How do I determine whether the J2K100 is compatible with my Caterpillar engines?

451 Mark Oslund May 15, 2018 J2K100 0 43.65K

Most Caterpillar engines may have J1939 on production years 1996 and beyond. A person who installs a J2K100 must do a visual assessment of the existing J1939 engine connections or contact a Caterpillar representative for guidence.

Here are some easy methods to help you determine if the J2K100 can bridge your Caterpillar engine to a NMEA2000 netwrok:

The helm pictured in ***Figure A*** has a Caterpillar MPD display interface. The Interface can be integrated with a J2K100 gateway using one of the following Maretron part numbers:

- MCF-2M-D12 use if you have a repeater MPD display port.
- MCF-2M-D12CAT Use if only a single port is available on the MPD display.



Figure A (MPD Display)

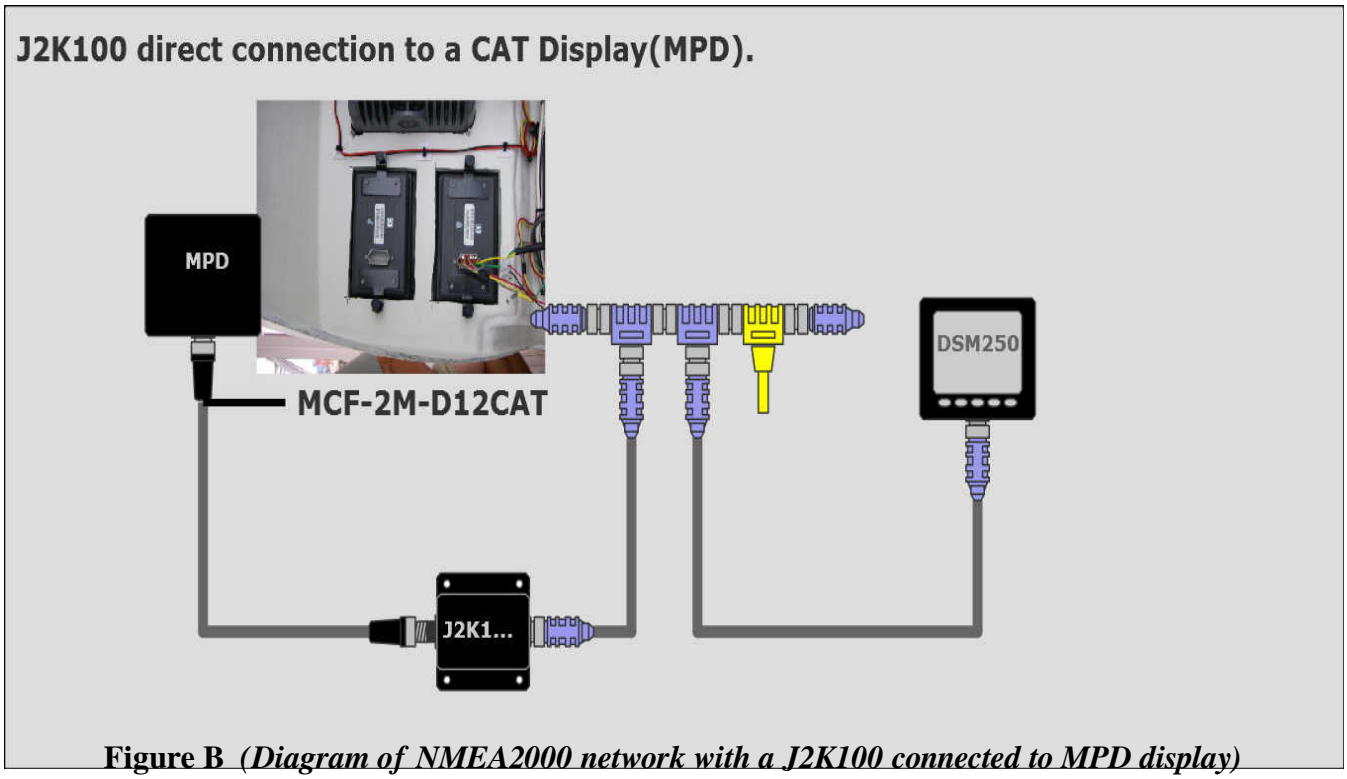


Figure B ***(Diagram of NMEA2000 network with a J2K100 connected to MPD display)***

For the following connector shown in **Figure C** , Caterpillar engines offer a diagnostic connection J1939 connections for pins "C" CAN+(High) and "D" CAN-(Low)

Note: "G" and "H" for industrial connections have a Keyed "A" pin shown in figure C:

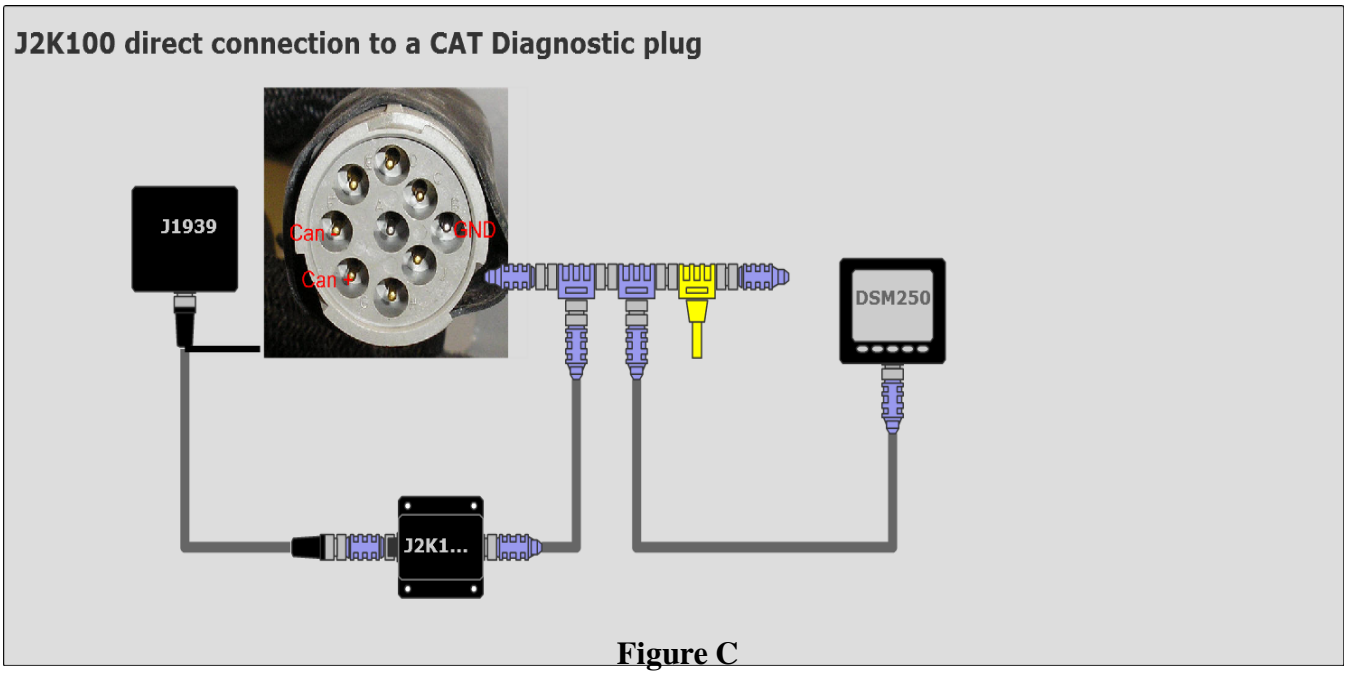


Figure C

Classic Caterpillar Helm EMS system. Image of Helm shows no J1939 option at location of vessel:



Classic Engine Room Panel (no J1939 available):



Figure D

This Caterpillar diagnostic plug has no J1939 another protocol is present possibly 1708 or 1587 contact your Caterpillar representative on options to determine what protocol has been packaged with your engine.



Figure E

Note: Pins "G" and "H" or "C" and "D" have no ECU wires installed.

Connector Pinouts for Caterpillar’s diagnostic connector are provided in article attachments below labeled " cat_pinouts.jpg"

Online URL: https://maretron.com/wp-content/phpkbv96/article.php?id=451