

ROAD TEST NO. 91

by the CYCLE Staff

By the time this road test reaches its readers cycle shops and bench racing sessions will be buzzing with the news that Matchless has a forty cubic inch twin for 1958. Previous Matchless (and its sister make AJS) twins had a 600 cc displacement, or roughly thirty-seven cubic inches. Though they performed well, Frank Cooper, the U.S.

bike is either polished or chromed) are triple dipped in excellent quality black enamel and then baked to a glossy hardness that resists scratching and wear. To illustrate the toughness of this finish, after nearly 300 miles of hard riding, the footpegs on the test bike, which are painted by this process, were only beginning to show metal through the paint over most of their length.

There is a new shade of red on the tanks and tool box of the Matchless



Ready for ROUGHIN'

Matchless-AJS distributor, felt that instead of spotting their competition three inches, an additional model should be added to the line with the extra cubes needed to bring them right up to the top of their class.

Cooper let CYCLE in on the displacement boost before he told anyone else about it and he gave us one of the first forty inch Matchless Super Hurricane Scramblers to test.

We picked up the bike at Cooper's distributorship and spent the better part of an hour just plain admiring it. The '58 Matchstick shines with enough polish and sparkle to dazzle a Detroit designer. From its full-chrome 19 inch front rim, past its polished alloy front hub, up the chromed forks and all the way back to the tip of its polished alloy rear fender the Matchless is a beautiful and businesslike piece of machinery. All the painted parts (and there aren't many of these, most of the

that immediately catches the eye. It's a brighter, more attractive red that should stay new looking for a long time. The red painted cover on the oil tank keeps your leg away from the hot tank on a long road ride and can be removed for scrambling. That way even if the tank gets dented (which should be pretty hard to do since it is well tucked in) the cover can be screwed back into place and the bike will still look cherry.

The seat is also a new color, a sort of imitation pigskin brown. Somehow this new shade just doesn't go with the rest of the bike. We'd like to see Associated Motor Cycles Ltd. return to the traditional black seat with white piping for scramblers and leave the cute colors to the ladies' machines.

The rear fender is broadened and lengthened to give more weather protection. We got a chance to test this feature the first night that we had the bike. The Los Angeles Chamber of Commerce had ordered some rain to make the tourists feel at home and one of CYCLE'S testers found that while the cars ahead of him on the freeway had no trouble keeping his face drenched, the rear mudguard caught all of the water and road slush thrown up by the back knobby, keeping the back of his jacket as clean as an atheist's Bible.

We cut our admiration of the Matchless' appearance short because we wanted to see how that brute engine performed. The motor was warm and fired up with one easy kick. We later found that starting on cold mornings was more difficult. The twin has so much compression when cold that it feels like you're breaking a weld every time you kick it over. After a few kicks it starts, though, and from then

on everything goes smoothly.

The engine idles with a steady drumming exhaust note and a turbine-like whirr that gives promise of great things to come. And it keeps its promise. You lift the gearshift until it nicks smoothly into low, feed the horses to the rear wheel and something



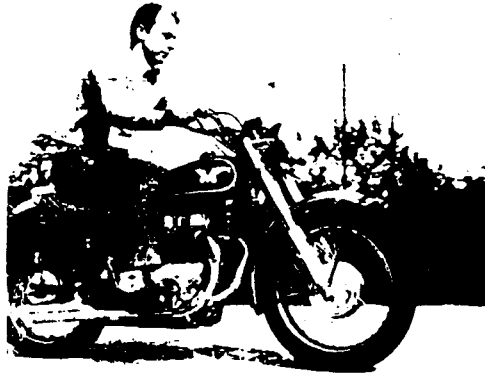
GEARED TO THE GROUND—Heavy rear knobby digs in even in loose dirt. Here Assistant Editor Chuck Clayton tackles hill from dead stop. Made it, too.



ATTRACTIVELY TRACTABLE—Was Editor Jack Snyder's description of the Hurricane Scrambler. Hill in background is the one navigated in photo at left.

ROAD TEST

CONTINUED



SPORTY FORTY incher took lots of starting and stopping abuse without a whimper.

moves — It's the motorcycle and you with it. Since it is made for TT and scrambles competition the Hurricane engine is tuned to spread its power over a wide rpm range. Even at that it can break an honest 106 mph at the top end (with road gearing and fully muffled), but where the power is really felt is in acceleration.

The extra inches are gotten by stroking the engine. The stroke in this case has been increased from 2.866 to 3.13 inches. Lengthened stroke means added torque and added torque means added acceleration. Added acceleration means getting ahead of the pack at the start and getting head of the pack at the start means having a dust-free, uncrowded lead in an event, and that means — if you're a reasonably good rider—a new trophy to add to the shelf.

Check the performance chart and you will find that the scrambler twin

accelerated through the 1/10th and 1/4 mile drags in exceptionally good time. These tests were conducted on smooth macadam with road tires and 5:1 gear ratios. The bike was supplied out of the crate with knobby tires, of course, but we switched to road specs for the speed and braking tests because a scrambler is poorly set up for road work and our tests of this type have to be made on pavement if they are to be standardized. No changes were made on the engine except to remove the air cleaner and swap the plugs for better high speed performance.

The Matchless performed well on the road except for vibration at about 60 mph in high with road gearing and about 50 mph with dirt cogs. The tough, 3-bearing lower end of the Hurricane engine is basically the same as the famous Matchless G45 road racer, and the intake valves are identical diameter, but since this is a road test of a scrambler let's get those knobbies and scrambles gears back on it and take it to the boondocks.

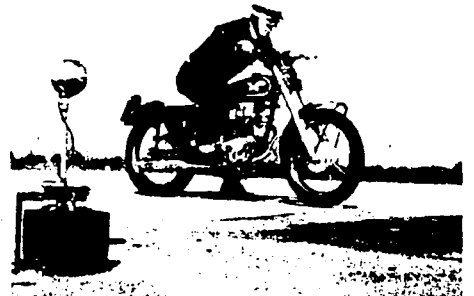
In its favorite trim with a heavy hand on the throttle the Matchless once and for all answers the old question, "what's in a name." Through the years this make's handling, ride, and performance have truly been Matchless. Now, with its new larger engine, it is just about catchless. The teledraulic front and the newly modified Girling rear swinging arm suspension can only be described as excellent. With its terrific engine and traction combination the Matchless scrambler climbs like a starving chimpanzee in a banana grove. It barrels smoothly around curves with no hint of breaking loose until you want it to and plows confidently through territory where experts



ON THE DOWNGRADE—For the faint of heart the engine's compression would hold the machine to a reassuring speed on downgrades. More fun to give 'er some gas, though.

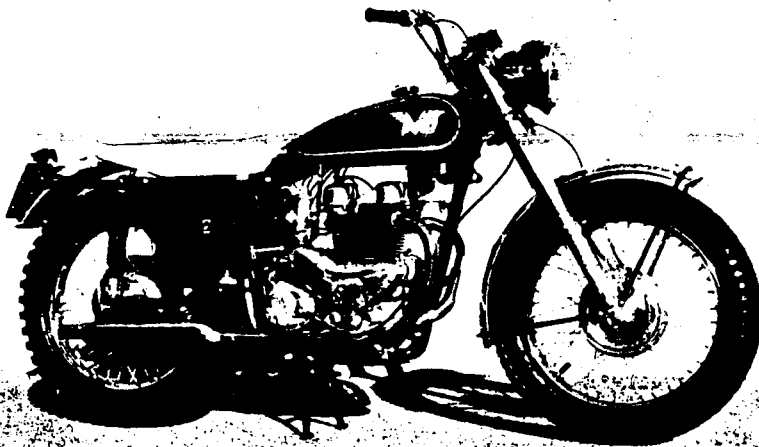
fear to tread.

The brakes on the machine are excellent. After being impressed by their stopping power in actual use and the braking tests, we decided to give them the acid test. At the end of each of ten high speed runs we applied the brakes hard to stop the bike as quickly as possible. This was bringing the ma-



DIGGING FOR GO—Clayton pulls the trigger that shoots the Matchless through the 1/10 mile acceleration test. Source of light for electric eye timer is at left.

chine to a halt from 100 miles per hour in a few hundred yards, several times without using engine compression. At the end of each of these stops the rear brake would be smoking, but the brakes never did fade completely and always returned to their original power after a few seconds cooling period. The amazing part was, during the whole test we only adjusted the brakes once! Which brings to mind another good feature. The rear brake adjuster was changed in 1957 to the forward end of the brake rod near where the brake pedal pivots. This



POTENT PACKAGE OF POLISHED POWER describes the 1958 Matchless twin. Note new slanted rear shocks, tucked-in crossover pipes, 19 inch front wheel.



BRIGHT SIGHT—The front of the Matchless is nearly all chrome and polished alloy.

puts it up out of the way and makes adjustment easier.

The new forty incher should be a real trophy-taker when the nation's hotshoes get ahold of it. We could wind the throttle open in the rough and there'd be a sudden surge forward no matter how fast we were already going. Several detail features help make scrambling with the Matchless easier such as rubber ball-ended clutch and brake lever covers that keep fingers from slipping and help prevent hand fatigue; a tucked-in oil tank that doesn't interfere with the rider's leg; and heavy duty components that are built to take plenty of abuse and then come back next Sunday for some more.

The kickstarter folds way in to keep it out of the way, but sometimes the ball snap that holds it in position be-

came stuck, then it was very difficult to unfold for starting.

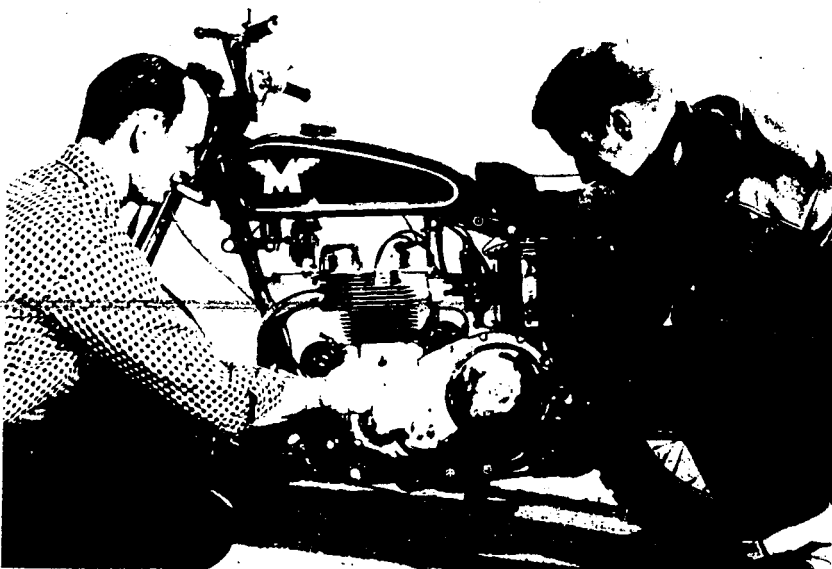
Pillion passengers liked the high rear peg arrangement and the comfort of the dual seat and rear suspension. Although passengers were not aware that the engine displacement had been increased, they remarked on the extra amount of urge that the Matchless seemed to have.

The model is supplied with full lighting equipment which is quickly detachable. The lights were adequate. The tool kit is of average quality and the instruction manual is good.

The gearbox, while not fully broken in, was a joy to operate except when down-shifting. Sometimes we held up traffic trying to get the machine into low gear, but the trouble seems due only to the stiffness that all new machines have and will no doubt go away in a few hundred more miles.

Oil consumption was very low despite plenty of running at full bore. Much of this is due to the fact that the engine leaked practically no oil at all, just a little weeping out of the rocker covers. The gearbox leaked a little more, but not enough to warrant a gunking. Just about the most oil-tight component of all was the new alloy primary chaincase, which didn't let enough lubricant leak to show us where the joint was. This chaincase is indeed a welcome improvement on A.M.C. motorcycles, whose old-style pressed steel chaincase was sometimes prone to problems.

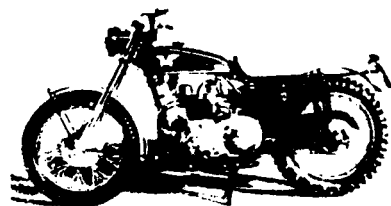
The scrambler twin is equipped with jiffy and center stands, both of which were stiff to operate, and crossover pipes plugged with a very efficient muffler.



POLISHED PRIMARY of aluminum alloy is a feature of new Matchless. Cooper Motors Sales Manager Bill Adams points out the clutch rod adjusting aperture.

The performance figures and our handlebar impressions indicate that the new Matchless Hurricane scrambler promises to blow up a storm on American scrambles and TT courses. It will remain for U.S. competition riders to prove whether this promise will be fulfilled or not. But in any case, this is one machine to keep your eye on in any starting lineup.

MATCHLESS SUPER HURRICANE



PERFORMANCE SUMMARY

TOP SPEEDS:

(With scrambles pipes and muffler)
Third Gear 92.02 mph
Fourth Gear 106.84 mph

ACCELERATION:

Tenth Mile 8.05 sec.
Quarter Mile 14.17 sec.

BRAKING DISTANCE:

(From 25 mph)
Front Brake Only 19' 2"
Rear Brake Only 26' 8"
Both Brakes 13' 8"

WEIGHT:

With Lights 389 lbs.

GASOLINE MILEAGE:

Average with Road Gearing 50 mpg
Aver. with Scrambles Gearing .. 38 mpg

SPECIFICATIONS

Engine: Vertical twin cylinder ohv. Bore 2.834, stroke 3.130, 40 cu.in. Light alloy connecting rods with Vandervell plain bearings. Cast alloy iron crankshaft supported in three main bearings, journals roller, center Vandervell. Compression ratio 8.5:1. Dry sump lubrication with two spur gear pumps. 1 1/8" Amal Manabloc carburetor.

GEARBOX: A.M.C. four-speed, foot-operated, positive stop type. Multiple plate clutch, engine shock absorber. Primary chain enclosed in polished alloy housing.

ELECTRICAL EQUIPMENT: Lucas magneto ignition and lighting equipment. Quickly detachable headlight and taillight. Gear-driven generator and magneto.

FRAME: Duplex cradle frame, skid plate under crankcase, telescopic front and Girling rear shocks. Swinging arm rear suspension. Spring-up side and center stands.

BRAKES: Seven inch front and rear brakes. Full width hubs and straight, heavy-duty spokes.

TIRES: 3.25x19 front, 4.00x19 rear.

Sports knobbies. Road tires optional.

TANK CAPACITY: 2.2 U.S. gallons.

MANUFACTURERS: Associated Motor Cycles Ltd., Plumstead Rd., London, England.

U.S. DISTRIBUTOR: Cooper Motors, 5832 So. Broadway, Los Angeles, Calif.