Reprinted from "The Motor," April 11, 1951

100 PER CENT. FOR DOLLAR EXPORT

DONALD HEALEY MOTOR CO., LTD.

WARWICK

Telephone: 676/7

cent. for EXPORT

the Healey Concern on the Production of for U.S. Market

FULL WIDTH—All enveloping coachwork was successfully tested in the 1950 Le Mans Healey, and is now produced in Birmingham.

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So far as the transmission is concerned, there are several interesting points. One is that, although the usual steering-column change was naturally available to the manufacturers, a stubby remote-control lever of European sports-car type has deliberately been chosen at the instigation of the Nash concern. This new control has been installed particularly neatly alongside the gearbox, where it gives an unusually positive action and, being off-set, does not interfere with three-abreast seating.

Of even greater interest is the way the usual kick-down Warner overdrive has been modified to suit hard-driving needs. As most readers are aware, the usual overdrive of this type is arranged so that, at anything above a certain pre-determined speed, a driver has only to ease his foot off the accelerator for the overdrive to come into operation; conversely, reversion from overdrive to top is obtained simply by depressing the accelerator beyond its normal full-throttle position, when a relay switch momentarily cuts out the ignition and brings the vacuum-operated change into operation.

Whilst this system works excellently under normal conditions, it has the serious disadvantage for racing purposes that a change down from overdrive to direct on a corner involves a sudden and (with a power-weight ratio such as that of the Nash-Healey) violent increase in torque, just at the moment when the car is, in any case, on the verge of sliding; thus a broadside is very liable to occur.

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So far as bodywork is concerned, the pictures on these pages tell their own story, apart from the fact that no wood enters into the construction; fabricated by the Panelcraft Sheet Metal Co., of Birmingham, the bodies are complete all-metal shells, panelled in aluminium for lightness.

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NASH-HEALEY DATA

Engine Dimensions:		**Chassis Details:**	
Cylinders	6	Brakes	Hydraulic
Bore	85.7 mm. (3⅜ ins.)	Brake drum diameter	—
Stroke	111.1 mm. (4⅜ ins.)	Friction lining area	—
Cubic capacity	3,848 c.c. (234.8 cu. ins.)	Suspension: Front	Independent (coil, trailing link and anti-roll bar)
Piston area	53.6 sq. ins.	Rear	Coil and panhard rod
Valves	Overhead	Shock absorbers	Girling
Compression ratio	8.1 to 1	Wheel type	15 in. disc.
		Tyre size	6.40 x 15
Engine Performance:		Steering gear	Burman re-circulating ball
Max. b.h.p.	125	Steering wheel	Bluemel 17 in. adjustable
at	4,000 r.p.m.		
Max. b.m.e.p.	114.8	**Dimensions:**	
at	1,600 r.p.m.	Wheelbase	8 ft. 6 ins.
B.H.P. per sq. in. piston area	2.33	Track: Front	4 ft. 7⅛ ins.
Peak piston speed ft. per min.	2,920	Rear	4 ft. 5 ins.
		Overall length	14 ft. 6 ins.
Engine-Details:		Overall width	5 ft. 6 ins.
Carburetter	Two S.U. (H6)	Overall height	4 ft. 6 ins. (hood up, 4 ft. 8 ins.)
Ignition	Coil	Ground clearance	6 ins.
Plugs: make and type	14 mm. Autolite AL5 or Lodge CN	Turning circle	34 ft.
	A.C. Mech.	Dry weight	21⅛ cwt.
Fuel pump	17 galls.		
Fuel capacity		**Performance Data:**	
Oil filter (make, by-pass or full flow)	—	Piston area, sq. in. per ton	49.8
Oil capacity	10 pints	Brake lining area, sq. in per ton	—
Cooling system	Pump	Top gear m.p.h. per 1,000 r.p.m.	Direct, 21.8; Overdrive, 31.2
Water capacity	4 galls.	Top gear m.p.h. at 2,500 ft./min. piston speed	Direct, 75; overdrive, 107
Electrical system	6-volt	Litres per ton-mile, dry	Direct top, 4,920; overdrive top, 3,440
Battery capacity	105 amp./hrs.		
Transmission:			
Clutch	Single dry plate		
Gear ratios:	Direct Overdrive		
Top	3.54 2.48		
2nd	5.48 3.84		
1st	9.09 —		
Rev.	9.09 —		
Prop. shaft	Nash torque tube drive		
Final drive	Hypoid bevel.		

STOCK-IN-TRADE—Nash engines arrive from America with modified camshaft, cylinder head and inlet manifold, twin horizontal S.U. carburetters fitted in England giving maximum performance and minimum engine height.

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Warwick Factory of Now Totally Engaged Nash-Healey Models

COMPOSITE—Engines and transmissions built in America by Nash Motors are installed in race-bred Healey chassis at Warwick.

CHALK and cheese have at least as much in common as photography, with 35 mm. cameras, and the production of high-performance sports cars—or as little. Yet it was, oddly enough, a mutual interest in 35 mm. cameras which brought together two passengers who were on their way to New York in the liner "Queen Elizabeth" in December 1949, and paved the way to an unique export achievement by a British motor-car manufacturer; and, if it comes to that, to an unprecedented commercial arrangement by an American car manufacturer as well.

The personalities concerned in this chance meeting were Mr. Donald Healey, managing director of the Donald Healey Motor Co., of Warwick, who was on his way to the U.S. to investigate the possibilities of using American power units in an export edition of the Healey, and Mr. George W. Mason, President of the Nash-Kelvinator Corporation of America. It was as a result of preliminary conversations which took place on this voyage that the Nash-Healey project finally arose.

As readers are now aware, although the fact was not public knowledge at the time, it was the original prototype of this new Anglo-American marque which took fourth place in the general classification of the Le Mans 24-hour Race last summer, having covered 2,103.4 miles at an average speed of 87.6 m.p.h. in the process. First public announcement of the car appeared in "The Motor" of October 4 last year and the car was exhibited for the first time at the London and Paris Motor Shows immediately afterwards. In America, the car made its initial appearance at the Chicago Automobile Show just under two months ago.

Now, the entire facilities of the Healey factory at Warwick are devoted to its production. Thus to Donald Healey goes the credit, not only for seeing the possibilities of an Anglo-American link-up in sports-car production, but also for the enterprise necessary to carry through the project to a stage in which the entire energies of his factory are devoted to dollar-earning—a position unique in the history of the motor industry.

As readers who are familiar with the American scene will know, the sports car occupies a far less prominent position in the U.S. market than is the case in Europe; no major American manufacturer, in fact, has seen fit to introduce a sports model since the mid-20's. There exists, nevertheless, a very enthusiastic fringe which has hitherto been catered for solely by European cars; and it is to this small but enthusiastic field that the Anglo-American Nash-Healey, with an initial target output of 500 cars a year, is designed to appeal.

Combined Effort

The basis of the car is a slightly modified Healey Silverstone chassis, a Nash engine and transmission line (complete but slightly modified for the purpose in hand) and a three-abreast body specifically designed for the American market. Production arrangements involve importation of the Nash components under special licence, their installation into the Healey chassis and the fitting of British bodywork, after which the complete cars are shipped to the U.S. for sale through the Nash dealer organization.

In view of the description already published and the full specification set out in the usual way on these pages, there is no point in dealing with the design in detail here, but one or two points of particular interest must be mentioned.

The engine, for example, is fitted with a high-compression aluminium head, a camshaft giving a greater-than-normal degree of overlap, and two S.U. carburetters in place of the normal single instrument. As a result of these changes, the output is increased from 115 b.h.p. at 3,400

SPORTING LUXURY—Geared for three-figure cruising speeds in its overdrive gear, the Nash-Healey has three-abreast seating, winding windows, and a "Weather Eye" thermostat-controlled fresh air heating system. Lights are American, tyres white-wall Goodyears made in Wolverhampton.

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	A.C. Mech.	Dry weight	21⅛ cwt.
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