

Service Kit 753-06042A

Date: May 3, 2010

Subject:

Service Replacement for the 618-04711, 618-04711A, 618-04711B and 618-04735 Transmissions

Models N/A Affected:

Read through and understand these instructions completely before proceeding with repair.

PURPOSE: This kit contains the service replacement for the 618-04711, 618-04711A, 618-04711B and 618-04735 Bronco/ Pro-Line Series Transmissions which are no longer available.

NOTE: These materials are prepared for use by trained technicians who are experienced in the service and repair of equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. Such individuals should seek the assistance of an authorized service technician or dealer.

NOTE: Save this Instruction Sheet. Refer to it when ordering replacement parts.

Service Kit Contents

(See Figure 1)

ITEM	PART	QTY	DESCRIPTION
NO.	NUMBER		
1	618-04934	1	TRANSMISSION: BRONCO: CRT
2	712-0700	1	NUT: FLANGE: 9/16"-18: GR2
3	718-04407	1	HUB: PULLEY: 5/8" SPLINE
4	756-04355	1	PULLEY: TRANSMISSION
5	*	1	THIS INSTRUCTION SHEET

^{* -} Not Available Separately

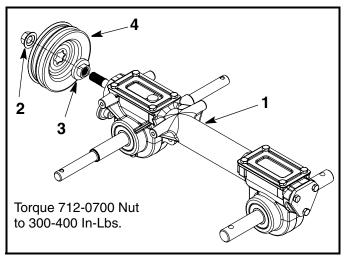


FIGURE 1

Pre-Service Preparation:

- 1. Place the tiller on a flat and level surface.
- 2. Turn off engine and allow engine and muffler to cool before proceeding.
- 3. Remove the spark plug wire from the spark plug and ground wire to the engine block.
- 4. Set the adjustable depth bar to it's lowest position.

NOTE: Left (LH) and right (RH) sides are determined from the operator's position behind the handle bars and facing the tiller engine.

NOTE: Refer to the Operator's Manual - Illustrated Parts List for part identification and location.

Disassembly:

5. Block the wheels and block up the rear of the tiller as shown in Figure 2. Using a rope or bungy strap, secure the tine shield rear flap as shown.

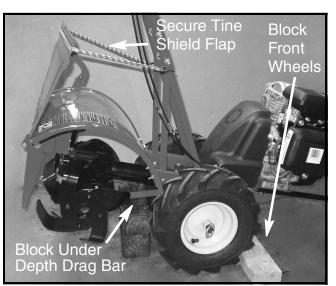
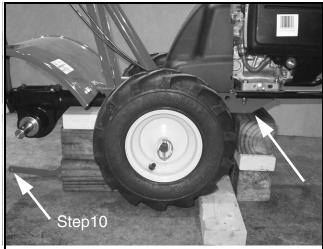


FIGURE 2

Service Kit 753-06042A 1 of 3 Form No. 769-05160A

- 6. Tag the two tine assemblies, Right Side and Left Side, as to the side of the tiller they are mounted on. Remember Left (LH) and Right (RH) sides are determined from the operator's position behind the handle bars and facing the tiller engine. This will assist when reassembling the tiller.
- 7. Using a 9/16" box wrench, 9/16" socket and ratchet, remove the cross bolt and nut securing each tine assembly to the transmission's tine shaft.
- 8. Remove the tine assemblies.
- 9. Place sufficient, approximately 9" high, wood blocking under the forward part of the frame. With the help of an assistant, tip the tiller forward to rest the front of the frame on the blocking thereby raising the wheels off the ground. Position additional wood blocking at the rear on each frame rail between the transmission housing and wheel. See Figure 3.



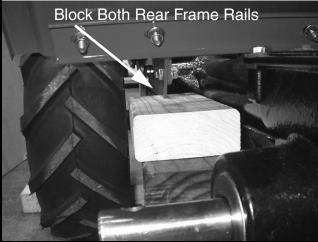


FIGURE 3

- 10. Using a 1/2" socket and ratchet, remove the shoulder bolt and flange lock nut securing the depth drag bar to the adjustable depth bar.
- 11. Using a 1/2" socket, short extension and a ratchet, remove the two 5/16" x .75 screws securing the left and right tail brackets to the rear of the transmission. See Figure 4.
- 12. Remove both wheel assemblies.

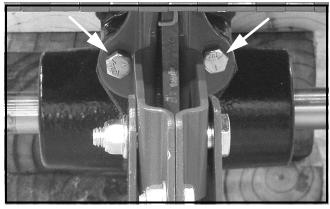


FIGURE 4

13. Using a 3/8" socket and ratchet, remove the two (2) screws retaining the belt cover. One is located on the left frame rail and the second is located just above when the two cables enter the belt cover at the right frame rail.

Refer to Figure 5 for Steps 14 through 19.

- 14. Using a 7/16" socket and ratchet, loosen the self-tapping screw securing the forward cable roller to the cable bracket sufficiently and slip the cable off the roller.
- 15. Using a pair of long nose pliers, squeeze the two ears of the forward cable fitting together and remove the forward cable end from the bracket.
- 16. With the forward drive cable free, unhook the cable's spring end from the forward idler bracket.
- 17. Slip the forward drive belt off of the engine pulley.
- 18. If so equipped using a 7/16" socket and ratchet and a 7/16" box wrench, loosen the reverse drive belt idler pulley sufficiently to slip the belt off the pulley and idler bracket.
- 19. Using a pair of long nose pliers, unhook the forward idler tension spring from the cable bracket.

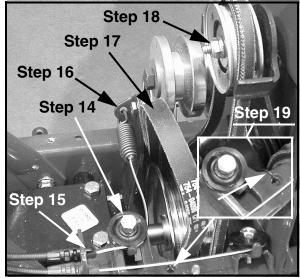


FIGURE 5

For Discount Troy Bilt Parts Call 606-678-9623 or 606-561-4983

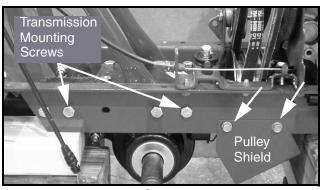


FIGURE 6

- 20. Using a 3/8" socket and ratchet, remove the 4 self-tapping screws (2 on each side) securing the pulley shield to the frame rails. Remove the pulley shield. See Figure 6.
- 21. Support the transmission at the forward end so that when the four (4) transmission mounting bolts are removed in the next step the transmission will not drop.
- 22. Using a 1/2" socket and ratchet, remove the four (4) screws (2 on each side) securing the transmission to the frame rails. See Figure 6.
- 23. With the help of an assistant to hold the tiller handles and keep the tiller from coming off the blocks, work the transmission down and out of the frame.

NOTE: Blocking may need to be re-adjusted to allow the transmission to drop down.

NOTE: A 2"x4" wood of sufficient length can be used as a tamper on the forward gear box to assist in removing the transmission from the frame.

24. With the transmission out of the frame, using a 1/2" socket and ratchet, remove the forward idler bracket and pulley assembly, pivot spacer and extension spring from the front of the transmission, and both belts.

NOTE: Observe that the reverse drive belt is installed so that it runs on it's back side against the engine and transmission pulleys.

25. Discard the old transmission with its' pulley.

Preparing the New Transmission:

- 26. The new Transmission Pulley, Item 4, Pulley Hub, Item 3, and Flange Nut, Item 2, must be installed onto the new Transmission, Item 1. See Figure 1.
- Apply anti-seize to the spline on the transmission's input shaft.
- 28. Install the pulley hub onto the transmission's input shaft. Ensure that the star side of the hub is facing away from the transmission.
- 29. Install the transmission pulley onto the hub. Ensure that the V shaped sheave of the pulley is facing the transmission and that the star in the pulley is fully seated onto the star of the hub.

30. Install the lock nut onto the end of the transmission shaft and tighten to a torque of 300-400 In-Lbs.

NOTE: Use the forward drive belt on the pulley as a strap wrench. Ensure that the pulley remains seated on the hub's star as the nut is brought down and tightened.

31. Install the belts onto the transmission pulleys and secure them to the pulley by placing a rubber band around the loose end of each belt. See Figure 7.

NOTE: The reverse drive belt is to be installed so that it runs on it's back side against the engine and transmission pulleys.



FIGURE 7

- 32. Install the forward idler bracket and pulley assembly onto the new transmission with the hardware removed in Step 24. Ensure that the extension spring is hooked onto the idler bracket and secured so that it does not fall off during installation of the transmission into the frame.
- 33. Proceed with reassembly of the transmission to the frame. Reassembly sequence is accomplished by reversing the disassembly procedure.
- 34. Coat the transmission's tine shafts with anti-seize before installing the tines.
- 35. Ensure all screws and nuts are tight before starting the unit and testing the forward, reverse drives and tine operation.

This completes this service kit installation.

Servicing The Fluid in the Transmission:

The transmission was filled at the factory with 20 oz.of the correct fluid.

When servicing the fluid level or replacing the fluid use SAE 85W-140 or SAE 140 Gear Oil (GL-4 Spec).