



Service Kit 753-0912

CODE: ST-169

DATE: November 17, 2001

SUBJECT: Electric Chute Motor & Bracket Assembly

MODELS 400, 500 & 700 2-Stage Walk-behind Snowthrowers with electric chute rotation option built prior to 5/31/2001.

Use this Service Kit when required to replace a defective electric chute motor due to electrical failure or stress fracture in the aluminum housing on 400, 500 & 700 walkbehind snowthrowers with the electric chute rotation capability. While installing this Service Kit perform the checks defined in the **Pre-Installation Checks** section below.

Typical Installation Time: 30 - 45 Minutes

Service Kit Contents (FIGURE 1)

REF. NO.	PART NUMBER	QTY	DESCRIPTION
1	710-0599	2	Screw: TT: 1/4-20: .050
2	710-0602	1	Screw: TT: 5/16-18: 1.00
3 *	710-0606	1	Hex Screw: 1/4-20:1.50: Gr. 5
4 *	710-0650	1	Screw: TT: 5/16-18: 0875
5 *	710-1652	1	Screw: TT: 1/4-20: 0625
6	710-3008	1	Hex Screw: 5/16-18: .75 Gr. 5
7	712-3010	1	Hex Nut: 5/16-18: Gr. 5
8 *	712-3027	1	Lock Nut: 14-20
9 *	724-0249B	1	Electric Motor
10	731-2611	1	Cover: Electric Motor / Crank
11 *	736-0119	1	Lock Washer: 5/16: Regular Duty
12	736-0242	2	Belleville Washer: 0340 ID x 0872 OD
13 *	741-1140	1	Bushing: 03135 ID x .3735 OD x 03125
14 *	784-0411	1	Motor Bracket: Top Support
15 *	784-5745	1	Motor Bracket: Chute Rotator

* - Denotes parts of Motor /Motor Brackets Sub-assembly preassembled in Service Kit

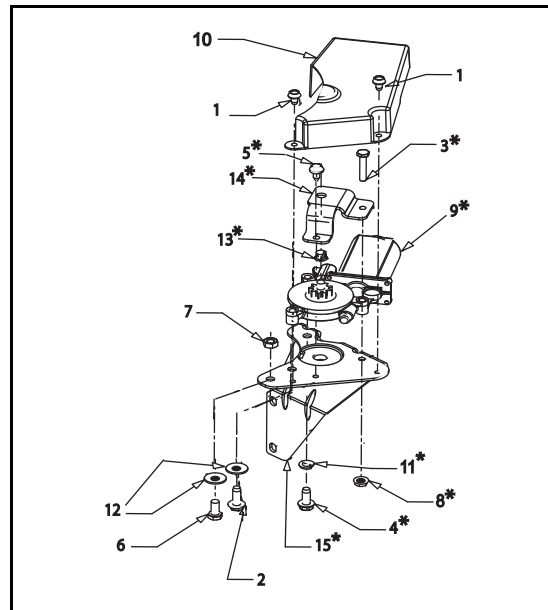


FIGURE 1

Removal : Refer to Figure 2

Discard all hardware removed except as noted.

1. Remove two (2) hex tap screws (A) securing plastic motor cover. Remove old motor cover (B).
2. Disconnect harness from electric chute motor.
3. Remove one (1) hex screw (E), bell washer (D) and hex nut (F) and one (1) hex tap screw (C) and bell washer (D) securing motor bracket (J) to chute adapter (Not shown).
4. Remove and save two (2) each hex nuts (G) and lock washers (H) securing the motor bracket to the auger housing/frame.
5. Remove old motor bracket and defective motor.

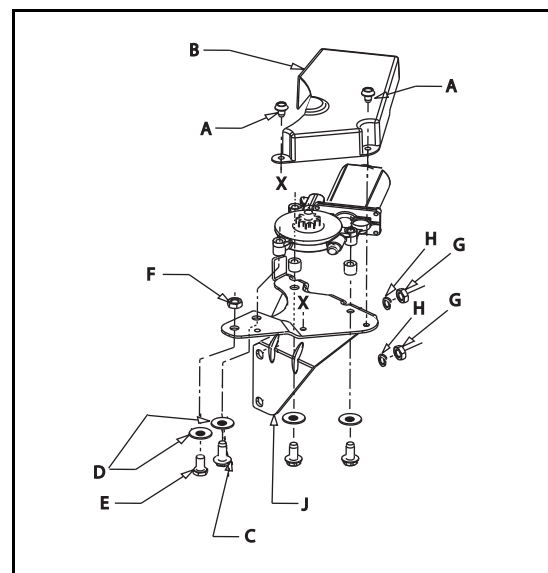


FIGURE 2

Pre-Installation Checks:

1. Refer to FIGURE 3.
2. This kit will only install properly if the Chute Adapter is of the "C" level configuration, i.e. Part Number 731-1379C.
3. To determine if your unit has the 731-1379C Chute Adapter carefully measure the height of the motor mounting bracket shelf from the bottom edge of the Chute Adapter, The correct height is 7 1/4 inches (7.25 inches). If you measure 7 3/8 inches (7.38 inches) you will need to order the 731-1379C Chute Adapter.
4. Refer to FIGURE 4.
5. To ensure proper operation of the electric chute mechanism the Chute Rotation Ring Gear must be flat across its diameter.
6. To check the flatness of the Chute Rotation Ring Gear while on the unit do the following:
 - a.) The motor bracket shelf on the Chute Adapter can be used as a reference point with a suitable scale.
 - b.) While rotating the Chute by hand watch the Ring Gear teeth as they move past the scale on the Chute Adapter shelf. If the teeth path height varies more than + or - 1/16 inches remove the gear for repair or replacement.

Installation: Refer to Figure 1

7. Before proceeding with the Installation see **Pre-Installation Checks** section above.
8. Place Motor/Motor Brackets Sub-Assembly onto the chute adapter's motor bracket shelf. Ensure that the motor bracket (Item 15) sets onto the two (2) auger housing/frame studs.
9. Secure the Motor/Motor Brackets Sub-Assembly to the auger housing/frame studs using the two (2) hex nuts and lock washers (not shown) removed in Step 6. Snug lightly- Do not tighten.
10. Secure Motor/Motor Brackets Sub-Assembly to the chute adaptor's motor bracket shelf using one (1) each Hex Screw (Item 6), Bell Washer (Item 12) and Hex Nut (Item 7). in the hole closest to the auger housing. Use one (1) each Hex Tap Screw (Item 2) and Bell Washer (Item 12) in rear position. This hex tap screw will tap into the the motor's forward most mounting boss.Snug lightly- Do not tighten.
11. Ensure the Motor's output gear is engaged into the teeth of the ring gear on the discharge chute. Tighten all hardware.
12. Connect electrical harness to the Motor's connector.
13. Operate chute rotation motor to ensure free operation. If binding occurs loosen motor bracket attach hardware and realign and retighten.
14. Install and secure Electric Motor/ Crank Cover (Item 10) with two (2) Hex Screws (self tapping) (Item1).

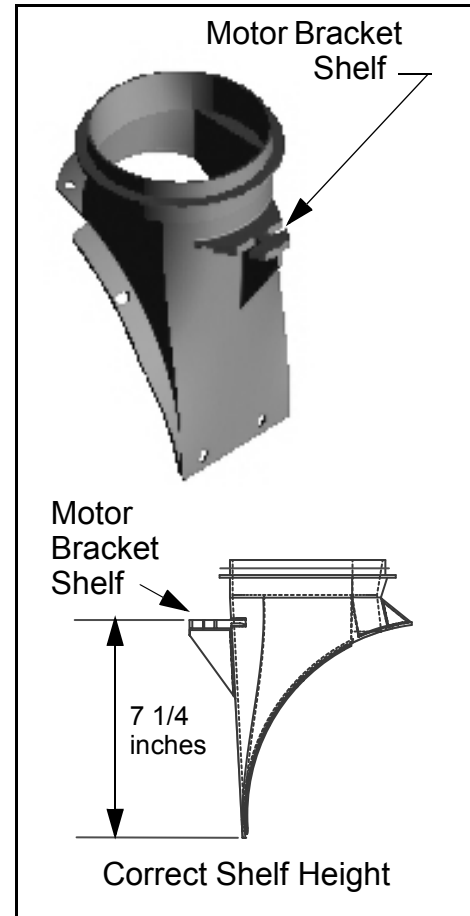


FIGURE 3
Chute Adapter

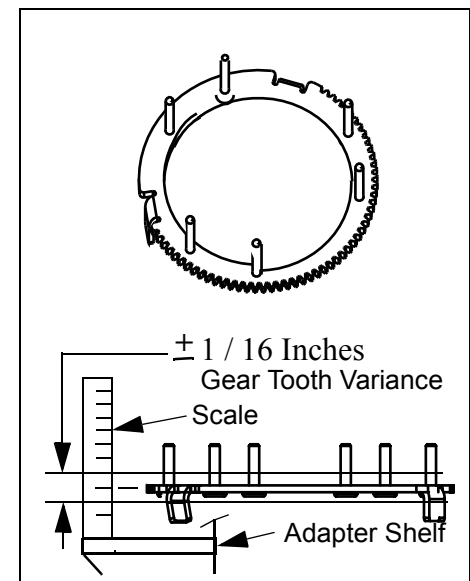


FIGURE 4
Ring Gear