# **Polaris Troubleshooting Guide**

#### 1. Check the Battery.

These vehicles are very voltage sensitive. The battery voltage must stay above 12 volts to operate reliably. A weak battery can cause the same problems as a bad PDM.

# If the Vehicle has no power...

# 2. Check the Ignition and/or Run switch.

With both switches in the OFF position you will see ~4.5 volts on the ignition line. Once the switches are in the ON/RUN position it will switch the 4.5 volts to a live 12 volts. The PDM will not start if these switches aren't making good connection.

# 3. Inspect the wire harness

Check the wire harness for damage, wear, and loose connections. Problem areas are commonly the wires going to the battery (particularly the negative cable) and the connections between the ECM and various sensors on the engine. If wires on the harness are melting you will likely need to replace the Stator as well as the wires.

This is a Power Distribution Module (PDM). If your machine has Electronic Fuel Injection (EFI), then it also has an Engine Control Module (ECM). The PDM supplies power to the machine, but the ECM controls the engine.

# If the Vehicle has power...

#### 2. Check that fuel is getting to the vehicle.

If the fuel pump is running but no fuel is getting to the vehicle your pump might have blown a gasket. This causes the fuel pump to pull gas into it then spray if right back into the tank.

# 3. Check that the vehicle isn't stalling.

If the vehicle is hesitating or stalling under throttle you potentially have a problem with the throttle position sensor and/or the wire connections between it and the ECM.

#### 4. Inspect the wire harness

Check the wire harness for damage, wear, and loose connections. Problem areas are commonly the wires going to the battery (particularly the negative cable) and the connections between the ECM and various sensors on the engine. If wires on the harness are melting you will likely need to replace the Stator as well as the wires.

# 5. Check that the battery is charging correctly.

Not charging/over charging is usually caused by a shorted or open stator. It can also be caused by compromised battery wires. See the polaris service manual for stator test instructions. We cannot provide service manuals.

# 6. Check spark plug for spark.

If the ignition coil will not trigger this is a problem with the ECM. The PDM supplies 12 volts but the ECM triggers it. We do not rebuild Polaris ECMs.