

Compressors

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What and Why

- Based on recent information concerning compressors, it is necessary to send this updated Immediate Action Message. **NOW ALL Schrader and Chicago Pneumatic compressors within each region must be checked for cracks and air leaks.**
- The stores' Safety Leaders will check for air leaks in the tanks.
- You will receive the list of Schrader and Chicago Pneumatic compressor serial numbers and their respective store numbers (specific to your region) from the Technical Team at Corporate.

Action

Warehouse Adjustment Manager or Maintenance Manager:

- Perform a visual inspection of each Schrader and/or Chicago Pneumatic compressor.
 - You will receive written inspection procedures through iAuditor
 - If a compressor is found to be defective, follow the Lock out/Tag out procedures (Document 58466, Published 3/29/16, ver. 1.0).
- If the Lock out/Tag out devices are not available:
 - ■Use any lock on the electrical box
 - ■Cut the power cord on the auto-drain
 - ■Use heavy duty tape to ensure the ball valve remains closed from the system

IF THE REGIONAL MAINTENANCE MANAGER RECEIVES NOTIFICATION ABOUT A LEAKING TANK, MAINTENANCE PERSONNEL MUST TAKE THAT TANK OUT OF SERVICE IMMEDIATELY.

Final Step

Please be sure you have the latest version of iAuditor downloaded for Compressor Inspection Procedures!

Thank you for keeping our people Safe!



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Useful Terminology

Shell – cylindrical portion of the tank; i.e. middle portion of the tank.

Head – cap welded to the shell; each tank has two heads – top and bottom.

Nameplate – plate attached to the shell that contains information about the tank.

Mounting bracket – pedestal mounted at the top of each tank. The pedestal supports the compressor and the electric motor.

Mounting bracket welds – welds that attach the pedestal to the top head of the tank.

Procedure to be followed when inspecting Schrader International air compressor tanks:

Locate the following on each tank:

- The sticker with serial number information: located on the left side of the pedestal beneath the compressor, see green arrows and circles in Figure 1.
- The nameplate: located approximately 12 inches above the ground, and centered on the shell see yellow arrows and circles in Figure 1.



Figure 1. Location of the sticker with serial number information – green arrows and circles.

Location of the nameplate on air compressor tanks – yellow arrows and circles.



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Record and report the following information from the sticker:

- a. Is the inspected tank Unit A or Unit B
- b. Serial number
- c. Model number
- d. Manufacturing code (MFG. CODE)
- e. Pump model number
- Shine a flashlight from the right side of the nameplate so that the stamped information becomes visible see Figure 2.

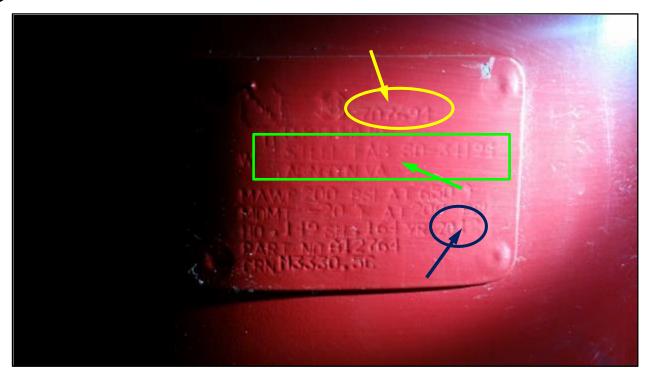


Figure 2. Nameplate has information stamped on it. To better see the information provided on the nameplate, shine the flashlight from the right side and parallel to the surface of the nameplate, as shown in this image.

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Record and report the following information from the nameplate:

- a. Serial number yellow arrow and circle
- b. Certified by green arrow and rectangle
- c. Year of manufacture blue arrow and circle



- Thoroughly wipe clean the surface of the top head in the area where the welds attach the compressor mounting bracket to the top head. Remove all contaminants from the surface including, dust, grease, and oil. Red paint should be clear see Figure 3.
 - a. Perform cleaning on all four corners where the mounting bracket is welded to the top head.

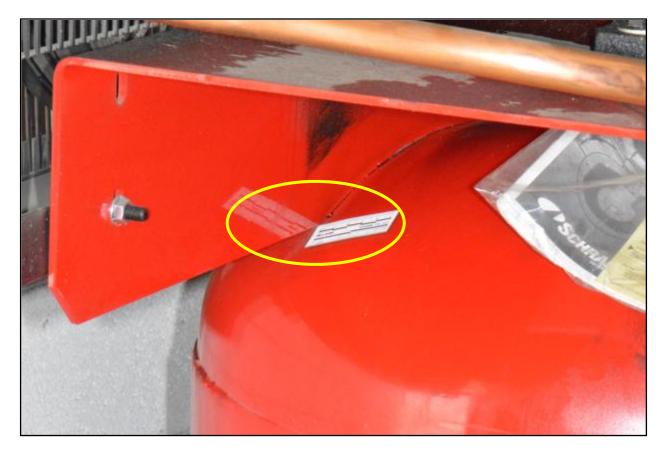


Figure 3. One of the four corners where the welds attach the compressor mounting bracket to the top head of the tank.

Shine a flashlight from the bottom left corner of Figure 3 and parallel to the surface of the head.



ACTION

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Observe if a straight line shadow is visible perpendicular to the weld in the area circled in Figure 3. Inspect both sides of the weld. Shadow under these lighting conditions could be an indication that a crack is present in the head material. Figure 4 shows the appearance of the shadow perpendicular to the weld. However, the crack, if present, could also have a different angle to the weld.

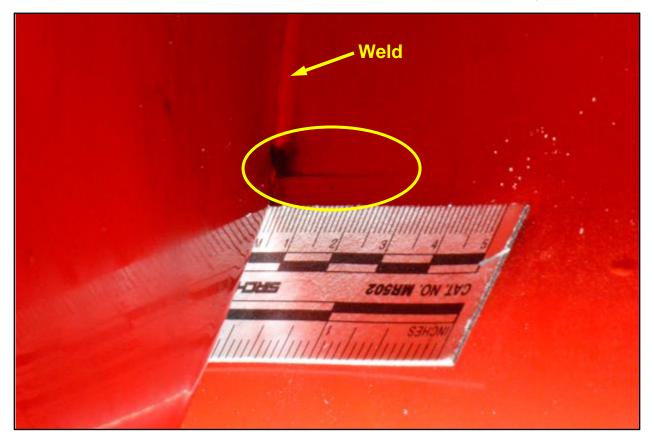


Figure 4. Appearance of the weld (yellow arrow) and the crack perpendicular to the weld (yellow circle).

Even if you do not see the shadow, use your index finger and feel the surface of the head in the area circled in Figure 3. Uneven surface with edge like feel could be an indication that a crack is present in the head material. The edge/crack typically extends perpendicular from the weld but could also have a different angle.



If you either observe the shadow, or feel a slight edge on the surface, measure and report the length of the edge or shadow. Subsequently, remove the air pressure from the tank, and disconnect the tank and its compressor from the pressurized air loop.

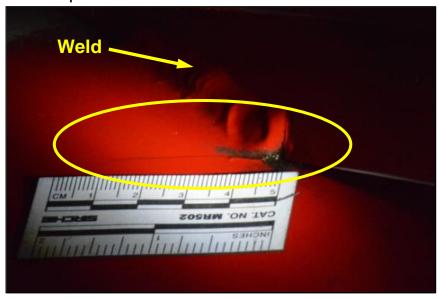


Figure 5. Appearance of the opposite side of the weld shown in Figure 4 (yellow arrow), and the crack perpendicular to it (yellow circle).

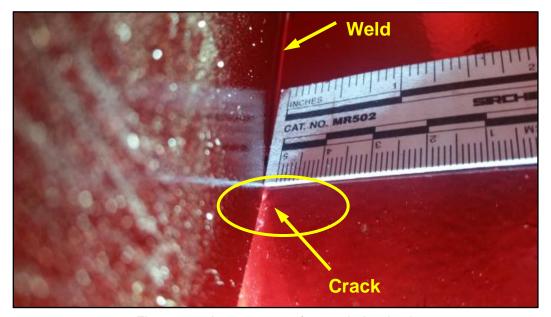


Figure 6. Appearance of a crack that is short.