



A40
ARTICULATING CRANE
MOUNTING AND
INSTALLATION
INSTRUCTIONS

Manual No. 407900001

Rev. 9/2/2003

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***A40 ARTICULATING CRANE
MOUNTING AND INSTALLATION INSTRUCTIONS REVISION RECORD***

Revision Date	Section(s) Or Page(s)	Description of Change
09/02/03	Last page	New 2-year warranty policy to replace 1-year warranty policy

AUTO CRANE A40 ARTICULATING CRANE MOUNTING and INSTALLATION

1. Vehicle should meet minimum 17,500 lb. GVW rating and/or a frame resistance to bending of 600,000 in-lbs. minimum, dual rear wheels and tires, engine tachometer and throttle control, and front and rear springs to match axle ratings.
2. Make sure frame is clear of all obstructions in the area where the crane is to be mounted.
3. Distance required between back of cab and front of flatbed or body is 24 in.
4. A40 weight: **1,750 lbs with (1) hydraulic extension**
1,860 lbs with (1) hydraulic extension & (1) manual boom
2,040 lbs with (2) hydraulic extension
2,100 lbs with (2) hydraulic extension & (1) manual boom
5. In preparation for crane mounting, ensure mounting surfaces are flat by having wear plates between the crane base and the top of truck frame rails. Wear plates are as follows: (Fig. 1)
 - ◆ (1) ¼" thick x 3" wide x 25" long flat bar on the driver side.
 - ◆ (1) ¼" thick x 3" wide x 11" long flat bar on the passenger side.

These wear plates should have clearance holes as applicable to clear rivet heads on the truck frame rails.

6. Use lifting eye, ref fig. 2, to lift the crane and position it on the truck frame
7. Once the crane is positioned on the wear plates on the truck, weld (4) stop tabs on wear plates in front and behind of crane mount to prevent the wear plates from moving. Stop tab should be a minimum of ½" thick x 2 ¾" wide x 2" long.

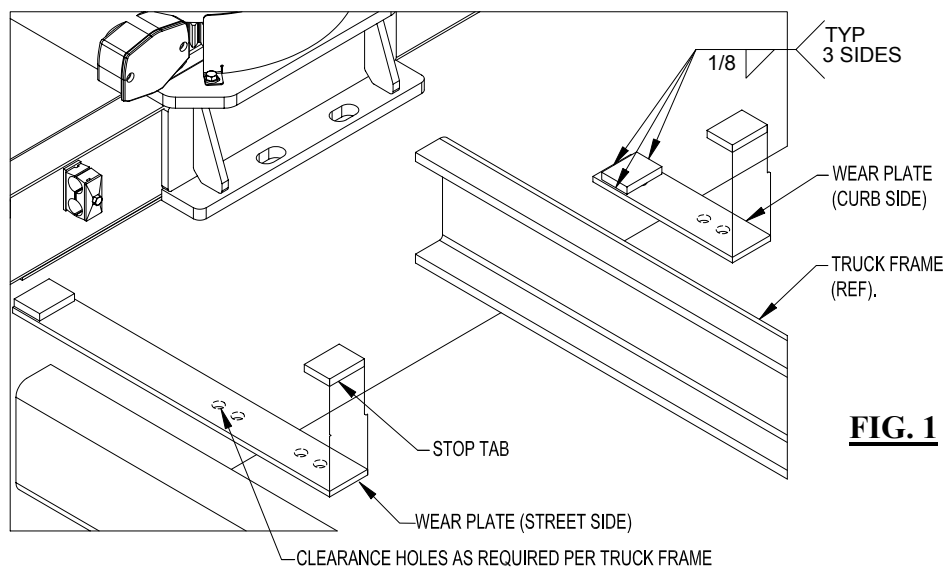


FIG. 1

NOTE: Never weld on truck frame.

AUTO CRANE A40 ARTICULATING CRANE MOUNTING and INSTALLATION

8. Install the mounting hardware, as shown in diagram according to selected Ford chassis.
9. Torque the first set of mounting bolts and nuts to 225 ft-lbs. Torque the second set of mounting bolts and nuts to 100 ft-lbs. Recheck the torques after initial installation testing is performed, after the first 10 hours of operation and once a year thereafter.
10. The Suction & Pressure hoses and fittings are not furnished with this crane. These items are normally determined at installation.
 - A. Suction hose from pump to reservoir: Hose size, 1 inch (-16) SAE 100 R4
 - B. Pressure hose from pump to control valve inlet: Hose size, 3/4 inch (-08) with minimum working pressure of 4000 psi.

Install PTO by following PTO's manufacturers installation instructions. It is recommended that PTO mounting bolts be safely wired to prevent bolts from becoming loose. Always check to make sure that there is no transmission oil leaking around the PTO mounting.

NOTE: After installation of the pump/PTO and the reservoir is complete, connect the pressure and return lines together. Circulate the hydraulic oil for thirty minutes to trap any contaminants in the system before hooking the pressure and return lines to the crane. Be sure to check filters after purging the system.

11. Crane operation requires 8 gpm at 3800 psi.
12. To insure proper crane operation and crane performance, the vehicle shall be equipped with an engine speed control and tachometer.
13. Always store the crane in the figure-4 position as shown in fig. 2, when not in operation.

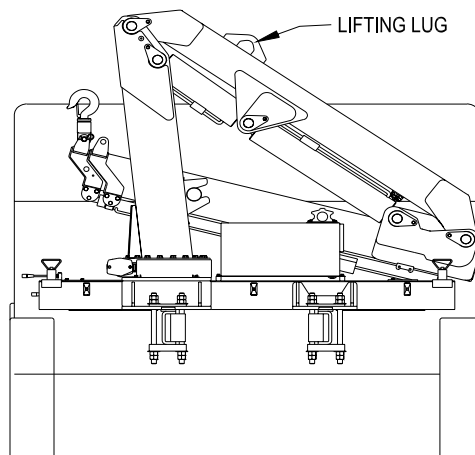
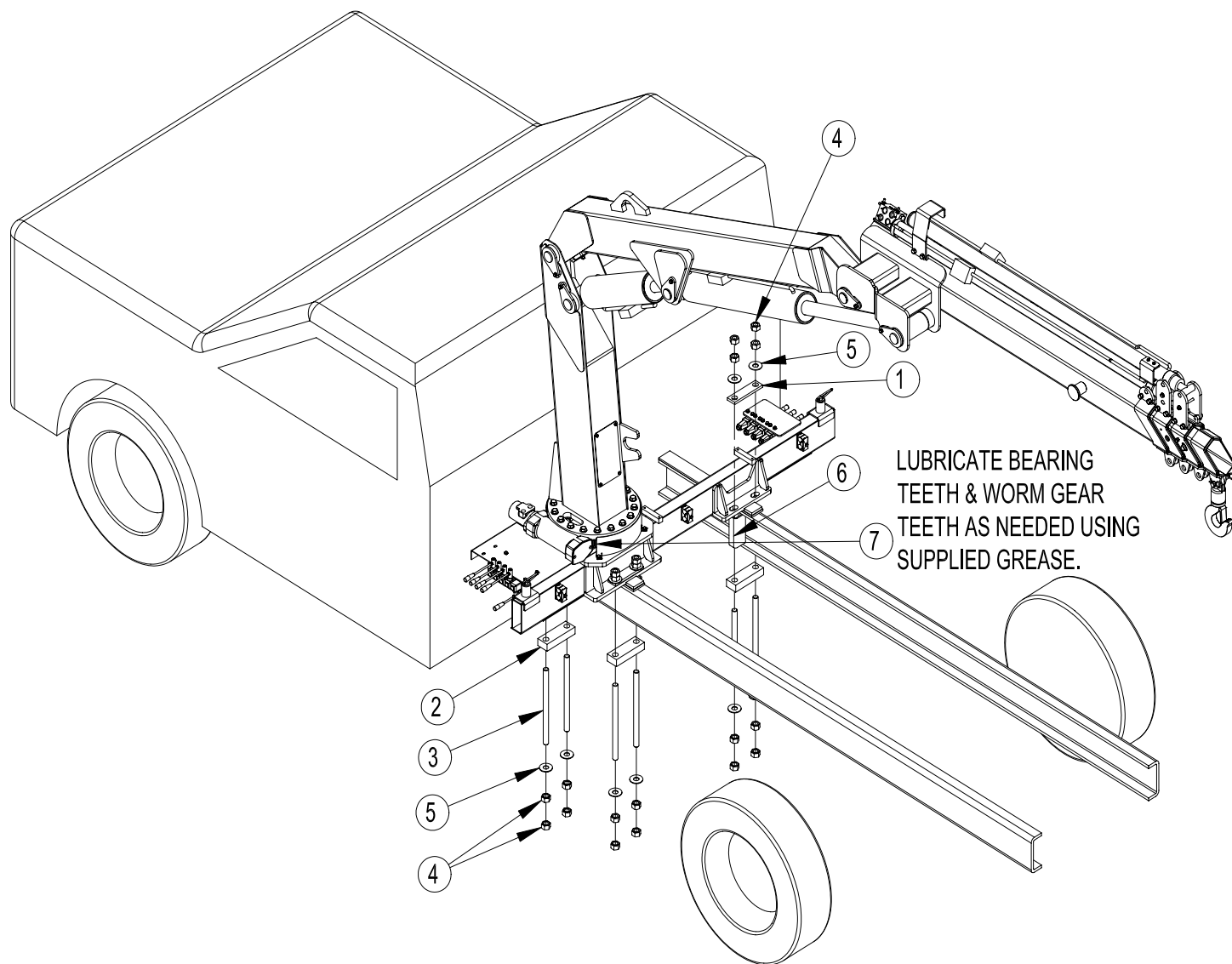


FIG. 2

14. Lubricate bearing teeth and worm gear teeth as needed using supplied grease.

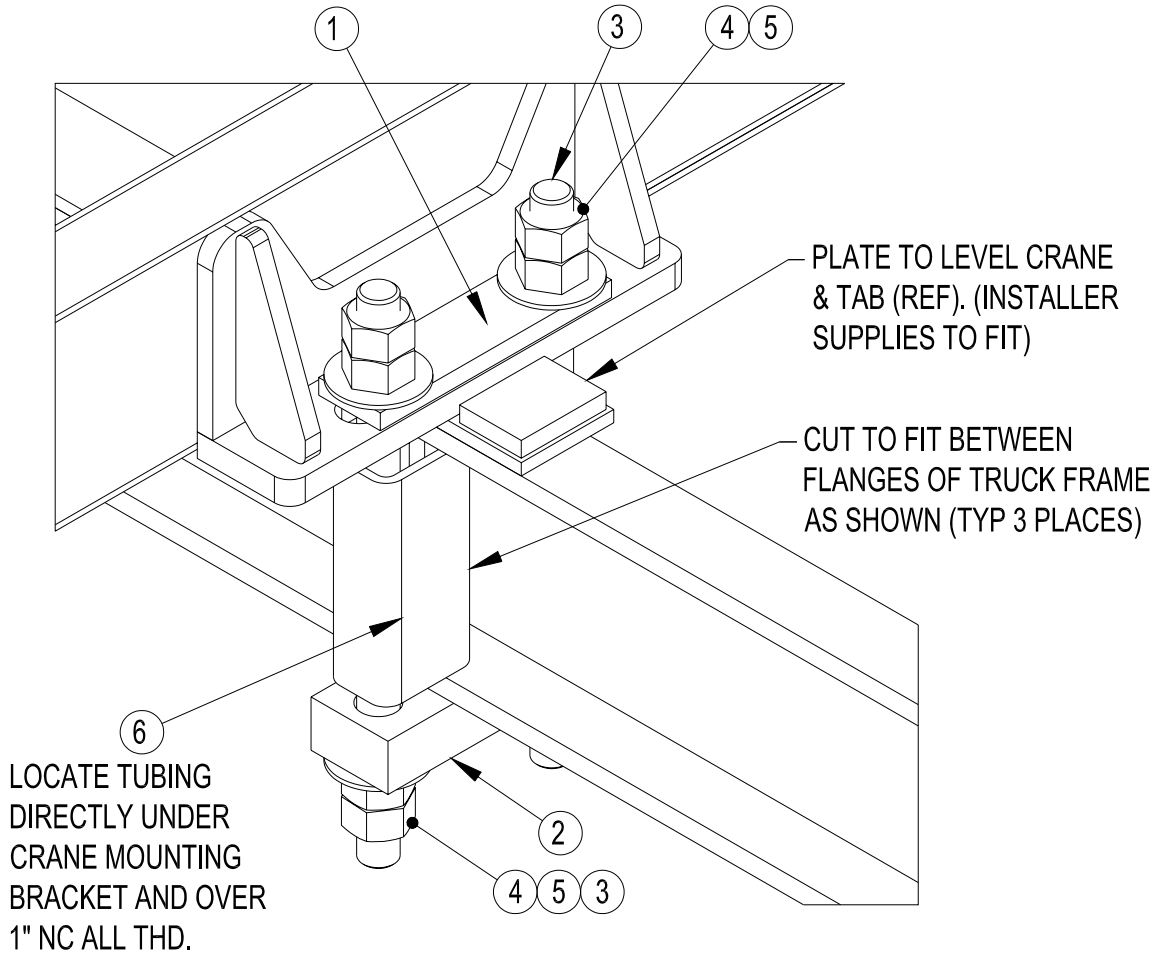
AUTO CRANE A40 INSTALLATION USED WITH FORD F-650/750 CHASSIS



HYDRAULIC RESERVOIR REMOVED FOR CLARITY

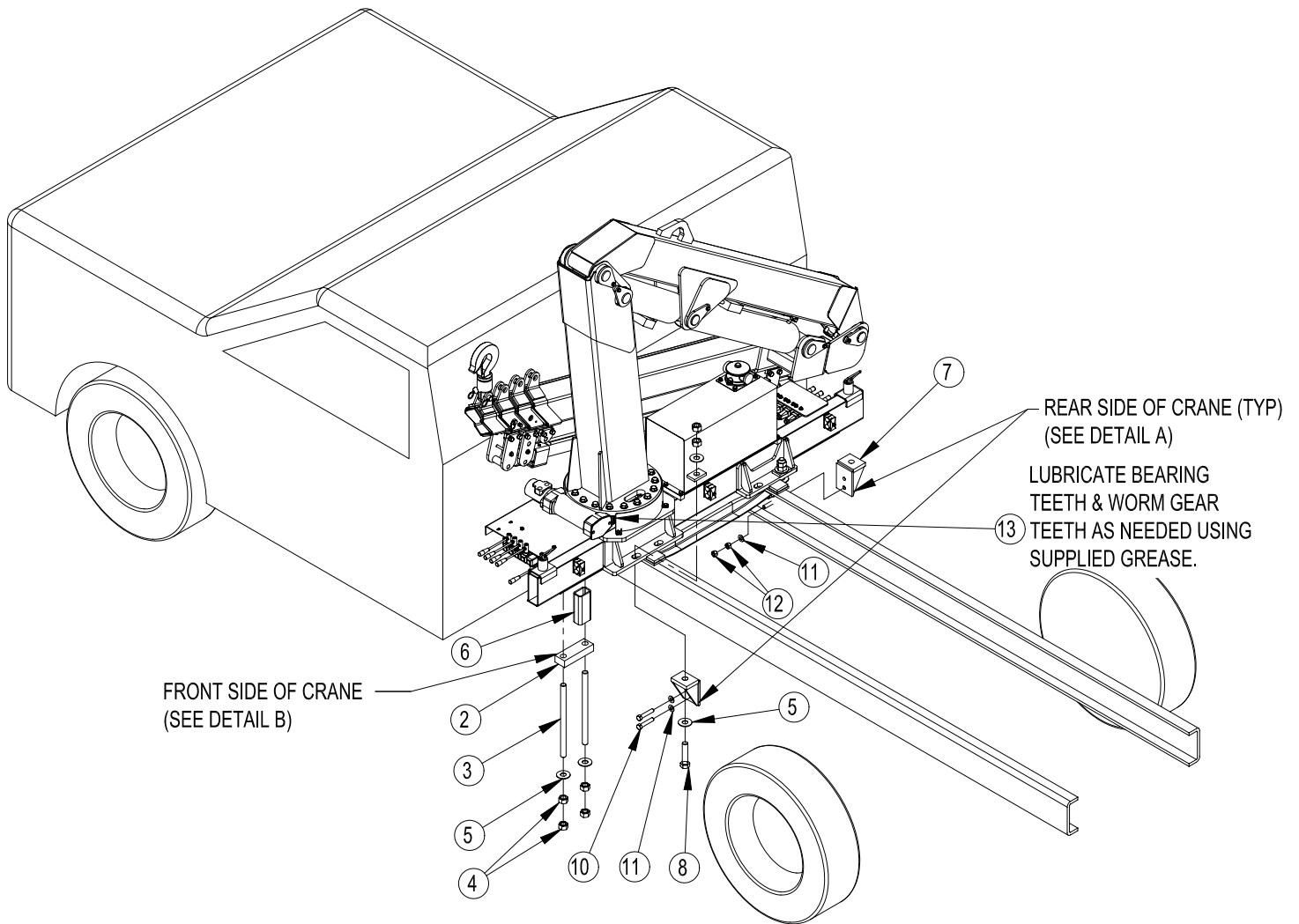
AUTO CRANE A40 INSTALLATION USED WITH FORD F-650/750 CHASSIS

VIEW OF REAR MOUNTING POINT ON THE PASSENGER SIDE.



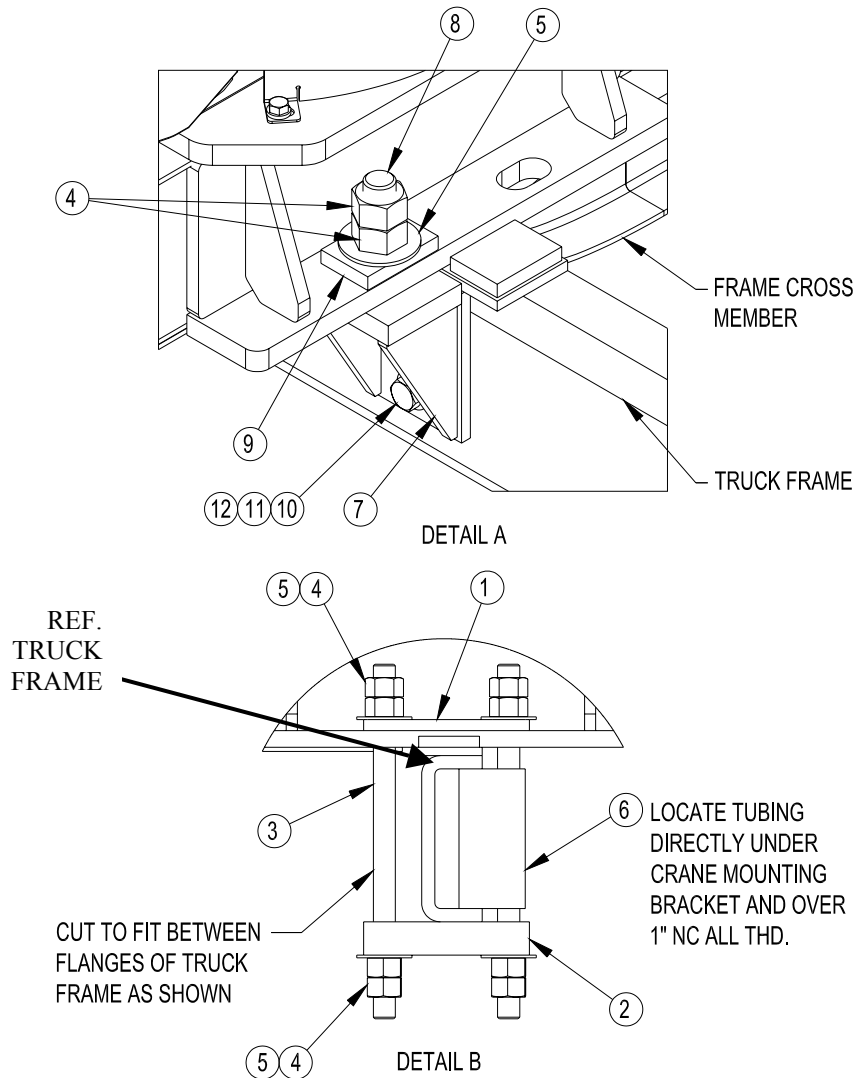
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	3	368087	PAD MTG
2	3	368088	PAD BTM MTG
3	6	367182	ALL THD 1" UNC X 20 LG
4	24	367183	NUT 1" UNC
5	12	407311000	WASHER FL 1 I.D. x 2.50 O.D. HARDENED
6	3	407174000	TBG RT STL 3 X 2 X .250W X 10
7	1	407106101	GREASE - MOLY 29

AUTO CRANE A40 INSTALLATION USED WITH FORD F-550 CHASSIS



(ONLY FOR USE ON THE FORD F-550 TRUCK CHASSIS)
EXAMPLE: FRAME CROSS MEMBER

AUTO CRANE A40 INSTALLATION USED WITH FORD F-550 CHASSIS



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	368087	PAD MTG
2	1	368088	PAD BTM MTG
3	2	367182	ALL THD 1" UNC X 20 LG
4	12	367183	NUT 1" UNC
5	8	407311000	WASHER FL 1 I.D. x 2.50 O.D. HARDENED
6	1	407174000	TBG RT STL 3 X 2 X .250W X 10
7	2	407307000	FRAME MTG BRKT WDMT
8	2	407173000	SCW HX HD 1" NC X 4.50 LG GR8
9	2	407171000	DOUBLER
10	4	490170000	SCW HX 5/8 NC X 3 1/4 GR 8
11	8	407314000	WASHER FL 5/8 X 1 5/16 OD HARDENED
12	8	407315000	NUT HX 5/8 NC CP GR8
13	1	407106101	GREASE - MOLY 29

