

Aug 22 2016 @ Grand Planes, Tulsa
TNIO-520 BA Fuel Pump Flow Specs.

BP 29.20" Hg
Absolute
Correct to 30" Hg

646210-2 E069113BR

P/N FT-B8.5/1-632818-2

S/N ~~E069113~~

R.P.M.	Flow(pph)	Setup pph	P.S.I.	Setup psi	Boost Pressure
600	7.0	2.0	10.5	0.4	Ambient
1600	38.0	38.0	18.0-19.5	20.2	Ambient
2700	185.0		31.0 (set)	31.0	Ambient
2700	189.0 (min)		32.5 (min)		+1" Hg.
2700	195.0 (min)		35.0 (min)		+2" Hg.
2700	200.0 (min)		38.0 (min)		+3" Hg.
2700	208.0 (min)		40.5 (min)		+4" Hg.

59.2

Notes:

- See TCM X30953A (73-70-03 note 10): At maximum flow settings on fuel pumps equipped with aneroid controlled variable orifice, allowable hysteresis to be minus 5% of outlet flow and pressure.

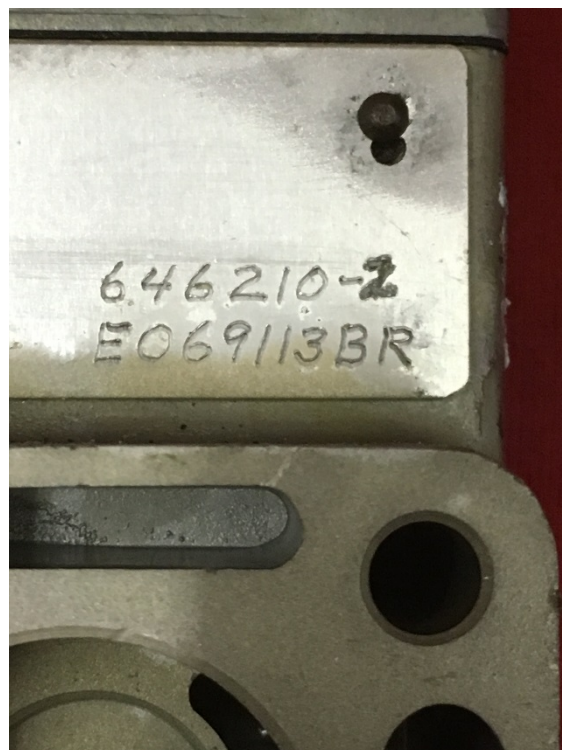
Date _____

Mechanic _____

304pph ↔ @ 31.0
÷ 5.8 = 57.5gph

After?
A.S. Aneroid

185 pph ↔ 31.0

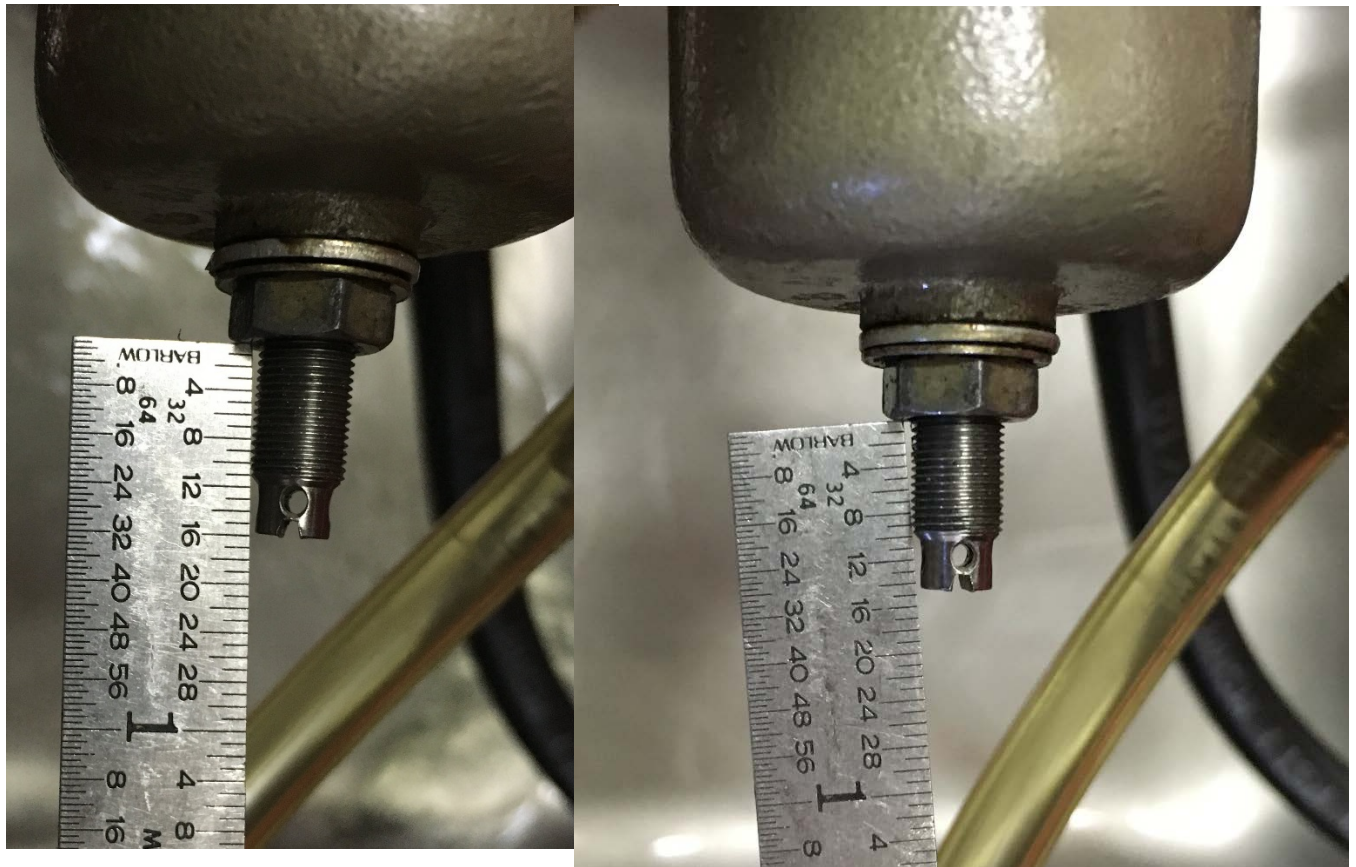


No data plate on the fuel pump.
These are the only markings, and we believe they are correct.

Before adjusting the aneroid on the pump, the fuel flow was 304 pph at the reference 31.0 psi. That is about 51.8 gph. That is an amount sufficient to flood the engine. Anything over about ~44 gph will normally cause a loss of significant power on that engine, and maybe total loss of power.

After adjusting the pump, it flowed 185 pph at the standard reference pressure of 31.0 PSI.

185 pph is about 31.5 gph which is close to the 32 gph "redline" full power fuel flow for that engine/aircraft/STC.



Picture above-left is before adjustment. Aneroid is extended $\sim 15.5 / 32$ of an inch.

Picture above-right is after adjustment. Aneroid was screwed in (which by-passes more fuel) about 3 turns to about $14/32$ inch. That by-passes more fuel internally in the pump and reduces the fuel flow to the engine.