Do gasoline engines with an electronic control module (ECM) have J1939 compatibilities?

536 Mark Oslund July 28, 2015 J2K100 0 36.80K

Most Gasoline engines come equipped with a standard ECM which communicates the J1939 protocol. One of the most common ECMs found today on many gasoline engines happens to be manufactured by Delphi and is commonly called MeFi.

This particular ECM can be found on many manufacturer's engines; the most common are as follows:

- Volvo Penta Gxi and Osi engines.
- Crusader
- GM Marine engines
- Volkswagen Marine engines.
- Mercruiser engines

Jim MacFarlane out of Portland Marine Electronics has compiled a list of J1939 PGNs transmitted via the Mefi ECMs.

**highlighted PGNs are compatible with the J2K100*

MEFI ECM Type						
5	5A	5B	5C	5D	PGN	Information Description
Yes	Yes	Yes	Yes	Yes	61443	Pedal Position
Yes	Yes	Yes	Yes	Yes	61444	Engine RPM
Yes	Yes	Yes	Yes	Yes	65262	Coolant Temperature (and Oil Temperature MEFID)
Yes	Yes	Yes	Yes	Yes	65263	Fuel Pressure and Oil Pressure
No	No	Yes	Yes	Yes	65266	Fuel Rate (LPH) and Throttle Position
No	No	Yes	Yes	Yes	65269	Barometer
No	No	Yes	Yes	Yes	65270	Boost Pressure, Manifold Air Pressure, and Manifold Air Tempe
Yes	Yes	Yes	Yes	Yes	65271	Voltage from Ignition Switch, Voltage from System Relay
Yes	Yes	Yes	Yes	Yes	65276	Fuel Level (No engines equipped with sensor to date)
Yes	Yes	Yes	Yes	Yes	65500	Proprietary Engine Data Data Useful for Dash / Cluster / Helm)
No	No	No	Yes	Yes	65501	Proprietary Fuel Consumption Data)

You can establish whether or not the interface is working, with the key on but engine NOT running (useful for jet boats that cannot be run out of water) while in the shop – you will see voltage and temperature.

The USB100, N2KMeter, and N2KAnalyzer are very helpful with the diagnostic/bus health and installation issues.

Helpful links:

Marine Mefi info: http://www.gmpowertrain.com/Libraries/Marine_Engines/Marine_EFI.sflb.ashx

Online URL: https://maretron.com/wp-content/phpkbv96/article.php?id=536