

VERY IMPORTANT

LIQUID FOR THE HYDRAULIC SYSTEM

This liquid (green color) is now a liquid of mineral origin. It is absolutely different from all other liquids used previously in Citroens of the U.S. model.

USE ONLY THE GREEN L.H.M. LIQUID, SOLD IN CON-CONTAINERS ON WHICH THE LETTERS"L.H.M." APPEAR. ALL authorized Citroen dealers carry this L.H.M. Liquid.

ALL OTHER LIQUIDS ARE EXTREMELY HARMFUL, particularly those with a synthetic base such as L.H.S.2 and brake fluids, which would quickly and completely destroy the hydraulic system of your car.

PLEASE READ THE GREEN PAGES 17 AND 60 (PAGE 56 FOR DV MODEL) VERY CAREFULLY.

Owner's Guide 1921



Like any other piece of precision-made fine machinery, your Citroën requires certain routine maintenance to insure regular uninterrupted performance. Please take the time to read this guide carefully, as well as the Maintenance Guide you received from your Dealer at time of delivery.

These books have been prepared by Citroën engineers. By following the suggestions and instructions found within and by patronizing Authorized Citroën Dealers, your car will give you thousands of miles of trouble-free service.

All of us at Citroën, and our network of Citroën Authorized Dealers, maintain an interest in you and your car. We are always happy and interested in hearing from Citroën owners, and remain always at your service

Sincerely,
CITROEN CARS CORPORATION

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Specifications and information outlined in this manual were in effect at the time of printing. S. A. André Citroen and/or its Subsidiaries reserve the right to change these specifications and include revisions without prior notice and without responsibility whatsoever.

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 Information covered in this guide applies to the following models:

Model Symbol
DS19M Mechanical shift... DL
DS21M Mechanical shift... DJ
DS21 Hydraulic shift DX

IDENTIFICATION PLATES AND LABELS



fig. A

The car SERIAL NUMBER is stamped on a rectangular plate on the upper right side of the fire wall in the engine compartment. See in fig. A The MOTOR NUMBER is stamped on a rectangular plate on the left side of the engine block.

The MANUFACTURER'S PLATE with the words "Made in France" is mounted on the fire wall at the left side of the engine.

The PAINT REFERENCE NUMBER is stamped on a small round plate next to the serial number plate. This number is a three digit figure preceded by "AC". See fig. A.

Note: You must not remove or change the location of these plates.

Two LABELS are located on the cover of the glove compartment:

- Label testifying conformity to US Federal Standards.
- Label giving vehicle Capacity
 Weight and Tire Pressures recommended by the Manufacturer.
- A third LABEL giving idling specifications is located next to the fuse box. See fig. page 54.

MAJOR SPECIFICATIONS AND SETTINGS

MAIN DIMENCIONS

MAIN DIMENSIONS	
Wheelbase	
Front Track	59"
Rear Track	_ 511/4"
Overall Length	190½"
Overall Width	701/2"
Height (running position)	58"
Unloaded: DS 19 or 21	2,885 IDS.
Loading Capacity: DS 19 or 21	930 lbs.
CAPACITIES	
Cooling System:	
Single Heater	12 U.S. qts.
H/D Heater (optional)	14 U.S. qts.
Fuel Tank	17 U.S. gals.
Engine crankcase: with filter change w/o filter change	51/4 U.S. qts. 5 U.S. qts.
Gear Box	21/4 U.S. qts.
(*) Hydraulic System: (Complete) (Reservoir only)	5½ U.S. qts. 3½ U.S. qts.
(*) Use only Heavy Duty Brai Fluid SAE 70 R3	ke

FUEL ALL MODELS	Premium		
ENGINE	DS 19	DS 21	
Bore	3.386"	3.542"	
Stroke	3.366"	3.366"	
Displacement—cc		2175	
Displacement—cu. in	121.1	132.7	
Compression Ratio	8.75	8.75	
SAE Torque Maxi	110 ft./lbs. at 3500 rpm	128 ft./lbs. at 3000-3500 rpm	
SAE Horse Power	0@5250rpm	109@5500 rpm	
Firing Order (all models)		-3-4-2	
Spark Plugs (*) Engine Symbol		-L-12ED	
DX and DJ		chal 35B	
DL			
Spark Plug gap (Marchal)	0.6 m	m or .024"	
Valve Clearance (Hot):	0.20 m	m or .008"	
Exhaust			
Point of ignition			
Contact breaker gap		nm or .016"	
Cylinder Head Torque: —Tighten when cold:	0.40 11		
1si 2nd		Ft. lbs.	
1.1.011	AMDION D	anark plugg	

(*) For recommended CHAMPION or BOSCH spark plugs, consult your Authorized CITROEN Dealer.

ELECTRICAL SYSTEM ____ 12 Volt

Battery Polarity Negative Post Grounded

ALTERNATOR

Never disconnect the battery or the alternator when the engine is running. The two battery cables must be disconnected before connecting a charger to the battery terminals. Also see important recommendations page 69.

INSTRUMENTS AND CONTROLS

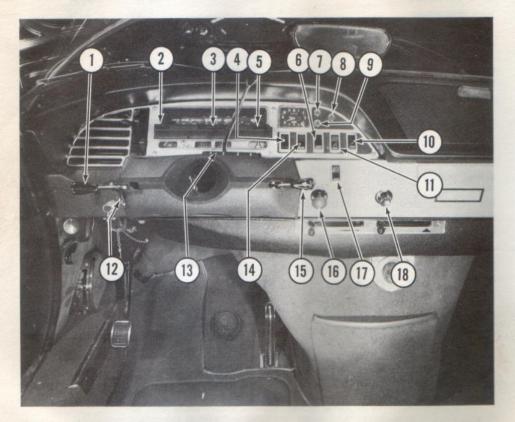


fig. 1

DASHBOARD - Fig. 1

- 1 Directional Lever See page 9
- 2 Turn Signal Indicator
- 3 Hydraulic Pressure Indicator
- 4 Hydraulic Indicator Check Switch – See page 27
- 5 Hazard Warning Signal Indicator
- 6 Hazard Warning Switch See page 9
- 7 Charge Indicator See page 10
- 8 Oil Pressure Indicator See page 10
- 9 High Beam Indicator
- 10 2 Speed Windshield Wiper Switch – See page 10
- 11 Windshield Washer Switch See page 11
- 12 Ignition Switch See page 11
- 13 Starter and Shifting Pattern
- 14 Interior Light Switch
- 15 Horns and Light Switch See page 9
- 16 Choke Control See page 18
- 17 Heater Switch
- 18 Cigar Lighter



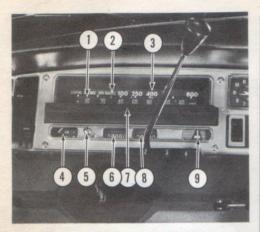
fig. 2

Instrument Light Switch —

This rheostat type switch regulates the cluster light when the Switch 15 fig. 1 is rotated to 1st or 2nd Light position.

AUXILIARY CLUTCH CONTROL - 2 Fig. 2

On cars with hydraulic shift only. When the engine is not running, the clutch is automatically disengaged. The purpose of this control is to suppress the automaticity and to permit clutch engagement when the engine is not running. This is required to start the engine by hand-cranking (see page 23) in case of weak battery or to free up solidified engine oil in very cold weather.

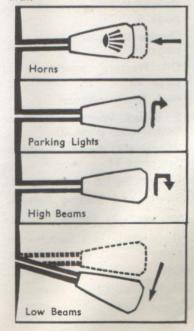


INSTRUMENT PANEL - Fig. 3

- 1 Speedometer Dial
- 2 Stopping Distances See page 25
- 3 Shifting Limit Range See page 22
- 4- Fuel Gauge
- 5 Trip Odometer reset Knob
- 6 Trip Mileage Register
- 7 Hydraulic Pressure Indicator -See page 26
- 8 Odometer (Total Mileage)
- 9 Temperature Gauge See page 16 and 44



To set the clock to correct time, press and turn the button on the dial.



DIRECTIONAL SIGNAL LEVER -

1 Fig. 1

Move lever up to signal a right turn or down to signal a left turn. To cancel a signal, slightly lift the lever toward the steering wheel. The signals can be reversed immediately by moving the lever all the way up or down. In addition to the indicator light 2 fig. 1 an audible clicking sound occurs during the operation of the signal lights.

HORN and HEADLIGHTS SWITCH

— combined unit — 15 Fig. 1 It operates the Horns, the Headlights and serves as a Dimmer switch. The lever can move in 3 different directions:

HORNS - Press lightly to sound

Low or City Horn.

Press fully to sound the High or Country Horns (or the optional Air Horns).

LIGHTS – In position (al

Rotate 1/4 turn to first light position:

Parking lights are ON.

Rotate again 1/4 turn to second light position: High beams are ON. DIMMER SWITCH — When lights are set in 1st or 2nd light position and the Lever is moved DOWN, the Low Beams will go ON.



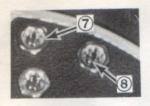
HAZARD WARNING SWITCH -

6 Fig. 1

This signal must be used with reason and as its name says, it serves to warn other drivers of an unusual or hazardous situation.

Put signal ON if you must double park or stop on a highway – or if you are calling for help. When this switch is ON, the front and rear directional lights will intermittently go ON and OFF as well as indicators 2 and 5 fig.1.

DO NOT use this signal when car is in motion unless its speed is too slow due to mechanical failure or any other reason.



CHARGING INDICATOR - 7

It must go out when the engine is running. If it remains on or lights up when the car is driven, the charging circuit must be inspected at the first opportunity.

OIL PRESSURE INDICATOR - 8

This light must go out as soon as engine is running. If it does not or if this warning light appears while the car is being driven, STOP AND SHUT THE ENGINE AT ONCE. Then verify the oil level and replenish if necessary up to the upper notch of the dipstick. See page 14. Should the light remain on when the engine is started again, have the oil circulation checked at once by a CITROEN Dealer before running the engine any longer. The car should not be driven before the condition is corrected as severe damage to the engine may result.



WINDSHIELD WIPER SWITCH -10 Fig. 1.

Press half way to operate the low speed. Use high speed in heavy rain only. Stop the wiping action when blades begin to screech over the dry glass.

NOTE: In the case of replacement of the wiper blades, the new blades must be identical to those originally mounted at the Factory. On the other hand, it is required not to modify the wiper arms positions which are set in conformity with regulations in force in the United States of America.



WINDSHIELD WASHER CONTROL — 11 Fig. 1.

Press on to spray liquid on windshield. Operate with slow wiping speed only.

Water in the container must be clear and free of deposits or residue. You may add to water commonly sold products that prevent deposit formation. If the presence of deposits is noticed, have the container removed and thoroughly rinsed by your CITROEN Dealer.

IGNITION SWITCH - 12 Fig. 1

When the ignition is first turned ON, Indicator lights 7, 8 fig. 1 will light up. This is normal and serves to check the proper condition of the Charging and Oil circuits. If they remain out, the circuits must be checked by a CITROEN Dealer at the first opportunity.

When the car is parked, the glow of the lamps reminds you that the ignition was not cut off.

NOTE: It is unlawful to leave keys in the switch when car is unattended.

600-MILE INSPECTION

After the car has been driven for the first 600 miles, it must receive an inspection which shall be performed by any Authorized CITROEN Dealer. The inspection is free, the Owner must pay only for the new engine oil, gear box, oil and oil filter cartridge. Performance of this inspection is an essential condition of the Warranty and it is the Owner's responsibility to have it made between the first 600 and 1000 miles. Failure to do so will void the warranty.

NOTE: Several operations which are part of the inspection require the engine to be completely cold which extends the time of the work itself. It is therefore suggested that you schedule the inspection well in advance, for instance when you take delivery of your car and also that, whenever possible, you leave your car with the Dealer overnight.

BREAK-IN PERIOD

Under normal conditions you can expect to add oil between oil changes. During the break-in period engine may use slightly more oil. Therefore it is essential that you

know the proper way to check the oil level—See page 16. If oil must be added use MULTIGRADE SAE 10W-30 Oil. There is no necessity of using special lubricants containing graphite or oil concentrates in the engine oil reservoir or by adding to the gasoline during the break-in period, nor thereafter.

It is important that during the first 600 miles, the car be driven very gently so that all moving parts are properly mated together. Avoid fast starts or brutal sudden stops. Avoid driving at constant and sustained speeds for long distances, rather deliberately change speeds on long stretches and down shift on hills before engine begins to labor. Do not drive in 4th gear below 40 mph. During the first 600 miles, do not exceed the recommended speeds. Between 600 and 1200 miles, increase your speed gradually. After 1200 miles, the car may be driven freely.

During the break-in period, do not exceed the following speeds:

1st gear15	mph
2nd gear28	mph
3rd gear42	mph
4th gear60	mph

driving

buckle your seat belts



fig. 4



ENGINE OIL DIPSTICK

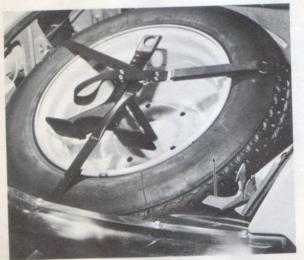


fig. 5



fig. 6

Frequent checking of the Engine Oil Level, the Hydraulic Brake Fluid Level and of the cooling system Water Level are entirely the responsibility of the Driver. They should not only be made while the car is new but for the entire life of the car. Every Driver should become thoroughly familiar with the proper method of performing these checkings.

TO OPEN THE HOOD

Before opening the hood, put parking brake ON and shut the engine OFF.

Release both hood catches by pulling release rings situated under the dashboard on each side of the car (see left side ring in fig. 4). The front part of the hood will then rise slightly. The hood can now be opened completely.

Being in front of the car, raise the safety latch (fig. 5). Reach this latch by inserting your right hand between top of bumper and hood. With your left hand, raise hood completely to head level and with your right hand, disengage the support rod from its rubber grommet. Place rod into notch on the right side of radiator.

To close the hood, release support rod and press it back in place on grommet. Let hood fall from a sufficient height (chest level). Make sure that latches are secured by pressing down each side of hood over them.

CHECKING THE ENGINE OIL

The dipstick is situated on the left side of the engine below carburetor (pull up by ring).

The engine of your car should ALWAYS contain a sufficient quantity of oil in order to lubricate all moving parts. The minimum quantity for this engine is established at 41/4 US quarts—NEVER LESS. The total crankcase capacity including the oil filter is approximately 51/2 US quarts. Refilling without changing the oil filter cartridge requires 5 US quarts.

The amount of oil is verified by its Level in the crankcase shown on tip of Dipstick. Proper level is when oil reaches the top of the notch on the Dipstick or MAXI mark. See page 14.

Capacity difference between top and bottom of notch, or MINI mark, is about 1 US quart. NEVER let the level fall below the MINI mark on the dipstick.

Oil checking should be made often, at least every time you stop for gasoline.

Correct reading requires that:

- The car be on level ground
- The engine be stopped for several minutes to allow oil trapped in upper engine components to return into crankcase
- The dipstick be wiped off between readings.

If necessary, replenish to correct level. Do not overfill. It is always preferable to use the same grade and brand of oil as the one you already have in the engine.

Choice of Oil: Select the viscosity range of your oil to accommodate the extremes of anticipated temperatures.

0° F to 85° FSAE 10 W-30 90° F and aboveSAE 20 W-40 0° F and belowSAE 5 W-20

NOTE:

Sustained speeds above 60 mph should be avoided when using SAE 5W-20 oil.

CHECKING THE WATER LEVEL

The level should be about one inch from the top of the filling neck at all times.

The radiator is fitted with a pressure cap. Therefore, when checking level of a warm engine, use caution before removing cap.

Turn cap counter-clock-wise approximately 1/4 turn. A slight hissing sound will indicate the escape of pressure. Wait until this stops before lifting the cap.

CAUTION: If engine is VERY HOT, which may result, for instance, from a continuous "stop and go" driving in heavy traffic during hot weather, make no attempt to remove the Filler Cap, as you run the risk of being scalded by steam under pressure. Let the engine cool down naturally. Develop the habit of watching the temperature gauge from time to time while driving in order not to allow the needle of the gauge to penetrate and remain in the red Danger zone of the gauge.

LIQUID FOR THE HYDRAULIC SYSTEM

This liquid (green color) is a liquid of Mineral Origin (similar to automatic-transmission-oil). It is absolutely different from all other liquids used to date.

Its height, in the reservoir situated at the side of the radiator, should be comprised between the "mini" and "maxi" references of the transparent level gauge (See Fig. 6).

The reading of this gauge should be done when the car is at its highest position. In order to raise the car to this position; start the motor, place the lever (Fig. 4) in the highest position, accelerate slightly if you wish to shorten the time, and wait until the car stabilizes.

At this moment, check to see if the liquid level remains stable between the "mini" and "maxi" marks of the transparent gauge (see Page 14, Fig. 6).

Should the occasion arise, in order to replenish the level of the liquid, use only the green liquid sold in containers on which the green letters "L.H.M." appear.

.../...

This green L.H.M. fluid is manufactured by the following companies :

> . TOTAL, ANTAR, B.P., CASTROL, ESSO, LOCKHEED, SHELL AND STOP.

All other liquids are prohibited, particularly those of synthetic origin such as L.H.S.2 and all brake fluids, which will rapidly and completely destroy the hydraulic system of your car.

In case of emergency, it is permissible to use AUTOMATIC TRANSMISSION OIL, REF. FLUID A. TYPE A. such as the brands listed below :

ESSO: AQ-ATF-2924 A

. SHELL : DONAX T 6 . SUNOCO : TRANS-MATIC B-10-107

. CITGO : AQ-ATF-1562 A

In such cases, please visit your CITROEN dealer, as quickly as possible, to drain the reservoir and refill it with the liquid recommended.

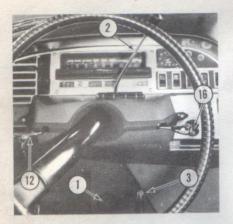


fig. 7

Be sure the Gear Selector Lever 2 is in Neutral (position between the 1st and 2nd gear)

Insert the key in the Ignition Switch 12 and turn clockwise.

The ignition is now ON.

When the engine is WARM:

Press the Accelerator Pedal 3 all the way down. Do not use the choke control. Start the engine by moving the gear selector lever to the full "S" position. If the engine does not start after 3 or 4 seconds, wait a moment, then repeat the same operation.

STARTING WITH HYDRAULIC SHIFT

As soon as the engine starts, release the Accelerator Pedal.

When the engine is COLD:

Pull the Choke Control 16 to full choke position (all the way out) and depress the Service Brake Pedal 1 with your right foot. Move the Gear Selector Lever to "S" or start position until the engine starts running.

If the engine does not start immediately, wait a few seconds and repeat the operation. Do not release the brake until the engine has started.

In VERY COLD weather:

The engine may stall when the brake is released. If so, repeat the previous operation. Keep the service brake applied until the engine is warm enough to eliminate stalling when the brake is released. Push the choke control half way in, then all the way in.

The engine can be started by cranking—See page 23.

IMPORTANT

Before driving off, always wait a few moments to allow the car to stabilize in normal position.

Do not race the engine especially in cold weather after it has started and do not drive at high rate of speed until engine is thoroughly warmed up.

SHIFTING GEARS — Hydraulic Shift.

The clutch is hydraulically operated and is controlled automatically. There is no clutch pedal.

To shift gears, simply move the selector lever to the desired position. The shifting pattern is indicated on a rubber plate attached to the dash at the base of the selector lever. The lever can be moved through either one of the three parallel planes.

It can also be moved forward from the NEUTRAL position to 1st gear (1) and rearward from 1st gear to 2nd gear through neutral. The 1st and reverse (R) gears are in the line furthest from the Driver.

Second, third and fourth gears are in the line nearest to the Driver.

To shift from 1st to reverse (R), push the lever toward the wind-shield, and pass the checkpoint before moving it completely to the right.

When moving the lever from one gear to another, a detent catch can be felt, indicating that the lever is in correct position for a particular gear.

When up-shifting from 1st to 2nd, 3rd and 4th, release the accelerator pedal momentarily between shifts. When shifting from 1st to 2nd, do not release the accelerator pedal until the lever is at "neutral". When down-shifting from 4th to 3rd gear, release the foot from accelerator only slightly.

When up-shifting, the car may have a tendency to shoot ahead at each gear range. This is due to over-acceleration. To permit the car to drive smoothly, gradually apply pressure to the accelerator after each shift.

When a car is standing with the engine running, do not shift if the choke control is all the way out. The engine will be idling at an accelerated rate, causing brutal starts.

CAUTION: When down-shifting from 1st to reverse, stop the car motion before completing the shift.

NOTE: It may exceptionally happen during the breaking in period that after you engage the first gear and accelerate, the car will not move. In that case, move the gear selector lever to Neutral position and back to 1st or to 2nd gear and accelerate again.

STARTING ON A HILL

Release the parking brake as previously described, but keep the car stationary with the left foot on the main brake. Shift into gear and gradually accelerate while decreasing the pressure from the main brake.

STOPPING the DS with Hydraulic Shift

To stop the Car apply the Service Brake only. Do not use the Parking brake. Application of the Service Brake, in addition to bringing the car to a halt permits the clutching system to disengage automatically.

PARKING

When parking or driving in congested city traffic, the driver is frequently required to move the car within short spaces or tight areas. In such circumstances, driving strain is greatly relieved due to a clutching system designed to permit movement of the car in 1st or reverse at a very low speed, eliminating the use of the accelerator. Car motion is stopped or resumed by simply applying or releasing the brakes lightly.

The car must always be completely stopped before shifting from 1st to reverse and vice versa.

CAUTION: When parking the car on a hill, it is imperative that the gear selector lever be returned to the Neutral position.

STARTING With Mechanical Shift

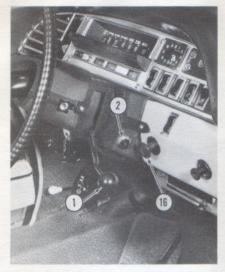


fig. 8

Be sure that the Gear Shift Lever 1 is in NEUTRAL position and turn the Ignition Switch ON.

When engine is WARM: press the accelerator pedal completely down without using choke control, then press starter button 2. If engine does not start at the first attempt, wait three to five seconds (keeping

the foot on the accelerator pedal), then press starter button again.

As soon as engine has started, release the accelerator pedal.

Before driving off, always let the engine run for a few moments. This will allow the car to stabilize in normal driving position.

When engine is COLD: pull the choke control knob 16 completely OUT.

Depress the clutch pedal and press the starter button 2 without touching the accelerator pedal.

If the engine does not start at the first attempt, wait three to five seconds and start again. As soon as the engine has started, progressively push the choke half way IN. Leave it in that position until the engine idles smoothly, then push the choke IN completely.

Never overuse the choke and do not race the engine when cold. In very cold weather, let the engine idle for a few minutes before driving off.

SHIFTING-with Mechanical Shift

The Gear Shift Lever can be moved in three parallel planes as shown on diagram. In the plane nearest to you, it engages the 1st and 2nd gears. In the intermediate plane it controls the 3rd and 4th gears. The reverse gear is the farthest.

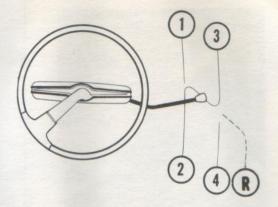
Always bring the car to a complete stop before shifting from 1st to Reverse and vice-versa.

To complete a shift:
Depress the Clutch Pedal completely. Move the Shift Lever from 1st through 4th gear as car gains speed. Release the Clutch Pedal progressively and simultaneously accelerate the engine after completing each shift.

SPEED SHIFTING RANGE both shifts

After the car has been broken-in the most economical driving speeds are:

1st	
2nd	 34 mph
3rd	 50 mph
4th	 70 mph



MAXIMUM PERMISSIBLE SPEEDS both shifts

The limits of the range corresponding to 1st, 2nd and 3rd gear are indexed on the speedometer dial by orange triangles. See 3 fig. 3. These limits are not to be exceeded since they represent the Maximum Permissible Speed for each gear.

1st	 25 mph
2nd	 50 mph
3rd	 75 mph
4th	 _

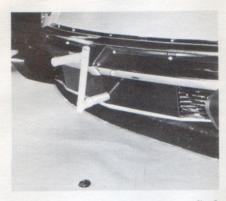


fig. 9

TO START WITH CRANK HANDLE

The crank handle may be used in cold weather to free up the engine or to start engine when battery is too weak

The crank handle and its extension are stowed under the spare wheel. Insert the extension through the guide under front bumper until it engages the gear box spindle. Do not forget to put the ignition ON. Be sure Gear Shift is in Neutral and Parking Brake is on.

HYDRAULIC SHIFT

Before cranking the engine, push the lever 2 fig. 2 forward, then lock it in this position by pushing upward. In this position, the engine can be hand-cranked. As soon as the engine starts, return the lever to its normal position before shifting into gear.

IMPORTANT

No attempt should ever be made to start the car with hydraulic shift by pushing the car or while coasting downhill as severe damage to transmission may result.

NOTE:

Although it is not advisable to use the choke excessively, it is permissible to run the engine with choke control half opened to facilitate maneuvering while parking or to raise car when changing a wheel.

NOTE:

When the car has been garaged for a long time, or if gasoline tank has been emptied, prime the fuel pump by turning the starter on 3 or 4 times during 5 seconds each time but without touching the ignition switch nor the choke.

distances required to stop a car

CITROEN wishes to bring the information that follows for the sake of safety, and especially to the attention of drivers who drive in areas where speed is not limited.

The total distance required to stop a car is actually the sum of two distances. The first distance is the one covered by the car before the brakes are applied, the second during the time while the brakes are operative. The first distance, or time, is function of individual reflexes. It averages approximately $\frac{3}{4}$ of a second. On the other hand, decelerations provided by the best of the braking systems can only tend towards a limit determined by the grip of tires on the road. Remember also that for a deceleration, as high as it may be, the distance covered by the car during braking time increases considerably with the speed. For instance, it will be 34 feet at 25 mph and 540 feet at 100 mph. Thus, while the speed increased only 4 times, the stopping distance increased 16 times.

On the chart below are shown the **total** stopping distances as they are related to the speed of the car.

SPEED OF THE CAR	25 mph	50 mph	75 mph	100 mph	112 mph
Distance covered during reflex time	27′	55′	82'	110′	123′
Distance covered during braking time	34′	133′	305′	540′	682'
Total stopping distance	61′	188′	387′	650′	805′

The stopping distances shown above are approximate. They are valid when the following conditions are met: brakes and tires in perfect condition, the car is not overloaded, the road is dry with good traction surface . . . These distances may be considerably increased on wet and slippery roads.

BRAKES

The braking system is similar on cars with Hydraulic and Mechanical Shifts. The difference is that on cars with Hydraulic Shift the Parking Brake is foot operated, whereas on cars with Mechanical Shift it is hand operated.

SERVICE BRAKE - Both Shifts

The braking action is proportional to the pressure of the foot on the pedal 1 fig. 10. This brake is power assisted and even in case of sudden stops, relatively little pressure is required to bring the car to a halt. Before driving on the open road for the first time, it is advisable to test the brakes to become familiar with their response and power.

EMERGENCY BRAKE and BRAKE SECURITY CONTROL — Both Shifts

A red Indicator 7 fig. 3 serves as a warning when the hydraulic pressure controlling either the front or the rear brake circuits becomes insufficient.

If the light appears after switching the ignition on, it is normal. Start the engine. After a few moments, the light will go out. Wait until it goes out before driving.

Should light appear while driving, stop the car immediately. There is ample reserve pressure to do so under all circumstances. Without delay, have your car inspected by your nearest CITROEN Dealer.

If the circumstances make driving mandatory, do so at speeds below 20 mph using the Parking Brake only.



In addition, a check switch enables you to verify at any moment the good condition of the warning indicator. To do this, press on switch 4 fig. 1. the Indicator must light up. On DS 21 (DX and DJ), this warning light is also wired to the pads of the front disc brakes. Consequently, if these pads wear off excessively, this red warning light will also light up and stay lit.

PARKING BRAKE — Hydraulic shift only

Contrary to the main brake, which requires little effort, the emergency brake must be applied strongly. Pressure applied to the foot pedal operates the front brakes only. It has two functions:

It serves as an emergency brake and as a parking brake, both controlled by the same KNOB 3.

In the illustration, the knob 3 is in "parking" position. The foot pedal can only be pushed down; it cannot return to normal position. The front brakes are applied and locked proportionately to the effort exerted on pedal 2. To release the foot pedal (thus unlocking the front brakes) pull the knob and move it to the NOTCH 5. The foot pedal can now be moved up and down freely and applied repeatedly.

As an added precautionary feature a safety LOCK 4 is incorporated to prevent accidental release of the control KNOB 3 from the "parking" position. The lock is operated from right to left and vice versa. When it is positioned to the right, the control knob cannot be released until the lock is moved to the left. When stopping or parking on a hill, it is essential to press the foot pedal down very firmly.

The control knob should always be in NOTCH 5 when the car is being driven.

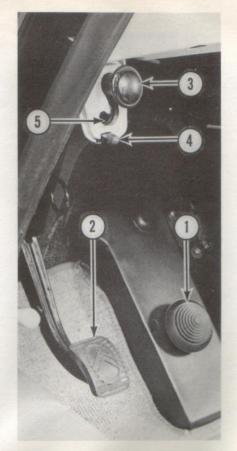


fig. 10

BRAKES - Car with Mechanical Shift

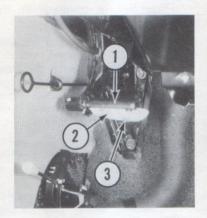


fig. 11

The Service Brake, the Emergency Brake and Brake Security Control are the same as on cars with Hydraulic Shift

PARKING BRAKE - Fig. 11

The Parking Brake operates on the front wheels only. To apply the parking brake, pull HANDLE 1. It will lock automatically. To release the brake, pull the handle slightly, then squeeze the RELEASE TRIGGER 2 and push the brake handle all the way forward. The brake handle may be locked in the parking position if it is so desired. A SAFETY LOCK 3 when moved ½ turn prevents the operation of the release trigger 2.

When parking on a hill, it is essential that the parking brake be applied firmly.

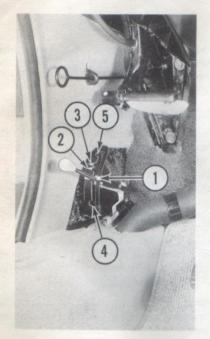


fig. 12

ROAD CLEARANCE ADJUSTMENT -

Fig. 12

When the Height Control Lever is in slot 1 (as illustrated) the car is at its normal driving height.

Driving comfort is greatest in this normal position.

In order to facilitate driving on difficult roads; snow, ruts, sand, etc. . . , it is advisable to increase the road clearance of the car. The height control lever serves this purpose. When it is set in slots 2 or 3, the road clearance is increased accordingly.

In addition, the lever can be set in two extreme positions 4 and 5 which are used to jacking the car up or changing a wheel. See page 34. In position 4 (the lowest), the car CANNOT be driven under any circumstances.

However, in position 5 (the highest), it is permissible to drive at slow speed to clear road obstacles such as snow-drifts, flooded roads, etc. In such circumstances, drive with care, and only far enough to clear the obstacle, then reset the lever to the normal driving position or to the height the condition of the road may require.

TIRES

Your automobile is fitted with MICHELIN "XH" Radial type tires as exclusive Original Equipment. It is the most appropriate tire for this CITROEN model.

In case of replacement, always replace one "XH" tire by another "XH" tire of identical specifications. Never mount a different type tire on the same axle with MICHELIN "XH" including MICHELIN "X" or other Radial Type tire.

TIRE SIZE

180×15 (180×380) MICHELIN "XH"

VEHICLE CAPACITY

WEIGHT:930 lbs.

VEHICLE DESIGNATED

SEAT CAPACITY4-2 in Front

2 in Rear

INFLATION PRESSURES—Measured when tires are **cold**.

Front	30	psi
Rear	28	psi
Spare	32	psi(*

(*)Deflate to proper pressure depending on wheel to be replaced.

TIRE CARE

It is important to check the tire pressure frequently and before the car has been driven more than one mile at moderate speed, i.e. while tires are still COLD.

Correct tire pressure not only will insure even wear-off of the tires, but also provide a better and safer ride.

While servicing your car, have the tire inspected for cuts and bruises and if uneven wear is noticed, switch the tires.

A good practice is to switch tires regularly every 10,000 miles or more often if necessary.

Cross switch wheels and tires per following pattern:

Spare to Right Front
Right Front to Left Rear
Left Rear to Right Rear
Right Rear to Left Front
Left Front to Spare.

During this operation, have the wheels checked for proper balance. Always have the wheel balance checked after a tire has been repaired.

BATTERY

The battery requires little attention. However, this attention is essential. This is the Owner's responsibility. Distilled water should be added at such intervals as will insure the plates being covered at all times. Never add acid.

Hydrometer readings should be made by your Dealer periodically.

To prevent corrosion of battery terminals and connections apply a coating of vaseline over the battery posts, making sure the terminals are properly tightened. If corrosion occurs, clean posts and terminals with a soda solution before applying the vaseline. When using the soda solution be sure the cell caps are in place to prevent the soda from entering the cells. Flush off well with water and dry the battery.

In the WINTER the best protection is to keep the battery fully charged. A normally charged battery will withstand a temperature of 20°F below zero. A weak battery may burst. It cannot be repaired. If water must be added during freezing weather do it just before the car is to be driven.

NOTE: The Battery is warrantied by its Manufacturer who issued a separate Guarantee Certificate which is given with every new car to the Original Owner. Your automobile is fitted with MICHELIN "XAs" Radial type tires as exclusive Original Equipment. It is the most appropriate tire for this CITROEN model.

In case of replacement, always replace one "XAs" tire by another "XAs" tire of identical specifications. Never mount a different type tire on the same axle with MICHELIN "XAs" including MICHELIN "X" or other Radial type tire.

Because of the structural characteristics and tread design, MICHELIN "XAs" tires must be mounted according to special instruction indicated on the side wall. Each wall is marked according to its designated position either "OUTER SIDE" or "INNER SIDE". These instructions must be imperatively respected.

TIRE SIZE
180x15 (180x380) MICHELIN "XAs"
VEHICLE CAPACITY

VEHICLE DESIGNATED
SEAT CAPACITY4-2 in Front

2 in Rear

WEIGHT: 930 lbs.

INFLATION PRESSURES — Measured when tires are **cold**.

Front	30	psi
Rear	27	psi
Spare	33	psi(*)

(*)Deflate to proper pressure depending on wheel to be replaced.

TIRE CARE:

It is important to check the tire pressure frequently and before the car has been driven more than one mile at moderate speed, i.e. while tires are still COLD.

Correct tire pressure not only will insure even wear-off of the tires, but also provide a better and safer ride.

While servicing your car, have the tires inspected for cuts and bruises and if uneven wear is noticed, switch the tires.

A good practice is to switch tires regularly every 10,000 miles or more often if necessary.

Cross switch wheels and tires per following pattern:

Spare to Right Front Right Front to Left Rear Left Rear to Right Rear Right Rear to Left Front Left Front to Spare.

During this operation, have the wheels checked for proper balance. Always have the wheel balance checked after a tire has been repaired.

BATTERY

The battery requires little attention. However, this attention is essential. This is the Owner's responsibility. Distilled water should be added at such intervals as will insure the plates being covered at all times. Never add acid.

Hydrometer readings should be made by your Dealer periodically.

To prevent corrosion of battery terminals and connections apply a coating of vaseline over the battery posts, making sure the terminals are properly tightened. If corrosion occurs, clean posts and terminals with a soda solution before applying the vaseline. When using the soda solution be sure the cell caps are in place to prevent the soda from entering the cells. Flush off well with water and dry the battery.

In the WINTER the best protection is to keep the battery fully charged. A normally charged battery will withstand a temperature of 20°F below zero. A weak battery may burst. It cannot be repaired. If water must be added during freezing weather do it just before the car is to be driven.

NOTE: The Battery is warrantied by its Manufacturer who issued a separate Guarantee Certificate which is given with every new car to the Original Owner.

features and comfort

POWER JACKING — CHANGING A WHEEL

The whole operation should take no more than 10 to 15 minutes. MICHELIN "XAs" tires give extra long service and are seldom subject to puncture. Nevertheless remember in case of such emergency, always drive to a safe area out of the traffic path. Put the hazard warning signal 6 fig. 1 ON.

From engine compartment, remove spare wheel, stand with pin and crank handle with extension. Have the engine idle during the entire operation. If the rear wheel is to be replaced, remove the rear fender. Loosen the fender bolt with the crank handle as shown in fig. 15. Then, with a slight lift, pull the fender to the rear see fig. 16.



fig. 15

Procedure for removing wheel

- Set emergency brake firmly and lock it.
- Set height control lever to top position 5 fig. 12. Let car rise and stabilize at upper lever.
- Remove hub cap with hook on stand pin by prying fig. 17.
- Loosen the five wheel nuts without removing them at this point.
 You may use crank extension as a lever. See fig. 18.
- Hook stand on stud located about middle of car side body member same side as wheel to be changed. Be sure the stand extension eye is well engaged over the stud.
- Insert pin in hole through stand and stand extension. Use hole before last on horizontal surface fig. 19.
- Move down the height control lever to lowest position. Car will then descend, tilt on opposite side and wheels retract from ground.
- Unscrew wheel nuts completely.
 Remove the wheel.



fig. 16



fig. 17



fig. 18



fig. 19



fig. 20



fig. 21

Installing new wheel

- Insert crank extension into the wheel center hole and present wheel on hub as shown in fig.
 20. Install the five nuts without tightening them at this point.
- Raise car to high position slot
 fig. 12 and remove stand.
- Lower car to normal driving position (slot indexed with white mark)
- Tighten wheel nuts with crank handle (do not use the extension)
- Install the hub cap respecting the valve location. To do this, place hub springs on each side of the valve hole in the rim and push hub spring with the stand pin and hook, fig. 21.
- Replace tools and wheel in engine compartment. Secure them firmly. See fig. 5.
- Make sure hood is well locked after that operation and have the tire repaired at the first opportunity.

NOTE: We recommend that you ask your CITROEN Dealer to demonstrate this procedure.

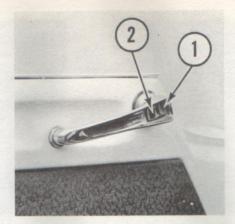


fig. 22

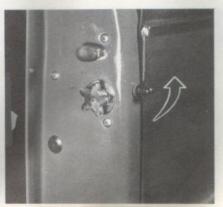


fig. 23

KEYS

Two keys are supplied with the car. The code number of the lock is stamped on each key. It is important to have on record this four digit number. Should you decide to order additional keys, always specify the code number. Carry keys separately.

Never leave the keys in an unattended car.

To free frozen door locks in very cold weather use a cigarette lighter or match to heat the shank of the key before inserting in the lock. If the lock still cannot be turned, continue to heat the head of the key until the tumblers defrost completely.

DOORS - Fig. 22.

To open the door from inside, grasp the handle and press on trigger 1 while pressing the door open with the forearm. When fully opened the doors are held by a retractable door check.

To lock the doors from outside.

Trigger 1 also serves the purpose of locking the doors. To do this move it toward the front until a click is heard.

Both the front doors must be locked from outside with the key.

To unlock the trigger 1 press on CATCH 2.

To lock the doors from inside.

Both the rear doors cannot be opened from outside once they are locked with trigger 1 fig. 22, but the front doors can be opened as explained before. If you wish to secure the front doors while sitting inside the car, raise the lever fig. 23. Once this is done, the front doors cannot be opened from outside NOT EVEN WITH A KEY.

CARPETS

To remove the carpets, simply lift the tabs from the clips.

Particularly avoid the use of floor mats on the driver side as they may interfere with proper operation of the brake pedal.

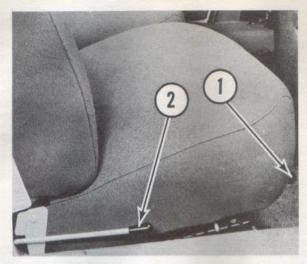


fig. 24

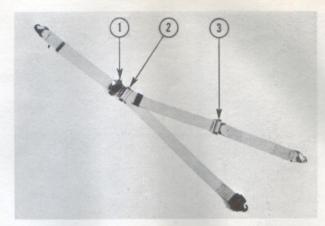
FRONT SEATS

Both front seats can be individually adjusted for best posture and comfortable driving. They can also (when equipped) be converted into beds.

To bring a seat cushion forward or backward move from right to left the latching LEVER 1. Then move the seat to the desired position and release the lever to lock the seat on its tracks. To change the back rest angle, simply lift the side lever while leaning backward or forward. Release the lever to lock the back rest in the desired position.

To convert a seat into a bed, first move it completely forward. Then lift LEVER 2 and tilt the back rest all the way down.

NOTE: On cars with front bench seat, the fore and aft adjustment lever is in the middle of the bench.



SEAT BELTS

In compliance with Federal Standards 208 and 210, every US model "D" type is equipped with two Type II Safety Belts in front (lap and harness) and two Type I Safety Belts in rear (lap).

We strongly recommend that you and your passengers fasten these belts before you start driving. It has been proven that the use of safety belts contributes to safety and saves lives.

Prior to fastening belts, make sure that the seat is properly adjusted for driving comfort.

Make sure the straps are not twisted and the buckle is facing upward when latched. Three self adjusting FASTENERS are shown above.

To adjust straps, squeeze both side knobs of the fastener and slide the strap to correct length over the roller.

To release a belt, simply lift the upper section of the buckle.

NOTE: If a part of a seat belt is lost or worn out, it is necessary in order to conform with Safety Regulations to have it replaced by another new part of the same specifications as the original one, answering to requirements of Federal Standard No. 209. Ask your CITROEN Dealer for replacement.

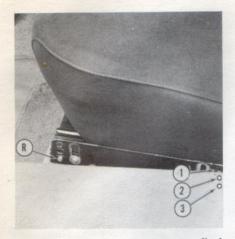


fig. A

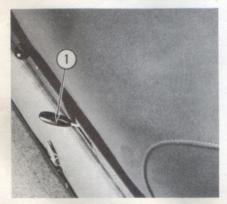


fig. B



fig. C

FRONT SEAT HEIGHT ADJUSTMENT

— Optional

When the car is so equipped, the seat rails have 3 locating Holes in front and in the back, see fig. A. The adjustment of the seat height or angle is made possible by moving the seat support RODS R from one hole to another. To change the seat height first, move LEVER 1 fig. B to the left, then raise or lower the front of the seat until ROD R interlocks in the desired position. Proceed the same way with LEVER 2 Fig. C located behind the seat.

NOTE: Obviously the seat height adjustment is directly related to the height of the DRIVER. Consequently, extreme positions of the driver's seat should be avoided if the Driver's visibility is being jeopardized in these positions.

SUN VISORS

Both sun visors slide on their spindles and can be moved according to the direction and angle of the sunlight. They also can be swung around to mask the top of the door windows.

REAR VIEW MIRROR

The rear view mirror is of the Day and Night type. It can be set in either of the two positions without changing its angle. To avoid headlight glare from the rear, simply tilt the lower edge to the "night" position.

INTERIOR LIGHTS

The switch 14 fig. 1 controls the interior lights. However the lights will go on automatically when either front door is opened.

ASH TRAYS

To empty a tray pull it completely out and lift while still pressing on the spring catch.

TRUNK LIGHT

This light will automatically go ON when the trunk lid is open and when the light switch 15 fig. 1 is in 1st or 2nd light position.

CIGAR LIGHTER

To operate, push IN completely. Wait a few moments until it springs back when ready to use.

VENTILATION — HEATING — DEFROSTING

Your Citroen is provided with two distinct air control systems. One is used for fresh air ventilation, the other for heating and/or defrosting while the car is driven.

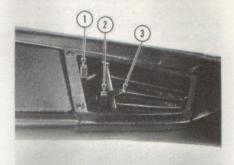
If the car is stopped or is being driven at a low rate of speed, the ventilation or heating can be maintained by using the electric fan 5 (photo on page 43). The ventilation and heating systems may be used separately or in combination according to the comfort desired.

VENTILATION

Fresh air is admitted to the interior of the car through a vent situated at each end of the dashboard. The air stream is supplied to the vents through ducts incorporated in the front bumpers.

Three control levers at each vent enable the driver or the front passenger to regulate the incoming air volume at will. The vents may be used separately or together.

Lever 1 controls a flow of air toward the floor of the car. When the lever is all the way down, this air flow is shut off. As the lever



is raised, the air flow volume increases.

Lever 2 controls an air flow directed toward the upperhalf of the interior. When the lever is at its lowest position, this air stream is shut off. As the lever is raised, the incoming volume of air increases. Lever 3 operates a deflector which diverts the air stream controlled by lever 2. In warm weather, this may be utilized to fan the face of the Driver or front Passenger.

TO OPERATE THE HEATER

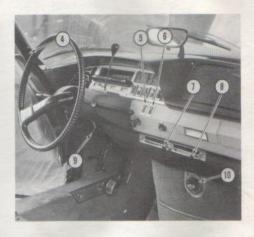
Turn the heater valve 10 to desired temperature. It regulates the volume of hot water flowing through the heating system. When the pointer of the valve is at the red triangle, the heat is the highest. When it is at the blue triangle, the valve is closed.

Move the lever 8 to the left. Move the lever 7 to the left according to the heat desired.

This lever operates a shutter flap which controls the volume of warm air entering the interior. When the lever is at the extreme right, the flap is closed, there is no heat. As the lever is gradually moved to the left, the incoming volume of warm air increases.

TO OPERATE THE DEFROSTER

Proceed the same way as for the heating, but, in addition, use the lever 8. The lever 8 controls a shutter which diverts air from the heater to the defroster. For maximum defrosting, the lever must be at the right (upward triangle). At the extreme left (downward tri-



angle), the defrosting outlets are closed and the air is used for heating only. In all intermediary positions, it divides the hot air between the heating and the defrosting. The defrosting action can be maintained when the car is not being driven by using the electric fan 5.

At each end of the dashboard, additional outlets 4 serve to defrost or demist the front door windows.

ADDITIONAL VENTILATION

If additional ventilation is desired in Summer time, the heater ducts can be used to supplement the ventilating outlets.

Proceed as described above, but make sure to close the valve 10.

NOTE: If there is a noticeable decrease of heating or ventilation efficiency, have an Authorized CITROEN Dealer check cleanliness of the ducts located at the end of the ventilation tubes.

HEAVY DUTY HEATERS

Two optional Heating Systems include:

- A shutter for air intake controlled by a Pull Chain 9 fig. page 43.
- An additional heating unit controlled by a switch 6. It distributes hot air to the rear compartment of the car and to the rear window defrosting outlets.

TO OPERATE THE PULL CHAIN

In very cold weather, the interior, heating may be amplified by regulating the front shutter with the pull chain 9.

When the chain is all the way pulled in, the shutter is closed, reducing the volume of air supplied by the engine fan. This raises the engine cooling system temperature



and heat efficiency. The temperature gauge dial has a white scale which is used as an indicator for controlling the shutter opening. If the gauge needle tends to move toward the right end of the scale, the shutter must be opened. Release the pull chain to permit additional air volume into the engine compartment. Control the shutter so that the needle will NOT be pointing to the right red area of the scale.



ELECTRIC REAR WINDOW DEFROSTER — Optional

Can function only if the Ignition Switch is ON. Press the control switch 1 in, the Green Indicator 2 will light up immediately and remain lit as long as the heating of the rear window lasts.

If you notice that there is no defrosting or demisting action when this Defroster is in operation, consult your nearest CITROEN Dealer as soon as possible.

To stop the Defroster, push the Switch 1, IN, the green indicator 2 will go off.

NOTE: to clean the Rear Window, do not use any products with acid or ammonia base. Use water or regular window spray.

TRAILER HITCH

A trailer hitch may be installed by your CITROEN Dealer. Trailer hitches for the Sedan and Station Wagon are of different types.

The maximum permissible weight of trailers (when fully loaded) for either model of the car is 2,750 lbs. the trailer being equipped with Inertia Braking System.

When the car is pulling a trailer the tire pressure for the REAR WHEELS should be increased to 30 psi (tires cold).

TOOL KIT

A tool kit is provided with each new car as standard equipment. It contains the following pieces:

- screwdriver
- 1 pair pliers
- 1 spark plug wrench
- l engine and gear box drain plug wrench
- 3 box wrenches

ACCESSORY TERMINAL

If additional 12 volt electrical accessories are to be installed such as radio, fog lamps, back-up lights, etc., the serviceman should be advised to use the special terminal provided for this purpose behind the ashtray. This terminal is suitable for a 10 amp. current draw.

ACCESSORY INSTALLATION

It is important to remember, that in order to protect normal engine operation, no accessories of any kind should ever be installed inside the engine ventilation shroud, or in front of the brake cooling ducts, or in front of the grills on the license plate between rubber bumperets.

Iubrication and maintenance

Periodic Maintenance and scheduled inspections as outlined in the Warranty and Maintenance Booklet are of major importance.

This booklet is provided with every new vehicle.

CHOICE OF LUBRICANTS

Be sure the oil you use is of the right type and of a quality brand name. Do not mix different types of oils. Do not use any additives with these oils without the advice of your Authorized CITROEN Dealer.



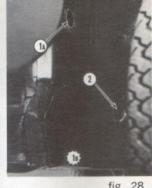
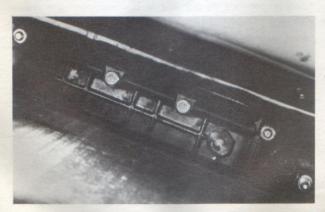




fig. 27

fig. 28

fig. 29



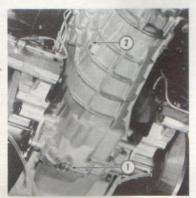


fig. 30

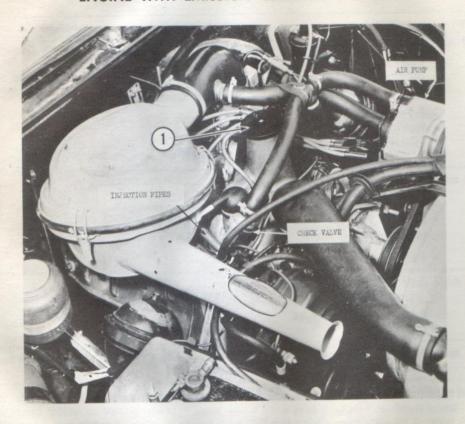
fig. 31

LUBRICATION CHART

Every	Lubricate	Lubricant	Remarks	
3000 mi.	- Drive Shaft 1 fig. 27	Chassis Grease	Moderate pressure is required.	
- Upper and Lower Anti-Roll bar knuckles		Chassis Grease	Remove dust caps. The lower Grease Fitting 1B is reached	
	- Anti-roll bar bearings 2 fig. 28	Chassis Grease) through the underpan.	
	- Drain Engine Oil	-		
	filter element change: 5½ qts. without element change: 5 qts.	SAE 10W-30	See page 52	
6000 mi	- Replace Oil Filter Element	_	See page 52	
-	- Check Gear Box Level 2 fig. 31	-	_	
-	- Fan Shaft Bearing	Engine Oil	_	
	Distributor Shaft:	Very Light Oil	1 or 2 drops on Felt pad.	
-	- Clean Hydraulic Filter	-	See page 62	
12000 mi	Drain Gear Box Oil1 fig. 31 capacity 2 ¹ / ₄ qts.	SAE 90 EP	See page 52	
	Lubricate Rear Suspension Cylinder Ball	Wheel Bearing Grease	These operations to be carried out correctly must be performed by an Authorized CITROEN Dealer.	
18000 mi. –	Drain Hydraulic System Fluid	SAE 70 R3 Brake Fluid		

special conditions: The given lubrication schedule is recommended for NORMAL suburban driving. If "Stop and Go" driving prevails or if the car is being driven in dusty areas, these intervals must be reduced. Consult your CITROEN Dealer. If the yearly mileage is less than 3000 miles perform the above lubrication once a year at the minimum.

ENGINE WITH EMISSION CONTROL SYSTEM



MAINTENANCE

FOR 1968 CARS BUILT TO U. S. SPECIFICATIONS WITH CLOSED CRANKCASE VENTILATION AND EXHAUST EMISSION CONTROL WITH AIR INJECTION.

CARBURETOR	DX	DJ	DL
Weber 2 barrel 28 x 36	DDE 3	DDE 4	DDE D
Main Jet on primary side	125	125	125
Normal idling (RPM)	750±25	750±25	750±25*
Accelerated idling (RPM)	1025±25	1025±25	1025±25
Clutch engagement speed (RPM)	925±25	_	-

All Carburetors are equipped with a Dash Pot and a Hydraulic Accelerated Idling.

(*) Obtained by adjusting to 775+25 RPM then reducing 25 RPM by turning mixture screw out.

ON ALL U. S. MODEL CARS THE FOLLOWING OPERATIONS MUST BE PERFORMED IN ADDITION TO THE NORMAL SCHEDULE.

1. ENGINE	First 600/1000 mile free inspection	6000 miles or 6 months	Thereafter evi 12000 miles or 12 months	18000 miles or 12 months
- Clean and Check Spark Plugs - adjust gap	_	X	_	_
- Adjust Engine idling speeds — see above		X	_	_
- Check Engine tuning		_	X	_
- Overhaul and Clean the Carburetor		-	-	X
2. CLUTCH				
- Adjust Clutch Clearance - DJ and DL	X	X	-	-
- Adjust declutching Guarantee - DX		X	-	-
3. CRANKCASE EMISSION CONTROL SYSTEM				
- Check Downstream Jet; clean if necessary		X	_	-
- Check condition of Rubber Hoses & Clamps		X	-	-
4. EXHAUST EMISSION CONTROL SYSTEM				
- Check drive belt tension of Air Pump	X	X	-	-
- Check condition of Rubber Hoses	_	X	_	-
- Tighten exhaust manifold bolts @ 25 ft/lbs	X	-	-	X
Check the operation and the delayed action of the Carburetor Dashpot		_	-	x

ENGINE LUBRICATION

Drain the crankcase with the engine WARM every 3000 miles and refill with MULTIGRADE SAE 10W-30 oil, both in Summer and in Winter.

Oil filter cap is in 1 fig. page 50. In countries where the average temperature exceeds 86°F, the 20W-40 oil is recommended.

In countries where Winter temperatures frequently fall below 0°F, the 5W-20 multigrade oil may be used. Sustained speeds above 65 mph should be avoided when using SAE 5W-20 oil.

The Refiner or Marketer supplying the oil is responsible for the Quality of his product. His reputation is the car Owner's best indication of Quality. Never use additives of any kind with the oil.

CAUTION: Never run the engine, even on the starter, when crankcase is empty.

ENGINE OIL FILTER REPLACEMENT

It is very important that the cartridge be replaced at prescribed intervals: the first time during the 600 mile inspection and every 6000 miles thereafter. Also see page 65. NOTE: It is recommended to carry with you one or more spare filter cartridges and their gaskets.

GEAR BOX

Gear box oil must be drained and refilled at the 600 mile inspection. Every 6000 miles, check the gear box oil level. It must be leveled with the edge of the Cap 2 fig. 31. If necessary, replenish with SAE 90 "extreme pressure" oil.

Every 12000 miles, it is advisable to have the gear box drained by a CITROEN Dealer. See Drain Plug 1 fig. 31. Capacity 21/4 US qts. Refill gear box by the upper filler Plug fig. 30.

BRAKES

Have Front Brake Pads checked every 6000 miles.

Every 12000 miles, have the Rear Linings checked by your CITROEN Dealer.

If you notice that the traveling stroke of your parking brake is too long, have it adjusted by a CITROEN Dealer.

CARBURETOR

All cars are equipped with a WEBER double barrel carburetor.

These modern high precision units will practically never lose their adustment. The Original Factory Settingi Should Never be Altered or Changed. They will usually require no maintenance except an eventual cleaning of the fuel filter screen.

CLEANING THE FUEL FILTER SCREEN

Loosen the NUT F fig. 32 remove the screen and dip it in gasoline. Blow dry with compressed air. If the main and idling jets must be inspected or cleaned, see page 67.

FILTERS

THE CARBURETOR AIR FILTER: Every 6000 miles, rinse the cartridge in gasoline and dip it in engine oil. Let the excess oil drip away before replacing. (Do not blow dry cartridge with compressed air).

THE FUEL FILTERS: In addition to the carburetor filter, which may be removed and cleaned, a second filtering element is located in the fuel pump. Do not try to remove this unit yourself; have it cleaned by your CITROEN Dealer when needed. The same is true for the filter in the Fuel Reservoir. To reach it, the reservoir must be drained and the main drain plug must be removed. It is advisable to have this filter cleaned by your CITROEN Dealer from time to time.

HYDRAULIC SYSTEM FILTER

It is located at 1 fig. 6. Have it cleaned by your CITROEN Dealer every 6000 miles. Also see page 62.

FUSE BOXES

Two fuse boxes are located in the engine compartment. They are proteced by plastic covers and contain three active fuses and one spare fuse.

All fuses are rated 30 amps. each.



Left Fuse Box

Yellow terminal—Front low beams, tail lights, instrument light, trunk light, clock and rear license lights. The other fuse is the spare one.

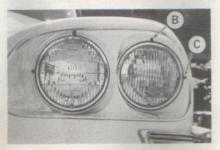
Right Fuse Box

See in fig. A page 4. This fuse box is located under the serial number plate.

Yellow terminal – Windshield wiper and washer, cigar lighter, accessory terminal.

White terminal – All circuits except the horns, the high beams and the ignition coil.

HEAD LIGHT ADJUSTMENT



U.S. MODEL WITH STATIONARY HEADLIGHTS

- B. Vertical Aim Adjusting Screw
- C. Horizontal Aim Adjusting Screw

DOOR WINDOWS

To insure easy sliding of the windows, have a CITROEN Dealer apply two coats of special varnish or silicon compound on the rubber.

AIR HORNS - Optional

Every 3000 miles (or at least every 6000 miles, if horns are not used frequently), apply few drops of fluid vaseline oil into the fitting located on top of the electro compressor.

COOLING SYSTEM CARE

The cooling system should not normally require regular maintenance except FREQUENT CHECKING OF WATER LEVEL IN RESERVOIR see page 16. And also seasonable inspections consisting of checking the condition of all hoses, water pump belts, thermostat and proper antifreeze protection.

We recommend that the anti-freeze solution be kept in the cooling system the entire year regardless of its concentration, except for cars with air conditioners. For these cars, you should consult your CITROEN Dealer for proper maintenance of the Cooling System.

It is advisable when totally or partially draining the cooling system, to add rust inhibitor (soluble oil) to the extent of ½ of 1% of the total cooling system capacity. Check with your CITROEN Dealer to be certain that inhibitor has been originally added to the anti-freeze you will use.

CITROEN Dealers are kept informed on suitable brand of anti-freeze solutions and their method of use.

NEVER USE ALCOHOL AS ANTI-FREEZE IN YOUR CITROEN.

WINTERIZING

Prior to their delivery, all cars are adequately protected against the lowest anticipated regional temperatures. Should it be necessary to further increase the protection of the cooling system, consult your local CITROEN Dealer.

DRAINING THE COOLING SYSTEM

To drain the Radiator, open the petcock located at its lower right side. To drain the cylinder block, remove the hexagonal plug located just below the oil dipstick tube.

When refilling, be certain the control valve 10 fig. page 43 is fully opened. Accelerate several times to insure complete filling of the system.

In very cold weather, and especially when the concentration of antifreeze is high, the engine should be allowed to idle some time before accelerating.

NOTE: In areas where only hard water is available, add a cooling neutralizer to prevent chalky deposits in the cooling system and particularly in the radiator.

RADIATOR CLEANING

A zipper is provided on the vinyl section of the air intake shroud. When open, it will facilitate inspection or cleaning of the radiator core as well as the lower metal section of the air shroud.



IMPORTANT: THE CAR SHOULD NEVER BE DRIVEN WHEN THIS ZIPPER IS OPEN. In exceptional cases, for example when the air flow is obstructed by a very thick blanket of snow, you may drive with the zipper open, thus providing additional ventilation. In this case, hold the flap open by means of a snap-on button.

NOTE: If there is a noticeable decrease of heating or ventilation efficiency, have an Authorized CITROEN Dealer check cleanliness of the ducts located at the end of the ventilation tubes.

BATTERY - See page 32.

WINDSHIELD WASHERS

In cold weather, add proper solution to prevent freezing.

CLEANING HINTS

The life of the car finish obviously depends greatly upon the care and attention given to it by the Owner. The car should not be permitted to stand for long periods unwashed, or allowed to stand outdoors night after night under trees where drippinas or moisture will attack the finish. Long periods of exposure to the sun should also be avoided. Dried dirt, salt or mud should be soaked off with flowing cold water before applying a sponge or cloth to the finish. This process will tend to loosen the accumulation and rinse it off without harming the surface.

Don't wash or polish the car in the hot sun or immediately after engine has been stopped; let it cool naturally.

Don't use so-called "speedy" cleaners containing abrasive ingredients which soon wear off the paint.

The under section of the car is coated with a black sealer which provides protection against road salts and ice-melting agents. It also improves soundproofing. Avoid washing the coated areas with gasoline or strong detergent solutions.

INTERIOR

The care of the interior of your car determines to a large measure the resale value when you contemplate trading in or selling. It is not a difficult job to perform and the small amount of time thus expended will be well repaid by the pride you will derive from its neat appearance.

It is advisable when cleaning soiled sections or spots to work in a circular manner outside the area, working gradually toward the center. By this method you will be certain not to leave an unsightly ring.

If you are confronted with particularly bad stains such as the ones made with lipstick, inks, dyes or chewing gum, it is advisable to request the help of a professional cleaner rather than to attempt to remove the stain yourself.

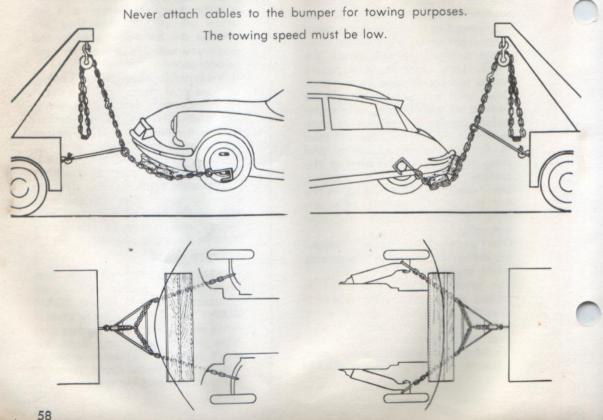
LEATHER SEATS

Prepare a solution of lukewarm water and mild soap to form an abundant foam. With the FOAM ALONE, rub the dirty spots several times with a wet clean sponge and wipe out the remaining foam. Always prevent the water entering the seams which could damage the padding and the seams.

TOWING THE CAR

Should it be necessary to have the car towed by another vehicle, the towing cables may be attached to the lower right and left suspension arms only.

The cables must be sufficiently padded to protect the front gravel shield.



Should you decide to send your car by trailer or by ship, the following instructions must be given to the Shipper:

LOADING ON TRAILER

Wide loading ramps are to be used. See track dimensions on page 5. The care must be driven on and from the trailer in high position—notch 5 fig. 12.

Before the car is fastened down, it must be lowered – notch 4 fig. 12. (Do not drive with Lever in this position).



LOADING ON SHIP

The car is to be lifted by the wheels or on a platform. Never by the frame.

Prior to the loading operation, it is advisable to remove the rear fenders. They can be stored inside the car.

Shipping volume for all models is 450 cu. ft.

Fastening points:

FRONT - main tension - use lower Suspension Arms only.

REAR - moderate tension - use loops on chassis.

TOURIST INFORMATION :

The liquid, in the hydraulic system of your U.S. model CITROEN, is now the same green mineral liquid as used in European cars since September 1966.

All authorized Citroen dealers throughout the world carry this green L.H.M. liquid (LIQUID FOR HYDRAULIC SYSTEM, MINERAL BASED).

HEADLAMP CONVERSION:

If you take delivery of your new CITROEN in Europe and your car is a U.S. model "D" car, the Headlights on this car will be in conformity with the European Standards.

If you decide to bring your car to the United States, you are entitled, as long as you are the original Owner of the car, to a free conversion of the Headlights to U.S. Standards. Consult any Authorized CITROEN Dealer in U.S.A.

DV : 56 DX : 60

general hints and minor trouble shooting

The Minor Trouble-Shooting section is included in this Owner's Manual for reference only. It must be well understood that owners with insufficient mechanical skill and knowledge should never attempt to do the work themselves, but rather have an Authorized Citroen Dealer perform these functions at the normal maintenance schedule.

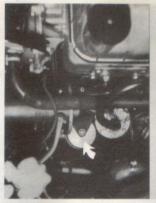
All Authorized Citroen Dealers are kept informed by means of technical bulletins on the best products and latest repair methods suitable for your car. They also have special tools and equipment.



HOW TO CLEAN HYDRAULIC FILTER

Loosen retaining clip and lift the filter housing tube from the reservoir. Remove the filter from inside the tube and clean it with ALCO-HOL only. Dry the filter by blowing compressed air inside.

Re-assemble and bleed the hydraulic system.





HOW TO BLEED HYDRAULIC PRESSURE SYSTEM.

Important-After removal of filter housing, it is necessary to bleed the air out of the hydraulic system. The bleeding screw is on the pressure regulator (resembles an aluminium cylinder) located under the fuel pump. The bleeding screw is an 8 mm hexagonal rod. Open the bleed screw about 1/2 turn (never unscrew it completely). Start the engine and let it run a few seconds before tightening. Do not expect to see fluid escape as bleeding is done internally. It may be necessary to accelerate the engine slightly to initiate the pumping process.



TO DRAIN HYDRAULIC FLUID

Loosen COLLAR 1 – without taking it off.

Disengage PIPE 3 from CLIPS 2 and bring the pipe down before removing PLUG 4.

NOTE: If the total quantity of fluid is to be drained open the bleed screw and lower the car to its lowest position 4 fig. 12. This will allow the remaining fluid to return in to the reservoir and be drained.



TO REFILL HYDRAULIC FLUID

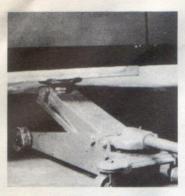
Close and reinstall draining pipe 3. Tighten collar 1.

Fill Hydraulic Reservoir with 3 qts. of proper fluid.

Place Height Control Lever in position 5 fig. 12.

Start the engine and wait until car reaches maximum height. Let the engine run.

Continue to fill the reservoir until the fluid level 2 fig. 6 is stabilized between MAXI and MINI marks. Bleed the Hydraulic System.



HOW TO RAISE THE CAR

Insert a thick flat board between the jack and the edges of the car frame – preferable near the jacking sockets.

NOTE! Never use a bumper jack, or a horizontal hydraulic lift other than a drive-on type lift.

HOW TO SERVICE THE REAR SUSPENSION CYLINDER BALL

Place the car on horses.
Remove the rear fenders.
Move the manual height control lever in the lowest position 4 fig.

Release the pressure in rear sus-

pension circuit by loosening the bleed screw at the pressure regulator.

Remove the tie clip from suspension cylinder rod.
Remove the dust boot clamp.

Disengage the dust boot and push it to the rear.

Disengage the piston rod from the support socket. (The rod can be disengaged and replaced only when the tie clip through holes are parallel.)

Pack the ball socket with wheel bearing grease.

HOW TO START THE ENGINE WITH STARTER RELAY

This device permits starting the engine without being obliged to get into the car.

The starter relay is located on the battery positive cable. It is provided for use by mechanics – not by owners.

CAUTION: Before starting the engine with the starter relay make sure that the gear shift lever is in NEUTRAL position and the emergency brake is ON.

HOW TO REPLACE SPARK PLUGS

Disconnect the secondary terminal 1.

Disconnect the Rubber dust cap.

Disconnect the Insulation cap.

A 13/16" socket type wrench is provided as standard equipment in the car tool kit. Insert a screw driver into the hole provided at the top of the wrench and turn sharply counter-clockwise.

If replacing a new plug, fit it with the center electrode extension and insulating jackets removed from the old spark plug.

TO REMOVE THE 4th SPARK PLUG A hole is provided in the center of the drain shelf to permit access to the 4th plug. Remove the rubber sealing plug 2. Be sure to replace it after installing the spark plug.

OIL FILTER REPLACEMENT

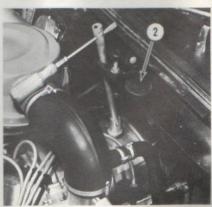
To replace the oil filter cartridge proceed as follows:

Remove cover 2 fig. 29 from the oil pan.

Unscrew the center bolt and remove filter components.

Before replacing cartridge wash and dry components.





Place new cartridge and components respecting their sequence on the bolt and starting from the head of the bolt place: washer, pre-filter screen, cup, spring, washer, steel ring, retainer and cartridge.

Install the above parts in the oil filter. ALIGN THE BOLT PROPERLY. Make sure gasket is in good condition, otherwise replace it.

CAUTION: the screen housing must be placed so that the locating indentation on its edge engages the oil suction embossment (toward the front of the car).

Before locking the tightening bolt, make sure that the screen cover cannot turn. If it can, the locating tab is placed badly.

Oil capacity when cartridge is replaced is 5½ qts. After the cartridge is replaced, run the engine at fast idling and make sure there is no leak.

TO CHECK FUEL DELIVERY

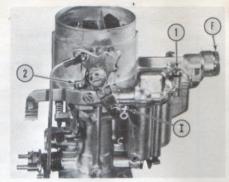
If no fuel is delivered to the carburetor, the car will not start. To check the fuel delivery, remove the rubber hose from the carburetor intake tube. Hold the hose downward. Prime the fuel pump (see page 24). Rotate the engine by means of the solenoid manual button.

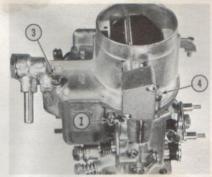
CAUTION: Be sure the ignition switch is OFF.

If fuel spurts from the hose, the trouble is in the carburetor or valve system. If fuel does not appear, the trouble may be lack of fuel, faulty fuel pump or delivery tubes or unvented gas tank filler tube. See your CITROEN Dealer.

CLEANING CARBURETOR JETS

Although the main and idling jets of each barrel appear to be identical, they have a different calibration and therefore are not interchangeable.





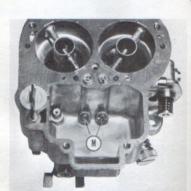


fig. 34

fig. 32 fig. 33

CAUTION: To avoid incorrect installation, it is advisable not to remove the jets. If they must be inspected, identify and reach them as follows: Main Jets: They are located in M fig. 34. To reach them, remove the air horn by loosening screws 1, 2, 3 and 4. Idling jets: Loosen screws 1 fig. 32 and 33.

HART STARTING

Hard-starting may be due to: faulty ignition or improper or no fuel delivery.

TO CHECK THE IGNITION SYSTEM:

- First check condition of fuses and their connections.
- Check the battery: Press the manual button of the solenoid. If the engine rotates the battery is good.

If the engine does not rotate the trouble may be in the solenoid or starter. In this case the car may be started by hand cranking.

Check the Spark Plugs for Sufficient Sparking.
 Remove a wire from any spark plug (preferably at the front of the engine).

Hold the terminal approximately 3/8" from the valve cover and at least 10-12 inches from the carburetor or fuel delivery lines.

Turn the ignition key ON and rotate the engine by means of the manual button at the solenoid.

Be Sure Your Hand Is Insulated

If spark occurs the ignition system is good. The fault is with the spark plugs, or valves. If no spark appears the trouble may be in the coil, distributor or any other part of the primary ignition system.

4. Check the Coil:

Remove the heavy wire from the coil center tower.

Hold the wire approximately 3/8" from its socket.

Turn the ignition key ON.

Rotate the engine by means of the manual button at the solenoid.

If a strong spark jumps between the wire and the socket the coil is good.

If no spark appears proceed to check the distributor.

5. Check the Distributor:

Distributor failure may be due to faulty contact points, a bad condenser, a bad rotor, a wet or cracked distributor cap, dirty wire connections, etc.

CONTACT POINTS: Remove the distributor cap by loosening the two spring clips. (Do not separate the wire from their sockets).

The rotor and contact points will then be visible. By means of the solenoid manual button, rotate the engine with the ignition key on. Observe the contact points to see if a small spark occurs. If a spark appears the trouble may be in the rotor or distributor cap or their connections. If no spark appears have the primary circuit checked by your CITROEN Dealer.

ROTOR: Replace the distributor cap. Remove any one of four spark plug high tension wires from their socket on the distributor cap. Hold the wire approximately 3/8" from its seat. With the ignition key on rotate the engine by means of the solenoid manual button, If a spark occurs the rotor is good. If no spark appears check the rotor and its connections, including the wire from the coil tower to the distributor cap. Caution must be exercised at this operation due to the possibility of the engine starting suddenly.

DISTRIBUTOR CAP: Before checking the distributor cap be sure it is dry and clean. With the ignition key ON observe the cap to see if a spark seems to jump between any of the wire sockets. If so, replace the cap.

Caution: At all times be sure the parking brake is applied firmly and the gear shift is in neutral position.

PRECAUTIONS TO TAKE ON A CAR EQUIPPED WITH AN ALTERNATOR

The correction of current furnished by an alternator is assured by the diodes.

Certain precautions should therefor be taken on cars equipped with an alternator. These are:

- Do not drive the alternator without the battery being placed in the charging circuit. (If a battery switch is mounted on the car, do not turn the motor with the battery switch open).
- Do not reverse the positive (+) and negative (—) terminals of the battery or the alternator.
- Do not invert the wires connected on the regulator.
- Do not connect a condenser to the field (EXC) terminal of the regulator or the alternator.

- Do not connect the terminals of the battery to a charger without having disconected the two posts (positive and negative) of the battery.
- In order to start a car on which the battery is discharged, connect a "booster" battery to the terminals of the battery on the car. (Positive (+) connected to the positive (+) and negative (-) connected to the negative (-).

(If a battery is in circuit on the car, NEVER connect a charger to the terminals of said battery, even for a very short time.

For the connection between the "booster" battery and the battery of the car, use electric cables provided with alligator clips, establishing a good contact on the terminals. It is necessary to prohibit cables which use sharp points to make contact, because, at the moment of putting the starter in action, they will product electric arcs which can destroy the diodes of the alternator.

FRONT END ADJUSTMENTS

Turning Radius .	181/2"
Castor	1.30°
Camber (equal both sides)	1 mm-or .039"
Front Wheel	040"120"

Cover: Made in France Text: Printed in U.S.A.