

# Circuit Diagram Glossary TIGER 900 RALLY, TIGER 900 RALLY PRO, TIGER 900 GT, TIGER 900 GT - LRH, TIGER 900 BOND EDITION

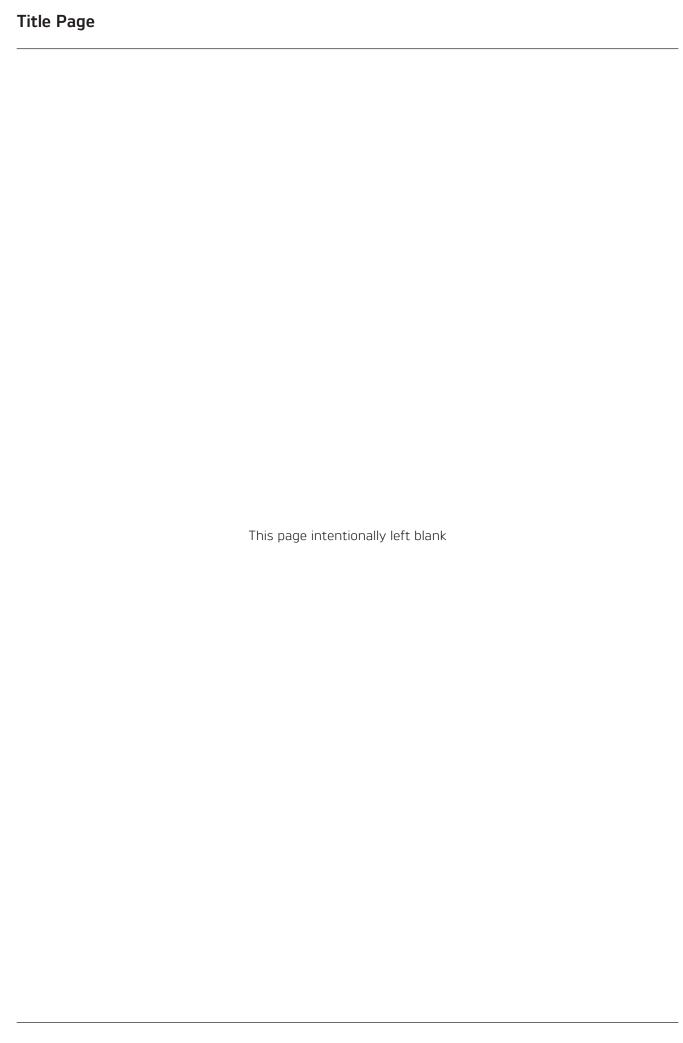
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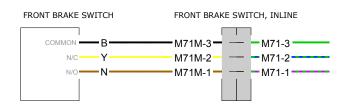
#### **GLOSSARY OF CIRCUIT DIAGRAM SYMBOLS**

The following is a description of the symbols and information found in the circuit diagrams for this model.

#### Note:

 Wire colours and connector pin references shown in the illustrations below are examples and may differ from those contained in circuit diagrams for this model.

# Components with a Fly lead and an In-line Connector



The illustration shows an example of a component with a fly lead and an in-line connector.

The component is represented by a white box, with fly lead wires leading to an in-line connector (shaded grey). Information provided with the component includes:

- The component name located above the component.
- A function reference for each terminal located inside the component, adjacent to the connecting wire (provided in English only).
- Wire colour references located on each wire.
- An in-line connector name located above the in-line connector.
- A component and pin number reference located on each wire entering the in-line connector.

In the above example, the component and pin number references can be interpreted as follows:

| M71     | Component reference for the front brake switch        |  |
|---------|---|--|
| М       | Identifies the mating connector (component side only) |  |
| -       | Separator   |  |
| 1, 2, 3 | Connector pin number reference                        |  |

#### Components with an Integral Connector



The illustration shows an example of a component with an integral connector.

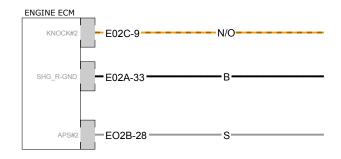
The component is identified by a white box, with a grey shaded area representing the integral connector. Information provided with the component includes:

- The component name located above the component.
- A function reference for each terminal located inside the component, adjacent to the connecting wire (provided in English only).
- · Wire colour references located on each wire.
- A component and pin number reference located on each wire entering the integral connector.

In the above example, the component and pin number references can be interpreted as follows:

| M01    | Component instruments | reference   | for   | the |
|--------|-----------------------|-------------|-------|-----|
| -      | Separator             |             |       |     |
| 24, 25 | Connector pin         | number refe | rence |     |

#### Components with Multiple Integral Connectors



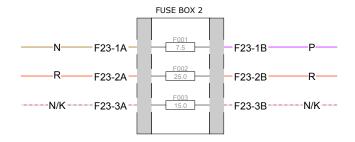
The illustration shows an example of a component with multiple integral connectors.

The multiple integral connectors can be identified by separated grey shaded areas (as shown), or by a grey shaded area that is divided into multiple sections by black line(s).

The above example shows an engine ECM with three integral connectors, connectors A, B and C. The component, connector and pin number references can be interpreted as follows:

| E02      |     | Component reference for the engine ECM |  |
|----------|-----|--|--|
| A, B,    | С   | Connector reference                    |  |
| -        |     | Separator                              |  |
| 9,<br>33 | 28, | Connector pin number reference         |  |

#### **Fuse Boxes**



The illustration shows an example of a fuse box.

A fuse is a device which protects a circuit in the event of a fault. The fuse will 'blow' should a short circuit occur, protecting that circuit from further damage.

Information provided with the fuse box includes:

- The fuse box name located above the fuse box.
- A fuse number/location reference for each fuse
   located above the fuse.
- A fuse rating (in Amps) for each fuse located inside the fuse.
- A fuse box, terminal number and terminal block reference - located on each wire entering the fuse box.

In the above example, the fuse box, terminal number and terminal block references can be interpreted as follows:

| F | Reference code for a fuse box                  |  |
|---|--|--|
| 2 | Denotes the type of fuse box:                  |  |
|   | 1 = Fuse box 1 (Main fuse)                     |  |
|   | 2 = Fuse box 2 (Individual circuit protection) |  |

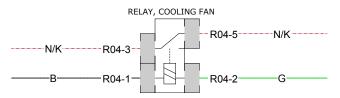
| 3       | Indicates the number of fuses contained in the fuse box |  |
|---------|---|--|
| -       | Separator   |  |
| 1, 2, 3 | Connector terminal number reference                     |  |
| A or B  | Terminal block reference A (power in) or B (power out)  |  |

#### Relays

A relay is effectively an electromagnetic switch. To close the relay contacts and complete the circuit, an electromagnet in the relay is energised which causes the relay contacts to close, making the circuit complete.

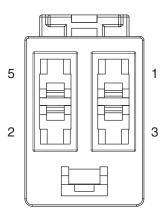
Relays are used when the electrical current is too great for a mechanical switch, usually when the switching must be done quickly to prevent arcing across the switch contacts. If a mechanical switch were used, the mechanical switch contacts would quickly burn away.

# Relays Connected with a Single Socket Connector



The illustration above shows an example of a relay connected to the wiring harness with a single socket relay connector.

A pin diagram of a typical single socket relay connector is shown below.



### Glossary Of Circuit Diagram Symbols

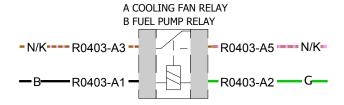
Information provided on the circuit diagram for relays with a single socket harness connector includes:

- The relay name located above the relay.
- A relay and terminal number reference located on each wire entering the relay connector terminals.

In the above example, the relay and terminal number reference can be interpreted as follows:

| R          | Indicates the component is a relay                                      |  |
|------------|---|--|
| 04         | Reference number for the relay (cooling fan relay in the example shown) |  |
| -          | Separator   |  |
| 1, 2, 3, 5 | Connector terminal number reference                                     |  |

# Relays connected with a Dual Socket Connector



The illustration above shows an example of a relay connected to the wiring harness with a dual socket relay connector.

A dual socket relay connector provides sockets for two individual relays, socket A and socket B. A pin diagram of a typical dual socket relay connector is shown below. Information provided on the circuit diagram for relays with a dual socket harness connector includes:

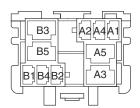
- The names of the relays connected to sockets A and B located above the relay.
- A dual relay and terminal number reference located on each wire entering the relay connector terminals.

In the above example, the relay and terminal number reference can be interpreted as follows:

| R          | Indicates the component is a relay  |  |
|------------|---|--|
| 04         | Reference number for the relay connected to socket A (cooling fan relay in the example shown)   |  |
| 03         | Reference number for the relay connected to socket B (fuel pump relay in the example shown)   |  |
| -          | Separator   |  |
| A or B     | Socket reference (socket A or socket B) In the example above, all references show socket A. This indicates that the component shown is the cooling fan relay. |  |
| 1, 2, 3, 5 | Connector terminal number reference for the socket/relay identified   |  |

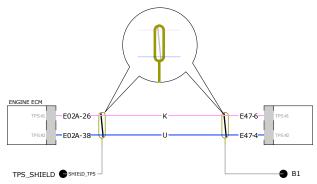
#### Ring Terminals





The illustration shows the symbol used to identify a ring terminal (commonly used as ground points). A ring terminal reference is provided on the wire entering the terminal.

#### **Shielded Wires**



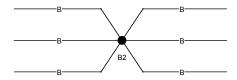
The illustration shows the symbol used to identify wires that are shielded against electromagnetic interference.

Examples of components that have shielded wires include:

- · ABS wheel speed sensors
- · Immobiliser antenna
- Throttle position sensor
- USB socket

The wire shielding is typically connected to ground.

#### **Splices**

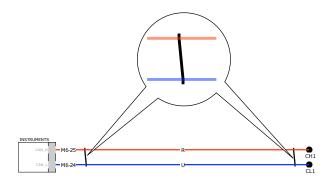


The illustration shows an example of a splice.

A splice is a hard cable joint where two or more cables are joined in the wiring harness. A splice is a potential source of both open and short circuits.

A splice reference code is provided at the nearest convenient location to the splice symbol.

#### **Twisted Wires**



The illustration shows the symbol used to indicate a pair of wires that are twisted together, such as CAN circuit wires.

#### **Starter Motor Grounding**

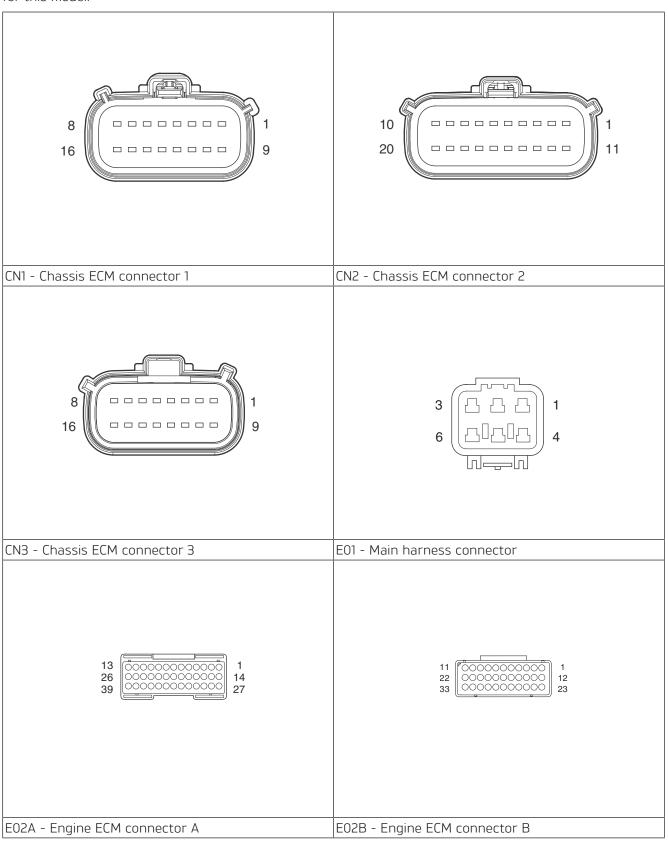
Starter motors fitted to Triumph motorcycles are connected to ground through the mating faces of the starter motor body and the crankcase.

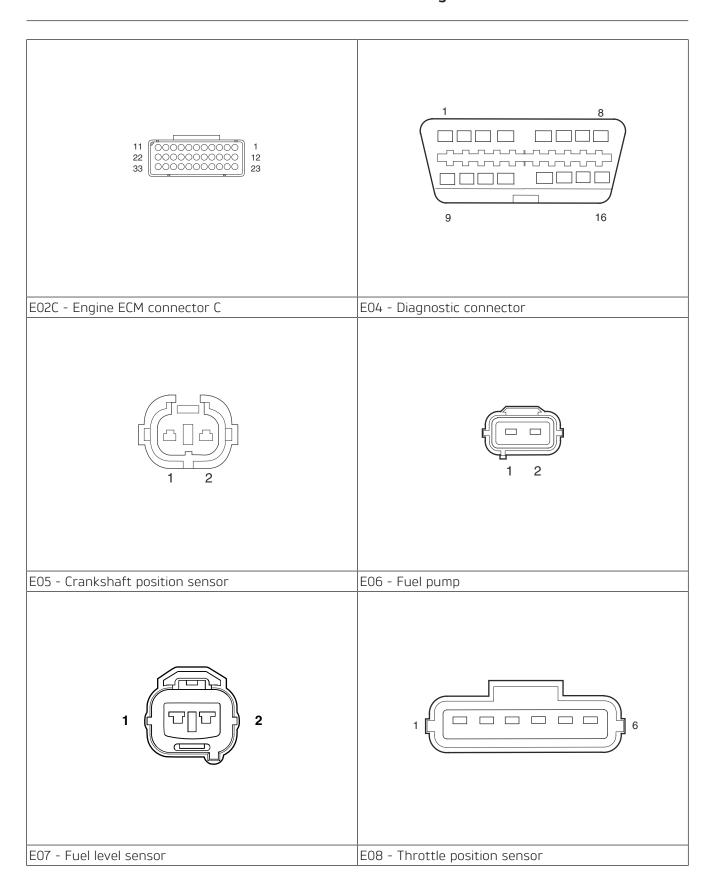
#### **Key To Wiring Colour Codes**

| Code | Wiring Colour |
|------|---------------|
| В    | Black         |
| U    | Blue          |
| N    | Brown         |
| G    | Green         |
| S    | Slate/Grey    |
| 0    | Orange        |
| K    | Pink          |
| R    | Red           |
| Р    | Purple        |
| W    | White         |
| Υ    | Yellow        |
| LG   | Light Green   |
| LU   | Light Blue    |

### MAIN WIRING HARNESS ELECTRICAL CONNECTORS

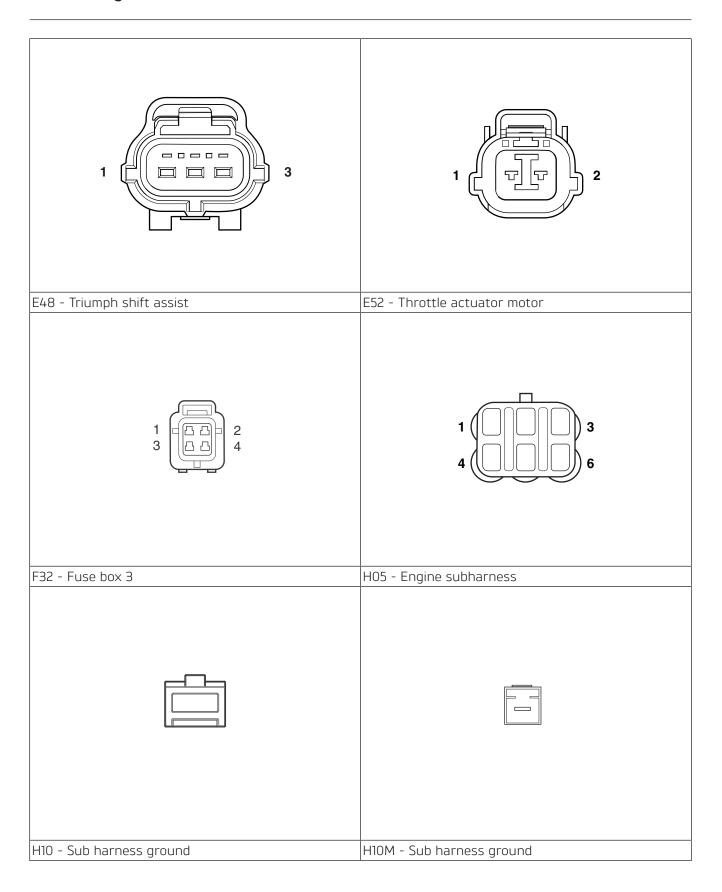
The table below shows the connector pin diagrams for each electrical connector on the main wiring harness for this model.

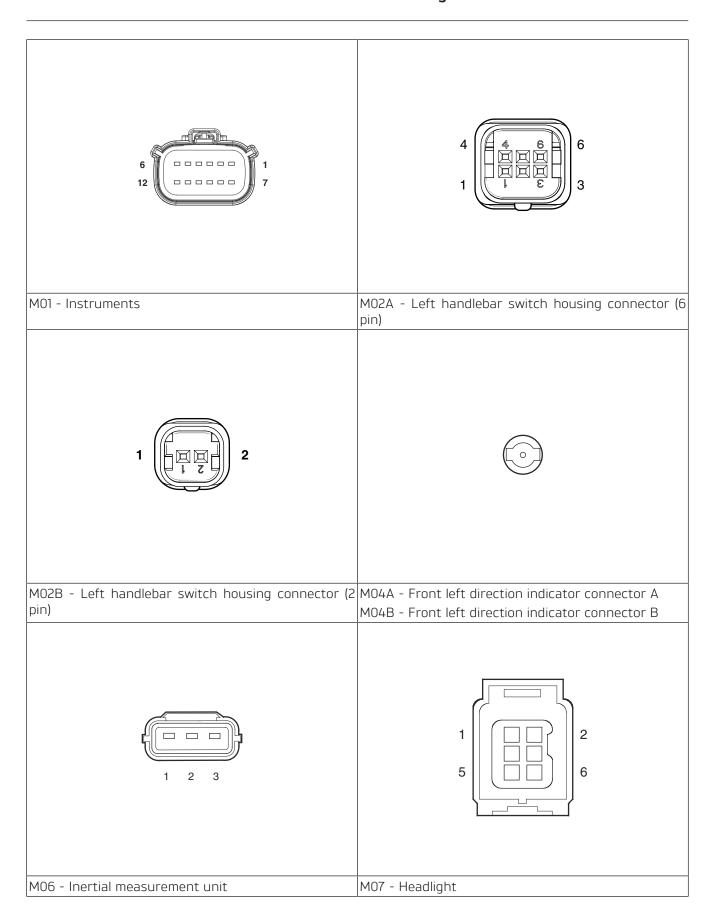




| 1                                    | 1 2                              |
|--------------------------------------|----------------------------------|
| E09 - Purge valve                    | E10 - Coolant temperature sensor |
| 1 2                                  | 2<br>4<br>4<br>3                 |
| E11 - Fuel injector 1                | E15 - Gear position sensor       |
| E12 - Fuel injector 2                |                                  |
| E13 - Fuel injector 3                |                                  |
| 2 1<br>4 3                           | 2                                |
| E16 - Oxygen sensor, bank 1 sensor 1 | E17 - Side stand switch          |

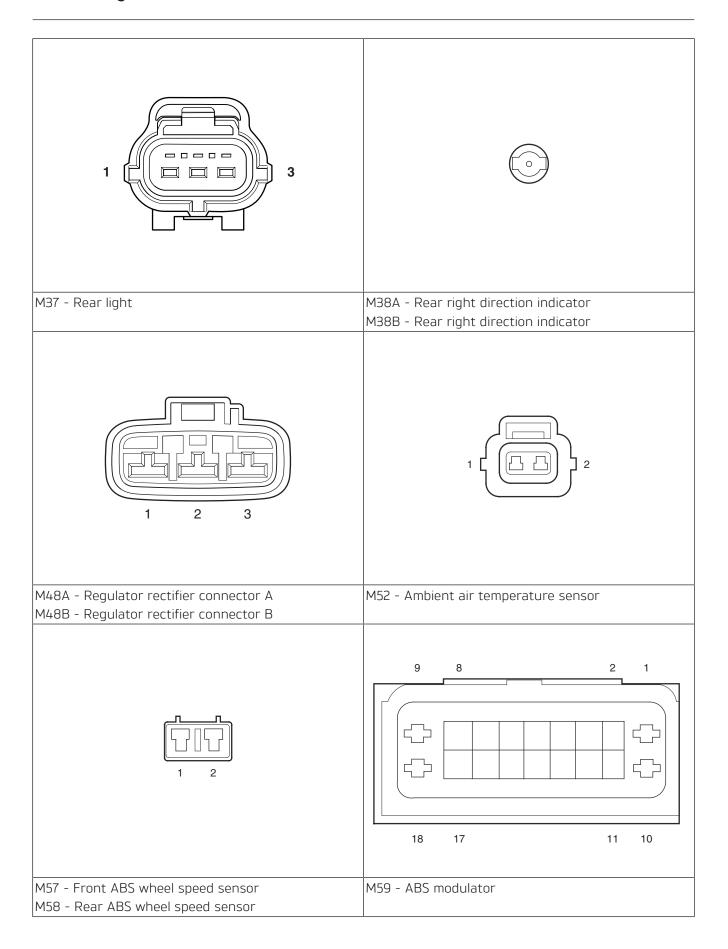
| 2 1                           |  |
|-------------------------------|--|
| E19A - Cooling fan 1          | E20 - Intake air temperature sensor  |
| E19B - Cooling fan 2          | ·  |
| 1                             |  |
| E21 - Ignition coil 1         | E25 - Oil pressure sensor  |
| E22 - Ignition coil 2         |  |
| 1 Property 2                  | 1 2 3  |
| E37 - Secondary air injection | E38 - Manifold absolute pressure sensor<br>E39 - Ambient air pressure sensor |

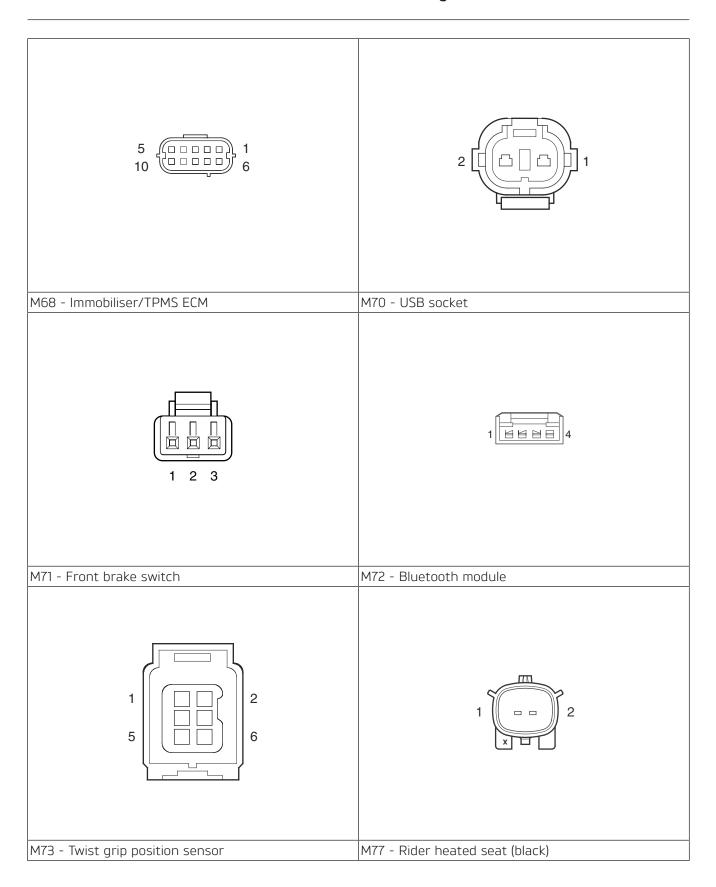




|  | 1 2 4  |
|--|--|
| M11A - Horn connector A  | M13 - Ignition switch                                    |
| M11B - Horn connector B  | in is agricult switch                                    |
| 4 6 6 6 3  | 4 6 6 6 1 1 E 3  |
| M14A - Right handlebar switch housing connector A (Black)  | M14B - Right handlebar switch housing connector B (Grey) |
| (DIdCK)  | (Grey)   |
| M19A - Front right direction indicator connector A<br>M19B - Front right direction indicator connector B | M21 - Accessory socket, live                             |

|                                       | 2                                   |
|---------------------------------------|-------------------------------------|
| M22 - Rear accessory socket, switched | M26 - Rear brake switch             |
|                                       |                                     |
| M28 - Starter solenoid                | M28A - Starter solenoid connector A |
|                                       | M28B - Starter solenoid connector B |
|                                       | 1 4 5 8                             |
| M35A - Rear left direction indicator  | M36 - Alarm                         |
| M35B - Rear left direction indicator  |                                     |
|                                       | ı                                   |





| 1 2  | 1 2 3  |
|--|--|
| M78 - Passenger heated seat (grey)   | M79 - Passenger heated seat switch           |
| 1 2  |  |
| M81 - Right hand fog light   | M86 - Battery positive terminal              |
| M81 - Left hand fog light  |  |
| MO6 Pattery pogative terminal  | 5 2 2 5 COZ. Engine management system relay. |
| M96 - Battery negative terminal<br>M97 - Engine ground<br>M100 - Starter motor | R07 - Engine management system relay         |