

SCR Investigates:

# TEENAGE AUTO RACING

PDC

# STOCK CAR



# RACING

60c

MAY 1971

Riverside 500  
•  
Mini-  
Stock Prediction  
•  
The First  
Stock Car Race  
•  
ARI: Inside Scoop

*Cotton Owens  
and Pete Hamilton  
Race the '71  
Roadrunner*





a photoessay by Denis Hill



Cotton Owens teamed up with a new sponsor, American Brakeblok, and a new driver, Pete Hamilton, to campaign a new car, 1971 Plymouth Roadrunner, on the Grand National circuit. Cotton's construction strategy leaned toward careful attention to detail. The result is a

**PERFECT  
PLYMOUTH**



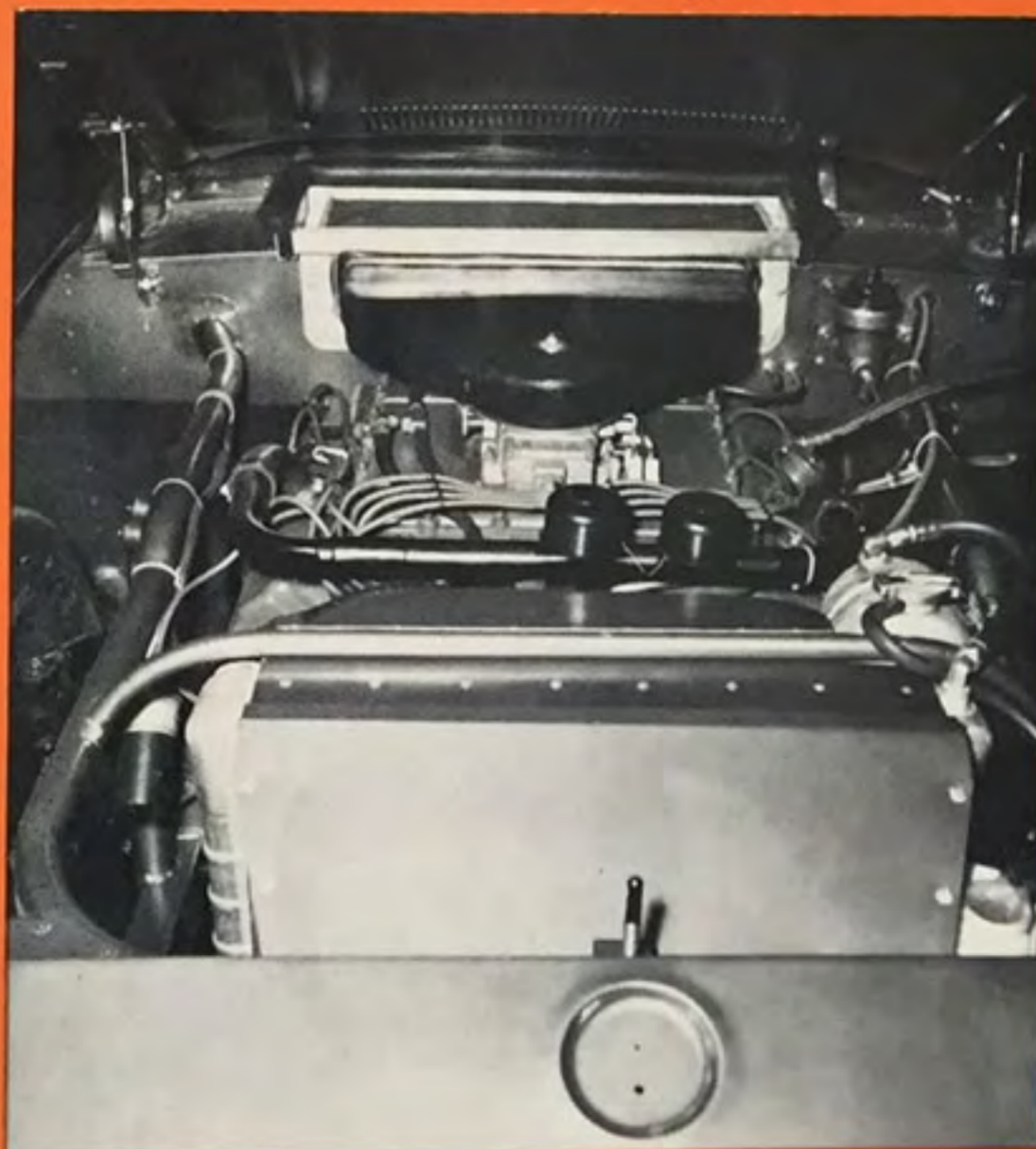
*BELOW—Keith Black fire system protects Hamilton from possible burns. Regular tach is augmented by tell-tale tach to help determine proper gearing and detect possible over-revving. Shifter is by Hurst. Note generous padding on side roll-cage members.*



*ABOVE—Oil cooler keeps differential fluid from overheating on those long 500-mile drives. Standard location in the back seat was chosen.*

*BELOW—Engine is all Hemi. Cotton decided to go the 426 inch engine for reliability and cost. Now that restrictor plates may be required for all displacements, this will certainly be the way to go. Internal engine components are all standard MoPar racing parts.*

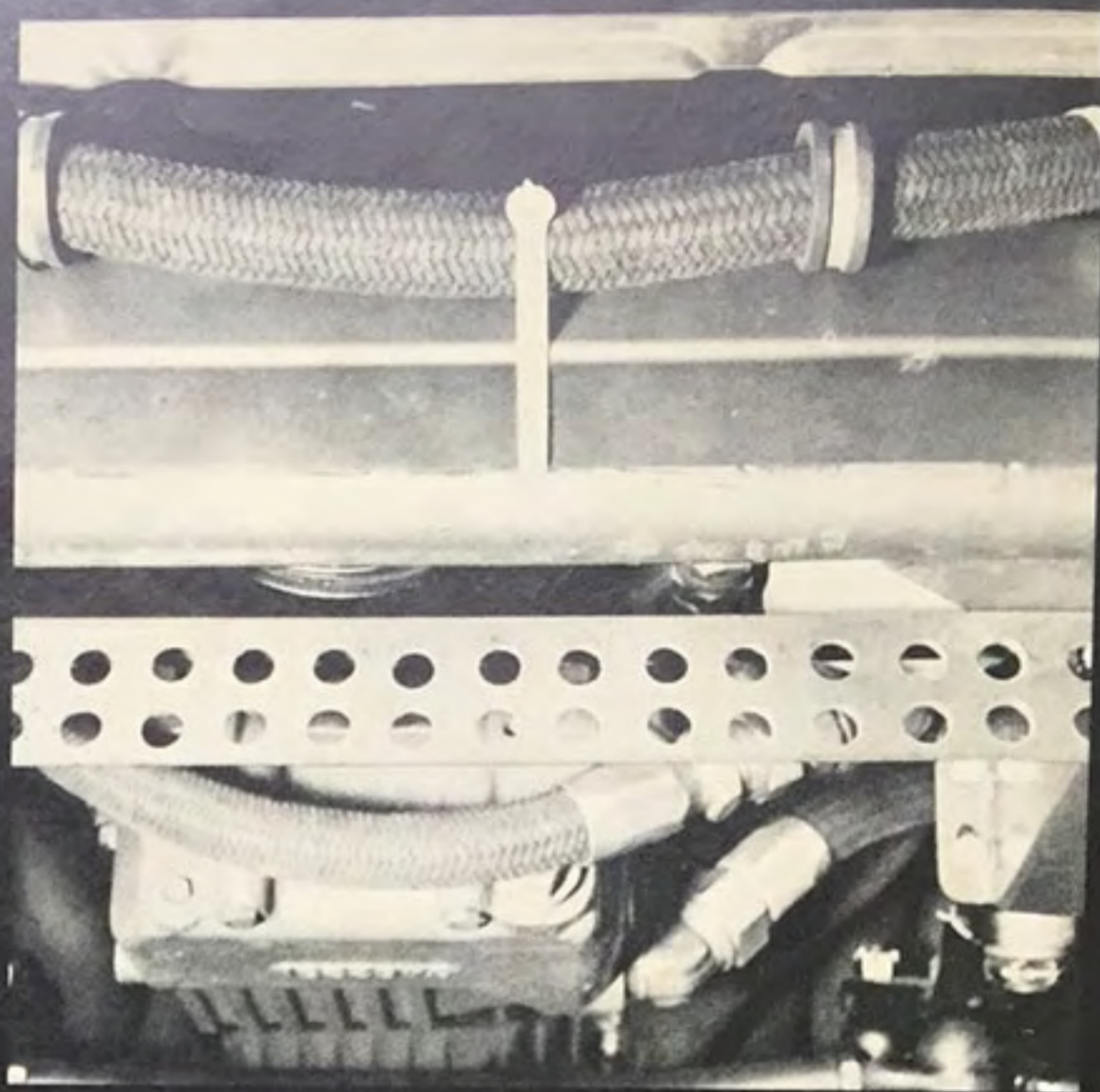
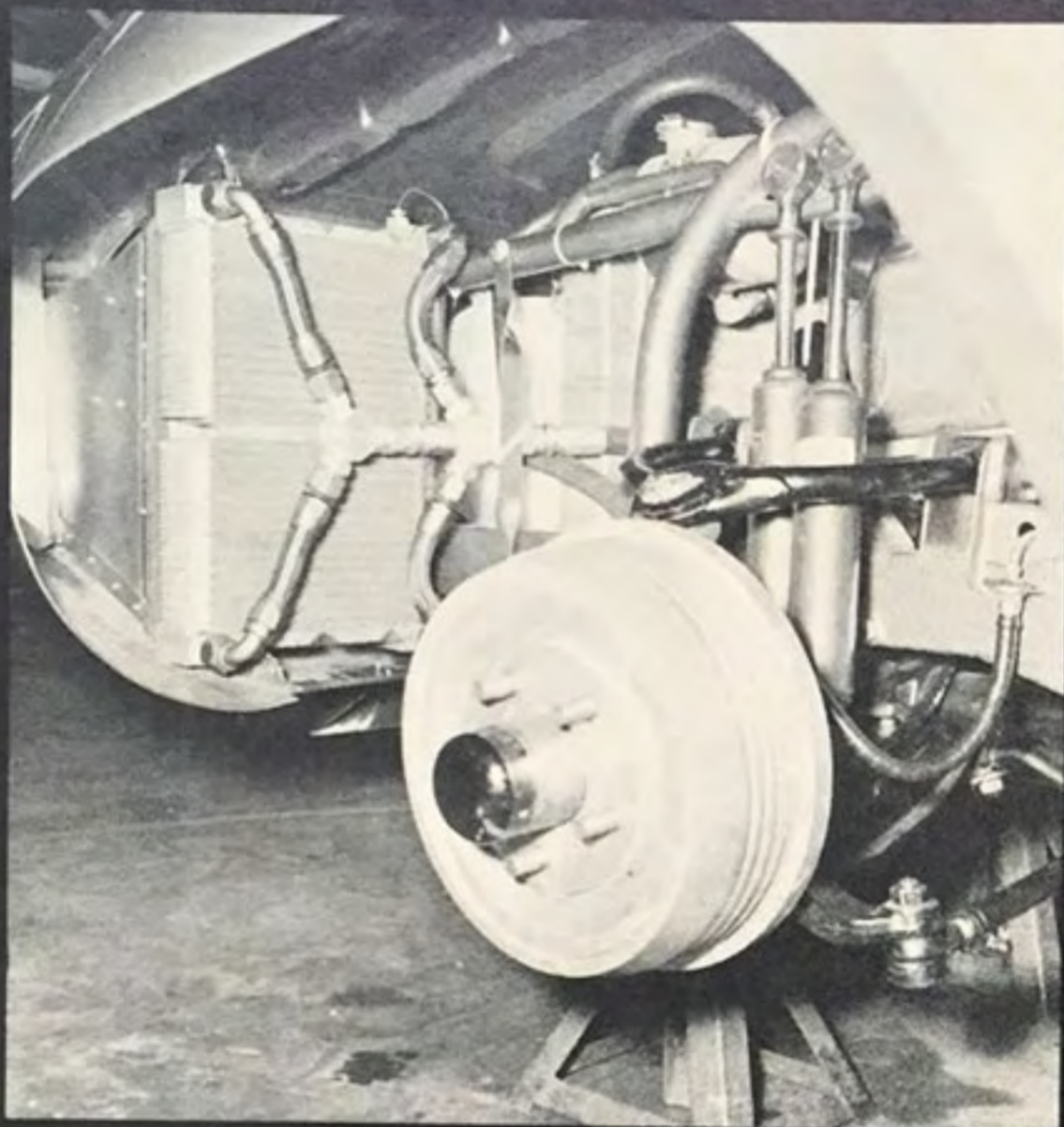
*BELOW—A breakerless distributor was chosen for reliability. The twin ignition system is mounted under the dash. If one unit fails, the other can be plugged in with minimal delay.*





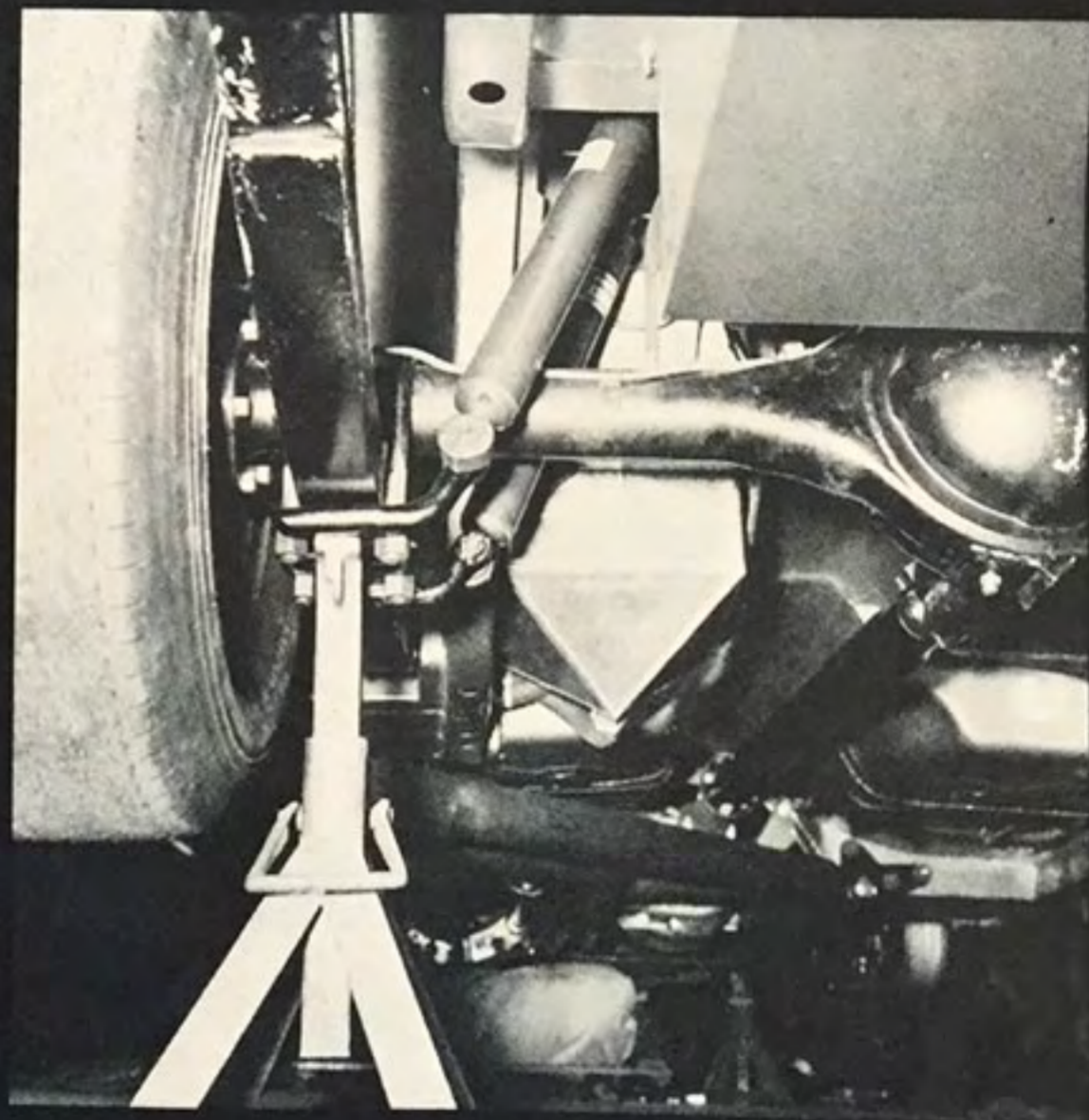
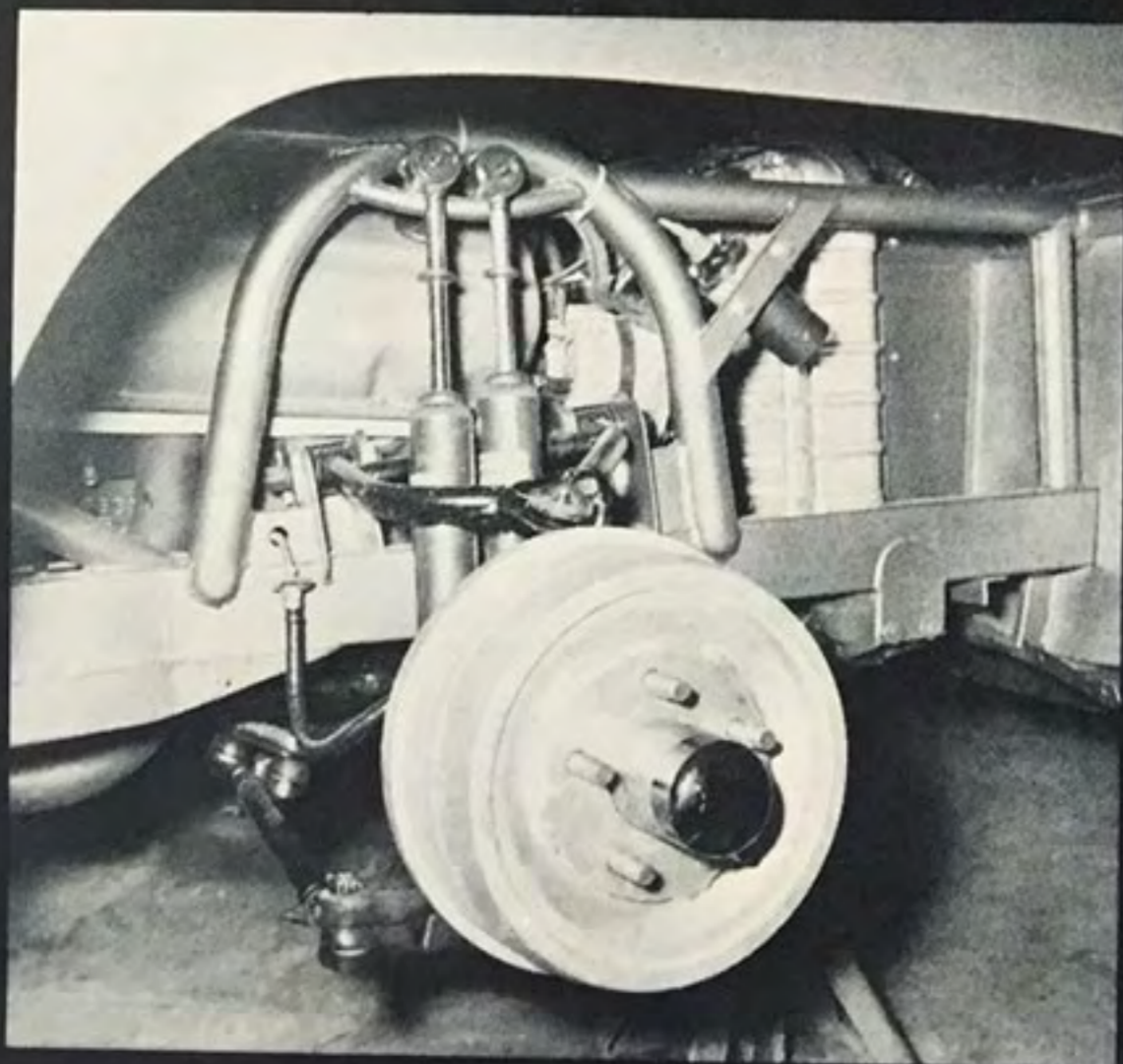
# PERFECT PLYMOUTH

*BELOW*—Despite recommendation of factory engineers to use twin oil coolers in front fenders, Cotton used only one Stewart-Warner unit in the left front. He felt right-front fender was too vulnerable. Twin Regal-Ride shocks and torsion-bar suspend each front wheel.



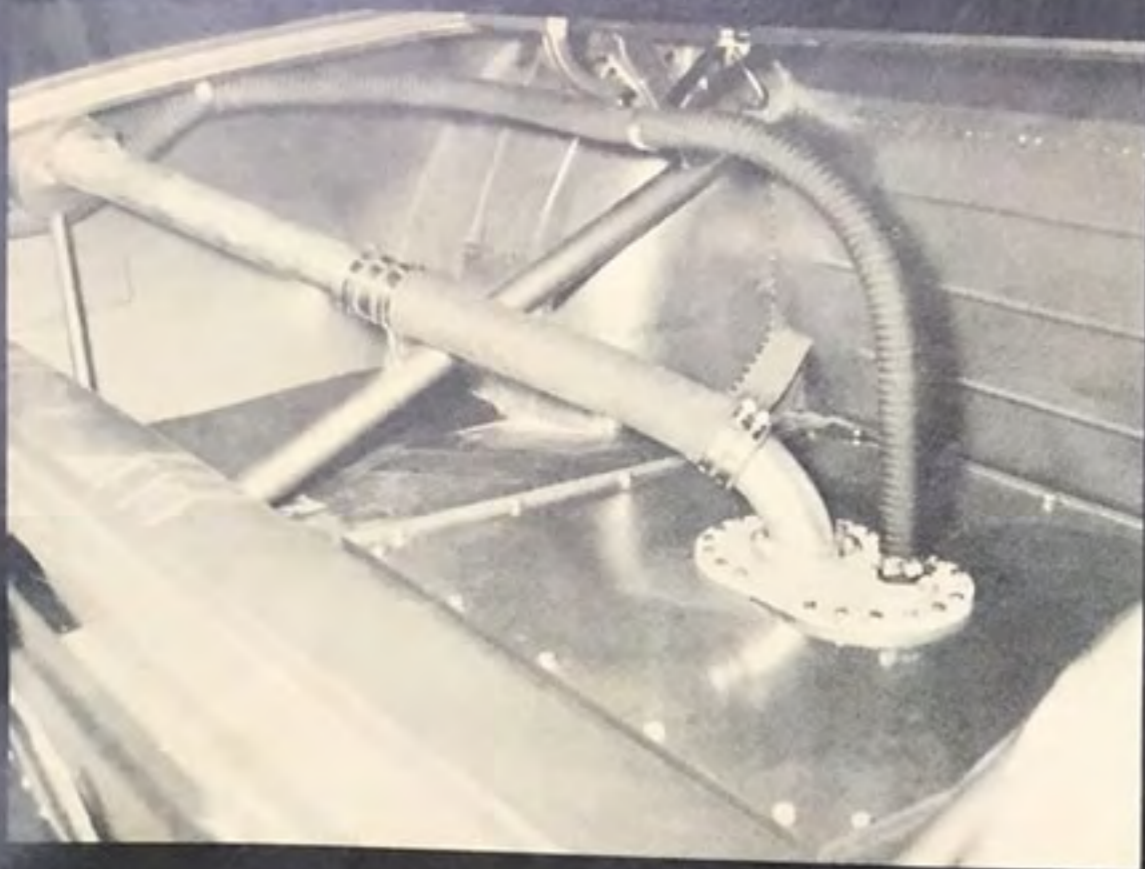
*ABOVE*—Right front suspension differs in shock mounting, for left hand turns. Lower control arm is cut-down Dodge Monaco unit, for strength and the larger hex for torsion-bar diameter. Upper control arms are hand-made from tubing so shocks can run through them. Heavy-duty spindles are racing units as are the steel hubs.

*BELOW*—All fluids are carried in braided tubing for safety. Dry sump oil system is favored in almost all types of race cars these days.



*ABOVE*—Twin shocks and leaf springs hold up the rear end. Dry sump oil tank is mounted behind the driver's seat for comfort, reducing heat blown back into driver's compartment. Headers are spring mounted to make engine changes quicker and easier.





ABOVE—Firestone fuel cell is another safety feature. Vent allows quick filling during pit stops. Note that even the trunk is neat and clean.

BELOW—Dodge truck carries all tools, spare parts and even a couple of spare engines needed for the big races.



LEFT—Cotton at work on construction of the new car. He decided to build it from the ground up himself to save money and get the safest possible race machine. BELOW—Owens' crew leads the car for the '1971 Daytona 500. Any new racer requires much pre-Daytona labor to please NASCAR's strict technical crew.

