

23.13. The double idler pivot bracket is held to the frame by the same bolt that holds the fore-most of the two pulleys. The rear pulley can be easily removed from the bracket. It is necessary to take the fenders off to remove the front pulley or the bracket itself.

23.14. Install the drive belt by reversing the order of the removal process.

- Apply anti-seize compound to the crankshaft before installing the PTO clutch.
- Tighten the crankshaft bolt to a torque of 38-50 ft.-lbs. on assembly.
- Test the drive system and all tractor safety features in a clear area that is free of hazards and by standers before returning the tractor to service.

24. DRIVE SYSTEM ADJUSTMENT: HYDROSTATIC LT

24.1. The relief valve is operated using a small rod that is visible at the bottom right corner of the rear of the tractor frame. See Figure 24.1.

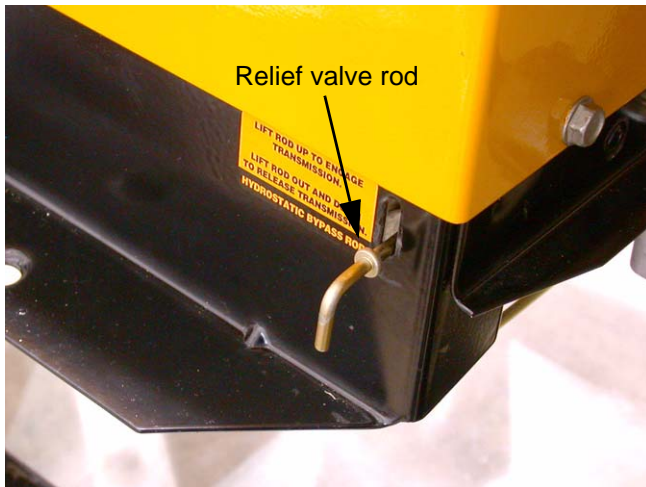


Figure 24.1

24.2. Pulling the rod out and locking it in the upper portion of the keyhole enables the tractor to be pushed, but disables the hydraulics of the drive system by opening a valve that releases the hydraulic pressure from the motor circuit.

24.3. There is no adjustment to the relief valve, but full travel of the linkage should be checked if the drive system is losing power or ground speed. See Figure 24.3.

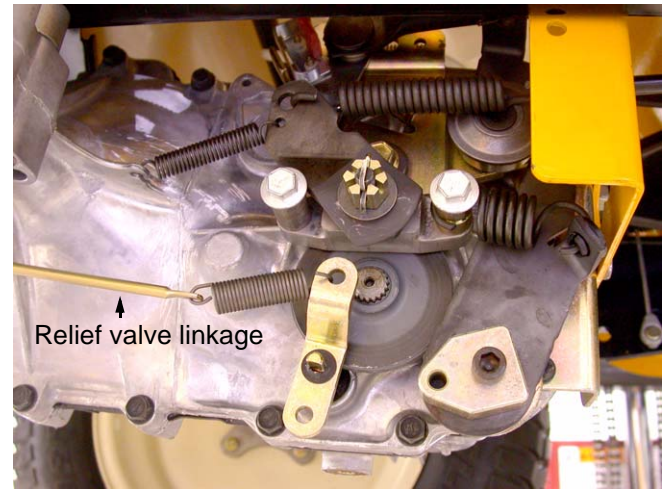


Figure 24.3

24.4. **Symptoms** of a linkage that is out of adjustment include:

- **Low ground speed** in either direction with no unusual noises from the transaxle. One possible cause for low ground speed is a linkage that does not transfer all of the pedal travel to the input arm on the transaxle.
- **“Creeping”** when the transaxle is in neutral position.
- **Whining or growling** when the tractor is in Neutral with the brake applied.
- The creeping and whining symptoms usually accompany one-another, indicating that the linkage is not properly centered around Neutral.
- Low ground speed in one direction only (Forward or Reverse) may accompany whining, growling or creeping in Neutral if the linkage is out of adjustment.
- Low ground speed, accompanied by excessive noise is likely to be an internal problem or a brake that is dragging or out of adjustment.

24.5. Begin linkage adjustment by inspecting the linkage. Linkages on equipment that has been in the field are usually out of adjustment because the linkage is binding, worn, bent, or tampered with.

24.6. Replace any worn or damaged parts before adjusting the linkage.

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24.7. Turn-off the engine and allow it to cool before starting to work on the tractor. To gain access to the control linkage, perform the following three steps:

24.8. Remove the cutting deck.

24.9. Lift and safely support the rear of the tractor.

24.10. Remove the rear wheels using a 3/4" wrench.

24.11. Move the control pedal through it's range of travel (with the parking brake released) and look for the following conditions that will cause loss of linkage motion:

- Pedal loose on the pedal shaft.
- Loose arm that connects the pedal shaft to the control rod.
- Worn bushings supporting the pedal shaft.
- Worn ferrule or an elongated hole where ferrule connects to pedal shaft.

24.12. Disconnect the control rod from the pedal shaft by removing the cotter pin that secures the adjustable ferrule on the rod to the shaft. See Figure 24.12.

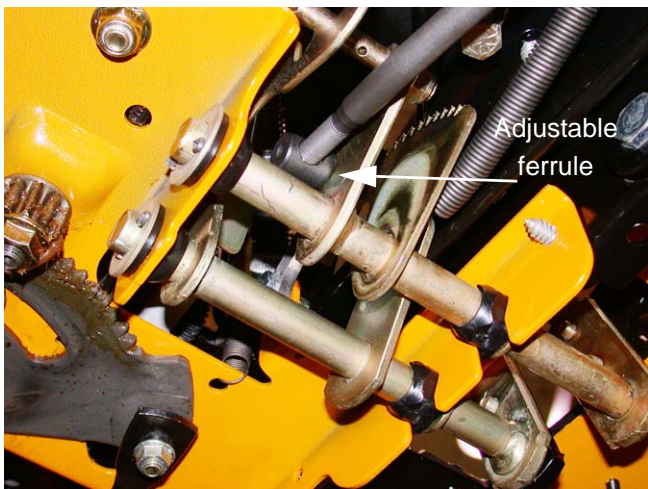


Figure 24.12

24.13. Confirm that the pedal shaft moves freely in the bushings, and does not bind.

24.14. Worn pedal shaft bushings are easily replaced using the following 5 steps.

NOTE: It is recommended to replace all four bushings at the same time.

24.15. Set the parking brake, and remove the drive pedal using a T-40 driver. See Figure 24.15.

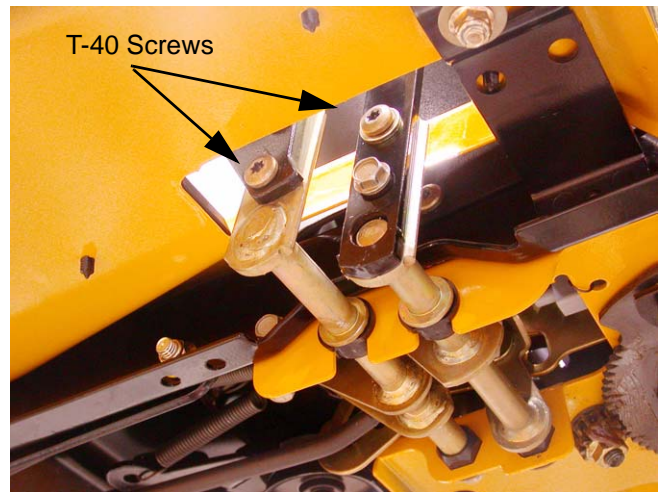


Figure 24.15

24.16. Remove and discard the cotter pins that hold the inboard bushing in place on both the speed control assembly and the brake control assembly. See Figure 24.16.

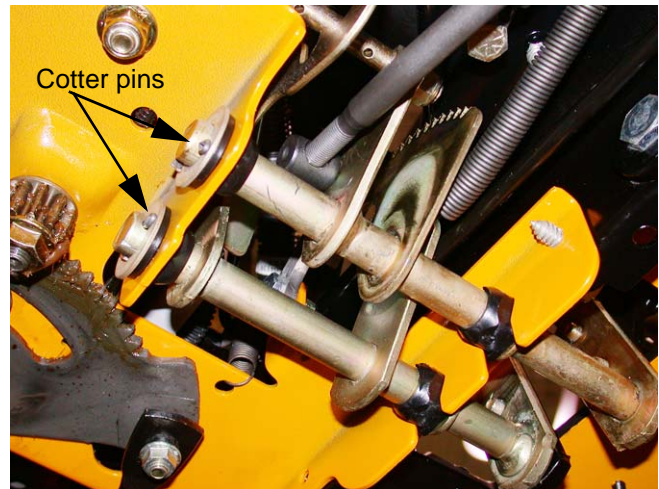


Figure 24.16

24.17. Remove the washers and inboard bushings from both shafts. See Figure 24.17.

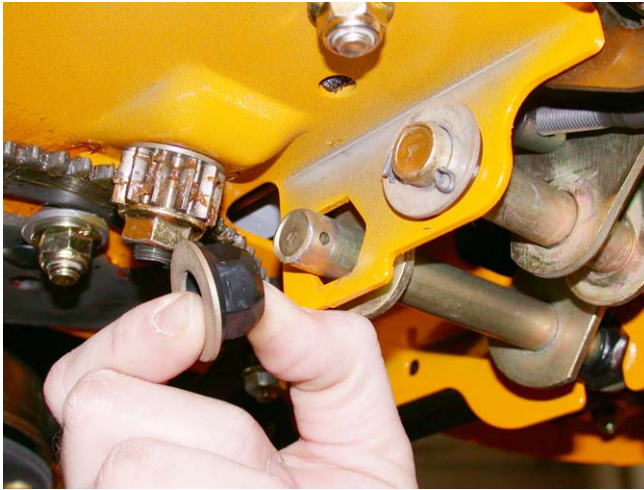


Figure 24.17

24.18. Slide both shafts outboard far enough to create clearance to remove the outer shaft bushings, and remove the bushings. See Figure 24.18.

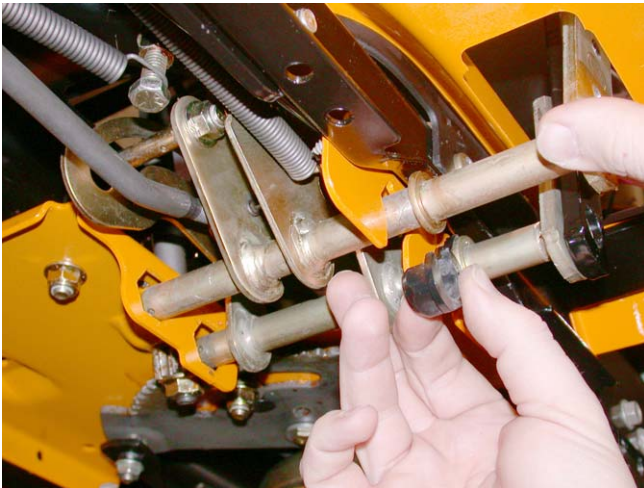


Figure 24.18

NOTE: The inner bushings are hex flange bushings. The outer bushings are similar, but are open on one side. The “tooth” in the top facet of the bracket that supports the bushing registers in the open side of each bushing.

24.19. Clean any corrosion or dirt from the surfaces where the pedal shaft contacts the bushing, and slip the new bushings into place.

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

24.20. Secure the pedal shafts with new cotter pins and previously removed washers.

24.21. Install the drive pedal, tightening the screw that secures it to a torque of 250 in.-lbs.

24.22. Move the pedal through its 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.

24.23. Correct any source of binding. The pedal shaft is easily removed at this point. The bracket may be straightened if damage is minor.

24.24. Confirm that no unsafe conditions will arise from starting the engine.

24.25. Start the engine, and operate it at top-no-load speed. Note the operation of the transaxle with the pedal linkage disconnected: An assistant may be required.

- Growling or whining with brake applied indicates that the input arm on the transaxle needs adjustment.
- Movement of the left rear wheel or the right drive hub with the brake released indicates that the input arm on the transaxle needs adjustment.
- With the hydro control rod disconnected from the pedal shaft, the input arm on the transaxle should return to Neutral.

24.26. If the transaxle does not return properly to neutral, adjust the input arm to correct the issue, then proceed with the following step. Review the next section for procedures.

24.27. If the transaxle returns properly to neutral:

- Adjust (if necessary) and reconnect the hydro control rod.
- Install the right rear wheel on the tractor, tightening the lug nuts to a torque of 350 - 500 in.-lbs.
- Lower the tractor to the ground and test the operation of the drive system in a safe area that is free of hazards, obstacles, and by-standers.
- Install the cutting deck, test all safety features, and return the tractor to service if everything works properly.