



Electrical Circuit Diagrams



FREELANDER

2004MY

Electrical Circuit Diagrams

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COLOUR CODES**DRAADKLEURCODES****CODICI COLORI DEI CAVI****CODES DES COULEURS DES FILS****CODIGOS DE COLORES DE LOS CABLES****KABELFARBCODES****CÓDIGOS DAS CORES DOS FIOS**

CODE	COLOUR	CODE	KLEUR	CODE	COULEUR	CODE	FARBE	CODICE	COLORE	CODIGO	COLOR	CÓDIGO	COR
B	BLACK	B	ZWART	B	NOIR	B	SCHWARZ	B	NERO	B	NEGRO	B	PRETO
G	GREEN	G	GROEN	G	VERT	G	GRÜN	G	VERDE	G	VERDE	G	VERDE
K	PINK	K	ROZE	K	ROSE	K	ROSA	K	ROSA	K	ROSA	K	ROSA
LG	LIGHT GREEN	LG	LICHTGROEN	LG	VERT CLAIR	LG	HELLGRÜN	LG	VERDE CHIARO	LG	VERDE CLARO	LG	VERDE CLARO
N	BROWN	N	BRUIN	N	BRUN	N	BRAUN	N	MARRONE	N	MARRON	N	CASTANHO
O	ORANGE	O	ORANJE	O	ORANGE	O	ORANGE	O	ARANCIONE	O	NARANJA	O	LARANJA
P	PURPLE	P	PAARS	P	VIOLET	P	LILA	P	PORPORA	P	PURPURA	P	ROXO
R	RED	R	ROOD	R	ROUGE	R	ROT	R	ROSSO	R	ROJO	R	VERMELHO
S	SLATE (grey)	S	LEIGRIJS	S	GRIS	S	GRAU	S	ARDESIA (grigio)	S	PIZARRO (gris)	S	CINZENTO
T	TRANSPARENT	T	TRANSPARANT	T	TRANSPARENT	T	TRANSPARENT	T	TRASPARENTE	T	TRANSPARENTE	T	TRANSPARENTE
U	BLUE	U	BLAUW	U	BLEU	U	BLAU	U	BLU	U	AZUL	U	AZUL
W	WHITE	W	WIT	W	BLANC	W	WEISS	W	BIANCO	W	BLANCO	W	BRANCO
Y	YELLOW	Y	GEEL	Y	JAUNE	Y	GELB	Y	GIALLO	Y	AMARILLO	Y	AMARELO

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KV6 - NAS	50	75 PARK DISTANCE CONTROL (PDC)			

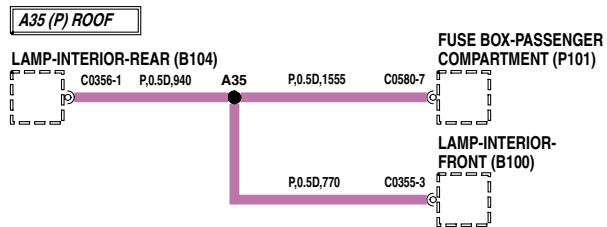
HOW TO USE THE CIRCUIT DIAGRAMS

All of the information in this publication is intended for use in conjunction with the Electrical Library, which can be found on RAVE.

The circuit diagrams are presented with Power and Earth distribution first, followed by individual circuits for each electrical system on the vehicle.

Power Distribution

The Power Distribution diagram shows the connections from the battery to the engine, passenger, and where applicable, rear fuse box. It also shows the internal circuitry of the fuse boxes.



M86 5963

The fuse box details are followed by independent functionally specific circuits and then a splices and centre taps section outlining the way in which internal harness splices and centre taps distribute power in the harnesses. This information should be used during diagnosis of electrical faults to check for symptoms in associated circuits and narrow down the search area.

Earth Distribution

The earth distribution section comprises a number of Headers and Splices 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.

Splices and centre taps

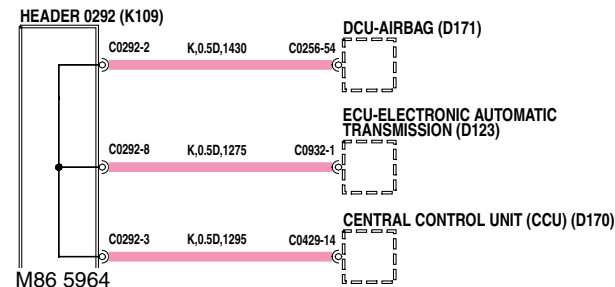
Header and splice tables present the joint(s) and wiring up to the first component. Splices are identified by a number with an alphabetical prefix and the wire colour.

The splice information shown on individual system circuits is not complete. Always refer to the splices circuit for complete information on each splice.

Wire length (Power & Earth Distribution only)

The length of the wire is shown in millimetres. This can be used to locate internal harness splices; look for the shortest wire between the joint and connector. For example, it can be seen that C0580-7 is 1555mm from joint A35.

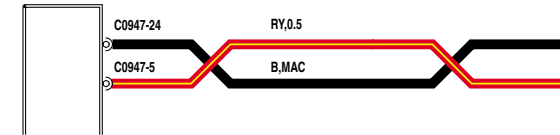
Connectors



M86 5964

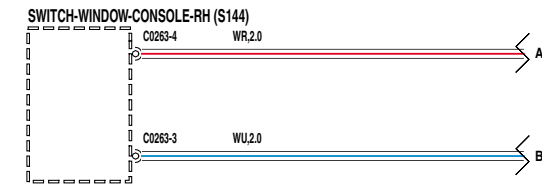
Header joints are identified by their corresponding connector number with a numbered suffix to indicate the pin-out detail of the wire, i.e. C0292-1 identifies connector 292, pin number 1. Wire insulation colour is identified in the normal way. Where wires have a predominant colour with a secondary colour tracer, the main colour is identified first, i.e. LGS - Light Green with a Slate tracer.

Line Types



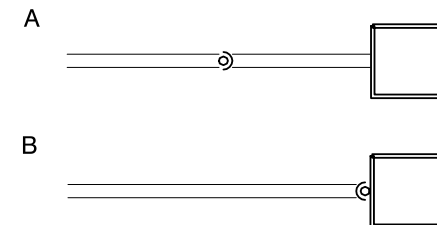
M86 5967

This denotes the wires are a twisted pair.



M86 5968

These page break symbols indicate the circuit continues on later pages.



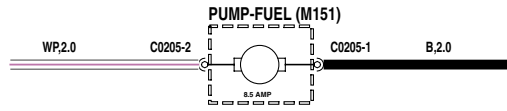
86M4230A

The cup and ball symbol indicates the male and female halves of connector.

- A. Plug on lead (Flylead) wired directly to the component.
- B. Connector plugs directly into component.

HOW TO USE THE CIRCUIT DIAGRAMS

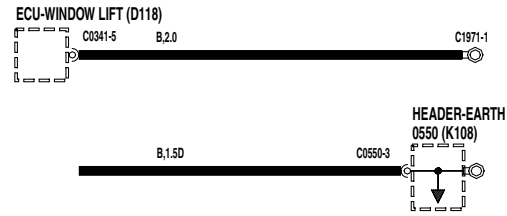
Components



M86 5965

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

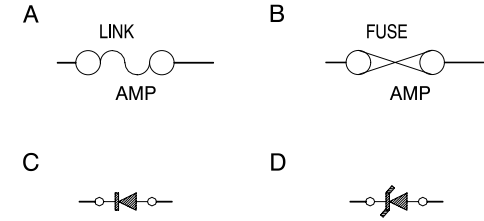
Earth points



M86 5966

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.

Fuses and Diodes



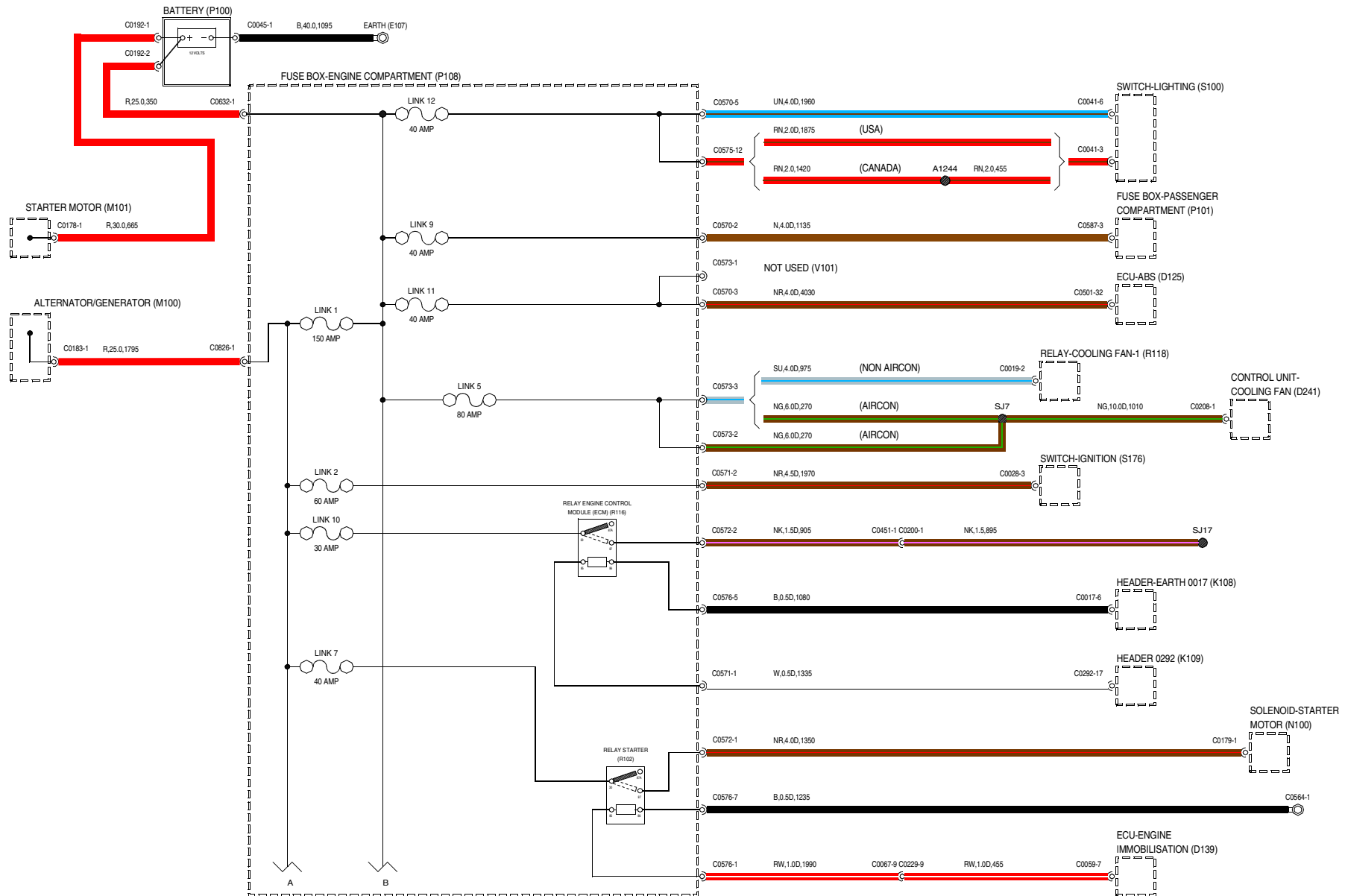
86M4234A

Fusible links (A) and current rated fuses (B) are identified as shown.

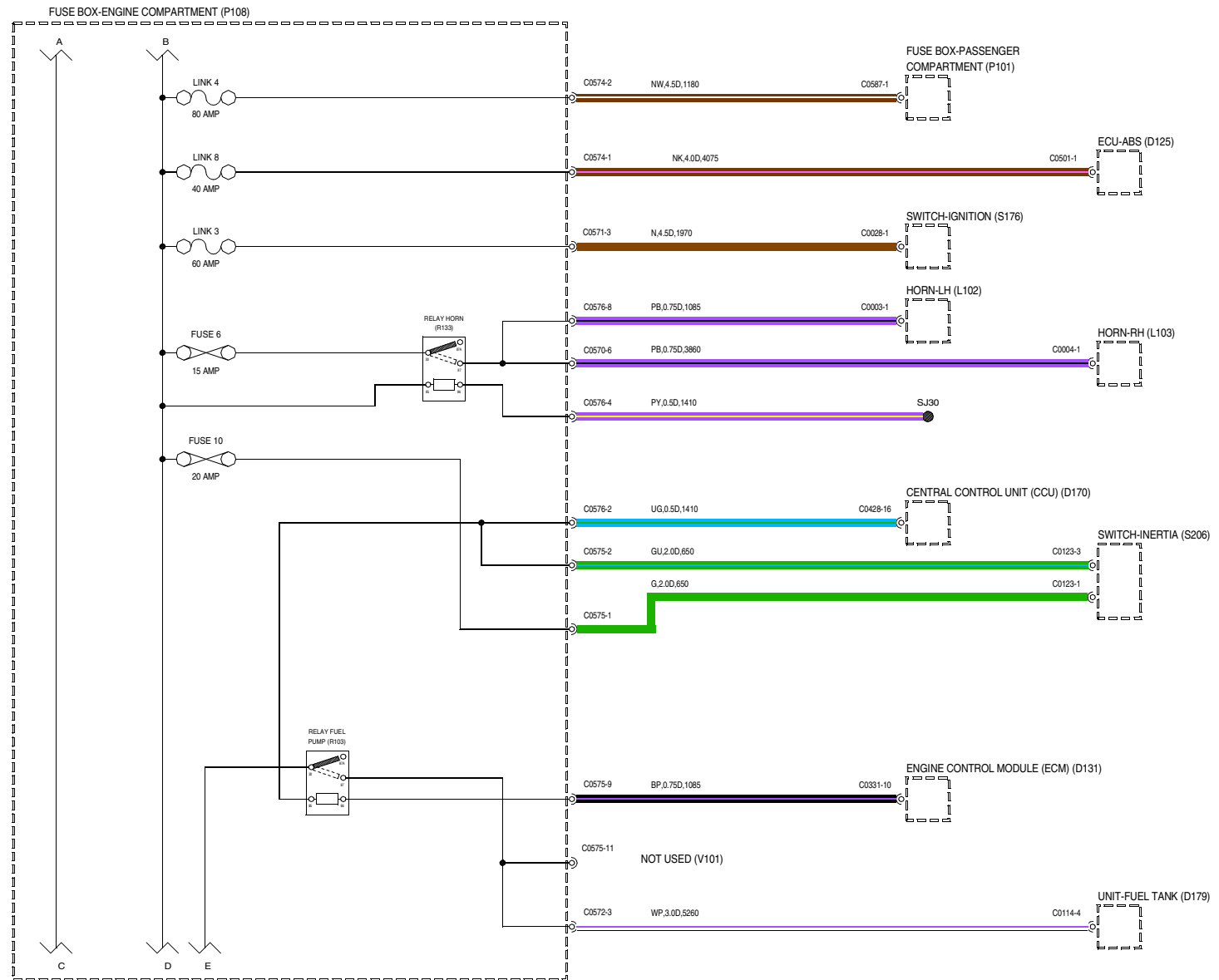
The direction of the arrow in a Diode symbol (C) indicates the direction of current flow. The Zener diode (D) - prevents current flow until a precise voltage is reached.

1 POWER DISTRIBUTION

Engine Compartment Fuse Box - NAS



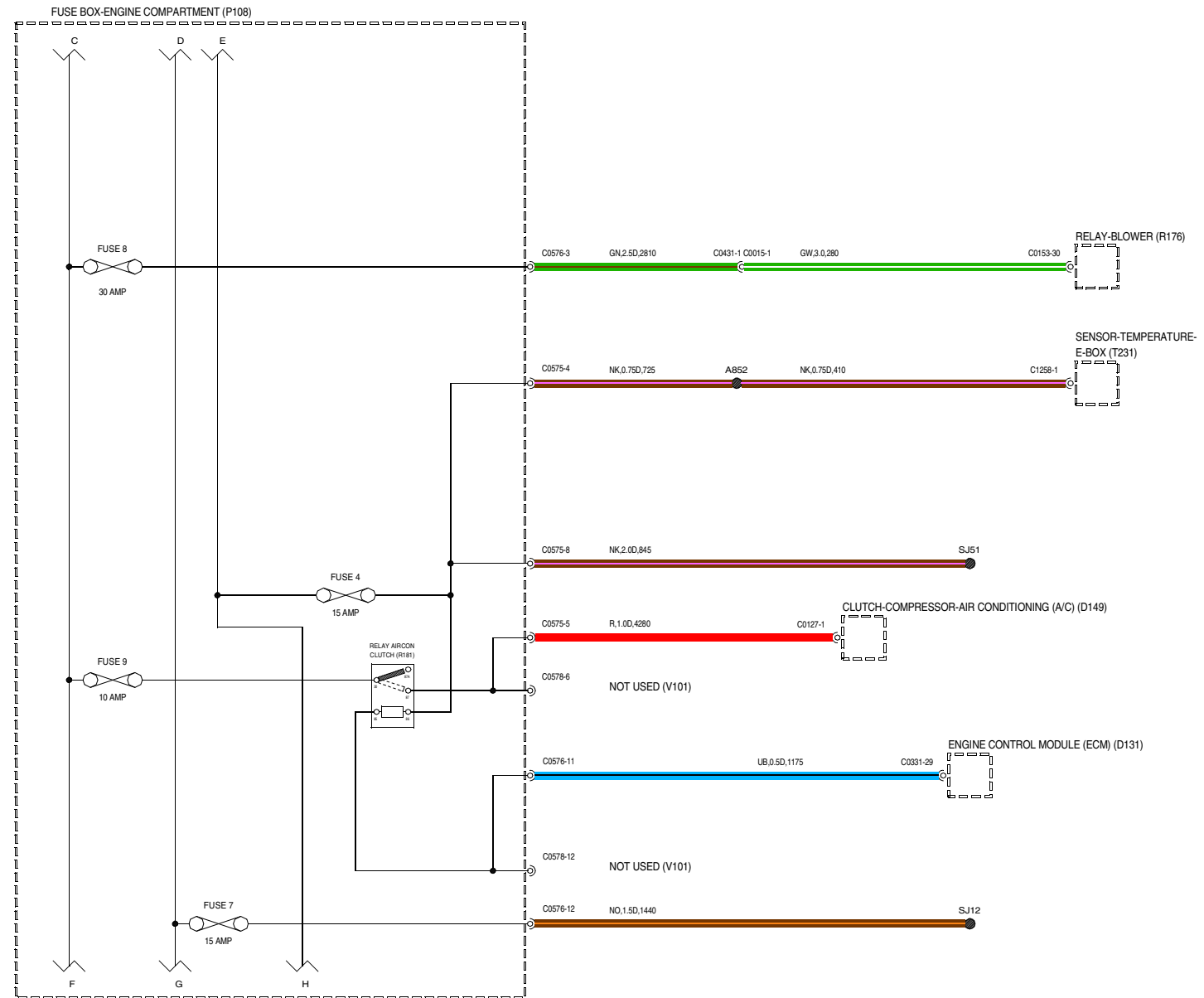
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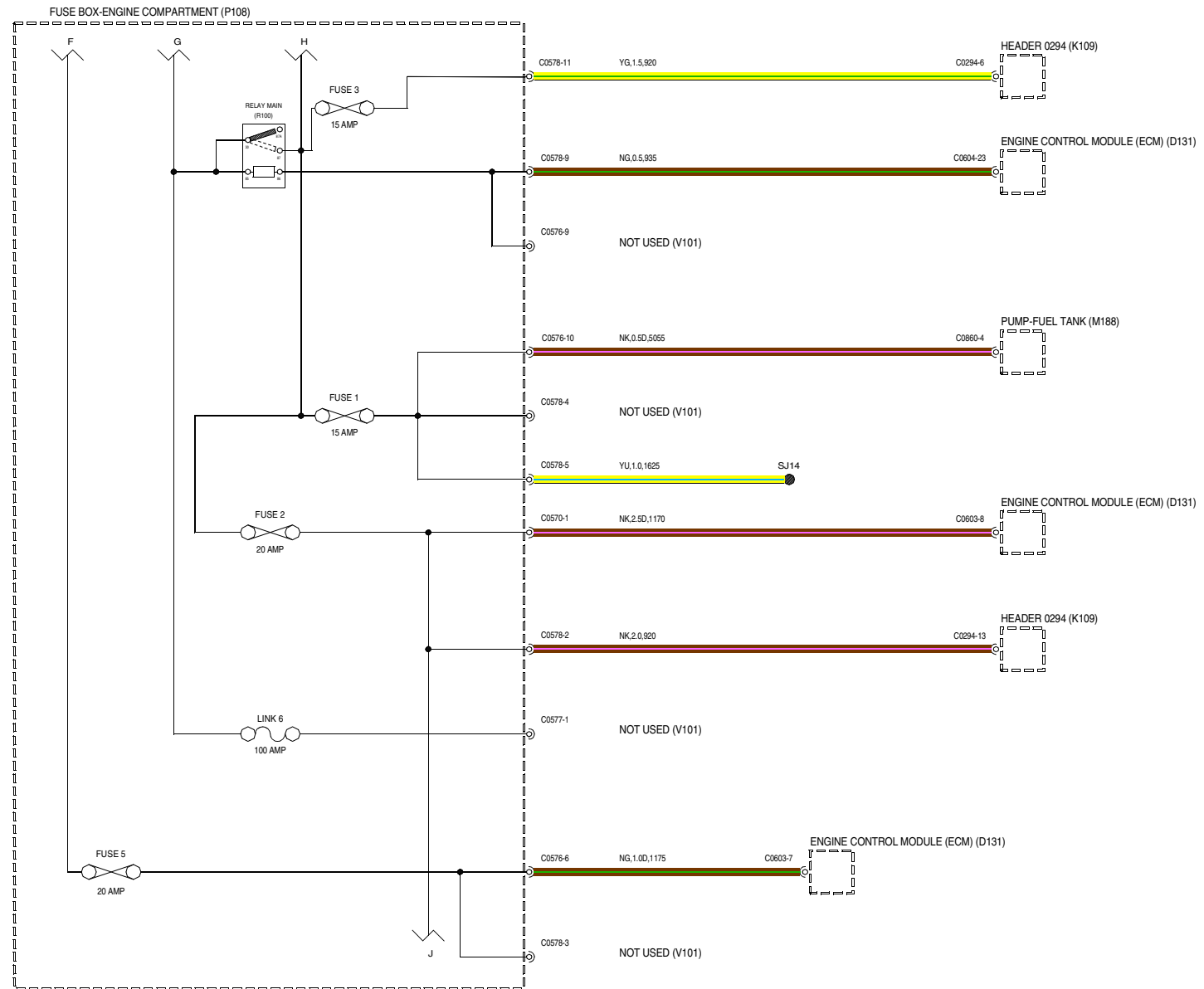
WVR004251-A-02

1 POWER DISTRIBUTION

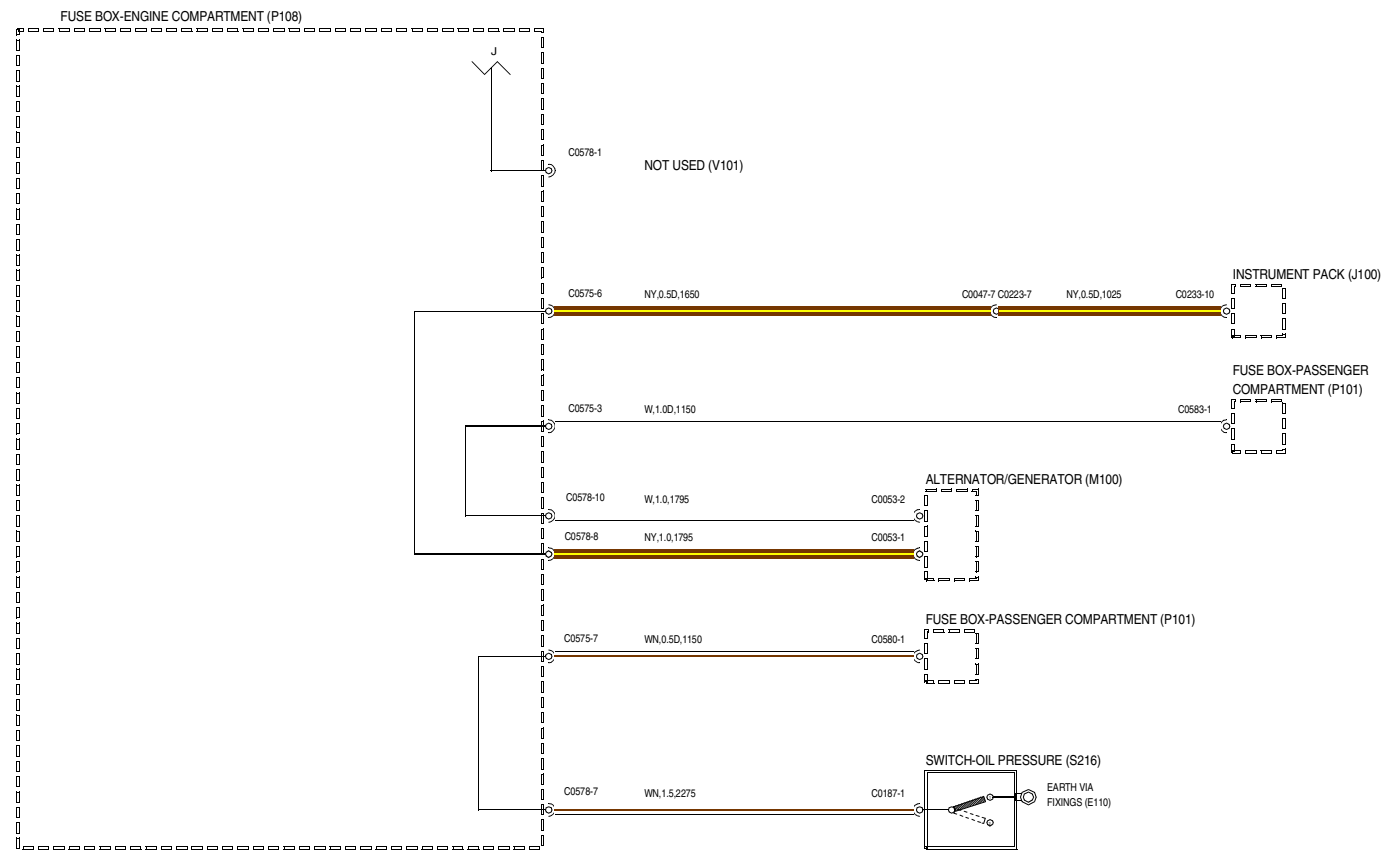
Engine Compartment Fuse Box - NAS



WFR004251-A-03

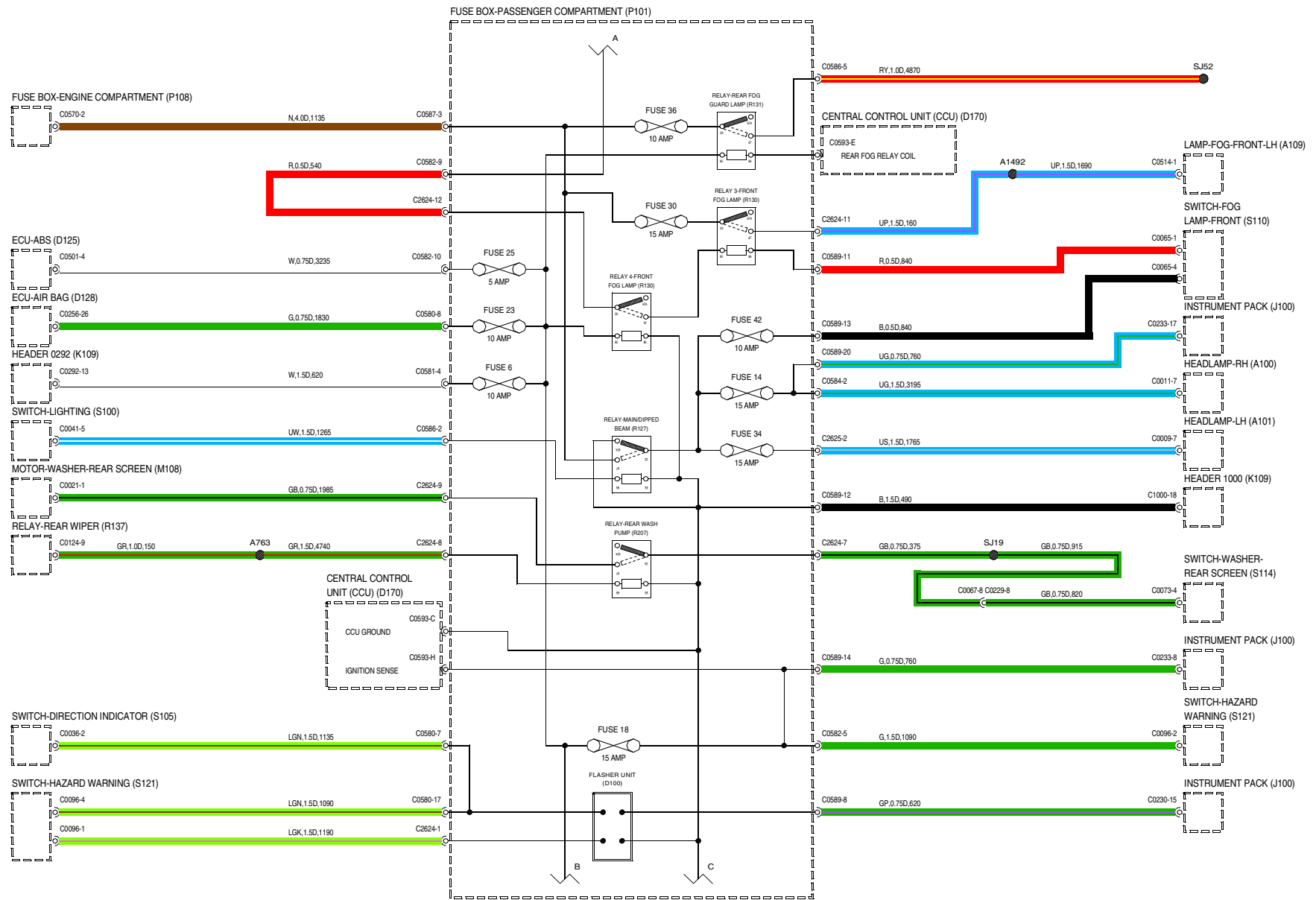


WR004251-A-04

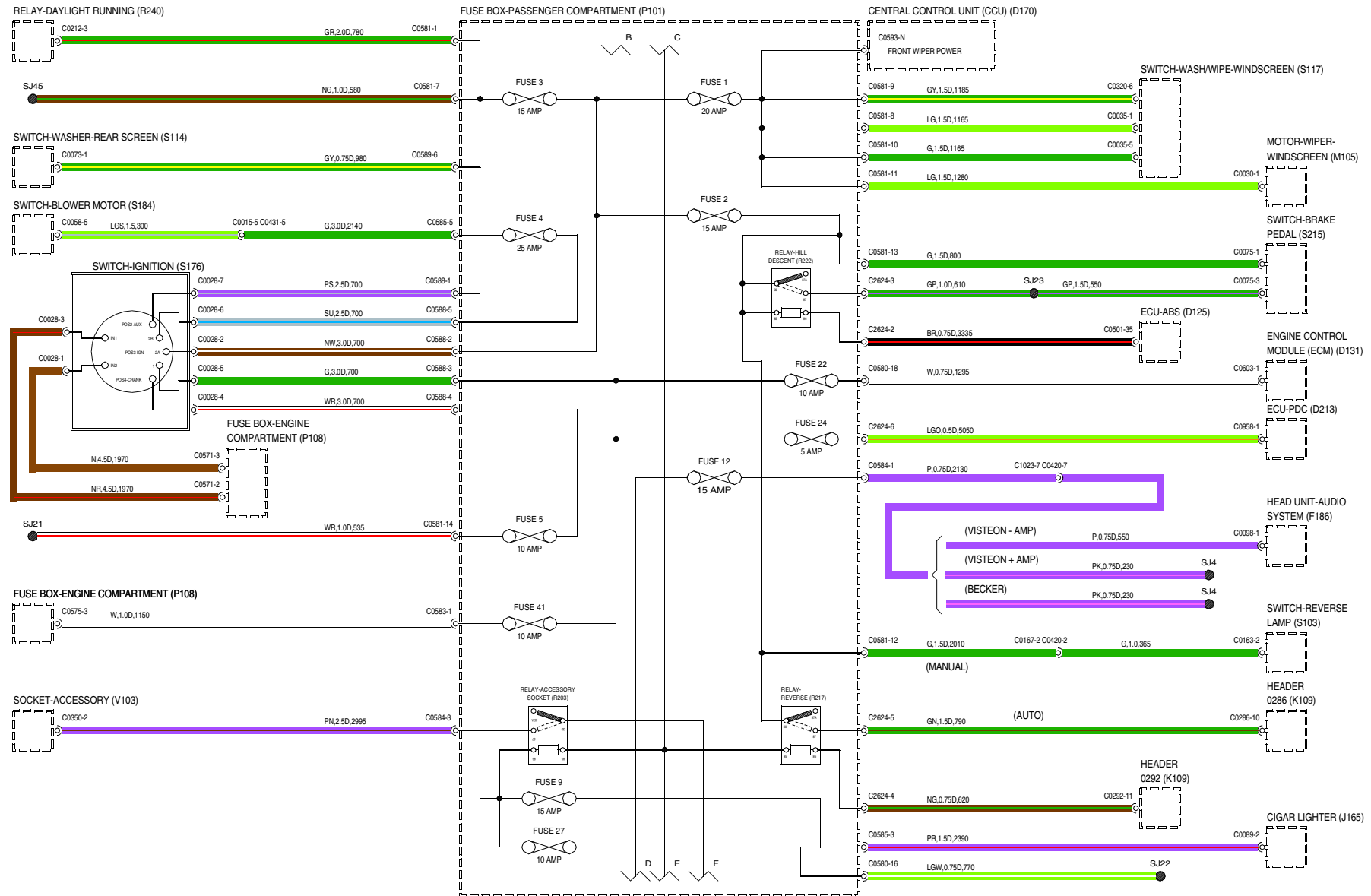


1 POWER DISTRIBUTION

Passenger Compartment Fuse Box - NAS



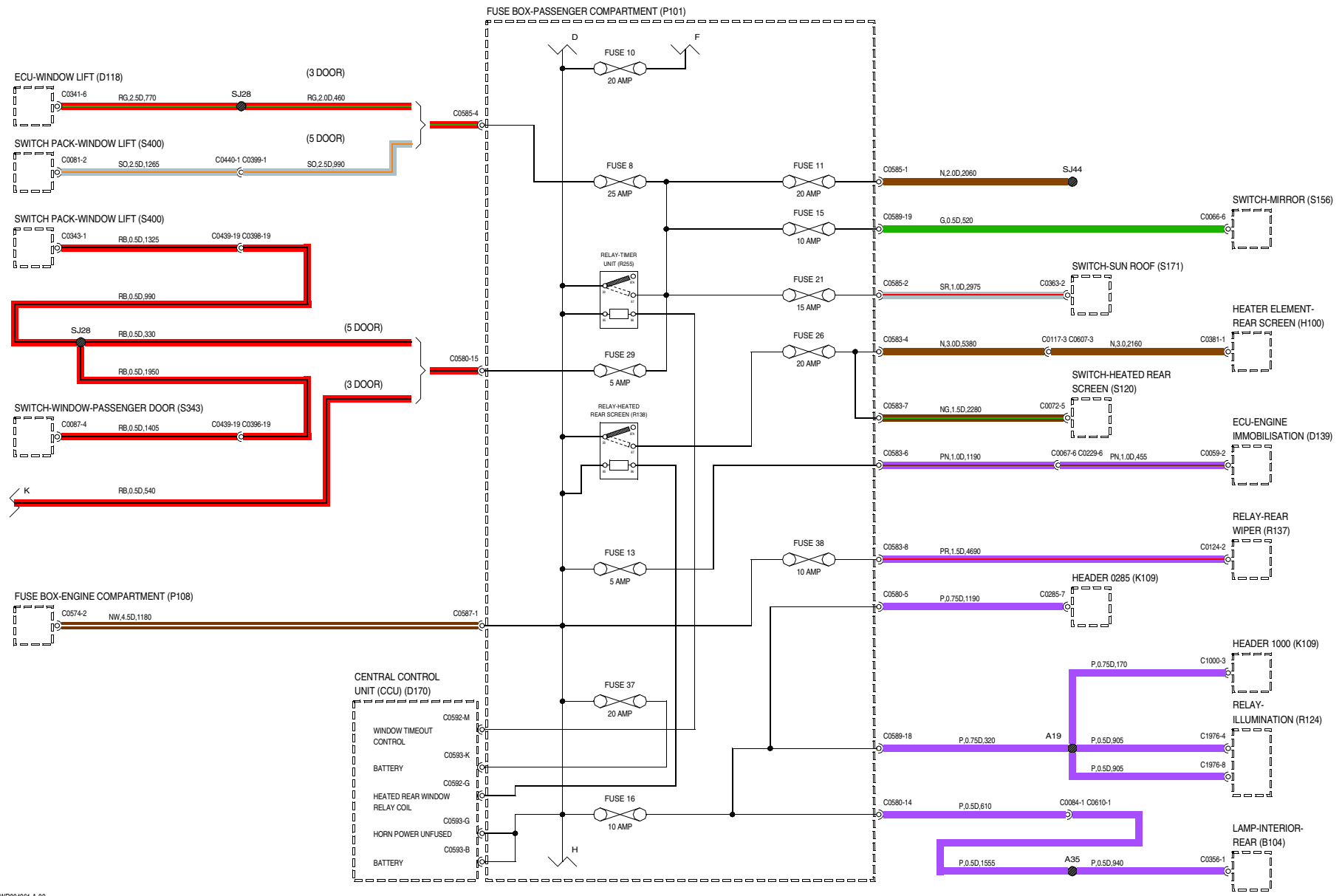
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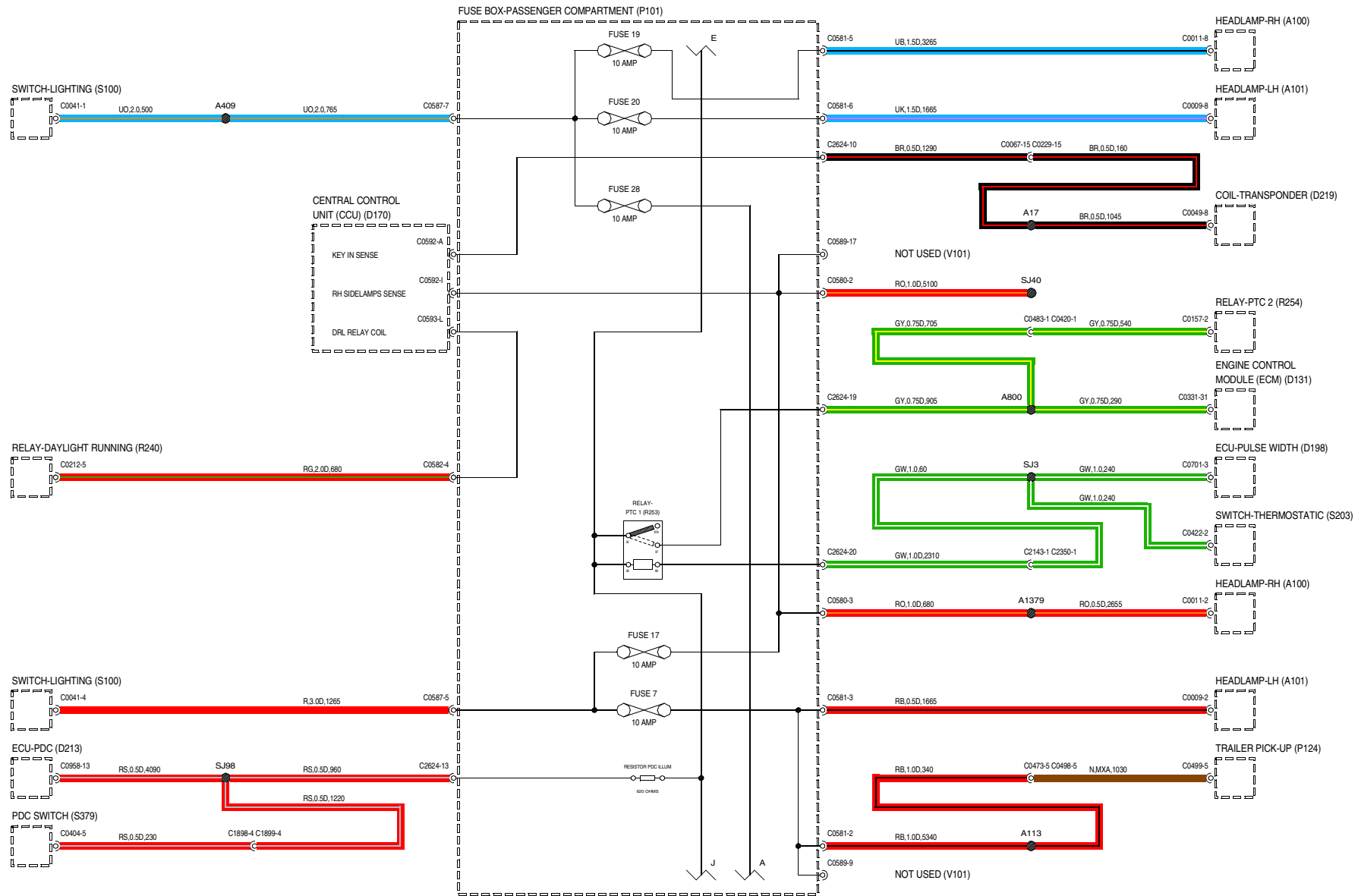
WR004261-A-02

1 POWER DISTRIBUTION

Passenger Compartment Fuse Box - NAS



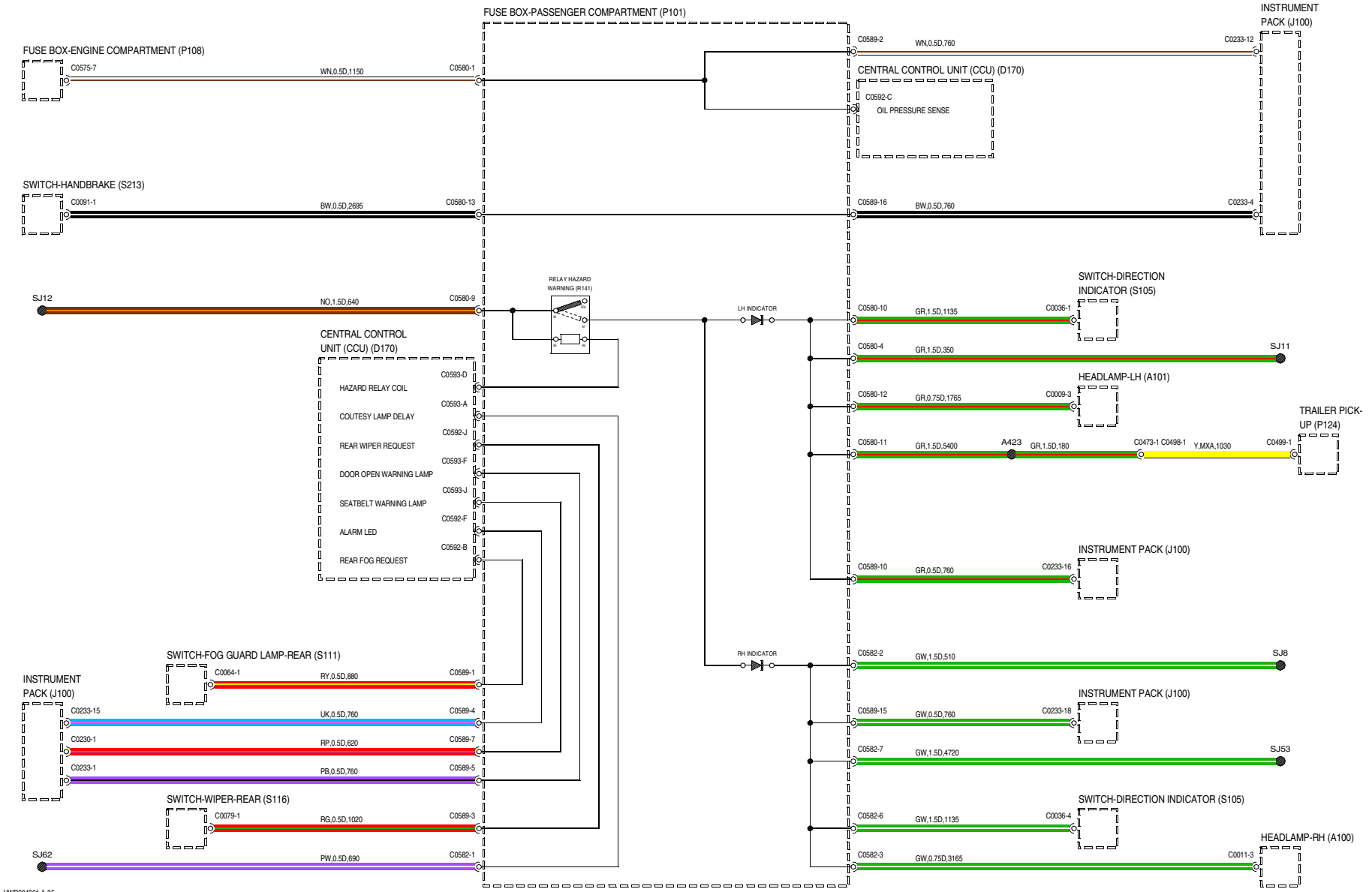
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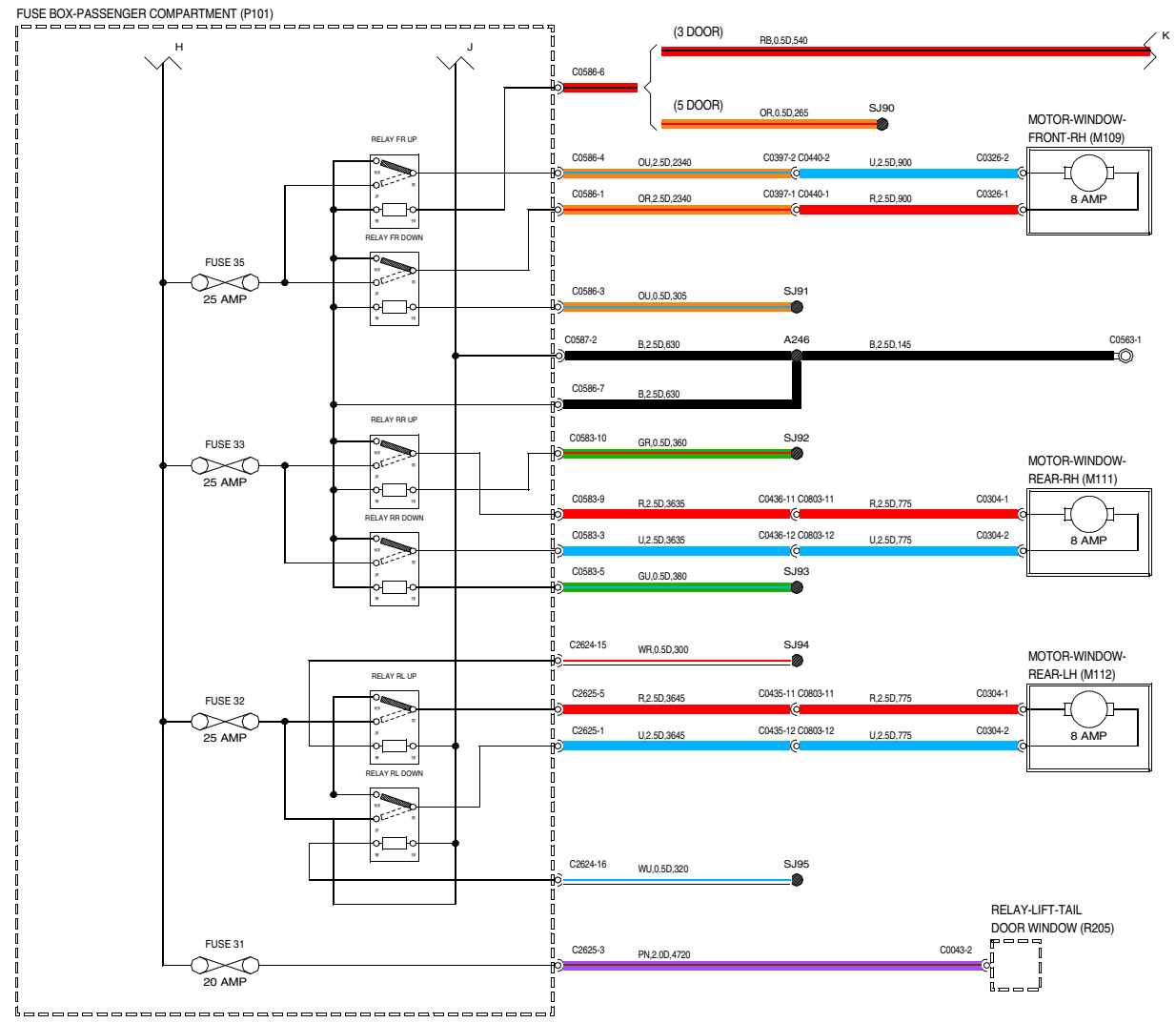
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1 POWER DISTRIBUTION

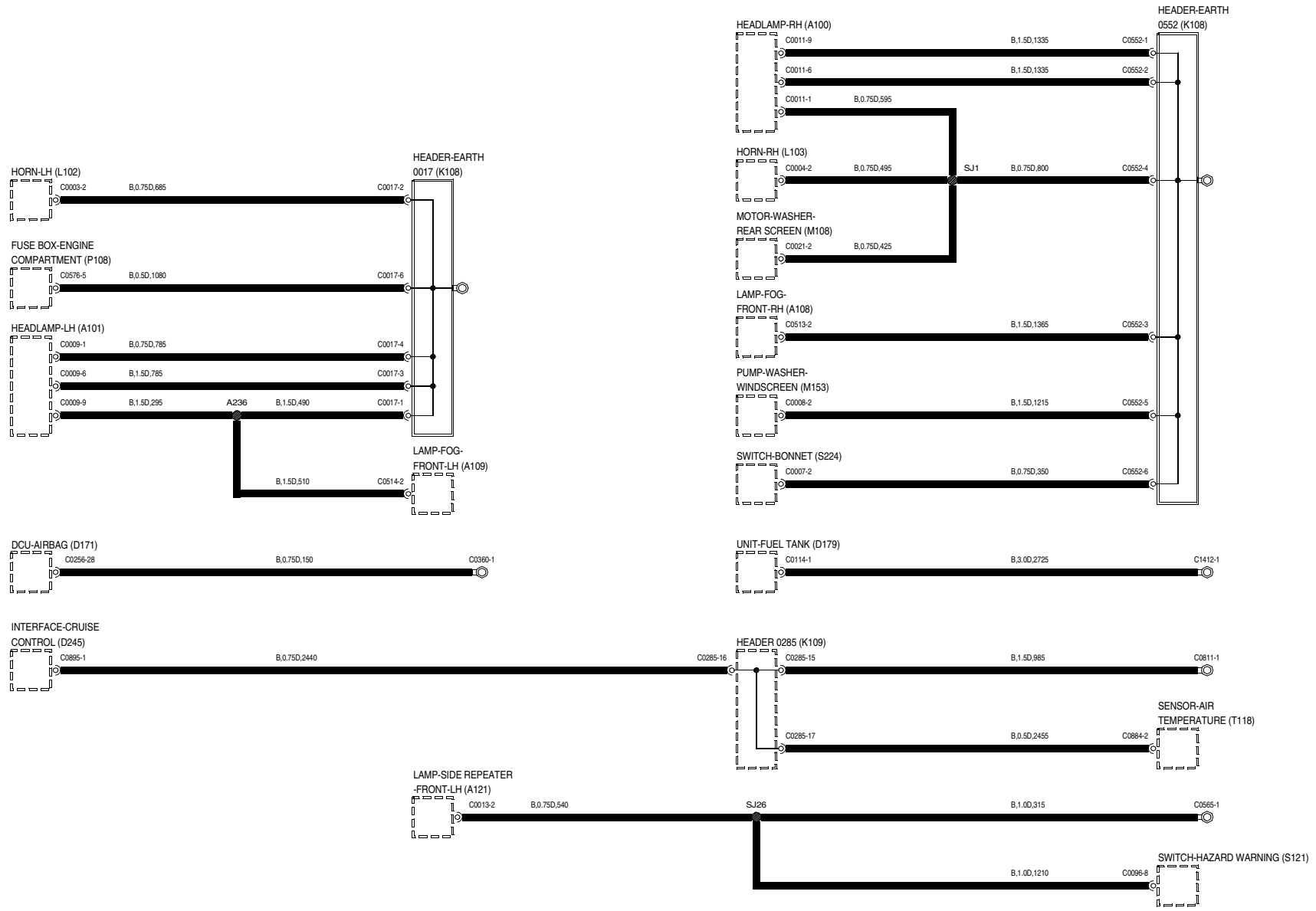
Passenger Compartment Fuse Box - NAS



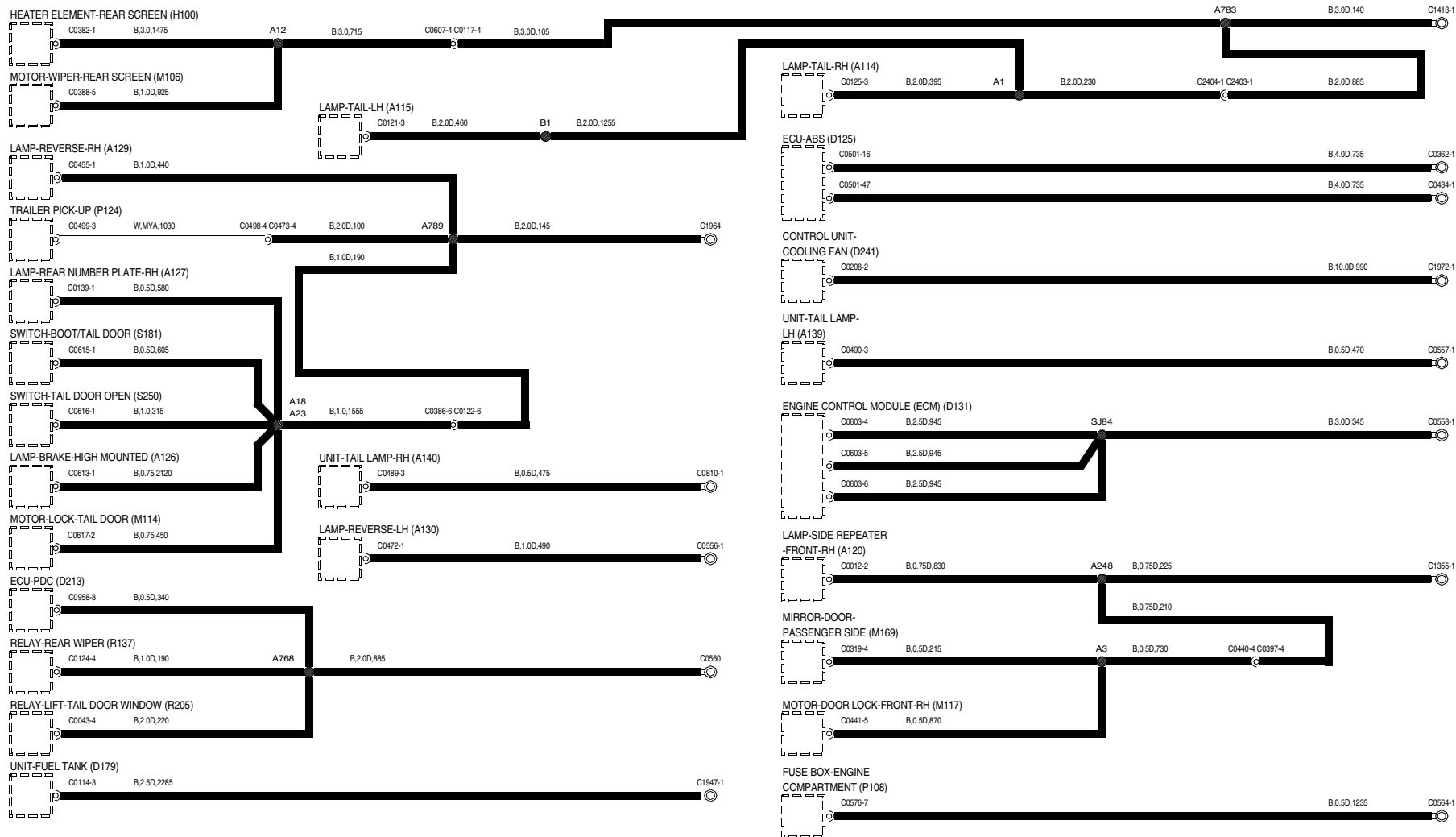
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WVR004261-A-06

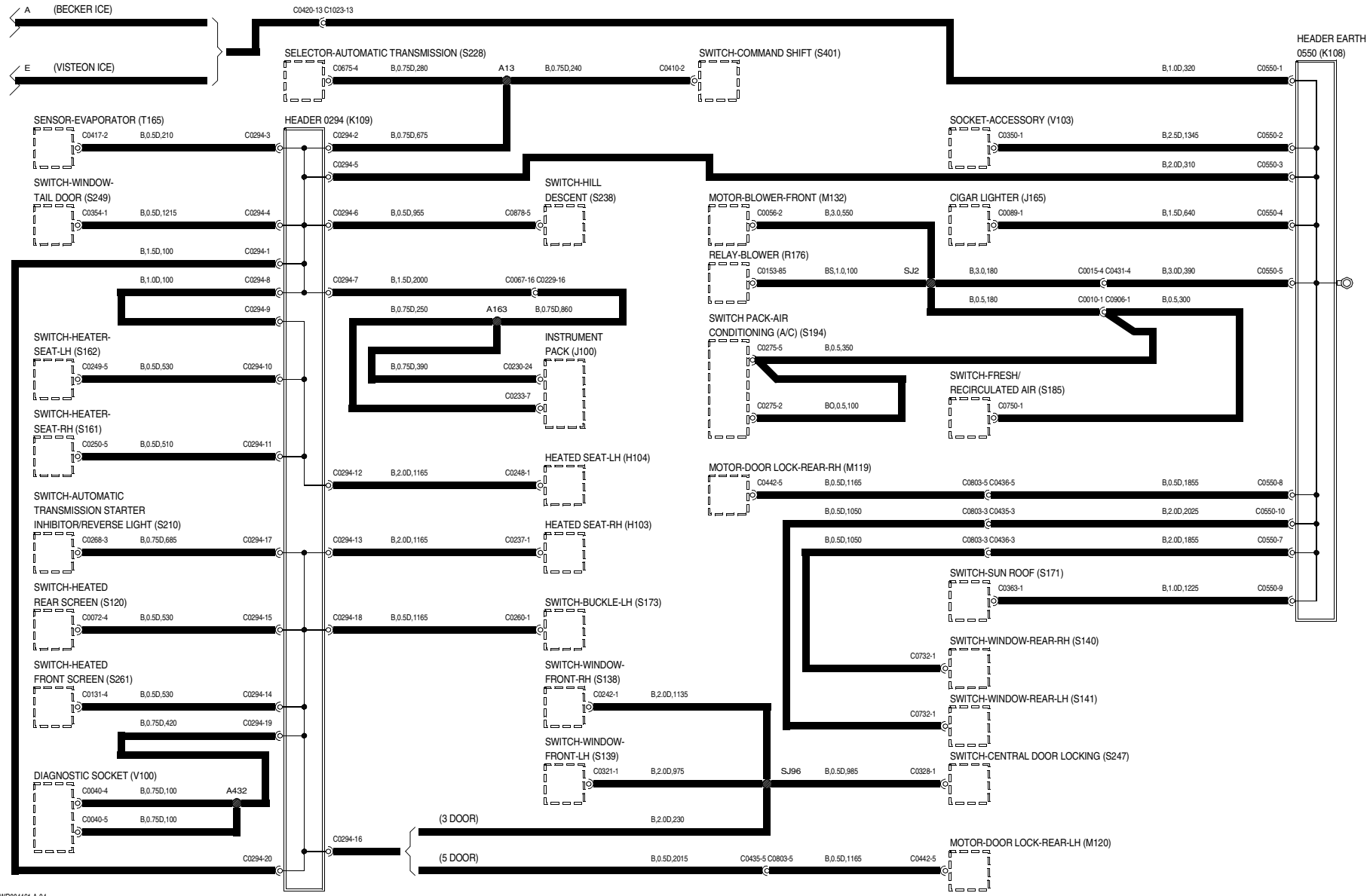


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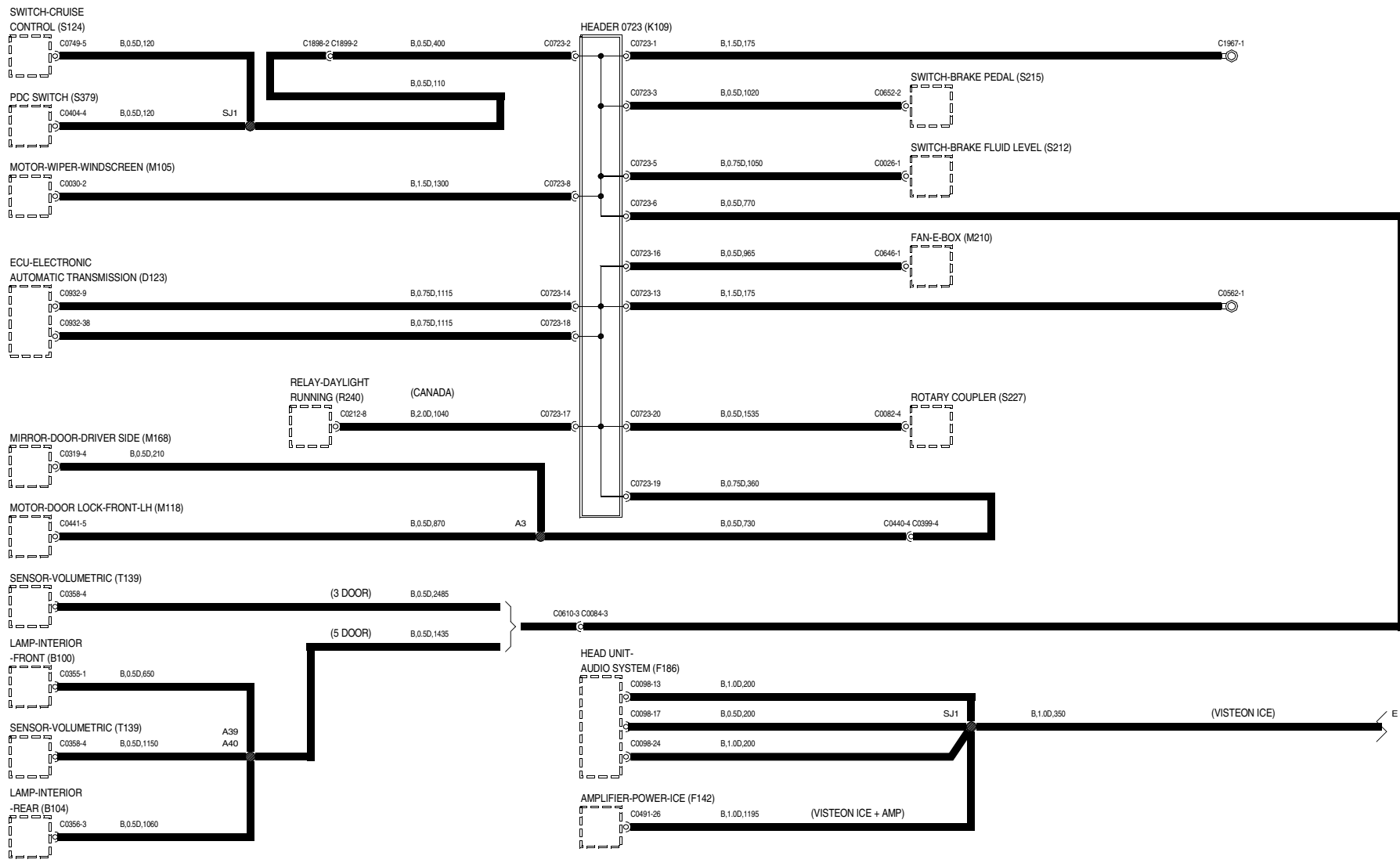


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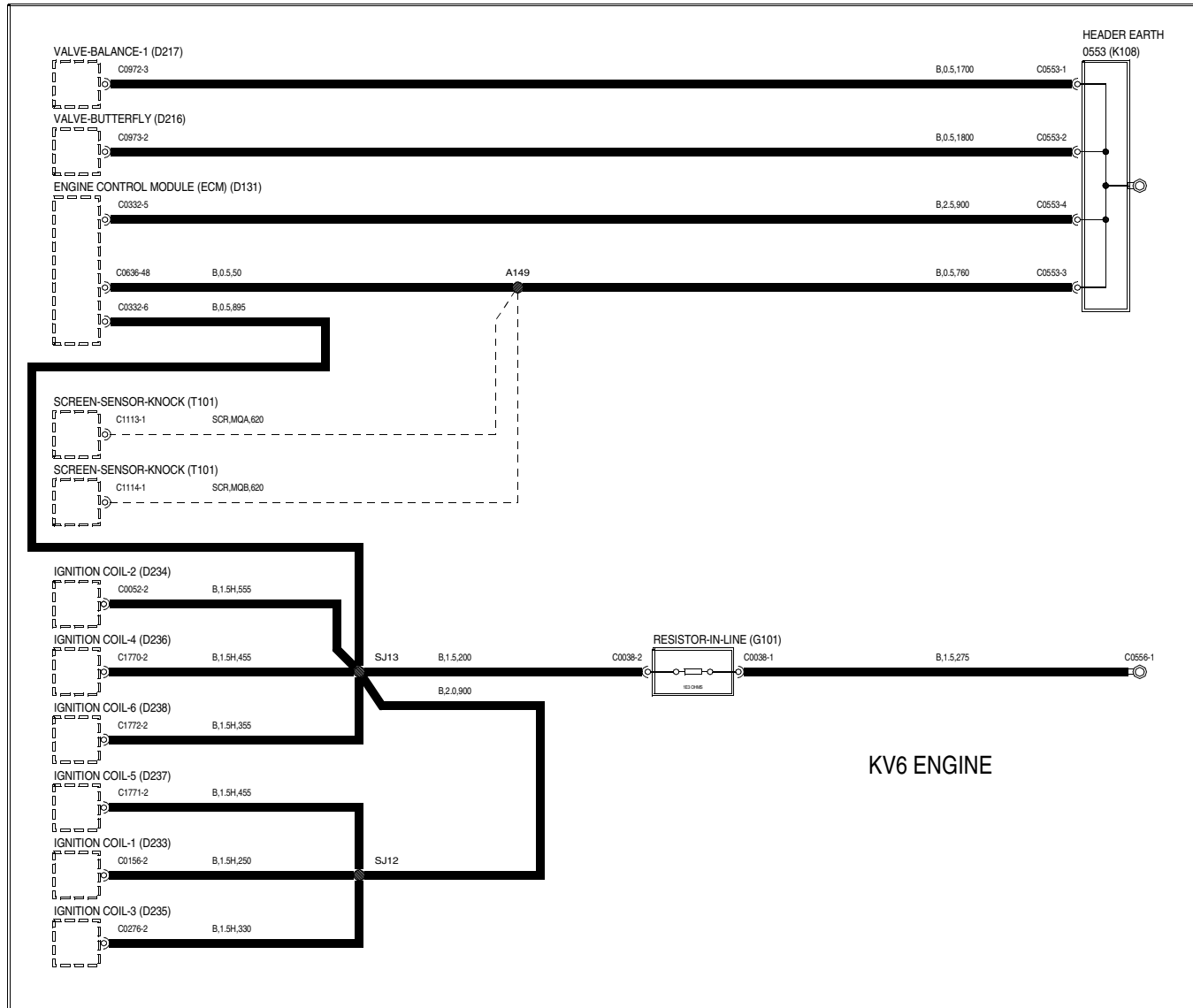
2 EARTH DISTRIBUTION



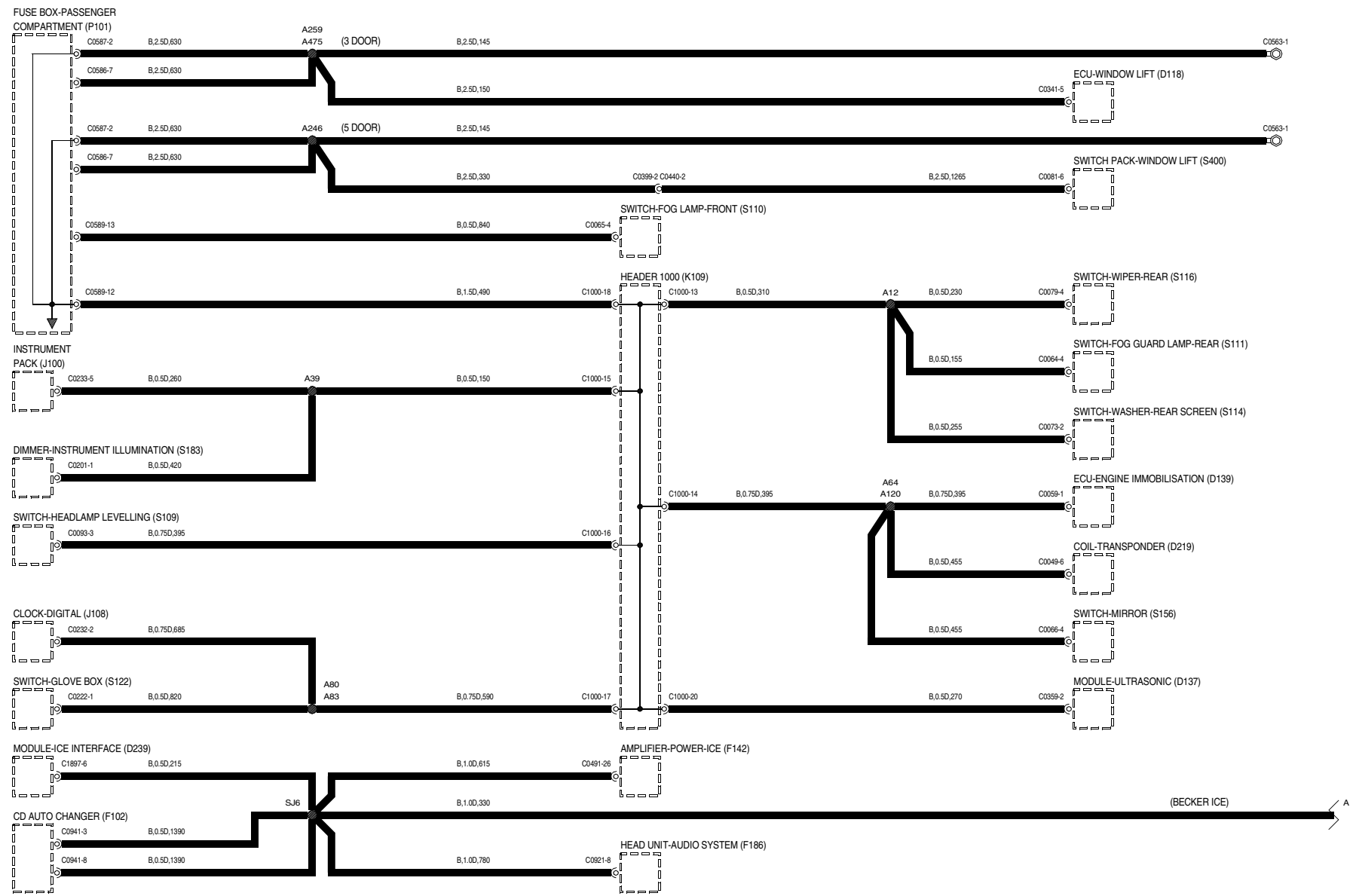
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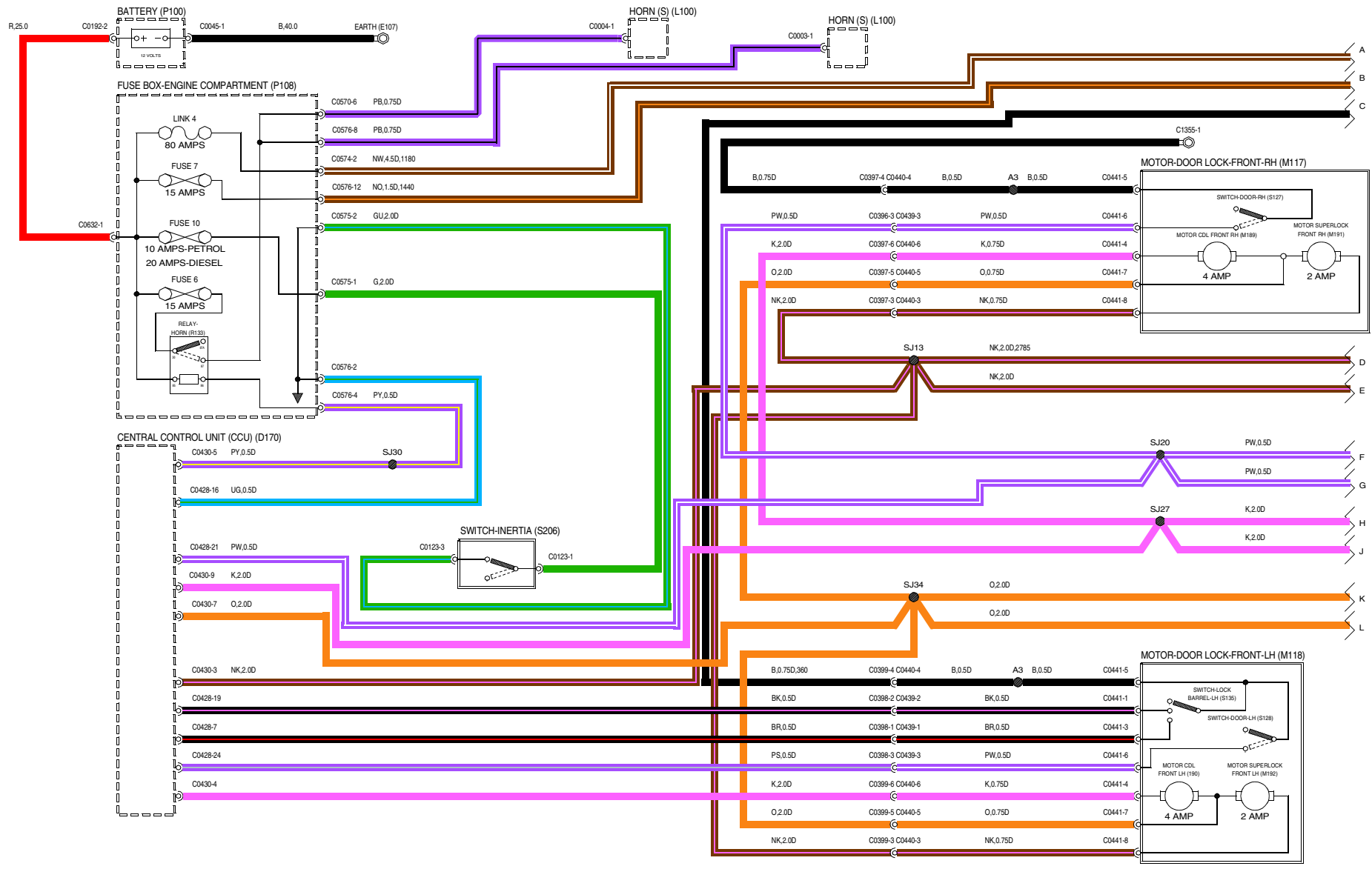


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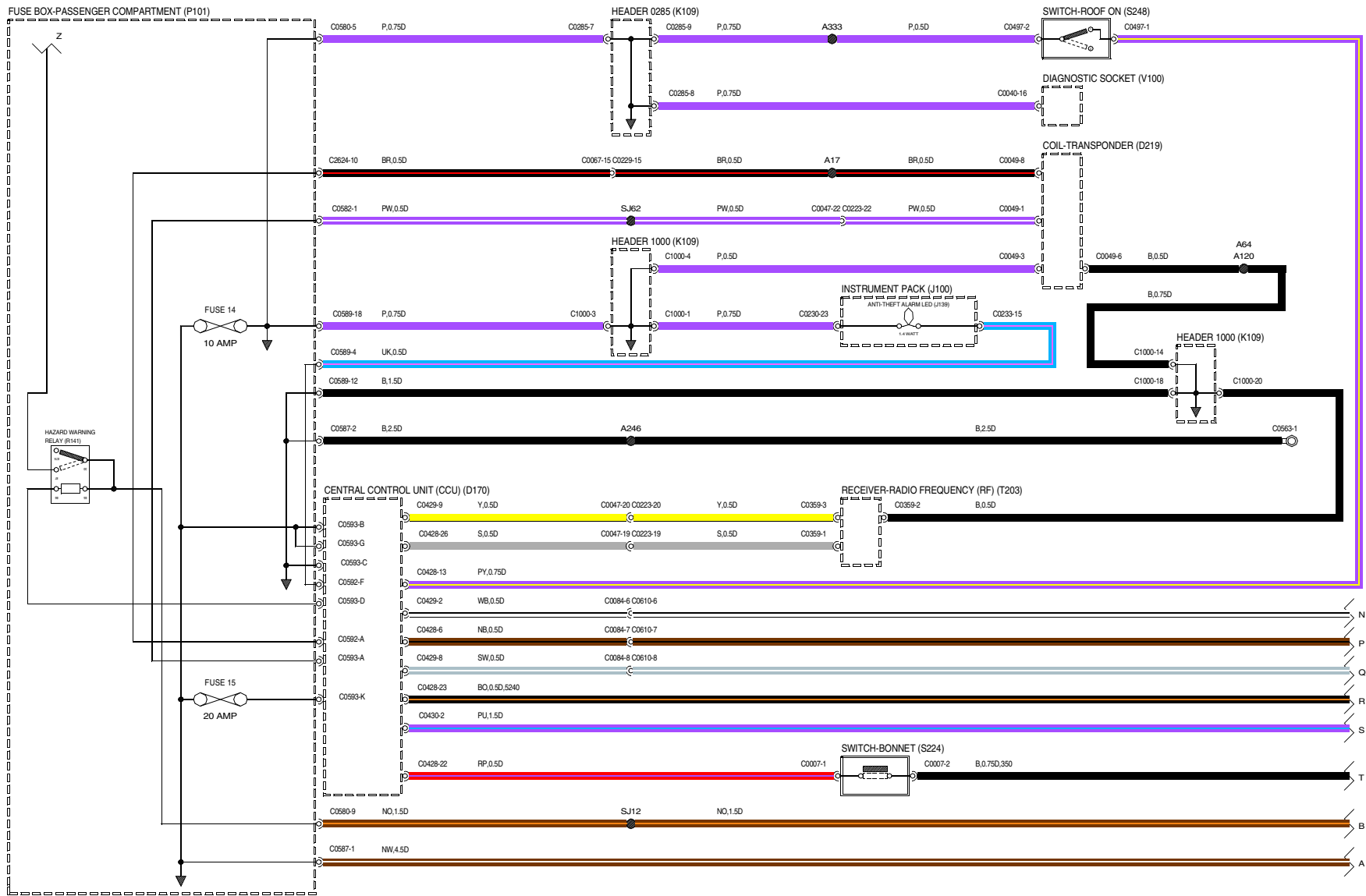
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3 ANTI-THEFT ALARM AND CENTRAL DOOR LOCKING



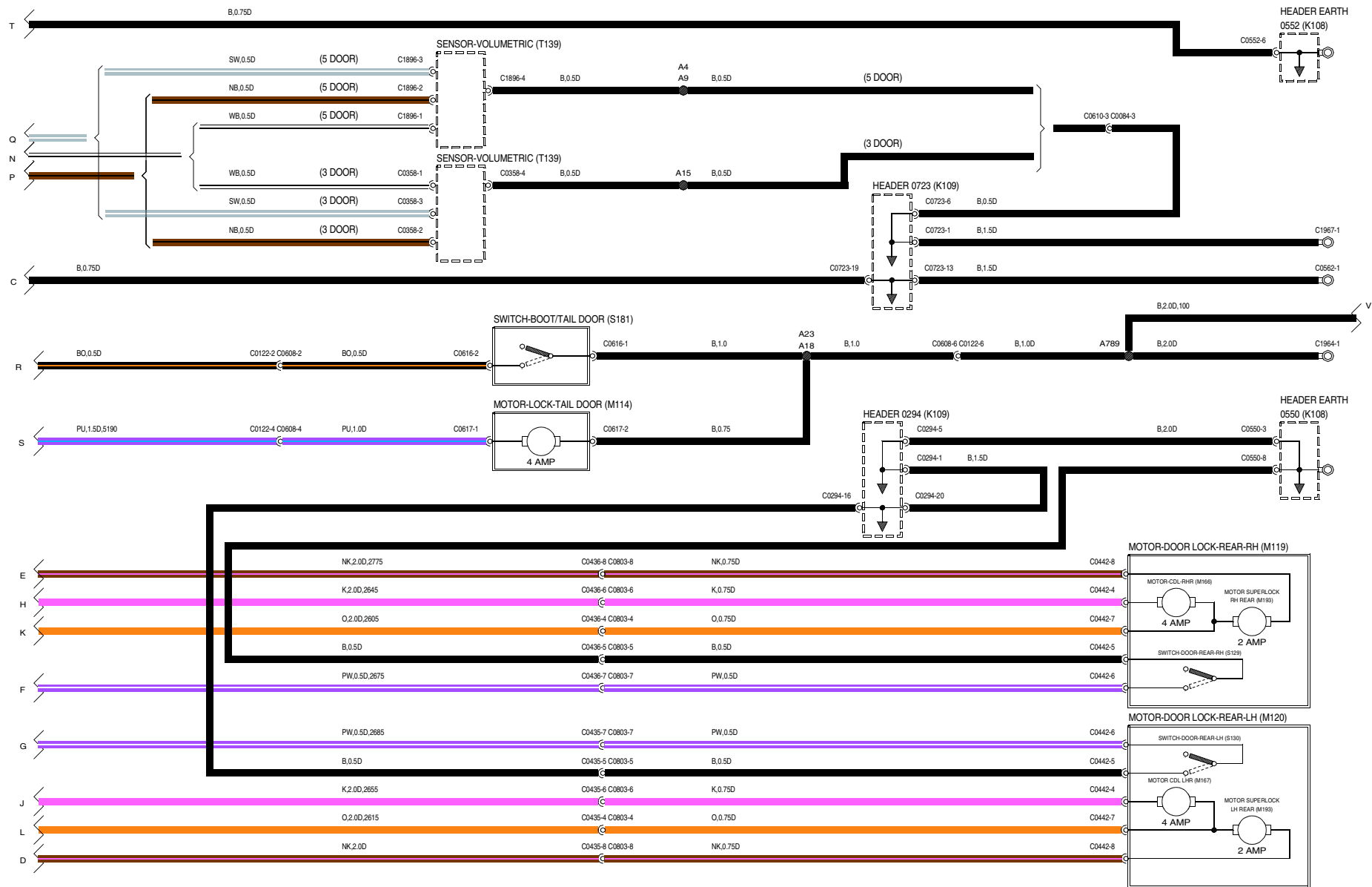
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3 ANTI-THEFT ALARM AND CENTRAL DOOR LOCKING



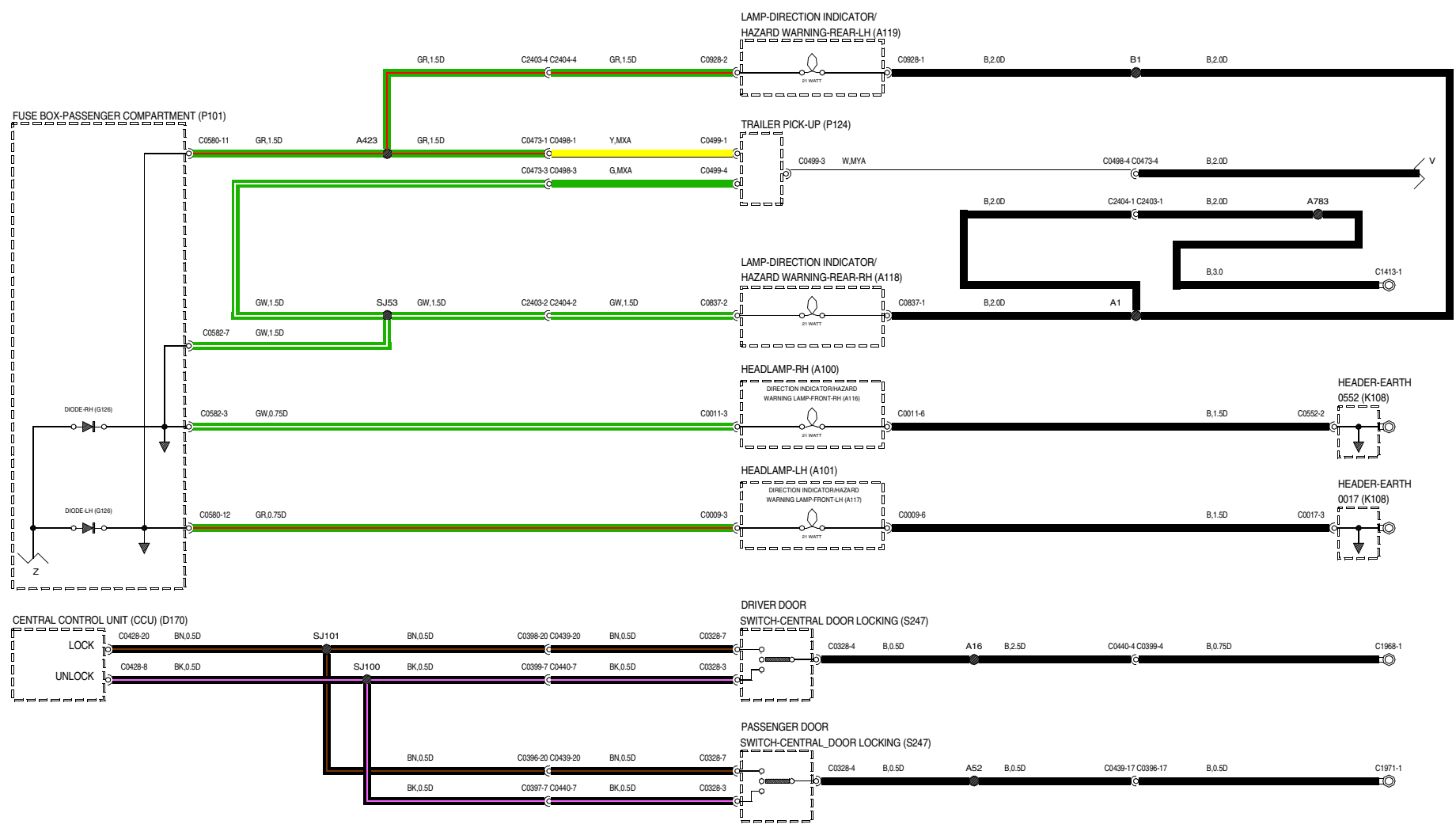
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3 ANTI-THEFT ALARM AND CENTRAL DOOR LOCKING



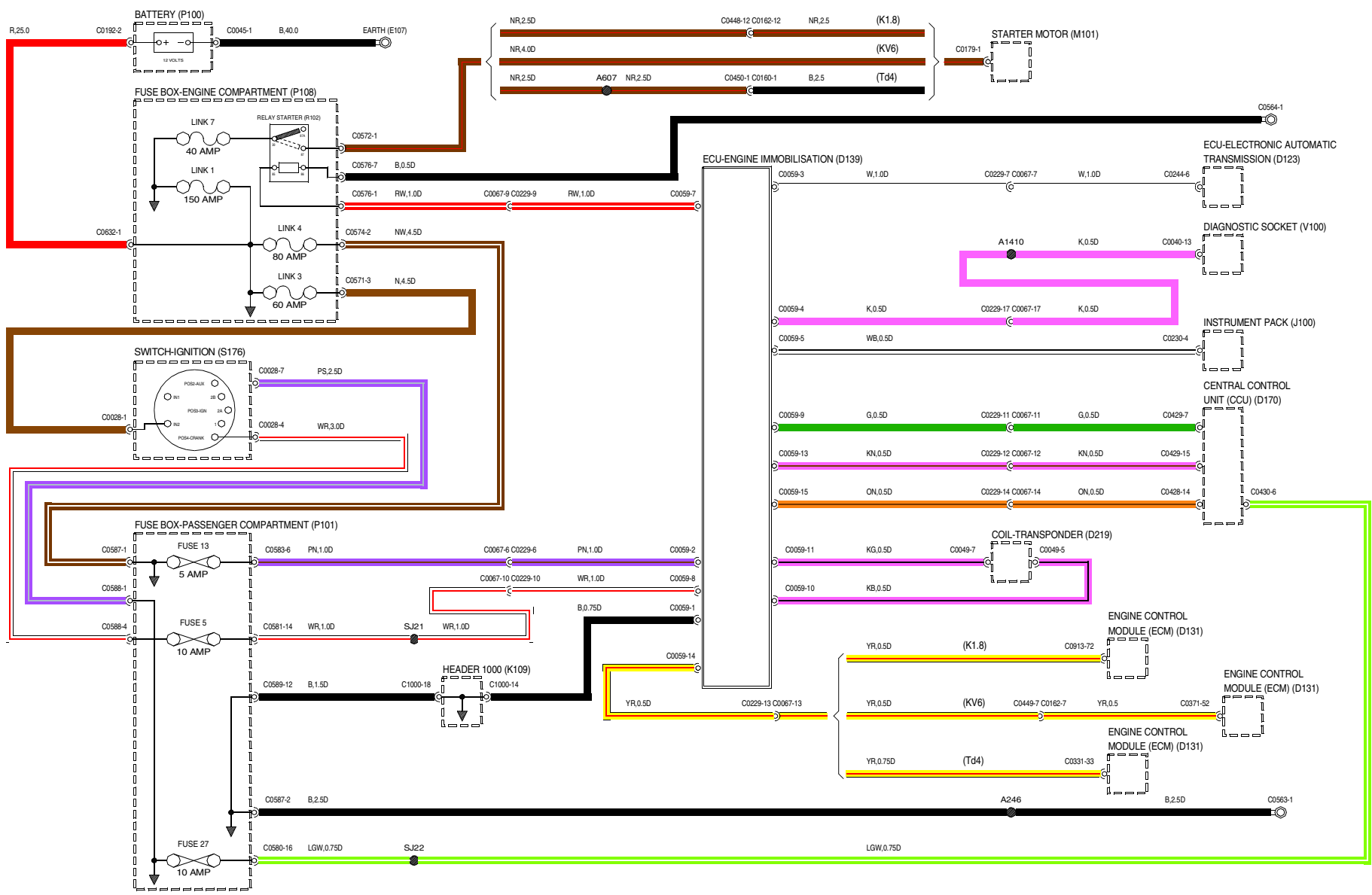
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3 ANTI-THEFT ALARM AND CENTRAL DOOR LOCKING

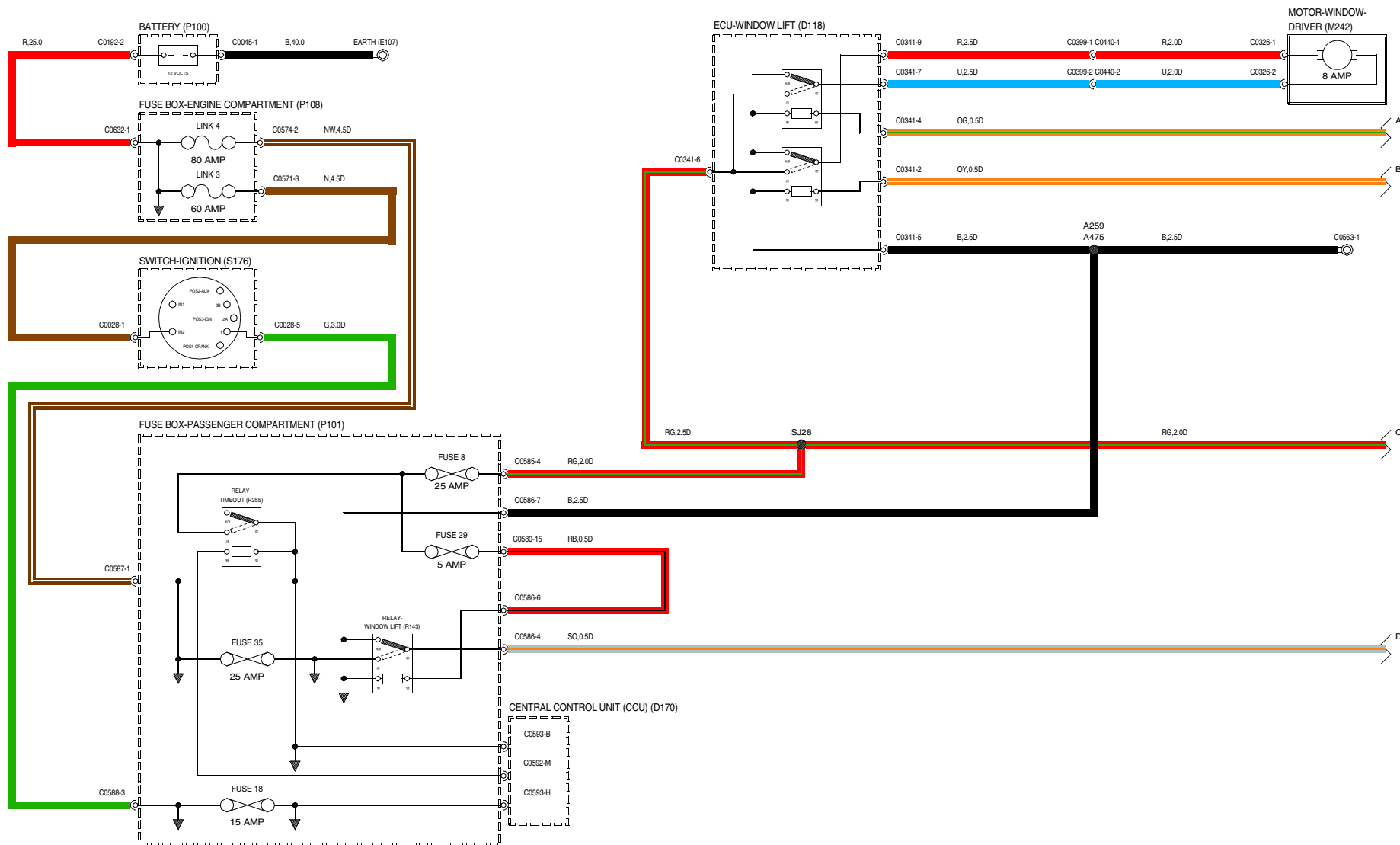


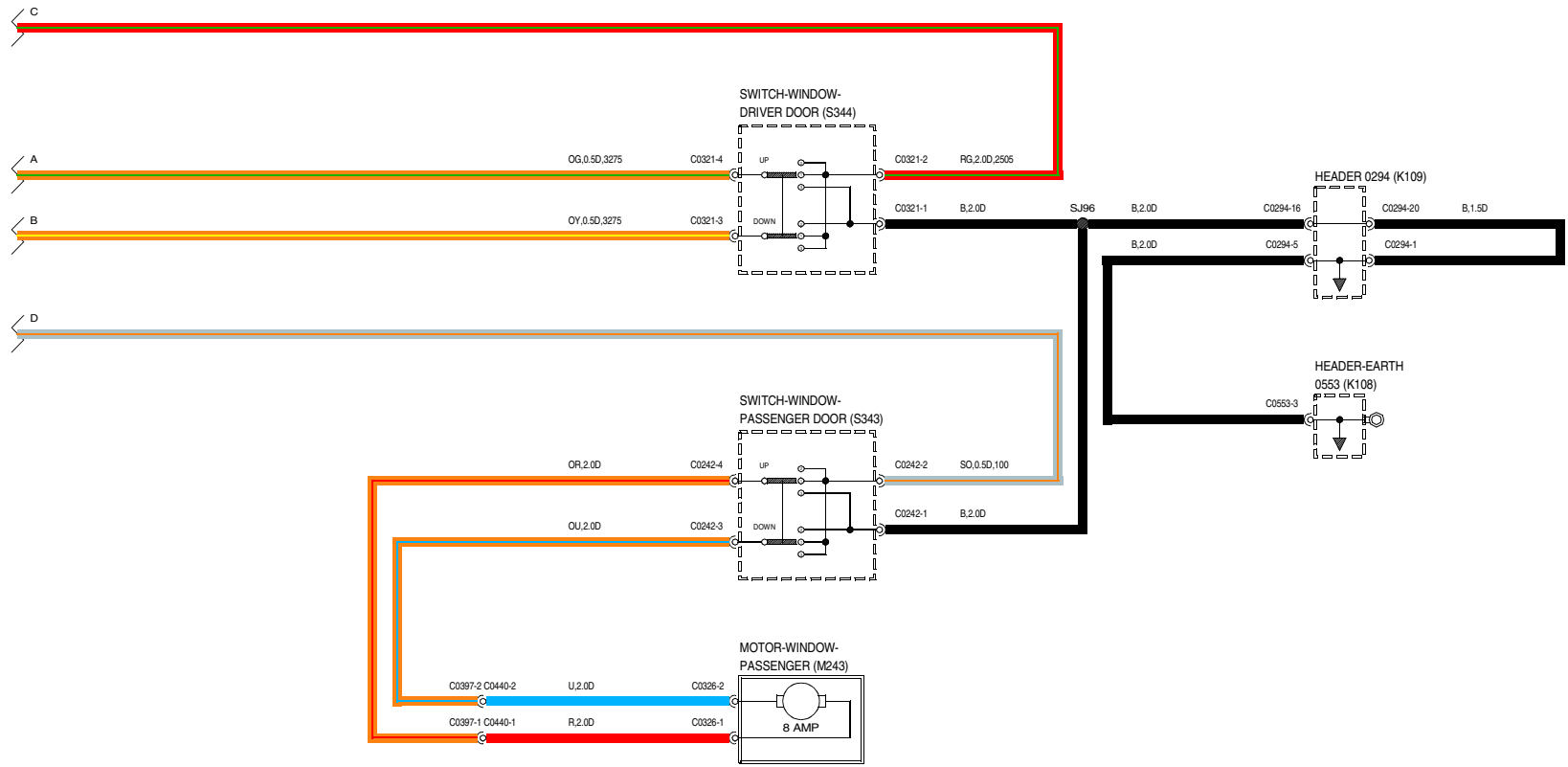
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3 ENGINE IMMOBILISATION

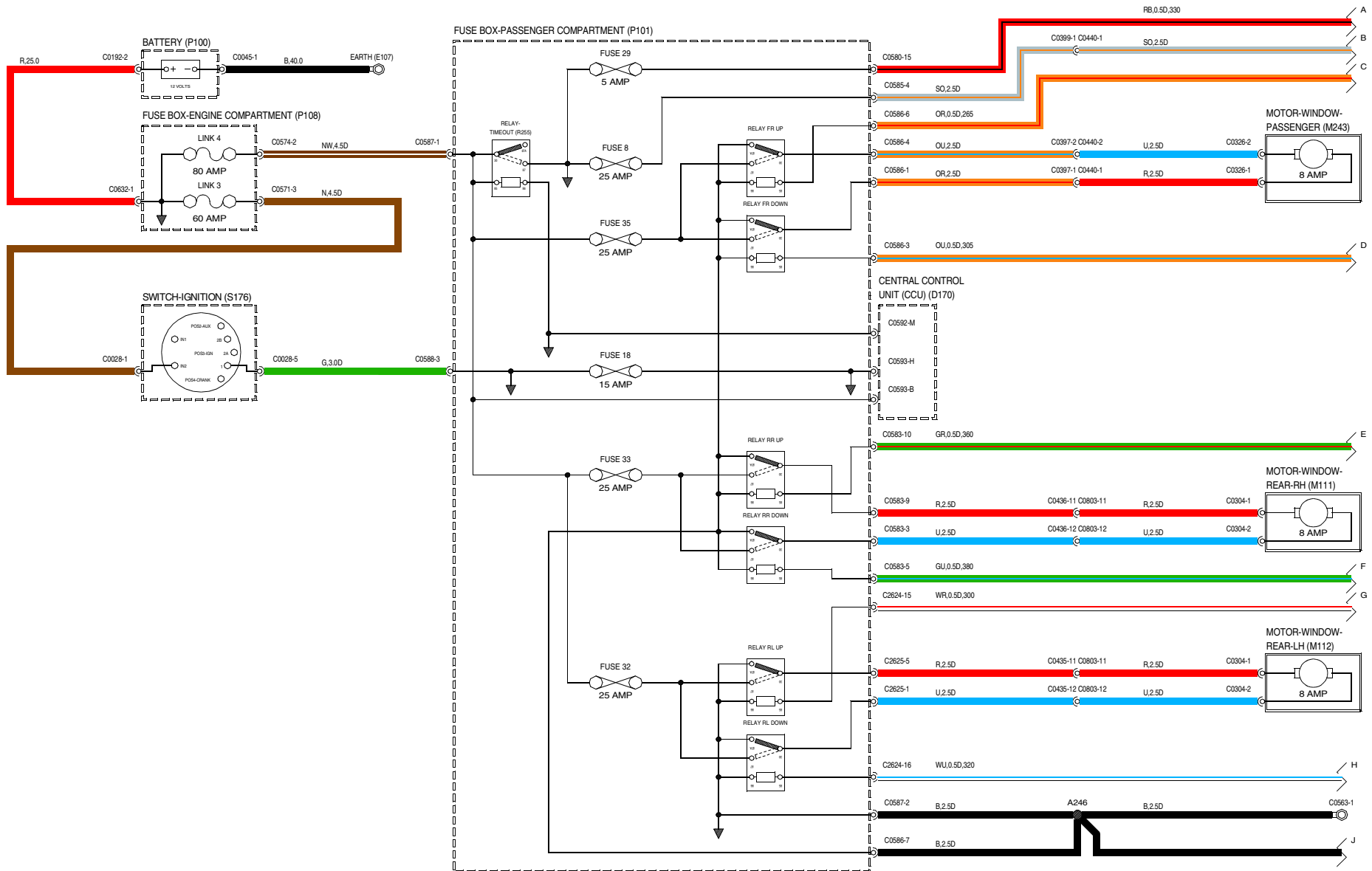


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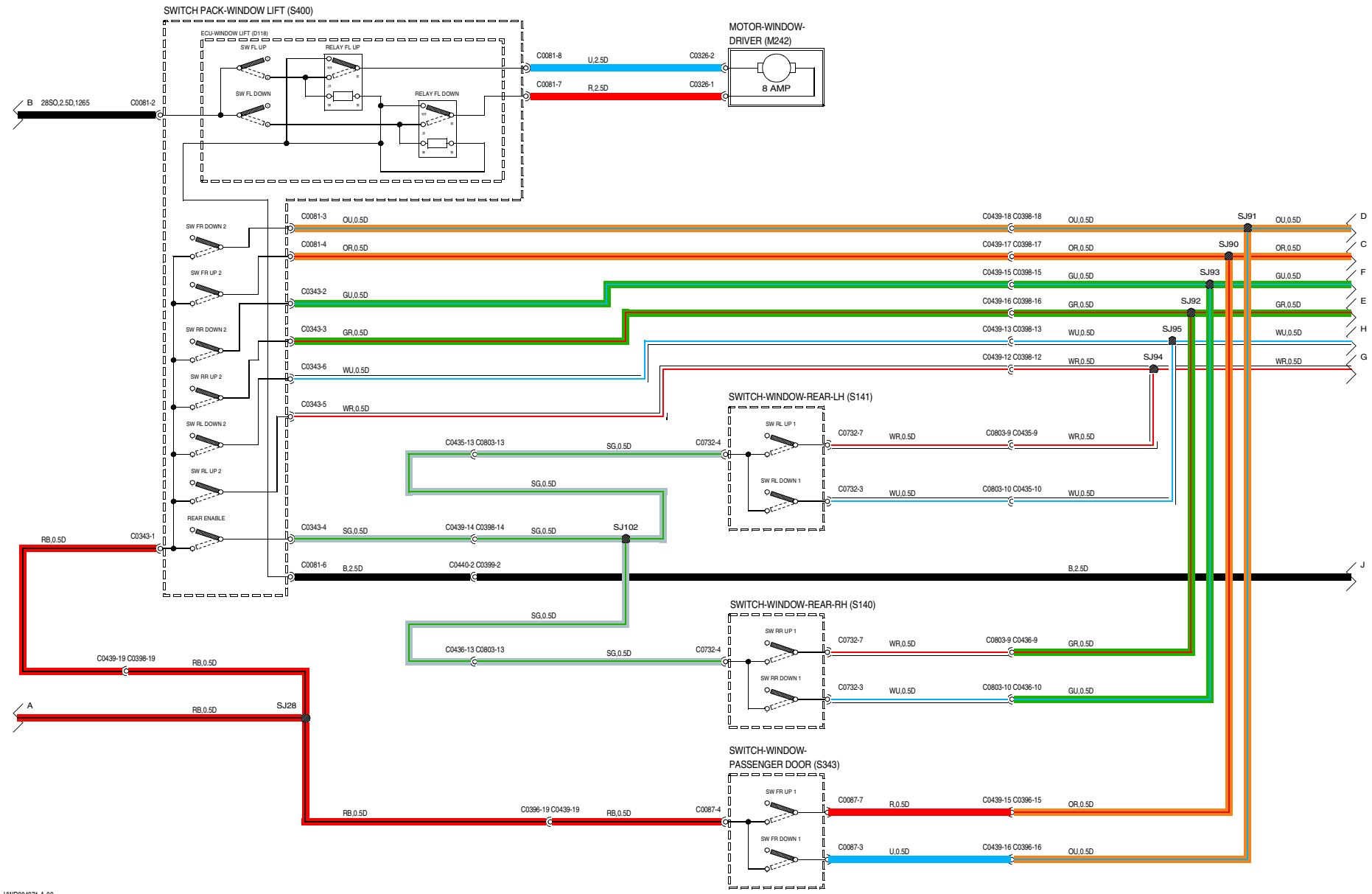




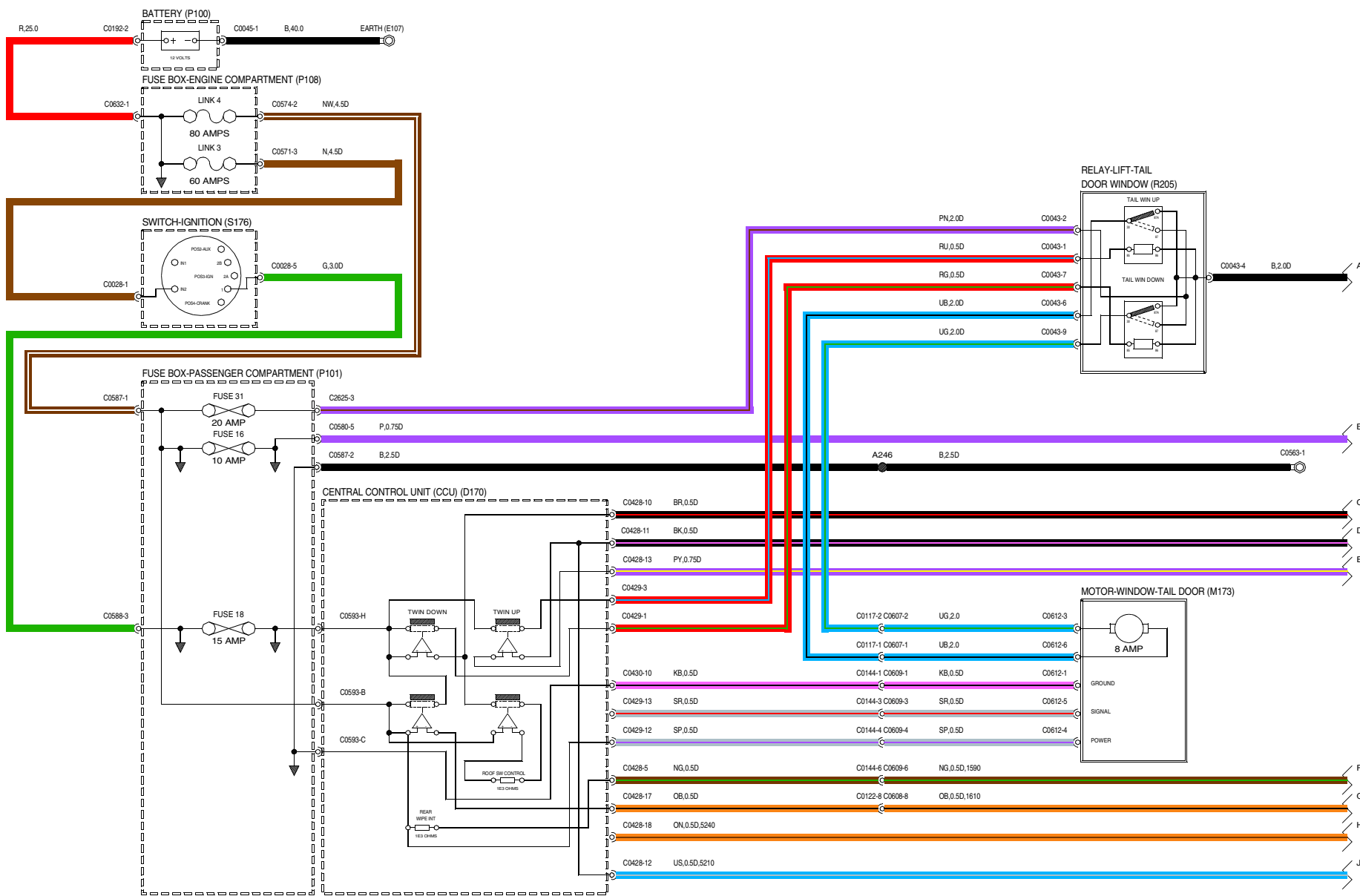
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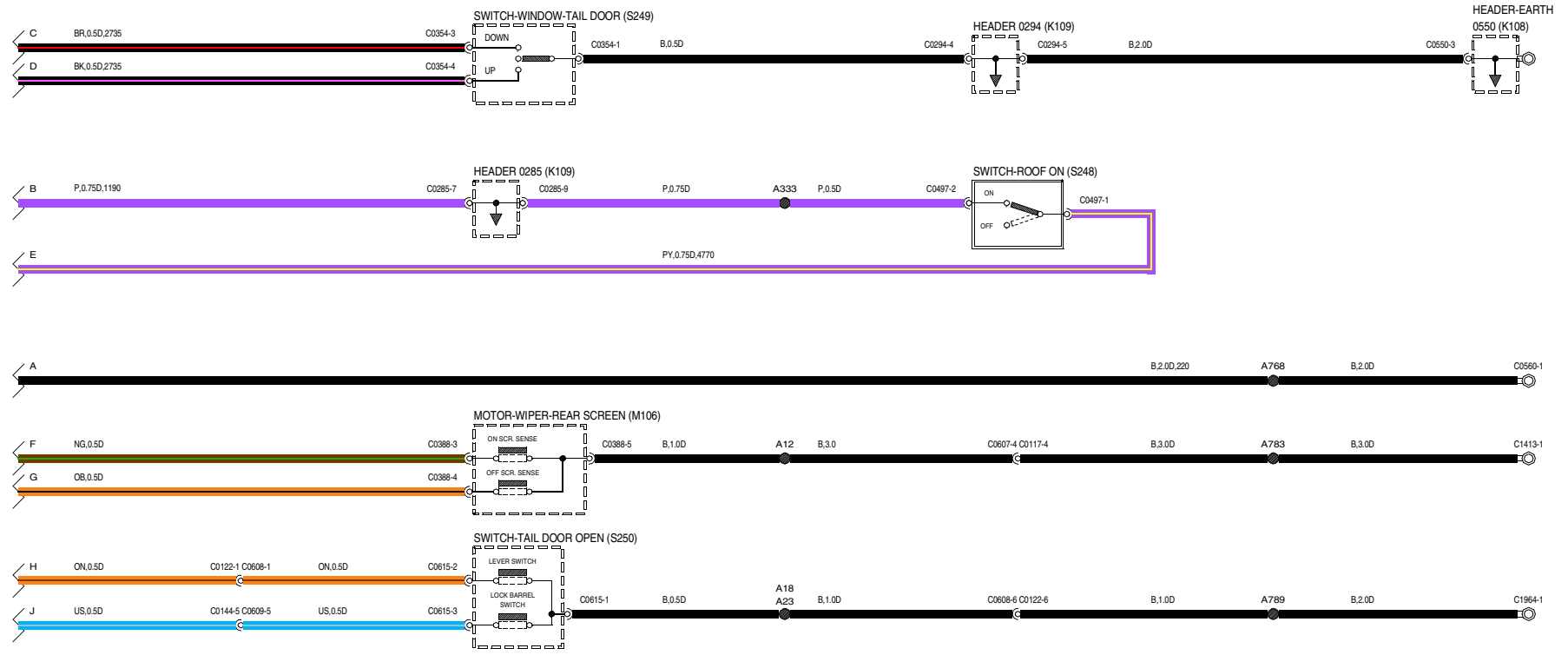
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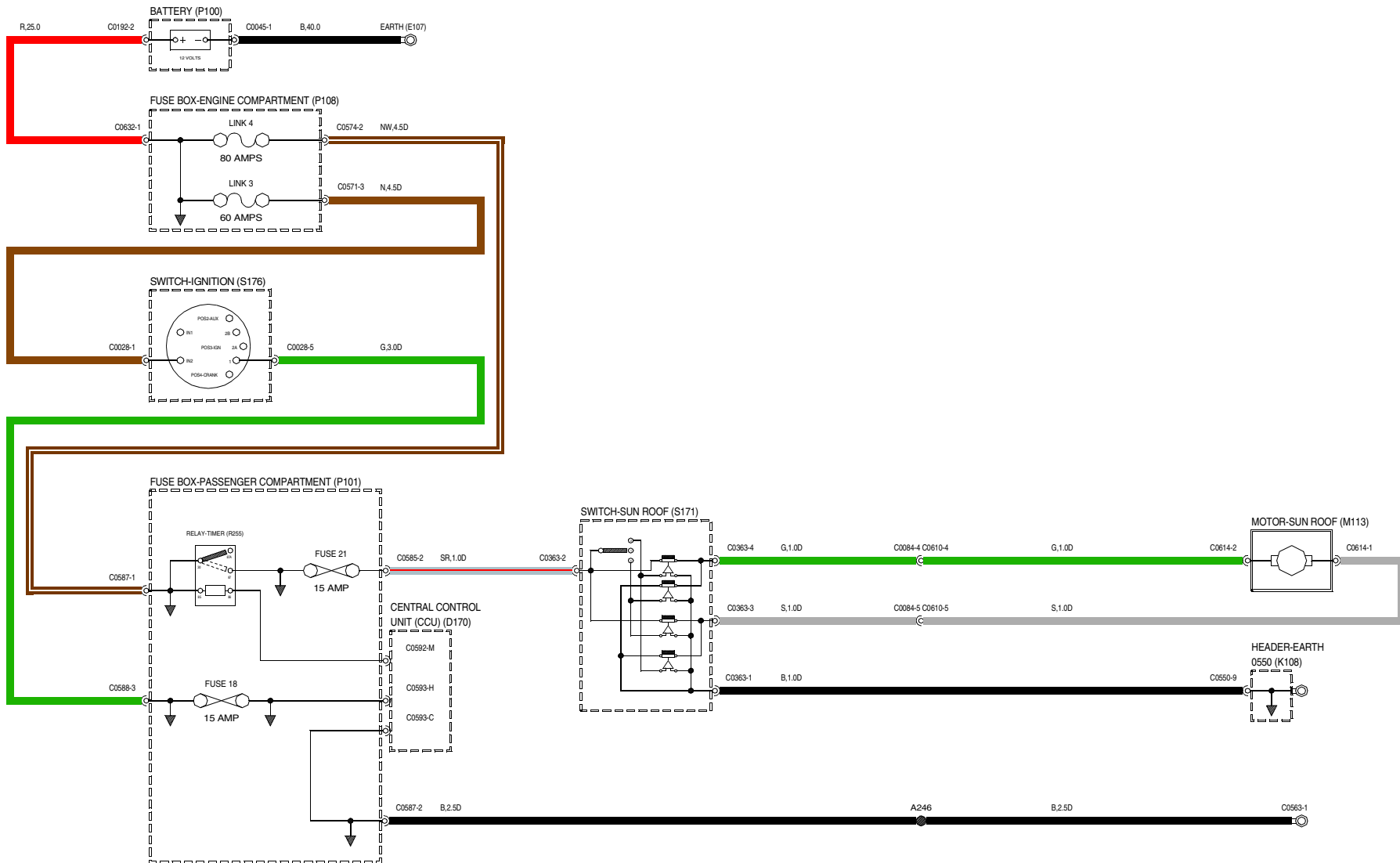


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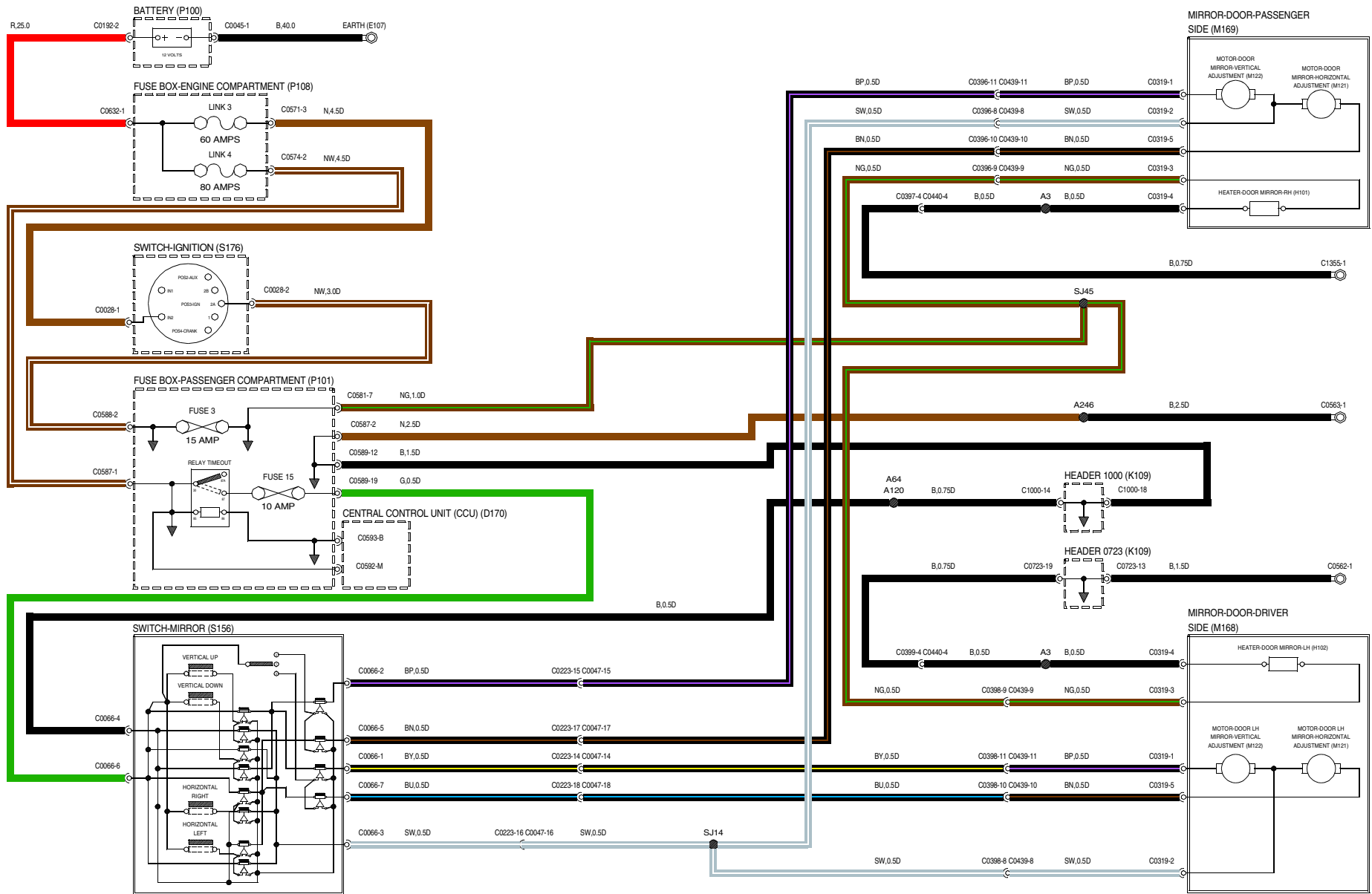
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6 SUNROOF



WR004341-A-01

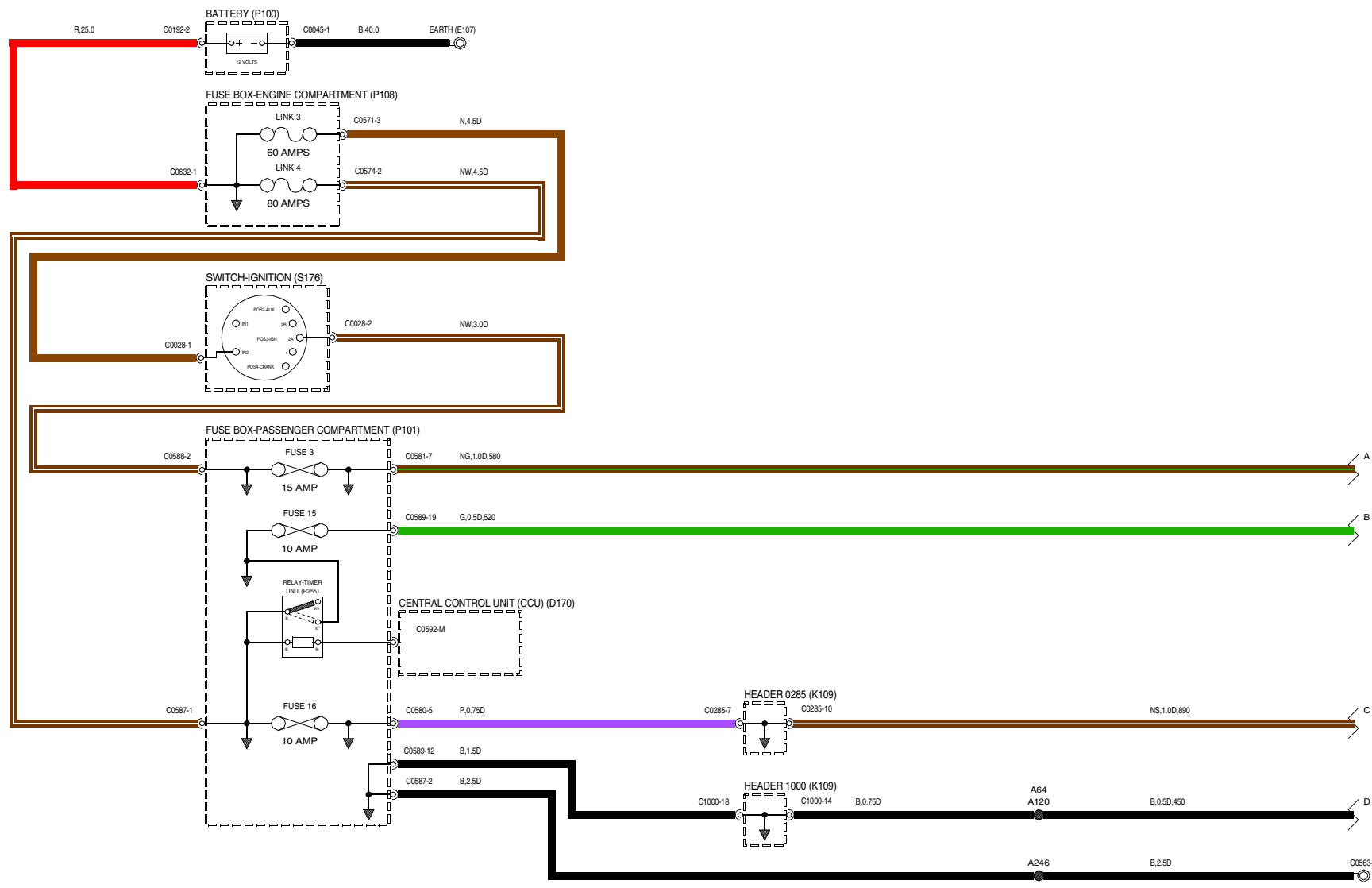
7 DOOR MIRRORS



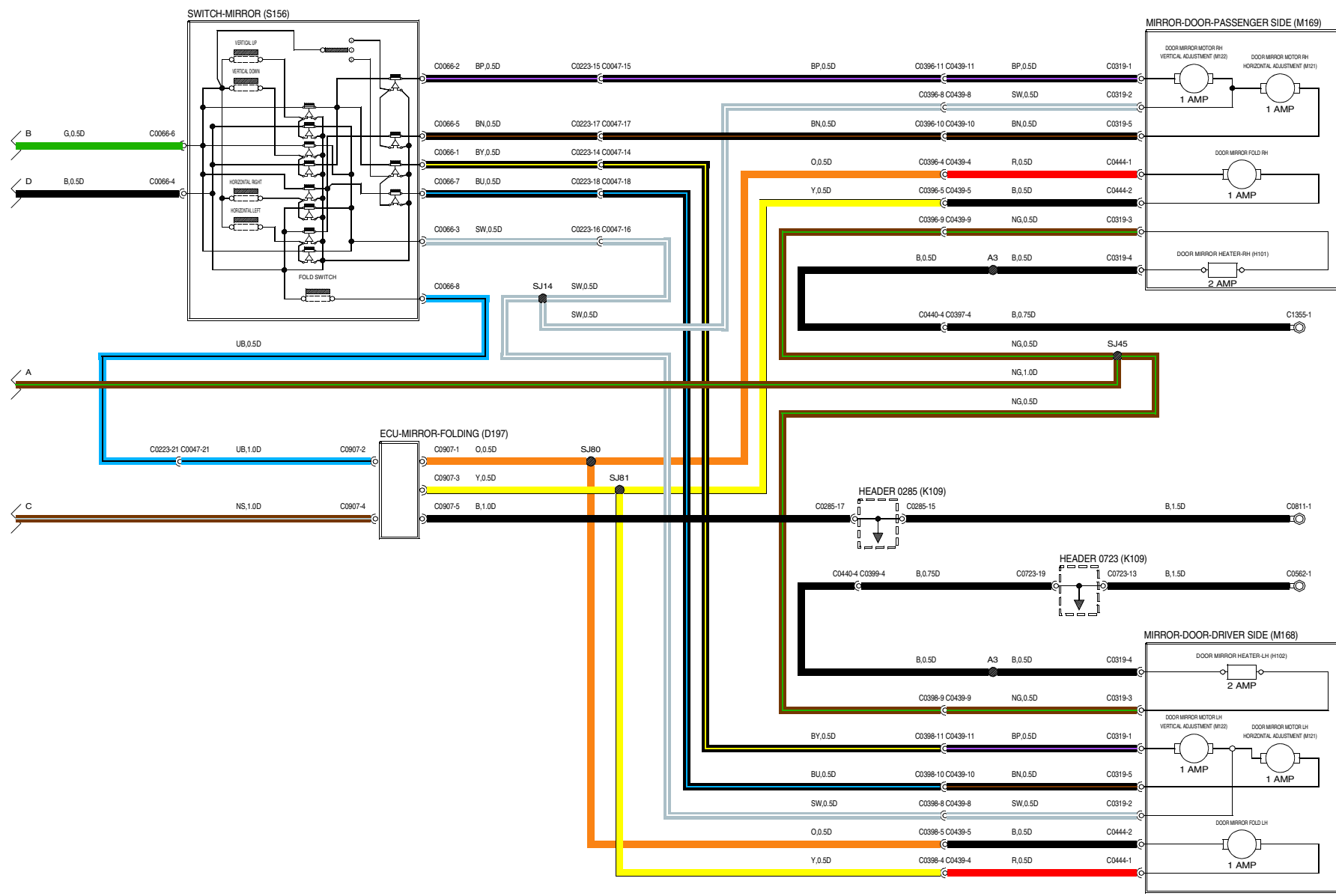
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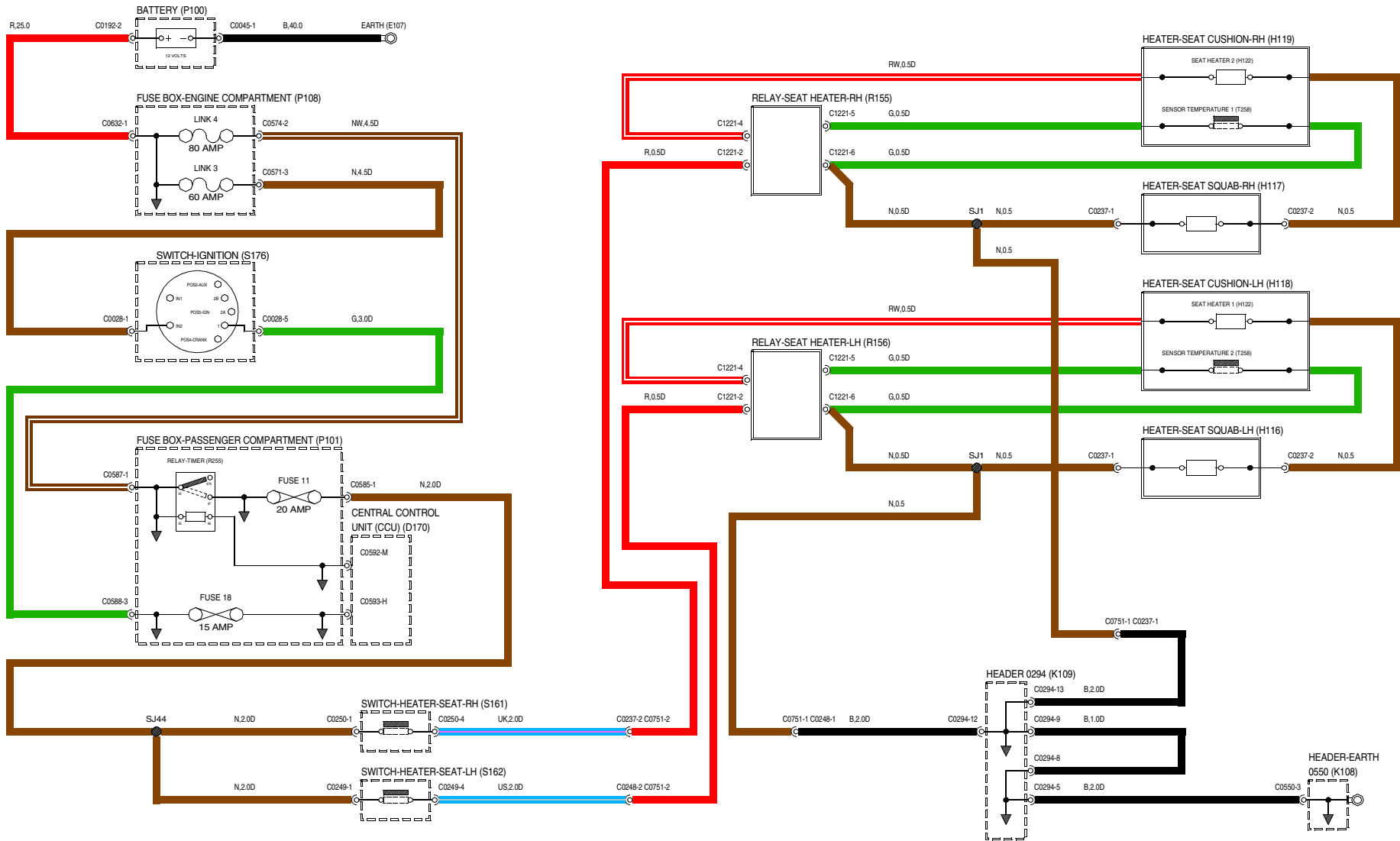
Folding



WR004601-A-01

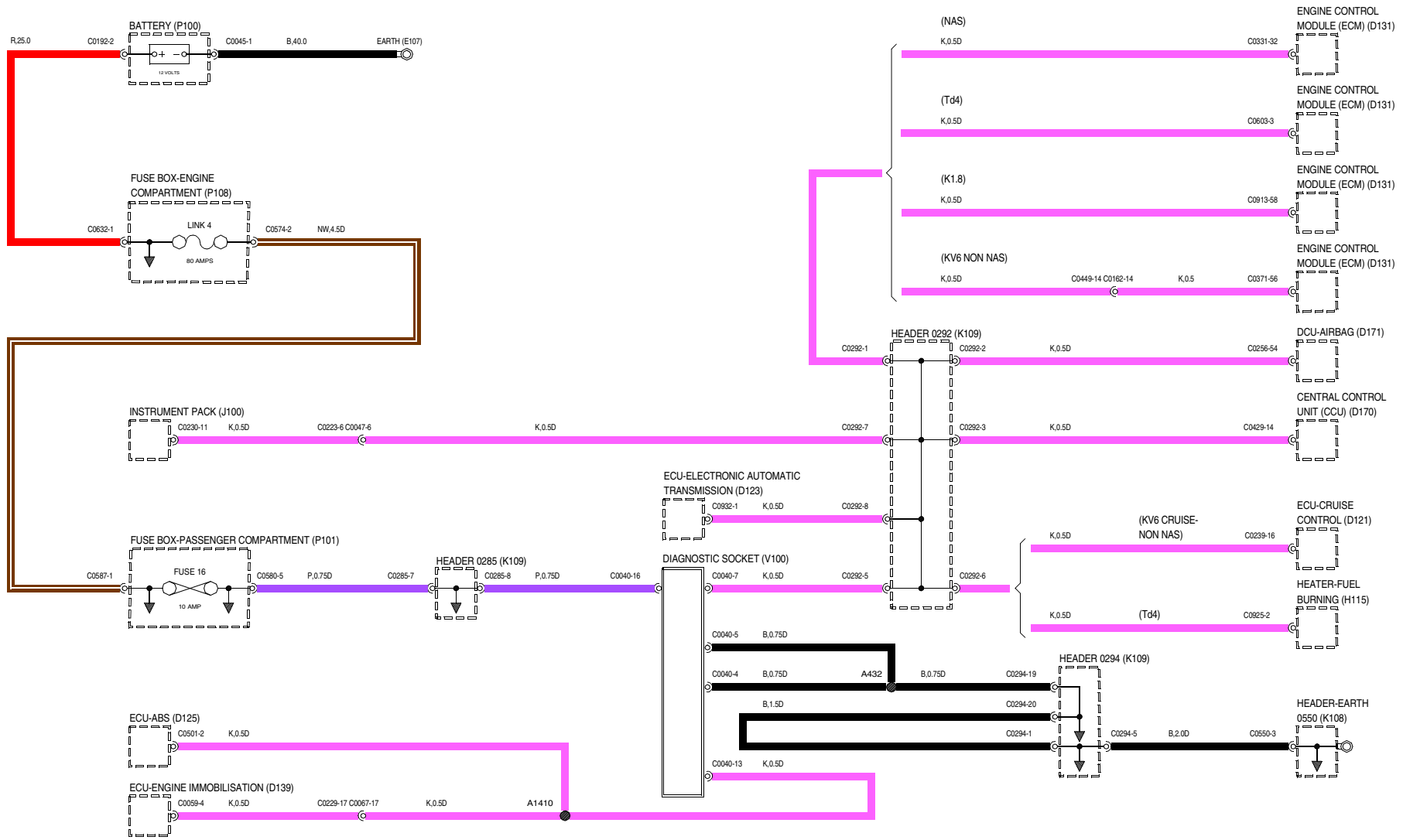


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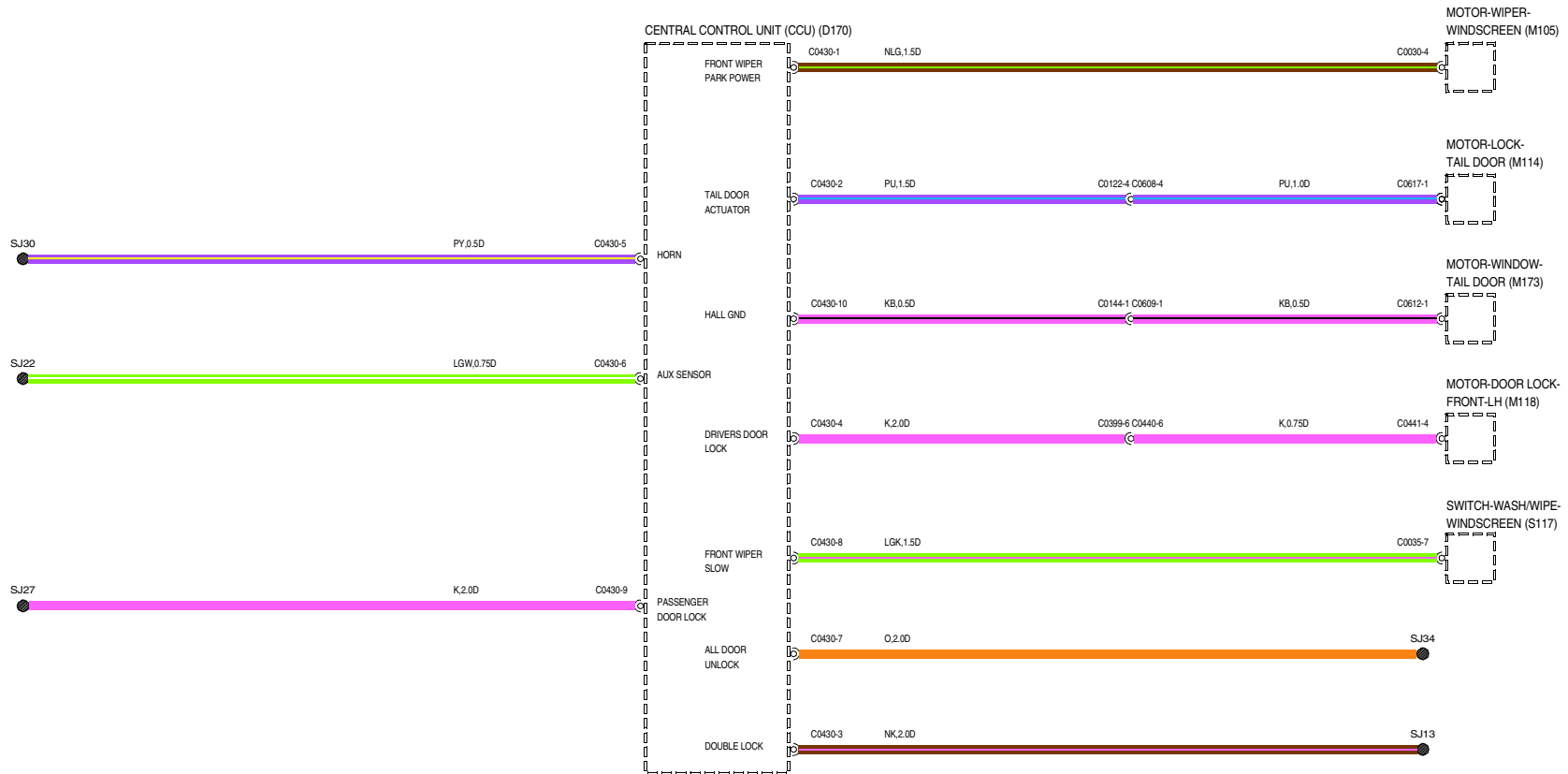
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10 DIAGNOSTIC SOCKET

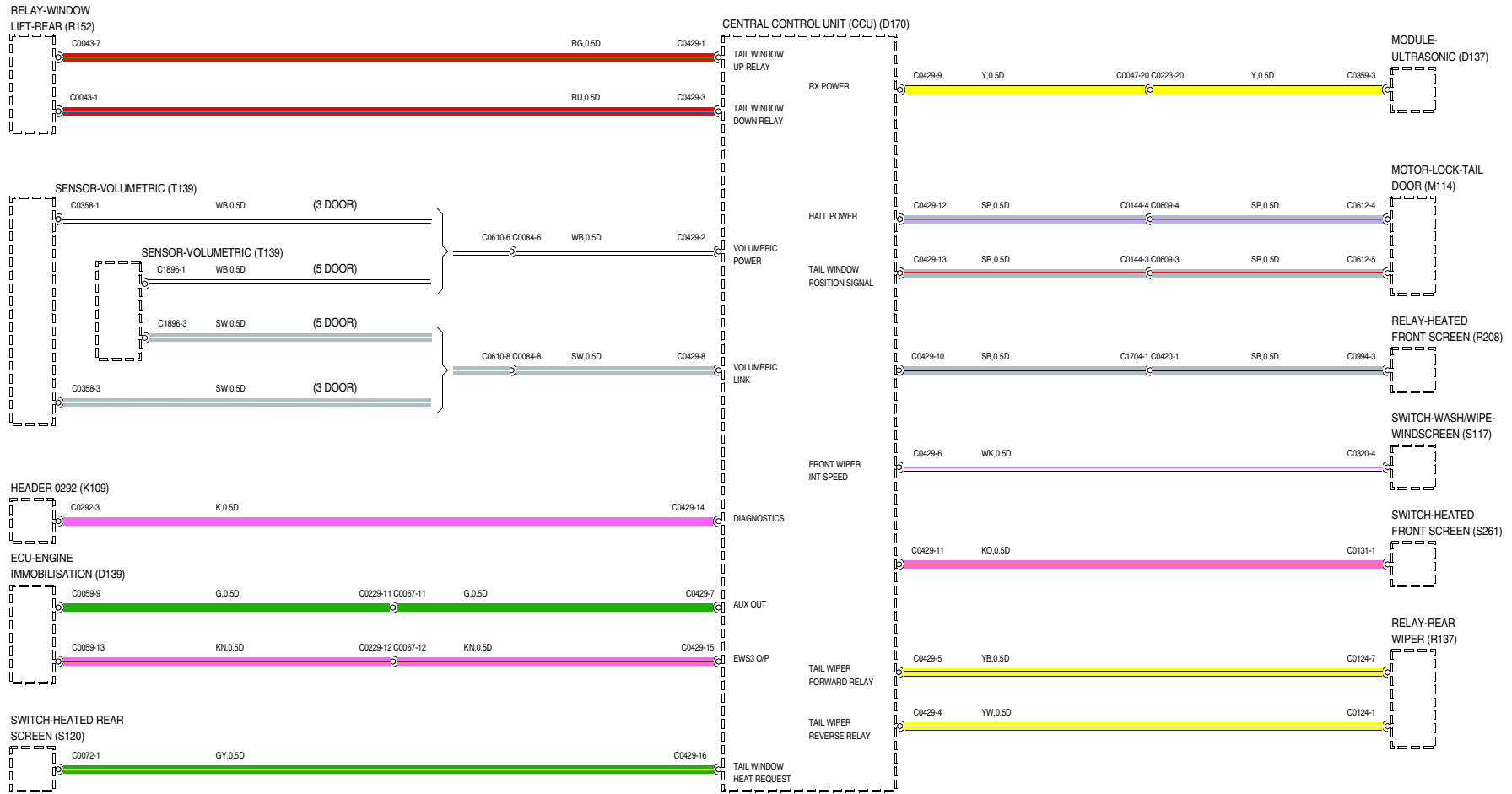


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11 BODY CONTROL UNIT

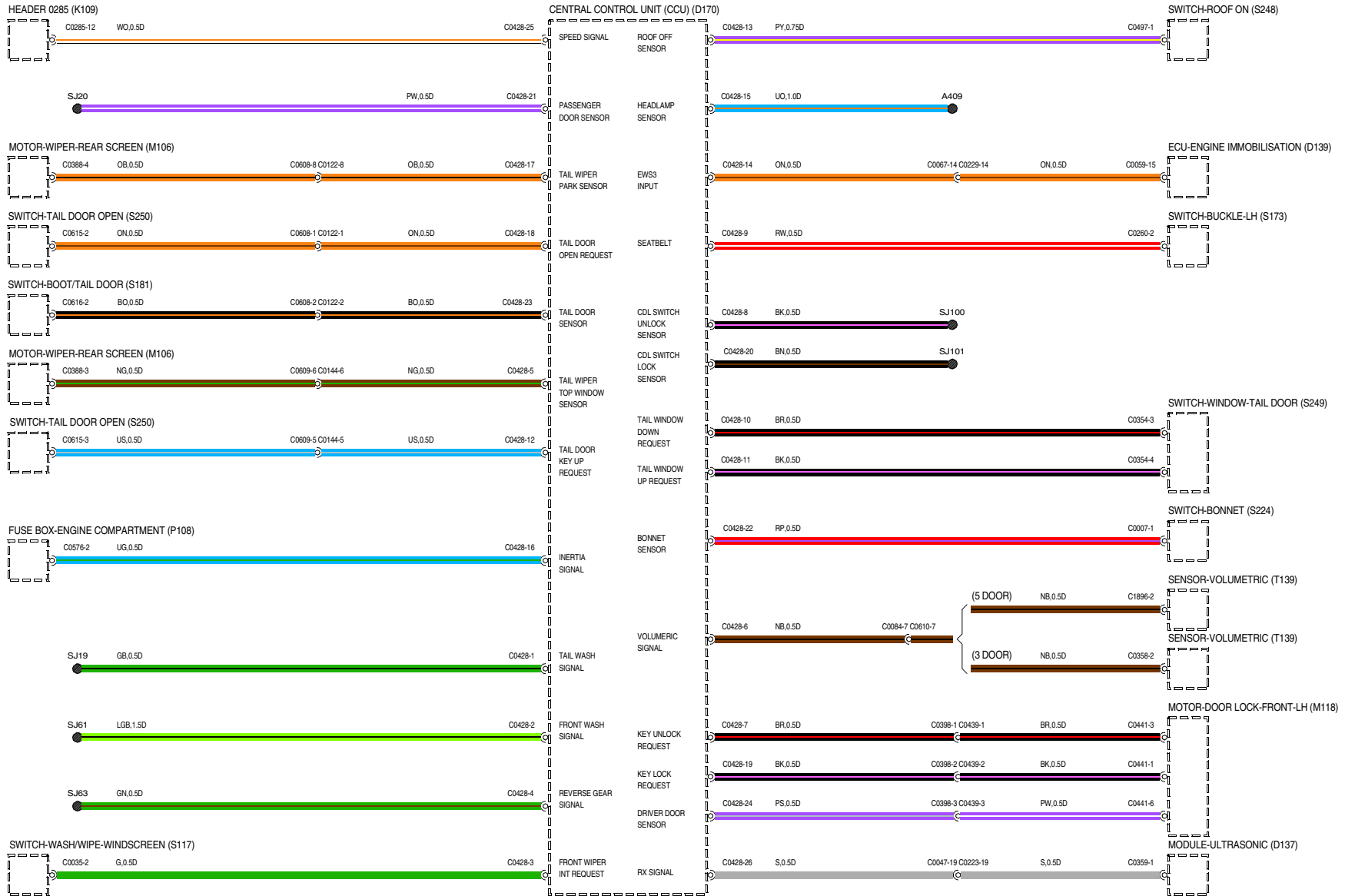


11 BODY CONTROL UNIT

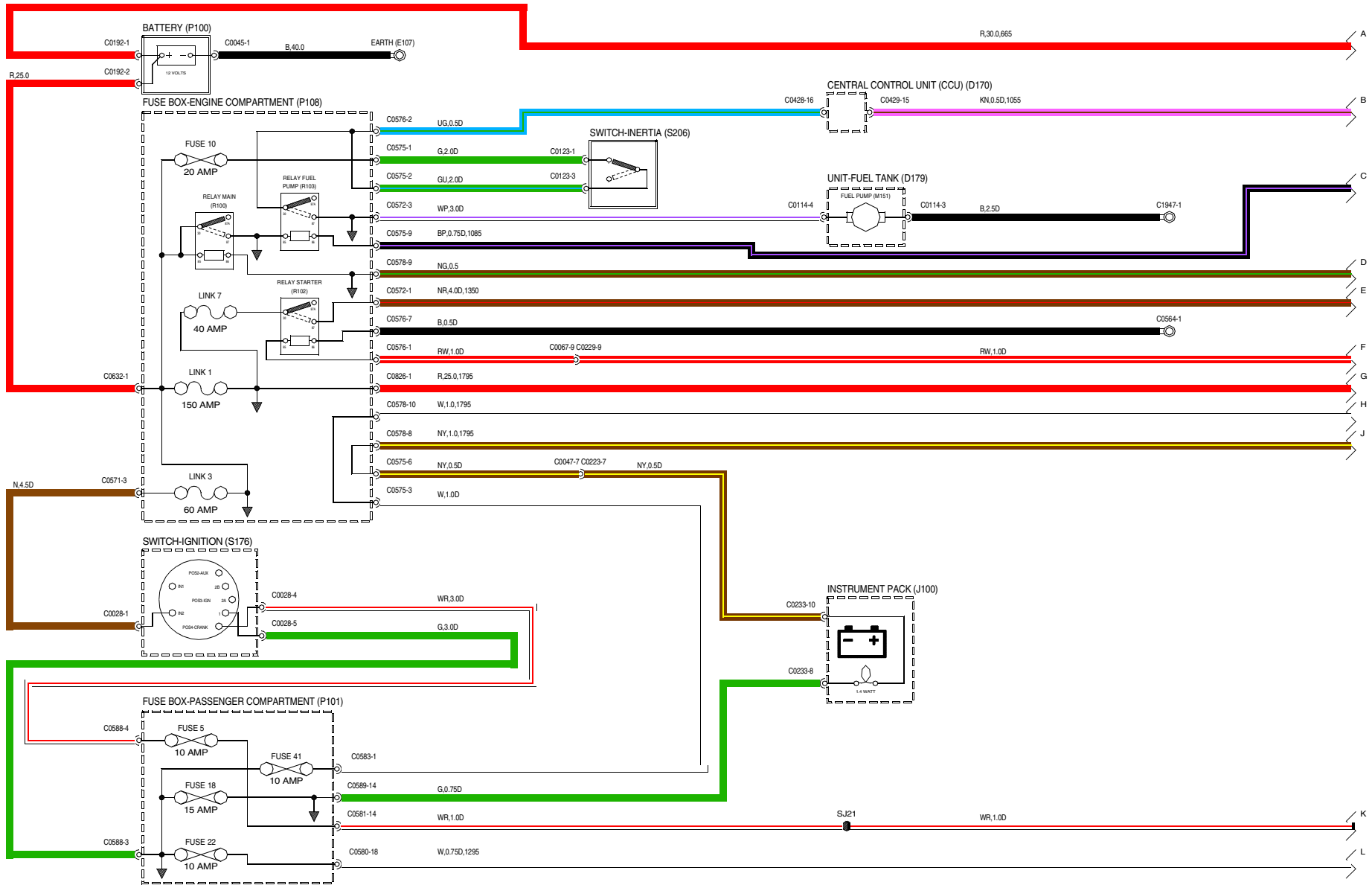


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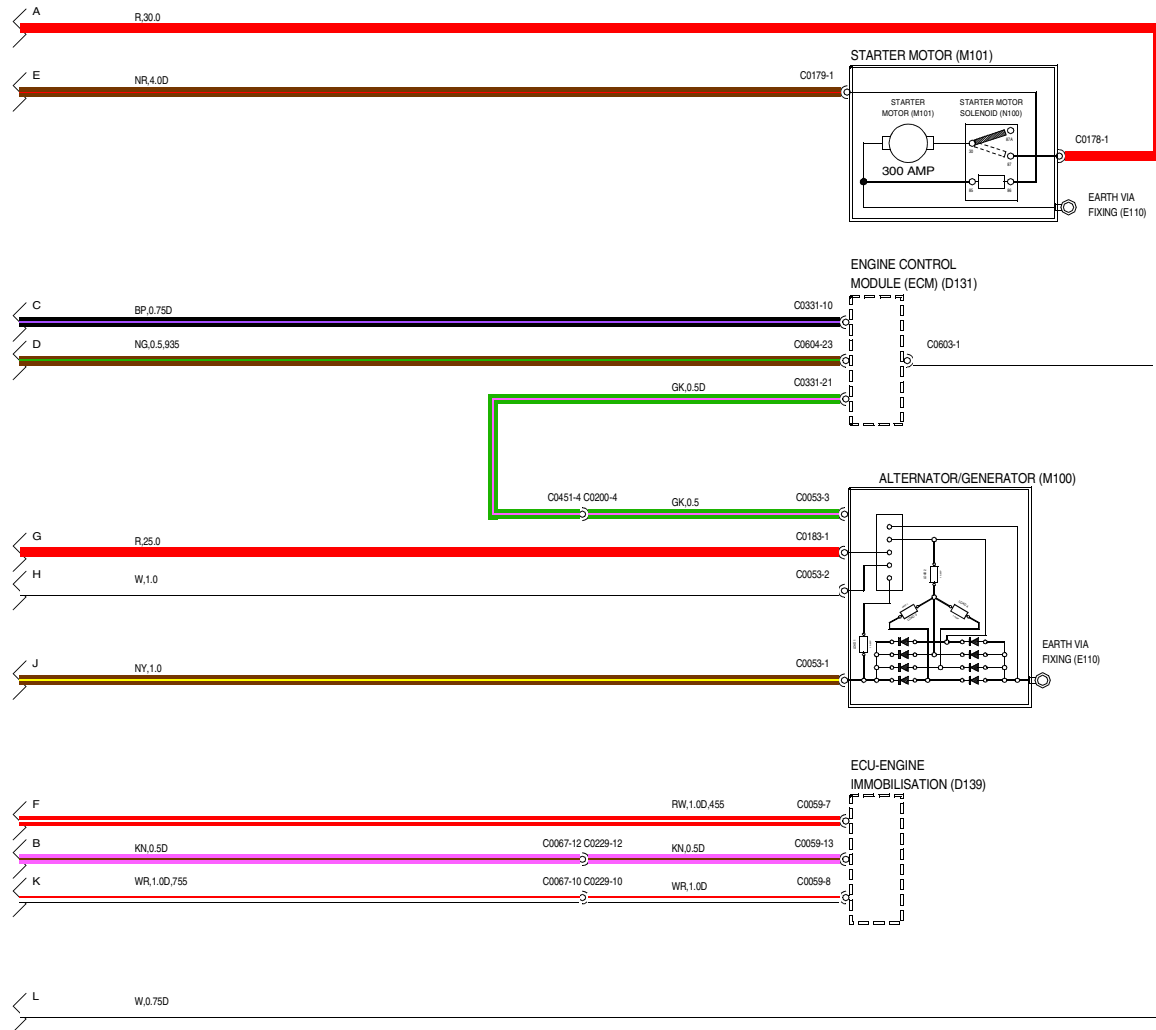
11 BODY CONTROL UNIT



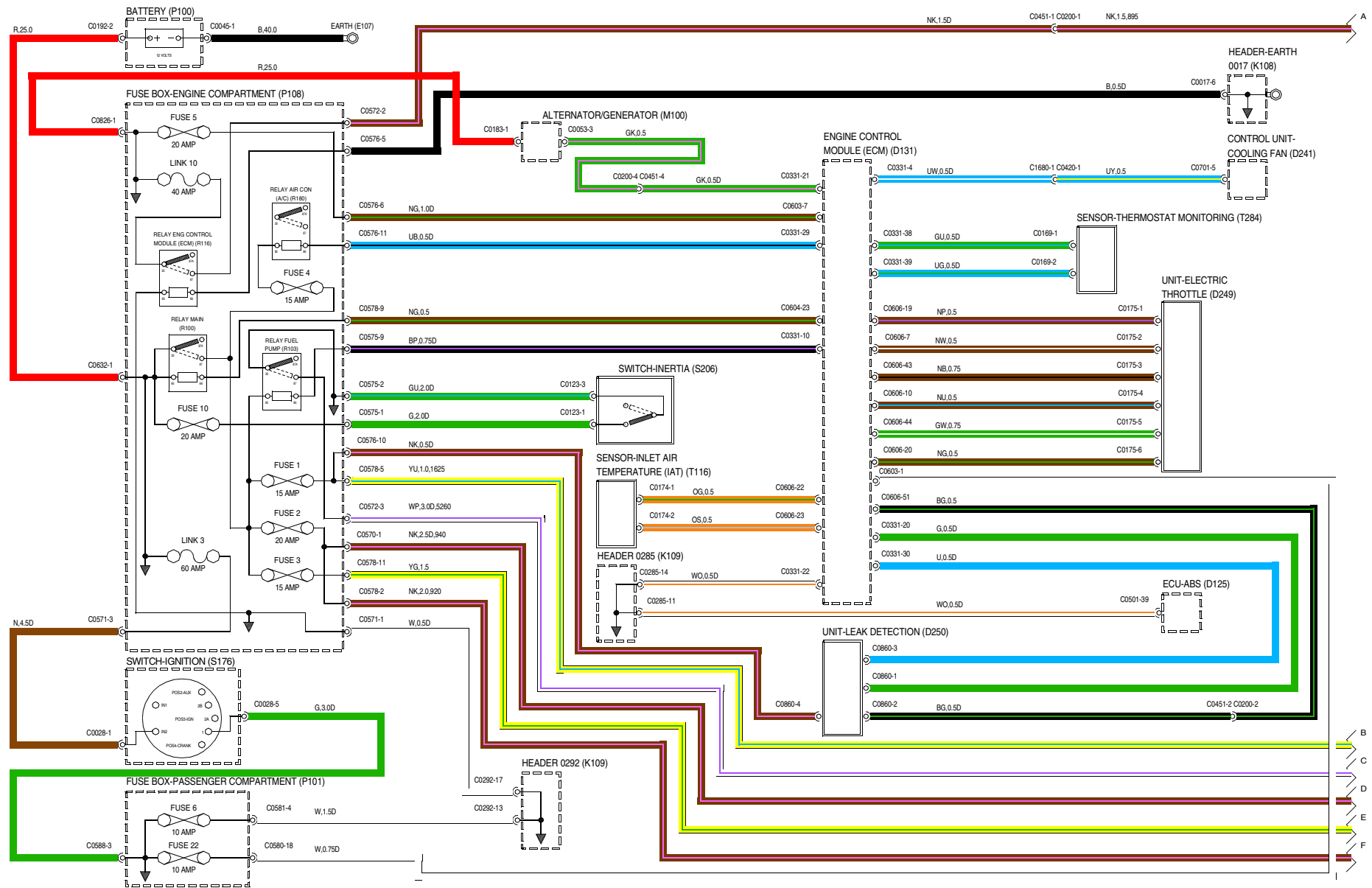
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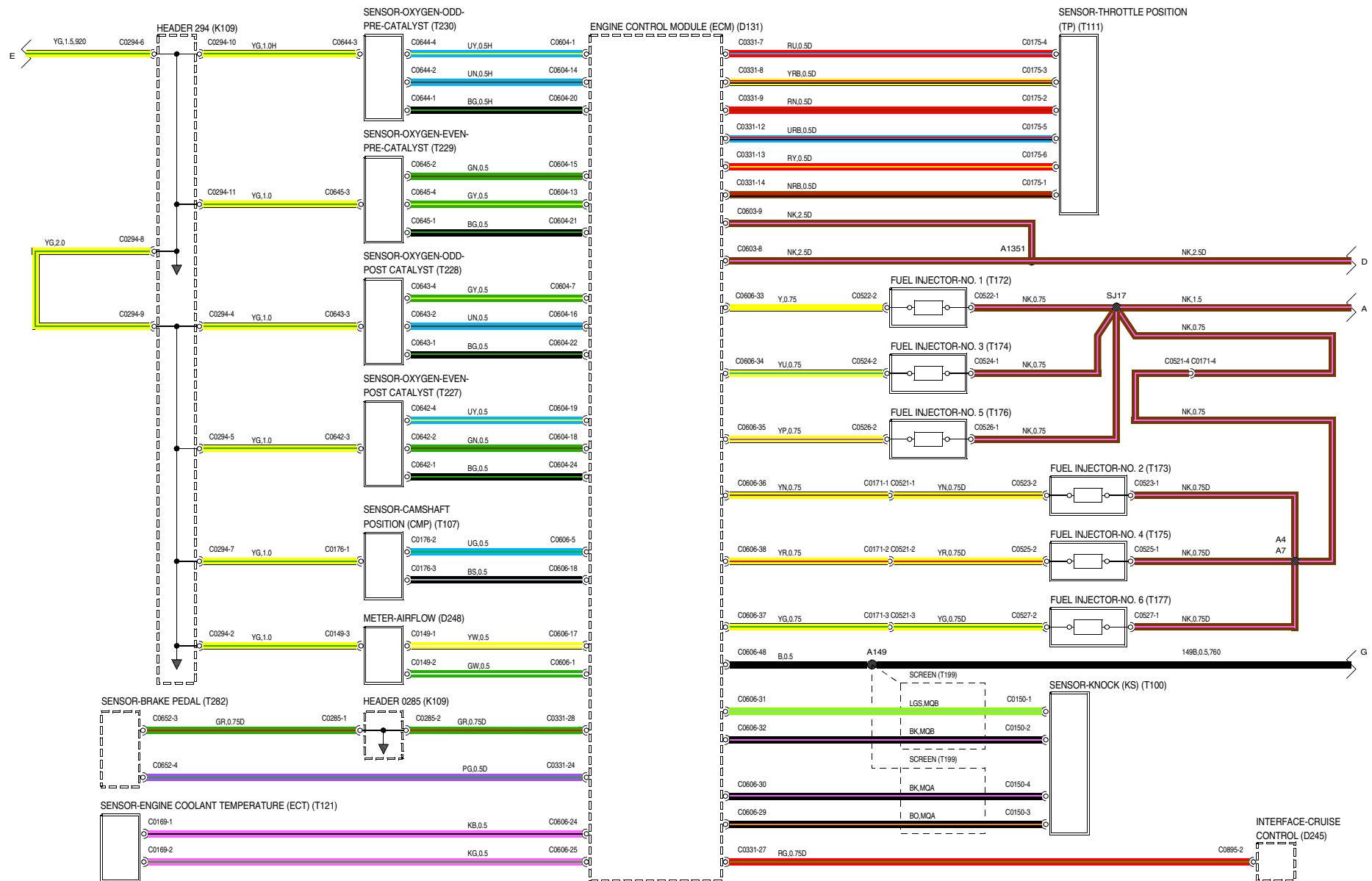
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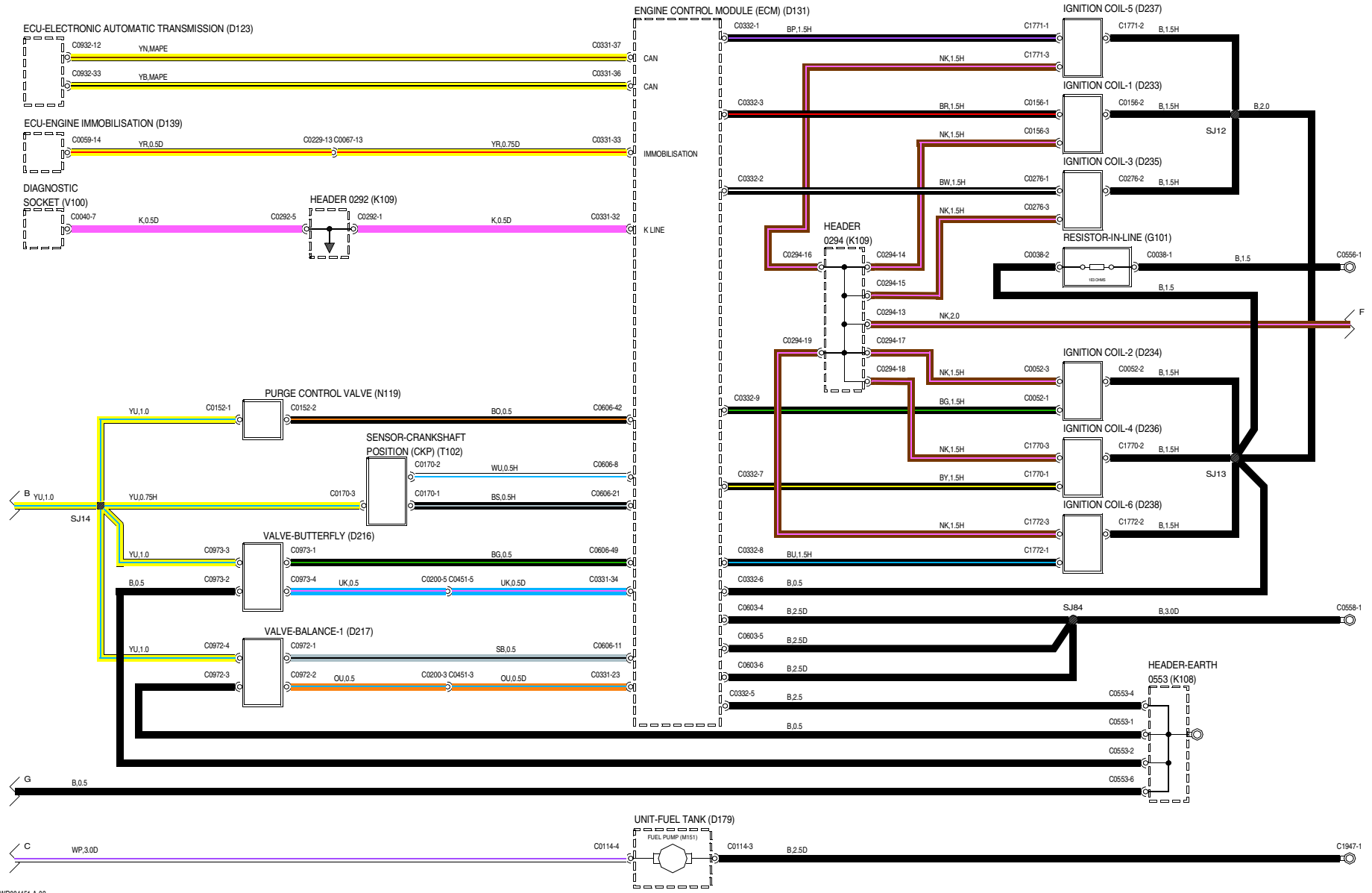
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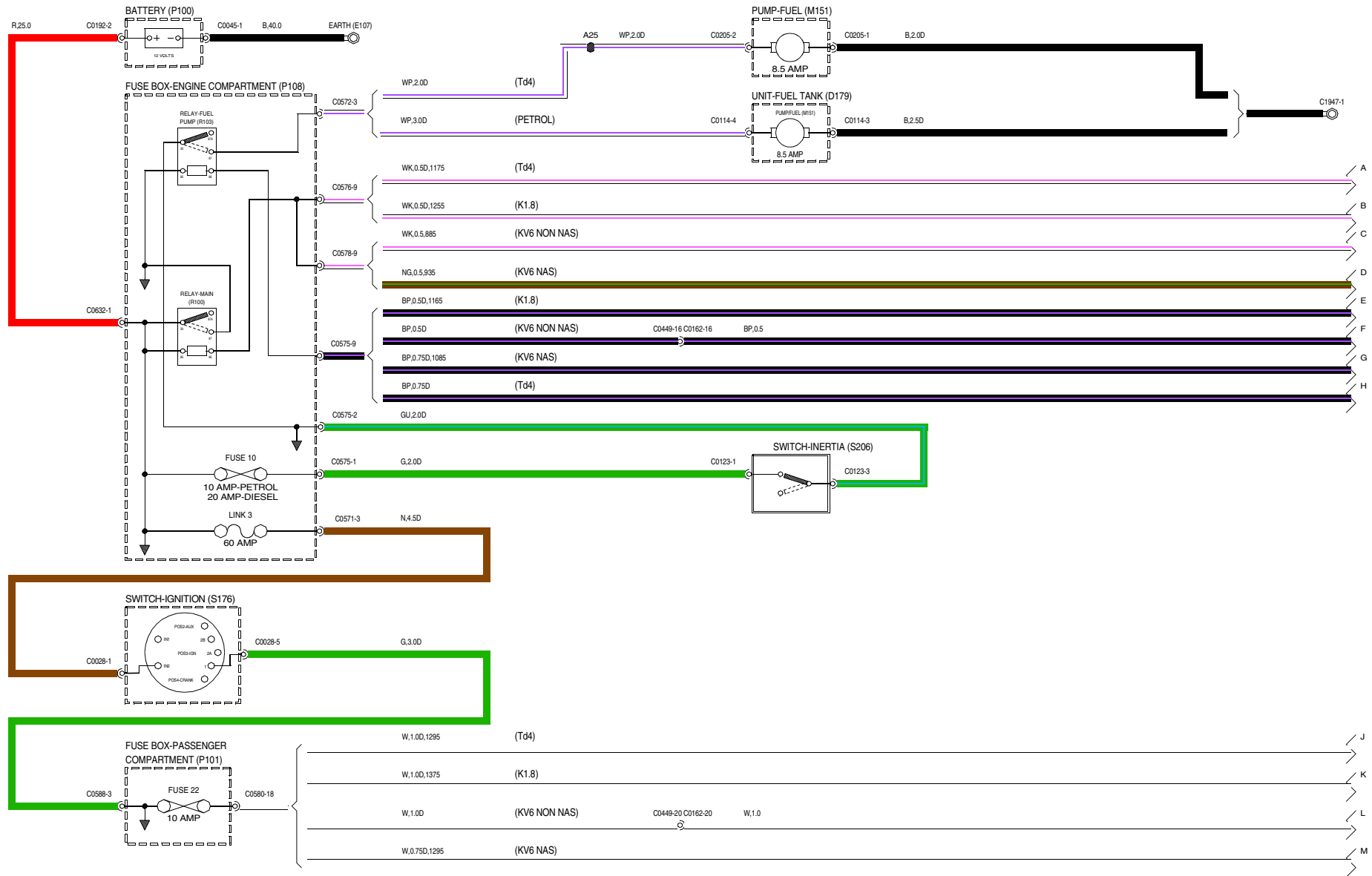


WR004451-A-02



WVR004451-A-03

20 FUEL PUMP



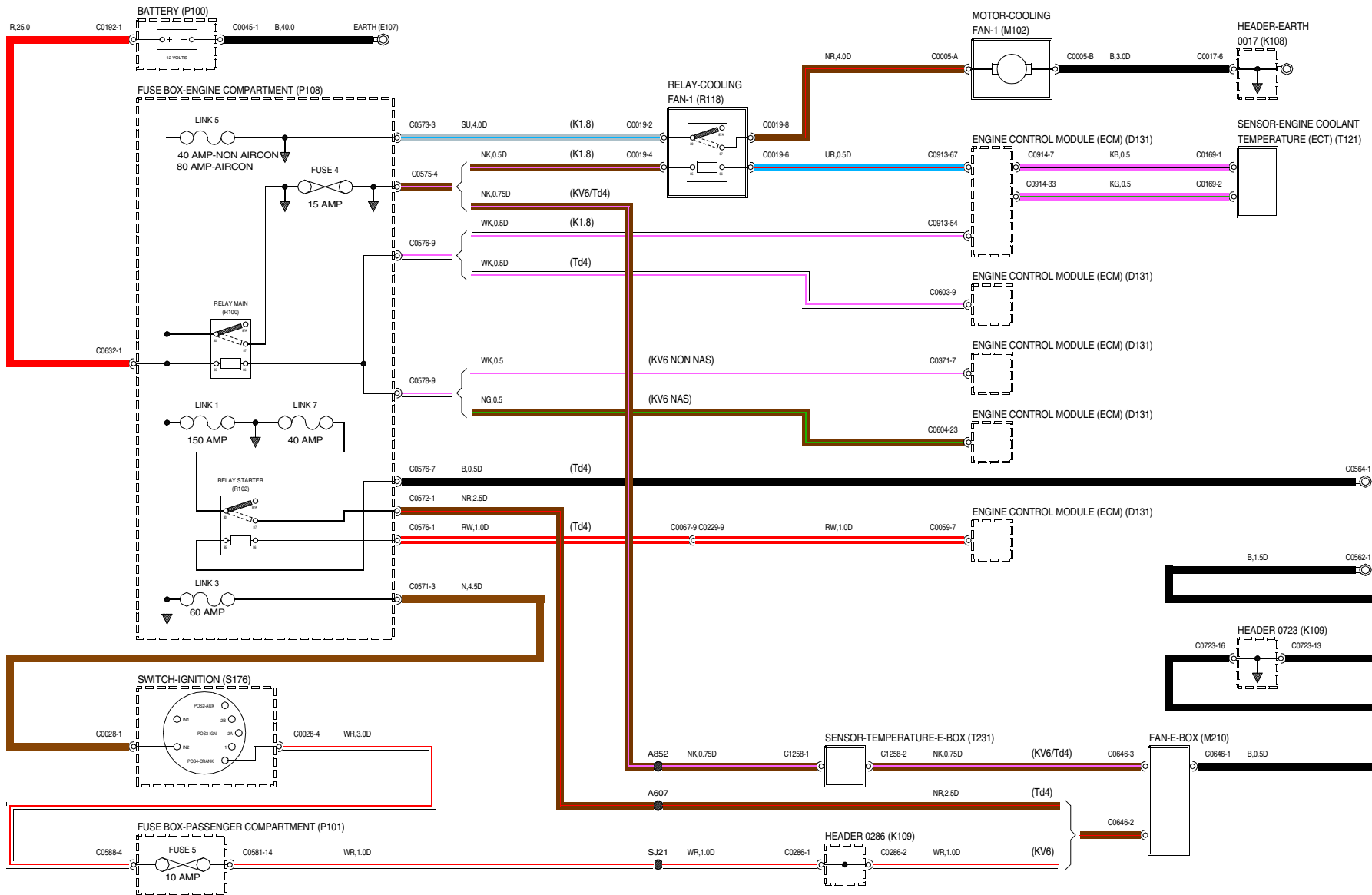
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20 FUEL PUMP

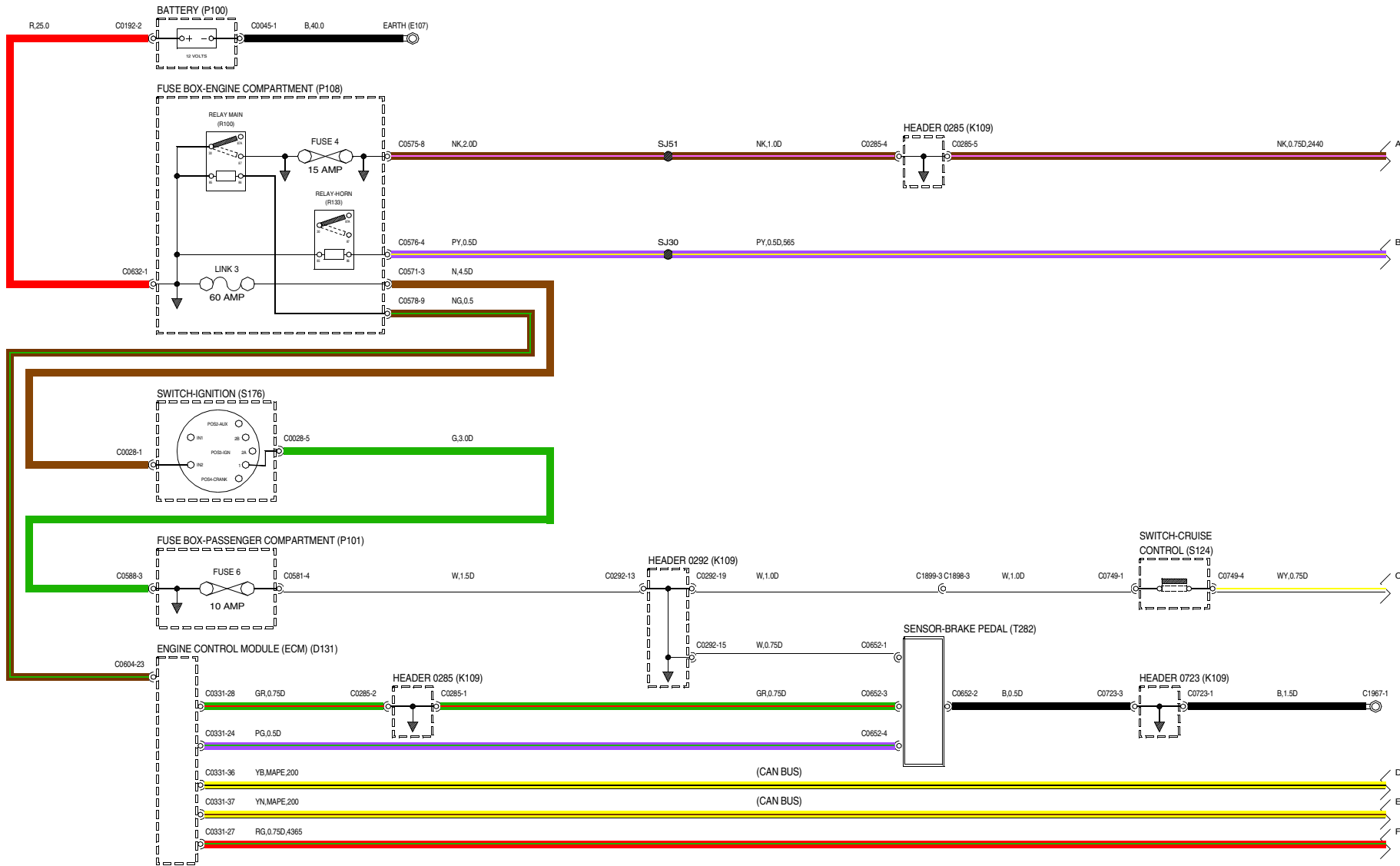


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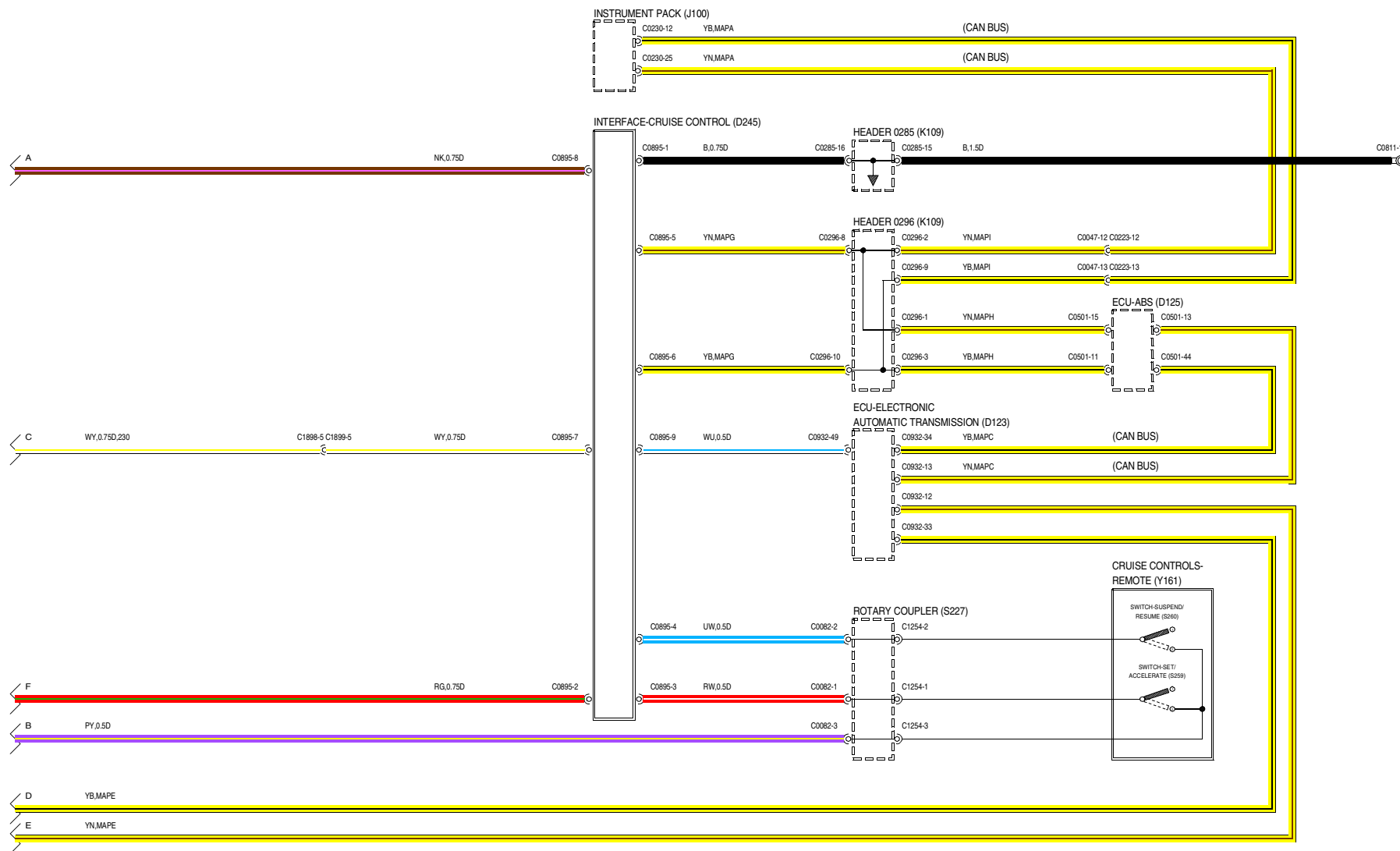
22 COOLING FANS



WFR004021-A-01

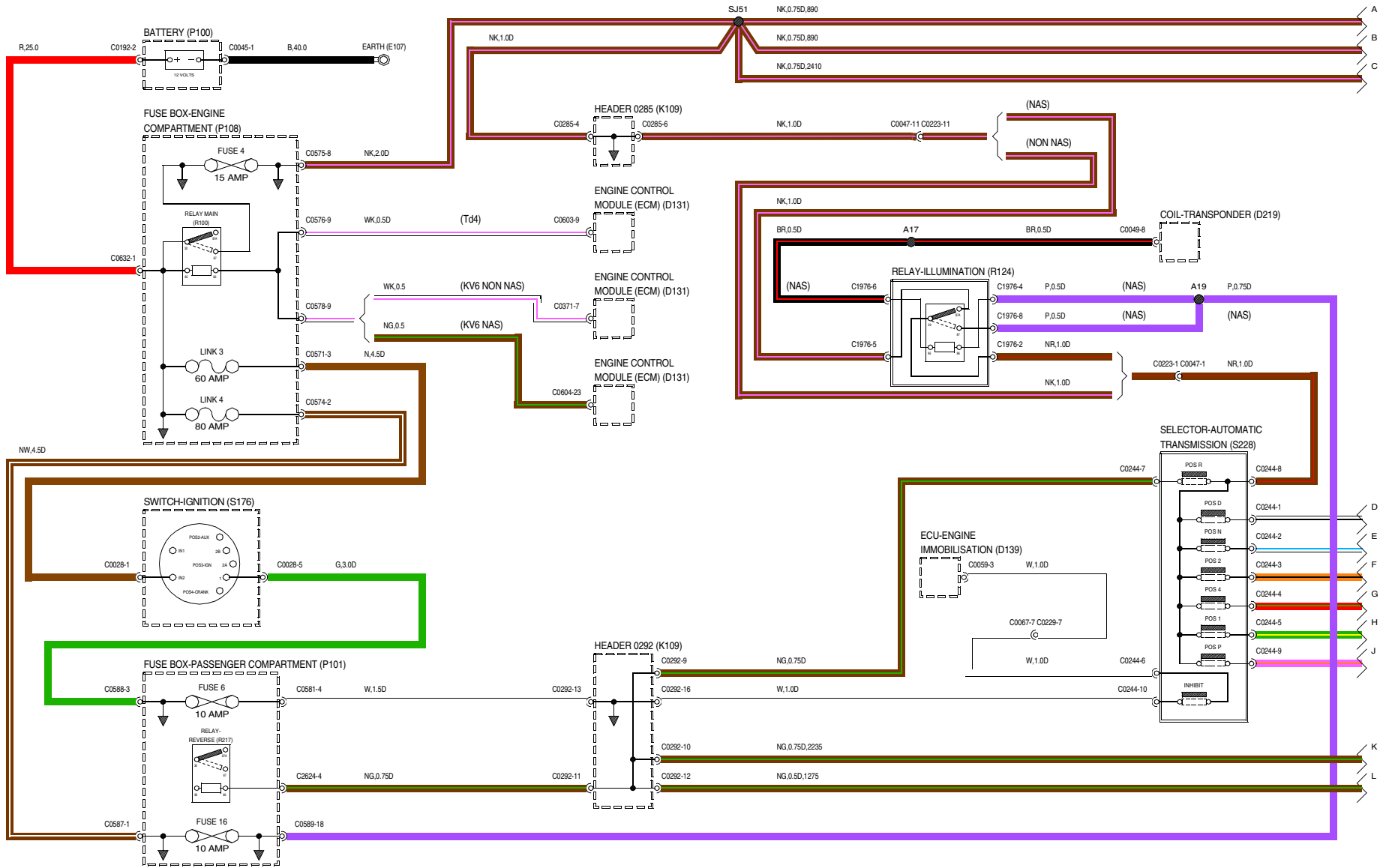


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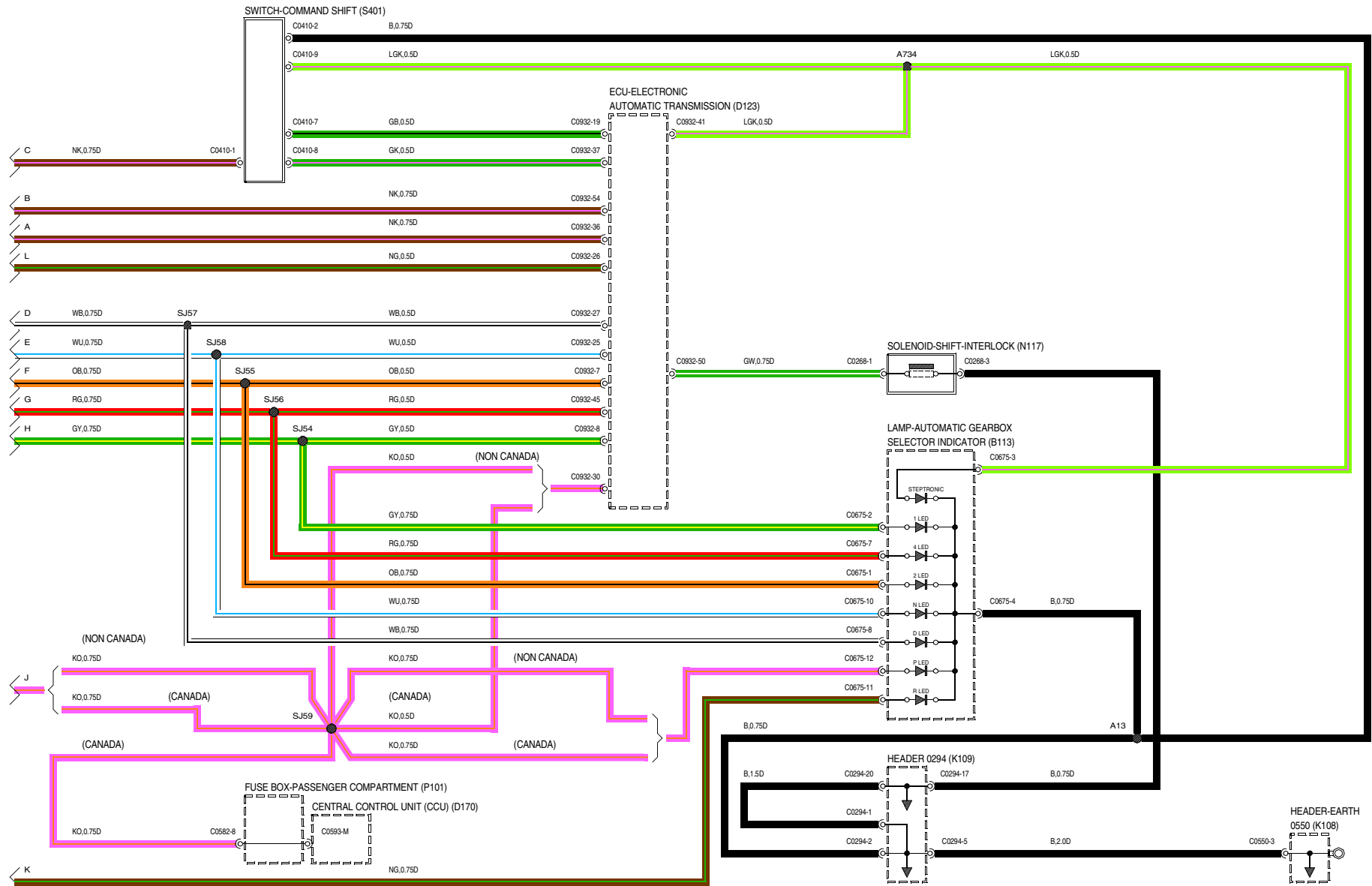
WVR004031-A-02

32 ELECTRONIC AUTOMATIC TRANSMISSION



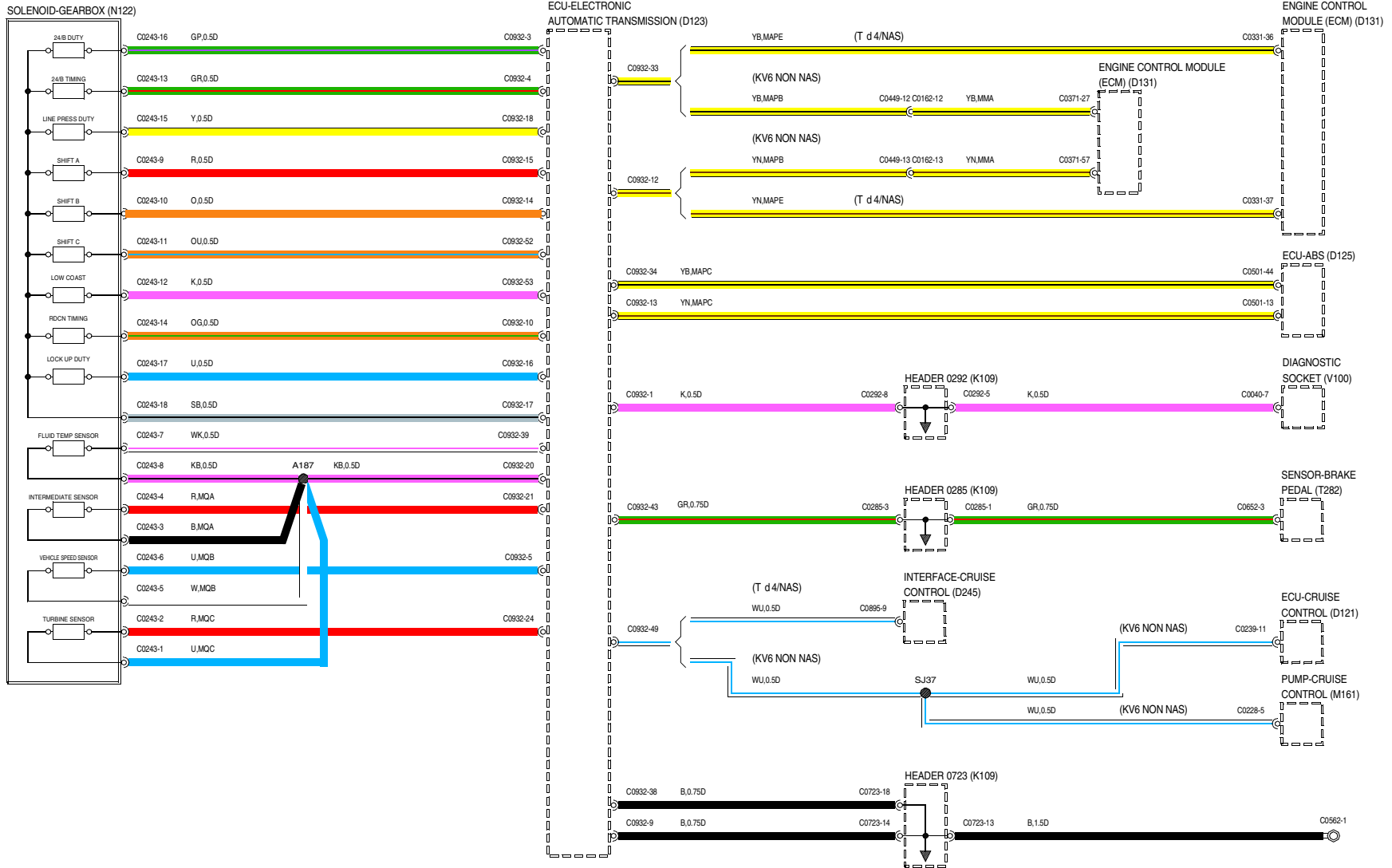
WR004351-A-01

32 ELECTRONIC AUTOMATIC TRANSMISSION



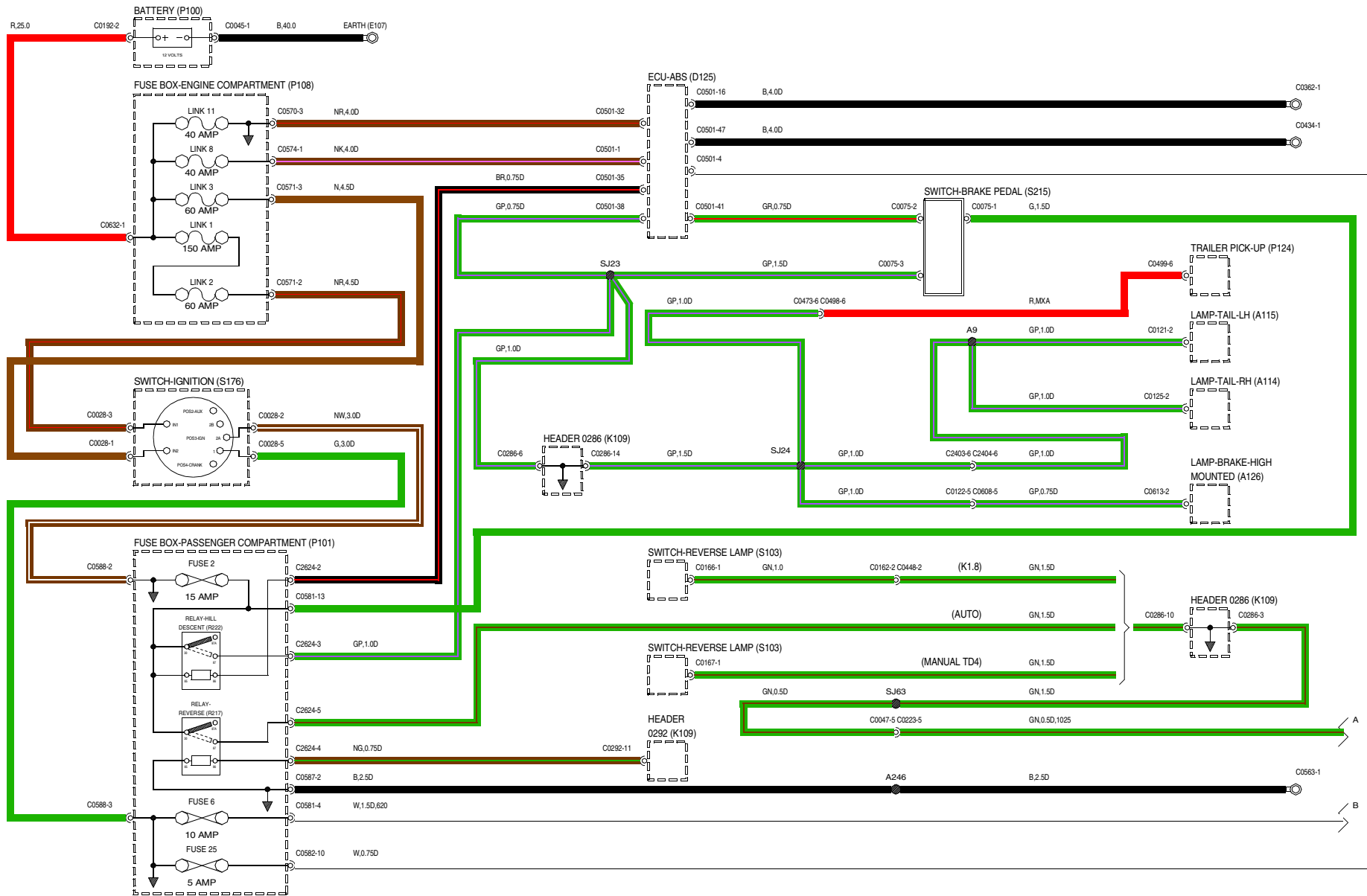
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32 ELECTRONIC AUTOMATIC TRANSMISSION



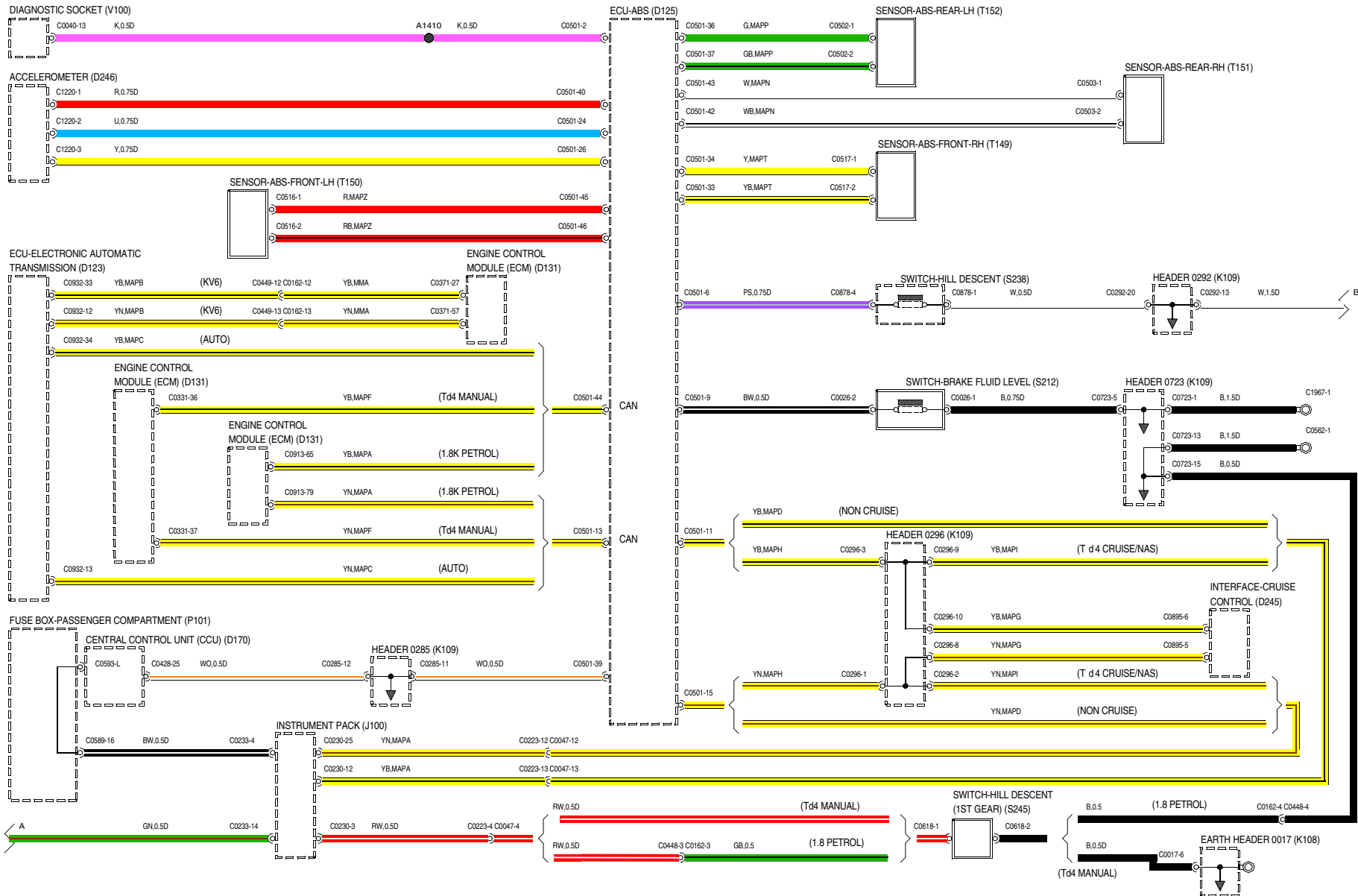
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35 ANTI-LOCK BRAKING SYSTEM (ABS)



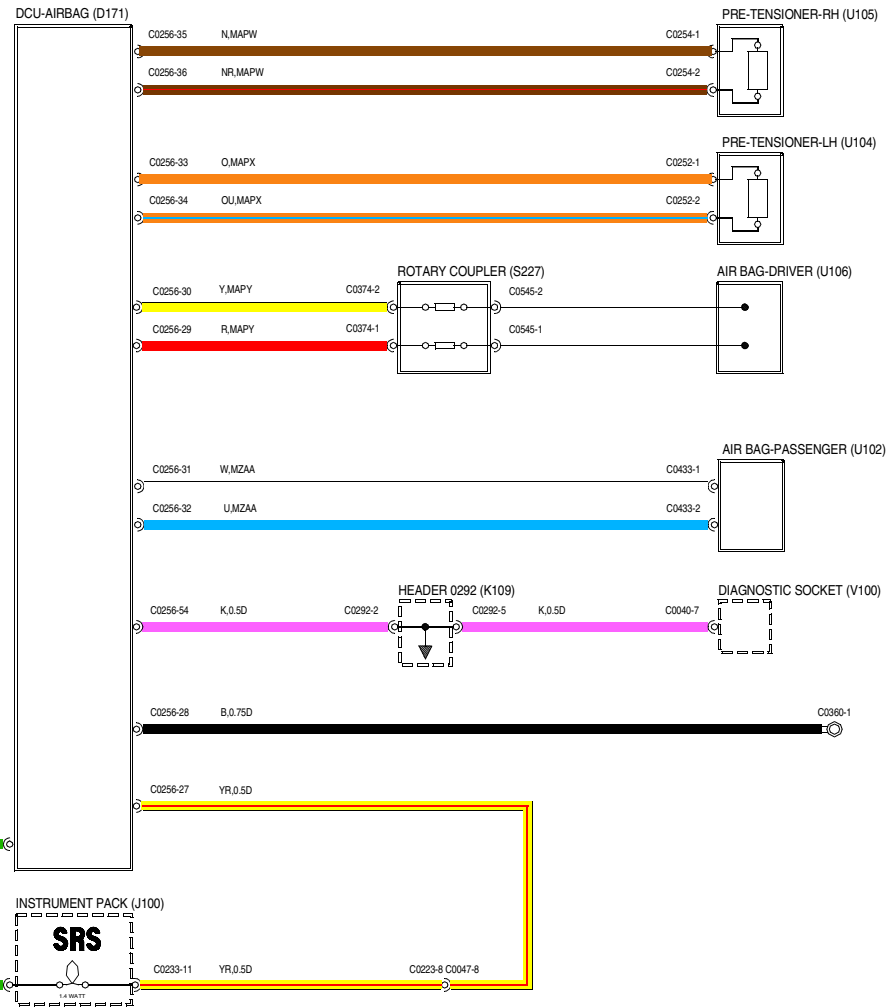
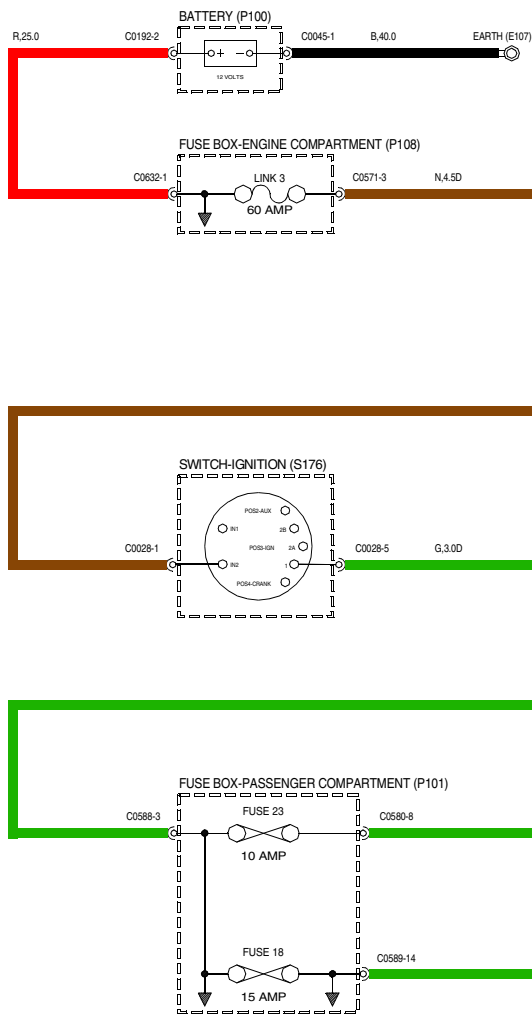
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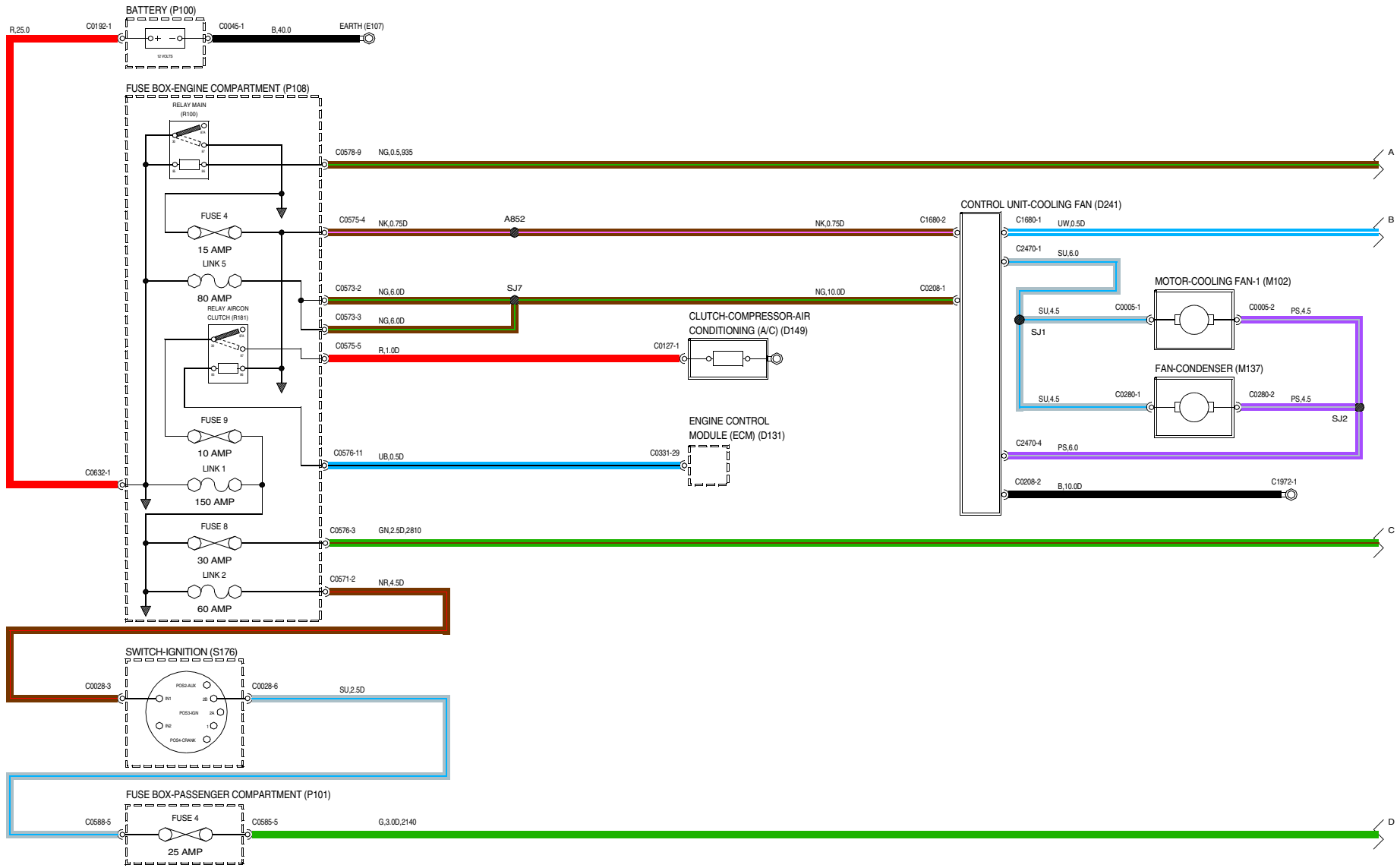
35 ANTI-LOCK BRAKING SYSTEM (ABS)



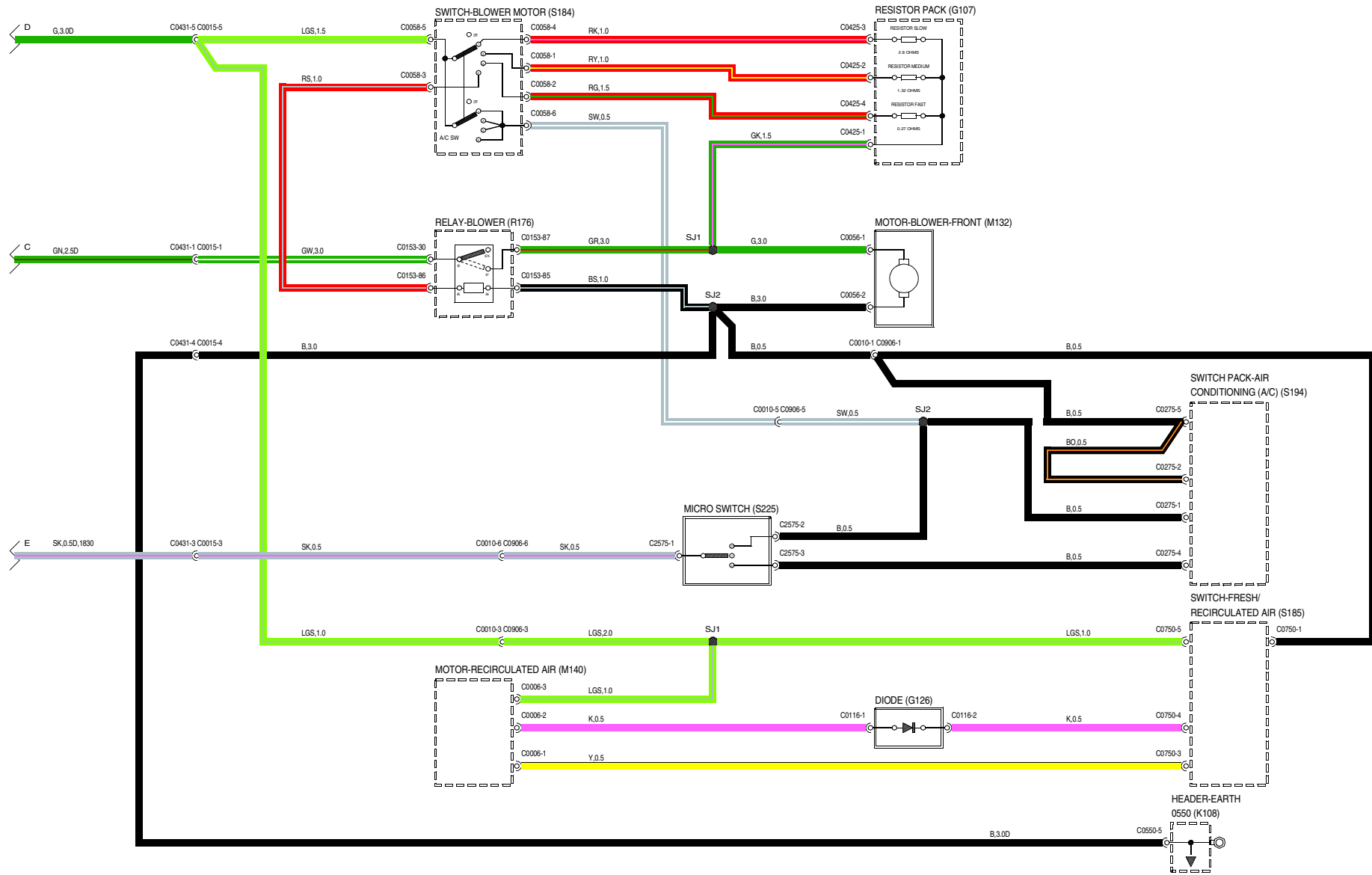
WVR004411-A-02

36 SUPPLEMENTARY RESTRAINT SYSTEM (SRS)

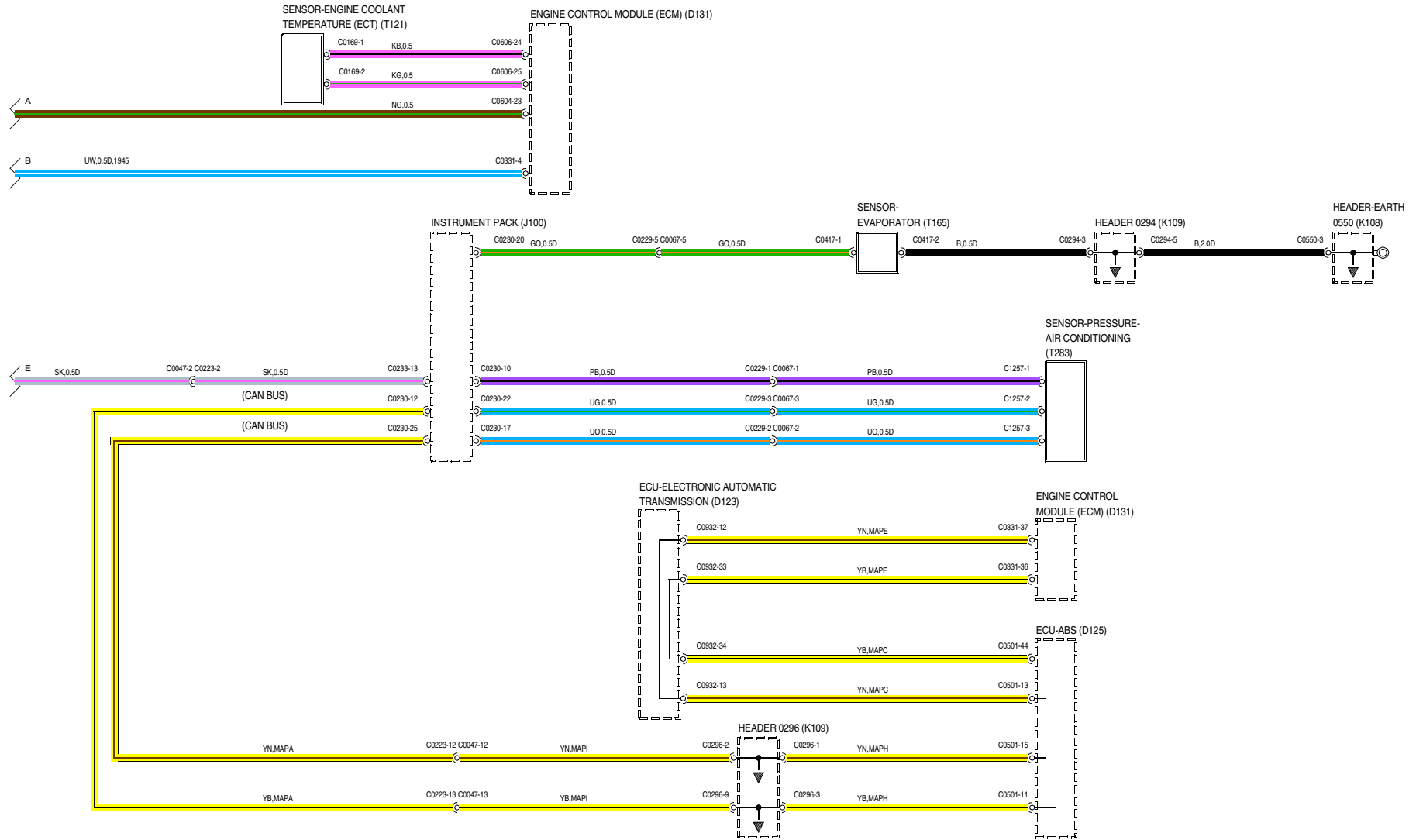




WFR003961-A-01

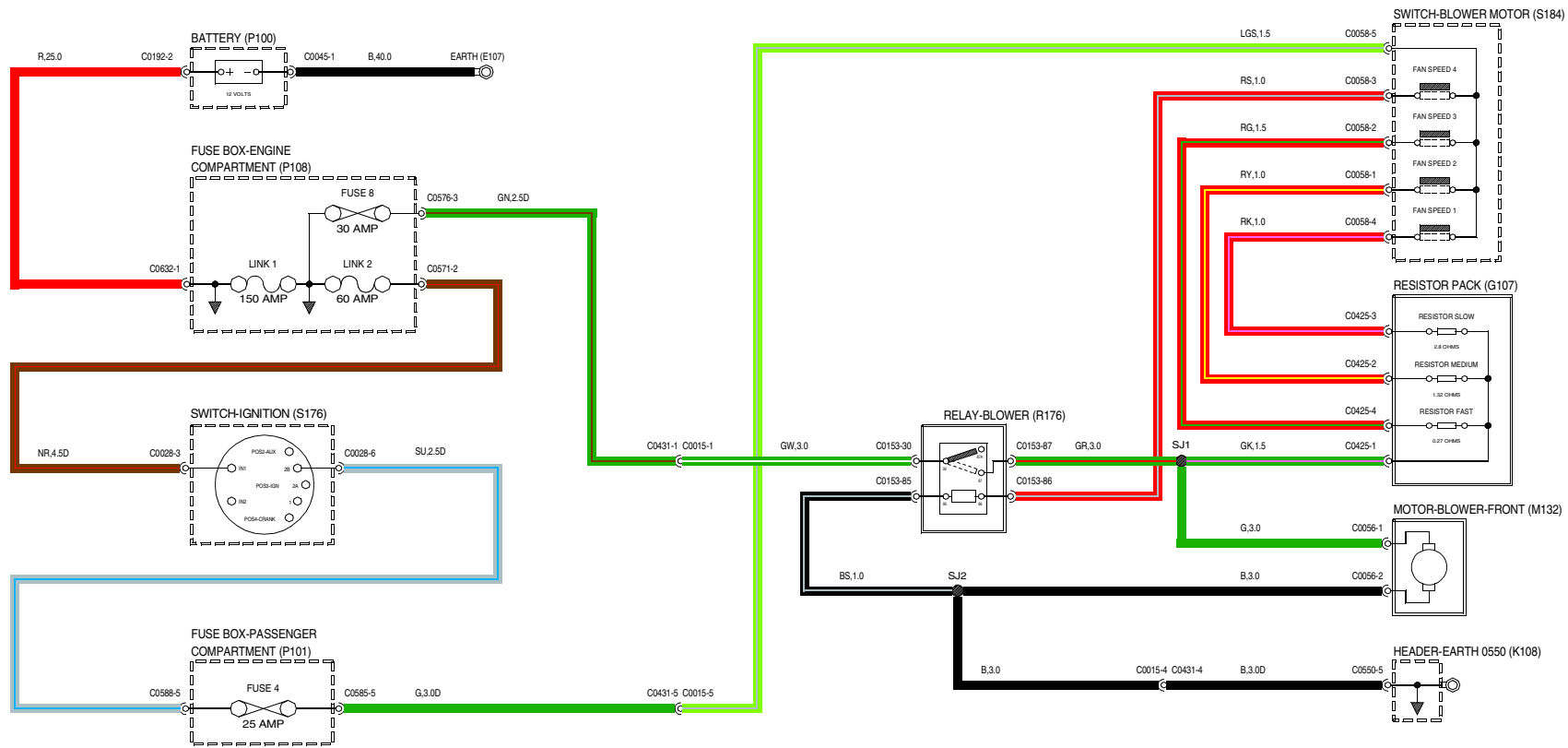


WVR003961-A-02

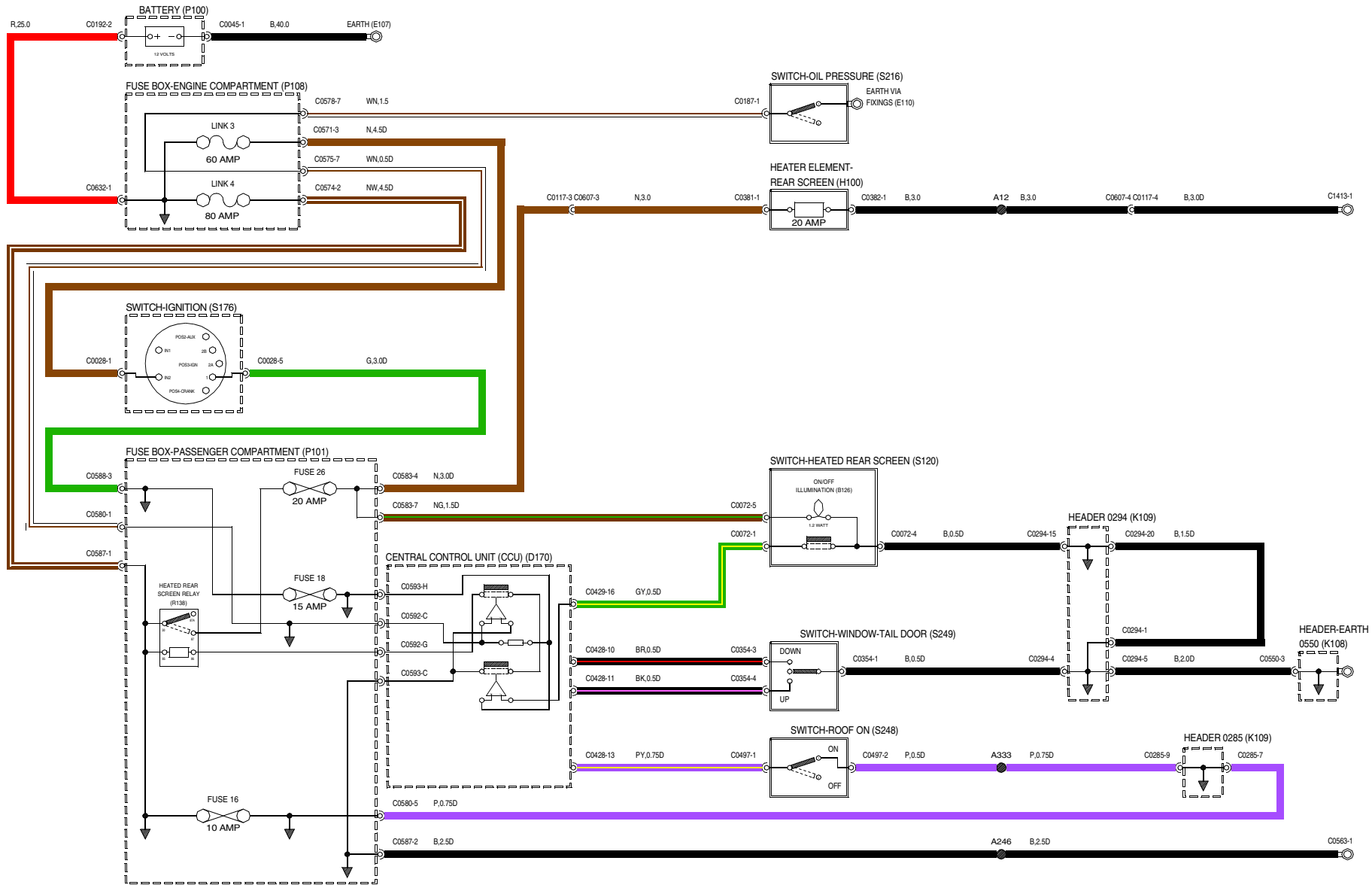


WVR003961-A-03

39 HEATER

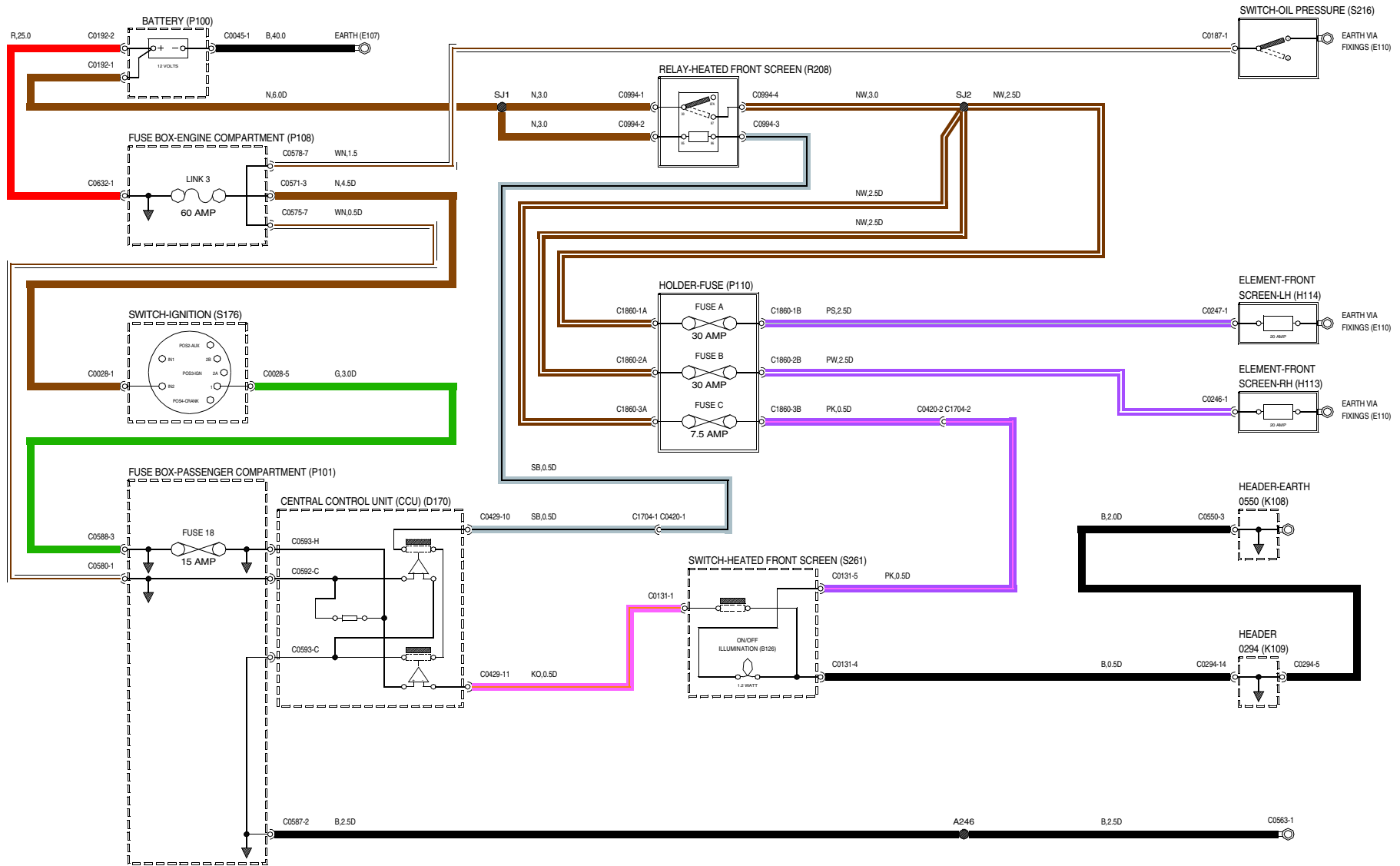


40 HEATED REAR SCREEN



WR004151-A-01

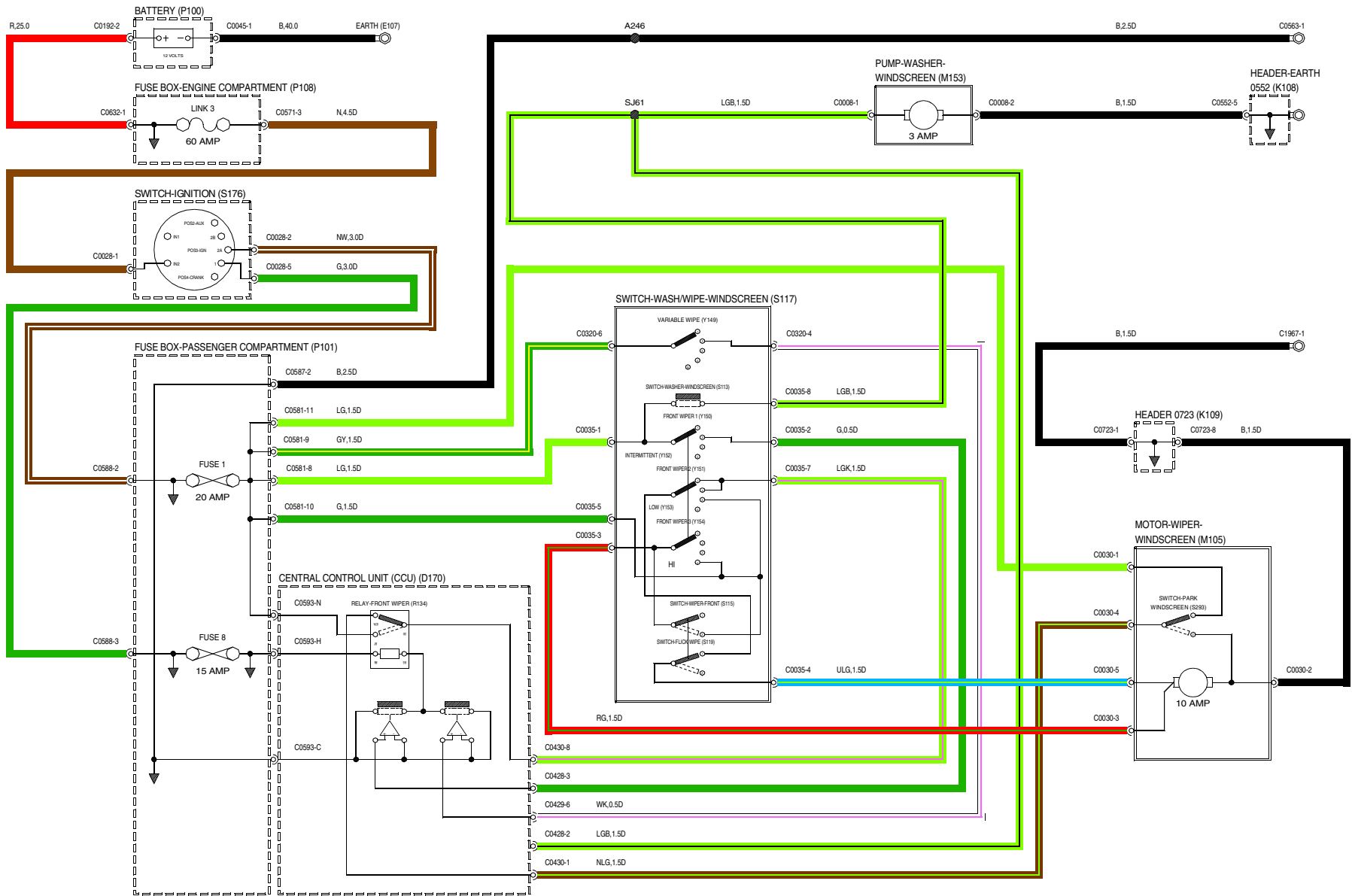
40 HEATED FRONT SCREEN



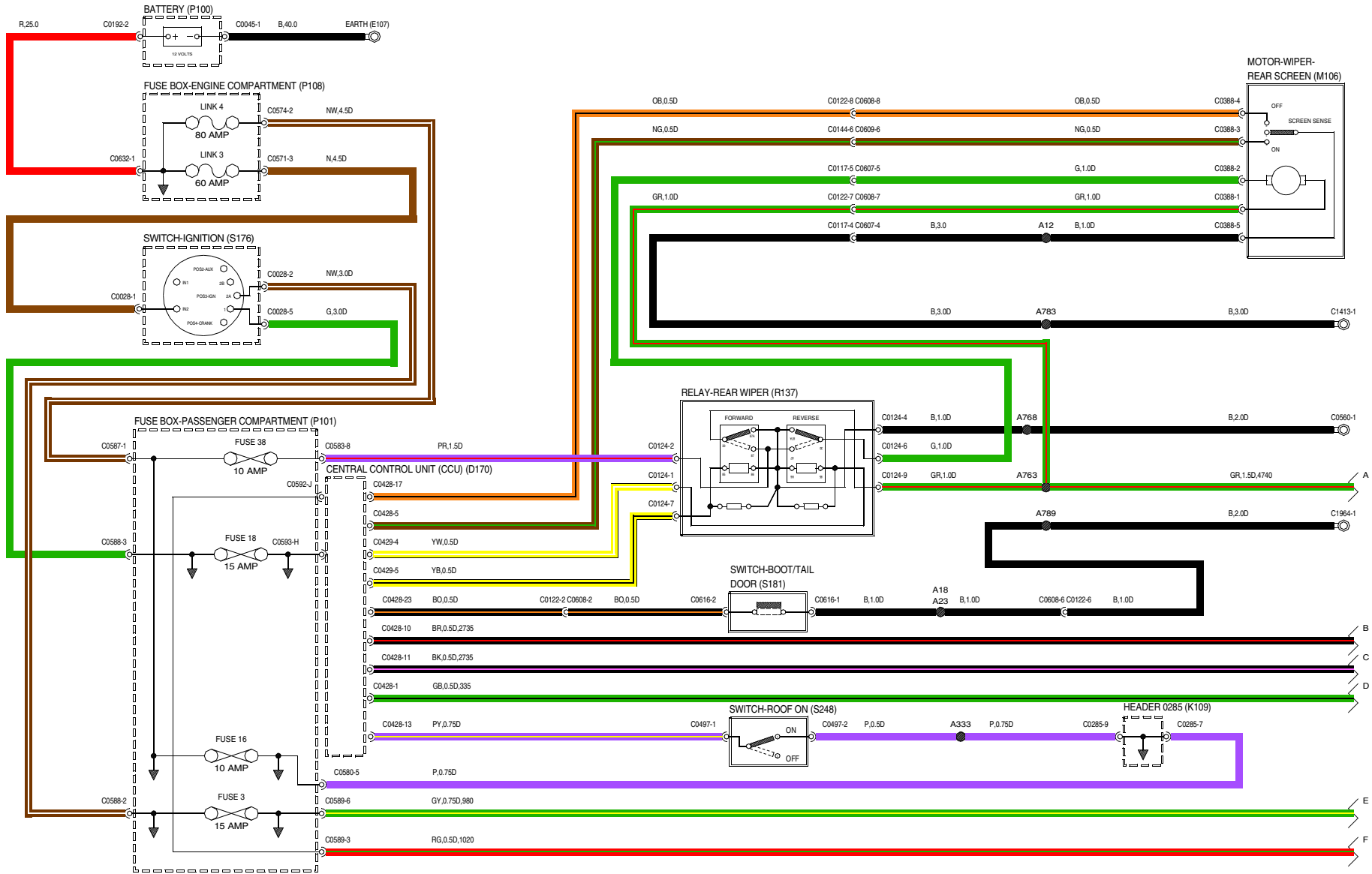
WR004571-A-01

42 WIPERS AND WASHERS

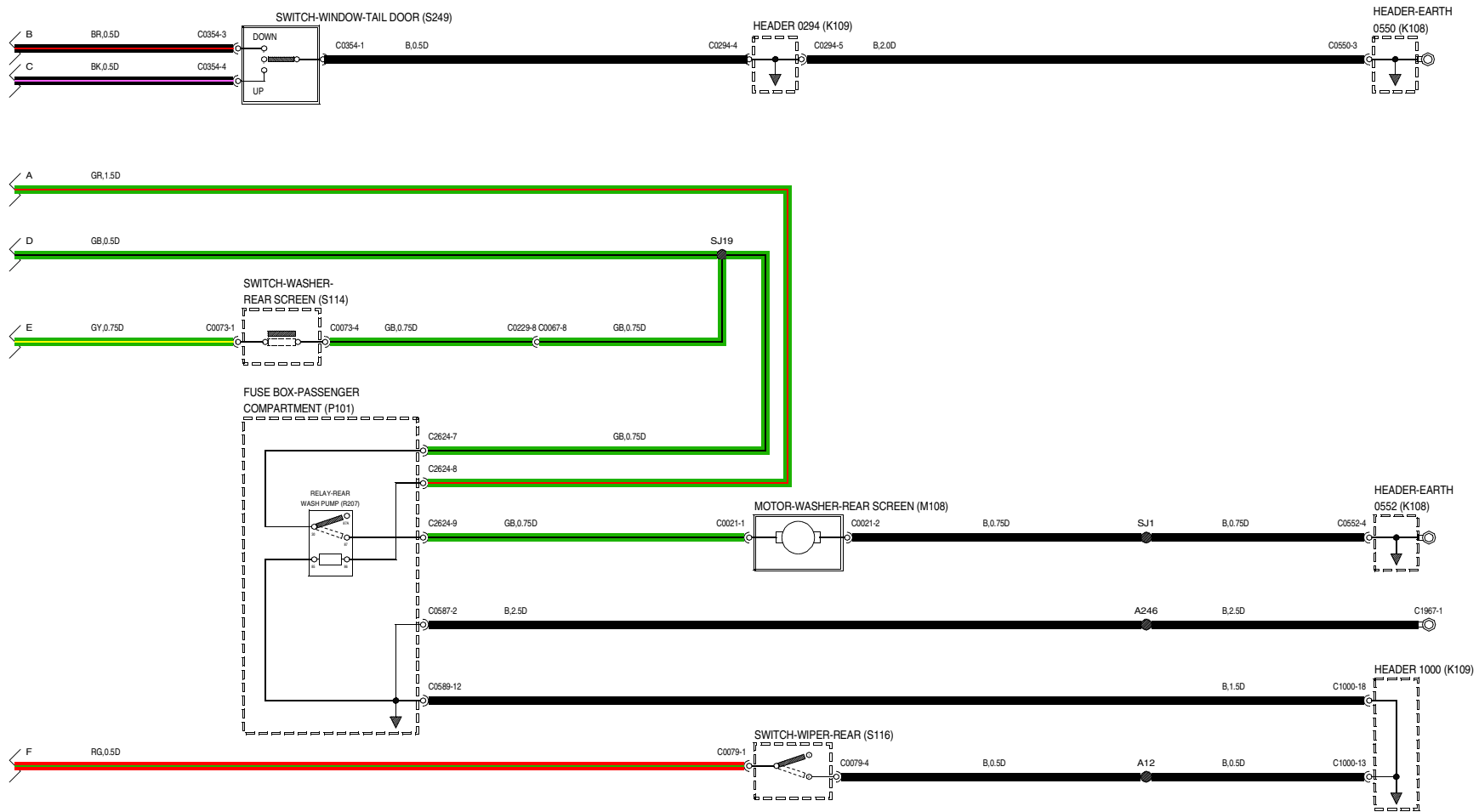
Front



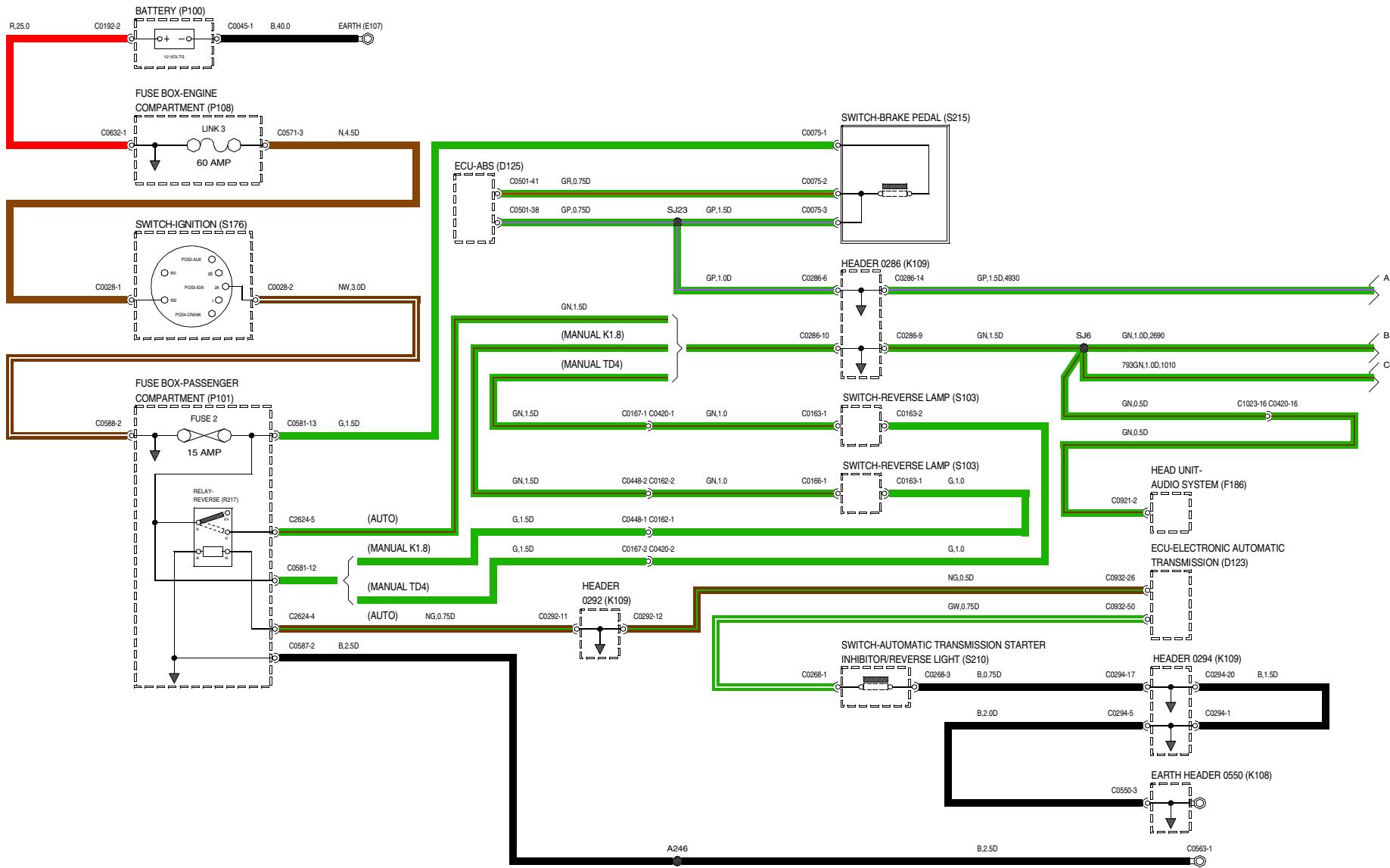
WR004391-A-01



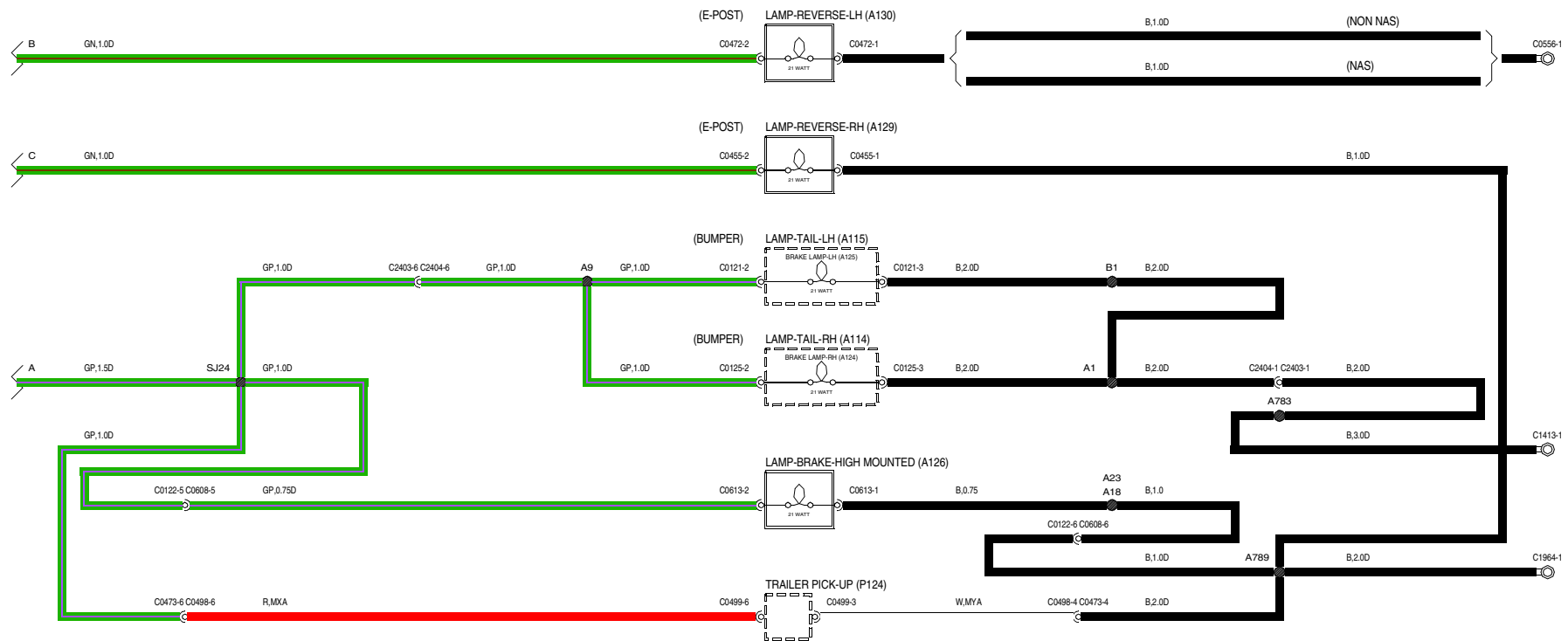
WR004401-A-01



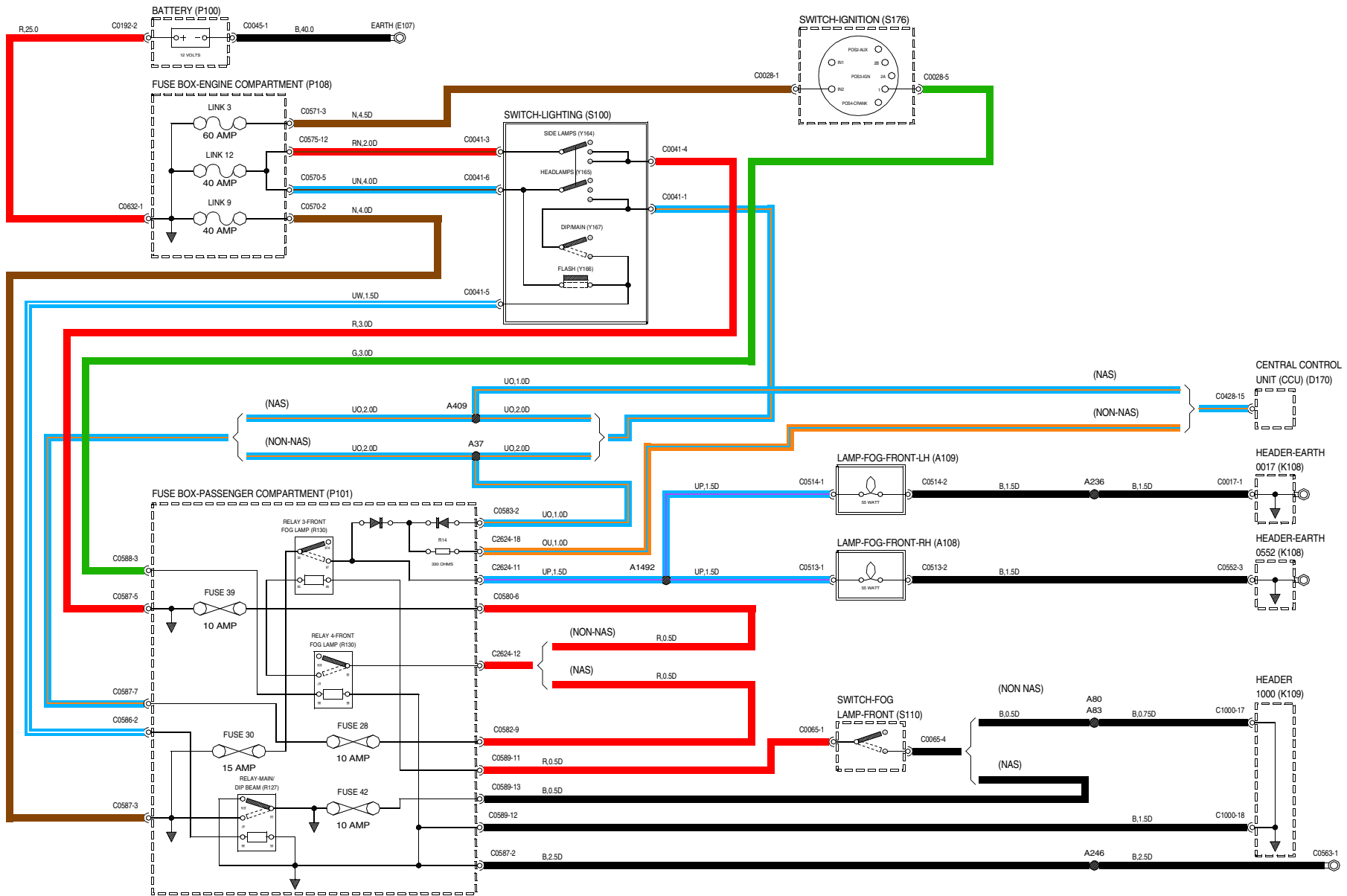
WVR004401-A-02



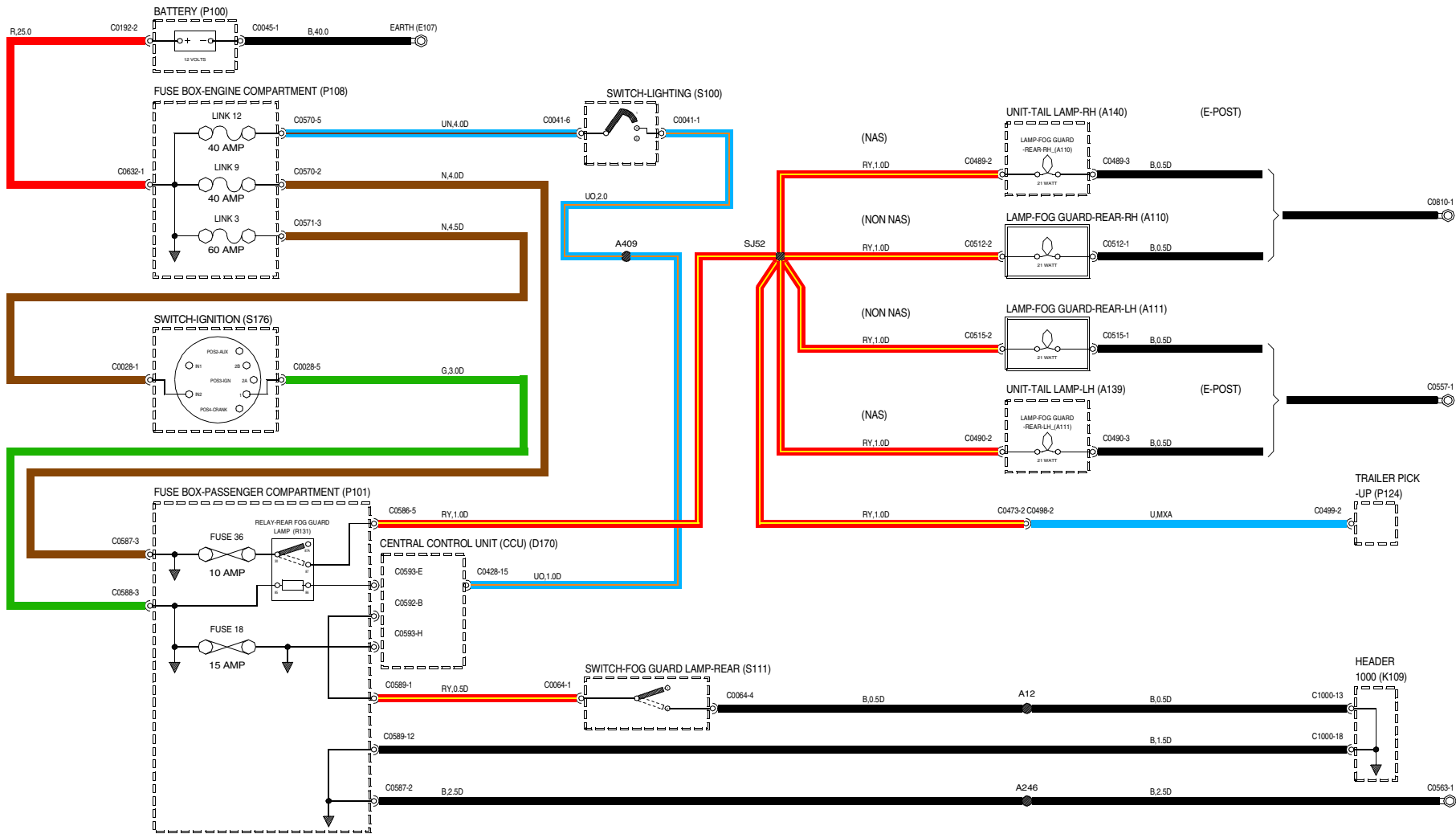
WFR003981-A-01



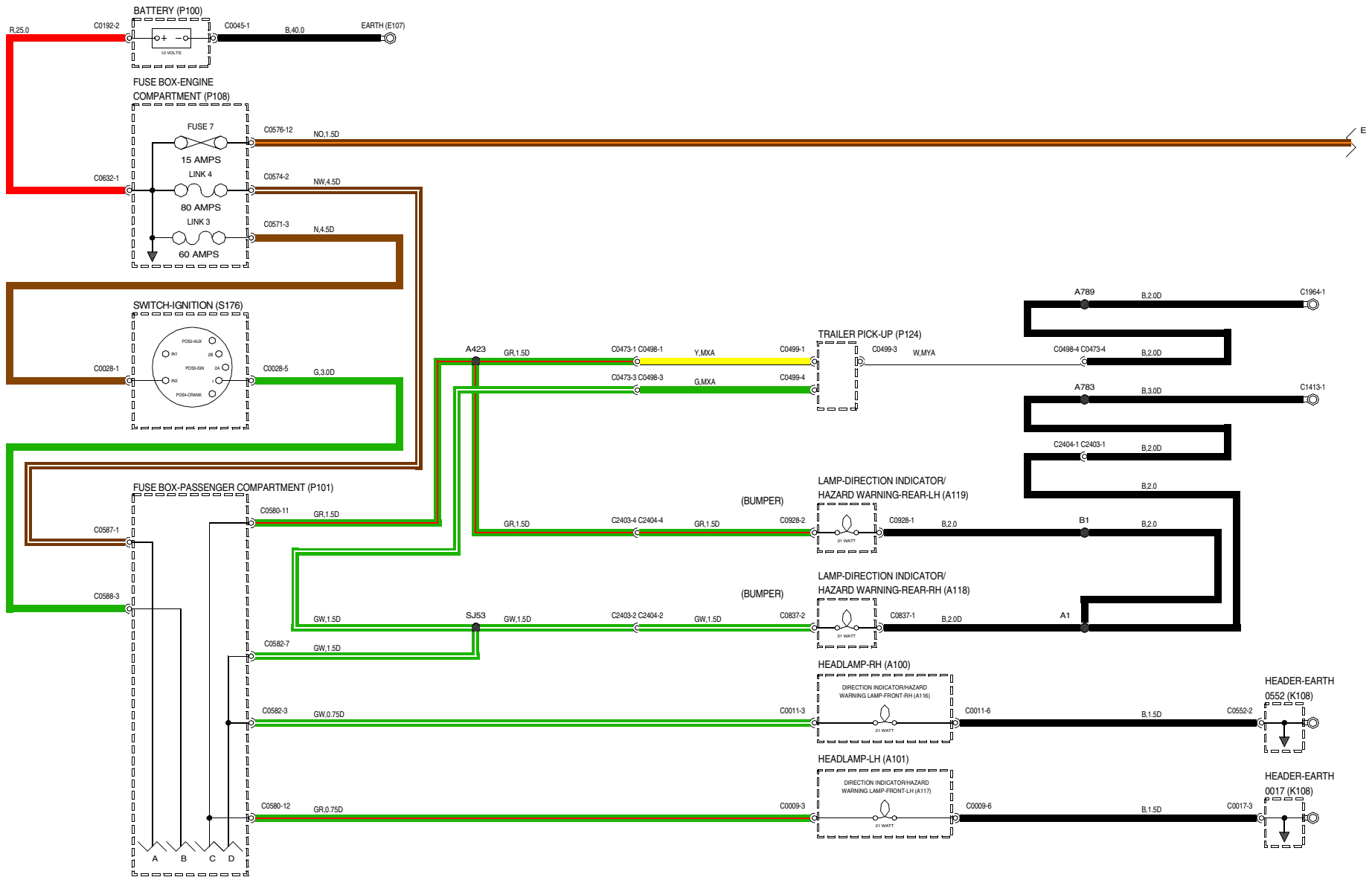
WVR003981-A-02



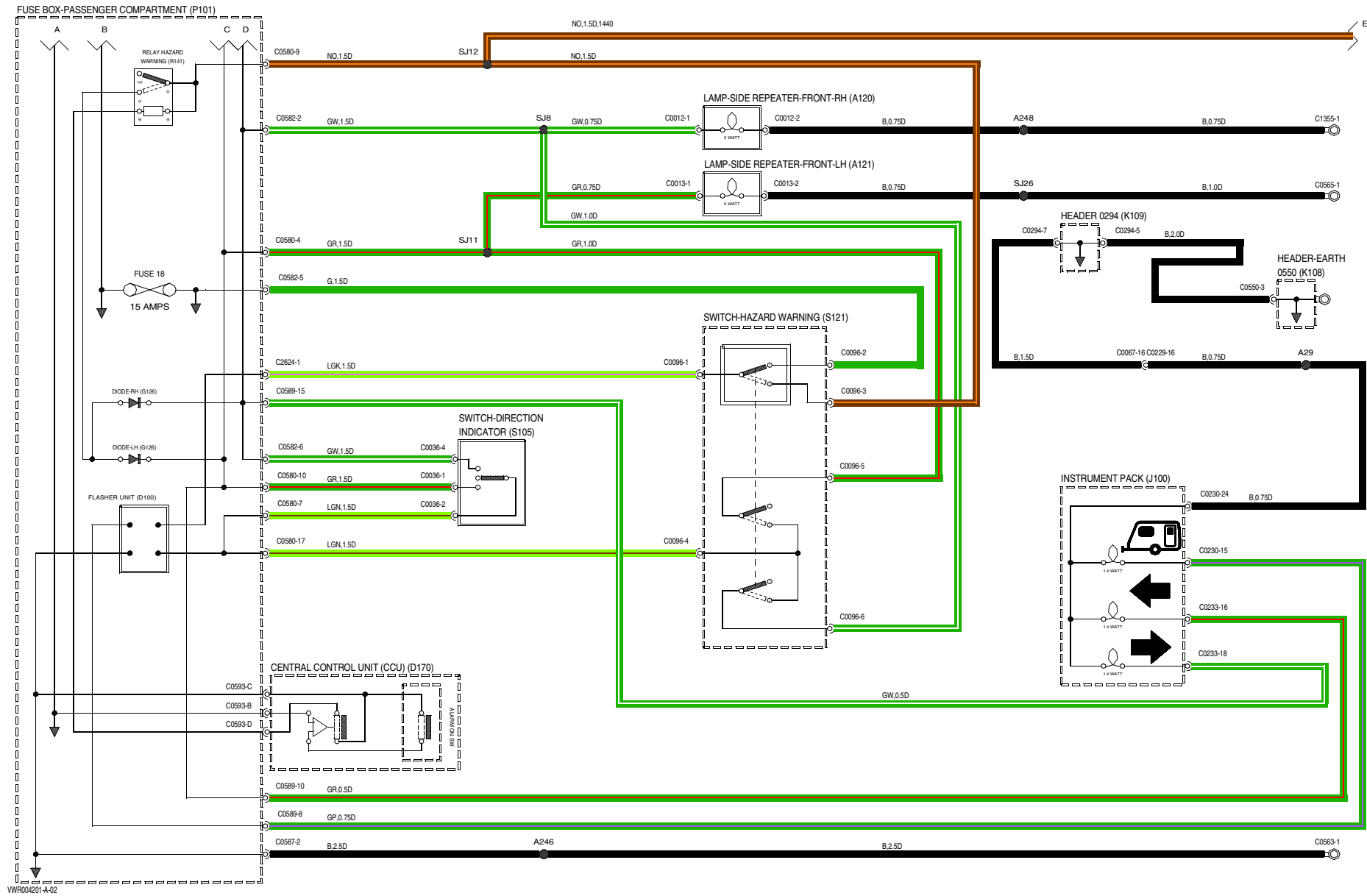
WFR500030-A-01



WFR004101-A-01

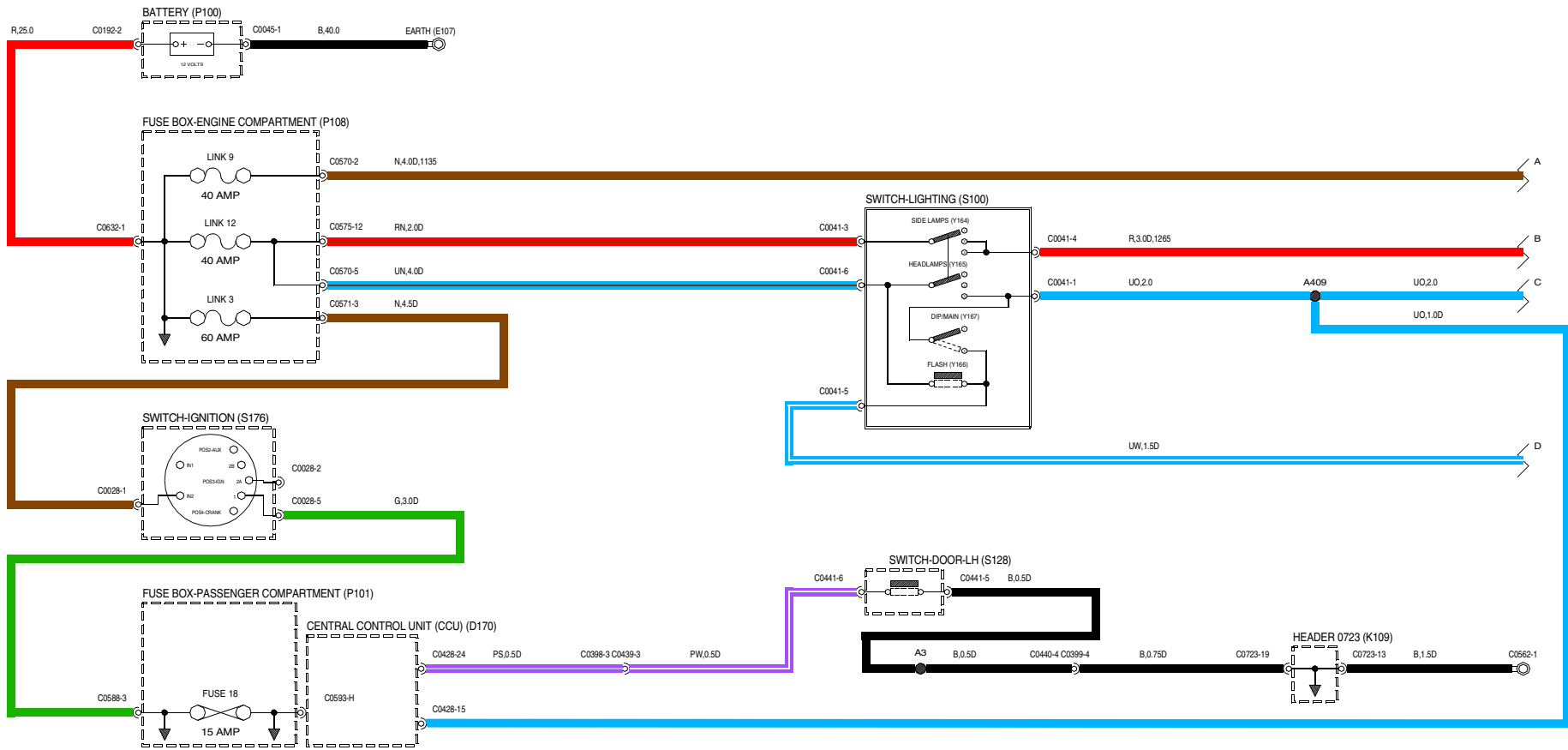


WFR004201-A-01

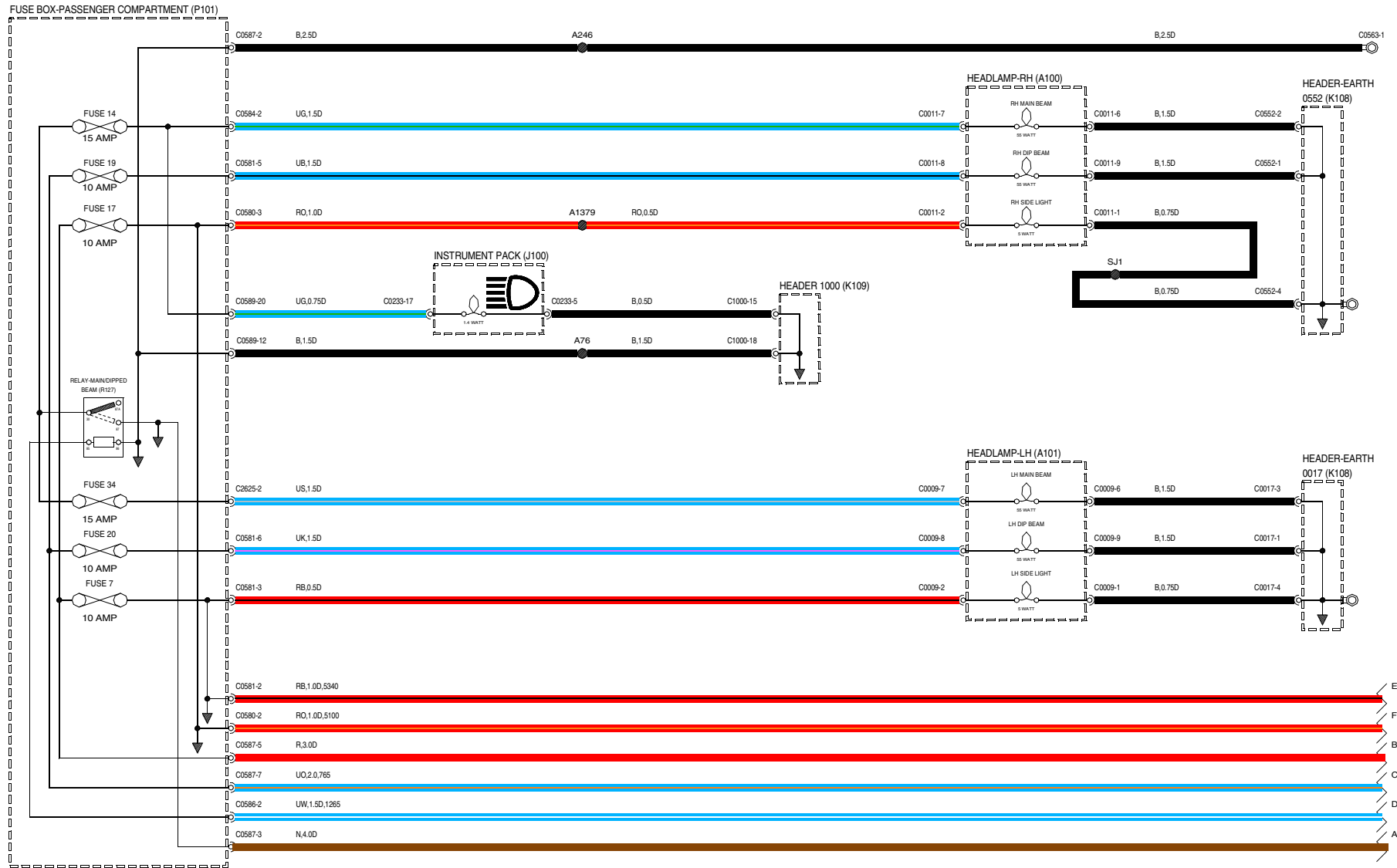


43 EXTERIOR LAMPS

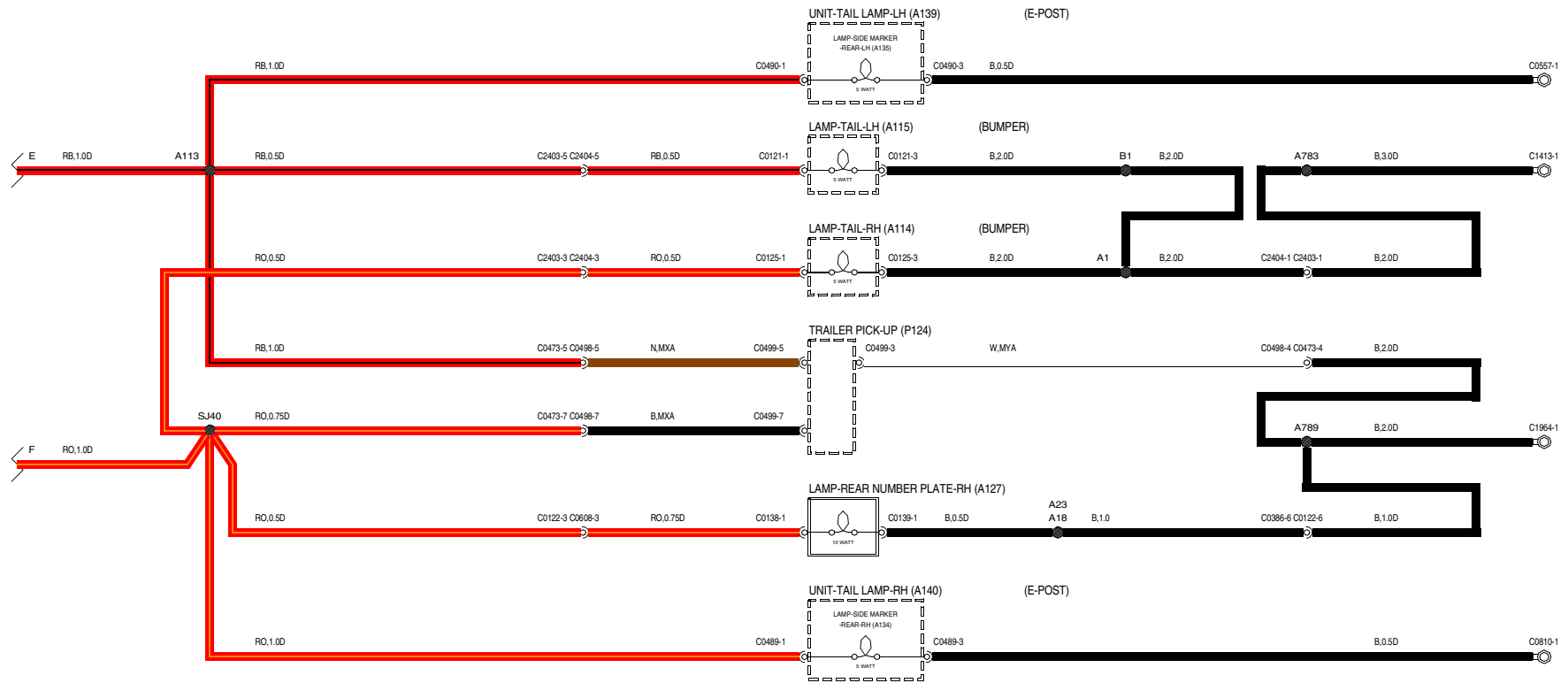
Head, side and tail lamps - NAS

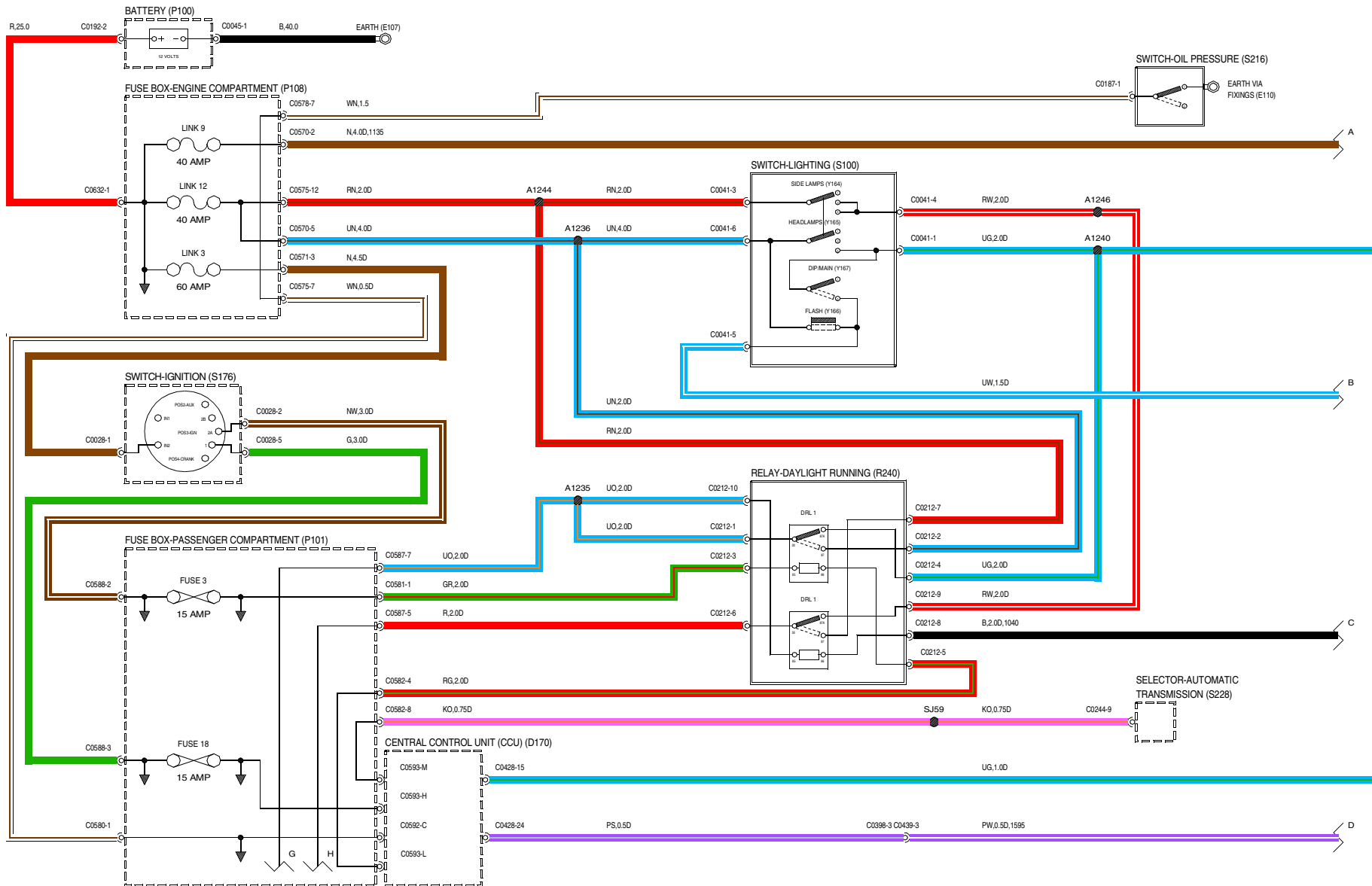


VWR004471-A-01

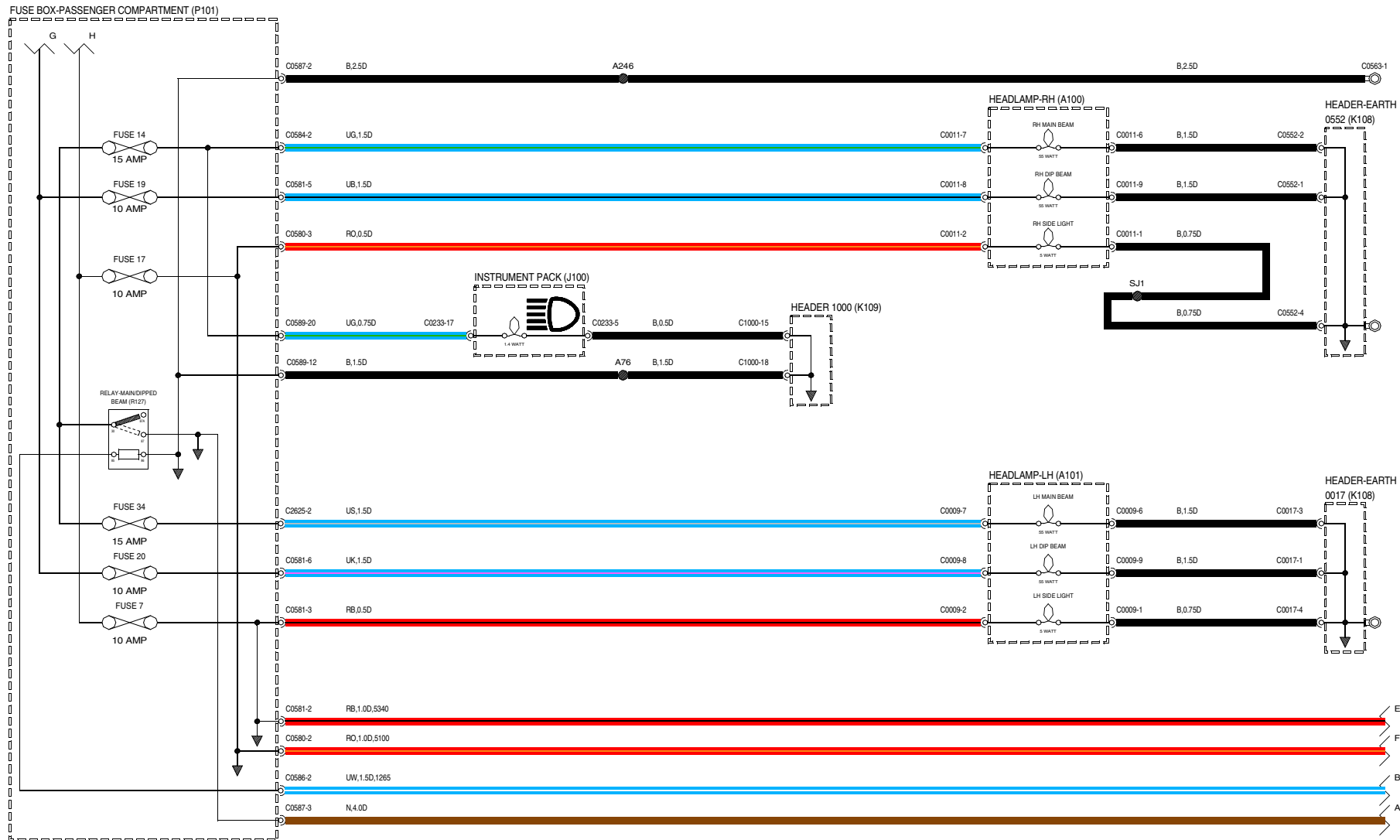


WVR004471-A-02

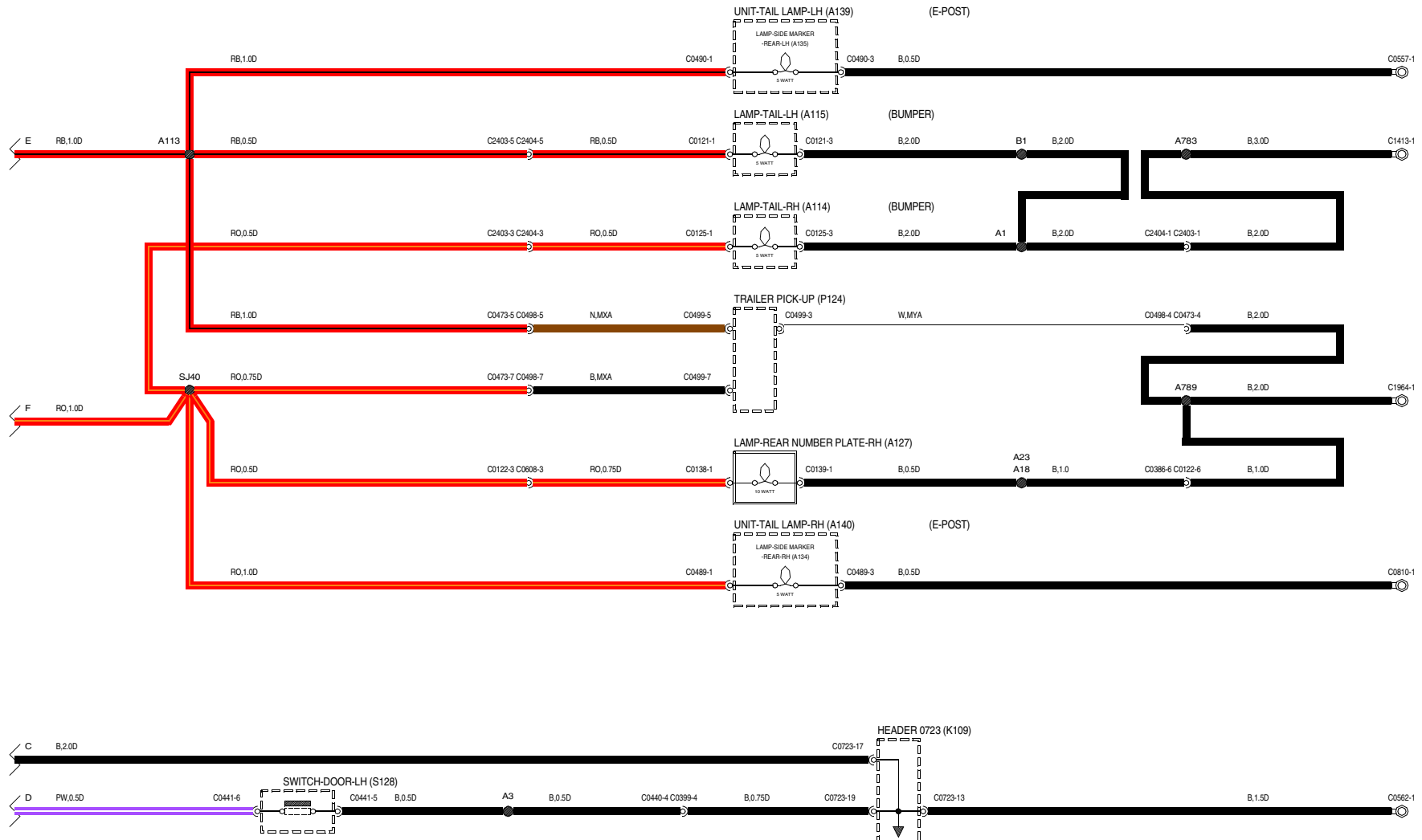




WFR004581-A-01

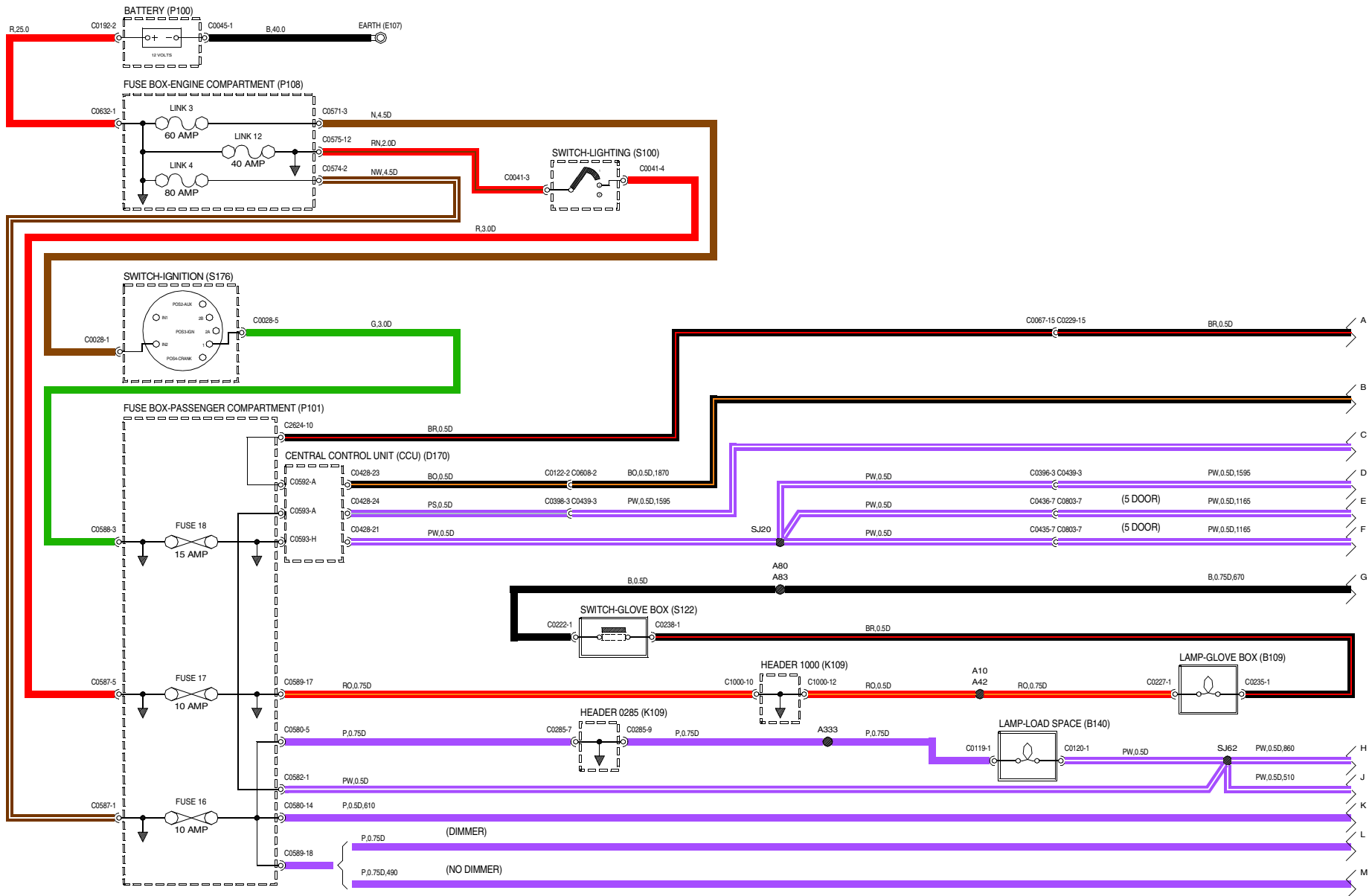


WVR004581-A-02



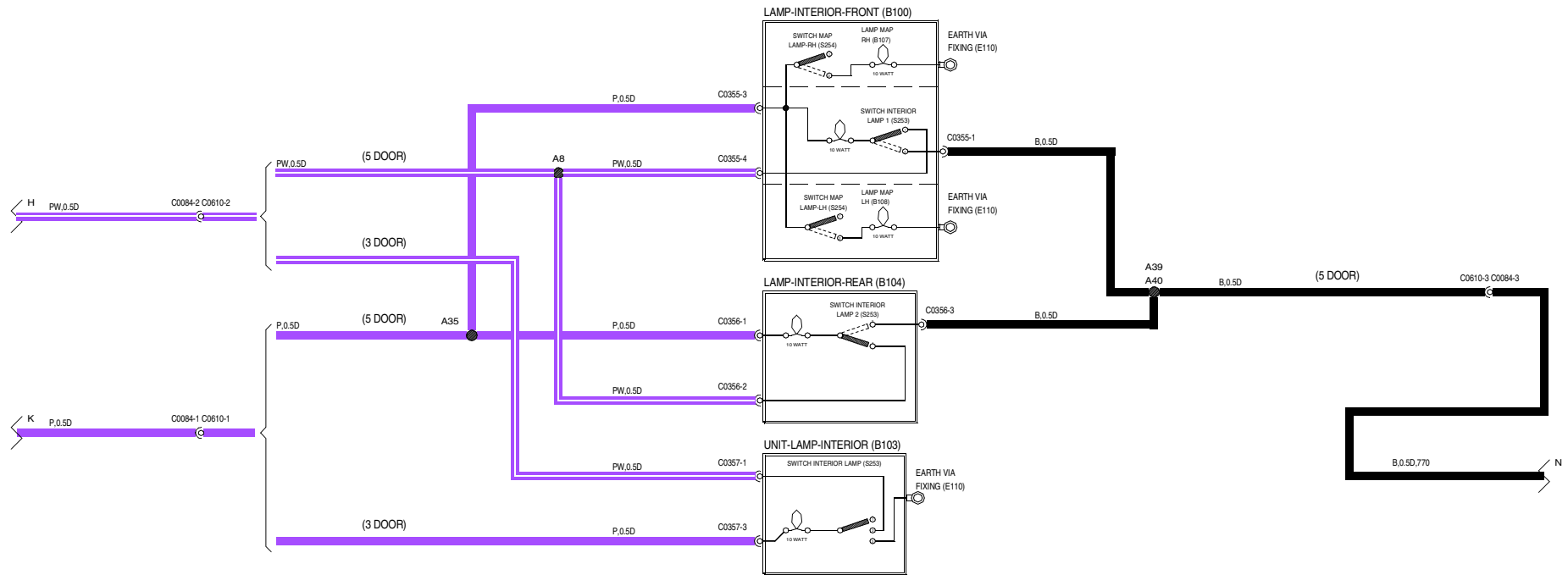
WFR004581-A-03

44 INTERIOR LAMPS



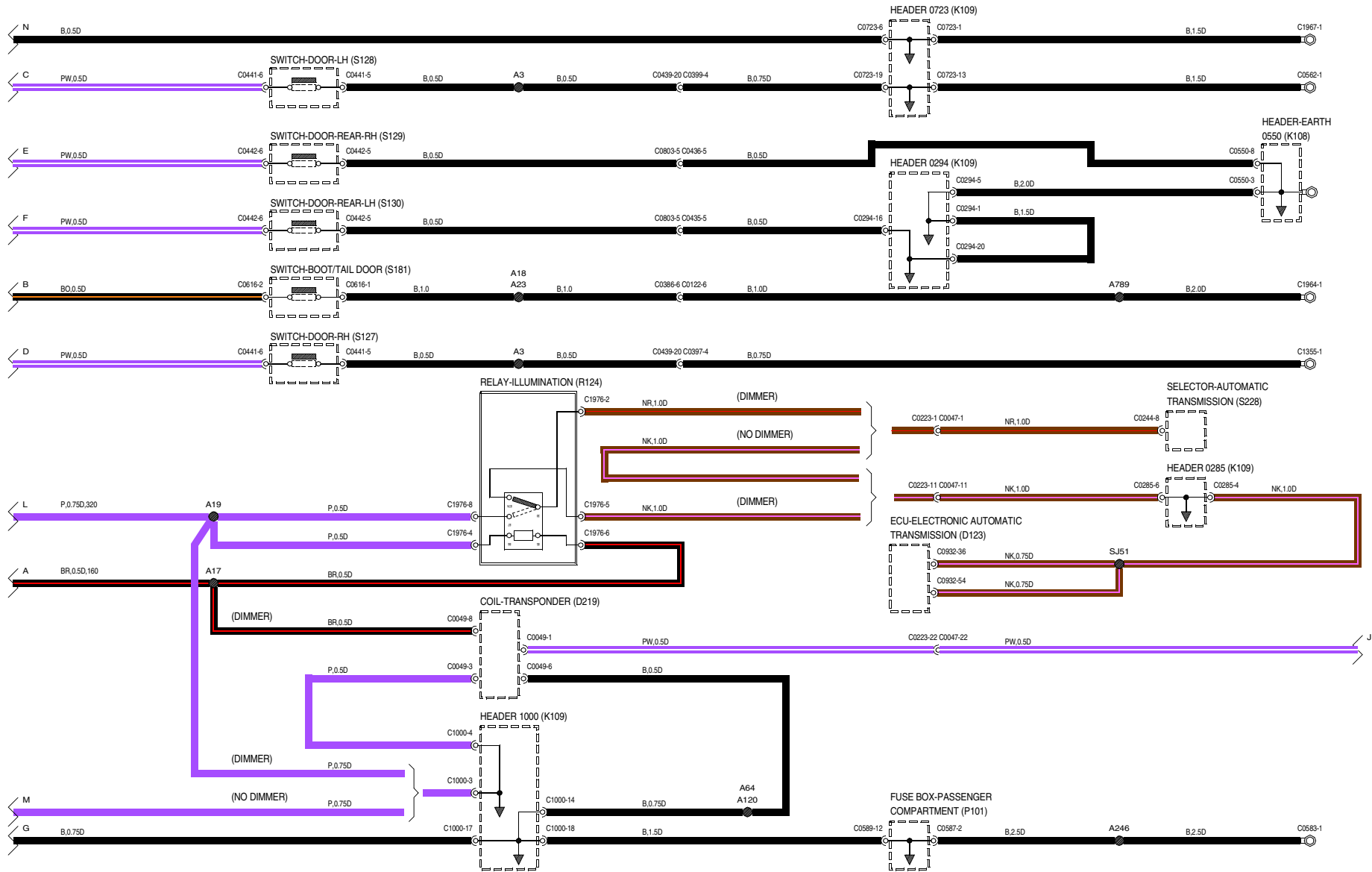
WFR004231-A-01

44 INTERIOR LAMPS



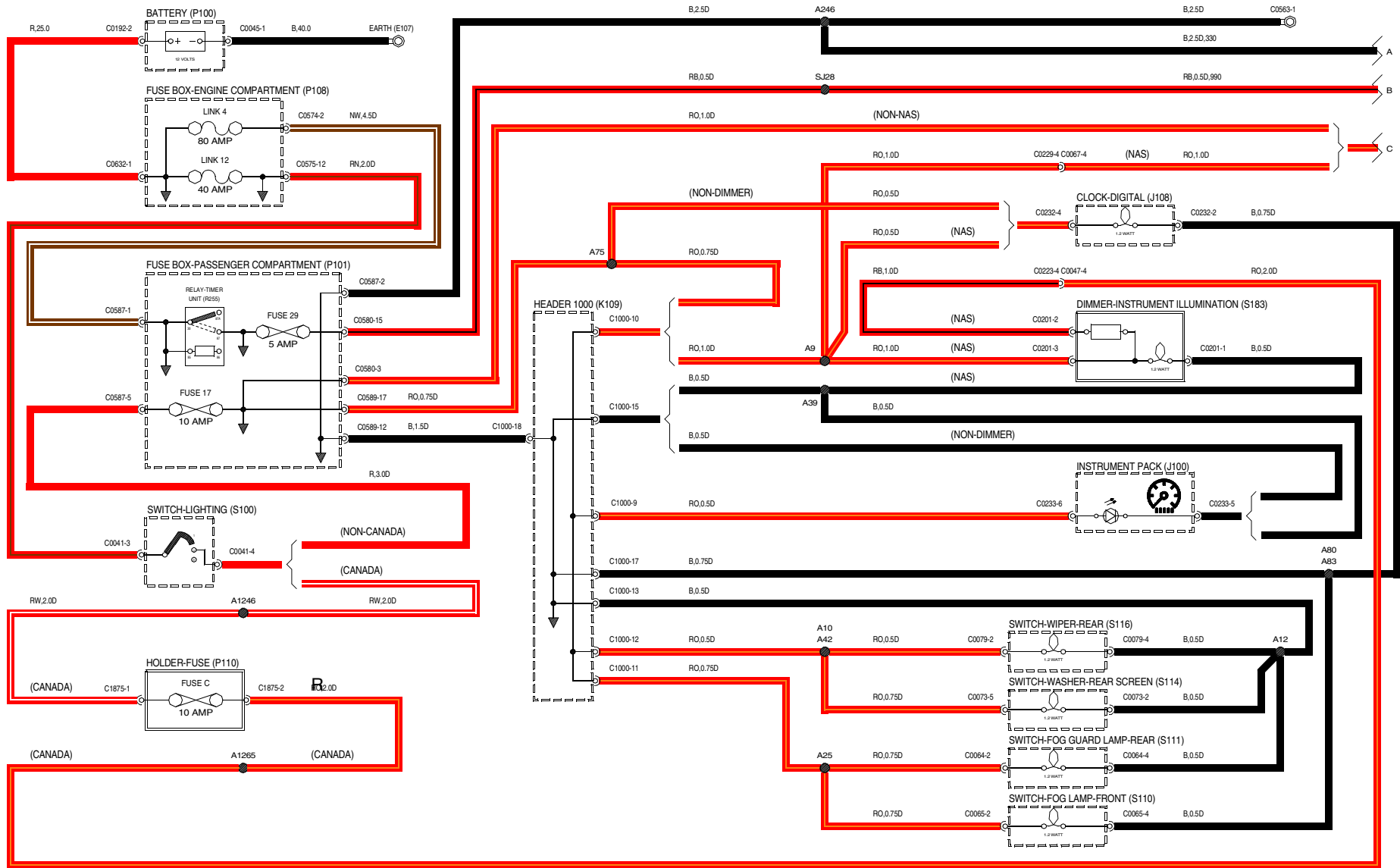
WVR004231-A-02

44 INTERIOR LAMPS



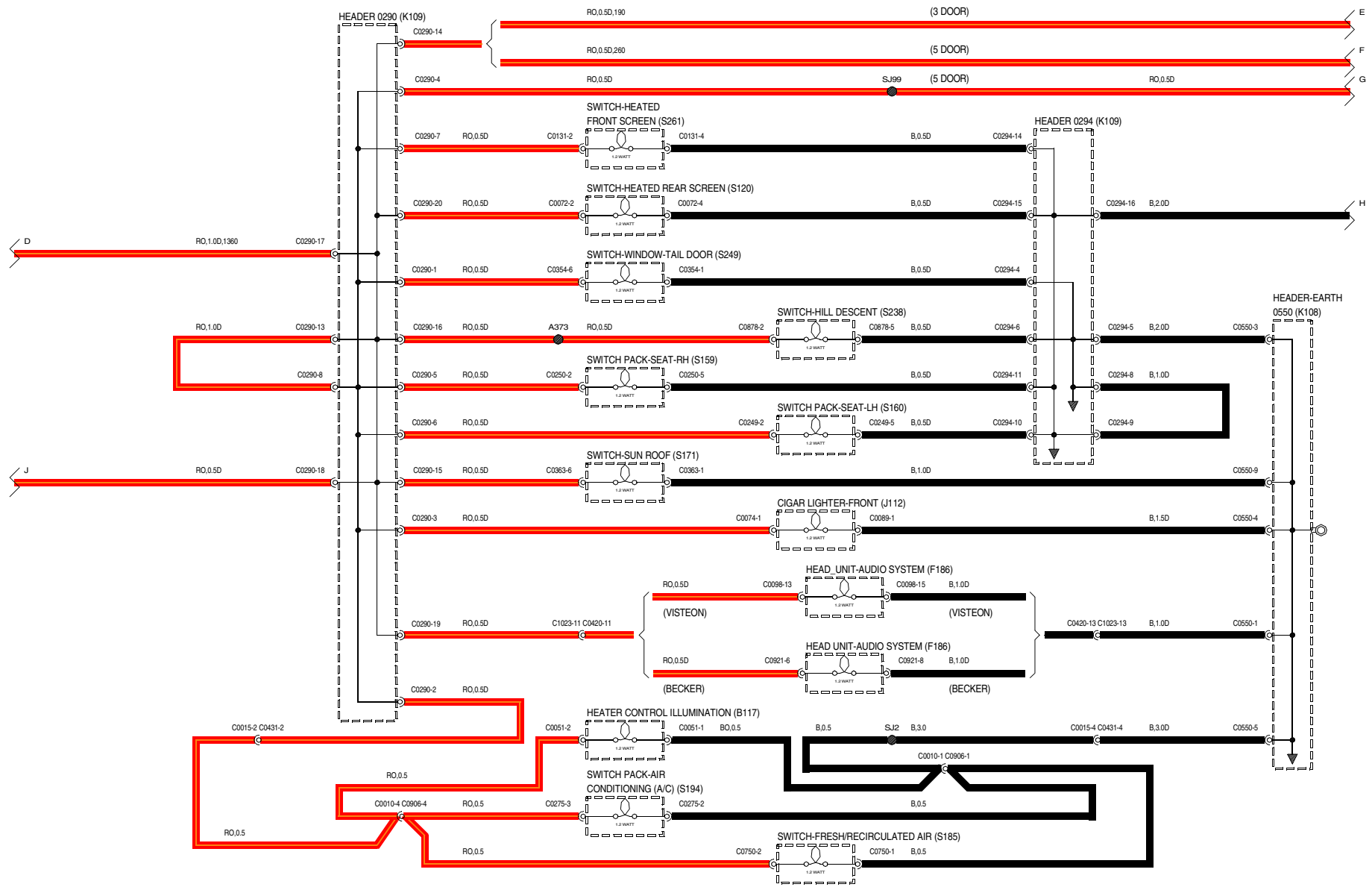
WFR004231-A-03

46 INTERIOR ILLUMINATION



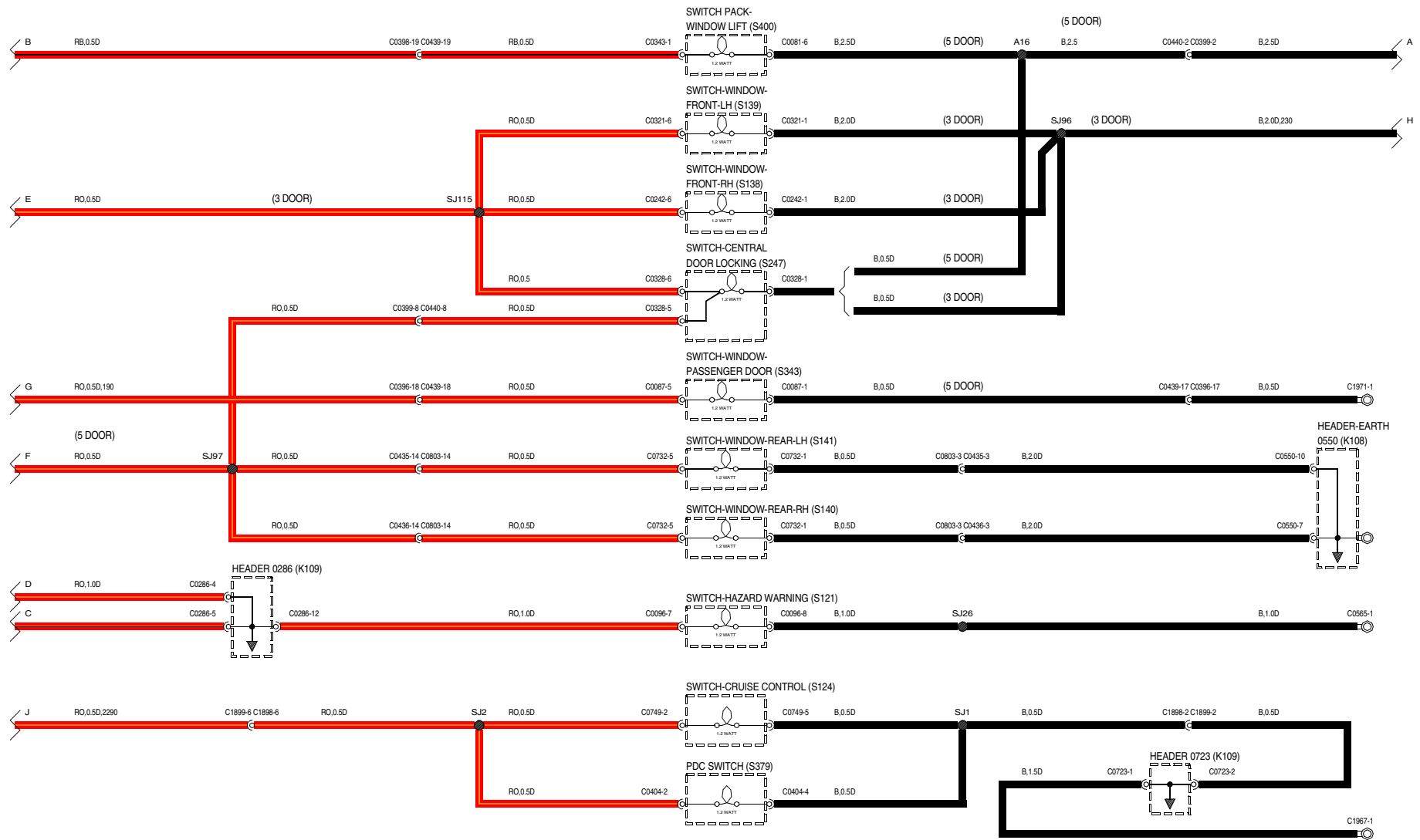
WFR00421-A-01

46 INTERIOR ILLUMINATION



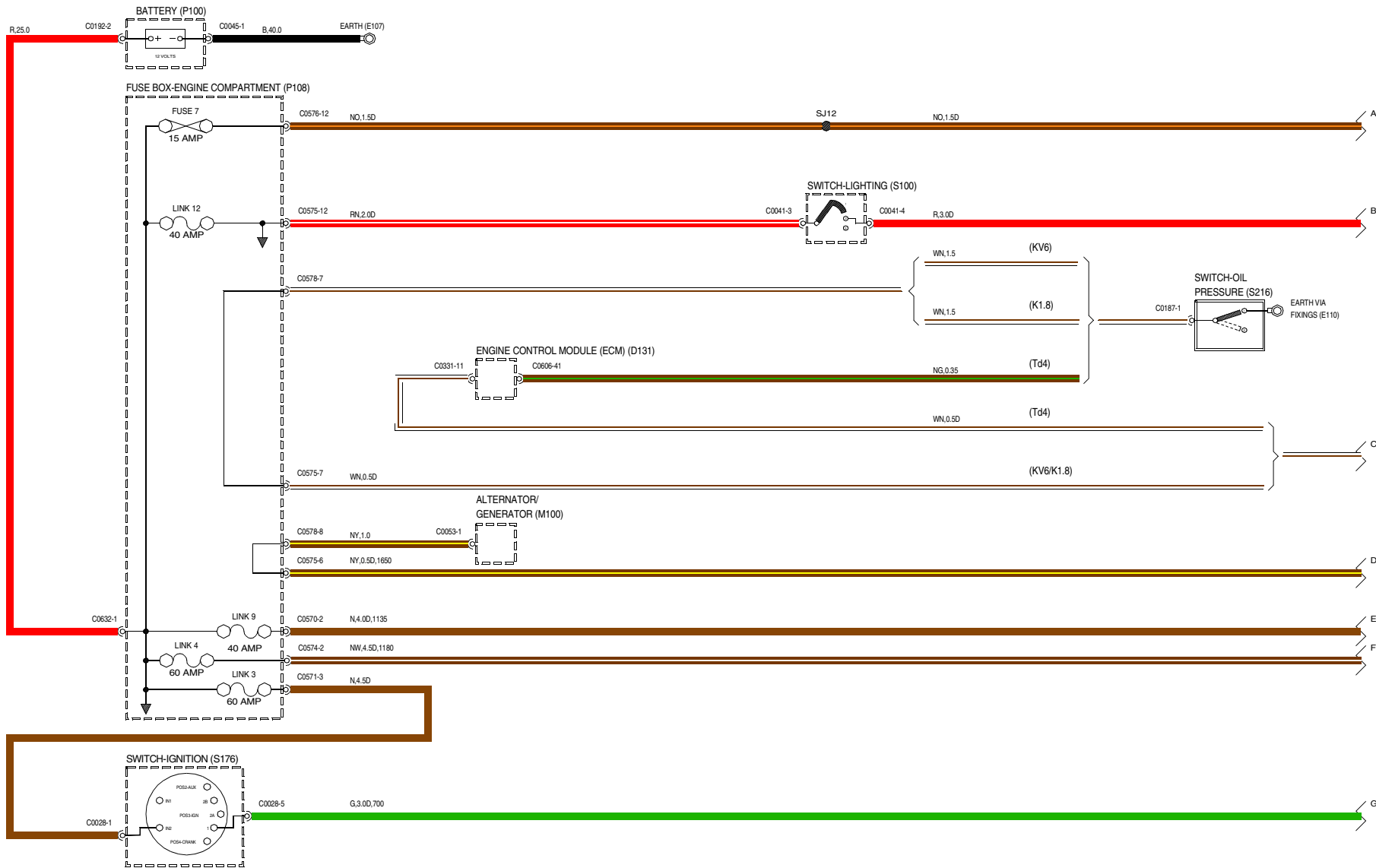
WVR00421-A-02

46 INTERIOR ILLUMINATION

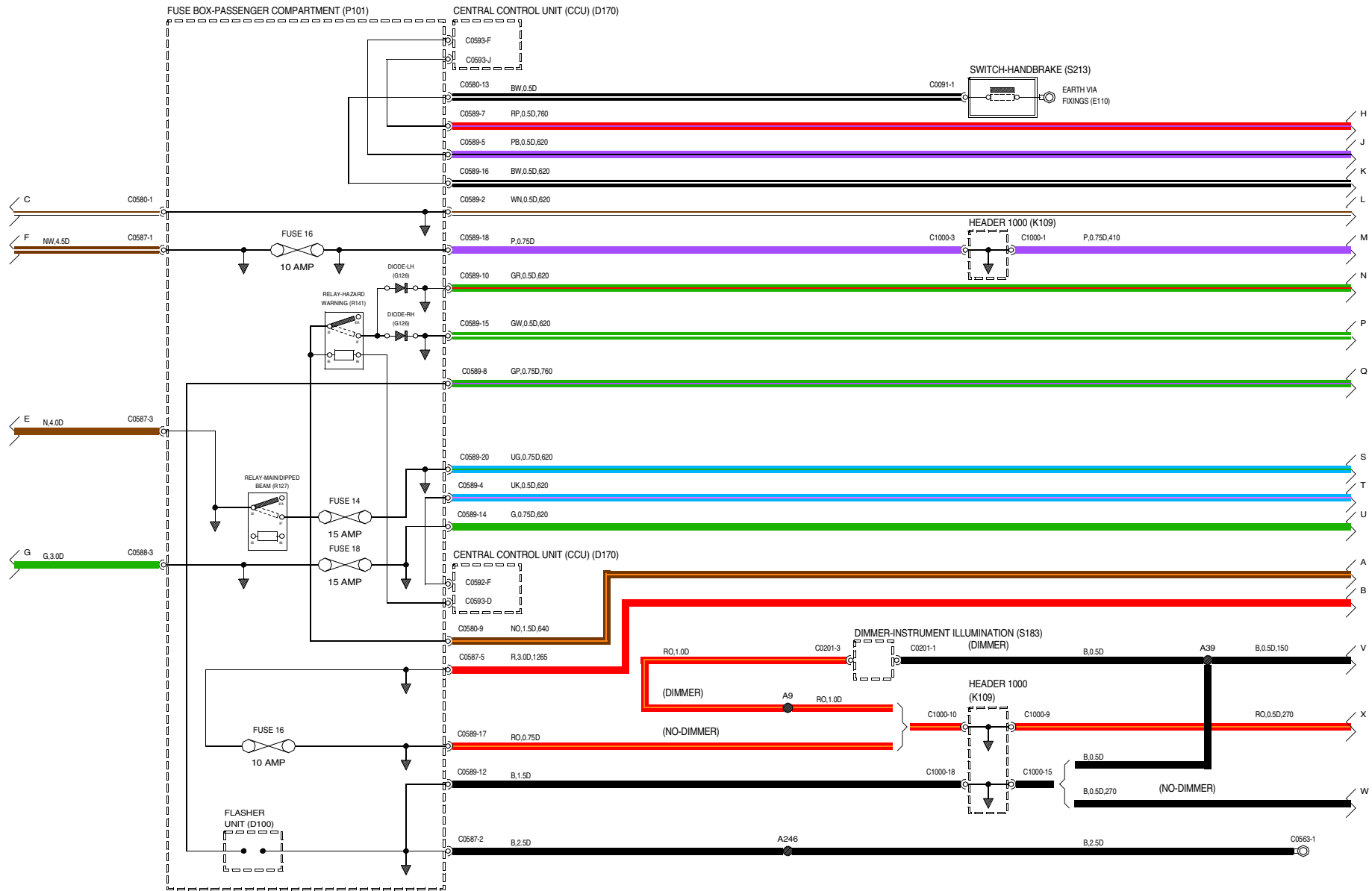


WFR004221-A-03

47 INSTRUMENTS

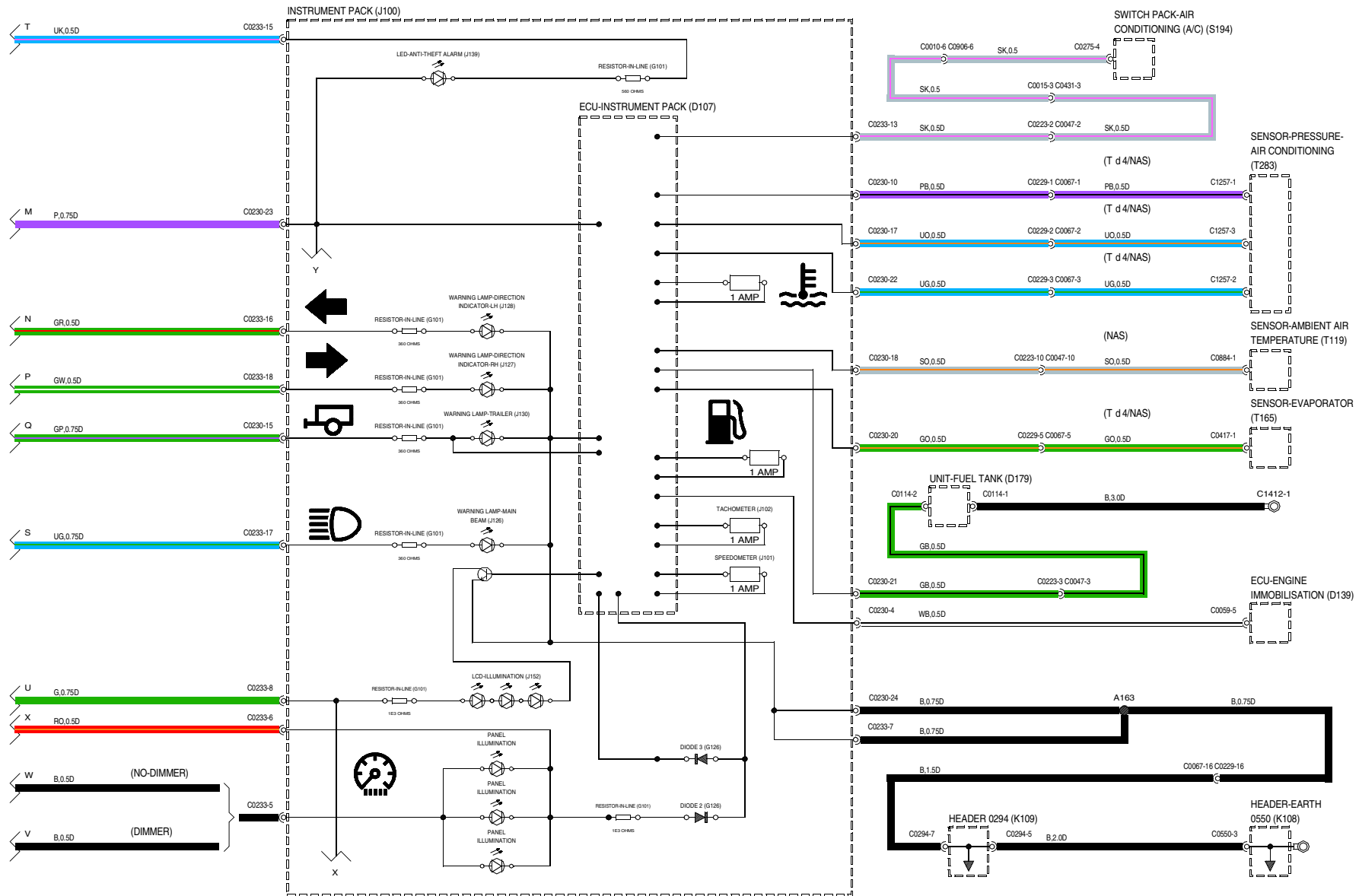


WFR004211-A-01

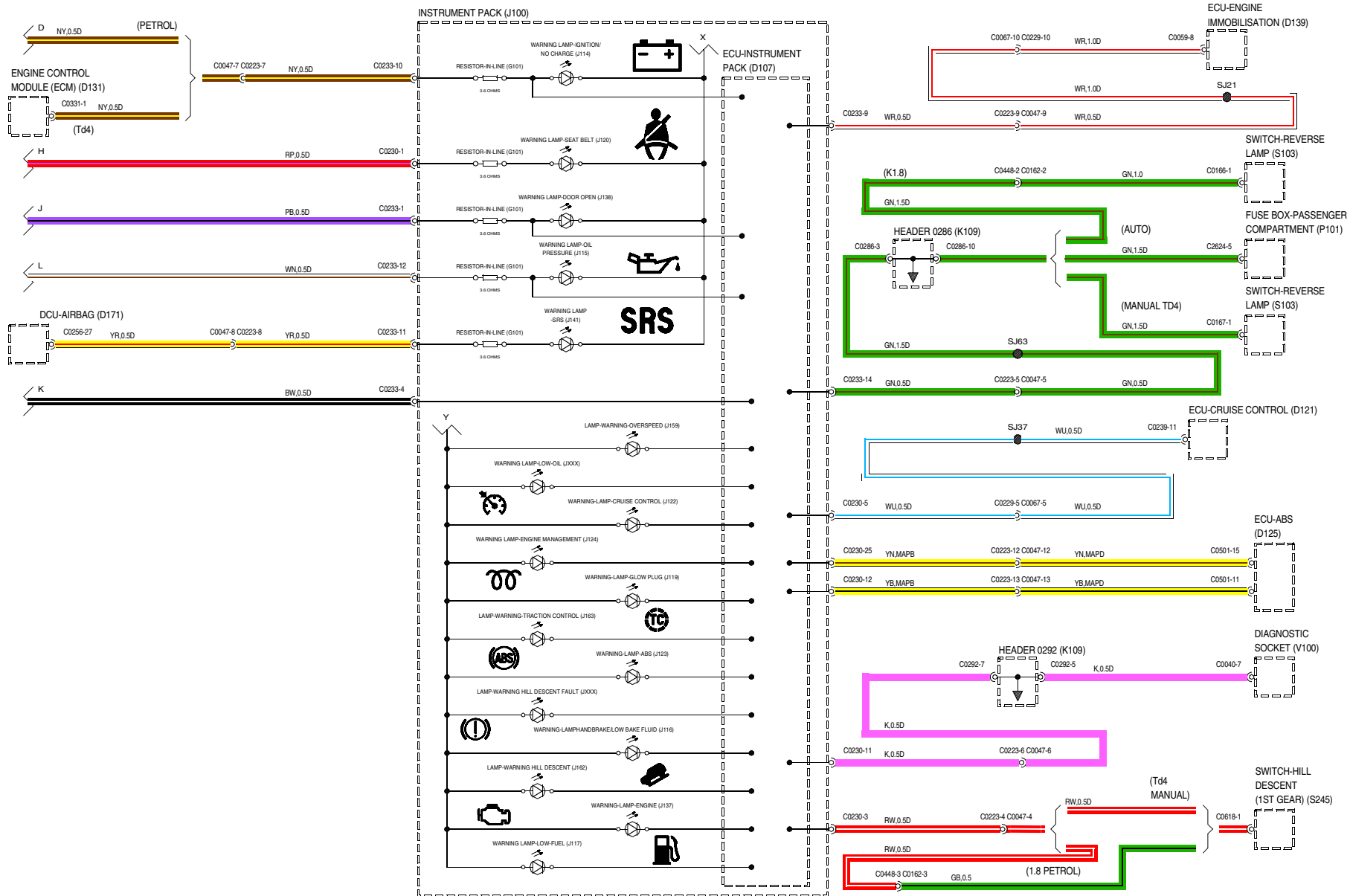


WR004211-A-02

47 INSTRUMENTS

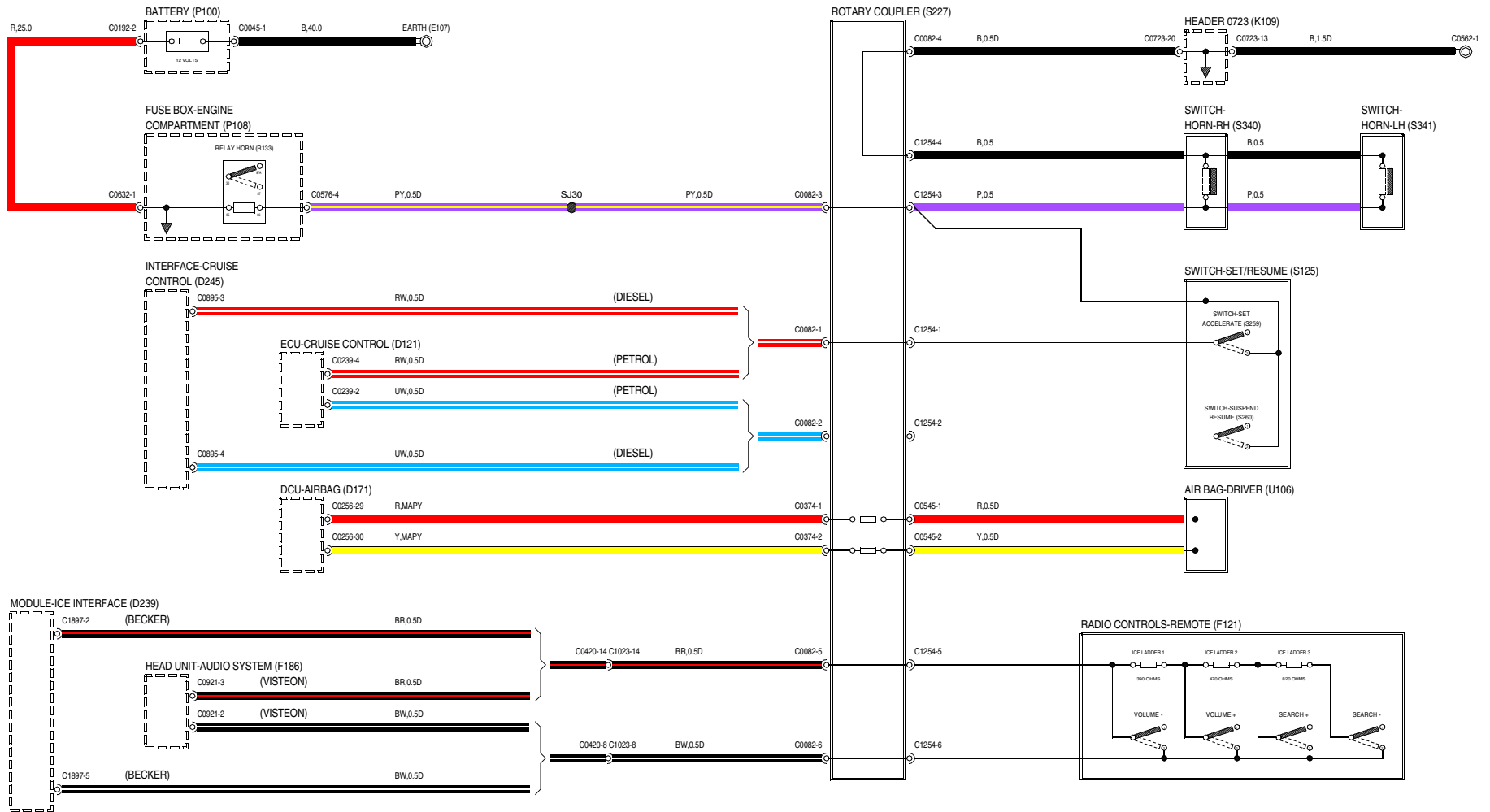


WR004211-A-03

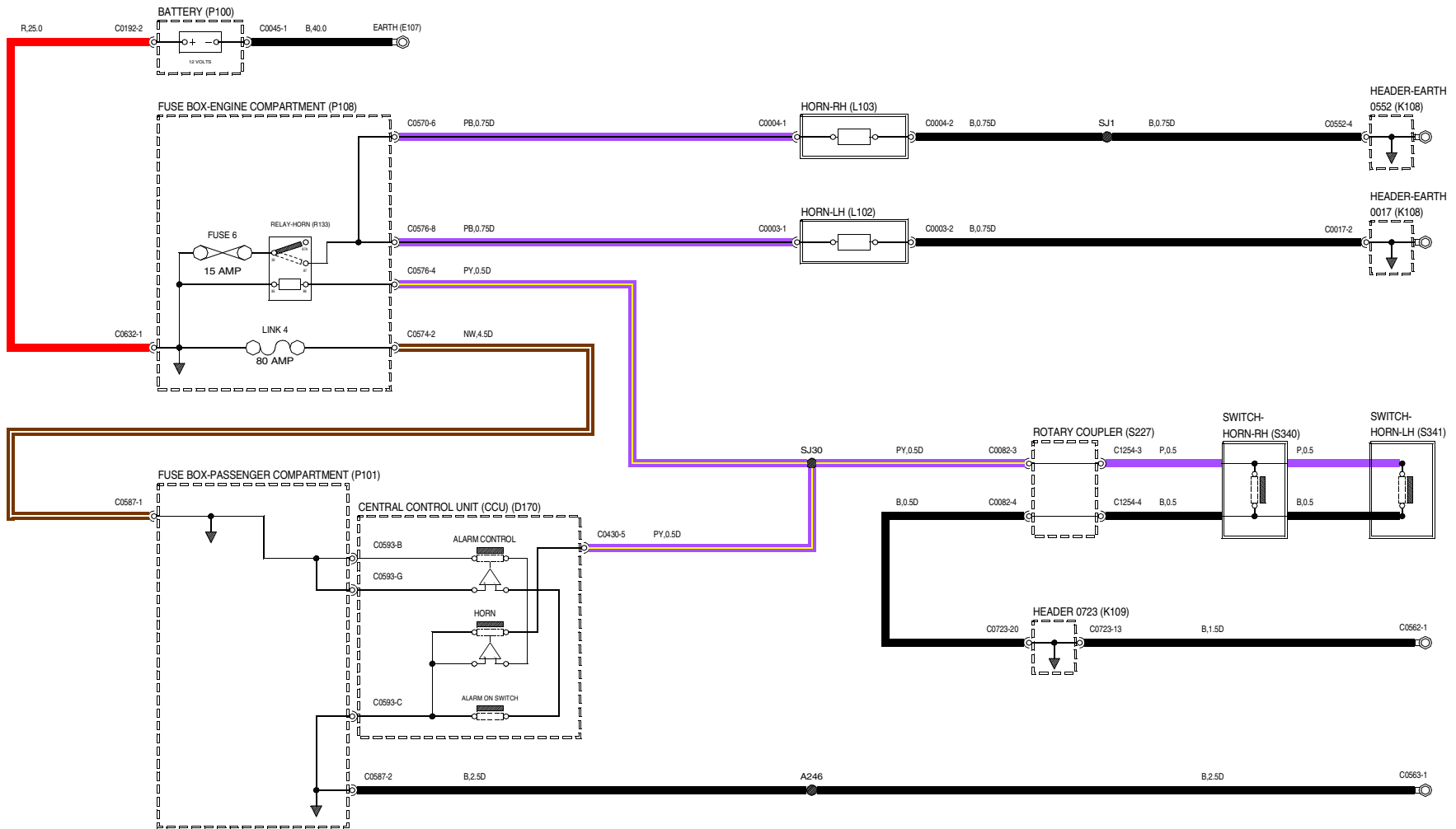


WVR004211-A-04

47 ROTARY COUPLER

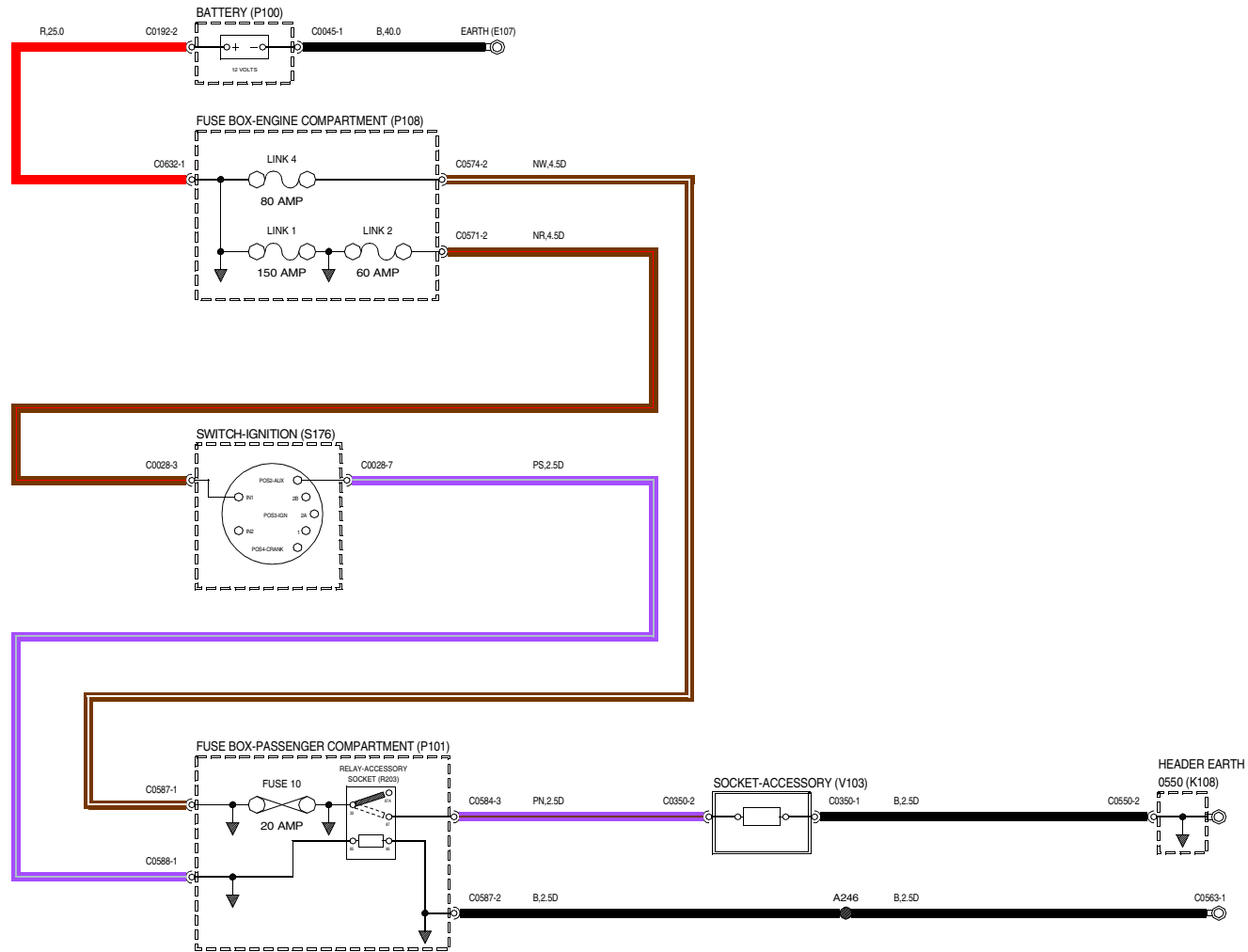


48 HORN (S)



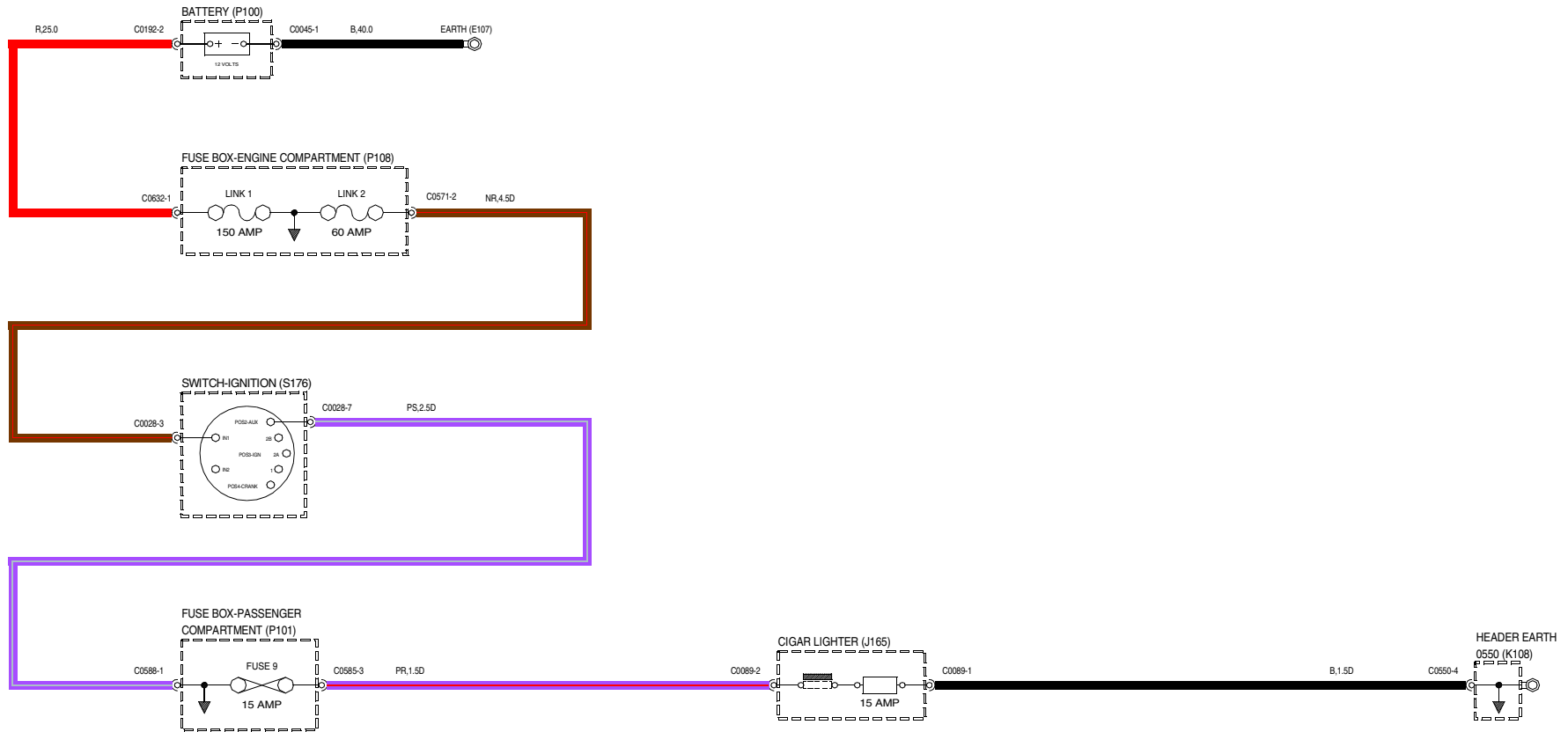
WR004171-A-01

49 ACCESSORY SOCKET

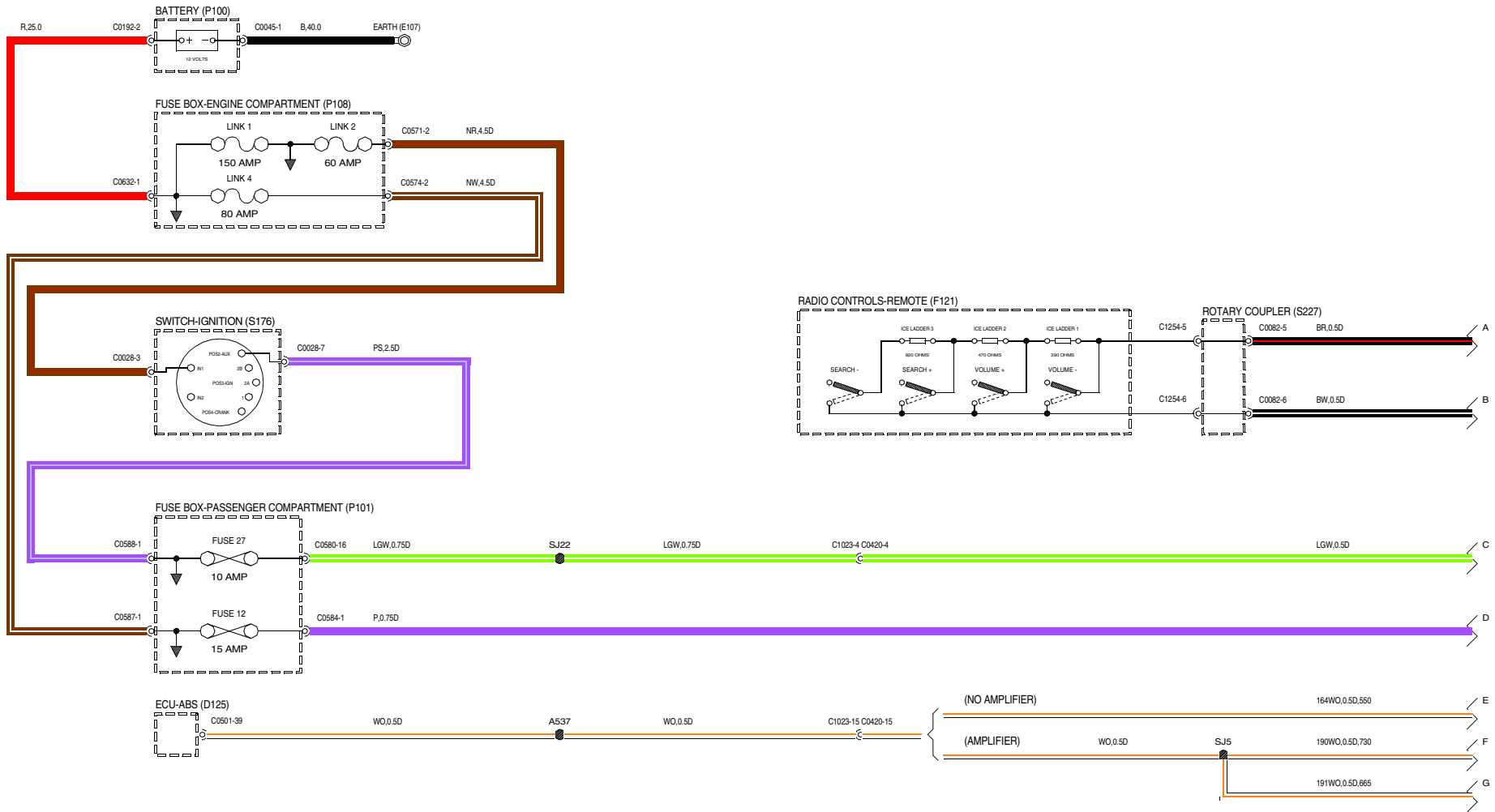


WVR003941-A-01

49 CIGAR LIGHTER



50 AUDIO SYSTEMS

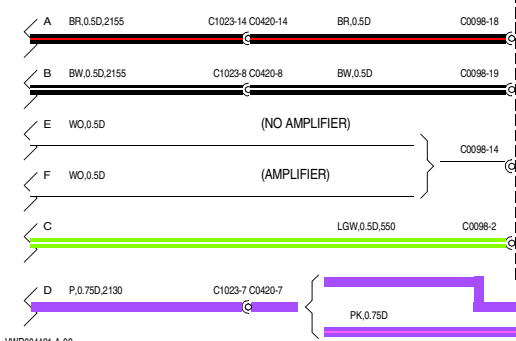


WFR004421-A-01

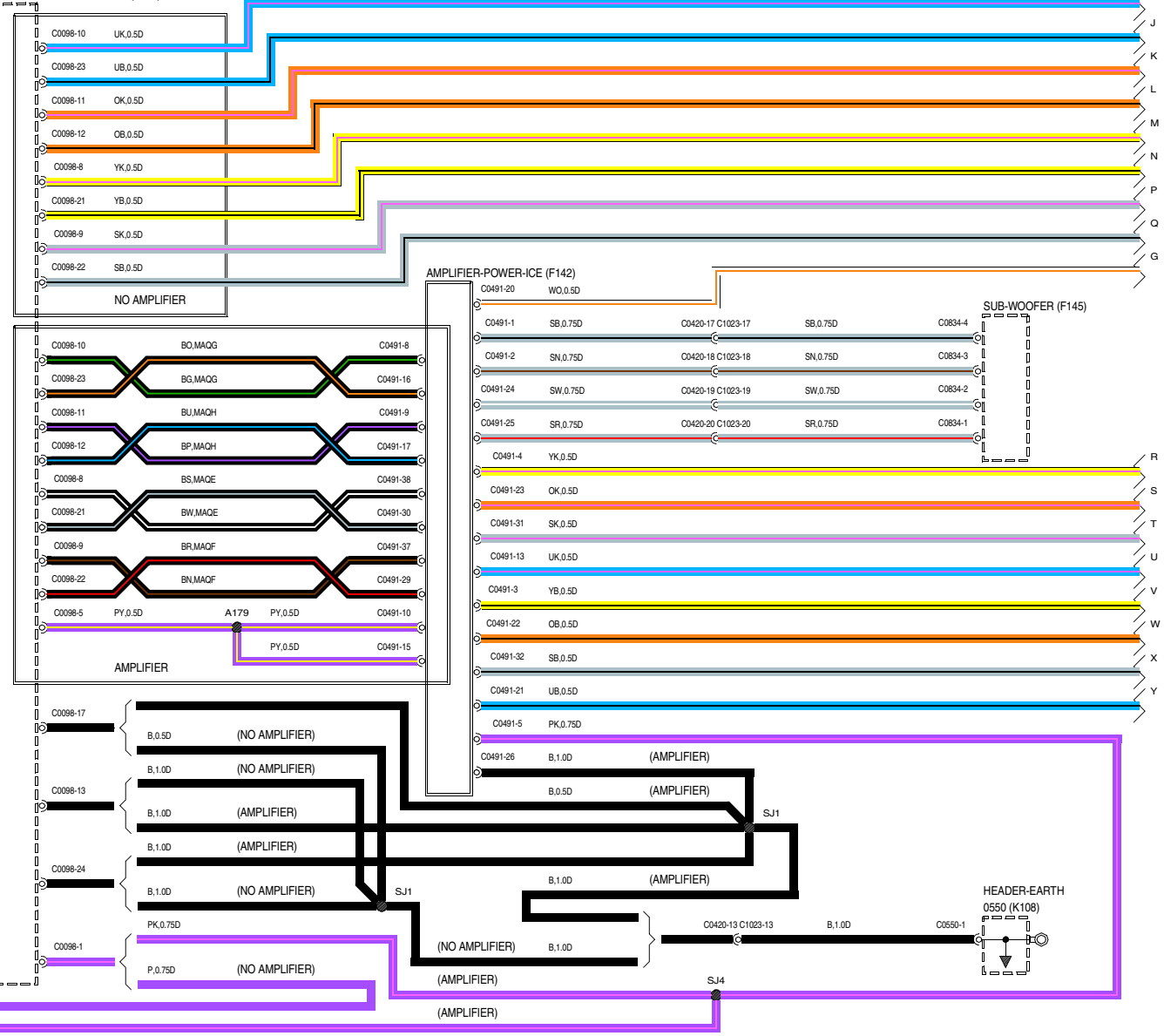
HEAD UNIT-AUDIO SYSTEM (F186)

- PIN 01 - BATTERY
- PIN 02 - RUN/ACCESSORY
- PIN 03 - ILLUM +VE
- PIN 04 - ILLUM -VE
- PIN 05 - EXT AMP (FL5)
- PIN 06 - NOT USED
- PIN 07 - PHONE MUTE
- PIN 08 - LEFT FRONT +
- PIN 09 - LEFT REAR +
- PIN 10 - RIGHT REAR +
- PIN 11 - RIGHT FRONT +
- PIN 12 - RIGHT FRONT -
- PIN 13 - POWER GROUND
- PIN 14 - VSS INPUT (AVC)
- PIN 15 - NOT USED
- PIN 16 - VEHICLE ALARM
- PIN 17 - KEYCODE
- PIN 18 - ANALOGUE REMOTE 1
- PIN 19 - ANALOGUE REMOTE 2
- PIN 20 - NOT USED
- PIN 21 - LEFT FRONT -
- PIN 22 - LEFT REAR -
- PIN 23 - RIGHT REAR -
- PIN 24 - RADIO GROUND

PIN NOT YET USED
HAS BEEN MADE AVAILABLE
FOR EXTERNAL PHONE MUTE

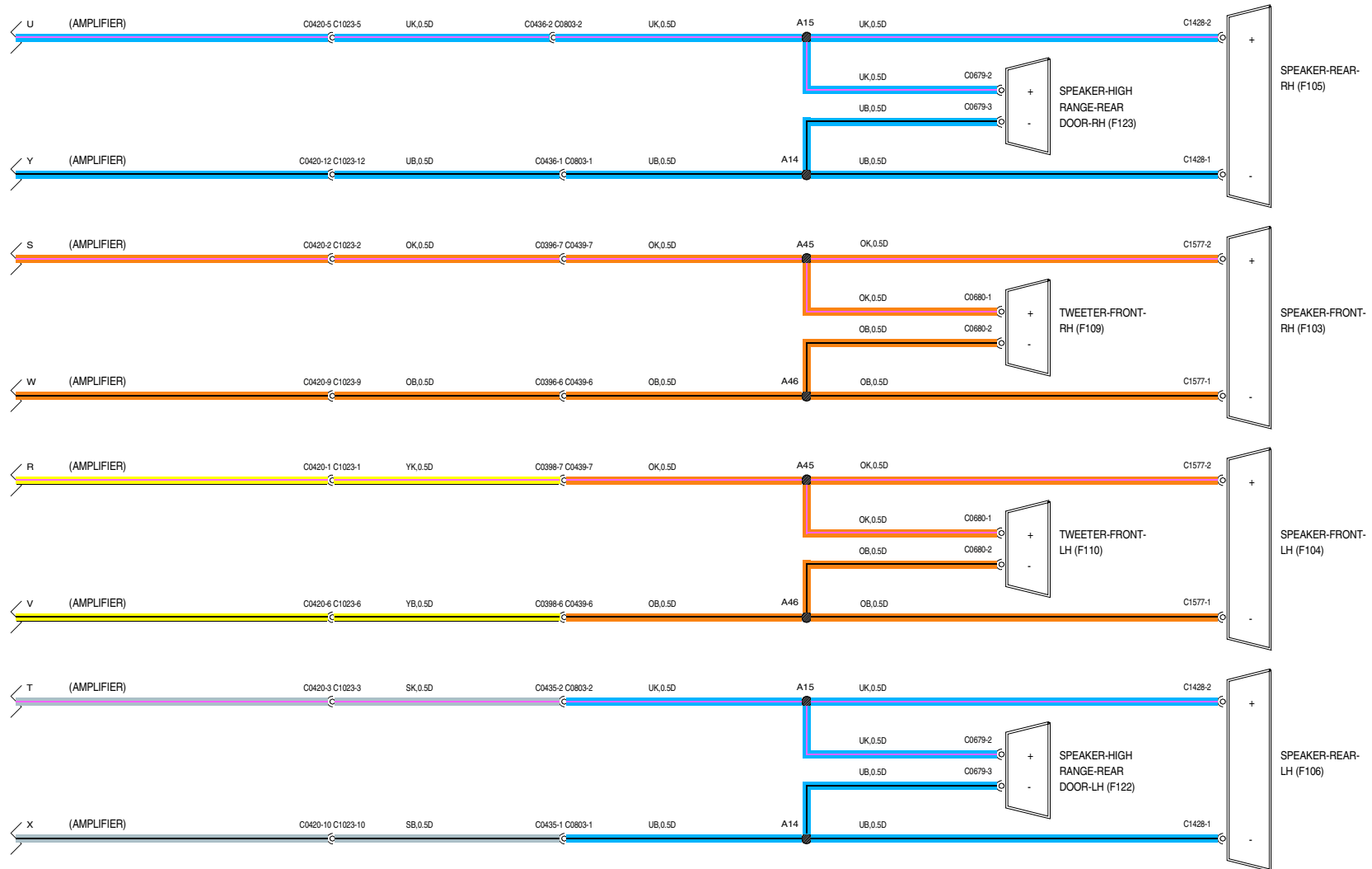


HEAD UNIT-AUDIO SYSTEM (F186)

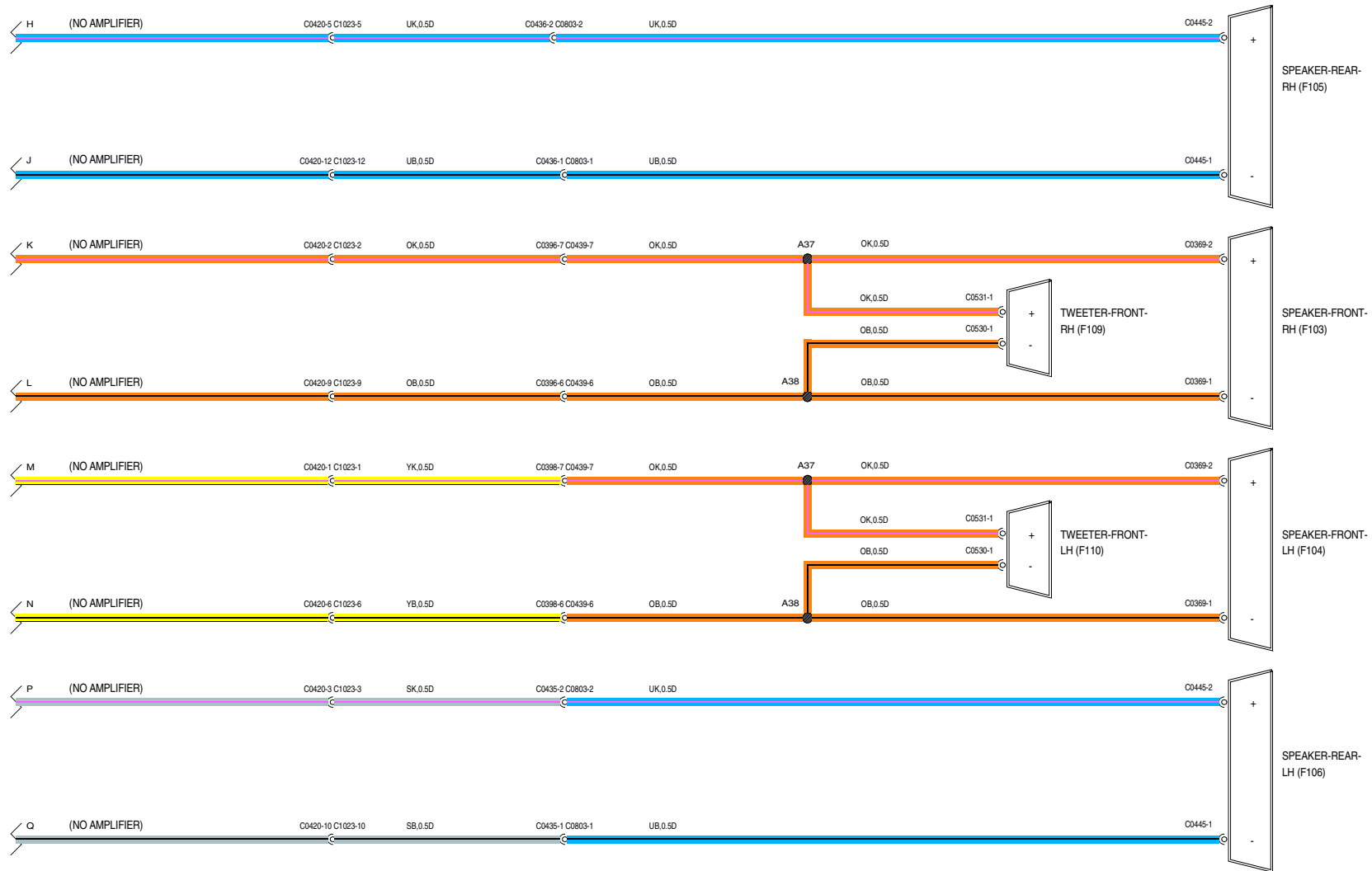


WR0004421-A-02

50 AUDIO SYSTEMS

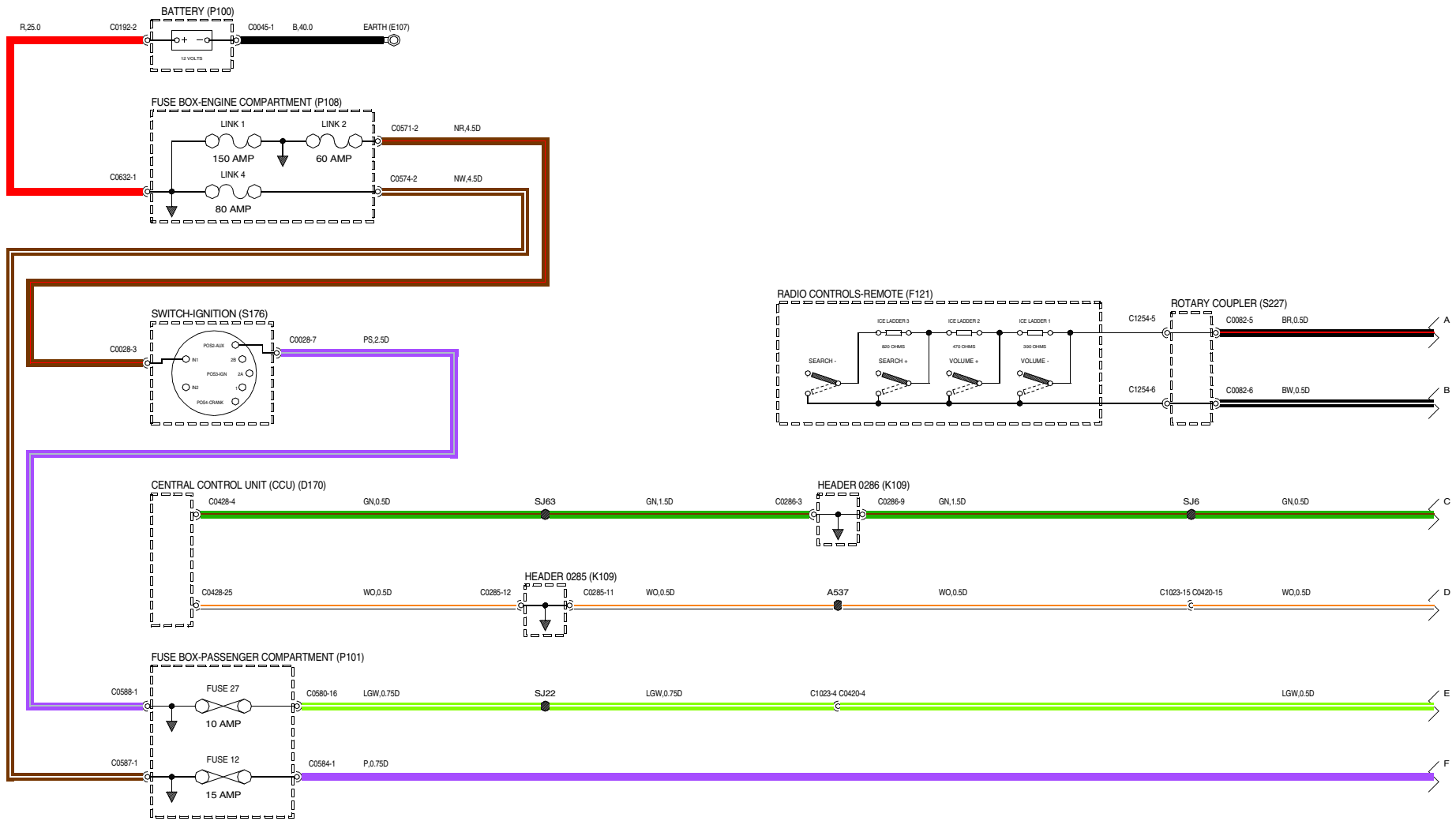


WFR004421-A-03

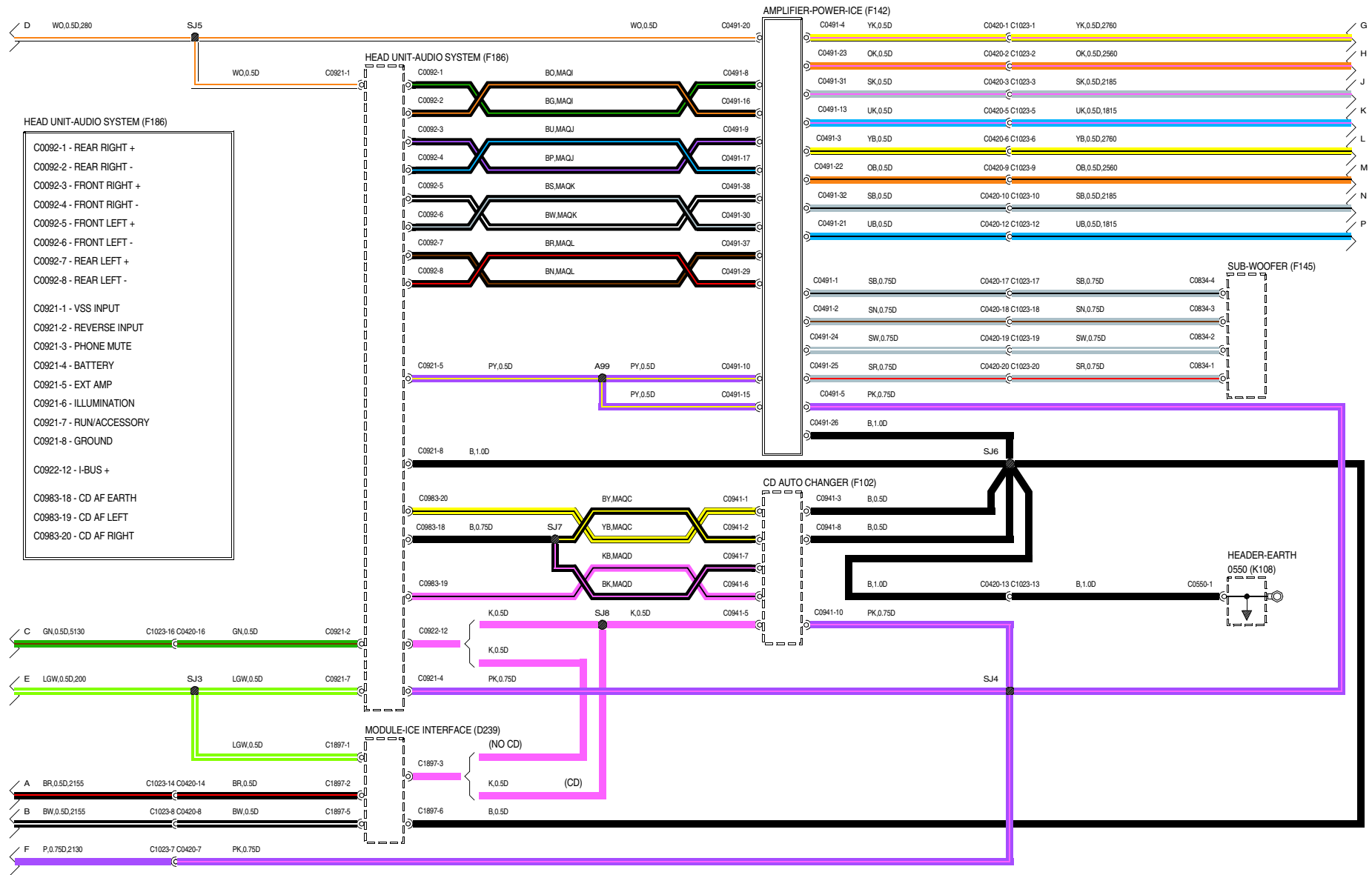


WR004421-A-04

50 NAVIGATION SYSTEMS

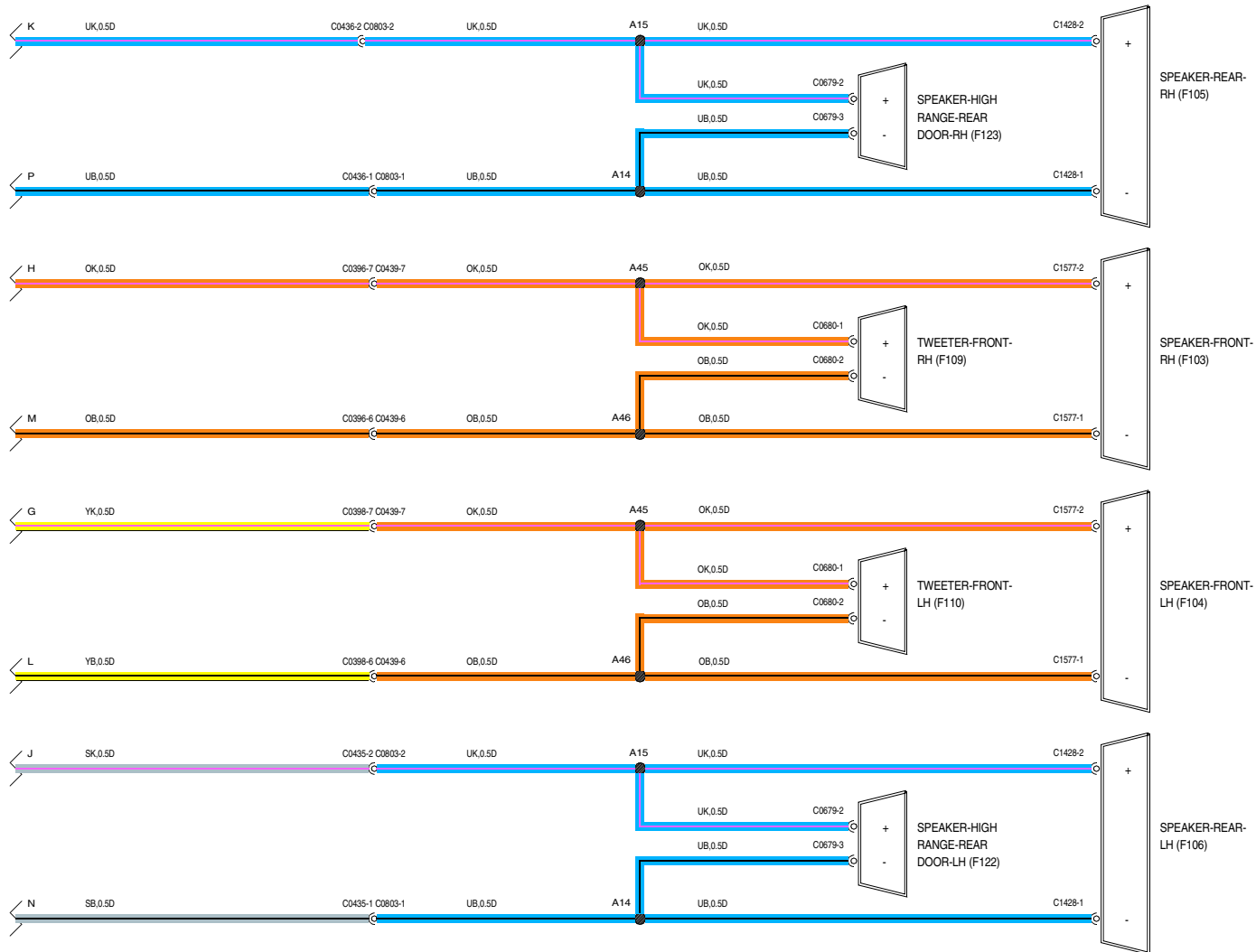


WFR004611-A-01



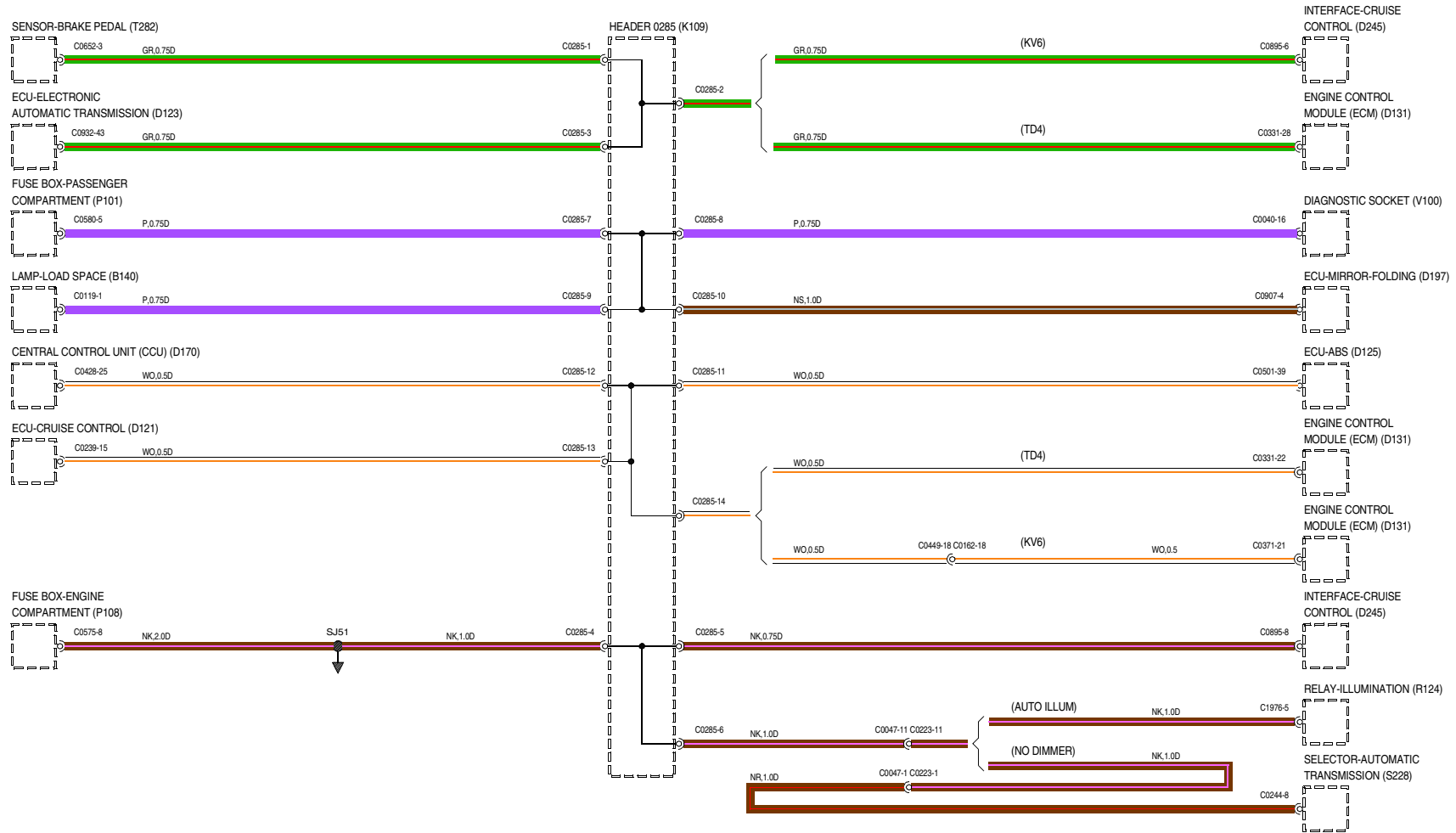
WFR004611-A-02

50 NAVIGATION SYSTEMS



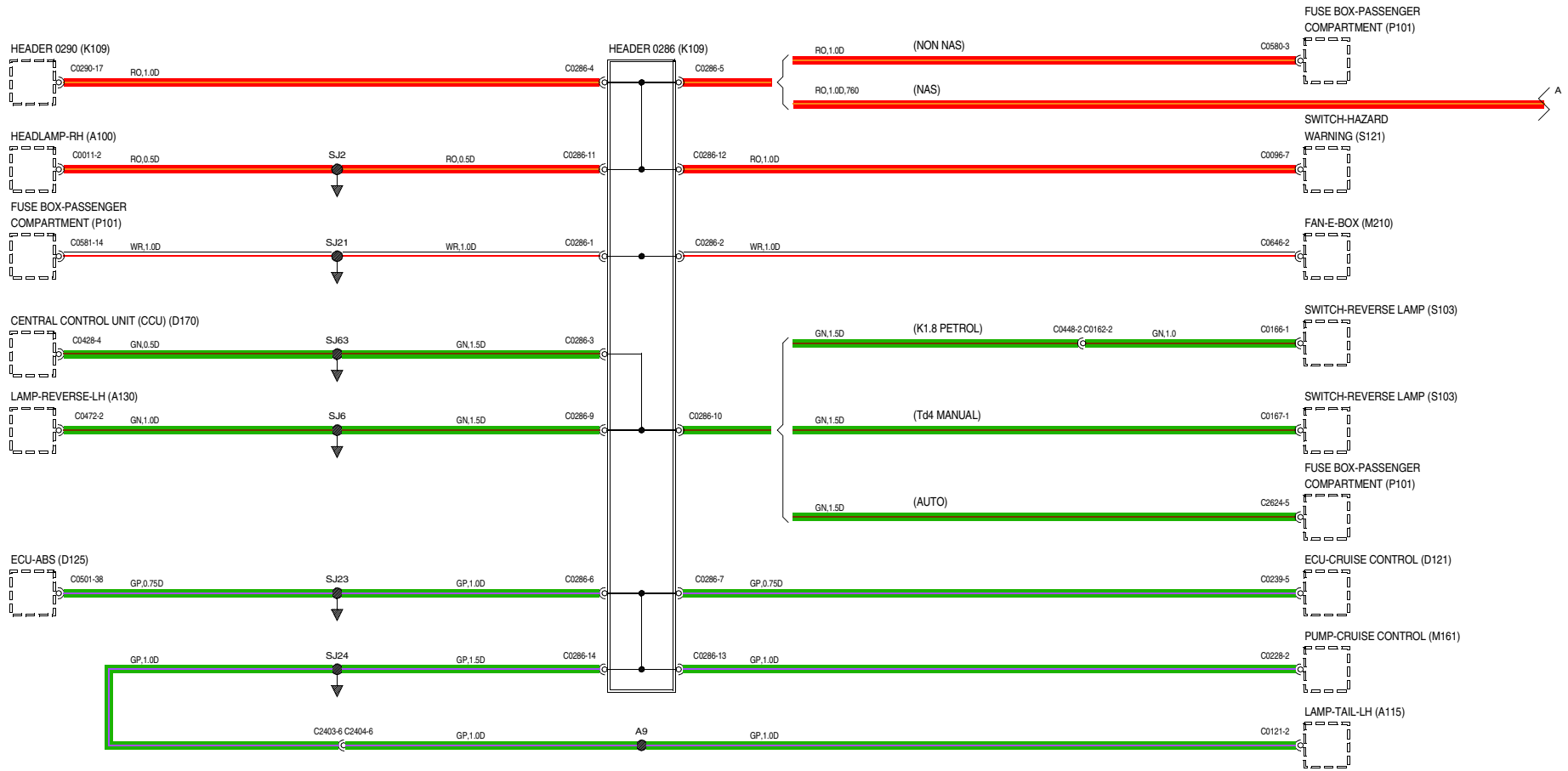
WFR004611-A-03

60 HEADER JOINTS



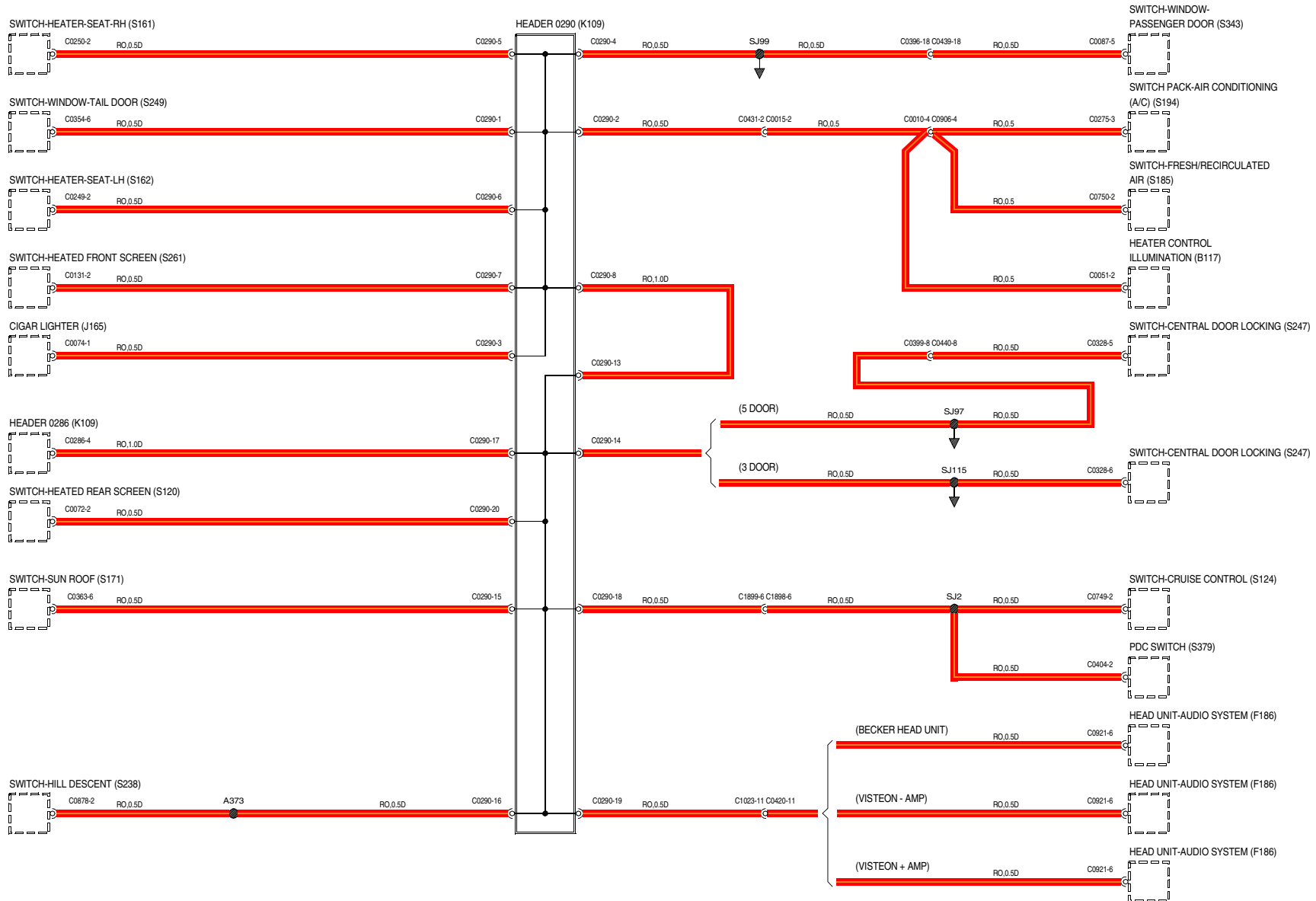
WR004141-A-01

60 HEADER JOINTS



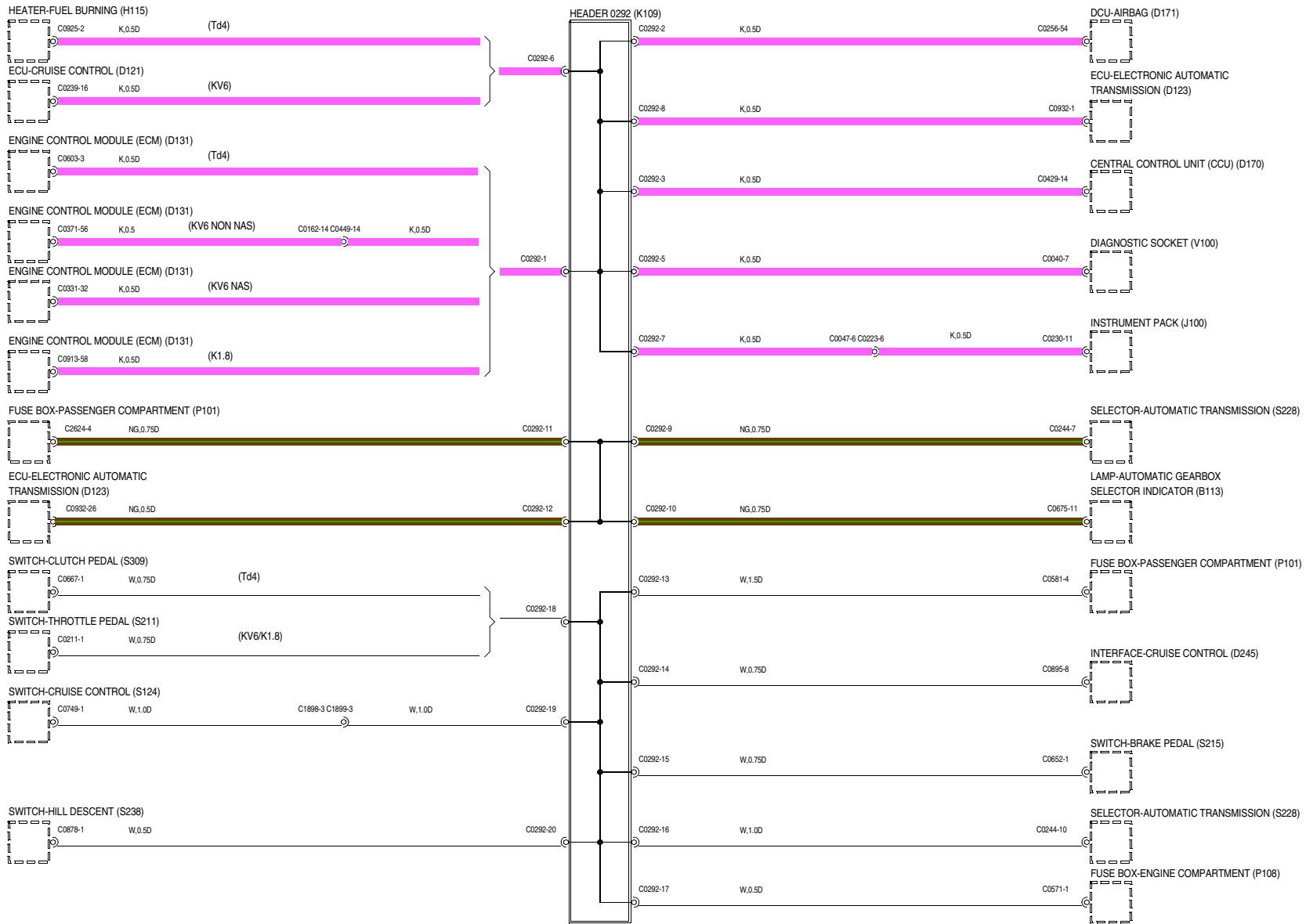
WR004141-A-02

60 HEADER JOINTS



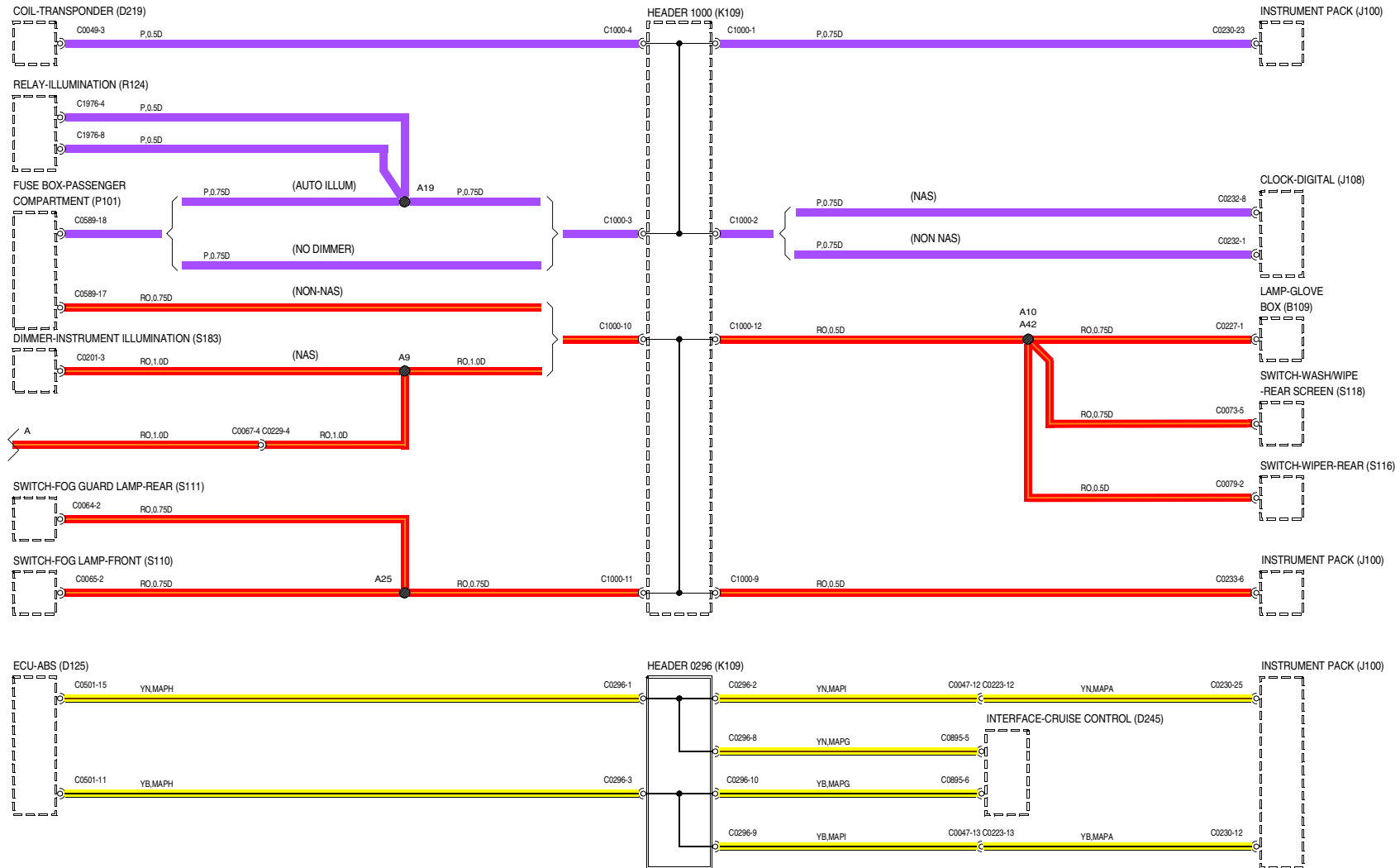
WR004141-A-03

60 HEADER JOINTS

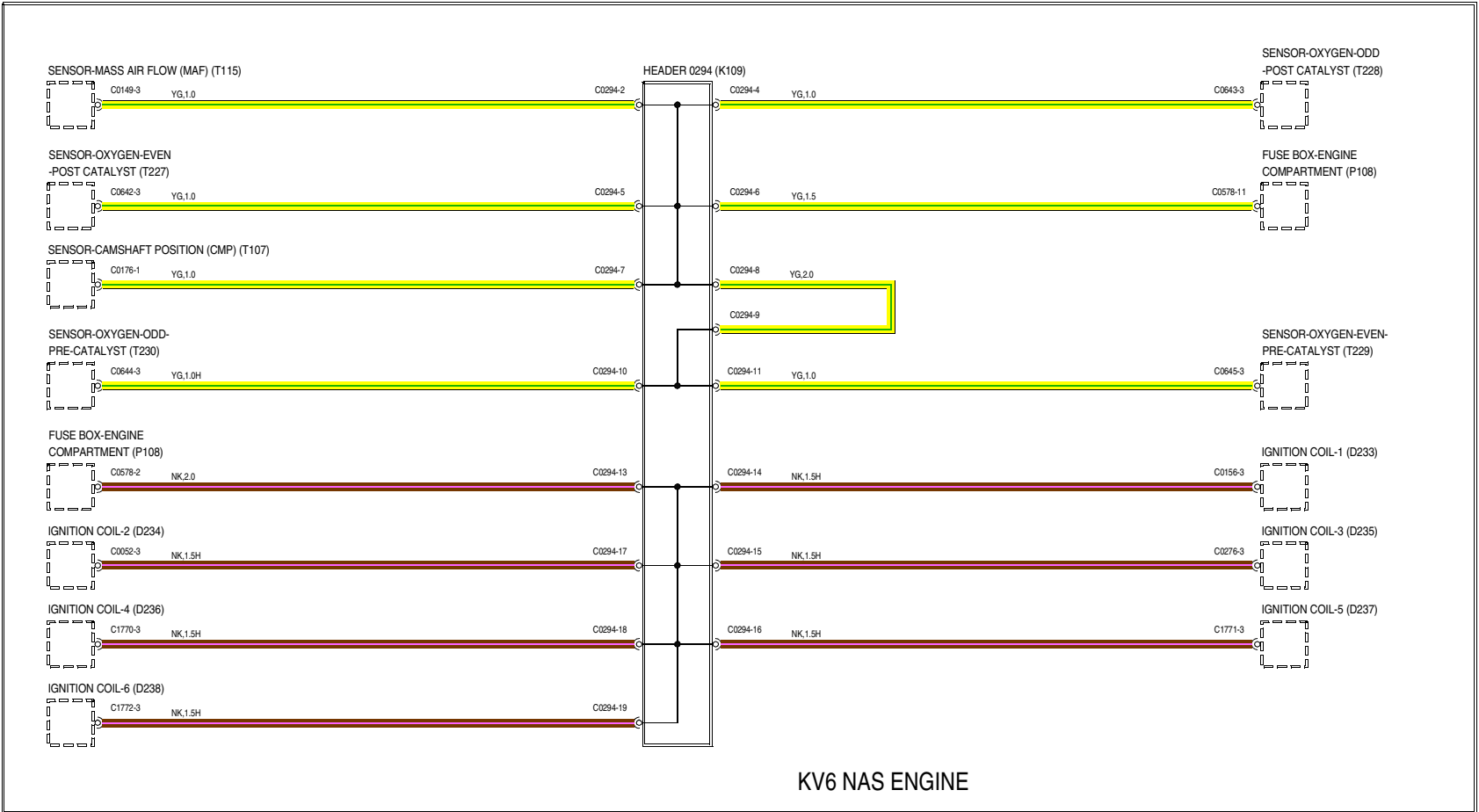


WR004141-A-04

60 HEADER JOINTS

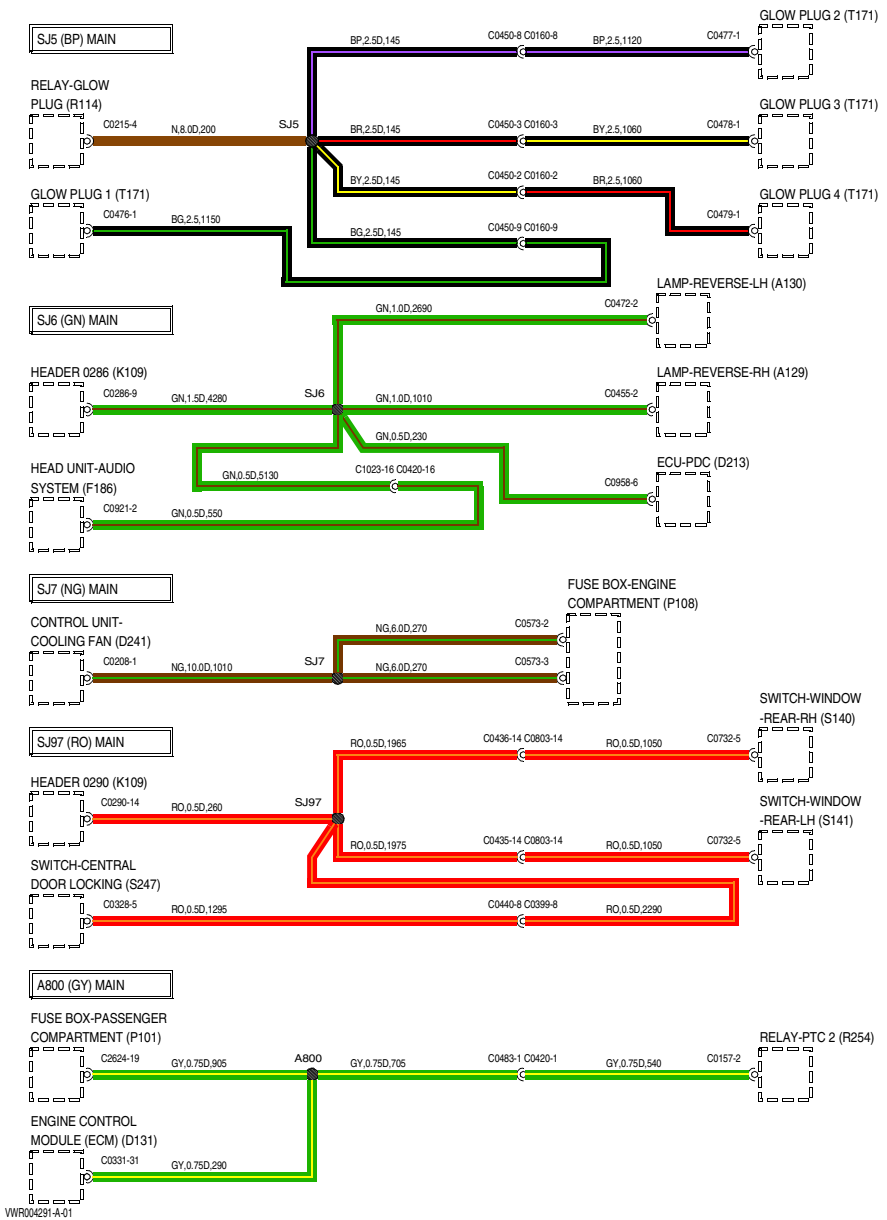


WFR004141-A-05

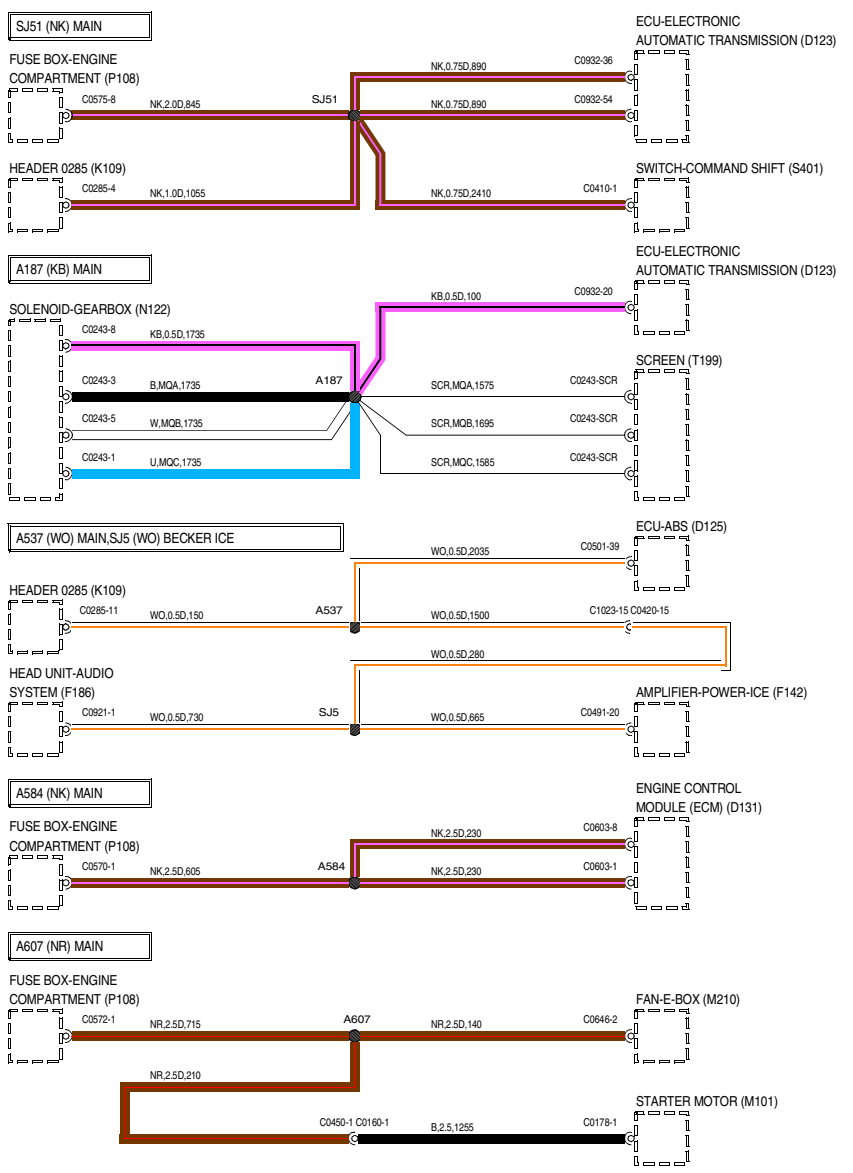


WVR004141-A-06

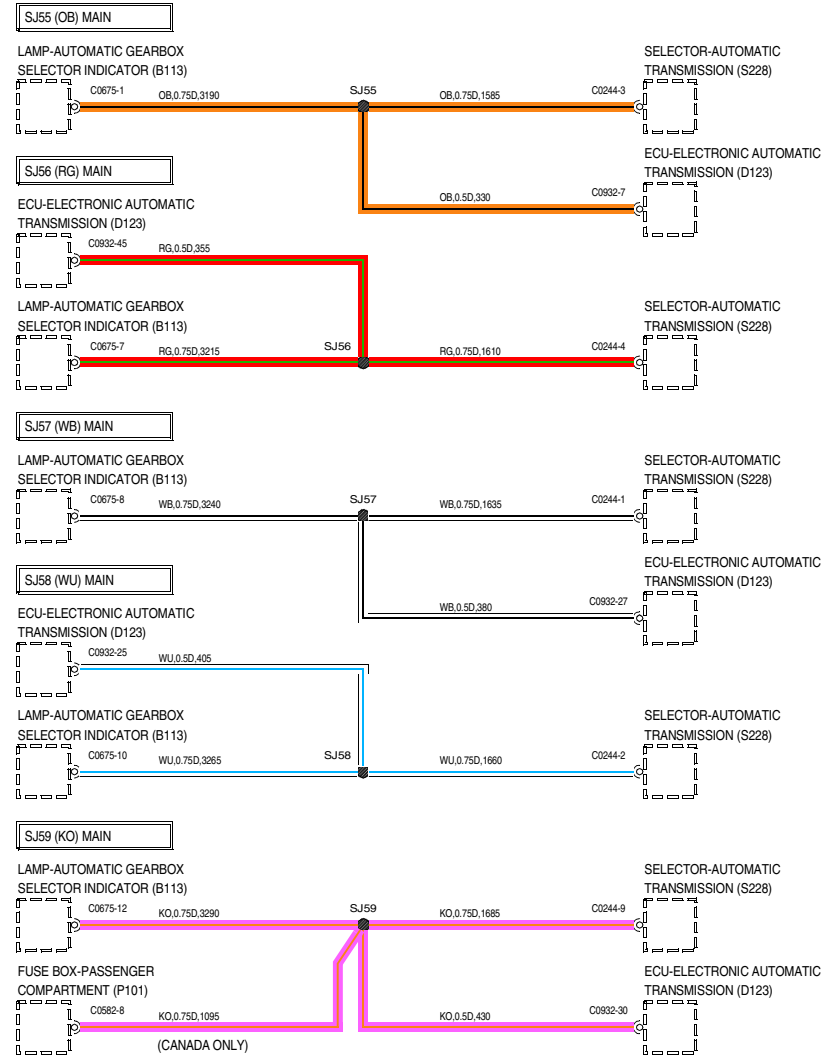
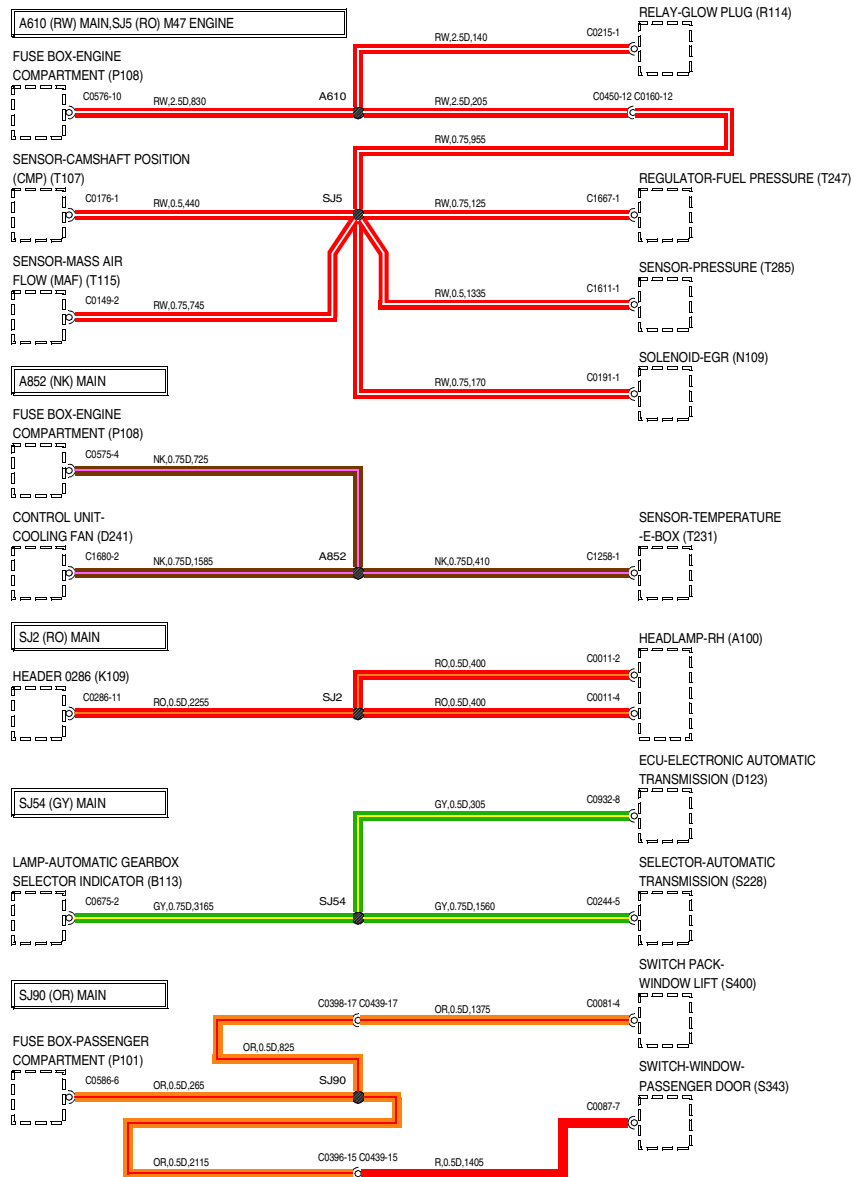
65 SPLICES AND CENTRE TAPS



WPR004291-A-01

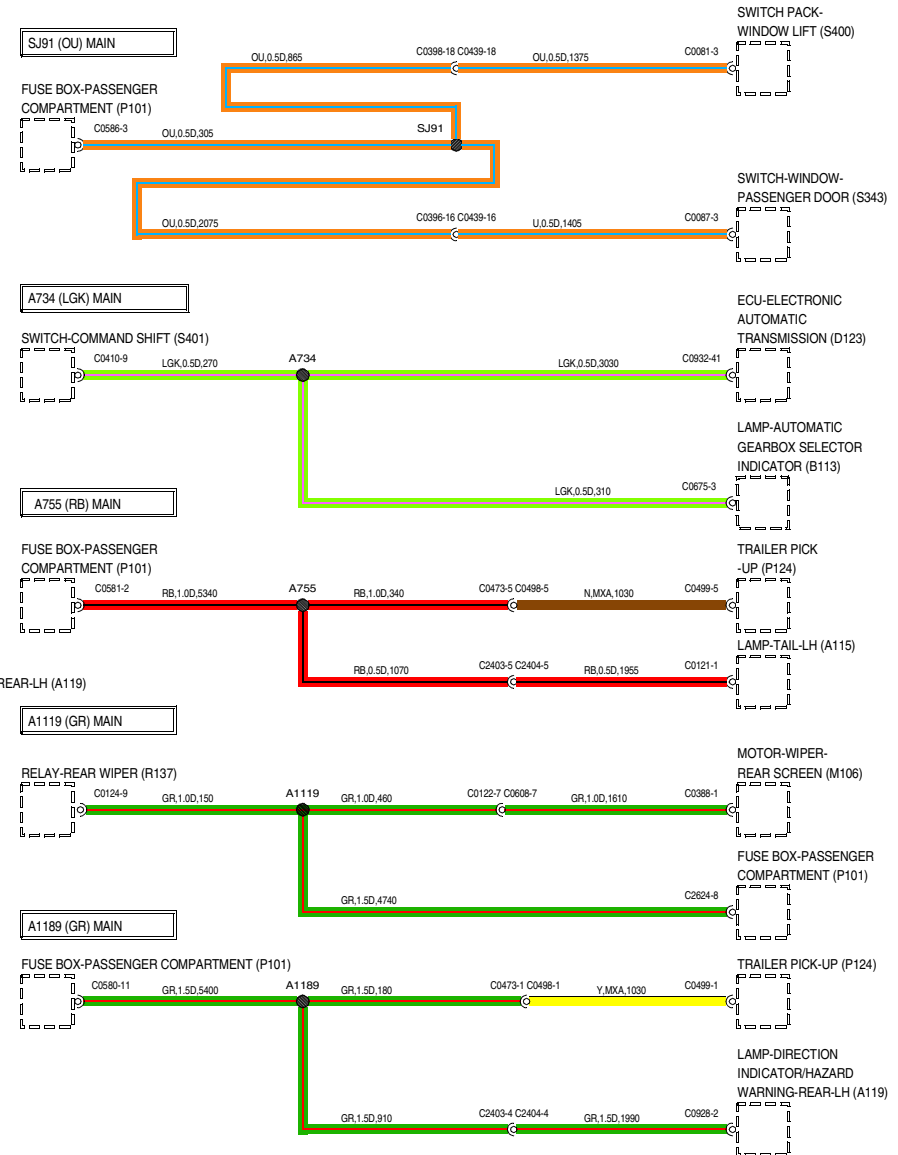
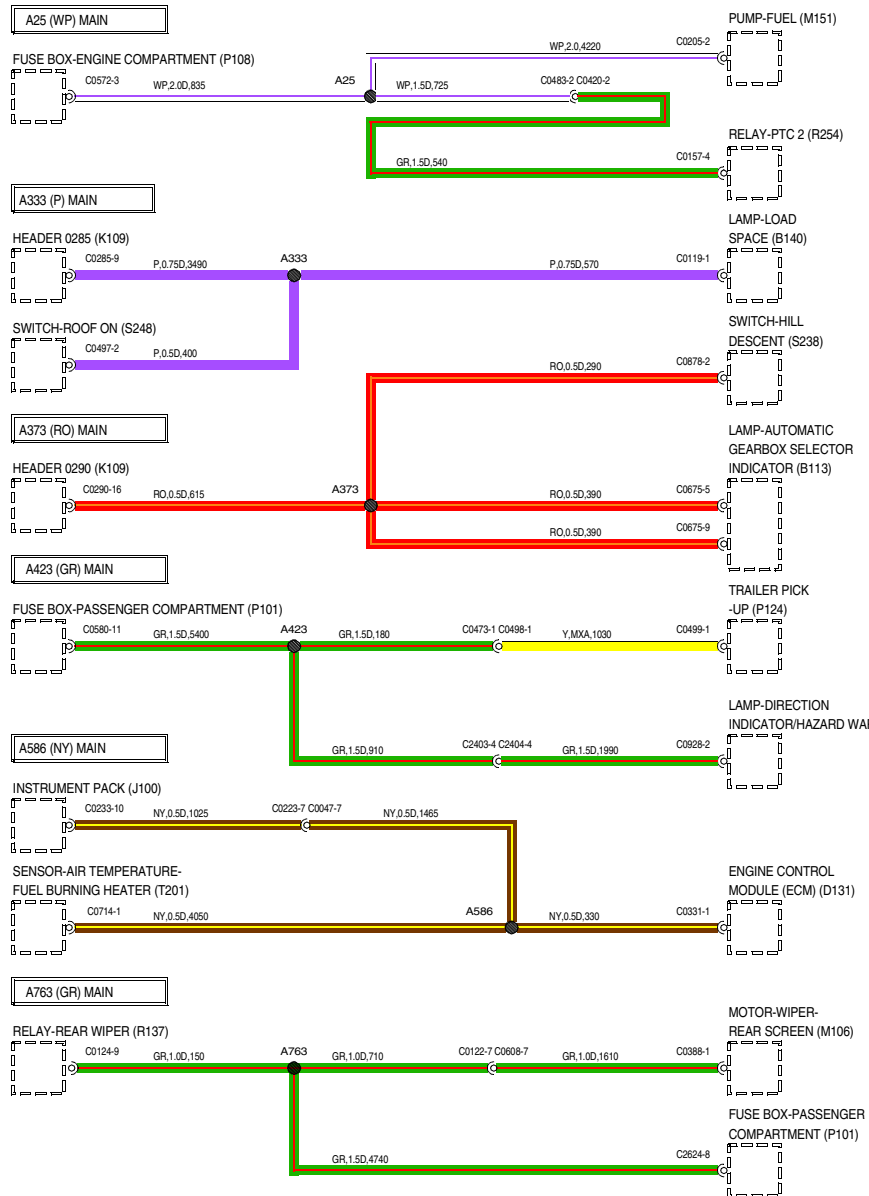


65 SPLICES AND CENTRE TAPS



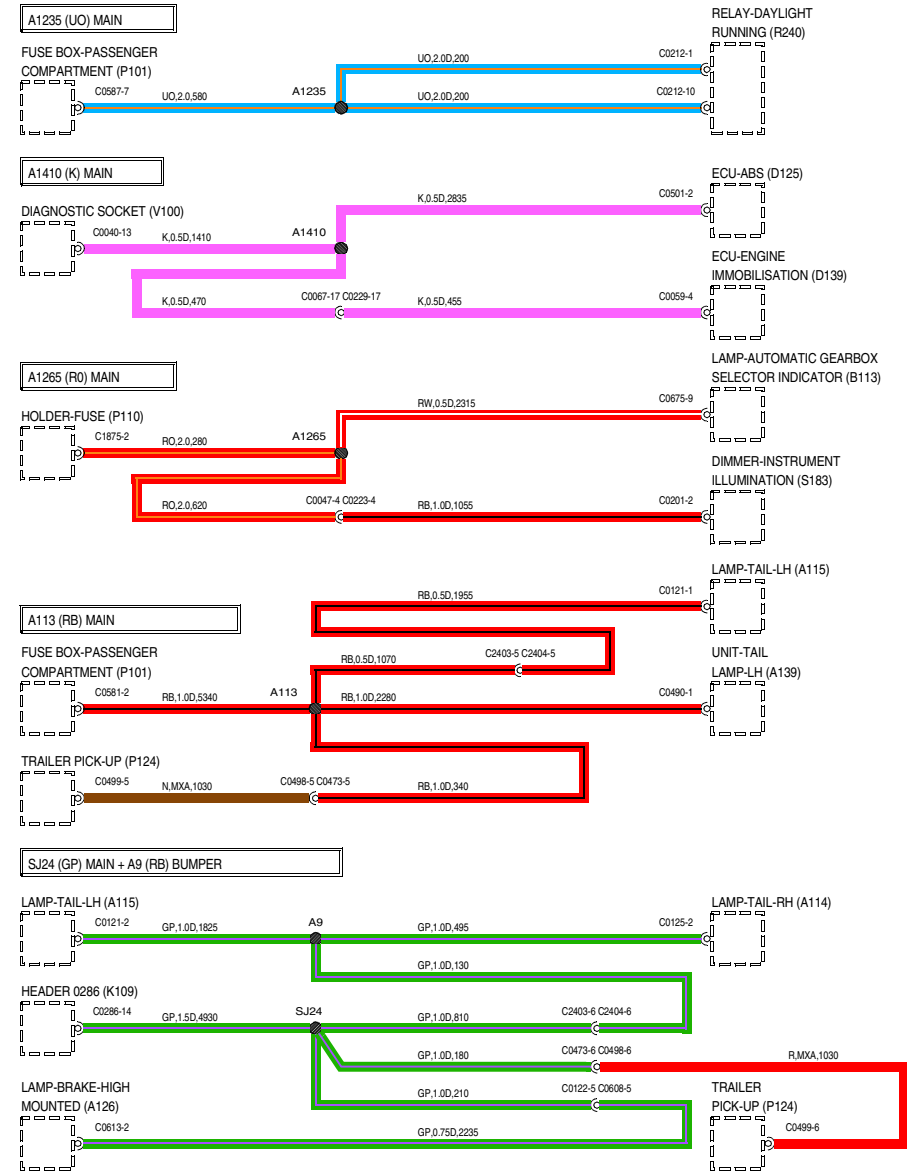
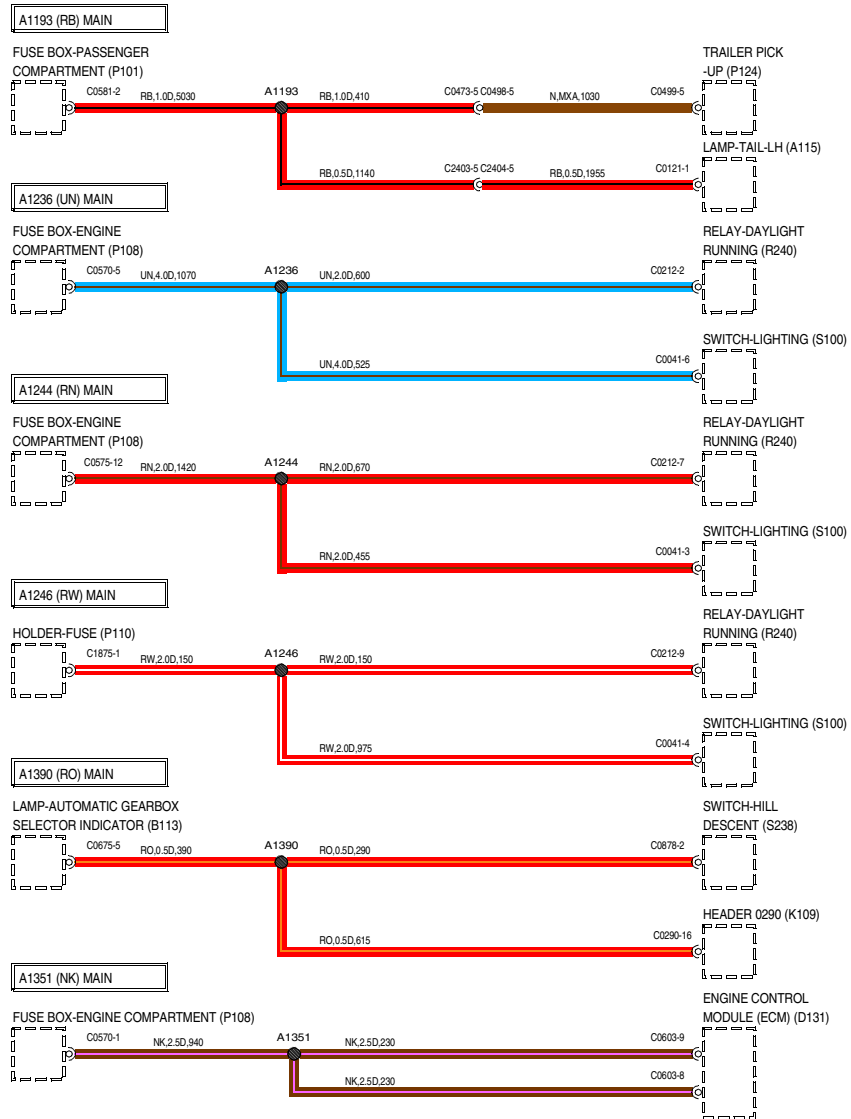
WR004291-A-02

65 SPLICES AND CENTRE TAPS



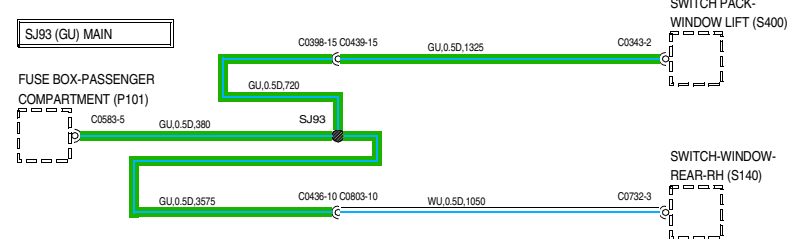
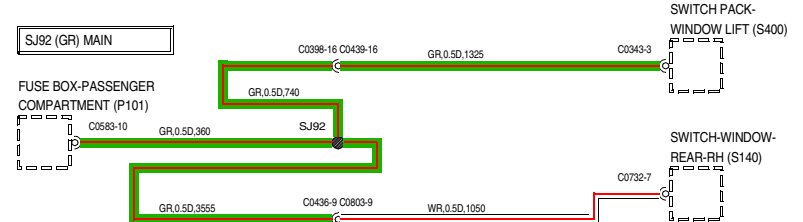
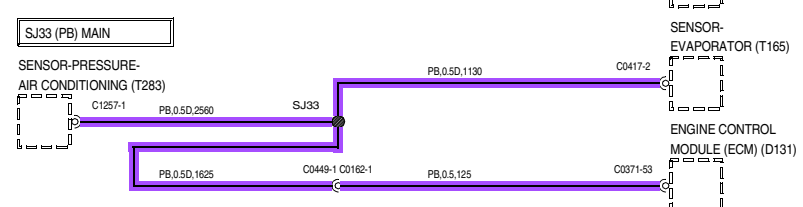
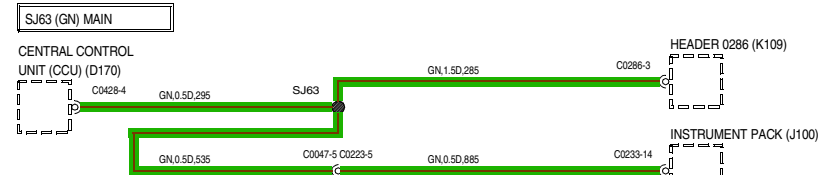
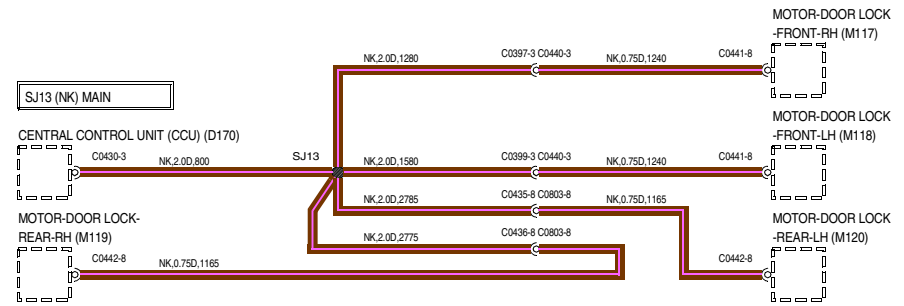
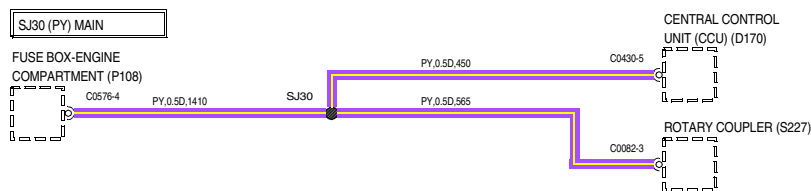
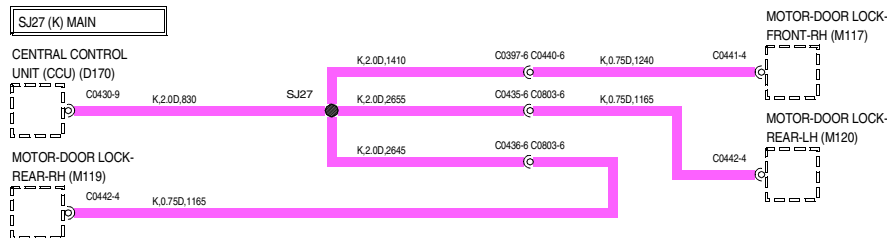
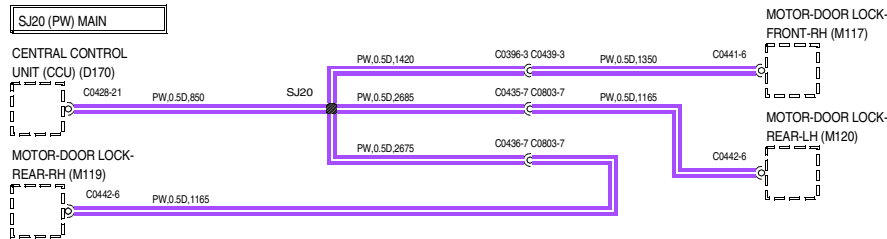
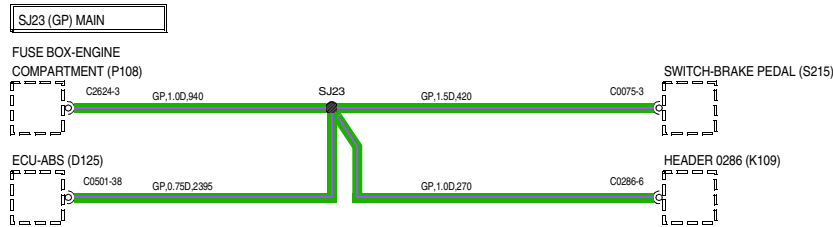
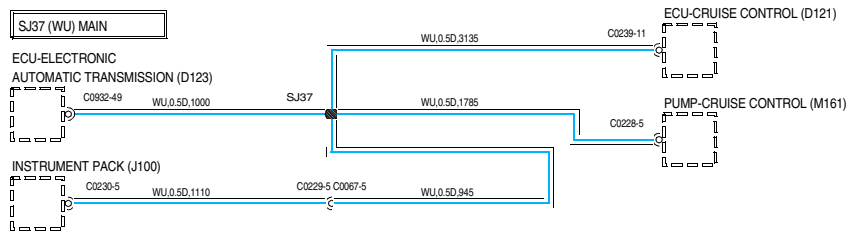
WFR004291-A-03

65 SPLICES AND CENTRE TAPS

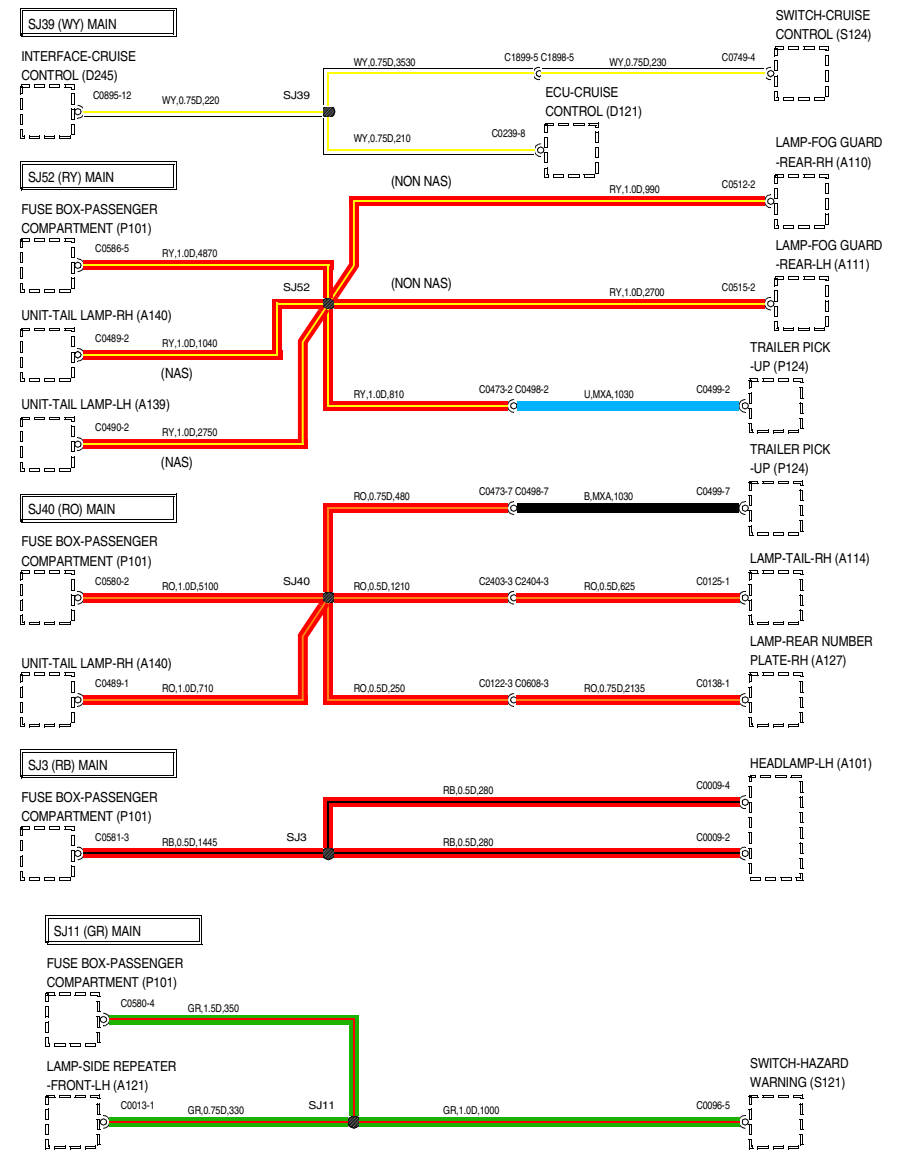
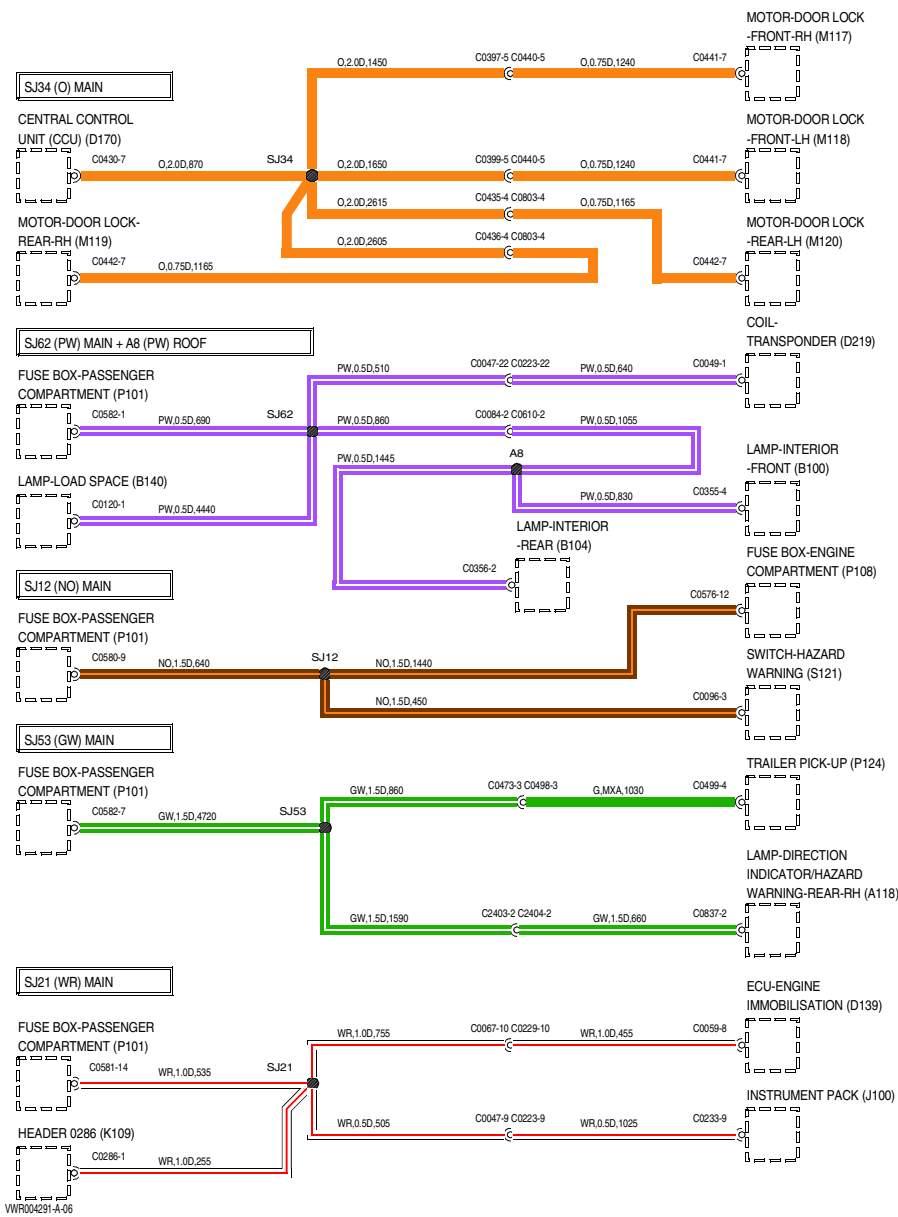


WRR004291-A-04

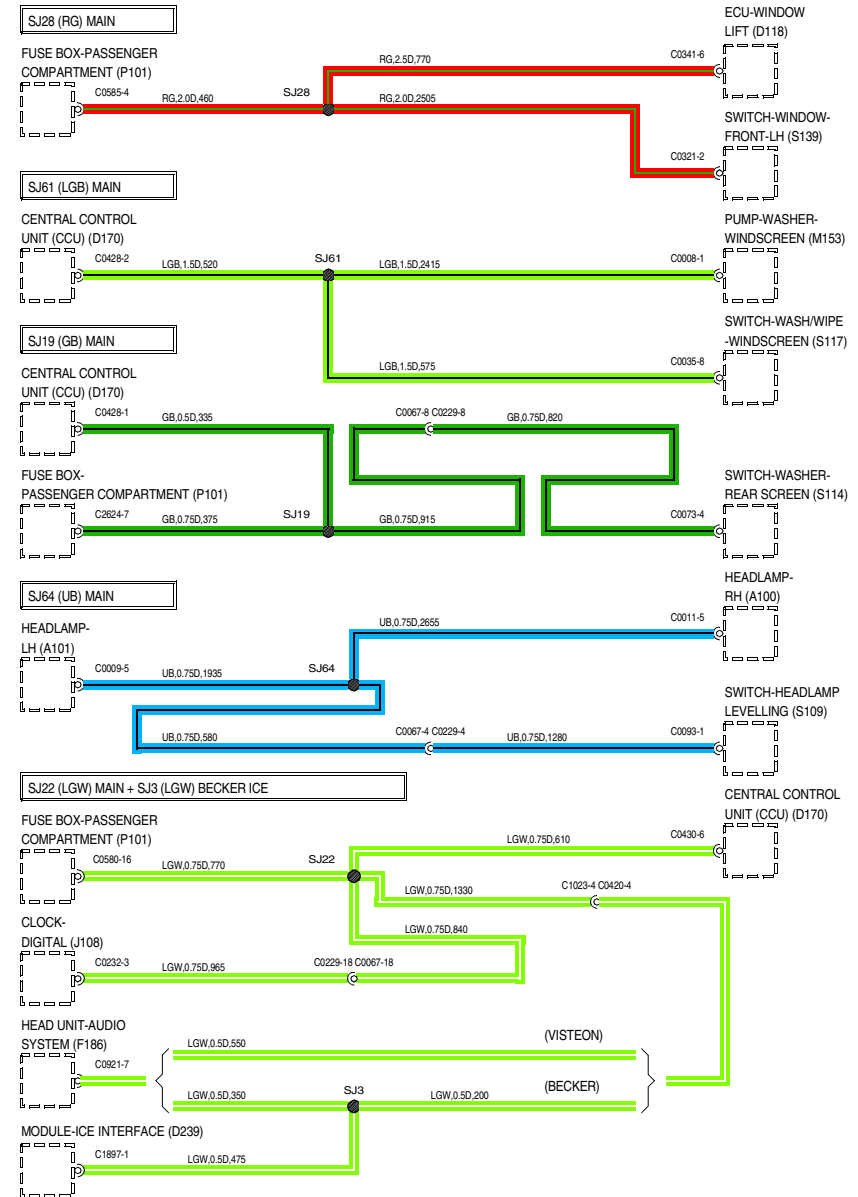
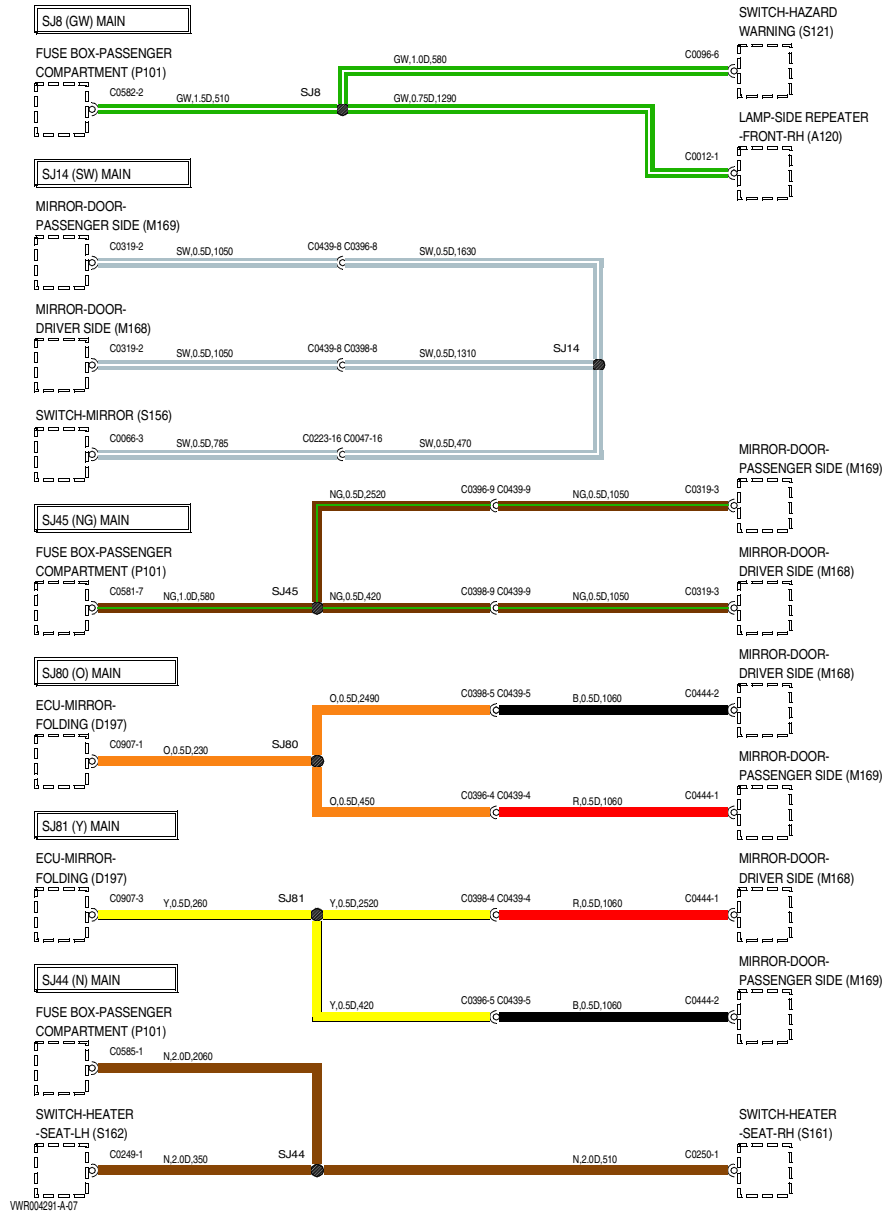
65 SPLICES AND CENTRE TAPS



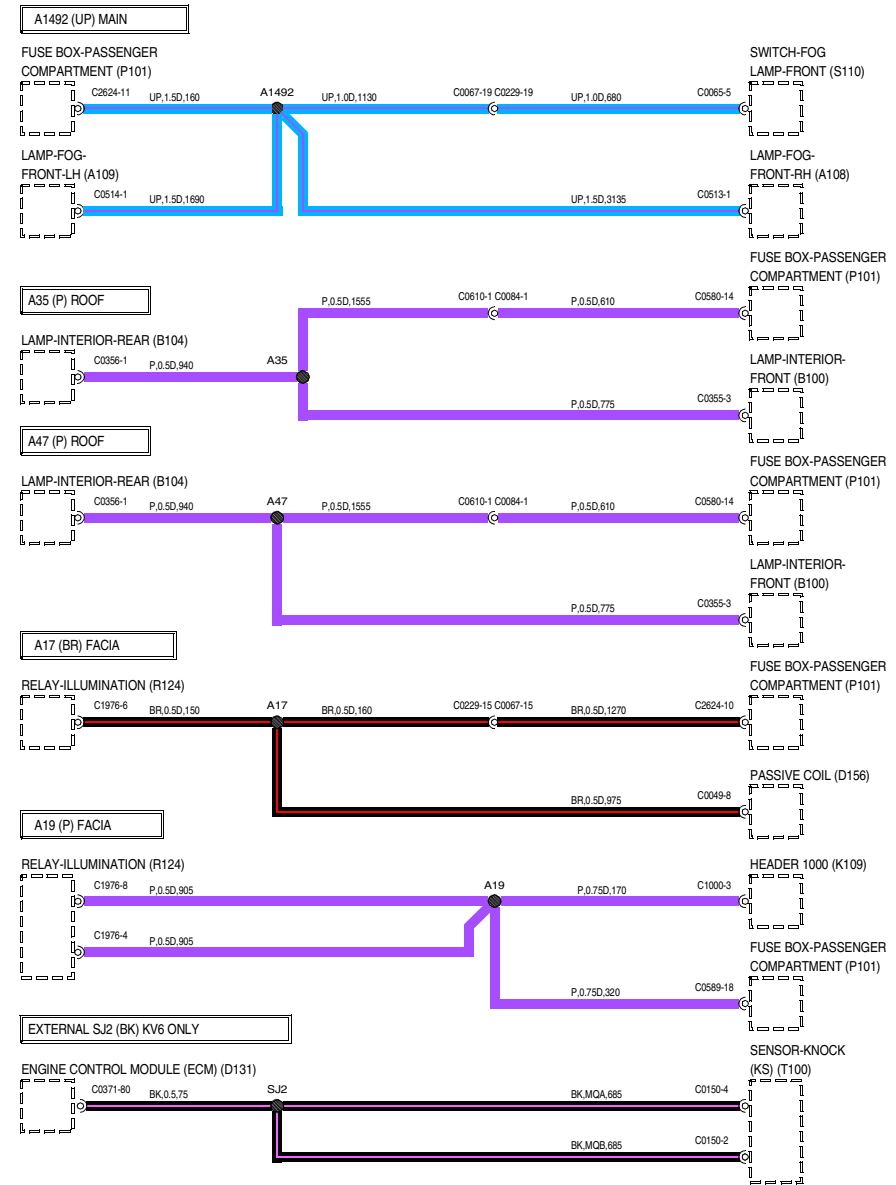
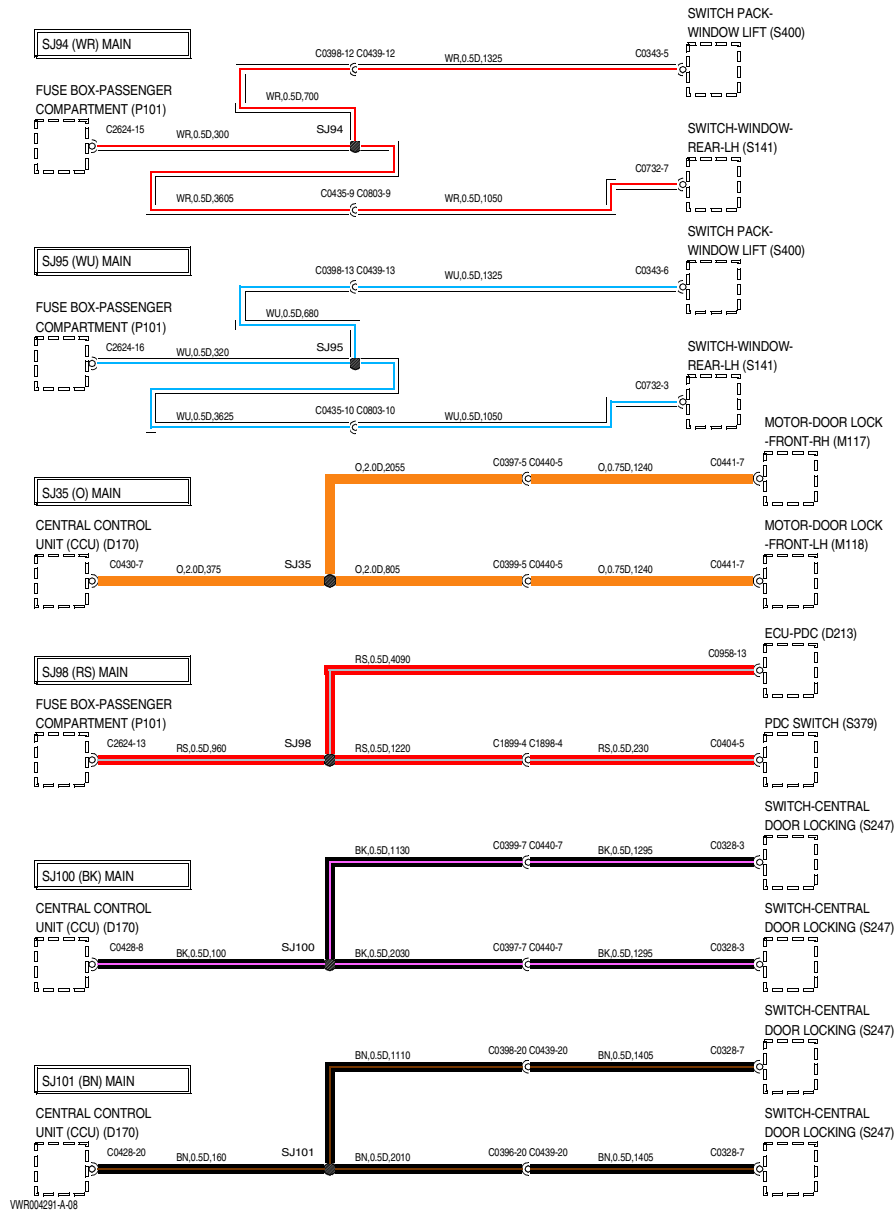
WR004291-A-05



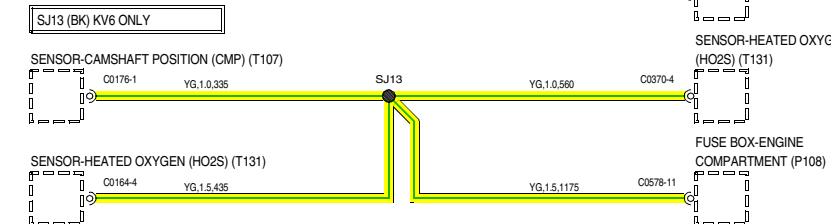
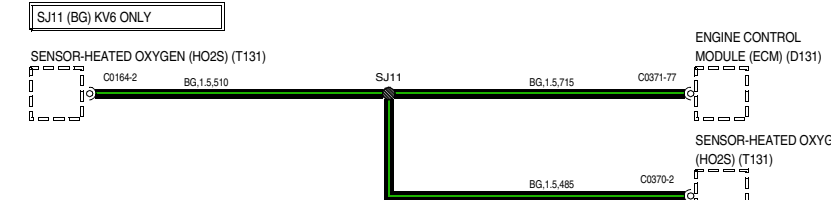
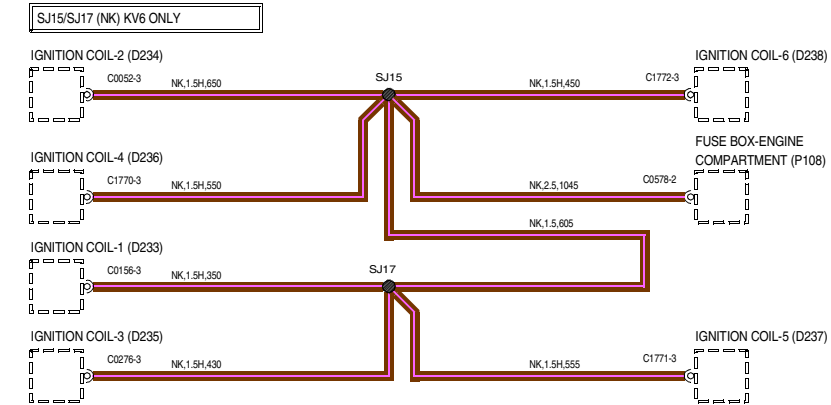
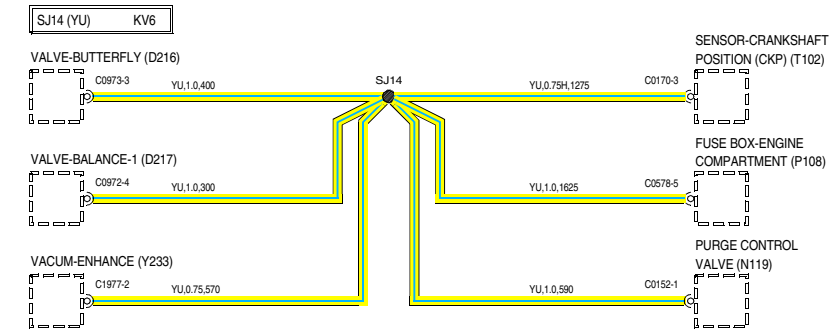
65 SPLICES AND CENTRE TAPS



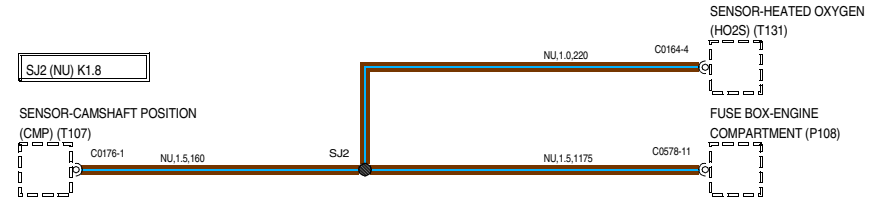
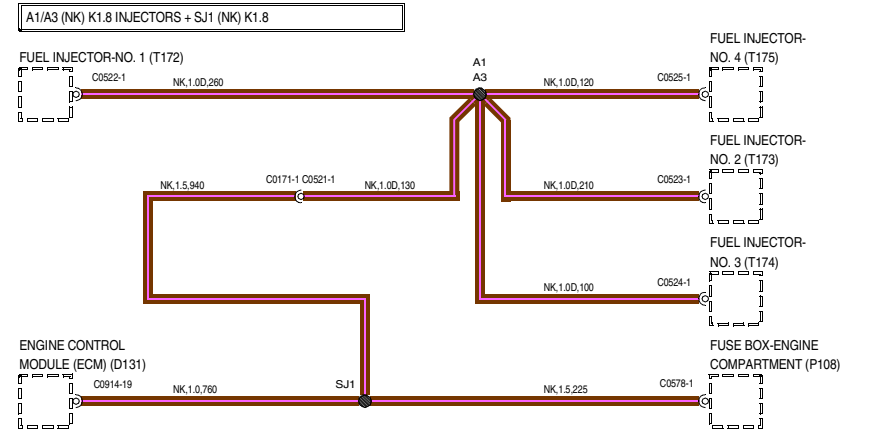
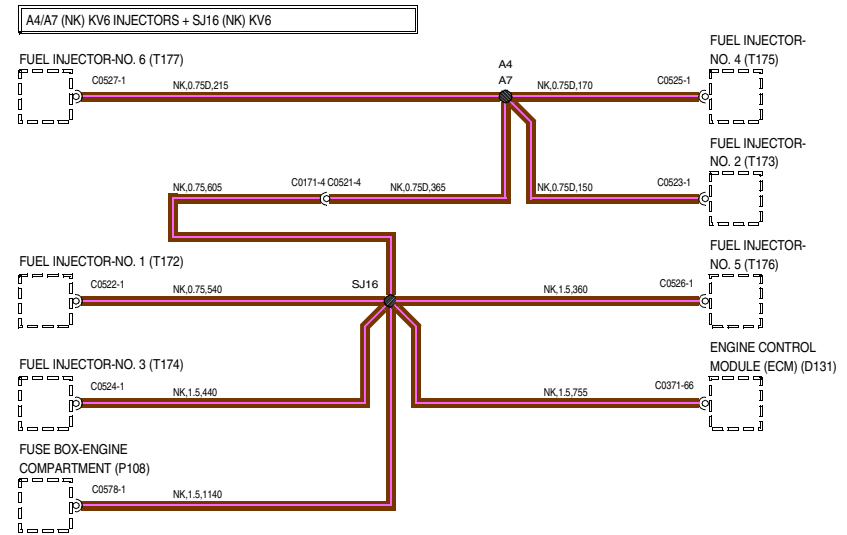
65 SPLICES AND CENTRE TAPS



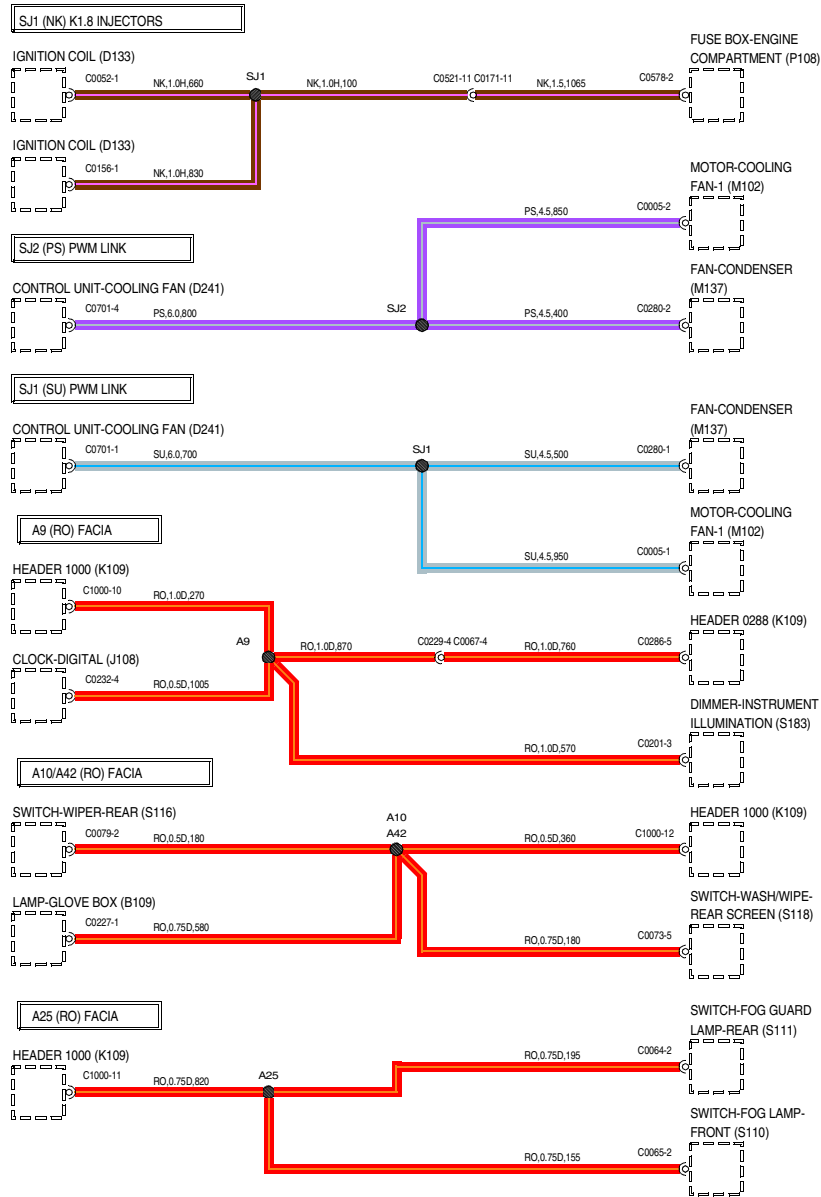
65 SPLICES AND CENTRE TAPS



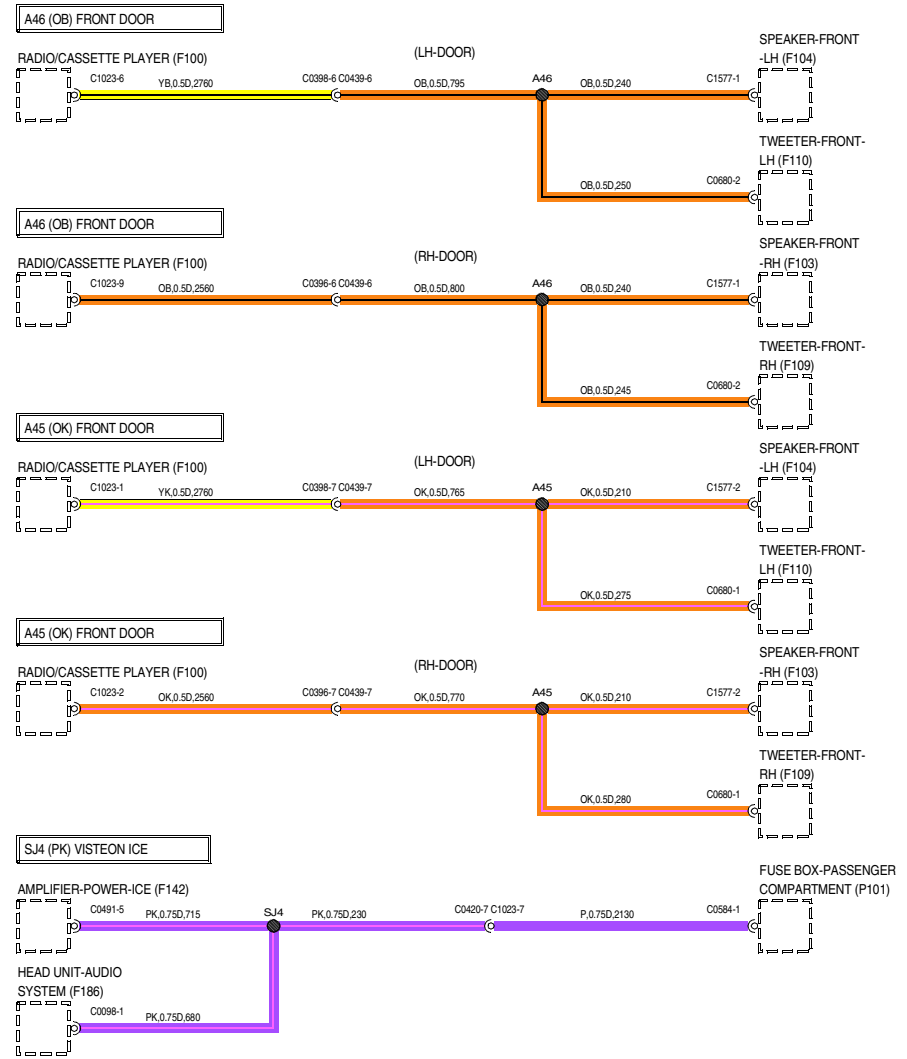
WPR004291-A-09



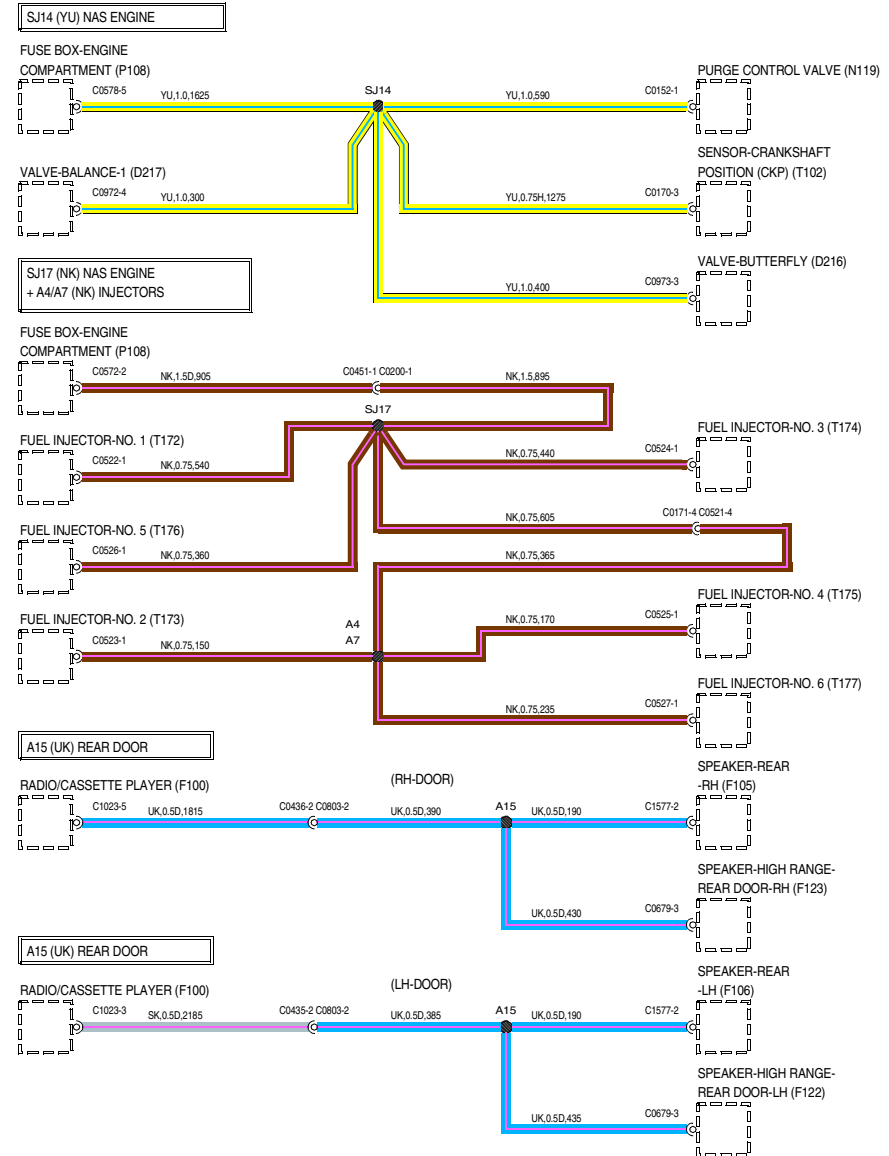
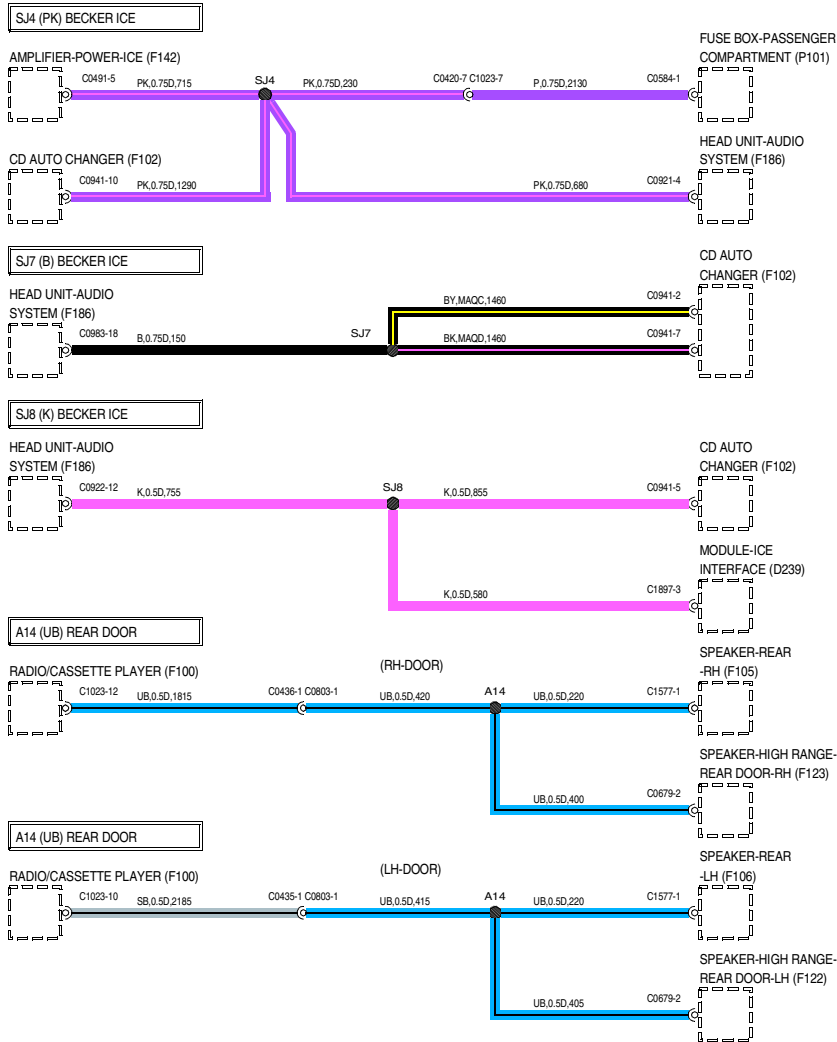
65 SPLICES AND CENTRE TAPS



WR004291-A-10



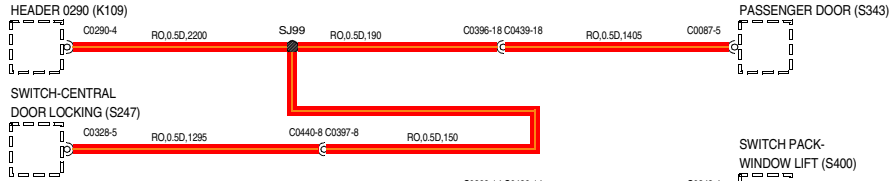
65 SPLICES AND CENTRE TAPS



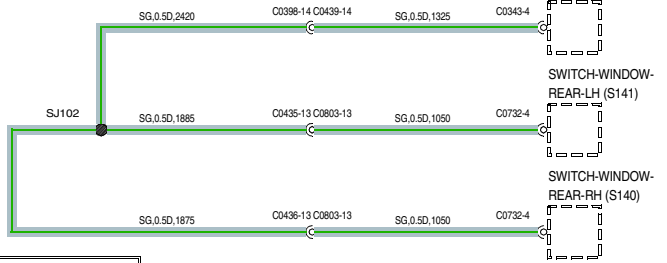
WR004291-A-11

65 SPLICES AND CENTRE TAPS

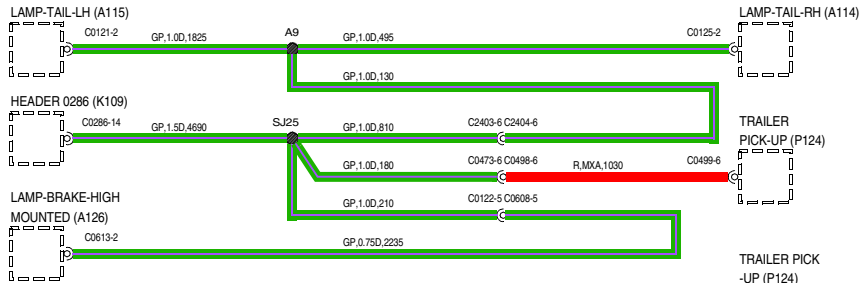
SJ99 (RO) MAIN



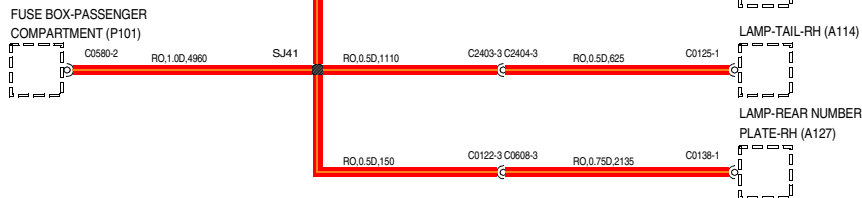
SJ102 (SG) MAIN



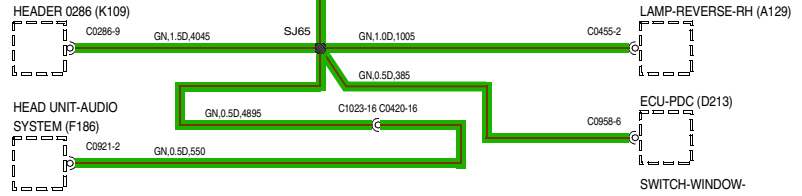
SJ25 (GP) MAIN + A9 (RB) BUMPER



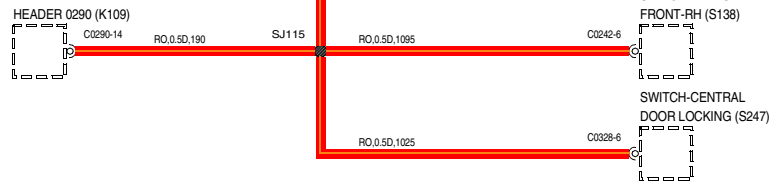
SJ41 (RO) MAIN



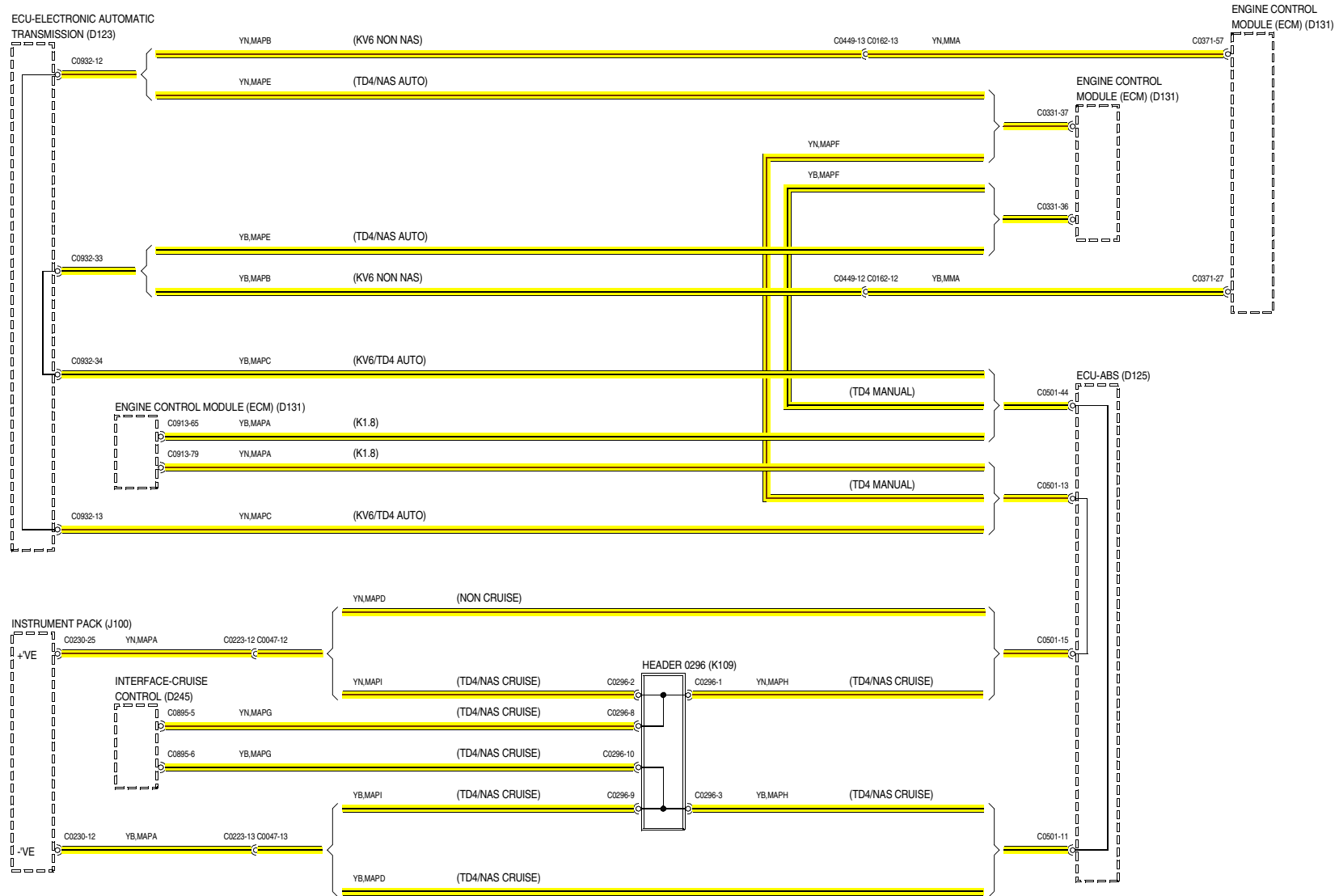
SJ65 (GN) MAIN



SJ115 (RO) MAIN

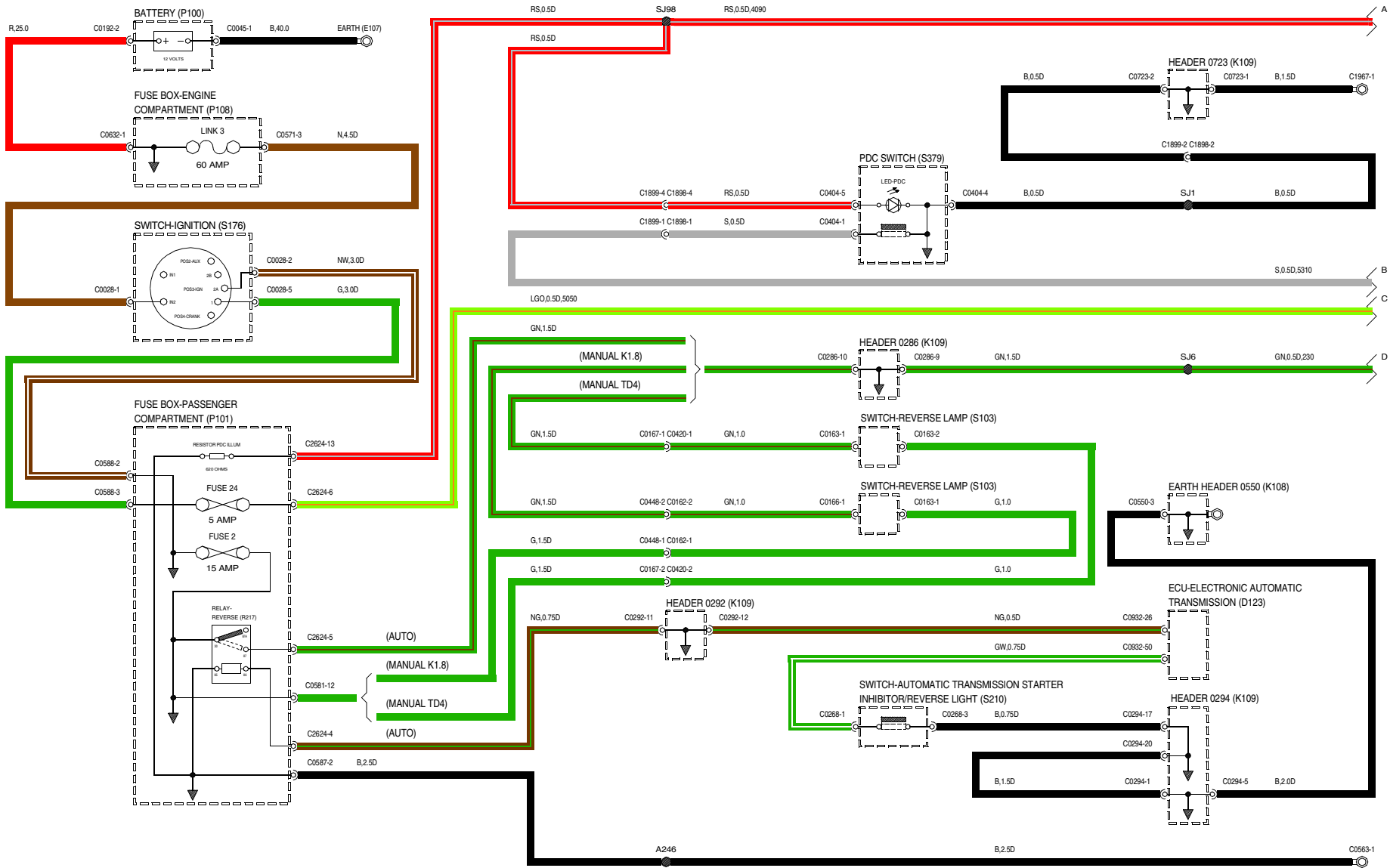


WR004291-A-12



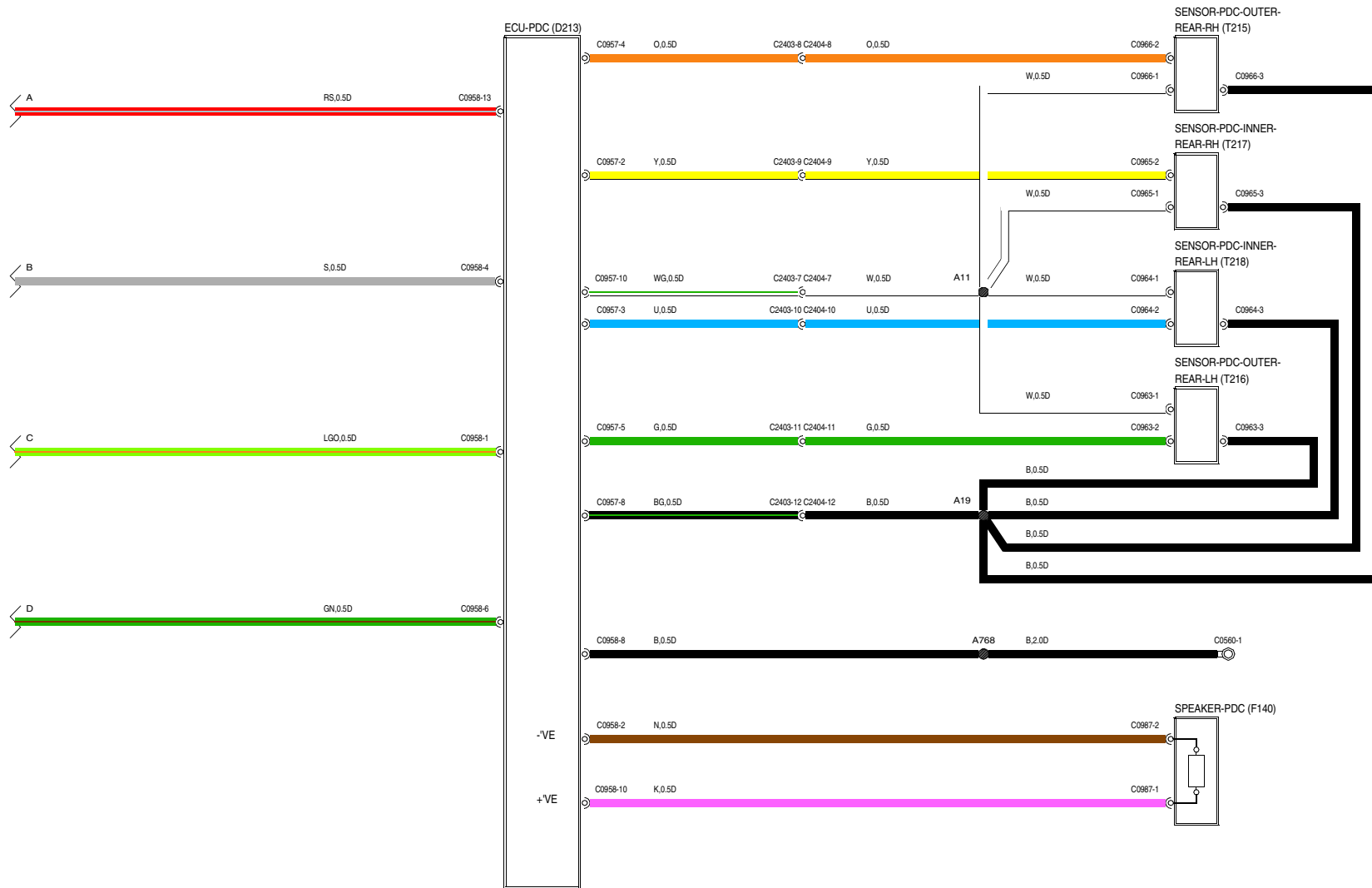
WFR003991-A-01

75 PARK DISTANCE CONTROL (PDC)



1500011-A-01

75 PARK DISTANCE CONTROL (PDC)



WRS00011-A-02