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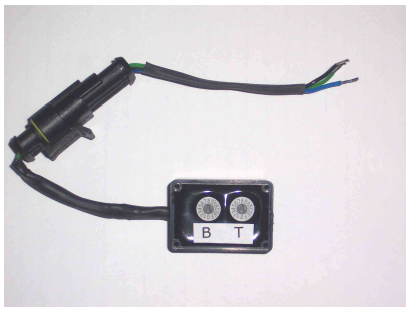
TZ250 - 16 settings Curve Changer

Change your ignition-timing map the easy way



(Shown with outer cover removed)

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

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' do to the increased compression effect. A simper lower cost unit could provide this requirement. … The curve changer

The largest advantage is in the increase of spread of power. It has been found to be very useful not only on race bikes but on karts also using TZ engines.

The 16 settings unit is an enhancement of the standard TZ250 Curve Changer. It allows a switch selectable range of map alteration.

By using fixed switch values the result is accurate and repeatable.
The switch has 16 positions 0...9,A,B,C,D,E,F:

- (0) Is 80% of the standard curve changer value.
- (8) Is the same as the standard curve changer value.
- (F) Is 120% of the standard curve changer value.

Each switch position is a step increase in the curve changer value. With a changing the curve changer switch values the static advance will need to be advanced.

The unit is mounted using velco provided, The switches are waterproof and the unit should be operated with the cover on

The switch closest to the cable marked B controls the bottom cylinder.

The switch away from the cable market T controls the top cylinder.

Fig 1. Standard TZ250 Curve Changer

This diagram shows both the ignition curves the power jet and power valve action with RPM. The standard curve changer enables increased advance in the drive area and over rev retard.

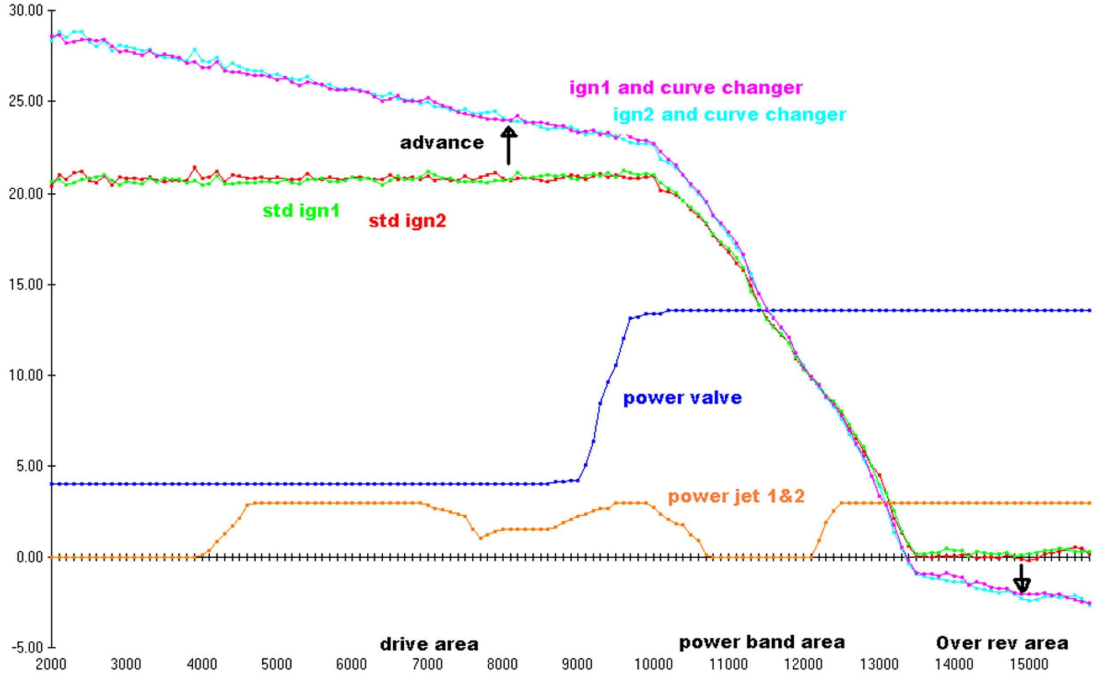
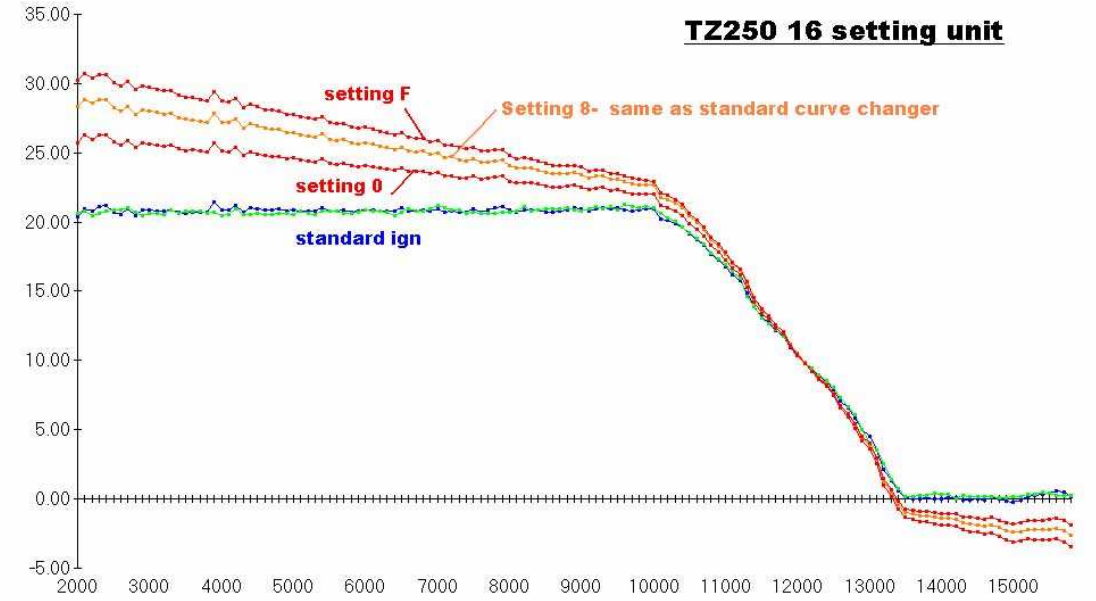


Fig 2. 16 setting TZ250 Curve Changer

This diagram shows the effects of the range of the 16 settings, allowing the user to fine tune the ignition map.



Installation Procedure

1. Advance the static timing.

With the unit set to standard – switch position 8

For pre 2000 TZ250
Advance the static timing to 2.3mm BTDC

For post 2000 TZ250
Advance the static timing from 20 degrees to 28 degrees advance.
If you normally use a dial gauge for 2.4mm BTDC them set now to 3.6mm BTDC
This may require a slight widening of the slot! (Add 0.65mm rotation per degree)

For other settings advance the advance to:
Setting 0 = 5 degrees
Setting 4 = 6.5 degrees
Setting 8 = 8 degrees
Setting A = 9 degrees
Setting F = 10 degrees

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	Blue	to	'White with blue 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.