



**EVINRUDE  
Johnson**

# VOLTAGE REGULATOR KIT

P/N 173640  
(v-4 and v-6)

## Installation Instructions

### PURPOSE

Voltage Regulator Kit 173640 provides a voltage regulator and mounting instructions for 1978 and 1979 V-4 and V-6 Factory Trim Equipped Outboard Motors. Follow instructions for year and model as applicable.

### CONTENTS OF KIT 173640

- 1 – Clamp
- 1 – Voltage Regulator Assembly
- 2 – Screws - Regulator Assembly
- 1 – Ty Strap
- 1 – Instruction Sheet
- 2 – Lock Washers

### MOUNTING VOLTAGE REGULATOR TO 1978 V-4 MOTORS

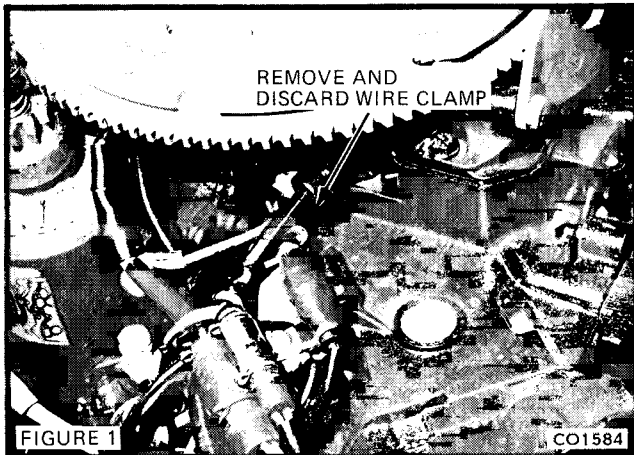
1. Remove motor cover.
2. Disconnect battery cables.



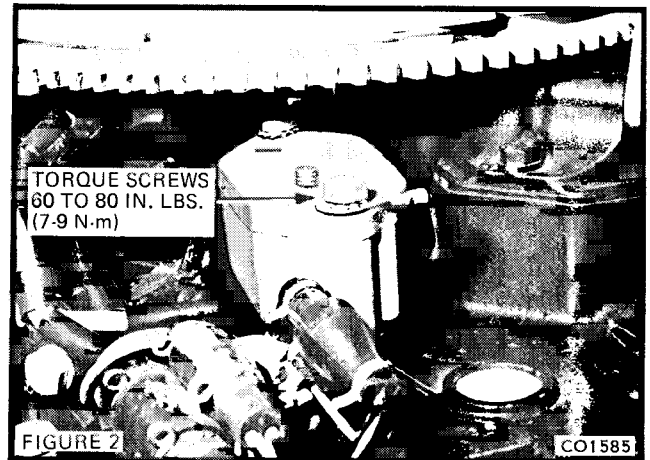
### SAFETY WARNING

**FAILURE TO DISCONNECT BATTERY CABLES COULD RESULT IN MOTOR STARTING AND SERIOUS INJURY COULD RESULT FROM CONTACT WITH MOVING PARTS.**

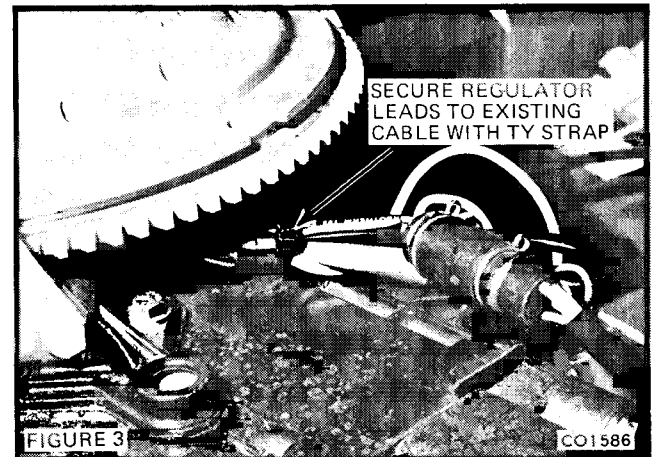
3. Remove and discard wire clamp located on mounting boss for voltage regulator. See Figure 1.



4. Insert one of two mounting screws through terminal of black lead and install voltage regulator to the mounting bosses routing the existing electrical cables under the regulator and between the mounting bosses. See Figure 2. Torque screws to 60 to 80 inch lbs. (7-9 N-m)



5. Route regulator leads alongside existing motor wiring cables running under flywheel and secure with ty strap provided. See Figure 3.



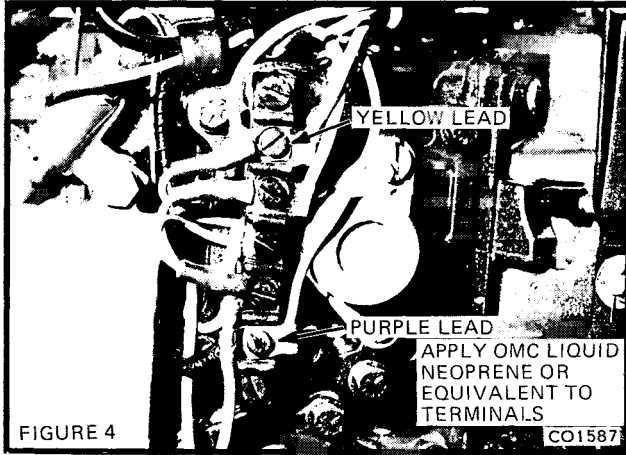
6. Attach terminal end of yellow lead under the two solid yellow leads on the terminal block. See Figure 4.



**NOTE**

DO NOT CONNECT YELLOW LEAD FROM VOLTAGE REGULATOR UNDER TERMINAL WITH YELLOW WITH GRAY STRIPE LEAD.

- Attach terminal end of purple lead under the purple lead on terminal block. See Figure 4.



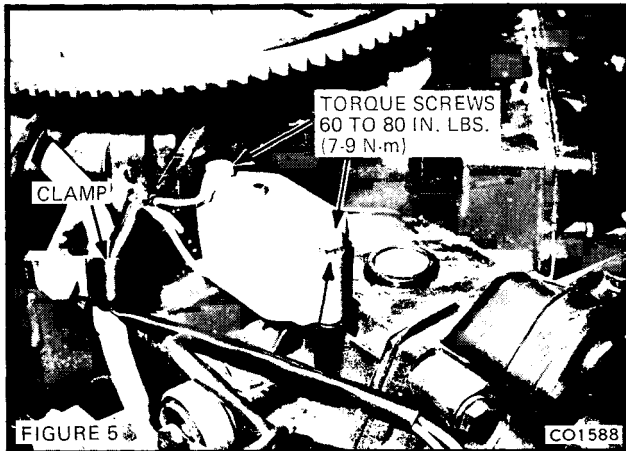
- Apply Liquid Neoprene P/N 909570 , or equivalent, to the terminals.
- Replace motor cover.
- Reconnect battery cables.

**NOTE**

CONNECT POSITIVE BATTERY LEAD (RED) TO THE POSITIVE BATTERY TERMINAL. CONNECT NEGATIVE BATTERY LEAD (BLACK) TO THE NEGATIVE BATTERY TERMINAL. EVEN A MOMENTARY REVERSAL OF THESE CONNECTIONS WILL DAMAGE ELECTRICAL EQUIPMENT IN THE MOTOR AND BOAT.

**MOUNTING VOLTAGE REGULATOR TO 1978 V-6 MOTORS**

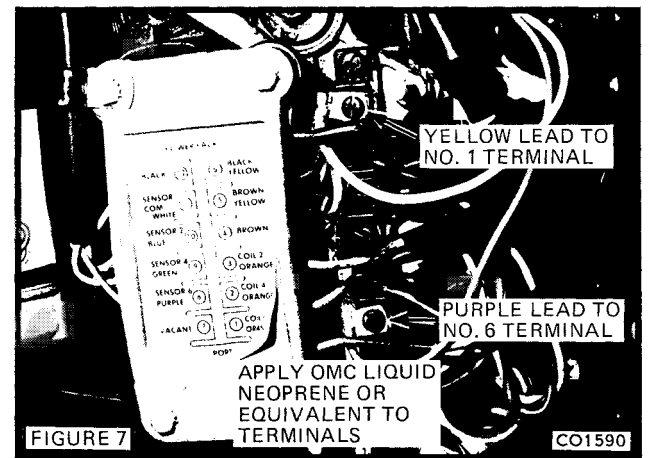
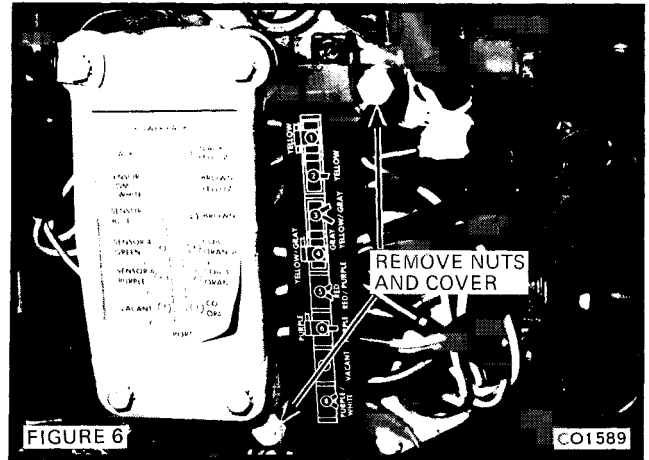
- Remove motor cover.
- Disconnect battery cables.



**SAFETY WARNING**

FAILURE TO DISCONNECT BATTERY CABLES COULD RESULT IN MOTOR STARTING AND SERIOUS INJURY COULD RESULT FROM CONTACT WITH MOVING PARTS.

- Mount voltage regulator on two bosses provided on engine block with terminal of black lead under head of mounting bolt. See Figure 5. Torque bolts to 60 to 80 inch lbs. (7-9 N-m)
- Route yellow and purple leads under existing clamp. See Figure 5.
- Remove two nuts holding the cover of the terminal strip. See Figure 6.



- Connect terminal end of purple lead to number 6 terminal with one existing solid purple lead. See Figure 7.
- Apply Liquid Neoprene P/N 909570 , or equivalent, to the terminals.
- Reinstall cover of terminal strip and tighten nuts securely.
- Replace motor cover.

11. Reconnect battery cables.

 NOTE

CONNECT POSITIVE BATTERY LEAD (RED) TO THE POSITIVE BATTERY TERMINAL. CONNECT NEGATIVE BATTERY LEAD (BLACK) TO THE NEGATIVE BATTERY TERMINAL. EVEN A MOMENTARY REVERSAL OF THESE CONNECTIONS WILL DAMAGE ELECTRICAL EQUIPMENT IN THE MOTOR AND BOAT.

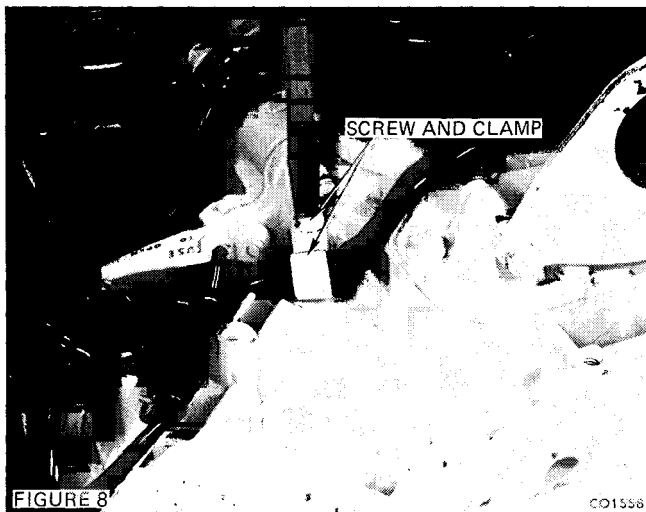
### MOUNTING VOLTAGE REGULATOR TO 1979 V-4 MOTORS

1. Remove motor cover.
2. Disconnect battery cables.

 SAFETY WARNING

FAILURE TO DISCONNECT BATTERY CABLES COULD RESULT IN MOTOR STARTING AND SERIOUS INJURY COULD RESULT FROM CONTACT WITH MOVING PARTS.

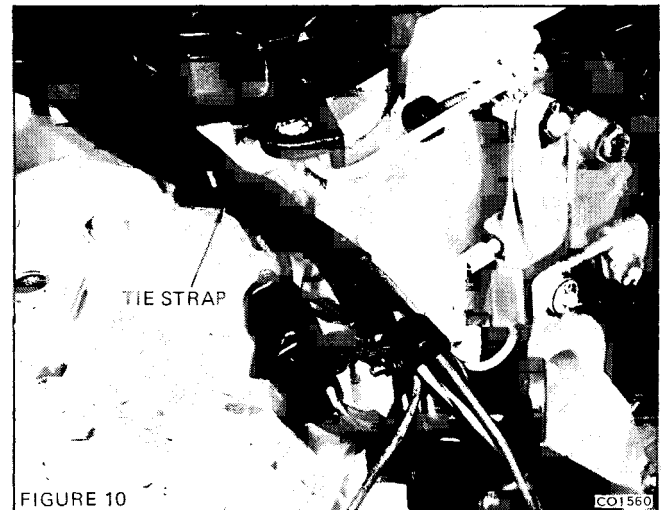
3. Remove and discard wire clamp located on mounting boss for voltage regulator. See Figure 8.



4. Install lock washers on screws. Insert one of two mounting screws through terminal of black ground lead and install voltage regulator to mounting bosses routing the existing electrical cables under regulator and between mounting bosses. See Figure 9. Torque screws 60 to 80 inch lbs. (7-9 N·m)



5. Route wire across rear of cylinder block and secure with tie strap. See Figure 10.

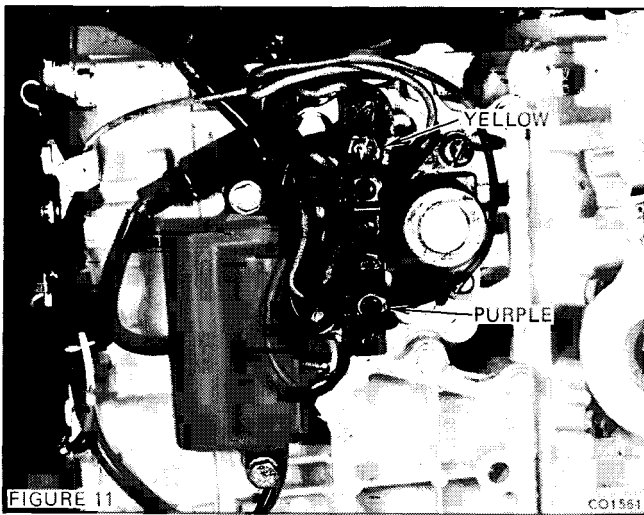


6. Attach terminal end of yellow lead under yellow lead on terminal block. Attach terminal end of purple lead under purple lead on terminal block. See Figure 11.

 NOTE

DO NOT CONNECT YELLOW LEAD FROM VOLTAGE REGULATOR UNDER TERMINAL WITH YELLOW WITH GRAY STRIPE LEAD.

7. Apply Liquid Neoprene P/N 909570 , or equivalent, to the terminals.
8. Replace motor cover.
9. Reconnect battery cables.



**NOTE**

CONNECT POSITIVE BATTERY LEAD (RED) TO THE POSITIVE BATTERY TERMINAL. CONNECT NEGATIVE BATTERY LEAD (BLACK) TO THE NEGATIVE BATTERY TERMINAL. EVEN A MOMENTARY REVERSAL OF THESE CONNECTIONS WILL DAMAGE ELECTRICAL EQUIPMENT IN THE MOTOR AND BOAT.

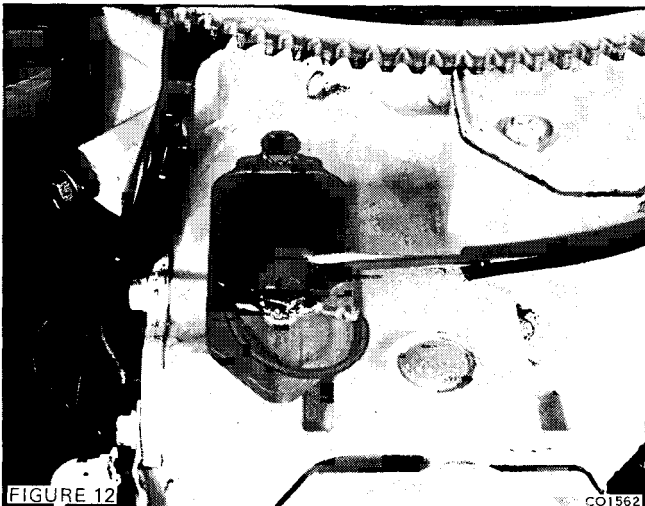
**MOUNTING VOLTAGE REGULATOR TO 1979 V-6 MOTORS**

1. Remove motor cover.
2. Disconnect battery cables.

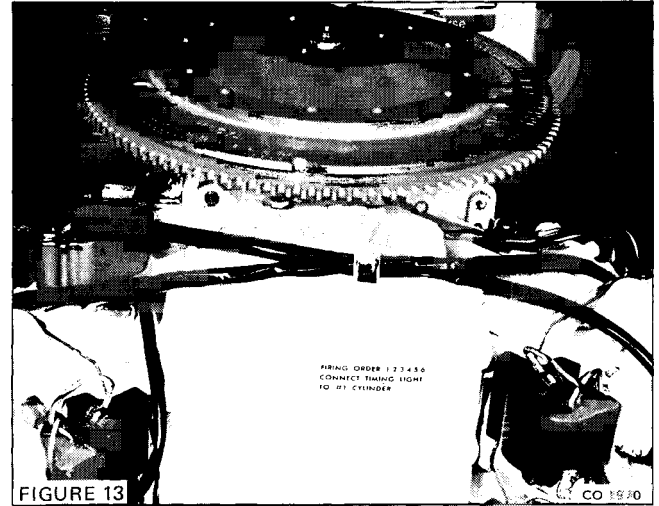
**SAFETY WARNING**

FAILURE TO DISCONNECT BATTERY CABLES COULD RESULT IN MOTOR STARTING AND SERIOUS INJURY COULD RESULT FROM CONTACT WITH MOVING PARTS.

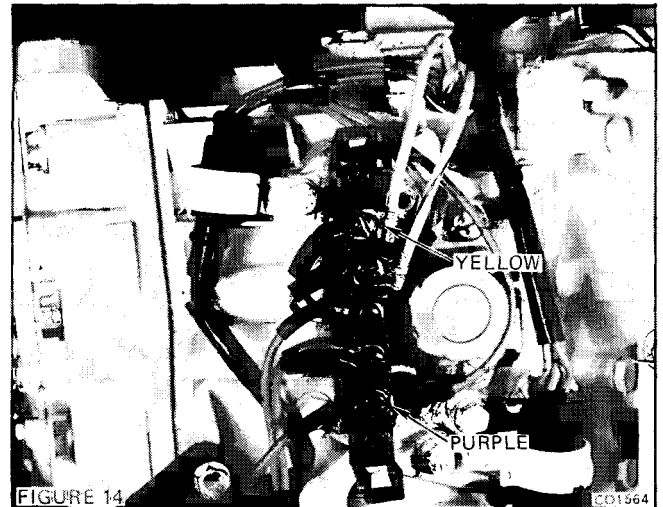
3. Install lock washers on screws. Insert one of two mounting screws through terminal of black ground lead and install voltage regulator to mounting bosses. See Figure 12. Torque screws 60 to 80 inch lbs. (7-9N-m)



4. Route wire across rear of cylinder block. Remove one screw and discard existing clamp. Install clamp provided in kit with same screw to hold motor cable and regulator lead. See Fig. 13.



5. Attach terminal end of yellow lead under yellow lead on terminal block. Attach terminal end of purple lead under purple lead on terminal block. See Figure 14.



6. Apply Liquid Neoprene P/N 909570 , or equivalent, to the terminals.
7. Replace motor cover.
8. Reconnect battery cables.

**NOTE**

CONNECT POSITIVE BATTERY LEAD (RED) TO THE POSITIVE BATTERY TERMINAL. CONNECT NEGATIVE BATTERY LEAD (BLACK) TO THE NEGATIVE BATTERY TERMINAL. EVEN A MOMENTARY REVERSAL OF THESE CONNECTIONS WILL DAMAGE ELECTRICAL EQUIPMENT IN THE MOTOR AND BOAT.