





Repair Procedure

The purpose of this instruction is to repair the rear spindle on JLG model ES series scissors lifts.

It is recommended that you read and thoroughly understand these instructions before starting this procedure.



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

# **Models Affected:**

1930ES, 2030ES, 2630ES, 2646ES, and 3246ES Scissor Lifts

# **Tools & Equipment Required:**

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

# **Personnel Required:**

- Certified Welder
- Qualified JLG equipment mechanic

#### **Parts/Material Required:**

• JLG P/N: 7027788 - Rear axle spindle weldment, (qty 1 per wheel)

**Note:** 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. Please inform them that these parts have been specified in a procedure supplied by JLG.

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Disconnect the battery power from the machine.

# **REPAIR PROCEDURE GUIDELINES**

#### **GENERAL GUIDELINES:**

- USE ALL APPLICABLE SAFETY PRECAUTIONS WHILE WORKING ON, UNDER, OR AROUND ANY MACHINERY.
- REFERENCE THE SERVICE AND SPECIFICATIONS MANUAL AND ILLUSTRATED PARTS MANUAL FOR SAFE AND PROPER DISASSEMBLY/ASSEMBLY PROCEDURES.

# WELD REPAIR GUIDELINES:

- ALL WELDING MUST BE IN STRICT ACCORDANCE WITH ANSI/AWS D1.1 STANDARD, AS REQUIRED BY THE APPROPRIATE ANSI A92 STANDARDS FOR AERIAL WORK PLATFORMS.
- 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, BEARING, GEARS, SEALS, VALVES, ELECTRICAL WIRING, OR HOSES TO BE BETWEEN THE GROUNDING POSITION AND THE AREA TO BE WELDED.
- FAILURE TO COMPLY WITH THE ABOVE WELD REPAIR GUIDELINES MAY RESULT IN COMPONENT DAMAGE.



# Procedure:

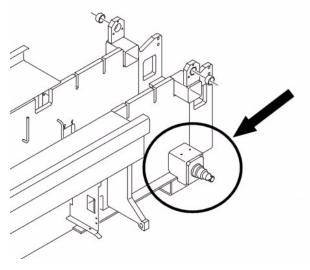
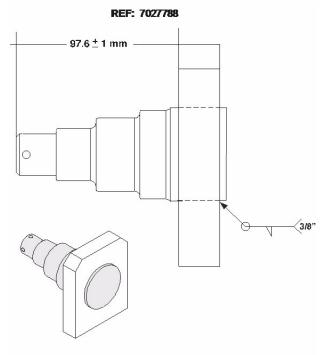


Figure 1: Rear Spindle

- Remove components, as required, to facilitate repair of the rear axle spindle. Refer to the Service and Specifications manual for proper assembly/ disassembly procedures. Safely support the components to alleviate pressure or stresses at affected repair area(s)
- Using a hand-held grinder or air carbon-arc equipment, remove the rear spindle weldment(s) and hub plate from the frame weldment.

*Note:* Do not damage the frame weldment during this procedure.

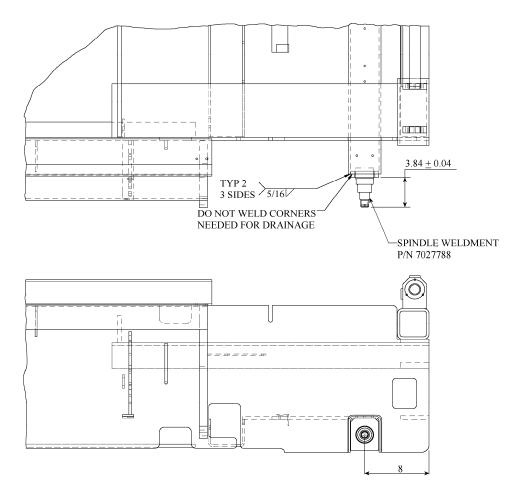
3. Dress the frame and rear axle spindle weldment(s) in preparation for welding.



# Figure 2: Spindle Weldment

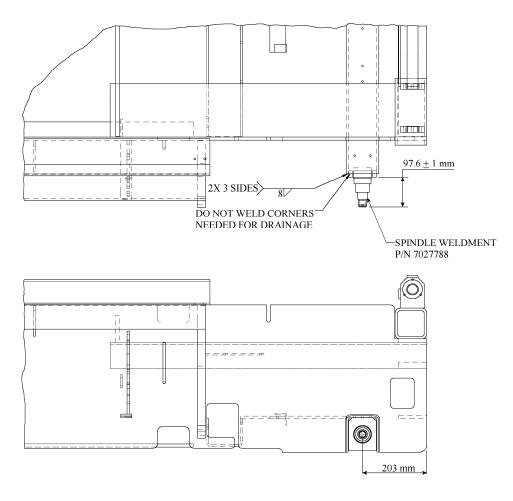
- 4. Locate each spindle weldment into position. Ensure that each spindle weldment fits properly into the frame. Tack weld into position as shown in the enclosed illustration.
- 5. Weld into place using the recommended weld material with types and sizes as shown in the enclosed illustration.
- 6. Inspect all repair procedure welds using a magnetic particle, dye-penetrant or other acceptable weld inspection method to determine the quality of the weld. If the quality is found to be unacceptable, according to the above listed standards, air carbonarc, cut, and/or grind to remove affected area(s). Reweld affected area(s) using recommended weld materials and procedures. Repeat weld inspection procedure.
- 7. Reassemble all components and prepare the unit for operation.
- 8. With the rated load placed in the platform, verify the proper operation of the drive and steer functions a minimum of five times before returning the machine to service.
- 9. Inspect the repair areas for discrepancies. All discrepancies must be properly corrected before returning the machine to service.
- 10. Clean, prime, and paint the affected areas.

# ES Scissor - Rear Axle Spindle Repair All Dimensions in inches



Dimension between the outer ends of each spindle: 30 inch wide frame - 29.02 46 inch wide frame - 45.20

# ES Scissor - Rear Axle Spindle Repair All Dimensions in millimeters



Dimension between the outer ends of each spindle: 30 inch wide frame - 737.2 mm 46 inch wide frame - 1148.2 mm