DS.21
Electronic injection
07550

# DS

# FA
# FB

## OWNER'S MANUAL

EFI 139

# alphabetic index

| | |
|---|---|
| **Horse-power** | |
| —Rated (French Fiscal) | 12 |
| —R.A.C. Rating | 20·08 |
| —Brake | 139 SAE at 5,500 rev/min |
| **Capacities** | |
| —Fuel tank | 14·3 gal (65 litres) |
| —Radiator, cylinder block and heating (coolant) | 23 pints (13 litres) |
| • With heating FR-15° (optional) | 25 pints (14·2 litres) |
| —Gearbox (oil) | $3\frac{1}{2}$ pints (2 litres) |
| —Engine sump (oil) | 8 pints (4·5 litres) |
| • After renewal of oil-filter cartridge | 9 pints (5 litres) |
| —Special fluid reservoir for hydraulic system | $9\frac{1}{4}$ pints (5·2 litres) |

| | |
|---|---|
| **Main dimensions** | |
| —Overall length | 15 ft. 11¾ in. (4·87 m) |
| —Overall width | 5 ft. 11 in. (1·80 m) |
| —Overall height | 4 ft. 10 in. (1·47 m) |
| **Sparking plugs** | |
| —Original fitting | MARCHAL 35 B<br>AC 42 FF |
| —Electrode gap | 0·020 to 0·024 in.<br>(0·5 to 0·6 mm) |
| —Authorized fitting | BOSCH W 225 T1<br>CHAMPION L87Y |
| **Tappet clearances** (warm) | |
| —Inlet | 0·008 in. (0·20 mm) |
| —Exhaust | 0·010 in. (0·25 mm) |
| **Toe-in of front wheels** | |
| —Towards the front | $\frac{5}{64}$ to $\frac{5}{32}$ in.<br>(2 to 4 mm) |

**IMPORTANT POINTS**

Only the **"Premium"** (4-star, 97-99 octane) type of fuels can be used with the **DS** engine.

If another make of sparking plug is to be used consult a CITROEN Agent beforehand to ensure that a type of plug is fitted which suits the engine and its operation.

This car is equipped with an alternator supplying an electrical system at 1 2 Volt and a **200/40 Ah IEC battery.**

- Never disconnect the battery or the alternator with the engine running.
- Never connect a battery charger to the battery terminals unless the two leads linking the battery and the car circuit are disconnected.

**Warning:**

- Ensure that when reconnecting the battery the correct polarity is obtained: a mistake would quickly ruin the electronic injection control.
- Never connect battery chargers or electric supplies with rated voltages in excess of 1 2 V.

**Running in**

The following speeds must not be exceeded during the first **600 miles (1,000 kilometres):**

**15 mph (25 km/h)** in bottom gear **44 mph (70 km/h)** in third gear
**28 mph (45 km/h)** in second gear **62 mph (100 km/h)** in top gear

Between **600** and **1,200 miles (1,000** and **2,000 kilometres)** the car should still not be loaded to the maximum.

Over **1,200 miles (2,000 kilometres)** there is no restriction so that you can drive at: **28 mph (45 km/h)** in bottom gear

**53 mph (85 km/h)** in second gear **80 mph (130 km/h)** in third gear

These maximum speeds are marked on the speedometer with **yellow-orange lines.**

To obtain the most economic running the following points should be borne in mind:

1 Always select the highest possible gear, both in town and on the open road.
2 Avoid systematically pushing the engine to its maximum power ("foot to the floorboard").
3 Release the accelerator pedal completely by taking the foot off whenever you want to slow down.

At the **600 mile (1,000 km)** service: Have the engine oil and the oil-filter cartridge renewed; the gearbox oil too should be renewed.

**GUARANTEE OVERHAUL**

At the time of delivery your supplier will also hand over a **"Maintenance Log-book"** which includes the **"Guarantee Card".**

When these documents are presented to any Citroen Agent he will carry out an overhaul after your car has completed **600 miles (1,000 kilometres).** The work involved is free of charge, payment only being required for the new oil in the engine and gearbox and for the filter cartridge.

On completion of the work the Agent (or Branch) retains the **"Overhaul Certificate"** and returns the **"Maintenance Log-book"** in which he has signed the **"Guarantee Card".**

Keep this Card in a safe place since it will be called for if you make a claim under Clause VII and VIII of our General Sales Conditions printed on the back of the Guarantee Card.

The oil level should be checked several times before the first **600 mile (1,000 km)** overhaul becomes due:

- If the level is near the "low" mark top up with new **TOTAL Altigrade GT "Motorway Special" 20 W 40.**
- Topping up must be done on level ground after the engine has been stopped for at least five minutes.
- Check the level two or three times, wiping the dipstick clean before every insertion.

Subsequently the instructions contained in the **"Maintenance Log-book"** should be strictly complied with: conscientious servicing will help to keep your car in good running order.

# 1 DRIVING

**OPENING AND LOCKING THE DOORS** (fig. 1)

To open a door grasp the handle and press the catch **A** with the thumb, the catch being moved from front to rear.
To lock a rear door once it is closed press the catch A with the thumb, this time moving the catch forward.
To unlock depress the button B.
The front doors can be locked with a key. A retractable device holds the doors open, thus making entering or leaving the car easier.

**OPENING THE BONNET** (figs 2 4)

First pull the two release rings **A** on the left and right underneath the dashboard: this action allows the bonnet to rise slightly.
Facing the car release the safety catch by sliding the hand between the edge of the bonnet and the front bumper to the right of the number plate in order to lift the lever **B**.
To keep the bonnet open engage the end of the stay **C** in its support **D** on the left of the radiator.

**CHECKS BEFORE SETTING OFF** (figs. 5-6)

**Engine oil**

The dipstick can be found on the left of the engine beside the inlet manifold.

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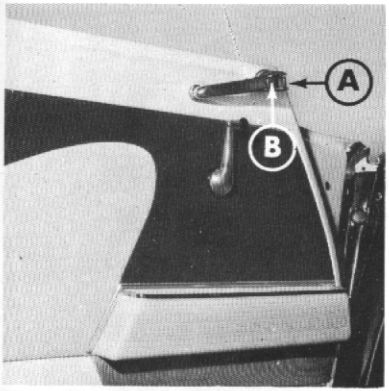


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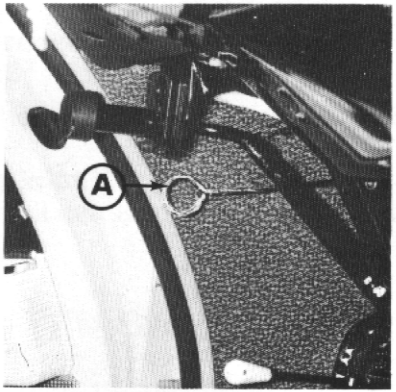


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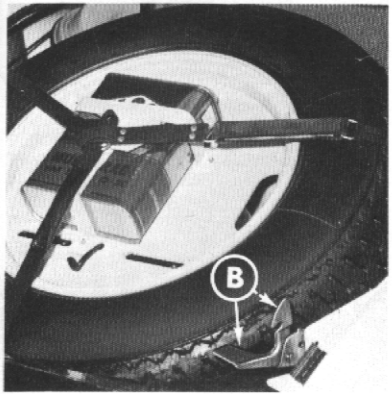


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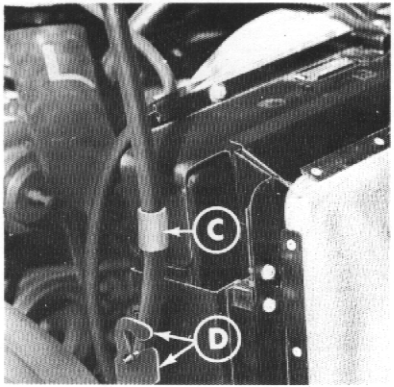


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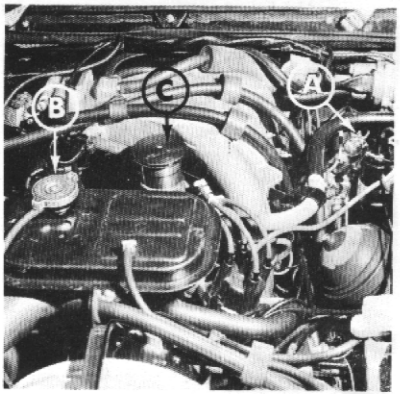


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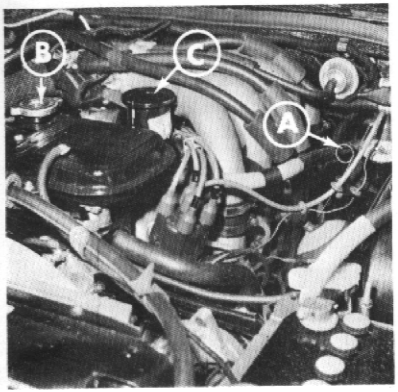


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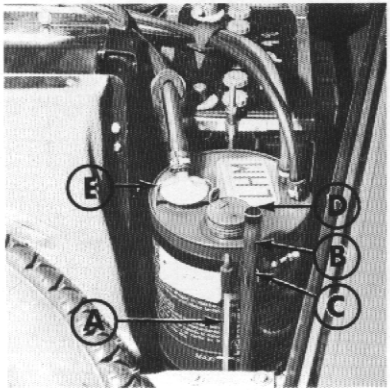


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**The oil level must reach the upper "High" notch of the dipstick without exceeding it.**

The distance between the "High" and "Low" notches of the dipstick represents about 1 3/4 pints (1 litre).

**The oil-filler opening is at C.**

The holder for the spare oil can is in the centre of the spare wheel (fig. 3).

**Coolant**

The level should be within $^{3}/_{4}$ to $1^{1}/_{4}$ inches (2 to 3 cm) from the lower rim of the radiator tank filler opening.

If the level requires topping up on the road be careful when removing the radiator cap since the system is under slight pressure when the engine is warm.

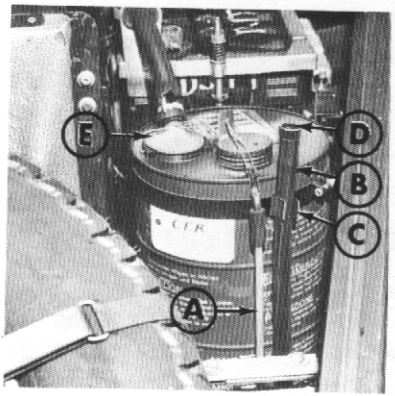
- First turn the cap a quarter of a turn into its safety notch and wait for the pressure to fall before taking off the cap altogether.
- If the engine is hot it is advisable to wait until it has cooled down a little.

**FLUID FOR THE HYDRAULIC SYSTEM** (fig. 7-10)

This fluid (green in colour) is a MINERAL one (similar to the engine oil).

The level of this fluid in the reservoir beside the radiator should lie between the **"High"** and **"Low"** marks on the transparent indicator at **A**.

This level must be read with the car at its maximum height.

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To achieve this start the engine, accelerating slightly to save time. Set the lever **A** (fig. 23 and 24) to position 5 and wait until the car has settled at its maximum height.
Check now that the level is steady between the "High" and **"Low"** marks of the transparent indicator at A.
To top up only use the green fluid **"LHM"** distributed by the firm "TOTAL".

- **No other fluid may be used,** especially those of a vegetable or synthetic origin such as CH 12-04, LHS2 or brake fluids: these quickly and completely ruin the car's hydraulic system.

IN AN EMERGENCY you can use:

- either engine oil TYPE SAE 10 or SAE 20,
- or oil for a hydraulic transmission FLUID A, TYPE A,

ensuring that the reservoir is drained at the earliest opportunity and the prescribed fluid is substituted.
To drain the reservoir lower the car to its minimum height by moving the lever A (fig. 23) to position 6, then open the bleed screw on the Pressure Regulator.
Unclip the tube B at **C** (fig. 9) from the lower clips and bend the tube downwards.
Remove the blanking plug D (fig. 10) and allow the fluid to drain from the reservoir.
Reset the lever to NORMAL (position 2) after refilling.

## ANTI-THEFT LOCK WITH BUILT-IN IGNITION-SWITCH IN THE DS FA (fig. 11)

The anti-theft housing located in the dashboard at **25** (fig. 19) combines the ignition-switch and the steering column lock.

### Starting the engine

Insert the key into the housing lock (diagram A fig. 11) and turn the key clockwise until a click is felt: the steering is now unlocked. If difficulty is experienced when turning the key clockwise turn the steering wheel slightly in both directions while turning the key. Continue turning the key in the same direction as far as the first stop (diagram B) at which point ignition contact is made.
Push the gear-selector lever/starter control 7 (fig. 1 3) to the left as far as the stop for starting the engine.

### Switching the engine off and anti-theft device

To switch off turn the key anti-clockwise as far as the first stop, then withdraw the key slightly and continue turning until the second stop.
The key can now be withdrawn.

### Parking

If for some reason the engine is to be stopped without locking the steering, gently turn the key about 300 anti-clockwise and at the same time pull it towards you **(diagram C).**
The key can then be withdrawn without locking the steering column.

**ANTI-THEFT LOCK WITH BUILT-IN IGNITION-SWITCH AND STARTER CONTROL IN THE DS FB** (fig. 12).

The anti-theft housing located in the dashboard at **25** (fig. 21) provides the following:
− ignition-switch,
− starting the engine and
− steering column lock.

**Starting the engine**

Insert the key into the housing lock (diagram **A**, fig. 1 2) and turn it clockwise until a click is felt: the steering is now unlocked.

**Note:** If difficulty is experienced when turning the key clockwise to start slightly turn the steering wheel in both directions while turning the key. Continue turning the key in the same direction as far as the first stop (diagram **B**) at which ignition contact is made.
Turn further until the second stop, the starter is energized and the engine is started (diagram **C**).

**Note:** A safety device prevents the starter being used with the engine running. Should the engine stop, therefore, the ignition has to be switched off and on again before the starter can be used again.

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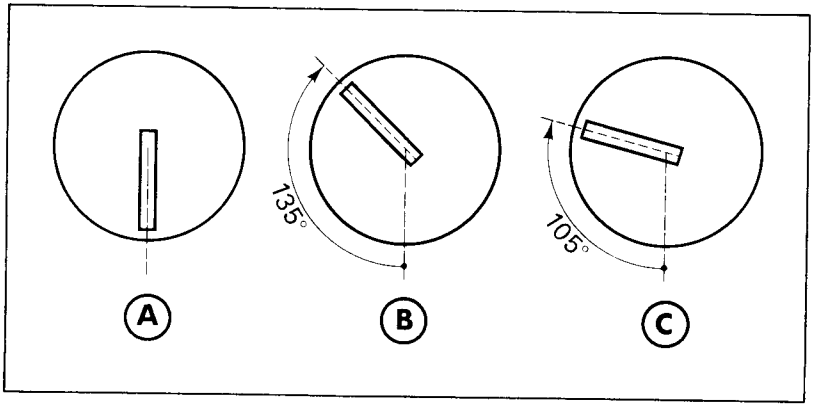


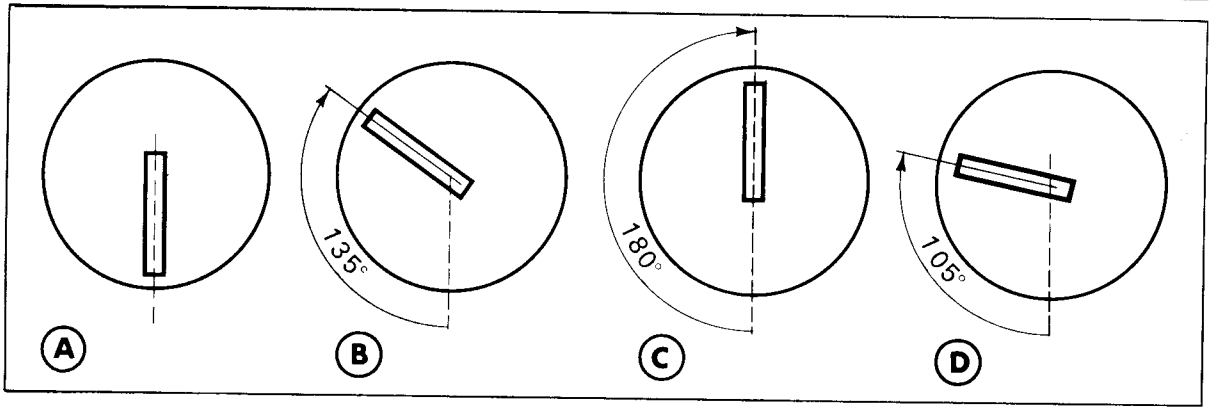




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**Switching the engine off and anti-theft device**

- To switch off turn the key anti-clockwise as far as the first stop, then withdraw the key slightly and continue turning until the second stop.
- Pull out the key.

**Parking**

If for some reason the engine is to be stopped without locking the steering, gently turn the key about 300 anti-clockwise and at the same time pull it towards you (diagram **D**, fig. 12). The key can then be withdrawn without locking the steering column.

**STARTING THE DS FA** (fig. 13)

Check that the gear-selector/starter lever **7** is in neutral **(PM).**
Switch on (diagram **B**, fig. 11) whereupon the warning light **K** of the dial **3** (fig. 20) lights up, also the warning lights **C** for the oil pressure and **H** for battery charging.

**When the engine is cold :** Depress the accelerator pedal slightly. Push the gear-selector/starter lever **7** fully towards the left until the engine starts. Do not persist for more than 1 0 seconds at a time.

- If the engine fails to start at the first attempt wait 3 to 4 seconds before trying again.

## Driving

When started from cold the engine is set to run at a fairly high speed.
If you want to drive off immediately apply the main footbrake before engaging a gear.

**Note:** Cars equipped with the optional "FR-15" heating system have a radiator blind: instructions for its use are contained in a complementary pamphlet supplied with this manual.

### When the engine is warm

Slightly depress the accelerator pedal.
Push the gear-selector/starter lever to the left until the engine starts (do not persist for longer than 5 seconds at a time).

- If the engine fails to start at the first attempt wait 3 to 4 seconds before trying again.
- As soon as the engine has started the accelerator pedal can be released to the slow-running position.

### Important points

The starting handle can be used to free the engine or to rotate the engine to start when the battery is flat. (See page 45, No.27).
After a lengthy period in the garage or after a fault in the fuel system this system can be primed by switching on the ignition 2 or 3 times before using the starter. Proceed then as described above.

**Before setting off allow the engine to run for a while so that the car can assume its running position.**

**STARTING THE DS FB** (fig. 14)

Ensure that the gear lever **7** is in neutral (PM).
Switch on (diagram **B**, fig. 1 2): the warning light **K** in the dial **3** (fig. 20) lights up, also the warning lights **C** for the oil pressure and **H** for battery charging.

### When the engine is cold

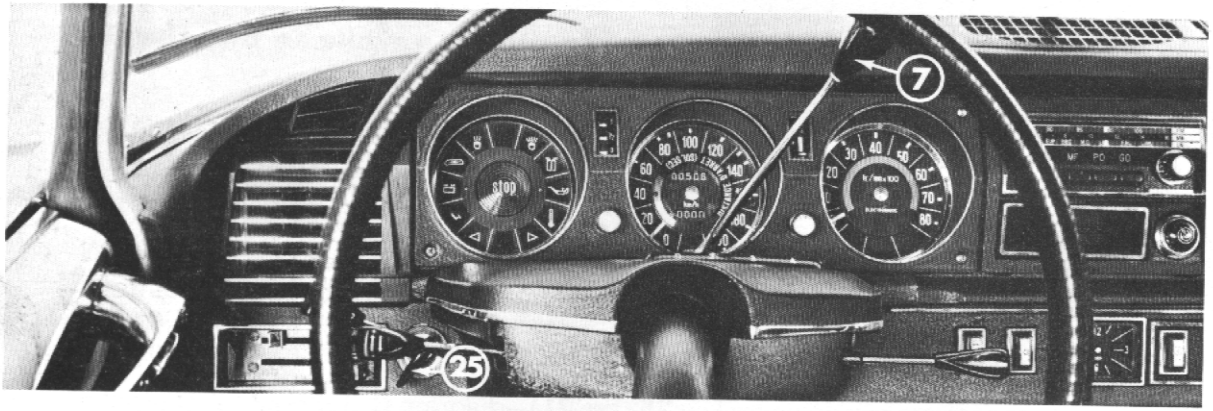
Operate the starter motor, using key **25** (fig. 21)-diagram **C**-without touching the accelerator pedal. The lights **K, C** and **H** go out as soon as the engine starts (fig. 20).

- If the engine fails to start at the first attempt wait 3 to 4 seconds before trying again.
- Never race a cold engine.

**Note:** Cars equipped with the optional "FR-15" heating system have a radiator blind: instructions for its use are contained in a complementary pamphlet supplied with this manual.

### When the engine is warm

Depress the accelerator pedal, then operate the starter control.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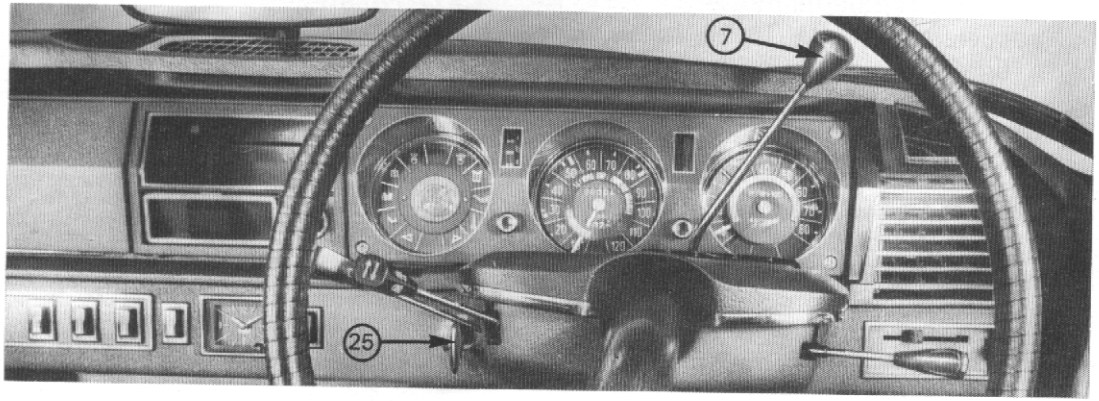
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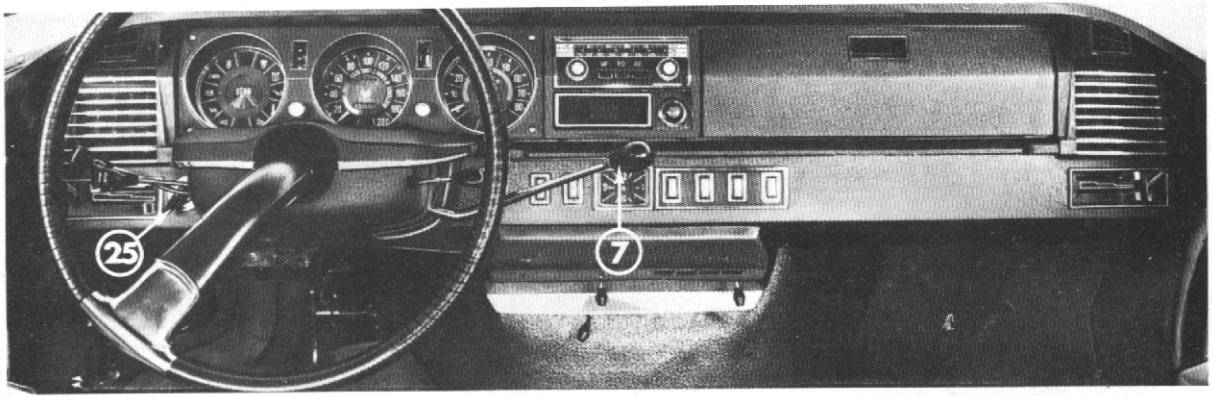


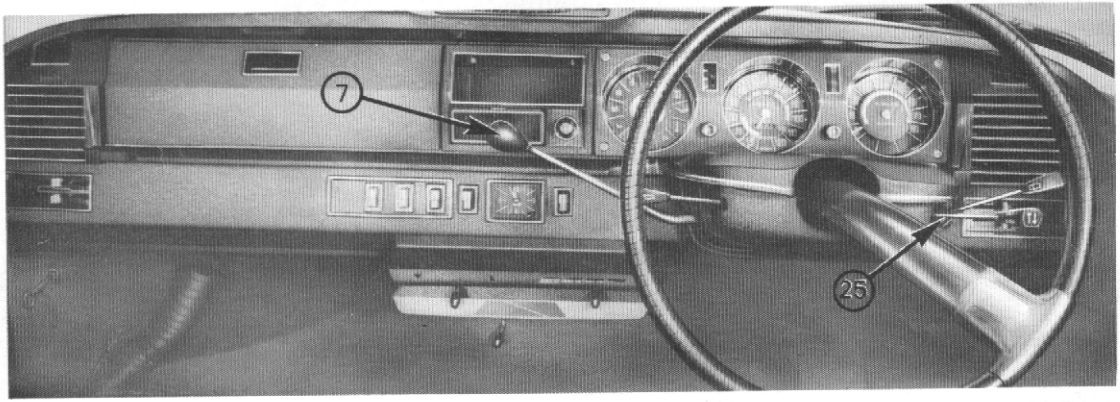


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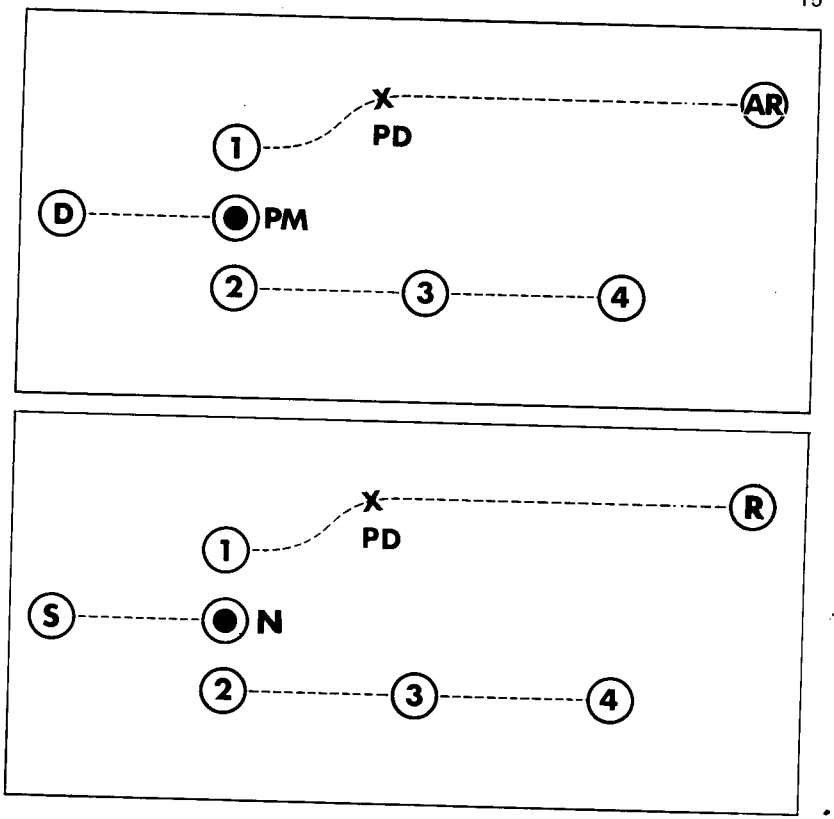


15 R.H.D.

• If the engine fails to start at the first attempt **keep the pedal depressed,** wait 3 to 4 seconds and try again.

· As soon as the engine has started the accelerator pedal can be released to the slow-running position.

**Important points**

The engine can also be freed or started with the handle which is stowed under the spare wheel; it is held in position in the extension. To insert the handle remove the blanking plug from underneath the bumper and slide the handle in to engage the hexagon.

After a lengthy period in the garage or after a fault in the fuel system, this system can be primed by switching the ignition on 2 or 3 times before using the starter. Proceed then as described above.

Before setting off allow the engine to run for a while so that the car can assume its running position.

**CHANGING GEAR ON THE DS FA** (fig 13 and 15)

Since the clutch is automatic the car does not have a clutch pedal.

To change gear merely set the stem of the gear selector/starter lever **7** (fig. 1 3) opposite one of the marks:

1 − AR

2−3−4 − at the base of the lever.

## Driving

The selector lever can move in several parallel planes in accordance with the diagram (fig. 15):

The positions corresponding to **bottom and reverse gear** are in the planes away from the driver.

The positions corresponding to **2nd, 3rd and top gear** are in the planes closest to the driver.

To change from **bottom to reverse gear** the selector lever has to be pushed towards the windscreen in order to overcome the "gate" **PD** (fig. 1 5) before the lever can be moved to the extreme right.

In addition to the marks on the dashboard "notching rollers" with a light but perceptible action enable the driver to feel the various gear positions.

**To select** a **higher gear** - release all pressure on the accelerator pedal.

**To select a lower gear** - release the pressure on the accelerator pedal very slightly, in fact at the higher engine speeds a lower gear is best selected without raising the foot.

Gradual pressure on the accelerator pedal gives the car a gentle acceleration; a sudden movement of the foot down to the floorboards results in vigorous acceleration. When stationary a gear should not be selected as long as the engine is running at its "cold start" fast idle, since at this engine speed there would be violent clutch action. Remember to depress the "mushroom-shaped" pedal of the main brake beforehand. Under very exceptional circumstances it is possible for the car not to start off after changing into bottom gear. In such a case return to neutral (PM in fig. 1 5) between bottom and 2nd gears and set off by changing into bottom or second.

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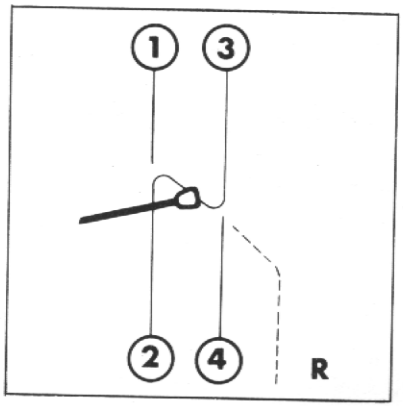


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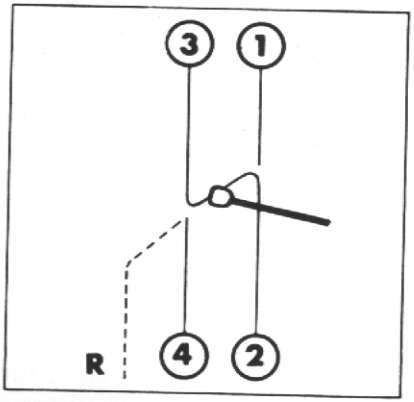


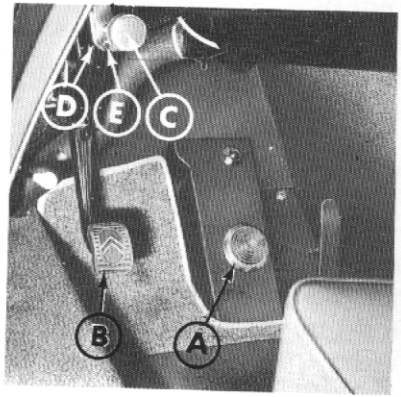


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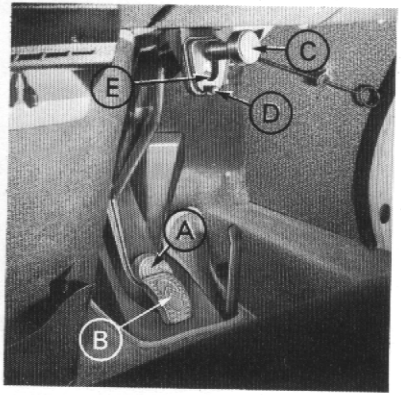


17 R.H.D.

## CHANGING GEAR ON THE DS FB (fig. 14 and 16)

Push the clutch pedal fully home and gently select the gear with the lever **7** (fig. 4) to the right of the steering wheel.
The gear lever can move in three parallel planes.
In the plane closest to the driver it controls bottom and second gear (pull lever towards you).
In the intermediate plane it controls third and top gear.
In the plane farthest from the driver it selects reverse gear.

## BRAKES ON THE DS FA (fig. 17)

The **DS** model is equipped with two braking systems actuated by pedals.

**I The main brake**

The main brake is actuated by the mushroom shaped pedal **A** near the driver's right foot. Its movement is very short (a few fractions of an inch). The effectiveness of the brake is proportional to the pressure exerted by the foot on the pedal.

The braking system is designed so that it requires only a slight effort on the part of the driver, even if a sudden stop becomes necessary.

Before setting off in a **DS** for the first time it is advisable to try the brake in order to assess its feel, i.e. its sensitivity and efficiency.

**2 The emergency brake**

This brake is actuated by the pedal **B** used by the left foot.

**Contrary to the action of the other controls in the car, which are all extremely gentle, the emergency brake requires very energetic pressure by the foot.**

The emergency brake is also used to **immobilize the car** as follows:

- Raise the button **C** (fig. 17) to the upper position and push the pedal **B** hard down: the car is now perfectly immobilized and remains so as long as the button **C** is not touched.
- The safety lock **D** when pushed to the left secures button **C** in the upper position (brake applied).
- When stopping on a gradient **it is essential that the pedal B be pushed down very energetically.**
- To release the emergency brake unlock it by pushing the button **D** towards the right, pull the button **C** and lower it into the notch **E**. **The button C must always be at this position when the car is in motion.**

  When the movement of the emergency brake becomes excessive have it adjusted by a CITROEN Agent.

**BRAKES ON THE DS FB** (fig. 18)

The DS Series FB is equipped with two braking systems:

**1 The main brake**

The main brake is actuated by a mushroom-shaped pedal near the driver's right foot. Its movement is very short (a few fractions of an inch).

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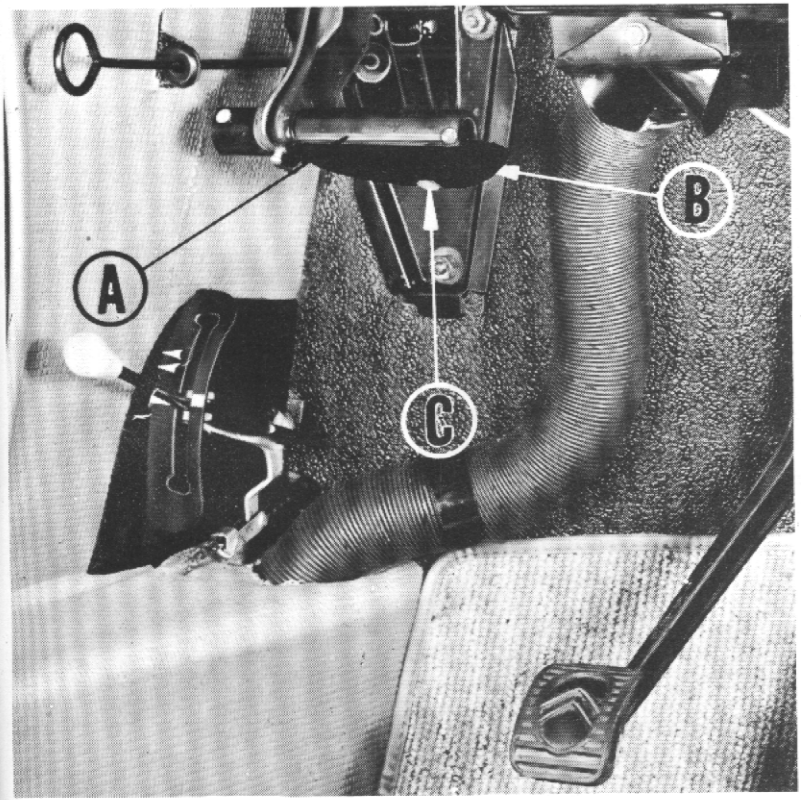
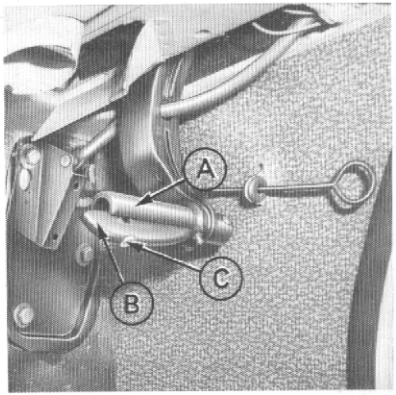



18 R.H.D.

The effectiveness of the brake is proportional to the pressure exerted by the foot on the pedal. The braking system is designed so that it only requires a slight effort on the part of the driver, even if a sudden stop becomes necessary. Before setting off for the first time it is advisable to try the footbrake in order to assess its feel, i.e. its sensitivity and efficiency.

**2 The handbrake**

The handbrake lever **A** is located within reach of the driver.

To apply it pull the handle, the ratchet holding it in the selected position. To release the handbrake pull the handle to free the ratchet, push the free end of the catch **B** to clear the ratchet and move the lever fully forward.

A safety device can lock the ratchet catch in position: it is applied by giving the knurled nut **C** a quarter of a turn.

When stopping on a gradient **the handle A must be pulled with a considerable effort.**

When the movement of the handbrake lever becomes excessive have the brake adjusted by a CITROEN Agent.

**BRAKE MONITOR**

If the pressure of the brake hydraulic system controlling the main footbrake becomes insufficient the **red warning light B** in the dial **3** (figs. 20 and 22) **lights up**, also the **STOP warning light K.**

As soon as the wear of the front brake pads becomes appreciable so that replacement is necessary the **yellow warning light G** in the dial **3** comes on. Should these warnings appear while on the road it is vital that you should have the braking system inspected by the nearest CITROEN Agent, driving with extra care to reach him.
When switching on for starting the **red warning light B** comes on: this is quite normal. Wait for it to go out before setting off.
You are reminded that the efficient operation of the engine or of the brakes **precludes** fitting anything:
¾ either in the air duct to the engine
¾ or in front of the cooling ducts for the brakes.

**STOPPING DISTANCE**
The soft suspension of the DS and its general comfort coupled with the monotony of motorway driving or a long journey tend to make the driver unaware of speed. Added to this the top speed of the DS has been raised year after year.
Bear in mind that the rate of deceleration produced by the most efficient brakes is ultimately limited by the adhesion between the tyres and the road surface.
Moreover the distance travelled by the car during braking at a given deceleration, however effective the braking effort, increases considerably with speed. At **25 mph (40 km/h),** for instance, this distance is about **33 ft (10 metres)** whereas it becomes **524 ft (160 metres)** (i.e. 16 times longer) by just raising the speed by a factor of four, i.e. to **100 mph (160 km/h).**
The total stopping distance is made up of the distance travelled with the brakes applied and that covered between the instant the obstacle appears and that when

the brakes become effective. This lapse of time depends mainly on the driver's reaction but is in the order of $^3/_4$ **second.**

The table below lists the **distances** to the final stop as a function of the car's speed.

These distances presuppose brakes and tyres in perfect condition, a car which is not overloaded and a dry road surface offering good adhesion. They can be considerably increased on a wet or oily surface.

As a reminder and in an attempt to avoid serious errors of judgement the speedometer **6** (fig. 20) is equipped with an indicator annotated **"Stopping distance (dry surface)"** controlled by the speedometer needle so that three numbers are displayed in succession: **80—150--250.** These express the total stopping distances as an order of magnitude on a dry surface at three speeds: **62, 87 and 112 mph (100, 140 and 180 km/h).** At high speeds, i.e. in excess of **93 mph (150 km/h),** it is advisable not to apply the brakes fully at once: try instead to foresee the need to slow down as early as possible and to use the decelerating effect of the engine first.

| Cars speed mph/(km/h) | **25/(40)** | **50/(80)** | **75/(120)** | **100/(160)** | **112/(180)** |
|---|---|---|---|---|---|
| Distance travelled during reaction time ……. | 27 ft (8.30 m) | 54 ft. (1670 m) | 82 ft. (25 m) | 110 ft. (33.40 m) | 122 ft. (37.50 m) |
| Distance travelled during braking…….... | 34 ft. (10.30 m) | 134 ft. 6 in. (41 m) | 305 ft. (93 m) | 550 ft. (165 m) | 680 ft. (208 m) |
| Total stopping distance .. | 60 ft. (1860 m) | 190 ft. (5770 m) | 390 ft. (118 m) | 650 ft. (19840 m) | 820 ft. (24550 m) |

## PARKING MANOEUVRES ON LEVEL GROUND (DS FA)

Traffic density and parking manoeuvres in congested urban areas often call upon the driver to carry out precise and gentle movements over very short distances, both forwards and backwards.

With bottom or reverse gear selected the car can be driven at very slow speed just by releasing the main brake.

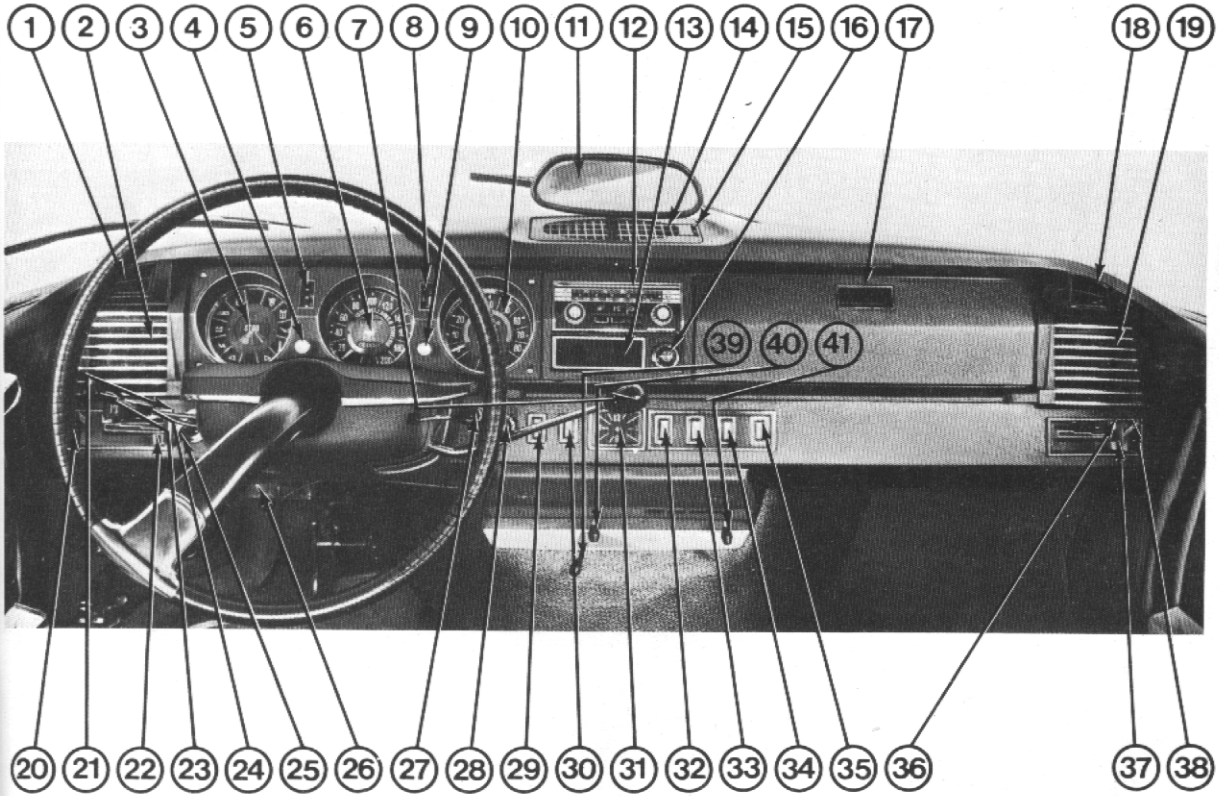
**Always wait for the vehicle to come to a complete stop** before moving the selector **7** (fig. 13) from **the bottom to the reverse gear** position or vice versa.

## STOPPING AND SETTING OFF ON A GRADIENT (DS FA)

Always stop the car by depressing the main-brake pedal **A** (fig. 17) with the right foot, so that the clutch is completely disconnected.

Maintain pressure on this pedal with the right foot to hold the car.

To set off again push the emergency brake pedal **B** (fig. 17) with the left foot and gradually release it while accelerating.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## DASHBOARD OF THE DS FA (fig. 19 and 20)

**1 Demisting/defrosting duct for left-hand front window.**

**2 Left-hand ventilating duct.**

**3 Warning-light dial (for detail see fig. 20)**

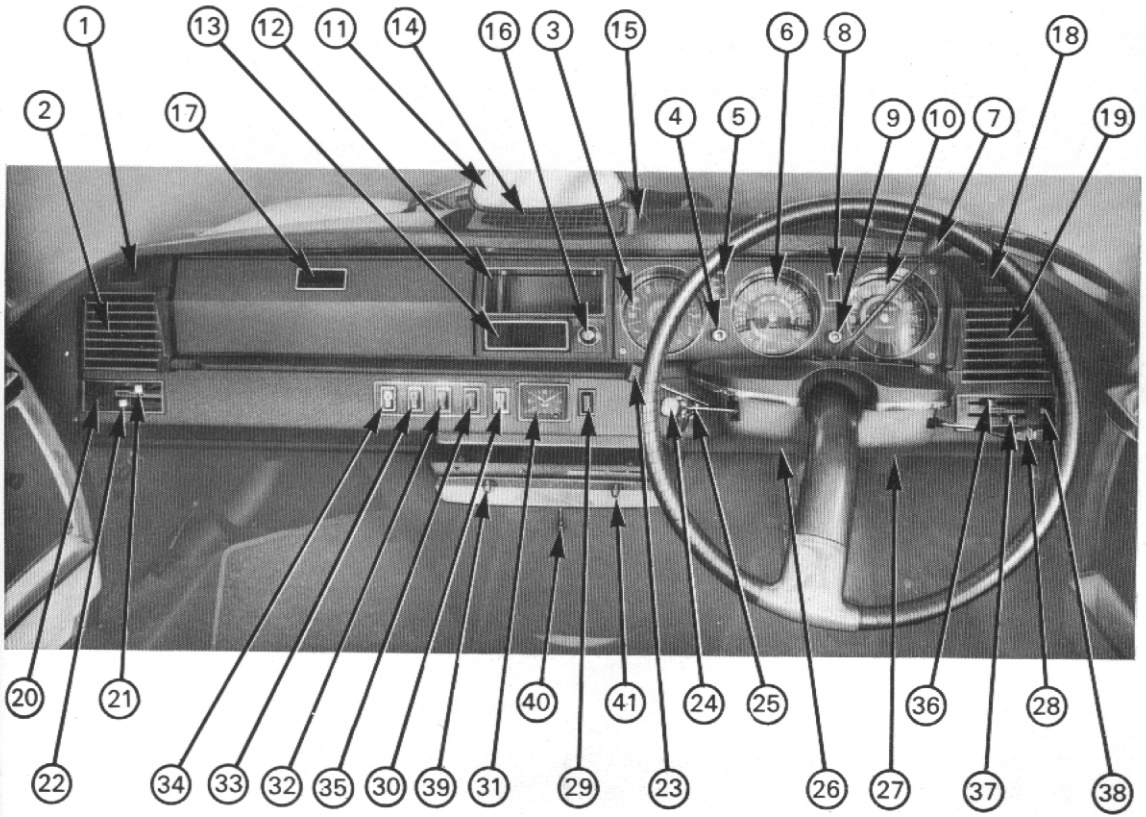
**A** - **Blue** light for main headlight beam
**B** - **Red** light for brake hydraulic pressure
**C** - **Red** light for engine oil pressure
**D** - **Red** light for coolant temperature
**E** - **Green** light for right-hand indicator
**F** - **Green** light for left-hand indicator
**G** - **Yellow** light for brake wear
**H** - **Yellow** light for battery charging
**I** - **Yellow** light for rear window heating (optional)
**J** - **Green** light for sidelights
**K** - **Red** (bright) light for obligatory stop. Lights up when one or more of the lights **B**, **C**, **D** come on.

**4 Test button for checking operation of red warning lights.**

When button is pushed fully home the lights **B**, **C**, **D** and **K** light up at the same time.

When the button is only pushed lightly they come on in succession but always at the same time as the light **K**.

This facility enables you to check the operation of these lights at any time.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19 R.H.D.

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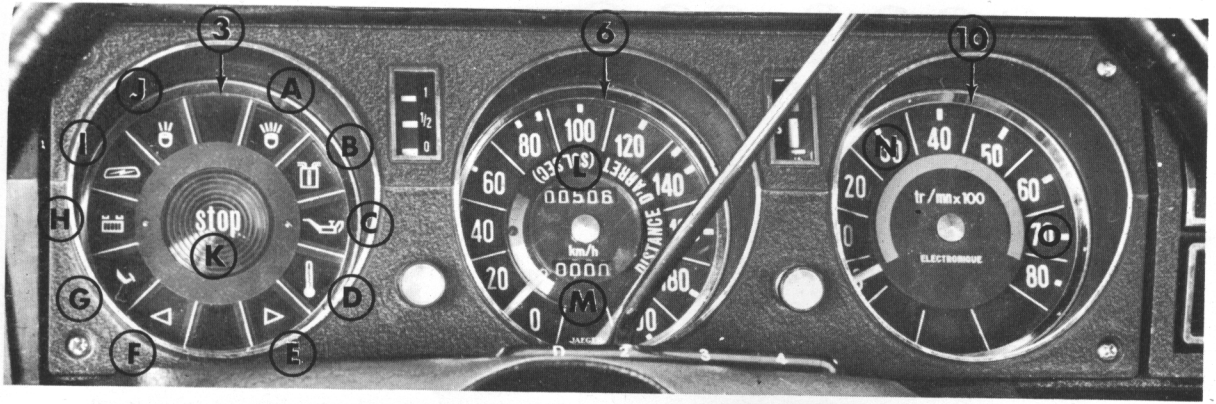
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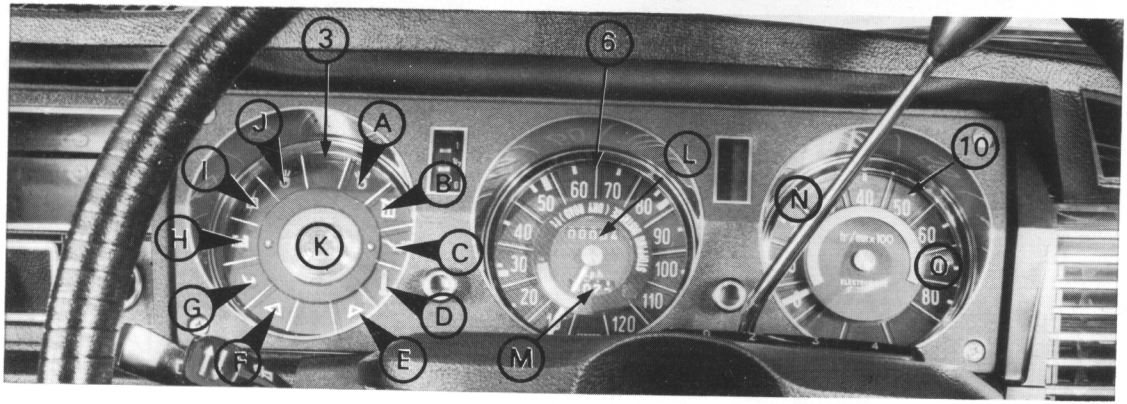
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20 R.H.D.

If the warning light **K** comes on you should stop immediately and determine from one of the other warning lights where the trouble lies.
According to the light check the oil and water levels, the condition of hoses and the fan belt. Consult a CITROEN Agent as soon as possible.

**5 Fuel gauge**

**6 Speedometer with total and trip mileage indicators** (detail fig. 20).
**L** - Total mileage indicator
**M** - Trip mileage indicator

**7 Gear selector/starter lever**

**8 Coolant thermometer**
Only provided in cars equipped with the optional "FR-15" heating system. The thermometer is marked in three zones: from top to bottom a red, a white and a striped white zone. The needle should remain in the **white** sector in the middle; if it enters the **red** sector for any time the red warning lights **D** and **K** come on. Stop immediately, open the radiator blind and check the coolant level. If the needle climbs into the red sector again on starting off afterwards drive slowly to the nearest CITROEN Agent.

**9 Resetting knob for trip mileage indicator**
Push in and turn anti-clockwise.

**10 Electronic revolution counter** (detail fig. 20)
This is divided into two sectors:

**N** - from 0 to 6,000 rev/min .....**green**

**O** - from 6,000 to 8,000 rev/min .....**red**

Whatever the gear selected the speed of the engine should never be increased to the extent that the needle enters the red sector.

**11 Rear view mirror**

The mirror has two settings without altering its alignment: to avoid being dazzled by the headlights of the car behind set the mirror to the night position by pushing the small lever at the top. Pull it towards you again to return to the day position.

**12 Storage compartment (or location for radio)**

This space can accommodate a transistor radio designed specially by "CONTINENTAL EDISON": for details consult your CITROEN Agent.

**13 Ashtray**

To extract pull it out completely and unlock by depressing the end of the leaf-spring with the thumb while continuing to pull.

**14 Loudspeaker grille (with optional radio)**

**15 Volume control for front and rear loudspeakers in car (with optional radio**

**16 Lighter**

To use, push in and remove after it has resumed its original position.

**17 Glove compartment**
Pull to open.

**18 Demisting/defrosting duct for right-hand side window**

**19 Right-hand ventilating duct**

**20 Direction control high/low for ventilation of driver's face**

**21 Fresh air control "high" for interior—left side**

**22 Fresh air control "low" for interior—left side**

**23 Control for windscreen wipers and washers**
**Windscreen wipers:** Move the lever downwards.

*First position:* normal wiping rate.
*Second position:* fast wiping rate.
Return lever upwards: wipers automatically return to parked position.
In principle the fast wiping rate should only be used in very heavy rain or when overtaking under certain difficult conditions.
In case of fine light rain wait until the windscreen is sufficiently wet before switching on the wipers.

**Windscreen washers:** To wash the windscreen move the end of the lever towards the steering wheel rim. Do not apply too much water: allow the windscreen wipers to operate until the windscreen is almost dry before rewetting as necessary. Remember that the wiper blades need cleaning regularly too.

## 24 Warning devices

### Direction indicators

Move the end of the lever in a plane parallel to the steering wheel, in the direction in which you are going to turn the wheel. To stop flashing return the lever to the neutral position. The control can be moved straight through neutral from one side indicator to the other without stopping in the middle. An audible warning and the green lights **E** and **F** (fig. 20) reveal that the winkers are being used. If these warnings are not operating one of the winkers must be faulty: have the system checked by a CITROEN Agent.

### "Flashing" the headlights

Push the end of the lever away from the steering wheel at the rate of about one flash every second or so. This action is possible from any of the positions of the lever. During daylight the headlights can then be used to warn the driver in front of your intention to overtake.

### Horns

Pull the end of the lever towards the steering wheel: this sounds one of the horns; by pulling further all the horns (including the compressed-air type if fitted) will operate.

## 25 Ignition-switch and anti-theft device

## 26 Rheostat control for instrument lighting

This controls the intensity of illumination of the instruments in the dashboard; turn to adjust.

This lighting only operates when the headlights are set to "Town or Country".

## 27 Auxiliary clutch control

During very cold weather the engine can be freed with the aid of the starting handle before setting off or exceptionally when, for instance, the battery is discharged.
For this purpose the auxiliary clutch-control lever is pushed forward and locked in this position by moving it up. As soon as the engine starts do not omit to return this lever to its initial position before selecting a gear.
The starting handle is stowed under the spare wheel in its extension. To insert the handle remove the blanking plug underneath the front bumper and push the handle until the hexagon engages.

## 28 Control for headlights and iodine lamps (optional)

### Headlights

These are controlled by turning the switch knob clockwise.
With the end of the lever pulled towards the steering wheel the first quarter turn of the knob results in **"Town"** (side) lights, the second quarter turn **"Country"** lights, (main beams).
In both the **"Town"** and **"Country"** positions the **"dipped"** setting is obtained by pushing the end of the lever towards the dashboard.

**Iodine lamps (optional)**
With the control knob at the **"Country"** setting push the switch knob inwards to switch the iodine lamps on or off.

**29 Parking lights**
Depress the arrow pointing to the side to be illuminated.
To switch off return the switch to its neutral position.

**30 Rooflights**
Depress the button to switch on, depress and release to switch off.
The rooflights are also switched on and off automatically when the front doors are opened and closed.

**31 Electric clock**
To adjust the time depress the button to the right underneath the dial and turn.

**32 Left side heating and ventilating control**

**33 Rear window demisting/defrosting (optional)**
This control only brings the heating system into action if the ignition is on.
To switch the heating on depress the switch button, whereupon the warning light **Yellow I** of the dial **3** should light up. Depress and release button to switch off.
Even if you forget to switch the heating off this will be done automatically when switching off with the ignition key.
To clean the rear window only modern washing liquids diluted in water or any product based on isopropanol should be used to the exclusion of all products containing acids, alkalines or ammonia.

34 Control for FR-15 heating (optional)

35 Right side heating and ventilating control (optional)

36 Fresh air control "high" for interior—right side

37 Fresh air control "low" for interior—right side

38 Direction control high/low for ventilating driver's face

39 Distribution control for heating/demisting/defrosting

40 Thermostatic heating control

41 Control for entry of warm air

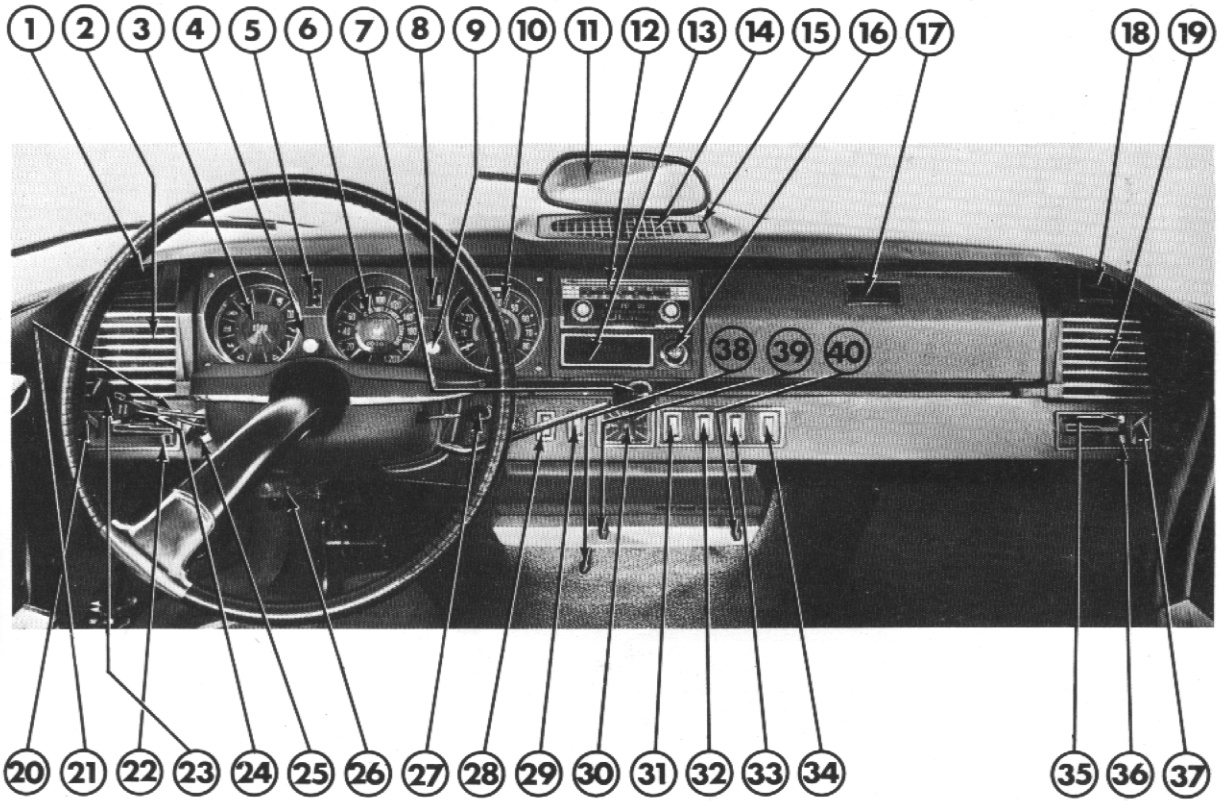
## DASHBOARD OF THE DS FB (fig. 21 and 22)

**1 Demisting/defrosting duct for left-hand front window.**

**2 Left-hand ventilating duct.**

**3 Warning-light dial (for detail see fig. 22)**
**A - Blue** light for main headlight beam
**B - Red** light for brake hydraulic pressure
**C - Red** light for engine oil pressure
**D - Red** light for coolant temperature
**E - Green** light for right-hand indicator
**F - Green** light for left-hand indicator
**G - Yellow** light for brake wear
**H - Yellow** light for battery charging
**I - Yellow** light for rear window heating (optional)
**J - Green** light for sidelights
**K - Red** (bright) light for obligatory stop. Lights up when one or more of the lights **B**, **C**, **D** come on.

**4 Test button for checking operation of red warning lights.**
When button is pushed fully home the lights **B**, **C**, **D** and **K** light up at the same time.
When the button is only pushed lightly they come on in succession but always at the same time as the light **K**.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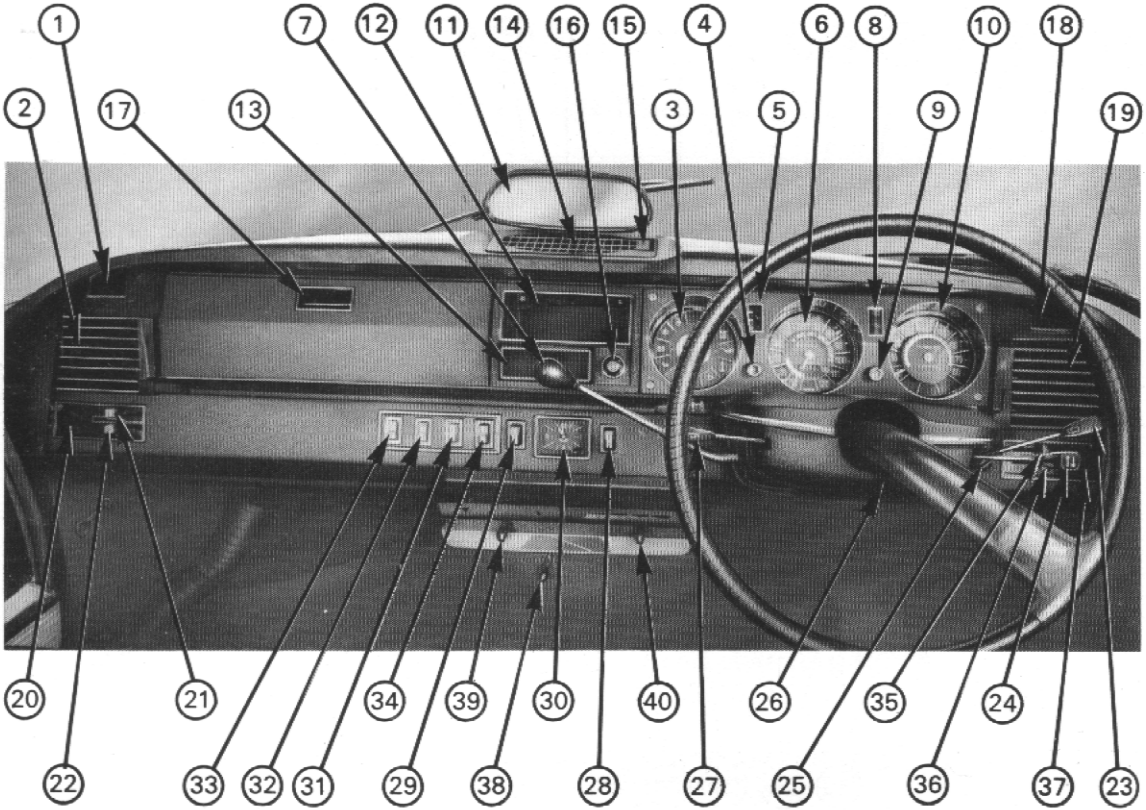
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21 R.H.D.

This facility enables you to check the operation of these lights at any time. If the warning light **K** comes on you should stop immediately and determine from one of the other warning lights where the trouble lies.
According to the light check the oil and water levels, the condition of hoses and the fan belt. Consult a CITROEN Agent as soon as possible.

**5 Fuel gauge**

**6 Speedometer with total and trip mileage indicators** (detail fig. 22)
**L** - Total mileage indicator
**M** - Trip mileage indicator

**7 Gear selector lever**

**8 Coolant thermometer**
Only provided in cars equipped with the optional "FR-15" heating system. The thermometer is marked in three zones: from top to bottom a red, a white and a striped white zone. The needle should remain in the **white** sector in the middle; if it enters the **red** sector for any time the red warning lights **D** and **K** come on. Stop immediately, open the radiator blind and check the coolant level. If the needle climbs into the red sector again on starting off afterwards drive slowly to the nearest CITROEN Agent.

**9 Resetting knob for trip mileage indicator**
Push in and turn anti-clockwise.

**10 Electronic revolution counter** (detail fig. 22)

This is divided into two sectors:

**N** - from 0 to 6,000 rev/min .....**green**
**O** - from 6,000 to 8,000 rev/min .....**red**

Whatever the gear selected the speed of the engine should never be increased to the extent that the needle enters the red sector.

**11 Rear view mirror**

The mirror has two settings without altering its alignment: to avoid being dazzled by the headlights of the car behind set the mirror to the night position by pushing the small lever at the top. Pull it towards you again to return to the day position.

**12 Storage compartment (or location for radio)**

This space can accommodate a transistor radio designed specially by "CONTINENTAL EDISON": for details consult your CITROEN Agent.

**13 Ashtray**

To extract pull it out completely and unlock by depressing the end of the leaf-spring with the thumb while continuing to pull.

**14 Loudspeaker grille (with optional radio)**

**15 Volume control for front and rear loudspeakers in car (with optional radio)**

**16 Lighter**
To use, push in and remove after it has resumed its original position.

**17 Glove compartment**
Pull to open.

**18 Demisting/defrosting duct for right-hand side window**

**19 Right-hand ventilating duct**

**20 Direction control high/low for ventilation of driver's face**

**21 Fresh air control "high" for interior—left side**

**22 Fresh air control "low" for interior—left side**

**23 Control for windscreen wipers and washers**
**Windscreen wipers:** Move the lever downwards.

*First position:* normal wiping rate.
*Second position:* fast wiping rate.
Return lever upwards: wipers automatically return to parked position.
In principle the fast wiping rate should only be used in very heavy rain or when overtaking under certain difficult conditions.

In case of fine light rain wait until the windscreen is sufficiently wet before switching on the wipers.

**Windscreen washers:** To wash the windscreen move the end of the lever towards the steering wheel rim. Do not apply too much water: allow the windscreen wipers to operate until the windscreen is almost dry before rewetting as necessary. Remember that the wiper blades need cleaning regularly too.

## 24 Warning devices

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Move the end of the lever in a plane parallel to the steering wheel, in the direction in which you are going to turn the wheel. To stop flashing return the lever to the neutral position. The control can be moved straight through neutral from one side indicator to the other without stopping in the middle. An audible warning and the green lights **E** and **F** (fig. 22) reveal that the winkers are being used. If these warnings are not operating one of the winkers must be faulty: have the system checked by a CITROEN Agent.

### "Flashing" the headlights

Push the end of the lever away from the steering wheel at the rate of about one flash every second or so. This action is possible from any of the positions of the lever. During daylight the headlights can then be used to warn the driver in front of your intention to overtake.

**Horns**
Pull the end of the lever towards the steering wheel: this sounds one of the horns; by pulling further all the horns (including the compressed-air type if fitted) will operate.

**25 Ignition-switch, starter switch and anti-theft device**

**26 Rheostat control for instrument lighting**
This controls the intensity of illumination of the instruments in the dashboard; turn to adjust.
This lighting only operates when the headlights are set to "Town or Country".

**27 Control for headlights and iodine lamps (optional)**
**Headlights**
These are controlled by turning the switch knob clockwise.
With the end of the lever pulled towards the steering wheel the first quarter turn of the knob results in **"Town"** lights, the second quarter turn **"Country"** lights.
In both the **"Town"** and **"Country"** positions the **"dipped"** setting is obtained by pushing the end of the lever towards the dashboard.
**Iodine lamps (optional)**
With the control knob at the **"Country"** setting push the switch knob inwards to switch the iodine lamps on or off.

**28 Parking lights**
Depress the arrow pointing to the side to be illuminated.
To switch off return the switch to its neutral position.

**29 Rooflights**
Depress the button to switch on, depress and release to switch off.
The rooflights are also switched on and off automatically when the front doors are opened and closed.

**30 Electric clock**
To adjust the time depress the button to the right underneath the dial and turn.

**31 Left side fresh air ventilating control**

**32 Rear window demisting/defrosting (optional)**

This control only brings the heating system into action if the ignition is on.
To switch the heating on depress the switch button, whereupon the warning light **Yellow I** of the dial **3** should light up. Depress and release button to switch off.
Even if you forget to switch the heating off this will be done automatically when switching off with the ignition key.
To clean the rear window only modern washing liquids diluted in water or any product based on isopropanol should be used to the exclusion of all products containing acids, alkalines or ammonia.

**33 Control for FR-15 heating (optional)**

**34 Right side fresh air ventilating control (optional)**

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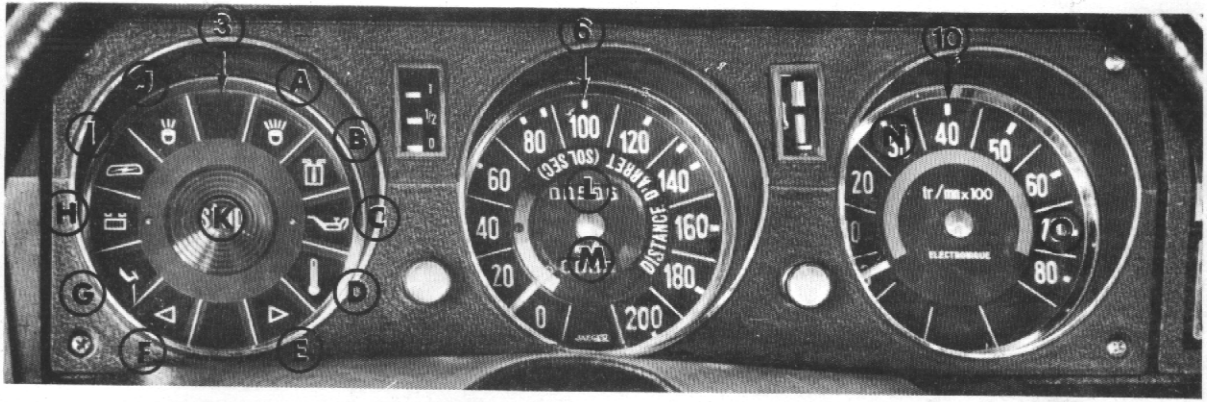


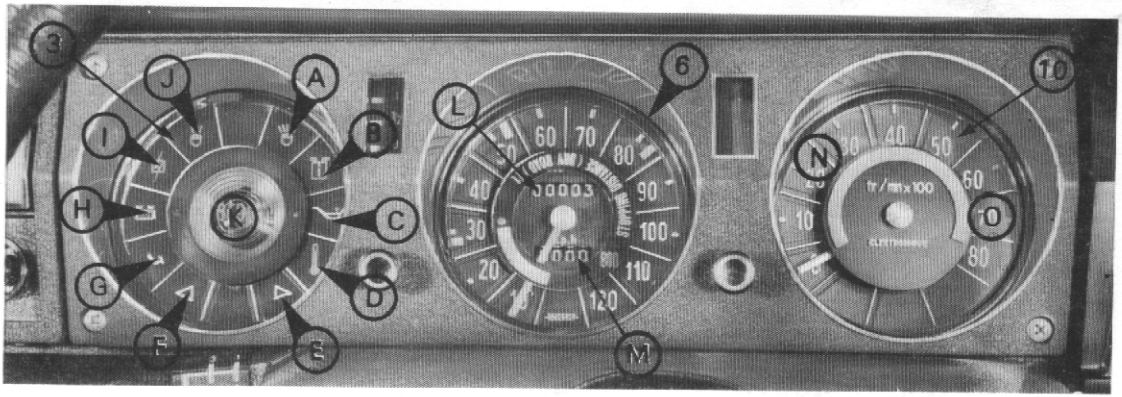


22 R.H.D.

35 Fresh air control "high" for interior—right side

36 Fresh air control "low" for interior—right side

37 Direction control high/low for ventilating driver's face

38 Thermostatic heating control

39 Distribution control for heating/demisting/defrosting

40 Control for entry of warm air

## ADJUSTMENT OF HEIGHT ABOVE GROUND (fig. 23–24)

To facilitate negotiation of rough ground (rutted roads, depressions, snow drifts, etc.) it may be useful to increase the car's ground clearance.

Control **A** can assume three positions as indicated by white lines on the housing.

When set to line **2** the car is at its normal height, when opposite lines **3** or **4** the car is raised.

The most comfortable driving position is at the normal height but it is possible to travel at any of the two other settings.

The control **A** has two further settings: the extreme lower one **6** and the extreme top one **5**.

These two settings are only to be selected during wheel changes and **must not be used during normal driving**.

Nevertheless it is permissible to raise the vehicle to its maximum position (control **A** to position **5**) to negotiate certain particularly difficult obstacles providing these do not extend over any distance and care is exercised.

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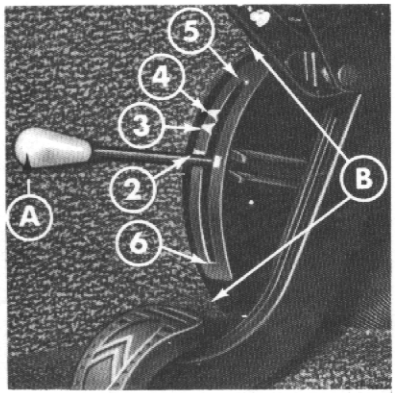
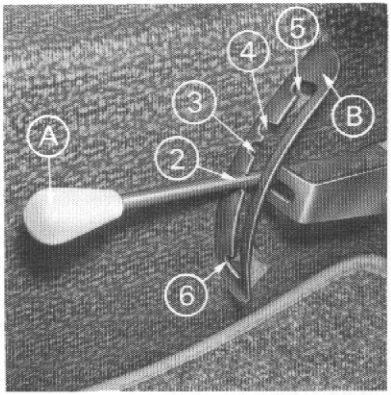



23 R.H.D.

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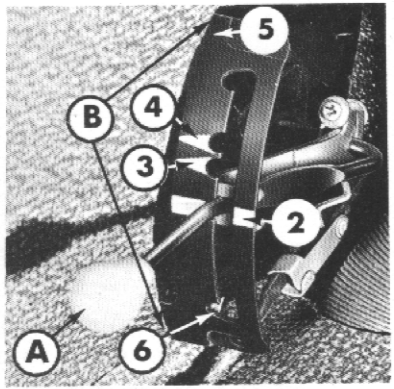


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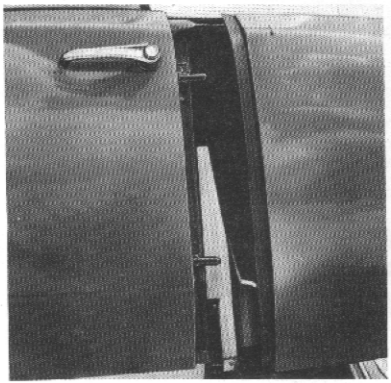

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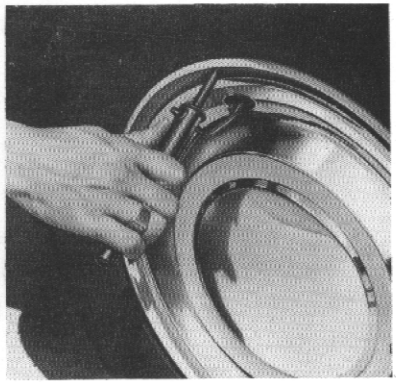

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## CHANGING A WHEEL (fig. 25 to 32)

**1** To remove a wheel the hydraulic suspension is resorted to in order to raise the car, which is then lowered on to a stay. The wheels then automatically lift from the ground.
The uncomfortable task of jacking the car up by hand is thus avoided.
Set the brake and lock it.
Allow the engine to idle throughout the operation.
Lift the lever **A** (figs. 23 and 24) to its upper position whereupon the car gently rises.
Take out the tools and the spare wheel from under the bonnet, the stay being underneath the oil-can holder under the spare wheel (fig. 28A).
If a rear wheel is involved remove the rear wing by unscrewing the bolt (fig. 25) using the starting handle/wheelbrace, then withdraw the wing towards the rear while raising it slightly (fig. 26). Then proceed for the rear as for the front wheels as follows:

- Remove the hub cap by inserting the curved end of the punch in the valve hole and levering as shown (fig. 27).
- Slacken off the 5 wheelnuts with the handle, using the extension (fig. 28) if necessary. At this stage the nuts are only slackened a little without removing them.
- With the car raised completely engage the top of the stay (fig. 29) in the peg under the door and allow the stay to take up its own position.
  Ensure that the stay is correctly engaged.

The upper part of the stay has a number of holes into which the straight end of the punch is inserted (fig. 30), selecting the hole closest to the base.

- Lower the control lever **A** to position **6** (fig. 23 and 24) and wait for the wheels to lift clear (the front and rear wheels on the side involved rise simultaneously).
- Remove the 5 wheelnuts and the wheel.

2 **Fitting the spare wheel:** Slide the end of the extension through the hole in the centre of the wheel and engage the extension in the centre hole of the hub (fig. 31). Raise the other end of the extension and allow the wheel to slip on to the studs; screw on the 5 nuts without tightening.
Reset the lever **A** to the high position (fig. 23 and 24) and remove the stay. Then adjust the lever **A** to the normal position (thick white line on housing **B**, fig. 23 and 24).
Tighten the 5 wheelnuts down hard **using** the handle but **not the extension**.
Replace the hub cap, lining up the valve hole and fitting the two springs on either side of it; finally locate the last spring by using the curved end of the punch as lever level with the spring (fig. 32).
If a rear wheel was changed refit the wing: insert the lugs (fig. 26) in their respective holes and push the wing home **forward**, then tighten the screw (fig. 25).

**Note:** Locate the spare wheel under the bonnet with the **valve downwards** so that the stay and its punch can be stowed under the oil can.

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28 a

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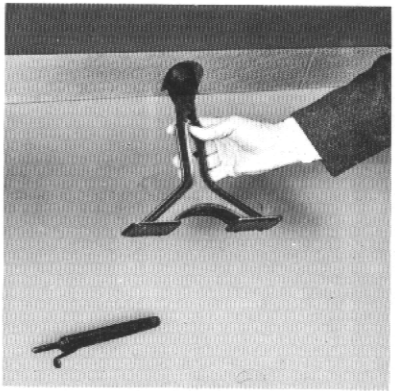

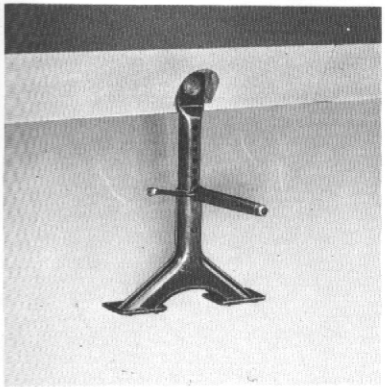

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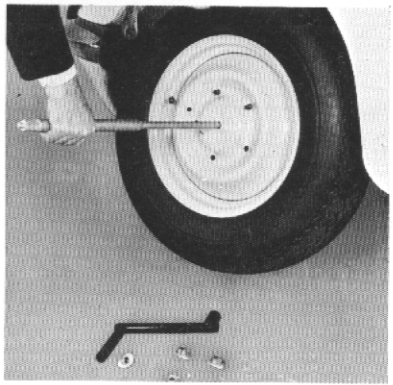

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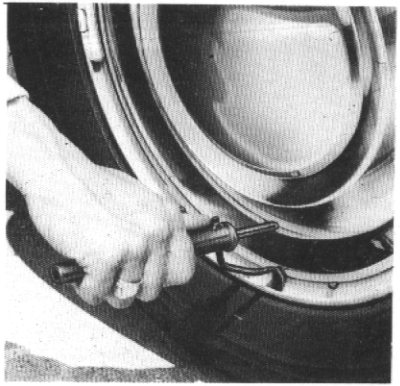

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# 2—MAINTENANCE

## LUBRICATION INSTRUCTIONS

Do not attempt any experiments with lubricants neither must they be mixed: **CITROEN recommends "TOTAL" lubricants.** If you cannot obtain the recommended products, use equivalent products of reputable make.

We also advise against any form of additives to the oils: they might cause serious damage.

Summer and winter and in all countries where the temperature normally exceeds +30°C the oil to be used is **"TOTAL" Altigrade GT "Motorway Special" 20 W 40, or 20 W 50.** If it is impossible to obtain these "TOTAL" oils, a 20 W 40 or 20 W 50 Multigrade oil of another reputable make may be used.

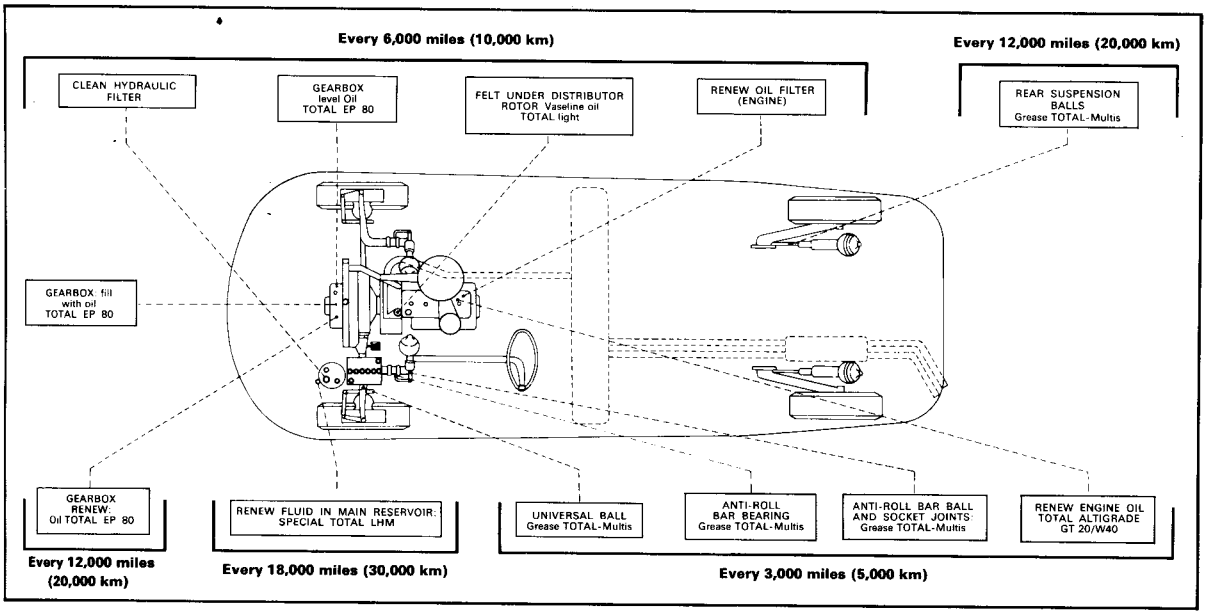
In countries subject to very cold weather (Northern USA, CANADA, SWEDEN) use oil **"TOTAL" Altigrade GT "Motorway Special" 10 W 30, or a 10 W 30 Multigrade of another reputable make.**

If Multigrade oils are not available, use an S.A.E. 20 oil in cold countries, and an S.A.E. 30 oil in temperate or hot countries, in accordance with local practice.

The "Maintenance Log-book" part of this booklet lays down the operations to be carried out annually, at **600 miles (1,000 km)** then between **3,000 miles (5,000 km)** and **56,000 miles (90,000 km)** (every 3,000 miles) (5,000 km).

**The diagram on the opposite page complements the above information.**

## Lubrication chart



## THE INJECTION SYSTEM

The injection system is electronically controlled.
All servicing of this equipment must be left to the CITROEN Agents since they alone possess the special tools and instruments for testing, repair and adjustment.
The system includes a filter secured to the right-hand longeron (level with the centre pillar) behind the fuel pump; this filter must be renewed by the CITROEN Agent every **30,000 miles (50,000 km)**.

## BATTERY

Check its level frequently, **especially in summer**.
The level should be **0·4 to 0·8 inches (1 to 2 cm)** above the plates in each cell but **not more**. Top up with distilled water only, **never acid**. After some time the terminals may become coated with salts. Remove and clean the terminals and before replacing them renew the insulating felt washers after soaking them in castor oil or neutral vaseline oil.

## PRECAUTIONS AGAINST FROST

**CITROEN prescribes "TOTAL" anti-freeze only.**

**1 Battery**

The best protection against frost is provided by a charged battery.

—**Normally charged: (Density 1·25 to 1·27)**
the battery resists **−50°C**.
—**Half charged: (Density 1·17 to 1·19)**
the battery still resists **−15°C**.
—**Discharged: (Density 1·07 to 1·09)**
the battery bursts at **−5°C**.

A burst battery cannot be repaired.

## 2 Radiator and cylinder block

Cars are delivered with coolant systems containing sufficient anti-freeze to protect the radiator and block down to the temperature shown on a label on the air duct behind the radiator (−5 or −15°C).

To increase protection from the **−5°C** level down to **−15°C**, for instance, the proportion is **5¼ pints (3·0 litres)** of concentrated anti-freeze with **17½ pints (10 litres)** water. This is achieved by draining **5¼ pints (3·0 litres)** of the original coolant and pouring in **5¼ pints (3·0 litres)** of "TOTAL" anti-freeze.

### At low temperatures

The viscosity of the coolant mixture at the proportion needed to give protection down to **−15°C** appreciably slows down the rate of circulation.

**At very low temperatures**
The engine must be allowed to warm up several minutes at fast idling before setting off to ensure that a normal circulation exists in the coolant system.

**Warning:**
The anti-freeze sold in the trade is often a GLYCOL-water mixture and not pure GLYCOL: take this dilution into account when working out proportions.

**Retain the anti-freeze during all seasons, whatever its concentration.** When the system is **partly or entirely** drained we advise adding **0·5% commercial soluble oil** to the water/anti-freeze mixture. This precaution is not necessary with "TOTAL" anti-freeze since this already contains an inhibitor.

**Replacement of the coolant is a rather critical operation.** Only the official Citroen agents can carry out the filling correctly because they alone can be kept up to date with procedures and products to be used.

**The radiator is drained** through the cock at its base, right hand side, the **cylinder block** from the opening behind the starter (hexagon screw plug).

## PRECAUTIONS WHEN DRAINING

If you have drained the radiator completely take the following precautions when refilling:

—Check that the thermostatic valve 40 (fig. 19) or 39 (fig. 21) is on its **fully open stop**.
—Start the engine and give a few bursts on the accelerator to ensure that all ducts are full.

## CLEANING THE RADIATOR (fig. 33)

The front face of the radiator can be reached for cleaning by opening the zip fastener.

**During normal running this opening must be closed.**
**Exceptionally** it can be left open under conditions of thick snow which could block the screen in the inlet for the ventilating duct. The flap is then held open by the press stud provided for the purpose.

## AIR FILTER

Clean the filter **about every 6,000 miles (10,000 km)** in accordance with the instructions on the housing.

## FILTER IN THE HYDRAULIC SYSTEM (fig. 7 to 10)

This is located at **E** in the reservoir.
Have it cleaned by a CITROEN Agent **every 6,000 miles (10,000 km)**.

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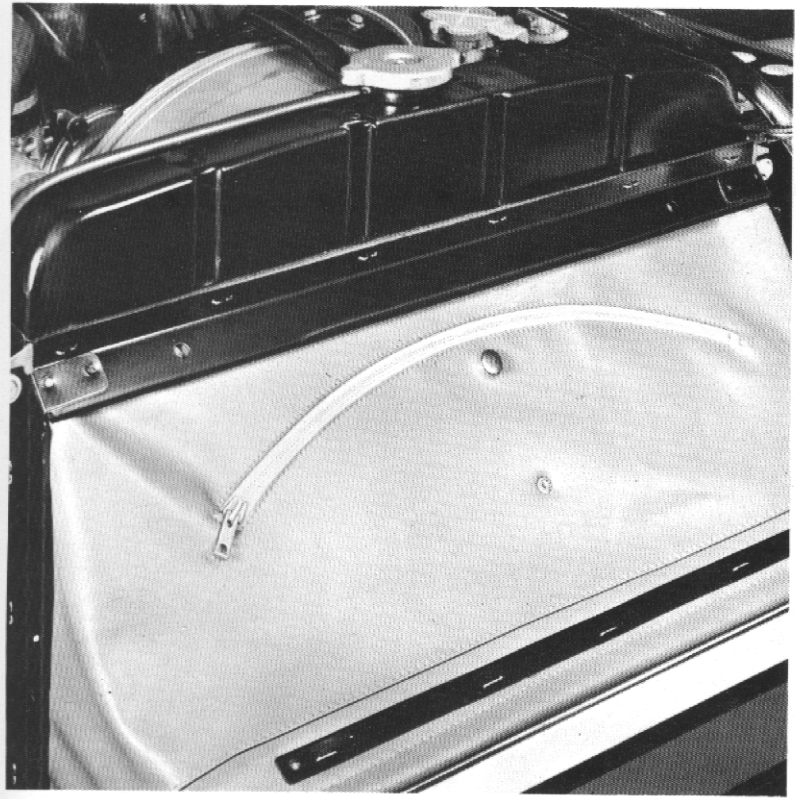

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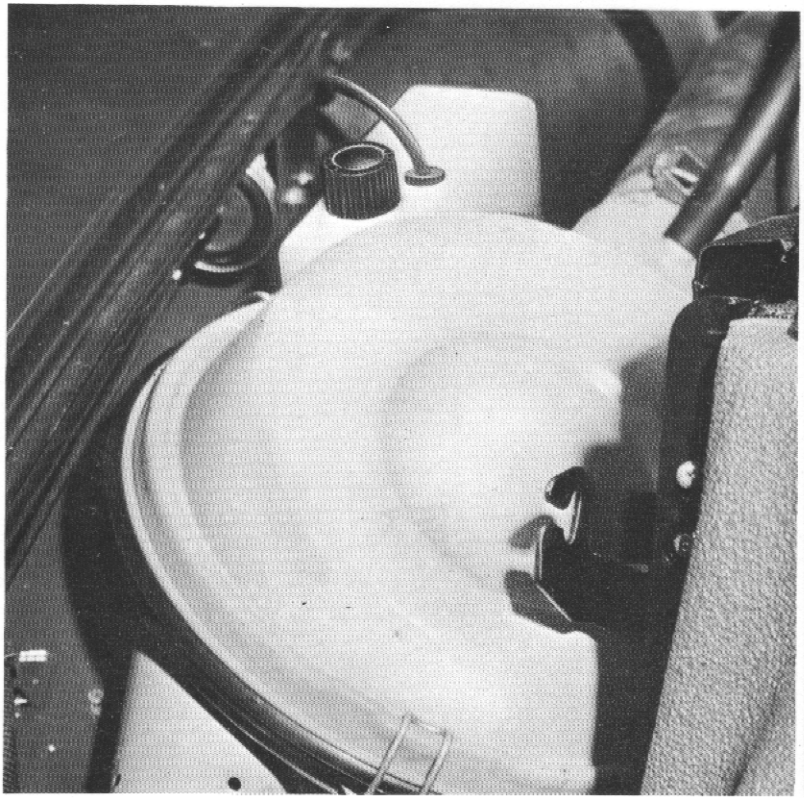

## WINDSCREEN WASHER (fig. 34)

Before setting off on a long journey check the level of the reservoir under the **right-hand** side of the bonnet.

Top up with clean water to which a tablet of a product like **"Stop-Clair"** can be added in summer. A neutral solution like **"Stop-Gel"** can be added at all times: this not only acts as anti-freeze in winter but also stops furring up.

## COOLANT PUMP

**Every 3,000 miles (5,000 km):** check the belt tension.

**Every 30,000 miles (50,000 km):** we advise renewal of the belts.

## BRAKES

**Every 12,000 miles (20,000 km):** have the rear brake shoes adjusted.

## TYRES

The **DS** is supplied with MICHELIN type XAS tyres marked on one wall "side facing outwards".

It is essential that the tyres are fitted with this wall outward at all times.

Your safety is closely associated with the reliability of your tyres: ensure that their pressures are kept to the values listed in the Table below.

These pressures must be checked cold (before taking the car out in the morning). A check when warm would give a false reading: for instance, a loaded car travelling at high speed can cause the pressure to rise by 0·4 to 0·5 bar (6 to 7 lb/in$^2$).

| MAKE OF TYRE<br>Standard tyre | Inflation pressure lb/in² (bar) | | |
|---|---|---|---|
| | Front | Rear | Spare (2) |
| 185 HR 380 XAS | 29 lb/in²<br>(2) | 26 lb/in²<br>(1·8) | 32 lb/in²<br>(2·2) |
| Other authorized fittings | | | |
| 180×380 XH (3) | 29 lb/in²<br>(2) | 26 lb/in²<br>(1·8) | 32 lb/in²<br>(2·2) |
| 180×380 X (M+S) (3) | (2) | (1·8) | (2·2) |
| 185×380 X (3) | (2) | (1·8) | (2·2) |

(1) One bar=14·2 lb/in² (1 kg/cm²) (to within 2%).

(2) Correct the pressure of the spare wheel when fitting (or as soon as possible afterwards).

(3) 1 **It is not advisable to exceed 100 mph (165 km/h)** with these three other makes of tyre.

2 The types 180 × 380 XH and 180 × 380 X (M+S) can be fitted with studs in which case the front and rear pressures are increased by 3 lb/in² (0·2 bar); it is then advisable not to exceed 93 mph (160 km/h).

**Warning:** Keep the wheels correctly balanced: have the balance checked at regular intervals and especially after punctures.

When much driving has to be done over snow-covered roads with XAS tyres these can be inflated to **35 lb/in² (2·4 bar)** at the front: this improves adhesion even more under such conditions than at normal pressures.

## REPLACEMENT OF HEADLIGHT BULBS (fig. 35 to 44)

The bulbs for the front lights are fitted in units symmetrically disposed in the wings (fig. 35) comprising:

—**Outside:** the **Main/Dipped (large diameter)** with sidelights fitted in the parabolic reflector at **A**.

—**Inside:** the **supplementary main headlights (small diameter)** with or without iodine bulbs—**B**.

Access to the rear of the optical units can be gained through a hole in the front wings **C**.

### A - "MAIN/DIPPED" HEADLIGHTS (LARGE DIAMETER)

**1 Metal bulb holder** (figs. 36 and 37)

Pull the holder rearwards by the tapered collar at **D**.

Once the holder is out of the hole **E** take it out of the wing through the opening **C** (fig. 35) to facilitate dismantling, as follows:

—Remove the connector **F** by pulling it towards you.

—Spread the two legs of the clip **G** by pushing lightly downwards to release the two lugs **1** and **2**.

—Swing the cover **3** clear.

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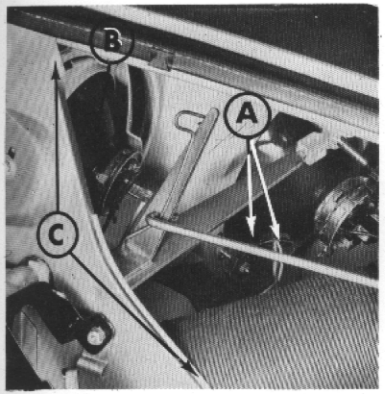


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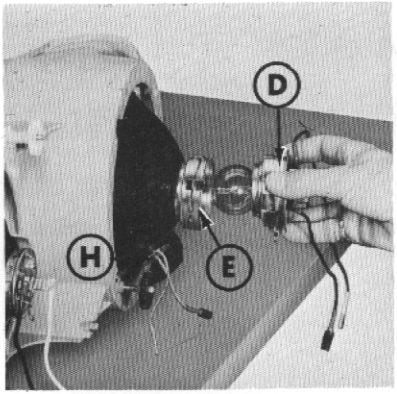


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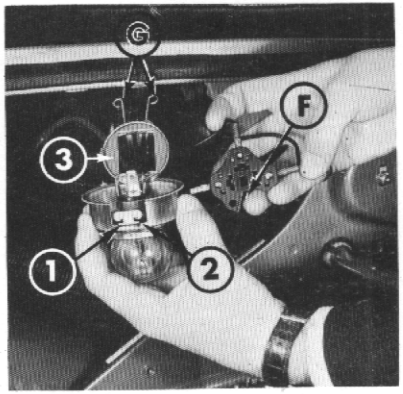


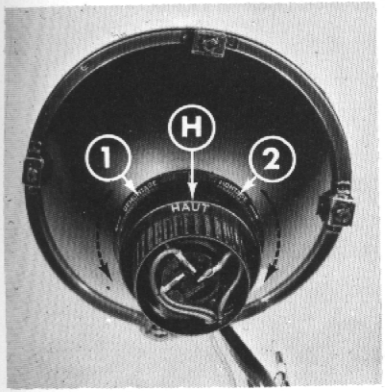


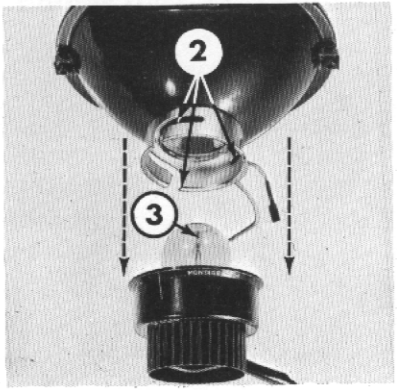


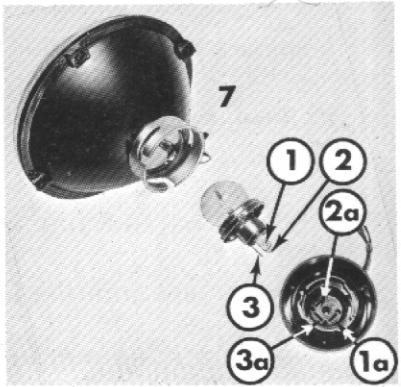


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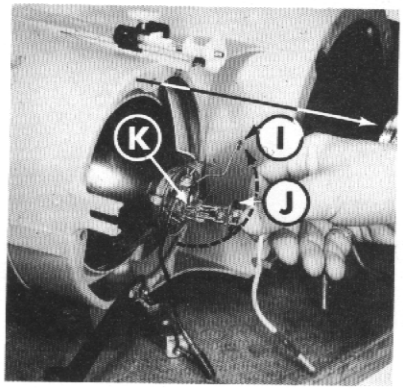


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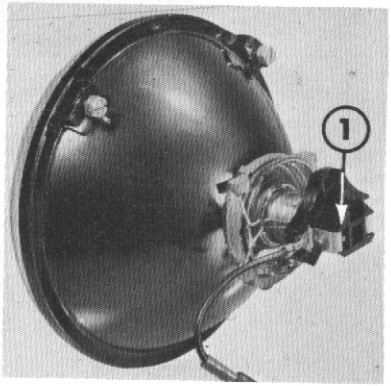


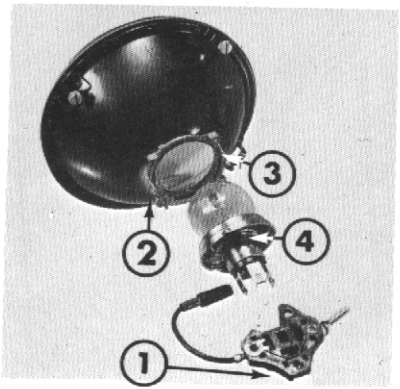


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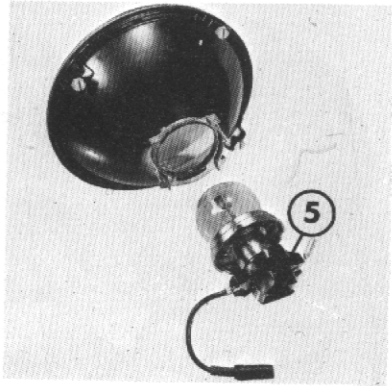


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—Fit a new bulb, ensuring that the flange is securely engaged so that subsequent movement of the bulb is avoided.
—Close the cover and engage the two legs of the clip **G** behind their lugs.
—Refit the connector by pushing the 3 contacts of the lamp fully home in their respective holes.
—Position the lamp holder in its location (clips downwards) rotating it anti-clockwise until the stop ensuring its correct fitting is reached (fig. 36).

**2 Black plastic bulb holder** (figs. 38, 39 and 40)

Rotate the holder in the direction of the arrow **1**, holding it at the splined extension.

Withdraw it from the fitting **2** by pulling it towards you, then take it out of the wing.

Take out the faulty bulb **3** by pulling it.

Fit the new bulb by inserting the three tongues **1**, **2** and **3** of the base into the slots **1A**, **2A** and **3A** respectively.

Offer up the lamp holder around its bayonet fitting **2** ensuring that the word "haut" **H** is at the top.

Push the holder home without undue force and rotate it as far as the stop in the direction of the arrow **2**.

## B - FRONT SIDELIGHT

The sidelight bulbs are fitted into the reflector of the main headlights (large diameter) at **H** (fig. 36).

Pull the holder while rotating it slightly to free it from the reflector.

Fit a new bulb.

Replace the holder by pushing it into the reflector.

## C - SUPPLEMENTARY HEADLIGHTS "MAIN BEAM" (SMALL DIAMETER)

### 1 With iodine bulbs (fig. 41)

The headlights must be off to replace a bulb.

If the headlights had just been in use it is advisable to allow the bulb to cool for five minutes before handling it.

Avoid touching the bulb with the fingers.

Should you accidentally touch the bulb it should be carefully wiped with soapy water and dried with a lint-free cloth.

Unhook the securing spring **I**: depress its end and disengage it from the locking lug.

Withdraw the bulb from the reflector and take it out of the wing.

Disconnect the lead from the base of the bulb.

Connect the lead to the new bulb **J**, holding it at the metal collar (avoid touching the bulb with the fingers).

Offer up the holder to the projector so that the locating lugs are lined up with the holes **K**.

Clip the securing spring in position.

## 2 Without iodine lamps (fig. 42 to 44)

Remove the black plastic connector **1** with the supply leads by pulling it towards the rear.

Swing the springs **2** and **3** through 90° by holding them between the nails of the thumb and the forefinger, ensuring that the collar remains in place; fit a new unit **4**.

Reconnect the bulb and its collar to the connector **5**.

Insert the holder into the hole at the centre of the reflector, carefully aligning the locating lug in the bulb collar with the corresponding slot.

Clip the two springs in position on the collar of the bulb.

**Note:** When driving in a country where the opposite rule of the road applies consult a CITROEN Agent beforehand.

## ADJUSTING THE HEADLIGHTS (fig. 45 to 48)

### A - "MAIN/DIPPED" HEADLIGHTS (LARGE DIAMETER) (figs. 45–46)

**1 Movable** (fig. 45)

Looking at the projector from the rear: left-hand light, the right-hand one being symmetrical.

—To adjust the **height** turn the screw **A**.

—To adjust in the **horizontal plane** turn the screw **B**.

**2 Fixed** (fig. 46)

Looking at the projector from the rear: left-hand light, the right-hand one being symmetrical.

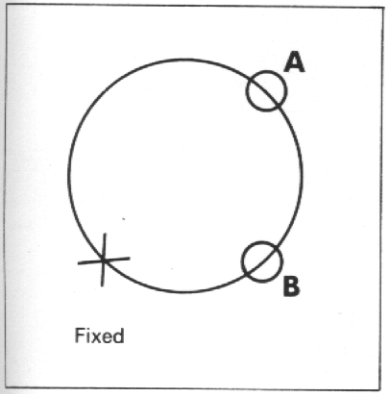
—To adjust the **height** turn the screw **A**.

—To adjust in the **horizontal plane** turn the screw **B**.

### B - SUPPLEMENTARY "MAIN" HEADLIGHTS (SMALL DIAMETER)

**1 Directional** (fig. 47)

If you become aware that the secondary headlights do not shine along the axis of the car when driving straight ahead the direction of the two headlights can be adjusted simultaneously by a mechanism which is simple and easily accessible.

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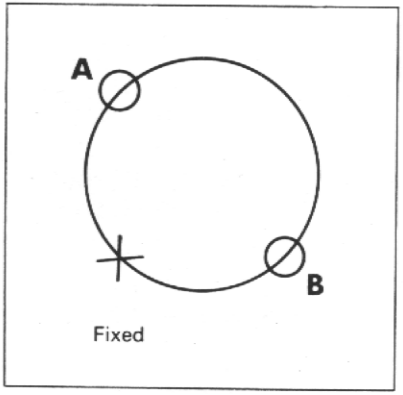


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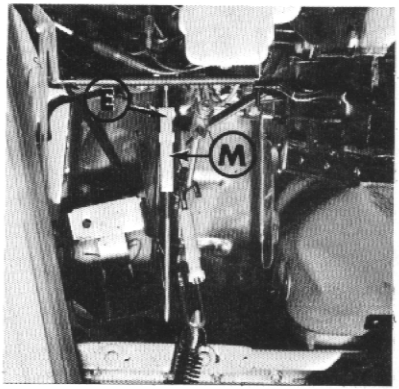


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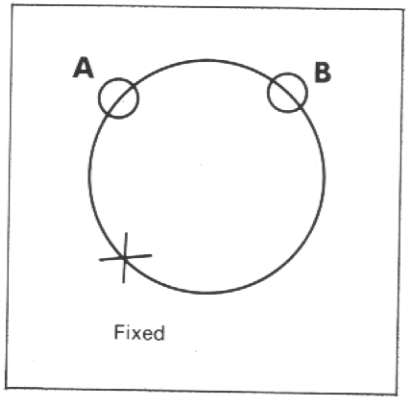


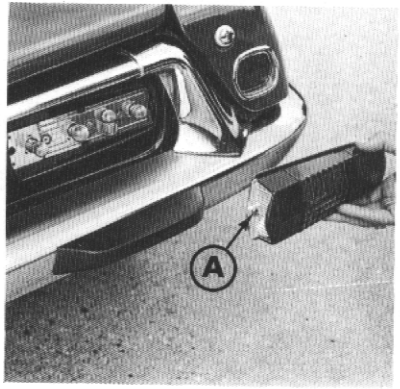


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The adjustment is achieved by means of the white sleeve **M** on the tierod:
—Slacken the locknut **E** at the rear end of the sleeve.
—Unscrew the sleeve **M** to swing the set of beams towards the **right**.
—Screw up the sleeve **M** to swing the set of beams towards the **left**.
—Assess the angle through which the headlights should be swung while driving.
—Stop the car facing a wall at least 50 ft (15 m) away.
—Turn the white sleeve **M** in the direction to obtain the required correction. Do not omit to tighten the locknut **E**.
—Repeat the process if the headlight setting is still not satisfactory.

**Note:** CITROEN Agents are equipped to carry out a comprehensive alignment of the headlights.

**2 Fixed** (fig. 48)

Looking at the headlight from the rear: left-hand light, the right-hand one being symmetrical.
—To adjust the **height** turn the screw **A**.
—To adjust in the **horizontal plane** turn the screw **B**.

## REPLACEMENT OF A TAIL-LIGHT BULB (fig. 49)

To replace a bulb the transparent housing has to be removed: withdraw the screw **A**, slightly hinge the housing and slide it towards the outside of the car.

## REPLACEMENT OF A REAR WINKER BULB (fig. 50)

Remove the reflector from its housing by pulling the lug at the bottom followed by the rubber cap.

After renewing the bulb replace the rubber cap.

Insert the reflector unit into its housing by engaging the top lug first, then the bottom one and pushing.

## REPLACEMENT OF A FRONT WINKER BULB (fig. 51)

Unscrew the two outer securing screws of the housing.

### AXO and SEIMA lights

Release the bulb holder by swinging the retaining bar clear.

**General note:** Whenever headlights are adjusted or bulbs renewed it is advisable to have the alignments checked by a CITROEN Agent.

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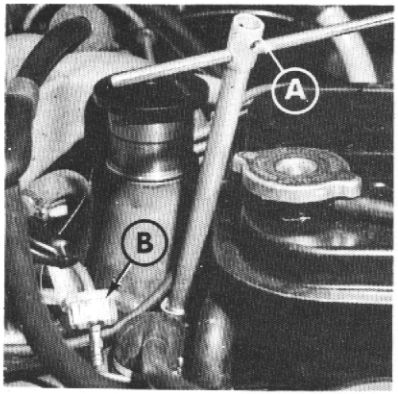


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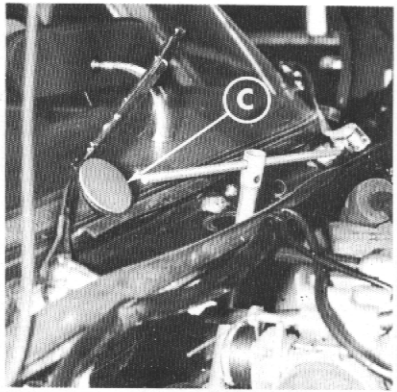


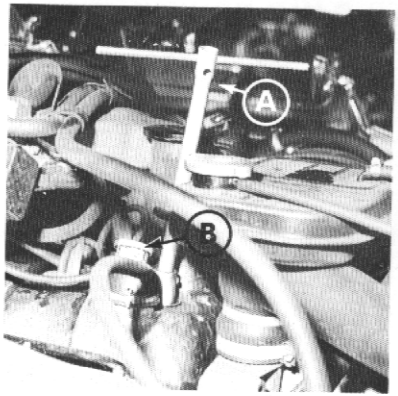


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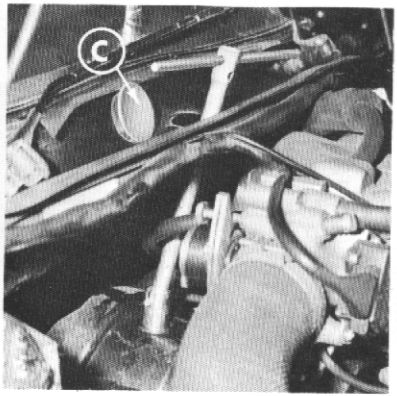


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## REPLACEMENT OF A SPARKING PLUG (fig. 52–55)

Withdraw the bakelite protecting sleeve.
Release the cap from the plug socket, then pull the plug lead.
Insert a special spanner consisting of two parts so that the end fits over the plug body.

Unscrew the plug using a tommy bar as a lever.
After fitting the new plug, the protecting sleeve and the lead do not omit to insert the cap **B**.
If a new plug is fitted re-use the extension for the central electrode of the old plug.
Only plugs with captive washers and metric threads at the top should be used.

### Special case of the fourth plug

An opening is provided in the bulkhead gutter to reach the fourth plug.
Remove the rubber blanking plug in the hole and remember to replace it after changing the sparking plug.

## TERMINAL FOR CONNECTING ACCESSORIES

If you wish to install certain electrical accessories (12-V equipment such as a radio, foglights, reversing lights, etc.) it is recommended that the special terminal provided for the purpose be used.
This terminal is located behind the dashboard and can carry a current of **10 Amperes**.

## FUSEBOX

The fusebox is located under the bonnet and is attached at the top left-hand side of the bulkhead hood (looking forward).
Removing the cap reveals 4 fuses: 2 at 16 A (rated current) and 2 at 10 A, from left to right facing the car:

—**To the green lead (16 A)**
Rooflights
Winkers and their warning lights
Battery charge warning light
Cigarette lighter
Heating for rear window (optional)
Right side pulsed ventilation (optional)
—**To the red lead (16 A)**
Electronic revolution counter
Rheostat and fuel gauge
Warning light dial
Windscreen washer pump and wiper motor
Accessory terminal
Stoplights
Heating—5°
Heating—15° (optional)
Clock
Lighting for glove compartment (on "Pallas" models only)
—**To blue lead (10 A)** Parking lights

—**To yellow lead (10 A)**
Illumination of rear number plate
Boot light
Side light warning light
Dashboard lighting
Town lights
Clock light
Heating control light (on "Pallas" models only)

## TOWING

**1** If you have to be towed by another vehicle:
Pass a cable or rope around each of the lower links of each front wheel so that the apex of the triangle thus formed points towards the towing vehicle. Place some padding between the cable and the underneath of the front fairing as a protection.
Never attach the towing cable or rope to the bumper.

**2** If you want to tow a trailer:
Consult a CITROEN Agent first: he will tell you all the precautions you have to take, especially with regard to the requirements of the law.
A trailer equipped with a brake up to 35 cwt (1,800 kg) can be towed (starting on a 11·5% (1 in 9) gradient).

## DOOR WINDOWS

To ensure that the windows continue to slide freely have the rubber sealing strips coated with two layers of **"LISSAPRET"** or other silicone varnish by a CITROEN Agent every **6,000 miles (10,000 km) approximately**.

## CLEANING

| CLOTH | Ball-point ink | Waterman ink | Engine oil | Lockheed oil | Lipstick | Nail varnish | Greenery | Mud | Chocolate | Grease tar | Blood | Syrup, sweets caramels |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Man-made fibres** | 1–2 | 8 | 2–3 | 1 and 4 | 5–6 and 12 | 4 | 14 and 12 | 10 | 11 and 13 | 7 | 11 | 14 |
| **Brushed Cotton** eg. rooflining fabric | 1 | 8–9 | 2–3 | 1 and 4 | 5–6 | 4 | 14 and 12 | 10 | 11 and 13 | 7 | 11 | 14 |
| **Leather** | 1 | 11 | 3 | 1 | 6 | | 14 | 14 | 11 and 13 | 7 | 14 | 14 |
| **Proofed felted jute**<br>**Similoids** (plasticized fabrics) e.g. Rear lining of front seats | 1 | 11 | 3 | 1 | 5 | | 14 | 14 | 11 and 13 | 7 | 14 | 14 |

**Type of remover or removing solutions**

(1) **Methylated spirits 90°** available in the trade; do not use 95° since this may also remove the varnish or the pattern printed on the leather.
(2) **Tri or perchlorethylene.**
(3) **Petrol C (without lead).**
(4) **Acetone, methylethyl ketone or nail varnish remover.**
(5) **Commercial benzene.**
(6) **White spirits.**
(7) **Carbon tetrachloride** which was used in some fire extinguishers.
(8) **Bleach at 12°** (diluted at 50%).
(9) **Corrector** sold in book shops.
(10) **Acetic acid** available from chemists; rinse with soapy water afterwards **(14)**.
(11) **Ammonia** diluted to $\frac{1}{4}$.
(12) **Hydrogen peroxide** diluted to 20 volumes.
(13) **Concentrated boracic water,** rinse with lukewarm water.
(14) **Soapy water** producing a lasting foam.

**Note:** Special removers based on absorbent earths are available which if used carefully offer the advantage of not leaving rings. These products are active and should be reserved for cases when solvents **2-3-5-7** are recommended; not

advisable for leather and similoids with printed patterns. Always use dry wads and rub in light strokes.

## MAINTENANCE OF EXTERNAL METAL EMBELLISHMENTS

These fittings only require cleaning with water containing a detergent such as **TEEPOL (5·7 to 8·5 cm$^3$ per pint) (10 to 15 cm$^3$ per litre)** preceded and followed by rinsing with a hose.
In the case of the hub caps this washing should be done frequently since they are particularly exposed to mud: if left on for some time this could affect the surface and necessitate repolishing.
After rinsing and drying with chamois we advise one of the following products to keep the metal shiny:

**CAR PLATE BY JOHNSON** *(liquid)*
**ABEL ALU** *(liquid)*
**JON WAX BY JOHNSON** *(paste)*
**ABEL CHROME PROTECTOR** *(paste)*

Allow a few minutes to dry and polish with a dry cloth.

## MAKING GOOD SCRATCHES OR MINOR DAMAGE TO PAINTWORK

Small repairs to the paintwork can easily be done without necessitating re-spraying by using aerosol cans "Soudée SPRAY" These contain air-drying touch-up paint. We have checked the colour and quality of this touch-up paint.

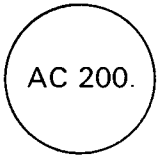
Instructions for use on the cans are simple to follow.
The cans exist in all the CITROEN colours as marked on the tin.

Example:

CITROEN – BLACK – AC 200

To avoid matching errors we have mounted a small round aluminium plate with the paint reference against the front bulkhead under the bonnet close to the right-hand ventilating duct.

Example:



# 3—COMFORT

## FRONT SEATS (fig. 56)

The front seats can be adjusted **forward and backward** by lowering the lever **A** from right to left.
Length of movement: **6¼ inches (16 cm)**.
—If your car has a bench seat this lever is in the middle under the seat: depress to adjust.

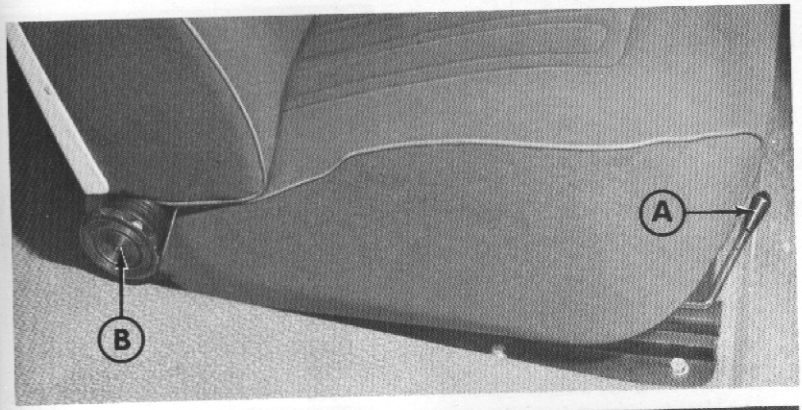
**The angle of the backrest** can be adjusted when seated.
—Turn the knurled knob **B** on the outside of the seat in line with the backrest.
—The backrest will gradually slope backwards until the required inclination is reached.
—To return to the vertical turn the knob back again.

**Couchette position:** first adjust the seats to the extreme forward position, then turn the knob backwards to the stop.

**Height adjustment (optional)** (fig. 57 to 61)
On request your car can be equipped with seats capable of adjustment in height.
To raise or lower the front of the seat push the handle **1** at the bottom front of the seat from right to left and allow the seat to tilt until the pin **2** engages in one of the holes provided; three positions **3** are possible. Adjustment can be made while seated.

**To raise or lower the rear of the seat** push the handle **4** from right to left; it is located behind the backrest under the seat.

56

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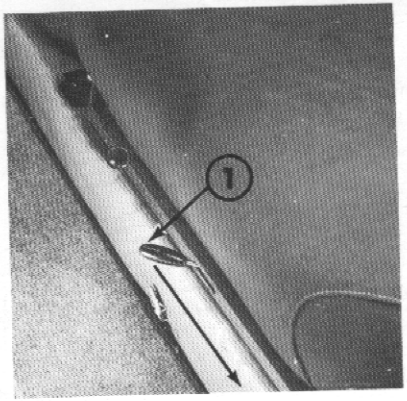



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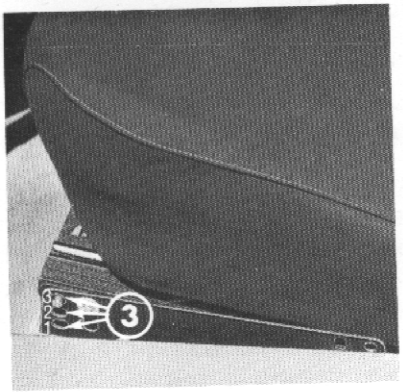


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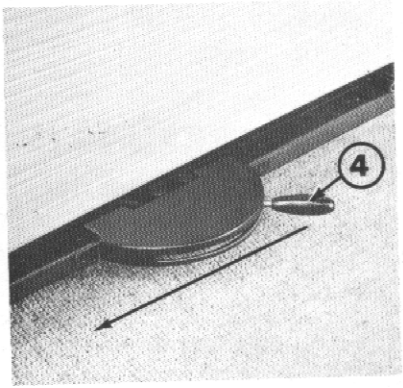


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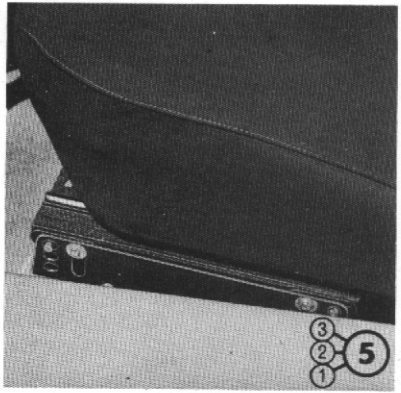


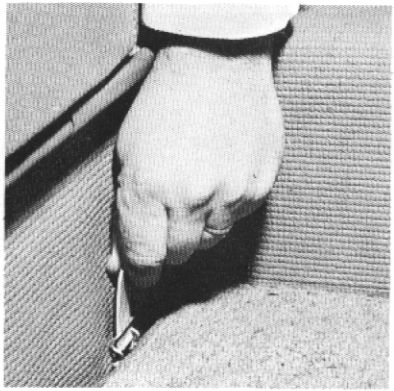

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Raise or lower the rear of the seat until the pin **5** engages in one of the holes provided; three settings are possible.

## SAFETY BELTS

The chassis of our cars is provided with reinforcements and the necessary holes to take the eye-bolts for attaching the safety belts.

**There are 12 attachment points: 6 at the front, 6 at the rear** (only 4 at the rear, below the seat back, for Great Britain).

These points enable two types of belts to be fitted both front and rear: either the single diagonal strap or the combined lap and diagonal shoulder strap at the front; lap straps at the rear for Great Britain.

## ATTACHMENT OF THE FRONT AND REAR CARPETS (fig. 62)

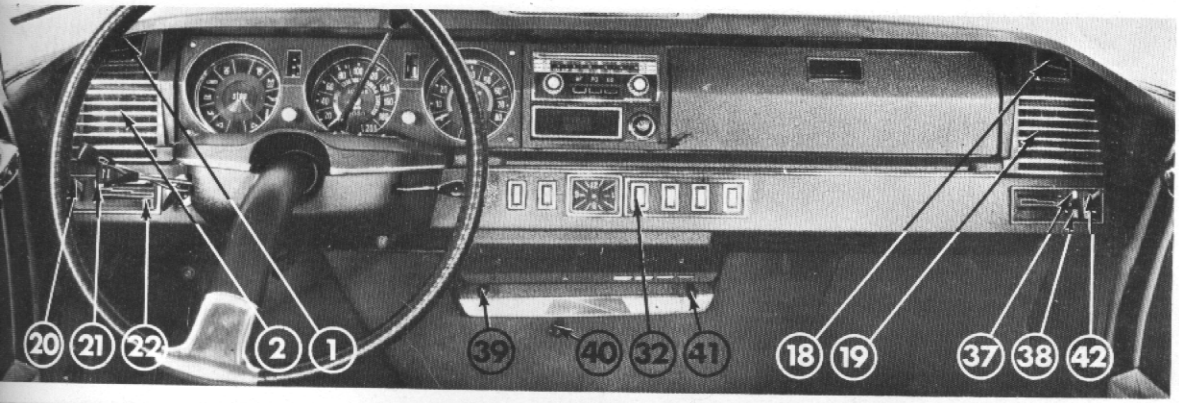
The front and rear carpets are equipped with 3 hooks with short straps; the hooks engage in 3 corresponding springs in the wells of the seats.
To fix the carpet take each strap in turn and offer the hook vertically to the spring, then push down and apply some force to engage.
To remove the carpets pull the straps vertically upwards.
We strongly advise against fitting an additional carpet at the front since it could slide under the brake pedal and prevent its correct operation.

## AIR CONDITIONING

Ventilation and heating air for the interior of the car, also for demisting or defrosting the windscreen and the front door windows is obtained from an inlet between the front bumpers.
Heating and ventilation can be operated together or separately to suit conditions of comfort.
A centrifugal blower ensures that the heating and ventilation remain effective when stopped (engine running) or travelling at low speed.

### HEATING (fig. 63–64)

The temperature of the air can be adjusted by means of the control **40 (39 for the DS FB):**
—Pushed towards the left (red mark) the air temperature is raised to its maximum.
—Pushed towards the right (blue mark) the heating is shut off.
Push the lever **39** fully to the left **(38 for the DS FB)**.
The supply of warm air is controlled by means of the lever **41 (40 for the DS FB)**.
—Pushed to the left it allows maximum supply to the outlets front and rear.
—Pushed to the right it stops the supply.
Heating can be maintained when travelling slowly or even when stopped by allowing the engine to idle and depressing the button **32 (31 for the DS FB)** for starting the blower.
It is not advisable, however, to make use of this facility if the vehicle in front is emitting thick exhaust smoke.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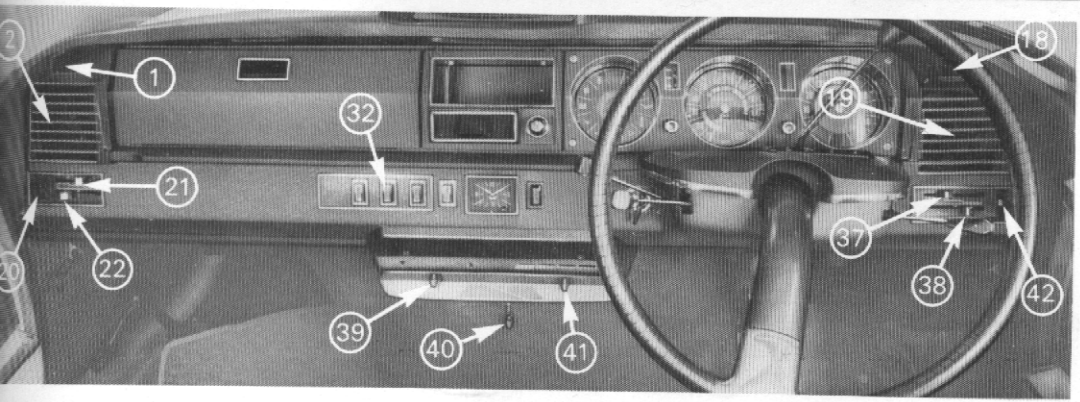
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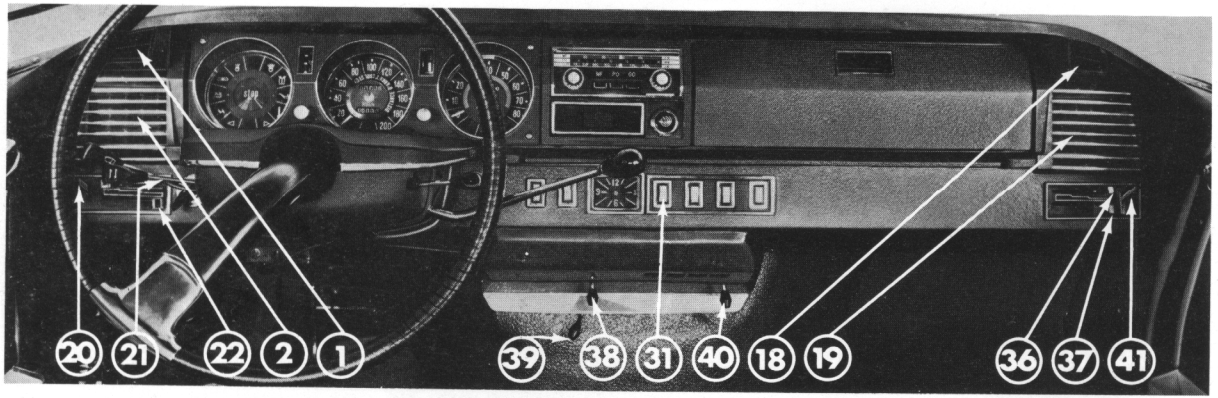
63 R.H.D.

64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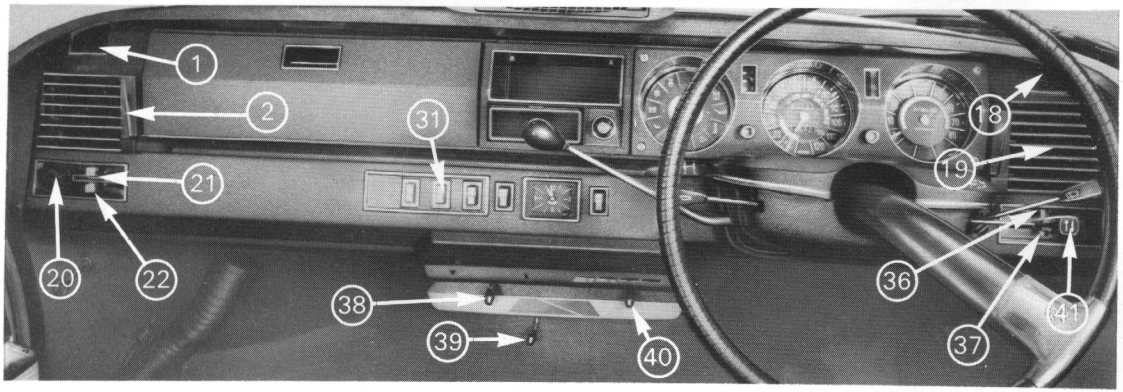
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64 R.H.D

## DEFROSTING/DEMISTING (fig. 63–64)

Proceed as in the case of heating but operate the lever **39 (38 for DS FB)** as well. The lever controls the distribution of the warm air between the heating system and defrosting/demisting:
—Pushed to the right it directs the warm air to the windscreen and the side windows at the front.
—Pushed to the left it cuts off the supply for defrosting/demisting.
—Set to intermediate positions it divides the warm air between the two systems.

## VENTILATION (fig. 63–64)

Two vaned outlets at the ends of the dashboard introduce fresh air to the top of the car interior.
To control the supply of fresh air move the buttons **21** and **37 (36 for DS FB)**:
—to the left for maximum ventilation,
—to the right for no ventilation.
To direct the flow of fresh air move the buttons **20** and **42 (41 for DS FB)**:
—upwards to direct the air towards the roof,
—downwards to direct it towards the face of the driver and front passenger.
This air can also be directed towards the feet of the driver and passenger by moving the levers **22** and **38 (37 for DS FB)**, the action of which is independent of that of the levers **21** and **37 (36 for DS FB)**:

—Pushed to the left: full ventilation.
—Pushed towards the right: no ventilation.

Ventilation along the left of the car can be maintained when travelling slowly or even when stopped by pushing the button **32 (31 for the DS FB)** to start the blower.

This facility should not be used if the vehicle in front is emitting thick exhaust smoke.

Heating and ventilation can operate simultaneously.

**Note:** The inlets of the two ducts between the front bumpers are protected by insect screens: these may eventually become clogged and so reduce the efficiency of the heating and ventilating systems.

Have them cleaned by a CITROEN Agent.

## ADDITIONAL VENTILATION

During hot weather the heating system can be used to supply an additional flow of fresh air into the car via the heating and defrosting/demisting openings.

Push the control **40 (39 for DS FB)** (blue mark) to the right and operate the controls as for heating/defrosting/demisting.

Besides the additional ventilation demisting of the windscreen and of the front side windows is then ensured by fresh air.

## REAR ASHTRAY

This ashtray is located in the backrest of the front seat on the right.
To withdraw the ashtray pull it out completely, depress the locking spring with the thumb and continue pulling.
Once the catch is clear extract by raising the ashtray.

## SUN VIZORS

The two sun vizors can slide longitudinally on their shafts so that they can be adjusted to suit the angle of the sun's rays.
They can also be swung round to cover the top of the side windows.
The vizor on the passenger side is equipped with a mirror.

## LIGHTING OF THE BOOT

The boot light is switched on and off automatically by the opening and closing action of the boot cover (headlights or sidelights switched on).

## ADDITIONAL DOCUMENTATION

Our **"Spare-parts department"** can supply spare-parts catalogues and repair manuals for sale through our Agents and Concessionnaires (these publications are intended mainly for garages rather than for users).

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