRL Assembly 3/4" Air Supply (Parker Standard)
- **25522** FRL Assembly 3/4" Air Supply includes Manual Lockout (SMC Optional)



MANUAL LOCKOUTS

- **25523** Manual Lockout 1/2" Air Supply (Parker Standard)
- **25524** Manual Lockout 1/2" Air Supply (SMC Optional)
- **78107** Manual Lockout 3/4" Air Supply (Parker Standard)
- **78108** Manual Lockout 3/4" Air Supply (SMC Optional)



(Parker Standard)

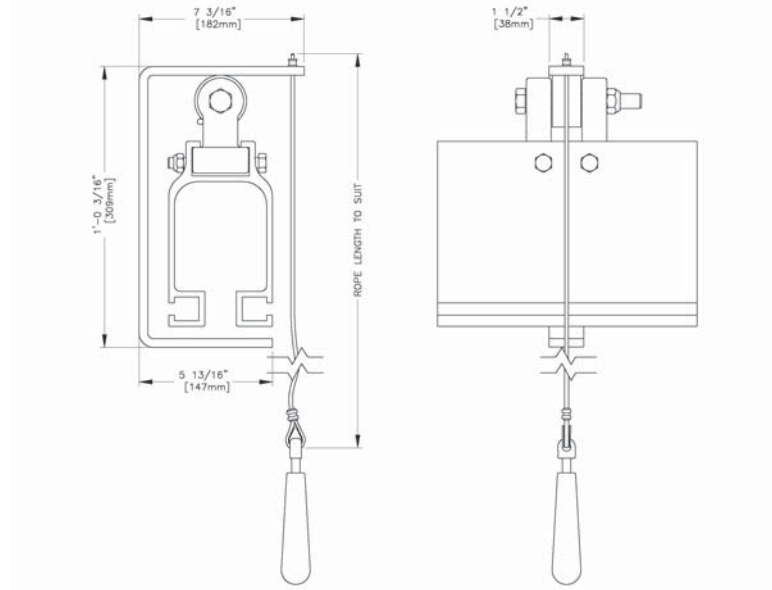
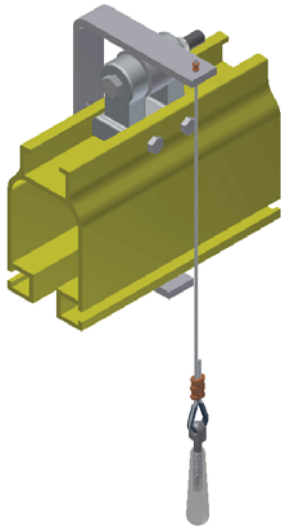


(SMC Optional)

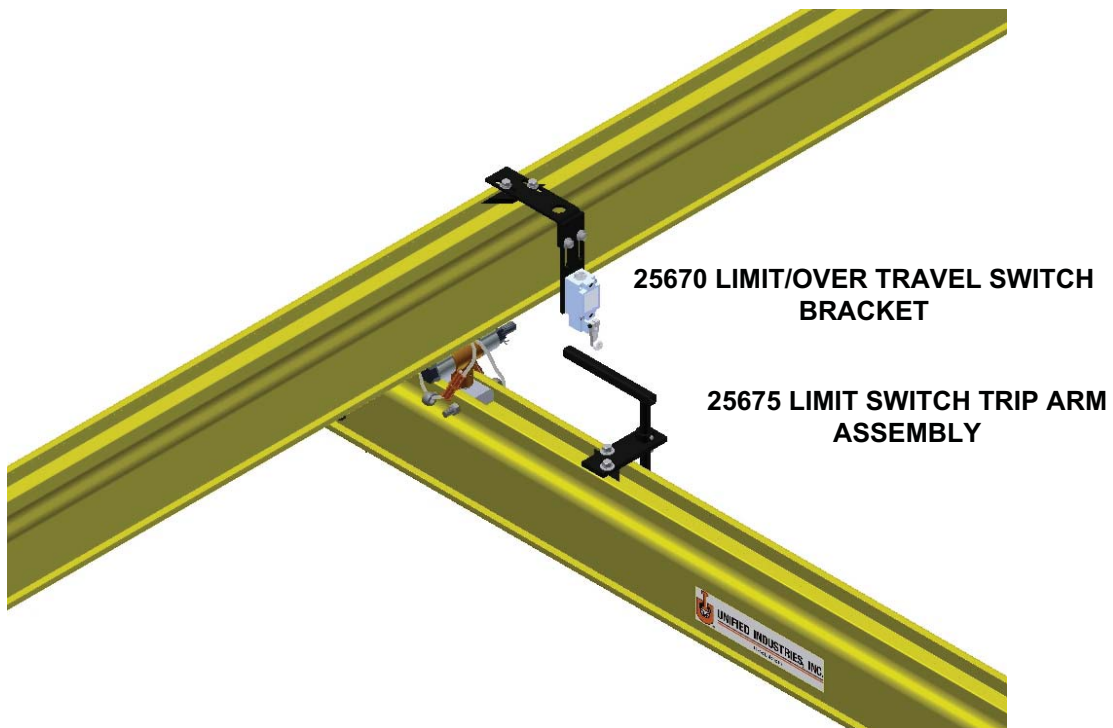
ELECTRIC JUNCTION BOX

- **25665** Electric Junction Box
- **67000** 4-Wire 12 ga. Flatwire Electric Cable (per foot)





27065 BY-PASS ASSEMBLY



25677 OVER TRAVEL SWITCH ASSEMBLY

- Limit switch not included

UNIFIED DROP ANGLE KITS



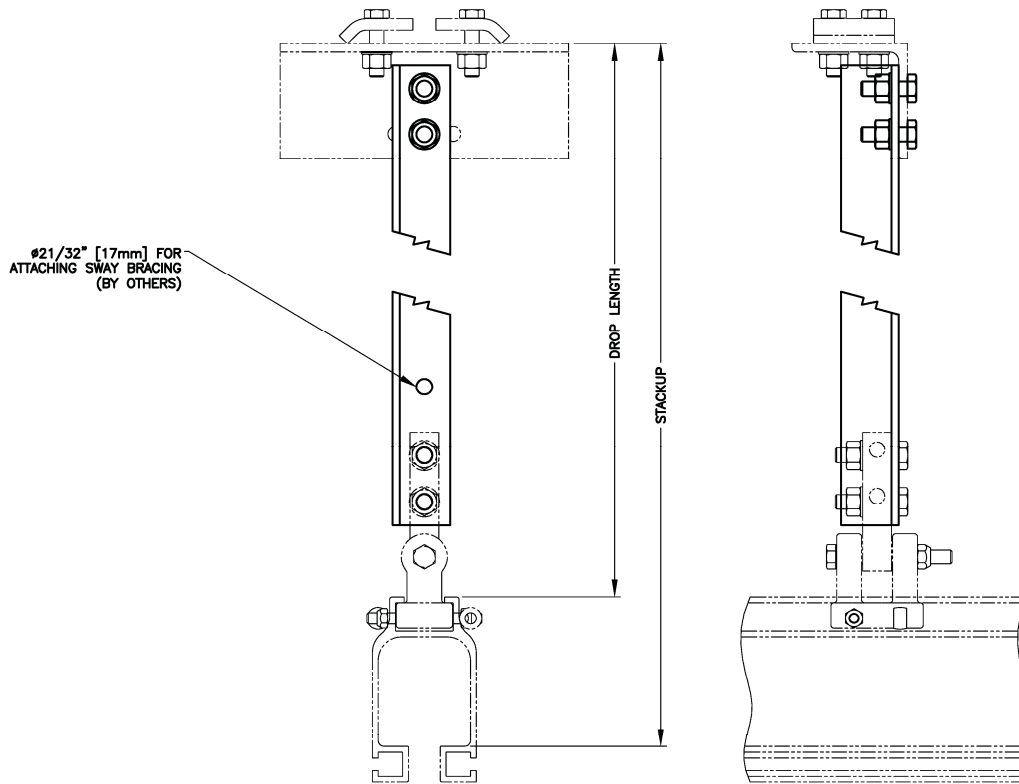
Beam Hanger

- Rated Load 3,500lbs (908kg)
- Beam Hanger sold separately
- Drop Angle Lengths 1'-2" (355mm) to 6'-0" (1829mm) require a cable hole
- Drop Angle Lengths 2'-0" (610mm) to 6'-0" (1829mm) require knee braces in both directions
- Knee Bracing by others
- Drops of 8" (203mm) to 11" (280mm) Consult Engineering



Adjustable Hanger

- Rated Load 3,000lbs (680kg)
- Adjustable Hanger sold separately
- Drop Angle Lengths 1'-2" (355mm) to 6'-0" (1829mm) require a cable hole
- Drop Angle Lengths 2'-0" (610mm) to 6'-0" (1829mm) require knee braces in both directions
- Knee Bracing by others
- Drops of 8" (203mm) to 11" (280mm) Consult Engineering

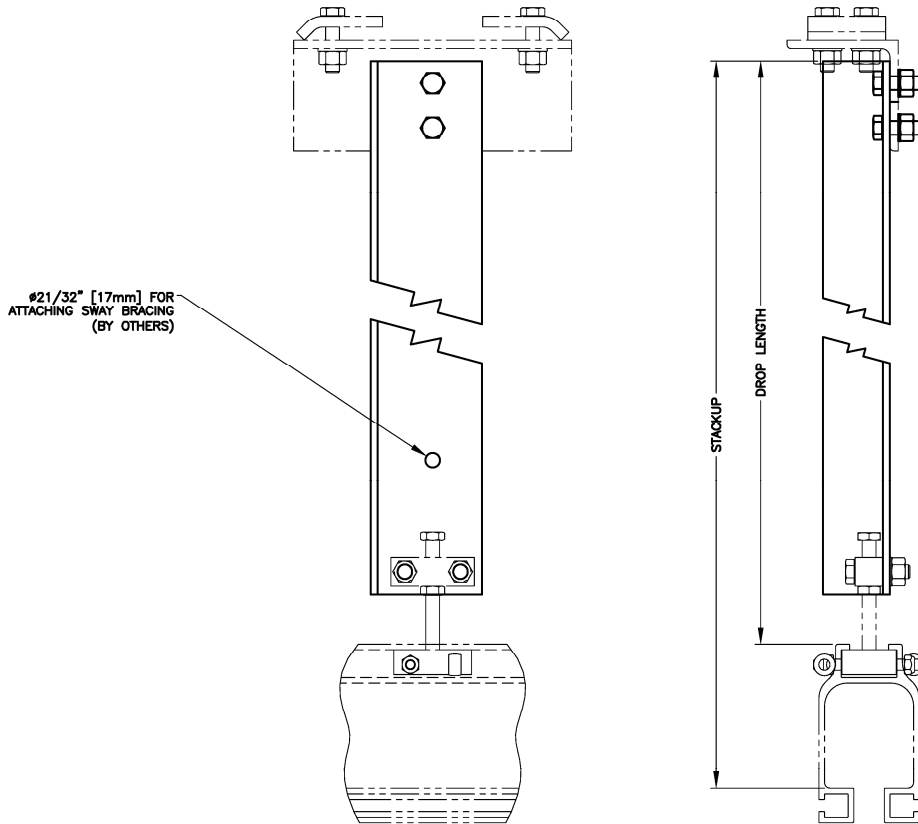


NOTE:
RATED LOAD 3500 LBS [1588 Kg].

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | STACKUP | |
|------------|-------------------|-------------|-------------|------------|---------|
| | | Drop Length | Drop Length | Stackup | Stackup |
| 28705 | 75106 | 1'-0" | 305mm | 1'-6 1/2" | 470mm |
| | | 1'-1" | 330mm | 1'-7 1/2" | 495mm |
| | | 1'-2" | 356mm | 1'-8 1/2" | 521mm |
| | | 1'-3" | 381mm | 1'-9 1/2" | 546mm |
| | | 1'-4" | 406mm | 1'-10 1/2" | 572mm |
| | | 1'-5" | 432mm | 1'-11 1/2" | 597mm |
| | | 1'-6" | 457mm | 2'-0 1/2" | 622mm |
| | | 1'-7" | 483mm | 2'-1 1/2" | 648mm |
| | | 1'-8" | 508mm | 2'-2 1/2" | 673mm |
| | | 1'-9" | 533mm | 2'-3 1/2" | 699mm |
| | | 1'-10" | 559mm | 2'-4 1/2" | 724mm |
| 28706 | 75107 | 1'-11" | 584mm | 2'-5 1/2" | 749mm |
| | | 2'-0" | 610mm | 2'-6 1/2" | 775mm |
| | | 2'-1" | 635mm | 2'-7 1/2" | 800mm |
| | | 2'-2" | 660mm | 2'-8 1/2" | 826mm |
| | | 2'-3" | 686mm | 2'-9 1/2" | 851mm |
| | | 2'-4" | 711mm | 2'-10 1/2" | 876mm |
| | | 2'-5" | 737mm | 2'-11 1/2" | 902mm |
| | | 2'-6" | 762mm | 3'-0 1/2" | 927mm |
| | | 2'-7" | 787mm | 3'-1 1/2" | 953mm |
| | | 2'-8" | 813mm | 3'-2 1/2" | 978mm |
| | | 2'-9" | 838mm | 3'-3 1/2" | 1003mm |
| 28707 | 75108 | 2'-10" | 864mm | 3'-4 1/2" | 1029mm |
| | | 2'-11" | 889mm | 3'-5 1/2" | 1054mm |
| | | 3'-0" | 914mm | 3'-6 1/2" | 1080mm |
| | | 3'-1" | 940mm | 3'-7 1/2" | 1105mm |
| | | 3'-2" | 965mm | 3'-8 1/2" | 1130mm |
| | | 3'-3" | 991mm | 3'-9 1/2" | 1156mm |
| | | 3'-4" | 1016mm | 3'-10 1/2" | 1181mm |
| | | 3'-5" | 1041mm | 3'-11 1/2" | 1207mm |
| | | 3'-6" | 1067mm | 4'-0 1/2" | 1232mm |

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | STACKUP | |
|------------|-------------------|-------------|-------------|------------|---------|
| | | Drop Length | Drop Length | Stackup | Stackup |
| 28707 | 75108 | 3'-7" | 1092mm | 4'-1 1/2" | 1257mm |
| | | 3'-8" | 1118mm | 4'-2 1/2" | 1283mm |
| | | 3'-9" | 1143mm | 4'-3 1/2" | 1308mm |
| | | 3'-10" | 1168mm | 4'-4 1/2" | 1334mm |
| | | 3'-11" | 1194mm | 4'-5 1/2" | 1359mm |
| | | 4'-0" | 1219mm | 4'-6 1/2" | 1384mm |
| 28708 | 75109 | 4'-1" | 1245mm | 4'-7 1/2" | 1410mm |
| | | 4'-2" | 1270mm | 4'-8 1/2" | 1435mm |
| | | 4'-3" | 1295mm | 4'-9 1/2" | 1461mm |
| | | 4'-4" | 1321mm | 4'-10 1/2" | 1486mm |
| | | 4'-5" | 1346mm | 4'-11 1/2" | 1511mm |
| | | 4'-6" | 1372mm | 5'-0 1/2" | 1537mm |
| | | 4'-7" | 1397mm | 5'-1 1/2" | 1562mm |
| | | 4'-8" | 1422mm | 5'-2 1/2" | 1588mm |
| | | 4'-9" | 1448mm | 5'-3 1/2" | 1613mm |
| | | 4'-10" | 1473mm | 5'-4 1/2" | 1638mm |
| | | 4'-11" | 1499mm | 5'-5 1/2" | 1664mm |
| 28709 | 75110 | 5'-0" | 1524mm | 5'-6 1/2" | 1689mm |
| | | 5'-1" | 1549mm | 5'-7 1/2" | 1715mm |
| | | 5'-2" | 1575mm | 5'-8 1/2" | 1740mm |
| | | 5'-3" | 1600mm | 5'-9 1/2" | 1765mm |
| | | 5'-4" | 1626mm | 5'-10 1/2" | 1791mm |
| | | 5'-5" | 1651mm | 5'-11 1/2" | 1816mm |
| | | 5'-6" | 1676mm | 6'-0 1/2" | 1842mm |
| | | 5'-7" | 1702mm | 6'-1 1/2" | 1867mm |
| | | 5'-8" | 1727mm | 6'-2 1/2" | 1892mm |
| | | 5'-9" | 1753mm | 6'-3 1/2" | 1918mm |
| | | 5'-10" | 1778mm | 6'-4 1/2" | 1943mm |
| 5'-11" | 1803mm | 6'-5 1/2" | 1969mm | | |
| 6'-0" | 1829mm | 6'-6 1/2" | 1994mm | | |

*Beam Hanger sold separately



NOTE:
RATED LOAD 3000 LBS [1361 Kg].

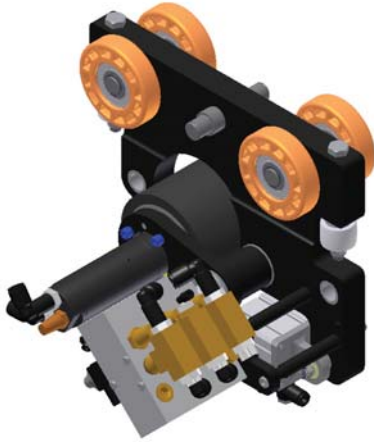
| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | STACKUP | | | |
|------------|-------------------|-------------|-------------|------------|---------|-----------|-------|
| | | Drop Length | Drop Length | Stackup | Stackup | | |
| 28716 | 75117 | 9" | 229mm | 1'-3 1/2" | 394mm | | |
| | | 10" | 254mm | 1'-4 1/2" | 419mm | | |
| | | 11" | 279mm | 1'-5 1/2" | 445mm | | |
| | | 1'-0" | 305mm | 1'-6 1/2" | 470mm | | |
| 28717 | 75118 | 1'-1" | 330mm | 1'-7 1/2" | 495mm | | |
| | | 1'-2" | 356mm | 1'-8 1/2" | 521mm | | |
| | | 1'-3" | 381mm | 1'-9 1/2" | 546mm | | |
| | | 1'-4" | 406mm | 1'-10 1/2" | 572mm | | |
| | | 1'-5" | 432mm | 1'-11 1/2" | 597mm | | |
| | | 1'-6" | 457mm | 2'-0 1/2" | 622mm | | |
| | | 1'-7" | 483mm | 2'-1 1/2" | 648mm | | |
| | | 1'-8" | 508mm | 2'-2 1/2" | 673mm | | |
| | | 1'-9" | 533mm | 2'-3 1/2" | 699mm | | |
| | | 1'-10" | 559mm | 2'-4 1/2" | 724mm | | |
| | | 1'-11" | 584mm | 2'-5 1/2" | 749mm | | |
| | | 2'-0" | 610mm | 2'-6 1/2" | 775mm | | |
| | | 28718 | 75119 | 2'-1" | 635mm | 2'-7 1/2" | 800mm |
| | | | | 2'-2" | 660mm | 2'-8 1/2" | 826mm |
| 2'-3" | 686mm | | | 2'-9 1/2" | 851mm | | |
| 2'-4" | 711mm | | | 2'-10 1/2" | 876mm | | |
| 2'-5" | 737mm | | | 2'-11 1/2" | 902mm | | |
| 2'-6" | 762mm | | | 3'-0 1/2" | 927mm | | |
| 2'-7" | 787mm | | | 3'-1 1/2" | 953mm | | |
| 2'-8" | 813mm | | | 3'-2 1/2" | 978mm | | |
| 2'-9" | 838mm | | | 3'-3 1/2" | 1003mm | | |
| 2'-10" | 864mm | | | 3'-4 1/2" | 1029mm | | |
| 2'-11" | 889mm | | | 3'-5 1/2" | 1054mm | | |
| 3'-0" | 914mm | | | 3'-6 1/2" | 1080mm | | |
| 28719 | 75120 | 3'-1" | 940mm | 3'-7 1/2" | 1105mm | | |
| | | 3'-2" | 965mm | 3'-8 1/2" | 1130mm | | |
| | | 3'-3" | 991mm | 3'-9 1/2" | 1156mm | | |
| | | 3'-4" | 1016mm | 3'-10 1/2" | 1181mm | | |

| KIT PART # | DROP ANGLE PART # | DROP LENGTH | | STACKUP | |
|------------|-------------------|-------------|-------------|------------|---------|
| | | Drop Length | Drop Length | Stackup | Stackup |
| 28719 | 75120 | 3'-5" | 1041mm | 3'-11 1/2" | 1207mm |
| | | 3'-6" | 1067mm | 4'-0 1/2" | 1232mm |
| | | 3'-7" | 1092mm | 4'-1 1/2" | 1257mm |
| | | 3'-8" | 1118mm | 4'-2 1/2" | 1283mm |
| | | 3'-9" | 1143mm | 4'-3 1/2" | 1308mm |
| | | 3'-10" | 1168mm | 4'-4 1/2" | 1334mm |
| | | 3'-11" | 1194mm | 4'-5 1/2" | 1359mm |
| | | 4'-0" | 1219mm | 4'-6 1/2" | 1384mm |
| | | 4'-1" | 1245mm | 4'-7 1/2" | 1410mm |
| | | 4'-2" | 1270mm | 4'-8 1/2" | 1435mm |
| 28720 | 75121 | 4'-3" | 1295mm | 4'-9 1/2" | 1461mm |
| | | 4'-4" | 1321mm | 4'-10 1/2" | 1486mm |
| | | 4'-5" | 1346mm | 4'-11 1/2" | 1511mm |
| | | 4'-6" | 1372mm | 5'-0 1/2" | 1537mm |
| | | 4'-7" | 1397mm | 5'-1 1/2" | 1562mm |
| | | 4'-8" | 1422mm | 5'-2 1/2" | 1588mm |
| | | 4'-9" | 1448mm | 5'-3 1/2" | 1613mm |
| | | 4'-10" | 1473mm | 5'-4 1/2" | 1638mm |
| | | 4'-11" | 1499mm | 5'-5 1/2" | 1664mm |
| | | 5'-0" | 1524mm | 5'-6 1/2" | 1689mm |
| 28721 | 75122 | 5'-1" | 1549mm | 5'-7 1/2" | 1715mm |
| | | 5'-2" | 1575mm | 5'-8 1/2" | 1740mm |
| | | 5'-3" | 1600mm | 5'-9 1/2" | 1765mm |
| | | 5'-4" | 1626mm | 5'-10 1/2" | 1791mm |
| | | 5'-5" | 1651mm | 5'-11 1/2" | 1816mm |
| | | 5'-6" | 1676mm | 6'-0 1/2" | 1842mm |
| | | 5'-7" | 1702mm | 6'-1 1/2" | 1867mm |
| | | 5'-8" | 1727mm | 6'-2 1/2" | 1892mm |
| | | 5'-9" | 1753mm | 6'-3 1/2" | 1918mm |
| | | 5'-10" | 1778mm | 6'-4 1/2" | 1943mm |
| | | 5'-11" | 1803mm | 6'-5 1/2" | 1968mm |
| | | 6'-0" | 1829mm | 6'-6 1/2" | 1994mm |

*Adjustable Hanger sold separately

UNIFIED AIR TRACTOR

The lube free air tractor was developed to be a compact, and reliable alternative to those large air tractors most companies are familiar with.



Features

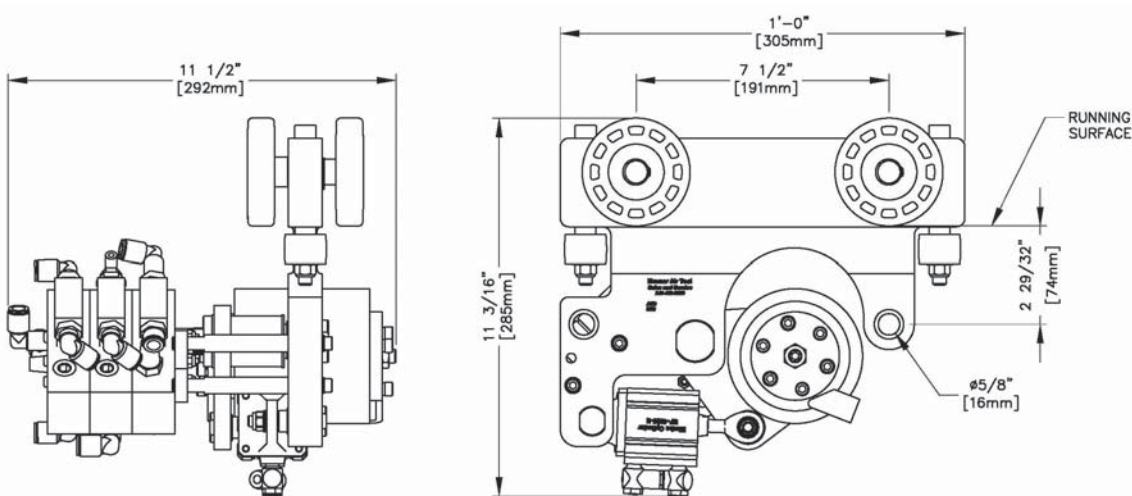
- **Lightweight and Compact**
- **Lube Free Air Motor**
- **Maintenance Friendly Design**
- **Quick Delivery, Excellent Pricing**

Control Package Options:

- C1 = SMC Control Pack w/Fwd/Rev 2-Button Control Pendant.
- C2 = SMC Control Pack Only. (Requires main air connection + Fwd/Rev signals)
- C3 = Base Tractor Only. No Control valves.
- C4 = SMC Control Pack w/4-Button Control Pendant (Fwd/Rev + ?/?)

Part Number

- **UAT-NB-C(x)-ETA8** Air Tractor to run on ETA-8 rail. Specify control pack above. Weight 33lbs (15kg)
- **25684** ETA-8 Tractor Tow Bar-Hitch
- **60315** Replacement Drive Wheel



Proper Tractor Operation: Tractor must come to a complete stop before it can be engaged in the opposite direction. If this process is not followed, damage to the Tractor will occur and the warranty will be void.

Designed for a working plant air pressure of: 87-102psi (600-700kPA)

***NB = No Brake**



UNIFIED AIR BALANCER

A proven ergonomic lifting and positioning device



- **Capacities** up to 485lbs. (220kg) single reeve - 1940lbs. (880kg) tandem reeved.
- **Safety** overload limit and check valve in case of loss of air supply.
- **Energy Efficient** only a fraction of a CFM per cycle required when compared to a pneumatic hoist.
- **Robust** precision mechanical design & powder coated housing ensures trouble free extended service life.
- Uses non-lubricated air, assures clean environment.
- Ideal for ergonomic handling applications and suspension of tools, weld guns & fixtures.
- All Non-Reeved balancers come equipped with a 25'-6" (9m) cable.

Control Styles

UBB = Basic Balancer with no controls
UAB = Balancer with Up/Down controls
U^ZB = Balancer with Zero G

| Model # | Weight Capacity/Lift | Air Consumption |
|---------|-------------------------------|-------------------|
| U_B-132 | 132lbs (60kg)/79in (2000mm) | .5 CFM(.85CMH) |
| U_B-220 | 220lbs (100kg)/118in (3000mm) | 1.3 CFM(2.21CMH) |
| U_B-331 | 331lbs (150kg)/79in (2000mm) | 1.3 CFM(2.21CMH) |
| U_B-485 | 485lbs (220kg)/79in (2000mm) | 1.9 CFM(3.23 CMH) |

- Wire Rope Units (Air Pressure 7kgf/cm²) (100 PSI)

Optional Accessories

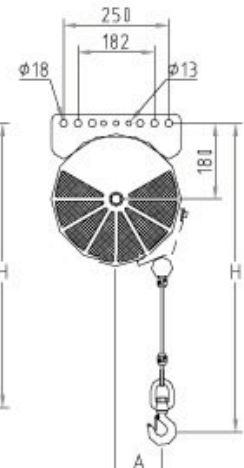
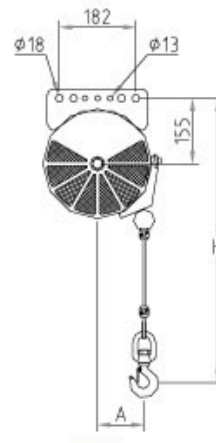
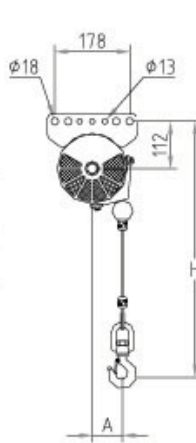
| Part # | Description |
|--------|-------------------------------------------------------------------------------|
| 99025 | Up/Down Manifold |
| 99026 | Up/Down Control Kit—Includes Manifold, 12ft (3.65m) Hose and 2-button pendant |
| 99100 | Top Hook Assembly |



Single Type

| Model | "A" Dimension |
|---------|---------------------|
| U_B-132 | 2.83 inch (72mm) |
| U_B-220 | 4.35 inch (110.5mm) |
| U_B-331 | 2.83 inch (72mm) |
| U_B-485 | 2.83 inch (72mm) |

Single Type

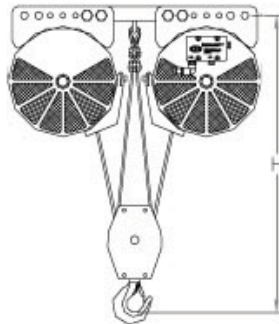


U_B-132

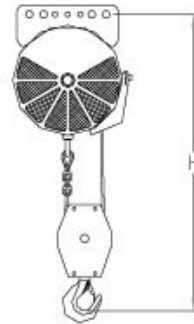
U_B-220, 331

U_B-485

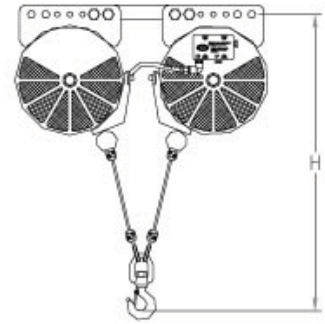
Tandem Reeved Type



Reeved Type



Tandem Type



Single Balancer

| Model # | Capacity | | Lift | | D x L | | H | | Net Weight | | CFM (per cycle) |
|-------------|----------|-----|------|------|---------------|-----------|----|-----|------------|------|--------------------|
| | lbs | kg | in | mm | in | mm | in | mm | lbs | kg | |
| U_B-132-079 | 132 | 60 | 79 | 2000 | 6.1 x 15.43 | 155 x 392 | 23 | 600 | 51 | 23 | .5 |
| U_B-220-118 | 220 | 100 | 118 | 3000 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 94 | 42.5 | 1.3 |
| U_B-331-079 | 331 | 150 | 79 | 2000 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 105 | 47 | 1.3 |
| U_B-485-079 | 485 | 220 | 79 | 2000 | 12.21 x 15.75 | 310 x 400 | 30 | 750 | 110 | 50 | 1.9 |

Reeved Balancer (R) Tandem Balancer (T) Tandem-Reeved Balancer (TR)

| Model # | Capacity | | Lift | | D x L | | H | | Net Weight | |
|---------------|----------|-----|------|------|-----------------|-----------|----|-----|------------|-----|
| | lbs | kg | in | mm | in | mm | in | mm | lbs | kg |
| U_B-440-59R | 440 | 200 | 59 | 1500 | 10.24 x 15.75 | 260 x 400 | 28 | 700 | 104 | 47 |
| U_B-440-118T | 440 | 200 | 118 | 3000 | 2-10.24 x 15.76 | 260 x 400 | 28 | 700 | 203 | 92 |
| U_B-662-39R | 662 | 300 | 39 | 1000 | 10.24 x 15.77 | 260 x 400 | 28 | 700 | 99 | 45 |
| U_B-661-79T | 662 | 300 | 79 | 2000 | 2-10.24 x 15.78 | 260 x 400 | 28 | 700 | 198 | 90 |
| U_B-970-39R | 970 | 440 | 39 | 1000 | 12.21 x 15.75 | 310 x 400 | 30 | 750 | 124 | 56 |
| U_B-970-79T | 970 | 440 | 79 | 2000 | 2-12.21 x 15.75 | 310 x 400 | 30 | 750 | 243 | 110 |
| U_B-882-59TR | 882 | 400 | 59 | 1500 | 2-10.24 x 15.78 | 260 x 400 | 28 | 700 | 209 | 95 |
| U_B-1323-39TR | 1323 | 600 | 39 | 1000 | 2-10.24 x 15.79 | 260 x 400 | 28 | 700 | 203 | 92 |
| U_B-1940-39TR | 1940 | 880 | 39 | 1000 | 2-12.21 x 15.75 | 310 x 400 | 30 | 750 | 254 | 115 |

CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 125% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

***All dimensions are reference only
and need to be verified with factory.**

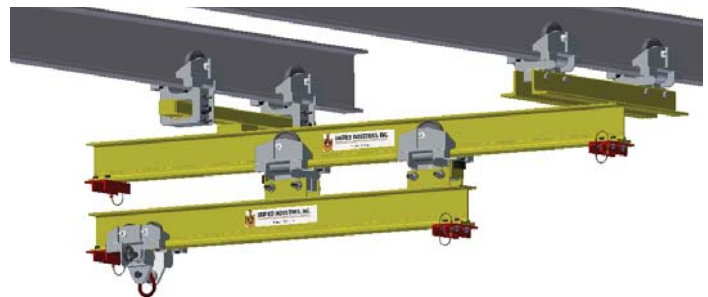




UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

MANUAL BRIDGE CRANES



Custom bridge cranes for special applications...to your specifications

Low headroom bridge crane

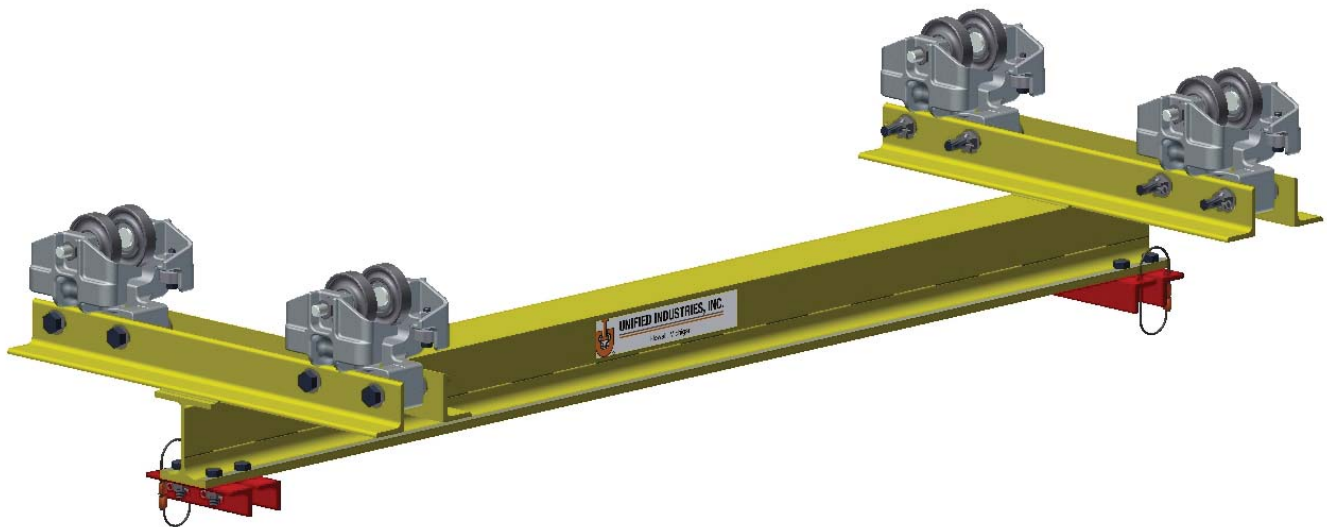
- For extremely low headroom conditions
- Bridge beam operates with a better under clearance

Dual beam bridge crane for suspension of large fixtures that move parallel to an assembly line for a balanced suspended load condition.



| | PAGE |
|-------------------------------------------------|--------------|
| Custom Bridge Cranes | 1-2 |
| Light load Bridge Cranes..... | 3-4 |
| Medium Load Bridge Cranes..... | 5-6 |
| Overhanging Bridge Cranes | 7-8 |
| Heavy Load Bridge Cranes..... | 9-10 |
| Telescoping Unit Light/Medium Duty | 11-12 |
| Telescoping Unit Standard Duty..... | 13-14 |
| Telescoping Unit Heavy Duty..... | 15-16 |
| Custom Combination Unit..... | 17-18 |

***All dimensions are reference only
and need to be verified with factory.**



Application

Unified light load bridge cranes are designed for the suspension of portable spotwelding guns, power tools, balancers, hoists, fixtures etc., and other light loads not exceeding 1000 lbs. (454kg).

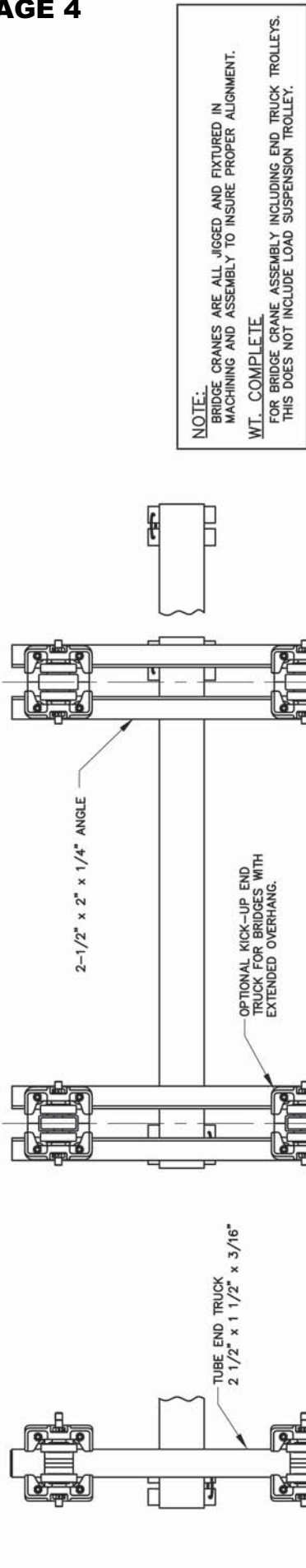
Specifications

Unified light load bridge cranes consist of two end truck assemblies, mounted with either MBC-500, SAC-500 or AC-500 trolleys, supporting a bridge beam. The bridge beam is a compound section with a hardened and ground flat track 3.25" in width. (See trolley section for trolley specifications).

End trucks are mounted with trolleys for operation on either flat rail or S-Beam. End stops bolted to each end of the bridge complete the assembly.

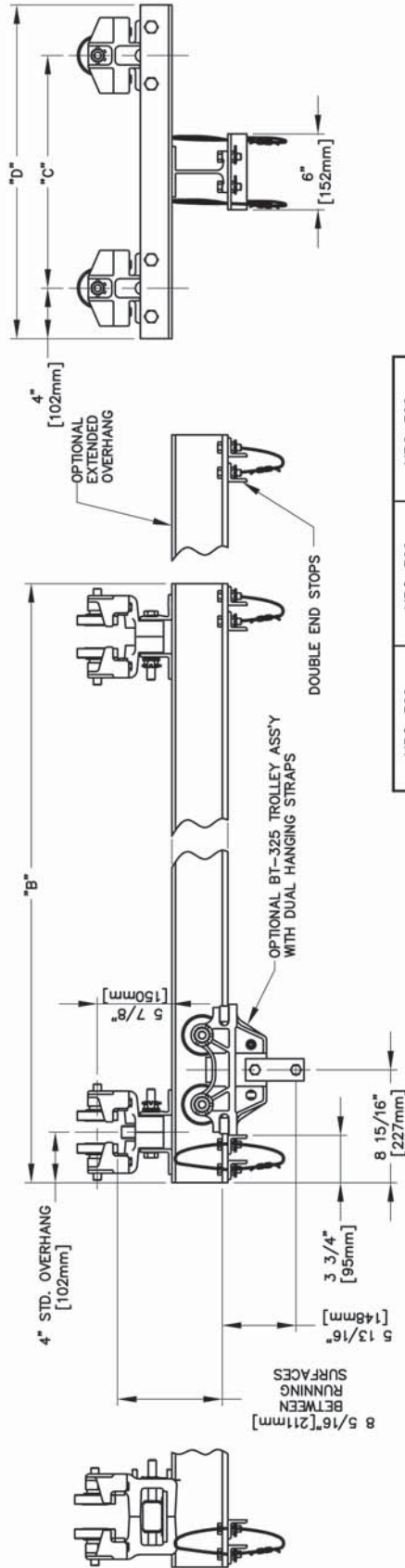
Options

- Bridge beam overhang to your specifications
- Counter thrust wheels or trolleys are available to prevent "kick-up" action when suspended load must be extended beyond bridge span
- Standard redundant end stops



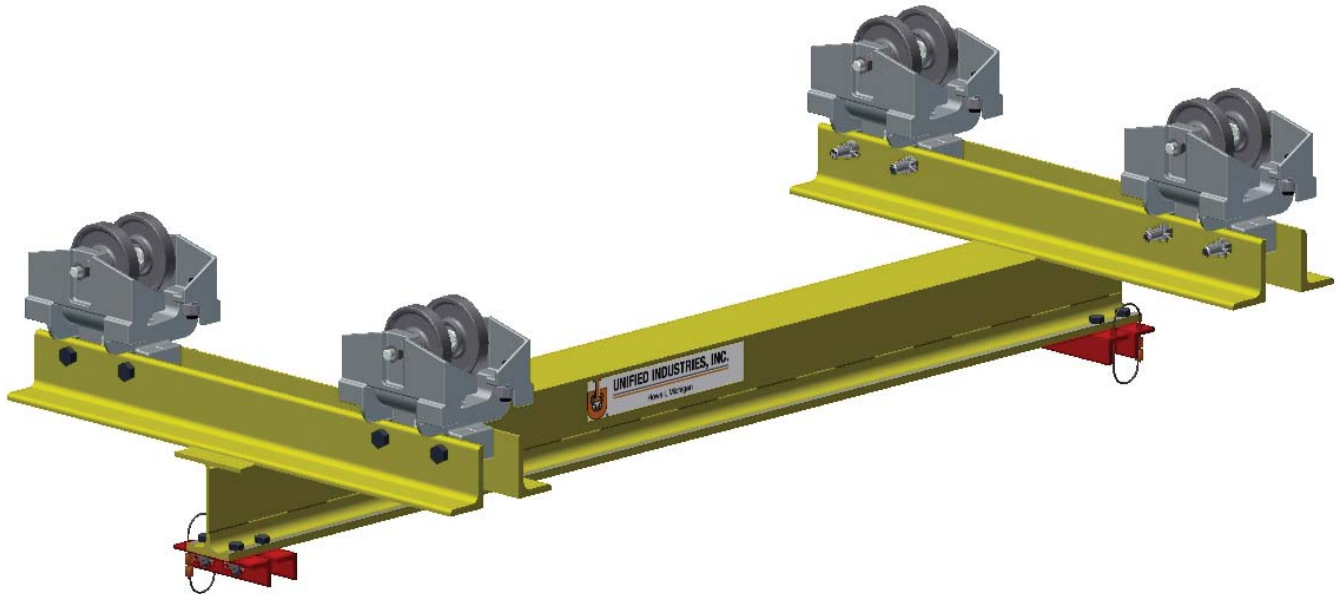
NOTE:
 BRIDGE CRANES ARE ALL JIGGED AND FIXTURED IN
 MACHINING AND ASSEMBLY TO INSURE PROPER ALIGNMENT.
 WT. COMPLETE
 FOR BRIDGE CRANE ASSEMBLY INCLUDING END TRUCK TROLLEYS.
 THIS DOES NOT INCLUDE LOAD SUSPENSION TROLLEY.

OPTIONAL SELF ALIGNING END TRUCK



| BRIDGE SPAN A | OVERALL B | | WHEEL BASE C | | OVERALL D | RATED LOAD | | MBC-500 | | MBC-500 | | |
|---------------|-----------|--------|--------------|-------|-----------|------------|----------|---------|--------------|--------------|--------------|--------------|
| | 2'-0" | 3'-0" | 4'-0" | 5'-0" | | 6'-0" | 7'-0" | 8'-0" | MBC-500 | MBC-500 W/KU | MBC-500 | SAC-500 |
| 2'-0" | 609 mm | 2'-8" | 812 mm | 14" | 558 mm | 22" | 1000 LBS | 448 KGS | 90 LBS | 40.3 KGS | 96 LBS | 43 KGS |
| 3'-0" | 914 mm | 3'-8" | 1117 mm | 14" | 558 mm | 22" | 1000 LBS | 448 KGS | 96 LBS | 43 KGS | 102 LBS | 45.7 KGS |
| 4'-0" | 1219 mm | 4'-8" | 1422 mm | 18" | 660 mm | 26" | 1000 LBS | 448 KGS | 108 LBS | 48.4 KGS | 114 LBS | 51.1 KGS |
| 5'-0" | 1524 mm | 5'-8" | 1727 mm | 18" | 660 mm | 26" | 1000 LBS | 448 KGS | 121 LBS | 54.2 KGS | 127 LBS | 56.9 KGS |
| 6'-0" | 1828 mm | 6'-8" | 2032 mm | 24" | 812 mm | 32" | 1000 LBS | 448 KGS | 134 LBS | 60.0 KGS | 139 LBS | 62.3 KGS |
| 7'-0" | 2133 mm | 7'-8" | 2336 mm | 30" | 965 mm | 38" | 1000 LBS | 448 KGS | 146 LBS | 65.4 KGS | 152 LBS | 68.1 KGS |
| 8'-0" | 2438 mm | 8'-8" | 2641 mm | 30" | 965 mm | 38" | 1000 LBS | 448 KGS | 159 LBS | 71.2 KGS | 165 LBS | 73.9 KGS |
| 9'-0" | 2743 mm | 9'-8" | 2946 mm | 34" | 1066 mm | 42" | 750 LBS | 336 KGS | 172 LBS | 77.1 KGS | 178 LBS | 79.7 KGS |
| 10'-0" | 3048 mm | 10'-8" | 3251 mm | 34" | 1066 mm | 42" | 500 LBS | 224 KGS | 185 LBS | 82.9 KGS | 190 LBS | 85.1 KGS |
| | | | | | | | | | WT. COMPLETE | WT. COMPLETE | WT. COMPLETE | WT. COMPLETE |

The above table is based on 1/550 deflection ratio.



Application

Unified medium load bridge cranes are designed for the suspension of portable spot-welding guns, power tools, balancers, hoists, fixtures etc., and other medium loads not exceeding 3000 lbs. (1360kg)

Specifications

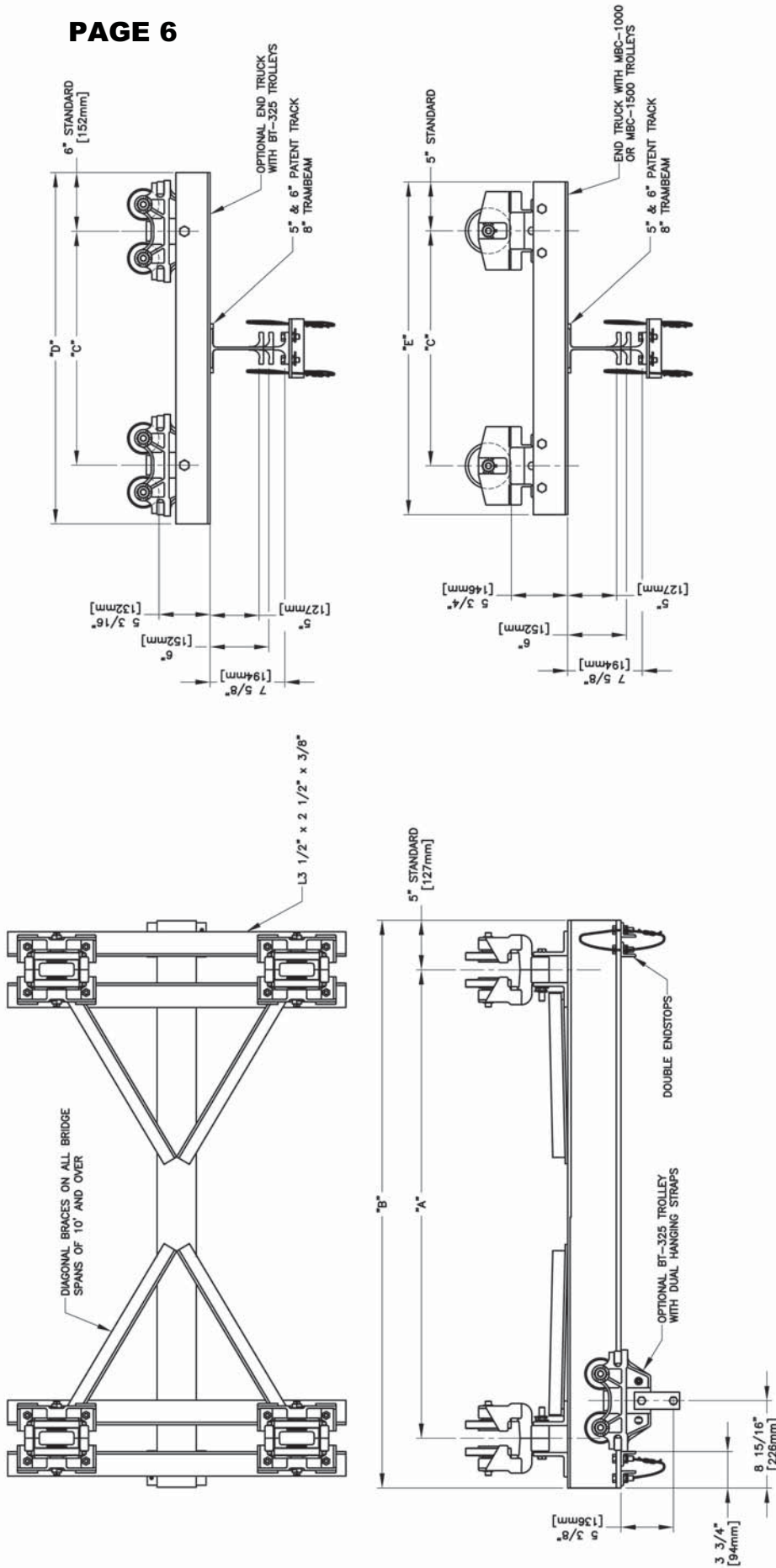
Unified medium load bridge cranes consist of two end truck assemblies, mounted with either BT-325 or MBC-1000 trolleys, supporting a bridge beam. The bridge beam is a compound section with a hardened and ground flat track 3.25" in width. (See trolley section for trolley specifications).

End trucks are mounted with trolleys for operation on either flat rail or S-Beam. End stops bolted to each end of the bridge complete the assembly.

Spans of 10 ft (3m) or more have diagonal bracing from bridge beam to end trucks.

Options

- Bridge beam overhang to your specifications
- Counter thrust wheels or trolleys are available to prevent "kick-up" action when suspended load must be extended beyond bridge span
- Bridge crane spans 10 feet (3m) to 15 feet (4.6m) will be furnished with 6" compound section bridge beam flat flange 3.25" in width
- Bridge crane spans 16 ft. (4.9m) to 20 (6m) feet will be furnished with 8" Trambeam bridge beam flat flange 3.25" in width
- Standard redundant end stops



⊗ WT.
 FOR BRIDGE CRANE ASSEMBLY INCLUDING END TRUCK TROLLEYS THIS DOES NOT INCLUDE LOAD SUSPENSION TROLLEY.
 NOTES:
 (1) BRIDGE BEAMS OVER 12 FT. [3657.6 mm] SPANS WILL BE FURNISHED WITH 6\"/>

| BRIDGE | BT-325 END TRUCK (STANDARD) | | MBC-1000 OR MBC-1500 END TRUCKS (OPTIONAL) | | RATED LOAD | | COMPLETE | |
|-----------------|-----------------------------|------------------|--------------------------------------------|-----------------|-----------------|-----------------|--------------|------------|
| | WHEEL BASE | "D" OVERALL | WHEEL BASE | "E" OVERALL | lbs. | Kg. | lbs. | Kg. |
| 5' BRIDGE BEAM | "A" SPAN | "B" OVERALL | "C" WHEEL BASE | "D" OVERALL | "E" WHEEL BASE | "E" OVERALL | △ RATED LOAD | ⊗ COMPLETE |
| | 3'-0" [914mm] | 3'-10" [1168mm] | 1'-6" [467mm] | 2'-6" [762mm] | 2'-4" [711mm] | 2'-4" [711mm] | 3000 | 1361 |
| | 4'-0" [1219mm] | 4'-10" [1473mm] | 2'-0" [610mm] | 3'-0" [914mm] | 2'-10" [646mm] | 2'-10" [646mm] | 3000 | 1361 |
| | 5'-0" [1524mm] | 5'-10" [1778mm] | 2'-6" [762mm] | 3'-6" [1067mm] | 3'-4" [1016mm] | 3'-4" [1016mm] | 3000 | 1361 |
| | 6'-0" [1829mm] | 6'-10" [2083mm] | 3'-0" [914mm] | 4'-0" [1219mm] | 3'-10" [1088mm] | 3'-10" [1088mm] | 3000 | 1361 |
| | 7'-0" [2134mm] | 7'-10" [2388mm] | 3'-4" [1016mm] | 4'-4" [1321mm] | 4'-2" [1270mm] | 4'-2" [1270mm] | 3000 | 1361 |
| | 8'-0" [2439mm] | 8'-10" [2692mm] | 4'-0" [1219mm] | 5'-0" [1524mm] | 4'-10" [1473mm] | 4'-10" [1473mm] | 2650 | 1202 |
| | 9'-0" [2743mm] | 9'-10" [2997mm] | 4'-6" [1372mm] | 5'-6" [1676mm] | 5'-4" [1626mm] | 5'-4" [1626mm] | 2000 | 907 |
| | 10'-0" [3048mm] | 10'-10" [3302mm] | 5'-0" [1524mm] | 6'-0" [1829mm] | 5'-10" [1778mm] | 5'-10" [1778mm] | 2212 | 1003 |
| | 11'-0" [3353mm] | 11'-10" [3607mm] | 5'-6" [1676mm] | 6'-6" [1981mm] | 6'-4" [1930mm] | 6'-4" [1930mm] | 1937 | 879 |
| 6' BRIDGE BEAM | 12'-0" [3658mm] | 12'-10" [3912mm] | 6'-0" [1829mm] | 7'-0" [2134mm] | 6'-10" [2083mm] | 6'-10" [2083mm] | 1705 | 773 |
| | 13'-0" [3962mm] | 13'-10" [4216mm] | 6'-6" [1981mm] | 7'-6" [2337mm] | 6'-6" [1981mm] | 6'-6" [1981mm] | 1508 | 684 |
| | 14'-0" [4267mm] | 14'-10" [4521mm] | 7'-0" [2134mm] | 8'-0" [2439mm] | 7'-0" [2134mm] | 7'-0" [2134mm] | 1338 | 607 |
| | 15'-0" [4572mm] | 15'-10" [4826mm] | 7'-6" [2337mm] | 8'-6" [2641mm] | 7'-6" [2337mm] | 7'-6" [2337mm] | | |
| 7' BRIDGE BEAM | 16'-0" [4877mm] | 16'-10" [5131mm] | 8'-0" [2439mm] | 9'-0" [2743mm] | 8'-0" [2439mm] | 8'-0" [2439mm] | | |
| | 17'-0" [5182mm] | 17'-10" [5436mm] | 8'-6" [2641mm] | 9'-6" [2945mm] | 8'-6" [2641mm] | 8'-6" [2641mm] | | |
| 8' BRIDGE BEAM | 18'-0" [5486mm] | 18'-10" [5791mm] | 9'-0" [2743mm] | 10'-0" [3048mm] | 9'-0" [2743mm] | 9'-0" [2743mm] | | |
| | 19'-0" [5791mm] | 19'-10" [6045mm] | 9'-6" [2945mm] | 10'-6" [3250mm] | 9'-6" [2945mm] | 9'-6" [2945mm] | | |
| 20'-0" [6096mm] | 20'-10" [6350mm] | 10'-0" [3048mm] | 11'-0" [3353mm] | 10'-0" [3048mm] | 10'-0" [3048mm] | | | |

The above table is based on 1/550 deflection ratio.



Application

Unified overhanging bridge cranes are designed for the suspension of portable spotweld guns, power tools, balancers, hoists, fixtures etc. and other loads not exceeding recommended rated loads. See next page for rated loads of various overhangs.

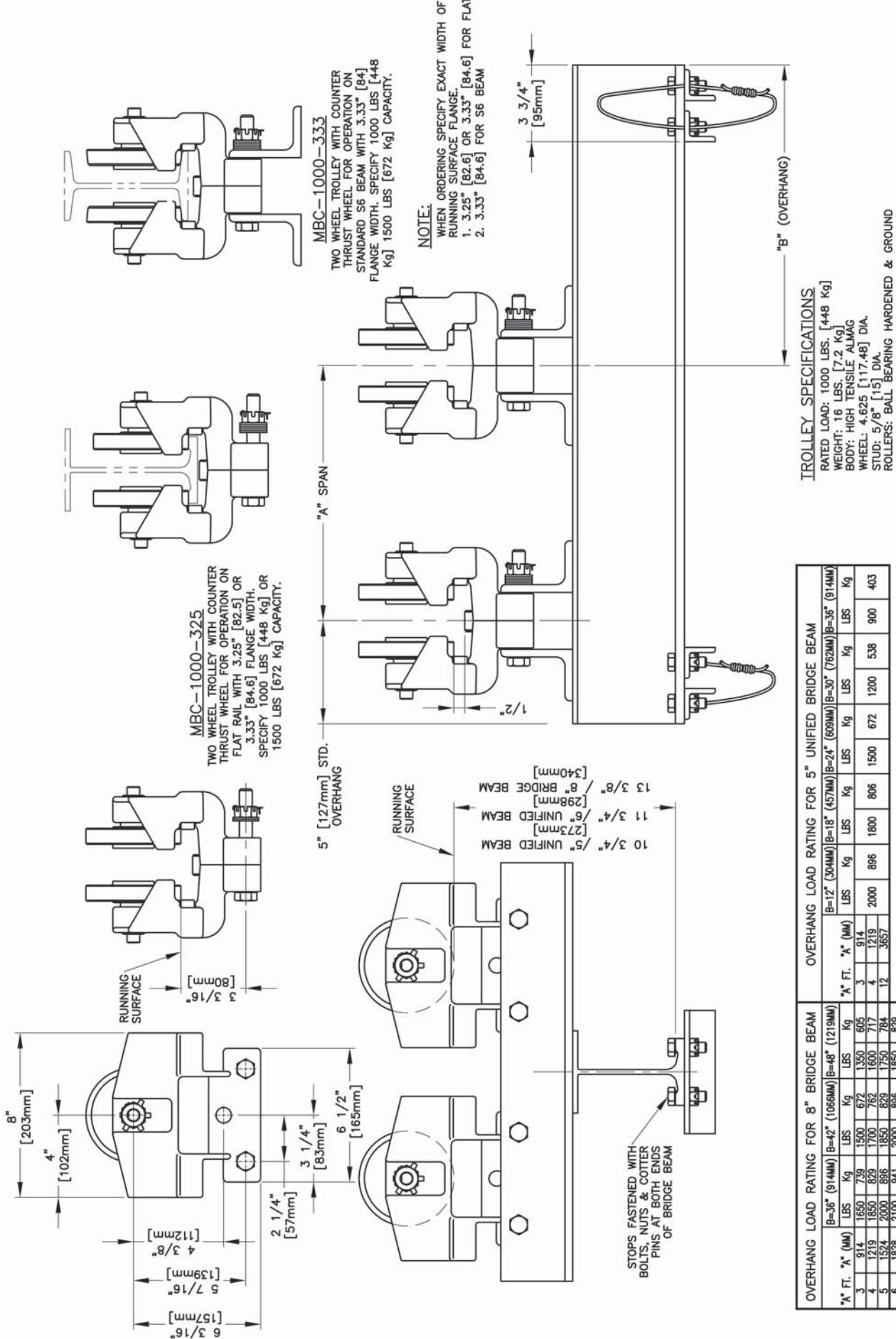
Specifications

Unified overhanging bridge cranes consist of two end truck assemblies, mounted with two MBC-1000 trolleys without kickup wheels and two MBC-1000 trolleys with kickup wheels on opposite end of overhang, supporting a bridge beam. The bridge beam is a compound section with a hardened and ground flat rail 3.25" in width. See next page for various spans and rated loads.

End trucks are mounted with trolleys for operation on either flat rail or S-Beam. End stops bolted to each end of the bridge beam complete the assembly. Spans of 10 feet (3m) or more have diagonal bracing from bridge beam to end trucks.

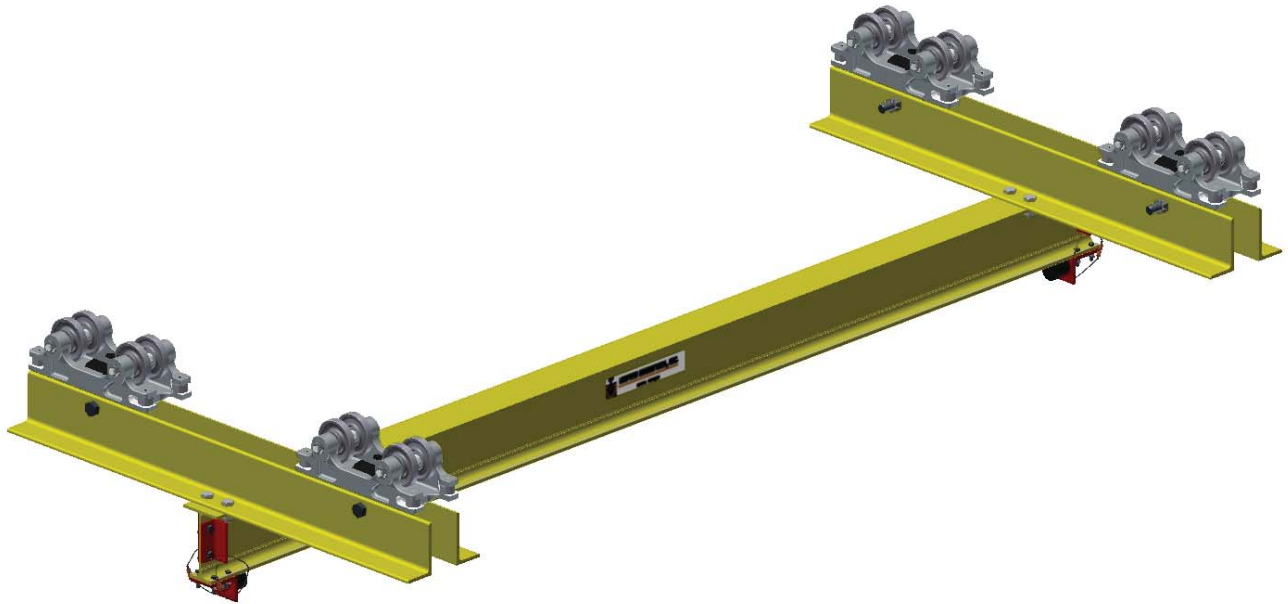
Options

- Bridge beam overhang opposite of regular overhang to suit your requirements
- Standard redundant end stops



| OVERHANG LOAD RATING FOR 8" BRIDGE BEAM | | | | OVERHANG LOAD RATING FOR 5" UNIFIED BRIDGE BEAM | | | |
|-----------------------------------------|----------|----------------|------|-------------------------------------------------|------|---------------|------|
| B=36" (914MM) | | B=42" (1066MM) | | B=18" (457MM) | | B=24" (609MM) | |
| "A" Ft. | "A" (MM) | LBS | Kg | LBS | Kg | LBS | Kg |
| 3 | 914 | 1650 | 739 | 1500 | 672 | 1350 | 605 |
| 4 | 1219 | 1850 | 829 | 1700 | 762 | 1600 | 717 |
| 5 | 1524 | 2000 | 896 | 1850 | 829 | 1750 | 784 |
| 6 | 1828 | 2100 | 941 | 2000 | 896 | 1850 | 829 |
| 12 | 3657 | 2500 | 1120 | 2400 | 1075 | 2300 | 1030 |

The above table is based on 1/550 deflection ratio.



Application

Unified heavy load bridge cranes are designed for the suspension of balancers, hoists, fixtures, heavy portable tools etc. and other heavy loads not exceeding 8000 lbs. (3629kg)

Specifications

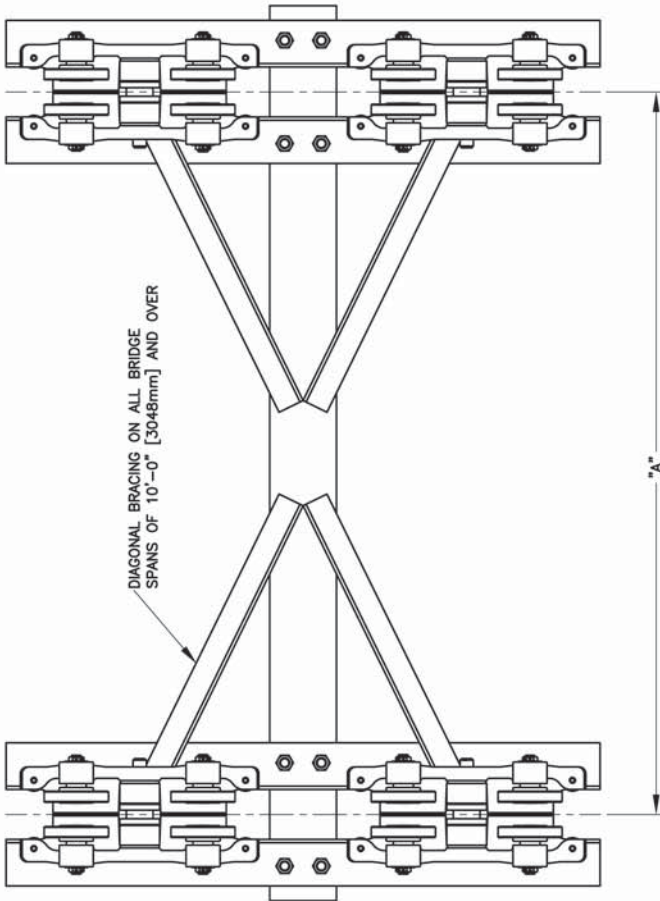
Unified heavy load bridge cranes consist of two end truck assemblies, mounted with BT- 325-10, supporting a bridge beam. The bridge beam is either 8" or 8 1/2" in height with a hardened and ground flat track 3.25" in width. (See trolley section for trolley specifications). End trucks are mounted with trolleys for operation on either flat rail or S-beam. Bolted end stops with neoprene bumpers complete the assembly.

Spans of 10 ft (3m) or more have diagonal bracing from bridge beam to end trucks.

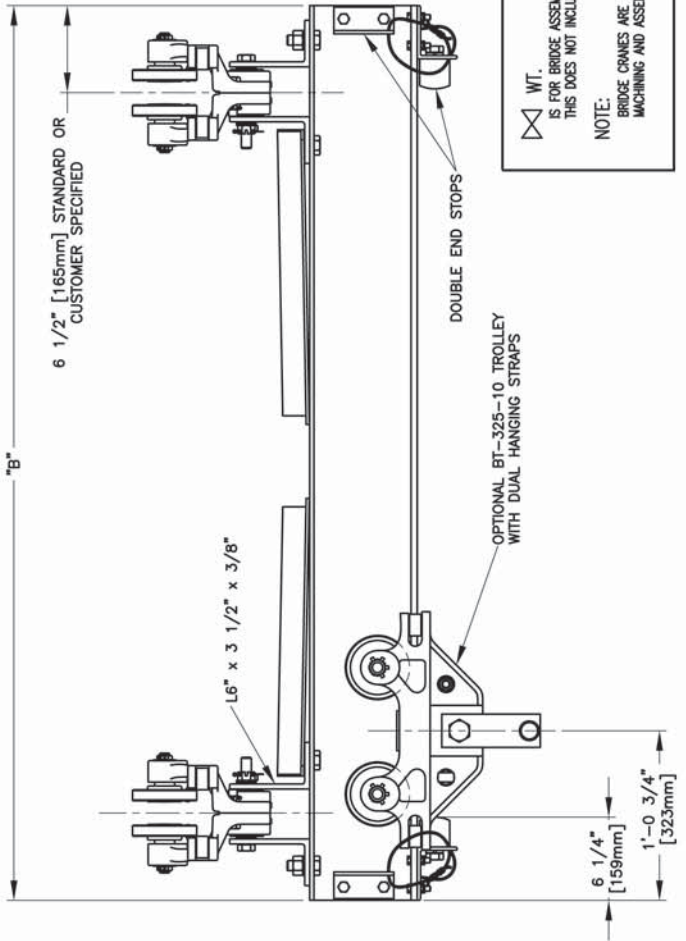
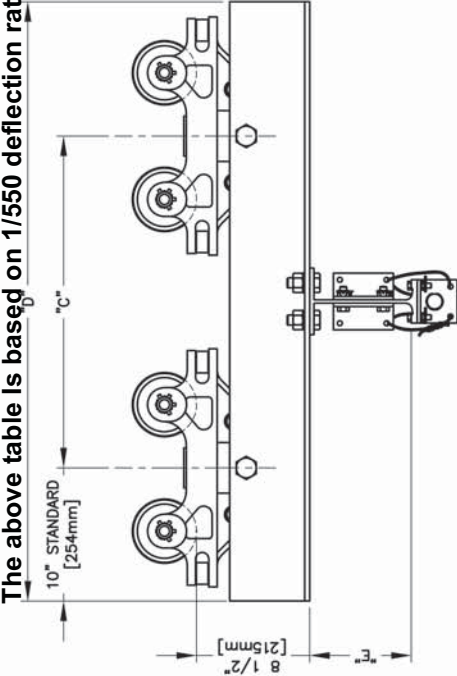
Options

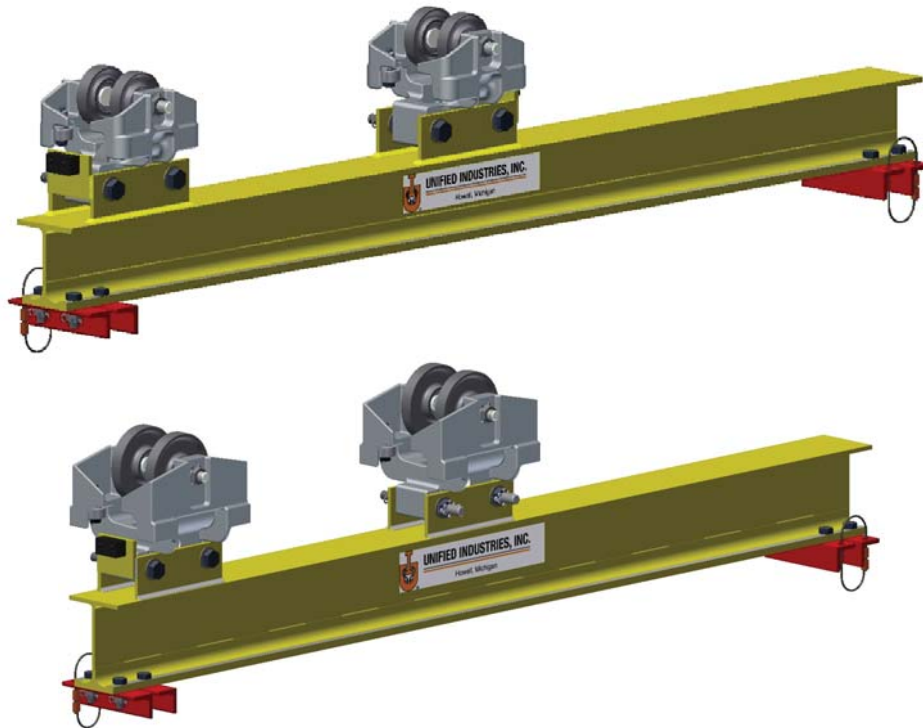
- Bridge beam overhang to your specifications
- Counter thrust wheels can be furnished on request when suspended load must be extended beyond bridge span
- 10" bridge beam with hardened and ground flat rail 3.25" in width
- Standard redundant end stops

| HEAVY LOAD BRIDGE CRANE ASSEMBLY | | | | | | | | | |
|----------------------------------|----------------|---------------|----------------|----------|----------|------------|----|-----------------|------|
| BRIDGE | | | END TRUCK | | | RATED LOAD | | WEIGHT COMPLETE | |
| SPAN | | OVERALL | WHEEL BASE | | OVERALL | Lb | kg | Lb | kg |
| "A" (mm) | "B" (mm) | "C" (mm) | "D" (mm) | "E" (mm) | "F" (mm) | | | | |
| 5'-0 (1524.0) | 6'-1 (1854.2) | 2'-0 (609.6) | 3'-8 (1117.6) | | | | | 461 | 209 |
| 6'-0 (1828.8) | 7'-1 (2159.0) | 2'-6 (762.0) | 4'-2 (1270.0) | | | | | 477 | 216 |
| 7'-0 (2133.6) | 8'-1 (2463.8) | 3'-0 (914.4) | 5'-0 (1524.0) | | | | | 516 | 234 |
| 8'-0 (2438.4) | 9'-1 (2768.6) | 3'-4 (1016.0) | 5'-8 (1727.2) | | | | | 532 | 241 |
| 9'-0 (2743.2) | 10'-1 (3073.4) | 4'-0 (1219.2) | 6'-2 (1879.6) | | | | | 572 | 259 |
| 10'-0 (3048.0) | 11'-1 (3378.2) | 4'-6 (1371.6) | 6'-8 (2032.0) | | | | | 635 | 288 |
| 11'-0 (3352.8) | 12'-1 (3683.0) | 5'-0 (1524.0) | 7'-2 (2184.4) | | | | | 652 | 296 |
| 12'-0 (3657.6) | 13'-1 (3987.8) | 5'-8 (1727.2) | 7'-8 (2336.8) | | | | | 698 | 317 |
| 13'-0 (3962.4) | 14'-1 (4292.6) | 6'-0 (1828.8) | 8'-2 (2489.2) | | | | | 719 | 326 |
| 14'-0 (4267.2) | 15'-1 (4597.4) | 6'-6 (1981.2) | 8'-8 (2641.6) | | | | | 758 | 344 |
| 15'-0 (4572.0) | 16'-1 (4902.2) | 7'-0 (2133.6) | 9'-2 (2794.0) | | | | | 774 | 351 |
| 14'-0 (4267.2) | 15'-1 (4597.4) | 6'-2 (1879.6) | 8'-2 (2489.2) | | | | | 6000 | 2688 |
| 15'-0 (4572.0) | 16'-1 (4902.2) | 6'-8 (2032.0) | 8'-8 (2641.6) | | | | | 5200 | 2329 |
| 16'-0 (4876.8) | 17'-1 (5207.0) | 7'-2 (2184.4) | 9'-2 (2794.0) | | | | | 4500 | 2016 |
| 17'-0 (5181.6) | 18'-1 (5511.8) | 7'-8 (2336.8) | 9'-8 (2946.4) | | | | | 4000 | 1792 |
| 18'-0 (5486.4) | 19'-1 (5816.6) | 8'-2 (2489.2) | 10'-2 (3048.0) | | | | | 3500 | 1568 |
| 19'-0 (5791.2) | 20'-1 (6121.4) | 8'-8 (2641.6) | 10'-8 (3200.4) | | | | | 3100 | 1388 |
| 20'-0 (6096.0) | 21'-1 (6426.2) | 9'-2 (2794.0) | 11'-2 (3352.8) | | | | | 2800 | 1254 |



The above table is based on 1/550 deflection ratio.





Application

Unified light and medium duty telescoping units are designed for the suspension of portable spotweld guns, power tools balancers, hoists fixtures etc. and other light or medium weight loads not exceeding recommended rated loads. See next page for rated loads of various extensions.

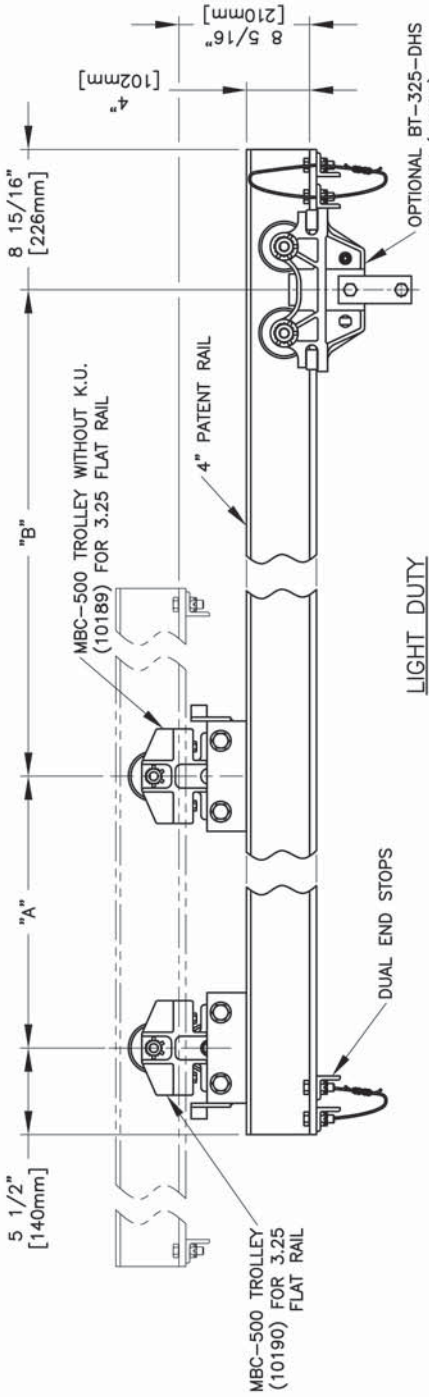
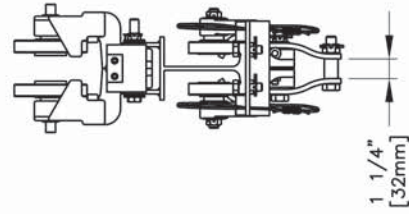
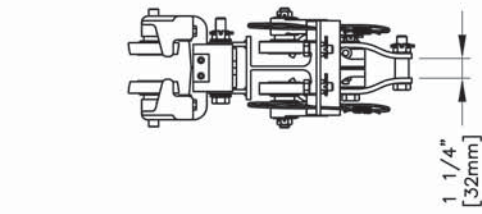
Specifications

Unified light and medium duty telescoping units consist of one two-wheel and one three-wheel trolley or carrier head opposite of overhang, mounted to a transfer beam. The medium duty units have a compound section, with a hardened and ground flat track 3.25" in width. (See trolley section for trolley or carrier head specifications).

Transfer beam is mounted with trolleys or carrier heads for operation on either flat rail or S-Beam. End stops bolted to each end of transfer beam complete the assembly.

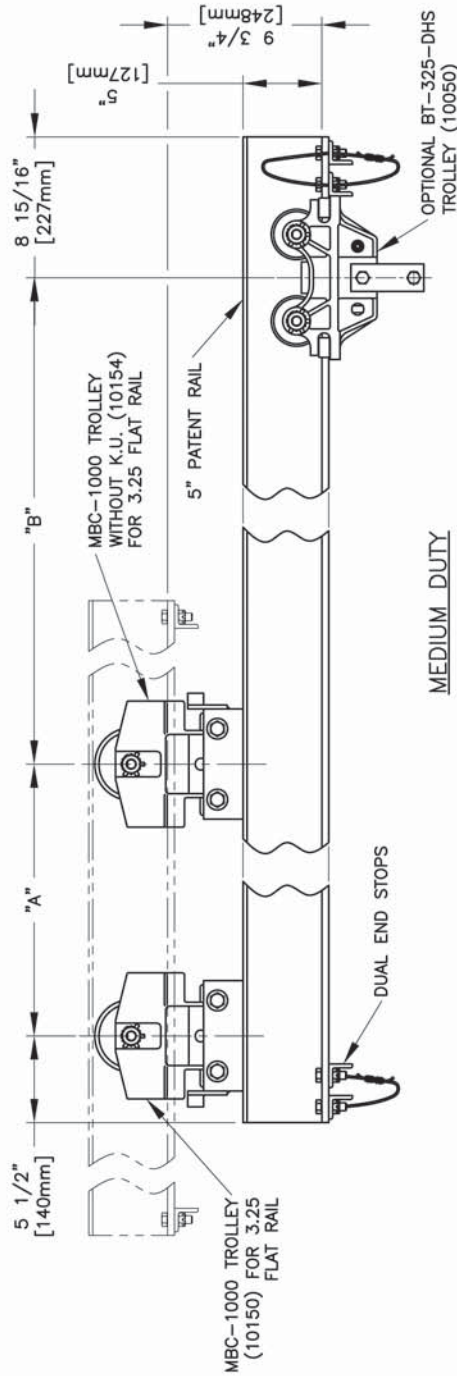
Options

- Transfer beam overhang opposite of extension to your specifications
- Standard redundant end stops



LIGHT DUTY

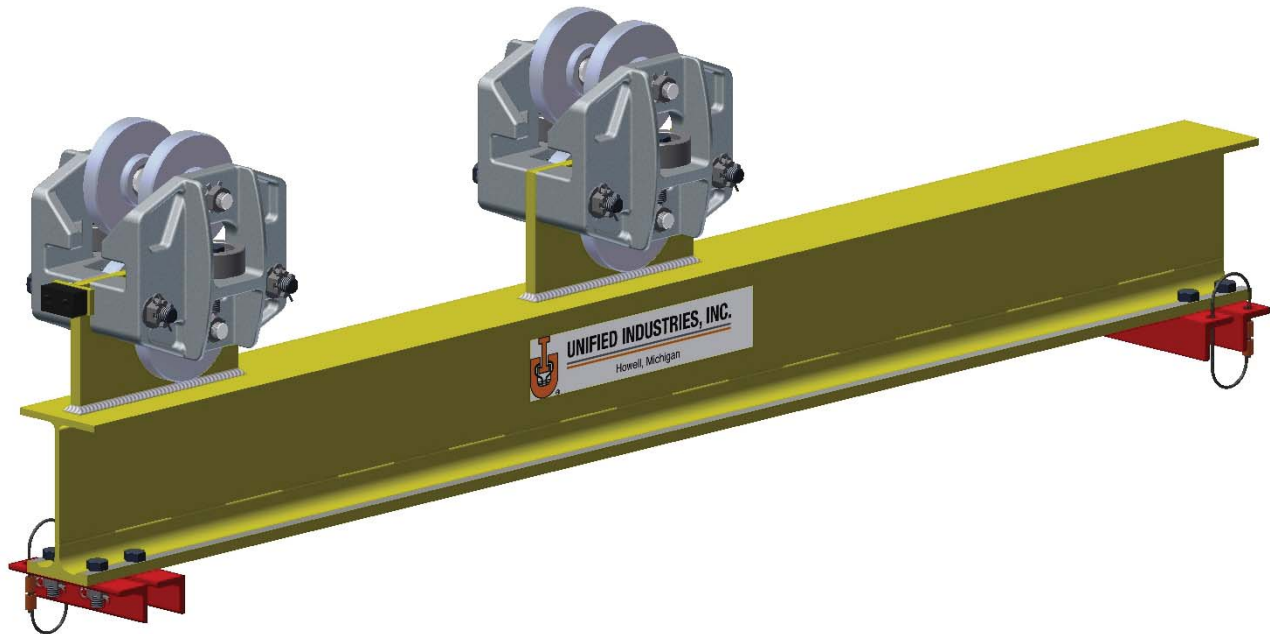
| "A" | | "B" | | | | | | |
|--------------|-----|--------------|--------------|--------------|---------------|-------|-----|------|
| | | 12" [304 mm] | 24" [609 mm] | 36" [914 mm] | 48" [1219 mm] | LBs | Kgs | |
| 18" [457 mm] | 300 | 136.3 | 210 | 95.4 | 165 | 75 | 135 | 61.3 |
| 24" [609 mm] | 330 | 150 | 250 | 113.6 | 200 | 90.9 | 165 | 75 |
| 30" [762 mm] | 355 | 161.3 | 275 | 125 | 225 | 102.2 | 190 | 86.3 |



MEDIUM DUTY

| "A" | | "B" | | | | | | |
|--------------|-----|--------------|--------------|--------------|---------------|-------|-----|-------|
| | | 12" [304 mm] | 24" [609 mm] | 36" [914 mm] | 48" [1219 mm] | LBs | Kgs | |
| 18" [457 mm] | 600 | 272.7 | 425 | 193.1 | 330 | 150 | 270 | 122.7 |
| 24" [609 mm] | 665 | 302.2 | 500 | 227.2 | 400 | 181.8 | 330 | 150 |
| 30" [762 mm] | 710 | 321.7 | 555 | 252.2 | 450 | 204.5 | 380 | 172.7 |

The above tables are based on 1/550 deflection ratio.



Application

Unified standard duty telescoping self-equalizing tandem trolley units are designed for the suspension of portable spotweld guns, power tools, balancers, hoists, fixtures, etc., and other loads not exceeding recommended rated loads. See next page for rated loads of various extensions.

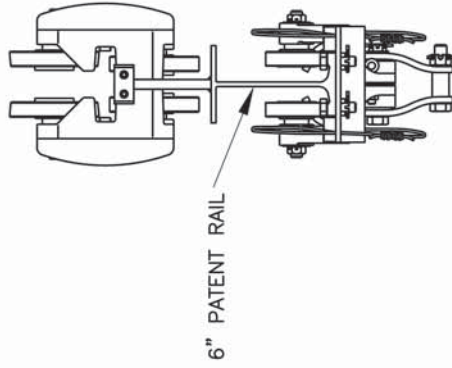
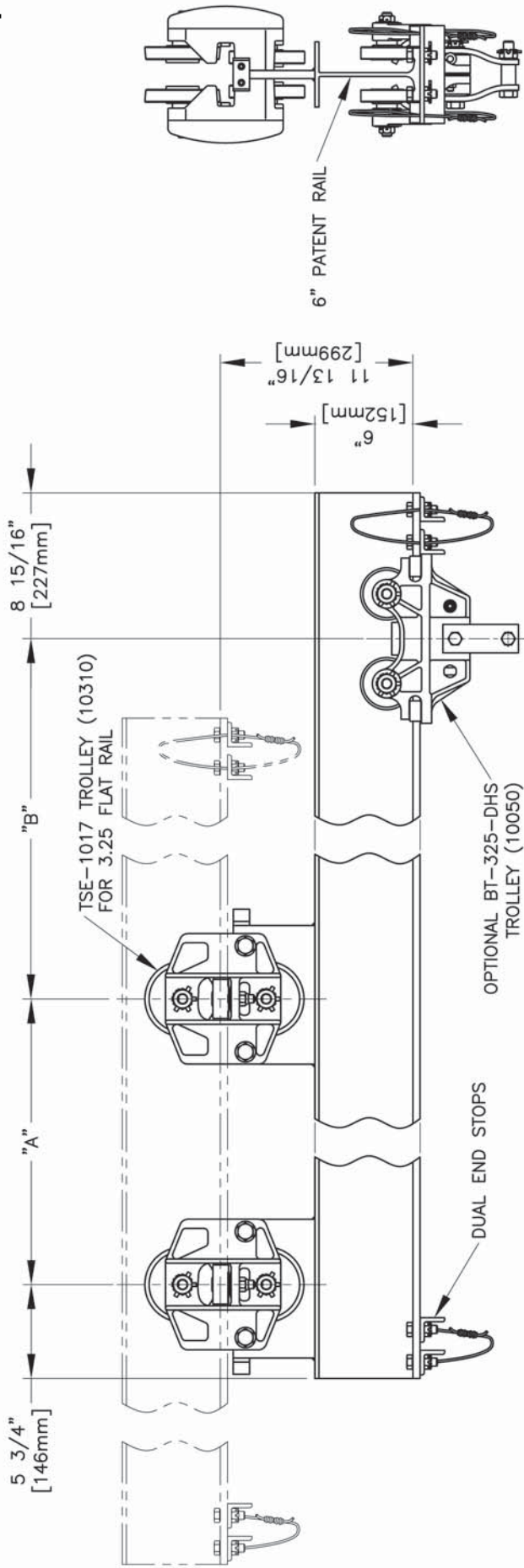
Specifications

Unified standard duty telescoping units consist of two tandem trolleys welded to a transfer beam. The transfer beam is a compound section 6" in height with a hardened and ground flat rail 3.25" in width. (See trolley section for trolley specifications).

Transfer beam is mounted with tandem trolleys for operation on either flat rail or S-Beam. End stops bolted to each end of transfer beam complete the assembly.

Options

- Transfer beam overhang opposite of extension to your specifications ("C" dimension).
- Standard redundant end stops

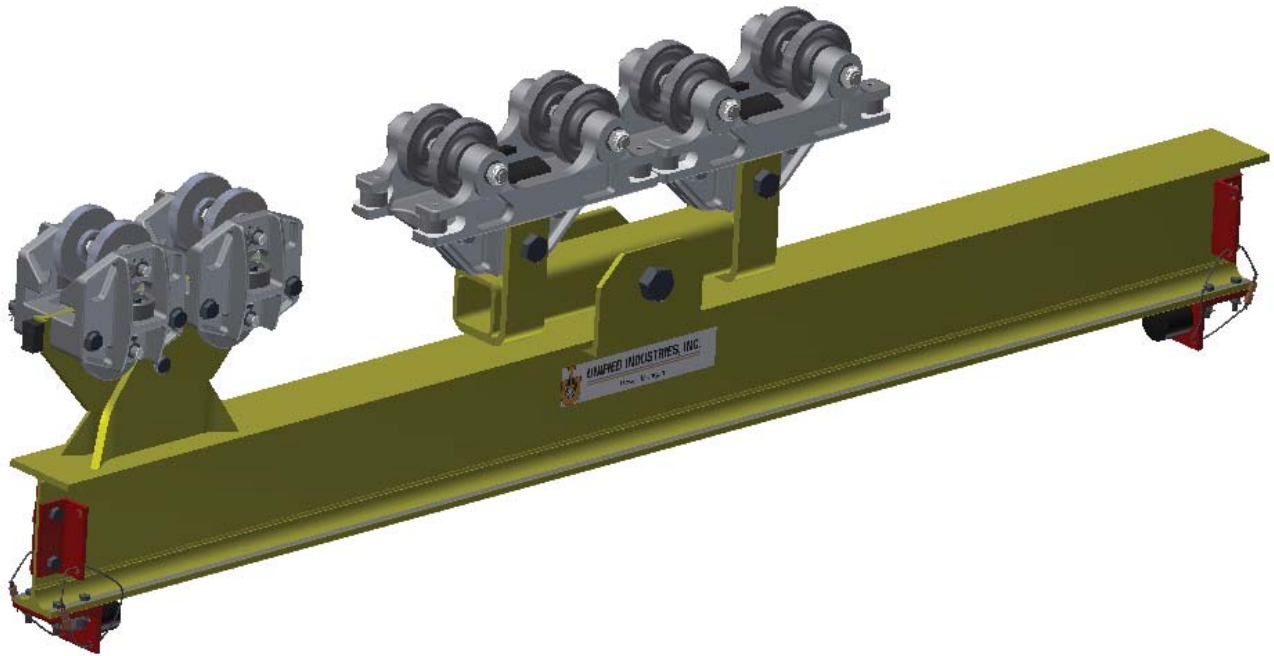


TROLLEY SPECIFICATIONS
 RATED LOAD: 2,500 LBS. (1120 Kgs)
 WEIGHT: 31 LBS. (14 Kgs)
 BODY: HIGH TENSILE ALMAG
 WHEEL: 4 5/8" [117] DIA.
 STUD: 5/8" [15] DIA.

NOTE:
 WHEN ORDERING SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE.
 1. 3.25" [82.6] FOR STD. FLAT RAIL AND 3.33" [84.6] FLAT RAIL.
 2. 3.33" [84.6] FOR S6 BEAM

| "A" | | DIMENSION "B" EXTENDED LOAD RATINGS IN POUNDS & KILOGRAMS | | | | | | | | | | | |
|-----|------|-----------------------------------------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|---------|-----------|---------|-----------|
| IN. | MM | 12" | 304 mm | 24" | 609 mm | 36" | 914 mm | 48" | 1219 mm | 60" | 1524 mm | 72" | 1828 mm |
| 18 | 457 | 1500 LBS | 681.8 KGS | 1070 LBS | 486.3 KGS | 830 LBS | 377.2 KGS | 680 LBS | 309 KGS | 575 LBS | 261.3 KGS | 500 LBS | 227.2 KGS |
| 24 | 609 | 1665 LBS | 756.8 KGS | 1250 LBS | 568.1 KGS | 1000 LBS | 454.5 KGS | 830 LBS | 377.2 KGS | 710 LBS | 322.7 KGS | 585 LBS | 265.9 KGS |
| 30 | 762 | 1785 LBS | 811.3 KGS | 1385 LBS | 629.5 KGS | 1135 LBS | 515.9 KGS | 960 LBS | 436.3 KGS | 750 LBS | 340.9 KGS | 550 LBS | 250 KGS |
| 36 | 914 | 1875 LBS | 852.2 KGS | 1500 LBS | 681.8 KGS | 1250 LBS | 568.1 KGS | 1000 LBS | 454.5 KGS | 700 LBS | 318.1 KGS | 520 LBS | 236.3 KGS |
| 42 | 1066 | 1940 LBS | 881.8 KGS | 1590 LBS | 722.7 KGS | 1345 LBS | 611.3 KGS | 930 LBS | 422.7 KGS | 660 LBS | 300 KGS | 495 LBS | 225 KGS |
| 48 | 1219 | 2000 LBS | 909 KGS | 1665 LBS | 756.8 KGS | 1330 LBS | 604.5 KGS | 875 LBS | 397.7 KGS | 625 LBS | 284 KGS | 470 LBS | 213.6 KGS |

The above table is based on 1/550 deflection ratio.



Application

Unified heavy duty telescoping self-equalizing tandem trolley units are designed for the suspension of portable spotweld guns, power tools, balancers, hoists, fixtures, etc., and other loads not exceeding recommended rated loads. See next page for rated loads of various extensions.

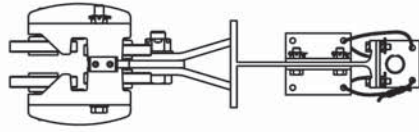
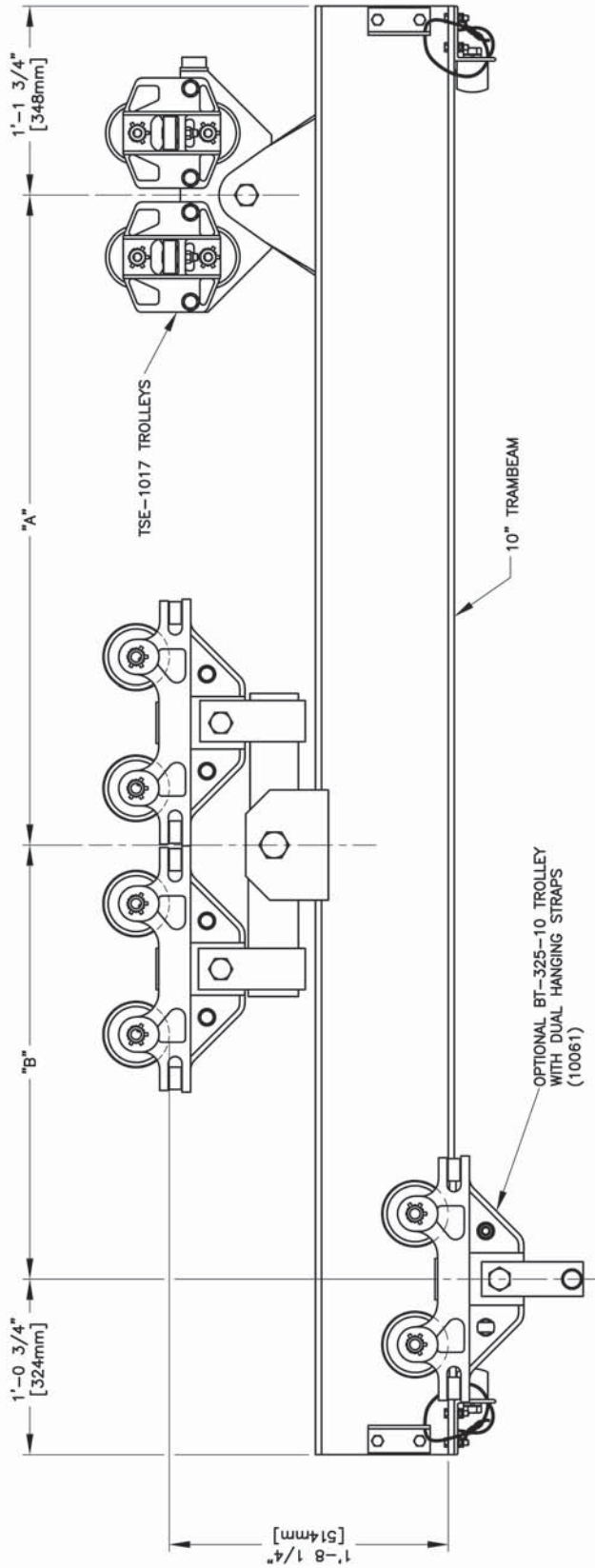
Specifications

Unified heavy duty telescoping units consist of two tandem trolleys welded to a transfer beam.

Transfer beam is mounted with tandem trolleys for operation on either flat rail or S-Beam. End stops bolted to each end of transfer beam complete the assembly.

Options

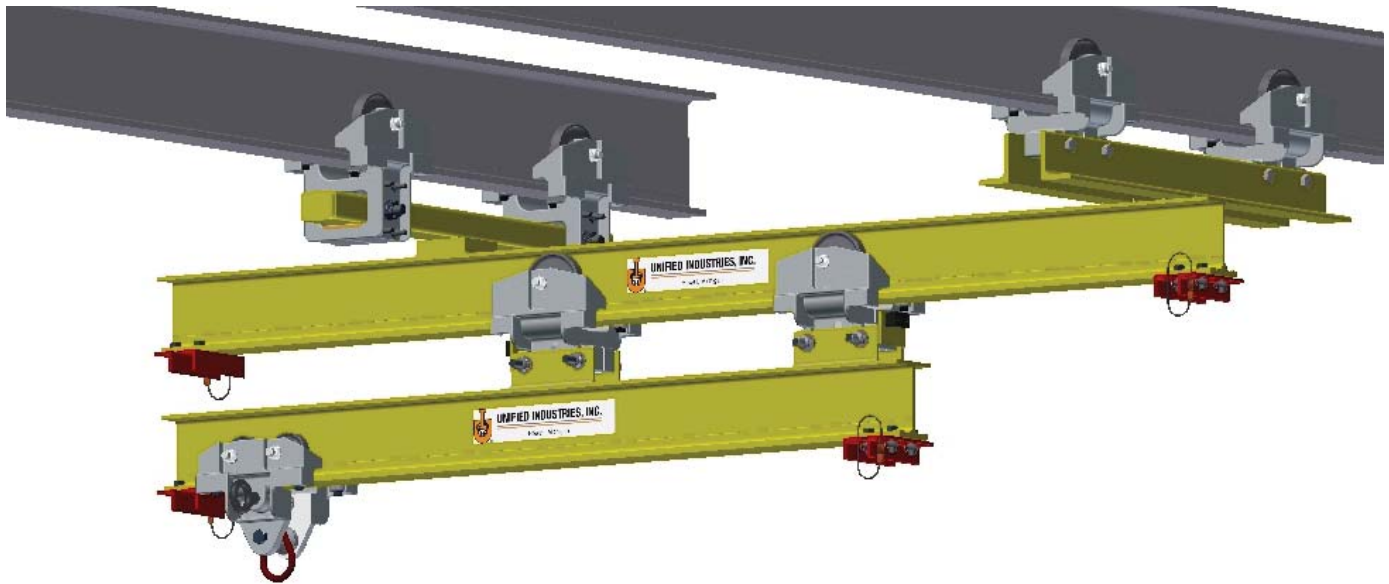
- Transfer beam overhang opposite of extension to your specifications ("C" dimension).



| "A" | | "B" LOAD IN POUNDS AND KILOGRAMS | | | | | |
|-----------|---------|----------------------------------|-----------|-----------|-----------|---------|-----------|
| BEAM SIZE | "A" | 36" | 48" | 60" | 72" | 1828 mm | |
| 10" | 36" | 4000 LBS | 3425 LBS | 3000 LBS | 2225 LBS | 1828 mm | 1011.3 Kg |
| | 48" | 4570 LBS | 3750 LBS | 2660 LBS | 2000 LBS | 1524 mm | 909 Kg |
| | 60" | 5000 LBS | 4440 LBS | 3650 LBS | 2760 LBS | 1219 mm | 1254.5 Kg |
| | 72" | 5330 LBS | 4550 LBS | 3330 LBS | 2540 LBS | 914 mm | 1154.5 Kg |
| | 1828 mm | 2422.7 Kg | 2086.1 Kg | 1513.6 Kg | 1154.5 Kg | | |

FOR ADDITIONAL LOADS AND DIMENSIONS, CONSULT FACTORY.

The above table is based on 1/550 deflection ratio.



Unified bridge crane and telescope unit combination for extending loads beyond normal span of runway.

Unified self-aligning carrier SAC-1020-1 used for runways that are not parallel.

Unified anti kick-up carrier MBC-1000-3 for opposing counter thrust of extended load.



UNIFIED INDUSTRIES, INC.

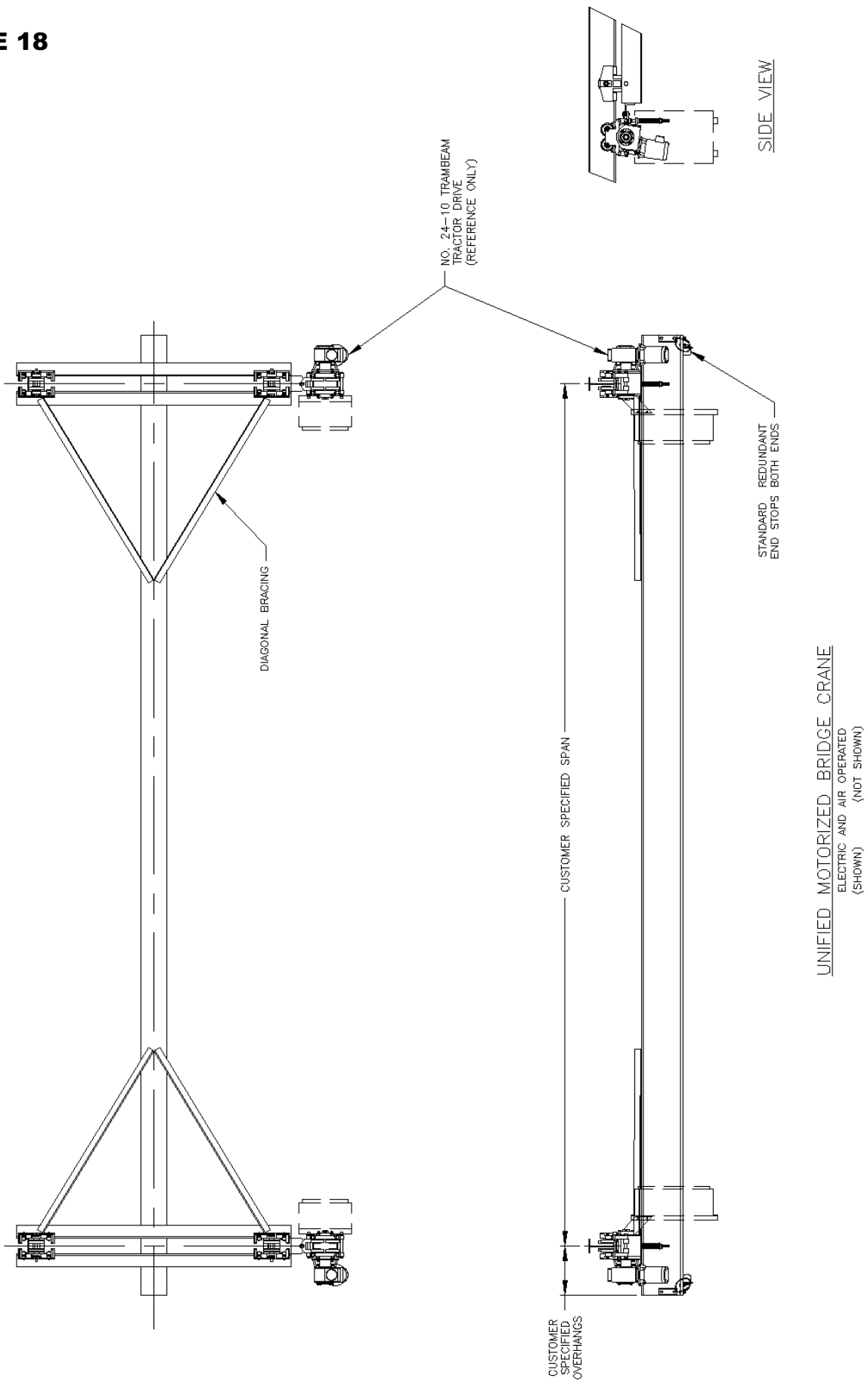
A Columbus McKinnon Company

Phone: 517-546-3220

Email: sales@unified-ind.com

MOTORIZED BRIDGE CRANES (AIR AND ELECTRIC)





CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 125% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

***All dimensions are reference only
and need to be verified with factory.**

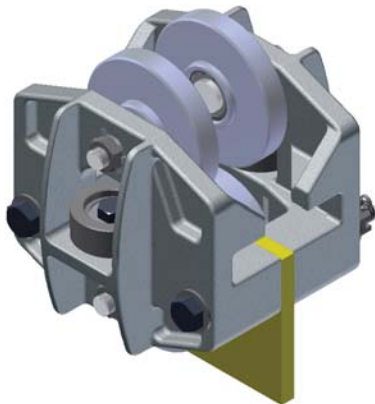




UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

PATENT RAIL & STANDARD SHAPES TROLLEYS





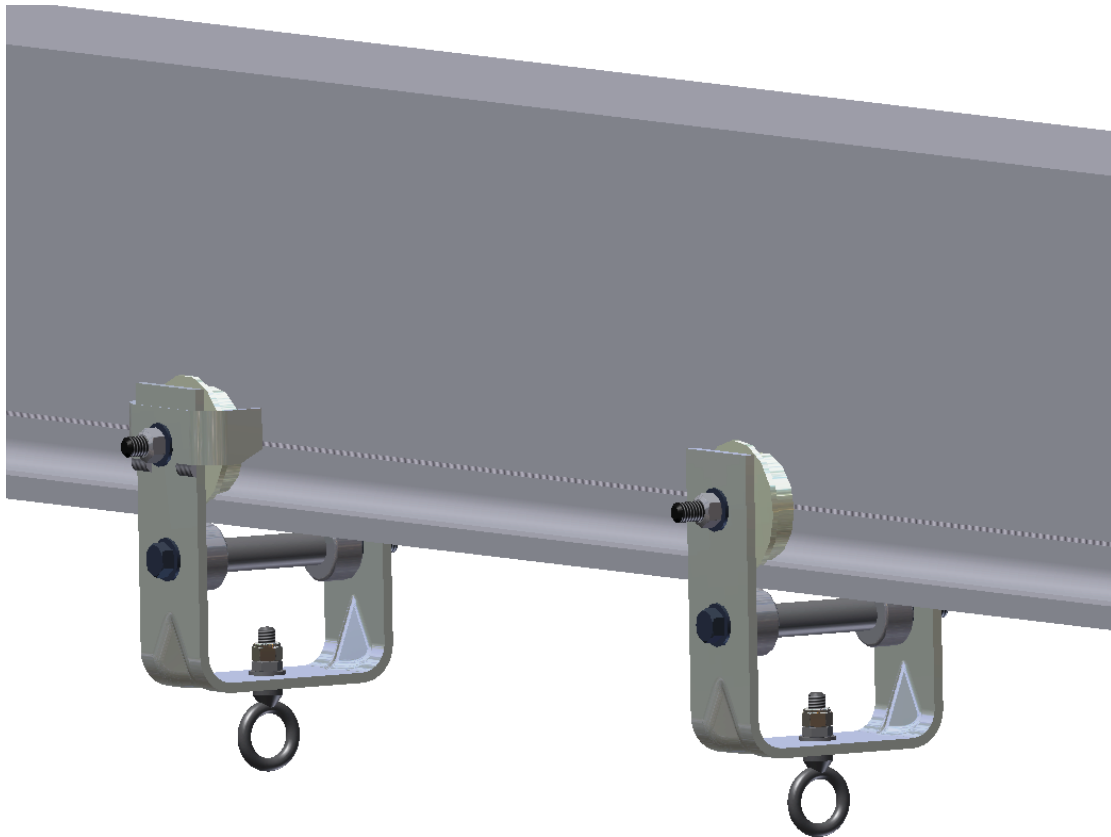
| | PAGE |
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| Two Wheel Festoon Trolleys 150 lb (68kg) Rated Load..... | 3-4 |
| Four Wheel Trolleys 250 lb (113kg) Rated Load..... | 5-6 |
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| Two Wheel Articulating Trolley 500 lb (227kg) Rated Load | 11-12 |
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| Articulating Two Wheel Trolley 1000 lb (454kg) or 1500 lb (680kg) Rated Load | 23-24 |
| Self Aligning Two Wheel Trolley 1000 lb (454kg) or 1500 lb (680kg) Rated Load | 25-26 |
| Four Wheel Safety Trolleys 2000 lb (908kg) Rated Load..... | 27-28 |
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***All dimensions are reference only
and need to be verified with factory.**



| MODEL NUMBER | RATED LOAD POUNDS | kg | SAFETY CLEVIS | FOR OPERATION ON: | | | | ADJUST-ABLE WIDTH | SEE PAGE |
|--------------------------------------|--------------------|------------------|---------------|-------------------|-------------|------------|------------------|-------------------|----------|
| | | | | 3.25" FLAT RAIL | 4" "S" BEAM | 6" S" BEAM | 3.33" FLAT TRACK | | |
| FT-325 FT-266 FT-333 | 150 | 68 | NO | X | X | X | X | NO | 3-4 |
| MT-250-B | 250 | 113 | LUG | X | X | X | X | YES | 5-6 |
| MBC-500 MBC-500-4 | 500 | 228 | LUG | X | X | X | X | NO | 7-8 |
| MBC-500 W/KU MBC-500-4 W/KU | 500 | 228 | LUG | X | X | X | X | NO | 9-10 |
| AC-500-2 AC-500-2-4 | 500 | 228 | LUG | X | X | X | X | NO | 11-12 |
| SAC-500-2 SAC-500-2-4 | 500 | 228 | LUG | X | X | X | X | NO | 13-14 |
| UT-500 | 500 | 228 | LUG | X | X | X | X | YES | 15-16 |
| UT-1000 | 1000 | 453 | LUG | X | X | X | X | YES | 17-18 |
| MBC-1000 or MBC-1500 | 1000 or 1500 | 453 or 680 | LUG | X | | X | X | NO | 19-20 |
| MBC-1000 W/KU or MBC-1500 W/KU | 1000 or 1500 | 453 or 680 | LUG | X | | X | X | NO | 21-22 |
| AC-1027-1 | 1000 or 1500 | 453 or 680 | LUG | X | | X | X | NO | 23-24 |
| SAC-1020-1 | 1000 or 1500 | 453 or 680 | LUG | X | | X | X | NO | 25-26 |
| BT-325 BT-266 BT-333 | 2000 | 907 | STEEL | X | X | | X | NO | 27-28 |
| TSE-1017-1 | 2500 | 1134 | LUG | X | | X | X | NO | 29-30 |
| BT-325-10 BT-333-10 | 4000 | 1814 | STEEL | X | | X | X | NO | 31-32 |

* Consult factory for metric beams



Part Number

- **10080** FT-233 for operation on 2.33" flange 3" S-Beam
- **10100** FT-266 for operation on 2.66" flange 4" S-Beam
- **10120** FT-325 for operation on 3.25/3.33" flange flat rail
- **10135** FT-333 for operation on 3.33" flange 6" S-Beam

Trolleys with Bumpers

- **10090** FT-233-B for operation on 2.33" flange 3" S-Beam
- **10110** FT-266-B for operation on 2.66" flange 4" S-Beam
- **10130** FT-325-B for operation on 3.25/3.33" flange flat rail
- **10137** FT-333-B for operation on 3.33" flange 6" S-Beam
- Consult factory for metric beams

Application

- For festooning of cable or hose along runway
- For suspension of small portable tools
- For suspension of light duty balancers

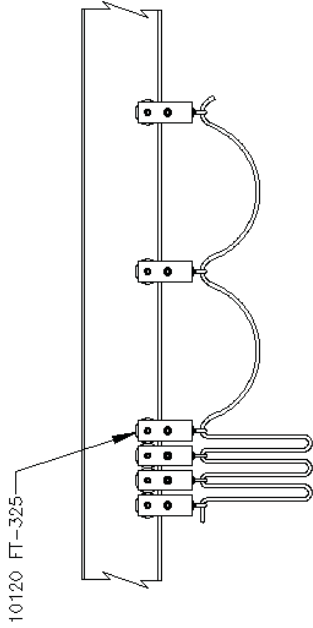
Features

- 2 inch diameter ball bearing flanged load wheels
- Flat or tapered tread for flat rail or S-Beam
- Flat ball bearing "kick-up" wheels
- Bumpers are optional
- Fits up to 7/16" max. bottom flange thickness

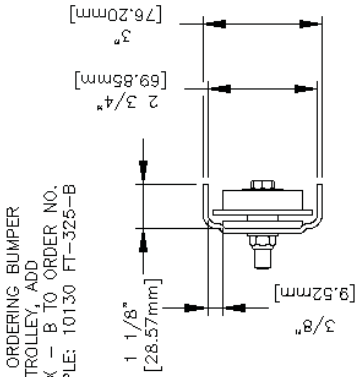
Options

- Can be furnished with various festooning saddles to accommodate either round or flat cables, consult factory.

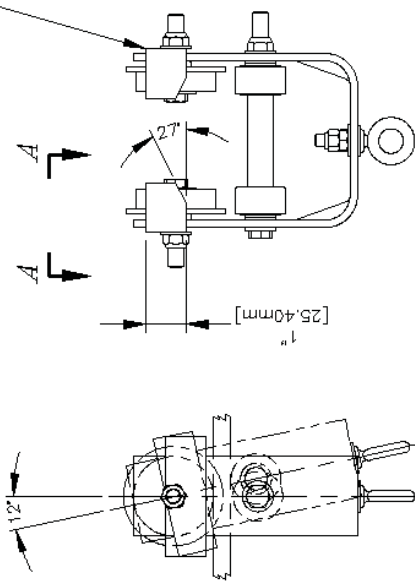
TROLLEY APPLICATION



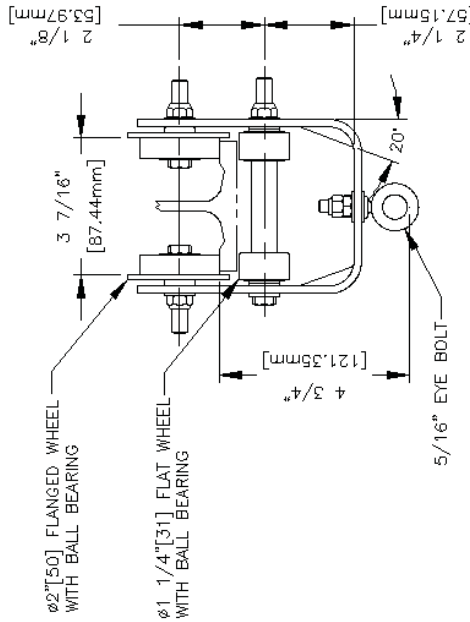
WHEN ORDERING BUMPER WITH TROLLEY, ADD SUFFIX - B TO ORDER NO. EXAMPLE: 10130 FT-325-B



VIEW A-A



• ALL DIMENSIONS ARE REFERENCE ONLY

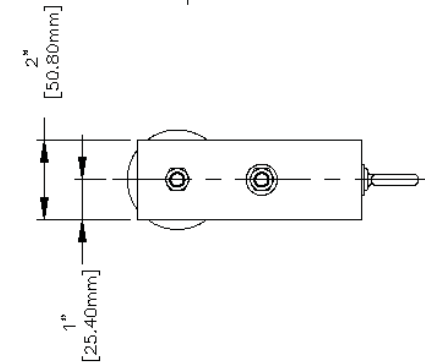


10135 FT-333 TROLLEY

FOR USE ON S6 BEAM.
TROLLEY LOAD RATING: 150LBS (67.2Kgs)
10137 FT-333-B

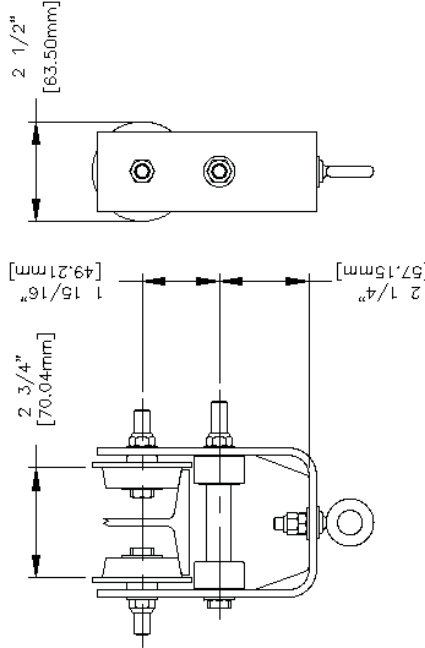
10120 FT-325 TROLLEY

FOR USE ON FLAT TRACK WITH
A 3.25"[82.6] OR 3.33"[84.6] FLANGE WIDTH.
TROLLEY LOAD RATING: 150LBS (67.2Kgs)
10130 FT-325-B



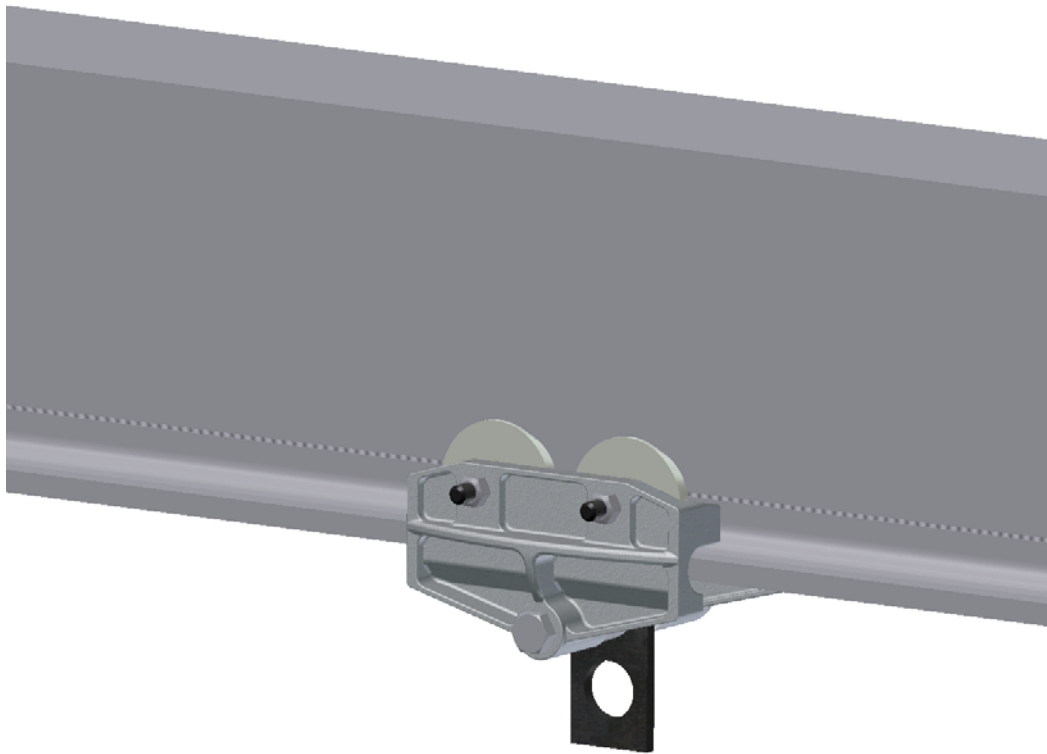
10100 FT-266 TROLLEY

FOR USE ON S4 BEAM WITH
A 2.66"[67.6] FLANGE WIDTH.
TROLLEY LOAD RATING: 150LBS (67.2Kgs)
10110 FT-266-B



10080 FT-233 TROLLEY

FOR USE ON S3 BEAM WITH
A 2.33"[59.2] FLANGE WIDTH.
TROLLEY LOAD RATING: 150LBS (67.2 Kgs)
10090 FT-233-B



Part Number

- **10210** MT-250-B for operation on 3.25"/3.33" flange flat rail
- **10211** MT-250-B for operation on 3.33" flange 6" S-Beam
- **10212** MT-250-B for operation on 2.66" flange 4" S-Beam
- **10215** MT-250-B for operation on 2.66" flange 4" S-Beam with brass wheels

Application

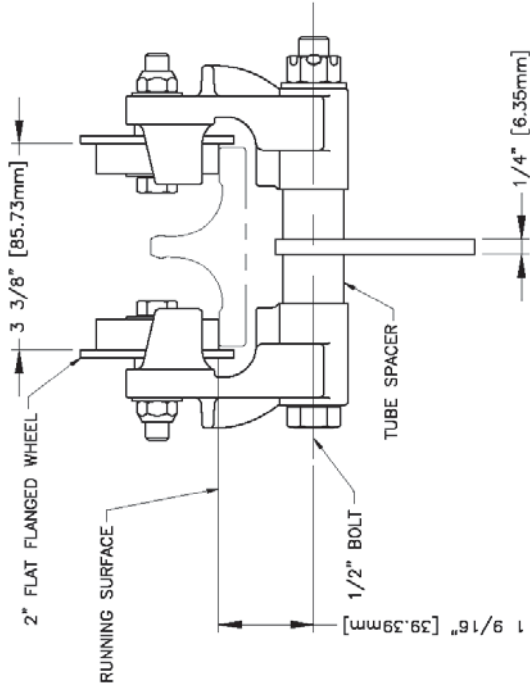
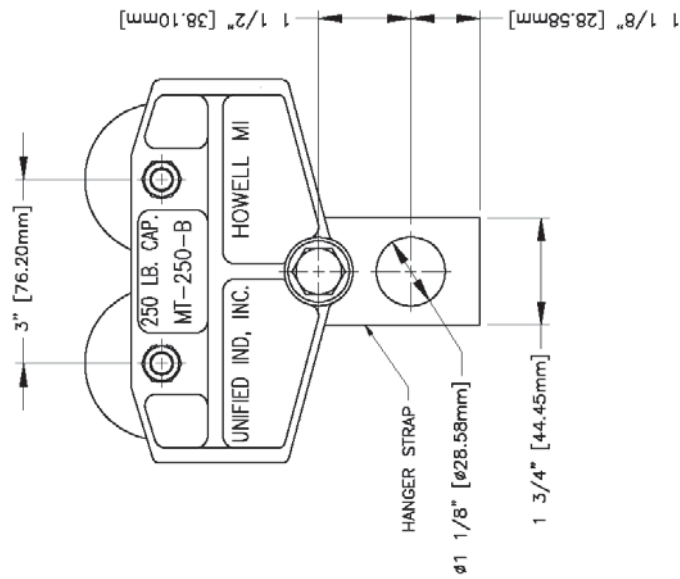
- For suspension of light duty balancer or hoist
- For suspension of portable tools or fixtures

Features

- Adjustable width to fit flat rail and 4" to 6" S-Beam
- High tensile almag alloy frames
- Built in safety lugs also prevent "kick-up"
- Ball bearing flanged load wheels for flat rail or S-Beam
- Minimum track radius is 36" (914mm)
- Fits up to 9/16" max. bottom flange thickness

Options

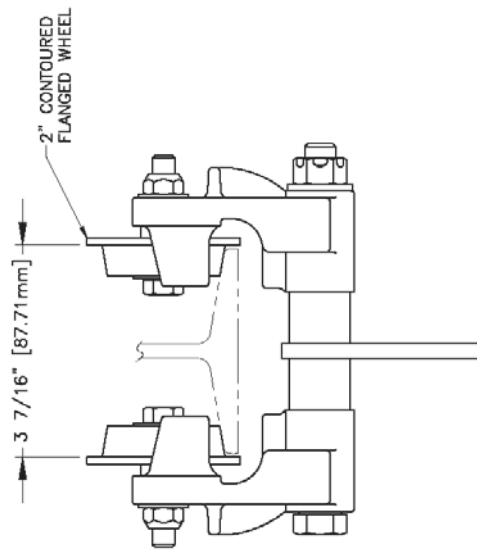
- Can be furnished with load link



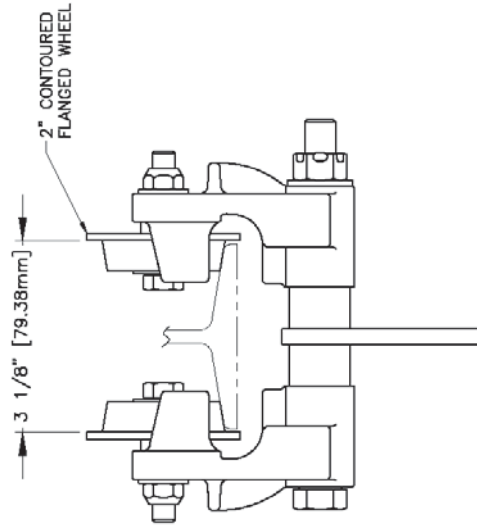
TROLLEY SPECIFICATIONS
 RATED LOAD: 250 lbs. (112 kgs)
 WEIGHT: 5.5 lbs. (2.5 kgs)
 BODY: HIGH TENSILE ALMAG
 WHEELS: 2" DIA. FLAT OR CONTOURED FLANGED
 STUDS: 3/8" DIA.
 BEARING TYPE: BALL THRUST BEARING, HARDENED
 AND GROUND.

NOTE:
 WHEN ORDERING SPECIFY WIDTH OF
 RUNNING SURFACE FLANGE
 3.25" FOR STD. OR SPECIAL FLAT RAIL
 3.33" FOR S6 BEAM
 3.00" FOR S5 BEAM
 2.66" FOR S4 BEAM

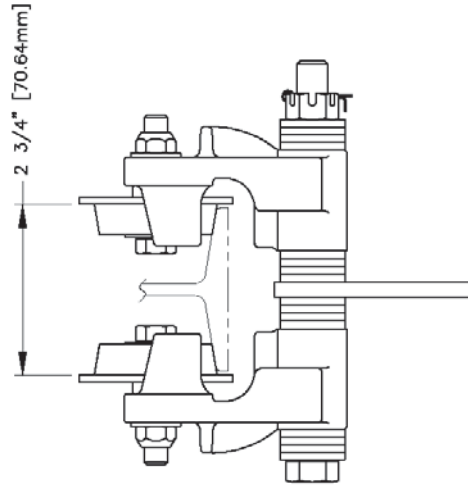
10210 MT-250-B-325
 FOR OPERATION ON FLAT RAIL WITH A
 3.25" [82.6] OR 3.33" [84.6] FLANGE WIDTH



10211 MT-250-B-333
 FOR OPERATION ON S6 BEAM
 WITH A 3.33" [84.6] FLANGE WIDTH



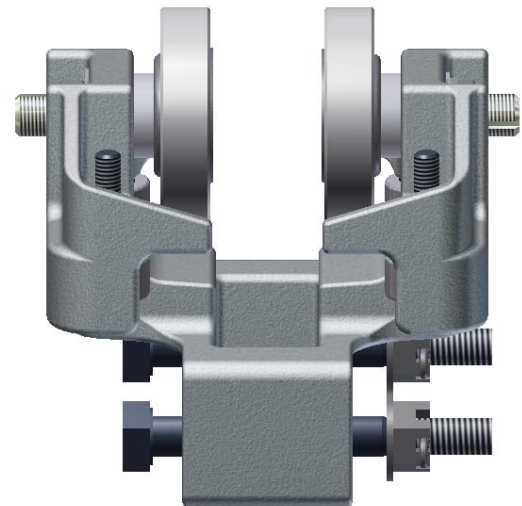
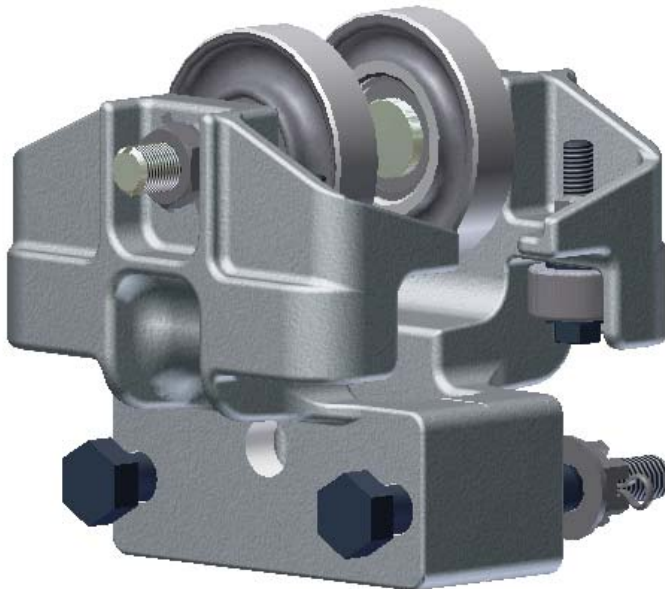
10209 MT-250-B-300
 FOR OPERATION ON S5 BEAM
 WITH A 3.00" [76.2] FLANGE WIDTH



10212 MT-250-B-266
 FOR OPERATION ON S4 BEAM
 WITH 2.66" [67.6] FLANGE WIDTH

10215 MT-250-B-266
 WITH BRASS WHEELS FOR
 OPERATION ON S4 BEAM WITH
 2.66" [67.6] FLANGE WIDTH

• ALL DIMENSIONS ARE REFERENCE ONLY



Part Number

- **10189** MBC-500-3-325 without kickup wheels for operation on 3.25" or 3.33" - flange flat rail
- **10192** MBC-500-3-333 without kickup wheels for operation on 3.33" flange 6" S-Beam
- **10201** MBC-500-3-4-266 without kickup wheels for operation on 2.66" flange 4" S-Beam

Application

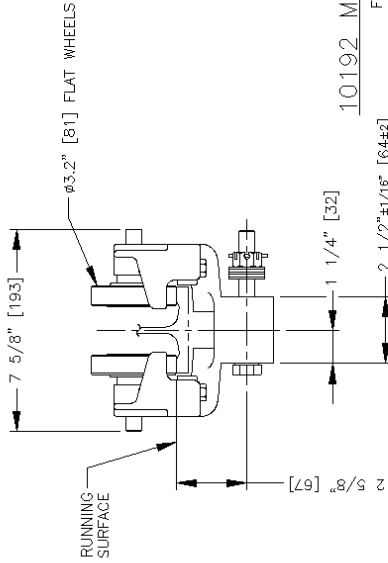
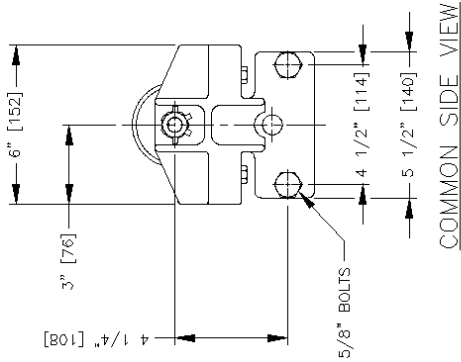
- Used in pairs for light load bridge crane end trucks
- Use in tandem for rated load to 1000 lbs. (454kg)

Features

- High tensile almag alloy frames
- Integral built in safety lugs
- Shielded side thrust roller protection
- Hardened ball bearing side thrust rollers
- Forged wheels 3.2" (81mm) diameter flat or contoured induction hardened with permanently sealed precision ball bearings

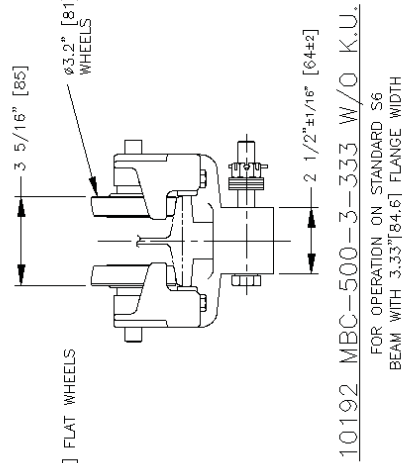
Options

- Standard conveyor wheels 3.2" (81mm) diameter flat or contoured with lubricated ball bearings
- Can be furnished as assembled end truck



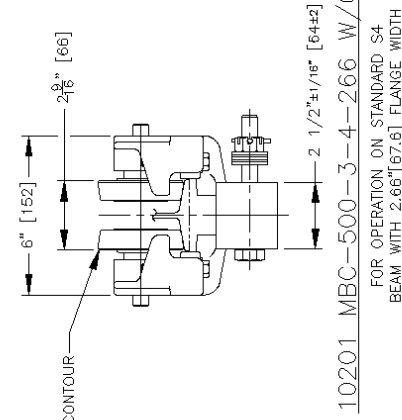
10189 MBC-500-3-325 W/O K.U.

FOR OPERATION ON FLAT RAIL WITH 3.25" [82.6] FLANGE WIDTH OR SPECIAL FLAT TRACK WITH 3.33" [84.6] FLANGE WIDTH



10192 MBC-500-3-333 W/O K.U.

FOR OPERATION ON STANDARD S6 BEAM WITH 3.33" [84.6] FLANGE WIDTH



10201 MBC-500-3-4-266 W/O K.U.

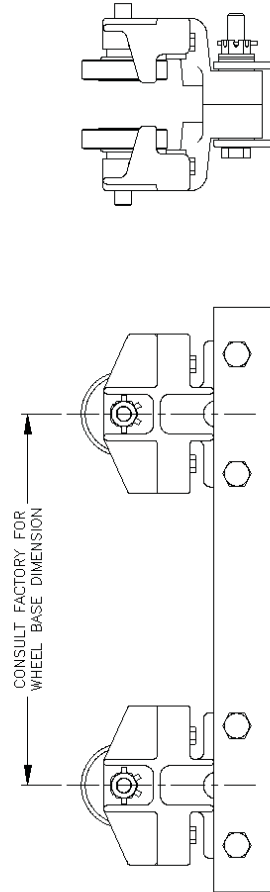
FOR OPERATION ON STANDARD S4 BEAM WITH 2.66" [67.6] FLANGE WIDTH

TROLLEY SPECIFICATIONS

- RATED LOAD: 500 LBS. (224 Kgs)
- WEIGHT: 12 LBS. (5.4 Kgs)
- BODY: HIGH TENSILE ALUMAG WHEEL: 3.2" [81] DIA.
- STUD: 5/8" [15] DIA.

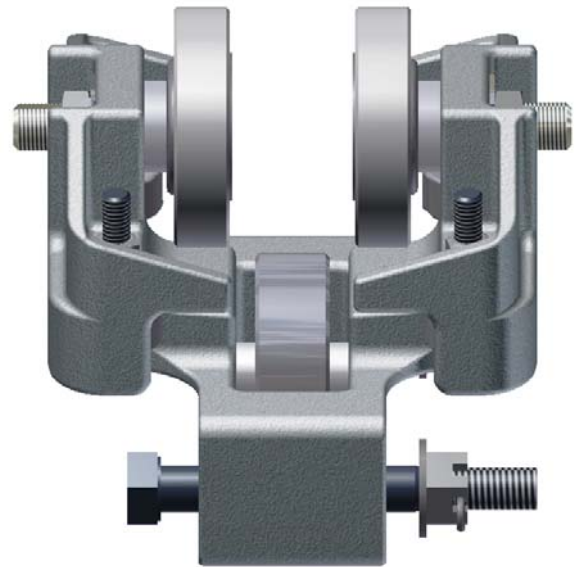
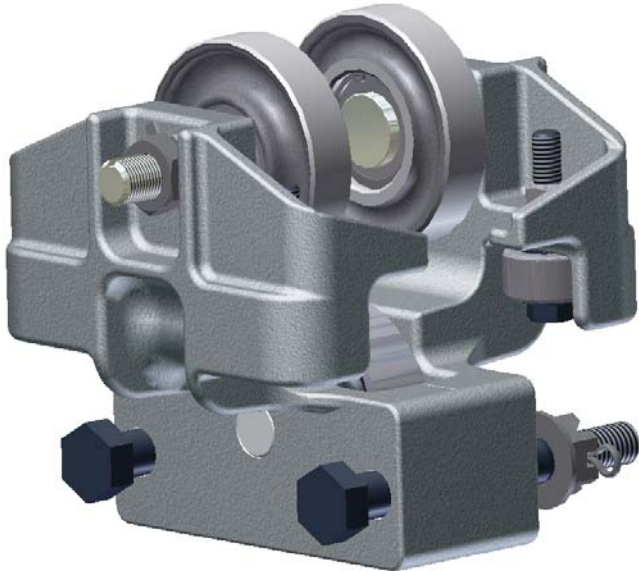
NOTE:

- WHEN ORDERING SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE.
- 1. 3.25" [82.6] FOR STD. OR SPECIAL FLAT RAIL
- 2. 2.66" [67.6] FOR S4 BEAM
- 3. 3.33" [84.6] FOR S6 BEAM



BRIDGE CRANE END TRUCK

• ALL DIMENSIONS ARE REFERENCE ONLY



Part Number

- **10190** MBC-500-3-325 with kickup wheels for operation on 3.25" or 3.33" - flange flat rail
- **10191** MBC-500-3-333 with kickup wheels for operation on 3.33" flange 6" S-Beam
- **10200** MBC-500-3-4-266 with kickup wheels for operation on 2.66" flange 4" S-Beam

Application

- Used in pairs on one or both ends of bridge crane to eliminate cantilever "kick-up" where overhang of bridge beam and load exceeds counter weight of bridge
- Use on light load telescope units for extending load beyond bridge crane span
- Can be adapted to tools and fixtures where cantilever rolling action is required. Third wheel engages underside of rail to eliminate possible drag

Features

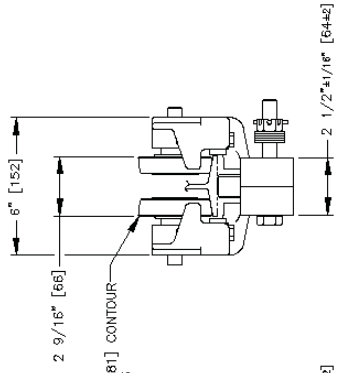
- High tensile almag alloy frames
- Integral built in safety lugs
- Shielded side thrust roller protection
- Hardened ball bearing side thrust rollers
- Forged wheels 3.2" (81mm) diameter flat or contoured induction hardened with permanently sealed precision ball bearings

Options

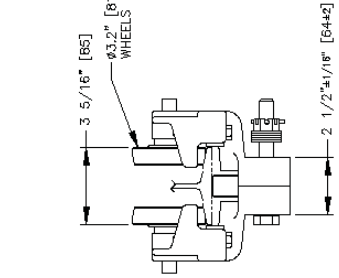
- Standard conveyor wheels 3.2" (81mm) diameter flat or contoured with lubricated ball bearings
- Can be furnished as assembled end truck

TROLLEY SPECIFICATIONS
 RATED LOAD: 500 LBS. (224 Kgs)
 WEIGHT: 12 LBS. (5.4 Kgs)
 BODY: HIGH TENSILE ALUMINUM
 WHEELS: 3.25" [82.6] DIA.
 RAILS: 5/8" [158.8] DIA.
 ROLLERS: BALL BEARING HARDENED & GROUND

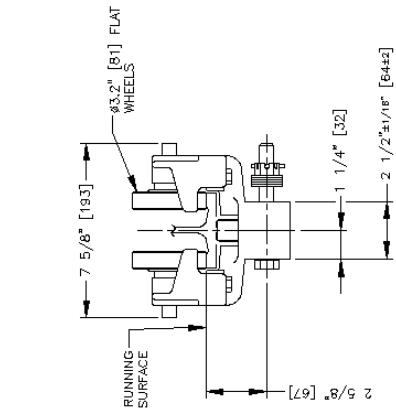
NOTE:
 WHEN ORDERING SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE.
 1. 3.25" [82.6] FOR STD. OR SPECIAL FLAT RAIL
 2. 2.65" [67.6] FOR S4 BEAM
 3. 3.33" [84.6] FOR S6 BEAM



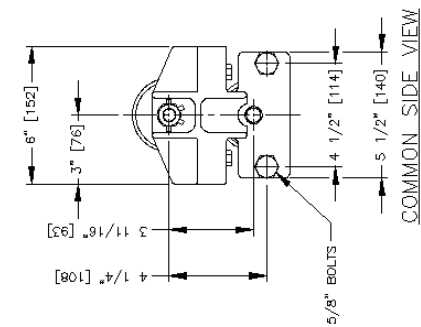
10200 MBC-500-3-4-266
 FOR OPERATION ON STANDARD S4 BEAM WITH 2.66"[67.6] FLANGE WIDTH



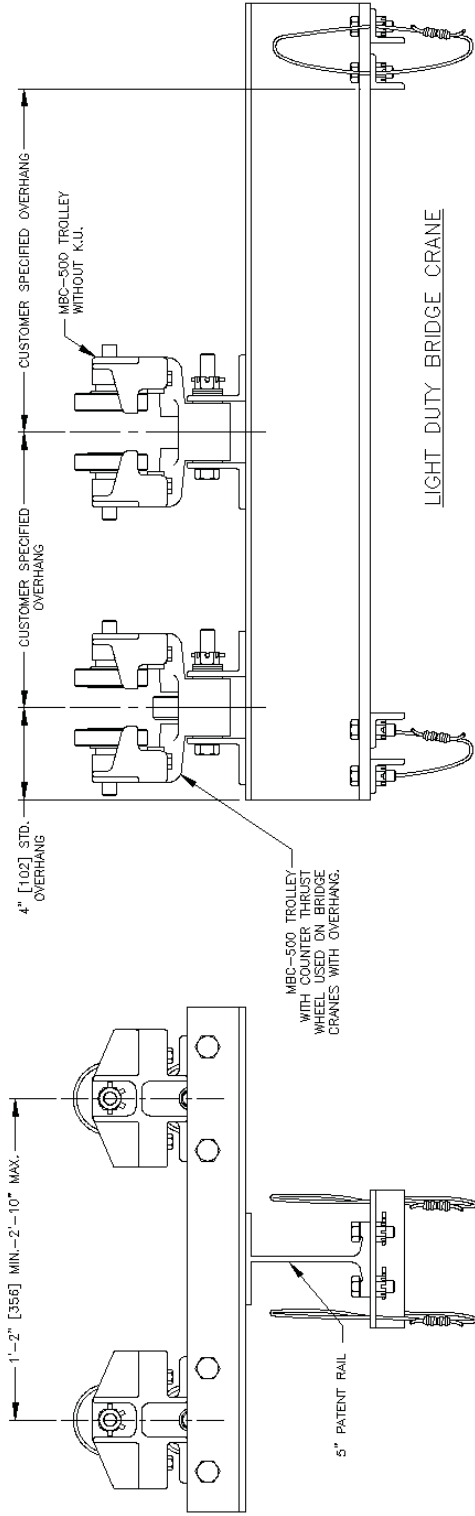
10191 MBC-500-3-333
 FOR OPERATION ON STANDARD S6 BEAM WITH 3.33"[84.6] FLANGE WIDTH



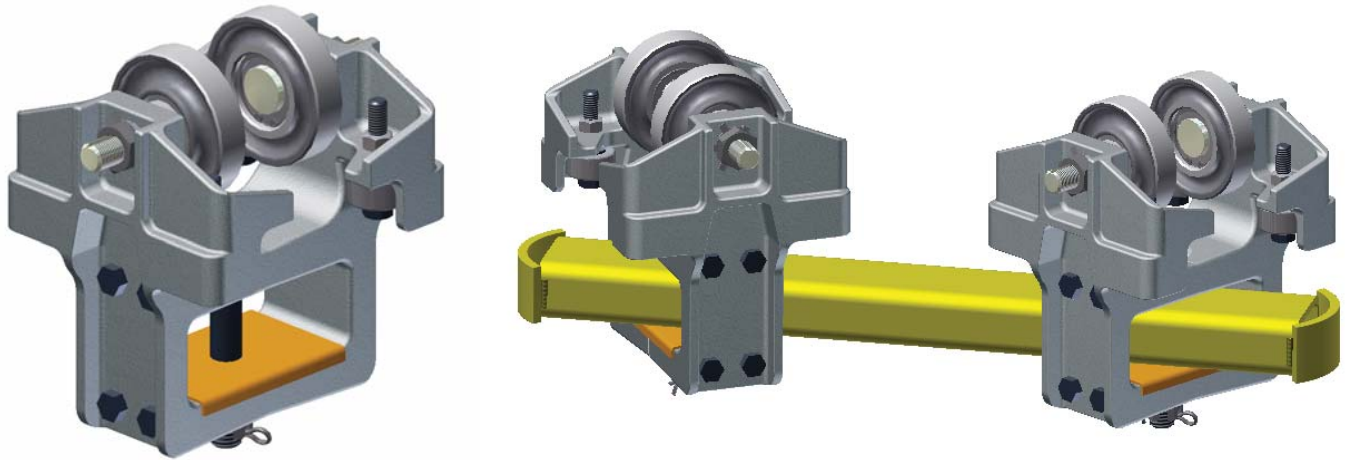
10190 MBC-500-3-325
 FOR OPERATION ON FLAT RAIL WITH 3.25"[82.6] FLANGE WIDTH OR SPECIAL FLAT TRACK WITH 3.33"[84.6] FLANGE WIDTH



COMMON SIDE VIEW



• ALL DIMENSIONS ARE REFERENCE ONLY



Part Number

- **10020** AC-500-2-325 for operation on 3.25" or 3.33" flange flat rail
- **10021** AC-500-2-333 for operation on or 3.33" flange 6" S-Beam
- **10030** AC-500-2-4 for operation on 2.66" flange 4" S-Beam

Application

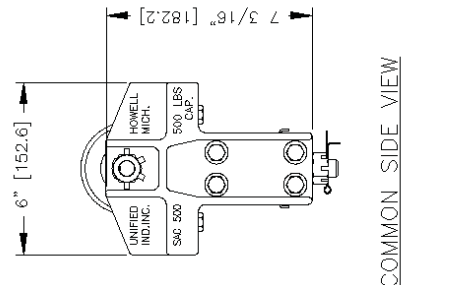
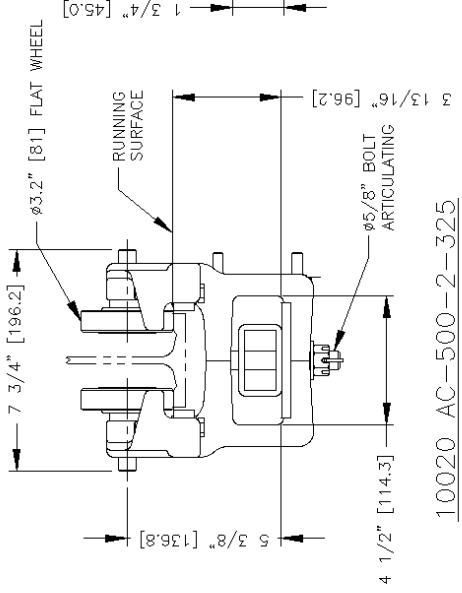
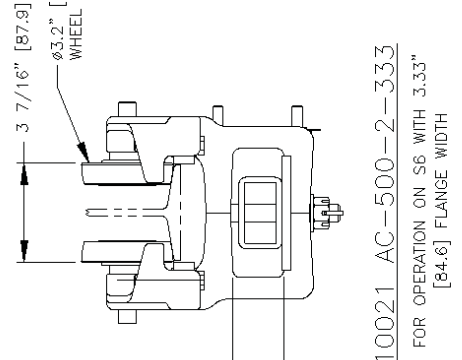
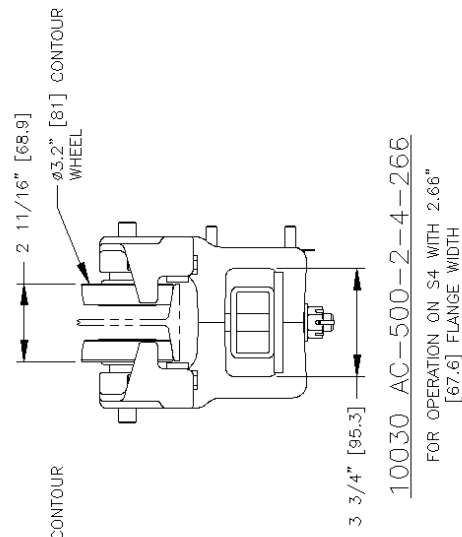
- Used in tandem as articulating load bars on horizontal curved monorail systems

Features

- High tensile almag alloy frames
- Integral built-in safety lugs
- Shielded side thrust roller protection
- Hardened ball bearing side thrust rollers
- Forged wheels 3.2" (81mm) diameter flat or contoured induction hardened with permanently sealed precision ball bearings
- Load bearing brass wear plate
- Heat treated steel pivot bolt

Options

- Standard conveyor wheels 3.2" (81mm) diameter flat or contoured with lubricated ball bearings
- Can be furnished as an assembled end truck or load bar



COMMON SIDE VIEW

• ALL DIMENSIONS ARE REFERENCE ONLY

APPLICATIONS FOR AC-500
ARTICULATING CARRIER HEAD TROLLEYS

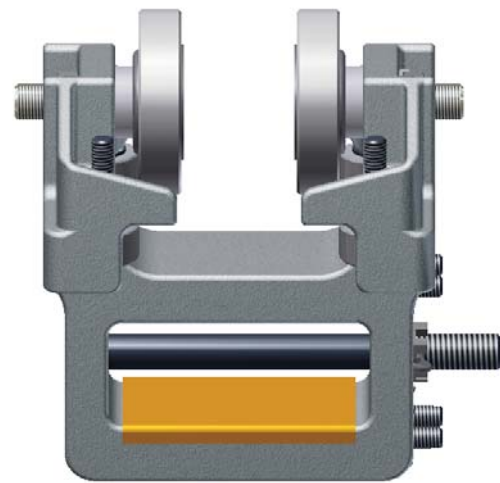
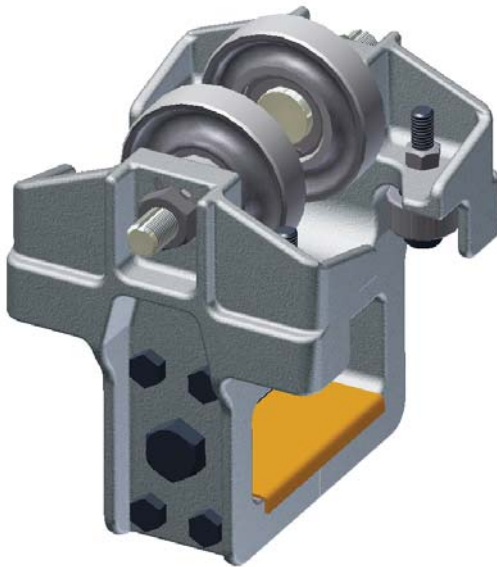
ASSEMBLIES ON A MINIMUM 3FT. CURVED RUNWAY.
USE IN PAIRS FOR LOAD BAR ASSEMBLIES ON
3FT. MINIMUM CURVED MONORAIL.

TROLLEY SPECIFICATIONS

RATED LOAD: 500LBS. (224Kgs)
WEIGHT: 10.5LBS. (4.70Kgs)
BODY: HIGH TENSILE ALMAG
WHEELS: $\phi 3.2$ " [82.6]
STUD: $\phi 5/8$ " [16]
ROLLERS: BALL THRUST BEARINGS

NOTES:

ALL AC-500 TROLLEYS COME WITH A BRASS WEAR
PLATE.
WHEN ORDERING PLEASE SPECIFY WIDTH OF RUNNING
SURFACE FLANGE.
(1) 3.25" [82.6] FOR STD. & SPECIAL FLAT RAIL.
(2) 2.66" [67.6] FOR S4 BEAM
(3) 3.33" [84.6] FOR S6 BEAM
AVAILABLE WITH FLAT OR CONTOUR WHEELS.



Part Number

- **10230** SAC-500-2-325 for operation on 3.25" or 3.33" flange flat rail or
- **10231** SAC-500-2-333 for operation on 3.33" flange 6" S-Beam
- **10240** SAC-500-2-266 for operation on 2.66" flange 4" S-Beam

Application

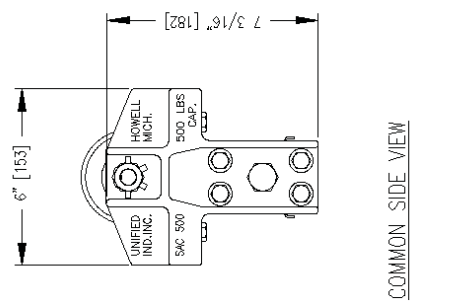
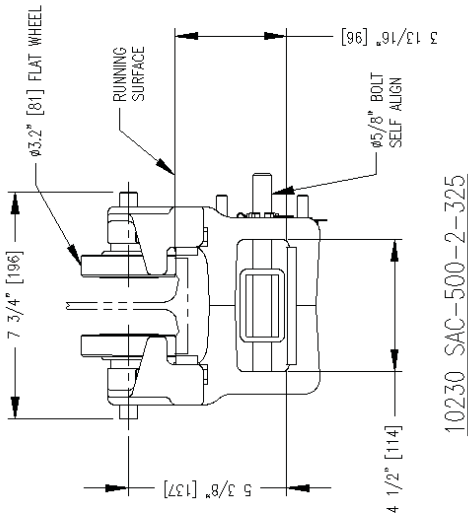
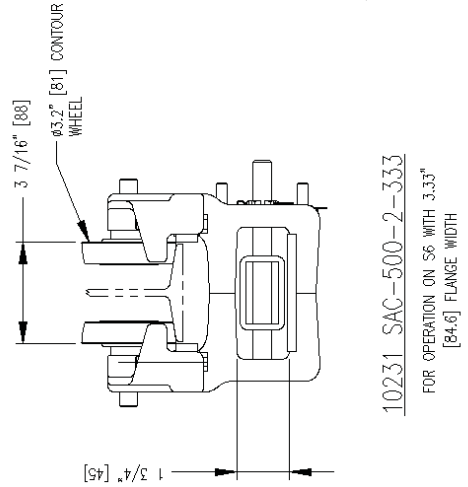
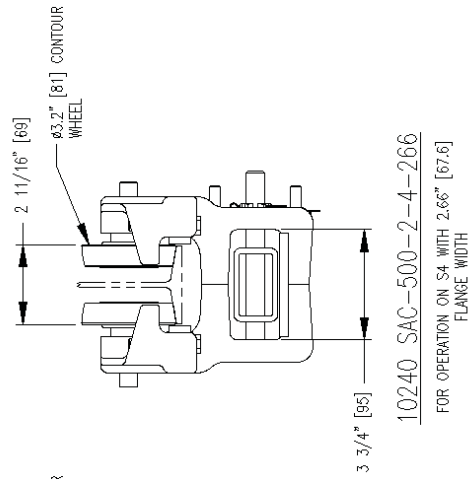
- Used in pairs for bridge crane end trucks where gage of span is not parallel

Features

- High tensile almag alloy frames
- Integral built in safety lugs
- Shielded side thrust roller protection
- Hardened ball bearing side thrust rollers
- Forged wheels 3.2" (81mm) diameter flat or contoured induction hardened with permanently sealed precision ball bearings
- Load bearing brass wear plate
- Hardened steel self aligning bolt
- Trolley is designed to seek center of runway rail

Options

- Standard conveyor wheels 3.2" (81mm) diameter flat or contoured with lubricated ball bearings
- Can be furnished as an assembled end truck



COMMON SIDE VIEW

10230 SAC-500-2-325
FOR OPERATION ON 3.25\"/>

• ALL DIMENSIONS ARE REFERENCE ONLY

APPLICATIONS FOR SAC-500 TROLLEYS

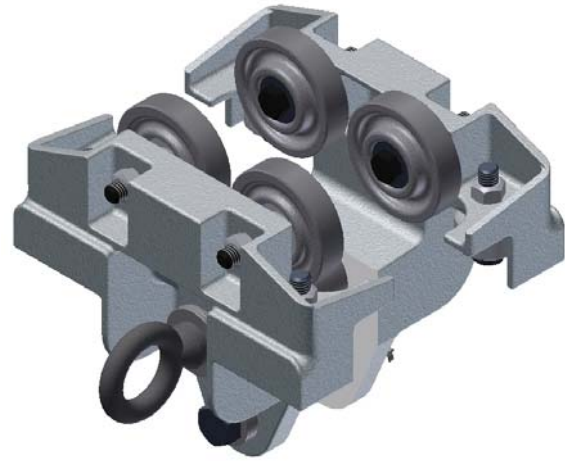
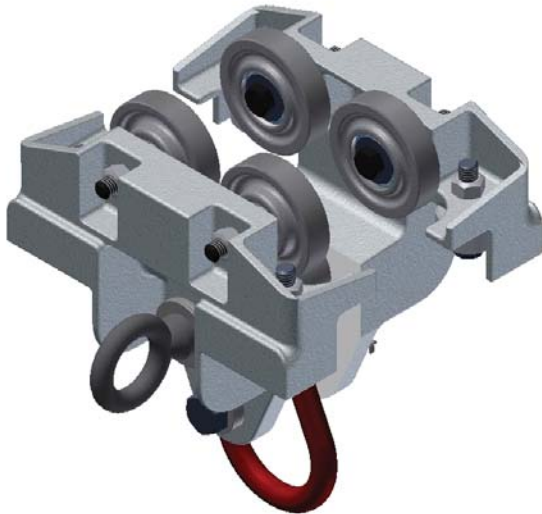
USE IN PAIRS FOR BRIDGE CRANE END TRUCK

TROLLEY SPECIFICATIONS

- RATED LOAD: 500LBS. (224kgs)
- WEIGHT: 10.5LBS. (4.70kgs)
- BODY: HIGH TENSILE ALMAG
- WHEELS: ϕ 3.2\"/>

NOTES:

- ALL SAC-500 TROLLEYS COME WITH A BRASS WEAR PLATE. WHEN ORDERING PLEASE SPECIFY WIDTH OF RUNNING SURFACE FLANGE.
- (1) 3.25\"/>



Part Number

- **10350** UT-500-LL-325 For operation on 3.25"/3.33" flange flat rail
- **10351** UT-500-LL-333 For operation on 3.33" flange 6" S-Beam
- **10352** UT-500-LL-266 For operation on 2.66" flange 4" S-Beam
- **10353** UT-500-S-325 For operation on 3.25"/3.33" flange flat rail
- **10354** UT-500-S-333 For operation on 3.33" flange 6" S-Beam
- **10355** UT-500-S-266 For operation on 2.66" flange 4" S-Beam

Application

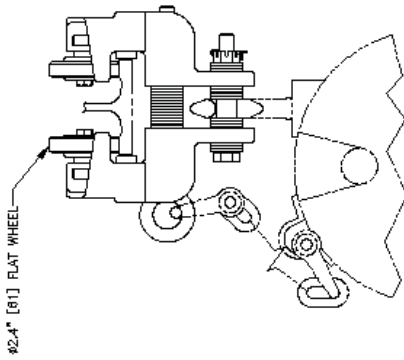
- Suspension of hook mounted spring balancers, hoists, nut runners, rivet guns, hand tools, fixtures, etc.
- Used in pairs for load bars

Features

- High tensile almag alloy frames
- Integral built in safety lugs
- Shielded side thrust roller protection
- Safety eye bolt penetrates through both almag trolley frames
- Independent load bearing bolt
- Forged 2.3" diameter wheels flat or contoured induction hardened with permanently sealed precision ball bearings
- Hardened ball bearing side thrust rollers
- Minimum track radius is 18" (457mm)
- Fully adjustable with stored spacers to allow for adjustment to the rail sizes at left

Options

- UT-500-S with spool and no load link
- UT-500-LL with load link
- Standard conveyor wheel 2.3" diameter flat or contoured with lubricated ball bearings



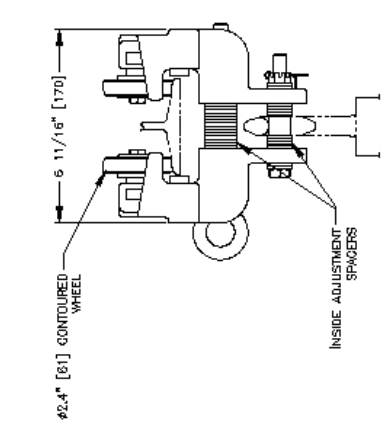
10353 UT-500-S-325
FOR OPERATION ON FLAT RAIL
WITH A 3.25\" [82.6] FLANGE WIDTH.
HOOK MOUNTED BALANCER SHOWN

TROLLEY SPECIFICATIONS:
 RATED LOAD: 600 LBS (274 kg)
 WEIGHT: 8.2 LBS (4.1 kg)
 BODY: HIGH TENSILE ALMAG
 WHEELS: 92.4\" [61] DIA. FLAT OR CONTOUR.
 STUD: 43/8\" [8.5]
 THRUST ROLLERS: BALL THRUST BEARING
 HARDENED AND GROUND

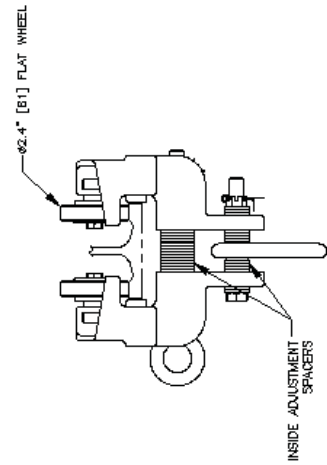
NOTE:
 WHEN ORDERING SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE.
 (1) 2.86\" [72.6] FOR S4 BEAM
 (2) 3.33\" [84.6] FOR S6 BEAM
 (3) 3.25\" [82.6] FOR FLAT RAIL
 EAST-WAY CURVED RAIL MINIMUM RADIUS OF 18\" [457]
 HARDWAY CURVED RAIL MINIMUM RADIUS OF .36\" [9.14]

OPTIONAL USES:
 (1) USED IN TANDEN WITH A LOAD BAR TO MAX. LOAD OF 1000 LBS (448 Kg)
 (2) USED FOR BRIDGE CRANE END TRUCKS
 (3) USED FOR HOOK MOUNTED DEVICES. SAFETY CHAINS AND SHACKLES CAN BE ORDERED FOR HOOK MOUNTED DEVICES

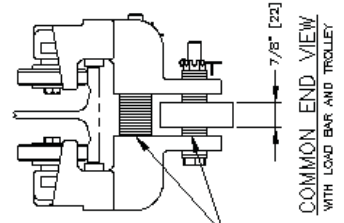
ALL DIMENSIONS ARE REFERENCE ONLY



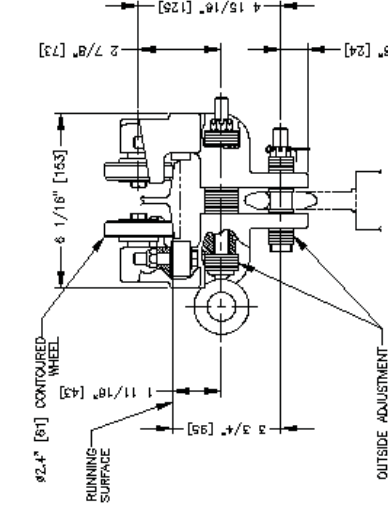
10354 UT-500-S-333
FOR OPERATION ON
S6 BEAM WITH A FLANGE
WIDTH OF 3.33\" [84.6]



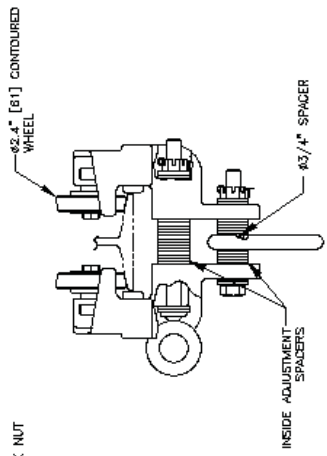
10350 UT-500-LL-325
FOR OPERATION ON
FLAT RAIL WITH A 3.25\" [82.6]
FLANGE WIDTH.



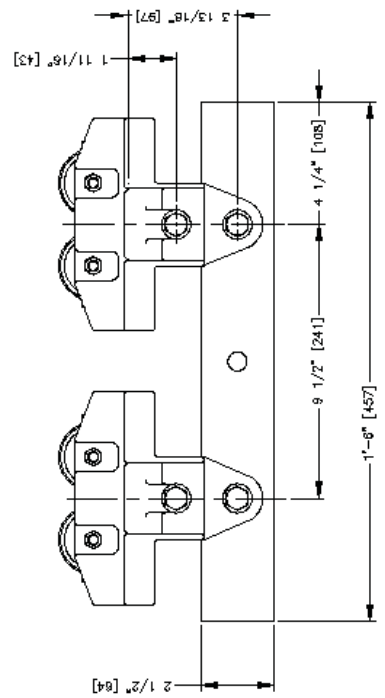
COMMON END VIEW
WITH LOAD BAR AND TROLLEY



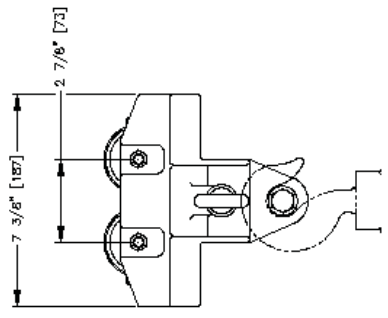
10355 UT-500-S-268
FOR OPERATION ON
S4 BEAM WITH 2.86\" [72.6]
FLANGE WIDTH



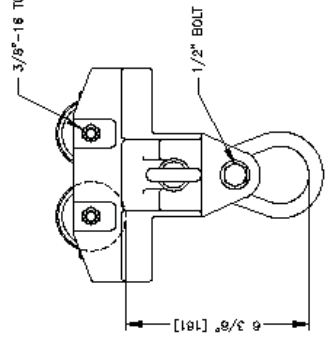
10351 UT-500-LL-333
FOR OPERATION ON
S6 BEAM WITH A FLANGE
WIDTH OF 3.33\" [84.6]



COMMON SIDE VIEW



UT-500-S TROLLEYS



UT-500-LL TROLLEYS



Part Number

- **10339** UT-1000-S-325 for operation on 3.25"/3.33" flange flat track with brass wheels
- **10340** UT-1000-LL-325 for operation on 3.25"/3.33" flange flat track
- **10341** UT-1000-LL-333 for operation on 3.33" flange 6" S-Beam
- **10342** UT-1000-LL-266 for operation on 2.66" flange 4" S-Beam
- **10343** UT-1000-S-325 for operation on 3.25"/3.33" flange flat track
- **10344** UT-1000-S-333 for operation on 3.33" flange 6" S-Beam
- **10345** UT-1000-S-266 for operation on 2.66" flange 4" S-Beam
- **10346** UT-1000-YBC-325 for operation on 3.25"/3.33" flange flat track
- **10347** UT-1000-YBC-333 for operation on 3.33" flange 6" S-Beam
- **10348** UT-1000-YBC-266 for operation on 2.66" flange 4" S-Beam

Application

- Suspension of weld gun balancers, hoists, nut runners, rivet guns, hand tools, fixtures, etc.
- Used in pairs for load bars

Features

- High tensile almag alloy frames
- Built-in safety lugs, Integral in almag frames
- Shielded side guide rollers
- Safety eye bolt penetrates through both almag trolley frames
- Independent load bearing bolt
- Forged 3.2" diameter wheels flat or contoured induction hardened with permanently sealed precision ball bearings
- Hardened and ground ball bearing side guide rollers
- Minimum track radius is 24" (610mm)
- Fully adjustable with stored spacers to allow for adjustment to the rail sizes at left

Options

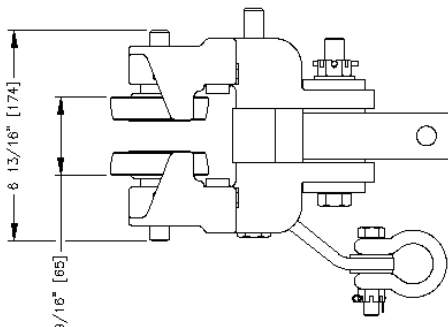
- UT-1000-YB dielectrically insulated yoke block, safety strap and shackle
- UT-1000-LL non-insulated with forged through eyebolt, spool and load link
- UT-1000-S non-insulated with spool
- 3.2" dia. flat or contour load wheel
- Lubricated hardened and ground steel wheel (standard)
- Permanently lubricated forged steel wheels induction hardened

TROLLEY SPECIFICATIONS

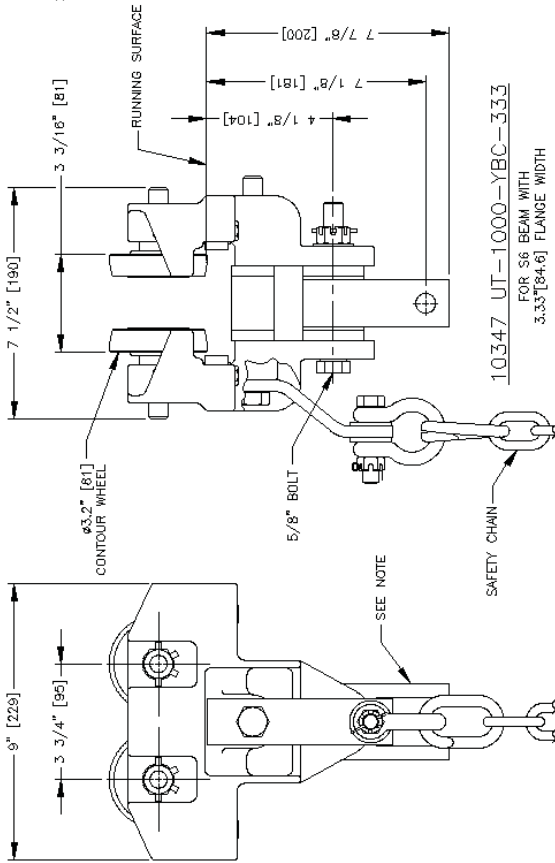
RATED LOAD: 1,000 LBS (448 Kgs)
 WEIGHT: 18 LBS (8.1 Kg) TO 18.5 LBS (8.3 Kgs)
 BODY: HIGH TENSILE ALMAG.
 WHEELS: ø3.2" [81.5] WITH A ø5/8" STUD
 THROST ROLLERS: BALL BEARING HARDENED
 AND GROUND

OPTION:
 SAFETY CHAIN CONSISTING OF TWO REPAIR LINKS
 AND FIVE LINKS OF 3/8" TRIPLE "B" CHAIN

NOTE:
 UT-1000-YBC TROLLEY 5/8" DIA. GRADE 5 BOLT
 SUPPLIED UPON REQUEST FOR HOOK OR YOKE
 MOUNTED EQUIPMENT.
 UT-1000-LL TROLLEY 5/8" DIA. LOAD LINK FOR
 HOOK MOUNTED EQUIPMENT.
 UT-1000-S TROLLEY 7/8" DIA. SPOOL FOR HOOK
 MOUNTED EQUIPMENT.
 INSULATED UT-1000-YB
 WHEN ORDERING SPECIFY WIDTH OF RUNNING
 SURFACE FLANGE.
 (1) 3.25" [82.6] FOR S4 BEAM
 (2) 3.33" [84.6] FOR S6 BEAM
 (3) 2.66" [67.6] FOR S4 BEAM

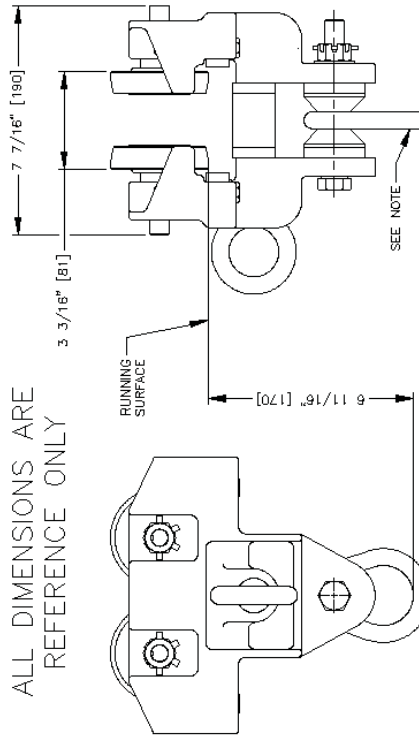


10348 UT-1000-YBC-266
 FOR S4 BEAM WITH
 2.66"[67.6] FLANGE WIDTH

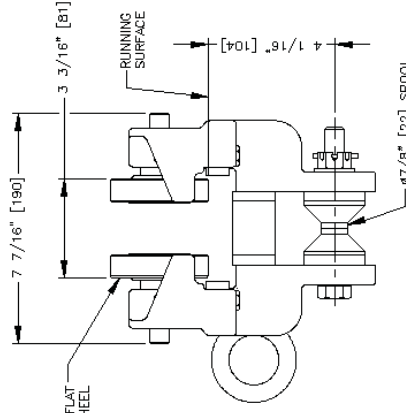


10347 UT-1000-YBC-333
 FOR S6 BEAM WITH
 3.33"[84.6] FLANGE WIDTH

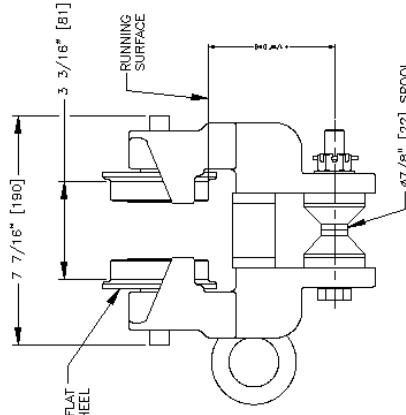
• ALL DIMENSIONS ARE
 REFERENCE ONLY



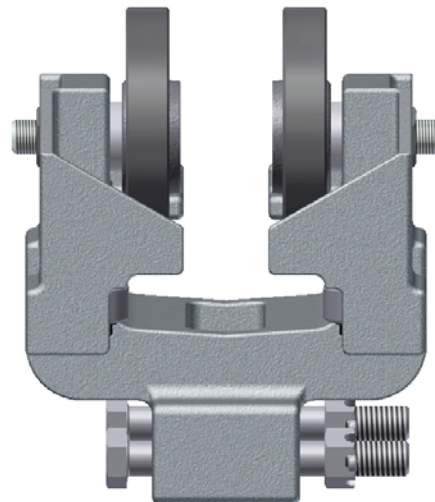
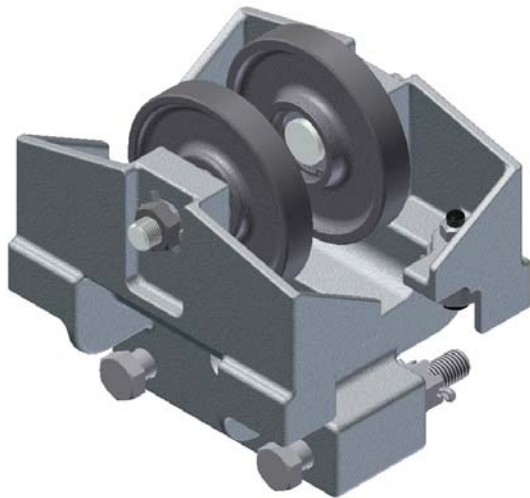
10341 UT-1000-LL-333
 FOR S6 BEAM WITH
 3.33"[84.6] FLANGE WIDTH



10343 UT-1000-S-325
 FOR FLAT RAIL WITH
 3.25"[82.6] FLANGE WIDTH



10339 UT-1000-S-325
 WITH BRASS WHEELS FOR
 FLAT RAIL WITH 3.25"[82.6]
 FLANGE WIDTH



Part Number

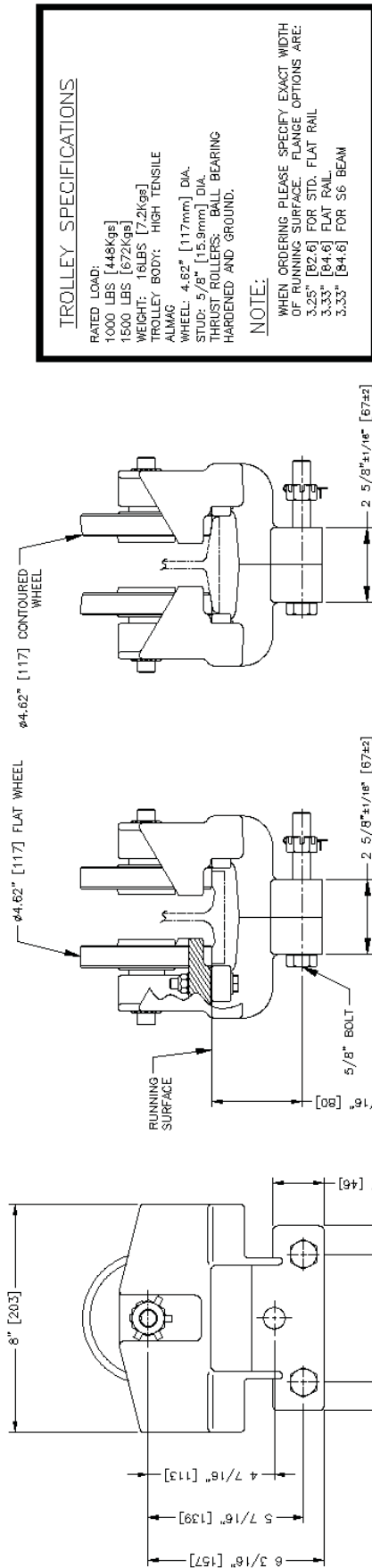
- **10154** MBC-1000-3-325 without kickup wheels for operation on 3.25"/3.33" flange flat rail. 1000 lb. Rated Load
- **10155** MBC-1000-3-333 without kickup wheels for operation on 3.33" flange 6" S-Beam. 1000 lb. Rated Load
- **10156** MBC-1500-3-325 without kickup wheels for operation on 3.25"/3.33" flange flat rail. 1500 lb. Rated Load
- **10157** MBC-1500-3-333 without kickup wheels for operation on 3.33" flange 6" S-Beam. 1500 lb. Rated Load

Application

- Used in pairs for bridge crane end truck assemblies and load bars

Features

- Built-in safety lugs, integral in almag frames
- High tensile almag alloy frames
- 4.62" diameter drop forged steel load wheels with low friction sealed bearings permanently lubricated
- Hardened and ground ball bearing side thrust rollers



TROLLEY SPECIFICATIONS

RATED LOAD:
 1000 LBS [448kgs]
 1500 LBS [672kgs]
 WEIGHT: 16LBS [7.2kgs]
 TROLLEY BODY: HIGH TENSILE ALMAG
 WHEEL: 4.62" [117mm] DIA.
 STUD: 5/8" [15.9mm] DIA.
 THRUST ROLLERS: BALL BEARING HARDENED AND GROUND.

NOTE:
 WHEN ORDERING PLEASE SPECIFY EXACT WIDTH OF RUNNING SURFACE. FLANGE OPTIONS ARE:
 3.25" [82.6] FOR STD. FLAT RAIL
 3.33" [84.6] FLAT RAIL
 3.33" [84.6] FOR S6 BEAM

10155 MBC-1000-333 W/O K.U.

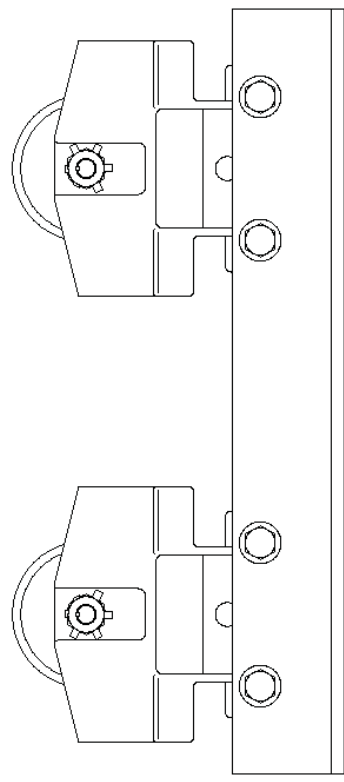
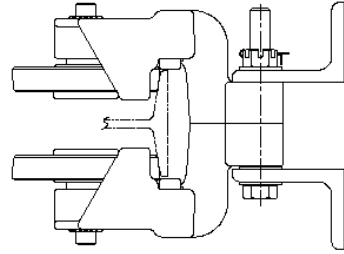
TWO WHEEL TROLLEY WITHOUT COUNTER THRUST WHEEL FOR OPERATION ON S6 BEAM WITH 3.33" [84.6] FLANGE WIDTH. SPECIFY 1000LBS [448kgs] OR 1500LBS [672kgs] (10157)

10154 MBC-1000-325 W/O K.U.

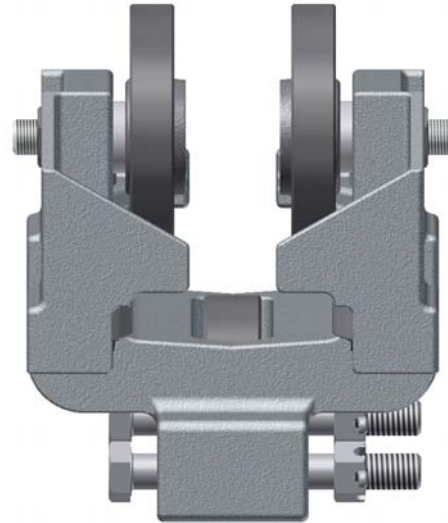
TWO WHEEL TROLLEY WITHOUT COUNTER THRUST WHEEL FOR OPERATION ON FLAT RAIL WITH 3.25" [82.6] OR 3.33" [84.6] FLANGE WIDTH. SPECIFY 1000LBS [448kgs] OR 1500LBS [672kgs] (10156)

COMMON SIDE VIEW

ALL DIMENSIONS ARE REFERENCE ONLY



BRIDGE CRANE END TRUCK ASSEMBLY
 COMPLETE WITH SAFETY LUGS. AVAILABLE IN VARIOUS LENGTHS USED ON UNIFIED BRIDGE CRANES



Part Number

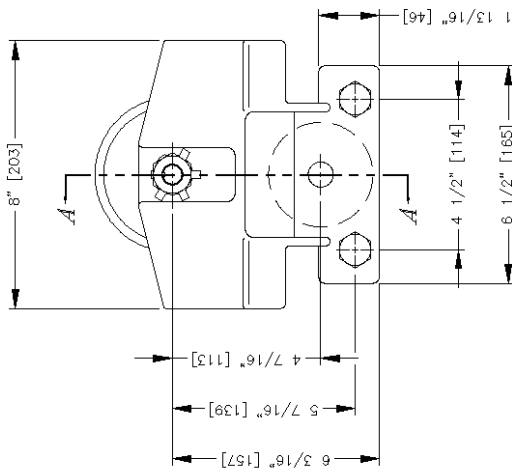
- **10150** MBC-1000-3-325 with kickup wheels for operation on 3.25"/3.33" flange flat rail. 1000 lb. Rated Load
- **10151** MBC-1000-3-333 with kickup wheels for operation on 3.33" flange 6" S-Beam. 1000 lb. Rated Load
- **10152** MBC-1500-3-325 with kickup wheels for operation on 3.25"/3.33" flange flat rail. 1500 lb. Rated Load
- **10153** MBC-1500-3-333 with kickup wheels for operation on 3.33" flange 6" S-Beam. 1500 lb. Rated Load

Application

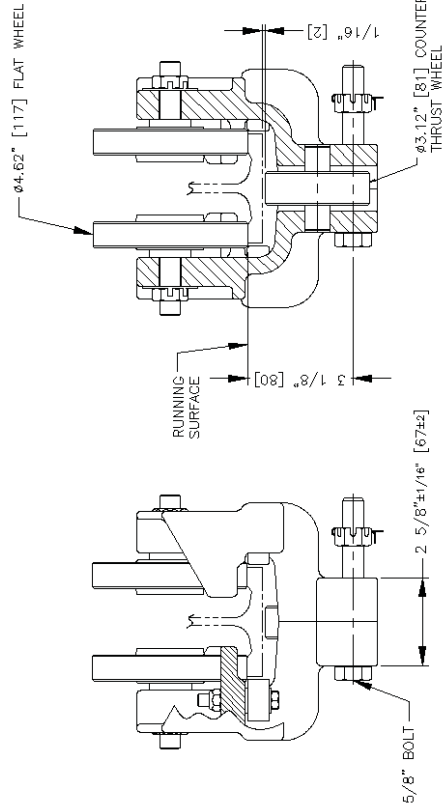
- Used in pairs on one or both end truck assemblies of medium or standard bridge cranes with overhanging bridge beam
- Can be adapted for tools or fixtures where a "kick-up" rolling action is required

Features

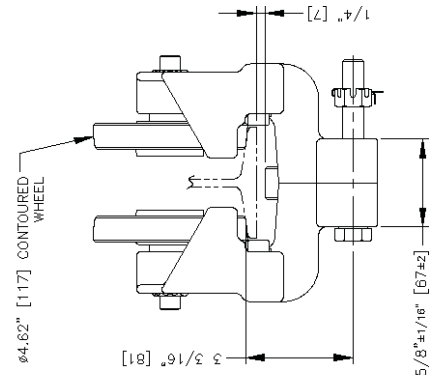
- Built-in safety lugs, integral in frames
- High tensile almag alloy frames
- 4.62" diameter drop forged steel load wheels with low friction sealed bearings permanently lubricated
- Third wheel acts as a counter thrust to avoid kick-up when load is extended beyond normal bridge span. This will allow movement of bridge with suspended load
- Hardened and ground ball bearing side thrust rollers



COMMON SIDE VIEW



10150 MBC-1000-325
TWO WHEEL TROLLEY WITH COUNTER
THRUST WHEEL FOR OPERATION ON FLAT
RAIL WITH 3.25" [82.6] OR 3.33" [84.6]
FLANGE WIDTH. SPECIFY 1000LBS [448Kgs]
OR 1500LBS [672Kgs] (10152)



10151 MBC-1000-333
TWO WHEEL TROLLEY WITH COUNTER THRUST
WHEEL FOR OPERATION ON S6 BEAM
WITH 3.33" [84.6] FLANGE WIDTH.
SPECIFY 1000LBS [448Kgs]
OR 1500LBS [672Kgs] (10152)

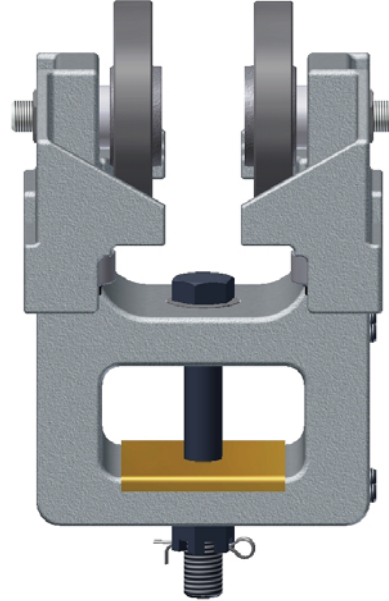
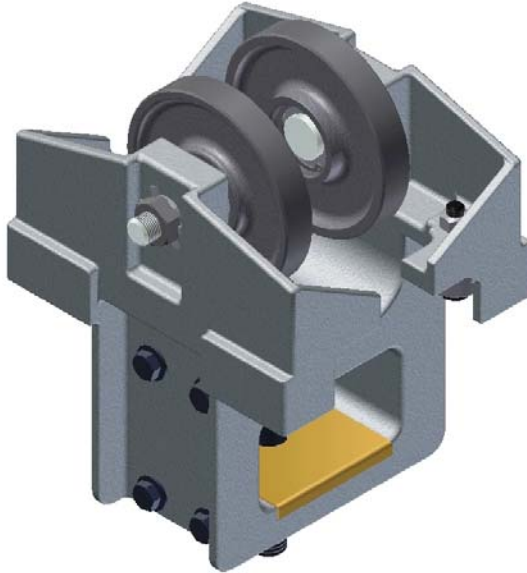
SECTION A-A

● ALL DIMENSIONS ARE REFERENCE ONLY

TROLLEY SPECIFICATIONS

RATED LOAD:
1000 LBS [448Kgs]
1500 LBS [672Kgs]
WEIGHT: 16LBS [7.2Kgs]
TROLLEY BODY: HIGH TENSILE ALMAG
WHEEL: 4.62" [117mm] DIA.
STUD: 5/8" [15.9mm] DIA.
THRUST ROLLERS: BALL BEARING HARDENED AND GROUND.

NOTE:
WHEN ORDERING PLEASE SPECIFY EXACT WIDTH OF RUNNING SURFACE. FLANGE OPTIONS ARE:
3.25" [82.6] FOR STD. FLAT RAIL & 3.33" [84.6] FLAT RAIL.
3.33" [84.6] FOR S6 BEAM



Part Number

- **10010** AC-1027-325 for operation on 3.25"/3.33" flange flat rail. 1000 lb. Rated Load
- **10011** AC-1027-333 for operation on 3.33" flange 6" S-Beam. 1000 lb. Rated Load
- **10012** AC-1027-325D for operation on 3.25"/3.33" flange flat rail. 1500 lb. Rated Load
- **10013** AC-1027-333D for operation on 3.33" flange 6" S-Beam. 1500 lb. Rated Load

Application

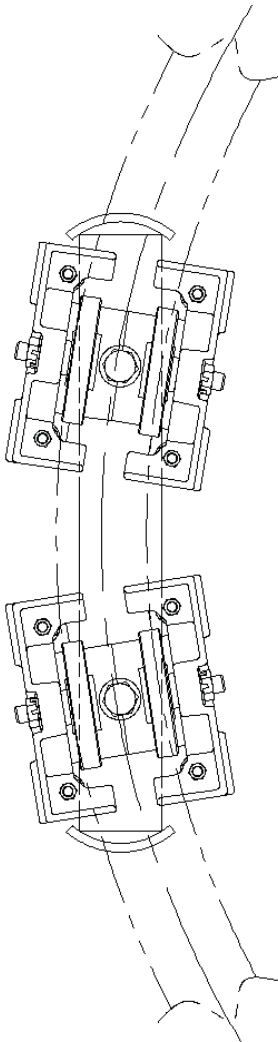
- Load bars for curved monorail, minimum 3 ft. (914mm) radius

Features

- High tensile almag alloy frames
- Built-in safety lugs, integral in almag frames
- 4.62" diameter drop forged steel load wheels with low friction sealed bearings permanently lubricated
- Hardened and ground ball bearing side thrust rollers
- Steel pivot pin (centralized to permit rotation around its axis)
- Brass wear plate

Options

- Dual bearing for greater rated loads up to 1500 lbs. (680kg) designated by the D at the end of the description



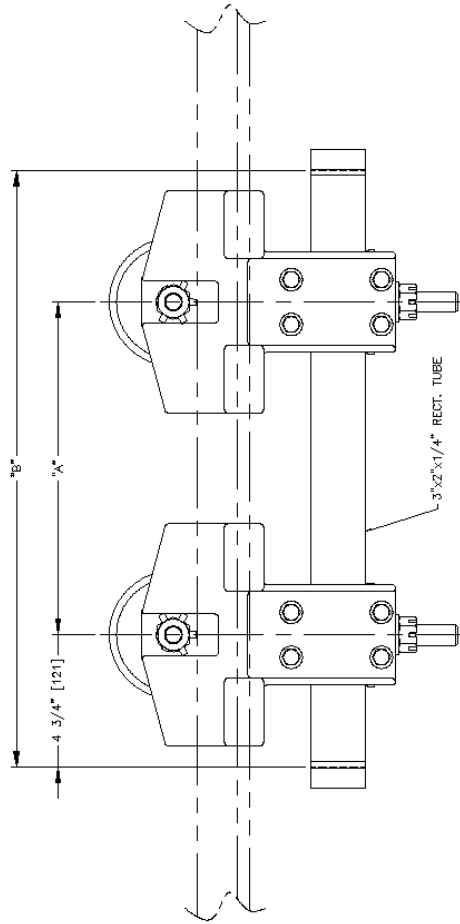
TROLLEY SPECIFICATIONS

RATED LOAD: 1418 (648)
1800 LBS (818)
WEIGHT: 16.5 LBS (7.5 kg)
BODY: HIGH TENSILE ALMAC
WHEEL: 4.62" [117.3] DIA.
4.50" [114.3] DIA. FLANGED
5/8" [15.9] DIA. 5100
S&W TUBET ROLLERS: BALL BEARING
(AS REQ'D)

NOTE:
WHEN ORDERING SPECIFY EXACT WIDTH OF
RUNNING SURFACE FLANGE:
3.25" [82.6] FOR FLAT RAIL
3.33" [84.6] FOR S6 BEAM
5.00" [127.0] FOR S60 LBS OR 1500 LBS
RATED LOAD.

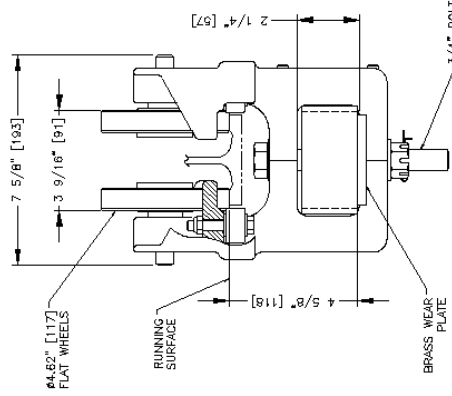
| CURVED RAIL RADIUS | "A" WHEEL BASE | "B" OVERALL |
|--------------------|----------------|-------------|
| 3'-0" [914] | 12" [304] | 22" [558] |
| 4'-0" [1219] | 18" [457] | 28" [711] |
| 5'-0" [1524] | 24" [609] | 34" [863] |
| 6'-0" [1828] | 30" [762] | 40" [1016] |
| 7'-0" [2133] | 36" [914] | 46" [1168] |
| 8'-0" [2438] | 42" [1066] | 52" [1320] |
| 9'-0" [2743] | 48" [1219] | 58" [1473] |
| 10'-0" [3048] | 54" [1371] | 64" [1625] |

• ALL DIMENSIONS ARE REFERENCE ONLY



AC-1027 LOAD BAR ASSEMBLY

COMMON SIDE VIEW

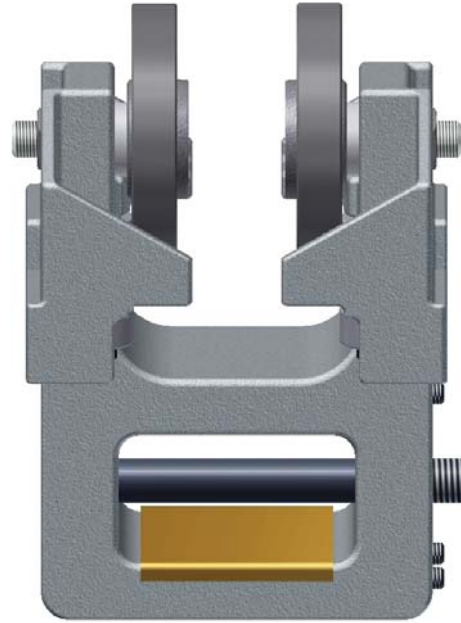
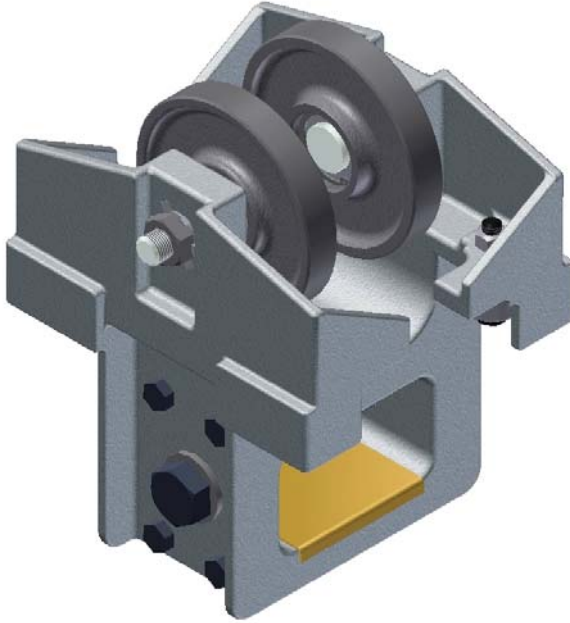


100.10 AC-1027-325

FOR OPERATION ON STD. RAIL WITH 3.25" [82.6] FLANGE WIDTH.

100.11 AC-1027-333

FOR OPERATION ON S6 BEAM WITH 3.33" [84.6] FLANGE WIDTH.



Part Number

- **10220** SAC-1020-325 for operation on 3.25"/3.33" flange flat rail. 1000 lb. Rated Load
- **10221** SAC-1020-333 for operation on 3.33" flange 6" S-Beam. 1000 lb. Rated Load
- **10222** SAC-1020-325D for operation on 3.25"/3.33" flange flat rail. 1500 lb. Rated Load
- **10223** SAC-1020-333D for operation on 3.33" flange 6" S-Beam. 1500 lb. Rated Load

Applications

- Used in pairs for bridge crane end truck assemblies where runway spans are not parallel

Features

- High tensile almag alloy frames
- Built-in safety lugs, integral in frames
- 4.62" diameter drop forged steel load wheels with low friction sealed bearings permanently lubricated
- Hardened and ground ball bearing side thrust rollers
- Steel self-aligning pin
- Brass wear plate

Options

- Dual bearing for greater rated loads up to 1500 lbs. (680kg) designated by the D at the end of the description

TROLLEY SPECIFICATIONS

RATED LOAD:
 1000 LBS (448 Kgs)
 1500 LBS (672 Kgs)

WEIGHT: 18.5 LBS (8.3 Kgs)

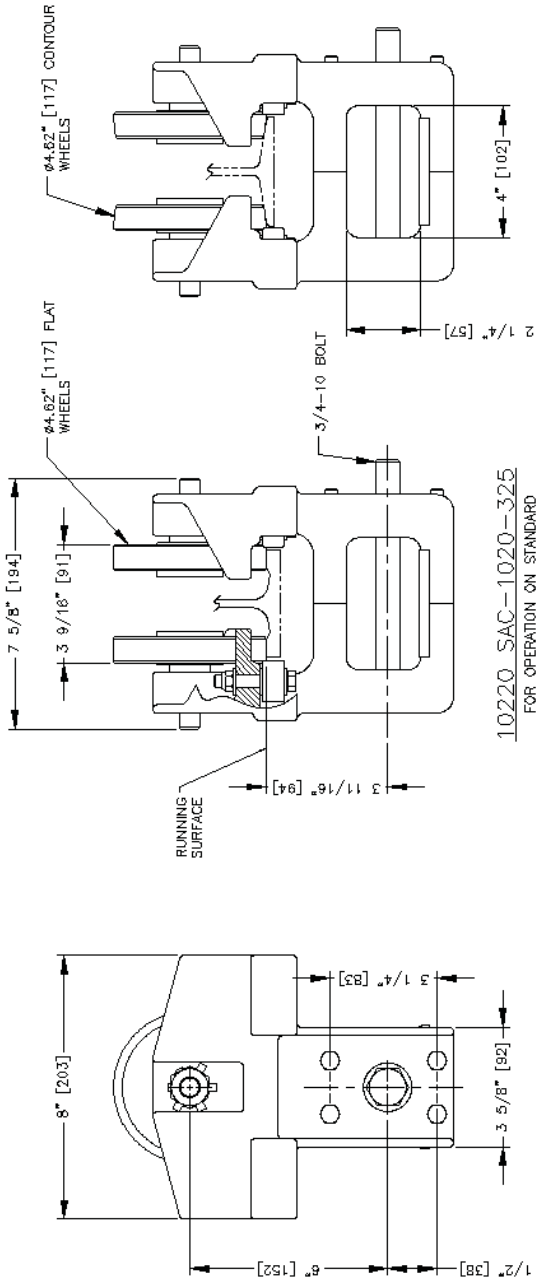
BODY: HIGH TENSILE ALMAG

WHEEL:
 4.62" [117.3] DIA.
 4.50" [114.3] DIA. FLANGED
 5/8" [15.9] DIA. STUD

SIDE THRUST ROLLERS: BALL BEARING (AS REQ'D)

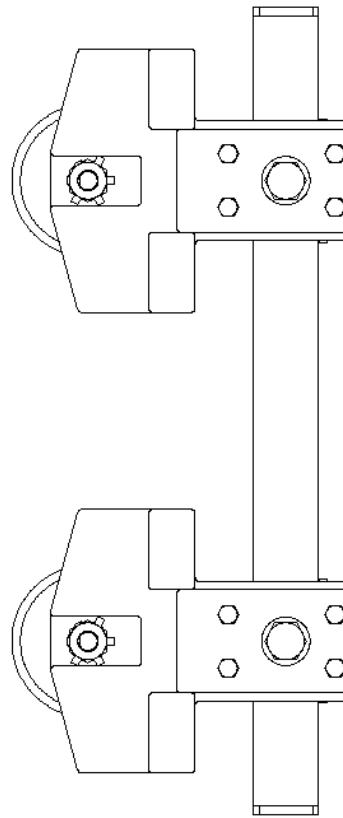
NOTE:
 WHEN ORDERING SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE:
 3.25" [82.6] FOR FLAT RAIL
 3.33" [84.8] FOR S8 BEAM
 SPECIFY 1000 LBS OR 1500 LBS RATED LOAD.

APPLICATION:
 PAIR UP FOR BRIDGE CRANE END TRUCK ASSEMBLIES IF RUNWAY SPAN IS NOT PARALLEL.



10220 SAC-1020-325
 FOR OPERATION ON STANDARD FLAT RAIL WITH 3.25" [82.6] FLANGE WIDTH.
 1000 LBS. RATED LOAD

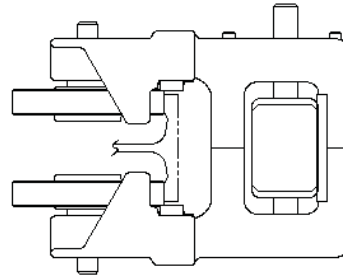
10221 SAC-1020-333
 FOR OPERATION ON S8 BEAM WITH 3.33" [84.8] FLANGE WIDTH.
 1000 LBS. RATED LOAD



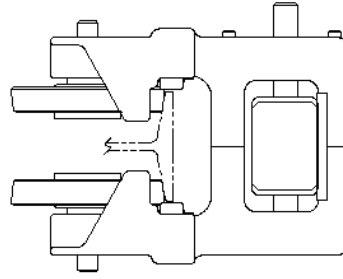
COMMON SIDE VIEW

COMMON SIDE VIEW

SAC-1020 LOAD BAR ASSEMBLY
 AVAILABLE IN VARIOUS LENGTHS

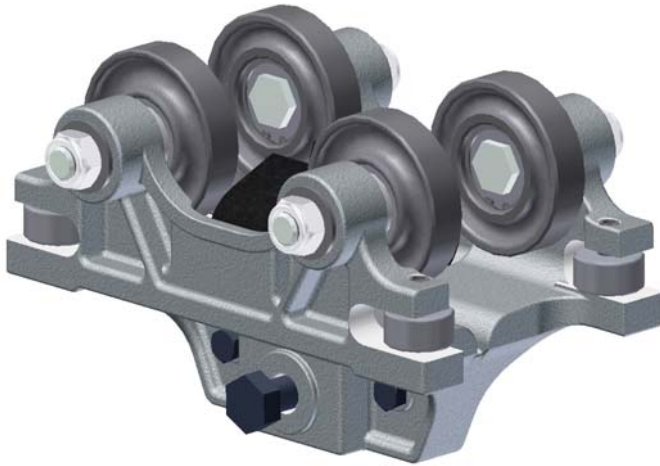


10222 SAC-1020-325D
 FOR OPERATION ON STANDARD FLAT RAIL WITH 3.25" [82.6] FLANGE WIDTH.
 1500 LBS. RATED LOAD



10223 SAC-1020-333D
 FOR OPERATION ON S8 BEAM WITH 3.33" [84.8] FLANGE WIDTH.
 1500 LBS. RATED LOAD

• ALL DIMENSIONS ARE REFERENCE ONLY



Part Number

- **10040** BT-266 for operation on 2.66" flange 4" S-Beam
- **10041** BT-266-DHS for operation on 2.66" flange 4" S-Beam
- **10050** BT-325-DHS for operation on 3.25"/3.33" flange flat rail
- **10051** BT-325 for operation on 3.25"/3.33" flange flat rail
- **10052** BT-333 for operation on 3.33" flange 6" S-Beam
- **10053** BT-333-DHS for operation on 3.33" flange 6" S-Beam

Application

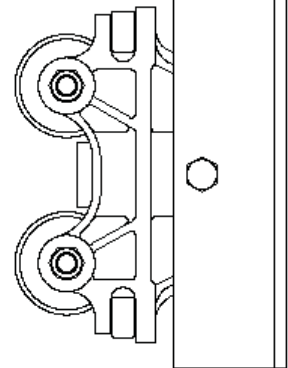
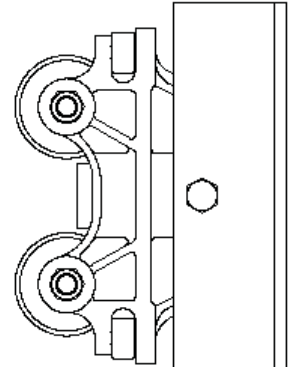
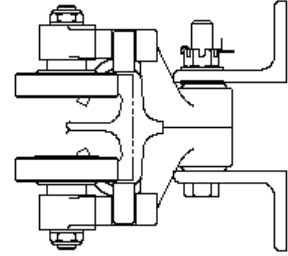
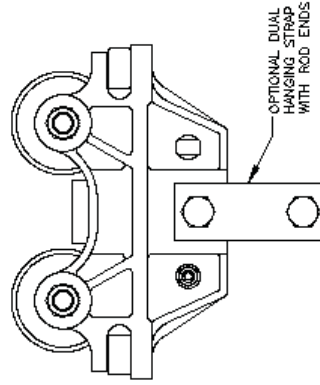
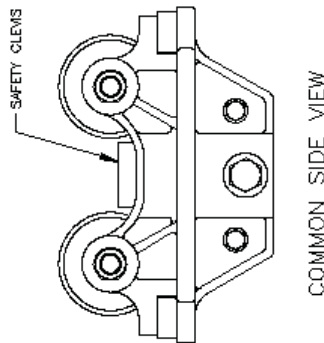
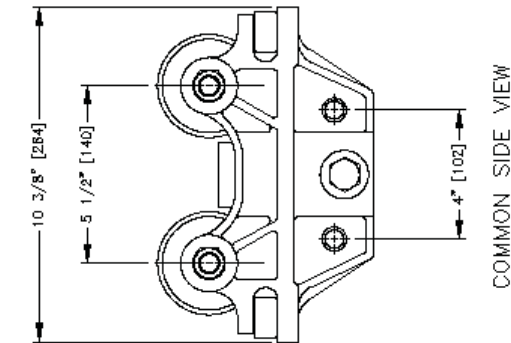
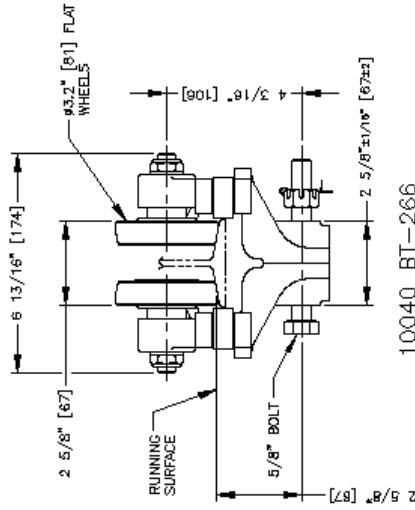
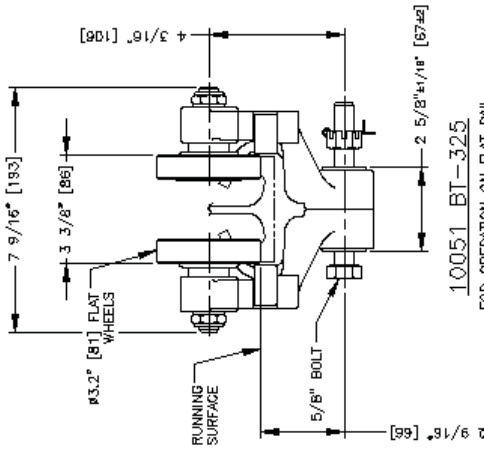
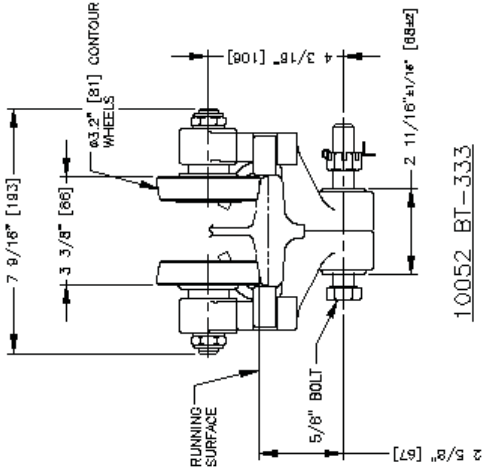
- For suspension of portable tools, welding guns, balancers, hoists, fixtures etc.
- Used in pairs for bridge crane end truck assemblies and load bars

Features

- Patented dual safety clevis
- 3.25" diameter load wheels
- High tensile almag alloy frames
- Hardened and ground ball bearing side thrust rollers
- Minimum track radius is 60" (1524mm)

Options

- Available with or without forged eye bolt
- Available with or without dual hanging strap
- Flat or contoured "Conveyor" steel load wheels



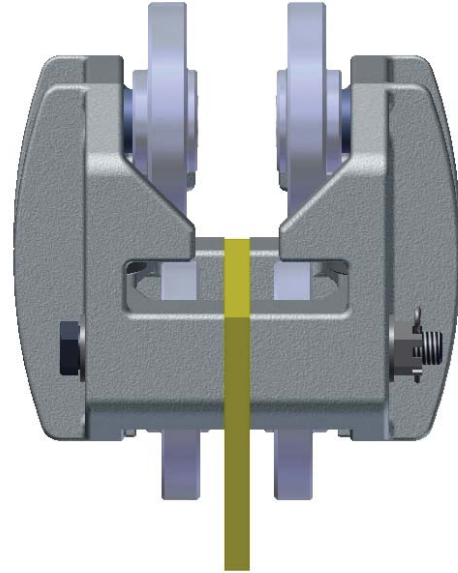
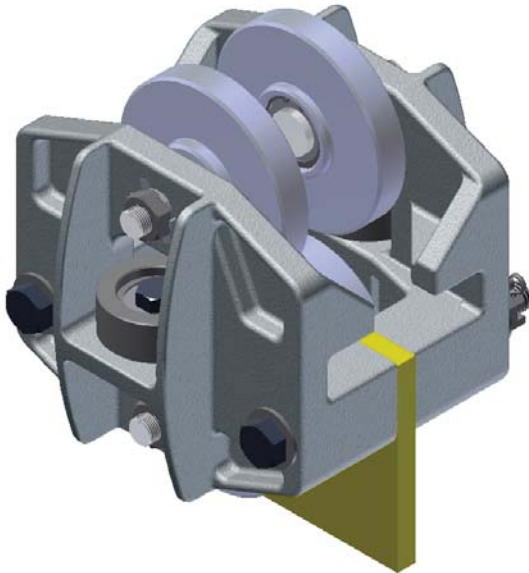
TROLLEY SPECIFICATIONS:

RATED LOAD: 2000 LBS (972 Kgs)
 WEIGHT: 16 LBS (7.2 Kgs)
 BODY: HIGH TENSILE ALMAG
 WHEELS: 3.2\"[81.3] DIA.
 STUDS: 5/8\"[1.6] DIA.
 THRUST ROLLERS: BEARING
 HARDENED & GROUND

NOTES:
 WHEN ORDERING SPECIFY EXACT WIDTH OF
 RUNNING SURFACE FLANGE.
 (1) 3.25\"[82.6] FOR FLAT RAIL
 (2) 2.68\"[67.6] FOR S4 BEAM
 (3) 3.33\"[84.6] FOR S8 BEAM
 MINIMUM TRACK RADIUS 60\"[1524].

• ALL DIMENSIONS ARE REFERENCE ONLY

BRIDGE CRANE END TRUCK
 AVAILABLE IN VARIOUS LENGTHS



Model Number

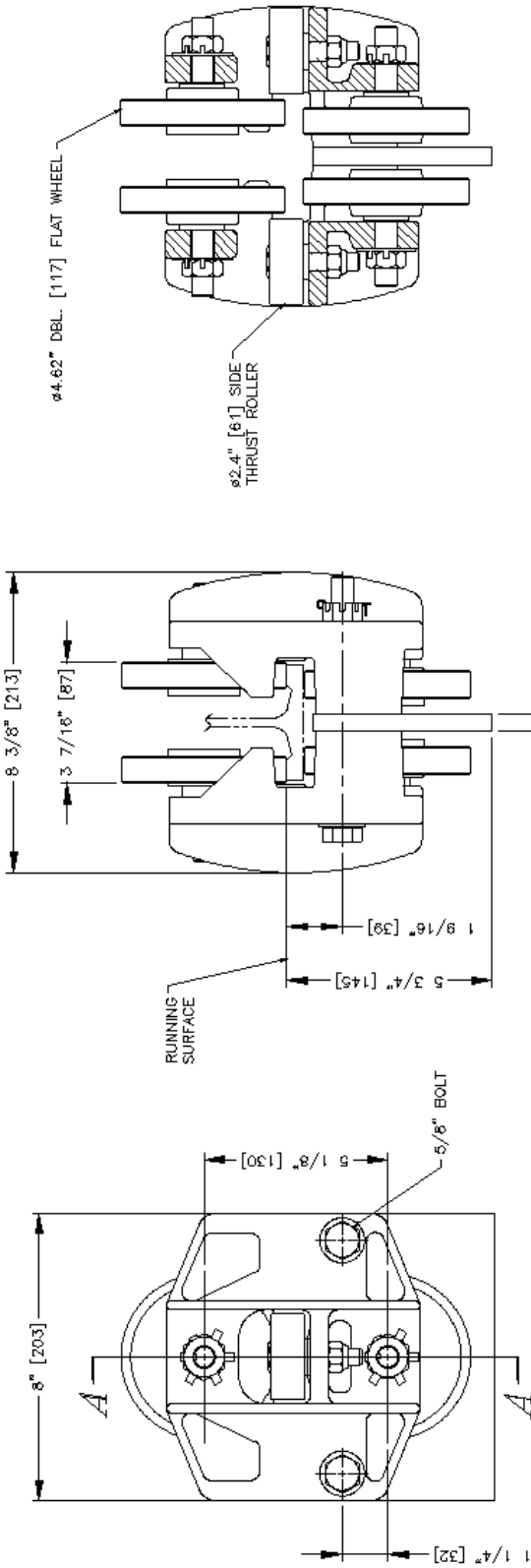
- **10310** TSE-1017-325 for operation on 3.25"/3.33" flange flat rail
- **10315** TSE-1017-333 for operation on 3.33" flange 6" S-Beam

Application

- Used in pairs on telescoping transfer beam extensions

Features

- High tensile almag alloy frames
- Built-in safety lugs integral in frames
- 4.62" diameter drop forged steel load and kick-up wheels with low friction sealed bearings permanently lubricated
- Large 2.40" diameter hardened and ground ball bearing side thrust rollers



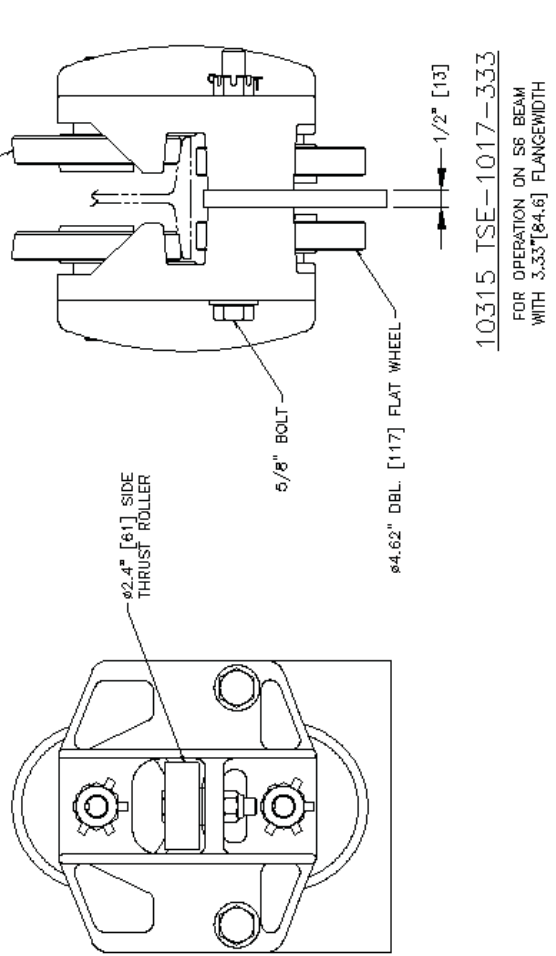
SECTION A-A

TROLLEY SPECIFICATIONS

RATED LOAD: 2500 LBS. (1120 Kgs) WEIGHT:
 31 LBS. (14 Kgs)
 BODY: HIGH TENSILE ALUMAG
 WHEEL: 4.5/8" [117] DIA.
 STUD: 5/8" [15.9] DIA.
 THRUST ROLLERS: 2.4 [61] DIA. BALL BEARING.

NOTE:
 WHEN ORDERING SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE
 1) 3.25 [82.6] FOR FLAT RAIL
 2) 2.66 [67.6] FOR S4 BEAM
 3) 3.33 [84.6] FOR S6 BEAM

ALL DIMENSIONS ARE REFERENCE ONLY





10060



10061

Model Number

- **10060** BT-325-10 for operation on 3.25/3.33" flange flat rail
- **10061** BT-325-10-DHS for operation on 3.25/3.33" flange flat rail
- **10062** BT-333-10 for operation on 3.33" flange 6" S-Beam
- **10063** BT-333-10-DHS for operation on 3.33" flange 6" S-Beam

Application

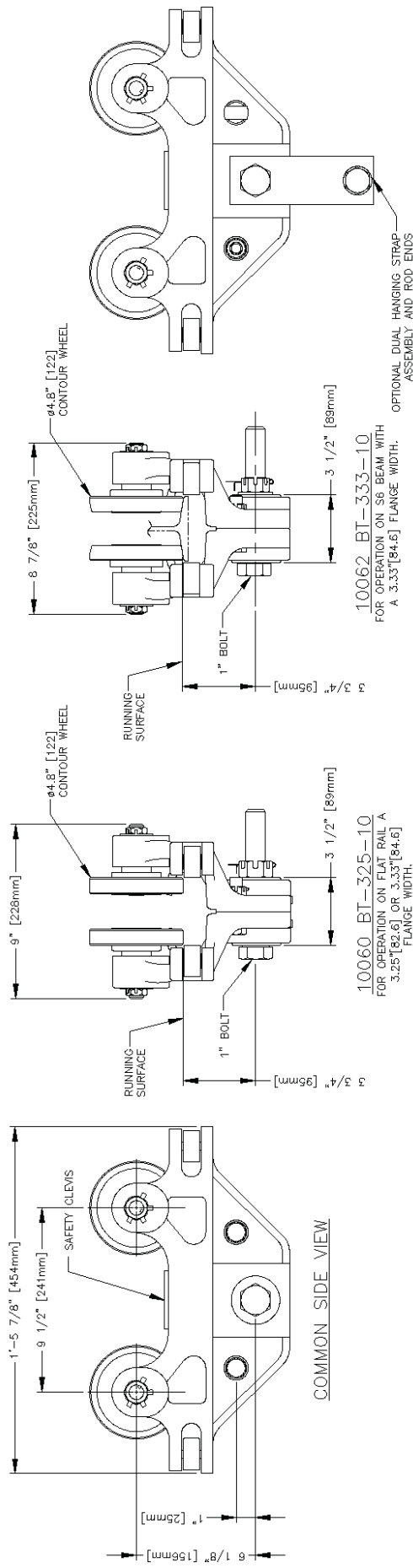
- Used in pairs for heavy load bridge crane end truck assemblies
- For suspension of portable tools, balancer, hoists, fixtures etc.
- For bridge beam trolley with optional dual hanging strap designated by DHS.

Features

- Patented dual safety clevis
- High tensile almag alloy frames
- 4.81" diameter heavy duty load wheels
- Hardened and ground ball bearing side thrust rollers
- Minimum track radius is 10'-0" (3048mm)

Options

- Available with dual hanging straps for suspension of heavy hook mounted loads. Rod ends come with dual hanging straps for safety cable.
- Available with universal swivel assembly



NOTE:

WHEN ORDERING PLEASE SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE:
 3.25" [82.6] FOR FLAT RAIL
 3.33" [84.6] FOR S6 BEAM

BT-325-10 OR BT-333-10 TROLLEY SPECIFICATIONS:

- RATED LOAD: 4000 LBS (1814 Kg)
- WEIGHT: 50 LBS (22.4 Kg)
- BODY: HIGH TENSILE ALMAG WHEELS:
- 4.8" [121.9] DIA.
- FLAT DR CONTOURED
- WHEEL STUD: 3/4" [19] DIA. GREASE FITTING OPTIONAL
- 10"-0" MINIMUM RADIUS
- SIDE THRUST ROLLERS: BALL BEARING HARDENED & GROUND

• ALL DIMENSIONS ARE REFERENCE ONLY

CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 125% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

***All dimensions are reference only
and need to be verified with factory.**

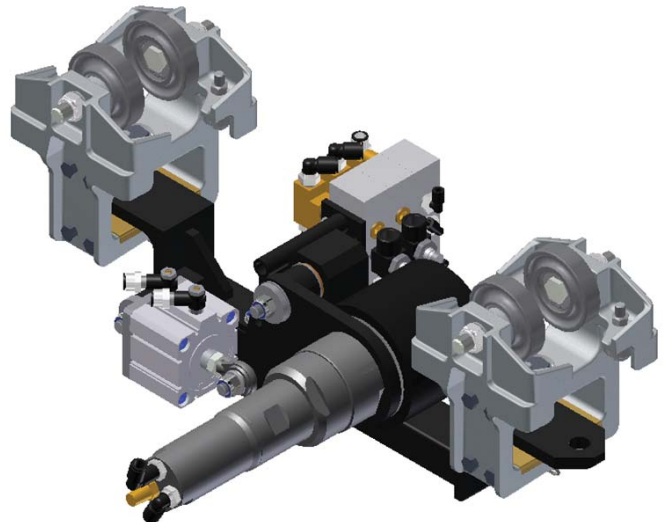
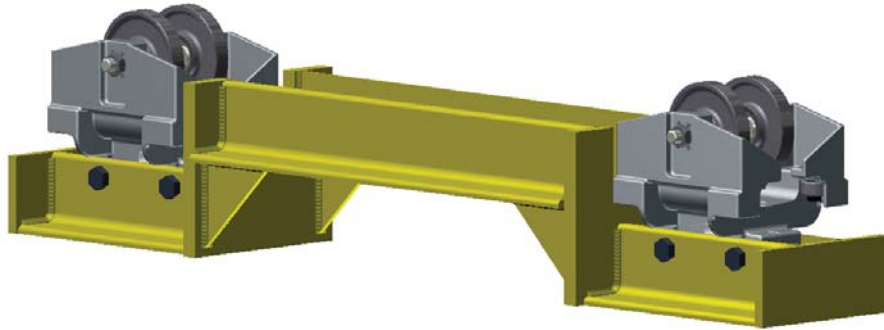


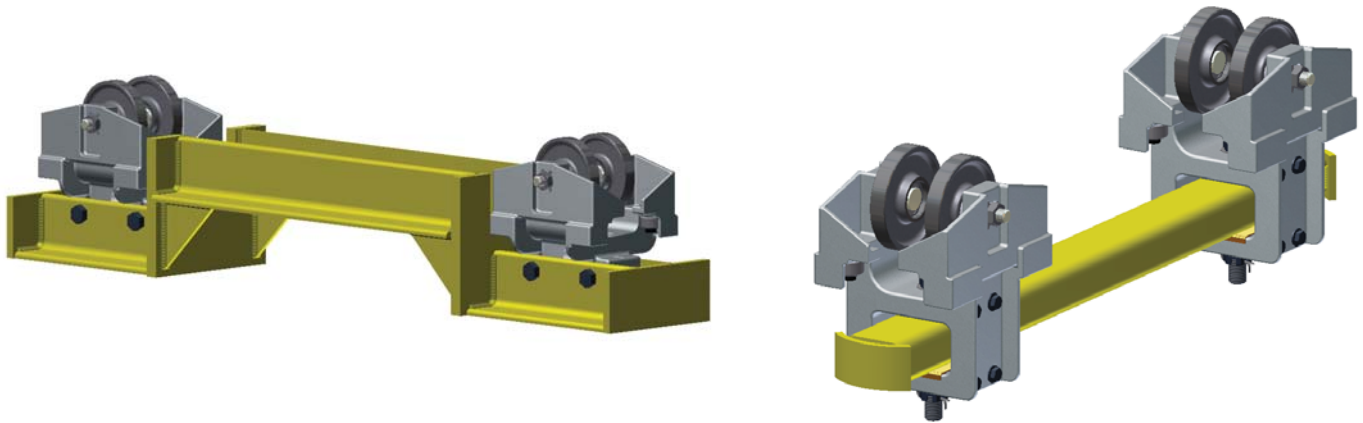


UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

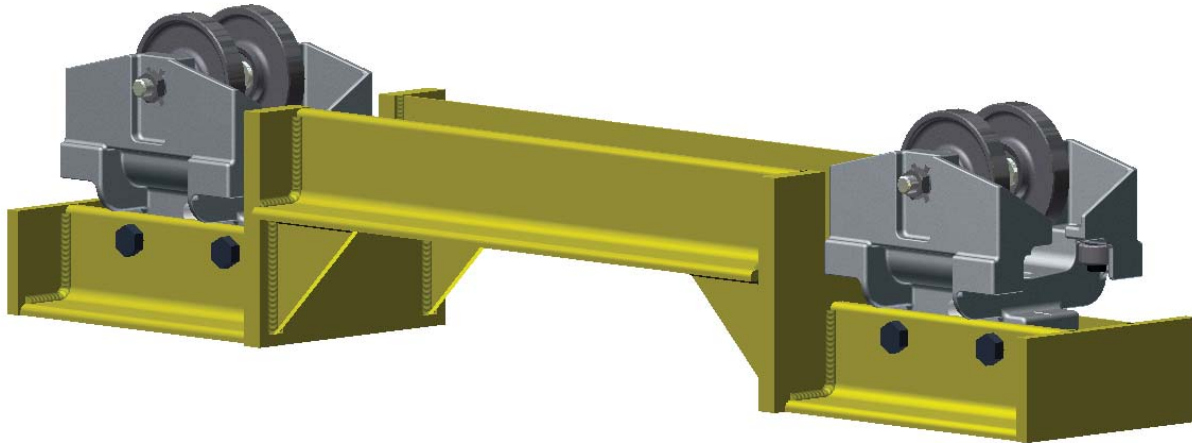
ACCESSORIES & SPECIALIZED CUSTOM PRODUCTS





Accessory Products

- Low headroom end trucks
- Customized load bars
- Universal swivel assembly
- Counter thrust roller assembly
- Insulated load link
- Dual hanging straps
- End stops
- Load links
- Air Tractors
- Patent Rail Sections



Model Number

- Series MBC-500 See page 3
- Series MBC-1000 See page 4
- Series MBC-1500 See page 4
- Series BT-325-10 See page 5

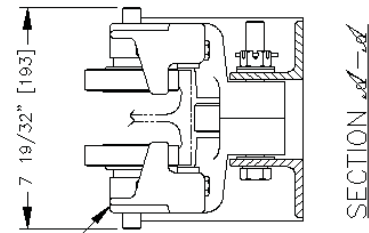
Application

- **Unified** low headroom end trucks are designed for use on bridge cranes that operate in an area of low headroom conditions.
- Or used as individual load bars to your specifications

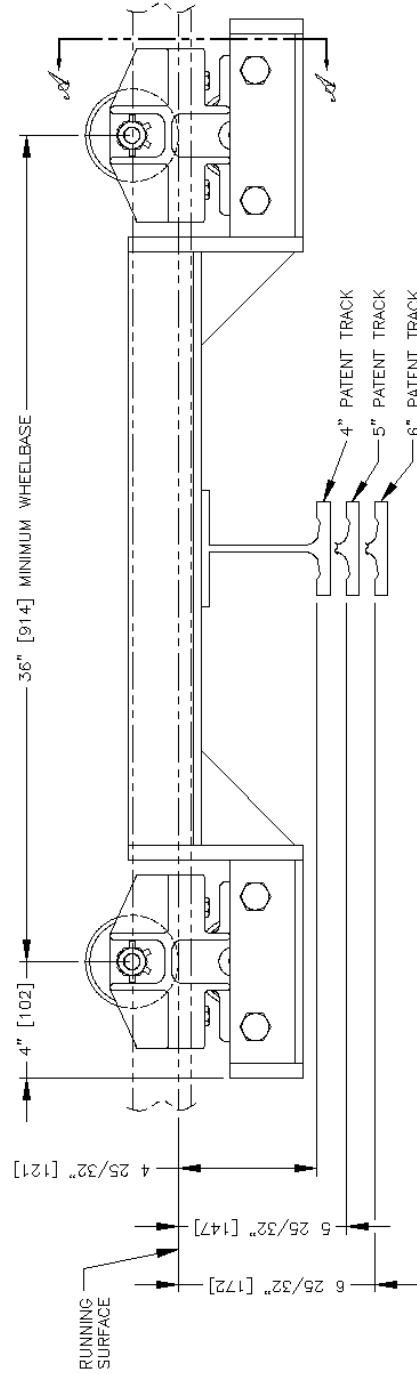
Features

Unified low headroom end trucks are available with three trolley or carrier head adaptations.

- Series BT for bridge cranes with no overhang
- Series MBC-1000 with no kickup wheel for bridge cranes with no overhang or used in conjunction with MBC-1000 with kickup wheel end truck
- Series MBC-1000 for bridge cranes with overhang that requires an end truck with kickup wheels

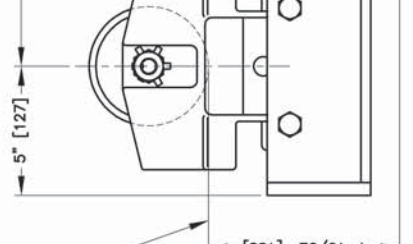
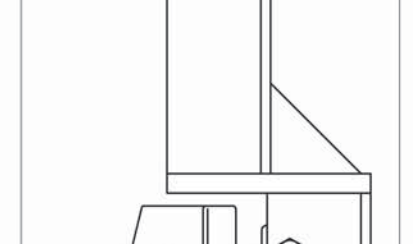
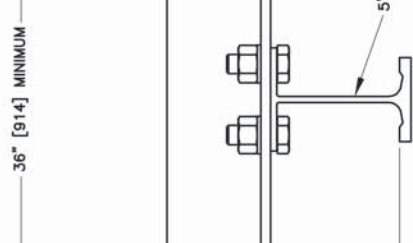
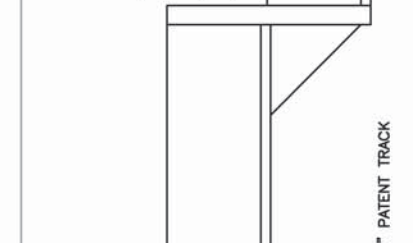
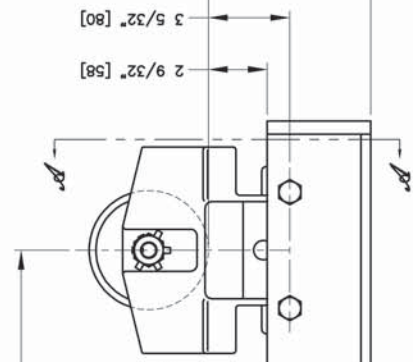
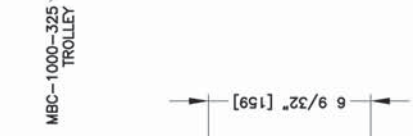
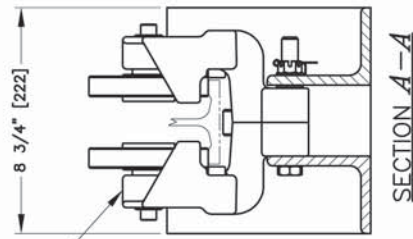


MBC-500-325
TROLLEY



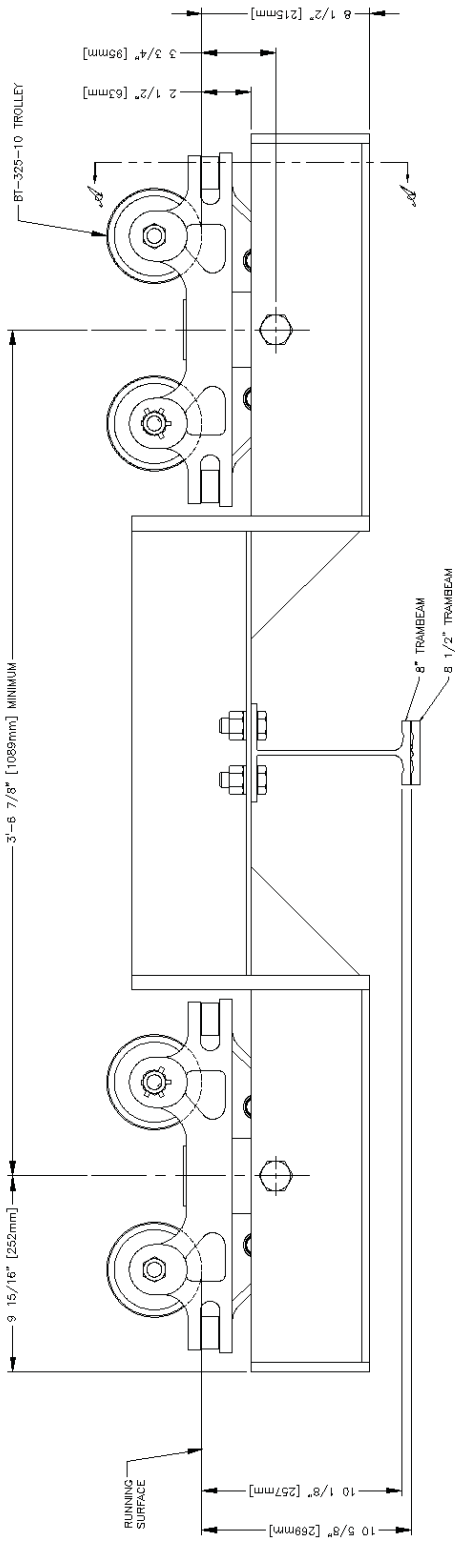
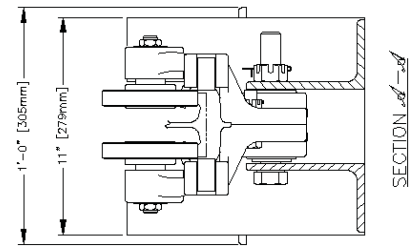
- OPTIONAL TROLLEYS:**
- (1) MBC-500-4-266 W/O K.U.
 - (2) MBC-500-325 W/O K.U.
 - (3) MBC-500-333 W/O K.U.
 - (4) MBC-500-4-266
 - (5) MBC-500-325
 - (6) MBC-500-333

LIGHT LOAD LOW HEADROOM END TRUCK
5" MINIMUM BRIDGE OVERHANG



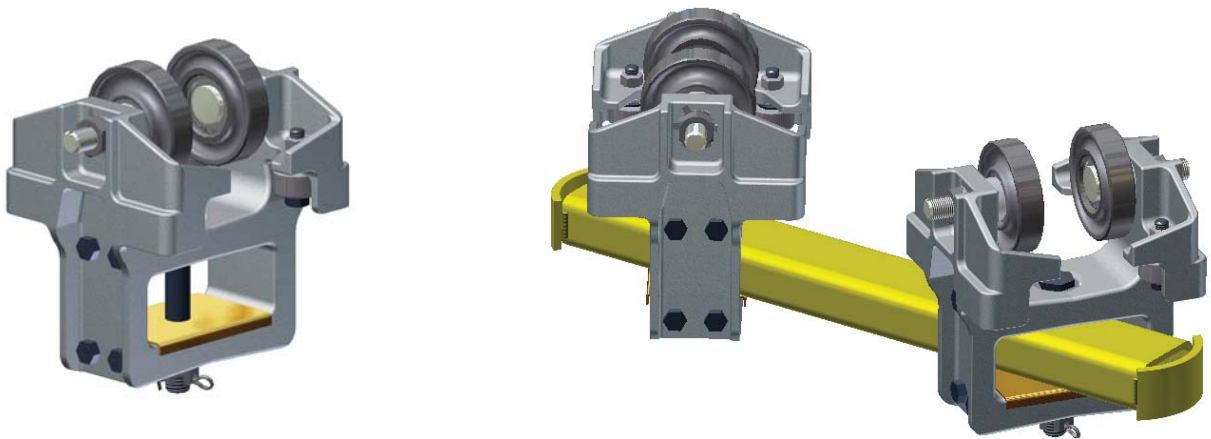
- OPTIONAL TROLLEYS:**
- (1) MBC-1000-333
 - (2) MBC-1000-325 W/O KICKUP
 - (3) MBC-1000-333 W/O KICKUP
 - (4) MBC-1500-325
 - (5) MBC-1500-333
 - (6) MBC-1500-325 W/O KICKUP
 - (7) MBC-1500-333 W/O KICKUP
 - (8) BT-266
 - (9) BT-325
 - (10) BT-333

MEDIUM LOAD LOW HEADROOM END TRUCK
6" MINIMUM BRIDGE OVERHANG



OPTIONAL TROLLEY: BT-333-10

HEAVY LOAD LOW HEADROOM END TRUCK
7" MINIMUM BRIDGE OVERHANG



Model Number

- AC-500-2 for operation on 3.25" or 3.33" flange flat rail or 3.33" flange 6" S-beam (12.5 lb.)
- AC-500-2-4 for operation on 2.66 flange 4" S-Beam (7.7 lb.)

Application

- Used in tandem as articulating load bars on horizontal curved monorail systems

Features

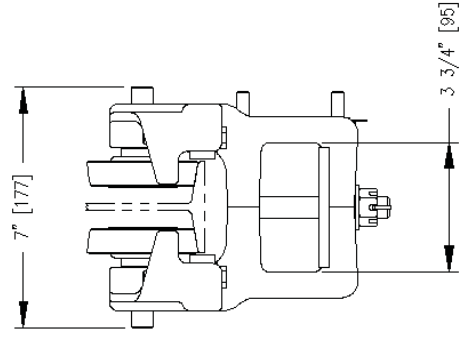
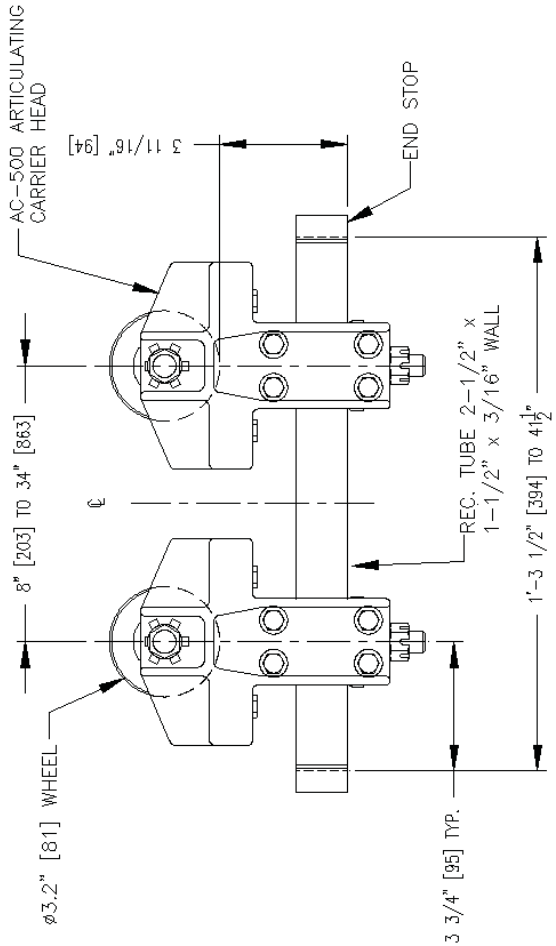
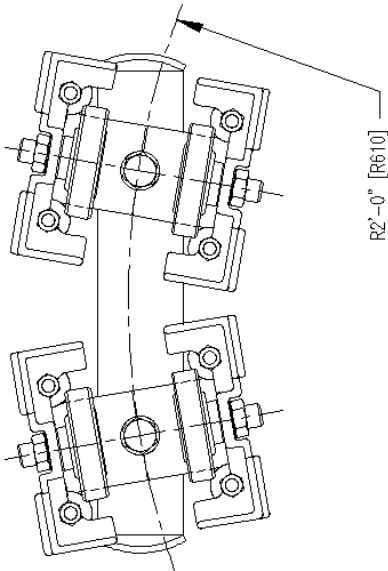
- High tensile almag alloy frames
- Integral built-in safety lugs
- Shielded side thrust roller protection
- Hardened ball bearing side thrust rollers
- Forged wheels 3.2" diameter flat or contoured induction hardened with permanently sealed precision ball bearings
- Load bearing brass wear plate
- Heat-treated steel pivot bolt

Options

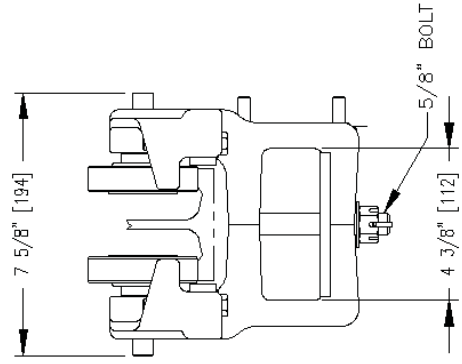
- Standard conveyor wheels 3.2" diameter flat or contoured with lubricated ball bearings
- Can be furnished as an assembled end truck or load bar

LOAD BAR SPECIFICATIONS:
 RATED LOAD: 1000 LBS (448Kgs)
 WEIGHT: 29.5 LBS (13.2Kgs)
 BODY: HIGH TENSILE ALMAG
 WHEELS: 3.2" [81.3] DIA.
 STUD: 5/8" [15] DIA.
 THRUST ROLLERS: BALL THRUST BEARINGS

NOTES:
 WHEN ORDERING PLEASE SPECIFY EXACT WIDTH OF RUNNING SURFACE FLANGE.
 (1) 3.25" [82.6] FOR STANDARD FLAT RAIL.
 (2) 2.66" [67.6] FOR S4 BEAM.
 (3) 3.33" [84.6] FOR S6 BEAM

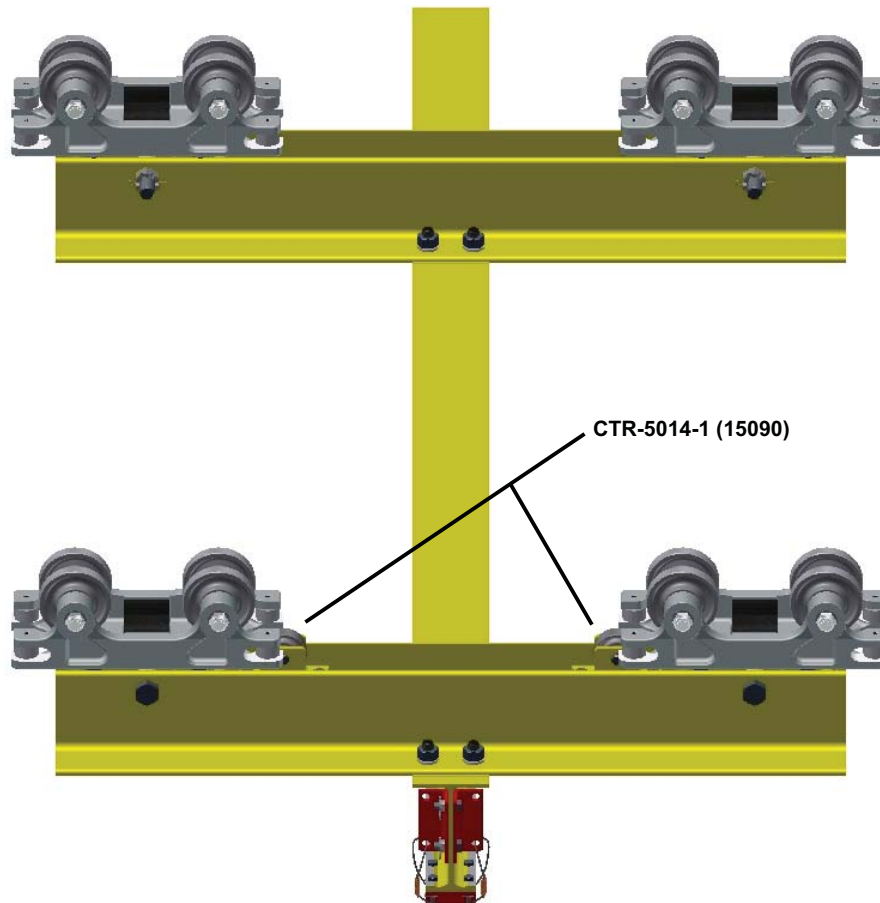


S4 BEAM



3.25" FLAT RAIL

Counter Thrust Roller Assembly



Model Number

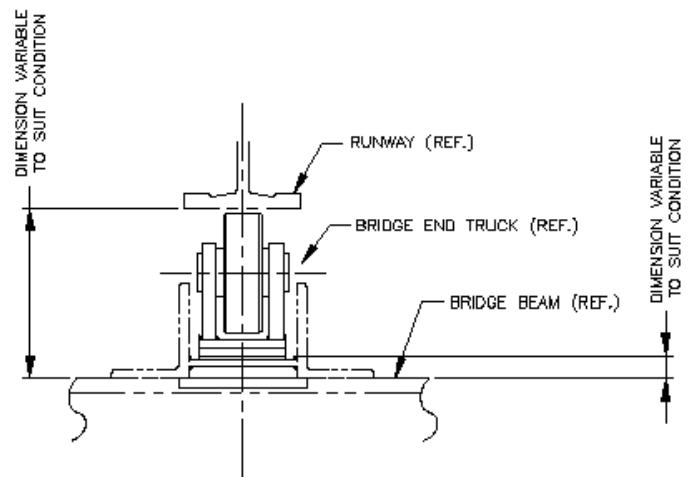
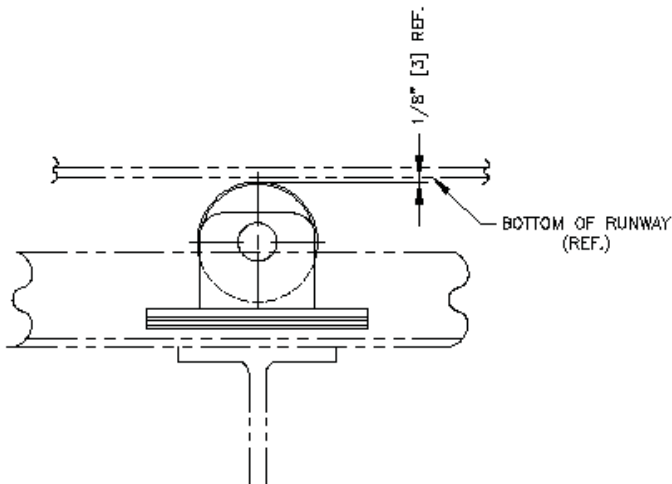
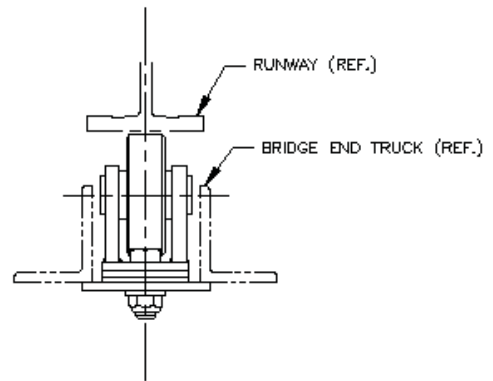
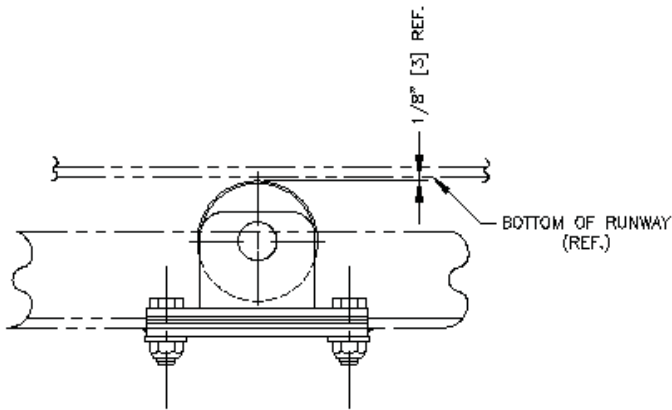
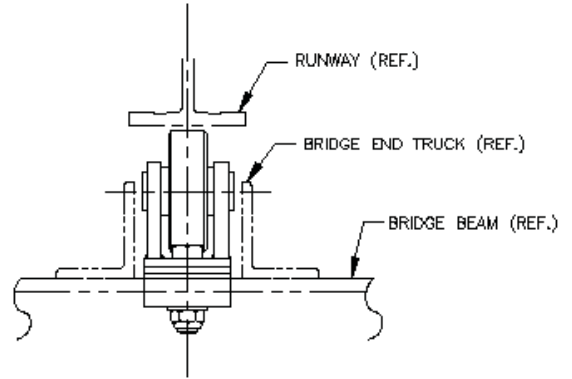
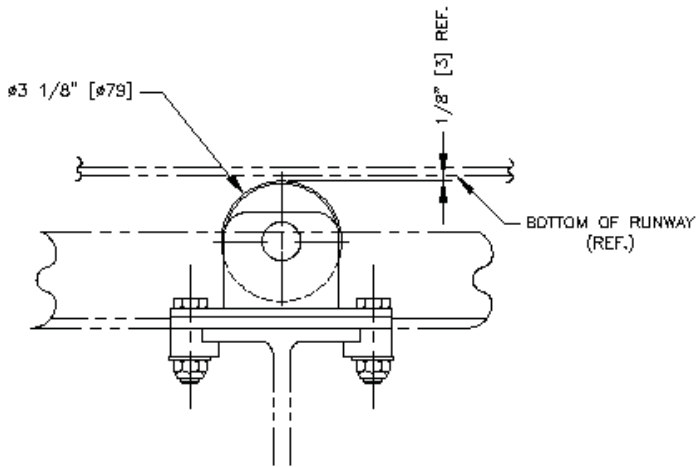
- CTR-5014-1 (15090)

Application

- Used singly or in pairs on bridge crane end trucks where wheel engages bottom surface of runway rail to absorb "kick-up" action when load is moved to extreme end of an overhang bridge beam

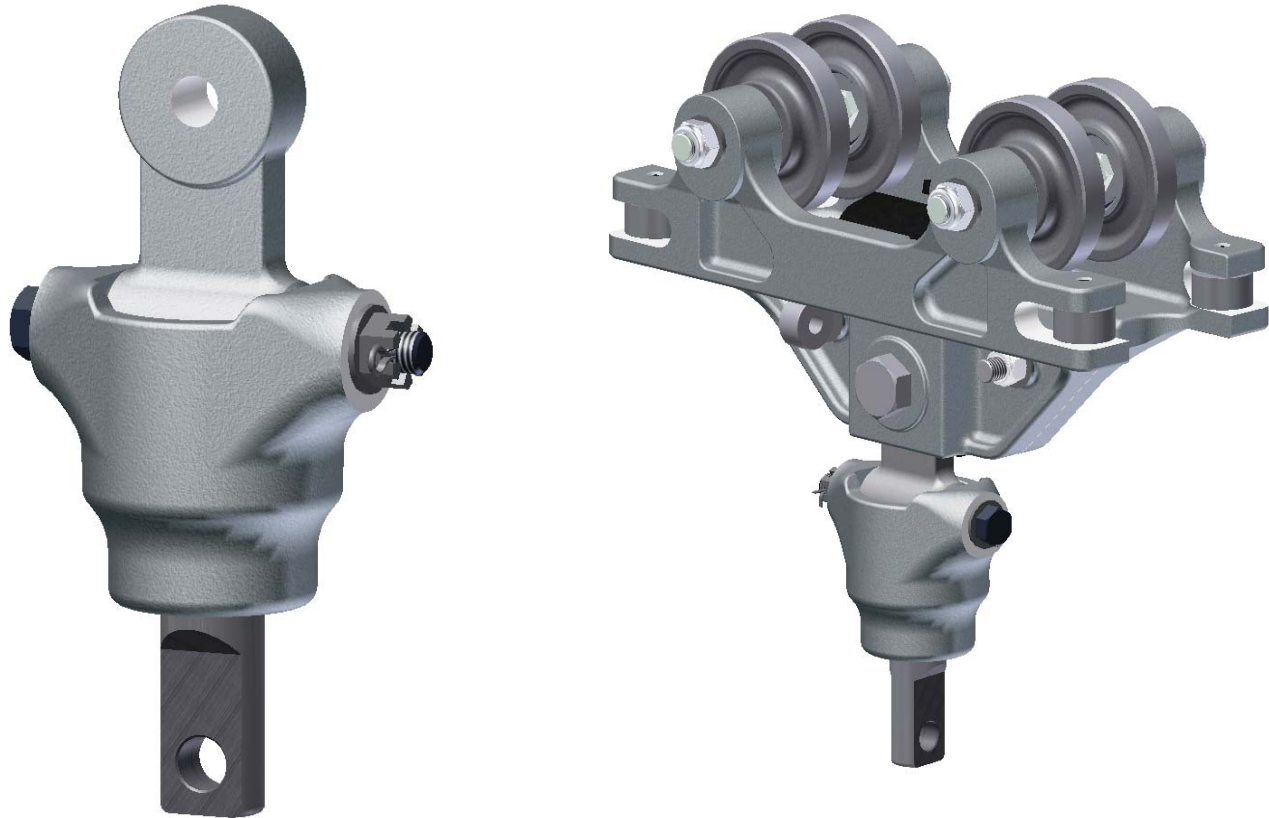
Features

- Large 3 1/8" dia. wheel
- Adjustable height for runway rail clearance
- 1,500 lb. (680kg) Rated Load per CTR



COUNTER THRUST ROLLER ASSEMBLY #CTR-5014-1
LARGE 3 1/8" DIA. WHEEL

Universal Swivel Assemblies



Model Number

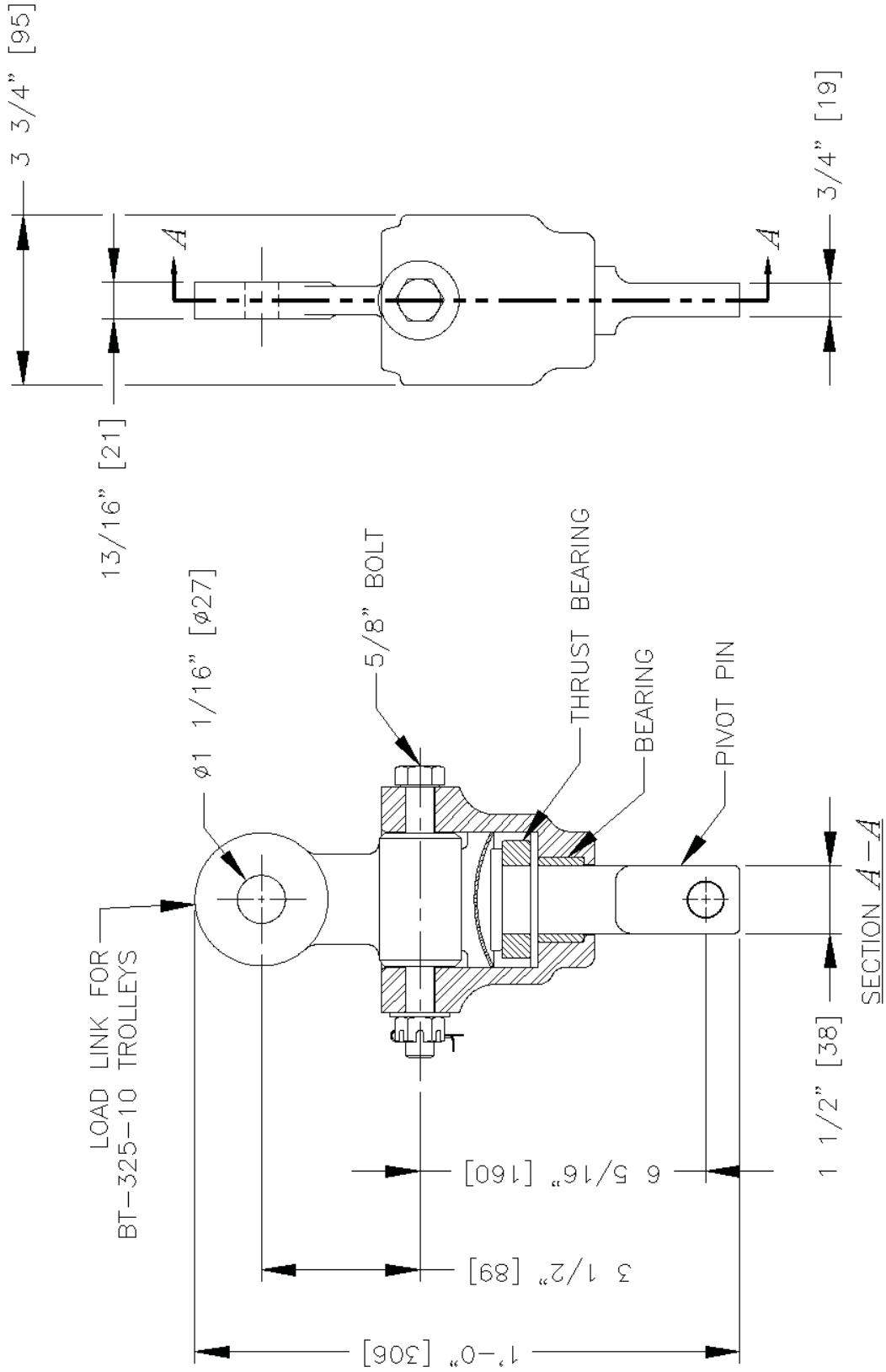
- S-300-1 For use on **Unified** trolley BT-325-10 and BT-333-10

Application

- **Unified** universal swivel assemblies are designed for the suspension of transformer stations not exceeding 2000 lbs. (907kg)
- Also used for the suspension of portable tools, hoists and fixtures

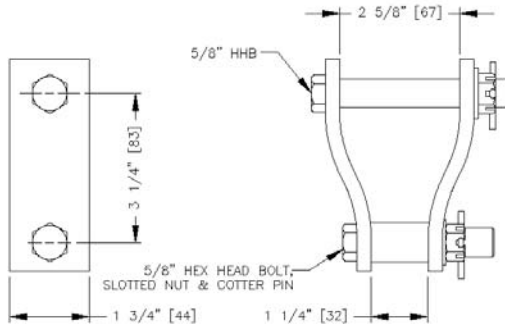
Features

- Rotating shaft on universal swivel designed to fit standard transformer clevis
- Universal swivel permits suspended load to move in all three planes

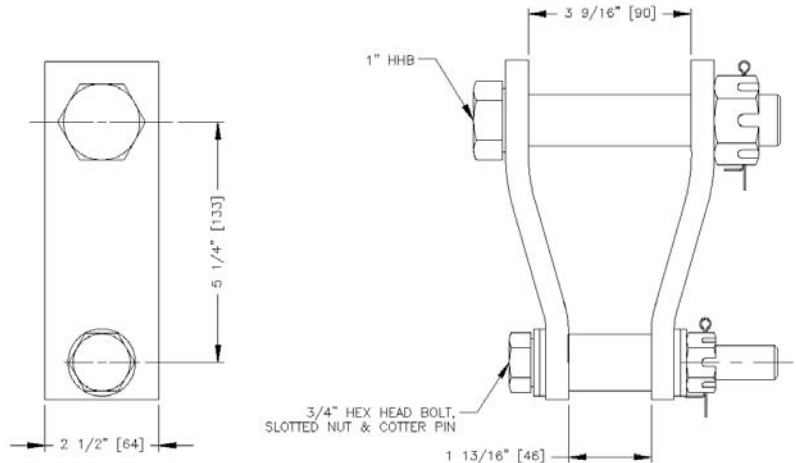


S-300-1 (15250)

Dual Hanging Straps



DHS_5011-1 (15100)
FOR USE ON UNIFIED TROLLEYS
BT-325, BT-266, AND BT-333



DHS_5012-1 (15110)
FOR USE ON UNIFIED TROLLEYS
BT-325-10 & BT-333-10

DHS-5011-1 (15100)



DHS-5012-1 (15110)



Model Number

- DHS-5011-1 for use with **Unified** trolleys BT-325, BT-266 and BT-333
- DHS-5012-1 for use with **Unified** trolleys BT-325-10, BT-333-10

Application

- For suspension of balancers, hoists, portable tools, power tools, fixtures etc.

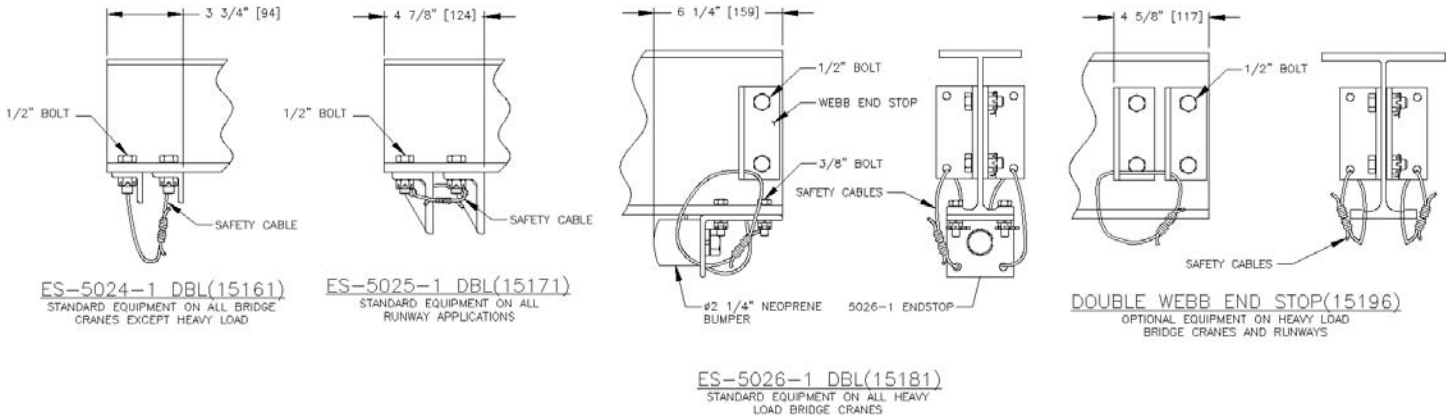
Features

- Forged steel eyebolt or eyebolt and eyenut

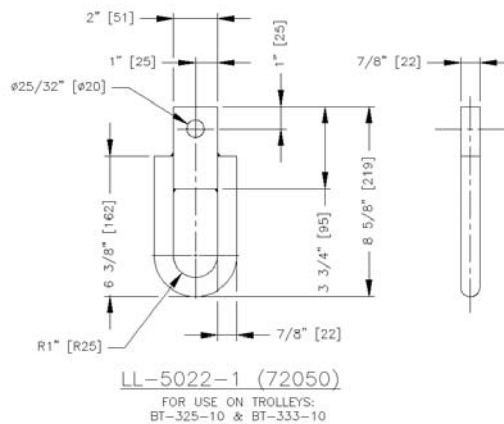
Options

- Available with or without forged eyebolt and eyenut or with standard hex head bolt

End Stops



Load Link



Model Number

Unified standard redundant end stop

- **15161** ES-5024-1
- Furnished as standard equipment on all **Unified** bridge cranes except heavy load bridge crane

Unified standard redundant end stop

- **15171** ES-5025-1
- Attached with two 1/2" steel bolts
- Will take the impact of the carrier on the end truck or load bar rather than on the load wheel

Unified standard redundant end stop

- **15181** ES-5026-1
- Furnished as standard equipment on all **Unified** heavy load bridge cranes
- Optional on other bridge cranes
- **15196** Double Webb End Stop
- Optional on heavy load bridge cranes and runways

Model Number

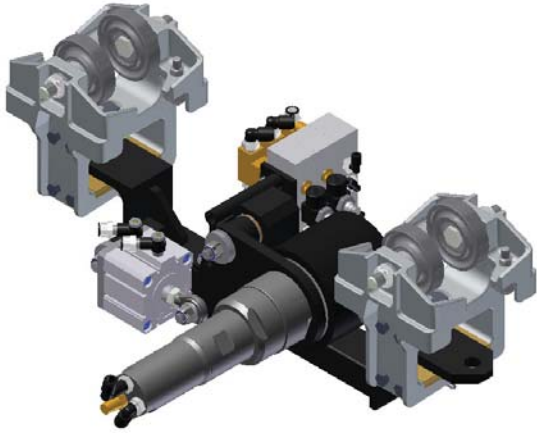
- LL-5022-1 for use on **Unified** trolleys **BT-325-10** & **BT-333-10**

Application

Used to suspend a variety of loads such as balancers, hoists, hooks, fixtures etc.

UNIFIED AIR TRACTOR

The lube free air tractor was developed to be a compact, and reliable alternative to those large air tractors most companies are familiar with.



Features

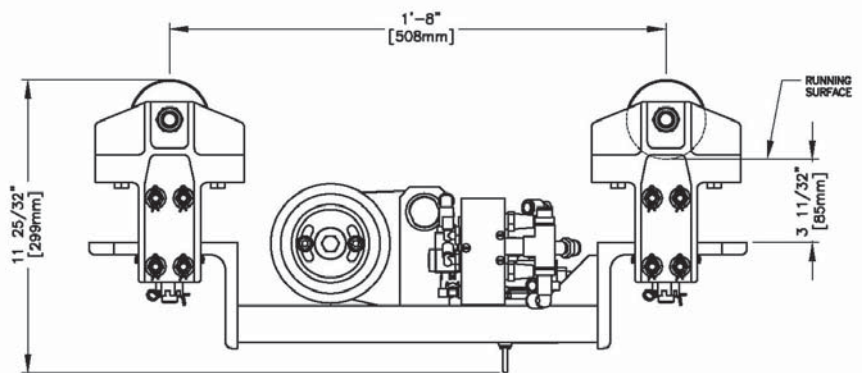
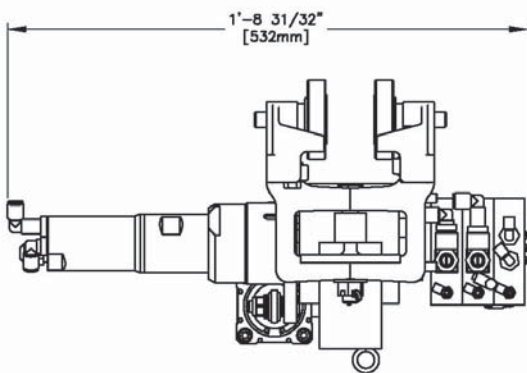
- Lightweight and Compact
- Lube Free Air Motor
- Maintenance Friendly Design
- Quick Delivery, Excellent Pricing

Control Package Options:

- C1 = SMC Control Pack w/Fwd/Rev 2-Button Control Pendant.
- C2 = SMC Control Pack Only. (Requires main air connection + Fwd/Rev signals)
- C3 = Base Tractor Only. No Control valves.
- C4 = SMC Control Pack w/4-Button Control Pendant (Fwd/Rev + ??)

Part Number

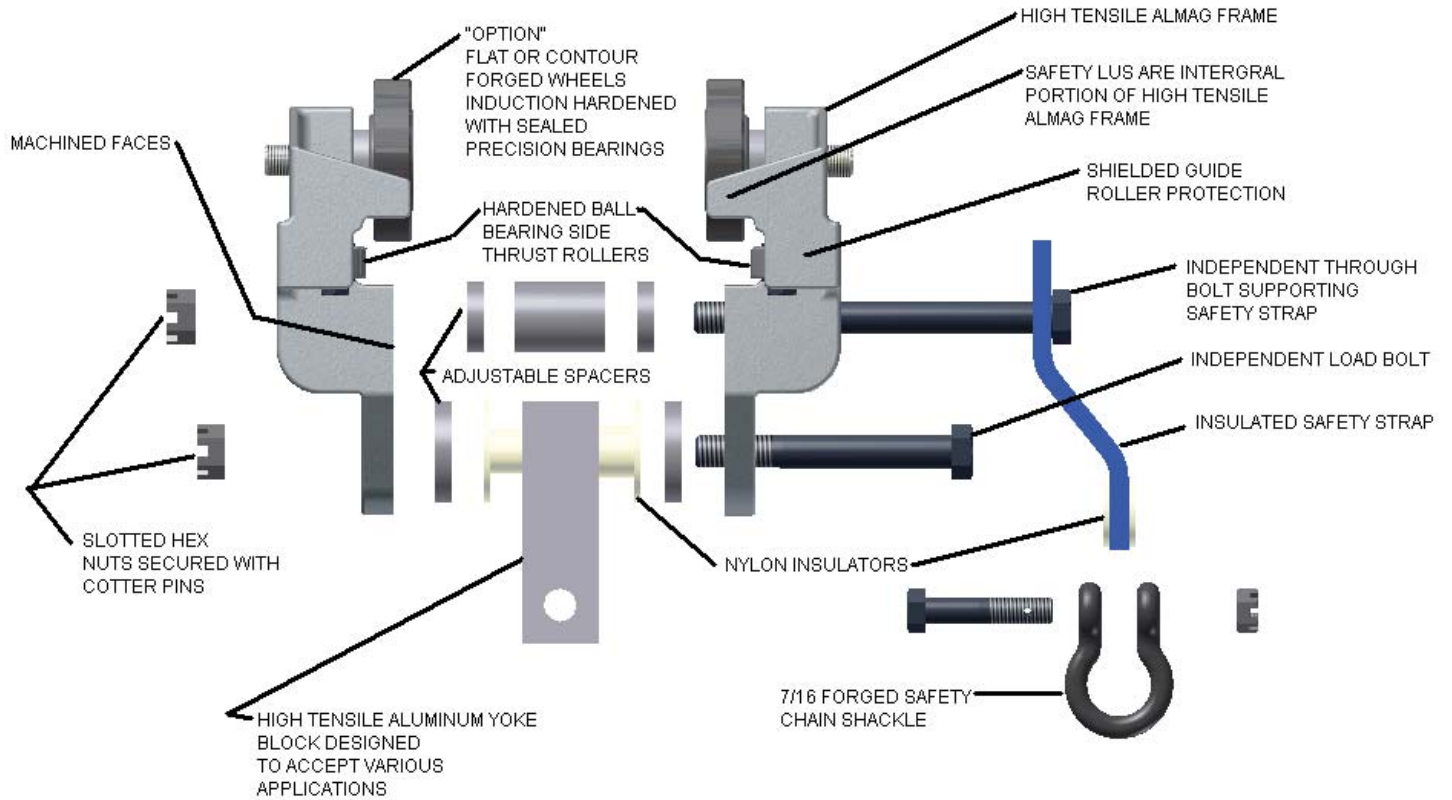
- **UAT-NB-C(x)-PAT** to run on Patent Track rail. Specify control pack above. Weight 75 lbs (34kg)
- **UAT-NB-C(x)-S4** to run on S4x7.7 rail. Specify control pack above. Weight 75 lbs (34kg)
- **UAT-NB-C(x)-S6** to run on S6x12.5 rail. Specify control pack above. Weight 75 lbs (34kg)
- **UAT-NB-C(x)-S8** to run on S8x18.4 rail. Specify control pack above. Weight 75 lbs (34kg)
- **60316** Replacement Drive Wheel



Proper Tractor Operation: Tractor must come to a complete stop before it can be engaged in the opposite direction. If this process is not followed, damage to the Tractor will occur and the warranty will be void.

*NB = No Brake

Unified Universal Insulated Trolley Assembly (Series UT-1000)





UNIFIED INDUSTRIES IS PROUD TO PROVIDE OUR UNIFIED CUSTOM PATENT RAIL SECTIONS

Unified Custom Patent Rail Sections are available up to 20'-0" (6m) in length and three (3) different sizes: 4", 5" & 6" (see page 16 for cross-section).

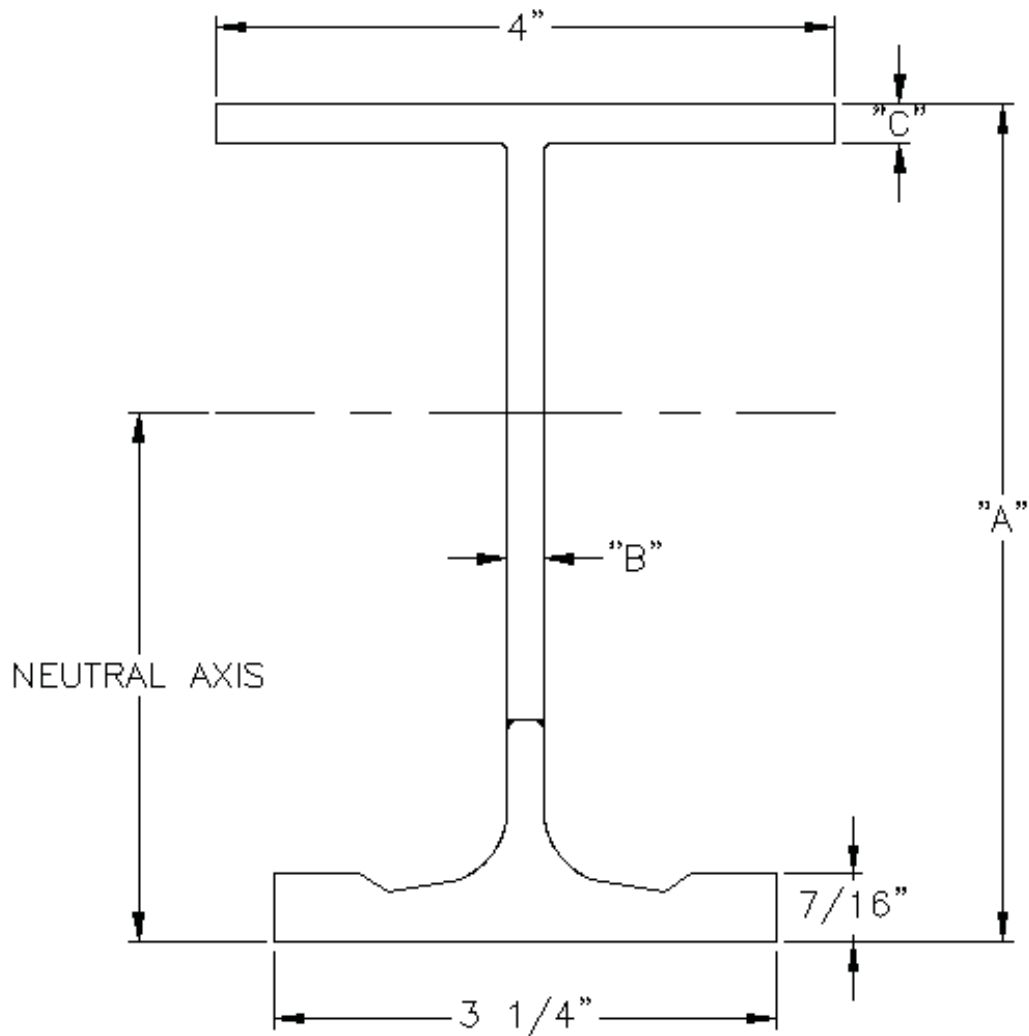
Unified Custom Patent Rails are compatible with our Unified Patent Rail Trolleys as shown in the "Standard Shapes Trolleys" Section of this catalog.

Unified Custom Patent Rails can be utilized in special circumstances such as: custom-built bridges and runways as illustrated in the "Manual Bridge Cranes" Section of this catalog.

Should you require further information concerning the "Unified Custom Patent Rail" Section or any other Unified Product, please consult the factory.

Unified Industries is also pleased to provide "Trambeam" patented rail sections in both light and heavy rail.

Note: Unified stocks all light rail sections and has to order all Heavy rail sections.

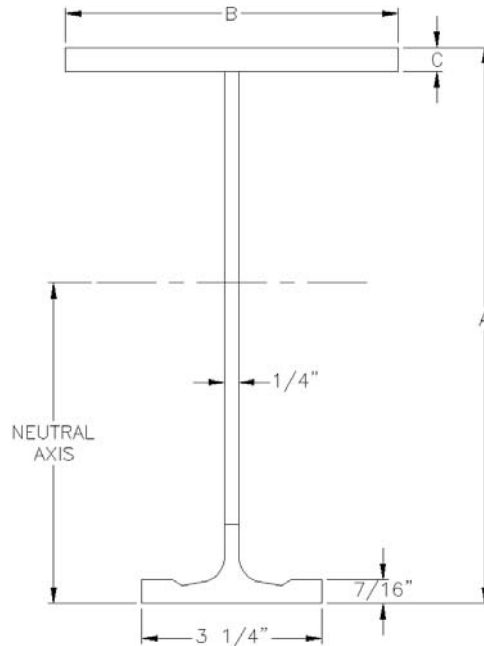


| "A" | "B" | "C" |
|---------|--------|-------|
| 4 7/16" | 15/64" | 9/32" |
| 5 7/16" | 15/64" | 1/4" |
| 6 7/16" | 15/64" | 1/4" |

Light Rail Sections

Nos. 34011 through 34031 light rail sections are used for runway and monorail tracks and bridge girders. Dimensions and section properties are shown in the tables.

Nos. 34011 and 34016 tracks are manufactured in stock lengths of 41 feet. All other light rail tracks are manufactured in stock lengths of 41, 50 and 60 feet. They are cut to length and fabricated in any length up to the maximum stock length.



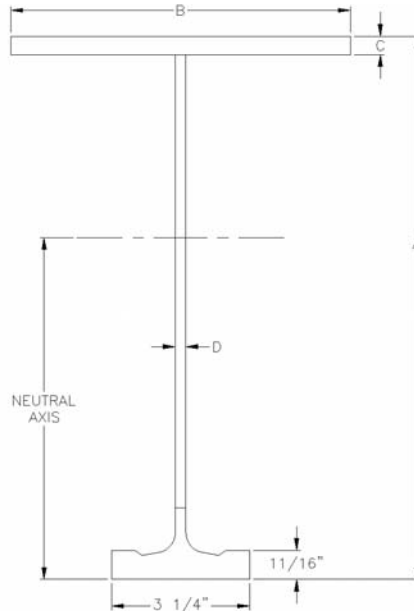
| Item Number | Norminal Size and Weight | A | B | C |
|-------------|--------------------------|---------|---|------|
| 34011 | 8 @ 16.5 | 8-1/16 | 5 | 5/16 |
| 34016 | 8-1/2 @ 19.4 | 8-9/16 | 5 | 7/16 |
| 34021 | 10 @ 22.2 | 10-1/16 | 6 | 7/16 |
| 34026 | 11-1/2 @ 26.3 | 11-9/16 | 7 | 1/2 |
| 34031 | 13 @ 29.3 | 13-1/16 | 8 | 1/2 |

| Item Number | Maximum Wheel Dia.(In) | Area (In. x 2) | Section Modulus (In. x 3) | | Moment of Interia(In. x 4) | Neutral Axis (In.) |
|-------------|------------------------|----------------|---------------------------|-------------|----------------------------|--------------------|
| | | | Tension | Compression | | |
| 34011 | 5 | 4.672 | 12.920 | 11.585 | 54.399 | 3.812 |
| 34016 | | 5.703 | 14.857 | 18.254 | 70.133 | 4.720 |
| 34021 | | 6.515 | 18.799 | 25.656 | 109.171 | 5.807 |
| 34026 | | 7.750 | 23.298 | 37.568 | 166.270 | 7.137 |
| 34031 | | 8.625 | 27.924 | 48.310 | 231.148 | 8.278 |

Heavy Rail Sections

No. 34037 Nos. 34041 through 34066 heavy rail sections are used for runway and monorail tracks and bridge girders. No. 34038 sections are used for monorail curves. Dimensions and section properties are shown in the tables.

Nos. 34037 and Nos. 34041 through 34056 tracks are manufactured in stock lengths of 41, 50 and 60 feet. Nos. 34061 and 34066 tracks are manufactured to order. They are cut to length and fabricated in any length up to the maximum.



| Item Number | Norminal Size and Weight | A | B | C | D |
|-------------|--------------------------|---------|--------|-----|------|
| 34037 | 12-1/2 @ 33.6 | 12-9/16 | 8 | 1/2 | 5/16 |
| *34038 | 12-1/2 @ 30.2 | 12-9/16 | 6 | 1/2 | 5/16 |
| 34041 | 14 @ 38.5 | 14-1/16 | 8 | 5/8 | 5/16 |
| 34046 | 16 @ 42.7 | 16-1/16 | 9 | 5/8 | 5/16 |
| 34051 | 18 @ 50.3 | 18-1/16 | 10 | 5/8 | 3/8 |
| 34056 | 20 @ 55.0 | 20-1/16 | 11 | 5/8 | 3/8 |
| 34061 | 22-1/2 @ 61.4 | 22-9/16 | 12-1/2 | 5/8 | 3/8 |
| 34066 | 25 @ 67.8 | 25-1/16 | 14 | 5/8 | 3/8 |

| Item Number | Maximum Wheel Dia.(In) | Area (In. x 2) | Section Modulus (In. x 3) | | Moment of Inertia(In. x 4) | Neutral Axis (In.) |
|-------------|------------------------|----------------|---------------------------|-------------|----------------------------|--------------------|
| | | | Tension | Compression | | |
| 34037 | 8 | 9.888 | 34.440 | 48.781 | 253.605 | 7.364 |
| *34038 | | 8.888 | 33.251 | 39.324 | 226.337 | 6.807 |
| 34041 | | 11.318 | 40.939 | 65.239 | 353.731 | 8.460 |
| 34046 | | 12.568 | 49.889 | 84.012 | 502.776 | 10.078 |
| 34051 | | 14.802 | 62.307 | 106.516 | 710.066 | 11.396 |
| 34056 | | 16.177 | 73.512 | 130.069 | 942.276 | 12.818 |
| 34061 | | 18.052 | 88.875 | 165.152 | 1303.680 | 14.669 |
| 34066 | | 19.927 | 105.539 | 204.237 | 1743.910 | 16.524 |

CAUTION

This bridge crane has a safe load rating, which has been clearly marked on both sides by the manufacturer. The total weight of the suspended load should never exceed 125% of this limit. The weight of all handling devices such as buckets, magnets, grabs, balancers, hoists, weldguns, etc. must be included as a part of the suspended load. The weight of such devices should therefore be determined and clearly marked.

Consideration should be given when installing hoisting devices. Load ratings for such devices may exceed the load rating of the bridge crane.

The operator should inspect this bridge crane for loose bolts and worn, cracked or distorted parts prior to use (inspection should include all handling devices and mounting equipment). Defective parts should be replaced with manufacturer-approved parts before use of bridge crane is resumed.

This bridge crane conforms to the safety standards of the U.S. Occupational Safety and Health Administration (OSHA). Any alteration of its structure or change in its rated load capacity may render null and void any manufacturer's warranties, expressed or implied.

***All dimensions are reference only
and need to be verified with factory.**





UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

STANDARD SHAPES TROLLEY PARTS MANUAL

PARTS AND REPAIR MANUAL

This manual has been compiled to expedite the ordering of repair parts for Unified Industries' products, as well as to present to maintenance personnel the correct method of servicing the product.

In order to show all component details of Unified Industries' products, an exploded view has been shown for each model. Further technical information is available in our current full line product catalog.

INSTRUCTIONS FOR ORDERING

Locate the model required in the index and turn to the page number indicated for the exploded view.

Each serviceable part or sub-assembly in the exploded view is identified by a reference number. Use the reference number to locate the necessary part information in the parts list on the opposite page.

Any parts listed without a reference number in the parts list are not sold separately, but are included in the sub-assembly above it as shown in the exploded view. Each item listed as a sub-assembly will be sold complete including all of its component parts listed directly below it.

The parts list quantity column gives the required amount of each component part for each complete assembly.

Specify which model each part is being ordered for to ensure that the correct part is shipped.

Always use the complete stock code number and part description for each part being ordered.

Specify the quantity needed for each part being ordered.

Email your order to: sales@unified-ind.com

or call Project / Distributor Sales at: (517) 546-3220

GENERAL OPERATION AND MAINTENANCE INSTRUCTIONS

A physical inspection of all Unified Industries' products is required at least every six months. Visually inspect all parts, moving as well as non-moving, for cracks, excessive wear, or other damage. Particular attention should be given to the following parts: load wheels (outer surface and bearings), side guide rollers, kick-up wheels, safety straps, attachment mechanisms or bolts, and all contact surfaces. Should cracks, excessive wear, or other damage be present, replace the part.

All trollies must move freely without restriction during operation. Should any restriction be present, an inspection and correction of the problem should be made.

Rail and bridge girder running surfaces must be clean and in good condition to allow the trollies to move freely.

Runway surfaces must be parallel and level to provide proper alignment for the bridge crane end trucks.

End stops on all bridge cranes, telescoping beams, or rails must be securely fastened with Grade 5 bolts, slotted nuts, and cotter pins. End stop bolts must be mounted with bolt head on rail surface, threads down, through the rail and end stop, as shown in exploded views of bridge cranes and telescopes.

Never operate bridge cranes without end truck trollies properly and securely fastened.

Do not load any bridge crane and/or trolley beyond its rated capacity as so labeled.

Safety straps are provided on trollies without built-in safety lugs in the casting. Any safety items such as safety straps, chains, etc. - provided with Unified Industries' trollies - must remain in place to provide added safety protection for the operator.

Any trolley model designed with special sliding or articulating action must be correctly mounted to allow the movement required.

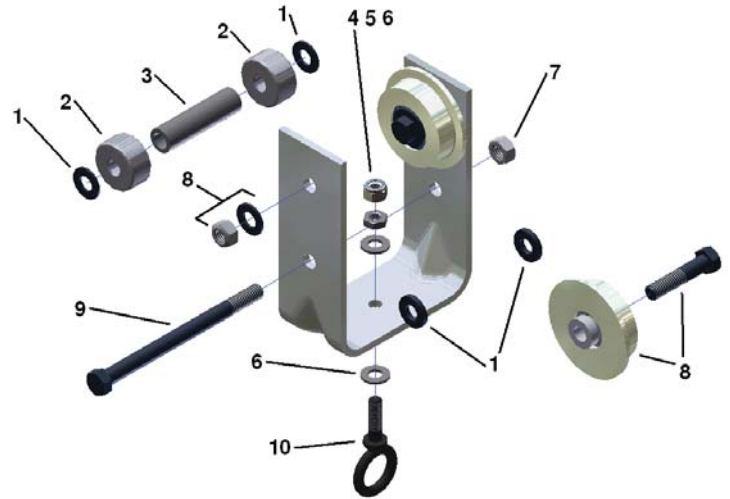
Any conveyor type load wheels with grease fittings on the axle should be inspected and properly greased, using a silicone free molysulfide grease, approximately every six months depending on work load and use.



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**FT-325, FT-325
FT-333, FT-333**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------------|----------|
| 1 | 53040 | 3/8" Washer | 4 |
| 2 | 56170 | 3021 1.25" Guide Roller | 2 |
| 3 | 55730 | FT-333 Spacer | 1 |
| 4 | 52020 | 5/16" Nylon Locknut | 1 |
| 5 | 52040 | 5/16" Hex Nut | 1 |
| 6 | 53030 | 5/16" Washer | 2 |
| 7 | 52095 | 3/8" Top Lock Nut | 1 |
| 8 | 30010 | 3022 Flanged Flat Wheel Sub-Assembly | 2 |
| | | 2" Flat Wheel | 2 |
| | | Wheel Bearing | 2 |
| | | 3/8" Washer | 2 |
| | | 3/8" Top Lock Nut | 2 |
| | | 3/8" Hex Bolt | 2 |
| 9 | 50600 | 3/8" Hex Bolt | 1 |
| 10 | 50020 | 5/16" Eyebolt | 1 |



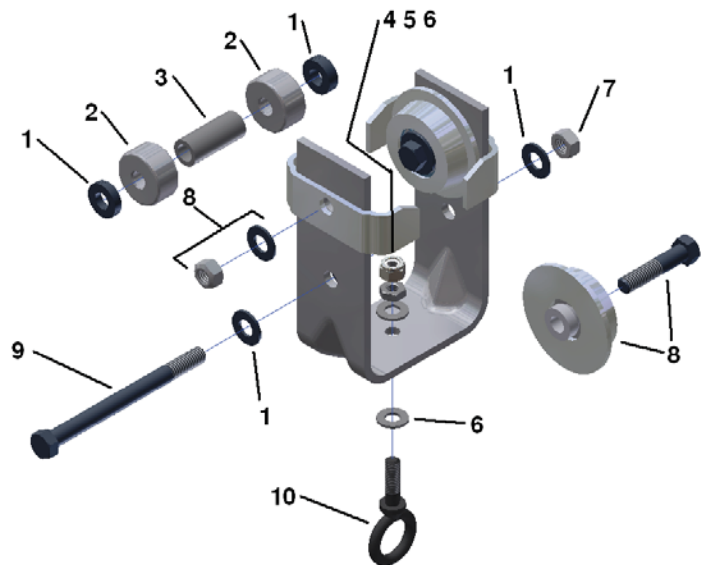
FT-333 and FT-333-B OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | | DESCRIPTION |
|------------|------|-----------------------------------|
| 30020 | 3039 | 2" Flanged Contour Wheel Assembly |

**FT-233, FT-233-B (BUMPER)
FT-266, FT-266-B (BUMPER)**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------|----------|
| 1 | 53040 | 3/8" Washer | 4 |
| 2 | 56170 | 3021 1.25" Guide Roller | 2 |
| 3 | 55710 | FT-233 Spacer | 1 |
| 4 | 52020 | 5/16" Nylon Locknut | 1 |
| 5 | 52040 | 5/16" Hex Nut | 1 |
| 6 | 53030 | 5/16" Washer | 2 |
| 7 | 52095 | 3/8" Top Lock Nut | 1 |
| 8 | 30020 | 3039 Flanged Contour Wheel Sub-Assembly | 2 |
| | | 2" Contour Wheel | 2 |
| | | Wheel Bearing | 2 |
| | | 3/8" Washer | 2 |
| | | 3/8" Top Lock Nut | 2 |
| | | 3/8" Hex Bolt | 2 |
| 9 | 50600 | 3/8" Hex Bolt | 1 |
| 10 | 50020 | 5/16" Eyebolt | 1 |



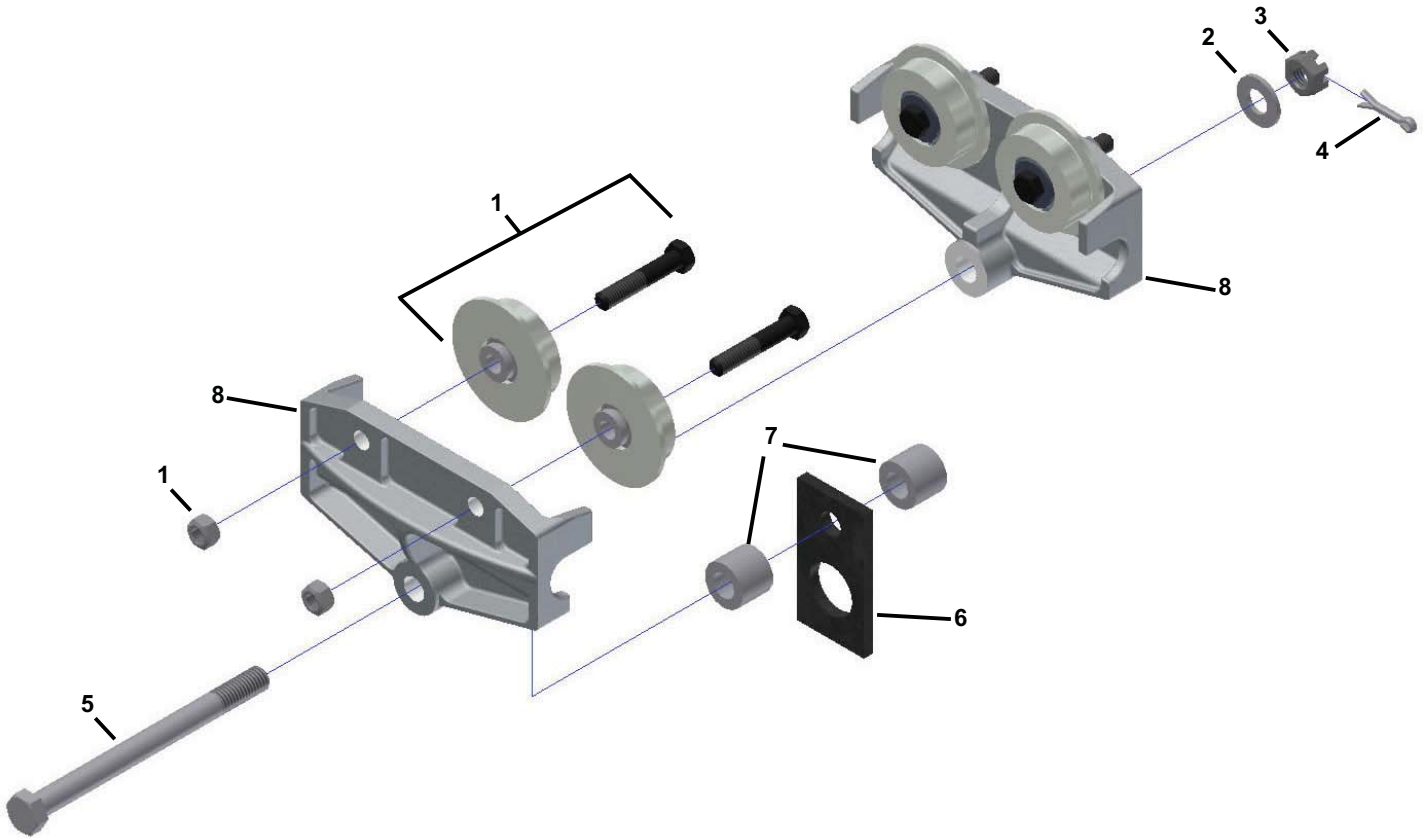
MT-250-B

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------|----------|
| 1 | 30010 | 3022 Flanged Flat Wheel Sub-Assembly | 4 |
| | | 2" Flanged Flat Wheel | 4 |
| | | Wheel Bearing | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Hex Bolt | 4 |
| 2 | 53060 | 1/2" Washer | 1 |
| 3 | 52220 | 1/2" Slotted Hex Nut | 1 |
| 4 | 54040 | 1/8" Cotter Pin | 1 |
| 5 | 50900 | 1/2" Hex Bolt | 1 |
| 6 | 61180 | MT-250B Hanger Strap | 1 |
| 7 | 83540 | 1" OD x 9/16 ID CQ STL Tube | 2 |
| 8 | 59150M | MT-250B Machined Casting | 2 |

MT-250-B OPTIONS

(See Page 25 for Optional Wheels)

| STOCK CODE | | DESCRIPTION |
|------------|------|-----------------------------------------|
| 30020 | 3039 | 2" Flanged Contour Wheel Assembly |
| 30025 | | 2" Brass Flanged Contour Wheel Assembly |
| 30365 | | 2" Brass Flanged Flat Wheel Assembly |



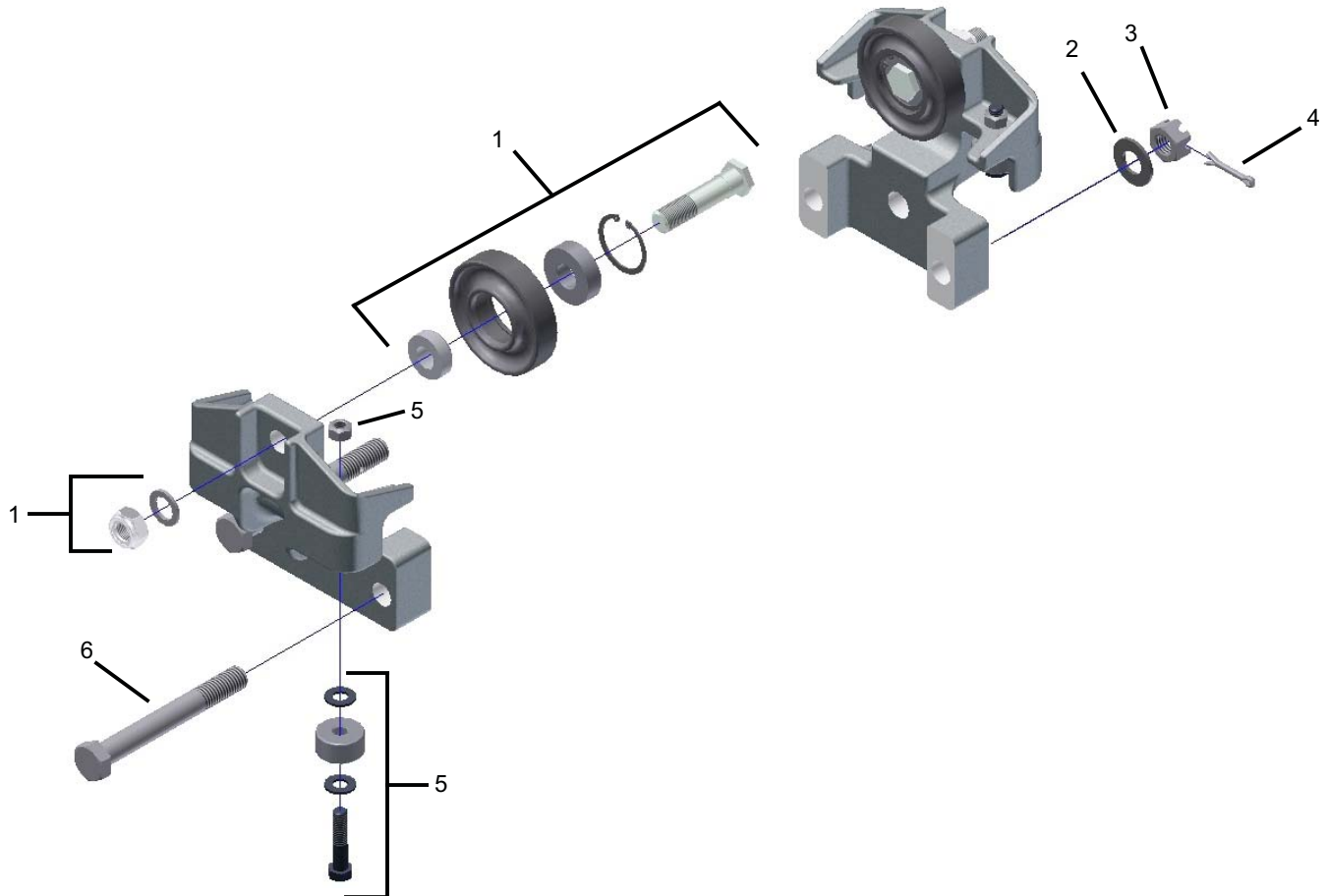
**MBC-500 WITHOUT KICKUP WHEELS
MBC-500-S4 WITHOUT KICKUP WHEELS**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1 | 30095 | 3.2 Flat Wheel Assembly 3.2" Flat Wheel Snap Ring Wheel Bearing Stud Spacer 5/8" Wheel Stud Washer 5/8" Nylon Insert Jam Nut | 2 2 2 2 2 2 2 2 |
| 2 | 53070 | 5/8" Washer | 2 |
| 3 | 52290 | 5/8" Slotted Hex Nut | 2 |
| 4 | 54083 | 5/32" Cotter Pin | 2 |
| 5 | 15010 | Guide Roller Sub-Assembly 3021 1.25" Guide Roller 3/8" Hex Bolt 3/8" Top Lock Nut 3/8" Washer | 4 4 4 4 8 |
| 6 | 51110 | 5/8" Hex Bolt | 2 |

MBC-500 and MBC-500-S4 WITHOUT KICKUP WHEELS OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assembly |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assembly |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assembly |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |



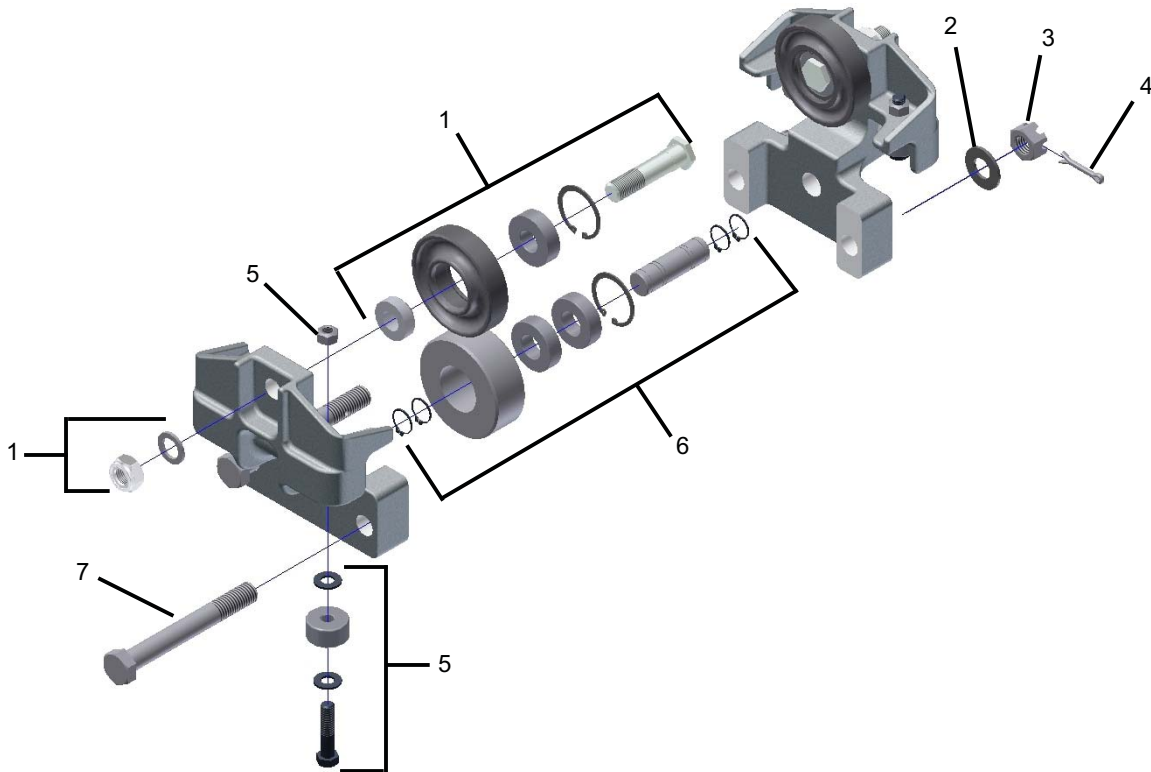
**MBC-500 WITH KICKUP WHEELS
MBC-500-S4 WITH KICKUP WHEELS**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------------|----------|
| 1 | 30095 | 3.2 Flat Wheel Assembly | 2 |
| | | 3.2" Flat Wheel | 2 |
| | | Snap Ring | 2 |
| | | Wheel Bearing | 2 |
| | | Stud | 2 |
| | | Spacer | 2 |
| | | 5/8" Wheel Stud Washer | 2 |
| | | 5/8" Nylon Insert Jam Nut | 2 |
| 2 | 53070 | 5/8" Washer | 2 |
| 3 | 52290 | 5/8" Slotted Hex Nut | 2 |
| 4 | 54083 | 5/32" Cotter Pin | 2 |
| 5 | 15010 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 6 | 30080 | Double Bearing Kick-Up Wheel Assembly | 1 |
| | | 3.12" Double Bearing Kick-Up Wheel | 1 |
| | | Wheel Bearing | 2 |
| | | Snap Ring | 1 |
| | | Snap Ring | 4 |
| | | Double Bearing Kickup Axle | 1 |
| 7 | 51110 | 5/8" Hex Bolt | 2 |

MBC-500 and MBC-500-S4 WITH KICKUP WHEELS OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assembly |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assembly |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assembly |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |

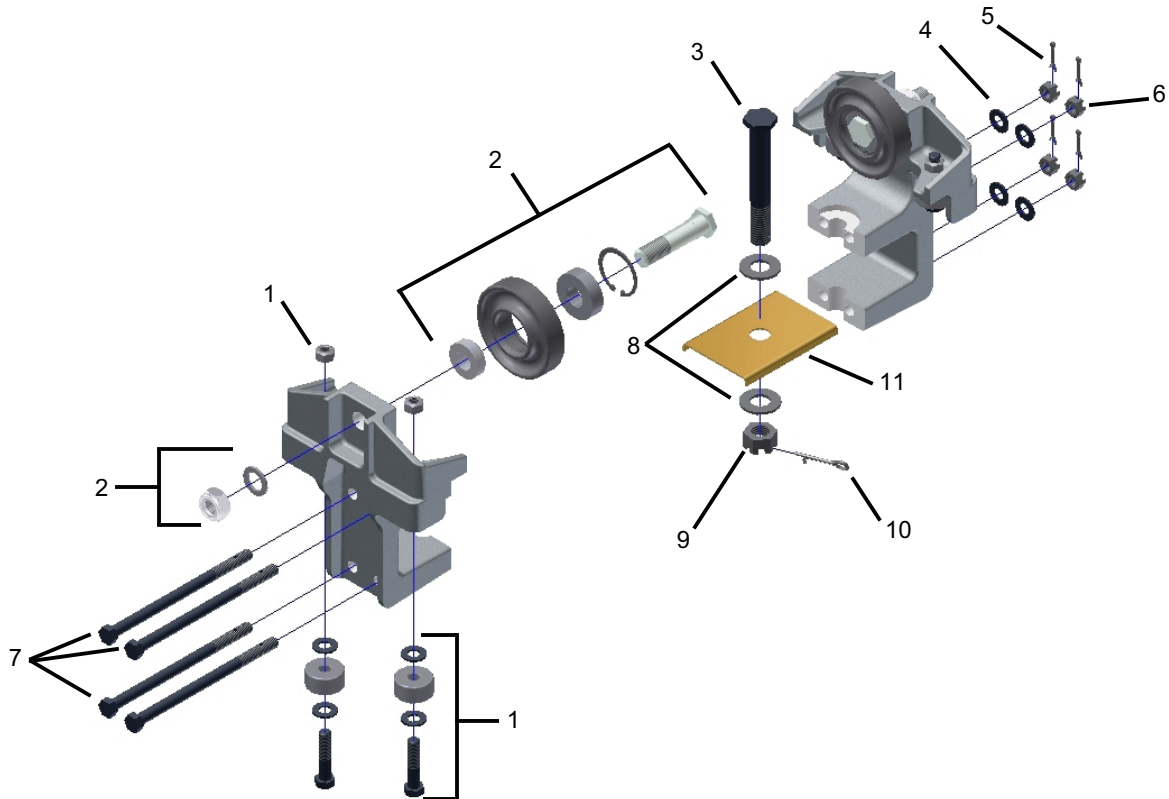


**AC-500-2
AC-500-2-4**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------|----------|
| 1 | 15010 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30095 | 3.2 Flat Wheel Assembly | 2 |
| | | 3.2" Flat Wheel | 2 |
| | | Snap Ring | 2 |
| | | Wheel Bearing | 2 |
| | | Stud | 2 |
| | | Spacer | 2 |
| | | 5/8" Wheel Stud Washer | 2 |
| | | 5/8" Nylon Insert Jam Nut | 2 |
| 3 | 51090 | 5/8" Half Head Hex Bolt | 1 |
| 4 | 53040 | 3/8" Washer | 4 |
| 5 | 54010 | 3/32" Cotter Pin | 4 |
| 6 | 52110 | 3/8" Slotted Hex Nut | 4 |
| 7 | 50610 | 3/8" Hex Bolt | 4 |
| 8 | 53070 | 5/8" Washer | 1 |
| 9 | 52290 | 5/8" Slotted Hex Nut | 1 |
| 10 | 54083 | 5/32" Cotter Pin | 1 |
| 11 | 75050 | SAC-500 Brass Pad | 1 |

AC-500-2 and AC-500-2-4 OPTIONS
(See Page 19 for Optional Wheels)

| STOCK CODE | | DESCRIPTION |
|------------|------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assembly |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assembly |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assembly |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |



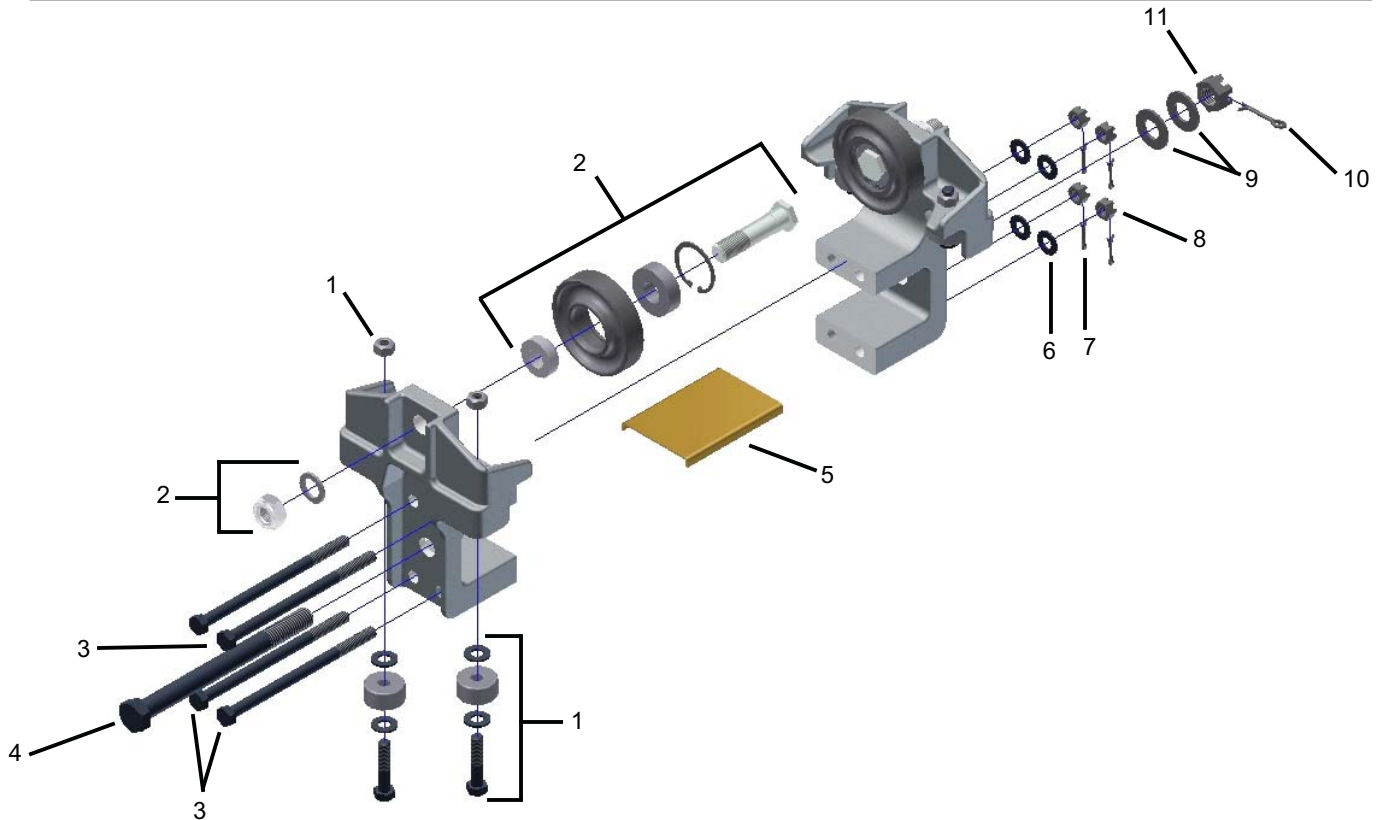
**SAC-500-2
SAC-500-2-4**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------|----------|
| 1 | 15010 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30095 | 3.2 Flat Wheel Assembly | 2 |
| | | 3.2" Flat Wheel | 2 |
| | | Snap Ring | 2 |
| | | Wheel Bearing | 2 |
| | | Stud | 2 |
| | | Spacer | 2 |
| | | 5/8" Wheel Stud Washer | 2 |
| | | 5/8" Nylon Insert Jam Nut | 2 |
| 3 | 50610 | 3/8" Hex Bolt | 4 |
| 4 | 51170 | 5/8" Hex Bolt | 1 |
| 5 | 75050 | SAC-500 Brass Pad | 1 |
| 6 | 53040 | 3/8" Washer | 4 |
| 7 | 54010 | 3/32" Cotter Pin | 4 |
| 8 | 52110 | 3/8" Slotted Hex Nut | 4 |
| 9 | 53070 | 5/8" Washer | 1 |
| 10 | 54083 | 5/32" Cotter Pin | 1 |
| 11 | 52290 | 5/8" Slotted Hex Nut | 1 |

SAC-500-2 and SAC-500-2-4 OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assembly |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assembly |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assembly |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |



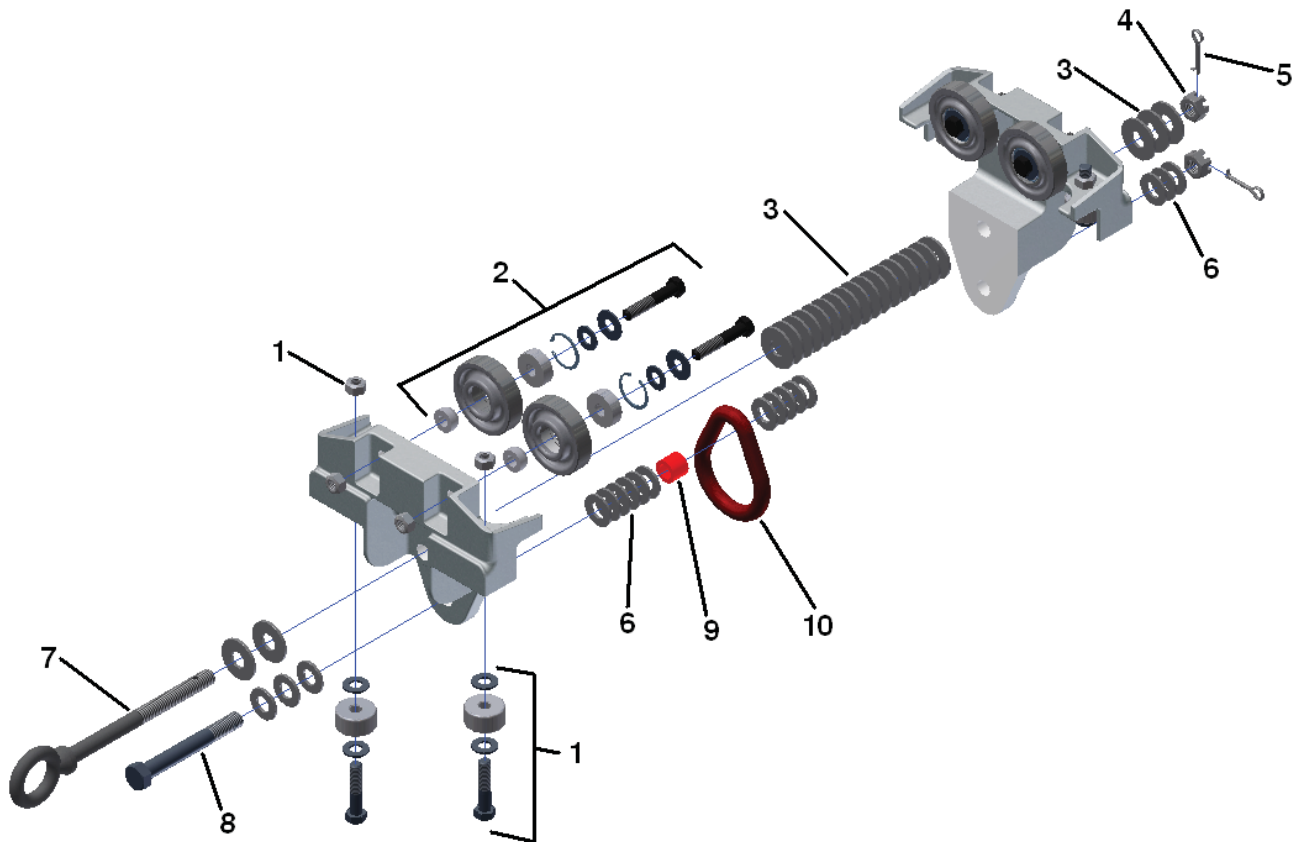
**UT-500-LL
UT-500-S**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------|----------|
| 1 | 15010 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Nylon Locknut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30040 | 3052 Flat Wheel Sub-Assembly | 4 |
| | | 2.4" Flat Wheel | 4 |
| | | Snap Ring | 4 |
| | | Wheel Bearing | 4 |
| | | Spacer | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" SAE Washer | 4 |
| | | 3/8" USS Washer | 4 |
| 3 | 53140 | 1/2" USS Washer | 17 |
| 4 | 52220 | 1/2" Slotted Hex Nut | 2 |
| 5 | 54040 | 1/8" Cotter Pin | 2 |
| 6 | 53060 | 1/2" SAE Washer | 17 |
| 7 | 50080 | 1/2" Eyebolt | 1 |
| 8 | 58040 | 1/2" Hex Bolt | 1 |
| 9 | 55820 | Spacer | 1 |
| 10 | 72010 | 1/2" Sling Link (For UT-500-LL Only) | 1 |

UT-500-LL and UT-500-S OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | | DESCRIPTION |
|------------|------|-----------------------------|
| 30050 | 3053 | 2.4" Contour Wheel Assembly |



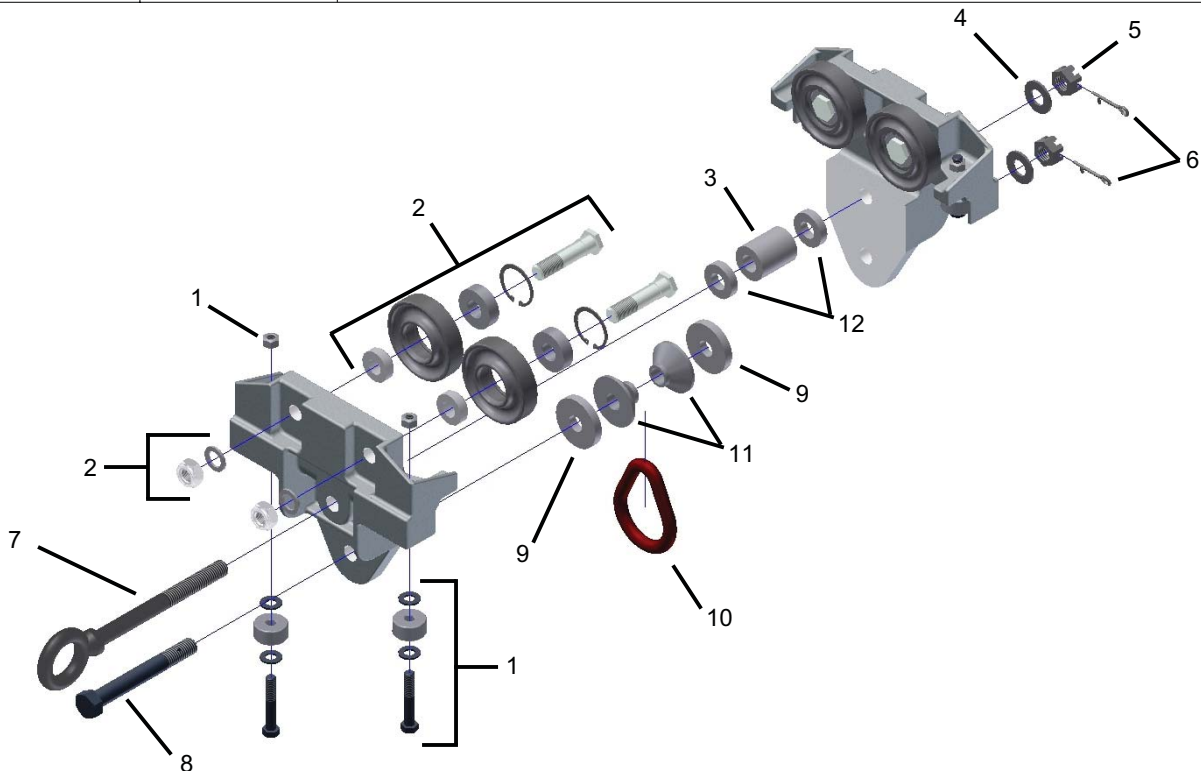
**UT-1000-S
UT-1000-LL**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------------|----------|
| 1 | 15020 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30090 | 3049 Flat Wheel Sub-Assembly | 4 |
| | | 3.2" Flat Wheel | 4 |
| | | Snap Ring | 4 |
| | | Wheel Bearing | 4 |
| | | Stud | 4 |
| | | Spacer | 4 |
| | | 5/8" Wheel Stud Washer | 4 |
| | | 5/8" Nylon Insert Jam Nut | 4 |
| 3 | 55660 | #4 UT Spacer | 1 |
| 4 | 53070 | 5/8" Washer | 2 |
| 5 | 55229 | 5/8" Slotted Hex Nut | 2 |
| 6 | 54083 | 5/32" Cotter Pin | 1 |
| 7 | 50110 | 5/8" Eye Bolt | 1 |
| 8 | 51100 | 5/8" Hex Bolt | 1 |
| 9 | 55700 | #10 UT Spacer | 2 |
| 10 | 72010 | 1/2" Sling Link (For UT-1000-LL Only) | 1 |
| 11 | 78440 | UT-1000 Spool | 2 |
| 12 | 55670 | #5 UT Spacer | 2 |

UT-1000-S and UT-1000-LL OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | | DESCRIPTION |
|------------|------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assembly |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assembly |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assembly |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |



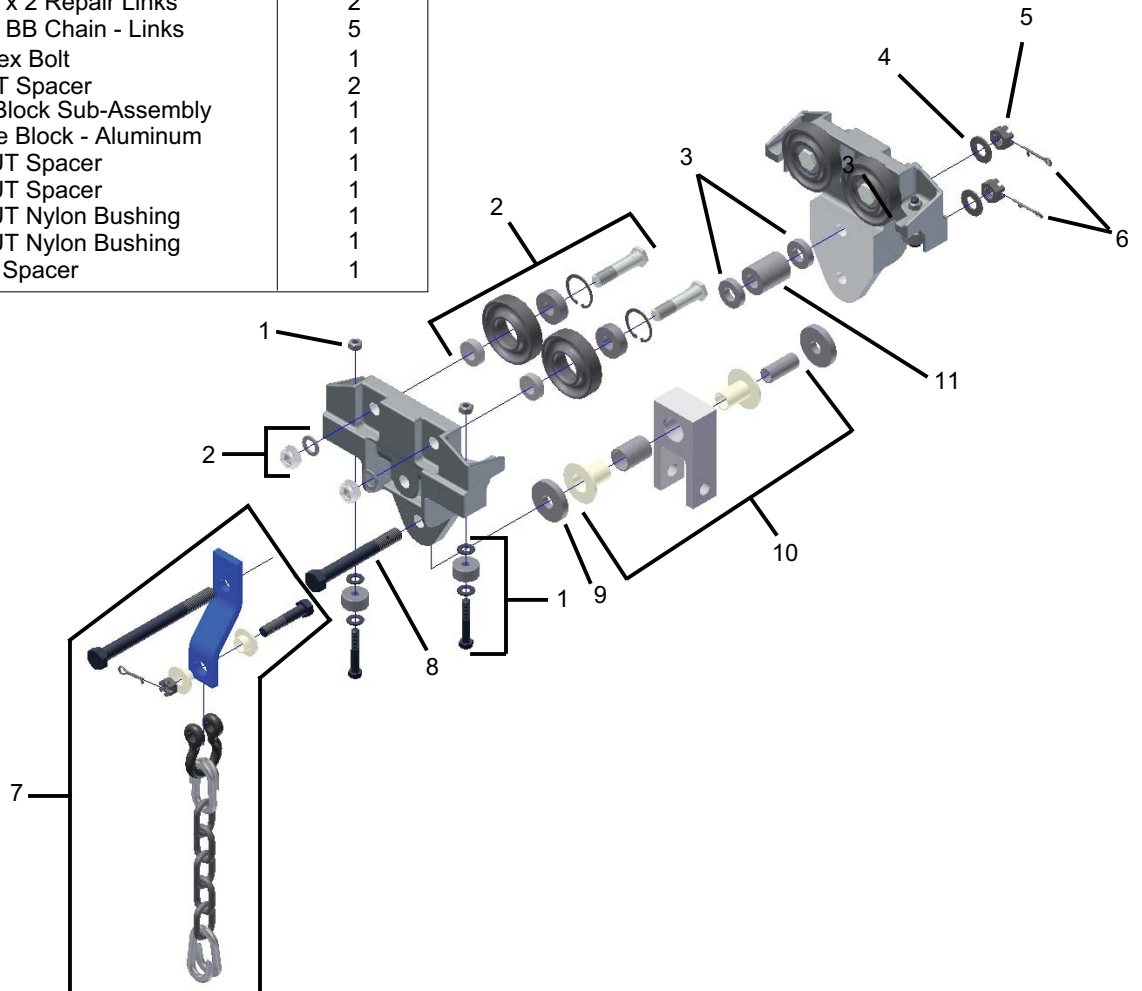
UT-1000-YBC

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------|----------|
| 1 | 15020 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30090 | 3049 Flat Wheel Sub-Assy. | 4 |
| | | 3.2" Flat Wheel | 4 |
| | | Snap Ring | 4 |
| | | Wheel Bearing | 4 |
| | | Stud | 4 |
| | | Spacer | 4 |
| | | 5/8" Wheel Stud Washer | 4 |
| | | 5/8" Nylon Insert Jam Nut | 4 |
| 3 | 55670 | #5 UT Spacer | 2 |
| 4 | 53070 | 5/8" Washer | 2 |
| 5 | 52290 | 5/8" Slotted Hex Nut | 2 |
| 6 | 54083 | 5/32" Cotter Pin | 2 |
| 7 | 15150 | Safety Strap Sub-Assembly | 1 |
| | | 5/8" Hex Bolt | 1 |
| | | UT Safety Strap | 1 |
| | | #12 UT Nylon Bushing | 1 |
| | | #13 UT Nylon Bushing | 1 |
| | | Anchor Shackle | 1 |
| | | 1/2" Hex Bolt | 1 |
| | | 1/2" Slotted Hex Nut | 1 |
| | | 1/8" Cotter Pin | 1 |
| | | 3/8" x 2 Repair Links | 2 |
| | | 3/8" BB Chain - Links | 5 |
| 8 | 51100 | 5/8" Hex Bolt | 1 |
| 9 | 55700 | #10 UT Spacer | 2 |
| 10 | 15085 | Yoke Block Sub-Assembly | 1 |
| | | Yoke Block - Aluminum | 1 |
| | | #8 UT Spacer | 1 |
| | | #9 UT Spacer | 1 |
| | | #6 UT Nylon Bushing | 1 |
| | | #7 UT Nylon Bushing | 1 |
| 11 | 55660 | #4 UT Spacer | 1 |

UT-1000-YBC OPTIONS

(See Page 19 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assy. |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assy. |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assy. |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |



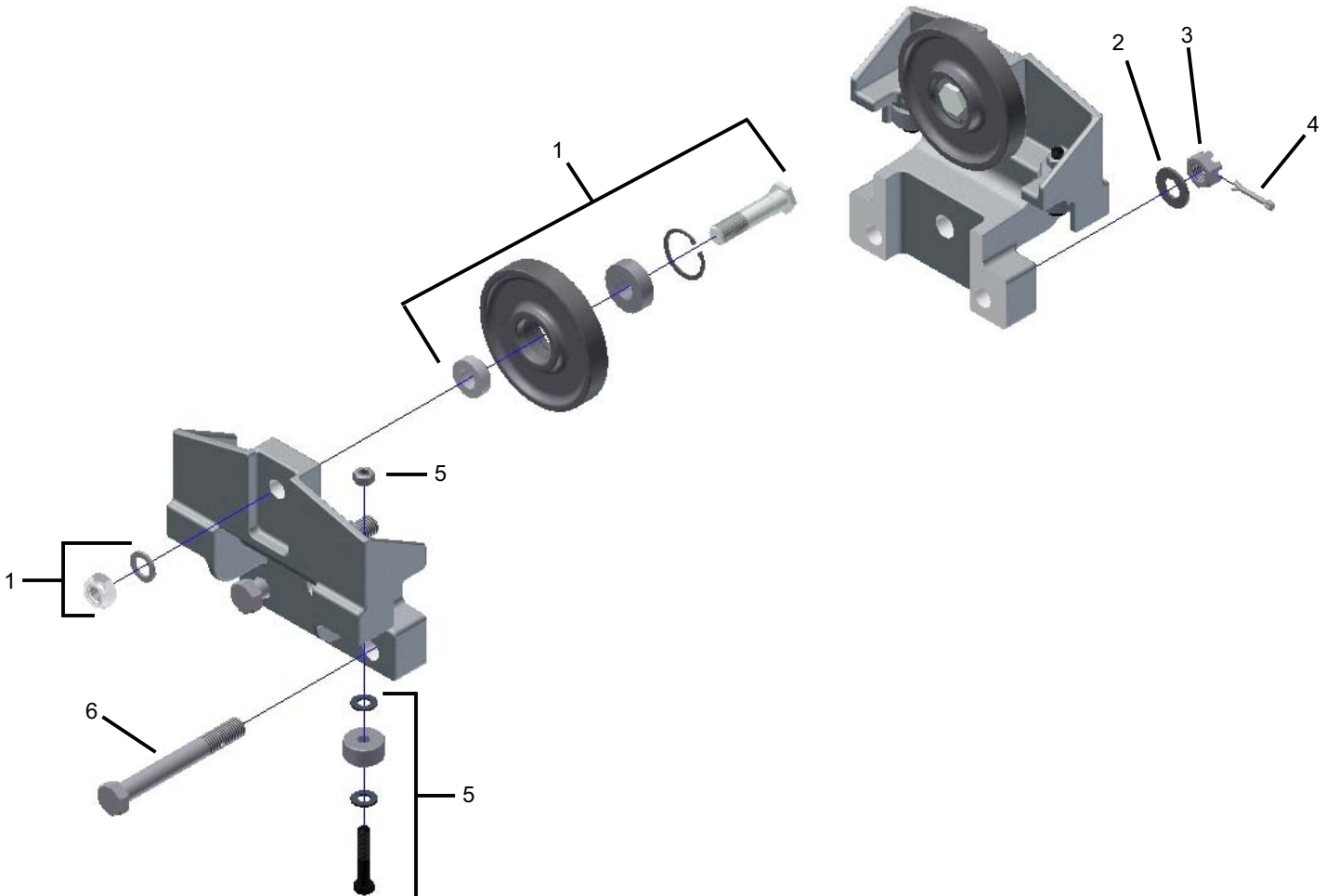
MBC-1000 Without Kickup Wheels

| REF. | STOCK CODE | DESCRIPTION | QUANTITY | | |
|------|------------|------------------------------|----------|---------------|---|
| 1 | 30250 | 3011 Flat Wheel Sub-Assembly | 2 | | |
| | | 4.6" Flat Wheel | 2 | | |
| | | Snap Ring | 2 | | |
| | | Wheel Bearing | 2 | | |
| | | Stud | 2 | | |
| | | Spacer | 2 | | |
| | | 5/8" Wheel Stud Washer | 2 | | |
| | | 5/8" Nylon Insert Jam Nut | 2 | | |
| | | 5/8" Washer | 4 | | |
| | | 5/8" Slotted Hex Nut | 2 | | |
| 2 | 53070 | 5/8" Washer | 4 | | |
| | | 5/8" Slotted Hex Nut | 2 | | |
| 3 | 52290 | 5/8" Slotted Hex Nut | 2 | | |
| 4 | 54083 | 5/32" Cotter Pin | 2 | | |
| 5 | 15020 | Guide Roller Sub-Assembly | 4 | | |
| | | 3021 1.25" Guide Roller | 4 | | |
| | | 3/8" Hex Bolt | 4 | | |
| | | 3/8" Top Lock Nut | 4 | | |
| | | 3/8" Washer | 8 | | |
| | | 5/8" Hex Bolt | 2 | | |
| | | 6 | 51110 | 5/8" Hex Bolt | 2 |

MBC-1000 Without Kickup Wheels OPTIONS

(See Page 20 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|------------------------------------------------|
| 30270 | 3029 | 4.6" Contour Wheel Assembly |
| 30290 | 3005 | 4.6" Double, Flat Wheel Assembly (MBC-1500) |
| 30240 | 3038 | 4.6" Double, Contour Wheel Assembly (MBC-1500) |
| 30380 | 3054 | 4.5" Flanged Brass Wheel Assembly |



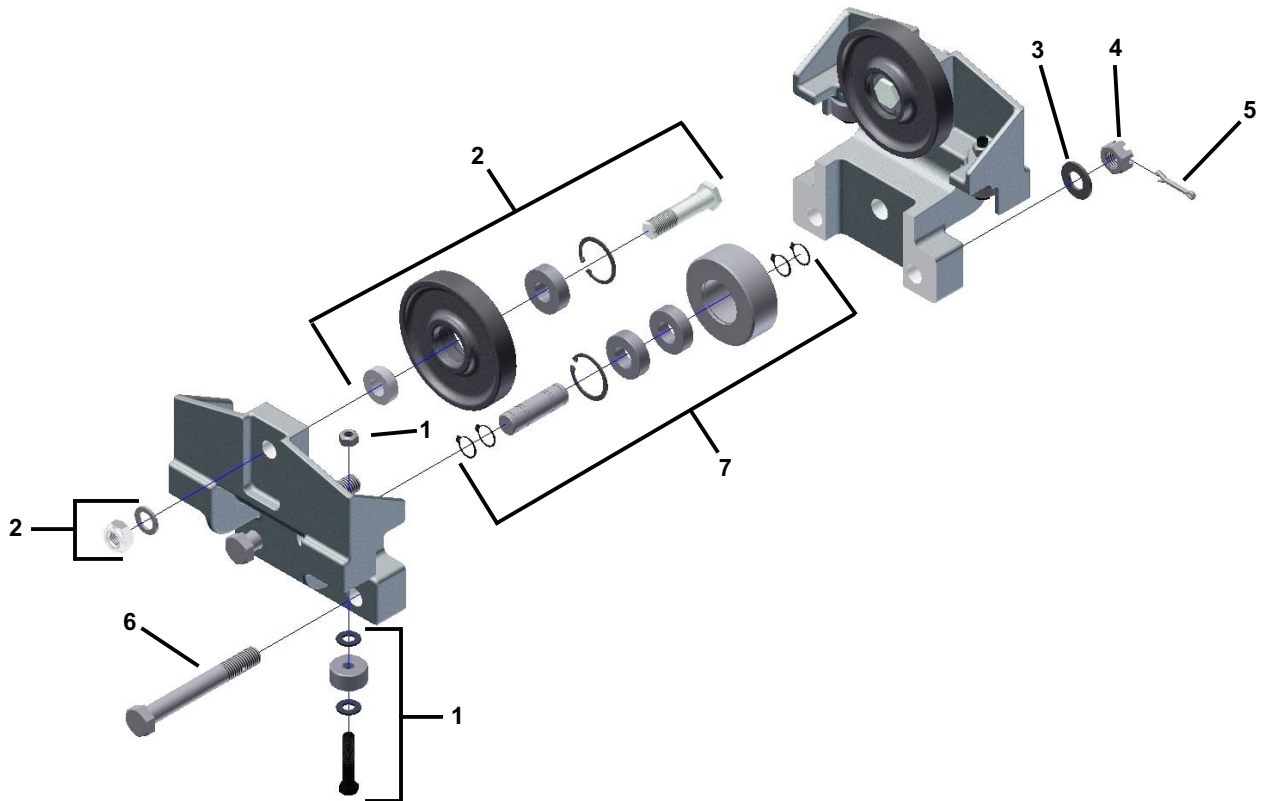
MBC-1000 With Kickup Wheels

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------------|----------|
| 1 | 15020 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30250 | 3011 Flat Wheel Sub-Assembly | 2 |
| | | 4.6" Flat Wheel | 2 |
| | | Snap Ring | 2 |
| | | Wheel Bearing | 2 |
| | | Stud | 2 |
| | | Spacer | 2 |
| | | 5/8" Wheel Stud Washer | 2 |
| | | 5/8" Nylon Insert Jam Nut | 2 |
| 3 | 53070 | 5/8" Washer | 2 |
| 4 | 52290 | 5/8" Slotted Hex Nut | 2 |
| 5 | 54083 | 5/32" Cotter Pin | 2 |
| 6 | 51110 | 5/8" Hex Bolt | 2 |
| 7 | 30080 | Double Bearing Kick-Up Wheel Assembly | 1 |
| | | 3.12" Double Bearing Kick-Up Wheel | 1 |
| | | Wheel Bearing | 2 |
| | | Snap Ring | 1 |
| | | Snap Ring | 4 |
| | | Double Bearing Kick-Up Axle | 1 |

MBC-1000 With Kickup Wheels OPTIONS

(See Page 20 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|------------------------------------------------|
| 30270 | 3029 | 4.6" Contour Wheel Assembly |
| 30290 | 3005 | 4.6" Double, Flat Wheel Assembly (MBC-1500) |
| 30240 | 3038 | 4.6" Double, Contour Wheel Assembly (MBC-1500) |
| 30380 | 3054 | 4.5" Flanged Brass Wheel Assembly |



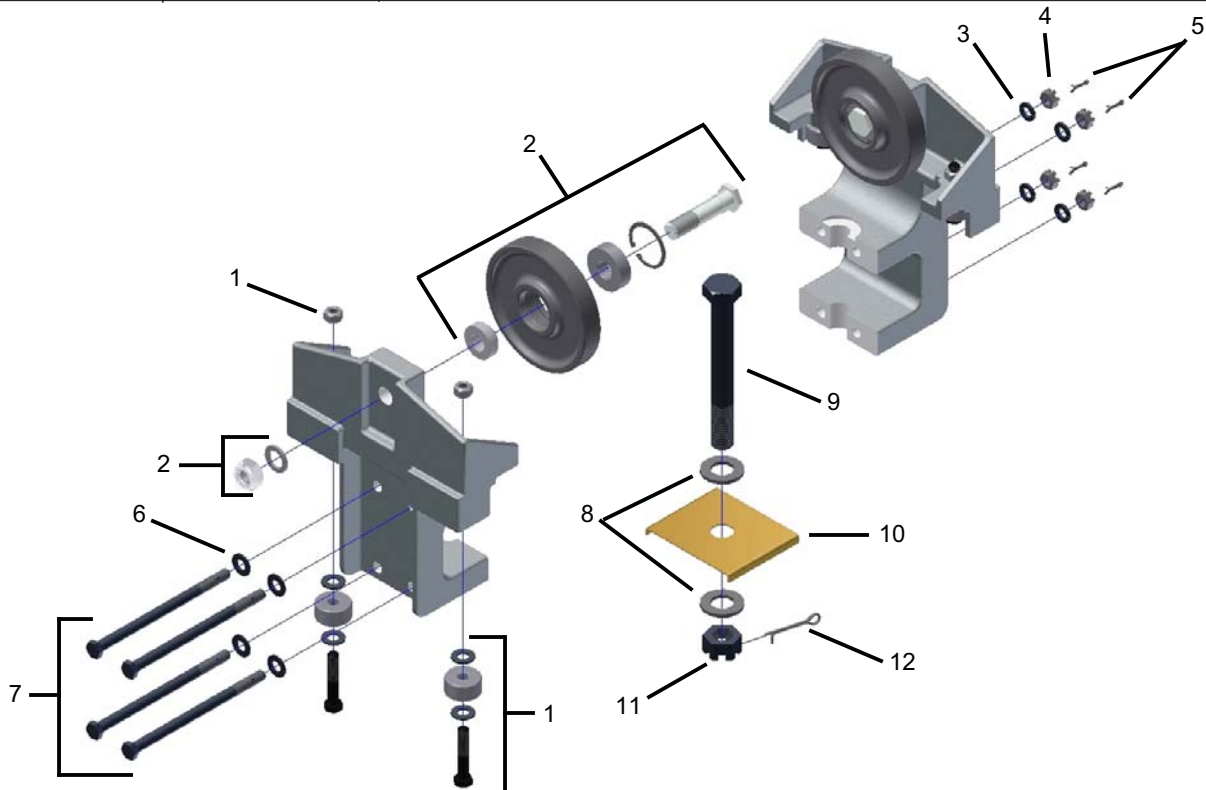
AC-1027

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 15020 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30250 | 3011 Flat Wheel Sub-Assembly | 2 |
| | | 4.6" Flat Wheel | 2 |
| | | Wheel Bearing | 2 |
| | | Stud | 2 |
| | | Spacer | 2 |
| | | 5/8" Wheel Stud Washer | 2 |
| | | Snap Ring | 2 |
| | | 5/8" Nylon Insert Jam Nut | 2 |
| 3 | 53200 | 3/8" Lockwasher | 4 |
| 4 | 52110 | 3/8" Slotted Hex Nut | 4 |
| 5 | 54010 | 3/32" Cotter Pin | 4 |
| 6 | 53040 | 3/8" Washer | 4 |
| 7 | 50610 | 3/8" Hex Bolt | 4 |
| 8 | 53080 | 3/4" Washer | 2 |
| 9 | 51370 | 3/4" Hex Bolt | 1 |
| 10 | 75040 | SAC-1020 Brass Pad | 1 |
| 11 | 52370 | 3/4" Slotted Hex Nut | 1 |
| 12 | 54083 | 5/32" Cotter Pin | 1 |

AC-1027 OPTIONS

(See Page 20 for Optional Wheels)

| STOCK CODE | DESCRIPTION |
|------------|-------------------------------------|
| 30270 | 4.6" Contour Wheel Assembly |
| 30290 | 4.6" Double, Flat Wheel Assembly |
| 30240 | 4.6" Double, Contour Wheel Assembly |
| 30380 | 4.6" Flanged Brass Wheel Assembly |



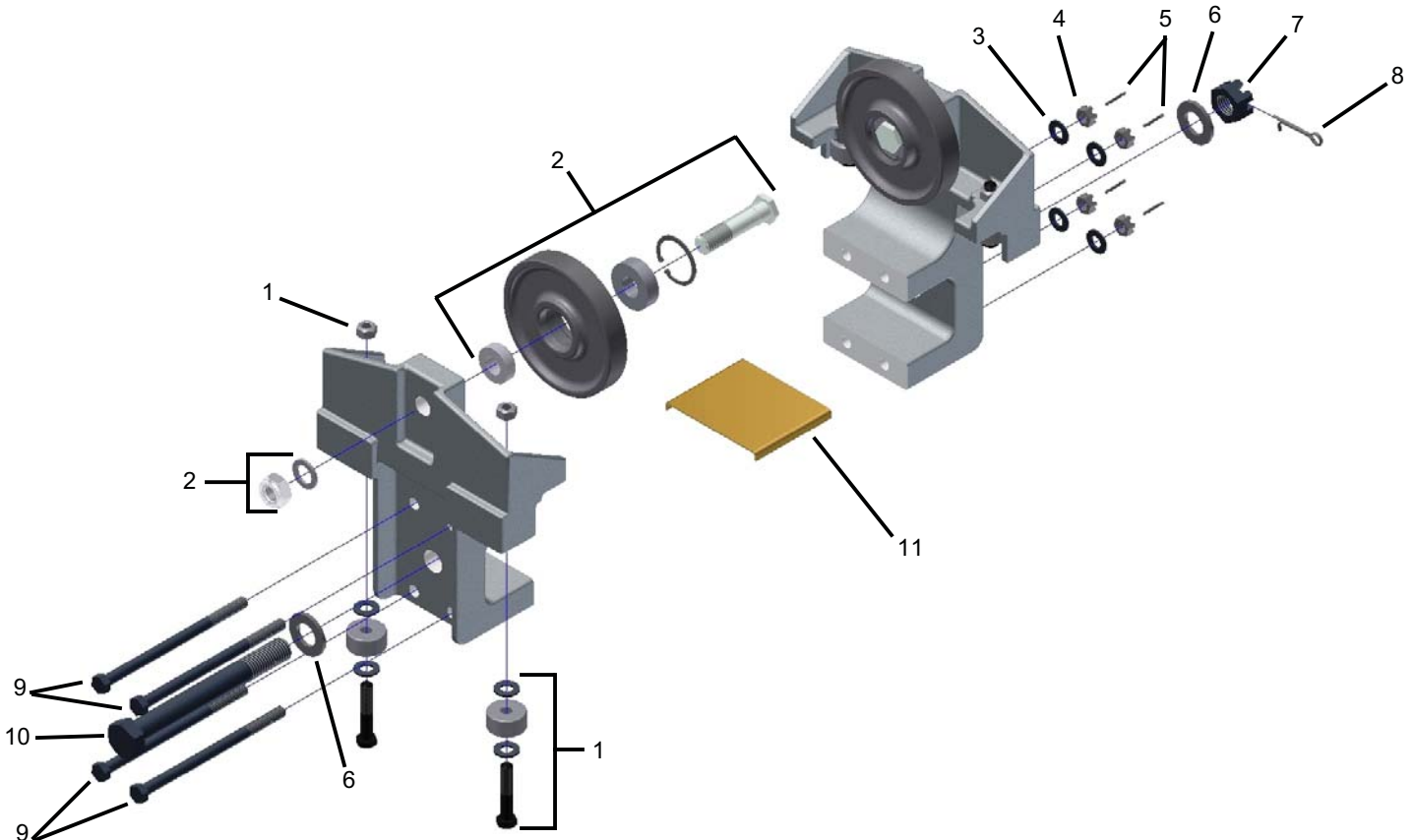
SAC-1020

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 15020 | Guide Roller Sub-Assembly | 4 |
| | | 3021 1.25" Guide Roller | 4 |
| | | 3/8" Hex Bolt | 4 |
| | | 3/8" Top Lock Nut | 4 |
| | | 3/8" Washer | 8 |
| 2 | 30250 | 3011 Flat Wheel Sub-Assembly | 2 |
| | | 4.6" Flat Wheel | 2 |
| | | Snap Ring | 2 |
| | | Wheel Bearing | 2 |
| | | Stud | 2 |
| | | Spacer | 2 |
| | | 5/8" Wheel Stud Washer | 2 |
| | | 5/8" Nylon Insert Jam Nut | 2 |
| 3 | 53040 | 3/8" Washer | 4 |
| 4 | 52110 | 3/8" Slotted Hex Nut | 4 |
| 5 | 54010 | 3/32" Cotter Pin | 4 |
| 6 | 53080 | 3/4" Washer | 2 |
| 7 | 52370 | 3/4" Slotted Hex Nut | 1 |
| 8 | 54083 | 5/32" Cotter Pin | 1 |
| 9 | 50610 | 3/8" Hex Bolt | 4 |
| 10 | 51390 | 3/4" Hex Bolt | 1 |
| 11 | 75040 | SAC-1020 Brass Pad | 1 |

SAC-1020 OPTIONS

(See Page 20 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|-------------------------------------|
| 30270 | 3029 | 4.6" Contour Wheel Assembly |
| 30290 | 3005 | 4.6" Double, Flat Wheel Assembly |
| 30240 | 3038 | 4.6" Double, Contour Wheel Assembly |
| 30380 | 3054 | 4.6" Flanged Brass Wheel Assembly |



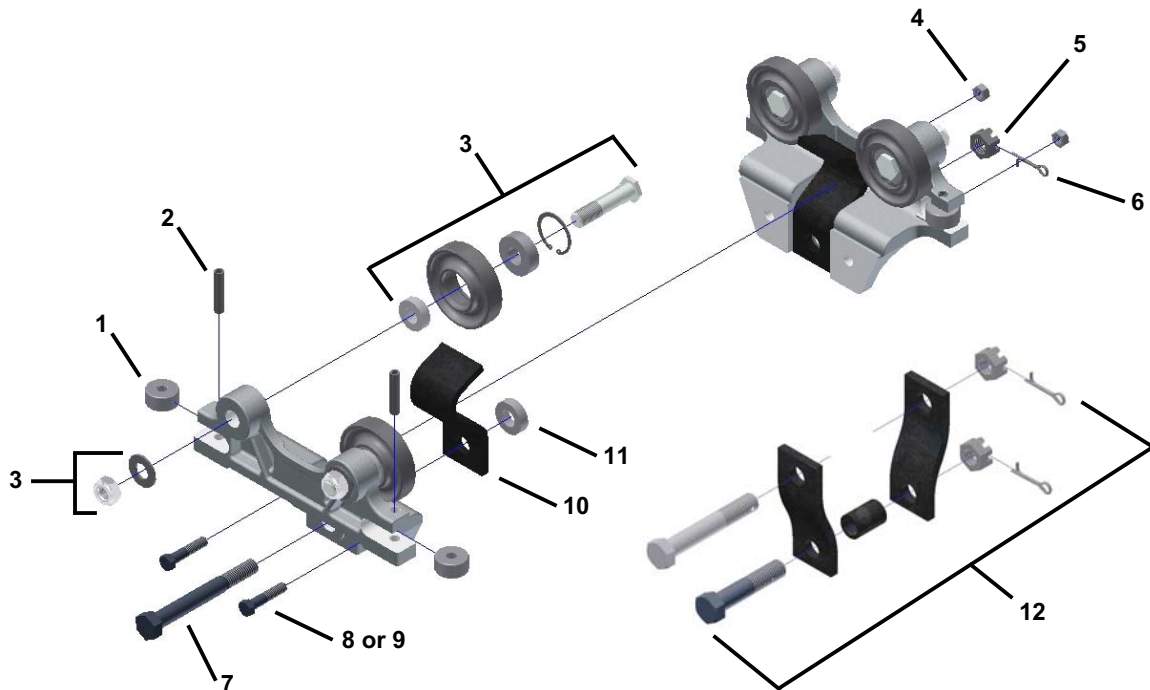
BT-325, BT-266, BT-333
BT-325-DHS, BT-266-DHS, BT-333-DHS

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------|----------|
| 1 | 56170 | 3021-1 1.25" Guide Roller | 4 |
| 2 | 54200 | 3/8" x 1.75" Spring Pin | 4 |
| 3 | 30095 | 3049 Flat Wheel Sub-Assembly | 4 |
| | | 3.2" Flat Wheel | 4 |
| | | Snap Ring | 4 |
| | | Wheel Bearing | 4 |
| | | Stud | 4 |
| | | Spacer | 4 |
| | | 5/8" Sae Flat Washer | 4 |
| | | 5/8" Nylon Insert Jam Nut | 4 |
| 4 | 52095 | 3/8" Top Lock Nut | 2 |
| 5 | 52290 | 5/8" Slotted Hex Nut | 1 |
| 6 | 54083 | 5/32" Cotter Pin | 1 |
| 7 | 51110 | 5/8" Hex Bolt | 1 |
| 8 | 50500 | 3/8" Hex Bolt | 2 |
| 9** | 50045 | 3/8" Rod End | 2 |
| 10 | 61120 | Safety Strap | 2 |
| 11 | 55590 | Spacer (Specify Trolley Model) | 1 |
| 12** | 15100 | DHS-5011-1 Hanger Strap Sub-Assembly | 1 |
| | | 5/8" Eyebolt | 1 |
| | | Hanger Strap | 2 |
| | | Spacer | 1 |
| | | 5/8" Hex Bolt | 1 |
| | | 5/8" Slotted Hex Nut | 2 |
| | | 5/32" Cotter Pin | 2 |

** For DHS Option Only

BT-325, BT-266, BT-333
BT-325-DHS, BT-266-DHS, BT-333-DHS OPTIONS
(See Page 19 for Optional Wheels)

| STOCK CODE | | DESCRIPTION |
|------------|------|------------------------------------|
| 30110 | 3050 | 3.2" Contour Wheel Assembly |
| 30370 | 3065 | 3.2" Flanged Brass Wheel Assembly |
| 30420 | 3017 | 4" Flat Conveyor Wheel Assembly |
| 30430 | 3018 | 4" Contour Conveyor Wheel Assembly |



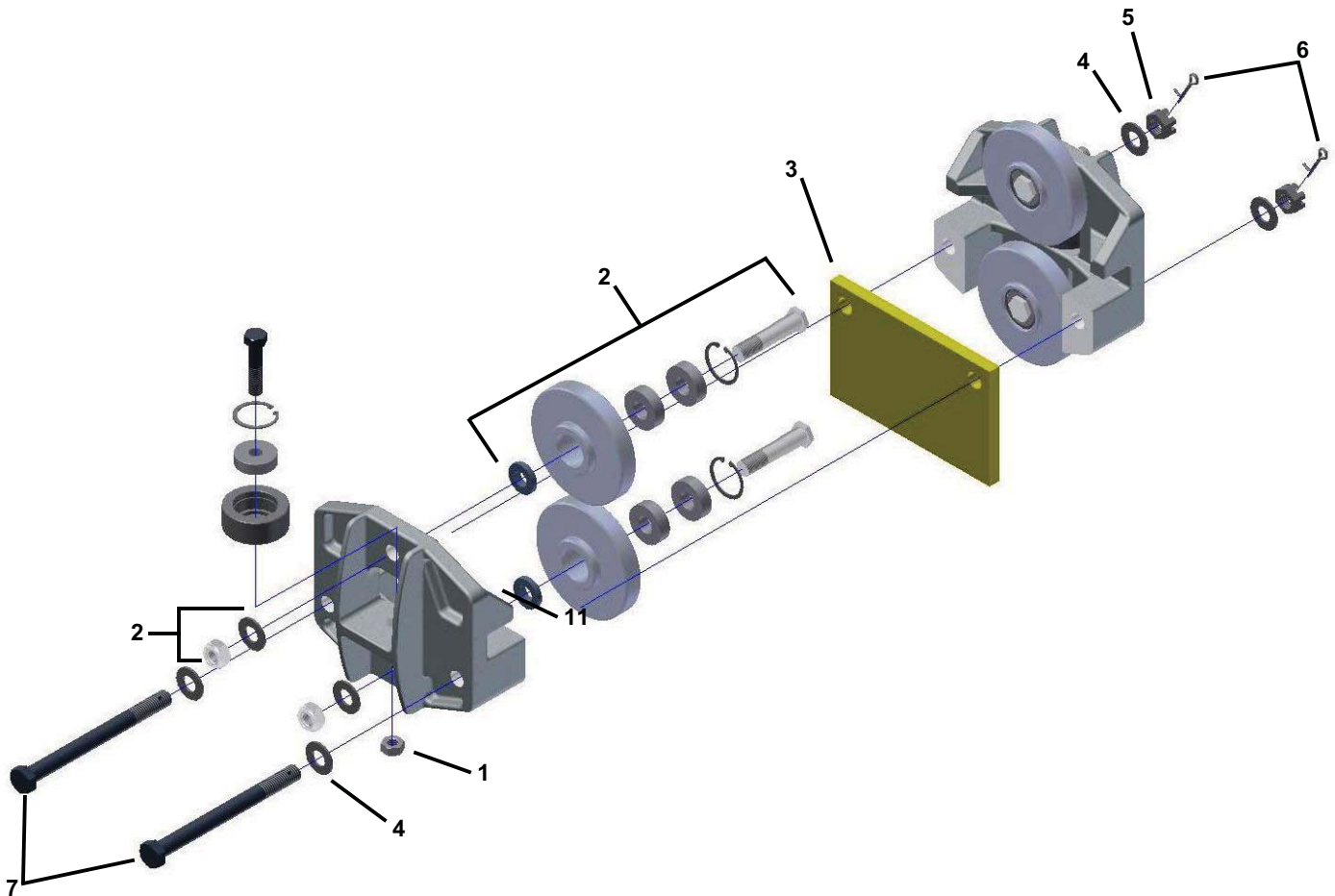
TSE-1017

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1 | 15038 | TSE Guide Roller Assembly 2.4" Flat Wheel Snap Ring Wheel Bearing Spacer 1/2" Hex Bolt 1/2" Top Lock Nut | 2 2 2 4 2 2 2 |
| 2 | 30290 | 3005 Double Flat Wheel Sub-Assembly 4.6" Flat Wheel Snap Ring Wheel Bearing Stud Spacer 5/8" Wheel Stud Washer 5/8" Nylon Insert Jam Nut | 4 4 4 8 4 4 4 4 |
| 3 | 55815 | TSE Spacer | 1 |
| 4 | 53070 | 5/8" Washer | 4 |
| 5 | 52290 | 5/8" Slotted Hex Nut | 2 |
| 6 | 54083 | 5/32" Cotter Pin | 2 |
| 7 | 51170 | 5/8" Hex Bolt | 2 |

TSE-1017 OPTIONS

(See Page 20 for Optional Wheels)

| STOCK CODE | STOCK CODE | DESCRIPTION |
|------------|------------|-------------------------------------|
| 30240 | 3038 | 4.6" Double, Contour Wheel Assembly |



BT-325-10, BT-333-10, BT-325-10-DHS, BT-333-10-DHS

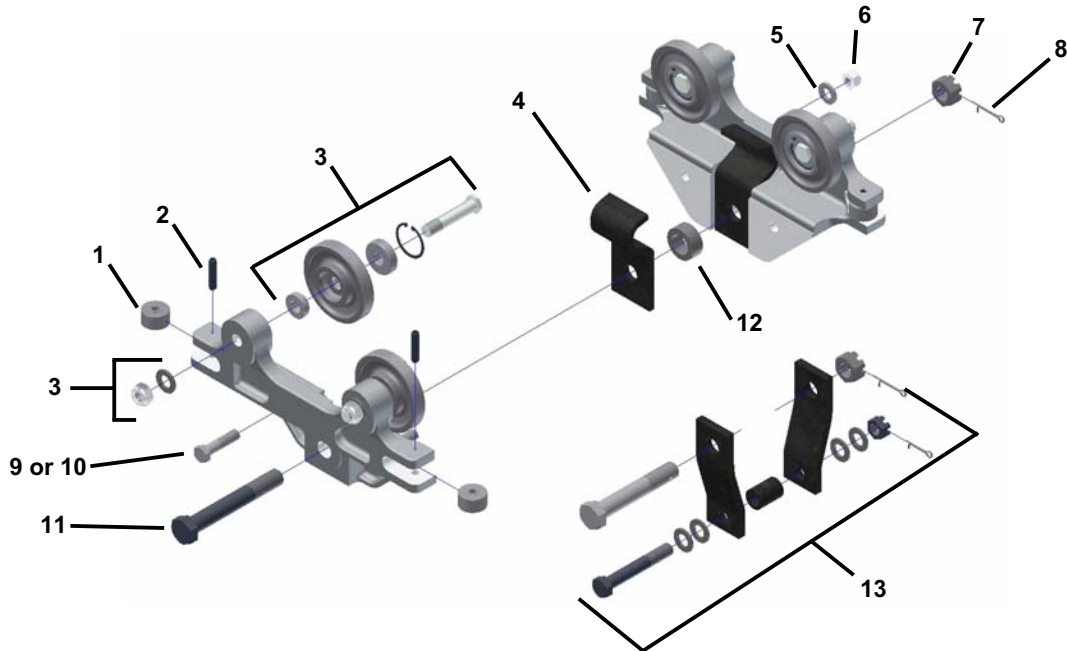
| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------|----------|
| 1 | 56180 | 3044-1 1.62 G. R. Bearing | 4 |
| 2 | 54210 | 7/16" x 2" Spring Pin | 4 |
| 3 | 30300 | 3046 Flat Wheel Sub-Assembly | 4 |
| | | 4.8" Flat Wheel | 4 |
| | | Snap Ring | 4 |
| | | Wheel Bearing | 4 |
| | | Stud | 4 |
| | | Spacer | 4 |
| | | 3/4" Flat Washer | 4 |
| | | 3/4" Nylon Insert Jam Nut | 4 |
| 4 | 61110 | Safety Strap | 2 |
| 5 | 53240 | 5/8" Flat Washer | 2 |
| 6 | 52255 | 5/8" Nylon Insert Lock Nut | 2 |
| 7 | 52400 | 1" Slotted Hex Nut | 1 |
| 8 | 54083 | 5/32" Cotter Pin | 1 |
| 9 | 51020 | 5/8" Hex Bolt | 2 |
| 10** | 50102 | 5/8" Rod End | 2 |
| 11 | 51550 | 1" Hex Bolt | 1 |
| 12 | 55610 | Spacer | 1 |
| 13** | 15110 | DHS-5012-1 Hanger Strap Sub-Assembly | 1 |
| | | 1" Hex Bolt | 1 |
| | | 1" Slotted Hex Nut | 1 |
| | | 3/16" Cotter Pin | 1 |
| | | Spacer | 1 |
| | | Hanger Strap | 2 |
| | | 3/4" Hex Bolt | 1 |
| | | 3/4" Slotted Hex Nut | 1 |
| | | 5/3" Cotter Pin | 1 |
| | | 3/4" Washer | 4 |

** For DHS Option Only

BT-325-10, BT-333-10, BT-325-10-DHS, BT-333-10-DHS OPTIONS

(See Pages 20 for Optional Wheels)

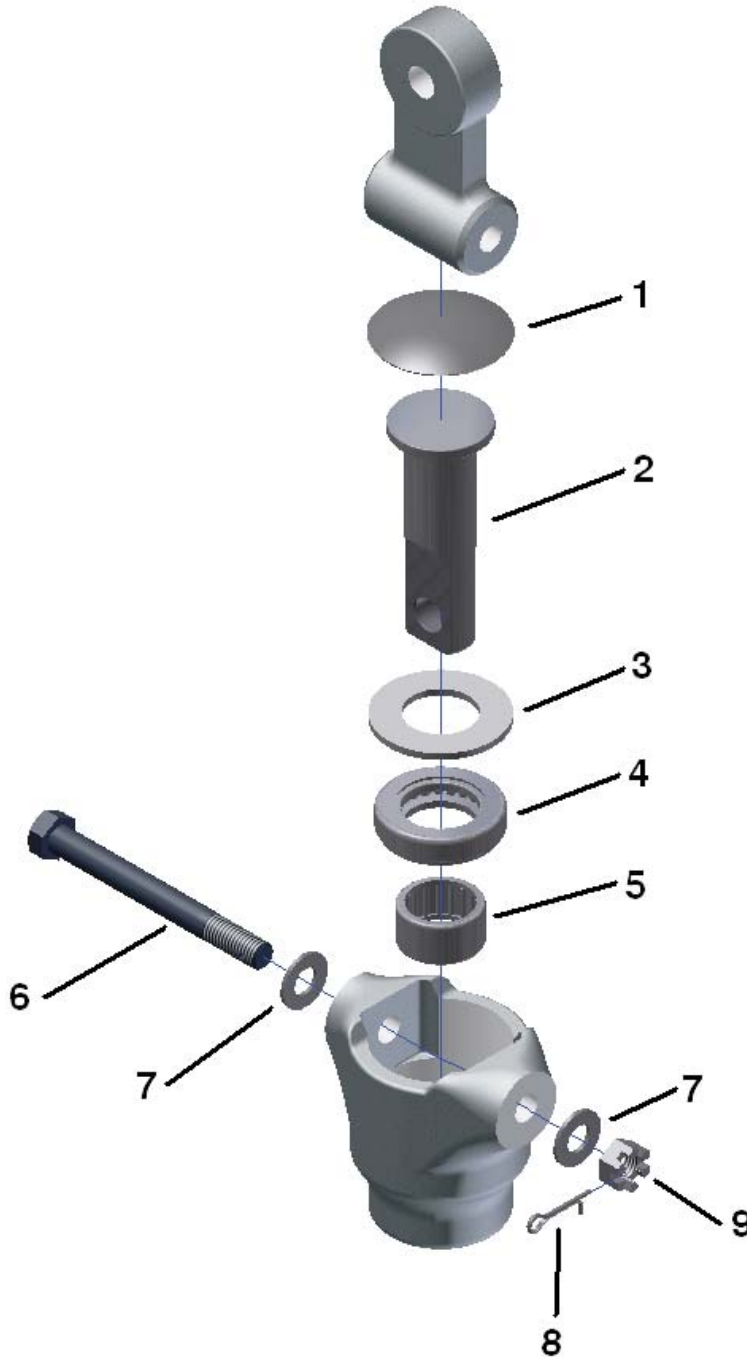
| STOCK CODE | | DESCRIPTION |
|------------|------|-----------------------------------|
| 30320 | 3047 | 4.8" Contour Wheel Assembly |
| 30390 | 3061 | 4.8" Brass Flanged Wheel Assembly |



**UNIVERSAL SWIVEL
S-300**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------|----------|
| 1 | 78470 | Welsh Plug | 1 |
| 2 | 54280 | Detent 9 Swivel Pin | 1 |
| 3 | 53110 | 1-1/2" Washer | 1 |
| 4 | 56010 | Thrust Bearing | 1 |
| 5 | 56050 | Roller Bearing | 1 |
| 6 | 51130 | 5/8" Hex Bolt | 1 |
| 7 | 53070 | 5/8" Washer | 2 |
| 8 | 54083 | 5/32" Cotter Pin | 1 |
| 9 | 52290 | 5/8" Slotted Hex Nut | 1 |

NOTE: Sold separately or as an Option on the BT-325-10 Trolley



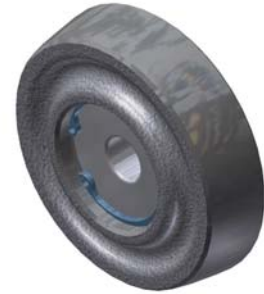
OPTIONAL WHEEL ASSEMBLIES



2" DIA. FLANGED WHEEL
3039 - Contour (Shown) (30020)



2" DIA. BRAS FLANGED WHEEL
Flat (Shown) (30365)



2.4" DIA. WHEEL
3053 - Contour (Shown) (30050)



3.2" DIA. WHEEL
3050 - Contour (Shown) (30110)



4" DIA. CONVEYOR WHEEL
3017 - Flat (Shown) (30420)
3018 - Contour (30430)



BRASS
3.2" DIA. FLANGED WHEEL
3065 - Flat or Contour Brass (30370)

OPTIONAL WHEEL ASSEMBLIES



BRASS
4.5" DIA. FLANGED WHEEL
3030 - Flat or Contour / Brass (30380)



4.62" DIA. WHEEL
3029 - Contour (Shown) (30270)
Single Bearing
3011 - Flat (30250)
3005 - Flat / Double Bearing (30290)
3038 - Contour / Double Bearing (30240)



4.8" DIA. WHEEL
3047 - Contour (Shown) (30320)
3046 - Flat (30300)



BRASS
4.8" DIA. FLANGED WHEEL
3061 - Flat (Shown) or Contour Brass
(30390)





UNIFIED INDUSTRIES, INC.

A Columbus McKinnon Company

ETA SYSTEM PARTS MANUAL

ETA-4, ETA-5 & ETA-8



PARTS AND REPAIR MANUAL

This manual has been compiled to expedite the ordering of repair parts for Unified Industries' products, as well as to present to maintenance personnel the correct method of servicing the product.

In order to show all component details of Unified Industries' products, an exploded view has been shown for each model. Further technical information is available in our current full line product catalog.

INSTRUCTIONS FOR ORDERING

Locate the model required in the index and turn to the page number indicated for the exploded view.

Each serviceable part or sub-assembly in the exploded view is identified by a reference number. Use the reference number to locate the necessary part information in the parts list on the opposite page.

Any parts listed without a reference number in the parts list are not sold separately, but are included in the sub-assembly above it as shown in the exploded view. Each item listed as a sub-assembly will be sold complete including all of its component parts listed directly below it.

The parts list quantity column gives the required amount of each component part for each complete assembly.

Specify which model each part is being ordered for to ensure that the correct part is shipped.

Always use the complete stock code number and part description for each part being ordered.

Specify the quantity needed for each part being ordered.

Email your order to: sales@unified-ind.com

Fax your order to: (517) 546-1273

or call Sales at: (517) 546-3220

GENERAL OPERATION AND MAINTENANCE INSTRUCTIONS

A physical inspection of all Unified Industries' products is required per OSHA standards. Visually inspect all parts, moving as well as non-moving, for cracks, excessive wear, or other damage. Particular attention should be given to the following parts: load wheels (outer surface and bearings), side guide rollers, kick-up wheels, safety straps, attachment mechanisms or bolts, and all contact surfaces. Should cracks, excessive wear, or other damage be present, replace the part.

All trolleys must move freely without restriction during operation. Should any restriction be present, an inspection and correction of the problem should be made.

Rail and bridge girder running surfaces must be clean and in good condition to allow the trolleys to move freely.

Runway surfaces must be parallel and level to provide proper alignment for the bridge crane end trucks.

End stops on all bridge cranes, telescoping beams, or rails must be securely fastened with Grade 5 bolts, slotted nuts, and cotter pins. End stop bolts must be mounted with bolt head on rail surface, threads down, through the rail and end stop, as shown in exploded views of bridge cranes and telescopes.

Never operate bridge cranes without end truck trolleys properly and securely fastened.

Do not load any bridge crane and/or trolley beyond its rated capacity as so labeled.

Safety straps are provided on trollies without built-in safety lugs in the casting. Any safety items such as safety straps, chains, etc. - provided with Unified Industries' trolleys - must remain in place to provide added safety protection for the operator.

Any trolley model designed with special sliding or articulating action must be correctly mounted to allow the movement required.

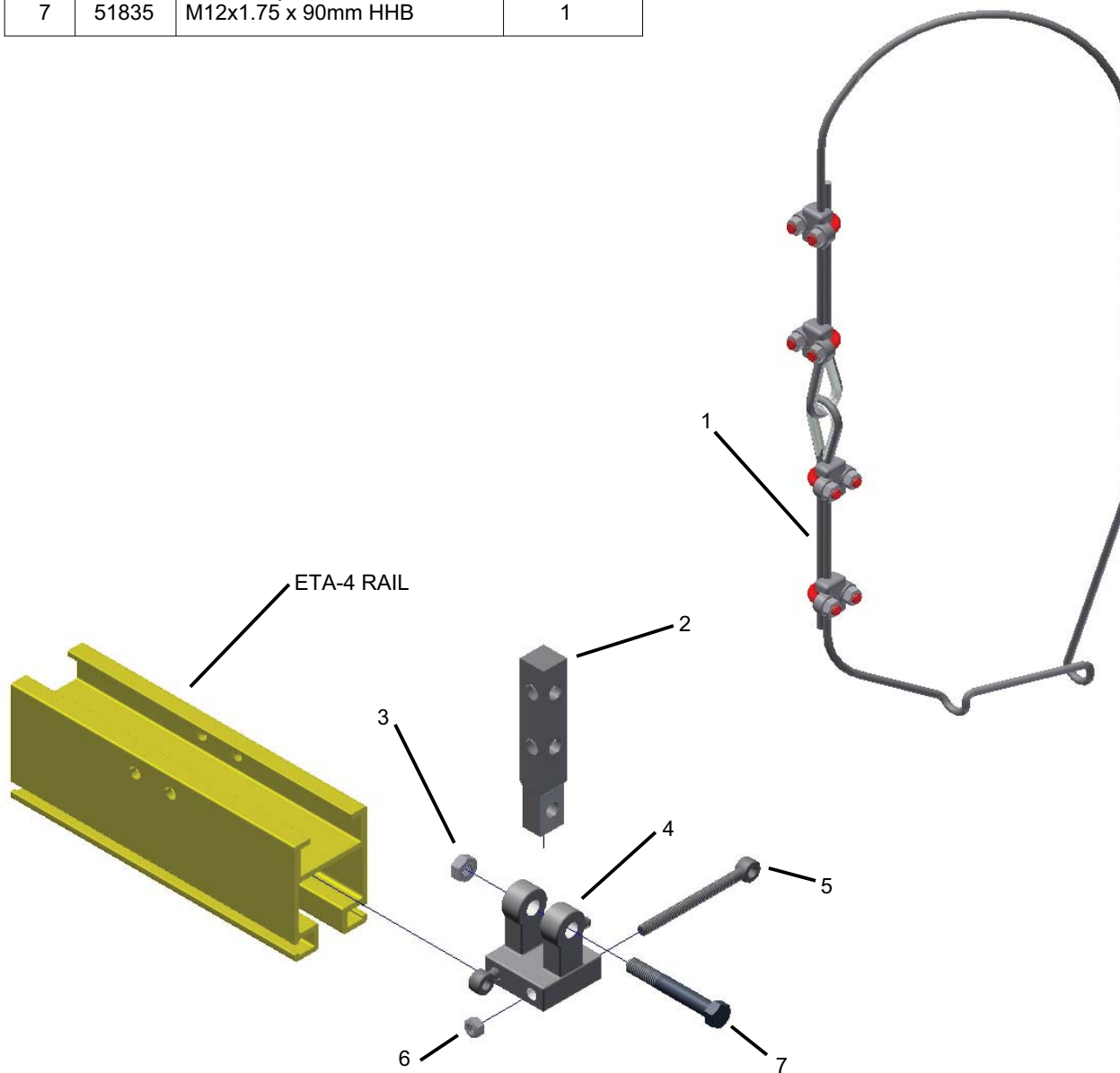
Any conveyor type load wheels with grease fittings on the axle should be inspected and properly greased, using a silicone free molysulfide grease, approximately every six months depending on work load and use.



| | PAGE |
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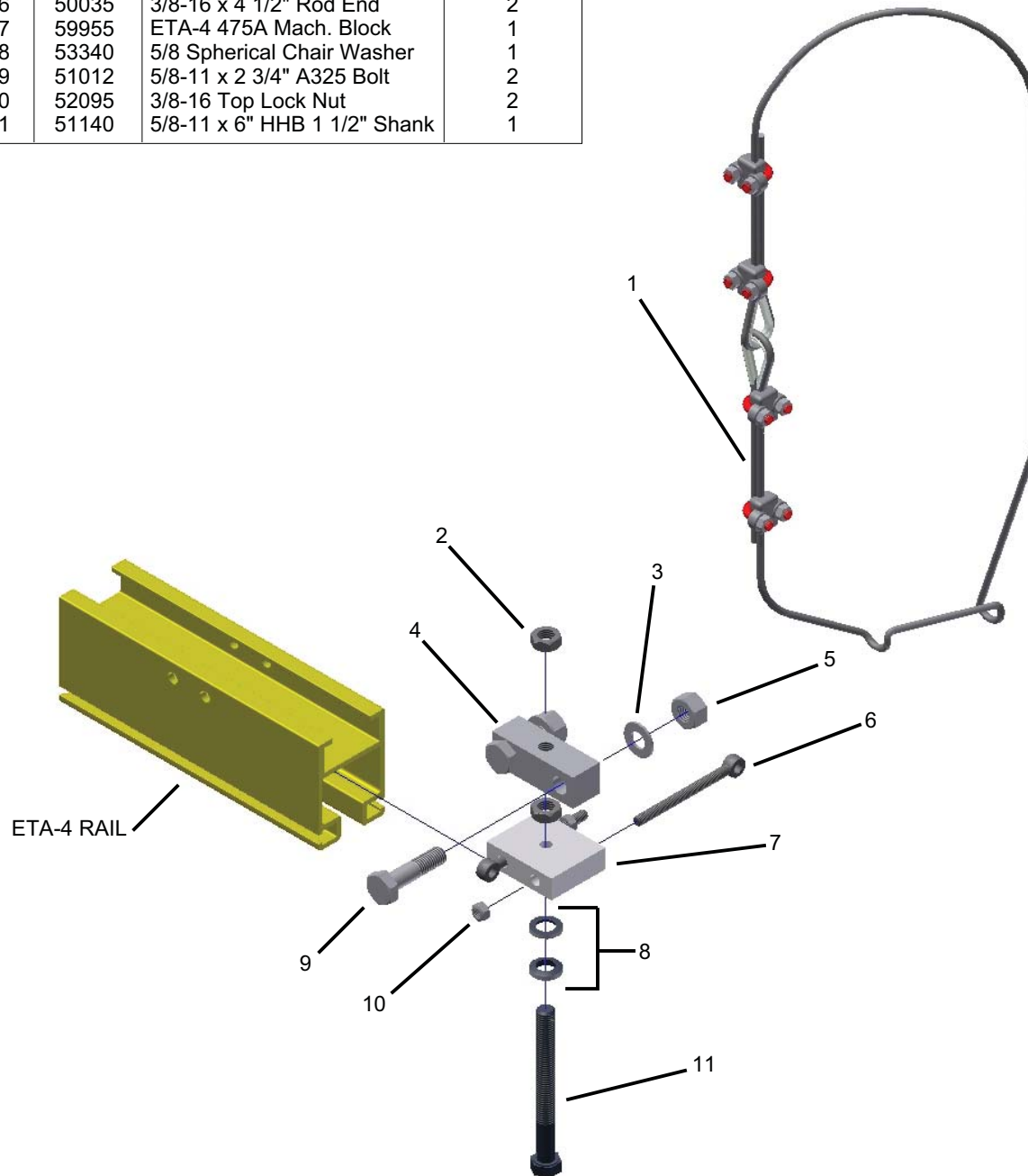
25286 ETA-4/5 BLOCK HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 63031 | ETA-4 Hanger Block | 1 |
| 3 | 52445 | M12x1.75 Prevailing Torque Nut | 1 |
| 4 | 59850M | 415 Mach. Hanger Casting | 1 |
| 5 | 50035 | 3/8-16 x 4 1/2" Rod End | 2 |
| 6 | 52095 | 3/8-16 Top Lock Nut | 2 |
| 7 | 51835 | M12x1.75 x 90mm HHB | 1 |



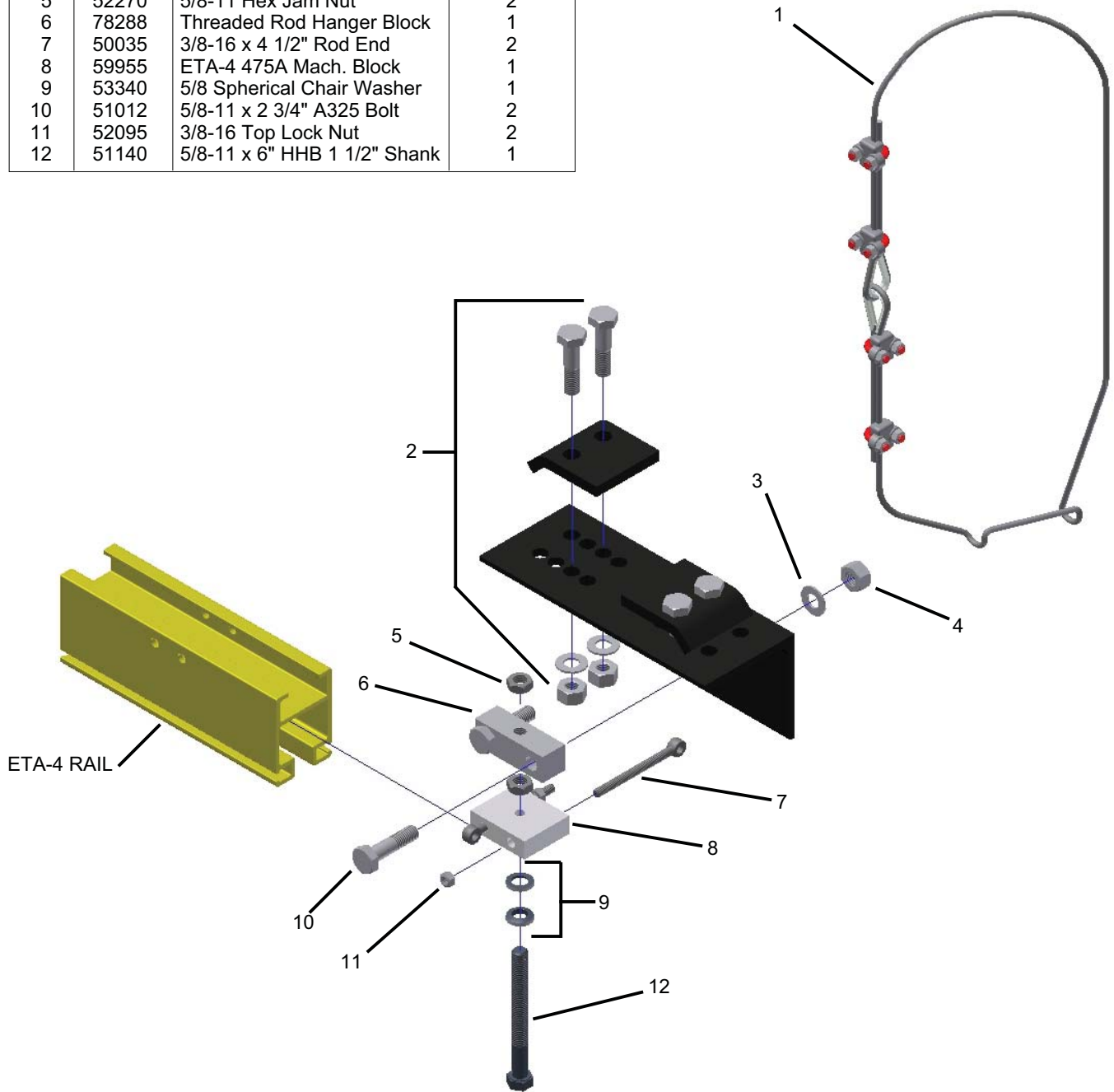
25467 ETA-4/5 ADJUSTABLE BLOCK HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 52270 | 5/8-11 Hex Jam Nut | 2 |
| 3 | 53405 | 5/8 F436 (A325 Struc F/W) | 2 |
| 4 | 78288 | Threaded Rod Hanger Block | 1 |
| 5 | 52315 | 5/8-11 Anco 2H Coloc Nut | 2 |
| 6 | 50035 | 3/8-16 x 4 1/2" Rod End | 2 |
| 7 | 59955 | ETA-4 475A Mach. Block | 1 |
| 8 | 53340 | 5/8 Spherical Chair Washer | 1 |
| 9 | 51012 | 5/8-11 x 2 3/4" A325 Bolt | 2 |
| 10 | 52095 | 3/8-16 Top Lock Nut | 2 |
| 11 | 51140 | 5/8-11 x 6" HHB 1 1/2" Shank | 1 |



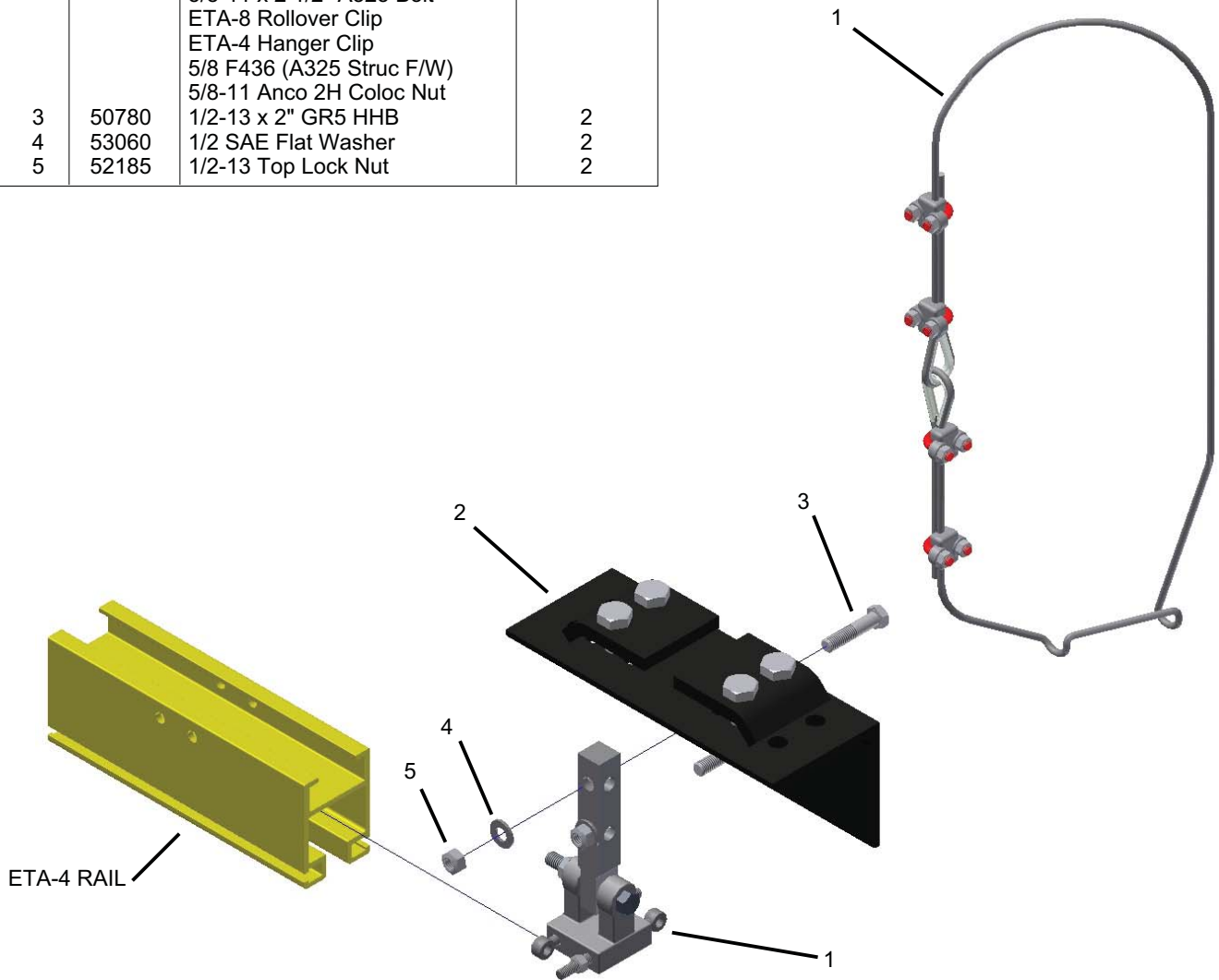
25474 ETA-4/5 CLOSED ADJUSTABLE HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 25704 | ETA-4 Hanger Clip Assembly | 1 |
| | | 5/8-11 x 2 1/2" A325 Bolt | |
| | | ETA-8 Rollover Clip | |
| | | ETA-4 Hanger Clip | |
| | | 5/8 F436 (A325 Struc F/W) | |
| 3 | 53405 | 5/8-11 Anco 2H Coloc Nut | 2 |
| 4 | 52315 | 5/8-11 Anco 2H Coloc Nut | 2 |
| 5 | 52270 | 5/8-11 Hex Jam Nut | 2 |
| 6 | 78288 | Threaded Rod Hanger Block | 1 |
| 7 | 50035 | 3/8-16 x 4 1/2" Rod End | 2 |
| 8 | 59955 | ETA-4 475A Mach. Block | 1 |
| 9 | 53340 | 5/8 Spherical Chair Washer | 1 |
| 10 | 51012 | 5/8-11 x 2 3/4" A325 Bolt | 2 |
| 11 | 52095 | 3/8-16 Top Lock Nut | 2 |
| 12 | 51140 | 5/8-11 x 6" HHB 1 1/2" Shank | 1 |



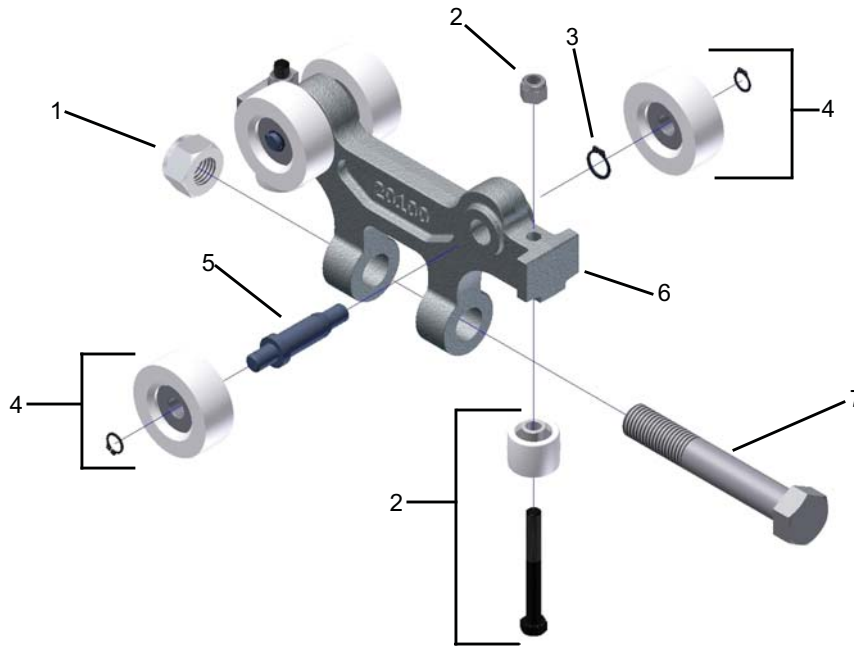
27057 ETA-4/5 BEAM HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1 | 25286 | ETA-4/5 Block Hanger Safety Cable for ETA Hangers ETA-4 Hanger Block M12x1.75 Prevailing Torque Nut 415 Mach. Hanger Casting 3/8-16 x 4 1/2" Rod End 3/8-16 Top Lock Nut | 1 |
| 2 | 25704 | M12x1.75 x 90mm HHB ETA-4 Hanger Clip Assembly 5/8-11 x 2 1/2" A325 Bolt ETA-8 Rollover Clip ETA-4 Hanger Clip 5/8 F436 (A325 Struc F/W) 5/8-11 Anco 2H Coloc Nut | 1 |
| 3 | 50780 | 1/2-13 x 2" GR5 HHB | 2 |
| 4 | 53060 | 1/2 SAE Flat Washer | 2 |
| 5 | 52185 | 1/2-13 Top Lock Nut | 2 |



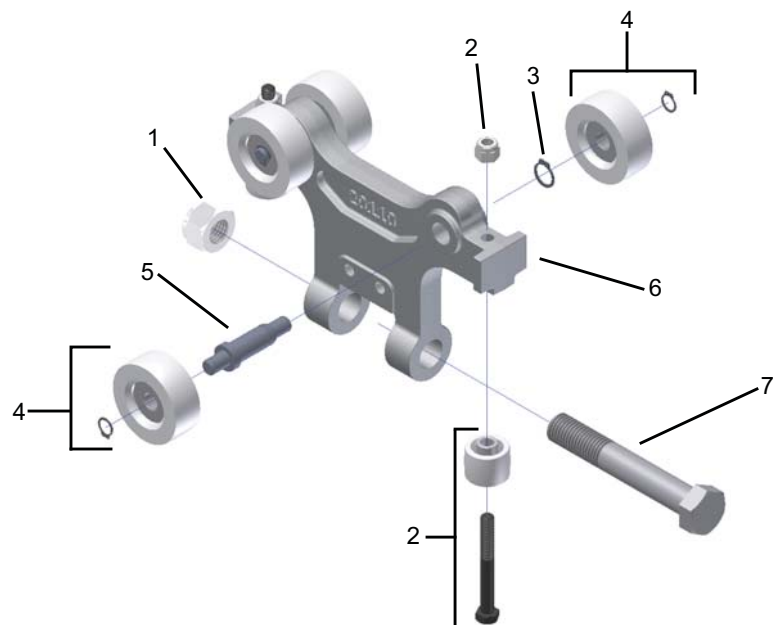
20100 ETA-4/5 SHORT BODY LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY | REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------|----------|------|------------|----------------------------------------|----------|
| 1 | 52455 | M16x2.0 Nylon Insert Nut | 1 | 5 | 57130 | 431 ETA-4 Wheel Stud 1/2" Dia. 1215 | 2 |
| 2 | 25159 | ETA-4 Guide Roller Assy | 2 | 6 | 59790M | 401A Casting | 1 |
| 3 | 55060 | N-5100-50 Snap Ring | 2 | 7 | 51900 | M16x2.0x100mm CL 8.8 HHB | 1 |
| 4 | 28000 | 437 1.8 White Wheel N-5100-37 Snap Ring | 4 | | | | |



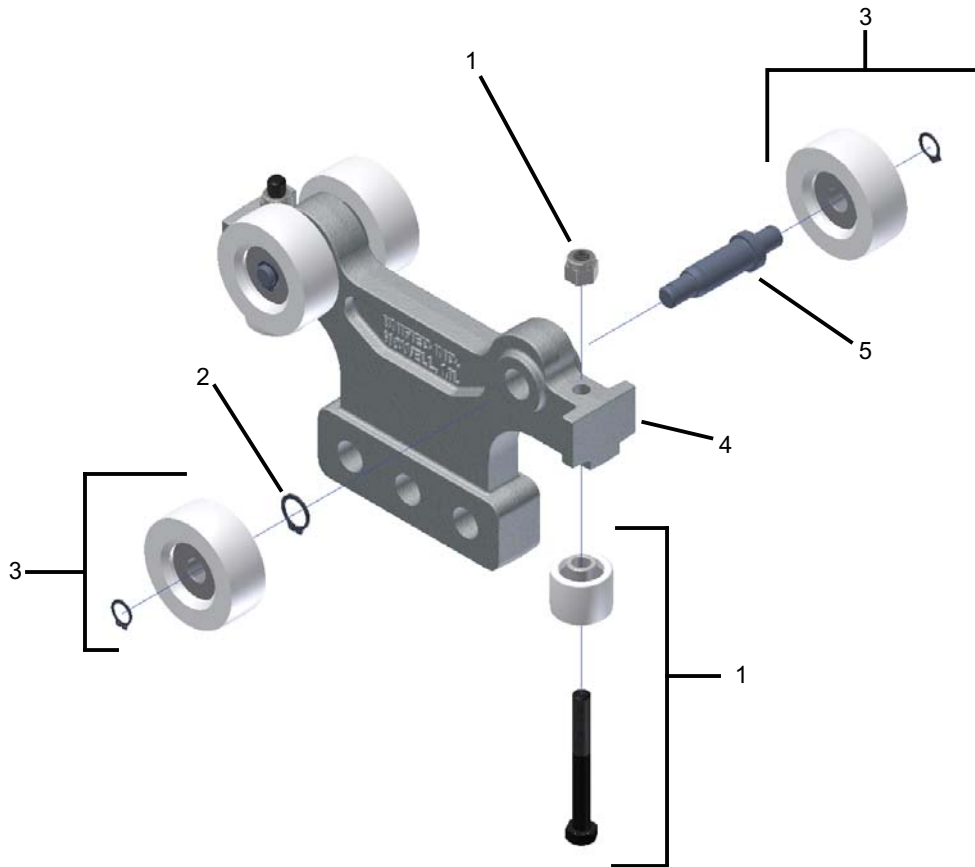
| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------|----------|
| 1 | 52455 | M16x2.0 Nylon Insert Nut | 1 |
| 2 | 25159 | ETA-4 Guide Roller Assy | 2 |
| 3 | 55060 | N-5100-50 Snap Ring | 2 |
| 4 | 28000 | 437 1.8 White Wheel N-5100-37 Snap Ring | 4 |
| 5 | 57130 | 431 ETA-4 Wheel Stud 1/2" Dia. 1215 | 2 |
| 6 | 59800M | 401B Casting | 1 |
| 7 | 51900 | M16x2.0x100mm CL 8.8 HHB | 1 |

20110 ETA-4/5 LONG BODY LOAD TROLLEY



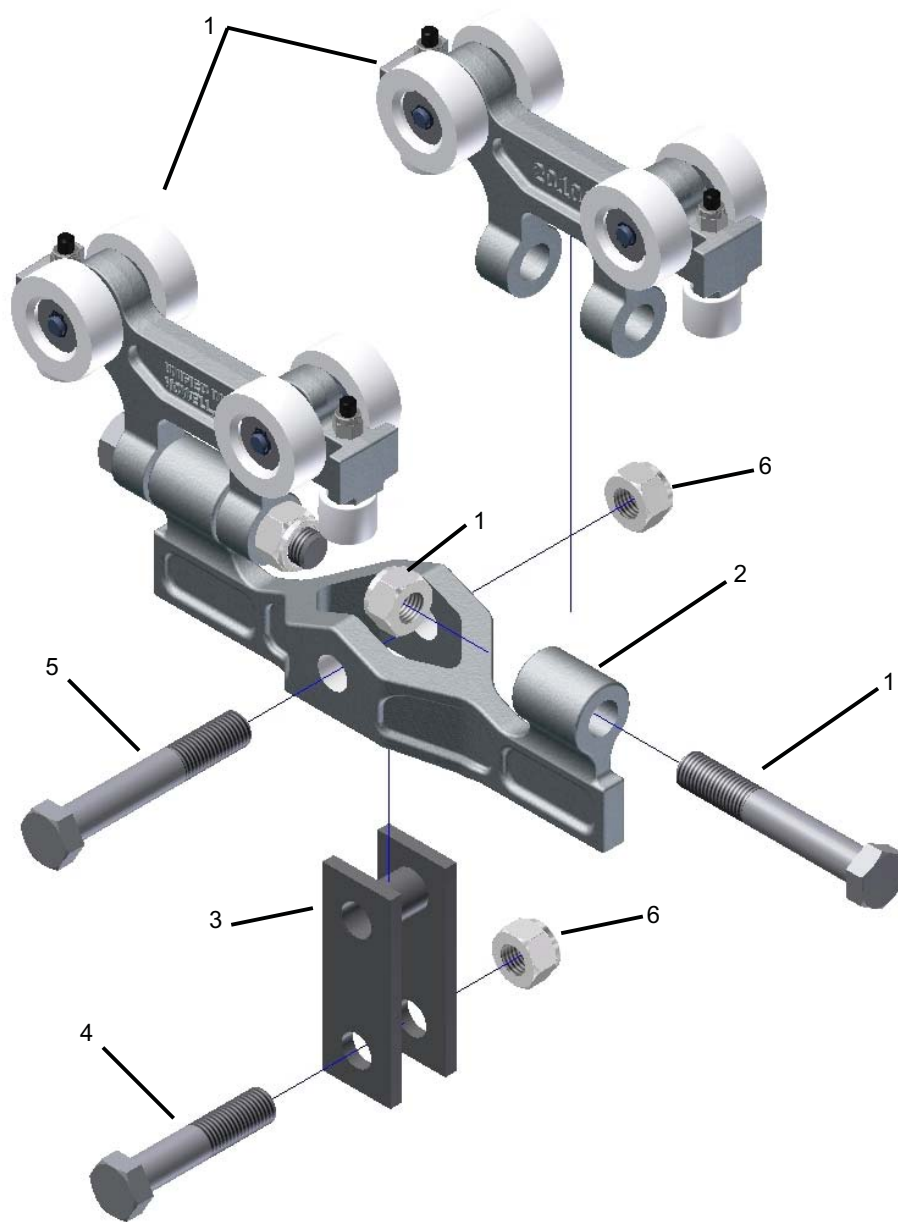
20115 ETA-4/5 THREE HOLE MOUNT LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY | REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------|----------|------|------------|----------------------|----------|
| 1 | 25159 | ETA-4 Guide Roller Assy | 2 | 5 | 57130 | 431 ETA-4 Wheel Stud | 2 |
| 2 | 55060 | N-5100-50 Snap Ring | 2 | | | | |
| 3 | 28000 | 437 1.8 White Wheel | 4 | | | | |
| 4 | 59801M | N-5100-37 Snap Ring | 1 | | | | |



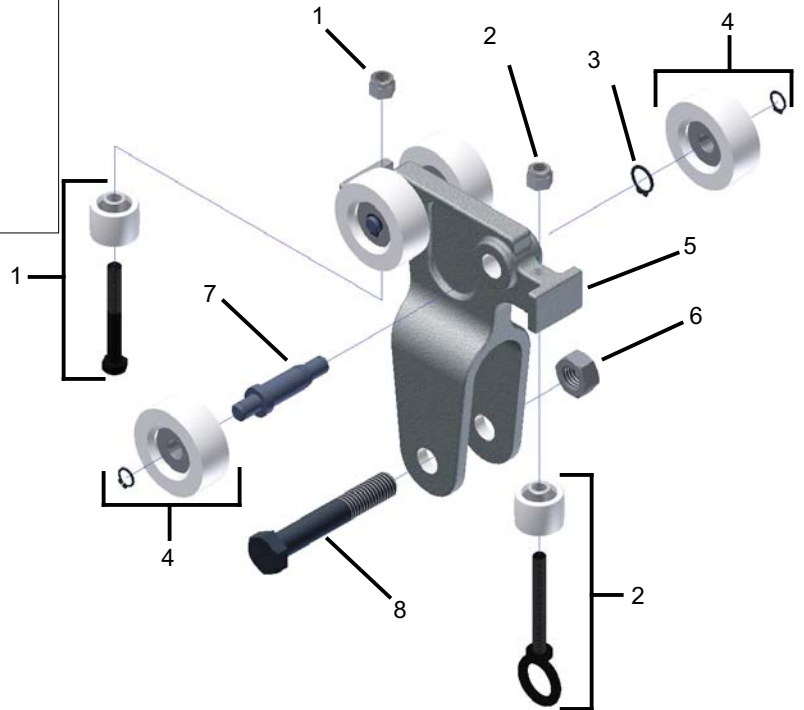
25330 ETA-4/5 DUAL HOIST TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20100 | ETA-4/5 Short Body Load Trolley | 2 |
| 2 | 59880M | 441 Machined E/T Casting | 1 |
| 3 | 25325 | ETA-4/5 Clevis Weldment | 1 |
| 4 | 51880 | M16x2.0 x 75mm Nylon Insert Nut | 1 |
| 5 | 51900 | M16x2.0 x 100mm HHB | 1 |
| 6 | 52455 | M16 x 2.0 Nylon Insert Lock Nut | 2 |



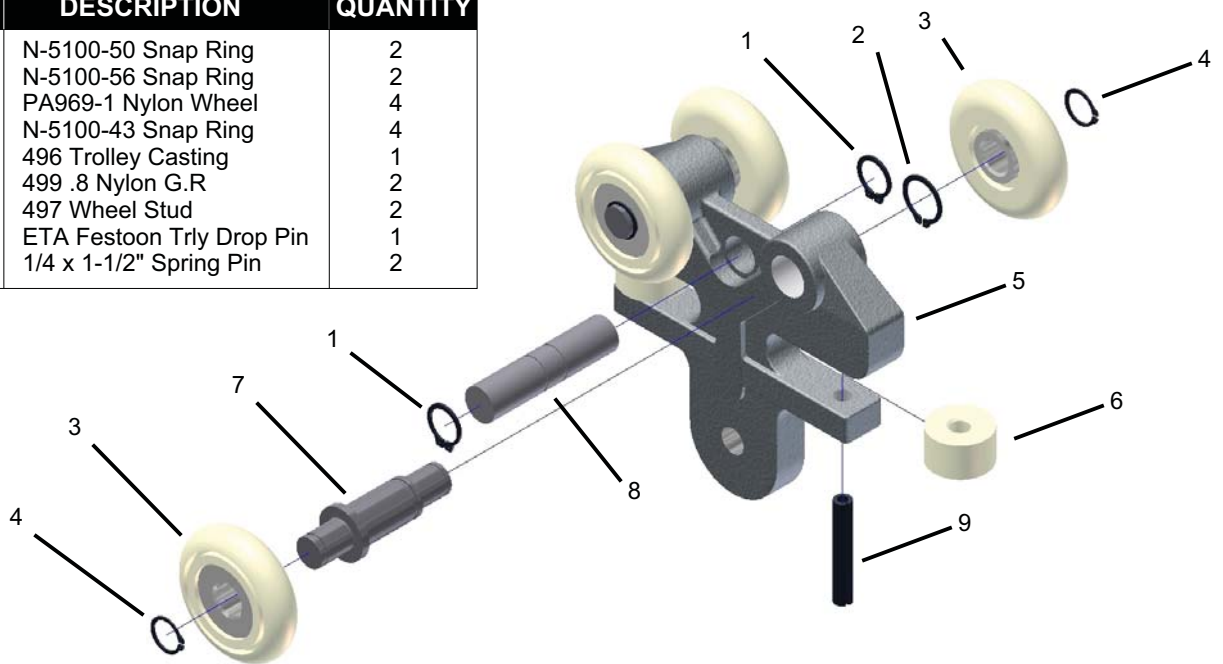
20140 ETA-4/5 SADDLE LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 25159 | ETA-4 Guide Roller Assy | 1 |
| 2 | 25157 | ETA-4 Guide Roller w/Eyebolt | 1 |
| 3 | 55060 | N-5100-50 Snap Ring | 2 |
| 4 | 28000 | 437 1.8 White Wheel | 4 |
| | | N-5100-37 Snap Ring | |
| | | 437 1.8 White Wheel | |
| 5 | 59840M | 411B Trolley Casting | 1 |
| 6 | 52445 | M12x1.75 Torque Nut | 1 |
| 7 | 57130 | 431 ETA-4 Wheel Stud | 2 |
| | | 1/2" Dia. 1215 | |
| 8 | 51820 | M12x1.75 x 70mm HHB | 1 |



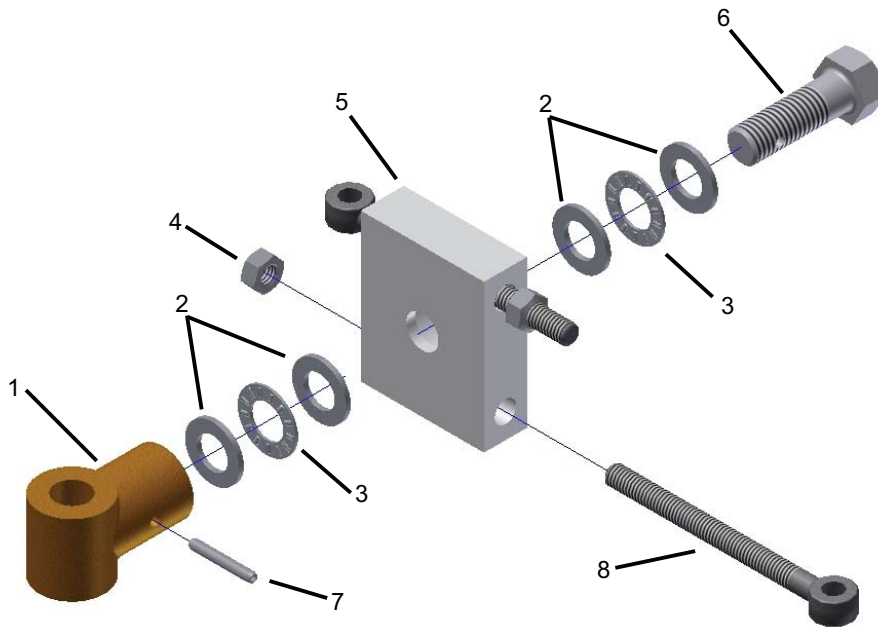
| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 55060 | N-5100-50 Snap Ring | 2 |
| 2 | 55080 | N-5100-56 Snap Ring | 2 |
| 3 | 58240 | PA969-1 Nylon Wheel | 4 |
| 4 | 55070 | N-5100-43 Snap Ring | 4 |
| 5 | 59900M | 496 Trolley Casting | 1 |
| 6 | 70040 | 499 .8 Nylon G.R | 2 |
| 7 | 57150 | 497 Wheel Stud | 2 |
| 8 | 57135 | ETA Festoon Trolley Drop Pin | 1 |
| 9 | 54190 | 1/4 x 1-1/2" Spring Pin | 2 |

20150 ETA-4/5 FESTOON TROLLEY



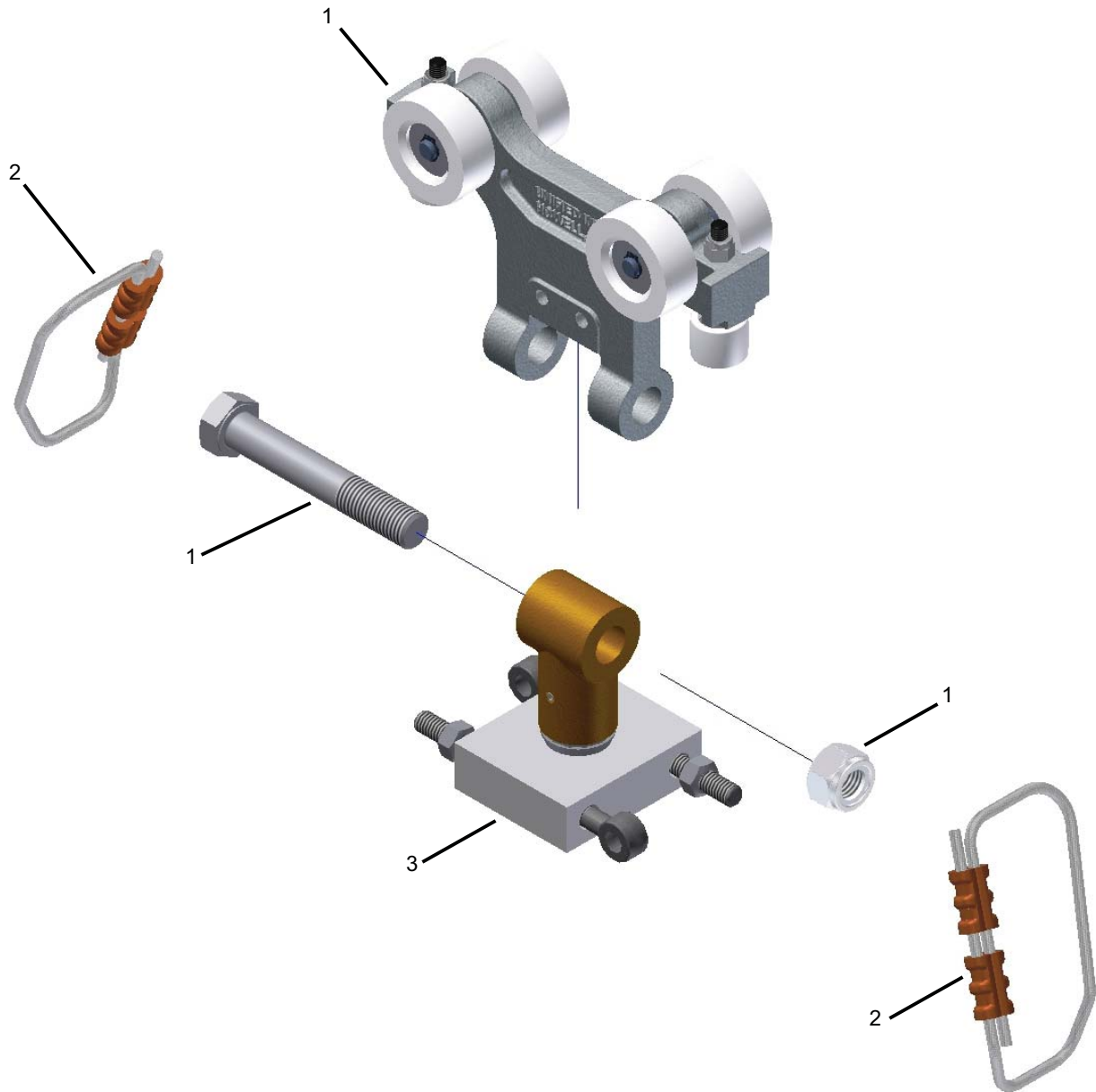
25260 ETA-4/5 BRONZE TEE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------|----------|
| 1 | 59830M | 406 T Mn Br Casting | 1 |
| 2 | 53370 | TRC-1018 Thrust Washer | 4 |
| 3 | 56150 | NTA-1018 Thrust Bearing | 2 |
| 4 | 52095 | 3/8-16 Top Lock Nut | 2 |
| 5 | 59960 | 475B Machined Block | 1 |
| 6 | 51020 | 5/8-11 x 2 1/2" GD5 HHB | 1 |
| 7 | 54180 | 3/16 x 1 1/4" Spring Pin | 1 |
| 8 | 50035 | 3/8-16 x 4 1/2" Rod End | 2 |



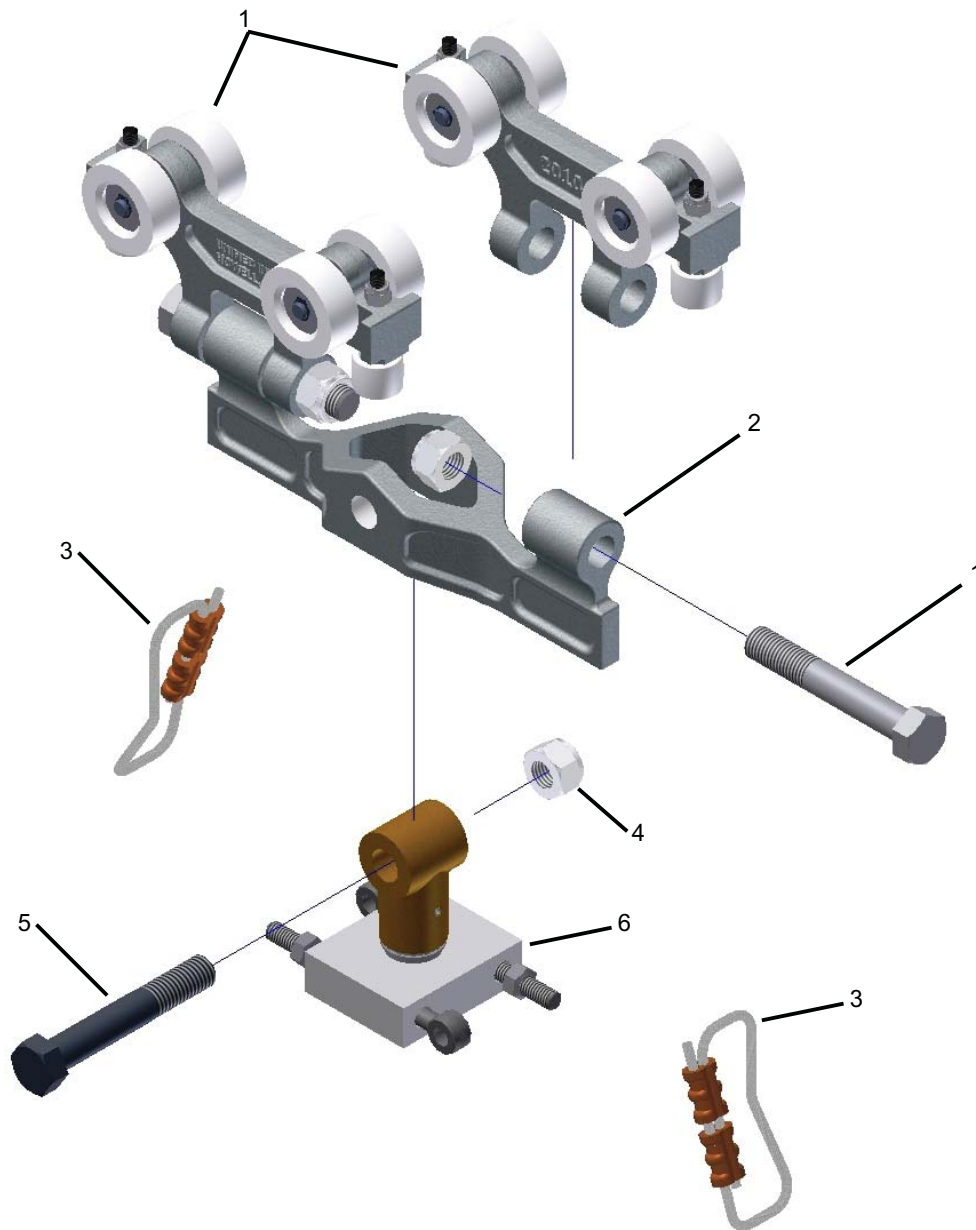
22521 ETA-4/5 SINGLE END TRUCK ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 20110 | ETA-4/5 Long Body Load Trolley | 1 |
| 2 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 3 | 25260 | ETA-4/5 Bronze Tee Assembly | 1 |



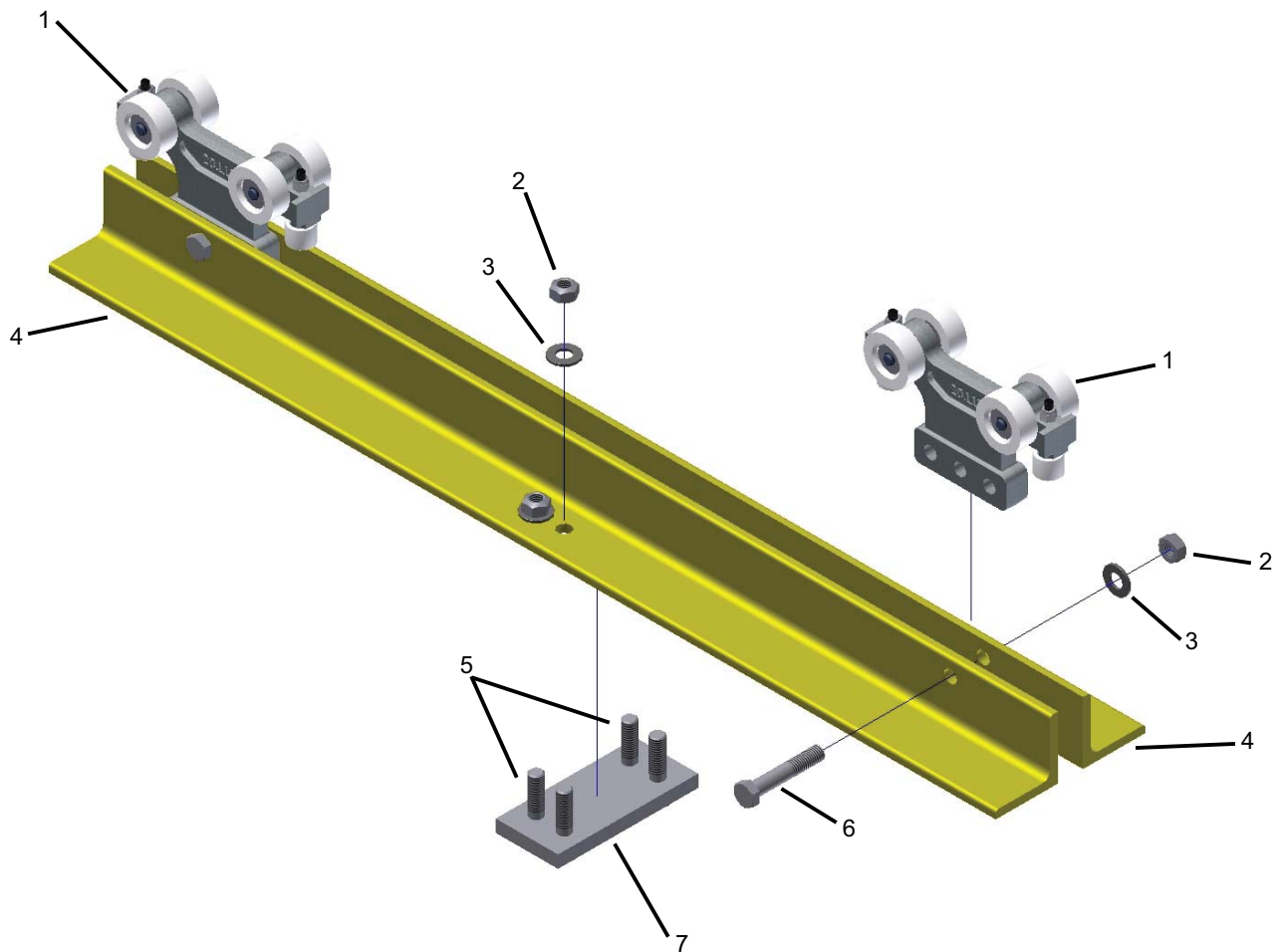
22540 ETA-4/5 DUAL END TRUCK ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20100 | ETA-4/5 Short Body Load Trolley | 2 |
| 2 | 59880M | 441 Machined E/T Casting | 1 |
| 3 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 4 | 52455 | M16x2.0 Nylon Insert Nut | 1 |
| 5 | 51900 | M16x2.0 x 100mm HHB | 1 |
| 6 | 25260 | ETA-4/5 Bronze Tee Assembly | 1 |



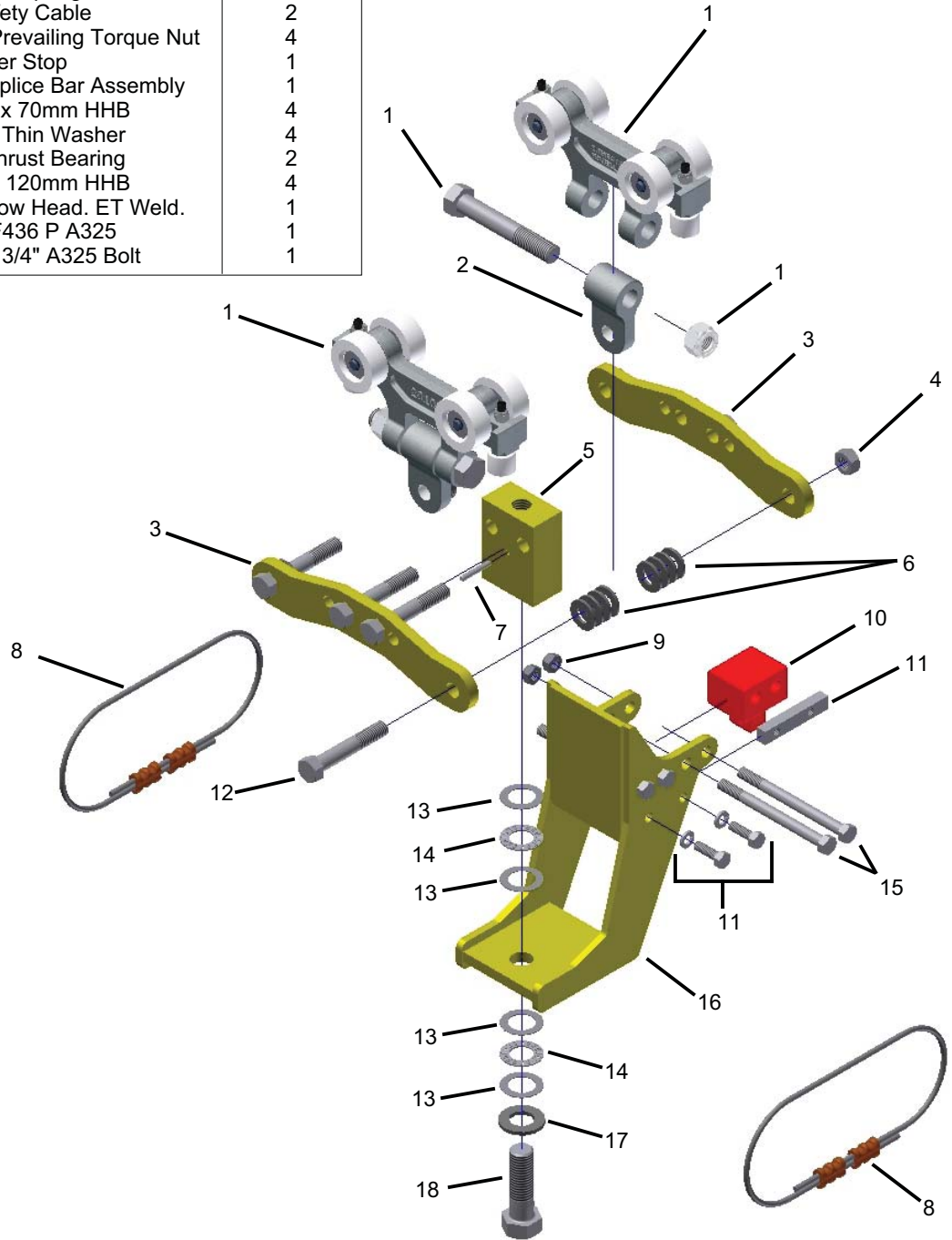
ETA-4/5 RIGID END TRUCK ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------------|----------|
| 1 | 20115 | ETA-4/5 Three Hole Mount Load Trolley | 2 |
| 2 | 52445 | M12x1.75 Lock Nut | 6 |
| 3 | 53060 | 1/2" SAE Flat Washer | 6 |
| 4 | | L2 1/2 x 2 1/2 x 5/16 | 2 |
| 5 | 51790 | M12x1.75 x 45mm HHB | 4 |
| 6 | 51820 | M12x1.75 x 70mm HHB | 2 |
| 7 | 78570 | ETA-4 End Truck Block | 1 |



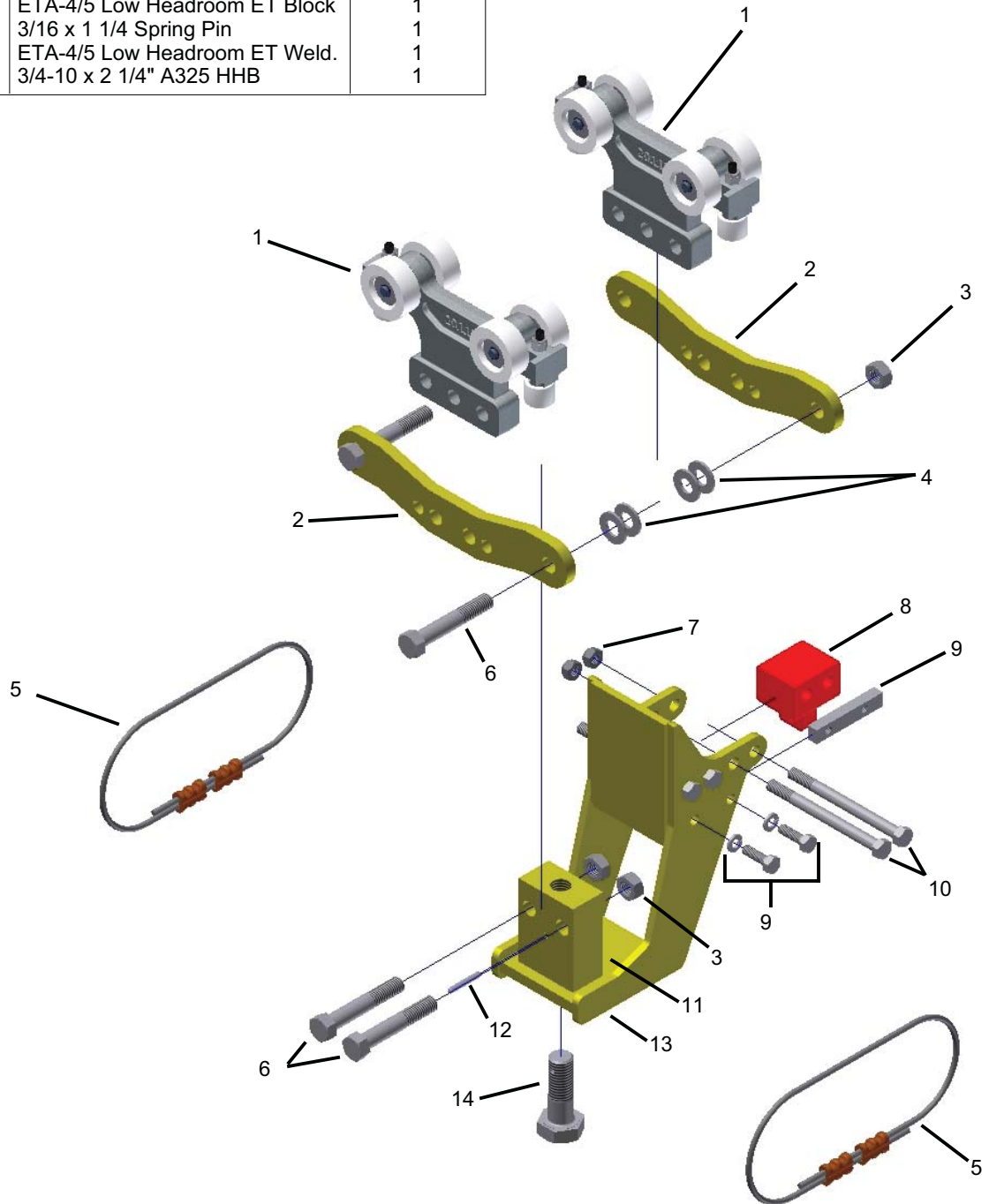
22600 ETA-4/5 ARTICULATING LOW HEADROOM END TRUCK

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20100 | ETA-4/5 Short Body Load Trolley | 2 |
| 2 | 59810M | 402 Mach. Flat LL Casting | 2 |
| 3 | 60025 | ETA-4/5 Low Head. ET Load Bar | 2 |
| 4 | 52445 | M12x1.75 Prevailing Torque Nut | 4 |
| 5 | 60030 | ETA-4/5 Low Head. ET Block | 1 |
| 6 | 53060 | 1/2 SAE Flat Washer | 16 |
| 7 | 54180 | 3/16 x 1 1/4 Spring Pin | 1 |
| 8 | 25640 | ETA-4 Safety Cable | 2 |
| 9 | 52440 | M10x1.5 Prevailing Torque Nut | 4 |
| 10 | 59980 | ETA-5 Inner Stop | 1 |
| 11 | 25515 | ETA-4/5 Splice Bar Assembly | 1 |
| 12 | 51820 | M12x1.75 x 70mm HHB | 4 |
| 13 | 53321 | TWA1220 Thin Washer | 4 |
| 14 | 56161 | TC1220 Thrust Bearing | 2 |
| 15 | 51770 | M10x1.5 x 120mm HHB | 4 |
| 16 | 25336 | ETA-4/5 Low Head. ET Weld. | 1 |
| 17 | 53410 | 3/4" F/W F436 P A325 | 1 |
| 18 | 51281 | 3/4-10 x 2 3/4" A325 Bolt | 1 |



22605 ETA-4/5 RIGID LOW HEADROOM END TRUCK

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------------|----------|
| 1 | 20115 | ETA-4/5 Three Hole Mount Trolley | 2 |
| 2 | 60025 | ETA-4/5 Low Head. ET Load Bar | 2 |
| 3 | 52445 | M12x1.75 Prevailing Torque Nut | 4 |
| 4 | 53060 | 1/2 SAE Flat Washer | 12 |
| 5 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 6 | 51820 | M12x1.75 x 70mm HHB | 4 |
| 7 | 52440 | M10x1.5 Prevailing Torque Nut | 4 |
| 8 | 59980 | ETA-5 Inner Stop | 1 |
| 9 | 25515 | ETA-4/5 Splice Bar Assembly | 1 |
| 10 | 51770 | M10x1.5 x 120mm HHB | 4 |
| 11 | 60030 | ETA-4/5 Low Headroom ET Block | 1 |
| 12 | 54180 | 3/16 x 1 1/4 Spring Pin | 1 |
| 13 | 25336 | ETA-4/5 Low Headroom ET Weld. | 1 |
| 14 | 51260 | 3/4-10 x 2 1/4" A325 HHB | 1 |

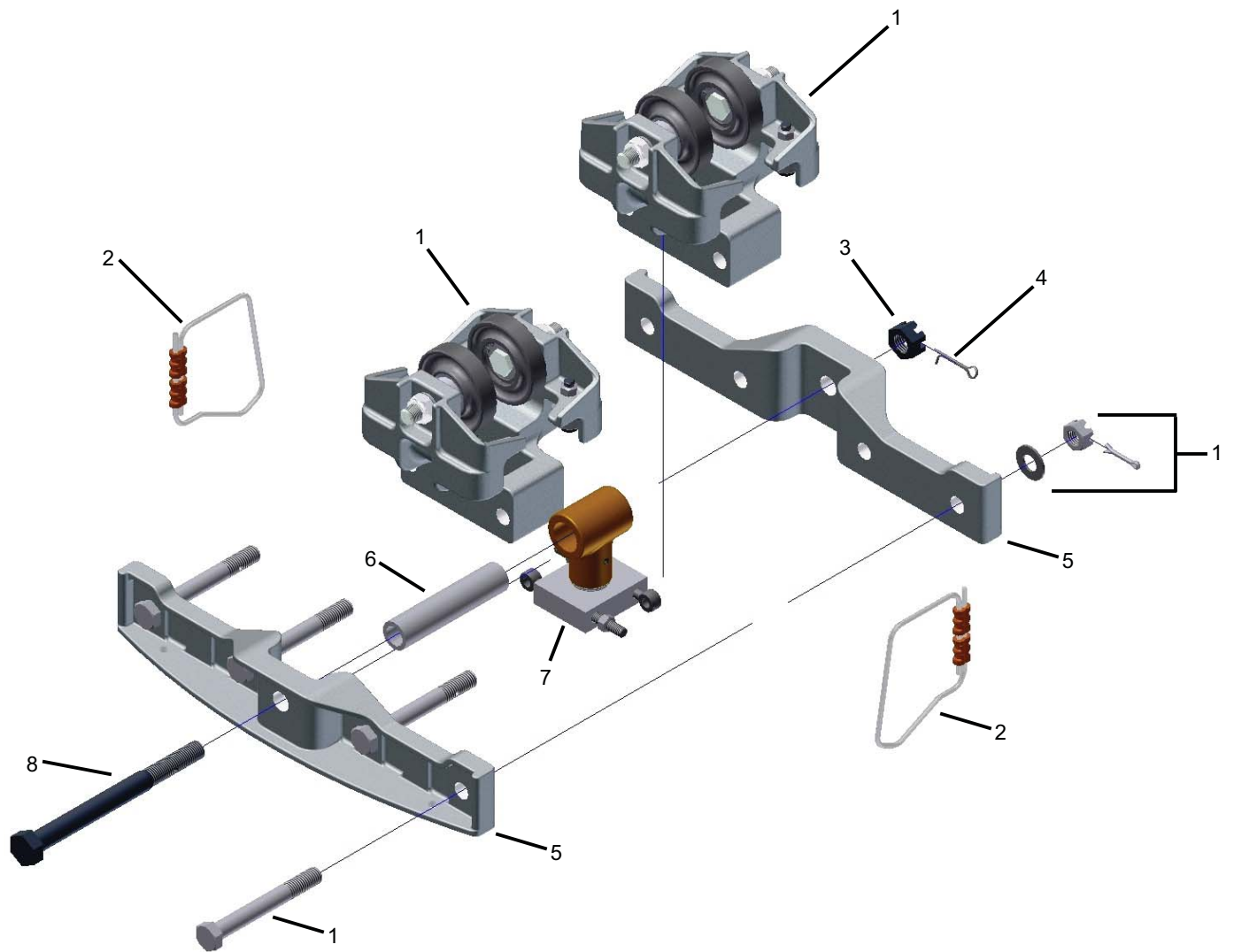


ETA-4/5 STANDARD RAIL END TRUCK ASSEMBLIES

(22557, 22558 AND 22559 WITHOUT KICKUP)

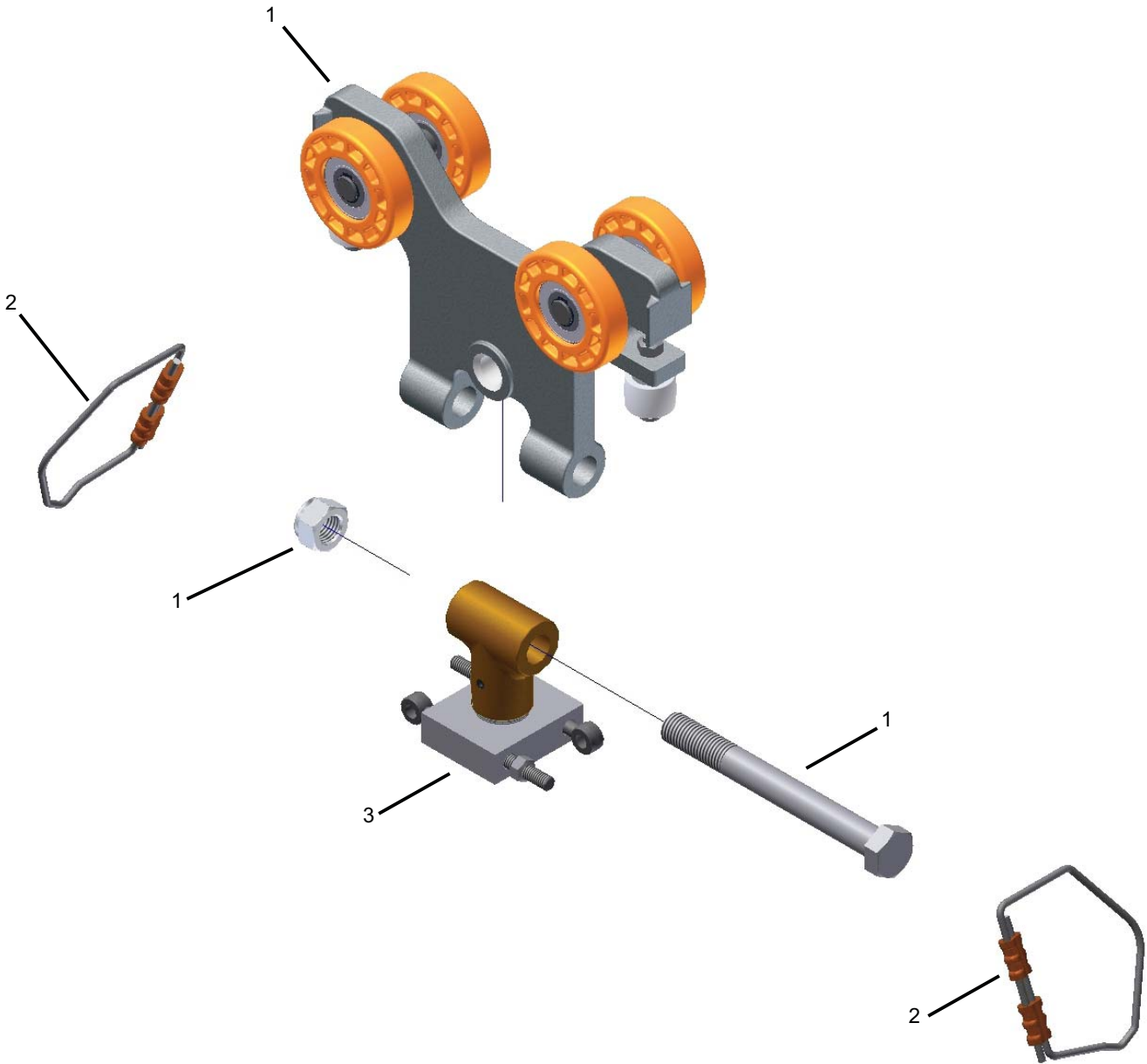
(22574, 22575 AND 22576 WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 10189 | MBC-500-3-325 Trolley W/O KU | 2 |
| 2 | 25640 | ETA-4 Safety Cable | 2 |
| 3 | 52370 | 3/4-10 Small Slot Hex Nut | 1 |
| 4 | 54086 | 5/32 x 1 1/2 Cotter Pin | 1 |
| 5 | 59580M | 156 MBC End Truck Mach. Cast. | 2 |
| 6 | 25010 | 1 1/8 OD Wear Sleeve Assy | 1 |
| 7 | 25411 | ETA-4 507 Hanger Assy 108/475 | 1 |
| 8 | 51420 | 3/4-10 x 8 GR5 HHB | 1 |



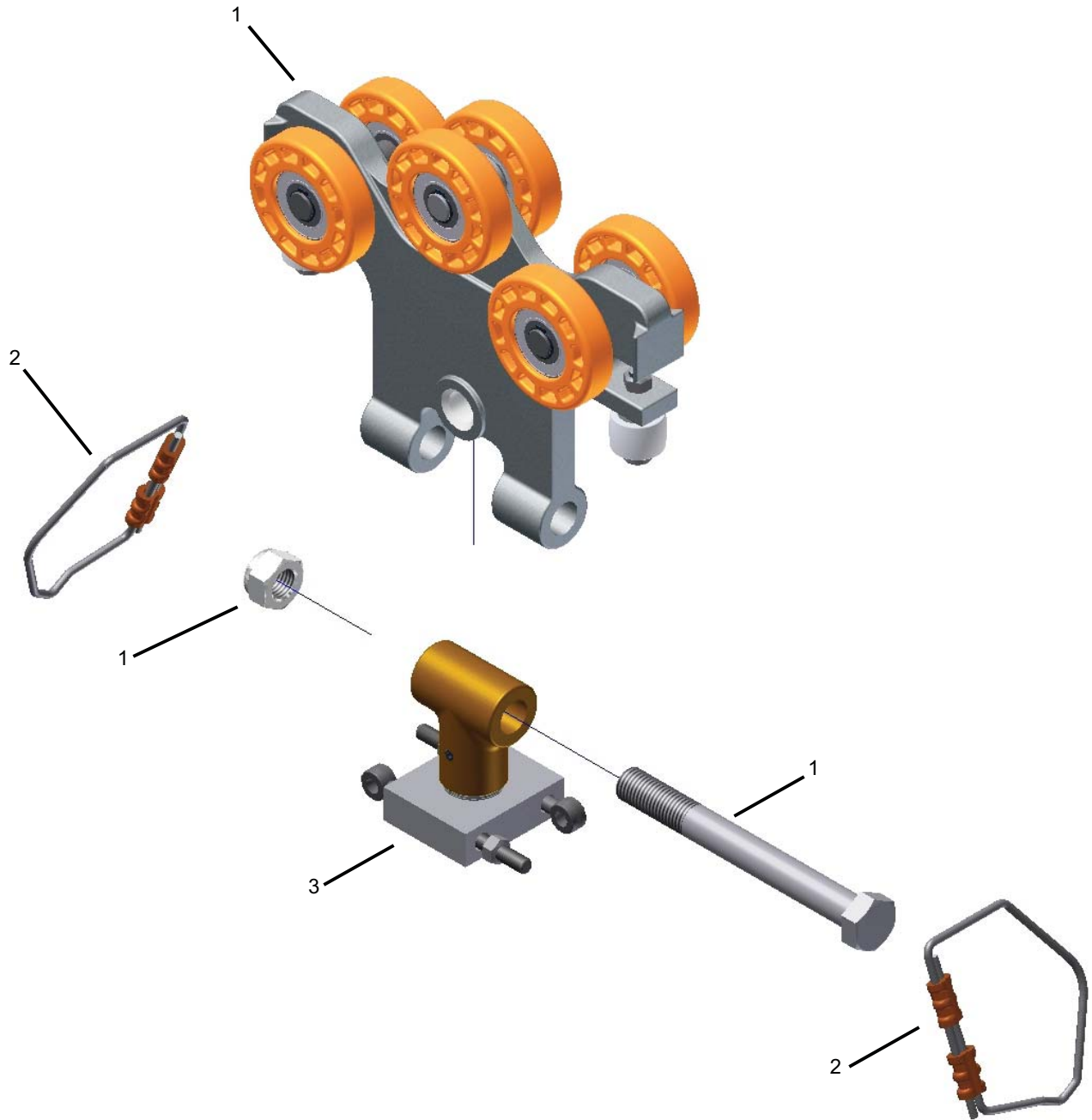
22039 ETA-4/5 SINGLE END TRUCK ASSEMBLY TO RUN ON ETA-8 (WITHOUT KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 20019 | ETA-8 Long Body Load Trolley | 1 |
| 2 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 3 | 25251 | 505A Hanger Assy (106/475) | 1 |



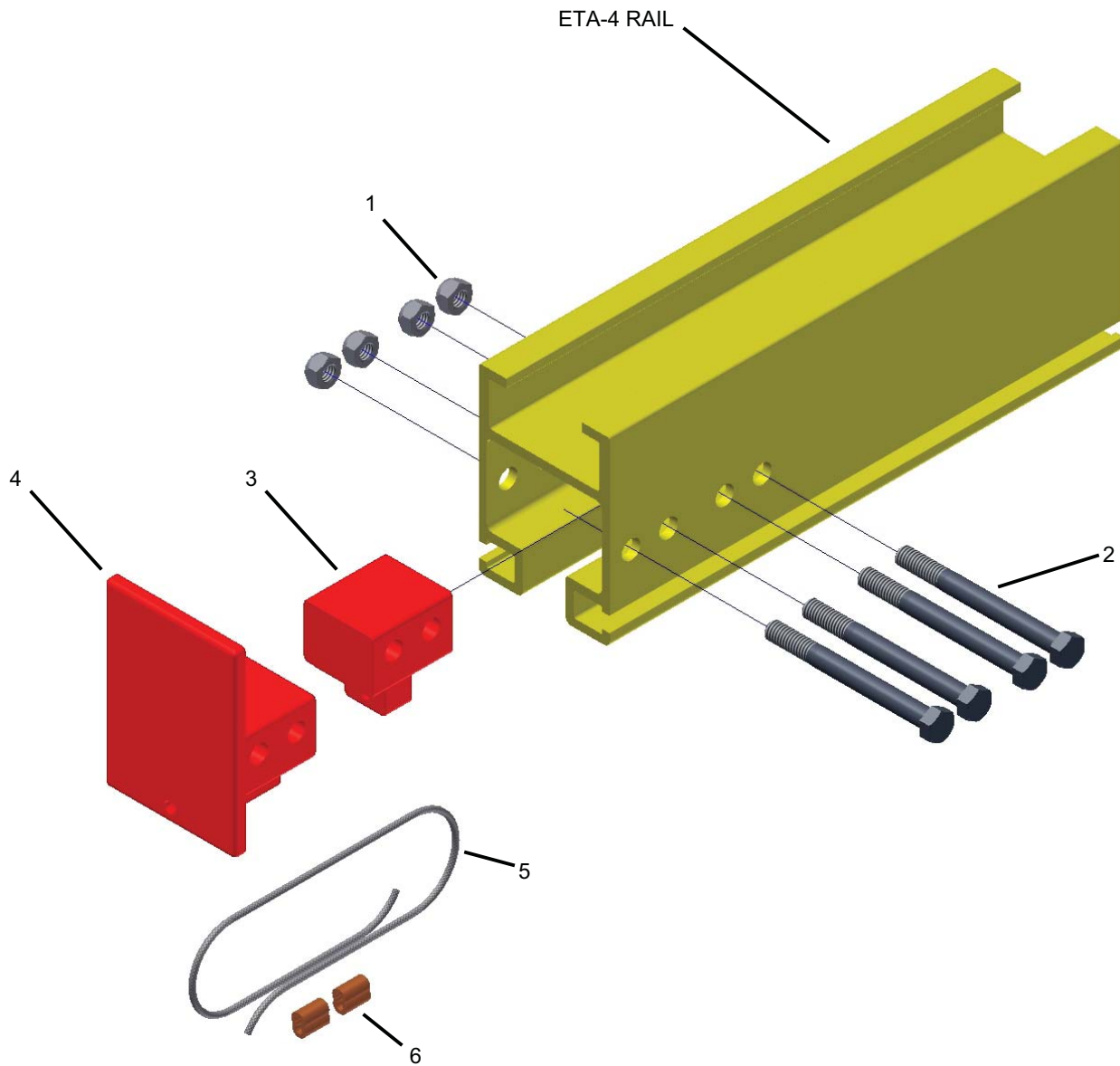
22047 ETA-4/5 SINGLE END TRUCK ASSEMBLY TO RUN ON ETA-8 (WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 20069 | ETA-8 Long Body Kickup Trolley | 1 |
| 2 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 3 | 25251 | 505A Hanger Assy (106/475) | 1 |



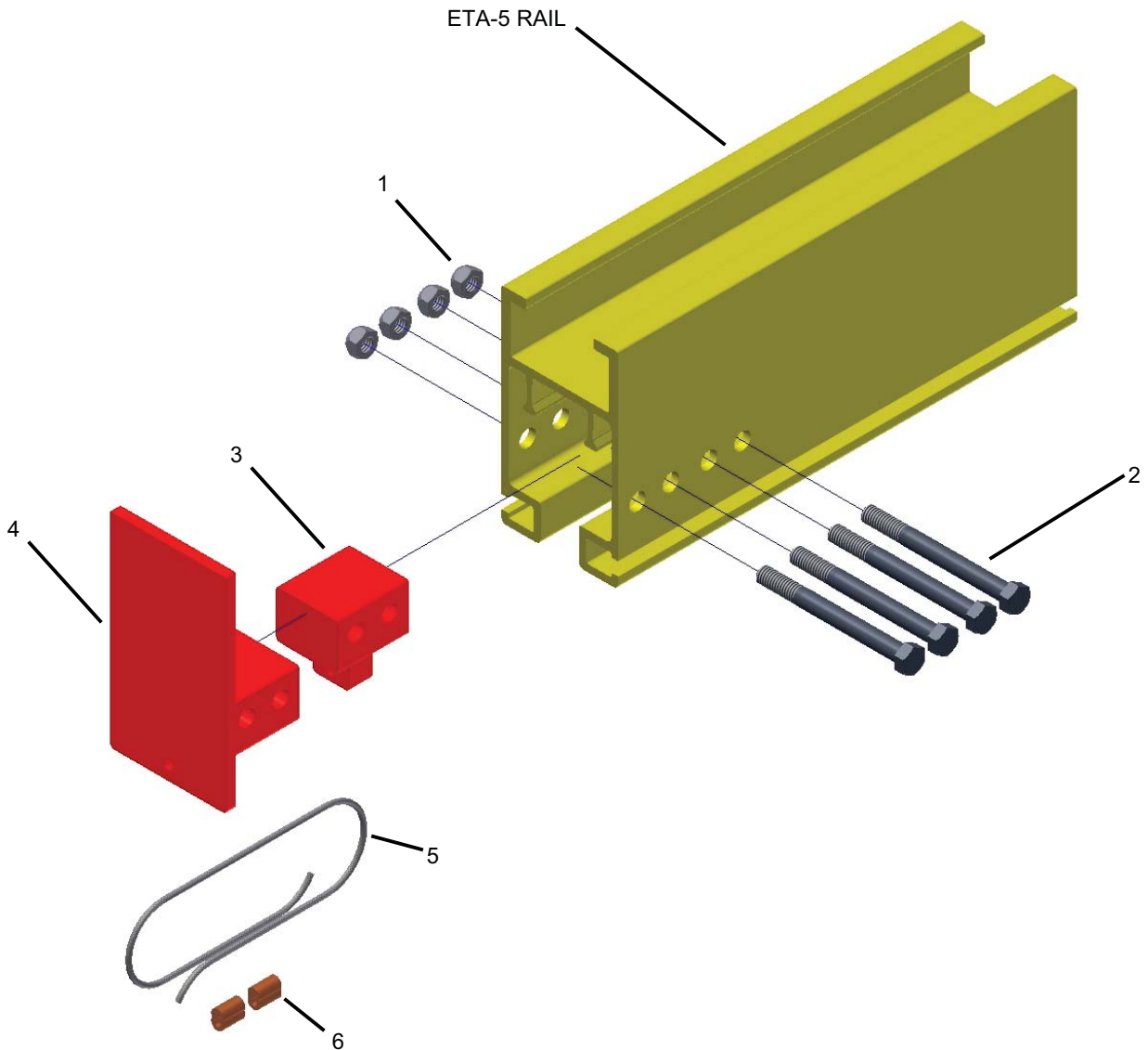
24900 ETA-4 DOUBLE END STOP

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 52440 | M10x1.5 Prevailing Torque Nut | 4 |
| 2 | 51765 | M10x1.5 x 100mm HHB | 4 |
| 3 | 59980 | ETA-5 Inner Stop | 1 |
| 4 | 59967 | ETA-4 End Cap | 1 |
| 5 | 65020 | 1/8" 7x19 Stain. Stl. Wire Rope | 1 |
| 6 | 78020 | 1/8" Copper Oval Sleeve | 2 |



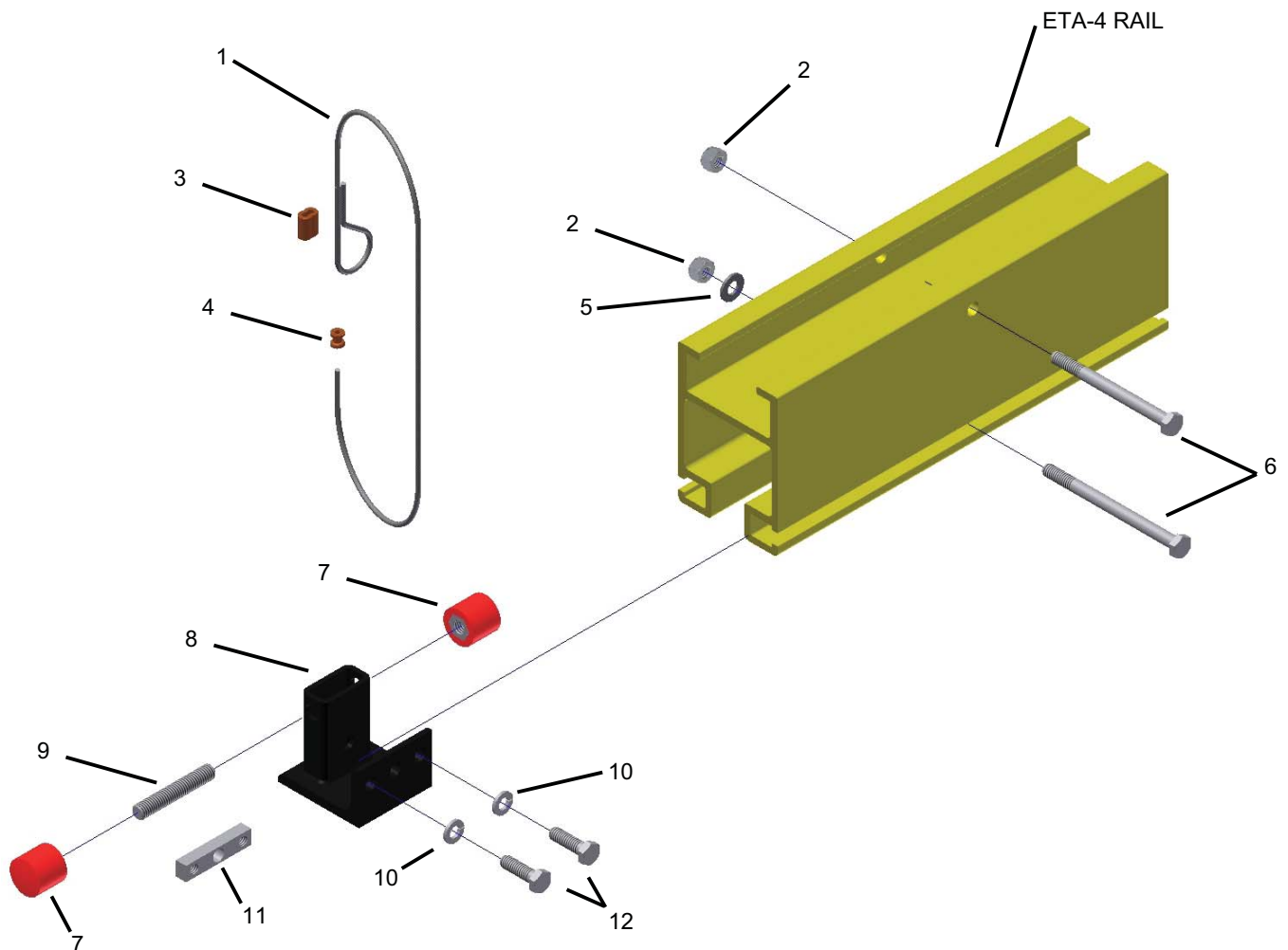
25194 ETA-5 DOUBLE END STOP

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 52440 | M10x1.5 Prevailing Torque Nut | 4 |
| 2 | 51765 | M10x1.5 x 100mm HHB | 4 |
| 3 | 59980 | ETA-5 Inner Stop | 1 |
| 4 | 59970 | ETA-5 Poly End Cap | 1 |
| 5 | 65020 | 1/8" 7x19 Stain. Stl. Wire Rope | 1 |
| 6 | 78020 | 1/8" Copper Oval Sleeve | 2 |



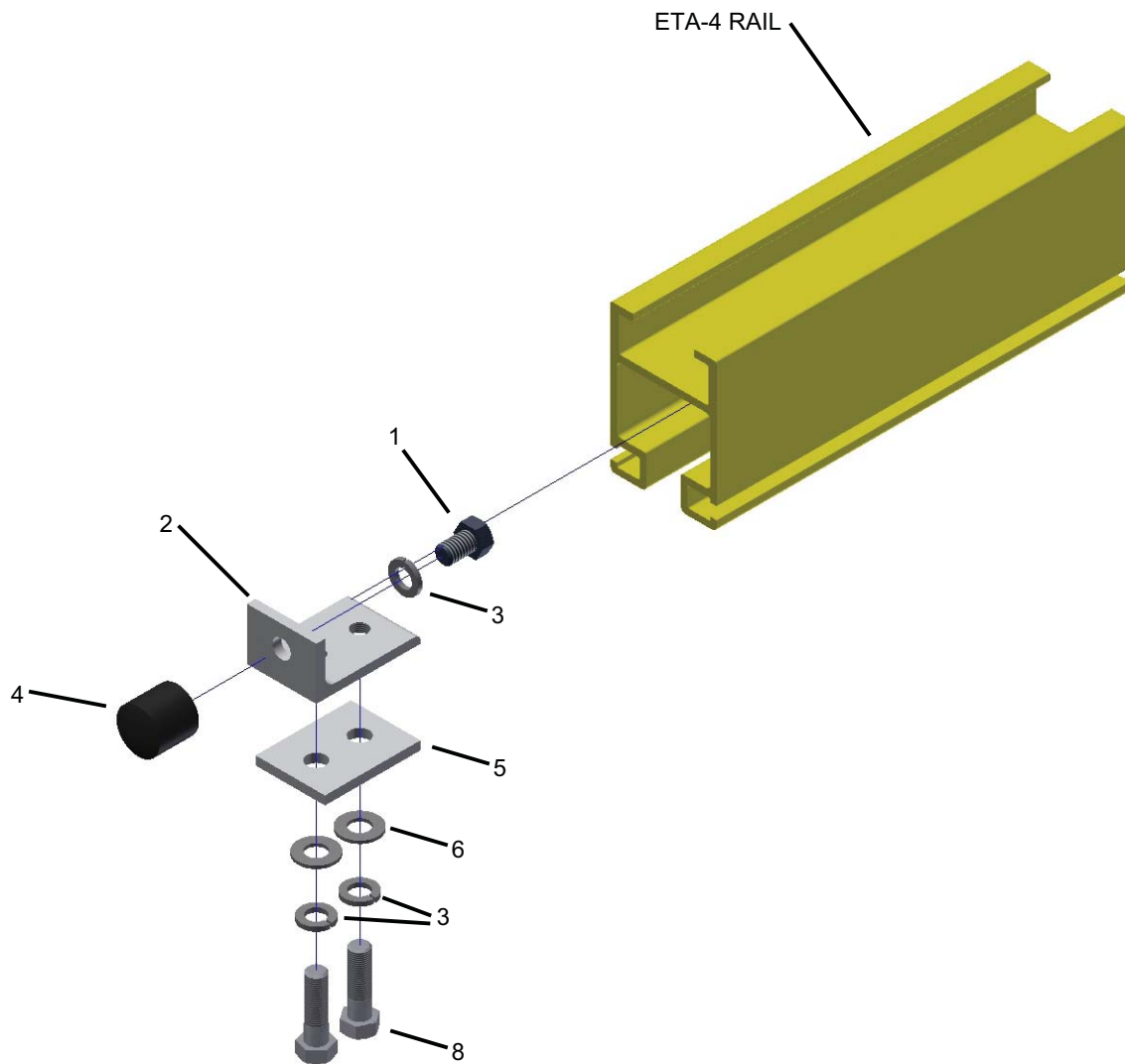
25575 ETA-4/5 INSERTABLE MID-RAIL STOP

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 65020 | 1/8" x 18" 7X19 SST. Wire Rope | 1 |
| 2 | 52435 | M8x1.25 Nylon Insert Lock Nut | 2 |
| 3 | 78020 | 1/8" Copper Oval Sleeve | 1 |
| 4 | 78021 | 1/8" Copper Stop Sleeve | 1 |
| 5 | 53030 | 5/16 SAE Flat Washer | 1 |
| 6 | 51725 | M8x1.25 x 100mm HHB | 2 |
| 7 | 60001 | ETA-4/5 Poly Bumper | 2 |
| 8 | 60000 | ETA-4/5 Mid-Rail Stop Weldment | 1 |
| 9 | 80970 | 3/8-16 x 2 1/4" Threaded Rod | 1 |
| 10 | 52500 | M8 Spring Lock Washer | 2 |
| 11 | 60002 | ETA-4/5 Mid-Rail Stop Bar | 1 |
| 12 | 51720 | M8x1.25 x 25mm HHB | 2 |



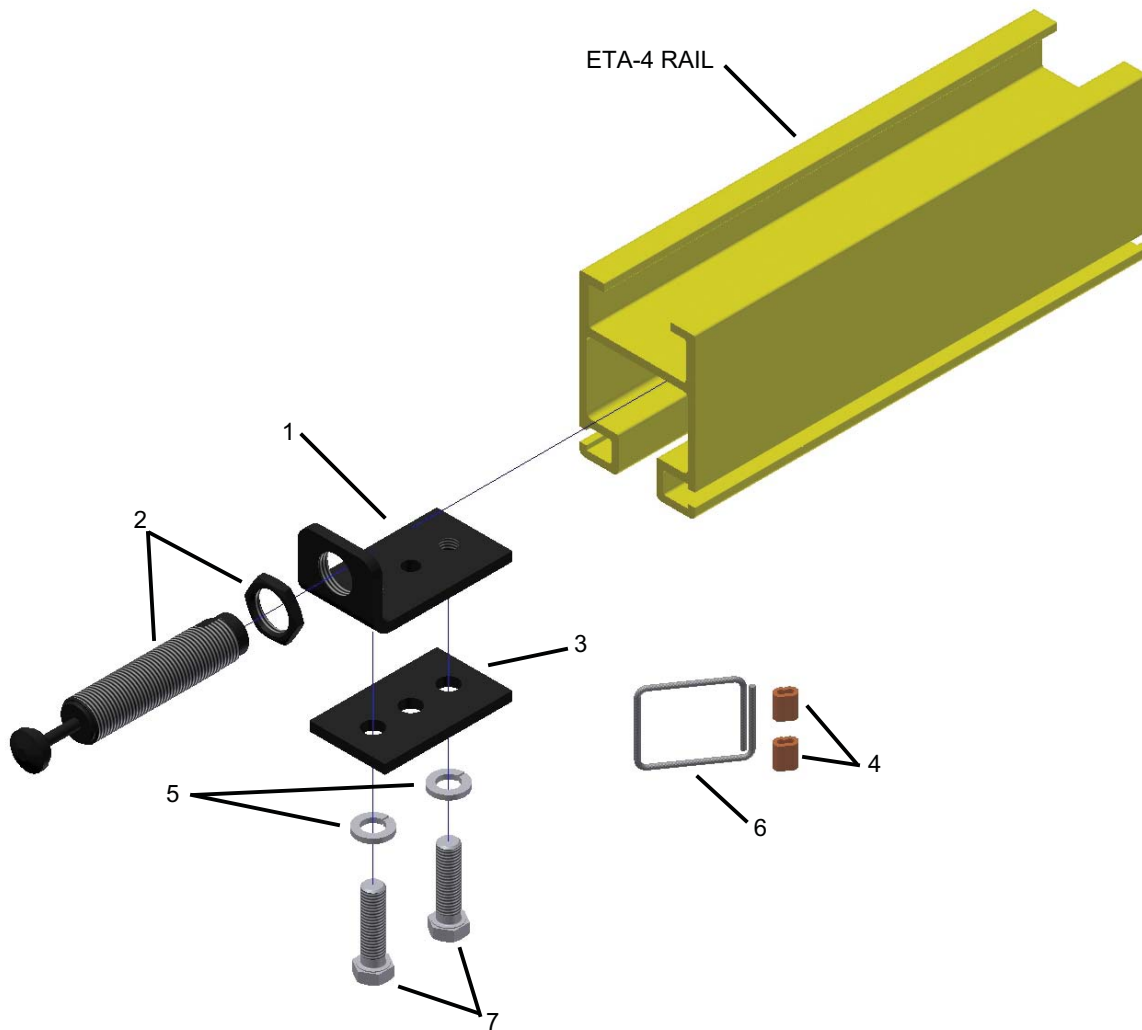
25580 ETA-4/5 MID-RAIL STOP ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------|----------|
| 1 | 50720 | 1/2-13 x 3/4" HHB | 1 |
| 2 | 25573 | ETA-4 Mid Stop Angle | 1 |
| 3 | 53230 | 1/2" Spring Lock Washer | 3 |
| 4 | 62010 | 1 1/4" Neo Bumper | 1 |
| 5 | 25574 | ETA-4 Mid Stop Plate | 1 |
| 6 | 53060 | 1/2" SAE Flat Washer | 2 |
| 7 | 51795 | M12x1.5 x 45mm HHB | 2 |



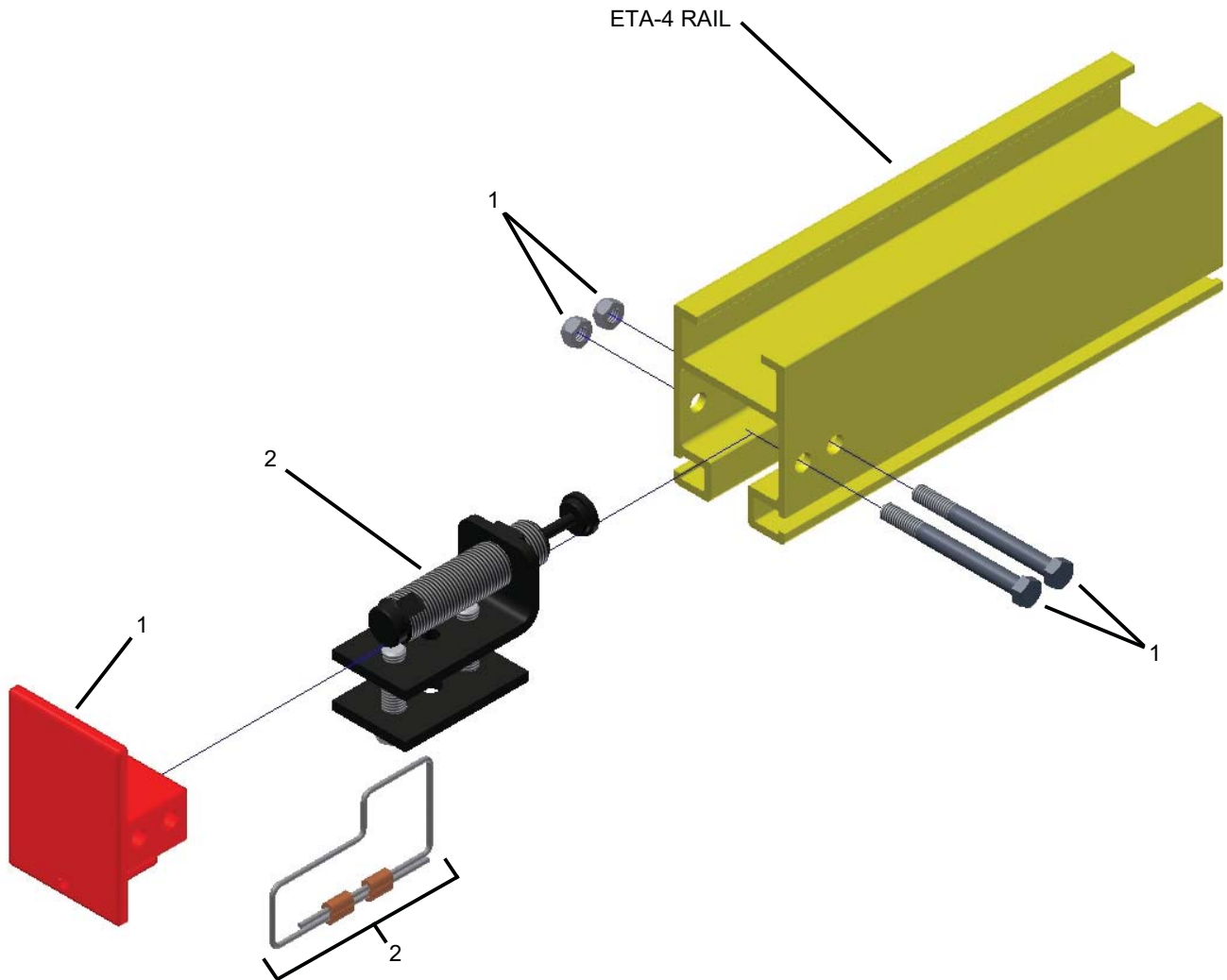
25185 ETA-4/5 POSITION STOP SHOCK ABSORBER ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------|----------|
| 1 | 59902 | ETA-4/5 Shock Absorber Holder | 1 |
| 2 | 59904 | SC650-3 SC Series Shock Absorber | 1 |
| 3 | 59903 | ETA-4/5 Position Stop Clamp Plate | 1 |
| 4 | 78020 | 1/8" Copper Oval Sleeve | 2 |
| 5 | 52510 | 12mm Spring Lock Washer | 2 |
| 6 | 65020 | 1/8" x 14" 7x19 SST. Wire Rope | 1 |
| 7 | 51790 | M12x1.75 x 45mm HHB | 2 |



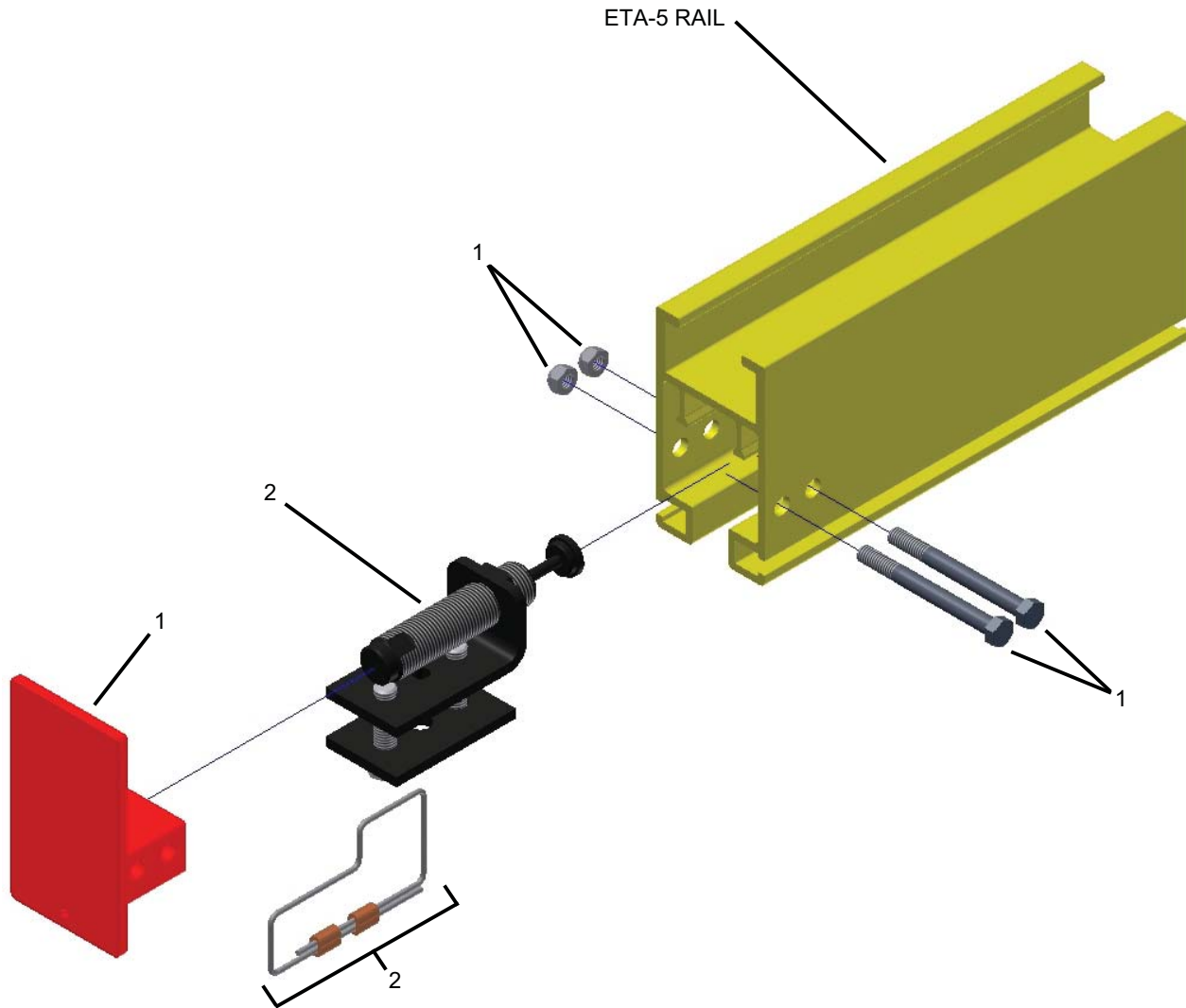
25133 ETA-4 END STOP SHOCK ABSORBER ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------|----------|
| 1 | 25199 | ETA-4 End Cap Assembly | 1 |
| 2 | 25185 | ETA-4/5 Position Stop Shock Absorber | 1 |



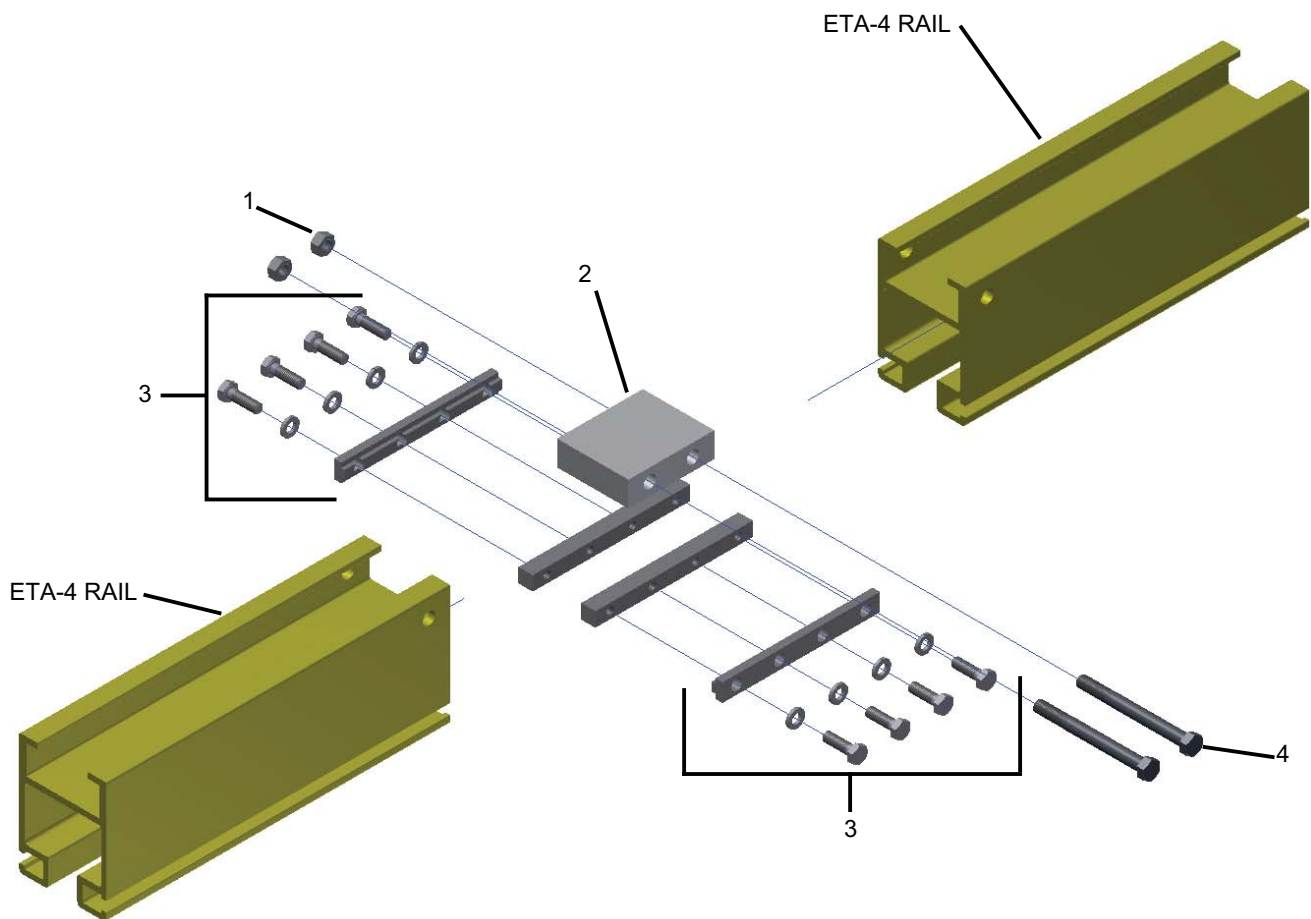
25134 ETA-5 END STOP SHOCK ABSORBER ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------|----------|
| 1 | 25192 | ETA-5 End Cap Assembly | 1 |
| 2 | 25185 | ETA-4/5 Position Stop Shock Absorber | 2 |



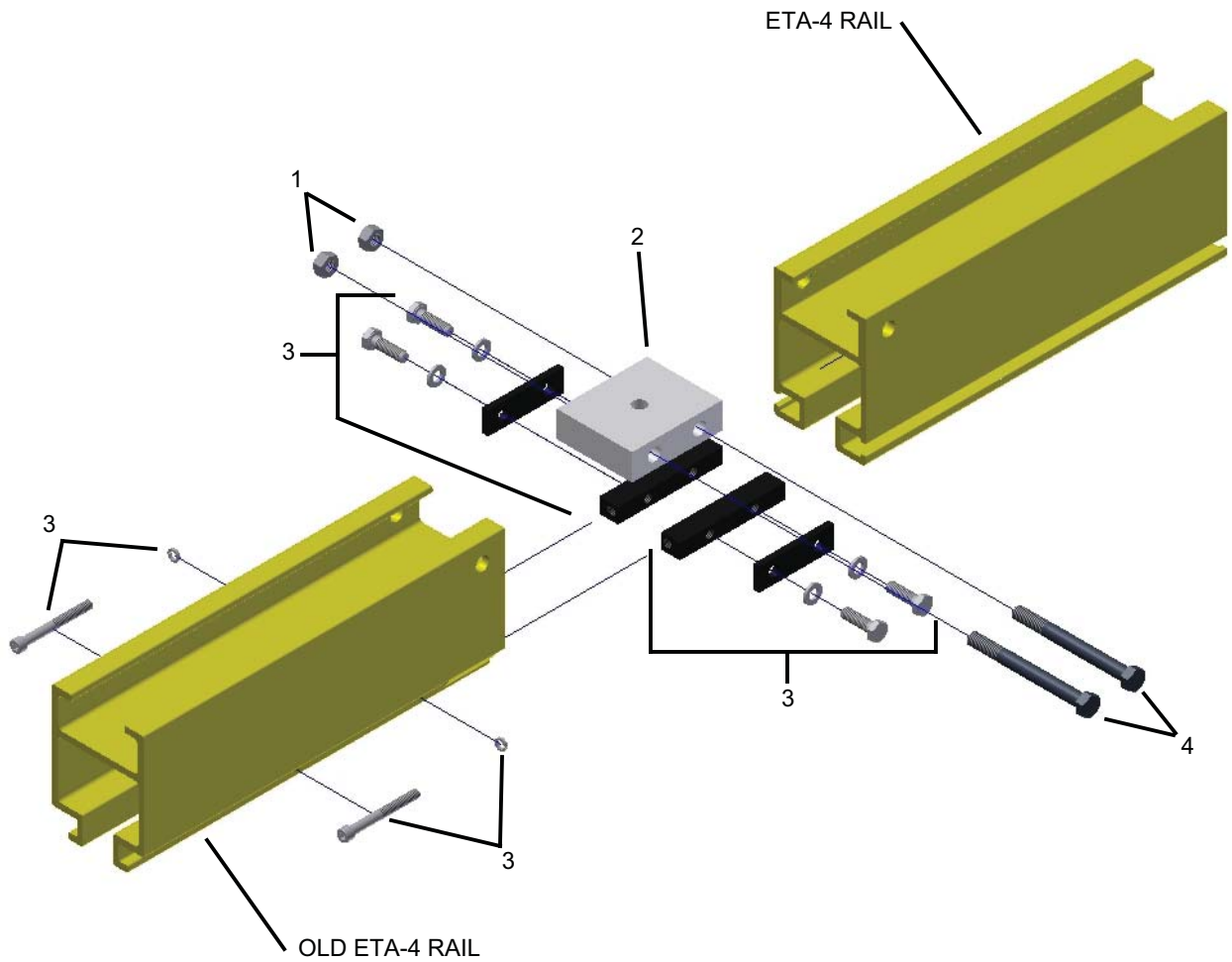
25514 ETA-4/5 BOLTED SPLICE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------------------------------------------------|----------|
| 1 | 52095 | 3/8-16 Top Lock Nut, GR C | 2 |
| 2 | 59955 | ETA-4 475A Block | 1 |
| 3 | 25515 | ETA-4/5 Splice Bar Assembly M8x1.25 x 25mm HHB 8mm Spring Lock Washer | 2 |
| 4 | 50035 | 3/8-16 X 4-1/2" Rod End | 2 |



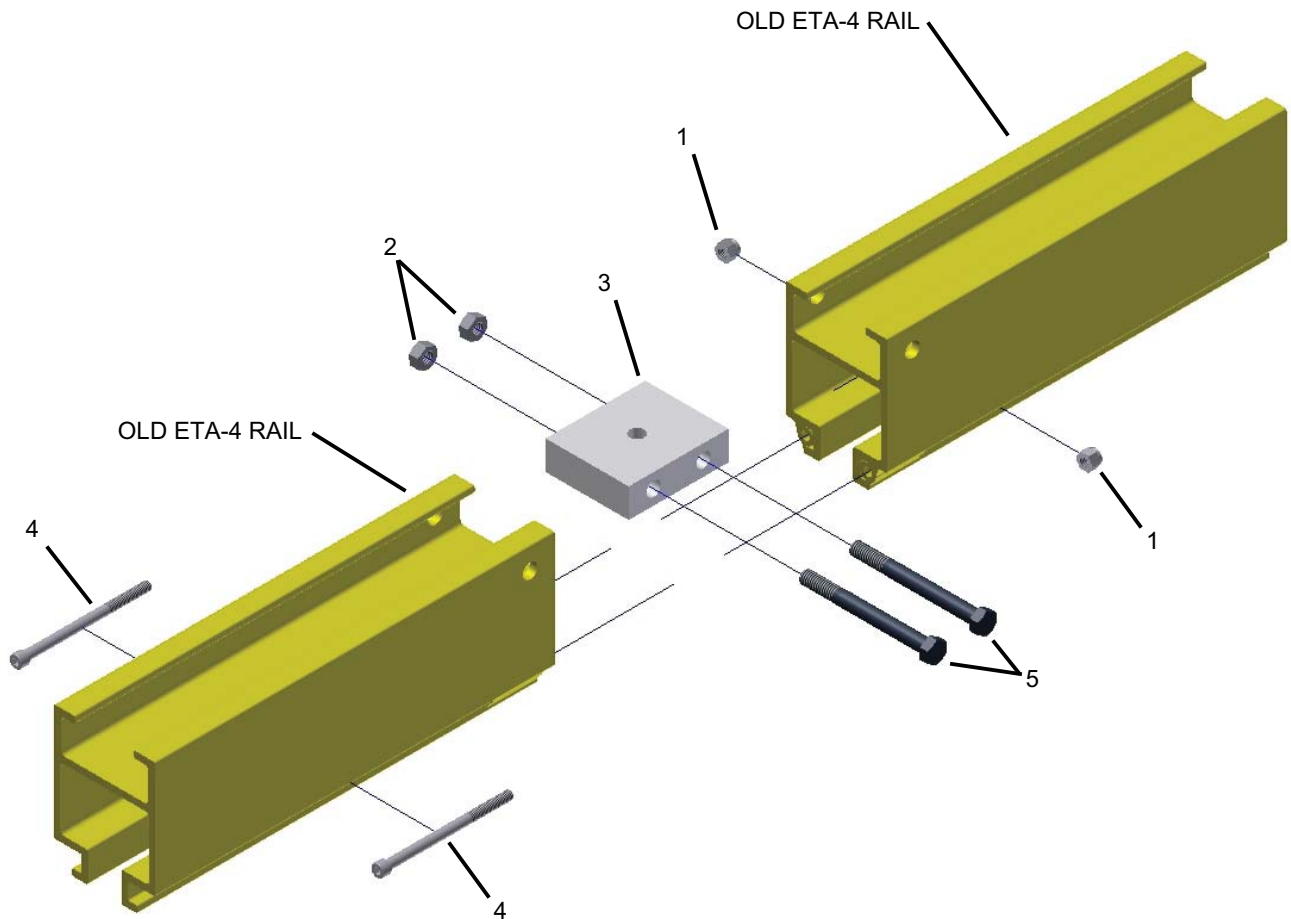
25559 ETA-4 TRANSITION SPLICE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 52440 | M10x1.5 Prevailing Torque Nut | 2 |
| 2 | 59955 | ETA-4 475A Block | 1 |
| 3 | 78290 | ETA-4 Transition Splice Bar | 2 |
| | | M8x1.25 x 25mm HHB | 2 |
| | | 8mm Spring Lock Washer | 2 |
| | | M6x1.0 x 60mm SHCS | 1 |
| | | 6mm Spring Lock Washer | 1 |
| 4 | 51765 | M10x1.5 x 100mm HHB | 2 |



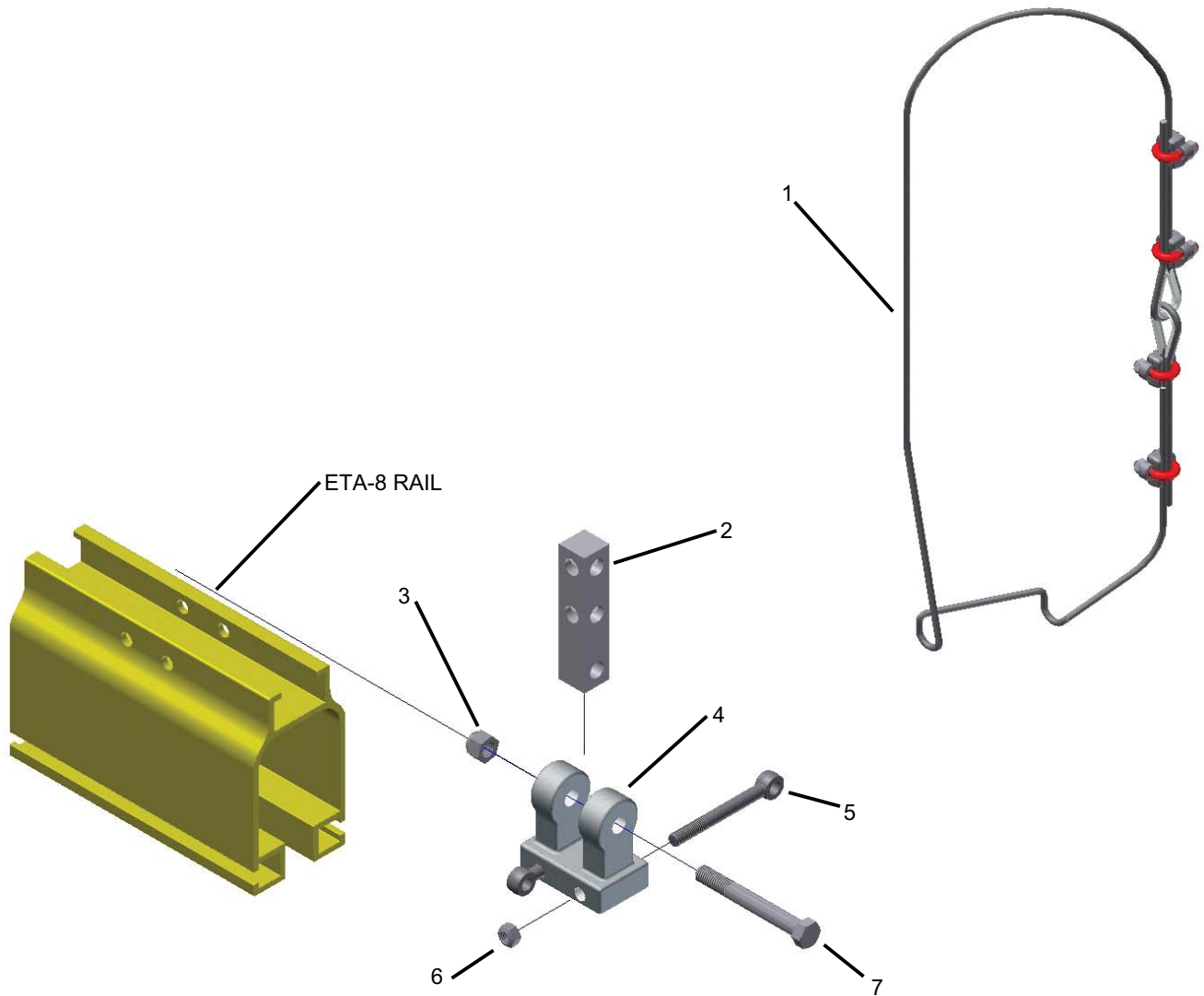
25530 ETA-4 OLD RAIL SPLICE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 52430 | M6x1.0 Nylon Insert Lock Nut | 2 |
| 2 | 52440 | M10x1.5 Prevailing Torque Nut | 2 |
| 3 | 59955 | ETA-4 475A Block | 1 |
| 4 | 51715 | M6x1.0 x 100mm SHCS | 2 |
| 5 | 51765 | M10x1.5 x 100mm HHB | 2 |



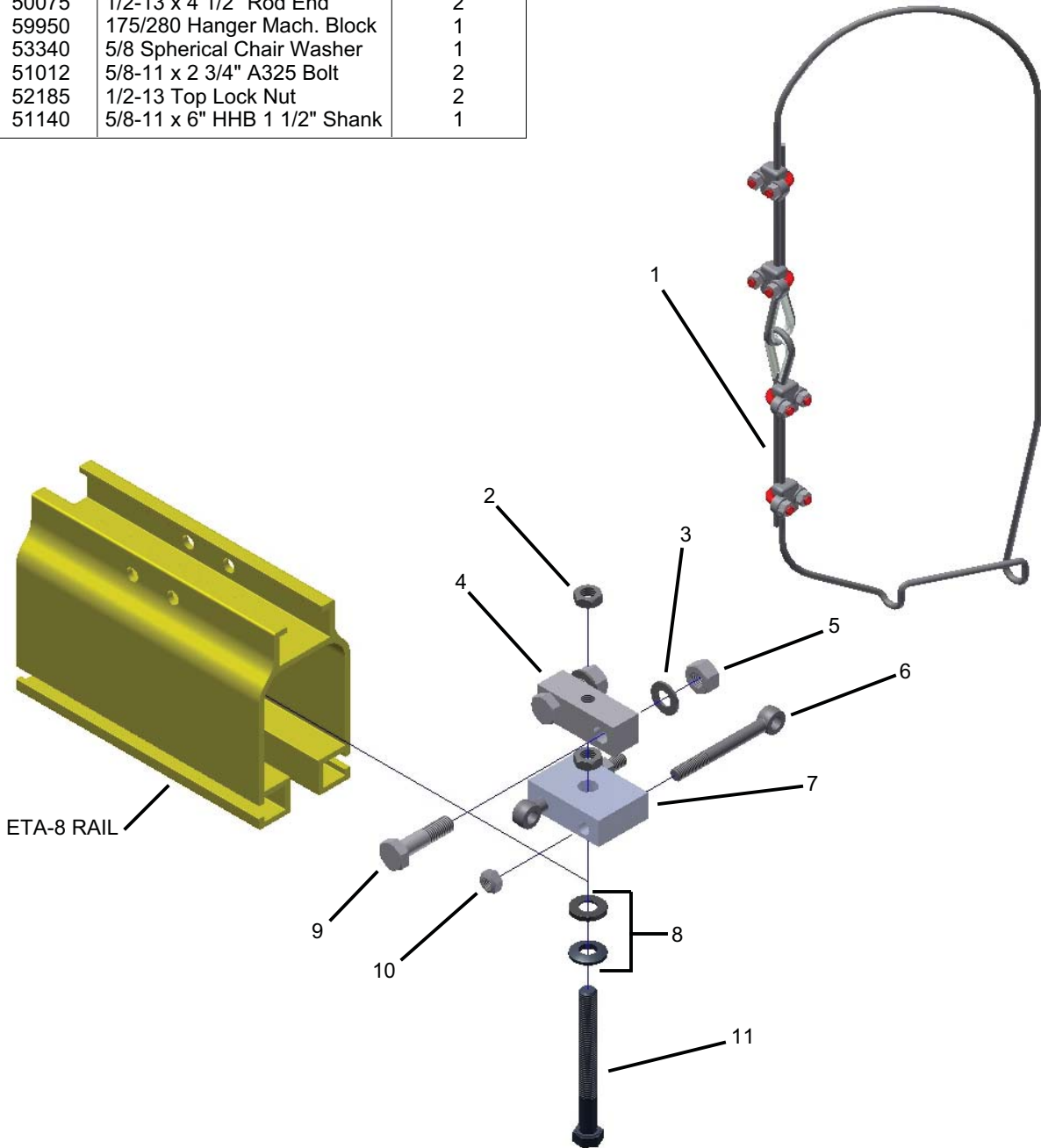
25170 ETA-8 BLOCK HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 63020 | ETA-8 Hanger Block | 1 |
| 3 | 52450 | M16x2.0 Prevailing Torque Nut | 1 |
| 4 | 59690M | 180/215 Mach. Hanger Casting | 1 |
| 5 | 50075 | 1/2-13 x 4 1/2" Rod End | 2 |
| 6 | 52185 | 1/2-13 Top Lock Nut | 2 |
| 7 | 51915 | M16x2.0 x 130mm HHB | 1 |



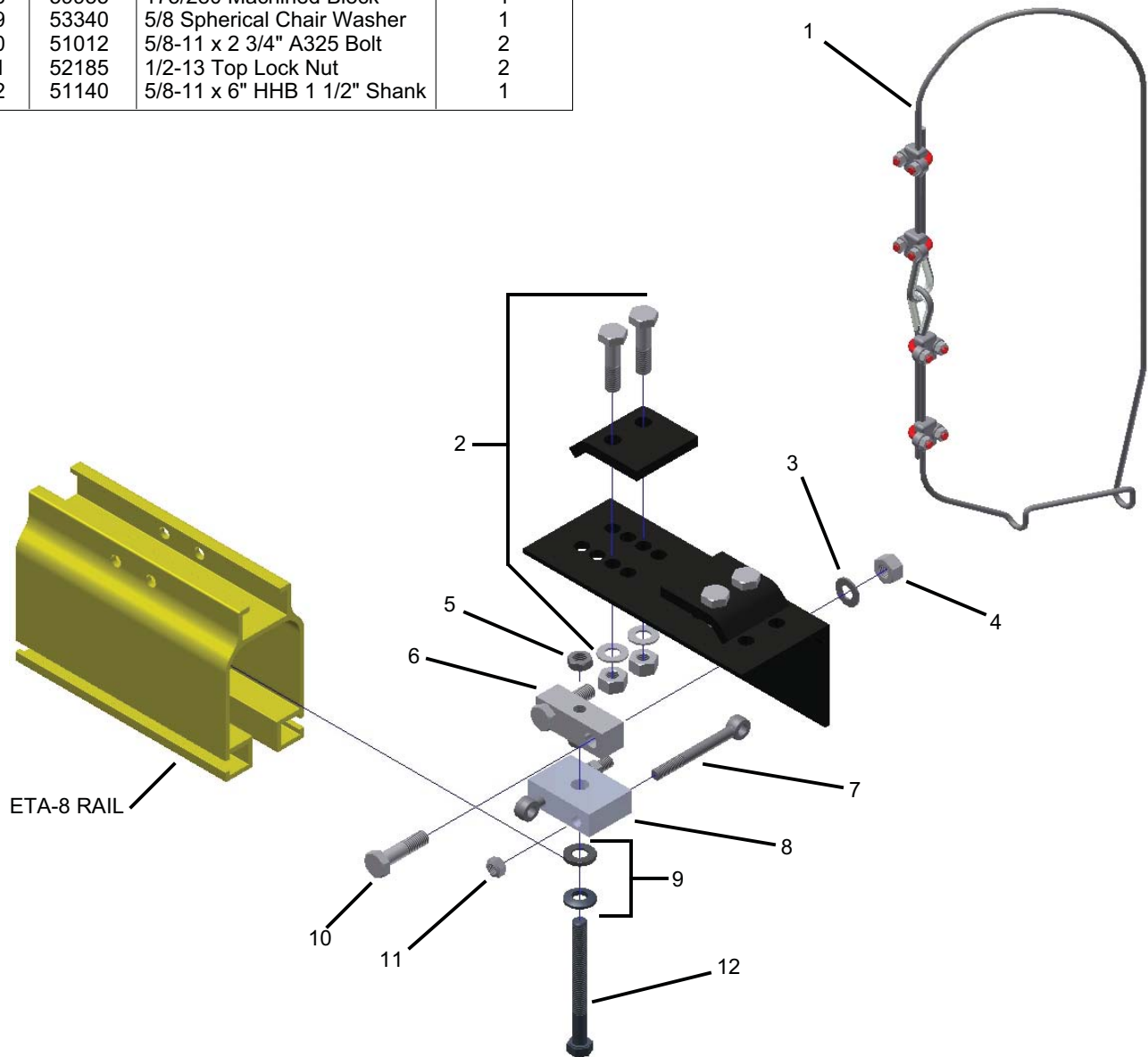
25465 ETA-8 ADJUSTABLE BLOCK HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 52270 | 5/8-11 Hex Jam Nut | 2 |
| 3 | 53405 | 5/8 F436 (A325 Struc F/W) | 2 |
| 4 | 78288 | Threaded Rod Hanger Block | 1 |
| 5 | 52315 | 5/8-11 Anco 2H Coloc Nut | 2 |
| 6 | 50075 | 1/2-13 x 4 1/2" Rod End | 2 |
| 7 | 59950 | 175/280 Hanger Mach. Block | 1 |
| 8 | 53340 | 5/8 Spherical Chair Washer | 1 |
| 9 | 51012 | 5/8-11 x 2 3/4" A325 Bolt | 2 |
| 10 | 52185 | 1/2-13 Top Lock Nut | 2 |
| 11 | 51140 | 5/8-11 x 6" HHB 1 1/2" Shank | 1 |



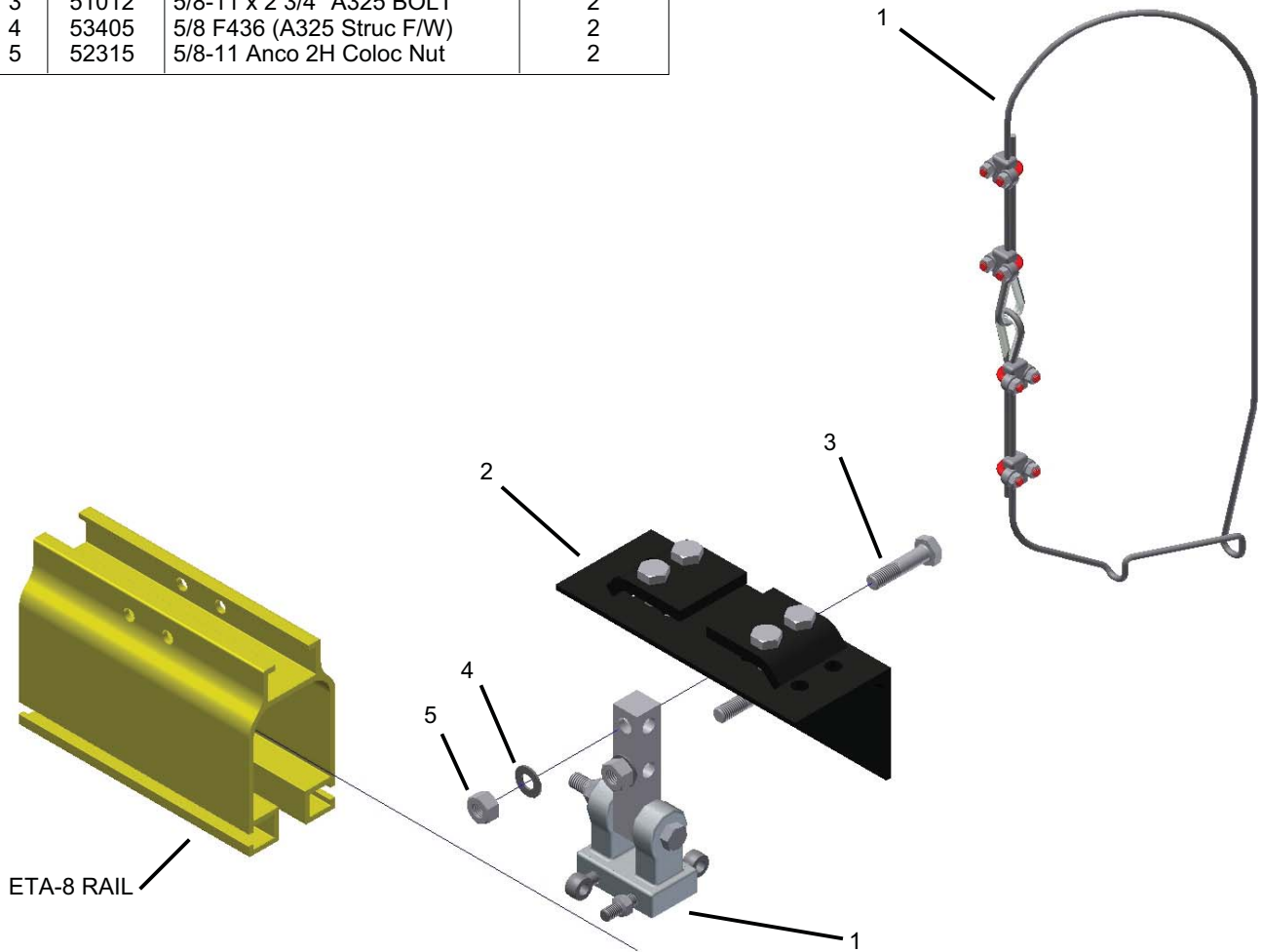
25472 ETA-8 CLOSED ADJUSTABLE HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 25702 | ETA-8 Hanger Clip Assembly | 1 |
| | | 5/8-11 x 2 1/2" A325 Bolt | |
| | | ETA-8 Rollover Clip | |
| | | ETA-8 Hanger Clip | |
| | | 5/8 F436 (A325 Struc F/W) | |
| 3 | 53405 | 5/8-11 Anco 2H Coloc Nut | 2 |
| 4 | 52315 | 5/8-11 Anco 2H Coloc Nut | 2 |
| 5 | 52270 | 5/8-11 Hex Jam Nut | 2 |
| 6 | 78288 | Threaded Rod Hanger Block | 1 |
| 7 | 50075 | 1/2-13 x 4 1/2" Rod End | 2 |
| 8 | 59955 | 175/280 Machined Block | 1 |
| 9 | 53340 | 5/8 Spherical Chair Washer | 1 |
| 10 | 51012 | 5/8-11 x 2 3/4" A325 Bolt | 2 |
| 11 | 52185 | 1/2-13 Top Lock Nut | 2 |
| 12 | 51140 | 5/8-11 x 6" HHB 1 1/2" Shank | 1 |



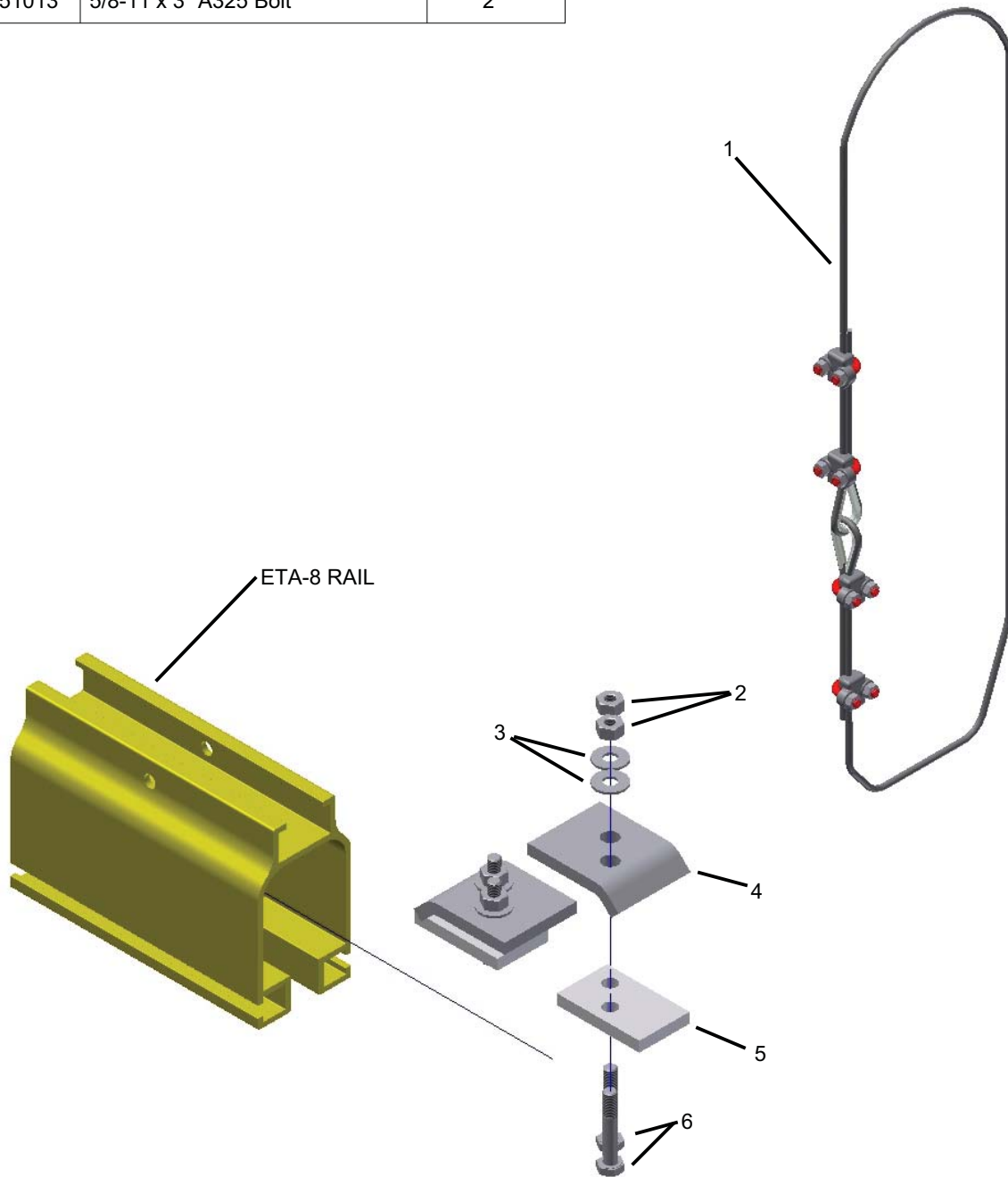
27061 ETA-8 BEAM HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1 | 25170 | ETA-8 Block Hanger Safety Cable for ETA Hangers ETA-8 Hanger Block M16x2.0 Prevailing Torque Nut 180/215 Mach. Hanger Casting 1/2-13 x 4 1/2" Rod End 1/2-13 Top Lock Nut M16x2.0 x 130mm HHB | 1 |
| 2 | 25702 | ETA-8 Hanger Clip Assembly 5/8-11 x 2 1/2" A325 Bolt ETA-8 Rollover Clip ETA-8 Hanger Clip 5/8 F436 (A325 Struc F/W) 5/8-11 Anco 2H Coloc Nut | 1 |
| 3 | 51012 | 5/8-11 x 2 3/4" A325 BOLT | 2 |
| 4 | 53405 | 5/8 F436 (A325 Struc F/W) | 2 |
| 5 | 52315 | 5/8-11 Anco 2H Coloc Nut | 2 |



27070 ETA RIGID MOUNT HANGER

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------------|----------|
| 1 | 78287 | Safety Cable for ETA Hangers | 1 |
| 2 | 52315 | 5/8-11 Anco 2H Coloc nut | 2 |
| 3 | 53405 | 5/8-11 F436 (A325 Struc. Washer) | 2 |
| 4 | 78285 | ETA Toe Clip | 1 |
| 5 | 78565 | ETA-8 Rigid End Truck Block | 1 |
| 6 | 51013 | 5/8-11 x 3" A325 Bolt | 2 |



20011 ETA-8 SHORT BODY LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 2 |
| 2 | 32050 | 137-C 3.2 Load Wheel | 4 |
| 3 | 52465 | N-5100-66PP Snap Ring | 1 |
| 4 | 59390M | M20x2.5 Nylon Insert Nut | 1 |
| 5 | 25161 | 101 Trolley Casting | 1 |
| | | ETA-8 Guide Roller | 2 |
| | | M10x1.5 Nylon Insert Nut | |
| | | M10x1.5 x 50mm SHCS | |
| 6 | 57121 | ETA-8 Axle | 2 |
| | | 3/4" Dia. 1215 | |
| 7 | 51996 | M20x2.5 x 180mm HHB CL 8.8 | 1 |

* For a trolley with **Black Load** wheels use replacement load wheel:

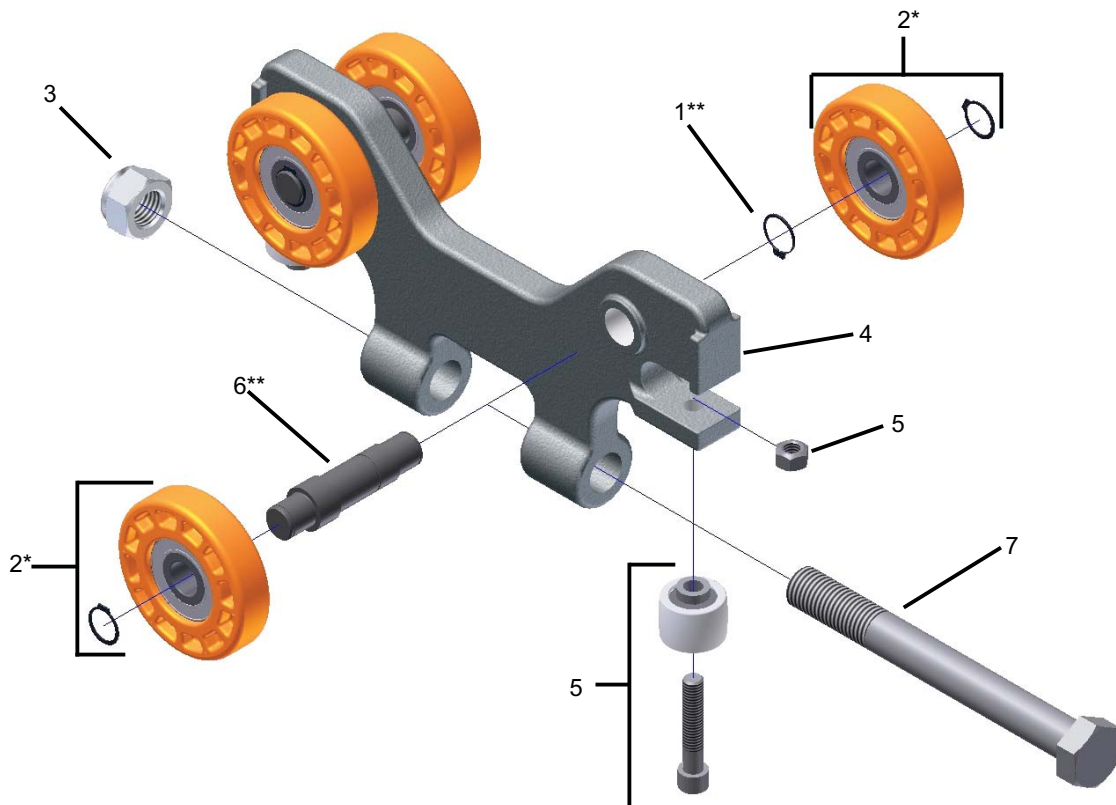
| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |

To change a trolley with **Black Load** wheels to **Orange Load** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|--------------------------------|----------|
| 28003 | ETA-8 Load Wheel and Axle Kit | 1 |
| | ETA-8 Axle | 1 |
| | N-5100-075 Snap Ring | 1 |
| | 137 Wheel Assy. with Snap Ring | 2 |

Axle Kit to change a trolley with **Black Load wheels to accept **Orange Load** wheels (does not include wheels):

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-----------------------------|----------|
| 28006 | ETA-8 Load Trolley Axle Kit | 1 |
| | ETA-8 Load Trolley Axle | 2 |
| | N-5100-075 Snap Ring | 2 |



20019 ETA-8 LONG BODY LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 2 |
| 2 | 32050 | 137-C 3.2 Load Wheel | 4 |
| 3 | 52465 | N-5100-66PP Snap Ring | 1 |
| 4 | 59400M | M20x2.5 Nylon Insert Nut | 1 |
| 5 | 25161 | 101B Trolley Casting | 1 |
| | | ETA-8 Guide Roller | 2 |
| | | M10x1.5 Nylon Insert Nut | |
| | | M10x1.5 x 50mm SHCS | |
| 6 | 57121 | ETA-8 Axle | 2 |
| | | 3/4" Dia. 1215 | |
| 7 | 51996 | M20x2.5 x 180mm HHB CL 8.8 | 1 |

* For a trolley with **Black Load** wheels use replacement load wheel:

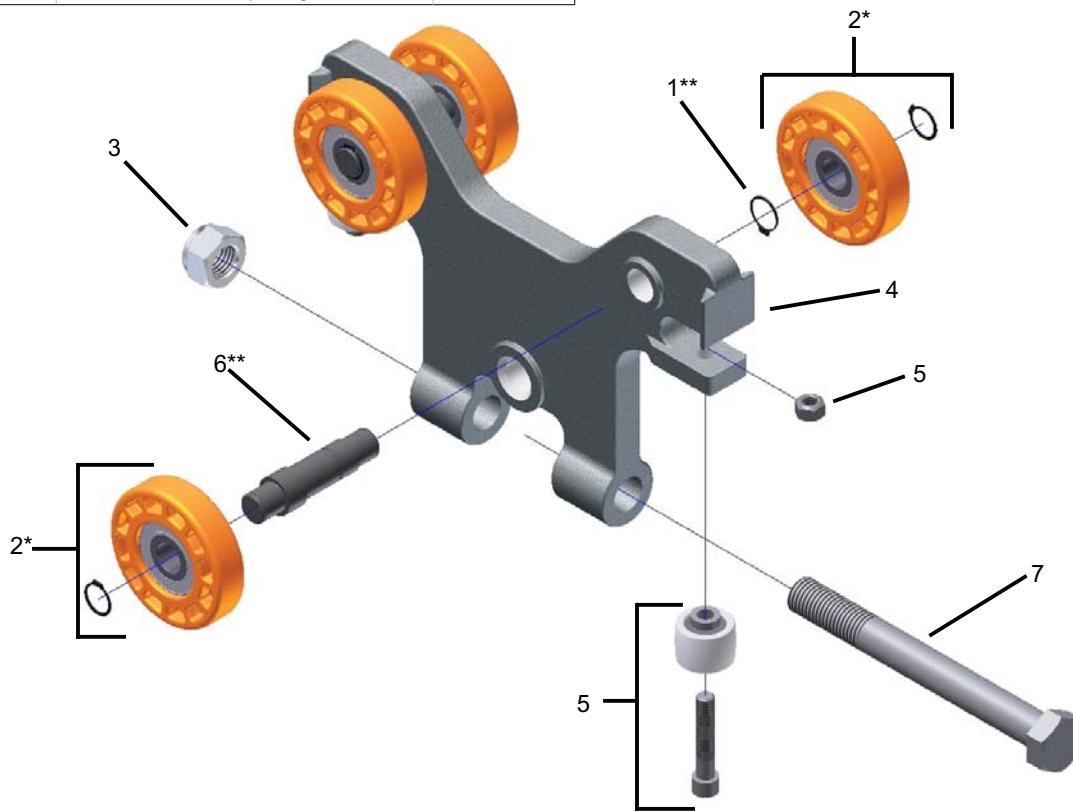
| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |

To change a trolley with **Black Load** wheels to **Orange Load** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|--------------------------------|----------|
| 28003 | ETA-8 Load Wheel and Axle Kit | 1 |
| | ETA-8 Axle | 1 |
| | N-5100-075 Snap Ring | 1 |
| | 137 Wheel Assy. with Snap Ring | 2 |

Axle Kit to change a trolley with **Black Load wheels to accept **Orange Load** wheels (does not include wheels):

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-----------------------------|----------|
| 28006 | ETA-8 Load Trolley Axle Kit | 1 |
| | ETA-8 Load Trolley Axle | 2 |
| | N-5100-075 Snap Ring | 2 |



20024 THREE HOLE MOUNT LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------------------------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 2 |
| 2 | 32050 | 137-C 3.2 Load Wheel N-5100-66PP Snap Ring | 4 |
| 3 | 59486M | 113C Trolley Casting | 1 |
| 4 | 57121 | ETA-8 Axle 3/4" Dia. 1215 | 2 |
| 5 | 25161 | ETA-8 Guide Roller M10x1.5 Nylon Insert Nut M10x1.5 x 50mm SHCS | 2 |

* For a trolley with **Black Load** wheels use replacement load wheel:

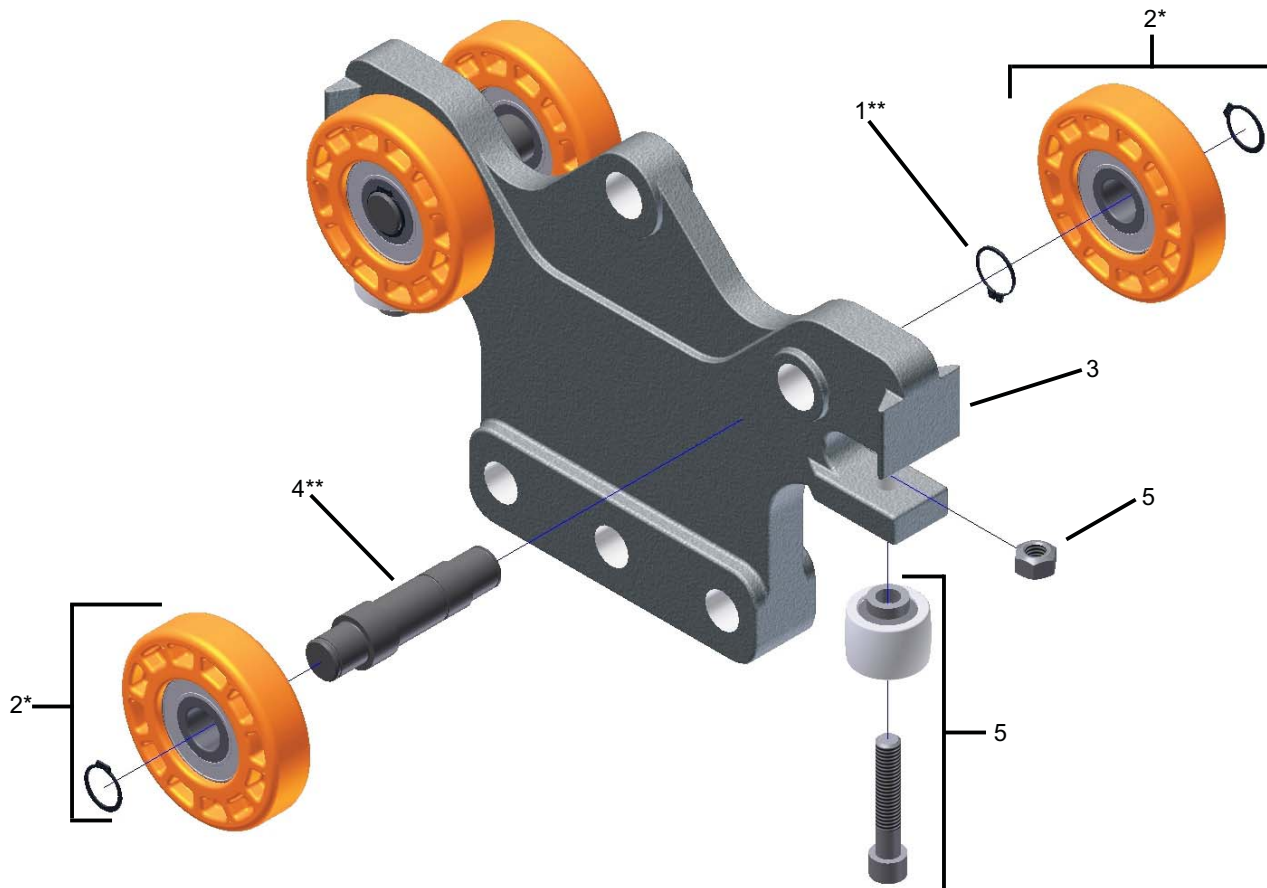
| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |

To change a trolley with **Black Load** wheels to **Orange Load** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|--------------------------------|----------|
| 28003 | ETA-8 Load Wheel and Axle Kit | 1 |
| | ETA-8 Axle | 1 |
| | N-5100-075 Snap Ring | 1 |
| | 137 Wheel Assy. with Snap Ring | 2 |

Axle Kit to change a trolley with **Black Load wheels to accept **Orange Load** wheels (does not include wheels):

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-----------------------------|----------|
| 28006 | ETA-8 Load Trolley Axle Kit | 1 |
| | ETA-8 Load Trolley Axle | 2 |
| | N-5100-075 Snap Ring | 2 |



20068 ETA-8 SHORT BODY KICKUP TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------------------------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 3 |
| 2 | 32050 | 137-C 3.2 Load Wheel N-5100-66PP Snap Ring | 6 |
| 3 | 52465 | M20x2.5 Nylon Insert Nut | 1 |
| 4 | 59480M | 113 K.U. Trolley Casting | 1 |
| 5 | 57141 | ETA-8 Kickup Axle 3/4" Dia. 1215 | 1 |
| 6 | 25161 | ETA-8 Guide Roller M10x1.5 Nylon Insert Nut M10x1.5 x 50mm SHCS | 2 |
| 7 | 57121 | ETA-8 Axle 3/4" Dia. 1215 | 2 |
| 8 | 51996 | M20x2.5 x 180mm HHB | 1 |

For a trolley with **Black Load** or **Black Kick-up** wheels use replacement:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |
| 28005 | 137 3.2 Black K.U. Wheel Assembly N-5100-66PP Snap Ring | 2 |

Axle Kit to change a trolley with **Black Load & Kick-up** wheels to accept **Orange Load & Kick-up** wheels (does not include wheels):

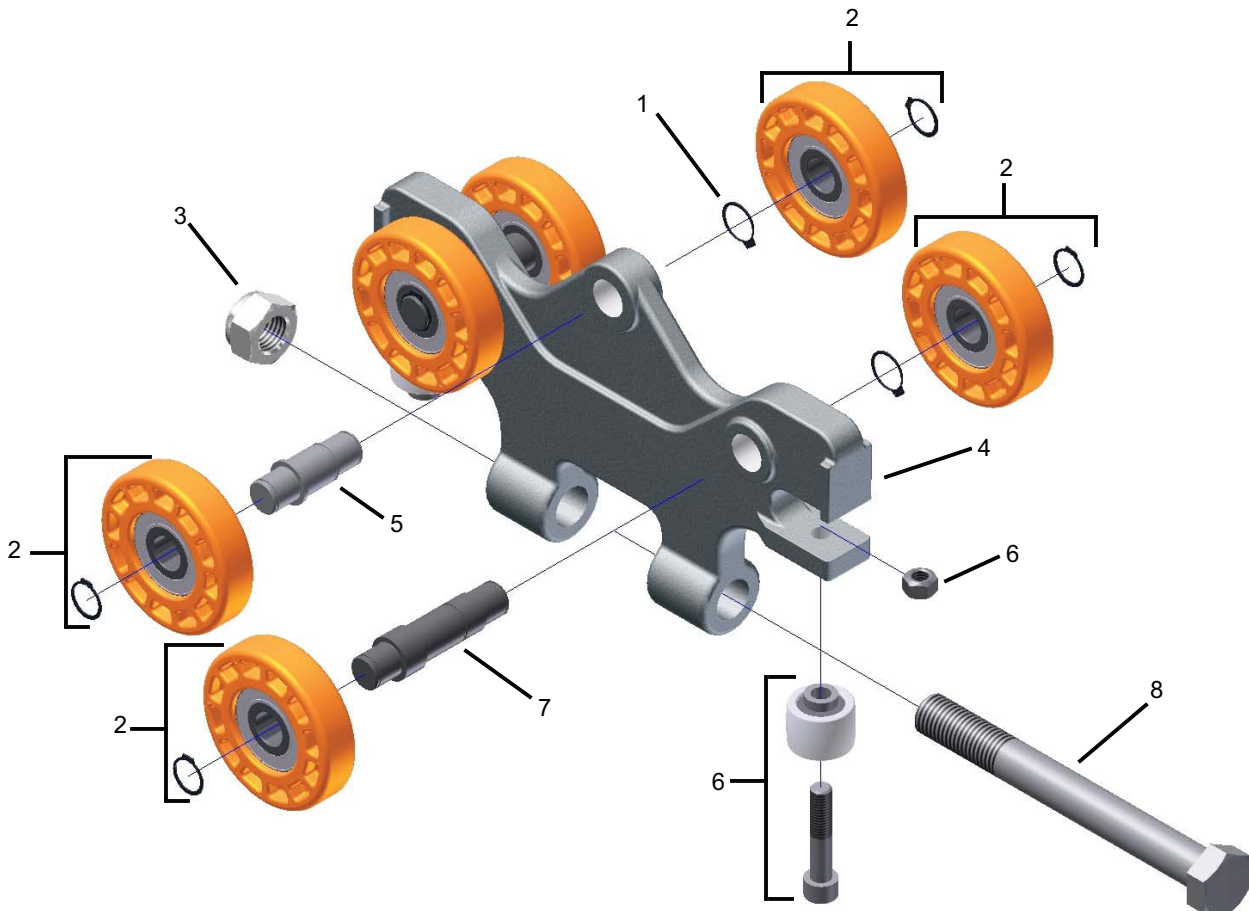
| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-----------------------------------------------------------------------------------------------------------|------------------|
| 28007 | Kick-up Trolley Axle Kit ETA-8 Load Trolley Axle ETA-8 Kick-up Trolley Axle N-5100-075 Snap Ring | 1 2 1 3 |

To change **Black Load** wheels to **Orange Load** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------------------------------------------------|------------------|
| 28003 | ETA-8 Load Wheel and Axle Kit ETA-8 Axle N-5100-075 Snap Ring 137 Wheel Assy. with Snap Ring | 1 1 1 2 |

To change **Black Kick-up** wheels to **Orange** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|---------------------------------------------------------------------------------------------------------------|------------------|
| 28004 | ETA-8 K.U. Wheel and Axle Kit ETA-8 Kick-up Axle N-5100-075 Snap Ring 137 Wheel Assy. with Snap Ring | 1 1 1 2 |



20069 ETA-8 LONG BODY KICKUP TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------------------------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 3 |
| 2 | 32050 | 137-C 3.2 Load Wheel N-5100-66PP Snap Ring | 6 |
| 3 | 52465 | M20x2.5 Nylon Insert Nut | 1 |
| 4 | 59485M | 113B Trolley Casting | 1 |
| 5 | 57141 | ETA-8 Kickup Axle 3/4" Dia. 1215 | 1 |
| 6 | 25161 | ETA-8 Guide Roller M10x1.5 Nylon Insert Nut M10x1.5 x 50mm SHCS | 2 |
| 7 | 57121 | ETA-8 Axle 3/4" Dia. 1215 | 2 |
| 8 | 51996 | M20x2.5 X 180mm HHB | 1 |

For a trolley with **Black Load** or **Black Kick-up** wheels use replacement:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |
| 28005 | 137 3.2 Black K.U. Wheel Assembly N-5100-66PP Snap Ring | 2 |

Axle Kit to change a trolley with **Black Load & Kick-up** wheels to accept **Orange Load & Kick-up** wheels (does not include wheels):

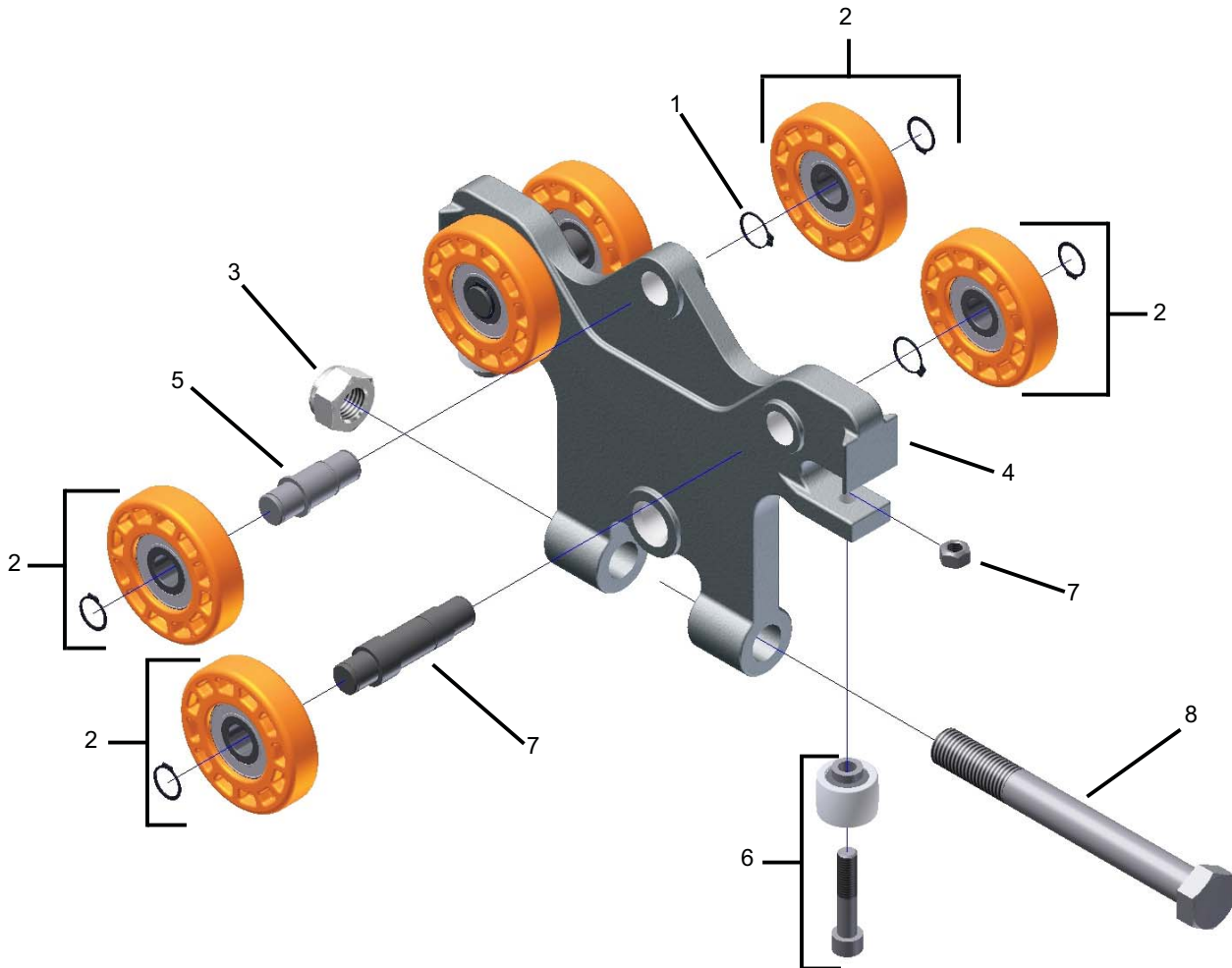
| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-----------------------------------------------------------------------------------------------------------|------------------|
| 28007 | Kick-up Trolley Axle Kit ETA-8 Load Trolley Axle ETA-8 Kick-up Trolley Axle N-5100-075 Snap Ring | 1 2 1 3 |

To change **Black Load** wheels to **Orange Load** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------------------------------------------------|------------------|
| 28003 | ETA-8 Load Wheel and Axle Kit ETA-8 Axle N-5100-075 Snap Ring 137 Wheel Assy. with Snap Ring | 1 1 1 2 |

To change **Black Kick-up** wheels to **Orange** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|---------------------------------------------------------------------------------------------------------------|------------------|
| 28004 | ETA-8 K.U. Wheel and Axle Kit ETA-8 Kick-up Axle N-5100-075 Snap Ring 137 Wheel Assy. with Snap Ring | 1 1 1 2 |



20071 ETA-8 THREE HOLE KICKUP TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------------------------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 3 |
| 2* | 32050 | 137-C 3.2 Load Wheel N-5100-66PP Snap Ring | 6 |
| 3 | 59486M | 113C Trolley Casting | 1 |
| 4 | 57141 | ETA-8 Kickup Axle 3/4" Dia. 1215 | 1 |
| 5 | 25161 | ETA-8 Guide Roller M10x1.5 Nylon Insert Nut M10x1.5 x 50mm SHCS | 2 |
| 6 | 57121 | ETA-8 Axle 3/4" Dia. 1215 | 2 |

For a trolley with **Black Load** or **Black Kick-up** wheels use replacement:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |
| 28005 | 137 3.2 Black K.U. Wheel Assembly N-5100-66PP Snap Ring | 2 |

Axle Kit to change a trolley with **Black Load & Kick-up** wheels to accept **Orange Load & Kick-up** wheels (does not include wheels):

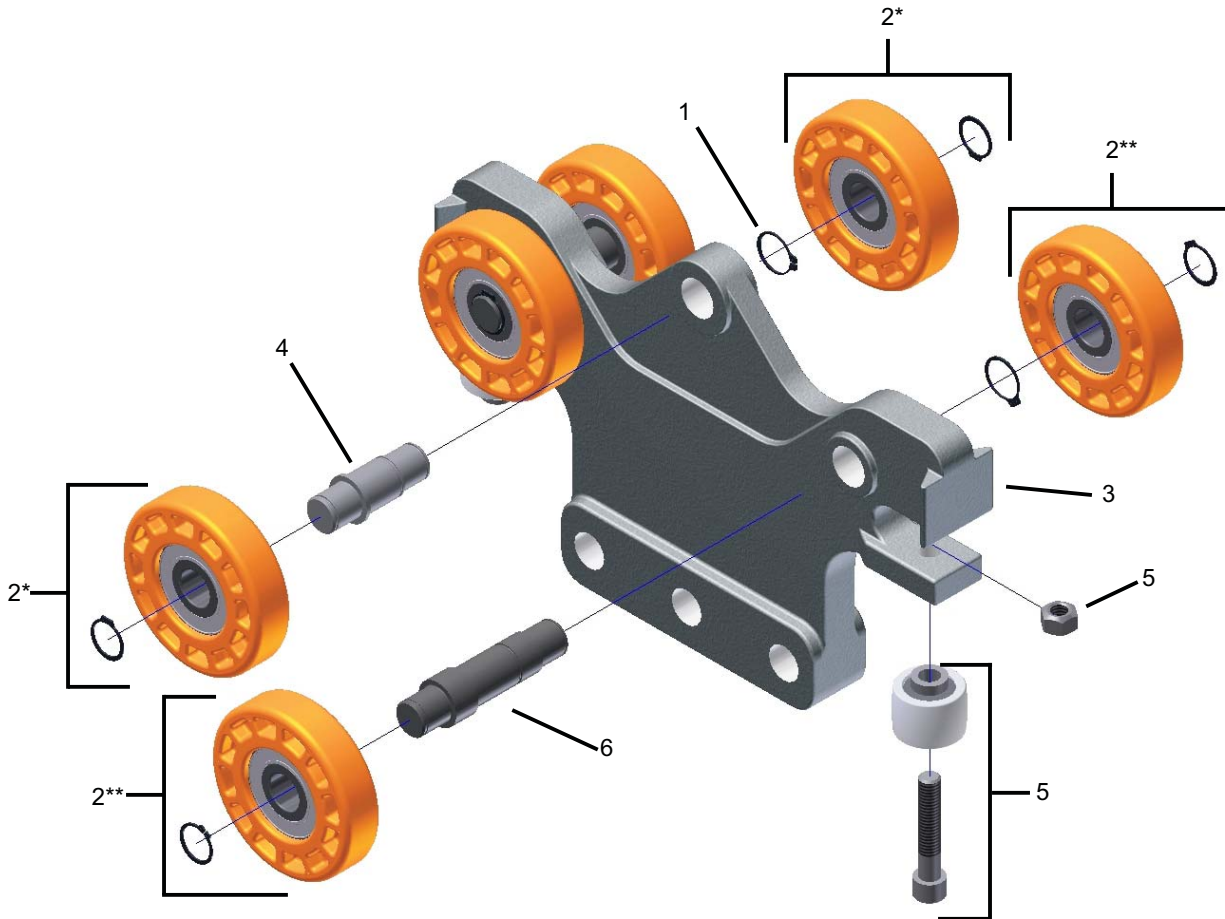
| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-----------------------------------------------------------------------------------------------------------|------------------|
| 28007 | Kick-up Trolley Axle Kit ETA-8 Load Trolley Axle ETA-8 Kick-up Trolley Axle N-5100-075 Snap Ring | 1 2 1 3 |

To change **Black Load** wheels to **Orange Load** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------------------------------------------------|------------------|
| 28003 | ETA-8 Load Wheel and Axle Kit ETA-8 Axle N-5100-075 Snap Ring 137 Wheel Assy. with Snap Ring | 1 1 1 2 |

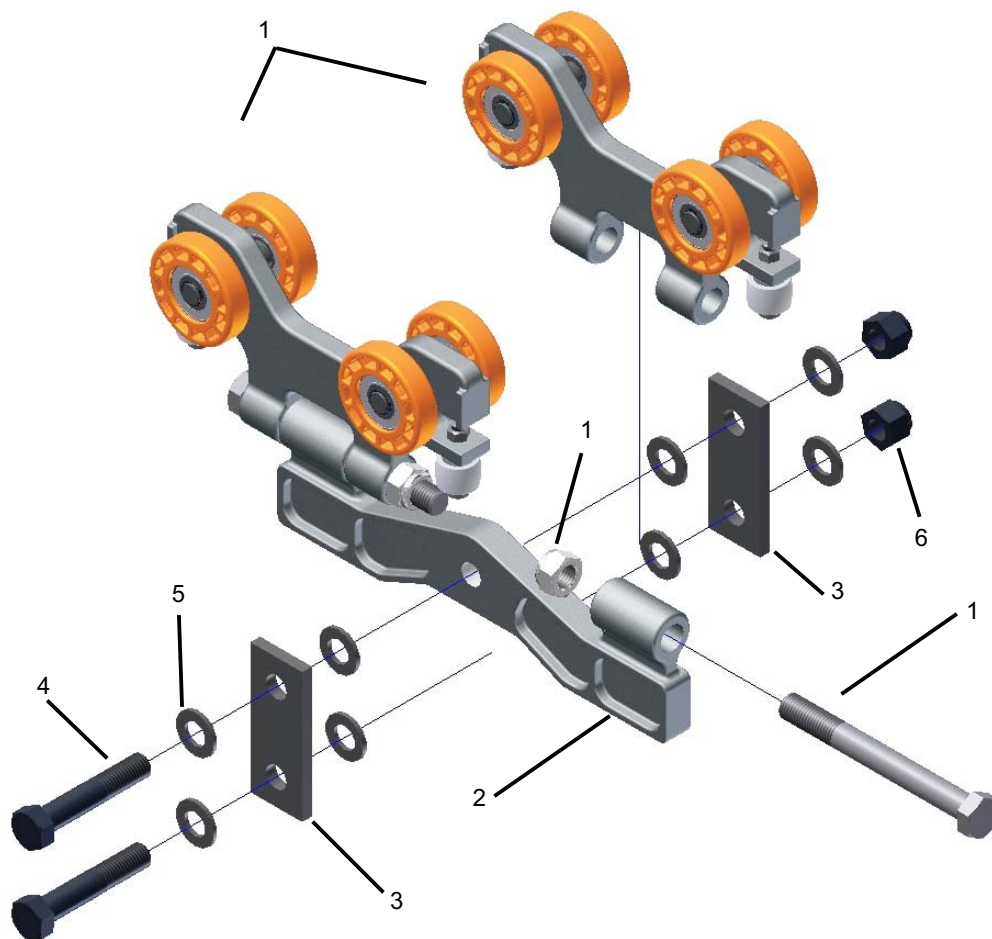
To change **Black Kick-up** wheels to **Orange** wheels:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|---------------------------------------------------------------------------------------------------------------|------------------|
| 28004 | ETA-8 K.U. Wheel and Axle Kit ETA-8 Kick-up Axle N-5100-075 Snap Ring 137 Wheel Assy. with Snap Ring | 1 1 1 2 |



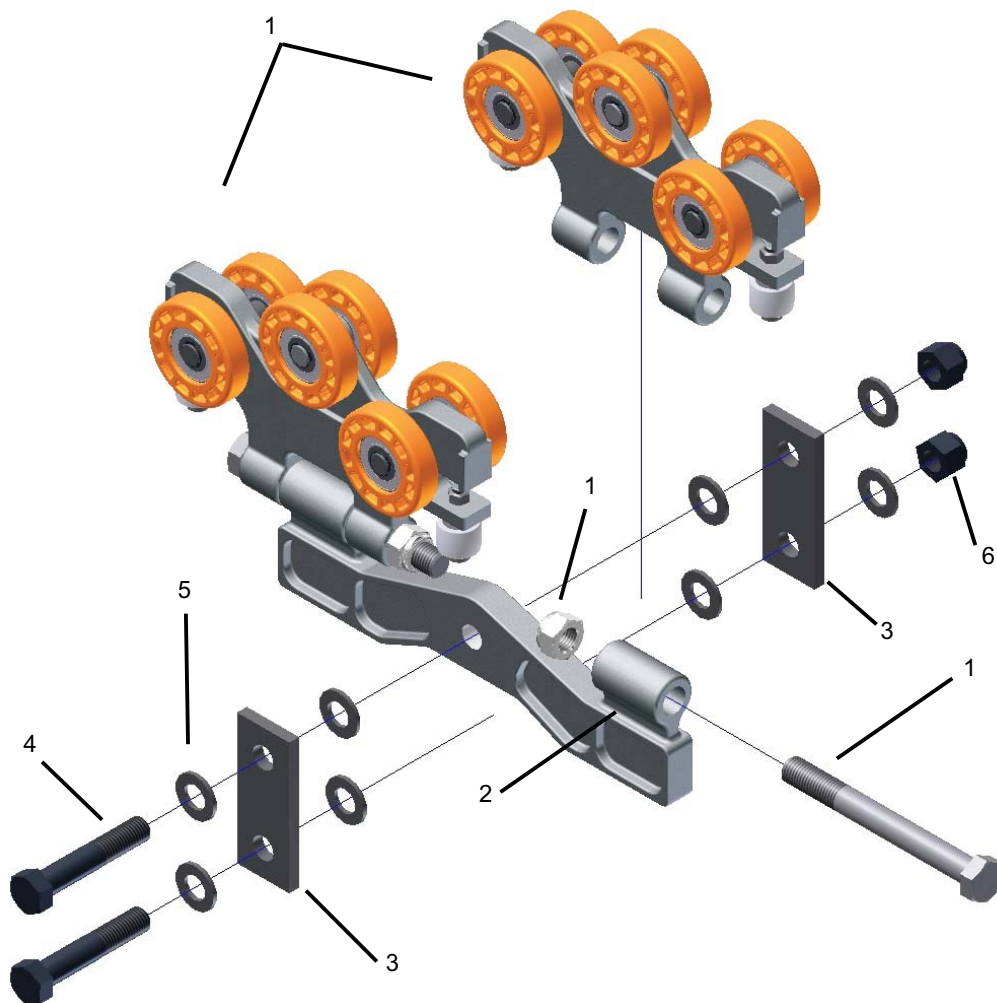
25120 ETA-8 DUAL HOIST TROLLEY (WITHOUT KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 20011 | ETA-8 Short Body Load Trolley | 2 |
| 2 | 59570M | 151 Mach.Fit End Trk Casting | 1 |
| 3 | 25121 | 150A Load Bar Clevis | 2 |
| 4 | 51330 | 3/4-10 X 4 GR5 HHB | 2 |
| 5 | 53080 | 3/4 SAE FLAT WASHER | 8 |
| 6 | 52330 | 3/4-10 FLEXLOCK NUT | 2 |



25125 ETA-8 DUAL HOIST TROLLEY (WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20068 | ETA-8 Short Body Kickup Trolley | 2 |
| 2 | 59570M | 151 Mach.Fit End Trk Casting | 1 |
| 3 | 25121 | 150A Load Bar Clevis | 2 |
| 4 | 51330 | 3/4-10 X 4 GR5 HHB | 2 |
| 5 | 53080 | 3/4 SAE FLAT WASHER | 8 |
| 6 | 52330 | 3/4-10 FLEXLOCK NUT | 2 |

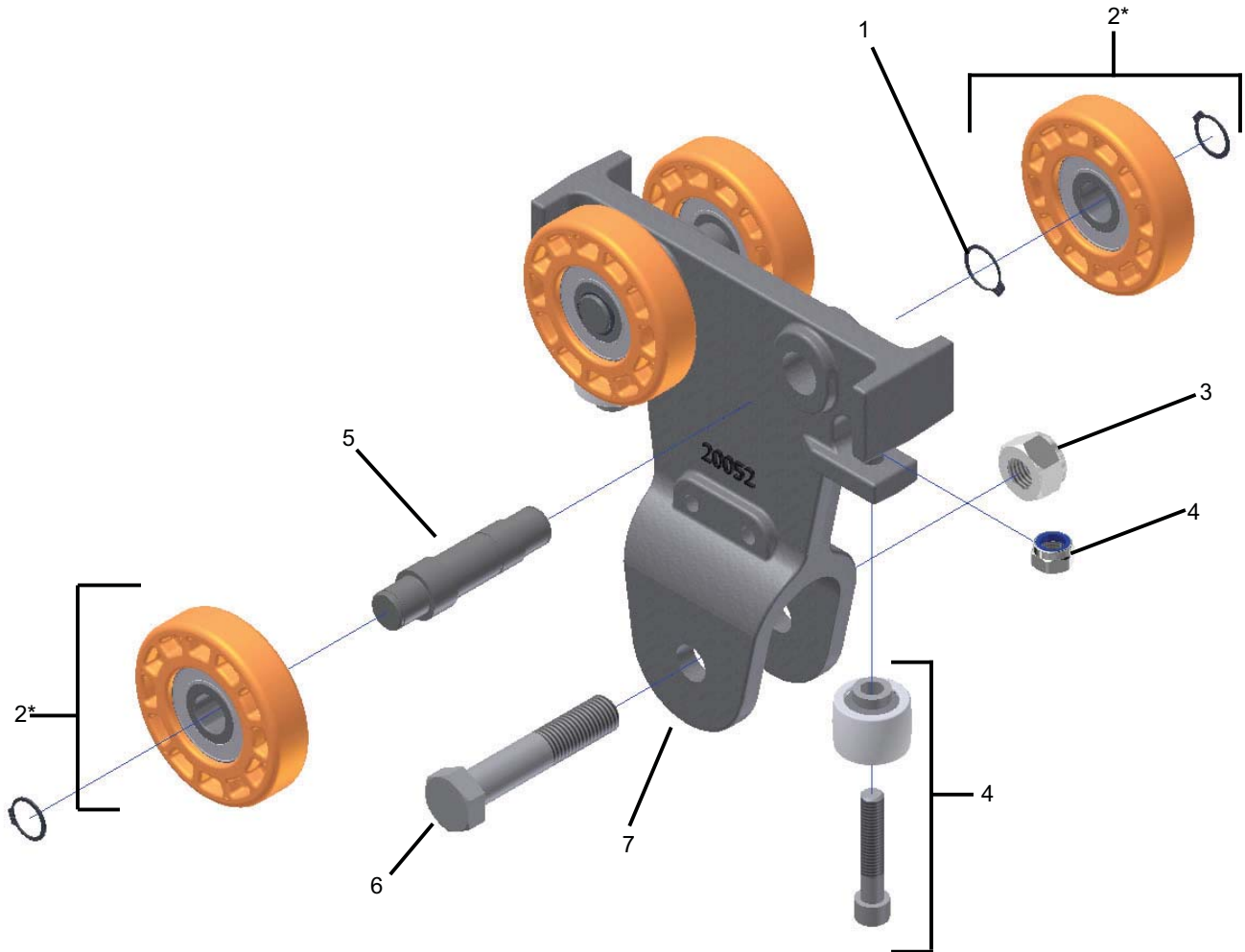


20052 SADDLE LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 2 |
| 2 | 32050 | 137-C 3.2 Load Wheel | 4 |
| 3 | 52455 | N-5100-66PP Snap Ring | 1 |
| 4 | 25161 | M16x2.0 Nylon Insert Nut | 2 |
| | | ETA-8 Guide Roller Assembly | 2 |
| | | M10x1.5 Nylon Insert Nut | |
| | | M10x1.5 x 50mm SHCS | |
| 5 | 57121 | ETA-8 Axle | 2 |
| | | 3/4" Dia. 1215 | |
| 6 | 51890 | M16x2.0 x 90mm HHB | 1 |
| 7 | 59470M | 111 Yoke Trolley Casting | 1 |

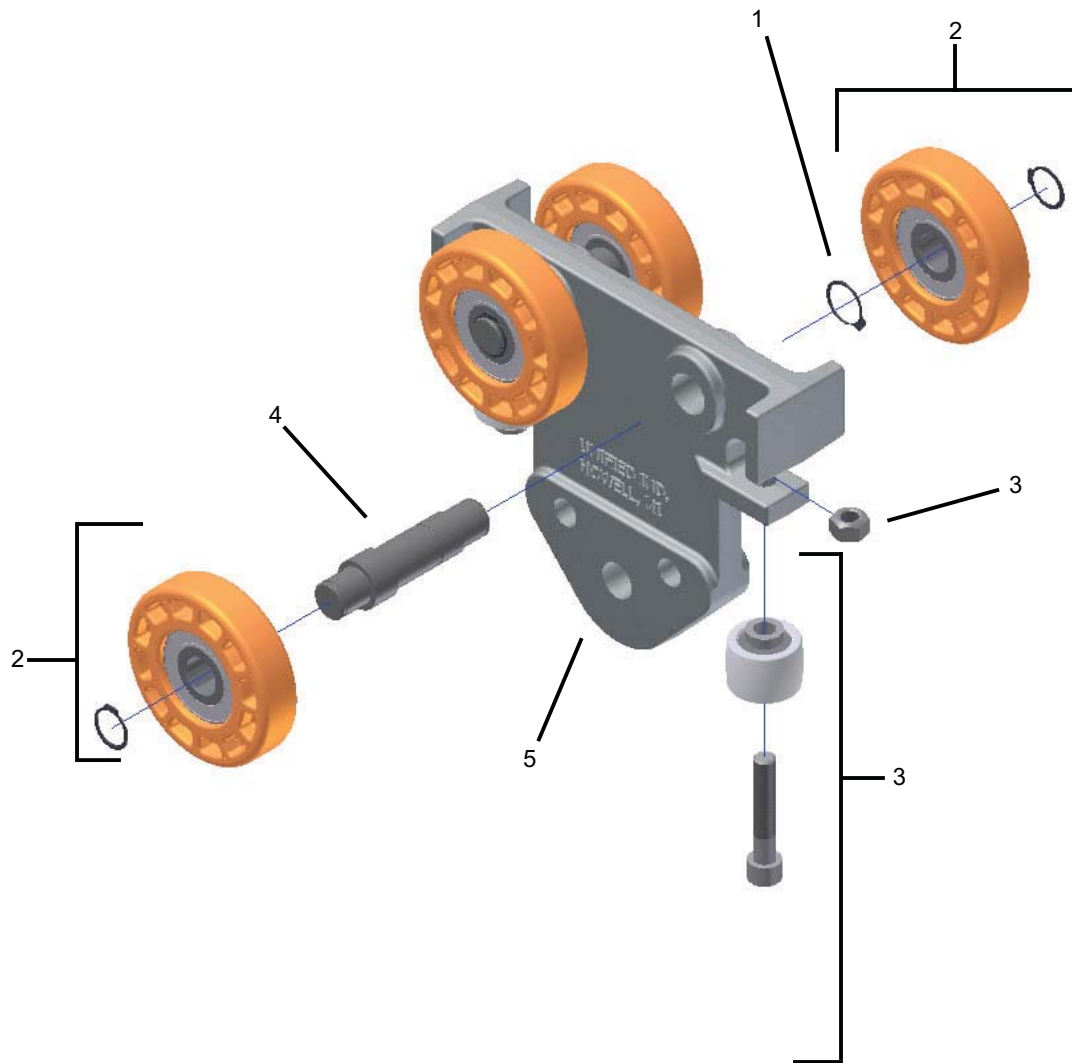
* For a trolley with **Black Load** wheels use replacement load wheel:

| STOCK CODE | DESCRIPTION | QUANTITY |
|------------|-------------------------------------------------------------|----------|
| 32040 | 3.2 Flat Black Load Wheel Assembly N-5100-66PP Snap Ring | 4 |



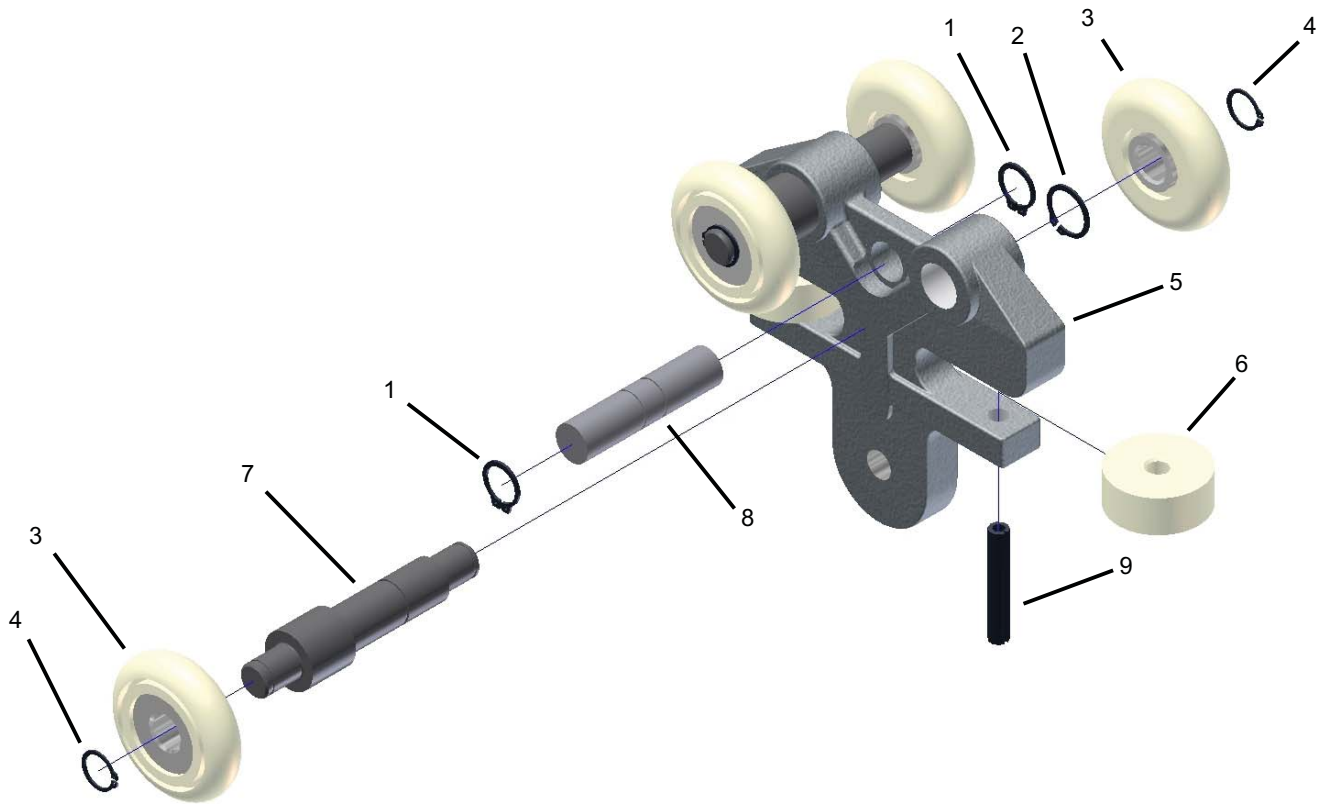
20070 PIN LOAD TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------------------------------------------|----------|
| 1 | 55040 | N-5100-075 Snap Ring | 2 |
| 2 | 32050 | 137B 3.2 Load Wheel | 4 |
| 3 | 25161 | ETA-8 Guide Roller Assembly M10x1.5 Nylon Insert Nut M10x1.5 x 50mm SHCS | 2 |
| 4 | 57121 | ETA-8 Axle 3/4" Dia. 1215 M16x2.0 x 90mm HHB | 2 |
| 5 | 59500M | 121 Machined Flat Trolley Cast | 1 |



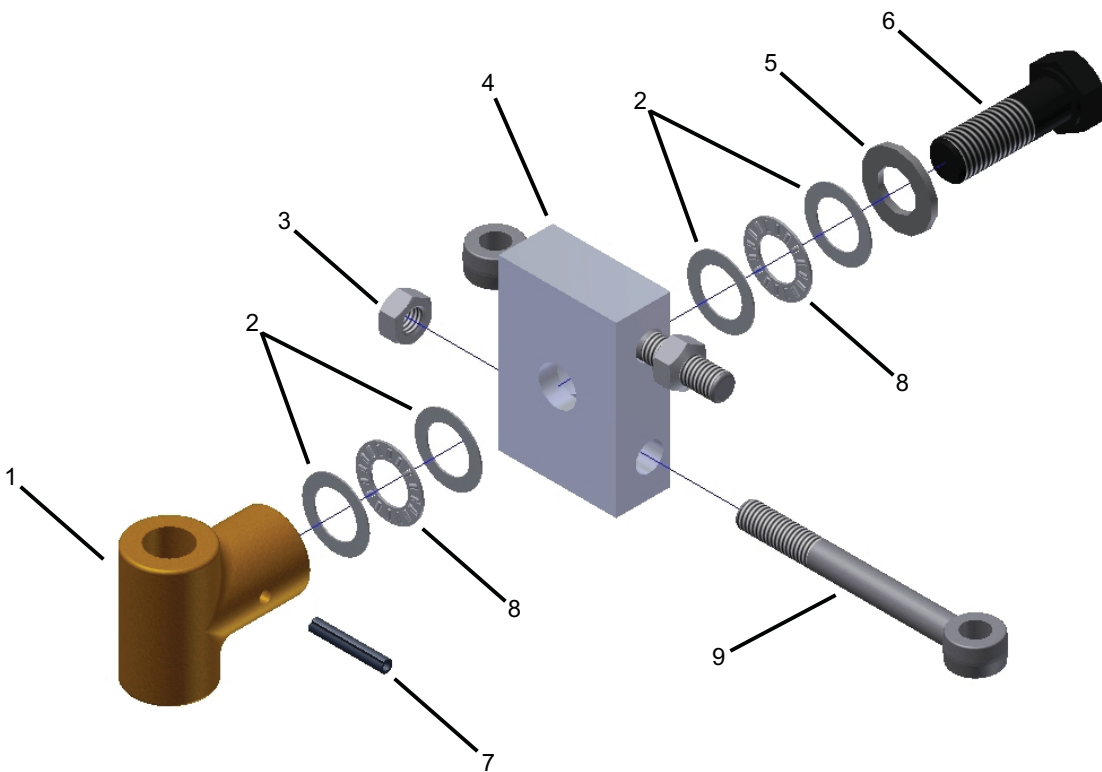
20090 ETA-8 FESTOON TROLLEY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 55060 | N-5100-50 Snap Ring | 2 |
| 2 | 55080 | N-5100-56 Snap Ring | 2 |
| 3 | 58240 | PA969-1 Nylon Wheel | 4 |
| 4 | 55070 | N-5100-43 Snap Ring | 4 |
| 5 | 59900M | 496 Trolley Casting | 1 |
| 6 | 70020 | 199 1 1/4" Nylon G.R. | 2 |
| 7 | 57160 | 197 Wheel Stud | 2 |
| 8 | 57135 | ETA Festoon Trolley Drop Pin | 1 |
| 9 | 54190 | 1/4 x 1-1/2" Spring Pin | 2 |



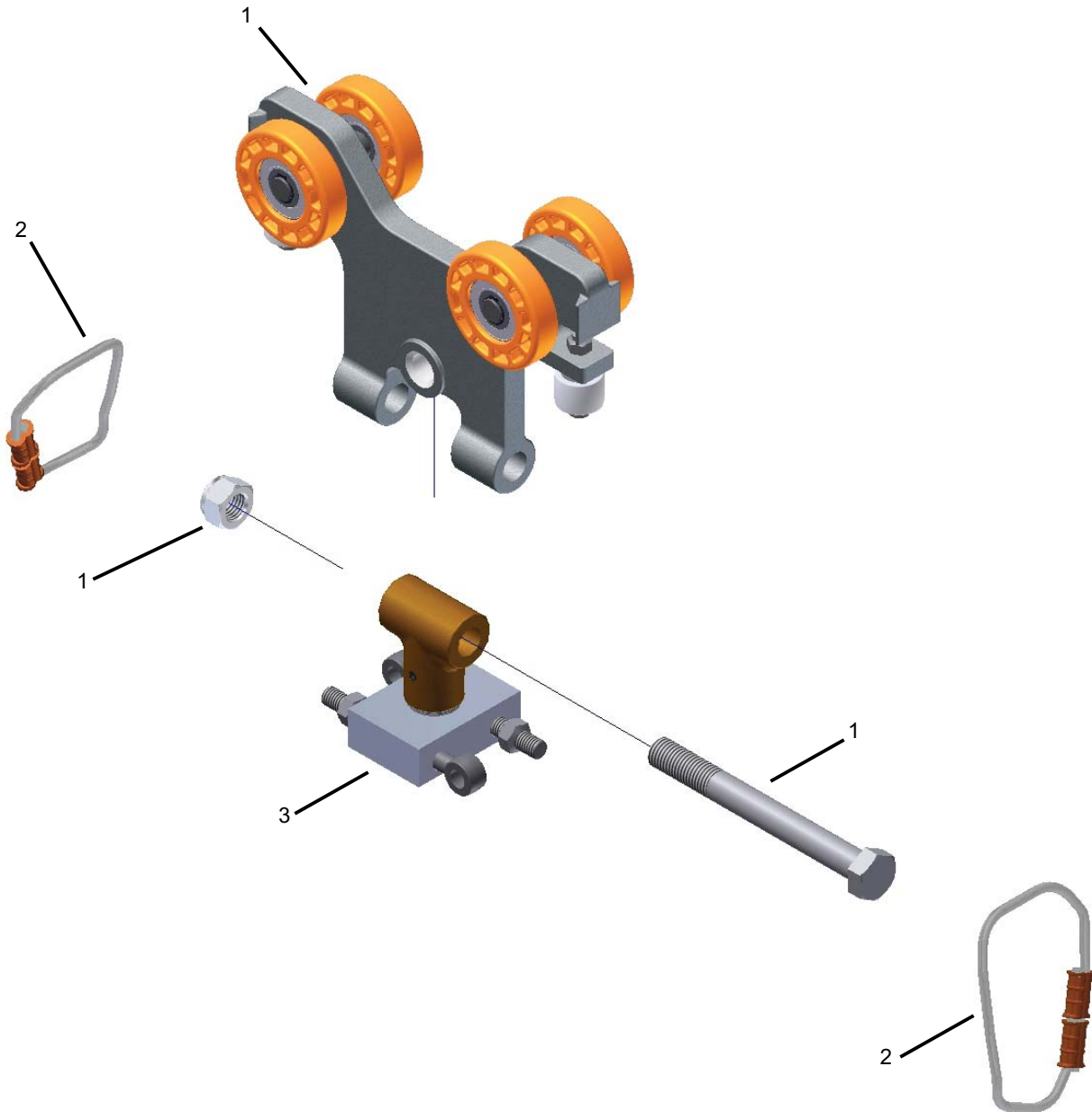
| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------|----------|
| 1 | 59450M | 106 Bronze Tee Mach. | 1 |
| 2 | 53321 | TWA1220 Thin Washer | 4 |
| 3 | 52185 | 1/2-13 Top Lock nut | 2 |
| 4 | 59950 | 175/280 Hanger Mach. Block | 1 |
| 5 | 53080 | 1/4" WASHER | 1 |
| 6 | 51260 | 3/4-10 x 2 1/4" GD5 HHB | 1 |
| 7 | 54190 | 1/4 x 1 1/2" Spring Pin | 1 |
| 8 | 56161 | TC 1220 Thrust Bearing | 2 |
| 9 | 50075 | 1/2-13 x 4 1/2" Rod End | 2 |

25250 ETA-8 BRONZE TEE ASSEMBLY



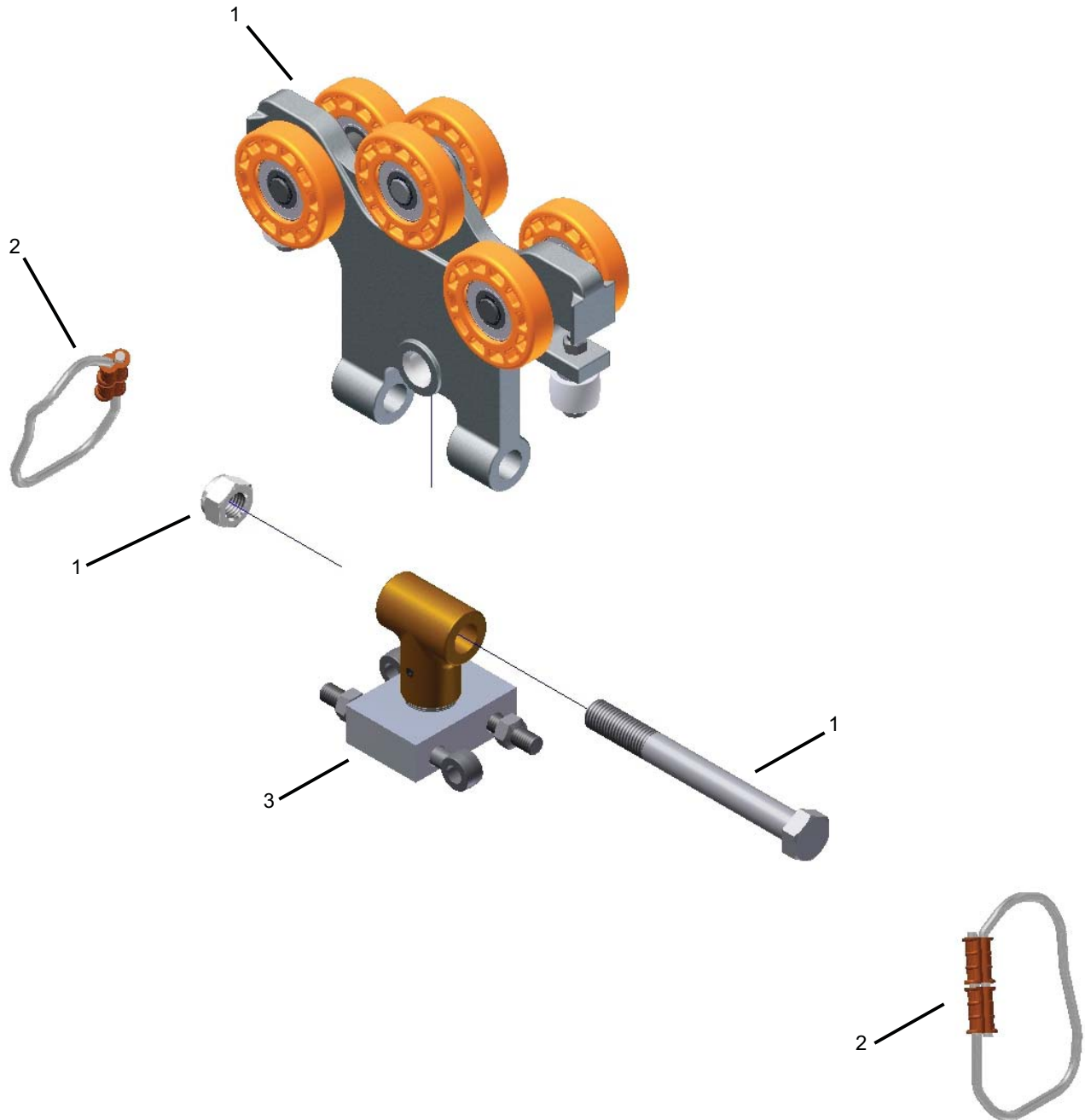
22041 ETA-8 SINGLE END TRUCK ASSEMBLY (WITHOUT KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------|----------|
| 1 | 20019 | ETA-8 Long Body Load Trolley | 1 |
| 2 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 3 | 25250 | ETA-8 Bronze Tee Assembly | 1 |



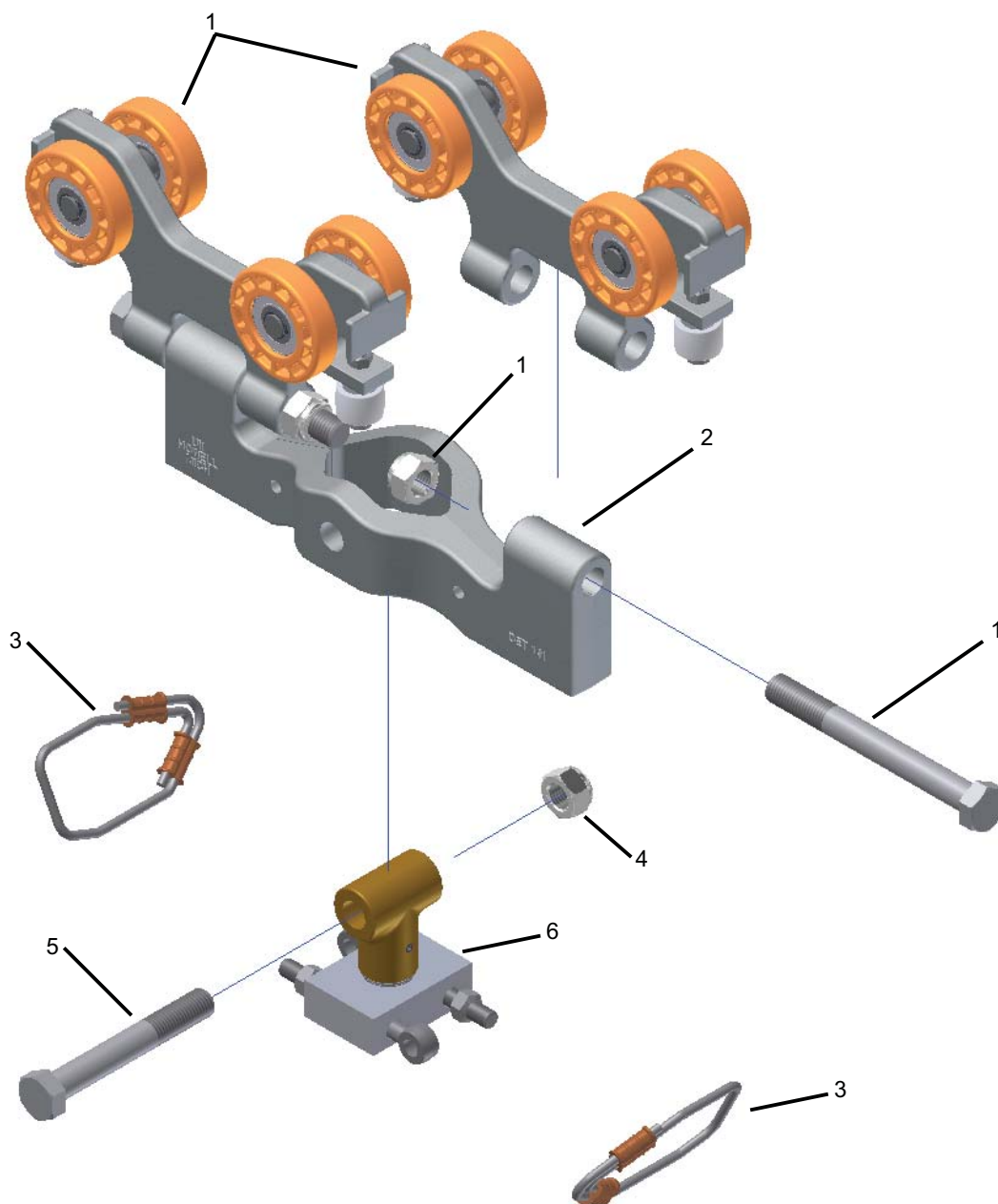
22046 ETA-8 SINGLE END TRUCK ASSEMBLY (WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 20069 | ETA-8 Long Body Kickup Trolley | 1 |
| 2 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 3 | 25250 | ETA-8 Bronze Tee Assembly | 1 |



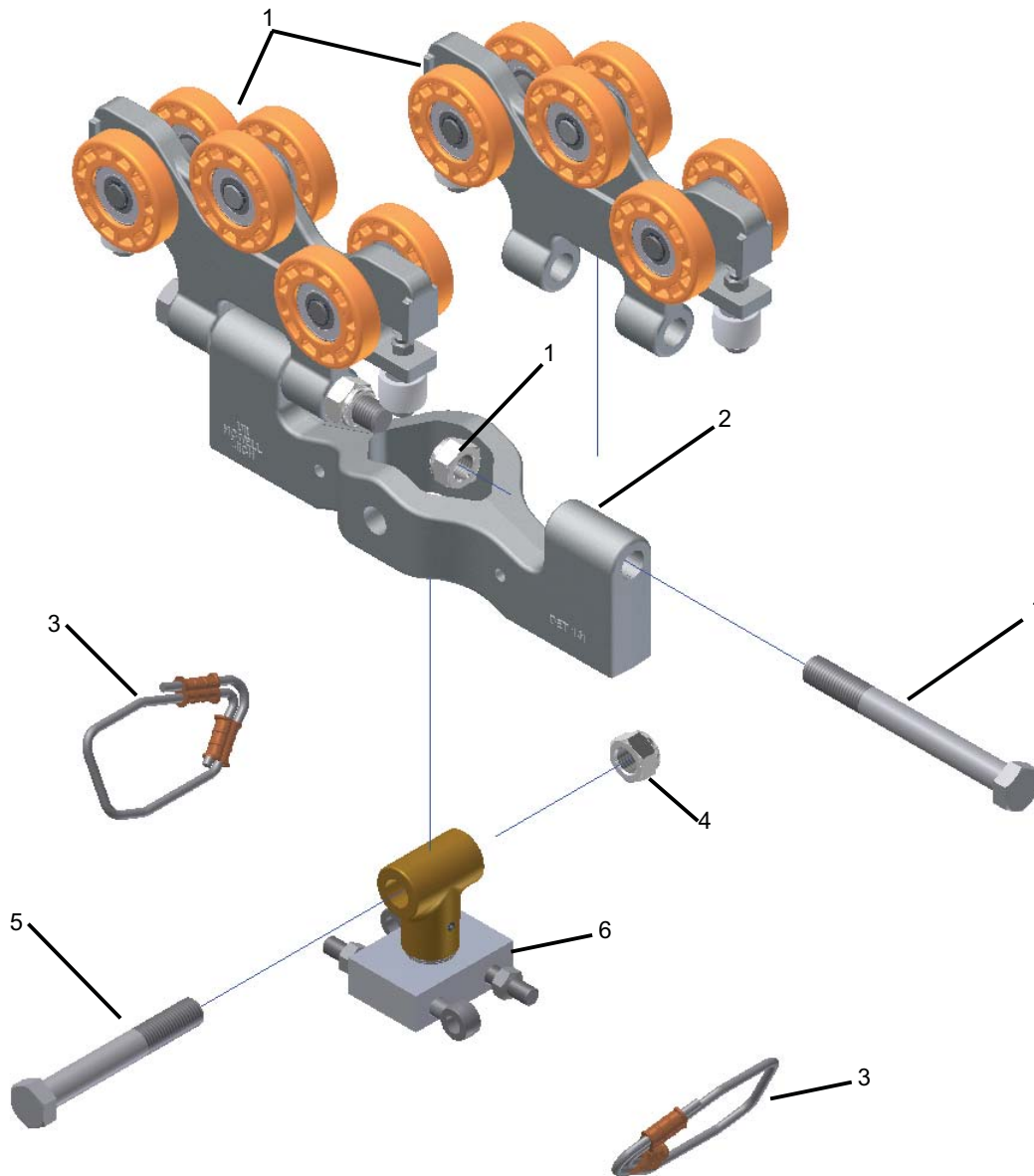
22051 ETA-8 DUAL END TRUCK ASSEMBLY (WITHOUT KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 20011 | ETA-8 Short Body Load Trolley | 2 |
| 2 | 59540M | 141 Machined E/T Casting | 1 |
| 3 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 4 | 52465 | M20x2.5 Nylon Insert Nut | 1 |
| 5 | 51987 | M20x2.5 x 140mm HHB | 1 |
| 6 | 25250 | ETA-8 Bronze Tee Assembly | 1 |



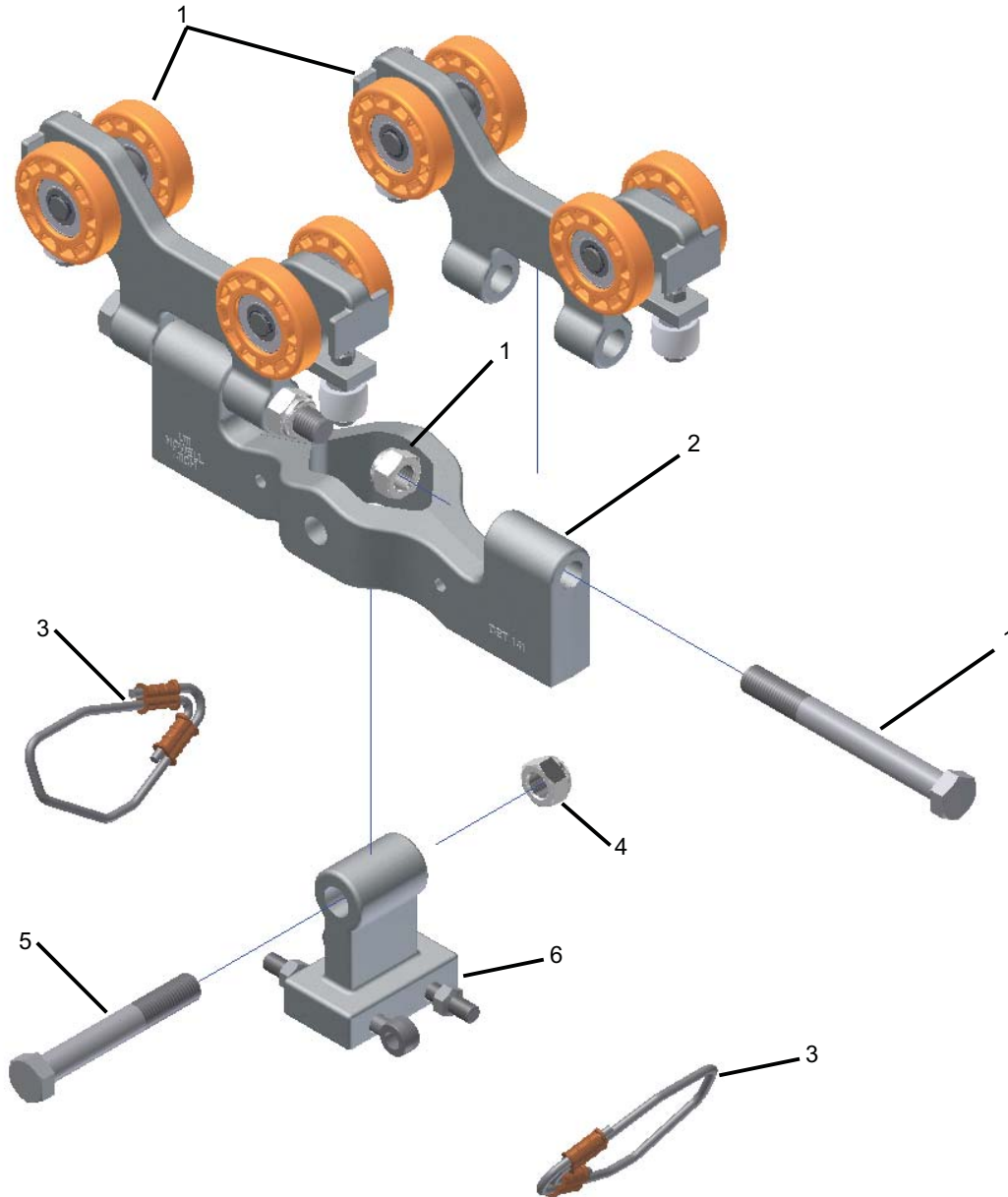
22131 ETA-8 DUAL END TRUCK ASSEMBLY (WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20068 | ETA-8 Short Body Kickup Trolley | 2 |
| 2 | 59540M | 141 Machined E/T Casting | 1 |
| 3 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 4 | 52465 | M20x2.5 Nylon Insert Nut | 1 |
| 5 | 51987 | M20x2.5 x 140mm HHB | 1 |
| 6 | 25250 | ETA-8 Bronze Tee Assembly | 1 |



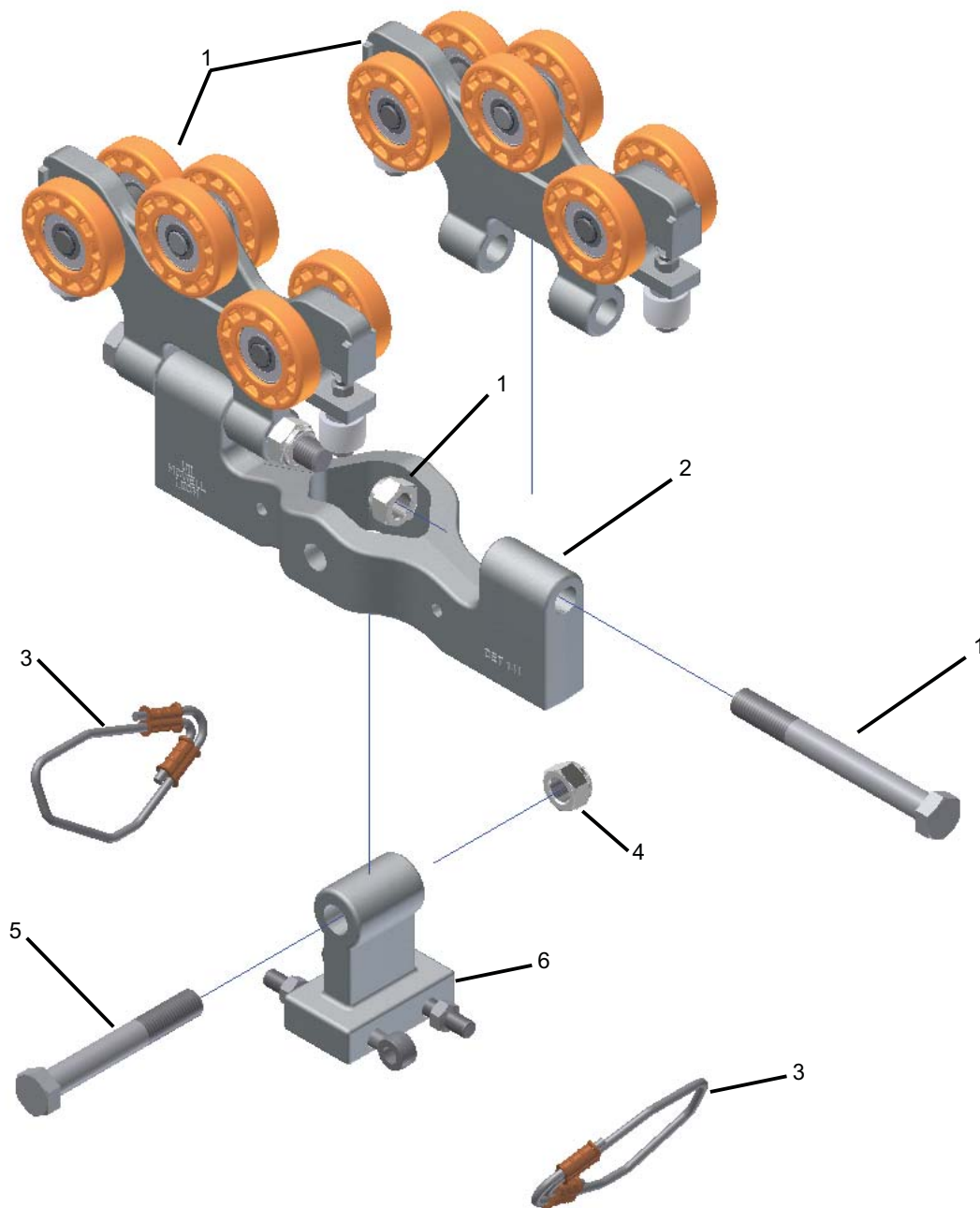
22052 ETA-8 RIGID DUAL END TRUCK ASSEMBLY (WITHOUT KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 20011 | ETA-8 Short Body Load Trolley | 2 |
| 2 | 59540M | 141 Machined E/T Casting | 1 |
| 3 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 4 | 52465 | M20x2.5 Nylon Insert Nut | 1 |
| 5 | 51987 | M20x2.5 x 140mm HHB | 1 |
| 6 | 59650M | 167 Machined Hanger Casting | 1 |



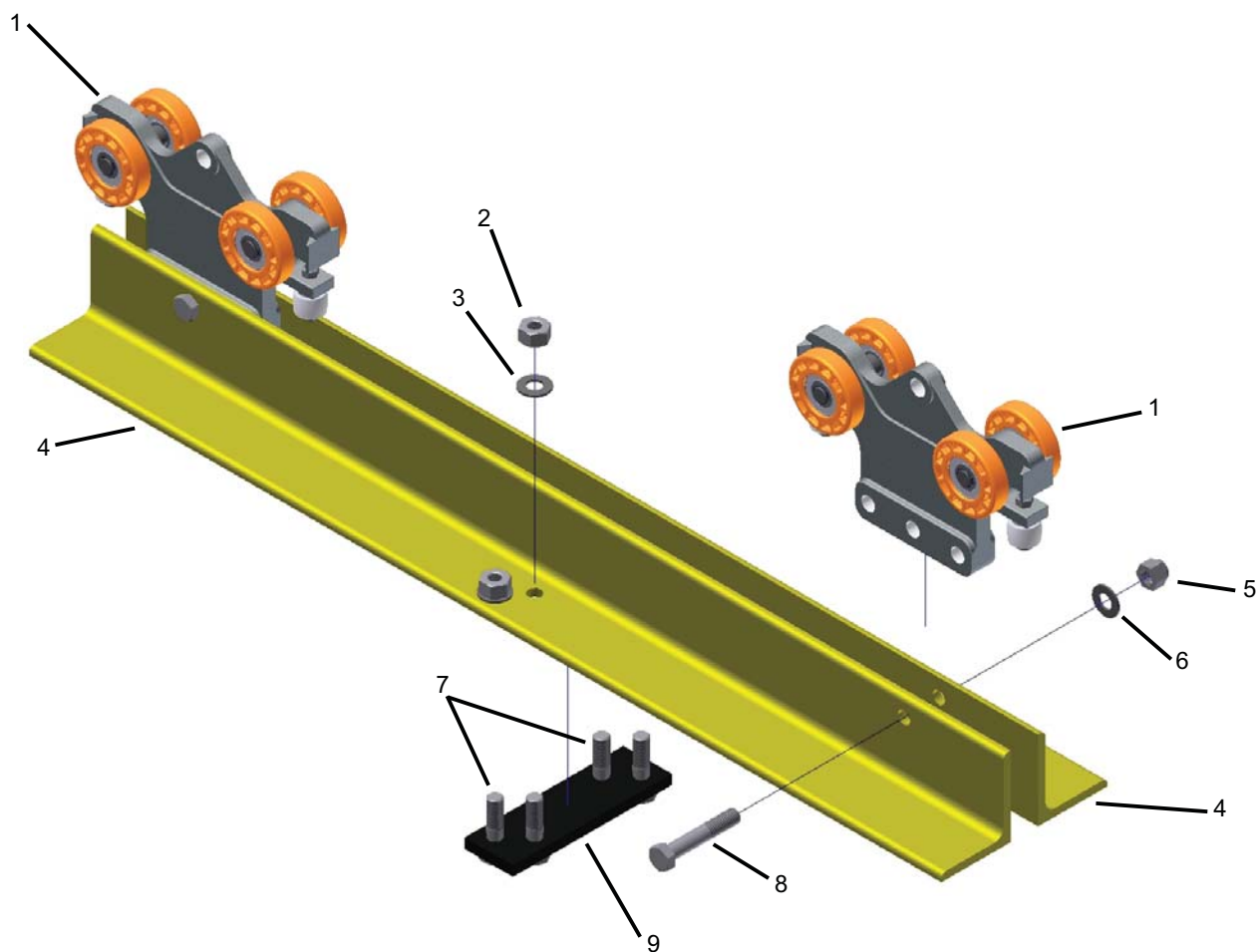
22068 ETA-8 RIGID DUAL END TRUCK ASSEMBLY (WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20068 | ETA-8 Short Body Kickup Trolley | 2 |
| 2 | 59540M | 141 Machined E/T Casting | 1 |
| 3 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 4 | 52465 | M20x2.5 Nylon Insert Nut | 1 |
| 5 | 51987 | M20x2.5 x 140mm HHB | 1 |
| 6 | 59650M | 167 Machined Hanger Casting | 1 |



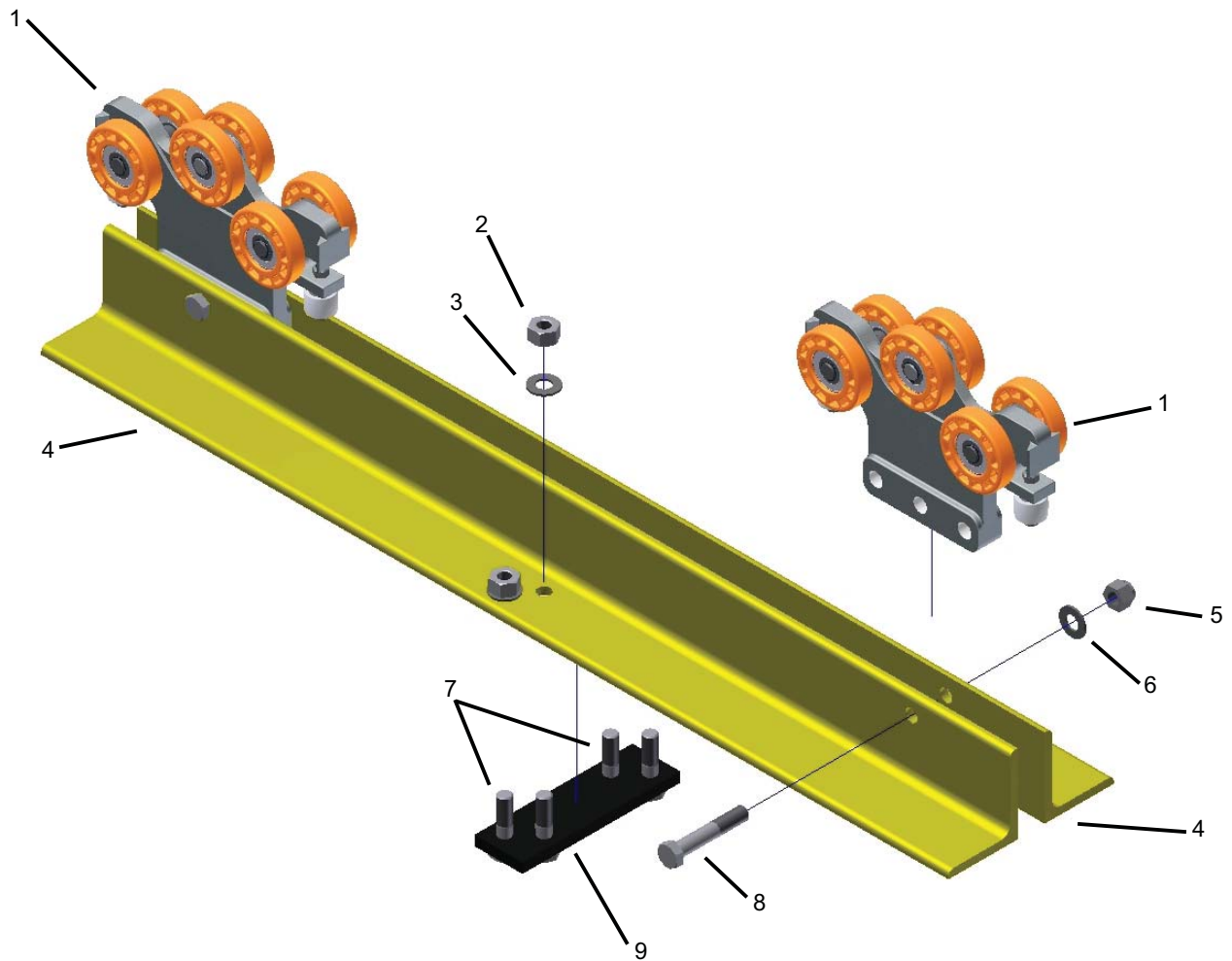
ETA-8 RIGID END TRUCK ASSEMBLY (WITHOUT KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------------------|----------|
| 1 | 20024 | ETA-8 Three Hole Mount Load Trolley | 2 |
| 2 | 52315 | 5/8-11 Anco 2H Coloc Nut | 4 |
| 3 | 53405 | 5/8 F436 (A325 Structural Flat Washer) | 4 |
| 4 | | L4 x 3 1/2 x 3/8 | 2 |
| 5 | 52450 | M16x2.0 Prevailing Torque Nut | 2 |
| 6 | 53070 | 5/8" SAE Flat Washer | 2 |
| 7 | 51009 | 5/8-11 x 2 1/4" A325 Bolt | 4 |
| 8 | 51890 | M16x2.0 x 90mm HHB | 2 |
| 9 | 78565 | ETA-8 Rigid End Truck Block | 1 |



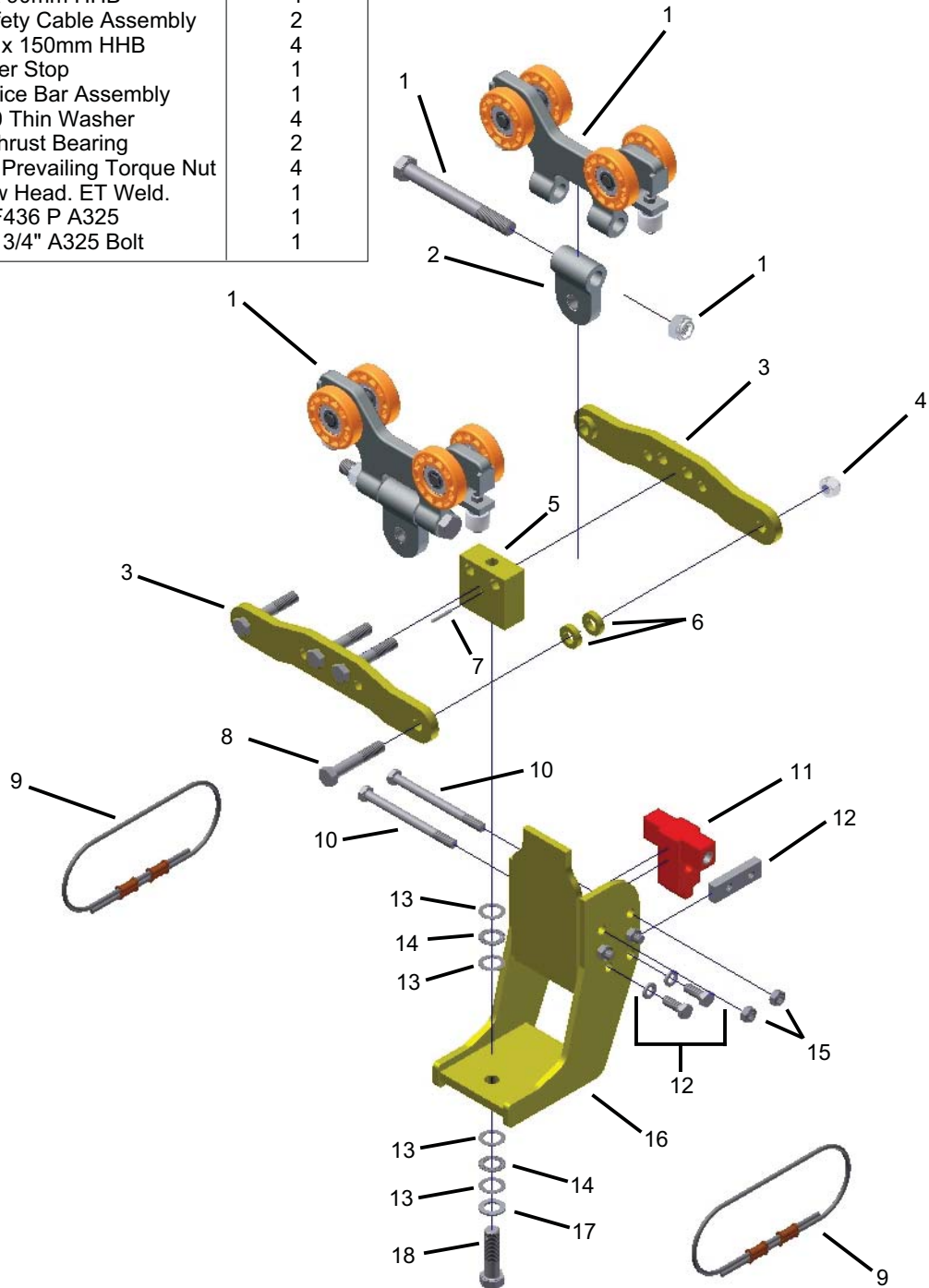
ETA-8 RIGID END TRUCK ASSEMBLY (WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|----------------------------------------|----------|
| 1 | 20071 | ETA-8 Three Hole Mount Kickup Trolley | 2 |
| 2 | 52315 | 5/8-11 Anco 2H Coloc Nut | 4 |
| 3 | 53405 | 5/8 F436 (A325 Structural Flat Washer) | 4 |
| 4 | | L4 x 3 1/2 x 3/8 | 2 |
| 5 | 52450 | M16x2.0 Prevailing Torque Nut | 2 |
| 6 | 53070 | 5/8" SAE Flat Washer | 2 |
| 7 | 51009 | 5/8-11 x 2 1/4" A325 Bolt | 4 |
| 8 | 51890 | M16x2.0 x 90mm HHB | 2 |
| 9 | 78565 | ETA-8 Rigid End Truck Block | 1 |



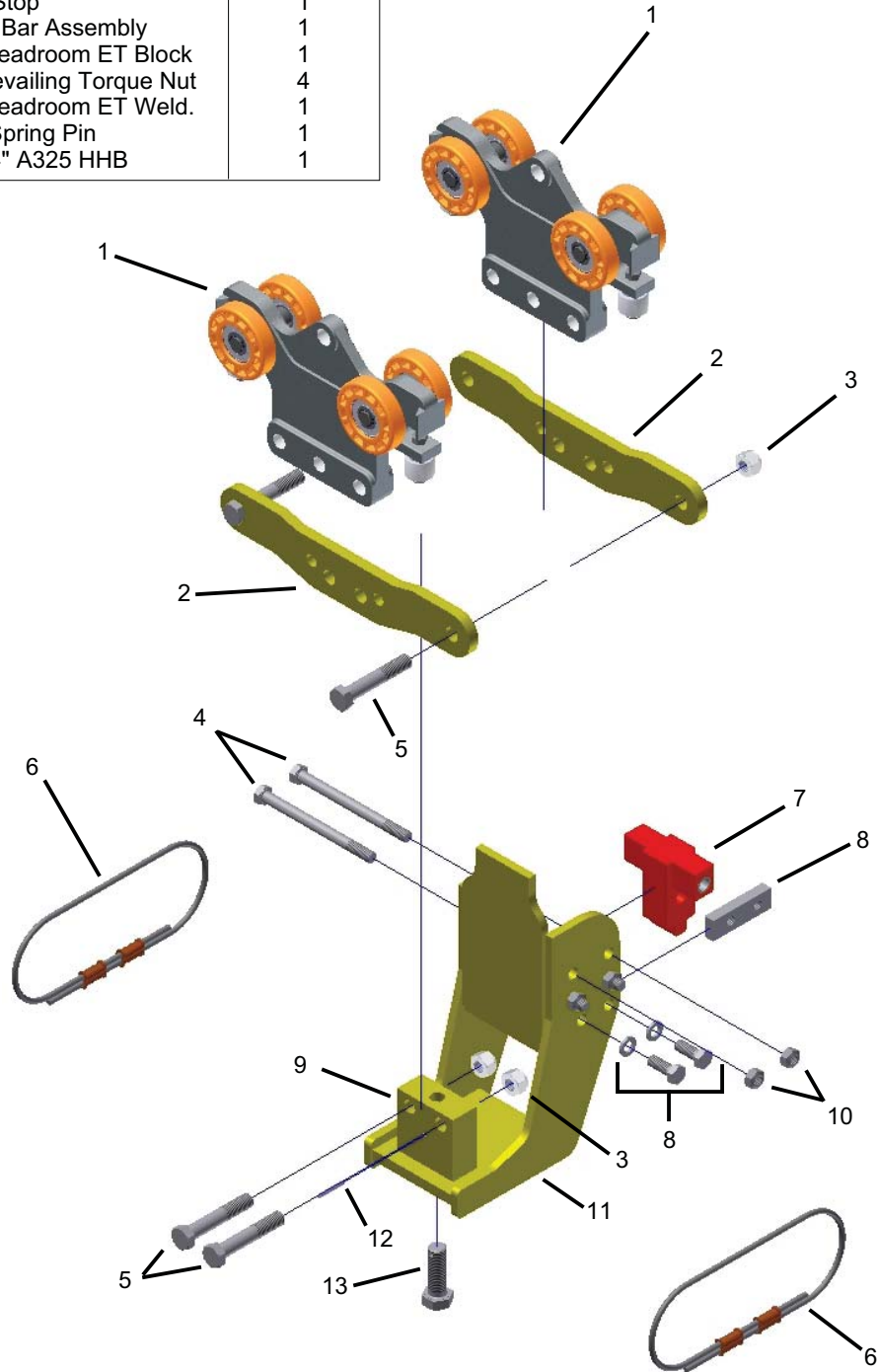
22620 ETA-8 ARTICULATING LOW HEADROOM END TRUCK

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20011 | ETA-8 Short Body Load Trolley | 2 |
| 2 | 25020 | 102 Flat Hanger Assembly | 2 |
| 3 | 60050 | ETA-8 Low Head. ET Load Bar | 2 |
| 4 | 52445 | M16x2.0 Nylon Insert Lock Nut | 4 |
| 5 | 60055 | ETA-8 Low Head. ET Block | 1 |
| 6 | 83580 | 1 1/4" OD x 11/16" ID Stl. Tube | 4 |
| 7 | 54180 | 3/16 x 1 1/4 Spring Pin | 1 |
| 8 | 51890 | M16x2.0 x 90mm HHB | 4 |
| 9 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 10 | 51851 | M12x1.75 x 150mm HHB | 4 |
| 11 | 59920 | ETA-8 Inner Stop | 1 |
| 12 | 25553 | ETA-8 Splice Bar Assembly | 1 |
| 13 | 53321 | TWA 1220 Thin Washer | 4 |
| 14 | 56161 | TC1220 Thrust Bearing | 2 |
| 15 | 52445 | M12x1.75 Prevailing Torque Nut | 4 |
| 16 | 25338 | ETA-8 Low Head. ET Weld. | 1 |
| 17 | 53410 | 3/4" F/W F436 P A325 | 1 |
| 18 | 51281 | 3/4-10 x 2 3/4" A325 Bolt | 1 |



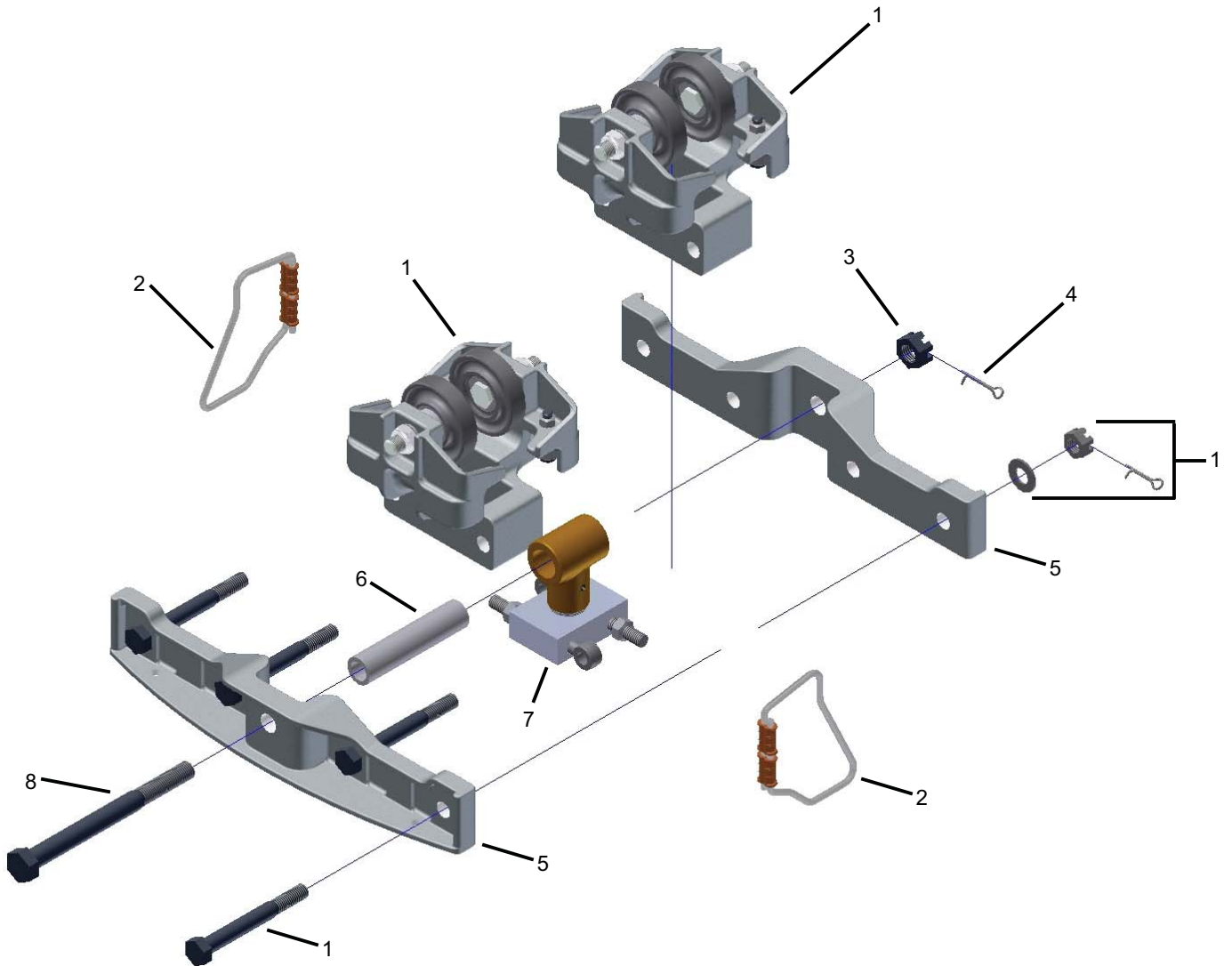
22625 ETA-8 RIGID LOW HEADROOM END TRUCK

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 20024 | ETA-8 Three Hole Mount Trolley | 2 |
| 2 | 60050 | ETA-8 Low Head. ET Load Bar | 2 |
| 3 | 52455 | M16x2.0 Nylon Insert Lock Nut | 4 |
| 4 | 51851 | M12x1.75 x 150mm HHB | 4 |
| 5 | 51890 | M16x2.0 x 90mm HHB | 4 |
| 6 | 25630 | ETA-8 Safety Cable Assembly | 2 |
| 7 | 59920 | ETA-8 Inner Stop | 1 |
| 8 | 25553 | ETA-8 Splice Bar Assembly | 1 |
| 9 | 60055 | ETA-8 Low Headroom ET Block | 1 |
| 10 | 52445 | M12x1.75 Prevailing Torque Nut | 4 |
| 11 | 25338 | ETA-8 Low Headroom ET Weld. | 1 |
| 12 | 54180 | 3/16 x 1 1/4 Spring Pin | 1 |
| 13 | 51260 | 3/4-10 x 2 1/4" A325 HHB | 1 |



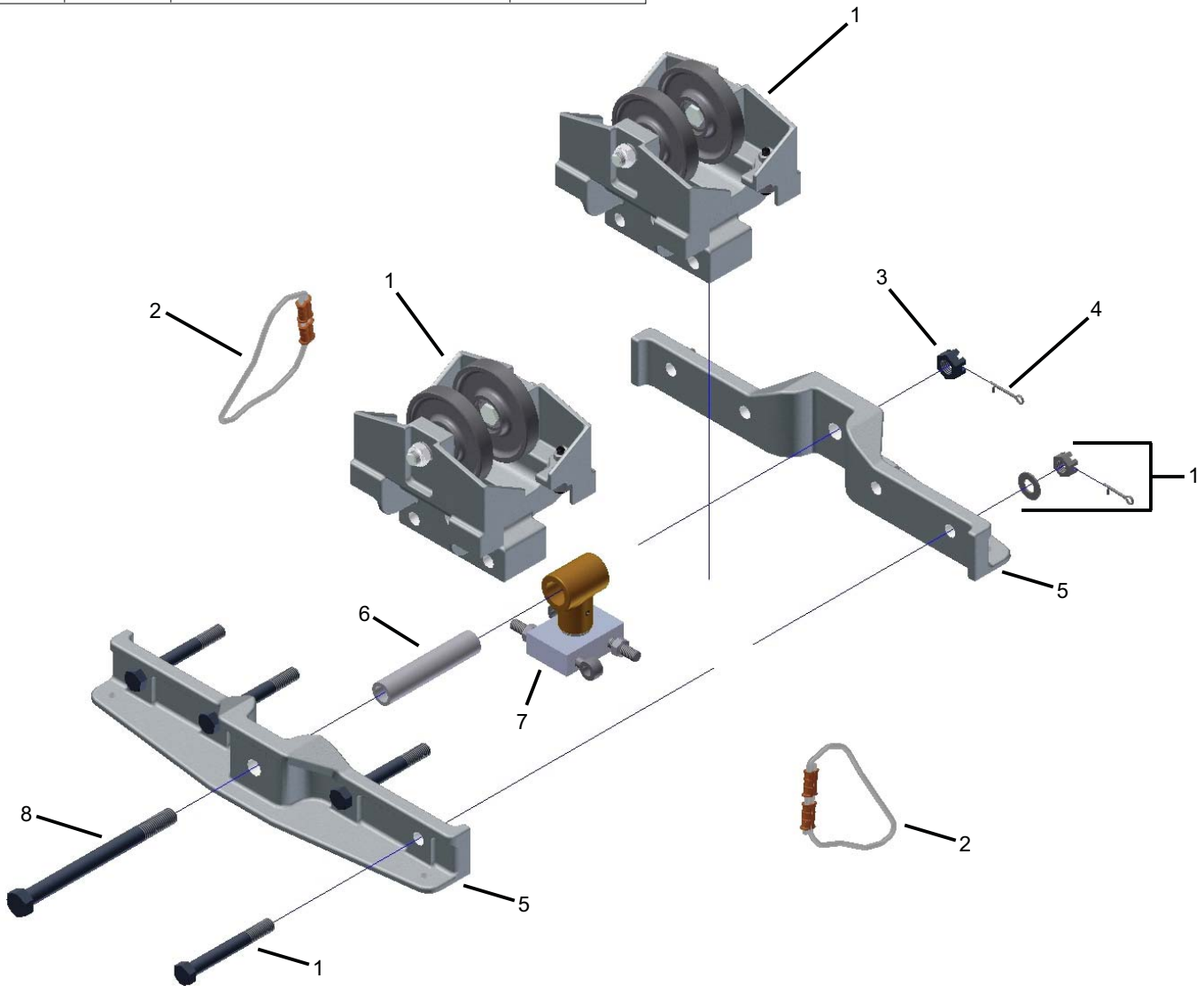
ETA-8 STANDARD RAIL END TRUCKS 1000 lb. RATED LOAD
(22199, 22200 AND 22201 WITHOUT KICKUP)
(22208, 22210 AND 22212 WITH KICKUP)

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 10189 | MBC-500-3-325 Trolley W/O KU | 2 |
| 2 | 25630 | ETA-8 Safety Cable | 2 |
| 3 | 52370 | 3/4-10 Small Slot Hex Nut | 1 |
| 4 | 54086 | 5/32 x 1 1/2 Cotter Pin | 1 |
| 5 | 59580M | 156 MBC End Truck Mach. Cast. | 2 |
| 6 | 25010 | 1 1/8 OD Wear Sleeve Assy | 1 |
| 7 | 25410 | 507 Hanger Assembly | 1 |
| 8 | 51420 | 3/4-10 x 8 GR5 HHB | 1 |



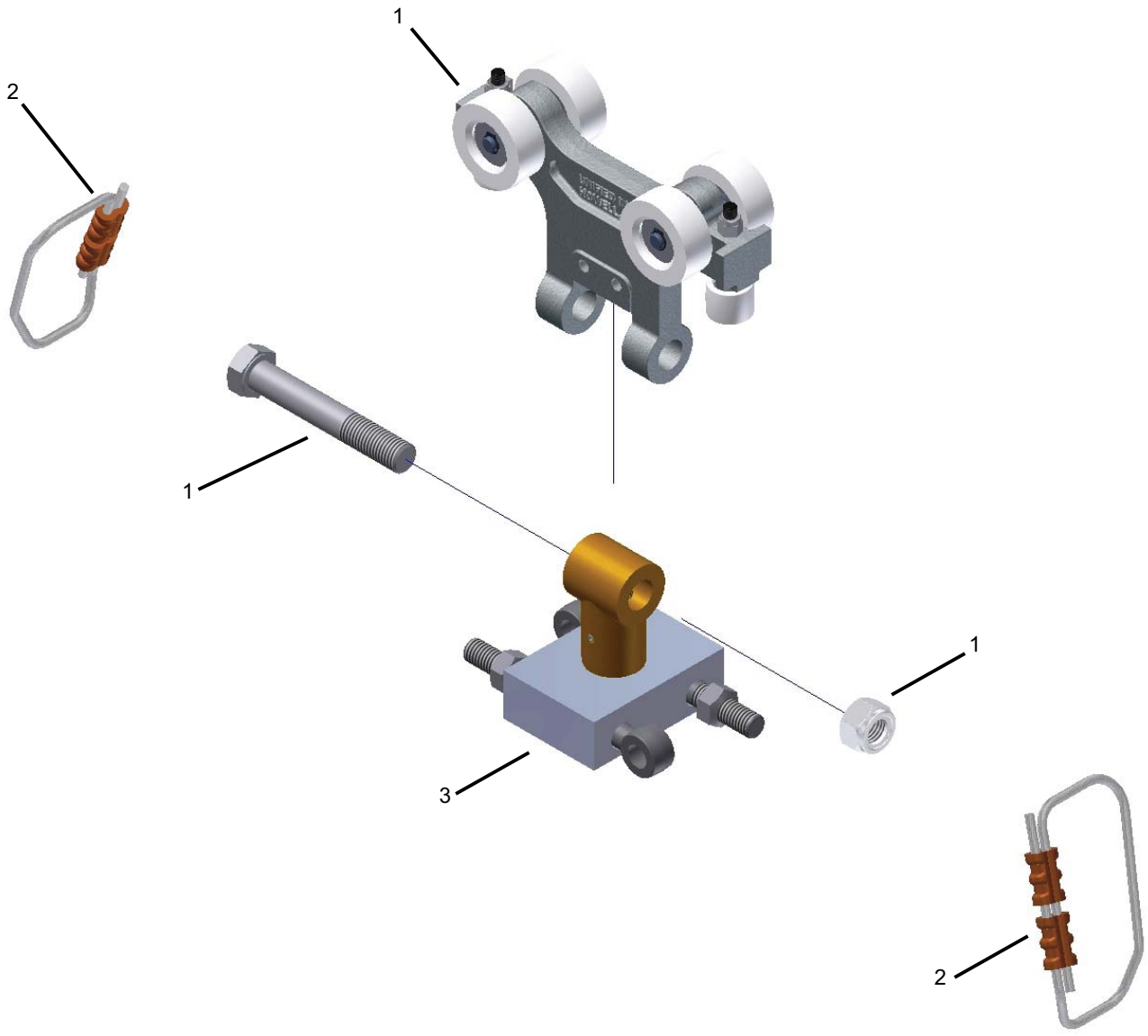
**ETA-8 STANDARD RAIL END TRUCKS 2000 lb. RATED LOAD
(22214 AND 22216 WITHOUT KICKUP)
(22218 AND 22220 WITH KICKUP)**

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------------|----------|
| 1 | 10154 | MBC-1000-3-325 Trolley W/O KU | 2 |
| 2 | 25630 | ETA-8 Safety Cable | 2 |
| 3 | 52370 | 3/4-10 Small Slot Hex Nut | 1 |
| 4 | 54086 | 5/32 x 1 1/2 Cotter Pin | 1 |
| 5 | 59590M | 158 MBC End Truck Mach. Cast. | 2 |
| 6 | 25010 | 1 1/8 OD Wear Sleeve Assy | 1 |
| 7 | 25410 | 507 Hanger Assembly | 1 |
| 8 | 51450 | 3/4-10 x 9 GR5 HHB | 1 |



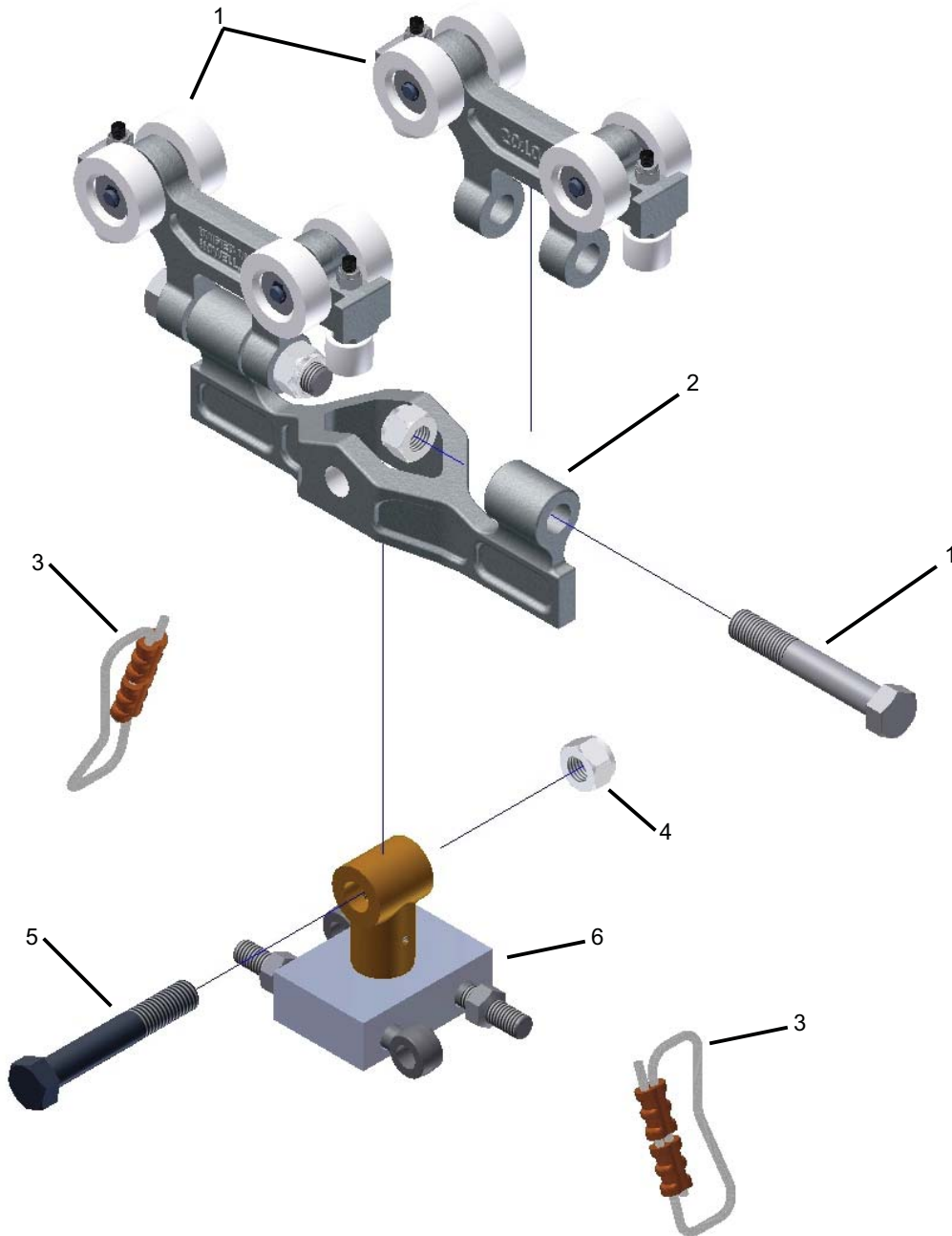
22519 ETA-8 SINGLE END TRUCK ASSEMBLY TO RUN ETA-4/5

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 20110 | ETA-4/5 Long Body Load Trolley | 1 |
| 2 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 3 | 25261 | 405 Hanger Assy (406/175) | 1 |



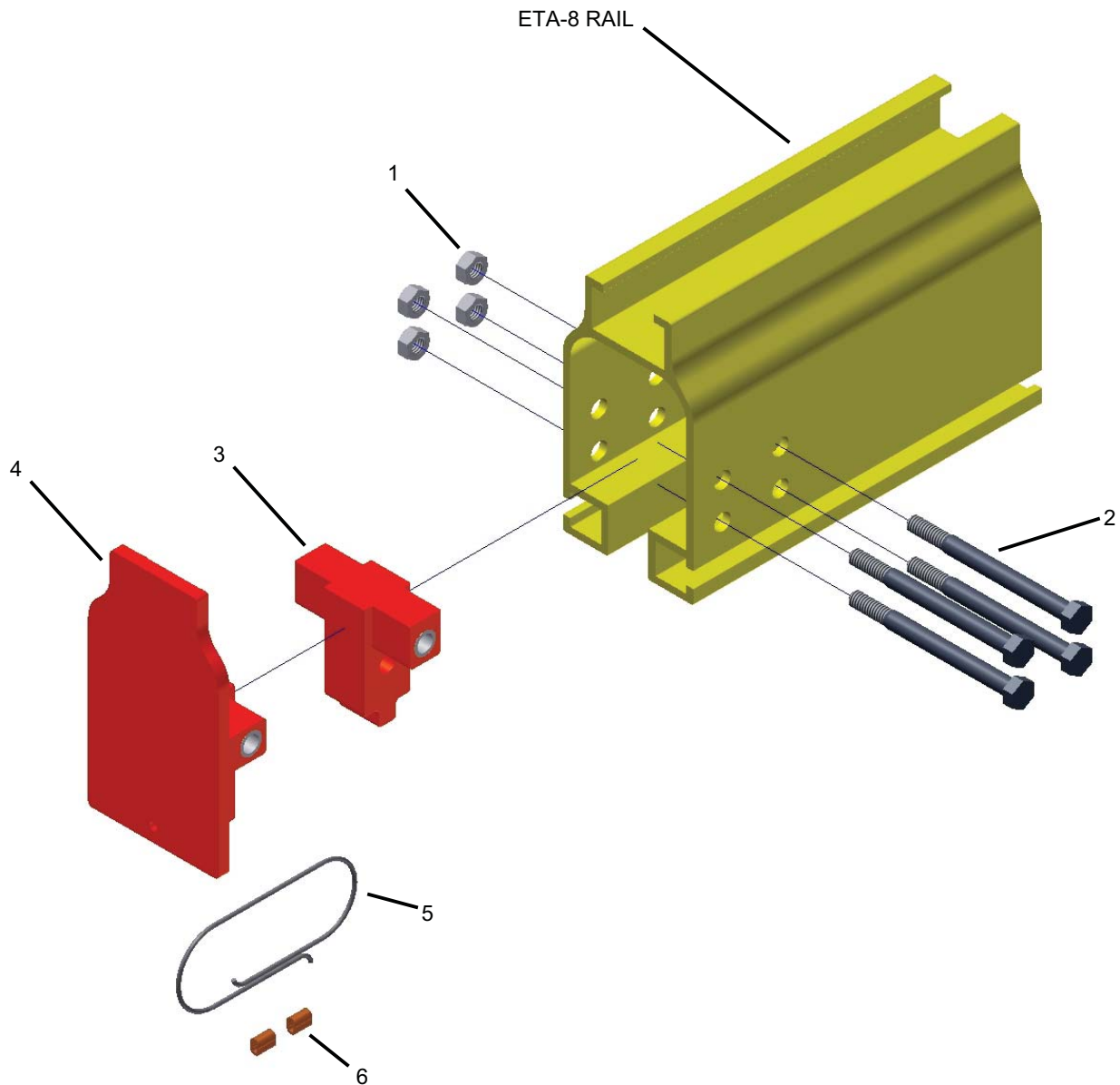
22528 ETA-8 DUAL END TRUCK ASSEMBLY TO RUN ON ETA-4/5

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 20100 | ETA-4/5 Short Body Load Trolley | 2 |
| 2 | 59880M | 441 Machined E/T Casting | 1 |
| 3 | 25640 | ETA-4 Safety Cable Assembly | 2 |
| 4 | 52455 | M16x2.0 Nylon Insert Nut | 1 |
| 5 | 51900 | M16x2.0 x 100mm HHB | 1 |
| 6 | 25261 | 405 Hanger Assembly (406/175) | 1 |



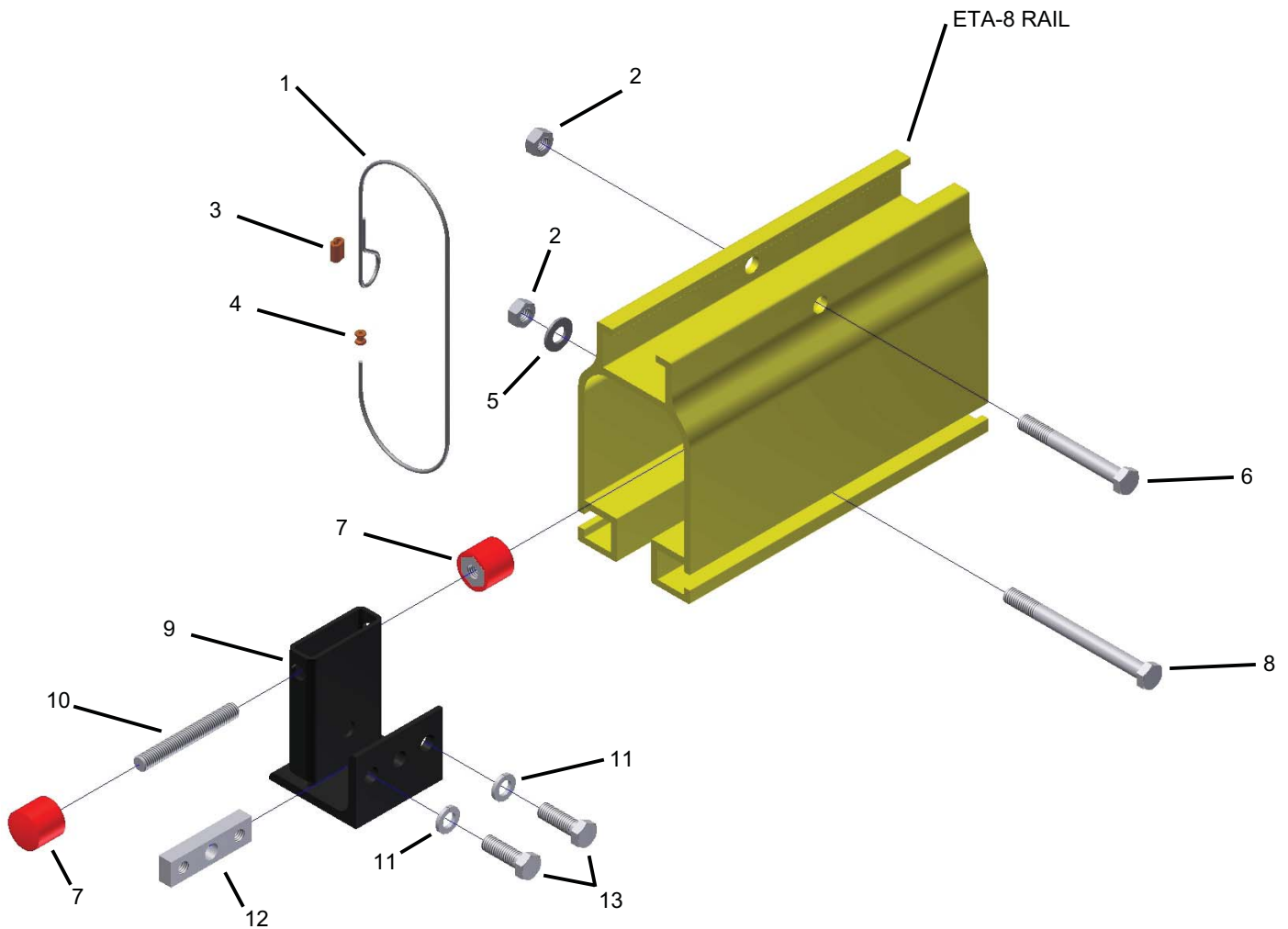
24950 ETA-8 DOUBLE END STOP

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|---------------------------------|----------|
| 1 | 52445 | M12x1.75 Prevailing Torque Nut | 4 |
| 2 | 51850 | M12x1.75 x 140mm HHB | 4 |
| 3 | 59920 | ETA-8 Inner Stop | 1 |
| 4 | 59967 | ETA-4 End Cap | 1 |
| 5 | 65020 | 1/8" 7x19 Stain. Stl. Wire Rope | 1 |
| 6 | 78020 | 1/8" Copper Oval Sleeve | 2 |



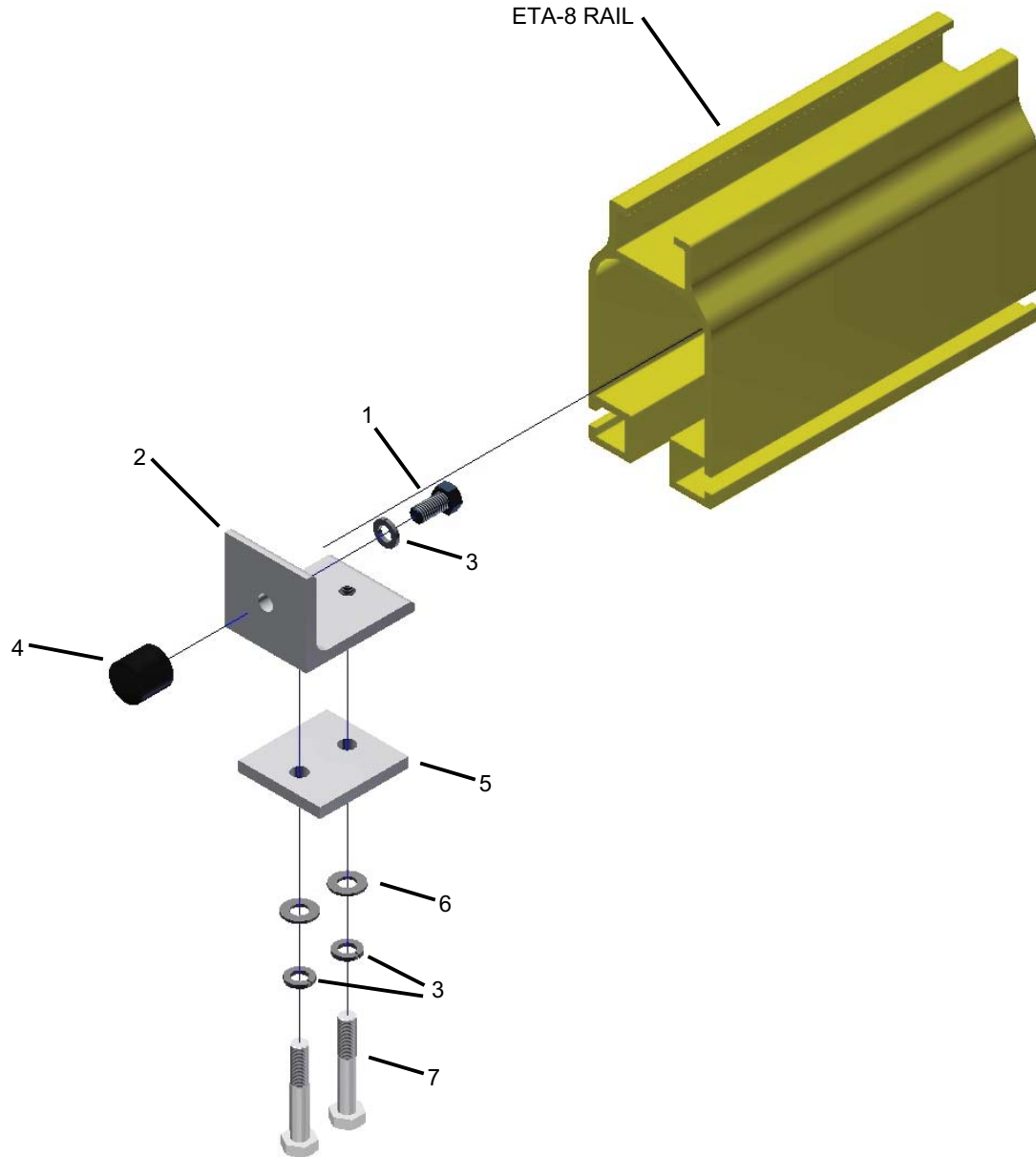
25576 ETA-8 INSERTABLE MID-RAIL STOP

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 65020 | 1/8" x 18" 7X19 SST. Wire Rope | 1 |
| 2 | 52445 | M12x1.75 Prevailing Torque Nut | 2 |
| 3 | 78020 | 1/8" Copper Oval Sleeve | 1 |
| 4 | 78021 | 1/8" Copper Stop Sleeve | 1 |
| 5 | 53060 | 1/2 SAE Flat Washer | 1 |
| 6 | 51840 | M12x1.75 x 110mm HHB | 1 |
| 7 | 60004 | ETA-8 Poly Bumper | 2 |
| 8 | 51850 | M12x1.75 x 140mm HHB | 1 |
| 9 | 60003 | ETA-8 Mid -Rail Stop Weldment | 1 |
| 10 | 80990 | 1/2-13 x 3 13/16" Threaded Rod | 1 |
| 11 | 52510 | 12mm Spring Lock Washer | 2 |
| 12 | 60005 | ETA-8 Mid-Rail Stop Bar | 1 |
| 13 | 51785 | M12x1.75 x 40mm HHB | 2 |



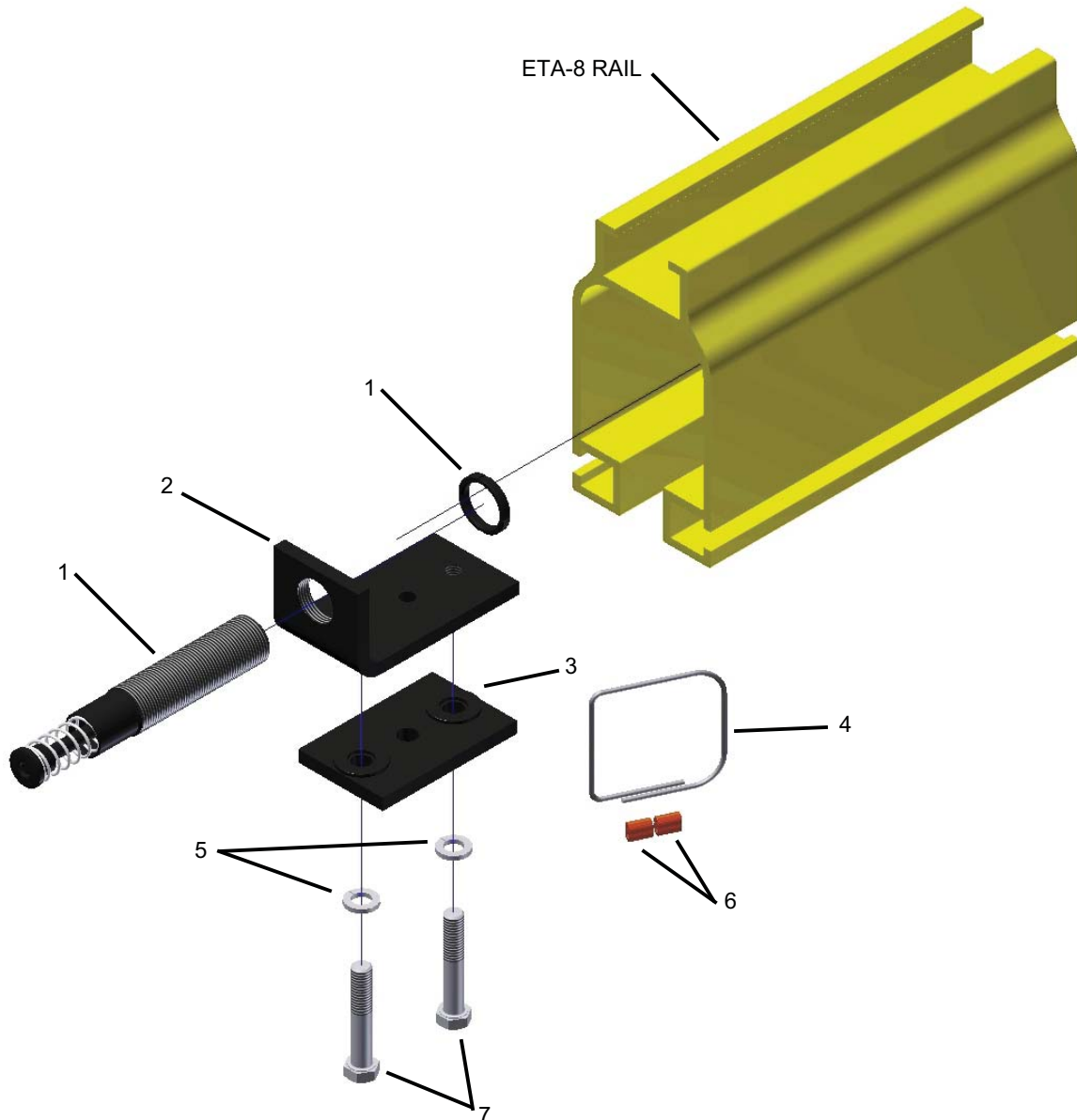
25570 ETA-8 MID-RAIL STOP ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-------------------------|----------|
| 1 | 50730 | 1/2-13 x 1" HHB | 1 |
| 2 | 25571 | ETA-8 Mid Stop Angle | 1 |
| 3 | 53230 | 1/2" Spring Lock Washer | 3 |
| 4 | 62010 | 1 1/4" Neo Bumper | 1 |
| 5 | 25572 | ETA-8 Mid Stop Plate | 1 |
| 6 | 53060 | 1/2" SAE Flat Washer | 2 |
| 7 | 51830 | M12x1.5 x 80mm HHB | 2 |



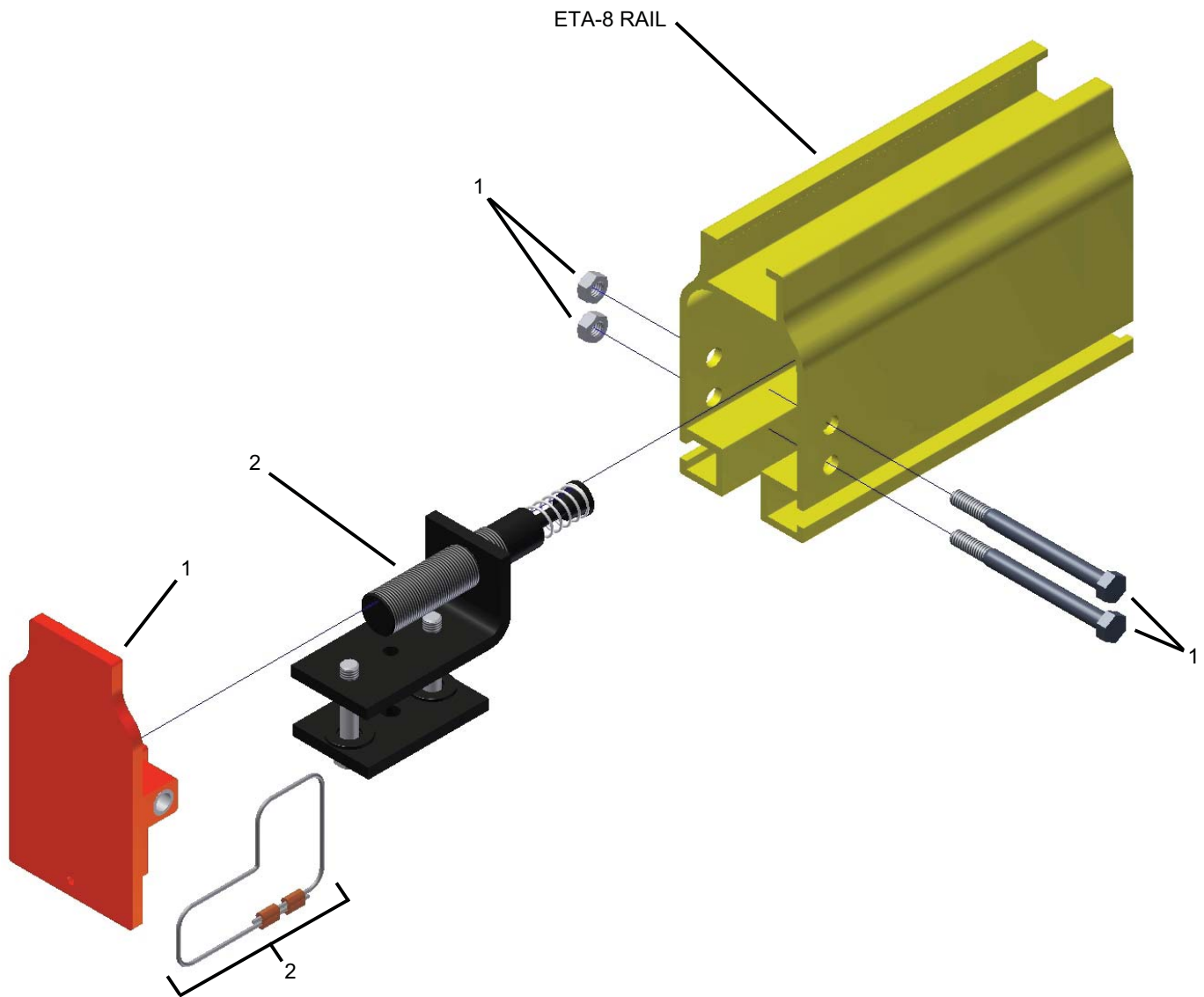
25179 ETA-8 POSITION STOP SHOCK ABSORBER ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|-----------------------------------|----------|
| 1 | 59905 | MC3350-3 MC Series Shock Absorber | 1 |
| 2 | 59908 | ETA-8 Shock Absorber Holder | 1 |
| 3 | 59906 | Clamp Plate | 1 |
| 4 | 65020 | 1/8" x 14" 7x19 SST. Wire Rope | 1 |
| 5 | 52510 | 12mm Spring Lock Washer | 2 |
| 6 | 78020 | 1/8" Copper Oval Sleeve | 2 |
| 7 | 51820 | M12x1.75 x 70mm HHB | 2 |



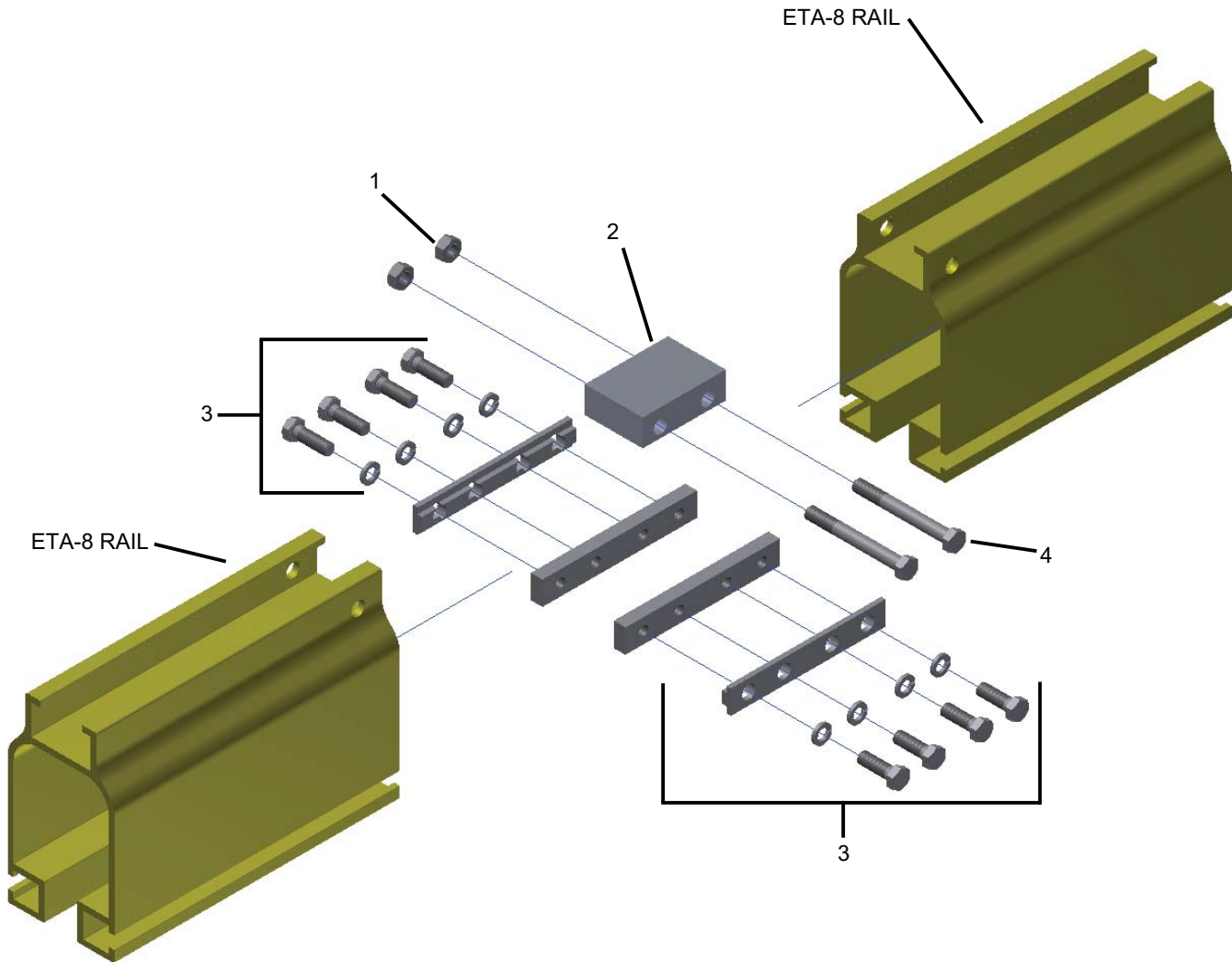
25135 ETA-8 END STOP SHOCK ABSORBER ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|------------------------------------|----------|
| 1 | 25198 | ETA-8 End Cap Assembly | 1 |
| 2 | 25179 | ETA-8 Position Stop Shock Absorber | 1 |



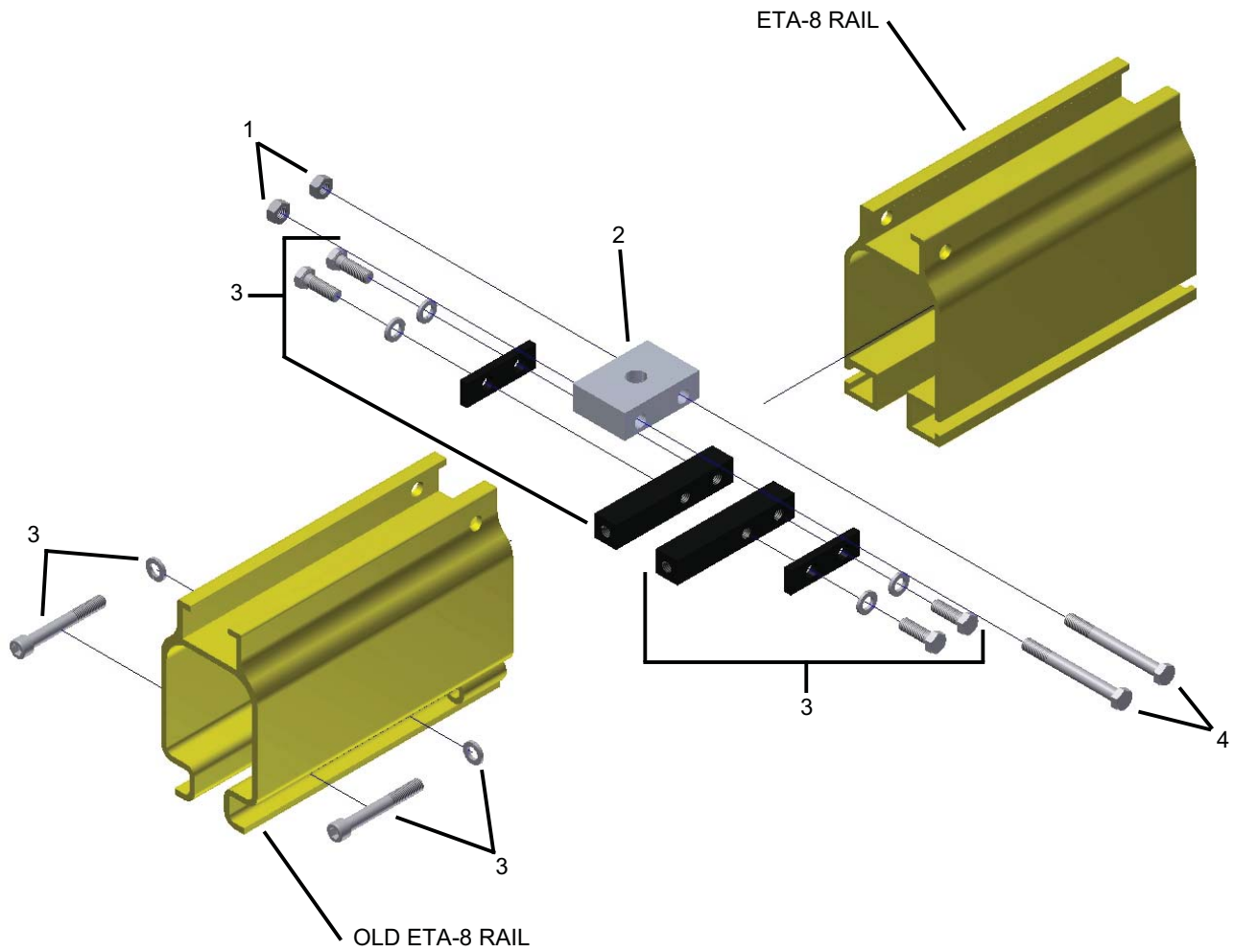
25552 ETA-8 BOLTED SPLICE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------------------------|----------|
| 1 | 52185 | 1/2-13 Top Lock Nut, GR C | 2 |
| 2 | 59950 | 175/280 Hanger Mach. Block | 1 |
| 3 | 25553 | ETA-8 Splice Bar Assembly M12x1.75 x 35mm HHB | 2 |
| | | 12mm Spring Lock Washer | 4 |
| 4 | 51837 | M12 x 1.75 x 100mm HHB | 2 |



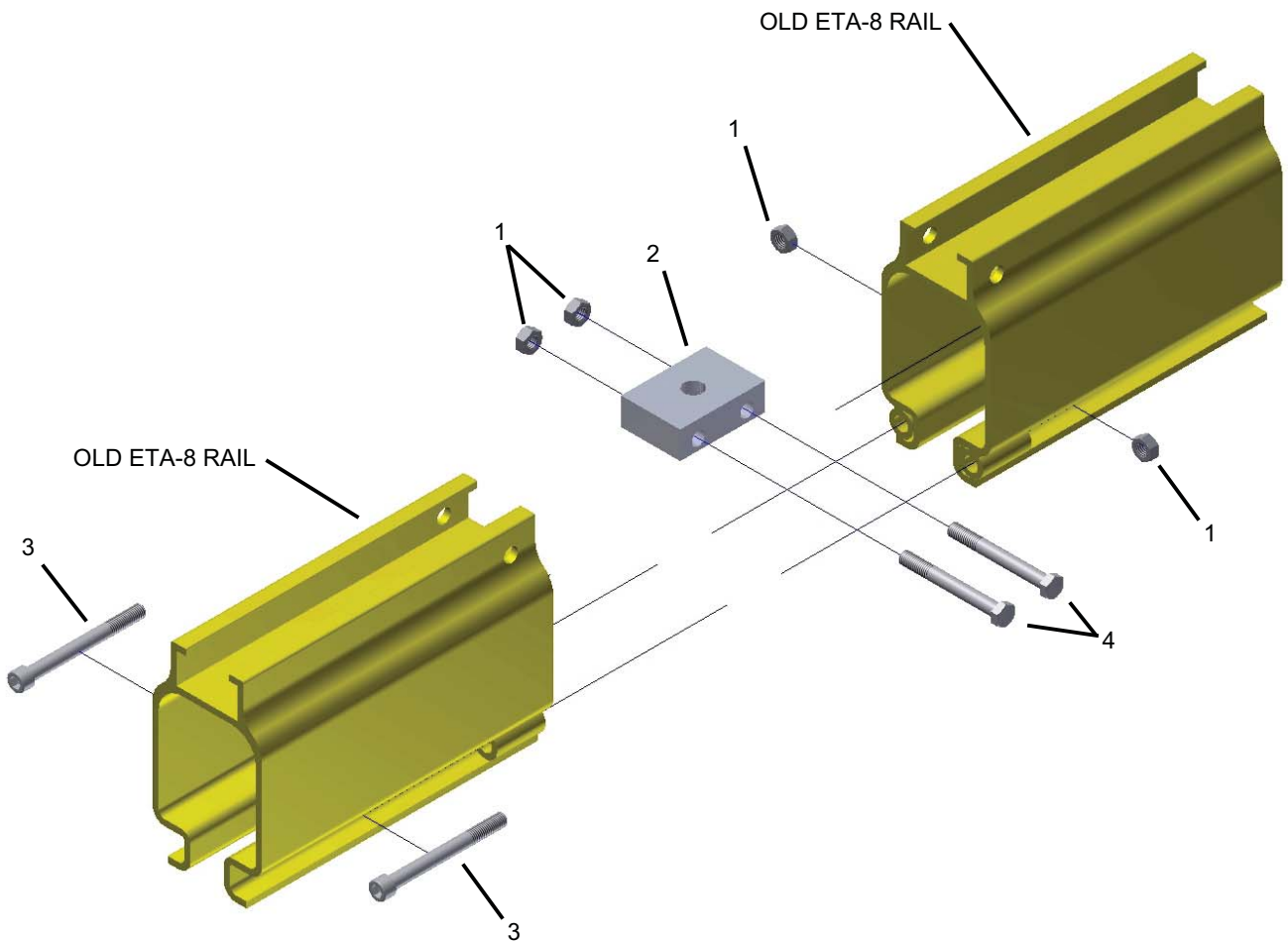
25557 ETA-8 TRANSITION SPLICE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 52445 | M12x1.75 Prevailing Torque Nut | 2 |
| 2 | 59950 | 175/280 Hanger Mach. Block | 1 |
| 3 | 25555 | ETA-8 Transition Splice Bar | 2 |
| | | M12x1.75 x 35mm HHB | 2 |
| | | 12mm Spring Lock Washer | 3 |
| | | M12x1.75 x 90mm SHCS | 1 |
| 4 | 51840 | M12x1.75 x 110mm HHB | 2 |



25550 ETA-8 OLD RAIL SPLICE ASSEMBLY

| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------------|----------|
| 1 | 52445 | M12x1.75 Prevailing Torque Nut | 4 |
| 2 | 59950 | 175/280 Hanger Mach. Block | 1 |
| 3 | 51842 | M12x1.75 x 120mm SHCS | 2 |
| 4 | 51840 | M12x1.75 x 100mm HHB | 2 |





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INSTALLATION MANUAL

ETA & STEEL

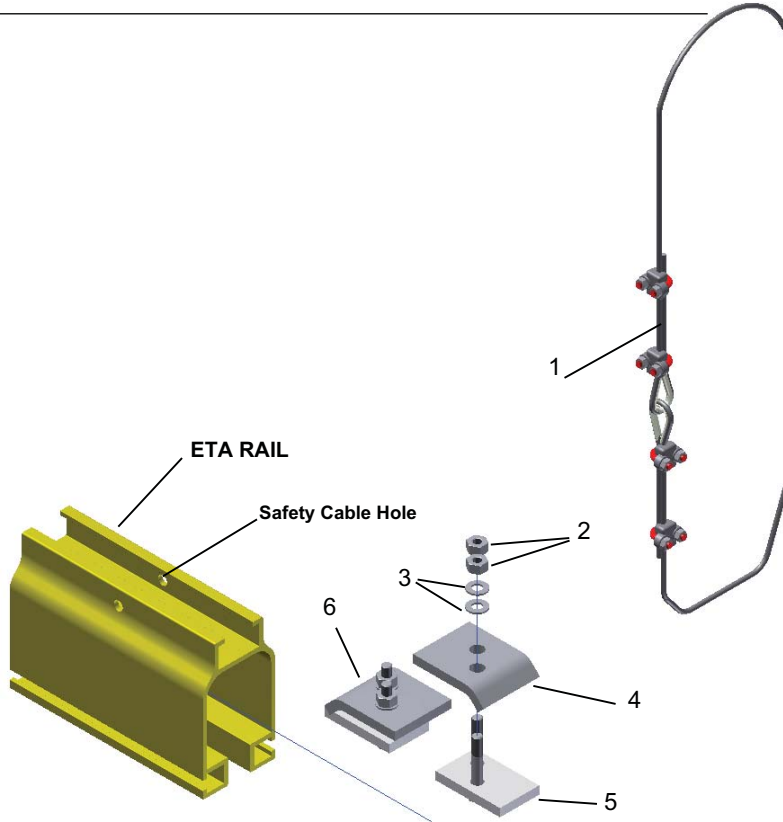
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| 27072/27074 - ETA-8 Parallel Rigid | 4 |
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| 25467/25473/25474 - ETA-4/5 Adjustable | 6 |
| 25170/27059/27061 - ETA-8 Beam | 7 |
| 25465/25471/25472 - ETA-8 Adjustable | 8 |
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INSTALLATION OF THE 27070 HANGER ASSEMBLY

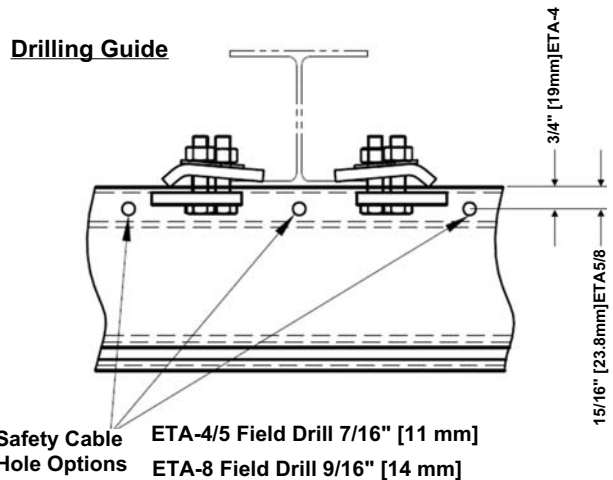
- Shown as an exploded assembly, the 27070 Hanger Assembly is shipped completely assembled.
- The 27070 Hanger Assembly can be used on ETA-4/5 & 8 rail series. **NOTE: For use on W-Beams Only.**

INSTALLATION PROCEDURE

1. Loosen nuts, washers (Items 2, 3) on 27070 Hanger Assembly (Item 6).
2. Slide rigid hanger block (Item 5) into top channel of ETA rail.
3. Slide Hanger assemblies (Item 6) onto header steel and push into place on beam, snug tighten nuts. (Item 2)
- This procedure requires the installer to lift entire rail and hangers to the header steel.
4. Drill (1) hole thru in the center of where the header steel will be directly above ETA Runway. (See Drilling guide below)
5. Fasten Safety cable (Item 1) through drilled holes and around header steel. Refer to Safety cable installation instructions.
6. Continue until all required hangers are placed onto header steel.



| REF. | DESCRIPTION |
|------|------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | Nut |
| 3 | Washer |
| 4 | ETA Toe Clip |
| 5 | ETA Rigid Hanger Block |
| 6 | ETA Rigid Hanger Assembly |



INSTALLATION OF THE ETA-4/5 27071/27073 PARALLEL RIGID HANGER ASSEMBLY

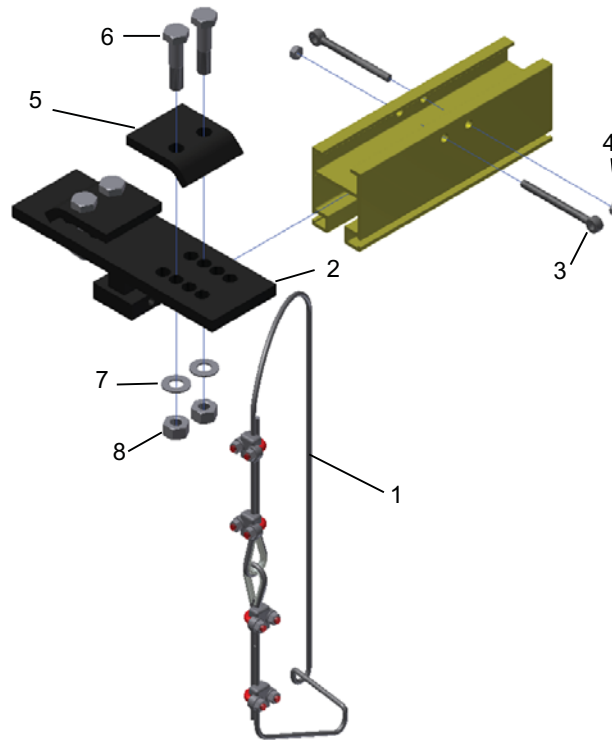
■ The ETA-4/5 27073 Hanger Assembly can be used for beams 2.33" to 3.33". Assembly can be mounted to header steel that is parallel to the runway.

■ The ETA-4/5 27071 Hanger Assembly can be used for beams 4" to 8". Assembly can be mounted to header steel that is parallel to the runway.

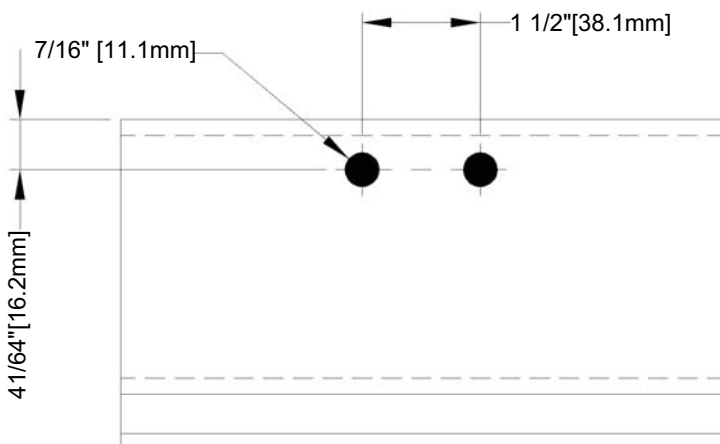
INSTALLATION PROCEDURE

1. Drill (2) holes in the location where the center of the hanger weldment will need to clamp to the header steel above. (See Drilling guide below)
2. Remove the (2) rod ends & (2) nuts (Items 3,4) on beam clamp weldment (Item 2).
3. Slide beam clamp weldment (Item 2) into top channel of ETA rail. Place rod ends (Item 3) through runway rail & beam clamp weldment and secure with nuts (Item 4) until snug against rail.
- This procedure requires the installer to lift entire rail and hangers to the header steel.
4. Remove hardware (Items 5,6,7,8) from beam clamp weldment (item 2). Center hanger clip below header steel. Bolt on rollover clips (item 5) into the closest holes to the center of header beam using washers (item 7) and nuts (item 8) until snug tight.
5. Fasten Safety cable (Item 1) through rod end holes and around header steel. Refer to Safety cable installation instructions.
6. Continue until all required hangers are placed onto header steel.

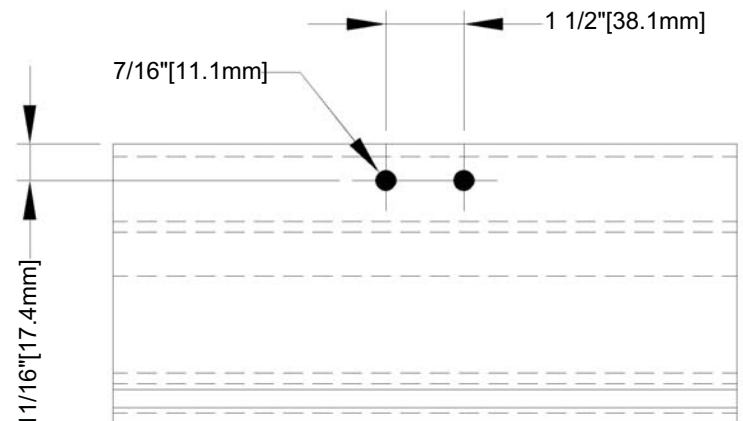
| REF. | DESCRIPTION |
|------|--------------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | ETA-4/5 parallel beam clamp weldment |
| 3 | Hanger rod end bolt |
| 4 | Hanger rod end nut |
| 5 | ETA-4/5 Rollover Clip |
| 6 | 5/8-11 X 2 3/4" Rollover Clip Bolt |
| 7 | Washer for Rollover Clip |
| 8 | Nut for Rollover Clip |



Drilling Guide for ETA-4



Drilling Guide for ETA-5



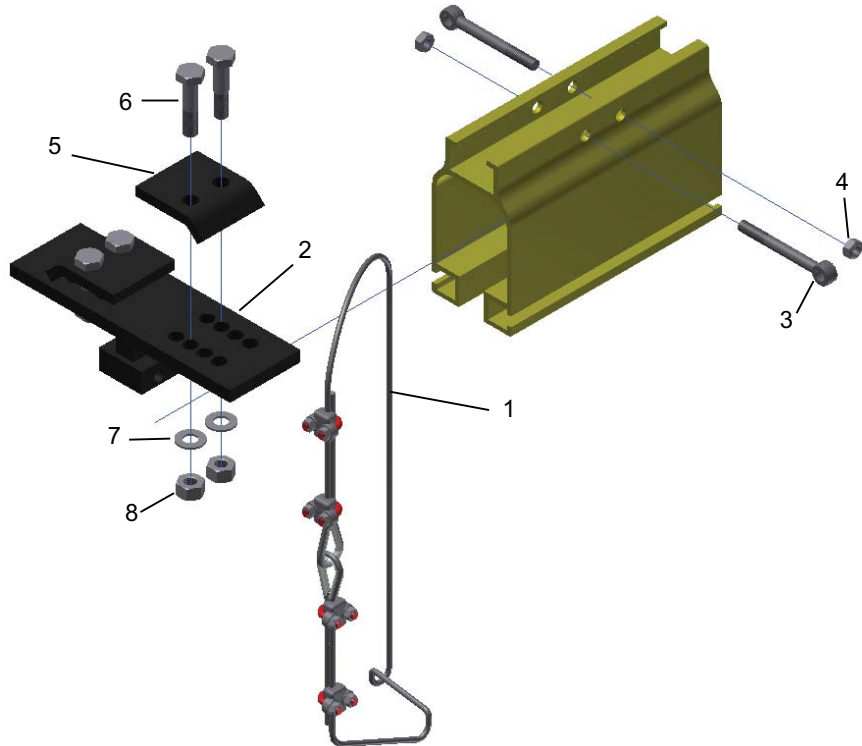
INSTALLATION OF THE ETA-8 27072/27074 PARALLEL RIGID HANGER ASSEMBLY

- The ETA-8 27074 Hanger Assembly can be used for beams 2.33" to 3.33". Assembly can be mounted to header steel that is parallel to the runway.
- The ETA-8 27072 Hanger Assembly can be used for beams 4" to 8". Assembly can be mounted to header steel that is parallel to the runway.

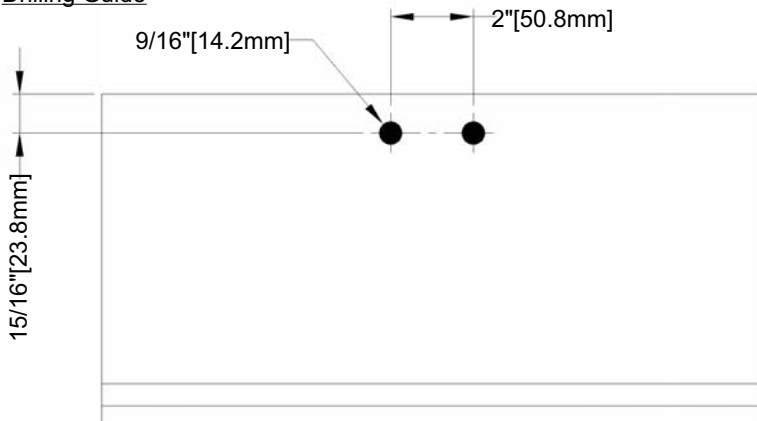
INSTALLATION PROCEDURE

1. Drill (2) holes in the location where the center of the hanger weldment will need to clamp to the header steel above. (See Drilling guide below)
2. Remove the (2) rod ends & (2) nuts (Items 3,4) on beam clamp weldment (Item 2).
3. Slide beam clamp weldment (Item 2) into top channel of ETA rail. Place rod ends (Item 3) through runway rail & beam clamp weldment and secure with nuts (Item 4) until snug against rail.
- This procedure requires the installer to lift entire rail and hangers to the header steel.
4. Remove hardware (Items 5,6,7,8) from beam clamp weldment (item 2). Center hanger clip below header steel. Bolt on rolover clips (item 5) into the closest holes to the center of header beam using washers (item 7) and nuts (item 8) until snug tight.
5. Fasten Safety cable (Item 1) through rod end holes and around header steel. Refer to Safety cable installation instructions.
6. Continue until all required hangers are placed onto header steel.

| REF. | DESCRIPTION |
|------|------------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | ETA-8 parallel beam clamp weldment |
| 3 | Hanger rod end bolt |
| 4 | Hanger rod end nut |
| 5 | ETA-8 Rollover Clip |
| 6 | 5/8-11 X 2 3/4" Rollover Clip Bolt |
| 7 | Washer for Rollover Clip |
| 8 | Nut for Rollover Clip |



Drilling Guide



INSTALLATION OF THE ETA-4/5 27055/27057 BEAM & 25286 BLOCK HANGER ASSEMBLY

- Shown as an exploded assembly, the ETA-4/5 25286 Hanger Assembly is shipped completely assembled.
- The ETA-4/5 27055 Hanger Assembly can be used for beams 2.33" to 3.33". Assembly can be mounted to header steel that is either parallel or perpendicular to runway.
- The ETA-4/5 27057 Hanger Assembly can be used for beams 4" to 8". Assembly can be mounted to header steel that is either parallel or perpendicular to runway.

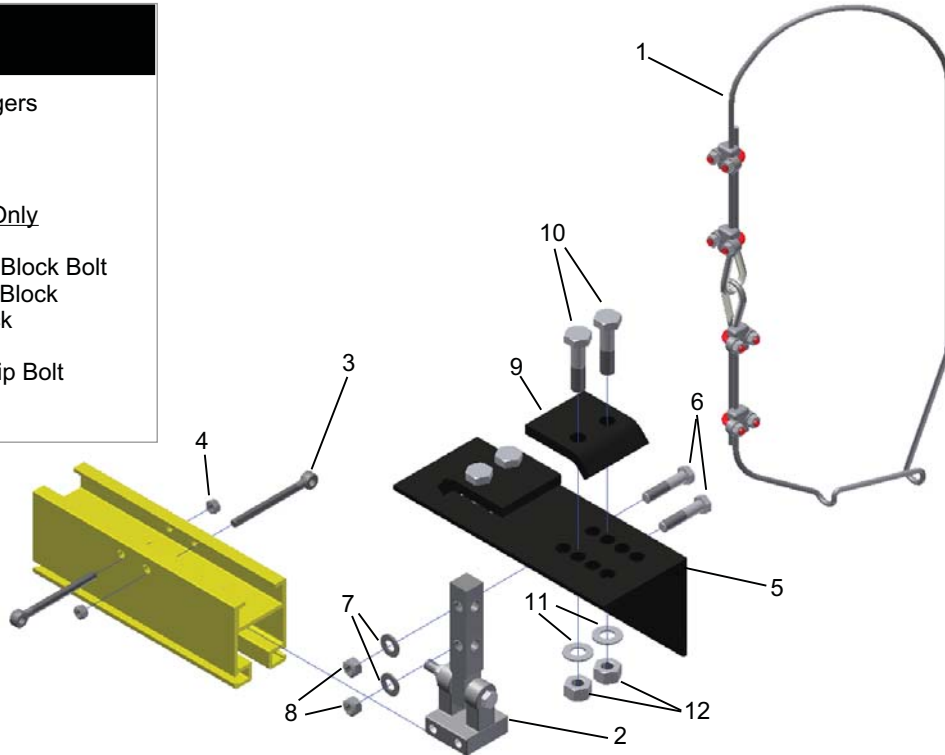
INSTALLATION PROCEDURE

1. Drill (2) holes in the center of where the header steel will be directly above ETA Runway into top channel of rail. (See Drilling guide below)
2. Remove the (2) rod ends & (2) nuts (Items 3,4) on Hanger Block (Item 2).
3. Slide hanger block (Item 2) into top channel of ETA rail. Place rod ends (Item 3) through runway rail & hanger block and secure with nuts (Item 4) until snug against rail.

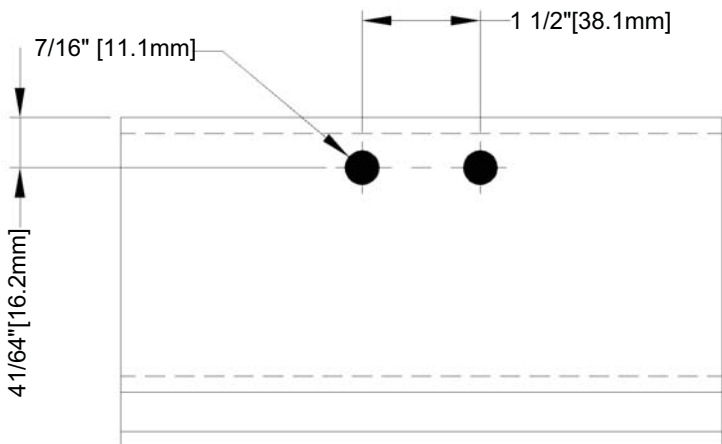
Below steps are for 27055/27057 Beam Hangers only; for 25286 block hanger skip to steps (6 & 7)

4. Remove hardware (Items 9,10,11,12) from hanger clip (item 5). Center hanger clip below header steel and position so runway rail will be under Beam hanger (item 5). Bolt on rollover clips (item 9) into the closest holes to the center of header beam using washers (item 11) and nuts (item 12) until snug tight.
- This procedure requires the installer to lift entire rail and hangers to the header steel.
5. Remove items (6,7,8) from Hanger Clip (item 5) and bolt hanger block (item 2) to Hanger Clip.
6. Fasten Safety cable (Item 1) through rod end holes and around header steel. Refer to Safety cable installation instructions.
7. Continue until all required hangers are placed onto header steel.

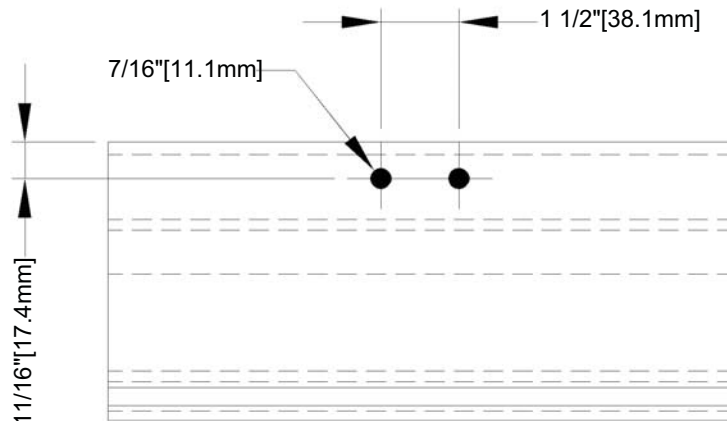
| REF. | DESCRIPTION |
|------------------------------------|---------------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | ETA-4/5 Block Hanger |
| 3 | Hanger rod end bolt |
| 4 | Hanger rod end nut |
| <u>For 27055/27057 Models Only</u> | |
| 5 | ETA Hanger Clip |
| 6 | 1/2-13 X 2" Hanger Clip to Block Bolt |
| 7 | Washer for Hanger Clip to Block |
| 8 | Nut for Hanger Clip to Block |
| 9 | ETA-4/5 Rollover Clip |
| 10 | 5/8-11 X 2 1/2" Rollover Clip Bolt |
| 11 | Washer for Rollover Clip |
| 12 | Nut for Rollover Clip |



Drilling Guide for ETA-4



Drilling Guide for ETA-5



INSTALLATION OF THE ETA-4/5 25473/25474/25467 ADJUSTABLE BLOCK HANGER ASSEMBLY

- Shown as an exploded assembly, the ETA-4/5 25467 Hanger Assembly is shipped completely assembled.
- The ETA-4/5 25473 Hanger Assembly can be used for beams 2.33" to 3.33". The ETA-4/5 25474 Hanger Assembly can be used for beams 4" to 8". The assembly can be mounted to header steel that is either parallel or perpendicular to runway.

INSTALLATION PROCEDURE

1. Drill (2) holes in the center of where the header steel will be directly above ETA Runway into top channel of rail. (See Drilling guide below)
2. Remove the (2) rod ends & (2) nuts (Items 3,4) on Hanger Block (Item 2).
3. Slide hanger block (Item 2) into top channel of ETA rail. Place rod ends (Item 3) through runway rail & hanger block and secure with nuts (Item 4) until snug against rail.

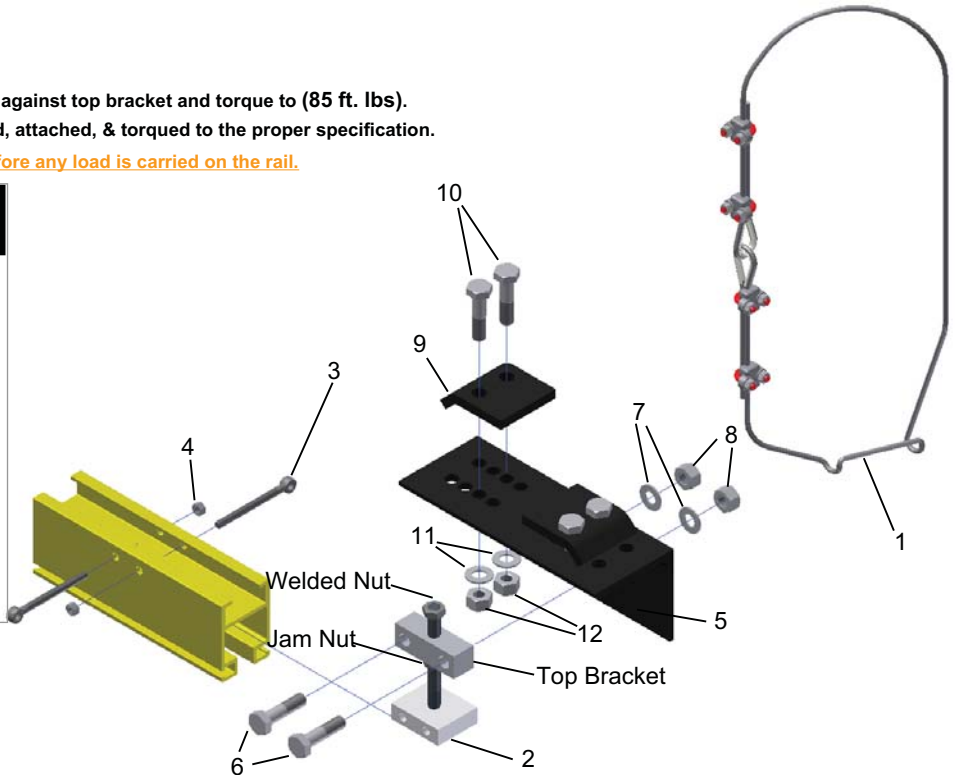
Below steps are for 25473/25474 Hangers only; for 25467 Hanger skip to steps (6 & 7)

4. Remove hardware (Items 9,10,11,12) from hanger clip (item 5). Center hanger clip below header steel and position so runway rail will be under Beam hanger (item 5). Bolt on rollover clips (item 9) into the closest holes to the center of header beam using washers (item 11) and nuts (item 12) until snug tight.
 - This procedure requires the installer to lift entire rail and hangers to the header steel.
5. Remove items (6,7,8) from Hanger Block (item 2) and bolt hanger block (item 2) to Hanger Clip until snug tight.
6. Fasten Safety cable (Item 1) through rod end holes and around header steel. Refer to Safety cable installation instructions.
7. Continue until all required hangers are placed onto header steel.

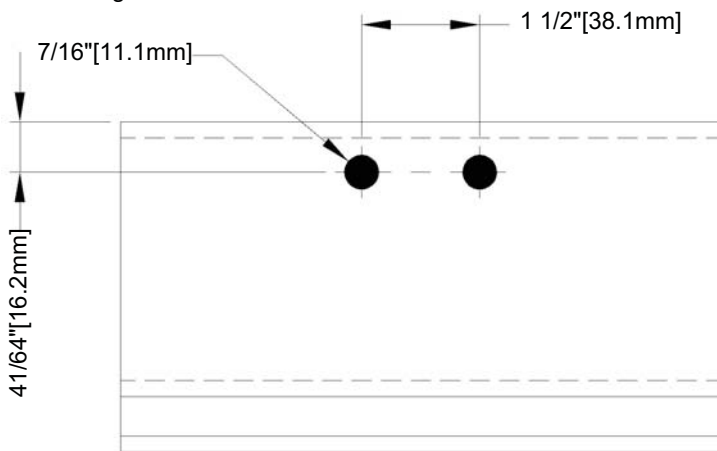
RAIL LEVELING PROCEDURE

1. Loosen jam nut (See Below)
2. Adjust height by turning welded nut (see below)
3. When proper adjustment is obtained, run jam nut against top bracket and torque to (85 ft. lbs).
4. Verify that ALL Hanger Assemblies are positioned, attached, & torqued to the proper specification.
5. **It is vital that all hardware is properly secured before any load is carried on the rail.**

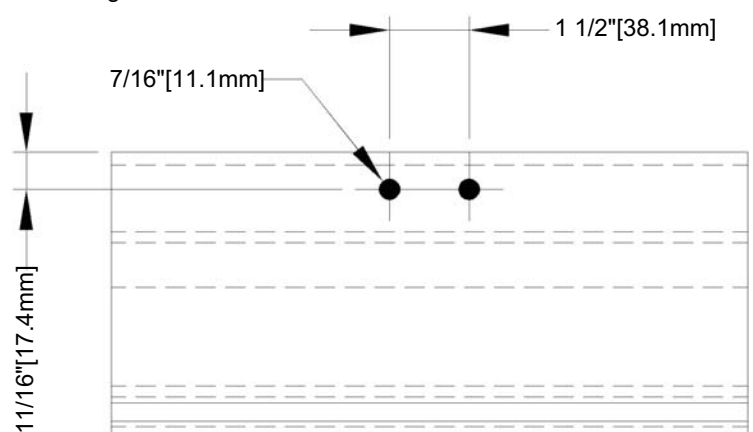
| REF. | DESCRIPTION |
|------------------------------------|-------------------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | ETA-4/5 Adjustable Hanger Block |
| 3 | Hanger rod end bolt |
| 4 | Hanger rod end nut |
| For 25473/25474 Models Only | |
| 5 | ETA Hanger Clip |
| 6 | 5/8-11 X 2 3/4" Hanger Clip to Block Bolt |
| 7 | Washer for Hanger Clip to Block |
| 8 | Nut for Hanger Clip to Block |
| 9 | ETA-4/5 Rollover Clip |
| 10 | 5/8-11 X 2 1/2" Rollover Clip Bolt |
| 11 | Washer for Rollover Clip |
| 12 | Nut for Rollover Clip |



Drilling Guide for ETA-4



Drilling Guide for ETA-5



INSTALLATION OF THE ETA-8 27059/27061 BEAM & 25170 BLOCK HANGER ASSEMBLY

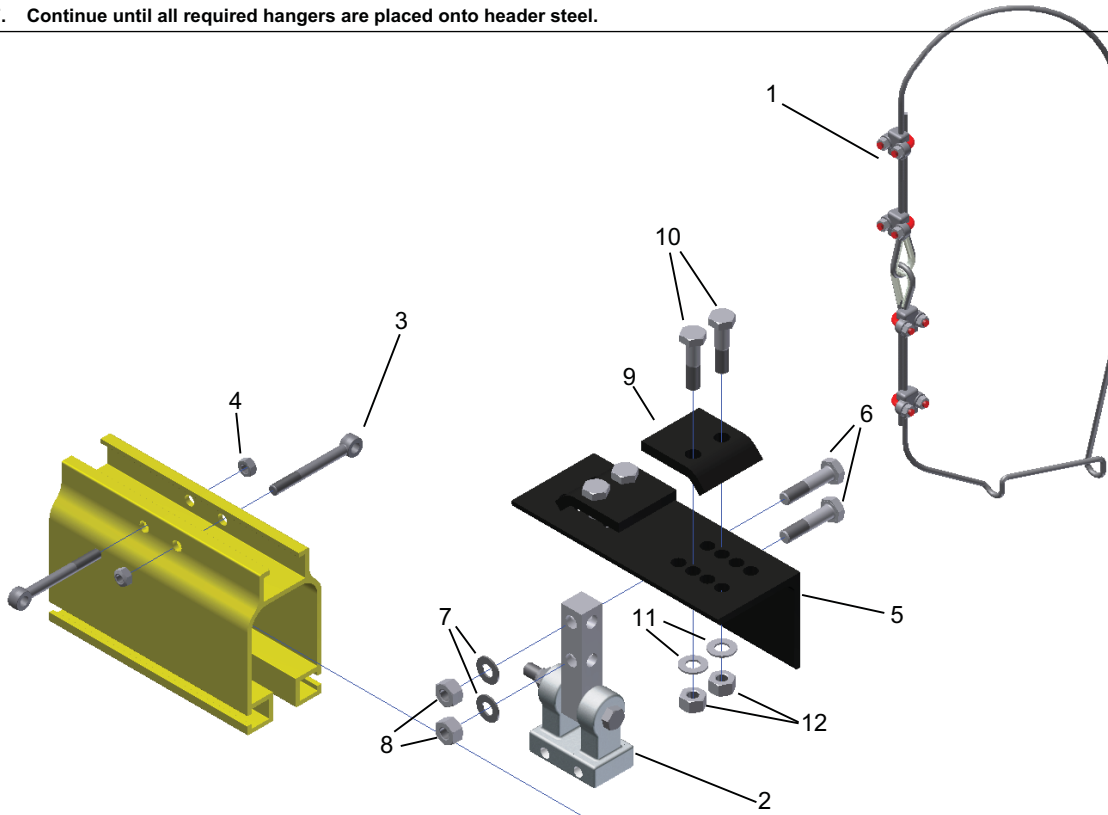
- Shown as an exploded assembly, the ETA-8 25170 Hanger Assembly is shipped completely assembled.
- The ETA-8 27059 Hanger Assembly can be used for beams 2.33" to 3.33". Assembly can be mounted to header steel that is either parallel or perpendicular to runway.
- The ETA-8 27061 Hanger Assembly can be used for beams 4" to 8". Assembly can be mounted to header steel that is either parallel or perpendicular to runway.

INSTALLATION PROCEDURE

1. Drill (2) holes in the center of where the header steel will be directly above ETA Runway into top channel of rail. (See Drilling guide below)
2. Remove the (2) rod ends & (2) nuts (Items 3,4) on Block Hanger (Item 2).
3. Slide Block Hanger (Item 2) into top channel of ETA rail. Place rod ends (Item 3) through runway rail & block hanger and secure with nuts (Item 4) until snug against rail.

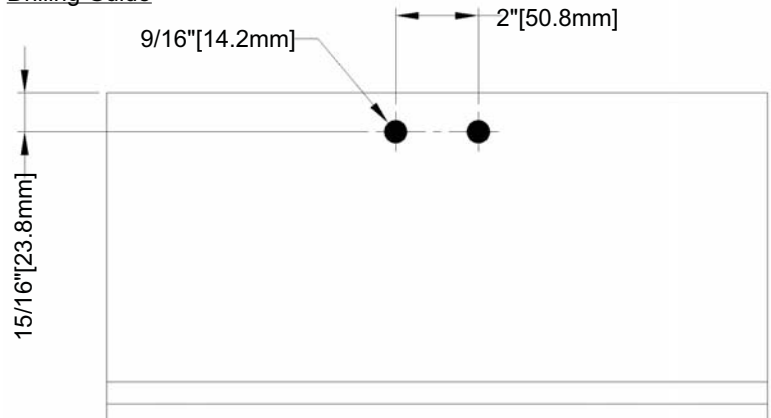
Below steps are for 27059/27061 Beam Hangers only; for 25170 block hanger skip to steps (6 & 7)

4. Remove hardware (Items 9,10,11,12) from hanger clip (item 5). Center hanger clip below header steel and position so runway rail will be under Beam hanger (item 5). Bolt on rollover clips (item 9) into the closest holes to the center of header beam using washers (item 11) and nuts (item 12) until snug tight.
 - This procedure requires the installer to lift entire rail and hangers to the header steel.
5. Remove items (6,7,8) from Hanger Clip (item 5) and bolt block hanger (item 2) to Hanger Clip until snug tightened.
6. Fasten Safety cable (Item 1) through rod end holes and around header steel. Refer to Safety cable installation instructions.
7. Continue until all required hangers are placed onto header steel.



| REF. | DESCRIPTION |
|------------------------------------|-------------------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | ETA-8 Block Hanger |
| 3 | Hanger rod end bolt |
| 4 | Hanger rod end nut |
| <i>For 27059/27061 Models Only</i> | |
| 5 | ETA-8 Hanger Clip |
| 6 | 5/8-11 X 2 3/4" Hanger Clip to Block Bolt |
| 7 | Washer for Hanger Clip to Block |
| 8 | Nut for Hanger Clip to Block |
| 9 | ETA-8 Rollover Clip |
| 10 | 5/8-11 X 2 1/2" Rollover Clip Bolt |
| 11 | Washer for Rollover Clip |
| 12 | Nut for Rollover Clip |

Drilling Guide



INSTALLATION OF THE ETA-8 25471/25472/25465 ADJUSTABLE BLOCK HANGER ASSEMBLY

- Shown as an exploded assembly, the ETA-8 25465 Hanger Assembly is shipped completely assembled.
- The ETA-8 25471 Hanger Assembly can be used for beams 2.33" to 3.33". The ETA-8 25472 Hanger Assembly can be used for beams 4" to 8". The assembly can be mounted to header steel that is either parallel or perpendicular to runway.

INSTALLATION PROCEDURE

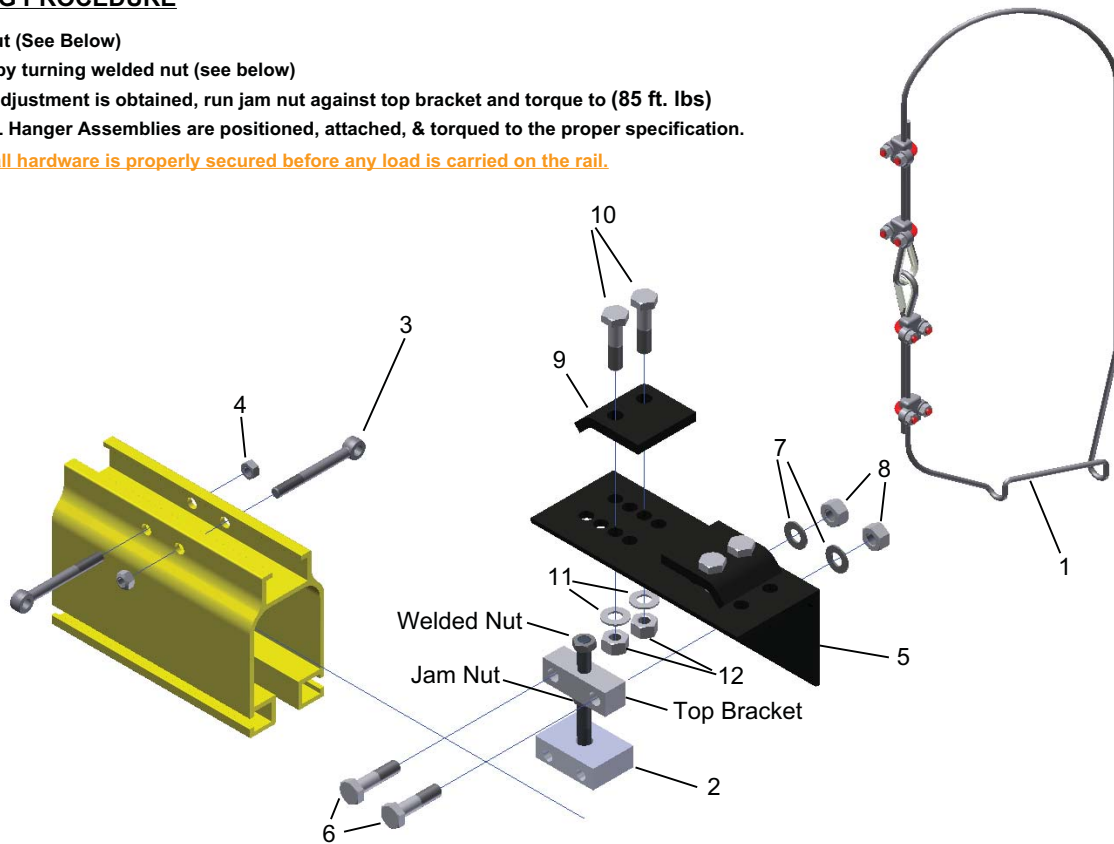
1. Drill (2) holes in the center of where the header steel will be directly above ETA Runway into top channel of rail. (See Drilling guide below)
2. Remove the (2) rod ends & (2) nuts (Items 3,4) on Hanger Block (Item 2).
3. Slide hanger block (Item 2) into top channel of ETA rail. Place rod ends (Item 3) through runway rail & hanger block and secure with nuts (Item 4) until snug against rail.

Below steps are for 25471/25472 Hangers only; for 25465 Hanger skip to steps (6 & 7)

4. Remove hardware (Items 9,10,11,12) from hanger clip (item 5). Center hanger clip below header steel and position so runway rail will be under Beam hanger (item 5). Bolt on rollover clips (item 9) into the closest holes to the center of header beam using washers (item 11) and nuts (item 12) until snug tight.
- This procedure requires the installer to lift entire rail and hangers to the header steel.
5. Remove items (6,7,8) from Hanger Block (item 2) and bolt hanger block (item 2) to Hanger Clip until snug tight.
6. Fasten Safety cable (Item 1) through rod end holes and around header steel. Refer to Safety cable installation instructions.
7. Continue until all required hangers are placed onto header steel.

RAIL LEVELING PROCEDURE

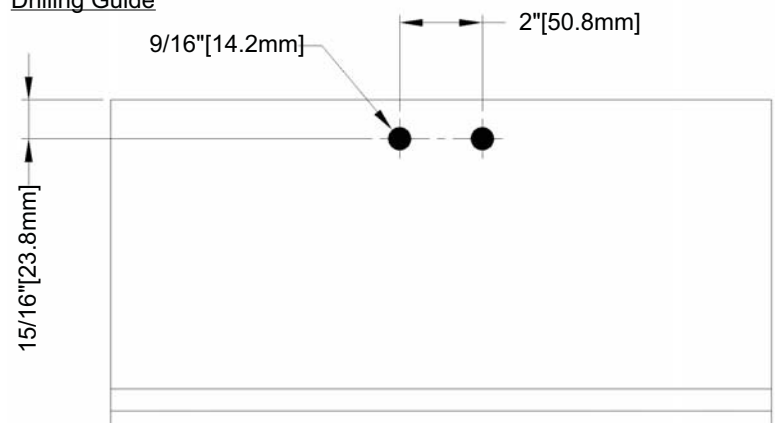
1. Loosen jam nut (See Below)
2. Adjust height by turning welded nut (see below)
3. When proper adjustment is obtained, run jam nut against top bracket and torque to (85 ft. lbs)
4. Verify that ALL Hanger Assemblies are positioned, attached, & torqued to the proper specification.
5. It is vital that all hardware is properly secured before any load is carried on the rail.



REF. DESCRIPTION

| | |
|------------------------------------|-------------------------------------------|
| 1 | Safety Cable for ETA Hangers |
| 2 | ETA-8 Adjustable Block Hanger |
| 3 | Hanger rod end bolt |
| 4 | Hanger rod end nut |
| <u>For 25471/25472 Models Only</u> | |
| 5 | ETA-8 Hanger Clip |
| 6 | 5/8-11 X 2 3/4" Hanger Clip to Block Bolt |
| 7 | Washer for Hanger Clip to Block |
| 8 | Nut for Hanger Clip to Block |
| 9 | ETA-8 Rollover Clip |
| 10 | 5/8-11 X 2 1/2" Rollover Clip Bolt |
| 11 | Washer for Rollover Clip |
| 12 | Nut for Rollover Clip |

Drilling Guide

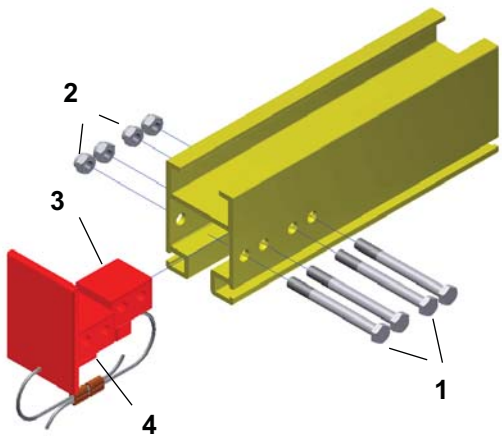


INSTALLATION OF THE 24900/25194/24950 CAP ASSEMBLIES

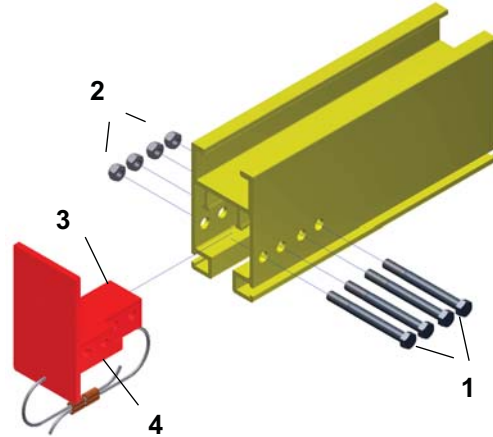
- Shown as an exploded assemblies, the Double End Cap Assembly is shipped separately with nuts and bolts attached.
- The 1/8" safety cable and crimped sleeves are not intended to be removed and will **VOID** the warranty.
- Rail comes pre-drilled from the factory. Drilling Guide is available on next page (Figure 1.)

INSTALLATION PROCEDURE

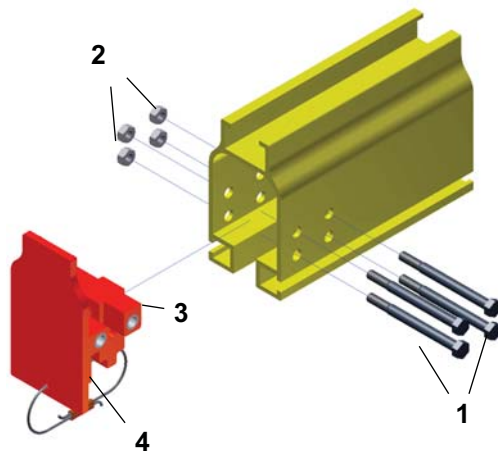
1. Remove (Items 1 & 2) from End Cap Assembly (Items 3 & 4).
2. Slide inner stop (Item 3) Assy. into runway until bolt holes line up.
3. Insert bolts and attach locknuts, (Items 1&2), tighten until nut is snug, do not over-tighten and collapse rail.
4. Slide End Cap over end of Rail until bolt holes line up.
5. Insert bolts and attach locknuts (Items 1 & 2), tighten until nut is snug, do not over-tighten and collapse rail.



ETA-4 (24900)



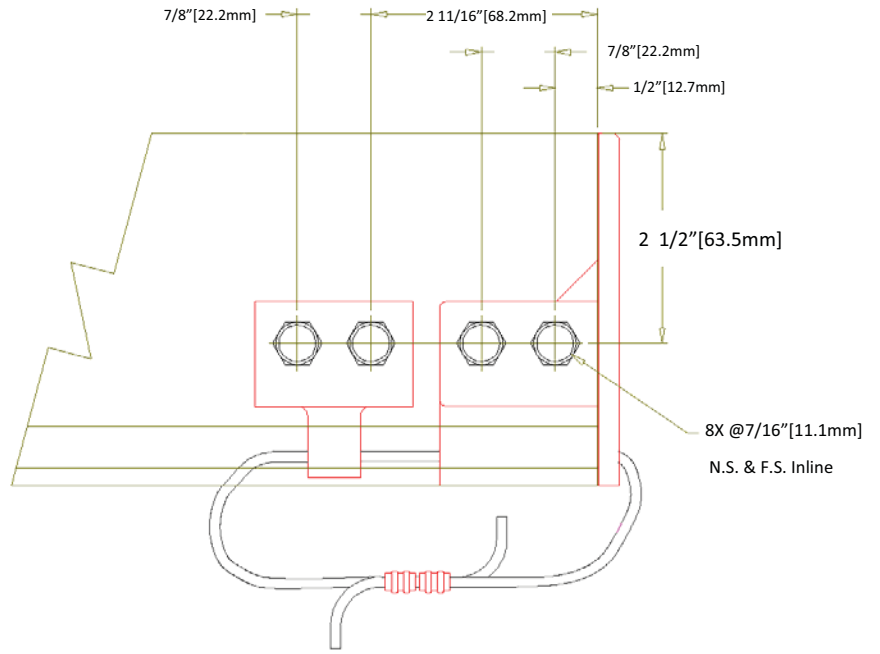
ETA-5 (25194)



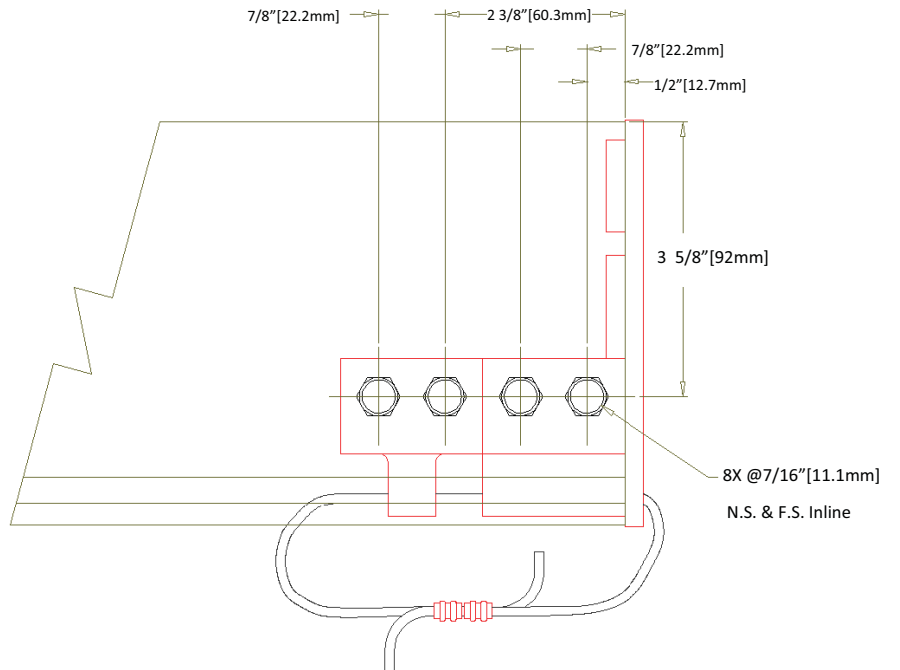
ETA-8 (24950)

End Stop Assembly Drilling Guide (Fig. 1)

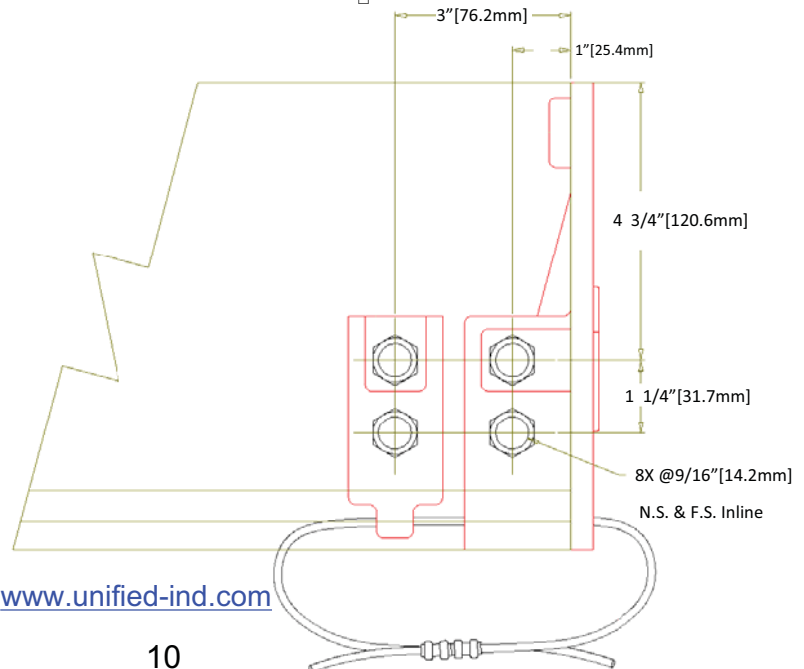
24900 ETA-4



25194 ETA-5



24950 ETA-8

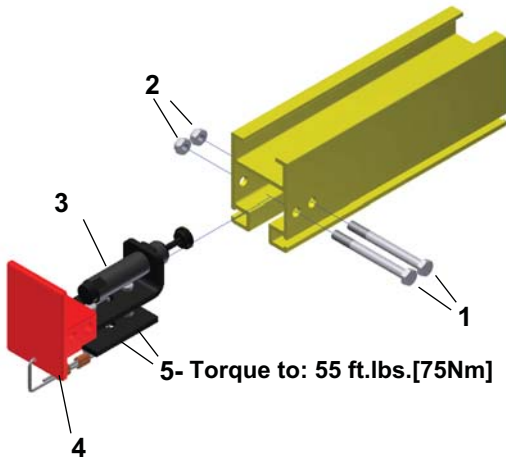


INSTALLATION OF THE 25133/25134/25135 STOP SHOCK ABSORBER ASSEMBLIES

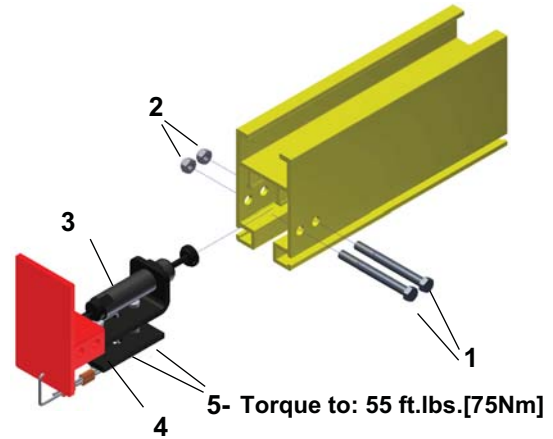
- Shown as an exploded assemblies, the End Cap Shock Absorber Assembly is shipped separately with nuts and bolts attached.
- The 1/8" safety cable and crimped sleeves are not intended to be removed and will **VOID** the warranty.

INSTALLATION PROCEDURE

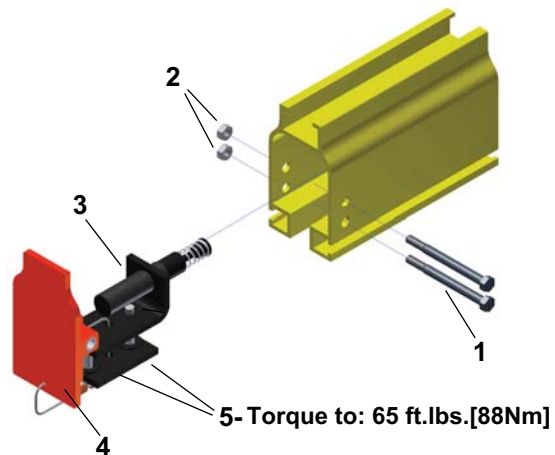
1. Remove (Items 1 & 2) from End Cap Assembly (Items 3 & 4).
2. Loosen the (2) bolts (item 5) in bottom of (item 3) and slide into channel of rail followed by End Cap (item 4) into rail until bolt holes line up.
3. Torque bolts (items 5)
4. Insert bolts and attach locknuts, (Items 1 & 2), tighten until nut is snug, do not over-tighten and collapse rail.



ETA-4 (25133)



ETA-5 (25134)



ETA-8 (25135)

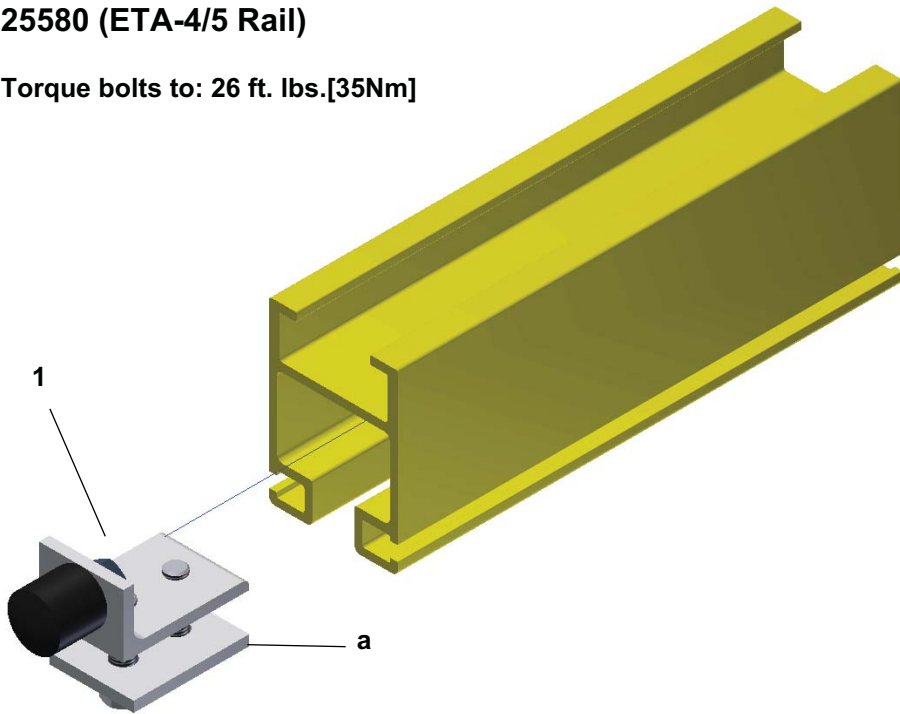
INSTALLATION OF THE 25570/25580 MID RAIL STOP ASSEMBLY

INSTALLATION PROCEDURE

1. Loosen bolts on Mid Rail Stop assembly. (Item 1)
 2. Slide Mid Rail Stop assembly into ETA rail with (Detail a) portion of assembly below rail.
 3. After Mid Rail Stop assembly is positioned torque bolts to (see below)
-

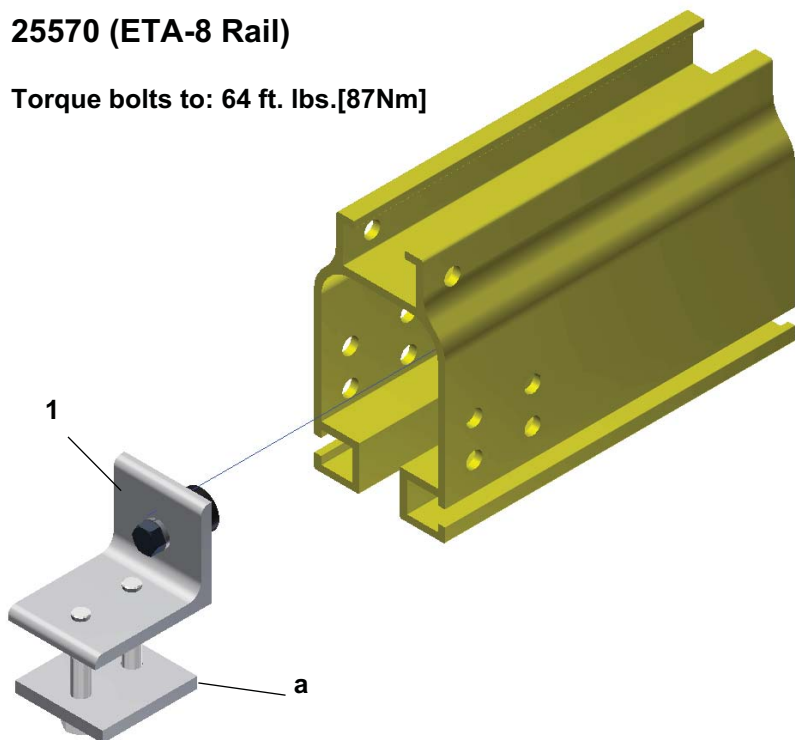
25580 (ETA-4/5 Rail)

Torque bolts to: 26 ft. lbs.[35Nm]



25570 (ETA-8 Rail)

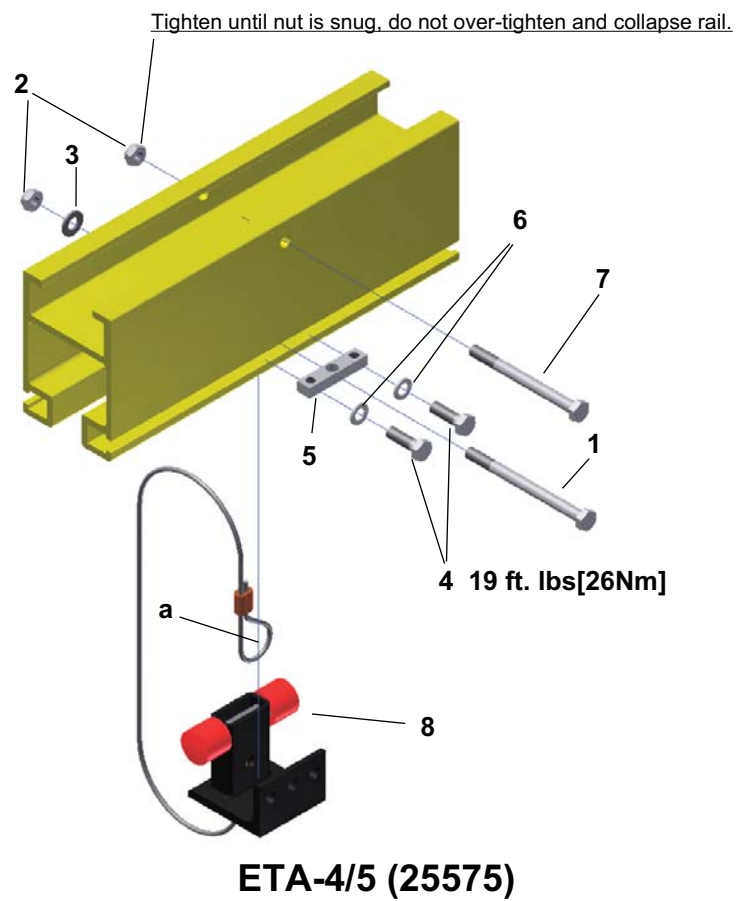
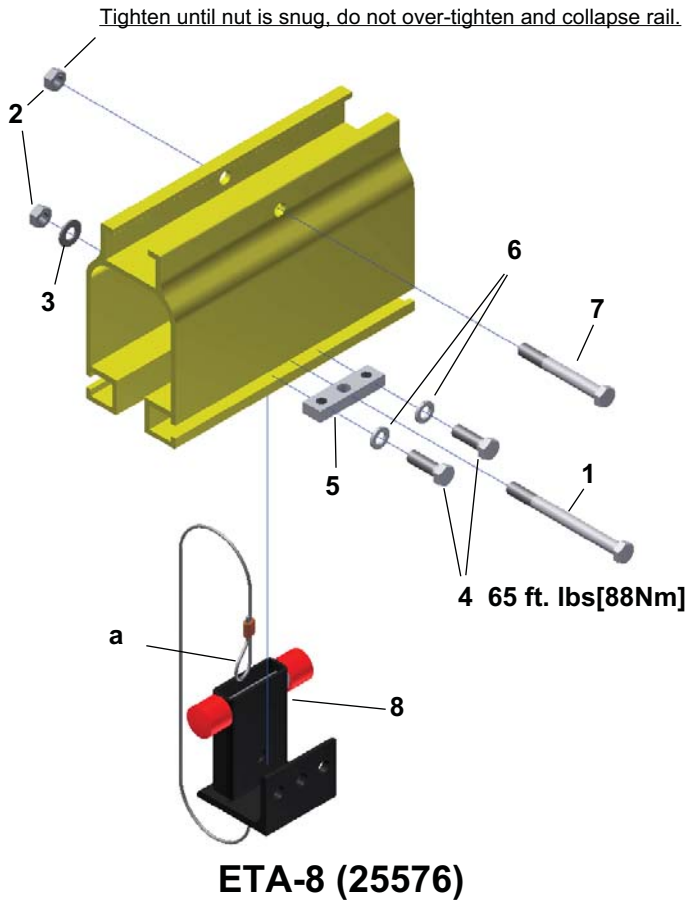
Torque bolts to: 64 ft. lbs.[87Nm]



INSTALLATION OF THE 25575/25576 INSERTABLE MID RAIL STOP ASSEMBLY

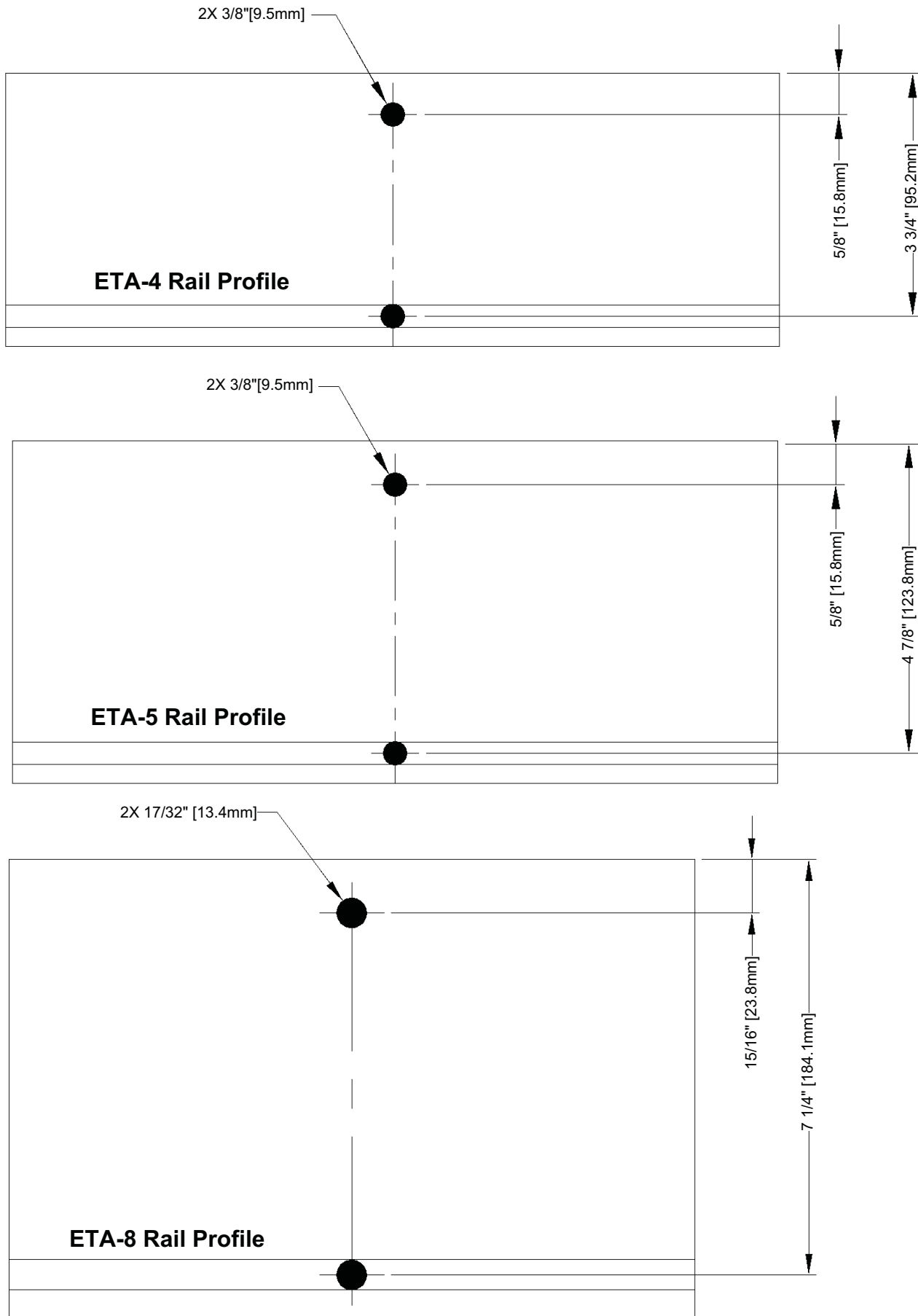
INSTALLATION PROCEDURE

1. Drill Top and bottom holes in upper and lower channel at desired location (see fig 2. on next page) for specific rail type hole location and hole size)
2. Loosen/remove washers nuts and bolts and plate on Mid Rail Stop (item 8) assembly. (Items 1,2,4,5 & 6)
3. Place plate (item 5) into lower channel of rail. With a flat head screw driver place upright with holes facing out. Insert Mid Stop assembly (item 8) into rail and line up with plate. Screw bolts and lock washers (items 4 & 6) into Mid Stop assembly, leave loose.
4. Slide Mid Stop assembly (item 8) into place over the lower drilled hole. Place lower bolt (item 1) through Mid Stop assembly and out the other side of rail. Secure with washer (item 3) and nut (item 2). Tighten until nut seats against washer.
5. Insert bolt (item 7) into upper hole of rail and place through safety wire loop (item a) and then through the next hole in rail and secure with nut (item 2). NOTE: Please make sure wire loop is inside the upper channel of rail.
6. After Mid Rail Stop assembly is positioned torque bolts (item 4) to (see below)



MID RAIL STOP ASSEMBLY DRILLING GUIDE

Figure 2



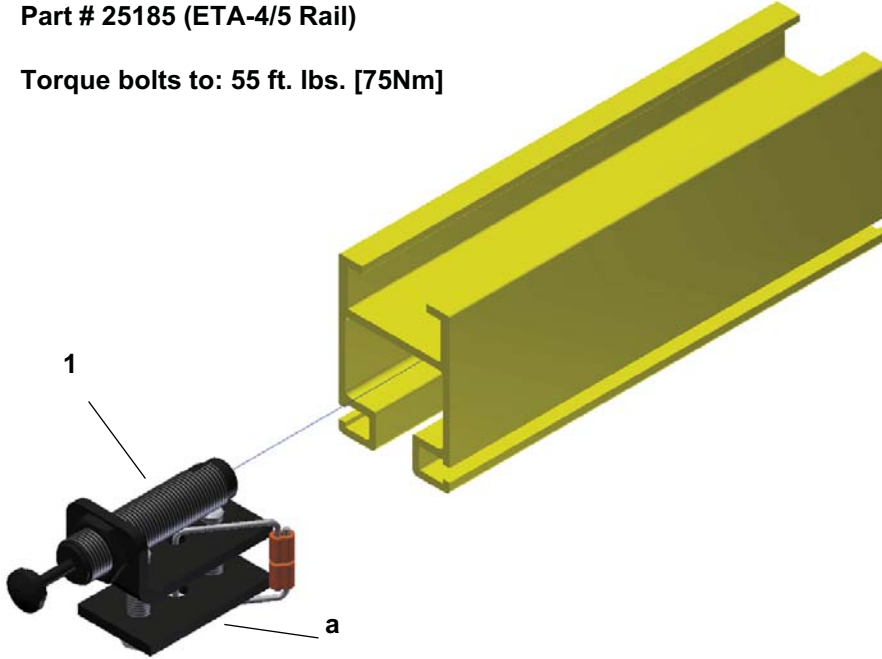
INSTALLATION OF THE 25185/25179 POSITION STOP SHOCK ASSEMBLY

INSTALLATION PROCEDURE

1. Loosen bolts on Position Stop Shock Absorber Assembly. (Item 1)
 2. Slide Stop Shock Absorber Assembly into ETA rail with (Detail a) portion of assembly below rail.
 3. After Stop Shock Absorber Assembly is positioned torque bolts to (see below)
-

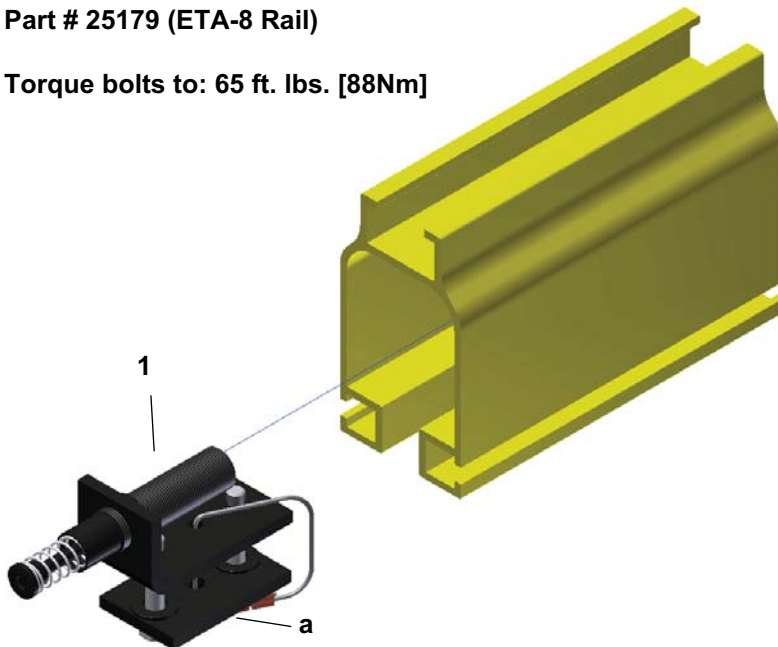
Part # 25185 (ETA-4/5 Rail)

Torque bolts to: 55 ft. lbs. [75Nm]

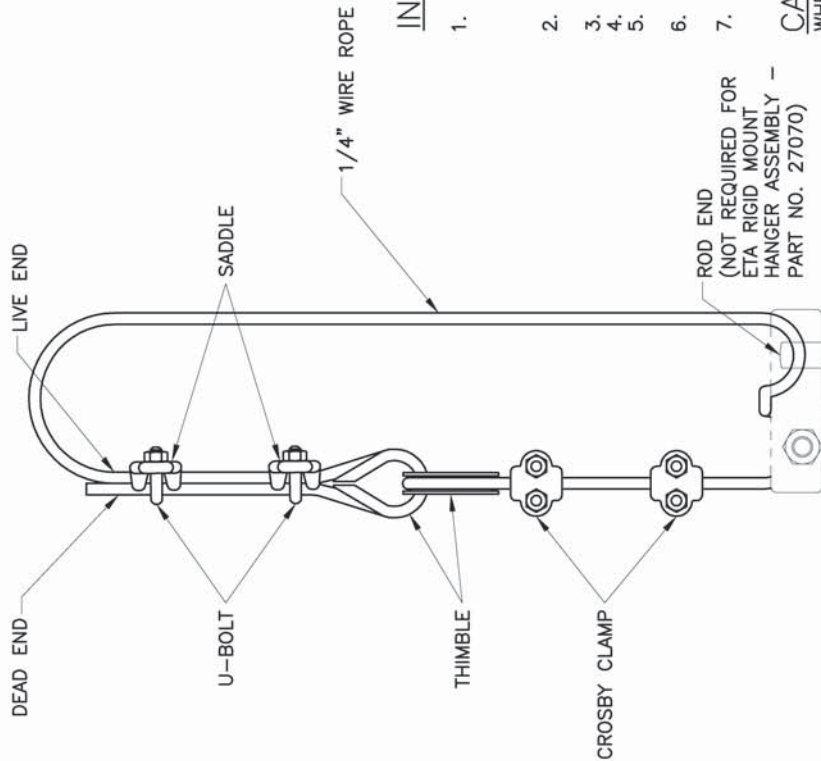


Part # 25179 (ETA-8 Rail)

Torque bolts to: 65 ft. lbs. [88Nm]



INSTALLATION OF THE 78287 SAFETY CABLE ASSEMBLY



INSTALLING SAFETY CABLE:

1. ROUTE THE WIRE ROPE THROUGH ONE ROD END, OVER RUNWAY AND THROUGH THE SECOND ROD END AND LAST OVER HEADER. (ROD END NOT REQUIRED FOR ETA RIGID MOUNT HANGER ASSEMBLY – PART NO. 27070. WIRE TO BE ROUTED THROUGH FIELD DRILLED HOLE AND OVER HEADER FOR PART NO. 27070 ONLY.)
2. USE THE TWO THIMBLES TO MAKE AN INTERLOCKING CONNECTION AND ROUTE THE WIRE ROPE AROUND THE THIMBLES.
3. APPLY THE FIRST CLAMP ONE BASE WIDTH FROM DEAD END OF THE WIRE ROPE, SNUG NUTS.
4. APPLY SECOND CLAMP AS CLOSE TO THIMBLE AS POSSIBLE, SNUG NUTS.
5. MAXIMUM HOLDING POWER IS ACHIEVED WHEN THE DISTANCE BETWEEN THE CLAMP AT ONE END IS 6-7 TIMES THE DIAMETER OF THE WIRE ROPE APART FROM THE OTHER CLAMP.
6. TAKE UP SLACK BY APPLYING TENSION TO THE THIMBLE AND CABLE; TIGHTEN NUTS EVENLY, ALTERNATING FROM ONE NUT TO THE OTHER UNTIL REACHING 15 FT. LBS. OF TORQUE.
7. ALL REDUNDANT SUPPORT SYSTEMS SHALL BE INSTALLED TO MINIMIZE LOAD DROP TO 1" OR LESS IN THE EVENT OF FAILURE AT THE PRIMARY CONNECTION.

CAUTION

WHEN ASSEMBLING WIRE ROPE CLAMPS TO WIRE ROPE BE SURE THE SADDLE PART OF THE CLAMP IS ON THE LIVE END OF THE ROPE. THE U-BOLT PART OF THE CLAMP SHOULD BE ON THE DEAD OR SHORT END OF THE ROPE.

SAFETY CABLE ASSEMBLY VIEW

INSTALLATION OF AN ETA RAIL SYSTEM

STEP 1: Insure that your overhead steel will comply with your system to be installed (ie):

1. Weight.
2. Hang points.

STEP 2: You must first slide the hanger assembly into the upper channel of the rail. Move hanger to the approximate desired location. Follow hanger installation instructions on pages:

SAFETY NOTE

Unified Ind. Strongly recommends the use of non-coated safety cable on all hangers.

NOTE

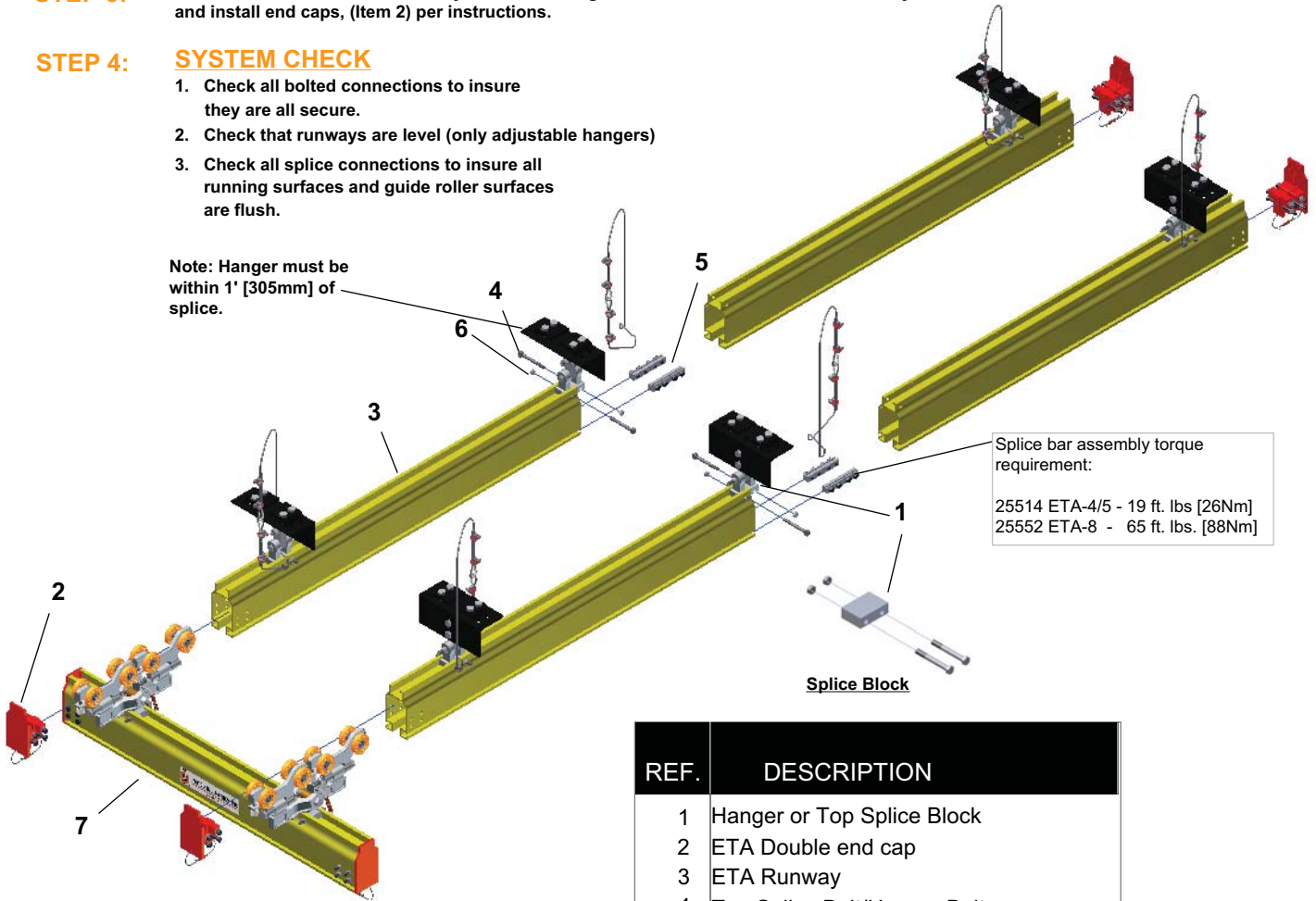
When splicing two rails together:

1. Slide lower portion of hanger or splice block (Item 1) into top channel of one rail, insert rod end or top splice bolt, (item 4) into place. Insert ETA splice bar assemblies into both side channels of one rail. (Item 5)
Slide second rail onto hanger or splice block and ETA splice bar assemblies from the other side, insert rod end or second top splice bolt into place.
2. Now that the two rails are butted up to each other, center ETA splice bar assemblies, (Item 5) across both rails and tighten to recommended torque. This will insure that the running surface and guide roller surface remain flush to each other.
3. Now tighten upper rod ends or upper splice bolts, (Item 4) until snug against rail.

STEP 3: Lift and roll end trucks into runways. Position bridge a safe distance from ends of runways and install end caps, (Item 2) per instructions.

STEP 4: SYSTEM CHECK

1. Check all bolted connections to insure they are all secure.
2. Check that runways are level (only adjustable hangers)
3. Check all splice connections to insure all running surfaces and guide roller surfaces are flush.



Splice bar assembly torque requirement:
25514 ETA-4/5 - 19 ft. lbs [26Nm]
25552 ETA-8 - 65 ft. lbs. [88Nm]

| REF. | DESCRIPTION |
|------|-----------------------------|
| 1 | Hanger or Top Splice Block |
| 2 | ETA Double end cap |
| 3 | ETA Runway |
| 4 | Top Splice Bolt/Hanger Bolt |
| 5 | ETA Splice bar assembly |
| 6 | Top lock nut |
| 7 | ETA Bridge |

INSTALLATION OF A STEEL BRIDGE SYSTEM

STEP 1: Insure that your overhead steel will comply with your system to be installed (ie):

1. Weight.
2. Hang points.

STEP 2: Attach beam clips, (Item 1), to overhead steel and slide into approximate position

NOTE

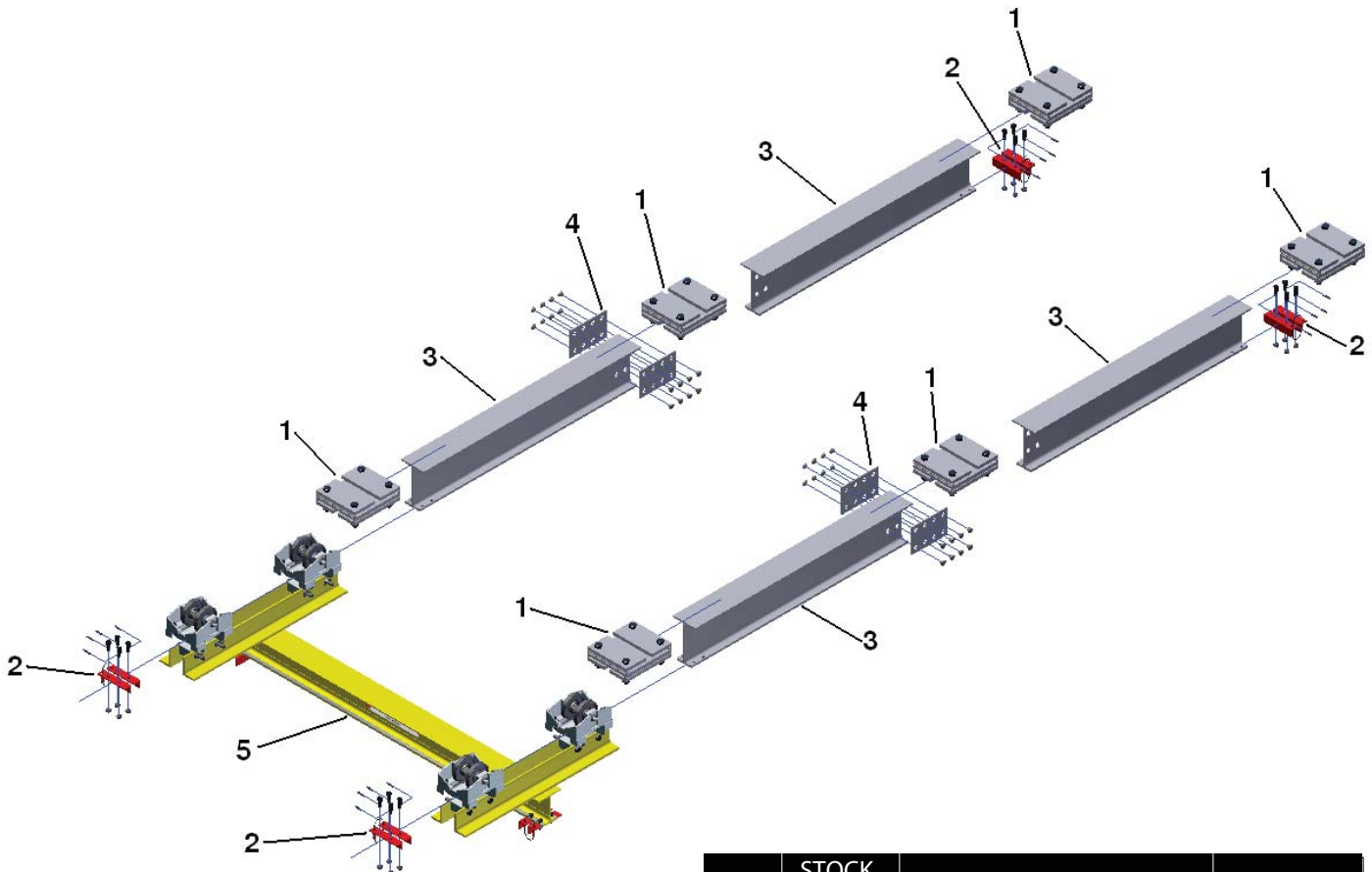
When splicing two rails together:

1. Slide top flange of one runway rail into beam clips (Item 1). Slide next rail into beam clips and push both rails together.
2. Now that the two rails are butted up to each other, center a beam clip, (Item 1), over the location where the beams meet and tighten.
3. Place splice plates on both sides of web where rails butt together insert splice bolts and tighten.

STEP 3: Lift and roll end trucks into runways. Position bridge a safe distance from ends of runways and install end caps, (Item 2) per instructions.

STEP 4: SYSTEM CHECK

1. Check all bolted connections to insure they are all secure.
2. Check that runways are level.
3. Check all splice connections to insure all running surfaces and guide roller surfaces are flush.



| REF. | STOCK CODE | DESCRIPTION | QUANTITY |
|------|------------|--------------------------|----------|
| 1 | | Beam Clip | 6 |
| 2 | 15171 | ES-5025-1 Dual End Stop | 4 |
| 3 | 80039 | 8" Trambeam | 4 |
| 4 | 80890 | Trambeam Splice Assembly | 2 |
| 5 | | Medium Load Bridge | 1 |

INSTALLATION OF THE ETA COILED HOSE RUNWAY & BRIDGE FESTOON PACKAGE

■ Note: ETA runways should be installed level and secured, per instructions prior to festoon installation.

INSTALLATION PROCEDURE

1. Each festoon package (Runway or Bridge) comes with (2) festoon brackets (Item 4). Slide the one with elbows and coated cable ass'y attached (item 4a) into top channel of one ETA runway or bridge. Locate on end of rail closest to plant air supply. Place the other bracket (Item 4b), on other end of the same runway rail.
2. Run coated cable end with rod end through coiled hose assembly (Item 5).
3. Remove one of the two jam nuts on rod end and attach it to the other festoon bracket, (Item 4b), at other end of runway, (cable comes cut and assembled to length).
4. After the rod end has been inserted into festoon bracket put second jam nut on rod end on opposite side of bracket. Adjust jam nuts until proper cable tension is achieved and tighten jam nuts against bracket.
5. Attach plant air supply to whip hose (Item 8a) on festoon bracket (runway festoon kit only).
6. Install coiled hose to bottom elbow on festoon bracket (Item 4a).
7. Use coupling and attach whip hose (Item 8b) to other end of coiled hose.
8. Install bridge per instructions (Item 3).
9. Attach ETA Double End caps per instructions. (Item 2)
10. Connect free end of runway whip hose (Item 8b) to open end of air hose bracket (Item 6), on bridge. (Air Hose bracket included in bridge kit)
11. Install Bridge Festoon Kit using brackets, cable, whip hose, and coiled hose to bridge using steps 1,2,3,4 & 6 above.

■ Unified Industries, Inc. recommends the use of a Filter Regulator or Filter Regulator Lubricator with any air festooning.

If using FR or FRL:

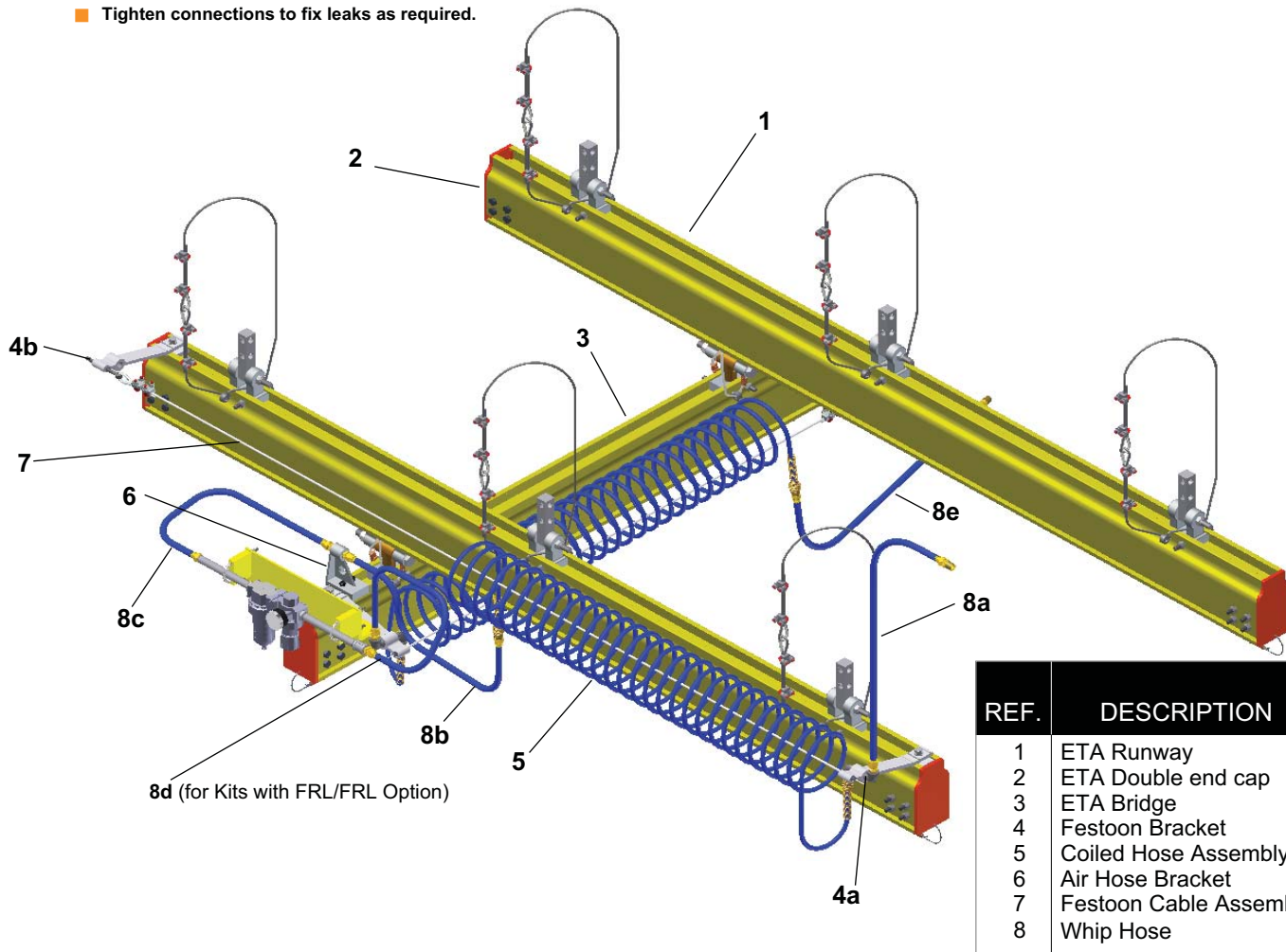
- a. Attach a whip hose (Item 8c) to Air Hose bracket on bridge and to FR or FRL.
- b. Connect another whip hose (Item 8d) to FR or FRL and top elbow of Bridge festoon bracket.

If NOT using FR or FRL:

- a. Attach a whip hose (Item 8c) to Air Hose bracket to top elbow of bridge festoon bracket.
- b. Install coiled hose to bottom elbow on festoon bracket.
- c. Use coupling and attach whip hose (Item 8e) to other end of coiled hose.

SYSTEM CHECK

- Pressurize system and check for leaks.
- Tighten connections to fix leaks as required.



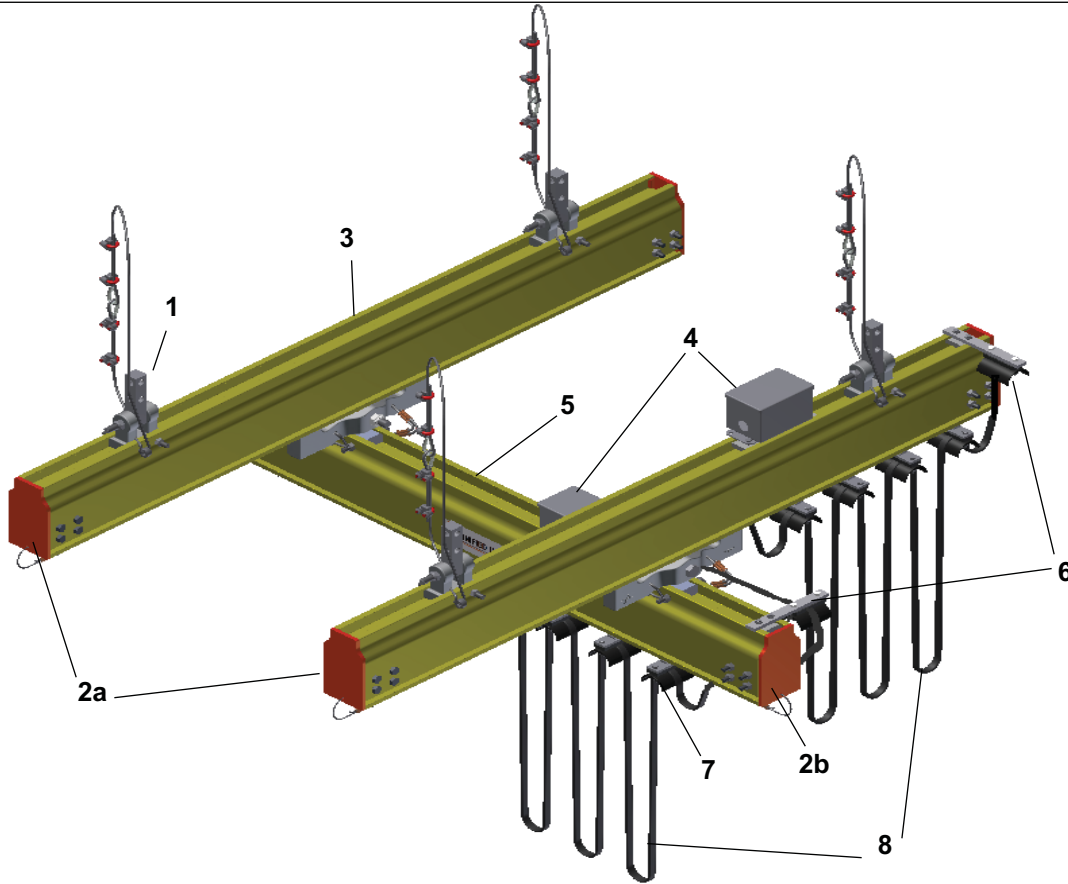
| REF. | DESCRIPTION |
|------|------------------------|
| 1 | ETA Runway |
| 2 | ETA Double end cap |
| 3 | ETA Bridge |
| 4 | Festoon Bracket |
| 5 | Coiled Hose Assembly |
| 6 | Air Hose Bracket |
| 7 | Festoon Cable Assembly |
| 8 | Whip Hose |

INSTALLATION OF ETA FLAT WIRE ELECTRIFICATION

■ Note: ETA runways should be installed level and secured, prior to festoon installation.

INSTALLATION PROCEDURE

1. Loosen nuts and bolts on flat wire saddles attached to the trolleys.
2. Roll trolleys with flat wire saddles (Item 7), into the end of the runway closest to the power drop.
3. Install bridge per instructions page (Item 5).
4. Attach ETA Double End Caps per instructions page (Item 2a).
5. Install load trolley or hoist.
6. Roll trolleys with flat wire saddles into the end of bridge rail.
7. Attach ETA Double End Caps per instructions page (Item 2b).
8. Connect junction boxes, (Item 4), to top of runway and on top of bridge in locations where there will be no interference with bridge operation.
9. Connect plant electrification to runway junction box (Item 4). **NOTE: Make sure power to wire is turned off**
10. Attach flat wire (Item 8), to runway junction box and insert through runway flat wire anchor (Item 6).
11. Insert flat wire through saddles on runway trolleys with maximum equal spacing of five feet.
12. Install end of runway flat wire through bridge flat wire anchor (item 6) and into bridge junction box.
13. Attach bridge flat wire from bridge junction box (Item 4) and insert through bridge flat wire anchor (Item 6).
14. Insert flat wire through saddles on bridge trolleys with maximum equal spacing of five feet.
15. Connect bridge flat wire to hoist.
16. Tighten nuts and bolts on flat wire saddles.



| REF. | DESCRIPTION |
|------|---------------------------|
| 1 | Hanger |
| 2 | ETA Double end cap |
| 3 | ETA Runway |
| 4 | 4" x 4" x 4" Junction Box |
| 5 | ETA Bridge |
| 6 | ETA Flat Wire Anchor |
| 7 | Trolley w/ Saddle |
| 8 | Flatwire |

INSTALLATION OF AN ETA JIB CRANE

■ All standard ETA jibs are shipped in (2) pieces, Jib Column Assembly (see figure 1) and Jib Crane Assembly (see figure 2).

1. Place Jib Column Assembly in desired location.
2. Shim under base plate to level vertical column in all directions.
3. Use concrete lag bolts or threaded rod and epoxy to secure Jib Column Assembly in place. Always allow the manufacturer recommended dry time for epoxy type anchors before installing the Jib Crane Assembly. The print package shipped with the jib will specify the minimum anchor requirements for your Jib Crane. (Anchor Bolts not included with Jib, but may be purchased)
4. Attach lower hinge to lower jib hinge mount as shown in figure 2.
5. Hand tighten the nut on the lower hinge assembly.
6. Attach the upper hinge to the upper hinge mount as shown in figure 2.
7. Tighten down upper and lower hinge nuts enough to completely compress the split lock washer fully.
Do not over tighten.

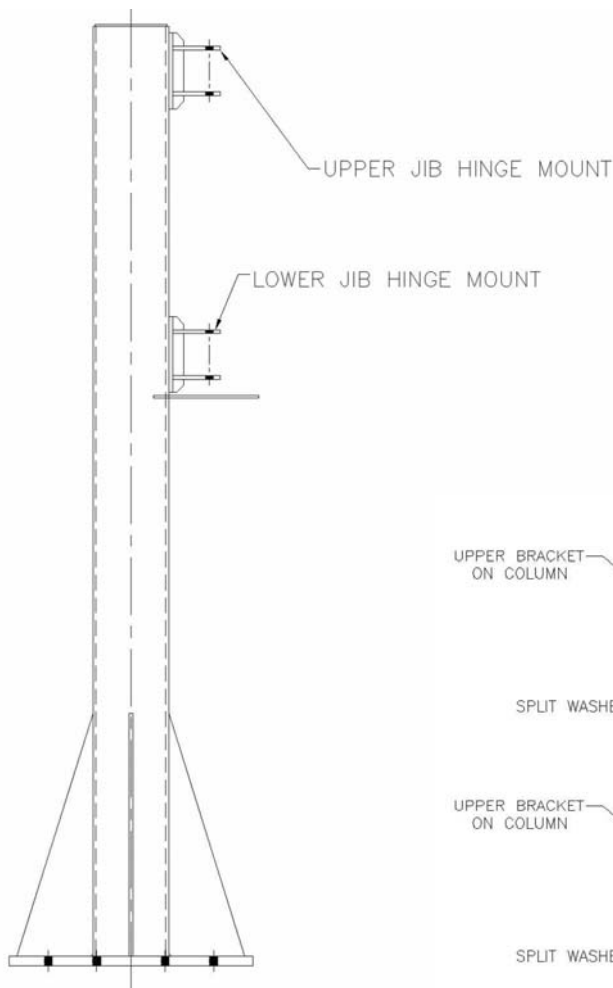


Figure 1 --Jib Column Assembly

ETA Jib and Column Maintenance:

- A visual inspection of all components should be done every 6 months to check for loose, damaged or missing parts. This should include hardware, concrete anchors, tie-rod, upper and lower hinge assemblies and safety pins.
- The grease zerks located on the upper and lower hinges should be greased every 6 months with an all purpose lithium-based grease. For high cycle applications the zerks may need to be greased more often.

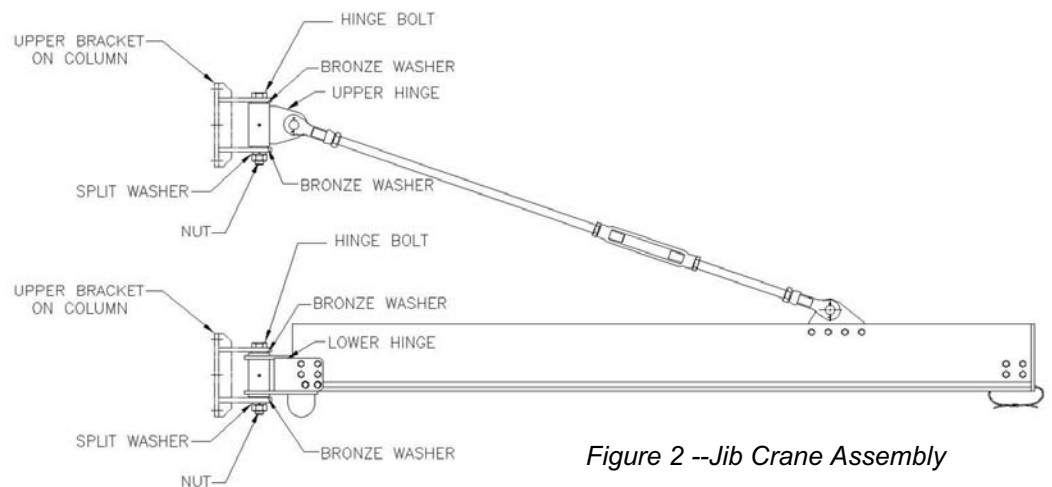


Figure 2 --Jib Crane Assembly



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