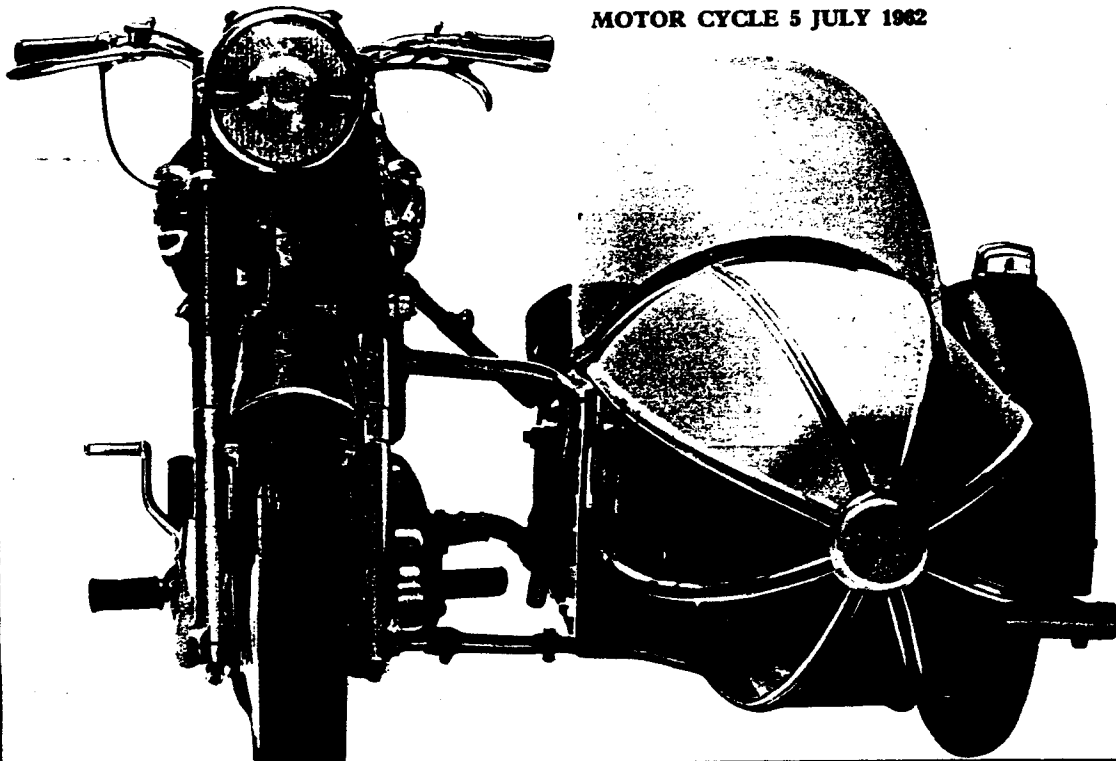


# ROAD TESTS OF CURRENT MODELS

348 c.c. Matchless G3 plus Garrard Grand Prix makes a trim, sporting outfit



# MERCURY and GRAND PRIX

**I**F you have never driven a sporting sidecar outfit, your motor-cycling education is incomplete. Such are the sentiments of hundreds of seasoned enthusiasts.

But wait. Not everyone can take on the high initial cost and heavy drinking habits of a big twin. If this is your problem, then the latest 348 c.c. G3 Matchless Mercury plus the sporty-looking but very comfortable Garrard Grand Prix, might well provide the answer.

With a 60 m.p.h.-plus maximum, this outfit contrives to squeeze no less than 58 miles from every gallon of petrol while cruising at a steady 50 m.p.h. And, what is more, it does this still leaving the firm impression that it is a zestful, sporting machine.

The Matchless was the same machine as tested in solo trim

(report: *Motor Cycle*, May 10). Let's recap briefly on the changes embodied in the new model.

Bore and stroke have been altered from 69x93mm to 74x81mm, and, because of the bigger bore, it has been possible to increase the valve sizes.

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## SPECIFICATION

**ENGINE:** Matchless 348 c.c. (74x81mm) overhead-valve single. Crankshaft supported in plain and ball bearings; roller big-end bearing, light-alloy cylinder head; compression ratio 8.5 to 1. Dry-sump lubrication; oil-tank capacity 4 pints

**CARBURETTOR:** Amal Monobloc; air slide operated by handlebar lever.

**IGNITION and LIGHTING:** Lucas coil ignition with auto-advance. Lucas RM15 alternator, with rotor mounted on drive side of crankshaft, charging Lucas 6-volt, 11-amp-hour battery through rectifier. Lucas 7in-diameter headlamp with pre-focus light unit.

**TRANSMISSION:** A.M.C. four-speed foot-change gear box. Gear ratios: bottom 16.6 to 1; second 11.05 to 1; third 7.91 to 1; top 6.48 to 1. Multi-plate clutch with bonded friction facings running in oil. Primary chain,  $\frac{1}{2}$ x0.305in in light-alloy oil-bath case. Rear chain,  $\frac{1}{2}$ x $\frac{1}{2}$ in with guard over top run. Engine r.p.m. at 30 m.p.h. in top gear, 2,550.

**FUEL CAPACITY:**  $\frac{1}{2}$  gallons.

**TYRES:** Dunlop 3.25x19in; ribbed front, Universal rear.

**BRAKES:** 7in-diameter front and rear; finger adjusters.

**SUSPENSION:** A.M.C. Teledraulic telescopic front fork with hydraulic damping. Pivoted rear fork controlled by Girling spring-and-hydraulic units with three-position adjustment for load.

**WHEELBASE:** 56in unladen. Ground clearance, 5 $\frac{1}{2}$ in unladen. Seat height, 31in unladen.

**WEIGHT:** Complete outfit, 567lb fully equipped, with full oil tank and approximately one gallon of petrol.

**PRICE:** Machine only, £248 4s 5d including British purchase tax.

**ROAD TAX:** Complete outfit £6 a year; £2 4s for four months.

**MAKERS:** Matchless Motor Cycles, Plumstead Road, London, S.E.18.

**DESCRIPTION:** *Motor Cycle*, 14 September, 1961.

## SIDECAR

**MODEL:** Garrard Grand Prix single-seat sports.

**BODY and CHASSIS:** Garrard integral metal construction with light-alloy panelling. Four attachments to machine. Pivoted fork wheel suspension controlled by Armstrong spring-and-hydraulic unit. Spoked wheel with 3.25x16in Avon Safety Mileage Mark II tyre. Fixed transparent plastic screen. Collapsible hood secured by press-studs. Dimensions: ground clearance, 6in unladen; track, 41in; overall length, 87in; seat back to nose, 45in; seat to hood, 30in; seat cushion and squab combined, 44in long x 19in wide; luggage compartment (irregular shape), 36x18x14in

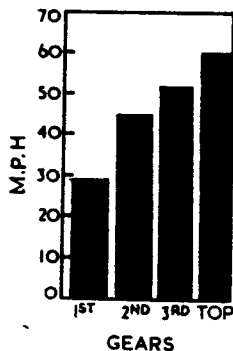
**PRICE:** Complete, £98 6s including British purchase tax. (This price includes the brake which has been added to the standard specification since this model was submitted for test).

**MAKERS:** Garrard Sidecars, Ltd., 13, Third Avenue, Bletchley, Bucks.

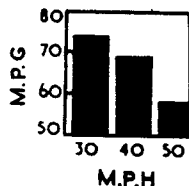
**DESCRIPTION:** *Motor Cycle*: 28 September, 1961.

## PERFORMANCE DATA

**HIGHEST ONE-WAY SPEED:** 62 m.p.h. (conditions: light tail wind; rider wearing two-piece suit and overboots; 12-stone passenger in sidecar.)



Speed in bottom and second gears limited by valve float.



**MEAN ACCELERATION:** 10-30 m.p.h. 20-40 m.p.h. 30-50 m.p.h.  
 Second 7.2 sec 8.2 sec —  
 Third — 13.4 sec 13.4 sec  
 Top — 17.6 sec 18.4 sec  
 Mean speed at end of quarter-mile from rest: 52 m.p.h.  
 Mean time to cover standing quarter-mile: 22.8 sec.

**BRAKING:** From 30 m.p.h. to rest, 36ft (surface, dry tarmac).

**TURNING/CIRCLE:** Left-hand, 15ft; right-hand, 22ft.

**MINIMUM NON-SNATCH SPEED:** 15 m.p.h. in top gear.

**WEIGHT PER C.C.:** 1.64 lb.

$\frac{1}{2}$ in to  $\frac{1}{4}$ in and exhaust pipe diameter up by  $\frac{1}{4}$ in to  $\frac{1}{2}$ in. The compression ratio has been raised from 7.5 to 8.5 to 1.

Unlike its predecessor, the Mercury engine now has the pushrod tubes cast integrally with the cylinder barrel and head.

More punch in the middle of the range and a generally crisper response from the engine are the main benefits from these changes. With a sidecar attached, this power bonus is even more noticeable. The outfit could be pushed all day with the speedometer needle hovering on the 55 m.p.h. mark. (The instrument read approximately 6 per cent fast throughout the range.)

Despite having had its power pepped up, the G3 remains extremely tractable—a desirable attribute in a machine used for sidecar work. The outfit could be

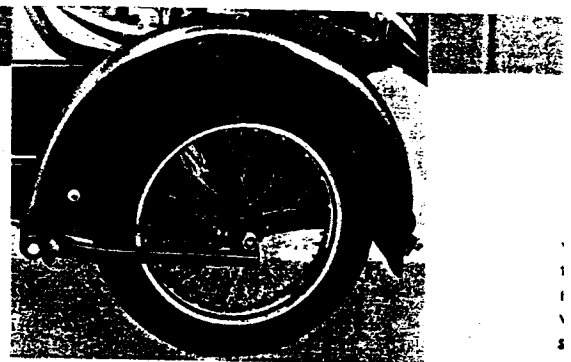
make or mar its appeal. No conditions encountered during the test, including standing in the open in rain overnight, failed to blemish the Mercury's one-kick record.

Upholding the reputation it has for sweet, positive changes, the A.M.C. gear box enabled the best use to be made of the power available. Top (6.48 to 1) and third (7.91 to 1) are ideally spaced and by "playing tunes" on these two ratios more than merely respectable average speeds could be maintained.

Bottom gear could be engaged quietly. At worst there was no more than a slight click. Neutral could be selected without bother with the outfit at rest.

The clutch engaged the drive smoothly and was not distressed by the additional weight of a sidecar, even when half-a-dozen full-throttle starts were under-

Close-up of the pivoted-fork sidecar wheel springing. The damper can be seen through the spokes



waffled along entirely unobtrusively at 30 m.p.h. in top gear.

If snap acceleration was wanted and a lower gear selected, the exhaust noise could, however, become obtrusive.

Mechanical noise was muted. Only slight hiss came from the carburettor, which is not fitted with an air filter.

Premium-grade petrol was used throughout the test and no pinking was experienced. Driven hard, and with full use made of the gear box, the Matchless used no more than a gallon of petrol every 50 miles. Oil consumption during the 700 miles covered was negligible. Oil-tightness of the engine and gear box was exemplary.

Whether an outfit is used for shopping or touring, the ease with which it can be started can

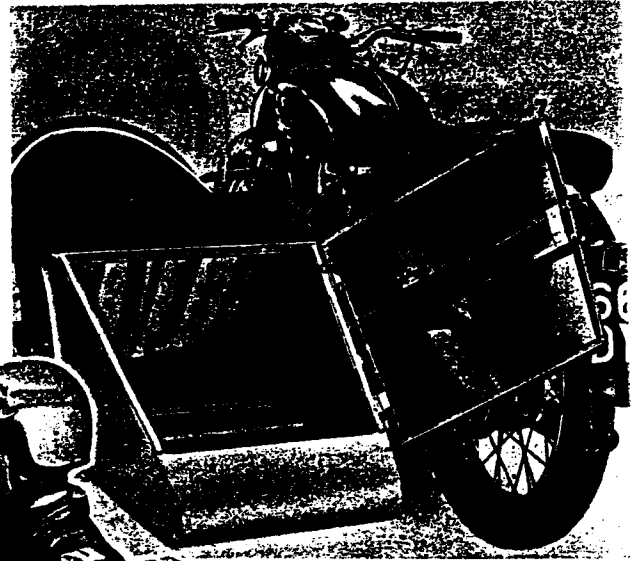
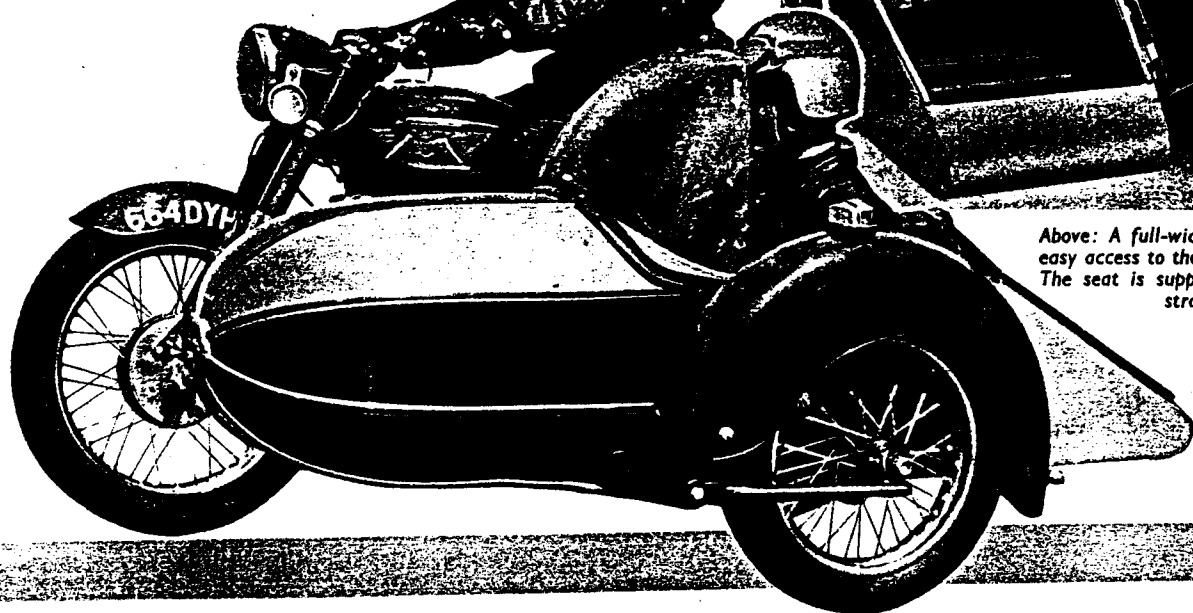
taken. The clutch had to be slipped when restarts were made on a 1 in 6 gradient. A 1 in 12 main-road hill was surmounted at 40 m.p.h. in third gear.

Driving position on the Matchless is comfortable and the rider's left leg is not hampered by sidecar connections.

Sidecar alignment was just right and the Matchless and Garrard steered hands-off on a level road. Reduced front-fork trail would have lessened the effort required for cornering. However, correct use of the throttle, particularly to make the machine run round the sidecar on left-handers, helped to reduce steering heaviness.

Handling was such that swerving could be zestfully tackled.

*On the road, the outfit proved pleasant to handle and the sidecar was comfortable*



*Above: A full-width door permits easy access to the luggage locker. The seat is supported on rubber straps*

When the outfit was being held hard into tight right-handers, some trace of front-wheel hop was evident, though the suspension absorbed all normal road shocks and provided a comfortable ride. A steering damper is fitted and was set so that it was just biting.

**Passenger comfort is good.** The Grand Prix seat cushion and squab are of hammock type, supported on broad rubber straps.

Weather protection is provided by a hood, erected in a few seconds, and fastened to the double-curvature, transparent-plastic screen by press studs. A lockable luggage compartment behind the seat provides reasonable stowage space.

Good braking enabled full use to be made of the performance. The figure of 36 feet from 30 m.p.h. is extremely creditable when it is considered that the total weight of rider and passenger was 24 stone. Both brakes were light and progressive in operation and did not require adjustment during the test.

Main-beam illumination was such that all the performance could be used after dark. Dipped

beam cut-off was satisfactory. The horn note was inadequate.

Accessibility is usually impaired when a sidecar is fitted. On the Mercury, however, the tappets, contact-breaker points and carburettor can all be reached easily from the right

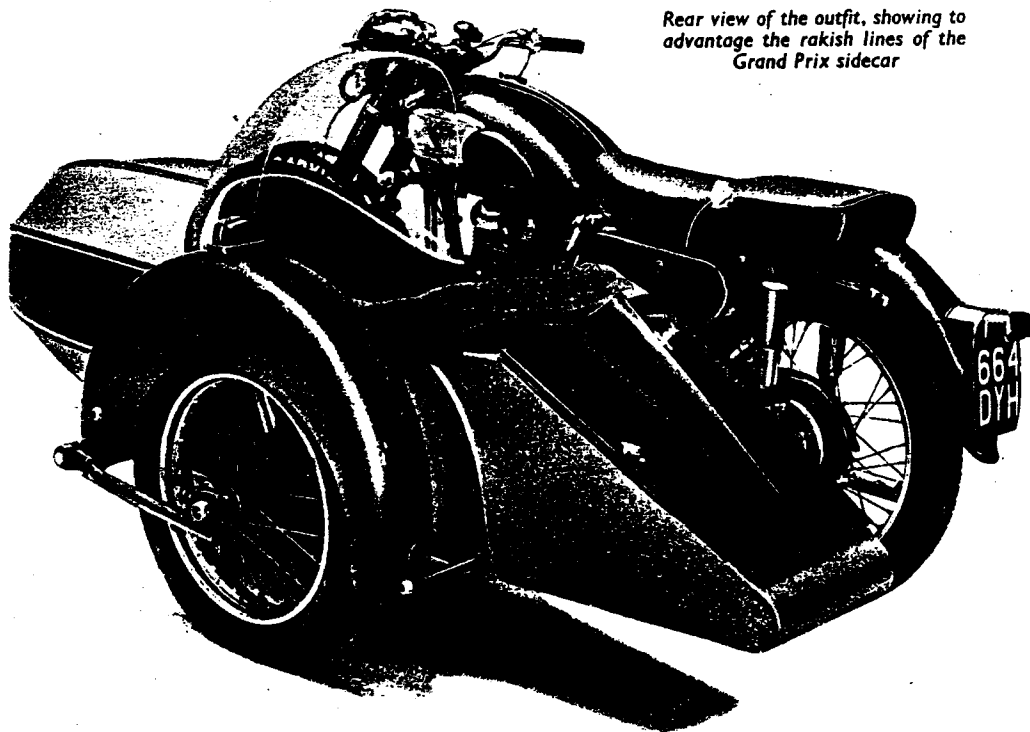
hand side of the machine.

Unhappily, the upper-rear sidecar connection fouls the hinged lid of the battery and tool compartment. The lid can be opened partially, permitting the tool roll to be removed. But to service the battery, the

connection had to be parted.

**The Mercury-Grand Prix outfit makes a good-looking zestful vehicle guaranteed to make journeys a lot of fun while helping to keep running costs down to sensibly economical levels.**

*Rear view of the outfit, showing to advantage the rakish lines of the Grand Prix sidecar*



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