21.12. Using a 1/2” socket and 1/2” wrench, remove the four hex nuts securing the transmission to the frame. See Figure 21.12.

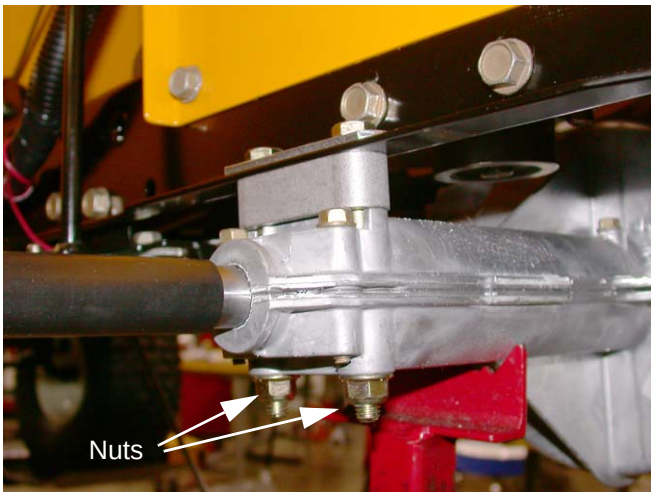

Figure 21.12

CAUTION: The transmission must be supported during removal of the bolts. Use a helper if necessary.

21.13. Lower the transmission from the rider. See Figure 21.13.

Figure 21.13

NOTE: There is a backing plate on the top of the frame. There may be a spacer between the frame and the transmission housing.

21.14. Reassemble in the reverse order of disassembly.

NOTE: If it appears that the drive belts are worn, we recommend replacing both of them when servicing the transaxle. Use original OEM belts to assure proper operation of the rider.

22. TRANSAXLE SERVICE AND INTERNALS: CVT

- Transaxles needing service within the warranty period qualify for like-kind exchange.
- If you are servicing transaxle internals, keep in mind that different transaxles/components have been used over the years.
- Carefully compare the transaxle with the illustrated parts list when ordering components.

23. TRACTION DRIVE BELT REPLACEMENT: HYDROSTATIC LT

23.1. Turn-off the engine and allow all parts to cool before beginning work.

23.2. Remove the cutting deck.

23.3. Identify and unplug the wires leading to the electric PTO clutch. See Figure 23.3.

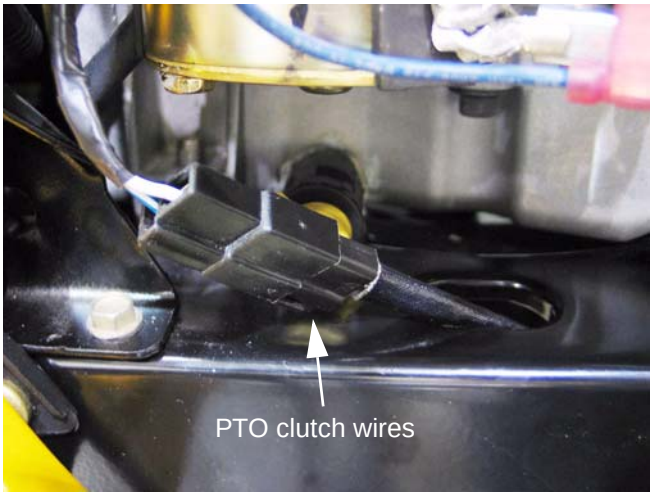

Figure 23.3

23.4. Remove the electric PTO clutch from the engine crankshaft using a 5/8” wrench. See Figure 23.4.

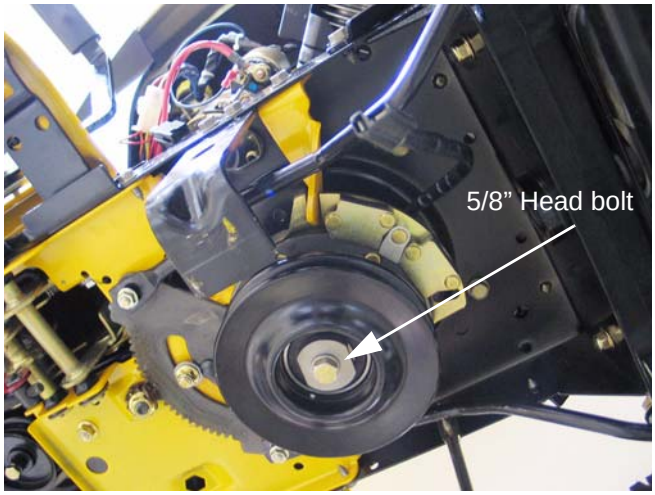

Figure 23.4

NOTE: Lower the clutch carefully, keeping track of the hardware on the crankshaft. There are variations between engines, clutches and years:

- Spacers above or below the traction drive pulley.
- Integral or separate key on traction drive pulley.
- Different PTO clutch anti-rotation brackets.

23.5. Slip the belt off of the single fixed idler. See Figure 23.5.

Figure 23.5

23.6. Carefully release the spring that maintains tension on the double idler bracket using a length of starter rope or an appropriate tool. See Figure 23.6.

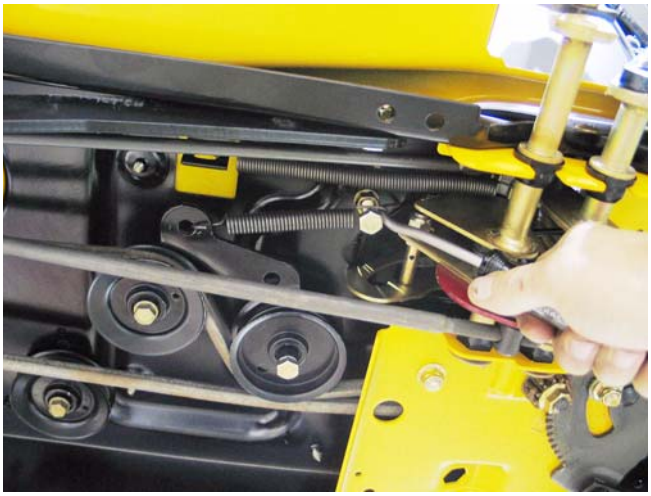

Figure 23.6

23.7. Slip the drive belt from between the double idler pulleys.

NOTE: On some early models, the rear-most pulley (rides against V side of belt) was large enough that the double idler bracket acted as a belt keeper. On those models, it is necessary to loosen the nut and bolt that secure that pulley to the bracket in order to slip the belt past the edge of the bracket.

NOTE: Pulleys may be steel or plastic, depending on when the tractor was built.

23.8. Slip the crankshaft pulley down far enough to get the belt off of the pulley, and remove the belt from the crankshaft. See Figure 23.8.

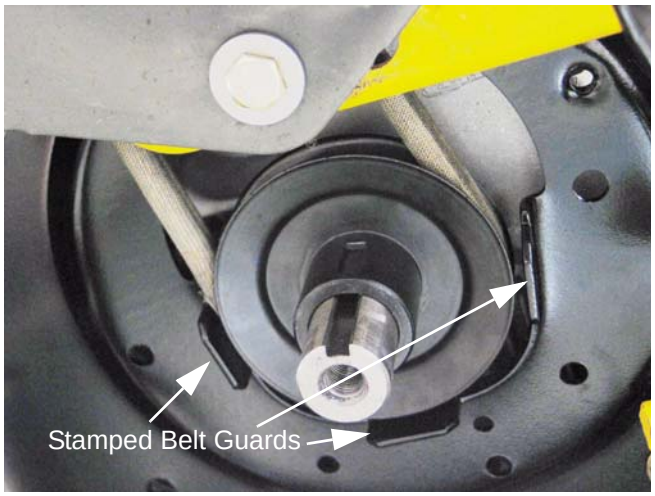

Figure 23.8

NOTE: Belt keepers that are part of the tractor frame prevent the belt from being removed without lowering the pulley.

NOTE: The pulley may be removed from the crankshaft at the discretion of the technician.

- If there is a spacer above the pulley, the end with the radiused inside edge mates with the radiused step on the crankshaft.
- If one end of the pulley has a radiused inside edge, that is the end that mates with the radiused step on the crankshaft.

23.9. Carefully work the belt over the top of the cooling fan on the transaxle, and remove it from the tractor. See Figure 23.9.

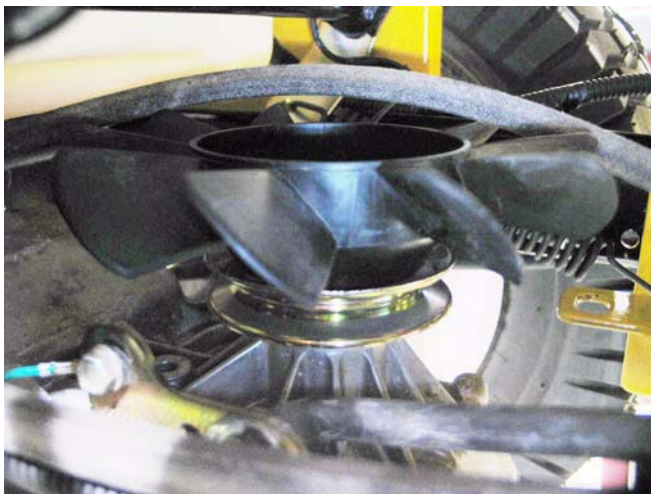

Figure 23.9

23.10. The belt for the G.T. models of the 1500 Series line is Kevlar wrapped. Substituting the poly-wrapped belt used on the L.T. models is not recommended, but the Kevlar belt is an acceptable premium upgrade for the L.T. tractors. See Figure 23.10.

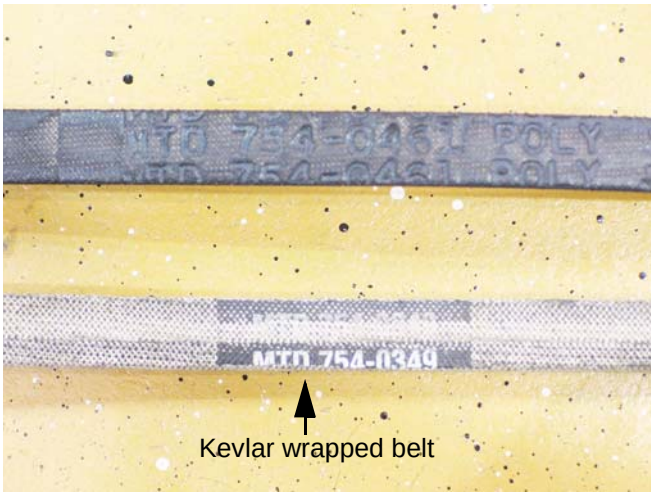

Figure 23.10

23.11. If the traction drive belt failed prematurely, identify the cause of it's demise before installing a replacement. Check the condition of all of the idler pulleys.

23.12. The fixed idler pulley can be removed from later models using a single 1/2" wrench. The bolt that holds the fixed idler to earlier models threads into a 3/8" nut above the tractor frame. The bolt can be removed from the nut using a pair of 9/16" wrenches without removing the fenders. See Figure 23.12.

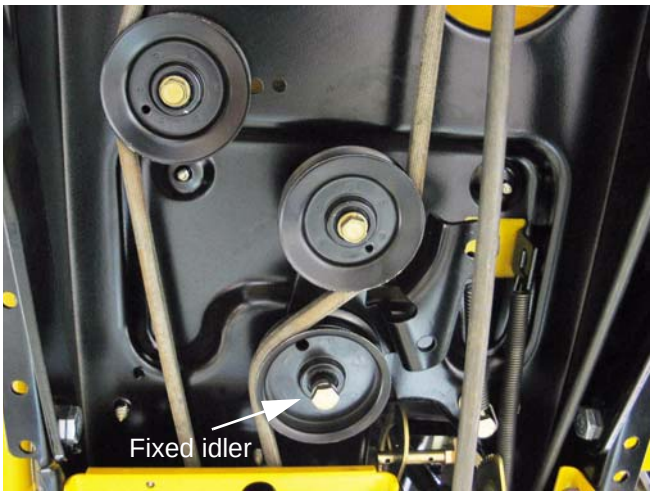

Figure 23.12

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.

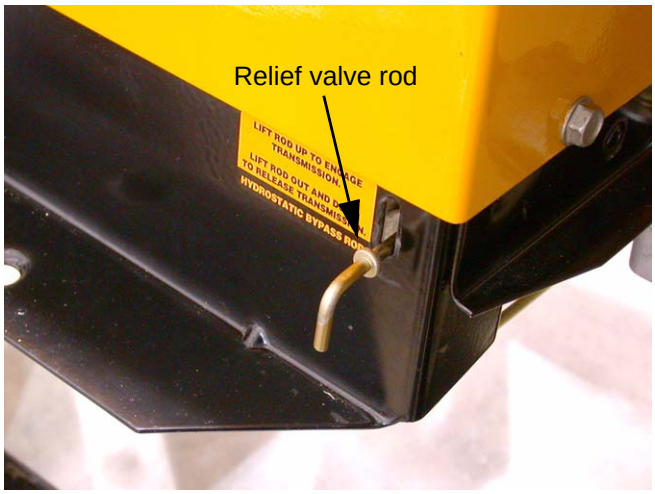

Figure 24.1

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.

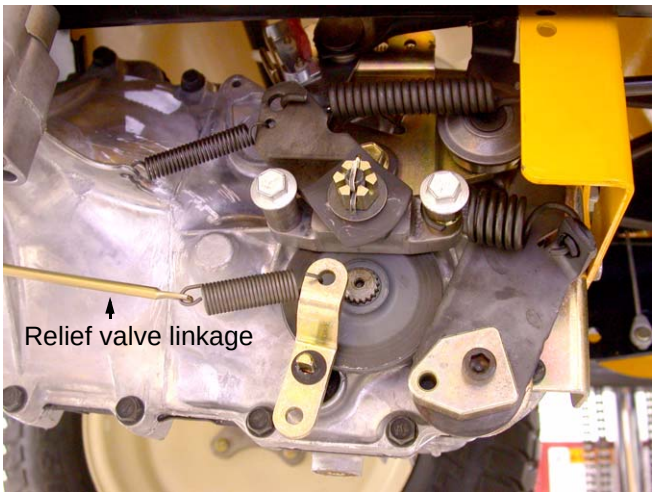

Figure 24.3

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.