This Workshop Repair Manual has been prepared by experts in repair and fault finding procedures.

The document covers the methods and the fault finding operations required in order to carry out high quality repairs on this vehicle.

However, if a removal - refitting operation involves no special features, difficulties or special tooling, the method is not described in this manual because it is considered very simple for a vehicle repair specialist.

The labour times are the result of time and motion studies carried out in our workshops, even though certain methods have not been described in the Workshop Repair Manual.

UNITS OF MEASUREMENT

- All dimensions are expressed in millimetres (**mm**) unless stated otherwise.
- Tightening torques are shown in decaNewton metres (**daNm**).
- Pressures are expressed in bar (reminder: **1 bar = 100 000 Pa**).
- Electrical resistance is given in ohms (Ω).
- Voltages are expressed in volts (**V**).

TOLERANCES

Tightening torques given without a tolerance must be accurate to within:

- In **degrees:** ± **3º**.
- In **daNm:** ± **10 %.**

EQUIPMENT AND TOOLING

The repair procedures described for the vehicles in the **NISSAN** range require special materials and tools in certain cases.

Vehicle type	Engine		Gearbox type
	Type	Capacity (cc)	
XL0B XL0C	F9Q	1870	PK5 PK6

VEHICLE IDENTIFICATION

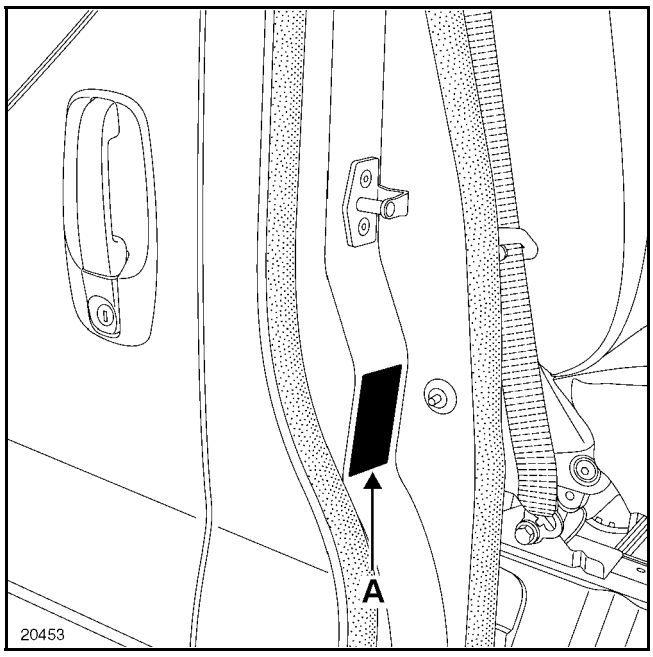
Example: **XL0B**

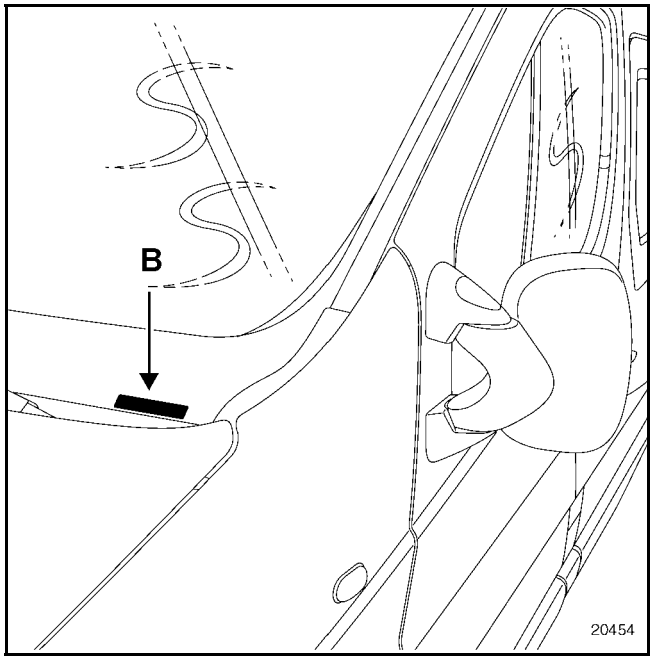
F : Body type (van)

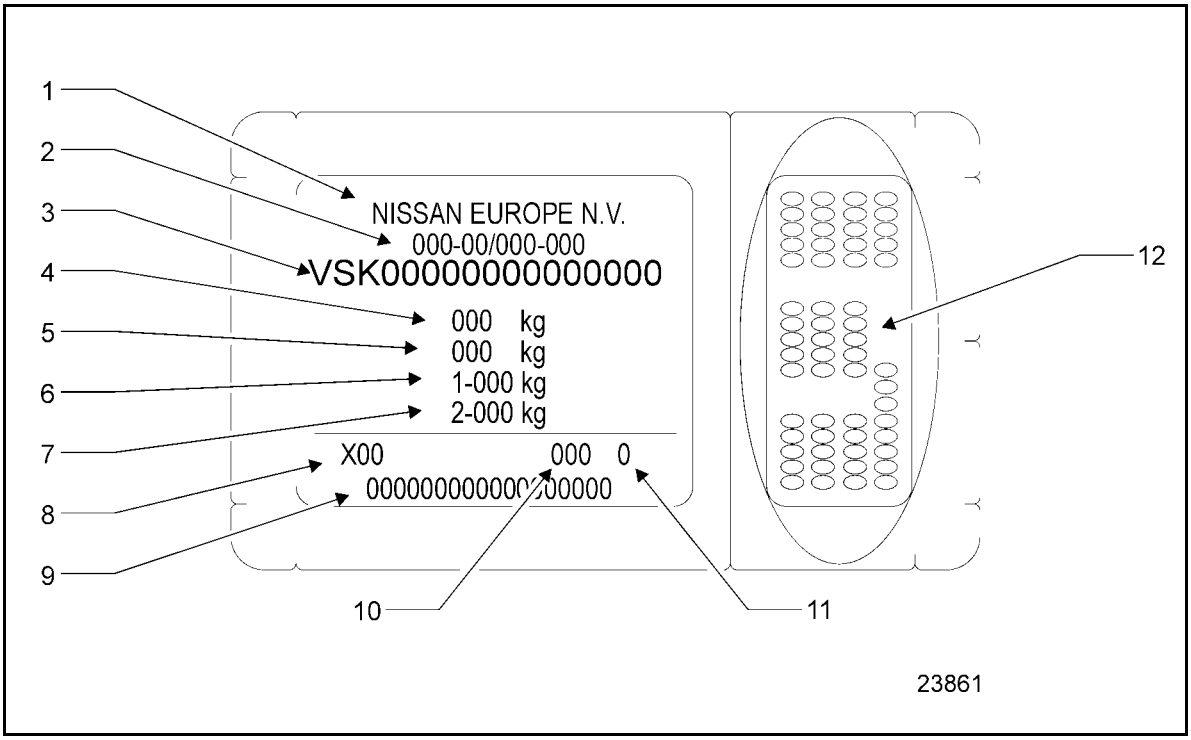
L : Project code

0B : Engine suffix

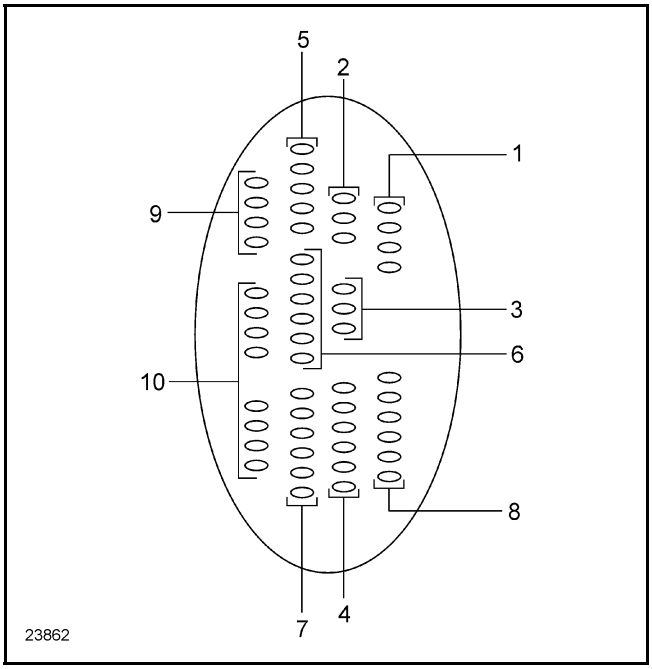
LOCATION OF VEHICLE IDENTIFICATION PLATE







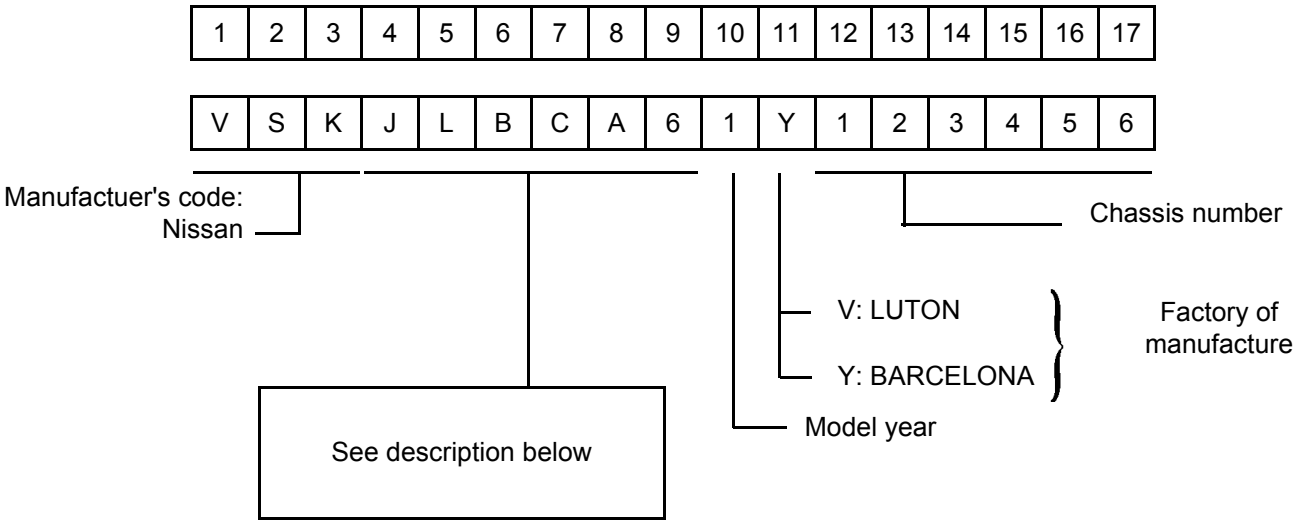
LEGISLATIVE INFORMATION	
1	name of Manufacturer
2	type-approval number
3	identification number
4	maximum weight under full load
5	maximum permitted gross train weight
6	maximum load on front axle
7	maximum load on rear axle
8	model
9	model code
10	exterior colour code
11	interior colour code
12	after-sales information



WORKS PRODUCTION INFORMATION	
1	vehicle type
2	equipment level
3	limited series specification supplement
4	special series specification supplement
5	paintwork and body colour grade
6	seat covers
7	vehicle interior colour scheme
8	fabrication number
9	technical specifications
10	main options

NOTE:
The seven characters making up the fabrication number (8) cannot be separated.

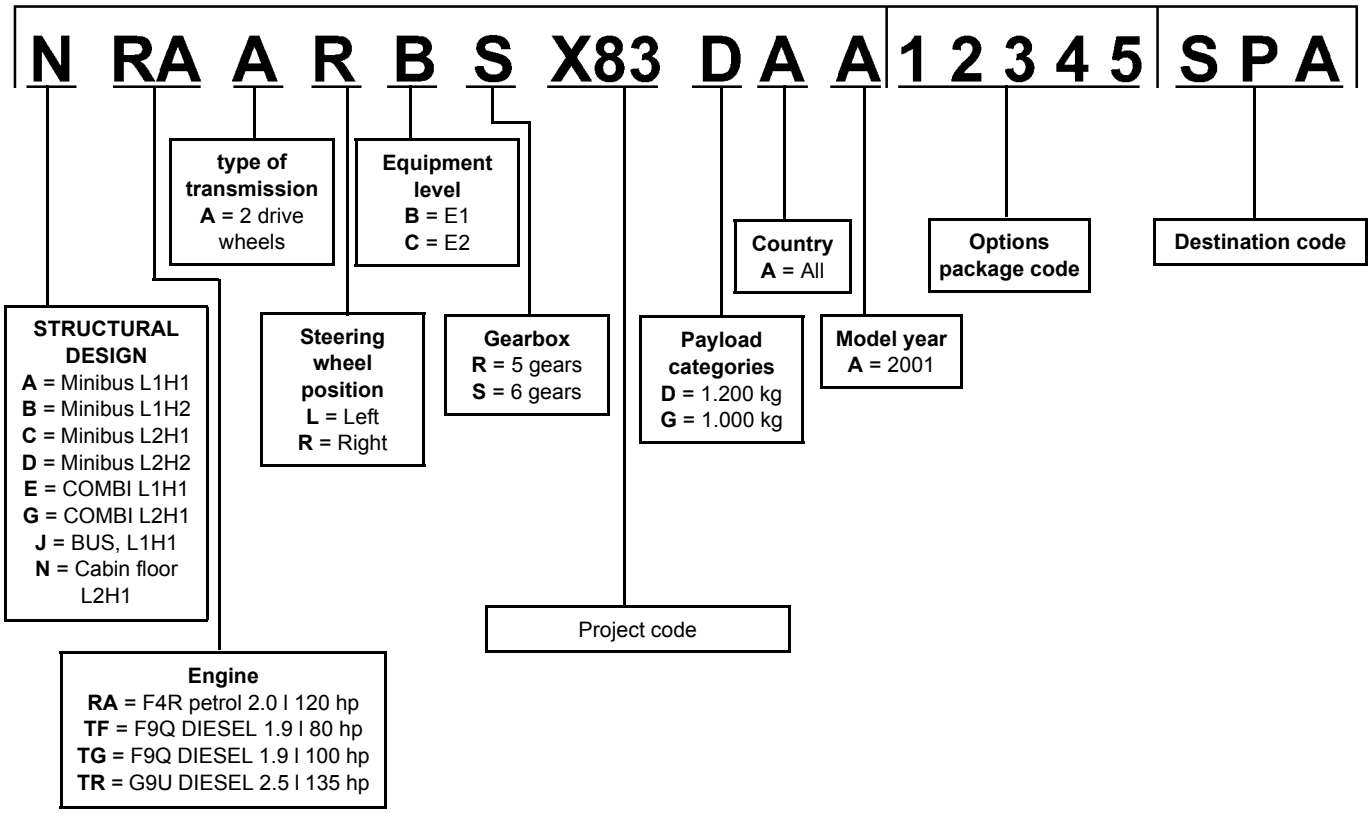
SIGNIFICANCE OF THE IDENTIFICATION NUMBER



Description

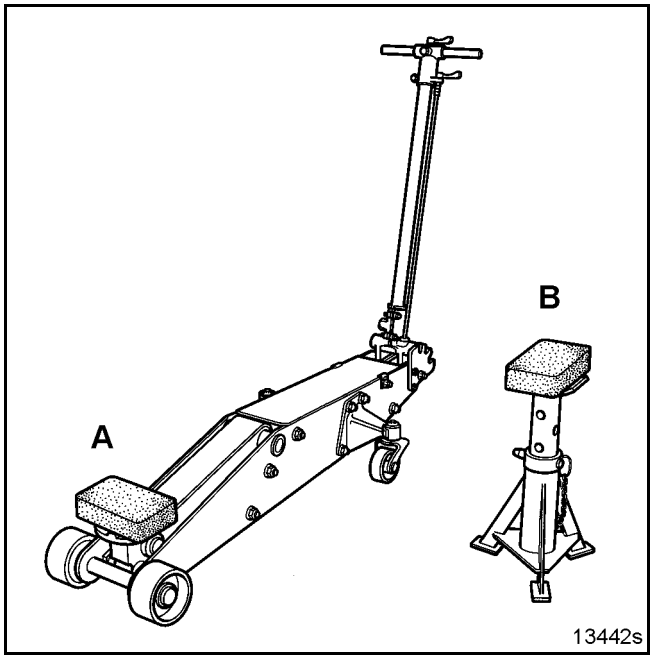
STRUCTURAL DESIGN	PROJECT	WEIGHTS	ENGINES	WHEELBASE / HEIGHT	MANUAL GEARBOX
N1 utility vehicles	**4:** NISSAN	**A:** 1000 kg **B:** 1200 kg } Payload categories	**A:** petrol hp **B:** 1.9 l diesel 80 hp **C:** 1.9 l diesel 100 hp	**A:** Wheelbase 10 / Height 10 **B:** Wheelbase 20 / Height 10 **C:** Wheelbase 10 / Height 20 **D:** Wheelbase 20 / Height 20	**5 gears** **6 gears**
F: VAN **E:** CAB FLOOR					
M1 people carriers		**WEIGHTS / NUMBER OF SEATS**	**ENGINES**	**WHEELBASES / HEIGHT**	**MANUAL GEARBOXES**
J: COMBI / MINIBUS		**A:** 1000 kg 2/9 seats (combi) **B:** 1200 kg 2/9 seats (combi) **C:** 1000 kg 6/8 seats (Minibus) **D:** 1000 kg 2/6 seats (combi) **E:** 1200 kg 2/6 seats (combi)	**A:** petrol hp **B:** 1.9l diesel 80 hp **C:** 1.9l diesel 100 hp	**A:** Wheelbase 10 / Height 10 **B:** Wheelbase 20 / Height 10 **C:** Wheelbase 10 / Height 20 **D:** Wheelbase 20 / Height 20	**5 gears** **6 gears**

SIGNIFICANCE OF THE TECHNICAL SPECIFICATIONS

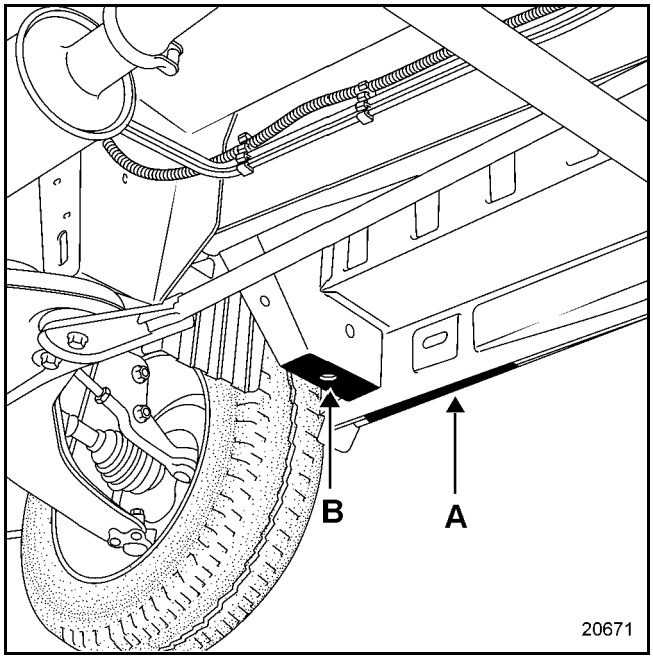


TROLLEY JACK AND AXLE STAND LOCATIONS

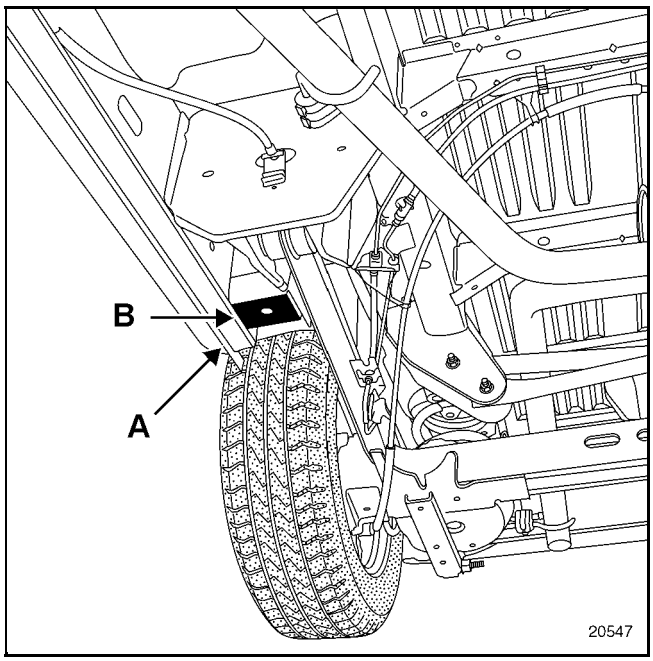
NOTE:
only use the underbody flange when the axle stands are in position.



FRONT



REAR



SAFETY INSTRUCTIONS

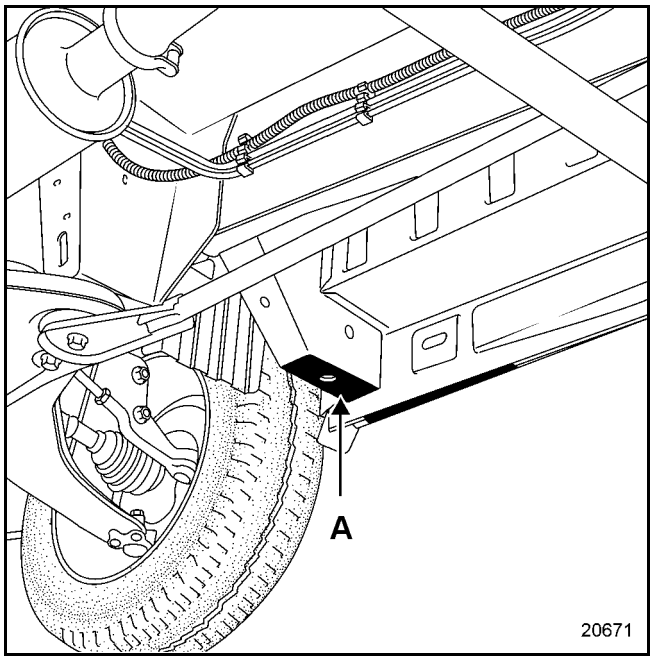
Various cases have to be considered:

1 - REMOVING COMPONENTS

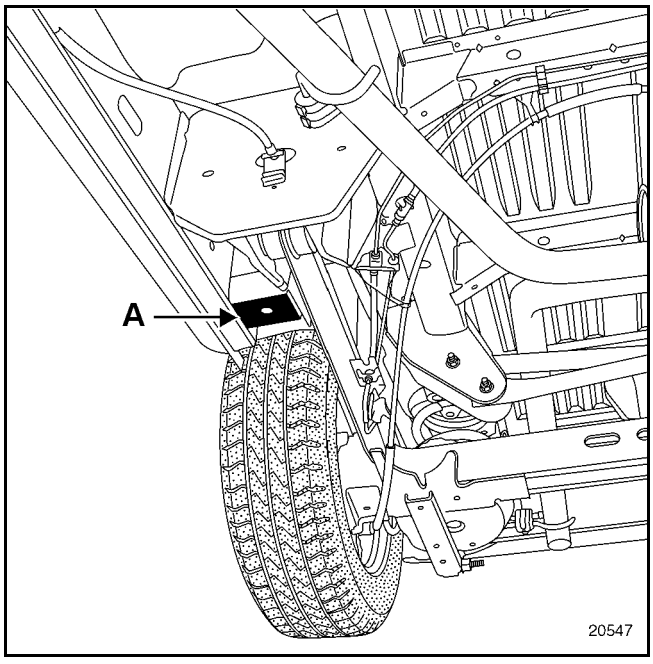
As a general rule, never use a two-post lift when a four-post lift can be used.

If this is not possible, place the lifting pads on the jack supports (A) as shown below:

FRONT



REAR



2 - REMOVING AND REFITTING HEAVY COMPONENTS

IMPORTANT:
Always use a safety harness if using a two-post lift to remove heavy components.

For your safety, take care to ensure that the vehicle is balanced when placed on a two-post lift.

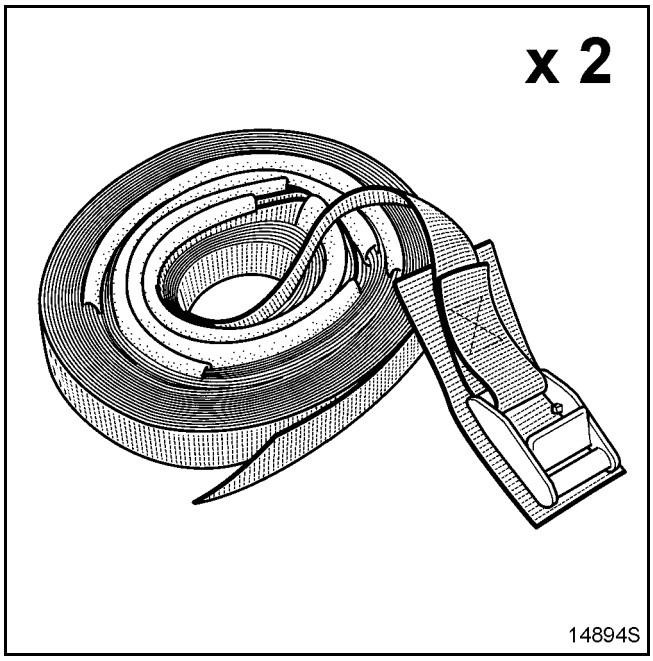
This is because removing heavy components (such as the engine and transmission assembly, rear axle or fuel tank, etc.), depending on:
– the vehicle load,
– its length,
– the position of the lifting pads,
may cause the vehicle to become unbalanced.

It is therefore essential to put a strap around or inside the bodywork and fix it to the arms of the lift between the pads.

TOOLING REQUIRED

Straps:
– **10 metres** long,
– **25 mm** wide.

Straps are available under Part no.: **77 11 172 554**.



This type of strap should only be used to immobilise a vehicle on a two-post lift (for safety reasons, they should not be used for any other purpose).

Use straps that are in good condition and clean (so as not to dirty the interior or the bodywork). Avoid damaging the vehicle by pulling the strap too tight (the sill panels can be protected at the point where the strap passes over them).

FITTING THE SAFETY STRAPS

Securing the vehicle with straps allows work to be carried out beneath the vehicle free from obstruction.

The strap must be in place during any operation involving the transfer of weight.

Check the strap before each use.

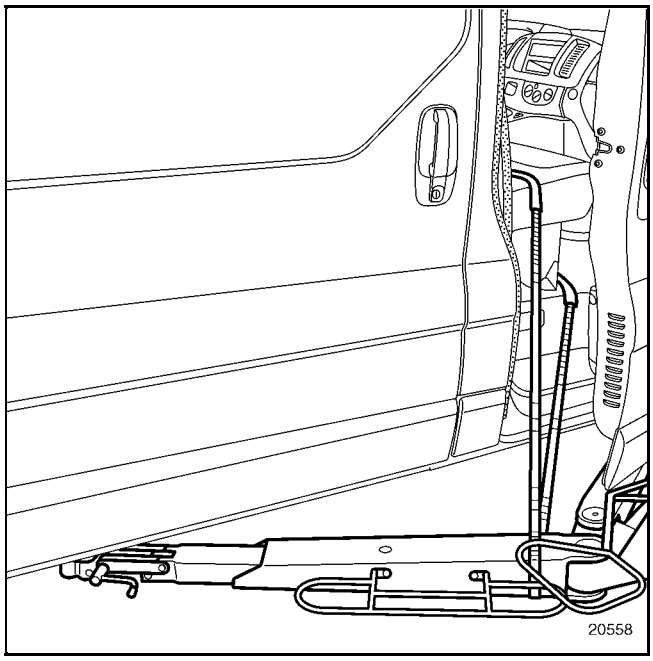
The lift pads are placed under the vehicle facing the supports as described above.

Lift the vehicle a few centimetres.

Protect the vehicle interior (seats, etc.).

Place the strap through under the arms of the lift and pass twice around the vehicle, placing the strap protectors correctly so as not to damage the bodywork or upholstery.

Do not pull too tight.

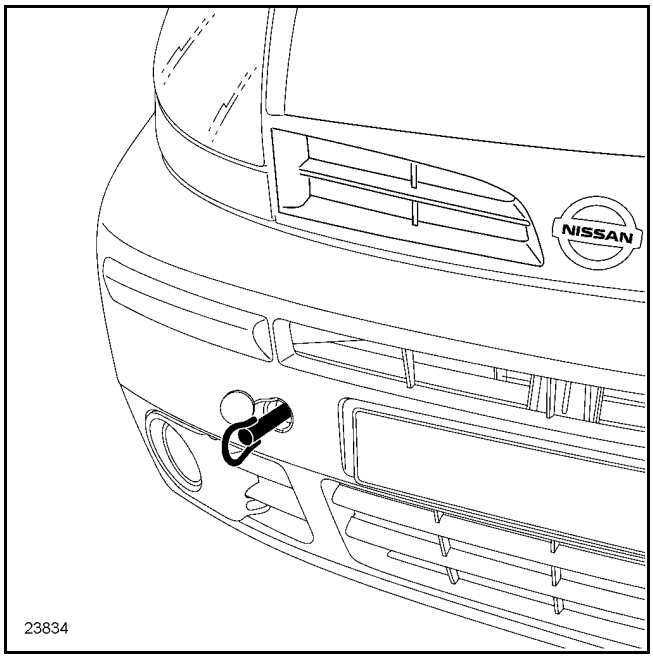


OBSERVE THE NATIONAL REGULATIONS CONCERNING TOWING FOR THE COUNTRY YOU ARE IN.

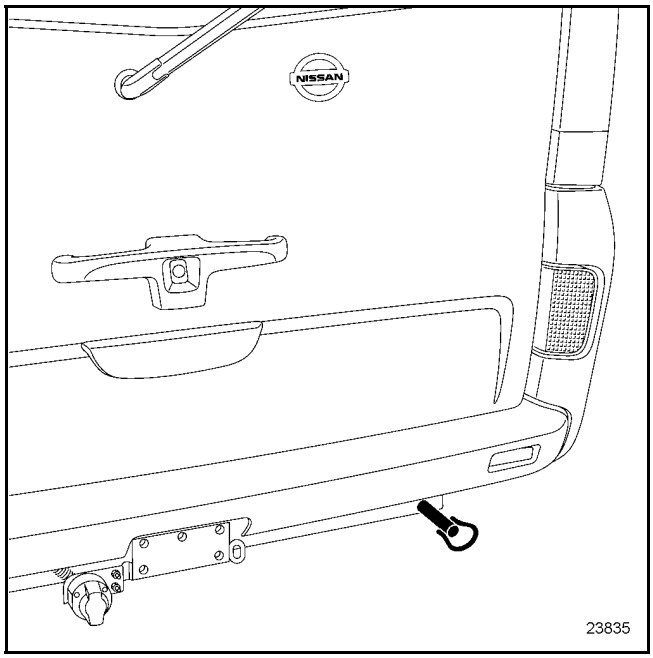
NEVER USE THE DRIVESHAFTS AS AN ATTACHMENT POINT.

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 to lift the vehicle, either directly or indirectly.

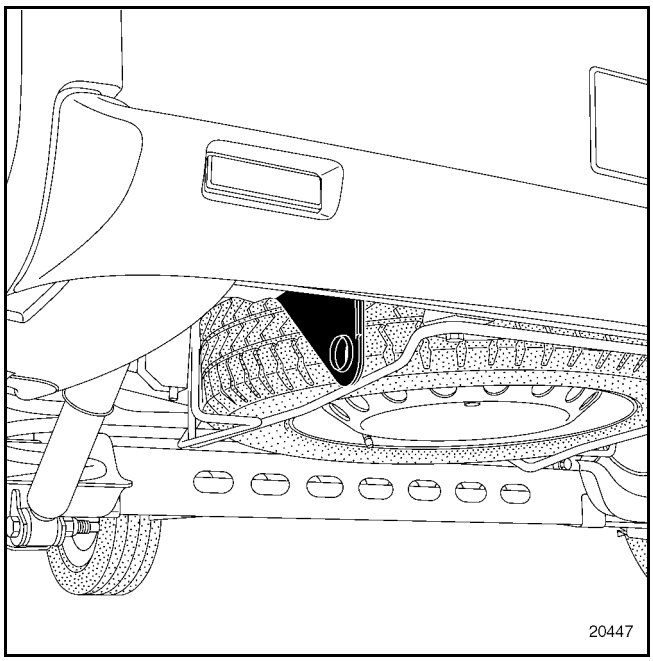
FRONT



REAR (vehicle with towing equipment)



REAR (vehicle without towing equipment)



DESCRIPTION	PACKAGING
GREASES	
● **MOLYKOTE "BR2"** for main bearing journal faces, thrust pad guide tubes, clutch fork pads, lower suspension arm bearings, torsion bar splines, steering rack, driveshaft splines.	**1 kg** tin
● **MOLYKOTE "33 Medium"** bushes on tubular rear axle, anti-roll bar bushes.	**100 g** tube
● **ANTI-SEIZE** (high temperature grease) turbocharger etc.	**80 ml** tube
● **MOBIL CVJ 825 Black star or MOBIL EXF57C** for driveshaft seals	**180 g** sachet
● **MULTIPURPOSE GREASE** wheel sensors.	Aerosol
MECHANICAL SEALANTS	
● **Mastic** for sealing exhaust pipe unions	**1.5 kg** tin
● **RHODORSEAL 5661**	**100 g** tube
● **HARDENER KIT (RHODORSEAL 5661)** for bearing cap lateral seals	Kit
● **AUTO blue seal** sealing paste	**100 g** tube
LACQUER	
● **"CIRCUIT PLUS"** lacquer for repairing heated screens	Bottle
BRAKES	
● Brake fluid	**0.5 litre** bottle of **DOT 4**

DESCRIPTION	PACKAGING
MECHANICAL SEALANTS	
● **AUTO grey seal** sealing paste	**100 g** tube
● **LOCTITE 518** for sealing the gearbox housing	**24 ml** syringe
● **Leak detector**	Aerosol
ADHESIVES	
● **"LOCTITE-FRENETANCH"** stops bolts slackening and allows them to be released	**24 cc** bottle
● **"LOCTITE - FRENBLOC"** locks bolts	**24 cc** bottle
● **"LOCTITE SCELBLOC"** for bonding bearings	**24 cc** bottle
● **"LOCTITE AUTOFORM"** for bonding the flywheel to the crankshaft	**50 cc** bottle
LUBRICANT CLEANING AGENTS	
● **"NETELEC"** unseizes, lubricates	Aerosol
● Carburettor cleaner	**300 ml** aerosol
● Injector cleaner	**355 ml** can
● Super-concentrated unseizing agent	**500 ml** aerosol
● **"DECAPJOINT" (FRAMET)** for cleaning the gasket faces of aluminium cylinder heads	Aerosol
● Brake cleaner	**400 ml** aerosol

Component	Average capacity*	
	After an oil change, check using the dipstick	After replacing the oil filter
Engine (oil)		
F9Q	4.45 l	4.6 l

Component	Capacity (litres)
Manual gearbox	
PK5 PK6	2.7 ± 0.15

* Check with dipstick

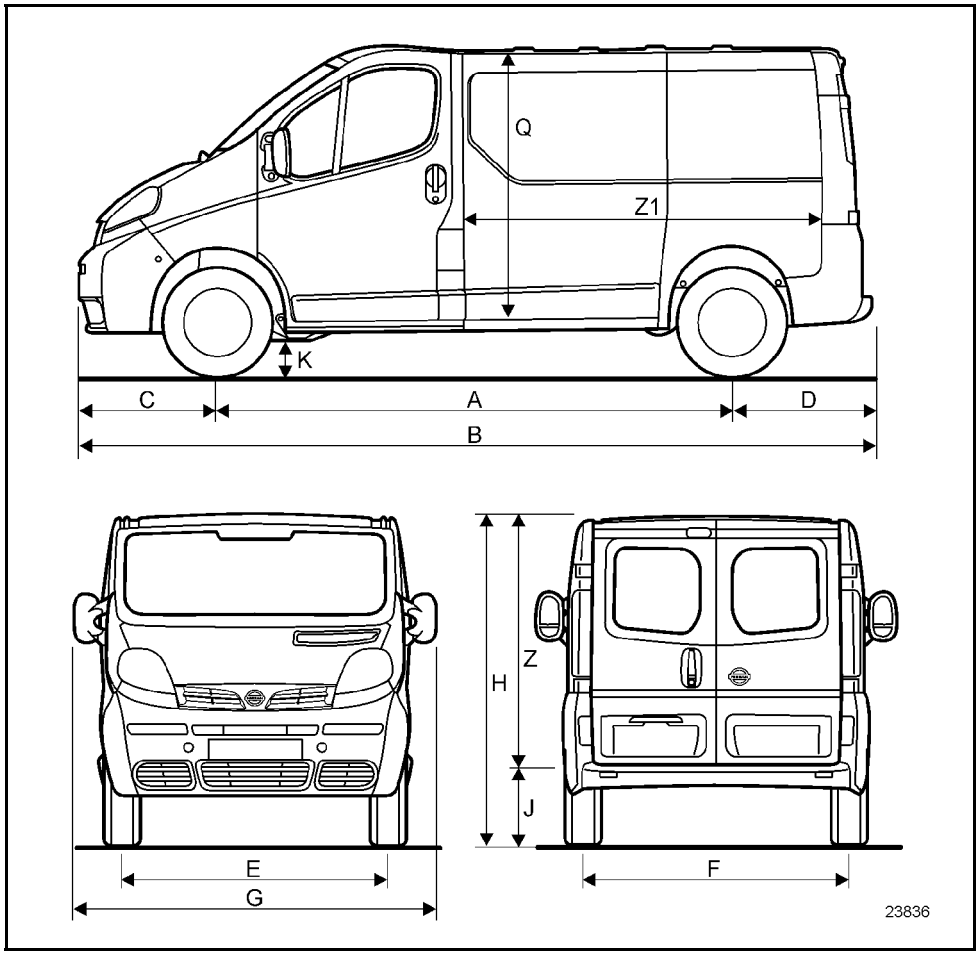
NOTE:
Never exceed the the maximum mark on the dipstick.

Components	Capacity in litres	Grade
Brake circuit	Standard: **0.7** **Anti-lock Braking System: 1**	**SAE J 1703** and **DOT 4**

Brake fluids must be approved by the Technical Department.

Components	Capacity in litres	Grade
Fuel tank	Approximately 90	Diesel
Power assisted steering	Separate reservoir: 1.1	**DEXRON II**
Cooling circuit	5.40 (F4R) 6.40 (F9Q)	**GLACEOL RX (type D)** add coolant only

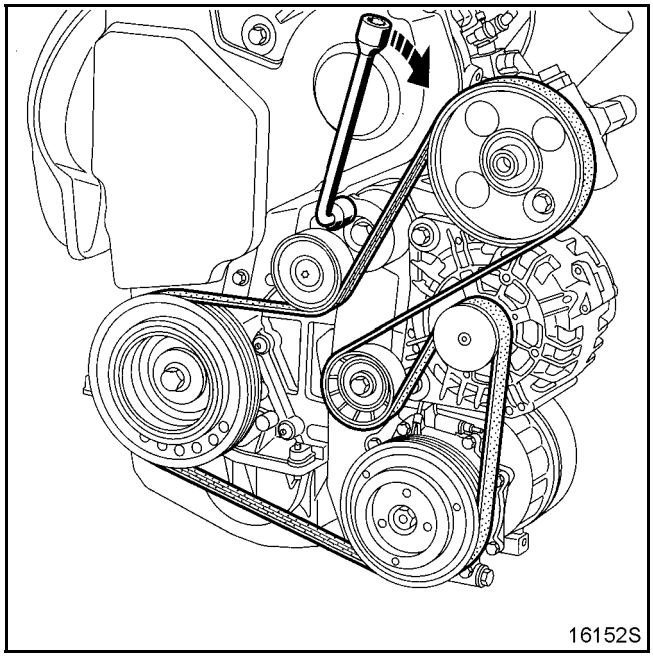
Dimensions in metres.



(1) unladen
(2) laden

VERSION	Van			Combi		
	Short		Long	Short		Long
A	3.098		3.498	3.098		3.498
B	4.782		5.182	4.782		5.182
C	0.833			0.833		
D	0.851			0.851		
E	1.615			1.615		
F	1.630			1.630		
G	2.232			2.232		
H(1)	1.959	1.965	1.958	1.940		1.944
J	0.543	0.549	0.542	0.521		0.525
K(2)	0.162	0.164	0.158	0.152	0.151	0.150
Q	1.387			1.369		
Y	1.390			1.390		
Z	1.335			1.306		
ZI	2.380		2.780	0.790		1.190

Removing/refitting the accessories belt is straightforward. Turn the belt auto tensioner in the direction indicated below using a **16 mm** spanner.



NOTE:
Never refit a belt once removed, always replace it.

Refitting is the reverse of removal.

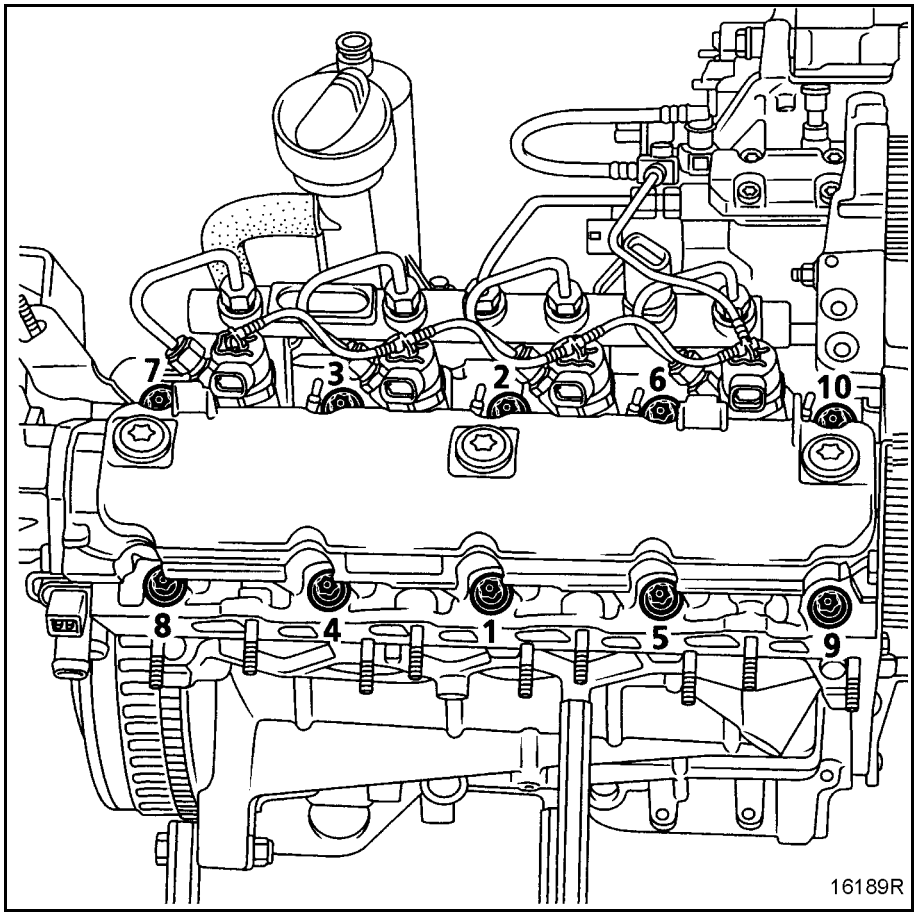
PROCEDURE FOR TIGHTENING THE CYLINDER HEAD

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

All cylinder head bolts must always be changed after removal. There is no cylinder head retightening operation.

Preseating the gasket

Tighten all the bolts to **3 daNm**, then angle tighten to **100º** ± **4º** in the order shown below.



Wait **3 minutes** settling time.

Tightening the cylinder head:
– tightening is carried out in stages, and the following procedure is applied successively to bolts **1-2**, then **3-4**, **5-6**, **7-8** and **9-10**,
– undo bolts **1-2** until they are completely free,
– tighten bolts **1-2** to **2.5 daNm**, then angle tighten to **213**°± **7**°,
– repeat the slackening and tightening operations for bolts **3-4, 5-6, 7-8 and 9-10**.

There is no cylinder head retightening operation.

Vehicle	Rim	Tyres	Tyre pressure when cold (in bar) (1)	
			Front	Rear
ALL TYPES	6J16	195/65 R16 C	3.2	3.6
		205/65 R16 C	3.6	4.1
		215/65 R16 C	3.0	3.4

(1) With full load and on motorways.


Tightening torque of the wheel nuts: **14.2 daNm**

Rim run-out: **1.2 mm**

Vehicle	Disc thickness (in mm)		Disc thickness (in mm)		Maximum disc run-out (in mm)
	Front		Rear		
	Standard	Minimum	Standard	Minimum	
ALL TYPES	28	24	12	10	0.07

Vehicle	Lining thickness (in mm) (not including mounting)				Brake fluid
	Front		Rear		
	New	Minimum	New	Minimum	
ALL TYPES	11.9	3	10.3	3	SAE J 1703 DOT 4

Braking pressure

Vehicle unladen.
Full fuel tank.
Driver on board.

Vehicle	Checking pressure (in bar)	
	Front	Rear
FL0X	> 100	44 ± 5
JL0X	> 100	49 ± 5

The check is carried out using two pressure gauges, one connected to the left-hand front wheel and the other connected to the right-hand rear wheel.

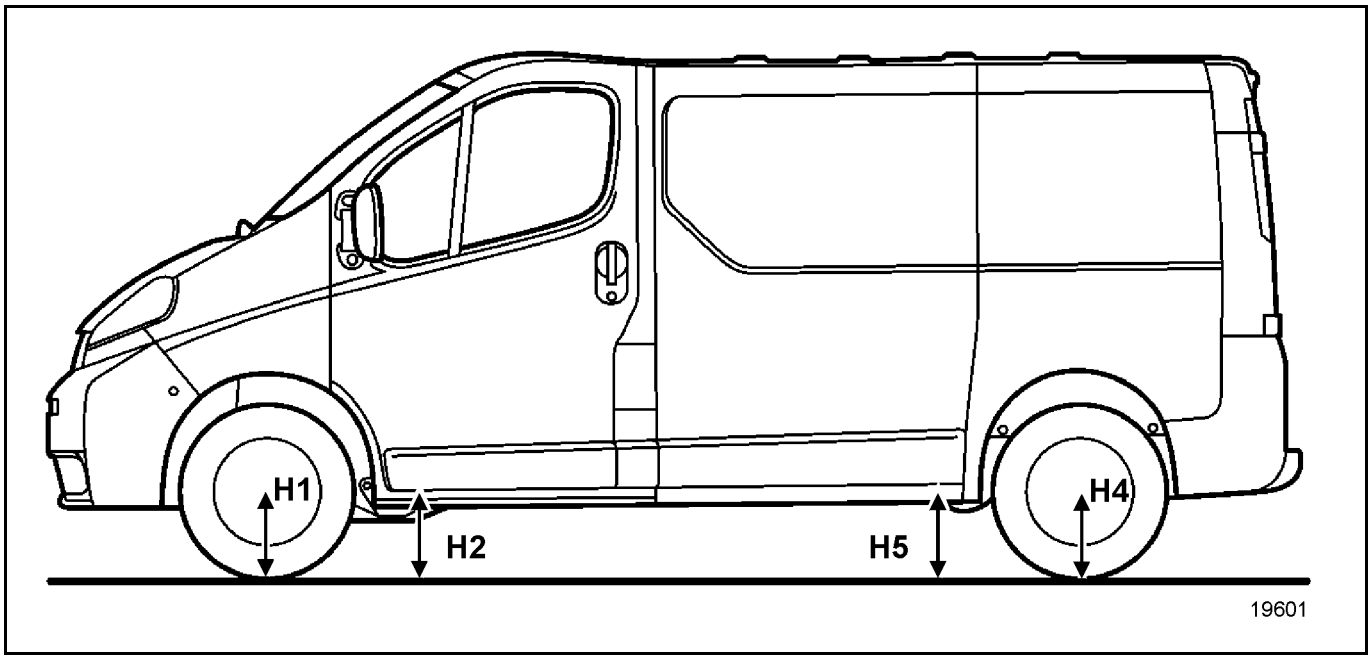
NOTE:
To determine the pressure of the compensator when the vehicle is loaded, follow the procedure described in **Section 37**.

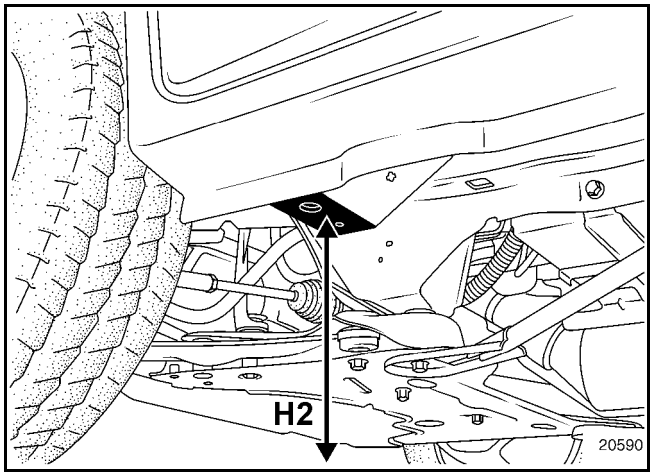
VEHICLE	At the front H1 - H2 = ... mm	At the rear H4 - H5 = ... mm	Dimension X (in mm) Left and right
FL0X	49	14	-
JL0X	52	30	-

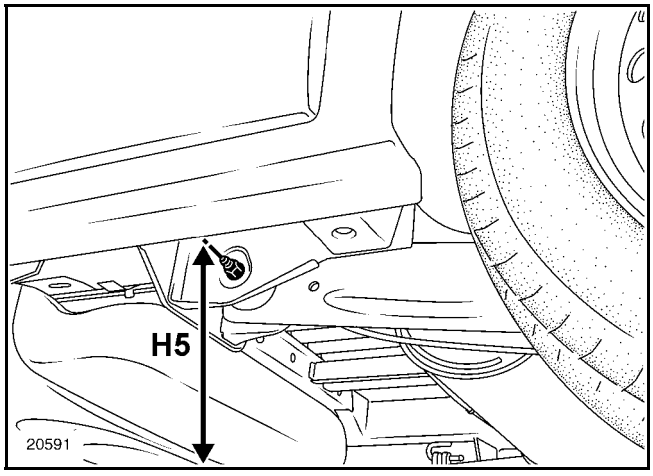
Tolerance: ± **7.5 mm**

The difference between the right and left-hand sides of the same axle of a vehicle must not exceed **5 mm**, the driver's side always being higher.
Any alteration to the underbody height also requires adjustment of the brake compensator and of the headlights.

MEASUREMENT POINTS

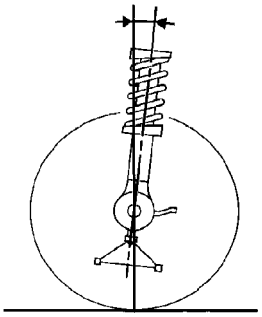
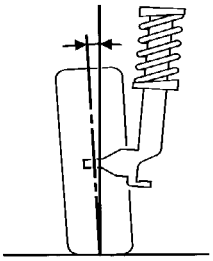
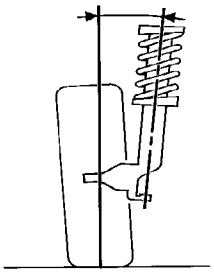
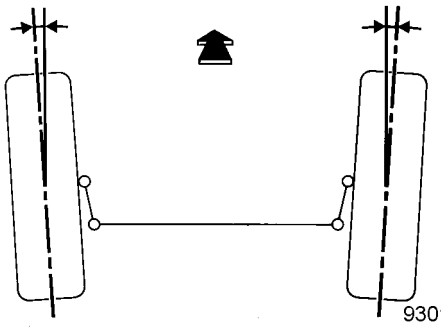
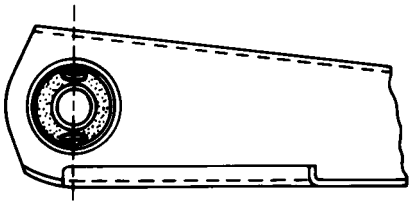




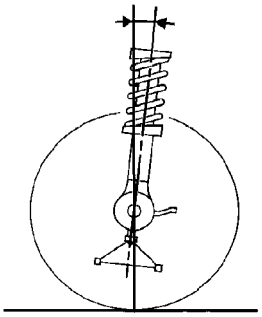
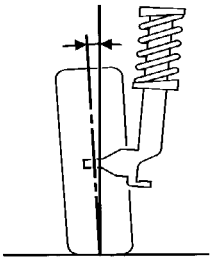
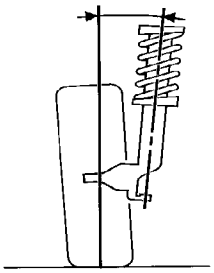
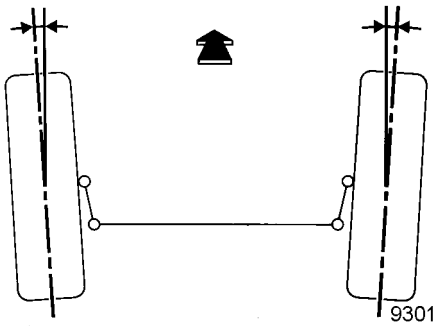
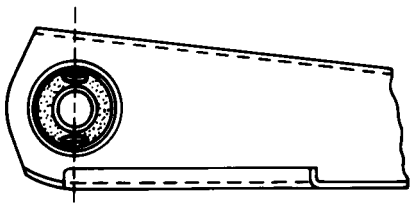


Measurements H1 and H4 are taken at the wheel shaft.
Measurement H2 is taken under the jacking point.
Measurement H5 is taken at the rear axle mounting shaft.

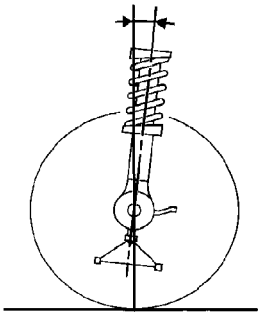
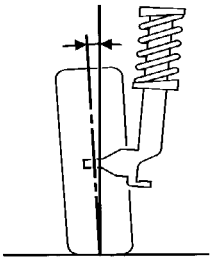
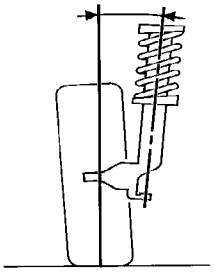
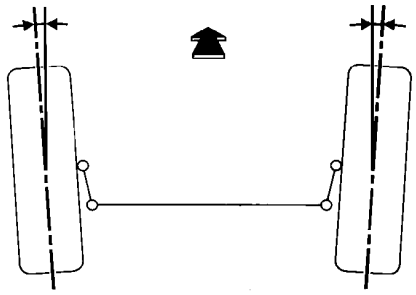
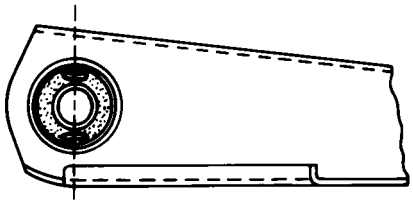
Front axle geometry checking values

ANGLES	VALUES	POSITION OF FRONT AXLE (mm)	ADJUSTING
CASTOR  93012-1S	2°35' ± 30' 2°54' ± 30' 3°14' ± 30' Max. right/left difference = 1°	H5 - H2 = 44 H5 - H2 = 30 H5 - H2 = 16	Not adjustable
CAMBER  93013-1S	-0°16' ± 30' -0°24' ± 30' -0°32' ± 30' Max. right/left difference = 1°	H1 - H2 = 51 H1 - H2 = 64 H1 - H2 = 78	Not adjustable
PIVOT  93014-1S	11°33' ± 30' 11°49' ± 30' 12°04' ± 30' Max. right/left difference = 1°	H1 - H2 = 51 H1 - H2 = 64 H1 - H2 = 78	Not adjustable
WHEEL ALIGNMENT  93011-1S	(For two wheels) Opening + 0°10' ± 10' + 1 mm ± 1 mm	Unladen	Adjusted by rotating the track rod sleeves
POSITION FOR TIGHTENING RUBBER BUSHES  81603S1	-	Unladen	-

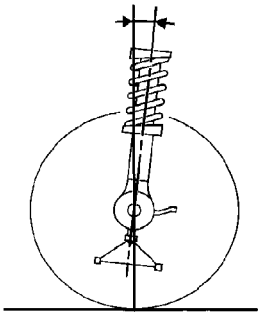
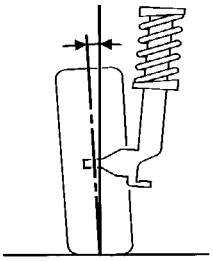
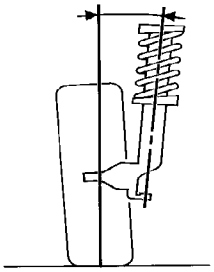
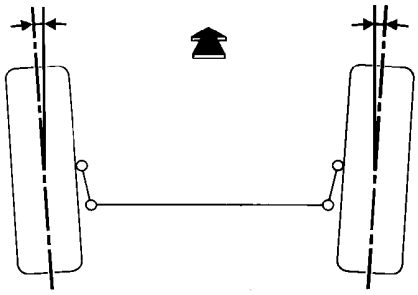
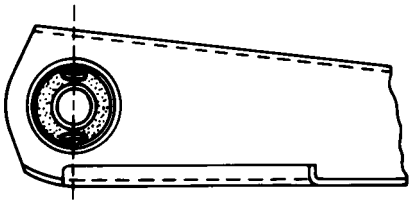
Front axle geometry checking values

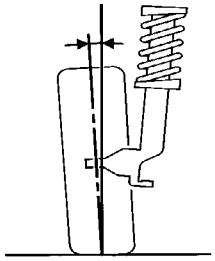
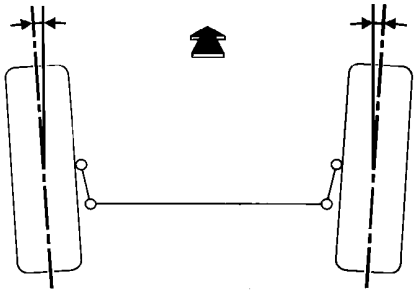
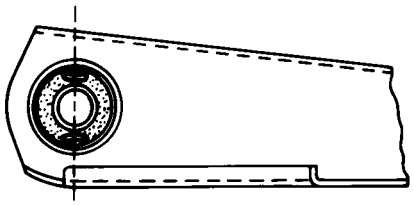
ANGLES	VALUES	POSITION OF FRONT AXLE (mm)	ADJUSTING
CASTOR  93012-1S	2°44' ± 30' 3°03' ± 30' 3°22' ± 30' Max. right/left difference = 1°	H5 - H2 = 40 H5 - H2 = 24 H5 - H2 = 9	Not adjustable
CAMBER  93013-1S	-0°16' ± 30' -0°24' ± 30' -0°32' ± 30' Max. right/left difference = 1°	H1 - H2 = 47 H1 - H2 = 62 H1 - H2 = 78	Not adjustable
PIVOT  93014-1S	11°33' ± 30' 11°49' ± 30' 12°04' ± 30' Max. right/left difference = 1°	H1 - H2 = 47 H1 - H2 = 62 H1 - H2 = 78	Not adjustable
WHEEL ALIGNMENT  93011-1S	(For two wheels) Opening + 0°10' ± 10' + 1 mm ± 1 mm	Unladen	Adjusted by rotating the track rod sleeves
POSITION FOR TIGHTENING RUBBER BUSHES  81603S1	-	Unladen	-

Front axle geometry checking values

ANGLES	VALUES	POSITION OF FRONT AXLE (mm)	ADJUSTING
CASTOR  93012-1S	2°51' ± 30' 3°06' ± 30' 3°22' ± 30' Max. right/left difference = 1°	H5 - H2 = 29 H5 - H2 = 18 H5 - H2 = 8	Not adjustable
CAMBER  93013-1S	-0°16' ± 30' -0°24' ± 30' -0°32' ± 30' Max. right/left difference = 1°	H1 - H2 = 54 H1 - H2 = 65 H1 - H2 = 76	Not adjustable
PIVOT  93014-1S	11°33' ± 30' 11°49' ± 30' 12°04' ± 30' Max. right/left difference = 1°	H1 - H2 = 54 H1 - H2 = 65 H1 - H2 = 76	Not adjustable
WHEEL ALIGNMENT  93011-1S	(For two wheels) Opening + 0°10' ± 10' + 1 mm ± 1 mm	Unladen	Adjusted by rotating the track rod sleeves
POSITION FOR TIGHTENING RUBBER BUSHES  81603S1	-	Unladen	-

Front axle geometry checking values

ANGLES	VALUES	POSITION OF FRONT AXLE (mm)	ADJUSTING
CASTOR  93012-1S	2°57' ± 30' 3°12' ± 30' 3°28' ± 30' Max. right/left difference = 1°	H5 - H2 = 27 H5 - H2 = 15 H5 - H2 = 3	Not adjustable
CAMBER  93013-1S	-0°27' ± 30' -0°30' ± 30' -0°32' ± 30' Max. right/left difference = 1°	H1 - H2 = 51 H1 - H2 = 63 H1 - H2 = 76	Not adjustable
PIVOT  93014-1S	11°33' ± 30' 11°49' ± 30' 12°04' ± 30' Max. right/left difference = 1°	H1 - H2 = 51 H1 - H2 = 63 H1 - H2 = 76	Not adjustable
WHEEL ALIGNMENT  93011-1S	(For two wheels) Opening + 0°10' ± 10' + 1 mm ± 1 mm	Unladen	Adjusted by rotating the track rod sleeves
POSITION FOR TIGHTENING RUBBER BUSHES  81603S1	-	Unladen	-

ANGLES	VALUES	POSITION OF REAR AXLE	ADJUSTING
CAMBER  93013-1S	- 0°45' ± 20'	Unladen	Not adjustable
WHEEL ALIGNMENT  93011-1S	(For two wheels) Opening 0.30' ± 20' 3 mm ± 2 mm	Unladen	Not adjustable
POSITION FOR TIGHTENING RUBBER BUSHES  81603S1	SHOCK ABSORBER CENTRE-TO-CENTRE DISTANCE 397 mm ± 2 mm	HALF-LOAD	-

WHEEL RIMS

There are two types of wheel identification marking:

- Engraved markings for steel rims.
- Cast marking for alloy rims.

The marking gives the main dimensional specifications of the wheel rim.

The marking may be complete:

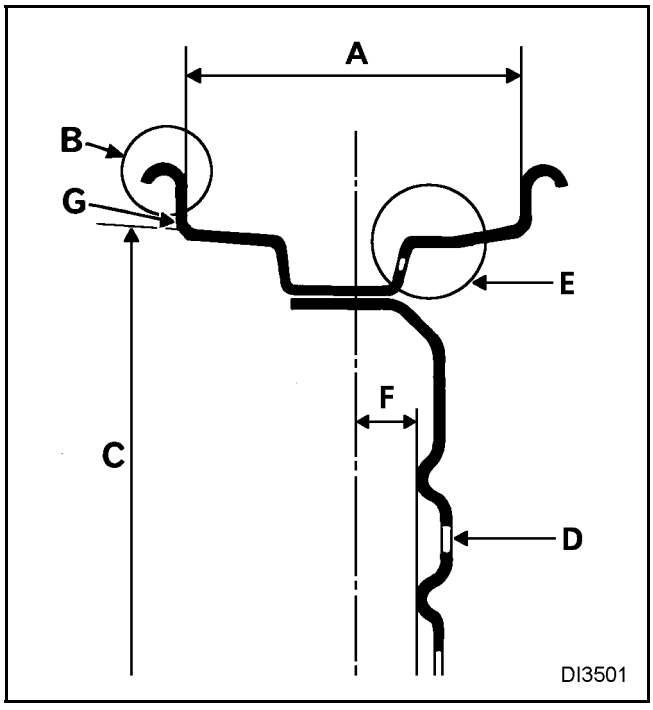
Example: 5 1/2 J 14 4 CH 36

or in abbreviated form:

Example: 5 1/2 J 14

	A	B	C	D	E	F
Rim type	**Width (in inches)**	**Rim edge profile**	**Nominal diameter (in inches) Under tyre bead**	**Number of holes**	**Tyre bead profile**	**Offset (in mm)**
5 1/2 J 14 4 CH 36	**5 1/2**	**J**	**14**	**4**	**CH**	**36**

Maximum run-out: measured on the rim edge (at **G**).



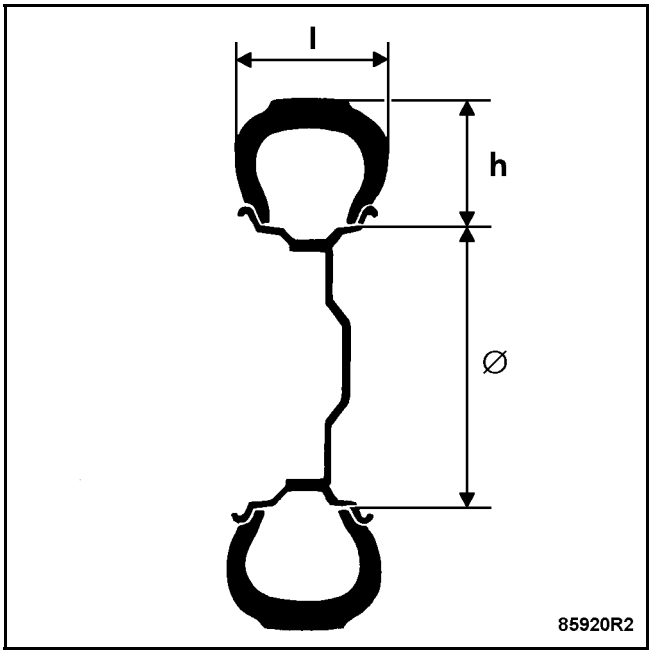
TYRES

The identification marking can be in two forms for the same type of tyre.

Example:

195	/	65	R	16	C	100/98	R
205	/	65	R	16	C	107/105	T
①		②	③	④	⑤	⑥	⑦

① Tyre width in mm (**l**)
② Ratio **h/w**
③ Structure suffix
④ Diameter in inches. Corresponds to the diameter of the rim.
⑤ Suffix (small van type)
⑥ Load index
⑦ Speed code



Example of a structure suffix:

Suffix	Structure
None	Cross ply
R	Radial
B	Bias belted

Example of a speed suffix:

Suffix	Maximum speed (km/h)
R	170
S	180
T	190
U	200
H	210
V	240
Z	over 240

Vehicle	Rim	Tyres	Tyre pressure when cold (in bar) (1)	
			Front	Rear
All types	6J16	195/65 R16 C	3.2	3.6
		205/65 R16 C	3.6	4.1
		215/65 R16 C	3.0	3.4

(1) With full load and on motorways.

 Tightening torque of the wheel nuts: **14.2 daNm**

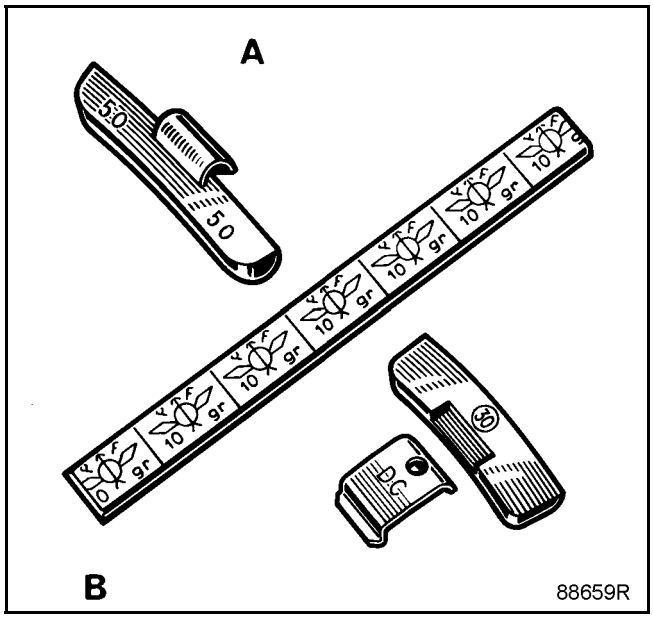
Rim run-out: **1.2 mm**

BALANCE WEIGHTS

Only use weights supplied by the Parts Department:

- secured to the metal rims by hooks (hooks incorporated in the weight),
- fitted by hooks (flat hooks) or self adhesive for alloy wheels.

A Steel rim
B Aluminium alloy



VEHICLE DESCRIPTION

PRIMASTAR is a vehicle with a multiplex network (a CAN network that links most of the main computers).

The multiplex network previously only connected the injection to the automatic gearbox.

This technology makes possible new functions such as the Electronic Stability Program.

However, it involves a great deal of information exchange between the various systems.

To run fault finding on this vehicle, select **Renault Basic Vehicle** in the tools menu.

This means:

- ***that a short circuit in the multiplex network could paralyse all the vehicle functions.***
- ***that a computer or a function (1) may fail due to a fault in another computer (2).***
- ***that after a repair operation, you must ensure that the system (1) is no longer faulty.***

This section describes:

the overall fault finding method,

the functions which can support faulf finding,

the main new features of the vehicle.

NOTES	**Once the vehicle has been selected, the diagnostic tool will only allow you to access the multiplex network diagnostic.** **Once the network diagnostic is completed, you will have access to the fault finding functions for all the vehicle systems.** **ALWAYS REPAIR NETWORK FAULTS BEFORE PERFORMING FAULT FINDING ON THE COMPUTERS**

TIP	Perform an automatic test on all the systems before selecting a particular function. When you select a system, a help function presents the computers contributing to the function.

FAULT CHECKING	Certain computers (notably, injection, ECUs) store parameters when a fault occurs. This allows you to recreate the fault conditions.

CONFORMITY CHECK	Check the states, parameters and configurations using the associated procedures.

Certain operating parameters of a system come from other computers via the multiplex network.

Example: the vehicle speed is transmitted by the ABS, sent to the instrument panel by wire then distributed on the multiplex network and appears in the injections or variable power assisted steering fault finding.

This information appears in a different colour on the fault finding tools.

	**Click on this data to run the diagnostic for the computer producing it.** **IMPORTANT: fault finding is not possible on the instrument panel. Do not start the connection.**

AFTER REPAIR	Switch off the ignition, and wait for 30 seconds. Switch on the ignition again and repeat an automatic test of all the computers to ensure that there is no longer a fault.

FAULT FINDING NOTES	Warning: if you are unable to carry out fault finding on a computer, check the connection between the corresponding **track 7** of the diagnostic socket and the diagnostic track in the computer. Also check the computer supply and conformity.

AIRBAG AND PRETENSIONERS	This computer supports fault finding with the tool and is present in the multiplex network.

ABS EBC 430	This function only performs the wheel locking during braking. This computer supports fault finding with the tool but is not present in the multiplex network.
ESP EBC 430	This function also ensures the anti-skid and Electronic Stability Program (ESP). This computer can support fault finding and is present in the multiplex network. It is linked with the steering wheel angle sensor (cannot support fault finding).

IMMOBILISER	This function is managed directly by the UCH. **This function also includes starting of the vehicle (UCH and Injection).** These computers support fault finding with the tool and are present in the multiplex network.

PASSENGER COMPARTMENT CONNECTION UNIT	This is the same as the UCH. Fault finding for this computer is shared between several fault finding functions (UCH and engine immobiliser). This function also includes fault finding on the **wipers and lighting**. This computer can support fault finding and is present in the multiplex network.

AUTOMATIC GEARBOX	This computer can support fault finding and is present in the multiplex network.

MANUAL AIR CONDITIONING	On this vehicle, the heating and ventilation computer does not control the compressor (function managed by the injection computer). This computer cannot support fault finding with the tool and is not present in the multiplex network.
AUTOMATIC AIR CONDITIONING	On this vehicle, the heating and ventilation computer does not control the compressor (function managed by the injection computer). This computer supports fault finding with the tool but is not present on the multiplex network.
LPG INJECTION	This is handled by a specific computer connected to the multiplex network. Be careful: there is also a petrol injection computer.
DIESEL INJECTION	This function manages the engine, cruise control and speed limiter functions This computer can support fault finding and is present in the multiplex network.
PETROL INJECTION	This function manages the engine and the cruise control and speed limiter functions This computer can support fault finding and is present in the multiplex network.
INSTRUMENT PANEL	This computer cannot support fault finding with the tool but is present on the multiplex network. ***Important*:** the vehicle speed is produced by the ABS and transmitted through a network connection to the instrument panel. The instrument panel makes this signal on the multiplex network available to the main computers (Air bag, Injection, UCH, etc).
CENTRAL COMMUNICATION UNIT	This optional computer manages the radio and navigation/networking functions. This computer cannot support fault finding with the tool but is present on the multiplex network. ***Important*:** This computer has a self-test type fault finding function described in the method.

FUNCTION	**Electronic Stability Program**

Function to select on the diagnostic tool	**ABS, traction control and electronic stability programme**

Computer responsible for the function	Anti-lock Braking System / Electronic Stability Program	**Computer using the multiplex network**

Measures vehicle performance and controls braking and engine torque to correct skidding.

Computer contributing data	Petrol or diesel injection.	**Computer using the multiplex network**

Measures engine torque and sends it to the ABS.
Processes the torque values received from the ABS.

Computer contributing data	Steering wheel angle sensor.	**Computer using the multiplex network**

Measures the steering wheel angle sensor given by the driver and transmits it to the ABS - ESP computer.
***Important*:** fault finding cannot be performed on this computer but it is present on the multiplex network.

FUNCTION	**Air conditioning (manual or automatic)**

Function to select on the diagnostic tool	**Air conditioning**

Computer responsible for the function	Air conditioning.

Controls the air conditioning compressor, processes all the sensor outputs except the engine coolant temperature and the external air temperature.

Computer contributing data	Petrol or diesel injection.	**Computer using the multiplex network**

Authorises or inhibits the air conditioning operation.
Processes requests for set-point values for the idle speed and startup of the engine cooling fan.

Computer contributing data	Radio display or Central Communication Unit.	**Computer using the multiplex network**

Sends the external air temperature received from the radio display or the Central Communication Unit to the climate control unit.

FUNCTION	**Cruise control - speed limiter**

Function to select on the diagnostic tool	**Petrol or diesel injection**

Computer responsible for the function	Petrol or diesel injection.	**Computer using the multiplex network**

Processes the driver's commands.
Displays cruise control status on the instrument panel (via the multiplex network).
Adjusts the speed of the vehicle according to the speed set by the driver.

Computer contributing data	Anti-lock Braking System.	**Computer using the multiplex network**

Supplies the vehicle speed.

Computer contributing data	Instrument panel.	**Computer using the multiplex network**

Displays cruise control speed - speed limit and the cruise control - limit condition.

FUNCTION	**The OBD (On Board Diagnostic: depollution)**

Function to select on the diagnostic tool	**Petrol or diesel injection**

Computer responsible for the function	Injection.	**Computer using the multiplex network**

The OBD function is shared by the injection ECU and the automatic gearbox ECU.
The injection ECU decides the emission control fault finding procedue to be sent to the diagnostic tool.
The emission control faults associated with the automatic transmission are also accessible to the injection ECU

Computer contributing data	Automatic gearbox.	**Computer using the multiplex network**

Can request emission control warning light to come on.

FUNCTION	**LPG**

Function to select on the diagnostic tool	**LPG injection**

Computer responsible for the function	LPG injection.	**Computer using the multiplex network**

Controls its injectors and pressure relief valve.
Measures the LPG level and sends it to the instrument panel.

Computer contributing data	Petrol injection.	**Computer using the multiplex network**

Measures the pressures (manifold), the air temperature and flow values, and sends them to the LPG computer.
Warning: there is a specific link between the petrol injection and LPG injection ECUs for transmission of the Top Dead Centre signal.

Computer contributing data	Instrument panel.	**Computer using the multiplex network**

Displays the LPG level and the change to LPG fuel combustion