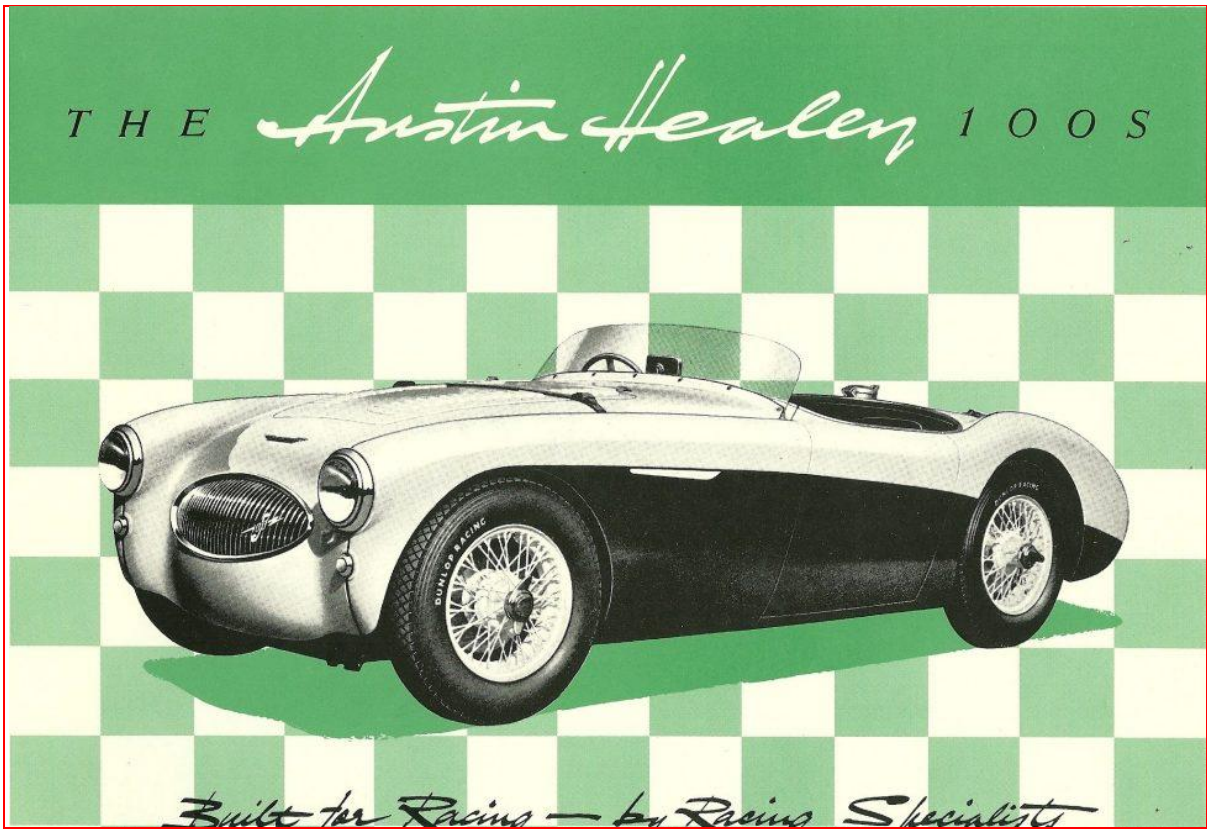
The Austin-Healey 100 S – Built for Racing – By Racing Specialists

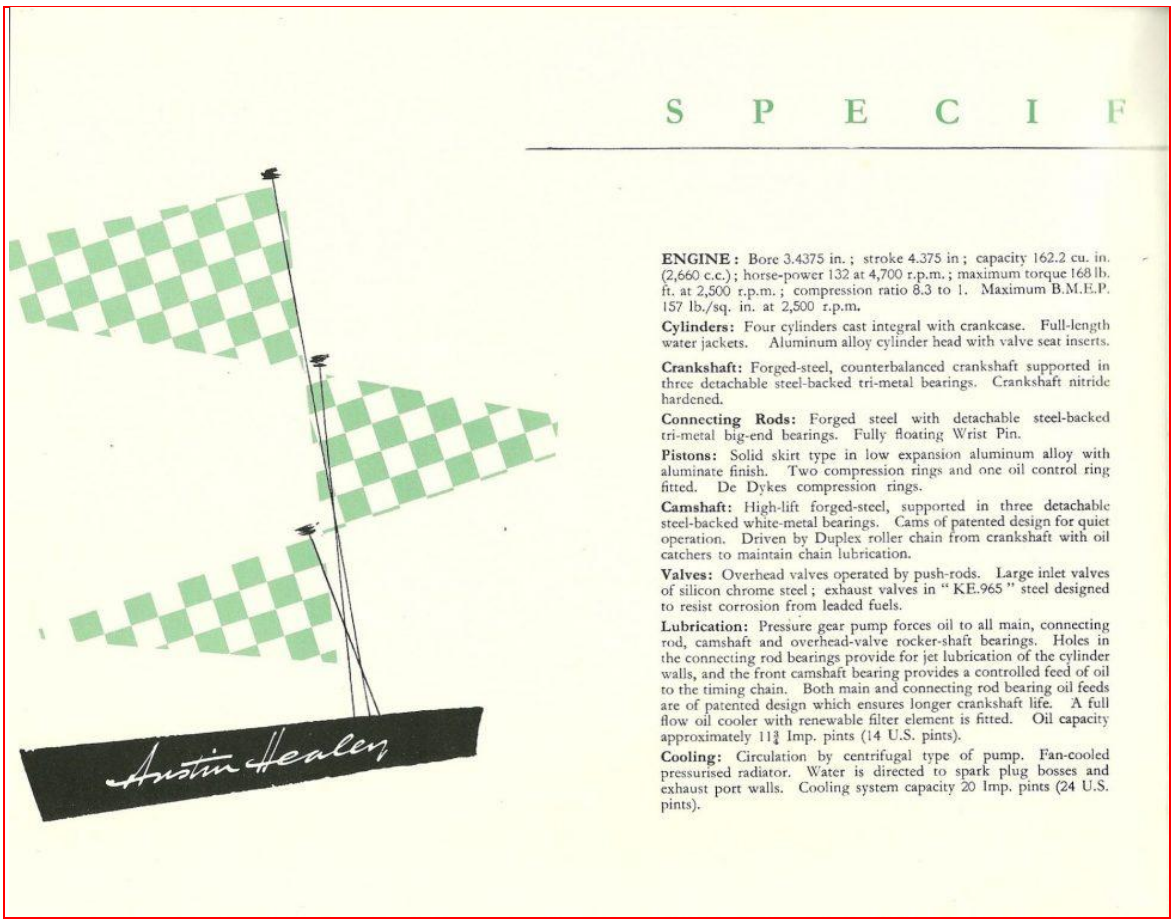
Richard Lentinello



Brochure from author's collection.

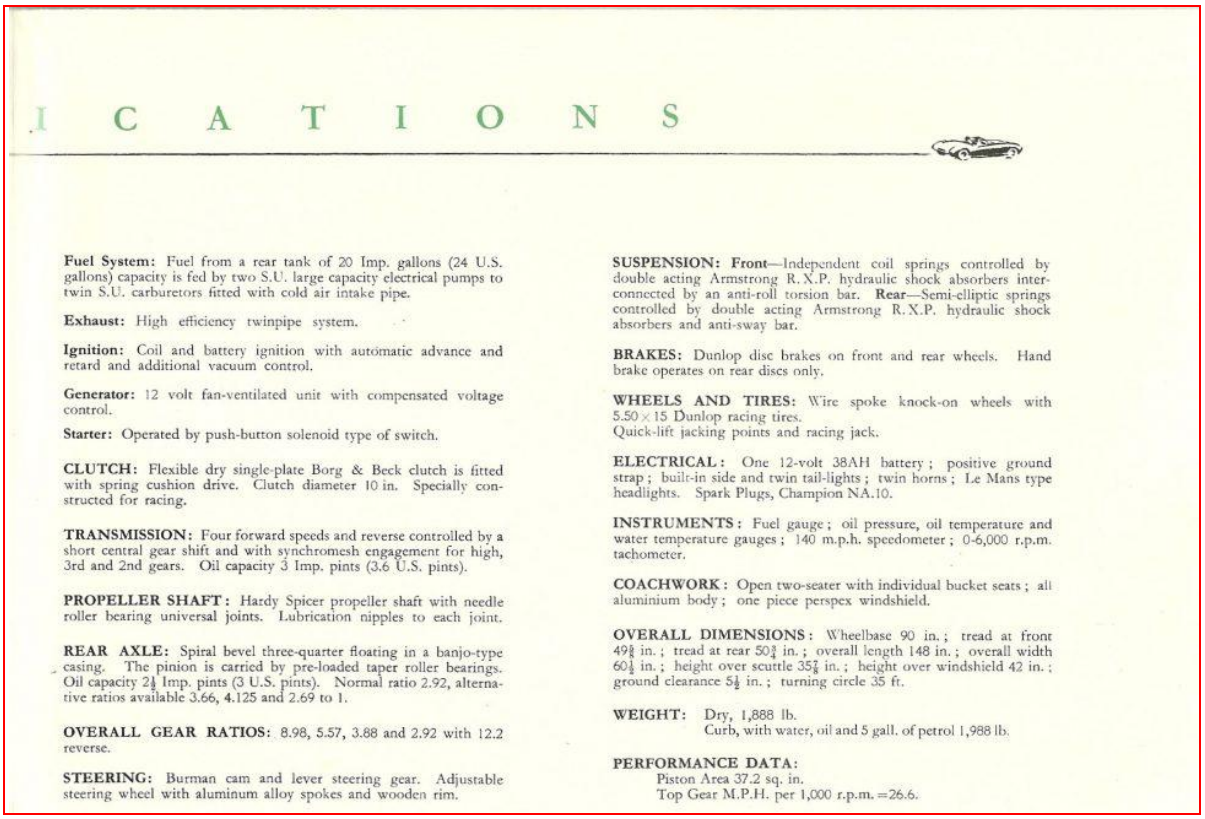
For Austin-Healey enthusiasts, the Holy Grail always has been and always will be the sensational 100 S. Of the 73,728 Austin-Healeys built, only 55 were 100 S models, making it the rarest and most desirable sports car that Austin-Healey ever built.

Produced from February to November of 1955, these handmade, aluminum-bodied high-performance Austin-Healeys were marketed specifically to racers who wanted to compete on the world stage. From Sebring to Le Mans to the Mille Miglia, the 100 S was quite successful.



Almost as rare as the car is a factory-issued 100 S brochure. While we don't know just how many were printed, it was well done with all the details about the special 100 S clearly listed on a two-page spread. The brochure consists of a single sheet of paper, which folds down to 8¼ x 10¾ inches; it was printed in just two colors – black and green. On the cover page, in the lower right hand corner is a hand-stamped number 141.

When fully opened, there are four photographs showing the car's various details, including the combination oil filter/cooler, engine, grille, cockpit, and the Dunlop disc brakes. In the center there's a letter from Donald Healey, which reads:



I C A T I O N S

Fuel System: Fuel from a rear tank of 20 Imp. gallons (24 U.S. gallons) capacity is fed by two S.U. large capacity electrical pumps to twin S.U. carburetors fitted with cold air intake pipe.

Exhaust: High efficiency twinpipe system.

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 & Beck clutch is fitted with spring cushion drive. Clutch diameter 10 in. Specially constructed for racing.

TRANSMISSION: Four forward speeds and reverse controlled by a short central gear shift and with synchromesh engagement for high, 3rd and 2nd gears. Oil capacity 3 Imp. pints (3.6 U.S. pints).

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

REAR AXLE: Spiral bevel three-quarter floating in a banjo-type casing. The pinion is carried by pre-loaded taper roller bearings. Oil capacity 2¼ Imp. pints (3 U.S. pints). Normal ratio 2.92, alternative ratios available 3.66, 4.125 and 2.69 to 1.

OVERALL GEAR RATIOS: 8.98, 5.57, 3.88 and 2.92 with 12.2 reverse.

STEERING: Burman cam and lever steering gear. Adjustable steering wheel with aluminum alloy spokes and wooden rim.

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

BRAKES: Dunlop disc brakes on front and rear wheels. Hand brake operates on rear discs only.

WHEELS AND TIRES: Wire spoke knock-on wheels with 5.50 × 15 Dunlop racing tires.
Quick-lift jacking points and racing jack.

ELECTRICAL: One 12-volt 38AH battery; positive ground strap; built-in side and twin tail-lights; twin horns; Le Mans type headlights. Spark Plugs, Champion NA.10.

INSTRUMENTS: Fuel gauge; oil pressure, oil temperature and water temperature gauges; 140 m.p.h. speedometer; 0-6,000 r.p.m. tachometer.

COACHWORK: Open two-seater with individual bucket seats; all aluminium body; one piece perspex windshield.

OVERALL DIMENSIONS: Wheelbase 90 in.; tread at front 49⅜ in.; tread at rear 50¾ in.; overall length 148 in.; overall width 60¼ in.; height over scuttle 35⅝ in.; height over windshield 42 in.; ground clearance 5½ in.; turning circle 35 ft.

WEIGHT: Dry, 1,888 lb.
Curb, with water, oil and 5 gall. of petrol 1,988 lb.

PERFORMANCE DATA:
Piston Area 37.2 sq. in.
Top Gear M.P.H. per 1,000 r.p.m. =26.6.

THE AUSTIN-HEALEY “100 S”

Since its inception, the Austin-Healey “100” has had many Competition successes both in standard and modified forms. The cars which ran so well at Le Mans in 1953 were fitted with modifications which have since been made available to owners.

In September, 1953, at Utah, all Records in Class “D” up to 18 hours’ duration were broken at over 121 m.p.h.

Further engine developments have since been made which have been thoroughly tested during the past year in such events as the Sebring Grand Prix, in which the Austin-Healey won its Class and was third in general classification. Disc brakes were first used by us in this event and proved phenomenal. This success has given the car its title “S” for Sebring.

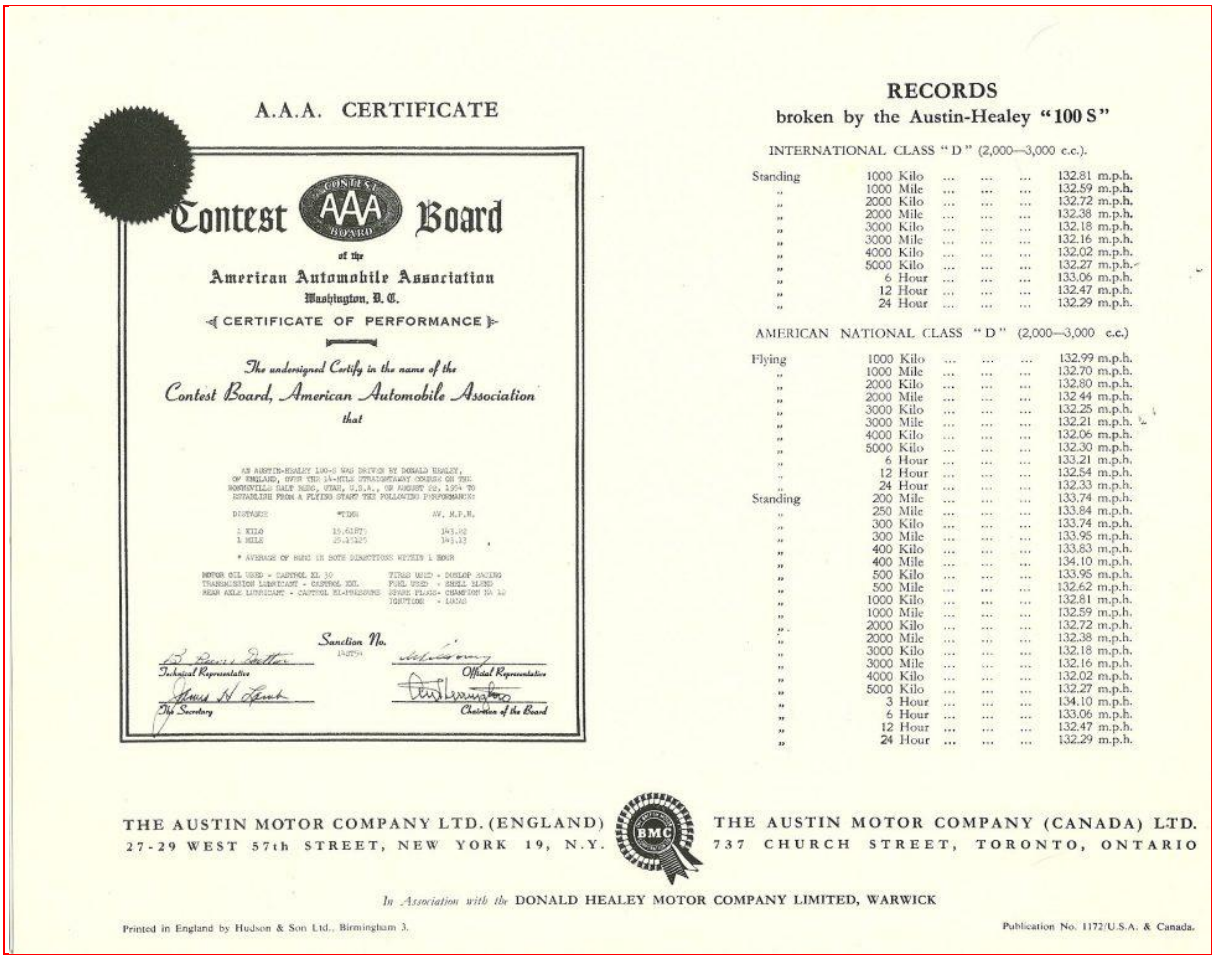
The prototypes of the “100 S” were further developed during this year culminating with the great success at Utah in August, 1954, when one averaged 132 m.p.h. for 24 hours – a higher speed for this period than any other car up to 5 liters has ever averaged over such a distance – a certificate of performance was issued for the car by the American Automobile Association giving a mean speed of 143.13 m.p.h. over the measured mile.

Two years of intensive development work have gone into the already well-proven power unit, the major development being the new four port aluminum cylinder head designed by Britain's greatest engine design specialist, Mr. Henry Weslake. The power now obtained is in excess of 130 B.H.P. and various modifications have been made to the engine such as nitride hardened crankshaft, tri-metal bearings, strengthened connecting rods, to withstand the extra stresses involved.

From these prototypes, the "100 S" has been developed and the production model offers the highest performance sports car available at its price today.

These cars will be hand assembled and road tested in our Racing Department at Warwick.

Donald Healey



A.A.A. CERTIFICATE

Contest Board

of the

American Automobile Association

Washington, D. C.

CERTIFICATE OF PERFORMANCE

The undersigned Certify in the name of the Contest Board, American Automobile Association that

AN AUSTIN-HEALEY 100-S WAS DRIVEN BY DONALD HEALEY, OF ENGLAND, OVER THE 24-MILE STRAIGHTAWAY COURSE ON THE BONNEVILLE SALT BEDS, UTAH, U.S.A., ON AUGUST 22, 1954 TO ESTABLISH FROM A FLYING START THE FOLLOWING PERFORMANCES:

DISTANCE	*TIME	AV. M.P.H.
1 KILO	15.61[illegible]	143.02
1 MILE	25.43[illegible]	141.33

* AVERAGE OF RUNS IN BOTH DIRECTIONS WITHIN 1 HOUR

MOTOR OIL USED - CASTROL XL 30 TIRES USED - DUNLOP RACING
TRANSMISSION LUBRICANT - CASTROL XXL FUEL USED - SHELL BLEND
REAR AXLE LUBRICANT - CASTROL HYPOY SPARK PLUGS - CHAMPION N 12
IGNITION - [illegible]

Sanction No. [illegible]

Technical Representative — Official Representative

The Secretary — Chairman of the Board

RECORDS

broken by the Austin-Healey "100 S"

INTERNATIONAL CLASS "D" (2,000—3,000 c.c.).

Standing	1000 Kilo	132.81 m.p.h.
"	1000 Mile	132.59 m.p.h.
"	2000 Kilo	132.72 m.p.h.
"	2000 Mile	132.38 m.p.h.
"	3000 Kilo	132.18 m.p.h.
"	3000 Mile	132.16 m.p.h.
"	4000 Kilo	132.02 m.p.h.
"	5000 Kilo	132.27 m.p.h.
"	6 Hour	133.06 m.p.h.
"	12 Hour	132.47 m.p.h.
"	24 Hour	132.29 m.p.h.

AMERICAN NATIONAL CLASS "D" (2,000—3,000 c.c.)

Flying	1000 Kilo	132.99 m.p.h.
"	1000 Mile	132.70 m.p.h.
"	2000 Kilo	132.80 m.p.h.
"	2000 Mile	132.44 m.p.h.
"	3000 Kilo	132.25 m.p.h.
"	3000 Mile	132.21 m.p.h.
"	4000 Kilo	132.06 m.p.h.
"	5000 Kilo	132.30 m.p.h.
"	6 Hour	133.21 m.p.h.
"	12 Hour	132.54 m.p.h.
"	24 Hour	132.33 m.p.h.
Standing	200 Mile	133.74 m.p.h.
"	250 Mile	133.84 m.p.h.
"	300 Kilo	133.74 m.p.h.
"	300 Mile	133.95 m.p.h.
"	400 Kilo	133.83 m.p.h.
"	400 Mile	134.10 m.p.h.
"	500 Kilo	133.95 m.p.h.
"	500 Mile	132.62 m.p.h.
"	1000 Kilo	132.81 m.p.h.
"	1000 Mile	132.59 m.p.h.
"	2000 Kilo	132.72 m.p.h.
"	2000 Mile	132.38 m.p.h.
"	3000 Kilo	132.18 m.p.h.
"	3000 Mile	132.16 m.p.h.
"	4000 Kilo	132.02 m.p.h.
"	5000 Kilo	132.27 m.p.h.
"	3 Hour	134.10 m.p.h.
"	6 Hour	133.06 m.p.h.
"	12 Hour	132.47 m.p.h.
"	24 Hour	132.29 m.p.h.

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

In Association with the DONALD HEALEY MOTOR COMPANY LIMITED, WARWICK

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Publication No. 1172/U.S.A. & Canada.

A copy of the certificate mentioned above is printed on the back cover, along with a listing of all the records broken by the 100 S. My copy was given to me by my friend Bud who collected all sorts of Austin-Healey literature. It now takes precedence in my Austin-Healey literature collection.