

MERITOR WABCO

Technical Bulletin

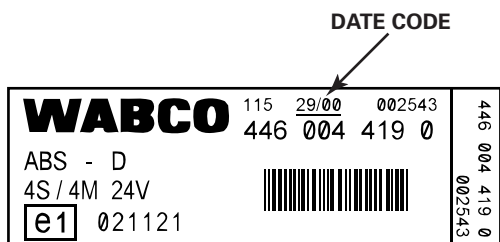
Engine Torque Reduction Diagnostics (J1922 Datalink Verification) for D-Version Meritor WABCO Pneumatic ECUs with Date Codes of 25/00 or Higher

WARNING

To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

The information in this technical bulletin explains the procedure for J1922 datalink verification for all D-version Meritor WABCO pneumatic ABS Electronic Control Units (ECUs) with date codes of 25/00 or higher. These ECUs require the ABS blink code be activated using **both** the vehicle ABS blink code switch **AND** a diagnostic tool — either TOOLBOX™ Software or the MPSI Pro-Link. Do not use the instructions in Maintenance Manual 30 for datalink verification if your ECU has a date code of 25/00 or higher.

NOTE: The date code appears on the ECU identification label, as illustrated. The date code is also displayed on the Main Screen of TOOLBOX™ Software and on the Program ID screen of the Pro-Link.



There are two ways to perform J1922 datalink verification, one using TOOLBOX™ Software and the other using the MPSI Pro-Link. Both methods require the use of the vehicle ABS blink code switch.

Using TOOLBOX™ Software for J1922 Datalink Verification

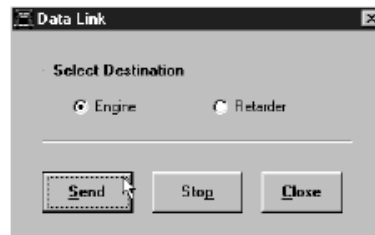
1. With TOOLBOX™ Software connected to the vehicle, turn the ignition ON.
 - A. Press the ABS blink code switch. Hold for 3 seconds. The ATC lamp will come on and stay on for the entire test. If vehicle is not equipped with ATC, the ATC lamp will not come on.

- B. The ABS lamp will come on and blink eight times. If the lamp does not blink eight times, there are faults that must be cleared **before** you continue with this test. The eight quick flashes will be followed by the system identification code. The system identification code will continue during the entire test.
2. Click on the Datalink Activation menu icon, or from the Component Tests pull down menu click on Engine Data Link.



3. Click on Engine.
4. Click on Send.

NOTE: TOOLBOX™ Software sends the engine torque reduction command continuously until you click on the Stop button.



5. Send the Blink Code J1922 engine torque reduction command, as follows:
 - A. Step on the accelerator. Bring the engine to 1000 RPM. Leave your foot on the accelerator during the entire test.
 - B. While the engine is at 1000 RPM, press the blink code switch twice, as follows:
 - Press and hold for one second.
 - Release for one second.
 - Press and hold for one second.
 - Release for one second.

The engine will alternate between 1000 RPM and idle indefinitely. Click the Stop button on the TOOLBOX™ screen. This stops the test and returns the RPM to accelerator control.

NOTE: To retest, begin at Step 4.

6. Click the Close button to exit the screen.
7. Take your foot off the accelerator. Turn the ignition OFF.

Engine torque reduction command verified.

Using the Pro-Link for J1922 Datalink Verification

1. With the Pro-Link connected to the vehicle, turn ignition ON.
 - A. Press the ABS blink code switch — hold for 3 seconds. The ATC lamp will come on and stay on for the entire test. If vehicle is not equipped with ATC, the ATC lamp will not come on.
 - B. ABS lamp will come on and blink eight times. If the lamp does not blink eight times, there are faults that must be cleared **before** you continue with this test. The eight quick flashes will be followed by the system identification code. This indicates the ECU is in the Datalink Verification mode. The system identification code will continue during the entire test.

2. Select the Pro-Link Engine Datalink choice, as follows:
 - A. Press the arrow key(s) to find the Component Test choice.
 - B. Press the Enter key to enter Component Test.
 - C. Press the arrow key(s) to find the Engine Datalink choice.
3. Prepare the Pro-Link Engine Datalink command, as follows:
 - A. Press the Enter key once to enter the first stage of the Datalink setup. The Pro-Link screen will display the following message: “run engine 1000 RPM/engine torque will change during test/[ENTER] to continue.”
 - B. **DO NOT** press Enter at this time.
4. Prepare the Blink Code J1922 Engine Datalink command, as follows:
 - A. Step on the accelerator.
 - B. Bring the engine to 1000 RPM. Leave your foot on the accelerator during the entire test.
 - C. While engine is at 1000 RPM, press the blink code switch twice, as follows:
 - Press and hold for one second.
 - Release for one second.
 - Press and hold for one second.
 - Release for one second.

This mode remains active for 10 seconds, which means you must start Step 5 within 10 seconds.

5. Send the Pro-Link J1922 engine torque reduction, as follows:

Press the Enter key on the Pro-Link. The engine will alternate between 1000 RPM and idle for approximately 10 seconds, then return to 1000 RPM.

NOTE: To repeat the test, start with Step 3.

6. Take your foot off the accelerator. Turn ignition OFF.

Engine torque reduction command verified.

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