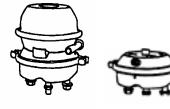


## SERVICE BULLETIN

## SUBJECT: PUSH-ROD REPLACEMENT PROCEDURE FOR MODELS LTR AND LTR-L3

- 1.0 Place Chocks Under Wheels to Prevent Runaway
- 2.0 Cage Parking Chamber Power Spring
  - a) Apply 90-100 psi air pressure to parking chamber
  - b) Remove the end cover cap
  - c) Turn the integral release bolt counter-clockwise using a 15/16 inch wrench until the power spring is fully caged and make sure the pushrod is retracted (DO NOT USE AN IMPACT WRENCH). When the brake is fully caged the release bolt should be extended out 3.25 inches.
  - d) Release parking chamber air pressure.
- 3.0 Remove Yoke
  - a) Loosen jam nut of slack adjuster yoke
  - b) Clamp pushrod before removing service chamber clamp. To do this clamp vice grips on pushrod so that vice grips abut mounting bracket to prevent pushrod from suddenly retracting when single piggyback is removed.
  - c) Remove cotter pins from yoke pins and knock out the yoke pins.
  - d) Back slack adjuster out of yoke and away from the pushrod.
  - e) Lift locking collar and turn slack adjuster back using proper procedures.
  - f) Remove two pin yoke from pushrod.
- 4.0 Remove Single Piggyback from Non-Pressure Chamber
  - a) Mark the flange case, clamp band, and non-pressure chamber with a marker so all parts will be correctly aligned when reassembled.
  - b) Remove service chamber clamp band, (DO NOT remove airlines), while holding the single piggyback. Carefully remove single piggyback from non-pressure chamber.
- 5.0 Install New Longer Pushrod
  - a) Remove pushrod from unit. (Caution: take preventive measures when releasing vice grips to prevent pushrod from propelling out due to the return spring force.)
  - b) Install new longer rod through small end of return spring. Be sure large end of return spring is seated against the steel retainer plate in bottom of the non-pressure housing.
  - c) Pushrod should then be inserted through the return spring, steel retainer plate, stone shield, and non-pressure chamber center hole.
  - d) Press on the pushrod piston plate to compress the return spring down until the plate is approximately even to the top of the non-pressure chamber clamping surface.
  - e) Clamp pushrod with vice grips so that vice grips abut mounting bracket to hold pushrod in place for reassembly.

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## SERVICE BULLETIN

## SUBJECT: PUSH-ROD REPLACEMENT PROCEDURE FOR MODELS LTR AND LTR-L3

- 6.0 Reassemble Single Piggyback
  - a) Place service side diaphragm and single piggyback onto non-pressure chamber. Be sure to align parts per the alignment marks.
  - b) Reattach clamp band using alignment marks for correct positioning.
  - c) Tighten clamp band bolts to 30-35 lb. ft. torque.
  - d) Remove vice grips from rod and center rod in unit. Be sure piston plate returns to zero stroke position.
  - e) Reassemble jam nut and slack adjuster yoke. Thread yoke onto pushrod until it is flush with inside of yoke.
  - f) Tighten jam nut to 25-50 lb. ft. torque.
- 7.0 Reassemble Slack Adjuster
  - a) Adjust slack adjuster until it aligns with yoke and install pins. Install small pin first. Be sure piston plate is all the way back against the diaphragm at zero stroke.
  - b) Install cotter pins into both yoke pins.
- 8.0 Adjust Brakes Using Manufacturer's Recommended Procedures
- 9.0 With 90-100 psi air pressure applied to the parking chamber, activate power spring by turning the release bolt clockwise until the bolt is fully engaged into the unit and the slotted nut bottoms out on the head insert. Tighten to 40-45 lb. ft. torque (DO NOT USE AN IMPACT WRENCH).
- 10.0 Check for Air Leaks
  - Apply 90-100 psi air pressure to service chamber and spray a leak detection fluid around clamp band. Check for bubbles. If leak occurs tap clamp all the way around with a hammer and retorque clamp bolts.
- 11.0 Apply Parking Brakes and Remove Chocks

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