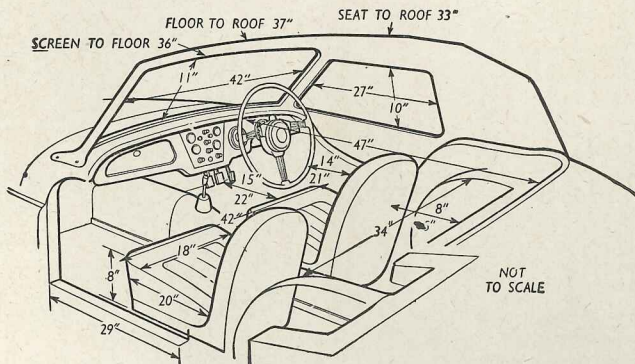
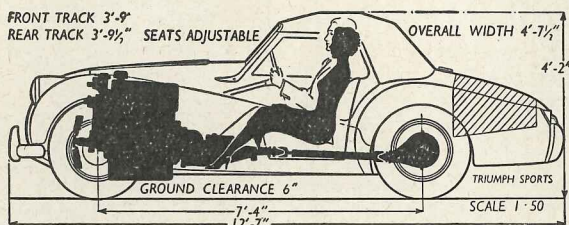


# The Motor Road Test No. 12/54 (Continental)

**Make:** Triumph **Type:** T.R.2, Sports 2-seater (with overdrive)  
**Makers:** The Standard Motor Co. Ltd., Coventry.

## Test Data



**WEIGHT**  
 Unladen Kerb Weight .. .. 18½ cwt.  
 Front/rear weight distribution .. 54/46  
 Weight laden as tested .. .. 22½ cwt.

**CONDITIONS:** Cold, dry weather with moderate cross wind. Belgian premium-grade pump fuel. Smooth concrete road surface (O.tend-Ghent motor road). Car tested with hood and sidescreeens erect, and with tyre pressures at 28-32 lb. as advised for sustained high speeds.

**INSTRUMENTS**  
 Speedometer at 30 m.p.h. .. .. 4% fast  
 Speedometer at 60 m.p.h. .. .. 5% fast  
 Speedometer at 90 m.p.h. .. .. 6% fast  
 Distance recorder .. .. 1% fast

**MAXIMUM SPEEDS**  
 Flying Quarter Mile (overdrive gear)  
 Mean of four opposite runs .. 107.3 m.p.h.  
 Best time equals .. 108.4 m.p.h.  
**Speed in gears**  
 Max. speed in 4th gear .. .. 105.3 m.p.h.  
 Max. speed in 3rd gear .. .. 79 m.p.h.  
 Max. speed in 2nd gear .. .. 52 m.p.h.  
 Max. speed in 1st gear .. .. 31 m.p.h.

**FUEL CONSUMPTION (in overdrive)**  
 52.0 m.p.g. at constant 30 m.p.h.  
 54.0 m.p.g. at constant 40 m.p.h.  
 49.5 m.p.g. at constant 50 m.p.h.  
 43.5 m.p.g. at constant 60 m.p.h.  
 37.5 m.p.g. at constant 70 m.p.h.  
 31.0 m.p.g. at constant 80 m.p.h.  
 27.0 m.p.g. at constant 90 m.p.h.  
 Overall consumption for 1,904 miles, 55.2 gallons, = 34.5 m.p.g. Fuel tank capacity 12½ gallons.

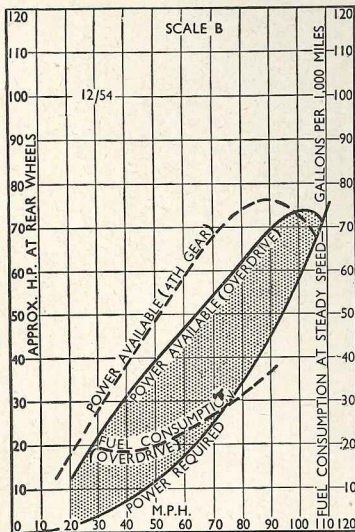
**ACCELERATION TIMES Through Gears**  
 0-30 m.p.h. .. .. 4.0 sec.  
 0-40 m.p.h. .. .. 6.0 sec.  
 0-50 m.p.h. .. .. 8.2 sec.  
 0-60 m.p.h. .. .. 12.0 sec.  
 0-70 m.p.h. .. .. 15.8 sec.  
 0-80 m.p.h. .. .. 22.1 sec.  
 0-90 m.p.h. .. .. 30.4 sec.  
 Standing Quarter Mile .. .. 18.6 sec.

**ACCELERATION TIMES on Three Upper Ratios**

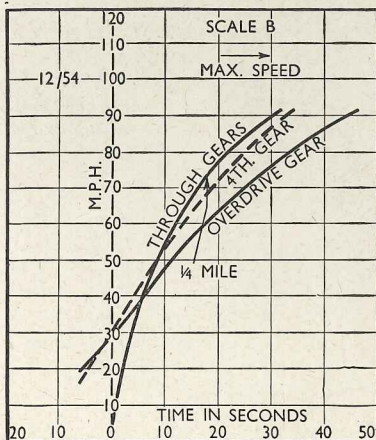
|              | Overdrive Top | 4th       | 3rd      |
|--------------|---------------|-----------|----------|
| 10-30 m.p.h. | —             | 8.6 sec.  | 6.0 sec. |
| 20-40 m.p.h. | 11.0 sec.     | 8.6 sec.  | 5.8 sec. |
| 30-50 m.p.h. | 11.3 sec.     | 8.7 sec.  | 6.0 sec. |
| 40-60 m.p.h. | 12.5 sec.     | 9.0 sec.  | 6.5 sec. |
| 50-70 m.p.h. | 14.2 sec.     | 10.1 sec. | 7.0 sec. |
| 60-80 m.p.h. | 16.0 sec.     | 11.3 sec. | —        |
| 70-90 m.p.h. | 19.3 sec.     | 14.2 sec. | —        |

**HILL CLIMBING in 4th gear (At steady speeds).**  
 Max. speed on 1 in 20 .. .. 94 m.p.h. (overdrive, 82 m.p.h.)  
 Max. speed on 1 in 15 .. .. 89 m.p.h. (overdrive, 69 m.p.h.)  
 Max. speed on 1 in 10 .. .. 71 m.p.h.  
 Max. gradient on overdrive gear .. .. 1 in 11.4 (Tapley 195 lb./ton.)  
 Max. gradient on 4th gear .. .. 1 in 8.0 (Tapley 275 lb./ton.)  
 Max. gradient on 3rd gear .. .. 1 in 5.9 (Tapley 375 lb./ton.)

**BRAKES at 30 m.p.h.**  
 1.00 g retardation (= 30 ft. stopping distance) with 135 lb. pedal pressure.  
 0.97 g retardation (= 31 ft. stopping distance) with 100 lb. pedal pressure.  
 0.70 g retardation (= 43 ft. stopping distance) with 75 lb. pedal pressure.  
 0.42 g retardation (= 72 ft. stopping distance) with 50 lb. pedal pressure.  
 0.22 g retardation (= 137 ft. stopping distance) with 25 lb. pedal pressure.



**Drag at 10 m.p.h.** .. .. 29 lb.  
**Drag at 60 m.p.h.** .. .. 112 lb.  
**Specific fuel consumption when cruising at 80% of maximum speed (i.e. 85.8 m.p.h.) on level road, based on power delivered to rear wheels** .. 0.59 pints per b.h p./hr



## Maintenance

**Sump:** 11 pints, S.A.E. 30 summer, S.A.E. 20 winter. **Gearbox:** 1½ pints, S.A.E. 30 (2 pints extra on overdrive models). **Rear Axle:** 1½ pints S.A.E. 90 hypoid gear oil. **Steering gear:** S.A.E. 90 gear oil. **Radiator:** 13 pints (2 drain taps). **Chassis lubrication:** By grease gun every 1,000 miles to 13 points and every 5,000 miles to 10 additional points. **Ignition timing:** 4° B.T.D.C. static. **Spark plug gap:** 0.032 in. **Contact breaker gap:** 0.015 in. **Valve timing (set with 0.015 in. valve clearance):** Inlet opens 15° B.T.D.C.; Exhaust closes 15° A.T.D.C. **Tapet clearances:** (Cold). Inlet 0.010 in. Exhaust 0.012 in. (for high speeds, 0.013 in., inlet and exhaust). **Front wheel toe-in:** ½ in. **Camber angle:** 2° positive. **Castor angle:** 1°-2° positive. **Tyre pressures (normal use):** Front 22 lb. Rear 24 lb. (increase by 6-8 lb. for sustained high speeds). **Brake fluid:** Lockheed orange. **Battery:** 12-volt, 51 amp-hr., Lucas GTW9A/2. **Lamp bulbs:** 12 volt. **Headlamps:** 60/36 watt Lucas No. 404. **Parking, tail and number plate lamps,** 18/6 watt Lucas No. 361.

# The TRIUMPH Sports 2-seater

## (With Overdrive)

The Lowest-priced British  
100 m.p.h. Car Displays  
Astonishing Fuel Economy

### In Brief

Price (with overdrive) £635 (plus purchase tax £265 14s. 2d.) equals £900 14s. 2d.

Capacity ... .. 1,991 c.c.  
Unladen kerb weight ... 18½ cwt.  
Fuel consumption... .. 34.5 m.p.g.  
Maximum speed ... .. 107.3 m.p.h.  
Maximum speed on 1 in 20  
gradient... .. 94 m.p.h. (4th gear)  
Maximum top (4th) gear  
gradient... .. 1 in 8.0

#### Acceleration:

10-30 m.p.h. in top (4th) 8.6 secs.  
0-50 m.p.h. through gears 8.2 secs.

Gearing: 20.2 m.p.h. in top (4th) at  
1,000 r.p.m. (24.6 m.p.h. in over-  
drive); 83.5 m.p.h. at 2,500 ft. per  
min. piston speed (102 m.p.h. in  
overdrive).

figures were no flash-in-the-pan, but were recorded on the way back from a visit to Switzerland without any attention being given to tappets, sparking plugs, contact breaker or other engine details for more than 1,500 miles.

Derived from the well-tried Standard Vanguard engine, the power unit of the Triumph Sports has a reduced cylinder bore which brings its size just below 2 litres, pistons giving reduced friction, a high compression cylinder head, and two S.U. carburettors. The compression ratio of 8½/1 is high enough to allow the engine to pink at low speeds on any premium-grade fuel which we tried, but neither the high compression ratio nor the modified valve timing and dual carburettors which permit higher r.p.m. to be attained have robbed the engine of its known ability to pull well at moderate speeds. An instant starter from cold, it develops enough power to give the car excellent performance when using extremely economical carburettor settings.

### Delightful Gearbox

The gearbox and overdrive which have been mated to this engine are, for the keen driver, a sheer delight. The four-speed gearbox, which is controlled by a sturdy and nicely positioned central remote-control lever, has the close ratios which are expected on a sports car and synchromesh mechanism which is amply effective without being obstructive. A push-pull electrical switch engages and disengages the overdrive (which operates only when top gear is in use) positively and reasonably smoothly without use of the clutch. No automatic or semi-automatic device is

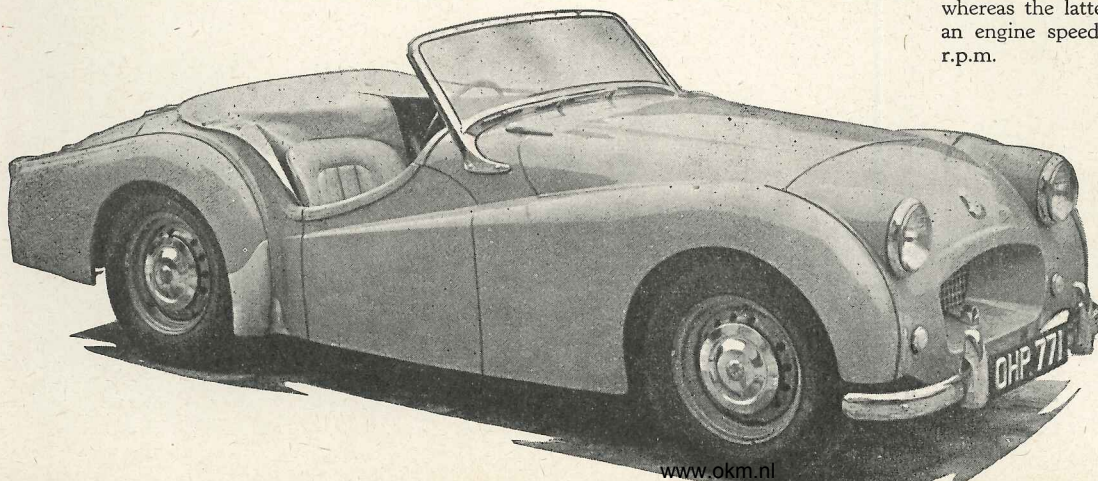


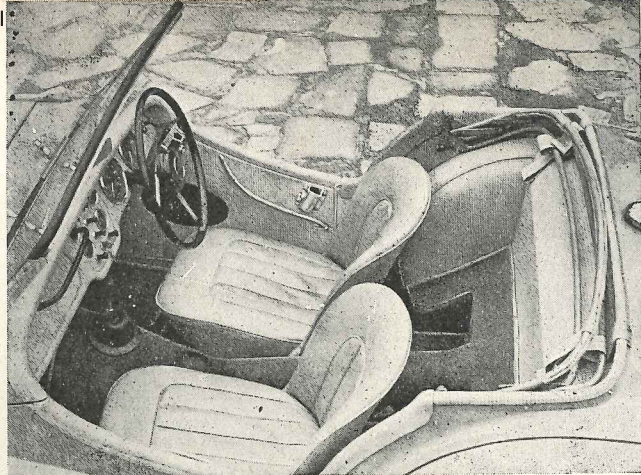
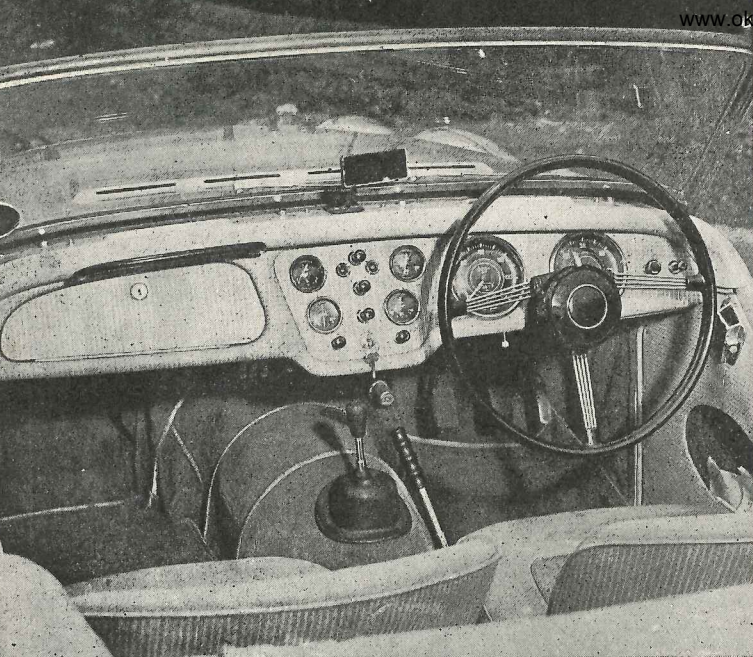
LOW FRONTAL AREA gives minimum air resistance but leaves useful internal roominess. High-mounted headlamps have a useful range but give a very limited sideways spread of light.

provided to take over from the keen driver the pleasant duty of deciding for himself which of the five progressively-spaced gear ratios he wants to use at any particular moment. To complete the transmission, there is a clutch which is firm-acting without being so fierce as to preclude starts from rest in 2nd gear, and a hypoid rear axle which allows 100 m.p.h. to be exceeded even without use of the optional-extra overdrive ratio. This car has the pleasing characteristic of being free from "awkward speeds," of being able to produce good acceleration in one ratio or another at any pace between a standstill and 90 m.p.h. or more.

The overdrive gear fitted to the test car is an optional but extremely worth-while extra, omission of which reduces the basic price by £40 and saves a further £16 13s. 4d. on purchase tax in the case of home-market sales. Using the direct 4th ratio instead of the overdrive 5th gear only reduced the timed maximum speed from 107.3 m.p.h. to 105.3 m.p.h., but the former figure corresponds to something less than the recommended limit for sustained engine speed of 4,500 r.p.m., whereas the latter figure is attained with an engine speed of approximately 5,250 r.p.m.

CUT-AWAY DOORS have their tops padded to form comfortable elbow rests. The tonneau cover has a central zip-fastener, so that it can be used to cover one half, three-quarters or the whole of the cockpit.





**FULL INSTRUMENTATION** is provided, with the speedometer and "rev. counter" directly facing the driver. Other details visible in these pictures are separately adjustable seats, fly-off handbrake, central remote-control gear-lever, and push-pull overdrive switch on the right of the fascia panel.

## The Triumph Sports - - Contd.

Brake performance fully adequate to make the use of high speeds safe on the road has been provided on this model, which has 10-inch front and 9-inch rear brakes. The optional wire-spoke wheels would no doubt provide improved brake cooling for racing, but in normal form the car can be braked from high speed without any judder or sideways pull, and can be driven uncomplainingly down an Alpine pass in top gear. The "hanging" type pedals which go with hydraulic brake and clutch operation seem more than usually comfortable with the "straight legs" driving position of a low-built sports car, there being no inconvenient sloping toe-board to restrict heel movement. To the left of the clutch, the driver's foot rests naturally on the dip-switch. Effective in use, the fly-off pattern handbrake is so placed that it can chafe the driver's left calf.

### Bodywork Details

Simple and rather unconventional in outline, the body lines of the Triumph evoke varied reactions from different people—the same may be said concerning the "geranium" paintwork of the model submitted for test. From a practical point of view, the merit of the bodywork shaping is unquestionable, there being comfortable room for two people and a fair amount of loose luggage inside the car, and a surprising amount of further luggage room in the rear locker, despite which the air resistance of the car with its hood and sidescreens erect is notably low. Like most open cars, this one loses some of its maximum speed when the hood is folded, an effective windscreen being also quite an effective air-brake, but for racing the complete windscreen can very easily be removed from the car and replaced by aero-screens.

Driven in cool spring sunshine with the hood folded but the sidescreens in position and the tonneau cover blanking off the space behind the seats, this model is certainly no more cold or draughty than most other open cars. Our test model had the optional-extra interior heater and windscreen de-mister fitted, this providing useful warmth around the legs even with the hood lowered and being able to keep the interior very snug when the hood is raised.

Two adjustable bucket seats are provided, but they fall just short of desirable comfort standards. For driving in Switzerland and back, we found that a thin rubber cushion which made up for inadequate padding over the seat springs also raised the driving position sufficiently to eliminate a "blind spot" behind the rear-view mirror, without cramping headroom below the hood for an average driver. Much care has obviously gone into details of the hood, the rubberised canvas of which removes completely from a folding frame, this unit being easily and quite reasonably quickly raised or lowered single-handed and behaving well during fast driving. A full-length tonneau cover, providing protection against rain showers or casual pilfering when the open car is parked, forms part of the normal equipment. With the hood erect, rearward vision is good, and with the car open all-round vision is of course virtually 100% clear.

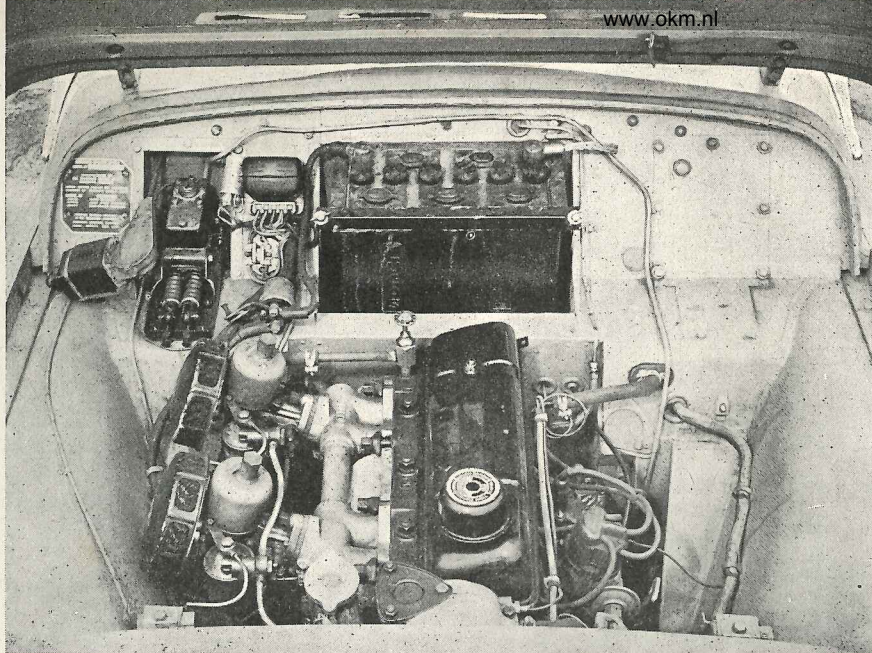
At present, certain annoyances result from details of the body design, and it must be hoped that these will soon be dealt with. Extending the doors down several inches below floor level results in it being impossible to open one door when the car is parked beside the kerb in a majority of city streets. The absence of exterior door-handles, and of easy means of securing or releasing from inside the car the useful elbow-flaps in the rigid-framed sidescreens,

plus the fact that a key (different from the ignition key) must always be used to open or close a capacious locker on the fascia panel, are at present major irritants on a car which is in most respects perfectly suitable for year-round everyday use. A vital point of merit with this open body is that under no circumstances do exhaust fumes appear to get sucked forwards into the cockpit.

With its comfortable body, considerable luggage capacity, high performance and astonishing economy of fuel, the Triumph comes close to being a magnificent vehicle for long-distance continental travel on business or on pleasure. At this early stage in the model's life, however (the example tested had engine no. 9 in chassis no. 6), chassis qualities which are very adequate for countries such as Britain with reasonably smooth roads, proved disappointing on the fast and bumpy roads of France and Belgium.

With the 22-24 lb. tyre pressures suggested for normal use, the Triumph rides very comfortably at touring-car speeds. There is none of the traditional sports-car harshness, but there is a certain amount of roll and a good deal of tyre squeal during fast cornering. For our performance tests and most of our other driving, the Dunlop "Road Speed" tyres which are optional extra equipment had their inflation pressures increased by 6 lb./sq. in., as is





TWIN CARBURETTORS and modified valve timing are among the specification changes which allow a well-tried engine to provide sporting performance on a very low fuel consumption. Under-bonnet accessibility is commendably good.

advised for sustained high speed driving, this also giving quicker steering response.

Over virtually the whole range of lateral accelerations used on sharp or moderately large-radius corners, this car shows a consistent but not exaggerated "understeer" characteristic, so that it is viceless right up to the limit of tyre adhesion. Only on wet and slippery roads did raised tyre inflation pressures appear to impair road-holding qualities. On really fast curves, however, it is wise to allow for the fact that due to light damping of the rear springs an un-

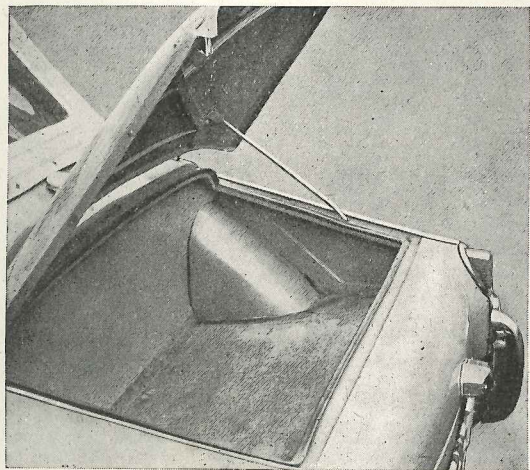
rous amount of noise at engine speeds around 2,400 r.p.m., and in the overdrive gear this often corresponds closely to natural cruising speeds used at night or on rough roads.

It will be noted that, amongst the items of optional equipment available for this model, stiffer front springs and larger rear shock absorbers are listed, and the latter at least are probably desirable for long-distance travel as well as for racing use. Increased damping would also no doubt minimize unexpectedly vigorous "shake" of the front end and scuttle at speeds around 75-80 m.p.h. which became increasingly evident towards the end of our extended Continental test, although the impression is formed that further stiffening of the frame or scuttle may be desirable.

Apart from chassis imperfections on this early example, the Triumph has merit for fast business travel as well as for sporting use. Almost completely weatherproof, even if slightly undignified to enter when the hood is raised, its astonishing economy at fast cruising speeds is backed up by the provision of a large fuel tank which enabled us to drive quite rapidly from Geneva to Calais, over 450 miles away, without any re-fuelling stop. Secured by two locks instead of the

usual one, the alligator bonnet gives very good access to the power unit. The light and high-g geared steering provides an extremely compact turning circle. A full set of instruments has been sensibly arranged on the plastic-covered fascia panel.

Although we have felt obliged to criticize some details and characteristics of the Triumph T.R.2 Sports two-seater in quite emphatic terms, we nevertheless rate this as not merely the best sports car available at its price, but also as one of the most promising new models which has been introduced in recent years. Not pared down to minimum weight especially with a view to use as a competition car, this model offers a combination of comfort, economy, speed and sheer enjoyment of travel in a responsive open two-seater, which should assure it of very large sales in many parts of the world.



LUGGAGE ACCOMMODATION inside the car is supplemented by an external locker of useful size which may be locked with either Yale or carriage keys. A separate lower compartment accommodates the spare wheel and jack.

pected bump can throw the car off its line to some extent. At speed, the steering is direct enough to transmit a fair amount of reaction to the driver's hands.

Especially with the car laden with two people and their normal touring luggage, the standard suspension seems much too lightly damped for open but badly surfaced roads, so that it can be necessary to keep the cruising speed down to 70 m.p.h. or less in circumstances when a much higher pace would otherwise be safe and economical. Unhappily, the exhaust system at present in use emits a quite ludic-

## Mechanical Specification

|  |   |
|--|---|
| <b>Engine</b>                                  |   |
| Cylinders ... ..                               | 4   |
| Bore and Stroke ... ..                         | 83 mm. x 92 mm.                                       |
| Cubic capacity ... ..                          | 1,991 c.c.  |
| Piston area ... ..                             | 33.5 sq. in.  |
| Valves ... ..                                  | Pushrod o.h.v.  |
| Compression ratio ... ..                       | 8.5/1   |
| Max. power 90 b.h.p. ... ..                    | at 4,800 r.p.m.                                       |
| Piston speed at max. b.h.p. 2,900 ft. per min. |   |
| Carburettors ... ..                            | 2 S.U. inclined, Type H.4                             |
| Ignition ... ..                                | 12-volt coil  |
| Sparkling plugs ... ..                         | 14 mm. Champion L105<br>(For hard driving, type L115) |
| Fuel pump ... ..                               | AC mechanical   |
| Oil filter ... ..                              | Purolator by-pass                                     |

|  |                          |
|--|--------------------------|
| <b>Transmission</b>  |                          |
| Clutch ... ..  | Borg & Beck 9-in. s.d.p. |
| Overdrive (clutchless engagement) ... ..                   | 3.03                     |
| Top gear (s/m) ... ..                                      | 3.7                      |
| 3rd gear (s/m) ... ..                                      | 4.9                      |
| 2nd gear (s/m) ... ..                                      | 7.4                      |
| 1st gear ... ..  | 12.5                     |
| Propeller shaft ... ..                                     | Hardy Spicer open        |
| Final drive ... ..   | Hypoid bevel             |
| Top gear, m.p.h. at 1,000 r.p.m. ... ..                    | 20.2                     |
| (Overdrive, 24.6)  |                          |
| Top gear, m.p.h. at 1,000 ft/min. piston speed 33.4 ... .. | (Overdrive, 40.8)        |

|                              |   |
|------------------------------|---|
| <b>Chassis</b>               |   |
| Brakes ... ..                | Lockheed hydraulic                              |
| Brake drums ... ..           | Front, 10 in. x 2½ in.<br>Rear, 9 in. x 1½ in.  |
| Friction lining area ... ..  | 148 sq. in.                                     |
| Suspension Front ... ..      | Coil and wishbone I.F.S.                        |
| Rear ... ..                  | Semi-elliptic                                   |
| Shock absorbers Front ... .. | Telescopic                                      |
| Rear ... ..                  | Piston-type                                     |
| Tyres ... ..                 | Dunlop 5.50-15<br>(Road Speed type on test car) |

|  |               |
|--|---------------|
| <b>Steering</b>                              |               |
| Steering gear ... ..                         | Cam and lever |
| Turning circle: Left ... ..                  | 32 feet       |
| Right ... ..                                 | 30 feet       |
| Turns of steering wheel, lock to lock ... .. | 2½            |

|  |      |
|--|------|
| <b>Performance factors (at laden weight as tested):</b>                |      |
| Piston area, sq. in. per ton ... ..                                    | 30.1 |
| Brake lining area, sq. in. per ton ... ..                              | 133  |
| Specific displacement, litres per ton mile 2,660<br>(Overdrive, 2,180) |      |

Fully described in "The Motor" October 22, 1952

## Coachwork and Equipment

|  |   |
|--|---|
| <b>Bumper height with car unladen:</b> |   |
| Front ... ..                           | (max.) 17½ in. (min.) 9½ in.                  |
| Rear (2 vertical bars only) ... ..     | (max.) 20½ in. (min.) 11½ in.                 |
| Starting handle ... ..                 | Yes   |
| Battery mounting ... ..                | On scuttle                                    |
| Jack ... ..                            | Screw type                                    |
| Jacking points ... ..                  | On frame, reached through trap-doors in floor |

Tool kit: Wheelbrace, jack, starting handle.  
Exterior lights: Two headlamps, two side lamps/direction indicators, two tail lamps/direction indicators, one stop/number plate lamp.

|  |                                |
|--|--------------------------------|
| Direction indicators ... ..  | Flashing type, self-cancelling |
| Windscreens wipers ... ..  | Two-blade electric             |
| Instruments: Speedometer with decimal trip, tachometer, oil pressure gauge, coolant thermometer, ammeter, fuel contents gauge. |                                |
| Warning lights: Dynamo charge, headlamp main beam, direction indicators.   |                                |

|  |                                 |
|--|---------------------------------|
| Locks: With ignition key ... ..  | Ignition                        |
| With other key ... ..  | Glove locker, luggage boot      |
| Glove lockers ... ..   | One on fascia, with locking lid |
| Map pockets ... ..   | Two on doors                    |
| Parcel shelves ... ..  | Nil                             |
| Ashtrays ... ..  | Nil                             |
| Cigar lighters ... ..  | Nil                             |
| Interior lights ... ..   | Nil                             |
| Interior heater: Optional extra, re-circulating type, with windscreens de-misters. |                                 |

Car radio ... .. Optional extra  
Extras available: Overdrive, knock-on wire wheels, cast aluminium engine sump, stiffer front springs, larger rear shock absorbers, aero-screens, undershield, rear wing spats, leather upholstery, metal cockpit cover, interior heater, radio, tool roll and tools, telescopic steering column, Road Speed tyres, two-speed screen wipers, fitted suitcase, dished steering wheel.  
Upholstery material ... .. Vynide  
Floor covering ... .. Pile carpets  
Exterior colours standardized (with effect from May, 1954): Signal red, pearl white, British racing green, black. Upholstery: Brown, blue or red. Hood and sidescreens: Fawn or black.