How to find the Self-Park feed wire

(Common / Lucas Type Wiper Motors)

The wire you are looking for has a specific function - when the wipers are turned off, it keeps the wipers moving until they are at the park position, by providing volts to the motor until that point. Once at the park position, the voltage is removed.

The voltage is applied by the Self-Park mechanism which is built into the wiper motor assembly. As the motor rotates it turns the wipers but it also turns the Self-Park mechanism. The Self-Park mechanism is basically a switch with its common connecting to the wiper switch. When the motor turns, the Self-Park switch turns and applies volts to the Self-Park feed wire. The switch changes over when in the park position and breaks the voltage to the wiper switch. If your wiper switch is set to ON, this feed from the Self-Park does not make any difference although it is still there. But if you have turned your wipers OFF, this feed will keep the wipers moving until the park position is reached.

If you do not know the schematic for your car, or are uncertain the wiring is the same as shown (vintage cars may have been tinkered with), there is a way you can check you have the correct wire using a voltmeter. If you do not have a voltmeter, you could use a 12V bulb attached to a couple of wires, one connected to ground and one to check the switch connections. A pencil and paper will also come in handy.

Procedure:

Follow these instructions exactly. Start with the ignition OFF and the wiper switch OFF. Study Figure 1.

1. Connect the negative probe of your voltmeter (or one of the wires from your bulb) to chassis/earth.

2. Turn the ignition switch to ON so that volts are applied to the wiper switch. Keep the wiper switch OFF.

3. Touch the other probe of the voltmeter (or the other wire from your bulb) to each of the connections on the wiper switch. Make a note of any connection on the switch that has +12V. The connections that do have +12V can be discounted, as they are not the Self-Park feed. Do not include these connections in the following instructions.

4. Touch your probe on each of the other connections in turn. For each connection, switch your windscreen wipers to ON/SLOW and when they have started, immediately turn the wipers OFF again.

5. Make a note of which two connections to the switch, still have +12V after you have turned the wipers off. One of these two is the SLOW supply to the wiper motor, the other is the Self-Park feed wire.

6. Turn your wipers ON again. When the wipers are moving, pull one of these two connections off from the switch. The wipers will stop somewhere in the middle of the windscreen.

7. Touch your probe onto the connector of the wire you have just pulled off. Make a note if it is +12V or zero Volts.

8. For confirmation, do ‘6’ and ‘7’ again but with the other connection of the two.

9. The wire that has +12V is the Self-Park feed wire. The wire that has zero volts is the SLOW connection.

Now you know which wire is your Self-Park feed wire, you can start the installation of the RWTM.