



Service Kit 753-06154

Date: October 29, 2009 (Revised 1/20/2010)

Subject: Service Replacement 2-Way Chute Control Housing

Models: 2009 Model Year and later 2-Stage Snow
Affected: Throwers with Deluxe Handle Panel Remote Chute Rotation Control.

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

PURPOSE: This kit provides the 2-way chute control assembly's LH and RH housing halves and installation instructions for 2009 Model Year and later 2-Stage Snow Throwers with the Deluxe Handle Panel Remote Chute Rotation Control.

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	HOUSING: RH: 2-WAY CHUTE CONTROL
2	*	1	HOUSING: LH: 2-WAY CHUTE CONTROL
3	710-1256	8	SCREW: HI-LO: #8-18 x 1.250: PANPHI
4	937-04085	1	GREASE:LITHIUM:WHITE (Low Temp)
5	*	1	THIS INSTRUCTION SHEET

* - Not Available Separately

NOTE: Right (RH) and left (LH) sides are determined from the operator's position at the handle bars facing the auger housing.

Pre-Service Preparation:

1. Place the snow thrower on a flat and level surface, turn off the engine and allow the muffler and engine to cool before proceeding.

2. Remove spark plug wire from the spark plug and ground to the engine block.

Removal of the Chute Control Assembly:

3. At the chute control assembly joystick, depress the red trigger and position the chute as shown in Figure 3.

4. Check the chute control assembly input shaft to ensure that the arrow on the input shaft is at the top as shown in Figure 2A. Adjust chute position as necessary.

5. At the chute rotation gear box, the coupler holes should be at the top as shown in Figure 2B. Mark the coupler, as shown, to assist reassembly later.

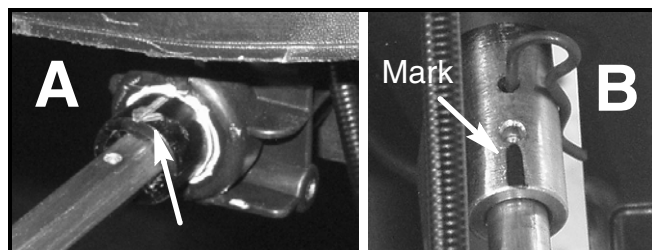


FIGURE 2

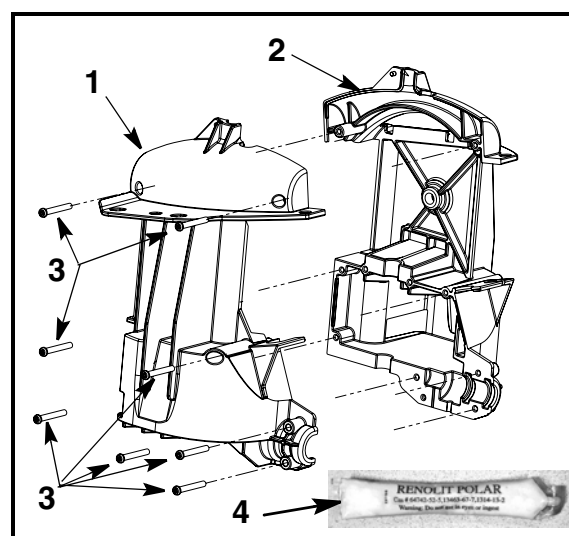


FIGURE 1

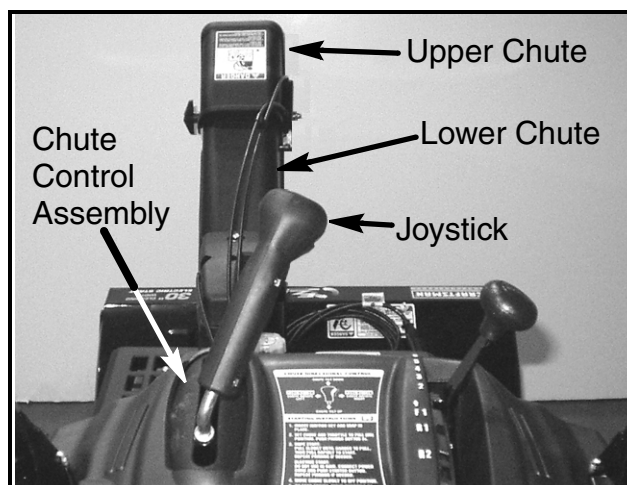


FIGURE 3

6. At the chute rotation gear box assembly, remove the hairpin clip. See Figure 4.

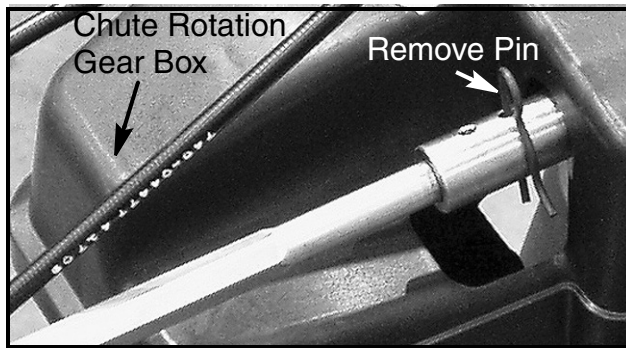


FIGURE 4

7. Carefully slide the 3/8" hex rod into the metal coupler of the chute rotation gear box to free the rod from the chute control assembly input shaft. See Figure 5.

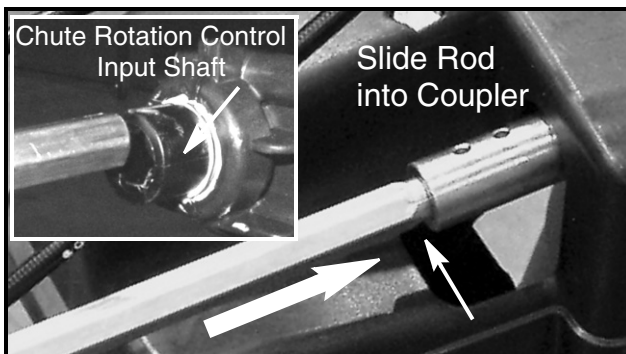


FIGURE 5

8. Using a 3/8" socket, long extension and ratchet, remove the six (6) Hi-Lo screws, from the underside of the handle panel, securing the chute control assembly to the handle panel. See Figure 6.

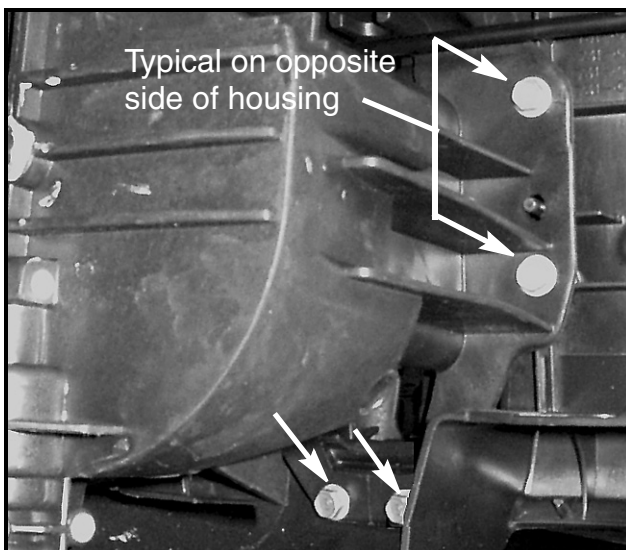


FIGURE 6

9. Carefully, remove the chute control assembly from under the handle panel and set the control assembly on a convenient work surface with its' RH housing half (i.e. screw heads facing down).

There is no need to disconnect the cable at the chute rotation gear box assembly.

Disassembly of the Chute Control Assembly:

10. Turn the chute control assembly over onto its' LH housing side. Using a No. 2 Phillips screwdriver remove and discard the eight hi-lo screws securing the two housing halves of the chute control assembly. See Figure 7.

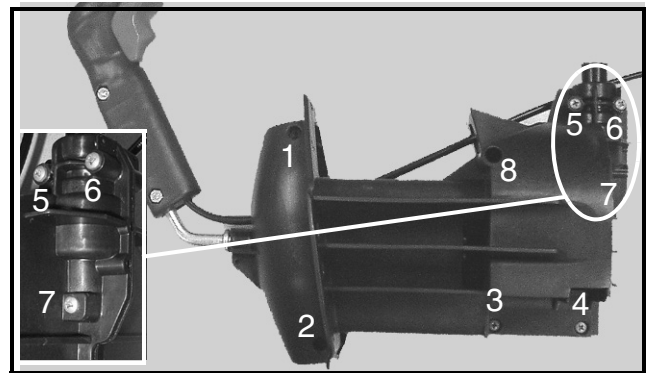


FIGURE 7

11. Holding the lower housing half (LH side) firmly, remove the RH housing half. See Figure 8.

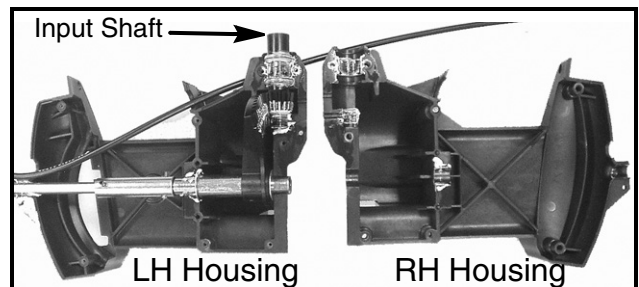


FIGURE 8

12. Remove the input shaft from the LH housing half and set aside.

NOTE: Observe the location of the two flat washers on the bevel gear shaft for reassembly later. See Figure 10.

13. Lift the joystick along with the bevel gear and washers straight up out of the LH housing and set aside. Do not remove the bevel gear or washers from the joystick.

14. Discard both old housing halves.

15. Clean the input shaft and bevel gear of grease and debris. Inspect both to ensure that there are no cracks, no damage to the bearing surfaces and/or gear teeth. If either gear is damaged, order new gear kit:

Bevel Gear Kit = 753-06152

Rev. "A"

Rebuilding the 2-Way Chute Control Assembly:

16. Set the new LH Housing, Item 2, and RH Housing, Item 1, on the bench, internal cavities facing up.

17. Apply a liberal amount of white lithium grease to both the new LH housing and the new RH housing at the areas shown. See Figure 9.

18. Apply a liberal amount of white lithium grease to the input shaft and to the 89 tooth bevel gear. See Figure 9.

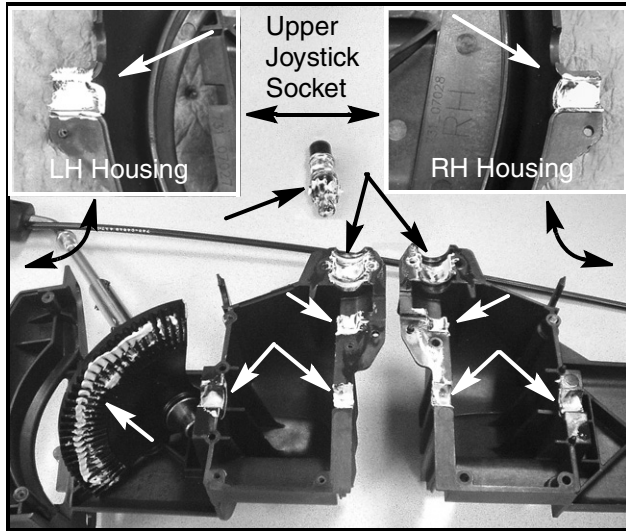


FIGURE 9

19. Install the joystick/ bevel gear/ flat washers sub-assembly (removed in Step 13) into the LH housing. Ensure that both flat washers are positioned as shown in Figure 10.

NOTE: The bevel gear shaft with flat washers may be a snug fit into the housing. Slight pressure to spread the housing walls will facilitate assembly.

NOTE: Ensure that the joystick is oriented as shown in Figure 7.



FIGURE 10

20. While installing the input shaft, align the timing marks on the input shaft with that on the bevel gear as shown in Figure 11A. Once aligned and set in the LH housing, insert a 1/8" allen wrench or similar tool through the pinion gear hole and through the bevel gear hole locking them together in the correct timing position. See Figure 11B.

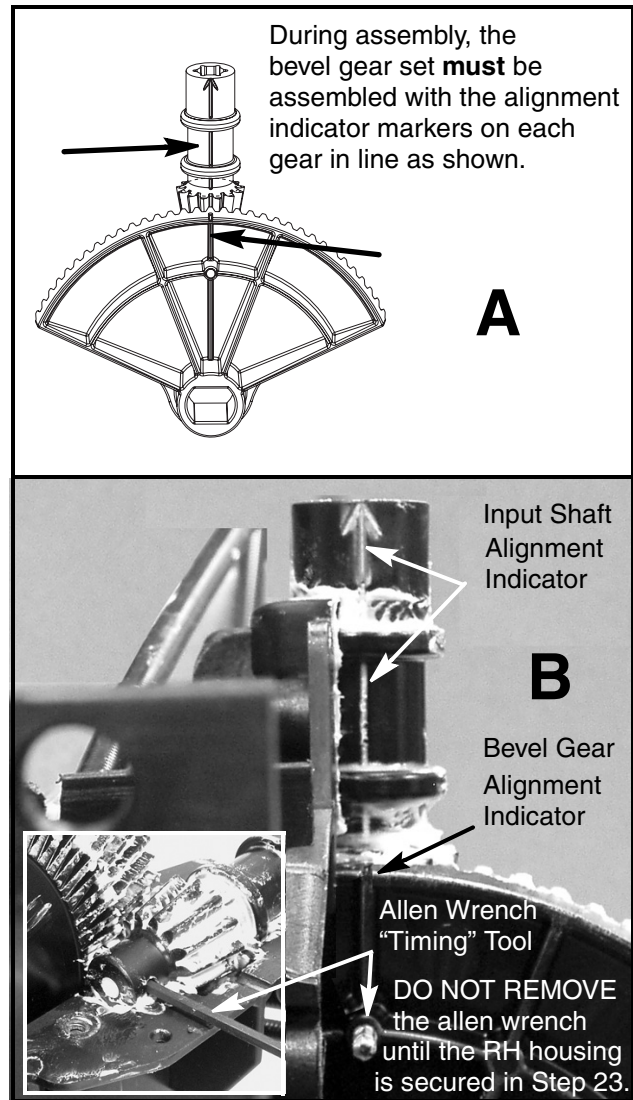


FIGURE 11

21. Before replacing the RH housing onto the LH housing ensure that the trigger cable is set in the half slot as shown in Figure 12.

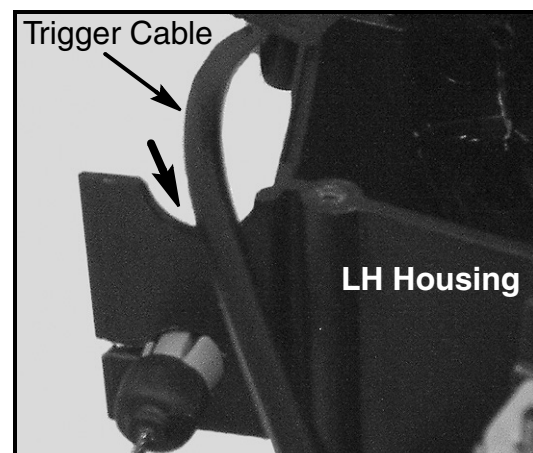


FIGURE 12

22. Carefully align the RH housing onto the LH housing subassembly ensuring that the RH housing's three guide pins align with the three LH housing's holes. See Figure 13.

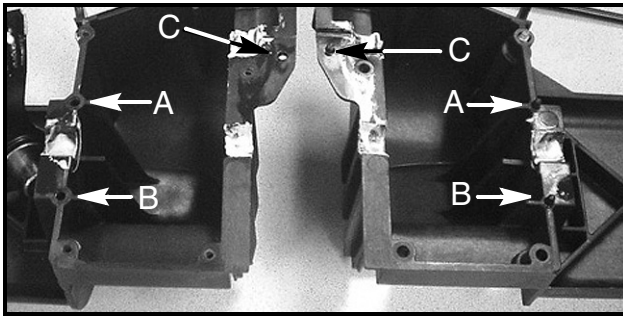


FIGURE 13

23. Secure the two housings together with the eight new #8-18 Hi-Lo Screws, Item 3. Refer to Figure 7.

24. Remove the allen wrench "timing" tool from the assembled housing's hole.

Chute Control Assembly Installation:

25. Re-install the chute control assembly onto the handle panel with the 6 screws removed in Step 8.

26. Squeeze the trigger on the joystick and rotate the chute by hand to face forward. The holes in the chute rotation gearbox coupler will be facing up. See Figure 14.

NOTE: The chute will not rotate without squeezing the trigger on the joystick.

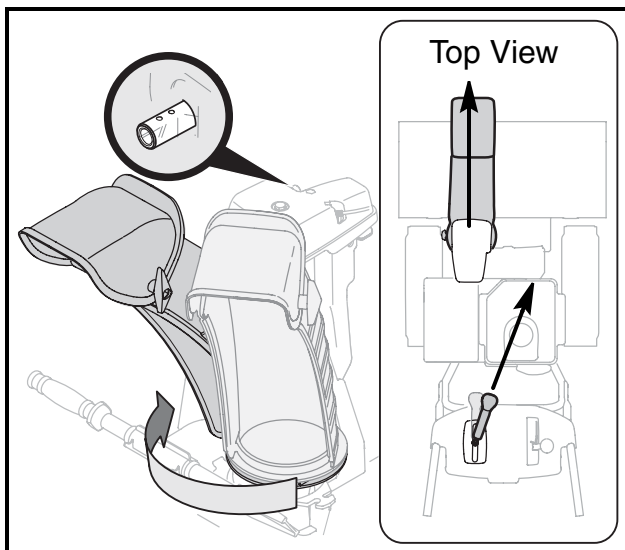


FIGURE 14

27. Rotate the joystick until the silver indicator arrow on the chute control assembly input shaft, below the control panel, faces upward. See Figure 15.

NOTE: The joystick will be angled slightly to the right, about the 1 o'clock position. See Figures 3 and 14.

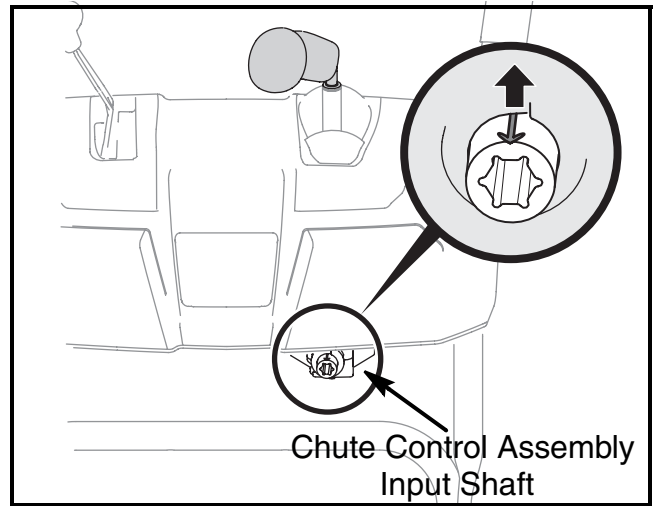


FIGURE 15

28. Insert hex rod into chute rotation gear box coupler. Push hex rod as far into the chute rotation gear box coupler as possible, keeping the hole in the hex rod pointing upward. See Figure 16.

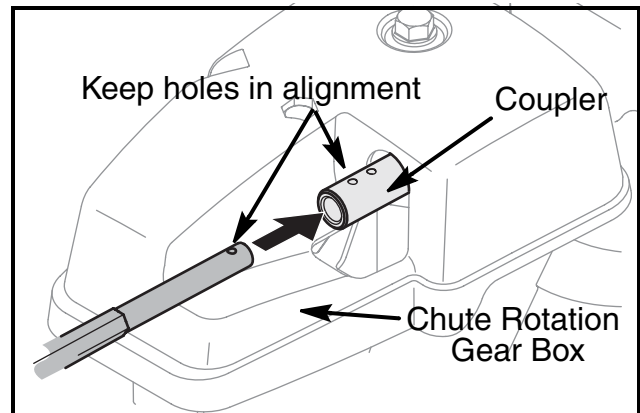


FIGURE 16

29. Insert the hex rod into the chute control assembly input shaft below the joystick. Make sure to line up the hole in the hex rod with the arrow on the input shaft. See Figure 17.

NOTE: The hex rod may fit snugly into the chute control assembly input shaft. Support the rear of the chute control assembly with one hand while inserting the hex rod with your other hand to ensure the hex rod is inserted **all the way** into the chute control assembly input shaft.

NOTE: The hole is a reference for aligning the rod with the indicator arrow on the chute control assembly input shaft. When the rod is properly inserted into the input shaft, the hole will be approximately a 1/4" from the end of the input shaft. See Figure 17.

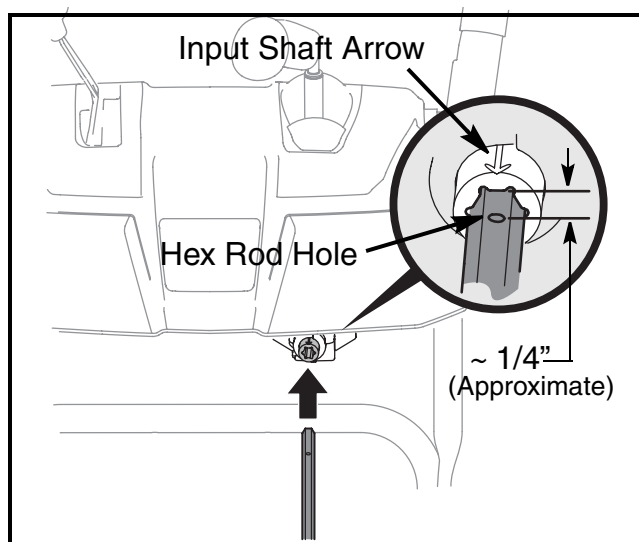


FIGURE 17

30. Push the hex rod toward the control panel until the hole in the hex rod lines up with the hole in the chute rotation gear box coupler closest to the chute rotation gear box and insert the cotter pin. See Figure 18.

NOTE: The second hole is used to achieve further engagement of the hex rod into the chute control assembly input shaft if required.

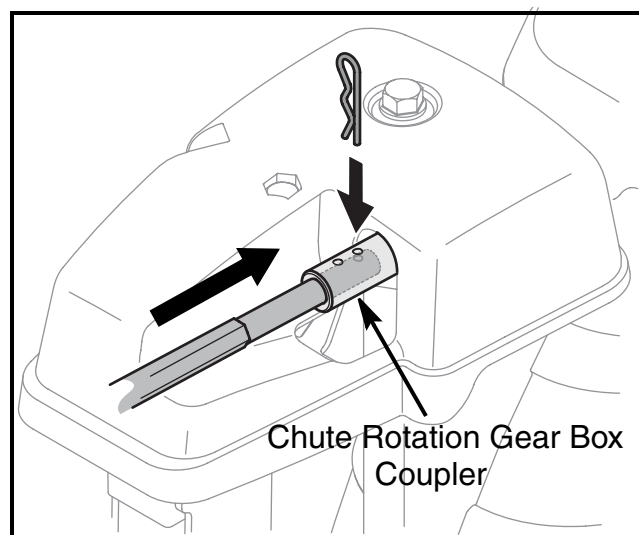


FIGURE 18

31. Test the operation of the chute control assembly to ensure full left to right chute direction. The chute should not come any closer to the muffler shield than approximately 1-1/4" when in the full left position.

This completes the installation of the 2-Way Chute Control Housing kit.

NOTES