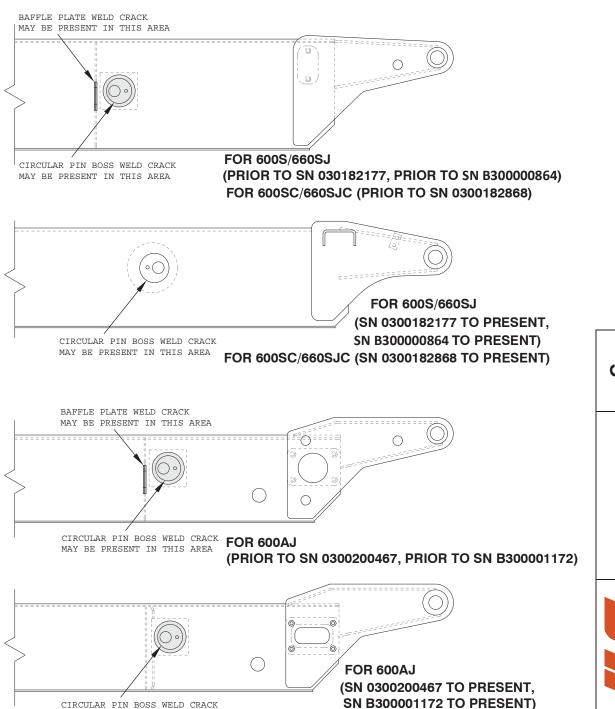


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## **Instruction Sheet**

JLG Model 600S, 660SJ, 600SC, 660SJC, 600AJ Fly Boom Baffle Plate/Pin Boss Crack Repair



KAF1677

MAY BE PRESENT IN THIS AREA

## **▲** CAUTION

USE ALL APPLICABLE SAFETY PRECAUTIONS WHILE WORKING ON, AROUND OR UNDER MACHINERY.

## **SPECIAL TOOLS REQUIRED:**

- Stands and lifting equipment capable of lifting/supporting the affected components
- · Air carbon-arc equipment
- · Hand held power grinder
- · Electric welding equipment
- AWS 70 grade, low hydrogen rod or wire
- Standard welder's tools
- · Standard mechanics tools
- Paint

## **PERSONNEL REQUIRED:**

- Qualified JLG equipment mechanic
- Certified welder

## **GENERAL REPAIR GUIDELINES:**

- This repair procedure provides parts and 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.
- Refer to the service and specifications manuals and illustrated parts manual for safe and proper disassembly/assembly procedures.

## **WELD REPAIR GUIDELINES:**

 All welding being performed on JLG equipment must be in strict accordance with the appropriate market standards for the material being welded. Below are the applicable welding standards for North America, Europe and Australia.

#### Steel:

#### Aluminum:

ANSI/AWS D1.1	• ANSI/AWS D1.2
• EN ISO 1011-1	• EN ISO 1011-4
• AS/NZS 1554.1	<ul> <li>AS/NZS 1665</li> </ul>

2. 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.

## **MACHINE PREPARATION:**

- 1. Park machine on a firm level surface, fully retract and lower the boom.
- 2. Turn machine OFF and place Do Not Operate tag on the key select switch.

## NOTICE

THE BELOW PROCEDURES MAY BE USED TO CORRECT DISCREPANCIES ON THE LEFT OR RIGHT SIDE PLATE OF THE FLY BOOM WELDMENT.

#### **BAFFLE PLATE WELD CRACK PROCEDURE:**

- Safely support the fly boom section to alleviate pressure or stresses at affected repair area(s). Remove all necessary components from the boom assembly to facilitate repair.
- 2. Using a hand-held power grinder, grind along the parent metal crack of the fly boom section to form a 45 degree "V" groove, 1/8" deep, 0" root opening on the outside surface of the boom side plate. Ensure that all sharp corners are removed along the crack(s).
- 3. Prepare the affected area(s) for welding. Using the recommended weld material, weld the discrepancy area(s) using a 1/8" full penetration groove weld technique with AWS 70 grade low hydrogen rod or wire, weld along the crack(s), filling the groove up through termination points(s).

## NOTICE

DO NOT GRIND THE REPAIR WELD FLUSH WITH BOOM SIDE PLATE.



- 4. 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.
- 5. Clean, prime and paint all affected areas.
- 6. Re-install all components removed to facilitate repair.

- 7. Operate the boom telescope function through a minimum of five (5) complete cycles to verify proper operation prior to returning the subject boom lift to service.
- 8. All discrepancies must properly corrected before returning the machine to service.

# PIN BOSS (PLATFORM LEVEL CYLINDER PIN MOUNTING) WELD CRACK PROCEDURE:

- Safely support the fly boom section to alleviate pressure or stress at affected repair area(s). Remove all necessary components from the boom assembly to facilitate repair.
- For weld cracks around the pin boss area, use air carbon-arc equipment or a portable power grinder to remove area(s) of weld discrepancy. Remove weld 1" beyond end(s) of weld discrepancy, tapering to a depth of 0".



- 3. Prepare the affected areas for welding. Using the recommended weld material, weld the discrepancy area(s) using a 1/4" fillet weld technique with AWS 70 grade low hydrogen rod or wire.
- 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 attached area(s) and repeat the weld and inspection procedures.
- 5. Clean, prime and paint all affected areas.
- 6. Reinstall all components removed to facilitate repair.
- 7. Operate the boom telescope function through a minimum of five (5) complete cycles to verify proper operation prior to returning the subject boom lift to service.
- 8. All discrepancies must be properly corrected before returning the machine to service.
- 9. Remove Do Not Operate tag from key select switch and return machine to service.

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