

Ignition Troubleshooting

This troubleshooting guide is for Rcexl and many C&H ignitions, it will not work with DA ignitions. If you have no spark or think you are having an ignition problem, carefully following this guide will test the ignition module, hall sensor, and spark plug cap components. This guide can be used for single or twin cylinder ignitions, it does not test the manual or any optical ignition switches that may be in the system. You will need a good fully charged 4 cell Nicad or Nimh battery, an old servo extension, and your trusty volt meter. So,.....

Take an old expendable servo extension and cut off the male plug end, separate the wires, strip a bit of insulation from each of the 3 leads and plug the other end into the sensor lead on the ignition module.

Put a good spark plug in the cap, doesn't need to be all the way seated but far enough for the hex of the plug to make good contact with the metal shell of the plug cap, plug a fully charged 4 cell battery directly into the ignition.

Test for battery voltage at the red and black wires of the test extension you made and plugged into the sensor lead of the module, if there is no voltage replace the module, if there is battery voltage->

Short the white and black wires together, every time you break this connection there should be a spark, no or intermittent spark=bad module, has good spark->

Remove the test lead and plug the sensor on the engine into the module and turn the engine over, no spark, replace the sensor, good spark->

Remove the spark plug, look down into the plug cap and turn the engine over, if you see spark arcing through the silicone boot to the metal shell, replace the spark plug cap, no visible spark but you hear a snap->

Put a small screw driver into the bottom of the cap, turn the engine over and you should observe spark jumping from the screw driver to the plug cap shell outside of the silicone boot, an arc of about 1/4"-3/8", if it does this there is nothing wrong with the ignition, if you hear an arc but it's not in the cap with the screw driver, it could be a problem with the resistor in the cap or the high tension lead where it goes into the cap, replace the plug cap.

All of this can be done on a bench, the plug does not need to be grounded to the engine.

Good luck!