

# HARSCO

## RAIL

www.harscorail.com

---

### SERVICE BULLETIN

#### MAINTENANCE OF WAY EQUIPMENT

---

**DATE:** 12-12-2017 **BULLETIN NO:** 17-012

**TITLE:** Corrective Repair of Premature wear of Pivot Assembly

**RATING:**

<input type="checkbox"/> <b>DIRECTIVE</b> (Action Is Required)	<input type="checkbox"/> <b>ALERT</b> (Potential Problem)
<input type="checkbox"/> <b>INFORMATION</b> (Action Is Optional)	<input checked="" type="checkbox"/> <b>PRODUCT IMPROVEMENT</b> (Enhance Product)

**PRODUCT SERIES / MODEL:** Model 6700 Tamper PD Workheads with rigid style upper pivot pin designs (no square center bonded joint).

**SERIAL NO:** Factory built 6700 PD Workhead machine S/N's 153807 and earlier. All 6700's that were rebuilt from standard vibrating workheads to PD workheads.

**SUMMARY:** The upper pivot assembly has shown premature wear with PD workheads.

**OPERATIONAL IMPACT:**

1. Improved Workhead performance.
2. Avoid further physical damages to the Workheads / Machine.
3. Proper control and setting of the Workheads operation.
4. Improves the life time of Pivot Assembly and Workheads.
5. Improved safety - if there is a failure in the pivot assembly.

**ACTION:** The rigid style upper pivot pins have been prone to wear over time of use. This service bulletin reworks the machine and the upper pivot ears of the pivot assembly of the workhead to incorporate latest OEM builds. There are both the 25 inch stroke and a 28 inch stroke style workheads that were installed on machines. Overtime components will wear and this service bulletin should be applied to ensure machine functionally.

**CONTACT:** If you have any questions or if we can be of any service, please contact:  
Harsco Rail Service Department  
Ludington, MI. Facility  
(231) 843-7413

Contact the Parts Department at Harsco Rail to order the parts.  
Harsco Rail Parts Department  
Ludington, MI  
1-800-800-6410

**Important:** Be able to provide the Machine Model and Serial number when ordering parts.

## SAFETY INFORMATION



- FOLLOW APPLICABLE RAILROAD LOCKOUT - TAGOUT PROCEDURE TO REMOVE MACHINE FROM ALL ENERGY SOURCES. FAILURE TO COMPLY COULD RESULT IN SEVERE BODILY INJURY.

**Welding Precautions:** Disconnect the Battery Cables, make proper grounding, use 70Ksi filler material and welding should be carried out according to the engineering drawings at the end of this Service bulletin.

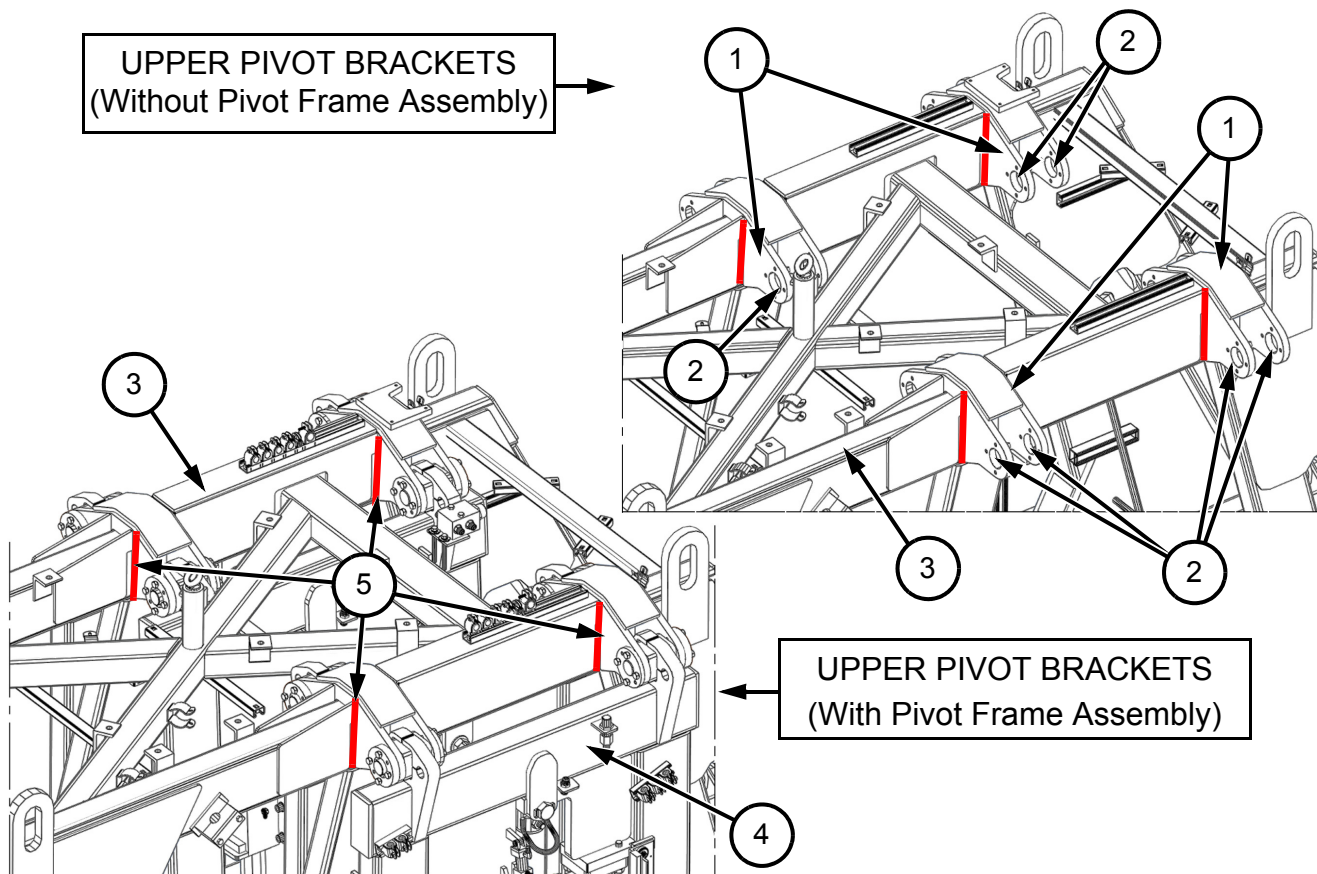
### 1. Frame Pivot conversion (P/N 5061246) - See Figure1

- a. Remove the Pivot frame assembly(4) from the Mainframe (3).
- b. Inspect the Pivot Pin holes (2) on the Upper Pivot brackets (1).

**Note: This conversion is not required if there is no wear in Pivot Pin Holes. If no wear is observed proceed to Step 2.**

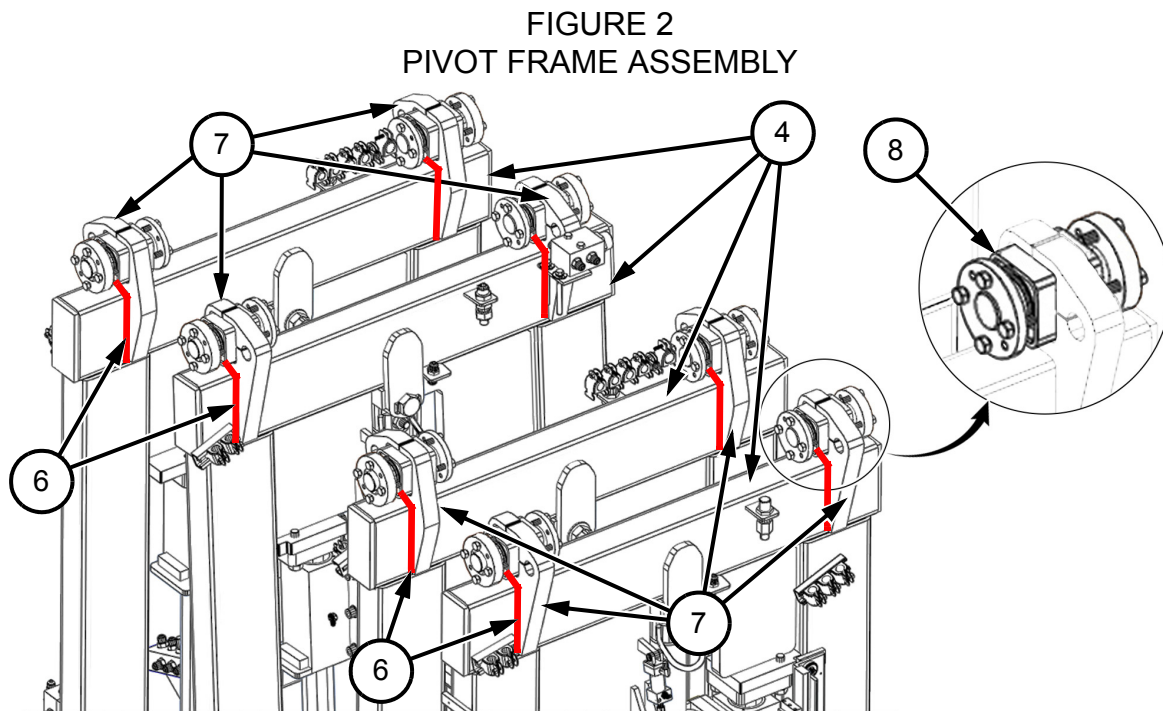
- c. If there is wear observed to the Pivot Pin holes (2), Cut off workhead upper pivot brackets (1) at the weld (5).
- d. Keep surrounding member pieces intact.
- e. Grind the surfaces smooth and remove all burrs.
- f. Replace the Upper Pivot brackets (1) with new brackets by welding them to the Mainframe (3)

FIGURE 1  
WORKHEAD UPPER PIVOT BRACKET



## 2. Upper Pivot Frame conversion (P/N 5061209) - See Figure 1 & 2

- a. Remove Pivot Frame Assembly (4) from the Mainframe (3).
- b. Cut off Pivot brackets (7) from Pivot Frame Assembly (4) at the welds (6).
- c. Keep rectangular tube intact.
- d. Grind the surfaces smooth and remove all burrs.
- e. Replace the Pivot brackets (7) with new brackets by welding them to the Pivot Frame Assembly (4).
- f. Assemble the Pivot Frame Assembly(4) to Mainframe (3) using Square Upper Pin Kits (8).



## 3. Square Upper Pin Kits (P/N 5061131) - See Figure 2

Square Upper Pin Kit (8) has the pivot pins, associated hardware and square bonded pivot bushings that are required after conversion 1 or 2.

Once conversion 1 or 2 are done on a machine Square Upper Pin Kit (8) can be used to refresh the pins and bushing (around 1 to 5 yearly intervals, depending on insertions/ hours).

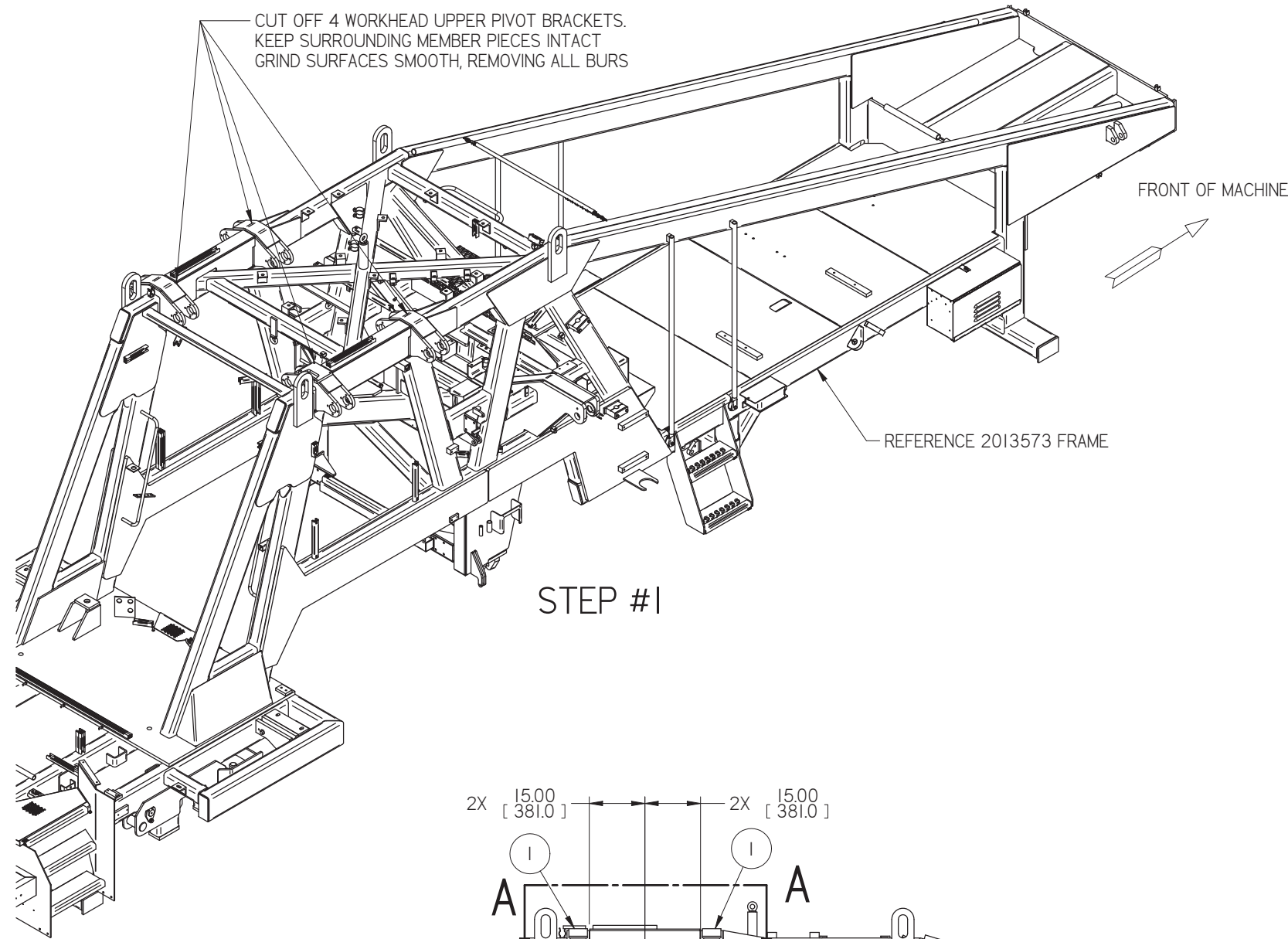
### Parts List

ITEM	PART NO	QTY	DESCRIPTION
1	5061246	1	Conversion, Wkhd Upper Pivot Bracket
2	5061209	4	Conversion, Pivot Frame
3	5061131	4	Kit, Upper Workhead Pin

**Note: The above quantities are for one machine**



CUT OFF 4 WORKHEAD UPPER PIVOT BRACKETS.  
KEEP SURROUNDING MEMBER PIECES INTACT  
GRIND SURFACES SMOOTH, REMOVING ALL BURS

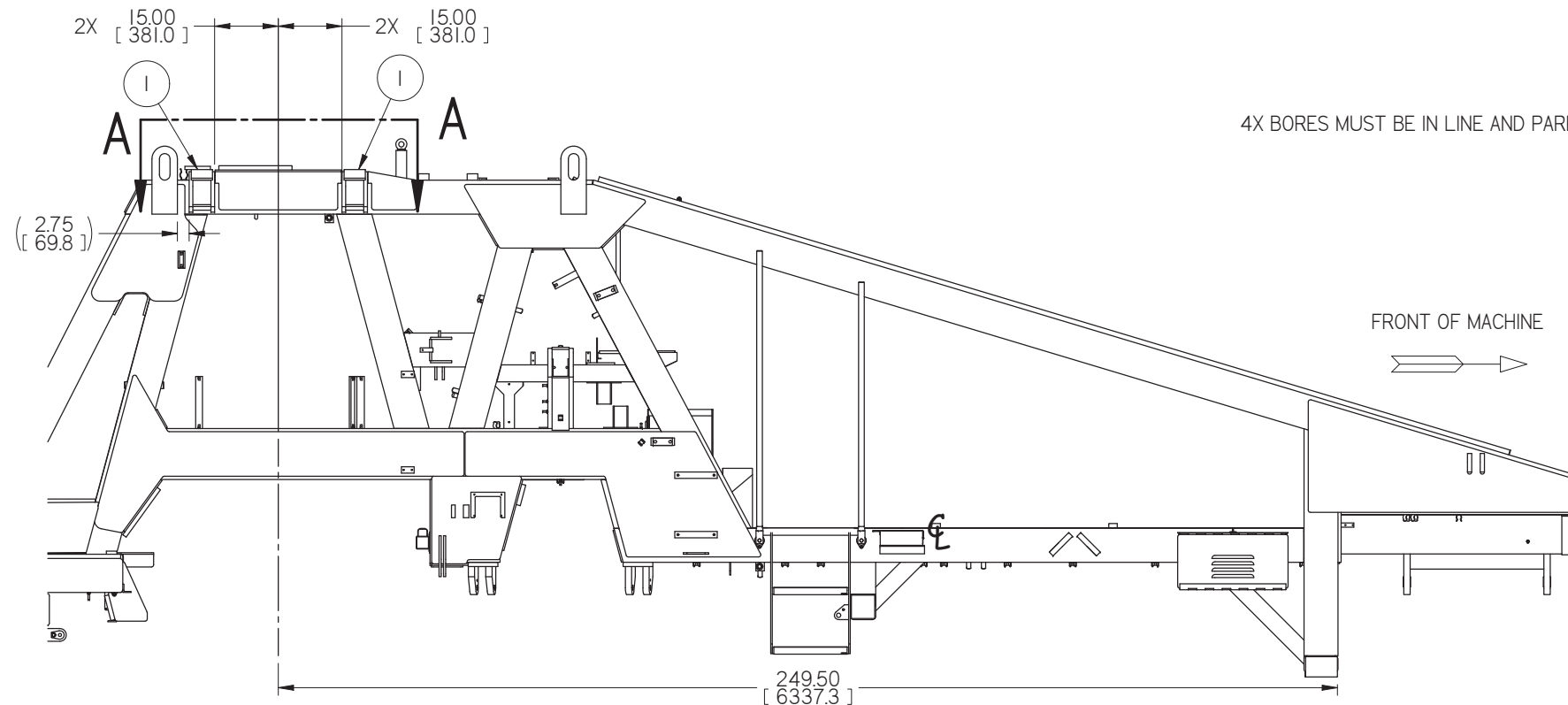
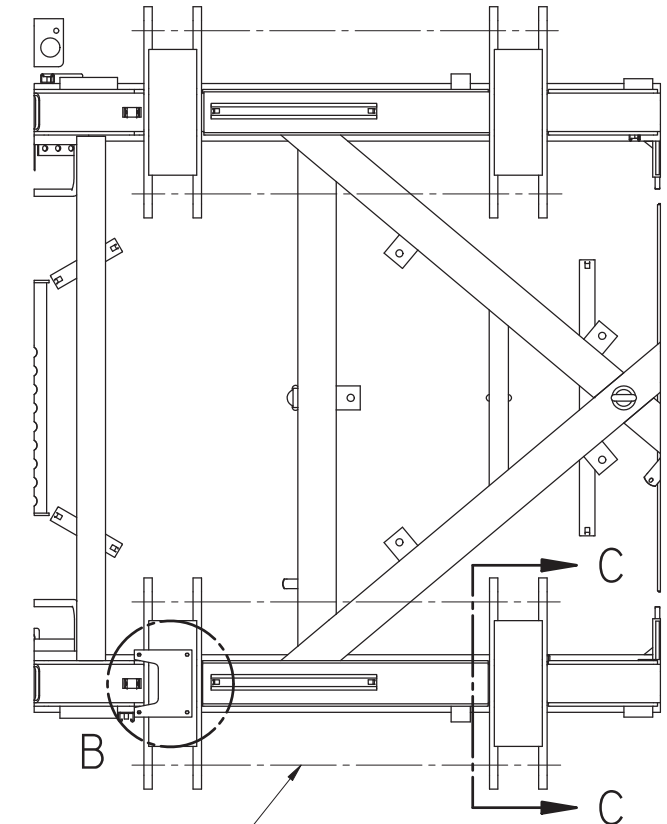
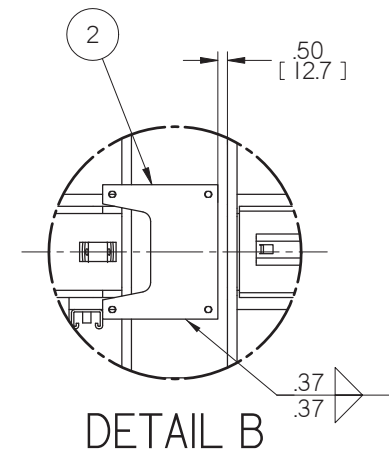


### REFERENCE DRAWINGS

INCLUDE A COPY OF EACH OF THE FOLLOWING DRAWINGS WITH EACH KIT

DRAWING #	DESCRIPTION
5061246	CONVERSION, WKHD UPPER PIVOT BRACKET
5061209	CONVERSION, PIVOT FRAME
5061131	KIT, UPPER WORKHEAD PIN

ITEM	PART NO	QTY	DESCRIPTION
1	312244-1	4	UPPER PIVOT BRACKET
2	5032788	1	MANIFOLD MOUNT



4X BORES MUST BE IN LINE AND PARRELL TO THE FRAME

SECTION A-A

SECTION C-C  
VIEW ROTATED 90°

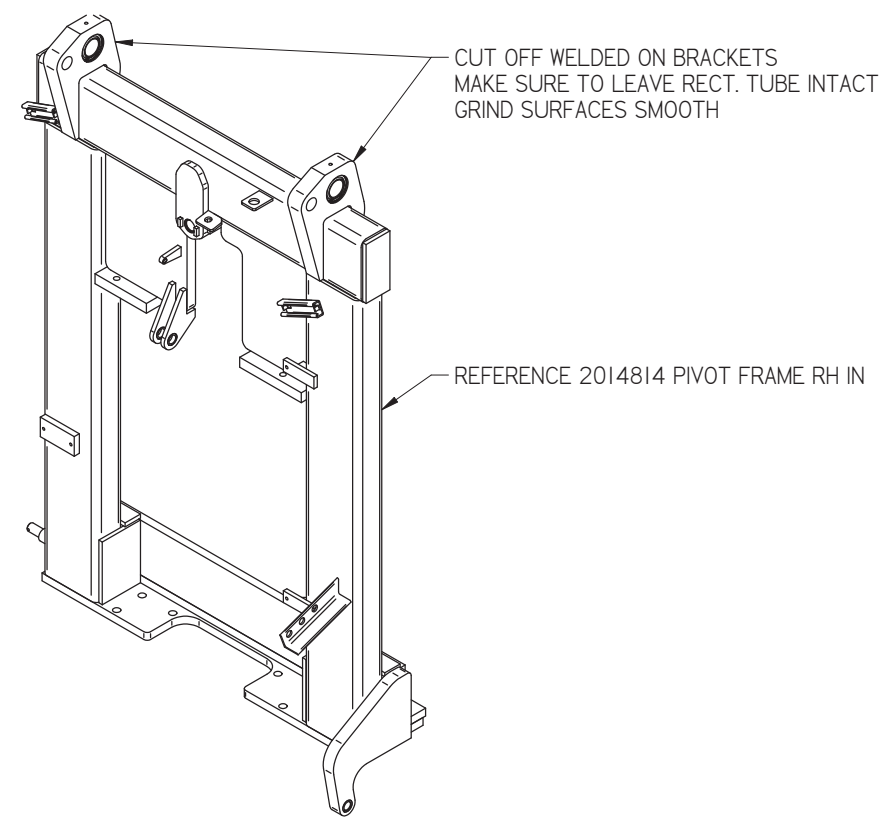
STEP #2

PARTS ARE FOR ONE MACHINE

Inch  
[mm]

CONFIDENTIAL				INCH		METRIC		UNLESS OTHERWISE SPECIFIED ALL MACHINED SURFACES WILL HAVE:		CHANGE	R/L	REVISION		DR	DATE	Description	HARSCO RAIL	
NORMAL SIZE RANGE	PLUS OR MINUS	FRAC DECIMAL	FRAC DECIMAL	NORMAL SIZE RANGE	PLUS OR MINUS	FRAC DECIMAL	FRAC DECIMAL	A SURFACE FINISH OF 32 MICRONS (1.25 MIL) ANGULAR TOLERANCE OF ± 50° CONCENTRICITY WITHIN .015	EC514019	A	NEW RELEASE		BJE	12/04/15	CONVERSION, WKHD UPPER PIVOT BRACKET	Machine Type 6700SJ PD WKHD Part Number 5061246		
0 .6	.03	.005		0 150	.8	.13		THIRD ANGLE PROJECTION										
6 24	.04	.008		150 600	1.0	.20												
24	.06	.010		600	1.5	.25		UNLESS OTHERWISE SPECIFIED ALL WELDS SHOULD ADHERE TO THE MOST CURRENT A.I.S. WELDING STANDARDS										
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"><b>SOLID EDGE DRAWING</b></td> <td style="width: 50%;"><b>DO NOT SCALE</b></td> </tr> </table>																<b>SOLID EDGE DRAWING</b>	<b>DO NOT SCALE</b>	Sheet 1 of 1
<b>SOLID EDGE DRAWING</b>	<b>DO NOT SCALE</b>																	

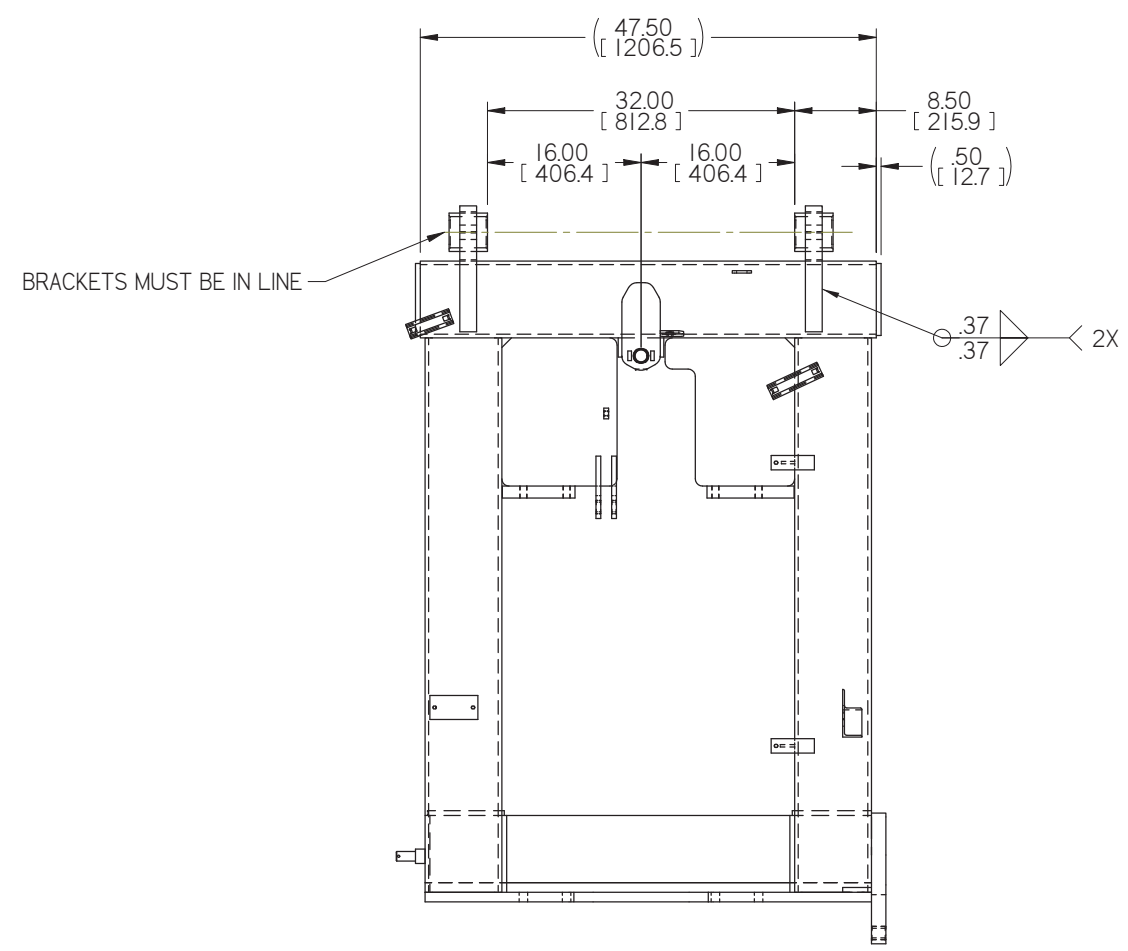
ITEM	PART NO	QTY	DESCRIPTION
1	5061196	2	PIVOT BRKT-WELDED



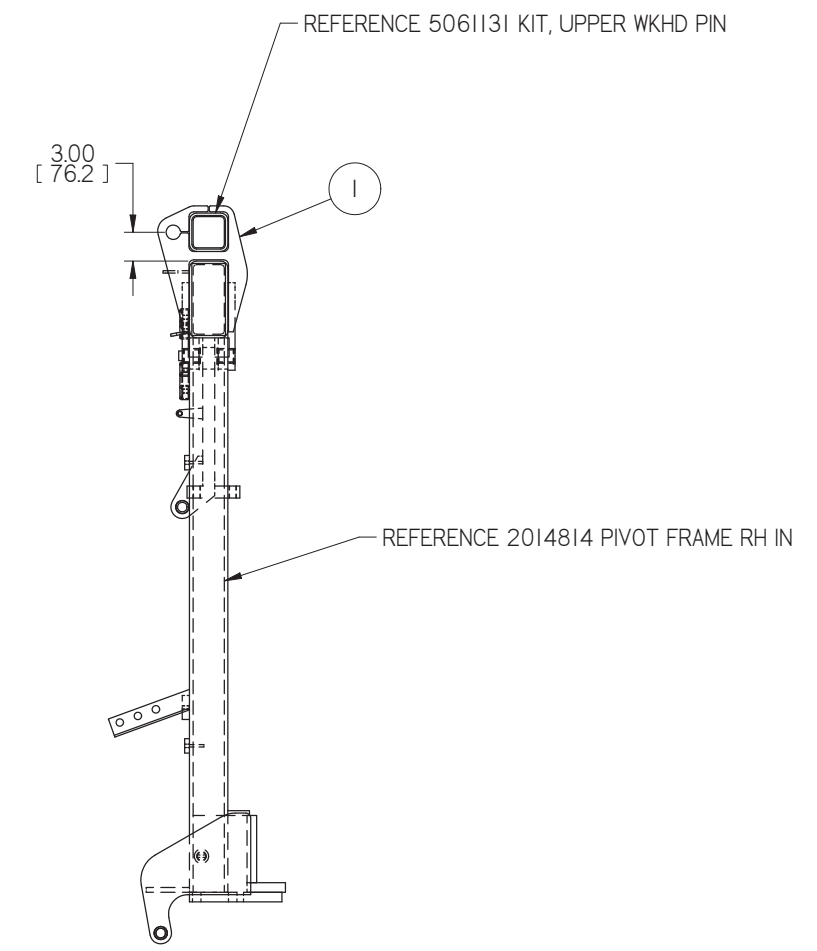
STEP #1

NOTE:  
CONVERTS PD PIVOT FRAME EARS  
TO STD VIB. STYLE EARS

REFERENCE DRAWINGS	
INCLUDE A COPY OF EACH OF THE FOLLOWING DRAWINGS WITH EACH KIT	
DRAWING #	DESCRIPTION
5061209	CONVERSION, PIVOT FRAME
5061131	KIT, UPPER WORKHEAD PIN



STEP #2



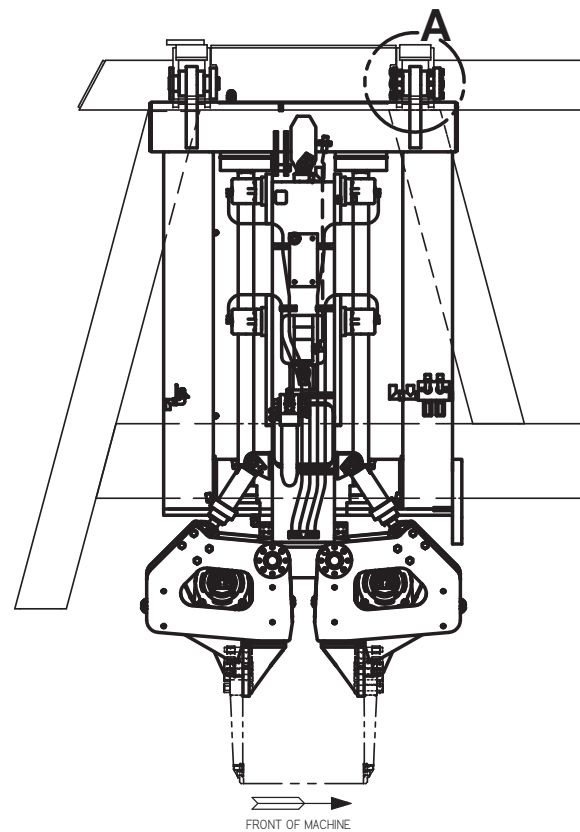
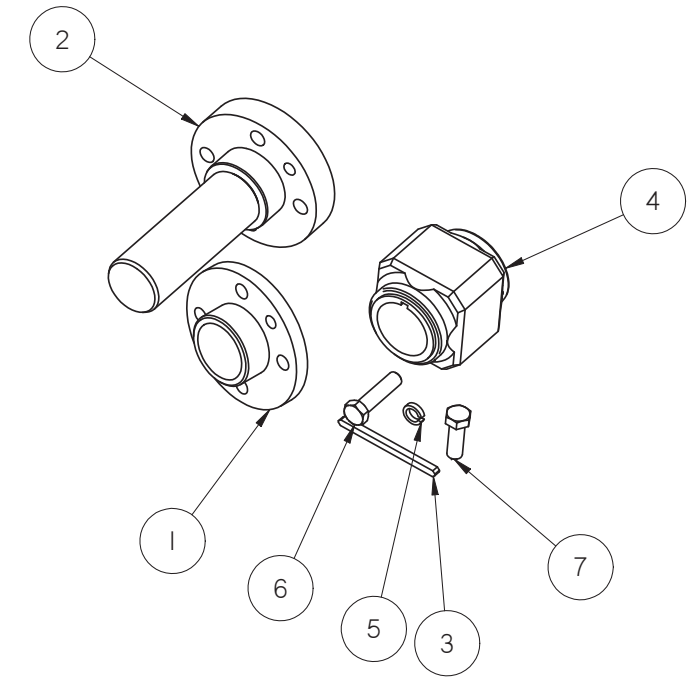
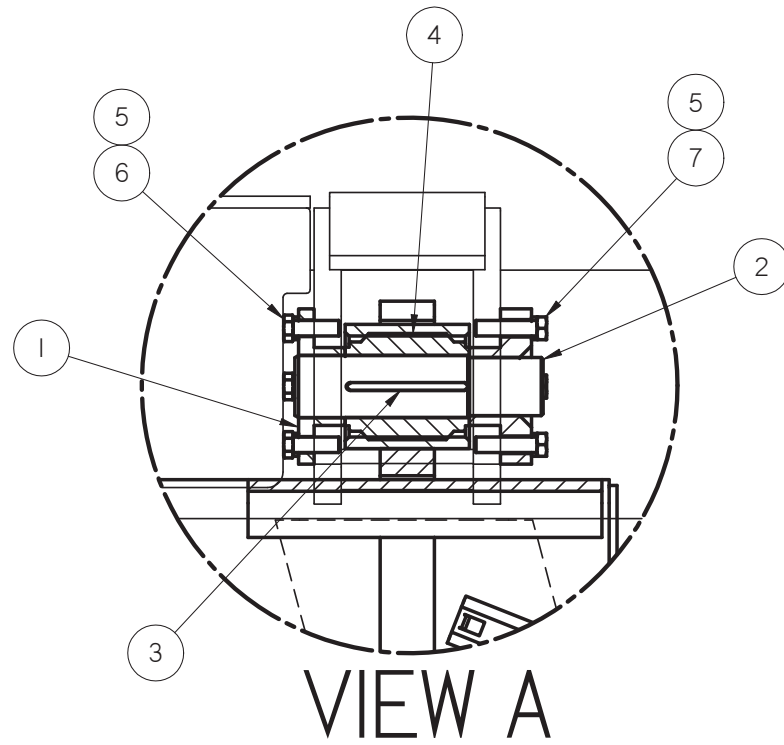
PARTS ARE FOR ONE PIVOT FRAME

Inch [mm]

CONFIDENTIAL				CHANGE		REVISION		DR	DATE	Description	HARSCO RAIL	
<small>© 2015 HARSCO CORPORATION. ALL RIGHTS RESERVED. THIS DRAWING OR DOCUMENT IS THE PROPERTY OF HARSCO AND EMBODIES CONFIDENTIAL INFORMATION, TRADE SECRET INFORMATION AND/OR KNOW-HOW THAT IS THE PROPERTY OF HARSCO. BY ACCEPTING THIS DRAWING OR DOCUMENT, THE RECIPIENT AGREES (1) NOT TO PROVIDE, OR OTHERWISE MAKE AVAILABLE, THE DRAWING OR DOCUMENT, OR ANY INFORMATION OR KNOW-HOW EMBODIED THEREIN, TO ANY THIRD PARTY AND (2) NOT TO REPRODUCE OR USE THE DRAWING OR DOCUMENT TO MANUFACTURE ANY APPARATUS OR DEVICE, WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF HARSCO.</small>				EC514012	A	NEW RELEASE		BJE	12/03/15	CONVERSION, PIVOT FRAME	Machine Type 6700SJ	
Weight	57.3 lbm	Drawn	bedel	Date Drawn	12/3/2015	Part Number	5061209	Sheet	1 of 1			
				SOLID EDGE DRAWING		DO NOT SCALE						



ITEM	PART NO	QTY	DESCRIPTION
1	2005566	2	END PLATE-W.H. PIVOT
2	2005567	2	PIN WELDMENT-W.H. PIVOT
3	116716-1	2	KEY
4	116735-1	2	SQ.CTR.BONDED JOINT
5	150988-13	16	WASHER, LOCK, 1/2", HIGH COLLAR
6	252272-254	8	SCREW-HHC, GRADE 8, .50-20 X 2
7	157037-1	8	DC-HHD CAP SCR 1/2-20X1-1/2GR8



REFERENCE DRAWINGS	
INCLUDE A COPY OF EACH OF THE FOLLOWING DRAWINGS WITH EACH KIT	
DRAWING #	DESCRIPTION
5061131	KIT, UPPER WORKHEAD PIN

# PARTS FOR ONE WORKHEAD

Inch  
[mm]

<p><b>CONFIDENTIAL</b></p> <p>© 2015 HARSCO CORPORATION. ALL RIGHTS RESERVED. THIS DRAWING OR DOCUMENT IS THE PROPERTY OF HARSCO AND EMBODIES CONFIDENTIAL INFORMATION, TRADE SECRET INFORMATION, AND/OR KNOW-HOW THAT IS THE PROPERTY OF HARSCO. BY ACCEPTING THIS DRAWING OR DOCUMENT, THE RECIPIENT AGREES (1) NOT TO PROVIDE, OR OTHERWISE MAKE AVAILABLE, THE DRAWING OR DOCUMENT, OR ANY INFORMATION OR KNOW-HOW EMBODIED THEREIN, TO ANY THIRD PARTY AND (2) NOT TO REPRODUCE OR USE THE DRAWING OR DOCUMENT TO MANUFACTURE ANY APPARATUS OR DEVICE, WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF HARSCO.</p>				<table border="1"> <thead> <tr> <th>NOMINAL SIZE RANGE</th> <th colspan="2">INCH PLUS OR MINUS</th> <th colspan="2">METRIC PLUS OR MINUS</th> </tr> <tr> <th>OVER TO</th> <th>3 PLACE DECIMAL</th> <th>5 PLACE DECIMAL</th> <th>1 PLACE DECIMAL</th> <th>2 PLACE DECIMAL</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>.03</td> <td>.005</td> <td>0</td> <td>.150</td> </tr> <tr> <td>6</td> <td>.04</td> <td>.008</td> <td>150</td> <td>600</td> </tr> <tr> <td>24</td> <td>.06</td> <td>.010</td> <td>600</td> <td>1.5</td> </tr> </tbody> </table>	NOMINAL SIZE RANGE	INCH PLUS OR MINUS		METRIC PLUS OR MINUS		OVER TO	3 PLACE DECIMAL	5 PLACE DECIMAL	1 PLACE DECIMAL	2 PLACE DECIMAL	0	.03	.005	0	.150	6	.04	.008	150	600	24	.06	.010	600	1.5	<p>UNLESS OTHERWISE SPECIFIED ALL MACHINED SURFACES WILL HAVE: A SURFACE FINISH OF 125 MICROINCHES ANGULAR TOLERANCE OF ±.50° CONCENTRICITY WITHIN .010</p> <p>THIRD ANGLE PROJECTION</p> <p>UNLESS OTHERWISE SPECIFIED, ALL WELDS SHOULD ADHERE TO THE MOST CURRENT A.W.S WELDING STANDARDS</p>	<table border="1"> <thead> <tr> <th>CHANGE</th> <th>R/L</th> <th>REVISION</th> <th>DR</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>EC513997</td> <td>A</td> <td>NEW RELEASE</td> <td>BJE</td> <td>12/01/15</td> </tr> </tbody> </table>	CHANGE	R/L	REVISION	DR	DATE	EC513997	A	NEW RELEASE	BJE	12/01/15	<p>Description <b>KIT, UPPER WORKHEAD PIN</b></p> <p>Material : Machine Type 6700SJ PD Weight 17.4 lbm Drawn bedel Date Drawn 12/1/2015 Part Number <b>5061131</b></p> <p><b>SOLID EDGE DRAWING</b>    <b>DO NOT SCALE</b></p>	<p><b>HARSCO RAIL</b></p> <p>Size <b>C</b> Sheet 1 of 1</p>
NOMINAL SIZE RANGE	INCH PLUS OR MINUS		METRIC PLUS OR MINUS																																								
OVER TO	3 PLACE DECIMAL	5 PLACE DECIMAL	1 PLACE DECIMAL	2 PLACE DECIMAL																																							
0	.03	.005	0	.150																																							
6	.04	.008	150	600																																							
24	.06	.010	600	1.5																																							
CHANGE	R/L	REVISION	DR	DATE																																							
EC513997	A	NEW RELEASE	BJE	12/01/15																																							