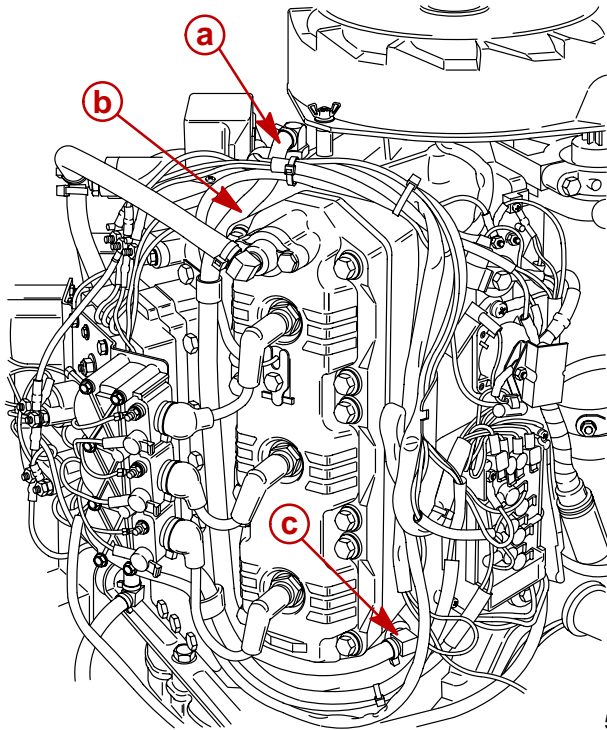


1989 Model V6 Outboards – 40 AMP Charging System

Recently a concern was discovered in cooling the watercooled voltage regulator for the 40 amp charging system. It was found that prolonged idling could allow a steam pocket to grow in the cylinder block, to the point that the cooling fins, on the bottom of the regulator, are not fully submerged in water. While this does not effect the operation of the outboard, the regulator has a thermo-safety switch built in. Therefore, if the regulator temperature gets to a critical point it shuts off the charging system which over a period of time could result in a discharged battery.

To solve this problem, route the poppet bypass water out the top of the block and eliminate the 3/8" hole at the bottom of the block. This will route the water externally back into the poppet valve area thru a fitting in the relief valve cover. (Figure 1) This will eliminate this situation at all engine speeds.



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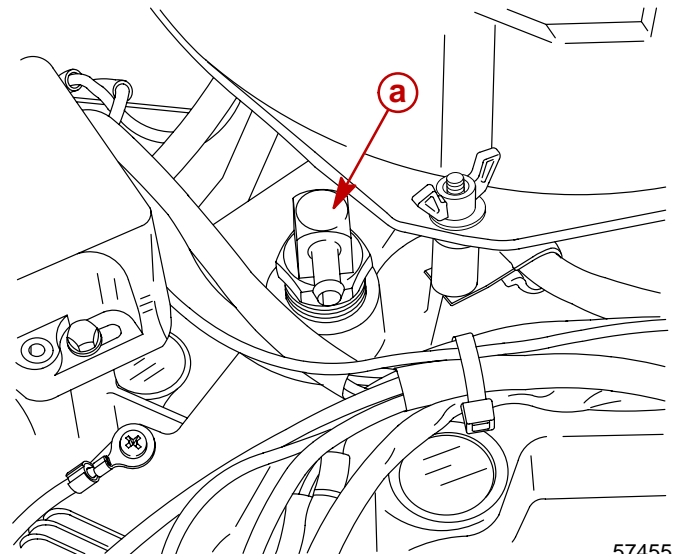
Figure 1.

- a** - Elbow Fitting
- b** - Hose
- c** - Fitting in Relief Valve Cover

A Water Bypass Kit P/N 814654A1 is available for this modification. Should a customer indicate that their battery is not charging properly, it may be necessary to install the bypass kit. This installation of the kit will be covered under warranty.

Future V6 cylinder blocks and short blocks will not have the pipe plug installed in the top of the block. An elbow will replace the pipe plug. (Figure 2)

Production V6 Outboards Serial No. 0C164371 and above will have the water bypass installed.



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Figure 2.

- a** - Elbow Fitting