## If you are not familiar with electric wiring, please be sure to have a professional motorcycle repair technician perform the installation of this switch.

Please read all of the instructions before attempting the install! These instructions © California Cycleworks, LLC 2003

Ducati OEM switch		Aftermarket switch	
Wire Color <sup>2</sup>	Pin	Wire Color	Function
Black	G	Yellow	High (or Low) Beam <sup>1</sup>
Blue	Κ	Black	Horn Ground
Blue/Red	С	Brown	Left Turn Signal
White	Н	Green	Low (or High) Beam <sup>1</sup>
Blue/Black	D	Brown/White	Turn Signal Supply
Green	F	Red/Yellow	Headlight Supply
		Blue	Parking light <sup>3</sup>
Gray	J	Pink	Horn
Red/Black	В	Dark Green	Right Turn Signal
Yellow	Α		Ducati "parking light" circuit.
	E		(shorted) <sup>3</sup>

Table Notes:

1) The instructions supplied with the switches have the High and Low beam wire colors crossed on dual sport switch model. It would be best to use the above table as a starting point and to verify the connections of the different circuits with an Ohmmeter as a first step. (Ensure that the off/park/on switch is "on" before testing!)

2) Note that the OEM wire colors are different on either side of the left hand switch's wiring connector. The above chart corresponds to the wire colors as they come out of the switch itself. The wire colors of the main wiring harness are not especially important given that in this replacement scenario, we are working solely with the OEM left switch gear. Wiring harness wire colors and the pin letters they correspond to are available via the wiring diagrams found in Ducati or Haynes repair manuals.

3) The Aftermarket switch assumes that the parking/tail light circuit is supplied voltage via the headlight circuit. While a valid assumption and popular with Japanese made motorcycles, Ducati uses a separate circuit for this function. Ducati motorcycles imported to the US have a common wire connected to both "parking light" pins of the switch connector (shown in the table above), causing the parking circuit to always be on. As well as being a cost effective replacement part, this aftermarket switch allows one to turn off the headlight / main beam to allow for easier starting.

4) The "dual sport" aftermarket switch group is an attractive option because it looks similar to the OEM switch housing as found in Superbikes and Monsters. The problem is that some solder work needs to be performed to transform the kill switch lever into a high beam flasher. To do this, open up the switch group using a Phillips head screwdriver. There are a couple layers of pieces to take apart. Use a soldering iron to remove the blue/white wire and then remove it from the switch group. Next, remove the extra black wire that goes from the horn to the flasher switch. Now, be sure to verify the high beam connections with an ohmmeter and playing with the high beam switch. Now, use the soldering iron to add two pieces of wire to the two contacts for the high beam switch and route them to the flasher switch and solder the other ends of these wires. If you have ever soldered anything before, this is not a difficult task.

## Instructions:

1. Locate the connector for the left handlebar switch. On Monsters, this is in the space below the ignition switch. In carbureted SSs, this is under the fuse panel. On first generation Superbikes, this connector should be in the headlight shell area. For SSs and SBKs, removal of the front fairing is likely required. At this time, remove any cable ties or rubber straps that secure the wire harness for the left switch and also disconnect the connector from the main wiring harness.

2. Remove the left switch group from the handlebar using a Phillips head screwdriver. Verify the functions of the different wire colors and pin letters of the OEM switch to ensure that the table above is correct. Also do this for the aftermarket switch (Ensure that the off/park/on switch is "on").

3. Cut the wiring harness of the Ducati OEM left switch approximately 4~5 inches from the connector. Retain the plastic shielding for a factory look. Strip the ends of the wires from the OEM switch connector and crimp on the supplied male tabs to these wires. It would be possible to strip the wire ends coming from the switch itself, so it is best to move the switch itself far away to avoid this mistake.

4. Carefully consider the locations of the different wires in the aftermarket switch connector. Look at the mating connector. Notice that empty part of the connector only attaches one way. Also note that with each slot for the connector pins, there is a recess "above" it. This is where the raised metal tab engages into the connector.

5. Now, starting with one corner, fit the wire from the Ducat connector into the slot to mate up with the corresponding wire from the aftermarket switch. Example: see the pink wire in one corner of the aftermarket switch? Feed the Gray wire from the Ducati connector into the plastic connector for the switch. Note that there is an audible click and the pin is retained into the connector. Try a gentle tug and it should stay in place.

6. Plug the connector you just made into the one from the aftermarket switch group. Verify the function of each wire and that they make sense.

7. If no mistakes are made in Step 5, this step isn't required. If a pin pushed out during Step 6 as you tried fitting the connector together, try bending that tab up a little more and pushing it into the slot again. This should help the pin stay engaged in the slot. If there was a mistake in the location of a wire, you will need to remove the pin from the connector. Get a very narrow screwdriver and press down on the raised tab from the face of the connector and then gently pull the wire and pin from the back of the connector. This requires relatively strong pressure applied to the tab. Also, after pulling out a pin, you should carefully lift up the locking tab to ensure it will fully engage upon reassembly. Because pulling pins out is not a trivial task, I have done this to the supplied connector and its 9 wires to make the installation of the kit easier.

8. Install the new switch and plug it into the wiring harness. It would be best to test the actual function of the switch before spending the additional time making your bike absolutely perfect, but the above ohm test of the switch should make this a formality.

9. Put everything back the way you found it. Route the switch wiring the same way as original and replace all cable ties. For the monster, I made a short upside down "U" out of the original wiring and the new switch connector is located adjacent to the original one. This or a similar idea should be viable for SS and SBK owners.

10. Don't forget to turn off the headlight when you stop or before you try to start your bike. This makes life easier on the battery while turning the starter. And certainly **do not forget to turn your headlight on** before riding away! Because the OEM "parking lights" are always on, this switch should not violate lighting laws in your area, but it is the buyer's and installer's responsibility to verify vehicle codes before installing and using this switch.