

## CYCLE GUIDE ROAD TEST

A cafe racer attracts its buyer because, in addition to being a vehicle for physical transportation, it also represents a vehicle for the ego. Another intent of a cafe racer is sensual: taking it out and playing with it; cutting smooth, graceful arcs on a winding canyon road or slashing and skittering on the very edge of *your* road, those special few miles of pavement that you know intimately and that challenge you to the utmost. A cafe racer has to handle, stop, and go.

But it also has to be startling in appearance, to carry its rider in a certain way, to represent him as someone of a certain sort (exotic, exciting perhaps), to look great just standing at the curb. Any cafe racer worthy of the name makes people look.

The Dunstall Honda 900 does this magnificently, partially because it says right there in bold white letters on the fairing "... Honda 900." Everybody wants to know what it's like to ride a Honda 900. "I didn't know they made a 900," they'll say. Or, "Wow! Bet it'll beat a Kawasaki 900, huh?" And strangely enough, many of the people you encounter with the bike seem to think that "Dunstall" is just a name for a particular model Honda. Not so.

Years ago, long before any of the manufacturers were building cafe racers, Englishman Paul Dunstall was building bits and pieces for Nortons that not only made them look more like road racers but also made them handle better and grew hair on their engines. Eventually he branched out and began to produce parts for Triumphs, BSAs, and Hondas, and to assemble complete machines. His first complete Honda was a 750, and now with the Dunstall Honda 900 (and a 610cc version of the Honda CB-500) he has come up with an all-out Honda-based cafe racer. The Dunstall Honda 900 is a faster, better-handling version of the Honda CB-750 and is suitable for everything from Saturday night profiling to sanctioned production road racing.

# DUNSTALL HONDA 900

*Like a Cadillac, it will get you there in style.  
Only it's a much more radical style.*

**THE BIKE:** The changes from the CB-750 fall into two headings: cosmetic and functional. The cosmetic changes are the most obvious; the Dunstall Honda 900 looks long, low, and crimson. The most visually outstanding part of the machine is, of course, the fairing—a bright red-im-



pregnated fiberglass bikini-type (that is, the upper portion of a road racing "dolphin" fairing) with a heavily tinted windshield. The fairing mounts in three places: at each side under the tank and from a mount that bolts around the steering head in front. (All Dunstall's modifications are bolt-on, incidentally. There is no welding involved.) The square hole for the headlight gives the fairing a boxy look.

The other major styling change is the matching red one-piece fiberglass body cover, which includes the seat and side panels, and covers the stock Honda tank. "Glass fibre" tanks (as they call them over there) are illegal in England, so Dunstall opted for a tank cover to achieve the road

saw the head, liked it, and asked for red-head replicas. Now it's standard, although its heat dissipating properties are dubious.

The four-into-two exhaust system routes the four header pipes back to a single crossover tube that collects and empties them into a pair of Dunstall "Decibel" mufflers.

The stock CB-750 forks and chassis are retained. The headlight brackets are still mounted, although they no longer serve any function other than covering the top of the fork tubes. The full double-loop frame has the same thorough welds—occasionally sloppy, but still neater than most machine-welded frames.

The CB-750 steel 19-inch front and 18-

inch rear stops—to keep the bars from hitting the fairing or pinching your fingers against the tank—makes it impossible to lock the forks.

A pair of alloy plates is used to place the rider's pegs and foot controls rearward, almost to the point where the passenger pegs normally are, and the stock CB-750 passenger pegs are raised and moved back. The shift linkage is remote but the shift pattern is the same as the CB-750: down for low with neutral between first and second.

The headlight and front turn signals are moved forward in the fairing and don't turn when the forks do. The back half of the rear fender is removed and the taillight is mounted on the back of the seat, which also serves as the rear fender. The Dunstall 900 uses British electrics, which means that a parking light is incorporated into the headlight and the horn button flashes the high beam when you push the button sideways.

A fiberglass front fender, also finished in "British Cafe Racer Red" (as one wag named it), combines with the fairing to shield you from water, dirt, road crud, and crawling animals thrown up by the front wheel. The long dual seat is held in place with two 6mm nuts and must be removed to gain access to the battery and tool kit.

Oil for the dry sump engine is carried in the stock black tank, which is partially visible under the right side panel. The chrome cap/dipstick is outside the bodywork. The CB-750 gas tank holds 4.5 gallons; it has a square of red paint on the top where the steel tank is visible through the hole in the cover that provides access to the gas cap.

**ENGINE AND GEARBOX:** Since the introduction of the Honda CB-750, each successive model has had milder valve timing to provide (among other things) a broader powerband. The latest CB-750s have usable power from very low rpm. When 153cc is added to already good low end, you get an enormous amount of torque. The Dunstall 900 will pull very strongly from 2000 rpm even in fifth gear, and you can disengage the clutch at just a few hundred rpm above 1000-rpm idle. We fixed ourselves up with a fifth-gear drag race against a 1000cc Harley-Davidson Sportster, which has a reputation for having more top-gear low-speed acceleration than anything else around, and the Dunstall effortlessly walked away from it (and a Ducati 750 GT) from 35, 40, 45, and 50 mph.

The four stock 28mm Keihin carburetors are retained, and the bike idles well. Throttle response is generally good except the same problem is evident with the Dunstall that exists with the CB-750: If the throttle is snapped all the way open below 2500 rpm, for a moment the engine acts as if you hit the kill switch, then the bike lunges forward like it was kicked by a giant rugby player.

The stock main jets are also used, and



PHOTOGRAPHY BY LEE STANLEY

racer look.

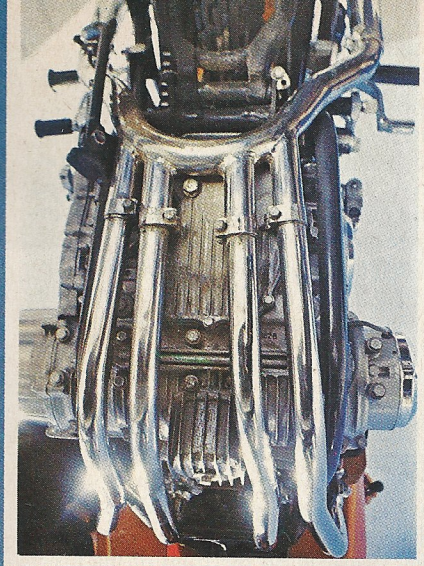
The functional modifications start in the engine, which is the CB-750 SOHC four-cylinder four-stroke. The stock CB-750 cylinders are bored by six millimeters for a total displacement of 889cc, an increase of about 20 percent. The compression ratio is raised one point to 10:1 and the cylinder head is modified with enlarged, reshaped, and polished ports. The gear box and clutch are left stock; the 18-tooth transmission sprocket is supposed to be replaced with a 19-tooth, but our bike still had the stock sprocket.

The cylinder head is painted (yep) red while the engine is disassembled. The idea for the red head came from Zach Reynolds, an R.J. Reynolds tobacco heir, who asked Dunstall to build him a custom Honda with a red head. Other customers

inch rear rims are replaced by a pair of 19-inch WM-2 Borrani alloy rims. Both wheels have 4.10 x 19 Dunlop K-81 (TT100) tires.

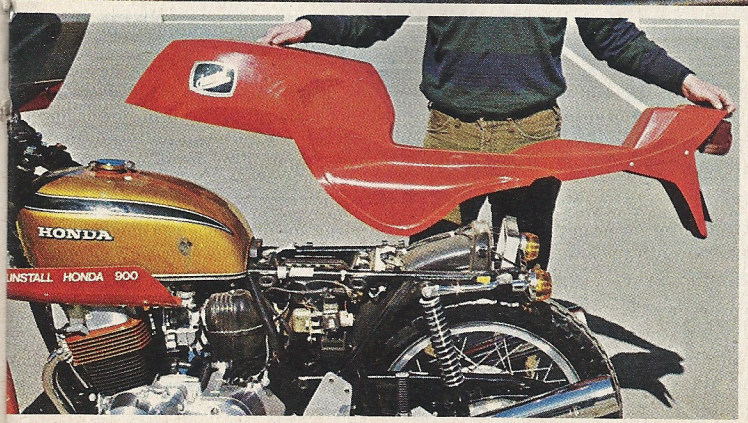
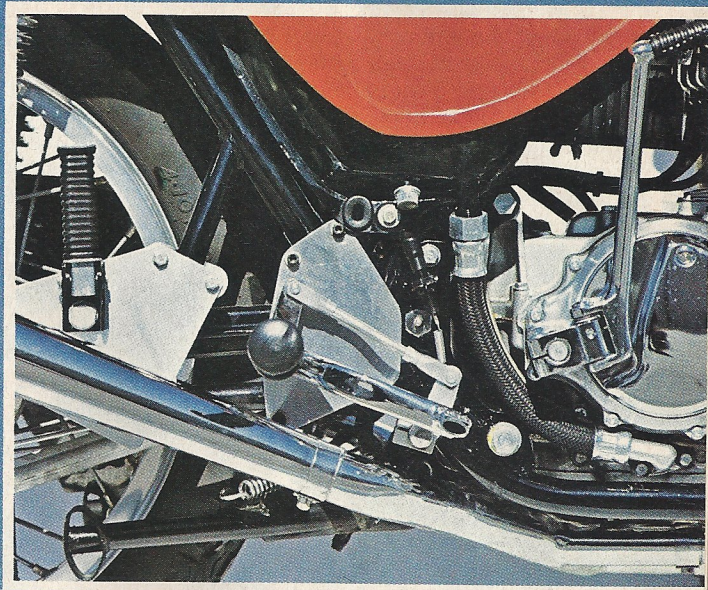
Three-way adjustable eye-and-clevis Girling shocks with chrome constant-wind springs are fitted at the rear. They give four inches of travel.

Low handlebars that at first glance look like clip-ons are used. They don't mount in the conventional handlebar clamps, nor do they clamp around the forks like true clip-ons. They are anchored by two bolts each: One goes through the fork cap and the other is the fork crown clamp bolt. This keeps them from slipping around as clip-ons occasionally do, but it also means they can't be adjusted to suit the rider. The Honda controls, switches, and grips are retained on the handlebars. A pair of special



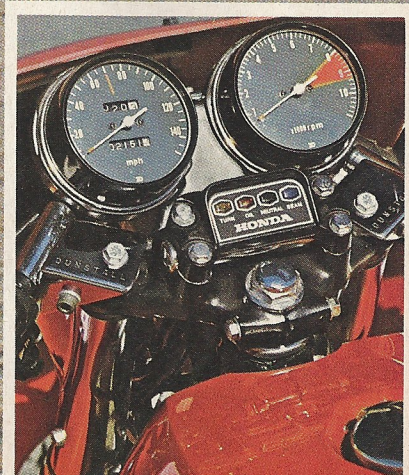
*The right footpeg folds to get out of the way of the kickstart lever, but the brake pedal is still in the way.*

*A crossover tube collects the exhaust from all four header pipes and dumps it into a pair of Dunstall mufflers.*



*The Dunstall 900 uses the standard Honda instruments and idiot lights. Note the strange handlebar mounts.*

*Under the one-piece body cover lives the stock frame—and the stock gas tank—with a little red square painted where it shows through.*



although the jetting was correct around town, the bike ran lean during hard operation. Since an owner of a cafe racer will probably run it hard, the Dunstall 900 should be jetted up at least one size.

A more serious problem with our Dunstall Honda 900 was oil consumption. It burned a quart of oil every 600 miles. It smoked at all engine speeds but was worst at high rpm or when the engine was hot. There was also a related problem with spark plug fouling caused by the oil passed into the combustion chambers. We replaced six plugs in 2500 miles, four of them in the left cylinder. The smoking and oil consumption appeared to be caused by rings that didn't seat properly.

We received the bike with no mileage on it and broke it in for 500 miles by keeping the engine below 5000 rpm with an occasional spurt to 6000 rpm. That was an adequate break-in for the engine, according to one of the service managers at American Honda.

The added linkage needed to rear-set the shift lever adds a barely perceptible amount of slop to the mechanism. Most shifts were accompanied by a fairly hefty clunk. Not much pressure is required on the gearshift lever and the clutch pull is extremely light. We missed an occasional shift when the selector failed to index properly after a shift and gave us a false neutral, or allowed the gearbox to pop out of gear after the next shift.

The power characteristics make five speeds in the gearbox almost unnecessary. With a powerband like that you could almost get away with a close-ratio three-speed.

The electric starter is retained, and starting is easy after you get everything ready. The only problem is that the fairing and body cover get in the way of everything you use to get ready. The petcock is hidden behind the lower sweep of the fairing and under the cover; the ignition switch, still down under the left front of the gas tank, is partially blocked by the fairing; you have to reach around the fairing to get at the choke lever on the left side of the carbs. Close the choke all the way, give it about an eighth turn of throttle, and press the button. It will start instantly, and you can open the choke slightly. It likes a few minutes of warm-up but will move away smoothly after a few seconds.

Heaven help you if you run the battery down, though. Even though the right footpeg folds out of the way of the kickstart lever, the brake lever is in the way, only allowing about half a stroke. That will allow you to start it with several kicks when warm, but you're going to have to work if it's cold. And push starting a 520-pound motorcycle is no fun.

**HANDLING:** The Honda CB-750 has a strong chassis going for it, but it has to carry considerable weight, mostly from the big, wide engine, mounted high in the frame because of its width. But even with low bars, the handling of the bike in 20 to

40 mph turns is improved because the center of gravity has been lowered. Gone almost entirely is the Honda's tendency to fall into a turn because its high center of gravity pulls it over. The seat, at 31.5 inches, is about an inch lower than the stock seat, and the handlebars are eight inches lower than the stock 43-inch-tall bars.

The Girling shocks were too stiff initially, but after about 700 miles had been recorded, they softened up. They were still firm enough to keep the rear wheel on the ground over ripply or bumpy pavement. Steering was precise, and we could confidently pick a line through a corner and stick to it.

The stock front forks aren't very responsive to tiny road irregularities. This was especially evident when we were going into a turn with the power off, and the weight was transferred to the front. When we were cornering very hard, at the limit of tire adhesion, it caused concern. Only the



fastest riders will ever be concerned with this effect on handling.

The heaviness of the bike is still apparent when tossing it around in a quick, tight set of esses. It takes effort to make it change directions rapidly; you have to tug vigorously on the bars and shift your weight a lot. If you hang off the bike like Paul Smart, you'll find the bars are well-suited because of their low height and narrowness; that allows you to get well out to the side.

With the larger rear wheel and the Dunlop K-81s, ground clearance and traction are improved. You can touch the pegs on either side and the centerstand on the left, but you won't do it very often. Ground clearance is more than adequate.

The English-made Dunlop K-81 has become the accepted standard in tires for American cafe racers and road racers who can't afford or don't want road racing tires. One of the nicest things about the K-81 is the amount of warning it gives, by creeping noticeably before it lets go.

Unlike the stock CB-750 which is not affected very much by sidewinds, the Dunstall Honda, with its extra cross section from the fairing and tailpiece on the seat, must be leaned into them. You won't get blown off the road, but you have to compensate for winds.

**COMFORT AND RIDE:** You lean forward on the bars, with the heels of your hands supporting the weight of your upper body through your hands, wrists, arms, and shoulders. Without a fairing, this position would be comfortable because the wind force keeps a lot of the weight off your arms. But a bike with a fairing prevents the wind from getting to you, so you have to support yourself without the wind's help. And because so much of your weight is placed on the front of the bike, the forks' response to bumps is magnified in your arms. The stock Honda grips add to the discomfort of the Dunstall 900 because they are too hard to cushion the heels of your hands. Bigger, softer grips would improve things considerably. Everyone asks if your back gets sore; it doesn't—your arms, wrists and hands do.

The riding position is good for what it was intended: hard acceleration and fast cornering. Acceleration takes the weight off your arms, and the low, tight bars allow you to climb around the bike when you're out "scratching pavement." But for cruising, the riding position is tiring.

Vibration was considerable at high rpm, more than with the CB-750. The bike is smooth below 5000 rpm, but over that you get a bad buzzing through the footpegs and a less severe one through the bars. The fairing also makes an audible buzz at 5500 to 6000 rpm.

At 55 mph, the engine isn't revving very high, so there isn't much engine or exhaust noise. Everyone who heard the bike described it as sounding "mellow." Everyone. The noise level in the rider's seat at 55 mph is low, and almost all of it comes from the wind. If you crouch down behind the fairing, it becomes whisper-like.

In addition to improving streamlining (the Dunstall Honda beat several other bikes in coasting races, especially when there was a headwind), the fairing helps when the weather is chilly. Since it keeps the wind off your chest, neck, and upper legs, it makes riding warmer than if the bike were unfaired. On our bike the lower sweep of the fairing hit the legs of our six-foot staffers, but shorter riders weren't bothered. It can be trimmed to suit the owner.

We preferred to keep the rear shocks on the softest setting. Once they had broken in, they provided a smooth and comfortable ride. The seat, although not thickly padded, is very comfortable, even for long periods of time. It has a slight hump about halfway back to keep you from sliding backwards when accelerating hard.

Although the seat is long enough, passenger accommodations are noticeably



lacking. Because of the rider's crouched position, it's difficult for the passenger to get a grip on the rider's body. The passenger's problems are compounded by his pegs, which are too high and too far back, and his half of the seat, which elevates him above the rider. The Dunstall 900 isn't a two-up tourer.

Although the position of the rider's pegs doesn't cramp his legs, the footpegs themselves are troublesome. The metal part of the peg isn't knurled, so the rubber is free to slide off when you put a lot of weight on your foot. The right peg folds, and since it is held in place by only one bolt, it can pivot and fold down unless the bolt is kept absolutely tight.

**BRAKES:** The Dunstall Honda 900 uses the stock Honda CB-750 brakes, a hydraulic single disc at the front and a rod-operated single-leading shoe drum at the rear. The front brake requires a lot of pressure and doesn't offer as much feedback as most other discs. But if you exert the effort, it will lock the front wheel at any speed.

The rear brake was terrible. Most of the leverage has been lost in the rearset conversion, and the brake has lost most of its sensitivity. To lock it you have to take your foot off the peg entirely and stand on the lever. Under repeated hard use, it will fade.

Our best stopping distances were 35 feet from 30 mph and 153.3 feet from 60 mph.

**MISCELLANEOUS:** The fairing bubble is not at all like a touring windshield. In a normal riding position, eye level is well above the tinted windscreen. If you tuck down it distorts your vision, and at night the tinting is too dark to see through.

Because the low bars necessitate cutting down the amount of steering lock with special fork stops, it is no longer possible to turn the forks far enough to lock them when you park the bike. You'll have to find an alternate method of keeping the bike from being stolen. We used a lock and chain.

The headlight mounting arrangement needs improvement. With the high beam on, the headlight aims barely as high as it should if it were on low beam, and there was no way to adjust it any higher without making new brackets. In addition, some light was reflected back from the inside of the fairing.

If you have to push the bike around to park it, the narrow bars and limited steering lock caused by the extended fork stops will make you crazy. It's not easy to push and turn a 520-pound motorcycle with clip-ons. Never, never park the front wheel against a curb in a downhill gutter. You'll need a tow truck to get it out. In addition, getting the bike on the centerstand requires a strong back and some practice.

Servicing the Dunstall Honda 900 is pretty much like servicing a run-of-the-mill CB-750 except that you have to pull off the fiberglass body cover, and that involves removal of four nuts and bolts,



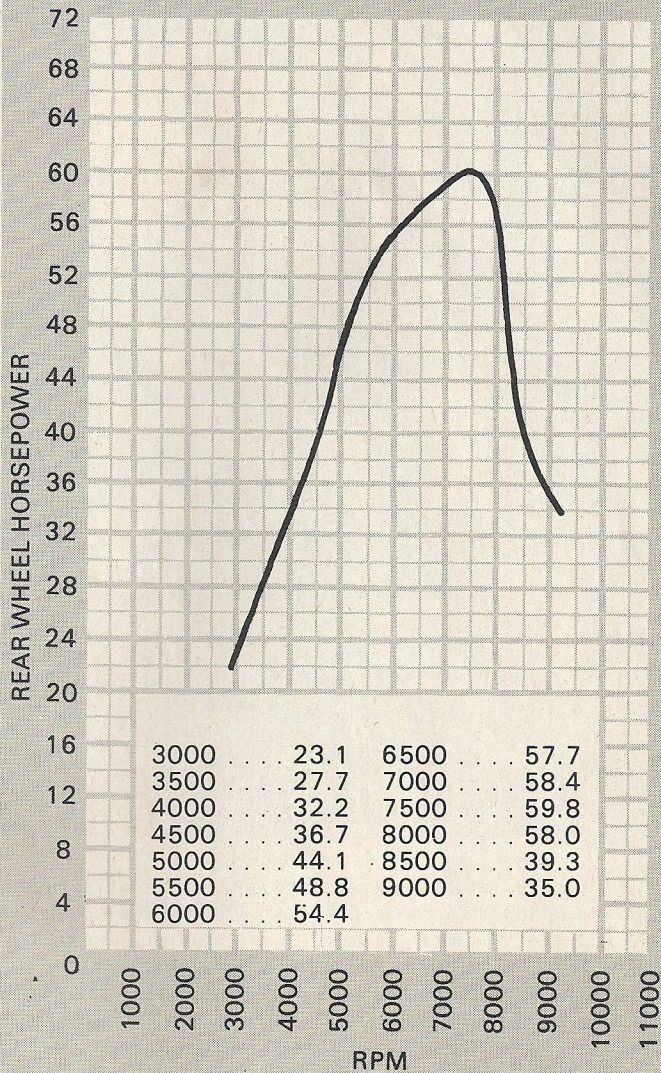
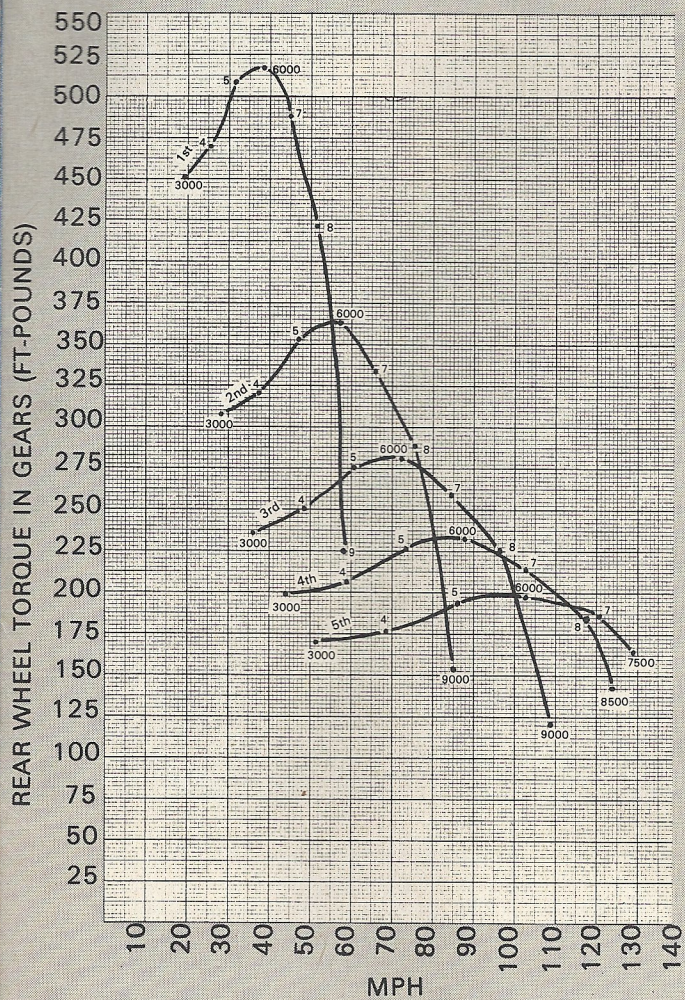
## SPECIFICATIONS

Engine type	four-stroke
Cylinder arrangement	transverse parallel four
Valve arrangement	single overhead camshaft
Bore and Stroke	67mm x 63mm
Displacement	888.5cc
Compression ratio	10:1
Ignition	battery/dual coil/dual point
Charging system	12-volt, AC generator, selenium rectifier
Carburetion	four 28mm Keihin, slide/needle
Air filter	disposable paper element
Lubrication	dry sump, 3.5 qt. oil tank capacity
Primary drive	two single-row chains
Clutch	wet, seven drive plates, seven driven plates
Starting system	electric, primary kick
Transmission	5-speed, left foot shift
Overall drive ratios	(1) 11.38; (2) 7.78; (3) 6.07; (4) 4.99; (5) 4.27
Transmission sprocket	18-tooth
Rear wheel sprocket	48-tooth
Drive chain	5/8 in. pitch, 3/8 in. width (#530)
Front forks	5.6 in. travel
Rear shocks	Girling, 3-way adjustable, 4 in. travel
Front brake	11.75-in. disc, single-action hydraulic caliper
Rear brake	drum, single-leading shoe, rod operated
Front tire	4.10 x 19 Dunlop K-81
Rear tire	4.10 x 19 Dunlop K-81
Frame	tubular steel, double downtube
Steering head angle	27 degrees from vertical
Front wheel trail	3.7 in.
Wheelbase	58 to 59.25 in.
Length	85 in.
Weight	520 lbs.
Weight distribution	45.3% front, 54.7% rear
Ground clearance	6.25 in. at exhaust system
Seat height	32 in.
Handlebar width	25 in.
Handlebar grip height	34.25 in.
Footpeg height	14.25 in.
Instrumentation	Tachometer, speedometer, trip meter resettable only to zero
Gas tank	4.5 gal., steel
Gas mileage	46.0 mpg average
Best 1/4-mile acceleration	13.00 sec., 102.97 mph
Stopping distance from 30 mph	35 ft.
Stopping distance from 60 mph	153 ft. 4 in.
Suggested retail price	\$3000 estimated (kit less cylinder head: \$1141.39) West Coast

REAR WHEEL TORQUE IN GEARS (FT.-POUNDS)

MIN  
IN M  
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# DUNSTALL HONDA 900



MINIMUM TO MAXIMUM SPEED  
IN MPH WITHOUT STALLING OR  
OVERREVVING THE ENGINE

ENGINE RPM

POWERBAND IN MPH

1ST  
GEAR

4500  
5000  
6000  
7000  
8000

2ND  
GEAR

4500  
5000  
6000  
7000  
8000

3RD  
GEAR

4500  
5000  
6000  
7000  
8000

4TH  
GEAR

4500  
5000  
6000  
7000  
8000

5TH  
GEAR

4500  
5000  
6000  
7000  
7500

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130

MILES PER HOUR