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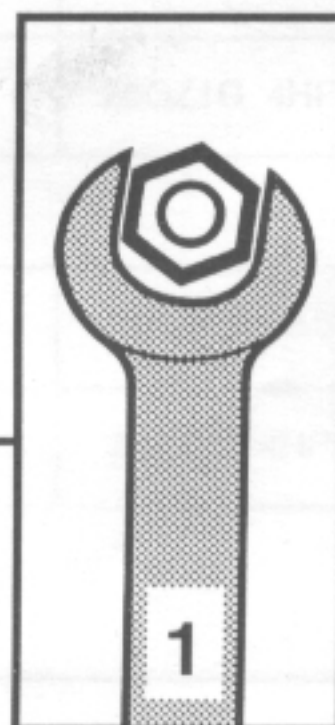
PRESENTATION

● 1999 MODEL YEAR

"The technical information contained in this document is intended for the exclusive use of the trained personnel of the motor vehicle repair trade. In some instances, the information could concern the security and safety of the vehicle. The information is to be used by the professional vehicle repairers for whom it is intended and they alone would assume full responsibility to the exclusion of that of the manufacturer".

"The technical information appearing in this brochure is subject to updating as the characteristics of each model in the range evolve. Motor vehicle repairers are invited to contact the CITROËN network periodically for further information and to obtain any possible updates".

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AUTOMOBILES CITROËN
DIRECTION EXPORT EUROPE
DOCUMENTATION APRÈS VENTE

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PRESENTATION : 1999 MODEL YEAR RANGE

1 – MAINTENANCE

The 1999 Model Year service schedules are characterised by an increase in the mileage intervals between engine oil changes.

The new service intervals are as follows :

- petrol vehicles (all types) – direct injection diesel vehicles : 12,500 miles (instead of 10,000 miles)
- indirect injection diesel vehicles (Turbo D) (pre-combustion chambers) : 110,000 miles (instead of 6,000 miles)

WARNING : The new mileage intervals are based on using an engine oil, the quality of which meets the performance standards ACEA (A3.96 – B3.96) or API (SJ/CF) (synthetic or semi-synthetic oils).

2 – EUROPE MARKETED RANGE

2.1 – Index

Ref. letters used in the tables "commercial range of vehicles" :

(a) = automatic gearbox	(f) = fiscal rating in "HP" (France)
(m) = manual gearbox	L3 = CEE 95 L3
(l) = "long" gearbox	L4 = CEE 2000 (EURO 2000)

2.2 – Commercial range of CITROEN XM vehicles – Saloon

Vehicle		Engine		Gearbox
Type code	Trim level	Plate. Type	Power kW/hp. (f)	Reference. Type

CITROEN XM 2 l injection (1998 cc) :

Y4-CZ	SX	RFV (L3) XU10J4R	97,4/135 (9)	20TA53 BE3 (m) (*)
Y4-TV			97,4/135 (10)	20GZ5G 4HP18 (a)
Y4-TX			97,4/135 (9)	20TA52 BE3 (m) (l) (*)

(*) gearbox equipped with a new reverse gear brake.

CITROEN XM 2 l turbo – CT (1998 cc) :

Y4-GG	SX	RGX (L3) XU10J2TE	108/150 (10)	20GM32 ME5T (m)
	EXCLUSIVE			
Y4-TT	SX		108/150 (11)	20GZ1G 4HP18 (a)
	EXCLUSIVE			

CITROEN XM 6 cylinders (2946 cc) :

Y4-WG	SX	ES9J4 (L3) XFZ	140/194 (13)	20LE33 ML5T (m)
	EXCLUSIVE			
Y4-WH	SX		140/194 (14)	20HZ02 4HP20 (a)
	EXCLUSIVE			

GENERAL SPECIFICATION

Vehicle		Engine		Gearbox
Type code	Trim level	Plate. Type	Power kW/hp. (f)	Reference. Type

CITROEN XM turbo D12 (2088 cc) :

CITROEN XM turbo DTZ (2088 cc) :				
Y4-GZ	For conversion into ambulance	P8C (L3) XUD11BTE	80/110 (7)	20GM31 ME5T (m)
	SX			
	EXCLUSIVE		80/110 (8)	20GZ5D 4HP18 (a)
Y4-RN	SX			
	EXCLUSIVE			
Y4-WE	SX	P8C (L4) XUD11BTE		

CITROEN XM 2,5 l turbo diesel (2446 cc) :

Y4-NZ	SX	THY (L3) DK5ATE	94,5/130 (9)	20KM50 MG5TB (m)
	EXCLUSIVE			

2.3 – Commercial range of CITROEN XM vehicles – Estate

CITROEN XM 2 l injection (1998 cc) :

Y4-GB	SX	RFV XU10J4R	97,4/135 (9)	20GM36 ME5T (m)
Y4-TU			97,4/135 (10)	20GZ5G 4HP18 (a)

CITROEN XM 2 l turbo – injection (1998 cc) :

Y4-GM	Varebiler	RGX XU10J2TE	108/150 (9)	20GM33 ME5T (m)
	SX			
Y4-TS	Varebiler		108/150 (10)	20GZ1G 4HP18 (a)
	SX			

CITROEN XM 6 cylinders (2946 cc) :

Y4-WJ	SX	ES9J4 XFZ	140/194 (13)	20LE33 ML5T (m)
Y4-TN			140/194 (14)	20HZ02 4HP20 (a)

CITROEN XM turbo D12 (2088 cc) :

Y4-MZ	Varebiler	P8C XUD11BTE	80/110 (7)	20GM31 ME5T (m)
	SX			
Y4-CW	Varebiler		80/110 (8)	20GZ5D 4HP18 (a)
	SX			
Y4-WF	SX	P8C (L4) XUD11BTE	80/110	20GM31 ME5T (m)

CITROEN XM 2,5 l turbo diesel (2446 cc) :

Y4-RM	Varebiler	THY DK5ATE	94,5/130 (9)	20KM50 MG5TB (m)
	SX			

MECHANICAL DEVELOPMENTS : 1999 MODEL YEAR RANGE

1 – ELECTRONIC CONTROL UNITS

1.1 – Engine management ECU

4 cylinders (1998 cc) :

Engine type	Gearbox	Injection system			Remarks
		Supplier Type	PSA reference Manufacturer reference	Software version Indication	
RFV XU10J4R	Manual	BOSCH	96 309 013 80	1037357305	Improved driving performance
	Automatic	MP 52 (*)	0261204694	26FM435	
RGX XU10J2TE	Manual	BOSCH	96 304 296 80	1037357230	
	Automatic	MP 32 (*)	0261200808	26FM0349	

6 cylinders (2946 cc) :

Engine type	Gearbox	Injection system			Remarks
		Supplier Type	PSA reference Manufacturer reference	Software version Indication	
UFZ ES9J4	Manual	BOSCH MP 7.0 (*)	96 255 522 80	1037357243	Improved driving performance
			0261204412	26FM413	
	Automatic		96 255 523 80	1037358274	
			0261204413	26FM0432	

NOTE : (*) downloading an update to the ECU.

4 cylinder Turbo Diesel engine :

Engine type	Gearbox	Injection system			Remarks
		Supplier Type	PSA reference Manufacturer reference	Software version Indication	
P8C XUD11BTE/L3	Manual	LUCAS EPIC	96 305 092 80	41502211	
	Automatic		R 040 100 20 C	0B	
	Manual		96 314 459 80	41501411	
			R 040 100 16 D	0C	
P8C XUD11BTE/L4			96 304 668 80	41501412	New indirect injection diesel engine
			R 040 100 15 D	0C	
THY DK5ATE	Manual	BOSCH MSA 11 7.6	96 286 071 80	L3 16	
			00281001336		

1.2 – Automatic gearbox ECU ZF 4HP20

Supplier : BOSCH (*).

PSA reference : 96 328 731 80.

Software version : PS08G03.

(*) ECU updated by downloading.

2 – XUD11BTE/L4 ENGINE

Vehicles fitted with XUD11BTE/L4 engines have been marketed since the 02/1998.

The XUD11BTE/L4 engine replaces the XUD11BTE/L3 engine in countries offering tax incentives.

The new emission standard L4 is stricter than the preceding standard (L3 emission standard) :

- reduction in nitrogen oxide (Nox) emissions
- reduction in soot emissions

2.1 – Principal evolutions

Components integrated in the air inlet system :

- air flowmeter
- throttle housing (on inlet manifold)

Specific elements :

- the catalytic converter is impregnated with 70 g of precious metal
- engine wiring harness
- precombustion chamber (specific cylinder head)
- inlet manifold connection (adapted for the throttle housing)
- diesel fuel injectors (specific rating = 150 bars)
- diesel injection ECU (location of new channels)
- exhaust gas recycling valve
- electrovalve allowing the gradual operation of the throttle butterfly housing located on the inlet manifold

NOTE : The XUD11BTE/L4 engine can only be coupled with manual gearboxes.

2.2 – Main specification

2.2.1 – Vehicle

Type code :

- "Saloon" version : Y4WE
- "Estate" version : Y4WF

2.2.2 – Engine

Engine code : XUD11BTE/L4.

Legislation type : P8C.

Cubic capacity : 2088 cc.

Compression ratio : 21.5/1.

Max. power E.E.C. (DIN) : 80 kW (110 HP).

Corresponding engine speed : 4300 rpm.

Max. torque E.E.C. (DIN) : 25 m.daN (26 m.kg).

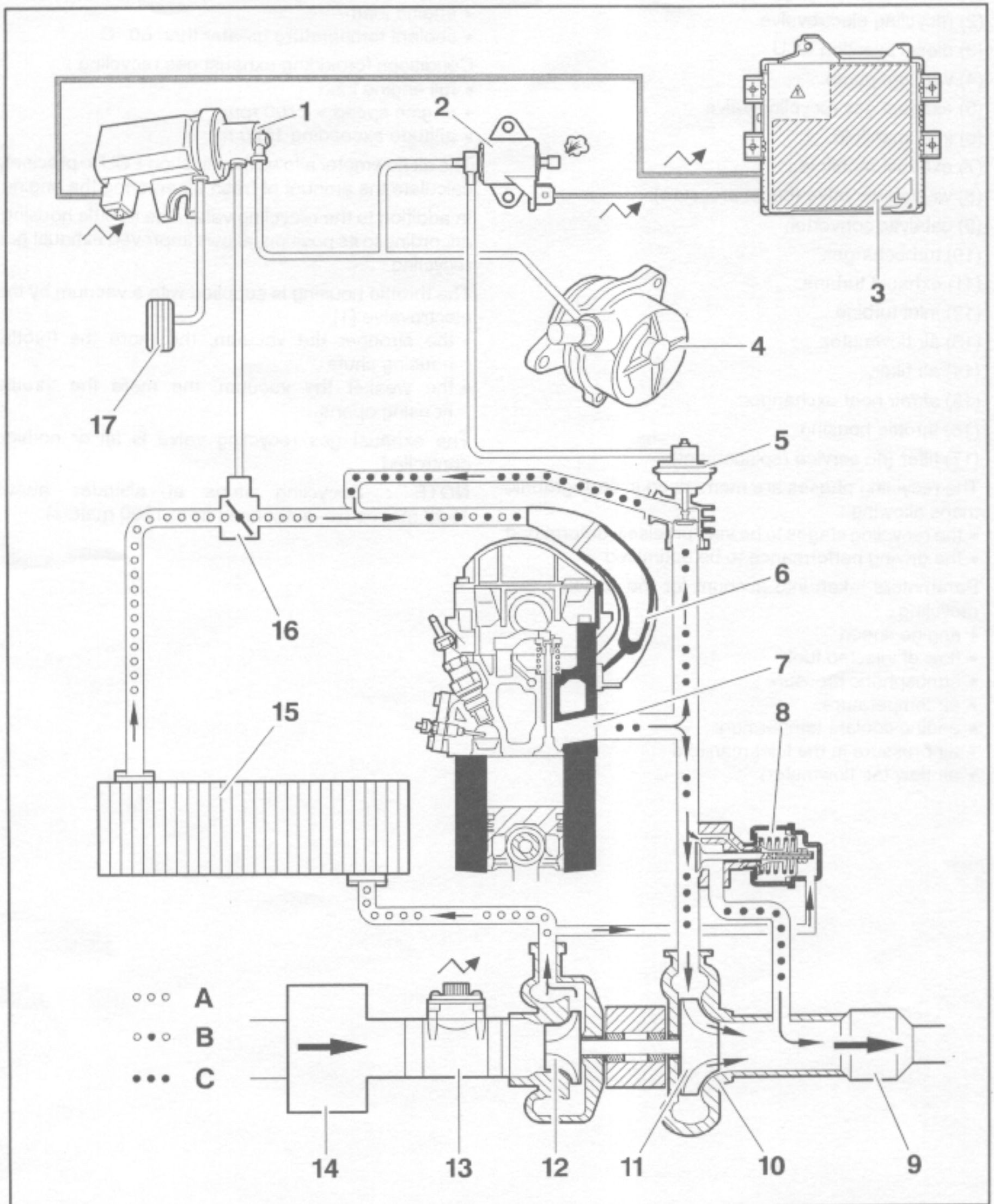
Corresponding engine speed : 2000 rpm.

Emission standard : L4 (EURO 2000).

2-way catalytic converter : yes.

Injection system : LUCAS DIESEL.

2.3 – Description : exhaust gas recycling system



- (1) proportional electrovalve (progressive control of the throttle housing).
- (2) recycling electrovalve.
- (3) diesel injection ECU.
- (4) vacuum pump.
- (5) exhaust gas recycling valve.
- (6) inlet manifold.
- (7) exhaust manifold.
- (8) wastegate valve (boost pressure).
- (9) catalytic converter.
- (10) turbocharger.
- (11) exhaust turbine.
- (12) inlet turbine.
- (13) air flowmeter.
- (14) air filter.
- (15) air/air heat exchanger.
- (16) throttle housing.
- (17) filter (no service replacement).

The recycling phases are memorised in cartographic maps allowing :

- the recycling stages to be very precisely determined
- the driving performance to be optimised

Parameters taken into account for the exhaust gas recycling :

- engine speed
- flow of injected fuel
- atmospheric pressure
- air temperature
- engine coolant temperature
- air pressure in the inlet manifold
- air flow (air flowmeter)

Conditions for recycling of exhaust gas :

- engine speed < 2700 rpm
- engine load
- coolant temperature greater than 60 °C

Conditions forbidding exhaust gas recycling :

- full engine load
- engine speed > 2700 rpm
- altitude exceeding 1500 m

The air flowmeter allows the injection ECU to precisely calculate the amount of fresh air entering the engine.

In addition to the recycling valve, the throttle housing, according to its position, allows improved exhaust gas recycling.

The throttle housing is supplied with a vacuum by the electrovalve (1) :

- the stronger the vacuum, the more the throttle housing shuts
- the weaker the vacuum, the more the throttle housing opens

The exhaust gas recycling valve is all or nothing controlled.

NOTE : Recycling stops at altitudes above 1500 metres (re-authorised from 1200 metres)

3 – DK5ATE ENGINE

Evolutions :

- fuel supply system
- diesel fuel filter

3.1 – Fuel supply system

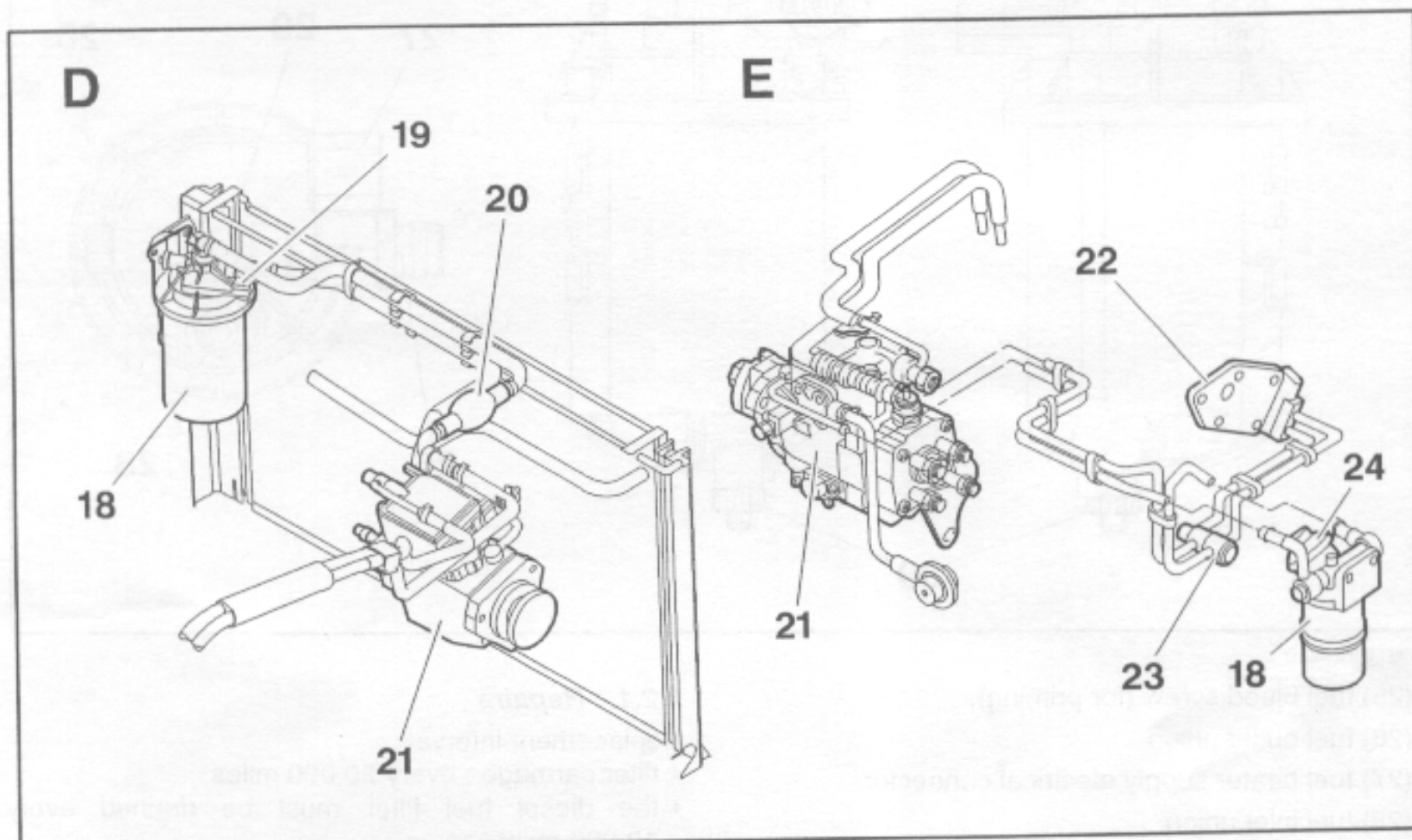


Fig : B1HP0Z9D

D – new arrangement.

E – former arrangement.

- (18) diesel fuel filter.
- (19) diesel fuel heater (electrical).
- (20) bulb type fuel primer.
- (21) diesel fuel injection pump.
- (22) diesel fuel heater (thermal).
- (23) thermostatic regulator.
- (24) priming pump.

3.1.1 – Former arrangement

Special features :

- priming pump integrated in the fuel filter
- fuel heater on cylinder head
- fuel filter equipped with a water-in-fuel sensor
- thermostatic valve allowing the fuel temperature to be regulated
- fuel filter with aluminium well

3.1.2 – New arrangement

Special features :

- specific fuel pipes
- priming pump separate from the fuel filter
- new fuel filter with plastic well

3.2 – Diesel fuel filter

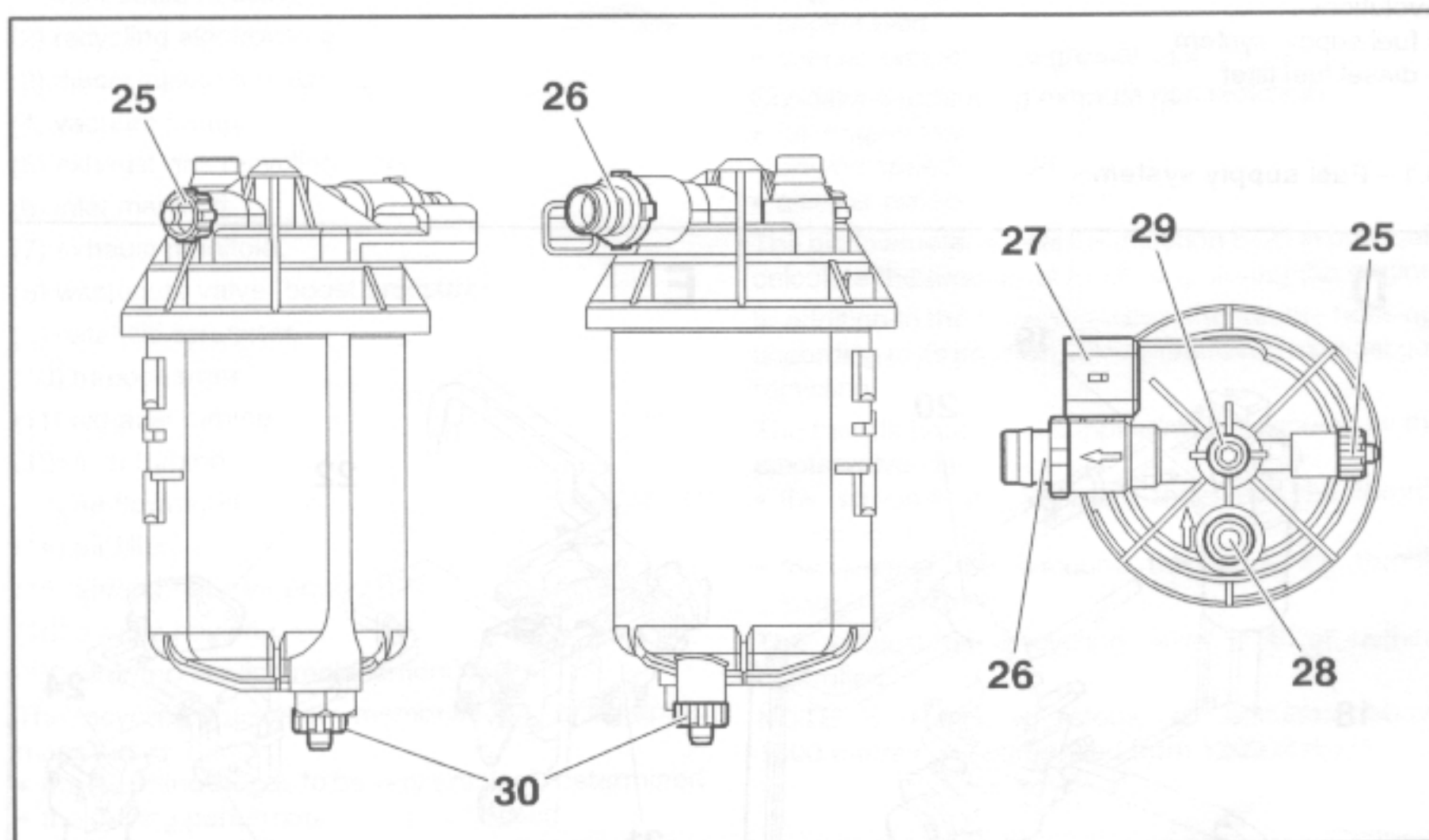


Fig : B1HP0ZAD

(25) fuel bleed screw (for priming).

(26) fuel outlet union.

(27) fuel heater supply electrical connector.

(28) fuel inlet union.

(29) fuel filter cover screw.

(30) coolant bleed screw.

Tighten the bolt (29) to 0,5 m.daN.

Special characteristics of the new fuel filter :

- specific fuel filter cartridge
- incorporation of an electric fuel heater in the fuel filter

NOTE : The fuel filter is not fitted with a water level detector.

Characteristics of the fuel filter cartridge :

- type (: C460)
- diameter : 70 mm
- height : 85 mm

The fuel pipes are connected to the fuel filter by click-fit connectors.

The heater integrated in the fuel filter is electrically supplied after the ignition is switched on.

Fuel heater operating conditions :

- fuel heater is activated :
when the temperature is < 7°C
- fuel heater stops :
when the temperature is > 20°C

3.2.1 – Repairs

Replacement intervals :

- filter cartridge : every 20,000 miles
- the diesel fuel filter must be drained every 10,000 miles

3.2.2 – Replacement parts

Both old and new parts are available from the Replacement Parts Division.

4 – WHEEL BOLTS AND RIMS

NOTE : This evolution concerns vehicles equipped with light alloy wheel rims.

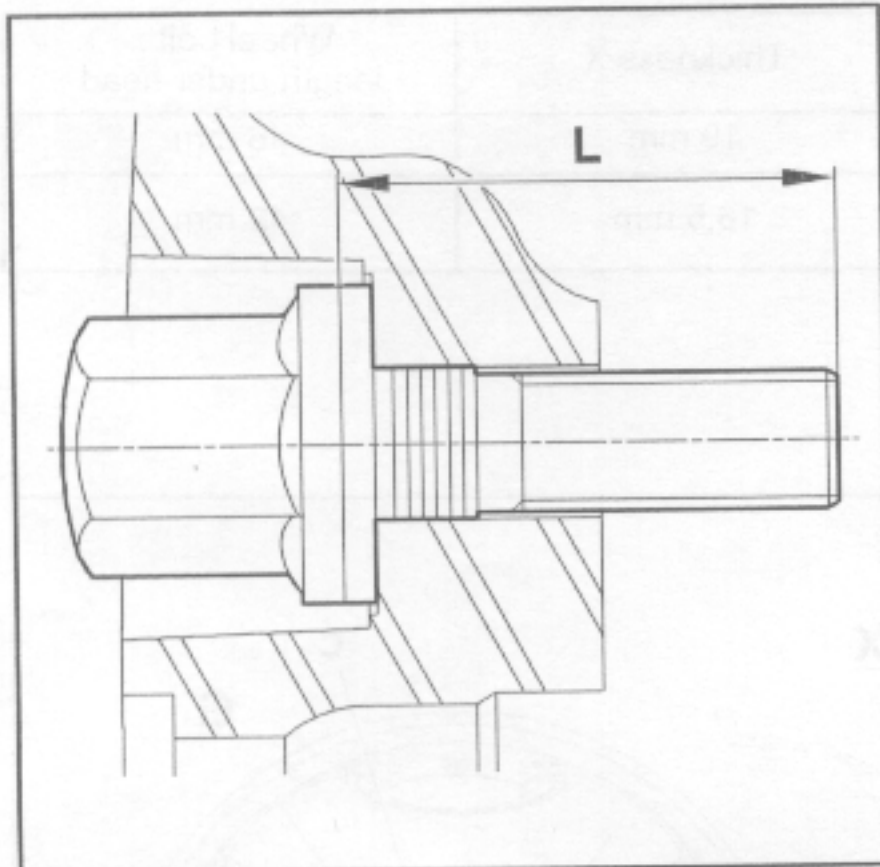


Fig : B2GP00BC

Evolution of the length under the head of the light alloy wheel bolts : $L = 42$ mm (instead of 46 mm).

NOTE : The spare wheel has not evolved and can use the 2 types of bolt.

4.1 – Identifying the fittings

4.1.1 – "MONTE-CARLO" wheel rim

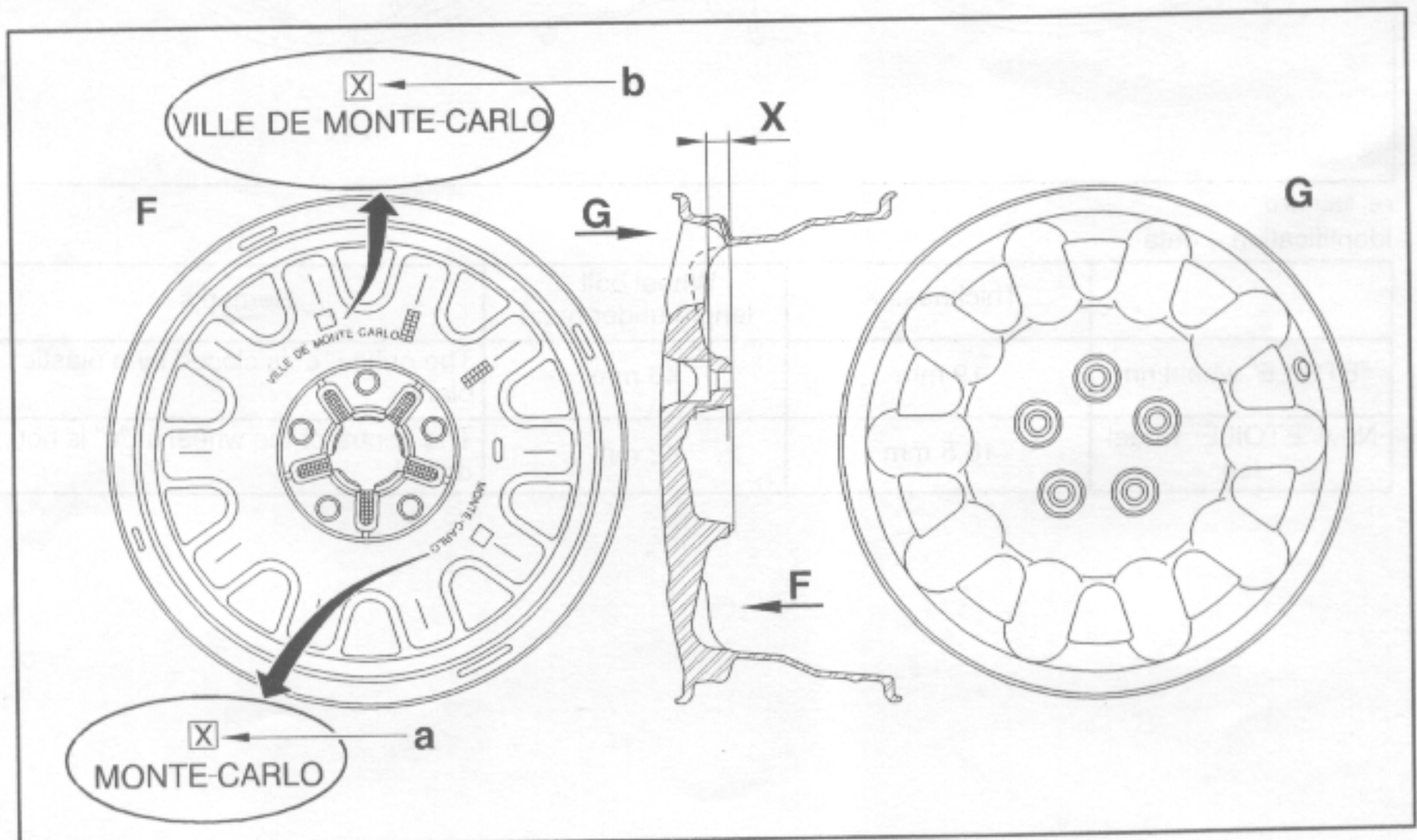


Fig : B2GP00DD

GENERAL SPECIFICATION

The "VILLE DE MONTE-CARLO" wheel rims replace the "MONTE-CARLO" wheel rims (identical style, but adapted for the new bolts).

The new wheels carry the markings "MONTE-CARLO" and "VILLE DE MONTE-CARLO" on their inner surface.

Identification – data :

Wheel rims	Identification	Thickness X	Wheel bolt : length under head
MONTE-CARLO	Marking at "a"	19 mm	46 mm
VILLE DE MONTE-CARLO	Marking at "b"	16,5 mm	42 mm

4.1.2 – "ETOILE" wheel rim

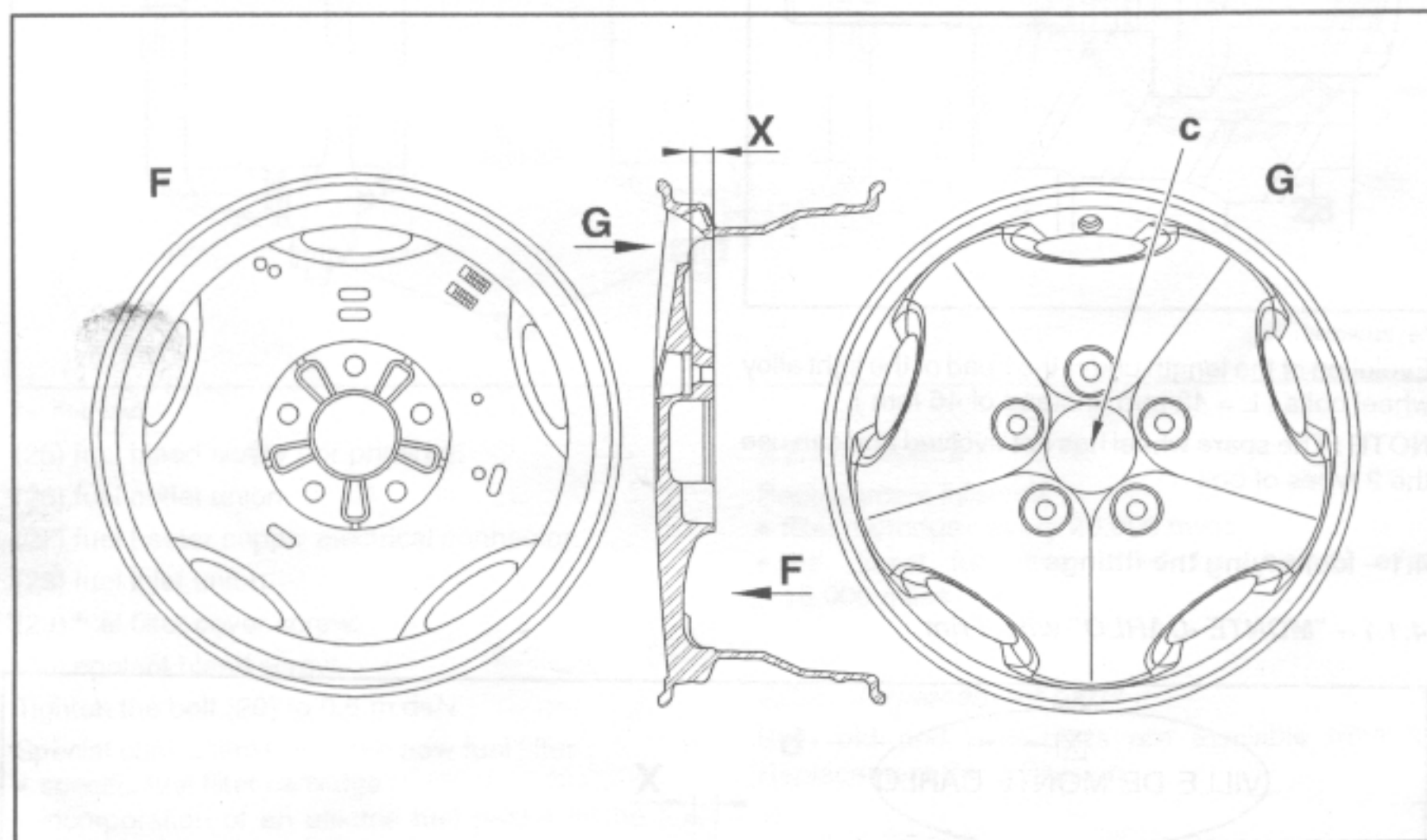


Fig : B2GP00ED

Identification – data :

	Thickness X	Wheel bolt : length under head	Remarks
"ETOILE" wheel rim	19 mm	46 mm	The orifice "c" is closed by a plastic blank
New "ETOILE" wheel rim	16,5 mm	42 mm	The centre of the wheel at "c" is not drilled

4.2 – Replacement parts

Both old and new parts are available from the Replacement Parts Division.

IMPERATIVE : Respect the pairing of the wheel rim type/length of bolt.

WARNING : The locking wheel nuts should be adapted to the length of the bolts.

Locking wheel nuts :

- earlier kit : reference (ZC 9 863 038 U)
- new kit : reference (9405 06)

5 – HYDRACTIVE SUSPENSION

5.1 – Brake pressure switch

Removal of the brake pressure switch, located in the braking circuit, allowing the hydractive ECU to control the firm state of the suspension during braking.

5.2 – Hydractive II ECU

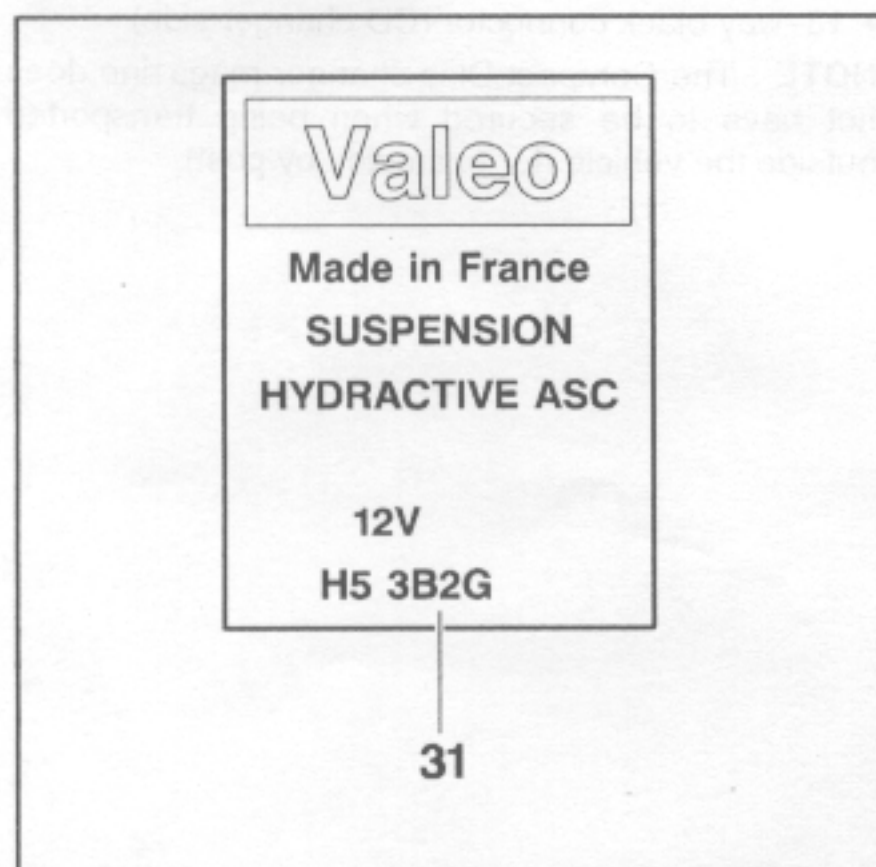


Fig : B3BP13CC

(31) application rating.

New hydractive II ECU with application rating H5 3B2G.

The hydractive ECU controls the suspension's firm state by monitoring the vehicle's speed (vehicle speed sensor).

The hydractive electronic control unit has parameter tables which can be configured for each vehicle version (application rating H5 3B2G).

5.3 – Interchangeability

The hydractive ECU H5 3B2G can replace hydractive ECUs with the following application ratings :

- H5 S2J5G
- H4 S2J2G
- H4 S2I2G
- H4 S2H2G
- H4 S2G2G

IMPERATIVE : The hydractive ECUs bearing the application rating H5 3B2G should be configured when the ECUs are fitted to the vehicle.

5.4 – Replacement parts

Only the new parts will be available from the Replacement Parts Division once stocks have been exhausted (application rating H5 3B2G).

NOTE : Fitting a new hydractive ECU to an old vehicle will render the brake pressure switch inactive (no longer used by the hydractive ECU).

MODIFICATIONS TO THE ELECTRICAL SYSTEM : 1999 MODEL YEAR RANGE

1 – GENERAL

The electrical equipment changes after the following modifications :

- fitting of a new engine oil pressure switch (all engines except ES9J4)
- brake pressure switch removed (hydractive suspension)

2 – ELECTRICAL HARNESSSES

2.1 – Engine electrical harness

New LUCAS DIESEL EPIC electronic injection system (XUD11BTE/L4 engine).

Fitting of a new engine oil pressure switch (all engines except ES9J4).

Removal of the throttle housing electric heater (ES9J4 engine).

Incorporation of an electric fuel heater in the fuel filter (2.5.l Turbo engine).

2.2 – Suspension electrical harness

Removal of the brake pressure switch, located in the braking circuit, allowing the hydractive ECU to control the firm state of the suspension during braking.

NOTE : The hydractive ECU controls the suspension's firm state by monitoring the vehicle's speed (vehicle speed sensor).

3 – AUDIO SYSTEM

Replacement of the 4040 RDS audio system Compact Disc changer.

Reminder : system make (audio system + Compact Disc changer) : Philips.

When replacing the CD changer, the following modifications must be made :

- adaptation of the CD changer mounting under the driver's seat
- adaptation of the harness connecting the audio system and the CD changer

NOTE : The new CD changer can be connected on old vehicles equipped with a first fitting audio system : 3040 RDS and 4040 RDS.

IMPERATIVE : Do not insert a mini Compact Disc into the CD changer magazine (80 mm diameter).

The CD changer is controlled from the audio system via a screened cable.

Screened cable connections :

- 7-way black connector (radio side)
- 13-way black connector (CD changer side)

NOTE : The Compact Disc changer magazine does not have to be secured when being transported outside the vehicle (for example : by post).