

# STK-300 Fantic Trials - 301, 241, 303, 243, 5&7 series 250/125cc



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Flywheel Outer Ring  
Flywheel Inner  
Stator  
Fitting Kit  
HT Coil  
CDI  
Handlebar switch (only if digital CDI)



STK-300 shown

STK-300D has in addition a digital CDI & handlebar switch

## PRODUCT FEATURES

- CDI ignition system for strong spark starting at only 150rpm.
- An external pick-up is used, this allows easy and precise timing set-up and stable performance.
- Advance curve depends on CDI supplied.
- Flywheel is a 2 piece solid alloy steel construction + magnet ring, with almost perfect balance 'by design'. With the outer flywheel removed initial timing set up and adjustment is easily achieved.
- The outer flywheel ring can be changed for a lighter or heavier version depending on rider preference, standard kit supplied has a total flywheel mass of 3.9kg (original Fantic 3.6kg).
- High quality electroplating and stainless steel fittings are used for maximum corrosion protection.

## Fitting Instructions



Fig. 1

- Step 1** Attach the base-plate and the stator assembly to the engine as shown using x3 M4 screws provided (fig 1), Locktite thread lock is recommended, don't **fully tighten** screws yet. **Note: only use threadlock not stud retainer if you wish to remove the screws in the future.**

Fitting instructions continued overleaf

## Fitting Instructions Cont.

### Step 2

Fit the inner flywheel using the woodruff key provided (if the original is in poor condition). To set the timing it is recommended that you attach a small piece of wire to a screw as shown (fig 2), this is used as a pointer for the timing marks engraved on the rotor. Set the piston to TDC using a dial gauge (if available), position the wire on the T-mark on the flywheel.



Fig. 2

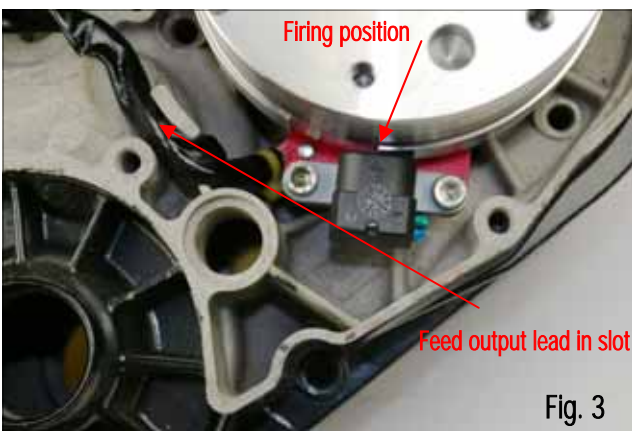


Fig. 3

### Step 3

Rotate the flywheel anti-clockwise to an indicated 24 deg/2.5mm BTDC, keeping the flywheel in this position rotate the stator on the slots so that the centre of the pick-up aligns with the end of the slot in the rotor (fig. 3).

The timing set at 24deg/2.5mm BTDC is for fixed timing and only a guide and is typical for later Reed valve motors (earlier models had timing of 26deg/3mm BTDC), it also depends on the CDI provided and whether it has a built in advance curve.

Of course the timing can also be set using a dial gauge if available by pre-setting the piston position to the required firing point, typically 2.5mm BTDC as above, and the timing marks on the rotor could be used to check the timing using the strobe.

**Step 4** Taking care not to move the base plate remove the inner flywheel and tighten the x3 M4 screws holding the base plate on.

**Step 5** (See fig. 4) Refit inner flywheel, screw outer flywheel on to inner flywheel using x6 countersunk M6 screws provided, Loctite is highly recommended to retain these (don't use Loctite stud retainer if you wish to remove the screws in the future). Note the position of the 2 holes indicated (10mm diameter) are in alignment on inner and outer rotor, these are to hold the rotor with a suitable tool when tightening the crankshaft nut.

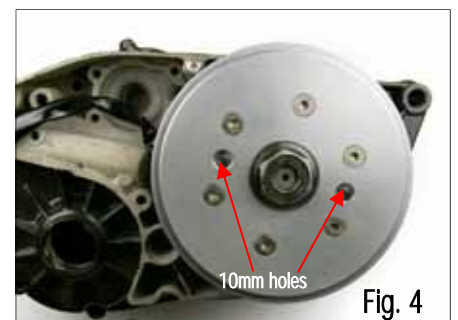


Fig. 4

**Step 6** Fit the HT coil and the CDI unit in a convenient position near to each other. Plug in the cable from the stator to the CDI unit. Connect the CDI to the HT coil using the orange cable with a female terminal.

**It is important that there is a good earth connection between the CDI (black M6 ring), the metal body of the HT coil and the engine.**

**Step 7** The kill switch is connected between the black/white cable from the CDI & earth, it is open circuit to run the engine.

**Step 8** Replace the plug, fit the HT cap on the lead after cutting to the length required.