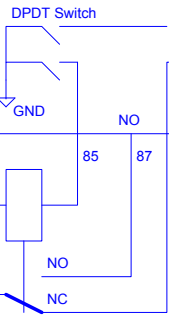


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4MATIC Electrical Disable mod for 90/91 models

to OVP 12V RD/BU wire cut wire here->  
cut OVP RD/BU wire found under passenger kick panel and tie 12V side to relay pins 30 and 86



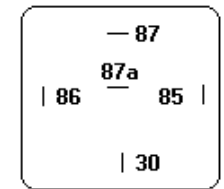
connect second pole to YL/GN wire which runs from the computer to X62/8 and the ZH-M pressure switch.

<- cut wire here RD/BU to X62/8 and 4MATIC valve module

connect relay pin 87A to the solenoid side of the RD/BL wire  
This is the same wire that was cut where 12V OVP side was tied to relay pins 30 and 86

This mod can be applied to a 86 to 91 4MATIC to emulate the 92/93 electrical function/test switch

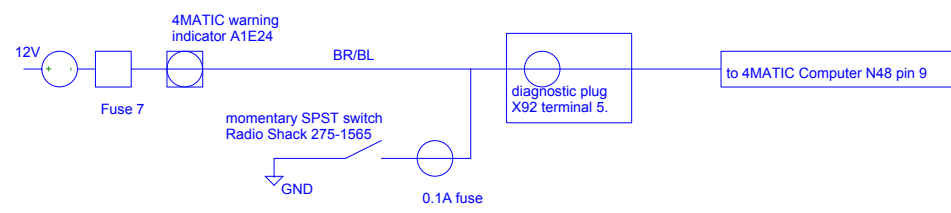
Standard Bosch Relay 0 332 209 150  
<http://www.partsexpress.com/resources/relays.html>  
<http://www.partsexpress.com/pe/pshowdetl.cfm?PartNumber=330-070>



Common Relay Pin Configuration (Bosch-type)

This circuit is identical to the relay circuit that was installed into the 92/93 4MATIC models, this relay replaced the mechanical valve in the engine compartment. The location of the 92/93 4MATIC function/test relay is at the passenger footwell behind the kick panel. The manual states that X62/8 is located under the car just forward of the fuel pump but the wiring passes through the floor near the door vacuum pump which is under the right rear seat. To save wire it would likely be best to install the relay where the factory has, under the rear seat could be an alternative location. The two wires (RD/BU and YL/GN) should be assessible under the passenger kick panel.  
Operation: When the DPDT switch is closed the relay switches and breaks power to the two transfer case solenoids. The second DPDT pole grounds and will indicate a loss of pressure and shut down the 4MATIC system operation. ZH-M pressure is not affected so self levelling systems will continue to operate.

4MATIC Impulse Test and Reset mod



If you tap into the 4MATIC warning lamp wire (brown blue BR/BL), and connect a wire to a panel mounted momentary switch with a fuse (0.1A) and have the other switch terminal grounded, you will have the capability to remotely flash codes or reset the 4MATIC system from the inside of the car. No more battery disconnect! Just press the button for 6 to 8 seconds. Or if easier, plug the momentary switch wire into pin 5 at the diagnostic plug near the battery. Pressing the button for 2-4 seconds will flash any stored codes to the indicator.

Future Modification: It may be possible to fool the 4MATIC computer to think that the two solenoids are still wired when the DPDT switch is closed. If fooled properly and the pressure line is "not" wired (Grounded) to the other switch pole, we may be able to keep the ASD function working. This may be possible by connecting a resistor to pin 87 (NO) and then connect the resistor to the RD/BL line going to the solenoids. I am not sure if the computer senses voltage or current thru the solenoids, this monitoring may be tested by measuring for solenoid current while in Mode 1 2WD. Mode 1 is when both solenoids are not actuated. The resistor would have to be large enough to not let the wire current rise to a level where the solenoids are actuated.

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Page Size: A

Revision: -

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Page 1 of 1

2

1

B

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