

Diodes

Unclip plastic housings to solder replacement diodes to the spade connectors

Alternative Diodes

1N5402 - 3 amp, 200v
1N5403 - 3 amp, 300v
1N5404 - 3 amp, 400v

Motronic/Load Relief Relays

BMW=Tyco V23073 B1005-X18

Alternatives

Any ISO Micro Plug Std Relay
12v, 20 amp, Normally Open
4pin, Single Pole Single Throw

Siemens/Tyco V23073/V23074

Narva 68062 - 12v, 20 amp
Bosch 0 332 017 302
Omron G8HE-1A7T-R-DC12

BMW Part No's (Single & Dual Spark)

61317650075 - Clutch Switch
61317654603 - Kick Stand Switch
23007676593 - Neutral Switch (Motorworks UK states Funduro 11112343476 is the same)

61311375475 - Diode, Natural Color - Qty 1
61127660287 - Diode, Gray - BYV27-200 - Qty 3 (BYV27-200 - 2 amp, 200v, glass encapsulated)

61312346566 - Starter Relay
61361393412 - Mini-Relay, N O Contact, Black - superseded by 61366902041. qty 2 (Load Relief & Motronic)
61367662056 - Diode Relay with Notch Lock
61367663573 - 4 pin Diode Relay with Notch Lock found on some 2006 models
61364623006 - 4 pin Diode Relay with Notch Lock found on some 2000 models

Diode Housings - Manufacturer is Kirsten - Marked 03 672, 13 679 and 03 569 inside

Notes

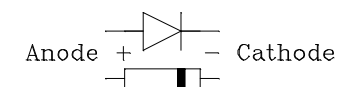
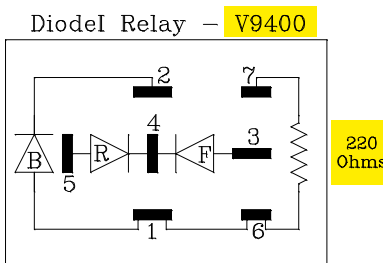
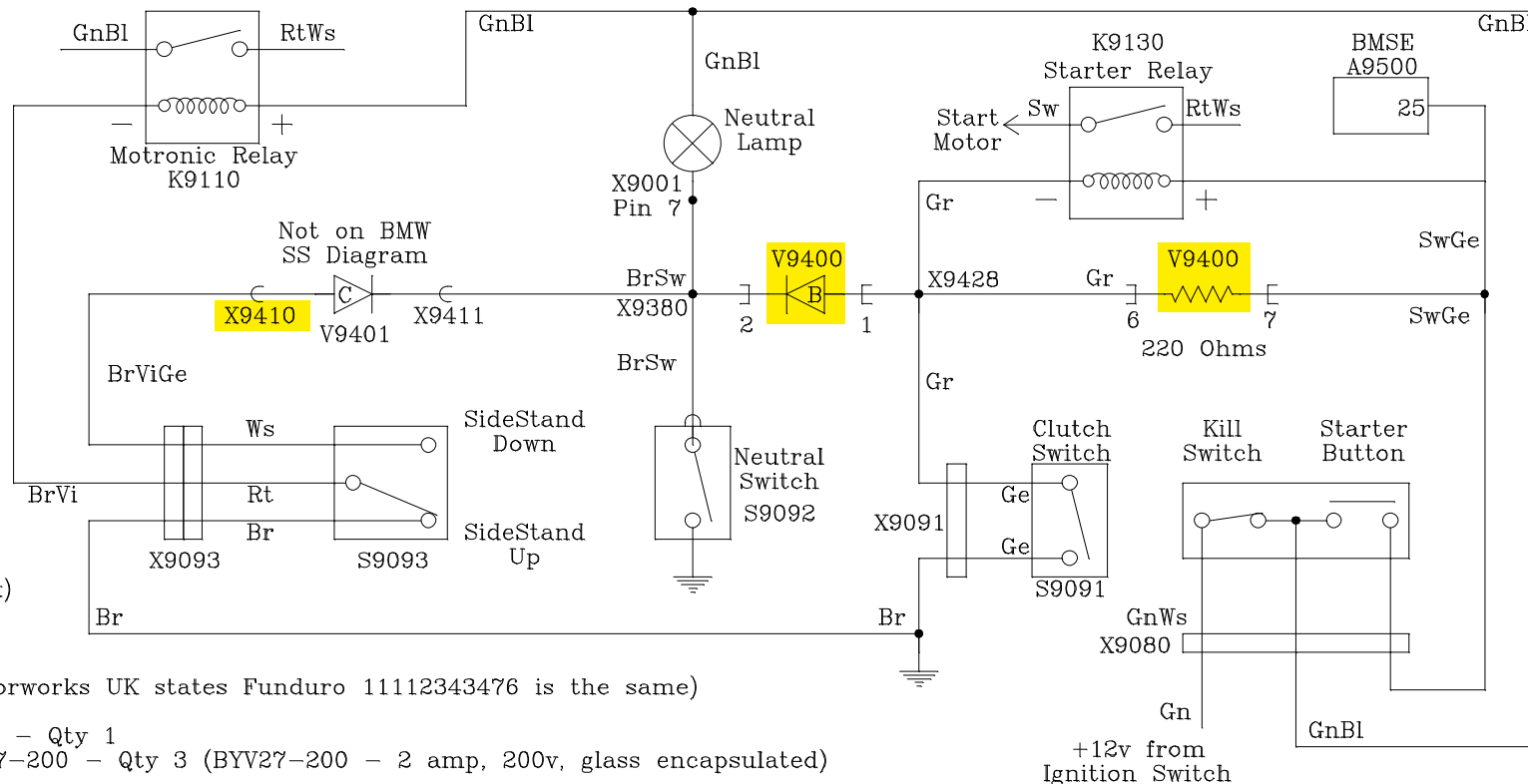
- 1/ There are variations in the published BMW diagrams on diode numbering and kill switch wiring colors
- 2/ Sidestand & Neutral switch are in Motronic Relay circuit. Clutch & Neutral Switches are in Starter Relay cct
- 3/ Neutral switch overrides sidestand switch. Clutch switch does not, starter operates but motronic relay has no earth
- 4/ The diode relay resistor is 220 ohms on a unit opened up & diode C is in electrical box tied to the wiring
- 5/ If diode C goes open cct engine will not start when side stand is down, A fractured diode C can cause engine cut outs
- 6/ If diode B fails, neutral lamp lights when clutch is in. If diode C shorts out neutral lamp lights when side stand is up
- 7/ **Diodes F & R in Diode Relay isolate front and rear brake light switches to stop faults disabling the brake light**
- 8/ Some 00-07 models were supplied with 4 pin Diode Relays which dont work if mounted reversed in the socket

Sidestand Switch Deactivation

At wiring harness connector - Join Brown & Brown/Violet wires
At back of switch - Join Brown & Red wires (Based on BMW diagrams)
Some people have needed to join Brown and White wires
When in doubt, all 3 wires can be connected together safely

Color Key

Sw-Black, Ws-White, Gn-Green, Br-Brown, Rt-Red, Ge-Yellow, Bl-Blue, Vi-Violet, Gr-Grey



650GS 2013 to 2014 Starter Control Circuits

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