



# Service Kit

## 753-05147

Date: 9/2/2005  
 Subject: Variable Speed Drive System Idler Brackets Replacement  
 Models Affected: 2005 Model Year 700 Series Transmatic Lawn Tractors; S/N Range Affected - December 9, 2004 (Date Code "...L094..." to April 15, 2005 (Date code "...D155..."))

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

**PURPOSE:** Use this kit when replacing variable speed dual pulley brackets 683-04174, 683-04174A, 683-04198 or idler bracket 683-04200 or variable speed dual pulley spacer 683-04196 which are no longer available.

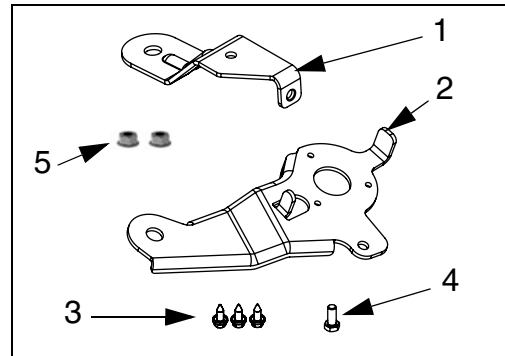
**NOTE:** These materials are prepared for use by trained technicians who are experienced in the service and repair of equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. Such individuals should seek the assistance of an authorized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

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

### Service Kit Contents

(See Figure 1)

ITEM NO.	PART NUMBER	QTY	DESCRIPTION
1	683-04207	1	BRACKET: IDLER
2	683-04206	1	BRACKET: VARIABLE:REAR
3	710-1652	3	SCREW: TAPTITE:1/4-20 X .625
4	710-0627	1	SCREW:5/16"-24 X .750: GR5:LOCK
5	712-04065	2	NUT: FLANGE LOCK: 3/8-16
6	769-01971A	1	THIS INSTRUCTION SHEET



**FIGURE 1**

#### Pre-service Preparation:

**NOTE:** Left and right are determined from the operators' position seated facing forward.

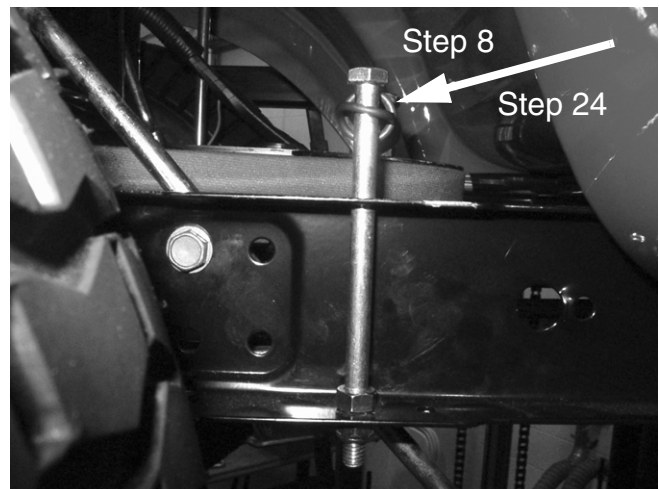
1. Turn engine off and remove the ignition key.
2. Set parking brake ON.
3. Allow engine and muffler to cool before proceeding.
4. Disconnect and secure the BLACK cable from the NEGATIVE battery terminal first.
5. Disconnect and secure the RED cable from the POSITIVE battery terminal.
6. Remove battery and battery tray.

#### Removal and Disassembly:

7. Remove and retain the variable speed dual pulley and bracket assembly spring, 732-04076A, from its attachment point at the lower left rear corner of the frame.

**CAUTION!** - The 732-04076A spring is a high load spring. Use spring puller tool 732-0571, or another suitable tool, to safely remove the spring hook from the frame.

8. Remove and retain the upper transmission belt tensioning idler spring, 732-04293, from its mounting on the right hand side of the frame. See Figure 2.



**FIGURE 2**

9. Remove and retain the upper belt from the transmission and variable speed dual pulley and lower belt from the variable speed pulley.
10. Remove and retain the four screws that attach the torque bracket, 683-04176A, to the frame (right side of

frame) and to the transmission. Keep separated and marked as to where they go. See Figure 3.

11. Remove the complete variable speed dual pulley/idler/torque bracket sub-assembly from the tractor.

12. Completely disassemble the sub-assembly removed in Step 11. Retain the 732-04076A spring, variable speed dual pulley, the small "V" idler pulley, the torque bracket, the two shoulder spacers and the 3/8-16 x 2.50 long hex head bolt and nuts that secured the small idler pulley to the idler bracket. Discard the remaining hardware.

**Upgrade Assembly and Installation:**

13. Assemble the existing 732-04076A extension spring onto the new Rear Variable Bracket, Item 2, as shown in Figure 3, Inset "A".

14. Pre-assemble the variable speed dual pulley, bearings and bearing cup to the new Rear Variable Bracket, Item 2, as shown in Figure 3, Inset "C". Insure that the 710-0627 screws are torqued to the required in-lbs.

15. Pre-assemble the small "V" pulley to the new Idler Bracket, Item 1, as shown in Figure 3. The taller shoulder side of the pulley hub goes against the idler bracket. Insure that the new Flange Lock Nut, Item 5, is torqued to the required in-lbs. Install one of the lock nuts removed in Step 12 to the end of the idler pulley bolt so the top on the nut is flush to one thread showing.

16. Refer to Figure 3. Lubricate those surfaces indicated using an EP grease.

17. Assemble the two lubricated pre-assembled idlers from Steps 14 and 15 to the existing torque bracket as shown in Figure 3.

18. Ensure that the new Lock Screw, Item 4, is properly torqued to the required in-lbs.

19. Using the two screws removed in Step 10, re-install the upgraded torque bracket sub-assembly onto the transmission. Do not tighten the two screws that hold the torque bracket to the transmission at this time.

20. Attach the torque bracket to the tractor frame with the two screws removed in Step 10. Do not tighten.

21. Tighten the two screws that attach the torque bracket to the transmission to the proper torque value listed in Figure 2. Now tighten the two screws that attach the torque bracket to the frame.

**NOTE:** *Inspect both drive belts. Replace if damaged, frayed, twisted or have burn areas.*

22. Re-install the lower drive belt onto the lower sheave of the variable speed pulley.

23. Re-install the upper transmission drive belt onto the

transmission pulley, upper sheave of the variable speed dual pulley and tensioning idler pulley.

24. Install the existing idler tensioning spring, 732-04293, between the two lock nuts on the threaded end of the small "V" pulley bolt. Hook the other end onto the long bolt on the right side of the frame as shown in Figure 2. Reference Step 15.

25. Using an appropriate spring puller, re-install the free end of the 732-04076A spring to its' attachment point at the lower left rear corner of the frame.

26. Reinstall the battery box and battery. Note the battery terminals are to the left side of the tractor placing the positive terminal toward the front.

27. Connect the RED battery cable to the POSITIVE battery terminal first.

28. Reconnect the BLACK battery cable to the NEGATIVE battery terminal.

29. Test run unit through all speeds, engaging and disengaging drive both in forward and reverse to ensure installation is correct. Ensure drive performs correctly and there is no loss of belts.

**NOTES**

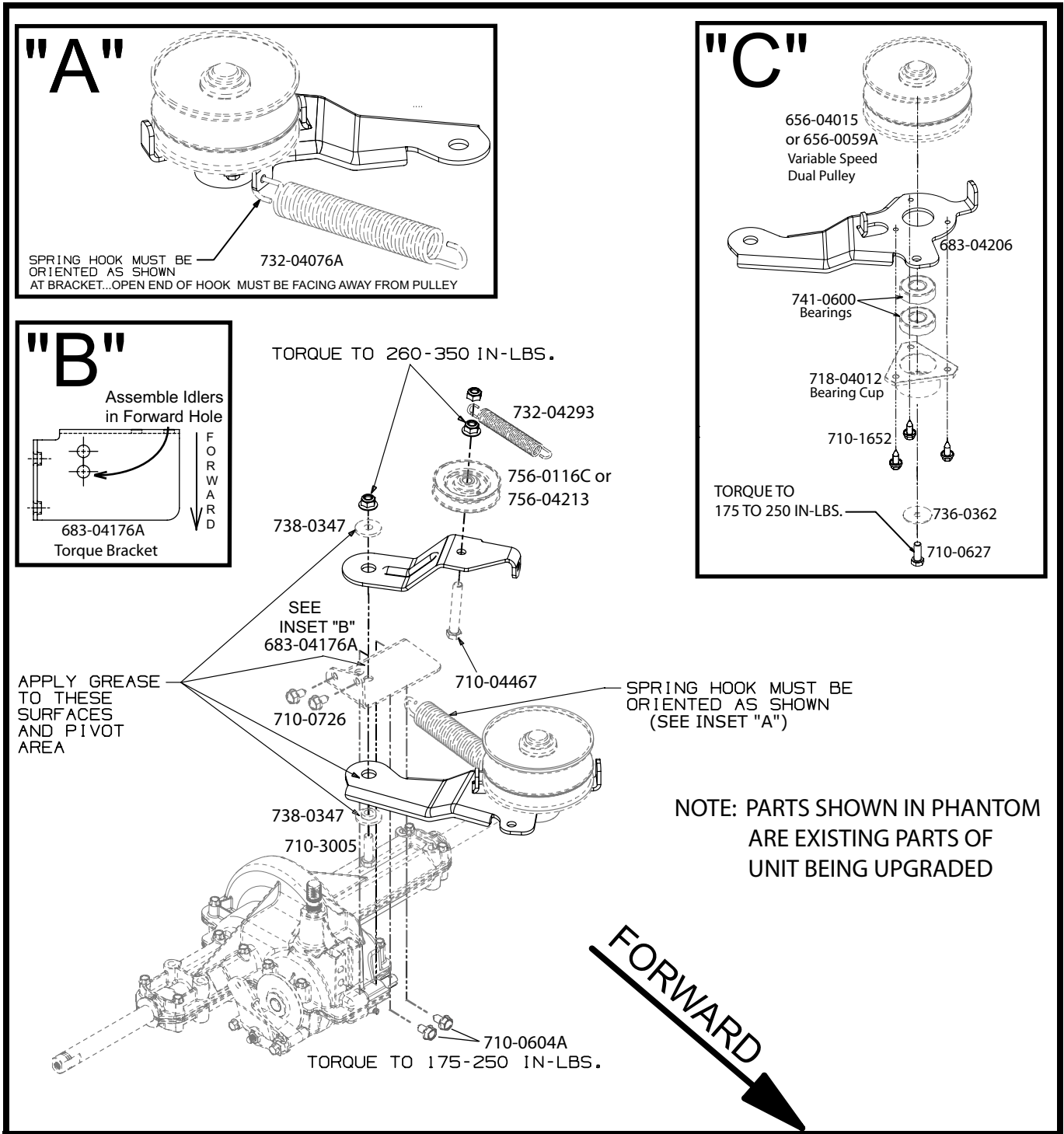


FIGURE 3