

ALPINE RALLY WINNER COMBINES COMFORT AND PERFORMANCE

by G. Thatcher Darwin

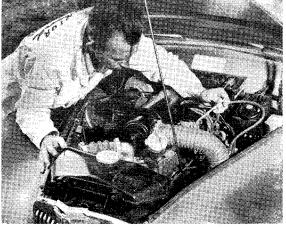
WITH A SPLENDID record of success in the Monte Carlo Rally, the International Alpine Trials and other rough and tumble long distance competitions, the Sunbeam-Talbot 90 has acquired a world wide reputation for stamina and reliability under extremely arduous conditions. It was therefore with keen anticipation that I accepted the assignment to test one of these cars. It was still more gratifying to learn that Mr. Timothy Rootes. Western Regional Director of Rootes, Ltd., manufacturers of the Sunbeam-Talbot, had kindly offered to place his personal car at the disposal of Motor Trend Research's staff for test purposes.

By the time I arrived at the Rootes Ltd. office in Beverly Hills I had built up a vivid mental picture of fur-coated adventurers battling their way over snow-choked Alpine passes, and I expected that such Homeric efforts would require a vehicle with all the gentle attributes of an army bulldozer. What a pleasant surprise to discover instead a trim convertible of modest overall dimensions, with very attractive lines highlighted by restrained use of chrome plating. The frontal aspect was refreshing for its simple dignity and the pastel blue paint job and white sidewall tires completed a most appealing ensemble.

Sliding in behind the wheel one finds the controls conveniently placed with the gearshift on the steering column and the emergency brake lever between the front seats. The steering wheel is at just the right angle and the cowl comes well back, bringing the instrument group close for easy reading. Radio controls are located centrally, and the air-conditioning group is under the main instrument panel. Electric windshield wipers are fitted and the front seat is adjustable fore and aft and for rake also.

SPORTS TRIAL





HOW COMPACT can you get? Engine and all possible auxiliaries have been engineered into remarkably small space. Darwin indicates conveniently located micrometer spark adjustment

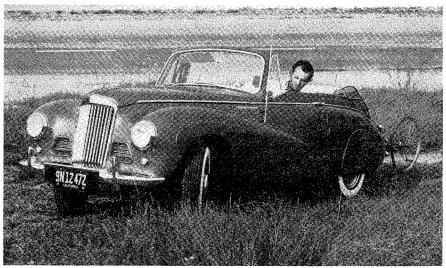
The engine started at once and after a brief warm-up and some instructions about tire pressure from Mr. Rootes I drove away. The weather was warm and I was glad to have the top down. Rolling through dense Los Angeles traffic was easy. The quick ratio steering has good caster action, is positive and shows no noticeable inclination to understeer or oversteer. This feature, combined with excellent two-leading shoe hydraulic brakes and the four speed transmission, make the Sunbeam-Talbot a nimble performer in crowded streets. A car of such sensible overall dimensions has a tremendous advantage over bulkier models, and the Sunbeam certainly refutes all arguments that a car has to be heavy to be comfortable.

The independent front suspension gives a smooth ride combined with good stabil-

ity on corners. Over vicious washboard dirt roads, the suspension proved excellent, absorbing all shocks and permitting the car's occupants complete relaxation. Only later in the tests under very harsh cornering methods did the car show much tendency to lean. Normal bends on the highway are taken without slackening speed, and the car gives a very satisfying impression of being completely manageable.

A point of criticism seems to be the transmission control. Even though the car tested had been driven several thousand miles, the control felt quite stiff going into and out of low gear. American gearshift levers are spring or gravity loaded

(Continued on page thirty-three)



ROUGHEST GOING failed to faze the solid Sunbeam. Versatile suspension, precision steering make for perfect control over any terrain

PHOTOS BY FELIX ZELENKA

Sports Trial

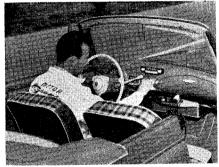
(Continued from page twenty-four)

toward the second and high "groove." On the Sunbeam-Talbot one lifts the lever towards the steering wheel to go from the low-second groove to the third-high groove. Even after several hundred miles of test driving, this did not seem to be a natural movement. It should be mentioned, however, that this arrangement is almost universal on British cars having column gearshift, and obviously one becomes accustomed to it in time.

So far as the transmission itself is concerned it seemed entirely adequate. The four forward ratios are well chosen and the engine's good low speed torque characteristics provide excellent acceleration when full use of the gears is made.

The manually operated Synchro box is of the Rootes balk ring type which makes very rapid shifts possible without clashing the gears. Accidental engagement of reverse is prevented by a lock which is released by pulling shift lever knob out.

The Sunbeam's brakes deserve special mention. The pedal pressure required is moderate and the car can be brought down to a crawl from cruising speeds without any sidesway. Under emergency conditions, all four wheels can be locked at once. On a wide boulevard in the rain I

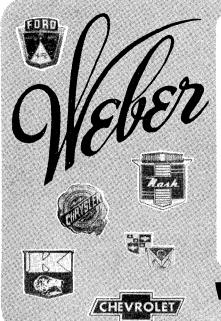


LAYOUT OF controls, radio, heater is neat, in keeping with car's trim overall design. Instruments are calibrated in U.S. and metric values

tried a "hands off" stop, locking all four wheels at 45 mph. The car continued in a straight line until the last 15 feet finally halting, the back about two feet off line.

Following conventional British practice, the Sunbeam-Talbot is powered with a four cylinder overhead valve engine. The bore and stroke are 3.19 x 4.33 ins. (81 x 110 mm) giving 138.2 cu. ins. (2,267 cc) piston displacement. This power plant running at $6\frac{1}{2}$ to 1 compression delivers 70 bhp at the flywheel at 4000 rpm. On the car tested, the cylinder head had been milled in order to raise the compression to a figure suitable to American fuels. It is understood that this modification is standard on all export models. The performance of this unit can be definitely termed "sporting."

One of the things I liked most about (Continued on page forty-six)



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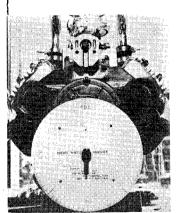
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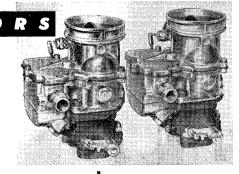


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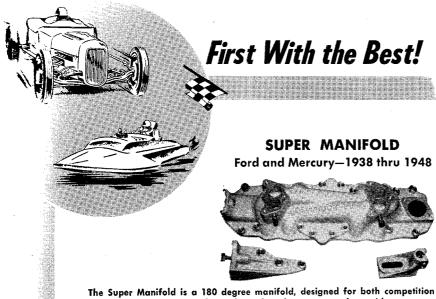
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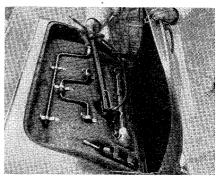
NEWHOUSE AUTOMOTIVE INDUSTRIES 5803 E. Beverly Blvd., Dept. M-7, Los Angeles 22, Calif.

Sports Trial

(Continued from page thirty-three)

the Sunbeam-Talbot was its top. Its lines are nicely proportioned and the car looks equally smart with the top up or down. The structure is hand operated, but not cumbersome. The joint across the top of the windshield is leak-proof and the seal around the windows is excellent. When the unit is erected, the last step of the procedure is to move a small lever on either side of the rear seat. These levers actuate eccentrics which apply just the right tension to the whole assembly making it wrinkle-free and rattle proof. In the "down" position, the top folds into a generous well aft of the rear seat and is covered with a neat canvas boot. A nice touch here is the provision of invisible clips which secure the boot to a chrome trim strip. The whole thing is a good job.

The upholstery suggests the best British workmanship and attractive plaid seat covers were fitted to the car tested. Other interior features include a commodious glove compartment in the instrument panel, a smaller one in each front door, and an ashtray thoughtfully placed on the



LARGE TOOLS are stowed in rattle-proof panel nested in trunk lid; small tools are carried in sponge-rubber case in built-in compartment

transmission tunnel ahead of the front seats. The door handles pull straight back in an easy motion. There are minor criticisms, for instance, the window cranks on the doors were quite stiff and the glove compartment needs a more positive latch since it came open occasionally of its own accord, and also there seems no point in having the hood latch on the right where the driver must reach over for it.

The flush-fitting panels over the rear wheels come off easily for tire changing, and blend very harmoniously with the car's lines. The spare wheel is concealed in a separate compartment under the trunk at the rear, which by the way, is roomy enough for most light luggage.

Altogether the Sunbeam-Talbot 90 merits very serious consideration by the purchaser who wants good performance and comfort in a car that is small enough to be highly maneuverable in present day traffic conditions. The car tested lists for \$2645 in this country. Several years ago the purchase of a car of this type was

(Continued on page forty-nine)

Sports Trial

(Continued from page forty-six)

of questionable wisdom because of rather sketchy spares and service facilities. Today with British cars commonplace on America's highways the prospective purchaser no longer need feel hesitant on this score. As one of Britain's largest auto manufacturers, the Rootes Group is particularly aware of the importance of spares and service, is providing an ever-expanding network of these facilities in the U.S.

TABLE OF PERFORMANCE DYNAMOMETER TEST

25 mph (full load) 40 mph (full load) 60 mph (full load)	20 road hp 33 road hp 43 road hp
ACCELERATION TRIALS (SECON Standing start 1/4-mile 0-30 mph through gears 0-60 mph through gears 10-60 mph in high 30-60 mph in high	(1DS) :22.30 :06.12 :21.78 :30.86 :24.33
TOP SPEED (MPH) Fastest one-way run Average of four runs	84.34 81.08
FUEL CONSUMPTION (MPG) At a steady 30 mph At a steady 45 mph Through light traffic Through medium traffic Through heavy traffic	25.9 23.4 28.0 19.6 15.3

GENERAL SPECIFICATIONS

Stopping distance at 30 mph Stopping distance at 45 mph

	GINE
Type Bore and Stroke Stroke/Bore Ratio Cubic Inch Displacement	Four cyl. pushrod ohv 3.19 x 4.33 ins. 1.36:1 138.2
Maximum Bhp Bhp/Cubic Inch	70 at 4000 rpm .506
DRIVE	SYSTEM

BRAKE CHECK

36 ft. 8 ins. 84 ft. 9 ins.

Transmission: Manual Shift, Synchro-mesh. Overall

gear ratios:
Low 13.905, Second 9.633, Third 5.811, Top 3.9
Rear Axle: Hotchkiss drive, 3.9:1 hypoid bevel gears

DIME	NSIONS		
Wheelbase			971/2 ins.
Tread 471/2 ins. Fron	t, 50½ in	ns. Rear	,
Overall Length	.,,		1671/2 ins.
Overall Height			59 ins.
Overall Width			621/2 ins.
Road Clearance			6.6 ins.
Weight (Test Car)			2890 lbs.
Weight/Bhp Ratio			36.6:1
Weight/Road hp Ratio			65.8:1
Weight Distribution (From	t to Rear) .	51/49

Lincoln Motor Trials

(Continued from page thirty-five)

			(E CHE	CK			
Stopping	distance	at 30	mph	44	ft.	11	ins.
Stopping	distance	at 45	mph	101	ft.	3	ins.
Stopping	distance	at 60	mph				ins.
	GEN			FICATIONS			-
-		E	NGINE				

	CITIE
Type	L-head V-8
Bore and Stroke	$3\frac{1}{2} \times 4\frac{3}{8}$
Stroke/Bore Ratio	1.25:1
Cubic Inch Displacement	336.7
Maximum Bhp	154 @ 3607
Bhp/Cu. In.	.457
Maximum Torque	265 ft. lbs. @ 2000 rpm
Compression Ratio	7:1
DRIVE	SYSTEM

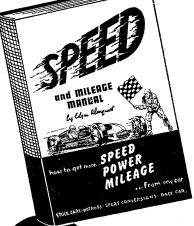
DRIVE SYSTEM

Transmission—Conventional three-speed. Ratios:
First—2.526·1, Second—1.518:1, Third—1.0:1,
Reverse—3.158:1
Optional Overdrive—.722:1
Hydra-Matic Ratios: First—3.8195:1, Second—
2.634:1, Third—1.4500:1, Fourth—1:1. Reverse—
4.3045:1
Rear Axle—Semi-floating, Hypoid, Hotchkiss drive.
Ratios available: 3.31:1 (Plains), 3.91:1 (Standard),
4.27:1 (Station Wagon).

DIMENSIONS

DIMENSIONS	1
Wheelbase	121 ins.
Overall Length	214 ins.
Overall Height (loaded)	63.6 ins.
Overall Width	76.7 ins.
Tread Front—58.5 ins.,	Rear 60.0 ins.
Turns, Lock to Lock	51/2
Weight (Test Car)	4375 lbs.
Weight/Bhp Ratio	28.4:1
Weight/Road Hp Ratio	46.0:1
Weight Distribution (Front to Rear)	55.4/44.6

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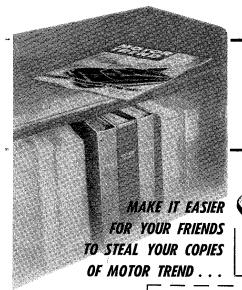
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