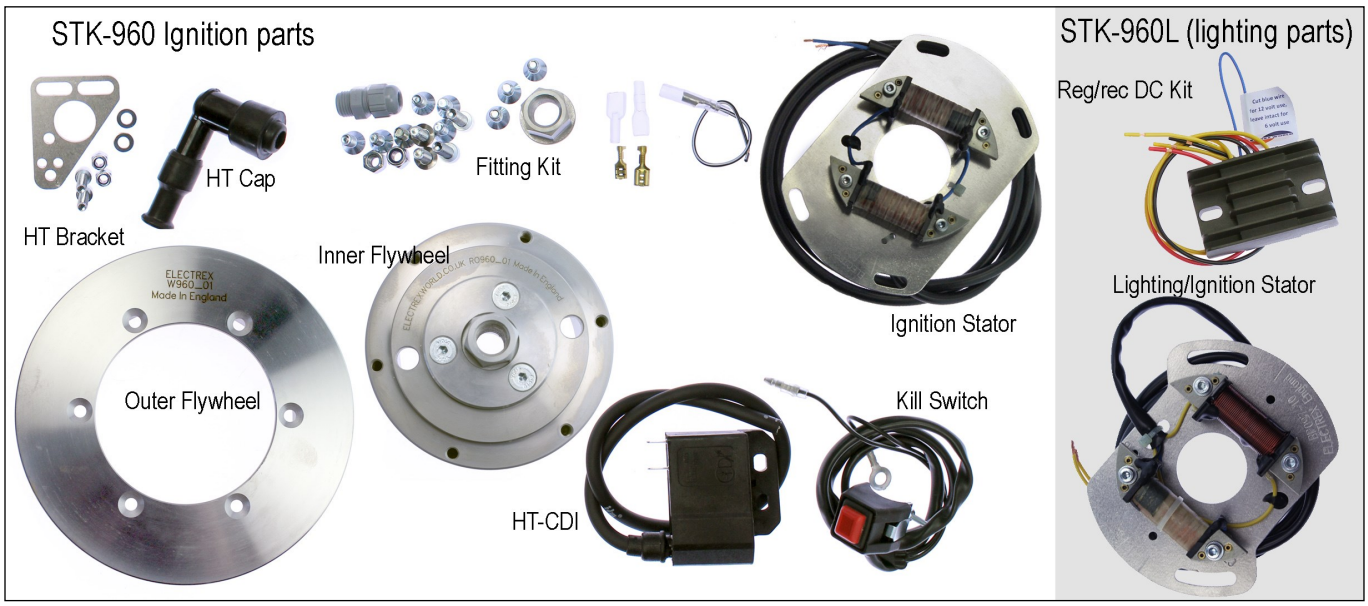
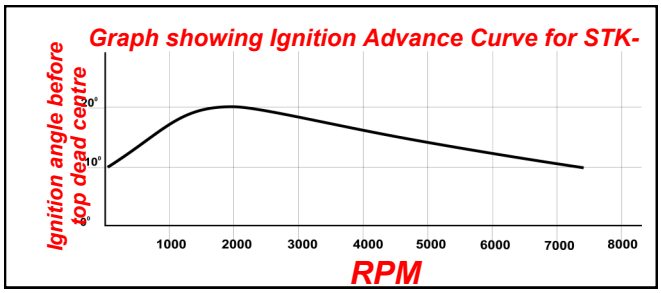
STK-960 - Villiers 30c, 6e, 7e, 8e Engines

(may also fit other Villiers engines not specified)



GENERAL INFORMATION



- CDI ignition system for strong spark starting at only 150 rpm.
- Automatic variable advance curve specifically for the Villiers 2 stroke engine.
- Flywheel is a 2 piece solid alloy steel construction + magnet ring with perfect balance 'by design'. It has a self extracting/retaining nut as per the Villiers original. With the outer flywheel removed initial timing set up and adjustment is easily achieved.
- High quality electroplating and stainless steel fittings are used for maximum corrosion protection.
- Combined weight 3.68g. Lighter version's are available on request.
- Note original standard brass flywheel is 2.65kg and 'heavy' original for trials is 3.45kg.

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Fitting Instructions

Step 1: The base plate is retained by tapping the 4 holes indicated, thread size M6 see fig. 1 (overleaf). The original hole size is already correct at about 5.2mm.

Step 2: Feed the cables and sleeves through the grommet indicated in see fig. 1 (overleaf) then attach the base plate, ensure the cables are not trapped under the plate see fig. 2 (overleaf). Use the 4x dome head M6 x 14 screws and spring washers.
Note: it is important to use the spring washers provided - **do not fully tighten yet**.

Step 3: Fitting the connectors see fig. 3 (overleaf). Slide on the clear insulator over both the blue and short black/white cable. Crimp solder longer 1/4 female terminal. Crimp/solder the small 3/6" terminal on to the black cable then heatshrink the black sleeve over the terminal and cable.

Step 4 Before fitting the inner flywheel ensure the surface of the crankshaft taper is clean and undamaged, if not the flywheel will not lock onto the shaft.

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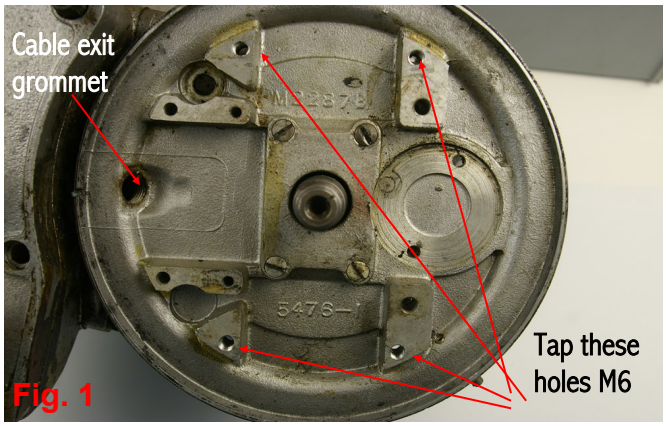
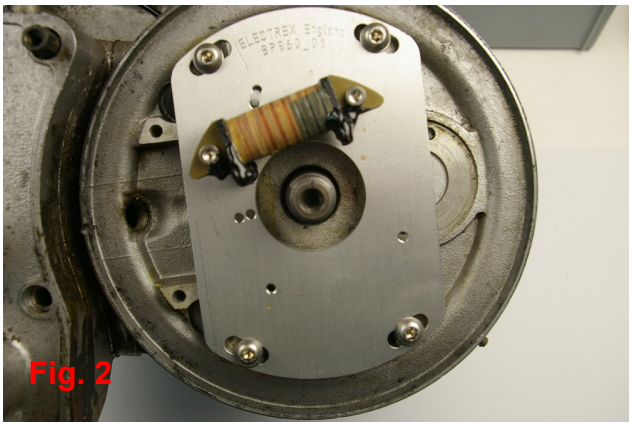
Fitting Instructions Cont.

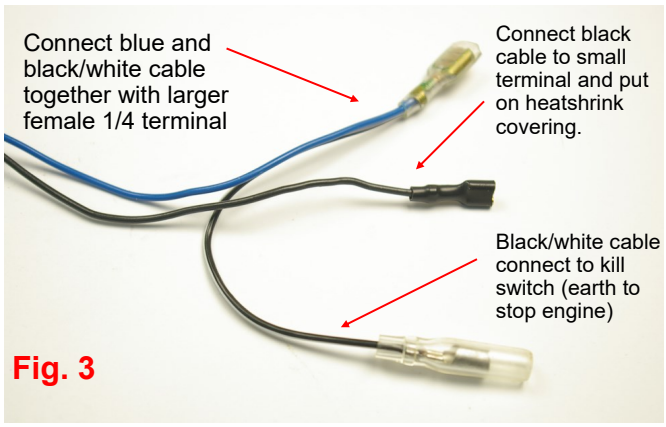
Step 5 See fig. 4: Set the piston to TDC then fit the flywheel by rotating the 'retained' nut by hand, before the flywheel locks on the shaft check the piston is at TDC and align the 'T' mark on the rotor with the line on the base plate. Finally tighten the flywheel retaining nut to original specified torque.

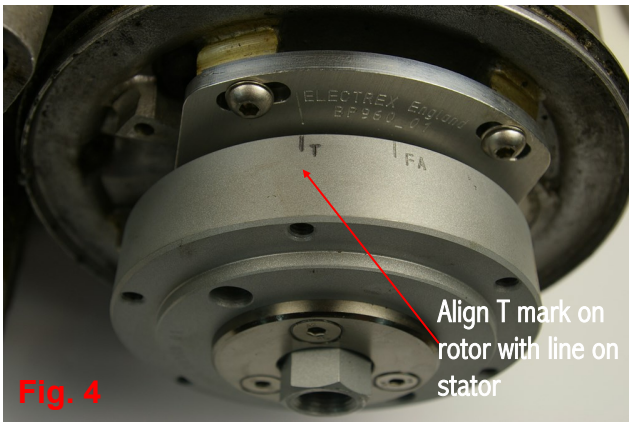
Step 6 See wiring diagram overleaf: Fit the combined HT-CDI unit, plug in the 2 terminals from the stator, the larger terminal has a black/white lead connected; if this terminal is connected to earth or the engine or chassis, this will cut the ignition so a kill switch can be fitted if required.

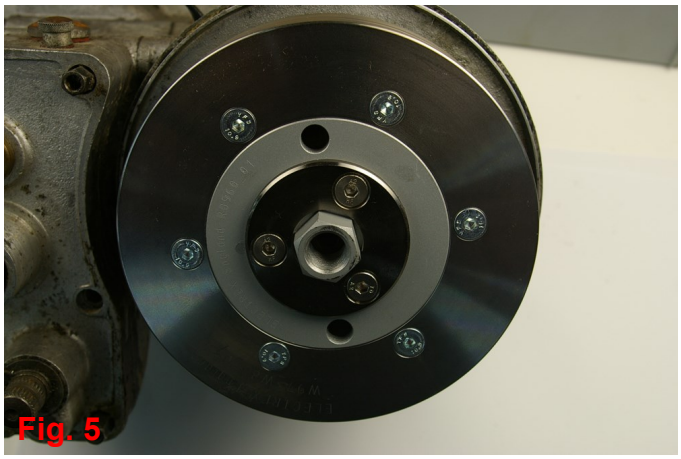
Step 7 Fit the HT cap on the lead after cutting to the length required.











Step 8 For lighting version (STK-960L): Using the two yellow cables from the stator, connect as shown overleaf. For DC battery charging system connect reg/rec to battery and lighting, making sure you link all earth connections together and for AC (without battery)connect regulator to lighting.

Step 9 (See fig. 5) When fitting the outer flywheel it is recommended that you use Locktite Threadlock or similar to retain the x 6 M6x12 countersunk screws (don't use Locktite stud retainer if you wish to remove the screws in the future).

Setting Timing

To check the timing use a strobe light, the 'FA' mark on the flywheel will align with the timing line (**not line B**) on the stator at maximum advance position at approx. 3000rpm.

You can also accurately set the timing with the 'FA' mark. Example: set piston with a dial guage to 23^0 BTDC (4.36mm). Move plate so timing mark is in alignment with 'FA' mark on the flywheel. ***Note: Check actual full advance figure for your engine.**

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Wiring diagram if using STK-960L (Lighting kit)

Wiring diagram for STK-960 and STK-960L

Please note for the Ignition only kit (STK-960) you just need to refer to the top section and the stator plate looks slightly different with only 1 coil.