



RS125 - 16 settings Curve Changer

Change your ignition-timing map the easy way



Available for:
RS125 1995 model onwards

(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. After designing a programmable ignition for the RS1250 and RS125 Power Valve, the largest requirement was to increase the drive area advance, without then causing the over rev to 'brick wall' do to its increased compression effect. A simpler lower cost unit could provide this requirement. ... The curve changer

The largest advantage is in the increase in the spread of power

The 16 settings unit is an enhancement of the standard RS125 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 2.5% step in the curve changer value. With a higher curve changer switch values the static advance will need to be advanced. See the table below

Fig 1. Standard RS125 Curve Changer

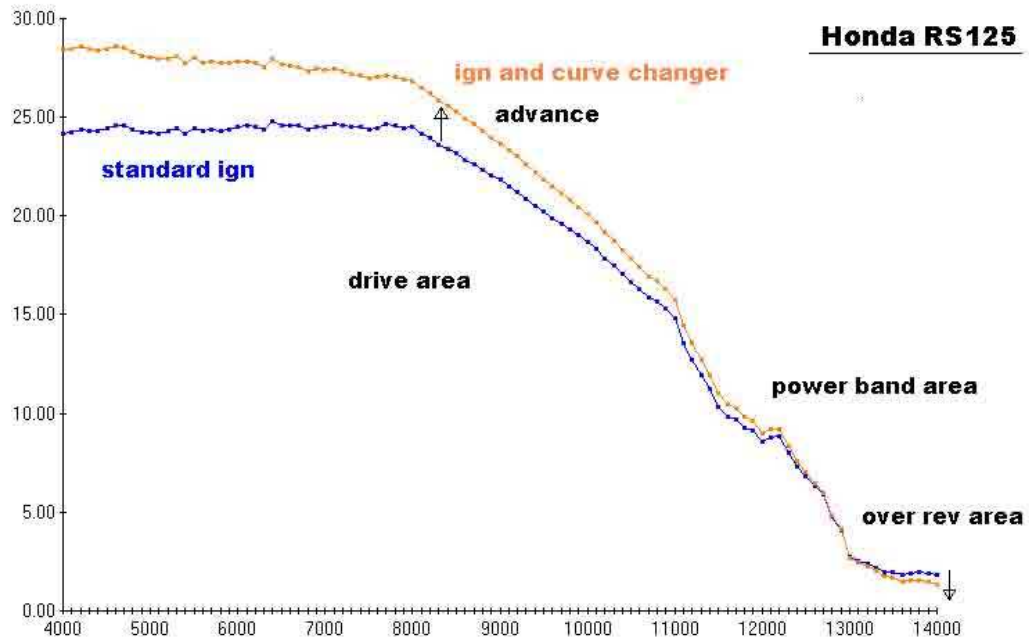
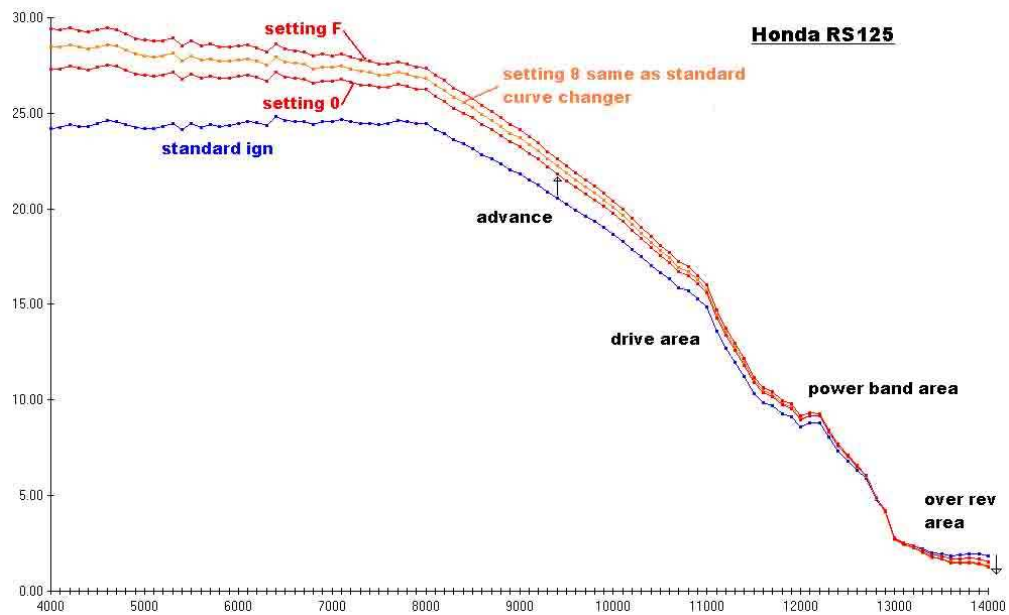


Fig 2. 16 setting RS125 Curve Changer



Installation Procedure

1. Advance the static timing

Initial Base setting

Set the curve changer unit to setting 8.

Elongate the timing slot to adjust to what would be the 5th line (there are only 3 lines there as standard)

ROTATE THE IGNITION ADJUSTER PLATE ANTI-CLOCKWISE 

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 5.5 degrees of ignition adjuster plate advance = Setting 4

For 6 degrees of ignition adjuster plate advance = Setting 8 (standard position)

For 6.7 degrees of ignition adjuster plate advance = Setting A

For 7.5 degrees of ignition adjuster plate advance = Setting F

2. Connect the curve Changer

Locate the 2 wires from the Ignition Pulse Generator (30300-NX4-003) which come out of the main clutch/water-pump cover on the right side of the engine.

Solder the Curve Changer wires onto these wires as follows:

Curve Changer Yellow wire connects to the Pulse Generator 'White with Yellow stripe' wire.

Curve Changer Blue wire connects to the Pulse Generator 'White with Blue stripe' wire.

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

By using a tyrap, or the Velcro on the unit, the Curve Changer then can easily be fastened to the front of the frame, for easy adjustment access.

3. 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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