Modify a Rochester Quadrajet Toronado 7043252 to GMC Motorhome 7043254 specs

by Espen Heitmann

On the 7043252 you will have to:
Enlarge the small hole in it primary butterflies to 1/8".
Change the primary rods and jets.
Change the power valve spring.
Change the secondary rod hanger.
Block the extra external vacuum ports.
There is a minimal difference in the original air valve dashpot opening time, if/when the dashpot is replaced they will be identical.
Set it up to 7043254 specs.

Other than that they are identical down to the internal air bleeds, same casting # etc, that there should be any differences in the internal passages is a statement that I cannot take seriously as there is just NO reason for it or possibilities in the carb castings to re-route anything from the original design.

Please prove me wrong, I have just spent the last week going through the carburetors in question tearing them completely down and measured every opening, bleed and length that it is possible to measure.

Ok here we go for the jet and rod:
So we know for sure that the 7043254 in the primary circuit had # 70 jets and 50D rods, this is our starting point, we have to compare and do some math.
How much will this combination flow is the question and the answer, the 50D rods with the 0.036 tip is the clue, remember that all other rods have a 0.026 tip.

I will not take everything now but in short what I did find out is that the open area with a :
70 jet and a 0.036 tip is 0.00283057
70 jet and a 0.026 tip is 0.00331752
That gives a difference of 0.00048695
To give you an idea of how large the difference is we will try to find a jet size that will flow the same as the # 70/0.036 but with the standard 0.026 tip.
I did some more research and did find a combination that would flow 0.00289027, just a tiny bit more with a 0.026 tip, it was jet size # 66.

The above is with the rod at WOT, so what about at idle ?

Well we know the diameter for the 50D rod, it is 0.050, this has a flow with the # 70 jet at 0.00188496.
So since I did find out that a# 66 jet with a 0.026 rod did flow about the same as the #70/0.036 combo I just have to find a rod with a diameter that gives the same, the # 44 rod flows 0.00190066 with the #66 Jet and that is pretty darn close to the # 70/0.050 combo.

So now I know that the closest jet/rod combination to the # 70/50D is #66/44 and that is way to lean for a 455 on idle.

BUT remember in the post above I said the primary butterflies had a larger 1/8" hole in them? Well there is your answer to why the 455 can run on the lean rod and jet combo, the hole is directly over the idle mixture screws, get it?

Use the secondary rod hanger "P" this is only 0,005 lower than the original "O" hanger

Here is a link to the power piston spring http://www.allcarbs.com/detail.php?pid=1007

Then you just need a gasket/repair kit and a carb to work on.

http://gmc.mybirdfeeder.net/GMCforum/index.php?t=msg&th=33516&prevloaded=1&rid=3866&start=0
QUADRAJET POWER PISTON SPRING
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