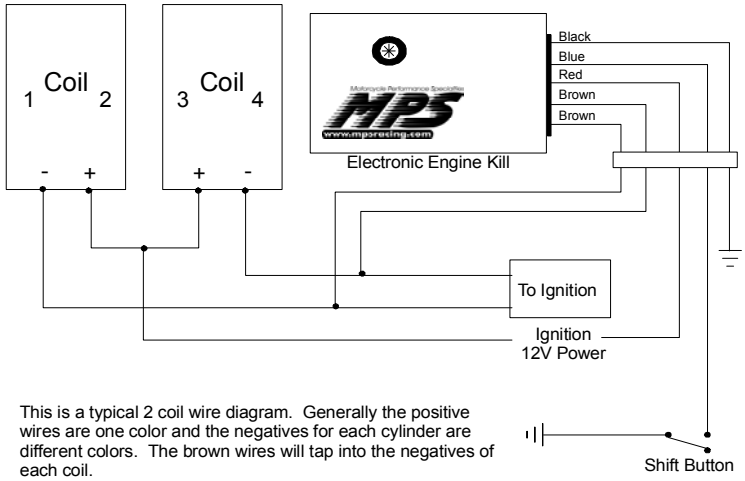
MPS Electronic Engine Kill Installation Instructions

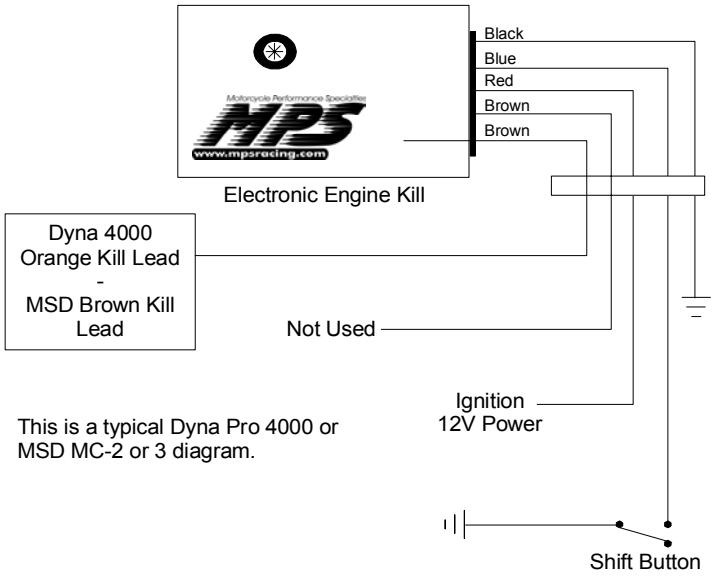
The first thing to do is remove the seat, fuel tank, and possibly the front fairing if equipped. You will need plenty of room to work.

Electrical Connections – You will need to locate and test a few things on your bike before you start wiring. A good ground, a ignition switched 12 volt power source, and the ignition coils or Ignition air shift interrupt wire on Dyna Pro 4000, MSD MC-2, and MC-3.

Control Box Wiring Coils – Most four cylinder motorcycles use either a individual firing system or a waste spark system. Waste spark is by far the most common. All four-cylinder bikes with only two coils use a waste spark system. The Electronic Engine Kill has two brown wire leads that are connected to the negative of each individual coil on a two-coil system. You can either solder the brown wires to the coil leads (recommended) or use the provided scotchlok splices. Race bikes with Dyna Pro 4000 Ignitions must use one brown wire connected to the orange dyna kill wire. MSD Ignitions with a brown kill wire must use one brown lead connected to it. **Do not connect brown wires to the coils on a Dyna Pro 4000 or MSD ignition.**



This is a typical 2 coil wire diagram. Generally the positive wires are one color and the negatives for each cylinder are different colors. The brown wires will tap into the negatives of each coil.



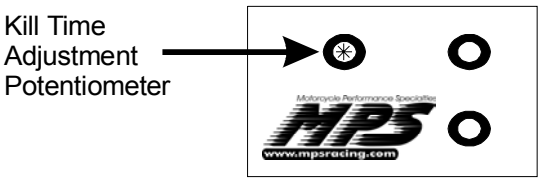
This is a typical Dyna Pro 4000 or MSD MC-2 or 3 diagram.

Power, Ground, and Activation Lead – The red wire is connected to a ignition switched 12 volt power source. Do not attach direct to battery! The black wire is connected to a good ground. The negative battery post is best. The blue wire is the activation lead. When a ground is applied to the blue wire the unit kills the motor for the specified time period. The

blue wire should be connected to the normally open pole of the shift button.
The Shift Button is a momentary type switch. The common pole of the shift button should be connected to a good ground and the normally open connects to the blue wire from the Electronic Engine Kill box.

Electric Air Valve – The Electric Air Valve has two wires. These wires are interchangeable. One needs an ignition switched 12 volt power source. The other needs a ground signal when the shift button is depressed. The easiest way to do this is to locate the red and blue wires in the Electronic Engine Kill wire harness. Splice one Electric Air Valve wire into the red wire and splice the other Electric Air Valve wire into the blue. Once again soldering is the preferred method but you can use schotchlok splices.

Setting Kill Time – Kill time is the amount of time the engine stays dead between gears during a shift. Generally the shorter the kill time the quicker the shift. The proper kill time will vary from bike to bike. Its generally better to start with to much kill time and work your way quicker. We generally start at around 75 ms. of kill time. The Kill Time is adjusted via a small potentiometer accessed through the grommet on the front of the unit. Using a small screwdriver Carefully turn the pot clockwise to the end of its travel. This is 100 ms of kill time. Now, carefully turn the pot screw counterclockwise to the end of its travel. This is 50 ms of kill time. Halfway in between is 75 ms. The pot only goes from 7 oclock to 5 oclock so don't force it, they break easily!



Testing The System – With no air in the system start the bike. Bring the rpm up to around 3000 rpm and push the shift button. You should hear a slight hesitation in the engine each time you depress the shift button. Once you establish that you have a engine kill when pushing the shift button remove the clevis pin from the shift cylinder and extend the shaft to the end of its travel. Air up the shifter to 120 psi. We also have onboard compressor kits available to conveniently fill the air tank on the fly or high pressure CO2 systems that can shift hundreds of times without refilling. With the engine off and the key on push the shift button. The shift cylinder shaft should snap into position. With these preliminary tests done you can put the bike back together and go for a ride! Shift it at lower rpms first to make sure it is in fact operating properly. If you have any more questions we have a Frequently Asked Questions page at our web site as well as the telephone tech support. Thank you for your purchase of this MPS product. All products sold by MPS are for use at closed course competition events and not for use on public streets or highways.