

Insert switch through the hole, flat section of the threads up, from the rear of the dashboard. Be sure that the washer is between the hex nut and the dashboard. See Figure 3. Place the switch plate over the switch and position with round knurled nut. Then secure with hex nut from rear of dash.

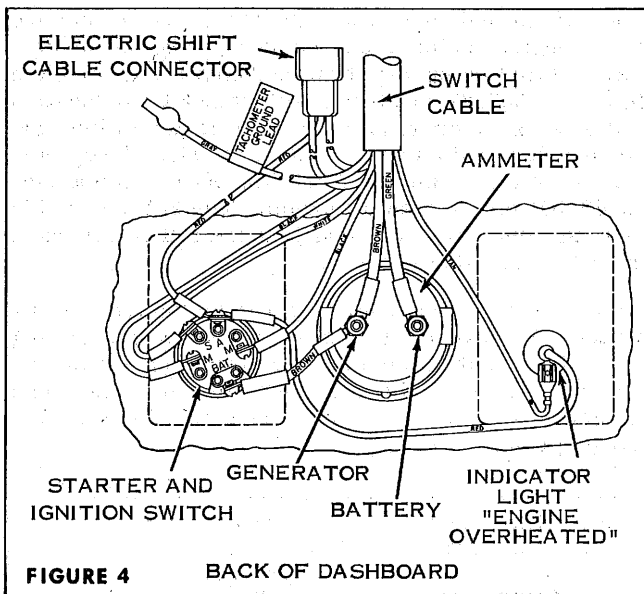
Center indicator light plate over holes and screw to dashboard. Insert lens sleeve and reassemble to light receptacle.

Make small notch in bottom of ammeter hole in dash to position ammeter. Insert the ammeter through hole in the dashboard from the front. Install the retaining bracket and insulating washer. Reconnect the green wire to the terminal marked BAT and the two brown wires to the terminal marked GEN. See Figures 3 and 4.

#### NOTE

On boats with unusually thick dashboards the legs of the retaining bracket may have to be cut down slightly to permit assembly of the nuts, washers and ammeter leads.

The switch cable should be neatly fastened to the boat - in an out-of-the-way place. Necessary clamps are provided for this purpose. The cable may be strung under the floor boards, if desired, since it resists possible damage by bilge water. The cable may be shortened if required - contact your dealer for the extra terminals required. Be sure to crimp and solder terminals securely. Plug electric shift cable connector into cable from electric shift control box.



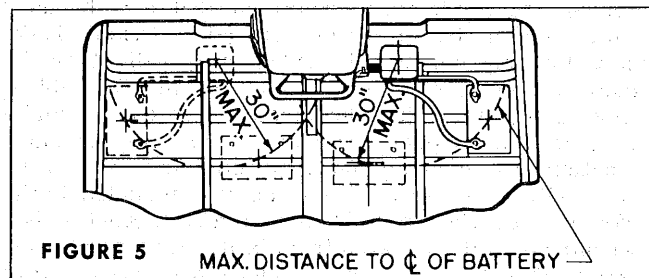
Connect either of the "M" terminals to the tachometer "breaker point" terminal, and the gray lead to the "Tachometer Ground."

#### NOTE

If the tachometer reads erratically the wiring may be reversed. Check your connections carefully to insure proper polarity.

## BATTERY INSTALLATION

Install the battery near the junction box. See Figure 5 for preferred locations and limiting dimensions. **IMPORTANT:** Do not place battery directly under front carrying handle of motor. When motor is tilted battery may be damaged. For mounting the battery, use a frame or box securely fastened to the boat. A loose battery may shift in the boat, damaging battery or other equipment. If a battery box and cover are used, drill two vent holes (3/16" will do) on each side of the cover to allow battery gas to escape. This gas is explosive when confined. **CAUTION:** Connect the positive battery lead (RED) from the junction box to the positive (+) battery terminal. Attach negative lead (BLACK) to negative (-) battery terminal. See Figure 1. Tighten connections securely. For service information for the battery, refer to instructions provided by the battery manufacturer. Fuses for accessory take-off and generator are in the junction box.



#### IMPORTANT

Disconnect battery before removing junction box cover or making any connections.

## TWIN MOTOR INSTALLATION

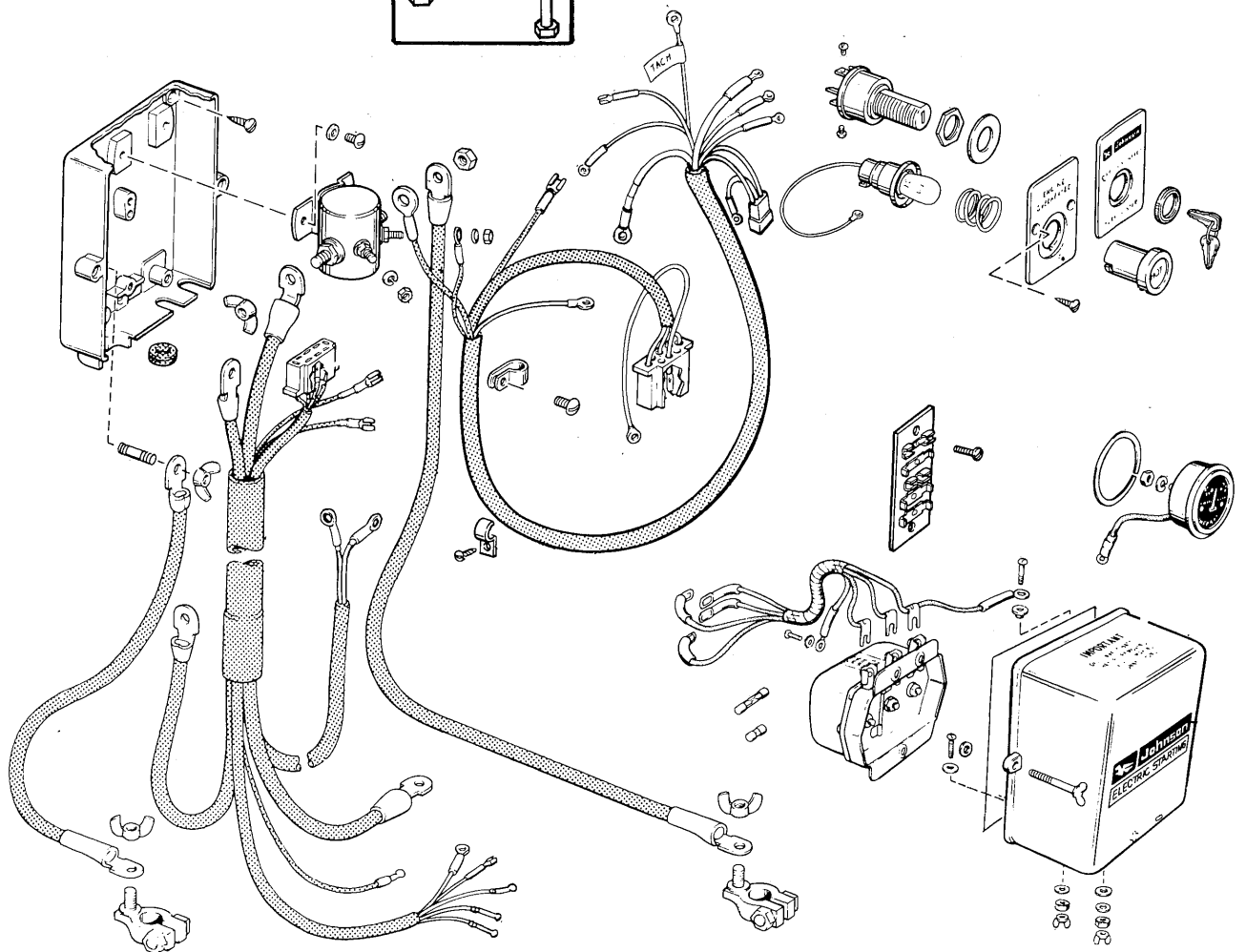
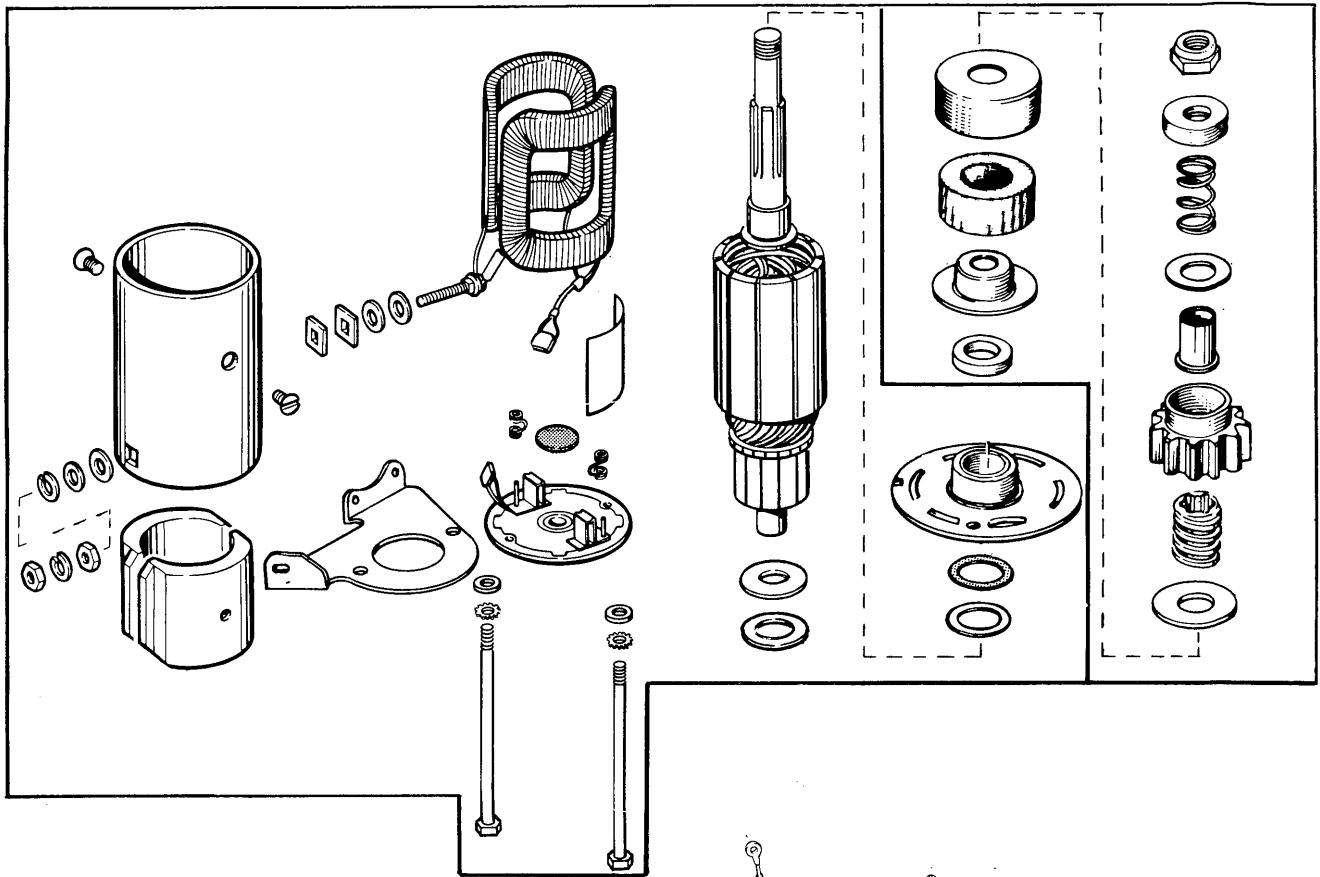
A direct current generator is standard equipment on all 40 HP electric shift models. For dual motor installation, two junction boxes, two starting switches, two motor temperature warning lights and two ammeters are required (included with electric starting motors). A separate installation will be required for each motor. Before cutting holes in dashboard plan their location carefully. Two 12 volt batteries may be used. We recommend that the two batteries have the same characteristics and specifications mentioned previously. Connect each motor and battery as a separate and independent electrical system. To use one battery - disconnect one generator. Remove generator drive belt.

A current coupler is available as an accessory for use with two electric starting motors equipped with D.C. generators. A current coupler permits feeding two generators into one battery. See your local authorized dealer.

## TACHOMETER CONNECTIONS

Provisions have been made for connecting a tachometer if so desired. It must be of the type which operates off the primary circuit of the ignition system.

The leads from the breaker points and from the ground are available at the switchplate. The breaker point lead is available at the "M" terminals of the starting switch, and the ground lead is the gray wire labeled "Tachometer Ground Lead". (See Figure 4.)



ELECTRIC STARTER GROUP  
Model RK-24



## Installation Instructions

### ELECTRIC STARTING — 18 H.P.

All equipment necessary for converting the manual starting 18 HP motor to electric starting operation is included in the kit, with the exception of the battery. This system will require a 12 volt battery, readily obtainable through local sources.

For best performance we recommend a 12 volt battery having a 60 ampere-hour rating or better, with a minimum of 2 minutes cold starting capacity at 300 amperes discharge, zero degrees Fahrenheit and a 10 second voltage rating of 7.5 volts.

Installation will require preparing the motor for and installing the electrical components on the powerhead

and carburetor, mounting and connecting the cable assembly in the lower front cover, mounting of the switch plate on boat dash, mounting the junction box on boat transom, and mounting the battery securely to the boat. We recommend that your dealer make the installation. However, if you decide to install the kit yourself, the following tools will be required: 7/16" and 1/2" combination wrenches, 7/8" and 1-1/16" open end wrenches, small and large screwdrivers, an offset screwdriver, common and needle nose pliers, and a brace with 5/8" and 13/16" wood bits.

### Preparing Motor For Installation

1. Mount motor on a motor stand and remove motor cover assembly.
2. Remove the three mounting screws holding manual starter to powerhead and lift off the complete starter assembly. See Figure 1.

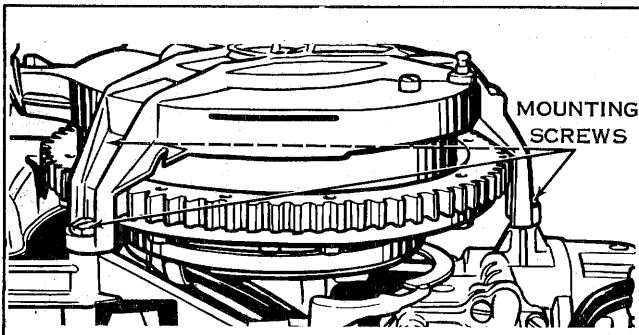


FIGURE 1

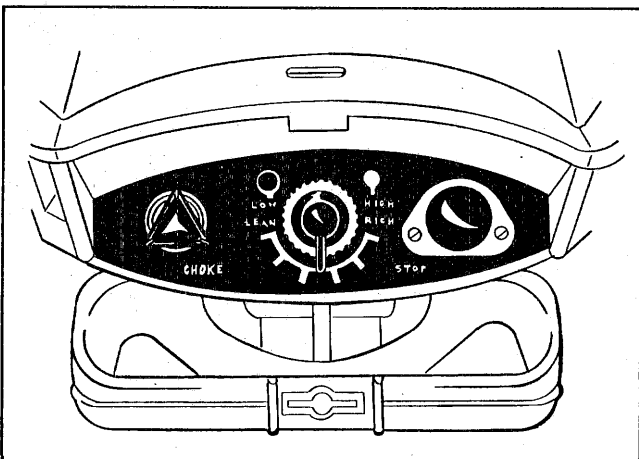


FIGURE 2

3. Remove carburetor controls and silencer assembly, if so equipped, as follows: Models having carburetor controls as shown in figure 2, proceed as follows:

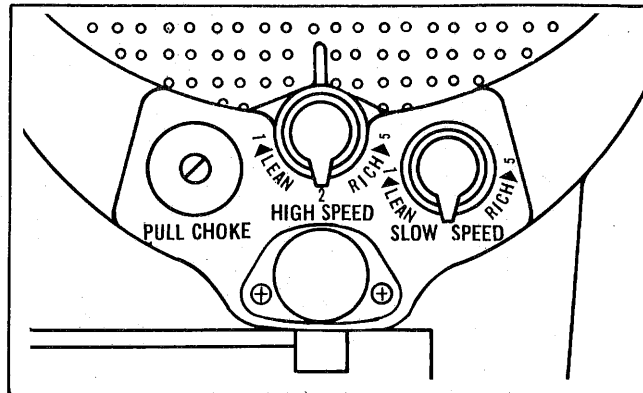


FIGURE 3

- 3a. Note knob settings, then pull off high and slow speed knobs. Do not disturb high speed needle setting.
- 3b. Remove choke rod cotter pin and washer. Remove rod.
- 3c. Disconnect slow speed control link at bottom end. Be careful not to bend linkage or disturb needle setting.

Models having carburetor controls as shown in figure 3, proceed as follows:

- 3d. Note knob settings, then pull off high and slow speed knobs. Loosen choke knob screw and remove knob.
- 3e. Disconnect the upper end of high speed link (pry off with screwdriver) figure 5. Remove the two air silencer plate screws with offset screwdriver. Remove air silencer plate.