

Bulkhead Connector Outputs

- Malfunction Indicator Lamp (BROWN/WHITE STRIPE) – This allows a MIL to be mounted inside the vehicle (there is also a redundant light in the Fuse/Relay center). This wire is grounded by the ECM to illuminate a lamp, 12V must be provided to the other lamp input.
- GMLAN Communication Link (TAN/BLACK STRIPE [+], TAN [-]) – This provides the GMLAN communication messages containing engine operating parameters for potential use in future add-on modules – any current integration of this is left to the user.
- Tachometer Signal (WHITE) – This is a 2 pulse/rev output (see features above).
- Vehicle Speed (BROWN) - This is a non scaled output for use with auto-scaling speedometers and will not function unless a vehicle speed sensor (VSS) is connected to the ECM through the VSS wire in the harness. Note that a VSS input is not required for engine operation.
- MAP (LT GREEN) – This is an output for use in gauges or for load indication in transmission controllers (any connection must be to high-impedance device). The output is a 0-5 Volt signal ranging from 10 – 105 KPa (1.5 – 15.2 psia). Use the ground wire in the bulkhead connector as the low reference (ground).
- Throttle Position (PURPLE) - This is an output for use in gauges or for load indication in transmission controllers (any connection must be to a high-impedance device). The output is a 0.5 – 4.5 volt signal ranging from 0 – 100 %. Use the ground wire in the bulkhead connector as the low reference (ground).
- 10A Fused 12V Power (ORANGE) - This is a power output supply and is always enabled.
- 15A Fused 12V Ignition Power (PINK) – This is a power output supply and is enabled only when the ignition is on.
- Ground (BLACK) – This is used as the low reference (ground) for completion of the MAP, TPS, and oil pressure output circuits. It can also be used for modules connected to either of the fused 12V outputs.
- Oil pressure Sensor (TAN/WHITE STRIPE) – This is the output from the oil pressure sensor which can be used for monitoring (Pressure = [32*Sensor Voltage]-16). Use the ground wire in the bulkhead connector as the low reference (ground).

Terminals for the included mating connector can be acquired at a GM dealership in the Delphi Terminal Service kit (J38-125) in tray 8 position 9. At most dealerships this can be found at the Service Desk.

Service information

Contact your GM Performance Parts Dealer for Service or for instructions on how to obtain Service Manuals and Service Information. Use information from a 2006 LS2 Cadillac CTS-V for engine and harness diagnosis (use this information for all LS crate engine systems).

Fuel Pump:

This system requires 60 psi constant fuel pressure. The fuel pump you choose must be capable of 40 gph @ this pressure for LS2/LS3s and 50 gph for LS376/LS7s. GM Part Number 19151145 is an in-tank unit that meets these requirements, and may be adaptable depending on the application. Numerous aftermarket pumps will meet these requirements as well.

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ALL INFORMATION WITHIN ABOVE BORDER TO BE PRINTED EXACTLY AS SHOWN ON 8.5x11 WHITE 16 POUND NON-BOND RECYCLABLE PAPER. PRINT ON BOTH SIDES, INCLUDING TEMPLATES. TO BE UNITED IN ACCORDANCE WITH GMSPQ SPECIFICATIONS.

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INSTALLATION INSTRUCTIONS
LS Series Crate Engine Control System

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