



POWERCONTROL technologies

ECU Type: 941

Engines

All engines up to 12 cylinders fitted with ignition distributor
All engines up to 8 cylinder not fitted with ignition distributor

Fuel Injection

All engines up to 12 cylinders – grouped, banked or batch injection
All engines up to four cylinders – sequential injection available

Ignition

ECUs have built-in amplifiers for direct ignition coil drive. Coil-on-plug and redundant spark capabilities

Control Strategies

Main Maps

Fuel Injection and Ignition Timing are controlled from base maps of Engine Speed (250 rpm map sites) and Engine Load (16 programmable map sites)

Compensation Maps

Compensations may be applied to injection duration and ignition timing via Intake Pressure (MAP), Engine Temperature, Intake Air Temperature, Barometric Pressure and Battery Voltage

Data Security

Maps and data are programmable by the user.
Security coded access to mapping data

Additional Outputs

Six digital outputs (0.5 Amp) are provided. Used for Gearshift Light, Radiator Fans, Electronic Throttle or other such devices. Mapped and threshold outputs available

Diagnostics

On-board diagnostics, fault-code memory and fault indication

I/O Facilities

Inputs

- Engine Speed and Position
- Engine Phase
- Throttle Position (TPS)
- Manifold Pressure (MAP)
- Mass Airflow
- Barometric Pressure
- Engine Temperature
- Air Temperature
- Battery Voltage
- Lambda Sensor(s)
- Gear Lever Position
- Fuel Pressure
- Oil Pressure
- Oil Temperature
- Launch Control Switch
- Powershift Switch

Outputs

- Up to 24 Solenoid Injectors
 - Up to 8 Direct Ignition Coils
 - Wastegate Control
 - Idle Valve (optional)
 - Tachometer
 - Diagnostic Lamp
 - Fuel Pump Relay
 - 6 programmable outputs
- Data Logger interface
 - Fuel consumption signal
 - PC interface



Control Strategies

- Sequential / Banked Injection
- Programmable Dwell Control
- Multiple Crank Trigger Wheels
- Acceleration Fuel
- Overrun fuel cut-off
- Closed Loop Lambda
- Fuel Pump Relay
- Gearshift Light
- Exhaust Gas Recirculation
- Electronic Throttle Control
- Radiator Fan Control
- Variable Cam Timing Control
- Auxiliary Air Pump Control
- Water Injection Control
- Lambda Heater Control
- Canister Purge Valve
- Secondary Air injection
- Intercooler Water Spray Control
- Closed Loop Wastegate Control
- Power On Gearshift facility
- Launch Control
- Diagnostic Fault Lamp
- Traction Control

Windows 98 Mapping

- Windows 98 mapping Interface
- Graphical Map editing
- Incremental Keyboard Mapping
- Infinitely Adjustable Potentiometer Mapping

Physical Data

ECU - General

- Envelope: 170 X 160 X 38 mm (6.7 X 6.3 X 1.5 in)
- Mass: 680g (1.5 lb)
- Operating: -40C to +85C (-40F to 185F)
- Supply voltage: 6.5V to 23V

Case

Black anodised aluminium for ultimate durability

Mounting

Four X M4 tapped holes

Connector

Sealed 55 pin connector, integral security lock, high integrity terminals

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