

Thank for purchasing our electronic ignition kit. Through in-depth and continuous development our technical team create industry leading ignition and lighting up-upgrades to modernise ageing original systems. Our 12 volt kits are intended **ONLY** for use with standard Yamaha wiring systems and machines. We strive to ensure that our equipment is simple for the owner to fit and gives outstanding results.

Rex's electronic ignitions are available in two options; standard, which gives improved performance for road bikes and "Dual Power" - for competition use. The Dual Power's vastly more powerful spark is suitable for high compression, high revving engines or dual spark plug heads. Our ignition timing is set to take in to account increased spark intensity and the effects of its modern dynamic timing curve.

"Ignition Only" systems are intended for competition and racing and are designed to run with no other electrical system fitted. The owner is expected to solve any issues that arise due to the machine being modified, non standard, have additional or missing parts. Modified "Expert" kits with adjustment slots in the stator are available as an optional extra. These require set up with a strobe.

IMPORTANT: The ignition and lighting (charging) are two completely separate systems. One does not effect the other. The ignition must **NEVER** be connected to the bike's charging or DC system.

We take away all the guess work from the ignition set up - just bolt on and go.
No strobe lamp needed (standard kits). No fiddling about repeatedly removing the flywheel!

Warnings & Cautions:

Working on motor vehicles requires specialist tools, knowledge and training. Serious injuries or accidents may result if parts are not correctly fitted or adjusted. Loss, serious accident, injury or misadventure may occur where parts are modified or incorrectly fitted or adjusted or where the fitting guide or shop manual or industry standard procedures or conventions are not followed or ignored.

This guide must be used in conjunction with the Yamaha shop manual for your bike. You must refer to the latest revision of Yamaha manual for torque figures, assembly procedures and safety precautions. This guide does not over-ride any safety warnings or cautions.

Only use strobe lamps with an inductive clamp that fits around the HT lead when checking ignition timing. The type of strobe lamp that is connected between the spark plug and HT lead, interrupting the HT supply must **NEVER** be used as this type can cause the system HT voltage to rise to dangerous levels that can result in severe electric shocks which may be lethal or could cause serious injury.

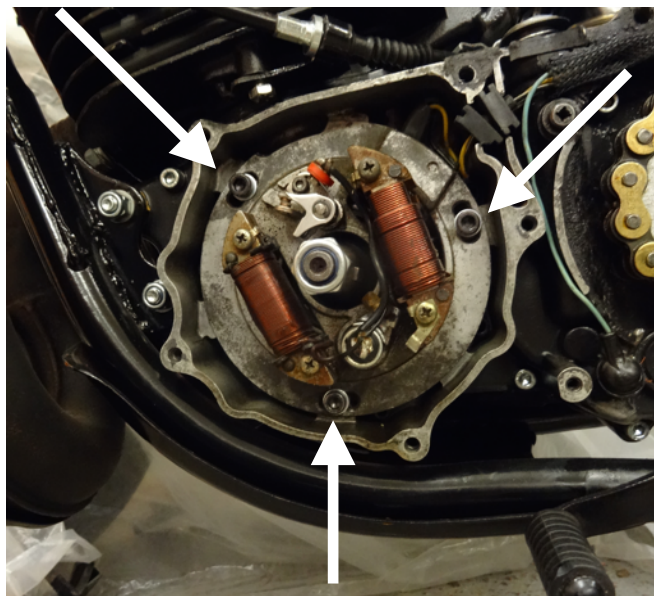
People with heart conditions or those fitted with a pacemaker must not work on or adjust our ignition systems, nor work on the machine whilst the engine is running in case of electric shock from the ignition.

Fitting Guide

1. Start by removing the flywheel. You will need a flywheel puller (p/n: FWP-1). A pneumatic or electric impact driver makes this job much easier. The flywheel can be virtually impossible to remove without the correct tools.

Damage to the engine and/or flywheel will be caused if you attempt to remove the flywheel with pry bars, "three leg" pullers or other tools than the correct puller

2. Undo the 3 stator retaining screws and remove the stator along with the wiring.

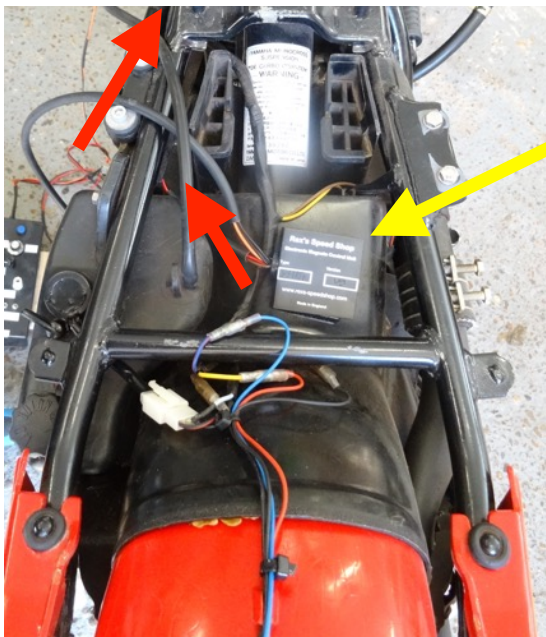
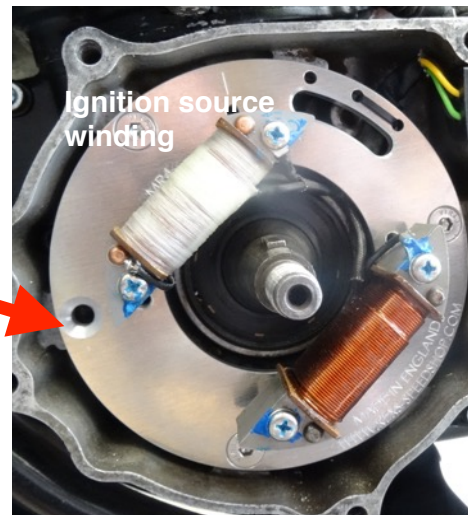


3. Fit the new stator with windings as shown. Ensure the three original threaded holes you removed the retaining screws from align with those in the new stator. Use the 3 x M6 c'sunk screws from the kit to retain the new stator. All 3 must be used. The stator will only align one way round with three screws in alignment. Securely tighten the screws.

One position has no screw, this is intentional.

4. Follow the original wire routing. Ensure the sealing grommets are in place. Check that no wires are trapped or rubbing on moving parts. Refer to the shop manual for correct cable routing.

Refit the flywheel following the shop manual.



5. Clean away all traces of oil and dirt then mount the CDI unit on the plastic cover as shown.

Cables must exit to the left, around the air intake.

The shorter wire connects to the stator, the longer wire runs up the left side of the frame, keeping clear of the exhaust, to the HT coil.

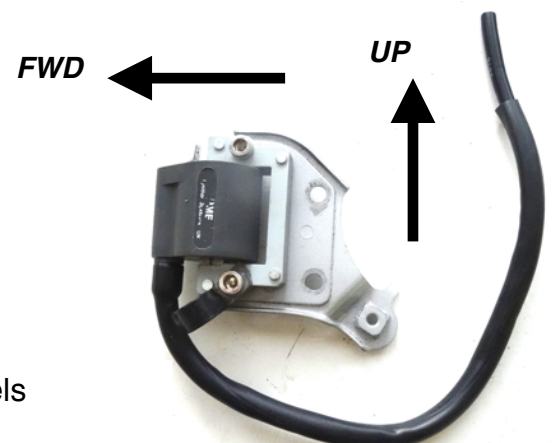
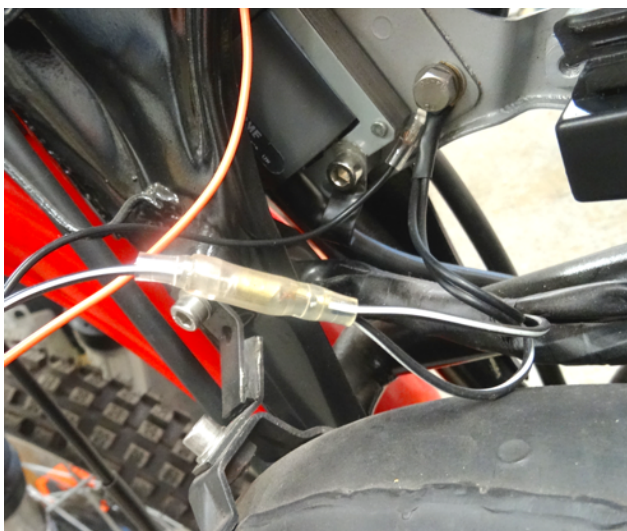
On twin shock models find a suitable location around the battery

Remove the backing from the velcro on the CDI and adhere to the mudguard



6. Replace the HT coil with the one from the kit. This is a little fiddly on MX models as the coil is on a separate bracket tucked under the headstock. Correct fitting is shown opposite.

Secure all wires clear of the exhaust.



MX Models

7. Connect the 'Hot' orange to the HT coil tag terminal.

The black with the ring **MUST** be grounded here.

Connect the black/white to the black/white in the wiring loom. If no wiring loom, connect to the kill switch (see wiring diagram).

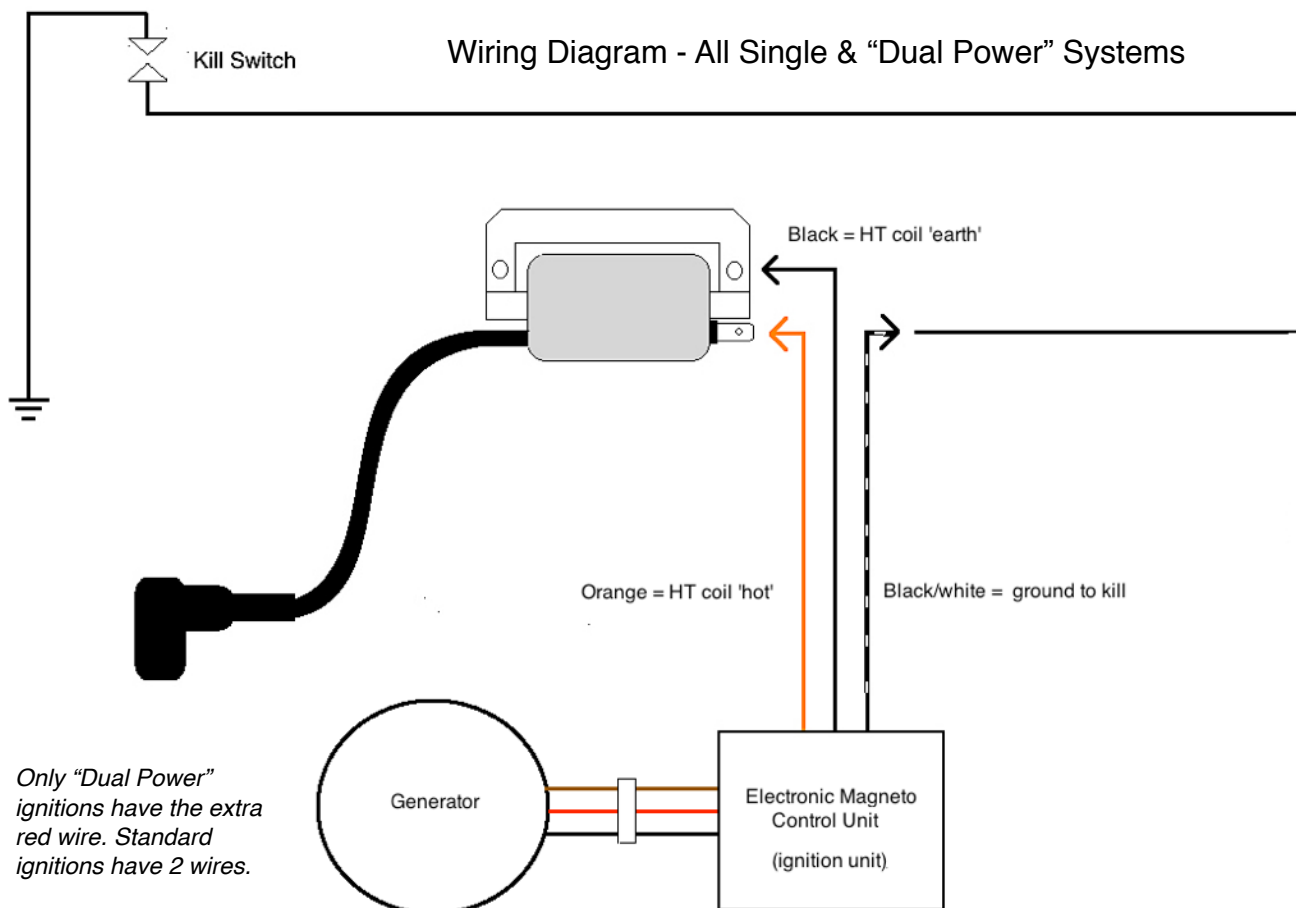
Check that none of the controls have been restricted or impeded by the new wiring looms.

Check all wiring looms are secured to the frame. If using cable ties: **Place cable ties on black sleeving, not directly on to individual wires!**

Check all your connections.

Start the engine if it is safe to do so.

Operate the kill and/or ignition switches to confirm they cut the engine.



Your new electronic ignition has a dynamic timing curve that very accurately responds to engine RPM. It advances then retards the higher the revs climb. You should not be alarmed by the difference in timing as RPMs change.

DT250 Ignition Specifications: RMK-6 &10	
Recommended spark plug	Standard plug should be used. See shop manual for plug type.
Spark plug gap	0.7 - 0.8 mm (0.028-0.032")
Plug cap	LB05F, LB05EMH. Do not use non resistor types.
Timing, engine set at a steady idle.	RMK-6: 22.0 Degrees BTDC @1,100RPM +/- 2 RMK-10: 23.5 Degrees BTDC @1,100RPM +/- 2
Best performance RPM range	Sparks from 250, rated to 8,000 RPM
HT Coil	P/N: HTC8 Primary 1.0 - 1.5 Ohms. Sec 5 to 8 K Ohms.
Ignition Source winding	P/N: SC-6A
Source winding resistance	Black to brown 175 Ohms +/- 5% Measure at 20 degrees C, engine not run for several hours.