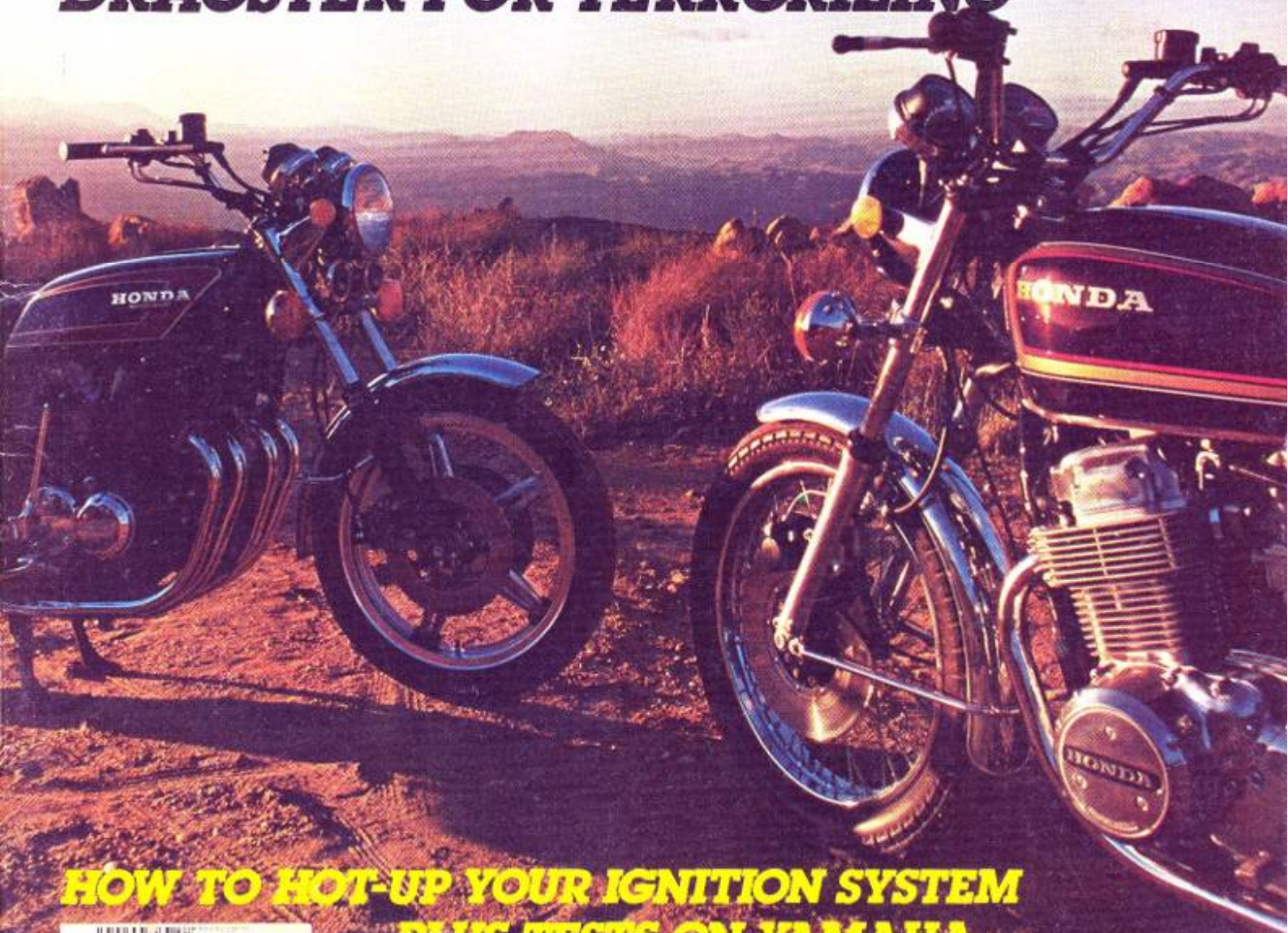


# Cycle

APRIL 1977 • 75 CENTS

**THREE HONDA SPECIALISTS:  
CB750 F2 FOR TEARING, CB750 K  
FOR TOURING, DOUBLE-ENGINE  
DRAGSTER FOR TERRORIZING**



**HOW TO HOT-UP YOUR IGNITION SYSTEM  
PLUS TESTS ON YAMAHA  
XS750 2D AND HUSQVARNA  
250 CROSS COUNTRY**





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This Month's Cover: You could call it "found art." Whilst meandering through the ruins of the camp of Alaric of the Goth, sacker of Rome and brother of Visi Goth, super-snapper Bluro P. Bottomoon found this month's cover etching attached with Elmer's Glue-All to the back-side of Alaric's favorite battle shield. "Now that's what I call action-packed yet curiously restrained!" enthused Cycle's Art Director.

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The  
R.C. Engineering  
Double-Engined,  
Fuel-Injected,  
Supercharged  
**Extravaganzamatron**



*One Russ Collins, two 970cc  
Honda Fours, one GMC blower,  
a two-speed B&J transmission  
and enough exotic hardware to  
fill an aerospace parts store.*

*By Gordon Jennings*

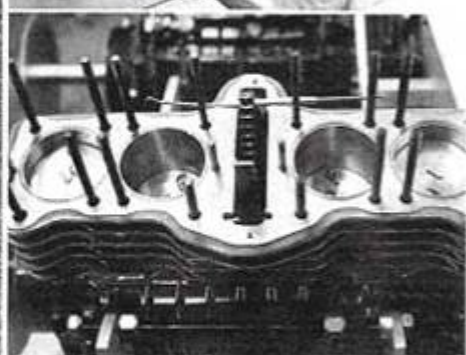
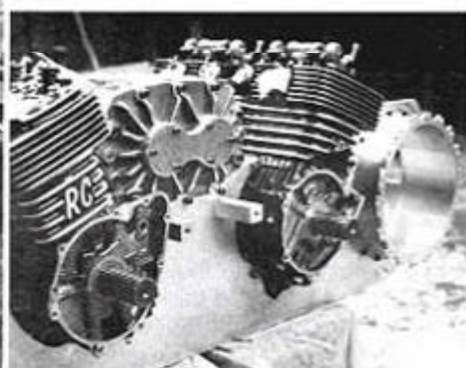
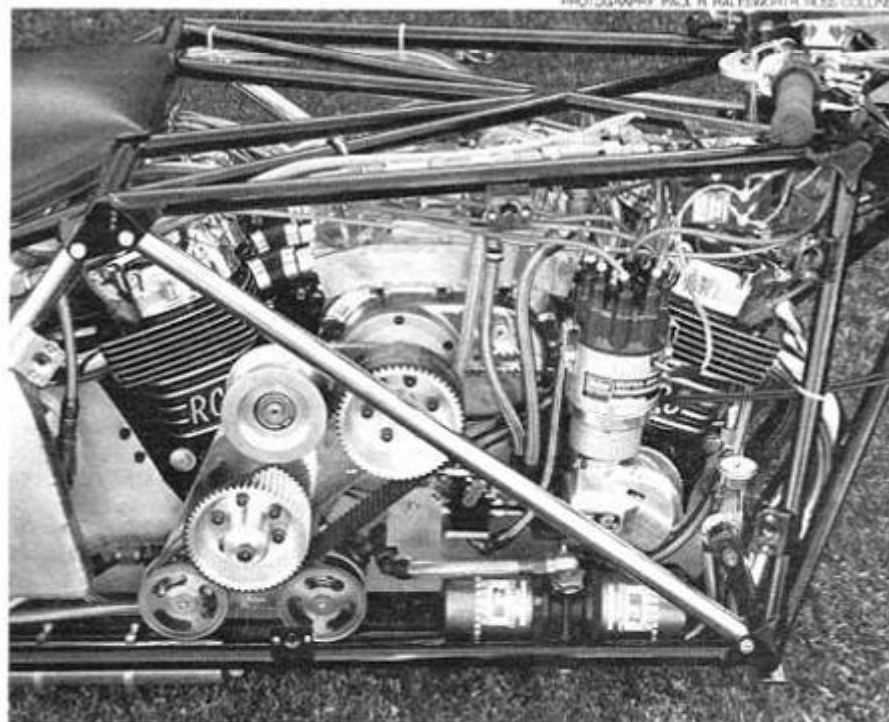
In Hollywood there's a private club for magic buffs that includes among its several diversions a wonderful, circa-1880 antique called an "orchestration," which is a kind of mechanical MacNamara's Band. This device was the 19th century's answer to the juke box, but greatly differs from the modern version in being built to Brobdignagian scale and in having within its glass walls a mechanism that combines the artifice of the early industrial revolution with the complexity of Byzantium in full, ornate flower. Even in silent, musty repose the orchestration is an arresting sight and when activated it becomes a mind-boggler. You drop a coin in a slot and, with a wracking shudder, the machine bolts into frenzied motion: an electric motor old enough to have powered a ventilator fan on Noah's Arc yanks at a leather belt, which drives an air pump and reduction gears that crank a broad, perforated strip of paper between two rollers. The paper is dragged across the top of a small table, the underside of which sprouts a thicket of hoses that snake away through the maze of struts, pillars

and beams comprising the machine's underpinnings. Individual hoses ultimately make connection with the orchestration's numerous miniature bellows, each of which is in turn connected by means of levers, links, shafts, bellcranks, walking-beams and rockers to the plectrums and hammers of its stringed and percussion instruments, and with the valves of a woodwind section. And when all this machinery begins its flailing away you hear a banjo, violins, horns that toot, drums that bang, cymbals that clang, and tinny arpeggios from an unseen pianist. It's music, if you please, but what you hear is not even a tenth of the entertainment. For the orchestration is something to be watched, not heard, and the quality of its musical performance must have been no more than a peripheral consideration at the time of its creation. More than anything else, it exists simply to demonstrate that its existence was possible.

● IN GARDENA, R. C. ENGINEERING MAKES performance hardware for motorcycles and the firm's owner, Russ Collins, creates imaginative entertainments in the

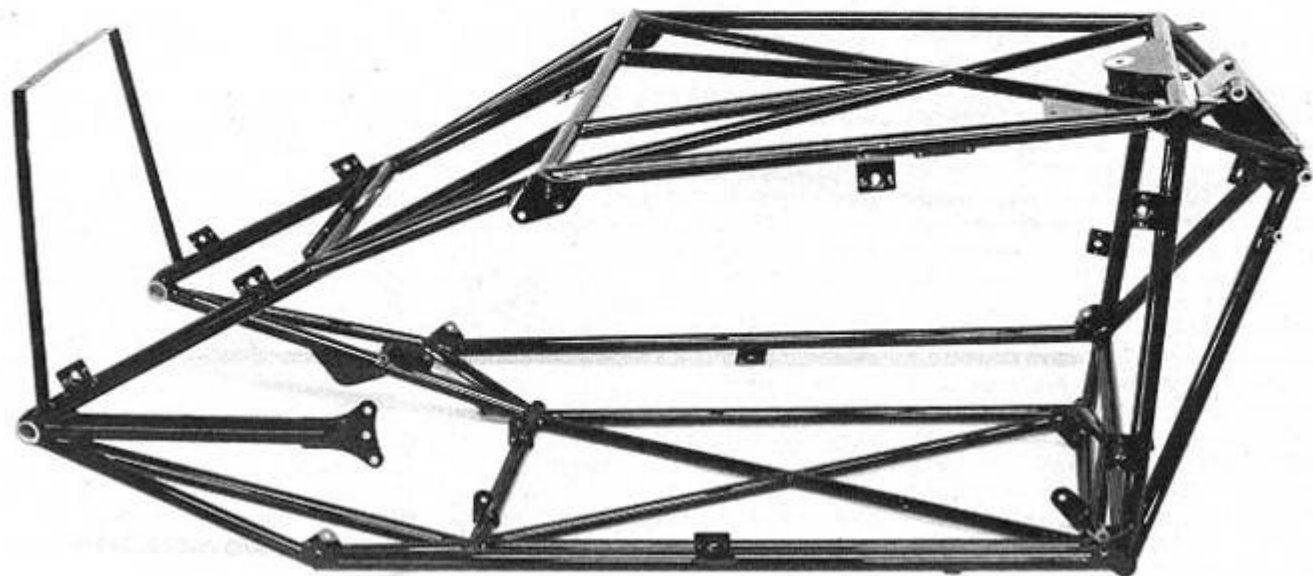
form of Top Fuel drag racing bikes. Russ is the man who brought you the triple-Honda fueler featured on *Cycle's* February, 1976, cover—and who reduced the monster to a \$30,000 scattering of rubble last summer in a spectacular crash at Akron. Collins himself suffered enough damage in that 170 mph get-off to emerge from the experience with a body that looks like a surgeon's sampler, and he could be excused for retiring from Top Fuel quarter-miling. Surprisingly, neither Russ' nerve nor his eagerness to embrace hyper-horsepower complexity have faltered, and he's making a 1977 comeback with the incredible machine presented here. This new R. C. Engineering bike has not, as this is written, been to a drag strip and is so recently completed that Russ hasn't even given it a name. He'll probably just call it the R. C. Engineering Blown Double; we've looked it over pretty carefully, thought about the implications of what we've seen, and we're prepared to suggest something more to the point: we think Russ should call his new machine the "Extravaganzamatron." (Continued)

PHOTOGRAPHY BY PAUL R. HALEWORTH (RACE COLLINS)



Divided chores: engine-one has the eight-cylinder magneto; number-two drives the blower. Special R. C. cylinder blocks are used to cope with a big overbore, nitro, and manifold boost pressures up to 30 psi. Toothed belts drive the blower and oil and fuel pumps lurk below the second Honda engine.

*You can see aircraft and funny-car inspiration in this all-straight-tubes frame designed and built for the blown double by car specialist Don Long.*



Collins says he's not going to run his new Top Fueler at every strip in the country; that it will make only a few special appearances. We've not even heard the bike's two engines running, but we can assure you that its appearances will be special. We can see it in our mind's eye: Russ' crew straining to shove nearly ten feet of motorcycle into the staging area while Russ stalks along beside his creation, resplendent in red, white and blue Joseph's-Coat leathers. If you're there your senses will be grand-slammed not merely by the machine's sheer size but by its massive richness of detail, a visual symphony of tooled aluminum wreathed in braided-sheath aircraft hoses and surrounded by the triangulations of a steel tube frame seemingly sprung from the loins of a NASA moon-lander.

Then Russ will climb aboard, stretching prone to grasp the handlebar, and the crew will wrestle the heavy electric starting motor into position, slipping its splined nose into engagement with the rearmost primary-reduction sprocket and getting the starter's end-plate locked into a set of quick-release dogs. This done they'll signal Russ that all is ready, he'll nod, and the oversize starter will be energized to set all

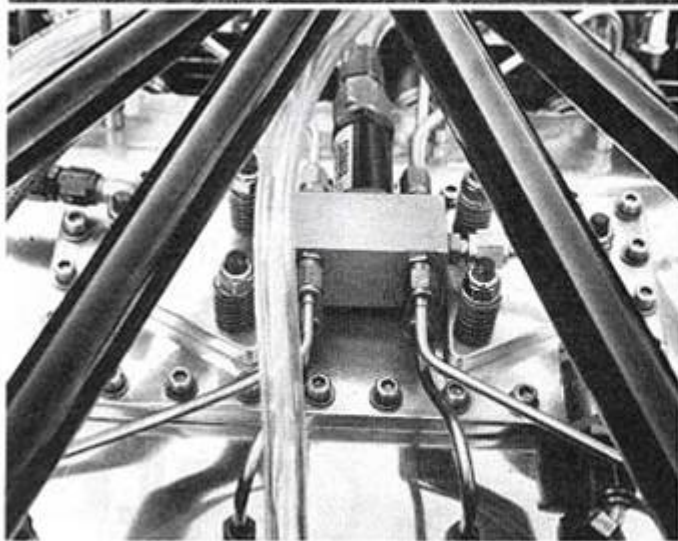
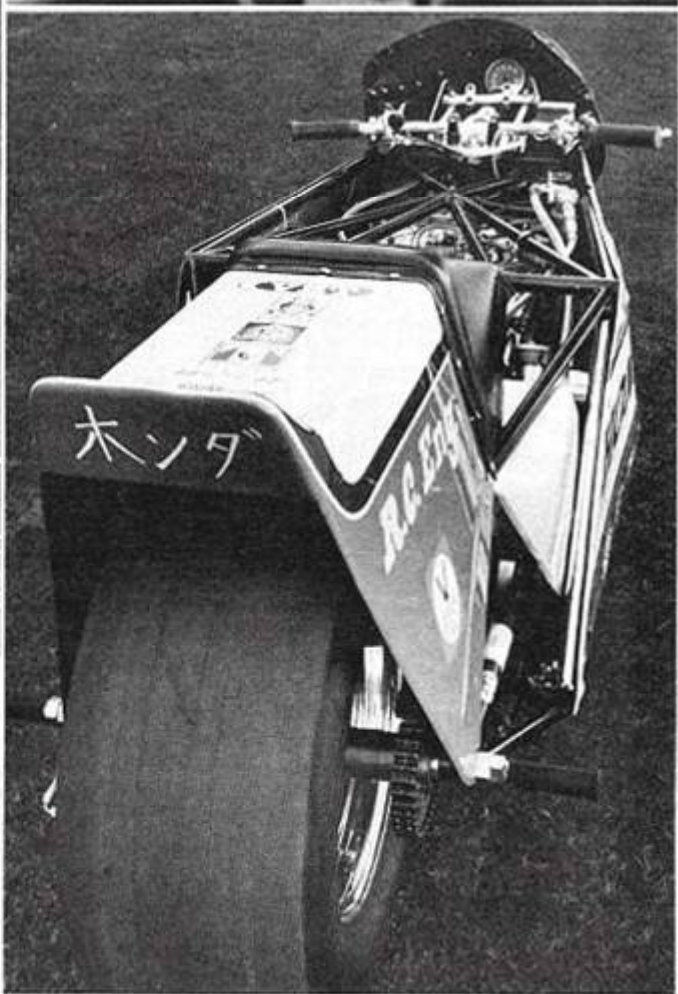
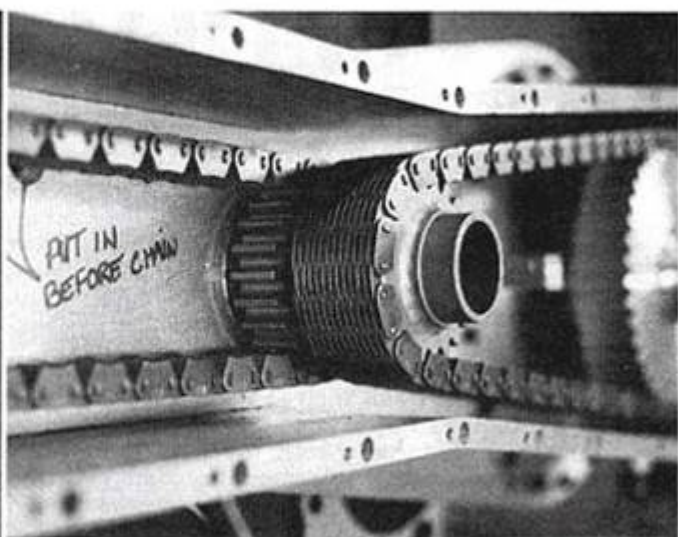
the machinery in motion: two wide Hy-Vo chains and four sprockets; two cranks and eight pistons; oil pressure and scavenging drives, with their pulleys and toothed belts; a supercharger and its drive; the drive to a fuel pump, with *more* pulleys and belts. Rockers will rock and shafts will spin and a special, pressurized start-up tank will force gasoline up into the labyrinthine fuel-injection system. Russ will brace himself, visibly, then crack the throttle a bit to clear air from the injection lines, and flick the magneto into action. There'll be stand-rattling coughs and barks from the eight straight pipes, the engines will begin to fire more regularly, and as they gather speed the suddenly more active fuel pump will drive a flow of heavy, sullen and frighteningly-potent methanol and nitromethane mixture into the injection galleries to displace the gasoline. Manifold pressure will rise as the supercharger's figure-eight rotors churn faster, and you'll hear the eerie, chest-hammering thunder of a force-fed fueler getting itself awake and warming to its improbable task.

While all the above is underway, Russ' crew will be busy buttoning the machine's side panels into place, and his opponent

will be waiting. Waiting to see if all the unrestrained vision, all the hours on the milling machine and lathe, all the planning and plotting, all the *money*, will amount to anything a quarter-mile away where the E. T. lights are doing their own insentient waiting. And Russ will be psyching himself for the effort that will make all the earlier effort worthwhile, rehearsing the sequence in his mind: wondering about slick spots on the strip, trying to pre-judge how much throttle to use for the launch, how soon to start thinking about punching the button that will shift the two-speed transmission and light the monster's second stage. And then, after the obligatory tire-warming burnout, the wink of the lights on the tree marching downward to green, Russ will set all that machinery into a fury and in about eight seconds everyone will know—and only Philistines will care, because win, lose or scatter, it's going to be one of this tired earth's great shows. Even standing silent, in glistening display, the R. C. Engineering Blown Double is pure entertainment. It has only to exist to lift the top of a machinery-freak's conical skull, and its existence is justified simply by its demonstration that its existence is possible. ●

## Extravaganzamaton

The fueler draws its air from beneath the fairing, and feeds its power through two Morse Hy-Vo chains on sprockets held in separate support bearings.



Nitro is distributed to eight nozzles from this block on the 3-71 GMC blower's plenum box. Japanese characters on the bike's tail just say "Honda."