



Transfer Carriage Rear Tilt Cylinder Lug Repair Instructions

For Kit 1001182758

The following instructions describe the preparation and installation of the Transfer Carriage Rear Tilt Cylinder Lug Kit.

1.1 GENERAL GUIDELINES

- This repair procedure provides repair information for a specific discrepancy. It is the responsibility of the entity performing the repairs to determine if the discrepancy can be corrected by this procedure. This procedure is for the repair of the transfer carriage rear tilt cylinder mount only.
- During inspection, if any cracks or deformities exist beyond the radius of the transfer carriage frame at the rear tilt cylinder mount, the transfer carriage MUST be replaced.
- After inspection, if any cracks or deformities Do Not exist beyond the radius of the transfer carriage frame at the rear tilt cylinder mount, complete the transfer carriage rear tilt cylinder lug repair instructions.

1.2 MODELS AFFECTED

1044C-54

1.3 WELD REPAIR GUIDELINES

CAUTION

Use all applicable Safety precautions while working on, around or under any machinery.

- All welding must be in accordance with ANSI/AWS D1.1 Standard.
- Disconnect the battery of the machine being repaired prior to welding.
- Ground only to the component being welded. Do not ground to any adjacent component or allow pins, wear pads, wire ropes, bearings, gears, seals, valves, electrical wiring, or hoses to be between the grounding position and the area to be welded.

1.4 PARTS REQUIRED

NOTICE

Failure to comply with the above weld repair guidelines may result in component damage.

Transfer Carriage Rear Tilt Cylinder Lug Kit:
P/N 1001182758

1.4.1 PARTS LIST

P/N	Qty	Description
10136503	1	Rear Carriage Rear Tilt Cylinder Mounting Lug
3575665	2	Reinforcement Plate
8050001	1	Bearing, Spherical
10136464	1	Pin, Rear Tilt Cylinder to Transfer Carriage
3841709	1	Rod, Keeper, 1/2 Dia X 3.25 LG
10715272	1	Fitting, 1/8 Grease
10732689	1	Cover, Grease Zerk

Note: Quantities listed are for one side only. Two Kits required to repair both RH and LH Rear Tilt Cylinder Mounting Lugs.

Some weld-on parts may not be available or may require long lead times for delivery. Please consult with the Parts Department prior to ordering the parts outlined above to check on availability.

1.5 TOOLS & EQUIPMENT REQUIRED

1. Stands and lifting equipment capable of lifting/supporting the affected components
2. Portable power grinder
3. Drilling and reaming equipment
4. Air carbon-arc equipment
5. Electric welding equipment
6. AWS 70 grade, low hydrogen rod or wire
7. Standard mechanic tools
8. Standard welder tools
9. Paint

1.6 PERSONNEL REQUIRED

1. Qualified Lull equipment mechanic
2. Certified Welder

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1.7 REPAIR PROCEDURE**1.7.1 MOUNTING LUG / REINFORCEMENT PLATE REMOVAL**

1. Park the machine on a firm, level surface, fully retract the boom, lower the boom, place the transmission in (N) NEUTRAL, engage the park brake and shut the engine OFF.
2. Support the boom assembly with a suitable support or crane.
3. Place a Do Not Operate Tag on both the ignition key switch and steering wheel, stating that the machine should not be operated.
4. If equipped, open the engine access door. Allow the system fluids to cool.
5. Properly disconnect the battery.
6. Remove pin securing barrel end of the carriage rear tilt cylinder.
7. Refer to the appropriate service manual for detailed removal procedure.
8. Raise and secure the carriage rear tilt cylinder away from the mounting lug area.
9. Protect any hoses, wires and hydraulic cylinder rods before preparing or welding in the immediate area.
10. Thoroughly clean each repair area (i.e, dirt, grease, rust, paint, etc.)
11. Remove the mounting lug and reinforcement plates around the damaged rear carriage rear tilt cylinder mounting lugs from the transfer carriage weldment using a hand-held grinder or air carbon-arc equipment.
12. Inspect the transfer carriage weldment using the magnetic or dye-penetrant inspection methods to assure there are no cracks or deformities. If any cracks or deformities exist, grind to remove affected area(s) and repair.
13. Grind the top of frame flush. Thoroughly clean each repair area (i.e, dirt, grease, rust, paint, etc.)

1.7.2 MOUNTING LUG / REINFORCEMENT PLATE INSTALLATION

1. Locate the Transfer Carriage Rear Tilt Cylinder Mounting Lug (1) P/N 10136503 into position and mark location as shown on the applicable illustration. (Refer to Section 1.9. "Mounting Lug / Reinforcement Plate Weldment")
2. Tack weld the mounting lug in place.
3. Ensure mounting lug is properly located.
4. Weld the mounting lug as noted in the applicable illustration. (Refer to Section 1.9. "Mounting Lug / Reinforcement Plate Weldment")
5. Inspect welds using the magnetic or dye-penetrant inspection methods to assure there are no cracks or deformities. If any cracks or deformities exist, grind to remove affected area(s) and repeat the weld and inspection procedures.
6. Locate the Reinforcement Plate (2) P/N 3575665 into position and mark location as shown on the applicable illustration. (Refer to Section 1.9. "Mounting Lug / Reinforcement Plate Weldment")
7. Tack weld the reinforcement plate in place.
8. Ensure reinforcement plate is properly located.
9. Weld the reinforcement plate as noted in the applicable illustration. (Refer to Section 1.9. "Mounting Lug / Reinforcement Plate Weldment")
10. Inspect welds using the magnetic or dye-penetrant inspection methods to assure there are no cracks or deformities. If any cracks or deformities exist, grind to remove affected area(s) and repeat the weld and inspection procedures.

NOTICE

Do not damage the parent metal during this procedure.

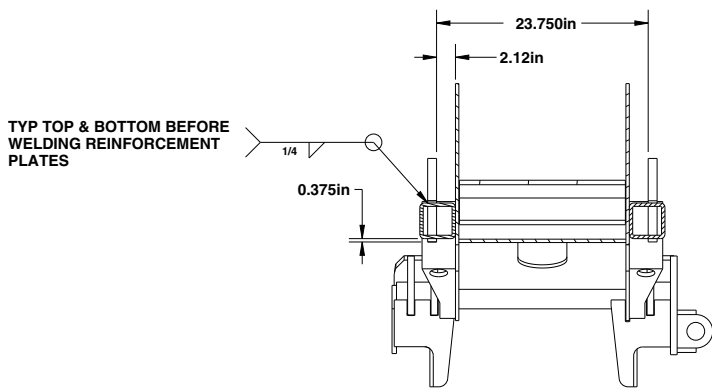
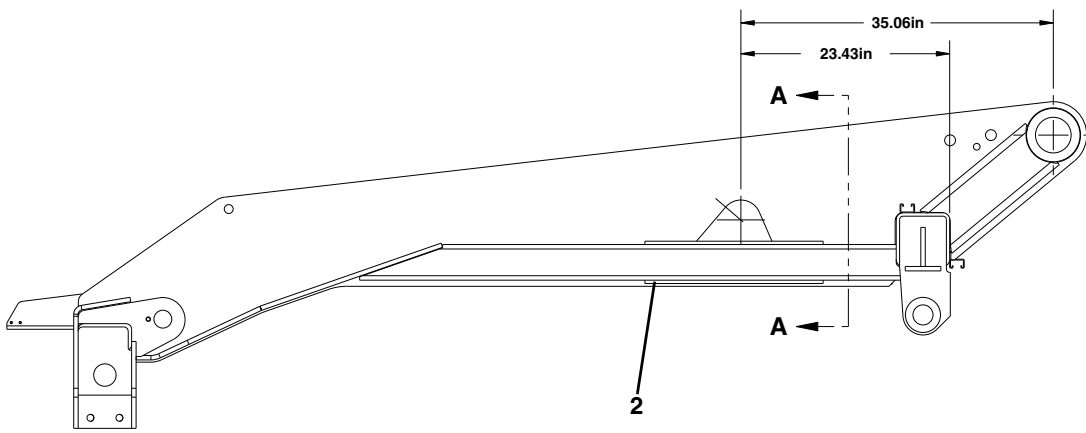
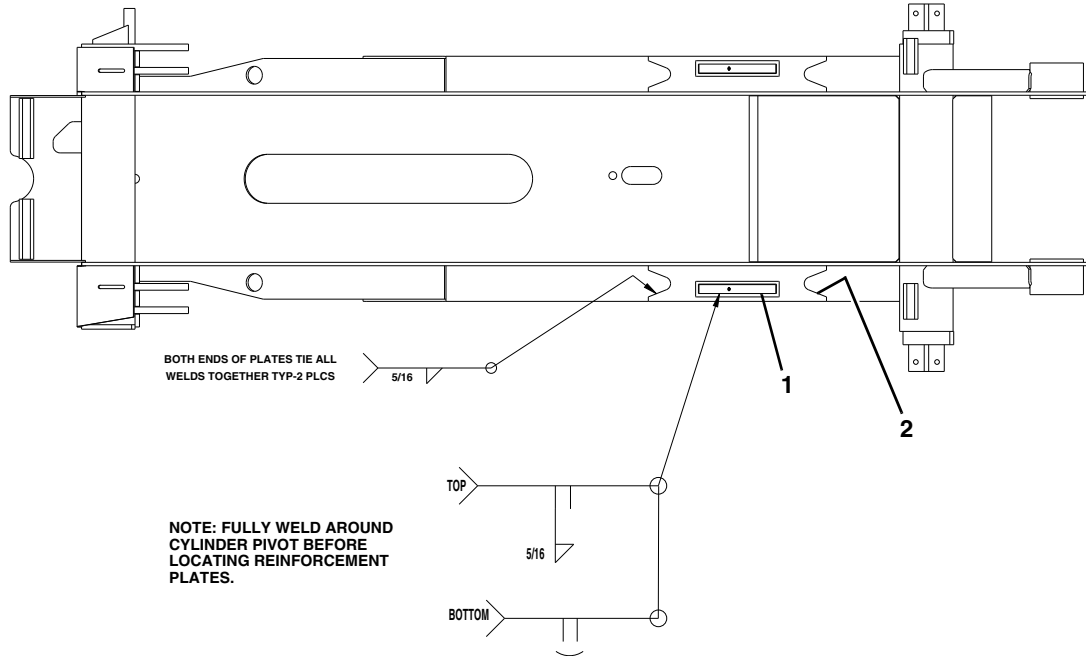
1.7.3 MOUNTING LUG MACHINING

1. The mounting lug will require drilling and/or machining. This operation can be performed in house if the proper equipment is available. If not, a reputable machine shop will be required to perform the machining.
2. Refer to Section 1.10. "Mounting Lug Machining" for exact machining sizes and tolerances.
3. Drill and ream a new hole in the new transfer carriage rear tilt cylinder mounting lug (1). (Refer to Section 1.10. "Mounting Lug Machining")
4. Clean, prime and paint the affected areas.

1.8 TRANSFER CARRIAGE REAR TILT CYLINDER ASSEMBLY

1. If required, replace all damaged transfer carriage slave cylinder components.
2. Reassemble all components incorporating new Spherical Bearing P/N 8050001, Pin P/N 10136464, Keeper Rod P/N 3841709, Grease Fitting P/N 10715272 and Cover P/N 10732689.
3. Refer to the appropriate service manual for detailed assembly procedure.
4. Remove all protective coverings from any hoses, wires and hydraulic cylinder rods.
5. Properly connect the battery.
6. Load the unit with the rated capacity and cycle the boom functions throughout their full range a minimum of five times to ensure safe and proper operation.
7. Inspect the repair areas for discrepancies.
8. If equipped, close engine access door.
9. Remove the Do Not Operate Tag from the ignition key switch and the steering wheel.
10. Return machine to service.

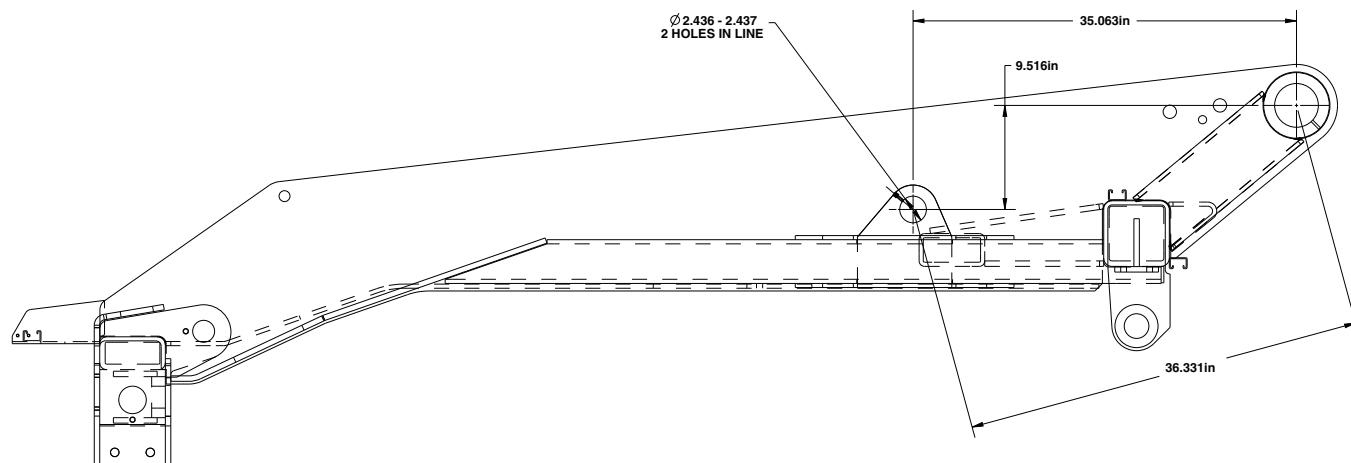
1.9 MOUNTING LUG / REINFORCEMENT PLATE WELDMENT



SECTION A-A

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1.10 MOUNTING LUG MACHINING



MAP28960

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