NEXIQ Brake-Link™ Operator's Manual

NEXIQ
TECHNOLOGIES™

NEXIQ Brake-Link™ Operator's Manual

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Getting Started

Thank you for choosing NEXIQ Brake-Link™. Brake-Link™ is a hand-held diagnostic tool primarily designed to troubleshoot heavy-duty vehicle Anti-lock Brake Systems (ABS). Use it to view ABS data points and trouble codes; access and edit Electronic Control Unit (ECU) configurations; and perform special diagnostic tests.

Brake-Link™ is also a *PC-to-Vehicle Interface*, allowing you to connect your PC to the vehicle with Brake-Link™ and use *any* RP1210A-compliant OEM PC application to diagnose the applicable system.

This chapter gets you started with safety warnings and cautions, and an overview of the documentation.

Safety Warnings & Cautions

To protect yourself from injury and the test vehicle from damage:

✔ Always wear approved eye protection.

✔ Always refer to and follow the vehicle manufacturer's WARNINGS, CAUTIONS and service procedures.

✔ Exhaust gas contains deadly poison. Always test outdoors *or* use properly vented exhaust hose.

✔ Keep yourself and your test equipment clear of all moving or hot engine parts.

✔ Unless otherwise noted, set the parking brake and place the gear selector in the NEUTRAL or PARK position. If the vehicle has an automatic parking brake release, temporarily disconnect the release mechanism. Also, block the drive wheels before performing a test with the engine running.

✔ Unless otherwise directed, turn the ignition switch OFF before disconnecting or connecting any electrical components.

✔ Read and understand this manual before operating your NEXIQ Brake-Link™.

✔ NEXIQ Technologies recommends having an assistant drive the vehicle while you use the NEXIQ Brake-Link™ to perform vehicle road testing.

✔ Never leave the vehicle unattended while testing.

Certain Electro-Static Discharge (ESD) and/or Electrical Fast Transient (EFT) events may lock up the NEXIQ Brake-Link™. Disconnect the NEXIQ Brake-Link™ from the power source and re-connect to regain full operation.

Documentation Overview

NEXIQ Brake-Link™ features task-oriented documentation that is divided into the following operator's manuals.

 📖 This manual, **NEXIQ Brake-Link™ Operator's Manual** provides:

  — a list of safety warnings and cautions.

  — an introduction to the Brake-Link™.

  — information on how to connect the Brake-Link™ to the vehicle.

  — descriptions for general Brake-Link™ navigation principles.

  — instructions for using the *GENERIC PLC TEST* and the *RP1210A PC LINK* options.

  — warranty and service information.

 📖 **NEXIQ Brake-Link™ Bendix® & Eaton ®ABS Applications Operator's Manual** details navigating and using the Bendix® & Eaton® ABS Applications.™

 📖 **NEXIQ Brake-Link™ Haldex Trailer ABS Application Operator's Manual** details navigating and using the Haldex Trailer ABS Application.

 📖 **NEXIQ Brake-Link™ Meritor WABCO ABS Application Operator's Manual** details navigating and using the Meritor WABCO ABS Application.

 📖 **NEXIQ Brake-Link™ Wabash National ®** ABS Application Operator's Manual details navigating and using the Wabash National® ABS Application.

Specialized Text

These manuals feature the following specially formatted text to help you differ-entiate software elements presented by the NEXIQ Brake-Link™.

- • *MENU ITEMS*: Whenever the manual instructs you to select from a list of menu items, it presents the desired choice with the formatting you see here, e.g., "From the main menu, select *J1708/J1587 BUS*." If a task re-quires multiple menu selections, a " ▶ " appears between each menu selection, e.g., "Select *TESTS* ▶ *ABS WARNING LAMP*..."

- • **Screen titles**: Once you select a menu item, NEXIQ Brake-Link™ pre-sents the selected item's screen. A screen may display information or present another list of menu items. The screen title appears in bolded type, e.g., "From the **Protocol Selection** menu, select *PLC/ENHANCED MODE*."

- • **Field/Line**: The manual presents a field or line of text from a display with this formatting. For instance, "The **Request Lamp** line updates to reflect the current request."

- • *Emphasis*: This format draws your attention to particularly important information.

Navigation Icons

Brake-Link™ offers two methods of navigation: **menu** and **direct access buttons**. *See "Navigating Brake-Link™", on page 22.* Most tasks can be per-formed with both methods. Depending on the task, the manual may provide a separate set of instructions for each navigation method. The following icons indicate the navigation method for the given set of instructions.

⬆⬅ Exhaust the modulators ***via menu navigation***:

(Direct Access) Exhaust the modulators ***via buttons navigation***:

General Icons

These manuals also present icons that denote specific types of peripheral information.

Troubleshooting Tips help you diagnose or anticipate potential issues.

Caution Tips help you avoid injury or prevent damage to NEXIQ Brake-Link™.

Frequently asked questions, industry definitions and other relevant background information

Introducing NEXIQ Brake-Link™

Brake-Link™ is a multi-faceted, hand-held diagnostic tool primarily designed to trouble-shoot heavy-duty vehicle Anti-lock Braking Systems (ABS). It also translates vehicle data for use as a PC-Vehicle Interface.

This chapter introduces NEXIQ Brake-Link™, explains how to connect to a vehicle, and provides an overview of tool navigation.

Introducing NEXIQ Brake-Link™

NEXIQ Brake-Link™ is a hand-held, ABS diagnostic tool primarily designed to support:

- Bendix® ABS Tractor controllers: EC-17 and EC-30

- Bendix® ABS Trailer controllers: EC-30T, Generation 4 and 5 (formerly of Eaton®)

- Haldex Trailer ABS controllers: PLC, PLC Plus, and PLC Select

- Meritor WABCO Trailer ABS controllers: Easy-Stop™ (TCS I) and Enhanced Easy-Stop™ (TCS II)

- Wabash National® Trailer ABS controllers: MBS-1®P and MBS-2®

You can use the Brake-Link™ to view data points and trouble codes; access and edit Electronic Control Unit (ECU) configurations; and perform special diagnostic tests. (See the applicable manufacturer-specific Brake-Link™ manual for detailed information on these applications.)

Brake-Link™ also offers a *generic* Trailer ABS Warning Lamp diagnostic application that supports *all* controllers equipped with the Power Line Carrier Communication Network. See Chapter 3, "Using Generic PLC Test"

Brake-Link™ supports J1708 and Power Line Carrier (PLC) Communications, which provides a variety of connection configurations. See "Connecting Brake-Link™ Components", on page 13.

In addition to its diagnostic capabilities, Brake-Link™ is a *PC to Vehicle Interface Device*. It translates J1708 and/or Power Line Communications, coming from vehicle data buses, to serial data that the PC COM port can accept. Use it to interface a vehicle with *any* RP1210A compliant OEM PC application. See Chapter 4, "Using RP1210A PC Link" for details.

Finally, Brake-Link™ offers two means of navigation: **menu navigation** and **direct access**. While you're learning to use Brake-Link™, menu navigation allows you to navigate through options presented on the display to find what you're looking for. After you have become familiar with the tool, the direct access method allows you to quickly access the functions you need, without having to navigate through options.

Refer to "Navigating Brake-Link™", on page 19 for details on using these navigation options.

The remainder of this chapter describes Brake-Link™ features, explains how to connect the Brake-Link™ components, and provides an overview of the two navigation methods available.

> **Note:** For information purposes, these manuals refers to *all* components/accessories compatible with NEXIQ Brake-Link™. Refer to the *Inventory Sheet* that accompanied your Brake-Link™ to find out which components are included with the standard kit. Order additional components and accessories from NEXIQ Technologies Call 1-800-639-6774 or visit www.nexiq.com.

Identification Tag

The ID Tag on the back of the Brake-Link™ provides the model number and the unit's serial number. Refer to this ID tag if you require service. (See Appendix A, "Warranty & Service".)

Figure 2.1 *NEXIQ Brake-Link™ Identification Tag*

LCD Display

Brake-Link™ contains a *liquid crystal display* (LCD) that presents four, 20-character lines. The backlit display enables you to read the screen regardless of the available light. The lines of the LCD text typically show menu options, navigational instruction, and system status information, as applicable.
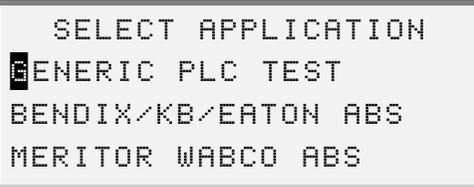
```
    SELECT APPLICATION
█ENERIC PLC TEST
BENDIX/KB/EATON ABS
MERITOR WABCO ABS
```

Buttons

Brake-Link™ features a sealed membrane keypad that prevents contamination from grease and most fluids. See "Navigating Brake-Link™", on page 19, for an overview of button functionality.

> **Note:** Clean the keypad with a damp cloth or mild cleaner as needed. DO NOT immerse Brake-Link™ in any substance.

Serial Port

The serial port (labeled **To Personal Computer** on the tool's front panel) accommodates the 9-pin serial cable. Use this port to connect Brake-Link™ to a PC to:

- use the *RP1210A PC LINK* option. See Chapter 4, "Using RP1210A PC Link".

- update Brake-Link™ software.

Serial Cable

Figure 2.2 *Serial Port*

Data Port

The data port (labeled **To Vehicle** on the tool's front panel) accommodates the Power/Data cable.

Data Cable with
Atari End

Power Cable with
Cigarette Li ghter
Connector

DB15 C onnector
(male)
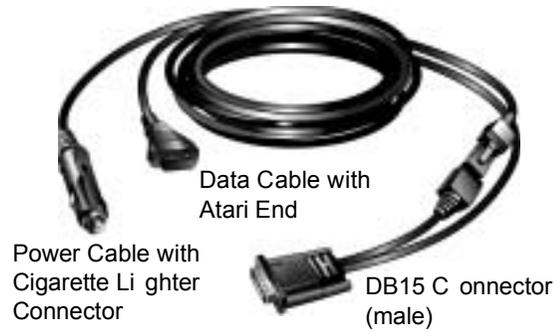
Figure 2.3 *Power/Data Cable*

The Power/Data Cable contains two cables that converge into a single DB15 (male) connector. The Power Cable is actually a separate cable that plugs into the Data Cable.

NEXIQ Brake-Link™ requires a 12V power supply. If you're attached to a truck via a powered connector, such as the Deutsch, the Power Cable is not required; the Data Cable is *always* required.

The cigarette lighter plug on the Power Cable contains a 3-amp fuse. If the NEXIQ Brake-Link™ powers up with the Deutsch or another powered connection, but does not power up with the Power/Data cable, test the cigarette lighter plug with an ohm meter.

The Power/Data cable attaches to a vehicle interface cable. The next section describes vehicle interface cable options and explains how to connect the components.

Connecting Brake-Link™ Components

Brake-Link™ interfaces with the vehicle's ECU(s) via:

- the 6- or 9-pin Deutsch connector, typically located under the dash, beside the driver's seat or near the trailer's brake ECU;

  or

- the J560 power line connector on the outside of the tractor or trailer.

Determining which connector (and adapter) to use depends on:

- which application you plan to use;

- which portion of the vehicle you need to diagnose;

- whether the tractor is attached to the trailer;

- which connectors are available on the vehicle;

- whether the ECU is configured to support *Enhanced PLC Mode*.

? *Do you know what Enhanced PLC Mode is?*

Older brake ECUs transmit diagnostic information over the J1708 Bus *only*—accessing both Tractor and Trailer Brake ECUs requires independent connections. Newer ECUs offer **Enhanced PLC Mode**—they can send diagnostic information over the power line. If the tractor and trailer are connected, access both ECUs via a single connection. See the manufacturer's service manual or the "Selecting a Protocol" discussion in the applicable Brake-Link™ operator's manual to find out if the ECU you're working on supports Enhanced PLC Mode.

Use the following table to help you decide which connector (and adapter) to use with each application. Connection diagrams and detailed instructions follow the table.

RP1210A PC LINK	
If you are testing the...	**Connect to the...**
Tractor Only	Deutsch
Trailer Only	If Trailer ECU supports Enhanced PLC Mode, connect to the J560 power line; otherwise, connect to the Deutsch (if available).
Tractor/ Trailer Together	If you need to communicate with a Tractor, or a Trailer ECU that supports Enhanced PLC Mode, connect to the Tractor Deutsch.
	If you need to communicate with a Trailer ECU that doesn't support Enhanced PLC Mode, connect to the Trailer Deutsch (if available).
GENERIC PLC TEST	
If you are testing the...	**Connect to the...**
Tractor Only	Deutsch or J560 Power Line
Trailer Only	J560 Power Line
Tractor/ Trailer Together	Connect to the Tractor Deutsch to communicate with both ECUs via a single connection.

BENDIX & EATON ABS APPLICATIONS	
If you are testing the...	**Connect to the...**
Tractor Only	If the Tractor ECU supports Enhanced PLC Mode, use either connector. If it doesn't, use the Deutsch Connector.
Trailer Only	If the ECU supports Enhanced PLC Mode, connect to the J560 Power Line; otherwise, connect to the Deutsch (if available).
Tractor/ Trailer Together	If the Trailer ECU supports Enhanced PLC Mode, connect to the Tractor Deutsch to communicate with both ECUs via a single connection. If it doesn't, attach to the Trailer and/or Tractor Deutsch Connectors separately.
HALDEX TRAILER ABS	
If you are testing the...	**Connect to the...**
Tractor Only	Not Applicable. This application supports Trailer ECUs only.
Trailer Only	J560 Power Line
Tractor/ Trailer Together	Tractor Deutsch
MERITOR WABCO ABS	
If you are testing the...	**Connect to the...**
Tractor Only	Not Applicable. This application supports Trailer ECUs only.
Trailer Only	If the ECU supports Enhanced PLC Mode, connect to the J560 Power Line; otherwise, connect to the Deutsch if available.
Tractor/ Trailer Together	If the Trailer ECU supports Enhanced PLC Mode, connect to the Tractor Deutsch to communicate with both ECUs via a single connection. If it doesn't, attach to the Trailer and/or Tractor Deutsch Connectors separately.

WABASH NATIONAL ABS	
If you are testing the...	**Connect to the...**
Tractor Only	Not Applicable. This application supports Trailer ECUs only.
Trailer Only	J560 Power Line
Tractor/ Trailer Together	Tractor Deutsch

Figure 2.4 shows how to connect Brake-Link™ components for use as an *RP1012A PC LINK*. See Chapter 4, "Using RP1210A PC Link".

Figure 2.5 shows how to connect them for standard ABS diagnostics. Detailed connection instructions follow the diagrams.

**Figure 2.4** *Connectivity diagram to Interface the PC with the Vehicle*
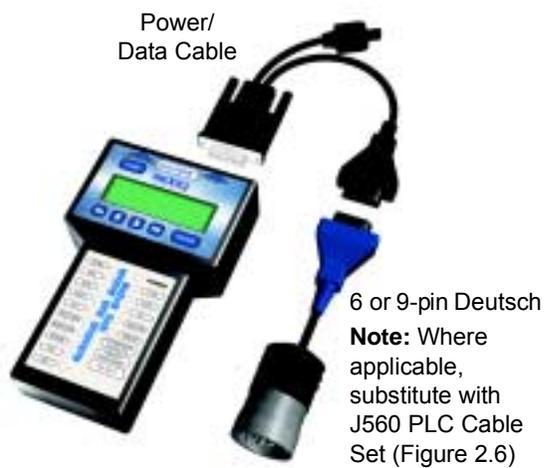
Figure 2.5 *Connectivity diagram for standard brake system diagnostics.*

Use the J560 PLC Cable Set in place of the Deutsch adapter if you plan to attach to the Tractor or Trailer's Power Line Connector.

← Quick
Disconnect

Figure 2.6 *J560 PLC Cable Set*

To connect Brake-Link™ components:

1 If you're using Brake-Link™ as a ABS diagnostic tool, go to Step 3.

   If you're using Brake-Link™ as a PC-to-Vehicle interface, attach the female end of the 9-Pin Serial Cable to a COM Port located on the back of your PC; then tighten the thumbscrews to secure the cable.

2 Connect the male end of the 9-Pin Serial Cable to the Serial Port (labelled **To Personal Computer**) on the Brake-Link™; then tighten thumbscrews.

3 Attach the Power/Data Cable DB15 Connector to the data port (labelled **To Vehicle**) on the Brake-Link™; then tighten the thumbscrews.

4 Plug the Data Cable Atari End (Figure 2.3, page 12) into the Atari End on the Deutsch adapter or J560 PLC Cable Set.

5 Attach the vehicle interface cable to the vehicle.

   — If you're using the J560 PLC Cable Set, plug into the Power Line Connector on the outside of the Tractor or Trailer.

If you're connecting to a tractor, use the **Quick Disconnect** *(Figure 2.6) to remove the alligator clips from the cable set first. Since the tractor provides power, the alligator clips are unnecessary and could potentially cause a short.*

— If you're using the Deutsch Adapter, plug into the Deutsch connector typically located under the dash on the driver's side, beside the driver's seat or near the brake ECU on the Trailer.

Note: Not all Trailers are equipped with Deutsch connectors.

6 If you're using the J560 PLC Cable Set to attach to the *Trailer*, connect the alligator clips to an external power supply; otherwise, turn the tractor's key to the "on" position.

Navigating Brake-Link™

Brake-Link™ offers the following navigation options:

• Menu navigation: use arrow buttons to traverse the application menus.

• Buttons navigation: use direct access buttons to access specific Brake-Link™ options directly.

Note: Both methods utilize HOME , ENTER and the arrow buttons (just below LCD).

This section provides an *overview* of button functionality. Refer to the procedures discussed in the manufacturer-specific Brake-Link™ manuals for details on which buttons to push and when, based on the application you're using.

Home Button

Press the HOME button to return to the **Select Application** screen.
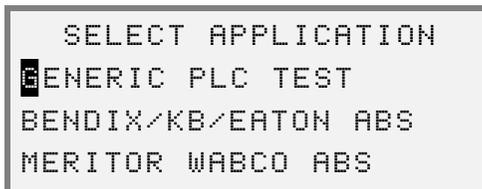
```
   SELECT APPLICATION
GENERIC PLC TEST
BENDIX/KB/EATON ABS
MERITOR WABCO ABS
```

Note: This button does not function if the screen displays "[ENTER] TO CONTINUE".

Enter Button

Press the ENTER button to select a menu item, confirm a response, or instruct Brake-Link™ to proceed to the next step.

Menu Buttons

If you choose *MENU NAVIGATION*, use the menu buttons (located below the tool's LCD) to navigate through the menu screens.
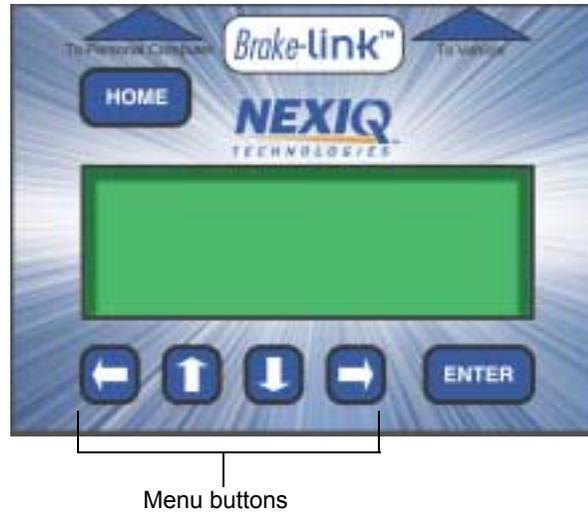
Menu buttons

Figure 2.7 *Menu buttons*

When the LCD displays a list of information or an options menu,

- press the ⬆ or ⬇ key to scroll through the list or menu;

  Note: A dashed line displays after the last data item/option indicating the end of the list/menu.

- press ENTER to select the option marked with a blinking cursor;

- press ⬅ to exit your selection and return to the previous menu or screen.

Direct Access Buttons

The *direct access buttons* reside on the lower portion of the Brake-Link™ keypad. Notice they are grouped by functionality. These buttons operate differently depending on the application you're using. Refer to the applicable manufacture-specific Brake-Link™ Operator's Manual for details.


Button group tags
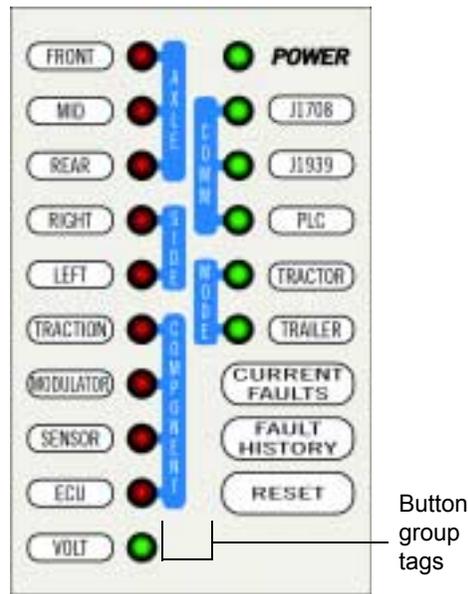
Figure 2.8 *Direct Access Buttons*

Light Emitting Diodes (LEDs)

The **POWER** LED indicates whether Brake-Link™ is receiving power. The **COMM** and **MODE** LEDs light up, according to the Brake-Link™ operation(s) you select.

The rest of the LEDs operate differently depending on the application you're using. Refer to the manufacturer-specific Brake-Link™ manual.

Red Fault LEDs
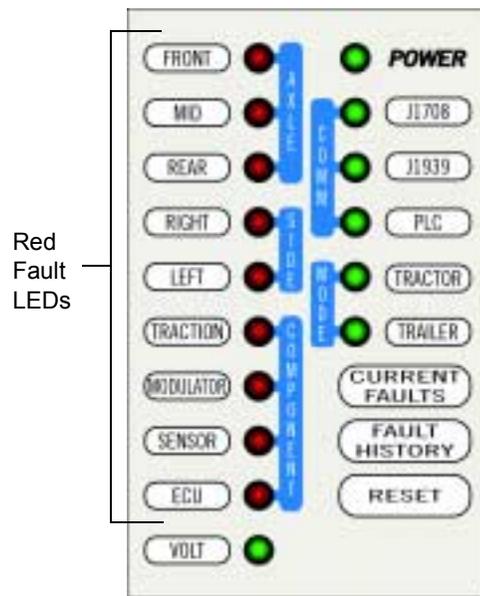
Figure 2.9 *Light-Emitting Diodes*

Using Generic PLC Test

Brake-Link™ offers a *generic* Trailer ABS Warning Lamp diagnostic application that supports *all* controllers equipped with the Power Line Carrier (PLC) Communication Network (see SAE protocol J2497). Use the ***GENERIC PLC TEST*** to:

• test the in-dash Trailer ABS Warning Lamp;

• detect the *Trailer ABS Warning Lamp illumination message* sent from the trailer's brake ECU (electronic control unit) over the PLC.

Testing Trailer ABS Warning Lamp

All 2001 or newer tractors/trailers are required to support an in-dash Trailer ABS Warning Lamp that illuminates if the trailer's brake ECU detects a fault. Use Brake-Link™ to force the warning lamp on and off to ensure proper functioning.

⬆️⬅️ To test the Trailer ABS Warning Lamp:

1 Connect Brake-Link™ to the tractor (see "Connecting Brake-Link™ Components", on page 14).

2 Turn the tractor key to the "on" position. Brake-Link™ boots up and presents the **Select Application** screen.

```
    SELECT APPLICATION
 GENERIC PLC TEST
 BENDIX/KB/EATON ABS
 MERITOR WABCO ABS
```

3 Press the [⚫] or [⚫] key to select *GENERIC PLC TEST*; then press [ENTER] Brake-Link™ displays the **Generic PLC Test** options.

4 Press the [⚫] or [⚫] key to select *TEST TRAILER LAMP*, then press [ENTER]

```
       SELECT ONE
 TEST TRAILER LAMP
 DETECT PLC MESSAGE
```

Brake-Link™ presents the following screen.

```
     PRESS [ENTER]
     TO TURN TRAILER
      ABS LAMP ON
     [←] TO EXIT
```

5 Press ENTER to turn the lamp on and off.

If the light is on and you turn it off, expect a 2.5 second delay. The ECU must receive the **OFF** message for a full 2.5 seconds before it will turn off the light. This prevents the lamp from flickering if there's a faulty message. Also, NEXIQ Brake-Link™ will *not* override an **ON** message coming from the trailer ECU.

6 Press [◆] to return to the **Generic PLC Test** options menu.

Detecting PLC Message

The trailer's brake ECU sends a message to the tractor's ECU, via the PLC, which governs illumination of the in-dash Trailer ABS Warning Lamp.

- If the trailer's brake ECU detects a fault in the ABS, it sends an ON (MID 10) message, which lights the lamp.

- If the trailer's brake ECU does not detect a fault, it sends an OFF (MID 11) message.

The *DETECT PLC MESSAGE* test detects the illumination message, if any, sent by the trailer's brake ECU. The test reports "N/A" (no message) under the following circumstances:

- the ECU is not functioning

- the vehicle is not equipped with PLC communications

- there is a fault in the PLC itself

> **Note:** You need an external 12V power supply to provide power to the trailer if you're using the J560 PLC Cable Set.

To Detect the PLC Message:

1 Connect Brake-Link™ to the trailer (see "Connecting Components", on page 6).

— If the trailer is attached to the tractor, connect Brake-Link™ to the tractor's Deutsch connector.

> **Note:** The Deutsch connector is typically located under the dash on the driver's side or beside the driver's seat.

2 Turn the key to the "on" position if you have connection to the *tractor*.

— If you have connection to the *trailer*, clip the J560 Cable Set alligator clips to an external 12V power supply.

Brake-Link™ boots up and presents the **Select Application** screen.

```
  SELECT APPLICATION
GENERIC PLC TEST
BENDIX/KB/EATON ABS
MERITOR WABCO ABS
```

3 Press the ⬛ or ⬛ key to select *GENERIC PLC TEST*; then press ENTER Brake-Link™ displays the **GENERIC PLC TEST** options.

```
     SELECT ONE
TEST TRAILER LAMP
DETECT PLC MESSAGE
```

4 Press the ⬛ or ⬛ key to select *DETECT PLC MESSAGE*, then press ENTER Brake-Link™ displays the value of the message sent from the trailer's brake ECU.

```
    TRAILER ABS
 WARNING LAMP STATUS


       ON
```

— **ON** indicates the trailer's brake ECU is detecting a fault and is requesting the tractor's ECU to turn on the in-dash Trailer ABS Warning Lamp.

— **OFF** indicates the trailer's brake ECU is *not* detecting a fault and is requesting the tractor's ECU to turn off the in-dash Trailer ABS Warning Lamp.

Note: Brake-Link™ waits 2.5 seconds prior to displaying **OFF,** to ensure that it's not a faulty message. This corresponds to tractor ECU functionality.

— **N/A** indicates Brake-Link™ isn't detecting a message; either the ECU is not functioning properly, the ECU is not equipped with PLC communications, or there is a fault in the PLC.

Note: If the lamp is on and you turn it off or if the ECU is sending the **OFF** message when you initiate the test, NEXIQ Brake-Link™ displays an **N/A** for 2.5 seconds.

5 Press [　◆　] to return to the **Generic PLC Test** options menu.

Chapter **4**

Using RP1210A PC Link

▼ *Installing the Brake-Link™ Driver, page 30*

▼ *Initiating PC/Vehicle Communications, page 34*

In addition to providing tractor/trailer diagnostics, Brake-Link™ also provides serial data communication by translating J1708 and Power Line Communications vehicle data to serial data, which can then be communicated to your PC's COM port. This feature allows you to interface RP1210A-compliant OEM PC applications with heavy-duty vehicle electronic control units (ECUs).

This chapter explains how to install the device driver necessary for using Brake-Link™ as a PC to Vehicle Interface and how to initiate communications.

Installing the Brake-Link™ Driver

Using Brake-Link™ as a PC-to-Vehicle Interface requires installing a device driver on your PC/laptop. This section provides detailed installation instructions.

> **Note:** This device driver is compatible with Microsoft® Windows® 95, 98, 2000, ME, XP and NT.

To install the Brake-Link™ device driver:

1 Close all programs and insert the installation floppy into the floppy drive.

2 From the Windows® taskbar, select *Start* ▶ *Run*.The **Run** dialog displays.

3 Type A:\SETUP.EXE, then click the OK button.
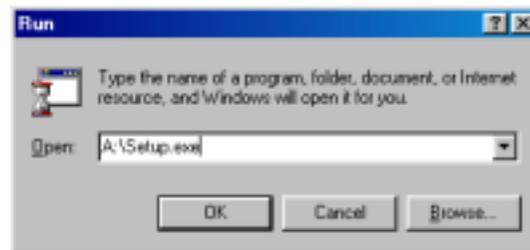
Figure 4.1 *Windows® Run Dialog*

The installation **Welcome** screen displays.

Figure 4.2 *Installation Welcome Screen*

4 Read the installation details, then click the NEXT> button.

Once the **Copyright Notice** screen appears; read *all* information pre-sented in this dialog.
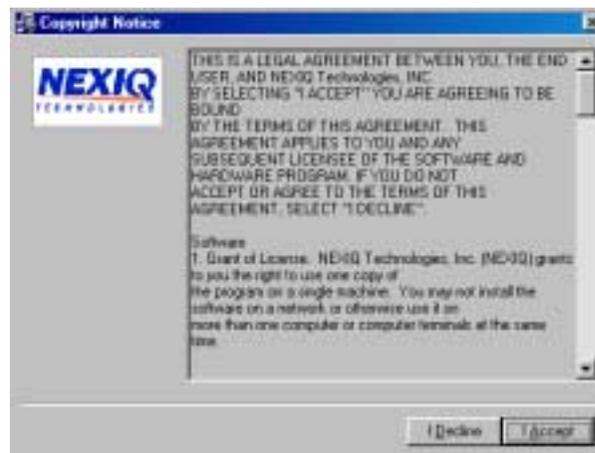
Figure 4.3 *Copyright Notice Screen*

5 Click the I ACCEPT button if you accept to the terms of the license agreement.

— If you do not accept the terms, click the I DECLINE button. The instal-
lation program prompts you for confirmation; click EXIT SETUP to
cancel the installation.

The **Backup Replaced Files** screen displays prompting you to indicate
whether you want to create back up files.

Figure 4.4 *Backup Replaced Files Screen*

6 Click inside the YES radio button to create a backup of each file the
installation program will update.

— If you do not want to create backup files, click inside the NO radio
button to skip replaced file backup.

> **Note:** If you're unsure, click YES.

7 Click NEXT> to continue.

— If you declined replaced file backup, go to Step 12.

If you elected to backup replaced files, the installation program requests
a location to store the files.

You can either accept the default directory *or* click the B<small>ROWSE</small> button to select a different destination.


Figure 4.5 *Select Backup Directory Screen*

If you press the B<small>ROWSE</small> button, the following screen appears.
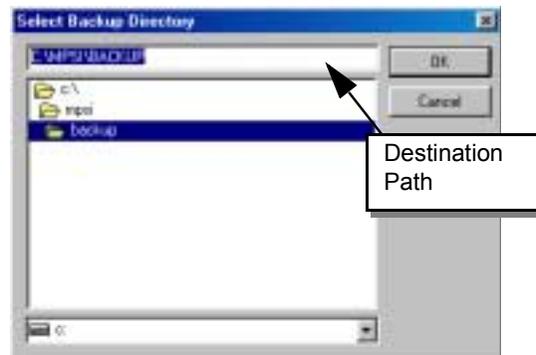
Figure 4.6 *Destination Selection Browse Screen*

8 Use the drop-down list at the bottom of the screen to select the desired hard-drive.

9 Double-click each directory you wish to include in the destination path.

 — To create a new directory, position the cursor at the end of the destination path and type backslash (\) followed by the new directory's name.

10 Click the O<small>K</small> button. The installation program returns to the **Select Backup Directory** screen (Figure 4.5).

11 Confirm the destination then click the NEXT> button.

> **Note:** Press BACK to step backward through the previous screens or CANCEL to stop the installation.

12 The installation begins; a status screen displays progress. When the **Installation Complete** screen appears, click the FINISH button.

Initiating PC/Vehicle Communications

Brake-Link™ translates vehicle data for both hardware and software compatibility.

J1708 and Power Line Communications are converted to serial data that the PC COM port can accept. The Brake-Link™ also translates these communications into RP1210A format for compatibility with RP1210A-compliant OEM PC applications.

> **Note:** Refer to your PC Application's documentation to find out if it is RP1210A-compliant.

To initiate communication:

1 Connect Brake-Link™ to your PC/laptop COM port (see pg. 12) and the tractor or trailer (see "Connecting Brake-Link™ Components", on page 14).

2 If you have connection to the *tractor*, turn the key to the "on" position.

— If you have connection to the *trailer*, clip the J560 Cable Set alligator clips to an external 12V power supply.

Brake-Link™ boots up and presents the **Select Application** screen.
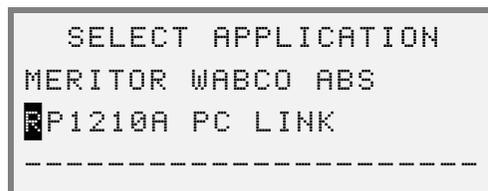
```
   SELECT APPLICATION
MERITOR WABCO ABS
RP1210A PC LINK
--------------------
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3 Press the [↑] or [↓] key to select *RP1210A PC LINK*; press [ENTER]. Brake-Link™ displays a **WAITING FOR CONNECT** message.

4 Launch the PC application. Providing the application is RP1210A compliant, connection occurs and the PC application begins receiving live data.

The Brake-Link™ display updates to show **CONNECTED** and the applicable communication LED (i.e., light next to J1708 or PLC button) blinks indicating data bus activity.

Some PC applications require you to provide the name of the device manufacturer, the device ID, and the protocol it uses, before they can establish connection. If you're using NEXIQ Brake-Link™ RP1210A PC Link to communicate with an ECU over the:

- *J1708 Bus, indicate the following information:*
  - *— **Vendor or Manufacturer Name** to MPSI*
  - *— **Protocol** to J1708*
  - *— **Device ID** to NEXIQ Brake-Link™ for J1708 communications*
- *Power Line Carrier (PLC) Bus, indicate the following information:*
  - *— **Vendor or Manufacturer Name** to MPSI*
  - *— **Protocol** to PLC*
  - *— **Device ID** to NEXIQ Brake-Link™ for PLC Communications*

Refer to the PC Application's documentation to find out if you have to do this and how. If you're using a NNT, Inc. PC application, use the NEXIQ Device Detector Software to set this information.