

Quick Reference Guide

Allison DOC™ For PC–Service Tool



WARNINGS AND NOTES

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WARNING: To avoid personal injury, the operator of the vehicle must not use or read the service tool while the vehicle is moving. Doing so can result in loss of vehicle control, which can cause vehicle damage and personal injury.
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WARNING: Only personnel other than the vehicle operator must use the service tool.
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WARNING: The vehicle operator must maintain control of the vehicle while an assistant performs the diagnostic evaluations.
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NOTE: Allison DOC™ For PC–Service Tool users must have a basic working knowledge of Microsoft® Windows 2000® and XP® Professional Operating System(s).
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NOTE: During TCM/ECU reprogramming, make sure the transmission controller is supplied with continuous power at all times, and ignition is on.

SYSTEM REQUIREMENTS

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- Microsoft® Windows® XP Professional, or Windows® 2000 (SP4 or later).
 - 20GB Hard Drive, or 40GB or greater (recommended)
 - 600 MB free hard disk space required (including the training videos).
 - 128MB RAM, or 256MB RAM or greater (recommended)
 - Pentium® III, 800 MHz (minimum), Pentium® 4, 2.0 GHz (recommended)
 - One USB port V1.1, or USB 2.0 (recommended)
 - Serial Port is required for J1850 and CEC1 communications.
 - 16x CD-ROM, or 48x Max. Speed or greater (recommended)
 - 1024 X 768 screen resolution
 - 256-color palette
 - Small Fonts
 - Internet connection capability (Internet Explorer® 5.0.1 or greater)
 - Windows® Media Player® Version 9 will be used to support video-based training materials installed by default.
 - Adobe® Acrobat Reader®—installed by default.

NOTE: Refer to the Readme.txt file for more information.

JA3434EN

INSTALLING THE ALLISON DOC™ FOR PC–SERVICE TOOL SOFTWARE

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1. Insert the Allison DOC™ For PC–Service Tool CD-ROM into your CD-ROM drive. Microsoft.net Framework 1.1 installation starts. Follow the instructions on the screen.
 2. If the installation process does not start automatically, do the following:
Using Windows Explorer, navigate to the CD-ROM drive and access the Setup file located at (CD-ROM drive):\\Setup.exe and double-click the file.
 3. The Acrobat® Reader® installation starts, and the License Agreement window displays.
 4. Do NOT reboot/restart if prompted by Acrobat® Reader® installation or Windows Media Player® installation.
 5. Click the Yes button to accept the license agreement and continue the installation. The Choose Destination Location window displays.
 6. The installation program automatically installs the Allison DOC™ For PC–Service Tool software at C:\\Program Files\\Allison Transmission\\Allison DOC™ For PC. You may choose another location by clicking the Browse button, navigating to the desired location, and clicking OK. Once the correct location displays as the Destination Folder on the Choose Destination Location window, click the Next button to continue installation.
 7. Choose whether or not to copy the training videos to the hard drive. Click Next.
 8. The Review Settings windows appear for a final confirmation. Click Next.
 9. The Setup Status window displays to show the progress of the Allison DOC™ For PC–Service Tool setup. This might take a few minutes.
 10. The View Readme file option displays.
 11. The InstallShield® Wizard Complete window displays to indicate that the installation has completed successfully. Restart the PC before attempting to run the program.
 12. Click the Finish button to exit the setup process.

CONNECTING THE SERVICE TOOL TO THE VEHICLE

The J 47943 Connection Diagram on the back illustrates all the components you need to establish communication with the transmission control module. Optional connection diagrams are also on the back showing J 44652-A and CEC Translator devices.

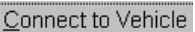

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1. The Allison DOC™ For PC–Service Tool Installation CD
 2. The Dearborn DPA4 USB Translator Device package (SPX P/N: J 47943), which includes:
 - a. USB cable
 - b. DPA4 USB translator device
 - c. “Y” shaped cable J 47943-2 with 6-pin Deutsch Connector cable for J1708 communications and 9-pin Deutsch Connector cable (for both J1939 and J1708 communications).
 3. The J 47949 - GMLAN Cable is required for GMLAN communications. This cable is not included in the DPA4 USB package, but is available for purchase from SPX/Kent-Moore.

SPX Corporation (Kent-Moore Service Solutions)
28635 Mound Road
Warren, MI 48092
Phone: 1-800-328-6657
Fax: 1-800-578-7375

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NOTE: For More information go to www.allisontransmission.com -> Service -> Diagnostic Tools -> Translator Devices.

CONNECTING TO THE TCM/ECU

1. From the Warnings window of the Allison DOC™ For PC–Service Tool, click the  button. The Connect/Disconnect window appears.
 2. Select the Transmission Type from the options displayed.
 3. Check the SmartConnect box.
 4. Click the  button.
 5. Upon a successful connection, the Trouble Code window displays.

BASIC CONNECTIVITY TROUBLESHOOTING

- Make sure the ignition is ON.
 - Make sure all the cables and connectors are in good condition.
 - Make sure that you have selected the correct transmission type.
 - Make sure that your PC meets all the platform requirements to run Allison DOC™ For PC–Service Tool.
 - Disconnect the translator device from both the PC and the diagnostic connector and reconnect it in order to recycle power on the translator device.
 - Before attempting to connect, disable any virus scan software or any other active application that could be delaying the data going in/out the PC.
 - Make sure you have the correct translator device driver version installed on your PC.
 - Close the application, disconnect the translator device from the PC, reboot the PC and try to reconnect.

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NOTE: For INSTALLATION or CONNECTIVITY problems, please contact SPX Kent-Moore at 1-800-328-6657 or 1-800-578-7375.

ACCESS TO DIAGNOSTIC SCREENS

After connection, you can navigate through the different diagnostic screens using the F3 button on the keyboard, clicking on the F3—Diagnostics command button, or clicking Diagnostic on the menu bar. You can select:

- Trouble Code—Default screen after connection. DTC information with links to troubleshoot-ing manuals, and other data items.
 - Performance Complaint—Provides a list of commonly known transmission complaints with links to troubleshooting steps.
 - Data Monitor—Displays Transmission data items (Diagnostic Data), Solenoid Information, Shift Inhibits, and I/O status information.
 - TCM/Calibration Information—Provides information related to current CMC settings, I/O information, SEM/LRTP information, and other TCM calibration information.
 - Custom Data Monitor—Allows the user to select specific diagnostic data.
 - DTC Test—Displays whether the TCM has performed DTC test to determine if a DTC is active or not.
 - Failure Record—Shows a list of transmission parameters recorded when a specific DTC occurred.
 - Graphics Monitor—Allows the user to view transmission parameters in a graphical manner.
 - Strip Chart—Displays user selectable transmission parameters (up to 8 parameters) on a graphical strip chart.
 - Data Bus Traffic Viewer —Allows the user to view and collect raw data from the data bus, as well as monitoring SAE J1939 transmission messages in engineering units.

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NOTE: For more information, please refer to the Allison DOC™ For PC–Service Tool User Guide (GN3433EN).

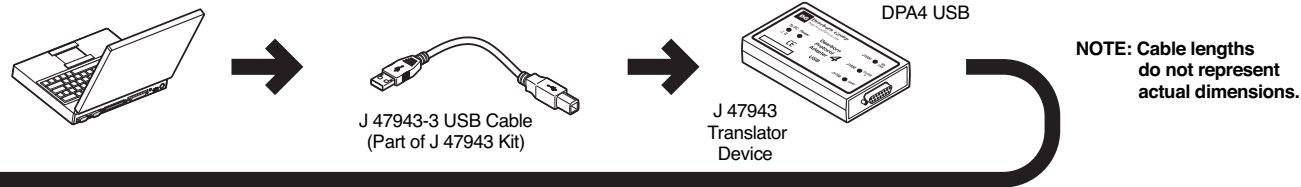


J 47943 DPA4 USB

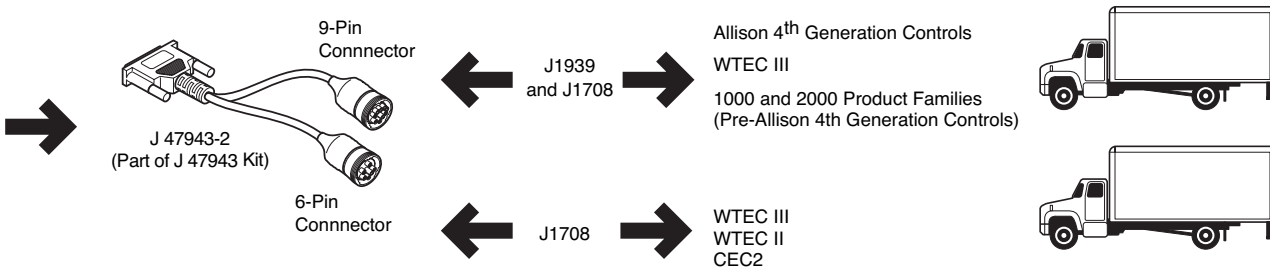
Allison DOC™ For PC-Service Tool Connection Diagrams

SPX KENT-MOORE

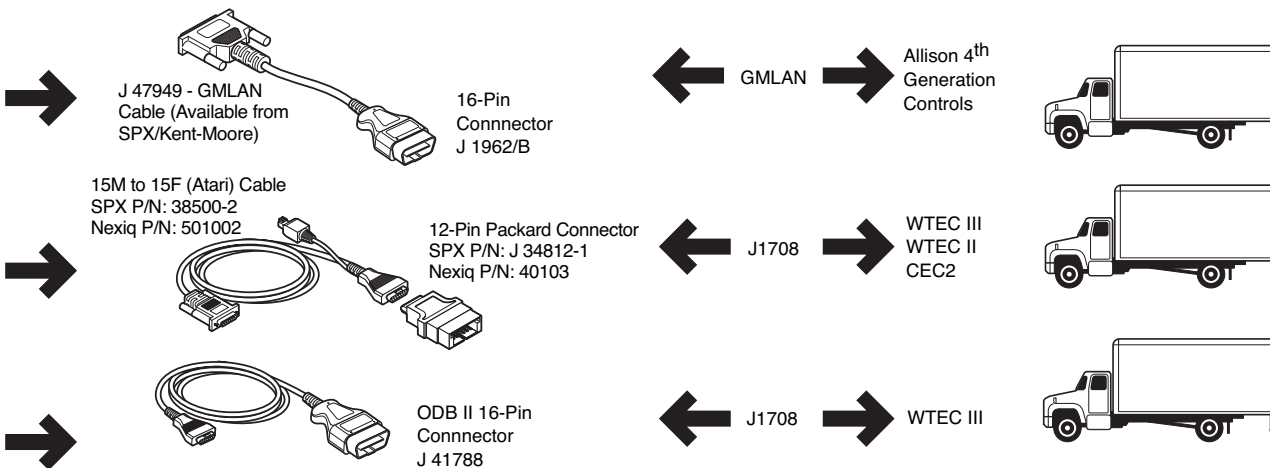
Phone: 1-800-328-6657
Fax: 1-800-578-7375



Used with J 47943



Optional Vehicle Interface Adapter Connections



CEC2, WTEC II, WTEC III, 1000 and 2000 Product Families (Pre-Allison 4th Generation Controls), and Allison 4th Generation Controls

V09364.00.00

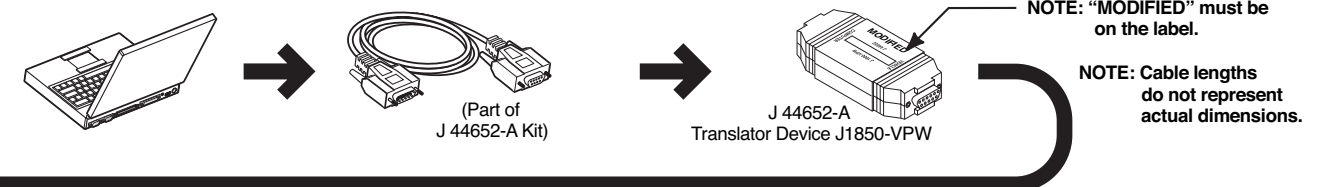


J 44652-A J1850-VPW

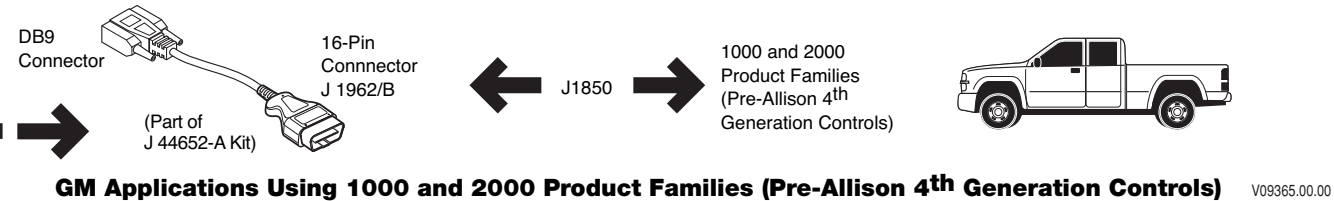
Allison DOC™ For PC-Service Tool Connection Diagrams

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Used with J 44652-A



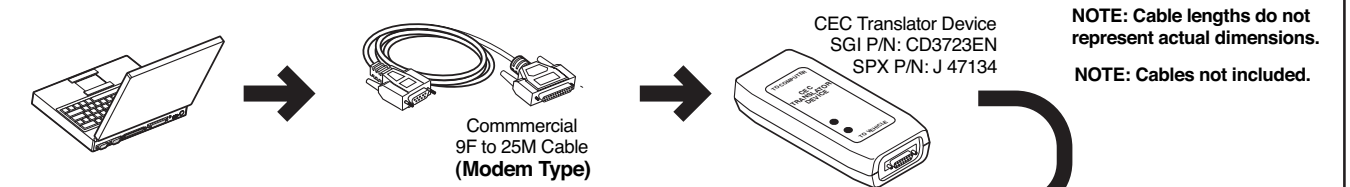
Allison Transmission CEC Translator Device

Allison DOC™ For PC-Service Tool Connection Diagrams

For Purchase Contact:

SGI, Inc.
Phone: 1-888-666-5799
Fax: 1-317-471-4996

SPX Kent-Moore
Phone: 1-800-328-6657
Fax: 1-800-578-7375



Used with CEC Translator Device

