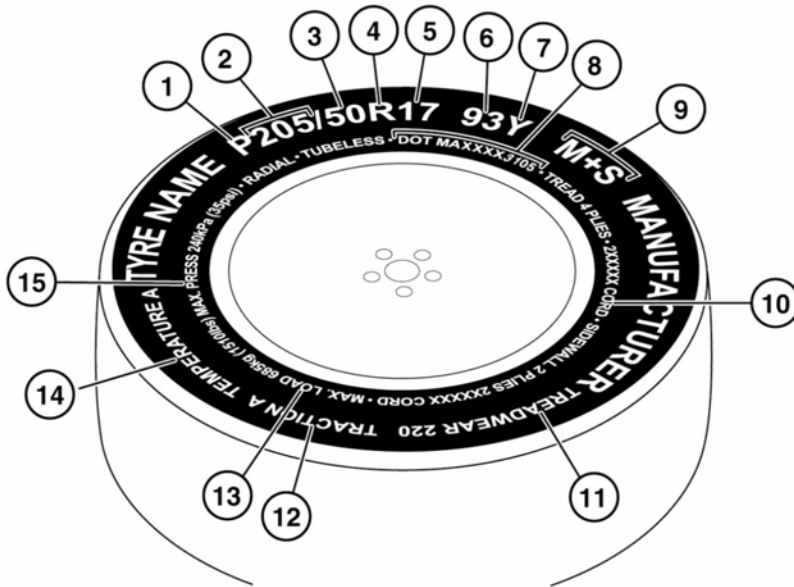


## TYRE MARKINGS



E153418

1. **P** indicates that the tyre is for passenger vehicle use. This index is not always shown.
2. The width of the tyre from sidewall edge to sidewall edge, in millimetres.
3. The aspect ratio, also known as the profile, gives the sidewall height as a percentage of the tread width. So, if the tread width is 205 mm and the aspect ratio is 50, the sidewall height will be 102 mm.
4. **R** indicates that the tyre is of Radial ply construction.
5. The diameter of the wheel rim, given in inches.
6. The load index for the tyre. This index is not always shown.




The load index and speed rating on all replacement tyres must be, at least, the same specification as the manufacturer's original equipment supplied with the vehicle (except for approved winter tyres, see 285, USING WINTER TYRES). If in doubt, consult a Retailer/Authorised Repairer.

7. The speed rating denotes the maximum speed at which the tyre may be used for extended periods. See 281, SPEED RATING.

8. Tyre manufacturing standard information, which can be used for tyre recalls and other checking processes. Most of this information relates to the manufacturer, place of manufacture, etc. The last four numbers are the date of manufacture. For example, if the number was 3106, the tyre was made in the 31st week of 2006.
9. **M+S** or **M/S** indicates that the tyre has been designed with some capability for mud and snow.
10. The number of plies in both the tread area and the sidewall area, indicates how many layers of rubber-coated material make up the structure of the tyre. Information is also provided on the type of materials used.
11. Wear rate indicator: A tyre rated at 400, for example, will last twice as long as a tyre rated at 200.
12. The traction rating grades a tyre's performance when stopping on a wet road surface. The higher the grade, the better the braking performance. The grades, from highest to lowest are; **AA, A, B, and C**.
14. Heat resistance grading: The tyres resistance to heat is grade **A, B, or C**, with **A** indicating the greatest resistance to heat. This grading is provided for a correctly inflated tyre, which is being used within its speed and loading limits.
15. The maximum inflation pressure for the tyre. This pressure should not be used for normal driving. See **284, AVOIDING FLAT SPOTS**.




## SPEED RATING

Rating	Speed km/h (mph)
Q	160 (99)
R	170 (106)
S	180 (112)
T	190 (118)
U	200 (124)
H	210 (130)
V	240 (149)
W	270 (168)
Y	300 (186)

 **The traction grade assigned to this tyre is based on straight-ahead braking traction tests and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.**

13. The maximum load which can be carried by the tyre.

## TYRE CARE

-  **Do not drive the vehicle if a tyre is damaged, excessively worn, or incorrectly inflated.**
-  **Avoid contaminating the tyres with vehicle fluids, as they may cause damage to the tyre.**
-  **Avoid spinning the wheels. The forces released can damage the structure of the tyre, and cause it to fail.**

**⚠** If wheel spin is unavoidable due to a loss of traction (in deep snow, for example), do not exceed the 50 km/h (30 mph) point on the speedometer.

**⚠** Do not exceed the maximum pressure stated on the sidewall of the tyre.

**Note:** Tyre condition should be checked after the vehicle has been used off-road. As soon as the vehicle returns to a normal, hard, road surface, stop and check for damage to the tyres.

All of the vehicle's tyres (including the spare) should be checked regularly for damage, wear, and distortion. If you are in any doubt about the condition of a tyre, have it checked immediately by a tyre repair centre or a Retailer/Authorised Repairer.

## TYRE PRESSURES

**⚠** All tyre pressures, including the spare, should be checked regularly using an accurate pressure gauge, when the tyres are cold.

**⚠** Pressure checks should be carried out only when the tyres are cold, and the vehicle has been stationary for more than 3 hours. A hot tyre at, or below, the recommended cold inflation pressure, is dangerously under-inflated.

**⚠** Never drive your vehicle if the tyre pressures are incorrect. Under-inflation causes excessive flexing and uneven tyre wear. This can lead to sudden tyre failure. Over-inflation causes harsh ride, uneven tyre wear and poor handling.

**⚠** Do not drive the vehicle with a leaking tyre. Even if the tyre appears to be inflated, it could be dangerously under-inflated and will continue to deflate. Renew the tyre or contact an approved repairer.

**⚠** Under-inflation also reduces fuel efficiency and tyre tread life and may affect the vehicle's handling and stopping ability.

**⚠** If the vehicle has been parked in strong sunlight, or used in high ambient temperatures, do not reduce the tyre pressures. Move the vehicle into the shade and allow the tyres to cool before rechecking the pressures.

	kPa	bar	psi	kPa	bar	psi
XXX/XXX/XXX/XXX/XXX	XXX	XX	XXX	XXX	XX	XXX
XXX/XXX/XXX/XXX/XXX	XXX	XX	XXX	XXX	XX	XXX
XXX/XXX/XXX/XXX/XXX	XXX	XX	XXX	XXX	XX	XXX
XXX/XXX/XXX/XXX/XXX	XXX	XX	XXX	XXX	XX	XXX
XXX/XXX/XXX/XXX/XXX	XXX	XX	XXX	XXX	XX	XXX

XXXX XXXX XX



E166146

The tyre information label is located on the driver's side B pillar.



Check the tyres, including the spare, for condition and pressure on a weekly basis and before long journeys.

If tyre pressures are checked while the vehicle is inside a protected covered area (e.g., a garage) and subsequently driven in lower outdoor temperatures, tyre under-inflation could occur.

A slight pressure loss occurs naturally with time. If this exceeds 14 kPa (0.14bar/2 psi) per week, have the cause investigated and rectified by qualified personnel.

If it is necessary to check the tyre pressures when the tyres are warm, you should expect the pressures to have increased by up to 30 - 40 kPa (0.3 - 0.4 bar/4 - 6 psi). Do not reduce the tyre pressures to the cold inflation pressure under these circumstances. Allow the tyres to cool fully before adjusting the pressures.


The following procedure should be used to check and adjust the tyre's pressures:

-  To avoid damaging the valves, do not apply excessive force or sideways force on the gauge/inflator.
  -  To avoid damage to TPMS valves, it is recommended not to use rigid tyre inflation wands. This is to avoid the risk of excess leverage and sideways pressure on the valve.
1. Remove the valve cap.
  2. Firmly attach a tyre pressure gauge/inflator to the valve.
  3. Read the tyre pressure from the gauge and add air, if required.



4. If air is added to the tyre, remove the gauge and re-attach it before reading the pressure. Failure to do so may result in an inaccurate reading.
5. If the tyre pressure is too high, remove the gauge and allow air out of the tyre by pressing the centre of the valve. Refit the gauge to the valve and check the pressure.
6. Repeat the process, adding or removing air as required, until the correct tyre pressure is reached.
7. Refit the valve cap.


## TYRE VALVES


Keep the valve caps screwed down firmly to prevent water or dirt from entering the valve. Check the valves for leaks when checking the tyre pressures.


-  Do not twist or bend the valves when attaching a pressure hose or gauge, as damage may result.


## REPLACEMENT TYRES


-  **Always fit replacement tyres of the same type, and wherever possible, of the same make and tread pattern. Failure to fit the same type, make and tread pattern may reduce vehicle stability.**
-  **The load and speed index ratings on all replacement tyres must be, at least, the same specification as the vehicle's original equipment. If in doubt, consult a Retailer/Authorised Repairer.**

 **If lower speed rated specialist tyres are fitted (e.g., winter tyres or off-road tyres), the vehicle must be driven within the speed limitations of the tyres. Consult a Retailer/Authorised Repairer for further information. In markets that require a tyre's maximum speed label to be fitted, the tyre's maximum speed label should be placed within the driver's field of vision. These can be obtained from the tyre retailer.**

 **Do not rotate the tyres around the vehicle.**

 **If the use of tyres not recommended by the vehicle manufacturer is unavoidable, make sure you read, and fully comply with, the tyre manufacturer's instructions.**

 Tyre removal and fitting should be carried out by a Retailer/Authorised Repairer.

 When removing a tyre from a wheel or fitting a tyre to a wheel, make sure the Tyre Pressure Monitoring System (TPMS) sensor is not damaged.

When the tread has worn down to approximately 2 mm, wear indicators start to appear at the surface of the tread pattern. This produces a continuous band of rubber across the tread, as a visual reminder.

Tyres should be renewed in sets of 4. If this is not possible, renew the tyres in pairs (both front or both rear). When tyres are replaced, the wheels should always be re-balanced and the alignment checked.

For the correct tyre specification and pressures, see **282, TYRE PRESSURES**. Alternatively, contact a Retailer/Authorised Repairer for advice.

### **Replacement TPMS sensor**

If a new TPMS sensor is to be fitted to a standard size running wheel on the vehicle, it should be installed by a Retailer/Authorised Repairer. The vehicle needs to be stationary for 15 minutes during the sensor fitment, before the system is ready to detect the new sensor. The vehicle must be driven for a minimum of 15 minutes after the sensor change, and then remain stationary for 15 minutes to activate full TPMS operation.

If the TPMS warning lamp does not extinguish, even after checking the tyre pressures and driving for more than ten minutes above 25 km/h (16 mph), seek qualified assistance as soon as possible.

### **AVOIDING FLAT SPOTS**

In areas of extended high ambient temperature, vehicle tyres can be affected by a softening of the tyre's sidewall. If the vehicle is stationary for long periods, the effect is to slightly deform the tyre at the point where the tyre meets the standing surface. This is known as a flat spot.

This is normal tyre behaviour. However, when the vehicle is subsequently driven, vibration may be experienced from the flat spot. The condition will steadily improve with extra mileage.

In order to minimise flat spotting while the vehicle is stationary for a long period, tyre pressures can be increased to the maximum, as stated on the tyre's sidewall. The tyres must be returned to the specified running pressures before driving. See **282, TYRE PRESSURES**.

## TYRE DEGRADATION

Tyres will degrade over time, due to the effects of ultraviolet light, extreme temperatures, high loads, and environmental conditions. It is recommended that tyres are replaced at least every 6 years from the date of manufacture, but they may require replacement more frequently.

## USING WINTER TYRES

In many countries legislation exists that requires the use of winter tyres during specified periods of the year.

M+S (mud and snow) tyres have a recognised level of winter performance and need not be renewed. The **M+S** marking on the tyre's sidewall indicates an 'all season' tyre designed for use all year round, including cold temperatures, snow and ice.



This symbol identifies dedicated winter tyres, which can be fitted if optimum winter traction is required, or the vehicle is to be used in more extreme winter conditions.

**Note:** *A dedicated winter tyre often has a lower speed rating than the original equipment tyre, and the vehicle must, therefore, be driven within the speed limitation of the tyre. Consult your Retailer/Authorised Repairer for further information. In markets that require a tyre's maximum speed label to be fitted, the tyre's maximum speed label should be placed within the driver's field of vision. These can be obtained from the tyre Retailer.*

The tyre pressures indicated on the tyre information label are for use in all conditions on the original equipment tyres. If a reduced speed rating tyre is fitted, the recommended pressures are only suitable for use below 160 km/h (100 mph).

For optimum traction, tyres should be run in for at least 160 kilometres on dry roads, before driving on snow or ice.

Approved winter tyres			
Wheel size	Tyre size	Brand	Pattern
17 inch wheels	225/65 R17 106H	Pirelli	Scorpion Winter
	225/65 R17 102T	Continental	Cross Contact Winter
	225/65 R17 106H	Michelin	Lattitude Alpin 2

Approved winter tyres			
Wheel size	Tyre size	Brand	Pattern
18 inch wheels	235/60 R18 107H	Continental	4x4 Winter Contact
	235/60 R18 107H	Pirelli	Scorpion Winter
	235/60 R18 107H	Michelin	Lattitude Alpin 2
	235/60 R18 107H	Goodyear	Ultra Grip + SUV
	235/60 R18 107H*	Pirelli	Winter Ice Zero
19 inch wheels	235/55 R19 105H	Continental	Cross Contact Winter
	235/55 R19 105H*	Pirelli	Winter Ice Zero
20 inch wheels	245/45 R20 103V	Michelin	Lattitude Alpin 2
	245/45 R20 99T*	Michelin	Latitude X-Ice North

**Note:** \* Studded tyres are market dependent. Consult a Retailer/Authorised Repairer.

**Note:** The vehicle's speed should be limited to a maximum of 180 km/h (112 mph) when recommended winter tyres are fitted. Failure to comply with this speed restriction will mean that the tyres are underinflated for the vehicle's speed. In addition the TPMS will fail to warn of underinflation at the correct pressure thresholds for these higher speeds. Contact your Retailer/Tyre distributor for the supply of an appropriate label, which should be placed within the driver's field of vision, as a reminder of this speed restriction.




Use of dedicated winter tyres may require a change of wheel size, depending on the original choice of wheel. All 4 wheels must be changed.

If fitted with standard rubber valves, the Tyre Pressure Monitoring System (TPMS) warning lamp will flash for 75 seconds and then remain illuminated. The Message centre will also display **TYRE PRESSURE MONITORING SYSTEM FAULT**.

When the original wheels and tyres are refitted, the vehicle will need to travel a short distance to reset the TPMS and extinguish the warning lamp.

For more information on winter tyres, contact a Retailer/Authorised Repairer.

## USING SNOW CHAINS

-  **Only use traction devices in heavy snow conditions, on compacted snow.**
-  **Never exceed 50 km/h (30 mph) when traction devices are fitted.**
-  **Never fit traction devices to a temporary use spare wheel.**

Land Rover approved traction devices may be used to improve traction on compacted snow in heavy snow conditions. They should not be used in off-road conditions.

If it becomes necessary to fit traction devices, the following points must be observed:

- Only Land Rover approved traction devices should be used on the vehicle. Only Land Rover approved traction devices have been tested to make sure they do not cause damage to the vehicle. Contact a Retailer/Authorised Repairer for information.
- The wheels and tyres fitted must conform to the specifications of the vehicle's original equipment.
- For the 17, 18, 19 and 20 inch diameter wheels, only half chains can be fitted.
- Fit traction devices in pairs on the front axle only.
- Always read, understand and follow the traction device manufacturer's instructions. Pay particular attention to the maximum speed and fitting instructions.
- Avoid tyre/vehicle damage, by removing the traction devices as soon as the conditions allow.

### **TYRE DECLARATION (India only)**

All imported tyres meet the requirements of Bureau of India Standards (BIS) and comply with the requirements under Central Motor Vehicle Rules (CMVR) 1989. The tyres are the same as those tyres supplied as Original Equipment (OE) for Land Rover models which are fully Type Approved for the Indian market.