

At Pebble Beach, Wright twists his Renault Special around last hairpin turn before straightaway to starting line. Here, car ran well up in class.



The result of four months of after-hours work, this tiny Renault special is one man's answer for power at a price.

By LEE EDWARDS

BUDGET BOOMER

ACCORDING to Vale Wright, racing is a peculiar sport with a firm rule about substitutions: no substitute for inches can win a race and no substitute for money can build a car. Wright, who has been an ardent fan of West Coast racing around his Berkely, California, home, dropped out of active participation when he found that costs of his special plastic-bodied M.G. were skyrocketing like the national debt.

This season Wright was inflicted with a particularly severe case of the urge-to-compete. He succumbed, but as he recently said, "I was determined to be as tight-fisted as a trapeze artist about this one. I wanted a real boomer, but I set my total costs at less than \$1000."

He knew that that kind of money ruled out the big cars. If he wanted a winning combination, he felt the only answer was a potent small car.

Wright made his decision: Class H competition. His decision was clinched when a wrecked Renault was offered to him for \$125. He bought the car and was in business. The result, four months later, is a potent budget boomer for \$800.

He discarded the body and frame sections, saving the axles, suspension, spindles, clutch and brakes. He planned to build a lightweight racing frame to house these stock parts.

Using 2 1/4 inch tubing, he built the basic longitudinal frame members with a roomy kick-up in the rear. Two cross-members were used, aft of the center, to tie the frame rails together. He installed the stock Renault wheel assemblies, with their independent coil suspension, on a 78 inch wheel base. He kept the stock tread of 47 inches.

To improve the weight distribution of his tiny machine, Wright reversed the Renault engine, placing it ahead of the

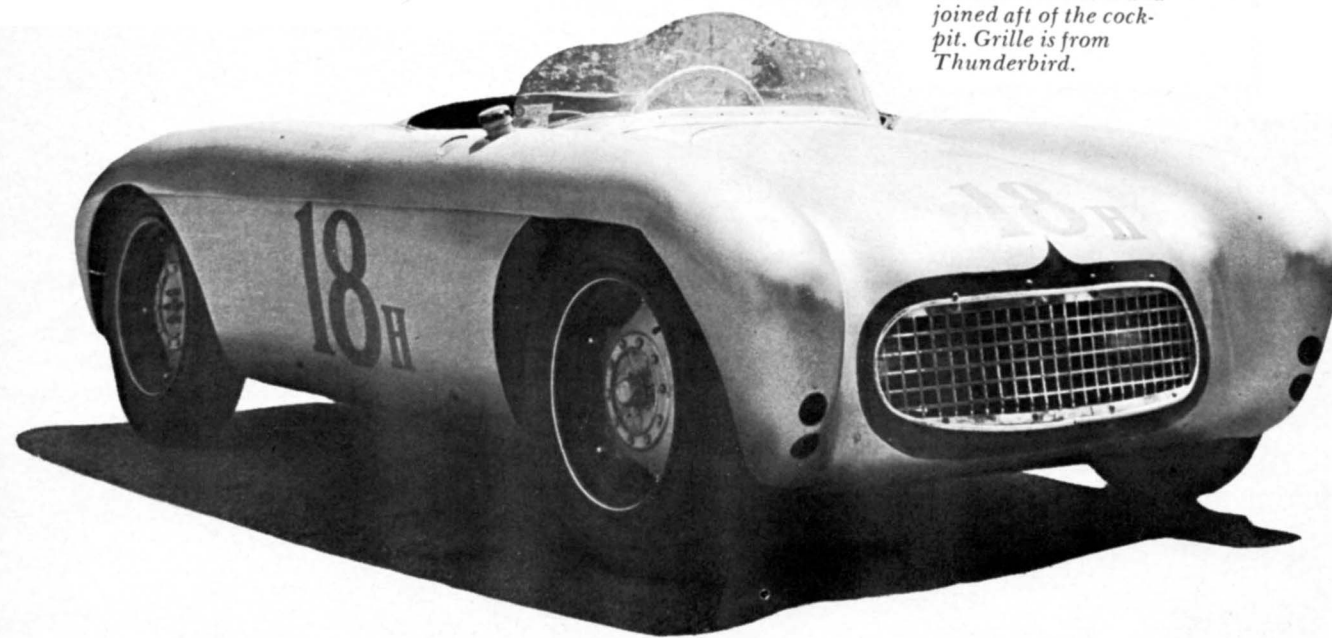


The engine hatch was cut into the body after the mold was completed. Lowered cover is aluminum. Rear lanterns are '53 Ford tail lights.

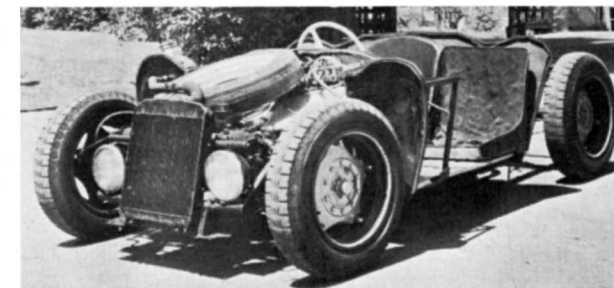
rear axle in place of the after-axle location on stock models. A direct drive hooks to the rear wheels. Tire size, front and rear, is 5.20 x 15. Up front, between sheet aluminum and thin vertical bracing above the frame, he left room for the required spare. It helps coordinate balance, which Wright set at 50/50. Alongside of the spare, Wright installed the stock Renault steering which he modified to center steering through the use of A.C. universals.

To further the much needed balance, Wright installed the radiator up front, ahead of tire and headlights. A combination of rubber hoses and copper tubing carries water aft along the frame rails to the engine. On either

The shell of the Renault Special was built from two early MG Special mold nose sections and joined aft of the cockpit. Grille is from Thunderbird.

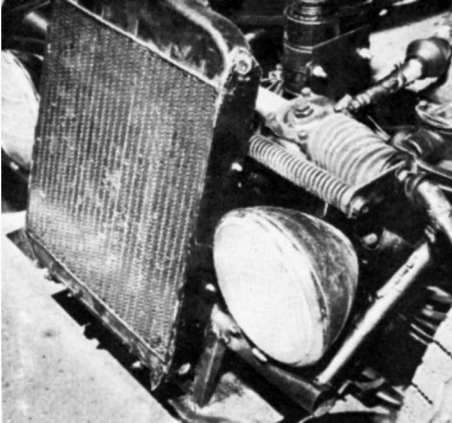
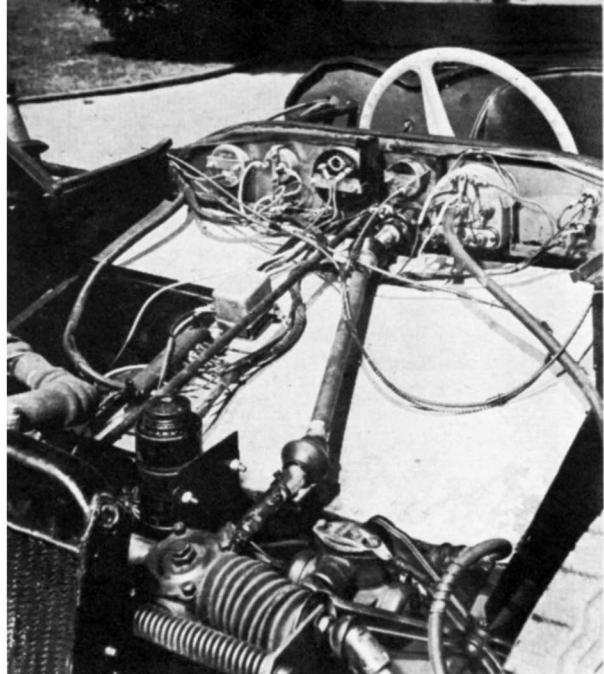


All that remains of Renault on this 78 inch wheelbase are the axles, suspension, spindles, clutch, brakes and engine. Note location of spare under hood.



This rear view shows the high kick-up in the rear needed for new engine hanger built by Chuck Clemens. Engine is reversed, set ahead of axle to improve weight distribution.

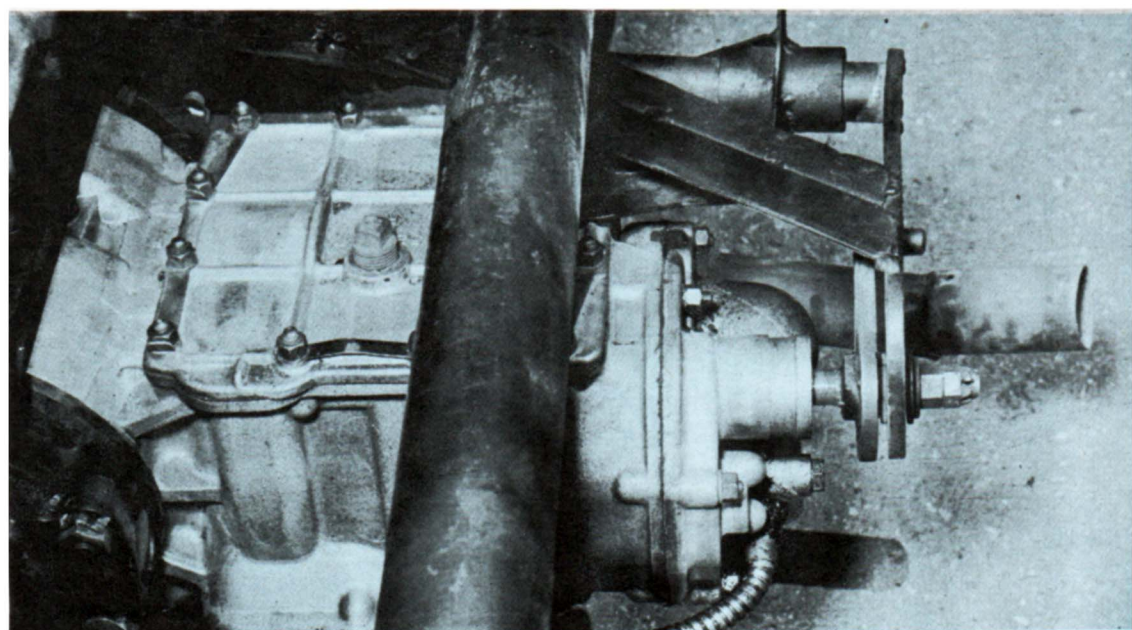




Put forward for better cooling and weight distribution, the radiator is connected to the engine thru hoses and copper tubing.

LEFT: A.C. universals used to adapt stock Renault steering assembly to center steering for easier handling.

BELOW: Scotch yoke transmission linkage is anchored to rear of transmission. Flat stock coming from yoke activates bell crank which is welded to shift rod.



Rear view of scotch yoke. Bar part of yoke connects to stick shift at front. Slotted plate moves up and down, in and out, operating bell crank.



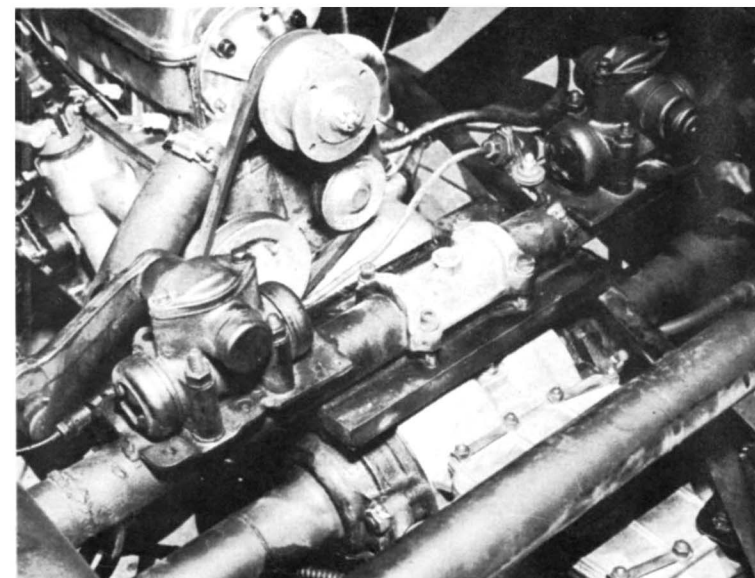
side of the radiator, he installed Crosley headlights.

In the rear, the reversed Renault engine was fitted, then removed for limited souping. Bore and stroke were kept stock: 2.146 x 3.15. Intake valves are 27mm and exhaust valves are 25mm. Stock valve springs were used.

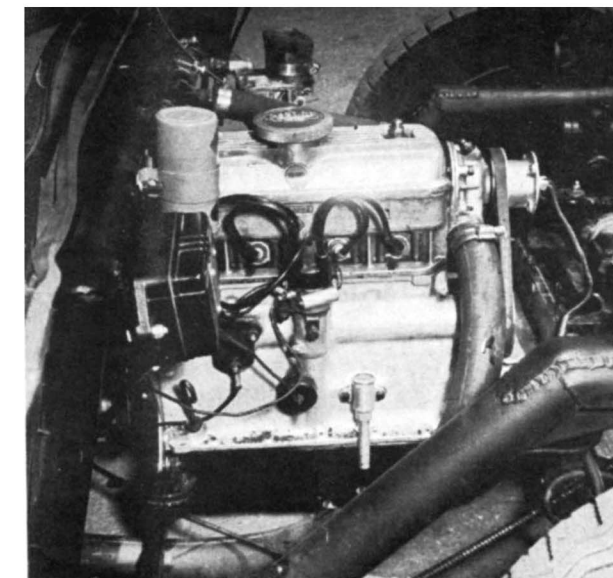
Wright purchased a special Renault-built racing cam. The new cam, a hot one, has a split overlap and when Wright tuned the engine, he used 00 dial indicator setting for valve opening and .063 before zero on closing.

The stock rocker set-up was retained, and Bosch plugs are used with the 7.5 to one compression.

Perhaps the most interesting innovation on the car is the solution to the problem of transmission. Wright found it necessary to reverse the transmission, turning it 180 degrees, which put the fork aft of the housing.

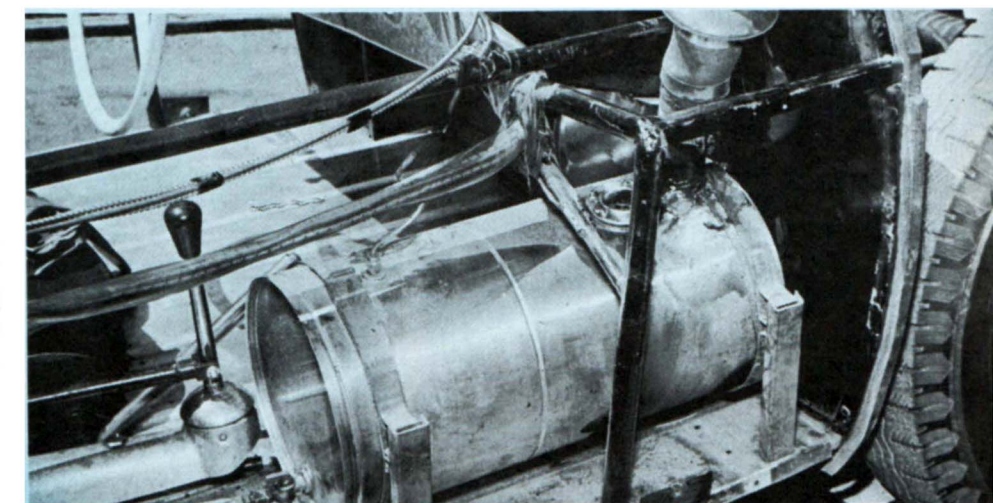


Because of the switch in engine and transmission layout, a special hanger (U clamp) was suspended from cross member and bolted to transmission case.



The reverse mounted engine was kept stock except for a special Renault-built racing cam. The split over-lap requires precision timing when tuning engine.

Gas tank holds four gallons, and is mounted beside driver. A visual gauge is used at top of tank just behind the filler neck.



Chuck Clemens, of Oakland, devised a "scotch yoke" as the most economical answer. The yoke is a slotted plate which fits over the transmission fork arm. A semi-solid linkage leads to the shift lever in the cockpit. As the stick is moved, the arm pulls the yoke in, out, up and down, to select the proper gear.

Throughout the project, Wright was interested only in building the lightest, cheapest yet best car possible. He was hoping to rely more on weight than on a hot engine. To complete his treatment, he built a body of plastic.

There were two reasons for his choice: (1) the weight saving qualities of plastic were substantial, and, (2) his special bodied MG had been a plastic job. Wright still had the original plaster of Paris mold for the MG body.

As it happened, the nose section of the MG body was a perfect fit for half the Renault special. "When I saw the fit of the nose section," Wright said, "I could hear opportunity knocking."

The body of the Renault is built from two MG special nose sections, joined aft of the cockpit. A Ford Thunderbird grille was cut down and mounted in the nose and 1953 Ford tail lights have been mounted on the rear. Painted a Silver Eldorado lacquer, the car looks low and potent. With a top speed of somewhere around 83 mph, Wright relies on cornering to place well up in the events.

Loaded, the special weighs 862 pounds. Considering the total outlay of \$800, that's just about a buck a pound. Is Wright pleased? "A buck a pound seems a good price," he said, "you can't get steak for that money today." #