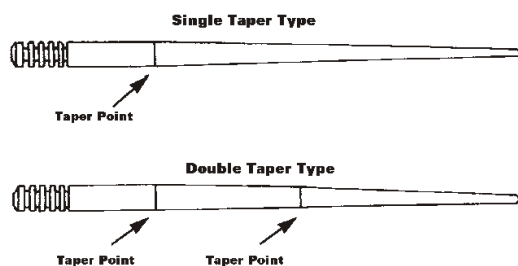


## TUNING AND JETTING COMPONENTS

### Needles (a.k.a. Jet Needle)

The Jet Needle controls the fuel mixture in the midrange (1/4 - 3/4) throttle position. The taper of the needle determines the amount of fuel. For example, the thinner the diameter of the needle, the more fuel will be drawn. The thicker the diameter of the needle. The less fuel can be drawn.

#### Two Types of Needles

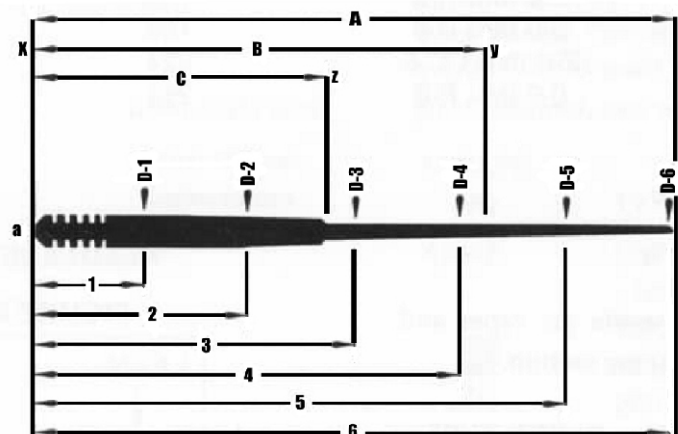


D1 through D-5 indicates diameter (mm) at each point

	A	B	D-1	D-2	D-3	D-4	D-5
4DG6	50.3	24.0	2.518	2.518	2.405	2.119	1.850
4E1	50.3	28.0	2.515	2.515	2.345	2.127	1.924
4F10	50.2	24.5	2.513	2.513	2.385	2.135	1.877
4L6	50.3	24.5	2.515	2.515	2.178	1.660	1.190

D1 through D-6 indicates diameter (mm) at each point

	A	B	C	D-1	D-2	D-3	D-4	D-5	D-6
5D5	57.6	30.0		2.513	2.513	2.513	2.366	2.205	
5D120	59.1	28.2		2.520	2.520	2.479	2.311	1.980	
5DH21	52.3	30.1	16.5	2.515	2.470	2.465	2.328	2.024	
5DP2	60.3	32.4		2.515	2.512	2.513	2.418	2.067	1.418
5DP7	57.6	26.4		2.512	2.512	2.440	2.259	1.580	
5EJ11	60.3	28.5		2.515	2.515	2.515	2.241	1.839	1.420
5F3	58.0	27.4		2.519	2.519	2.419	2.135	1.863	
5FJ9	59.2	35.0		2.517	2.517	2.517	2.364	2.021	
5FL7	58.0	28.0		2.518	2.518	2.440	2.170	1.735	
5FL11	60.3	28.2		2.518	2.518	2.438	2.175	1.740	1.256
5FL14	58.0	28.0		2.520	2.520	2.440	2.170	1.735	
5J6	58.0	27.5		2.518	2.518	2.340	1.890	1.450	
5J9	58.0	27.0		2.522	2.520	2.432	1.996	1.505	
5L1	58.0	27.0		2.518	2.518	2.330	1.811	1.297	



D1 through D-6 indicates diameter (mm) at each point

	A	B	C	D-1	D-2	D-3	D-4	D-5	D-6
6CF1	61.5	29.5		2.512	2.512	2.429	2.240	1.974	1.710
6DH2	62.3	28.0		2.511	2.511	2.466	2.295	2.000	1.660
6DH3	62.3	22.0		2.512	2.512	2.458	2.286	1.948	1.607
6DH4	62.3	25.5		2.520	2.520	2.440	2.258	1.915	1.575
6DH7	62.2	28.5		2.516	2.516	2.505	2.316	2.009	1.688
6DH8	62.2	20.3		2.538	2.538	2.436	2.208	1.827	1.497
6DJ30	64.7	26.3		2.510	2.510	2.450	2.090	1.660	1.240
6DP1	62.3	28.9		2.511	2.511	2.476	2.312	1.748	1.075
6DP10	62.4	26.5		2.510	2.510	2.440	2.260	1.560	.890
6DP17	62.3	32.1		2.518	2.518	2.518	2.372	1.834	1.141
6F3	60.5	34.2		2.512	2.512	2.512	2.313	2.050	
6F4	62.3	32.0	19.4	2.515	2.442	2.436	2.206	1.939	1.678
6F5	62.3	38.1	19.0	2.515	2.456	2.454	2.364	2.098	1.840
6F8	62.3	34.0	21.5	2.512	2.512	2.386	2.214	1.945	1.688
6F9	62.3	28.9		2.516	2.516	2.475	2.210	1.949	1.678
6F13	64.2	32.8		2.500	2.460	2.460	2.240	1.970	1.700
6F15	62.2	19.8		2.535	2.538	2.461	2.208	1.979	1.649
6F16	64.6	31.2	18.4	2.520	2.404	2.400	2.201	1.941	1.679
6FJ6	62.3	35.2		2.505	2.505	2.505	2.376	2.040	1.606
6FL14	62.1	26.7		2.538	2.538	2.538	2.233	1.649	1.218
6J1	64.0	36.2		2.517	2.517	2.517	2.339	1.919	1.495
6L1	62.3	37.0		2.512	2.512	2.512	2.335	1.826	1.313
6N1	62.3	37.0		2.514	2.514	2.514	2.278	1.672	1.058

D1 through D-7 indicates diameter (mm) at each point

	A	B	D-1	D-2	D-3	D-4	D-5	D-6	D-7
7DH2	75.3	31.6	2.99	2.99	2.99	2.84	2.66	2.27	1.92
7DH3	72.5	28.1	2.98	2.98	2.96	2.80	2.47	2.11	1.76
7DH5	72.2	27.4	2.98	2.98	2.94	2.78	2.44	2.08	1.72
7F6	72.3	29.0	3.00	3.00	2.95	2.68	2.41	2.14	1.87
7F7	72.3	33.1	2.99	2.99	2.99	2.80	2.54	2.28	2.02

A = Needle Length (mm)

B = Length between point (x) and the taper point (y)

C = Length between point (x) and the pronounced taper point (z)

- 1 = 10mm      D-1, D-2, D-3, D-4
- 2 = 20mm      D-5, D-6 are the
- 3 = 30mm      actual taper
- 4 = 50mm      deameters at those
- 5 = 50mm      given points in
- 6 = 60mm      millimeters



## TUNING AND JETTING COMPONENTS

### Needles (a.k.a. Jet Needle) con't.



Jet Needle Number	Applications	Needle Diameter Before Taper (mm)	Air Fuel Ratio
J8-6FJ41	TM38 Flatslide	2.522	Leanest ↕ Richest
J8-6FM46		2.522	
J8-6FJ40		2.522	
J8-6DP04		2.515	
J8-6EJ12-60	Early TMX38 Flatslide	2.60	Leanest ↕ Richest
J8-6EJ12-59		2.59	
J8-6EJ12-58		2.58	
J8-6EJ12-57		2.57	
J8-6EJ12-56		2.56	
J8-6EJ12-55		2.55	
J8-6EJ12-54		2.54	
J8-6EJ12-53		2.53	
J8-6EN11-58	Early TMX35 Flatslide	2.58	Leanest ↕ Richest
J8-6EN11-57		2.57	
J8-6EN11-56		2.56	
J8-6EN11-55		2.55	
J8-6EN11-54		2.54	
J8-6EN11-53		2.53	
J8-6EN11-52		2.52	
J8-9DZH01 (Std)		RS34 - 36	
J8-9DZH03	Smoothbore	2.49	
J8-9DZH04		2.48	
J8-9CHY03 (Std)	RS38-40	2.99	Leanest ↕ Richest
J8-9CHY05	Smoothbore	2.95	
J8-9CHY06		2.97	
J8-8DDY01-98	HSR42	2.98	Leanest ↕ Richest
J8-8DDY01-97 (Std)		2.97	
J8-8DDY01-96		2.96	
J8-8DDY01-95		2.95	
J8-8CFY02-98	HSR45	2.98	Leanest ↕
J8-8CFY02-97 (Std)		2.97	