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# HOT ROD

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MERCURY COMET 1700 LB. SUPER-FUNNY CAR



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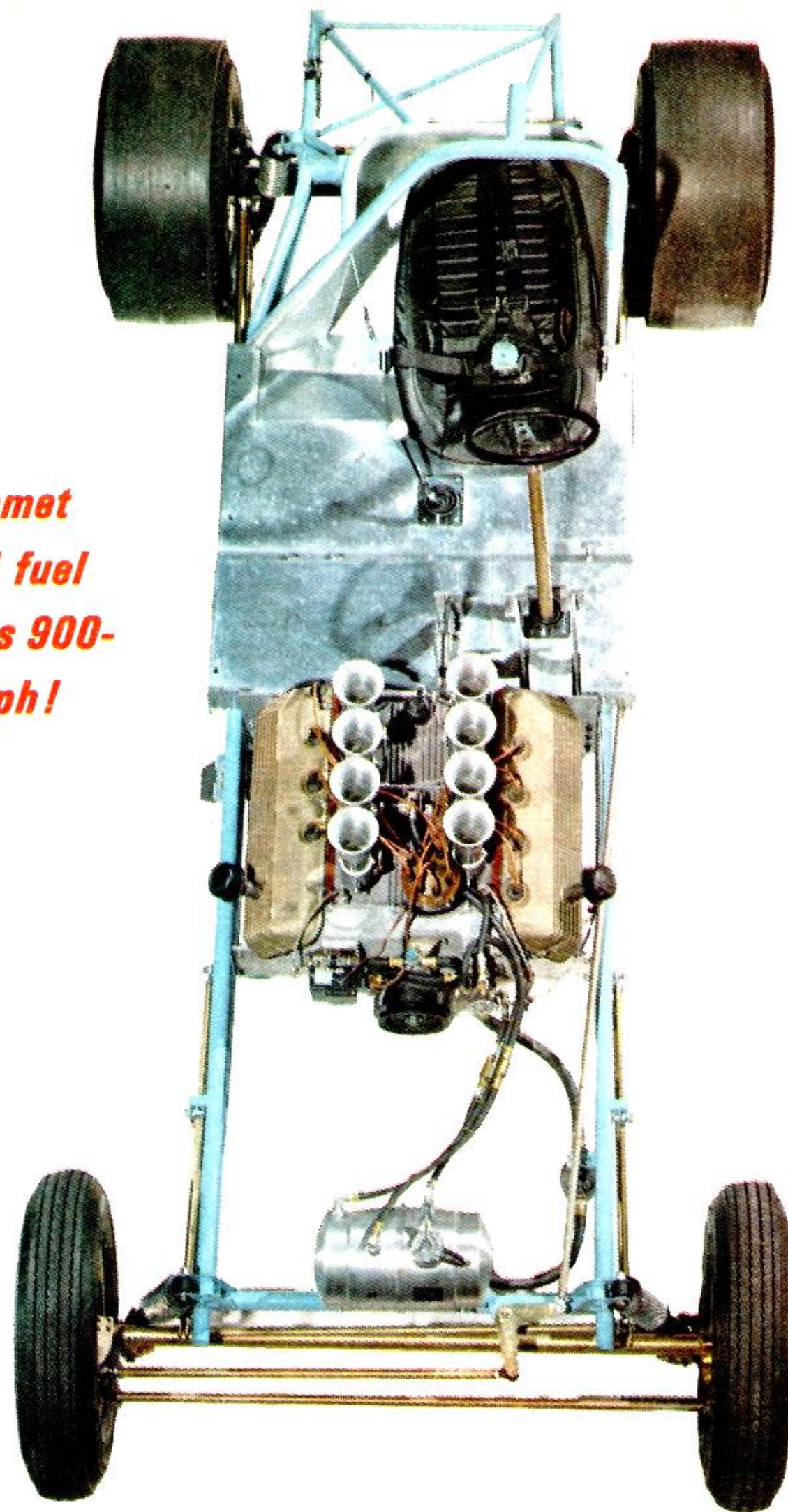


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*With a strong trend toward funny cars, Comet reaches for the ultimate with a 1700-pound fuel burner that looks like a standard sedan but has 900-plus horsepower and a potential of 175 mph!*

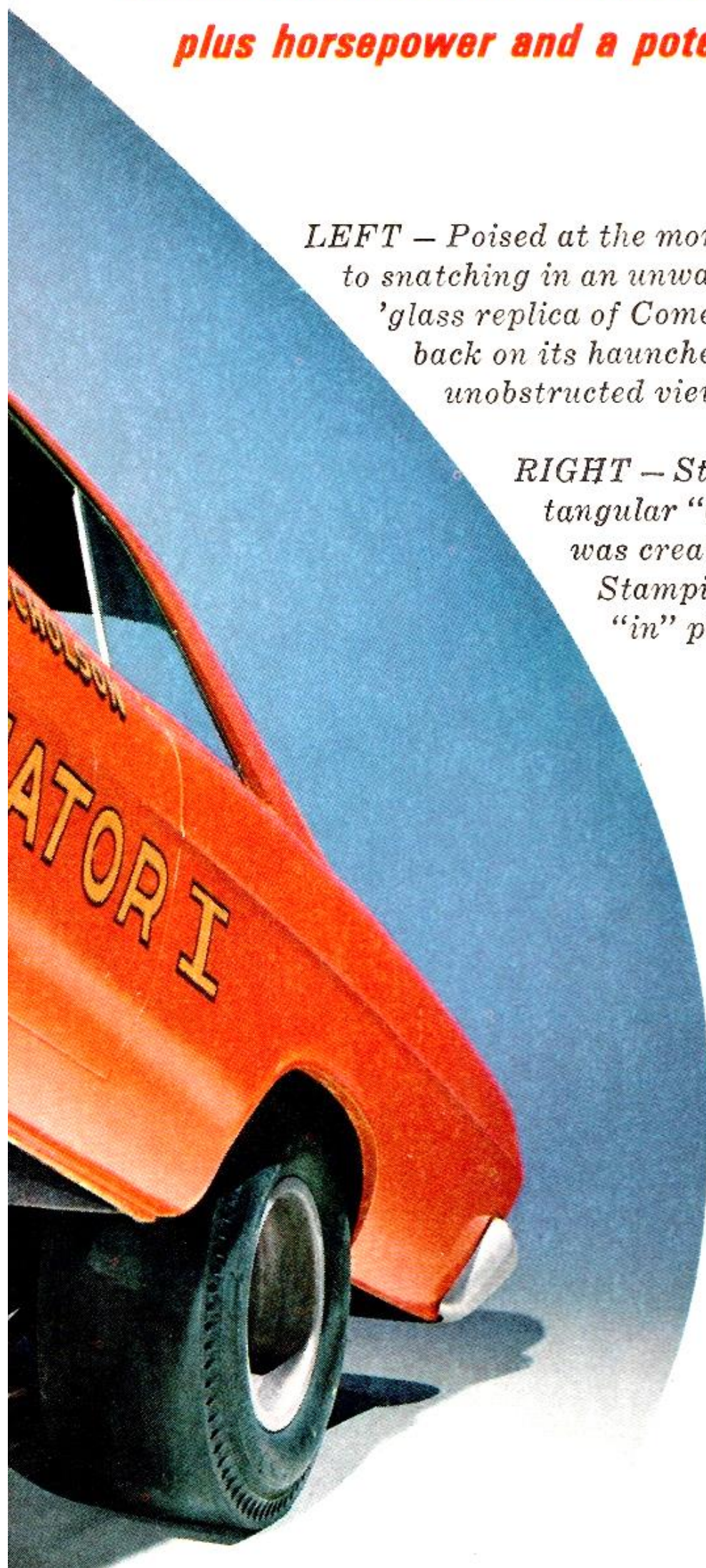
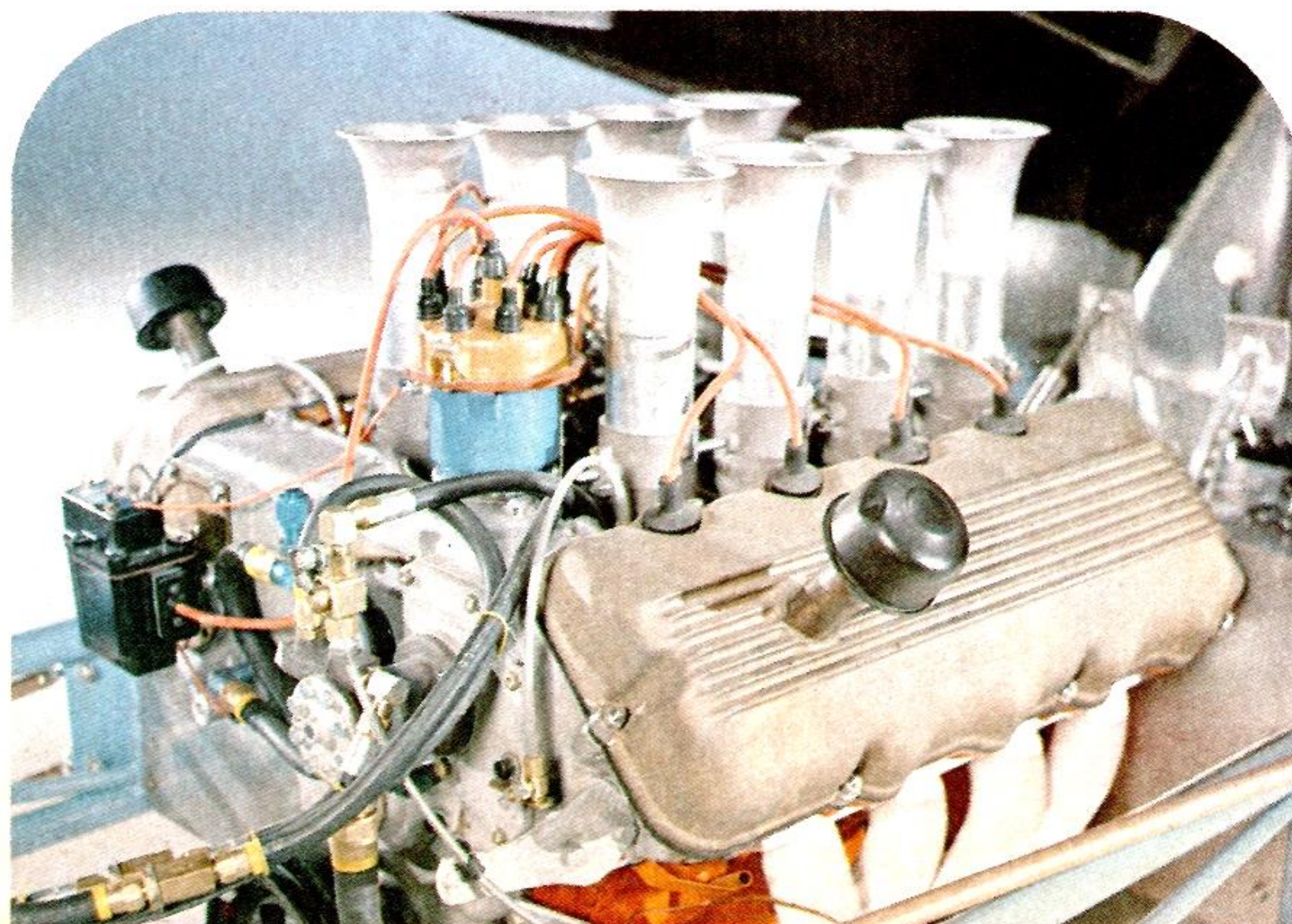
*LEFT – Poised at the moment prior to snatching in an unwary foe, 'glass replica of Comet shell pivots back on its haunches providing unobstructed view or access.*

*RIGHT – Study in rectangular "op" art was created by Logghe Stamping in Detroit, the "in" place for boss work.*

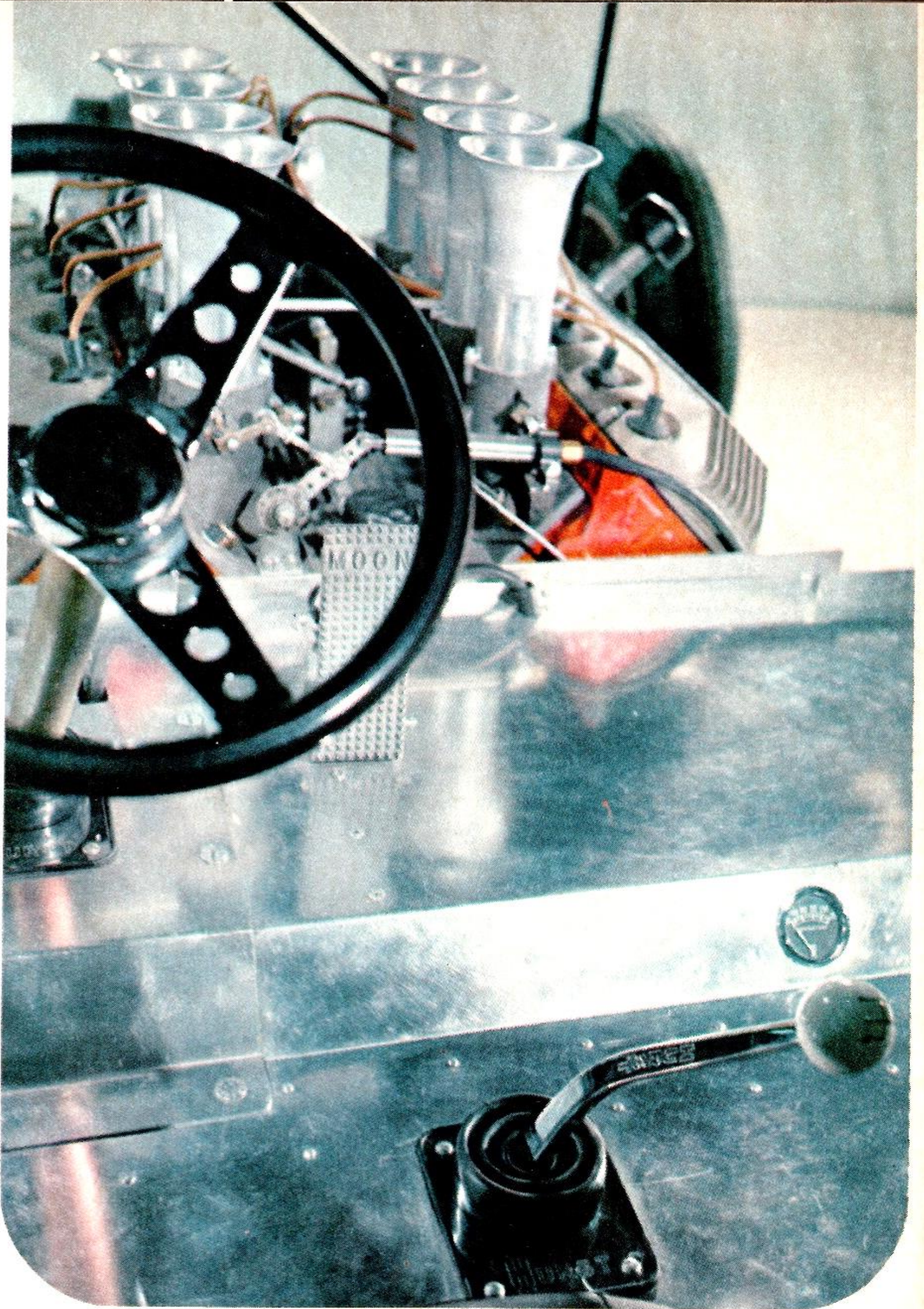
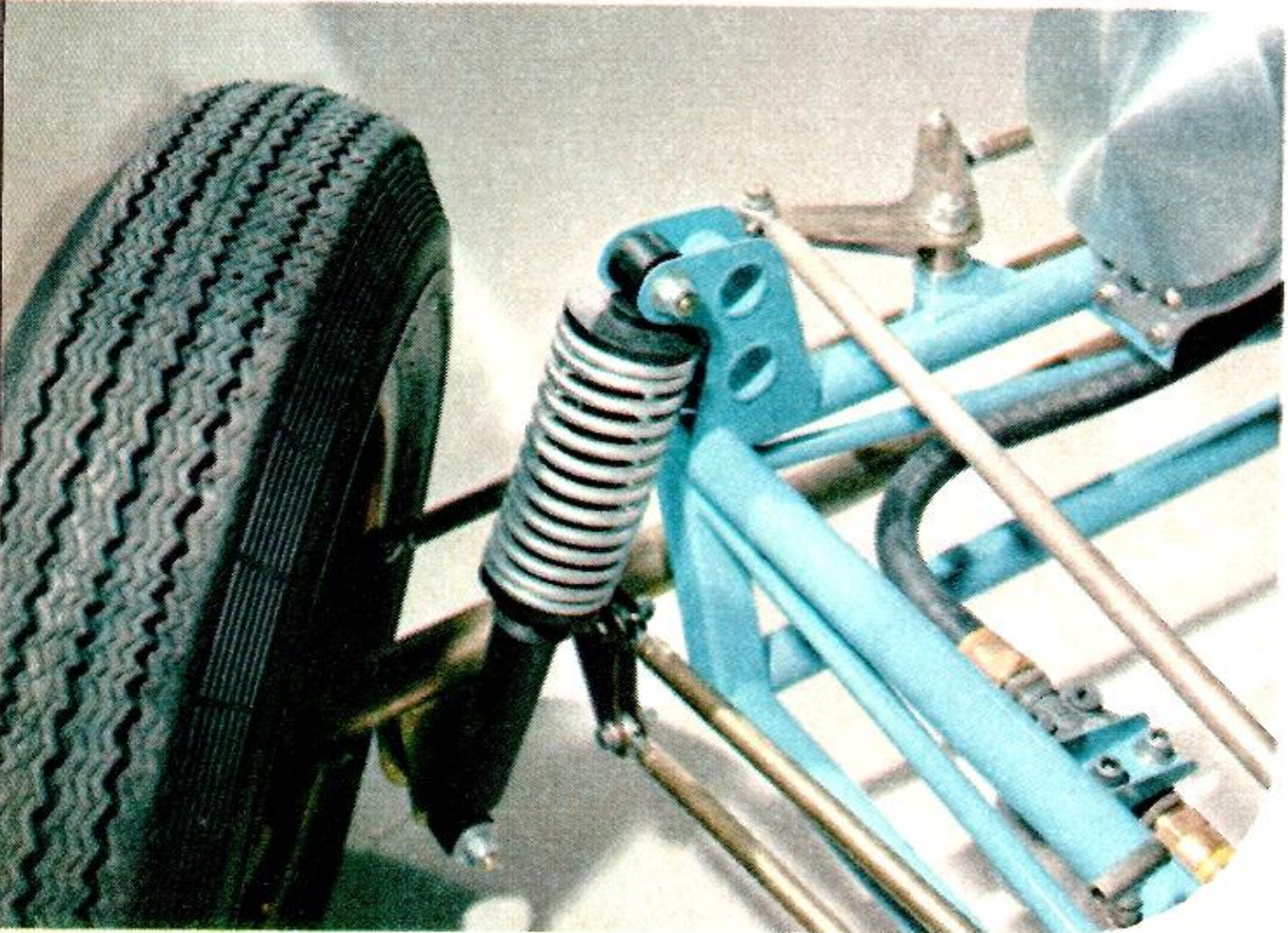
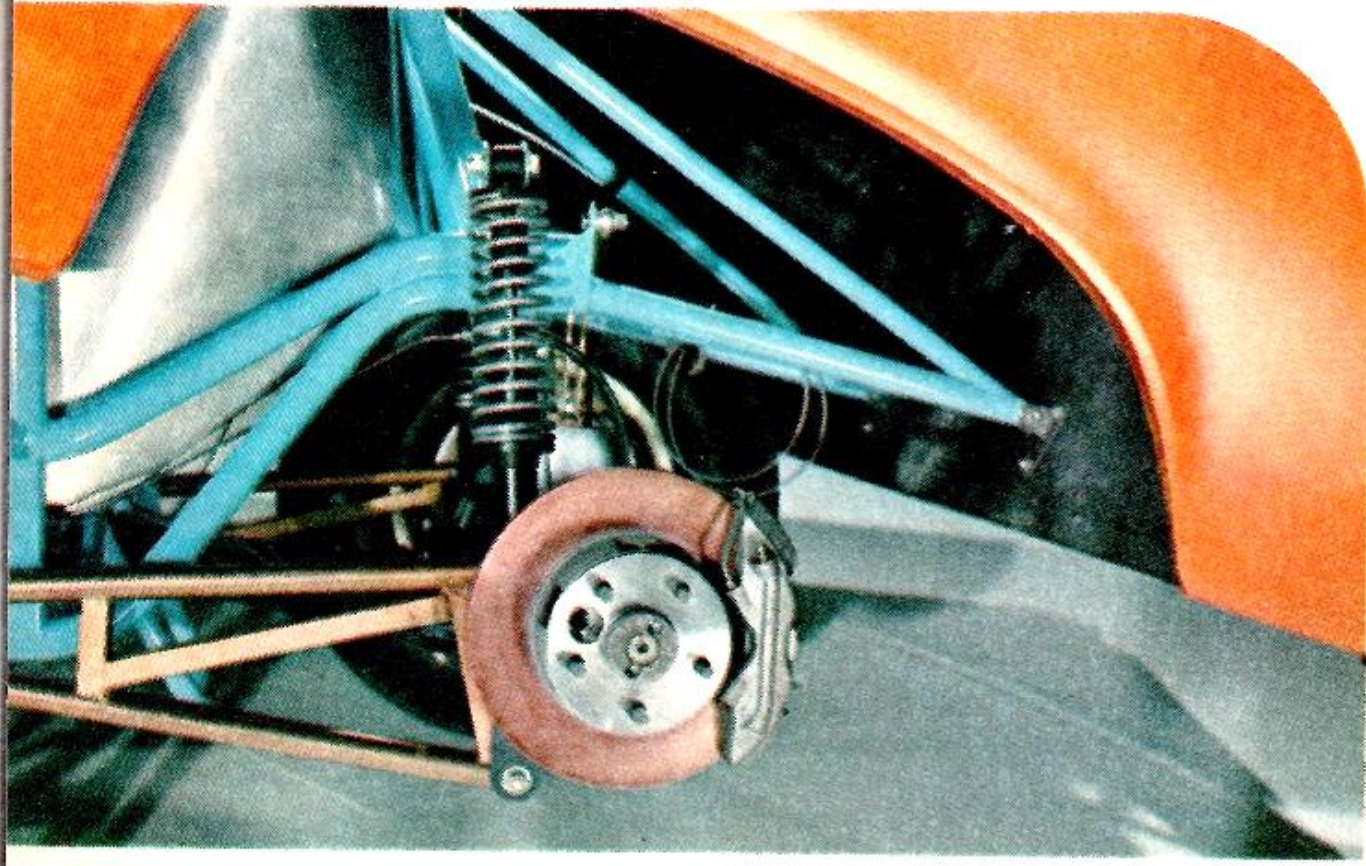


# **DRAGSTER IN DISGUISE**

*RIGHT – SOHC hemi sports Crane cams and Hilborn injectors developed with Lincoln Mercury engineers. 10:1 compression M/T pistons were used with Dykes type, Power-Loc rings.*



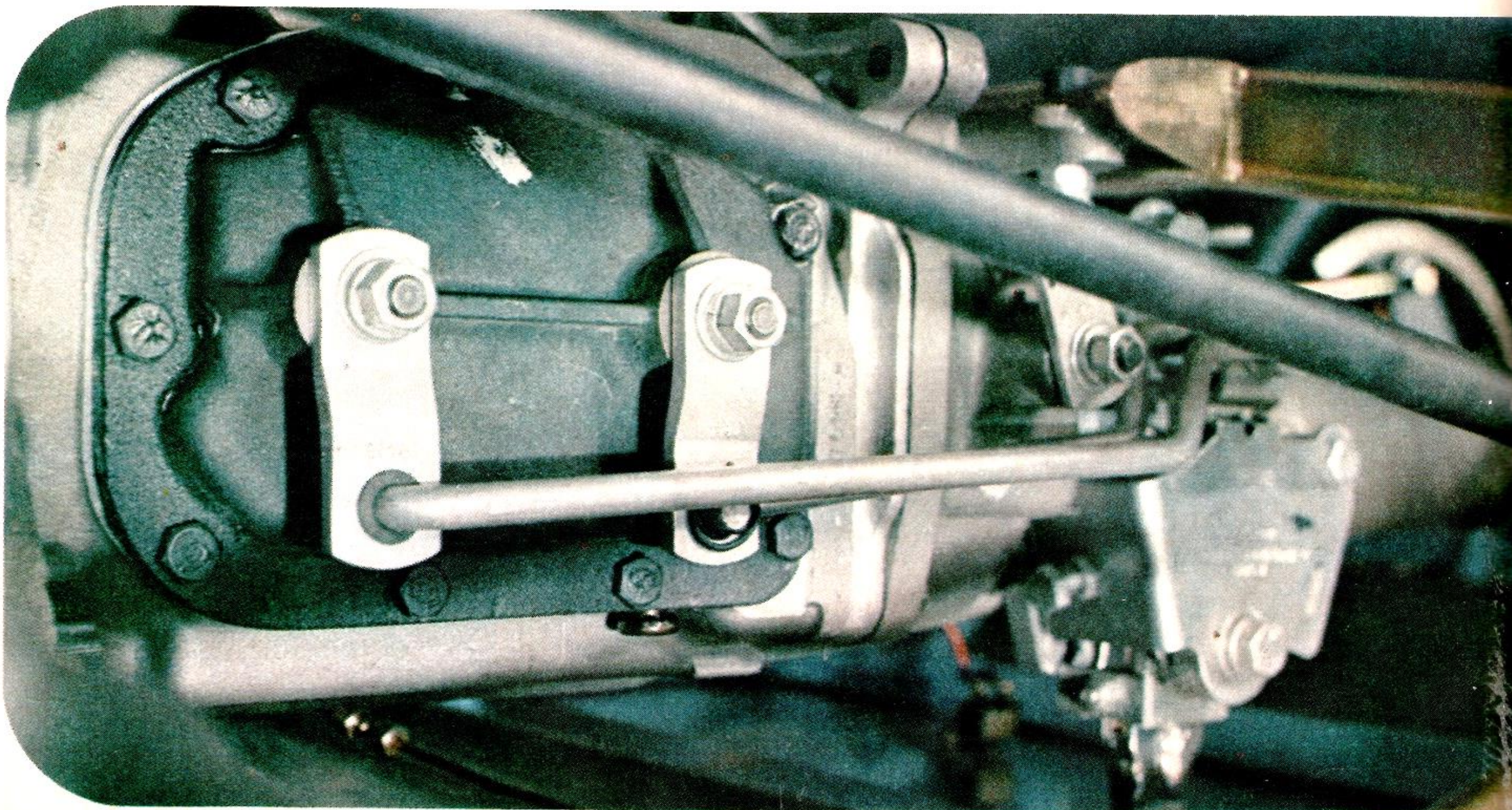
*RIGHT — Pale reflection in the .030-inch aluminum floor backdrops bold Covico steering wheel, forest of Hilborn tubes. Dead-sure shifts by Hurst.*



*At top we note method of locating "Daytona" type rear end assembly by 1 1/4-inch square tube composed traction truss. Long, curved calipers are Mustang-breed with beefed castings. Suspension is Autolite coil/shocks both front and rear.*

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**DRAFTER IN DISGUISE**



*Many transmissions will be called upon during initial phase of program to determine best one possible for 1683-pound car. Choices consist of experimental 2-speed auto, B-W T-10, Ford four-speed.*

Gamesmanship it's called; being one up on your competitor. It's practiced from the office of the highest to the lowest, but most of all it's a creative art in automobile racing. Take funny cars, for instance, or match-bash stockers or run-what-you-brungers or whatever else you want to call them. A scant 24 months ago, the stocker scene was almost serene. And then the boys began to run light, and then someone shoved his rear axle forward, and then injectors were added, and then blowers, and then alcohol, and nitro, and then. . . Mr. Norm went 8.63 in the quarter. That day the laughing stopped.

This meant war, deadly combat between Detroit and Dearborn. It was clear '66 would be the season of truth. The gang at Mercury was effectively put out of circle track competition in '65 because their big Mercs were too big and their compacts too compact, but they were looking good on the drag strip. In fact, they marched through some pretty formidable engagements behind headliners like "Dyno Don" Nicholson in the East and Jack Chrisman in the West and a new hot-shoe Eddie Schartman out of Ohio who was happily enhancing his reputation. Some said they were clearly "up" on the rest of the pack. But to remain there in '66 they knew there would be trouble in Drag-City if a new secret weapon wasn't forthcoming. So the Mercury men went out to Ron and Gene Logghe in Fraser, Michigan, (Logghe Stamping) and said, "Hey, guys, we need the wildest match race fleet ever built. But we don't want to be too obvious. Be subtle. Work up a Comet that from a distance looks almost stock — normal height, wheelbase where it belongs and like that."

And they did. Starting with 1½-inch x .049 wall chrome-moly main tubes, supplementary ¾-inch x .030 wall pieces and 1¼-inch x .030 wall square tube spreaders, the brothers came up with a 97-pound wonder. Which wasn't bad, because this included the 1⅞-inch x .125 wall roll cage. Keeping everything as uncomplicated as possible, a straight, 2½-inch heat-treated chrome-moly front axle (.125-inch wall) was fabricated and a pair of Logghe spindles added. Four parallel ¾-inch radius rods position the axle for the Autolite coil-shock units that suspend it. The drag link and tie rods are of like material and designed à la Ford I-beam axle to provide correct ackerman. Suspen-

sion at back duplicates the forward situation for the most part, only here a Watts link is used to position the rear end; a heavy-duty Merc with shortened tubes that put the slicks within the body shell. The axle carrier is a "Daytona-hybrid" that features a nodular iron casting in lieu of the regular grey iron. Another novel touch is that the differential has been fitted with a Detroit Automotive ratchet-type locking device and a 4.11 ratio standard (if indeed anything could be called standard on these cars), with others available. The third-member assembly also embodies a set of larger carrier bearings to take the gaff of hard service.

Although the Autolite coil-shock units in the rear appear identical to what's up front, they have a high resistance jounce control and low resistance rebound. This is to aid weight transfer which this car will need a lot of, since there will be no ballast hanging behind the rear axle. Traction bars are truss-type goodies fabricated from 1¼-inch square with .100-inch wall.

Axle shafts are shortened heavy-duty units with experimental Kelsey-Hayes Research and Development vented brake rotors (discs) fastened to the flanges. These particular rotors use a "Dye-packed" facing, sprayed on a specially-prepared aluminum rotor which is then baked to form a bond with the metal.

Calipers for these special rotors are Mustang-type but the casting is beefed a bit. Dual pistons per side actuate long curved spots with 11 square inches of lining total per wheel. This type of unit is extremely appropriate for dragster operation because of its fantastic stopping power, but the fact that aluminum tends to melt without adequate cool-downs between applications has generally kept the configuration off sports cars or the like. Regardless, the Comets will have a 12-foot Deist crossform chute on deck for primary stopping action.

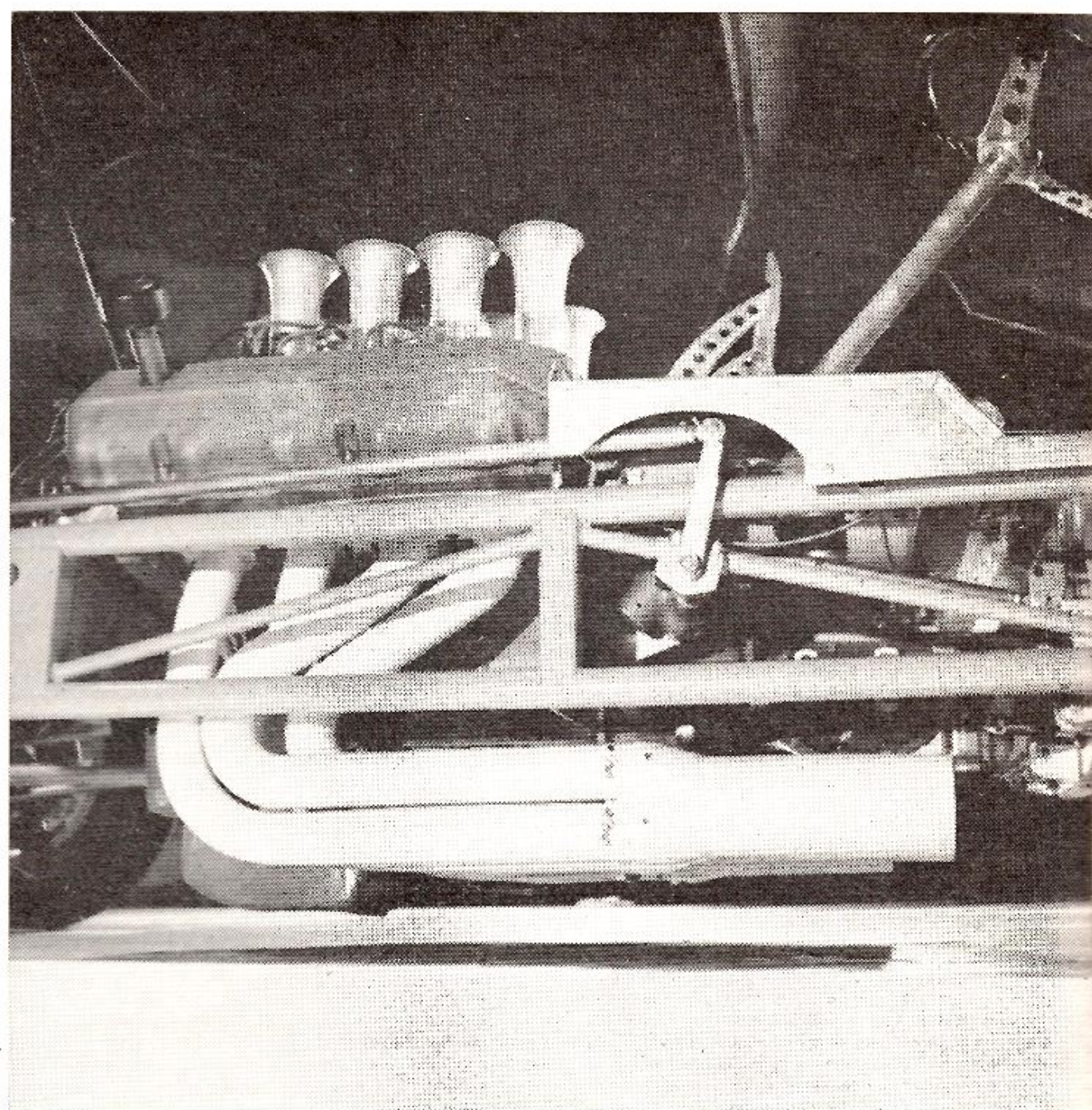
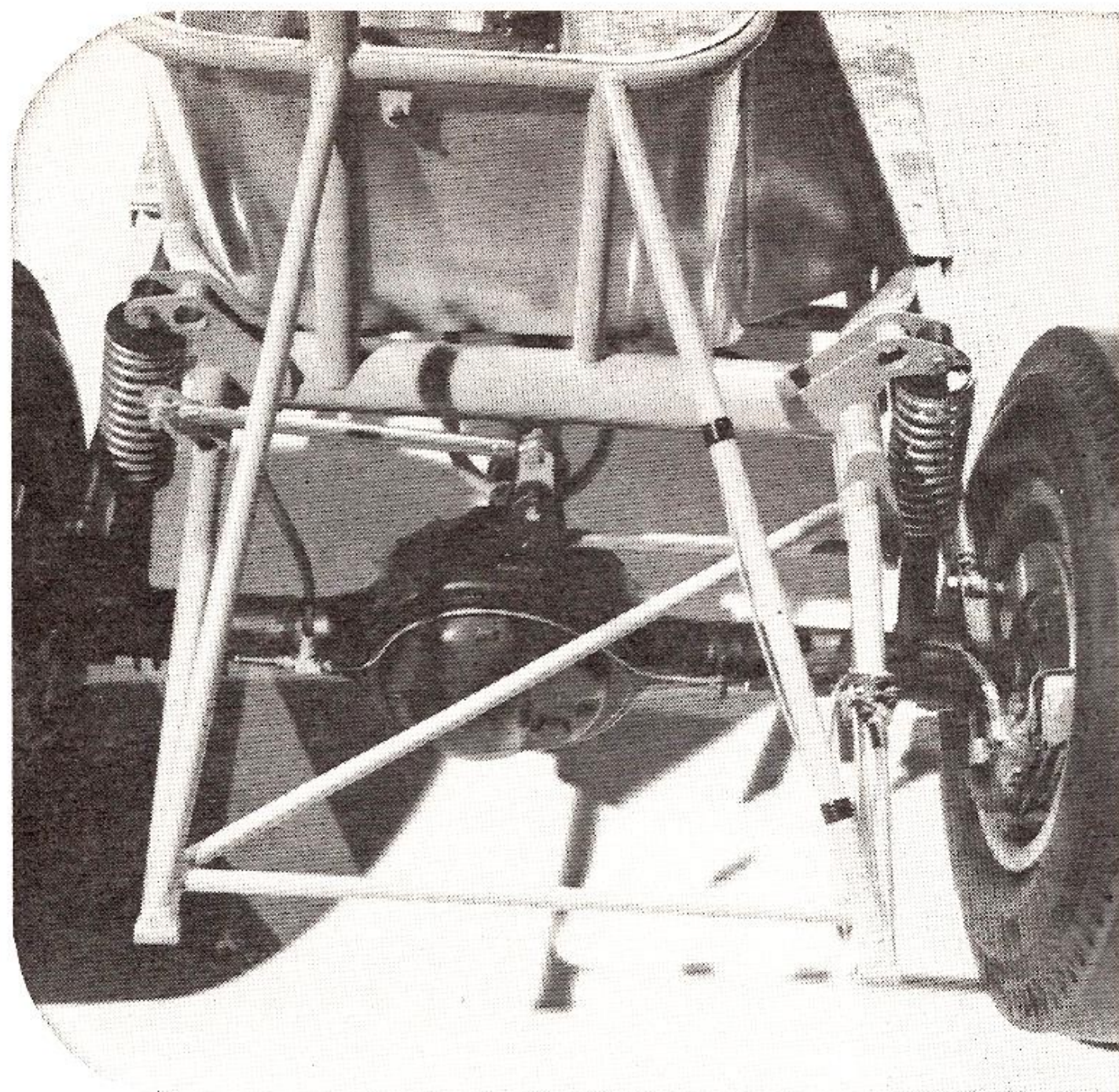
"Dyno Don" will be the recipient of the particular car under discussion here, and when he slips behind the wood-rimmed Covico wheel, there'll be a petite P&S steering box transmitting his commands at a 9:1 ratio to the nylon Goodyear 2-plys on Halibrand mags. As quitting time approaches, he'll use the Girling-design master cylinder under the brake handle made under license by Kelsey-

*(Continued on following page)*

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*Hazing 'em out of the gate, "Dyno" drops the hammer on the big M for the first time in Florida. Acceleration was so brutal that the oil in the pan stood almost straight against the sump. Baffling fixed this. Potential looks toward the eights.*



*To absorb strain of SOHC on 90%, if that's what it takes, big Daytona rear end is used. Suspension is totally under the control of Autolite coil/shock units. Watts link positions axle on rough strips. Lightweight in concept, steering just had to be the feathery P&S setup. Header system is composed of individual 32-inch runners, 12-inch collectors.*

Hayes. And to reduce lost motion, George Hurst has whipped up a positive shifter for that T-10 aluminum 4-speed (ratios 2.20, 1.43, 1.19) beneath the boards, a box that can be exchanged for an experimental 2-speed automatic or even one of Ford's own 4-speeds just by swapping tube crossmembers.

Push down on the aluminum clutch pedal and the mechanical linkage works into a Long dual-disc package that has two 10-inch discs, one with marcells to dampen the enthusiasm of engagement, and one without. The pressure plate coil springs carry a rather mild 1600-pound total load. The Long flywheel is nodular iron and working with it is a disc with an organic face, and if you put it all together in a basket - wheel, 2 discs, floater and pressure plate - and plopped it on the bathroom scale, it would weigh surprisingly scant 62 pounds.

As you probably anticipated, the engine for these buzz-bombs is the 427 SOHC model that has done such a magnificent job in the last year. Gradually, during the past season, injection began appearing on this unit, and now it's the first choice, a Hilborn assembly developed in conjunction with Lincoln-Mercury engineers. Other specialty items are the camshafts that were designed by Crane, and 10:1 M/T pistons that were selected for their Dykes-type Power-Loc rings. The SOHC compression ratio is usually pegged at 12:1 for gas, but because the cars are slated for 75% (nitro), the piston pin bores are raised slightly to lower the ratio. Connecting rods are the latest high-tensile forged steel models from Ford's Engine and Foundry Division. Touching off the conflagration every fourth stroke will be the Mallory Super-Mag, a unit able, we expect, to leap tall gaps at a single bound.

Collection point for escaping fumes is a set of equal length stainless steel headers that are in current vogue. Runners are 32 inches long (measured from the valve to the transition piece), gathering in a 4-inch-diameter, 12-inch-long collector. Kay Industries in Detroit is the outfit that makes these up, and if the name sounds vaguely familiar, it's only because they worked up the rope-winder's nightmare on the Indy Fords.

The master plan now outlines injectors and fuel for three of the cars and a blown injected version for Jack

Chrisman who has been running this kind of Comet all along. Despite the disparity of manufacturers, the supercharger will probably be a GMC 6-71 capped by a Hilborn "bug catcher" that incorporates port injection. Normally aspirated and puffed-up models alike will use the Moon-distributed Marbet hydraulic linkage.

Because it was just hopeless to try and trim down a steel Comet shell to the lightweight Mercury wanted, a 'glass job was struck by Plastigage Corporation in Jackson, Michigan, using an Engineering Styling model for the mold. The body is formed up in two pieces which meet at the belt line and are glued together. Total weight for a complete skin is 250 pounds with 1/8-inch side windows and 3/16-inch windshield and backlight installed. If this sounds a bit toward the pleasingly plump persuasion, one must remember that 5 glassed-plywood bulkheads are used for strength and 1/2-inch x .020 steel tubes for stiffening. Still, there seems to be some superfluous material about in the works because later bodies will weigh in at nearer 200 pounds. One other note of interest is that three of the drivers will have to limber up some because entrance and exit will be through the glassless driverside window, following long oval-track stock car precedent. Jack Chrisman's car, by contrast, will be a roadster which will compensate partially for the blower's additional weight.

Now the last statistics you'd probably like to see are the top speed and low e.t. that Don Nicholson's 1680-pound (dry) Pearl Tangerine (painted by Paul Shedlik, Taylor, Michigan) machine has run. Well, it hasn't - yet. L&M hopes that the injected Comets will pop easy 160's; and Chrisman's, 170 or more. Because the cars are to use the non-flex-i-wall 10.00 x 15 M&H's for bite and will not have a lot of ballast hanging behind the rear end, they will rely on low weight to get out of the gate. The chassis and engine weighs 1380 pounds, but as you can see by the photos, there are a few spots where some dieting could be done. Last season "Dyno Don" Nicholson was running 9.50-145 with consistency on 30% at 2200-2300 pounds. Given a slightly better engine on a bigger load in a 400-500-pound lighter car, he and the rest of the Comets ought to blaze a trail of 8.50's or 60's through many a summer afternoon's sky. And with blowers? Oh, wow - look out! ■ ■

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