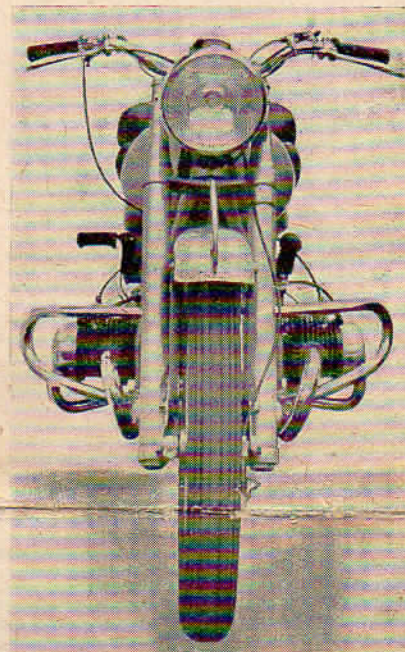
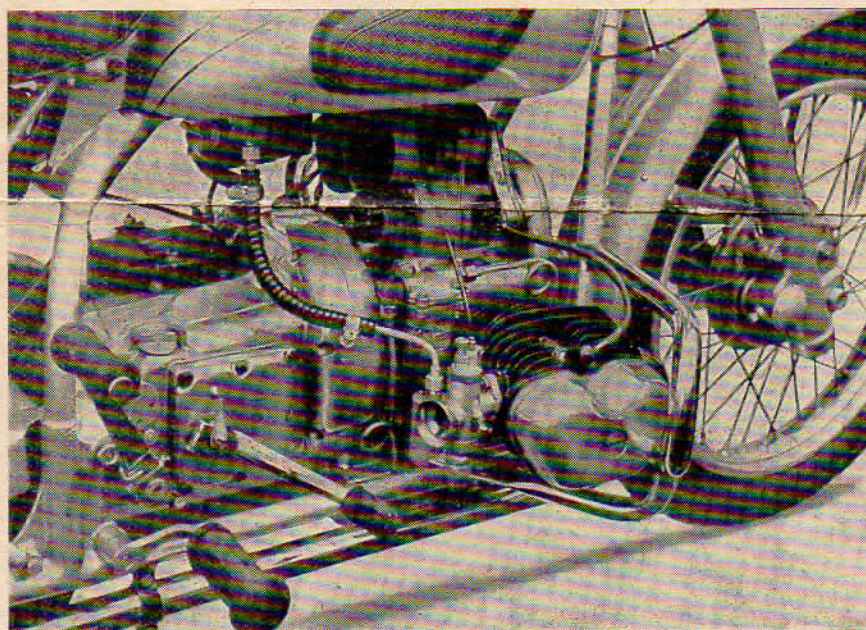
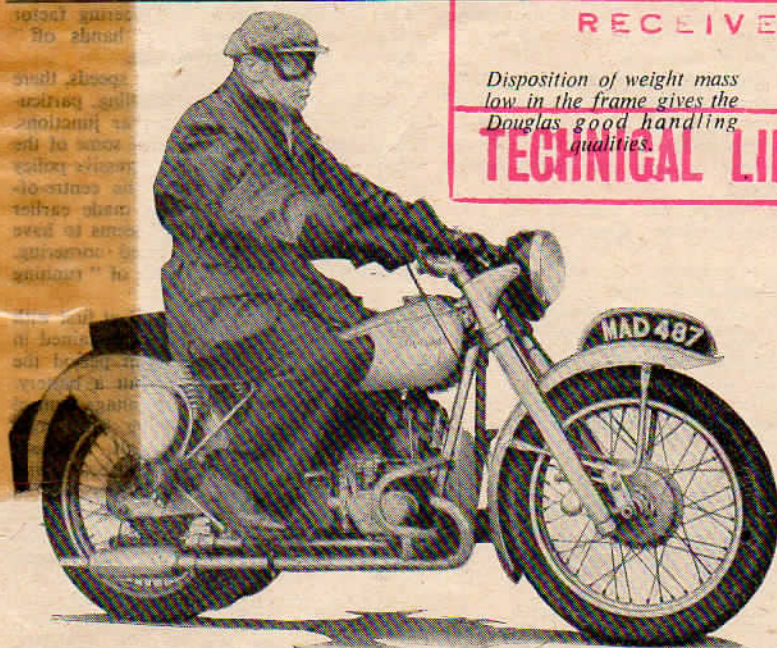


Road Tests of Current Models

THE AUTOMOBILE ASSOCIATION
RECEIVED
Disposition of weight mass
low in the frame gives the
Douglas good handling
qualities.
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The 348 c.c. o.h.v.,
Horizontally Opposed
Twin Mk. V Model
DOUGLAS

High Performance, Comfort and
Reliability Characterize the
1953 "350" from Kingswood



(Above) Protection of vital engine components is assured by a well-designed crash-bar arrangement.

(Left) A new feature in the Mk.V specification is the inclusion of a Vokes filter in the lubrication system.

TESTED now for the third time since post-war production commenced, the twin-cylinder Douglas carries on a name famous before World War I. In this present decade it is known as one of the two transverse twins available on the British market and, with bottom-link front forks and swinging fork rear suspension, torsion-bar controlled, it commands the attention of all who admire that which is unconventional yet efficient. Whilst the engine capacity and general design have remained unaltered since 1945, many modifying factors, introduced in the light of seven years' experience, have contributed to a very interesting 1953 Douglas motorcycle.

Amongst recent modifications there has been an improvement in lubrication arrangements. Originally, internal drill-ways took care of the oil supply, but, later, it was considered that an improvement would be

obtained if the feed from the submerged vane-type pump, located in the crankcase, was looked after by means of an external lead to a suitable-capacity Vokes oil filter, mounted on the off side of the engine, and thence by another external lead to the working parts of the power unit.

Certain alterations have been made also to the front and rear suspension and, in both instances, a beneficial stiffening has resulted. A retarding of the 1948 standard ignition setting now provides what might be termed a "softer" performance and, therefore, better pulling at lower speeds in all gears. These points are mentioned for the benefit of those who, due to post-war paper shortage, are not conversant with previous test articles and to whom this story is in the nature of a first-time introduction to the Douglas.

From the start, those of us who rode the

Mark V recently became re-acquainted with the need to be gentle on the throttle at low r.p.m. Each of the two cylinders obviously fires as a "175" and, because of embellishment, a certain amount of weight has been unavoidably added. If, however, the user puts aside the temptation to accelerate sharply at low r.p.m., or to let the engine slog, and, instead, uses the gearbox and the high r.p.m. potential of the power unit, there will be no question of pinking or knocking. Nor, with that technique, will he be aware of any torque reaction symptom. With the Mark V Douglas, sparkling, smooth acceleration depends entirely upon the intelligent use of the gearbox. Except at comparatively low r.p.m., when the engine was pulling hard, there was never any trace of vibration. When it occurred, the cause, without doubt, was torque reaction which manifested itself

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in a barely perceptible tremor at the saddle. The handlebars and footrests transmitted no vibration whatsoever.

All four of the gears can be held, with useful results, almost to the point of valve float and the maximum obtained in each ratio is indicated by the tester's speed graph. Normally, as shown, a change was made at somewhat lower r.p.m. in each case. In general, however, it was found satisfactory to retain first gear to about 20-25 m.p.h. and second gear until the speedometer—mounted in an easily read position on the

front fork bridge—registered between 40 and 45 m.p.h., the speed varying according to conditions, of course. The change from third to top gear took place at a road speed in the region of 60 m.p.h.

In each gear position plenty of "pull" was available immediately the clutch went home, one exception being "top," to engage which a considerable "dwell" was necessary. The flywheel and clutch work at engine speed.

At high speeds the handling of the machine was excellent. Castor action left

nothing to be desired at any gain over 40 m.p.h. and, weather permitting—side-winds naturally affected the steering factor—the rider could continue "hands off" from the mid-40s to maximum.

Below the "40s," i.e., at town speeds, there was a suggestion of heavy handling, particularly at roundabouts and similar junctions. It is possible that the shifting of some of the weight—inseparable from a progressive policy of improvement—has altered the centre-of-gravity factor. Mention was made earlier of stiffened suspension. This seems to have contributed to good high-speed cornering. There was never any suggestion of "running out of road."

Some trouble was experienced at first with the lighting set, due to damage sustained in transit. During a brief interim period the model was run at night without a battery. Here the Lucas dynamo and voltage control did sterling work in providing from road speeds of 15-20 m.p.h. upwards, adequate current for a brilliant head-lamp beam, and for speedometer and tail-light illumination, and for the horn. The exigency provides food for thought; road-test electrical equipment might more often be subjected to such a test.

At all speeds a small amount of mechanical noise was noticeable, this being due, without doubt, to the fact that the cylinders, protruding to right and left in front of the rider, are not screened and the slight mechanical chatter of tappets normally going on beneath a petrol tank, can be clearly heard. And there was a slight whine from the bevel transmission in third gear.

Douglas accessibility is of a particularly high order. Adjustment of the tappets called only for the slackening of the single large screw which holds each of the rocker covers in position. Clutch adjustment is easily effected by a cable adjuster on the crankcase. The contact breaker, on the other hand—and this was mentioned in an earlier road-test article—is still somewhat obscured by the clutch housing. Adjustment of the points, when necessary, could be a rather intricate operation.

Retailing at £180, plus £50 P.T., total £230, the Douglas Mk. V is a well-constructed, well-finished machine offering comfort of a degree above the average and combining the almost legendary reliability of the horizontal twin engine with a performance which puts it in the very front rank of machines of medium capacity.

BRIEF SPECIFICATION OF THE 348 c.c. DOUGLAS MARK V

Engine: Horizontally opposed, o.h.v. twin, set transversely in frame; bore 60.8 mm., stroke 60 mm. = 348 c.c.; C.R. 7.2:1; built-up crankshaft mounted on double-row ball bearing at flywheel end and large plain bearing on timing end; high-tensile steel connecting rods, with plain small-end bearings and double-row roller big-end bearings; twin camshafts, gear-driven, located in crankcase; twin Amal carburettors; vane-type oil pump feeds through external leads to Vokes oil filter mounted on crankcase.

Transmission: Gearbox bolted-up to form unit with engine; single-plate dry clutch, of 6½ ins. diameter, in separate housing interposed; four-speed gearbox operated by positive-stop, foot-change mechanism; ratios: 5.86, 7.38, 10.1 and 16.3:1; final drive by ½ in. x 305 in. chain to rear wheel, with shock-absorber incorporated in gearbox final-drive sprocket.

Ignition and Lighting: Lucas "Magdyno," gear-driven, provides for ignition and supplies current for charging Lucas 6-volt battery; Lucas 7-in. diameter head lamp, with nacelle pilot light; Lucas tail lamp.

Frame: Duplex cradle type, with torsion bars controlling swinging fork gear, contained within lower frame tubes; Douglas "Radiadraulic" hydraulically damped, bottom link front forks.

Wheels: Rims, W.M.2-19, front and rear, carrying 3.25-in. x 19-in. Firestone tyres.

Brakes: Douglas internal-expanding brakes, 7 ins. diameter, front and rear.

Tanks: Welded-steel petrol tank, adjustable for height, of 3½-gals. capacity; oil reservoir in engine sump, 4 pints capacity.

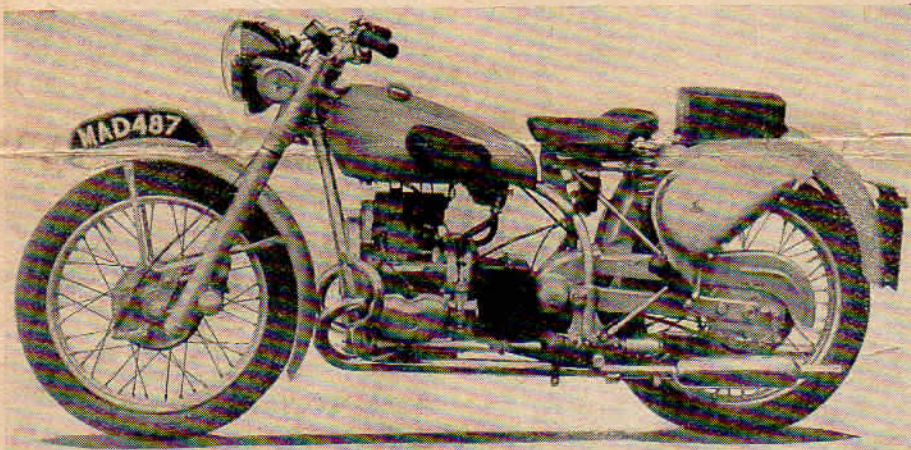
Dimensions: Wheelbase, 55 ins.; overall length, 81 ins.; saddle height, 30 ins.; ground clearance, 6½ ins.; weight (dry), 340 lb.

Finish: Polychromatic green overall finish, with silver detail; wheel rims in silver, with green centres.

Equipment: Electric horn; Smiths 80 m.p.h. speedometer, internally illuminated; cast-alloy toolboxes, with inbuilt pillion footrests, central stand; tool kit; tyre inflator.

Price: £180, plus £50 P.T. = £230.

Makers: Douglas (Sales and Service), Ltd., Kingswood, Bristol.



MOTOR CYCLING

TESTER'S ROAD REPORT MODEL 1953 348cc MKV DOUGLAS

Maximum Speeds in:—

Top Gear (Ratio 5.86 to 1) 74 m.p.h. = 5200 r.p.m. 36 sec.
Third Gear (Ratio 7.38 to 1) 67 m.p.h. = 6460 r.p.m. 18 sec.
Second Gear (Ratio 10.1 to 1) 51 m.p.h. = 6740 r.p.m. 12 sec.

Speeds over measured Quarter Mile:—

Flying Start 73.75 m.p.h. Standing Start 46.8 m.p.h.

Braking Figures On WET CONCRETE Surface, from 30 m.p.h.:—

Both Brakes 32 ft. Front Brake 35 ft. Rear Brake 52 ft.

Fuel Consumption:— Town m.p.g. Country m.p.g.
30 M.P.H. 80; 40 M.P.H. 72; 50 M.P.H. 55; 60 M.P.H. 50; 70 M.P.H. 45;

Oil Consumption:— NEGLIGIBLE m.p.g.

Carrying on a long Douglas tradition the Mark V, seen from the nearside, combines good looks with sound, modern construction. Note the generously dimensioned tool accommodation and battery accessibility.

