

G6-42A Axle Mount Weldment Repair Instructions

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 repair is only for drilling drain holes in the front and rear axle mount plates, repairing of weld cracks that exist on the rear axle mount.
- After inspection, if only weld cracks and NO plate deflection is found, complete the Axle Mount Weldment Repair Instructions.
- After inspection, if weld cracks AND plate deflection are found on the rear axle weldment, kit number 100112699 will be required.

NOTICE

Reference the Service Manual for safe and proper disassembly/assembly procedures.

1.2 WELD REPAIR GUIDELINES

- 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.

NOTICE

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

1.3 TOOLS & EQUIPMENT REQUIRED

- 1. 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

1.4 PERSONNEL REQUIRED

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



1.5 REPAIR PROCEDURE

1.5.1 Front Axle Mounting Plate Drain

- 1. Remove any attachment from the machine.
- 2. Park the machine on a firm, level surface with the machine level, retract and level the boom. Place the transmission control lever in the (N) NEUTRAL position and engage the parking brake. Shut the engine OFF.
- 3. Place a Do Not Operate Tag on both the ignition key switch and the steering wheel, stating that the machine should not be operated.
- 4. Open the engine cover. Allow system fluids to cool.
- 5. Properly disconnect the battery.
- 6. Remove components as required to facilitate repair. Refer to the machine Service Manual for proper disassembly procedures.



- Drill 0.500 in (12,7 mm) drain holes (1) in the front axle mounting plates. See 1.5.4 "Front Axle Plate Drain Hole Locations" on page 4 for diagram.
- 8. Clean, prime and paint the affected areas.
- Install previously removed components. Refer to the machine Service Manual for proper assembly procedures.

1.5.2 Rear Axle Mounting Plate Drain

1. Remove components as required to facilitate repair. Refer to the machine Service Manual for proper disassembly procedures.



- Drill 0.500 in (12,7 mm) drain holes (2) in the rear axle mounting plates. See 1.5.5 "Rear Axle Plate Drain Hole Locations" on page 5 for diagram.
- 3. Clean, prime and paint the affected areas.

1.5.3 Rear Axle Block Weldment Repair



- 1. Thoroughly clean the area (i.e., dirt, grease, rust, paint, etc.) from the repair area (3).
- 2. Protect any hoses, wires and hydraulic cylinder rods before preparing or welding in the axle mount area.
- 3. Visually inspect the welds and base metal around the rear axle mount (3) on both sides to ensure there are no cracks or deformities. If any cracks or deformities exist, repair as outlined in Step 4 (a, b & c) or as recommended by a certified welder.

- 4. Repair the cracks:
 - a. Use air carbon-arc equipment or a portable power grinder to remove area(s) of weld discrepancy. Remove the weld 1 in (25,4 mm) beyond end(s) of weld discrepancy, tapering to a depth of 0 in (0 mm).

NOTICE

Do not damage the parent metal during this procedure.

- b. Prepare the affected areas for re-welding. Using the recommended weld material, weld the discrepancy area(s) using 0.375 in (9,5 mm) fillet weld.
- c. Inspect welds using the magnetic particle or dyepenetrant 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.
- 5. Clean, prime and paint the affected areas.
- Install previously removed components. Refer to the machine Service Manual for proper assembly procedures.
- 7. Remove all protective coverings from any hoses, wires and hydraulic cylinder rods.
- 8. Properly connect the battery.
- 9. Close and secure engine cover.
- 10. Install the previously removed attachment.
- 11. Remove the Do Not Operate Tag from the ignition key switch and the steering wheel.
- 12. Return machine to service.

1.5.4 Front Axle Plate Drain Hole Locations





- **A.** 11.824 in ± 0.063 in (300,3 ± 1,6 mm)
- **B.** 5.912 in ± 0.063 in (150,2 ± 1,6 mm)
- **C.** 5.250 in \pm 0.063 in (133,3 \pm 1,6 mm)
- **D.** 2.625 in ± 0.063 in (66,7 ± 1,6 mm)
- **E.** 14.750 in ± 0.063 in (374,6 ± 1,6 mm)
- **F.** 7.375 in ± 0.063 in (187,3 ± 1,6 mm)
- **G.** 4.125 in \pm 0.063 in (104,7 \pm 1,6 mm)
- **H.** 1.00 in \pm 0.063 in (25,4 \pm 1,6 mm)
- I. 0.500 in (12,7 mm)) Drill Through

1.5.5 Rear Axle Plate Drain Hole Locations







- **A.** 11.406 in ± 0.063 in (289,7 ± 1,6 mm)
- **B.** 3.125 in ± 0.063 in (79,375 ± 1,6 mm)
- **C.** 8.835 in \pm 0.063 in (224,4 \pm 1,6 mm)
- **D.** 4.415 in \pm 0.063 in (112,1 \pm 1,6 mm)
- **E.** 5.910 in \pm 0.063 in (150,1 \pm 1,6 mm)
- **F.** 11.824 in \pm 0.063 in (300,33 \pm 1,6 mm)
- G. 0.500 in (12,7 mm)) Drill Through

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