

**REPAIR MANUAL MAN 058531**

*CUSTOMER SERVICES*

*SEPTEMBER 1988*

*AFTER-SALES TECHNICAL DEPARTMENT*

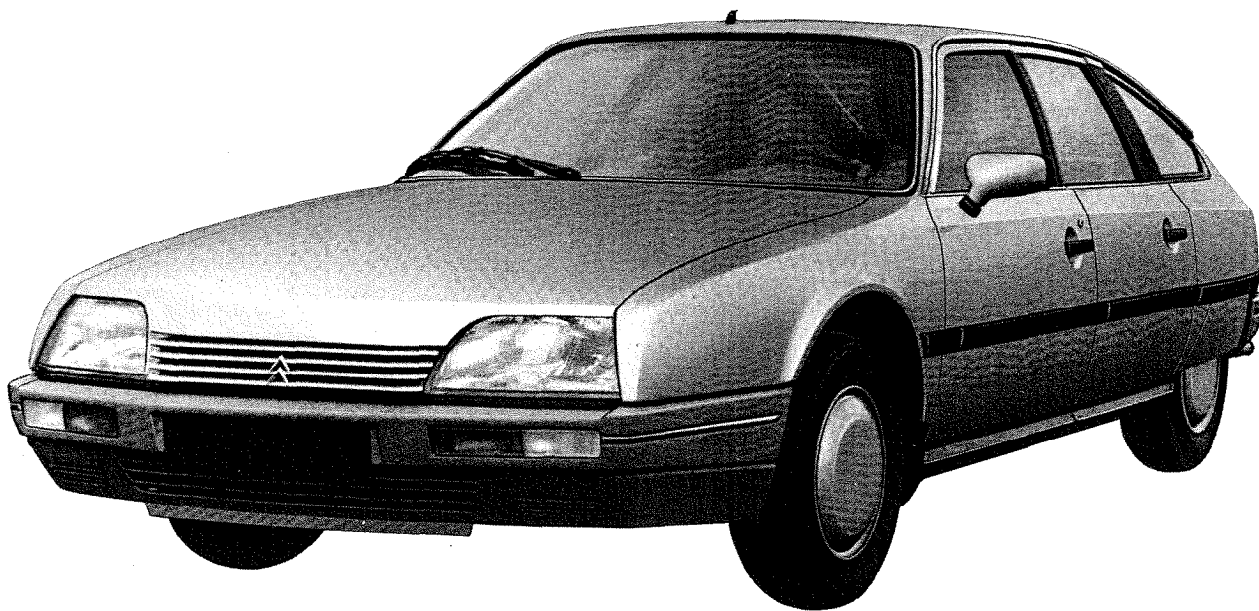
**CX  
VEHICLES**

*Additive No. 1 : .....*

*No. 2 : .....*

*No. 3 : .....*

**MECHANICAL COMPONENTS 1**



*Automobiles Citroën. S.A. au capital de 800.000.000 F*

*R.C.S. NANTERRE B 642 050 199. SIRET 642 050 199 00644 APE 3111. Télégramme et Télex : CITR 614830 F*

*ADRESSE POSTALE : 92208 NEUILLY-SUR- SEINE CEDEX FRANCE*

# USE OF THE MANUAL

## PRESENTATION

The **Repair Manual** comes in a binder with a "Multo" type mechanism to facilitate the filing of additive sheets or the removal of a part for operation in the workshop.

The **MECHANICAL COMPONENTS, PART 1 VOLUME (8531)** covers operations on the MECHANICAL COMPONENTS and the BODYWORK which may be carried out by a general workshop.

It is divided into **15 chapters** separated by vinyl tab **inserts** numbered ① to ⑮.

- |                                    |  |
|------------------------------------|--|
| ① : General                        | ⑧ : Rear axle                                |
| ② : Engine                         | ⑨ : Suspension - wheels - tyres              |
| ③ : Fuel system-Carburettor        | ⑩ : Steering                                 |
| ④ : Ignition system                | ⑪ : Braking system                           |
| ⑤ : Clutch                         | ⑫ : Electrical equipment and radio           |
| ⑥ : Gearbox-Drive shafts           | ⑬ : Heater, ventilation and air-conditioning |
| ⑦ : Source and reserve of pressure | ⑭ ⑮ : Bodywork                               |
| ⑧ : Front axle                     |  |

## COMPOSITION OF A CHAPTER

Each chapter includes:

- the list of operations in it,
- the operations in numerical order.

## OPERATIONS

The operation references are made up as follow:  $\underbrace{MA}_{a)} - \underbrace{100}_{b)} - \underbrace{00}_{c)} / \underbrace{1}_{d)} \underbrace{a}_{e)}$

- a) vehicle code letters: **MA**
- b) three figure number identifying the assembly or the assembly part.
- c) figure indicating the type of operation:
  - the figures **000** indicate the vehicle specification
  - the figures **00** indicate the assembly specification
  - the figures **0** indicate checks and adjustments
  - the figures **1** indicate removals and refittings
  - the figures **2** indicate dismantling and re-assembly
  - the figures **3** indicate reconditioning
- d) figure /1,.../2.../... standing for a variant,
- e) letter: **a, b**, standing for an evolution.

The various operations are presented:

- 1° either through photos, drawings and **texts**,
- 2° or through photos, drawings and **symbols**.

A **GLOSSARY** has been placed at the beginning of each volume for this purpose.

In the glossary (the one in the Mechanical Components volume is different from the one in the Bodywork volume), the meaning for each symbol has been translated into **nine languages**.

It consists in a **removable set of "plastic" sheets** bound with one manœuvrable metal ring to facilitate the extraction of one or several pages (and obtain photocopies from them, for instance).

\*

## TOOLS

For each chapter, the photos of the special tools required for proper completion of the work, are given at the end of the list of operations.

The special tool numbers and photos appear in the operation description as the work progresses.

The tools referenced **OUT** followed by **6 figures** and ending in the letter "**T**" are **sold** by the **Replacement Parts Department** to FRANCE and EXPORT networks.

The tools referenced with **4 figures** followed by the letter "**T**" are sold to FRANCE by the Société FENWICK, Département AMA :  
24, boulevard Biron, 93404 SAINT-OUEN. Tél. : 42.52.67.00, and to the EXPORT network by CITROËN.

The tools referenced **MR** must be made up by the repairer himself.

## TIGHTENING TORQUES:

The **tightening torques** are expressed in metre Decanewton (**mdaN**), the official torque measuring unit:

**0.981 mdaN = 1 mkg** (former measuring unit).

In practice, **1 mdaN = 1 mkg**.

## UPDATING THE MANUAL WITH ADDITIVES:

**Additives should be ordered immediately on receipt of the DOCUMENTATION BULLETIN announcing that they are issued.**

The updated sheets must be added to the existing pages in the manual or replace the corresponding ones. They are identified by spots located to the left of the *shortened* volume *number* placed at the bottom right hand side of the recto page:

Example : 1 spot • 8531 additive no. 1 ;      2 spots •• 8531 additive no. 2, etc.

## IMPORTANT NOTE:

For all technical information, please apply to:

### **CENTRE TECHNIQUE CITROËN**

Division Après-Vente

Service Technique

Chemin Vicinal n° 2 - 78140 VELIZY

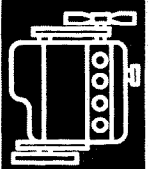
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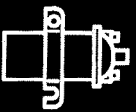
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2



3



4



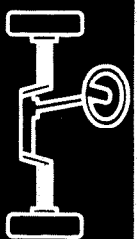
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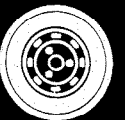
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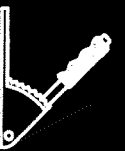
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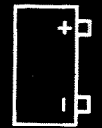
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11



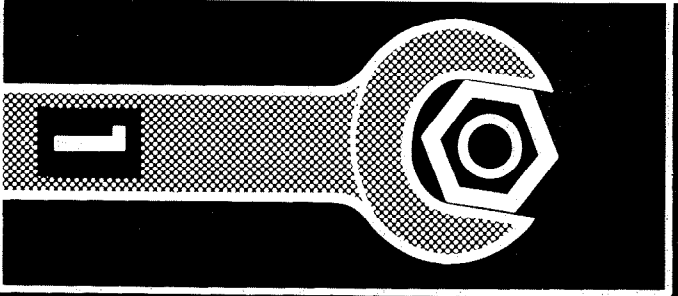
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13



14





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LIST OF OPERATIONS APPEARING IN THE CHAPTER :  
GENERAL INFORMATION

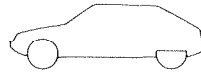
VEHICLE CONCERNED  
ENGINE TYPE

1

OPERATION NUMBER	DESCRIPTION	OPERATION		20 Petrol	22 Petrol	25 Petrol Injection	25 Prestige	25 Petrol Turbo	25 Prestige Petrol Turbo	25 Diesel	25 Diesel Turbo	25 Limousine Diesel Turbo	20 Safari Petrol + Familiale	25 Safari Petrol Injection	25 Safari Diesel + Familiale	25 Safari Diesel Turbo	Ambulance		
		△ TEXTS	○ SYMBOLS	829 A 5	J6T A 500	25/659	25/659	25/662	25/662	25/660	25/648	25/648	829 A 5	25/659	25/660	25/648	829 A 5 or 25/660		
<b>MA 000/1</b>	General specification - vehicle identification		○	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>MA 001/1</b>	Jacking and towing points		○	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>MA 002/2</b>	Protection of the electrical units	△		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>MA 003/3</b>	Recommended products	△		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>MA 004/4</b>	Products to be used on the bodywork	△		X	X	X	X	X	X	X	X	X	X	X	X	X	X		



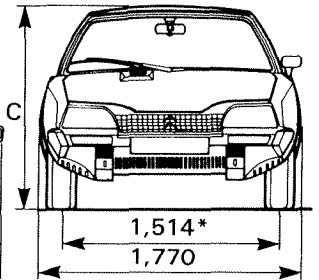
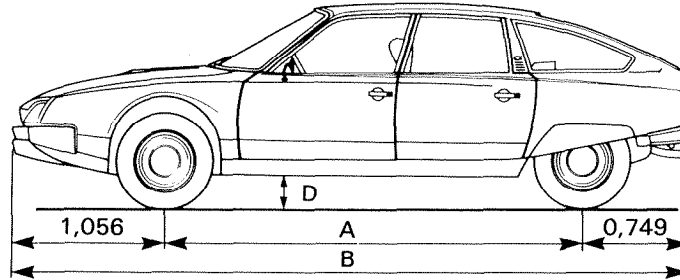
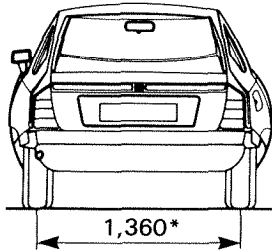
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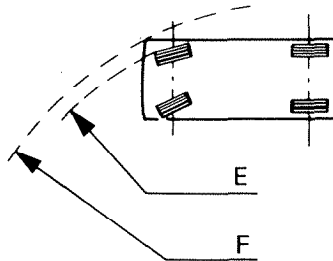
MA  
000/1

1

	CX20	CX22	CX25				
	20 20RE 20 TRE	22TRS	RI GTI (AM84)	Pallas IE RI GTI (AM85)	GTI Turbo	Prestige	Prestige Turbo
	MP	NR	NG	NG	NK	NH	NP
	829 A 5	J6T A 500	M25/659	M25/659	M25/662	M25/659	M25/662
	4	5	5	5	5	5	5
	5			Automatic		Automatic	

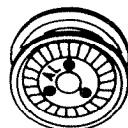


A	2,845 m	3,095 m
B	4,650 m	4,900 m
C	1,360 m	1,375 m
D	0,160 m	



E	11,70 m	12,50 m
F	12,50 m	13,40 m

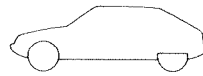
\* + 8 mm



TRX



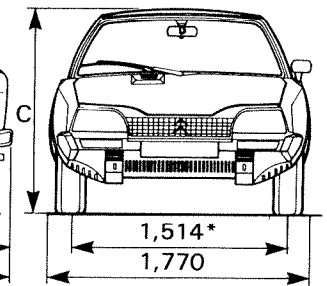
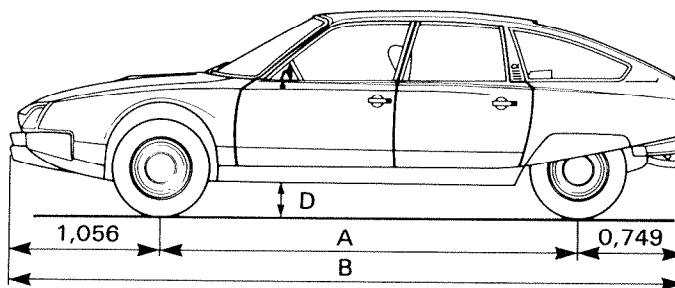
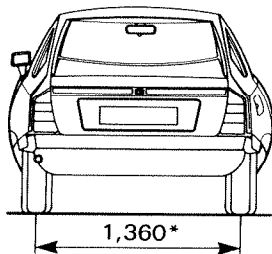
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MA  
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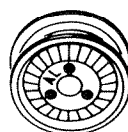
3

CX 25				
	Pallas D (AM84) — TRD	Pallas D (AM85) — D — RD	RD Turbo TRD Turbo	Limousine Turbo
	MM	MM	NB	ND
	M25/660	M25/660	M2/648	M25/648
	5	4 5	5	5



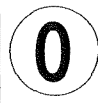
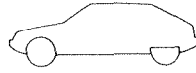
A	2,845 m	3,095 m
B	4,650	4,900 m
C	1,360	1,375 m
D	0,160 m	
E	11,70 m	12,50 m
F	12,50 m	13,40 m

\* + 8 mm



TRX



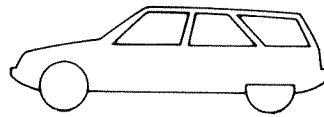


CX25			
	D Pallas D RD TRD	RD Turbo TRD Turbo	Limousine Turbo
	420 kg 950 kg 1370 kg	435 kg 970 kg 1405 kg	460 kg 990 kg 1450 kg
	1300 kg		
	685 kg	700 kg	725 kg
	755 kg 1140 kg 1890 kg	755 kg 1155 kg 1905 kg	790 kg 1160 kg 1920 kg
	3190 kg	3205 kg	3220 kg
	80 kg		
	100 kg		
	3190 kg	3205 kg	3220 kg
	12 %		





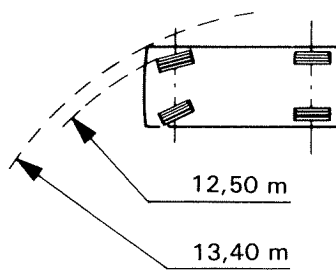
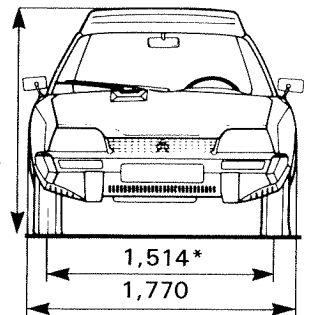
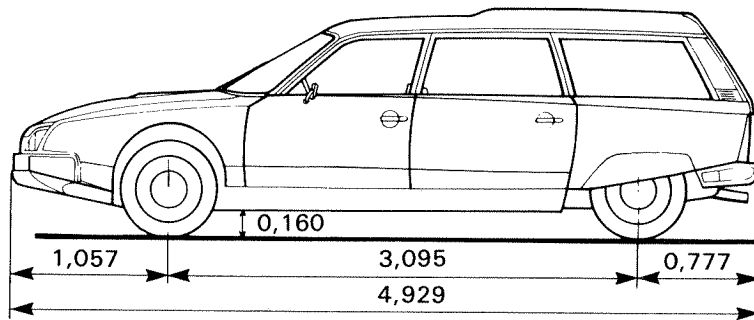
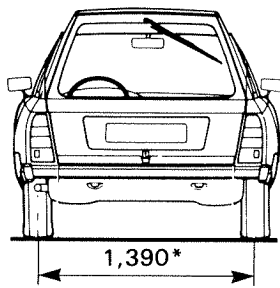
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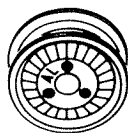
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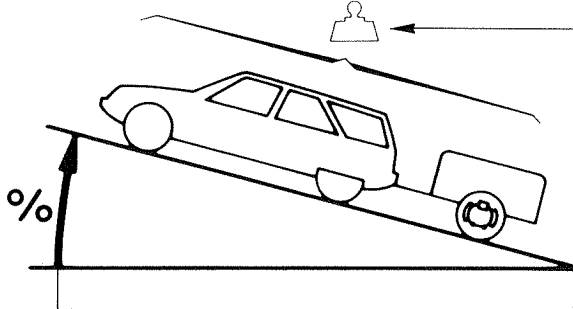
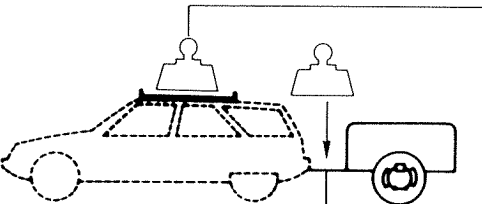
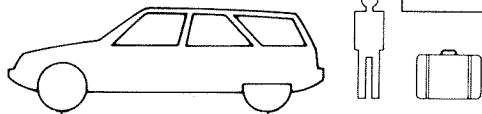
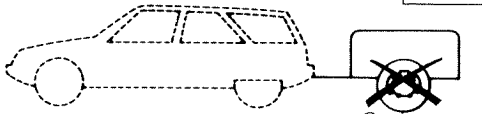
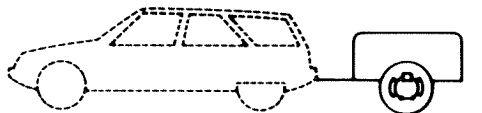
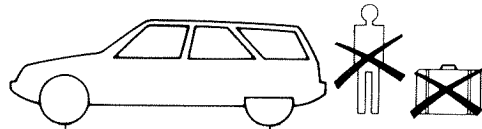
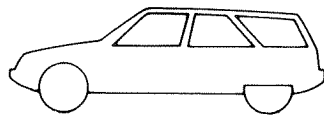
	CX 20 CX 20 RE		CX 25 TRI	CX 25 D CX 25 RD		CX 25 TRD Turbo
	MR		NJ	MN		NC
	5	8	5	5	8	5
	829 A5		M 25/659	M 25/660		M 25/648
	4	5	5	4	5	5
	5		Automatic	5		



\* + 8 mm



TRX

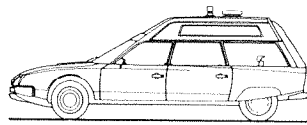


CX20	CX25		
20 20 RE	25 TRI	25 D 25 RD	25 TRD Turbo
530 kg	520 kg	510 kg	530 kg
860 kg	945 kg	965 kg	990 kg
1390 kg	1495 kg	1475 kg	1520 kg
1300 kg			
695 kg	730 kg	750 kg	750 kg
1030 kg			
1065 kg	1160 kg	1175 kg	1175 kg
2080 kg	2165 kg	2190 kg	2200 kg
3980 kg	3465 kg	3490 kg	3500 kg
80 kg			

100kg			
3380 kg	3465 kg	3490 kg	3500 kg
11 %			



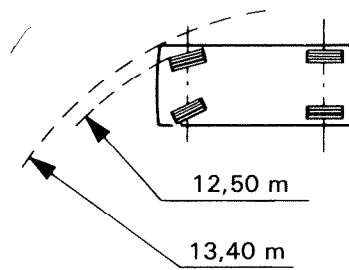
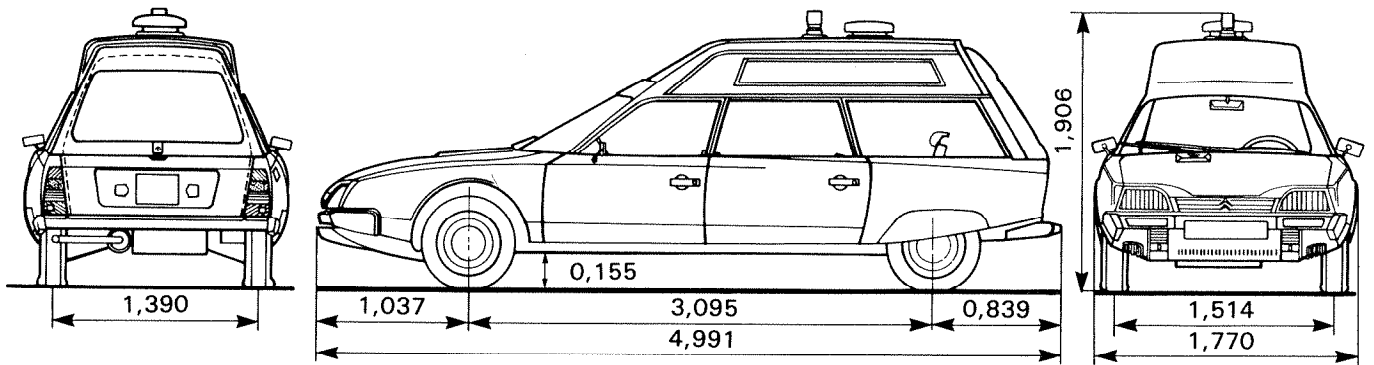
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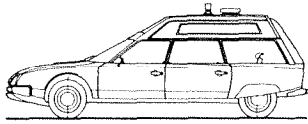


MA  
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	CX 20	CX 25 D
	MA-MR	MA-MN
	4  +	4  +
	829-A5	M25/660
	4	4
	5	5

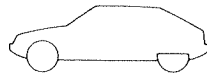




	CX20	CX 25D
	590 kg	585 kg
	880 kg	990 kg
	1470 kg	1575 kg
	1065 kg	1175 kg
	1030 kg	1030 kg
	2080 kg	2190 kg
	11 %	

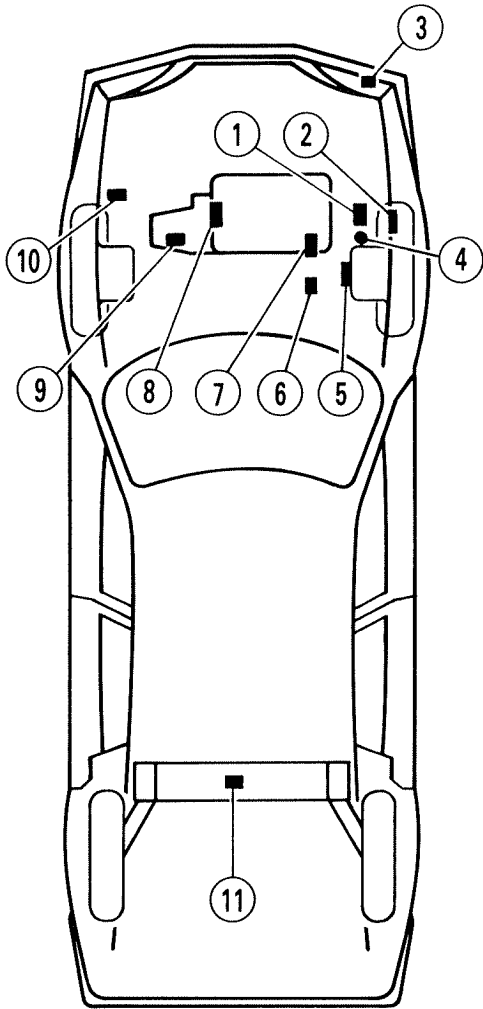


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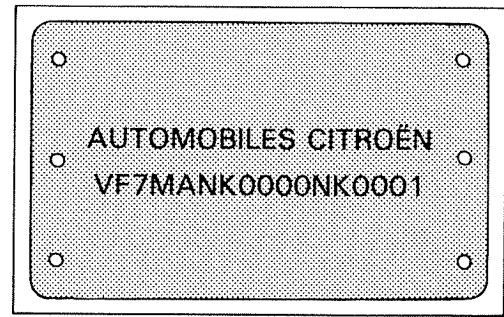


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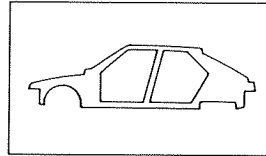
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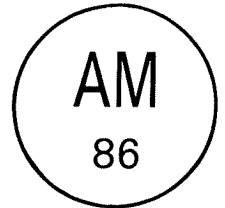
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⤴ VF7MANK0000NK0001 ⤴

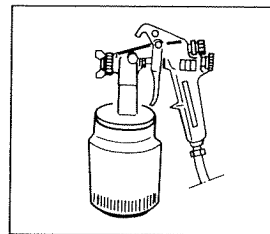
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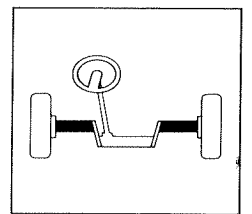
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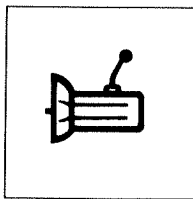
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6



9

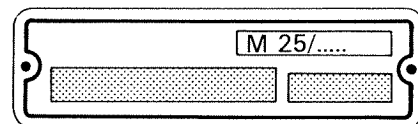


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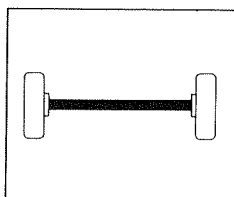


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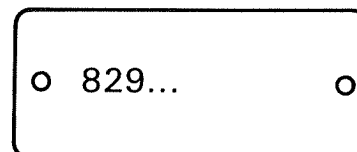
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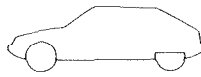


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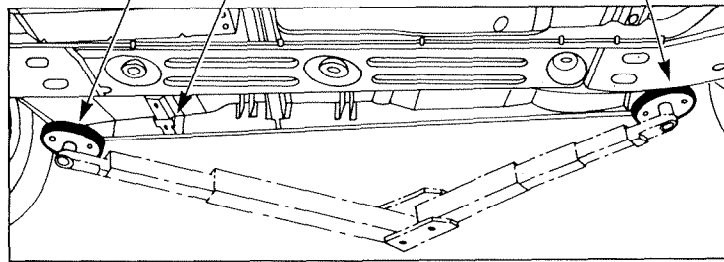
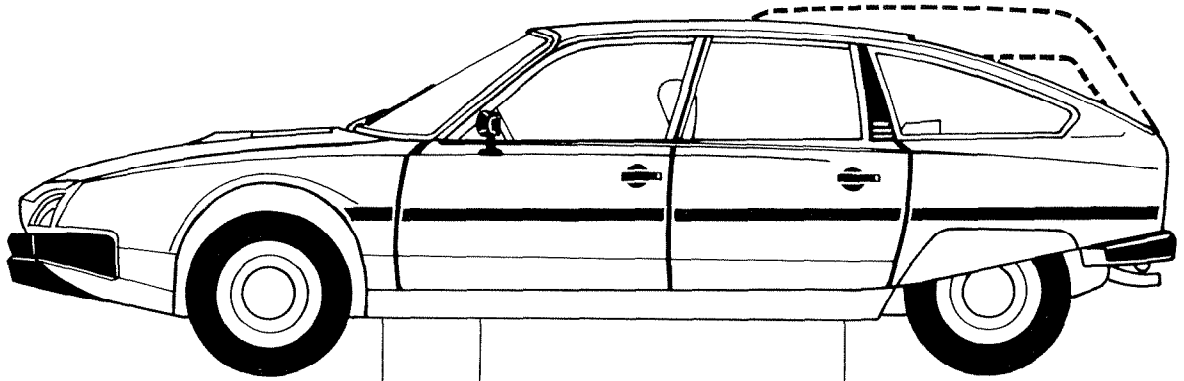


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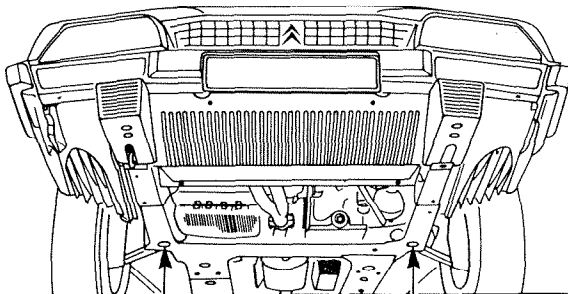


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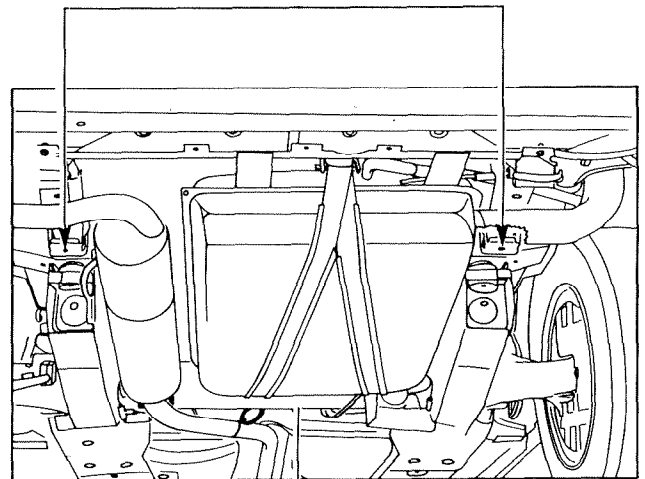
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C

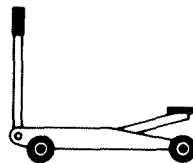
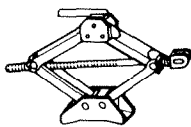


B



E

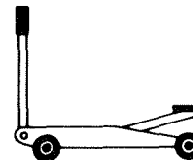
A + A1 :



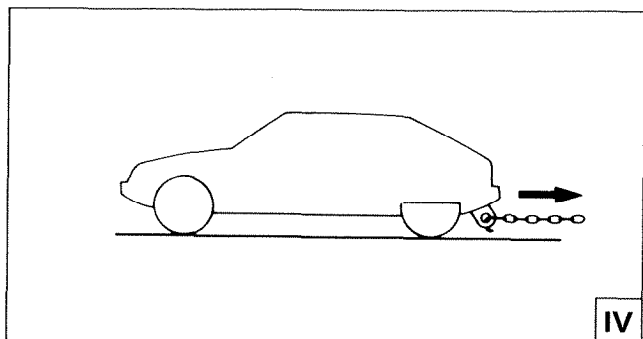
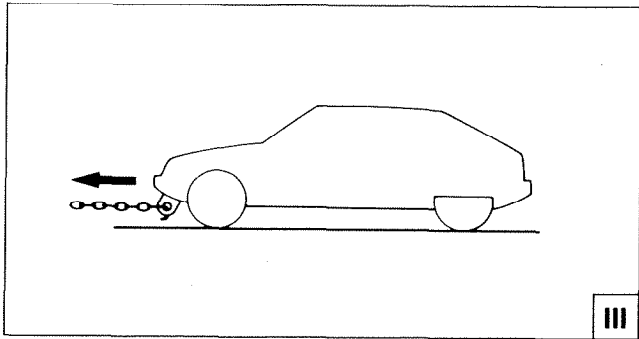
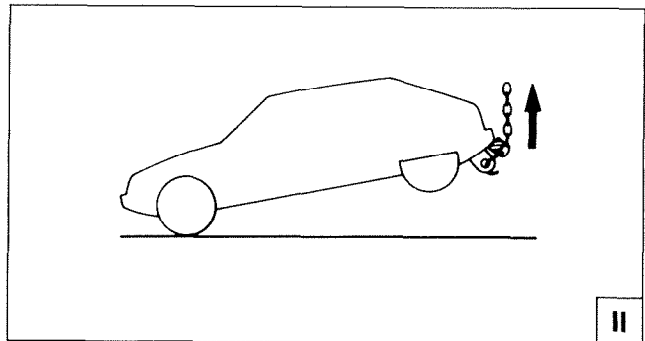
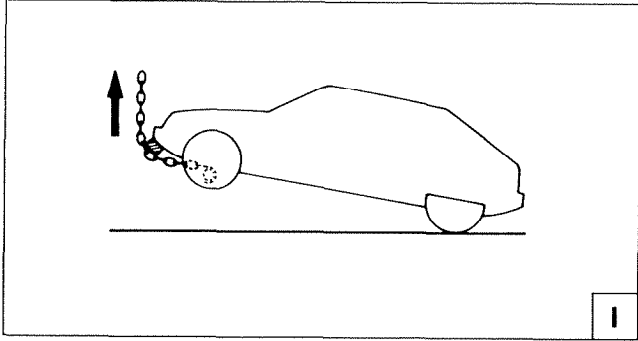
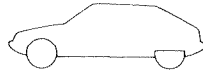
B + C :



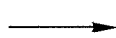
E :



\*



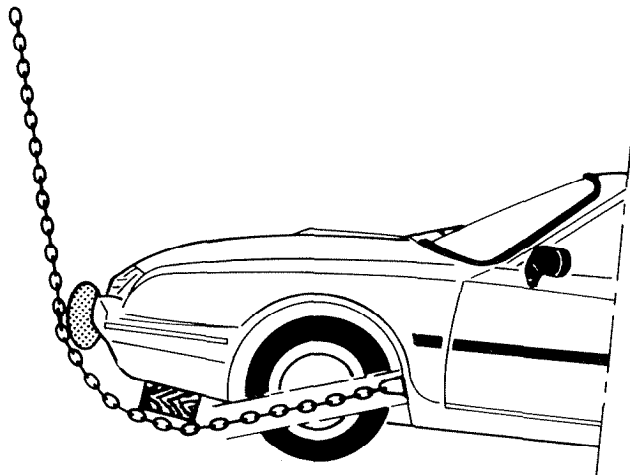
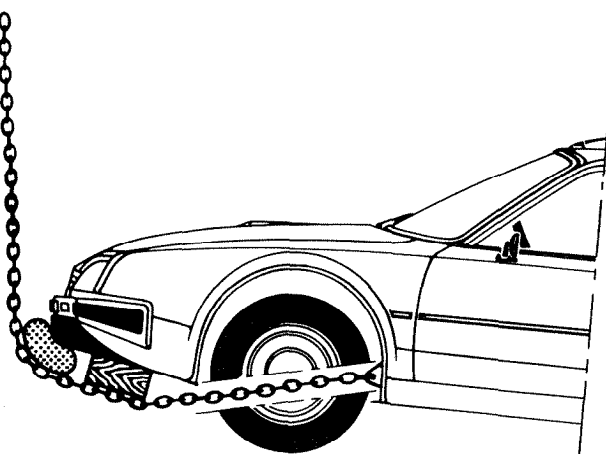
ZF 3HP22



: - 50 Km/h, - 50 Km

→ 7/85

7/85 →





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# GENERAL INFORMATION

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*PROTECTION OF THE ELECTRICAL UNITS*





## PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT AN OPERATION ON THE VEHICLE

It is essential to avoid actions which may damage the electrical or the electronic equipment or create a short circuit (with subsequent risk of fire or accident).

### Battery:

- a) First disconnect cable clamp from the battery negative terminal, earthed, then from the positive post.
- b) Before tightening the negative clamp to the battery (the negative lead should be connected last), ensure that there is no short circuit (bright sparks or arcs).  
Small sparks may occur due to the interior lamp (door open), door locking device, clock or components having remained in operation.
- c) Make sure that the terminals are properly connected. Clamps and terminals should be clean and correctly tightened.
- d) When recharging the battery, disconnect the two clamps first.
- e) Do not reverse the negative and positive clamps on the battery. (This could destroy the alternator diodes).

### Fuses:

- a) Fit the correct type of fuses: use the fuses specified for the protected devices.
- b) Take the added accessories and the functions into consideration.

### Charging circuit:

- a) Do not run the alternator unless it is connected to the battery. Do not disconnect the battery when the alternator is rotating.
- b) Ensure that the regulator is correctly earthed.
- c) Do not interchange the leads connected to the regulator, (charge detection warning lamp and excitation are specific).
- d) Do not connect a suppressor capacitor to the regulator without taking precautions or following proper instructions.
- e) Do not use an electric welding equipment on the vehicle without having first disconnected the alternator, the regulator and the battery (insulate the two terminals).
- f) Do not « check » the operation of an alternator by short circuiting the positive and ground terminals, which may destroy the diodes.

### Starting the engine:

Do not use a booster or a 24-volt battery. Only use a correctly charged 12-volt battery (a higher capacity battery may be utilised). Otherwise, risk of deterioration of the ignition module or any other electronic control units. If the starter is needed for starting the engine, without running it, it is necessary to disconnect datum and flywheel sensors on the All Electronic Ignition, or the primary lead of the coil on any other type of ignition.

### Ignition:

- a) Do not connect a suppressor capacitor to the negative terminal of the coil.
- b) Do not operate the module if its radiator is not connected to the earth.
- c) Fit the radio suppressor capacitors recommended by the factory.
- d) Never operate the ignition system while the HT circuit is open. Connect the HT leads to earth.
- e) Only use rev. counter having a HT sensor, (never puncture HT leads).

### Q.I. bulb:

- a) Never replace a Q.I. bulb with the headlamp switched on. If the headlamps have been in use, allow them to cool down.
- b) Do not touch a Q.I. bulb with bare fingers. Any fingerprints must be cleaned with soapy water and the bulb dried with a dry lint-free cloth.

### Checks :

- a) Preferably use a high resistance ( $> 10 \text{ k } \Omega \text{ V}$ ) voltmeter or a battery-operated ohm-meter...
- b) Take care not to use instruments taking their power from the mains.

### Electronic components:

- a) Avoid overvoltages due to a badly insulated charger, electric arcing or connections to the coil.  
The units such as regulator, ignition module, tachometer, windscreen wiper timer, flasher unit, clock, radio, oil gauge unit, door lock control unit, etc. comprising electronic components may be deteriorated.
- b) The electronic components should not be placed or operated under a temperature exceeding  $80^{\circ}\text{C}$ .
- c) Always switch off instruments or electronic control units before connecting or disconnecting them.



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RECOMMENDED PRODUCTS

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I - CLEANING PRODUCTS

USE AND SPECIAL FEATURES	PRODUCT AND R.P. No.	SYMBOL	MARK	SUPPLIER
- Cold degreasing agent for mechanical units specially designed to be used into cleaning tanks	SOLVANT P.L. ZC 9865832 U		D 1	R.P.D.
- Gelified liquid designed for stripping sealing surfaces and non metal gaskets	DECAPLOC ZC 9865104 U		D 2	R.P.D.
- Aerosol can intended for unsticking and stripping non metal gaskets and sealing surfaces	DECAPJOINT ZC 9875077 U		R.P.D.	
- Carburettor cleaning product. To be used pure.	Carburettor cleaner ZC 9862011 U		D 3	R.P.D.


II - SEALING COMPOUNDS

USE AND SPECIAL FEATURES	PRODUCT AND R.P. No.	SYMBOL	MARK	SUPPLIER
- Sealant for joint contact surfaces, screws and nuts. Clean with alcohol.	CURTYLON		E 1	CURTY
- Hydrocarbon resistant product	LOWAC		E 2	S.E.B.I.S.

2	MA 00/3	RECOMMENDED PRODUCTS			0		
USE AND SPECIAL FEATURES	PRODUCT AND R.P. No.	SYMBOL	MARK	SUPPLIER			
– Locking and sealing agent for removable threaded assemblies.	FRENETANCH ZC 9865034 U		E 3	R.P.D.			
– Sealant for joint contact surfaces, locking of screws, fixing studs and nuts. – Sealant for joint contact faces and unions.	FORMETANCH ZC 9865036 U		E 4				
– Bearings, rings, bushes, liners, inserts, pulleys locking products. Strengthening agent for splined and pinned connections.	SCELBLOC ZC 9865035 U		E 5				
– Product for locking and sealing studs, screws and nuts with maximum effectiveness.	FRENBLOC ZC 9865033 U		E 6				
– Sealant for joint contact faces in replacement of traditional gaskets.	FORMAJOINT ZC 9865037 U		E 7				
– Sealer for housings: Aluminium based	POXY. MATIC ALU ZC 9865565 U		E 8				
Metal based	POXY. MATIC ACIER ZC 9865559 U		E 9				
– Paste for bonding door linings, windscreen, etc. Sealant for joint contact surfaces. Remains flexible after drying.	AUTO JOINT NOIR ( <i>black</i> ) ZC 9865038 U		E 10				
– Sealant for joint contact surfaces. – Remains flexible after drying.	AUTO JOINT BLEU ( <i>blue</i> ) ZC9865103 U		E 10				
– Air intake casing heater tubes sealing compound	Fire-proof mastic paste Réf. 1500 (COLLAFEU)		E 11			Ets BARTHELEMY	
– Strengthenener of fixed assemblies	SCELMETAL		E 12			FRAMET	
<b>III - PENETRATING OILS</b>							
USE AND SPECIAL FEATURES	PRODUCT AND R.P. No.	SYMBOL	MARK	SUPPLIER			
– Aerosol can for rusted parts and seized assemblies	DEGRIPPANT ZC9865303 U		F 1	R.P.D.			



IV - GREASES AND LUBRICANTS

USE AND SPECIAL FEATURES	PRODUCT AND R.P. No.	SYMBOL	MARK	SUPPLIER	
<p><b>High adhesive grease:</b></p> <ul style="list-style-type: none"> <li>- Intended mainly for drive-shaft lubrication.</li> <li>- Can be used for mechanisms working under difficult conditions (high pressures, splashed water).</li> </ul>	95 615 129		G 1	R.P.D.	
	GRAISSE 1495			MOLYDAL	
	MOLYKOTE LONGTERM 2			DOW-CORNING	
<p><b>Grease resisting high temperatures:</b></p> <ul style="list-style-type: none"> <li>- For exhaust manifold ball-joints.</li> </ul>	GRIPCOTT AF			G 2	MOLYDAL
<p><b>Lubricant for parts working under difficult conditions:</b></p> <ul style="list-style-type: none"> <li>- Splashed water, high pressure and temperature.</li> </ul>	HI LUB-HTC			G 3	FRAMET
<p><b>Grease resisting high temperatures:</b></p> <ul style="list-style-type: none"> <li>- To lubricate the threaded spark plugs fitted to the cylinder head.</li> </ul>	NO-BIND			G 4	CURTY *
<p><b>Multifunctional lubricant:</b></p> <ul style="list-style-type: none"> <li>- Molybdenum disulfide-base product.</li> </ul> <p><b>Multifunctional grease:</b></p> <ul style="list-style-type: none"> <li>- For routine works.</li> </ul>	M.O.			G 5	TEROSON
	TOTAL MULTIS			G 6	TOTAL C.F.R.
<p><b>Special grease:</b></p> <ul style="list-style-type: none"> <li>- Designed for anti-roll bar bearings.</li> </ul>	PROBA. 270 ALTEMP 79.01973.067			G 7	R.P.D.
<p><b>Animal grease:</b></p> <ul style="list-style-type: none"> <li>- Tallow.</li> </ul>			G 8		
<p><b>Special grease:</b></p> <ul style="list-style-type: none"> <li>- To be used for fitting the road wheel sensors of the anti-locking brake system.</li> </ul>	ESSO NORVA 275		G 9	R.P.D.	

