



News for 10/09/07

CFM vs Test Pressure

Hi Again,

We received an interesting customer inquiry that should be of general interest; see below.

John



Butterfly	CFM at 10" water	CFM at 20" water	Booster Signal at inches of water	HP Range
1.750"	947	1329	86" at 20"	650-1000
1.875"	1050	1456	45" at 10"	750-1100
2.000"	1200	1592	39" at 10"	850-1400
2.125"	TBA	1682	39" at 10"	950-1300
2.250"	TBA	TBA	39" at 10"	1050-1400

1. Is the **dAM** 1.875" 4500 the same overall height as the 9375 holley 4500?

Yes.

2. Does your carb require bowl vent extensions as per hard launching drag combinations?

If you need bowl vents now, there maybe some improvements you could take advantage of to prevent that. You can use them, but they should not be needed.

3. Does your carb allow the use of a scoop pin to be screwed into the top flange, e.g. 5/16" thread like the 9375?

Yes, we put a cap screw in the hole for appearance reasons.

4. I have a little trouble understanding cfm versus water pressure. Is this important to know?

Many people ask, "What does your carburetor flow?" without quite knowing what they are asking. When one flows anything you have to use a reference pressure; that is what test pressure means. It is the amount of draw you put under - or push that you put over - the item you are flowing. This allows you to compare with someone else somewhere else. It is like dyno correction. That allows you to compare engine HP numbers all over the world. Test pressure allows one to compare heads, manifolds, and carburetors around the world.

5. Do you believe that my engine can use all of the available 1456 cfm that the 1.875" can supply?

The funny thing about this question, is the perception that the carburetor "supplies" the air. It does not, the engine does; the carburetor supplies the fuel. But the carb can be either too big or too small in size and resistance. That is where the flow numbers come into play. Just like cylinder heads, the smaller the port and the greater the flow, the better they are. That is why I give all the normal test pressures, so it is easy to compare. And it also makes one aware that a test pressure exists. When you look at our size, e.g. 1.875" flowing 1456, that should be compared to another for size and resistance to air moving through it. We have a very small hole that flows a lot of air (that is good),

rather than big hole that flows a small amount of air (that is bad, no booster signal or emulsion). We pick the sizes based on optimizing the air the engine will be moving to give the best mixing of the fuel that you will be "drawing" through the carburetor, without making the carburetor a resistor to the air drawn (Less resistance)

PS: If anybody has a copy of my 1992 Superflow Presentation on VHS, please contact me.

Visit dambest.com.

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