



REGULATOR RECTIFIER - P/N 763791 INSTALLATION / TROUBLESHOOTING GUIDE

APPLICATION

This regulator rectifier services regulator rectifiers - P/N 584675 and P/N 585192.

SAFETY INFORMATION

For safety reasons, this part should be installed by an authorized *Evinrude*[®]/*Johnson*[®] dealer. This instruction sheet is not a substitute for work experience. Additional helpful information may be found in other service literature for your engine.

This instruction sheet uses the following signal words identifying important safety messages.

!	DANGER	!
Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.		

!	WARNING	!
Indicates a potentially hazardous situation which, if not avoided, CAN result in severe injury or death.		

!	CAUTION	!
Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate personal injury or property damage. It also may be used to alert against unsafe practices.		

IMPORTANT: Identifies information that will help prevent damage to machinery and appears next to information that controls correct assembly and operation of the product.

These safety alert signal words mean:

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

Always follow common shop safety practices. If you have not had training related to common shop safety practices, you should do so to protect yourself, as well as the people around you.

It is understood that this instruction sheet may be translated into other languages. In the event of any discrepancy, the English version shall prevail.

DO NOT do any repairs until you have read the instructions and checked the pictures relating to the repairs.

Be careful, and never rush or guess a service procedure. Human error is caused by many factors: carelessness, fatigue, overload, preoccupation, unfamiliarity with the product, and drugs and alcohol use, to name a few. Damage to a boat and outboard can be fixed in a short period of time, but injury or death has a lasting effect.

When replacement parts are required, use *Evinrude/Johnson Genuine Parts* or parts with equivalent characteristics, including type, strength and material. Using substandard parts could result in injury or product malfunction.

Torque wrench tightening specifications must be strictly followed. Replace any locking fastener (locknut or patch screw) if its locking feature becomes weak. Definite resistance to turning must be felt when reusing a locking fastener. If replacement is specified or required because the locking fastener has become weak, use only authorized *Evinrude/Johnson Genuine Parts*.

If you use procedures or service tools that are not recommended in this instruction sheet, **YOU ALONE** must decide if your actions might injure people or damage the outboard.

TO THE INSTALLER: Give this sheet and the operating instructions to the owner. Advise the owner of any special operation or maintenance information contained in the instructions.

TO THE OWNER: Save these instructions in your owner's kit. This sheet contains information important to the future use and maintenance of your engine.



WARNING

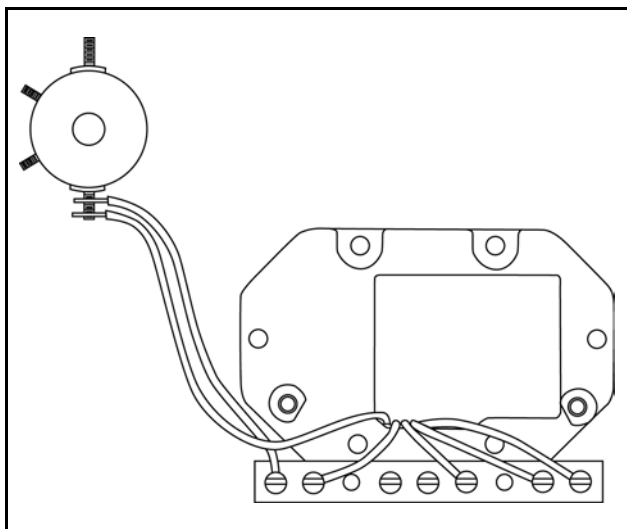


Do not disconnect battery while the engine is running, regulator/rectifier will be damaged.

IMPORTANT: Turn outboard OFF. Disconnect battery and remove spark plug leads from spark plugs to prevent outboard from starting.

INSTALLATION

- 1) Remove the regulator/rectifier wires from terminal board (and solenoid).
- 2) Remove the original regulator/rectifier. Requires removal of flywheel on some engines.
- 3) Clean all ground connections and regulator/rectifier mounting surfaces.
- 4) Install the new regulator/rectifier using the new gasket and original screws.
- 5) Reconnect wires on terminal board. Match regulator/rectifier wire colors to engine wire colors. (If equipped, reconnect unused red wire to original position on terminal board.)
- 6) Route red wire of regulator/rectifier to B+ battery cable terminal of starter solenoid.
- 7) Carefully route wiring. Use tie straps to secure wiring and to prevent from being damaged by moving linkages or flywheel.
- 8) Replace flywheel following procedure in appropriate service manual.



TROUBLESHOOTING

- 1) Install an ampmeter (capable of reading the maximum output of the charging system) in line on the red wire connected to the starter solenoid.
- 2) Connect a load bank to the battery.
- 3) With outboard in the water or on a dynamometer, start the engine. At 800-1000 RPM use a DVA meter to check voltage output on gray wire. Reading should be at least 8 volts. A low reading indicates a bad regulator if the system is charging the battery.
- 4) Increase engine speed to 3500 RPM. Turn the load bank switches to increase the battery load to match the rated output of the charging system.
- 5) Check ampmeter.
- 6) If amperage is low - check for battery voltage at purple wire of regulator rectifier. Verify key-switch and engine harness is providing battery voltage (12V) to purple wire. If amperage is correct and the battery voltage remains low, replace the battery.