

ELECTRONIC IGNITION SYSTEMS

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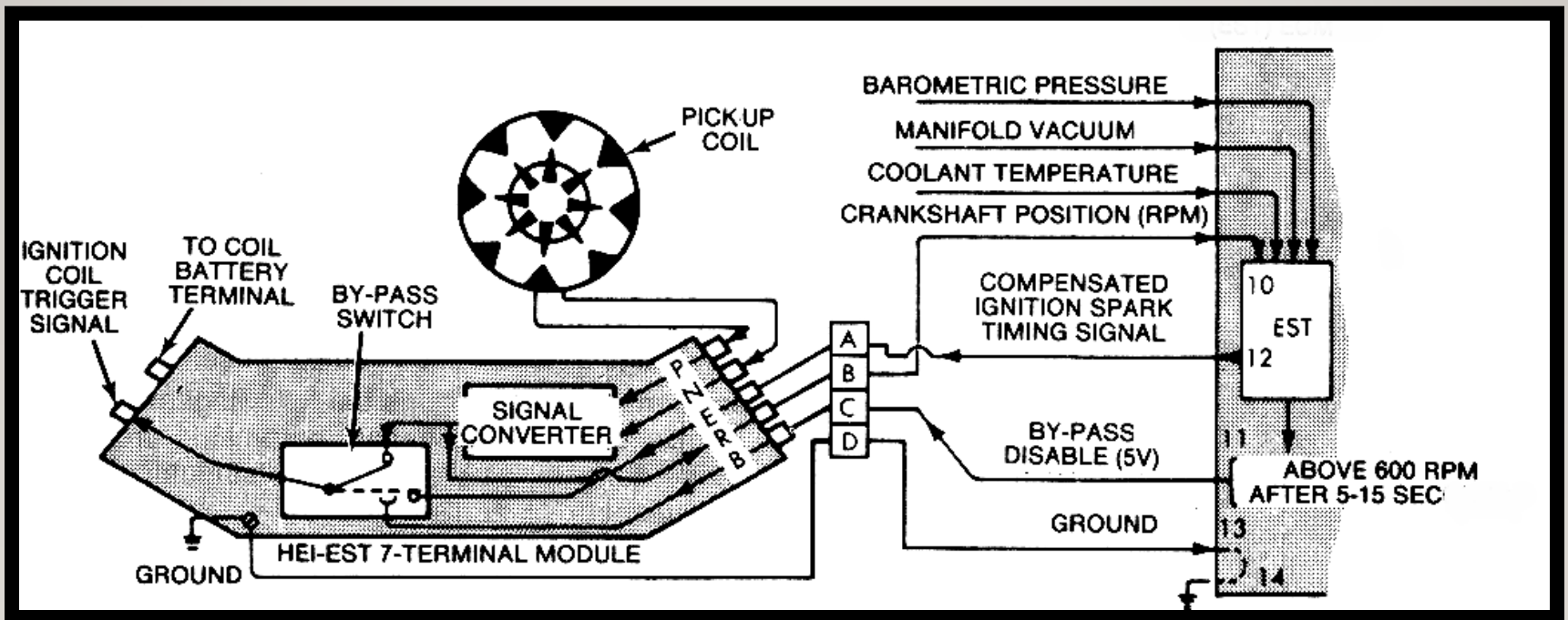
SYSTEM COMPONENTS

- Ignition Switch
- Ignition Coil(s)
- Control Module
- Position Sensor

CONTROL MODULE

- Tells coil when to fire spark plugs
- Requires Power and Ground circuits
- Requires input as to piston position
- Requires output circuit to control ignition coil(s)

ELECTRONIC SPARK TIMING



ELECTRONIC SWITCHING SYSTEM

- Engine Position Sensors
- Mounting Locations
 - Distributor
 - Crankshaft
 - Camshaft
- Four Types of Sensors

TYPES OF POSITION SENSORS

- Magnetic Pulse Generator
- Metal Detection Sensor
- Hall Effect Sensor
- Photoelectric Sensor

TIMING ADVANCE

- Centrifugal Advance
- Vacuum Advance

SPARK DISTRIBUTION

- Distributor Cap
- Distributor Rotor
- Spark Plugs Wires
- Spark Plugs

ELECTRONIC IGNITION SYSTEM SERVICE

- Visual Inspection
- Secondary and Primary Connections
- Routing (Electromagnetic Interference)
- Component Inspection

COMPONENT INSPECTION

- Distributor Cap (condition)
- Timing Advance mechanisms (operation)
- Primary Switches (points condition/operation)
- Control Modules (Appearance/Operation)
- Primary Sensors (Position)
- Spark Plugs and Wires (Condition)
- Ignition Coil (Output)

ENGINE ANALYSIS TESTING

- Basic Electrical System Performance
- Cylinder Performance Test
- Ignition Performance Test

THE END

