Batteries — 2 batteries system

Batteries

The battery supplies DC power to the electric starter for cranking the engine. During engine starting, it also supplies DC power to every electrical and electronic system in the vehicle as well as all accessories.

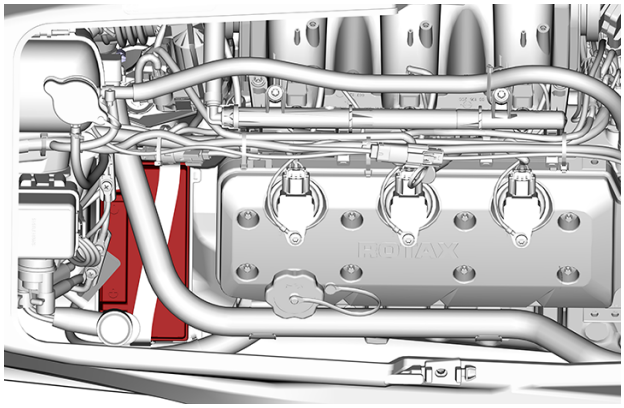
At low engine RPM operation and high current load conditions, it supplements the magneto output and helps to maintain a steady system voltage.

On some models, an additional auxiliary battery is used in parallel with the main battery to supply power for extended period of electrical demand when engine is not running.

On auxiliary battery equipped watercraft, the electrical system will perform normally if only one battery is installed. However, the charge reserve will be reduced by half.

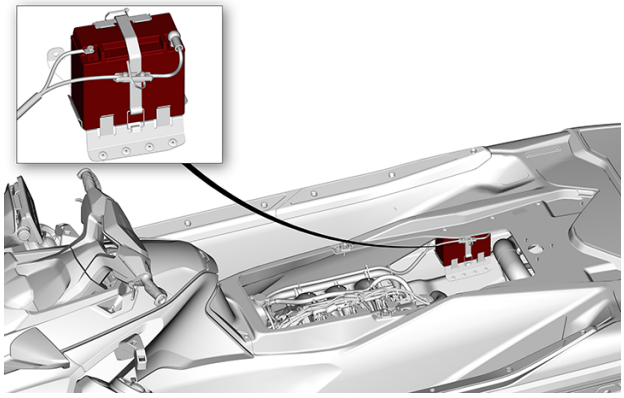
Battery Locations

Figure 1. Main battery



MAIN BATTERY

Figure 2. Auxiliary battery

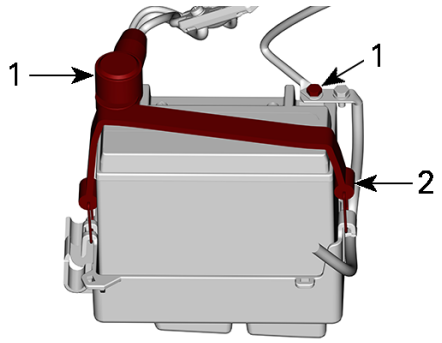


AUXILIARY BATTERY

Removing the Battery

1. Disconnect the battery cables.

NOTICE
Always disconnect the BLACK (-) cable first, then the RED (+) cable.



1. *Battery post*
2. *Strap*

2. Remove retaining strap.

Load Testing the Battery

1. Disconnect the battery cables.

NOTICE
Always disconnect the BLACK (-) cable first, then the RED (+) cable.

2. Connect a battery load tester to the battery.

NOTE: Follow manufacturer's instructions for proper use.

3. Ensure proper test conditions.

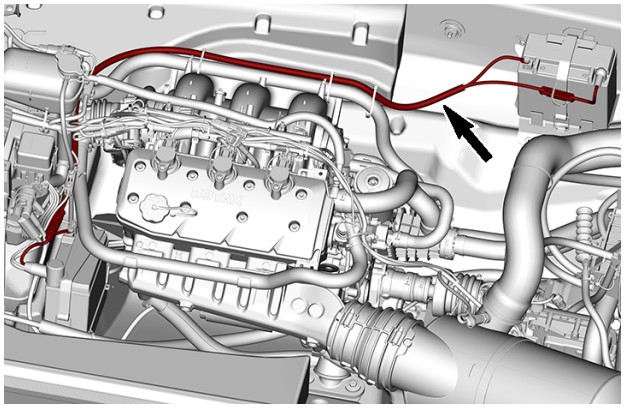
Test Conditions	
Ambient temperature‡	20 °C (68 °F)
Initial battery voltage‡	Above 12.5 Vdc
Engine	OFF
Load	3 times the amp-hour (AH) rating
Time	15 seconds
‡ Required for accurate testing	

Specification	
Battery	Above 9.6 Vdc

If the battery voltage drops below specification during the test, replace the battery and perform a *Charging System Load Test*.

Testing the Auxiliary Battery Cable

NOTE: Removing the auxiliary battery cable from the watercraft will greatly help procedure.



1. Using a multimeter, measure continuity of the auxiliary battery cable.

Auxiliary Battery Cable Resistance Test
Close to 0 Ω (continuity)

The continuity will not be close to 0 Ω if one of the two main fuses is burned. Inspect the main fuses by looking thru the transparent heat shrink.

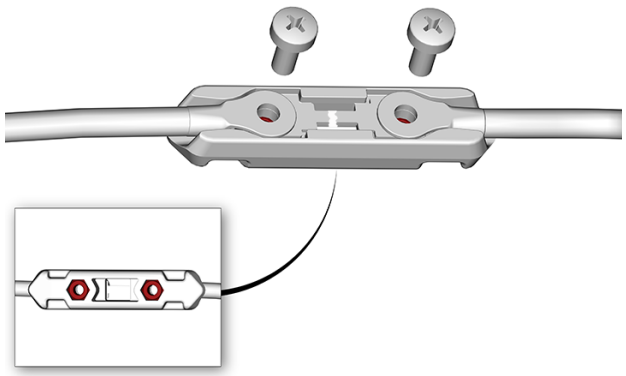
2. Refer to *Replacing a Main Fuse* in this subsection.

Replacing a Main Fuse

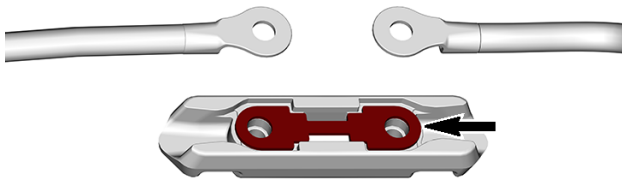
1. Cut open the heat shrink insulation covering the fuse.

NOTICE
Ensure not to damage the wire when removing the heat shrink insulation.

2. Remove fuse retaining screws. Ensure the nuts in the fuse holder stays in place.



3. Slide a new, properly sized heat shrink insulation tube on the wire.
4. Install a new fuse.



5. Install wires on top of the fuse.
6. Tighten screws to specification.

Tightening Torque	
M5 Fuse retaining screw	5 ± 0.5 Nm (44 ± 4 lbf-in)

7. Slide heat shrink insulation over the fuse holder and apply heat until it is set. Always follow heat shrink tube manufacturer recommendation.