# **SERVICE BULLETIN**



# Return notification to repair BD Caliper Brakes supplied by Nexen Group, Inc. (formerly Horton Industrial Products, Inc)

#### **Product:**

BD Caliper Brakes; Spring EngagedBD Caliper Brakes; Air Engaged

#### **Problem: Defective Weld**

The threaded tube/actuator welds are defective and could cause the actuator to become separated from the threaded tube. If this occurs, the actuator could be projected from the brake, under full actuator force, causing serious harm or injury.

#### What must be done:

Replace the actuator portion of the brake with the new 2-port actuator supplied for this purpose.

#### Required items and tools:

- 1. Nexen User Manual
  - L-20063
- 2. A new actuator
- 3. Spanner Wrench
- 4. Open End Wrench, 9/16
- 5. Socket Wrench Set
  - 9/16 deep well socket

## **Spring Engaged Brake**

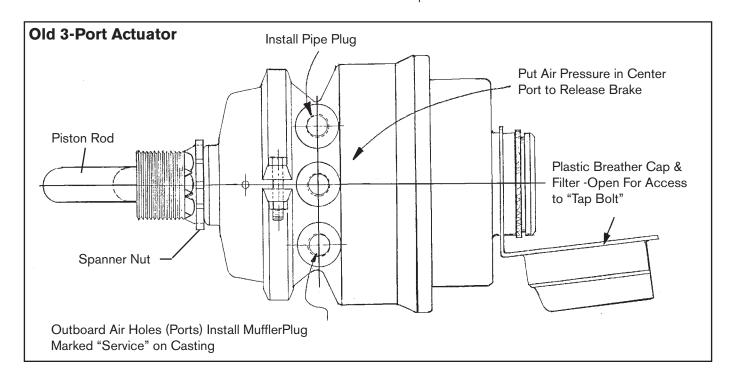
**Danger:** The Actuator Assembly (Item 11) is spring loaded under extreme pressure. Do not remove the clamp collar to disassemble the upper portion from the lower portion. Please follow the instructions listed below.



#### Disassembly

Manually release the Spring Actuator prior to disassembly.

- 1. Apply a minimum of 85 psi hold-off air pressure to remove the spring force on the brake arms, shoes and tap bolt.
- 2. Remove the plastic breather cap located at the top of the Actuator (Item 11). Using a 9/16 socket wrench, turn the tap bolt counterclockwise until the tap bolt is even with the top of the actuator and loose. Approximately 40 turns.
- Shut off the air supply to the brake and disconnect the air supply line.
- Remove the Muffler (Item 13) and Pipe Plug/Adapter (Items 21 & 22). Retain for reuse.
- Loosen the Spanner Nut on the threaded tube portion of the actuator.
- 6. Turn the Actuator counterclockwise to remove it from the brake
- 7. Pull the Piston Rod (Item 10) out of the threaded tube, remove the Spanner Nut and retain for reuse.

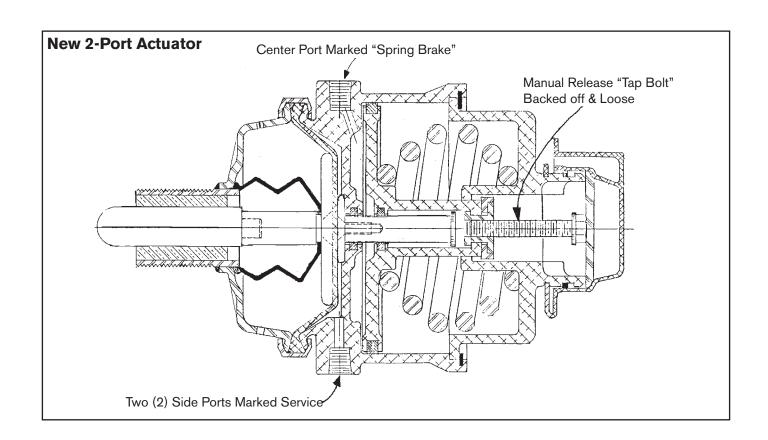


#### Re-Assembly

- Insert the Push Rod into the new Actuator tube and thread the Spanner Nut onto the tube.
- 2. Check if the tap bolt on the new Actuator is loose.
- Screw the new Actuator in the Brake Arm, turn the Actuator clockwise until the end of the tube is approximately 1/16" from the inside edge of the Arm.
- Attach the air line to the Actuator's center port labeled "Spring Brake".

**NOTE:** The Actuator may be rotated 360° for air line orientation. Loosen the ring clamp bolt and rotate to the desired position. Tighten the ring clamp to 15-20 ft-lbs.

- Install a Muffler Plug (Item 13) into one "Service" port and the Pipe Plug/Adapter (Items 21& 22) into the other "Service" port.
- 6 Apply a minimum of 85 psi hold-off pressure to the Actuator.
- 7. Using a 9/16 socket wrench, turn the Tap Bolt clockwise and tighten to 10-15 ft-lb torque.
- 8. Perform the Friction Facing Clearance Adjustment procedure found in User Manual #L-20063
- 9. Tighten the Spanner Nut.



# Air Engaged Brake

#### Disassembly

- 1. Loosen the Spanner Nut on the threaded tube portion of the Actuator.
- 2. Shut off the air supply
- 3. Disconnect the air supply line.
- 4. Turn the Actuator counterclockwise to remove it from the brake arm.
- 5 Pull the Push Rod out of the threaded tube, remove the Spanner Nut and retain for reuse.

### Re-Assembly

- Insert the Push Rod into the new Actuator and thread the Spanner Nut onto the tube.
- Screw the new Actuator into the brake Arm; turn the Actuator clockwise until the end of the tube is approximately 1/16" from the inside edge of the arm.
- 3. Attach the air supply line to the actuator port.



**NOTE:** The actuator may be rotated 360° for air line orientation. Loosen the ring clamp bolt and rotate actuator to desired position. Tighten ring clamp bolt to 15-20 ft-lbs.

- Perform the Friction Facing Clearance Adjustment procedure found in User Manual #L-20063
- 5. Tighten the Spanner Nut.



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