

# 4100 SPREADBORE

In this month's issue we are going to tell you about an item that has recently been the focus of some renewed publicity and interest. Our 4100 Spreadbore carburetor is a Pony Carburetors exclusive and has a lot of people talking. You all know that for years Pony Carburetors has been telling you about how wonderful the Autolite 2100 and 4100 carburetors are. The reasons that these carburetors perform the best on the planet are:

1. Annular fuel discharge - which atomizes fuel much better than any other metering system ever engineered in any carburetor.
2. A one piece float bowl and main body casting that eliminates leaks and maintenance.
3. A simple appearing design that does not require constant adjustments and attention while providing superior fuel economy and straight line performance!

Focusing in on the 4100, there were 2 sizes manufactured. (Really 3, but you will hardly ever see a 1958 only 1.19") The most common 1.12" venturi 600 CFM, and the much rarer 1.08" 480 CFM, are the ones you will come across. The large 600 CFM (1.12") was factory installed on Galaxies and T-Birds with 352, 390 and 428 engines. The small 1.08" was used on "A" and "D" code 289's and 1966 only Galaxie and T-Bird's with 390 and 428 applications. (The big blocks used the small carburetor for emissions reasons.) The "K" code 289 HiPo was fed by a unique 1.12" 600 CFM manual choke performance calibrated 4100.

For a normal or even "high performance" 289/302 to function the best it must have a carburetor with around 480 CFM, and until now that meant the 1.08" Autolite. Remember from our previous articles that a 289 cubic inch engine can utilize 453 cfm at 6,000 rpms and a 302 cubic inch engine can utilize 471 cfm. With it's appropriate size, the drivability is flawless (i.e. no hesitations or flat spots) and the fuel economy (with a 3:1 rear end ratio) can exceed 20 miles per gallon. Add to that, the 1/4 mile performance and it is actually faster than the 600 CFM version.

There is a big problem with all of this. A lot of enthusiasts have listened to the rave reviews of this engineering masterpiece. This means that the supply of 1.08" 4100's has been gobbled up all over the country. I challenge you to find one at a swap meet! Until now, the 1.08" was the only correct choice for the vast majority of 289/302 owners, and they either paid a hefty core charge (\$220) or patiently scoured swap meets and salvage yards for a restorable core.

Pony Carburetors has made the performance search much easier. About 12 years ago, we introduced a 1.12" venturi that works even better than the 1.08" on small blocks. By narrowing the primary venturi diameter to 1.00", it is now possible to get even better fuel economy, sizzling performance and drivability that begins to approach fuel injection. With the small primary (1.00") and the large secondary (1.12") the Autolite now has the spread bore characteristics that were so desirable and utilized by several carburetor manufacturers in the late 60's and throughout the 70's. The end result of a spread bore design maximizes fuel efficiency while maintaining neck jarring acceleration when the situation arises.

We can make all kinds of claims about a product - but the proof is in the actual results. Several years ago, while engineering the new "spread bore" configured 4100, Pony Carbu-

retors conducted a series of tests to show exactly what real life expectancies could be realized.

## Test Conditions

The car was a nice original 1969 Mustang Sports Roof with a 302 2V, C4 automatic transmission and a 3.25 rear end ratio. The engine was totally rebuilt in 1985 to stock specifications.

The standing quarter mile tests were done with a stopwatch on a measured quarter mile utilizing the cars odometer for the speed. This test was not entirely high tech but sufficient so that you can see the performance differences. The fuel economy tests were made with a combination of city and interstate driving with the car being refueled at the same station and pump each time. During the test, the stock 2V engine was converted to a 4V with an original Ford cast iron intake.

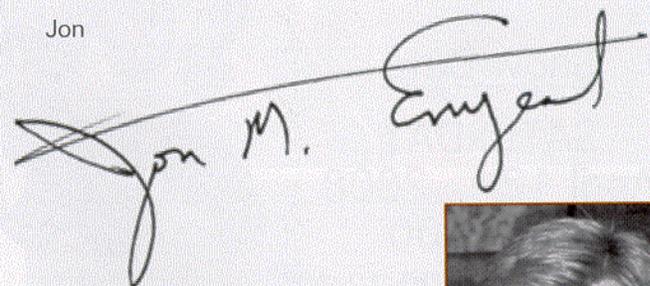
## Results

Test #	1/4 Mile	MPH	Avg Fuel Econ
Factory 2v, Single Exhaust	8.0 Sec.	76mph	19.33
Autolite 4100 1.08	16.3 Sec.	81mph	19.40
Factory Single Exhaust			
Autolite 4100 1.08	15.9 Sec.	84mph	19.43
Dual Exhaust			
Autolite 4100 "Spreadbore"	16.3 Sec.	81mph	20.08
Single Exhaust			
Autolite 4100 "Spreadbore"	15.8 Sec.	85 mph	20.13
Dual Exhaust			

As you can see from this informal test, performance and fuel economy were improved. Due to the overwhelming response we have had to these carbs, we are now selling them on Ebay as an outright purchase. We thank everyone for all their wonderful feedback about our "Good Carbs" columns and the great reviews we have been receiving on our products. As always, if you have any questions, comments or ideas for future Good Carbs articles, feel free to call or email.

Happy Driving,

Jon



**JON ENYEART**

Contributor &  
President of Pony Carburetors

Email: [sales@ponycarburetors.com](mailto:sales@ponycarburetors.com)  
Phone: 866.662.3003 (Toll Free)

