

Series 1000 and 1500

25. HYDRO CONTROL ROD ADJUSTMENT

- If the unit “creeps” in the neutral position, one of two things may have happened: 1. The hydro control rod has been bent, causing the unit to creep or 2. The neutral position adjustment on the hydro has changed.

25.1. Set the parking brake. The cam in the parking brake mechanism will lock the pin on the pedal shaft into neutral. See Figure 25.1.

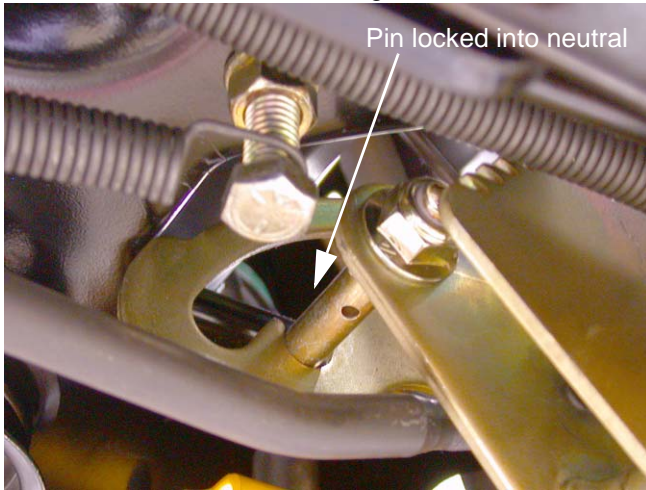


Figure 25.1

- 25.2. There should now be no tension on the hydro control rod. If there appears to be tension, look for a damaged or bent rod.
- 25.3. Remove the cotter pin securing the ferrule to the pivot arm on the pedal shaft.
- 25.4. Remove the ferrule from the hole in the arm. There should be no tension on the rod where it connects to the pivot arm.

25.5. If there is, thread the ferrule up or down the length of the hydro control rod until the post is centered in the hole that it fits into. At this point, the transaxle and the linkage should both be synchronized in neutral. See Figure 25.5.

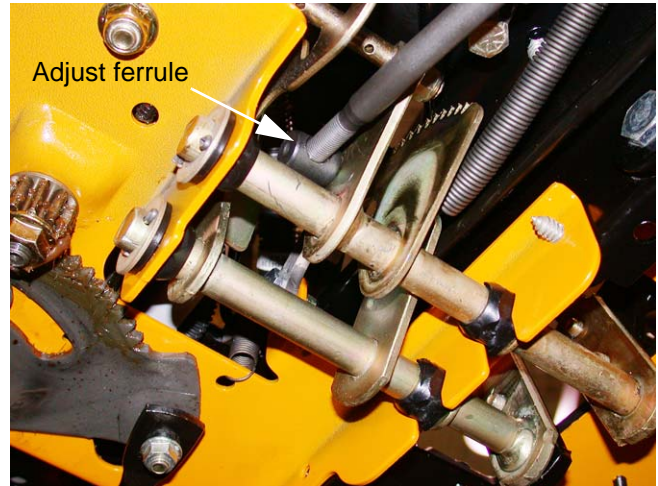


Figure 25.5

- 25.6. Secure the ferrule to the arm on the pedal shaft using a new cotter pin.
- 25.7. Test drive the unit to see if it still creeps. If it does you will have to adjust the input arm on the hydro: Confirm that the roller on the return arm draws fully into the valley in the cam surface on the front of the input arm. See Figure 25.7.

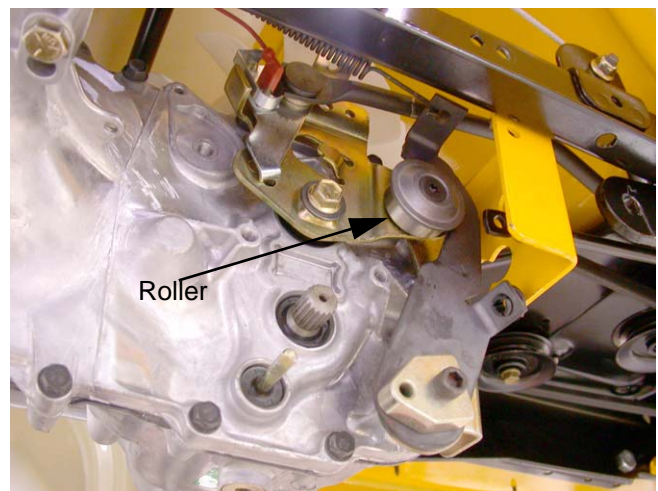


Figure 25.7

25.8. As the hydro control rod moves back on the input arm, it first moves a ground contact against the reverse safety switch. See Figure 25.8.

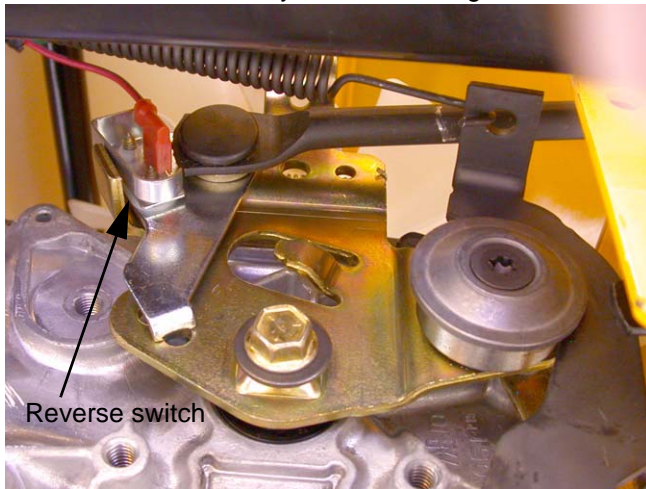


Figure 25.8

25.9. After the switch contacts the ground, the hydro control rod reaches the end of the lost-motion slot, and begins to push the arm forward, to the reverse position. Excessive lost motion will result in loss of ground speed in reverse.

25.10. As the hydro control rod is pushed rearward, it draws the cam (front) surface of the input arm upward, forcing the neutral return arm forward, applying more tension to the return spring. See Figure 25.10.

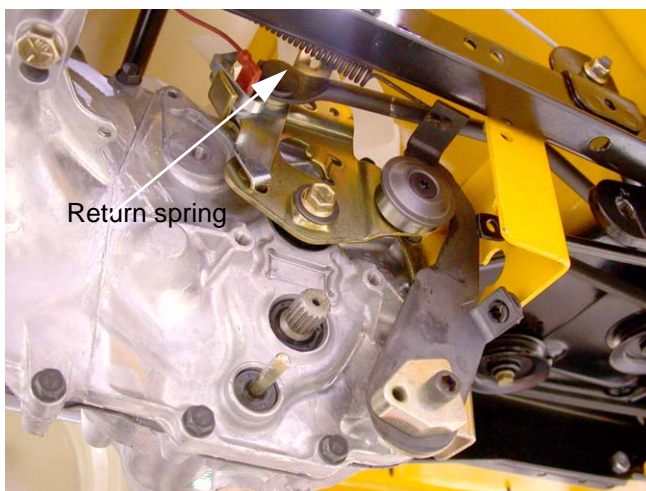


Figure 25.10

25.11. The point that the neutral return arm draws the input arm to is determined by the position of the roller on the neutral return arm:

- If the roller is moved higher, the input arm will move in the direction that causes forward drive.

- If the roller is moved lower, the input arm will move in the direction that causes reverse drive.

25.12. The roller is moved up or down by rotating the house-shaped eccentric that the neutral return arm pivots on. See Figure 25.12.



Figure 25.12

25.13. Loosen the eccentric using a 1/4" Allen wrench, and rotate it to adjust the roller up or down, as required to center the input arm in neutral.

25.14. Tighten the socket head cap screw to lock the adjustment, and check to confirm that the adjustment is correct.

25.15. After confirming that the transaxle is correctly adjusted:

- Adjust and reconnect the hydro control rod if it has been removed.
- Install the right rear wheel on the tractor if it was removed.
- Test the operation of the drive system in a safe area that is free of hazards, obstacles, and bystanders.
- Install the cutting deck, test all safety features, and return the tractor to service if everything works properly.

26. BRAKES AND BRAKE ADJUSTMENT: HYDROSTATIC LT

26.1. On hydrostatic garden tractors, most of the braking force is generated within the transaxle: when in Neutral, with the brakes released, the tractor will still be very difficult to push unless the relief valve has been opened. The brake functions mainly as a parking brake.