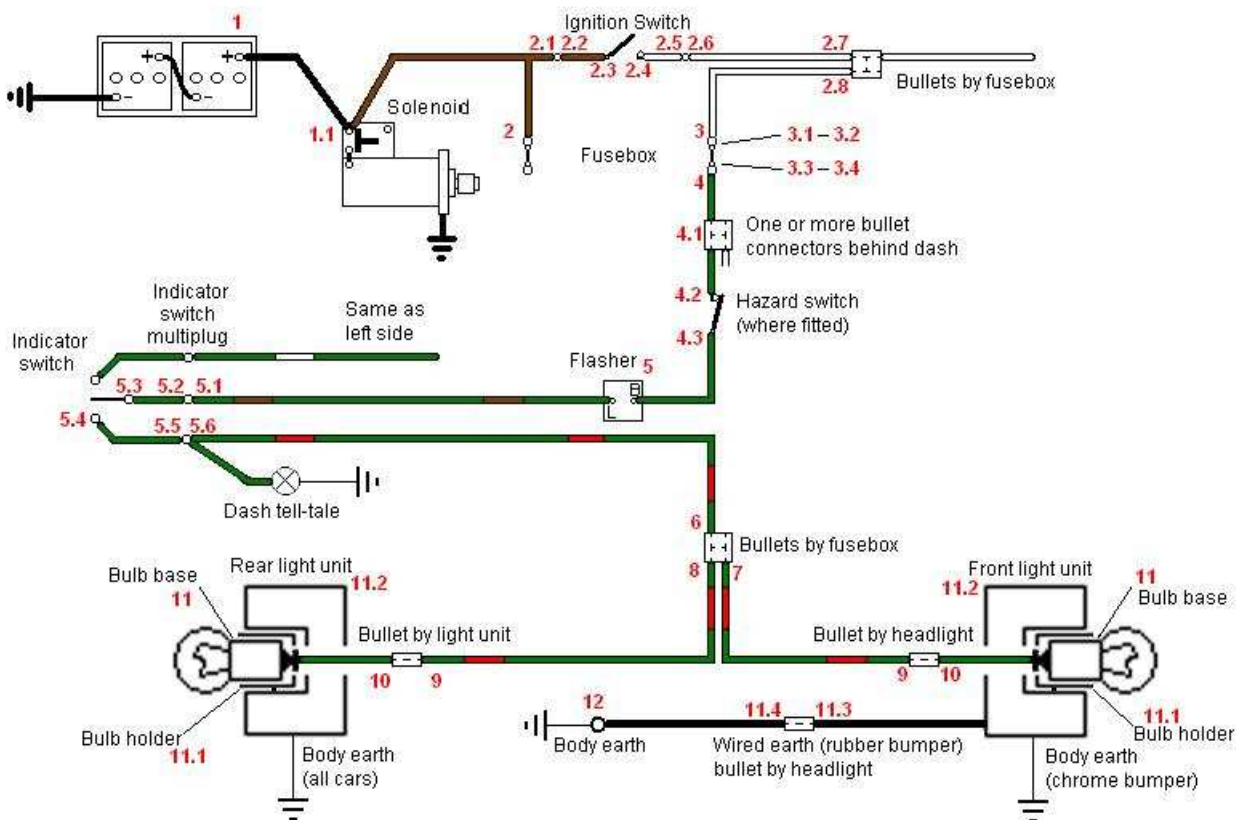




## Diagnosing Slow or Non-flashing Indicators

This schematic shows all the connection points as well as the components in the flasher circuit. The numbers in red show the order of tests from the battery through to the bulbs: 1, 2, 3 etc. as the main tests, n.1, n.2 n.3 etc. as supplementary tests where required.



Note that chrome bumper light unit body earths are shared with the parking lights (front and rear) so if the body earth is bad then with the parking lights on the indicators will be worse. Rubber bumper front indicators similarly share their wired earth with the pilot parking lights in the headlights, so again if the bullets by the headlight or the body earth are bad the indicators will be worse with the parking lights on.

By plotting the measured voltages on this chart it should be easy to see where the worst bad connections are, and hence the ones to be tackled first for the greatest improvement. [Click here to display a copy of the chart for printing.](#)

Whilst the list is in a logical order from battery to bulbs it makes sense to test the battery and points 10 and 11 first in order to identify which corner or corners need closer inspection.

About the only connection these tests don't take account of is that between the centre contact of the bulb and the bulb holder. Not possible to get at without removing the bulb, by which time you might as well clean the holder contact and check the bulb contact anyway. I've noticed the solder blob which forms the bulb connection has worn down on old bulbs, this will tend to reduce the spring tension on that contact from the holder contact.

Test Order	Test	Voltage				Note	Diff.
1	Battery		X	X	X		
1.1 if 2 bad	Solenoid stud		X	X	X		
2	Fusebox brown		X	X	X	1	
2.1 if 3 bad	Ignition switch multiplug brown		X	X	X	2	
2.2 if 3 bad	Ignition switch multiplug brown		X	X	X	2	
2.3 if 3 bad	Ignition switch brown		X	X	X		
2.4 if 3 bad	Ignition switch white		X	X	X		
2.5 if 3 bad	Ignition switch multiplug white		X	X	X		
2.6 if 3 bad	Ignition switch multiplug white		X	X	X		
2.7 if 3 bad	White from main to rear 1		X	X	X		
2.8 if 3 bad	White from main to rear 2		X	X	X		
3	Fusebox white spade		X	X	X		
3.1 if 4 bad	Fusebox white fuse holder		X	X	X	3	
3.2 if 4 bad	Fusebox white fuse endcap		X	X	X	3	
3.3 if 4 bad	Fusebox green fuse endcap		X	X	X	3	
3.4 if 4 bad	Fusebox green fuse holder		X	X	X	3	
4	Fusebox green spade		X	X	X		
4.1 if 5 bad	Green bullets behind dash (can be several)		X	X	X	4	
4.2 if 5 bad	Hazard switch (where fitted) green 1		X	X	X		
4.3 if 5 bad	Hazard switch (where fitted) green 2		X	X	X		
5	Flasher green linked to green/brown		X	X	X		
5.1 if 6 and 7 bad	Indicator switch multi-plug green/brown 1		X	X	X		
5.2 if 6 and 7 bad	Indicator switch multi-plug green/brown 2		X	X	X		
5.3 if 6 and 7 bad	Indicator switch green/brown		X	X	X		
<b>Sides of car</b>		<b>Right</b>	<b>Left</b>	X	X	X	X
5.4 if 6 and 7 bad	Indicator switch green/red and green/white			X	X		
5.5 if 6 and 7 bad	Indicator switch multi-plug green/red and green/white 1			X	X		
5.6 if 6 and 7 bad	Indicator switch multi-plug green/red and green/white 2			X	X		
6	Green/red and green/white bullets from main by fusebox 1			X	X	5	
7	Green/red and green/white bullets from main by fusebox 2			X	X	5	
8	Green/red and green/white bullet to rear by fusebox			X	X		
<b>Corners of car</b>		<b>RF</b>	<b>LF</b>	<b>RR</b>	<b>LR</b>	X	X
9	Green/red and green/white to green 1						
10	Green/red and green/white to green 2						
<b>Earth tests</b>		X	X	X	X	6	X
11	Bulb base						
11.1 if 11 bad	Bulb holder						
11.2 if 11 bad	Light unit base						
11.3 if 11 bad	RB bullet by headlight 1			X	X		
11.4 if 11 bad	RB bullet by headlight 2			X	X		
12	RB body earth			X	X	7	

Notes:

There will inevitably be some reduction in voltage as you work through the circuit from battery to the corners of the car. Go through the main test points 1, 2, 3, 4 etc. until you find a significant reduction then go back and do the intermediate test points n.1, n.2, n.3 etc. to find the connection causing the problem.

1. The fusebox brown is a convenient point to check the voltage on the brown to the ignition switch. If this shows a volt-drop from the battery you need to check connections at the solenoid where the brown wires join the battery cable.
2. As with all multi-plugs, test both sides in case the connection between the two halves is at fault.
3. If there is a significant volt-drop between the white spade and the green spade at the fusebox then it's probably easier to replace the fuse box rather than try and clean the various junctions up. There are hidden riveted connections underneath 4-fuse fuse boxes that can corrode.
4. Like multi-plugs test each bullet in 2- and 4-way connectors as any bullet could be making a bad connection with the connector.
5. One of the green/red and green/white wires from the main harness comes from the indicator switch, the other goes to the front light units, but you won't know which is which unless you part the connector. If you get different voltages on them, then that connector is at fault. But if they are both the same voltage, and that is significantly less than at test 5 i.e. the flasher unit green/brown, then the problem will be with the indicator switch or one of its relevant multi-plug connections.
6. In earth tests zero voltage measured is the ideal. Any voltage found is down to one or more bad connections between that point and the car body. As such a sudden reduction in voltage from test to test again shows a problem between the latest point and the previous point.
7. The body earth can be by the right-hand headlight (early cars), behind the dash (later cars), or by the starter relay otherwise.