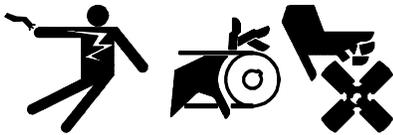


INSTALLATION INSTRUCTIONS

**Starter Motor Service Kit 224362
For 50-100 kW (Ford-Powered) Standby Generator Sets**

This service kit is used on all 50-100 kW Ford-powered generator sets requiring a starter motor replacement. The kit includes a wiring harness which allows installation of a permanent magnet type starter motor in place of the discontinued plunger pole starter motor. A starter solenoid externally attached to the starter motor identifies a permanent magnet type starter. If the defective starter motor has the starter with mounted solenoid, the wiring harness supplied with this kit is not required.

WARNING



Accidental starting.

Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

Accidental starting can cause severe injury or death. Turn generator master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

Hazardous voltage can cause severe injury or death. Short circuits can cause bodily injury and/or equipment damage. Do not contact electrical connections with tools or jewelry while adjustments are made. Remove wristwatch, rings, and jewelry that can cause short circuits.

INSTALLATION

1. Move generator master switch to OFF position.
2. Remove generator set battery cables, negative lead first.
3. Remove starter motor electrical connections. Take appropriate notes of where leads are connected.

If defective starter motor has the starter solenoid mounted to the starter motor, replacement starter motor will use the existing wiring.

If defective starter motor is the plunger pole type, remove starter motor leads from K1 relay. Two types of the K1 relay were used on these models. These leads will not be reused. See Figure 1.

4. Remove starter motor hardware and starter motor. Install new starter motor using the existing hardware.
5. Make electrical connections to starter motor.

If original starter motor had the starter solenoid attached to the starter motor, connect new starter motor to original wiring. The supplied wiring harness will not be used in this application.

If original starter motor was the plunger pole type, use Figure 2 to make electrical connections. This application will require installation of the supplied wiring harness. Use reference letters in Figure 2 to connect wiring harness.

6. Reconnect battery, negative lead last.

Parts List		
KIT 224362		
Qty.	Description	Part Number
1	Motor assembly, starter	276097
1	Harness, wiring	276340

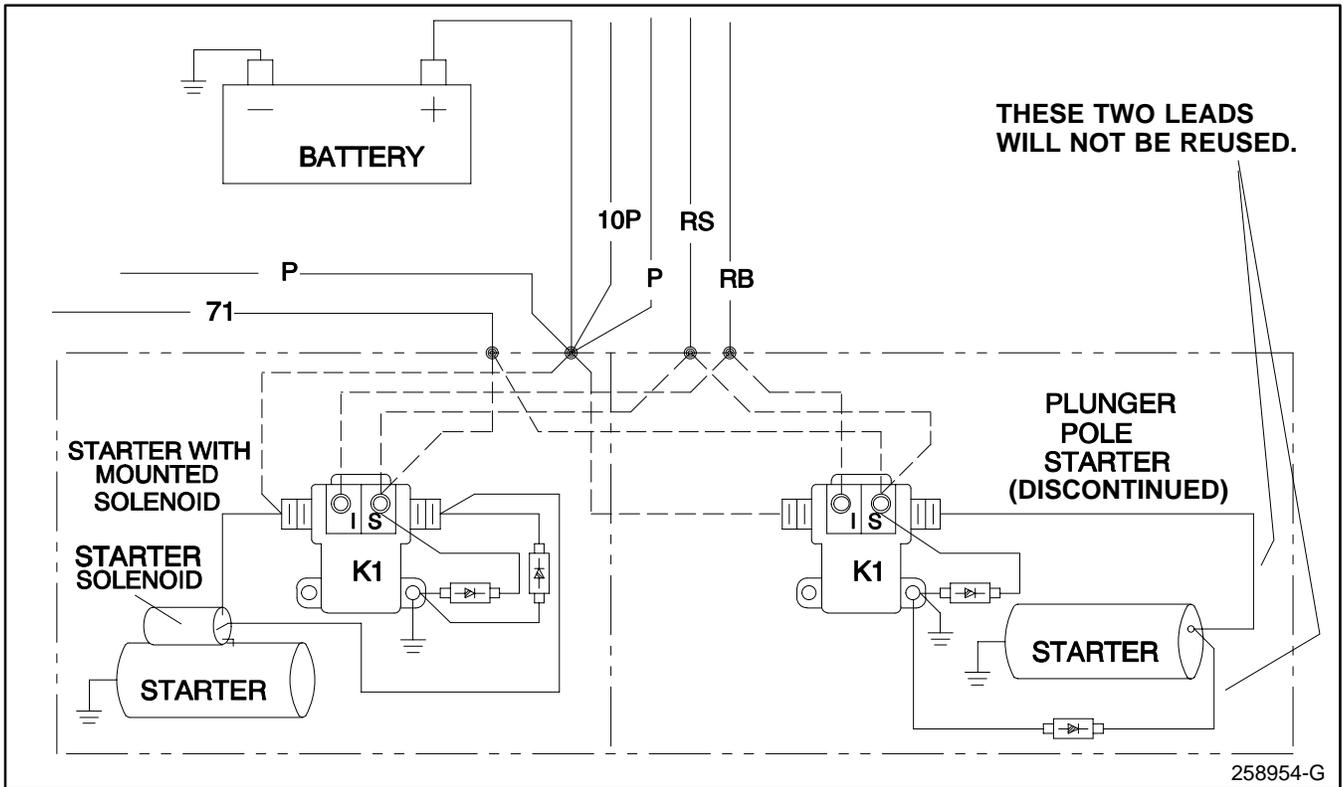
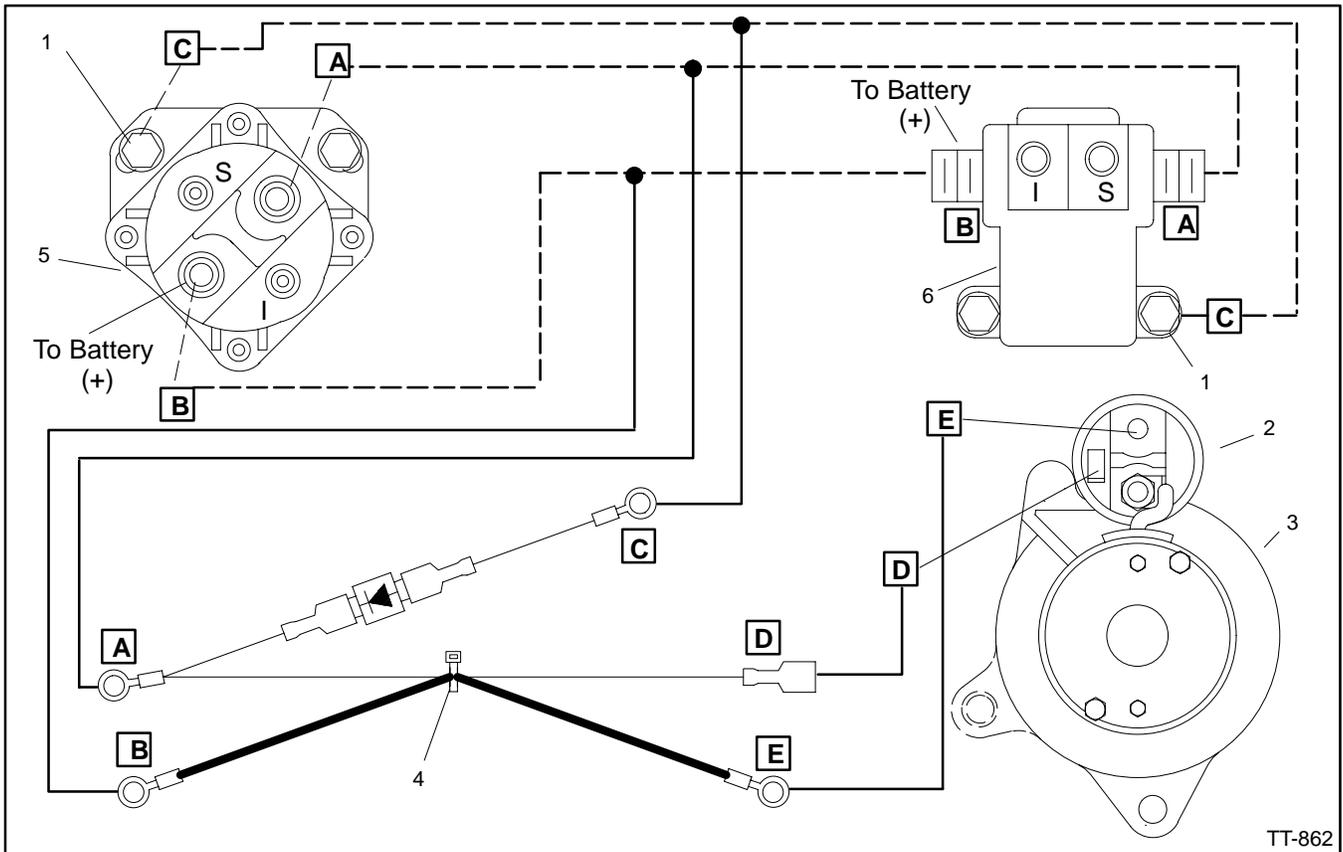


Figure 1. Starter Motor Configurations



- 1. Ground Screw
- 2. Starter Solenoid
- 3. Starter Motor
- 4. Wiring Harness
- 5. K1 Relay (newer version)
- 6. K1 Relay (early version)

Figure 2. Connecting Wiring Harness