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Ministry  
of Defence



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Thank you for your e-mail dated 9 October 2017, requesting the following information:

*As written in your reply, I want to specify the information:*

*Please have a look within the AESP 2320-D-128-302 and there specific within the ELECTRICAL section. There must be included wiring-diagrams about the Land Rover Defender, to be more specific, regarding the wiring of the light switch.*

I am treating your correspondence as a request for information under the Freedom of Information Act 2000(FOIA).

A search for the information has now been completed within the Ministry of Defence, and I can confirm that information in scope of your request is held. The information you have requested can be found attached.

If you have any queries regarding the content of this letter, please contact this office in the first instance.

If you wish to complain about the handling of your request, or the content of this response, you can request an independent internal review by contacting the Information Rights Compliance team, Ground Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.uk). Please note that any request for an internal review should be made within 40 working days of the date of this response.

If you remain dissatisfied following an internal review, you may raise your complaint directly to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not normally investigate your case until the MOD internal review process has been completed. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website at <https://ico.org.uk/>.

Yours Sincerely

DE&S Secretariat Land Equipment

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CHAPTER 13-1

ELECTRICAL SYSTEMS

CONTENTS

Para

- 1 Introduction
- 2 General
- 3 Electrical systems
- 4 Engine harness assembly
- 6 Chassis harness assembly
- 8 Main cable assembly harness
- 10 How to use the circuit diagrams
- 11 Power distribution
- 12 Headers, splices and centre taps
- 13 Wire attributes
- 14 Connectors
- 15 Earth distribution
- 16 Line types
- 18 Components
- 19 Earth points
- 20 Fuses and diodes

Fig

Page

1	Engine harness layout .....	11
2	Chassis harness layout.....	13
3	Main cable assembly harness layout.....	15
4	Power distribution.....	16
5	Connectors.....	17
6	Line types I.....	17
7	Line types II.....	17
8	Components.....	18
9	Earth points.....	18
10	Fuses and diodes.....	18
11	Earth distribution I - Non EEGR.....	19
12	Earth distribution II - Non EEGR.....	20
13	Header joints - Non EEGR.....	21
14	Instruments I - Non EEGR.....	22
15	Instruments II - Non EEGR.....	23
16	Power distribution I - Non EEGR.....	24
17	Power distribution II - Non EEGR.....	25
18	Power distribution III - Non EEGR.....	26
19	Splices and centre taps I - Non EEGR.....	27
20	Splices and centre taps II - Non EEGR.....	28
21	Splices and centre taps III - Non EEGR.....	29
22	Charging and starting I - Non EEGR.....	30
23	Charging and starting II - Non EEGR.....	31
24	Interior illumination - Non EEGR.....	32
25	Indicators and Hazards I - Non EEGR.....	33
26	Indicators and Hazards II - Non EEGR.....	34
27	Earth distribution I - EEGR.....	35
28	Earth distribution II - EEGR.....	36

(continued)

**CONTENTS (continued)**

Fig		Page
29	Header joints - EEGR .....	37
30	Instruments I - EEGR .....	38
31	Instruments II - EEGR .....	39
32	Power distribution I - EEGR.....	40
33	Power distribution II - EEGR.....	41
34	Power distribution III - EEGR.....	42
35	Splices and centre taps I - EEGR.....	43
36	Splices and centre taps II - EEGR.....	44
37	Splices and centre taps III - EEGR.....	45
38	Splices and centre taps IV - EEGR .....	46
39	Charging and starting I - EEGR.....	47
40	Charging and starting II - EEGR.....	48
41	Interior illumination - EEGR.....	49
42	Indicators and Hazards I - EEGR.....	50
43	Indicators and Hazards II - EEGR .....	51
44	EEGR.....	52
45	Brake reverse lamps.....	53
46	Fog lamps .....	54
47	Headlamp levelling .....	55
48	Horn .....	56
49	Trailer socket .....	57
50	Head, side and number plate lamps I.....	58
51	Head, side and number plate lamps II.....	59
52	Wipers and washers - front.....	60
53	Heater.....	61
54	Interior lamps.....	62

**INTRODUCTION**

1 This chapter gives a Technical Description for the 24 volt electrical system as fitted to the Truck Utility Light (TUL) HS, and Truck Utility Medium (TUM) HS.

**General**

2 The information given is applicable to both LH and RH drive vehicles.

**ELECTRICAL SYSTEMS**

3 The electrical systems on the TUL and TUM are made up of three main harnesses: Engine harness, Chassis harness and Main cable assembly harness. In addition, five supplementary harnesses/cables, covering vehicle battery, inter vehicle socket, convoy lamp, rear body components and fuel system are fitted. Connected together these harnesses form the vehicle harness, which supplies power to the instrument panel, switches and controls, interior and exterior lighting. Each harness can be disconnected and separated individually.

**Engine harness assembly**

4 The engine harness assembly connects the various electrical components fitted on the engine to the vehicle batteries and main cable assembly harness (Fig 1).

4.1 When the starter switch is turned to position III, an electrical current is sent from the battery to the starter motor, which cranks the engine over.

4.2 When the engine is running, the single drive belt at the front of the engine turns the alternator, which generates electricity to maintain operation of the vehicle and ancillary equipment.

4.3 The engine harness assembly is made up of the following items:

- 4.3.1 Alternator ECU Feed (FFR).
- 4.3.2 Twin alternator interlink (FFR).
- 4.3.3 Reverse switch.
- 4.3.4 Diff lock switch.
- 4.3.5 Fuel shut-off switch.
- 4.3.6 Oil pressure switch.
- 4.3.7 Water temperature switch.
- 4.3.8 Alternator connections.

4.4 There are various ancillary leads within the engine bay area that are not part of the engine harness assembly, but functional to the engine itself. There are also leads supplying other components within the electrical system, but will be mentioned in this paragraph.

4.5 Earth lead (part of negative earth cable). The earth lead, which connects the engine/gearbox assembly to the chassis, is fitted to prevent the drive train becoming live and, therefore, prevent electric shocks.

4.6 Low brake fluid level indicator. The lead runs from the top of the brake fluid reservoir to the main cable harness and operates the brake warning light in the instrument panel should the fluid level become low.

4.7 Brake pedal stop switch. The lead runs from the switch mounted on top of the brake pedal box to the main cable assembly harness. The switch operates the stop lights at the rear of the vehicle when the brake pedal is depressed.

5 The following list identifies the electrical components location and their harness route within the engine bay area:

- 5.1 Water temperature switch lead. Routes from the thermostat housing through the engine harness to the main cable assembly harness. Colours: Green/blue.
- 5.2 Engine harness leads (5 off). Routes from the starter solenoid to the main cable assembly harness. Colours: White/red, Brown (4 off) Brown/light green (FFR).
- 5.3 Heater plug lead (2 off). Routes from the main cable assembly harness to No.1 heater plug on the RH side of the cylinder head. Colours: Brown /red.
- 5.4 Heater plug connecting leads (3 off). Route from No.4 cylinder heater plug to the three other heater plugs. Colours: Yellow/black.
- 5.5 Alternator leads (2 off). Route from the rear of the alternator through the engine harness assembly to the main cable assembly harness. Colours: Brown/yellow, Brown.
- 5.6 Fuel cut-off solenoid lead. Routes from the fuel injection pump through the engine harness assembly to the main cable assembly harness. Colours: White.

- 5.7 Oil pressure switch lead. Routes from the oil filter housing through the engine harness assembly to the main cable assembly harness. Colours: White/brown.
- 5.8 Positive battery cable. Routes from the starter motor to the vehicle battery and inter vehicle socket. Colour: Red.
- 5.9 Negative earth cable. Routes from vehicle battery to inter vehicle socket and transfer box casing via chassis earthing point. Colour: Black.
- 5.10 Battery link cable. Links both batteries, negative to positive. Colour: Red.
- 5.11 Low brake fluid level indicator lead (3 off). Route from the brake fluid reservoir to the main cable assembly harness. Colour: Black/white, Black.
- 5.12 Brake pedal stop switch leads. Route to / from the pedal box to the main cable assembly harness. Colour: Green/purple, Green.

### Chassis harness assembly

6 The chassis harness (Fig 2) connects the rear lamps and fuel tank to the main cable assembly harness. The stop lights and number plate lamp are connected directly to the chassis harness but the side, indicator, fog, and reverse lamps, share supplementary rear body harnesses. The convoy lamp and fuel tank have separate harnesses.

6.1 The chassis harness assembly is made up to connect to the following items:

- 6.1.1 Stop lights.
- 6.1.2 Convoy lamp.
- 6.1.3 Trailer socket.
- 6.1.4 Number plate lamp.
- 6.1.5 Rear lamps.
- 6.1.6 Rear fuel tank connection, (TUM and Field Ambulance only).

7 The following list identifies the electrical components location and their harness route along the chassis.

7.1 Stop lights. Route from stop lights to the main cable assembly harness. Colours: Green/purple, black.

7.2 Convoy lamp harness leads (2 off). One routing from the convoy lamp to the chassis harness 6 way connector, the other to earth. Colours: Red/brown, Black.

7.3 Trailer socket leads (12 off). Route from the rear chassis cross member to the chassis harness connecting on the inside of the vehicle. Colours: Unipren (yellow) with lettered identification tags to ensure correct connection to chassis harness leads as follows:

- 7.3.1 A - Red/brown, B - Green/purple, C - Red/brown, D - Black, E - Red/orange, F - Red/yellow, H - Red/brown, J - Green/purple, K - Purple, L - Black, M - Green/purple, N - Green/purple.

7.4 Number plate lamp leads (2 off). Route from the number plate lamp to bullet connectors on the chassis harness. Colours: Red/orange, black.

7.5 Gearbox earth leads (3 off). Colour: Black.

7.6 Rear tank leads (2 off, TUM only). Route from the fuel tank to the chassis harness via the 6 way connector. Colours: Green/Black, black.

7.7 Chassis harness main connections. Connects the various electrical components, by way of moulded connectors, to the main cable assembly.

7.7.1 Plug 1 (black). Colours: Red/orange, Red/brown, Red/yellow, Green/red, Green/white, Green/purple.

7.7.2 Plug 2 (white). Green/brown, White/black, Green, Brown/light green, Red/light green, Purple.

7.8 Rear lamp harnesses. Separate harnesses, for LH and RH lamps, which connect to the chassis harness assembly via two 6 way connectors. Colours: LH - Red/yellow, Green/red, Red/orange, Black; RH - Green/brown, Red/yellow, Green/white, Red/orange, Black.

### **Main cable assembly harness**

8 The main cable assembly harness connects to the front lamps, chassis harness, engine harness and the various instruments, switches and indicators within the vehicle (Fig 3).

8.1 The main cable assembly harness is made up to connect to the following items:

- 8.1.1 Warning light panel.
- 8.1.2 Instrument panel.
- 8.1.3 Windscreen washer pump.
- 8.1.4 Wiper motor.
- 8.1.5 Horn/indicator/Dip switch.
- 8.1.6 Ignition switch.
- 8.1.7 Hazard warning switch.
- 8.1.8 Rear fog switch.
- 8.1.9 Heater/blower motor.
- 8.1.10 Map reading lamp.
- 8.1.11 Main lighting switch.
- 8.1.12 Inspection sockets.
- 8.1.13 Relays.
- 8.1.14 Headlamp levelling switch.
- 8.1.15 Headlamps and side lamps.
- 8.1.16 Headlamp levelling motors.
- 8.1.17 Indicators.

- 8.1.18 Brake fluid level switch.
- 8.1.19 Glow plug timer.
- 8.1.20 Main fuse box.
- 8.1.21 Side tank connections.

9 The following list identifies the electrical components, their location and harness route within the vehicle and engine bay area:

9.1 In-line resistors and diodes. Integral within the main cable assembly harness and are replaceable.

- 9.1.1 Diode leads (2 off). Colours: Brown/yellow, Yellow/brown.
- 9.1.2 In-line resistor leads (2 off). Colours: Yellow/blue, Blue/yellow.

9.2 Warning light leads. Grouped into two housings, which are plugged into the rear of the instrument binnacle and routed, to the main cable assembly harness.

9.3 Plug 1 (natural).

- 9.3.1 Oil pressure. Colours: White/brown, White, Brown/blue.
- 9.3.2 Ignition. Colours: Yellow/brown.
- 9.3.3 Brake circuit. Colours: Black/white.
- 9.3.4 Direction indicators. RH - Green/white, LH - Green/red.

9.4 Plug 2 (natural).

- 9.4.1 Trailer. Colours: Light green/purple.
- 9.4.2 Earth. Colours: Black.
- 9.4.3 Side lights. Colours: Red/black.
- 9.4.4 Fog lights. Colours: Red/yellow.
- 9.4.5 Main beam. Colours: Blue/white, Brown/light green.
- 9.4.6 Differential lock. Colours: Black/blue, White.
- 9.4.7 Glow plug. Colours: Yellow/black.

9.5 Wash/wipe switch. Located on the steering column and routed to the main harness assembly. (6 way moulded connector) Colours: Blue/light green, Light green/black, White/green, Yellow/light green, Red/light green, Green.

9.6 Horn, directional indicators, Dipswitch. Located on the steering column and routed to the main harness assembly. (8 way moulded connector) Colours: Blue, Green/white, Light green/brown, Green/red, Blue/white, Blue/red, Purple, Purple/black.

9.7 Hazard switch. Located on the fascia in the auxiliary switch panel, plugged into the rear of the panel and routed to the main harness assembly. (8 way black connector) Colours: Black/red, Light green/Brown, Green/red, Green/white, Light green, Purple, Green/yellow.

- 9.8 In line resistor (4) 2.7k 0.5 watt. Located behind the fascia and routed into the main harness assembly. Colours: Yellow blue, Blue yellow.
- 9.9 Flash. (2 way natural connector) Colours: Green/red, green/white.
- 9.10 Rear fog switch. (5 way black connector) Located on the fascia in the auxiliary switch panel, plugged into the rear of the panel and routed to the main harness assembly. Colours: Blue/purple, Red/yellow.
- 9.11 Headlight level switch. (5 way natural connector) Located on the fascia in the auxiliary switch panel and routed to the main harness assembly. Colours: Blue/black, Yellow/blue, Green/blue.
- 9.12 Ignition switch. (4 single natural connectors) Located on the steering column and routed to the main harness assembly. Colours: Brown, Brown, White, White/orange, White/red.
- 9.13 In line resistor (1) 0.5 watt. Colours: blue/green, green/blue.
- 9.14 Instruments. Located on the fascia and plugged into the rear of the instrument binnacle. Routed to the main harness assembly (8 way connector natural connector). Colours: Green/blue, White/black, Black, Green, Green, Red/orange, Green/black, Purple.
- 9.15 Heater fan switch. Located on the fascia on the side of the instrument binnacle and plugged into the rear of the binnacle. Routed to the main harness assembly (3 way black connector). Colours: Green/slate, Green/yellow, Black.
- 9.16 Inspection sockets. Located in the centre panel of the fascia and plugged into the rear of the panel (2 single black connectors). Colours: Black, Brown.
- 9.17 Wiper motor. Located behind the fascia lower panel and plugged into the wiper motor. Routed to the main harness assembly (5 way grey connector). Colours: Black, Brown/light green, Blue/light green, Green, Green, Red/light green.
- 9.18 Blackout lighting. Located in the fascia centre panel, plugged into the rear of the panel and routed to the main harness assembly. (2 off 4 way connectors).
- 9.18.1 Plug 1 (black). Colours: Brown, Brown/white, Green/purple, Green/purple.
- 9.18.2 Plug 2 (natural). Colours: Red, Blue, Red, Red/brown.
- 9.19 Map reading light. (2 way natural connector) Located on the fascia in the centre panel, plugged into the rear of the panel and routed to the main harness assembly. Colours: Purple/white, Black,
- 9.20 Map reading light switch. (5 way black connector) Located on the fascia in the centre panel, plugged into the rear of the panel and routed to the main harness assembly. Colours: Purple/white, Purple,
- 9.21 Relays. Located below the fascia behind the fusebox cover. Routed into the main harness assembly.
- 9.21.1 Brake check relay (Green). Colours: Black, Black, White/red, White/yellow.
- 9.21.2 Start relay (Yellow). Colours: White/red, White/red, Black, Brown, Brown.
- 9.21.3 Ignition cont. relay (Red). Colours: White/yellow, White, Black, Brown/white.
- 9.21.4 Hazard/DI unit (Black). Colours: Light green/purple, Light green, Black, Light green/Brown.



- 9.21.5 Front wipe delay (Black). Colours: White/green, Yellow/light green, Black, Brown/light green, Light green/black, Green, Green.
- 9.22 Fusebox (20 way). Located below the fascia under the fusebox cover, routed into the main harness assembly. Colours: 1 Brown/white; 2 Brown/white; 3 White; 4 White/yellow; 5 White/orange; 6 Red/brown; 7 Brown; 8 Brown; 9 Brown; 10 Blue; 11 Blue/red; 12 Blue/red; 13 Blue/white; 14 Blue/white; 15 Red; 16 Red; 17 Blue/red; 18 Brown; 19 Purple/light green; 20 Purple.
- 9.23 Brake fluid level. (2 single natural connectors) Located in the engine compartment plugged into the top of the brake fluid reservoir, and is routed to the main harness assembly. Colours: Black, Black/white.
- 9.24 Stop light switch. (2 single natural connectors) Located on the brake pedal box and is routed to the main harness assembly. Colours: Green/yellow, Green/purple.
- 9.25 Heater motor. (4 way black connector) Located in the engine compartment local to the heater motor and routed to the main harness assembly. Colours: Green/ slate, Green/yellow, Purple/green.
- 9.26 Wash pump. (2 way natural connector, 2 way black connector) Located under the bonnet local to the windscreen wash reservoir and routed to the main harness assembly. Colours: Black, Black/light green, Light green/black.
- 9.27 Glow plug timer. (6 way black connector) Located under the bonnet on the bulkhead. Routed to the main harness assembly. Colours: White/red, Yellow/black, White, Black, Brown, Black/yellow.
- 9.28 Radio. Located inside the vehicle, routed to the main harness assembly. Colours: Black, Red.
- 9.29 Main fuses. Located under the bonnet against the bulkhead. Routed to the main harness assembly. Colours: Brown, Brown, Brown and Brown.
- 9.30 L.H Repeater. Located under the L.H wing, routed back to the main cable harness assembly. Colours: Green/red, Black.
- 9.31 L.H Sidelamp. (2 way white connector) Located in the L.H wing, plugged into rear of sidelamp assembly. Routed back to the main harness assembly. Colours: Red/black, Black.
- 9.32 L.H Headlamp level. (3 way black connector) Located in L.H wing, plugged into rear of headlamp assembly. Routed back to the main harness assembly. Colours: Blue/yellow, Black, Blue/green.
- 9.33 L.H Headlamp. (4 way black connector) Located in L.H wing, plugged into rear of headlight assembly. Routed back to main harness assembly. Colours: Blue/slate, Blue/pink and Black.
- 9.34 L.H Indicator. (2 way red connector) Located in L.H wing, plugged into rear of indicator assembly. Routed back to main harness assembly. Colours: Green/red, Black.
- 9.35 Horn. (2 single natural connectors) Located behind radiator grille plugged into horn. Routed back to main harness assembly. Colours: Purple/black, Black.
- 9.36 Glow plug. (Terminal) Located under the bonnet local to glow plugs. Routed back to the main harness assembly. Colours: Black/yellow.
- 9.37 Starter solenoid. (2 way natural connector) Located under the bonnet local to the starter motor, routed back to the main harness assembly. Colours: White/red.

- 9.38 Side Tank connections. (3 way black connector) Located under bonnet local to bulkhead. Routed to main harness assembly. Colours: Green/black, Black.
- 9.39 Chassis connections (2 off 6 way). Located under the bonnet local to the bulkhead. Routed to the main harness assembly.
- 9.39.1 Plug 1 (6 way black connector) Colours: Red/orange, Red/brown, Red/yellow, Green/red, Green/white, Green/purple.
- 9.39.2 Plug 2 (6 way white connector) Colours: Green/brown, White/black, Green, Brown/light green, Red/Light green, Purple.
- 9.40 Engine connections. (12 Way black connector). Located under the bonnet local to the bulkhead. Routed to main harness assembly. Colours: White/brown, Green/blue, Brown/yellow, White, Green/yellow, Green/brown, Black/blue, Black, Brown/yellow.
- 9.41 R.H Repeater. Located in the R.H wing routed back to the main harness assembly. Colours: Green/white, Black.
- 9.42 R.H Sidelamp. (2 way white connector) Located in the R.H wing plugged into the rear of the side lamp assembly. Routed back to the main harness assembly. Colours: Red/black, Black.
- 9.43 R.H Indicator. (2 way red connector) Located in the R.H wing plugged into the rear of the indicator assembly. Routed back to the main harness assembly. Colours: Green/white, Black.
- 9.44 R.H Headlamp. (4 way black connector) Located in the R.H wing plugged into the rear of the headlamp assembly. Routed back to the main harness assembly. Colours: Blue/orange, Blue/black, Black.
- 9.45 R.H Headlamp Levelling. (3 way Black connector) Located in the R.H wing plugged into the rear of the headlamp assembly. Routed back to the main harness assembly. Colours: Blue/yellow, Black, Blue/green.

**KEY TO FIG 1**

1	Alternator connections	13	Starter solenoid connections (positive)
2	Oil pressure switch connection	14	Differential lock switch connections
3	Water temperature switch connection	15	Reverse switch connection
4	Heater plug harness	16	Earth bonding lead, rack to bodyside
5	Fuel shut off switch connection	17	Earth bonding lead, rear body to chassis
6	Earth bonding lead, door to "A" post	18	Earth bonding lead, rear body to body
7	Earth bonding lead, bonnet to bulkhead	19	Transfer box earth connection
8	Twin alternator link (FFR only)	20	Battery link cable
9	Alternator ECU feed (FFR only)	21	Vehicle batteries
10	Main harness connection	22	Earth bonding lead, door to "A" post
11	Main harness starter solenoid connection	23	Intervehicle starter socket connections
12	Starter solenoid connection	24	Earth bonding lead, toe box to chassis

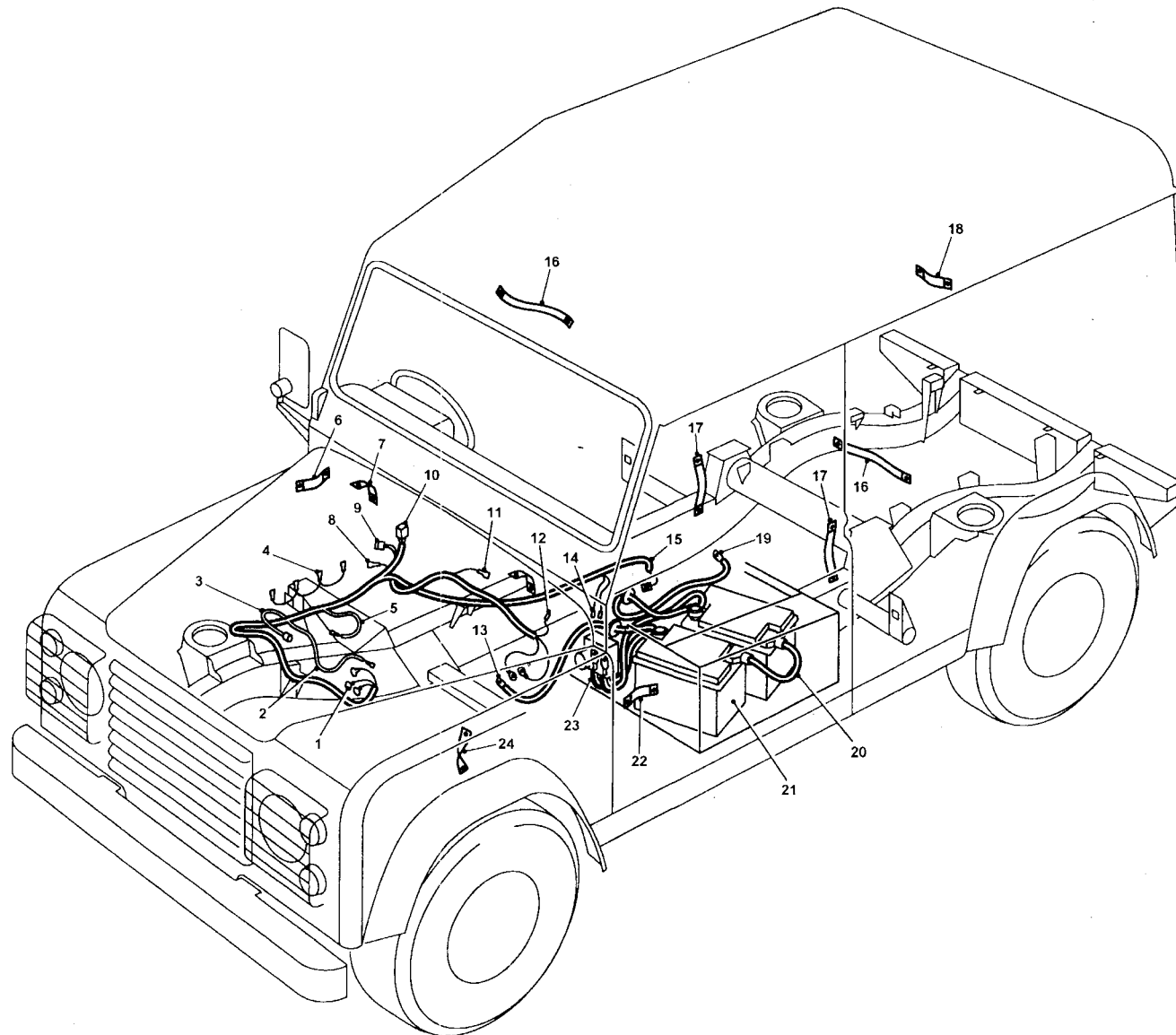


Fig 1 Engine harness layout

MIL0367

**KEY TO FIG 2**

1	Main harness connection	10	Trailer socket
2	Main harness connection	11	LH body harness connection
3	Main harness connection	12	Number plate light
4	Gearbox earth connection	13	Rear stop light connection (LH)
5	Convoy light harness	14	Reverse light connection
6	Rear body harness	15	Fog light connection
7	Rear stop light connection (RH)	16	Direction indicator light connection
8	Trailer socket connections	17	Tail light connection
9	RH body harness connection	18	Rear fuel tank connections (TUM only)

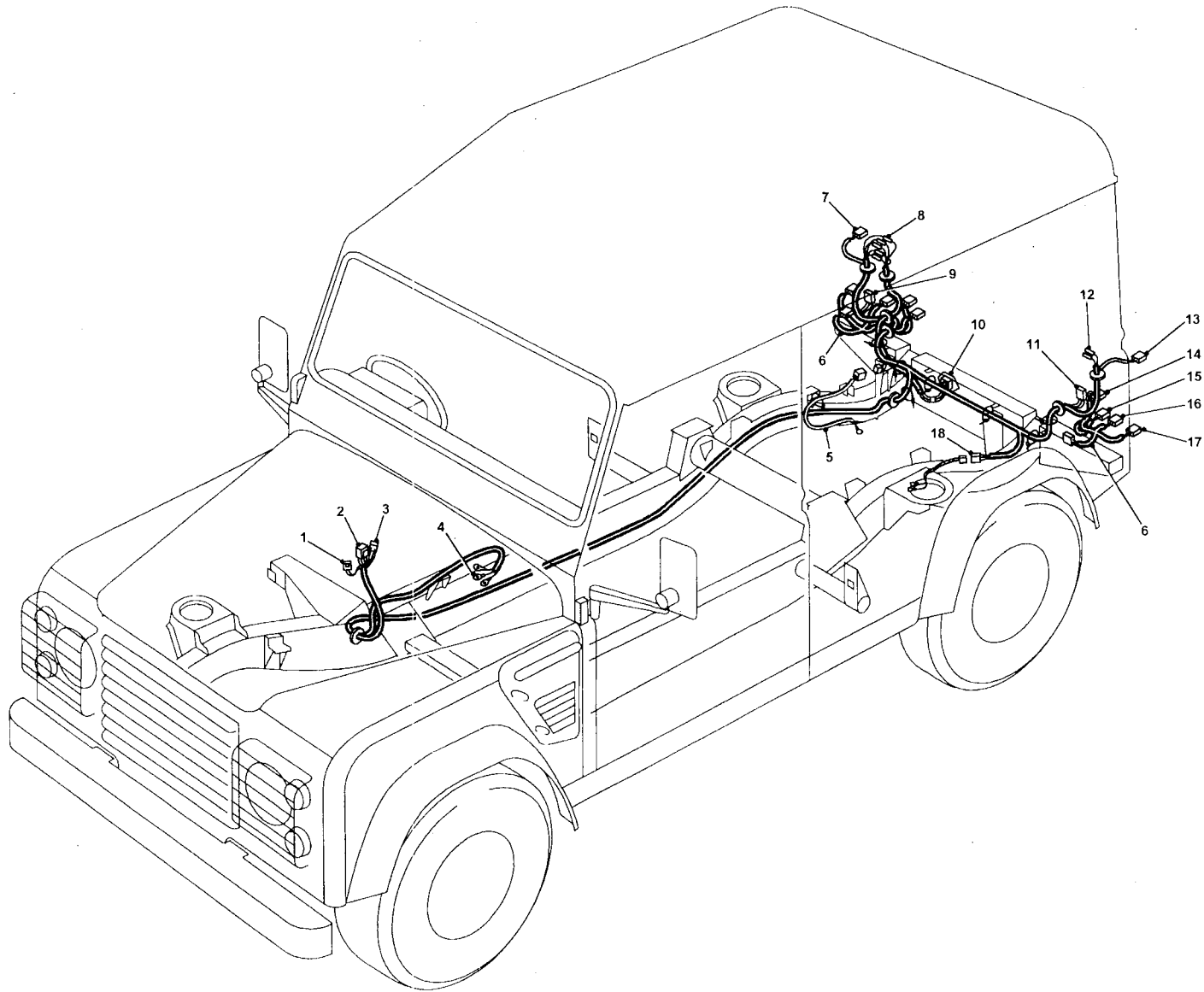


Fig 2 Chassis harness layout

MIL0368

## KEY TO FIG 3

1	Headlamp connection (RH)	19	Map reading light connectors
2	Headlamp levelling connection (RH)	20	Heater/blower motor connector
3	Indicator connector (RH)	21	Wiper motor connections
4	Side repeater connection (RH)	22	Glow plug timer
5	Side light connector (RH)	23	Earth point
6	Brake fluid level switch connections	24	Engine/Chassis harness connections
7	Brake light switch connections	25	No. 1 glow plug connector
8	Headlamp levelling switch connector	26	Starter solenoid connection
9	Hazard warning switch connector	27	Fuse box connections
10	Rear fog switch connector	28	Relays
11	Warning light panel connections	29	Main fuse box
12	Instrument panel connections	30	Windscreen washer pump connections
13	Horn/indicator/dip switch connections	31	Side light connector (LH)
14	Ignition switch connector	32	Side repeater connection (LH)
15	Inspection sockets	33	Headlamp connection (LH)
16	Main lighting switch	34	Indicator connector (LH)
17	Radio connectors	35	Headlamp levelling connection (LH)
18	Side fuel tank connectors (TUL only)	36	Horn connections

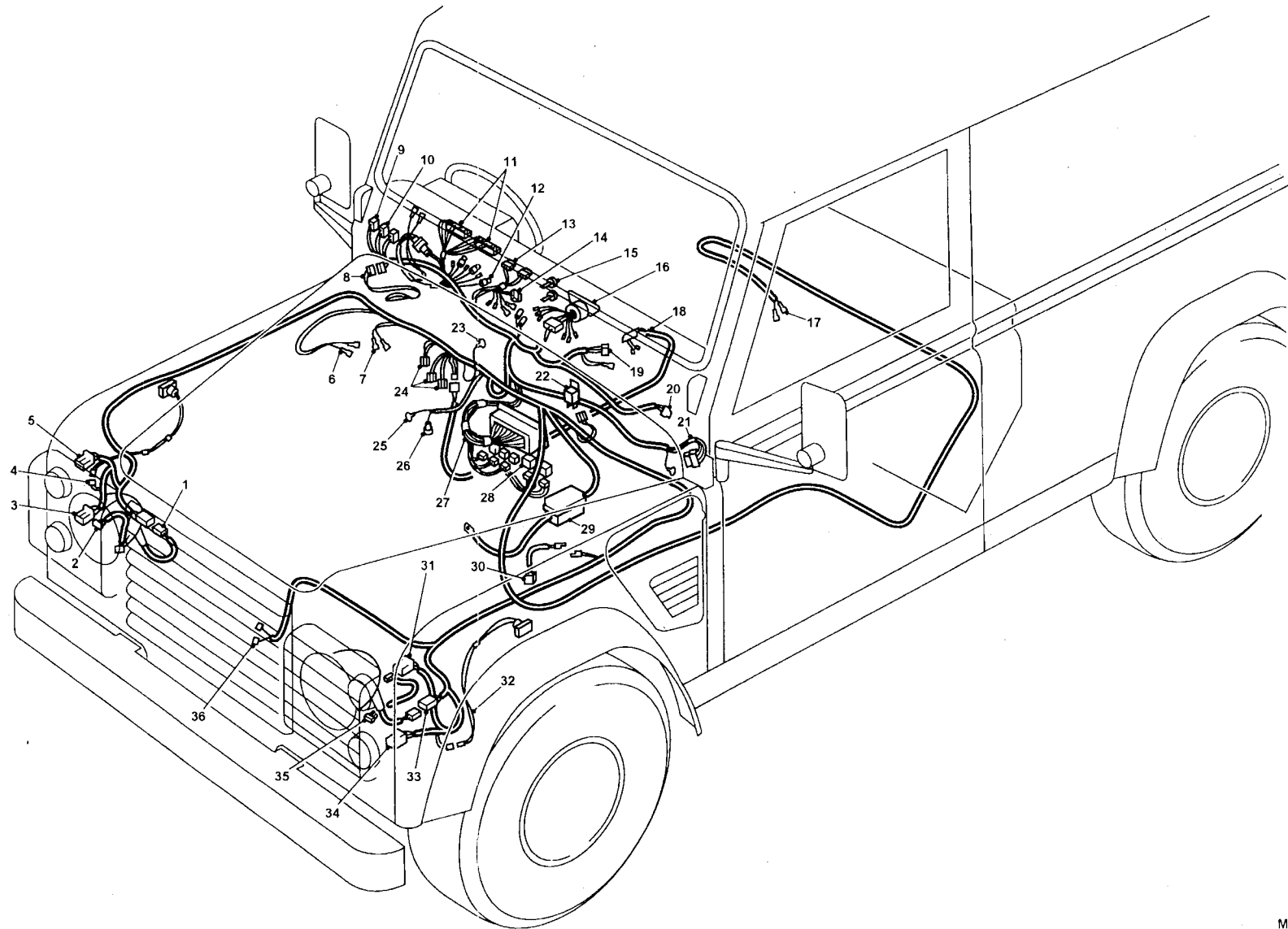


Fig 3 Main cable assembly harness

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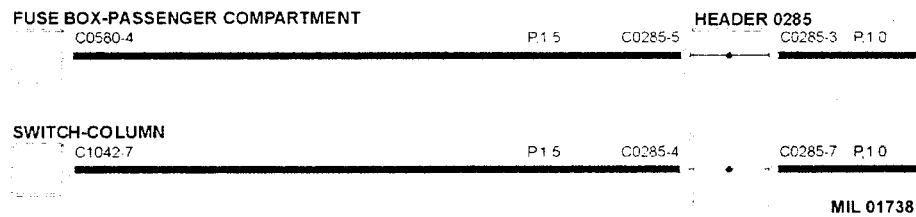


Fig 5 Connectors

**Earth distribution**

15 The ground distribution section comprises a number of Headers, Splices and centre taps circuits. These are used in a similar manner to those in Power distribution; to narrow the search area by checking for fault symptoms in associated circuits.

**Line types**

16 Fig 7 means that the wire connects to another circuit.



Fig 6 Line types I

17 The "cup and ball" symbol indicates the male and female halves of the connector (refer to Fig 8).

- 17.1 Plug on lead, fly lead (Fig 8 (A)), wired directly to the component.
- 17.2 Connector plugs directly into circuit (Fig 8 (B)).

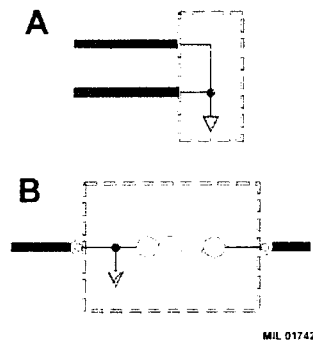


Fig 7 Line types II

**Components**

18 The name, or description of the component is shown. A dotted outline indicates that the component is not shown in its entirety.

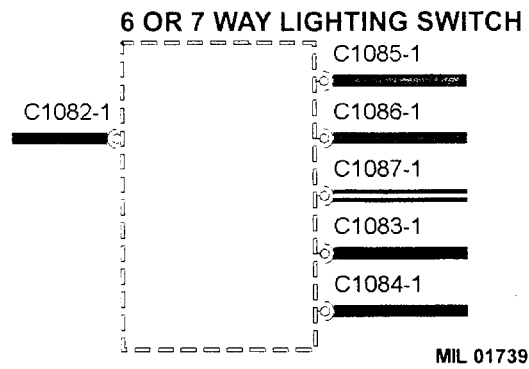


Fig 8 Components

**Earth points**

19 Earth points are identified with an eyelet symbol and a connector number, except where components are grounded through their fixings, when only the eyelet is shown.

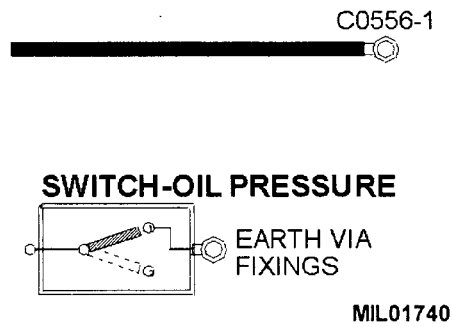


Fig 9 Earth points

**Fuses and diodes**

20 Fusible links (refer to Fig 11 (A)) and current fuses (B ), are identified as shown. The direction of the arrow in a diode symbol (C) indicates the direction of flow. The Zener diode (D) prevents current flow until a precise voltage is reached.

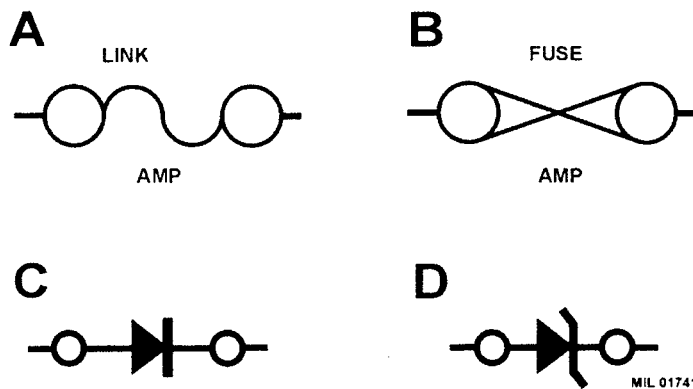


Fig 10 Fuses and diodes

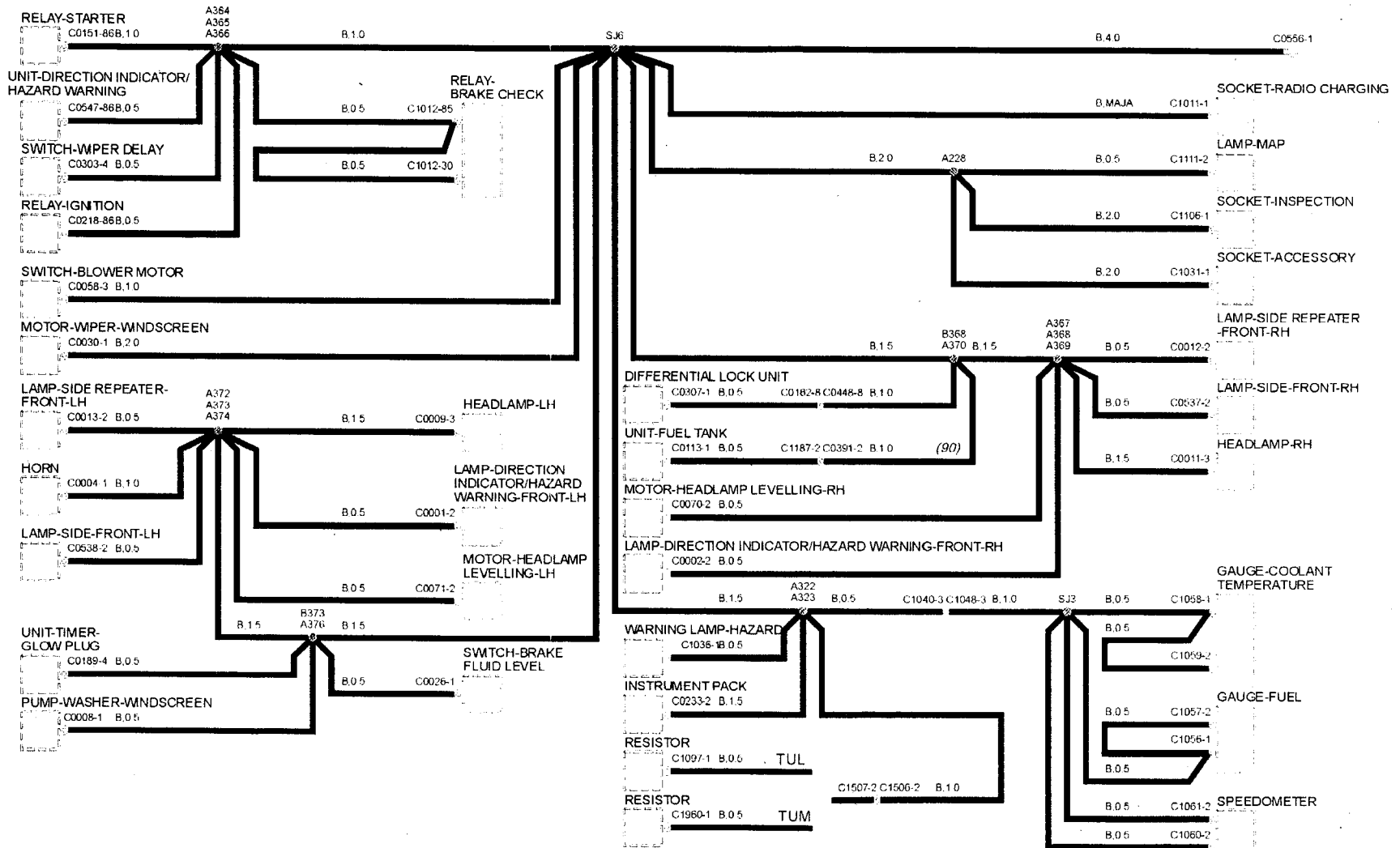


Fig 11 Earth distribution I - Non EEGR

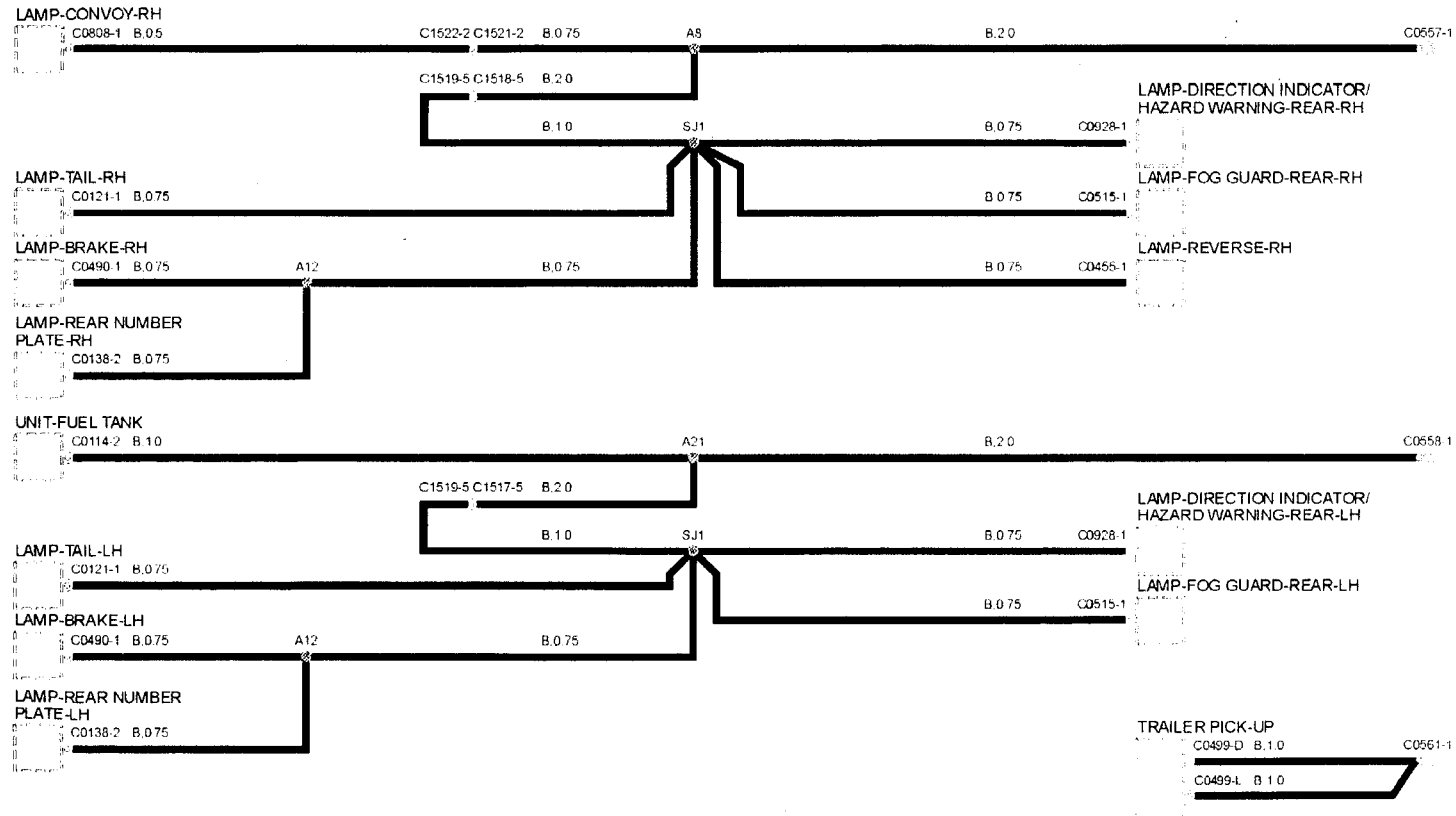


Fig 12 Earth distribution II - Non EEGR

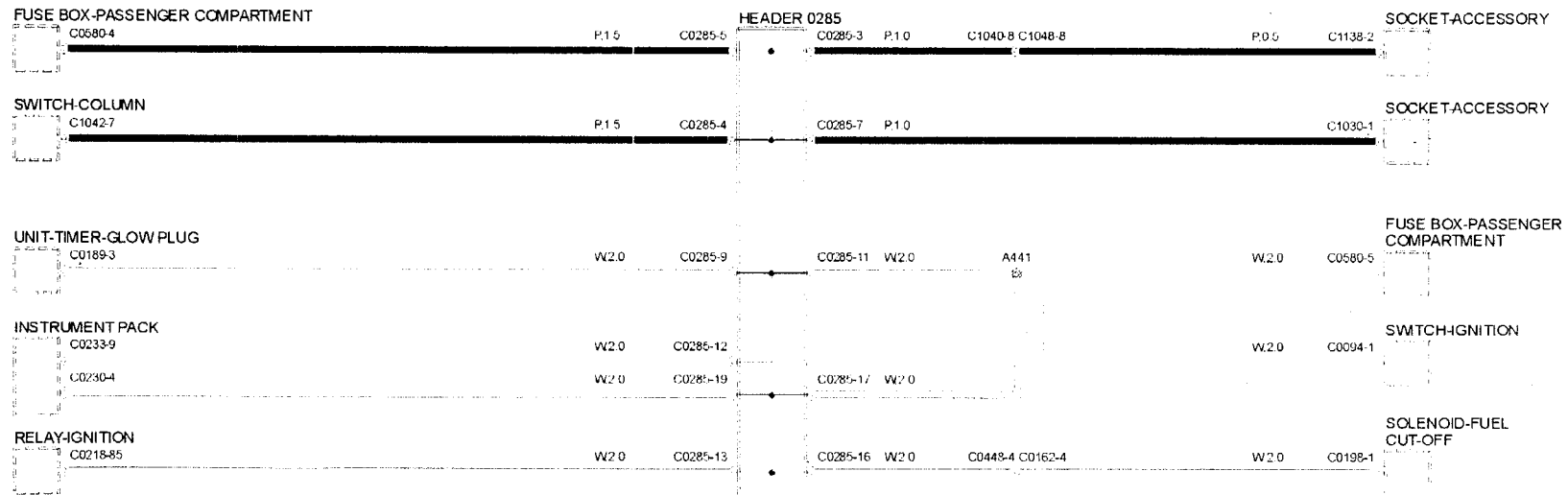


Fig 13 Header joints – Non EEGR

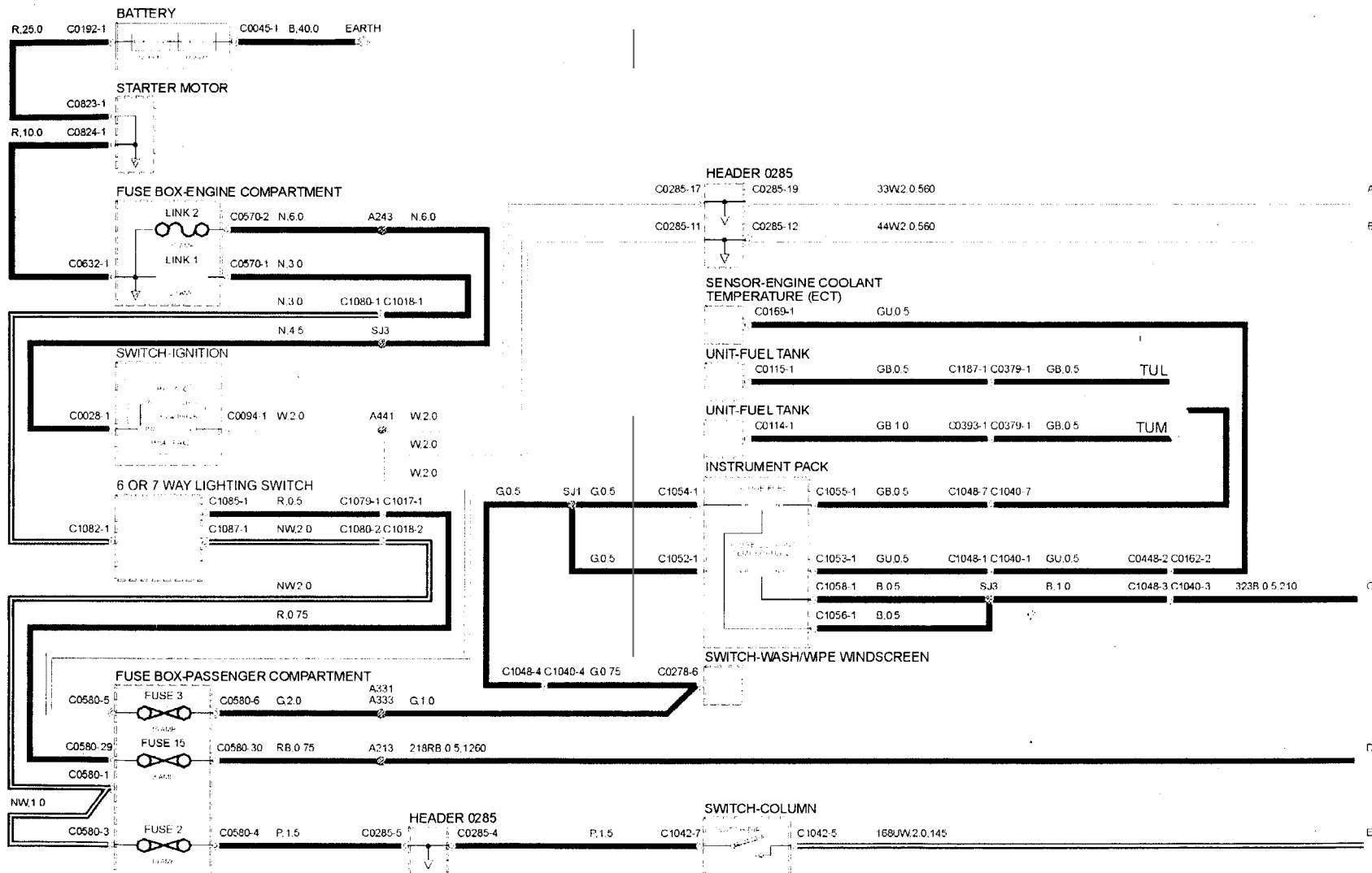


Fig 14 Instruments I - Non EEGR

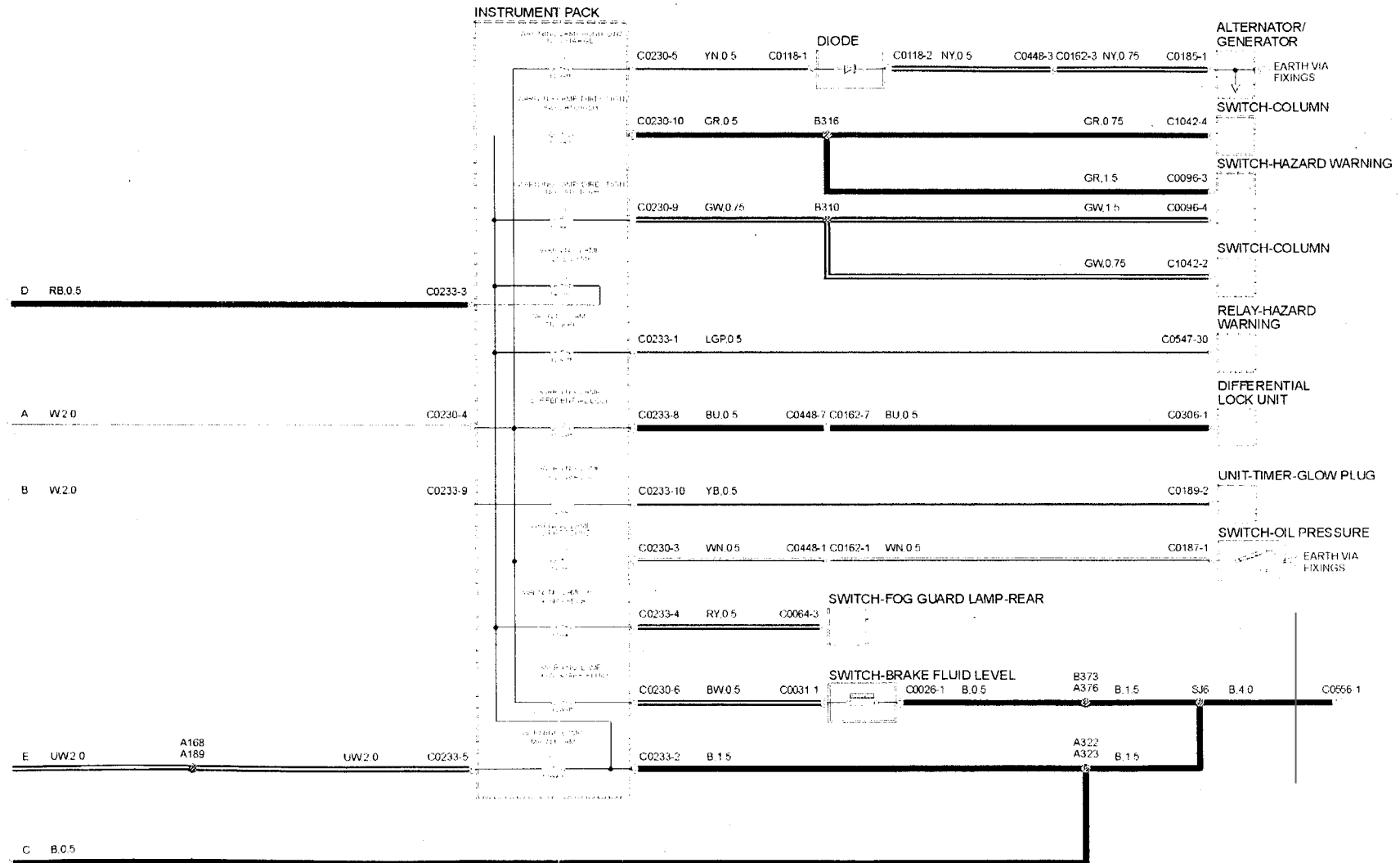


Fig 15 Instruments II - Non EEGR

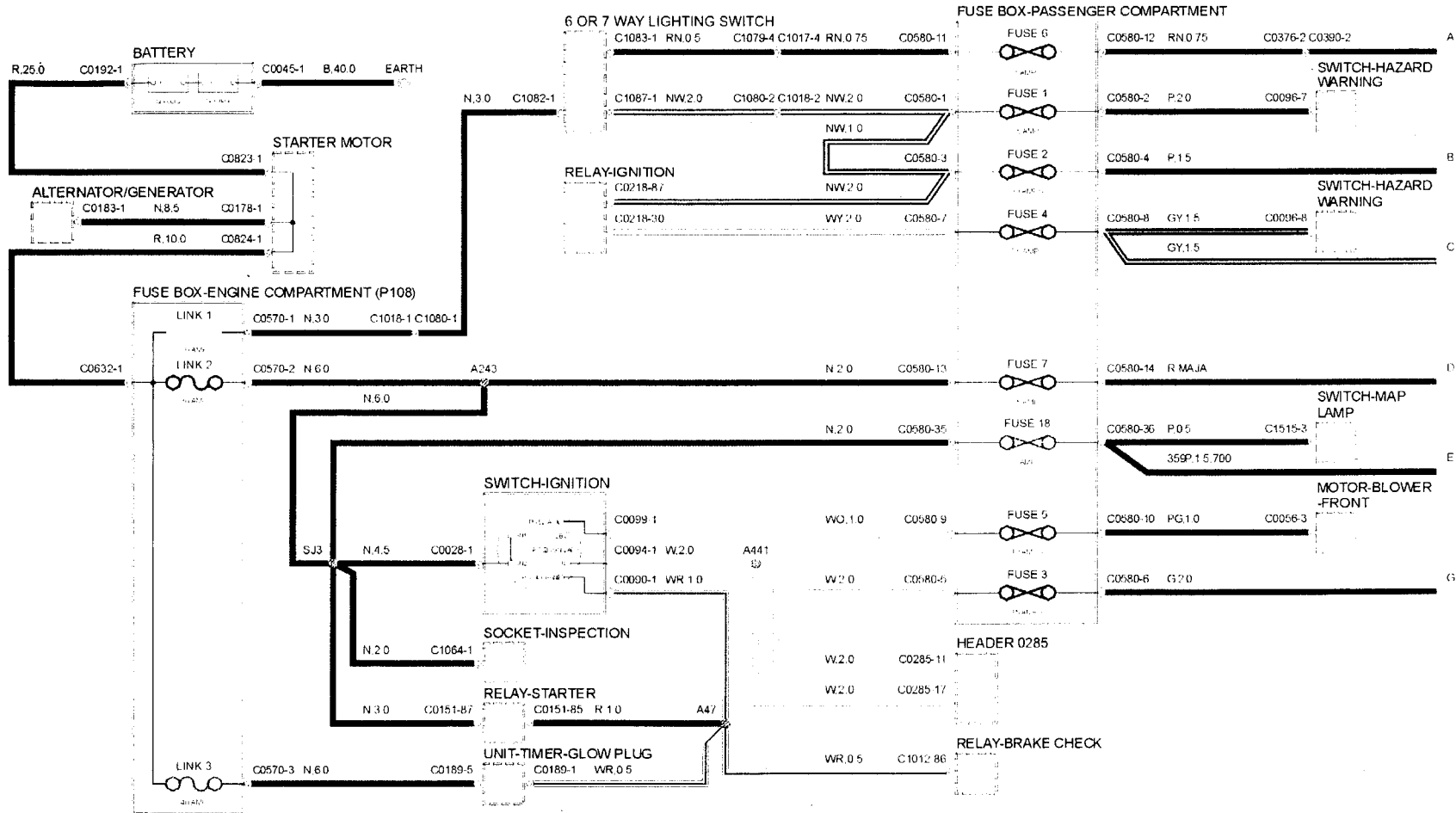


Fig 16 Power distribution I - Non EEGR



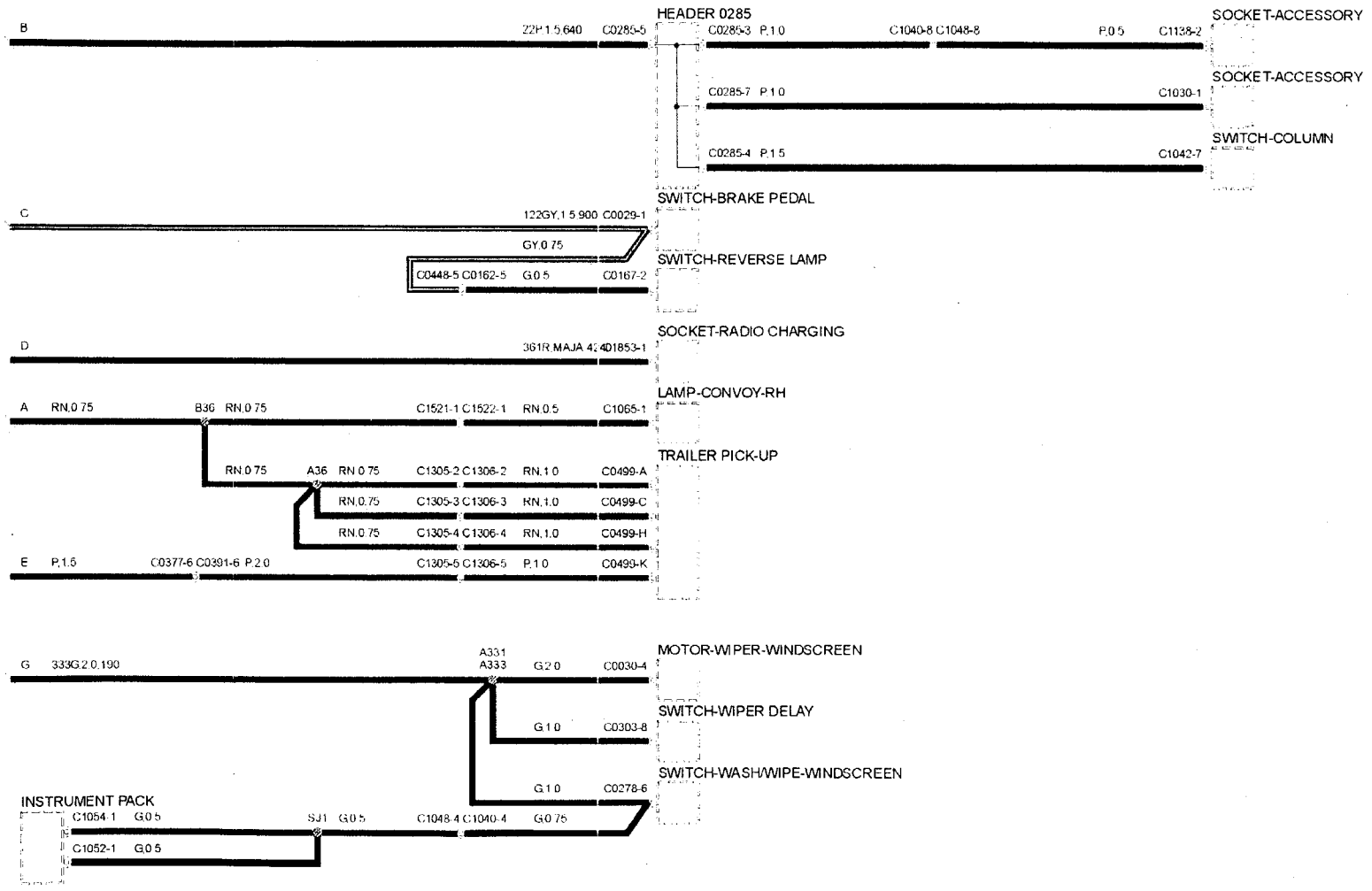


Fig 17 Power distribution II - Non EEGR

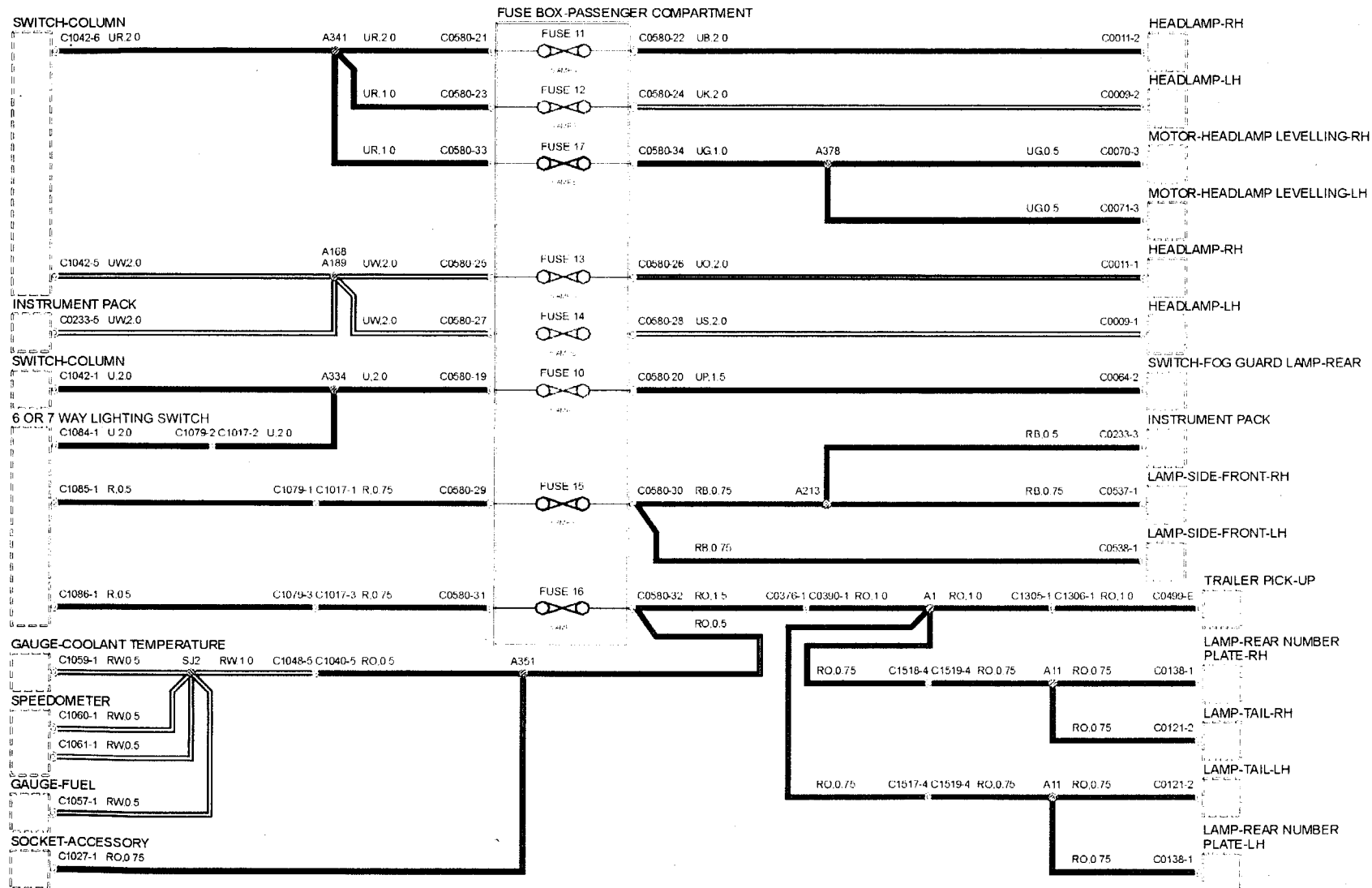


Fig 18 Power distribution III - Non EEGR

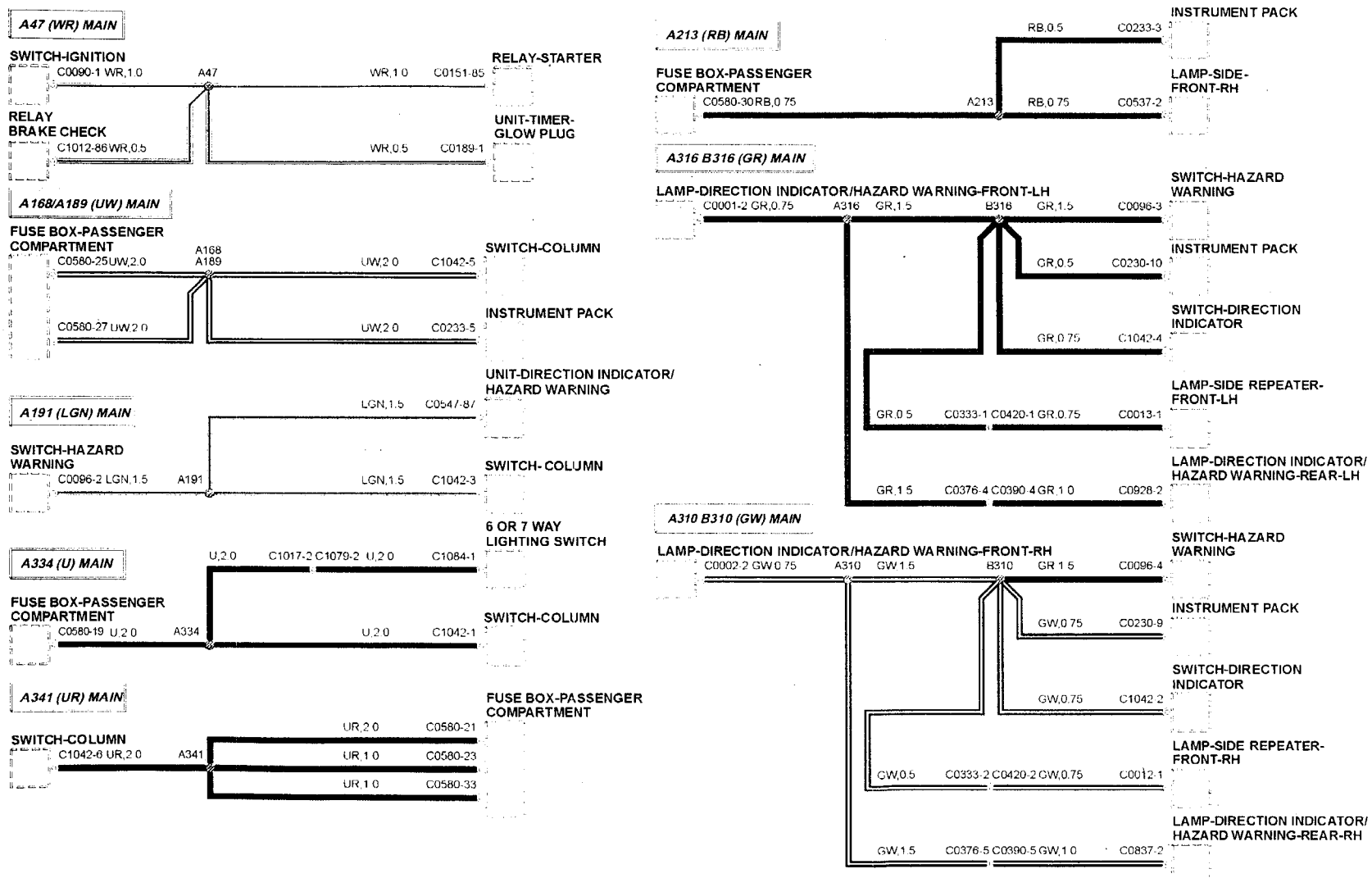


Fig 19 Splices and centre taps I - Non EEGR

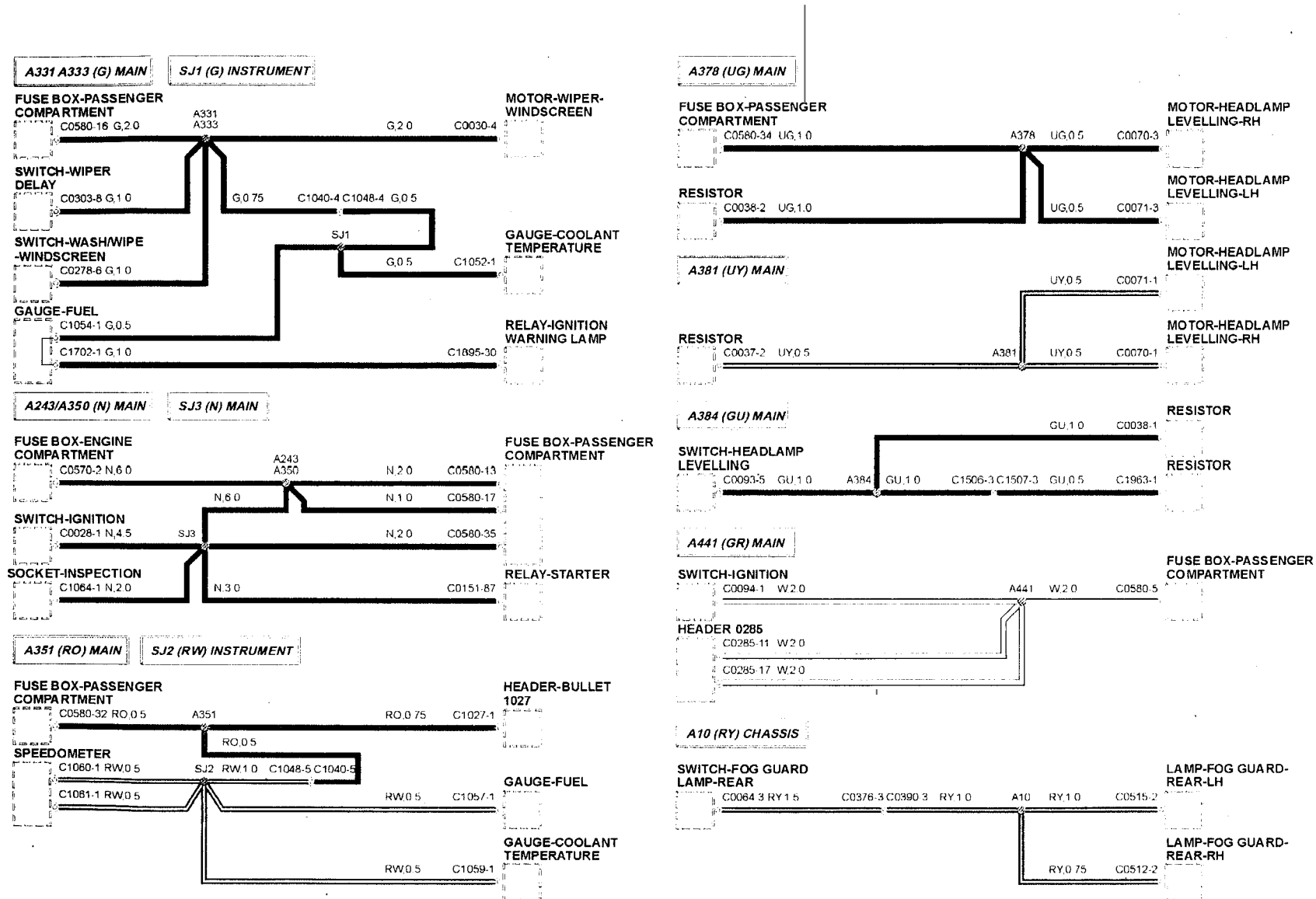


Fig 20 Splices and centre taps II - Non EEGR

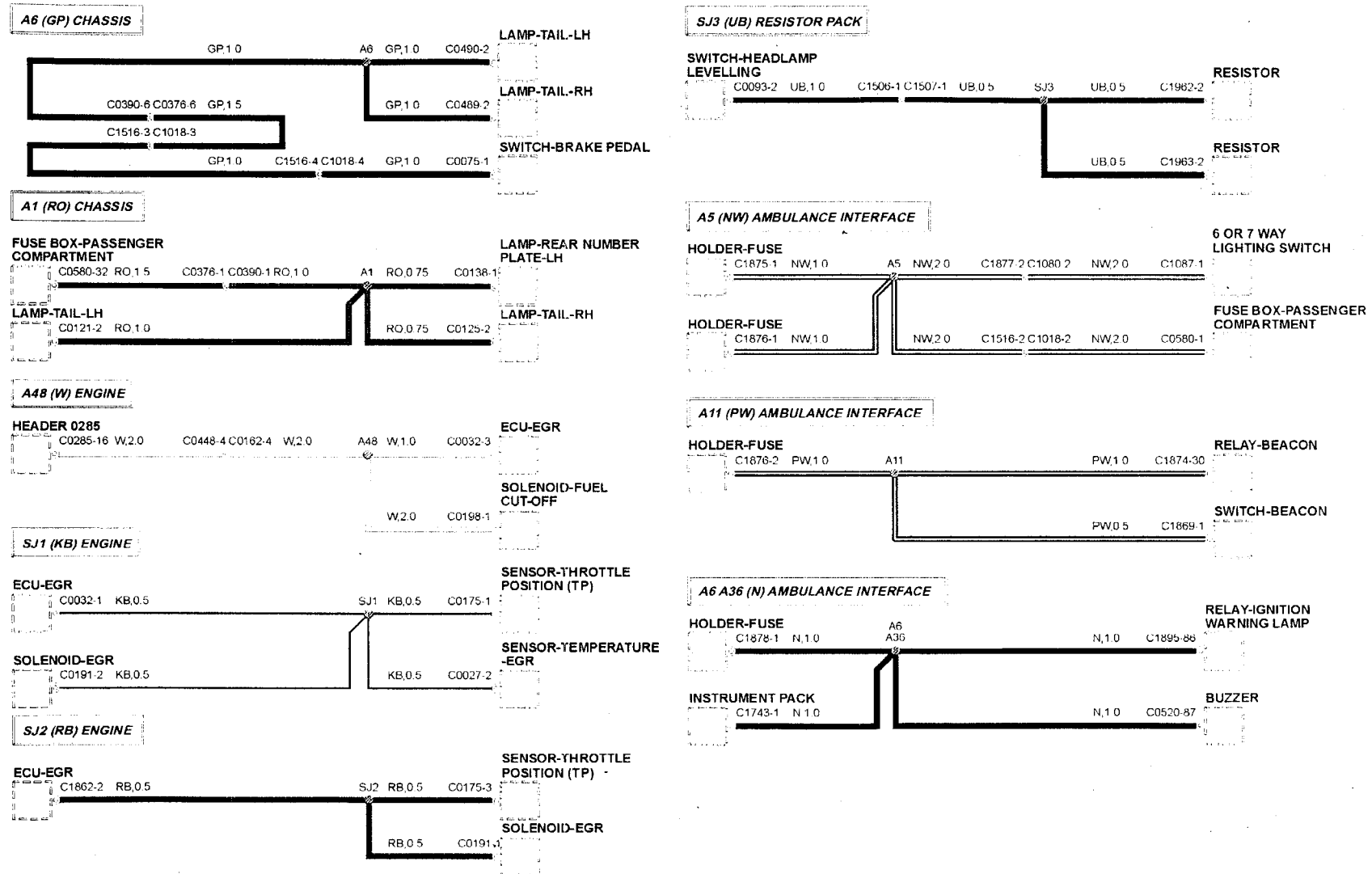


Fig 21 Splices and centre taps III - Non EAGR

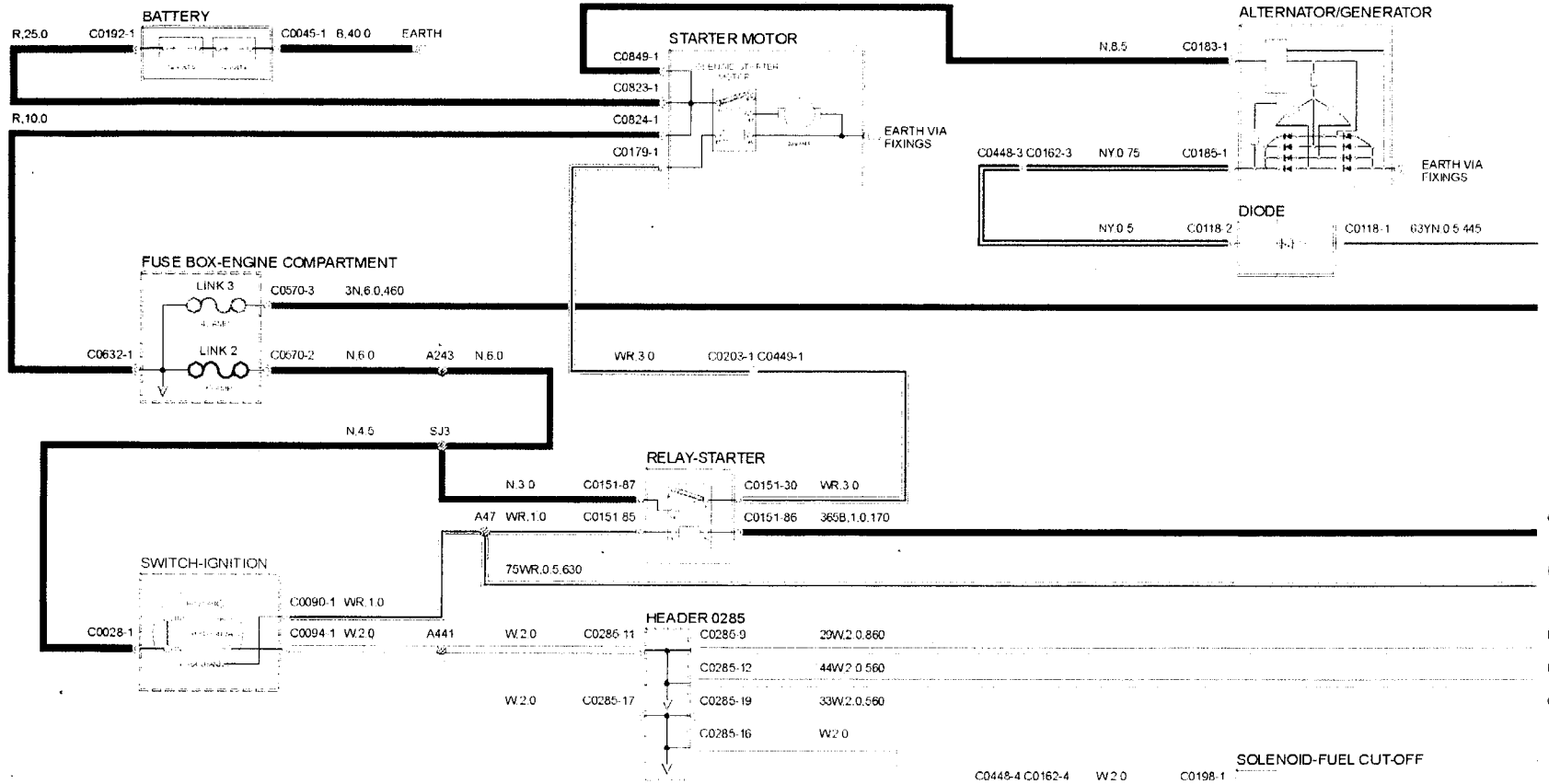


Fig 22 Charging and starting I - Non EEGR

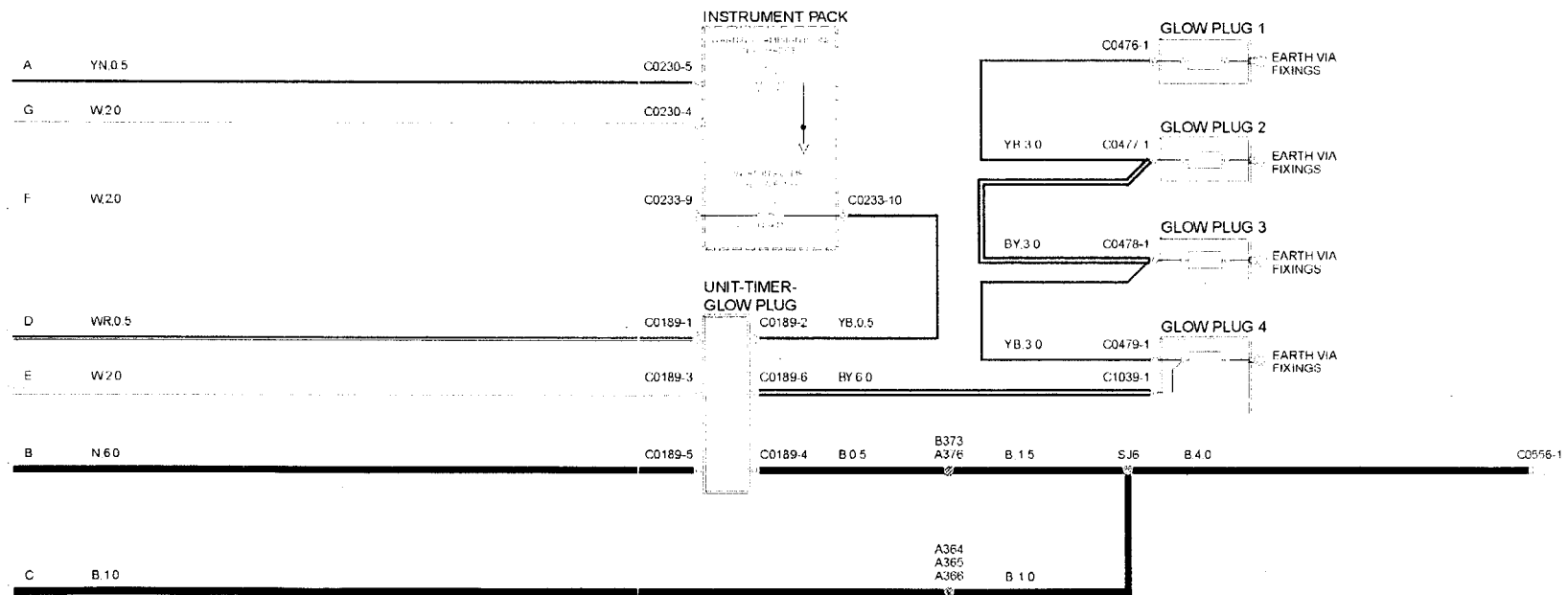


Fig 23 Charging and starting II - Non EEGR

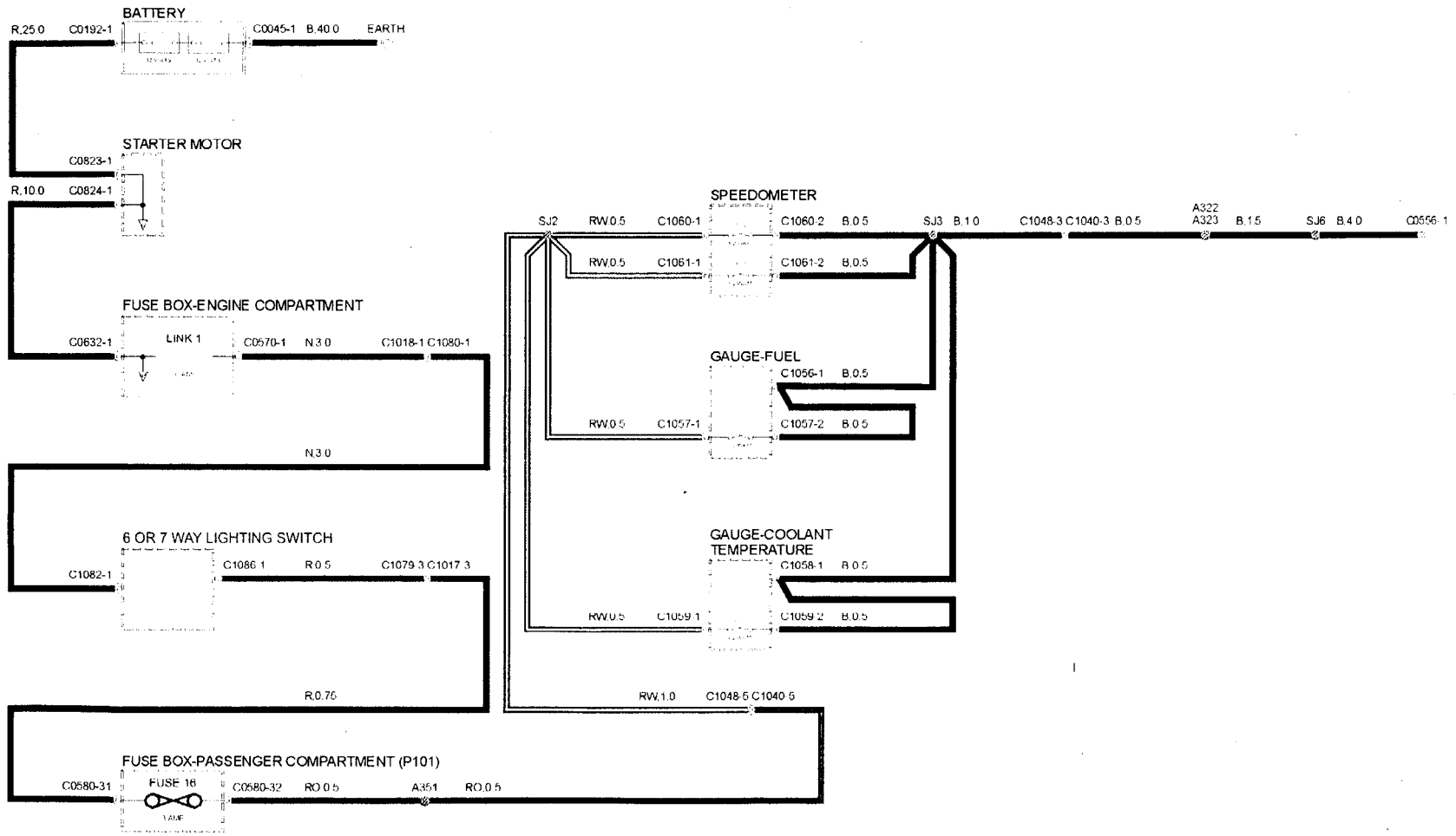


Fig 24 Interior illumination - Non EEGR



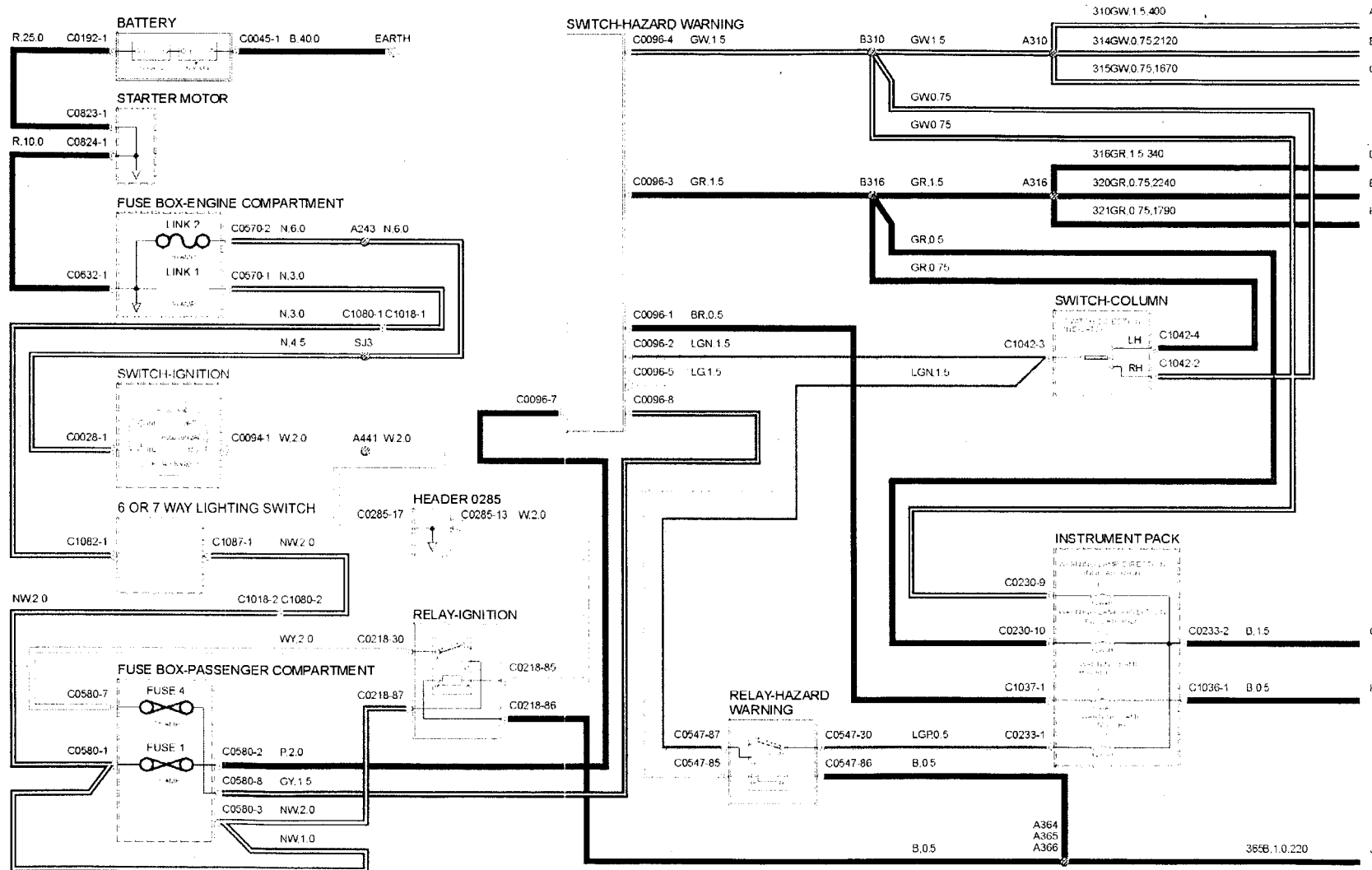


Fig 25 Indicators and Hazards I - Non EEGR

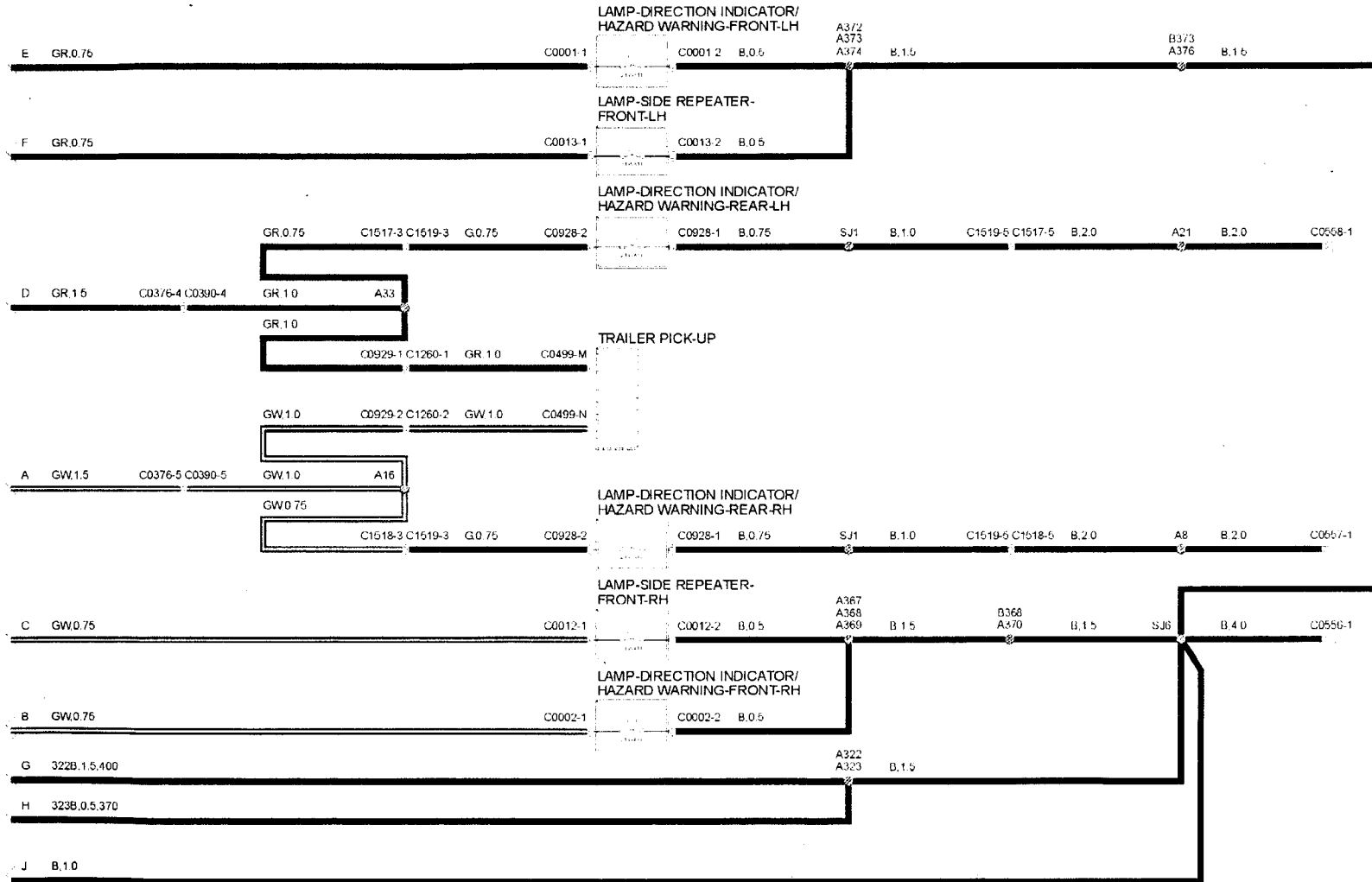


Fig 26 Indicators and Hazards II - Non EEGR

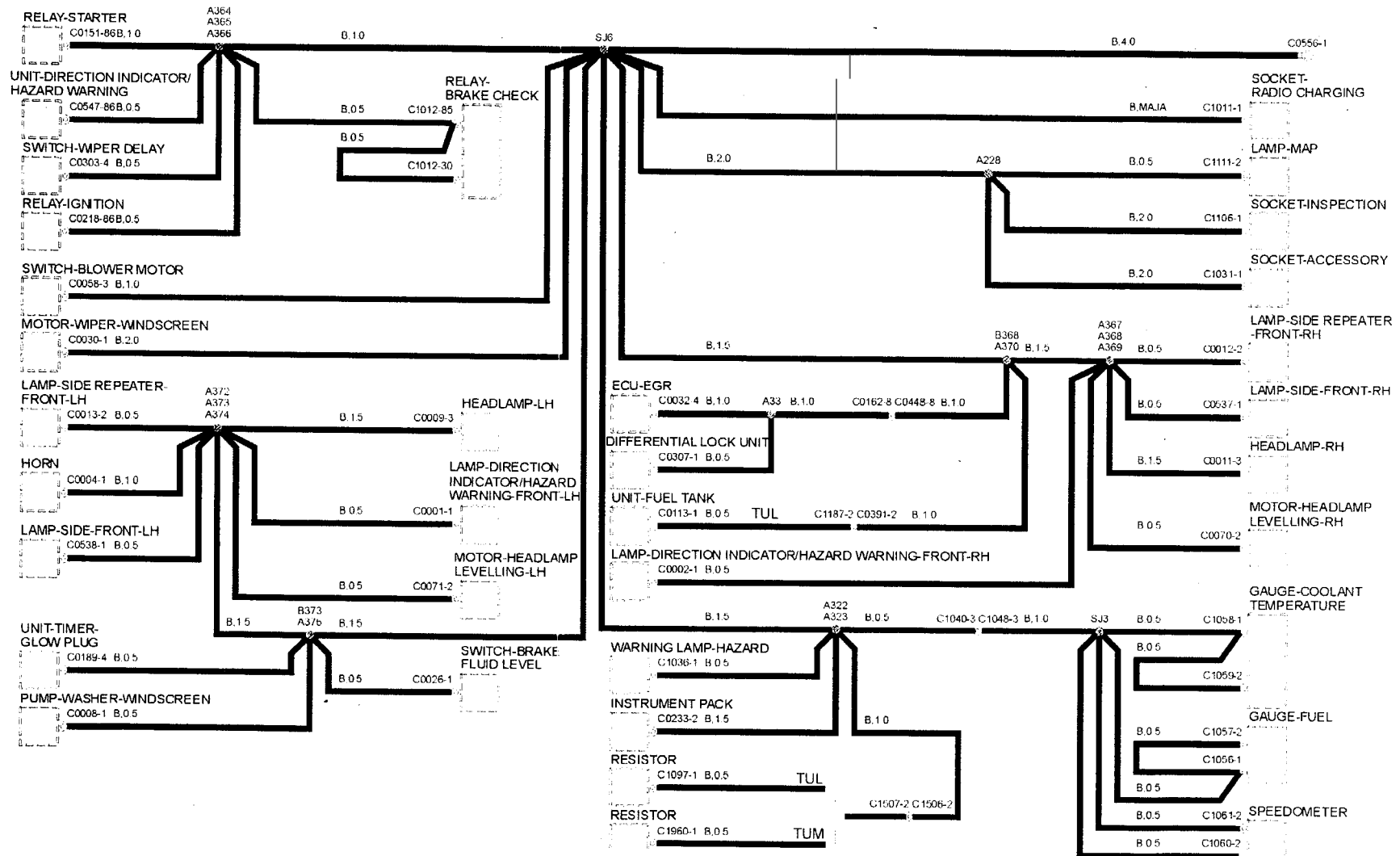


Fig 27 Earth distribution I - EEGR

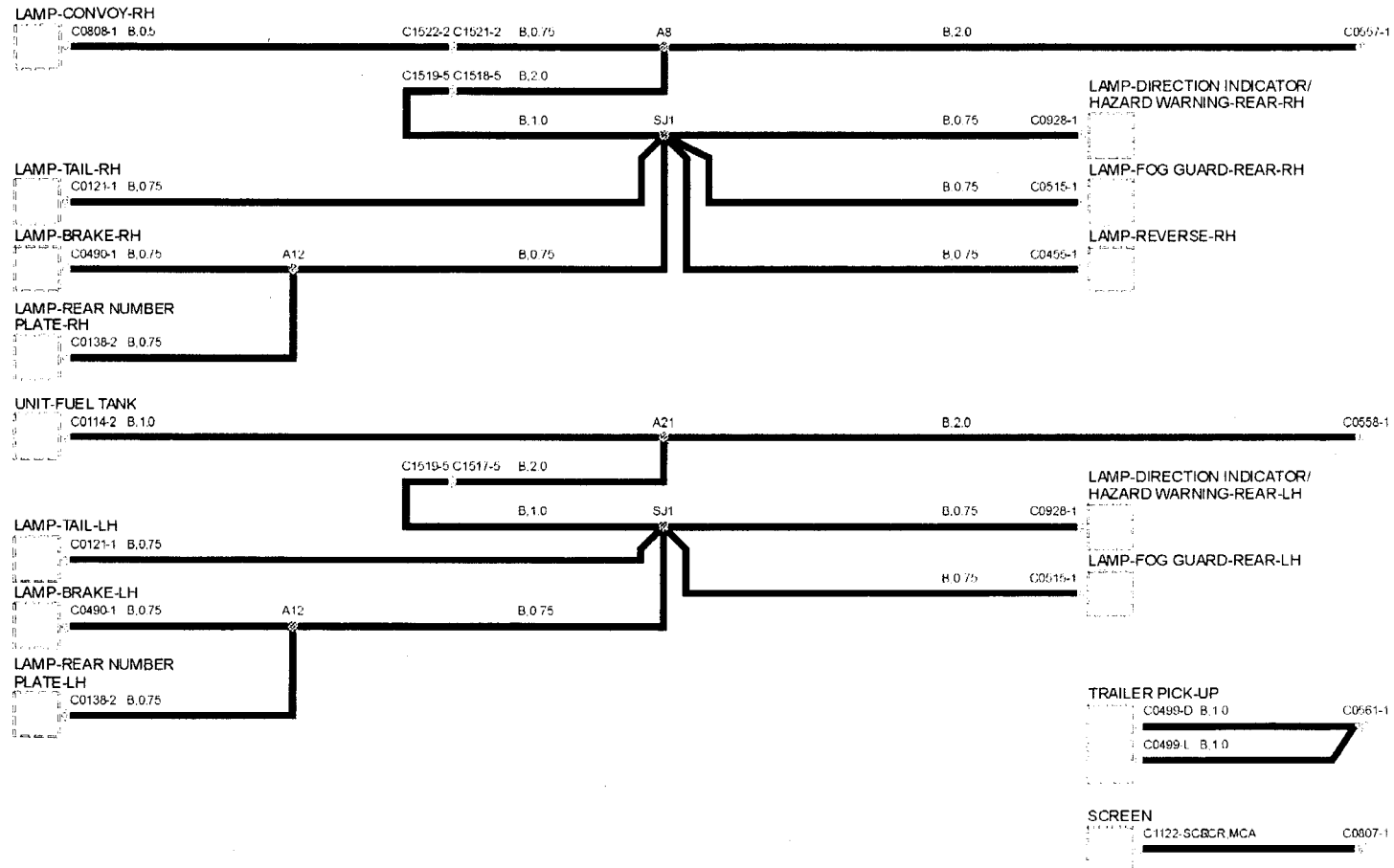


Fig 28 Earth distribution II - EEGR

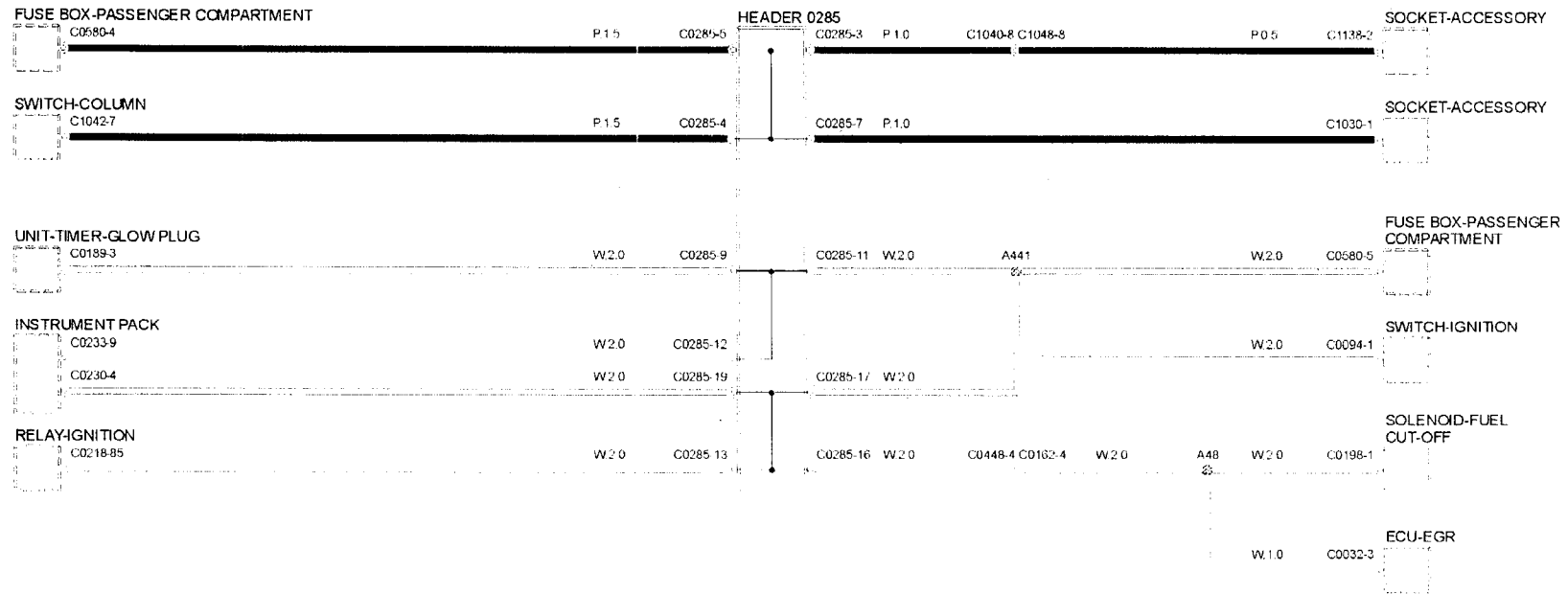


Fig 29 Header joints - EEGR

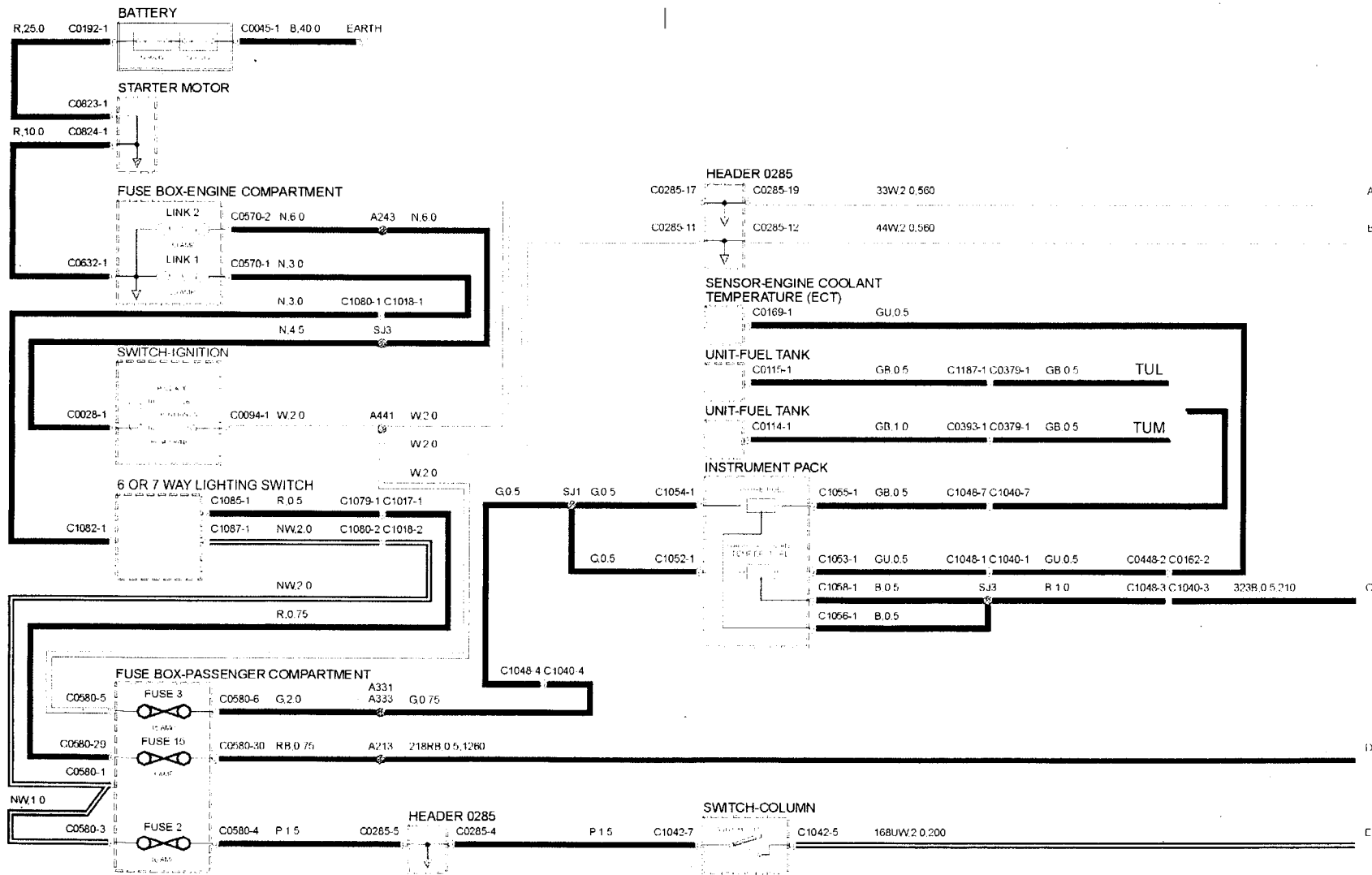


Fig 30 Instruments I - EEGR

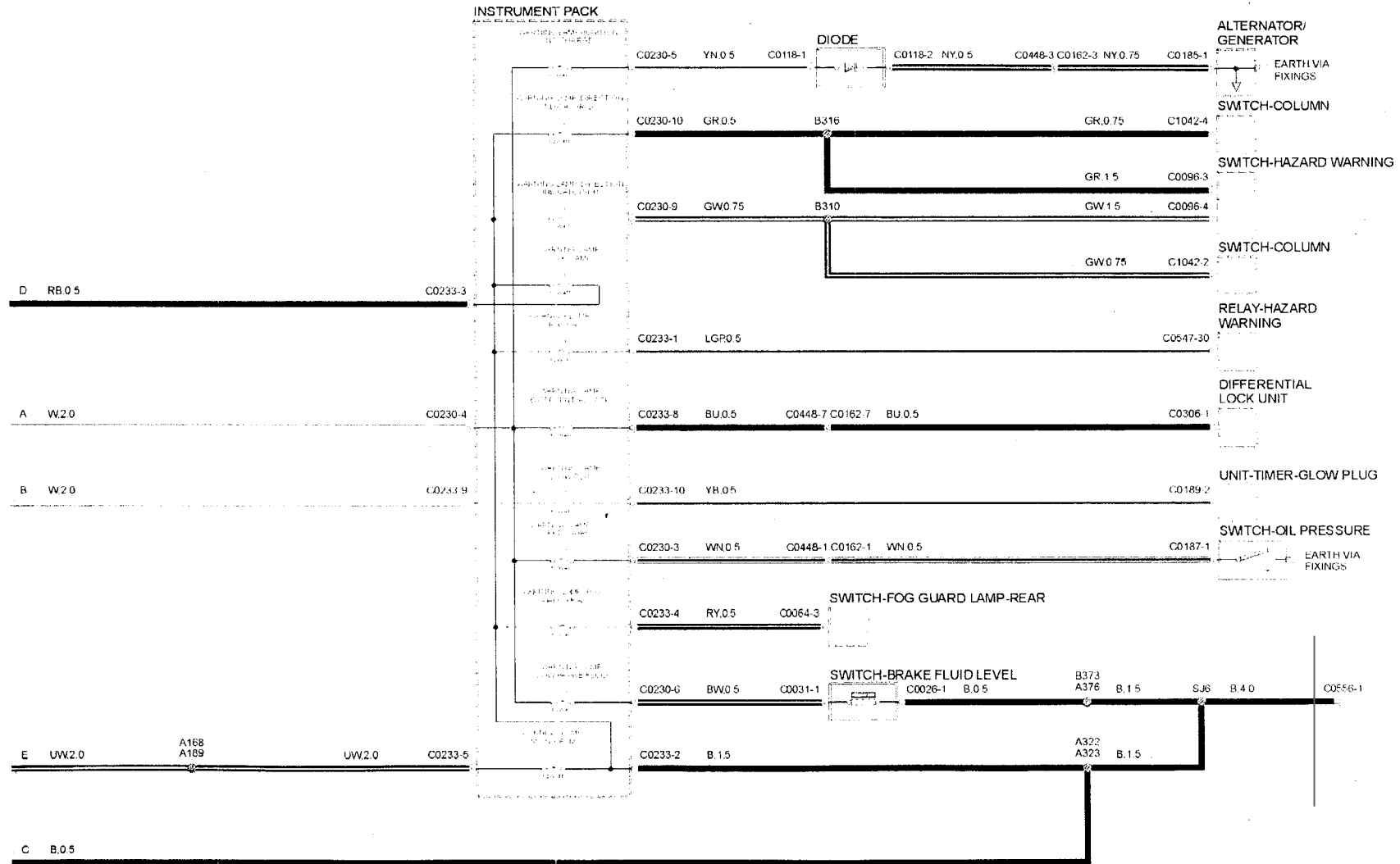


Fig 31 Instruments II - EEGR

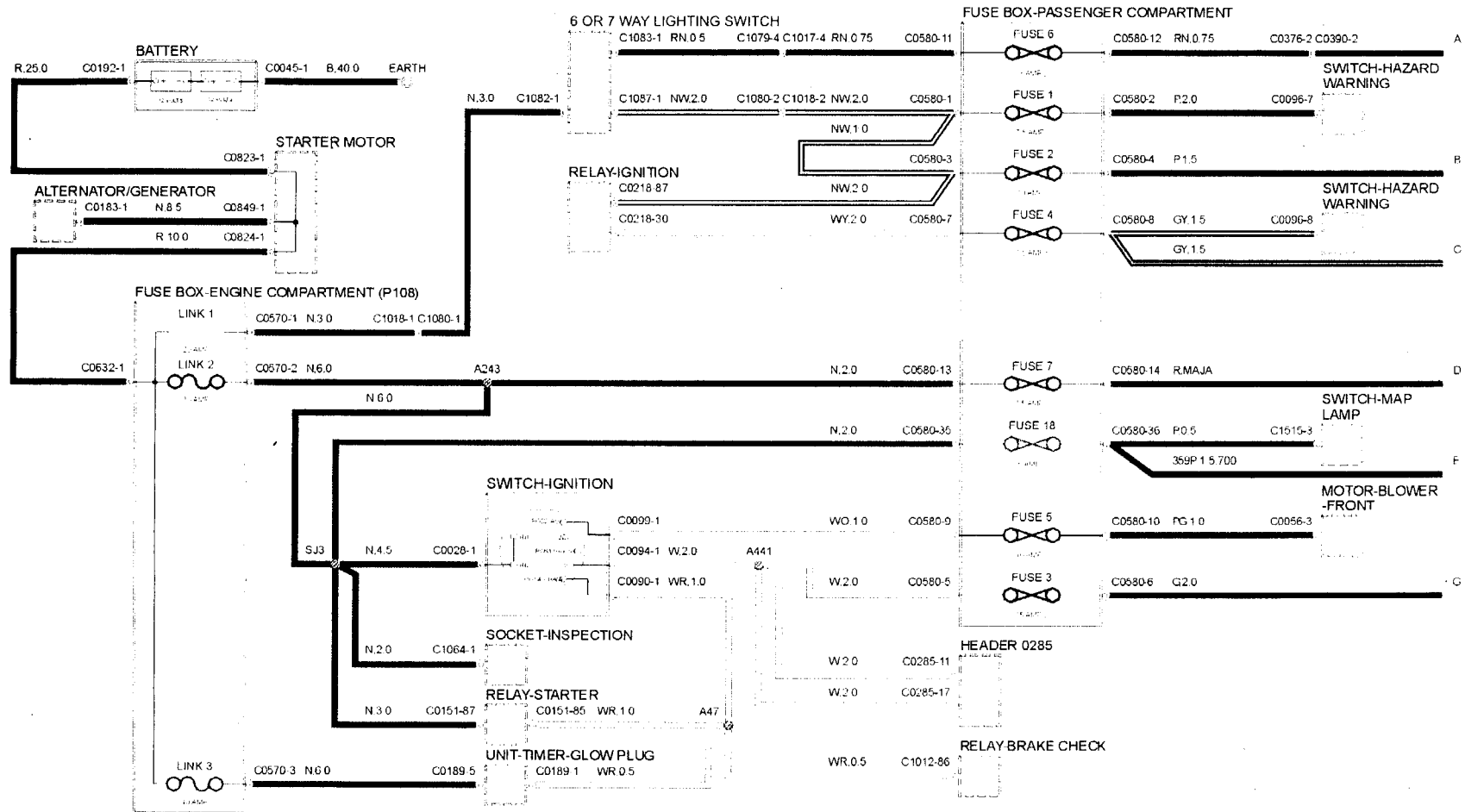


Fig 32 Power distribution I - EEGR



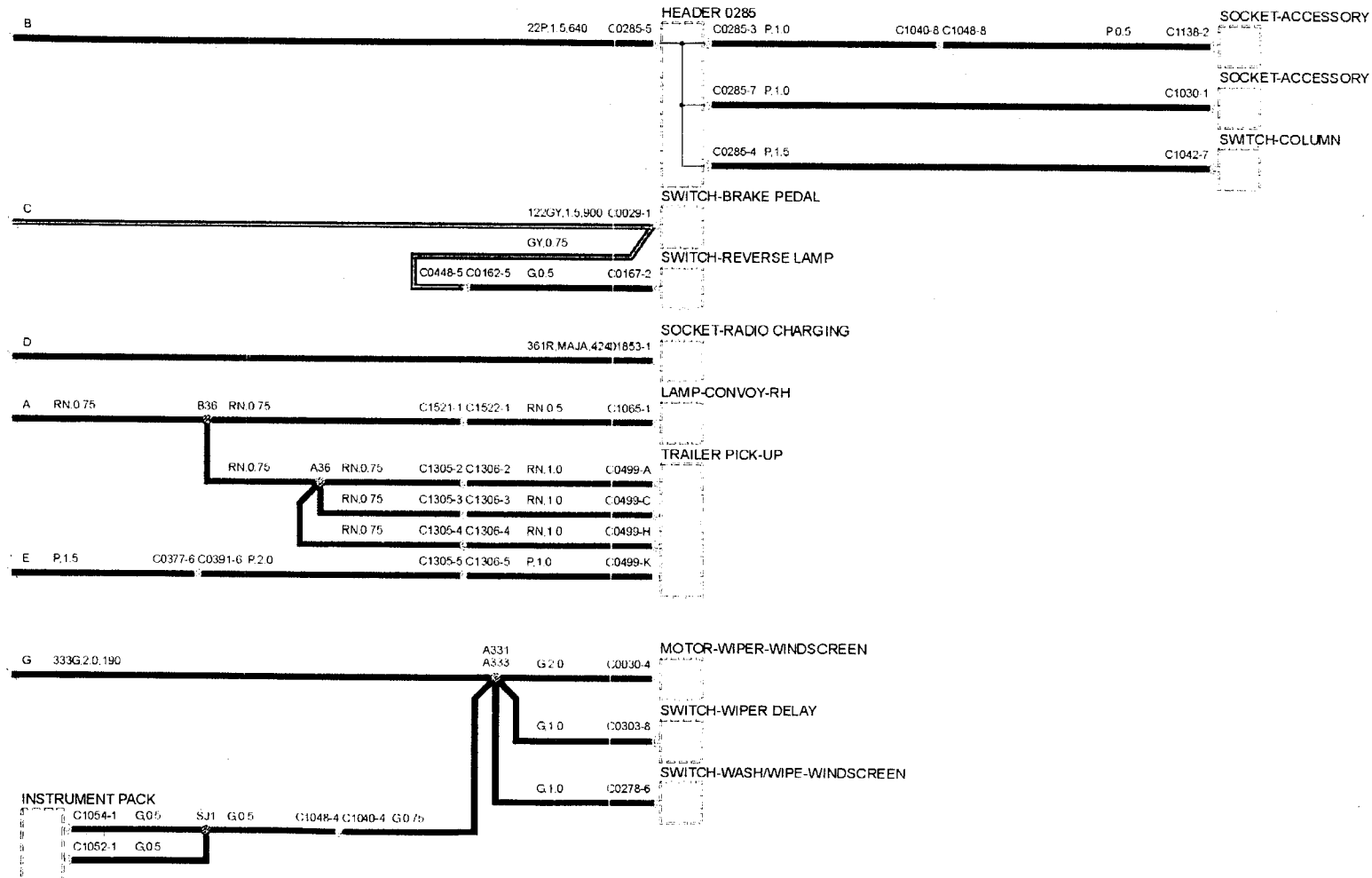


Fig 33 Power distribution II - EEGR

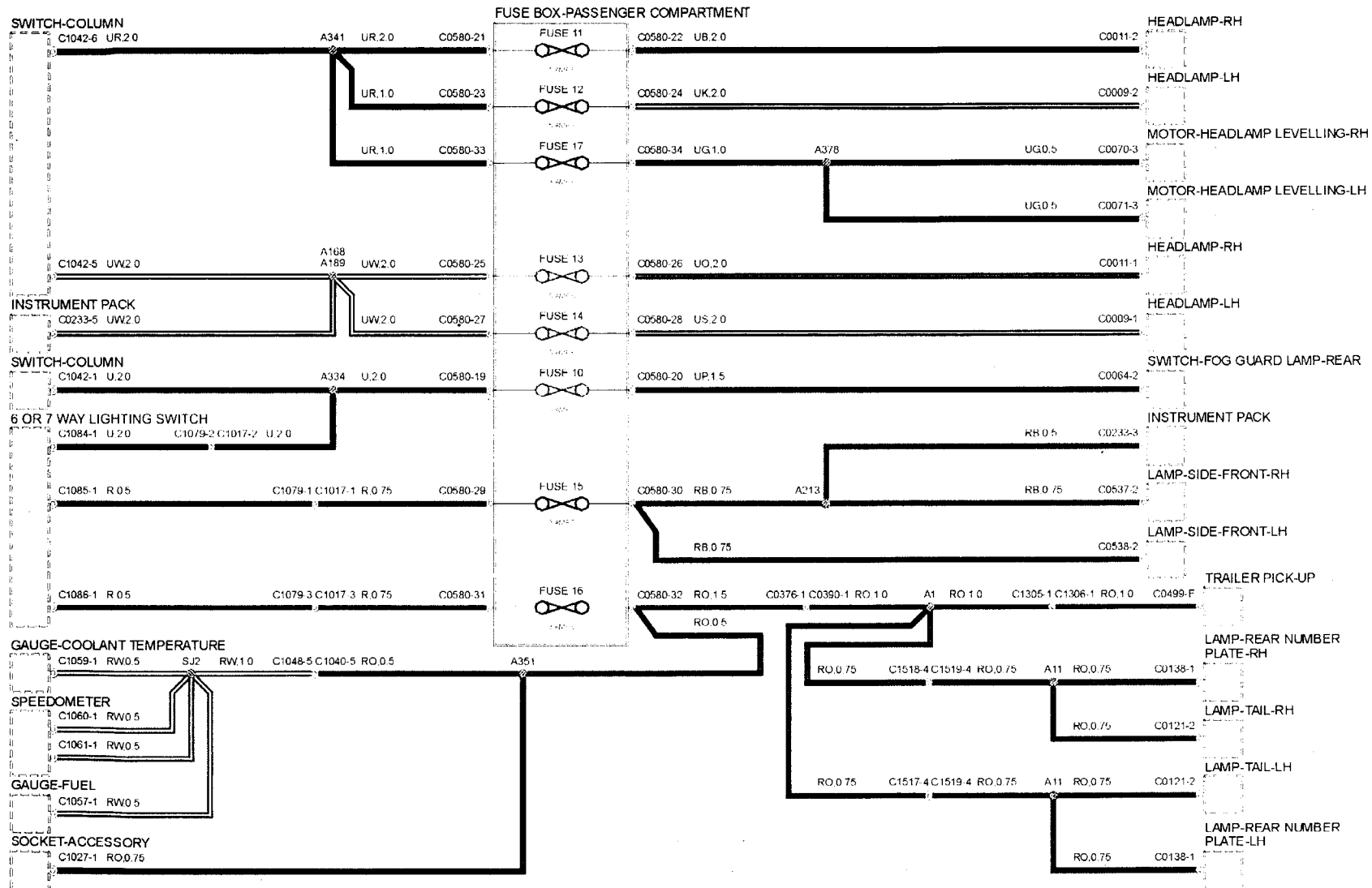


Fig 34 Power distribution III - EEGR

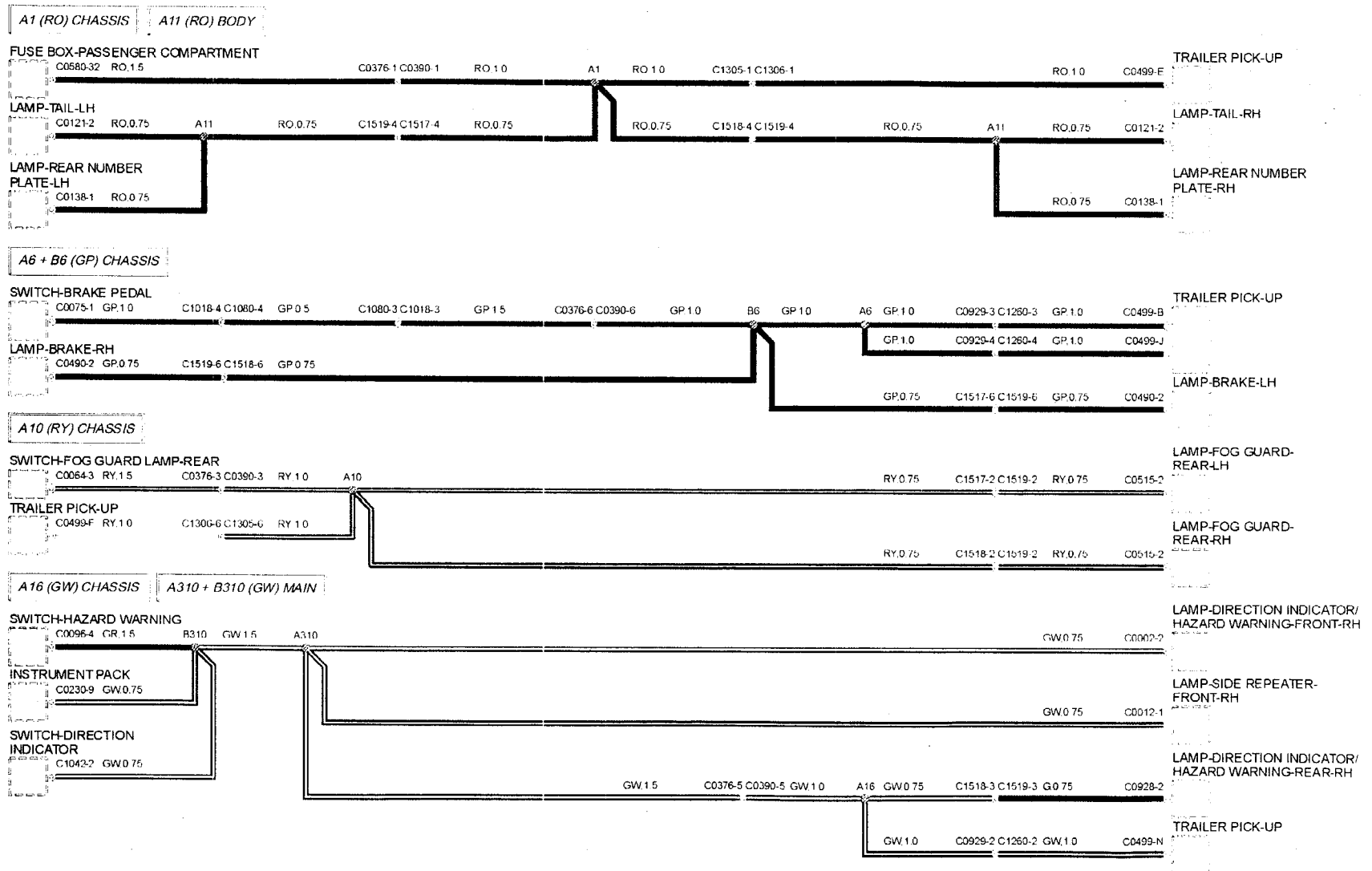


Fig 35 Splices and centre taps I - EEGR

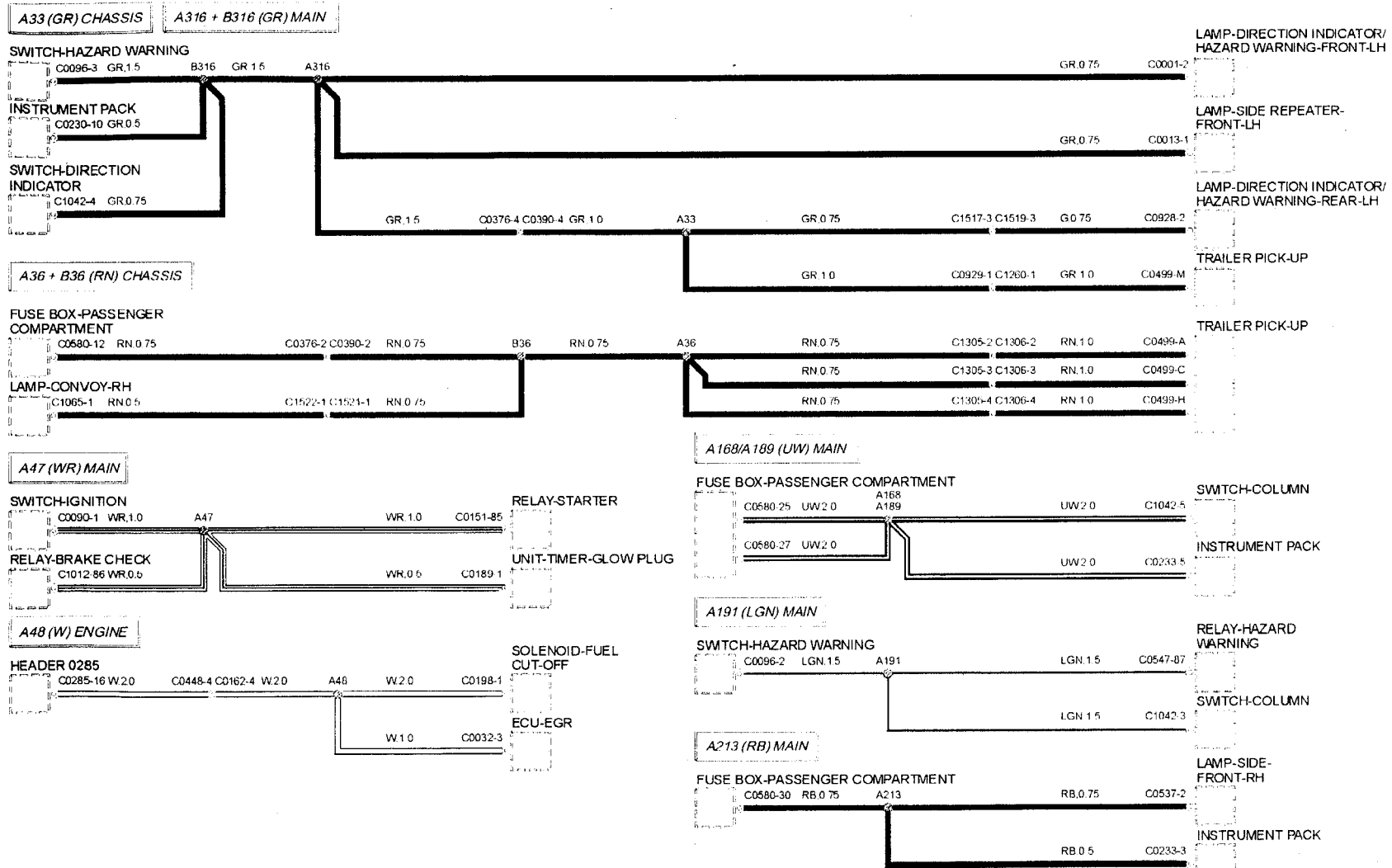


Fig 36 Splices and centre taps II - EGR

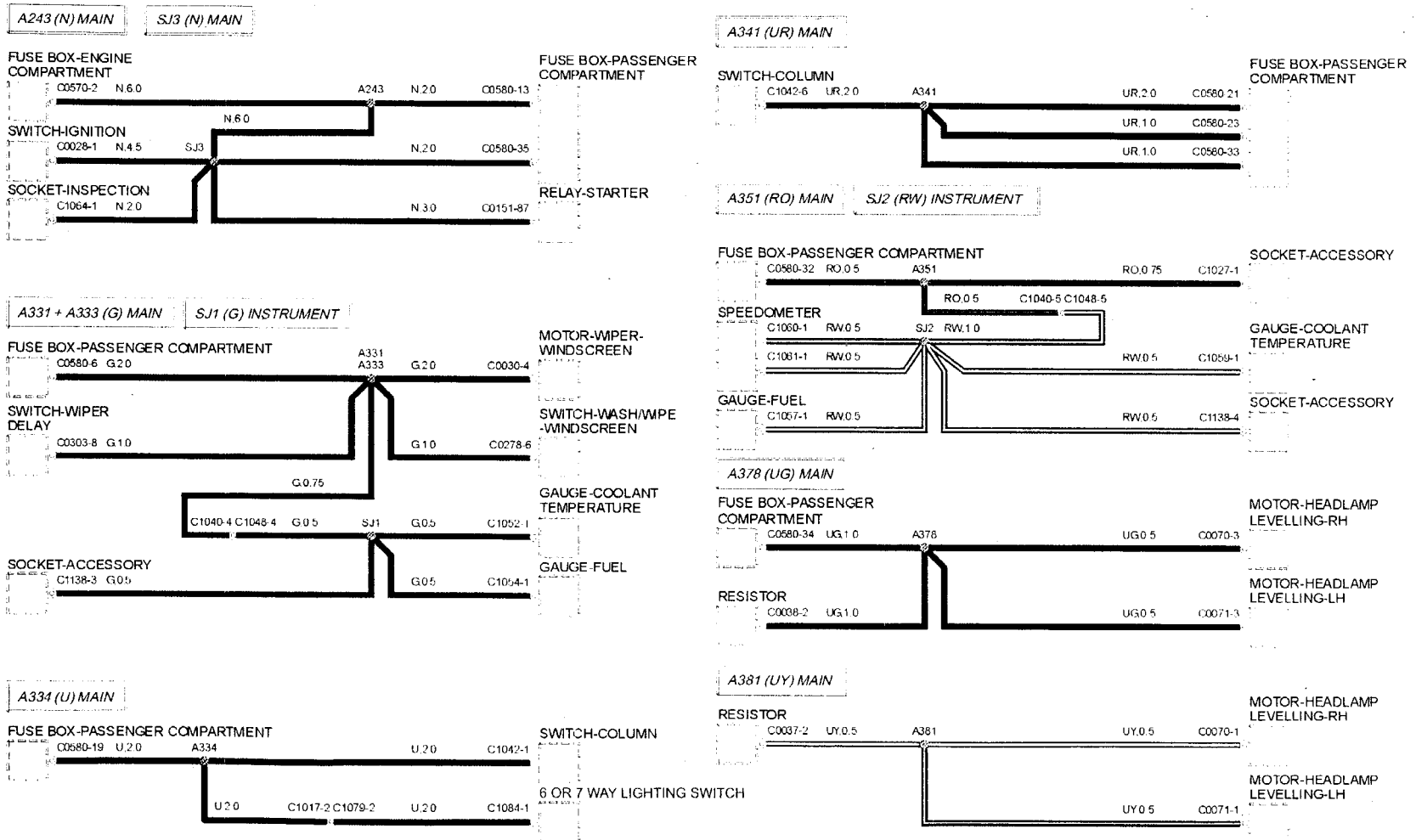


Fig 37 Splices and centre taps III - EEGR

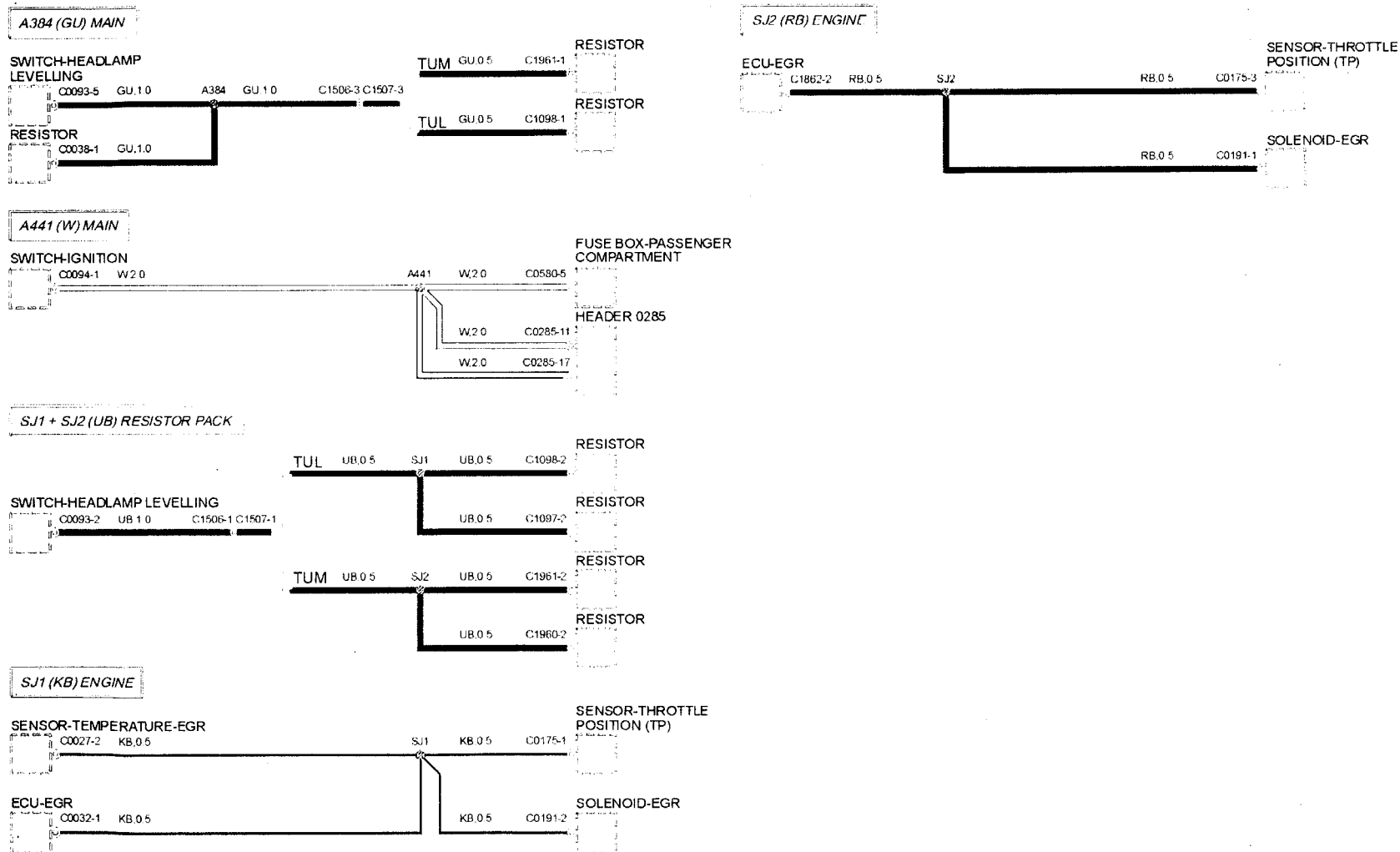


Fig 38 Splices and centre taps IV - EGR

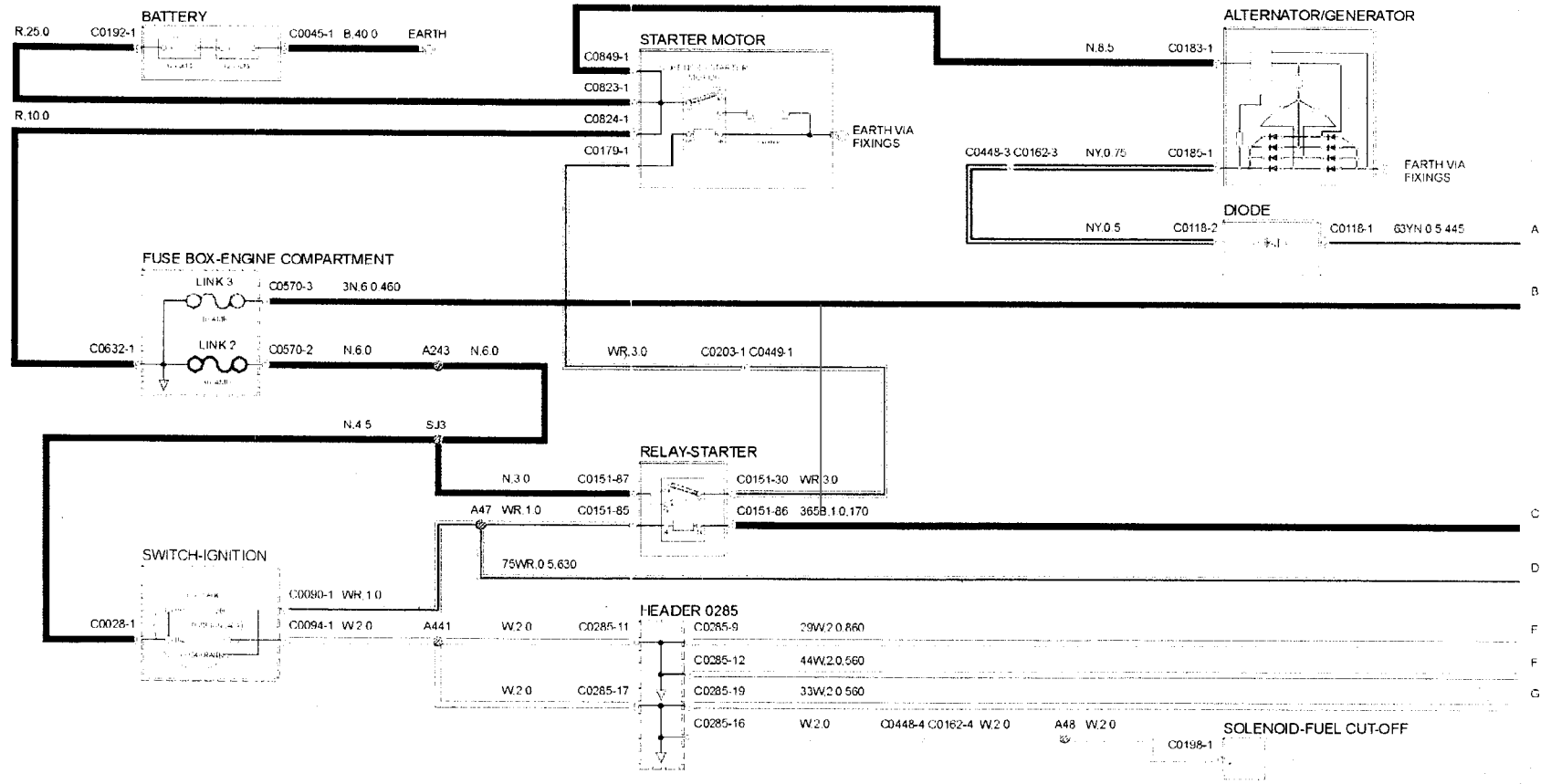


Fig 39 Charging and starting I - EEGR

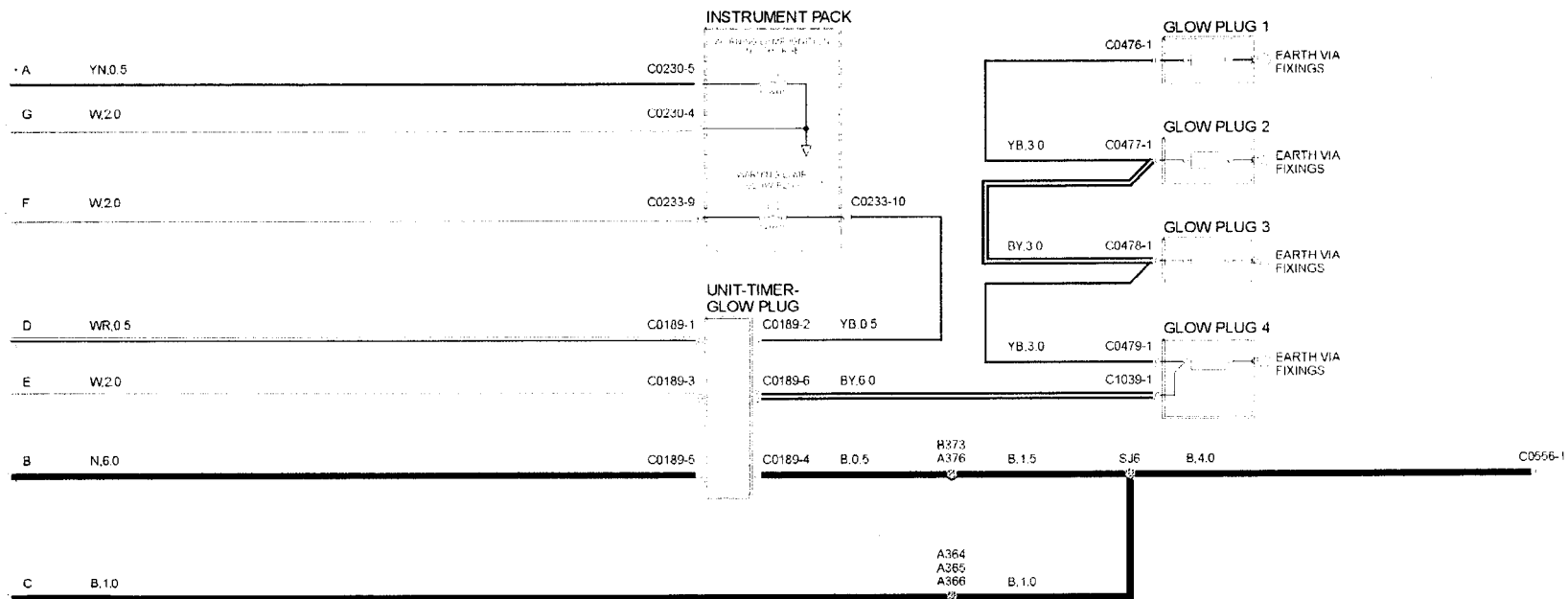


Fig 40 Charging and starting II - EEGR



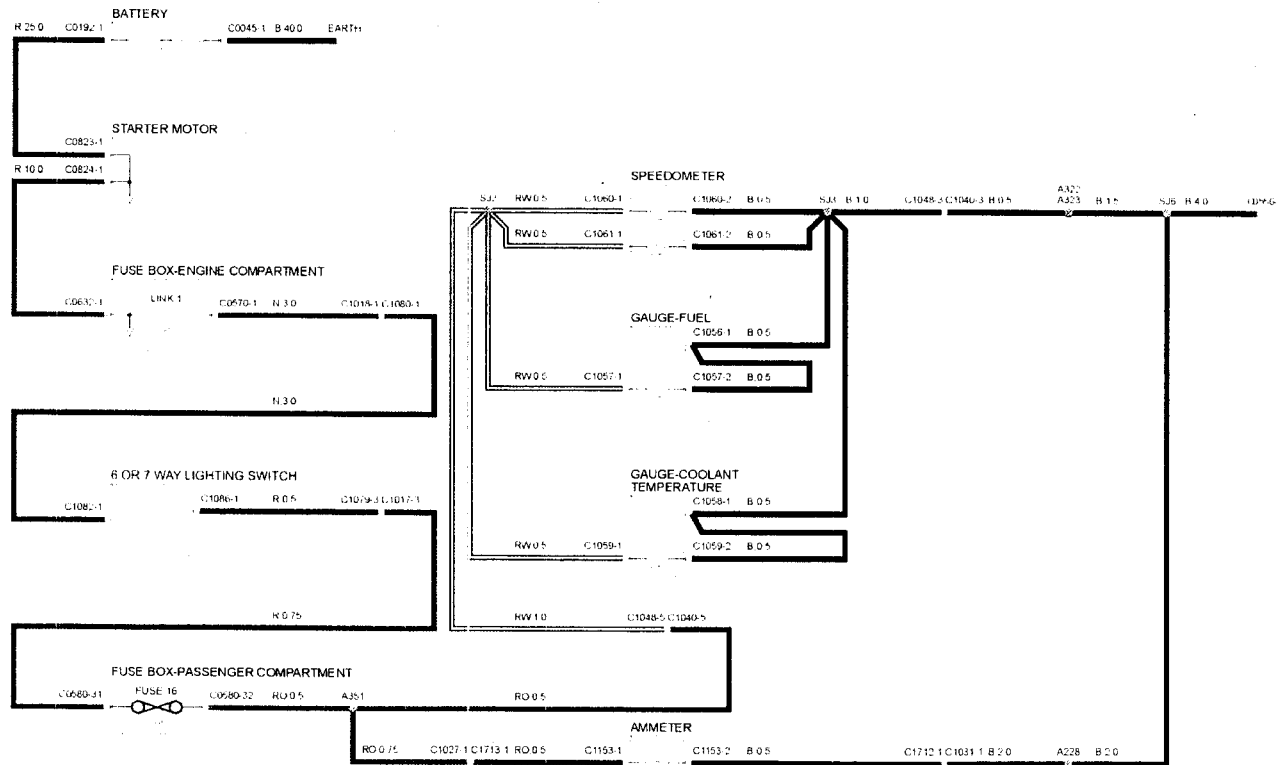


Fig 41 Interior illumination - EEGR

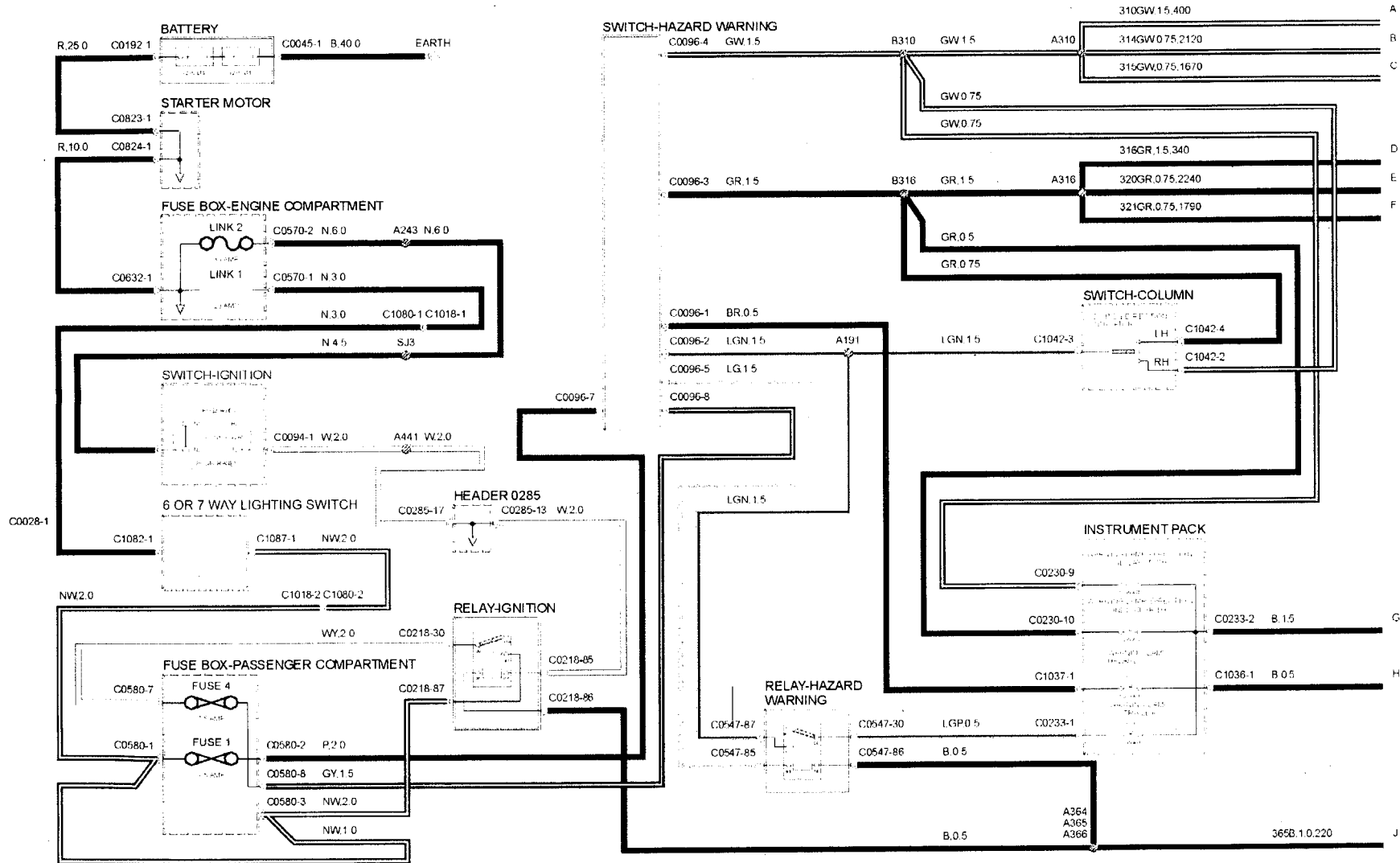


Fig 42 Indicators and Hazards I - EEGR

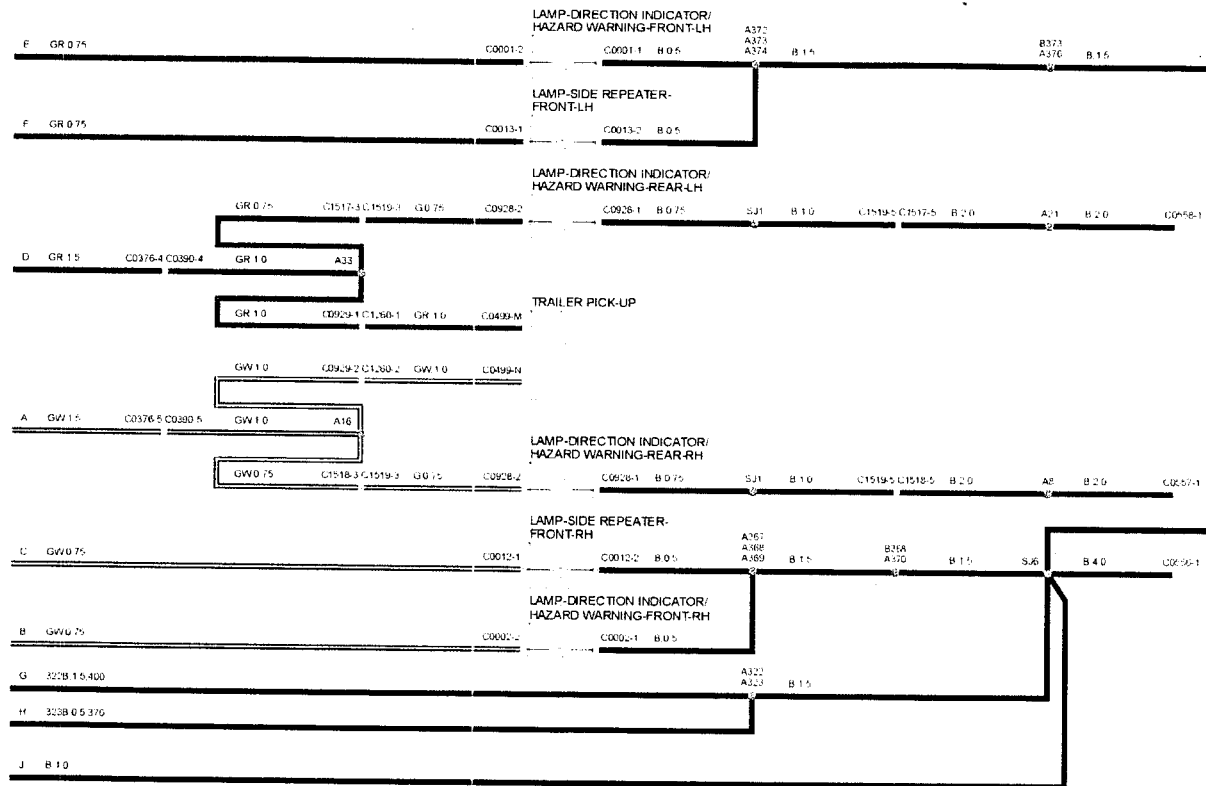


Fig 43 Indicators and Hazards II - EEGR

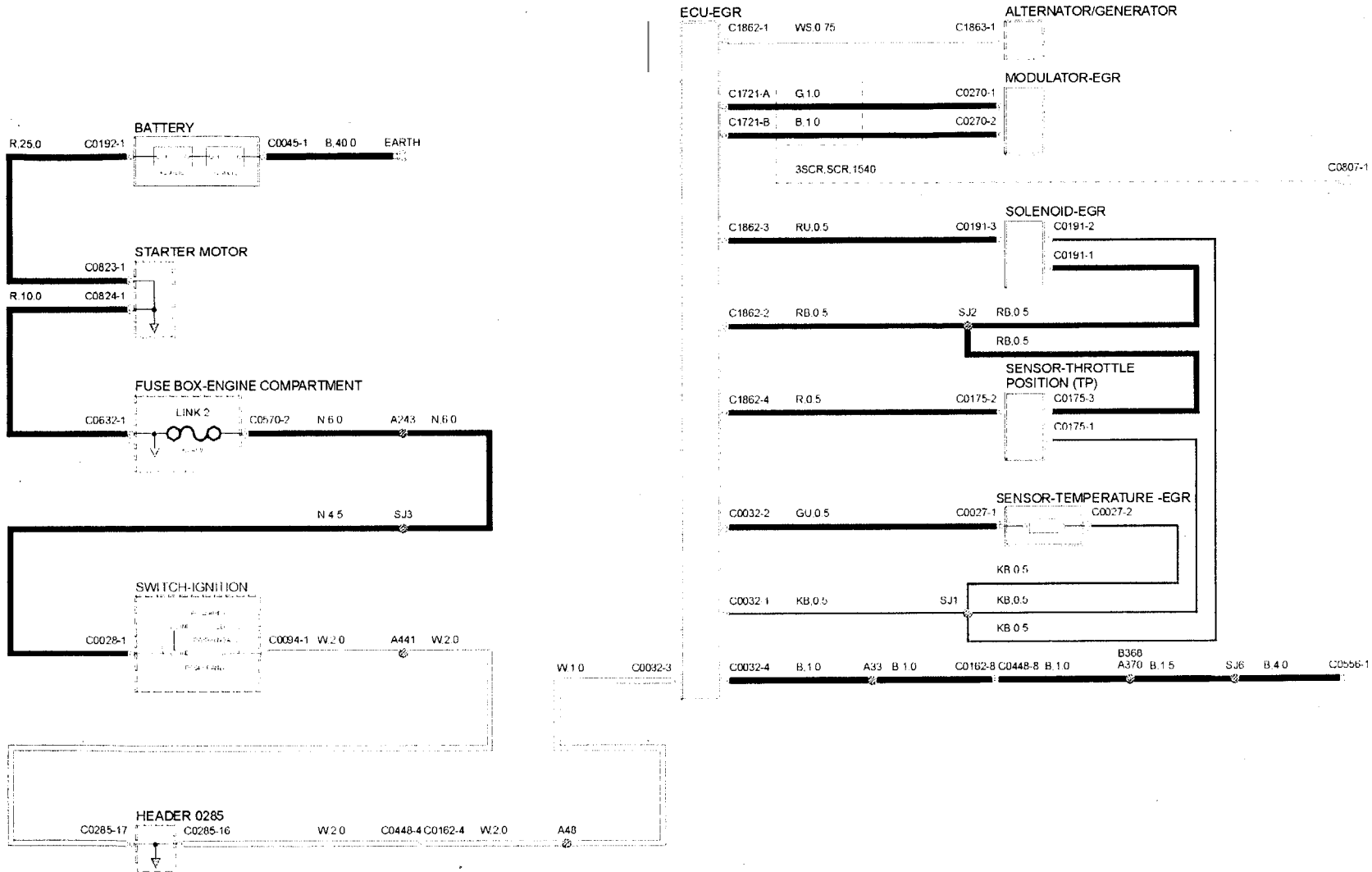


Fig 44 EEGR

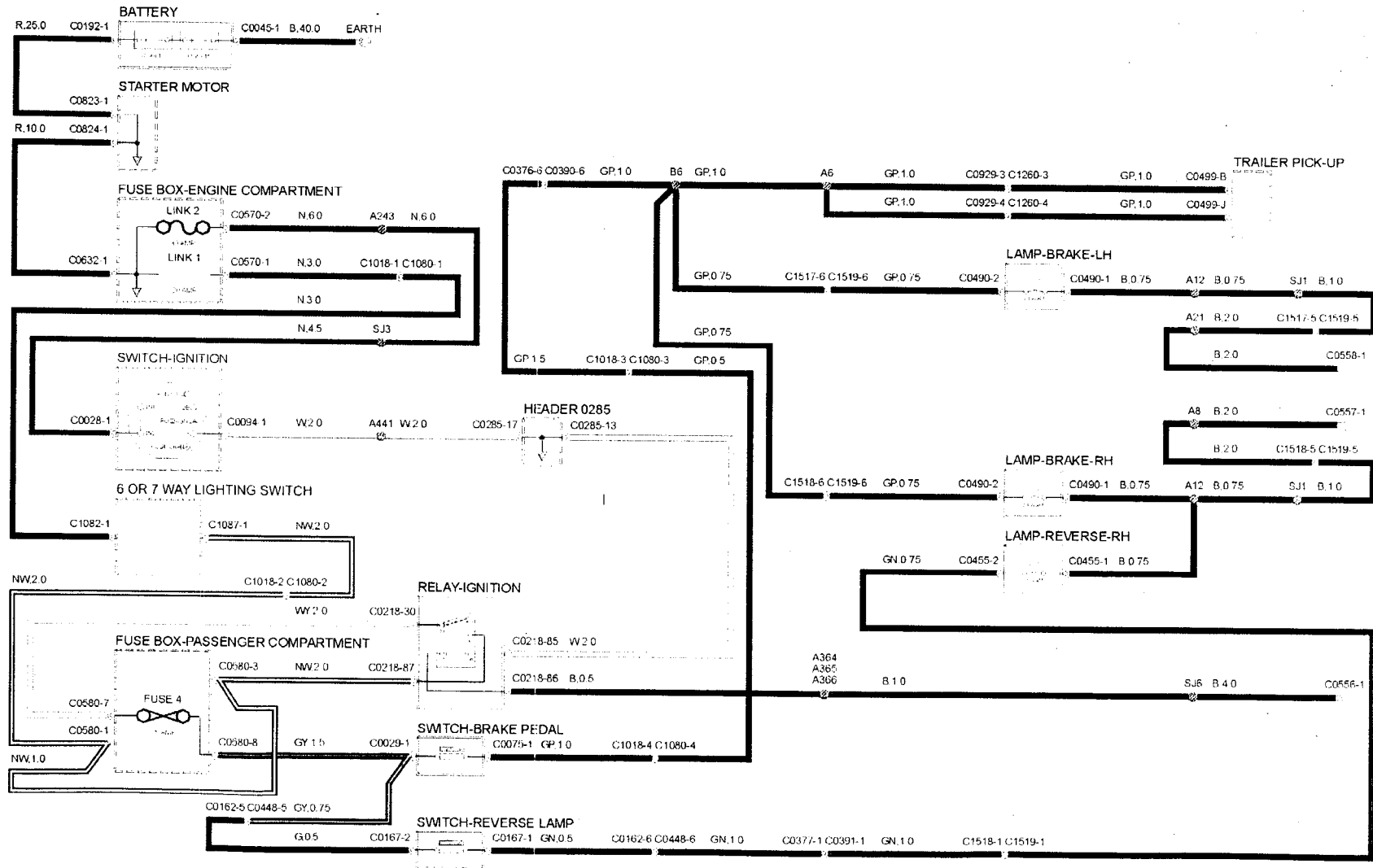


Fig 45 Brake reverse lamps

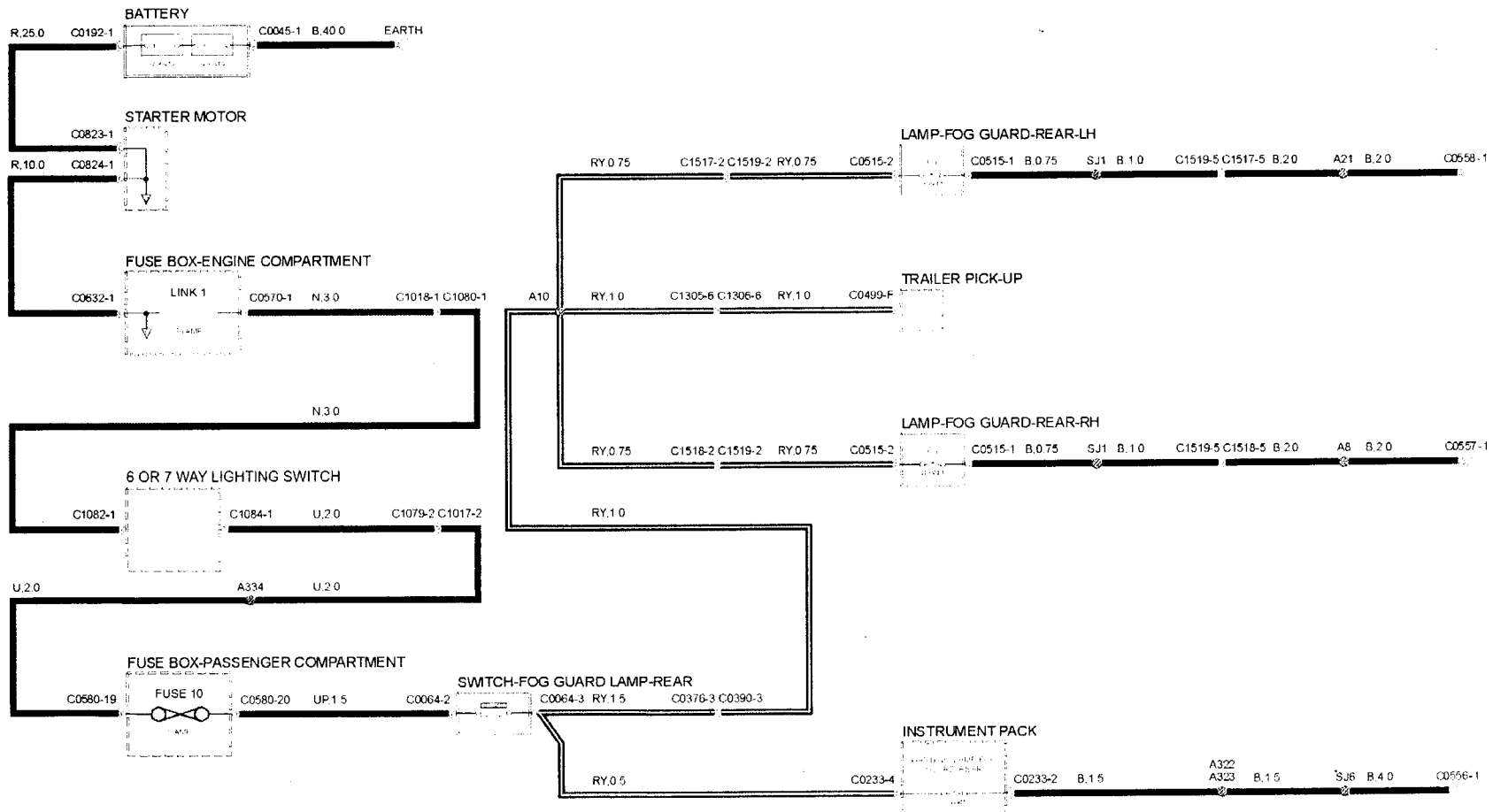


Fig 46 Fog lamps

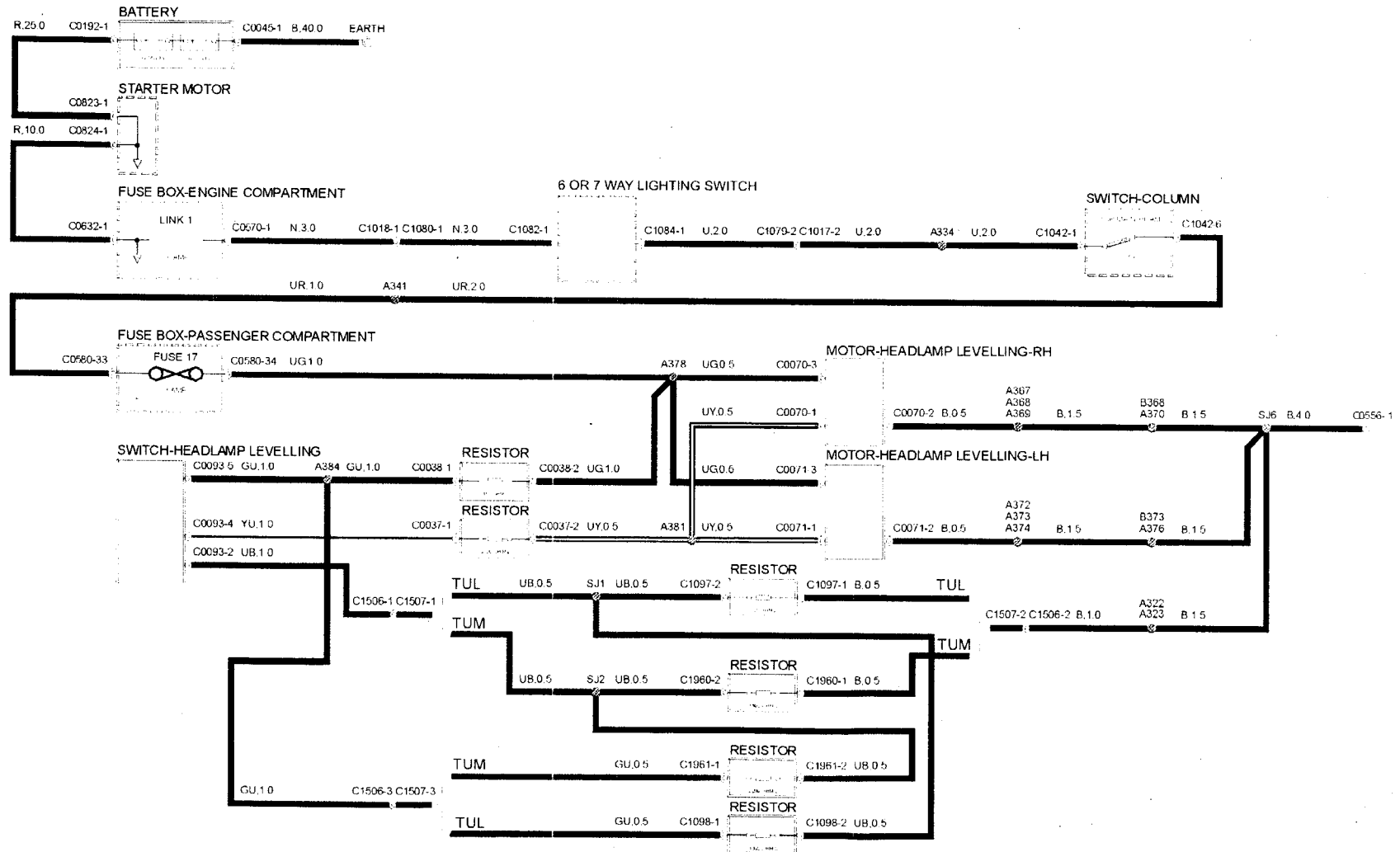


Fig 47 Headlamp levelling

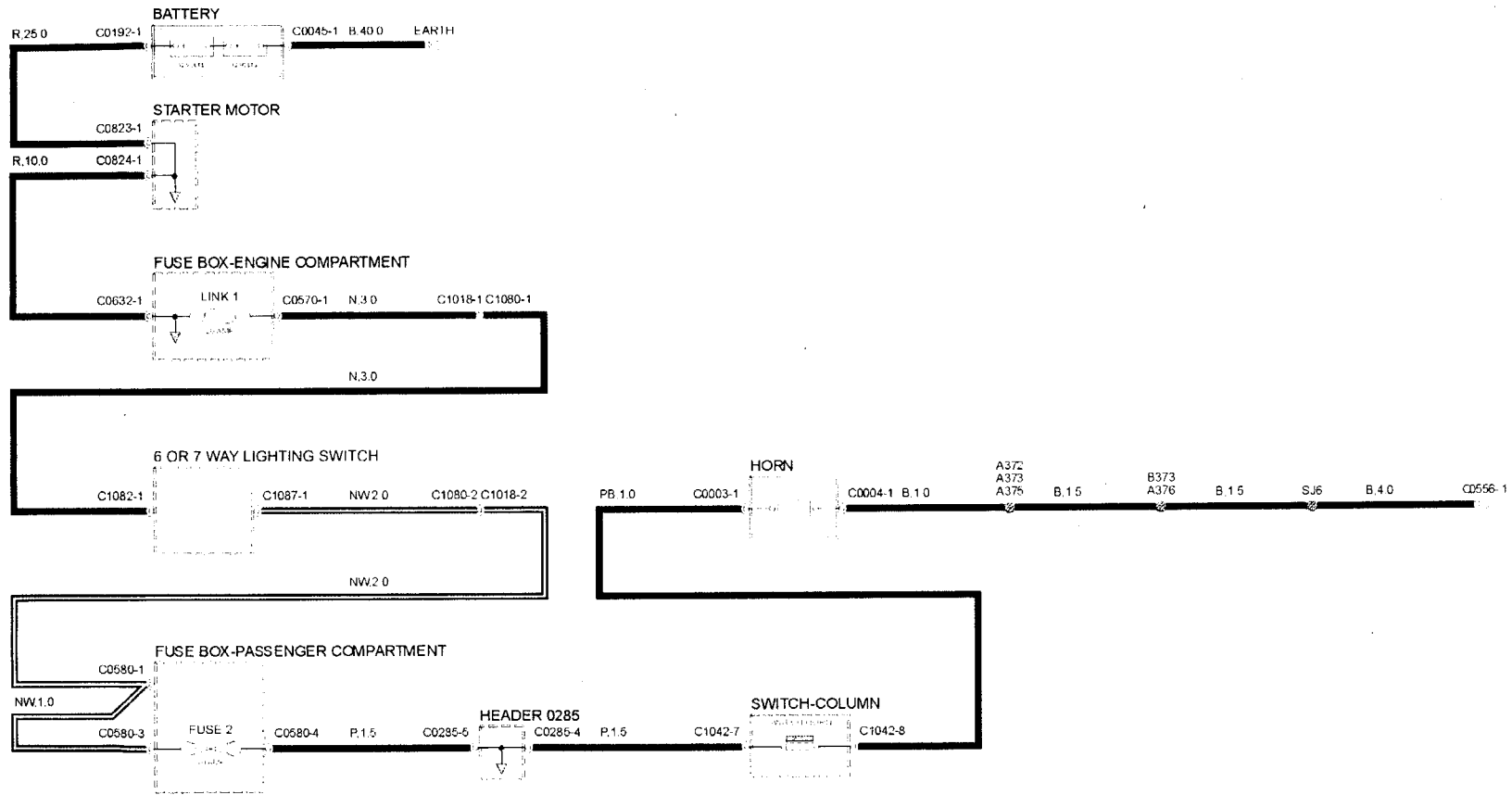


Fig 48 Horn



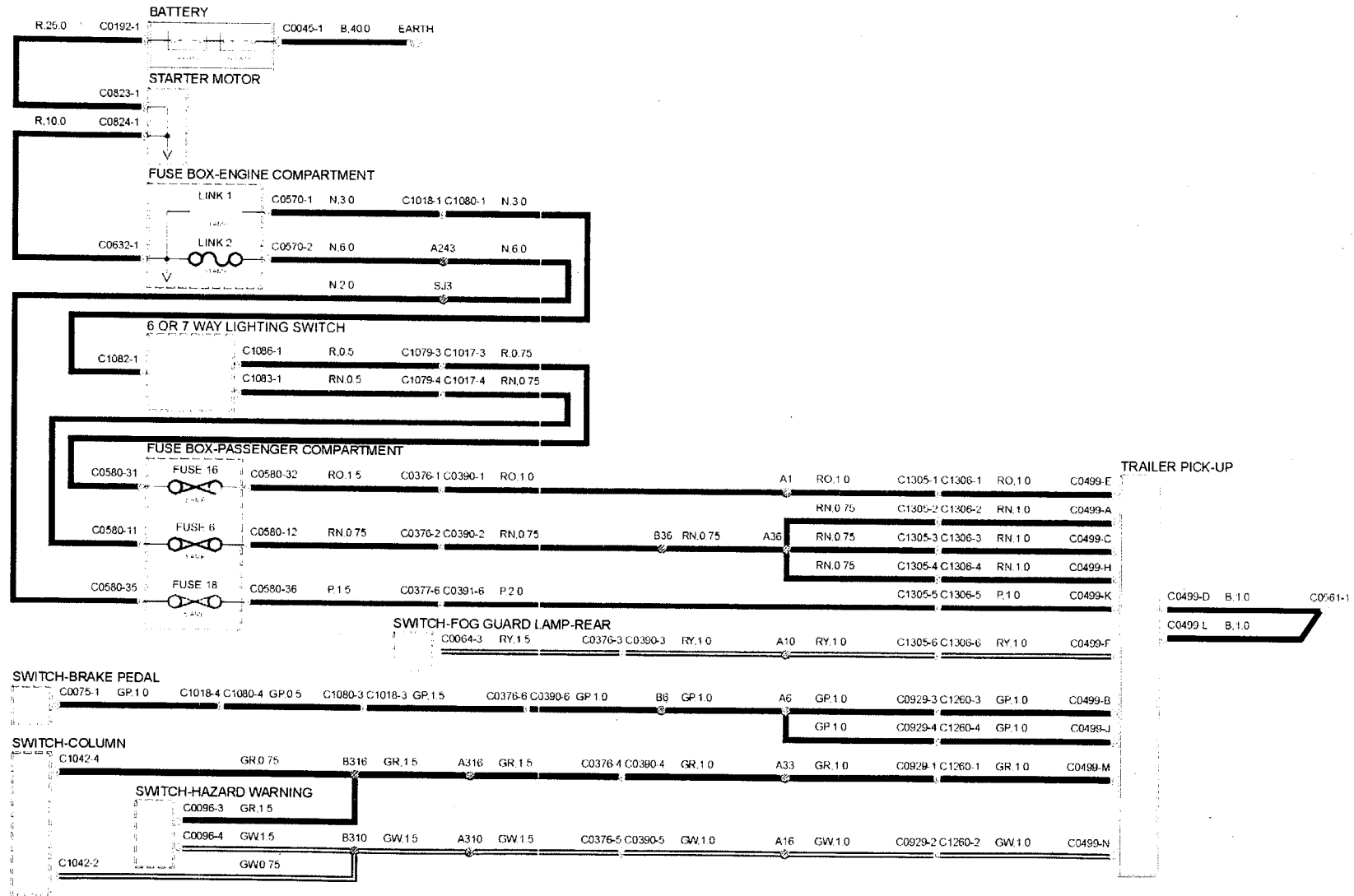


Fig 49 Trailer socket

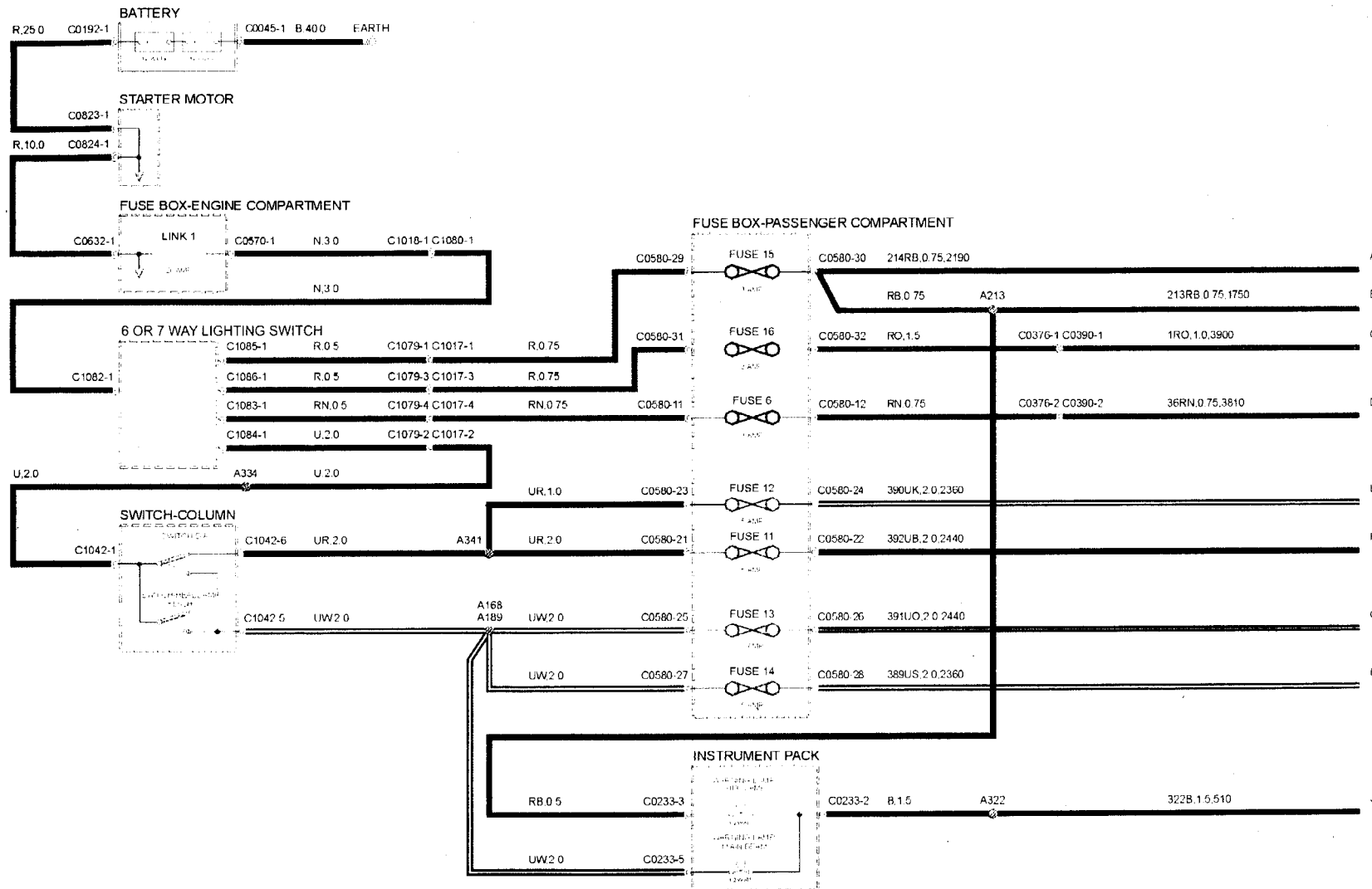


Fig 50 Head, side and number plate lamps I

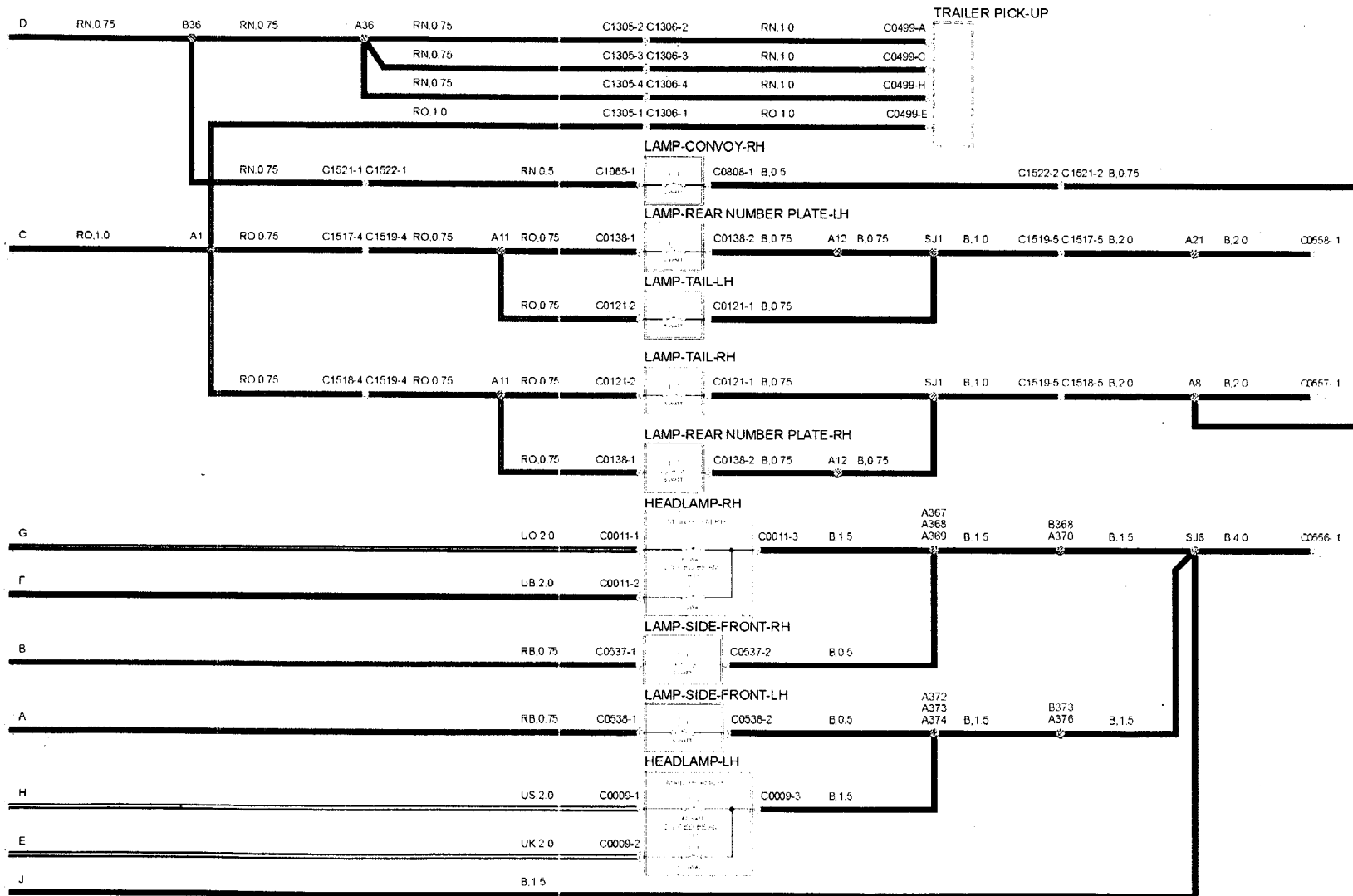


Fig 51 Head, side and number plate lamps II

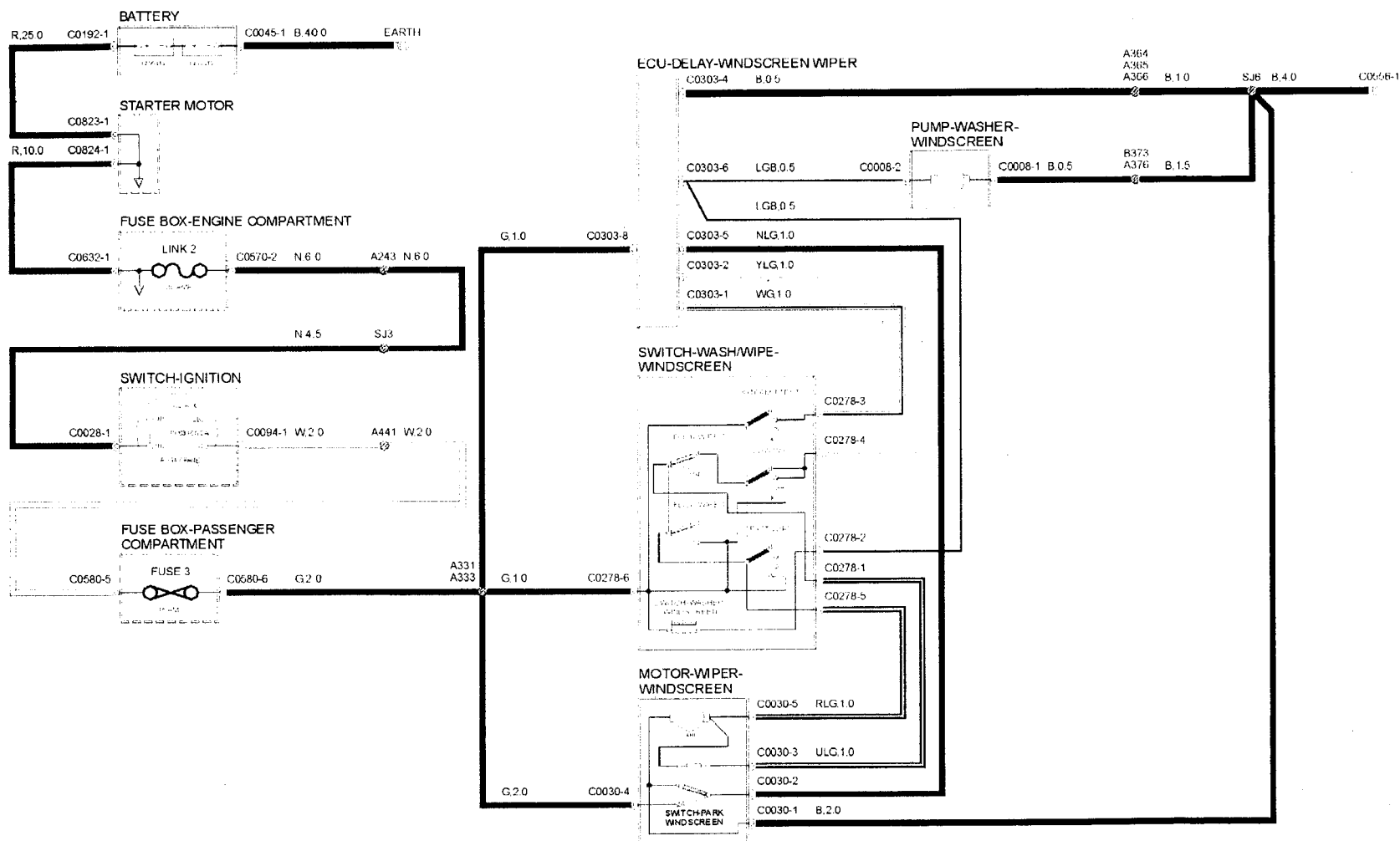


Fig 52 Wipers and washers – front

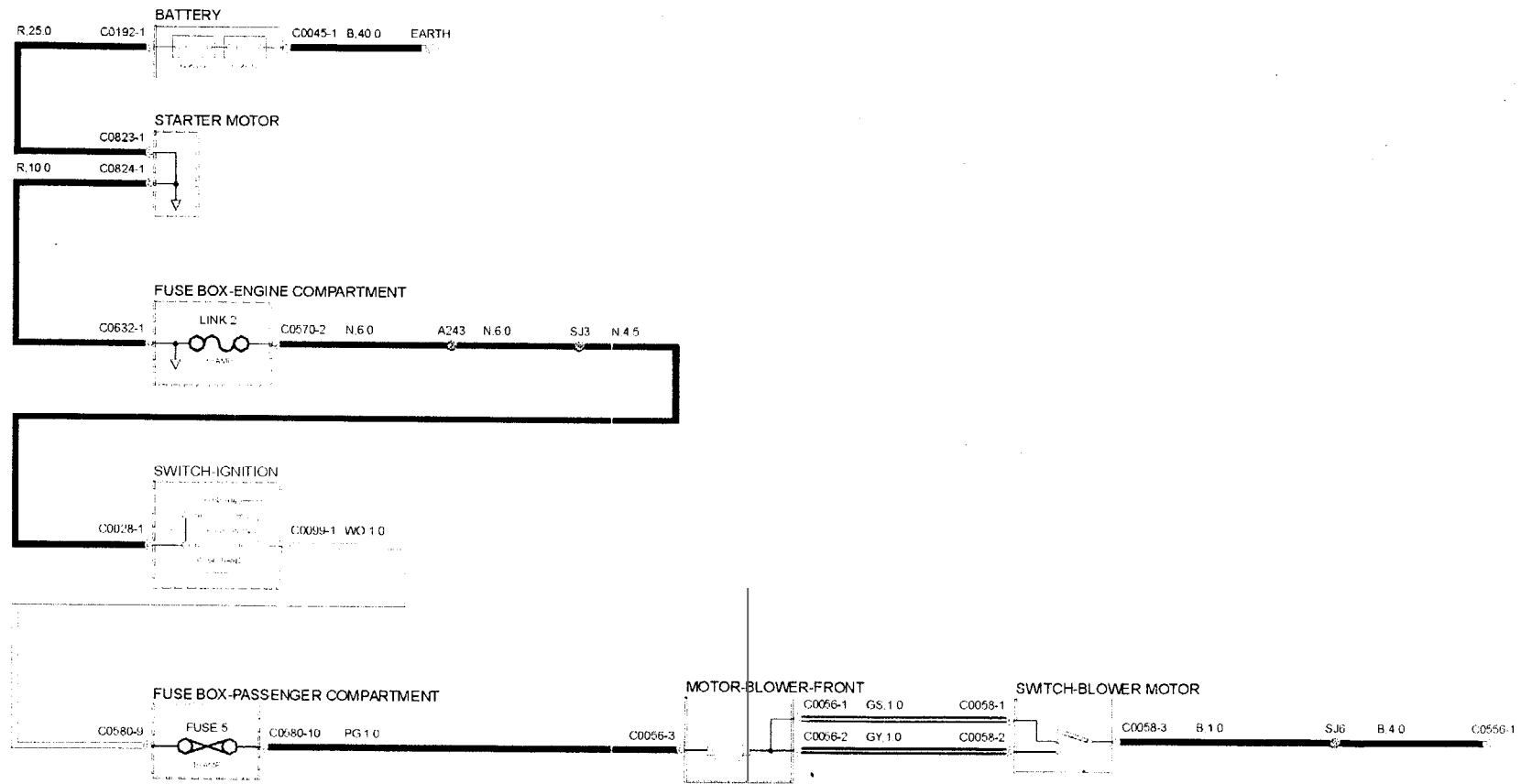


Fig 53 Heater

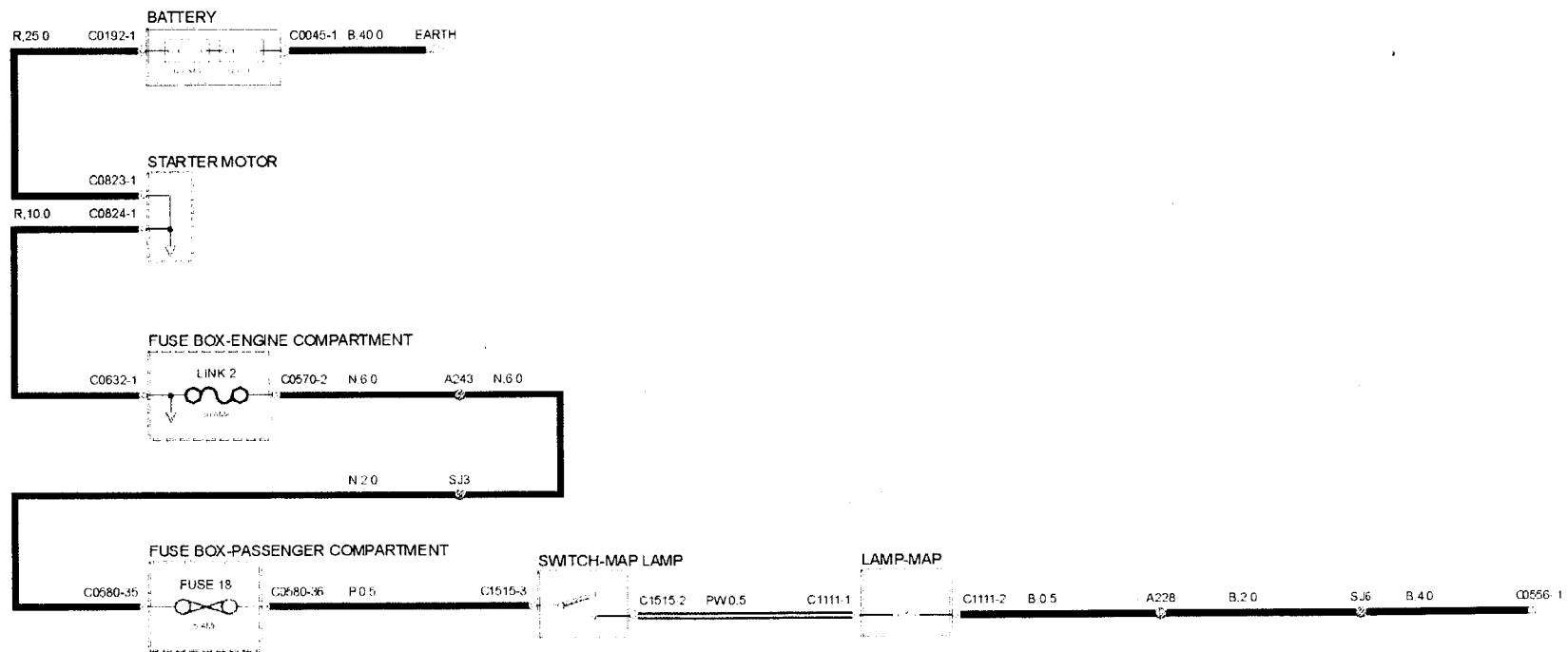


Fig 54 Interior lamps