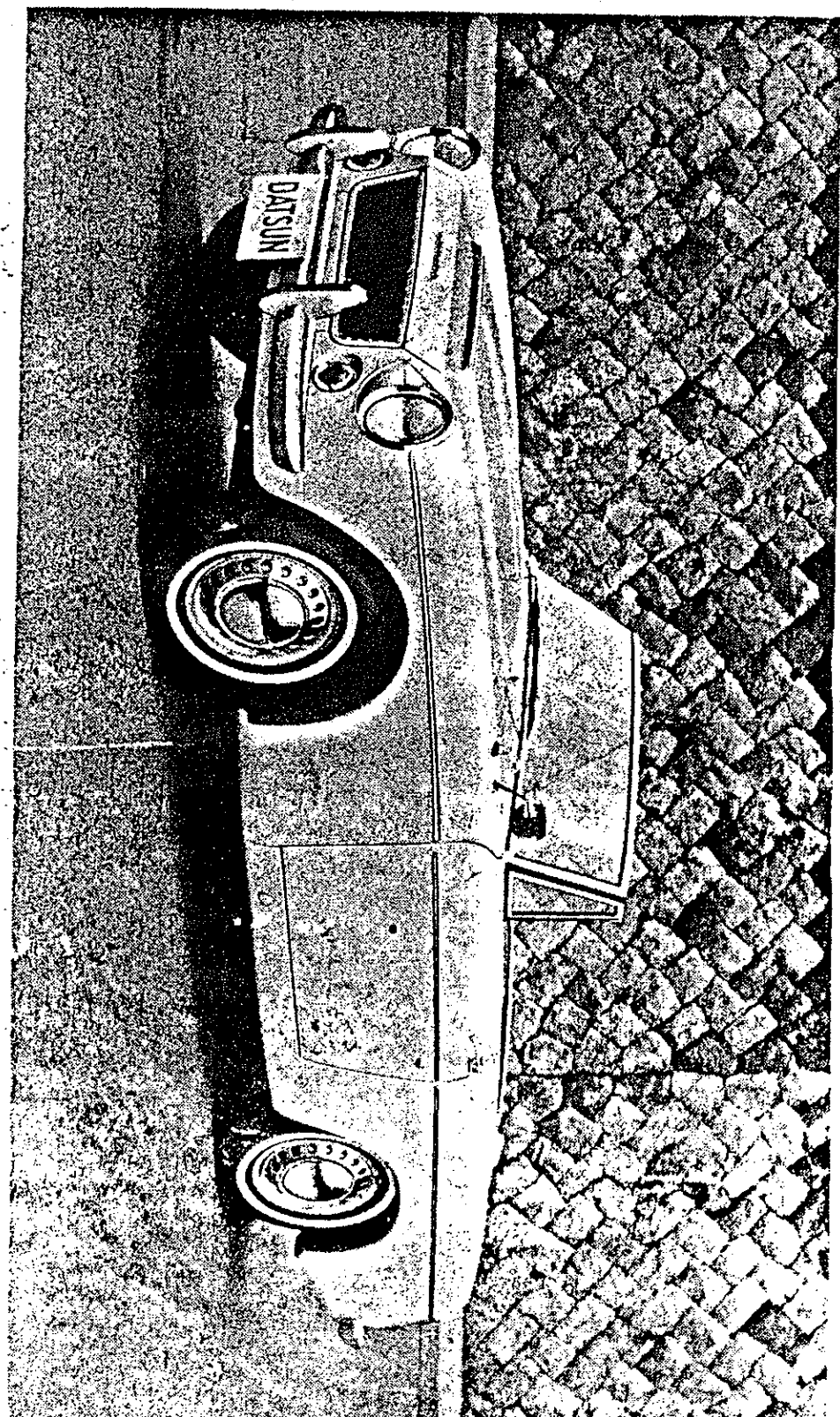




**FOR YOUR
DRIVING PLEASURE**



Porter's
SPH *Club* *GM* *GM* *(US Spd - 55 mph)*
018 - 022 "
028" - 032 "

TECHNICAL DATA

SPECIFICATION

US GAL = 3.7854 LITRES

**MODEL SP (L) 310-U
DIMENSIONS AND WEIGHT**

Overall length 3,953 m (155.6 in.)
 Overall width 1,495 mm (58.9 in.)
 Overall height 1,275 mm (50.2 in.)
 Wheel base 2,280 mm (89.8 in.)
 Tread front 1,213 mm (47.8 in.)
 Tread rear 1,198 mm (47.1 in.)
 Vehicle weight 905 Kg (1991 lb.)
 Seating capacity 3 Persons
 Min. road clearance .. 160 mm (6.3 in.)
 Gross vehicle weight .. 1,070 Kg (2365 lb.)

cycle O.H.V. : Four cylinder in line; Bore 80mm (3.15 in.); Stroke 74mm (2.91 in.);
 Max. brake horse power 85 HP at 5,600
 r.p.m. (S.A.E.); Max. torque 12.7 m-Kg
 (92 ft.-lb. *) at 4,400 r.p.m. (S.A.E.); Com-
 pression ratio 9.0 : 1.

FUEL SYSTEM

HITACHI HJB-38W-1 x 2; Variable venturi,
 side draft type twin carburetors. Mechanical
 type diaphragm pump; Paper element type
 air cleaner; Fuel tank capacity 43.1 (11.3 US
 gal.)

LUBRICATION SYSTEM

Pressure feed with full flow type oil filter;
 Gear type pump; Oil pan capacity 4.0
 (1.05 U.S. Gal.)

ENGINE OIL CAPACITY WITH FILTER
4.0/4.05 LITRES

PYCO 115

PERFORMANCE

Max. speed 155 Km/h (96 mile/h)
 Max. grade ability (sin ϕ) 0.460
 Min. turning radius 4.9 m (16.0 ft.)
 Brake distance at
 50 Km/h 14.3 m (46.8 ft.)

ENGINE

Model G; Gasoline engine; Water cooled four

IGNITION SYSTEM

Coil and distributor with automatic mechani-
cal and vacuum controls.

COOLING SYSTEM

Pressurized radiator; Centrifugal pump; Peller type thermostat and fan; Cooling water capacity 6.51 (1.7 US gal.)

REAR AXLE

Semi floating axle; Hypoid bevel gear, ratio 3.889.

ELECTRIC SYSTEM

12 volt 40 A. H. capacity battery; 300 watt alternator with Tirrill's voltage regulator; 1.4 HP magnetic shift starter.

FRONT SUSPENSION

Independent wishbones, coil springs with hydraulic double action type shock absorbers.

REAR SUSPENSION

Semi-elliptic leaf type spring; 4 leaves with hydraulic double action shock absorbers.

CLUTCH

Single dry disc with cushioning springs; Dia. 20.3mm (8 in.)

STEERING

Cam and lever type gear, ratio 14.8 : 1; Steering wheel 3 spokes 400 mm (15.7 in.) diameter

TRANSMISSION

4 speed forward and 1 reverse; Synchromesh on 2nd, 3rd and 4th gear; Gear ratio, 1st 3.515, 2nd 2.140, 3rd 1.328, 4th 1.000, reverse 4.597; Floor gear shift.

BRAKE

Hydraulic; Two leading shoe on front; Leading and trailing shoe on rear; Brake drum

dia. 228.6mm (9 in.); Brake lining area 702 square cm. (109 square in.); Parking brake mechanically operated on rear wheels only.

WHEELS AND TIRES

Steel disc wheels; 5.60-13-4P tires.

LAMPS

Two head lamps (sealed beam); Two front parking and turn signal lamps; Two tail lamps and stop lamps; Twin rear turn signal lamps; Rear license lamp; Map lamp; Reverse lamp.

INSTRUMENTS

Speedometer with mileage recorder; Tachometer; Combined meter (Fuel meter, Thermometer, Oil pressure warning pilot lamp, Main beam warning lamp); Instrument panel also includes ignition and starter switch, lighting switch, choke control knob and windshield wiper switch.

FRAME

Pressed steel box section with X member.

BODY WORK

Two door 3 seat, open type with canvas top; All steel body fully upholstered with vinyl leather; Floor carpet; Safety glass windshield; Roll up type door lass; Plastic rear window; Adjustable bucket type front seats; Anchorage for fitting safety belt; Ash tray and glove box on instrument panel; Fresh air control; Door lock with key, Bumper over rider, front and rear; Spare wheel housed in trunk room; Mid point side jacking.

EQUIPMENTS

Windshield wiper; Windshield washer; Cigarette lighter; Double horn, Inside and outside back mirrors; Tonneau cover.

OPTIONAL & EQUIPMENTS

Heater, Radio, & Plastic hard top (Fiber glass reinforced.)

INSTRUMENT & CONTROLS

TURN SIGNAL PILOT LAMP (green) SCREEN WIPER SWITCH

This green light takes action synchronously along with the turn signal lamp.

MAIN BEAM PILOT LAMP (red)

While the head lamps are lighting straight ahead, this red light is on, but when the head lamp beams are directed downward by depressing switch the pilot light goes off.

TACHOMETER

When it is fine and the windshield is dusty, do not turn on the wipers as recklessly it would make scratches on glass surface.

SPEEDO METER

CHOKE CONTROL KNOB

CLOCK

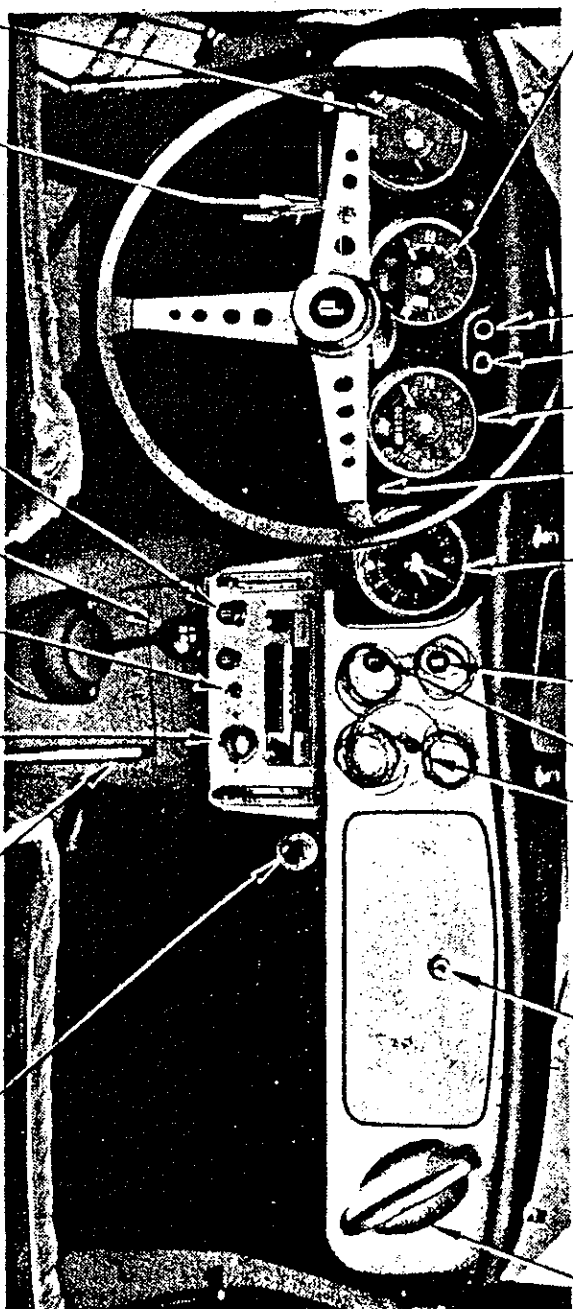
LIGHTING SWITCH

This is a pull type switch two notch operation. The first notch works to turn on the instrument panel light, and the parking, tail, license lamps, and the second notch to turn on the head lamp and off the parking lamp.

ASH TRAY

GLOVE BOX

ASSIST RAIL



COMBINATION IGNITION SWITCH

CIGARETTE LIGHTER

GEAR CHANGE LEVER SWITCH

MAP LAMP

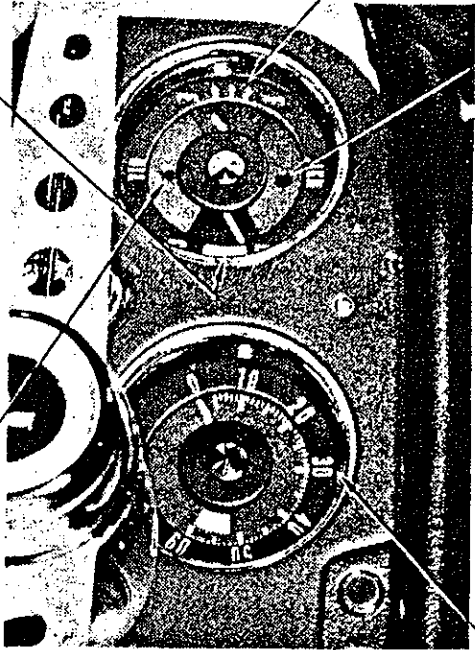
HAND BRAKE WIND SHIELD WASHER

FUEL GAGE

At the time the tank is full, capacity 11.3 U. S. gal. (43 ltr.) the pointer stands at "F" when the ignition is on.

IGNITION WARNING LAMP

When you turn the ignition switch, the light will come on. The light goes off when the engine has started and comes up to speed.

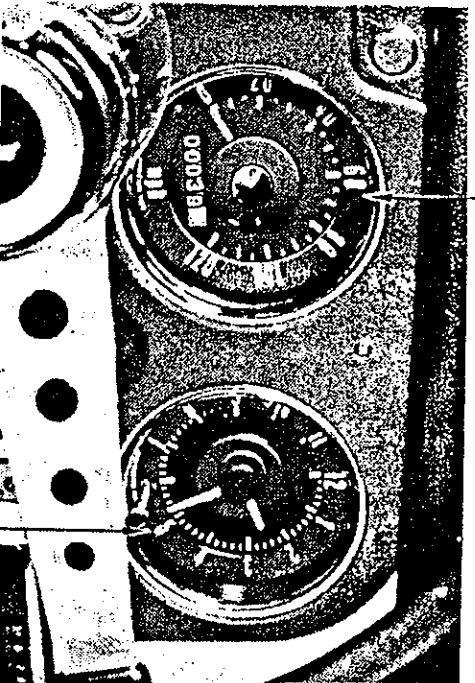


TACHOMETER

When ignition is on and engine started, the pointer indicated the revolution of per minute for running engine. (to multiply this showing number by 100).

SPEEDOMETER

(mph or kph)



WATER TEMPERATURE GAGE OIL PRESSURE WARNING LAMP

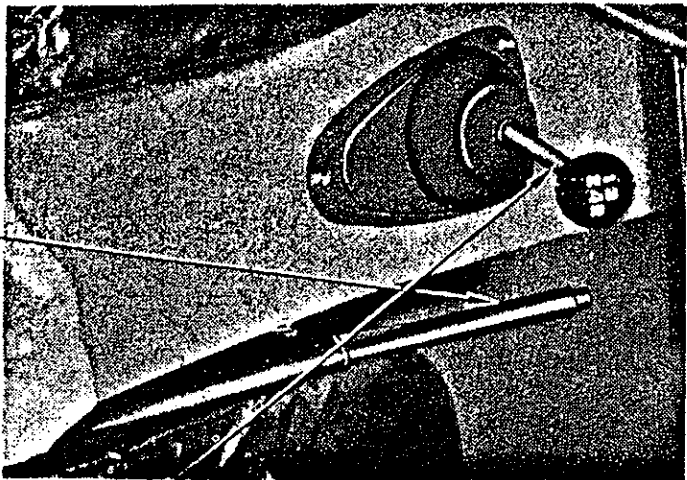
When the ignition is off, the pointer stays at the top of the gage. When the ignition is on, it swings to the position showing the water temperature at that time. In normal driving conditions, the pointer is horizontal indicating 80°C (175°F).

The red light is lit when the ignitions on. When the engine has started and the oil pressure is up, this light goes off.

CLOCK

To correct the time, push the knob at low position of center and set the hand to the correct time by turning it clockwise if possible. The clock is lighted from inside when the lighting switch is pulled out.

GEAR CHANGE LEVER & HAND BRAKE LEVER



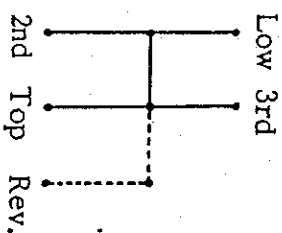
IGNITION & STARTER COMBINATION SWITCH

The switch is linked to the combination meter, heater, screen wiper, turn signal lamps, warning and pilot lights, but free from the horn, radio and the other lamps.

STARTING ENGINE

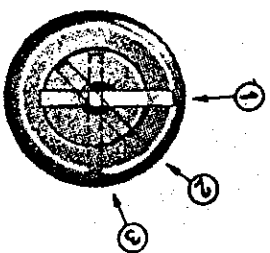
First, you make sure that the gear-shift lever is in neutral position and the side brake is applied. Turn on the ignition switch and see if the oil pressure and the ignition pilot lamps are lit. Then, turn the key more to start the engine, and release as soon as it fires.

GEAR POSITION



HAND BRAKE LEVER

Hand brake lever is on the seat side. Pulling up the lever effects braking mechanically on the rear wheels. To release brake, pull up the lever, push the button on the top of it and then fold down.



- (1) Switch off
- (2) Switch on
- (3) Starting

HOW THE EQUIPMENT WORKS

SELECT TURNING SWITCH

Turn the left hand knob and set the pointer of the dial to the frequency of the station you want.

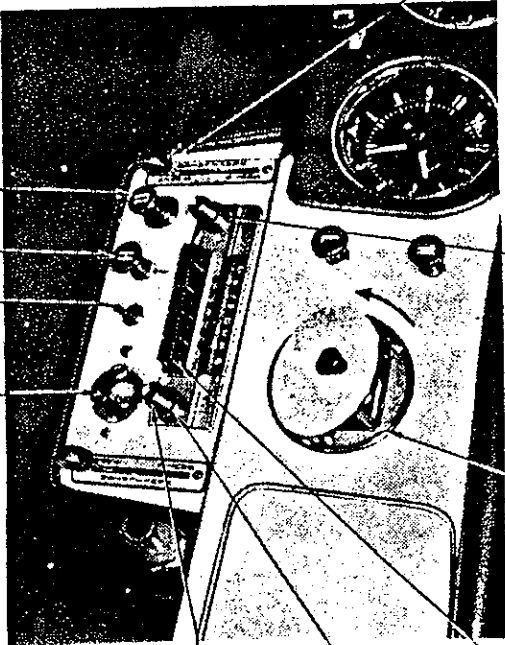
VENTILATOR

Fresh air is led into the room by pulling the knobs which are located both right and left side panel.

CIGARETTE LIGHTER

HEATER SWITCH (Optional)

If you pull down the heater control lever fully, the hot air is led into the room. Reverse, when lever is pulled-up, the system will work as a demister.



ASH TRAY

PUSH BUTTON TUNING

STONE CONTROL RING

RADIO PUSH SWITCH

TURN ON & VOLUME UP:

Push the right hand knob to turn on and turn the knob clockwise for volume up. To turn off push it again.

STONE CONTROL:

Turn the ring around the volume knob clockwise for high note, counter clockwise for low note.

MAP LAMP SWITCH

MAP LAMP

PUSH BUTTON TUNING:

If each of the push buttons is set beforehand to the station you want in the sequence shown below, you can tune in the broadcast of that station at once by pushing the button.

- a. Pull out hard any of the button one half inch (10 mm) swiving to the right.
- b. Listening to the broadcast, turn the tuning knob carefully to find the best tuning point.
- c. Then push back hard the button slowly, and you complete the setting. When you take your finger off the button, it recovers its original position, but the pointer of dial will stay at the frequency of that broadcasting station.
- d. In this respectively. In this case, if you set the buttons in the order accordance with the frequency indicated on the dial, it is more convenient for selecting stations.

NOTE:

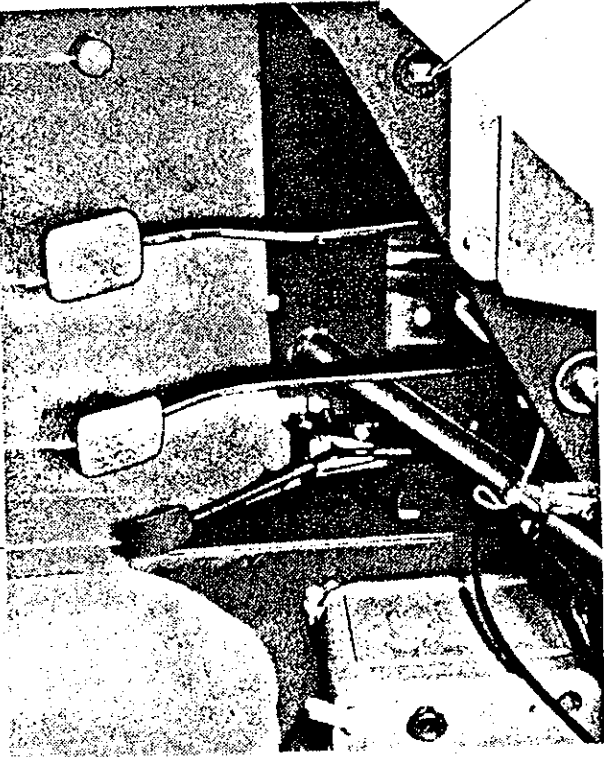
- a. When you extend the antenna pole, pull up first the thickest part of it.
- b. Keep the battery voltage in the range 11V to 15V. When the voltage regulator is in disorder, the voltage may often exceed the 15V.
- c. For replacement, use a fuse of 1A.
- d. If the fitting screws of the antenna become loose, the noises due to the ignition of engine may be mixed in.

ADJUSTMENT OF THE FRONT SEAT

Front seat can be adjusted within 4.8 in. (120 mm) with five set positions. Simply operating the adjusting lever under the center of the seat, you can move it forward and back in your sitting position.

HOOD LOCK KNOB

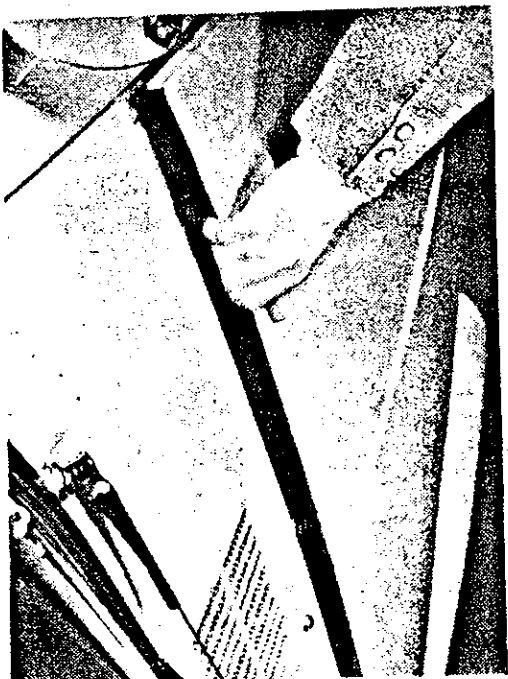
Hood lock is situated underneath the left-side (or right-side) instrument panel. To open the hood, pull the knob towards you, then the hood is ready for opening.

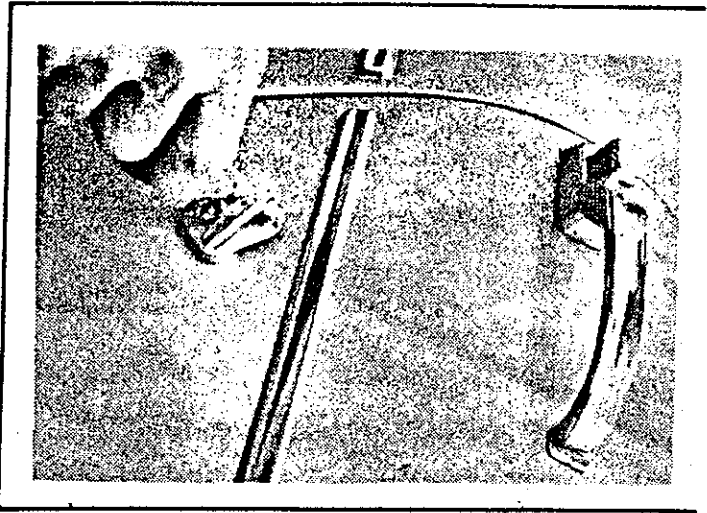


DIMMER SWITCH
CLUTCH PEDAL
ACCELERATOR
BRAKE PEDAL

HOOD SUPPORT

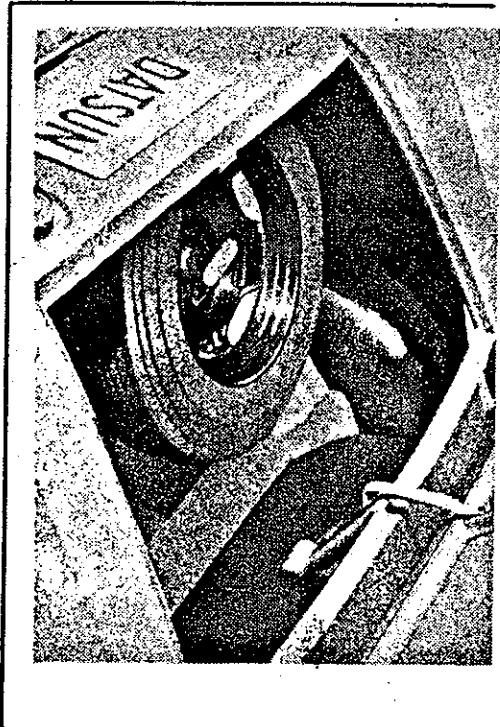
The hood support holds the hood at the fixed position as it is opened. To close the hood, raise it up slightly from it's opened position, and release the support from the depth of the guide.





DOOR LOCKING

The door on the both side can be locked from outside. With the ignition key, turning clockwise 45 degrees, the door is locked and returning 45 degrees makes the door unlocked.

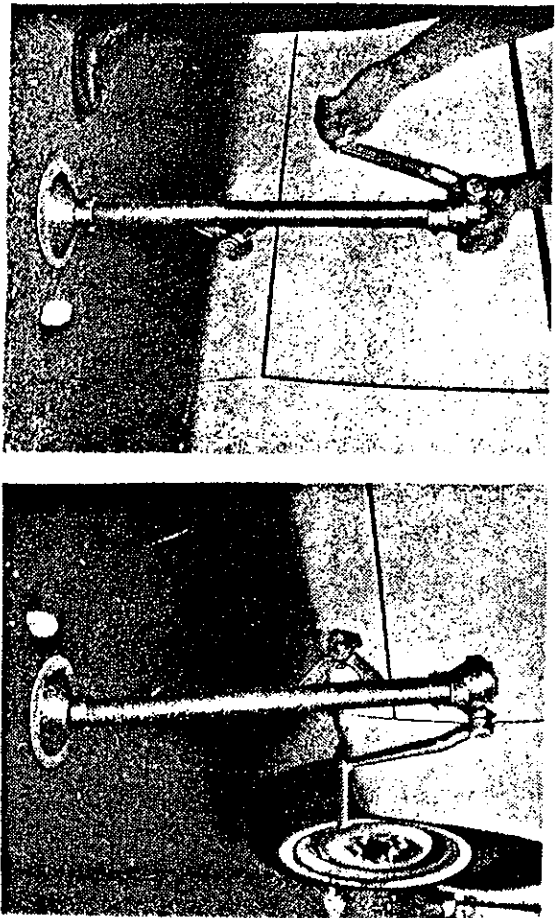


TRUNK LID

To open the trunk lid, turn the lock handle clockwise. When the lid is fully opened, the support comes into the position to hold the trunk lid. To close the lid, raise it up slightly, and pull the support up so that it comes out from the depth of the guide. For locking the trunk lid, the ignition key is used.

SPARE WHEEL & TOOLS

Spare wheel is fixed well to the trunk floor with the wing nut so as to be readily removed. The tool bag and jack are also placed on the trunk floor.



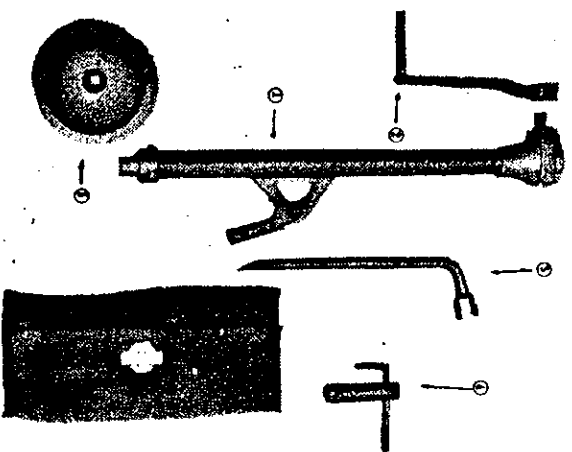
BODY JACK

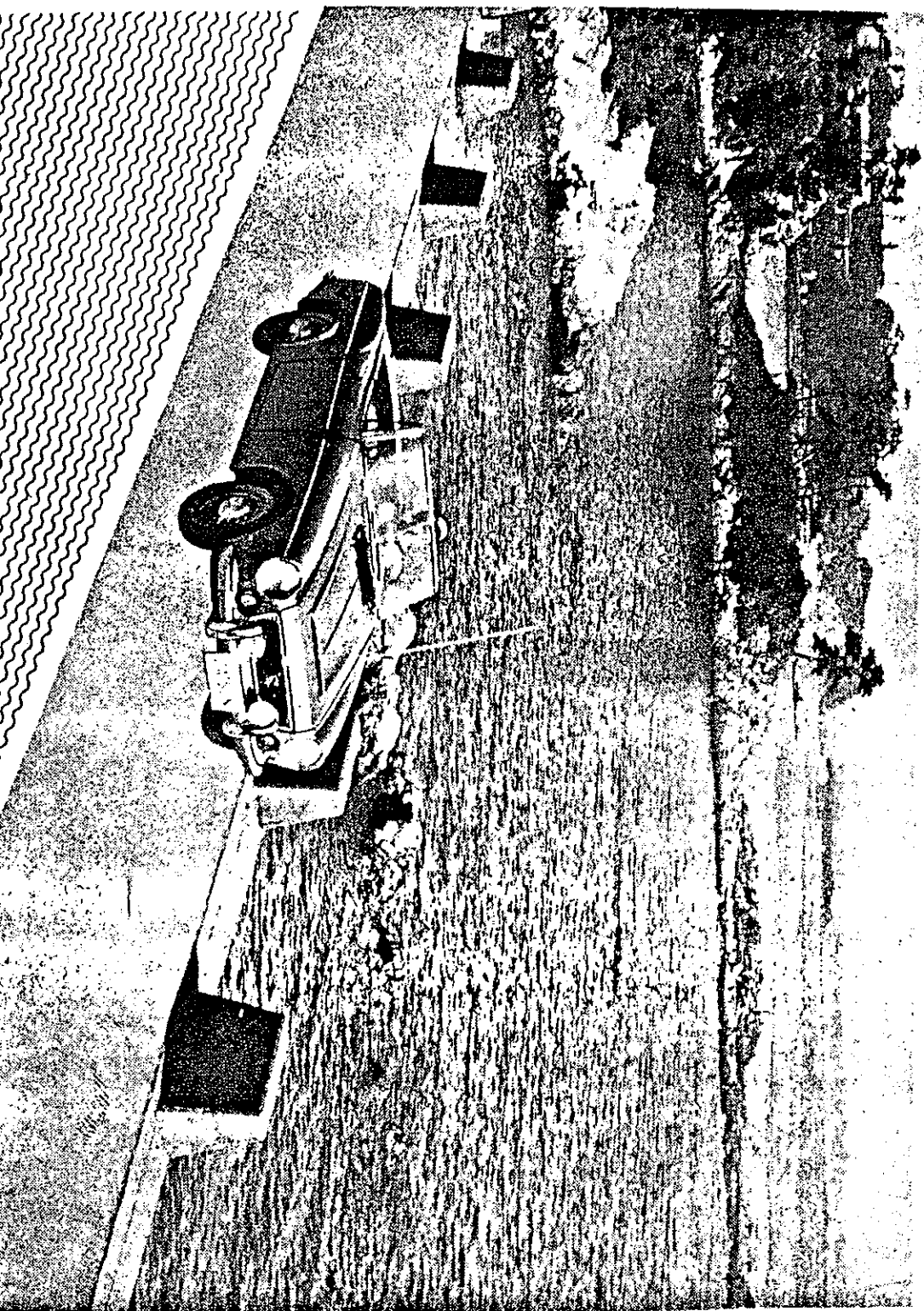
It is stored in the trunk. To jack up the car, put the jack nose into the jacking hole below the center of the body sill, insert the jack handle taken out of the jack column into its lower arm and move the lever up and down. To jack down, move the handle to the upper arm and move gently, then the body comes down with its own weight.

STANDARD TOOL KIT

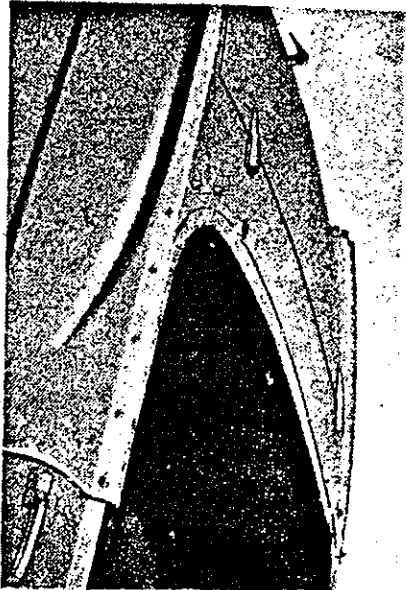
A tool bag is also stored in the trunk.

- (1) Body jack
- (2) Jack handle
- (3) Wheel nut wrench
- (4) Spark plug wrench and lever
- (5) Stand

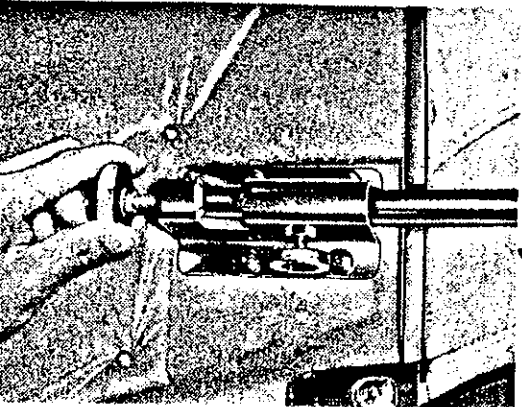
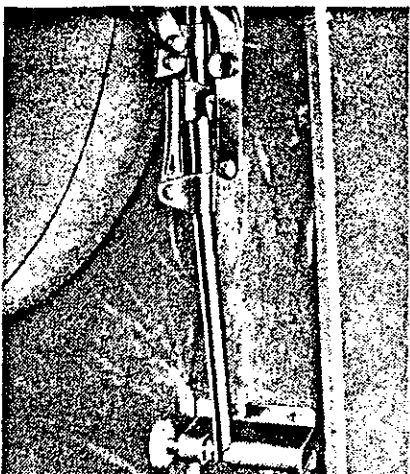
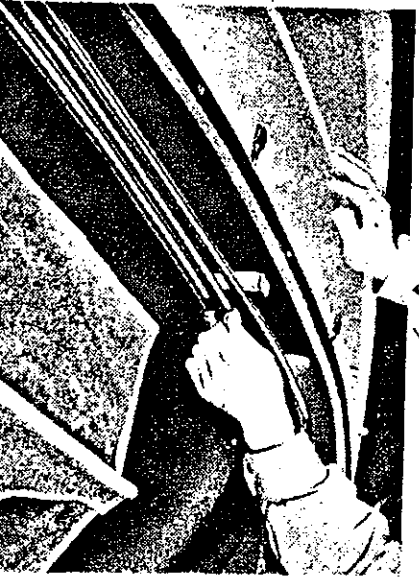




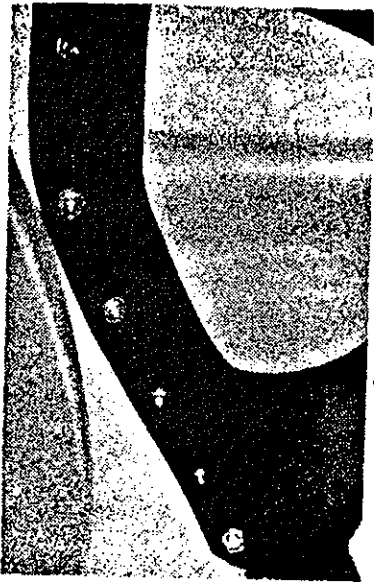
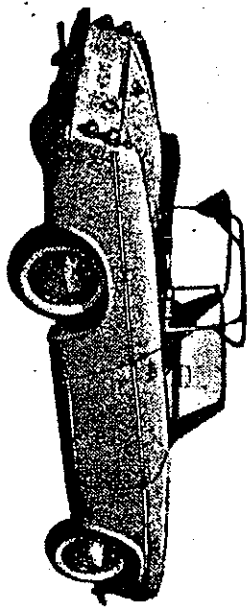
ALL WEATHER EQUIPMENT



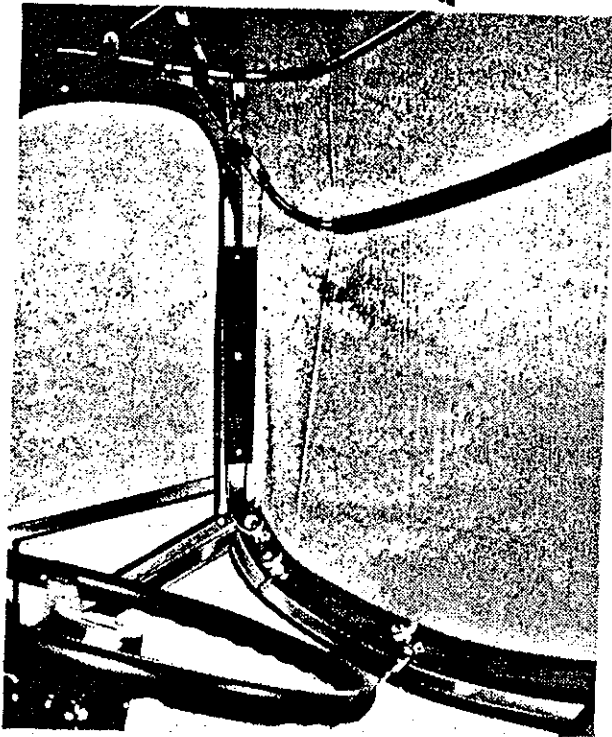
Drawn out of Camvass.



Adjusting screw



Snap on the end of Cover.



USEFUL DRIVING HINTS

STEEP HILLS

When driving up steep hills, shift to a lower gear a little earlier. Shifting after the car comes almost to a stop is too late, making the engine so much loaded that it cannot operate smoothly. When ascending uphill at top speed, always shift to the third gear if the speed slows down to about 25 MPH (40 KPH).

When descending steep hills, shift to a lower gear and keep the clutch engaged. This makes the engine act as a brake and prevents overspeeding. In this case, the ignition switch must be kept on.

When parking on the uphills, take such a step as to steer the front wheels sharply to the curb stone to prevent from accidents due to rolling.

SKID OR SLIP

Sudden braking, abrupt accelerating or turning on the icy, greasy or loose road surface possible causes skidding or slipping. In this case, take your foot off the pedal of brake or accelerator and turn the steering correct position.

WET BRAKE

After washing the car or driving through a puddle, the brake linings sometimes get wet. In that case while running at low speed depress the brake pedal at intervals to dry up the linings. Never drive at high speed until the functioning of the brake is perfectly recovered.

FUEL ECONOMY

Running economy is one of the conspicuous features, however, with the smart driving as mentioned below you will notice a further goodness in your *DATSUN*.

Do not depress the accelerator pedal suddenly, but gently depress it up to the desired speed, then slightly release the pedal to try to maintain that speed. Further, always drive the car at the suitable cruising speed as possible with the well matched shifting gear. Do not spur up the accelerator just like pumping. This causes the accelerating pump to over-feed fuel, giving an undesirable result to the fuel economy. Tires should have the most adequate pressure. Pay attention to the idle mixture adjustment.

If you follow the rules enumerated above, you will attain a remarkable improvement in the consumption of fuel.

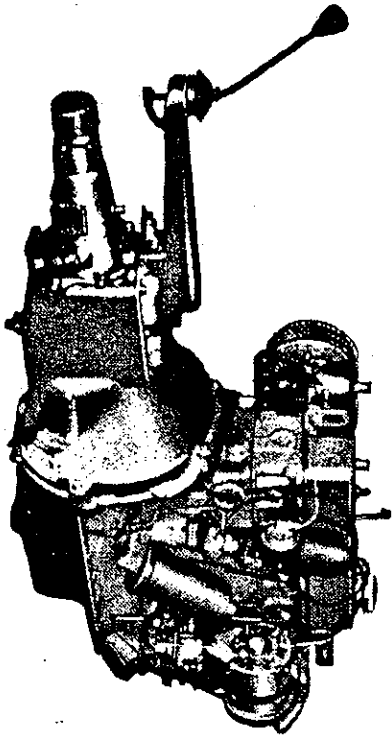
**Your DATSUN dealer will be glad in
helping you in this respect**

MAKE YOUR ENGINE

SUITABLE FOR YOUR GASOLINE //

Ask your gasoline station for the octane value of the gasoline you used to buy.

Gasoline with around 83 octanes is normally used for *DATSUN*, which the ignition timing is set for. If the octane value varies, or according to the extent of carbonization, slight adjustment is requested in the ignition timing for the higher performance and the fuel economy. Generally, when the gasoline octane value is higher, advance the ignition timing of distributor up to the degree that light engine knocking can be momentarily felt by effecting a sudden accelerating in driving on the flat road with a high gear at approx. 25 MPH (40 KPH).



IN HOT WEATHER

CHECK UP:

See to the following: Amount of the cooling water any leakage in the whole cooling system, the function of pressure type radiator cap and amount and specific gravity of battery electrolyte.



REPLACING THE LUBRICANT:

In summer when the temperature always stays over 90°F (32°C), the lubricating oil is to be replaced.

IN COLD WEATHER

STARTING ENGINE:



Pull the choke control knob out fully and do not depress the accelerator pedal. As soon as the engine starts, release the key and gradually push the choke in. When the engine is warm, the choke is not necessary. For a little after the engine is started keep the revolution at slow for "warming-up." In winter, these considerations are especially important. The water becomes warm in about five minutes and all is ready to start driving.

OIL VISCOSITY SUITABLE FOR THE CLIMATE

Temperature		Engine Oil (API-MS)	
°C	°F	Multi-viscosity	Regular
Over 32°C	(Over 90°F)	SAE 10W-30	SAE 30
0°C-32°C	(32°F-90°F)	SAE 10W-30	SAE 20-20W
-12°C-0°C	(10°F-32°F)	SAE 10W-30	SAE 10W
Under -12°C	(Under 10°F)	SAE 10W-30	SAE 10W

As the engine starts the oil pressure pilot lamp goes off, but the ignition pilot lamp may not go off at low speed idle.

REPLACING LUBRICANT:

When the temperature goes down below 10°F (-12°C), the lubrication oil is recommended to be replaced.

ANTI-FREEZE:

In winter when the temperature is anticipated to go down below 32° (0° C), apply anti-freeze to the cooling water. For the mixing rate of anti-freeze with water, refer to "Direction of Use" of the anti-freeze. Whole amount of the cooling water is 1.7 gal. (6.5 ltr.). Add water properly when the cooling water becomes low.

DRAIN-OUT OF COOLING WATER:

When the car is left outside in freezing weather, drain out the cooling water, operating the two cocks installed under the hood as shown, should anti-freeze be unavailable.

RADIATOR SHUTTER:

In winter when the thermometer would not get up to 176° F (80° C), apply a suitable cover over the radiator to adjust passage of the cold air.

BATTERY:

Under extremely low temperature, the efficiency of battery falls markedly down and causes battery to undergo possible freezing and damage. Always check the electrolyte level and its specific gravity. There might be necessity for charging. See undermentioned table.

BATTERY FLUID SPECIFIC GRAVITY

	Permissible range	Full Charge Value (at 68 F, 20° C)
Frigid Climates	Over 1.26	1.28
Tropical Climates	Over 1.23	1.26
Other Climates	Over 1.25	1.28

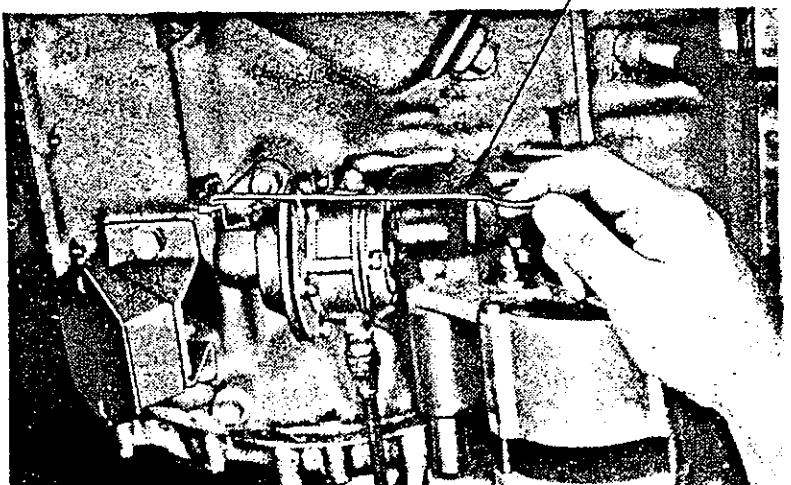
ENGINE FAILS TO START

HAND PUMP LEVER

* When the starter motor is out of order, raise the cover and check the cable of battery terminals. If the terminal is corroded, brush it up. Or it may be necessary to charge the battery.

* When the carburetor is considered to be out of gasoline, move many times the hand primer lever of the fuel pump at the right hand side below the engine to pump in gasoline.

* Examine the electric system. Disconnect the high tension cord from one of the plugs and hold its terminal as near as 1/4" (5 mm) to the cylinder and turn the starter. If the spark is not seen, there is some trouble in the electric system.



"BREAKING-IN"

You are now in the most thrilling stage in the life of your DATSUN Fair Lady, the "Breaking-in" period. How far you can break your DATSUN Fair Lady will determine the amount of pleasure and advantages you can have with your Fair Lady.

For this, however, we invite your attention to a few points below:

Warm up the engine for some minutes at slow RPM after started.

Do not race the engine at high speed.

Follow the speed limit for a breaking-in period.

Do not accelerate or stop rapidly.

Get the 500, 1,000 and 2,000-mile services for your car at the garages.



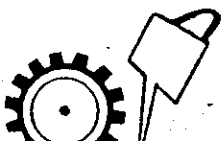
MAX. SPEED LIMIT FOR NEW CAR

Stage	Gear					Top	
	Low	2nd	3rd				
First 800 km (500 mile)	18	30	50	70		70	K/H
	11	20	30	45		45	M/H
Second 800 km (500 mile)	40	70	115	155		155	K/H
	25	43	71	96		96	M/H
After break- ing in period	30	50	80	40		40	K/H
	20	30	50	25 (MIN)		25 (MIN)	M/H

CHANGE THE ENGINE & GEAR OIL

To ensure continuation of best performance, low maintenance cost and long life of your car, it is necessary to change the engine and gear oil whenever it becomes contaminated with harmful foreign materials.

Especially, during "Breaking-in" period, change the oil according to the following table.



When	Engine Oil	Gear oil, Transmission & rear axle
First 500 miles (800 km) finished	Drain and refill	Drain and refill
Second 500 miles (800 km) finished	Drain and refill	Check and top-up if necessary
Another 1,000 miles (1,500 km) finished	Drain and refill	Check and top-up if necessary
After "Breaking-in" period is over	Drain and refill every 2,000 miles (3,000 km)	Drain and refill every 6,000 miles (9,000 km). Or at least twice a y

See the next page for the viscosity of oil suitable for the climatic condition.

OIL VISCOSITY SUITABLE FOR THE CONDITION

The SAE (Society of Automotive Engineers) viscosity numbers fix a classification of lubricants in terms of viscosity or fluidity, but with no reference to any other characteristics or properties.

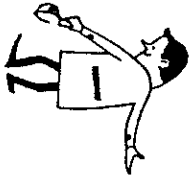
We recommend you to use the oil sold by reputable oil companies, which are shown in the table page 33.

It is also important to choose right grade and viscosity of engine and gear oil suitable for the climatic conditions you expect during the period the oil is in engine, transmission and rear axle.

Choose the suitable oil according to the following table;

OIL VISCOSITY SUITABLE FOR THE CLIMATE

Temperature °C	°F	Engine Oil (API-MS)		Gear Oil Multi-purpose
		Multi- viscosity	Regular	
Over 32°C	(Over 90°F)	SAE 10W-30	SAE 30	SAE 140
0°C—32°C	(32°F—90°F)	SAE 10W-30	SAE 20-20W	SAE 90
-12°C—0°C	(10°F—32°F)	SAE 10W-30	SAE 10W	SAE 90
Under -12°C	(Under 10°F)	SAE 10W-30	SAE 10W	SAE 80



DAILY CARE BEFORE DRIVING

With the general maintenance, the most important you can do yourself is **DAILY CARE**. Before driving every morning or each time you go to the gas station, do not fail to check the following:

- * Turn on the ignition key and see to the fuel amount at the gage.

- * Check the water level, removing the radiator cap while the water is cold.

If the water level strands at about 1/2 inch (15 mm) below the intake hole, the amount of water can be regarded as correct. When the engine is heated, ample care should be taken to release the cap slowly as it is removed.

CHECKING THE OIL LEVEL

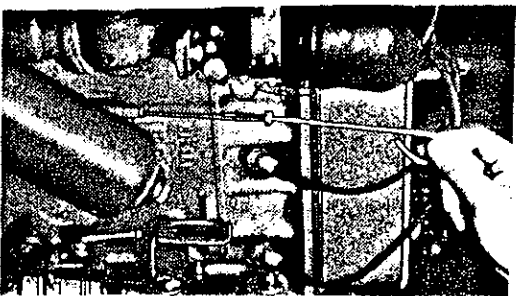
Pull out the oil level gage provided in front of the distributor on the right of the engine, wiping it with rags. Then reinsert it, and pull out again and check the oil level with the wet portion of the gage. The oil level should stand between the marks

MAX and MIN on the gage. Checking must be done with the car positioned as level as possible and a while after the engine comes to a stop. When the oil is added, check the level a while thereafter. In addition, when you pull out the gage, it is necessary to see to the extent of contamination or consistency of the oil on the gage.

- * Check the pressure of tires including the spare tire. Remove oil stains or metal sticking to the tires, if any.

- * Make sure the functioning of all lights, the turn signals and the dimmer switch is proper.

- * Check the play and stroke of the brake pedal. Ensure proper functioning of the brakes just after the car starts running.





USE OF CHART

PERIODICAL MAINTENANCE

The **PERIODICAL CHECKS** for your **DATSUN** are designed to give you lasting driving pleasure. It will be enough for you just to drive your car into a **DATSUN SERVICE SHOP**. However, the **Checking Chart** and the **Lubrication Chart** are provided for your own interests.

500, 1,000 And 2,000 Mile (800, 1,500 And 3,000 Km) Check

Of the periodic checks, those related directly to the "braking-in" are the 500, 1,000 and 2,000 mile checks. These checks are extremely important to cover the problems that may occur in the early stage of the car's life.

You should have the service shops authorized by this company check your car and consult with them concerning any defects noticed. As to the "Braking-in", refer to page 20.

Check the mileage meter of your **DATSUN**. If it shows 9,000 miles, see the figure 90 in checking chart of next page. You will find that figure in the third column from right side. It means your **DATSUN** needs the checking of marked "o" items.

After your **DATSUN** has finished 35,000 miles, give the services according to the left hand columns which show "**MAINTENANCE FREQUENCY**".

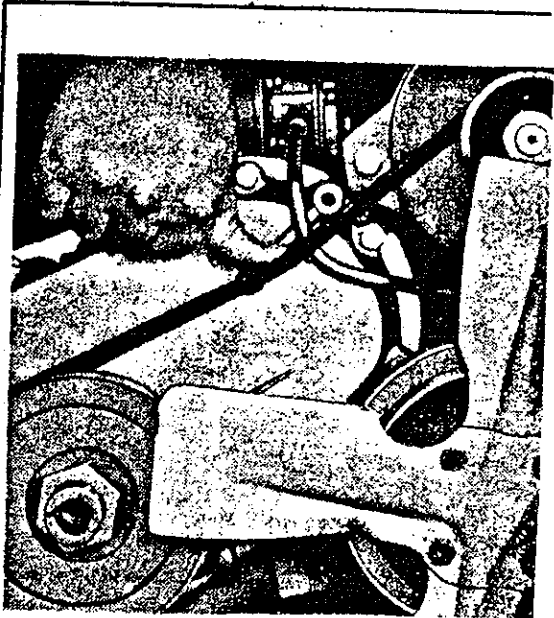
On the same way should be used the "**LUBRICATION CHART**".

It is recommended that you will contact your **DATSUN** Dealer to serve your **DATSUN** at any time.

70 US GAL = 265 LTRS

MAINTENANCE FREQUENCY mile (kilo)		EVERY		LUBRICANTS		ITEM		QUANTITY		PAGE DAILY		x 100 mile (kilo)		
1000 (1500)	2000 (3000)	3000 (4500)	6000 (9000)	ITEM No.	DESCRIPTION	QUANTITY	PAGE	DAILY	500 kilo (600)	1000 kilo (1500)	20 (30)	30 (45)	40 (60)	50 (75)
				1	Engine oil pan check level & top up if necessary	0.70 U.S. Gal					140 (210)	90 (135)	100 (150)	170 (255)
				2	Engine oil pan drain and refill	- (2.6)					200 (300)	120 (180)	120 (180)	230 (345)
				3	Starter motor bearings	1 or 2 drops					250 (390)	150 (225)	150 (225)	290 (435)
				4	Distributor-bearing, point arm pivot & automatic advancer	few drops					320 (480)	190 (285)	180 (270)	350 (525)
				5	Engine control linkages, accel. pedal support	few drops								
				6	Hand brake system-lever pivot & linkage	few drops								
				7	Brake and clutch pedal shaft	few drops								
				8	Bodywork: door handle, hinge, striker									
				9	Transmission - check level & top up if necessary									
				10	Rear axle case-check level & top up if necessary	0.4 U.S. Gal.								
				11	Rear axle case-drain and refill	0.7 U.S. Gal.								
				12	Steering Gear box check & top up if necessary									
				13	Steering linkage-king pin, side rod, cross rod, idler									
				14	Front Suspension - upper and lower link spindle and bush									
				15	Body work-hood lock, door lock control, trunk lid lock									
				16	Hand brake wire bracket									
				17	Propeller shaft joints	joint grease								
				18	Road wheel bearings (recharge with grease)	Big Grease								
				19	Radiator - check and top up if necessary									
				20	Radiator - drain water, flush out and refill	1.7 U.S. Gal.								
				21	Battery - check electrolyte and top up if necessary	1.2 U.S. Gal.								
				22	Brake and clutch fluid-check and top up if necessary									

HOW TO CHECK & LUBRICATE



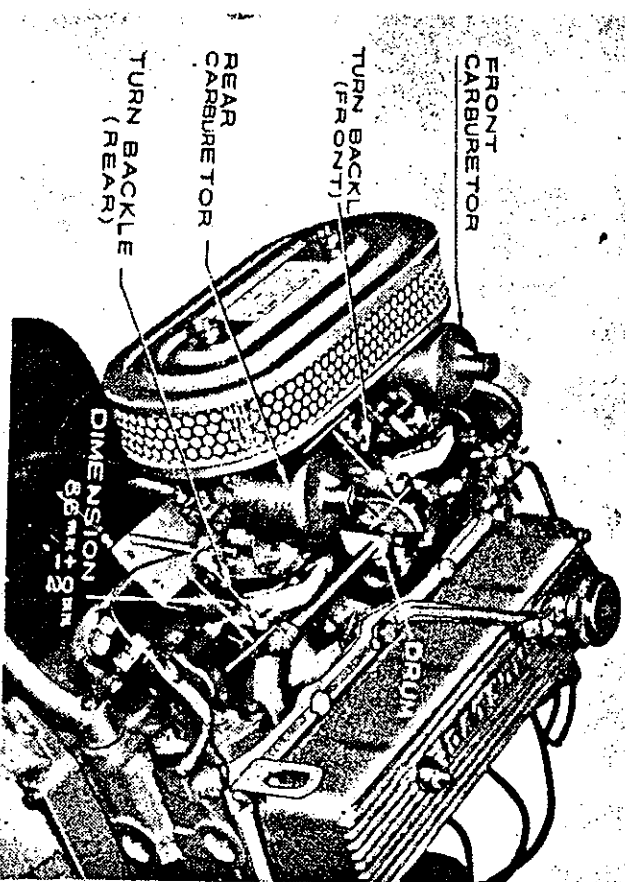
FAN BELT & ALTERNATOR

When it is necessary to check the fan belt tension, loosen the generator adjusting link bolt and adjust the tension by moving the generator up and down.

Push the belt between the generator and the crank pulley, and check the correct slackness of 10 to 15 mm.

- 1) Always make absolutely sure that the grand polarity is correct when installing a new battery, connecting a charger to the battery, or when using a slave battery.
- 2) Do not short across or ground any of the terminals on the alternator or the regulator.
- 3) Always disconnect the battery ground strap before replacing any electrical unit.
- 4) Never operate the Alternator on open circuit. Make sure all leads are connected and tightened securely.
- 5) In the case of using the steam washing machine, keep it from an injury by the heat of it.
- 6) When the battery is charged quickly with the quick charger, an extraordinary voltage is loaded on the silicon rectifier, so the battery must be removed from the car or the circuit of alternator output terminal be disconnected.
- 7) Do not make the megger test on the any parts of alternator and the regulator because any abnormal voltage threatens to break the silicon rectifier down.

CARBURETOR



Adjustment of idling:

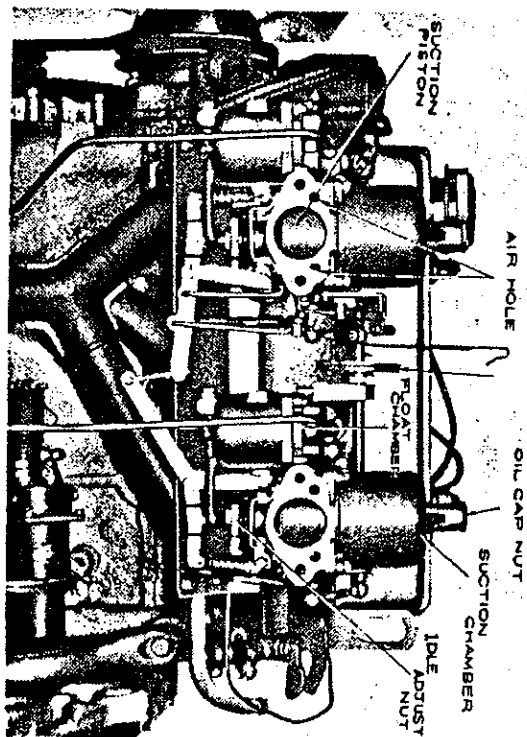
Slow adjustment is conducted with the throttle adjust screw and the idle adjust nut after the engine has been warmed up.

1) Tighten completely the idle adjust nuts of the carburetors on the front and rear sides, then return about three turns and tighten 2~3 turns the throttle adjust screw of the carburetor on the front side and make starting.

Release the throttle adjust screw of the carburetor on the rear side so as the end of it is free from the stopper and do not move it till the last.

- 2) Return the throttle adjust screw slowly, then the engine revolution slows gradually down and stop it just before the engine revolution becomes stagnant.
- 3) After that, release or retighten the idle adjust nuts of the carburetors on the front and rear sides the same turns and stop them when the engine revolution is the most speedy and smooth.
- 4) Further return the throttle adjust screw of the front side carburetor and slow down revolution, then the stable idling driving can be obtained.

- 5) At last stage for adjusting, tighten the throttle adjust screw of the rear side carburetor until its end makes contact with the stopper. Be careful not to screw in too much and further open the throttle valve. Adjustment of idling will affect consumption of fuel and acceleration.



Remarks:

The length of connecting rod must be fixed previously by the turn backle $86 \pm 2^{+0}$ mm in overall length and specially as to the one of rear carburetor never change it length. Maximum boost at the point of best conditioned mixture ratio will be about 470 mm Hg at 650 r. p. m.

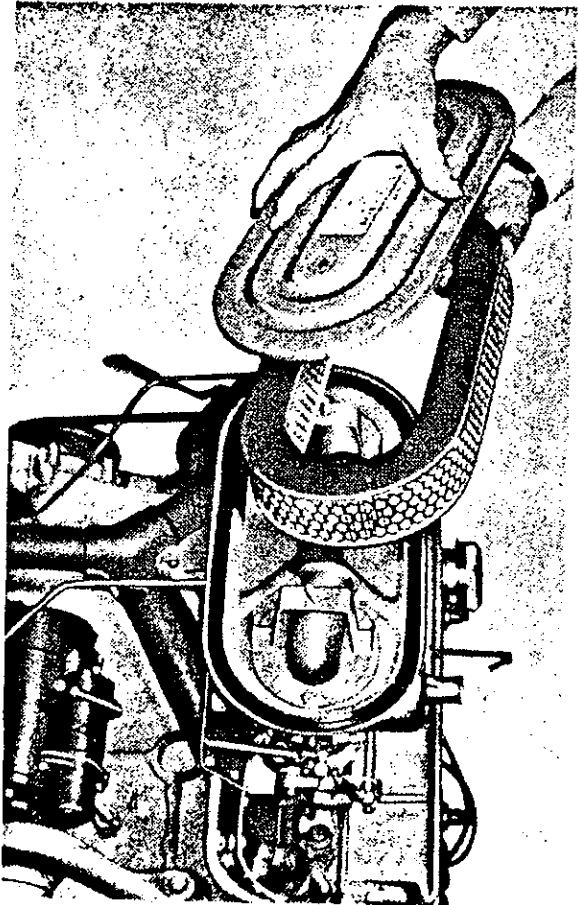
INSTRUCTIONS FOR BALANCING TWIN HITACHI HUB-38-W VARIABLE VENTURI SIDE DRAFT CARBURETOR

Method (A)

- 1) Remove air cleaner.
- 2) Disconnect throttle connections of both carburetors.
- 3) On the front carburetor (nearest radiator) set idle screw so that tachometer reading is 500 RPM. If you do not have an instrument for balancing multiple carburetors, use a length of plastic hose, 1/2 inch diameter, and place at open horn of carburetor, and at your ear. Listen to sound of air entering carburetor.
- 4) Move to second carburetor and follow same procedure of listening to air entering this carburetor. If the sound is exactly the same as the front carburetor, then they are synchronized. If not, then adjust the idle screw until they have the same sound.
- 4A) Now if reading of the tachometer has changed, you must move both idle screws until you have both carburetors hissing the same tone and the RPM is not more than 650. You have now synchronized the throttle opening of dual carburetors.
- 5) We will now proceed to adjust and synchronize the fuel flow of both carburetors.
Start with the front carburetor adjustment.
With the engine running at 600 RPM, lift the piston of the back carburetor 1/2 inch. (This will make the carburetor inoperative.)
If engine stalls, then you must richen the front carburetor until it will keep the engine running as if it were firing only two cylinders, rough but a steady bear.
Now repeat this same procedure of lifting the piston on the front carburetor, and adjust the mixture of the back carburetor.

5A) You have now synchronized your air fuel ratio in both carburetors. You may find when this step is completed that RPM has increased on your tachometer; if so, go back to Step and correct your idle to 600 RPM.

6) Next, adjust your throttle linkage connecting the carburetors with the throttle shaft mounted on the intake manifold.
Adjust the length of throttle link so that it will snap in place without changing RPM on the front carburetor.
Do this same operation with the link to the back carburetor.
Your engine should now run smoothly, providing the rest of your engine is properly tuned, such as valves, points, plugs, condenser, and ignition timing properly set.



AIR CLEANER

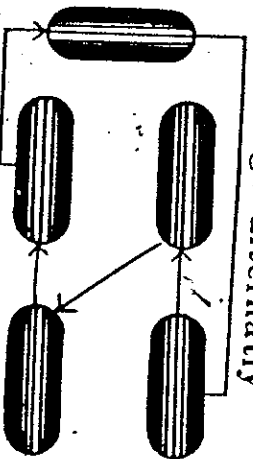
The element is of paper filter type and can be easily taken out by removing wing nut.

Clean the element every 5,000 km (3,000 M) by giving vibration or by blowing dry pressure air from inside, and change new one every 30,000 km (20,000 M).

Care must be taken not to injure filter paper.

ROTATION OF TIRES

If the tires are used for long at the same positions, they are apt to be worn and damaged only in their particular portion and shorten their lives. For instance, the front tires are unevenly worn generally, and the rear tires of the car running a mountain district are worn and get cuts at their outside edges. Therefore, check the tires periodically and rotate them every 3,000 miles (6,000 km). The spare tire also must be included in the rotation.



Excess Want Correct



Pressure for tire

Tire must always have a proper air pressure according to the load. Tire with the correct air pressure will bear evenly on the ground. If the pressure is too low the tire touches the ground with its both edges, and if too high it touches the ground with its center portion. In such cases above the tire will be unevenly worn and have a shortened life.

The tire pressure should be checked while it is cold. Otherwise an allowance must be made for the increase in pressure due to the heat generated during running. Pressure should not be reduced when it is raised by the heat.

Checking and maintenance should be done for not only tires in use, but spare tire. If air pressure of tire reduces more than 7 lb (0.5 kg/cm²) in a week, this can be regarded as having air leaks somewhere. In this case, first make sure whether or not there are air leaks at the air valve.