



Model: PC3000 Serial #: PM3000-1001 to PM3000 / 300158 to 300342	September 27, 2012
Product Bulletin # CATWALK 021	

Lift-Lug Upgrade

The PC3000 operations manual does not describe limitations on the lift angle and type of attachment to be used during certain types of ramp lifting operations. The PC3000 ramp-lift bar is not designed to meet certain factor of safety (FoS) requirements with the installed lift bar, depending on the ramp size, angle of lift, and whether the lift attachment is a point load (such as a shackle) or a distributed load (such as a fabric sling).

Recommendation

To increase the FoS, replace the installed lift bar with the lug kit (AY50931) for all ramp types and angles of lift. Contact RigLine 24/7™ Support to order the upgrade kit.

Refer to Table 1 to determine the FoS with and without the lug kit installed.

Table 1: Factor of Safety (FoS)

Ramp Size	Ramp P/N	Ramp Weight	45° Lift (From Rig Floor)			Vertical Lift (From Crane)		
			FoS (Current W Dist. Load)	FoS (Current W Point Load)	FoS + (Lug Kit)	FoS (Current W Dist. Load)	FoS (Current W Point Load)	FoS + (Lug Kit)
15FT-8IN W/O STAIRS	111200040	10200 lb	3.3	1.6	18.1	4.8	2.4	26.4
18FT W/O STAIRS	111200036	10900 lb	3.1	1.6	17.2	4.5	2.3	24.9
19FT W/O STAIRS	111200034	11200 lb	3.1	1.5	17.0	4.4	2.2	24.5
19FT-6IN W/O STAIRS	111200041	11300 lb	3.0	1.5	16.8	4.4	2.2	24.2
20FT W/O STAIRS	111200026	11400 lb	3.0	1.5	16.7	4.3	2.2	24.0
20FT-1IN W/O STAIRS, 55 DEG	111200039	10900 lb	3.2	1.6	17.6	4.6	2.3	25.3
21FT-6IN W/O STAIRS	111200004	11800 lb	2.9	1.5	16.1	4.2	2.1	23.2
22FT W/O STAIRS	111200007	11900 lb	2.9	1.5	16.1	4.2	2.1	23.0
22FT W/ STAIRS	111200016	14100 lb	2.6	1.3	14.3	3.3	1.7	18.2
22-26FT W/ STAIRS	111200038	14900 lb	2.4	1.2	13.3	3.1	1.5	17.1
23FT-6IN W/O STAIRS	111200033	12300 lb	2.8	1.4	15.5	4.0	2.0	22.2
25FT W/O STAIRS	111200008	12800 lb	2.7	1.3	14.8	3.9	1.9	21.3
25FT W/ STAIRS	111200009	15200 lb	2.4	1.2	13.0	3.0	1.5	16.7
26FT-6IN W/O STAIRS	111200019	13200 lb	2.6	1.3	14.4	3.7	1.9	20.5
28FT W/O STAIRS	111200037	13800 lb	2.5	1.2	13.7	3.5	1.8	19.5
30FT W/O STAIRS	111200010	14200 lb	2.4	1.2	13.3	3.4	1.7	18.9
30FT W/ STAIRS	111200011	17000 lb	2.0	1.0	11.2	2.7	1.3	14.7
30FT W/ STAIRS SPEC	111200027	17300 lb	2.0	1.0	11.0	2.6	1.3	14.4
33FT W/O STAIRS	111200013	15500 lb	2.1	1.1	11.8	3.1	1.5	16.8
35FT W/O STAIRS, 50 DEG	111200006	15500 lb	2.1	1.1	11.8	3.1	1.5	16.8
* Note: FoS for ramp only. Specified shackle rating exceeds lifting forces for all setups.								

Overview

Figure 1 illustrates the PC3000 before and after installation of the lift-lug upgrade.

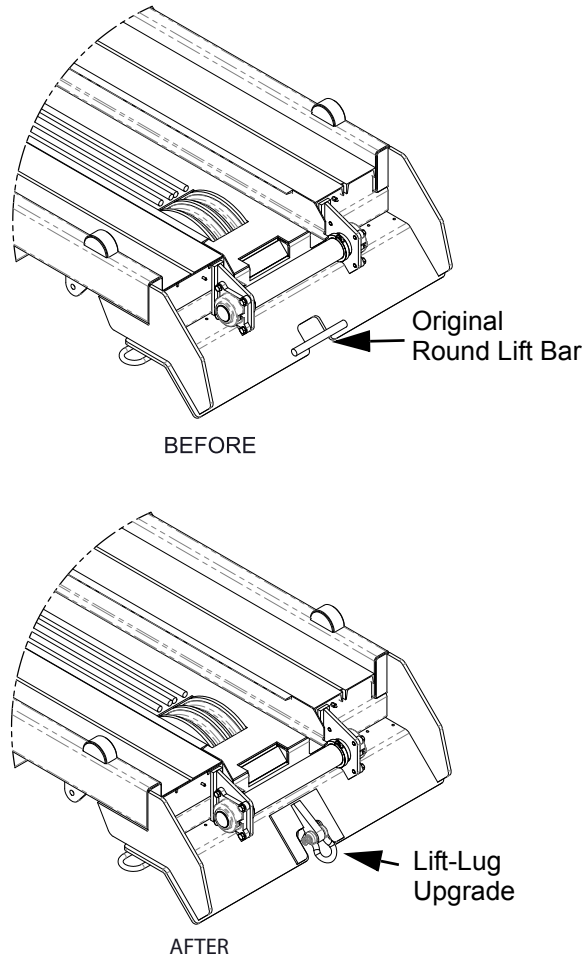


Figure 1: Overview of Upgrade

The upgrade kit part number is AY50931 and consists of the following components:

Table 2: Lift-Lug Upgrade Kit

Item	Canrig P/N	Description	Qty
1	141103355	PLATE, LUG REINFORCEMENT	1
2	141103354	LUG, PLATE, RAMP LIFT	1
3	141103356	GUSSET PLATE, RAMP LUG	2
4	M14011	SHACKLE, 1-1/8, ANCHOR SCREW PIN, 9-1/2T	1

Procedure

Step 1

Remove the existing round bar.

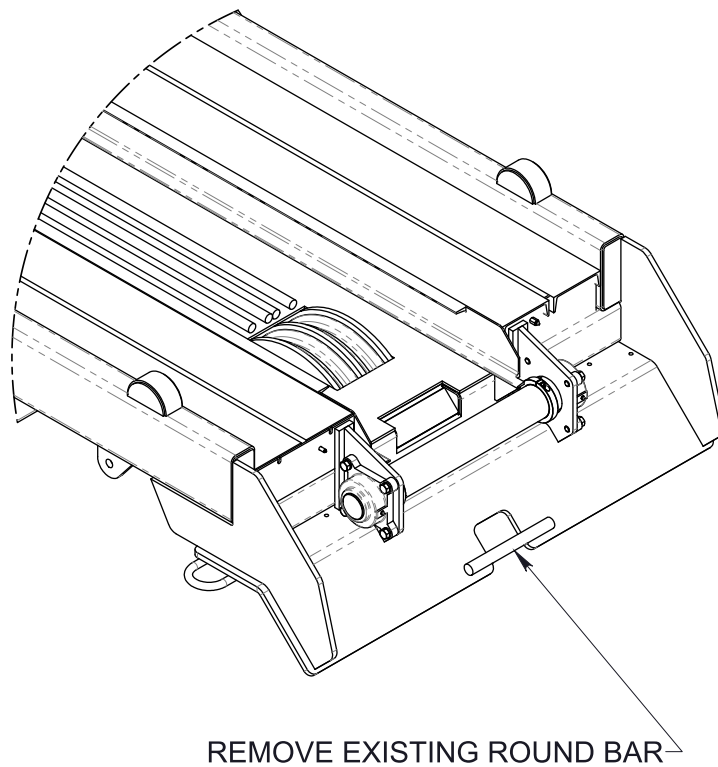


Figure 2: Existing Round Bar

Model: PC3000 Serial #: PM3000-1001 to PM3000 / 300158 to 300342	September 27, 2012
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Step 2

Weld the lug-mount plate as shown in the following figures and perform a magnetic particle inspection (MPI) of the welds.

Refer to Table 2 for item number descriptions.

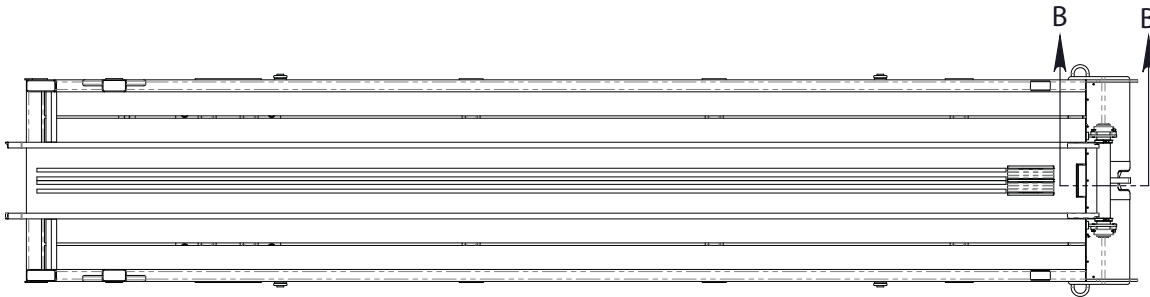
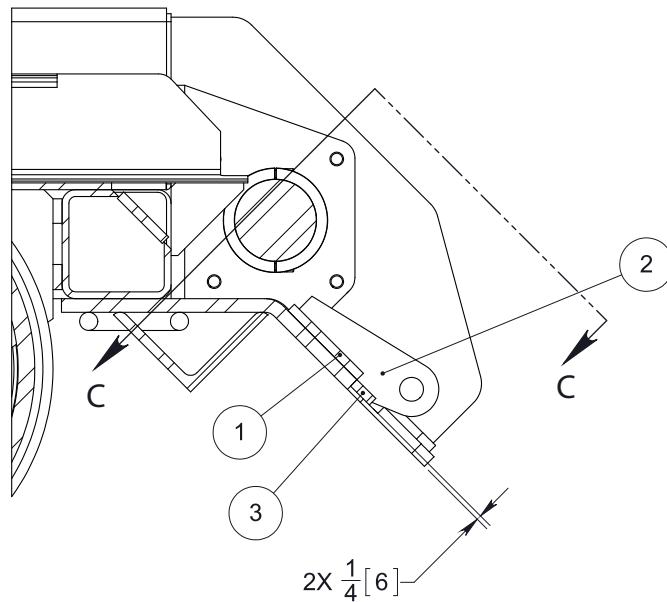


Figure 3: Lug-Mount Plate Location



SCALE 1 : 6

Figure 4: Lug Location Section B-B

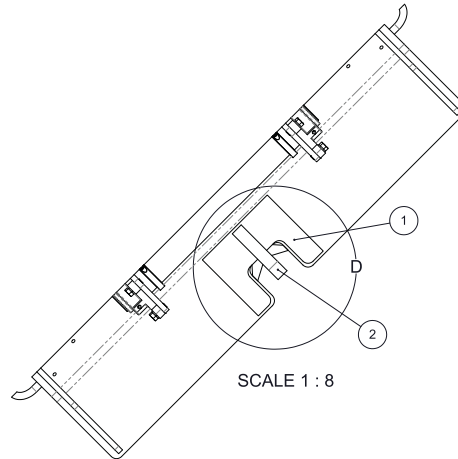
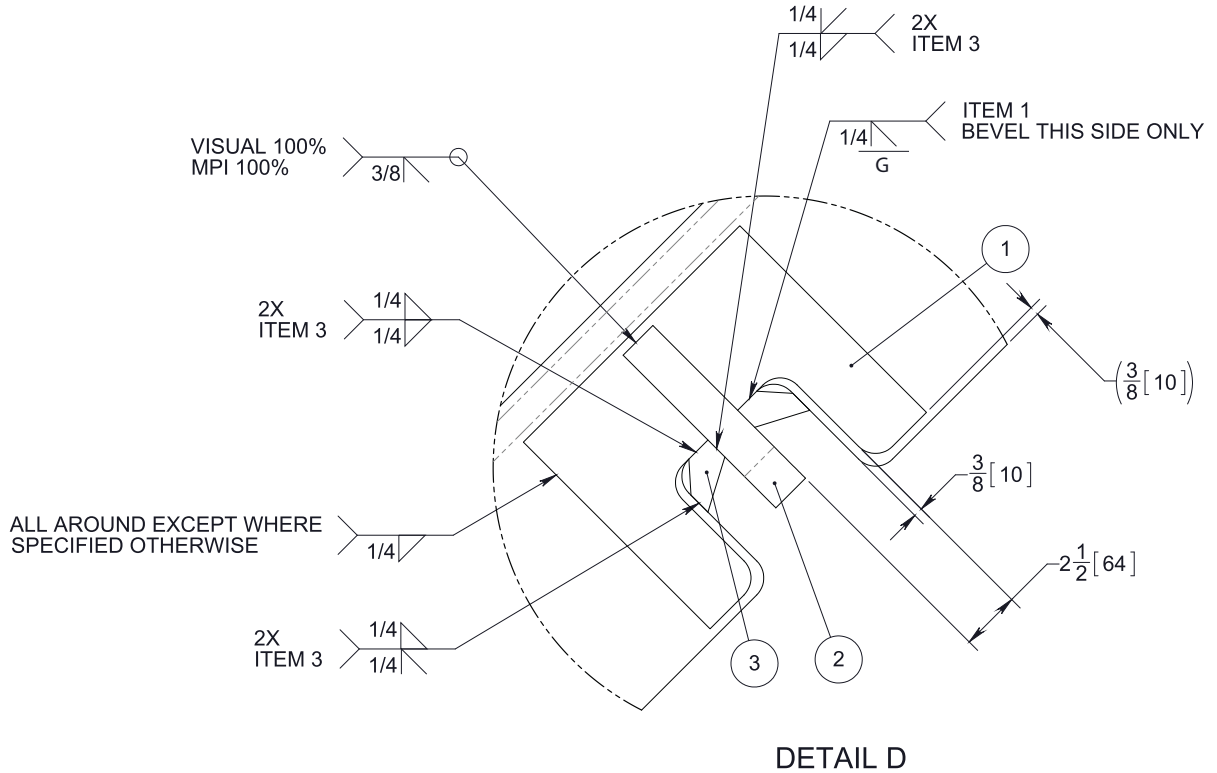


Figure 5: Top View



DETAIL D

Figure 6: Lug Location Detail D

Model: PC3000 Serial #: PM3000- 1001 to PM3000 / 300158 to 300342	September 27, 2012
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Step 3

Attach the shackle (M14011).

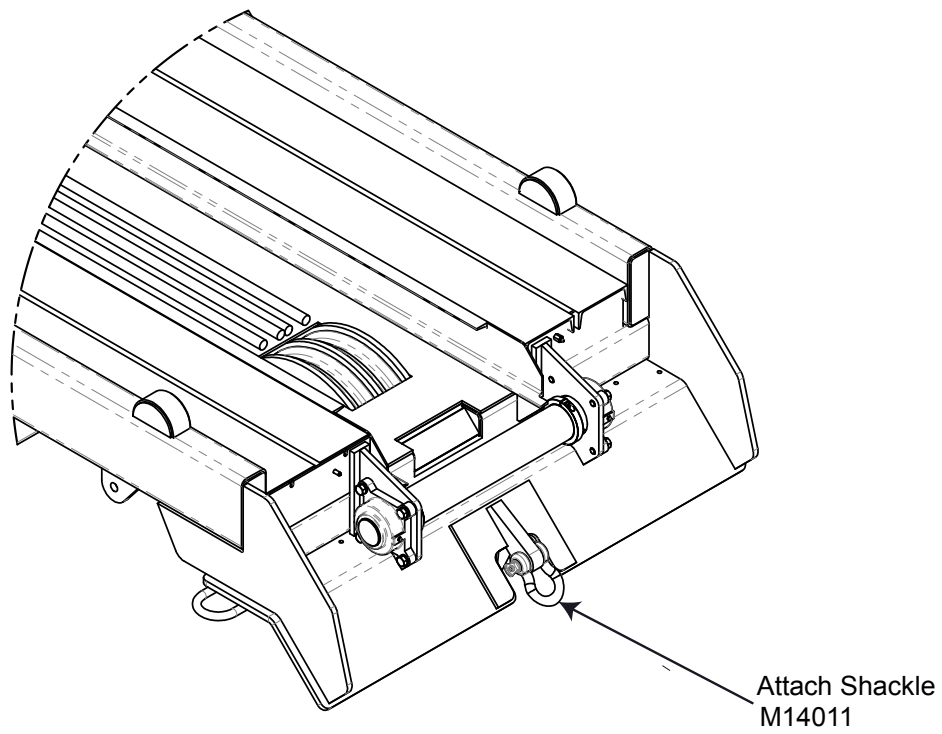
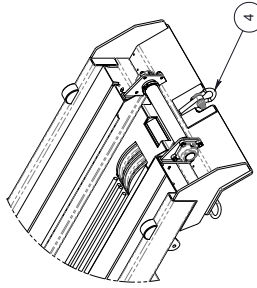


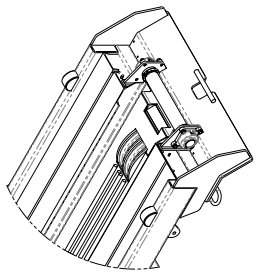
Figure 7: The Shackle

IF IN DOUBT.....PLEASE ASK!

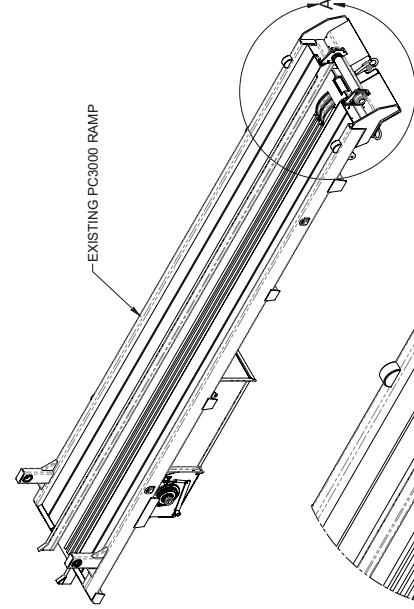
ITEM	QTY	DESCRIPTION	MATERIAL	CANRIG PART No.
1	1	PLATE, LUG REINFORCEMENT	G40, 21-50W / A572 G50	141103355
2	1	LUG, PLATE, RAMP LIFT	G40, 21-44W / A572 G50	141103354
3	2	GUSSET PLATE, RAMP LUG	G40, 21-44W / A572 G50	141103356
4	1	SHACKLE, 1-1/8, ANCHOR SCREW PIN, 9-1/2T		M14011



AFTER
DETAIL A2



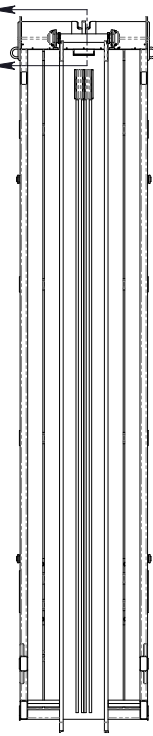
BEFORE
DETAIL A1



EXISTING PC3000 RAMP

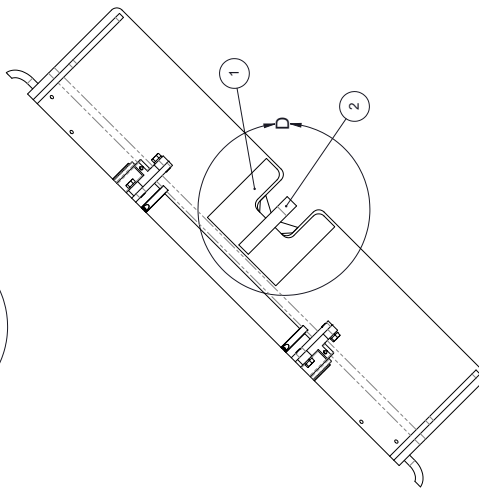
STEP 3: ATTACH SHACKLE M14011 AS SHOWN IN DETAIL A2

STEP 2: WELD LUG MOUNT PLATES AS SHOWN

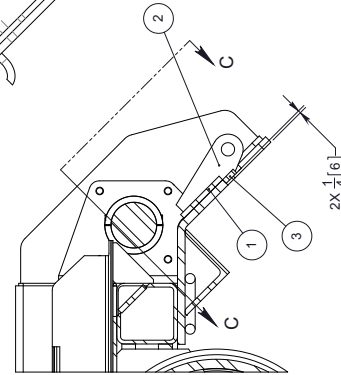


STEP 1: REMOVE EXISTING ROUND BAR

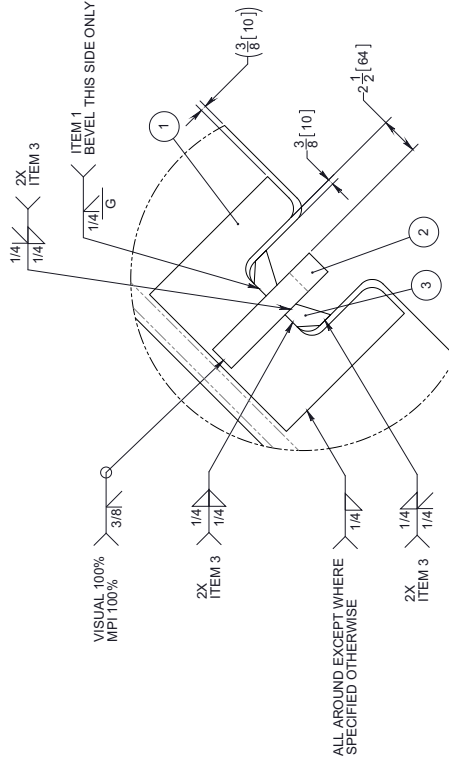
DETAIL A3



SECTION C-C
SCALE 1 : 8



SECTION B-B
SCALE 1 : 6



DETAIL D

WELDING PROCEDURE AS PER CANRIG SPECIFICATION - ENG. 704. UNLESS NOTED OTHERWISE REMOVE SHARP CORNERS AND BURRS

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REMOVE SHARP CORNERS AND BURRS
 CASTINGS ± 1/16
 FURNISHED WITH THE UNDERSI TANGING
 SQUARENESS ± 0.01 IN 8 INCHES
 STRAIGHTNESS ± 0.005 IN 8 INCHES
 FLATNESS ± 0.010 IN 8 INCHES
 TRUE POSITION ± 0.010 IN 8 INCHES
 MACHINED SURFACES ± 0.005
 MIN. RADIUS UNLESS SHOWN = 0.031 MAX.

TOLERANCE - UNLESS OTHERWISE SPECIFIED
 FABRICATING (MATERIAL)
 MAX. MIN. GDF 12.0418
 CHECKED GRY 12.0418
 APPROVED WSS 12.0427
 MATERIAL

± 0.10
 ± 0.05
 ± 0.03
 ± 0.02
 ± 0.015
 ± 0.01
 ± 0.005
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