

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.

PRICE 17/6 NET

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

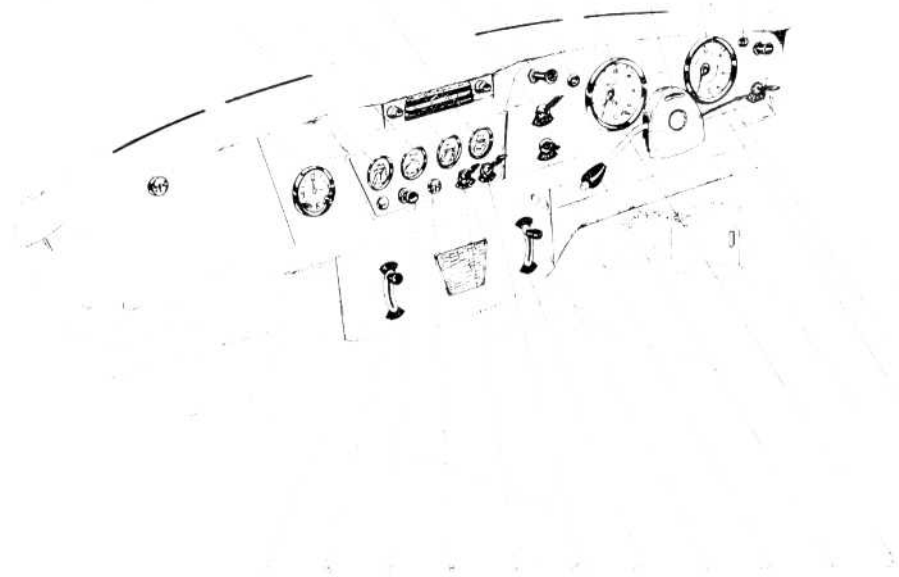


Fig. 1

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 (Dipstick top level must not be exceeded)
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
	Manual with Overdrive	1st
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 GAP	.014 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.

6

* 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 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.
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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.

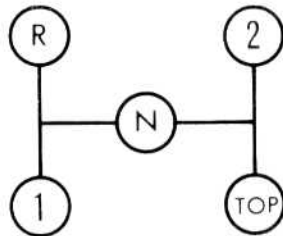


Fig. 2

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.

