

MPS Auto Shift 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.

Control Box Mounting – Any spot you can find room away from extreme heat. Try to isolate it from vibration as much as possible. Use the double-sided tape to stick the box to a flat surface.

Electrical Connections – You will need to locate and test a few things on your bike before you start wiring: a good ground, an ignition switched 12-volt power source, and the ignition coils or tach lead.

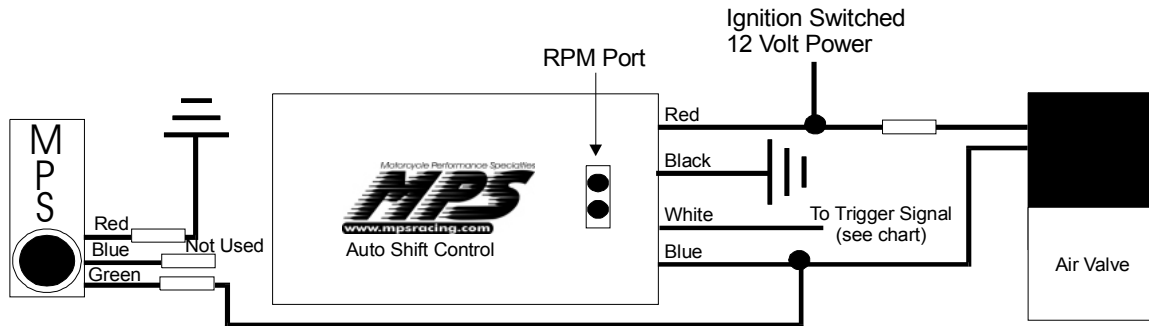
Control Box Wiring – Most four cylinder motorcycles use either an individual firing system or a waste spark system. Waste spark is by far the most common. All four-cylinder bikes with only two coils use a waste spark system. MSD Ignitions and Dyna 4000 combine signals from both 1-4 and 2-3 pickup. These Ignitions use the standard unit and will have no outside identifiers and the P/N 1-0010. Bikes with a waste spark systems and no MSD or Dyna 4000 (Dyna S Only) will need the 360 calibrated unit. Harley Davidsons will also use the 360 calibrated model. The 360 calibrated Auto Shifts are identified by the 360 engraved into the box below the wire lead exit. The P/N for these boxes has the 360 as a suffix. (P/N 1-0010-360)

Red Power & Black Ground Leads – The red wire is connected to an ignition switched 12-volt power source. Do not attach direct to battery! The black wire is connected to a good ground. Preferably, the battery negative post.

White Trigger Lead – The trigger lead senses engine rpm. Refer to the table below for trigger lead connection.

MSD MC-1, MC-2, MC-3, & MC-4	Tach Terminal (male spade on side of box)
Dyna Pro 4000 & Super Pro 4000	Tach Output Lead (green)
Four Cylinder Dyna S Only (360 calibration)	Negative Side Of 1-4 Coil
Stock Four Cylinder (360 calibration)	Negative Side Of 1-4 Coil
Stock Harley Davidson (360 calibration)	Negative Side Of Coil
Single Fire Harley Davidson (360 calibration)	Tach Output Lead Of Ignition

Blue Output Lead – The blue output lead outputs a ground to activate your shifter. The blue lead connects to one of the two black wires on the **Electric Air Valve**. The other lead on the electric air valve is connected to an ignition switched 12-volt power source. An easy way to wire the electric air valve is to tap one wire into the blue and the other into the red on the auto shift harness. It does not matter which black leads are connected to which. **Shift Button -** Connect the common lead on the shift button (red on mps buttons) to a good ground. Connect the normally open (green on mps buttons) to the blue output lead of the Auto Shift box.



Setting Shift Point – The shift point is set using standard MSD RPM Modules or “Chips”. The chips simply push into the RPM Chip Port on the Auto Shift With Engine Kill. These are not included, but can be purchased from MPS. They are sold 5 to a package in full 1000 RPM ranges. For example a 10,000 series would include: 10,000, 10,200, 10,400, 10,600, and 10,800 chips.

Testing The System – For the first test run shift it with the button at lower rpms first to make sure it is in fact operating properly using the button. Once you have it operating correctly with the button you can try an auto shifted run. To disarm the auto shift portion remove the rpm chip. The button can be used at any time to short shift the bike.

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.