Service Manual

Cub Cadet 5000 Compact Tractor

NOTE: These materials are for use by trained technicians who are experienced in the service and repair of outdoor power equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. These materials are intended to provide supplemental information to assist the trained technician. Untrained or inexperienced individuals should seek the assistance of an experienced and trained professional. Read, understand, and follow all instructions and common sense when working on power equipment. This includes the contents of the product's Operators Manual, supplied with the equipment. No liability can be accepted for any inaccuracies or omission in this publication, although care has been taken to make it as complete and accurate as possible at the time of publication. However, due to the variety of outdoor power equipment and continuing product changes that occur over time, updates will be made to these instructions from time to time. Therefore, it may be necessary to obtain the latest materials before servicing or repairing a product. The company reserves the right to make changes at any time to this publication without prior notice and without incurring an obligation to make such changes to previously published versions. Instructions, photographs and illustrations used in this publication are for reference use only and may not depict actual model and component parts.

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Series 5000

1. FENDER, FLOOR AND ROPS REMOVAL

1.1. Remove the brake, forward and reverse pedals using a 9/16 socket.

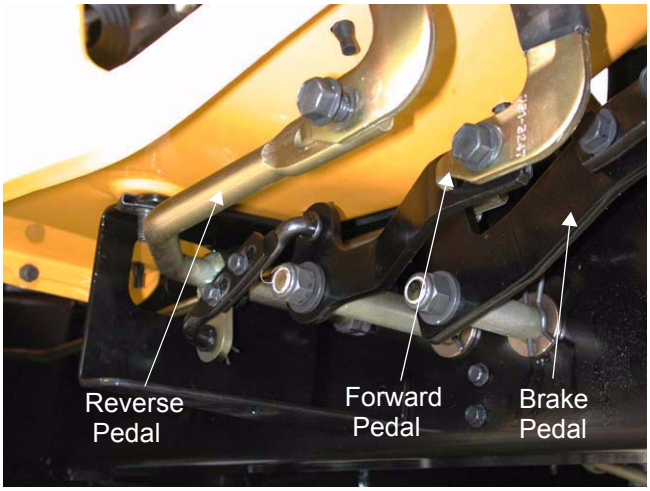


Figure 1.1

1.2. Remove the differential lock pedal.

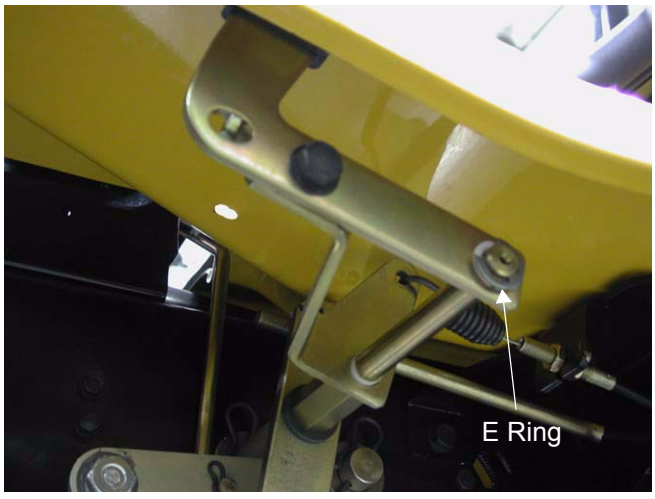


Figure 1.2

1.3. Remove the dash extension.

Figure 1.3

1.4. Remove the foot pads from the running boards.

1.5. Remove the ROP's using a 3/4 socket.

1.6. Remove the four screws securing the seat to the seat rails using aT27 torx.

1.7. Remove gas cap and disconnect the seat safety switch.

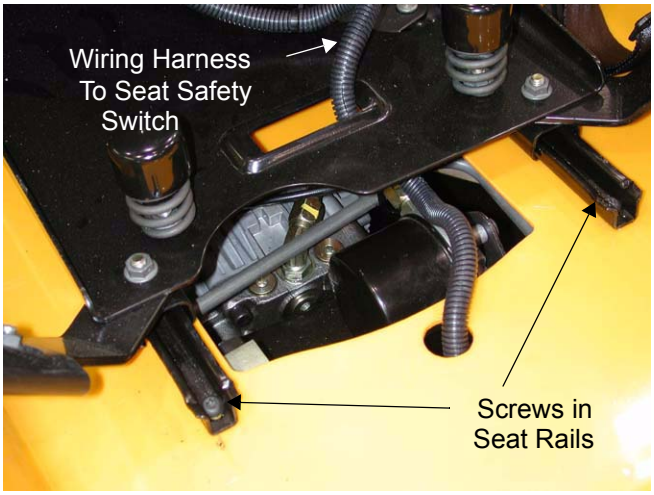


Figure 1.7

1.8. Remove rubber handle from left side high / low range lever and from right side PTO lift lever.

1.9. Remove the two screws securing the heat shield / running board mounting bracket to the frame using a 1/2 wrench.

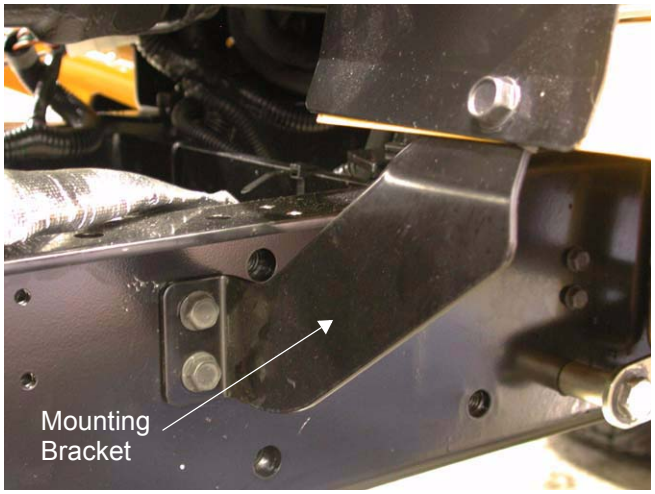


Figure 1.9

1.10. Lift left side slightly and disconnect PTO reverse safety override switch.

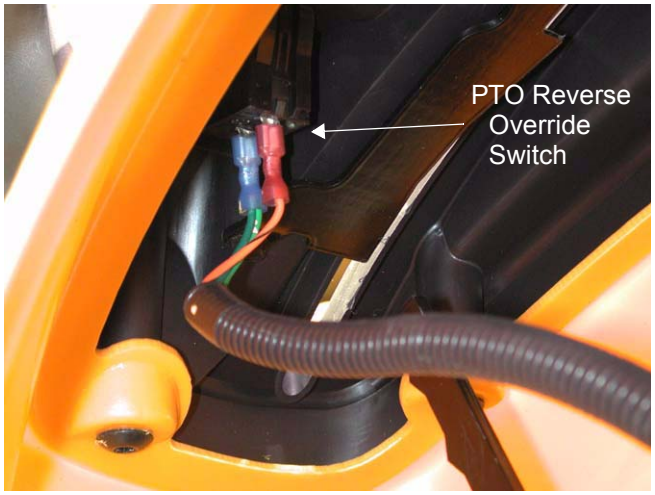


Figure 1.10

1.11. Slide the left side of the fender/running board forward to clear the fuel tank.

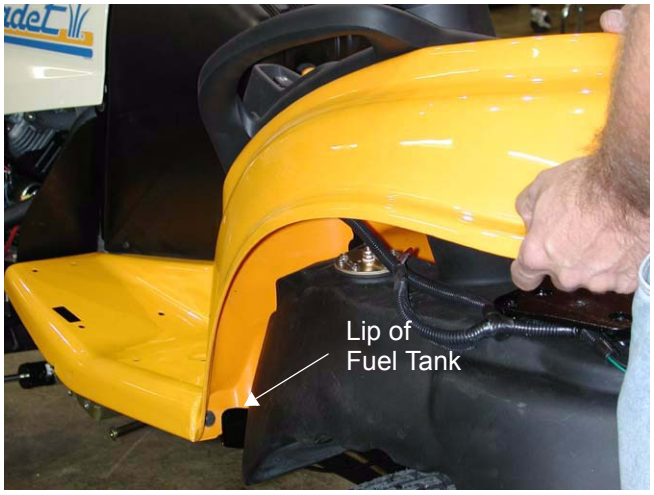


Figure 1.11

1.12. Lift assembly up and back to remove from frame.

NOTE: The fender is plastic and specific to 5000. running boards are steal and the same as the 30000 series.

2. PTO CLUTCH REMOVAL

2.1. Remove three bolts securing the rear seat mounting bracket to the frame using a 1/2 wrench. Feed the harness and seat switch through the hole and remove the bracket.

NOTE: Center screw secures ground connection and star washer for wiring harness.

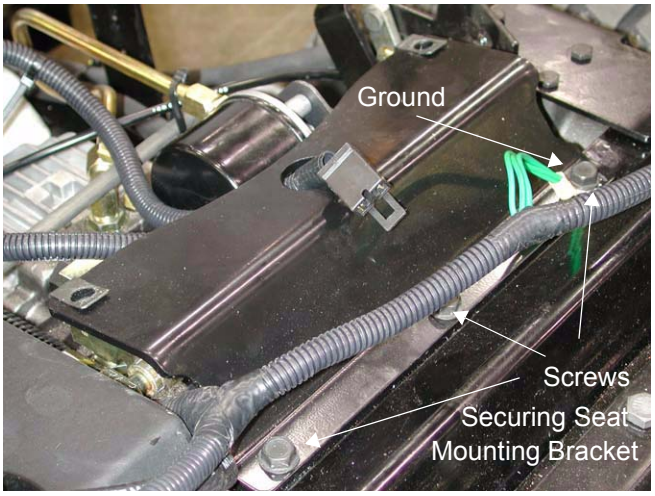


Figure 2.1

2.2. Remove three point hitch.

2.3. Remove the two screws securing PTO 540 PTO backshaft shield to the transmission using a 3/8 wrench.

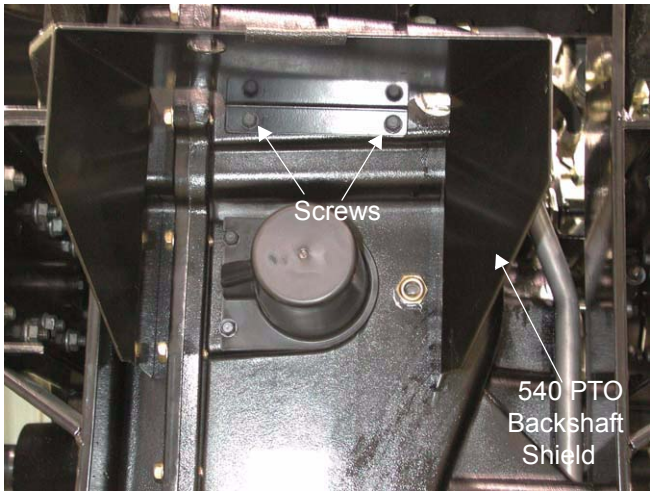


Figure 2.3

2.4. Remove the fifteen screws securing the three point hitch mounting bracket to the frame using a 9/16 socket and 9/16 wrench.

2.5. Remove the four screws securing the three point hitch mounting bracket to the transmission housing using a 3/4 wrench.

2.6. Cut the zip tie securing the hydraulic breather tube to the ROPS at the rear of the gas tank.

2.7. Cut the zip tie securing the fuel line to the wiring harness at the front of the gas tank.

2.8. Remove the two screws securing the front seat mounting bracket to the gas tank using a 9/16 socket.

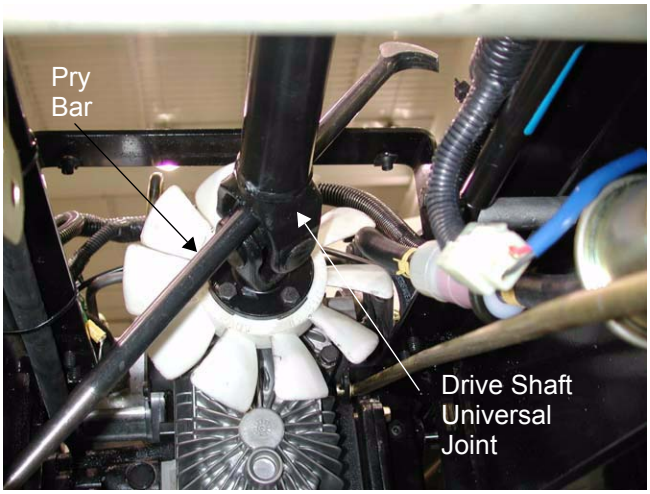
2.9. Remove the two screws securing the gas tank to the ROPS using a 9/16 socket.

2.10. Remove the two screws securing the gas tank to the front seat bracket unit

2.11. Remove the eight screws securing the lower section of the ROPS to the frame using a 9/16 socket and a 9/16 wrench.

2.12. Remove the ROPS.

2.13. Secure the PTO clutch. This can be done either by placing a universal joint and pipe onto the PTO backshaft or by engaging the clutch (reconnect the battery) and placing a stop in the drive shaft universal joint.



2.14. Disconnect the clutch.

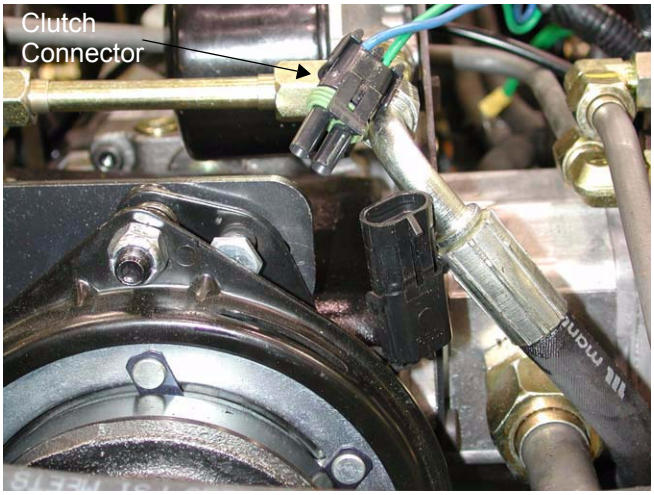


Figure 2.14

2.15. Loosen the top socket head cap screw on the PTO clutch.

2.16. Rotate the clutch by turning the universal joint on the PTO backshaft. This allows access to another hex cap screw on the PTO clutch. Loosen, but do not remove, the second hex head cap screw.

2.17. Repeat step 24 for the third socket head cap screw.

2.18. Remove the PTO shaft plug seal from the rear of the transmission housing.

2.19. Remove retaining ring securing rear PTO bearing.

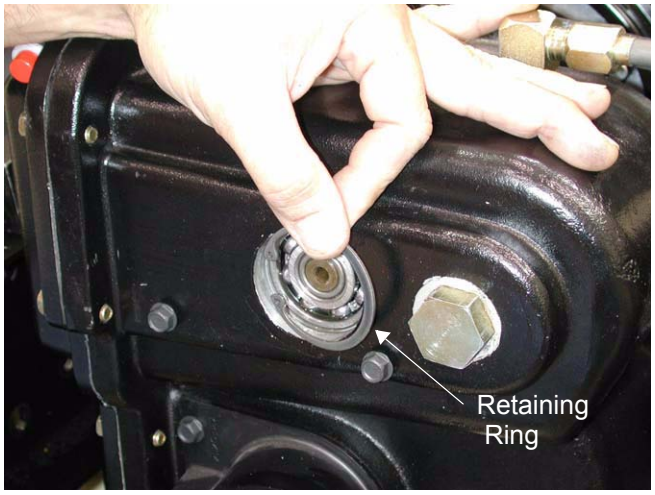


Figure 2.19

2.20. Remove the rear PTO shaft bearing.

NOTE: It may be necessary to remove any paint from around the seal surface area.

2.21. Remove hydraulic oil fill plug and insert a soft, debris free, drift.

NOTE: This will prevent the large PTO gear from falling down into the transmission housing.

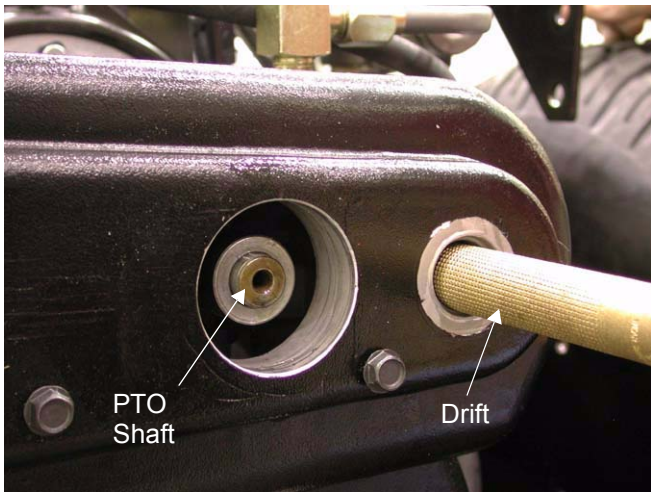


Figure 2.21

2.22. Remove the spacer from the rear PTO shaft.

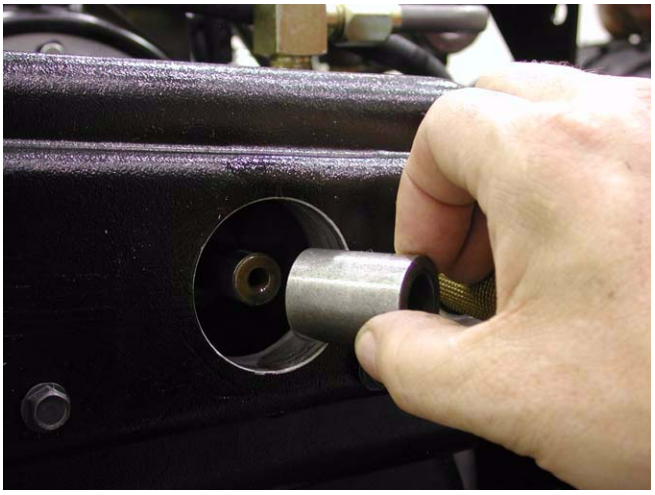


Figure 2.22

2.23. Thread a 1/4 - 20 bolt into the end of the PTO shaft. Install the bolts that secured the PTO shield back into the housing.

NOTE: These bolts will provide a pry point and fulcrum to remove the rear PTO shaft.

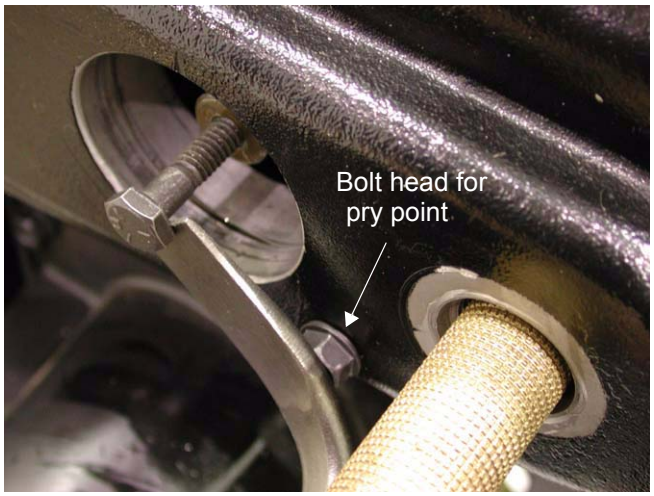


Figure 2.23

2.24. Remove the rear PTO shaft and 540 drive gear.

Figure 2.24

2.25. Remove the three socket head cap screws. securing the cast iron cover to the rear of the PTO clutch using a 1/4 allen wrench.

Figure 2.25

2.26. Place a pry bar in the rear universal joint on the drive shaft to keep the shaft from rotating.

WARNING: The next step involves removing the bolt securing the clutch to the PTO input shaft. When performing the step do NOT pull the bolt back far enough for it to fall inside the rear transmission housing.

WARNING: When performing the next step use a 5” piece of 1” pvc pipe to insure that the front bearing in the rear section of the transmission housing does not fall into the transmission.

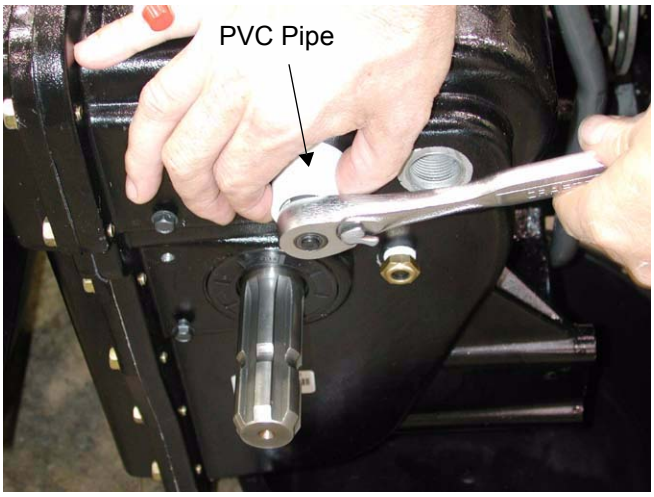


Figure 2.26

2.27. Remove the 12 point bolt securing the clutch to the PTO input shaft using a 3/8” 12 point socket.

NOTE: Upon assembly torque this bolt to 540 - 600 inch pounds (45 - 50 foot pounds). Use loctite 242 when installing the bolt.

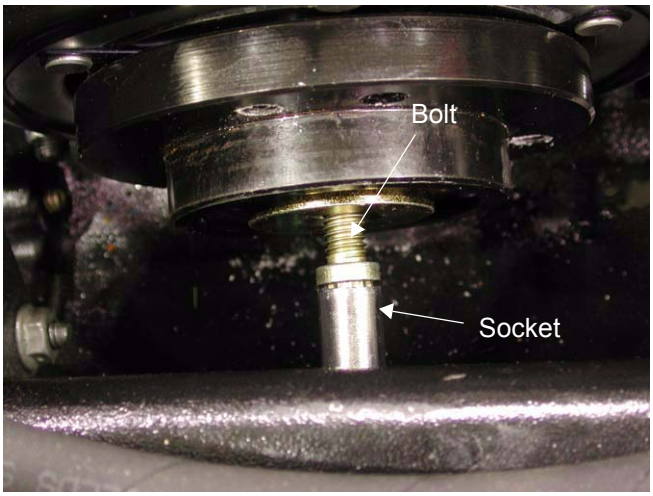


Figure 2.27

2.28. Remove the shoulder spacer from the recess in the back of the PTO clutch.

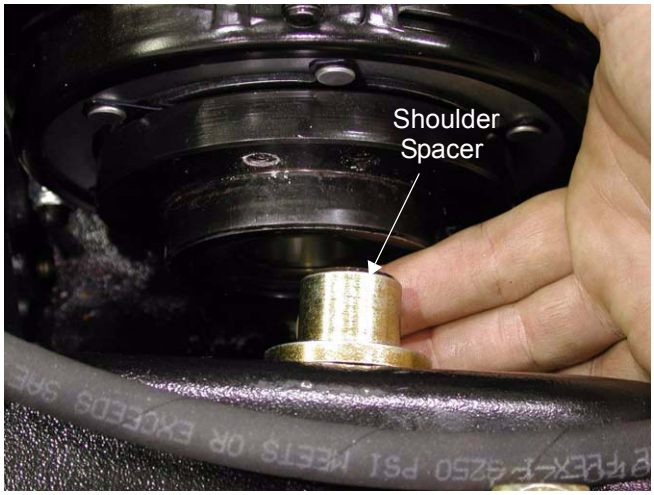


Figure 2.28

2.29. Remove the anti-rotation bolt from the top of the anti-rotation bracket.

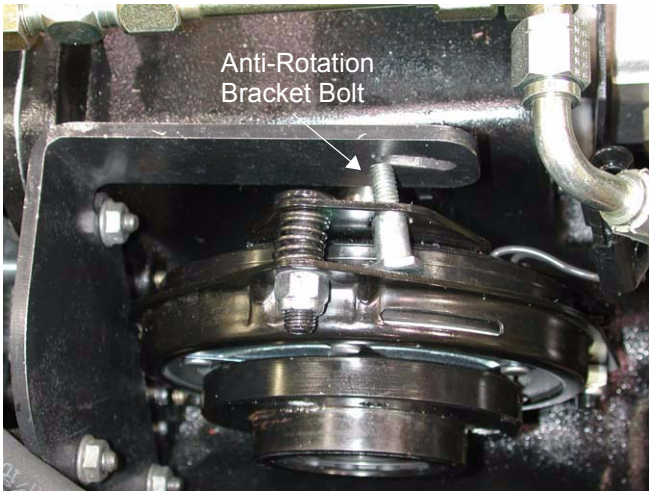


Figure 2.29

2.30. Remove the key from the keyway on the PTO input shaft.

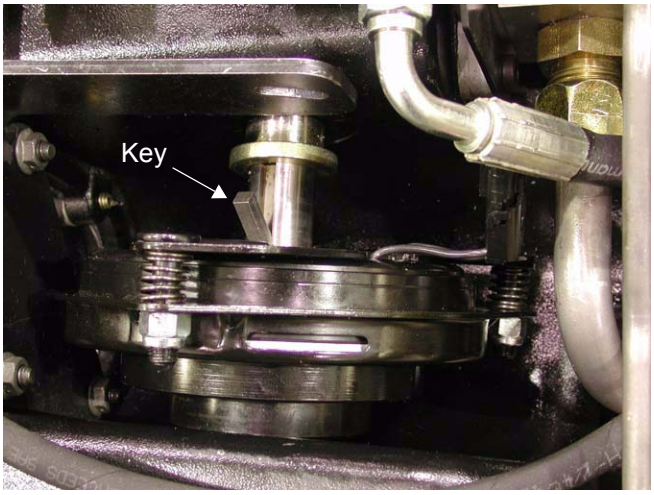


Figure 2.30

2.31. Remove the hydraulic return tube that runs from the auxiliary valve to the rear of the transmission housing using a 11/16” wrench.

2.32. Remove the high pressure tube running from the t-fitting on the top filter to the steering pump from the t-fitting using a 3/4” wrench.

2.33. Disconnect the suction tube running from the auxiliary pump to the steering pump from the auxiliary pump using a 1 1/4” wrench.

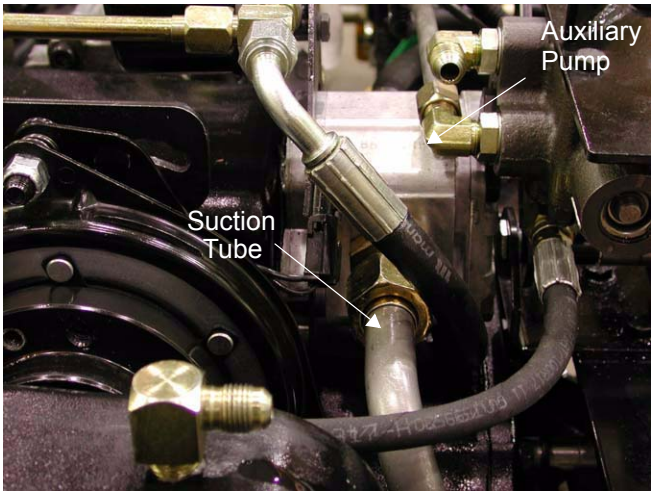


Figure 2.33

2.34. Remove the PTO clutch from the PTO input shaft.

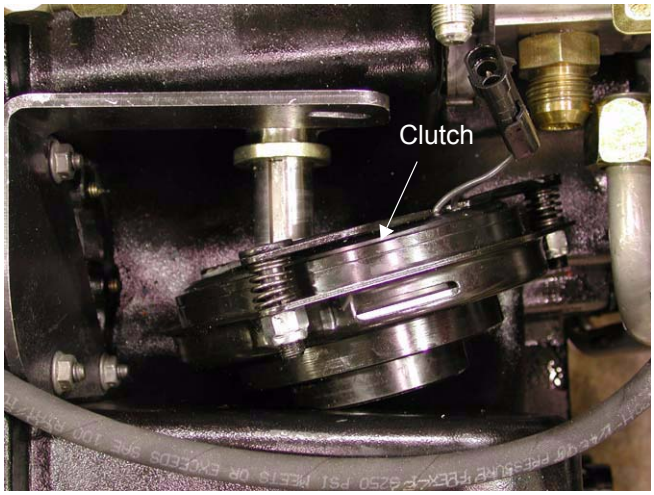


Figure 2.34

3. HYDROSTATIC REMOVAL

NOTE: The series 5000 uses a BDU 21L Hydrogear pump to power the transmission.

3.1. Remove the fender, floor and ROPS.

3.2. Remove the four screws securing the front seat mounting bracket to the frame using a 1/2" socket.

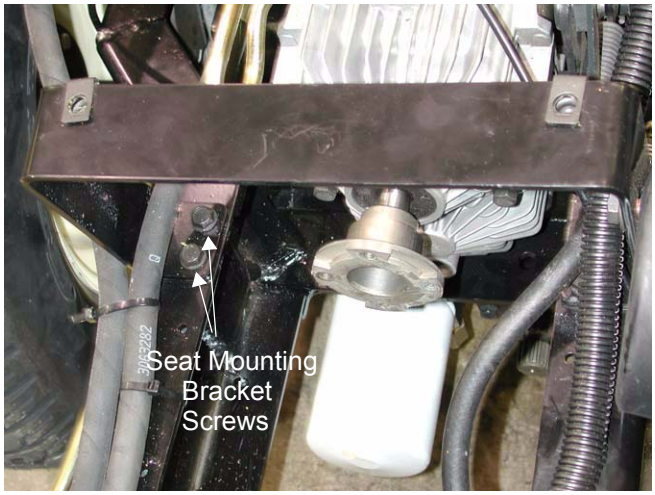


Figure 3.2

3.3. Remove the two screws and washers securing the front seat mounting bracket to the gas tanks using a 1/2" socket.

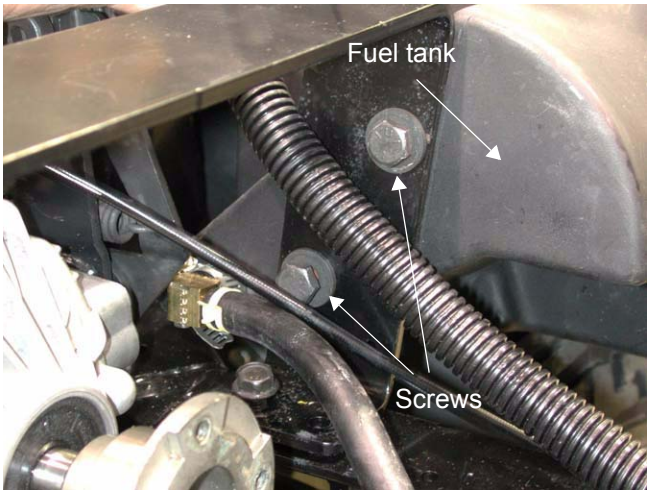


Figure 3.3

3.4. Raise front axle and safely secure with jack stands. This will minimize the amount of hydraulic fluid in the pump.

3.5. Remove the spring from the ferrule on the drive control rod.

3.6. Remove the hairpin from the ferrule on the drive rod.

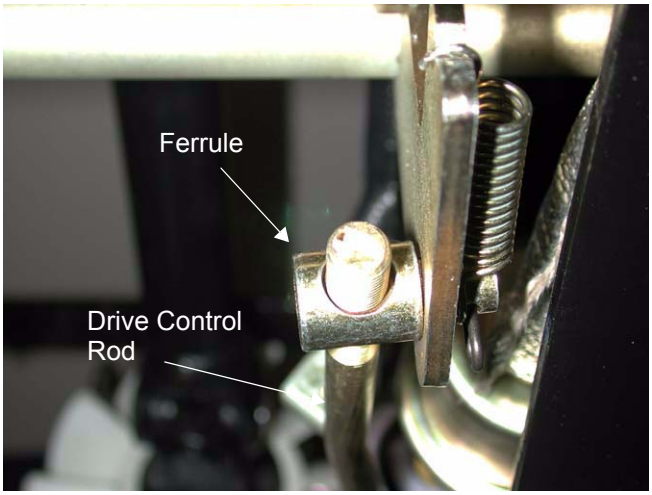


Figure 3.6

3.7. Remove the four screws securing the hydo fan and pump adapter to the hydro pump input shaft.

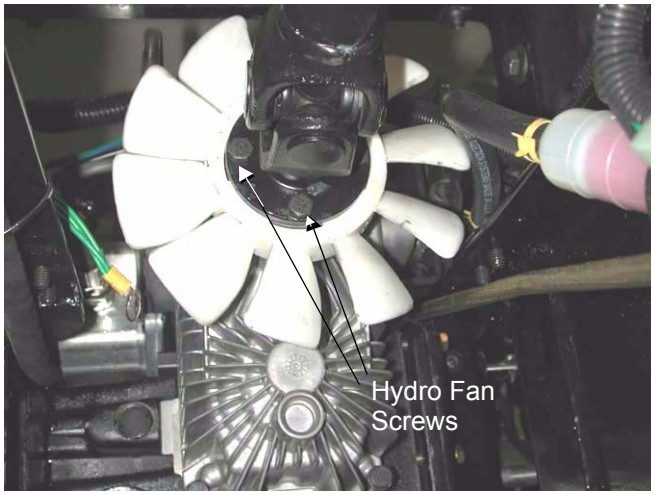


Figure 3.7

3.8. Remove the hydraulic feed tube from the top filter base and hydro pump using two 11/16" wrenches.

Figure 3.8

3.9. Mark the neutral position on the shoulder bolt between the right hand and left hand neutral arms (scissor brackets).

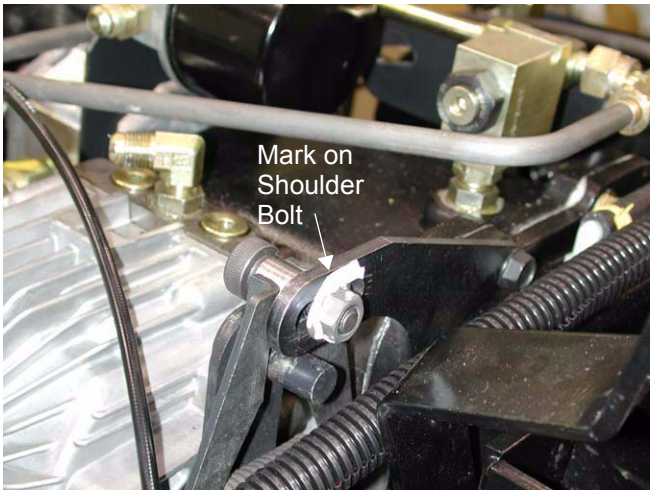


Figure 3.9

3.10. Remove the shoulder bolt, thrust washer and flanged lock nut from the hydro return bracket arm and scissor bracket using a 9/16" socket and 1/4" allen wrench.

Figure 3.10

3.11. Inspect the O rings (seal glands) around the PTO shaft opening and the transmission drive spiral bevel gear opening located on the front of the transmission housing.

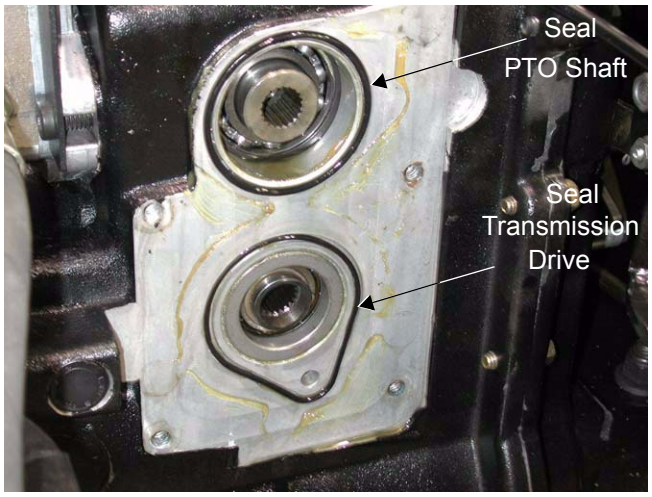


Figure 3.11

3.12. Inspect the mating surface on the back side of the pump.

Figure 3.12

4. TRANSMISSION REMOVAL

4.1. Remove the fender, floor and ROPs.

4.2. Disconnect the fuel level sensor wires from the top of the fuel tank.

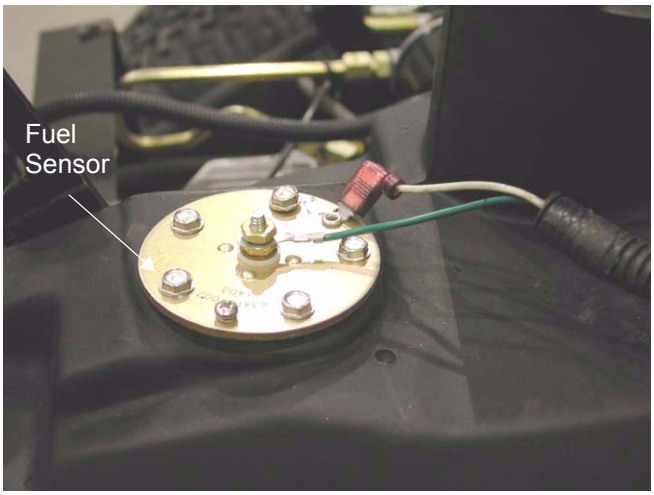


Figure 4.2

4.3. Clamp and disconnect the fuel line from the fuel tank.

Figure 4.3

4.4. Drain the transmission.

NOTE: The transmission holds approximately 5 gallons of Cub Cadet transmission fluid plus.

Figure 4.4

4.5. Mark the position of the ferrules on the brake rods.

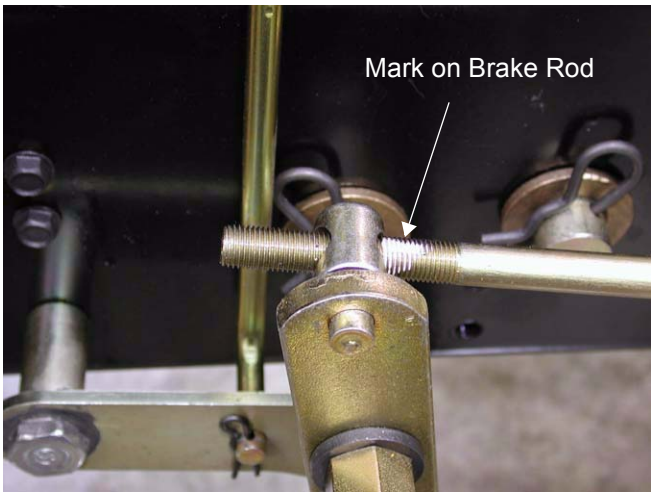


Figure 4.5

4.6. Remove the hairpins securing the ferrules to the brake rods on either side of the frame.

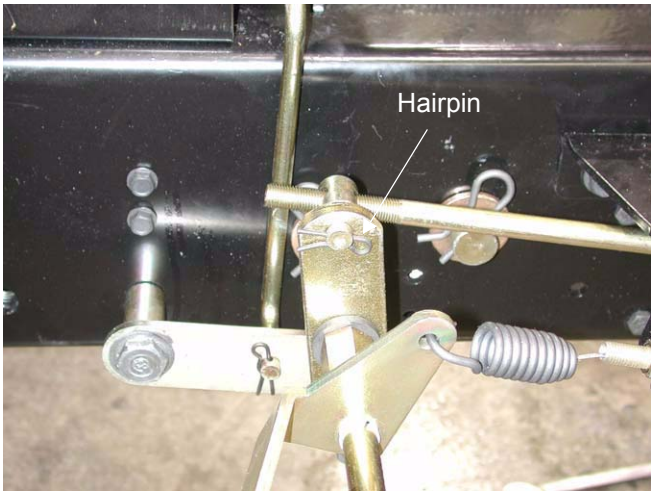


Figure 4.6

4.7. Remove the ferrule from each brake rod.

NOTE: This will allow the brake rod to slide through the frame during transmission removal.

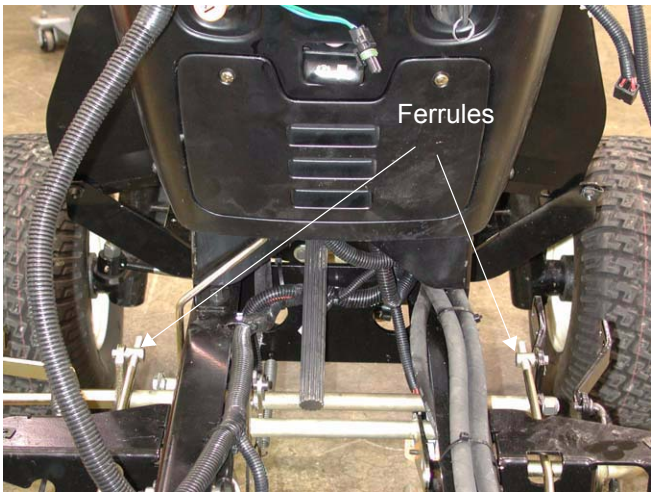


Figure 4.7

4.8. Disconnect the differential lock cable from the differential lock actuator link.

4.9. Remove the differential cable from the differential cable bracket.

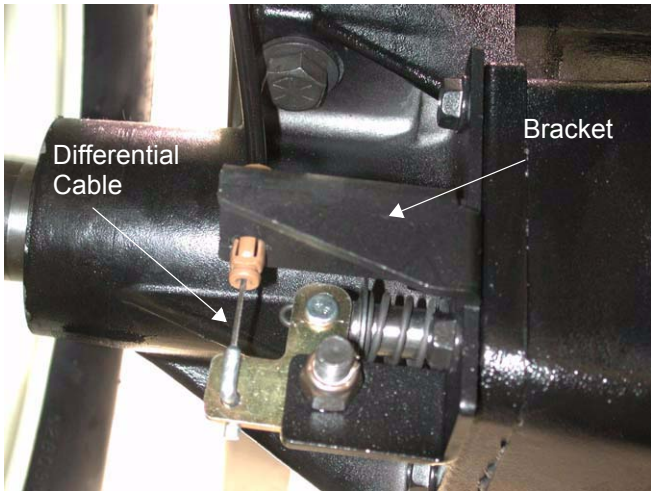


Figure 4.9

4.10. Remove the hydraulic line running from the three point hitch lift cylinder to the valve from the cylinder using two 9/16” wrenches.

4.11. Loosen the supply tube running from the valve to the L-fitting on the pressure regulator from the valve using a 11/16” wrench.

4.12. Remove the supply tube from the L-fitting end located just above the vent tube.

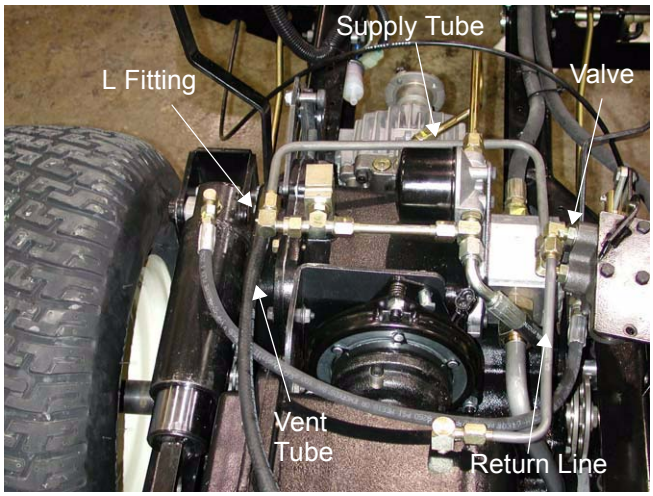


Figure 4.12

4.13. Loosen the hydraulic return line running from the valve to the top of the rear section of the transmission from the valve using a 11/16” wrench.

4.14. Remove the hydraulic tube from the rear section of the transmission using a 11/16” wrench.

4.15. Remove the valve assembly from the valve control lever and position it away from the transmission.

NOTE: The pin on the valve link will come out of the lift handle during this step.

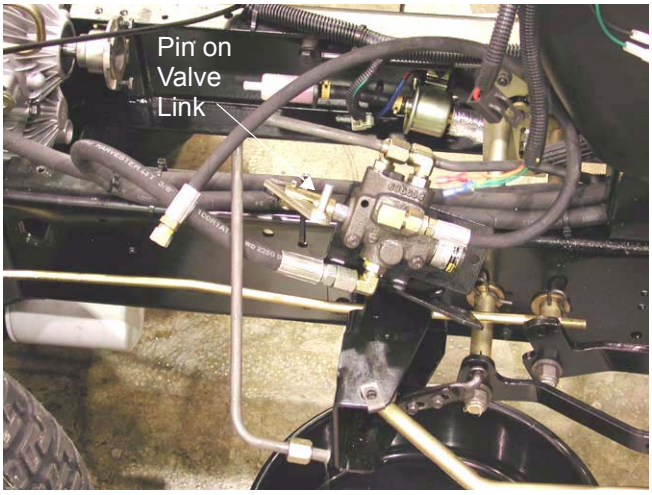


Figure 4.15

4.16. Disconnect the hydraulic line running from the steering pump to the top filter on the tranmission. The elbow fitting on the end of the line can be separated from the t-fitting on the filter housing using two 11/16” wrenches.

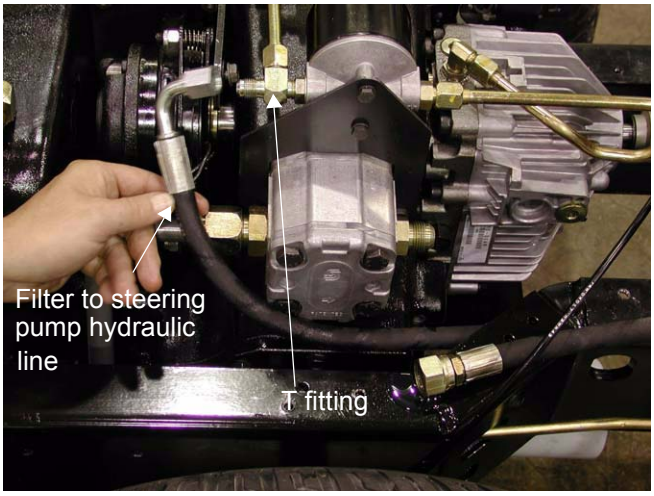


Figure 4.16

4.17. Disconnect the hydraulic line running from the front of the auxiliary pump to the steering pump using a 1” wrench and a 1 1/16” wrench.

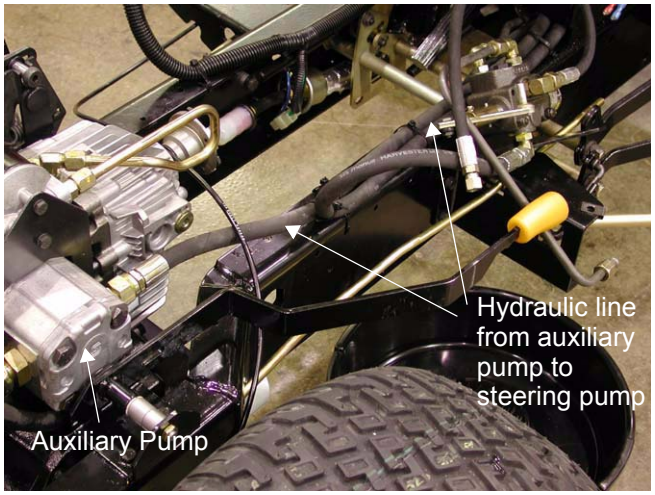


Figure 4.17

4.18. OPTIONAL: Remove lift cylinder.

4.19. Remove the self tapping screw securing the tab on the lift cylinder pin to the lift cylinder mounting bracket.

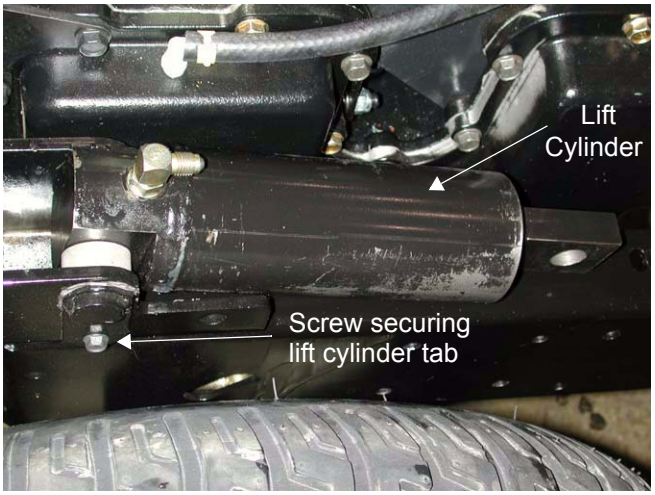


Figure 4.19

4.20. Slide the pin out of the cylinder and bracket while removing the cylinder.

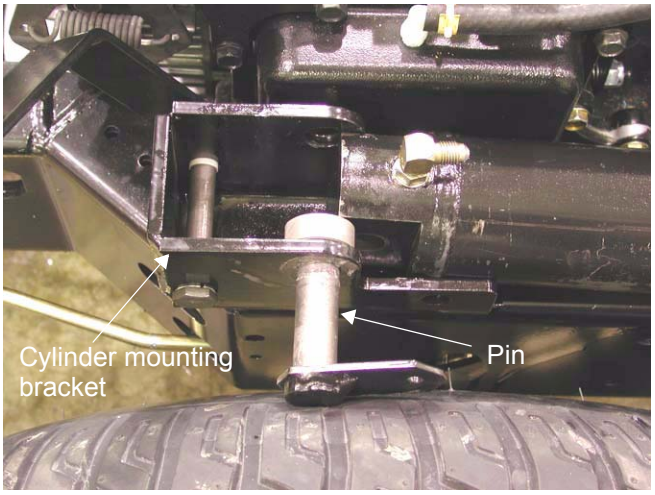


Figure 4.20

4.21. Place the tractor in neutral.

4.22. Remove the hairpin that connects the high / low actuator shaft to the high / low pivot link.

4.23. Remove the bellcrank from the frame using a 1/2” socket and a 5/8” wrench.

NOTE: Upon assembly, the bell crank is installed with the larger hole (mounting hole to frame) positioned towards the outside and rear of the transmission.

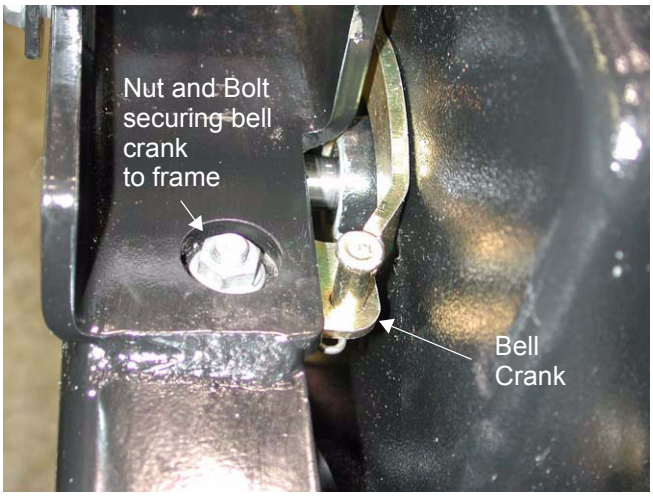


Figure 4.23

4.24. Place jack stands under the frame, 6” - 12” in front of the rear cross-member. Do not lift the tractor onto the jack stands. Raise the jack stands to meet the frame. Some adjustment can be made using shims or rear tire pressure.

WARNING: The transmission housings are mounted to the underside of the frame. If the frame is raised and the mounting bolts removed, then the brake assembly will be resting on the inside of the frame rail.

Figure 4.24

4.25. Remove the four nylon lock nuts, flat washers and bolts securing the transmission to the frame using 3/4” wrench and a 3/4 socket.

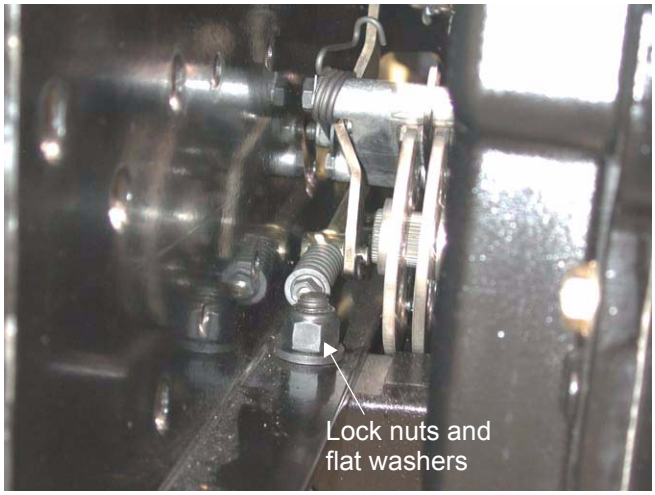


Figure 4.25

CAUTION: Slowly roll the wheels and transmission rearward while guiding the brake rods through the frame. The transmission is rear-heavy, do not allow it to rotate backward.

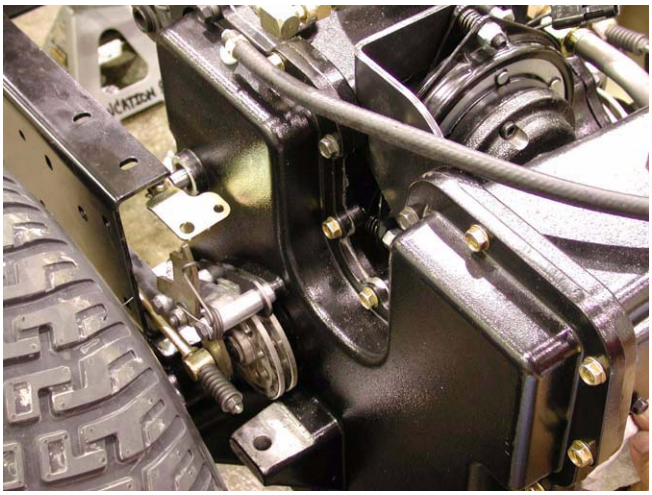


Figure 4.25

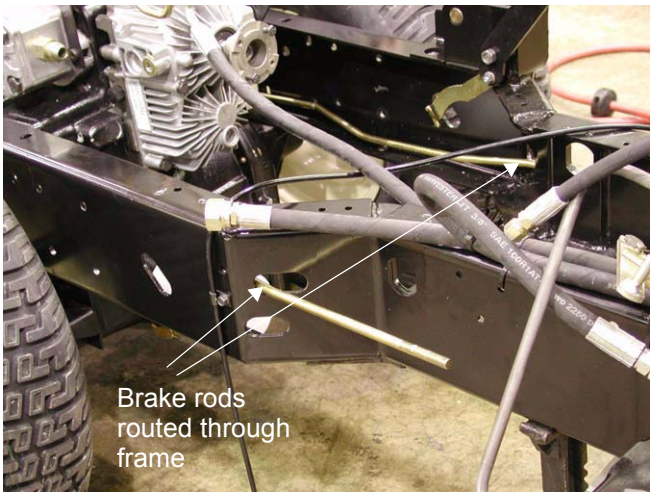


Figure 4.25

4.26. Support the rear of the transmission.

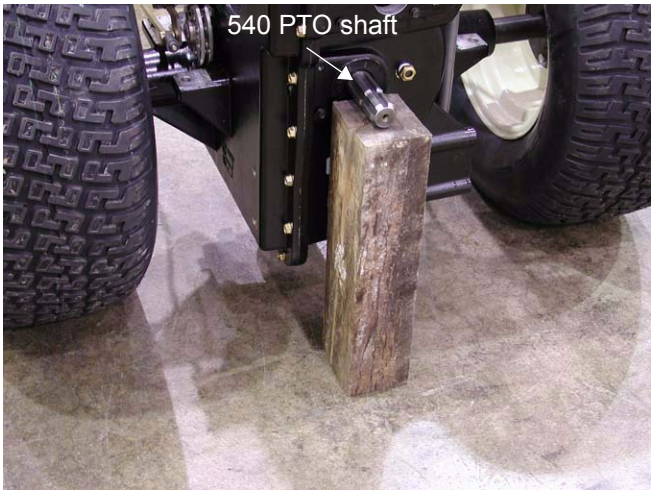


Figure 4.26

4.27. Remove the hairpins securing the brake rods to the brake actuation arms. Maintain the position of the brake rod ferrules to minimize adjustments upon assembly.

NOTE: The brake rods are not identical. The left brake rod is longer than the right brake rod.

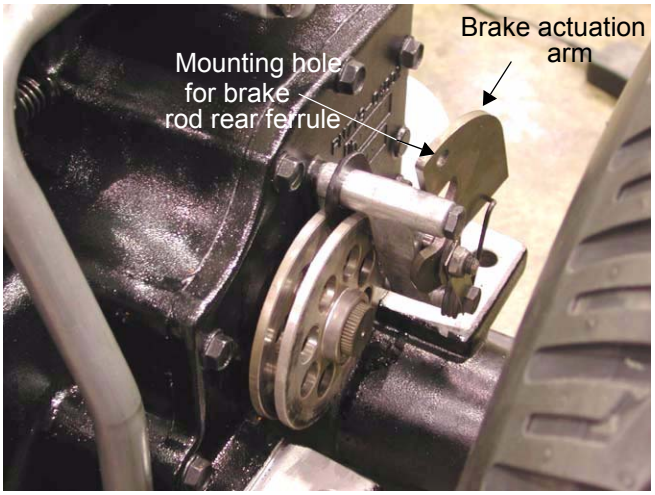


Figure 4.27

5. TRANSMISSION DISASSEMBLY

5.1. Remove the two screws securing each brake assembly to the transmission using a 1/2" socket.

NOTE: On the inner brake disc the shoulder faces inward. On the outer brake disc the shoulder faces outward.

5.2. Remove the brake assemblies.

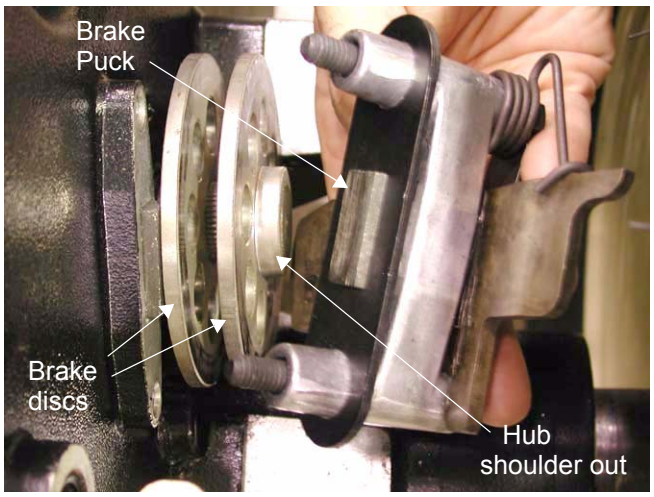


Figure 5.2

5.3. Tilt the transmission onto the right wheel assembly.

Figure 5.3

5.4. Remove the four lug nuts securing the left (top) wheel to the axle hub using a 3/4" socket and impact wrench.

5.5. Remove the cotter pin securing the high / low pivot link to the high / low actuator shaft. Remove the pivot link.

NOTE: It is not necessary to remove the axles in order to separate the transmission case housings.

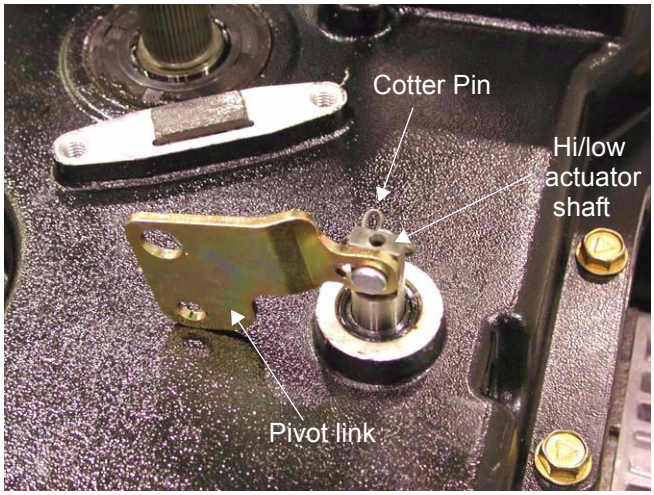


Figure 5.5

5.6. Remove the axle seal.

5.7. Remove the retaining ring.

5.8. Remove the axle shaft and bearing.

Figure 5.8

5.9. Loosen the clamp securing the transmission vent tube and remove the vent tube.

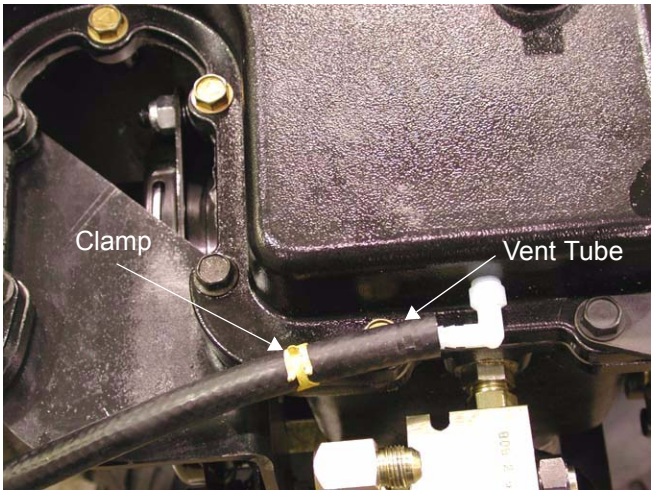


Figure 5.9

5.10. Remove the high / low shift lever detent screw, spring and ball from the transmission housing using a 5/32 allen wrench.

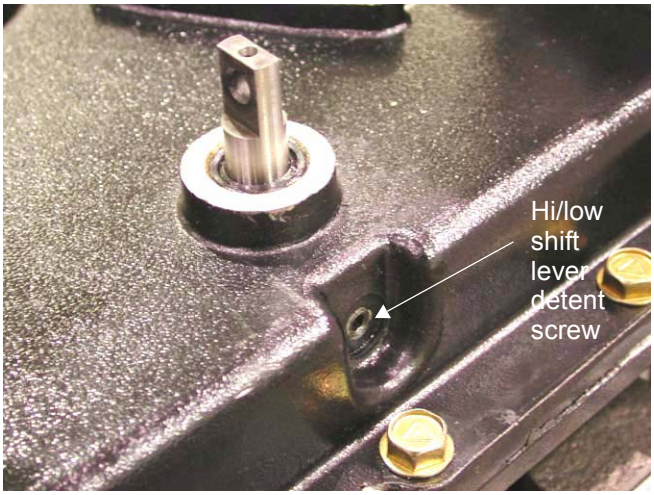


Figure 5.10

5.11. Remove the three bolts and lock nuts securing the PTO anti-rotation bracket to the left hand transmission housing using a 1/2” socket and 1/2” wrench.

NOTE: Leave the anti-rotation bracket connected to the clutch.

NOTE: Theses three bolts are the longest bolts securing the transmission case housing together.

5.12. Remove the two bolts securing the center control pivot bracket for the neutral scissors to the transmission housing using a 1/2” socket and a 1/2” wrench.

NOTE: These two bolts are longer than the other bolts securing the transmission case halves together, but shorter than the three bolts securing the PTO anti-rotation bracket.

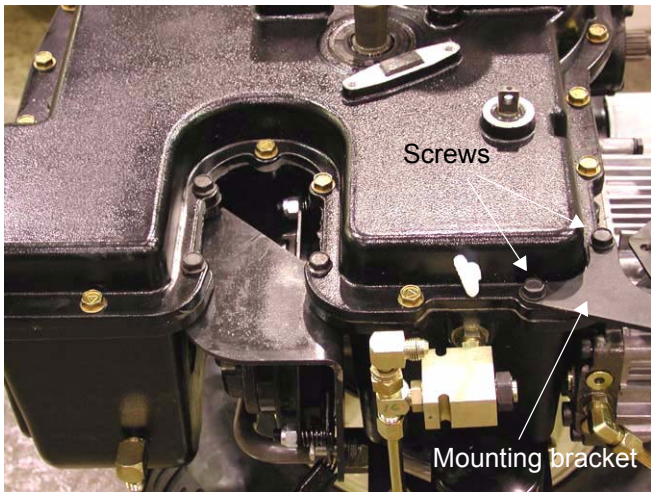


Figure 5.12

5.13. Remove the remaining twenty one bolts securing the two transmission case housings together.

5.14. Separate the two transmission case halves.

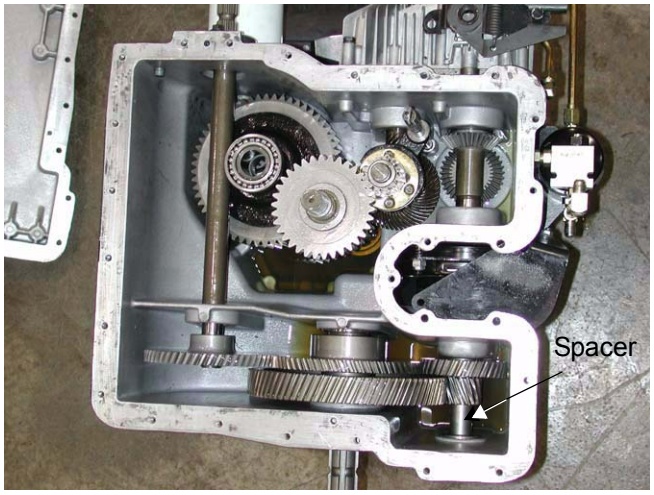


Figure 5.14

NOTES

5.15. Remove the PTO countershaft plug seal to gain access to the circlip that holds the PTO countershaft rear bearing.

5.16. Remove the retaining ring that holds the PTO countershaft rear bearing in place in the rear of the transmission housing.

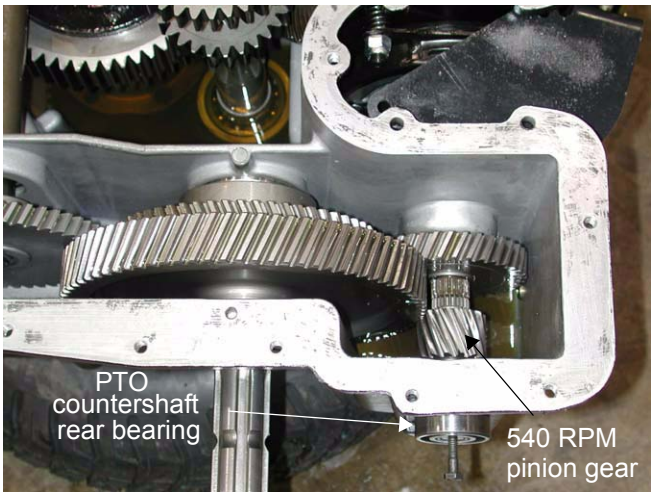


Figure 5.16

5.17. The PTO countershaft rear bearing, countershaft, spacer, and 540 RPM pinion gear can be removed through the bore in the back of the transmission housing.

Figure 5.17

5.18. As the PTO countershaft comes out, the 2000 RPM PTO pinion will fall loose. The PTO countershaft front bearing may or may not remain in the bore in the front bulkhead of the rear section of the transmission.

5.19. The PTO countershaft is splined to engage the 2,000 RPM PTO pinion gear. The 2,000 RPM pinion gear is splined to engage the 540 RPM PTO pinion gear.

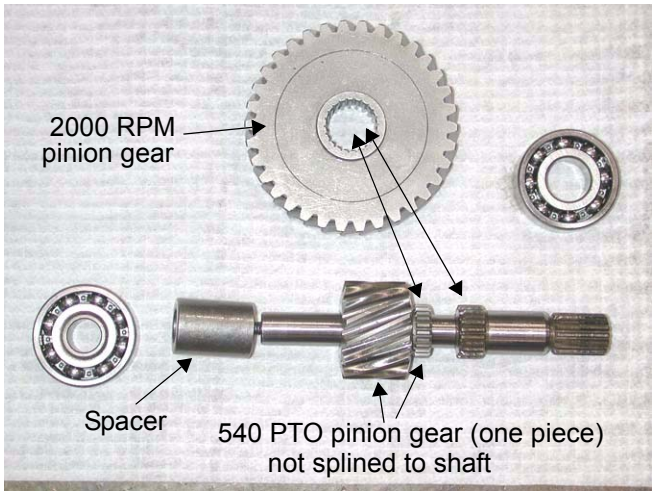


Figure 5.19

5.20. The nose of the PTO countershaft is splined to engage the electric PTO clutch.

NOTE: Whenever the PTO clutch is engaged, both the 540 RPM and the 2,000 RPM PTO pinon gears will turn, driving both front (2,000 RPM) and rear (540 RPM) PTO output shafts.

5.21. The rear PTO shaft can be removed in similar fashion: remove the seal and retaining ring, then withdraw the shaft.

5.22. As the shaft comes out, the 2,000 RPM and 540 RPM PTO gears will come free of it. Remove the gears one at a time as they come off the shaft.

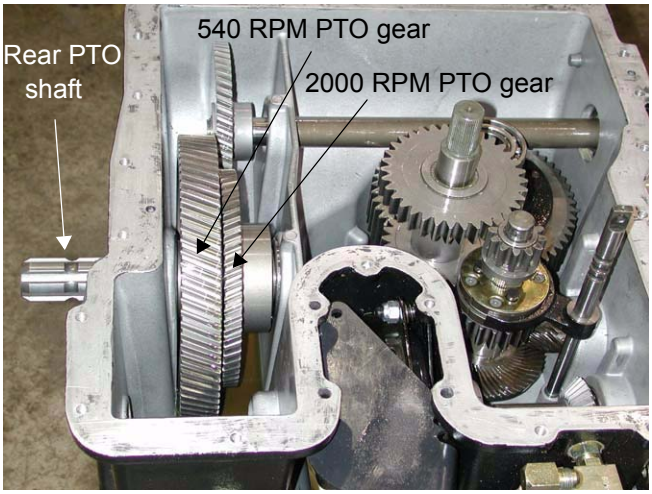


Figure 5.22

5.23. The front PTO shaft cover can be removed using a 9/16” wrench.

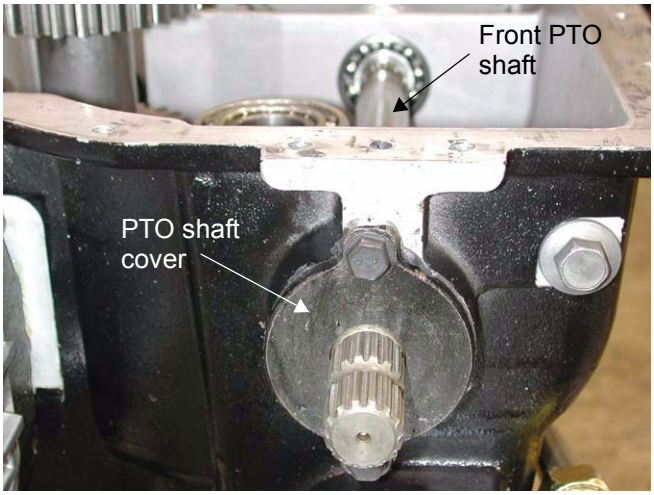


Figure 5.23

5.24. Remove the retaining ring that holds the drive gear onto the back of the front PTO shaft.

5.25. Pry the front PTO shaft forward to remove the front PTO shaft cover.

5.26. The front 2000 PTO shaft drive gear can be removed as the shaft slides forward.

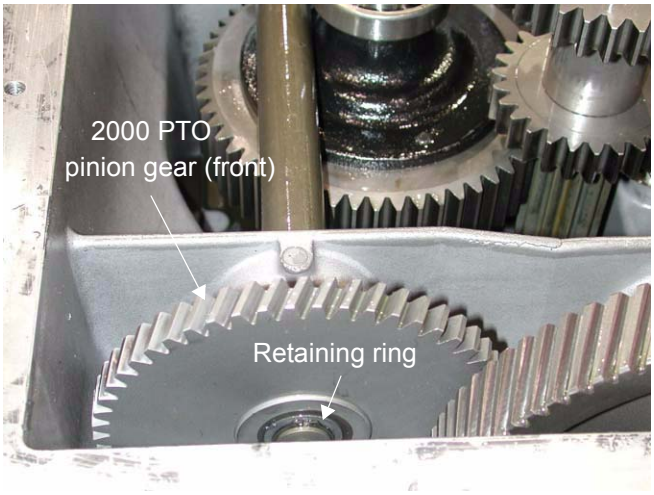


Figure 5.26

5.27. The PTO system is driven by a shaft that passes through the hydrostat, providing power to the variable displacement pump in the hydro and the charge pump in the hydro.

5.28. The direct-driven output shaft from the hydro (passing through the variable displacement pump) drives the auxiliary pump (mounted on the transmission housing) through a set of bevel gears. The same shaft drives the electric PTO clutch.

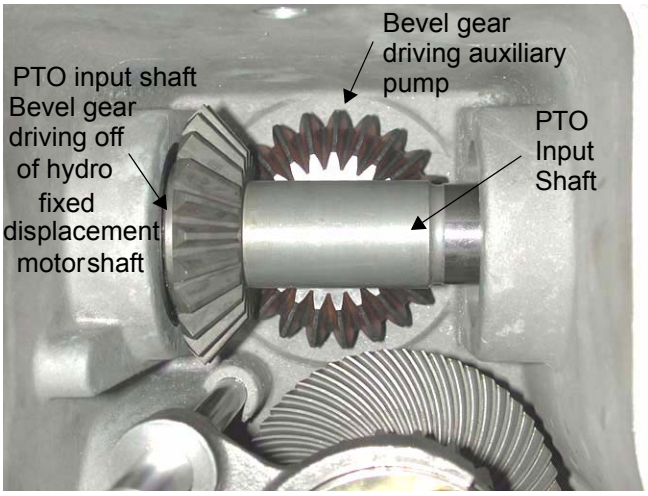


Figure 5.28

5.29. The lower output shaft from the hydro. is driven by the fixed displacement pump in the hydro. The lower shaft responds to the output of the variable displacement pump with changes in speed and direction. The variable displacement pump responds to control inputs from the operator.

5.30. The input spiral pinion gear that is driven by the lower output shaft of the hydro is suspended on its own ball bearing. A stem on the spiral pinion gear passes through the bearing, and is secured there by a retaining ring.

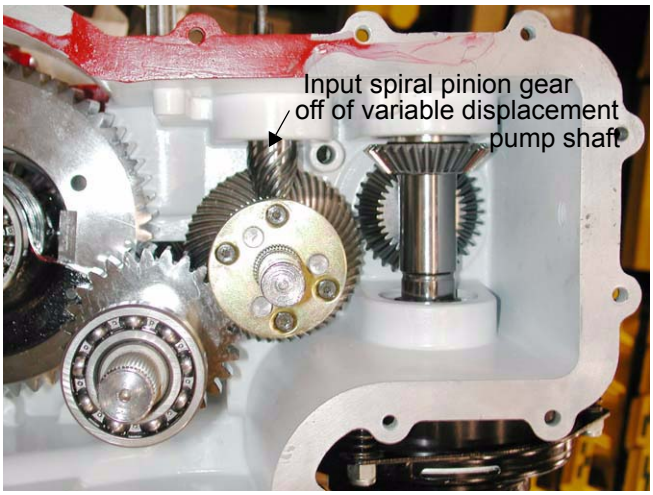


Figure 5.30

5.31. The ball bearing is held in the base of its bore by the hydrostat. A spacer and a flat washer between the body of the hydro. and the bearing set the end play of the gear.

NOTE: Because backlash between the input spiral pinion gear and the spiral bevel gear is a function of each gears' end play, different thicknesses of flat washer are used to adjust the end play (backlash) of the spiral pinion gear. Flat washers are available in thicknesses of .005", .015", and .030".

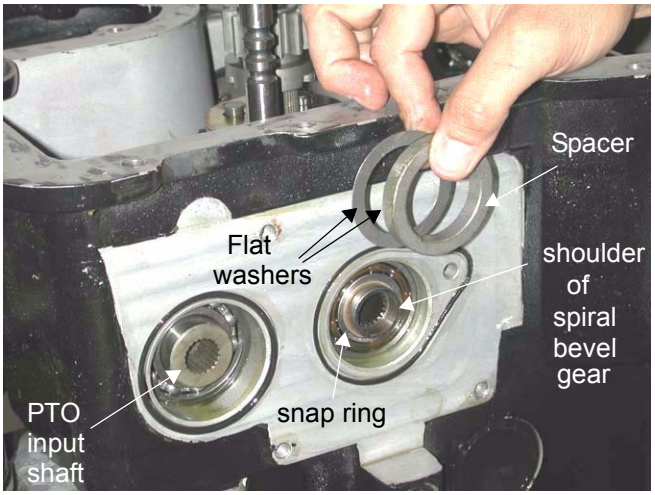


Figure 5.31

5.32. The spiral bevel gear is keyed to the primary shaft (referred to as the drive shaft in the IPL).

5.33. Also on the primary shaft are two small spur gears (12 tooth and 19 tooth), and a high - low shift collar assembly.

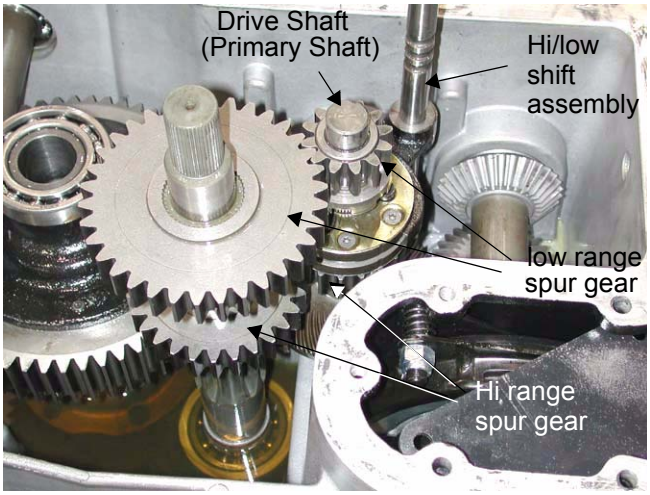


Figure 5.33

5.34. Adjacent to the primary shaft is the high - low actuator shaft with a shift yoke splined onto the shaft and retained on it by a rotor clip.

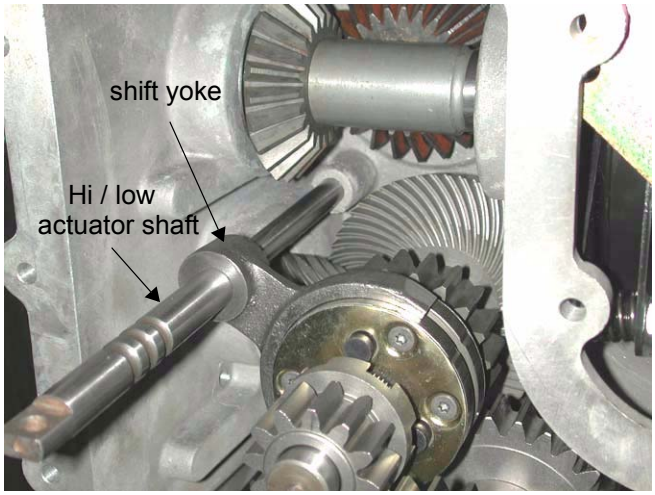


Figure 5.34

5.35. To remove any of these components, the large, low range spur gear (34 tooth) must be lifted off of the brake shaft (referred to as output shaft in IPL). The low range spur gear is slip-fit onto splines on the brake shaft.

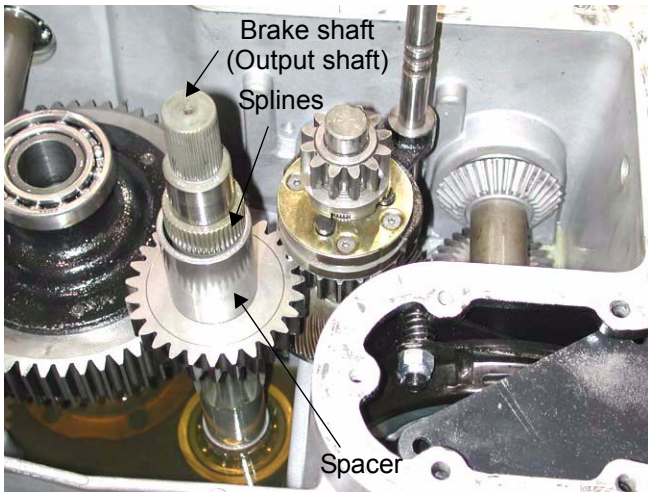


Figure 5.35

5.36. Remove the spacer from the brake shaft.

NOTE: The two large spur gears that fit on the brake shaft are reversible, but should not be reversed once any significant number of hours have been put on the transmission because of wear patterns on the teeth. Circles are cut into one side of each gear for the sake of orientation.

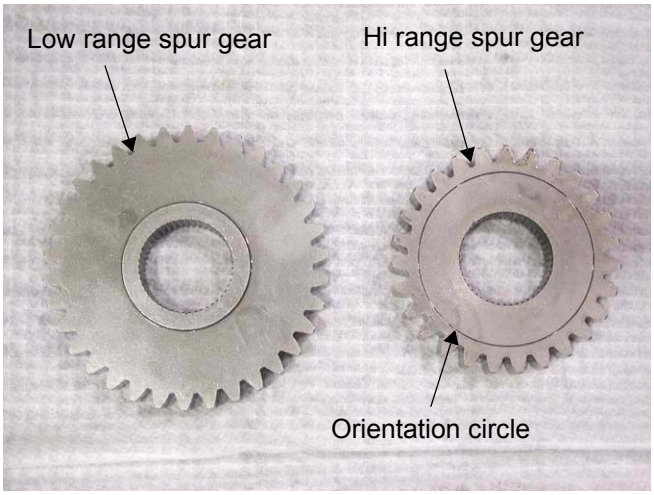


Figure 5.36

5.37. Once the 34 tooth low range spur gear is removed, the smaller 12 tooth low range spur gear that mates with it can be removed from the primary shaft.

NOTE: Anti-seize compound is applied to the primary shaft on assembly.

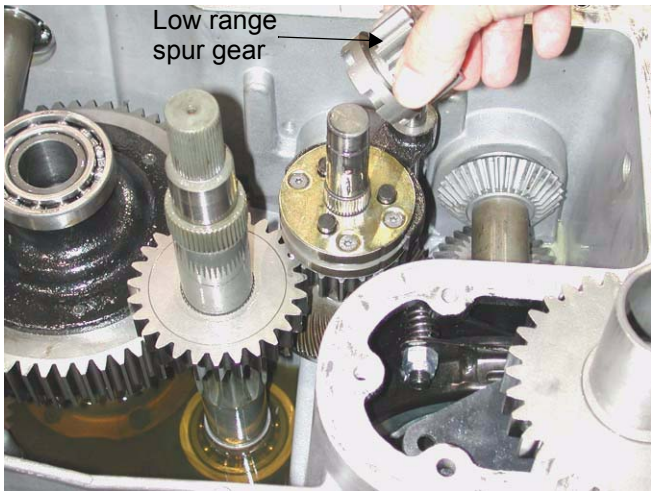


Figure 5.37

5.38. The high - low shift collar can then be lifted off of the primary shaft. The high - low actuator shaft and shift yoke will come out of the transmission housing.

Figure 5.38

NOTE: The yellow zinc finished side of the shift collar must face the low range (12 tooth) spur gear. The spacing of the engagement pins in the collar is such that the yellow side will only fit the low range (12 tooth) spur gear.

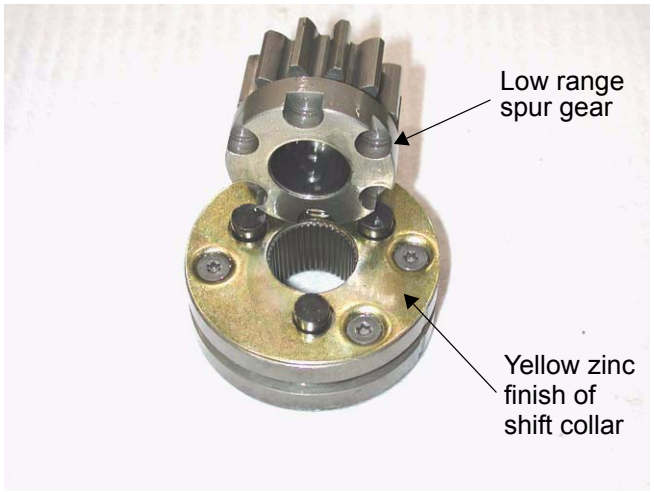


Figure 5.38

NOTE: The silver colored side will only fit the high range (19 tooth) spur gear.

Figure 5.38

5.39. The shift yoke can be removed from the high - low actuator shaft by removing the rotor clip.

NOTE: Match mark the yoke and shaft before they are separated. When they are installed, the yoke must engage the shift collar, and the flat on the end of the actuator shaft must be parallel with the top and bottom surfaces of the transmission.

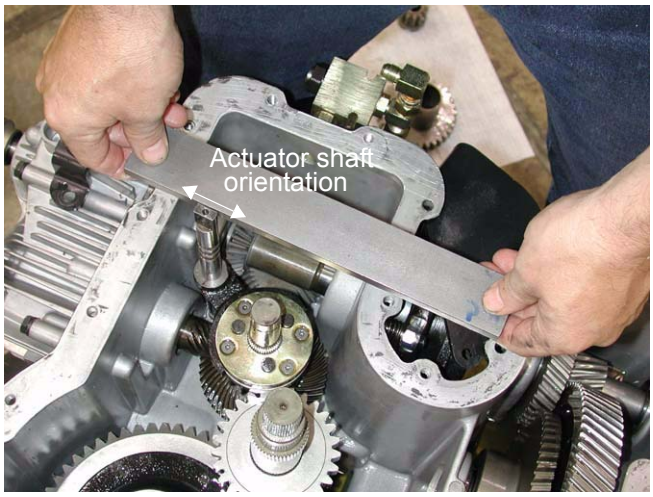


Figure 5.39

5.40. The low range (19 tooth) spur gear is held onto the primary shaft by a spiral retaining ring.

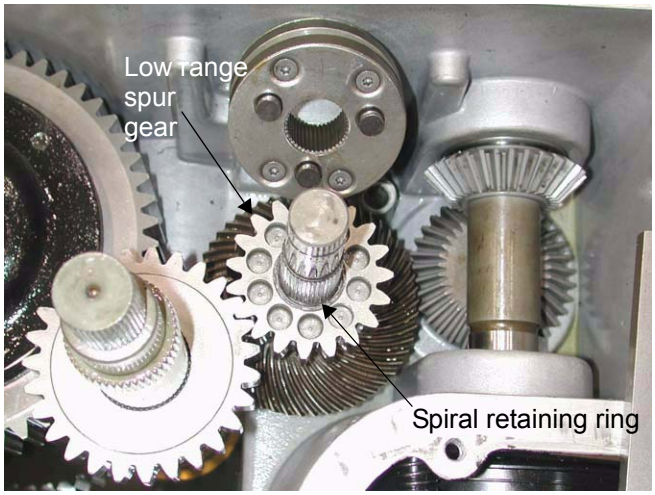


Figure 5.40

5.41. If it is necessary to remove the primary shaft, carefully pry the input spiral pinion gear back.

NOTE: BDU 21L Hydrostatic pump previously removed.

NOTE: The spiral bevel gear is a keyed press fit onto the primary shaft.

5.42. Lift the primary shaft, low range (19 tooth) spur gear, and spiral bevel gear out of the transmission housing together.

Figure 5.42

5.43. The thrust pack (radial needle bearing sandwiched between two ground flat washers) that fits between the spiral bevel gear and the transmission housing comes out with the shaft.

5.44. The roller bearing that the nose of the primary shaft pilots into in the transmission housing must be removed using a blind bearing puller.

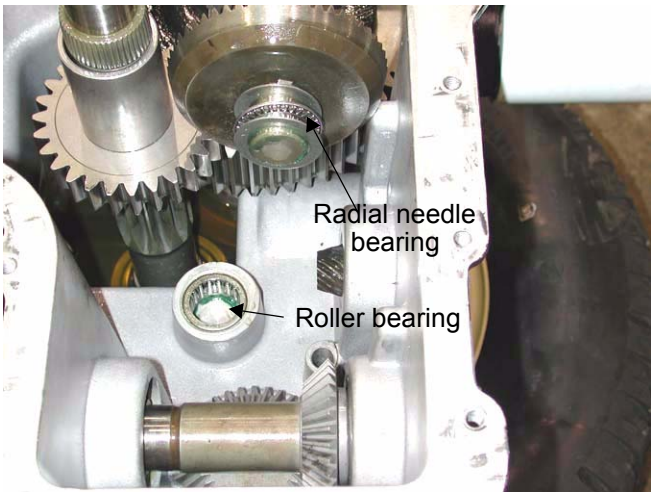


Figure 5.44

5.45. The brake shaft can be lifted out of the transmission if the brake assembly is removed from the other end of the shaft, and the transmission is completely empty of oil.

6. BRAKE ADJUSTMENT

6.1. Raise the rear of the tractor and safely support it with jack stands.

6.2. Remove the rear tires.

6.3. Disconnect the brake rods by removing the hairpin clips that connect the ferrules at the front of each brake rod to the arms on the brake shaft assembly.

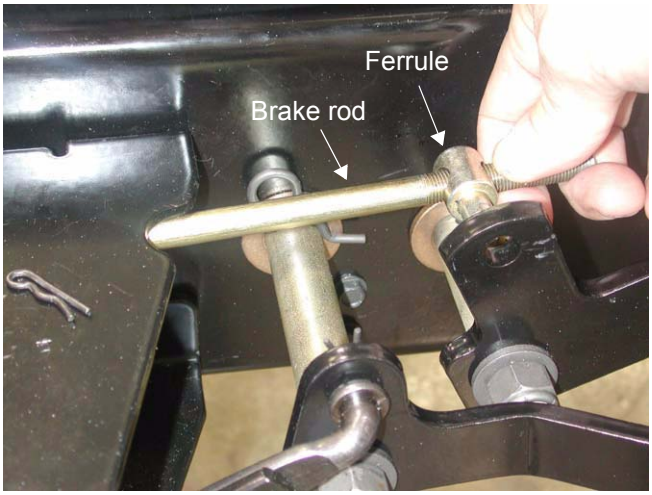


Figure 6.3

6.4. Insert a 0.010” feeler gauge between either brake rotor and brake pad. Loosen or tighten the adjustment nut on the brake caliper as necessary using a 1/2” wrench.

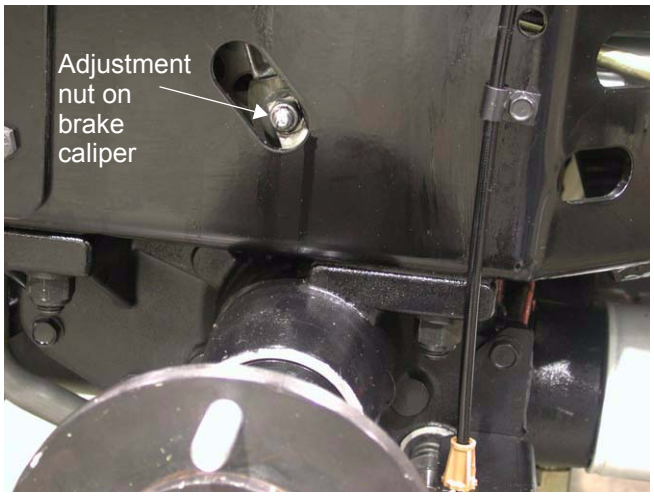


Figure 6.4

NOTE: There are two brake rotors and three brake pads on each side of the tractor.

Figure 6.4

6.5. Repeat step 6.4 for the opposite brake asssembly.

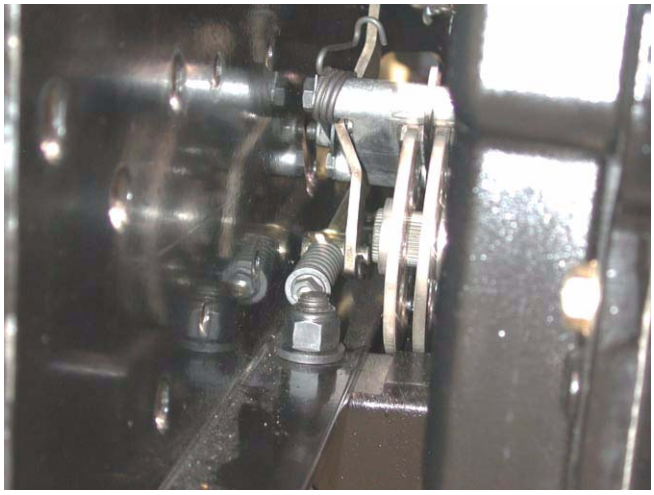


Figure 6.5

6.6. Pull each brake rod forward until light tension is felt, to remove any slack.

6.7. Thread the ferrules forward (lengthen rod) four turns.

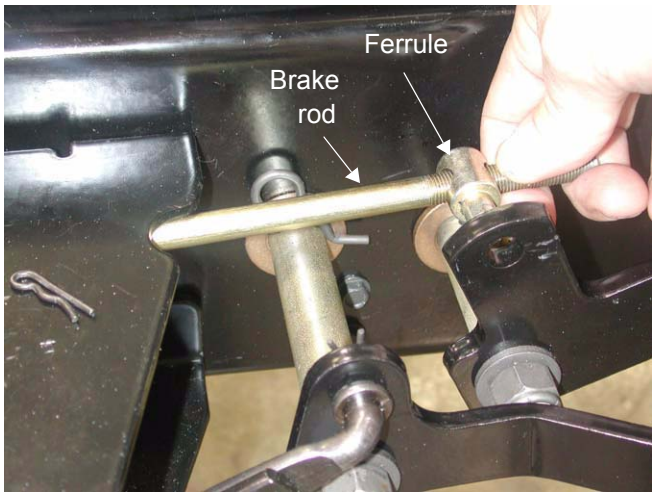


Figure 6.7

6.8. Connect the ferrules to brake pedal assembly and secure with hairpins.

NOTE: Do not attempt to adjust the length of the brake rods by moving the rear ferrule.

6.9. Install the rear wheels

6.10. Engage the differential lock and attempt to rotate the rear wheels. There will be slight drag. With the parking brake set, the wheels should not rotate.

6.11. Confirm that the parking brake mechanism engages / disengages.

6.12. Test the brake operation in a safe area before returning the unit to service.

7. DIFFERENTIAL LOCK ADJUSTMENT

7.1. Adjust the differential lock cable with the jam nuts securing it to the left side running board mounting bracket.

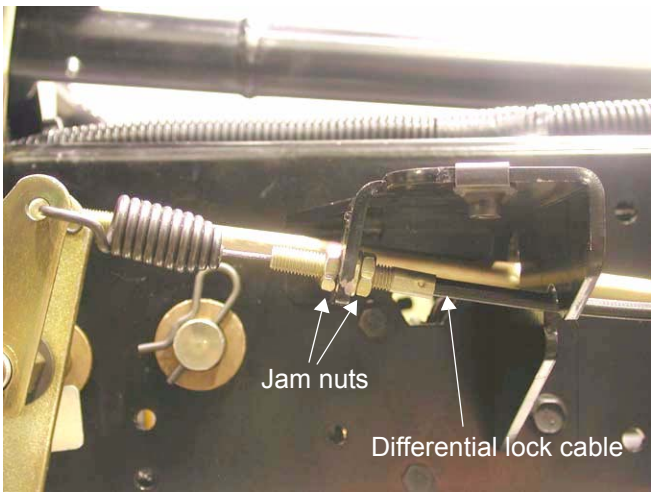


Figure 7.1

8. NEUTRAL CONTROL ADJUSTMENT

8.1. Lift and safely support the back of the tractor so that the rear wheels are clear of the ground.

NOTE: On four wheel drive models, confirm that the four wheel drive is not engaged, or lift all four wheels off the ground.

8.2. Disconnect the seat safety switch, and temporarily by-pass it with a short jumper wire.

8.3. Slide the seat all the way back and remove the two torx head cap screws that hold the front of the seat tracks to the seat bracket using a T-30 driver.

8.4. Slide the seat all the way forward and remove the two torx head cap screws that hold the back of the seat tracks to the seat bracket.

8.5. Remove the seat.

8.6. Disconnect the ferrule at the front of the hydro control rod from the arm on the pedal shaft by removing the hairpin clip and removing the small pre-load spring.

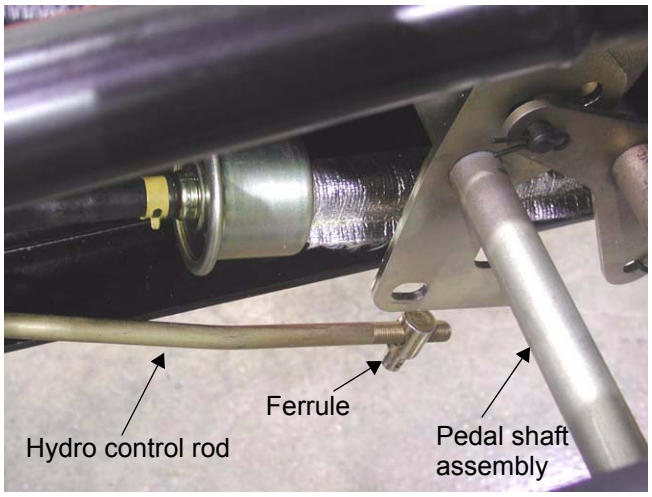


Figure 8.6

8.7. Loosen the nut and neutral adjustment shoulder screw using a 9/16” wrench and a 1/4” allen wrench.

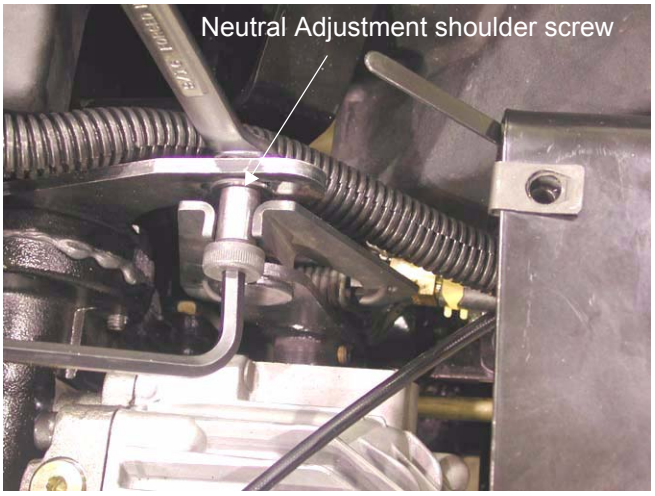


Figure 8.7

8.8. Start the engine, and engage the differential lock.

NOTE: It is necessary to engage the differential lock to make both wheels turn in unison, clarifying the presence and direction of drive motion.

8.9. Slide the neutral adjustment shoulder screw forward or backward to eliminate any wheel motion.

8.10. When wheel motion has stopped, turn-off the engine and tighten the neutral adjustment shoulder screw and nut.

8.11. Re-start the engine and confirm that the adjustment did not shift as it was tightened.

8.12. Turn the engine off.

8.13. Operate the drive pedals to confirm freedom of movement and operation of the hydraulic damper.

8.14. Set the parking brake.

8.15. Thread the ferrule up or down the hydro control rod until it fits into the slot in the arm on the pedal shaft, resting against the front of the slot.

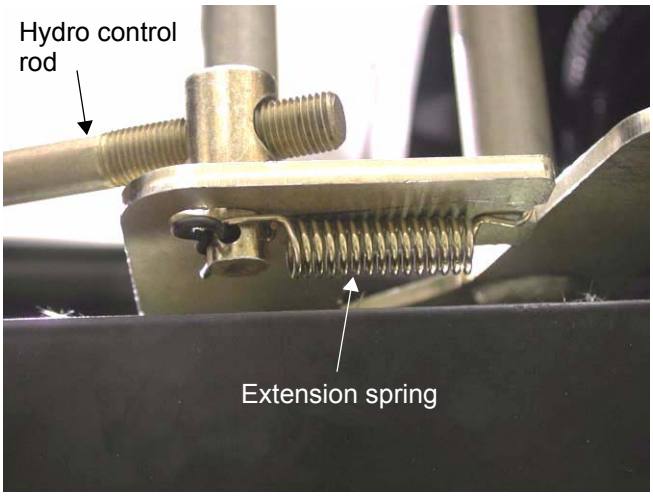


Figure 8.15

8.16. Secure the ferrule using the hairpin clip and pre-load spring.

8.17. Start the engine and confirm that the wheels do not creep with the brake released, the differential lock engaged, and neither drive pedal (forward or reverse) depressed.

8.18. Install the seat.

8.19. Remove the jumper wire from the seat safety harness, and **reconnect the seat safety switch**.

8.20. Test the operation of the reverse safety switch and seat safety switch.

8.21. Lower the tractor to the ground.