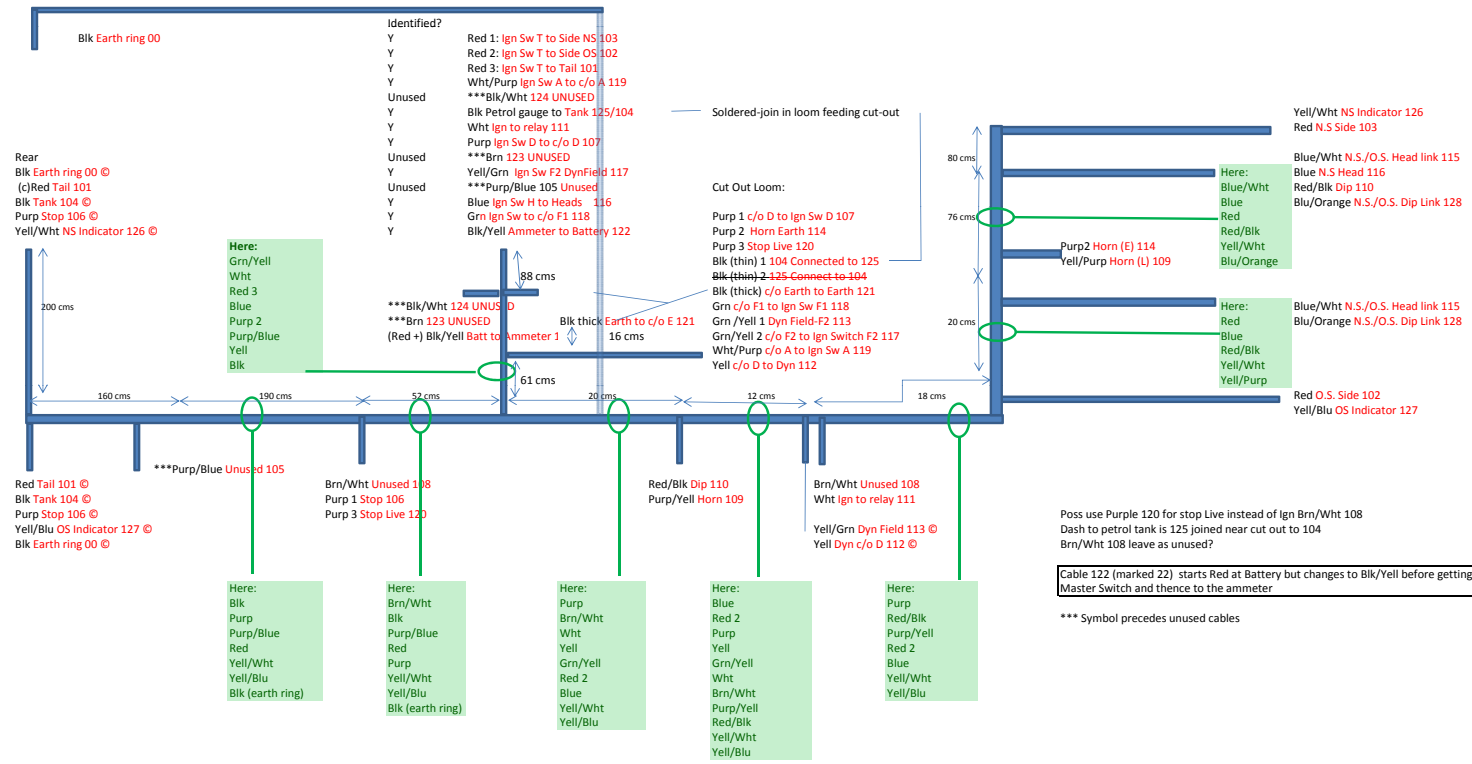


**All**

Based on a 1934 Cowley Saloon loom with added earth ring wire, indicators and double dip bulbs.  
 Durite Relays added to ensure max power for dipping and horn (and initially only to provide for magneto operation with the original coil based ignition switch. This later removed when new coil ignition installed)  
 Lucas SFB-105 Flasher unit and AES Ltd indicator switch (#080903) added to serve 21w arrow indicators.

Dimensions in cms

|     | Rear           | Mid Chassis | Door Jamb | Cockpit        | Steering box       | Distributor             | Off/side Front       | N/side Front          |
|-----|----------------|-------------|-----------|----------------|--------------------|-------------------------|----------------------|-----------------------|
| To: | Stop/Tail/Tank | Not used?   | Wiper??   | Dashboard Loom | Dip, Horn & Cutout | Distributor & Dynamotor | Offside front lights | Nearside front lights |



Poss use Purple 120 for stop Live instead of Ign Brn/Wht 108  
 Dash to petrol tank is 125 joined near cut out to 104  
 Brn/Wht 108 leave as unused?

Table 122 (marked 22) starts Red at Battery but changes to Blk/Yell before getting to Master Switch and thence to the ammeter

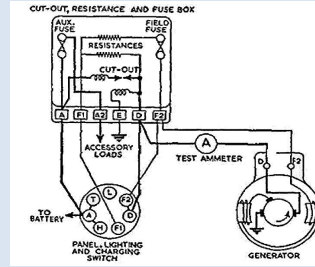
\*\*\* Symbol precedes unused cables

|  | Tail/Stop and Tank | Originally for interior light | W/screen wiper? | Horn & Dip | Ignition | Side | O/side Head | N/Side Head, Side & Dip |
|--|--------------------|-------------------------------|-----------------|------------|----------|------|-------------|-------------------------|
|--|--------------------|-------------------------------|-----------------|------------|----------|------|-------------|-------------------------|

**Cable Numbering**

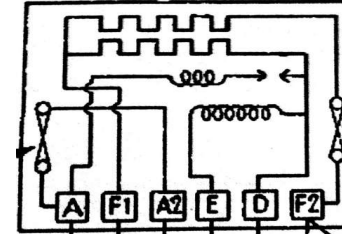
| Cable No | Cable numeral | Colour      | In Loom            | Purpose      | From/To                      | Comment  |
|----------|---------------|-------------|--------------------|--------------|------------------------------|--|
| 0        | 00            | Blk         | Round car          | Earth        | Rear/dash/c/o                | Connects wings, tank earth, battery box, relay mount, and dash |
| 100      | 0             | Blk         | Reserved for       | Earth        |                              |  |
| 101      | 1             | Red         | Dash/Main          | Tail         | Dash to tail                 |  |
| 102      | 2             | Red         | Dash/Main          | OS Side      | Dash to OS Front             |  |
| 103      | 3             | Red         | Dash/Main          | NS Side      | Dash to NS Front             |  |
| 104      | 4             | Blk         | Cutout             | Tank         | C/Out to rear                | Connects with 125 in-loom at cut out to dash                   |
| 105      | 5             | Purp/Blue   | Dash/Main          |              | Dash to rear                 | ***UNUSED  |
| 106      | 6             | Purp        | Main               | Stop?        | Mid Main to rear             | Needs connecting with 120                                      |
| 107      | 7             | Purp        | Dash/Cutout        |              | Dash to Cutout               |  |
| 108      | 8             | Brn/Wht     | Main               | ?            | Distributor area to mid rear | Power feed to wiper motor?                                     |
| 109      | 9             | Purp/Yell   | Main/Front         | Horn power   | Relay to Horn                | Power  |
| 110      | 10            | Red/Blk     | Main/Front         | Dip          | Steering box to NS Head      |  |
| 111      | 11            | Wht         | Main               | Ignition     | Dash to Distributor          |  |
| 112      | 12            | Yell        | Main               | Dynamotor    | Dynamotor to Cutout          | Output   |
| 113      | 13            | Yell/Grn    | Main               | DynaField    | Dynamotor to Cutout          | Field Assoc with 117   |
| 114      | 14            | Purp        | Cutout/Main        | Horn earth   | Horn to cutout loom & E      | Earth to Horn  |
| 115      | 15            | Blu/Wht     | Front Main         | Dip          | NS Head to OS head           | Feed to OS Head  |
| 116      | 16            | Blu         | Dash/Front         | MaHeads      | Dash to NS Head              | Power to Heads   |
| 117      | 17            | Yell/Grn    | Dash/Cutout        |              | Dash to Cutout               | Dynamotor Field maybe connected to 113                         |
| 118      | 18            | Grn         | Dash/Cutout        |              | Dash to Cutout               | ??   |
| 119      | 19            | Wht/Purp    | Dash/Cutout        |              | Dash to Cutout               | To Cut Out 'A'   |
| 120      | 20            | Purp        | Cutout/Main rear   |              | Cutout/Door jamb             | Power  |
| 121      | 21            | Blk (thick) | Cutout to Dashloom |              | Cutout Loom                  | Cutout E - Earth to Body                                       |
| 122      | 22            | Yell/Blk    | Dashloom           | Battery      | Dash to Dashloom             | Main battery feed  |
| 123      | 23            | Brn         | Dashloom           |              | Dash to Dashloom             | ***UNUSED  |
| 124      | 24            | Blk/Wht     | Dashloom           |              | Dash to Dashloom             | ***UNUSED  |
| 125      | 25            | Blk         | Dash F/Gauge       | Tank         | Dash to Tank unit            | Connects with 104 in-loom at cut out to dash                   |
| 126      | 26            | Yell/Wht    | Main/Front         | NS Indicator | Rear to Front                | Also connects to Flasher                                       |
| 127      | 27            | Yell/Blu    | Main/Front         | OS Indicator | Rear to Front                | Also connects to Flasher                                       |
| 128      | 28            | Blu/Org     | Main/Front         | Dip Link     | NS Head to OS head           | Feed to OS Dip   |
| 129      | 29            | Red         | Separate           |              | Power to Flasher & Wiper     | From dash (Earthed to flasher earth)                           |
| 130      | 30            | Red/Yell    | Separate           |              | Flasher repeater to dash     |  |
| 131      | 31            | Red/Blk     | Cigar Lighter      |              | Battery to Lighter           | Separate wiring direct from battery Plus - fused               |
| 132      | 32            | Yell/Purp   | Cigar Lighter      |              | Lighter to Battery           | Separate wiring direct to Batt Neg                             |

**Cut Out**







|    |         |
|----|---------|
| A  | 119/122 |
| F1 | 118     |
| A2 |         |
| E  | 121     |
| D  | 112     |
| F2 | 117/113 |

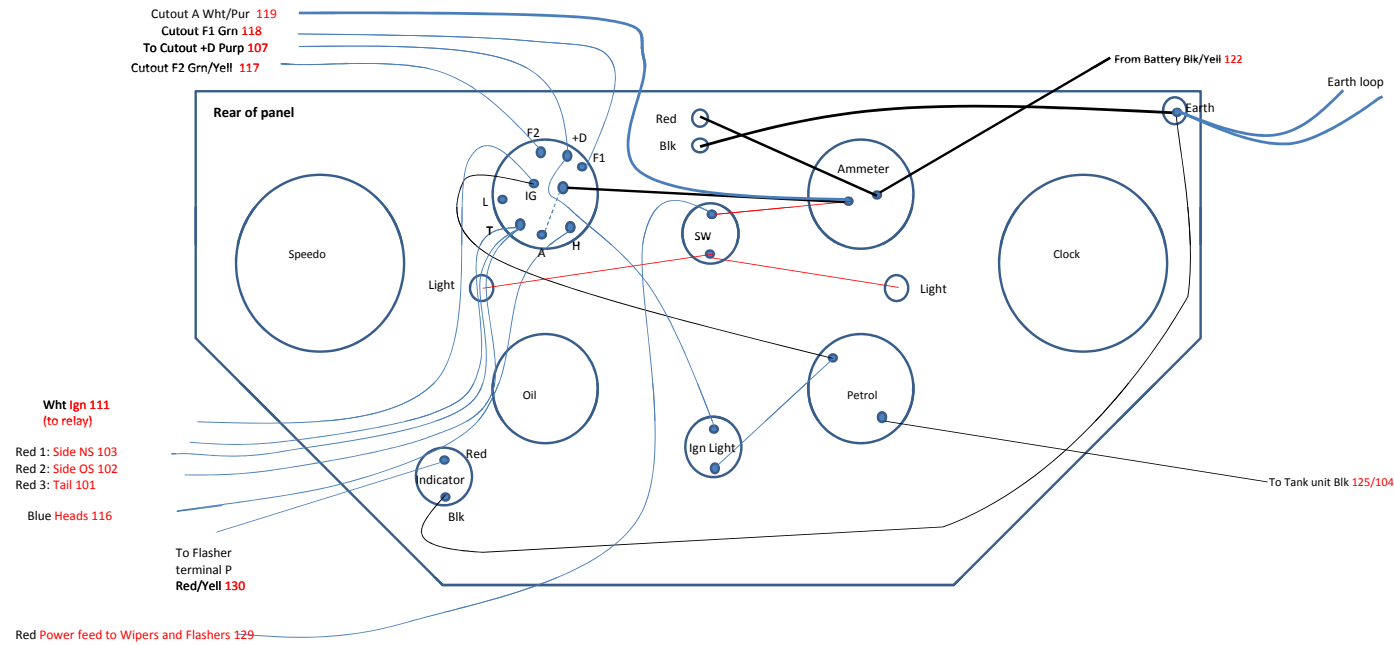
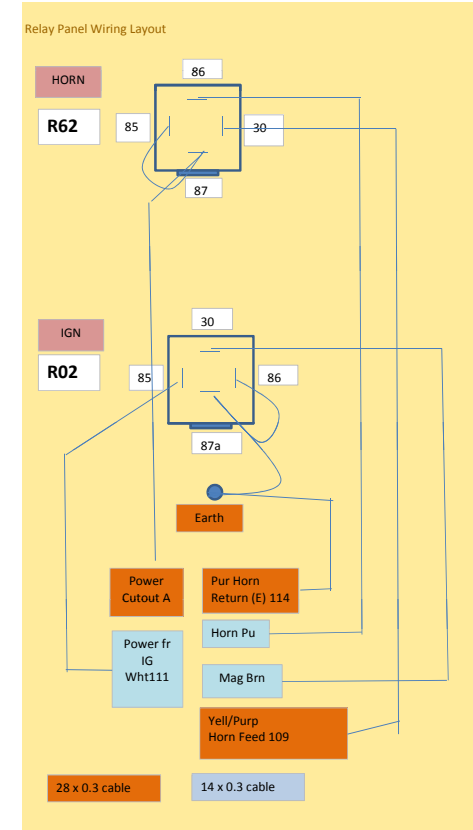
Located on outer bulkhead surface



The Fuel Gauge's 'T' connexion is numbered 125 at the gauge and 104 at the tank. The soldered join is made within the loom close to the Cut Out.

**Durite Relays etc**

| Bulkhead | Top  | Bottom   | Lucas Flasher  | Durite Relay (In NS Headlight)   |
|----------|--|--|--|--|
|          | Horn Power<br>N/O: 0-727-62  | Ignition<br>N/C: 0-727-02  | Indicators<br>Lucas SFB-105  | Dipping control<br>C/O: 0-728-13   |
|          |                           |       |   |    |
|          | 30 85 86 87  | 30 85 86 87a   | X P L  | 30 85 86 87 87a  |
|          | 30 Yell/Purp Horn (E) 109<br>85 Power from cut out 'A'<br>86 To horn push<br>87/87a Power from cut out 'A' | Mag'to ?Brn/Wht<br>Wht Ign 111<br>Earth<br><u>Removed after coil ignition restored</u> | X Power from cut out 'A'<br>P New red to dashboard<br>L New red to stalk<br>Case earthed by mount?<br><br>Wiper supplied from X and earth return | 30 Blue N.S Head 116<br>85 Red/Blk Dip 110 Check diode<br>86 Connect Blue NS Head 116 check diode<br>87 Bulb Dip Beam & Blu Orange 128<br>87a Bulb NS M-Beam & Blu/Wht OS Head 115 |
|          |  |  |  | Power in<br>Dash warning light<br>To column stalk<br><br>Power when Heads switched on Earthed when dip set<br><br>To NS and OS dipped filaments<br>To NS and OS main filaments     |
|          | Located on outer bulkhead  | Located outer bulkhead   | Located on inner bulkhead  | Located inside NS Headlight  |



## Operation of the Four Position Ignition and Charging Switch - Lucas Type "PLC"

The PLC switch controls three aspects:

Ignition on/off

Charge: Low/High from Dynamotor in summer/winter and when lights are on

Lights Off/Side/Head

There is a coupling between charging and use of lights so that more charge is given when lights are on. Viz:

|    | Summer | Winter | Side | Head | IG off | IG on | Connexions                             |
|----|--------|--------|------|------|--------|-------|--|
| F2 |        |        |      |      |        |       | To cut out F2 (and on to F on D/motor) |
| D  |        | •      | •    | •    |        |       | To cut out D                           |
| F1 |        |        |      |      |        |       | To cut out F1                          |
| IG |        |        |      |      |        | •     | To Ignition                            |
| A' |        |        |      |      |        | •     | Power in                               |
| L  |        | •      | •    |      |        |       | Unused                                 |
| T  |        | •      | •    | •    |        |       | Sides/Tail                             |
| A  |        |        | •    | •    |        |       | Power from A' & to horn                |
| H  |        |        |      | •    |        |       | Heads                                  |

### Explanation:

#### Charging Settings:

The D/F1/F2 connexions switch in or short out the field resistors in the base of the cut out as needed for summer winter and lighting settings.

Thus in summer no shorting of the resistors leads to higher field resistance and therefore the lowest charge rate

In winter one of the resistors is shorted out leading to an increased charge rate

Winter charge rate also applies if the sides are on

When heads are on no resistors are in the field circuit leading to the maximum charge rate as set by position of the third brush.

#### Ignition Settings:

Power from the battery always goes to A' (and also to A since the two are internally connected) and thence to IG when the ignition key is turned to ON.

#### Lighting Settings:

On Side setting, power from A goes to T for sides and tail lights

On Head setting power from A goes to both T (for sides) and to H (for heads)

The L terminal has power to it in the Winter and side settings but this is not used.

#### Misc

The A terminal is also used to provide power to the horn which then only operates when its other lead is earthed.

Fuel gauge uses two wire connections and earth and is prone to a poor earth. See [www.ppowers.com/mygauge.htm](http://www.ppowers.com/mygauge.htm) for more details.

