

lb-ft at 3,300. The hp surprised us too, coming in the highest so far with 395.3 at 3,200. Average hp jumped to 336.2 as did torque at 434.4. We were baffled by the bsfc going up to .50, but perhaps with the carb at wide open throttle for the entire pull, we were now getting a truer picture of what was going on.

### TIMING IS EVERYTHING

Before going into the carb again, we thought we'd do an easy change and retard the timing to 33 degrees. Wow, did the CJ like that! Peak hp jumped to 399.0 at 5,200. Peak torque did as well, hitting 471.7 lb-ft at 3,400. Averages were now 342.4 and 443.0 respectively. Bsfc's came down to a better .49.

We should have retarded the timing further, to see if the engine would surpass the 400 hp threshold with the small exhaust pipes, but we had a stronger need for noise. So we switched the small 2½-inch pipe for the 6-inch header pipes. Boy, did that make a difference, not only in sound (louder!), but hp jumped almost seven ponies to a new high of 405.7 at 5,100. Average hp went up to 347.7. Torque went up as well, hitting 477.2 lb-ft at 3,500. The average came in at 449.4 lb-ft, and the bsfc fell to a more ideal .48.

We dropped the timing another 3 degrees to 30. Horsepower rose just slightly to 406.1 at 5,100, and the average did too, making 348.6. Torque, on the other hand, was still responding well to the changes with the peak rising to 481.2 at 3,500. Average torque increased a good amount too at 451.0. Bsfc's held at .48.

To see if we could get any more power, we dropped the timing to 28 degrees. We had seen the law of diminishing returns at work with the change to 30 degrees above, so we weren't surprised to finally go backwards, if ever so slightly. Horsepower dropped a couple to 404.0 at 5,000, and the average fell to 347.8. Torque was still good, with peak hitting 484.2 lb-ft at 3,400 on one pull, our best of the day. But it was the average torque on this particular pull that told the real story. It fell back to 450.3, not much, but enough to tell us that 30 degrees worked the best overall. So we set the timing back to 30. Also, a higher .49 bsfc confirmed what the averages were telling us.

Next, we installed a modified air cleaner base to see if there was additional power to be gained by helping direct the flow of air into the Holley, and there was. The combination of 30 degrees and the air cleaner base gave us our best peak and average hp of the day, 409.0 at 5,000 and 351.4 respectively. Torque didn't



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