

PART NO. 92-6021

INSTALLATION INSTRUCTIONS

ELECTRIC STARTER MOTOR KIT

(For S- 200, S-620 And CR-20 Electric Start Snowthrowers)

Since this instruction sheet covers only a small portion of the information necessary to maintain and operate your snowthrower, we suggest that you keep this material with your Operator's Manual so that both may be referred to for instructions concerning safe operation and proper maintenance procedures.

INSTALLATION INSTRUCTIONS

- 1. Remove gas cap and save.
- 2. Remove (3) three screws from front of upper shroud (Fig. 1) and (2) two self-tapping screws from either side of upper shroud (Fig. 2). Save screws.

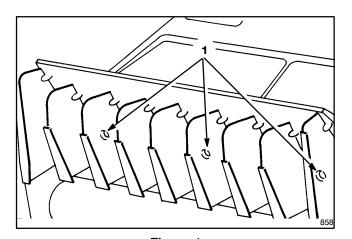


Figure 1
1 Screw (3)

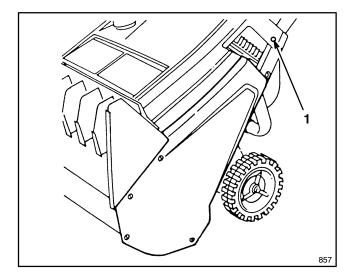


Figure 2

1 Self-tapping screw (2)

3. Remove (3) three screws securing switch assembly to upper shroud (Fig. 3). Save screws for later reinstallation. Discard upper shroud.

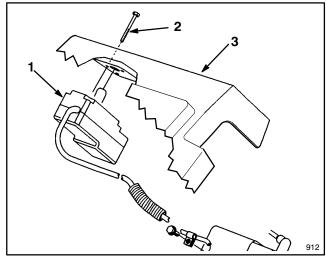


Figure 3

- 1. Switch assembly
- 2. Screw (3)
- 3. Upper shroud
- **4.** Remove screw and r-clamp (Fig. 4) and save for reinstallation.

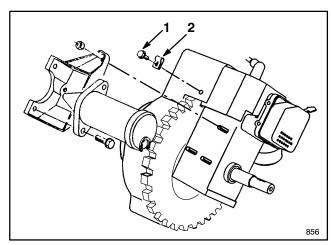


Figure 4

- 1. Screw
- 2. R-clamp

INSTALLATION INSTRUCTIONS

5. Remove (2) two screws securing starter motor to motor mounting bracket (Fig. 5). Discard motor and (2) two screws.

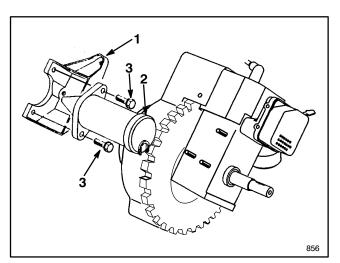


Figure 5

- 1. Motor mounting bracket
- 3. Screw (2)
- 2. Starter motor
- **6.** Remove (3) three fasteners securing motor mounting bracket to engine.
 - A If bracket was secured to engine with studs and nuts (Fig. 6), remove (3) three nuts and bracket. Then remove right hand stud (nearest to flywheel) (Fig. 6) using a vise grip.

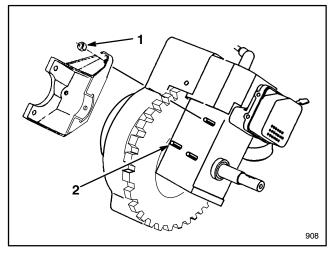


Figure 6

- 1. Nut
- 2. Remove right hand stud

B If bracket was secured to engine with (3) three screws (Fig. 7), remove screws and bracket.

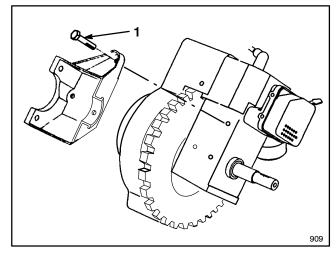


Figure 7

- 1. Screw
- 7. Discard old motor mounting bracket.
- **8.** Install new motor mounting bracket (Fig. 8) with correct fasteners. For units with studs, you will need (2) two new nuts and a screw provided in kit. For units without studs, you will need (3) three new 1/4-20 screws provided in kit.

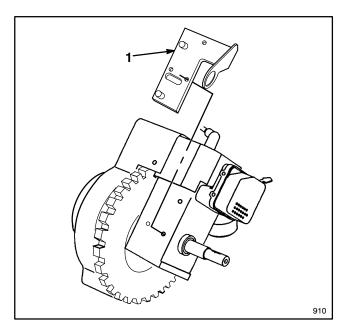


Figure 8

1. New motor mounting bracket

INSTALLATION INSTRUCTIONS

9. Before installing new motor, route electrical wiring **under** motor as shown in Figure 9.

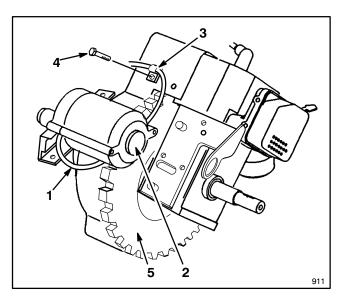


Figure 9

- 1. Electrical wiring
- 2. Boss on motor end
- 3. R-clamp
- 4. Screw
- 5. Flywheel
- **10.** Slide boss on right end of motor (Fig. 9) into hole in bracket and then seat left side of motor onto bracket. Secure motor with (2) two 6 mm screws.

- **11.** Fasten wiring cable to engine with R-clamp and screw (Fig. 9), making sure the wire routing clears the flywheel.
- **12.** Attach new switch assembly to underside of new shroud using screws removed from old switch assembly (Fig. 10).

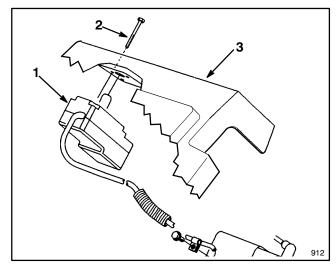


Figure 10

- 1. Switch assembly
- 2. Screw (3)
- 3. Upper shroud
- **13.** Reinstall new shroud supplied in kit and old gas cap removed in step 1.

OPERATING INSTRUCTIONS

STARTING/STOPPING ENGINE

1. CONTROLS—All controls are mounted on the control panel (Fig. 11). They consist of a primer, ignition switch, recoil starter, choke and electric start button.

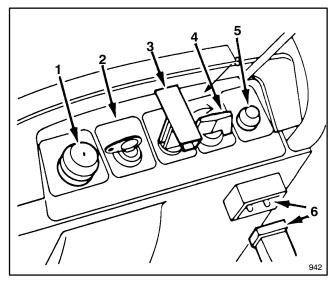


Figure 11

- 1. Primer
- 2. Ignition switch
- 3 Recoil starter
- 4. Choke

- 5. Elec. start button*
- 6. Cord connection*
- *ELEC. START MODEL
- 2. Slowly pull recoil rope to assure rotor paddles turn.
- **3.** Turn key to ON and rotate choke clockwise, even when starting hot engine.
- 4. Cover hole in center of primer with thumb and push one or two times at temperatures above 0°F

(-18°C), and two to three times at 0°F (-18°C) or below. More primes may be necessary in extremely cold temperatures. DO NOT PRIME IF ENGINE HAS BEEN RUNNING AND IS HOT.

Note: When starting engine for the first time or after running out of fuel, more priming will be required to start engine.

5a. ELECTRIC STARTING—Connect extension cord to snowthrower and standard household power outlet. Push starter button. When engine starts, disconnect extension cord from snowthrower and outlet.

IMPORTANT: Excessive running of the electric starter could damage the starter due to overheating. If you are having difficulty starting the engine, ONLY TRY THIS STARTING PROCEDURE TWICE. Run the electric starter no more than 10 times at intervals of 5 seconds ON, 5 seconds OFF, Make sure starter motor rotation stops completely between each attempt. If engine does not start after trying this starting procedure once, wait more than 40 minutes to allow starter to cool before trying to run starter again. Before repeating engine starting procedure, check that ignition key switch is ON, and make sure there is fresh fuel in fuel tank. If engine still will not start after a second attempt, bring the snowthrower to an Authorized Toro Service Dealer for servicing.

- **5b.** RECOIL STARTING—Hold snowthrower with one hand and pull recoil starter vigorously with other hand. If engine does not start after four pulls, prime engine again and repeat starting procedure.
- **6.** When engine starts, rotate choke counterclockwise after a few seconds of running time. If engine begins to stall, regulate choke accordingly.
- **7.** TO STOP ENGINE—Turn key to OFF and wait for all moving parts to stop before leaving operator's position.