

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 use and are designed to run with no other electrical system fitted. This fitting guide is intended for standard bikes, on competition machines securely fit the components where they go best and ensure the connections are made. The person doing the work is expected to solve any issues that arise due to the machine being non standard. We can supply "Expert" kits with adjustment slots in the stator as an optional extra, to allow trimming of the base timing. These require set up with a strobe and it is the responsibility of the person doing the work to correctly set the timing.

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 were 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 cause the system HT voltage to rise to dangerous levels that can result in severe electric shocks which may be lethal or cause serious injury.

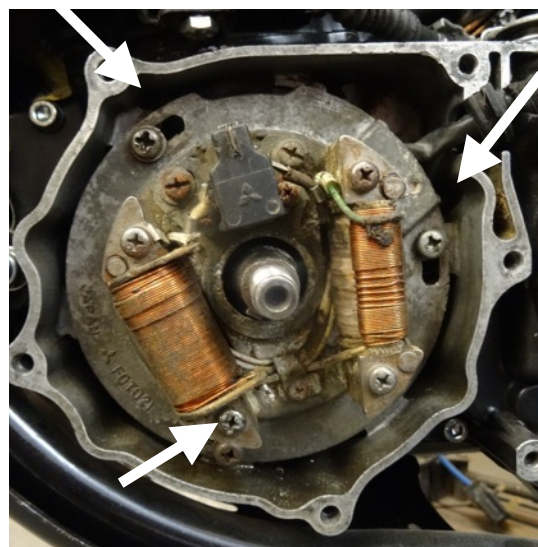
People with heart conditions or those fitted with a pacemaker must not work on or adjust our ignition systems, nor work on the machine whilst the engine is running in case of electric shock from the ignition.

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.

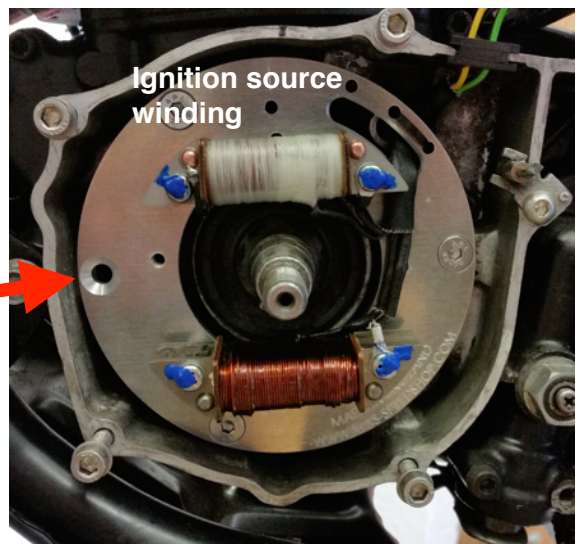


3. Fit the new stator with windings as shown. Ensure the three original threaded holes you removed the retaining screws from align with those in the new stator. Use the 3 x M6 c'sunk screws from the kit to retain the new stator. All 3 must be used. The stator will only align one way round with three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

One position has no screw, this is intentional.

4. Ensure the sealing grommet is in place. Follow the original wire routing for the new stator and ignition unit wires. Check that no wires are trapped or rubbing on moving parts.

Refit the flywheel following the shop manual.



**Lighting coil
(where fitted)**



5. Fit the new Electronic Magneto Control Unit (ignition unit) in the original carrier as shown.

Route the wires as per the original Yamaha wires.

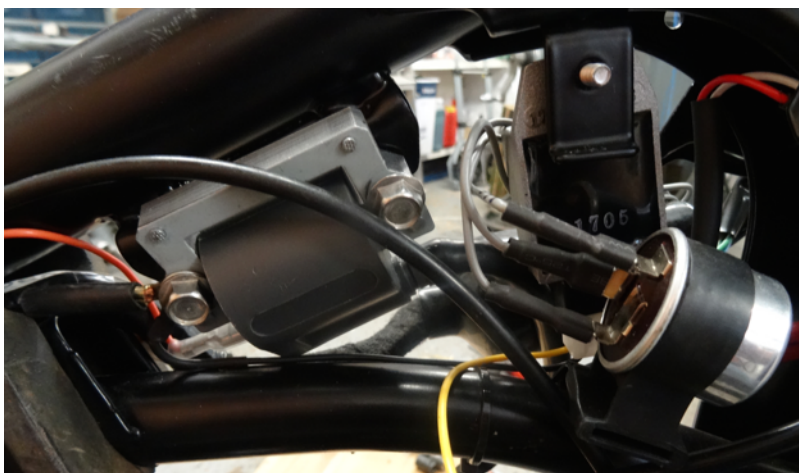
The white connector from the ignition plugs to the corresponding connector from the new stator wire.

The wire from the ignition unit with the black rubber connector plugs in to the original place for the CDI on the loom.

If in doubt where cables go refer to the shop manual for correct cable routing.

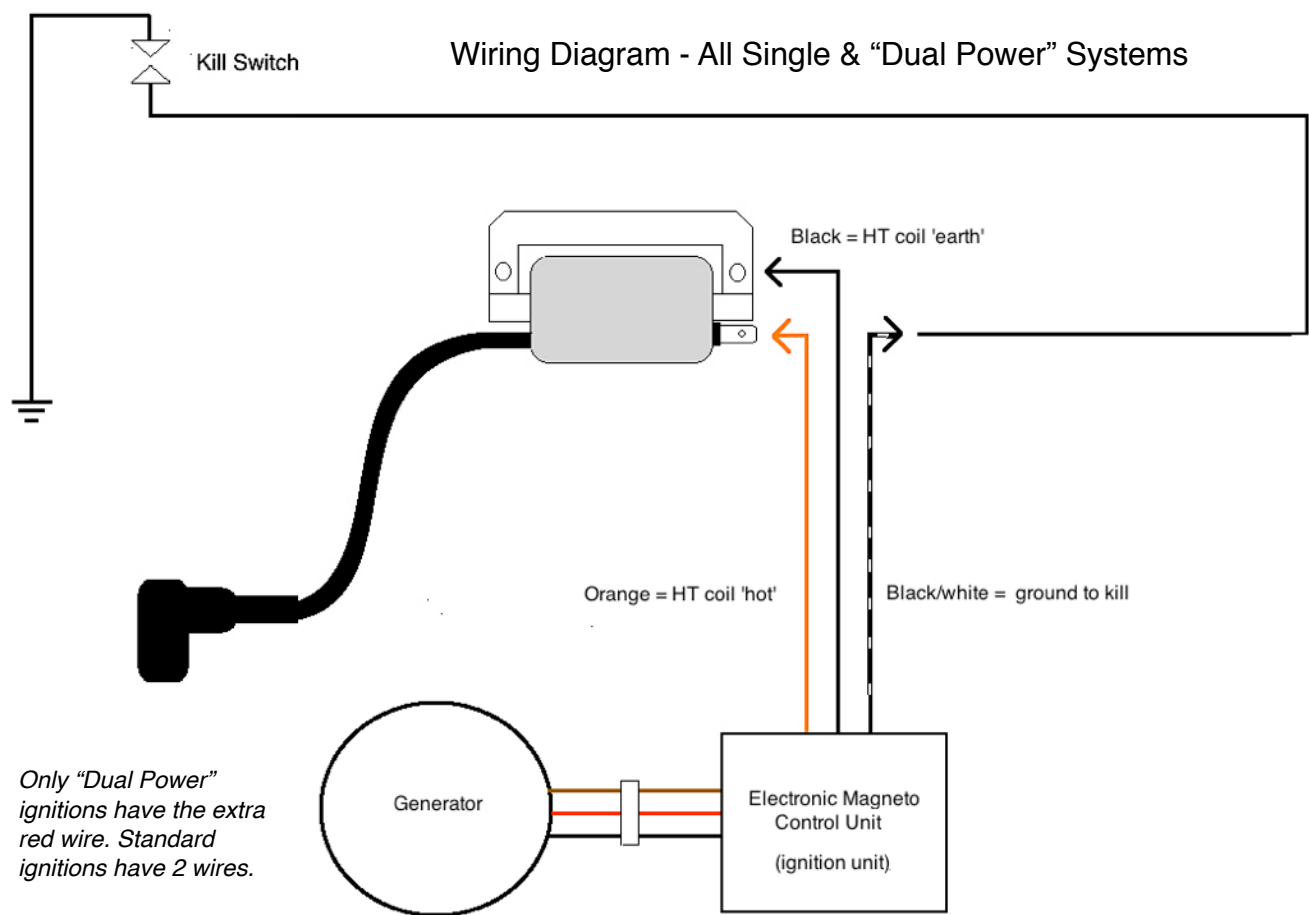
6. Replace the HT coil with the one from the kit. The main earthing ring terminal is here. When fitting a 12 volt conversion the regulator must earth here too.

Secure all wires clear of the exhaust.



7. Connect the 'Hot' orange wire to the HT feed from the standard wiring loom.

- 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.

DT400 B/C Ignition Specifications: RMK-8	
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	RMK-8: 22.0 Degrees BTDC +/- 2 @1,100RPM
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.