



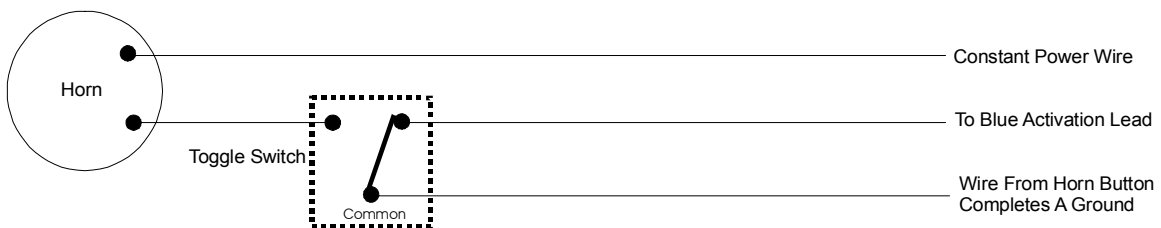
MPS Autoshift With Fuel Kill Installation Instructions

The MPS Autoshift With Fuel Kill activates your shifter and interrupts the fuel supply to your engine at a set rpm to allow full throttle air shifts without backfires or the FI light coming on. The MPS Autoshift With Fuel Kill is a universal product that can easily be installed on any EFI bike. The MPS Autoshift With Fuel Kill is ideal for use when using a big dry nitrous kit. The kill time is adjustable from 50ms -100ms via the access port on the top of the box. The shift point is adjustable via MSD rpm modules available separately.

Power In Lead and Injector Power Lead - The positive injector lead is the common colored wire on each injector. Follow them back in the harness until you find the point where they are spliced together. Cut the lead after it is a single wire. Connect the injector side to the Orange wire from the Autoshift With Fuel Kill. Connect the power side to the Red wire on the Autoshift With Fuel Kill.

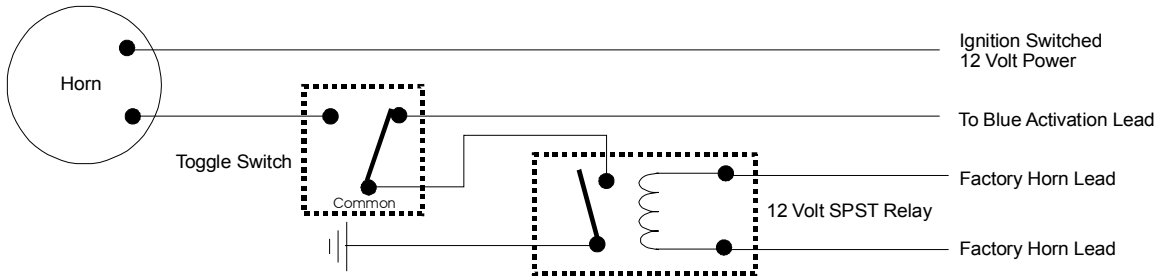
RPM Trigger Wire – The white rpm trigger wire from the Autoshift With Fuel Kill should be tapped into the #1 coil negative lead. The negative is the unique colored leads on your coils.

Horn Test - Unplug both your horn leads from the horn(s). Turn the key on. Using a test light, check each horn wire for power. If one of the wires has continuous power the horn button circuit completes a ground circuit to operate. This is the typical Kawasaki and Suzuki horn system. A wiring diagram showing how to wire a switch to select the shifter or the horn appears below.



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If no wires have continuous power, check them each with the horn button depressed. One of the two should have power with the horn button depressed. This system completes a power circuit to operate. This is the typical Honda and Yamaha horn system. This system requires a SPST relay to be added to the system. A wiring diagram showing how to wire a switch to select the shifter or the horn appears below.



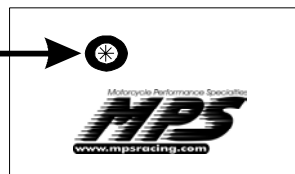
If you would like to skip all the horn/relay stuff we have a nice kit to eliminate all the work of wiring the relays. It works with either system and is a snap to wire. (P/N 1-0317 Air Shifter To Horn Control Harness)

Ground and Activation Lead –The black wire is connected to a good ground (preferably, the battery negative post). The blue wire is the activation lead. When a ground is applied to this wire the unit kills the motor for the specified time period. The horn wiring diagrams will show you how to wire it.

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 Autoshift With Fuel 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. It's generally better to start with too 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

Kill Time Adjustment Potentiometer



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 o'clock to 5 o'clock 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. If you don't hear a hesitation and the horn sounds the arm switch is in the horn position. Once you establish that you have an 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. After shifting correctly

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manually it is time to install a rpm module and try the auto shifting function. 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.

Wiring Diagram

