



HARVIE



**TPMS IS
MANDATORY
FOR NEWLY
APPROVED
TRUCKS &
TRAILERS**

FROM 2024

WHAT YOU NEED TO KNOW

Tyre pressure monitoring systems (TPMS) have already been a requirement for all newly registered passenger cars for around ten years. From 01/07/2024, TPMS became mandatory for all newly approved class N1-3, M2-3 and O3+4 vehicles. The first sensor manufacturers are already preparing for the change with sensors for the aftermarket. Specific sensors are required, as passenger car sensors differ in technology and are therefore not suitable. They must be designed for higher tyre filling pressures and longer service life. The type of fixing may also differ.

The introduction of TPMS requirements for commercial vehicles is certainly of great importance for general driving and road safety. The move is intended to prevent tyre bursts, which often result in serious accidents or vehicle fires. Lorry breakdowns will be avoided due to constant pressure availability. TPMS also has other benefits in addition to improving road safety. This includes lower fuel consumption and CO2 emissions, as well as a longer tyre service life.



WHAT SYSTEMS ARE AVAILABLE?

The current assumption is that direct systems will be used in the commercial vehicle sector. They monitor the tyre pressure using sensors in each tyre, which detect both gradual and rapid pressure loss. They are faster and more precise compared to passive measurement systems.

THE CHALLENGE OF TPMS FOR COMMERCIAL VEHICLES

Most workshops already know how TPMS works and have experience with TPMS solutions for passenger cars. Due to the complexity, TPMS for commercial vehicles is a challenge for workshops. The technology of the systems differs from those for passenger cars and there are new factors to consider, such as the communication path between the tractor and trailer, i.e. the combination with a non-motorised trailer. This is because they have no OBD interface and no control unit. When decoupled, there is not even a power supply.

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There is a wide range of sensor and valve variants available and the type of sensor mounting in TPMS systems can vary. Belt, valve mounting or containers glued into the tyres are

currently available. In addition, suitable TPMS diagnostic tools are required along with corresponding assembly tools, such as torque screwdrivers, depending on the type of sensors being mounted.

For vehicles with a TPMS requirement, it must be noted that TPMS is part of the general operating license, this means that TPMS must function properly after service work on the tyre, for example, after a puncture or tyre change. Another problem is that vehicle manufacturers are increasingly restricting access to the OBD interface, making teaching and configuring the sensors more difficult.

In general, there are still many unanswered questions on this topic, workshops and tyre dealers still have to address issues such as configuring and teaching in sensors, replacing complete wheels or individual sensors.





TRUCK TPMS VALVE BOX KIT

The Truck TPMS Valve Box Kit offers an ideal solution for maintaining fleets of heavy goods vehicles. The comprehensive kit includes six valves of varying lengths and angles, ensuring compatibility with a wide range of rim types. Each valve is manufactured to OE quality standards, making this kit highly recommended for enhancing Truck TPMS tyre maintenance.

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CODE	LENGTH	ANGLE	SCREW TORQUE	QTY
H6-465	43.5mm	0°	4Nm	10
H6-460	54mm	22°	4Nm	10
H6-461	63mm	27°	4Nm	10
H6-462	73mm	0°	4Nm	10
H6-463	78mm	17°	4Nm	10
H6-464	58mm	45°	4Nm	10



H6-465



H6-460



H6-461



H6-462



H6-463



H6-464

Hamaton

HTS-T01A FIXED SENSOR

Our simple and easy to use Truck 1.0 TPMS solution fits seamlessly into your existing truck tyre changing and maintenance processes and is highly flexible, offering compatibility with both OE and aftermarket Truck TPMS valves.

- Mandatory for new M1, M2, M3, N1, N2, N3, O3, O4 EU vehicle registrations from July 2024.
- European database of trucks, trailers, and buses, with new protocols automatically added.
- Compatible with ATEQ's VT Truck 2.0, and VT56/57 and H56/57 tools with a truck upgrade.
- 24-month warranty or 100,000-kilometres, whichever comes first.
- Cutting-edge battery and the latest NXP chip.
- 433MHz frequency required for HD commercial TPMS systems.

HTS-T01A



Hamaton

HTS-T01B BANDED SENSOR

The EU-Pro Truck 1.0 BMS is a band mounted aftermarket original equipment replacement (OE-R) universal programmable TPMS sensor for commercial and heavy-duty vehicles. The EU-Pro Truck 1.0 BMS is the same innovative TPMS sensor technology as the EU-Pro Truck 1.0 valve mounted sensor (VMS) but with an adjustable, universal fitment band mounting solution for easy installation and maintenance without valves. The banded sensor wraps around

HTS-T01B





VT TRUCK 2.0

The ATEQ VT TRUCK offers functionalities specifically designed for maintenance of European trucks and buses. With its sturdy and compact design, the tool can easily read sensors, even in twin wheels, and has the ability to manage up to 26 wheels. The tool is compatible with most truck and bus TPMS sensors and can be frequently updated with new heavy transport vehicles as soon as they are introduced.

- 1 year updates included
- Full sensors brands database
- OBD module
- 4.3" display and improved graphics.
- Wi-fi enabled

HATE-D091



TPMS CALIBRATED TOOL

The TPMS Torque Tool is an essential companion for sensor replacement on trucks and buses, ensuring precise installation every time. Built with durability in mind, this compact and rugged tool applies the correct torque to valve nuts and sensor screws, helping to prevent overtightening or under-tightening that can lead to sensor failure or air leaks. Ideal for heavy-duty applications, it supports a wide range of TPMS sensors and valve types commonly found on European commercial vehicles. Its ergonomic design allows for confident use in challenging workshop environments.

H5628538





GETTING THE RIGHT TORQUE

The correct torque must be applied to the screws in a Tyre Pressure Monitoring System (TPMS) sensor for several reasons:

- 1. Preventing Damage to the Sensor or Valve Stem:** Over-tightening the screws can damage the sensor, valve stem, or the valve itself, which can lead to leaks, malfunctions, or even breakage. Conversely, under-tightening can cause the sensor to become loose, leading to unreliable pressure readings or sensor failure.
- 2. Maintaining an Airtight Seal:** TPMS sensors often form part of the valve stem assembly, and the screws help ensure a secure, airtight seal between the sensor, valve, and the wheel. Incorrect torque could compromise the seal, causing air leakage and affecting tyre performance.
- 3. Avoiding Stress on the Tyre and Rim:** Uneven or improper torque can result in stress points on the tyre or rim, which could lead to wheel or tyre damage over time, especially under high-speed or high-load conditions.
- 4. Ensuring Proper Sensor Functionality:** The correct torque ensures that the TPMS sensor is properly mounted and positioned. If the sensor shifts or becomes loose, it might not accurately monitor the tyre pressure, causing false readings or warnings.
- 5. Safety and Compliance:** Many TPMS systems are regulated, especially in regions where they are mandated by law. Using the correct torque ensures that the system remains compliant with manufacturer and regulatory specifications, providing accurate and reliable safety data for the vehicle's operation.

Due to the variety of fitments for vehicles, we can only recommend the screws for installation, as the outer collars on the truck and trailer may vary. We are unable to provide specific guidance regarding the collars given the numerous configurations.



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