

- 27.3. Remove and discard both cotter pins that secure the brake pedal shaft and the hydro drive pedal shaft to the frame. See Figure 27.3.

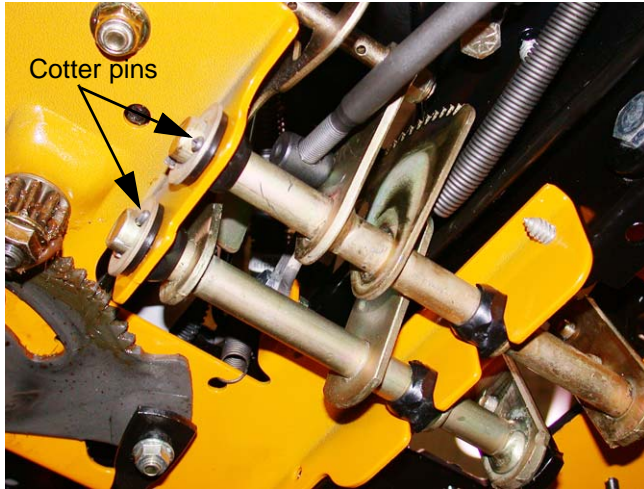


Figure 27.3

- 27.4. Remove the large washers and inner bushings from each shaft.
- 27.5. Press both shafts as far outward as possible, and pry the worn bushings out of the bracket. See Figure 27.5.

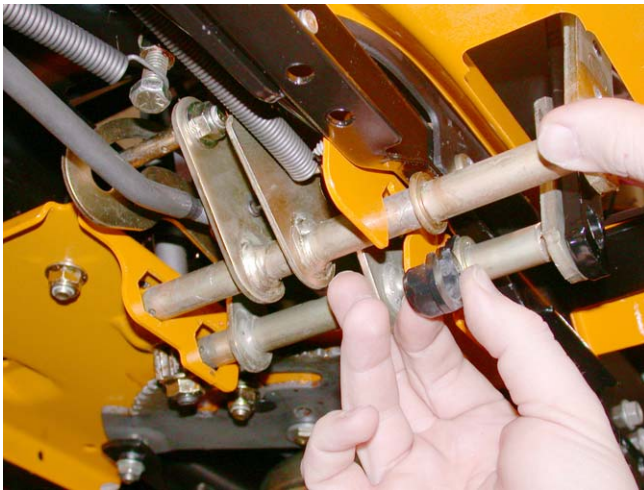


Figure 27.5

NOTE: A pair of vice-grips and a plate can be used to press the end of the shaft flush with the edge of the bracket to aid removal of the bushings.

NOTE: The inner bushing is a hex flange bushing. The outer bushing is similar, but has one open side. The “tooth” in the top facet of the bracket that supports the bushing registers in open side of the bushing.

- 27.6. Clean any corrosion or dirt from the surfaces where the pedal shafts contact the bushings, and slip the new bushings into place. See Figure 27.6.

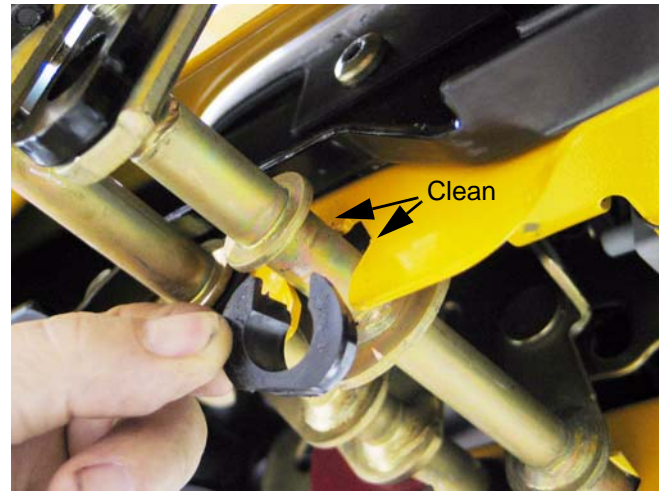


Figure 27.6

NOTE: Lubrication with grease may accelerate bushing wear. If lubrication is applied it should be in dry form such as graphite or PTFE (Teflon).

- 27.7. Secure the inner bushings with new cotter pins and the flat washers that were previously removed.
- 27.8. Move the pedal through it's range of travel to check for bind. If binding is encountered:
- Bind in a portion of the travel may be caused by a bent pedal shaft.
 - Constant bind is likely to be caused by a bent bracket.
 - Also check for interference between the park brake and cruise control interlocks.
- 27.9. Correct any binding condition.
- 27.10. Connect the brake rod to the brake pedal shaft, and secure it with a new cotter pin.
- 27.11. After any brake service is performed, test the brakes as described in Section 23, then test-drive the tractor in a safe area that is free of hazards, obstacles, and by-standers before returning the tractor to service.
- 28. TRANSAXLE SERVICE AND MAINTENANCE: HYDROSTATIC LT**
- 28.1. In normal use, the transaxle should last the life of the tractor with minimal maintenance.

Series 1000 and 1500

- 28.2. Because the transaxle dissipates heat through air-cooling of the housing, it must be kept clean of dirt and debris, and the cooling fan should be replaced immediately if damaged.
- 28.3. Cleanliness is vitally important when doing any service work that might expose the fluid or internal parts to any form of contamination. Clean thoroughly around any fittings, parts, or seals that are to be removed prior to removal.
- 28.4. Pressure washing is not recommended, and may contaminate the transmission fluid. Damage caused by contaminated fluid is not warrantable.
- 28.5. Before commencing internal repairs, eliminate all possible external performance issues:
- Dragging brake
 - Maladjusted linkage
 - Partially open relief valve
 - Slipping traction drive belt/ low engine speed
- 28.6. The transaxle contains .600 to .632 gal of 20W-50 motor oil with an API classification of SH/CD.
- 28.7. Fill through the port at the top of the transaxle. Fluid will spill into the plastic over-flow reservoir as the fluid capacity is reached. See Figure 28.7.

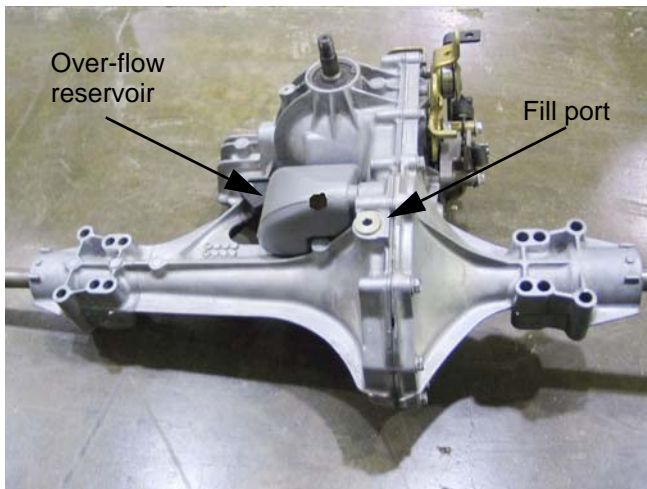


Figure 28.7

NOTE: Some transaxles may be painted black, depending on the year of production.

NOTE: The plastic over-flow reservoir has a plastic vent cap at the top. This is strictly a vent cap. Attempting to add fluid through the vent cap

will fill the over-flow reservoir, but will not add to the level of fluid in the transaxle.

NOTE: This oil (fluid) should not have to be changed in the normal service life of the transaxle unless it develops a leak or becomes contaminated.

- 28.8. If the transaxle develops a leak, identify and repair the leak to prevent further damage.
- 28.9. To drain the oil, Hydro-Gear recommends removal of the transaxle, for draining through the fill port.
- 28.10. A new addition to the transaxle is a drain plug. Depending on the date of manufacture, this plug may or may not be present. See Figure 28.10.

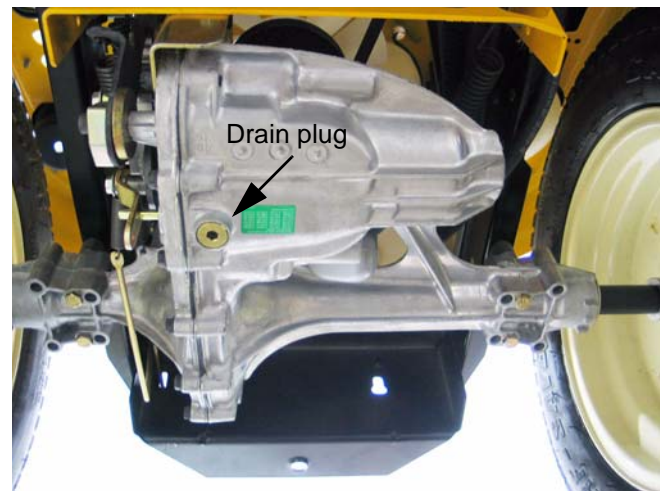


Figure 28.10

- 28.11. Any time the fluid has been drained from a hydrostatic transaxle, the air should be purged from the system on initial start-up.
- 28.12. **To purge** the air from the hydraulic system in the transaxle:
- Open the relief valve.
 - Start the engine.
 - Slowly cycle the drive pedal from full speed forward to full speed reverse 5 or 6 times, taking about 10 seconds to complete a single cycle.
 - Stop the engine and check the fluid level at the fluid level port near the back of the right side axle housing. The plug can be removed with a 1/4" Allen wrench. Top-up as necessary.
 - Close the relief valve.
 - Start the engine.

- Repeat as necessary until the transaxle operates normally.
- 28.13. Any service beyond fluid change requires removal substantial disassembly of the transaxle. Refer to Hydro-Gear manual BLN-52261 for complete repair instructions.

**29. TRANSAXLE REPLACEMENT:
HYDROSTATIC LT**

- 29.1. Warrantable failures on Cub Cadet tractors are to be repaired by replacing the transaxle. Failed, warrantable transaxles will be called-back through Cub Cadet's vendor recovery system. Failures of Hydro-Gear transaxles are rare.
- 29.2. Outside of warranty, Hydro-Gear transaxles may be repaired or replaced at the discretion of the customer and servicing dealer.
- 29.3. Before condemning a transaxle, eliminate all possible external performance issues:
- Dragging brake
 - Maladjusted linkage
 - Partially open relief valve
 - Slipping traction drive belt/ low engine speed
- 29.4. Remove the cutting deck to gain access to the linkages that will need to be disconnected.
- 29.5. Lift and safely support the rear of the tractor.
- 29.6. Remove the rear hub caps, then the rear wheels using a 3/4" wrench.
- 29.7. Remove the rear hub caps, then the rear wheels using a 3/4" wrench. See Figure 29.7.



Figure 29.7

- 29.8. Disconnect the front of the brake rod from the brake pedal shaft by removing the cotter pin, and pulling the "L" at the forward end of the rod out of the hole in the brake pedal shaft. See Figure 29.8.

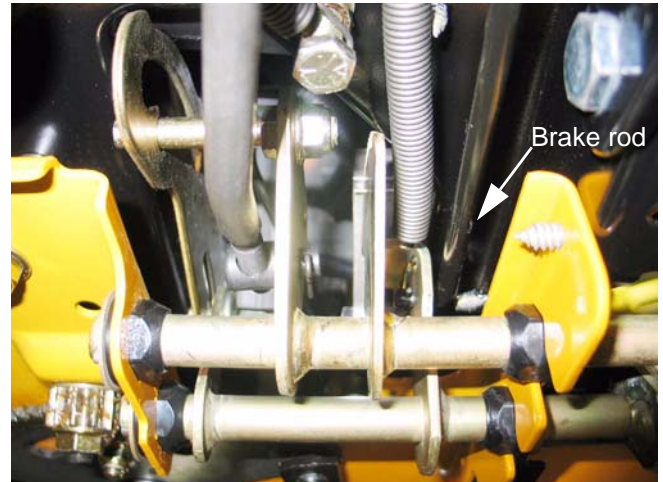


Figure 29.8

- 29.9. Disconnect the ferrule at the forward end of the speed control rod from the speed control pedal shaft in similar fashion.
- 29.10. Unplug the wire from the reverse safety switch (Red wire w/black trace on Rev-Tek equipped models, Yellow wire w/black trace on others).
- 29.11. Disconnect the ground wire from the transaxle using a 3/8" wrench.
- 29.12. Remove the fan from the input pulley on the transaxle using 5/16" wrench. See Figure 29.12.

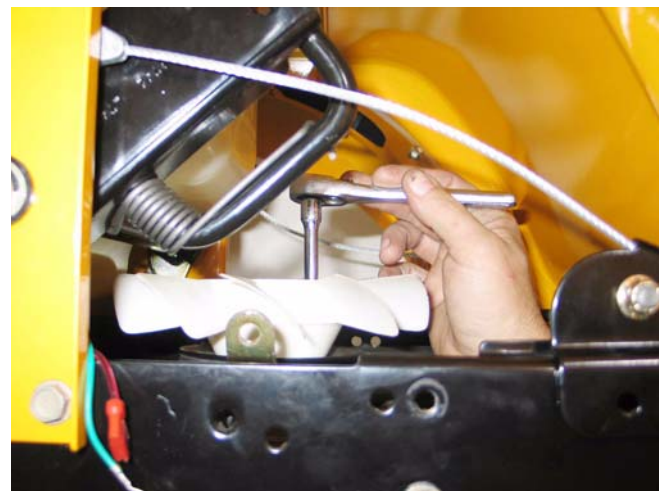


Figure 29.12