

# CYCLE WORLD

K 10/63

OCTOBER

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**THREE  
HONDA  
FEATURES**

AMERICA'S LEADING MOTORCYCLE  
ENTHUSIASTS' PUBLICATION

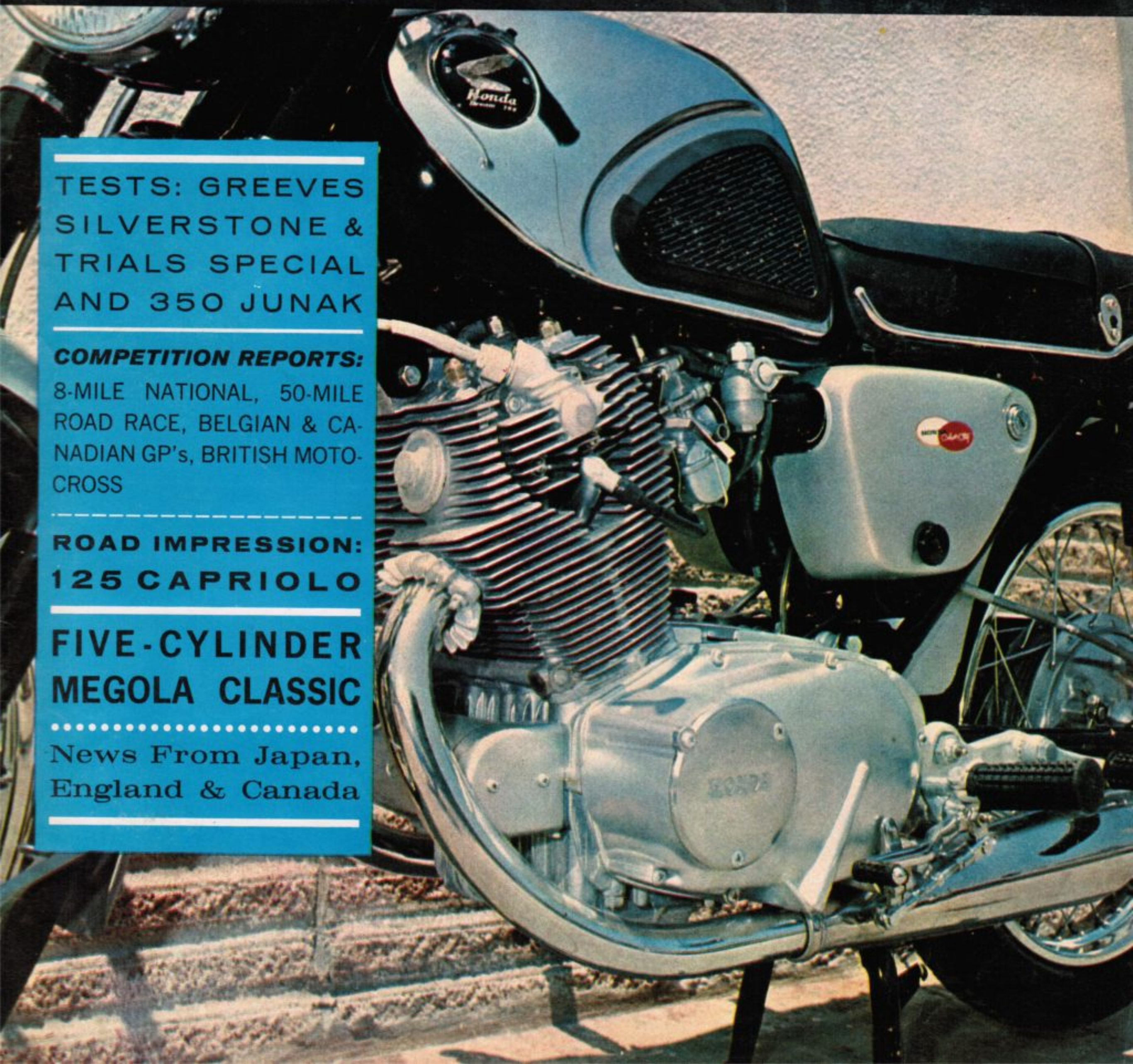
TESTS: GREEVES  
SILVERSTONE &  
TRIALS SPECIAL  
AND 350 JUNAK

**COMPETITION REPORTS:**  
8-MILE NATIONAL, 50-MILE  
ROAD RACE, BELGIAN & CA-  
NADIAN GP's, BRITISH MOTO-  
CROSS

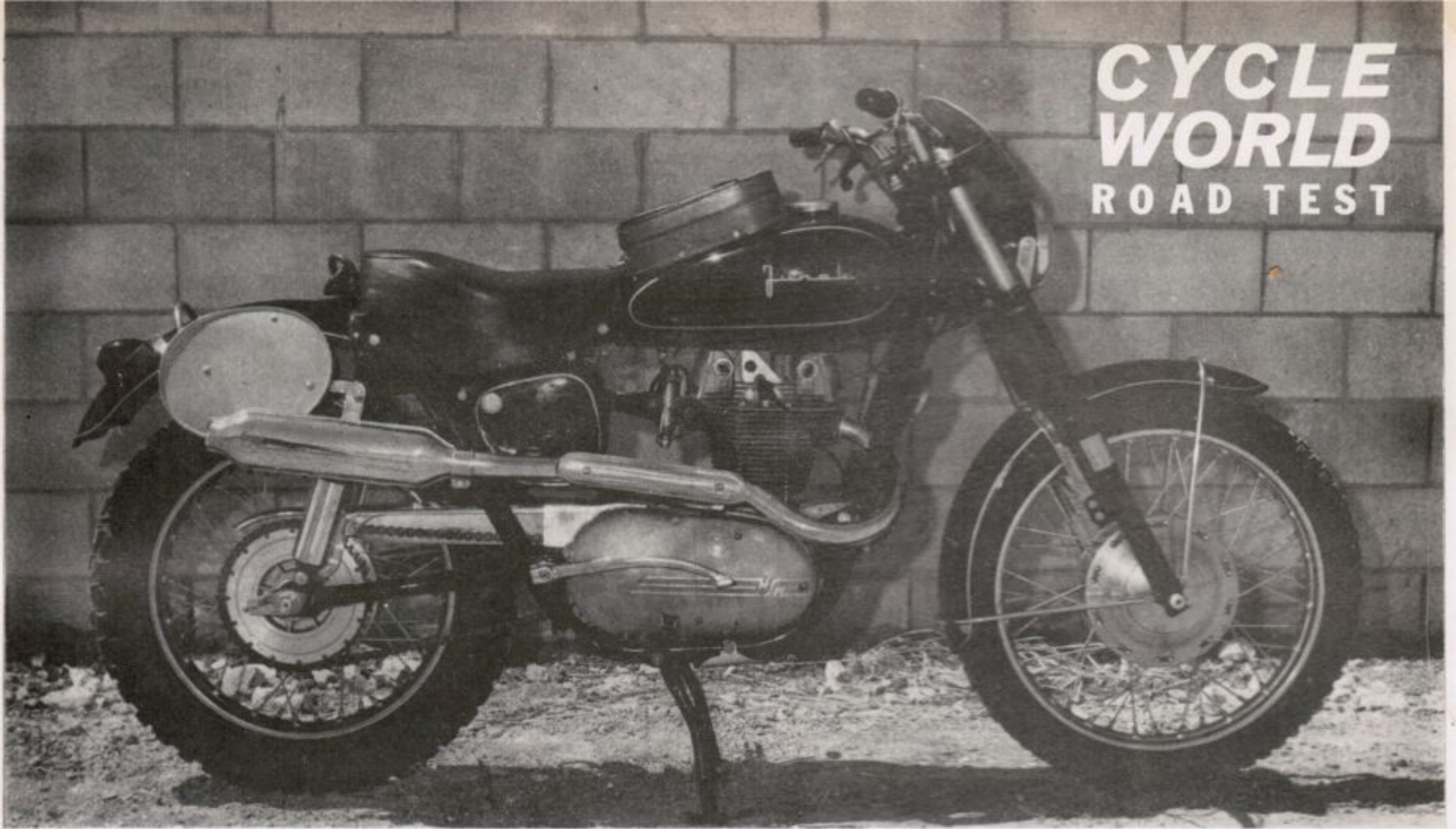
**ROAD IMPRESSION:**  
125 CAPRIOLO

**FIVE-CYLINDER  
MEGOLA CLASSIC**

.....  
News From Japan,  
England & Canada







## JUNAK 350 SCRAMBLER

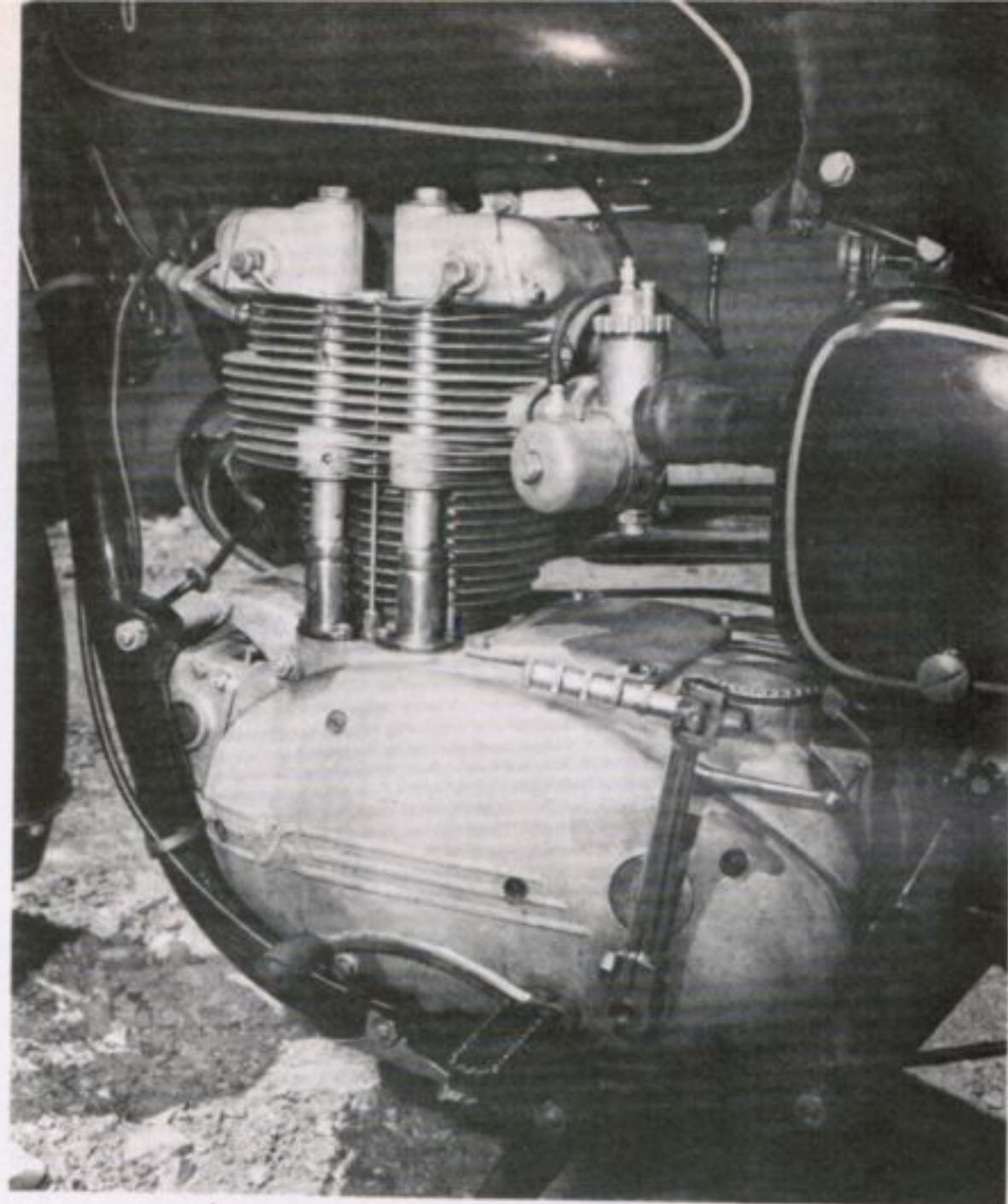


**S**ZCZECINSKA FABRYKA MOTOCYKLI is a new, and largely unpronounceable name on America's motorcycle scene, and it is just as well that the Poles have seen fit to abbreviate it to SFM. In any case, the SFM line of motorcycles is here, and it consists of a couple of mopeds (50cc), 125cc and 175cc lightweight motorcycles, a 175cc scooter, and an astonishing bulky 350cc model called the "Junak," which is the subject of this report.

The Junak given us for test and evaluation was their "Six Days Trials" machine, intended to keep right on rolling under the most arduous conditions, and from what we learned of the Junak, if the rider can get it going at all, it will probably last not just the Six Days, but probably six years. The men who designed this Polish-built motorcycle may not have created a technical masterpiece, and certainly the men who built it have not achieved a jewel-like finish, but they have not spared the iron. The Junak gives the distinct impression that it could be kicked off a cliff without damage to anything but the rocks below. It is as crude, in some respects, as a stone axe, but it is also just as strong. Unfortunately, there were a few little things wrong, as we shall relate, and these do tend to diminish the confidence one would otherwise have in the machine.

As is almost universally true these days, the Junak's crank assembly and transmission share a common casing; this item being made of cast aluminum. The crankshaft is of the built-up variety, with a pair of flywheels and a crankpin and mainshafts pulled into their tapers and secured by large-diameter nuts. Double-row rollers are





used at the connecting-rod big-end, and a single roller bearing on the "timing" side of the crank assembly. On the drive side, there are two wide roller bearings, and although this has offset the primary chain an uncommon amount (no attempt appears to have been made to keep it in close), there is no denying that the arrangement looks strong — and bulky.

The timing side of the engine is covered with gears (under a cover, of course): each of the cams is driven by a separate gear, and further sets of gears lead back to the generator; and forward to the magneto. The cams are located very low on the side of the engine, but the valve gear has been kept reasonably light by using quite small mushroom-type tappets, and lightweight, hollow pushrods. And, at the upper end of the engine, they have saved the reciprocating mass of valve-lash adjusters by having the rockers pivoted on eccentric spindles. Valve clearance is set by turning knobs on the side of the cylinder head. It is an arrangement familiar to owners of BSA 500cc singles. Valve size is, incidentally, quite generous; but for what reason we cannot fathom, as the power output is rather low for a 350cc engine. The cylinder head is of aluminum; the cylinder barrel of cast-iron.

A duplex chain takes the drive from the engine to the clutch, and this chain is fitted with an adjustable, shoe-type tensioner. There is a spring-loaded, cam-type drive cushioner on the crankshaft sprocket, and this seems to do an adequate job, although rubber-cushioned clutch hubs are much more in vogue.

The clutch itself is reasonably conventional, with alternate plain-steel and cork-covered plates, working in an oil bath, but instead of the usual group of pressure springs, there is a single, large-diameter spring, wound from rectangular-section wire, in the clutch hub. Clutch disengagement is accomplished in the usual manner, with a rod extending through the transmission mainshaft pushing the pressure plate outward, but in the Junak, the rod is in

three parts, with steel balls between the sections, so that rubbing is not concentrated at one point and prolonged operation with the clutch partially disengaged is not so likely to weld the various bits together. The transmission layout is of the direct-fourth type, and while the mainshaft turns on ball bearings, plain bushings are used on the layshaft.

This power unit is cradled in a two-loop tubular frame, and is unusual for having oval-section tubes. The frame layout is very neat, and it looks enormously strong. Little gusseting at stress points has been provided, but the tubes themselves appear to be more than stout enough to handle the load.

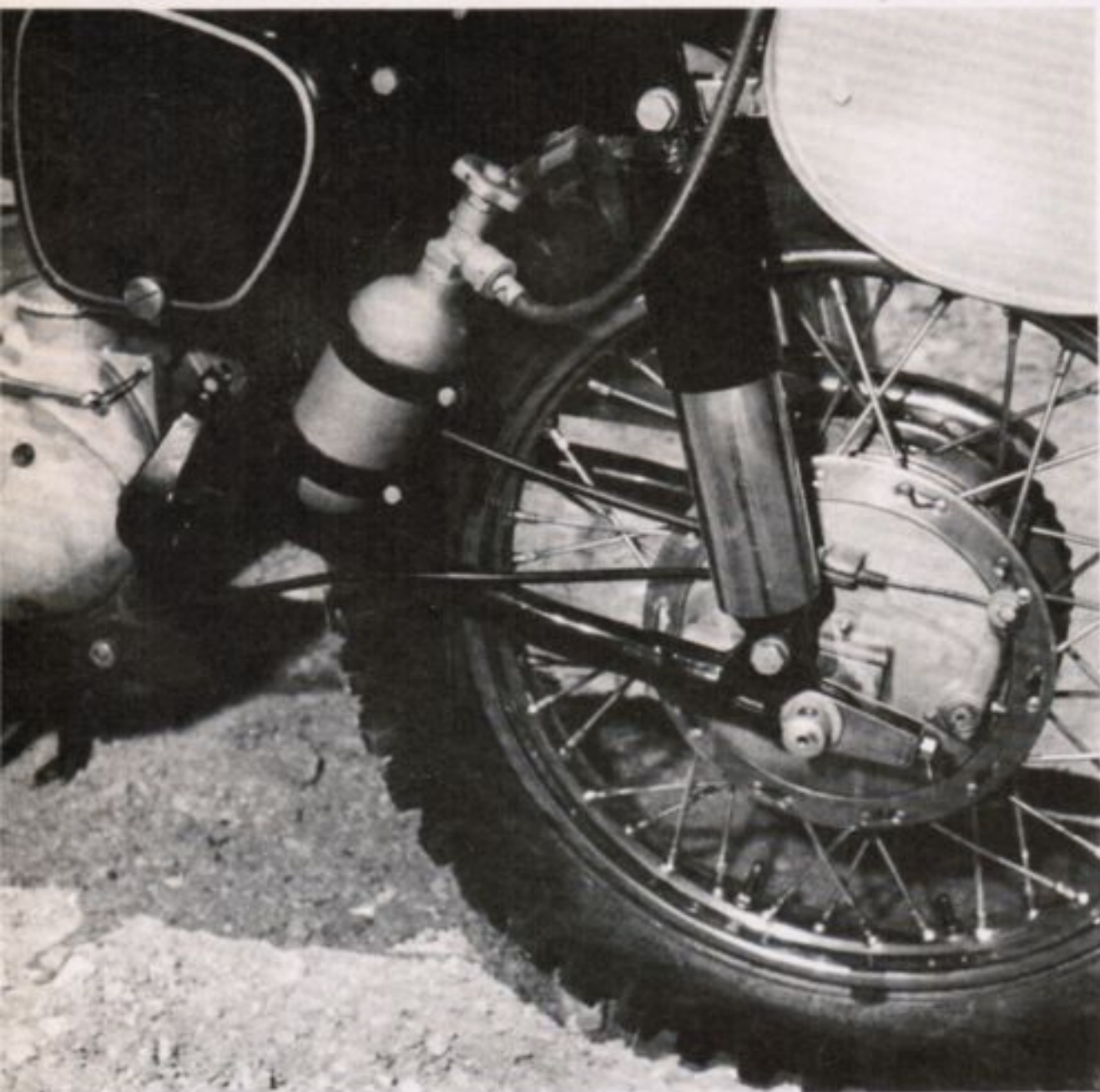
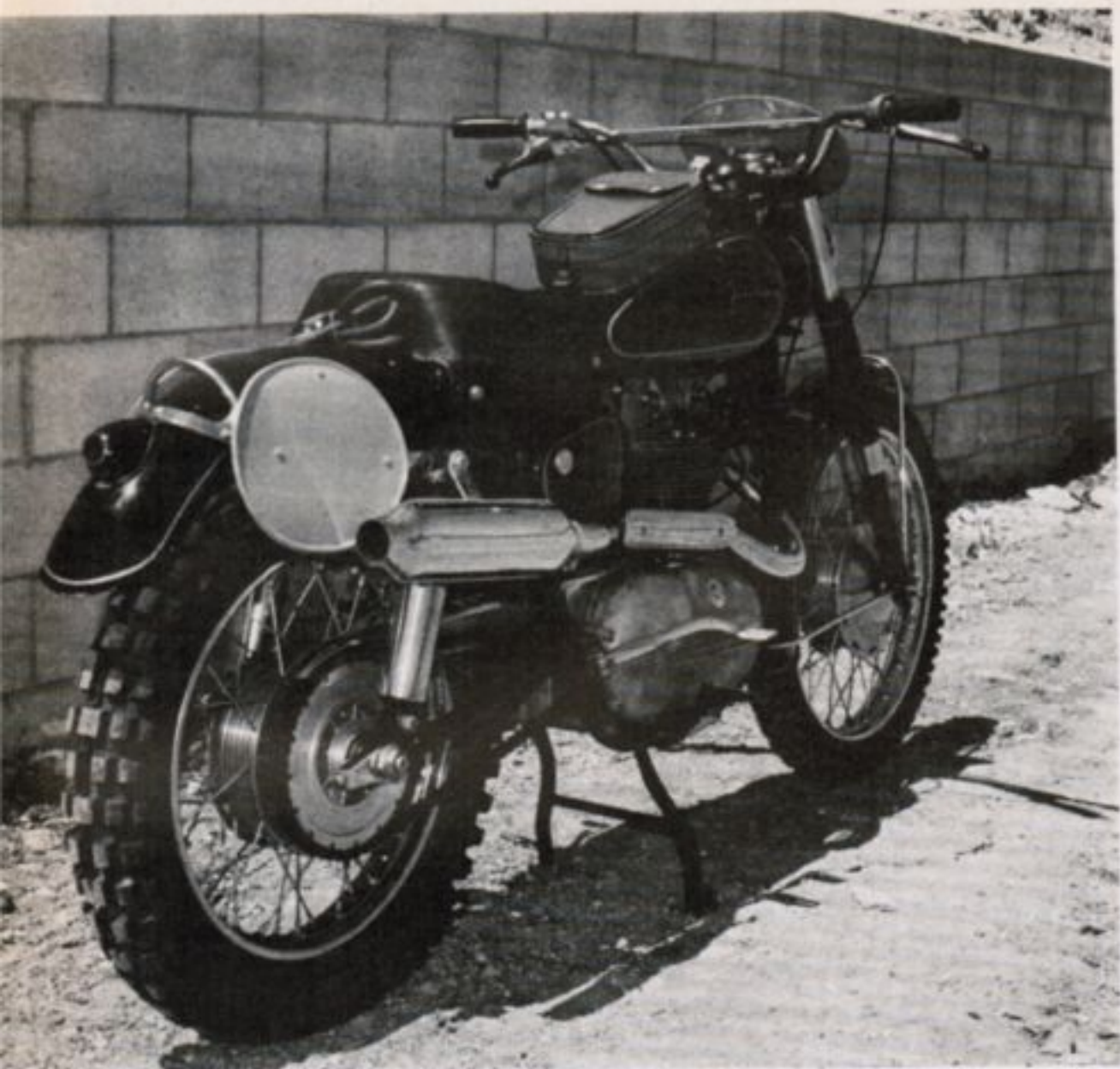
Front and rear suspensions are very orthodox, and like everything else on the machine, have enough sheer mass to inspire confidence. Plenty of wheel travel has been provided and the only reservation we have is that the dust covers on the front forks are the same silly and inadequate leatherette "chaps" that mar the otherwise excellent Jawa. Tightly-clamped rubber boots are much better and will, no doubt, be installed by anyone buying a Junak.

The front forks do have one little touch that is rather interesting: the axle is not clamped at the bottom of each fork leg, as is the custom; instead, it slips through an eye on one side, and screws into a threaded bore in the opposite fork leg. When the assembly is pulled up tight, the threaded fork leg is virtually locked to the brake backing plate, and the entire hub assembly is forced to act as a brace for the bottom of the forks.

The seating and control layout on the Junak would be really unbeatable but for one small defect: the bike is so tall that a rider with short legs will find it difficult, if not impossible, to get both feet on the ground once he is astride.

This is only a slight exaggeration; the Junak rider is so tall in the saddle that it is a bit ridiculous. If he ever leans well over to take a turn biskly, the change in altitude



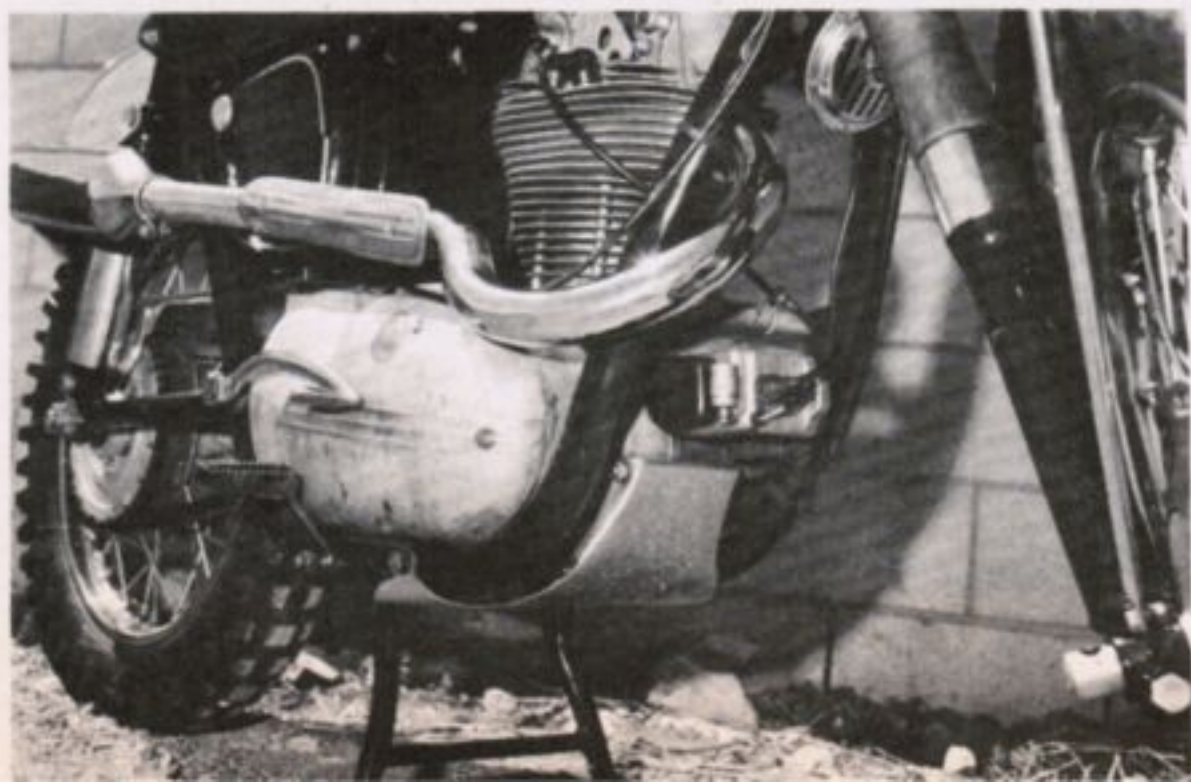


should be enough to make his ears crack. Part of this extreme height is due to adding very large-diameter wheels for dirt riding; part to the bulky engine; and partly just because no real effort has been made to make the machine more compact (we understand that sheer size is quite highly regarded in East Europe). For whatever reasons, the seat is away up there, and any rider standing less than six-feet in his bare tootsies (and having a lot of that height allotted to leg) is going to spend his standstill time on tip-toe.

Once the rider gets his feet retracted, and on the pegs, the Junak handles excellently and is very comfortable. The bars are wide, and at precisely the right height (relative to the seat; from the ground they look like the cross-bar on a telephone pole), and the seat is wide, soft, and nicely contoured. The ride is good even on outrageously bad surfaces, and the bumps that the suspension will not absorb, the weight of the machine will iron flat.

For us, the good ride and handling were in large measure offset by a couple of the "little things" we hinted at in the opening paragraphs of this report. For one thing, the Junak's fuel shutoff tap dripped gasoline for as long as there was a drop of the stuff in the tank. On or off, it bathed the crankshaft/transmission casing with a steady sprinkle of fuel, and after a little of this sort of nonsense, we found ourselves almost wishing that the gasoline would ignite and burn the bike right to the ground. Finally, in exasperation, we disassembled the fuel tap and discovered that the sealing rings had utterly disintegrated. We tried to get by the difficulty by leading the line directly from tank to carburetor. This stopped the leak, but our triumph (or Junak) was short-lived. Fuel would then leak past the carburetor float needle and, if the engine was stopped for more than a couple of minutes, flooding would occur. We also had a small problem with the headlight, the entire innards of which dropped right out on the ground.

The finish of the entire machine was not really up to the standard that most Americans expect. It is not bad; but it is not good, either, and we would guess that the people who buy this machine for its good qualities (which are there, despite our criticisms) will be compelled to do a bit of custom work, including the fitting of a new fuel valve, before they will be satisfied. •





# SFM Junak 350

## SPECIFICATIONS

List Price .....	\$950
Frame Type .....	tubular, two-loop
Suspension, front .....	telescopic fork
Suspension, rear .....	swing arm
Tire size, front .....	3.00-21
Tire size, rear .....	4.00-19
Brake lining area, sq. in. ....	n.a.
Engine type .....	single-cyl., ohv
Bore & stroke .....	2.96 x 3.13
Displacement, cu. in. ....	21.3
Displacement, cu. cent. ....	349
Compression ratio .....	7.0:1
Bhp @ rpm .....	18 @ 6000
Carburetion .....	26 mm (1.025") G25
Ignition .....	magneto
Fuel capacity, gal. ....	4.5
Oil capacity, pts. ....	2.5
Oil System .....	dry sump
Starting system .....	kick, folding crank

## POWER TRANSMISSION

Clutch Type .....	multi-disc, wet plate
Primary drive .....	duplex chain
Final drive .....	single-row chain
Gear ratio, overall:1	
4th .....	6.45
3rd .....	9.16
2nd .....	15.1
1st .....	23.5

## DIMENSIONS, IN.

Wheelbase .....	55.7
Saddle height .....	34.7
Saddle width .....	13.0
Foot-peg height .....	15.0
Ground clearance .....	11.8
Curb weight, lbs. ....	372

## PERFORMANCE

Practical maximum speed .....	79
(after 1/2-mile run)	
Max. speed in gears @ 6500 rpm	
4th .....	81
3rd .....	57
2nd .....	34
1st .....	22
Mph per 1000 rpm, top gear .....	12.5

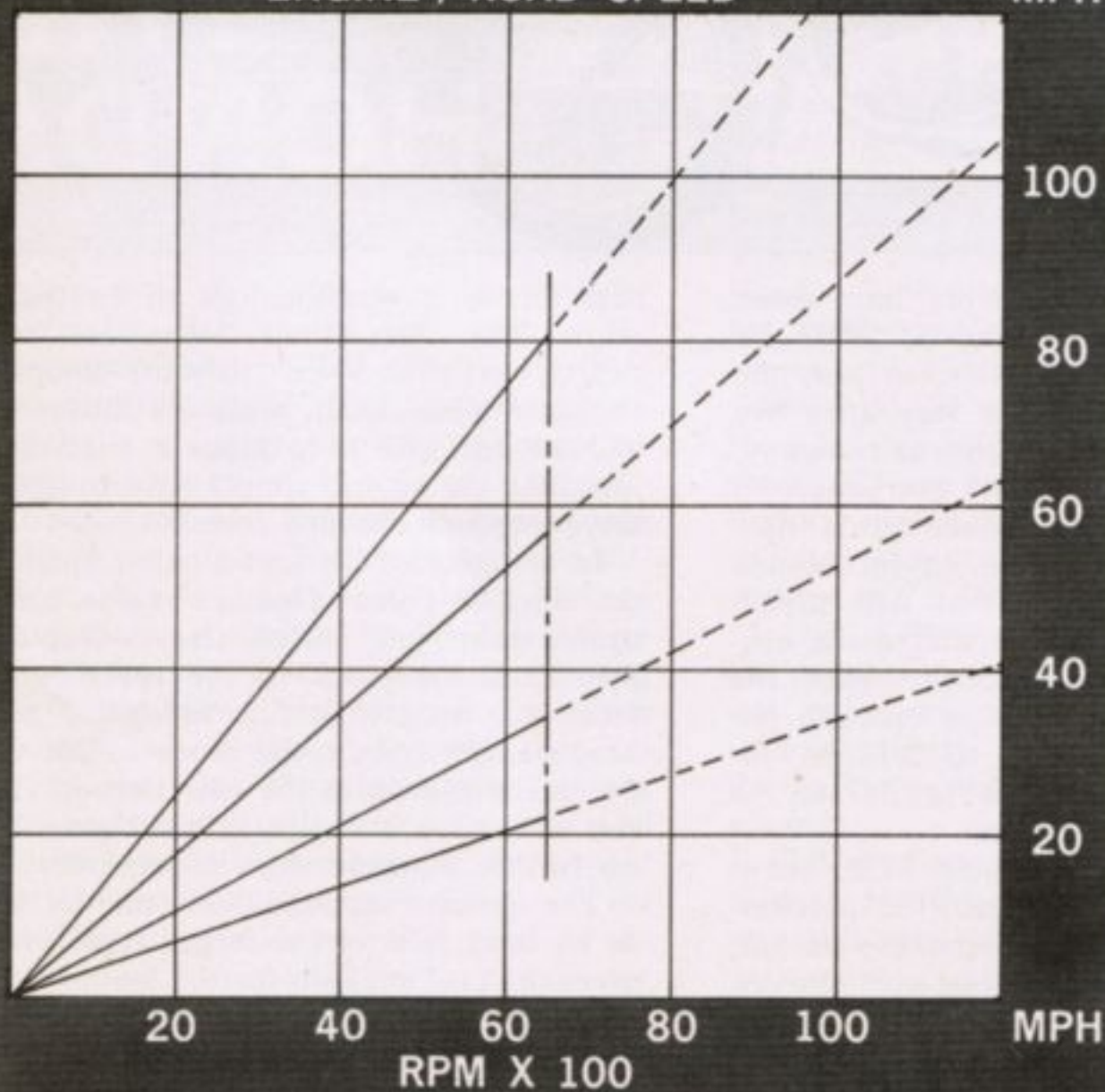
## SPEEDOMETER ERROR

30 mph, actual .....	29.8
50 .....	49.2
70 .....	68.7

## ACCELERATION

0-30 mph, sec. ....	4.5
0-40 .....	7.4
0-50 .....	10.4
0-60 .....	15.0
0-70 .....	21.1
0-80 .....	32.7
0-90 .....	
0-100 .....	
Standing 1/4 mile .....	19.5
speed reached .....	68

ENGINE / ROAD SPEED



ACCELERATION

