

# INSTRUCTION SHEET

## HERCU-LINK TROLLEY RACK DRIVE

This instruction sheet covers the installation of the trolley rack drive onto the support beam. This instruction sheet will give authorized service personnel the information needed to correctly install the trolley rack drive.

### NOTICE

• Refer to the **Installation, Operation and Maintenance manual Form Number MHD56075 for HA1 hoists or Form Number MHD56055 for HA2 hoists for additional information on these products.**

#### Pre-Installation Checks

Refer to Dwg. MHP1177.

Before welding the rack segments onto the trolley beam, install the rack segments on the bottom of the beam lower flange and clamp in place. Mount the trolley on the lower beam flange.

Measure the gap between the outside diameter of the drive pinion and root of rack segment teeth. As shown in Dwg. MHP1177, the trolley drive pinion and rack teeth must have a 0.06 to 0.10 inch (1.5 to 2.5 mm) clearance.

#### To adjust clearance:

Refer to Dwg. MHP1605.

There is an adjustment screw located below the reducer adapter.

1. Loosen capscrews attaching trolley drive to sideplate.
2. Loosen jam nut and rotate adjustment screw to achieve clearance as shown in Dwg. MHP1177.
3. Tighten jam nut and mounting screws.

#### If a larger adjustment is required.

1. Add shims between the rack segment and beam to decrease distance.
2. Remove material from rack segment to increase distance.

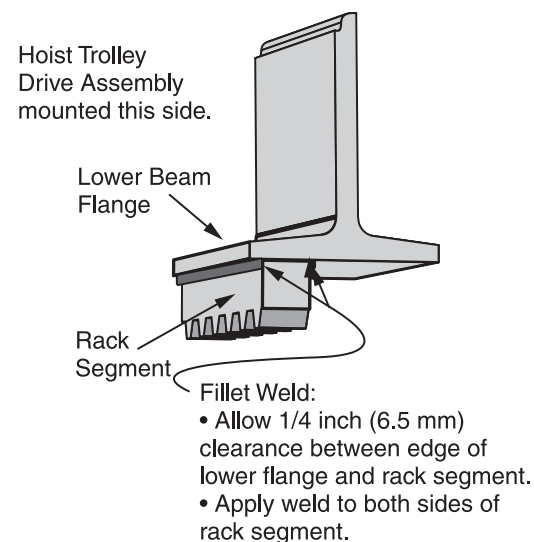
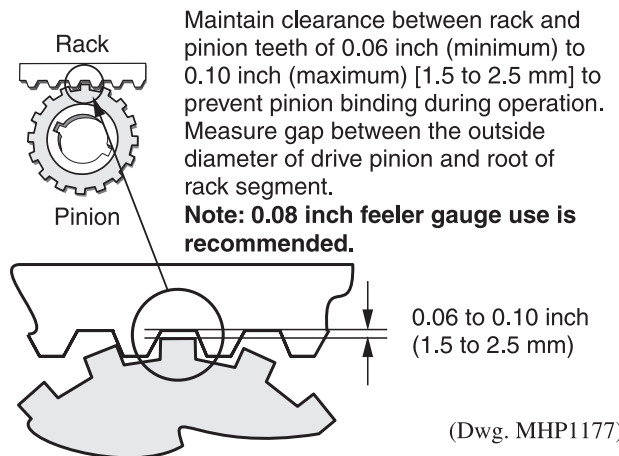
#### Installing Rack Segments Onto Beam

Refer to Dwg. MHP1178 and MHP1632.

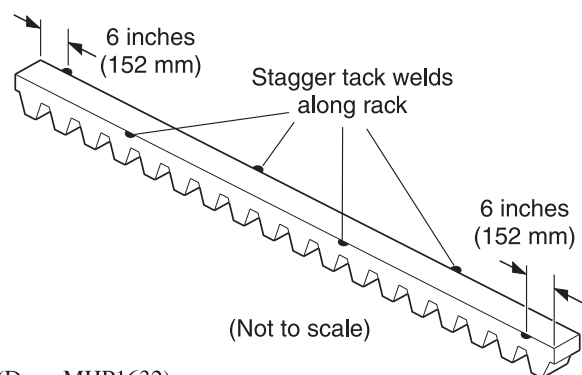
Rack segments should be installed on the outside edge of the lower flange of the trolley beam. Allow 1/4 inch (6.5 mm) clearance between the edge of the lower flange and rack segment for fillet weld. The rack segments should be clamped tight against the lower flange so that there is no sagging. Sagging of the rack could cause the drive pinion to bind as it traverses along the runway beam.

Racks are provided in segments. These segments should be tack welded (refer to Dwg. MHP1632) in place and the trolley traversed the entire length. During this movement observe for any high or low spots and correct. Also check each segment connection for drive tooth contact and correct as necessary.

When all clearances are achieved, weld both sides of the rack to the beam flange to prevent corrosion between the rack segment and beam..

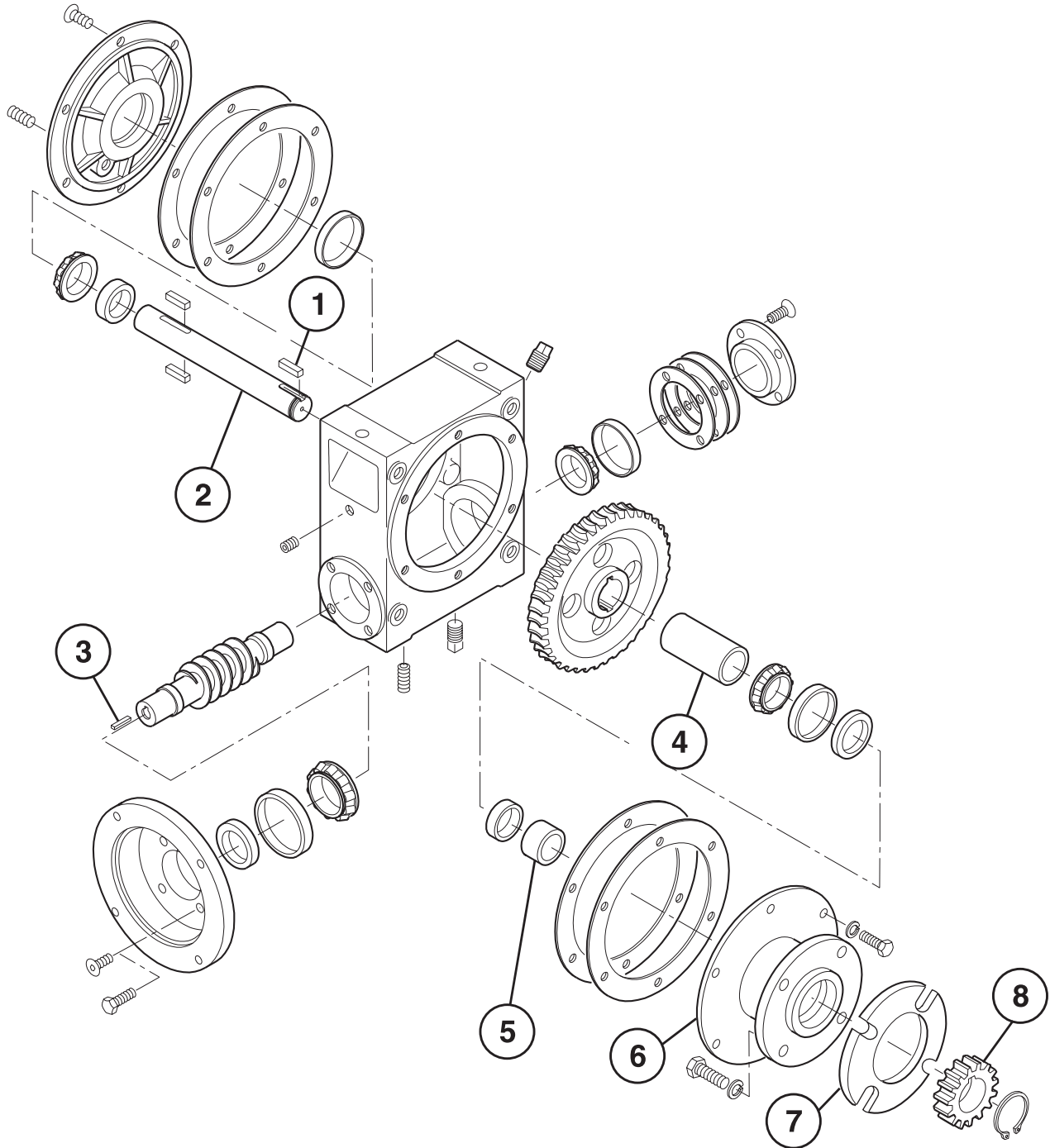


(Dwg. MHP1178)



(Dwg. MHP1632)

# TROLLEY DRIVE RACK KIT ASSEMBLY DRAWING



(Dwg. MHP1595)

## NOTICE

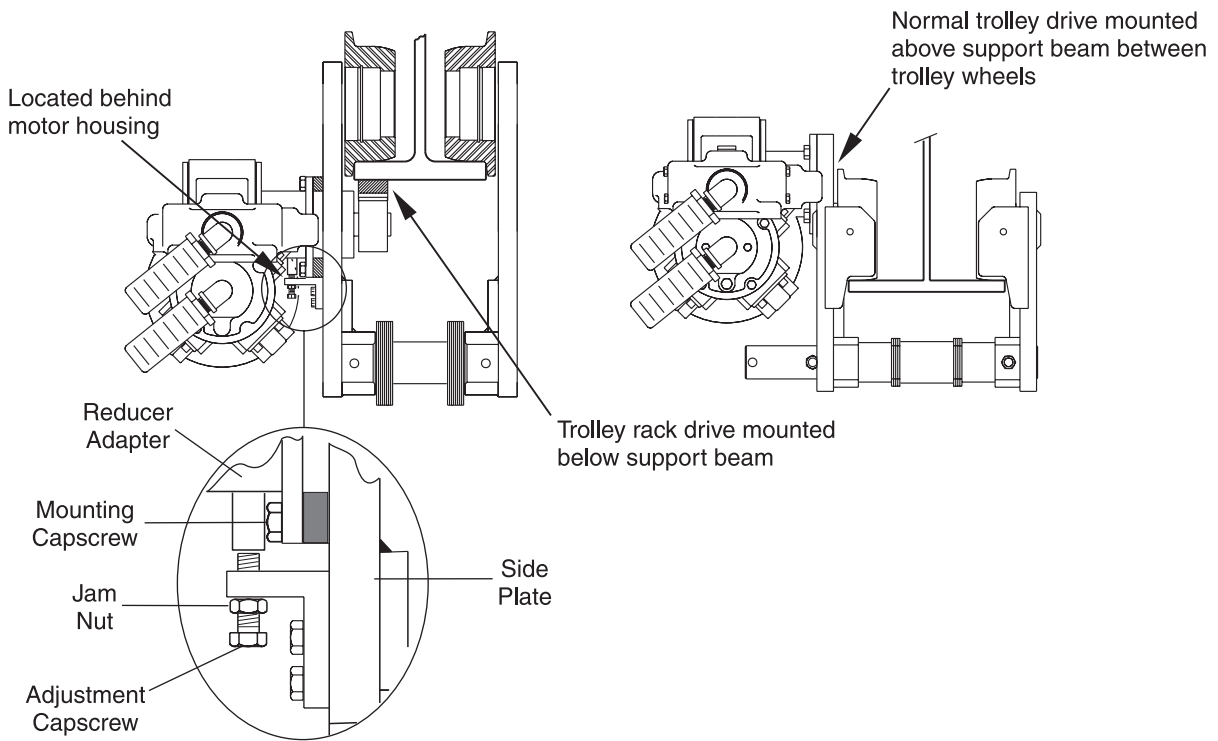
• Trolley Drive parts drawing and parts are shown for reference only. Refer to Dwg. MHP0551 in HA1 manual Form Number MHD56075, or Dwg. MHP0306 in HA2 manual Form Number MHD56055 for part item number references.

## TROLLEY DRIVE RACK KIT ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION OF PART | QTY TOTAL | PART NUMBER  |            |
|----------|---------------------|-----------|--------------|------------|
|          |                     |           | PISTON MOTOR | VANE MOTOR |

**Different Parts for use on trolley rack drive equipped hoists:**

|   |                 |   |                 |  |
|---|-----------------|---|-----------------|--|
| 1 | Key             | 2 | 9321-36         |  |
| 2 | Shaft           | 1 | 3112-1A         |  |
| 3 | Key             | 2 | 7285-41         |  |
| 4 | Spacer          | 1 | 4147-2          |  |
| 5 | Spacer          | 1 | 16755-18        |  |
| 6 | Reducer Adapter | 1 | 8333-3          |  |
| 7 | Spacer Plate    | 1 | Contact Factory |  |
| 8 | Pinion          | 1 | 8953-1          |  |



(Dwg. MHP1605)

### NOTICE

- Converting from normal trolley drive to Rack Drive requires new sideplates in addition to other items. Contact Technical Support for assistance.

## United States Office Locations

### Technical Support

**Ingersoll-Rand  
Material Handling**  
P.O. Box 24046  
2724 Sixth Avenue South  
Seattle, WA 98124-0046  
Phone: (206) 624-0466  
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