

ENGINEERING

Better Postwar Cars

May be vastly improved and have longer life as a result of faults brought to light by long-time ownership of cars during the war.

► YOUR POSTWAR car may be much better and have longer life as a result of information the automotive industry is getting from the faults brought to light by long-time ownership of cars in the war years, John Oswald, of the General Motors Corporation, told the meeting of the Society of Automotive Engineers, held in Detroit. Manufacturers are interested more than ever before in the difficulties of long-time ownership, in some cases already totaling six years of operating the same car, he pointed out.

The majority of the faults present in the cars being driven on the roads today are quite common to a percentage of all makes of cars and are disclosed by long-time ownership, he remarked.

Thousands of car owners who don't have a garage have experienced difficulty in locking their cars when tumblers in the lock stick, and when the mechanism that opens and closes the windows fails to function, Mr. Oswald pointed out.

This is only a minor problem, he stated, compared to the starting and ignition systems with a distributor cap that has collected a lot of dust, spark plug wires

slightly deteriorated, the starter a little worn, battery efficiency reduced, and a little precipitation during the night—all of which adds up to difficulty in starting the engine in the morning.

One of the major reasons for the apparent weakness of the electrical system on today's automobile is the limited capacity of the battery and the length of time it takes the generator to replace the electrical energy that can be consumed so quickly, Mr. Oswald declared. Part of the high current consumption is due to electrically-operated accessories. The speaker suggested that all car manufacturers step up the capacities of their automobile electrical systems for the benefit of both short- and long-time owners.

Keeping down wear on front tires has become a major problem on many cars, he stated. Maintaining correct tire pressure has been the easiest of the tire conservation efforts, and correct wheel alignment the most difficult. The necessity of maintaining the original geometry of front suspension systems to minimize tire wear was almost unknown to many who now have become long-time car owners

and find alignment correction to be rather expensive. Mr. Oswald recommended that front-end suspension systems should receive more attention from engineers and that the cost of replacing worn parts and alignment procedure time be reduced.

More miles per gallon may become an important consideration after the war as a result of limited-speed driving and fuel rationing during the war years. Therefore, Mr. Oswald points out, automobile manufacturers should be prepared to give postwar buyers the facts about aviation or high-octane gasoline that gasoline manufacturers are promising will give a potential increase in miles per gallon.

Few long-time owners register complaints on engine performance and engine life, he stated. The difficulty of excessive oil consumption has continued to be one of the few items of concern on high mileage cars but it has improved.

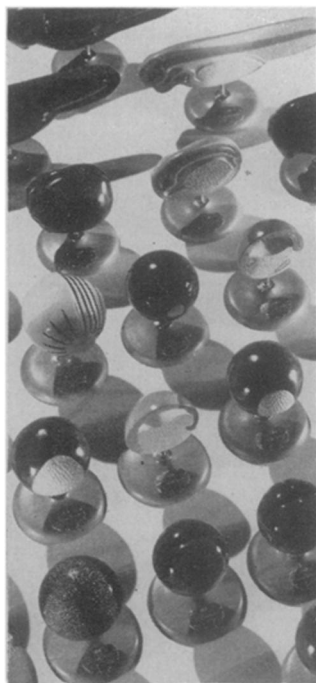
Corrosion, the rusting away of body and interior parts, is due largely to inadequate water drainage and insufficient ventilation, reports Mr. Oswald. Car manufacturers plugged all the holes and sealed all the joints to keep dust out of the car and they did such a good job that moisture which collects is retained long enough to increase corrosion. Present owners may be quite perturbed when they find out how much the rusted-away bodies will subtract from trade-in values when new cars are again offered for sale. Mr. Oswald pointed out that some corrosion problems may be solved by new designs eliminating some of the joints, better protective coatings, and improved ventilation and drainage. However, any additional cost for improvement will be reflected in the selling price of the car.

Long-time ownership has made the driving public more conscious of the quality of exterior finishes and chrome plate. After owning the same car for several years, many buyers of conservative cars have had an advantage over those who were attracted by pastel hues. Some of the latter may think a long time before purchasing another car for its color value, Mr. Oswald predicted.

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Commercial *fur farming* has greatly decreased during the war because of the difficulty of getting the meats, cereals and vegetables on which foxes, minks and other fur-bearing animals are raised.

Slender fluorescent *lighting tubes* up to 96 inches in length have been developed and will be available after the war; they are of the high-efficiency hot cathode type.



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