

Troubleshooting the EIS

Engine Kick-Back during starting:

1. check all ground connections
2. check for weak battery (particularly if using a permanent magnet type lightweight starter)
3. check for bad/worn starter cables
4. check starter functionality
5. verify that timing on EIS is set correctly

Engine runs poorly or rough:

1. check all ground connections
2. verify that spark plug wires are connected securely
3. verify that spark plugs are set to correct firing order
4. inspect all spark plug harnesses for evidence of arc-out (indicated by small burn marks near the spark plug)
5. inspect all spark plugs for proper gap, cracked ceramic, cleanliness, wear
6. verify that timing is set correctly

Engine runs poorly or rough at high RPM and/or high engine load:

1. indicates imminent failure of either a spark plug or spark plug wire; follow procedures for engine running rough

EIS is dropping off-line or is intermittent:

1. Indicates possible magnetic pick-up failure; inspect pick-up by disconnecting at the electrical interconnect and test impedance. The impedance should be between 600-800ohms and does not oscillate when wires are moved. (Impedance that moves up and down indicates a bad pick-up).
2. Inspect power supply to both coil pack & controller for proper voltage.
3. Inspect ground connections.

High CHT readings or detonation:

1. Indicates that timing has advanced too far. Adjust timing if necessary.
4. Disconnect MAP Sensor and verify that operation returns to normal settings (without vacuum advance)
5. Verify that the temperature range of the spark plugs is correct for the engine application (particularly important with automotive spark plugs)

If the above troubleshooting techniques are ineffective, call the factory for support. Evaluation of coil pack, EIS Controller, and any other components are all available through Electroair technical support for a nominal fee.