#### **Tire Information**

Tires of the correct type, manufacture and dimensions, with correct cold inflation pressures are an integral part of every vehicle's design. Regular maintenance of tires contributes not only to safety, but to the designed function of the vehicle. Road-holding, steering and braking are especially vulnerable to incorrectly pressurised, badly fitted or worn tires.

Tires of the correct size and type, but of different makes, have widely varying characteristics. It is therefore recommended that only Jaguar approved tires are fitted to all wheels.

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- Always ensure replacement tires have the correct rating and specifications (e.g. load index, size, speed rating) for your vehicle. Contact your Jaguar Retailer for more information.
- When using tires other than those recommended by Jaguar, do not exceed the speed capacity recommended by the manufacturer.

#### **Tire glossary**

Refer to page 208 for a glossary of terms and definitions associated with tire pressures and vehicle weights.

#### **Tire Pressures**

The tire pressures recommended provide optimum ride and handling characteristics for all normal operating conditions. The pressures should be checked and correctly set each week, with the tires cold.

Tire temperatures and pressures increase when running. Deflating a warm tire to the recommended pressure will result in under-inflation which may be dangerous.

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- Under-inflation causes excessive flexing and uneven wear to the tire. This can lead to sudden failure. Over-inflation causes a harsh ride, uneven tire wear and poor handling.
- Pressure checks should only be carried out when the tires are cold (the vehicle has been stationary for three hours or more).

#### Tire pressure label (Canada and Mexico only)

A tire recommendation label is visible on the end of the dashboard on the driver's side of the vehicle, giving information specific to the vehicle's wheel and tire equipment.

#### Tire pressure label/placard (USA only)



JOL3308

A tire information label is visible on the pillar behind the driver's door (also known as the 'B' pillar), giving information specific to the wheel and tire equipment fitted to the vehicle when it was built. The label contains the following information:

- The maximum number of occupants (1), divided between the front (2) and rear (3) of the vehicle.
- The vehicle capacity weight (4), which includes the weight of the driver, passengers and cargo.
- Cold inflation pressures for the spare tire (5) and the front and rear tires (6).
- The size of the tires (7) with which the vehicle was originally equipped.

**Note:** The label must not be changed, even if different wheels are fitted at a later stage.

#### **Recommended Tire Pressures**

The following table gives the tire pressures for all recommended tire sizes.

Tire Size	Tire Pressure		
	Front	Rear	
205/55 R16	38 psi, 260 kPa	35 psi, 240 kPa	
225/45 R17	38 psi, 260 kPa	35 psi, 240 kPa	
225/40 R18	40 psi, 280 kPa	35 psi, 240 kPa	
Space-saver spare wheel (front or rear)		60 psi, 420 kPa	

#### **Checking tire pressures**

The following procedure should be used to check and adjust the tire pressures:

- 1. Remove the valve cover.
- 2. Firmly attach a tire pressure gauge/inflator to the valve.
- **3.** Read the tire pressure from the gauge. If required, add air to the tire.
- 4. If air is added to the tire, remove the gauge from the valve and reattach it before checking that the pressure is correct. Failure to remove and reattach the gauge from the valve could cause the gauge to show an incorrect reading.
- 5. If too much air is added, remove the gauge from the valve and allow air out of the tire by pressing the centre of the valve. Reconnect the gauge to the valve, and check that the air pressure is correct.
- 6. Refit the valve cover.

A slight natural pressure loss occurs with time. If this exceeds 2 psi (14 kPa) per week, the cause should be investigated and rectified.

**Note:** It is an offence in certain countries to drive a vehicle with tires that are not inflated in accordance with the vehicle's proper use.

#### **'R' Performance Wheels**



Some wheels have a slotted valve cover on the wheel face. A pouch containing a special tool and a valve adaptor, for use with these wheels, is stowed in the glove compartment.

To access the valve, unscrew the slotted valve cover using the special tool (1). Screw in the adaptor (2) and hand-tighten.

After checking the pressure, remove the adaptor and refit the valve cover. The special tool will grip the valve cover, making it easier to refit.

#### Winter (Snow) Tires

The tires fitted as original equipment are designed with a rubber compound, tread pattern and width specially suited for high speeds in normal road conditions, but they are less suitable during extremes of low temperatures, snow and ice. The use of winter tires will considerably improve the vehicle's handling during these conditions. It is recommended that only Jaguar approved winter tires are used, as follows: Pirelli 205/55R 16

or

Continental 205/55R 16

Pirelli 225/45R 17

Tire directional indicators must be rotating in a clockwise direction when viewed from the right-hand side of the vehicle, and anti-clockwise when viewed from the left-hand side of the vehicle.

Do not exceed 130 mph (210 km/h) when using Jaguar approved winter tires.

Winter tires must be used in vehicle sets, that is, fitted on all four wheels.

The recommended tire pressures for winter tires are the same as shown on page 199.

If non-Jaguar approved winter tires are fitted, refer to the tire pressure information label, attached to the end of the dashboard on the driver's side of the vehicle (Canada and Mexico) or the pillar behind the driver's door (USA).



### **Tire Markings**



#### P (1)

The 'P' indicates the tire is for passenger vehicles.

#### Tire width (2)

This three-digit number gives the width in millimetres of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

#### Aspect ratio (3)

This two-digit number, known as the aspect ratio, gives the tire's ratio of height to width (this is also known as the tire profile). The lower the number, the shorter the tire's sidewall.

#### R (4)

The 'R' stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

#### Wheel diameter (5)

This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

#### Load index (6)

This two- or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support.

**Note:** You may not find this information on all tires because it is not required by law.

#### Speed rating (7)

The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed in the following table.

**Note:** You may not find this information on all tires because it is not required by law.

Letter Rating	Speed Rating	
Q	99 mph	
R	106 mph	
S	112 mph	
Т	118 mph	
U	124 mph	
Н	130 mph	
V	149 mph	
W	168 mph	
Y	186 mph*	
	-	

\* For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

#### U.S DOT tire identification number (8)

This begins with the letters 'DOT' and indicates that the tire meets all Federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer's discretion. This information can be used to contact consumers if a tire defect requires a recall.

#### M+S (9)

The 'M+S' or 'M/S' indicates that the tire has some mud and snow capability. Most radial tires have these markings: they have some mud and snow capability.

## Tire ply composition and materials used (10)

The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

#### Treadwear number (11)

This number indicates the tire's wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. For example, a tire graded 400 should last twice as long as a tire graded 200.

For more information, refer to page 206.

#### Traction letter (12)

This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as **AA**, **A**, **B**, and **C**. For more information, refer to page 206.

#### Maximum load rating (13)

This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

#### **Temperature letter (14)**

This letter indicates a tire's resistance to heat. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, under-inflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure. From highest to lowest, a tire's resistance to heat is graded as **A**, **B**, or **C**. For more information, refer to page 206.

## Maximum permissible inflation pressure (15)

This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

#### **Recommended Tire Fitment**

The following chart details the tires recommended for use in Mexico.

Tire size	Pattern	
225/45 R 17 91Y	Pirelli P Zero	
225/45 R 17 94W	Continental Conti Sport Contact	

For all other countries refer to your local Retailer for specific tire fitment.

#### **'R' Performance Wheels**

The following tires are approved for use where 'R' performance wheels are fitted.

Wheel size	Tire size/manufacturer	
7.5 x 18	225/40 ZR18 (92) Extra Load Pirelli P Zero Nero	

# Temporary-use Spare Wheel (Where fitted)

WARNING: Failure to comply with the following can be dangerous. When a temporary-use spare wheel is fitted, switch off dynamic stability control, drive with caution and replace with the specified wheel and tire assembly as soon as possible. Do not fit more than one temporary-use spare wheel at one time. Temporary-use spare wheel maximum speed is 50 mph (80 km/h).

For information about temporary-use spare wheel, refer to page 155.

#### **Tire Care**

In the interests of safety and reliability, it is advisable to check the tires, including the spare, for condition and pressure on a weekly basis. Refer to page 199 for instructions on how to check tire pressures.

#### Wear



All tires fitted as original equipment include tread wear indicators (TWI) in their tread pattern. When the tread has worn to a remaining depth of 1.6 mm the indicators appear at the surface as bars which connect the tread pattern across the full width of the tire.

It is illegal, in certain countries, to continue to use tires after the tread has worn to less than 1.6 mm over three quarters of the width and the entire circumference of the tire.

It should be noted that the properties of many tires alter progressively with wear. In particular the 'wet grip' and aquaplaning resistance are gradually but substantially reduced. Extra care and speed restriction should therefore be exercised on wet roads as the effective tread depth diminishes. Incorrect wheel alignment will accelerate tire wear. Fins on the inner or outer edges of the tread pattern are caused by excessive toe-in or toe-out respectively. As fins may also be caused by high cornering speeds or road camber, it is advantageous to have the cause detected by having the wheel alignment checked.

#### Tire repair

It is recommended that damaged tires are discarded and new tires fitted. They must not be repaired in view of the high performance capability of the vehicle.

#### Damage

Excessive local distortion can cause the casing of a tire to fracture and may lead to premature failure. Tires should be examined especially for cracked walls, exposed cords, etc. Flints and other sharp objects must be removed from the tire tread; if left in they may work through the cover. Clean off any oil or grease contamination by using a suitable cleaner.

#### Caution: Do not use paraffin (kerosene), because this has a detrimental effect on rubber.

#### Tire use after vehicle storage

After a long period of a vehicle standing, tires may become locally distorted with a flat area. This will cause an uneven ride for a few miles until the tires have warmed up and the 'flat' rounds off.

However, to reduce the effects of flat-spots, the tires of a stored vehicle may be inflated to pressures not exceeding 50 psi (343 kPa).

#### **Tire Quality Grades**

#### United States Department of Transportation/Uniform Tire Quality Grades

The following information relates to the tire grading system developed by the National Highway Traffic Safety Administration which will grade tires by tread wear, traction and temperature performance.

#### **Tread wear**

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1.5) times as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

#### Traction - A, B, C

The traction grades, from the highest to the lowest are 'A', 'B' and 'C', and they represent the tire's ability to stop on wet pavements as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked 'C' may have poor traction performance.



The traction grade assigned to this tire is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

#### Temperature - A, B, C

The temperature grades 'A' (the highest), 'B' and 'C' represent the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade 'C' corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades 'B' and 'A' represent higher levels of performance on the laboratory test wheel than the minimum required by law.

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The temperature grade for these tires is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure.

#### **Tire Renewal**

When renewing tires, it is preferable to fit a complete vehicle set. If either front or rear tires only need to be renewed, new tires must be fitted, as axle sets, to replace worn ones.

After new tires have been fitted the wheels need to be dynamically balanced.

The radial ply tires specified are designed to meet the high-speed performance capability of this vehicle.

Do not fit tires with a different tread pattern, size or speed rating.

#### **Snow Chains**

Snow chains, of the recommended type, may only be fitted to 16 inch front wheels.

Caution: Snow chains must not be fitted to 17 inch wheels or above.

Contact your Jaguar Retailer for details and availability of approved snow chains.

The maximum speed when using snow chains is 30 mph (48 km/h).

Remove the snow chains immediately the roads are clear of snow.

Ensure the fitting instructions supplied with the snow chains are kept in a safe place, for example, with this literature pack.

**Note:** Dynamic Stability Control **MUST** be switched **OFF** when using snow chains.

## **Tire Glossary**

#### Glossary

#### Cold tire pressure:

Pressure in a tire that has been driven for less than one mile or has been standing for three hours or more.

#### Maximum inflation pressure:

Maximum air pressure, to which a cold tire may be inflated, this figure (in psi and kPa) is molded onto the sidewall of a tire.

#### Curb weight:

The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, coolant and if so equipped, air conditioning and additional weight optional engine.

#### Accessory weight:

The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not).

#### Production options weight:

The combined weight of those installed production options weighing over 3 lb (1.4 kg) in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levellers, roof rack, heavy duty battery and special trim.

#### Vehicle capacity weight:

The rated cargo and luggage load plus 150.0 lb (68.0 kg) times the vehicle's designated seating capacity.

#### Maximum loaded vehicle weight:

This is the sum of:

- Curb weight.
- Accessory weight.
- Vehicle capacity weight.
- Production options weight.

#### Rim:

A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

The size of the wheel rims is stamped or cast on all wheels.

#### Bead:

The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim.

### **Production Options Weights**

#### (USA only)

This table lists the production options weights. To calculate the curbweight of your vehicle, add the weight of all production options, including optional alloy wheels and spare wheel, to the basic curbweight for your vehicle.

**Note:** The table only lists optional equipment that weighs more than 3 lb (1.4 kg).



Do not exceed the vehicle capacity weight (the total weight of driver, passengers and cargo) given on the tire information label (see page 198).

To calculate the cargo and luggage load capacity of your vehicle, refer to page 211.

	Weight	
	lb	kg
Curbweight, no options fitted		
Sedan		
2.5 and 3.0 litre, manual	3461	1570
2.5 and 3.0 litre, automatic	3554	1612
Wagon		
2.5 and 3.0 litre, manual	3599	1632
2.5 and 3.0 litre, automatic	3692	1675
Production options		
Sunroof	21.2	9.6
Xenon headlights	3.1	1.4
Headlight power wash	7.6	3.5
Electrically adjustable passenger seat - 8 way	12.1	5.5
Electrically adjustable front seats - 10 way	13.5	6.1
Premium audio system	15.0	6.8
CD autochanger	4.0	1.8
Navigation system	8.8	4.0
Rear spoiler (Wagon only)		2.8

## **Cargo Weights**

	Weight	
	lb	kg
Wheels and tires		
16" steel wheels	15.4	7.0
'Caicos' wheels	0.0	0.0
'Tobago' wheels	17.6	8.0
'Cayman' wheels	20.1	9.1
'Andros' wheels	24.5	11.1
'Aguila' wheels	20.1	9.1
'Aruba' wheels	39.9	18.1
'Melbourne' wheels	52.7	23.9
Spare wheel and tire		
16" spacesaver spare wheel	0.0	0.0
16" steel full-size spare wheel	13.2	6.0
'Caicos' spare wheel	9.3	4.2
'Tobago' spare wheel	13.7	6.2
'Cayman' spare wheel	14.3	6.5
'Andros' spare wheel	15.4	7.0
'Aguila' spare wheel	14.3	6.5
'Aruba' spare wheel	19.2	8.7
'Melbourne' spare wheel	22.5	10.2

**Note:** The weights listed under '**Wheels and tires**' give the increase in weight over a standard set of four wheels: the figure only needs to be added to the curbweight once. The '**Spare wheel and tire**' weight must also be added, where applicable.

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## **Cargo Weights**

Steps for determining correct load limit (USA only)

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Do not exceed the vehicle capacity weight (the total weight of driver, passengers and cargo) given on the tire information label (see page 198).

- Locate the statement 'The combined weight of occupants and cargo should never exceed XXXX kg or XXXX lb' on your vehicle's placard (see page 198).
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- Subtract the combined weight of the driver and passengers from XXXX kg or XXXX lb (weight given on placard).
- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the 'XXXX' amount equals 1400 lb, and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lb: (5 x 150 = 750, and 1400 750 = 650 lb).
- Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this handbook to determine how this reduces the available cargo and luggage load capacity of your vehicle. (Subtract the trailer nose load (see page 217) from the available cargo and luggage load capacity.)

The number and weight of passengers will affect the cargo and luggage load capacity. In the example above, the cargo and luggage load capacity is 650 lb. However, if fewer passengers ride in the vehicle, the luggage load capacity will increase. If this vehicle carries three 150 lb passengers, the cargo and luggage load capacity will increase to 950 lb:  $(3 \times 150 = 450 \text{ lb}, \text{ and}$ 1400 - 450 = 950 lb).

If the passengers weigh more, the cargo and luggage load capacity will decrease.

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- The weight of accessories must also be subtracted from the available cargo and luggage load capacity. If you are unsure of the weight of any accessories fitted to your vehicle, contact your Jaguar Retailer.
- Overloading the vehicle will have an adverse affect on braking and handling characteristics, which could compromise your safety.
  Overloading a vehicle may also cause tire damage or failure.
  Never overload your vehicle.

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## **Specifications**

### Weights

2.5 and 3.0 Litre Sedan	 216
2.5 and 3.0 Litre Wagon	 216

# Load Weights

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All Vehicles		 217

### Dimensions



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