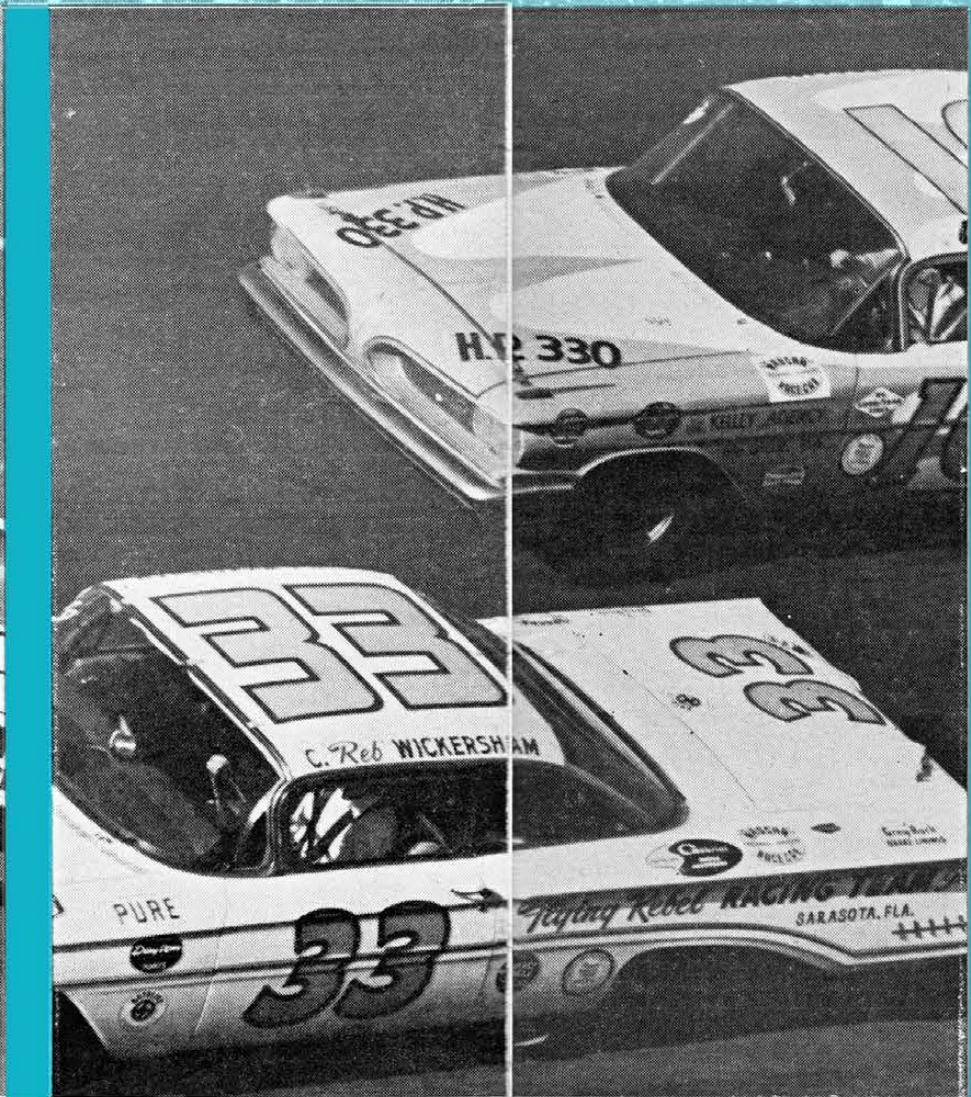


# STORMIN' STOCKERS!



**The crowd that goes to stock car races to see thrills, chills and spills is not disappointed. Thrills and chills are found in 150-mph speeds bumper-to-bumper and many spin-outs and crackups.**

BY WALT WORON

PHOTOS BY BOB D'OLIVO

**N**O MATTER WHAT an auto bug's specific interest might be, he could have found something to make his blood race faster during the two-week Daytona Speedweeks. Besides the compact car and late-model races, it could have been the 100-lap Modified and Sportsman Race, in which no less than 37 cars were involved in one pile-up. It could have been night kart races or it might have been watching dragsters scorch the quarter-mile strip nightly at speeds up to 164 mph. It could have been the two-way flying-mile runs on the beach, dominated by Chrysler 300-Fs (led by Gregg

Ziegler at 144.927 mph), Chevies (led by Harry Perry at 136.208 mph) and a Latham-blown '58 Pontiac coaxed by Vicki Wood over the bumpy sand to the highest speed this year of 150.375 mph. It could have been watching Jim Rathmann's twin-engine '59 Chevy tire test car easily cruise the tri-oval at 150-mph-plus.

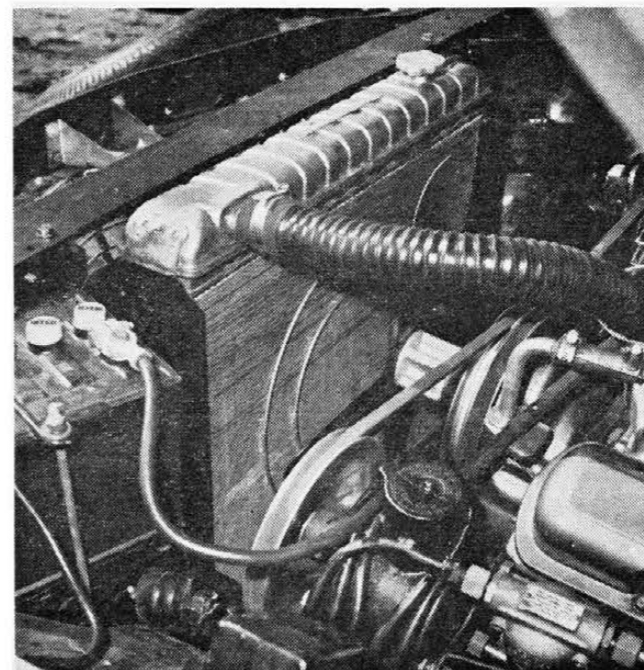
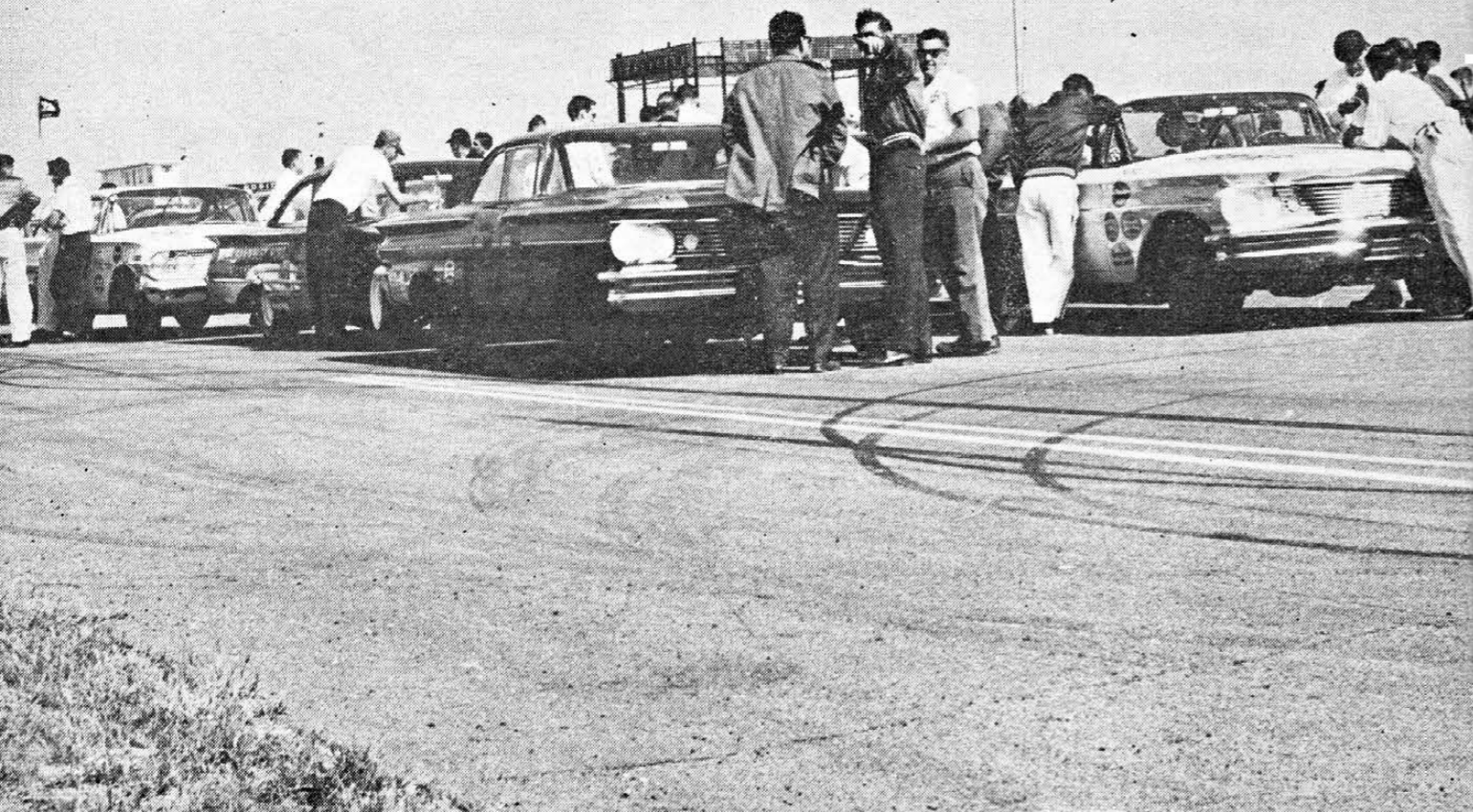
But more than likely, it was watching the late-model "stock cars" storm in a pack down the short stretch into the first 31-degree high bank, bunch together and jockey for position, going down the long, flat and straight backstretch, drift through the second high

bank and come charging down the second short home stretch—completing the tri-oval. It's watching the close ones, where the cars just nudge each other, or where one blows a tire and goes into a long loop-the-loop, other cars careening off onto the guardrail—or barely slipping by. It's the excitement of watching able drivers handle cars at speeds thought impossible just a few short years ago. It's the feeling that "I could do that too—if I had the chance." It's watching stock car racing. (Turn the page for some of the secrets that lie behind the pulse-quickenning thrills of racing stockers.)

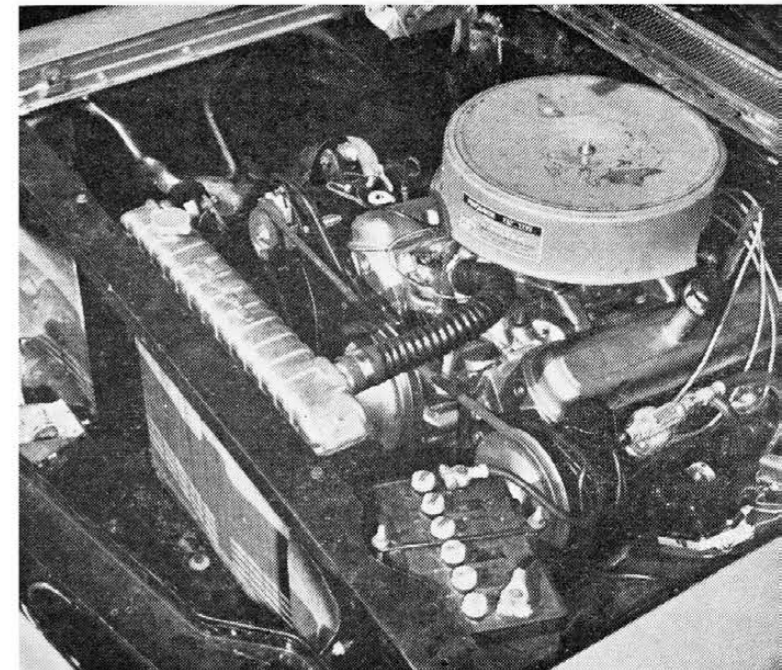
# 150-MPH STOCK SEDANS!

## how do they do it?

There's no real mystery about what it takes to make the late model stockers run like they do—it's a combination of know-how and skill, gained in hundreds of stock car races, carefully applied by some of the sharpest mechanics and engineers in the automobile game. That's how they can get—and safely handle—speeds well over the limits of your otherwise identical late model "stock" sedan...



A large-capacity radiator and aluminum fan make up the differences in the cooling system of "stock" racing Pontiacs. Concentric brass "rings" brazed onto the back side of the radiator protect it in the event the fan flies off. NASCAR racing rules prohibit multiple carburetion, so



Yunick uses the 333-hp, 389-cubic-inch Tempest 425-A engine with four-barrel carb. "But," Smokey says, "by completely disassembling it, balancing every part and cleaning it up here and there, we wind up with an engine that's pumping out quite a bit more than 333 horses."

**THE TIME:** A FEW DAYS before the 1960 Daytona 500-Mile Sweepstakes for late-model "stock" cars. The Place: the Firestone office at the Daytona International Speedway. The man on the other side of the desk let the phone jangle once more, then leaned forward to pick up the receiver. A mischievous glint came into his eyes as he answered, "Smokey the Bear."

Despite his allusion to being a rough character, Smokey Yunick is a quiet, unassuming man who dresses in conservative black. You'd probably never take him for the owner of "The Best Damn Garage in Daytona Beach" (his trademark) and the builder of winning stock racing cars. Yet, build 'em he does, starting with a showroom-fresh car and ending up with a car that *looks* basically the same, but which does 150 mph with ease!

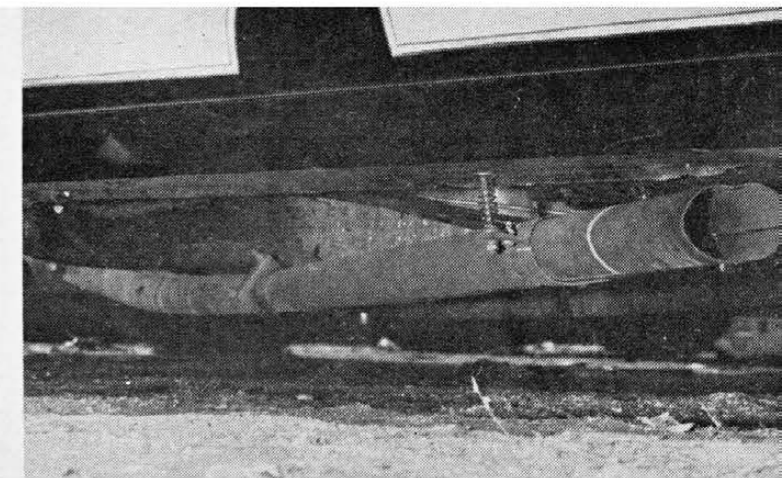
How does he do it? To find out, we dragged him away from

his two cars in the impound areas—the '59 Pontiac that Bobby Johns was to drive to a heart-breaking second and the '60 that Fireball Roberts was to lead with until ignition trouble forced him out. The Firestone office seemed like a good place to get away from the cacophony of sounds that are a part of every race track and a spot where we could go into the details of how he prepares his cars for racing.

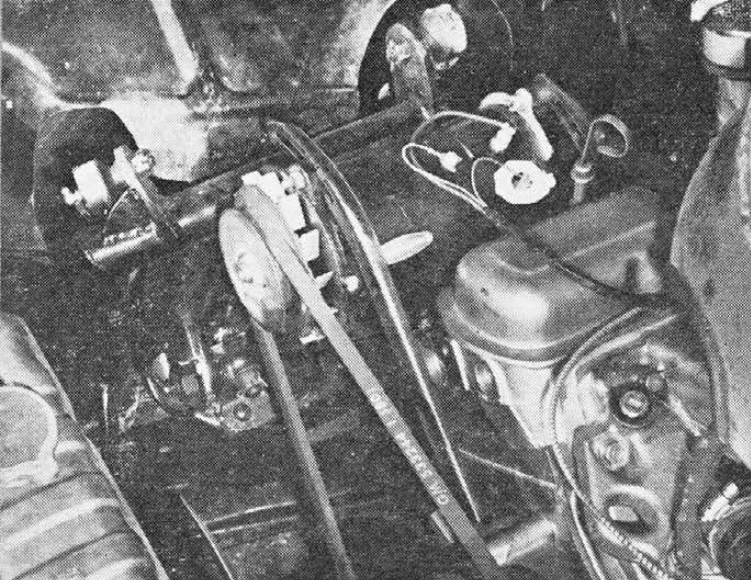
The first point Smokey made was that what he does is not what everyone else might necessarily do—that "the rest of the fellows may not agree with this." Yunick sets up his Pontiacs for asphalt tracks, where they have been demons to beat. (On dirt tracks he might do it differently.) Some of the reasons why Yunick-prepared cars are such hard ones to beat are shown on these and the following pages—the "secrets" of winning.



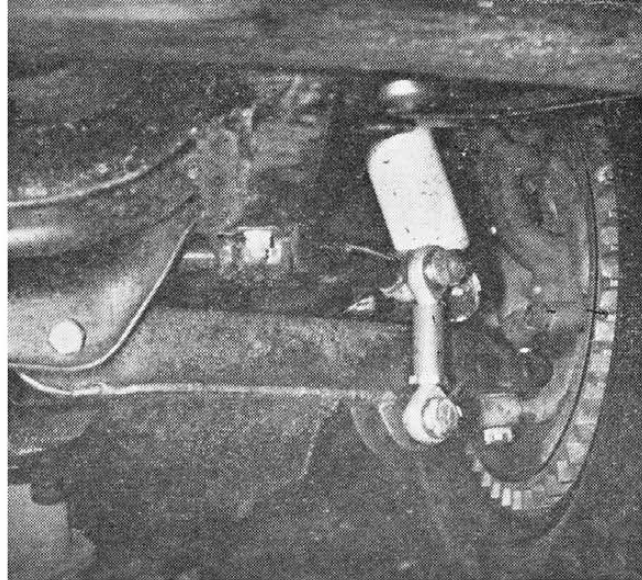
Exhaust headers used on the hot Pontiacs are huge cast-iron "tuned" headers specifically manufactured for use on racing stock cars. They are designed to scavenge the exhaust with no back pressure, the left bank header (seen



here) scavenging from cylinders 1-3 and 5-7 into common tubes which then spill into the large exhaust pipe that comes out behind the door. The right header exhausts from cylinders 2-4 and 6-8. Naturally, no mufflers are used.



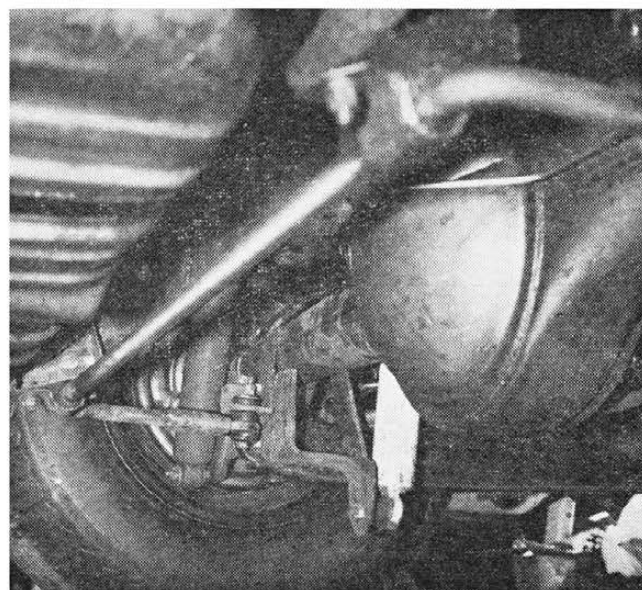
Front A-arms are stock, except that the open sides are welded shut. Coils have up to twice the spring rate of stock cars. Two heavy-duty Gabriel shocks are mounted



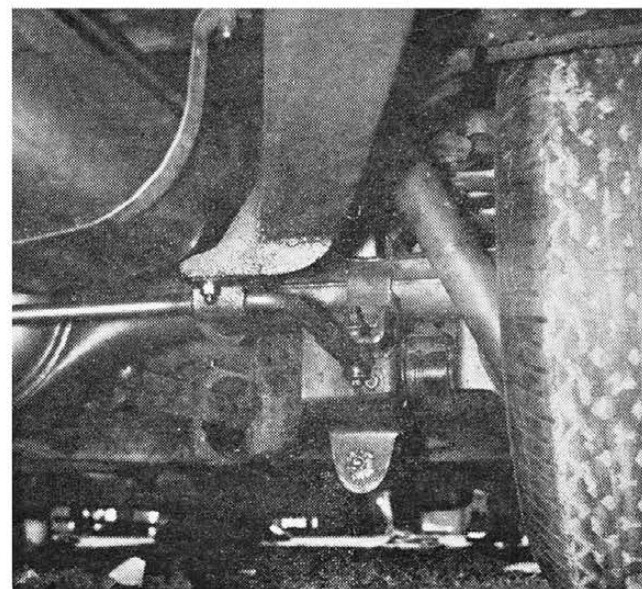
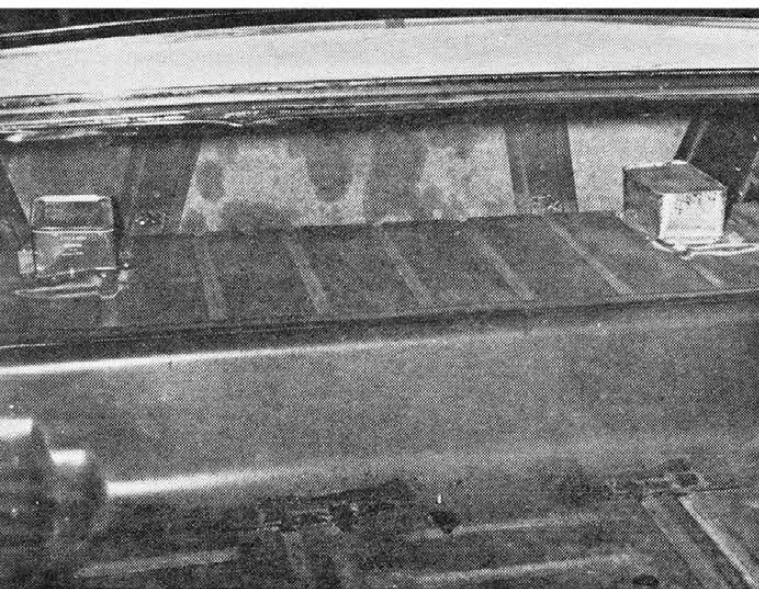
at each wheel; fender has to be cut away to accommodate them (left, above). Non-stock  $\frac{7}{8}$ -in. 4130 steel sway bars are used. Steering arms and linkage are also 4130.

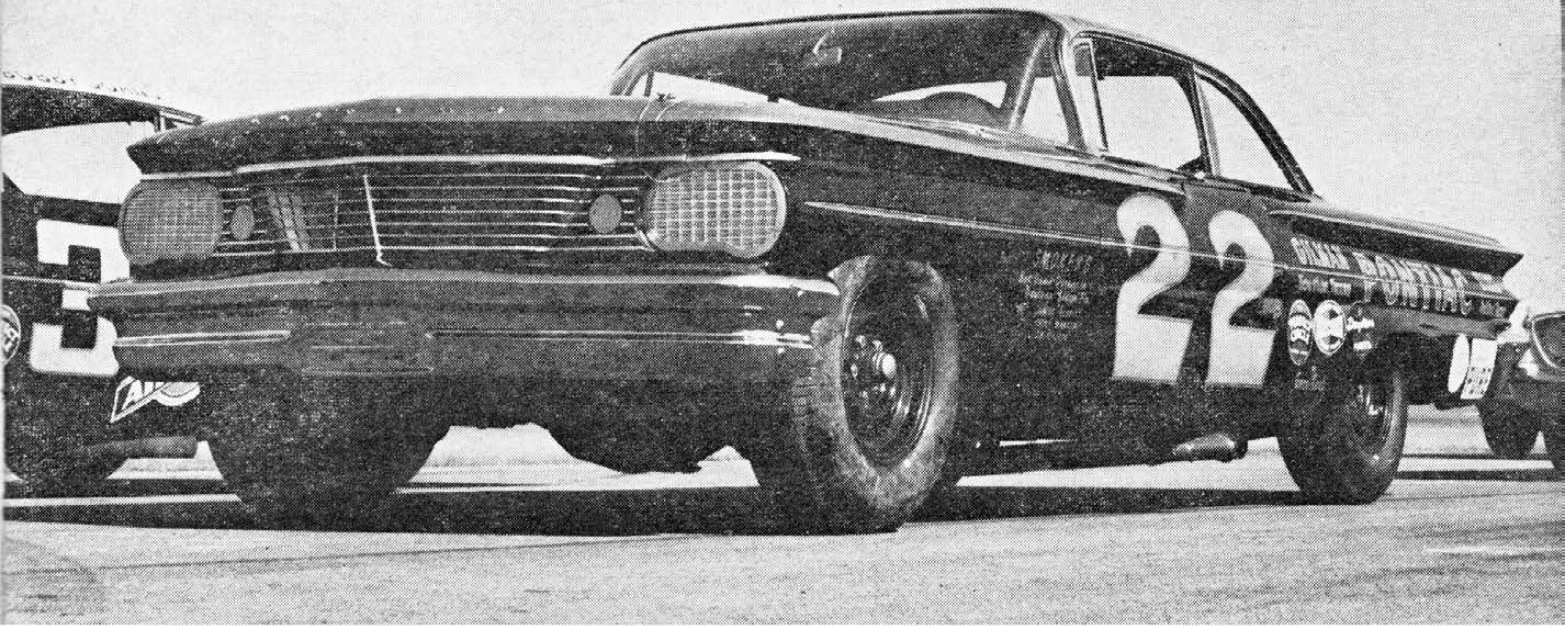


Wheels are standard-locking, but are wide-rim and use a double center for reinforcement. Tires are special racing 8.00 x 15s, using varied pressures depending on their location: at front—45 left, 65 right; at rear—55 and 60. The extra-long shocks have to protrude somewhere and so they do—into the trunk—with the bottom half of



gallon cans to cover them. A non-standard, hefty sway bar is used at the rear. Rear axle is "full floating," which means that the axle no longer carries the weight of the car; the housing is cut, hubs from a  $\frac{3}{4}$ -ton truck are mated to it and the wheels are mounted on bearings. Then, if the axle breaks, the wheel won't fly off.





When Smokey Yunick has a car set up like this, ready to roll, he expects it to deliver close to 375 hp and to

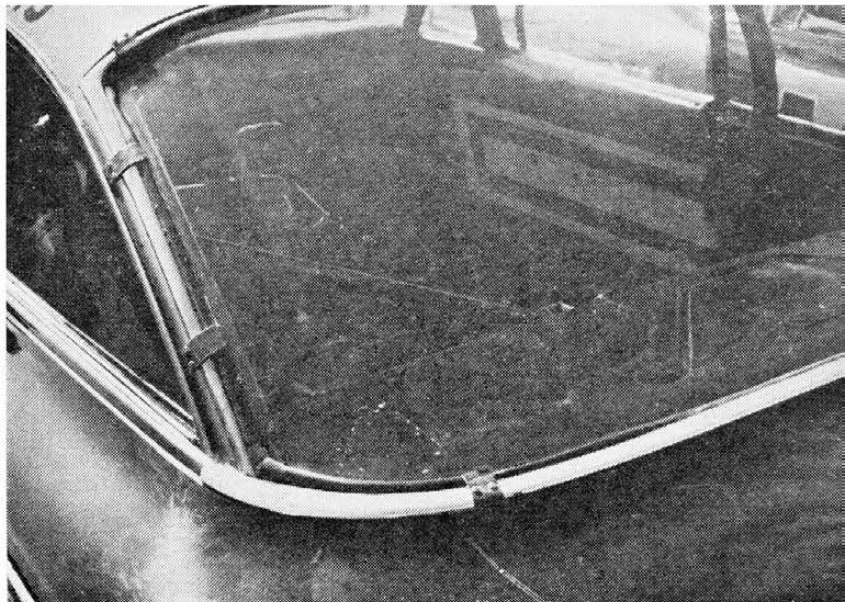
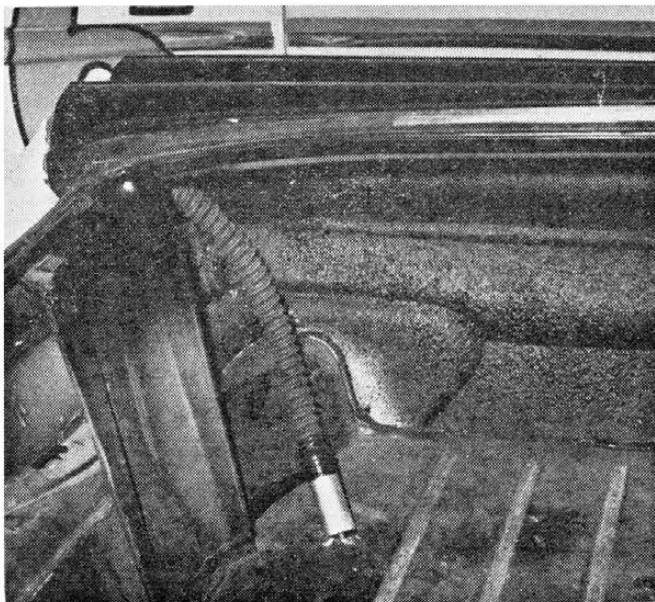
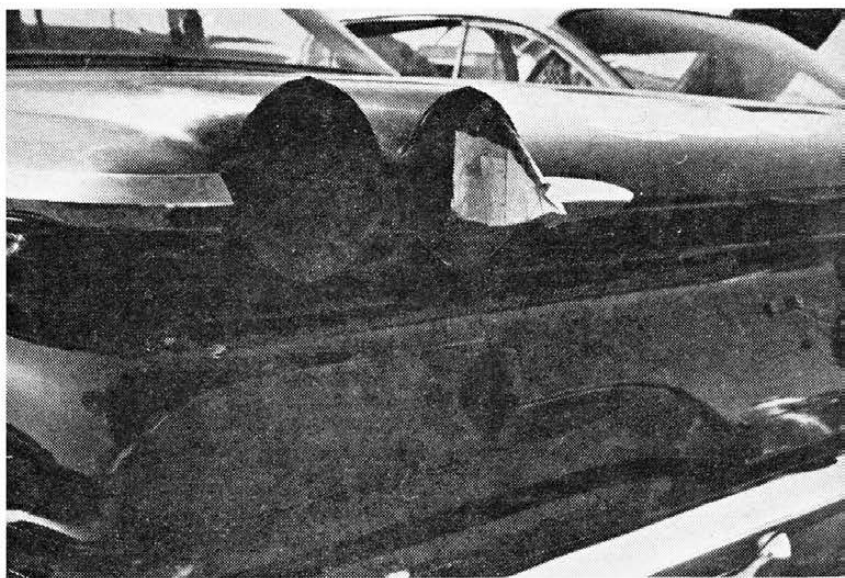
get around a track such as Daytona at 150-mph plus. A stock 333-hp Pontiac will do in neighborhood of 120 mph.

## 150-MPH STOCK SEDANS!

*continued*

Since Daytona, NASCAR has made some rule changes that affect the Fireball Roberts' car shown here. Though cars are to "remain standard in appearance," they can still remove the headlights and tail lights (above and right). Since "all glass must conform to original size and thickness," plastic glass cannot be used (below rt.). The standard rear glass must also have two metal strips that will keep it from popping out. This happened in the race to Bobby Johns, who was leading at the time. He spun out; Junior Johnson went on to win the race.

Flexible hose venting from tank (below) out through the fender allows for rapid filling in quick pit stops.



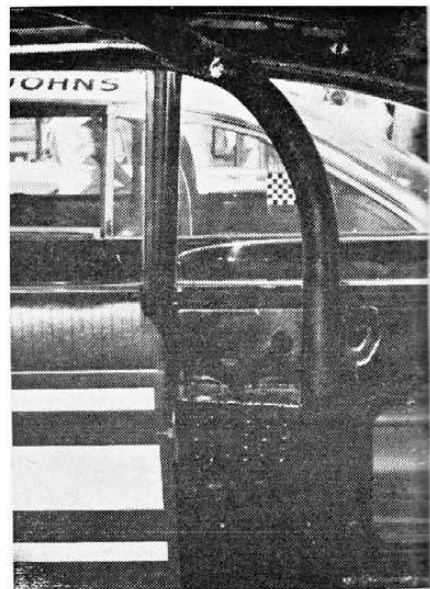
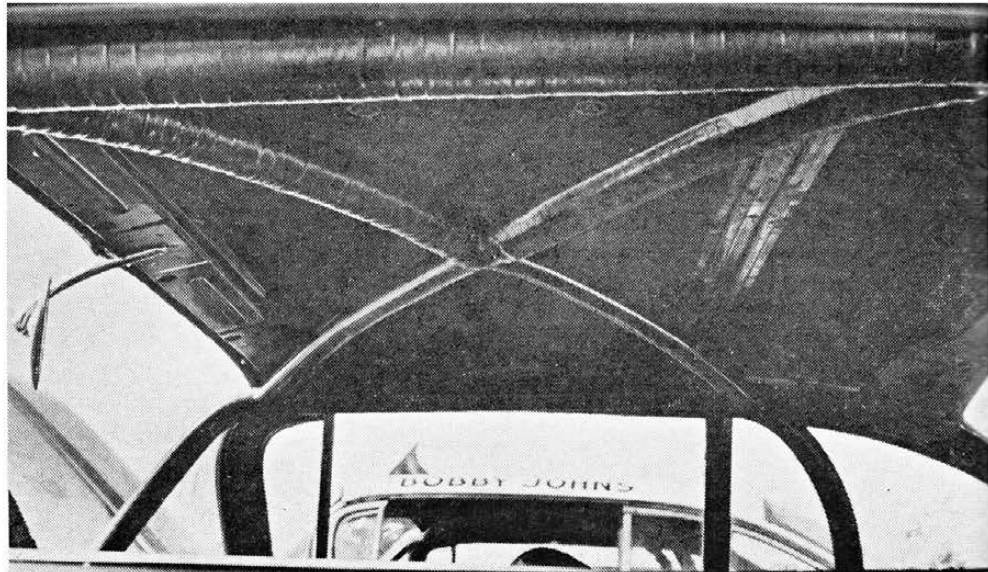


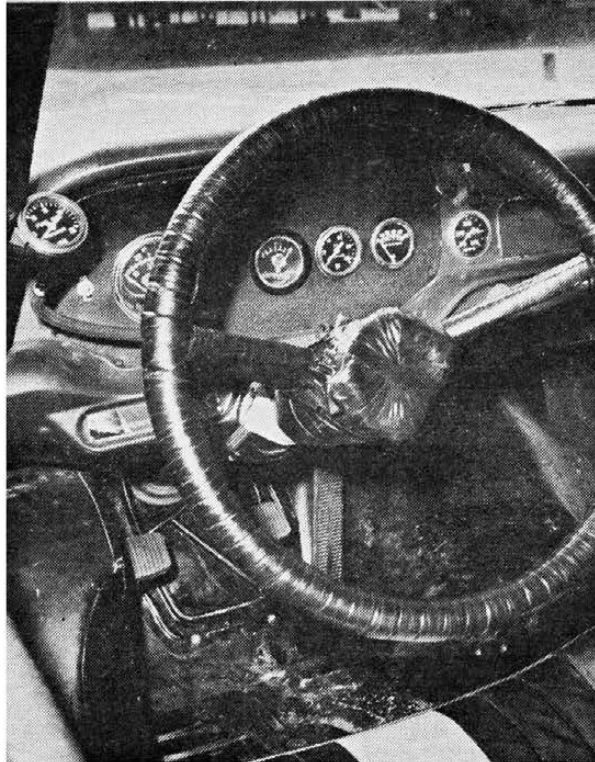
Tensely awaiting the starting flag, Fireball Roberts sits securely buckled into place. Asked later how he liked the variable-ratio power steering (Yunick's own design), Fireball said, "You have to get used to it, but you always know where you are. If you don't, you have no business driving anyway." He prefers Pontiac to other cars because "... it goes the fastest and handles well."

## 150-MPH STOCK SEDANS!

continued

The roll bars—complete with X-bracing to support the roof in event of rollover — are thick-walled, large-diameter steel tubing and add greatly to body stiffness. To get a rigid frame under this body, Smokey uses the convertible frame because of its added strength, then rewelds it completely. "We even reweld through the old welds because we find that welding the frame solid is the biggest single thing we can do to strengthen it." Everything is completely disassembled and the car is rebuilt from scratch. The interior is degutted, leaving only the one Bonneville seat for the driver. The driver's door is bolted in 8 places (but can be welded), while the passenger's door is bolted shut with a slide catch. Glass must now be of original size and thickness, though side windows can be removed

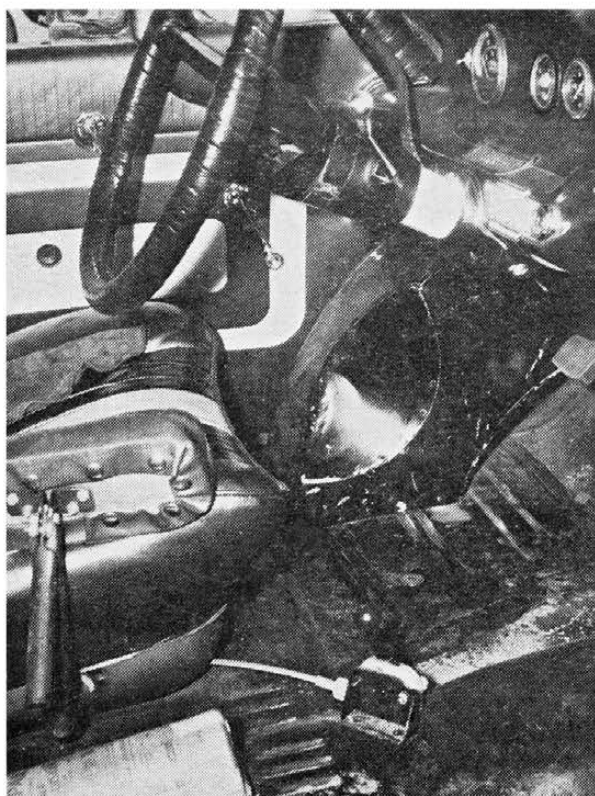




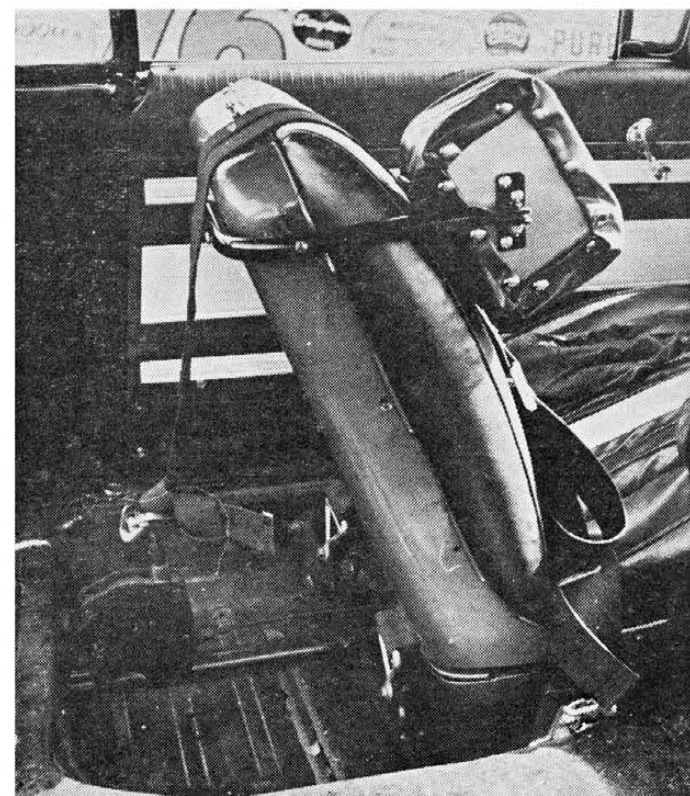
Steering wheel of Roberts' car is wrapped in several thicknesses of electrician's tape—both for a good grip and for protection. Original instruments have been removed and replaced with Stewart-Warner dials; used are a fuel pressure gauge, tachometer, fuel capacity, oil pressure and two temperature indicators.



The large sheet metal bulge (where the passenger's feet would go) is one of two ducts (see photo, lower left) to cancel out negative pressures created at speed in the engine compartment. The small tube to the outside is so the driver can see the condition of the right front tire.



The Yunick-Roberts' Pontiac uses a stickshift transmission, though at the speeds it goes, it's mostly in top gear. The duct on the floor is to relieve negative pressure (as stated above) and is also scooped out to clear Roberts' leg. The release handle on the floor is for quick release of the shoulder harness, which



goes over the top of the seat and attaches to the floor (above photo). The two pads that are bolted to the seat-side are to keep Roberts in as firm a position as possible during the violent maneuvering that's part of stock car racing—which allows him to concentrate solely on driving.