Technical Datasheet

SAE-J1962 OBD Diagnostic Cable – CBLCAN-OBD

Features

- Right-angle SAE-J1962 OBD connector
- Watertight Deutsch connectors
- Resistant to oils, fuels etc.

Description

The CBLCAN-OBD allows connecting the ISAAC Instruments' Recorder to the CAN bus of the vehicle equipped with SAE-J1962 OBD connector. A connection is also available to provide power to the Recorder.

The CBLCAN-OBD-Y01-xxx allows connecting the Recorder to the CAN bus while leaving one OBD plug available for other diagnostic tools.

CBLCAN-OBD-110-xxx

CBLCAN-OBD-Y01-xxx

Different models for different applications:

PN	Length	Description
CBLCAN-OBD-110-005	5'	1x power, 1x CAN
CBLCAN-OBD-110-012	12'	1x power, 1x CAN
CBLCAN-OBD-120-005	5'	1x power, 2x CAN
CBLCAN-OBD-120-012	12'	1x power, 2x CAN
CBLCAN-OBD-210-005	5'	2x power, 1x CAN
CBLCAN-OBD-Y01-005	5'	1x power, 1x CAN, 1 x OBD extension

1x CAN == HS-CAN
2x CAN == HS-CAN and MS-CAN

Installation

- Connect the OBD receptacle connector to the vehicle OBD plug (usually mounted under the dashboard – at the driver's side)
  or
  In the case of CBLCAN-OBD-Y01-xxx, detach the OBD plug on the vehicle and replace it with OBD plug of the CBLCAN-OBD-Y01-xxx. Connect the OBD receptacle of the CBLCAN-OBD-Y01-xxx to the plug that was originally on the vehicle. Hide this connection under the dashboard
- Do not bend cable with curvature radius smaller than 40mm (1.60″)
- Route the cables at least 20cm (8") away from high interference electrical devices, such as: ignition coils, plug leads, high-current leads, high emission electronic modules or antennas
- Verify that the cable is not pinched or stretched by moving parts
- Connect the connector labeled CAN to the Recorder CANx port
- Connect the connector labeled PWS to the Recorder PWS port

Specifications

Description	Symbol	Min	Typ	Max	Unit
Cable characteristics Gauge Insulation Dielectric strength		16 AWG extruded Ethylene-TetraFluorEthylene (ETFE) Min. 1500V RMS			
Connector Operating Temperature Cable Operating Temperature	T_{Oper}	-30 (-22) -55 (-67)		85 (185) 150 (302)	C (F)

Pinout Diagram

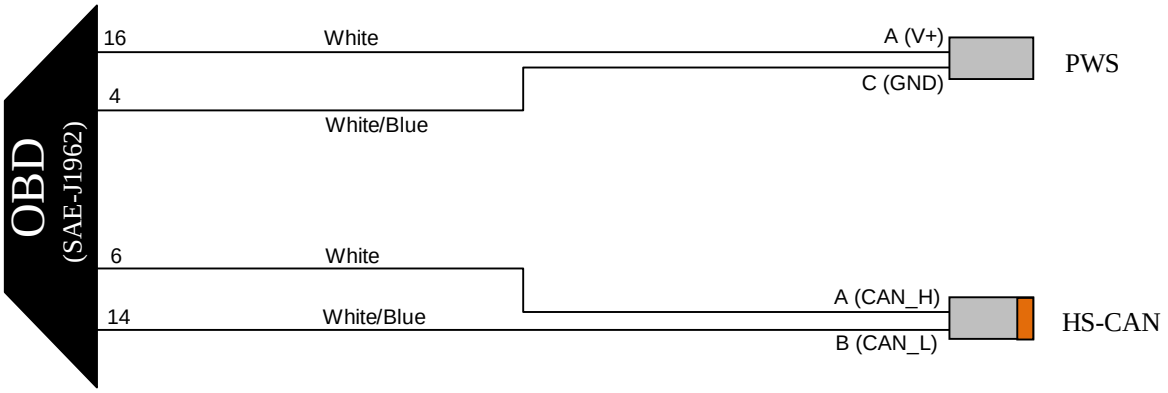


Figure 1 – CBLCAN-OBD-110

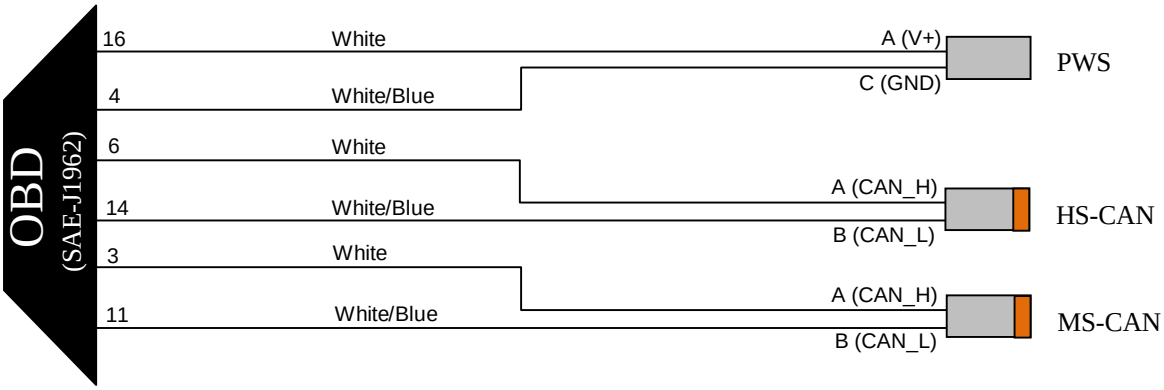
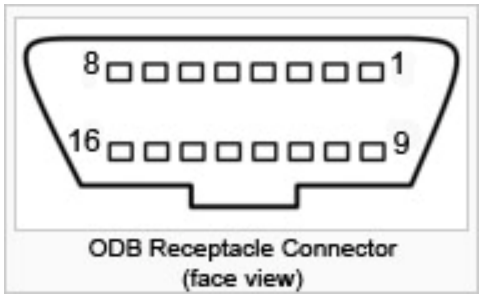


Figure 2 – CBLCAN-OBD-120



SAE-J1962 OBD connector pinout:

1. –
2. Bus positive Line of SAE-J1850
3. –
4. Chassis ground
5. Signal ground
6. CAN high (ISO 15765-4 and SAE-J2234)
7. K line of ISO 9141-2 and ISO 14230-4
8. –
9. –
10. Bus negative Line of SAE-J1850
11. –
12. –
13. –
14. CAN low (ISO 15765-4 and SAE-J2234)
15. L line of ISO 9141-2 and ISO 14230-4
16. Battery voltage