

**GROUP 28****WHEELS AND TYRES****INDEX**

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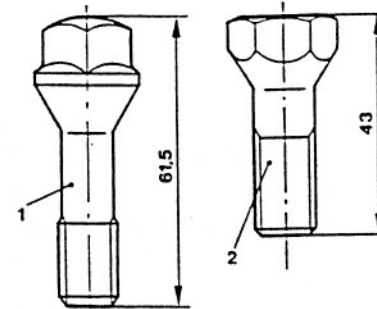
## WHEELS

### GENERALITIES

The wheels (rims and tyres) fitted to the vehicle are those which are the most suited to its characteristics and guarantee the highest degree of safety and comfort under all normal driving conditions. Before replacing rims and tyres check the CHARACTERISTIC DATA table. The original rim-tyre arrangement should be maintained when replacing wheels.

### RIMS

Steel and alloy wheels must be fitted to the vehicle using the bolts which are specific to each type of rim.



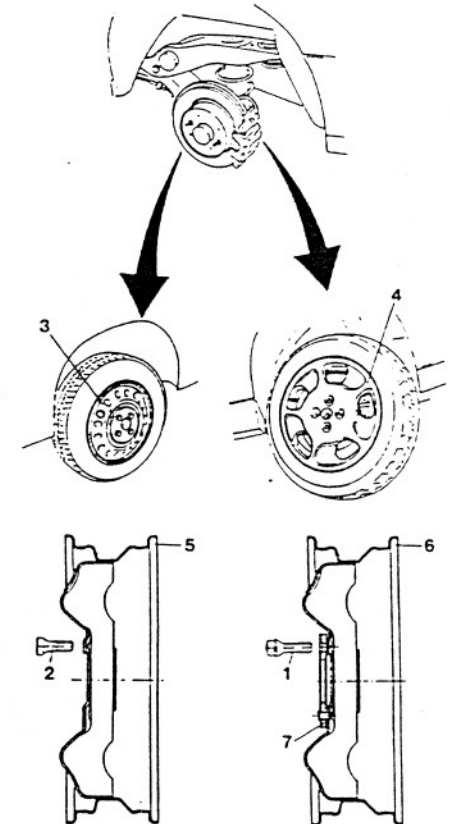
1. Bolt for alloy rims.
2. Bolt for steel rims.

When replacing steel rims with alloy rims or vice-versa:

- use the specific bolts (type 1 or 2) depending on the type of rims fitted.
- the rims of the compact spare wheel must also be replaced with those of the specific type.

### SPARE WHEEL

The rim of the spare wheel (steel only) and the relative bolts are specific to the type of rim (steel or alloy) of the wheels fitted to the vehicle.



1. Bolts for alloy rims
2. Bolts for steel rims
3. Wheel with steel rim
4. Wheel with alloy rim
5. Spare wheel for steel rims
6. Spare wheel for alloy rims
7. Rivetted spacer

Therefore:

- When replacing steel rims with alloy rims or vice-versa, the rim of the spare wheel must be replaced with the corresponding type, (6) or (5).
- When fitting the spare wheel the specific bolts (1) or (2) must be used.

**CAUTION:**

The spare wheel must only be used in an emergency and its use must be reduced to a minimum. The speed of the vehicle must not exceed 80 kph. The vehicle will handle differently when the spare wheel is used.

Ensure that the tyre pressure of the spare wheel is 4.2 bars (kg/cm<sup>2</sup>). The wheel must only be used for a total of 3,000 kilometers and then replaced with another of the same type.

RIM: 4Jx15"

TYRE: 115/70 R15" 90M.

Never fit a traditional tyre to the rim of the compact spare wheel.

No more than one compact spare wheel must be used at any time.

## TYRES

### GENERALITIES

The tyres fitted to the vehicle are of the tubeless type and do not contain an inner tube. To maintain the characteristics of comfort and safety and to ensure that the tyres last, the following should be observed:

- The wheels should be balanced and the front and rear suspension adjusted correctly.
- Do not insert any object between the rim and the tyre.
- If the rim is bent or damaged, replace it.
- When balancing the wheels, counter-weights which are specific for tubeless tyres must be used.
- The tyre pressure (including the compact spare wheel) must be as specified (see: TECHNICAL CHARACTERISTICS AND SPECIFICATIONS - CHARACTERISTIC DATA).
- Inner tubes must not be fitted to tubeless tyres.

To obtain a uniform wear pattern between the tyres on the front and those on the rear axle, the wheels should be swapped round every 10,000 - 15,000 kilometers, however, so that the direction of rotation is not changed, the tyres must remain on the same side of the vehicle.

**CAUTION:**

Do not cross the tyres over when replacing.

Some types of tyres are fitted with wear detectors and as soon as these indicators can be seen on the tread the tyre must be replaced. Check that the tread is evenly worn.

Worn tyres increase the risk of aquaplaning on wet roads.

Violent knocks against kerb stones, holes in the road surface and various other obstacles and when the vehicle is driven for long periods on badly made roads may result in small cuts on the tyre which are often difficult to see. These result in deformation, swelling and cuts on the side of the tyre which can cause sudden deflation or blow-outs.

### TYRE PRESSURE AND WEAR

The correct tyre pressure influences both the duration of the tyre and its road-holding characteristics and consequently the safety of the vehicle and its passengers.

The pressure of each tyre, including the spare wheel, must be checked regularly and especially before long journeys.

When checking the tyre pressure the tyres must be cold. Use a pressure gauge and inflate to the specified pressure.

If the tyre is not at the correct pressure it will not wear correctly:

#### A. Normal pressure

A correct pressure ensures that the tyre will have a longer life and give better results as the tread will use its entire width and the wear pattern will be more uniform.

This condition leads to:

- Better road holding.



- Light and precise steering.
- Lower fuel consumption as the wheel rolls without resistance.

#### B. Pressure too low

A low tyre pressure will cause the tread to wear unevenly (greater on the walls) and overheat which may lead to the loss of pieces of tyre and cause damage to the structure of the tyre resulting in a greater risk of sudden deflation or blow-out.

#### C. Pressure too high

An excessive tyre pressure will:

- cause uneven wear of the tread especially in the central part
- reduce comfort

- make the tyre more vulnerable to knocks.

### WHEEL BALANCING

Each wheel, excluding the spare wheel, has been statically and dynamically balanced in the factory. When the tyres are changed the wheels must be rebalanced to prevent instability, wearing of the steering components and irregular tyre wear.

**NOTE:** The spare wheel must not be balanced.

**WARNING:**

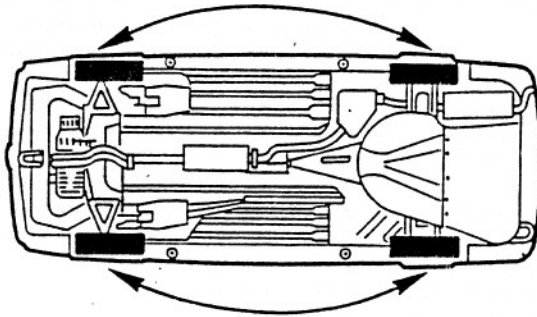
When balancing the wheels with alloy rims, only original Alfa Romeo counter weights must be used.



## TECHNICAL CHARACTERISTICS AND SPECIFICATIONS

### GENERAL SPECIFICATIONS

#### TYRE ROTATION



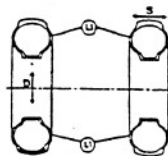
#### FLUIDS AND LUBRICANTS

APPLICATION	TYPE	NAME
Claw for fitting tyre to rim	FLUID	MILLOIL SC40/R MASCO 203SVA
		(*) (6 parts of water to 1 of fluid)

### CHECKS AND ADJUSTMENTS

#### DYNAMIC WHEEL BALANCING

Maximum residual imbalance permitted ..... 10 g (5 per side)  
Balancing weights ..... 70 g max per side (with no more than two weights per side)



L1 = location of balancing weights  
D = direction of shaking  
S = direction of «shimmy»

#### NOTE:

- Locate the balancing weights on the edge of the rim.
- No not fit more than two weights per side.
- Two types of weights are used: one to be used on wheels with steel wheels and one for wheels with light alloy rims. Avoid mixing the two types.
- The wheel must be balanced each time a hole is repaired.
- The spare wheel must not be balanced.



### TIGHTENING TORQUES

DESCRIPTION	N · m	kg · m
Screws securing wheel	83.3 - 102.9	8.49 - 10.49
Screws securing spare wheel	83.3 - 102.9	8.49 - 10.49

### CHARACTERISTIC DATA

#### Dimensions

VEHICLE	RIM - TYRE DIMENSIONS	MAKE/TYRE	PRESSURE			
			REDUCED LOAD (2 PEOPLE)		FULL LOAD	
			FRONT	REAR	FRONT	REAR
1.8 T.S.	6Jx14" - 185/60R14*82H	Pirelli/P4000E Michelin/MXV2 Good Year/NCT2	2.2	2.0	2.5	2.5
	OPTIONALS 6Jx14" - 195/60R14*85V	Pirelli/P4000E Michelin/MXV2 Good Year/NCT2				
2.0 T.S.	6Jx14" - 195/60R14*85V	Pirelli/P4000E Michelin/MXV2 Good Year/NCT2	2.2	2.0	2.5	2.5
2.4 V6	6Jx15" - 195/55R15*84V 6Jx15" - 195/55ZR15* *	Pirelli/P4000E Michelin/MXV2 Good Year/GSD	2.5	2.3	2.8	2.5
	OPTIONALS 6Jx15" - 205/50R15*85V **	Pirelli/P700Z Michelin/MXV2 Good Year/GSD				
ALL	SPARE WHEEL 4Jx15" - T115/70R15"	MICHELIN/TEX	4.2			

\* In countries where this type of tyre has been homologated (see vehicle documents) the 195/55R15\*84V must not be fitted to the vehicle.

\*\* At present it is not possible to fit snow-chains to these tyres.



## '95 VERSIONS

MODEL	RIM SIZE	TYRE SIZE	PRESSURES (Bar)			
			REDUCED LOAD (2 PERSONS)		FULL LOAD	
			FRONT	REAR	FRONT	REAR
T.SPARK 1.7 (167A4H) (167A4G) (167A4L)	6Jx14"	185/60 HR14	2.2	2.0	2.5	2.5
T.SPARK 1.8 (167A4E) (167A4M)	6Jx14"	185/60 HR14 195/60 VR14*	2.2	2.0	2.5	2.5
	6.5Jx15"	205/50 VR15	2.5	2.3	2.8	2.5
	7Jx16**	205/45 ZF16	2.5	2.3	2.8	2.5
V6 (167A1E)	6.5Jx15"	205/50 VR15	2.5	2.3	2.8	2.5
	7Jx16*	205/45 ZR16	2.5	2.3	2.8	2.5
ALL	SPARE WHEEL (compact) 4Jx15" for steel rims 4BX15" for alloy rims	115/70 R15 90M	4.2			

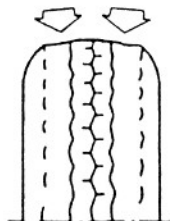


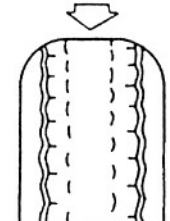
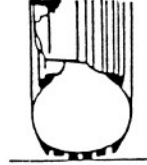

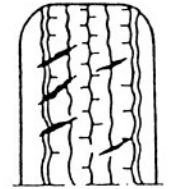


(\*) Optional

**WARNING:** In the event of continued driving at top speed the pressures should be increased by 0.3 bar.**NOTE:** To improve mating between the wheels and the car body the rims have a specific camber for each rim size. Therefore in addition to the correct rim and tyre match it is also necessary to check and maintain the camber of the rim.

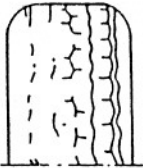
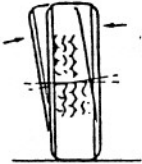
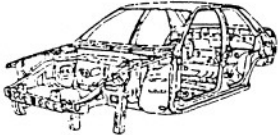
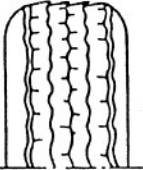
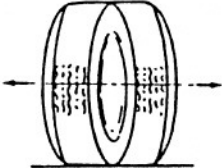
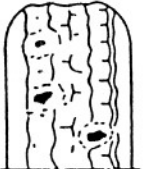
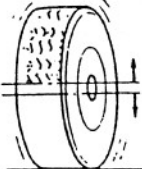
RIM SIZE	RIM CAMBER
6JX14"	31.5 mm
6.5JX15"	37 mm
7JX16"	41 mm



## TYRE WEAR

DEFECT	CAUSE	CORRECTIVE ACTION
<b>RAPID SHOULDER WEAR</b> 	 Pressure too low	 Service to correct pressure (cold) and replace both tyres of affected axle if necessary
<b>RAPID WEAR OF CENTRE</b> 	 Pressure too high	 Service to correct pressure (cold) and replace both tyres of affected axle if necessary
<b>CRACKS IN TREAD</b> 	 Pressure too low or tyres do not correspond to prescribed type	 Service to correct pressure (cold) and replace both tyres of affected axle if necessary

**TYRE WEAR (cont.d)**

DEFECT	CAUSE	CORRECTIVE ACTION
<p>UNEVEN WEAR</p> 	 <p>Incorrect camber</p>	 <p>Check underbody for damage; if necessary replace both tyres of affected axle</p>
<p>FEATHERED WEAR</p> 	 <p>Incorrect toe-in</p>	<p>Service to correct toe-in value (see: GR. 21); replace both tyres of affected axle if necessary</p>
<p>WEAR SPOTS</p> 	 <p>Incorrect balancing or defective tyre</p>	<p>Correctly balance the wheel; if necessary replace both tyres of the affected axle</p>