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QUARTER SCALE V-8



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SMALL WONDER

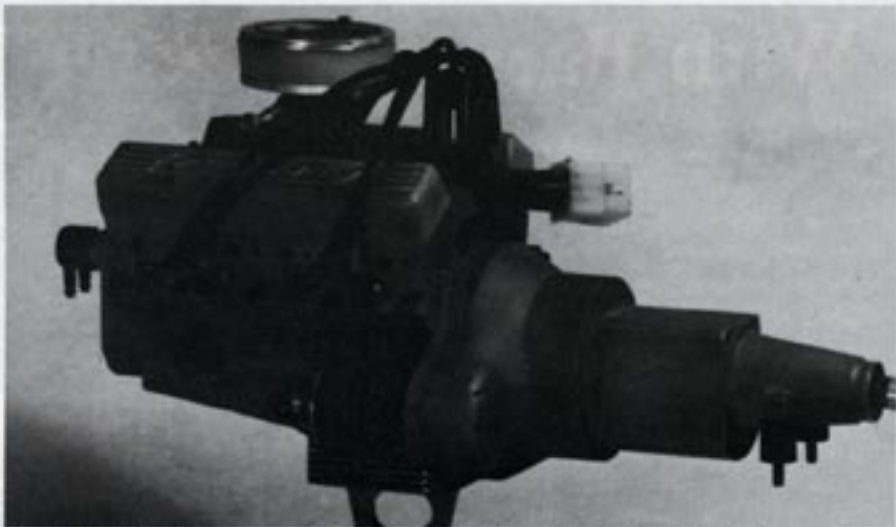
Gary Conley's quarter-scale V8 is a real gem

BY RICHARD DOWDY

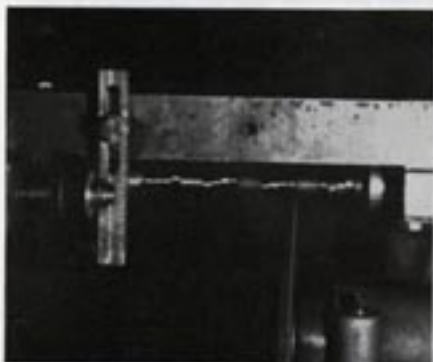
When you first get a look at Gary Conley's incredible quarter-scale V-8 small block engine, you think, "Well, it's pretty neat, but I've seen more detailed scale engines before." Then someone tells you that this all-aluminum engine runs, and you gasp. Once you hear it fire up, started by an on-board electric starter, the first thing that crosses your lips is "unbelievable!" followed closely by "outrageous!" or other exclamations.

Yes, this exquisite piece of machinery not only runs, but it powers such hot quarter-scale vehicles as the Butch Leal Trans Am Pro Stocker shown here, as well as dragsters, Gary Conley's own '32 Ford roadster, and just about any other Q-scale machine someone would want to stuff it in.

This 3 cubic inch, water-cooled engine has a 9.5:1 compression ratio, a solid lifter cam, and weighs 4.5 pounds. It generates about 2.2 horsepower at 11,000 rpm, and idles at between 1800 to 2000 rpm. The



Conley's small wonder measures 5 inches long, 6.5 inches tall, and when fitted with the nonfunctional transmission and bell housing, its length is 13 inches.

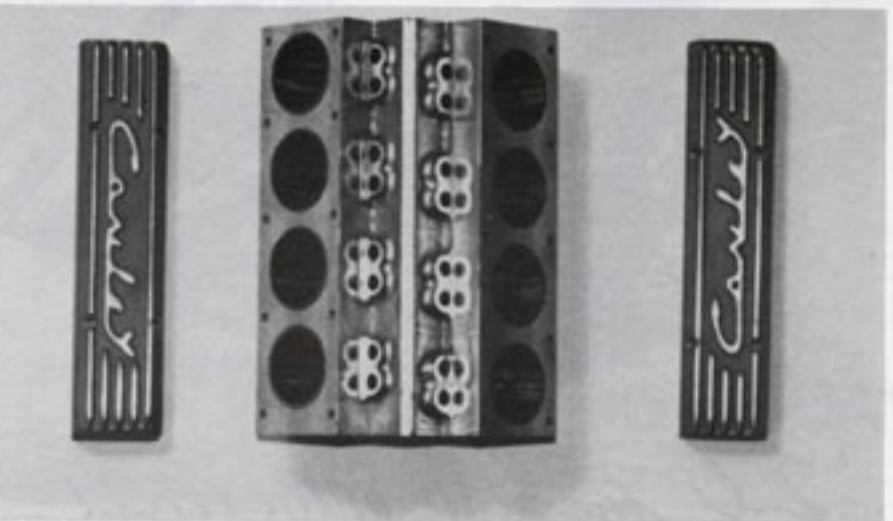
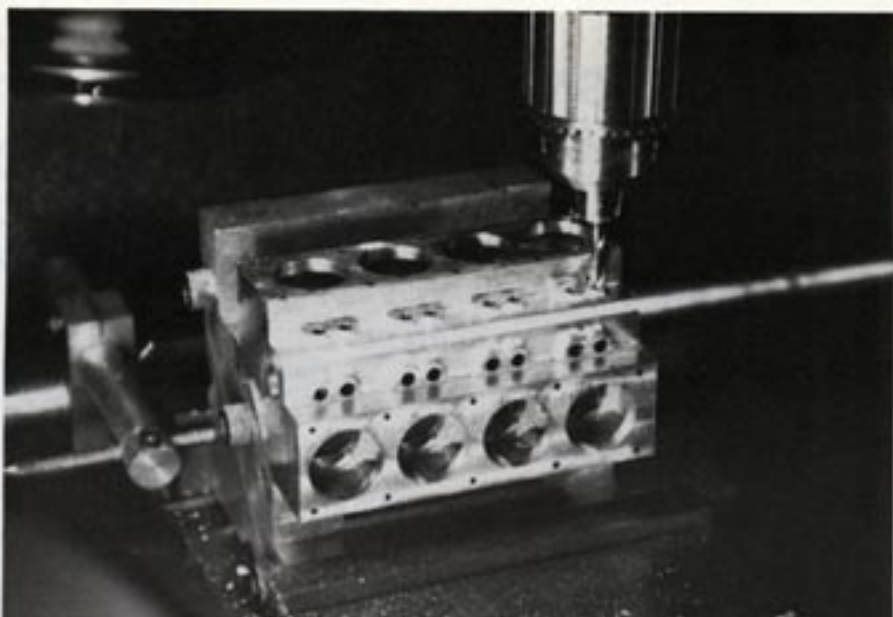


The machining process at Conley Engines involves typical machine shop tools and operations that produce full-size engines. The kit arrives with all parts milled and ready for assembly by the modeler.

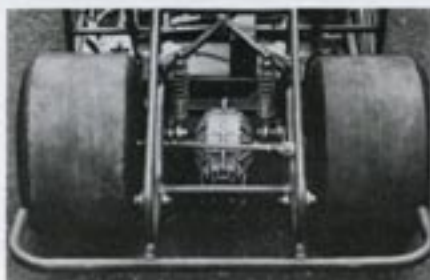
engine measures 5 inches long, 6.5 inches tall, and measures a total of 13 inches in length when fitted with the nonfunctional tranny and bell housing.

The Conley V-8 also features an electric starter, a runner-style cast aluminum intake manifold, a precision-ground camshaft, a carburetor with an air cleaner, rubber motor mounts, a functional water pump, and a centrifugal clutch that kicks in at approximately 2500 rpm.

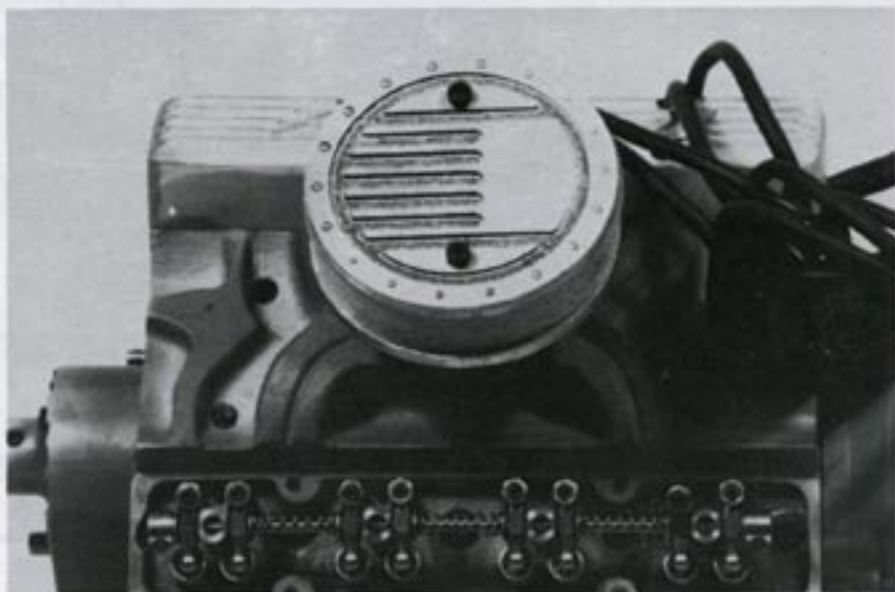
The replica 4-speed transmission serves as a ball-bearing support for the clutch bell and universal joint. Custom-designed electronic glow plug drivers, using a "Y" harness from the receiver, allow the glow plugs to be turned on and off from the transmitter.



The finished block and valve covers as the customer receives them. The company's finishing work is flawless.



The Pontiac Trans Am with the Conley V-8 mounted is a potent package. The short block, with Walbro carb, is watercooled. Note the SECO quick-change rear end; functional and scale-like, it's a perfect match for the Conley engine.



The engine's miniature timing gears connect the crankshaft to the camshaft, which in turn operates the valve lifters and pushrods to open the valves, just as in a full-size powerplant. The cylinder heads utilize a complete working valve train, with siamese ports, wet cylinder liners, shaft rocker arm assembly, and solid lifters. The crankshaft is supported by five main ball bearings, and the intake manifold and pan are reversible, just in case someone wants to more closely duplicate a Ford engine instead of a small block Chevy. The rods are machined from 2024 T6 bar stock, and each piston has one compression ring that allows enough blowby to adequately lube the rod and main bearings.

For engine lovers, or those who simply appreciate the skill and genius that goes into not only the creation, but the running of one of these delights, there is a way you can get one for your very own. First, start saving your pennies! (You didn't think a jewel like this was going to go cheap, did you?) You can order a kit directly from Gary Conley, by sending a deposit of \$500, and allowing from four to six weeks for delivery. The total price for a Conley V-8 is \$1695. What you get are all the machined components mentioned here, ready for assembly. Gary tells us that the only tools needed are hand tools, meaning no machining or lathe work is necessary

to get your Q-scale V-8 together and ready to fire up.

Then the only decision facing you is what to put it in, and with an ever-growing selection of quarter-scale cars, dragsters, funny cars, sprinters, Grand National chassis, and so on, that could be the most difficult thing for you to figure out.

Future projects from Conley Engines include a working transmission, with forward and reverse, plus there's talk of a super-charger becoming available.

When you pair the fabulous Conley V-8 with one of the late Jack Skellenger's precision SECO quick-change rear ends, and drop them into a quarter-scale car of your choice, you'll have a running combination that will be the envy of everyone who hears it fire up and sees it make a few laps at the track. We've heard of people who have bought and assembled the engine kit and then simply put on a shelf to admire. That would be a shame, as this one of a kind engine is meant to be run, and run it does!

If you want further information, or to order your V-8, contact Gary Conley at G.L. Conley Engines, 825 Duane St., Glen Ellyn, Illinois 60137, (708) 858-3190. SECO's quick-change rear axle is available from SECO, 2329 S. Otis, Santa Ana, California 92704, (714) 549-1556.

CONLEY SHORT BLOCK V-8

ENGINE SPECIFICATIONS

Type	Conley OHV 90-degree V-8
Bore & Stroke	.875 x .625 inch
Displacement	3 cid, 50cc
Compression Ratio	9.5:1
HP, SAE Net @ rpm	2.2+ @ 11,000
Torque, SAE Net @ rpm	@ 1600
Induction System	1 bbl Walbro Carburetor

PONTIAC PRO STOCK TRANS AM

Front Suspension	Independent control arms w/coil-overs
Rear Suspension	5-link with Salisbury axle
Steering	Radio control servo
Brakes	Radio control servos
Wheels	4x3-inch aluminum wheels
Tires	Front: 5x4-inch standard Rear: 8x4-inch slicks

Available from: New Era Models, 25 Main St., Nashua, NH 03060.