

Matrix TPS Tuning

This tuning mode is the most popular Dyno tune method for normal aspirated racing engines that have poor vacuum signal or throttle bodies. It is easier because the Dyno locks the RPM's to a specific load site and the tuner can move the load through the other axis. Then he tunes at specific intervals. The ECU will then interpolate points in-between his tuning points and get the fuel and time accurate and smooth. Note that this mode is not available in Novice mode. Requirements here is a good and accurate TPS signal and also the altitude sensor. This tuning method cannot cater for altitude and pressure differences due to temperature. See the Tips and Hotkeys section to understand how to manipulate all the data values.

Matrix TPS tuning Pallet

	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500
100	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
93.3	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
86.7	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
80.0	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
73.3	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
66.7	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
60.0	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
53.3	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
46.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
40.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
33.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
26.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
20.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
13.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
6.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6

The only differences in this tuning method is that the vertical load Y-axis is TPS instead of MAP signal. The tuning is the same as described in **Matrix Map Tuning**. Note: When the throttle closes, the block will stand a 0% and not at atmospheric pressure. Also when the throttle is released it will stand on 0% right at the bottom.

All that remains now is the space outside where the Dyno cannot reach. This is the RPM columns lower than idle.

On the RPM columns make the whole row 10 degrees which is your cranking timing. This will ensure the engine starts easy without kick back on the starter.

0.7	10	10	15	18
0.5	10	10	15	18
0.3	10	10	15	18
0.2	10	10	15	18
0.0	10	10	15	18
	0	500	1000	1500

On the fuelling column side use this as your cranking fuel. When the engine cranks it will use the block where the load is at. It will be compensated with the water temperature graph for cold starting.