

SkyTrak Boom Pivot Repair Instructions

For Kit 1001141603

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 boom pivot weldment only.

1.2 PARTS REQUIRED

A CAUTION

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

SkyTrak Boom Pivot Repair Kit: P/N 1001141603

P/N	Qty	Description
1001141633	1	Plate, Boom Pivot
8065641*	2	Bearing, Self Aligning

Note: * The Self Aligning Bearings P/N 8065641 will be factory installed in the Boom Pivot Plate Weldment P/N 1001141633.

1.3 WELD REPAIR GUIDELINES

- All welding must be in strict accordance with EN288-3, EN288-4 or ANSI/AWS D1.1 standards.
- 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.

NOTICE

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

1.4 TOOLS & EQUIPMENT REQUIRED

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

1.5 PERSONNEL REQUIRED

- 1. Qualified JLG Equipment Mechanic
- 2. Certified Welder

1.6 MODELS AFFECTED

SkyTrak 8042, 10042 & 10054

1.7 BOOM PIVOT WELDMENT REMOVAL

- 1. Park the machine on a firm, level surface, fully retract the boom, lower the boom, place the transmission control lever in (N) NEUTRAL, engage the park brake and shut the engine OFF.
- 2. Place a Do Not Operate Tag on both the ignition key switch and steering wheel, stating that the machine should not be operated.
- 3. Open the engine doors. Allow system fluids to cool.
- 4. Remove components as required to facilitate repair.

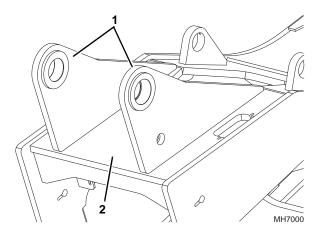
Note: Refer to Service Manual 31200353, Section 3.4.1 for detailed boom assembly removal.

- 5. Protect any hoses, wires and hydraulic cylinder rods before preparing or welding in the frame boom pivot area.
- Safely support the components to alleviate pressure or stresses at the affected repair area(s).

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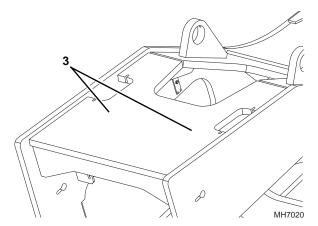


 Using a portable grinder or air carbon-arc equipment, remove both boom pivot plates (1) from the pivot tower weldment (2).

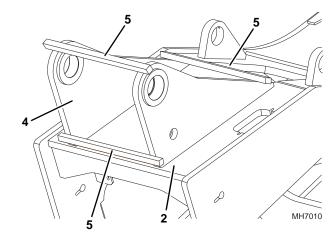
NOTICE

Do not damage the parent metal during this procedure.

 Inspect the affected area of the pivot tower weldment for cracks. If any discrepancies are evident, notify JLG Safety 1-877-554-7233 (877-JLG-SAFE) for further evaluation.



9. Grind the repair area (3) flush and prepare surfaces for welding.

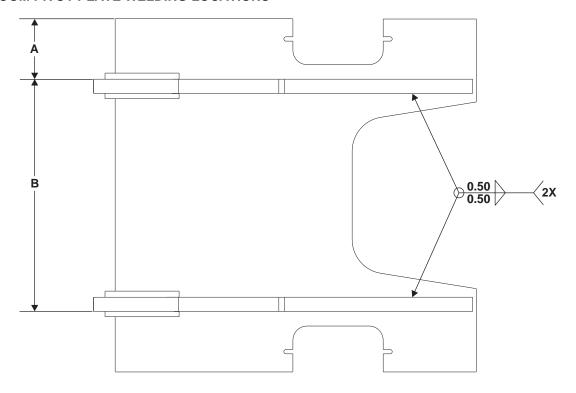


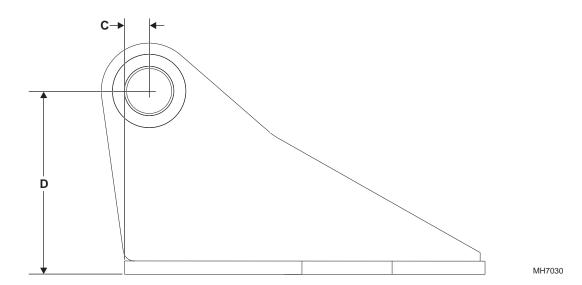
- Locate the Boom Pivot Plate Weldment (4) P/N 1001141633 to the pivot tower weldment (2). See "Boom Pivot Plate Welding Locations" on page 3. Tack into place.
- 11. Completely weld the boom pivot plates to the pivot tower weldment using the recommended weld material with types and sizes. See "Boom Pivot Plate Welding Locations" on page 3.
- 12. Inspect welds using the magnetic particle 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.
- 13. Remove the three retaining bars (5) connecting the two pivot plates.
- 14. Clean, prime and paint the affected areas.

Note: Refer to Service Manual 31200353, Section 3.4.8 for detailed boom assembly installation.

- 15. Properly connect the battery.
- 16. Verify the proper operation of all boom functions through a minimum of five cycles.
- 17. Inspect the repair areas for discrepancies. Contact *JLG* Safety 1-877-554-7233 (877-JLG-SAFE) for further evaluation if any discrepancies are found.
- 18. Close and secure the engine covers.
- 19. Remove the Do Not Operate Tags from both the ignition key switch and the steering wheel.
- 20. Return machine to service.

1.8 BOOM PIVOT PLATE WELDING LOCATIONS





- **A.** 5.220 5.340 in (134,1 135,6 mm)
- **B.** 20.320 20.440 in (516,1 519,1 mm)
- **C.** 2.180 in (55,3 mm)
- **D.** 16.270 in (413,2 mm)

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