

CAR AND DRIVER

ROAD TEST

Renault

R-8

Renault shows how to build compact-car room and performance into a small car

France's *Régie Nationale* obviously has high hopes for the Renault R-8 (*October C/D*). It introduced the car with great fanfare, first in Spain for the European press and then in Puerto Rico for U.S. publications. Frankly designed for the international—particularly the American—market, it is clearly intended to be Renault's comeback car here.

Renault's confidence is not misplaced—the R-8 is a thoroughly attractive package. Only \$160 higher in price, the R-8 meets the VW's chief selling points head on and adds unique features of its own. With 48 bhp (50% better than VW and Renault's own Dauphine) it has more than adequate power. Its sealed cooling system, which Renault first brought out last year on its R-4 line, has much of the advantage of air-cooling without its attendant noise and heater problems. The R-8 has disc brakes on all four wheels, a feature found on no other under-\$3,000 car except Renault's own Caravelle S, which also has them.

Following the new European small-car trend, Renault's stylists have built a boxy body in the mode led by Corvair with a rear-quarter treatment reminiscent of the Studebaker Lark's. Better-looking than its pictures, it is remarkably roomy for a car just two inches longer and an inch narrower than the Dauphine—the R-8 is one of that select group of cars that seem bigger on the inside than they do from the outside.



Leaning very slightly even on a sharp bend, R-8 demonstrates first-class road-holding. V-shaped trough in front trunk lid aids driver's forward visibility.

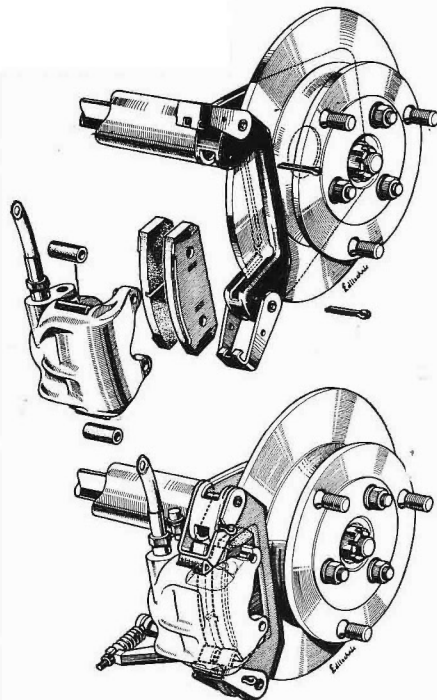
There is room for four in remarkable comfort or five for short local trips. Headroom is ample front and rear, and rear-seat kneeroom is exceptional—even with the front seats in their rear-most position a tall man can sit comfortably in the back. This is partly due to the fine design of the separate front seats, one of the car's outstanding features. So soft and comfortable that experienced drivers are immediately reminded of Citroën DS-19 seats, they have backrests raked at an angle which not only provides an excellent driving position but falls away from rear-seat passengers' knees to leave

plenty of footroom. Their foam padding curls back over the top of the backrest to form a soft padded roll which would cushion the impact if rear-seat passengers should be thrown forward by a sudden stop. Standard upholstery is cloth, but \$20 more purchases a vinyl covering which is virtually indistinguishable from leather.

Though intrusion of the front wheel arch dictates a position well to the right for the pedals, the driving position is offset only slightly, as the 22-inch-wide seat is placed well away from the door. Since there is no transmission tunnel, the pedals are not crowded on the right. The gearshift lever is central, and a pull-up handbrake is directly behind it, between the seats.

Much thought has gone into the steering-wheel design. Set at about 30° from vertical, it has two spokes which form an inverted 120° V, leaving the instrument panel visible through the top part of the wheel even in most curves. Thumb grips are set into the inner surface at the nine and three o'clock positions, and there are wavy handgrips all around the back of the wheel.

Safety padding runs along the top and bottom edges of the dashboard, with a neat extension just over the instrument cluster forming a cowling for it. Instruments include a quadrant speedometer, odometer and fuel gauge, with warning lights for generator, oil pressure, turn signals, high beam and water temperature. The last remains on until the engine reaches operating temperature—if it goes on again after warm-up it indicates overheating. A three-position switch operates tandem two-speed windshield wipers and a but-



Disc brake pads can be changed in a few minutes by removal of two cotter pins.

ton works the mechanical washer. Under the dash on each side is a roomy but lidless glove cubby.

Ventilation is provided by ducts which draw air from a screened intake just below the base of the windshield into a sealed compartment beneath, then into the body of the car through circular louvered grilles at each end of the dash. Air flow through these can be controlled by a lever which operates a butterfly valve, and directed by rotating the louvers. Fresh air flow can be increased as desired by opening the rear door windows, which slide forward. Front door windows roll down fully, and have no vent panes, which are not needed with this system, one of the best we have seen. All doors hinge at the front, and are opened from the inside by neat pull-out levers that lie almost flush. Child-proof latches on the rear doors can be set to disengage inside handles.

The heating system takes fresh air from the same source as the vents, passes it through a radiator connected to the engine cooling system, and blows it through windshield defrosting slots, floor ducts, or both, as desired. Controls are under the center of the dash panel.

A total of 10.2 cubic feet of luggage space is distributed between the forward trunk, which is opened by a T-handled cable release under the dash and spring-latched, and a deep well behind the rear seat. The latter is a feature often recommended by safety engineers—items stowed there can't be hurled forward in sudden stops—but rarely seen. Another safety feature is the forward-hinged trunk lid, which can't fly up and block the driver's vision. The battery rides in the trunk, but the spare wheel is in a separate compartment underneath, à la Dauphine, so that a tire can be changed without unloading luggage.

Suspension is independent all

around, with pressed-steel transverse wishbones at the front end, as on the Dauphine, swing axles at the rear. Two diagonal radius rods have been added at the rear, going forward from the outer ends of the axle housings to the center of the chassis, for longitudinal location of the rear wheels and to take some of the torque and braking thrust.

Power comes from a 956-cc four-cylinder in-line engine, mounted at the rear in Renault tradition. While it resembles and is obviously a direct descendant of the 4CV and Dauphine units, it is actually a slightly detuned version of the all-new unit used in the Caravelle S (*July C/D*). Its basic configuration is similar to the earlier engines—cast-iron block using wet sleeves, and an aluminum head with overhead valves. But the new unit rides in five main bearings instead of three, has a bigger bore and shorter stroke. Despite a 12% increase in displacement and 20% more power, the R-8 engine weighs the same 195 pounds as the Dauphine's. Since the shorter stroke encourages higher rpm, the larger bore makes room for bigger valves, and the power increase brings the weight-power ratio to a respectable 32.7 pounds per bhp, the R-8 is a lot friskier than its predecessors.

Frisky it is. We drove it in Puerto Rico, at the new Caguas circuit, from there over really tortuous up-and-down secondary roads to San Juan, and later from Ponce, on the south coast, across the mountain spine of the island to San Juan in the north, and its performance was impressive throughout.

Starting was instantaneous at all times, and the engine idled easily and quietly. The clutch was smooth and positive in action, without play or grab. In typical Renault style, the gear lever felt somewhat rubbery, with a very wide crossbar to the "H" of the standard four-speed pattern.

But its action was easy and precise, and there was never any doubt about what gear it was about to engage.

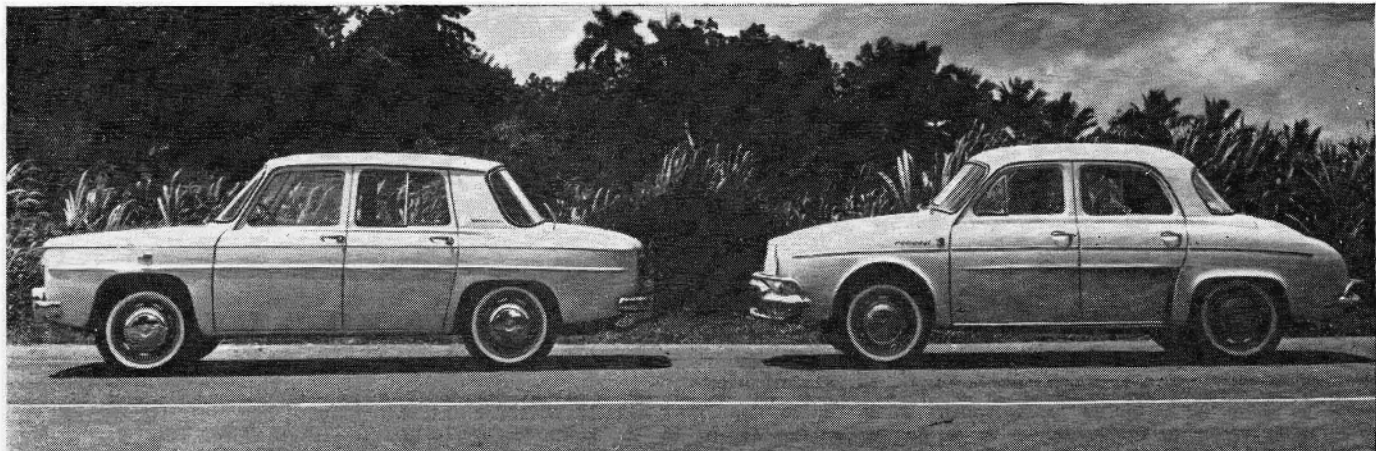
Gear ratios proved well spaced for city, highway and mountain driving. Acceleration was brisk for a car of this class and the 1.52-to-one third gear served as both an effective passing gear in 40-50-mph highway traffic and a climbing gear in the hills. Second was needed only for the tightest, steepest hairpins.

Driving through the mountains was, of course, an excellent test of the R-8's steering, handling and

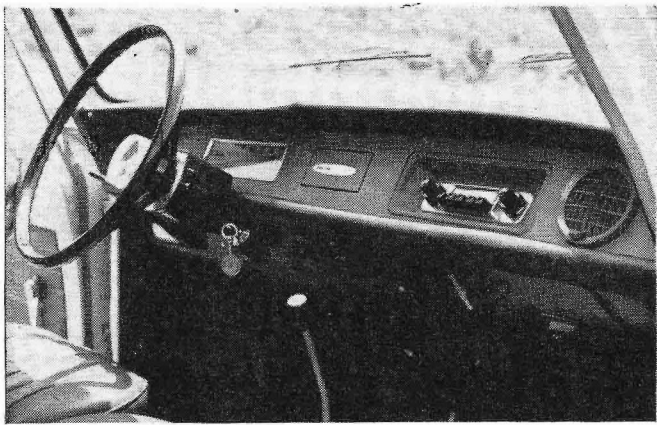


Neat engine compartment offers good accessibility. Hood locks from outside.

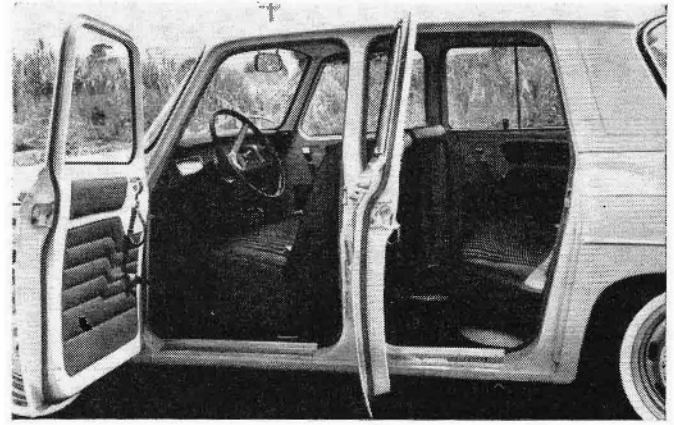
brakes, and it posted high marks in all departments. The steering felt quicker than its 3½ turns lock-to-lock and 30-foot turning circle would indicate, and was precise and without lag. At slow speeds the R-8 steers neutrally, changing very gradually to oversteer in harder cornering. When you throw it into a tight bend, the tail moves slowly out,



Comparison with Dauphine emphasizes modern lines of the R-8. Rear-fender air intakes have been replaced by louvers in deck lid.



Dashboard has dull gray crackle finish, is laid out neatly. Lever to right of steering wheel works headlights and horn.



Four large doors allow easy entry to R-8's roomy interior. Elimination of vent panes in front doors improves visibility.

gently and courteously signaling its intention all along the way. Correction is so easy that you always feel (and are) in complete control, and the sporting maneuver seems the natural way to take such turns. In rough-surfaced bends, however, there is some rear-wheel hop. On straight roads it maintains direction impeccably without the constant correction many small cars require.

Body roll is very slight and pitch is negligible, despite the surprisingly soft and comfortable ride. The standard Michelin tires demonstrated excellent adhesion and made very

little noise. There is, in fact, very little noise of any kind in the R-8—at 65 mph with the windows closed only the engine is audible, and it is commendably quiet.

Braking was, as might be expected with discs all around, excellent and free from fade, even during the steepest descents in the mountains. Pedal pressure was only slightly higher than would be required with most drum brakes.

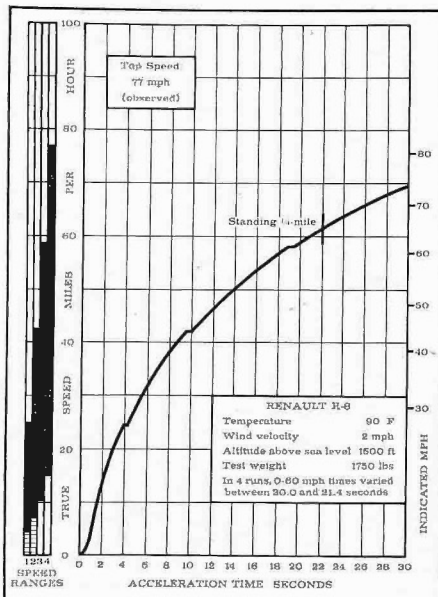
Gas mileage during the test period, which included acceleration runs and much hard driving, averaged 30 miles per gallon. In normal

driving a well run-in car should easily achieve the manufacturer's claimed 37 mpg.

Addition of the R-8 to its line puts Renault in an excellent competitive position, with a range of models including the maximum-economy R-4. (not yet available here), the \$1,500 Dauphine, the \$1,800 R-8 and the \$2,500 Caravelle S. For the U.S., the R-8 is a fine choice, offering performance, interior room and comfort in the compact class along with the nimbleness, fuel economy and price of the small car. **c/d**

RENAULT R-8

Price as tested: \$1,795 POE N.Y.
 Importer: Renault, Inc.
 750 Third Avenue
 New York 17, N.Y.



ENGINE:

Displacement..... 58.2 cu in, 956 cc
 Dimensions... 4 cyl, 2.55-in bore, 2.93-in stroke
 Valve gear..... Pushrod-operated OHV
 Compression ratio..... 8.5 to one
 Power (SAE)..... 48 bhp @ 5,200 rpm
 Torque..... 55.3 lb-ft @ 2,500 rpm
 Usable range of engine speeds... 1,000-5,700 rpm
 Carburetion..... Single Solex 32 PDIST
 Fuel recommended..... Regular
 Mileage..... 28-36 mpg
 Range on 8.2-gallon tank..... 230-295 miles

CHASSIS:

Wheelbase..... 89.5 in
 Tread..... F 49.25 in, R 48 in
 Length..... 156 in
 Ground clearance..... 5.75 in
 Suspension: F: Ind., wishbones and coil springs, anti-roll bar unequal-length
 R: Ind., swing axles, diagonal torque arms, coil springs
 Steering..... Rack and pinion
 Turns, lock to lock..... 3.6
 Turning circle diameter between curbs... 30.5 ft
 Tire size..... 145 x 380
 Pressures recommended..... F 14, R 23 psi
 Brakes..... Lockheed 16.2-inch discs, 342 sq. in swept area.
 Curb weight (full tank)..... 1,598 lbs
 Percentage on the driving wheels..... 62

DRIVE TRAIN:

Clutch..... Ferodo single dry plate
 Mph per 1000

Gear	Synchro	Ratio	Step	Overall	rpm
Rev	No	3.70		16.10	4.3
1st	No	3.70	63%	16.10	4.3
2nd	Yes	2.28	43%	9.17	7.4
3rd	Yes	1.52	48%	6.65	10.3
4th	Yes	1.03		4.50	15.2

Final drive ratio: 4.375 to one

