

On socket.... Fast – Lt Gr/ Blue Slow – Red/ Green Park – Brown / Green 12v - Green

This is a method of using any 3 position switch with the Lucas 14W windscreen wiper motor. This motor requires a switch with a particular operation ie when it is in the Off position, it joins the Slow and Park terminals on the motor, but breaks that connection in the Slow or Fast position. There is a particular Lucas switch for this motor, but it is a toggle switch. My S2 Europa has a rotary switch with a manual washer pump. I dont know the source of that switch, but I certainly don't want a manual pump, or a toggle switch, and updated all the switches in my car. I wanted to use a 3 position rotary switch with a push action for the washer motor. The Park terminal on the switches I found supplied 12v in the Off position, which does not allow the park function to work, and will blow the fuse if the motor is switched to Off in one part of its rotation.

So, the above arrangement allows a normal 3 position switch to be used with this motor. The Slow and Park terminals are connected in the Off position, as indicated. In Slow position, the relay switches, and power is supplied to the Slow terminal on the motor, and the Slow/Park connection is broken. In the Fast position, there is in fact still a voltage on the Slow terminal on the motor, so current flows back through the relay via 30, 87, 85 and earth, and keeps itself switched. When the switch is switched back to Off, the relay switches back to its normal position, and the motor self parks.

Now, I did design a more elaborate affair with two relays, but I found the above on the Net. I note that the 12v on the Slow terminal, when the switch is actually powering the Fast speed, blinds off once each rotation when the park position comes around. I actually dont know why the relay stays switched as that occurs, but I can say I have installed it all in my car as shown, and it does work. That being the case, I have not investigated further.

Alexander. 24 Aug 2010