

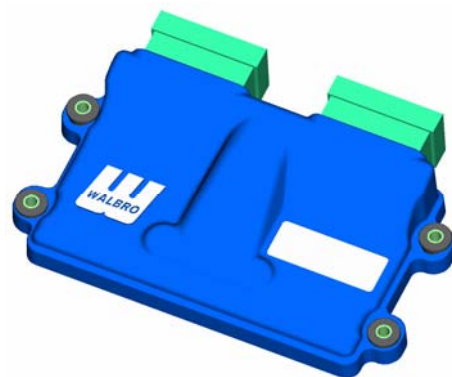
Walbro Introduces its New: “ECU” Series electronic “Engine Control Unit”

Emerging after years of development and testing in the most demanding arenas of professional motorcycle, automotive and marine racing, Walbro is proud to introduce its new line of “Engine Control Units” referred to as the “ECU” Series. Unlike many competitive engine control products, Walbro has designed its ECU to allow customers “Full Access” to calibration parameters which includes nearly any function required to configure an engine management system. Full Access allows Walbro engineers and customers alike the flexibility to meet nearly any engine control requirement using standard electronic fuel injection components which, in turn, supports very short lead times in completing calibration requirements. Further, this new line of ECU product is designed to provide customers in any market the ability to affordably equip their future engine with electronic fuel injection (EFI). Following is a brief explanation of the (3) new basic ECU models:

ECU-A Model Features:

Provides control of fuel and ignition for up to (4) cylinder engines

- Injection and ignition configurable parameters. A set of (32) x (16) calibration tables includes:
 - (1) Main fuel injection time based on Rpm vs. Load
 - (1) Fuel correction per cylinder based on Rpm vs. Load
 - (1) End-of-Injection timing based on Rpm vs. Load
 - (1) Main ignition timing based on Rpm vs. Load
 - (1) Ignition timing correction per cylinder based on Rpm vs. Load



ECU-C Model Features

Provides control of fuel and ignition for up to (2) cylinder engines

- Injection and ignition configurable parameters. A set of (32) x (16) calibration tables includes:
 - (1) Main fuel injection time based on Rpm vs. Load
 - (1) Fuel correction per cylinder based on Rpm vs. Load
 - (1) End-of-injection timing based on Rpm vs. Load
 - (1) Main ignition timing based on Rpm vs. Load
 - (1) Ignition timing correction per cylinder based on Rpm vs. Load



ECU-D Model Features:

Provides control of fuel and ignition for single cylinder engines

- Injection and ignition configurable parameters. A set of (32) x (16) calibration tables includes:
 - (1) Main fuel injection time based on Rpm vs. Load
 - (1) End-of-injection timing based on Rpm vs. Load
 - (1) Main ignition timing based on Rpm vs. Load



“ECU” Series electronic “Engine Control Unit”

Standard Functions of ECU-A, C & D

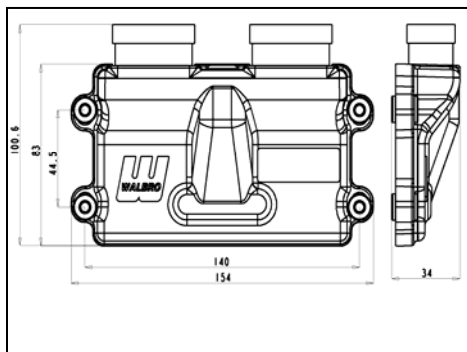
- Compensation provided for:
 - Battery voltage
 - Engine and air temperature
 - Barometric pressure
- Acceleration and deceleration calibration tables
- Cranking fuel adjustment table
- Internal barometric pressure sensor
- External manifold air pressure (MAP) sensor
- Adjustable engine speed limiter
- Load indicated by Throttle Position (“TPS”) and/or MAP
- Selectable trigger wheel tooth count minus two (example: 30-2)
- Closed loop lambda control (narrow or wide band)
- Closed loop idle speed control
- Adjustable cooling fan control
- Automatic and adjustable relay drive based on engine RPM
- Adjustable load calibration table points
- Adjustable RPM calibration table points
- User configurable for air and engine temperature and lambda Sensors
- Adjustable On-Off Solenoid table based on Rpm vs. Load
- End of Line Calibration: Using the appropriate tool, setting and/or adding the following parameters is possible:
 - TPS Limits
 - Idle CO correction
 - Idle speed Correction
 - Total injection correction
 - Chassis identification number
 - Engine identification number
 - Assembly date

Special Features and Functions

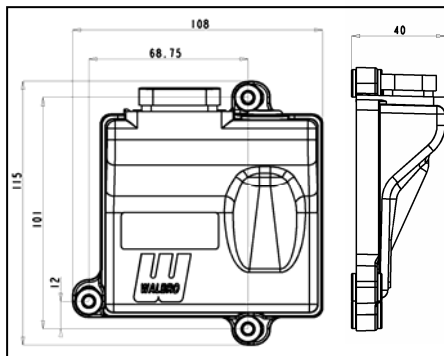
- Cam sensor elimination with sequential injection and ignition
- Electronic boost control
- Dashboard interface
- Vehicle “Safe Start” control: (in gear or side stand down, etc)
- Vehicle “Safe Operation” control (tilt, etc)
- “Dual Calibration” Maps
- Marine applications
- Housing colors

Outline Dimensions (in MM)

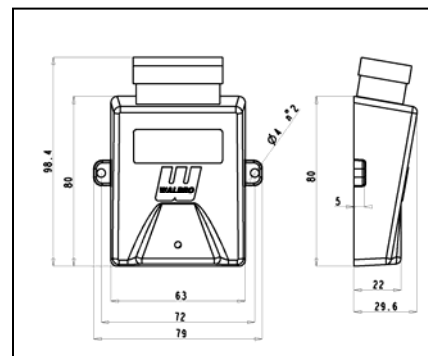
ECU-A



ECU-C



ECU-D



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