THE Austin Healey 100

THE RECORD-BREAKING AUSTIN-HEALEY HUNDRED

IT'S FAST ! IT'S DEPENDABLE ! IT'S RECORD-BREAKING !

Fast indeed, having recorded 142.636 m.p.h., the fastest speed over a measured mile for a production car of under 3,000 c.c. capacity.

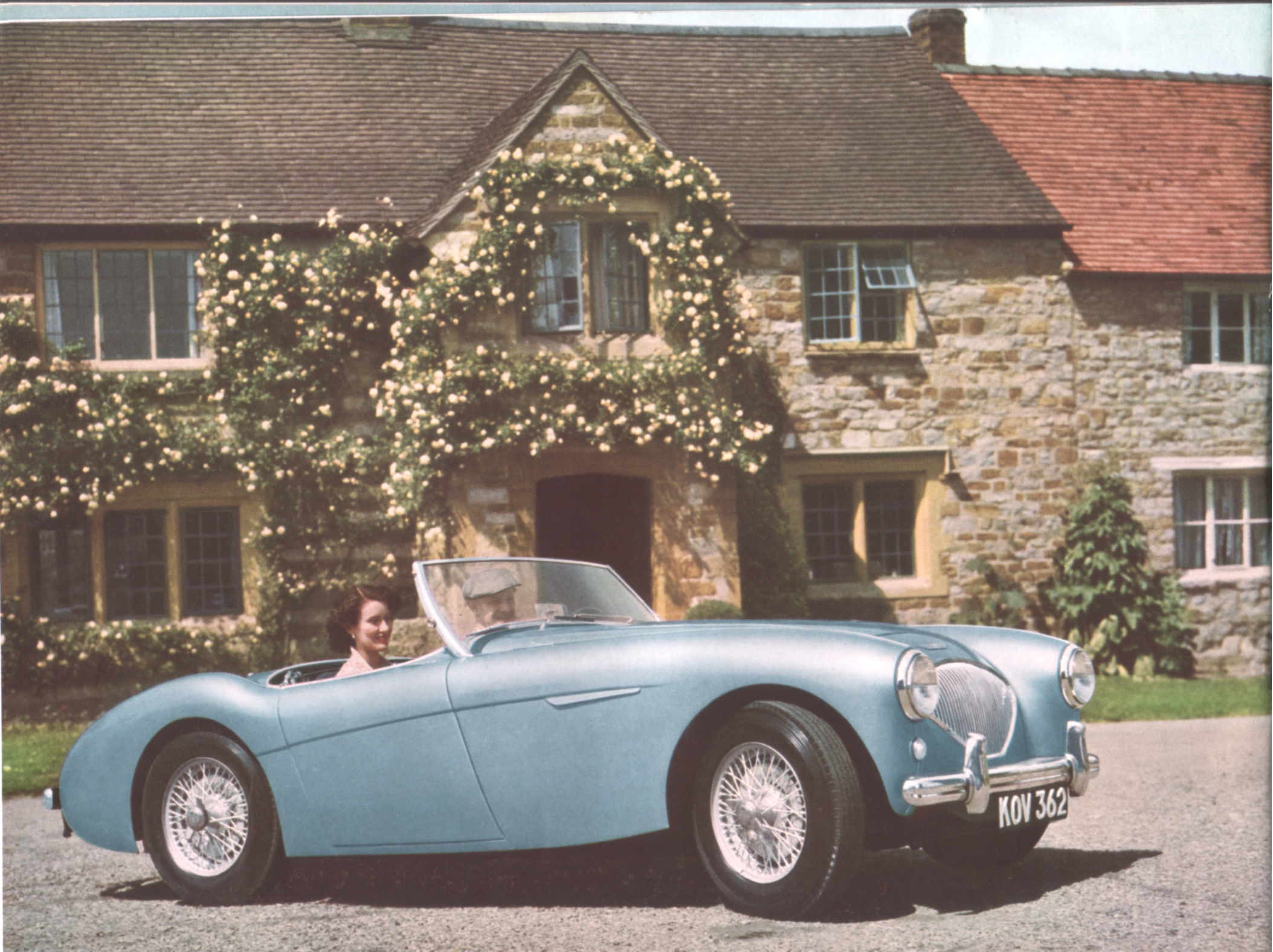
Over 100 other standing records have also been broken by this brilliant sports model, in its own and unlimited classes, American and International grades.

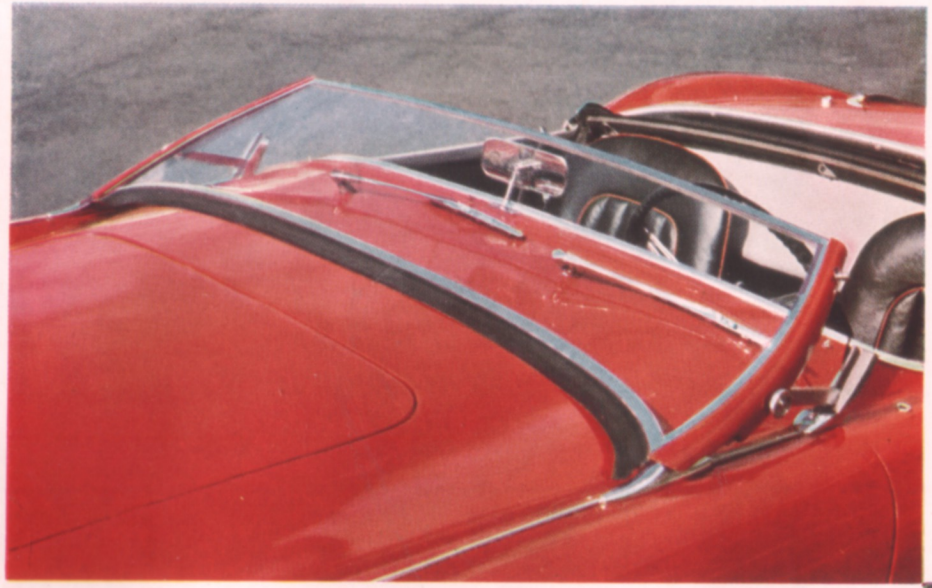
As for dependability, its outstanding and sustained performance under extremely trying conditions provides ample proof—24 hours continuous running at an average speed of 104.3 m.p.h. and 103.9 m.p.h. average for 30 hours covering a distance of 3,117.9 miles. And fuel consumption over several days of all-out effort was better than 21 m.p.g.

Power for the record-breaking runs and for every Austin-Healey '100' is provided by the already famous Austin A90 valve-in-head engine, an unstressed production unit working at speeds well within its capacity.

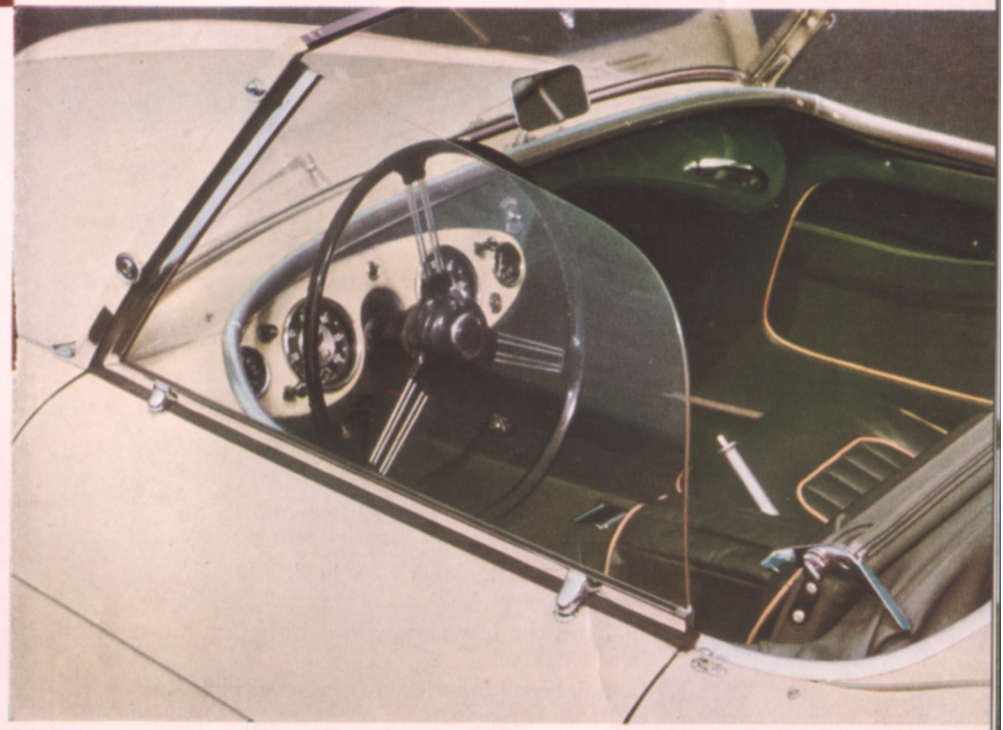
Yes, this is a car of rare distinction, a great example of British automobile engineering at its best.

(Records quoted above, certified by the A.A.A., were obtained at the Bonneville Salt Flats, Utah, U.S.A., in September, 1953).

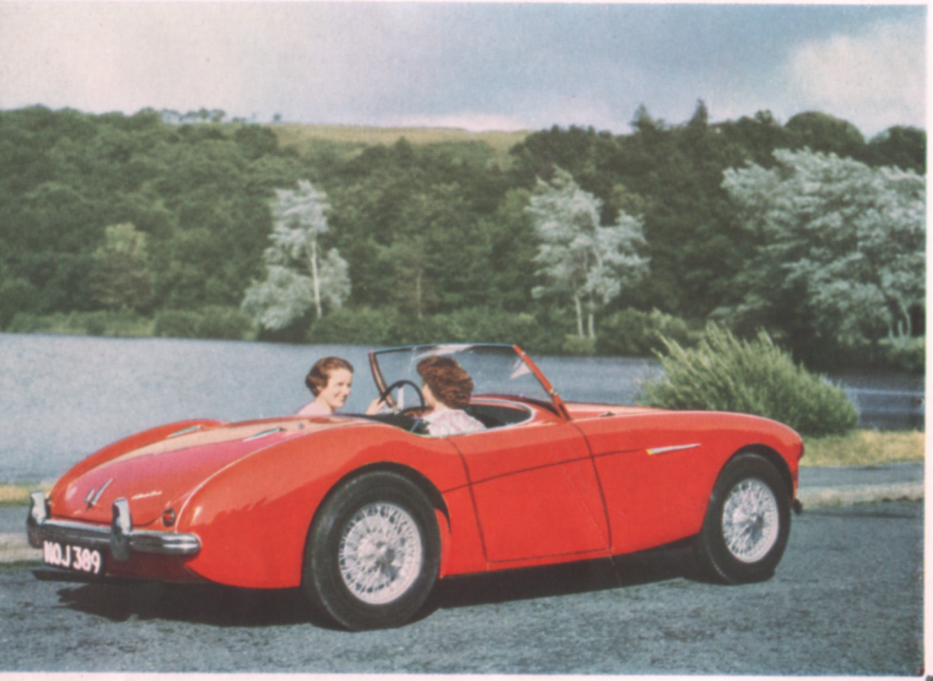

KOV 362



The windshield has two operative positions ; raised, for normal driving conditions and lowered to form a scuttle when high speeds are anticipated. The change-over is readily effected and a positive locking device ensures absolute security in either position. The illustration (left) shows the windshield neatly lowered and enclosing such protrusions as windshield wipers and driving mirror.



Moulded perspex side windows are available for use in cold or inclement weather. They can be fitted quickly and easily into the top edge of the doors and give sure protection to driver and passenger. When not required they are contained in a handy wallet which also accommodates the tonneau cover.

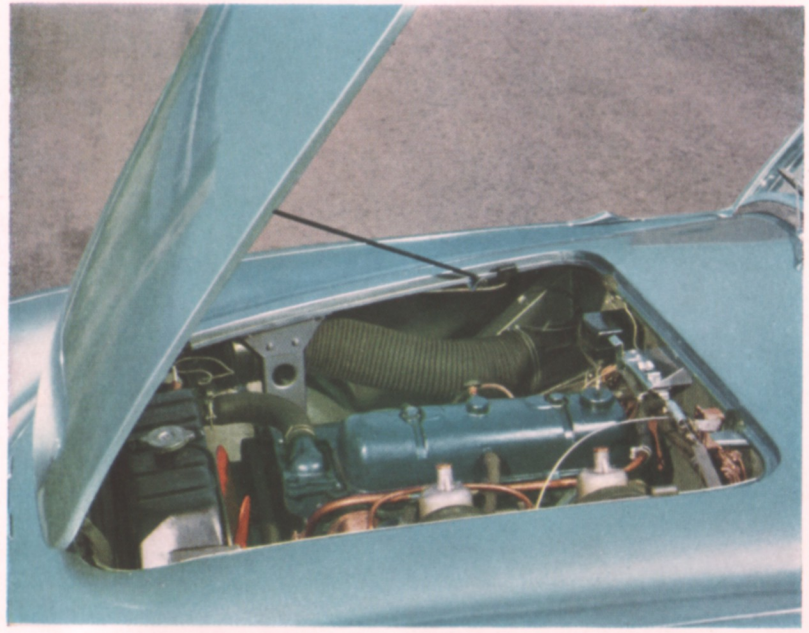


The Austin-Healey ' 100 ' is a fast car, and looks it, the smooth aerodynamic lines of the body providing a delightful picture from every point of view. Indeed, wherever it is seen this model is the center of interest and the subject of much favorable comment. The illustration on the left shows the car from a most attractive angle.

In the neatly designed interior which incorporates two individual bucket seats, there is compact comfort for driver and one passenger. Controls are handily positioned, a short central gear shift being employed, and closely grouped instruments are readily visible through the steering wheel. Driving vision is excellent, the low sloping hood offering an uninterrupted view of the road ahead.

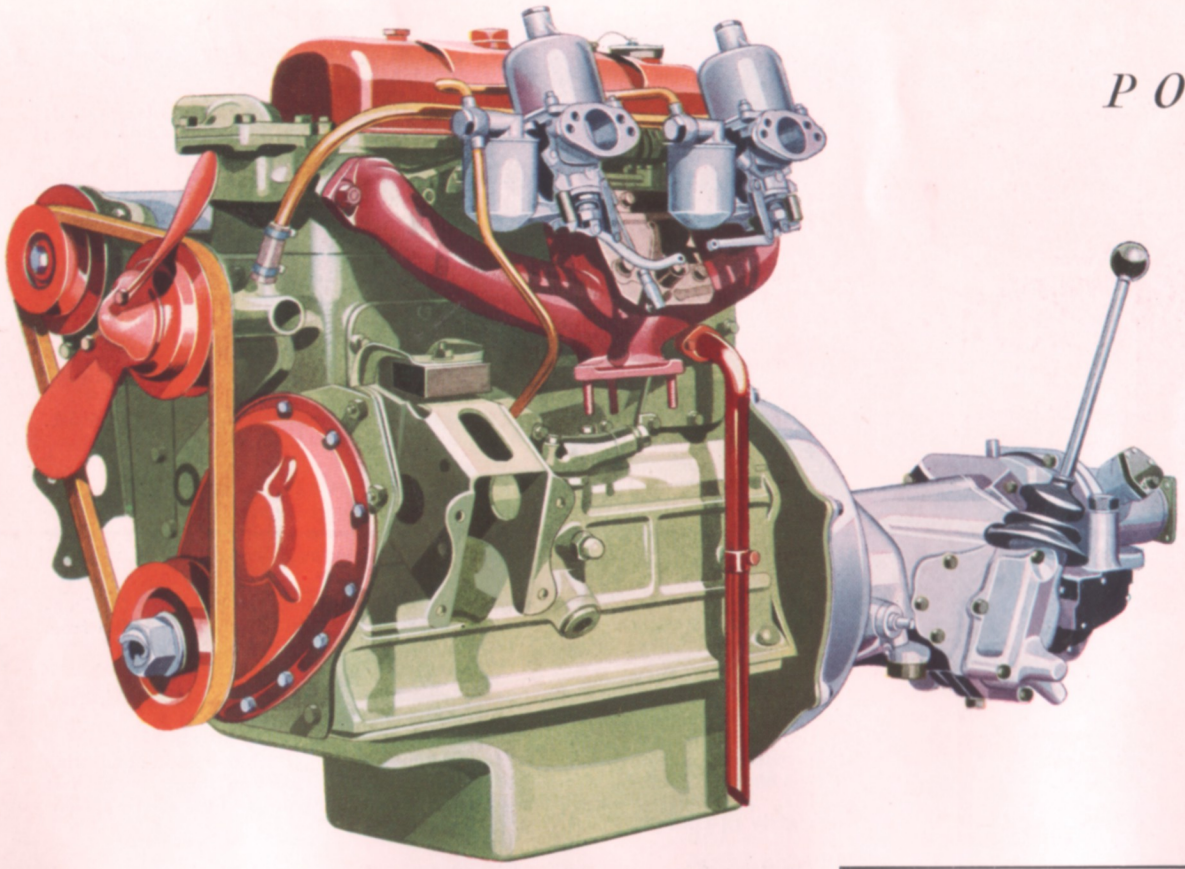

NOJ 389

An exceptionally spacious luggage compartment for this type of car is provided at the rear. It also accommodates the spare wheel in a separate recessed shelf and encloses the fuel filler pipe.



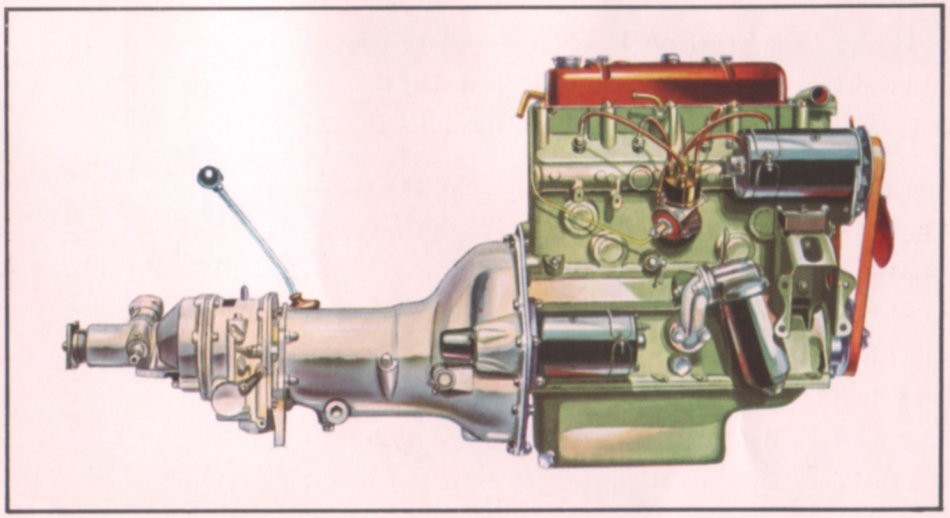
The hood is hinged along its forward edge and opens widely to give good access to the engine and ancillary components for routine maintenance.

A specially tough fabric top completes the comprehensive all-weather equipment of the Austin-Healey ' 100 '. It folds away behind the seats when not in use, and can be quickly erected when necessary.



POWER UNIT

This is the record-breaking Austin A90 valve-in-head engine which powers the Austin-Healey ' 100.' It is a sturdy, four-cylinder unit that has been " blooded " on road and track, and proved capable of sustained high-speeds. It is ideal for long periods of very fast motoring.



The overdrive is mounted to the rear of the three-speed transmission and comes into automatic operation at 40 m.p.h. when the electrical control switch is in the ' on ' position. This provides a higher ratio drive to give the car its great maximum speed while maintaining a modest fuel consumption.

PERFORMANCE DATA

The brief performance figures, extracted from the 'Autocar' road test report of September 11th, 1953 and given below, should be obtainable in suitable conditions by any standard Austin-Healey '100' car. A higher performance may be obtained under certain circumstances as indicated by the outstanding successes recently achieved with this car in the U.S.A.

Mean maximum speed	111 m.p.h.
From rest to 30 m.p.h.	3.3 secs.
From rest to 50 m.p.h.	7.6 secs.
From rest to 60 m.p.h.	10.5 secs.
From rest to 70 m.p.h.	13.4 secs.
From rest to 80 m.p.h.	18 secs.
Standing quarter mile	17.5 secs.
Average fuel consumption	25 m.p.g.

SPECIF

ENGINE: Bore 3·4375 in.; stroke 4·375 in; capacity 162·2 cu. in. (2660 c.c.); horse-power 90 at 4,000 r.p.m.; maximum torque 144 lb./ft. at 2,000 r.p.m.; compression ratio 7·5 to 1.

Cylinders: Four cylinders cast integral with crankcase. Full-length water jackets. Cast-iron cylinder head carrying all valve gear.

Crankshaft: Forged-steel, counterbalanced crankshaft supported in three detachable steel-backed white-metal bearings.

Connecting Rods: Forged steel with detachable steel-backed white-metal bearings.

Pistons: Split-skirt type in low expansion aluminum alloy with alumilite finish. Three compression rings and one oil control ring fitted.

Camshaft: Forged steel, supported in three detachable steel-backed white-metal bearings. Cams of patented design for quiet operation. Driven by Duplex roller chain from crankshaft with oil catchers and a tensioner ring of synthetic rubber to maintain chain lubrication and tightness respectively.

Valves: In-head valves operated by push-rods. Large inlet valves of silicon-chrome steel; exhaust valves in "XB" steel designed to resist corrosion from leaded fuels.

Lubrication: Pressure gear pump forces oil to all main, connecting rod, camshaft and valve rocker-shaft bearings. Holes in the connecting rod bearings provide for jet lubrication of the cylinder walls, and the front camshaft bearing provides a controlled feed of oil to the timing chain. Both main and connecting rod bearing oil feeds are of patented design which ensures longer crankshaft life. A full-flow filter with renewable element is fitted. Oil capacity approximately 14 U.S. pints (11¾ Imp. pints).

Cooling: Circulation by centrifugal type of pump with thermostat control. Fan-cooled pressurised radiator. Water is directed to spark plug bosses and exhaust port walls. Cooling system capacity 24 U.S. pints (20 Imp. pints).

Fuel System: Fuel from a rear tank of 14½ U.S. gallons (12 Imp. gallons) capacity is fed by an S.U. electrical pump to twin S.U. carburetors fitted with air cleaners.

Ignition: Coil and battery ignition with automatic advance and retard and additional vacuum control.

Generator: 12-volt fan-ventilated unit with compensated voltage control.

Starter: Operated by push-button solenoid type of switch.

CLUTCH: Flexible dry single-plate Borg and Beck clutch is fitted, with spring cushion drive. Clutch diameter 9 in.

TRANSMISSION: Three forward speeds and reverse controlled by a short central gear shift and having synchromesh engagement for all gears. Oil capacity 5½ U.S. pints (4½ Imp. pints).

I C A T I O N S

OVERDRIVE: An overdrive unit is fitted behind the transmission and engaged by a control switch mounted on the dashboard. The overdrive may be engaged in 2nd and high gears, which in effect provides a choice of five gear ratios. An over-ride governor prevents accidental use of the overdrive at low speed.

PROPELLER SHAFT: Hardy Spicer propeller shaft with needle roller bearing universal joints. Lubrication nipples to each joint and to the sliding splines.

REAR AXLE: Spiral bevel three-quarter floating in a banjo-type casing. The pinion is carried by pre-loaded taper roller bearings. Oil capacity 3 U.S. pints (2½ Imp. pints). Normal ratio 4·125. Alternative ratio available, 3·66 to 1.

OVERALL GEAR RATIOS: Without overdrive—9·28, 5·85 and 4·125, with 20·53 reverse. **With overdrive engaged**—4·42 and 3·12.

ROAD SPEEDS AT 1,000 R.P.M.: Without overdrive—Top 17·92 m.p.h.; second 12·63 m.p.h.; first 8 m.p.h. **Overdrive comes into operation at 40 m.p.h.**

STEERING: Burman cam and lever steering gear. Left-hand steering fitted.

SUSPENSION: Front—Independent coil springs controlled by double-acting hydraulic shock absorbers interconnected by an anti-roll torsion bar. **Rear**—Semi-elliptic springs controlled by double-acting hydraulic shock absorbers and anti-sway bar.

BRAKES: Girling hydraulic with two leading shoes in front. Brake-drum diameter 11 in.

WHEELS AND TIRES: Wire-spoke knock-on wheels with 5·90 × 15 roadspeed tires. Alternative size, 6·00 × 15.

THE AUSTIN MOTOR COMPANY LTD. (ENGLAND)
27-29 WEST 57th STREET, NEW YORK 19, N.Y.

THE AUSTIN MOTOR COMPANY (CANADA) LTD.
737 CHURCH STREET, TORONTO, ONTARIO

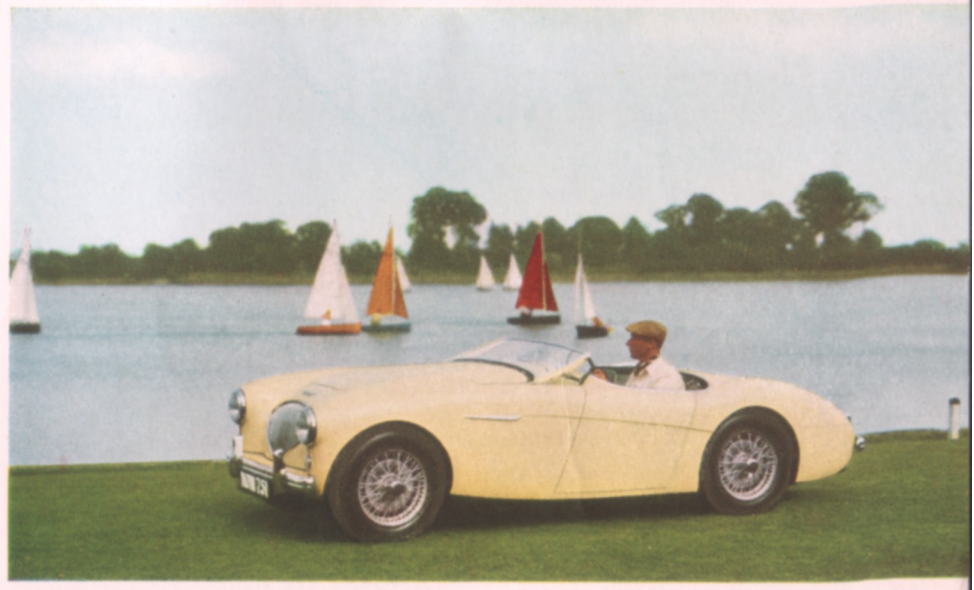
Printed in England by Wills & Hepworth Ltd., Loughborough

ELECTRICAL: Two 6-volt batteries of 50 ampere-hour capacity at 10-hour rate; positive ground strap; built-in head-, side- and twin tail-lights; twin windshield wipers; directional flashing lights available to conform with U.S. regulations; twin horns.

INSTRUMENTS: Fuel gauge; oil pressure gauge; water thermometer; 120 m.p.h. speedometer; 0–6,000 r.p.m. tachometer.

COACHWORK: Open two-seater with individual bucket seats; large enclosed rear luggage compartment; full weather protection, including folding windshield, disappearing top and detachable moulded perspex side windows.

OVERALL DIMENSIONS: Wheelbase 90 in.; tread at front 49 in.; tread at rear 50¾ in.; overall length 151½ in.; overall width 60½ in.; height over scuttle 35⅞ in.; height over windshield 47¼ in.; height over top 49 in.; ground clearance 5½ in.; turning circle 35 feet; approximate kerb weight 2,176 lb.



Publication No. 1040/U.S.A. & Canada/1

THE AUSTIN-HEALEY 100

2985 ow