

Tech Tool Adapters and Cables Guide



5/23/2023

Tech Tool Adapters and cables
V1.18

Connection tips

- Always make sure Tech tool is up to date via the Client update on the Windows Tool bar. Major releases will be updated via memory stick, or disk sent through the mail.
- Always make sure the interface adapter has the latest drivers installed. The manufactures list driver updates on their web pages.
- Make sure the correct interface adapter is selected in Tech tool. You can check this under the settings tab on the product page. Make sure the adapter is showing .
- If there is no power light lit up on your adapter, check the fuse labeled Diagnostic tool or Diagnostic connector.
- Allow the Tech tool to identify the truck. Do not click the connect button when the product page first loads. They could take 1-2 minutes depending on the truck and adapter used. VMAC I trucks will require a manual selection.
- If you are experiencing connection issues, control unit mismatches, incorrect model or electrical system populate, or operations for that vehicle are missing, do the following. Disconnect the adapter from the truck and PC for at least 2 minutes. Click “Finish Work” on the product page in Tech tool. Go to the “Latest selections” list and remove the VIN you are having the issue with. Power cycle the truck for at least 10 seconds. Now re-connect to the truck. If the issue persists, contact the help desk.
- For more information on adapters, please see the Compatible Adapter Matrix at <http://www.premiumtechtool.com/technical-support/>.

Identifying your vehicles electrical system

Volvo

- **PRE-ELECTRONICS (Not in Tech tool).** Engines: D7, D7A, & D7B. These are mechanical engines, do not need to use Tech tool. **Requires service binder: PV776-K-VED7 or Impact.**
- **OLDER ELECTRICAL SYSTEM.** Engines: D12 & D12A. Engine ECU only. Used in the Volvo/White/GMC models. **No guided diagnostics in Tech tool, requires service manual: PV776-TSP162100 or Impact.** 6 or 9 pin diagnostics connector.
- **VEHICLE ELECTRONICS '98.** Engines: D12B, D12C, & D7C. Engine ECU only. Used in the VN, VHD, Volvo/White/GMC models. **No guided diagnostics in Tech tool, requires service manual: PV776-TSP144528 or Impact.** 6 or 9 pin diagnostics connector.
- **VERSION 1.** Engines: D12B, D12C, & D7C. Engine ECU and Vehicle ECU. VN & VHD models. **No guided diagnostics in Tech tool, requires service manual: PV776-TSP144528 or Impact.** 6 or 9 pin diagnostics connector.
- **VERSION 2.** Engines: D12D, D16D, US07 & US10 D11/D13/D16. Engine ECU and Vehicle ECU. VN, VHD, VAH models. Emissions use Two modules Engine ECU and Vehicle ECU. US10 Emissions added the Aftertreatment Control Module for the SCR system. Tech tool has guided diagnostics for US07+ Emissions trucks. **No guided diagnostics in Tech tool for D12D and D16D engines, requires service binder: PV776-K-D12D, PV776-K-D16D, or Impact.** Uses the 9 pin diagnostic connector.
- **VERSION 3.** Engines: D11/D13/D16 US13+ Emissions. VN, VHD, VAH. VNX models. Added the ISO powertrain data link, has the 16 pin OBD style connector. **Requires the Volvo/Mack specific 16 pin cable.**

Service manuals available at www.Volvotrucksemedia.com

Mack

- **VMAC I – 1990-1997.** Engine: E-7, Two modules: ECU and FIC (Fuel Injection Controller). Modules are located together, in front of passenger seat. **Requires a manual selection in Tech tool. No guided diagnostics in Tech tool, requires service manual: 8-201.** Uses a 6 or 9 pin diagnostic connector.
- **VMAC II – 1995-1997.** Engine: E-7. One module: ECU. Module is located in front of the passenger seat. The latest version of Tech tool should automatically identify the truck from this electrical system on. **No guided diagnostics in Tech tool, requires service manual: 8-206.** Uses a 6 or 9pin diagnostic connector.
- **VMAC III – 1998-2006.** Engines: E-7 ETECH, ASET AI, & ASET AC. Two modules: Engine ECU and Vehicle ECU. Engine ECU is mounted on the engine, Vehicle ECU is located in front of the passenger seat. **No guided diagnostics in Tech tool, requires service manual: 8-211.** 6 or 9 pin diagnostics connector.
- **VMAC IV – 2004-2013.** Engines: MP Series. US04-US07 Emissions use Two modules Engine ECU and Vehicle ECU. US10 Emissions added the Aftertreatment Control Module for the SCR system. Tech tool has guided diagnostics for US07+ Emissions trucks. **No guided diagnostics in Tech tool for VMAC IV US04 emissions, requires service manual: 8-213.** Uses the 9 pin diagnostic connector.
- **VMAC IV+ - 2014+.** Engines: MP Series. US13+ Emissions. Three modules: Engine ECU, Vehicle ECU, and Aftertreatment Control Module. Added the ISO powertrain data link, has the 16 Pin OBD style diagnostic connector. **Requires the Volvo/Mack specific 16 pin cable.**

Service manuals available at www.Macktrucksemedia.com

Volvo/Mack 6 pin diagnostic connector.



6 Pin diagnostic connector.
Data link: J1587/J1708 only.

ADAPTER	CABLE
VOCOM (88890300/88894000) VOLVO ONLY	98097089 Also requires 88890306 (FCI cable)
VOCOM (88890300/88894000) MACK ONLY	88890257 6 to 9 Pin adapter Also requires 88890302, or 88890315 (9 pin cable)
NEXIQ USB LINK	402048 (6/9 Pin Combo cable)
NEXIQ USB LINK 2	493148 (6/9 Pin Combo cable)
J-PRO/NOREGON DLA+	12172
DEARBORN DPA 4+	DG-J1939-04-CABLE (6/9 Pin Combo cable)
DEARBORN DPA 5	DG-DPA5-YDUALCAN (6/9 Pin Combo cable)

Volvo/Mack 9 pin diagnostic connector.



9 Pin diagnostic connector.
Data links: J1587/J1708 and J1939.
Black is for the 250k baud rate
Green is for the 500k baud rate.

ADAPTER	CABLE
VOCOM (88890300/88894000)	88890302 (Black, standard connection) 88890315 (Green, for OBD16 Cummins) 88894201 (adapter 16 pin to 9 pin vehicle)
NEXIQ USB LINK	402048 (6/9 Pin Combo cable)
NEXIQ USB LINK 2	493148 (6/9 Pin Combo cable)
J-PRO/NOREGON DLA+	12189
DEARBORN DPA 4+	DG-J1939-04-CABLE (6/9 Pin Combo cable)
DEARBORN DPA 5	DG-DPA5-YDUALCAN (6/9 Pin Combo cable)

Volvo/Mack 16 pin diagnostic connector

Details with pictures on following pages



16 Pin diagnostic connector.
Data links: J1587/J1708, J1939, and J2284
(ISO 14229).

ADAPTER	CABLE
VOCOM (88894000,88890300)	88894001 (blue)
NEXIQ USB LINK	442023
NEXIQ USB LINK 2	493013
J-PRO/NOREGON DLA+	12159
DEARBORN DPA 4+	N/A (adapter does not support ISO)
DEARBORN DPA 5	DG-V13-CABLE-KIT

VOCOM II Adapter

VOCOM II Tough 88894000

- Replaces the Vocom 88890300
- Supports J1708, J1939, ISO 14229, Ethernet
- Supports Ethernet with 88894001 cable
- Supports high speed programming in Tech tool.
- Wireless (Wi-Fi) capability, for all functions
- 2-year Warranty (proof of purchase required)
- Available from Volvo and Mack dealers or www.premiumtechtool.com
- Product support: 877-978-6586



USB cable adapter 88894010



VOCOM II Adapter

VOCOM II MINI 88894200

- Supports J1708, J1939, and ISO 14229.
- Supports high speed programming in Tech tool.
- Wireless only (Wi-Fi) for all functions
- Available from Volvo and Mack dealers or www.premiumtechttool.com
- Product support: 877-978-6586

88894201 (Optional 9 pin adapter only)

VCM shown here with the 16 to 9 pin vehicle adapter



VOCOM Cables

Cables are available from Volvo and Mack dealers or, at www.premiumtechtool.com www.volvotrucksemedia.com



part number: 88894001 For use with the VOCOM II (88894000) or VOCOM (88890300) adapter.
Blue end for current and future products.
16 Pin OBD style diagnostic cable.



part number: 88890253-this has been replaced with 88894001
For use with the VOCOM II (88894000) adapter or VOCOM (88890300) or
Green end with retainer clip
16 Pin OBD style diagnostic cable.



Volvo Part number: 88890315
For use with the Vocom II (88894000) Vocom (88890300) adapter.
Used to connect to Cummins equipped vehicles. Will also connect to older black 9 pin.



part number: 88890306
FCI cable used in conjunction with [Volvo Part number 9809709](#). and on some Euro vehicles

Vocom Cables Continued

Cables are available from Volvo and Mack dealers or, at
www.premiumtechtool.com www.volvotrucksemedia.com



Volvo part number: 88890313

For use with the Vocom (88890300) or Vocom II (88894000) adapter.

USB cable that connects the VOCOM to the PC.



USB cable adapter 88894010

For use with the Vocom (88890300) or Vocom II (88894000) adapter. Note that this does not include the USB cable.

Requires a Quality USB 2.0 cable with gold plated ends, max length is 3 feet.



Volvo part number: 88894201

For use with a 16-pin cable to adapt to a 9-pin vehicle



Mack part number: 88890257 6 to 9 Pin adapter. Used to hook to 6 Pin Mack trucks. For use with 88890302, or 88890315 9 Pin cables.

Nexiq Adapters

USB Link 3

Wired

<https://www.nexiq.com/Product/Detail/121054>

Wireless

<https://www.nexiq.com/Product/Detail/121052>

- Supports J1708, J1939, and ISO 14229.
- Does not support high speed programming in Tech tool.
- Product support: 800-639-6774



Nexiq Adapters

USB Link

- Supports J1708, J1939, and ISO 14229.
- Does not support high speed programming in Tech tool.
- Wireless capability.
- No longer available. Replaced by USB Link -2



USB Link 2

- Supports J1708, J1939, and ISO 14229.
- Does not support high speed programming in Tech tool.
- Wireless and Bluetooth capability.
- Product support: 800-639-6774



Nexiq USB Link and cables

Cables are available at www.nexiq.com.

USB Link

- Supports J1708, J1939, and ISO 14229.
- Does not support high speed programming in Tech tool.
- Wireless capability.
- No longer available. Replaced by USB Link -2



Nexiq part number: 402048

For use with the USB Link adapter.

Combination 6/9 pin diagnostic cable.



Nexiq part number: 442023

For use with the USB Link adapters. 16 Pin OBD style diagnostic cable.

Cannot use a standard OBD cable, must use this Volvo/Mack specific cable from Nexiq.



Nexiq USB Link 2 and cables

Cables are available at www.nexiq.com.

USB Link 2

- Supports J1708, J1939, and ISO 14229.
- Does not support high speed programming in Tech tool.
- Wireless and Bluetooth capability.
- Product support: 800-639-6774



Nexiq part number: 493148
For use with the USB Link 2 adapter.
Combination 6/9 pin diagnostic cable.



USB Link -2 only



Nexiq part number: 493013
For use with the USB Link 2 adapters. 16 Pin OBD style diagnostic cable.

J-PRO/Noregon Adapter

DLA+

- Supports J1708, J1939, and ISO.
- Does not support high speed programming in Tech tool.
- Noregon offers a wireless version, DLA+ wireless.
- Noregon also offers a DLA+/PLC version for trailer ABS fault tracing.
- Available at www.jprofleetproducts.com
- Product support: 855-889-5776.



J-PRO/Noregon Cables

Cables available at www.jprofleetproducts.com



J-PRO part number: 12172
For use with the all J-PRO adapters.
6 Pin diagnostic cable.



J-PRO part number: 12189
For use with all J-PRO adapters.
9 Pin diagnostic cable.



J-PRO part number: 12159
For use with all J-PRO adapters.
16 Pin OBD style diagnostic cable.

Cannot use a standard OBD cable, must use this Volvo/Mack specific cable from J-PRO/Noregon.

Dearborn Adapters

DPA 4+

- Supports J1708 and J1939.
- Does not support high speed programming in Tech tool.
- No wireless capability.
- Available at www.dgtech.com
- Product support: 317-248-9332



DPA 5

- Supports J1708, J1939, and ISO.
- Does not support high speed programming in Tech tool.
- Wireless capability.
- Available at www.dgtech.com
- Product support: 317-248-9332

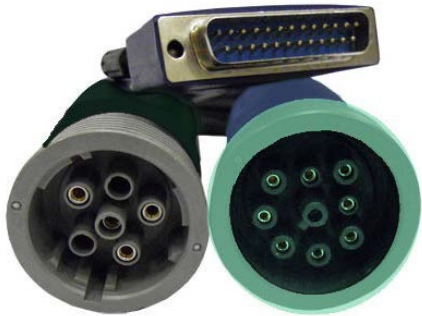


Dearborn Cables

Cables available at www.dgtech.com



Dearborn part number: DG-J1939-04-CABLE
For use with the DPA4+ adapter.
Combination 6/9 Pin diagnostic cable.



Dearborn part number: DG-DPA5-YDUALCAN
For use with the DPA5 adapter.
Combination 6/9 Pin diagnostic cable.



Dearborn part number: DG-V13-CABLE-KIT
For use with the DPA5 adapter.
Combination 9/16 Pin diagnostic cable.

Cannot use a standard OBD cable, must use this Volvo/Mack specific cable from Dearborn.