



THIS \$125 CONVERSION BECAME A MERC-MOBILE "88"

ENGINE conversions are becoming increasingly popular as an economical and dependable path to better car performance. The method of replacing an engine with one of greater horsepower output has much to recommend it, although not every case of substitution is successful. However, when carefully planned, a conversion may result in substantial improvement at modest cost, plus the reliability of running with a stock rather than a highly modified engine.

Some engine conversions are quite common. A rare case was the switch recently completed by Perc Salter, of Pasadena, Calif., who installed an Oldsmobile Rocket 88 in his '51 Mercury sedan. Salter reports that the job took the equivalent of three working days in time and represents a total investment, with engine exchange, of \$125.

For this expenditure of time and money, Salter gained slightly less than 25 hp, added approximately 60 ft. lbs. in torque and now owns a smooth-running sedan that has accelerated from a standing start to 89.52 mph in the quarter-mile at the Pomona, Calif., drags.

SALTER acquired the '51 Mercury sedan last June. After making some cross-country trips, he decided to experiment with an engine conversion. The decision was made when he determined that he could obtain a late model Olds engine for less than what it would cost to modify the Mercury V-8 to deliver comparable performance.

After checking several wrecking yards in the Los Angeles area, he found the engine he wanted in a rolled '50 Olds sedan. Salter was quite certain that the mileage shown on the odometer was fairly accurate at 25,647 miles. Condition of the spark plugs and the exhaust pipe indicated that the engine was in good condition. The price was \$200, complete with flywheel, clutch and related running equipment.

Additional purchase of a new generator, battery and other necessary items ran up the bill, but when sale of his old engine was completed, the total cost for all Salter needed was \$125 in cash for the job.

His first step was to buy an adaptor housing and have the flywheel drilled to accept the Mercury clutch, since there

wasn't sufficient room in the housing for the large Oldsmobile unit.

Preliminary measurements of the engine compartment had been made so Salter knew the Rocket 88 would fit, although somewhat snugly. After the Mercury engine had been removed and more precise measurements made, a new front motor mount had to be installed to accept the conversion.

The Mercury engine was mounted at two points forward and one aft, whereas the Olds engine had two mounts aft and one forward. To use the Mercury transmission, Salter fashioned a unit out of 1/2x2 inch stock that would rest on the existing forward motor mounts and could be bolted solidly to the front bracket assembly of the Olds engine. This gave him the two forward and one aft mounting necessary. He also placed a stiffener brace between the Olds engine and the new mounting to eliminate excessive roll of the engine and to transfer all shocking to the two front Mercury mounts in the car.

The gas line had to be extended around the engine compartment to the lower right front side to connect with the Olds fuel pump. The Mercury accelerator linkage had to be removed and a modified version of the standard Olds linkage was installed. This, it was later discovered, gives a very quick action of the accelerator arm and sometimes results in faster acceleration than desired. The lower section of the firewall had to be cut to clear the bell housing, and the floor panel was cut and raised to clear the wider, longer Olds engine bell housing.

AFTER lowering the engine into the chassis, Salter found that the clearance above the steering gear box was practically nil, while the valve cover just barely cleared the heater blower. Shifter arms had to be bent and readjusted to fit around the housing of the Olds engine. In addition, the left valve cover had to be bent at the rear so the shifter levers would function properly. A small portion of the stiffener webbing of the clutch housing had to be cut away so that the travel of the accelerator linkage would not be hindered.

Two ports of the radiator had to be blocked off since the

Olds engine requires only one up and one down. They were plugged off with cup type soft plugs and short lengths of hose. This left the radiator stock so that future trouble would not be encountered if Salter decides upon further exchange or re-conversion in the car.

A Ford type heat sending unit had to be adapted to the Olds engine, since the existing type would not function in conjunction with the dash element. For the same reason, a Ford type oil pressure sending unit had to be worked into the revised layout.

Salter next turned his attention to the problem of adapting the exhaust system to the dual pipe setup. No trouble was met on the right side, but on the opposite side the tolerances were very close. The front cross member and the steering linkage presented no obstacles and the stock Oldsmobile pan was used with sufficient clearance, but at the present time when running with the wheels cramped hard to the right or left there is a slight rumbling heard by the driver.

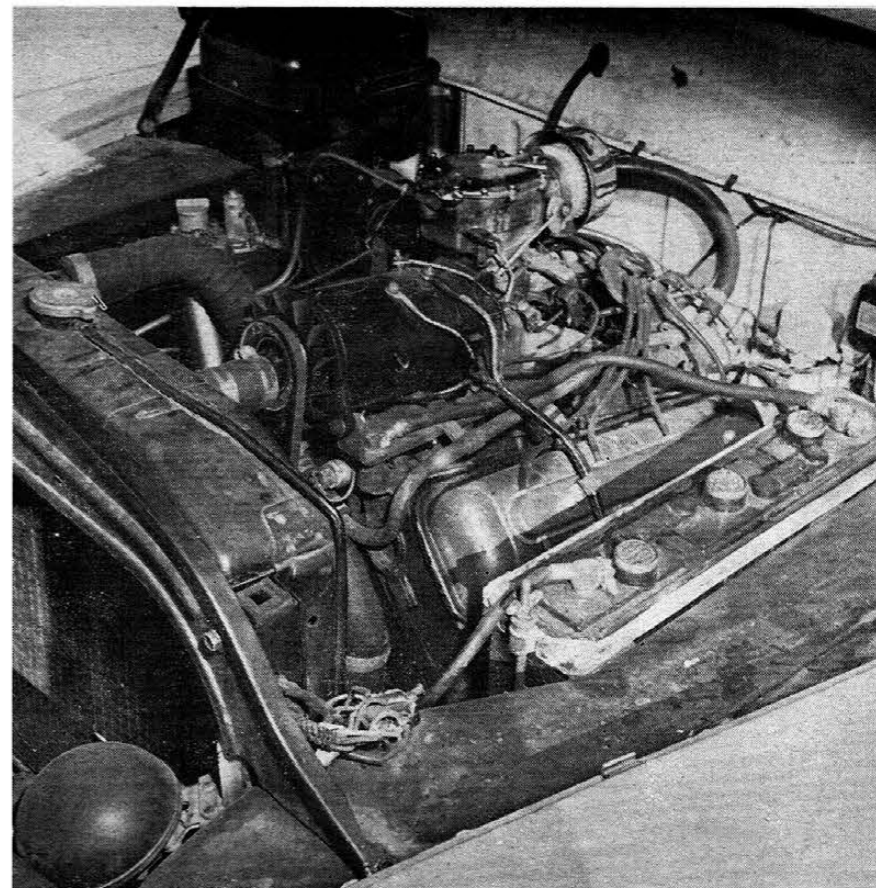
Installation of the long type of battery was effected easily, since there was ample room. Starter connections were devised with only one cable to the starter from the solenoid. A short piece of wire was used on the starter to connect the cable to the solenoid on the starter itself. This solenoid is energized when the Mercury solenoid is energized, sending current through the starter cable. The system, Salter opines, seems much simpler than others that have been described.

With the conversion completed, Salter made his first test. When he fired up the engine, valve lifter noise was heard for only a few seconds, even though the engine had not been used for several months. Out on the road, he found only one major fault.

The Mercury clutch does not hold the Olds 88 engine under full power. If similar work is ever done in the future, Salter says he will be sure to put in a "beefed up" clutch.

In its final form, the Merc-Mobile 88 is equipped with overdrive and a 4.10 rear end. To further check its performance, Salter visited the Pomona drag strip last November. After several practice runs, he finally clocked the 89.52 mph by using the three conventional gears. When locked in overdrive second, and with no shifting of gears whatsoever, the car turned an even 77 mph. This, Salter feels, shows exceptional acceleration in the upper speed range once the car is moving. No trouble was experienced with the valve lifters on the runs.

As Salter is now running it, the Olds engine is completely stock. Nothing has been done to it except replacement of spark plugs and points. However, he is thinking of boosting the compression soon in that never-ending search for better performance.



Oldsmobile engine fits snugly into Mercury forward compartment with only slight revisions in layout. Enough room was left to install the long type of battery

Adaptor housing for transmission is highlighted area in photo below. One flaw in performance is the slipping Mercury clutch which was used because space was insufficient for Oldsmobile unit. Salter made the entire installation in three days

