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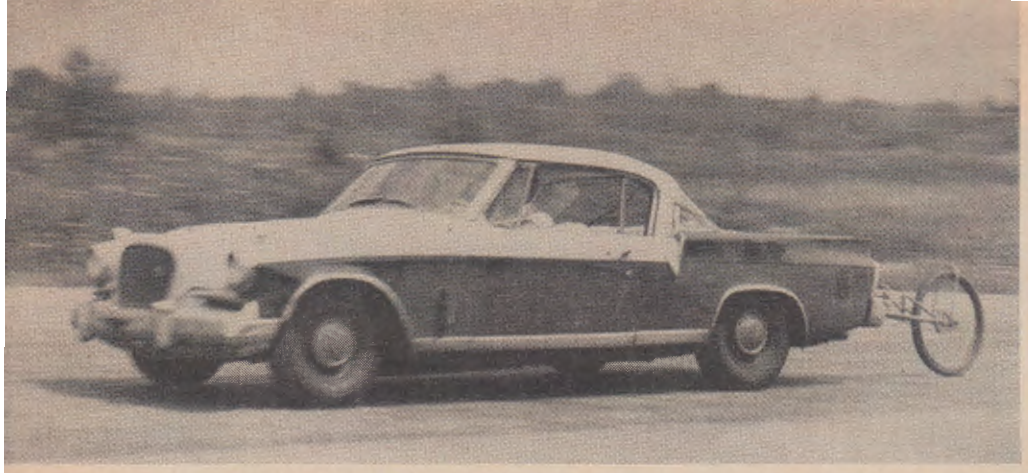

After 100,000 rugged miles of driving, Fermoyle rechecks Stude Golden Hawk again.

A GOLDEN HAWK

100,000 MILES LATER

BY KEN FERMOYLE

LAST FALL I had the opportunity to test drive a Studebaker Golden Hawk, a car which turned out to be one of the more interesting of the 1956 models. The results were reported in the January, 1956, issue of MOTOR LIFE. Recently I had the unique experience of driving a similar car—only this time it was one with 100,000 miles on the odometer!

Readers often ask why we don't do follow-up reports on cars we test "after they have some miles on them." As an experiment we decided to try it.

Studebaker was contacted and officials said they would be happy to cooperate. "In fact, we have a Golden Hawk which has been used extensively for testing and now has almost 100,000 miles on it. Would that do?" Perfect, we decided!

I flew down to South Bend just in time to drive the Hawk the last few laps—over a rugged road course and on the high speed track—required to complete the 100,000 miles. I then had an opportunity to re-run many of the same tests I had gone thru last fall for my original Golden Hawk report. The results were amazing.

Before going into that, however, it might be best to give a few details of what this car had gone thru during its 100,000-mile life.

The bulk of those miles were put on in standard durability testing, aimed at checking out the whole car in general and to bring out any design defects that need correction. For this type of testing, Studebaker has a standard procedure, as do all of the companies. In this case, the Hawk was run over a three mile road course which has been designed to stress every part of the automobile and gives the chassis a particularly rough time. (The course has a full assortment of curves, hills, mean bumps and dips.) Then it goes two laps over the oval high speed track at speeds ranging from 60 to over 100 mph. This test pattern is repeated continually. And the Hawk was weighted to simulate a five-passenger load all this time, by the way!

Not all its life was spent in these durability runs, however. This Hawk was also used for a number of special engineering tests to check specific things—cooling, performance, acceleration etc. Many of these tests are very severe and place terrific strain on many of the car's components.

How did the Golden Hawk stand up under this beating? A complete log was kept on the car during the entire test period, showing parts failures, maintenance, fuel consumption and similar data. I went over this with Studebaker engineers and was impressed. Naturally things went wrong with the car. That would be true on any car driven that many miles under the same grueling conditions. (Engineers calculate that each test mile represents roughly two or more miles of normal driving.)

The gas tank sprung a leak, for example, and the starter motor had to be replaced. The fan blade assembly cracked and the oil pump gave trouble (at 55,000 miles). Bearings eventually wore and the rear axle got noisy. There were other complaints of various natures too; many resulting from the special tests mentioned above which accelerated wear to an abnormal degree and were aimed pretty much at running a component to destruction to see how much it would take.

More surprising than the failures were such things as the brakes and springs. The brakes ran the full 100,000 miles without a lining change! Only two adjustments were made in that time. Studebaker engineers were modest about that achievement, pointing out that the brakes are one of the few areas which don't get as rugged a workout in this type of testing as they would, say, in an equivalent amount of traffic driving. Still, I feel it's a tribute to the Hawk's finned drum setup that the brakes held up like this—and still had lining left, as we found when we pulled a wheel.

The springs were equally impressive. The right rear main leaf broke at over 71,000 miles and the left rear broke at nearly 89,000 miles. You'd really have to drive around the rugged road course and hit some of the bumps at about 50 mph as the test drivers do to appreciate what that means.

As for the engine, it was worked over pretty thoroughly at about the 60,000 mark, needed only minor repairs after that overhaul. Ten sets of spark plugs were used, changes being made at 10,000 mile intervals.

The Hawk delivered more than 16 mpg of gas during the entire test; it burned 6187 gallons in the 100,000 miles. Oil was changed every 3,000 miles after the break-in period and a new oil filter installed every 6,000. It had its thirteenth set of tires on when I drove it.

The thing that impressed me when I first took over the driving just before the 100,000 mark was the overall tightness of the car. I could only detect one rattle: a piece of molding loose above the window on the driver's side apparently. The steering was not sloppy. The engine, with 40,000 miles on it since the overhaul, ran smoothly and quietly. The suspension, original except for rear springs and the shocks, showed no obvious signs of the miles it had covered.

This was an excellent testimonial to Studebaker, since I was assured it had not been given any special attention recently; just the normal maintenance procedures which were carried on throughout the test and paralleled the type of care any owner should give his car.

After completing the final lap during which the odometer hit the 100,000 mark and started all over again, we hooked up a fifth wheel and ran some performance checks. This Hawk had a manual transmission with overdrive, by the way, while the one I tested last fall had Ultramatic drive.

I found that it takes some practice to get the best out of this car on acceleration with this transmission. The combi-

nation of a 352-cubic-inch engine capable of putting out 380 pounds-feet of torque and a light rear end makes it difficult to get off the mark without a lot of time-wasting wheelspin. At first, my 0-to-60 mph runs were averaging about 9.5 seconds—a little slower than the first Hawk I drove. After some practice, however, I managed several runs under 9 seconds; 8.8 was the best time. This was done by winding up over 5,000 rpm and getting a very smooth and fast shift into second gear. The clutch held up well under this violent treatment, but the shift linkage had a tendency to hang up slightly going into second gear at times. This helped account for the higher initial times. Obviously the linkage was bound to get a bit sloppy after that many miles. All in all, however, I felt those times were excellent.

To check mid-range jump, I made several runs from 40 to 75 mph. The average was 9.6 seconds, running in regular third, not overdrive third, all the way.

Next came a series of passes over the road course to get a more thorough check on handling. I enjoyed this more than I had with the Ultramatic-equipped job tested last fall. The overdrive gearbox was more fun to use since it permitted easy down-shifting for corners etc. Otherwise there wasn't much difference between the two cars. The Golden Hawk is obviously a bit nose-heavy due to the big, heavy Packard V-8. The result is that the front end digs in on fast tight turns and the tail end tends to swing out on you. At one point I hit an unexpected bend of diminishing radius a shade faster than was comfortable. I was running in overdrive second and punched the throttle to try and power thru. It worked out all right, but I had an anxious moment as the front end mushed down and the tail started to come around. The suspension is closer to normal passenger car standards than sports car-like, despite the Hawk's designation as a sports-type or "family" sports car. It heels over very noticeably when cornered hard but sway is not excessive.

Speed runs on the oval track followed. Although this track is three miles long, it is not a true high speed track by modern standards. The surface tends to be rough in spots and the turns are not too steeply banked. However, I did get the speedo needle slightly over the 120 mark several times. This was indicated speed —the fifth wheel used didn't register that high—but I estimated it was about an honest 110 mph. And there was still more go left.

This "100,000 miles later" test indicated to me that Studebaker has some basis for claiming that it builds high quality products. When you can put an automobile thru 100,000 miles of back-breaking testing and have it wind up performing as well as this Golden Hawk —you must be building 'em right! •