

Installation Instructions

Conversion to 235/45 R 17 tyres and 8 J x 17 H 2 ET 30 three-piece disk wheel 40.02

Model 124

Excluding vehicles with special bodywork, sedans with long wheelbase and 124.020/031/036/051/091/120.

All the work described in sections A, B, C, D, E and F must be carried out in full before the wheel/tyre combination may be used.

The installation instructions are divided up into the following sections:

- A. Detaching the standard wheels
- B. Modifications to the chassis
- C. Modifications to the body
- D. Fitting the special wheels
- E. Tyre inflation pressure
- F. Speedometer correction
- G. Technical details
- H. Information for ordering replacement parts



Note

An entry in the vehicle documents is required in the Federal Republic of Germany. For this a copy of the respective sample report must be submitted to the TÜV/TÜA.

A. Detaching the standard wheels

- 1 Remove wheel covers on steel disk wheels.
- 2 Slacken wheel bolts.
- 3 Raise vehicle.
- 4 Unscrew wheel bolts.

Note

When unscrewing the final wheel bolt be sure that the wheel does not suddenly tilt off the hub.

- 5 Remove wheel.

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Five of the standard wheel bolts removed must be retained for the spare wheel.

B. Modifications to the chassis

In conjunction with 17-inch AMG disk wheels, the front axle compression travel on all vehicle models must be reduced in order to ensure adequate clearance under extreme wheel compression.

- 1 Detach front wheels.
- 2 Use spring clamp 124 589 06 31 00 to clamp and remove front axle springs.

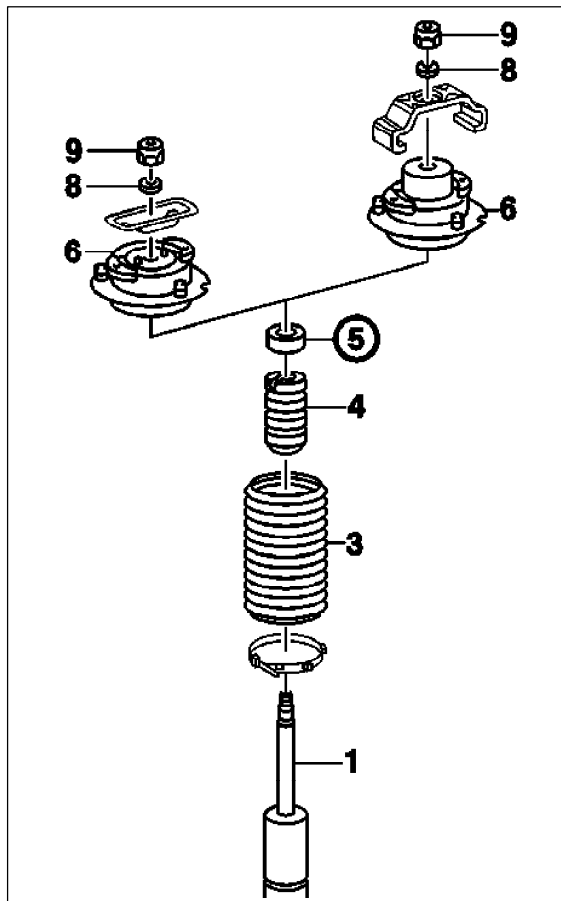
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Do not use impact screwdrivers to clamp front axle springs.

- 3 Unscrew front axle damper strut at upper damper strut mounting (6) whilst steadying the piston rod.
- 4 Lower control arm and damper strut (support control arm).
- 5 Install spring travel limiting washer (5) on piston rod (1) over stop buffer (4).
- 6 Assemble damper strut and front axle spring in reverse sequence.

Note

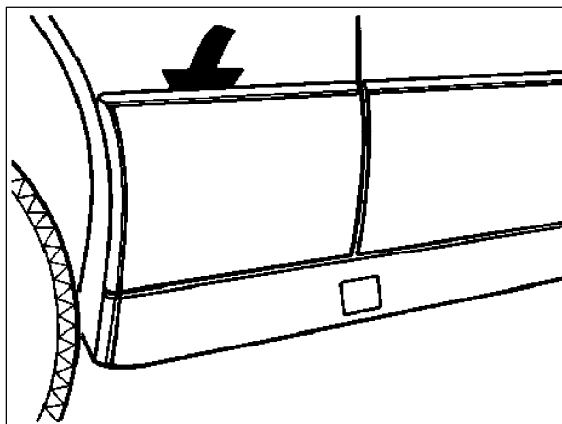
Use new self-locking nuts (9) and washer (8) on the upper damper strut mounting. (Tightening torque 60 Nm).



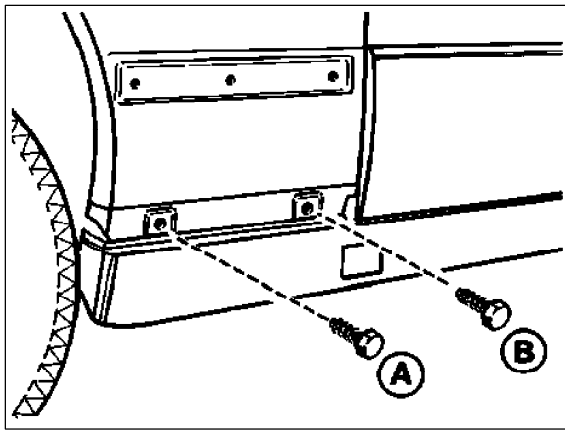
C. Modifications to the body

1 Adjusting the front fender

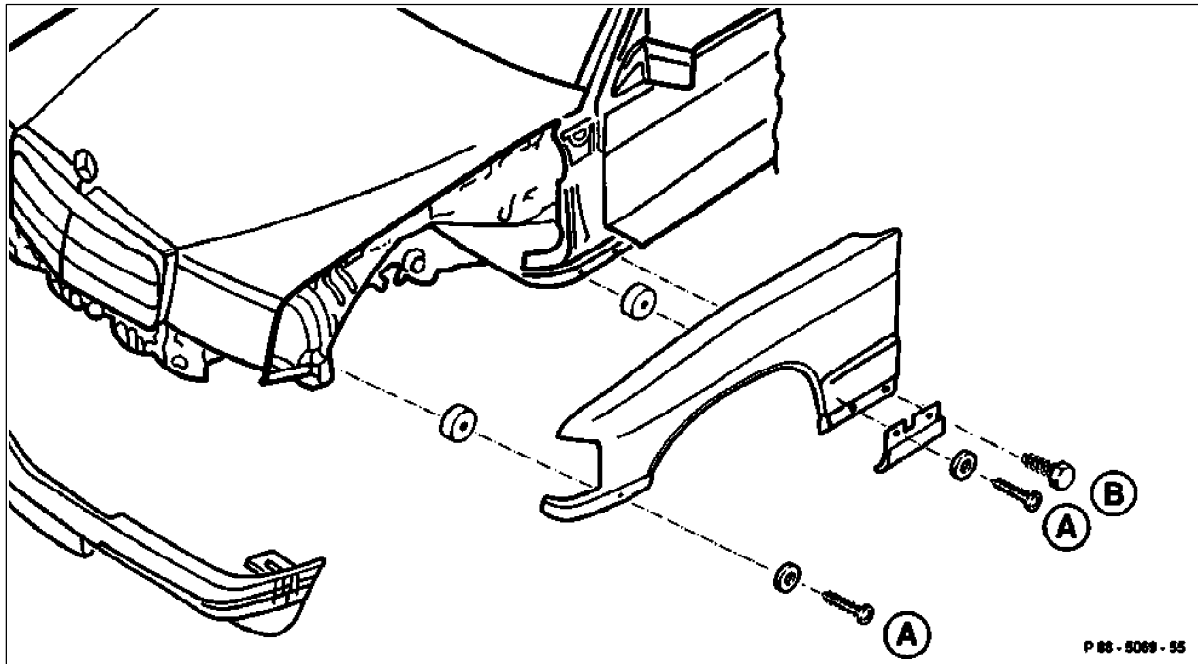
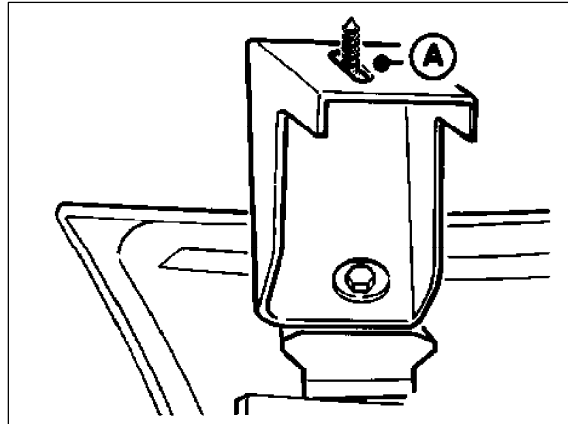
- 1.1 Detach side panel on the front fender from the fixing elements, pull to the rear and remove.



1.2 Unscrew bolts (A and B) on fender.



1.3 Slacken bolt (A) on side of bumper.



1.4 Press the side part of the bumper downwards and unscrew the bolts for fender fixing (A and B). Clamp a spacer between fender and body on the left and the right. The bore holes must align to permit troublefree fixing.

1.5 Place one spacer on the left and right between the fender and body in the side area of the bumper.

1.6 Tighten all bolts slightly in accordance with layout. Tighten bolts after a visual inspection.

2 Reworking the body at the front fenders

2.1 Flattening down front fender flange:

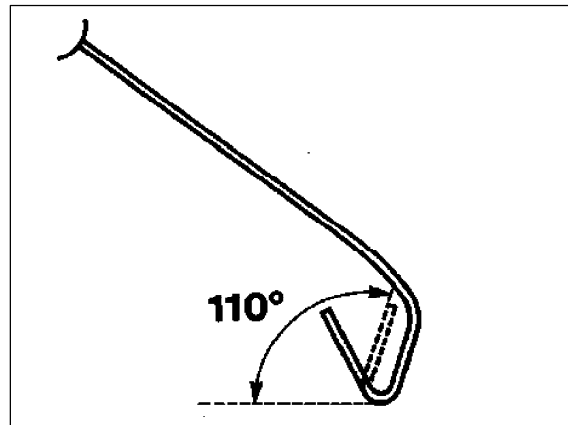
When converting to wider wheels and tyres the inside edges of the front fender must be flattened down to an angle of 110° over the complete wheel cutout.

2.2 If excessive PVC underbody protection has been applied, grind off excess before folding back the fender flange.

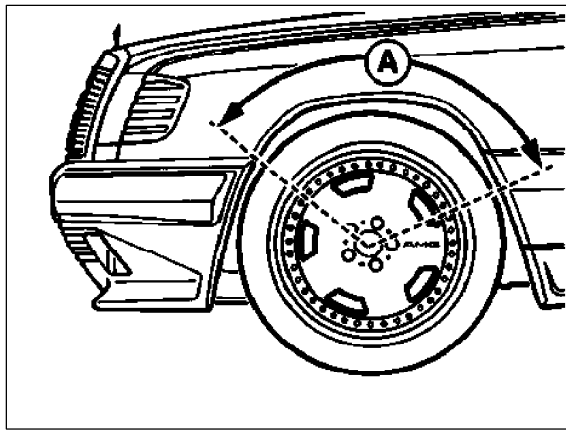
2.3 Using a hot air gun carefully heat up outer edges of fender to a maximum of $70^\circ - 80^\circ\text{C}$.

Note

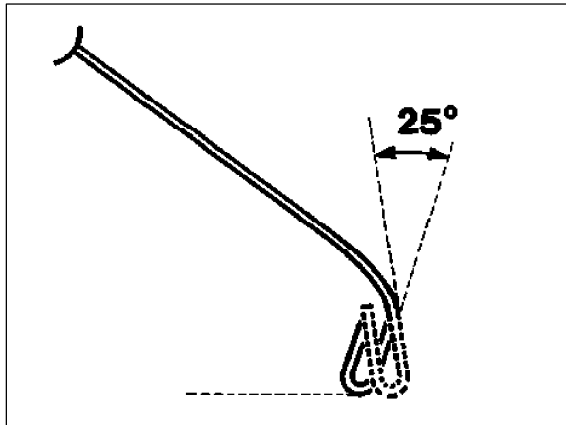
Do not overheat paint whilst applying heat (max. 80°C).



2.4 In the marked area (A), the fender flange is flattened down up to the inside of the fender in several stages. A plastic hammer must be used to avoid damaging the paint.



2.5 Flaring out the front fender:
Using a plastic hammer, apply even blows to flare out the edge of the front fender by 25° in the upper area.

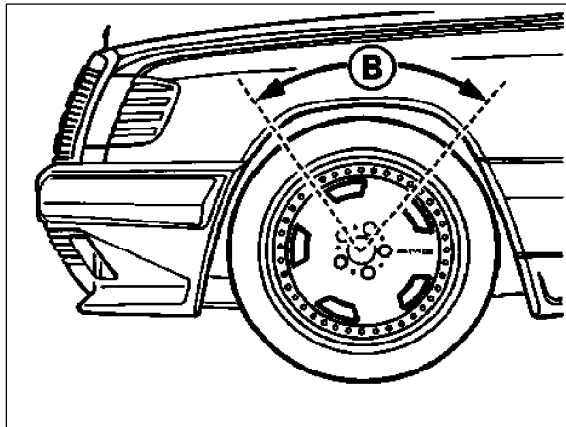


2.6 Allow front fender flare to curve smoothly back towards original, unflared line within the marked area (B).

Note

Rectify any damage to paint or underbody protection.

2.7 Grind off side panel to match the reworked fender contour and assemble.



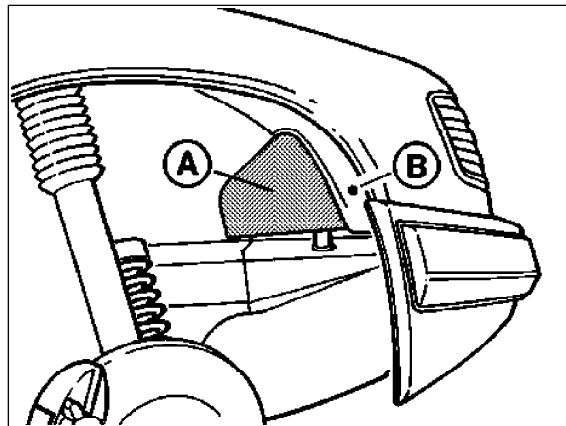
3 Reworking the body inside the wheel arches

3.1 Slacken the two bolts of the windscreen washer container on the right side. Tie up container so that it is not damaged when driving out the wheel arch. Slacken ABS hydraulic unit and hydraulic fluid container on the left side and tie up. Ensure that the units are not damaged whilst driving out the wheel arch.

3.2 Using a plastic hammer drive out wheel arch over an area of approx. 150 mm x 150 mm (A) approx. 10 mm towards the inside of engine compartment.

3.3 Remove weld stud (B) for fixing the inner fender and replace by a blind rivet with a large swage-head.

3.4 Treat wheel arch again with underbody protection. Spray the folded back fender edges with body cavity preserver.

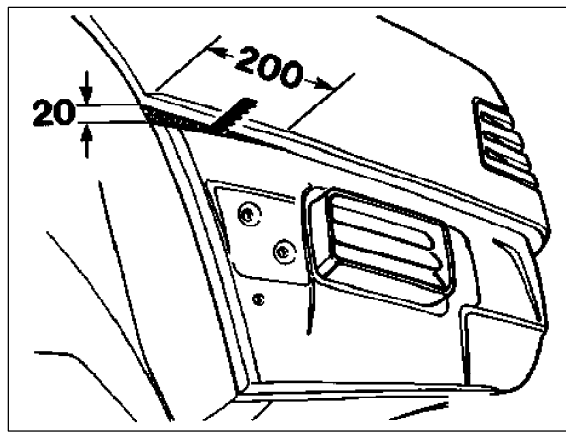


4 Body operations on rear fender

4.1 Sedan/coupé

Installing an angled sheet metal part:

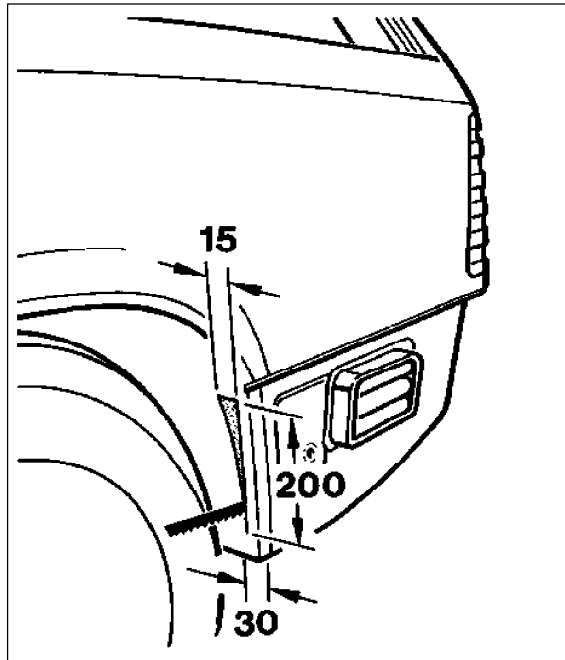
- Remove side covers in luggage compartment.
- Free the side wall from wax and sealing compound in the area shown.
- Saw side wall along a length of 200 mm and extend outwards by 20 mm.
- Apply primer to angled sheet metal part (33 x 10 x 1 x 200 mm) and weld in using a TIG welder.
- Grind off weld, then apply primer and seal with body sealing compound.
- Coat with PVC underbody protection.



4.2 124 T-model

Installing a sheet metal strip:

- Remove spare wheel and jack from luggage compartment.
- Free the wheel arch from wax and sealing compound in the area shown.
- Saw wheel arch along a length of 200 mm, 30 mm parallel to outer body contour and extend outwards by 15 mm.
- Apply primer to sheet metal strip and weld in from the wheel arch side using a TIG welder.
- Grind off weld, then apply primer and seal with body sealing compound.
- Coat with PVC underbody protection.



5 Folding back the edge of rear fender

5.1 If excessive PVC underbody protection has been applied, grind off excess before folding back the edge of the fender.

5.2 Using a hot air gun carefully heat up outer edges of fender to a maximum of 70° - 80°C.

Note

Do not overheat paint whilst applying heat (max. 80°C).

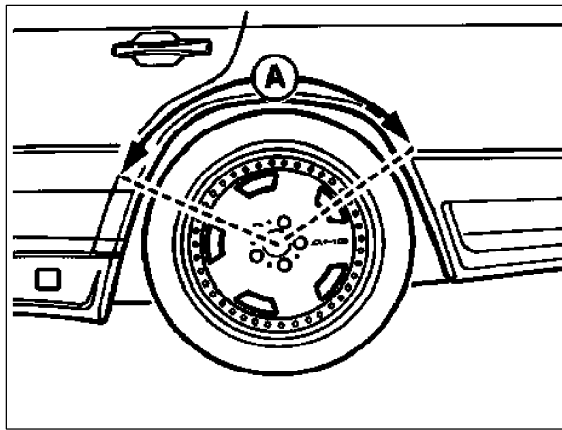
5.3 In the marked area (A), the edge of the fender is flattened down as far as the inside of the fender in several stages.

A plastic hammer must be used to avoid damaging the paint.

Note

Rectify any damage to paint or underbody protection.

5.4 Treat wheel arch again with underbody protection. Spray the folded back fender edges with body cavity preserver.



D. Fitting the special wheels

1 Screw in centering bolts (tool kit) in upper tapped hole of the wheel hub.

2 Put on AMG light alloy wheel and press onto wheel hub.

3 Screw in wheel bolts and tighten positively. The wheel bolts must be dry and free from grease. Ensure that the wheels are not tensioned by tightening the wheel bolts on one side. (Tighten wheel bolts diagonally in several stages).

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Only M12 x 1.5 x 33 mm spherical collar bolts supplied with the rims are to be used for the wheel fixing.

4 Unscrew centering bolt and replace by a wheel bolt.

5 Lower vehicle.

6 Evenly tighten wheel bolts diagonally to a tightening torque of 110 Nm.

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AMG light alloy wheel bolts must be retightened after 100-500 km. (Tightening torque 110 Nm).

Note

Fitting snow chains is not permitted.

E. Correction of tyre inflation pressure

- The minimum tyre inflation pressures required can be obtained from the tyre inflation pressure table (appendix).
- The front axle or rear axle tyre inflation pressures determined are to be noted on the AMG sticker using a waterproof felt tip pen. Attach sticker to a suitable point on the loading edge of luggage compartment.

F. Speedometer correction

By contrast with standard production tyres the rolling circumference of retrofitted tyres is in a range which necessitates checking and correcting the speedometer calibration if required. This can be performed by an authorized dealer of the respective instrument manufacturer (VDO/Motometer).

G. Technical details

Manufacturer:	AMG/OZ Racing	
Model:	C 7 40 0133	
Wheel size:	8 J × 17 H 2	
Offset:	30 mm	
Pitch circle:	d=112 mm, 5 hole	
Permitted wheel load:	630 kg at r _{dyn} =321 mm	
Centering:	Central centering d=66.5+0.1	
Type:	Three-piece light alloy wheel with pressed outer and inner bed as well as a cast wheel spider	
Marking:	Width of outer bed:	1.5 inch
	Width of inner bed:	6.5 inch
	Wheel spider:	flange-mounted from inside
	Outer side of wheel spider:	AMG
	Inner side of wheel spider:	AMG Germany/OZ Racing JU 8 J × 17 H 2 ET 30 C 7 40 0133
Valves:	Metal screw-on valves in accordance with DIN 7779 with long nut	
Fixing:	Only with M12 x 1.5 x 40 mm spherical collar bolts supplied by the wheel manufacturer	
Tightening torque:	110 Nm	
Balance weights:	Only adhesive weights are permitted	

Note

The individual parts are screwed together using 35 special 10-sided collar nuts. The bolts are secured with a special adhesive. Sealing is by means of an application of silicone compound. The center bore is closed with a plastic cover. Loosening the screwed connections or dismantling the wheels is not permitted.

H. Information for ordering replacement parts

Replacement parts

Designation	Part no.
Light alloy disk wheel 8 J × 17 H 2 ET 30	B6 602 00 61
Wheel trim	B6 602 00 98

Spherical collar bolt L=40 mm	H WA201 401 02 70
Valve	H WA201 400 01 13
Tyre pressure sticker	H WA201 584 00 39
Fender extension kit	B6 602 00 72
Spring travel limiter kit	B6 602 00 74

Note

A set wheel locking bolts
(Part no. B6 602 02 01) can be supplied upon request.

Conversion to AMG 8 J x 17 H 2 ET 30 disk wheel with tyre dimension: 235/45 R 17

Passenger car

Model 124 sedan/coupé/T-model

The appendix is divided up into the following sections:

- A. Assignment of tyre make/model
- B. Specified minimum tyre inflation pressures

A. Permitted makes of tyre

Make	Description	Vehicle model 124		
		Sedan	Coupé	T-model
Bridgestone	RE 71	X	X	X
Dunlop	SP Sport D 40	X	X	X
Pirelli	P 700 Z	X	X	X

B. Specified minimum tyre inflation pressures (bar)

Conversion to tyre dimension 235/45 R 17
Vehicle model: 124 sedan/coupé/T-model

Permitted maximum speed	Front axle		Rear axle			
	Permitted front axle load (kg) ¹⁾		Steel suspension Perm. rear axle load (kg) ¹⁾		Level control system Perm. rear axle load (kg) ¹⁾	
	up to 1015	up to 1055	up to 1025	up to 1230	up to 1025	up to 1230
210	2.0	2.4	2.4	2.9	2.3	2.7
220	2.1	2.5	2.5	3.0	2.4	2.8
230	2.2	2.6	2.6	3.1	2.5	2.9
240	2.3	2.7	2.7	3.2	2.6	3.0
250	2.4	2.8	2.8	3.4	2.7	3.1
Max. wheel camber angle (degrees)	- 1°30'		- 4°		- 2°30'	

1) Values for maximum speed and permitted front axle or rear axle loads can be obtained from the vehicle documents.

Comments:

- Tyre inflation details only apply for vehicles with a maximum speed of up to 250 km/h.
- The tyre inflation pressure can be reduced by $p = 0.1$ (bar) per 100 kg reduction in axle load.
- Remember that tyre inflation pressure details only apply for cold tyres!
- On warm tyres values of up to 0.5 bar higher are permissible. Do not reduce pressure of warm tyres! Tyre inflation pressure may only be corrected when tyres are cold!
- Tyre inflation pressure details relate to the use of permitted maximum speed and permitted axle load.