

■ TALK TO an American about custom bikes, and he will probably begin discussing an exercise in modern art that is very far removed from functional design. Ask an European a similar question, and he will probably leave you with an image of a streetable racer.

We call them cafe racers over here, and although they have been extremely rare in the past, the trend seems to be catching on. Manufacturers think so, too, and one, England's Paul Dunstall, is even importing modified bikes to satisfy the demand.

Dunstall is no newcomer to speed equipment. Both his Norton and Honda cafe racers and his all-out competition versions have enjoyed considerable success in England. And, because Dunstall offers both complete bikes and individual components, mounts can be easily tailored, both performance and appearance-wise, to suit individual taste.

In order to acquaint us with this new trend, Dunstall left us an immaculate, fully modified 750 Honda for test. A handsome, partial fairing with a tinted bubble shield sets the

Cycle World Road Test

bike off. Then there are clip-on bars, a huge gas tank, and seat suitable for two. Other less obvious changes are footpegs set slightly higher and farther to the rear, modified shift and rear brake controls, and some subtle engine modifications to improve performance, particularly at higher speeds.

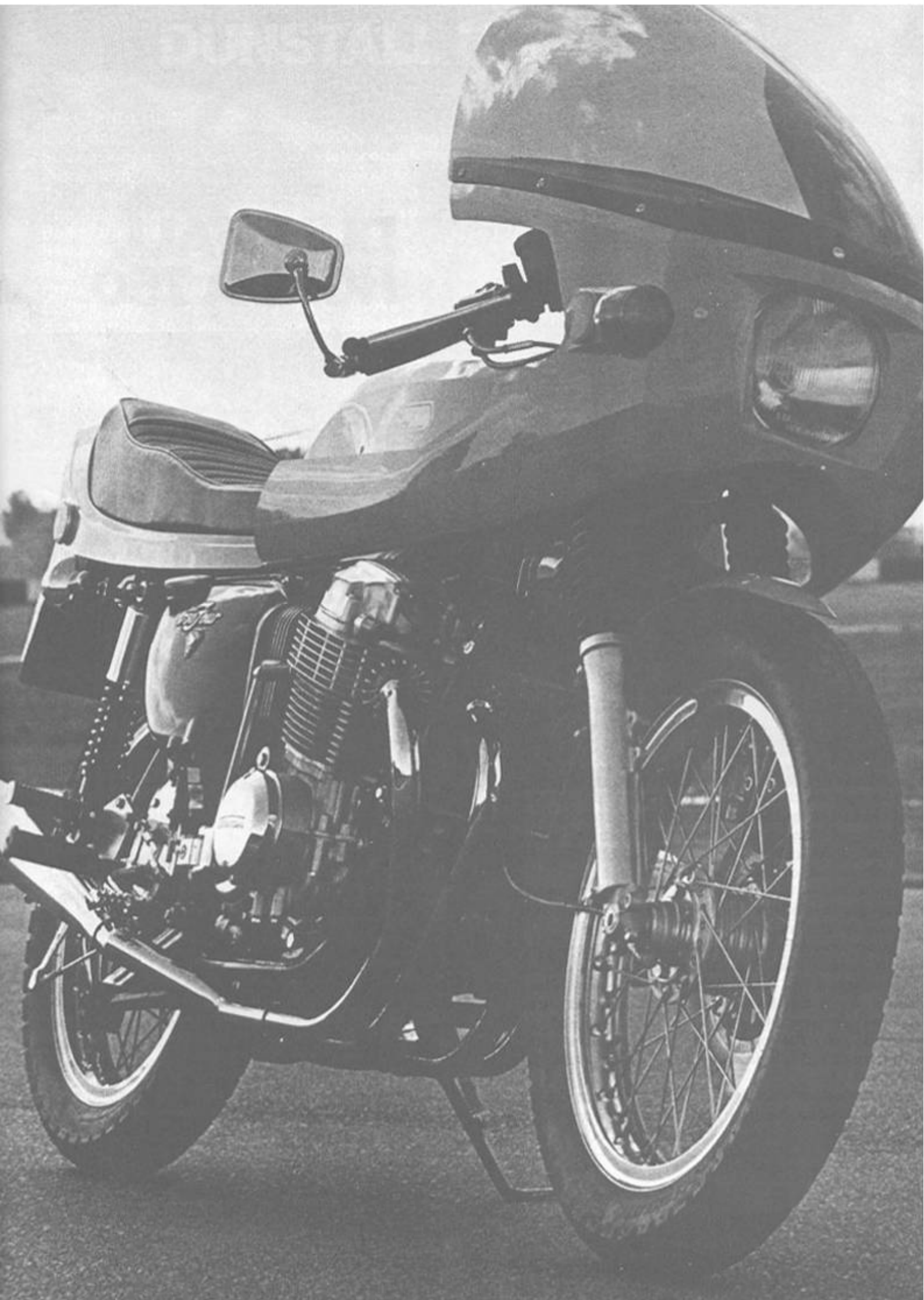
One of the most popular ways to increase engine performance without extensive internal modifications is through the substitution of a different exhaust system. Racing exhaust systems for four-stroke motorcycles are relatively easy to manufacture, but are often much too noisy for street use, especially considering the lower noise level standards being imposed by governments all over the world.

Designing a more efficient exhaust system without additional noise proved to be quite a problem. Working closely with Dr. Gordon Blair, of Queen's University in Belfast, Ireland, an exhaust pipe and muffler configuration was developed. The exhaust pipe design was entirely Dr. Blair's, while one of Dr. Blair's students, Sam Coates, and Paul Dunstall helped work out the silencer design and dimensions.

Actual development of the exhaust system on the motorcycle was left up to Paul Dunstall, who used both road testing and an American-made engine stand to determine the system's effectiveness. Finally, a combination was discovered that not

DUNSTALL HONDA 750

For Those Not Willing
To Compromise
Either Function Or Style



DUNSTALL HONDA 750



only increased power throughout the rev range, but also emitted a very low noise level of 83dba, using the noise measurement method employed by the state of California in 1973.

The exhaust system's four header pipes merge into a balance tube which connects all four pipes under the transmission. Just aft of the balance tube each set of two pipes extends outward and connects into a huge muffler on each side of the machine. These mufflers are located well off the ground to provide adequate cornering clearance.

In addition to the exhaust, Dunstall fits pistons which raise the compression ratio to 10.25:1. Other than these pistons and the exhaust, the Honda Four is completely standard.

As mentioned earlier, the Dunstall Honda comes equipped with a partial fairing. It and the remaining 'glass components were designed by Doug Mitchenall, who was with Avon fairings for a number of years. The fairing is pleasantly rounded and mates nicely with the angularly shaped gas tank and dual seat. The injection molded fiberglass is extremely well finished and is highly resistant to cracking from vibration and stress.

Other changes to the Honda CB750K2 are the substitution of 19-in. Boranni aluminum alloy wheel rims to both wheels.

Those weigh about 60 percent less than steel rims, increase rear wheel diameter by an inch to raise the gearing slightly, and provide a small increase in ground clearance for cornering.

The only bugaboo here is the sidestand's proximity to the ground. Even with the height increase and high mounted muffler the stand drags at a ridiculously low angle of lean, drastically decreasing the rider's cornering ability to the left.

Girling suspension units at the rear help stabilize the Dunstall Honda's tendency to "snake" through turns and the spring rate seems ideal for a rider of moderate weight.

A curious form of front fork stop to limit the turning arc is necessary because of the clip-on handlebars. These fork stops are attached by means of the pinch bolts on the lower triple-clamps and were found to be slightly loose after two of our testers got into wobbles at over 100 mph. Retightening these bolts and snugging up the swinging arm bolt reduced this alarming wobble to a great degree and made the tester who made the ultimate top speed runs feel more comfortable.

Riding the Dunstall Honda is a sheer joy out on the highway, but not around town. The clip-on handlebars are of moderate width (24 in.) and these, coupled with a 4.10-19 Dunlop TT100 tire on the front (as also fitted to the rear), made the steering at rush hour traffic crawl speeds a bit of a

DUNSTALL HONDA 750

SPECIFICATIONS

List price	\$2000 ex-works
Suspension, front	telescopic fork
Suspension, rear	swinging arm
Tire, front	4.10-19
Tire, rear	4.10-19
Brake, front, diameter x width, in.	(2) 10.0 x 1.8
Brake, rear, diameter x width, in.	7.1 x 1.6
Total brake swept area, sq. in.	93
Brake loading, lb./sq. in. (160-lb. rider)	7.4
Engine, type	sohc four-stroke Four
Bore x stroke, in., mm	2.40 x 2.48, 61 x 63
Piston displacement, cu. in., cc	44.9, 736
Compression ratio	10.25:1
Claimed bhp @ rpm	N.A.
Claimed torque @ rpm, lb.-ft.	N.A.
Carburetion	(4) 28mm Keihin
Ignition	battery and coil
Oil system	dry sump, gear pump
Oil capacity, pt.	7.4
Fuel capacity, U.S. gal.	6.0
Recommended fuel	premium
Starting system	electric; kick, folding crank
Lighting system	12V alternator
Air filtration	dry paper element
Clutch	multi-disc, wet
Primary drive	(2) single-row chain
Final drive	single-row chain
Gear ratios, overall: 1	
5th	4.70
4th	5.48
3rd	6.09
2nd	8.56
1st	12.52
Wheelbase, in.	56.9
Seat height, in.	32
Seat width, in.	10.5
Handlebar width, in.	24
Footpeg height, in.	13.5
Ground clearance, in.	6.7
Curb weight (w/half-tank fuel), lb.	524
Weight bias, front/rear, percent	48/52
Test weight (fuel and rider), lb.	679

TEST CONDITIONS

Air temperature, degrees F	59
Humidity, percent	71
Barometric pressure, in. hg.	29.69
Altitude above mean sea level, ft.	1632
Wind velocity, mph	5-7
Strip alignment, relative wind:	



PERFORMANCE

Top speed (actual @ 7250 rpm), mph	121
Computed top speed in gears (@ 8500 rpm), mph:	
5th	142
4th	122
3rd	110
2nd	93
1st	55
Mph/1000 rpm, top gear	16.7
Engine revolutions/mile, top gear	3600
Piston speed (@ 8500 rpm), ft./min.	2848
Lb./hp (160-lb. rider)	N.A.
Fuel consumption, mpg	46
Speedometer error:	
50 mph indicated, actually	49
60 mph indicated, actually	59
70 mph indicated, actually	69
Braking distance:	
from 30 mph, ft.	34
from 60 mph, ft.	138
Acceleration, zero to:	
30 mph, sec.	2.8
40 mph, sec.	3.5
50 mph, sec.	4.2
60 mph, sec.	5.4
70 mph, sec.	7.0
80 mph, sec.	7.9
90 mph, sec.	9.8
100 mph, sec.	13.4
Standing one-eighth mile, sec.	8.19
terminal speed, mph	82.71
Standing one-quarter mile, sec.	13.46
terminal speed, mph	100.22

