

mefiCAN Bridge Controller (Talon installation)

20-Sept-2015

Connector Pinouts:

EFIS connector (DB-9)

Connection to Gen 2 EFIS

- 1 - CAN HI
- 2 - CAN LO
- 6 - CAN GND

Note: the mefiCAN has an internal termination resistor installed on the CAN buss. The EFIS end of the buss may require a termination resistor.

ECUs/Power connector (DB-9)

- 4 - ECU 1 CAN HI
- 5 - ECU 1 CAN LO
- 1 - ECU 2 CAN HI
- 2 - ECU 2 CAN LO
- 3 - CAN GND

- 9 - Power +12V
- 8 - Power GND

Note: the mefiCAN has an internal termination resistor installed on both CAN buss lines. The ECU end of the buss may require a termination resistor.

Sensor Inputs connector (DB-25)

- | | |
|--------------------|-------------------------|
| 1 - +5V output | |
| 2 - GND | 14 - GND |
| 3 - GND | 15 - GND |
| 4 - n/c | 16 - n/c |
| 5 - n/c | 17 - n/c |
| 6 - Engine RPM | 18 - Rotor RPM |
| 7 - GND | 19 - GND |
| 8 - n/c | 20 - n/c |
| 9 - GND | 21 - GND |
| 10 - Oil Pressure | 22 - Front Gearbox Temp |
| 11 - Fuel Pressure | 23 - Rear Gearbox Temp |
| 12 - OAT | 24 - Secondary Temp |
| 13 - Fuel Level | 25 - Oil Temp |

Notes:

1. **Temperature Inputs:**
 - configured for LM335 type sensors.
2. **Pressure Inputs:**
 - configured for 0.5 - 4.5 volt pressure sensors.
 - these are the same as currently used in the Talon.

3. **Fuel Level Input:**
 - will only work with the Priceton type sender.
(ie. 0 to 5V output)
 - it will not work with the current Westach senders.
4. **Rotor RPM Input:**
 - configured for a 5 volt signal, 1 count per rev.
 - internal pull-up resistor installed.
 - sensor power can be supplied from +5V pin or +12V power.
5. **Engine RPM Input:**
 - configured for 12 volt signal, 2 counts per rev.
 - can be connected to the tach output on one of the MEFI ECUs.
 - this gives a much more stable RPM than the RPM derived from the MEFI CAN buss.
6. **Discovery EFIS:**
 - added a screen 9, which is a diagnostic screen.
 - all other pages have been left stock.
 - Volts is showing EFIS volts, which is not very accurate. A more accurate voltage is sent from the mefiCAN controller, but the EFIS has no means to display it. This needs to be fixed by MGL.
7. **USB programming port:**
 - the mefiCAN controller can be configured via the USB port.
 - new firmware can also be uploaded via this port.