

STK-400 - Yamaha YDS7, YR5, RD250/350 A/B, RD250/400 DX



CONTENTS

Stator (ST400)	CDI (CD402)
Rotor (RO402)	Reg rec
HT-Coil (HT2)	Puller (FP24x1L)
Fitting Kit - Spacers - 6x15 (2), Bolts - 6x35 (2), M7x20	
Nuts - M6 (2), Skt screws M5x20 (3), Washers - M5 (3),	
large M8 (2)	



DESCRIPTION

Complete cdi ignition, self generating type and permanent magnet 3 phase alternator and matching regulator rectifier, to replace the original 12v inductive points system and field energised alternator.

The system is almost independent of the original wiring so it avoids possible bad connections, inevitable on a bike that is 30-40 years old.

The ignition can be easily set precisely with the external pickup and adjustable stator, timing is fixed with no advance/retard - as same as the original system.

The system requires a battery but only to switch the internal relay, this allows direct connection to the original switch gears.

Fitting Instructions

Step 1 Disconnect the battery, unplug the original regulator and rectifier and remove. These are located under the battery box on early models, so it is easier to pull out the battery box from the bike to help removal.

Step 2 Take off the gear lever and the left hand engine cover and remove the original stator and rotor from the engine, remember to disconnect the blue neutral indicator lead, undo the 3 stator retaining screws and remove, pull out the small stator locator peg in the crankcase (if it is still there).



Step 3 Fit new stator as shown in Fig 1 using M5x20 screws and washers, attach blue neutral indicator cable.

Step 4 Fit the new rotor onto the crankshaft ensuring surfaces are clean and it is located correctly on the woodruff key.

Step 5 When fitting the cdi, on early models RD250/350AB, the cdi can be fitted in place of the original regulator under the battery box. Plug the 6 way connector block into the mating connector from the stator, feed the long cables x2 orange + red/black up to the HT coil.

Step 6 Plug the 3 way regulator/rectifier connector into harness from the loom. Connect the red cable (+ve) into the feed to the battery, not the fuse. Connect the black earth cable with M6 ring to the common earth by the battery box. The location of the regulator rectifier will vary with different models, the aluminium heat sync does not have to be earthed.

Step 7 See fig 2. The double output HT coil is fitted in place of one of the original HT coils using the 15mm spaces, M6x35 screws and lock nuts. Note terminals are facing to the rear. Cut the HT leads to length and fit the HT caps. The plugs fire



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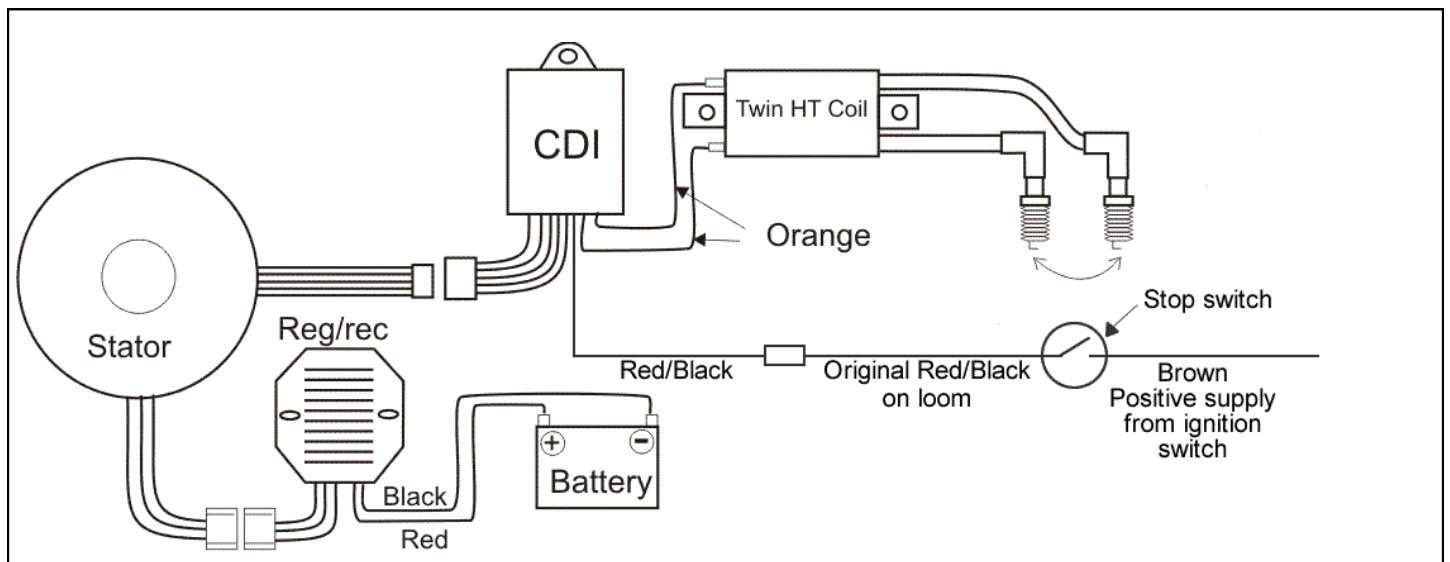
Fitting Instructions cont.

simultaneously at 180° so either cap can be fitted to the RH or LH cylinders. Attach the two orange cables to the terminals and the red/black cable to red/black on the wiring harness. This is a switched positive from the stop switch via the ignition switch. See wiring diagram.



Setting of the timing

Step 8 The ignition timing for this system is fixed so the timing can be set the same as the original specification. For RD250A set piston to 2mm BTDC, without moving the rotor adjust the stator so the pick-up is aligned with the rotor as shown in fig 3.



Additional notes:

Please note that two sizes of long rubber grommet were fitted to the original alternator wiring harness to protect it as it passes through the engine casing. We only have one type available which is supplied, please check to see if this fits your engine—if this does not fit you will need to use the original rubber grommet from your stator. Therefore, we have not fitted the terminal block connectors to allow the cabling to be passed through the grommet.

Procedure to finish stator harness

- 1) Check rubber grommet supplied to see if it fits into the hole in the crankcase. Use original if necessary.
- 2) Fit appropriate grommet onto harness.
- 3) Fit sleeving onto harness.
- 4) Plug terminals into supplied connectors, six way for CDI (look at CDI supplied to match up colours) and three way for the regulator/rectifier—the three whites can be placed in any order. If the terminals are placed in the wrong position they can be removed by lifting the tab with a small screwdriver.
- 5) Test terminations are inserted correctly by gently tugging on each cable.