



Service Kit 753-06491

Date: June 11, 2010

Subject: Shift Lever Svc Kit- 450 Series Tiller

Models Affected: 2010 Model Year -
Cub Cadet - 21AB455C709, 21AB455C710, 21AB455C756 and 21AB45M5010
Huskee - 21AA45M5031 & 21AA454E231
MasterCut - 21AB452A059
MTD Gold - 21AB452A004

REFERENCE. S/A: MTD-119

Read and understand these instructions thoroughly before proceeding.

PURPOSE: This service kit provides the shift lever hardware and installation instructions for the 450 series tiller to address the jumping out/disengagement of “**Tines Reverse**” mode on some early 2010 production units. The addition of this service kit provides a positive secondary index for the transmission in the “**Tines Reverse**” mode.

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 NO.	PART NUMBER	QTY	DESCRIPTION
1	*	1	BRACKET: SHIFT (90 ⁰)
2	*	1	BRACKET: INDEX: TRANSMISSION
3	*	1	LEVER: SHIFT
4	750-05467	1	SPACER:.33" x .50" x 1.00"
5	736-0430	1	WASHER: FLAT: .350" x 1.590" x .062"
6	736-0242	1	WASHER: BELL: .340" x .872" x .060"
7	732-0987	1	SPRING: COMP.: .72" O.D. x 2.25" LG
8	720-0313	1	GRIP: .1875" x 1.00"
9	712-04063	1	NUT: FLANGELOCK: 5/16"-18 :GRF:NYLON
10	710-3195	1	SCREW: 5/16"-18 x 4.50":GR5:STD
11	710-0599	2	SCREW: TAPTITE: 1/4"-20 x .500":HXINDWSH
12	*	1	THIS INSTRUCTION SHEET

* - Not Available Separately

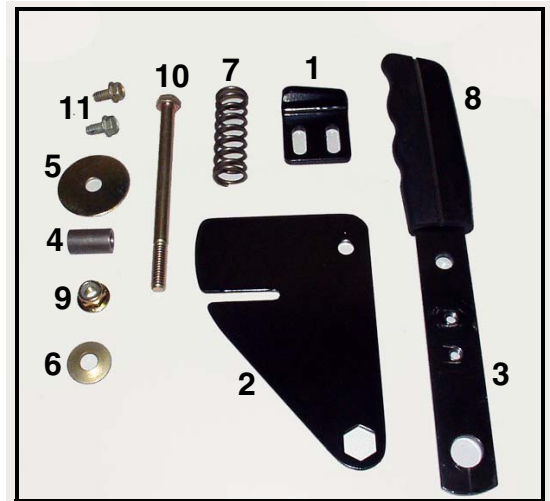


FIGURE 1

NOTE: *Left (LH) and right (RH) sides are determined from the operator's position and facing in the forward direction.*

Pre-Service Preparation:

1. Place the tiller on a flat and level surface.
2. Turn off the engine
3. Allow the engine and muffler to cool before proceeding.
4. Remove the spark plug wire from the spark plug and ground the wire to the engine block.

Existing Shift Lever Removal:

5. Using the existing shift lever, shift the tiller transmission into the “**Tines Reverse**” tilling mode. It is critical that the transmission be firmly in the “**Tines Reverse**” detent in order to proceed. See Figure 2.



FIGURE 2

6. Figure 3 shows the existing shift lever assembly with the shift lever in the “Tines Reverse” detent position.

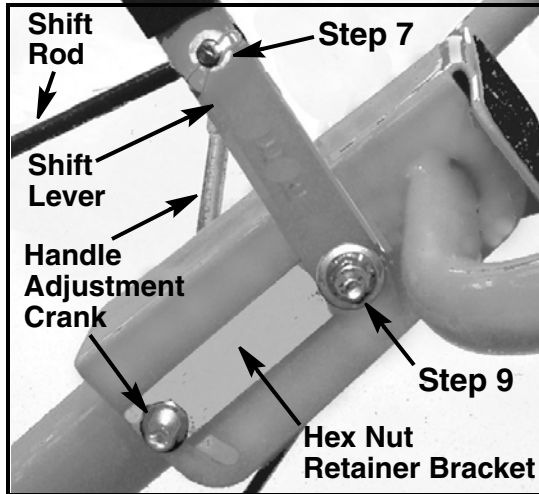


FIGURE 3

7. Using a pair of long nose pliers, remove and retain the hairpin clip and washer securing the shift rod to the shift lever. Carefully remove the shift rod from the lever so as not to shift the transmission out of the “Tines Reverse” detent position. See Figure 3.

NOTE: When removing the shift rod from the shift lever ensure that the rubber washer remains on the shift rod.

8. Loosen the handle adjustment crank a few turns to allow the upper handle to pivot freely. See Figure 3.

9. Using a 1/2” socket and ratchet and a 1/2” box wrench, remove the pivot bolt and nut securing the shift lever to the upper handle assembly.

10. Remove and discard the shift lever, pivot bolt, lock nut and hex nut retainer bracket. Retain the bell washer and shoulder spacer. See Figure 4 for parts to retain.

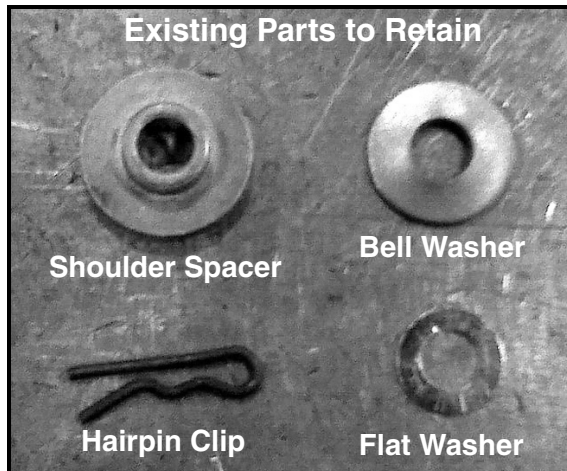


FIGURE 4

Installing New Indexing Shift Lever:

11. Place the bell washer, saved in Step 10, onto the new 5/16”-18 x 4.50” Screw (Item 10) with the cone of the bell washer facing away from the head of the screw.

12. Align the holes in the upper handle with the holes in the lower handle tube assembly. From the right hand side of the upper handle, insert the bell washer/screw subassembly through upper and lower handles to pin the upper handle to the lower handle tube assembly. See Figure 5.

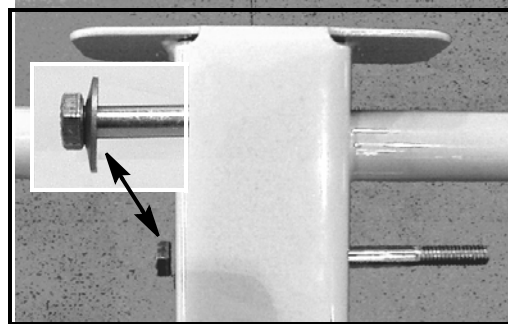


FIGURE 5

Refer to Figure 11 on Page 4 for assembly sequence.

13. Install the large Flat Washer (Item 5) onto the 4.50” screw, followed by the Transmission Index Bracket (Item 2). Rotate the handle adjustment crank to align the hex lock nut with the hex hole in the transmission index bracket.

14. Install the shoulder spacer, saved in Step 10, onto the 4.50” screw with the larger diameter against the transmission index bracket. followed by the shift lever. The smaller diameter of the shoulder spacer sets into the hole of the shift lever.

NOTE: Ensure that the finger indents on the lever’s rubber grip are facing forward.

15. Install the tubular Spacer (Item 4) onto the screw followed by the Compression Spring (Item 7). See Figure 6.

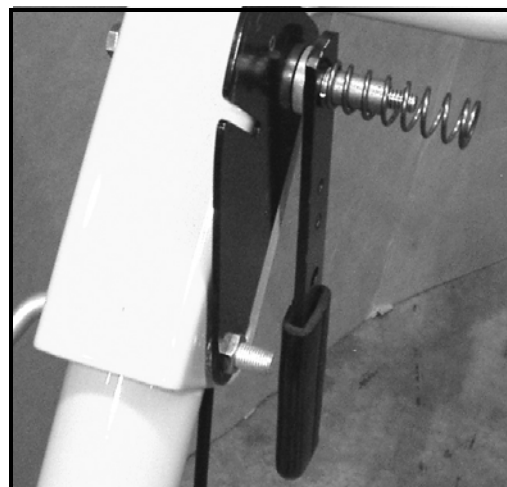


FIGURE 6

16. Using a 1/2" deep socket and ratchet, set the new 5/16"-18 Flange Lock Nut (Item 9) into the socket. Place the new Bell Washer (Item 6) on the nut as shown in Figure 7.

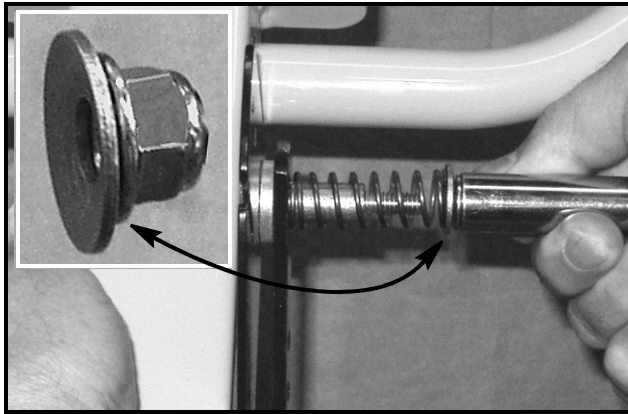


FIGURE 7

17. Using a second 1/2" socket (short) and ratchet on the head of the 4.50" screw, compress the spring until the nut is in contact with the screw threads and rotate the head of the 4.50" screw to start the screw threads into the nut. See Figure 8.

OPTION: The head of the 4.50" screw can be restrained with a 1/2" box wrench and finger and the nut rotated using the ratchet to start the threads.

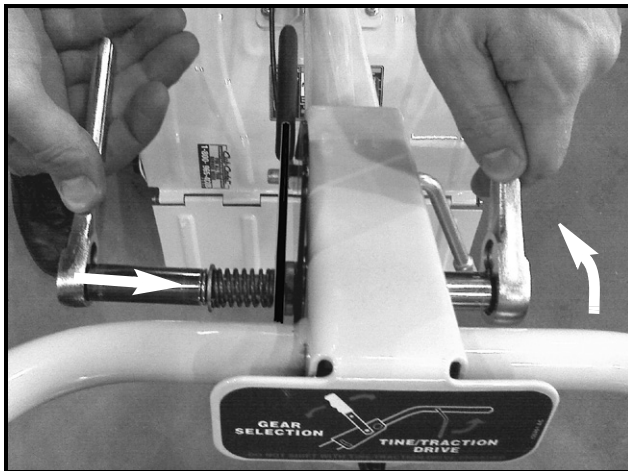


FIGURE 8

18. Tighten down on the nut until the nut bottoms out on the tubular spacer.

19. Ensure the tiller is still in the "Tines Reverse" mode detent position and the rubber washer is on the shift rod (see Figure 9 inset). Rotate the shift lever up and install the shift rod onto the shift lever using the hairpin clip and small flat washer removed in Step 7.

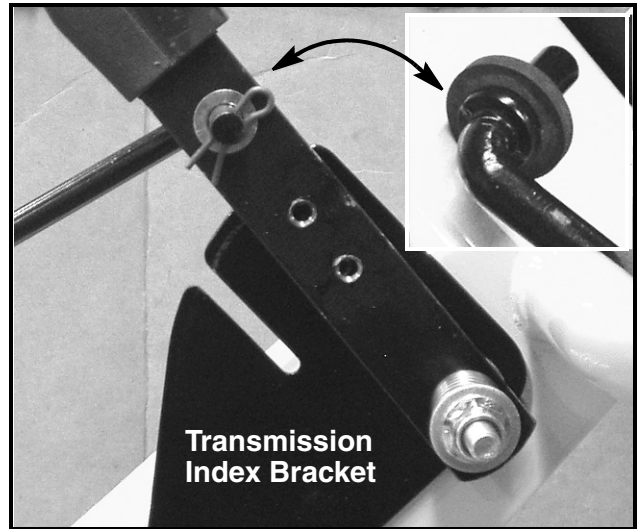


FIGURE 9

20. Place the short leg of the 90° Shift Bracket (Item 1) into the slot in the transmission index bracket. Align the slots in the shift bracket with the holes in the shift lever and hand start the two 1/4"-20 TapTite (Item 11) screws into the shift lever. See Figure 10.

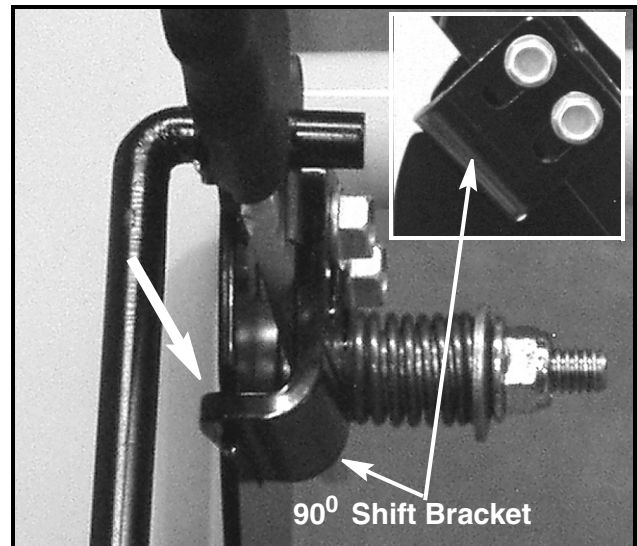


FIGURE 10

21. Using a 3/8" socket and ratchet, tighten the two 1/4"-20 TapTite screws securely.

Shifting Operation:

22. To shift between gears, push the shift lever to the left and select the drive mode desired, then allow the shift lever to rest back on the transmission index bracket.

23. When shifting into the "Tines Reverse" mode ensure that the 90° shift bracket sets into the slot of the transmission index bracket.

This completes the installation of this service kit

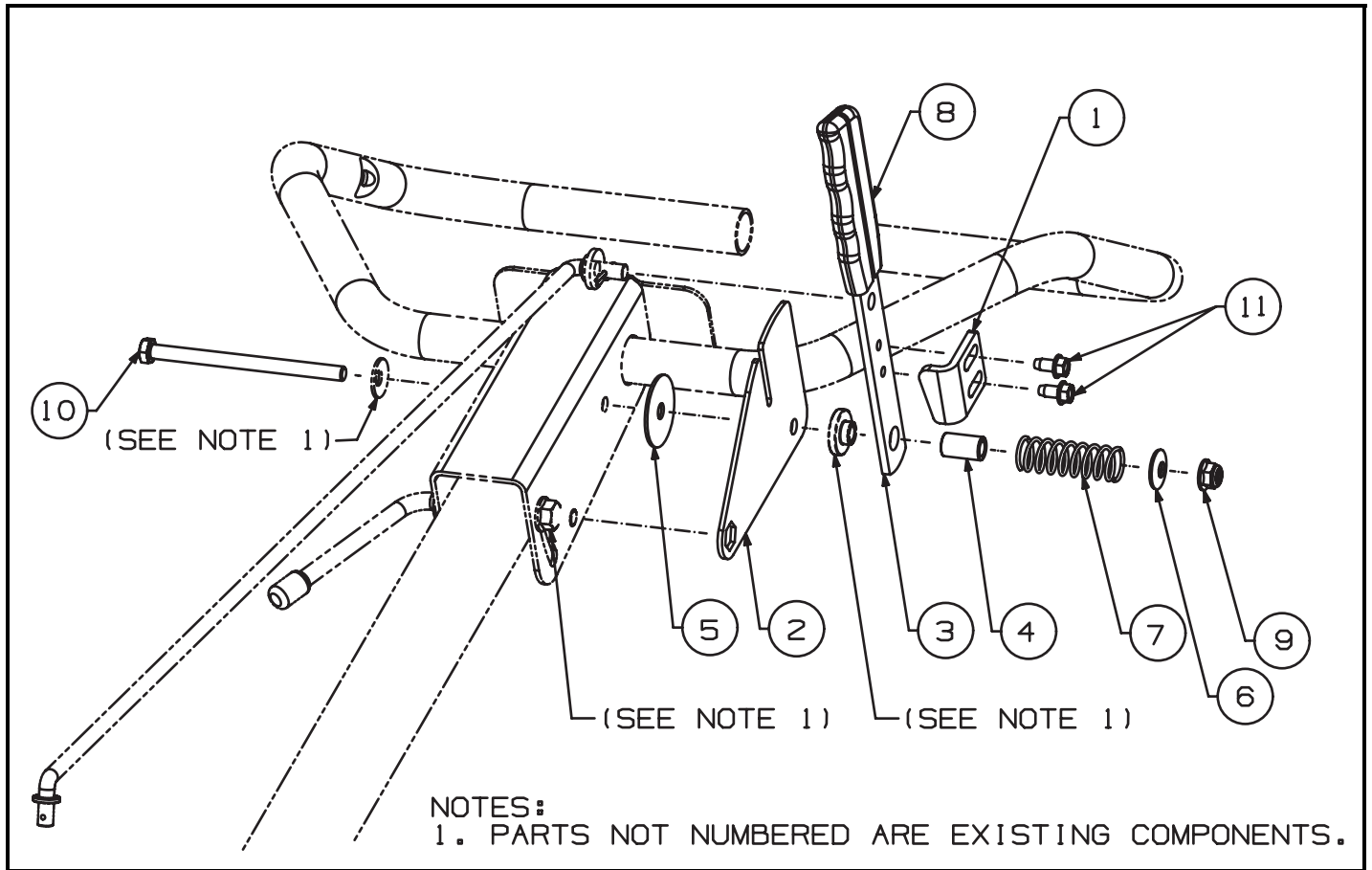


FIGURE 11