

Rear View Mirror

Courtesy of Cooperstein Archive

Nineteen sixty-four was Lotus's second trip to the Indianapolis 500. Colin Chapman and Jimmy Clark returned to Indy with high hopes after their near win with a Lotus 29 the year before. The Type 34 was very similar to the 29, the major differences being its Dunlop tires, 2F transmission, new wheel castings and an upgraded Ford V-8 with four overhead cams and Hilborn-based fuel injection.

Chapman was under much pressure to use Firestone tires, partly because of the qualifying speed set by one of the 29s running against Lotus. Clark took the pole, Bobby Marshman's 29 was second, and Dan Gurney qualified the other 34 on the second row.

During the race, Clark was passed by Marshman, but he retook the lead. However, he was let down by his Dunlops, which began to shed their treads. This led to a serious vibration, and his left rear suspension collapsed.

Gurney's car was withdrawn as a safety precaution.

— Foster Cooperstein



(SU CARBS, from page 9)

removed, so that, when the car was driven with the air box and hood removed, the passenger in the car could look down the throat of one of the carburetors. Fortunately, my wife, who gave me constant feedback as to the position of the slide, and I encountered no curious police officers during our brief jaunt down a nearby highway. The result was that the red spring seemed to function on the Lotus twin cam as required.

[Roger Stelling comments:

I have been very blessed, in that all of my Lotus cars have been originally equipped with Weber carbs. Even my Elan Plus 2S is a home market car, and my Eleven was one of the first to use Webers (38DCOE3s). But I have not always been so lucky. My expertise was honed as a British car mechanic in the late '60s and early '70s while I worked my way through college. I remember countless Sunbeam Alpines, Triumphs and Volvos that defied all of my efforts to make them run properly. I remember a paragraph from one shop manual (Triumph, I believe) stating that the Z-S carburetors would be worn out after 50,000 miles and should be replaced with a new set.

I was finally faced with the Stromberg problem in the mid-'70s after purchasing a Volvo 145, which had a system quite similar to Lotus's. It even had secondary butterflys in the manifold to circulate part throttle inlet mixture through a path that was heated by the exhaust manifold.

The system experienced all the same problems that Z-S-equipped twin carbs exhibit, and more. The secondary butterflys were the first to go, but this change made an unbearable situation only marginally better. Finally, I was able to find a partial set of SU's of a very early 140 series.

Like William Hurn, I had to do some fitting to get the SU's to work, but I had the benefit of experience with other cars using SU's and a junk box of pieces from various MG models, Austin-Healeys, and earlier TRs and Volvos. The SU's solved all the carburetion problems, but Japanese dependability finally won out and the Volvo was replaced.

Several years ago, as part of a lot of Elan parts, I acquired a spare S4 Elan engine. I remembered the frustration of Stromberg carburetors all too well, and, even though the engine was complete, I found and bought a set of SU H56 carbs. I considered installing the engine in my Mk. 1 Cortina GT and was not certain that the conversion would work, but I was willing to try, just to avoid the dreaded Strombergs. Unfortunately, I lost the garage for the Cortina and had to part with it before trying the conversion, so I still didn't know if it would work.

Now, I see that it can truly be done, and it looks to work out fine. However, I would recommend that anyone else, before trying this, first look under the hood of a pre-'74 MGB or Midget. There are much simpler means of connecting the linkage between the two carburetors, for both the throttle and the choke, than are shown by William. Most SU installations utilize one cable to the rear carb for the choke and an effective connecting linkage between the two. On the throttle slide, adapting the Lotus flexible coupling between the carbs defeats one of the most desirable features of these units. Normally, the inside end of the throttle shaft is fitted with the socket mentioned in the article, as well as a small, forked lever. There is a small amount of free play between the pin and the fork, which allows the idle speed to be set independently of open throttle synchronization. The throttle openings above idle should be set with the engine turned off by watching to see that the pins in the linkage contact the side of the forks on both carburetors at the same time when the cable is pulled.

If enough people have interest in making this conversion and want infor-

mation on this linkage, I will put together a chart with SU part numbers.

William's article discusses setting the mixture strength by both adjusting the nut at the bottom of the jet holder and changing the needles. It should be noted that changing the setting of the nut only affects the mixture at idle and has no effect on high-speed strength. It acts much like an idle jet in a conventional carb. Many needle contours are available, and these will change the mixture throughout the range. Some contours get rich quicker than others, and, of course, the final amount of richness will also vary.

Someone with a modified engine should look at a needle chart and choose the correct needle, as William's article suggests. I have a needle chart if anyone needs advice on a richer choice.]

(MONACO, from page 4)

Pedro Lamy's car was worse in the afternoon than in the morning, although no changes were made. "I've got a lot of wheelspin, so maybe it's the differential," he speculated. "It was getting worse with every lap." He added, "I was running a completely different setup than Johnny. My car was softer, and I was having real trouble getting out of the corners."

Lamy was 20th fastest, nearly two seconds behind Herbert. Nevertheless, Peter Collins was upbeat. "A good effort by both drivers. . . Today confirms our view on some of the fundamental things that are affecting the car."

In final qualifying, both Lotus drivers improved, with Herbert ending up 16th and Lamy 19th.

"We did a damper and roll bar change, and that resulted in a better balance for my second run, so I was able to push the car beyond its real limit," said Herbert. Lamy switched to the same setup as Herbert's and found that his grip and traction were helped.

Collins was glad that Lotus's practices had been mistake-free on the unforgiving circuit. "With the reliability we've demonstrated so far this year, we are hopeful of some points tomorrow," he said.

But it was not to be. In the race, Herbert stayed out of trouble and got as high as eighth place when the field thinned, but a problem with his semi-automatic gearbox forced him out with six laps to go.

"Numbers were coming up all over the dashboard display, and the gearbox was slow in responding to calls for downchanges," he said. After surrendering eighth, the problem seemed to go away, but then the gearbox began changing down a couple of gears at a time without warning, and he retired.

As Peter Wright put it, "Monaco isn't the sort of place to have someone else changing gear for you!"

After making a couple of extra stops to check for a suspected brake fluid leak and one for a new nose, Lamy finished 11th, five laps behind winner Michael Schumacher and the last of the cars still running.

— Mark Winston

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