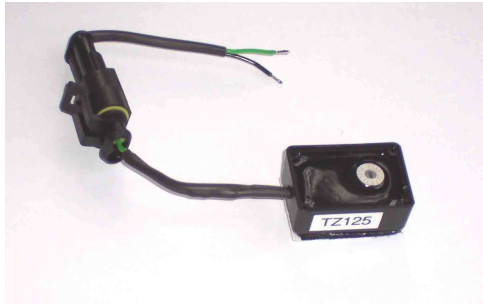




TZ125 - 16 settings Curve Changer

The Curve Changer will alter and improve your ignition map profile.



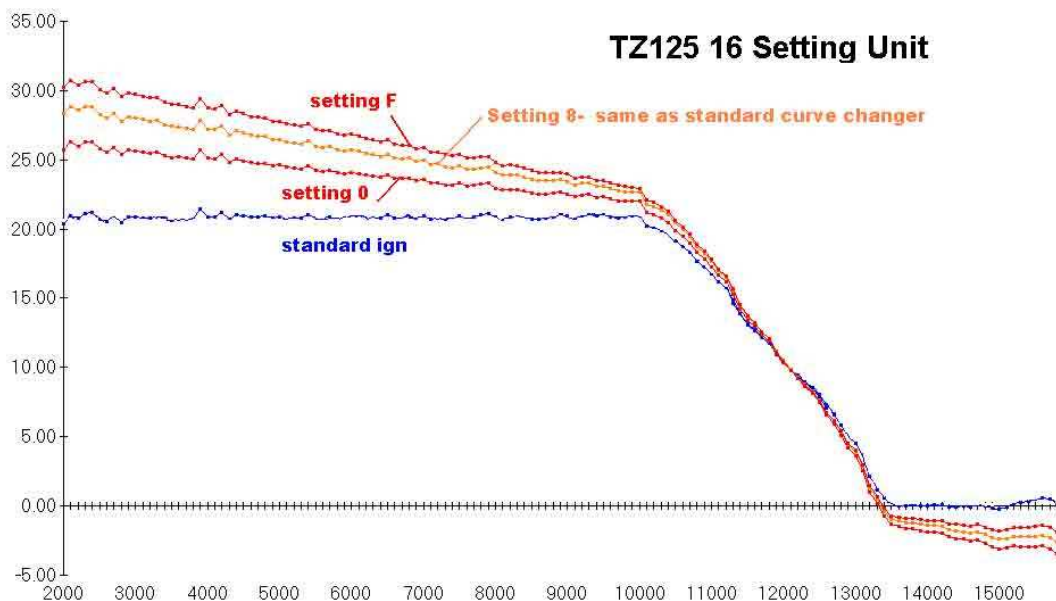
(Shown with outer cover removed)

The reason the curve changer works is that the standard ignition is a generalisation for all ... it is not too difficult to tune, suitable for all fuels, all gearing, etc. When we looked at designing a programmable ignition, the largest requirement was to increase the drive area advance by 3 to 4 degrees, without then causing the over rev to 'brick wall' due to the increased compression effect. A simpler lower cost unit could provide this requirement. ... The curve changer. The largest advantage is in the increase of spread of power. Curve changers have been found to be very useful not only on race bikes but also on karts also using TZ engines.

The unit requires the ignition base level static timing to be advanced as the unit delays (retards) the ignition back, and can so provide areas of more advance than normal (less unit retard) or less advance than normal.

The unit is mounted using Velcro provided; the switch is waterproof however the unit should be operated with the cover on

Fig 1. 16 setting TZ125 Curve Changer. This diagram shows the effects of the range of the 16 settings, allowing the user to fine tune the ignition



Installation Procedure

1. Advance the static timing.

With the unit set to standard – switch position 8

Advance the static timing from 20 degrees to 28 degrees advance.

If you normally use a dial gauge for 2.3mm BTDC them set now to 3.2mm BTDC

(Add 0.65mm of rotation movement per degree)

Fine Adjustment

If the over-rev is brick walling (will not rev out at max RPM) but has strong acceleration then turn the curve changer switch **up** one setting

If the over-rev is higher, but the acceleration not strong, then turn the curve changer switch **down** one setting

Specialist setting

To increase the curve changer effect (drive advance and over-rev) and retain the mid range, the static plate needs to be advanced more and at the same time the curve changer setting increased to return the timing to the correct level:

For 5 degrees of ignition adjuster plate advance = Setting 0

For 6.5 degrees of ignition adjuster plate advance = Setting 4

For 8 degrees of ignition adjuster plate advance = Setting 8 (standard position)

For 9 degrees of ignition adjuster plate advance = Setting A

For 10 degrees of ignition adjuster plate advance = Setting F

2. Locate the pick-up coil connection

Ease the outer sleeving back - you may need to cut the sleeving. Gently remove enough insulation 40mm back from the connector on the selected wires.

3. Connect the Curve Changer

Solder the Curve Changer wires onto these wires as follows:

Curve Changer	Black	to	'White with black stripe'
Curve Changer	Green	to	'White with green stripe'

Tape the joins with tape. Pull back the outer sleeving. Plug in the curve changer.

4. Check

Remember to allow for carburetion changes, increase the main by 2 jet sizes to be safe
Use of a detonation indicator or counter is recommended.

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