

Road Train TEBS Voltage Test Procedure

Step 1 – Vehicle Set-up:

- a. Ensure all air couplings throughout the combination are connected and taps turned on (service and supply).
- b. Ensure all lighting and EBS electric lines are connected throughout the combination.
- c. Turn on the prime mover / rigid truck (engine running) or the equivalent power supply and ensure there is a minimum of 24V across Pins 1 and 4 (EBS Connector Main Power Supply), without load.
- d. Charge up the brake air system to operating pressure (7Bar / 700kpa / 102psi minimum).

Step 2 – Diagnostic System Set-up:

- a. Connect TEBS diagnostic equipment as per the TEBS OEMs instructions. The port on the front of the rear trailer or the side port at the rear of the rear trailer can be used to connect the TEBS diagnostic equipment.
- b. Ensure CAN (diagnostic connection) relates to the last trailer / TEBS unit.
- c. Open the overview screen.
- d. Ensure there is approximately 24V at the rear trailer connector across Pins 1 and 4 (Main Power Supply) and across Pins 2 and 3 (Ignition Power), without load.
- e. Ensure brake air supply pressure is above 7 Bar (red coupling) at the rear trailer via the diagnostic equipment.

Step 3 – Diagnostic Test:

- a. Apply service brake for at least 15 seconds, release and allow the brake air system to recover. Repeat 3 times.
- b. Whilst brakes are applied and released, monitor the voltage on Pins 1 and 4, either directly at the connector or via the TEBS diagnostic equipment.
- c. Record Findings. A minimum of 10V DC is required.

Step 4 – Recording Results:

- a. Go to Diagnostic Memory.
- b. Make a note of or print result and keep a record.
- c. If there is a low voltage error, this indicates the system did not pass. Address the excessive voltage drop, clear the memory and retest from step 1.

Note:

- *Haldex - fault lamp illuminates when voltage is less than 8V and a fault is recorded if less than 7.6 volts.*
- *Knorr-Bremse – when the voltage is less than 9.5volts auxiliary functionality is limited and a fault is recorded at or below 8.5volts.*
- *WABCO - fault lamp illuminates and a fault it recorded at or below 8.5volts.*

TEBS OEM - Customer support contact details.

- BPW Transpec - Perth (08) 9454 4000
- Knorr-Bremse - 1300 309 991
- WABCO – 1300 4 WABCO