

RIDERS' REPORTS

number seven
COLLATED BY
MIKE EVANS

David Dixon samples the 1963 AJS Hurricane—bags of ground clearance, excellent handling

IN their several guises, these AMC twins are among the most popular large-capacity machines on the road. And a request for reports on models from 1956 onward brought an unprecedented response—we received well over 100 replies.

Of these the largest batches were those telling the story of the six-fifty standards (AJS 31 and Matchless G12) and sportsters (31CSR and G12CSR) with 35 each. Twenty-two had their bikes hitched to sidecars—three of them driving CSRs. Only a small number of earlier 600 cc models were reported on.

This test is the most international yet—we had replies from Australia, Bermuda, Holland, Sweden and the USA. But the most impressive facet is the high total mileage covered by the bikes. During the “known” lifetime of the 110 machines used to collate the percentage table, an astounding 2,688,000 miles has been covered! Present owners have clocked up just over **TWO MILLION MILES** between them!

Mr AJS or Matchless Owner, obviously, is a hard-riding enthusiast. How old is he? The average shows him to be 28—rising 29—and he has a good nine years of experience of bikes behind him. The forms show that his machine is most likely to be of 1960 vintage.

Departure for this test was an offer by the AMC Owners' Club to submit a few reports from members. We thought it would be useful to treat the 27 forms from members separately as far as preparation of the percentage tables was concerned. It is interesting to see how faithfully the club results tally with those from readers in general.

PERFORMANCE

“MY MATCHLESS CSR will cruise all day in the 80s, two up, and is vibration-free at this speed. In top gear vibration is noticeable between 65 and 80 mph—but then it disappears. The motor can be revved freely and, in fact, the real power comes in at fairly high revs—equivalent to 20, 40, 60 and 70 mph in the gears.”

This is the opinion of 20-year-old Mick Blundell, of Hillingdon, Middlesex. And he speaks for the majority of Sportstwin owners. Results of the questionnaire analysis show the CSR models to be capable of 104 mph flat out.

Average fuel consumption is around 60 mpg—perhaps a little optimistic for some of the faster riders.

Riders of standard G12s or Model 31s report a 99 mph top speed with a 62 mpg consumption.

Fitting a chair still leaves a potential of 75 mph—and knocks a mere ten miles off a gallon's riding.

More potent an outfit is a CSR. Only a few were reported on, but it seems that 85 or 90 mph is top whack while consumption is 50 mpg as on the standard outfits.

Of the dozen or so older 600 cc models covered, the mean top speed showed up as 90 mph. Consumption, 55 mpg.

Many readers say that the engine needs to be kept turning over faster than would be thought with a six-fifty if best results are to be obtained.

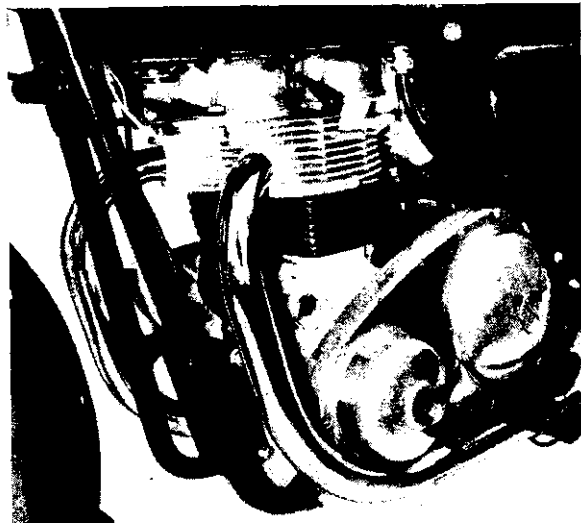
Acceleration is rated as good by the majority. “Smooth and with bags of punch at the top end,” says David Payne, a 23-year-old printer of Bristol.

Vibration is mentioned in many letters. Most have come to expect a certain amount from any vertical-twin layout—but it seems that the Ajays and Matchless suffer more than most.

Lancashire rider John Goulburn sums up: “Engine vibration seems to be present in all vertical twins and while elimination in the case of the Matchless would be advan-

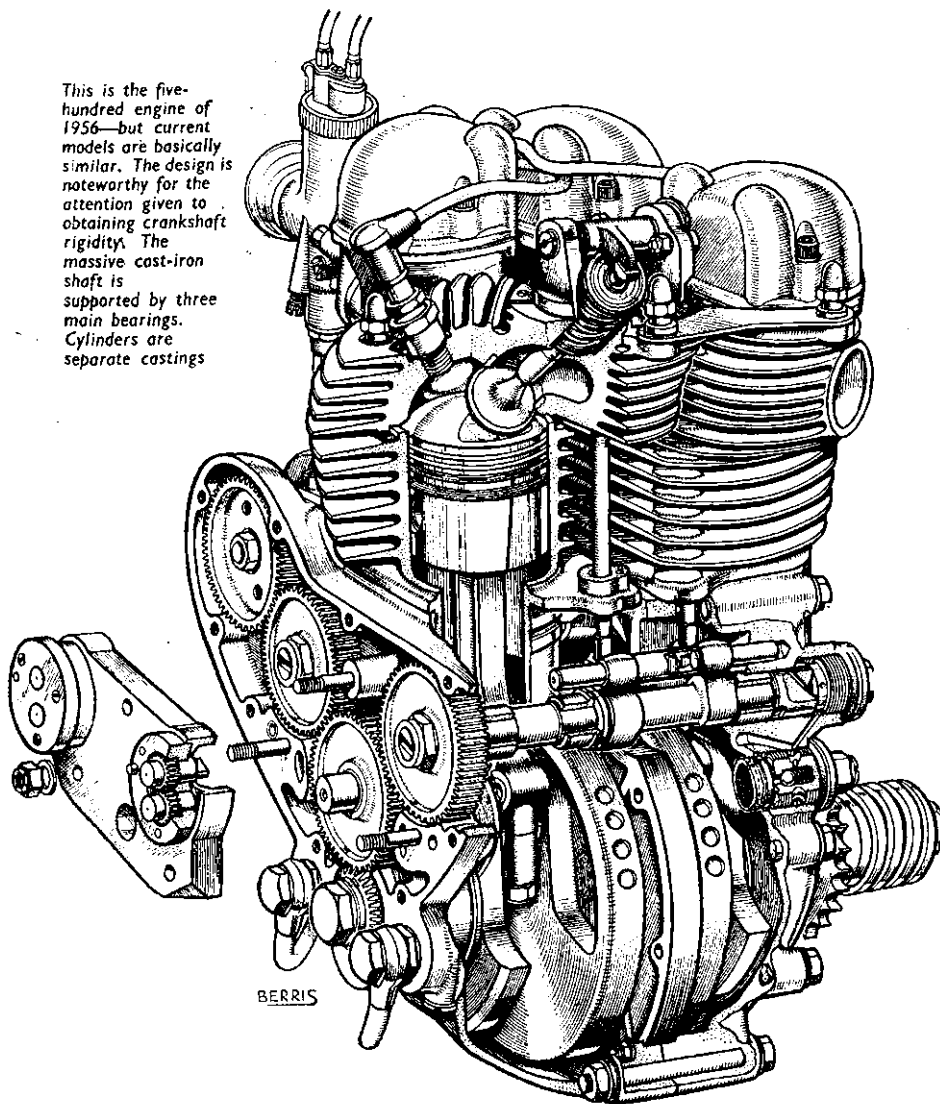
**AJS AND MATCHLESS SIX-
HUNDRED AND SIX-FIFTY TWINS**

TWO MILLION MILE TEST



Clean and businesslike—the power house of a brand-new 1965 G12. The AMC engine is praised for ease of maintenance and good looks

This is the five-hundred engine of 1956—but current models are basically similar. The design is noteworthy for the attention given to obtaining crankshaft rigidity. The massive cast-iron shaft is supported by three main bearings. Cylinders are separate castings



tageous, I hardly ever think about it so it cannot be so evident."

The majority mention that the engines—particularly, it seems, those of the CSRs—are mechanically noisy.

STARTING

"I EXPECT, and get, first-kick starting with the proviso that I must close the air below 50 deg." Rodney Hodges' G11 CSR is of 1958 vintage—but his experience is indicative of the whole.

Antony Curtis, 29, of Boston, says, "Starting requires some beef!"

HANDLING

IF there's anything that CSR owners can't comprehend, it's the aura surrounding Norton roadholding.

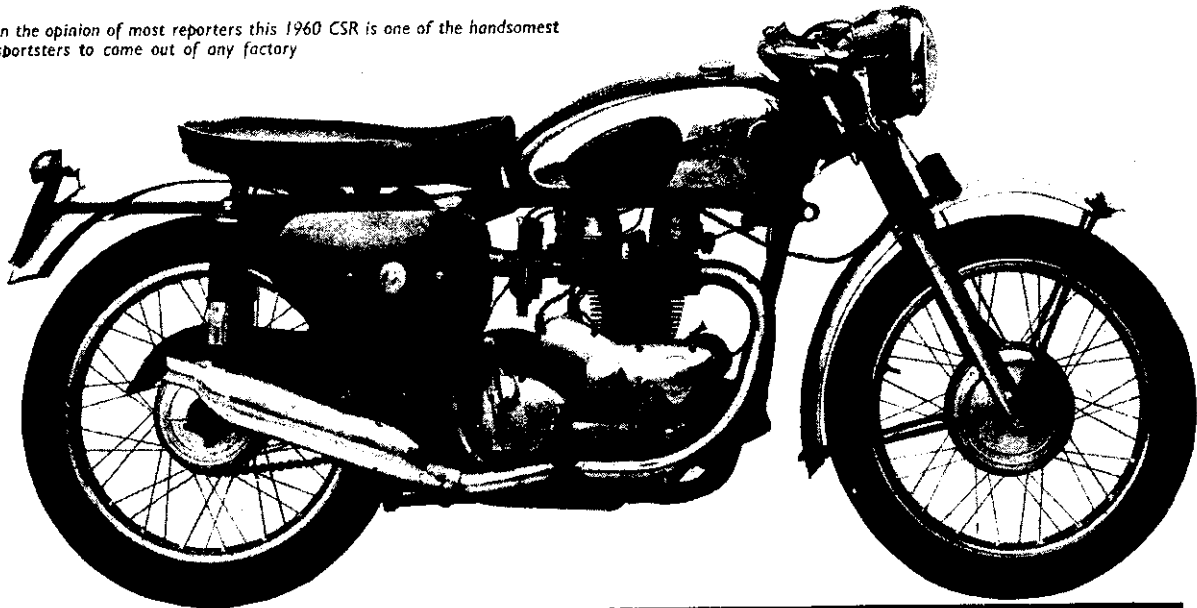
Twenty-two-year-old Charles Redgrave, of Chatham, is obviously a bit of an ad man: "Ear 'oling is fun with the CSR" is his slogan.

Whether it be sportster or de luxe tourer, it seems that a big Ajay or Matchbox will stick to the road effortlessly.

Says Robert Yate of Wolverhampton: "Roadholding sets a precedent encouraging the rider to take the bike to its limits. The precise steering and the remarkable design of the frame, giving great clearance, saves one a fortune in footrest rubbers!"

"The sure-footedness under

In the opinion of most reporters this 1960 CSR is one of the handsomest sportsters to come out of any factory



all road conditions, due in part to modern cling tyres, has come as a revelation to me in the light of 20 years' previous experience"—John Goulburn, Blackpool.

BRAKING

"**BOTH** brakes are real tyre squealers and are at their best at high speeds." The opinion of Mick Blundell is borne out by other correspondents: "Potent and free from fade" (Robert Yate); "Emergency stops can be made from 30 mph in 30 ft" (PC John Bleasdale).

One or two are dissatisfied. Says Charles Redgrave: "The brakes were okay for ordinary use, but I felt they could be improved—so I fitted Ferodo AM4 linings to the front. The braking department is now very potent."

ELECTRICS

IT IS very fashionable to decry modern electrics, but AMC owners seem quite content on the whole. The newer, 12-volt system gives better headlighting, naturally—but many fail to see why they should have to put up with two six-volt batteries instead of one 12-volt.

And more than a few mention the inadequacy of the modern "scooter" battery. Tales of frequent replacement are told. "Having bought two

in two years at over £3 each," says Antony Curtis, "I adapted the tool box to take a decent battery."

The horn gets dishonourable mention. The 14-per-cent mark is indication enough of the general disgust felt by owners.

The Japanese and Germans can fit good horns as standard equipment, say many, so why can't our manufacturers?

TRANSMISSION

THE AMC gear box receives universal praise. One of the best on the road, echo several readers.

What criticism there is is levelled at the clutch. "Going like the clappers up through the box on hard acceleration causes quite a bit of slip. I think a five- or six-spring clutch would definitely help." —David Payne.

A tip comes from Mick Blundell: "The oil in the primary chaincase must be only just high enough to touch the bottom run of the chain if clutch slip is to be avoided."

He adds a bit of chain lore: the tension of the primary chain never varies but, he says, he is always adjusting the rear one.

RIDING COMFORT

VERY little criticism here. Both the standard and sports models are perfectly comfort-

able. Even the shortish sports seat on earlier CSRs is acknowledged comfortable—but a bit cramped when a passenger is carried.

RELIABILITY

THERE is no secret of the fact that these twins have gained a notoriety for crankshaft breakages and rapid camshaft wear.

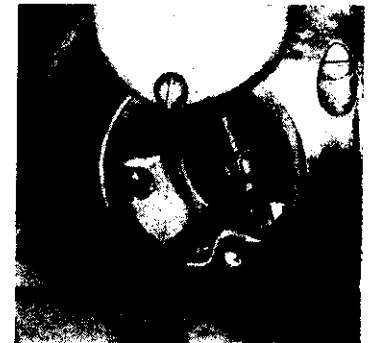
However, most of the grim tales concern bikes manufactured before 1962 when the new nodular iron crankshaft was introduced. This appears to have done the trick and later models are living down this reputation.

In mid-season 1963, Stellite tipped cam followers were first fitted—and have effectively cured the tendency to rapid wear. In any event, cam wear was only prevalent

in bikes used regularly for short trips.

With these two provisos in the letters of owners of pre-1962 mounts, the bikes gain top marks for reliability.

"In 27,000 miles," calculates Robert Lawmon, of Potters Bar, "I have bought my G12 one set of tyres, two



	AJS 31 CSR 21 March 1963	MATCHLESS G12 de luxe 8 June 1961
Mean maximum speed	99 mph	95 mph
Fastest one-way speed	104 mph	97 mph
Time to cover standing quarter-mile	14.8s	16.4s
Speed at end of standing quarter-mile	90 mph	82 mph
Fuel consumption at 40 mph	66 mpg	62 mpg
Fuel consumption at 60 mph	51 mpg	51 mpg
Braking distance from 30 mph	35 ft	34 ft

rear chains, one gear-lever spring, one ammeter, one contact breaker set (precaution), and one battery."

Real enthusiast is Barry Wood, of Wanstead, London: "My 1961 CSR AJS has covered 30,000 trouble-free miles since new. It has been in the Land's End Trial twice, the Exeter and Derbyshire once each. It is the most tractable motor cycle I have ever ridden."

ACCESSIBILITY

ONLY very few criticisms here. The tank is awkward to remove for one thing.

But the engine is praised time after time. The separate cylinders are much preferred to the block jobs on other vertical twins.

The engine is rated as one of the best-designed and easiest-to-work-on power units ever.

DETAIL FINISH

SAYS a Bristol reader: "The cycle parts, chrome work and polished alloy are undoubtedly excellent. But the oil tank, tool box and petrol tank, which were all red when they left the factory,

quickly discoloured into three different and dull-looking shades."

Speaking from 30 years of experience, Rodney Hodges, of New Malden, says that cost considerations are evident in his Matchless.

The enamel is not better than usual 50 years ago and the chrome (again as good as its competitors) needs more attention than nickel plating.

The lavish use of aluminium on the CSR machines comes in for equally lavish and repeated praise. Most CSR owners admit that the alloy rear mudguard is a bit of an apology—but it looks good.

SERVICE

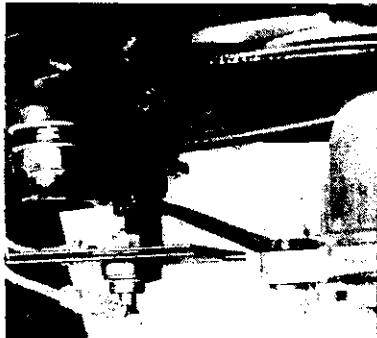
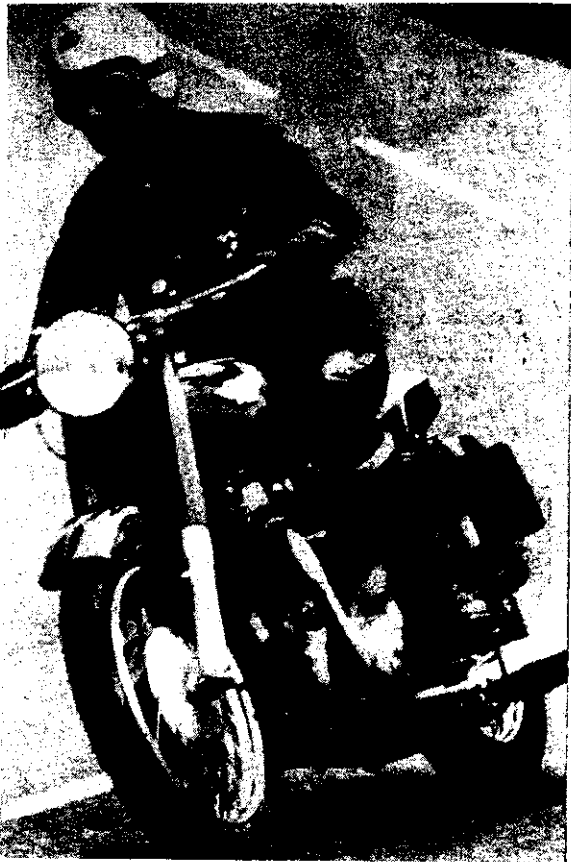
WHILE many reporters have very kind words to say about the availability of spares, the discontented ones undoubtedly prevail.

There is no overlooking that really very low percentage mark of 41. Even the AMC Owners' Club members have only a fractionally better view.

Says 26-year-old Dick Cummings, of Chelmsford: "A very fine machine let down by an abysmal after-sales service."

This is an overstatement.

The 1965 Matchless G12—acclaimed a comfortable, high-speed tourer. The verdict's the same for its sister AJS, the Model 31



Far left: Clutch cable can be changed in a jiffy. Middle: The new 12-volt Zener diode is mounted externally for better cooling. Left: Finger adjusters are welcome features of both front and rear brakes

But it has been common knowledge that spares supply has not been good.

Fortunately, things seem to be on the mend. Reorganization last year has made the spares flow more freely. Indeed, several readers with recent experience have been pleasantly surprised by the promptness of delivery.

The factory service department in general wins laurels

TECHNICAL GEN

THE basic AMC twin, introduced at the London Show in November, 1948, has been seen in many guises. Originally a five-hundred, it was not upped to 592 cc until September, 1956.

Next progression was in late 1958 when the 646 cc twins were introduced for the 1959 season.

This engine is no run-of-the-mill four-stroke twin. It has its unusual features. The crankshaft—extra-strong nodular iron since 1962—is mounted in three main bearings, unlike on the majority of twins where there are only two. Again, the cylinders and heads are com-

pletely separate, making for easier maintenance.

Bore and stroke of the six-fifty models are 72 x 79.35mm, and of the older six-hundreds 72 x 72.8mm.

Compression ratio of 1965 machines is 7.5 to 1 (8.5 on CSRs).

Current gear ratios for the tourers are: bottom, 12.23; second, 8.15; third, 5.85; top, 4.79 to 1. For CSRs they are: bottom, 11.07; second, 7.35; third, 5.27; top, 4.3 to 1.

Ignition is by coil on models G12 and 31 and magneto on the two CSRs. On all recent machines a 60-watt alternator charges two six-volt Lucas batteries wired in series. The head-

lamp houses a 12-volt, 50-40-watt main bulb.

Suspension on pre-1964 models is by hydraulically damped pivoted rear fork and Teledraulic front fork.

From 1964 the AMC Teledraulic fork is replaced by a Norton-pattern Roadholder.

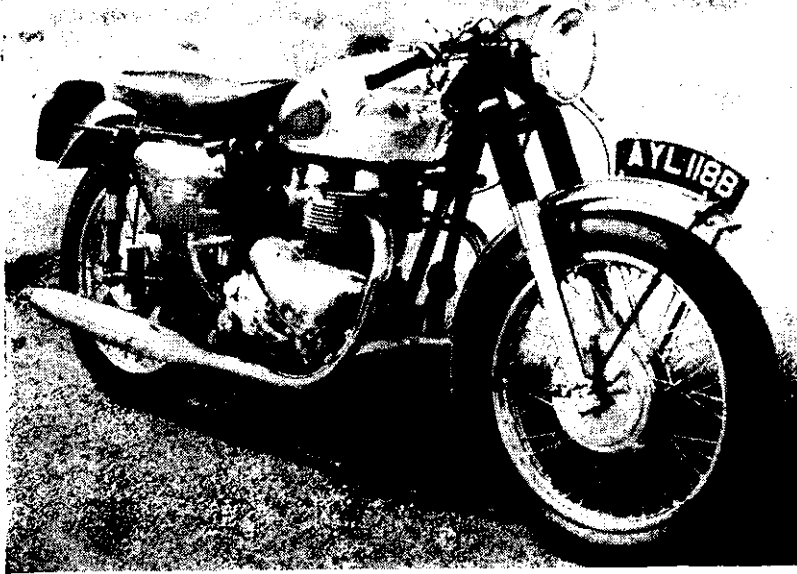
Wheels are 18in in diameter and carry 3.25in front and 3.50in rear tyres.

Makers are Matchless Motor Cycles, Ltd, 44, Plumstead Road, London, SE18.

1965 PRICES: Matchless Majestic (G12) and AJS Swift (31): £335 1s 1d.

Matchless Monarch (G12CSR) and AJS Hurricane (31CSR), £342 14s 2d.

Alec Merifield of Twickenham believes in keeping his Matchless G12CSR as smart and clean as new—here it is on its first birthday



Suspension is rated as good. Three-way adjustable Girdlings control the rear pivoted fork



all round. Any criticism here appears to be traceable to the non-availability of some part or other.

Alec Merifield, a 20-year-old accounts clerk of Twickenham, took his 1963 CSR Matchless into the service department for extensive accident damage repairs. It was ready in a week.

"I had to go to the factory for spares and I was dealt with straight away," confirms Elephant rallyist Peter Bowers. "They even reground the crankshaft while I went for a cup of tea!"

Dealers catch the backlash of the spares situation—they tend to get blamed when it isn't their fault.

Nevertheless, among those singled out for special credit are Pride and Clarke, Gus Kuhn, Joe Francis and Colin Seeley.

But service in many parts of the country—the West Country, Westmorland, Yorkshire, for example—is considered below par.

OVERALL VIEW

WHILE one or two readers are driven to exclaiming "by far the worst bike I have ever had the misfortune to own," the overwhelming verdict is of a charming, reliable machine.

"I wanted a big twin," says David Payne, "and I got one with which I am completely satisfied."

"A joy to maintain and a joy to ride"—Charles Redgrave.

"An eye-catching machine and, within the limits of the design, a sound one. As good as any other in the same price range." This is Rodney Hodges' opinion.

But the passing of the 100 per cent AMC bike—the Norton front fork and wheels were adopted in 1964—has not gone unmourned. While the standard bikes are still as highly regarded, the majority are of the opinion that the new CSRs are not an improvement. It is quite fair comment to say that the Ajay

and Matchbox CSR models with their alloy guards were among the handsomest and most businesslike machines ever produced.

Says Terry Smith of BFPO 17: "My next machine won't be a Matchless simply because I do not like the general appearance of the latest model."

WE LIKE . . .

The light-alloy mudguards on earlier CSRs—the present chrome ones are too prone to corrosion. (Antony Curtis.)

The really oil-tight engine and gear box.

The adjustable brake-shoe pads—useful when the external adjustments are used up. (Robert Lawman.)

The three-bearing crankshaft.

WE DON'T LIKE

The push-fit joints between exhaust pipe and cylinder head—prone to leakage.

The oil filler cap that bruises the leg when kick-starting.

The small Lucas battery—doesn't last long enough.

Too-small tool compartment—and it isn't waterproof.

Those names! Matchless Majestic—ugh! (Robert Lawman.)

The mechanically noisy engine.

YOUR OPINION AT A GLANCE

■ AFTER sending in their reports, readers were asked to complete a questionnaire in which they answered specific questions according to the formula good, middling or poor. In calculating these figures we have allowed two points for good and one point for middling. Poor got nothing.

The figures in brackets are percentages culled from the 27 forms submitted by members of the AMC Owners' Club. Note the remarkable consistency throughout.

THE MARKS ARE GIVEN AS PERCENTAGES

Acceleration	99 (87)	Steering	83 (85)	Brakes	81 (80)
Flexibility	78 (74)	Suspension (front)	83 (77)	Quality of finish	78 (68)
Smoothness	71 (71)	Suspension (rear)	82 (72)	Lighting	62 (52)
Starting	83 (85)	Smoothness of Controls	88 (95)	Horn	14 (13)
Oil-tightness	68 (72)	Riding Position	87 (85)	Other Electrics	65 (60)
Reliability	89 (96)	Mudguarding	75 (80)	Tool Kit	76 (65)
Clutch	80 (92)	Workmanship	66 (63)	Spares from Factory	41 (43)
Gear Bpx	91 (96)			Spares from Dealer	44 (50)
Delivery Tune*	71 (72)				
Accessibility	74 (83)				

*Second-hand machines not taken into account

Is the machine a good buy? 94 (98) per cent say yes.
 Would you buy another AMC twin? 81 (98) per cent say yes.
OVERALL MARK (averaging the above percentages): 75 (73) per cent.

WAIT FOR IT

■ This is the one the Triumph boys have been straining at the leash to see. Bonneville owners ahoy! Now is your chance to tell the world what you think of your favourite road-burner.

You may send in your reports right away. We do prefer to have a written report—but if you are short of time just drop us a postcard asking for a questionnaire form.

Is your bike eligible? To avoid complication in preparing the report, we feel that it is necessary to limit it strictly to Bonnevilles produced since October, 1958—no Trophys, standard six-fifties or specials (including Norton-Triumphs).

All correspondence to Bonneville Report, "Motor Cycle," Dorset House, Stamford Street, London, SE1.