

JENSEN

MODEL

C - V 8

INSTRUCTION BOOK

HANDBOOK OF INSTRUCTIONS

FOR THE

JENSEN CV-8

This handbook is published for the use and assistance of owners of JENSEN CARS. It embodies in a concise form the advice and suggestions of the Company's Technical Staff in regard to lubrication, general care and maintenance, together with supplementary information regarding the necessary adjustments which may be required from time to time.

COMPILED AND PUBLISHED BY

JENSEN MOTORS LIMITED

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NOTE:

The full Chassis Serial Number must be quoted in all correspondence.

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Foreword

In compiling this book some knowledge of the operation and care of a Motor Car has been presupposed, and the instructions contained herein, will, if followed with reasonable care, enable you to obtain the maximum enjoyment and satisfaction from your JENSEN Car.

A lubrication chart will be found on Page 11 of this Handbook.

In the rare event of any unforeseen defect or unusual trouble developing, it is requested that the matter be at once brought to our notice.

The interest of Jensen Motors Ltd. in their products, does not end with the delivery of the Car; on the contrary, it is the Company's desire to keep in close touch with all Jensen owners, and to provide for their convenience a Service-after-Sales second to none.

JENSEN MOTORS LIMITED

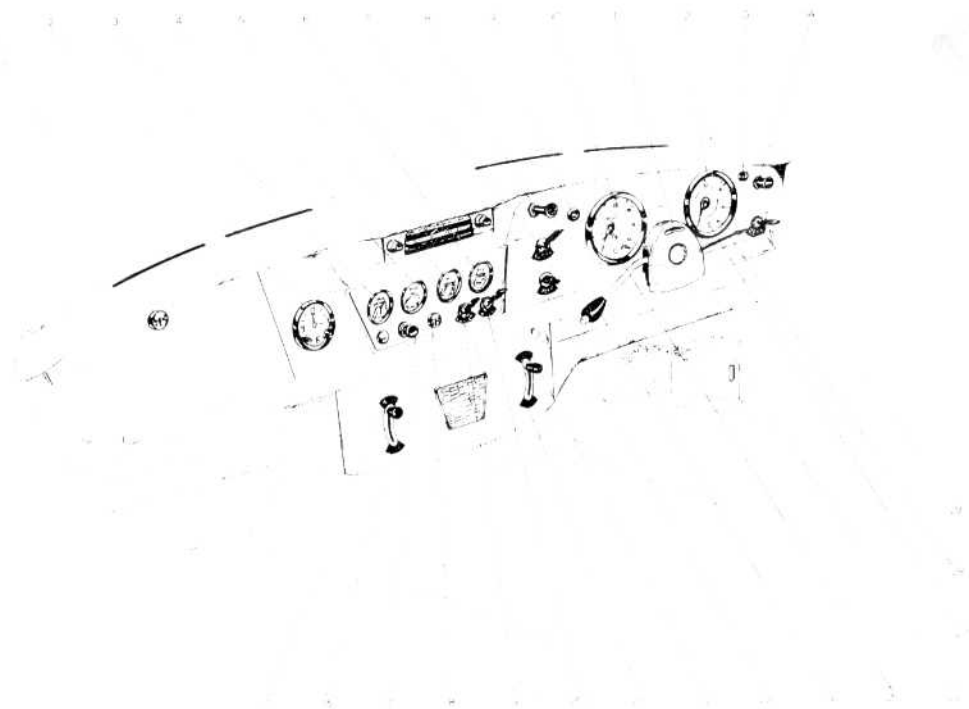


Fig. 1

INSTRUMENTS AND CONTROLS

- | | |
|--------------------------------|----------------------------------|
| 1. Cubby Lid Lock | 16. Interior |
| 2. Electric Clock | 17. Cigar Lighter |
| 3. Ammeter | 18. Ignition Starter |
| 4. Oil Pressure Gauge | 19. Instrument Illumination |
| 5. Water Temperature Gauge | 20. Fan-Heater |
| 6. Fuel Gauge | 21. Hot |
| 7. Lights | 22. Cold |
| 8. Wipers & Screen Wash | 23. Map |
| 9. L.H. Flasher Warning Light | 24. Gear Selector |
| 10. Speedometer | 25. High Beam Warning |
| 11. Gear Indicator | 26. Fresh Air Ducts |
| 12. Rev. Counter | 27. Low Fuel Warning |
| 13. R.H. Flasher Warning Light | 28. Indicator & Headlamp Flasher |
| 14. Air Control Heater | 29. Petrol Filler Lid |
| 15. Demist | |

GENERAL DIMENSIONS AND DATA FOR QUICK REFERENCE

The chassis number will be found stamped on a plate secured to the front of the scuttle. This number is also stamped on the front of the chassis frame front cross member. The engine number is stamped on the L.H. bank of the Cylinder Block immediately forward of No. 1 Cylinder.

Cylinders are numbered as follows:—

R.H. Bank Front to Rear	2 — 4 — 6 — 8
L.H. Bank Front to Rear	1 — 3 — 5 — 7

Bore	105 mm. (4.125 ins.)
Stroke	86 mm. (3.375 ins.)
Cubic Capacity	5,916 c.c. (361 cu. ins.)
B.H.P.	305 at 4,800 r.p.m.
Compression Ratio	9 : 1
Firing Order	1 — 8 — 4 — 3 — 6 — 5 — 7 — 2
Coolant Capacity including Heater	24 pints (Imp.), 29 pints (U.S.), 13.638 litres
Oil Sump Capacity	7 pints (Imp.), 8 pints (U.S.), 3.978 litres
<i>(Dipstick top level must not be exceeded)</i>	
Engine Oil Pressure at 40/50 m.p.h.	45/65 p.s.i.
Gearbox Capacity:	
Automatic	15.5 pints (Imp.), 18.5 pints (U.S.), 8.808 litres
Manual with Overdrive	5 pints (Imp.), 6 pints (U.S.), 2.841 litres.
Rear Axle Capacity	3 pints (Imp.), 3.6 pints (U.S.), 1.705 litres
Fuel Tank Capacity	16 galls. (Imp.), 19 galls. (U.S.), 72 litres

OVERALL GEAR RATIOS:

Automatic	1st	7.5 : 1
	2nd	4.4 : 1
	3rd	3.07 : 1
	Reverse	6.74 : 1
	Overdrive	2.75 : 1
Manual with Overdrive	1st	9.02 : 1
	2nd	5.27 : 1
	3rd	3.54 : 1
	Overdrive	2.75 : 1
	Reverse	11.8 : 1
Tyres	Dunlop 6.70 × 15 road speed.	
Tyre Pressure	24 p.s.i. all round (see notes on wheels and tyres pp. 17—18) (1.68 kg./sq. cm.)	
Wheelbase	8 ft. 9 ins. (2.667 metres)	
Track (Static laden weight)	Front	4 ft. 7 ¹³ / ₁₆ ins. (1.417 metres)
	Rear	4 ft. 8 ⁷ / ₈ ins. (1.445 metres)
Toe-in (Static laden weight)	¹ / ₁₆ ins. (1.5875 mm.)	
Camber (Static laden weight)	1° pos.	

Castor Angle (Static laden weight) 2° pos.
 King Pin Inclination 7°
 Centre of Gravity 49 ins. (124.46 cm.) aft of front axle
 Overall Width 5 ft. 7½ ins. (1.714 metres)
 Overall Height 4 ft. 7 ins. (1.397 metres)
 Overall Length 15 ft. 4 ins. (4.686 metres)
 Ground Clearance 6 ins. (15.24 cm.)
 Turning Circle 38 ft. (11.592 metres)
 Weight (dry) 29 cwt. (1473.2 kilogrammes)
 Steering Ratio 17.2 : 1 3.3 turns, lock to lock
 IGNITION TIMING 10° before T.D.C. at 500 r.p.m. *
 CONTACT BREAKER GAP014 ins. to .019 ins. (356 mm. to 483 mm.)
 SPARK PLUGS Champion J9Y or Autolite A 32. Gap .035 ins.
 VALVE CLEARANCES Zerolash. No adjustment required.
 OIL SUMP CAPACITY.—It is important that sump should not be filled above the high level mark on the dipstick, otherwise functioning of zerolash tappets may be impaired.

STARTING UP AND GENERAL RUNNING HINTS

ENGINE RUNNING-IN PERIOD

You do not have to drive your new car at consistently low speeds during the first few hundred miles of operation. Precision manufacturing methods and improved design make it possible for you to begin driving in a normal manner.

While speeds in excess of 50 miles an hour should be avoided for the first 300 miles, occasional spurts up to this speed (after the engine is warmed) will materially assist the "running-in" process.

After 300 miles of driving, occasional bursts of higher speed are not only permissible but desirable. Your new car should not, however, be operated at top speed until it has been driven at least 500 miles. High speeds should always be avoided until the engine is warmed up to operating temperature.

During the "running-in" period it is extremely important to keep close watch on the engine oil level and the panel instruments, especially the temperature and oil pressure gauges. Sustained high engine speed should be avoided during early life of the new car so that all parts will become adjusted to their position without excess friction and heat.

The observance of these precautions will be reflected later on in the prolonged life of the car. Under this heading, lubrication is by far the most important item. Many troubles are directly traceable to lack of proper lubrication and owners will be well repaid by giving careful attention to the lubrication diagram.

The engine attains maximum power at 4,800 r.p.m. and 5,100 r.p.m. should not be exceeded.

The illustration on page 4 shows the general arrangement of controls. The following points should be observed in starting the engine.

* WITH VACUUM ADVANCE DISCONNECTED

STARTING CAR ENGINE

On cars with automatic transmission move the gear range selector lever to neutral, quadrant position "N". The engine cannot be started unless the selector lever is in this position.

It is essential to ensure that the handbrake is applied before starting the engine, as the automatic carburettor system will cause the engine to run at a fairly fast idle speed on initial starting from cold.

Always depress the accelerator pedal slowly to one third of its travel before starting the engine.

Turn ignition key to extreme right to operate starter. When engine fires, release key. The engine should start immediately.

NOTE.—Do not pump accelerator pedal while starting. If engine does not start because of excess fuel in cylinder, push accelerator pedal slowly to full open and operate starter while keeping pedal depressed.

The fuel mixture is automatically adjusted to provide for easy engine starting and for the warming and operating periods.

GEARBOX OPERATION

The automatic gearbox is more than just a mechanism which automatically adjusts the gear ratios according to conditions of speed and load. An overriding control is provided which enables the driver to exercise his own judgment and desire in regard to the gear ratios to be selected and an understanding of what is possible greatly enhances the pleasure to be derived from driving the car.

The gearbox provides three forward changes, also Neutral and Reverse. The control quadrant is marked as follows:

R N D 2 1

The following indicates the gears obtained in each range:

- "1" — 1st only. (Maximum permissible 48 m.p.h.)
- "2" — 1st and 2nd. (Maximum permissible 82 m.p.h.)
- "D" — 1st, 2nd and top.
- "N" — Neutral.
- "R" — Reverse.

There are three "gate" positions.

- No. 1— 1st and 2nd.
- No. 2—"D" and "N".
- No. 3—"R".

To change from one gate to another it is necessary to depress the button in the end of the gear lever.

MOUNTAIN DRIVING

When driving in mountainous country or with heavy loads, the 2 or 1 position should be selected on upgrades which require heavy throttle for half a mile or more. Lower ratios reduce the possibility of overheating the transmission and converter

under these conditions. The 1 position is for severe operation or to obtain better control, or for operation in descending a steep hill.

TO DRIVE AWAY

If the driver so desires, he can leave everything to the automatic gearbox and gear changes will occur at the theoretically correct moment in terms of speed and load. Obviously, however, road or traffic conditions may be such that the automatic gear change may be undesirable, or may be unexpected, and it is for this reason that the overriding controls are provided to enable the driver to enforce a gear change as and when desired.

The driver should, therefore, first familiarise himself with the approximate speeds at which the automatic changes occur. These are as follows:

D RANGE		
	Up-changes	(m.p.h.)
	1 — 2	2 — top
Light Throttle	11	15
Full Throttle	48	82

The owner-driver who wishes occasionally to indulge in a very fast get-away will obtain maximum acceleration by allowing the automatic gearbox to make full throttle changes throughout the speed range.

The automatic down-change at light throttle will normally occur at the following speed:

Top to 1st direct	8 m.p.h.
-------------------	----------

Under "Kick-down" conditions down changes occur at speeds below the following limits:

Top to 1st	43 m.p.h.
Top to 2nd	75 m.p.h.

Caution must be observed when making a "Kick-down" change at speeds below 43 m.p.h. in view of the sudden surge of power engendered.

MANOEUVRING

When manoeuvring, "D" should be selected for forward movement. Reverse gear can be selected on quadrant, whilst vehicle is in forward motion.

IDLING

Engage neutral ("N") when it is necessary to idle the engine for an extended period.

COASTING

Coasting must be avoided at all times, otherwise the gearbox may suffer serious damage due to lack of lubrication.

TOWING

Transmission Inoperative. Tow the vehicle with a rear end pick-up or remove the propeller shaft.

Transmission Operating Properly. The vehicle may be towed safely in "N" (neutral) at moderate speeds. For long distance towing (over 100 miles) the propeller shaft should be removed.

PUSH STARTING

If the engine fails to start in the normal manner, it may be started by pushing. Towing the car to start is not recommended due to the sudden surge of power when the engine starts.

Turn the ignition on, then engage 1 (low) position and depress the accelerator pedal slightly, after the vehicle has been pushed to a speed of 15 to 25 m.p.h. (approximately), the transmission will drive the engine.

OPTIONAL MANUAL TRANSMISSION

The change speed arrangement being conventional, we do not propose to describe the method of engaging and changing gear, but we give here a plan showing the gear lever positions.

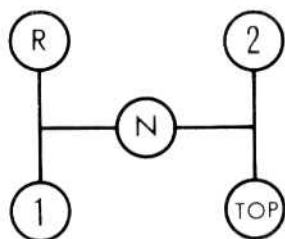


Fig. 2

OVERDRIVE

To engage overdrive, which can only be operated from top speed position, push down switch on facia. No movement of the clutch pedal is necessary. Reverse process to return to top speed position. If a change out of top gear is made with overdrive switched on, a special switch will automatically cut out the overdrive. On returning to top gear the overdrive will automatically be switched off.

Power changes are inhibited and it is necessary, therefore, to ease back the accelerator pedal and wait for the engagement to occur when changing from direct gear into overdrive. No inhibition is engineered into the disengagement of overdrive.

On no account must the inhibitor mechanism be removed and any fault must be immediately rectified.

LUBRICATION

FIRST 1,000 MILES SERVICE

The following special service is necessary after the car has covered the first 1,000 miles.

- | | |
|---|------------------------------------|
| Drain and refill axle. | Tighten driving belt if necessary. |
| Check contact breakers, and adjust if necessary. | Check electrical system. |
| Check steering and front end geometry. | Check tyre pressures. |
| Check clutch adjustment (where applicable). | Check lights. |
| Check hydraulic reservoirs for fluid. | Check braking system. |
| Check all water connections and tighten if necessary. | |

A — 1,000 MILES

- A1 — King Pin Bearings Upper and Lower—Grease Gun (4 nipples).
- A2 — Front Suspension Lower—Grease Gun (2 nipples).
- *N.B.—Rear Axle—Initial Drain and Refill.

B — 2,000 MILES OR MONTHLY

- B1 — Check Brake Fluid Level in Master Cylinder.

C — 4,000 MILES

- C1 — Steering Rack—Grease Gun (1 nipple).
- C2 — Brake Balance Lever—Grease Gun (1 nipple).
- C3 — Renew Oil Filter Element.
- C4 — Steering Dampers—Inspect and Top Up.
- C5 — Shock Absorbers—Inspect and Top Up.
- C6 — Sump—Drain and Refill.
- C7 — Manifold Heat Control Valve—Lubricate.
- C8 — Automatic Transmission—Inspect and Top Up.
- C9 — Distributor—Inspect and Lubricate.
- C10 — Wheel Hubs, Rear—Grease Gun.
- C11 — Rear Axle—Check and Top Up.
- C12 — Alternator—Clean

MANUAL TRANSMISSION

- C13 — Clutch Bell Crank Lever—Grease Gun (1 nipple).
- C14 — Clutch Bell Crank and Fork Linkages—Lubricate
- C15 — Gearbox—Check and Top Up.

D — 8,000 MILES

- D1 — Air Cleaner Element—Clean and Check.
- D2 — Oil Filler Air Cleaner—Clean and Re-oil.
- D3 — Distributor—Clean, Check Points.
- D4 — Crankcase Ventilator Valve—Clean and Check.
- D5 — Carburetter Choke Piston—Check.
- D6 — Sparking Plugs—Clean and Check.

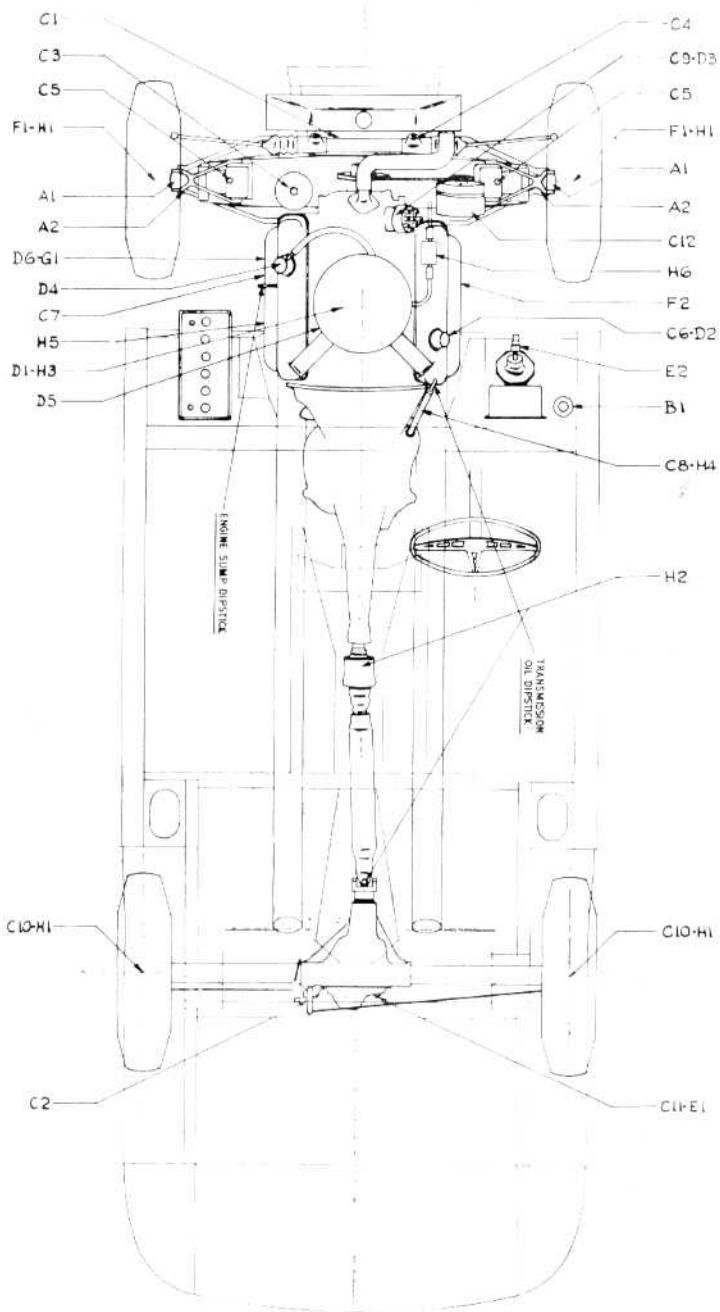


Fig. 3

E—12,000 MILES

- E1 — Rear Axle—Drain and Refill.
- E2 — Brake Servo Piston—Lubricate.

F—16,000 MILES

- F1 — Wheel Hubs, Front—Inspect and Repack.
- F2 — Fuel Pump Inlet Pipe Filter—Replace.

G—20,000 MILES

- G1 — Sparking Plugs—Replace.

H—32,000 MILES

- H1 — Wheel Hubs—Clean and Repack.
- H2 — Propeller Shaft Joints—Disassemble, Clean and Repack.
- H3 — Air Cleaner Element—Renew.
- H4 — Automatic Transmission—Drain, Refill and Adjust.
- H5 — Automatic Transmission Oil Filter—Replace.
- H6 — Fuel Filter, Carburetor Inlet Pipe—Replace.
- H7 — Manual Transmission—Drain and Refill.

ELECTRICAL EQUIPMENT

All electrical equipment is of Lucas manufacture with the exception of the ignition, charging and starter systems which are made by Autolite.

LAMP BULBS

7 in. Sealed Beam Units	12v. 60/45W	Lucas No. 54521872
5 $\frac{3}{4}$ in. Sealed Beam Units	12v. 37.5W	Lucas No. 54521805
Side Lamp	12v. 6W	Lucas No. 989
Number Plate	12v. 6W	Lucas No. 989
Reverse Lamp	12v. 24W	Lucas No. 199
Instrument	12v. 2.2W	Lucas No. 987
Warning Lamps	12v. 2.2W	Lucas No. 987
Stop and Tail	12v. 21/6W	Lucas No. 380
Flashers	12v. 21W	Lucas No. 382
Gear Quadrant Light	12v. 2.2W	Lucas No. 987
Boot and Bonnet Light	12v. 6W	Lucas No. 989
Map Light	12v. 3W	Lucas No. 256
Interior Roof Light	12v. 3W	Lucas No. 256

BATTERY (Negative Earth)

The Lucas 12 volt Battery Type BTZ11A, 72 amp hours, is situated on the left-hand side of the bulkhead. When the acid level falls below the top of the plates, distilled water should be added until the baffle plate is again covered. It is extremely important not to raise the fluid level beyond the amount necessary to cover the baffle plate as surplus fluid could, under certain conditions, cause the acid to overflow. Keep the battery terminals clean and tight and well smeared with petroleum jelly. This will protect the terminals from corrosion, which if allowed to continue unchecked, would result in a break in the battery circuit.

It is important that the battery be firmly secured at all times.

Battery is held in position by a clamp which is secured by four wing nuts.

FUSES

The main and auxiliary fuses are 35 amp and the fuse box is located forward and below the right-hand side of the fascia panel.

HEADLAMPS

The four headlamps contain sealed beam light units, giving four main beams in the 'on' position and two meeting beams in the 'dip' position.

The sealed beam units have a high degree of accuracy permitting the aiming of the beam to be effected with reference to a mechanical feature of the lamp. Three 'aiming pads' are moulded in the outside face of the lens to provide an 'aiming plane' which, when set vertical and square, gives correct beam aim. This is done by a pair

of mechanical 'aimers' before the car leaves the factory and any subsequent checks should be made with this type of equipment.

As the filaments are sealed in the unit it will be necessary to replace the complete unit in the event of filament failure.

The headlamps can be 'flashed' by pulling the trafficator control lever backwards.

SCREENWIPER

The screenwiper is of the two-speed heavy duty type and the motor is housed on the scuttle. To operate turn knob on facia clockwise to the required position.

SCREENWASHER

The electric screenwasher is brought into operation by depressing the screen-wiper control knob.

MAP LIGHT

To replace map light bulb the central instrument panel should be removed. The festoon bulb is secured in a transparent plastic housing and this should be slid forward and down, when the bulb will be easily accessible.

GEAR QUADRANT LIGHT

To replace bulb remove cover and slide the bulb holder and bulb out from the left-hand side of the panel.

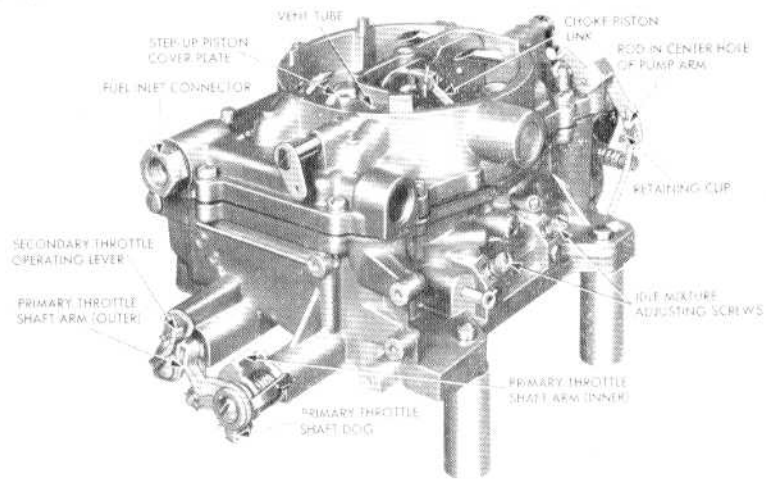
BRAKES

A Dunlop hydraulic disc braking system is used on all wheels, being operated by the foot pedal in conjunction with Vacuum Servo. The handbrake is separate from the hydraulic foot braking system and operates through a linkage to the self adjusting rear brakes. The supply tanks for the brakes and clutch master cylinder (when fitted) are separate. The fluid level should be checked approximately every 2,000 miles, and topped up if necessary with Dunlop Disc Brake Fluid, to within half an inch of the top of the tanks. This clearance is necessary to allow for the expansion of the brake fluid. See separate handbook for instructions on Disc Brakes.

WARNING.—Do not drill main frame tubes in any circumstances as these also function as vacuum reservoirs for the braking system, and in the case of manual transmission, the clutch control system.

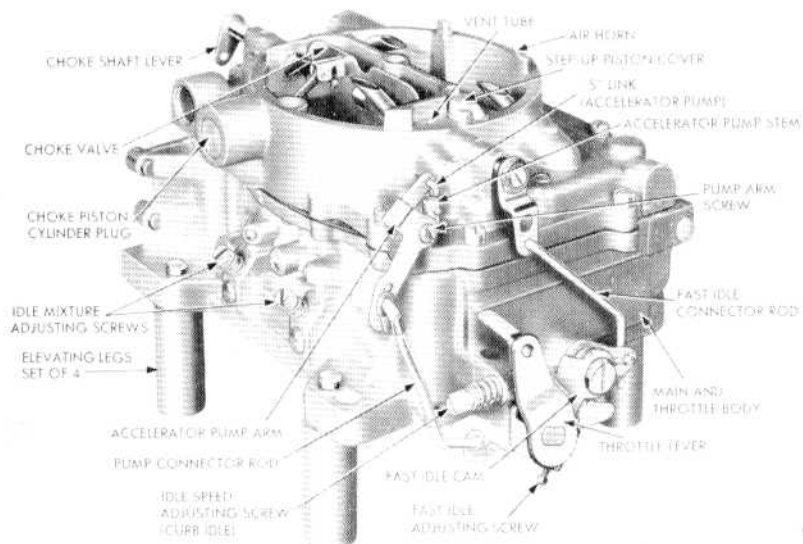
BRAKE SERVO

The vacuum piston of the Servo should be regularly lubricated every 12,000 miles, to prevent the leather cup from hardening and causing either an air leak or seizure of the piston. The correct lubricant for this purpose is Edgar Vaughan's 'Cosmolubric'. Otherwise the Servo motor should not require attention over long periods. However, should any trouble be experienced with the Servo, it is recommended that the unit be returned to the manufacturer for servicing. (See page 23).



814170A

Fig. 4



814169A

Fig. 5

FUEL SYSTEM

The fuel system consists of the tank, line and filters, mechanical pump, carburetter and air cleaner. The fuel tank contains 16 gallons (Imp.), 19 gallons (U.S.) or 72 litres. An orange warning light in the rev counter face begins to flicker when fuel level is down to 3 gallons (Imp.) and remains in the fully on condition as the level drops further. A solenoid operated flap can be raised by a switch on the right-hand side of the fascia (Re-fuel) to expose the fuel tank filler pipe. Alternatively this flap can be raised manually by depressing a button situated below the forward left-hand corner of the boot opening.

The carburetter is automatic and the only adjustments that may normally be required are the idling speed settings.

IDLE SPEED ADJUSTMENT

To make the idle speed adjustment, the engine must be thoroughly warmed up. For the best results, it is recommended that the rev counter be used in this adjustment.

Before making the idle speed adjustment observe the following precautions:—

On cars equipped with the automatic transmission loosen the nut in the sliding link of the carburetter to bellerank rod so that the stop in the transmission will not interfere with the free movement of the carburetter throttle lever.

To make idle speed adjustment, proceed as follows:

- (1) Turn the idle speed screw in or out to obtain 500 r.p.m. Be sure the choke valve is fully open and that the fast idle adjusting screw is not contacting the fast idle cam.
- (2) Turn each idle mixture screw to obtain the highest r.p.m. While making the adjustment, carefully watch the rev counter and notice that the speed can be decreased by turning the screws in either direction from the setting that gave the highest r.p.m. reading.
- (3) Readjust to 500 r.p.m. with the idle speed screw.
- (4) Turn each idle mixture adjusting screw in the clockwise direction (weaker) until there is a slight drop in r.p.m. Now, turn each screw out, counter-clockwise (richer) just enough to regain the lost r.p.m.

This procedure will assure that the idle has been set to the leanest possible mixture for smooth idle. **This setting is very important.**

Since the correct speed was originally set using the idle speed screw, the speed obtained after finding the leanest smooth idle setting will probably be too fast.

- (5) Readjust the idle speed screw to obtain correct idle speed. Repeat steps (2) and (4) above if necessary.

After the proper idle speed has been obtained, move the sliding link to the rear, against the stop, and tighten the nut securely.

FAST IDLE SPEED ADJUSTMENT

To set the fast idle speed, proceed as follows:—

- (1) With the engine not running, open the throttle halfway, close the choke valve, then allow the throttle to close. Release the choke valve.

The fast idle adjusting screw should be centred over the index mark on the fast idle cam. If an adjustment is necessary, bend the fast idle rod at the angle, to secure proper position of the fast idle cam. (See Figure 6).

- (2) **With the engine running and warmed up**, turn the fast idle adjusting screw in or out to the specified 1700 r.p.m.

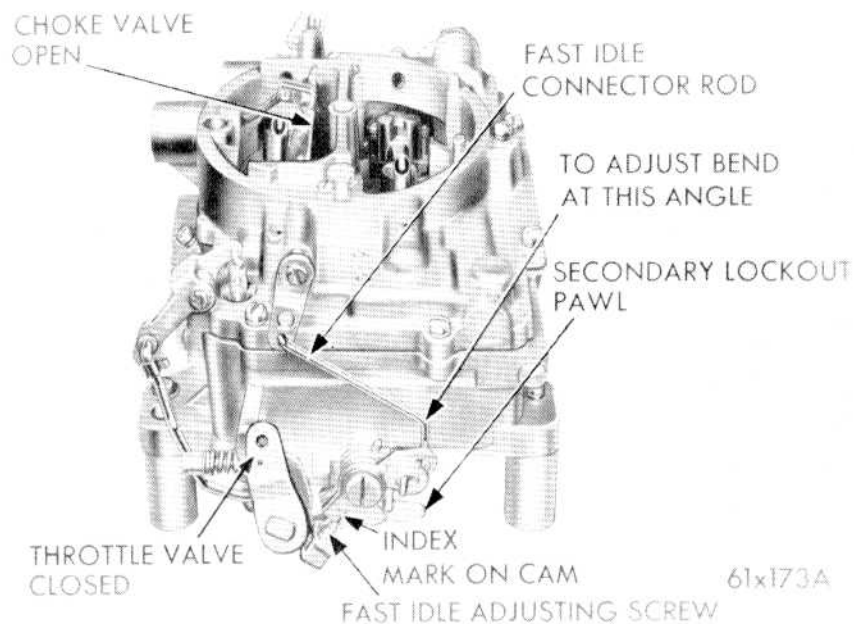


Fig. 6

THROTTLE LINKAGE

If for any reason the throttle linkage has been disturbed, the instructions in Fig. 7 must be carried out in order to regain the original settings.

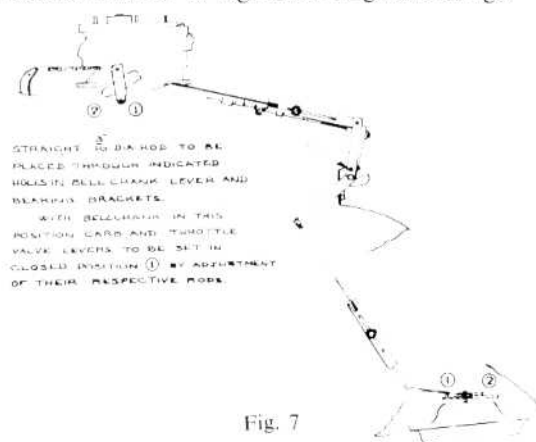


Fig. 7

ACCELERATOR PEDAL ADJUSTMENT

The accelerator pedal is adjustable for length as indicated in Fig. 8.

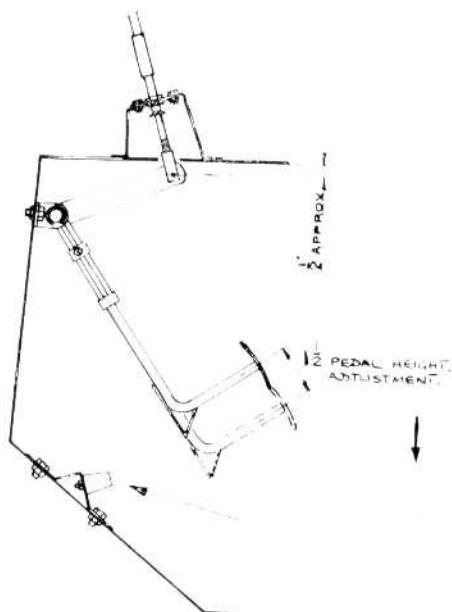


Fig. 8

CARE OF TYRES

TYRE PRESSURES

Standard tyre specification—Dunlop 6.70 × 15 RS.

The correct pressures are as follows:—24 p.s.i. all round.

For town use only, rear pressures may be dropped to 22 p.s.i.

For sustained high speed in excess of 110 miles per hour, the tyre pressures should be increased to 30 p.s.i.

Pressures (including spare) should be checked and adjusted at least weekly. This should be done when the tyres are cold and not when they have attained normal running temperatures. Any unusual pressure loss should be investigated and corrected.

Under-inflation has an adverse effect on the car and causes rapid and sometimes irregular wear. Also the casing may be damaged by excessive bending.

TYRE AND WHEEL BALANCE

Balancing of tyre and wheel assemblies is essential.

All wheel assemblies on JENSEN cars are balanced before leaving the factory.

The original balance may be disturbed after a period of running. It can be checked, and, if necessary, corrected by any Service Station with tyre balancing equipment.

FACTORS AFFECTING TYRE LIFE

The most important factors which have an adverse effect on tyre life are:—

- (1) Incorrect tyre pressures.
- (2) Misalignment of wheels. (See alignment of front wheels, below).
- (3) Harsh acceleration. Wheel spin should be avoided.
- (4) Frequent fierce braking.

SPARE WHEEL

To remove spare wheel fit special adaptor into wheel brace and lift right-hand rear corner of boot carpet. This will expose a slotted tube into which the adaptor should be inserted and the brace turned anti-clockwise until the wheel can be withdrawn. To replace wheel reverse this operation.

FRONT SUSPENSION

The independent front suspension is of the "Wishbone" type, the coil springs being held in compression between the chassis frame and the lower wishbone. Damping is effected by Piston type hydraulic dampers. The dampers should be topped up with Armstrong Damper Fluid every 4,000 miles. Suspension lubrication points are shown in the lubrication chart.

ALIGNMENT OF FRONT WHEELS

Alignment of the front wheels is an important factor in tyre economy and ease of steering. The front wheels should have a toe-in of $\frac{1}{16}$ ins. This measurement is taken between the wheel rims at the front and rear of the wheels at a height equal to the centre of the wheel from the ground. The rear measurement should be $\frac{1}{16}$ ins. greater than the front measurement. If the difference between the two measurements is other than this, the wheels are out of alignment and adjustment should be made immediately.

To carry out this adjustment, loosen the locknuts on the ends of the steering tie rods and rotate an equal amount in the appropriate direction to give the correct toe-in. When the correct measurement has been obtained, retighten the two locknuts.

ADJUSTING FRONT WHEEL BEARINGS

- (1) Jack up front of the car and remove the nave plate and hub cap.
- (2) Remove cotter pin.
- (3) Tighten wheel bearing nut to about 90 in.lbs. while rotating wheel and finish with slot of nut over cotter pin hole.
- (4) Back off nut one slot and install new cotter pin.

LUBRICATION OF FRONT HUBS

Wheel bearings should be cleaned and repacked with grease every 16,000 miles, under normal conditions. If grease is emulsified the hub should be dismantled and the bearings cleaned and regreased. Grease should also be sparingly applied to the inner surfaces of the hub and cap as shown in Figure 9. The hub should not under any circumstances be completely filled with grease.

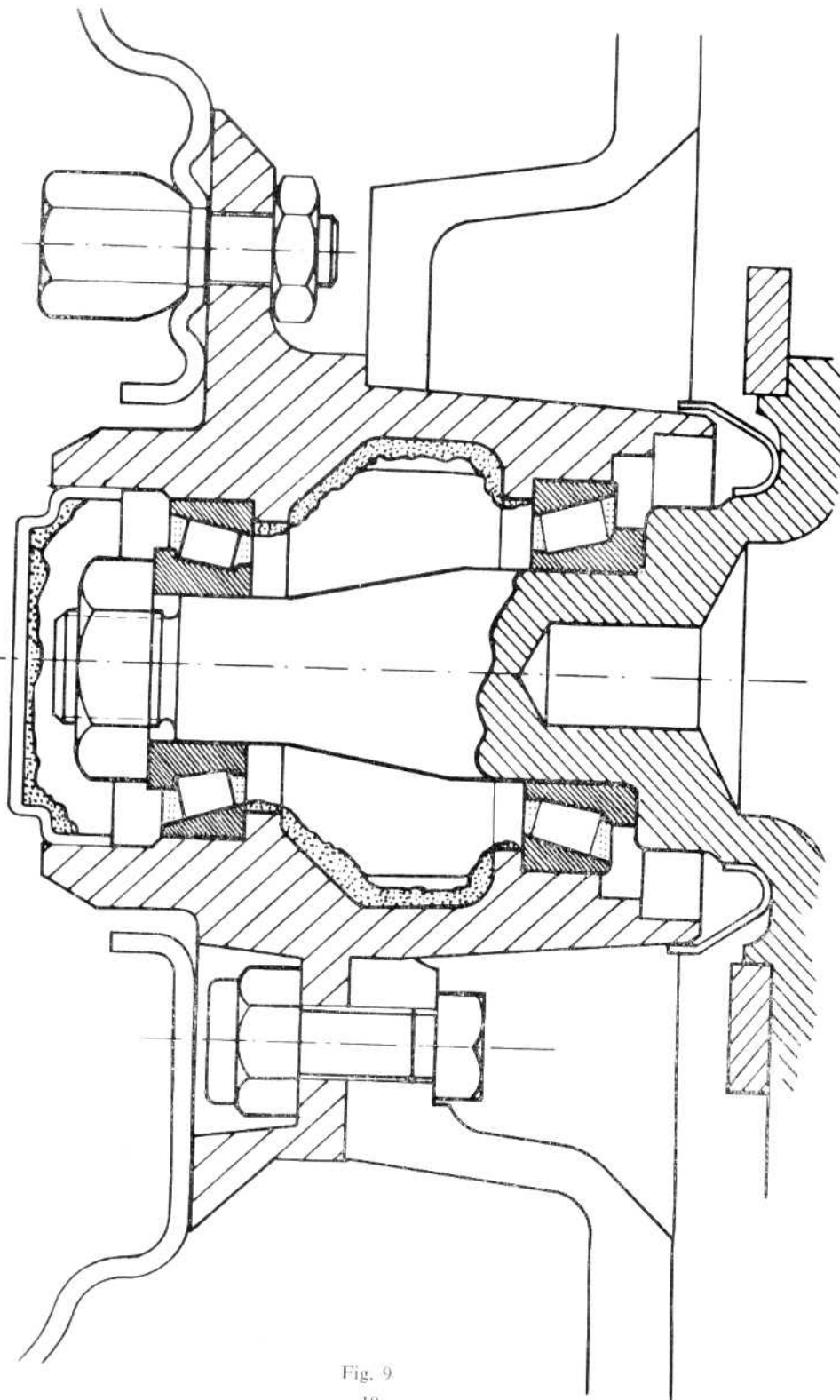


Fig. 9
19

REAR AXLE

The rear axle with Powr-Lok limited slip differential is of the semi-floating type.

A cover on the rear of the gear carrier housing permits the inspection and flushing of the differential assembly without dismantling the axle.

The axle gear ratio is stamped on a tag attached to the assembly by one of the rear cover screws. The axle serial number is stamped on the gear carrier housing and should always be stated when corresponding with reference to any particular unit.

In the event of trouble through any cause, wherever possible it is strongly recommended that use should be made of the factory reconditioning service.

For rear axle lubrication, see instructions on pages 10, 11 & 24.

Damping is effected by direct acting telescopic dampers which are sealed and require no adjustment.

DRIVING BELT ADJUSTMENT

The belt must be sufficiently tight to prevent slip at the alternator and water pump, yet there should be sufficient slack to deflect the centre of the belt—about $\frac{1}{4}$ in. between pump and alternator.

To make any necessary adjustments, slacken the bolts and raise or lower the alternator until the desired condition of the belt is obtained, then securely lock the alternator in the new position.

ELECTRIC COOLING FANS (Engine Radiator)

Two electric fans are provided and these are automatically operated only when coolant temperature reads above 'N' (normal) on the gauge.

HEATING AND VENTILATION

A heater of $4\frac{1}{2}$ kilowatt output is fitted, the controls of which are clearly marked. The two-speed fan is operated by a three-position switch marked "Fan" on the facia. Sliding panels are provided on each side of the scuttle to permit additional cool air to be admitted.

A water valve self regulating control is provided in the heater to maintain the temperature which has been selected by the hand control.

The main air intake to the heater is controlled by the knob below facia.

COOLING SYSTEM

Circulation of the coolant is by a large outlet centrifugal pump with a thermostat to assist rapid warming from cold.

Capacity 24 pints (Imp.), 29 pints (U.S.), 13.6 litres.

TOPPING UP

WARNING.—The cooling system is pressurised at 14 p.s.i. All checks on coolant level should be made when the engine is cold or cool. Coolant level should be checked weekly. Top up when necessary to approximately 1 in. below the top of the header tank when the engine is cold.

WINTER PRECAUTIONS

In winter, an anti-freezing mixture of Ethylene Glycol base must be added to the cooling water as a safeguard against freezing and damage to the cylinder block or the radiator. Carefully follow the maker's instructions when preparing the mixture, and when topping up.

When anti-freeze has been added an anti-freeze label should be affixed to the radiator.

DRAINING COOLING SYSTEM

There are three draining points: one at the bottom of the radiator and one on each side of engine crankcase at the base of the cylinder blocks.

It is advisable occasionally to clean out the tap aperture with a strong piece of wire since the drain taps may become choked with sediment.

FLUSHING

To ensure efficient circulation of the coolant and to reduce formation of chemical deposits within the cooling passages, the system should be thoroughly flushed with clean running water every 5,000 miles and before adding anti-freeze.

STEERING

The rack and pinion unit is fitted with a single grease nipple and multi-purpose grease should be applied every 4,000 miles.

The steering ball joints at the outer ends of the tie rods do not require attention.

Two hydraulic dampers are fitted in the rack housing and these should be inspected and topped up if necessary every 4,000 miles with Shell Tellus 15.

The steering wheel can be adjusted by releasing the nut at the top of the steering column and raising or lowering the steering wheel to the desired position.

BODYWORK

Dust on the car may be lightly flicked off with a duster, but on all other occasions the car must be thoroughly washed and dried before a cellulose polish is used. Any attempt to rub dirt off the car will result in a severe scratching of the smooth surface of the cellulose.

Grease and tar splashes must be carefully removed with a soft rag dipped in petrol.

WASHING AND POLISHING

When washing the car, commence from the top and work downwards, using a slow flood of water and then leather off all the surplus moisture. After washing and drying, use a good quality cellulose polish which will not only impart a brilliant lustre to the surface of the cellulose but will help to preserve it from atmospheric corrosion. An occasional application of a good class wax polish will also help considerably in maintaining a smooth finish.

SEATS

Both the front and rear seats are upholstered in best quality hide, and will not require any attention other than an occasional clean down with a cloth moistened in water.

Provision is made for "fore and aft" adjustment of the front seats. Adjustment is effected by pushing the control lever, located beneath the seat in an outward direction easing the seat backward or forward as required. To ensure that the seat is properly located, check that the trigger on the adjustment lever is located in one of the adjustment apertures. The seat backs are adjustable for rake.

CHROMIUM

Wash chromium plating with soap and warm water. On no account use metal polish.

OTHER ATTENTIONS

The front shroud safety catch should be regularly checked to ensure that it is functioning correctly.

Door locks, hinges and other small working parts should be given a drop of oil occasionally and be checked for security. Sliding seat runners will benefit if periodically smeared with grease.

TOOL KIT

An adequate set of tools is supplied with the car.

The tools are stowed in a compartment on the left hand side of the boot.

The tool kit comprises the following:—

- 1 — Phillips Head Screwdriver.
- 1 — Standard Screwdriver.
- 1 — Electricians' Screwdriver.
- 1 — Plug Spanner, 14 mm., complete with Tommy Bar.
- 1 — Open Ended Spanner, $\frac{7}{16}$ " \times $\frac{1}{2}$ " A.F.
- 1 — Open Ended Spanner, $\frac{9}{16}$ " \times $\frac{5}{8}$ " A.F.
- 1 — Open Ended Spanner, $\frac{11}{16}$ " \times $\frac{3}{4}$ " A.F.
- 1 — Adjustable Spanner, 3".
- 1 — Pair Pliers.
- 1 — Tyre Pressure Gauge.
- 1 — Lifting Jack (Bevelift).
- 1 — Wheelbrace, $\frac{3}{4}$ " A.F.
- 1 — Adaptor for Spare Wheel.

EQUIPMENT

JENSEN MOTORS LTD. accept no liability for tyres, speedometers, electrical equipment and components not manufactured by the Company although supplied by the Company. Claims in respect of such of the proprietary parts as are listed below, or orders for repair of them may be addressed to their respective manu-

facturers from whom further information may be obtained on application to the addresses quoted below.

IMPORTANT

When claims are being made under guarantee it is essential to quote the chassis number which is stamped on a plate located under the bonnet on the R.H. side of the scuttle, and the date on which the car was commissioned.

BRAKES

DUNLOP RIM & WHEEL CO. LTD., Foleshill, Coventry.

BRAKES SERVO UNIT

AUTOMOTIVE PRODUCTS CO. LTD., Tachbrook Road, Leamington Spa.

DAMPERS

ARMSTRONG PATENTS CO. LTD., Eastgate, Beverley, Yorks.

ELECTRICAL EQUIPMENT (General)

JOSEPH LUCAS (ELECTRICAL) LTD., Gt. Hampton Street, Birmingham 18, and Dordrecht Road, Acton Vale, London, W.3.

ELECTRICAL EQUIPMENT (Ignition, charging and starter)

AUTOLITE. (Refer to JENSEN MOTORS LTD.).

INSTRUMENTS

S. SMITH & SONS (M.A.) LTD., Cricklewood Works, London, N.W.2.

TYRES

DUNLOP RUBBER CO. LTD, Fort Dunlop, Birmingham, and 1, Albany Street, London N.W.1.

TOOLS

ABINGDON KING DICK LTD., Abingdon Works, Kings Road, Tyseley, Birmingham 11.

LIFT JACK

JENKS BROS. LTD., Brittol Works, Bushbury, Wolverhampton.

DOOR HANDLES AND KEYS

WILMOT BREEDEN LTD., Easter Works, Camden Street, Birmingham 1.

EXHAUST SILENCERS

SERVAIS SILENCERS LTD., Ashford Works, Ashford Road, Cricklewood, London, N.W.2.

RADIO

WORLD RADIO LTD., Edgware Road, Cricklewood, London, N.W.2.

As our policy is one of continual improvement, we reserve the right to alter the specification and maintenance instructions without notice.

RECOMMENDED LUBRICANTS FOR JENSEN C-V8.

	SHELL	B.P.	ESSO	CASTROL	MOBIL
ENGINE Above + 32 F	Shell X-100 30 Shell X-100 Multigrade 10W/30 or 20W/40	Energol SAE 30 or Energol Visco-Static	Esso Extra Motor Oil 20W/30	Castrolite	Mobiloil Special or Mobiloil A
As Low as + 10 F	Shell X-100 20W or Shell X-100 Multigrade 10W/30	Energol SAE 20W or Energol Visco-Static	Esso Extra Motor Oil 20W/30	Castrolite	Mobiloil Special or Mobiloil Arctic
As Low as + 10 F	Shell X-100 10W Shell X-100 Multigrade 10W/30 or 5W/20	Energol SAE 10W or Energol Visco-Static	Esso Extra Motor Oil 10W/30	Castrol Z	Mobiloil Special or Mobiloil 10W
Below - 10 F	Shell X-100 Multigrade 5W/20	Energol SAE 5W	Esso Extra Motor Oil 5W/20	Castrol ZZ	Mobiloil Special or Mobiloil 5W
Oil Filler, Air Cleaner	Shell X-100 30	Energol SAE 30	As for Engine	Castrolite	Mobiloil A
Distributor	Shell X-100 Multigrade 10W/30	Energol Visco-Static	As for Engine	Castrolite	Mobiloil Special
Automatic Transmission and Manual Transmission	Donax T6	Energol ATF Type A	Esso Automatic Transmission Fluid	Castrol TQ	Mobilfluid 200
Rear Axle	S 1747 A				
All Grease Points	Retinax A	Energol L2	Esso Multi-Purpose Grease H	Castrolase LM	Mobilgrease Special
Accelerator, Clutch and Fork Linkages	Shell X-100 Multigrade 10W/30	Energol Visco-Static	As for Engine	Castrolite	Mobiloil Special

N.B. —Additives to any of the above lubricants are not recommended.

SERVICE LUBRICATION

ENGINE UNIT		GRADE AND CAPACITIES	ATTENTION PERIODS	DETAILS
Sump	Above + 32 F (0 C)	SAE 30; 10W-30 20W-40	4,000 m. (6,500 k.)	Check oil level and top up if necessary at frequent intervals when new. Change oil and filter at stated intervals. Note. — When filter only is changed add 2 pints.
	As low as + 10 F (-12 C)	SAE 20W 10W-30	or for Town Traffic or operation below	
	As low as - 10 F (-23 C)	SAE 10W; 5W-20 10W-30	40 F (+ 5 C)	
	Below - 10 F (-23 C)	SAE 5W-20 5W	Every 2,000 m. (3,250 k.) or 2 months.	
	Sump and Filter	8½ pints (Brit. Imp.) 10 pints (U.S.) 4.7 litres		
Oil Filler Air Cleaner		SAE 30	Normal 8,000 m. (13,000 k.) Dusty 500 m. (800 k.)	Clean with paraffin or petrol and re-oil.
Carburettor Air Cleaner			Clean 8,000 m. (13,000 k.) Renew 32,000 m. (51,000 k.)	Clean housing and cover. Using compressed air, gently clean paper element. Hold nozzle 2 in. min. away from inside face. Examine and discard if any holes in filter or defacement of seal on element.
Distributor		SAE 10W-30 SAE 10W-30 M.P. Chassis Grease	4,000 m. (6,500 k.)	5—10 drops in oil cup. When servicing points lubricate felt rotor wick 2—3 drops, and apply thin coat of grease to cam and bumper block after wiping clean.
Manifold Heat Control Valve		Heat Control Valve Solvent (Mopar 1879318)	4,000 m. (6,500 k.)	Apply to each end of the valve shaft when manifold is cool .
Crankcase Ventilator Valve		Mopar Carburettor Cleaner P N 1643273 (Denatured alcohol)	8,000 m. (13,000 k.)	Clean and check. Extensive short trips with frequent idling (e.g., heavy city traffic) require more frequent servicing.

SERVICE LUBRICATION (continued)

ENGINE UNIT	GRADE AND CAPACITIES	ATTENTION PERIODS	DETAILS
Fuel Filter (2 off) (1) Before Fuel Pump (2) Before Carburettor		16,000 m. (26,000 k.) 32,000 m. (51,000 k.)	Replace Filter No. 1. Earlier replacement may be necessary due to operating conditions or dirty fuel. Replace Filter No. 2.
Carburettor Choke Piston	Mopar Carburettor Cleaner P/N 1643273 (Denatured alcohol)	8,000 m. (13,000 k.)	Check. If piston sticks in its well apply a quantity of solvent into the choke piston link opening in the air horn.
Alternator		4,000 m. (6,500 k.)	Wipe clean and inspect ventilation holes for dirt accumulation.
Engine Tune Up		8,000 m. (13,000 k.)	Spark Plugs. Clean and adjust. If necessary replace. Distributor. Remove cap and rotor. Clean and inspect. Check breaker points for pitting, blueing and misalignment, and clean and adjust. Lubricate cam and wick. Check all wire and caps for seating and clean and set for ignition timing. Carburettor. Clean air filter. Check fast idle cam. Adjust idle speed and mixture to correct settings. Tighten Carburettor to manifold nuts. Check operation of choke piston and manifold heat control valve. Use appropriate solvents if necessary. Electrical. Check battery S.G. Clean and tighten battery terminals and connections.

SERVICE LUBRICATION (continued)

UNIT	GRADE AND CAPACITY	ATTENTION PERIOD	DETAILS
Automatic Transmission	Automatic Transmission Fluid Type 'A', Suffix 'A' N.B.—Use fun dish for ease of filling. 15½ pints (Brit. Imp.) 18½ pints (U.S.) 8.75 litres	4,000 m. (6,500 k.) 32,000 m. (51,000 k.)	Check. With engine and transmission at normal operating temperature with handbrake on momentarily engage each gear ending in neutral. Fluid level should be at or below 'F' mark but never above when in its warmed up condition. Add or delete as necessary. If absolutely necessary to check cold, fluid should be at slightly below the "add one pint" mark. If below this, add pint. Re-check. Adjust automatic transmission and replace oil and filter. This should be done more frequently in cars whose operating conditions are similar to the following:— (a) Frequently tow trailer. (b) Operate in heavy traffic in hot weather. (c) Operate frequently with abnormal loads.
Manual Transmission	Automatic Transmission Fluid Type 'A', Suffix 'A'	4,000 m. (6,500 k.) 32,000 m. (51,000 k.)	Check fluid level by removing filler plug. Replenish to filler hole. Drain and refill.
Propeller Shaft Universal Joints (a) Front Ball and Trunion (b) Rear Cross and Roller	MultiPurpose Grease 2 ozs. NLGI-0 or 1 (U.S.)	32,000 m. (51,000 k.)	Disassemble, clean and repack with grease.
Rear Axle	Use only Shell S1747A 3 pints (Brit. Imp.) 3.6 pints (U.S.) 1.705 litres	4,000 m. (6,500 k.) 12,000 m. (19,500 k.)	Check and top up. Drain and refill. N.B.—Initial drain and refill at 1,000 miles.

SERVICE LUBRICATION (continued)

UNIT	GRADE AND CAPACITY	ATTENTION PERIOD	DETAILS
Wheel Hubs—Front	Grease Multi-Purpose	16,000 m. (26,000 k.) 32,000 m. (51,000 k.)	Inspect and repack if grease is emulsified. Clean and repack.
Wheel Hubs—Rear	Grease Multi-Purpose	4,000 m. (6,500 k.) 32,000 m. (51,000 k.)	Grease-gun. Clean and repack.
Steering Rack	Grease Multi-Purpose	4,000 m. (6,500 k.)	Grease-gun.
Front Suspension 3 Points Side	Grease Multi-Purpose	1,000 m. (1,625 k.)	Grease-gun.
Brake Balance Lever	Grease Multi-Purpose	4,000 m. (6,500 k.)	Grease-gun.
Shock Absorbers Front Suspension	Armstrong Hydraulic Fluid	4,000 m. (6,500 k.)	Inspect and top up.
Steering Rack Dampers	Shell Tellus 15	4,000 m. (6,500 k.)	Inspect and top up.
Clutch Bellerank Lever	Grease Multi-Purpose	4,000 m. (6,500 k.)	Grease-gun.
Clutch Bellerank and Fork Linkages	Oil SAE 10W-30	4,000 m. (6,500 k.)	Oil can.
Brake and Clutch Master Cylinder	Hydraulic Brake Fluid, Dunlop, or SAE 70-R3	Monthly or 2,000 m. (3,250 k.)	Check and top up.
Oil Filter		4,000 m. (6,500 k.)	Replace oil filter, Mopar Part No. 2129109.
Spark Plugs	Autolite A32 Champion J-9Y	8,000 m. (13,000 k.) 20,000 m. (32,000 k.)	Check, clean, re-gap. Replace.
Brake Servo Piston	Edgar Vaughan's 'Cosmolubric'	12,000 m. (19,500 k.)	Lubricate leather cup on vacuum piston.

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Vehicle Particulars

CHASSIS No.

ENGINE No.

KEY Nos.:
IGNITION, SHROUD AND DOOR

BOOT AND CUBBY LOCKER

REGISTRATION No.

ORIGINAL DATE OF
DELIVERY FROM WORKS

FANBELT PERODO V954
Contact Points (set of 2) MOPAR 2299322