

# Wheels and tyres

## Tyre monitoring system

### Introduction to the topic

The tyre monitoring system warns the driver when the tyre pressures are too low.

The following tyre monitoring systems are available for this vehicle:

#### Tyre Pressure Loss Indicator

- Monitors various parameters (including rolling circumference) of all four tyres while driving using ABS sensors (indirect measurement).

The reference pressure for the tyre monitoring system is the recommended tyre pressure for cold factory-fitted tyres at maximum load. The reference pressure corresponds to the information on the tyre pressure sticker → page 332.

If the tyre pressure of all four tyres has been adjusted correctly, the Tyre Pressure Loss Indicator must be re-synchronised → page 325. This adjusts the reference pressure to the current tyre pressure.

### WARNING

The intelligent tyre monitoring system technology cannot overcome the laws of physics, and functions only within the limits of the system. Incorrect handling of the wheels and tyres can lead to a sudden loss of pressure in the tyres, tread separation and even tyre blow-out.

- Check tyre pressures regularly and always maintain the specified tyre pressure value → page 332. If the tyre pressure is too low, it is possible that the tyre temperature will increase to such an extent that the tread peels off and the tyre bursts.

- Always maintain the correct cold tyre pressure as specified on the tyre pressure sticker → page 332.
- Check the tyre pressure regularly when the tyres are cold. If necessary, adjust the tyre pressure in the cold tyre to the recommended tyre pressure for the tyres installed on your vehicle → page 332.
- Check your tyres regularly for signs of wear or damage.
- Never exceed the top speed and load permitted for the fitted tyres.



Under-inflated tyres will increase energy consumption and tyre wear.



When new tyres are driven at high speeds for the first time, they can expand slightly and trigger a one-off pressure warning.



Old tyres should only be replaced by tyres that have been approved by Volkswagen for the vehicle type.



Do not rely solely on the tyre monitoring system. Check your tyres regularly to ensure that they are properly inflated and have no signs of damage, such as punctures, cuts, cracks, and blisters. Remove any objects that become embedded in the tyre tread but have not penetrated into the body of the tyre itself.

### Tyre Pressure Loss Indicator

 Please refer to  at the start of the chapter on page 325.

#### Functional description

The Tyre Pressure Loss Indicator uses data from the ABS sensors and other functions to check the speed of rotation and the rolling circumference of the individual wheels.



The Tyre Pressure Loss Indicator does not work if there is a fault in the ESC or ABS → page 191.

### The rolling circumference can change:

- If the tyre pressure has been changed.
- If the tyre pressure is too low.
- If the tyre has structural damage.
- If the vehicle is loaded more heavily on one side.
- If snow chains have been fitted.
- If a temporary spare wheel has been fitted.
- If one wheel per axle has been changed.

The Tyre Pressure Loss Indicator (Ⓛ) may react with a delay or not display anything at all in the event of a sporty driving style, when driving on snow-covered or icy roads or unpaved roads or when driving with snow chains.

The tyre monitoring system indicates a change in rolling circumference of the tyres with the (Ⓛ) warning lamp in the instrument cluster.

The recommended tyre pressure for the factory-fitted tyres is indicated on the tyre pressure sticker on the driver's door pillar → page 332.

The tyre pressure of all tyres including the spare wheel or temporary spare wheel must be checked monthly on a cold tyre and correspond to the vehicle manufacturer's specifications on the tyre pressure sticker. If the tyre size of the mounted tyres differs from the specifications on the type plate or tyre pressure sticker, the correct tyre pressure must be determined.

The Tyre Pressure Loss Indicator does not remove the need for regular maintenance and inspection of tyres. The driver is responsible for ensuring the correct tyre pressure is maintained at all times, even if the Tyre Pressure Loss Indicator does not give any warning that the tyre pressure is too low.

The Tyre Pressure Loss Indicator also can display a malfunction in conjunction with the (Ⓛ) warning lamp. If the Tyre Pressure Loss Indicator is malfunctioning, the (Ⓛ) warning lamp flashes for about a minute after the vehicle's

drive system has been activated and then stays continuously lit.


If the Tyre Pressure Loss Indicator shows a malfunction, tyre pressure cannot be monitored correctly. The malfunctioning of the Tyre Pressure Loss Indicator can have various causes, e.g. due to replacing a wheel or tyre. When a wheel or tyre has been replaced, a check needs to be made whether the (Ⓛ) warning lamp is indicating a system malfunction → page 327 to ensure that the Tyre Pressure Loss Indicator is functioning properly.

### Synchronising the Tyre Pressure Loss Indicator

The Tyre Pressure Loss Indicator must be re-synchronised under the following conditions:

- If the tyre pressures have been changed.
- If one or more wheels have been changed.
- If the wheels are swapped over, e.g. from front to rear.

The Tyre Pressure Loss Indicator may only be re-synchronised if all the tyres have been filled at the correct tyre pressure when measured on a cold tyre. To measure the cold tyre pressure, the vehicle must have been stationary for 3 hours or driven only a few kilometres at a slow speed during this time.

 After a warning about the tyre pressure being too low, switch the ignition off and then back on again. The Tyre Pressure Loss Indicator can only then be re-synchronised.

1. Switch on the ignition.
2. Switch on Infotainment system if necessary.
3. Touch **Vehicle** in the Infotainment system.
4. Touch **Vehicle** (left).
5. Touch **Tyres**.
6. Touch **(Ⓛ) SET**.
7. When all four tyre pressures correspond to the required values, touch **OK**.

**OR:** to cancel the operation, touch **Cancel**. The current tyre pressure is not saved and the system will not be re-synchronised.

After an extended driving time (at least 20 minutes) with driving at different speeds, the system will automatically learn the new values and monitor them. <

## Troubleshooting for Tyre Pressure Loss Indicator

📖 Please refer to ⚠ at the start of the chapter on page 325.

### ⚠ Low tyre pressure

The indicator lamp lights up yellow.

There is a loss of pressure in one or more tyres or the tyre is structurally damaged.

- 🚫 **Do not drive on!**
- Check and adjust all tyre pressures → page 332.
- Damaged tyres should be replaced.
- Re-synchronise the Tyre Pressure Loss Indicator → page 325.
- If the fault persists, go to a qualified workshop.

### ⚠ Fault in the Tyre Pressure Loss Indicator

The indicator lamp flashes for about a minute and then remains lit up in yellow.

There is a system fault.

- 🚫 **Do not drive on!**
- Switch the ignition off and then back on again.
- Re-synchronise the Tyre Pressure Loss Indicator → page 325.
- If the fault persists, go to a qualified workshop.

## ⚠ WARNING

Differing tyre pressures or tyre pressures that are too low can cause tyre damage, tyre failure, loss of vehicle control, accidents, serious injury and death.

- If the indicator lamp (⚠) lights up, stop the vehicle as soon as possible and check all the tyres → page 332.
- Different tyre pressures or tyre pressures that are too low can increase wear on the tyres, reduce vehicle stability and increase the braking distance.
- Differing tyre pressures or tyre pressures that are too low can cause sudden tyre failure and lead to a tyre bursting and the loss of control over the vehicle.
- The driver is responsible for the correct tyre pressure of all tyres on the vehicle. The recommended tyre pressure can be found on a sticker → page 332.
- The tyre monitoring system cannot function correctly unless all cold tyres have the correct tyre pressure.
- The pressure in all tyres must always be appropriate to the vehicle load → page 332.
- Always inflate all tyres to the correct tyre pressure before every journey → page 332.
- If the vehicle is driven with insufficient tyre pressure, this results in greater tyre flexing. This could warm up the tyre to such an extent that the tread may separate and the tyre could burst. This could cause the driver to lose control of the vehicle.
- High speeds and overloading of the vehicle may cause the tyres to heat up to such an extent that the tyre bursts, leading you to lose control of the vehicle.
- If the tyre pressure is too low or too high, the tyres will wear prematurely and the vehicle will not handle well.
- If the tyre is not flat and it is not necessary to change the wheel immediately, drive at low speed to the nearest quali-

fied workshop and check and correct the tyre pressure → page 332.

- The Tyre Pressure Loss Indicator must always be correctly calibrated.



Driving on unpaved roads for long periods or a sporty driving style can temporarily deactivate the Tyre Pressure Loss Indicator. In the event of a malfunction, the indicator lamp will flash for about a minute and then light up continuously. However, the indicator lamp will go out when the road conditions or driving style change.

## Useful information about wheels and tyres

### Introduction to the topic

The tyres are the most heavily loaded and most underestimated parts of a vehicle. Tyres are very important as the narrow tyre surfaces are the only contact between the vehicle and the road.

The service life of tyres is dependent on tyre pressure, driving style, handling and correct fitting.

### ⚠ WARNING

New tyres or tyres which are old, worn down or damaged cannot provide full levels of vehicle control and braking efficiency.

- Incorrect handling of wheels and tyres can reduce vehicle safety and cause accidents and serious injuries.
- All wheels must be fitted with radial tyres of the same type, size (rolling circumference) and the same tread. Exception → page 329.
- New tyres will have to be run in as they will initially have reduced grip and braking effect. Drive particularly carefully for the first 600 km (370 miles) in order to prevent accidents and serious injury.

- Check tyre pressures regularly when the tyres are cold, and always keep to the specified value. If the tyre pressure is too low, it is possible that the tyre temperature will increase to such an extent when driving that the tread peels off and the tyre bursts.

- Check the tyres for damage and wear at regular intervals.

- Never drive with worn tyres or tyres that are damaged (i.e. they have holes, cuts, cracks or blisters). Driving with tyres in this condition can result in burst tyres, accidents and serious injuries. Worn or damaged tyres must be replaced as soon as possible.

- Never exceed the top speed and load permitted for the fitted tyres.

- The effectiveness of the driver assist systems and brake support systems depends on the tyre grip.

- If you notice unusual vibrations or if the vehicle pulls to one side when driving, stop the car immediately and check the wheels and tyres for damage.

- In order to reduce the risk of losing control of the vehicle, and the risk of accident and serious injury, never loosen the bolts on rims with bolted-on rim rings.

- Do not use wheels or tyres if you do not know their history. Used wheels and tyres may be damaged, even if the damage is not visible. This can cause tyre damage, tyre failure and loss of control of the vehicle.

- Even if they have not been used, old tyres can suddenly lose pressure or burst, especially at high speeds, and thus cause accidents and serious injuries. Avoid using tyres that are more than six years old. If you have no alternative, drive slowly and with extra care at all times.

### ⚠ WARNING

If the wheels are incorrectly fastened or if wheel bolts are missing, the wheels could