NEW D&D TWIN PIPES FOR STOCK F7 & STOCK MUFFLER

Dale Roes, co-owner of D&D Racing brought this stock 05 F7 to DynoTech to verify the HP numbers on their new quiet-as-stock twin pipes. Essentially, D&D created a Ypipe that connects re-angled stinger outlets of their twin pipes into the stock muffler inlet. This quietness should satisfy the dB meter-toting gendarmes, and should appease those who write tickets for non-OEM mufflers.

Dale also brought along the stock pipe/ Ypipe to install on the sled to show that this sled was, indeed, a stocker. Note that the stock fuel pressure and fuel flow was on the lean side, and the 99 lb/ft of torque indicated that this was one of the "good" '05 stockers.

With the D&D twins in place fuel pressure was bumped up from stock with D&D's pneumatic fuel pressure booster. The higher airflow CFM of the twin pipes required higher than stock fuel flow in the midrange and on top end. The extra fuel pressure accommodated the top end requirement.

Also, on the dyno the pipes come on so hard at 7200 RPM exhaust valve opening, the dyno water control servo couldn't react rapidly enough to catch the quick-revving engine connected to the low-inertia dyno. Obtaining accurate data from 7200 on up was difficult because of the surge in revs. So to show the power accurately from 7200 on up, the tests were begun just after valve opening.

This is extreme HP on pump gas from such a small engine. Note the flat plateau of HP from 7900-8200 RPM and very broad torque curve.

We had no problem here running on pump gas WOT for 10-15 seconds at 160+ HP with coolant temp at 120 degrees F.

Stock 05 F7, slightly increased fuel pressure with new D&D twins into stock muffler

EngSpd RPM	STPTrq Clb-ft	STPPwr CHp	Fuel A lb/hr	Air1+2 scfm	FUEL-P psig	A/F Ratio	BSFC lb/hph	AirTmp degF
7300	96.8	134.5	98.9	229.1	44.2	10.6	0.754	47
7400	96.1	135.5	98.6	228.4	44.3	10.6	0.746	47
7500	101.3	144.6	102.5	237.6	43.9	10.6	0.727	47
7600	103.8	150.2	104.5	246.1	43.6	10.8	0.713	47
7700	105.7	154.9	105.8	253.9	43.5	11.1	0.711	47
7800	106.1	157.4	106.9	259.3	43.5	11.1	0.696	47
7900	106.4	160.1	105.9	268.9	43.6	11.6	0.679	48
8000	105.9	161.3	105.8	272.3	43.6	11.8	0.673	48
8100	104.8	161.6	105.1	276.8	43.7	12.1	0.667	48
8200	103.3	161.2	104.1	284.6	43.8	12.6	0.662	48
8300	100.7	159.1	102.2	293.1	44.1	13.1	0.659	47

Stock 05 F7, stock fuel pressure and stock single pipe installed in place of twins

EngSpd RPM	STPTrq Clb-ft	STPPwr CHp	Fuel A lb/hr	Air1+2 scfm	FUEL-P psig	A/F Ratio	BSFC lb/hph	AirTmp degF
5700	68.2	74.1	49.1	155.2	42.5	14.51	0.683	51
5800	70.2	77.6	49.7	157.4	42.5	14.51	0.661	51
5900	72.4	81.3	51.2	163.2	42.7	14.59	0.648	50
6000	73.2	83.7	51.6	165.1	42.4	14.65	0.635	50
6100	75.1	87.2	52.2	166.4	42.4	14.59	0.617	50
6200	75.9	89.6	53.1	168.2	42.4	14.53	0.609	50
6300	78.1	93.7	54.5	172.1	42.4	14.45	0.599	49
6400	78.3	95.4	55.1	173.6	42.3	14.45	0.594	50
6500	79.8	98.8	55.8	179.4	42.3	14.72	0.582	50
6600	81.5	102.4	57.1	183.7	42.2	14.75	0.573	50
6700	83.8	106.9	59.2	191.7	42.2	14.82	0.569	49
6800	85.4	110.5	60.7	195.8	42.2	14.77	0.566	50
6900	87.4	114.8	63.2	202.1	42.2	14.64	0.567	51
7000	88.5	118.1	64.7	205.9	42.1	14.57	0.565	51
7100	89.5	121.1	64.6	209.1	42.1	14.82	0.551	51
7200	90.6	124.2	66.1	213.2	42.1	14.76	0.549	51
7300	90.8	126.2	66.6	213.5	42.1	14.67	0.544	51
7400	91.2	128.5	68.1	215.8	42.1	14.51	0.546	51
7500	99.1	141.6	99.1	243.4	41.5	11.24	0.721	51
7600	98.4	142.4	99.8	244.7	41.5	11.22	0.722	51
7700	98.6	144.6	103.3	249.1	41.5	11.04	0.736	51
7800	97.2	144.4	102.5	250.8	41.4	11.21	0.732	51
7900	93.5	140.6	103.2	257.6	41.5	11.43	0.755	49
8000	90.9	138.5	103.6	258.5	41.5	11.42	0.769	49