MPS Auto Shift Module For MSD SB – 6

Mounting – Find a spot away from extreme heat or moisture. Peel back the double sided tape and stick the box in place. Find a convenient spot to mount the switch. A dash panel works well for this. Drill a ¼" hole in the panel and slip the switch through from the bottom and screw on the guard. The switch is in the off position in the photo. Look at the orientation of the wires on the switch. The wires are connected to the top 2 terminals on the switch. When the toggle handle is toward the wires it is off.

SB 6 Autoshift Module Wiring Connections – You will need to locate a ignition switched 12vdc power source. A tail light lead is a good source. Splice the red power wire into the ignition switched 12 vdc source wire. Soldering is the preferred method but you can use scotchlok splices. The black wire should be connected to a good ground. The battery negative is the best for the ground lead. The orange wire will connect directly to the orange shift light wire on the SB-6. The yellow wire connects directly to the Yellow/Black kill wire on the SB-6.

Red – Ignition Switched 12 VDC power
Black – Ground
Orange – Shift input positive from SB 6 shift light orange power wire
Yellow – Shift output negative to the SB 6 Yellow/Black kill wire

Phone: 321.972.8282 – Fax: 321.972.5123
380 Orange Lane – Casselberry, Florida 32707

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 yellow wires on the MPS SB 6 Autoshift Module. Splice one Electric Air Valve wire into the red wire and splice the other Electric Air Valve wire into the yellow wire. Once again soldering is the preferred method but you can use schotchlok splices.

Shift Button Connections – The shift button should be set up to send a ground when the button is pushed. The button wire should be spliced into the yellow lead on the SB-6 Autoshift Module. This will activate the kill on the SB-6 and the air valve when the shift button is depressed. This allows manual shifting at any time. MPS offers a Switch Swapper P/N 1-0317 that will wire into your horn to allow the horn switch to become your shift button. A toggle switch selects between the horn and the air shifter.

Arming Toggle Switch – The arming toggle must be off until you are ready to make your run. The SB 6 has a self test feature that will activate your shifter as soon as the key is turned on if the toggle is left in the arm position.

Setting The Shift Points – The shift points are programmed into the SB-6 as if there were a shift light. Follow the SB-6 instructions for setting the shift points.

Setting Kill Time & Kill Delay – The kill time and kill delay are both set by programming the SB 6. We recommend starting with 75ms of kill and 20ms of kill delay. Follow the SB-6 instructions for setting the kill time and kill delay.

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 140 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. Once you have it operating correctly with the button you can try an auto shifted run.

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.