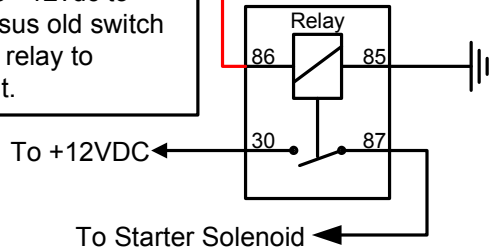
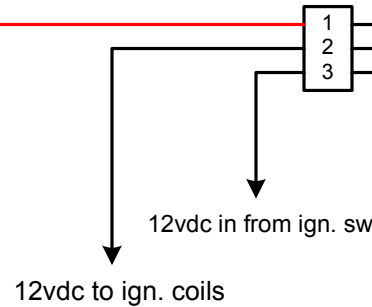


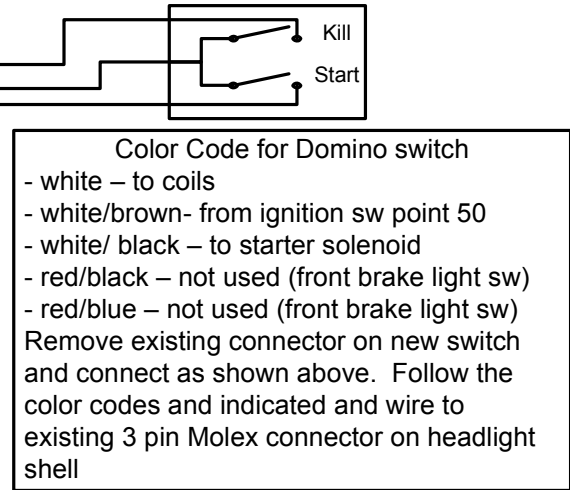
New switch requires starter relay to be rewired as shown.
 - Move wire from switch to pin 86.
 - Add ground wire to pin 85.
 New switch applies +12vdc to activate starter versus old switch applying ground to relay to complete the circuit.



Existing 3 Pin Molex On Headlight Shell



Domino Switch



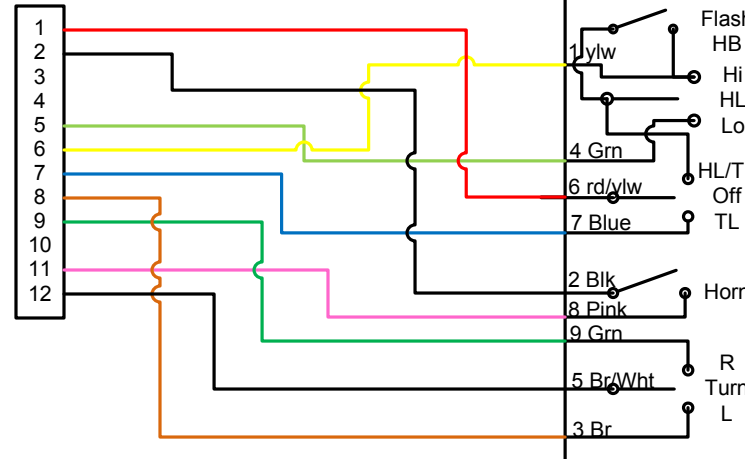
Nota Bene

Other modifications to the wiring are necessary in order to adapt this new universal switch. I haven't drawn these in detail, but please note the following changes at a minimum must be made.

- Remove existing flasher relay. Wire from headlight shell 15 pin Molex, pin 13 to flasher relay pin 87 should be removed and discarded. Original wires from fuze 1 to horn relay and front brake light switch should all be securely spliced together. Hi beam flash is now handled in the new switch.
- Add a ground wire within the headlight shell to pin 2 on the 12 pin Molex. This is for the horn relay ground.
- The 'Park' key position is no longer used. Only the run switch position is used. The new 'TL' position on the switch will turn on the instrument lamps and tail light. The HL/TL position will turn on the headlight AND the taillights/instrument lights. The hi/lo beam select is controlled via the hi/low switch on the universal switch.
- I have NOT done all these changes myself as I do not have a Convert. However, I HAVE help my brother on his Convert and believe these are reasonably correct. Please refer to Carl Allison's excellent drawings for overall reference.
- See second page for additional info on connectors and tools required.

K&S #12-0030 Universal Sw

Existing 12 Pin Molex On Headlight Shell



Best approach to wire in new switch involves removing existing connector from switch and running switch wires to existing 12 pin Molex on headlight shell. Numbers on switch refer to original switch connector. Pin assignments on Molex are as follows:

- 1 – 12 VDC from ign sw point 15/54 run position via fuze 4.
- 2 – Ground for horn relay – new assignment. Not in original wiring. Add ground to Molex pin 2 somewhere inside the headlight shell.
- 3 – NC
- 4 – NC
- 5 – Lo beam
- 6 – Hi beam and Hi beam flash
- 7 – Tail light out
- 8 – Left turn
- 9 – Right turn
- 10 – NC
- 11 – Horn relay in
- 12 - Flasher 12 VDC in

In undertaking a project like this, the proper tools are required plus you will need male and female Molex pins plus you MAY need connector bodies if the old ones have been damaged beyond repair. The below serves as a reference to the needed items.

All the connectors used on MG's are of the Molex .093" size. They are officially referred to as ".093 Series Plus and Receptacle Power Connectors, 5.03mm (.198") centerline". Common language refers to them as .093 Molex.

The following are some sources of connectors and pins:

www.jameco.com
<http://www.electronicplus.com/content/ProductPage.asp?maincat=WC&subcat=Wmo>

I mostly use Jameco, as they pretty well have everything you need. Electronicplus does also appear to have every Molex connector in the .093" size that you need.

You will almost certainly need the following:

Crimp Contact – Male - .093" AWG 14-20 – Jameco #224223CJ, Molex #02-09-2103
Crimp Contact – Female .093" AWG 14-20 – Jameco #224231CJ, Molex #02-09-1104

The possible connector bodies that you may need include the following:

3 Circuit male – 03-09-2031-P
3 Circuit female – 03-09-10232-P
12 Circuit male – 03-09-2121-P
12 Circuit female – 03-09-1121-P
15 Circuit male – 03-09-2151-P
15 Circuit female - 03-09-1151-P

I've listed only the Molex numbers here. Since I have added and changed my bike, I've also used 4 pin and 6 pin connector pairs as needed to breakout the signal lights cleanly and to add grounding blocks etc.

As far as tools, PLEASE use a good crimp tool. For an inexpensive, yet good quality tool, I recommend the Sargent 1028CT. This can be obtained from <http://technicalconnectionsinc.stores.yahoo.net/sa10opbacocr.html> .

For the pin extractor, there are several options as follows:

Extraction tool .093 pin and socket – Jameco #142236, Waldom Electronics W-HT-2038, Molex #W-HT-2038-P
A reasonable alternative is the Radio Shack tool, #274-223 – Pin Extractor.

I hope that this is helpful. If you need any hints or tips, please let me know as I'm very familiar with working with this stuff. If you do it right, this stuff lasts roughly forever. If you do it wrong, it's a complete nightmare!!