

VWR102140-A-01

Discovery Series II (LHD) 28

DESCRIPTION AND OPERATION

Front right window up

The right window switch up contact is connected to pin C0660-19 on the BCU by a BU wire. When the switch is set to the up position an internal supply from the BCU flows along the BU wire through the contacts of the switch and to earth via earth header C0552 on a B wire.

The BCU internal logic monitors the current flow from pin C0660-19 and uses this input as an up signal. The BCU routes power from the permanent feed from pin C0664-7 to pin C0664-6, from pin C0664-6 on an SK wire to connector C0326-2 on the RH front window motor. The motor is energised and drives the window mechanism towards the up position.

The front right window lift motor is earthed via an SK wire to connector C0664-2 on the BCU. The BCU completes the earth via pin C0664-5 on a B wire to earth header C0018 LHD/C0017 RHD.

Front right window down

The right window switch down contact is connected to pin C0660-2 on the BCU by a BK wire. When the switch is set to the down position an internal supply from the BCU flows along the BK wire through the contacts of the switch and to earth via earth header C0552 on a B wire.

The BCU internal logic monitors the current flow from pin C0660-2 and uses this input as a down signal. The BCU routes power from the permanent feed from pin C0664-7 to pin C0664-2. From pin C0664-2, the power flows to the RH front window motor on an SU wire. The motor is energised and drives the window mechanism towards the down position.

The front right window motor is earthed via an SK wire to connector C0664-6 on the BCU. The BCU completes the earth via pin C0664-5 on a B wire to earth header C0018 LHD/C0017 RHD.

Ignition key modes

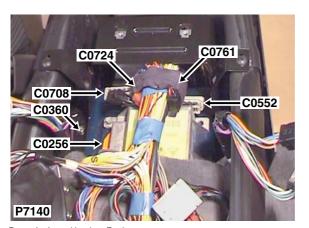
Depending on the vehicle specification:

The BCU controls operation of the front windows and will allow operation for a period of 44 seconds after the ignition switch is moved to the off position.

On some models if the time is less than 44 seconds and the drivers door (or any door on some models) is opened the BCU will disable the function of the windows.

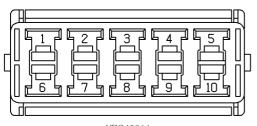
On some models the BCU disables the windows as soon as the ignition is turned off.

On all models the windows will not operate while the ignition key is turned to the cranking position III.



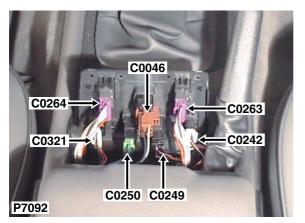
Cav	Col	Cct
1	В	ALL
2	В	ALL
3	В	ALL
4	В	ALL
5	В	37
6	В	ALL
7	В	ALL
8	В	ALL
9	В	ALL
10	В	ALL

Description: *Header -Earth*Location: *Behind centre console*



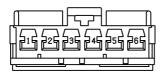
YPC10611

Colour: *LIGHT GREY* Gender: *Female*



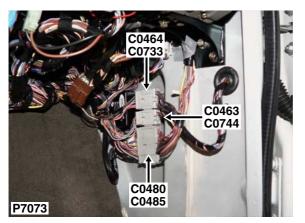
Cav	Col	Cct
1	В	ALL
3	BK	ALL
4	BU	ALL
6	RN	ALL

Description: Switch-Window-Front-RH Location: Behind centre console



YPC113220

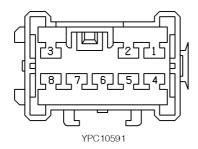
Colour: WHITE Gender: Female



Cav	Col	Cct
1	RB	ALL
2	KB	ALL
3	KG	ALL
3	BK	ALL
4	KR	ALL
4	BR	ALL
6	SU	ALL
7	SK	ALL

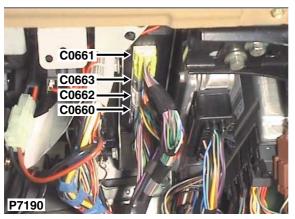
Description: Main harness to door harness - LHD

Location: RH 'A' post

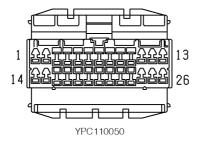


Colour: LIGHT GREY

Gender: Male

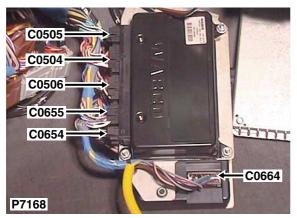


Description: Body control unit (BCU) - LHD Location: Behind RH side of fascia



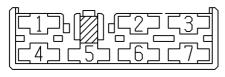
Colour: *GREY*Gender: *Female*

Cav	Col	Cct
1	GU	ALL
2	BK	ALL
3	LGW	ALL
4	PLG	ALL
5	UG	ALL
6	GW	ALL
7	KB	ALL
8	RU	9
9	RW	9
10	WK	ALL
11	В	ALL
12	WU	13
13	PN	ALL
14	KO	41
15	PO	ALL
16	KR	ALL
17	PW	ALL
18	BS	ALL
19	BU	ALL
20	LGS	ALL
21	LGG	ALL
22	RG	9
23	RS	9
24	RK	9
25	RP	9
26	RY	9



Cav	Col	Cct
1	SR	ALL
2	SU	ALL
3	RU	ALL
4	SB	ALL
5	В	ALL
6	SK	ALL
7	NG	ALL

Description: Body control unit (BCU)
Location: Behind passenger side of fascia



YPC10473

Colour: BROWN Gender: Female

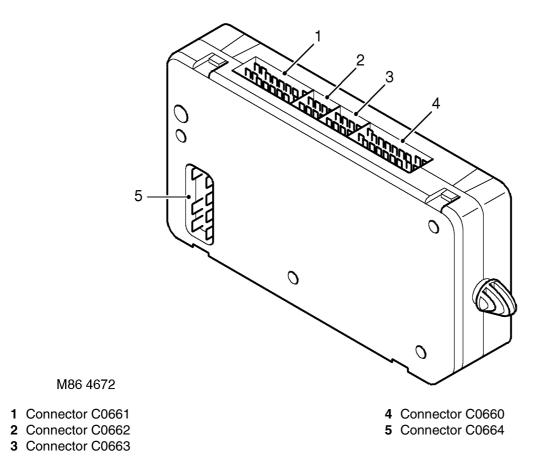
BCU outputs

The BCU processes the input signals it receives and uses the information to determine the control outputs that need to be established for any given set of conditions. The BCU provides controlled outputs for the following systems:

- Interior courtesy lamps.
- Fuel flap release actuator.
- Anti-theft status LED.
- Engine Control Module.
- Door lock actuators.
- Direction indicators and hazard warning lamps.
- Headlamps.
- Alarm sounder.
- Vehicle horns.
- Battery backed sounder.
- Starter relay.
- Passive re-mobilisation exciter coil.

Simultaneous switching of outputs in different units is limited by the bus transfer time, but the skew is no longer than 100 ms for either the BCU or the IDM. When the processor is reset, all outputs are switched off until the inputs have been read for the first time to check current condition.

BCU to harness connectors



The pinout details for the BCU connectors are defined below: