

Guide to wiring the 35927 2-speed toggle switch to the Lucas type 14w wiper motor

This is a popular combination, used on MGs, Triumphs, Land Rovers and Morgans. It is also popular with kit and special builders and as an upgrade modificatiin for older vehicles. This combination of the 35927 switch with the LRW110 motor gives 2 wiper speeds with a self-park function.

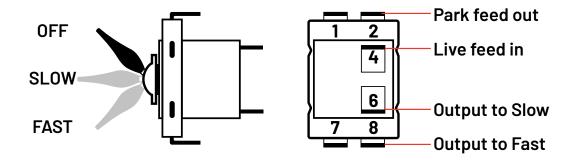


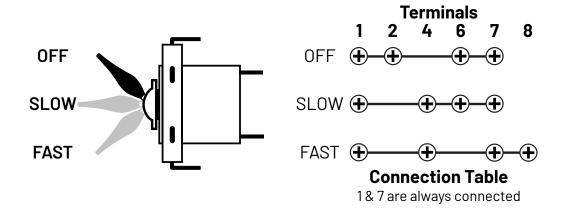




35927 Toggle Switch

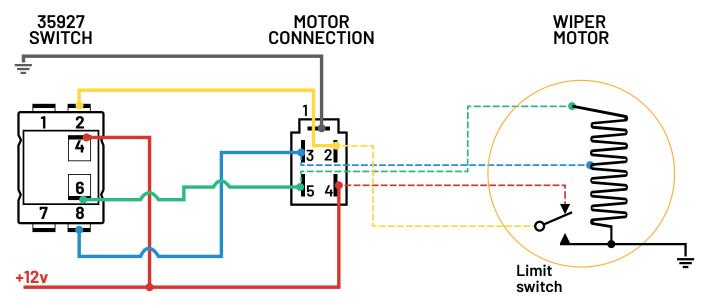
Lucas type LRW110, 14w motor





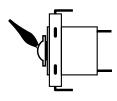
Notes

- Switch terminals 1 and 7 are always linked, regardless of switch position and are not used in this application.
- Switch terminal 4 is power feed to the switch, controlled by the ignition switch (a fused accessories circuit)



Note - colours are only illustrative, yours will be different Diagram shows limit switch connected - wiper arms not yet parked

Explanation of circuit functions to aid troubleshooting



OFF (switch off, wiper arms **not** yet parked)

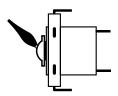
Switch terminals connected 1 - 2 - 6 - 7

No direct power to 8 (Fast) or 6 (Slow)

Park function (2 on switch) is supplied power via the limit switch (yellow wire).

This is connected to Slow (6 on switch)

Power supplied by green wire, motor runs until limit switch is tripped to off.



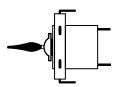
OFF (switch off, wiper arms are parked)

Switch terminals connected 1 - 2 - 6 - 7

No direct power to 8 (Fast) or 6 (Slow)

Limit switch NOT supplying power

Motor at stop



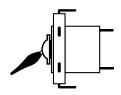
SLOW

Switch terminals connected 1 - 4 - 6 - 7

Power from 4 at switch is connected to 6 (Slow)

Green wire supplies power to resistor/coil in motor

Motor runs slow



FAST

Switch terminals connected 1 - 4 - 7 - 8

Power from 4 at switch is connected to 8 at switch (Fast)

Blue wire supplies power to connection 3 at motor

Motor runs fast

This is the basic circuit, you may need to adapt the wire colours.

It is recommended to add relays to the circuit to reduce power drops and protect the switch. Postion these near to the wiper motor.

Some people recommend adding an earth wire to the wiper motor body, this shouldn't be needed.



Replacement park switch (Limit Switch) and connection block for 14w wiper motor



Replacement brush and pad set for 14w wiper motor



Drive gear, from 90° to 130° in 5 degree increments



Wiper wheel boxes for the Lucas type 14w wiper motor



Rubber mounding pad and strap to reduce body noise



Drive rack, supplied as a 1.5 metre length

Please note

All articles and guides are provided only for the interest of classic and vintage car owners. A certain level of mechanical and electrical knowledge will be required in undertaking work as described in these articles, and anyone unsure of their abilities is advised to seek professional assistance.

SVC (Vintage Supplies Ltd) cannot be held responsible for any breakages and injuries that may occur, while working on a vehicle following any guides provided. With older vehicles being exempt from MOT checks, responsibility for vehicle safety and legality rests entirely with the owner.