

Mégane

0 General

- 01** SPECIFICATIONS
- 02** LIFTING
- 03** TOWING
- 04** LUBRICANTS CONSUMABLES
- 05** DRAINING, RE-FILLING
- 07** VALUES AND SETTINGS

BA0A - BA0E - BA0F - BA0G - BA0L - BA0U

77 11 176 201

APRIL 1995

Edition Anglaise

"The repair methods given by the manufacturer in this document are based on the technical specifications current when it was prepared.

The methods may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

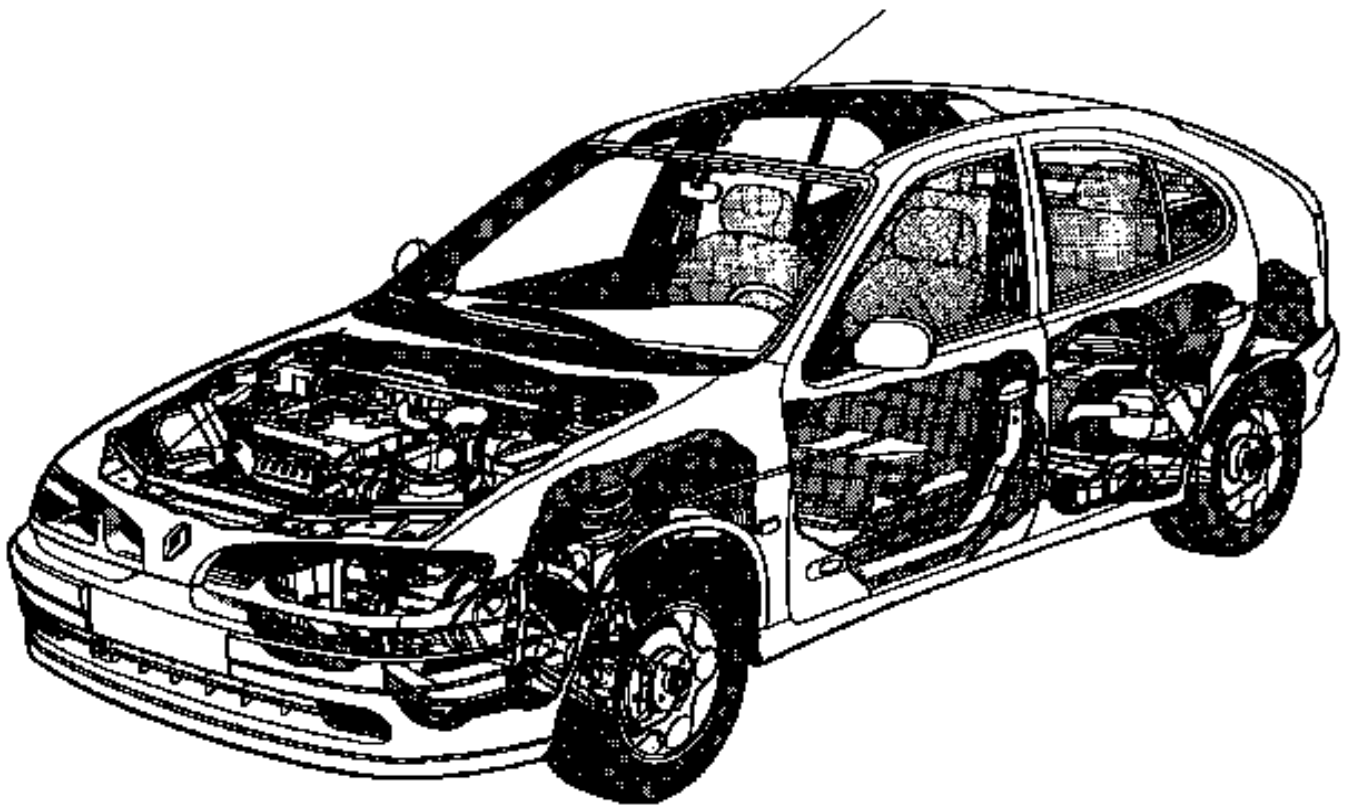
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Régie Nationale des Usines Renault S.A. 1995

SECTION VIEW



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SPECIFICATIONS

Engine- Clutch - Gearbox

01

Vehicle type	Engine		Clutch type	Type of manual gearbox and automatic transmission
	Type	Capacity		
BA0E	E7J	1390	180 DST 3050 180 CP 3300	JB1
BA0F BA0L	K7M	1598	200 HR 4000	JB1
BA0G	F3R	1998	215 HRN 4000	JB3
BA0A BA0U	F8Q	1870	200 HRV 4600 200 HRV 3100	JB1
BA0F	K7M	1598	-	AD4

VEHICLE IDENTIFICATION

Example : BA0E

- B : Body type (example 5 door hatchback)
- A : Project code (example 64)
- 0E : Engine suffix (example E7J 764)

SPECIFICATIONS

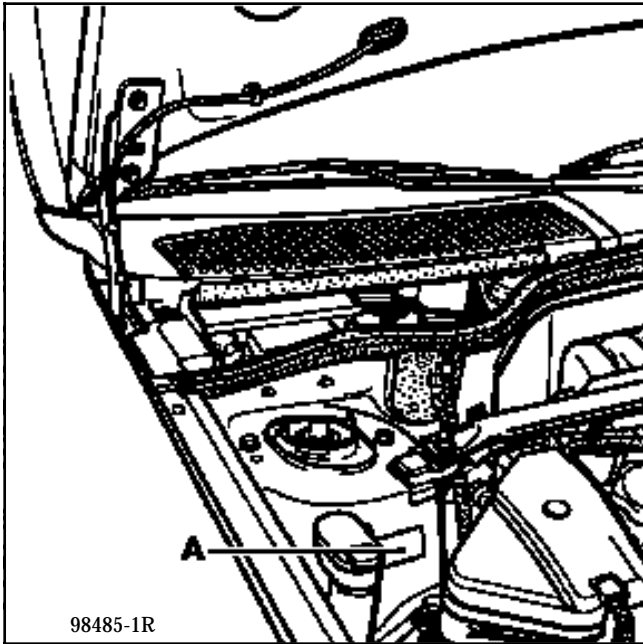
Vehicle identification

01

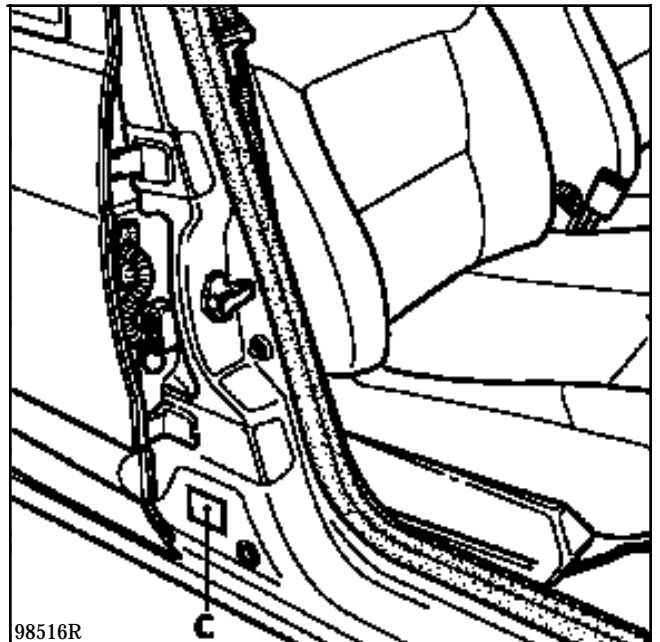
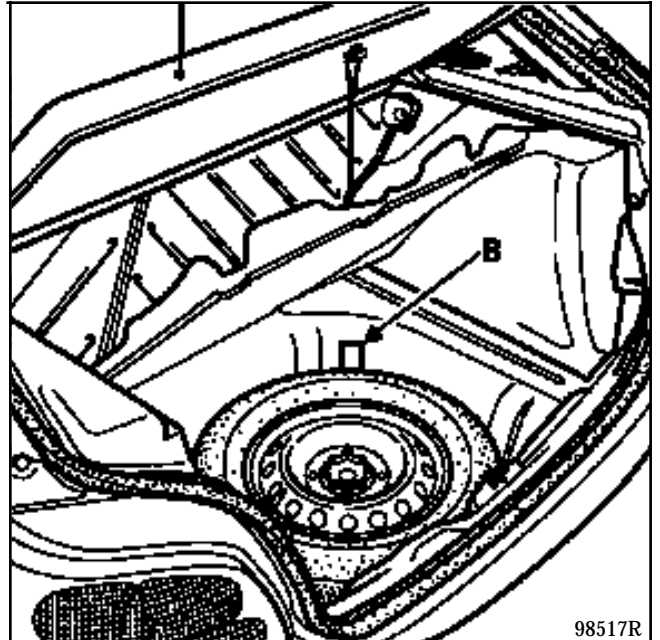
LOCATION OF THE VEHICLE IDENTIFICATION PLATE

Two possible locations on the vehicle:

- in the engine compartment (A),



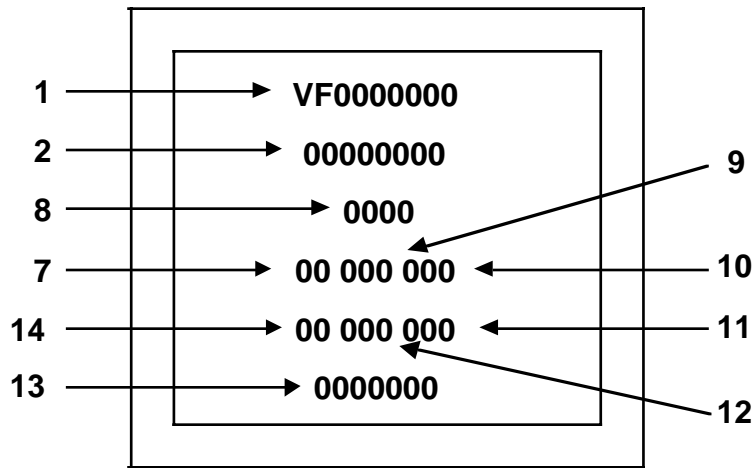
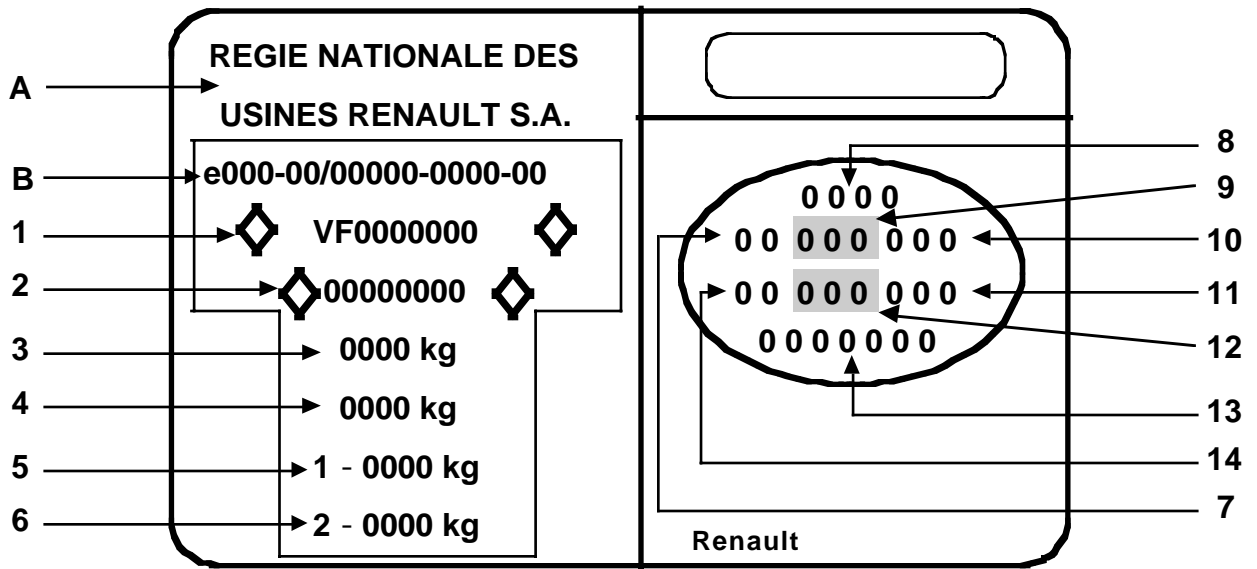
- near the emergency spare wheel (B) with a duplicate label of the oval plate on the lower section of the passenger door (C).



SPECIFICATIONS

Vehicle identification

01



SPECIFICATIONS

Vehicle identification

01

It shows:

- At **A** : the name of the manufacturer,
- At **B** : the E.E.C. approval number
- At **1** : the type mines of the vehicle preceded by the world manufacturers identification code (VF1 corresponds to RENAULT FRANCE),
- At **2** : the chassis number,
- At **3** : the maximum permissible weight,
- At **4** : the maximum permitted total train weight,
- At **5** : the maximum permitted weight on the front axle,
- At **6** : the maximum permitted weight on the rear axle,
- At **7** : the first figure indicates the gearbox or factory options, the second figure indicates the equipment level,
- At **8** : the vehicle type,
- At **9** : the technical equipment code,
- At **10** : additional factory optional equipment,
- At **11** : the equipment level,
- At **12** : the paint code,
- At **13** : a letter describing the factory of manufacture followed by the fabrication number,
- At **14** : the trim code.

NOTE : Depending on the country of export, certain details might not be given. The plate described above shows all possible information.

ALLOCATION OF TECHNICAL EQUIPMENT CODES

The equipment code, the three letters which appear in (9), must be documented for vehicle identification reasons (ordering spare parts, warranty claim, etc.)

LIFTING

Trolley jack - Axle stands

02



Safety symbol (special precautions to be taken when carrying out operations).

SPECIAL TOOLING REQUIRED	
Cha. 280 -02	Adaptable cross piece for trolley jack
Cha. 408 -01	Adaptable socket for trolley jack
or	
Cha. 408 -02	



If a trolley jack is used, appropriate axle stands must always be used.

It is **forbidden** to lift the vehicle by supporting its weight under the front suspension arm or under the V shaped part of the rear axle.

Depending on the type of trolley jack, use sockets **Cha. 408-01** or **Cha. 408-02** to position the cross piece **Cha. 280-02**.

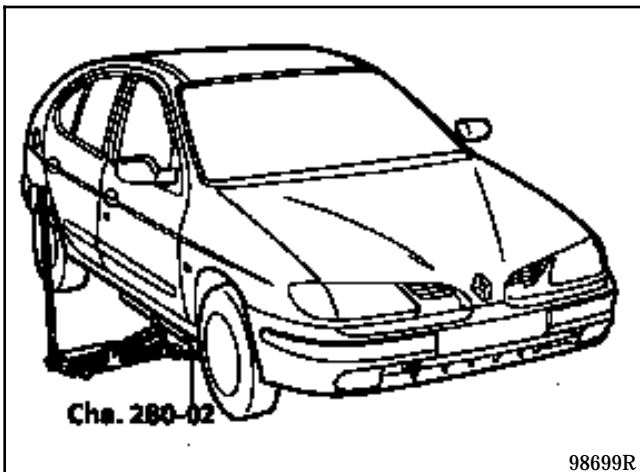
To lift the front or rear, support the vehicle's weight under the vehicle's jacking points .

TROLLEY JACK USED FROM THE SIDE

Use cross piece **Cha. 280-02**.

Take the weight under the sill, level with the front door.

Position the flange correctly in the groove of the cross piece.

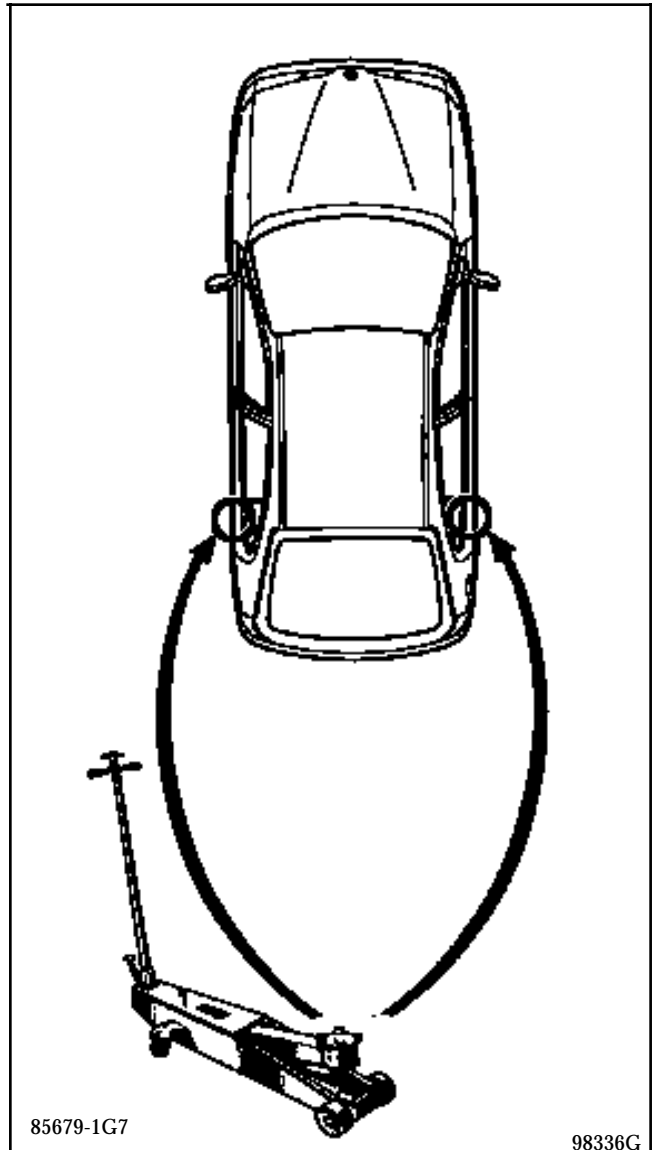


AXLE STANDS

When putting the vehicle on axle stands, they must be positioned:

- either under the reinforcements designed for lifting the vehicle using the vehicle's jack,
- or under the points located behind the reinforcements.

Axle stands are positioned at the rear when the vehicle is lifted from the side.



SAFETY INSTRUCTIONS



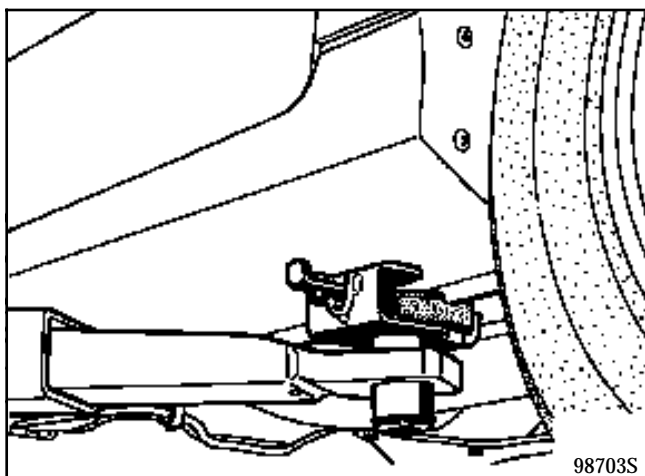
Several scenarios should be considered:

1 - WHEN REMOVING COMPONENTS

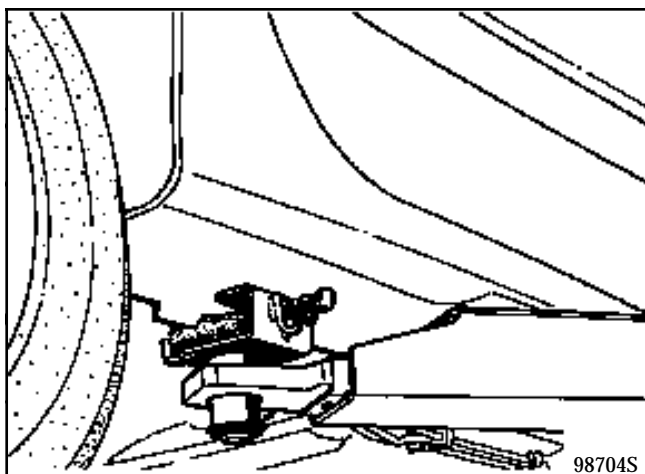
In general, **never use a 2 post lift**, if a four post lift can be used.

If this is not possible, position the lifting pads under the body sill, level with the vehicle's jacking points.

FRONT



REAR



These must be positioned in line with the vehicle's jacking points. They must be clipped into the holes in the body sill.

2 - SPECIAL CASE - REMOVING AND REFITTING THE ENGINE AND TRANSMISSION ASSEMBLY

In this special case, the body of the vehicle must be firmly attached to the arms of the two post lift using the special pads.

FOG

Reference FOG 449 8111 - 449 8411

or

CHEMICO

Reference 39 2550 0001

or

SCENCH

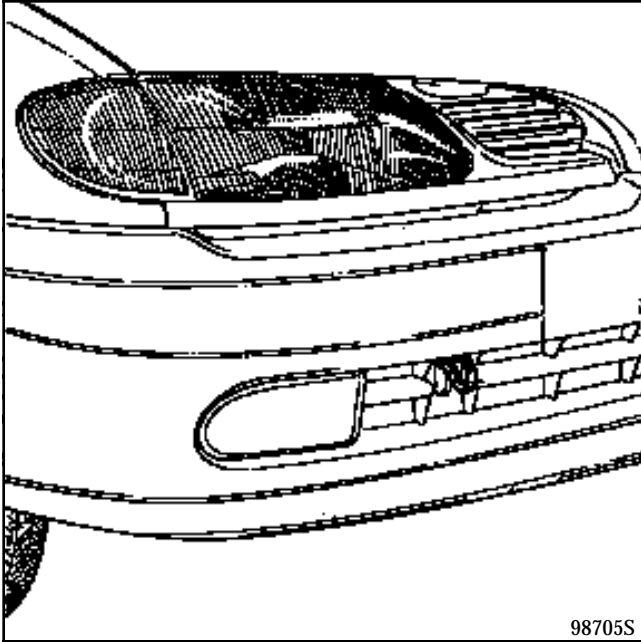
Reference 776 684

OBSERVE THE LEGAL TOWING REQUIREMENTS OF THE COUNTRY YOU ARE IN.

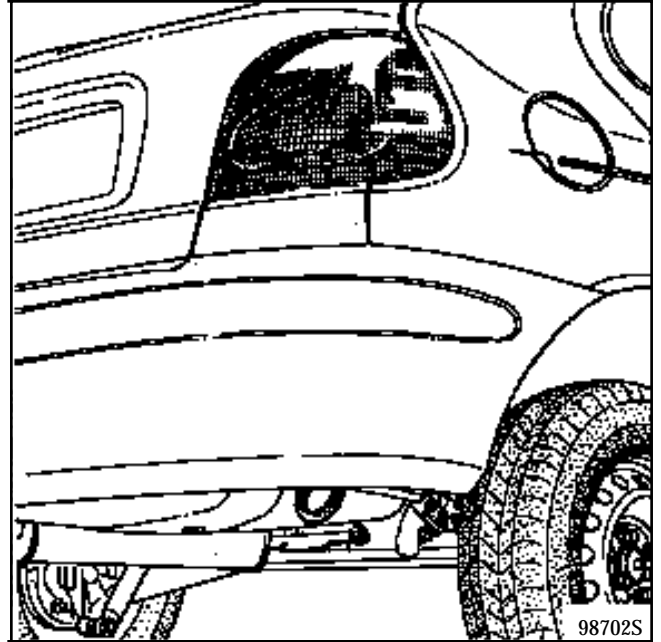
NEVER USE THE DRIVESHAFTS FOR TOWING THE VEHICLE.

The towing points may only be used for towing the vehicle on the road. They should never be used for removing the vehicle from a ditch or for any other similar breakdown operation or to lift the vehicle, either directly or indirectly.

FRONT



REAR



LUBRICANTS - CONSUMABLES

Packaging

04

DESCRIPTION	PACKAGING	PART NUMBER
LUBRICANTS		
<ul style="list-style-type: none"> • MOLYKOTE "BR2" for main bearing journal faces, thrust pad guide tubes, clutch fork pads, lower suspension arm bearings, torsion bar splines, steering box, driveshaft splines. 	1 kg tin	77 01 421 145
<ul style="list-style-type: none"> • MOLYKOTE "33 Medium" tubular rear axle rings anti-roll bar rings. 	100 g tube	77 01 028 179
<ul style="list-style-type: none"> • ANTI-SEIZE (high temperature grease) Turbo etc. 	80 ml tube	77 01 422 307
<ul style="list-style-type: none"> • "MOBIL CVJ" 825 Black star or MOBIL EXF57C for driveshaft joints 	180 g sachet	77 01 366 100
<ul style="list-style-type: none"> • MULTIPURPOSE LUBRICANT wheel sensor 	Aerosol	77 01 422 308
MECHANICAL SEALANTS		
<ul style="list-style-type: none"> • Perfect-seal "LOWAC" coating fluid for seals. 	100 g tube	77 01 417 404
<ul style="list-style-type: none"> • Mastic for sealing exhaust pipe unions. 	1.5 kg tin	77 01 421 161
<ul style="list-style-type: none"> • HARDENER KIT ("CAF 4/60 THIXO") for sealing sides of bearing caps. 	Kit	77 01 421 080
<ul style="list-style-type: none"> • AUTO joint blue sealing paste. 	100 g tube 45 g tube	77 01 396 227 77 01 397 027

LUBRICANTS - CONSUMABLES

Packaging

04

DESCRIPTION	PACKAGING	PART NUMBER
MECHANICAL SEALANTS		
<ul style="list-style-type: none"> • AUTO joint grey sealing paste. 	100 g tube	77 01 422 750
<ul style="list-style-type: none"> • LOCTITE 518 for sealing the gearbox housing. 	24 ml syringe	77 01 421 162
<ul style="list-style-type: none"> • Leak detector 	Aerosol	77 11 143 071
ADHESIVES		
<ul style="list-style-type: none"> • "LOCTITE - FRENETANCH" stops bolts coming loose and allows them to be undone. 	24 cc bottle	77 01 394 070
<ul style="list-style-type: none"> • "LOCTITE - FRENBLOC" locks bolts. 	24 cc bottle	77 01 394 071
<ul style="list-style-type: none"> • "LOCTITE SCELBLOC" for bonding bearings. 	24 cc bottle	77 01 394 072
<ul style="list-style-type: none"> • "LOCTITE AUTOFORM" for bonding the flywheel to the crankshaft. 	50 cc bottle	77 01 400 309
CLEANING AGENTS - LUBRICANTS		
<ul style="list-style-type: none"> • "NETELEC" unseizes, lubricates. 	150 g aerosol	77 01 408 464
<ul style="list-style-type: none"> • NC1 cleaner electrical contact cleaner 	Aerosol	77 01 422 379
<ul style="list-style-type: none"> • Carburettor cleaner 	250 ml can 300 ml aerosol	77 01 393 112 77 01 393 111
<ul style="list-style-type: none"> • Injector cleaner 	355 ml can	77 01 423 189
<ul style="list-style-type: none"> • Super concentrated unseizing agent 	500 ml aerosol	77 01 408 466
<ul style="list-style-type: none"> • "DECAPJOINT " (FRAMET) for cleaning the gasket faces of aluminium cylinder heads 	Aerosol	77 01 405 952
<ul style="list-style-type: none"> • Brake cleaner 	400 ml aerosol	77 01 421 282

LUBRICANTS - CONSUMABLES

Packaging

04

DESCRIPTION	PACKAGING	PART NUMBER
VARNISHES		
• "CIRCUIT PLUS" varnish for repairing heated screens	Bottle	77 01 421 135
• "CONTACT PLUS" varnish for repairing rear screen supply terminals	Kit	77 01 422 752
BRAKES		
• Brake fluid	0.5 litre bottle DOT 4	77 01 421 940

DRAINING, RE-FILLING Engine

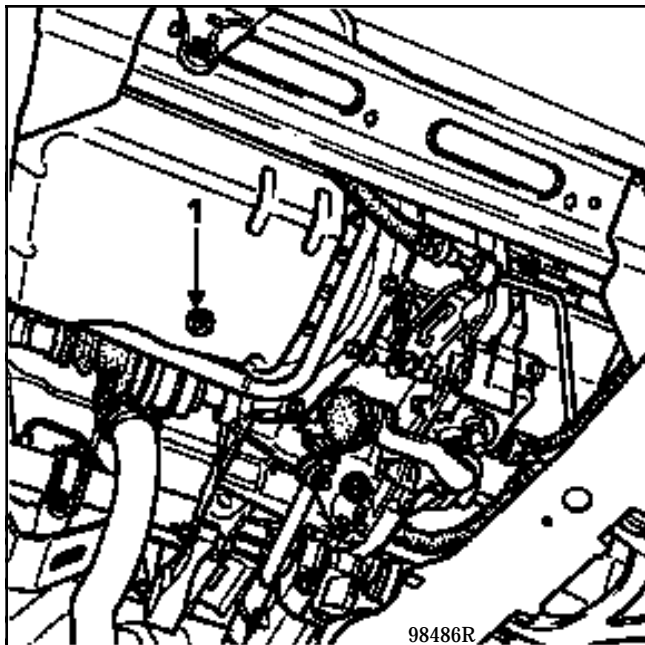
05

TOOLING REQUIRED

Engine drain plug spanner

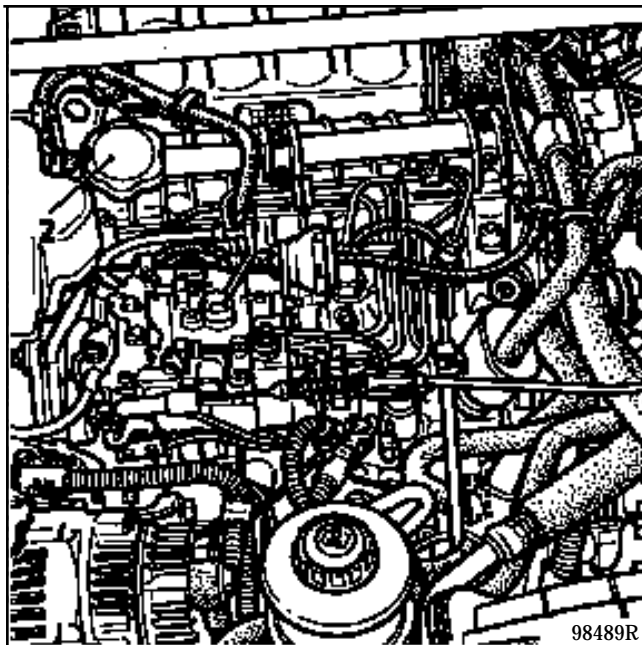
DRAINING: plug(1)

F3R - F8Q ENGINES

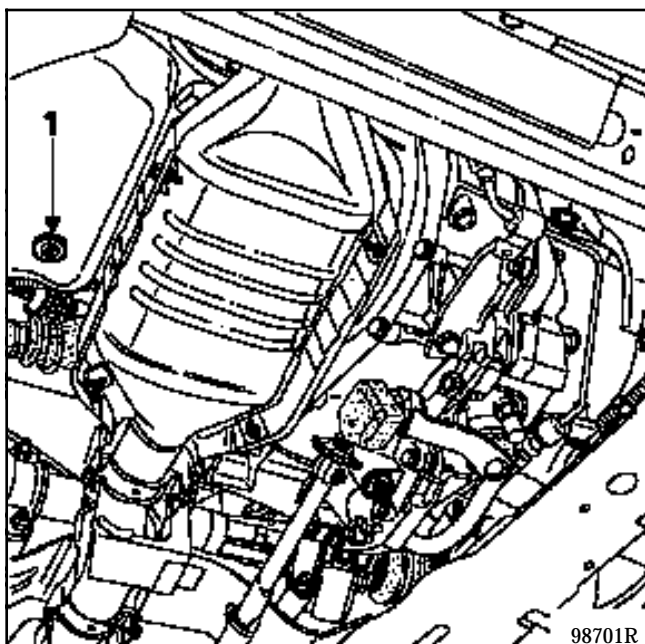


FILLING: plug(2)

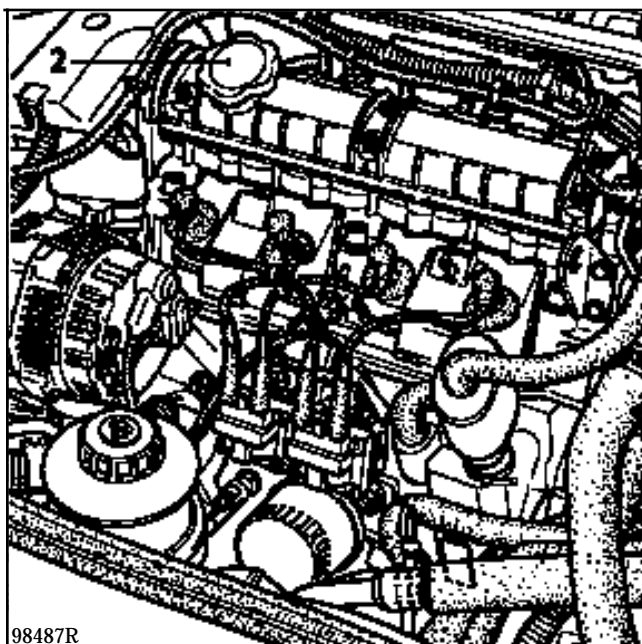
F8Q ENGINE



E7J - K7M ENGINE

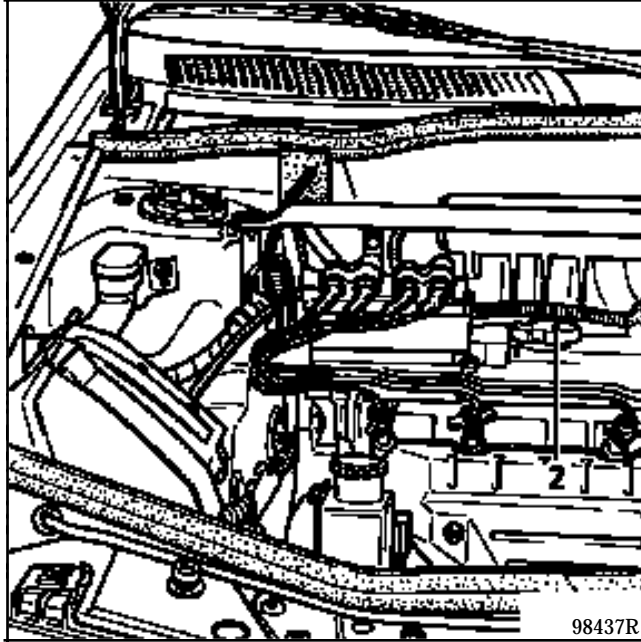


F3R ENGINE

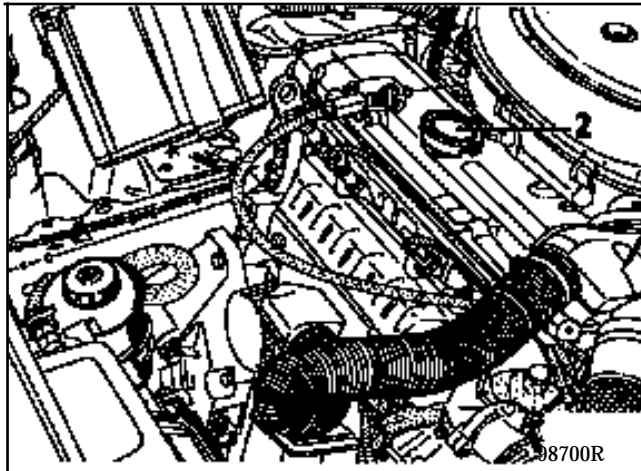


FILLING: plug(2)

K7M ENGINE



E7J ENGINE

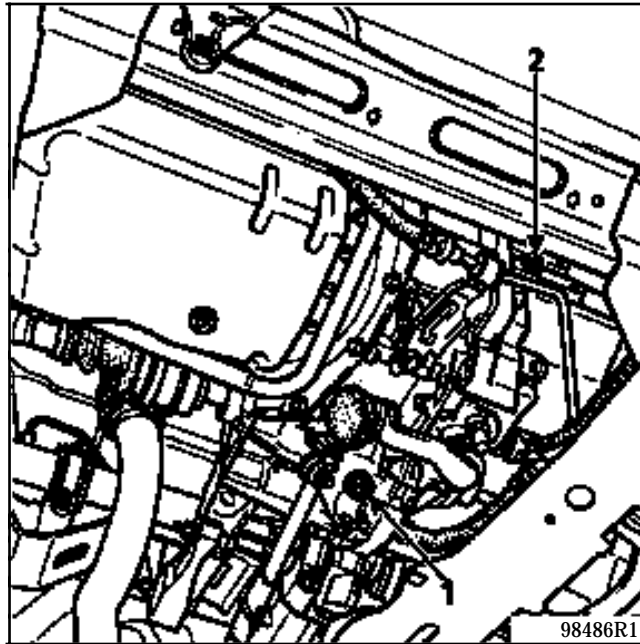


DRAINING, RE-FILLING Gearbox

DRAINING: plug(1)

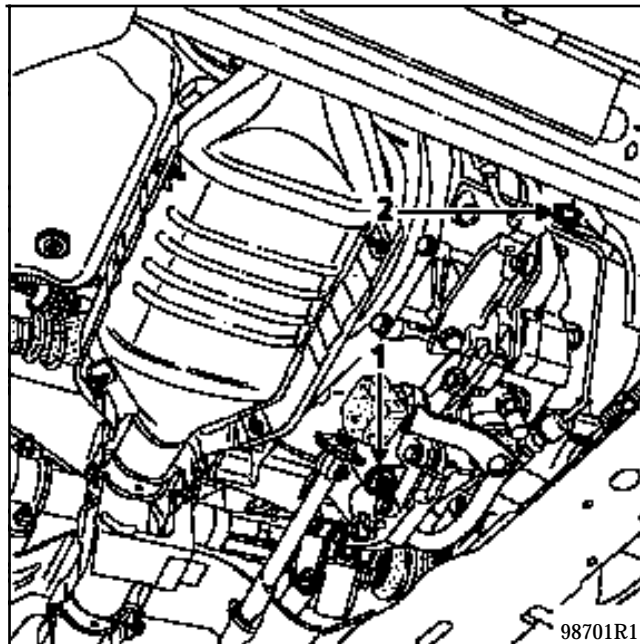
FILLING: plug(2)

F3R - F8Q ENGINE



98486R1

E7J - K7M ENGINE



98701R1

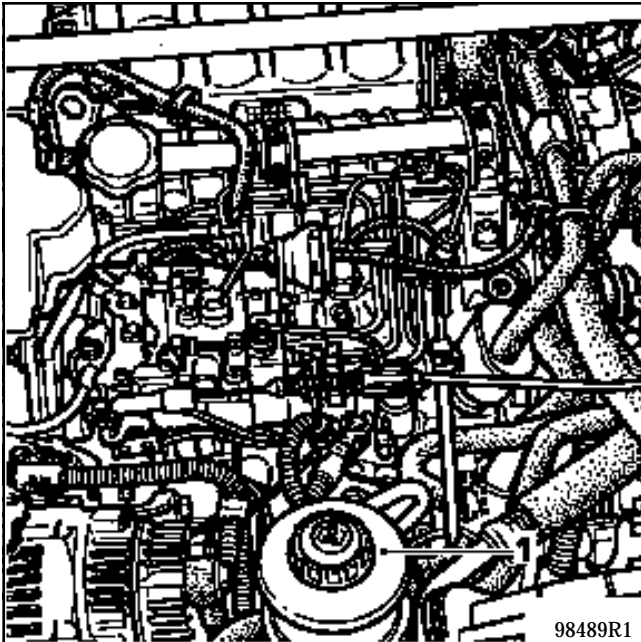
CHECKING THE LEVEL

POWER ASSISTED STEERING PUMP LEVEL

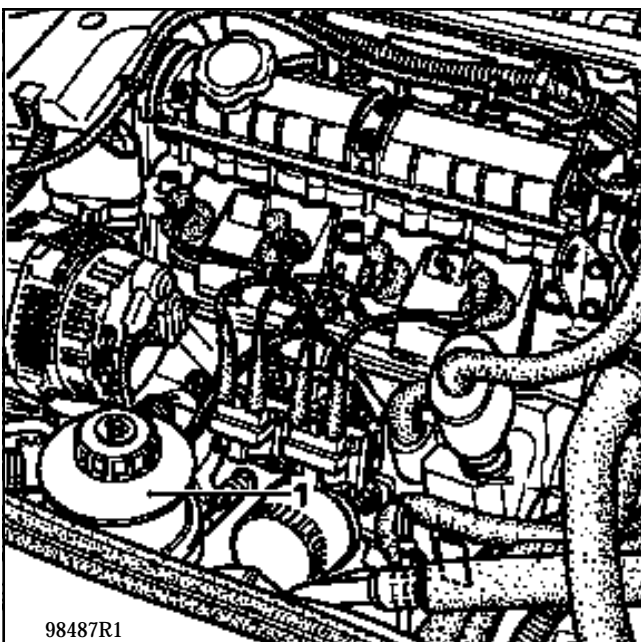
For topping up or filling, use ELF RENAULTMATIC D2 or MOBIL ATF 220 oil.

The level, when correct, should be visible between the **MINI** and **MAXI** marks on the reservoir (1).

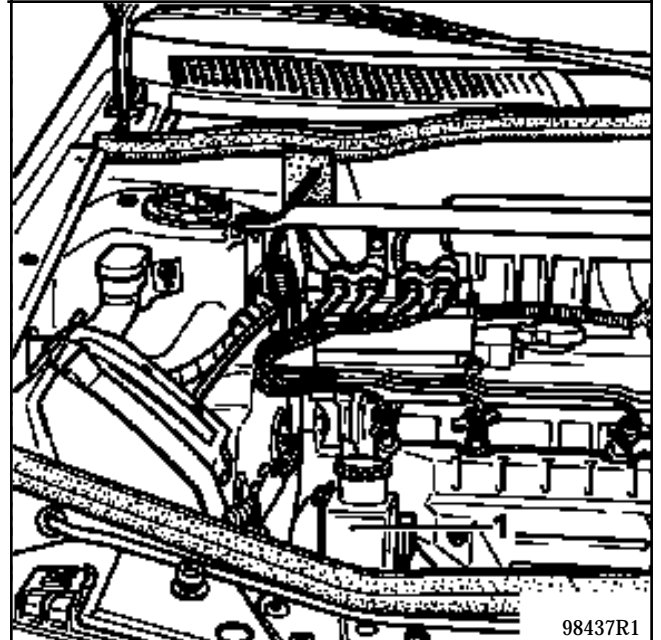
F8Q ENGINE



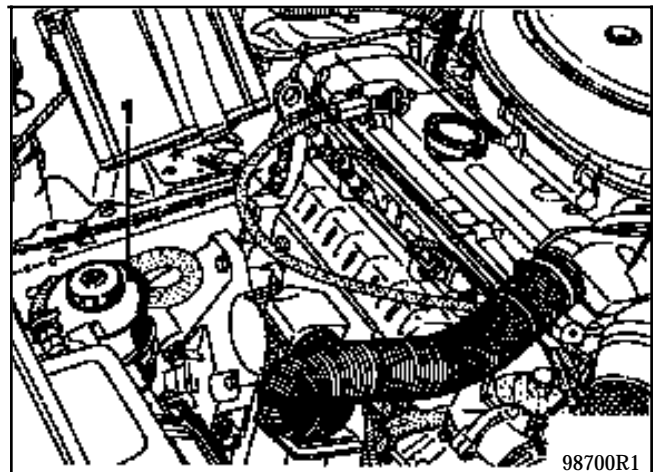
F3R ENGINE



K7M ENGINE



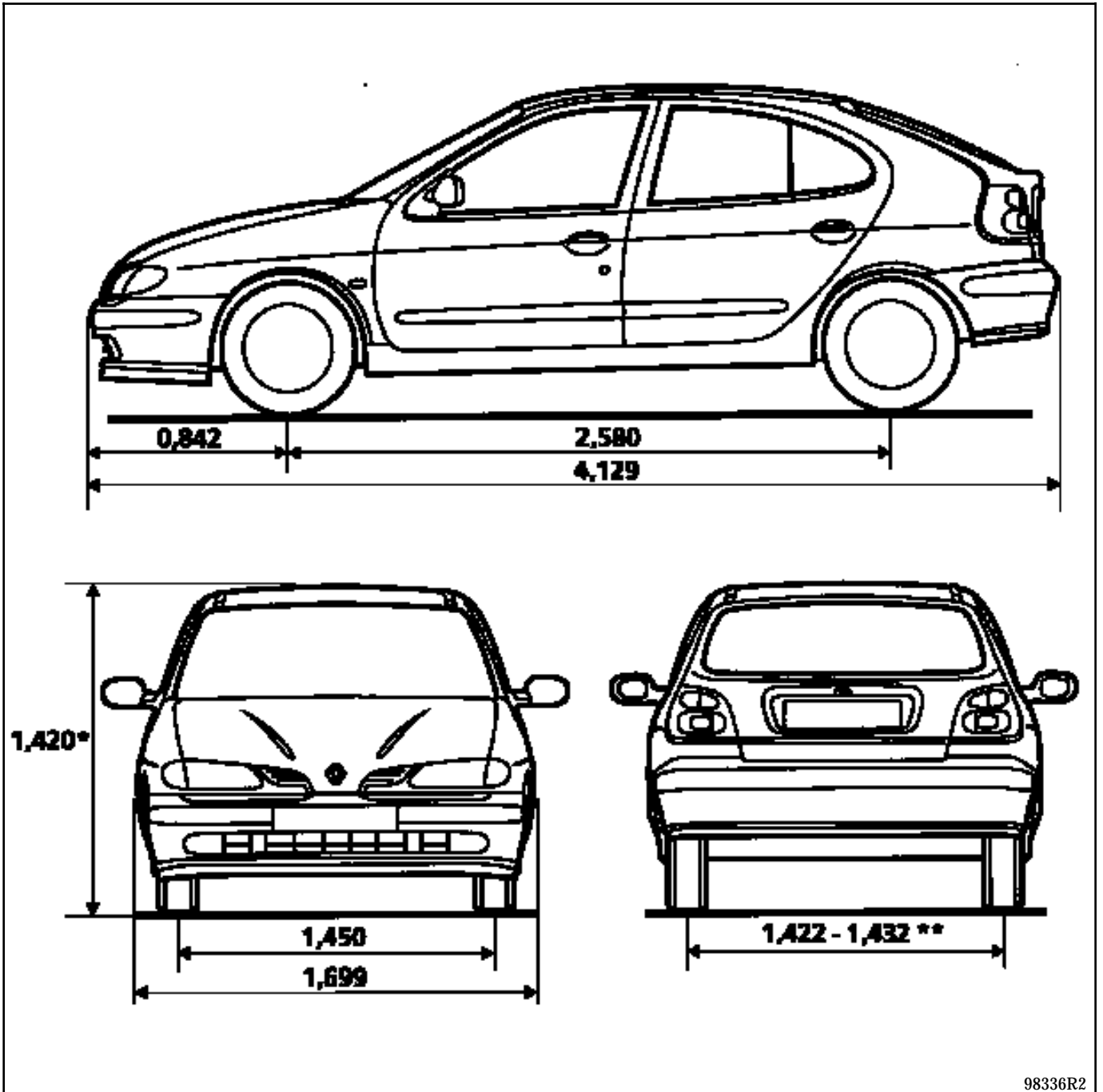
E7J ENGINE



VALUES AND SETTINGS

Dimensions

07



98336R2

* Unladen

** Depending on version

Dimensions in metres

VALUES AND SETTINGS

Capacity - Grades

Components	Capacity in litres	Grade
Petrol engine (oil) E7J } K7M } F3R	After draining 3,5 5,5 (plus 0.5 litres for the oil filter)	<p style="text-align: center;">E.E.C. countries</p> <p style="text-align: center;">Other countries</p>

VALUES AND SETTINGS

Capacity - Grades

07

Components	Capacity in litres	Grade	Features
Manual gearbox JB1 JB3	 3.4 3.4	All countries: TRANSELF TRX 75 W 80 W (API GL5 or MIL-L 2105 C or D standards)	
Automatic transmission AD4	 4	ELF RENAULT MATIC D2 (D20104) or use: MOBIL ATF 220 (D20104 or D21412) TEXAMATIC 4011	
Brake circuit	Normal : 0.7 ABS : 1	SAE J 1703 and DOT 3	Brake fluids must be approved by the Technical Department
Fuel tank	approximately 60	Unleaded petrol/diesel	
Power assisted steering	Separate reservoir 1.1	ELF RENAULT MATIC D2 or MOBIL ATF 220	
Cooling circuit F3R F8Q E7J - K7M	 7 7.5 6	GLACÉOL RX (type D) Only add coolant	

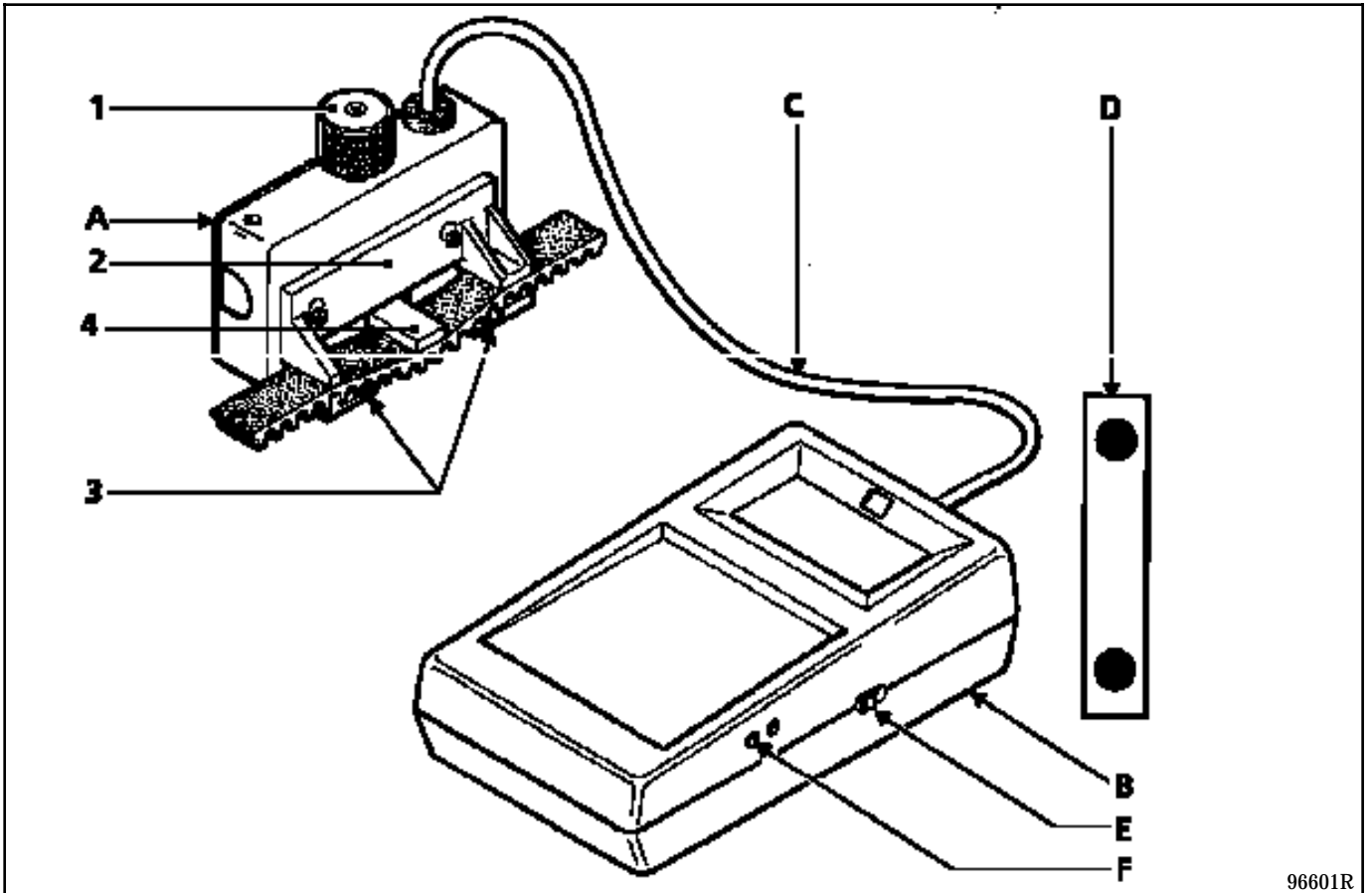
VALUES AND SETTINGS

Belt tension

07

SPECIAL TOOLING REQUIRED

Mot. 1273 Tool for checking belt tension



96601R

- A Sensor
- B Display
- C Connecting lead
- D Calibration checking plate

Principle

The sensor, through the adjusting button (1), the pressure device (2) and the outer lugs (3), applies a constant force to the belt.

The reaction from the belt is measured using a test piece (4) fitted with strain gauges.

Any movement on the gauges creates a variation in their electrical resistance. This variation, once it has been converted by the device, is displayed on the display in SEEM units (US).

Calibrating the device

The device is set in the factory, however it must be recalibrated every six months.

Procedure

Resetting zero:

- switch the device on (button E) with the adjusting button (1) fully screwed in,
- if 0 is displayed, do not touch anything,
- if nothing is displayed, check the condition of the 9 volt battery in the device ,
- if a value other than 0 is displayed, adjust screw (F) until 0 is displayed.

Checking the calibration

Switch the device on (button E).

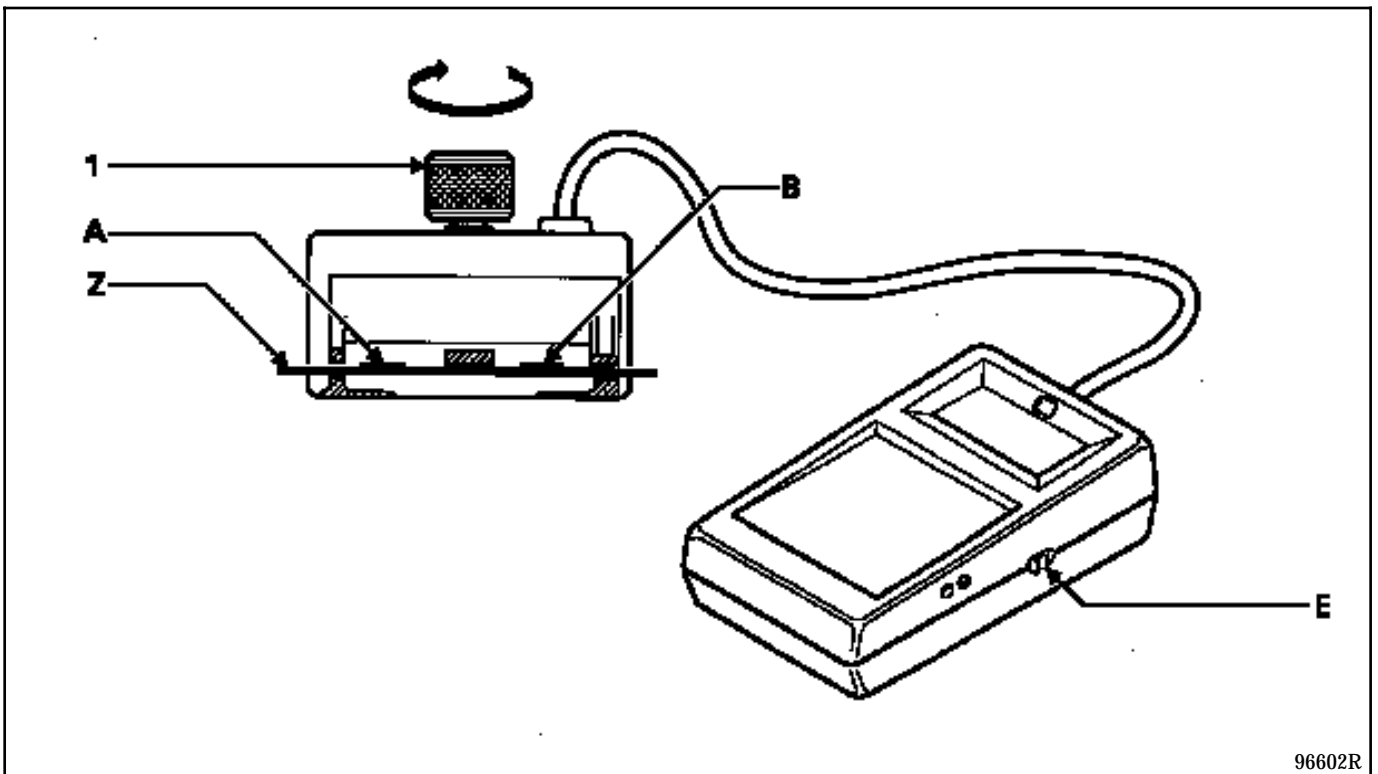
Position the calibration spring plate (Z) on the sensor as shown on the diagram (checking value engraved towards the top, (A) minimum value, (B) maximum value).

Tighten the adjusting button (1) until it goes "CLICK - CLICK - CLICK".

Check that a value X between the values (A and B) ($A \leq X \leq B$) is displayed.

Note: it may be necessary to perform several preliminary tests in order to obtain the correct value. If the correct value is still not obtained after several attempts, contact SEEM.

NOTE : each device has its own calibration spring plate and they are not interchangeable.



96602R

- 1 Adjusting button
- A } Calibration plate checking value
- B }
- Z Calibration plate

SEEM

For further information contact your After Sales Head Office.

GENERAL INSTRUCTIONS:

- Never refit a belt which has been removed, replace it.
- Never retighten a belt for which the tension reading is between the fitting value and the minimum operating value.
- When checking, if the tension is below the minimum operating value, replace the belt.

GROOVED BELT

Tensioning process

Engine cold (ambient temperature).

Fit the new belt.

Position the sensor of **Mot. 1273**.

Turn the adjusting button of the sensor until it disengages (three "CLICKS").

Tension the belt until the recommended fitting value is displayed on **Mot. 1273**.

Lock the tensioner, check it, adjust the value.

Turn the crankshaft over **three times**.

Check that the tension value is within the **fitting tension tolerance, otherwise readjust it**.

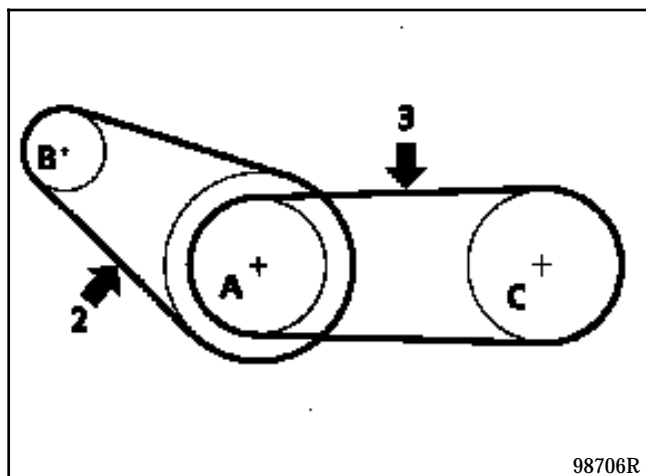
NOTE :

Never refit a belt which has been removed.

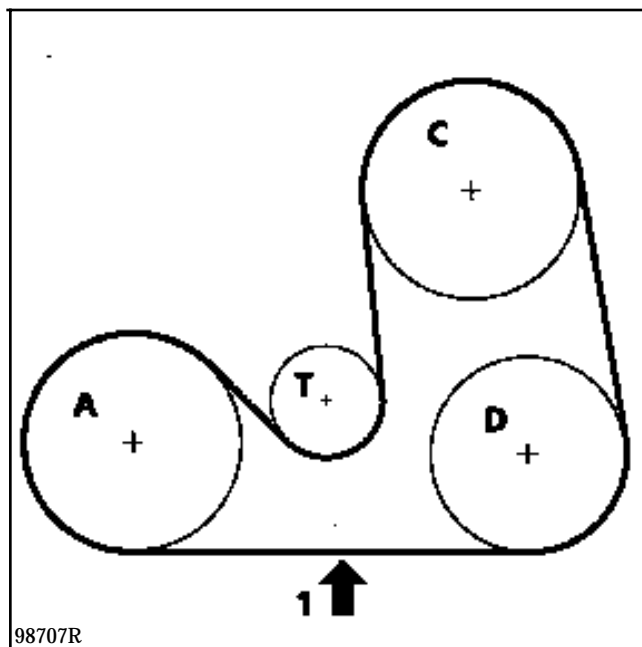
Replace the belt, if the tension is **below the minimum operating tension**.

Small cuts or cracks do not mean that the belt has to be replaced.

ALTERNATOR AND POWER ASSISTED STEERING



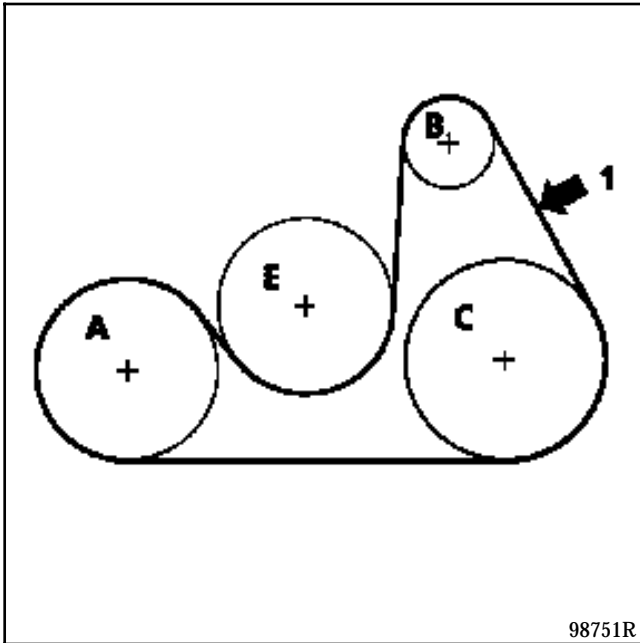
AIR CONDITIONING



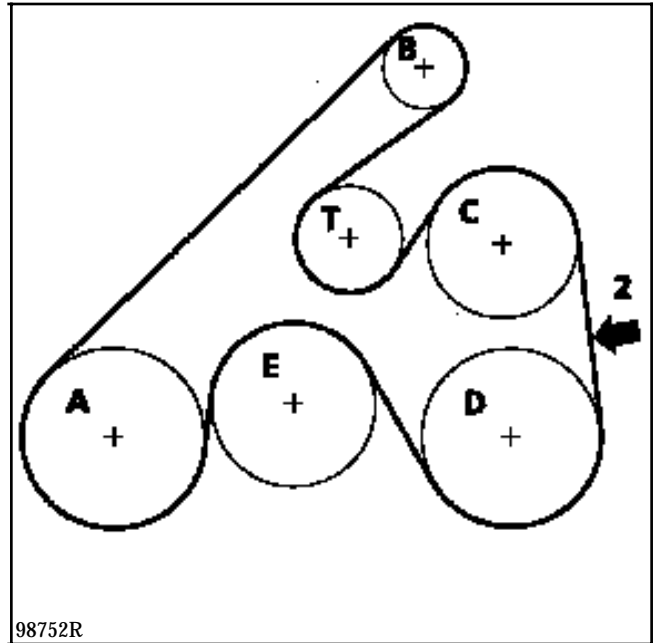
Tension (US=SEEM unit)	Multitoothed air conditioning belt (1)	Multitoothed alternator belt (2)	Multitoothed power assisted steering belt (3)
Fitting	110 ± 7	84 ± 6	84 ± 6
Minimum operating	75	52	52

- A Crankshaft
- B Alternator
- C Power assisted steering pump
- D Air conditioning compressor
- T Tensioner
- Tension check point

ALTERNATOR AND POWER ASSISTED STEERING



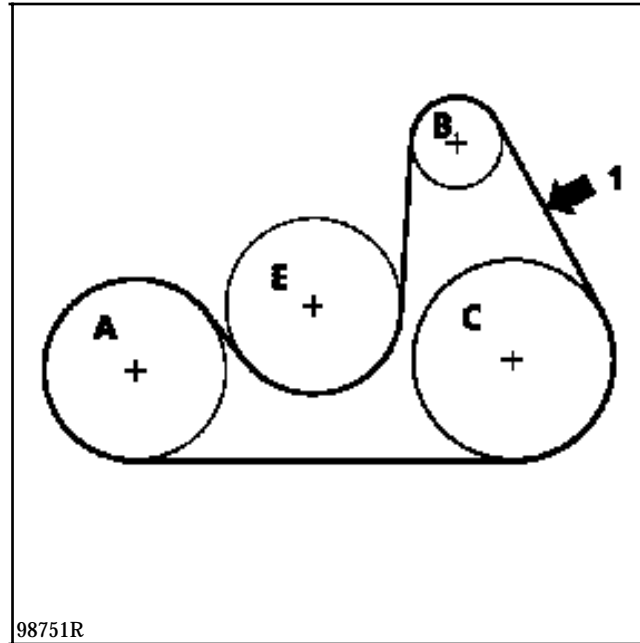
AIR CONDITIONING



Tension (US=SEEM unit)	Multitoothed air conditioning belt (2)	Multitoothed power assisted steering belt (1)
Fitting	109 ± 3	107 ± 3
Minimum operating	62	62

- A Crankshaft
- B Alternator
- C Power assisted steering pump
- D Air conditioning compressor
- E Water pump
- T Tensioner
- Tension check point

ALTERNATOR AND POWER ASSISTED STEERING



Tension (US=SEEM unit)	Multitoothed power assisted steering belt (1)
Fitting	97 ± 3
Minimum operating	67

- A Crankshaft
- B Alternator
- C Power assisted steering pump
- E Water pump
- T Tensioner
- Tension check point

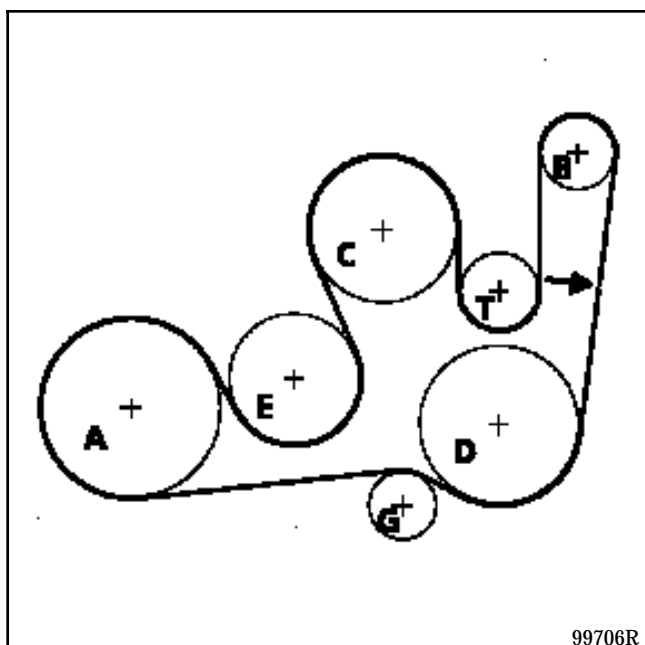
SPECIAL NOTES FOR REMOVING THE ACCESSORIES BELT

REMOVAL

Disconnect the battery.

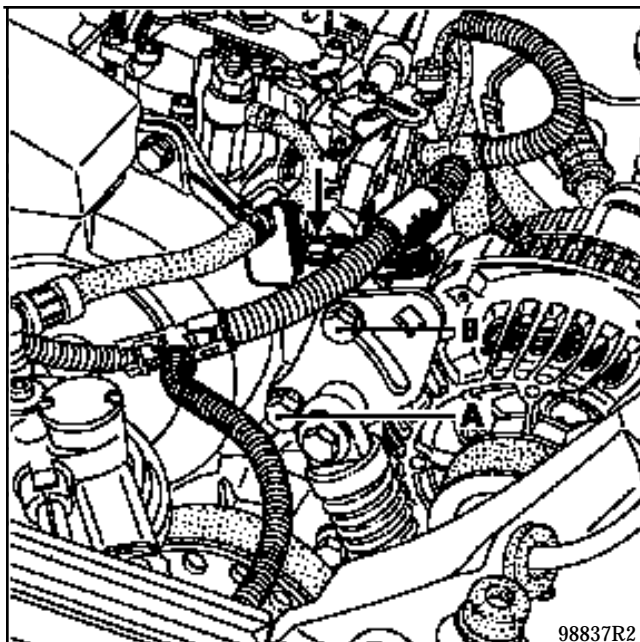
Before removing the accessories belt, check the value of the tension.

The tension measured must be between **61 and 77 SEEM units**.

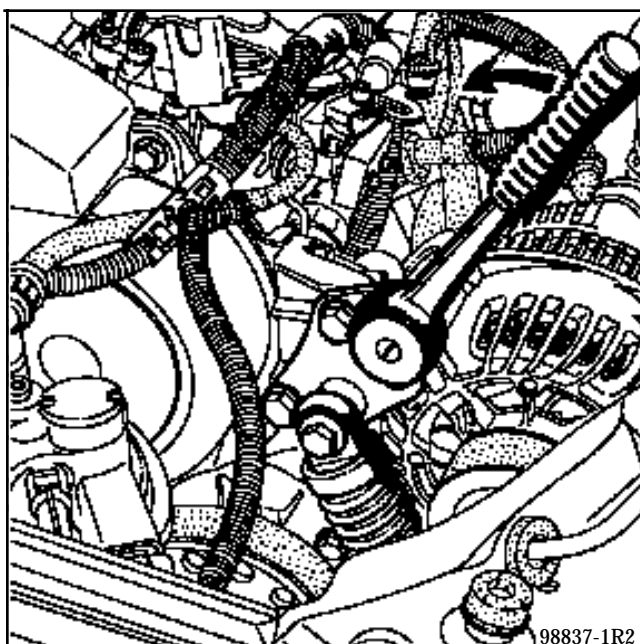


- A Crankshaft
- B Alternator
- C Power assisted steering pump
- D Air conditioning compressor
- E Water pump
- G Roller
- T Tensioner
- Tension check point

Remove the mounting bolt for the diesel pipe retaining bracket and move it.



Slacken bolt (A) then bolt (B), until the shoulder is exceeded, whilst holding the automatic tensioning plate using a **9 mm** socket (eg. : FACOM J 151 ratchet), then slacken the belt by moving the ratchet in the direction of the arrow.

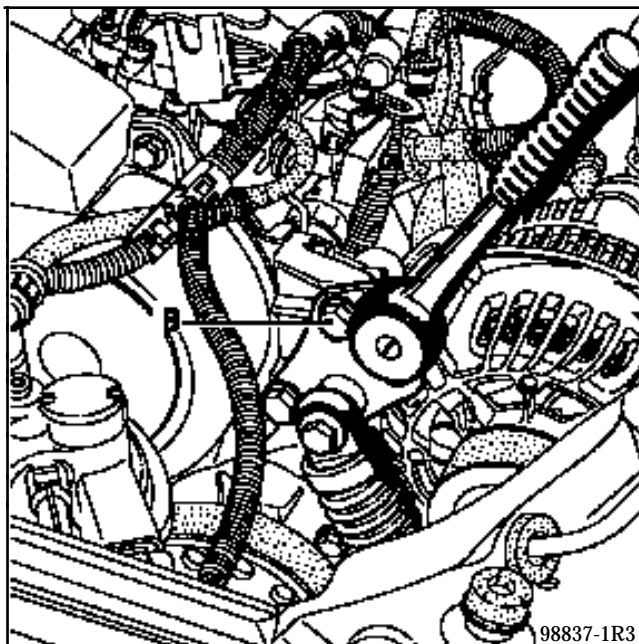


- Remove :
- the lower timing cover,
 - the belt.

REFITTING

Refitting is the reverse of removal.

The belt is tensioned by bringing the automatic tensioner up against the bolt (B), without forcing it, using a **9 mm** socket (eg. : FACOM J151 ratchet).



Check the tension of the accessories belt with the previously listed values.

NOTE: never refit a belt which has been removed.

Tensioning process

Engine cold (ambient temperature).

Fit the new belt.

Position the sensor of **Mot. 1273**.

Turn the adjusting button of the sensor until it disengages (three "CLICKS").

Tension the belt until the recommended fitting value is displayed on **Mot. 1273**.

Lock the tensioner, check it and adjust the value.

Turn the crankshaft over **three times**.

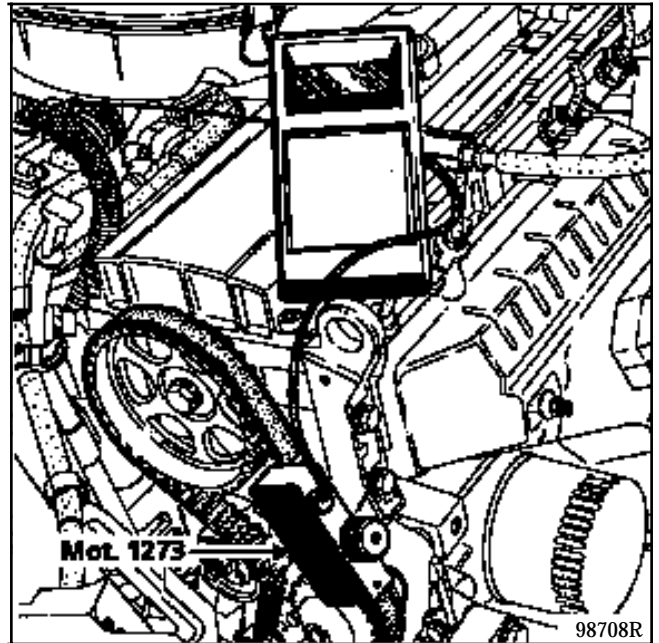
Check that the tension value is **within the fitting tension tolerance ($\pm 10\%$)**, otherwise readjust it.

NOTE :

Never refit a belt which has been removed.

Replace the belt if the tension is **below the minimum operating tension**.

E7J and K7M engine



Belt tension (in SEEM units)

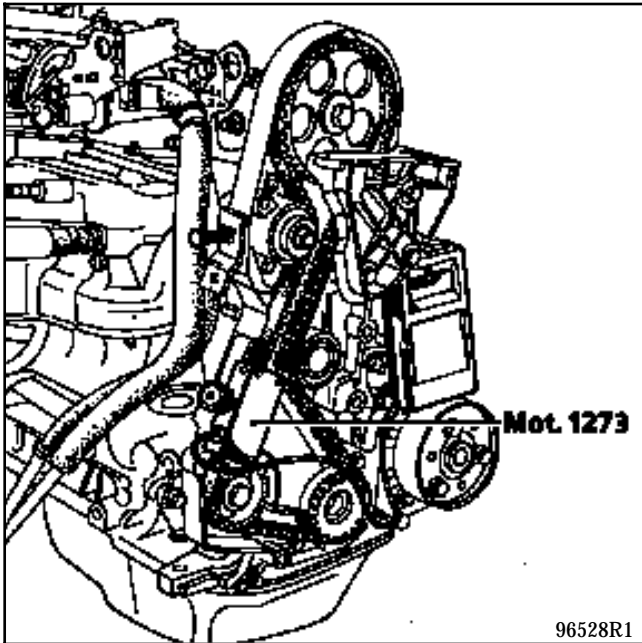
Fitting: 30 S.U

Minimum operating : 26 S.U.

VALUES AND SETTINGS

Timing belt tension

F3R engine

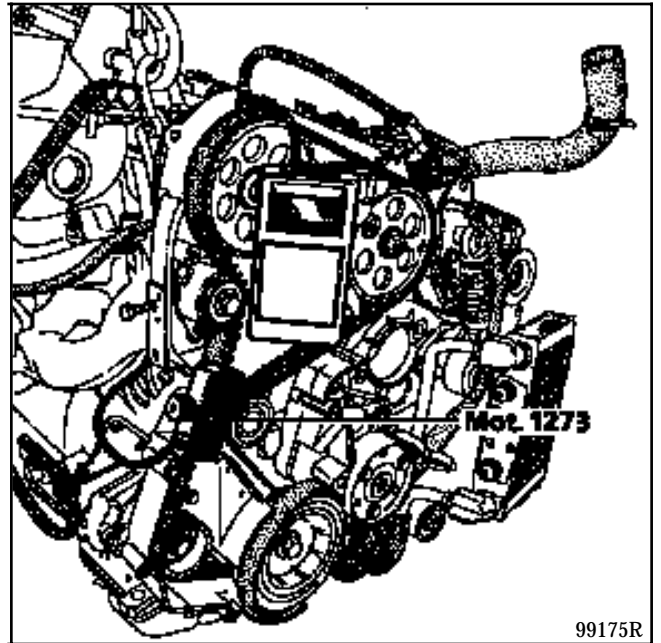


Belt tension (n SEEM units)

Fitting: 29 S.U.

Minimum operating : 27 S.U.

F8Q engine



Belt tension (in SEEM units)

Fitting: 38 S.U.

Minimum operating: 36 S.U.

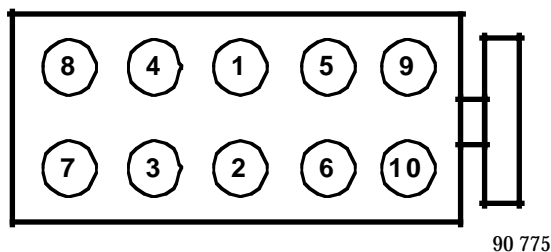
E ENGINE

METHOD FOR TIGHTENING THE CYLINDER HEAD

Using engine oil, lubricate the threads and under the heads of the bolts.

REMINDER: to ensure that the bolts are correctly tightened, use a syringe to remove any oil which may be in the cylinder head mounting holes.

Tighten the bolts in the order given below:



1st tightening to **2 daN.m.**

2nd tightening (angle) : $97^\circ \pm 2^\circ$.

Wait at least 3 minutes.

Slacken bolts 1 and 2 then tighten to **2 daN.m.**

2nd tightening (angle) : $97^\circ \pm 2^\circ$.

Repeat the slackening and retightening operation for bolts 3, 4, 5, and 6 then 7, 8, 9 and 10.

There is no cylinder head retightening operation.

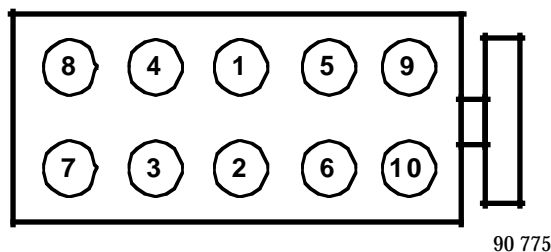
K ENGINE

METHOD FOR TIGHTENING THE CYLINDER HEAD

Using engine oil, lubricate the threads and under the heads of the bolts.

REMINDER: to ensure that the bolts are correctly tightened. Use a syringe to remove any oil which may be in the cylinder head mounting holes.

Tighten the bolts in the order given below:



1st tightening to **2 daN.m.**

2nd tightening (angle) : $100^\circ \pm 6^\circ$.

Wait at least 3 minutes.

Slacken bolts 1 and 2 then tighten to **2 daN.m.**

2nd tightening (angle) : $110^\circ \pm 6^\circ$.

Repeat the slackening and retightening operation for bolts 3, 4, 5, and 6 then 7, 8, 9 and 10.

There is no cylinder head retightening operation.

F ENGINE (diesel)

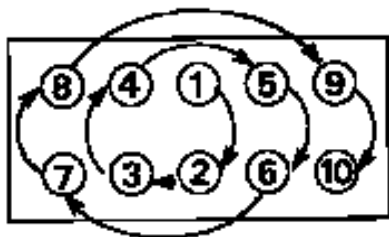
METHOD FOR TIGHTENING THE CYLINDER HEAD

All bolts must be systematically renewed after removal.

Using engine oil, lubricate the threads and under the heads of the bolts.

REMINDER: to ensure that the bolts are correctly tightened. Use a syringe to remove any oil which may be in the cylinder head mounting holes.

Tighten the bolts in the order given below:



81528-1S

1st tightening to **3 daN.m.**

2nd tightening (angle) : $50^\circ \pm 4^\circ$

Wait at least 3 minutes.

Slacken bolts 1 and 2 then perform a 1st tightening to **2.5 daN.m.**

2nd tightening (angle) : $213^\circ \pm 7^\circ$.

Repeat the slackening and retightening operation for bolts 3-4, 5-6, 7-8, 9-10.

There is no cylinder head retightening operation.

F ENGINE (petrol)

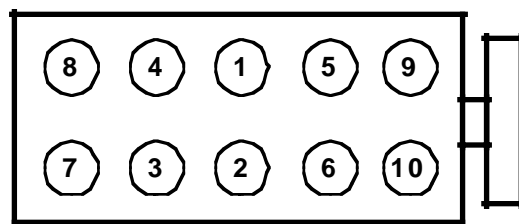
METHOD FOR TIGHTENING THE CYLINDER HEAD

All bolts must be systematically renewed after removal.

Using engine oil, lubricate the threads and under the heads of the bolts.

REMINDER: to ensure that the bolts are correctly tightened. Use a syringe to remove any oil which may be in the cylinder head mounting holes.

Tighten the bolts in the order given below:



90 775

1st tightening to **3 daN.m.**

2nd tightening (angle) : $50^\circ \pm 4^\circ$

Wait at least 3 minutes.

Slacken bolts 1 and 2 by 180° then perform :

1st retightening to **2.5 daN.m.**

2nd tightening (angle) : $123^\circ \pm 7^\circ$.

Repeat the slackening and retightening operation for bolts 3-4, 5-6, 7-8, 9-10.

There is no cylinder head retightening operation.

VALUES AND SETTINGS

Dimensions of the main braking components

07

	BA0A BA0E BA0L BA0U	BA0F	BA0G
FRONT BRAKE (dimensions in mm)			
Slave cylinder diameter	48	48	48
Disc diameter	238	238	259
Disc thickness	12	20	20.60
Minimum disc thickness	10.3	18.3	19
Lining thickness (including backing plate)	18	18	18
Minimum lining thickness (including backing plate)	7	6.5	6
Maximum disc run-out	0.07	0.07	0.07
REAR BRAKE (dimensions in mm)			
Slave cylinder diameter	17.5	17.5	17.5
Drum diameter	203.2	203.2	203.2
Maximum drum diameter after regrinding	204.4	204.4	204.4
MASTER CYLINDER (dimensions in mm)			
Diameter	20.6	20.6	20.6

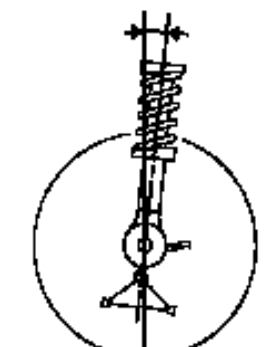
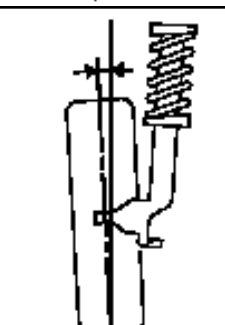
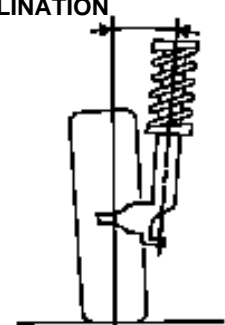
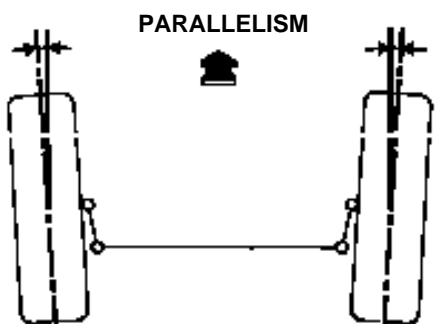

Brakes discs cannot be repaired. They must be replaced if large scratches or excessive wear occur.

VALUES AND SETTINGS

Values for checking the front axle geometry

07

E7J ENGINE - TUBULAR AXLE - MANUAL STEERING

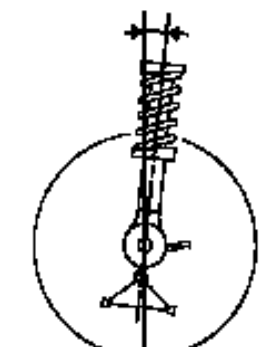
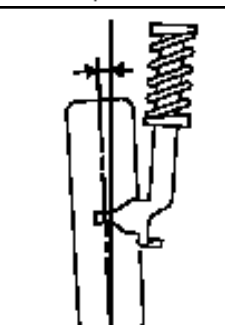
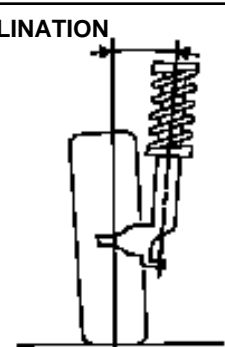
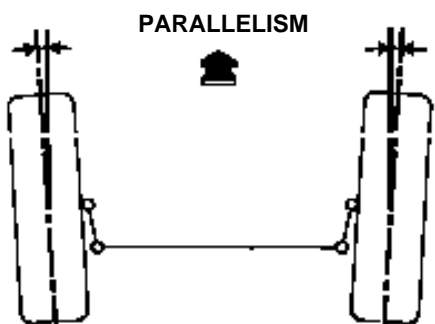

ANGLES	VALUES	POSITION OF FRONT AXLE	ADJUSTMENT										
CASTOR  93012-1S	$\left. \begin{array}{l} 2^{\circ}30' \\ 2^{\circ} \\ 1^{\circ}30' \\ 1^{\circ} \\ 0^{\circ}30' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	<table style="width: 100%; border: none;"> <tr><td style="padding-right: 10px;">H5-H2=</td><td>76.5 mm</td></tr> <tr><td>H5-H2=</td><td>96.5 mm</td></tr> <tr><td>H5-H2=</td><td>116.5 mm</td></tr> <tr><td>H5-H2=</td><td>136.5 mm</td></tr> <tr><td>H5-H2=</td><td>156.5 mm</td></tr> </table>	H5-H2=	76.5 mm	H5-H2=	96.5 mm	H5-H2=	116.5 mm	H5-H2=	136.5 mm	H5-H2=	156.5 mm	NOT ADJUSTABLE
H5-H2=	76.5 mm												
H5-H2=	96.5 mm												
H5-H2=	116.5 mm												
H5-H2=	136.5 mm												
H5-H2=	156.5 mm												
CAMBER  93013-1S	$\left. \begin{array}{l} 1^{\circ}14' \\ - 0^{\circ}08' \\ 0^{\circ}25' \\ 0^{\circ}30' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	<table style="width: 100%; border: none;"> <tr><td style="padding-right: 10px;">H1-H2=</td><td>33 mm</td></tr> <tr><td>H1-H2=</td><td>90 mm</td></tr> <tr><td>H1-H2=</td><td>109 mm</td></tr> <tr><td>H1-H2=</td><td>188 mm</td></tr> </table>	H1-H2=	33 mm	H1-H2=	90 mm	H1-H2=	109 mm	H1-H2=	188 mm	NOT ADJUSTABLE		
H1-H2=	33 mm												
H1-H2=	90 mm												
H1-H2=	109 mm												
H1-H2=	188 mm												
KING PIN INCLINATION  93014-1S	$\left. \begin{array}{l} 11^{\circ}10' \\ 13^{\circ}01' \\ 13^{\circ}29' \\ 14^{\circ}29' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	<table style="width: 100%; border: none;"> <tr><td style="padding-right: 10px;">H1-H2=</td><td>33 mm</td></tr> <tr><td>H1-H2=</td><td>90 mm</td></tr> <tr><td>H1-H2=</td><td>109 mm</td></tr> <tr><td>H1-H2=</td><td>188 mm</td></tr> </table>	H1-H2=	33 mm	H1-H2=	90 mm	H1-H2=	109 mm	H1-H2=	188 mm	NOT ADJUSTABLE		
H1-H2=	33 mm												
H1-H2=	90 mm												
H1-H2=	109 mm												
H1-H2=	188 mm												
PARALLELISM  93011-1S	<p>(For 2 wheels)</p> <p>(toe-out)</p> <p>$10' \pm 10'$</p> <p>$(1 \pm 1 \text{ mm})$</p>	UNLADEN	Adjustable by rotating track rod sleeves 1 turn= $30'$ (3 mm)										
RUBBER BUSHES  81603S1	-	UNLADEN	-										

VALUES AND SETTINGS

Values for checking the front axle geometry

07

E7J - E7M - F8Q ENGINE - TUBULAR AXLE - POWER ASSISTED STEERING

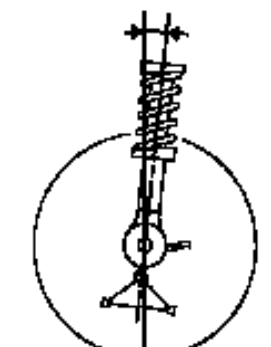
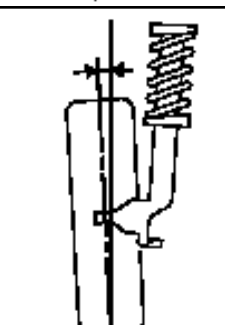
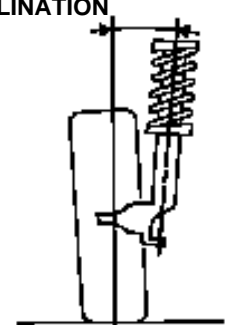
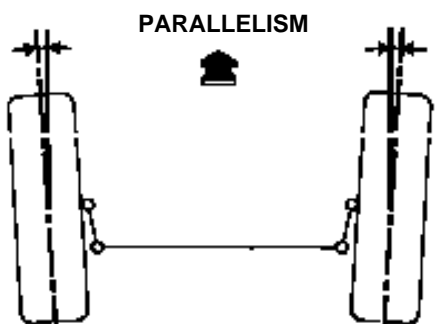

ANGLES	VALUES	POSITION OF FRONT AXLE	ADJUSTMENT
CASTOR  93012-1S	$\left. \begin{array}{l} 4^{\circ}30' \\ 4^{\circ} \\ 3^{\circ}30' \\ 3^{\circ} \\ 2^{\circ}30' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	H5-H2= 76.5 mm H5-H2= 96.5 mm H5-H2= 116.5 mm H5-H2= 136.5 mm H5-H2= 156.5 mm	NOT ADJUSTABLE
CAMBER  93013-1S	$\left. \begin{array}{l} 1^{\circ}35' \\ - 0^{\circ}20' \\ - 0^{\circ}35' \\ - 0^{\circ}30' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	H1-H2= 22 mm H1-H2= 102 mm H1-H2= 122 mm H1-H2= 188 mm	NOT ADJUSTABLE
KING PIN INCLINATION  93014-1S	$\left. \begin{array}{l} 10^{\circ}45' \\ 13^{\circ}21' \\ 13^{\circ}48' \\ 14^{\circ}32' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	H1-H2= 22 mm H1-H2= 102 mm H1-H2= 122 mm H1-H2= 188 mm	NOT ADJUSTABLE
PARALLELISM  93011-1S	(For 2 wheels) (toe-out) $10' \pm 10'$ (1 ± 1 mm)	UNLADEN	Adjustable by rotating track rod sleeves 1 turn= 30' (3 mm)
RUBBER BUSHES  81603S1	-	UNLADEN	-

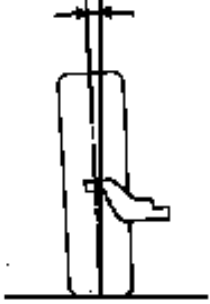
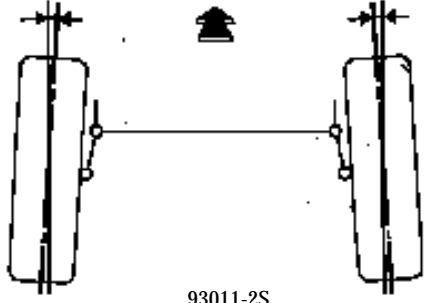
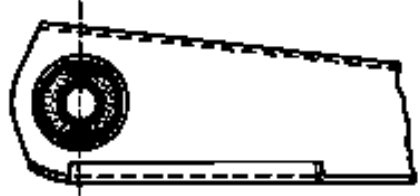
VALUES AND SETTINGS

Values for checking the front axle geometry

07

F3R ENGINE - 4 BAR AXLE - POWER ASSISTED STEERING

ANGLES	VALUES	POSITION OF FRONT AXLE	ADJUSTMENT										
CASTOR  93012-1S	$\left. \begin{array}{l} 4^{\circ}30' \\ 4^{\circ} \\ 3^{\circ}30' \\ 3^{\circ} \\ 2^{\circ}30' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	<table style="width: 100%; border: none;"> <tr><td style="padding-right: 10px;">H5-H2=</td><td>71,5 mm</td></tr> <tr><td>H5-H2=</td><td>91,5 mm</td></tr> <tr><td>H5-H2=</td><td>111,5 mm</td></tr> <tr><td>H5-H2=</td><td>131,5 mm</td></tr> <tr><td>H5-H2=</td><td>151,5 mm</td></tr> </table>	H5-H2=	71,5 mm	H5-H2=	91,5 mm	H5-H2=	111,5 mm	H5-H2=	131,5 mm	H5-H2=	151,5 mm	NOT ADJUSTABLE
H5-H2=	71,5 mm												
H5-H2=	91,5 mm												
H5-H2=	111,5 mm												
H5-H2=	131,5 mm												
H5-H2=	151,5 mm												
CAMBER  93013-1S	$\left. \begin{array}{l} 1^{\circ}35' \\ - 0^{\circ}20' \\ - 0^{\circ}37' \\ - 0^{\circ}30' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	<table style="width: 100%; border: none;"> <tr><td style="padding-right: 10px;">H1-H2=</td><td>22 mm</td></tr> <tr><td>H1-H2=</td><td>102 mm</td></tr> <tr><td>H1-H2=</td><td>122 mm</td></tr> <tr><td>H1-H2=</td><td>188 mm</td></tr> </table>	H1-H2=	22 mm	H1-H2=	102 mm	H1-H2=	122 mm	H1-H2=	188 mm	NOT ADJUSTABLE		
H1-H2=	22 mm												
H1-H2=	102 mm												
H1-H2=	122 mm												
H1-H2=	188 mm												
KING PIN INCLINATION  93014-1S	$\left. \begin{array}{l} 10^{\circ}45' \\ 13^{\circ}20' \\ 13^{\circ}53' \\ 14^{\circ}32' \end{array} \right\} \pm 30'$ <p>Maximum left / right difference = 1°</p>	<table style="width: 100%; border: none;"> <tr><td style="padding-right: 10px;">H1-H2=</td><td>22 mm</td></tr> <tr><td>H1-H2=</td><td>102 mm</td></tr> <tr><td>H1-H2=</td><td>122 mm</td></tr> <tr><td>H1-H2=</td><td>188 mm</td></tr> </table>	H1-H2=	22 mm	H1-H2=	102 mm	H1-H2=	122 mm	H1-H2=	188 mm	NOT ADJUSTABLE		
H1-H2=	22 mm												
H1-H2=	102 mm												
H1-H2=	122 mm												
H1-H2=	188 mm												
PARALLELISM  93011-1S	<p>(For 2 wheels)</p> <p>(toe-out)</p> <p>$10' \pm 10'$</p> <p>$(1 \pm 1 \text{ mm})$</p>	UNLADEN	Adjustable by rotating track rod sleeves 1 turn= $30'$ (3 mm)										
RUBBER BUSHES  81603S1	-	UNLADEN	-										

ANGLES	VALUES		POSITION OF REAR AXLE	ADJUSTMENT
	REAR AXLE		TUBULAR AND 4 BAR REAR AXLE	TUBULAR AND 4 BAR REAR AXLE
	TUBULAR	4 BAR		
<p>CAMBER</p>  <p>93013-2S</p>	$- 1^{\circ} \pm 15'$	$- 0^{\circ}50' \pm 15'$	UNLADEN	NOT ADJUSTABLE
<p>PARALLELISM</p>  <p>93011-2S</p>	$- 50' \pm 20'$ (Toe-in) or $- 5 \pm 2\text{mm}$	$- 30' \pm 20'$ (Toe-in) or $- 3 \pm 2\text{mm}$	UNLADEN	NOT ADJUSTABLE
<p>RUBBER BUSHES</p>  <p>81603S1</p>		-	UNLADEN	-

VALUES AND SETTINGS

Underbody heights

07

Axle type	Tubular axle	4 bar axle
Vehicle type	BA0A - BA0E - BA0F - BA0L - BA0U	BA0G
Wheel diameter (inches)	13"	14"
H1 - H2 (mm)	121 ± 5	123.5 ± 5
H4 - H5 (mm)	44.5 ± 11	52 ± 11

VALUES AND SETTINGS

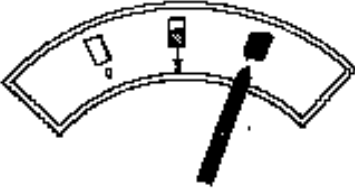
Brake limiter



These vehicles are fitted with limiters which are load sensitive.

They are checked and adjusted when :

- the vehicle is unladen,
- the fuel tank is full,
- the driver is in the vehicle.

Vehicle type	Fuel tank	Control pressure (Bar)	
		Front	Rear
BA0G	 <p style="text-align: center;">Full</p> <p style="text-align: right; font-size: 10pt;">90966S</p>	100 →	72 ⁺⁰ -8
BA0A BA0E BA0F BA0L BA0U		100 →	62 ⁺⁰ -8