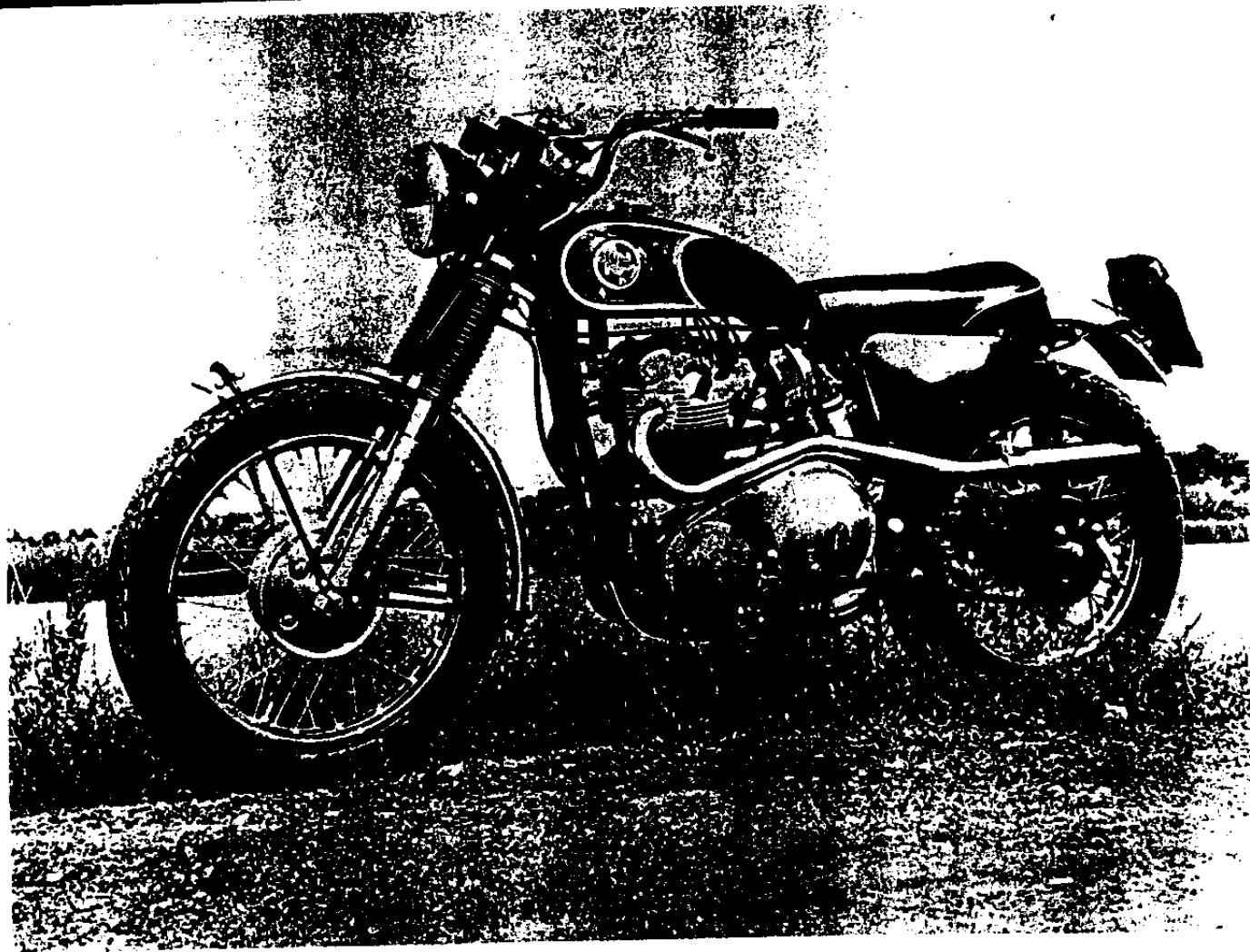


CYCLE WORLD
ROAD TEST

American motorcyclists have grown accustomed to making the most of machinery reaching our shores year after year that has been "carefully tailored" to our rather peculiar needs. And, predictably, each year's new Americanized models fit about as well as a mail-order tuxedo. So, we get out the tools and fuss, cuss and fettle until we arrive at what we asked for in the beginning, and after some years of playing this frustrating game, we have become resigned to the idea that something will most assuredly be lost in the translation — although in many cases, the language is ostensibly the same.

Imagine our surprise, then, when we encountered a motorcycle that is so well suited to the U.S. market that we'd swear it had been designed in this country. That the Norton 750 Scrambler blends into the American scene like the aroma of roasting turkey on Thanksgiving day, is hardly a rare and wonderful coincidence: the package was developed in the Southern California desert in a short but exhaustive six-week program that was conducted to de-bug a potentially good hybrid that was feasibly producible from bits and pieces reposing on one firm's shelves. The new Norton, dubbed the P-11, is the brainchild of Bob Blair of ZDS Motors, Norton-Villiers West Coast Distributor, and is a composite of two of the concern's more exciting achievements of recent years — the 750cc Norton Atlas twin and the G-85CS chassis. This information alone would indicate two rather important things: it's going to be strong, and it's going to handle well. This superficial hypothesis has potential — and hypothetical — weaknesses.



NORTON 750 SCRAMBLER

however: If the good handling chassis were heavier than the original piece, the powerplant would receive a performance haircut. Or, if the stronger engine were considerably bulkier than the original item, the previously good handling characteristics might very well be lost. This new Norton, however, winds up with the good characteristics of both its parents and comes off like a successful project in selective breeding.

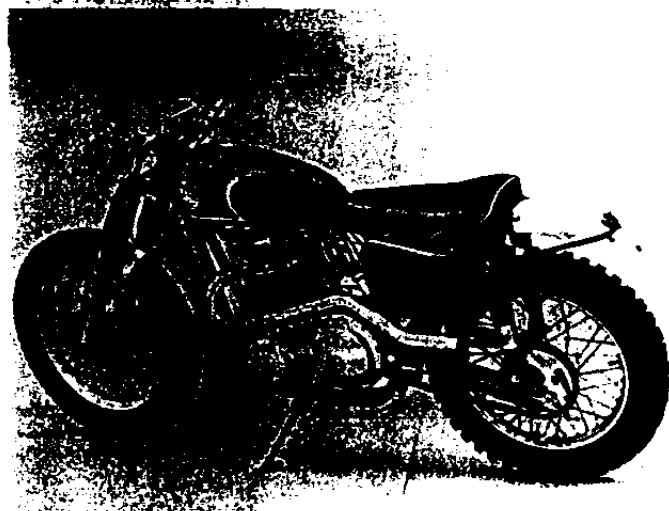
The P-11's engine began life as the 500cc Dominator twin, was overbored to 600cc for the "99," and bored again and stroked this time to 650cc for the Manxman — a decidedly undersquare (2.68x3.56 inches); fast but fragile piece. The 3.50-inch stroke was retained for the Atlas engine and the 95 additional cc's were gained with a bore increase to 2.98. Also at that time the Norton twin underwent some detail changes that served to strengthen it, to the point that the Atlas began to build a reputation for being quite reliable. The P-11 version of the 750 carries the development a step further and is without the annoying shaking that was characteristic of the Atlas. Even so, the long stroke does not invite gobs of revs: 8,000 rpm produces a rather frantic piston speed of 4,700 feet per minute. However, with 45 cubic inches the P-11 has bags of low-end torque that remains strong well up the scale, and so it isn't necessary to buzz it to get the job done.

The already-good breathing ability of the Norton head has been complemented with a civilized pair of Amal concentric — bowl carburetors that do much of the starting and operation. Starting is easy, however, only after the

routine is learned and applied, because the starter is short and all those inches simply do not permit the engine to spin through a couple of times with each prod. The no-fail drill we worked out involves taps on, generous prime, full choke, ignition on, one quarter throttle and one deuce of a kick. Invariably, the result — after a priming kick — is a healthy roar, a fitting reward for the exertion required. Also, even when warmed up, the engine prefers choking. We have encountered this trait previously on a large twin fitted with Concentrics and it is typical of the design.

Unlike the Atlas, which had an alternator-battery system for lighting and a magneto for ignition, the P-11 uses the alternator for all of the electrical chores. The AC output from the lighting coils is converted to DC by a zener diode and is stored in a large 12-volt battery that does a good job of lighting the way at night. The ignition portion of the alternator supplies its current, through the breaker assembly, to a pair of high tension coils mounted aft of the air cleaner. The system produces no ignition bite during starting and is up to the task of keeping the fire lit when the engine is run at the upper rev limit.

The gearbox is unmistakably Norton — smooth, positive and with a feeling of stoutness. The primary drive system differs from the scheme used in the Atlas roadster in that the hefty alloy cases are from the scrambles twin and the clutch runs in an oil mist. The exceptionally light clutch lever feel made us a little apprehensive when we first received the bike, but the lack of pressure required to operate it in no way relates to how the clutch holds once it



is engaged, for at no time did we experience even a hint of clutch slip or drag.

The P-11 is manufactured in one form, just as you see it here. If a familiar point of reference is needed it might be labeled a street-scrambler, and as such, it will certainly alter the concept considerably: it's not just a good roadster that can be ridden, somewhat cautiously, in the hills on weekends. It's an excellent roadster than can be ridden competitively in TT, scrambles or desert. Actually, it would be more accurate to say that it is an excellent heavy-weight competition bike that just happens to be exceedingly roadworthy. Much of the credit for its good handling, both on and off the road, must be given to the "Roadholder" type forks which are to be counted among the best. They employ a one-way check valve, in series with the damping orifices, and this permits oil to pass freely on compression but restricts it on rebound. One soon learns that attention can be focused on the driving chores and the forks will attend to surface irregularities. For pavement riding the lack of stiffness is surprising, and particularly so when one considers that these same forks are virtually impossible to bottom or top-out on cobby ground.

The brakes are ample for the P-11's primary purpose, but are short of optimum for high speed touring. Both units are prosaic single-leading-shoe types with cover plates removed and fins turned down in the interest of reducing unsprung weight. They do remarkably well, all things considered, and require heavy use to tire them out.

The control and seating relationship of the Norton very definitely favors riders on the large side. Saddle height is a little higher than average, and this with a slightly thin seat which could do nicely with another inch of foam. The relationship of the bars and the folding pegs allows the stand-up position to be easily attained, and stand-up comfort and control is excellent, with weight transfers having an immediate effect on traction and direction changes. We have watched for some time now the

emergence of the motocross formula for bike-to-rider relationship in production scramblers, and we can do nought but applaud it: when all of the pegs, levers, and hand-holds are in their proper places, a motorcycle will afford its rider as comfortable and confident a ride standing up as it will when he is seated.

Hard underway, the Norton is wondrously stable. The suspension, again, must be given credit here, but the longish wheelbase and mass of the machine certainly play their parts in this matter. One would scarcely imagine the front end to be two-stroke light, but it is surprising that a bike this heavy does not crash through obstacles, instead floats over them, and this without wild wheelies ever imminent. We had occasion, or rather necessity, to claw our way up some rocky and terribly rutted ridges with the P-11, and this maneuver which generally produces anxious moments (particularly when a lower cog is being selected) couldn't budge the bike from its straight-up-the-mountain with both wheels-on-the-ground attitude.

Our chief complaint with the P-11 is that it gets lighter with each mile ridden: to wit, it divests itself of its trappings with the carefree abandon of a youthful stripper. A curious pattern develops here, however, because the bits that it so carelessly sheds are all related to the road equipment. The only critical piece to come undone was the head steady — but that was sacrificed so it could get rid of the zener diode that belongs in the lighting system. This undone head steady, by the way, offered unimpeachable testimony to the excellent balancing job on the new 750, because there was no perceptible increase in vibration or shake. There is little question that all of the disappearing acts could be easily prevented with generous applications of plastic nut-locking compound, and the truly important point is that all of the critical components remained intact.

With a thought to the competition rider, routine maintenance on the P-11 is a simple matter with everything handily exposed and just waiting for that cautious wrench or screwdriver. And judging from the Norton's reputation as being near-unburstable, and the heavy-duty nature of the all-welded chrome-moly frame, we venture to say that major repairs will be widely spaced.

All indications are that Norton-Villiers have themselves a strong heavyweight contender — strong both physically and in its performance. We note with some interest that the Yankee-developed P-11 has its counterpart in the automotive field — the superstock, another concept that arose from letting the buyer "design" his own off-the-floor high-performance iron. ■

NORTON 750 SCRAMBLER

SPECIFICATIONS

List Price	\$1404
Suspension, front	telescopic fork
Suspension, rear	swing arm
Tire, front	3.50-19
Tire, rear	4.00-18
Brake, front	7.0 x .88
Brake, rear	7.0 x .88
Total brake swept area, sq.-in.	38.7
Brake loading (test weight/swept area) lb/sq.-in.	13.8
Engine type	ohv twin
Bore and stroke (inches-millimeters)	2.98 x 3.50, 73 x 89
Displacement (inches ³ -centimeters ³)	45.4, 745
Compression ratio	7.6:1
Carburetion	(2) 1 3/16" Amal concentrics
Ignition	battery and coil
Bhp @ rpm	60 @ 6500
Oil system	dry sump
Oil capacity, pts.	6.0
Fuel capacity, gal.	3.6
Starting system	kick, folding crank
Lighting system	battery and alternator
Air filtration	paper element
Clutch	multi-disc, wet plate
Primary drive	single-row chain
Final drive	single-row chain
Gear ratios, overall:1	
5th	none
4th	4.94
3rd	6.03
2nd	8.4
1st	12.65
Wheelbase	57.2
Seat height	33.5
Seat width	10.0
Foot-peg height	14.0
Ground clearance	8.8
Curb weight (w/half-tank fuel)	375
Test weight (fuel and rider)	535



PERFORMANCE

Top speed	102
Maximum speed in gears (@ 7200 rpm)	
5th	none
4th	102
3rd	92
2nd	65
1st	44
Mph per 1000 rpm, top gear	14.2
Speedometer error	
30 mph indicated, actually	28.2
50	47.7
70	68.6
Acceleration, zero to-	
30 mph, sec.	2.3
40	3.4
50	5.0
60	6.2
70	8.2
80	11.0
90	14.9
100	24.4
Standing 1/8-mile, sec.	8.7
terminal speed	75
Standing 1/4-mile, sec.	14.6
terminal speed	89

