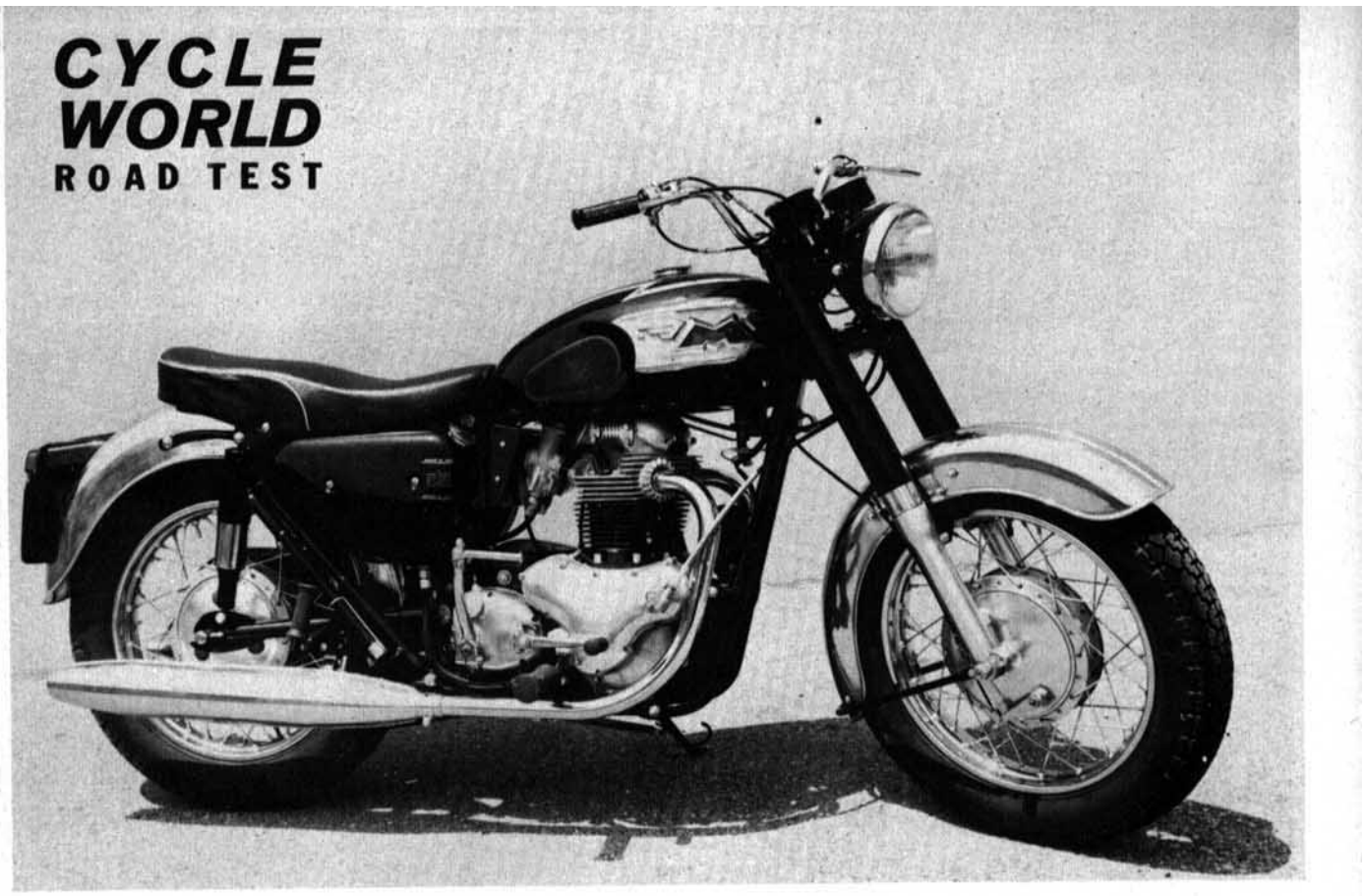
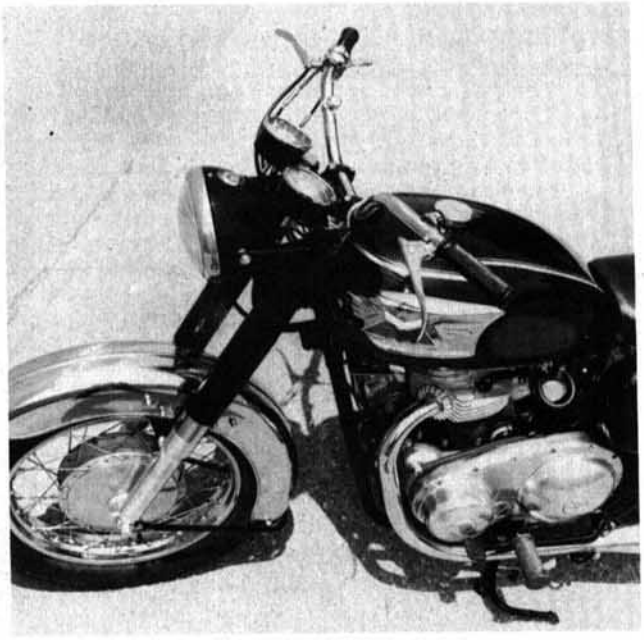
CYCLE WORLD
ROAD TEST

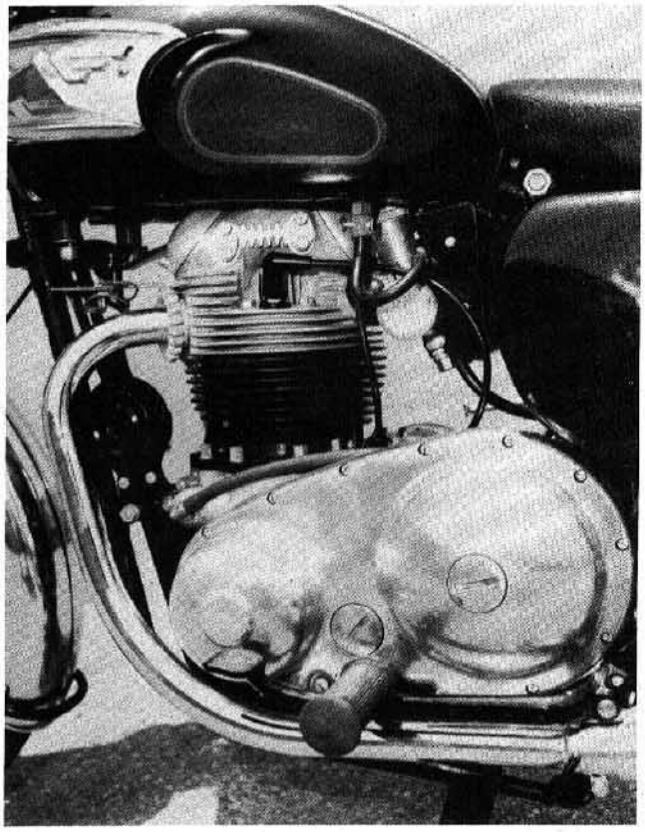


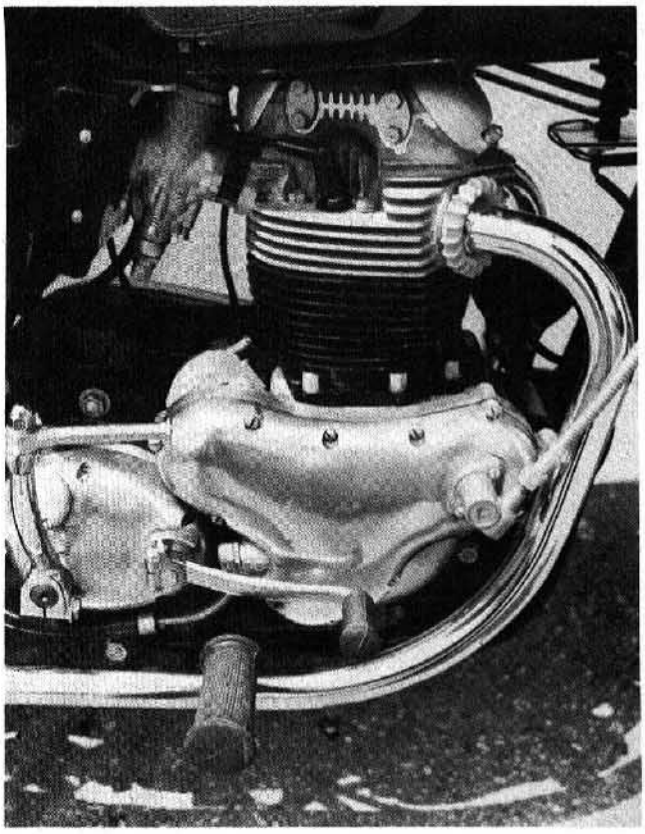
MATCHLESS G-15 CSR



ONCE UPON A TIME there was a Matchless touring bike powered by a big vertical-twin engine. This should have been a fine machine, because Matchless motorcycles have been winners for as long as most of us can remember, and exceedingly reliable as well. The big twin was built with typical Matchless care, and it was distinguished by having a crankshaft supported in three main bearings — which should have provided it with great powers of endurance. Unfortunately, the Matchless twin never quite lived up to its promise. Careful maintenance and reasonably gentle riding would keep one going for long periods, but most motorcyclists tend to neglect their mounts at times, and all are given to flogging along fairly vigorously. As a result, the history of the big Matchless twin was punctuated with the soft thuds of exploding engines. Inevitably, the Matchless twin fell from favor and it became rare to see even a confirmed Matchless lover (of which there are many) thundering about on one.

Now, the situation has changed, and we suppose it is for the better. AMC (the company that makes Matchless, AJS, and Norton motorcycles) has apparently abandoned the old 3-bearing twin. The big Matchless 750 tourer that is the subject of this report had a Matchless frame and name plates, but the engine is the 750cc Norton twin, and it has Norton forks and brakes. In fact, it can be





described as a Norton Atlas with a Matchless frame; or an Atlas Scrambler with road-going fenders, a big fuel tank, an 18″ front wheel and fat touring tires.

Taken item by item the Matchless touring twin has a lot of very good features – and some not so good. For instance, there is the Norton engine, which has enough torque to make using the transmission a rider option. The engine's 2.98″ x 3.50″ bore and stroke dimensions give it a whacking 45.4 cubic inches of displacement, and that much volume simply won't take no for an answer; even with the transmission in top gear. Considering the vast displacement, the 60 bhp is not anything out of the ordinary, but it is still 60 bhp, and it is backed up by really impressive low-speed torque.

Design features of this engine include such things as a cylinder head with its valves splayed out so that there is a wide channel between the exhaust ports, which admits a maximum amount of cooling air to the center of the head. To do this, the makers have had to use all separate rocker spindles, and the way the valves are angled across the head pulls the intake ports very close together, but it is certainly a very superior arrangement from the standpoint of cooling.

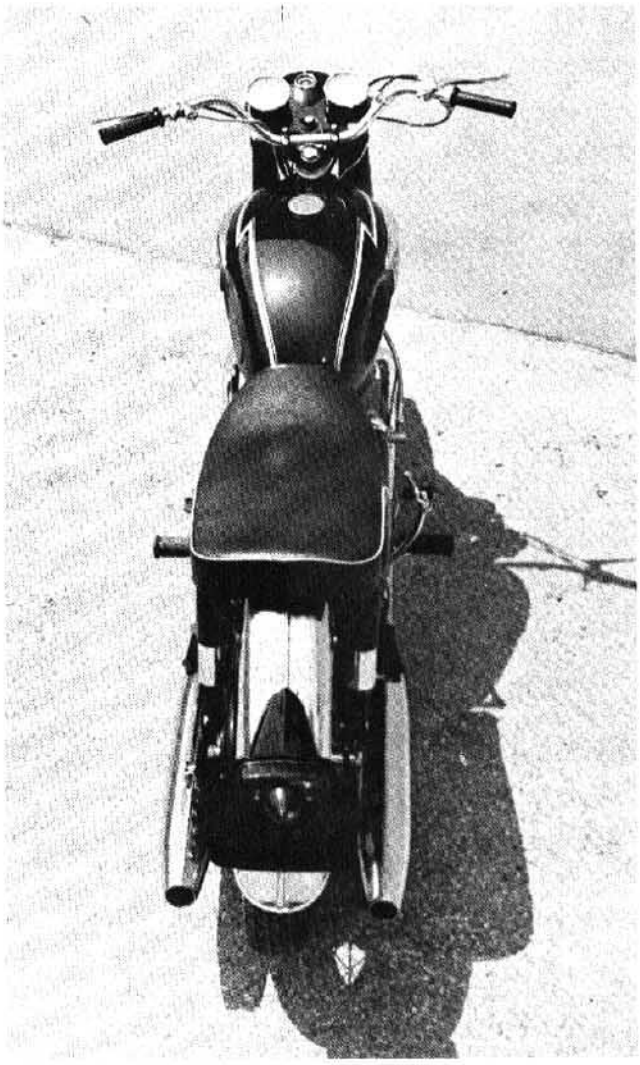
The engine's crankcase houses the crank (how's that for a fine, ringing statement of the obvious), carrying it in two main bearings, and also the gear-and-chain-driven camshaft. The main bearings are of the roller type, on both drive and timing ends of the shaft, and there are plain white-metal inserts at the connecting rod journals. As a design, it is quite conventional, but it does the job.

The AMC transmission that is tucked into the frame behind the Norton engine is one of the Matchless' best features, and indeed one outstanding feature of all Matchless models. It shifts very smoothly, with a positive stop, and the rider can actually feel the gears sliding into engagement. Even neutral can be selected with little fiddling at the lever, and it is all but impossible to miss a shift. The only flaw we found was that there is sort of false neutral between second and the true neutral position and at times we would get the false neutral instead of the real thing. Then, when we would pull up on the lever to notch into 1st-gear, the transmission would simply slip into the true neutral – which fools the rider into thinking he is ready to go, until he eases out the clutch.

The clutch itself was light in action, and smooth, but it slipped when used hard. Very probably, this is not characteristic of all the new Matchless tourers (we noticed no such problem with the virtually identical Norton Atlas Scrambler we tested) but it was a shortcoming of the bike given us for test.

As with the previous products of the Berliner Mtr. Corp., we took the machine right out of its crate, had it tuned, broke it in, and tested it.

In addition to the clutch problem, we had difficulties with the mufflers – and this was not just a peculiarity of a single machine. The mufflers now being supplied on the Matchless tourer extend very far back, and the mounting bracket is up quite near where the pipe leads in. Fixed in this fashion, the muffler vibrates back and forth rather badly, and one of them actually fractured its mounting bracket and dropped off. The other developed a crack around the mounting bracket, in exactly the same place, and was on the verge of dropping away like its mate when we returned the machine. The muffler was replaced with the very similar, but shorter, part from a Norton and we rather expect that the shorter mufflers will become stan-



dard equipment in the near future.

One thing that we discovered in the course of testing this new Matchless was that it is a big man's motorcycle. The reason we say this is not because the bike is too big for the small of physique to ride; it takes so much muscle just to get the thing started that only the comparatively large men will find it practical. The engine has a lot of displacement, as we have said, and while the compression ratio is not very high, it still takes a lot of pressure on the kick lever to run the engine through. Part of this can be attributed to the fact that we were dealing with a nearly new engine, but we put a lot of miles on the machine, and it did not free appreciably as the miles accumulated. Actually, not too many kicks were required to bring the engine to life – hot or cold – but prodigious effort was needed to swing the kick crank around even once.

The riding position provided on the Matchless was good, for the most part. The seat is wide, long and soft, and we cannot suggest that this part of the package could be improved. Also, the relationship between seat and foot pegs was good. What we did not like were the handlebars.

Ride and handling were quite good. The Norton forks appear to suit the Matchless frame very well, and while the bike was very stable in a straight line, it could be pulled over into a bend with considerable ease. The two characteristics do not usually come in one package. The overall ride was excellent: partly because of the exceptional springing and damping; partly because the large-section tires absorb minor road irregularities; and partly because the machine is so heavy. Standing at the curb, ready to ride (with approximately a gallon of fuel) the Matchless weighs 447 pounds.

Readers who might want to check the performance of the Matchless against the Norton 750 Atlas, tested in March of 1963, will find that the Matchless reached an almost identical speed in the quarter-mile but was a fraction slower doing it than the Norton. This is easily explained by the increase in weight. The weight does have one saving grace though; it improves riding qualities. That much sheer mass irons out the bumps in the road.

Vibration is quite noticeable, particularly at high cruising speeds, though rubber mountings on the handlebars would help. We might add in defense of this that most big twins we have ridden vibrated also, some quite a bit more than the Matchless. Our road test machine was ridden by two of CYCLE WORLD's staff members in the William Johnson Invitational Road Sports Rally in late September and received a more than ordinary amount of attention since it was the first of this new breed (hybrid) seen on the West Coast. Big machine lovers, be they Matchless or Norton prone, will find much to like in the Matchless 750, maybe even those members of the now doomed "original" Matchless twin fan club. We don't think they will miss much. •

MATCHLESS G-15 CSR

SPECIFICATIONS

List Price	$1189
Frame Type	tubular, two-loop
Suspension, front	telescopic fork
Suspension, rear	swing arm
Tire size, front	4.00-18
Tire size, rear	4.00-18
Brake lining area, sq. in.	
Engine type	vertical twin, ohv
Bore & Stroke	2.98 x 3.50
Displacement, cu. in.	45.4
Displacement, cu. cent.	745
Compression ratio	7.6:1
Bhp @ rpm	60 @ 6500
Carburetion	(2) 1 1/16" Amal Monobloc
Ignition	Lucas Magneto
Fuel capacity, gal.	4.5
Oil capacity, pts.	4.5
Oil System	dry sump
Starting system	kick, folding crank

POWER TRANSMISSION

Clutch Type	multi-disc, wet plate
Primary drive	single-row chain
Final drive	single-row chain
Gear ratio, overall:1	
4th	4.94
3rd	6.02
2nd	8.26
1st	12.65

DIMENSIONS, IN.

Wheelbase	56.5
Saddle height	29.5
Saddle width	11.75
Foot-peg height	11.0
Ground clearance	6.75 (side stand)
Curb weight, lbs.	447

PERFORMANCE

Maximum practical speed (after ½-mile run)	103
Max. speed in gears @ 7000 rpm	
4th	108
3rd	88
2nd	65
1st	42

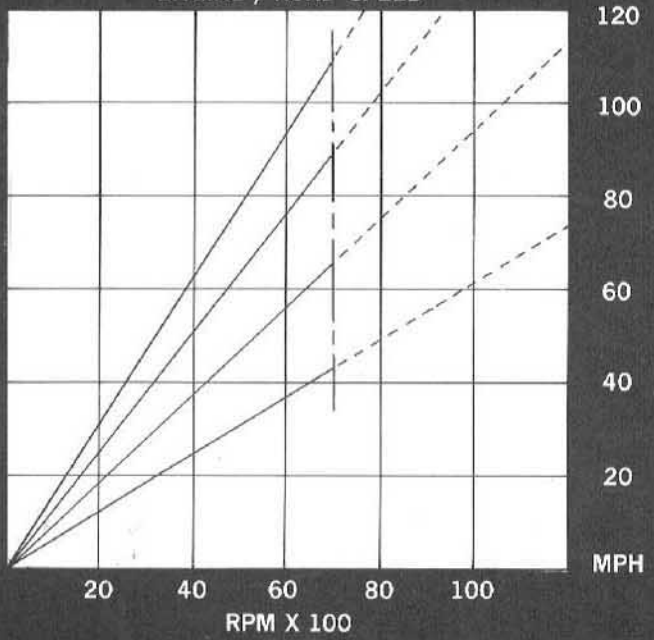
SPEEDOMETER ERROR

30 mph, actual	29.1
50	48.2
70	67.5

ACCELERATION

0-30 mph, sec.	1.6
0-40	2.2
0-50	3.7
0-60	5.2
0-70	7.7
0-80	10.9
0-90	15.2
0-100	21.7
Standing ¼ mile speed reached	14.8 @ 89

ENGINE / ROAD SPEED



ACCELERATION