

*This Service Document supersedes CD-20-17-002 R3, dated 1 December 2023. This new revision, R4, updates all connector information and adds additional CAN signal information. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.*

Model 3 and Model Y vehicles for Europe and Asia Pacific (except for Korea and Taiwan) are configured with a third-party CAN bus interface on the OBD-II connector. This is an SAE J1962 connector in the LH footwell area. CAN bus is available on these vehicles:

- 2017–2023 Model 3 (VIN starting with 5YJ) produced from January 5, 2019 onwards
- 2017–2023 Model 3 (VIN starting with LRW) produced from October 18, 2019 onwards
- 2024+ Model 3 from start of production
- Model Y (VIN starting with 5YJ) produced from January 13, 2021 onwards
- Model Y (VIN starting with LRW) produced from December 14, 2020 onwards
- Model Y (VIN starting with 7SA or XP7) from start of production

## Disclaimer

Connecting or hard-wiring non-Tesla or third-party accessories or equipment into existing Tesla vehicle electrical systems is not supported by Tesla, and the installer performs this modification at their own risk. Installed unapproved equipment is not covered by any Tesla warranty, and is considered a non-standard modification of the vehicle.

**⚠ CAUTION:** Installing unapproved components might be detrimental and incur damage to the vehicle. Tesla employees are not permitted to install or assist in the installation of any non-Tesla component. Service to rectify any damage caused by the installation of unapproved components is not covered by any warranty.

**📄 NOTE:** Installing unapproved components might affect the serviceability of the vehicle. Tesla employees are not permitted to service any non-Tesla component. Should the vehicle require service of a Tesla system which has been modified, such service is regarded as Modified Service. Modified Service requires a signed [SC-18-00-008](#), “Authorization and Release for Modified Service”, and may not be covered by any warranty. Tesla is not responsible for any damage incurred to an unapproved component while performing a Modified Service.

**⚠ WARNING:** Modifications can affect vehicle performance and behavior, and might compromise vehicle safety. Tesla does not guarantee the usability, functionality, or reliability of the modification, nor will Tesla bear any responsibility to the consequences of the modification.

**⚠ CAUTION:** 2017-2023 Model 3 vehicles and Model Y vehicles manufactured before April 2024 are equipped with both an OBD-II J1962 ancillary port and a dedicated diagnostic port for Diagnostic over Internet Protocol (DoIP) usage. Do not connect an OBD-II J1962 to RJ45 Ethernet cable into an OBD-II J1962 ancillary port that does not support DoIP. Doing so may cause damage to electronic equipment. For more information, always refer to [Diagnostic Cables](#).

## Third-Party CAN Bus Connector Location

The OBD-II connector X181 is an SAE J1962 connector type A located under the LH side of the instrument panel (Figure 1). Depending on vehicle configuration, the connector can be accessed directly or by removing the LH footwell cover.

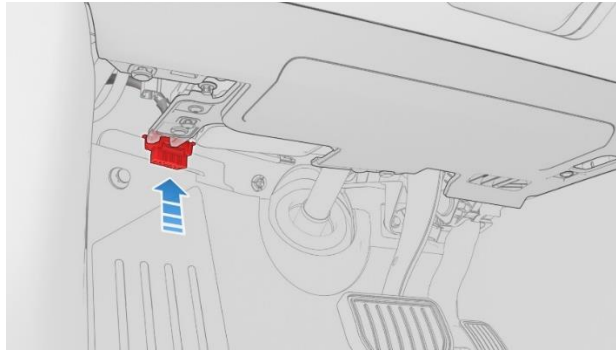
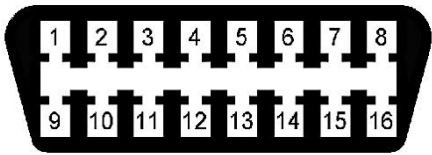


Figure 1 – Location of connector X181

## OBD-II Connector X181 Pinout and Considerations

The SAE J1962 connector type A offers a third-party CAN bus interface on Pin 6 and Pin 14. Additionally, chassis ground is available on Pin 4 and Pin 5, and Low Voltage+ is available on Pin 16.

	Pin 4	GND
	Pin 5	GND
	Pin 6	CAN HIGH - 500 kbps
	Pin 14	CAN LOW - 500 kbps
	Pin 16	ACCESSORY FEED 1 - Low Voltage+

While the vehicle is awake, the device connected to connector X181 can be powered through Pin 16 (ACCESSORY FEED 1). This pin can provide:

- 1000 mA of current on 2017-2023 Model 3 vehicles and Model Y vehicles produced before April 2024.
- 4000 mA of current for 2024+ Model 3 vehicles and Model Y vehicles produced April 2024 onwards.

**NOTE:** At the time of publication, the OBD-II connector on 2017-2023 Model 3 vehicles and Model Y vehicles produced until April 2024, also provides Low Voltage+ on Pin 3 and Pin 11. Low Voltage+ on these pins will be disabled in a future software update.

**NOTE:** If greater current capacity is required, refer to one of the following documents:

- [CD-19-17-001](#), “Model 3/Y 12V Power Circuit for Third-Party Accessories, First Generation Center Console” (not applicable for 2024+ Model 3).
- [CD-20-17-002](#), “Model 3/Y 12V Power Circuit for Third-Party Accessories, Second Generation Center Console” (not applicable for 2024+ Model 3).
- [CD-23-17-001](#), “LV Power Circuit for Third-Party Accessories - 2024+ Model 3”.

## Appendix: CAN Bus Signal Information (Additional Information for Taxi Meters)

The following CAN Bus signals are available for taxi meters:

Name	VCLEFT_taxi_Veh_GoToSleep	VCLEFT_taxiVehiclePowerState	VCLEFT_taxiVehicleSpeed
Message	VCLEFT_taxi	VCLEFT_taxi	VCLEFT_taxi
Message ID	261	261	261
Start bit	0	1	3
Length (Bit)	1	2	12
Byte Order	Intel	Intel	Intel
Value Type	Unsigned	Unsigned	Unsigned
Initial Value	0	0	-40
Factor	1	1	0.08
Offset	0	0	-40
Minimum	0	0	-40
Maximum	1	3	285
Unit	-	-	kph
Comment	Vehicle go to sleep reported for taxi meter	Vehicle power state reported for taxi meter	Vehicle speed reported for taxi meter

The signal VCLEFT\_taxiVehiclePowerState can provide the following values:

Value	Description
0x0	VEHICLE_POWER_STATE_OFF
0x1	VEHICLE_POWER_STATE_CONDITIONING
0x2	VEHICLE_POWER_STATE_ACCESSORY
0x3	VEHICLE_POWER_STATE_DRIVE