

## CAR LIFE ROAD TEST



# HONDA 450

A Japanese  
Haridavu-san

SCOTT MALCOLM PHOTOS

**A**NYONE WHOSE childhood occurred in the 1930s recalls "Made in Japan" as the stamp affixed to any number of clever, made-from-tin cans, lacking-in-craftsmanship mechanical toys in colorful but shoddy array on U.S. dimestore counters. The 1960s have brought a change. Japanese firms still manufacture toys for sale in the U.S., but where once a child bought a wind-up jackrabbit for 5¢, a teen-ager or adult now buys a kick-start roadrunner for \$300. These toys aren't made of salvaged beer cans, either: They're finely machined 50-650 cc piston displacement motorcycles.

As a plaything, the motorcycle always has maintained a measure of interest among enthusiastic Americans, but the tide of Asian motorbikes surging across the Pacific is strictly a latter-day phenomenon. Keys to inundation of America are sharply competitive pricing and, perhaps more significant, sheer quality.

Quality for competition in the world market is a prime goal of the Japanese. The nation has gained worldwide recognition for its Nikon and Canon cameras, Sony electronics and Noritake fine chinaware.

Honda has earned a name for quality, too, in the motorcycle world and its best and latest example of this is the new Super Sports—a 43-bhp toy for the internal combustion enthusiast.

The first impression of the 450 is one of quality and a more thorough inspection only serves to strengthen that feeling. All fittings show the best in materials, machining and hand workmanship. Welds in the semi-double cradle frame and engine mountings are examples of craft in beading and finishing. Overhead camshaft covers show no rough edges, only polish. Underneath the foam saddle are the 450's 12-v. battery and alternator rectifier in an imposing array of well-used space and outright neatness. If the interior of the Honda 450 engine is as well done as are the frame, rims, hubs, secondary chain drive and suspension components, a long service life for the machine is predictable.

Delivered to the *CAR LIFE* parking lot, the 450 immediately attracted a group of editorial personnel. All were taken with the motorcycle's appearance—shining black paint, polished aluminum and chromium plating. But, as pleased as staffers were at first meeting with the 450, an experience during a test ride removed some of this initial aura of glamor. A CL rider encountered beside a highway a forlorn teen-age Yamaha rider whose engine had fouled a spark plug. The 450-mounted CL man stopped to help and, because motorcyclists are a clanish sort, it was not long before two more riders paused to offer aid to the

grounded Yamahite. One of these cyclist samaritans was astride a Honda 305, the other a Triumph Bonneville. These machines were parked beside the Honda 450, which provided an opportunity for visual comparison.

The sister Honda 305 made it immediately apparent that the 450 has somehow lost that litheness of line, that smooth grace and functionality which have been Honda hallmarks. The Triumph only served to reinforce this impression. Though the Honda 450 engine offers but 444 cc piston displacement, it seemed bulky and overly large in comparison with the 650 cc Triumph unit. The 450's 4.2-gal. touring tank, beside the Triumph's sleek 2.5-gal. fuel cell, appeared positively huge. However, it must be noted that both Honda 305 and Bonneville were in semi-trailing trim and the 450 was in full roadway regalia.

Thus it was that the Honda 450 suddenly came to resemble that heavy-duty road machine from Germany, the BMW. The 450 somehow lost its resemblance to the lean, vertical twin BSAs, Nortons and Enfields from Great Britain—machines that Honda apparently is trying to emulate. Instead, it has the general plumpness, heaviness of line and overall impression of sheer bulk which earns it a nickname: "*Haridavu-san*."

With bulk goes weight. The Honda 450 is in no sense a lightweight trail machine. A relatively heavy machine, at a curb weight of 412 lb., the Honda 450 appears designed with no weight saving corner cuts, no sacrifice of metal muscle for ballet beauty. The 450's forte is paved roadway, be it turnpike or twisting secondary.

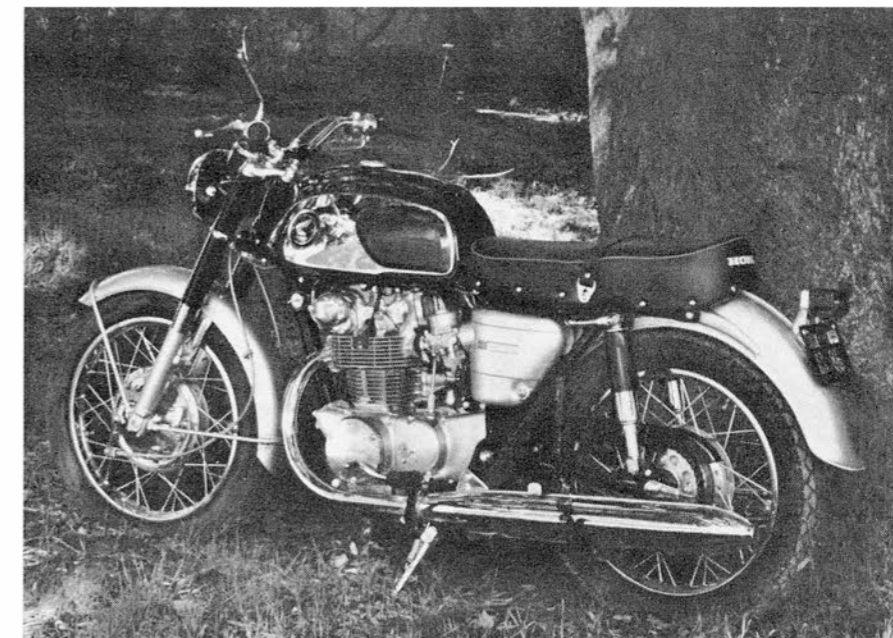
On the freeway—if the rider has the desire to propel a motorcycle in the heart of a herd of 4000-lb. V-8 pachyderms—the 450 can maintain effortlessly the speed of traffic flow at 75 mph. Indeed, the 450 at 75 mph in fourth gear is just starting to round the crest of its torque curve, leaving a reserve of power for non-downshift passing maneuvers and brisk acceleration to 85 mph or so.

**O**FF THE FREEWAY and into hill country is the only way to evaluate the 450's handling characteristics. Distance touring through mountainous territory demands comfort and handling ease. The Honda's soft saddle combined with spring-hydraulic telescoping front and swing-arm rear suspension provides a ride smooth enough to invite the long rides. An hour or two astride the 450 did not leave riders feeling severely beaten about the hip pockets—as can be the case with lighter machines. A simple pin-wrench adjustment sets up twin rear suspension dampers to meet lug-

gage load or passenger comfort requirements. However, the third notch—stiffest springing—seemed a bit harsh even for a 2-passenger load.

With a rated 43 bhp at 8500 rpm, a relatively long torque production span and standard gearing, gear changes are a sometime thing—at least a less frequent operation than is the case with machines of fewer bhp and less broad torque curves. The 450's carburetion, through twin single-throat units of 1.248-in. barrel diameter, and its moderate cam configuration are such that the all-on power range extends from 7500 to nearly 10,000 rpm.

The 450's 4-speed transmission is equipped with gearing for overall ratios, first through fourth, of 18.62, 10.61, 8.00 and 6.96. Hence most riding, even in hills, may be done with use of the top two gears. Handling was such that only the sharpest bends required downshifts to maintain engine speed through corners. The test rider gave up use of the Isle of Man, many-shifts-per-corner technique because it simply wasn't necessary.



With standard gearing, the 450 is capable of something above 100 mph at up to 10,000 rpm. Fifteen-tooth primary and 35-tooth drive sprockets are standard on the 450. However, Honda offers optional 16-tooth primary and 33-, 36-, 37- and 38-tooth drive sprockets for those who seek either higher or lower than standard ratios. The manufacturer recommends the hotter than standard NGK B-9-E spark plug for use with the speed sprockets.

Quiet is part of comfort. The 450's induction system is tidy and its breathing noises are minimized by a pair of side-mounted air cleaners. Exhaust

blast is reduced by twin, below-the-footpegs mufflers, though a note of authority remains. Honda's new product has been on the market only a few months, but already enthusiasts have fitted smaller fuel tanks, air cleaners of less restriction and megaphone exhausts to gain more performance.

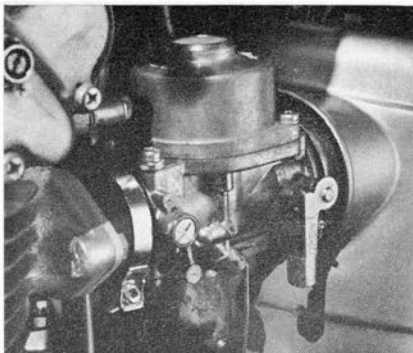
The 450 stops as well as it goes. Brake drum diameters of almost 8 in. and shoe widths of more than 1.5 in. provide smooth, no-grab braking. Standard tires on the machine are purely for gripping paved surfaces. The front tire is a Japanese Dunlop Grand Speed of linear tread for precise non-dirt cornering; the rear is a Grand Speed of double-diamond tread for acceleration and road-holding under load. The brakes and tires seemed an ideal combination to the CL testers who did a good bit of their test-riding on rain-wet streets and highways.

Instrumentation and lights, too, say road machine, rather than bushbuster. Incorporated into the headlight shell are 0-11,000 rpm tachometer, 0-140 mph speedometer, green neutral gear

indicator light and red headlamp high beam indicator light. The horn button and headlamp dimmer switch are located at the left handle grip. These conveniences are the sort of thing the trail rider removes from his machine and stores in a box in his garage. But, they should remain in place on the 450.

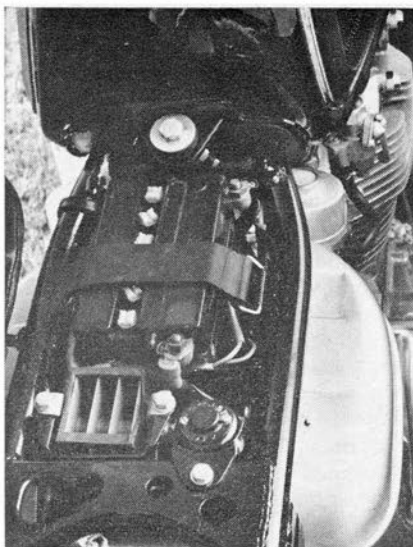
The appeal of the 450 must lie in such things as its instant electric start: On a cold morning a flip of the fuel tap to "On," regulation of the choke lever to "Rich" and one punch of the right handlebar-mounted start button brings 444 cc barking to imme-

# HONDA 450

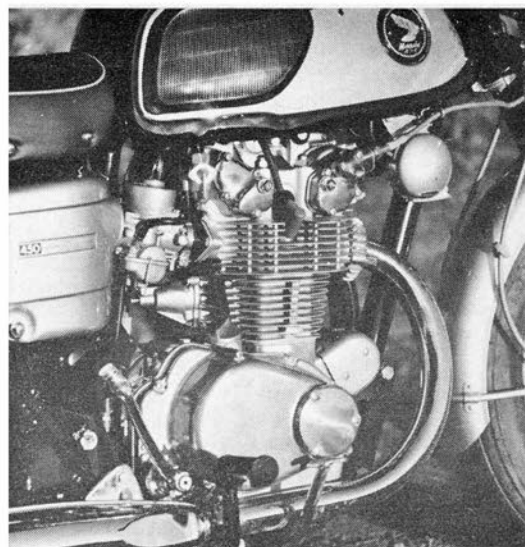


MILD carburetion may receive reworking from enthusiasts.

SATIN polish, fine machining demonstrate Honda quality.



NEATNESS and economy of space mark electrical compartment.



THOUGH cleanly put together, the engine seems a bit plump.

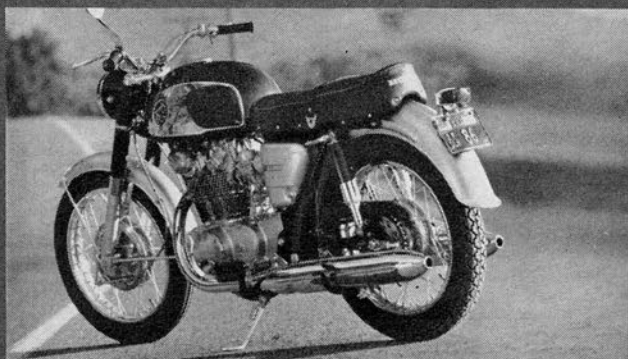
diate life. One who has never been bitten on the ankle by an angry motorcycle kick-starter cannot truly appreciate the wonders of electricity.

Once running, a warmup period of approximately 2 min. and a minute or two of operation at one-quarter choke insure engine smoothness from that point onward. The engine must be

turned up to approximately 3000 rpm for getaway. This requires some slipping of the 7-plate wet clutch, but subsequent gear changes upward can be accomplished quickly and precisely with no slip whatsoever, a tribute to quality engineering in Honda's constant mesh transmission.

What sort of American becomes a

## 1966 HONDA 450 SUPER SPORTS



### DIMENSIONS

Wheelbase, in.....	53.2
Track, f/r, in.....	
Overall length, in.....	82.1
width.....	30.7
height.....	41.4
Front seat hip room, in.....	10.8
shoulder room.....	
head room.....	
pedal-seatback, max.....	
Rear seat hip room, in.....	10.2
shoulder room.....	
leg room.....	
head room.....	
Door opening width, in.....	
Pedal to ground height, in.....	14.0
Ground clearance, in.....	5.3

### PRICES

List, poe West Coast.....	\$995
Equipped as tested.....	995
Options included: None	

### CAPACITIES

No. of passengers.....	2
Luggage space, cu. ft.....	
Fuel tank, gal.....	4.2
Crankcase, qt.....	5.9
Transmission/diff., pt.....	
Radiator coolant, qt.....	

### CHASSIS/SUSPENSION

Frame type.....	semi-double cradle
Front suspension type: Telescopic fork, compound springs, hydraulic rebound damping.	
ride rate at wheel, lb./in.....	86
anti-roll bar dia., in.....	
Rear suspension type: Swing arm, compound wound single springs, telescopic hydraulic damping.	
ride rate at wheel, lb./in.....	220
Steering system: Friction-damped handle bar.	
gear ratio.....	1:1
overall ratio.....	0.22
turns, lock to lock.....	13.2
turning circle, ft. curb-curb.....	442
Curb weight, lb.....	673
Test weight.....	41.5/58.5
Weight distribution, % f/r.....	

### BRAKES

Type: Drums with internal expanding twin leading shoes, independent mechanical linkage & hand front, foot rear.	
Front drum, dia. x width, in.....	7.82 x 1.52
Rear drum, dia. x width.....	7.02 x 1.52
total swept area, sq. in.....	70.9
line psi @ 100 lb. pedal.....	n.a.

### WHEELS/TIRES

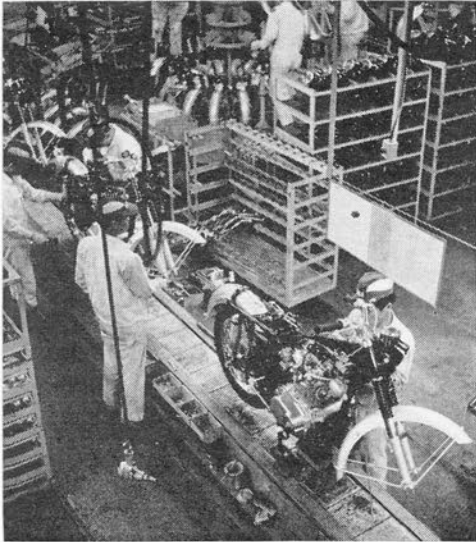
Wheel size.....	18w x 1.85B
optional size available..	
bolt no./circle dia., in..	
Tire make, brand: Dunlop Grand Speed	
size f/r.....	3.25-18/3.50-18
recommended inflation, psi f/r.....	26/28
capacity rating, total lb.....	n.a.

### ENGINE

Type, no. cyl.....	air-cooled dohc vertical twin
Bore x stroke, in.....	2.758 x 2.278
Displacement, cu. in.....	27.2
Compression ratio.....	8.5:1
Rated bhp @ rpm.....	43 @ 8500
equivalent mph.....	91
Rated torque @ rpm.....	276 @ 7250
equivalent mph.....	77
Carburetion.....	2 x 1 barrel dia., pri./sec..... 1.248
Valve operation: Chain-driven overhead camshafts, lever-type cam followers.	
valve dia., int./exh.....	1.365/1.208
lift, int./exh.....	0.320/0.320
timing, deg.....	n.a.
duration, int./exh.....	n.a.
opening overlap.....	n.a.
Exhaust system: Dual pipes, mufflers	
pipe dia., exh./tail.....	2.5/1.5
Lubrication pump type.....	plunger normal press. @ rpm..... n.a.
Electrical supply.....	alternator
ampere rating.....	5.5
Battery, plates/amp. rating.....	42/12

### DRIVE-TRAIN

Clutch type: Wet, 7 plates, hand operated.	
dia., in.....	5.46
Transmission type: Constant mesh, manual 4-speed.	
Gear ratio 4th (0.903) overall.....	6.96
3rd (1.034).....	8.00
2nd (1.400).....	10.61
1st (2.411).....	18.62
1st x t.c. stall ( ).....	
Shift lever location.....	left foot pedal
Drive type: primary, secondary chains	
drive ratio.....	7.72

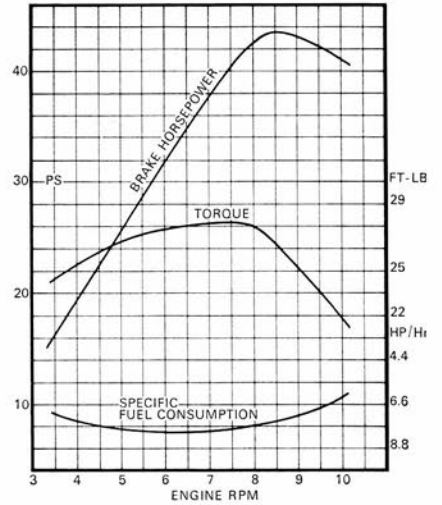


BILL MOTTA

**SKILLED** craftsmen assemble 450s in Honda's Tokyo factory.



**INSTRUMENTS** are integrated into the 450's headlamp shell.



**CURVES** show bhp, torque and specific fuel consumption ranges.

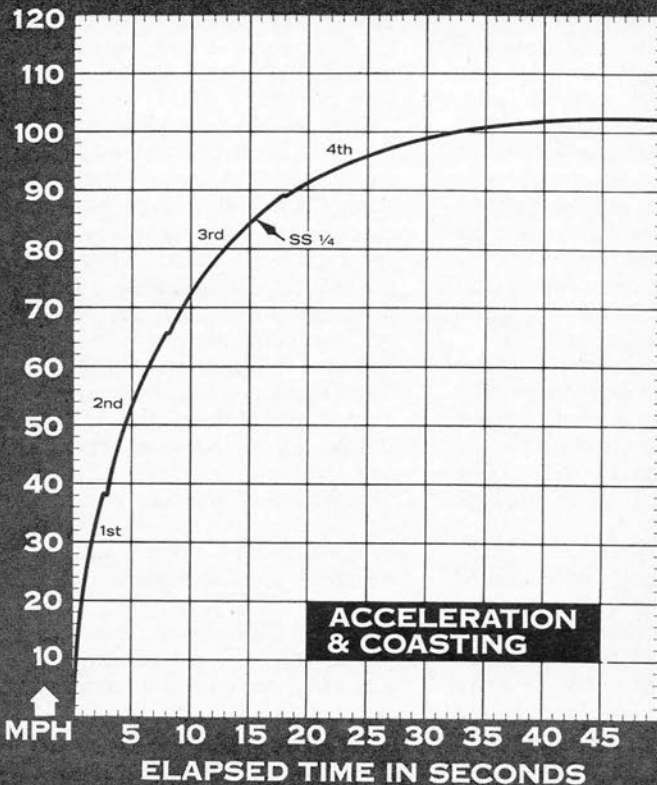
450 customer? The look and feel of the Honda 450 make it appear that such a buyer will be one who has no desire to go snarling up a brushy mountainside or clip along a muddy forest trail. He may be one who previously enjoyed off-the-road motorcycling, but now finds it backbreaking labor. The Honda 450 owner will be one who en-

joys getting away from it all—on asphalt or concrete.

There always is the desire to keep up with the Joneses. In the case of the Honda 450 owner, this means keeping up with the Joneses who own Triumph, BSA, Norton, Enfield or Harley-Davidson road machinery. Though Honda's engine is of an inter-

mediate size, it is easily capable of staying with machines of up to 650 cc displacement. For those who wish to surpass the Joneses, the correct gambit may be to wait a bit longer for arrival of another recently announced Honda product—a vertical twin of 650 cc piston displacement and 60-something bhp.

## CAR LIFE ROAD TEST



### CALCULATED DATA

Lb./bhp (test weight)	15.6
Cu. ft./ton mile	125
Mph/1000 rpm (high gear)	10.5
Engine revs/mile (60 mph)	5730
Piston travel, ft./mile	2190
Car Life wear index	126
Frontal area, sq. ft.	7.06
Box volume, cu. ft.	60.4

### SPEEDOMETER ERROR

30 mph, actual	28.8
40 mph	38.4
50 mph	48.0
60 mph	57.8
70 mph	67.2
80 mph	77.0
90 mph	

### MAINTENANCE INTERVALS

Oil change, engine, miles	2000
transmission/differential	
Oil filter change	6000
Air cleaner service, miles	6000
Chassis lubrication	6000
Adjust cam chain	6000
Adjust chain drive	6000
Coolant change, mo.	

### TUNE-UP DATA

Spark plugs	NGK B-7E, B-9E
gap, in.	0.028-0.031
Spark setting, deg./idle rpm	.5/1200
cent. max. advance,	
deg./rpm	40/n.a.
vac. max. adv., deg./in. Hg.	n.a.
Breaker gap, in.	0.015
cam dwell angle	n.a.
arm tension, oz.	2.1
Tappet clearance,	
int./exh.	0.001/0.001
Fuel feed	gravity

### PERFORMANCE

(Data courtesy CYCLE WORLD magazine)

Top speed (9700 rpm) mph	102
Shifts (rpm) @ mph	
3rd to 4th (9700)	89
2nd to 3rd (9700)	66
1st to 2nd (9700)	38

### ACCELERATION

0-30 mph, sec.	1.5
0-40 mph	2.9
0-50 mph	4.6
0-60 mph	6.5
0-70 mph	9.3
0-80 mph	12.9
0-90 mph	18.8
0-100 mph	32.6
Standing 1/4-mile, sec.	15.2
speed at end, mph	85
Passing, 30-70 mph, sec.	7.8

### BRAKING

(Maximum deceleration rate achieved from 80 mph)

1st stop, ft./sec./sec.	
fade evident?	
2nd stop, ft./sec./sec.	
fade evident?	

### FUEL CONSUMPTION

Test conditions, mpg	36.8
Normal cond., mpg	35-40
Cruising range, miles	417-468

### GRADABILITY

4th, % grade @ mph	16 @ 80
3rd	19 @ 70
2nd	24 @ 52
1st	30 @ 30

### DRAG FACTOR

Total drag @ 60 mph, lb.	30
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