



Electrical Circuit Diagrams

Elektrische Circuitdiagrammen

Schémas électriques

Elektrische Schaltpläne

Schemi elettrici

Esquemas de Circuitos Eléctricos

Diagramas dos Circuitos Eléctricos



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LRL 0436ENG 2nd Edition

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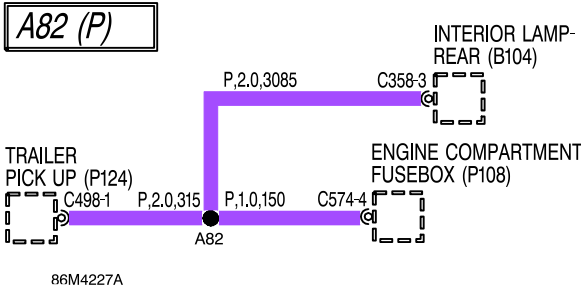
HOW TO USE THE CIRCUIT DIAGRAMS

All of the information in this folder is intended for use with the Electrical Reference Library booklet.

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

Power Distribution

The Power Distribution diagram shows the connections from the battery to the engine and passenger compartment fuseboxes. It also shows the internal circuitry of the fuseboxes.



These fuse box details are followed by a Headers and Splices section outlining the way in which internal harness splices and header joints 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.

Headers and splices

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 attributes

Additional information (separated by a ',') is shown alongside the wire colour: Wire gauge - the cross-sectional area of the wire in square millimetres. This is included to help you select the correct wire during harness repair.

Some wires do not have a gauge shown, these wires are of unique construction and will have a three or four letter code printed after the colour code, eg MAB. The code identifies the type of wire for manufacturing purposes. Usually, only the first two characters have significance in service, but in some instances the third character also becomes significant, see Wire Type information given below.

Wire type

The following table list the wire type codes together with an explanation of their meaning.

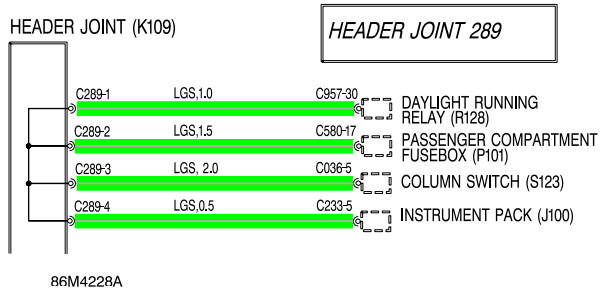
Code	Description
MAB	Twin core screened wire
MAH	Coaxial screened wire
MAT	Twin core double sheath
MCA	Twisted core screened wire
MD*	Twisted core ABS sensor wire
ME*	Twisted pair of wires min. 33 twists per metre
MM*	Twisted pair of wires
MQ*	Twin core foil screened cable
MZ*	Three core screened flexible cable

Wire length (Power & Earth Distribution only) - the length of the wire 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 C574-4 is 150mm from joint A82.

Earth Distribution

The ground distribution section comprises a number of Headers and Splices tables. 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.

Connectors



Header joints are identified by their corresponding connector number with a numbered suffix to indicate the pin-out detail of the wire, i.e. C289-1 identifies connector 289, pin number 1. Wire insulation colour is identified in the normal way. Where wires have a predominant colour with a secondary colour stripe, the main colour is identified first, i.e. LGS - Light Green with a Slate stripe.

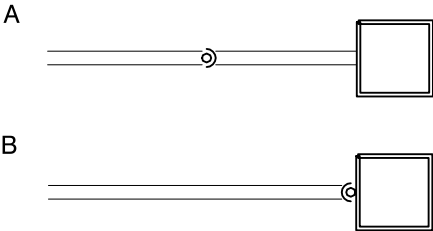
HOW TO USE THE CIRCUIT DIAGRAMS

Line Types



86M4229A

This means the wire connects to another circuit.



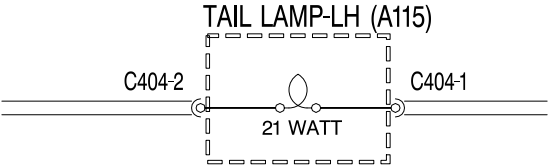
86M4230A

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.

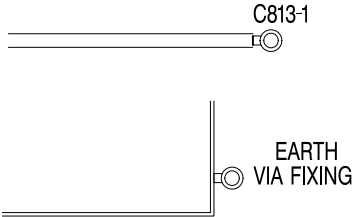
Components



86M4231A

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

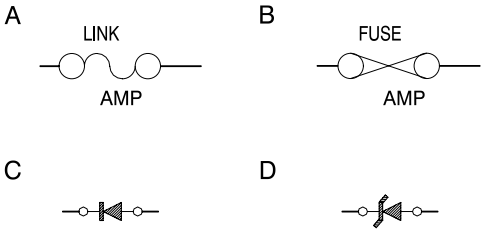
Earth points



86M4232A

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



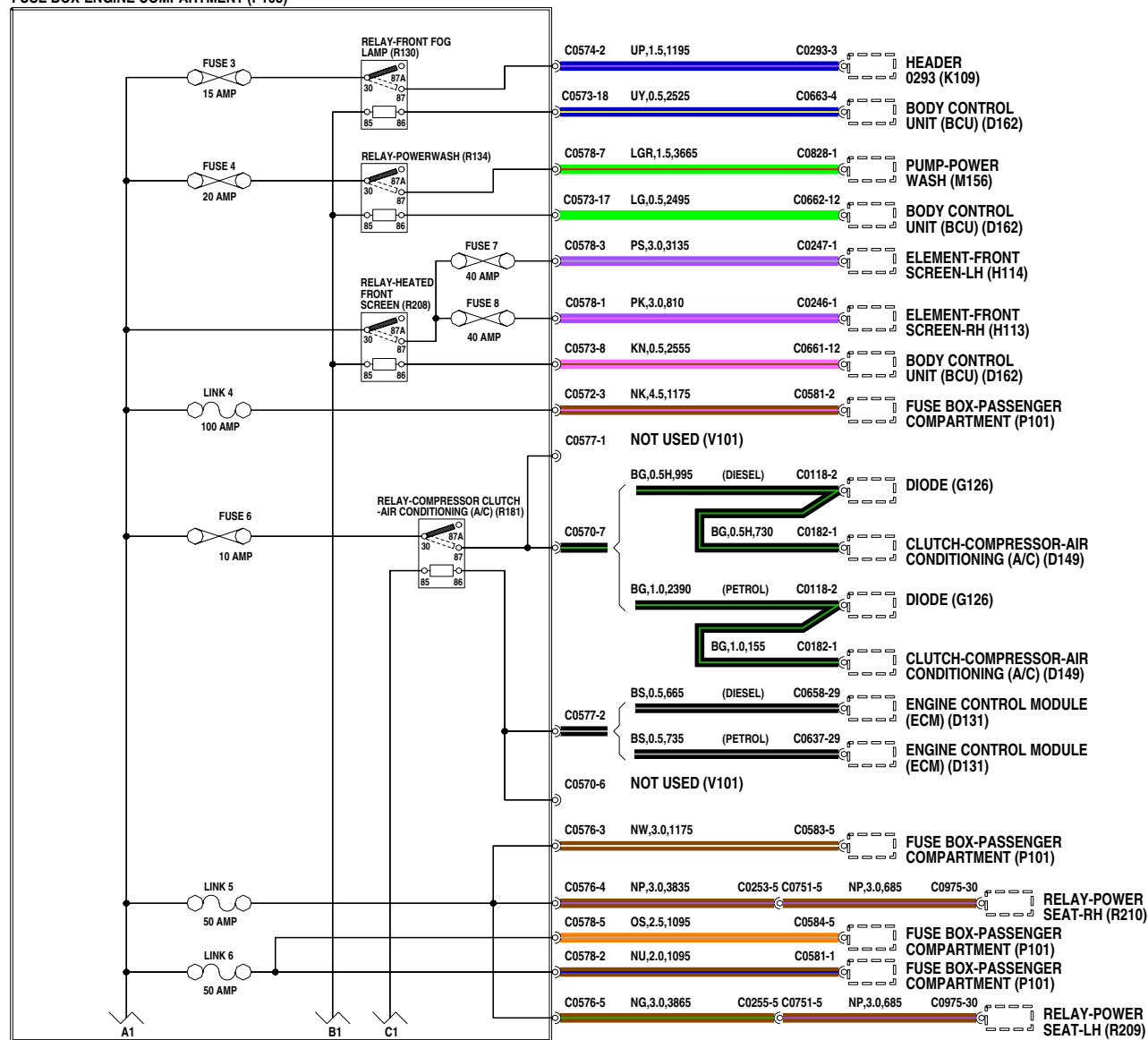
86M4234A

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

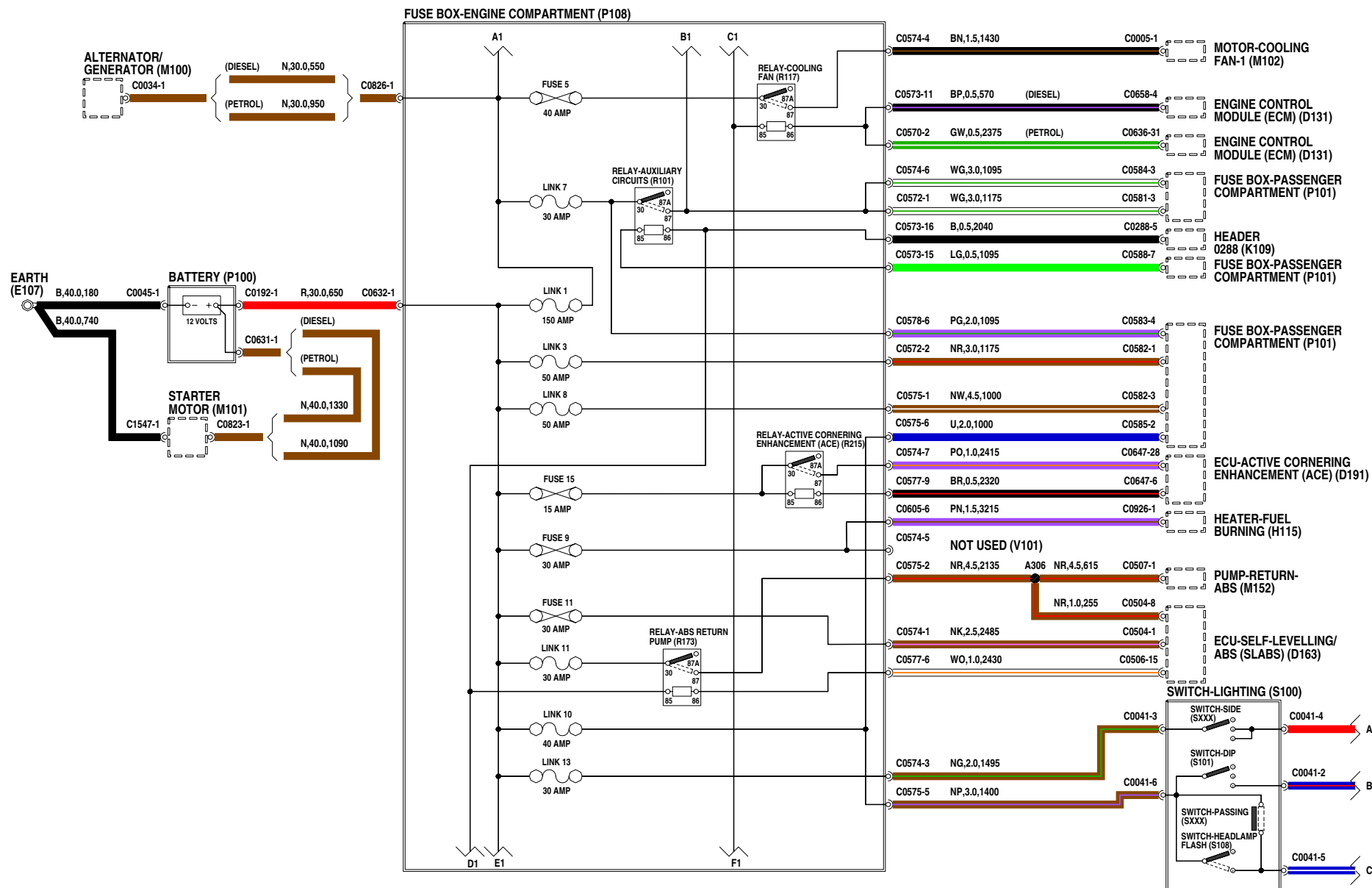
The direction of the arrow in a Diode symbol (C) indicates the direction of current flow. The Zener diode (D) - prevents current flow until a precise voltage is reached.

POWER DISTRIBUTION ENGINE COMPARTMENT FUSEBOX

FUSE BOX-ENGINE COMPARTMENT (P108)

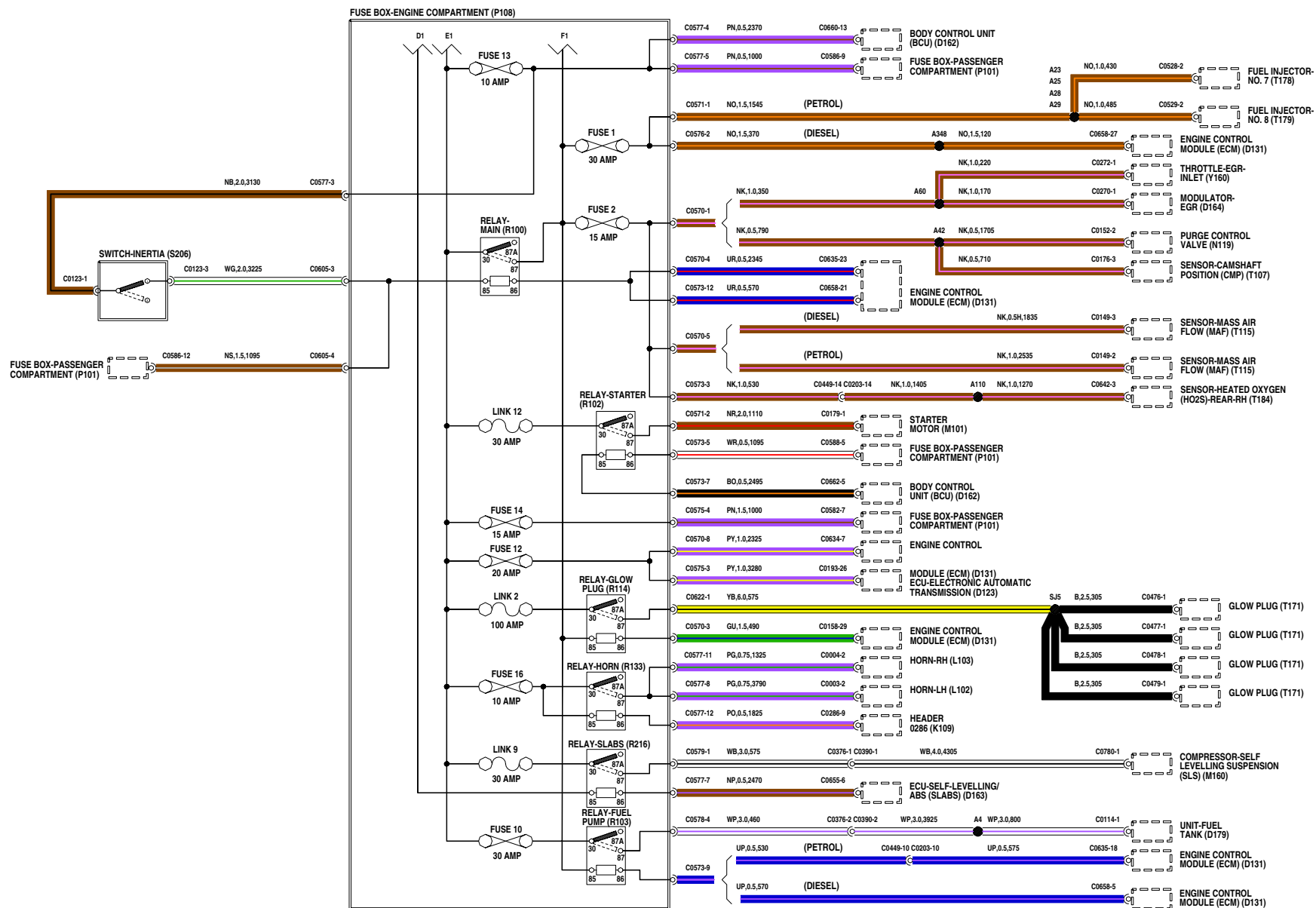


POWER DISTRIBUTION ENGINE COMPARTMENT FUSEBOX



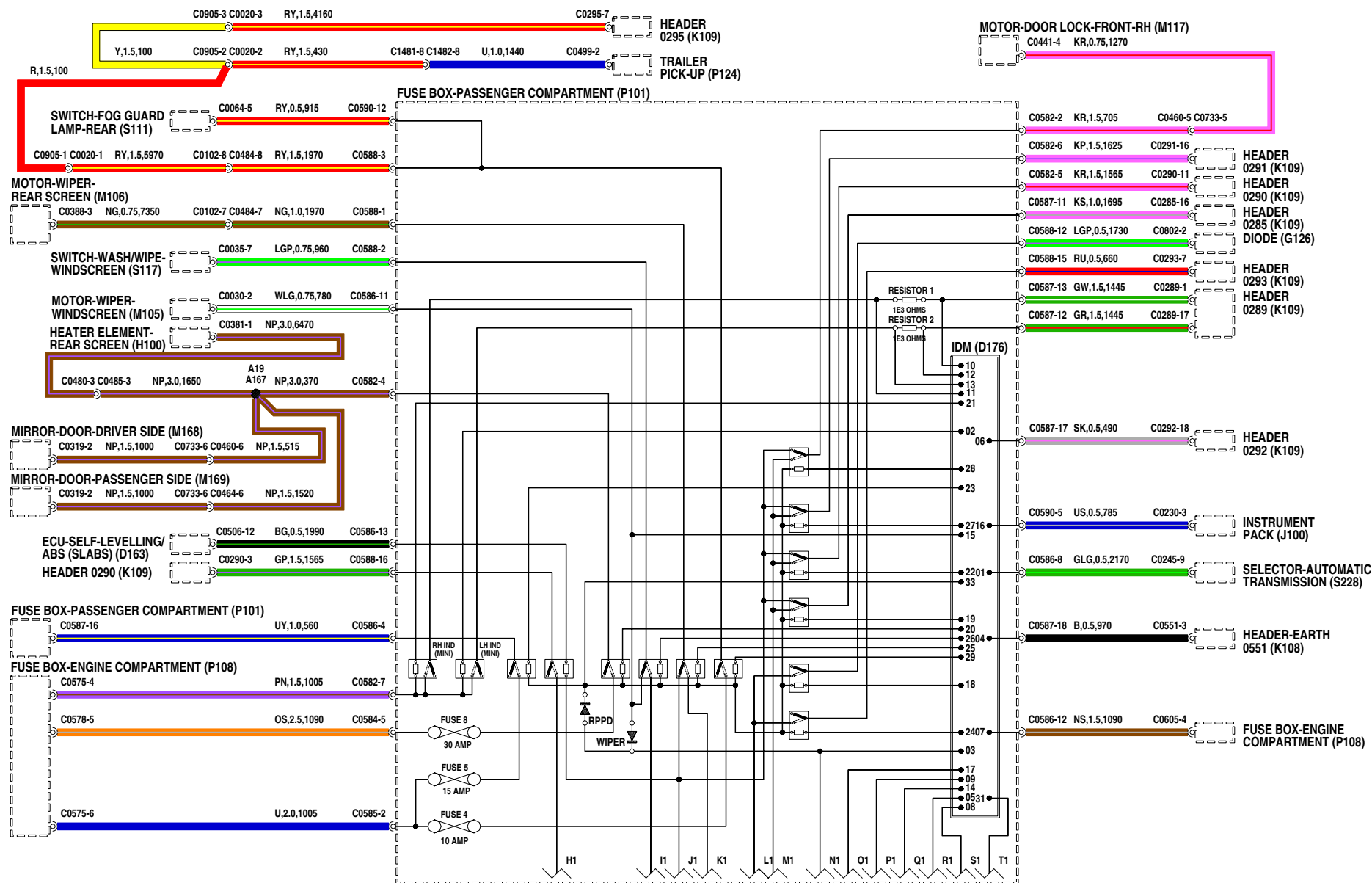
VWR108520-2of6

POWER DISTRIBUTION ENGINE COMPARTMENT FUSEBOX



VWR108520-3of6

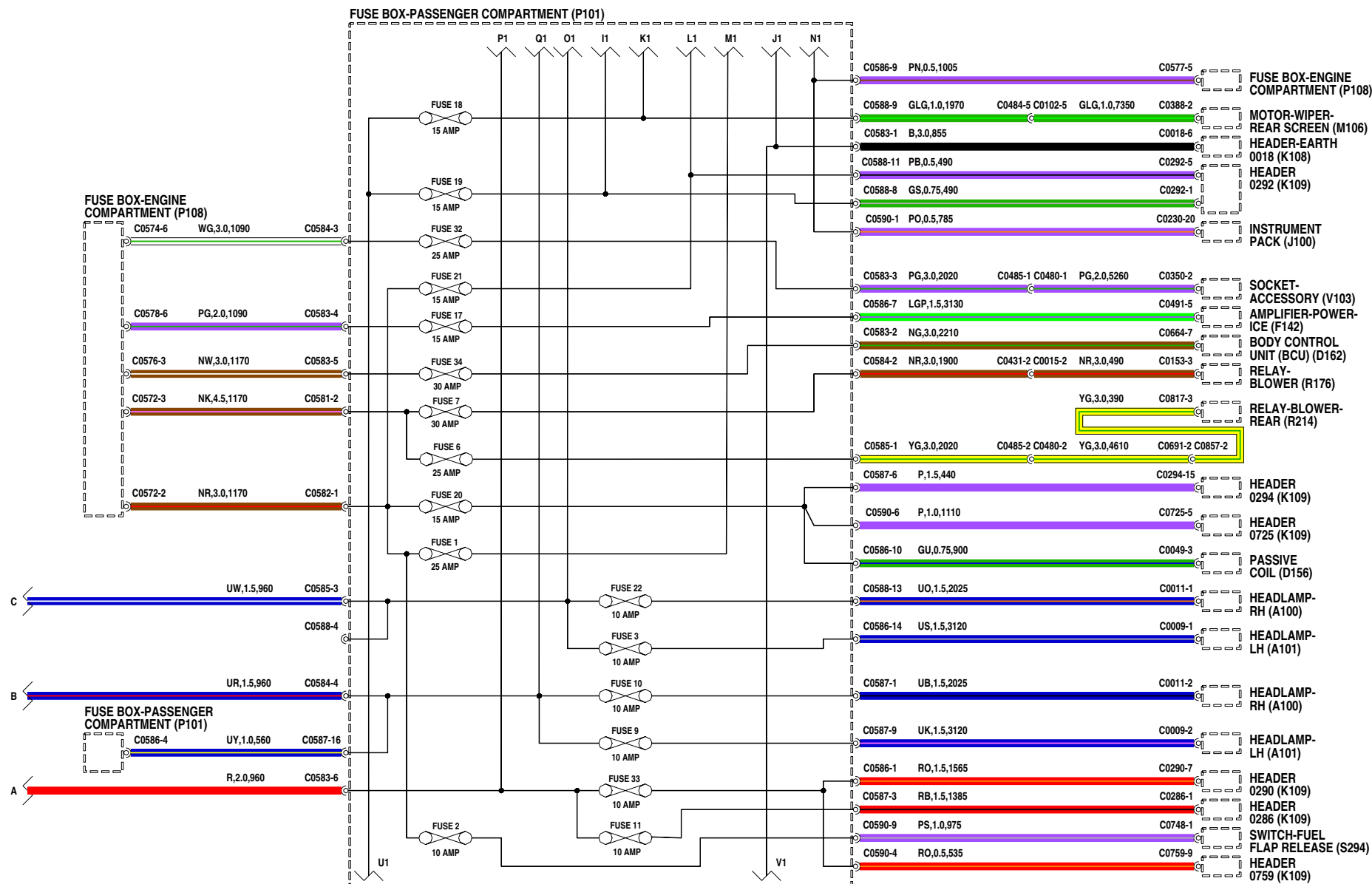
POWER DISTRIBUTION PASSENGER COMPARTMENT FUSEBOX



VWR108520-406

POWER DISTRIBUTION

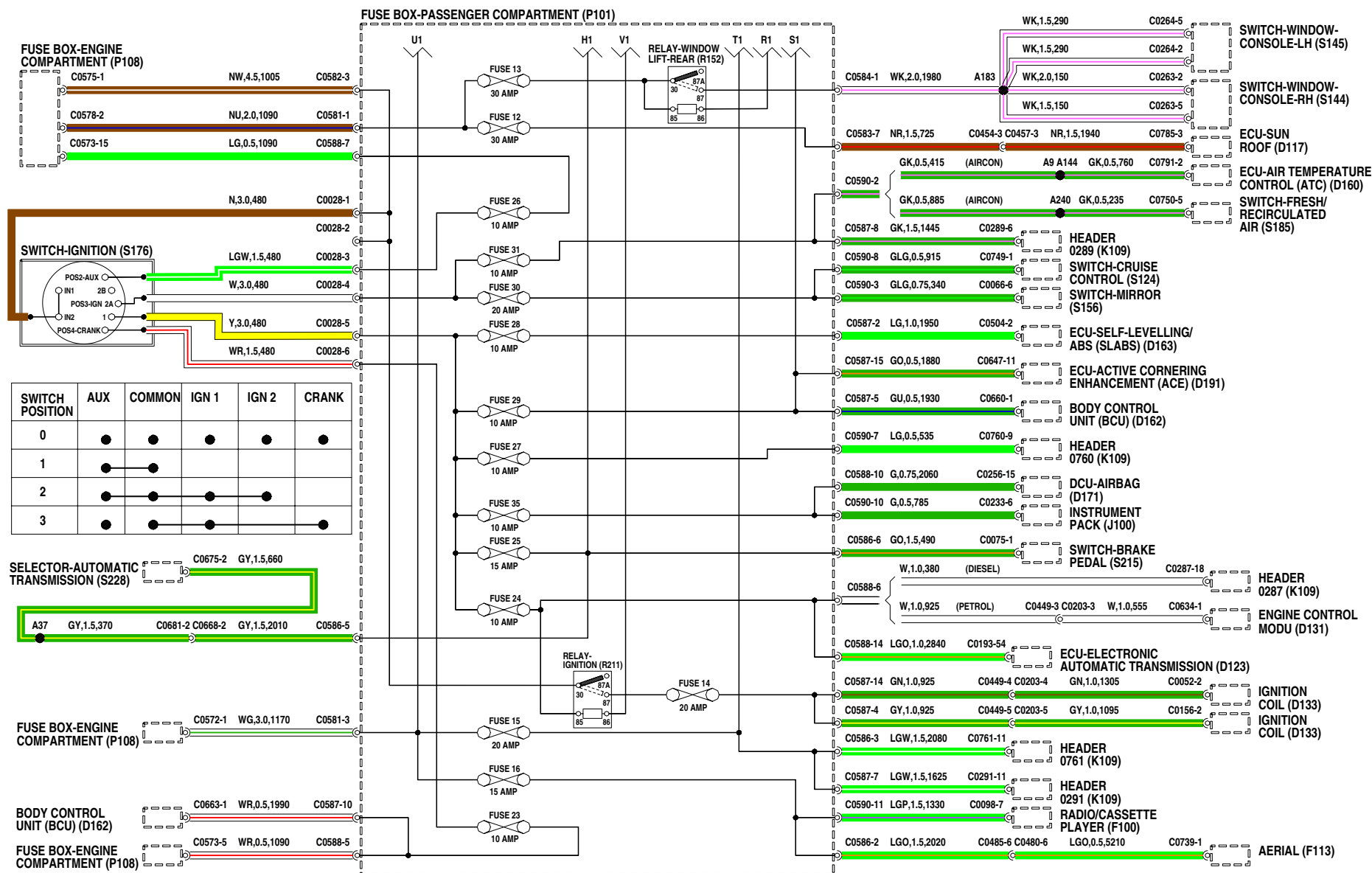
PASSENGER COMPARTMENT FUSEBOX



VWR108520-5016

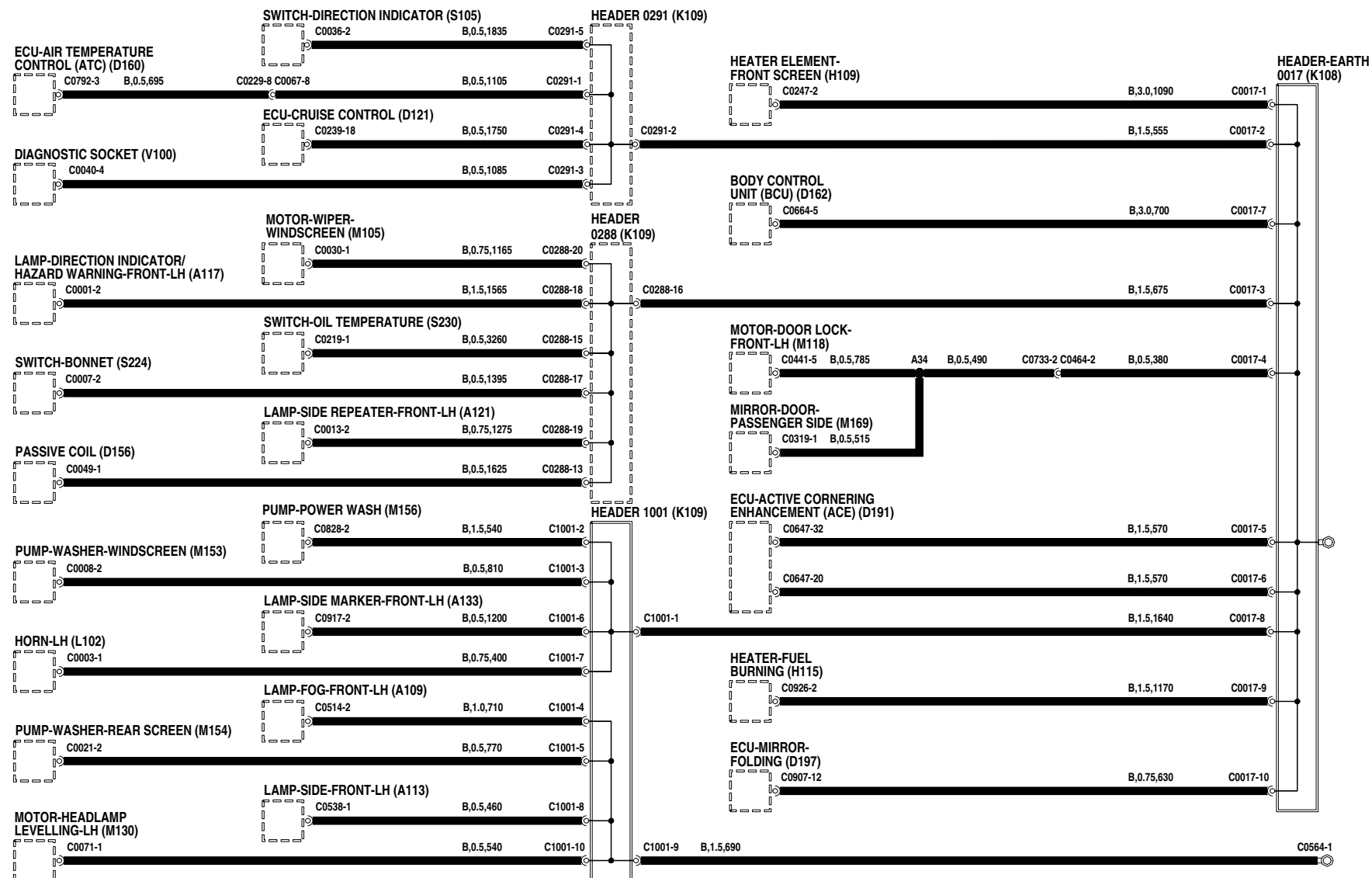
POWER DISTRIBUTION

PASSENGER COMPARTMENT FUSEBOX

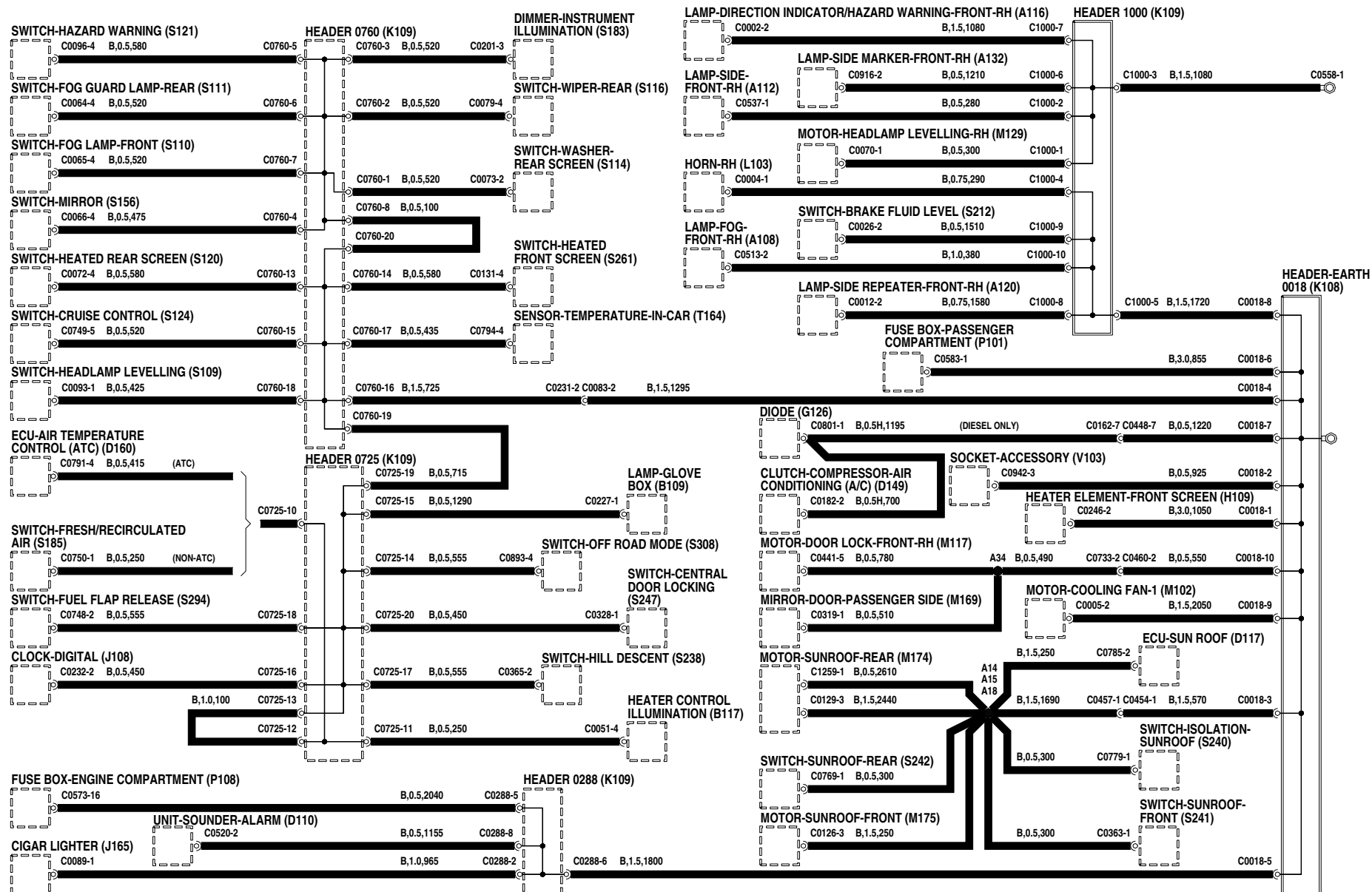


VWR108520-6of6

EARTH DISTRIBUTION

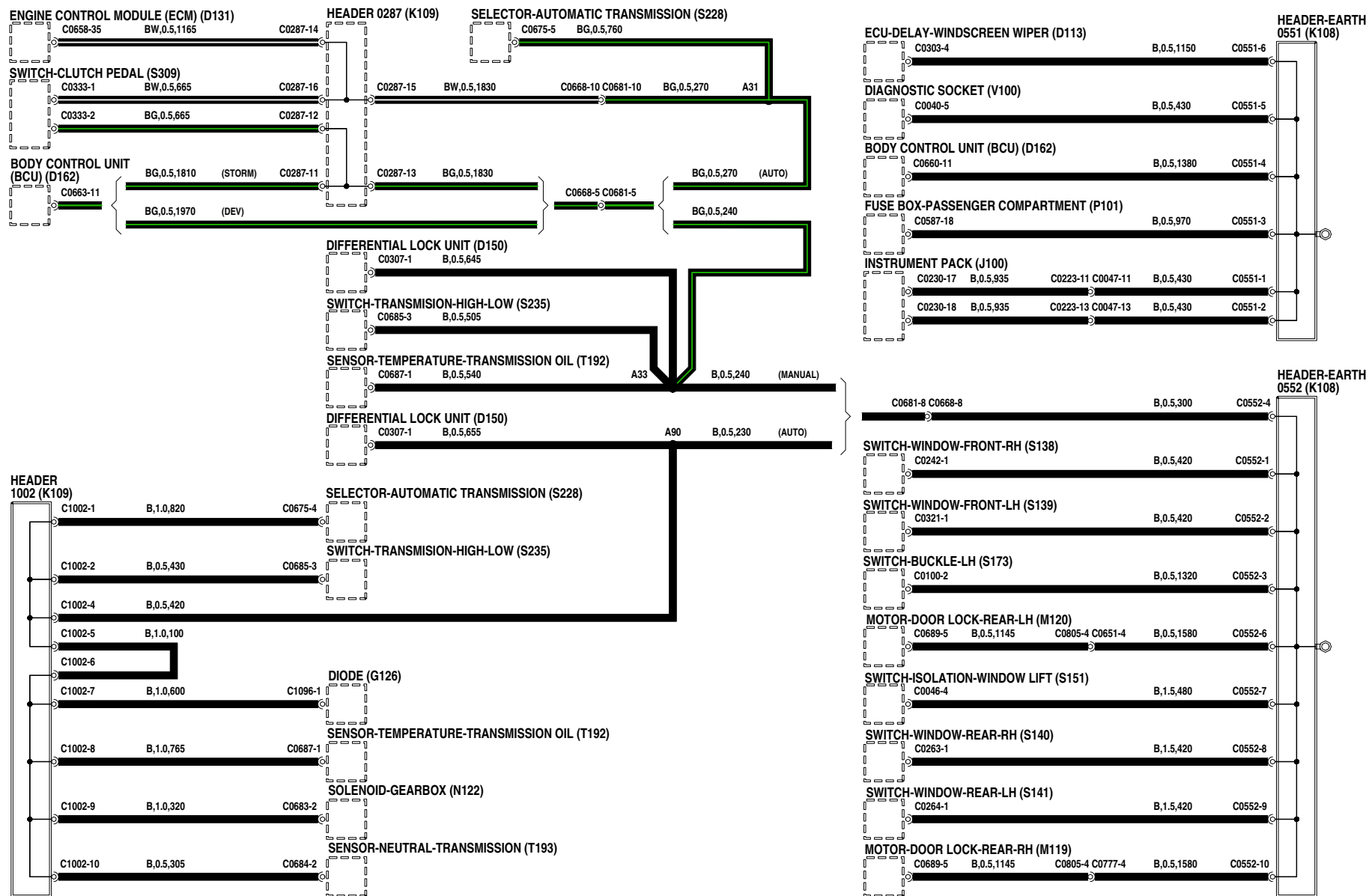


EARTH DISTRIBUTION



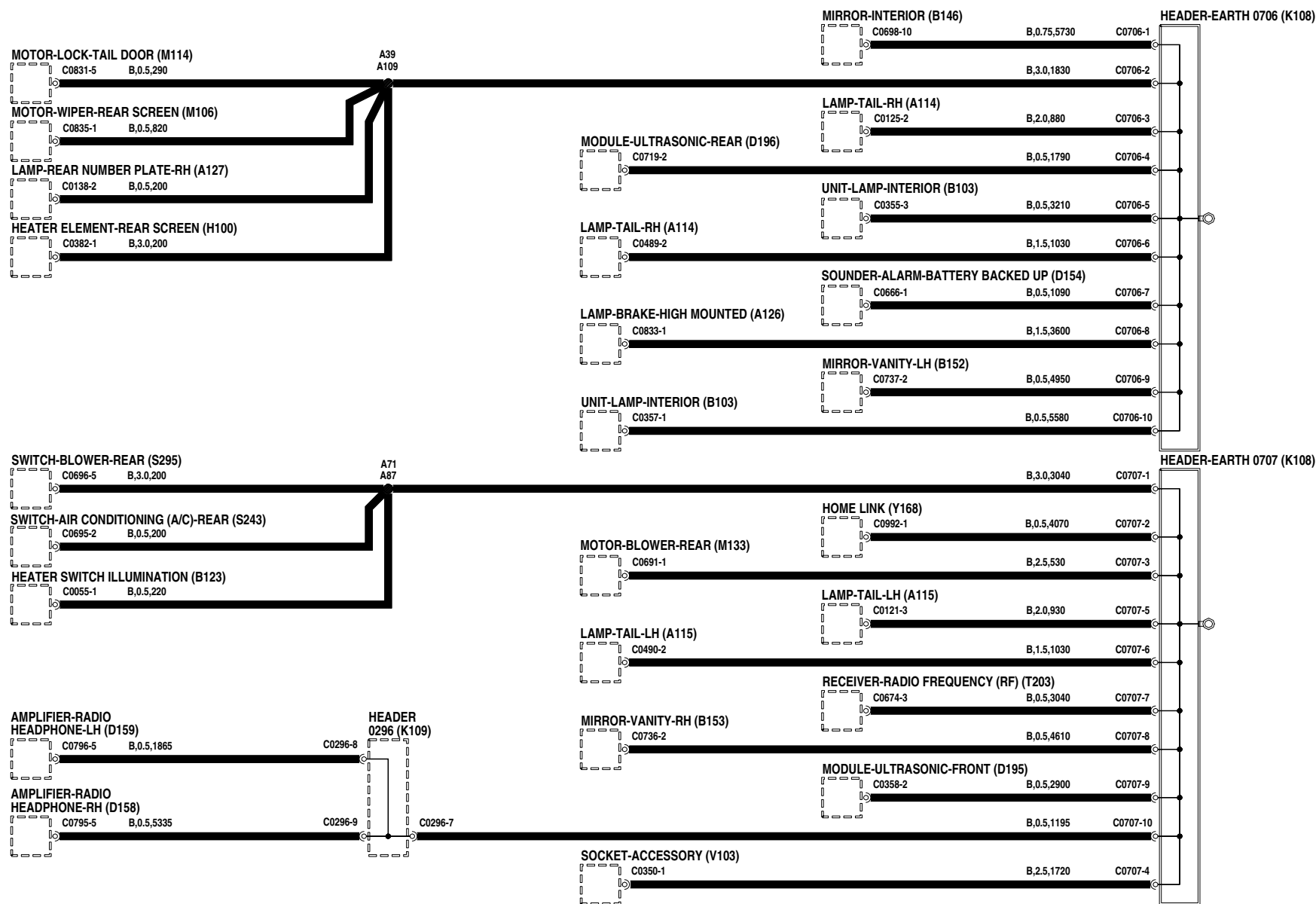
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EARTH DISTRIBUTION

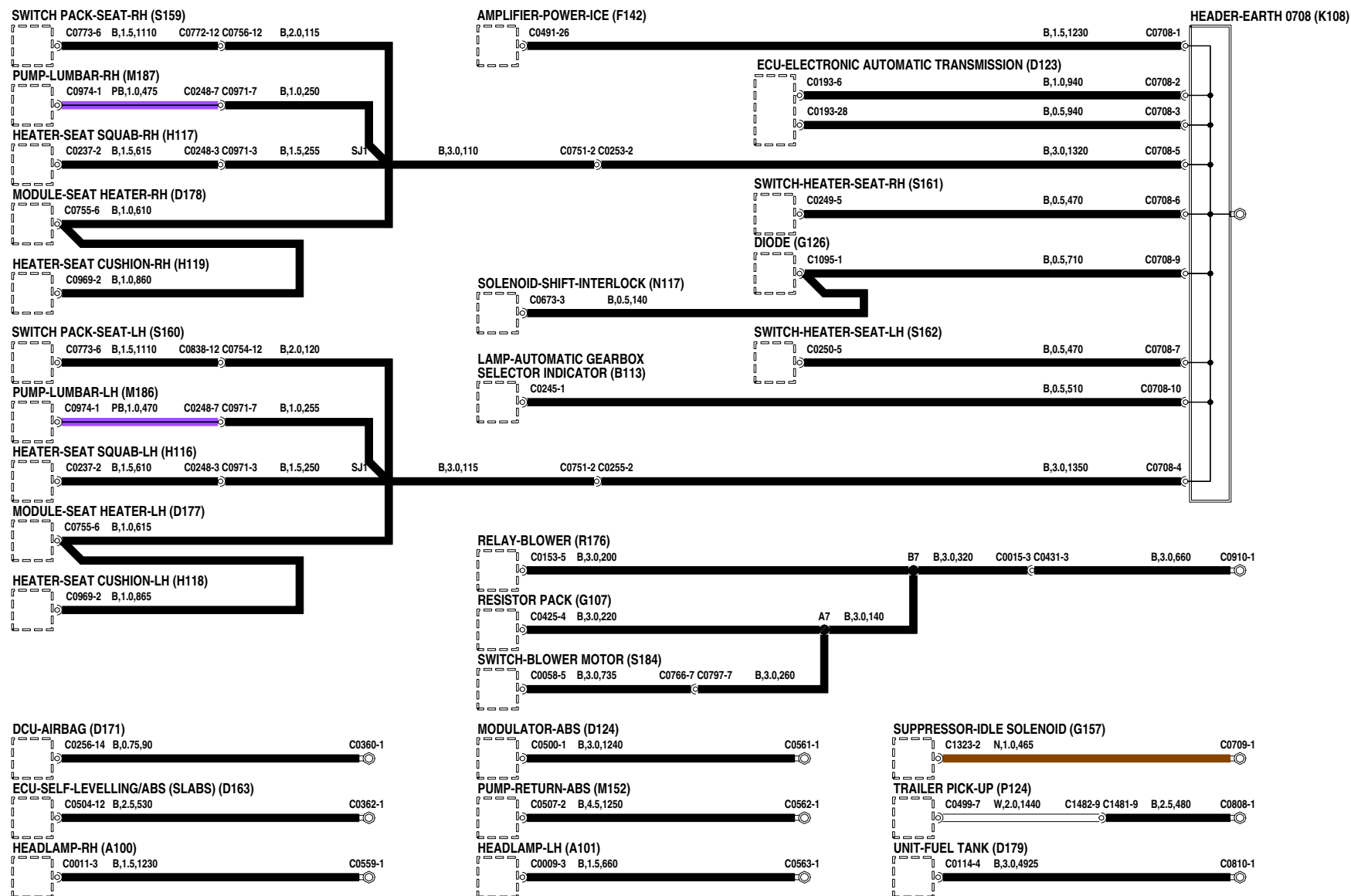


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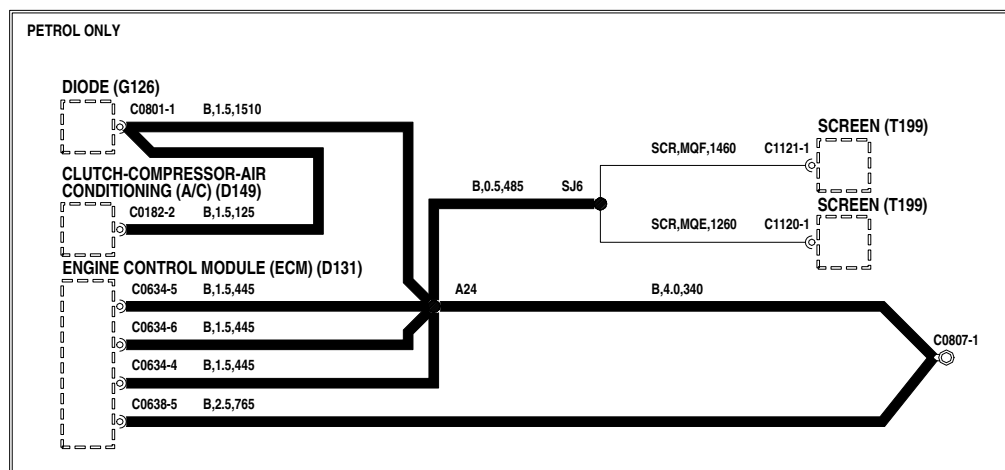
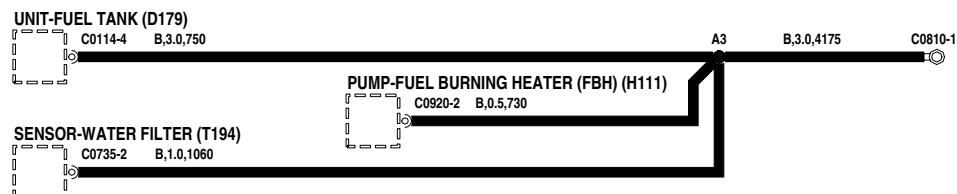
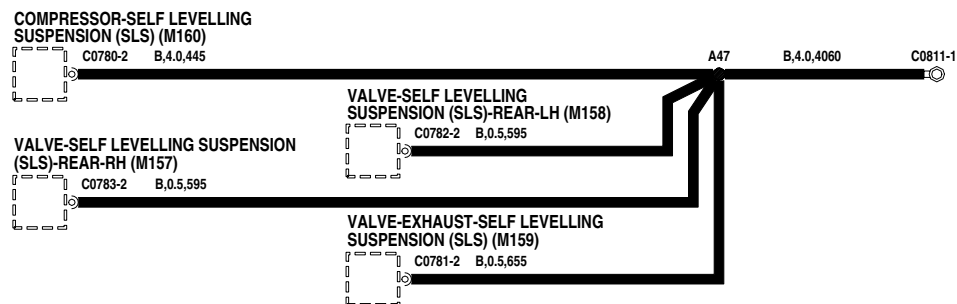
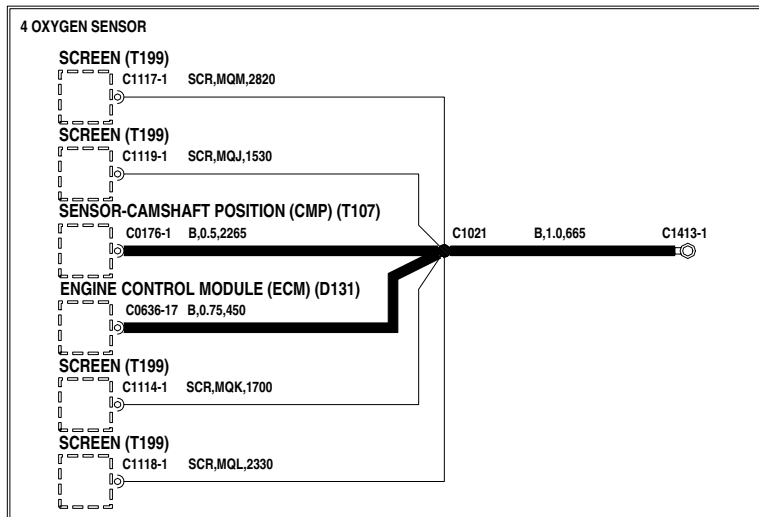
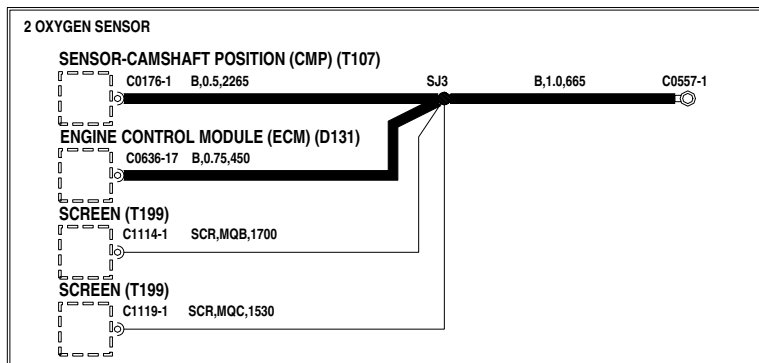
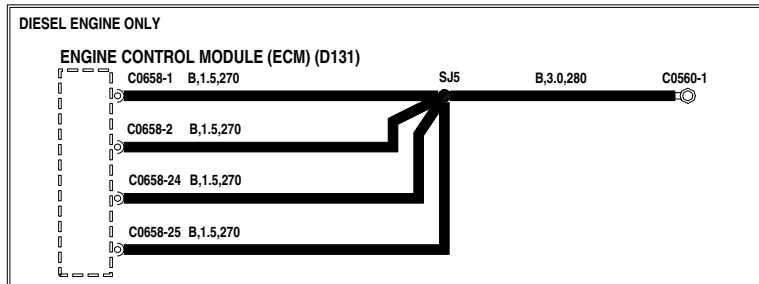
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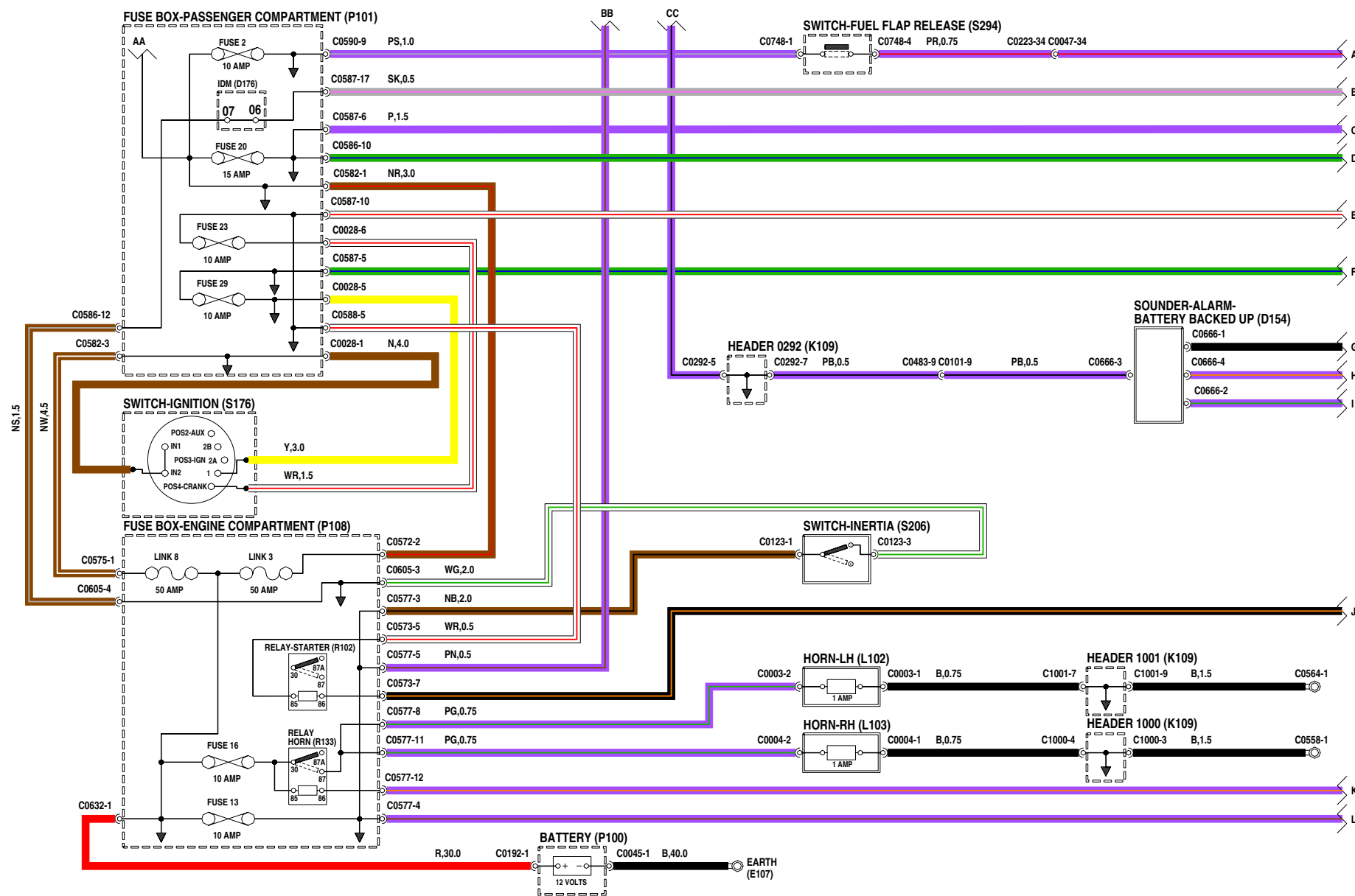
EARTH DISTRIBUTION



EARTH DISTRIBUTION

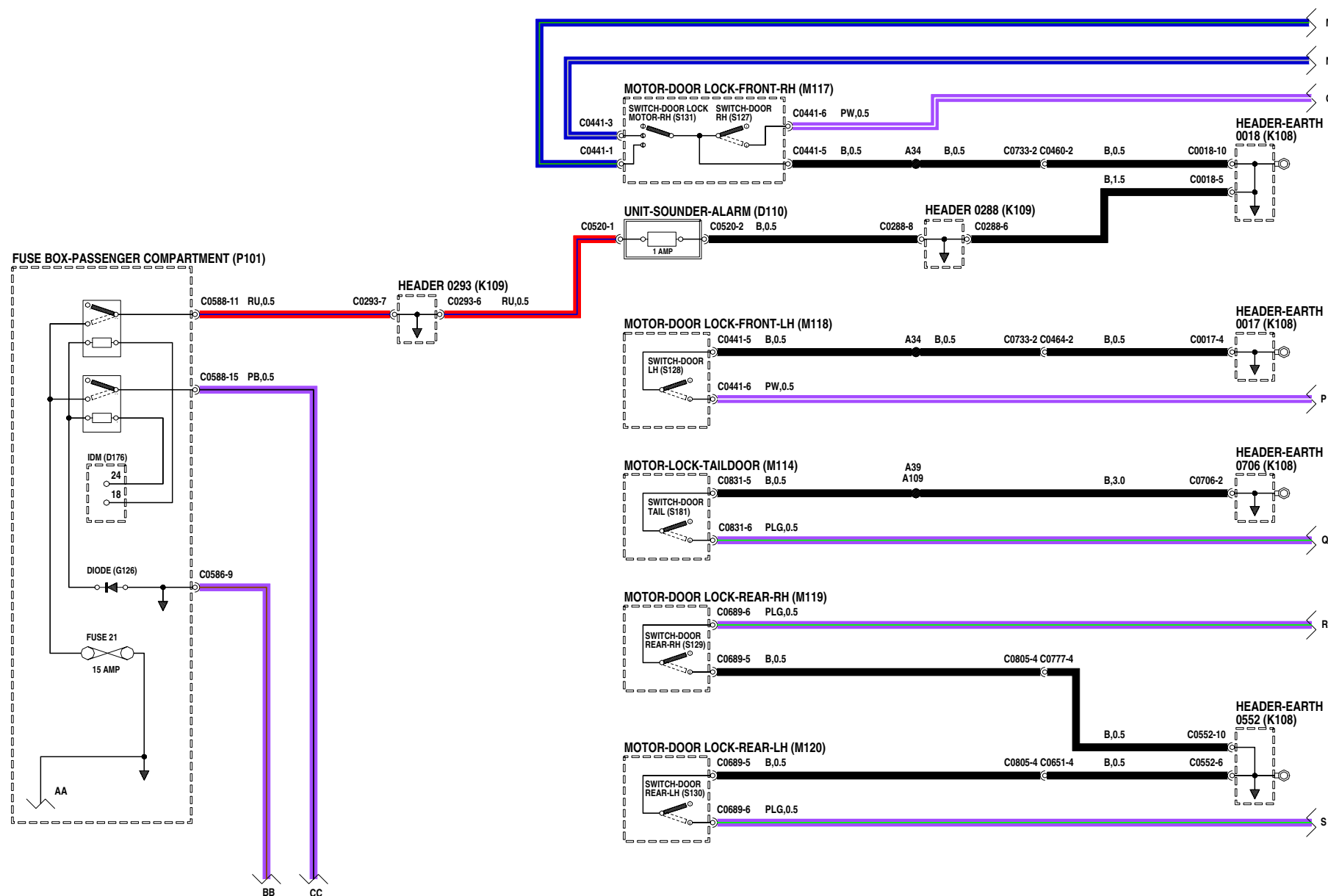


ANTI-THEFT ALARM



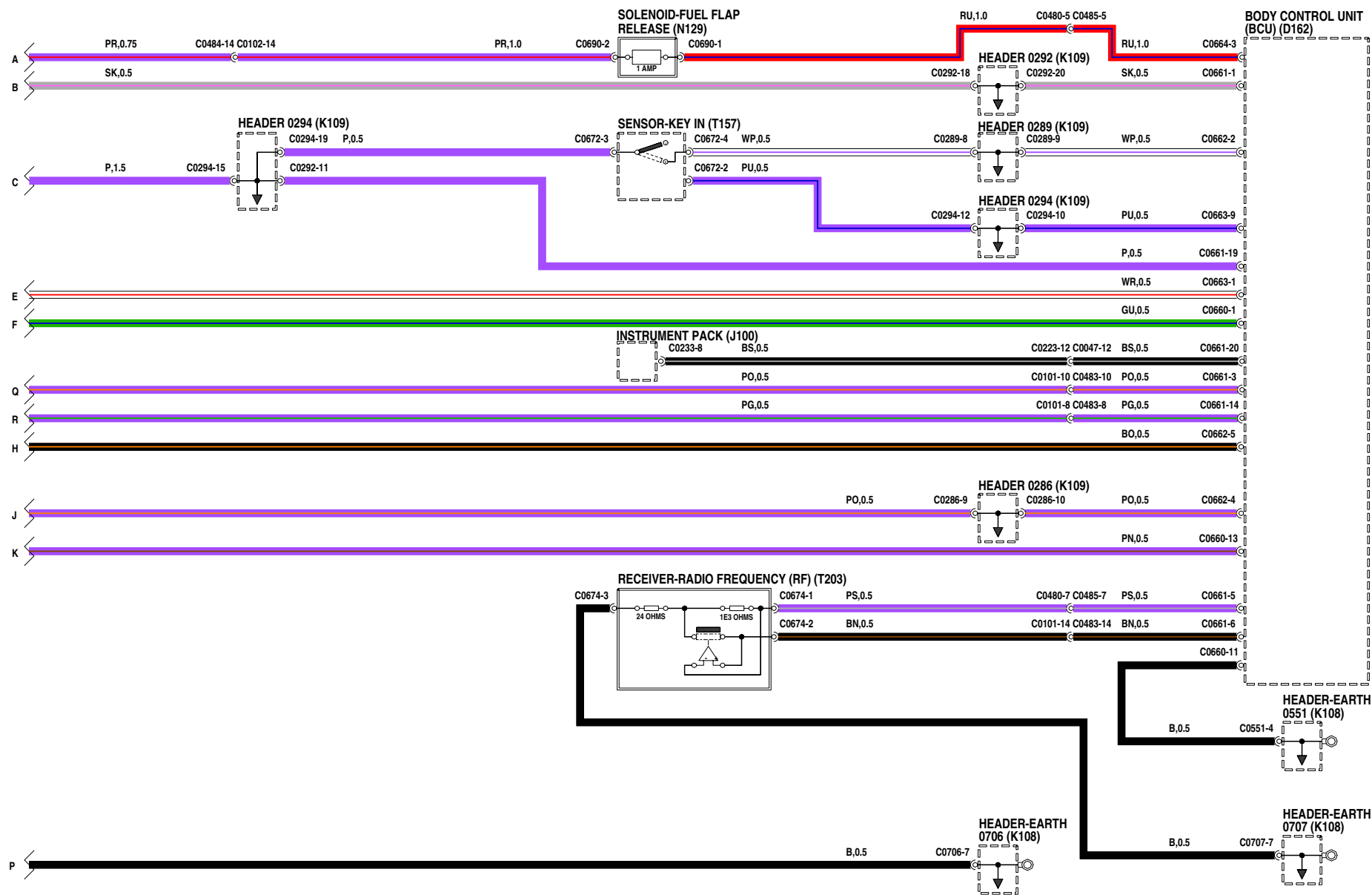
VWR108140-1of4

ANTI-THEFT ALARM



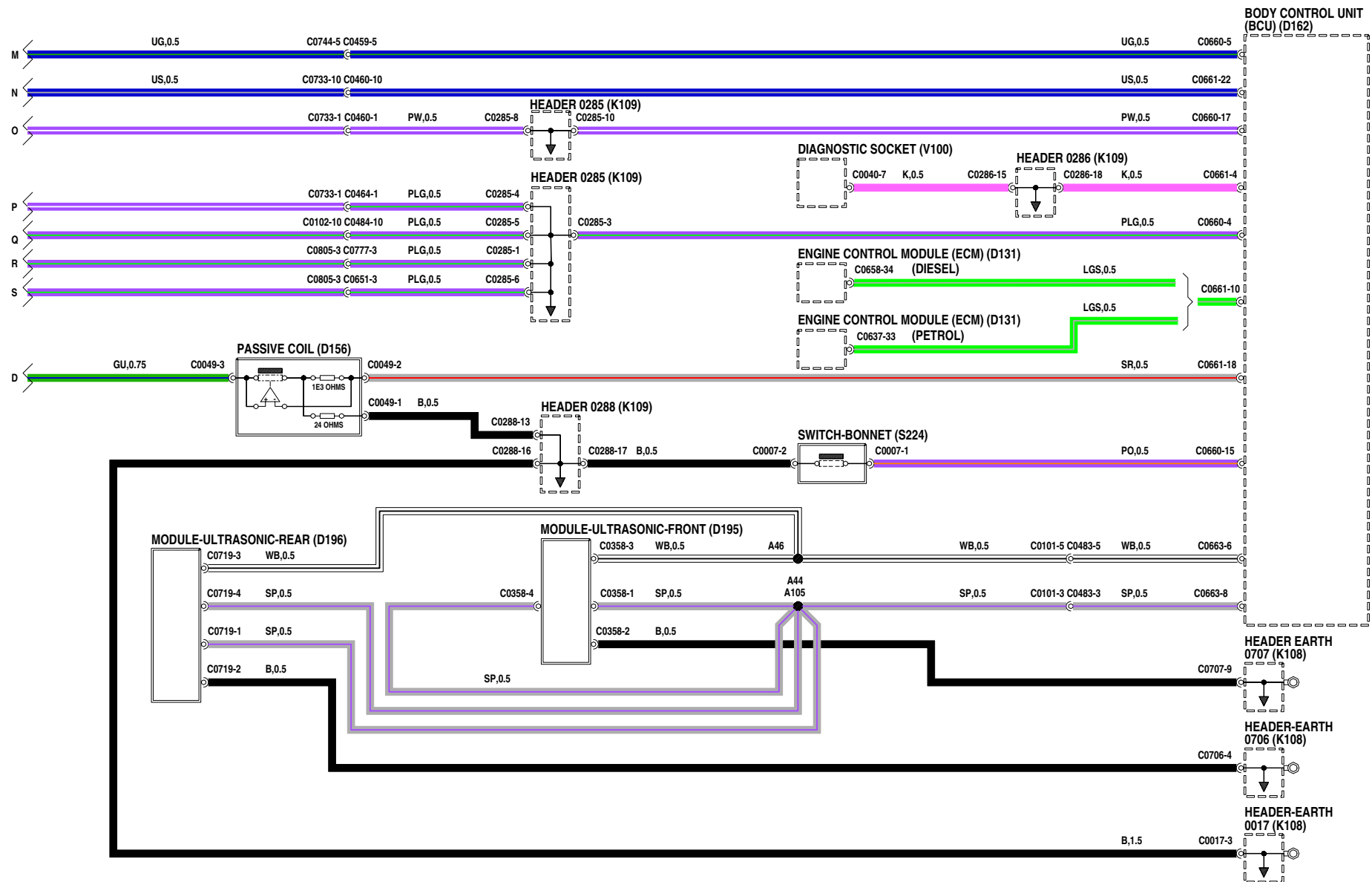
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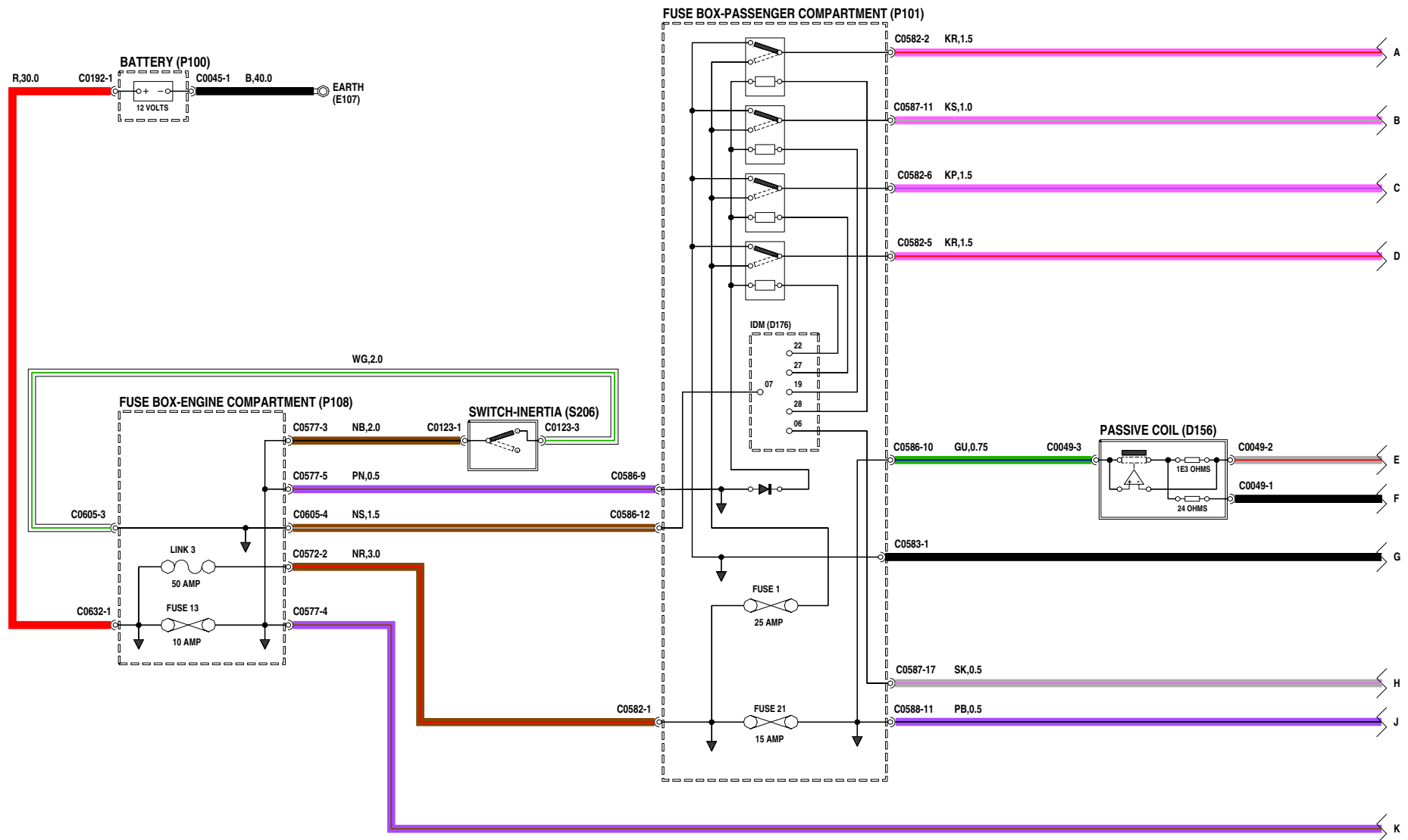
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ANTI-THEFT ALARM

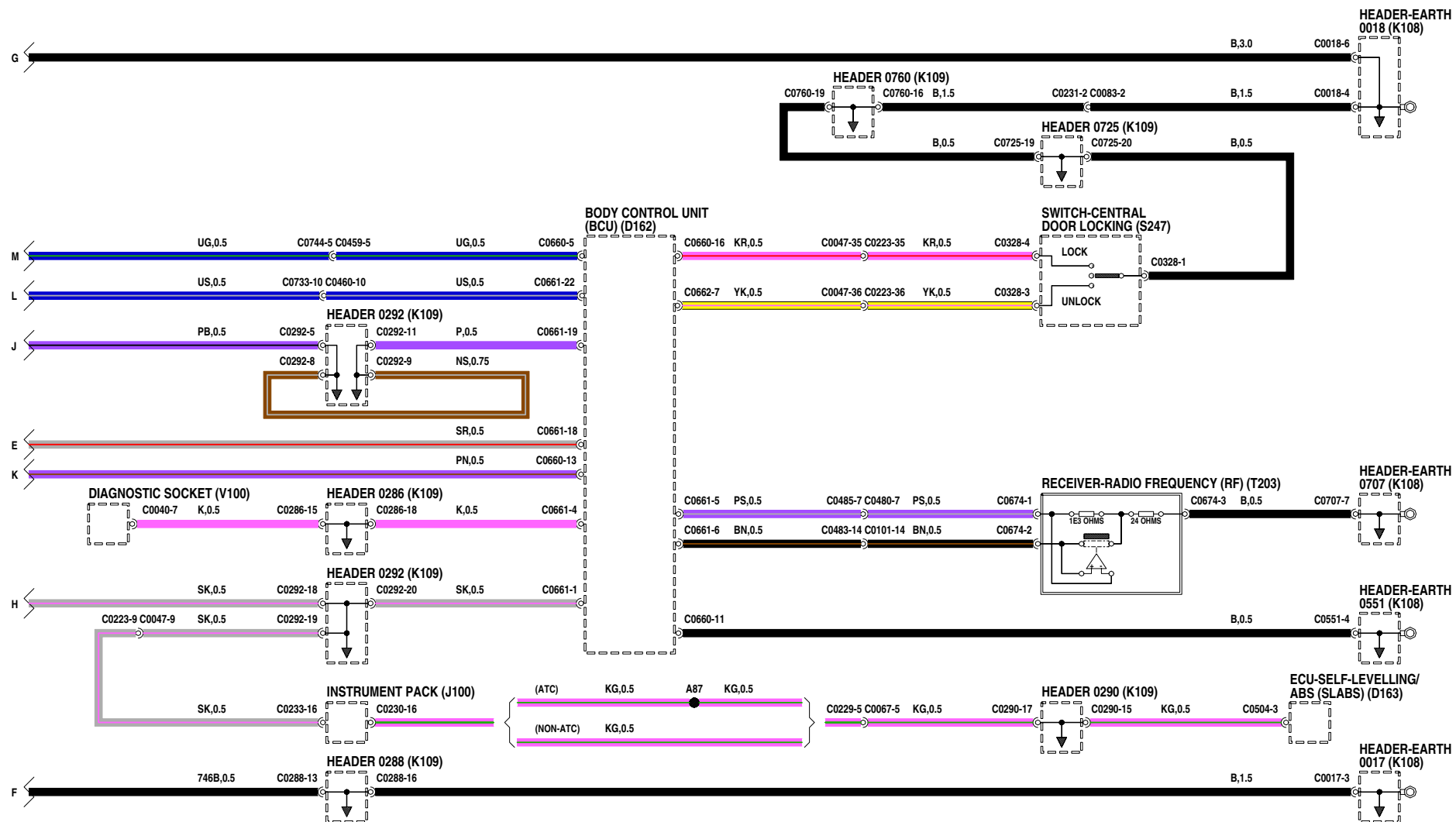


VWR108140-4x4

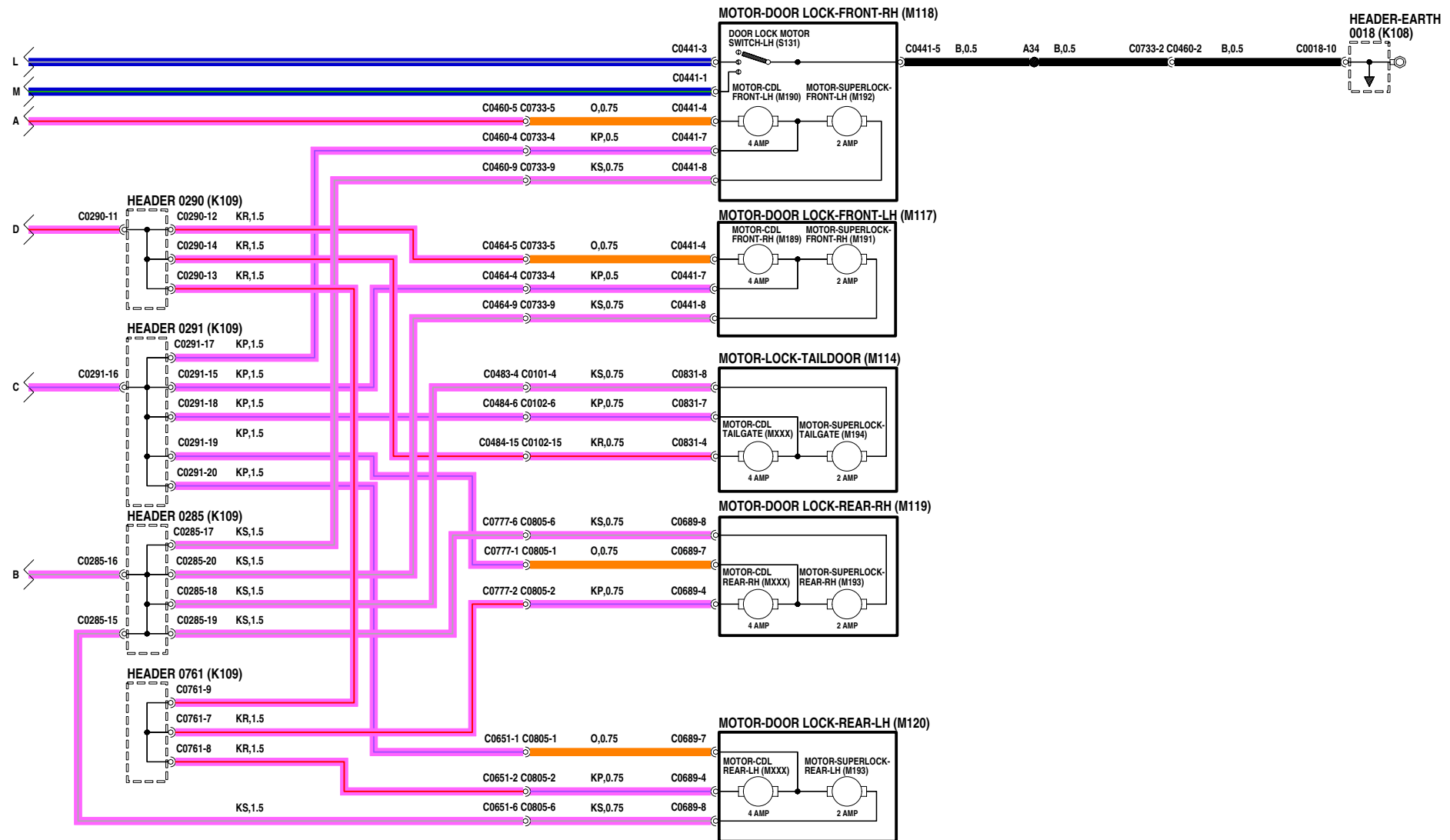
CENTRAL DOOR LOCKING



CENTRAL DOOR LOCKING

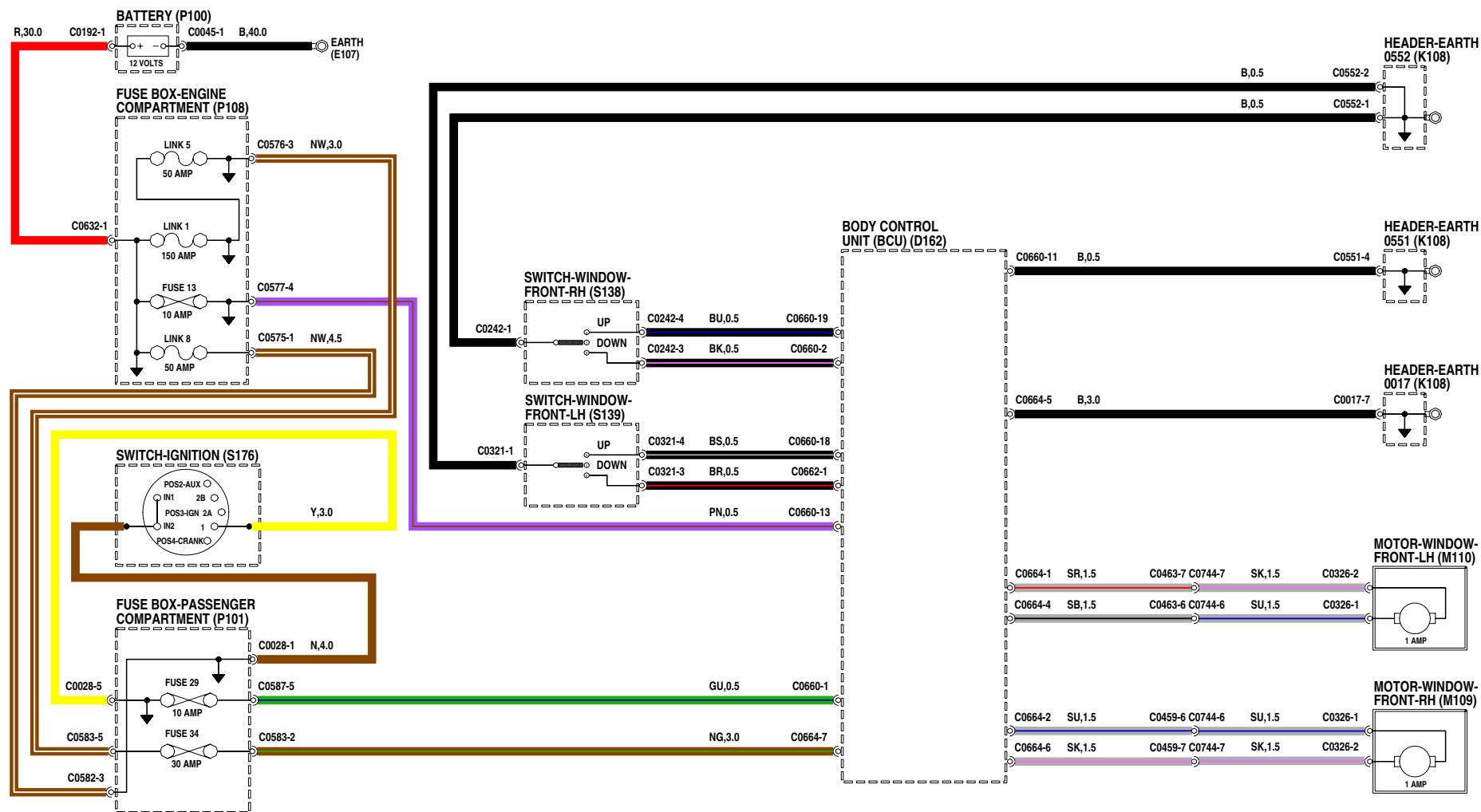


CENTRAL DOOR LOCKING



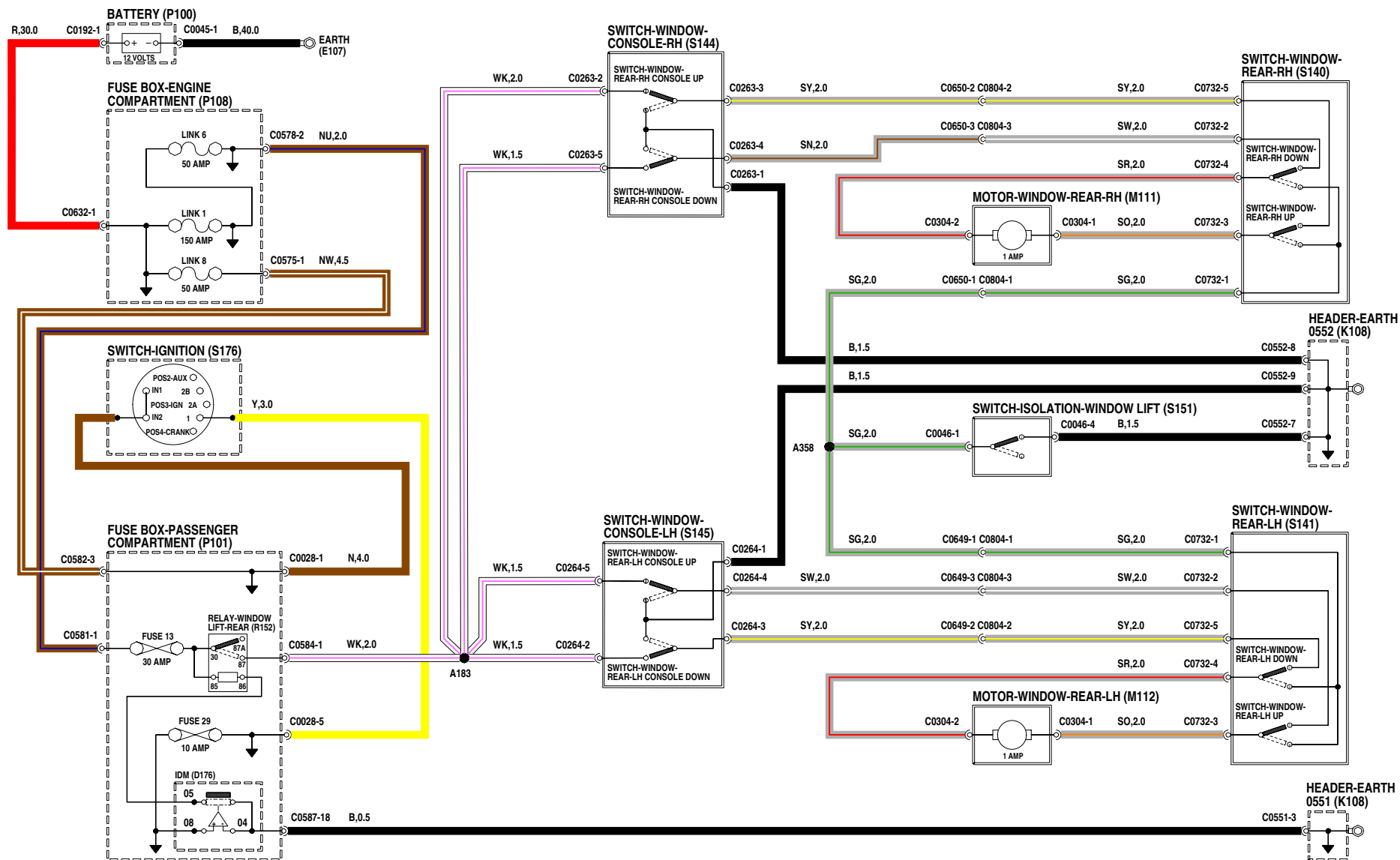
VWR108170-3a/3

WINDOWS FRONT



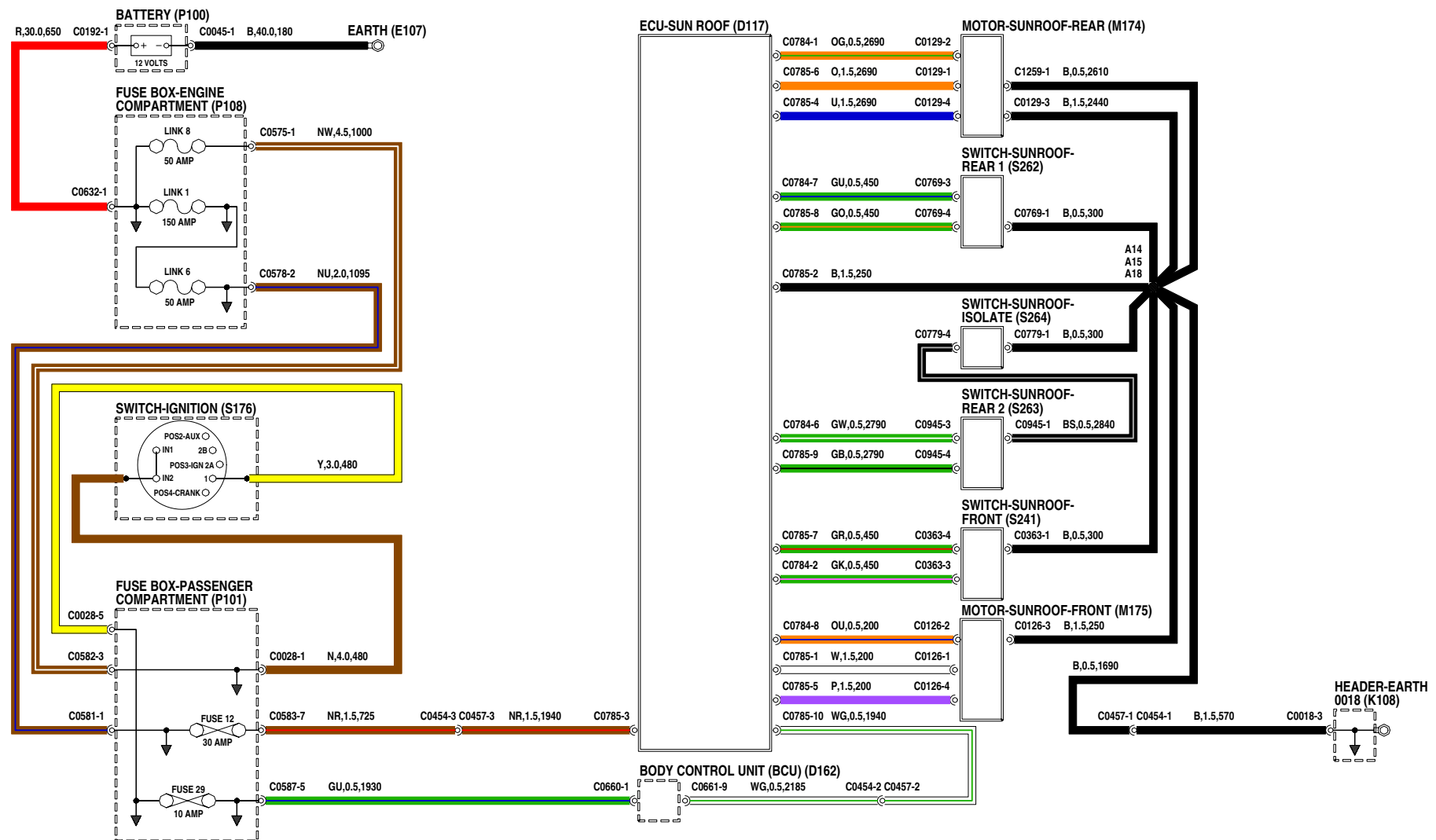
VWR108610-1a1

WINDOWS REAR

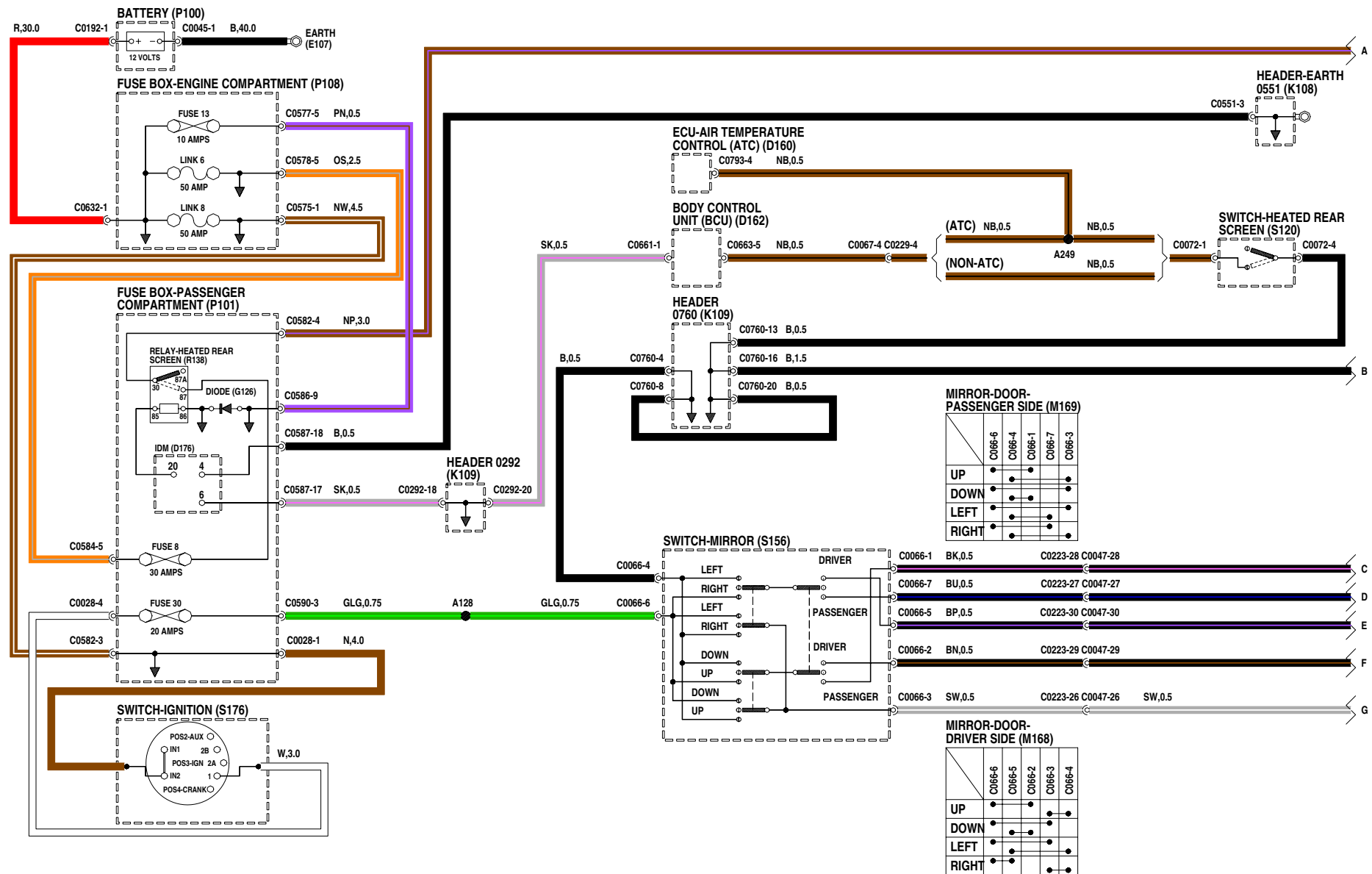


VWR108640-1of1

SUNROOF

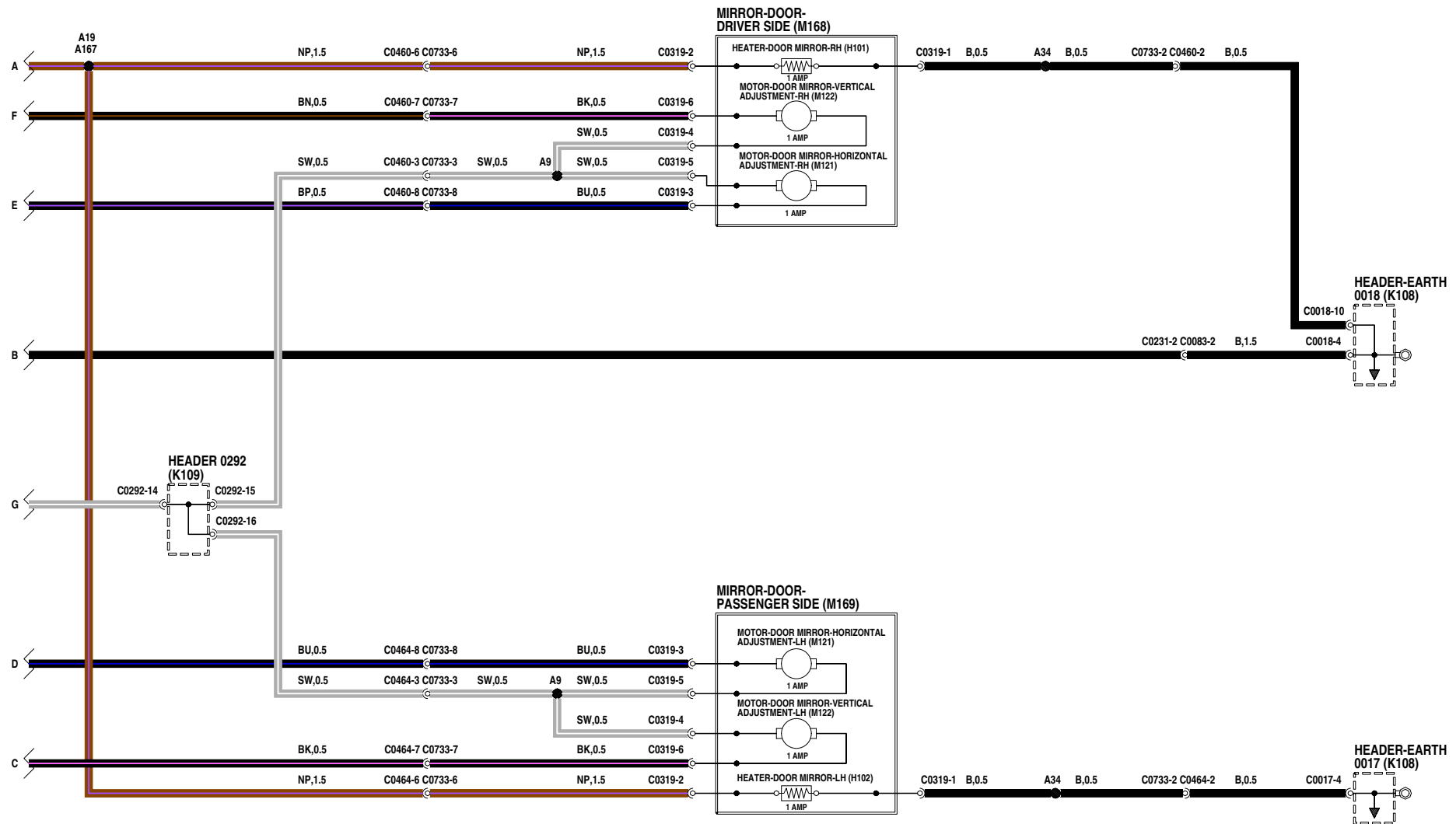


DOOR MIRRORS

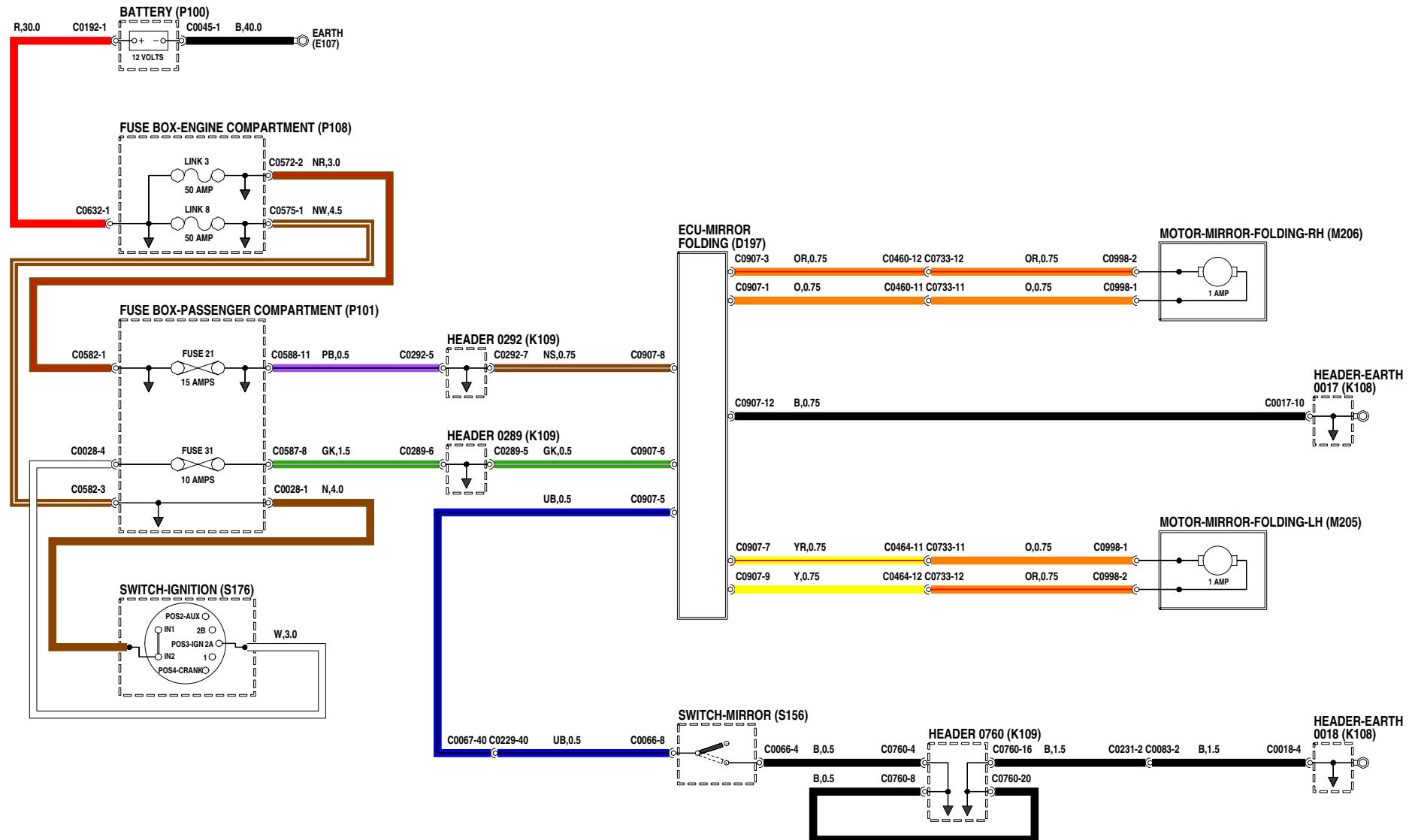


VWR108510-1a2

DOOR MIRRORS

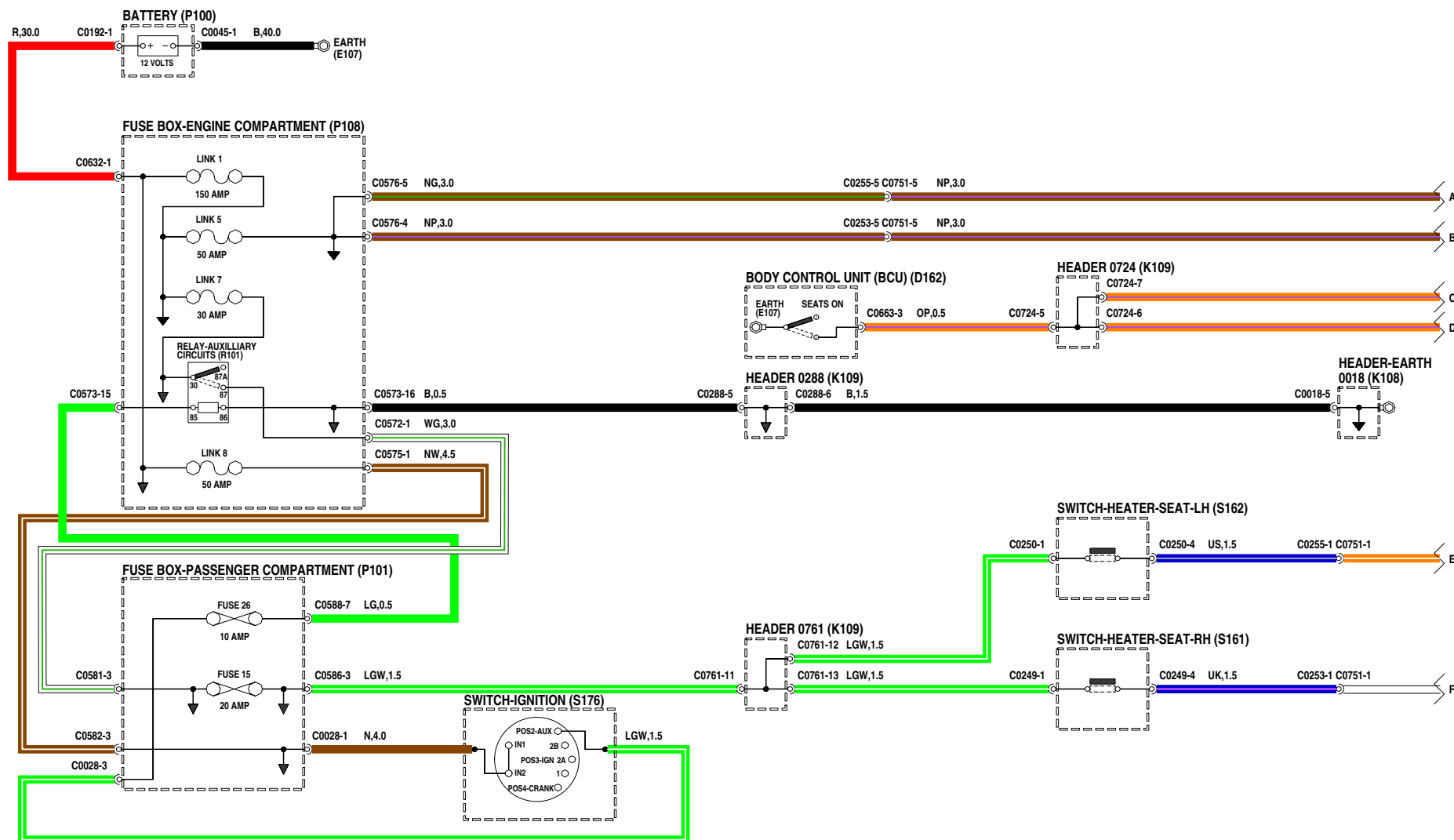


FOLDING DOOR MIRRORS



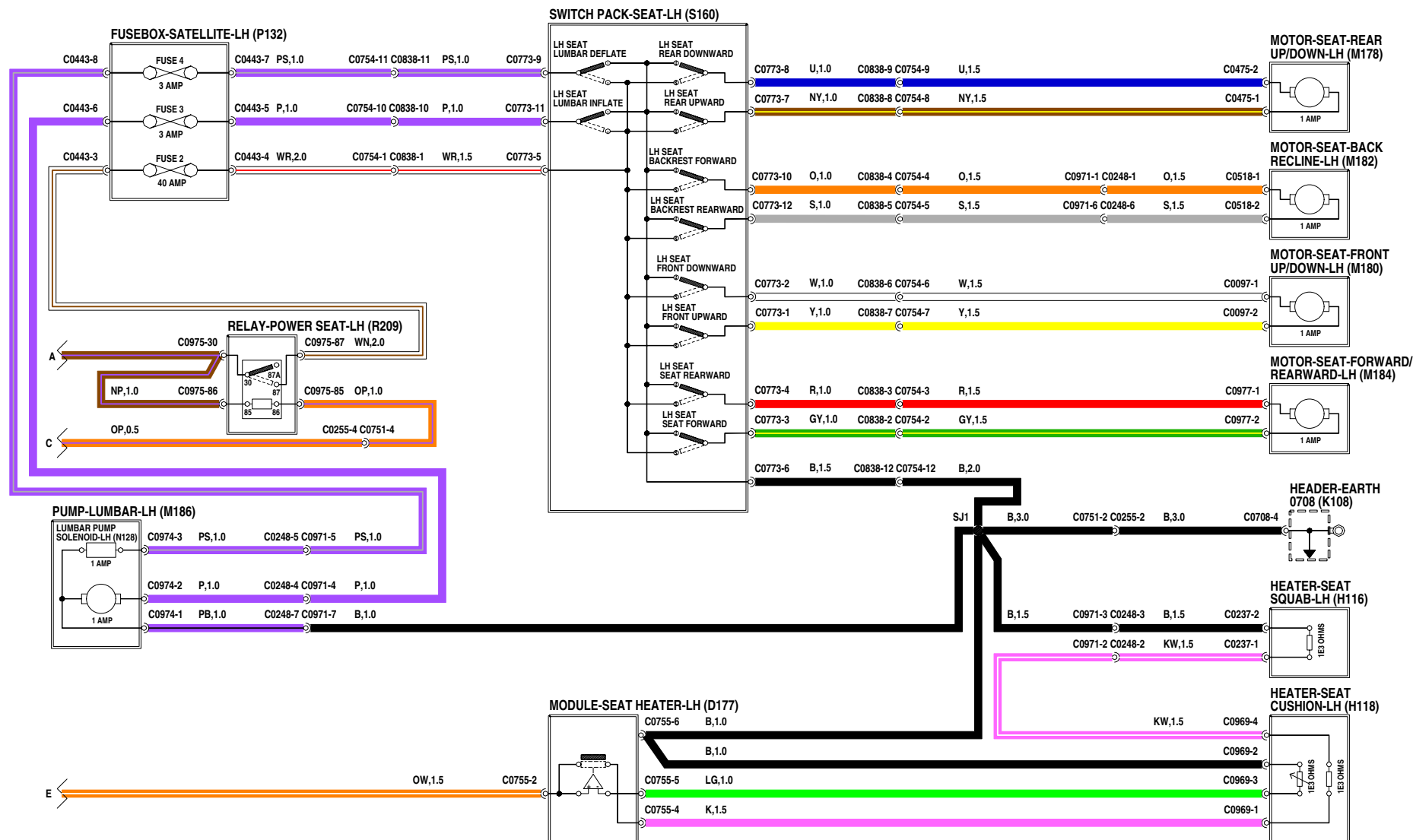
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SEATS POWER - HEATED

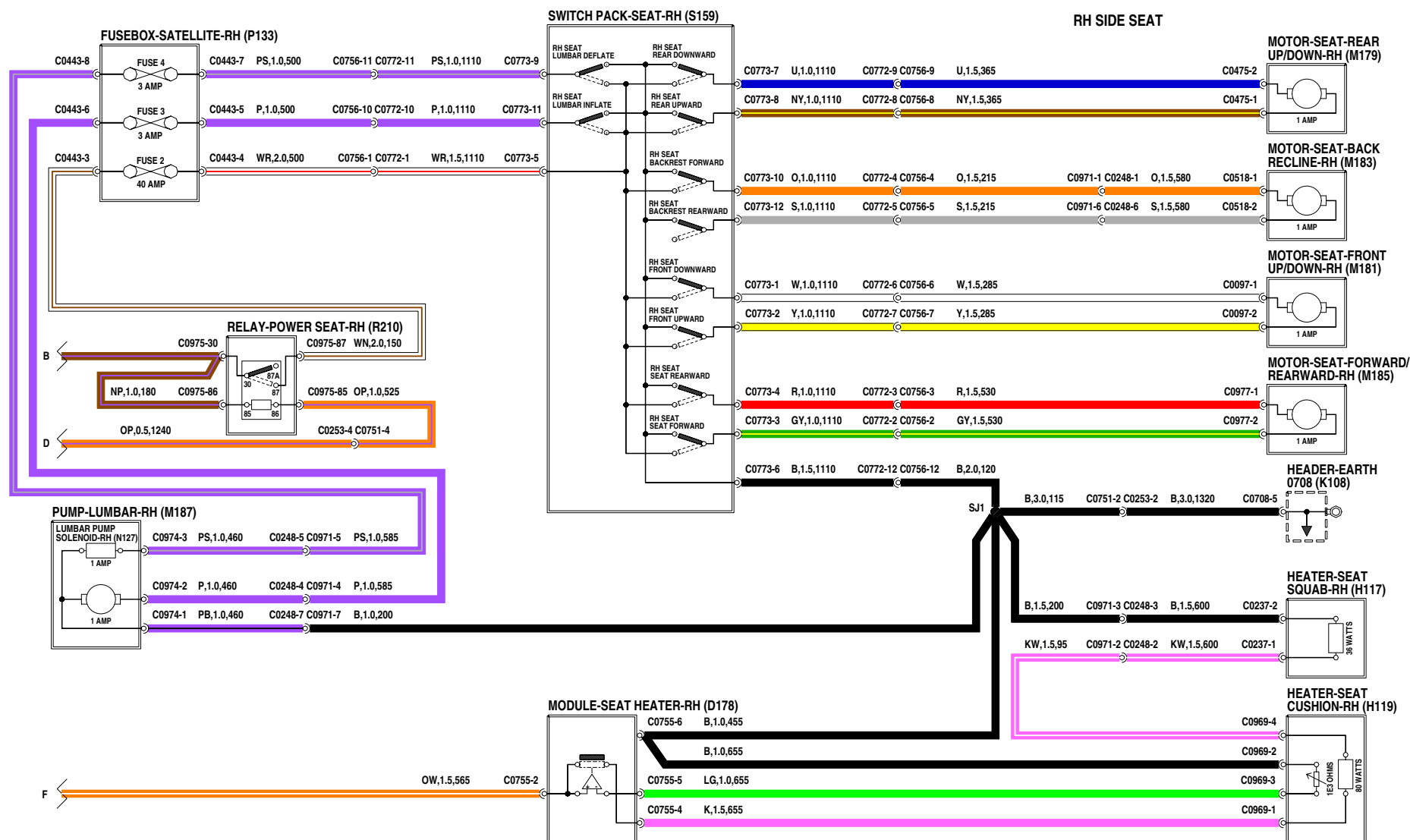


VWR108530-1a03

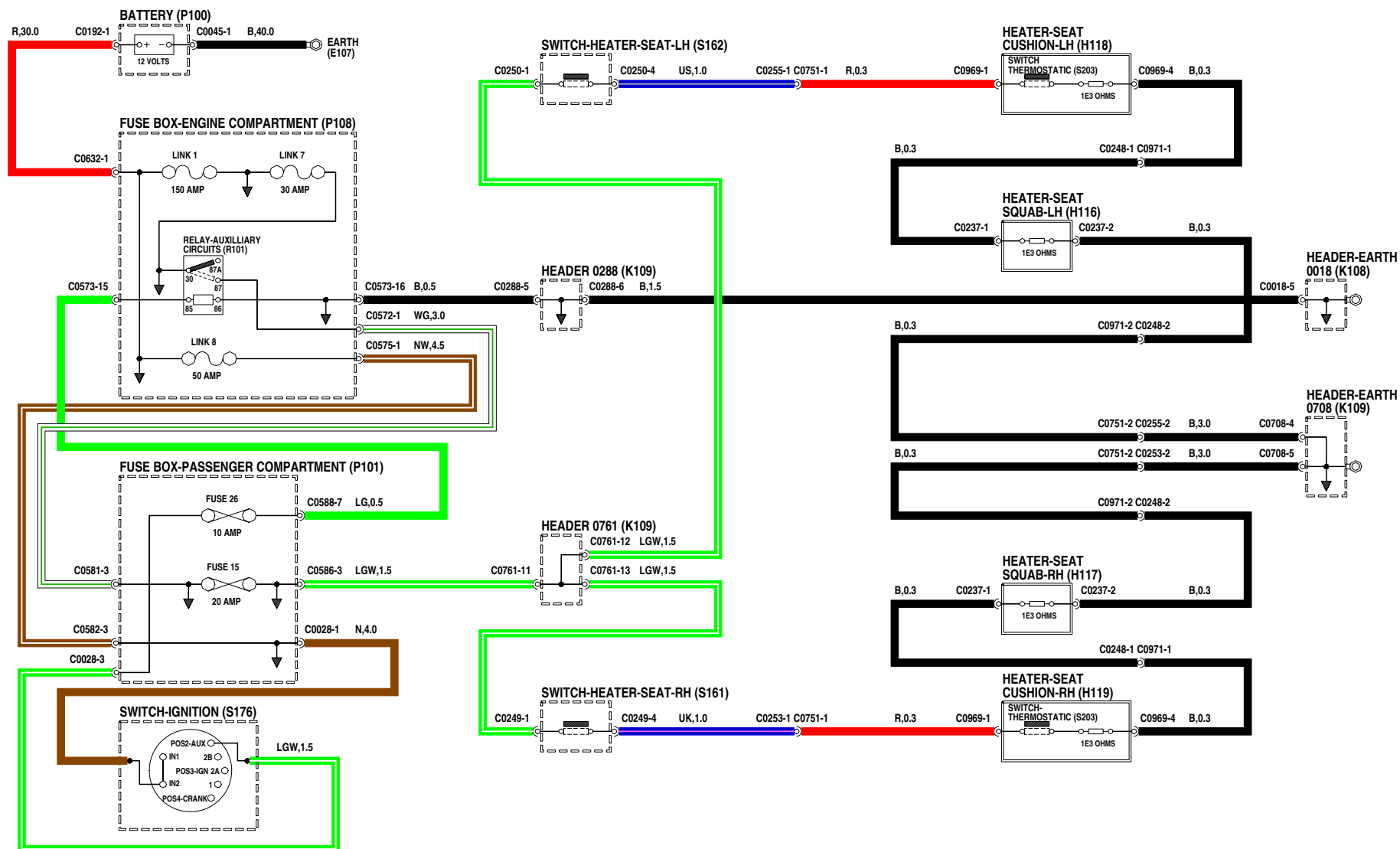
SEATS POWER - HEATED



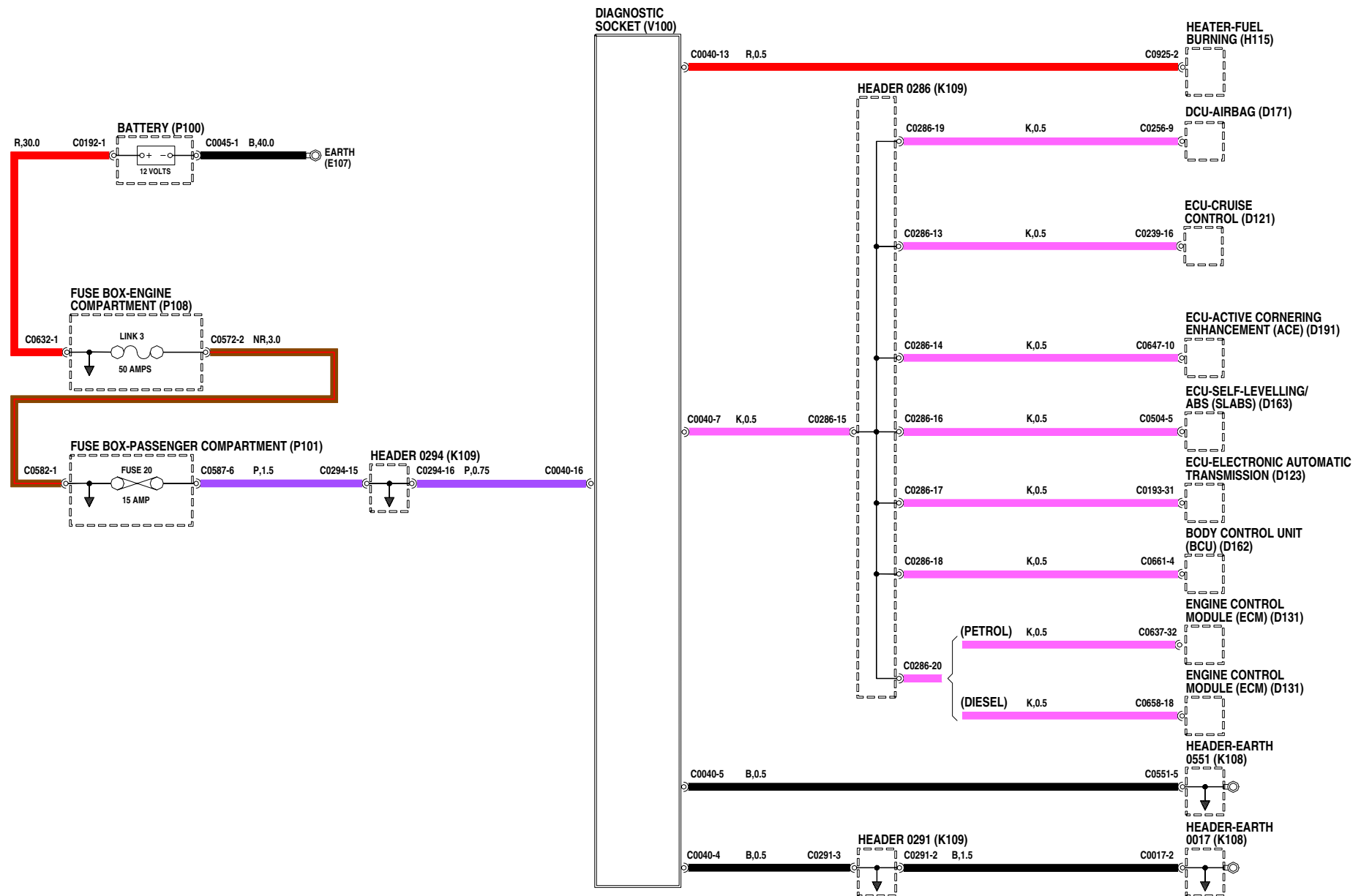
SEATS POWER - HEATED



VWR108530-3a/3

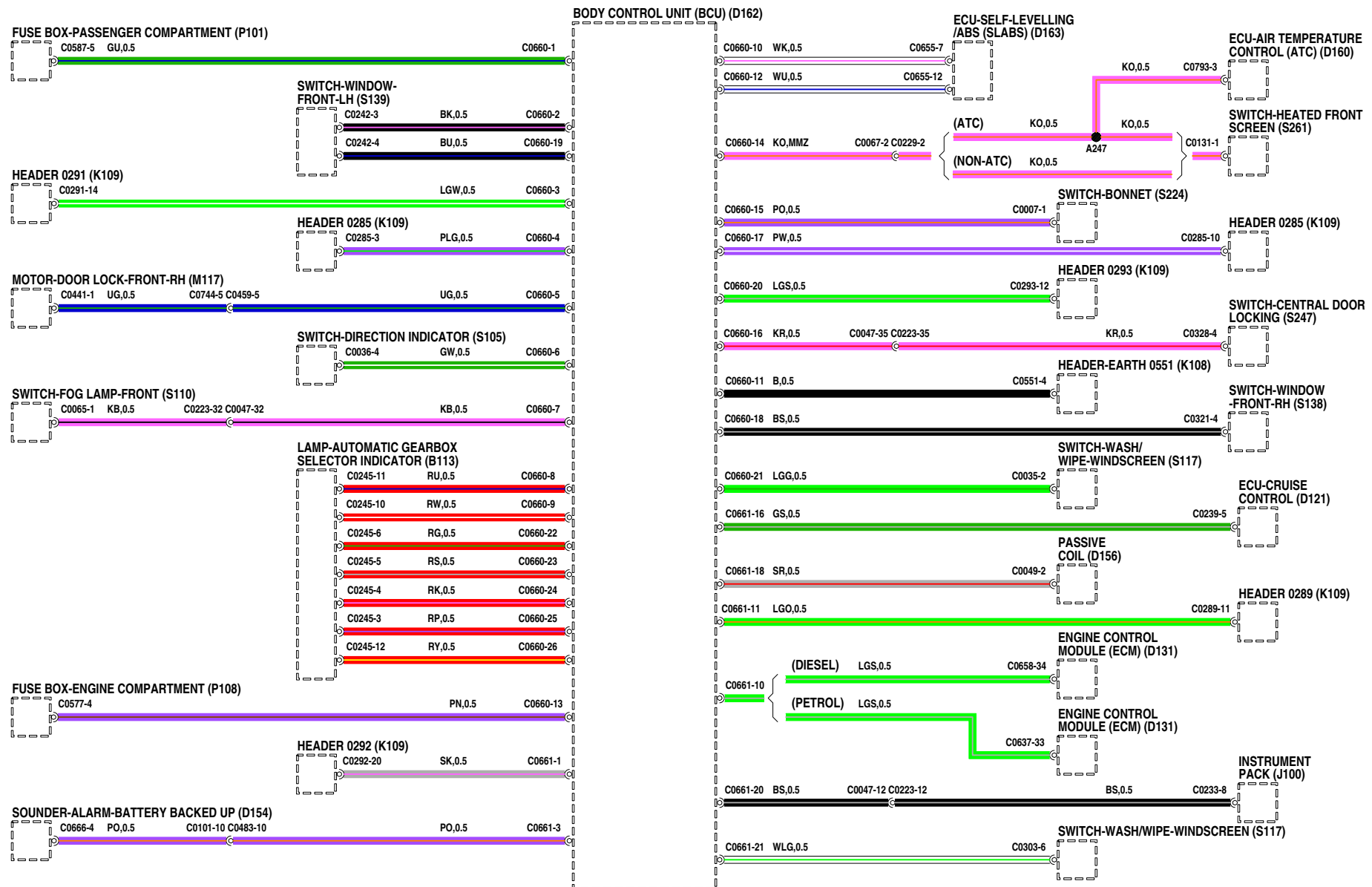


DIAGNOSTIC SOCKET

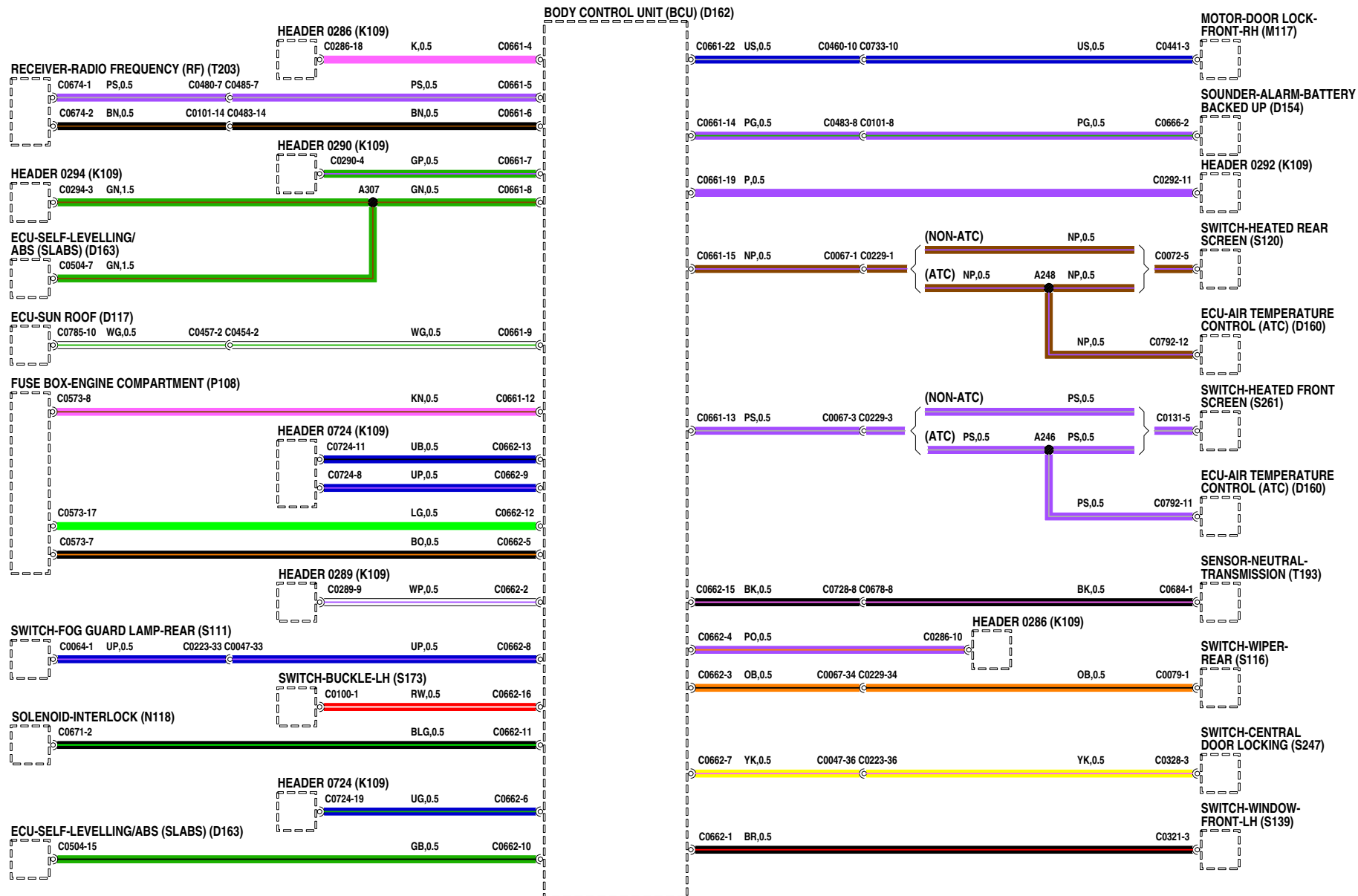


VWR108250-1of1

BODY CONTROL UNIT (BCU)

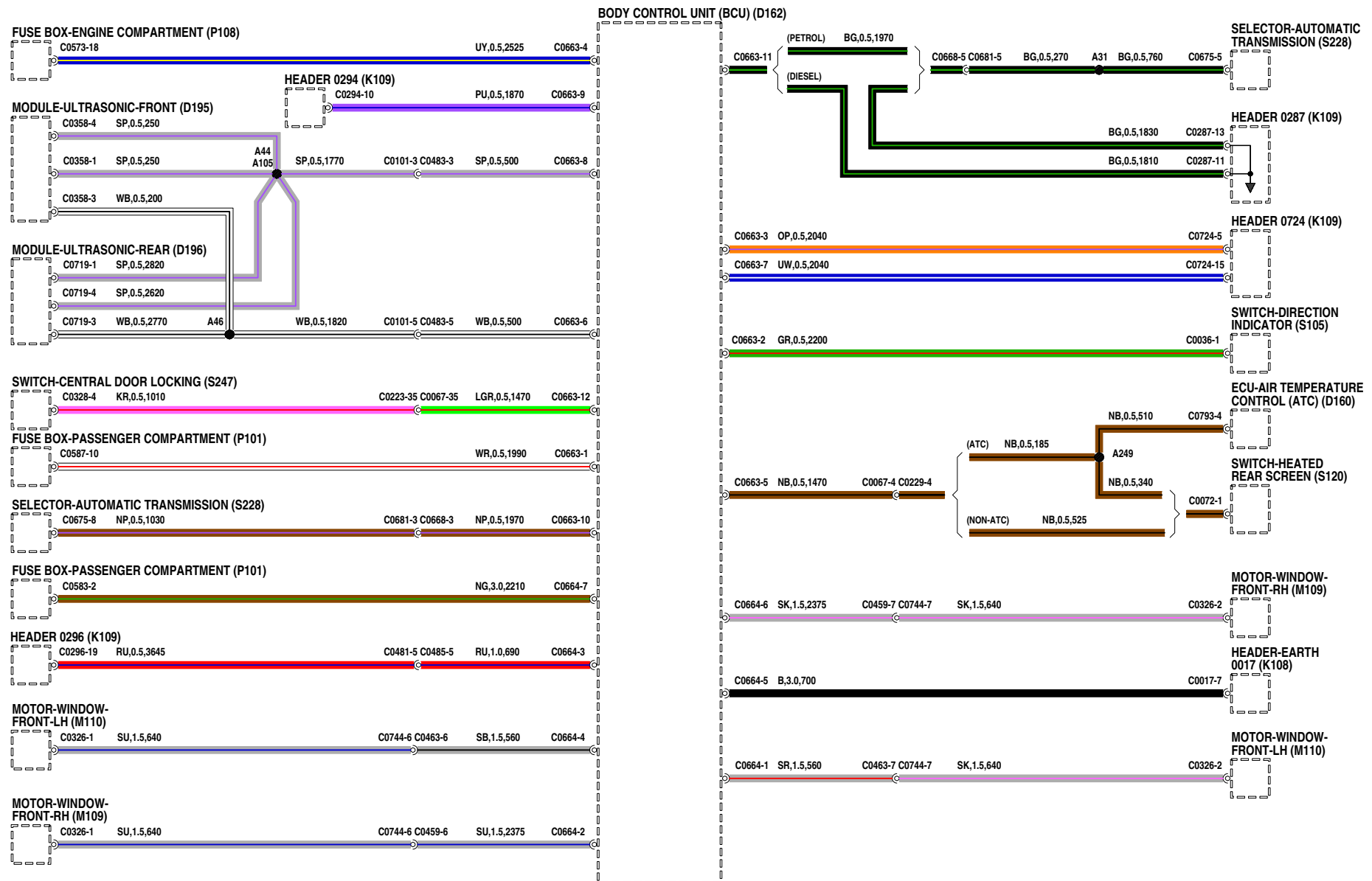


BODY CONTROL UNIT (BCU)



VWR108210-2x03

BODY CONTROL UNIT (BCU)



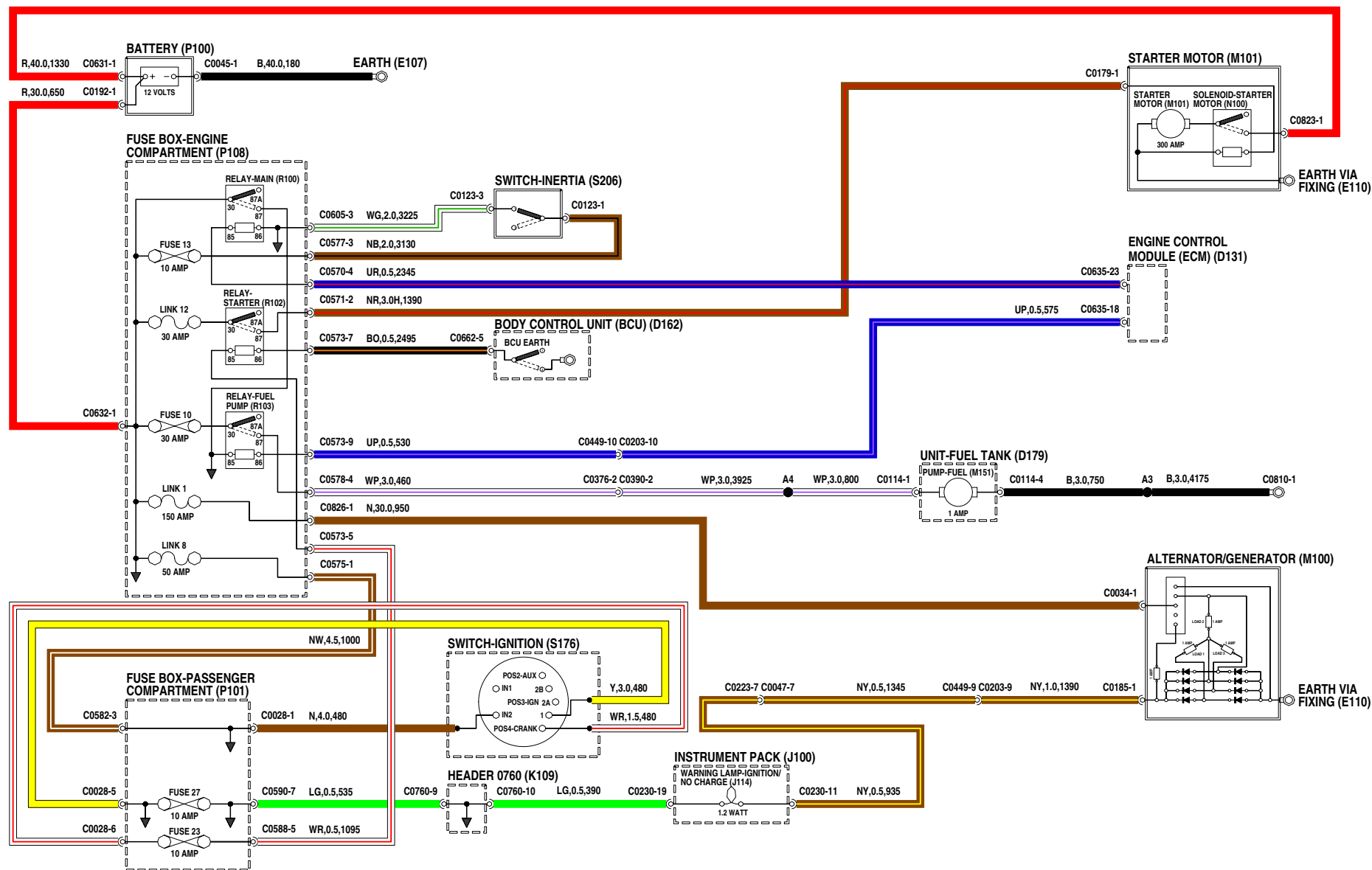
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Td5



CHARGING AND STARTING

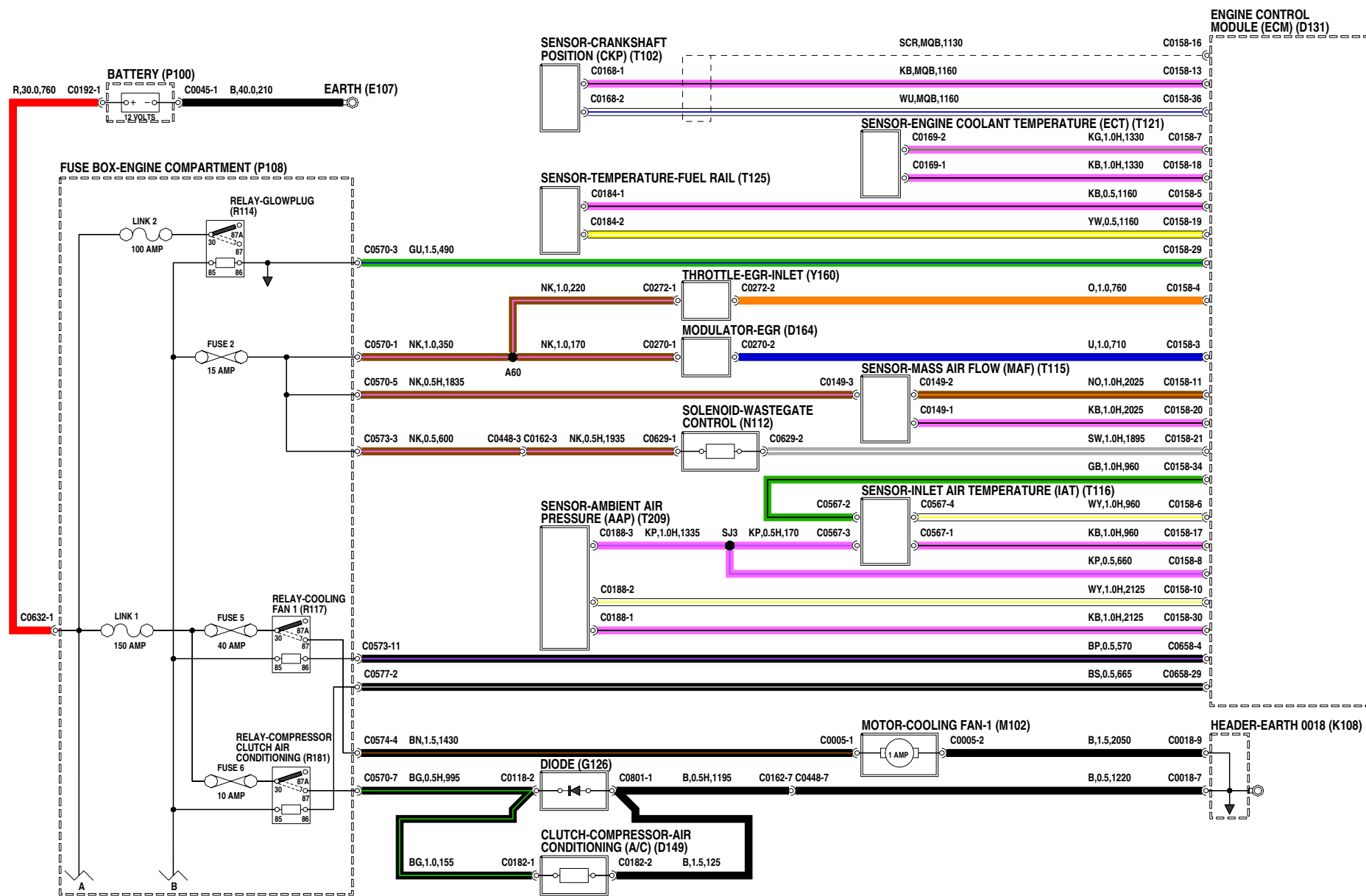
V8



VWR108580-1 of 1

ENGINE MANAGEMENT

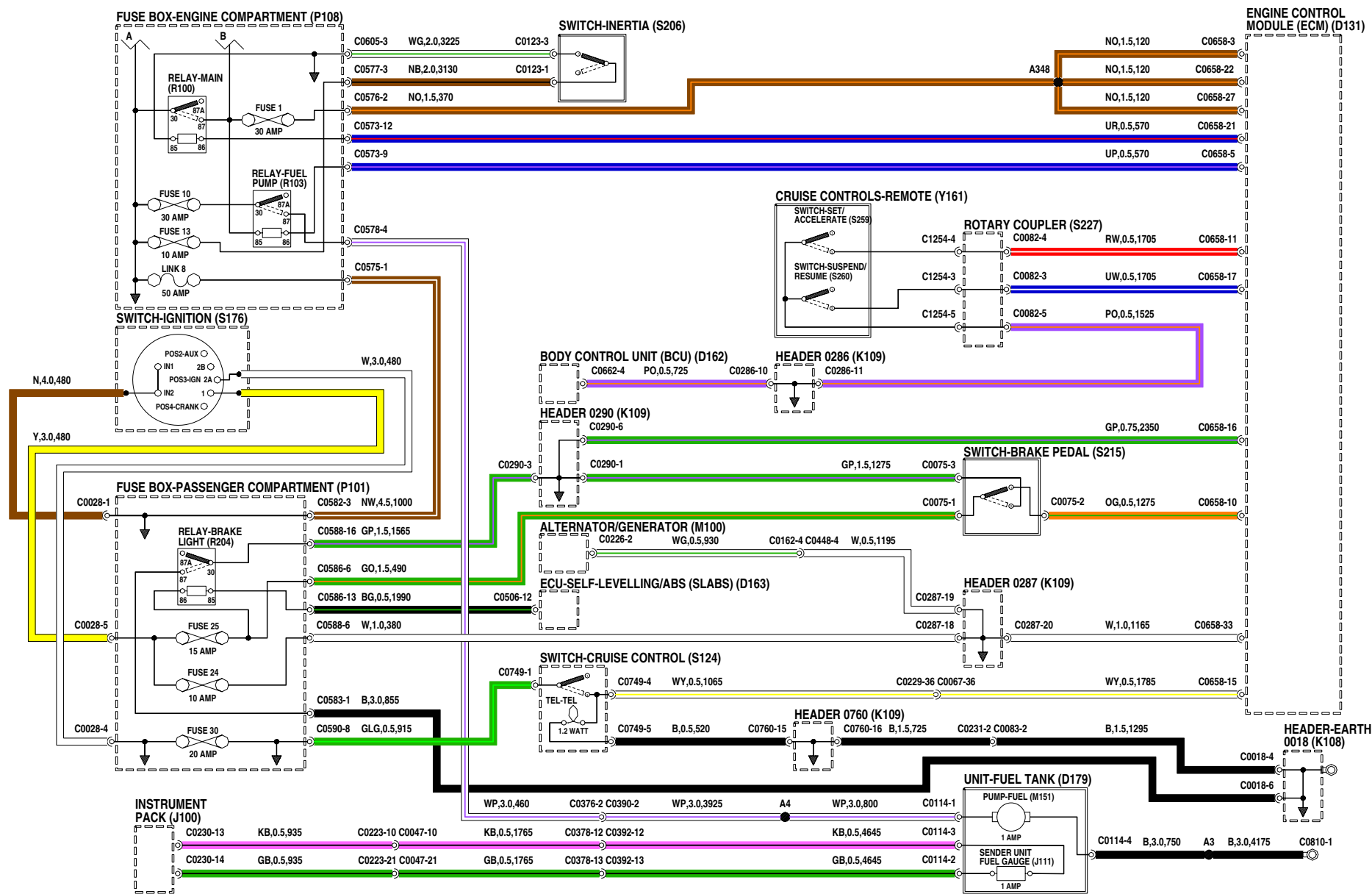
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VWR108270-1cd3

ENGINE MANAGEMENT

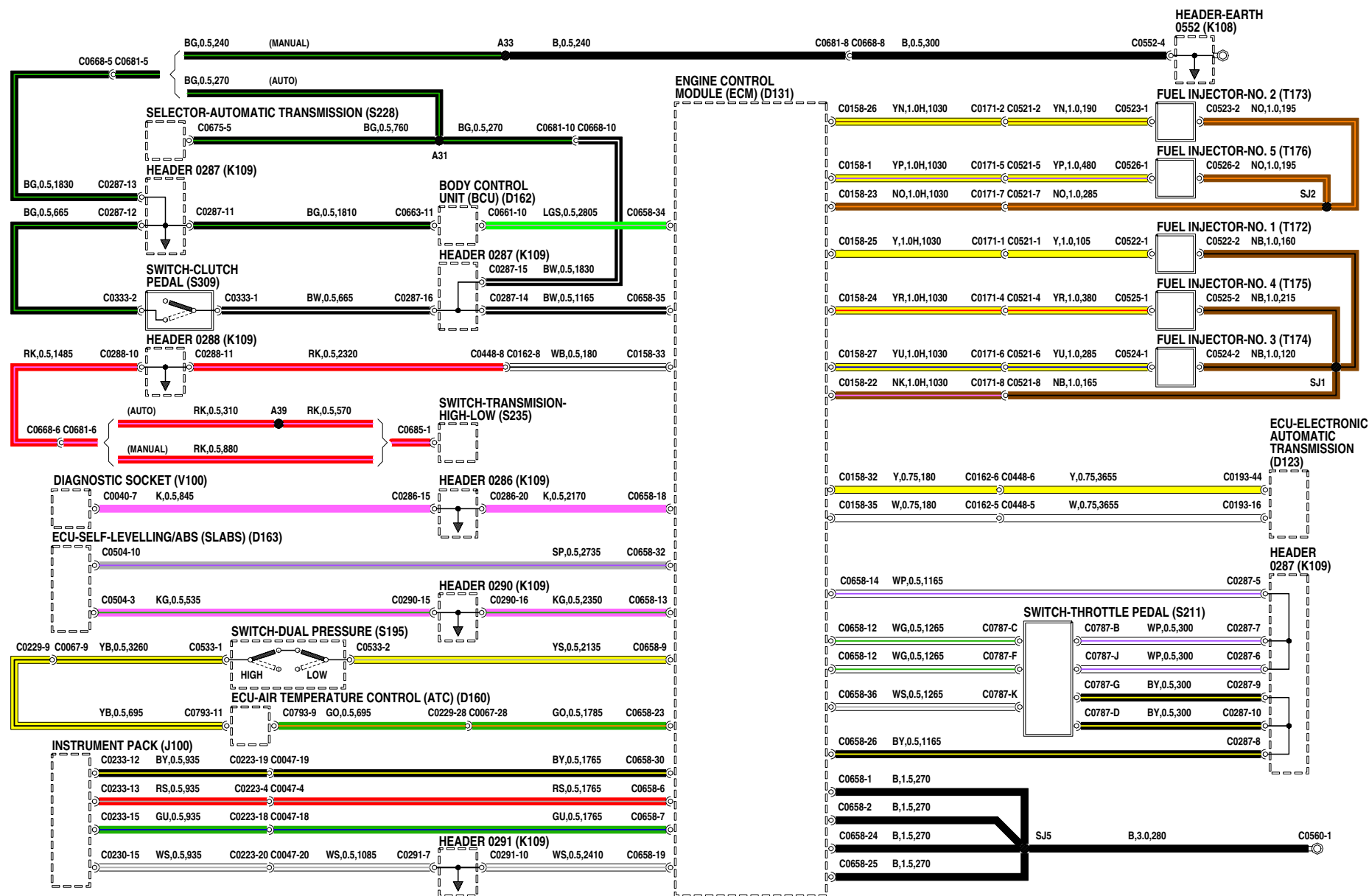
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VWR108270-2a/3

ENGINE MANAGEMENT

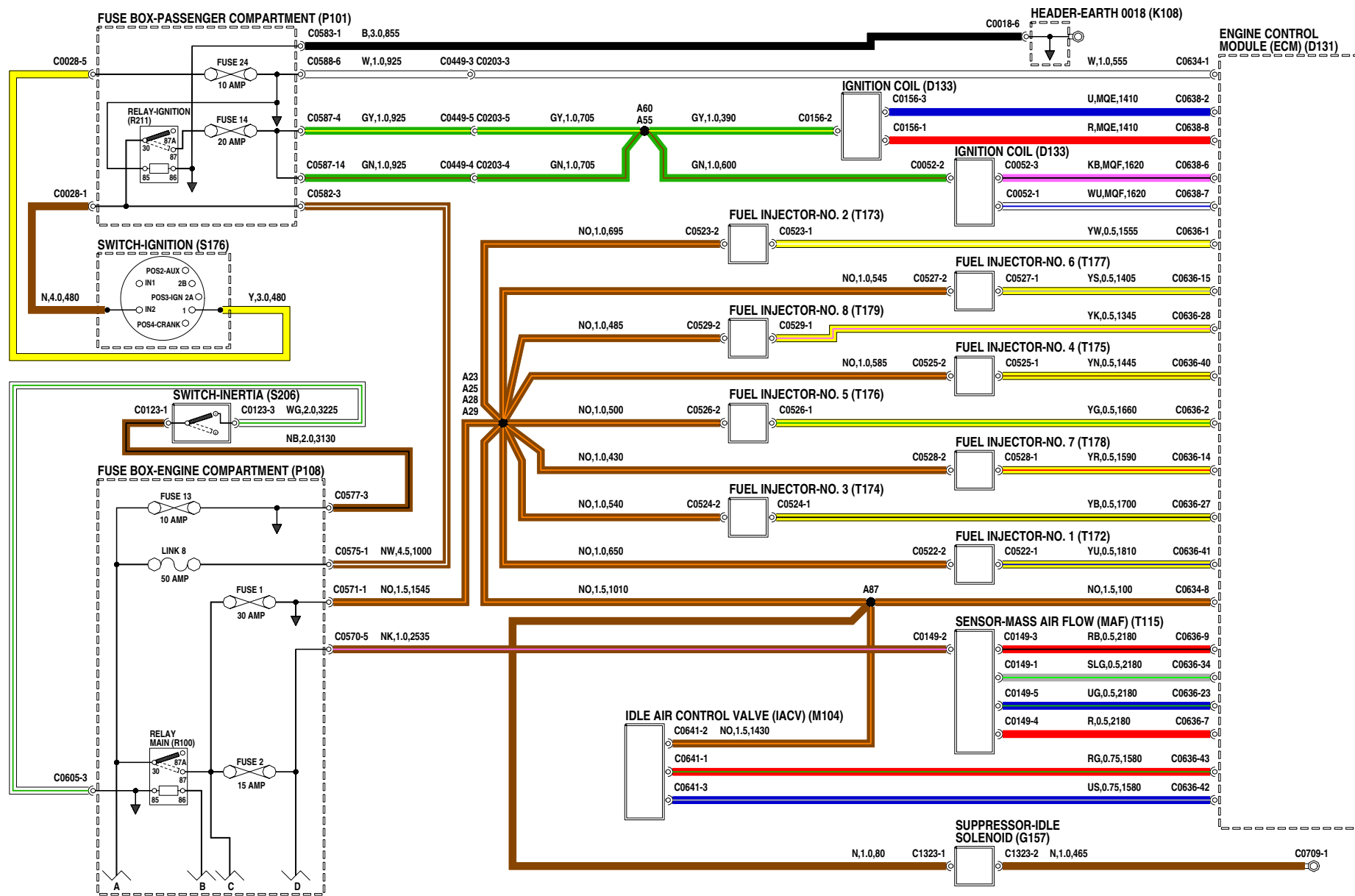
Td5



VWR108270-3a/3

ENGINE MANAGEMENT

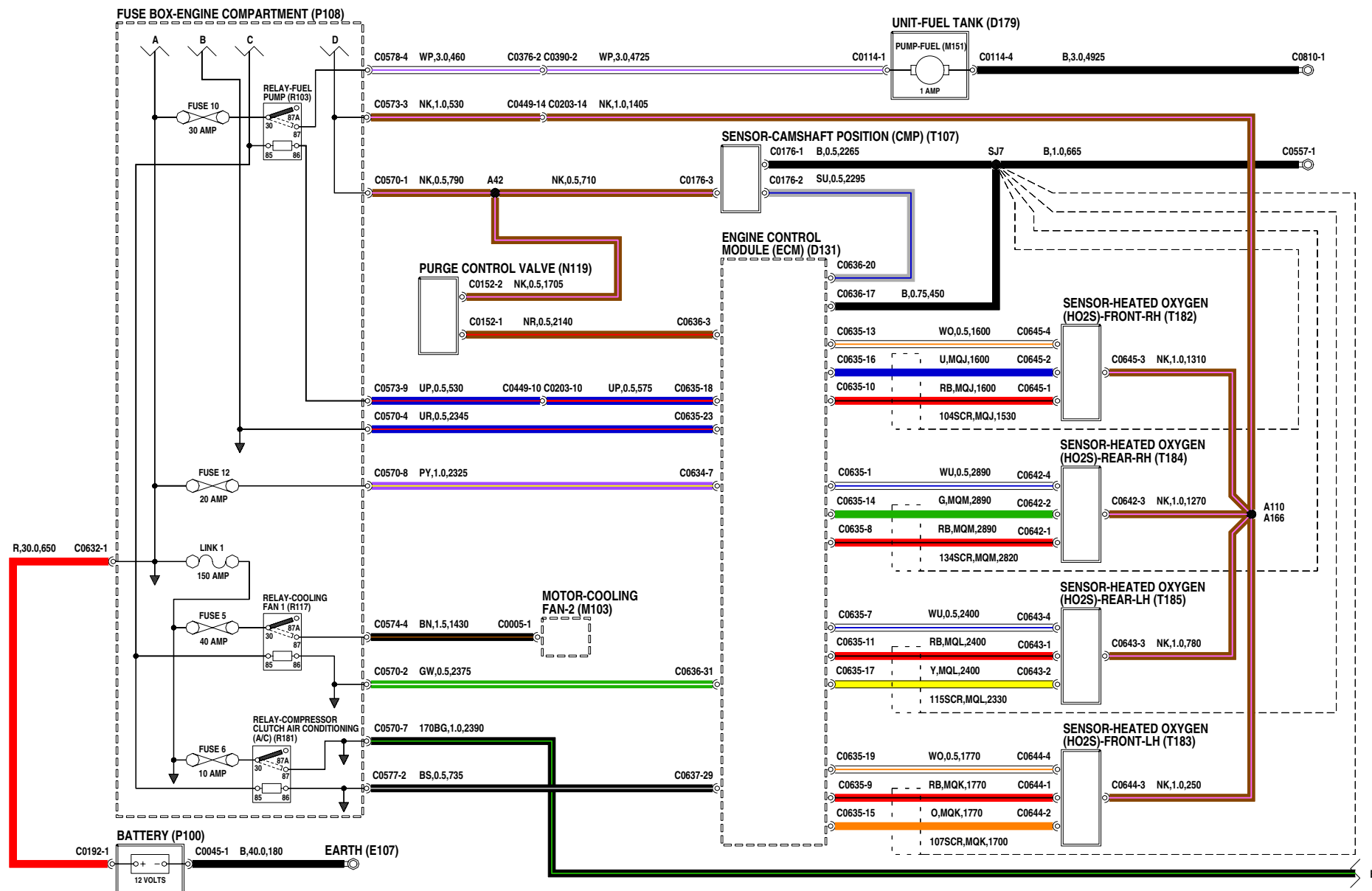
V8



VWR106280-1 of 3

ENGINE MANAGEMENT

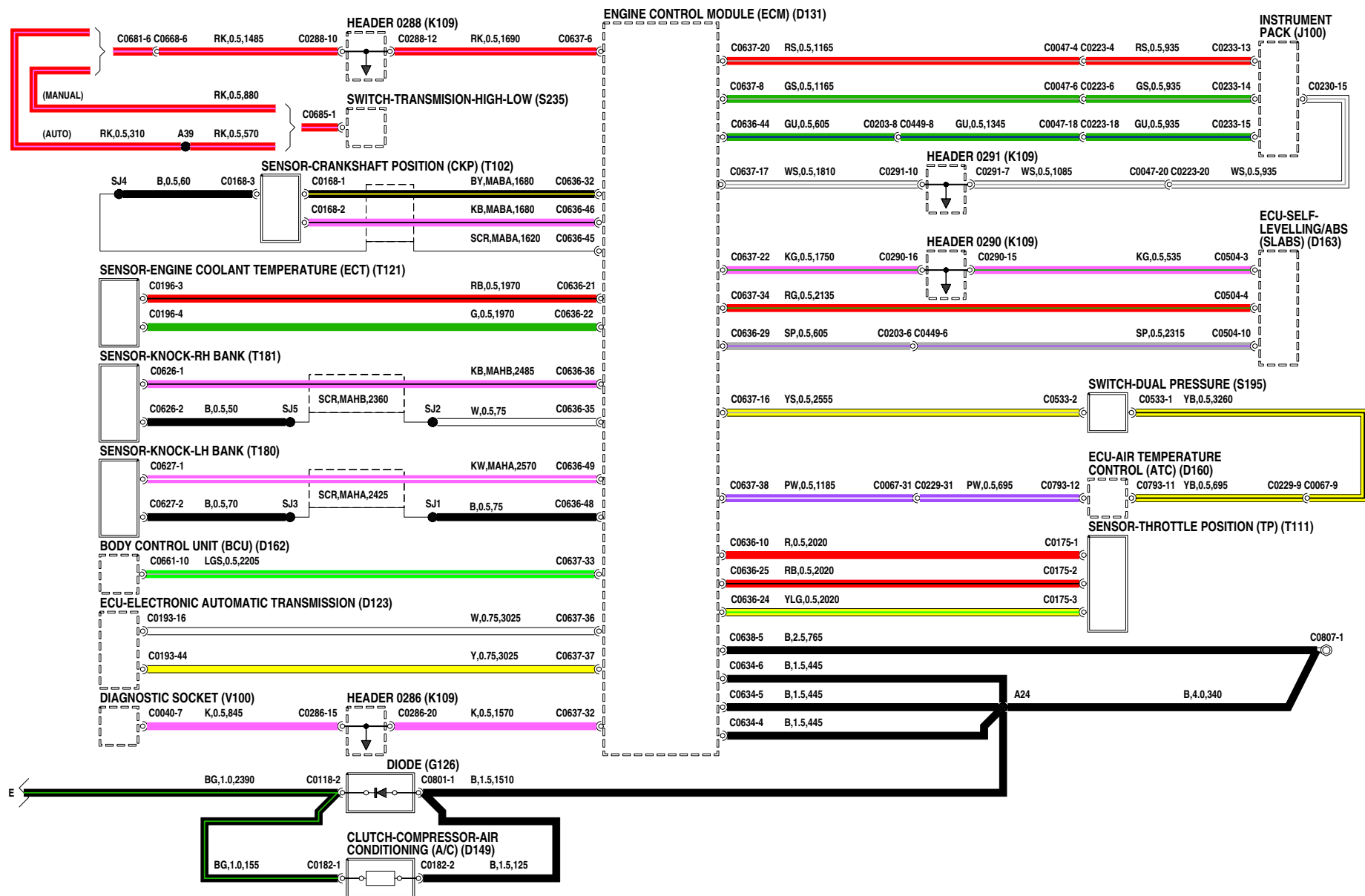
V8



VWR106280-2of3

ENGINE MANAGEMENT

V8

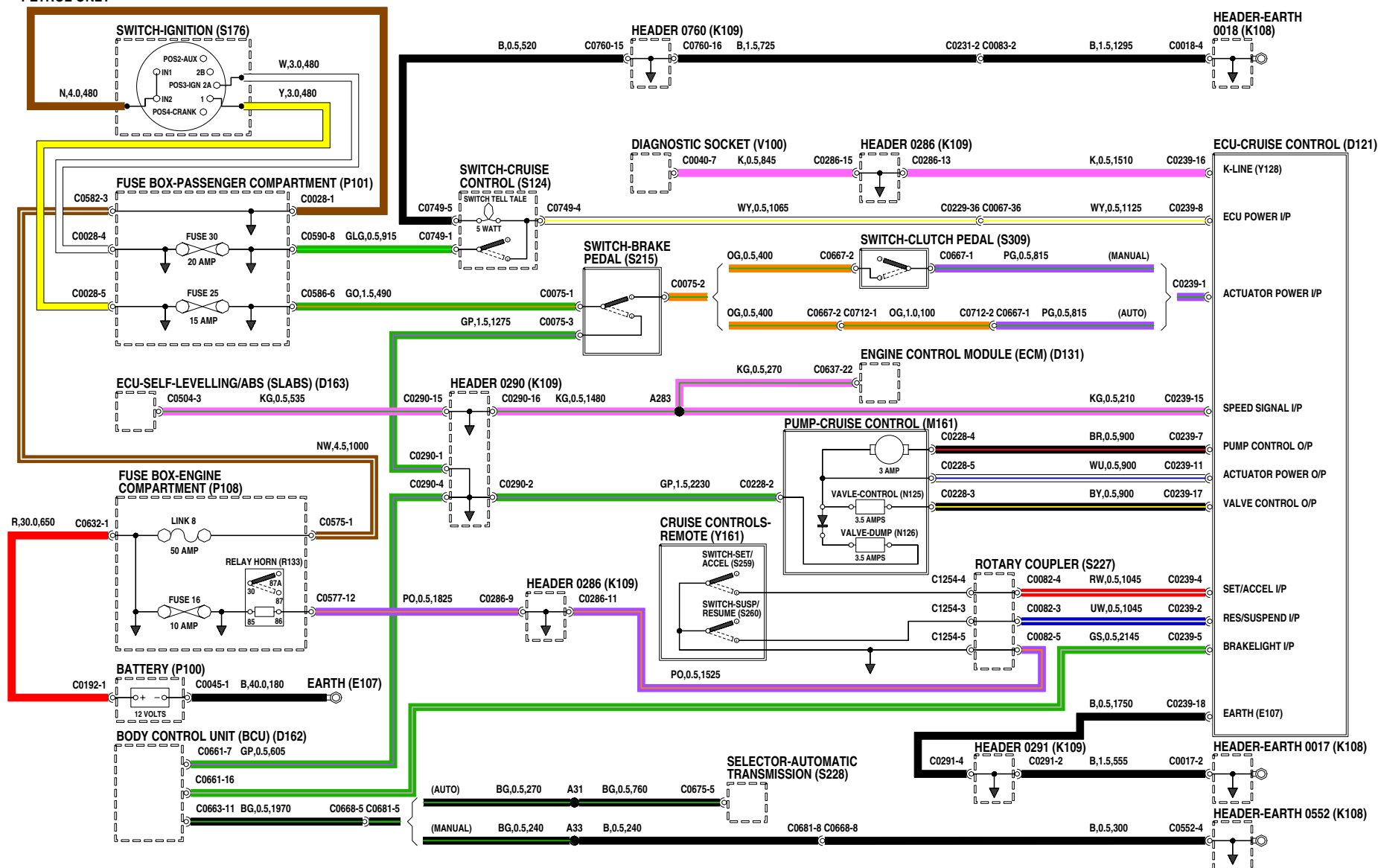


VWR108280-3of3



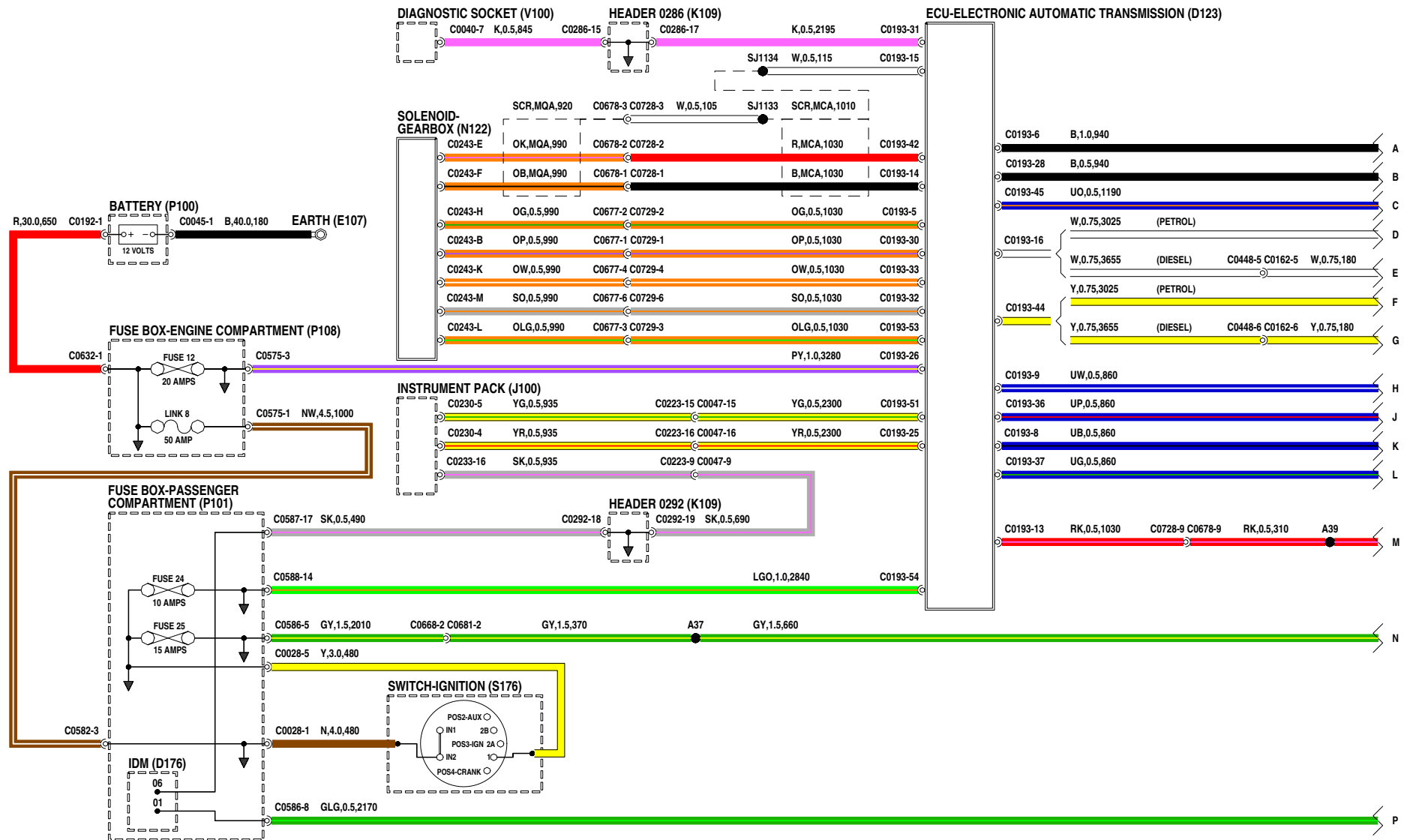
CRUISE CONTROL

PETROL ONLY

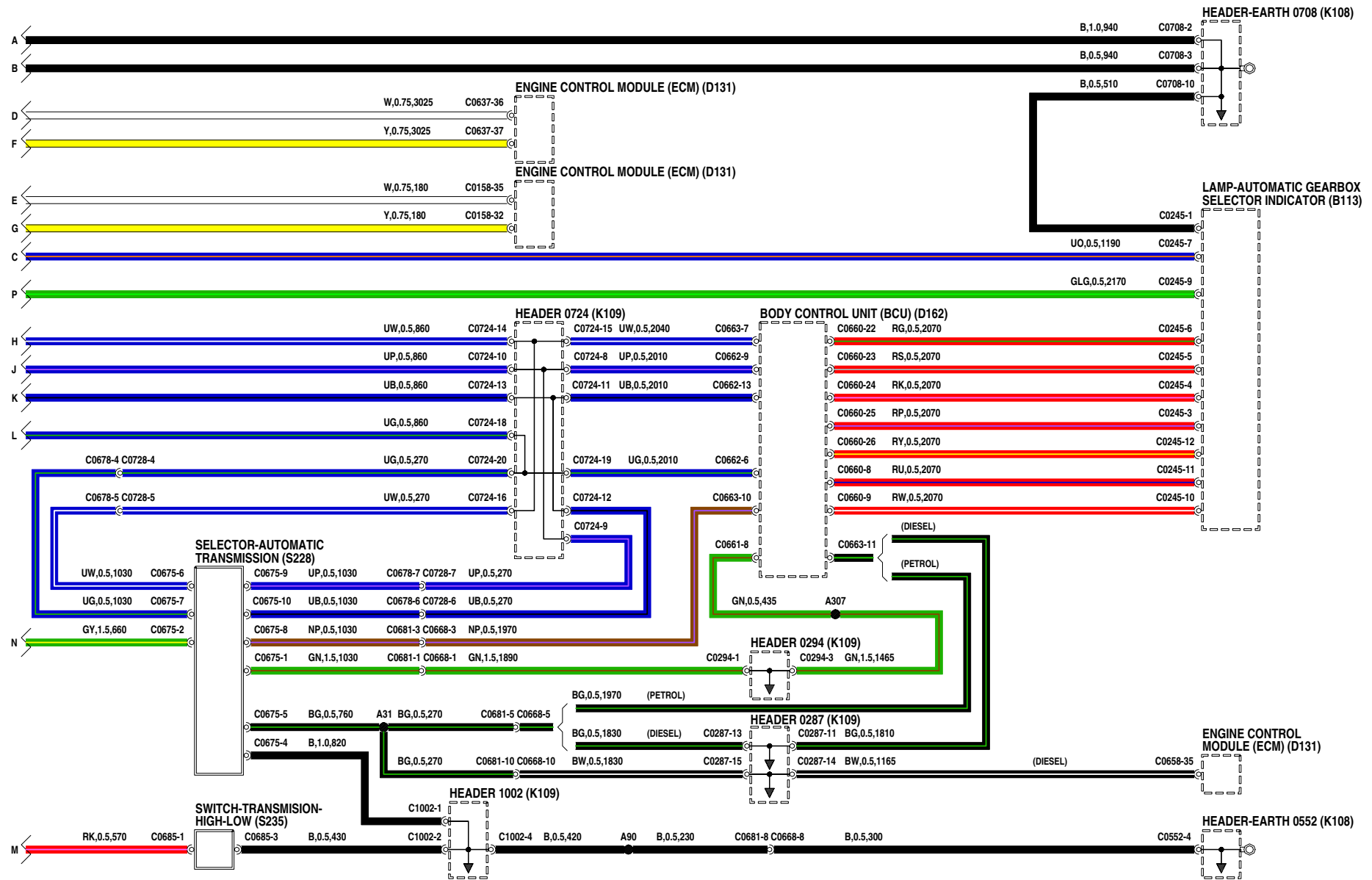


VWR108240-1of1

ELECTRONIC AUTOMATIC TRANSMISSION (EAT)

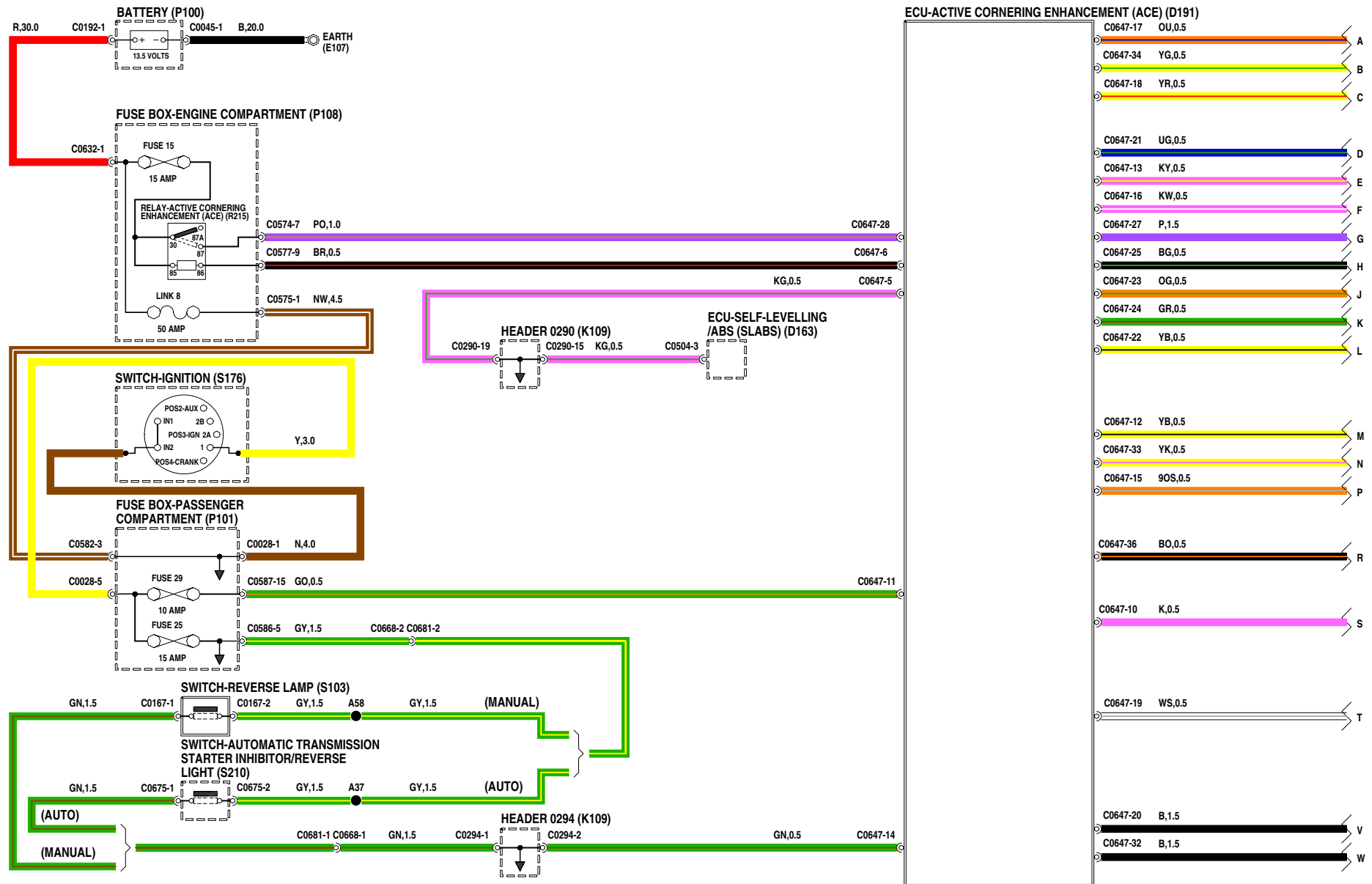


ELECTRONIC AUTOMATIC TRANSMISSION (EAT)



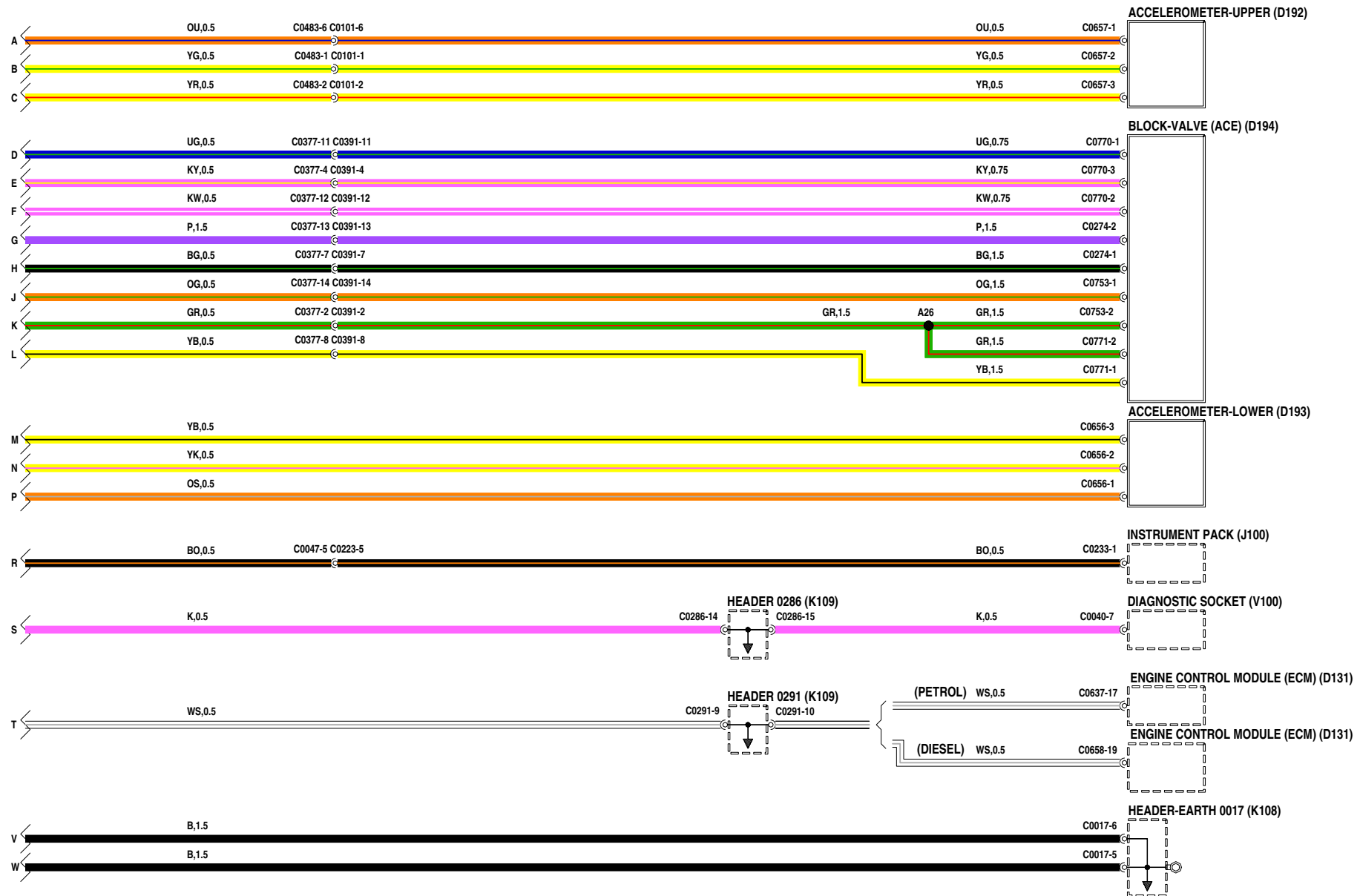
VWR108600-2of2

ACTIVE CORNERING ENHANCEMENT (ACE)



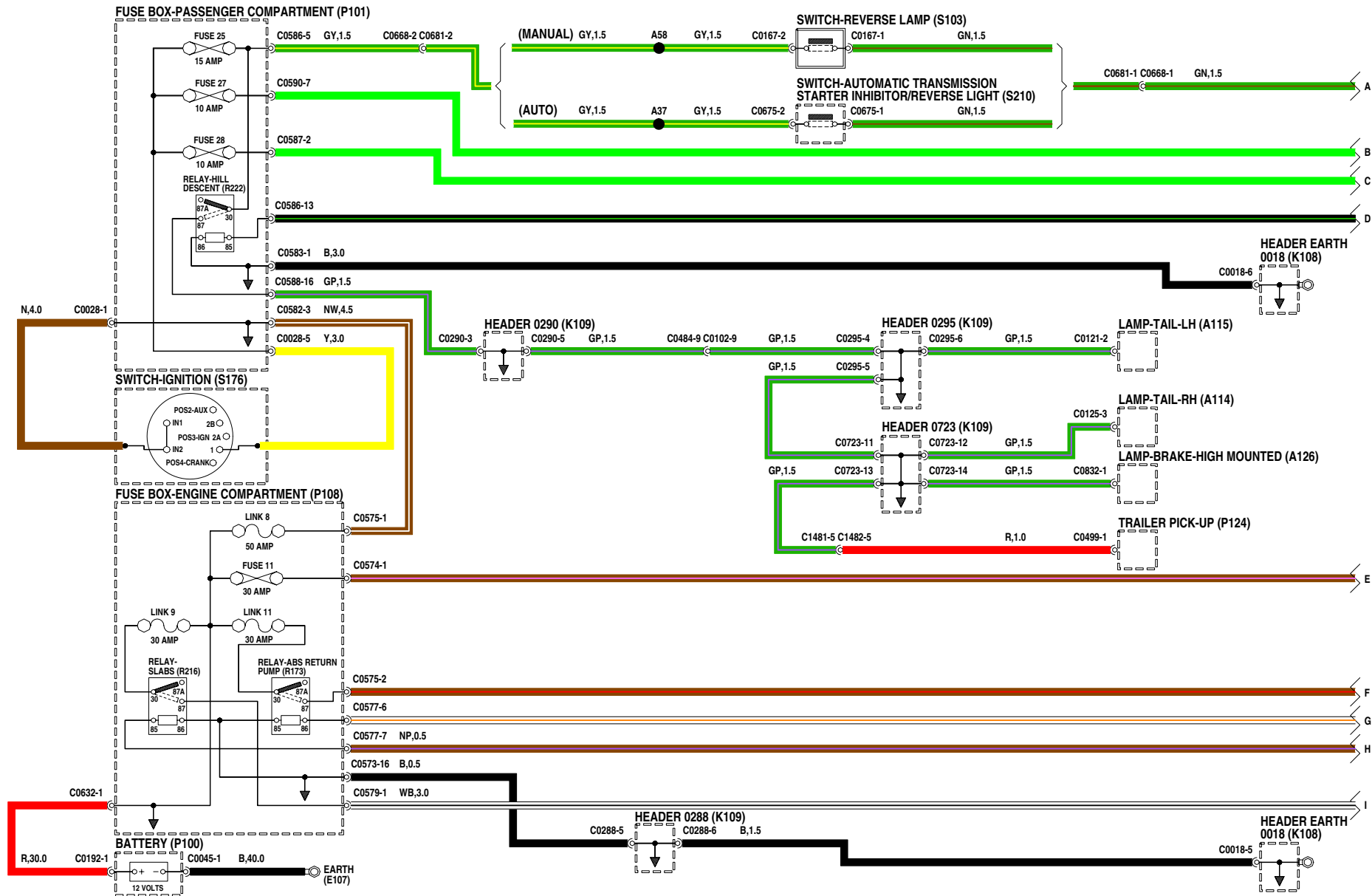
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ACTIVE CORNERING ENHANCEMENT (ACE)



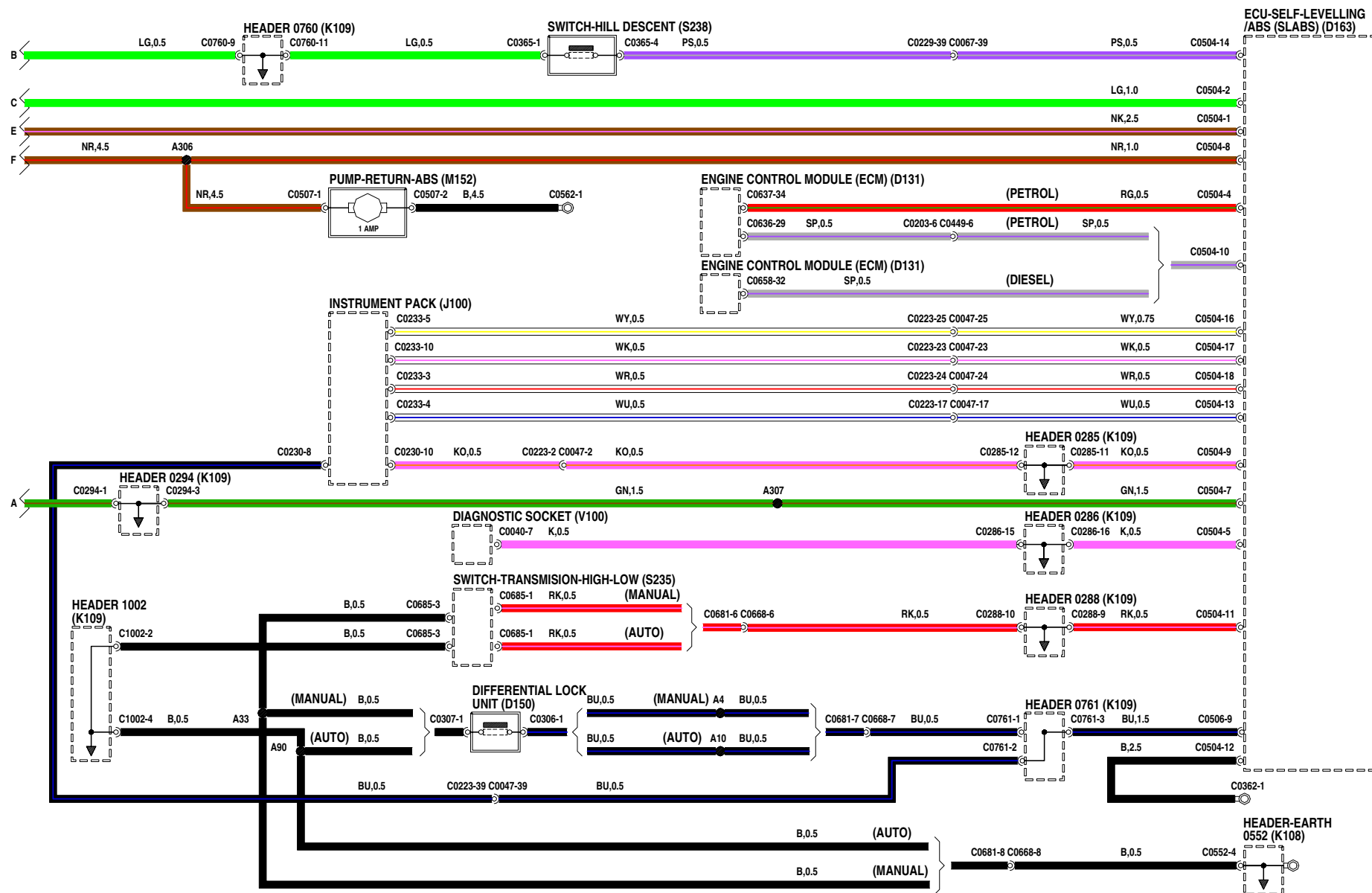
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SELF LEVELLING AND ANTI-LOCK BRAKING SYSTEM (SLABS)



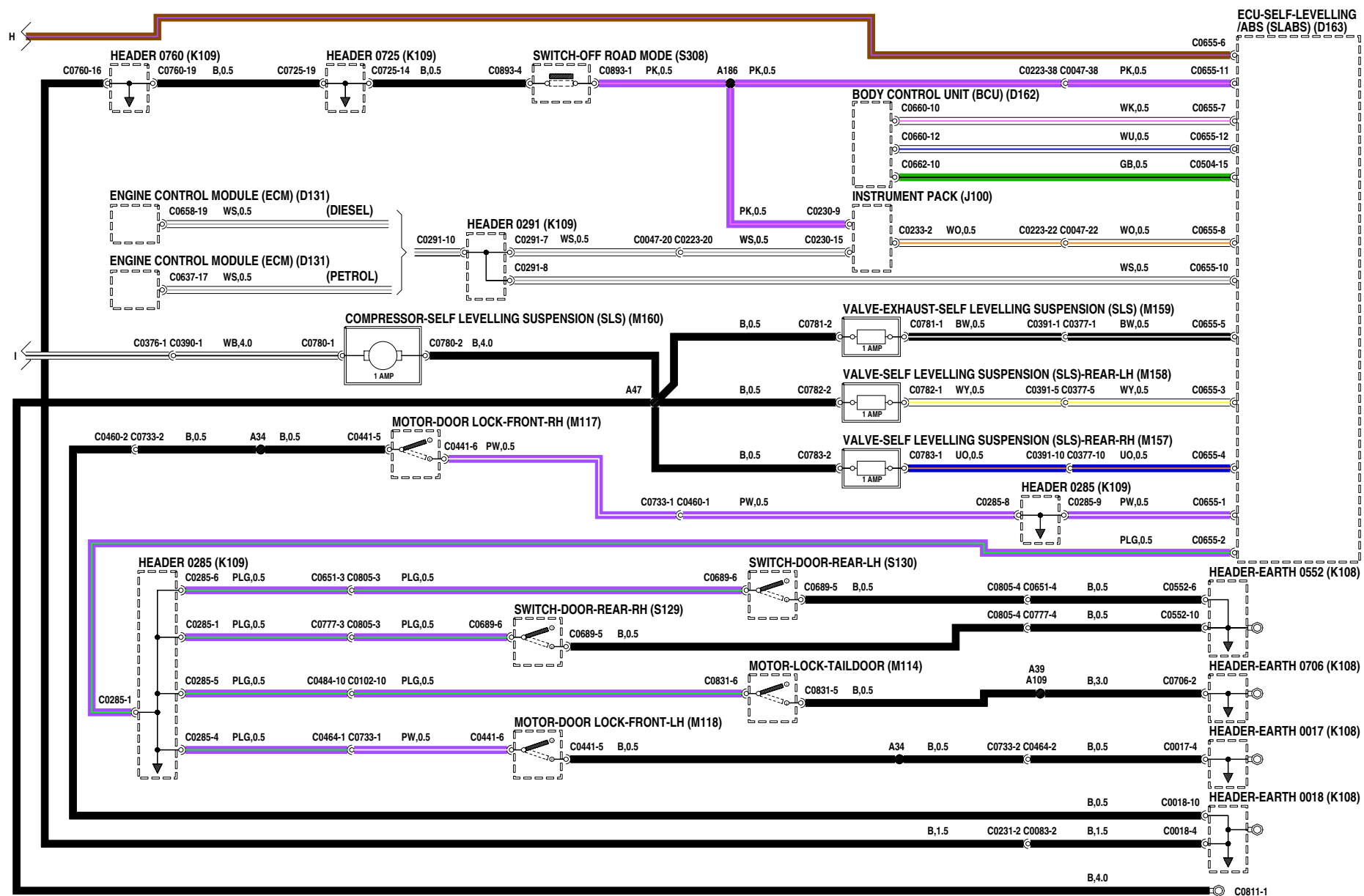
VWR108540-1of4

SELF LEVELLING AND ANTI-LOCK BRAKING SYSTEM (SLABS)

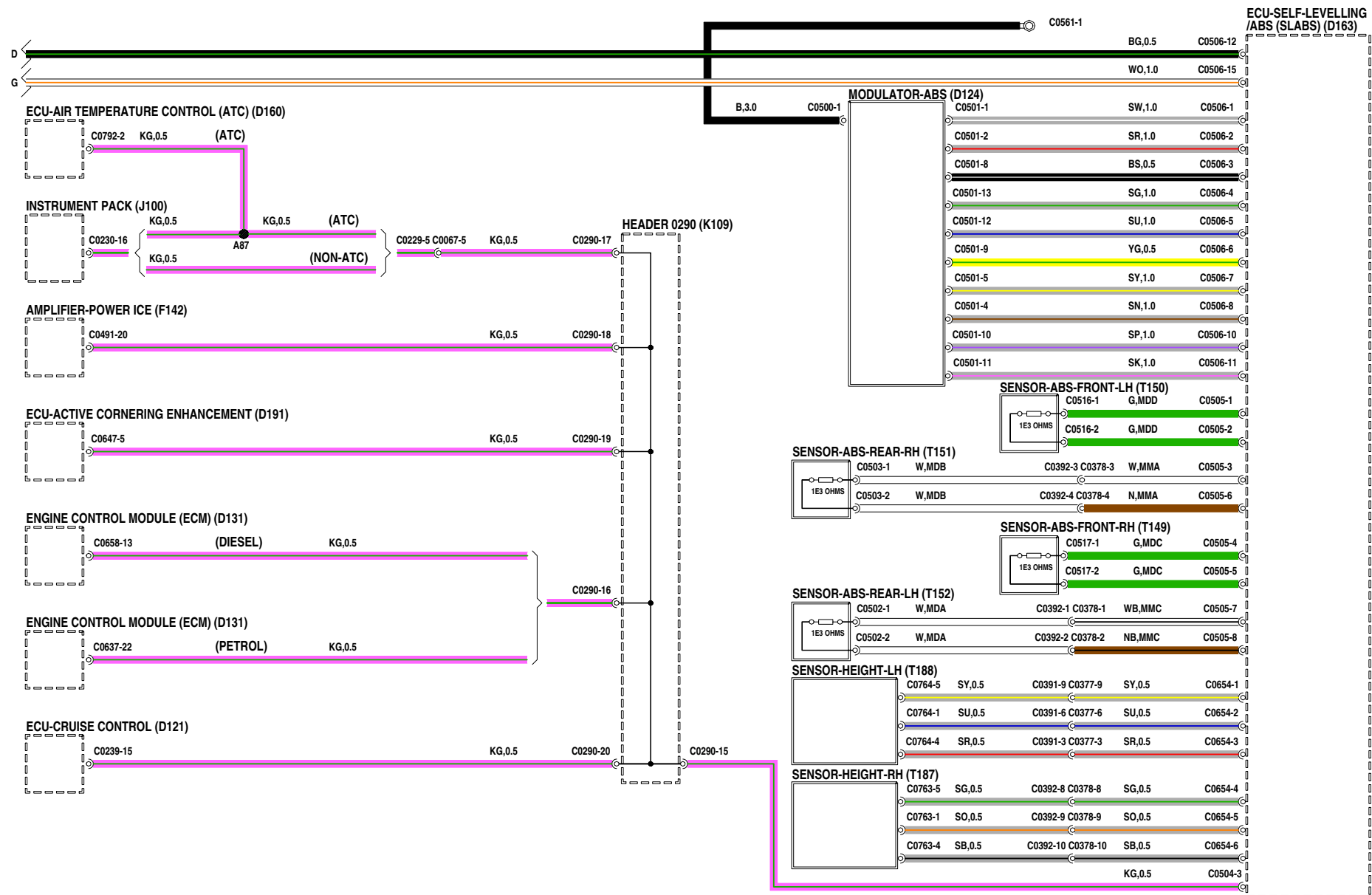


VWR108540-2x04

SELF LEVELLING AND ANTI-LOCK BRAKING SYSTEM (SLABS)

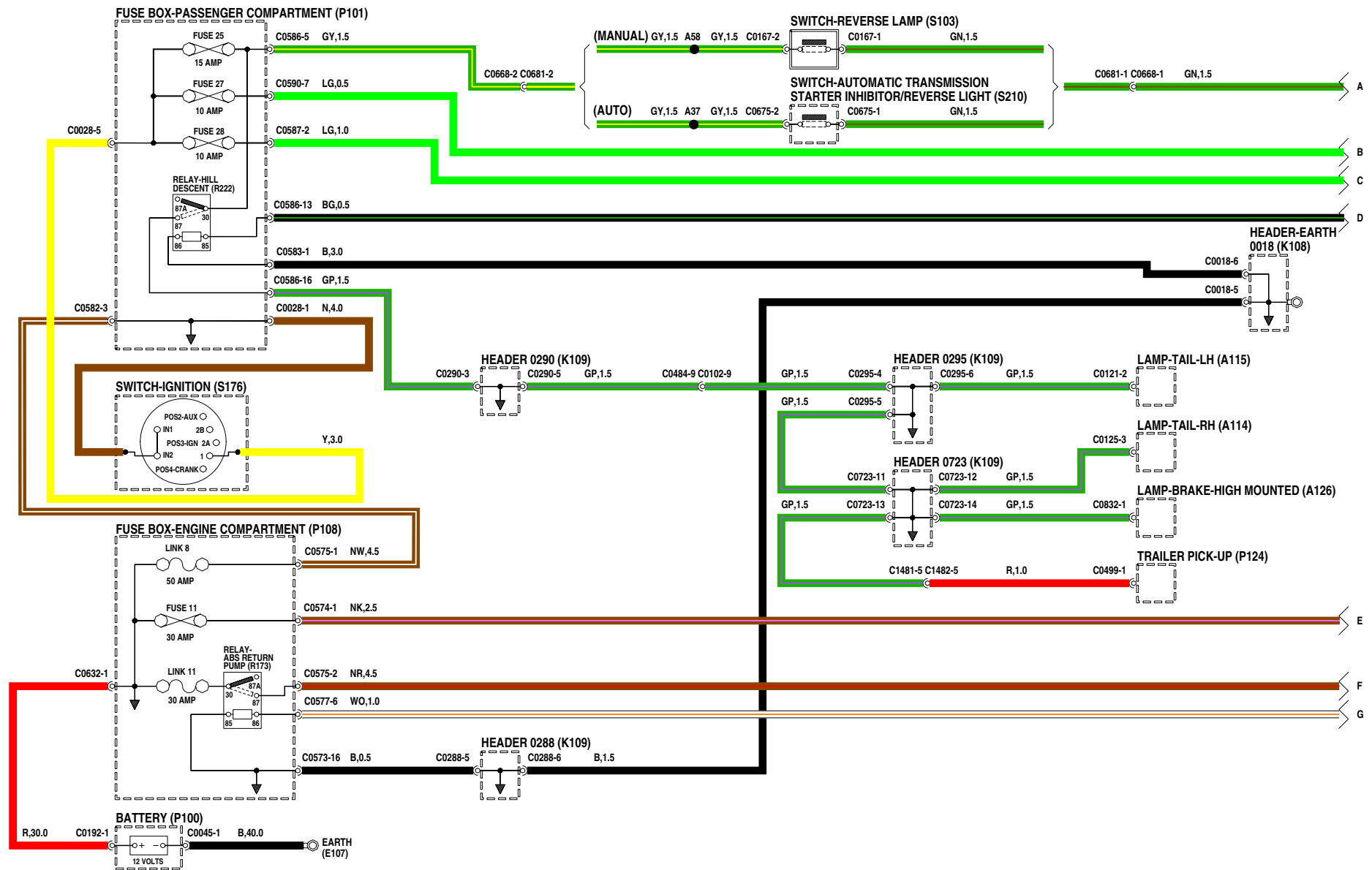


SELF LEVELLING AND ANTI-LOCK BRAKING SYSTEM (SLABS)



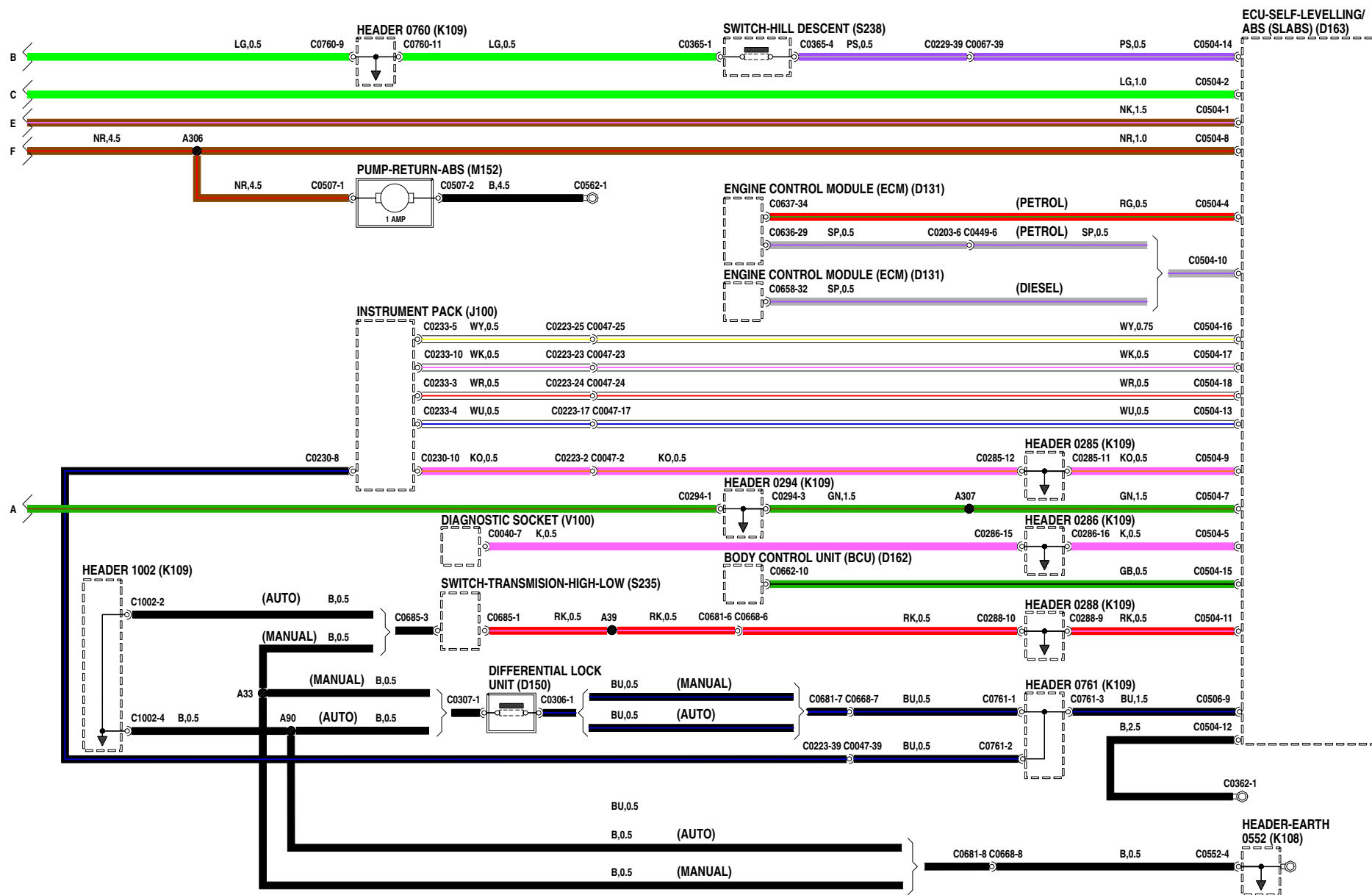
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ANTI-LOCK BRAKING SYSTEM (ABS)



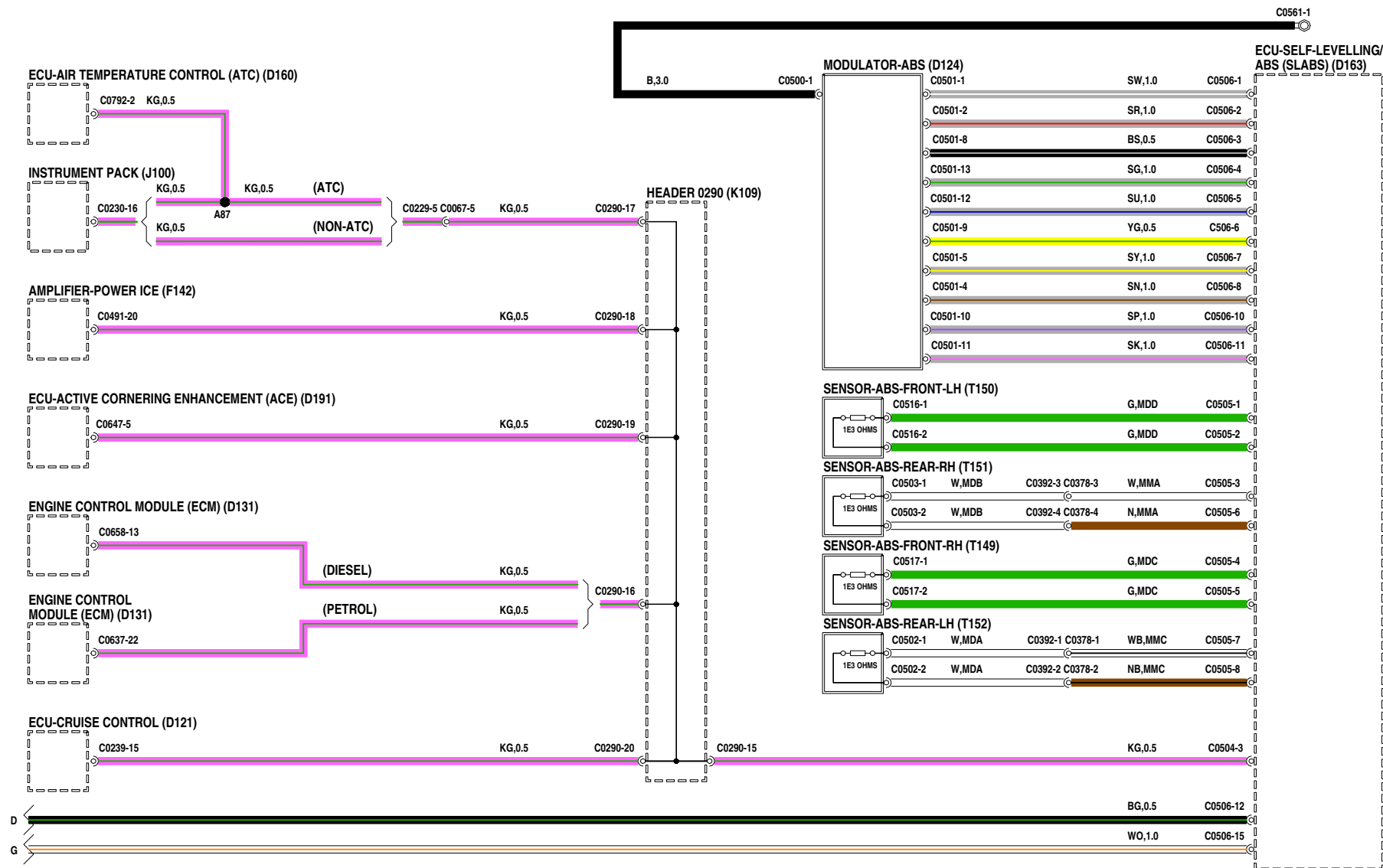
VWR108100-1a03

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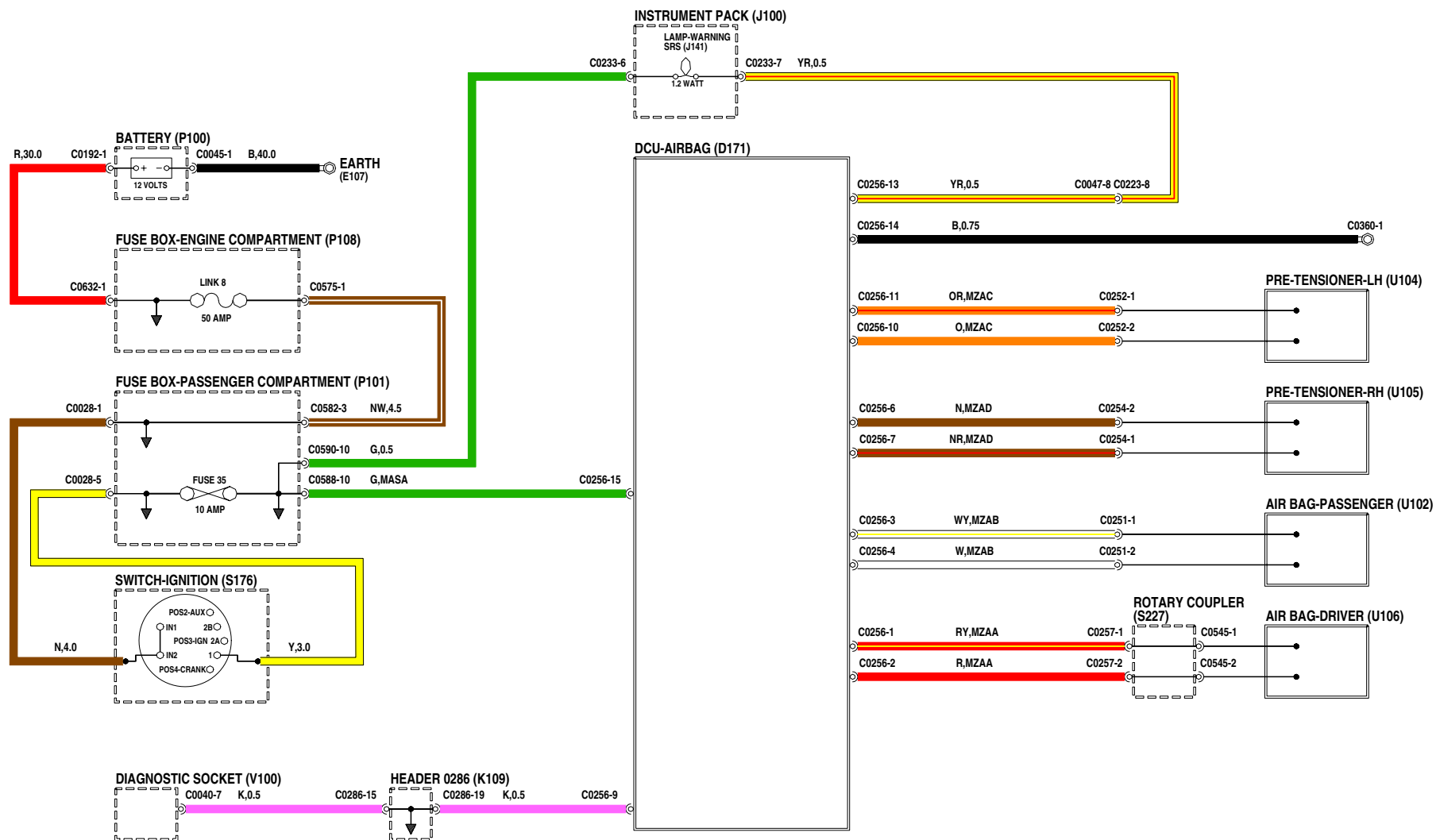


VWR108100-2x03

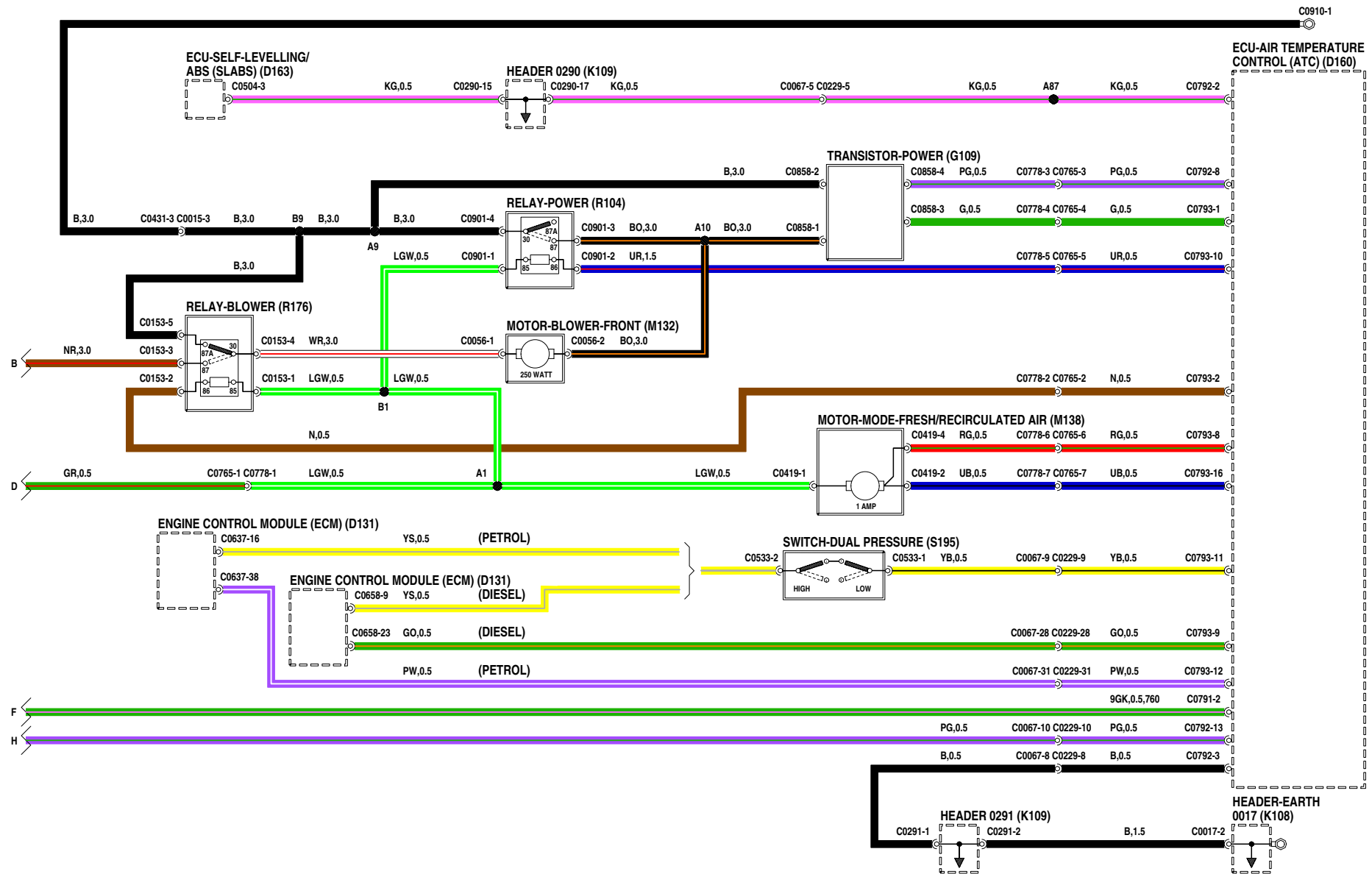
ANTI-LOCK BRAKING SYSTEM (ABS)



VWR108100-3a/3

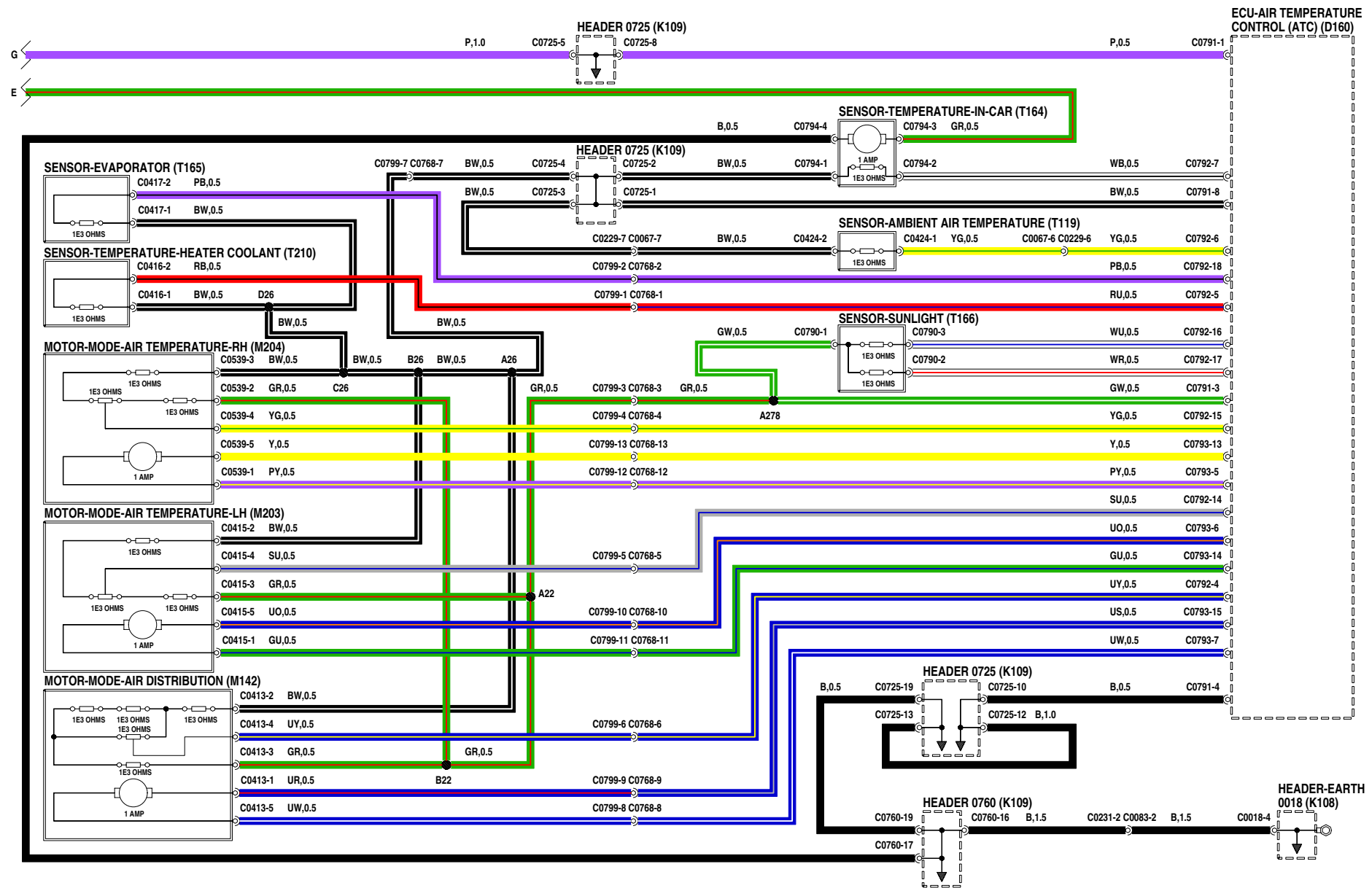


AIR CONDITIONING (A/C)



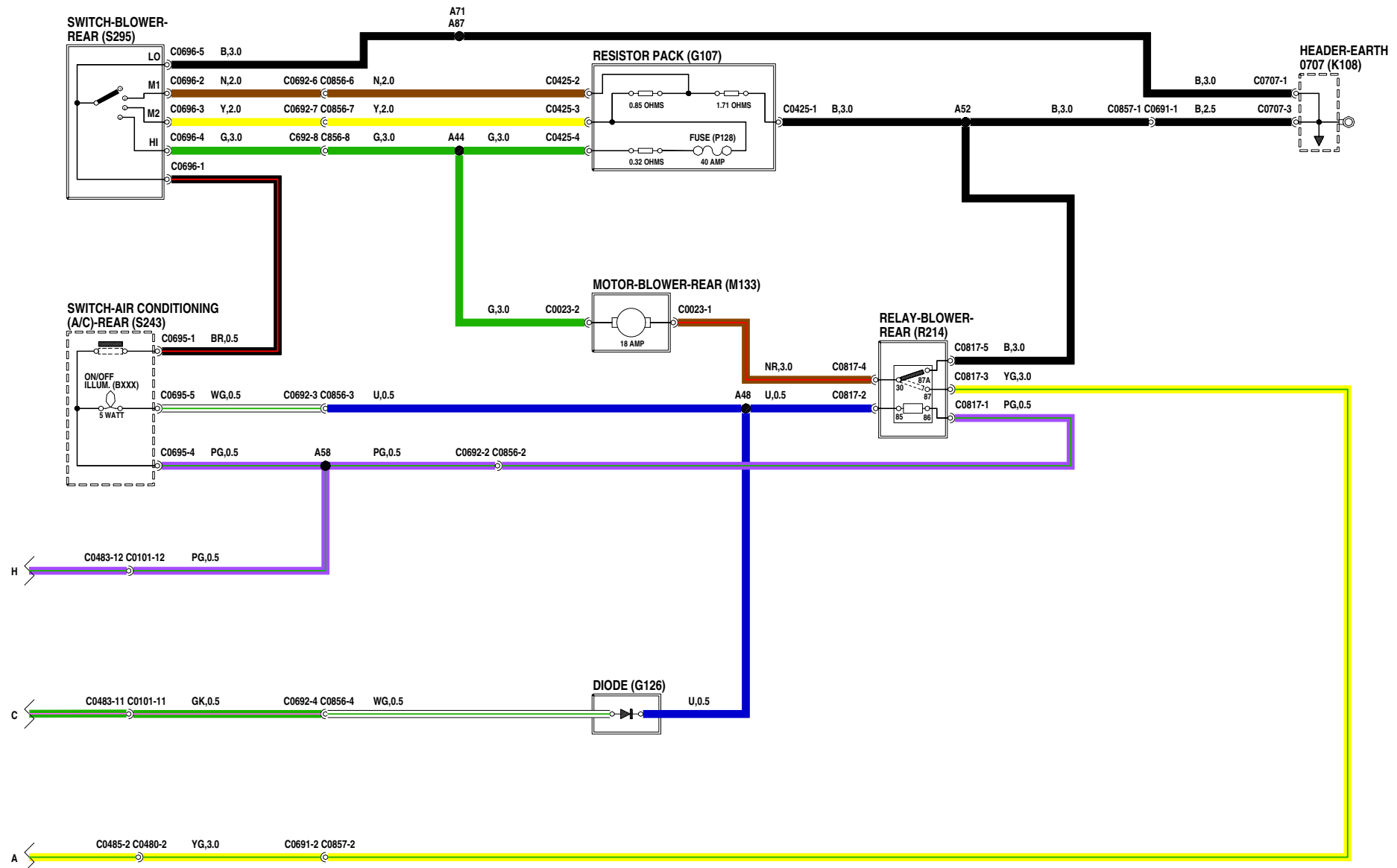
VWR108130-2x04

AIR CONDITIONING (A/C)

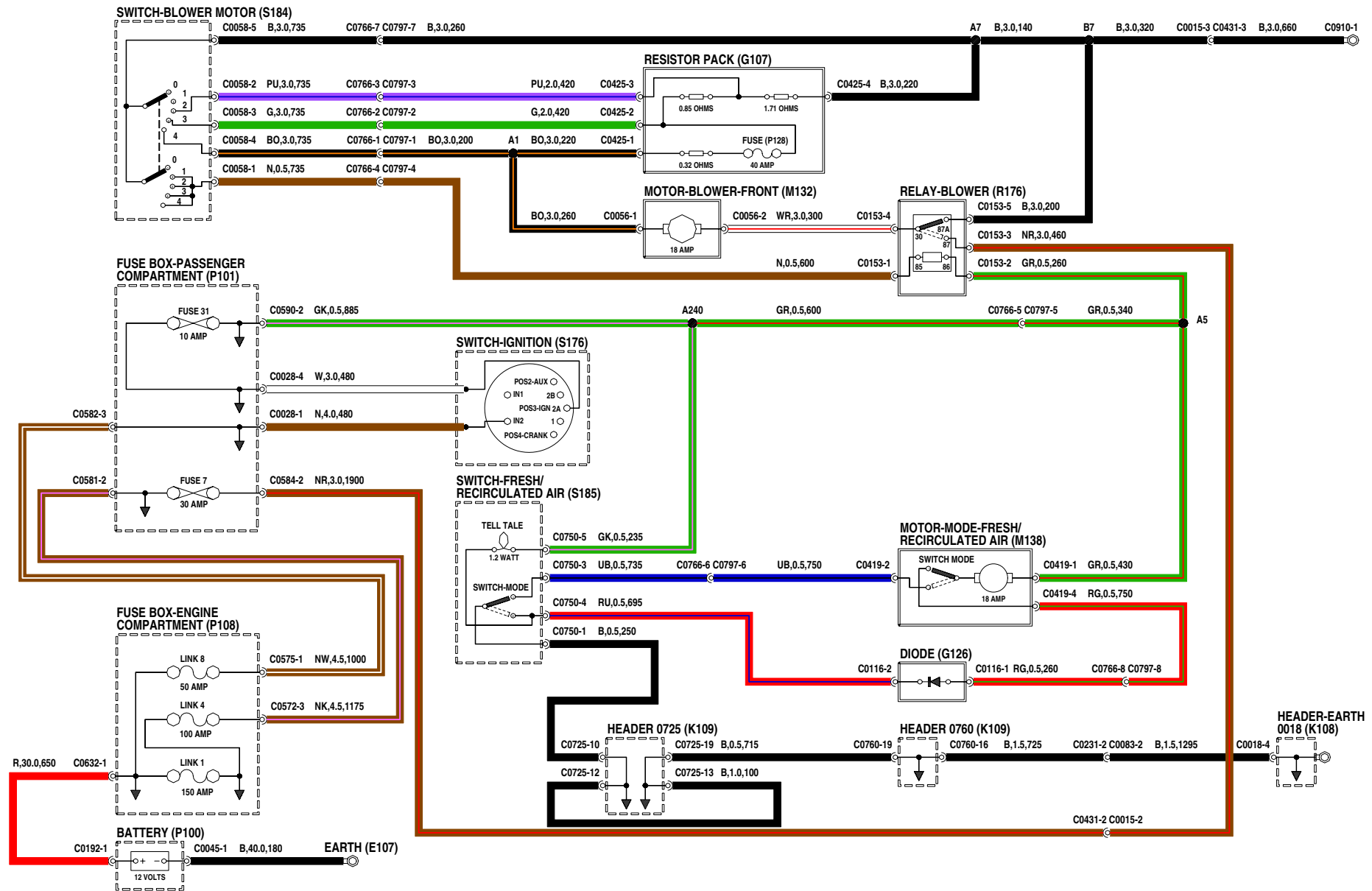


VWR108130-3of4

AIR CONDITIONING (A/C)

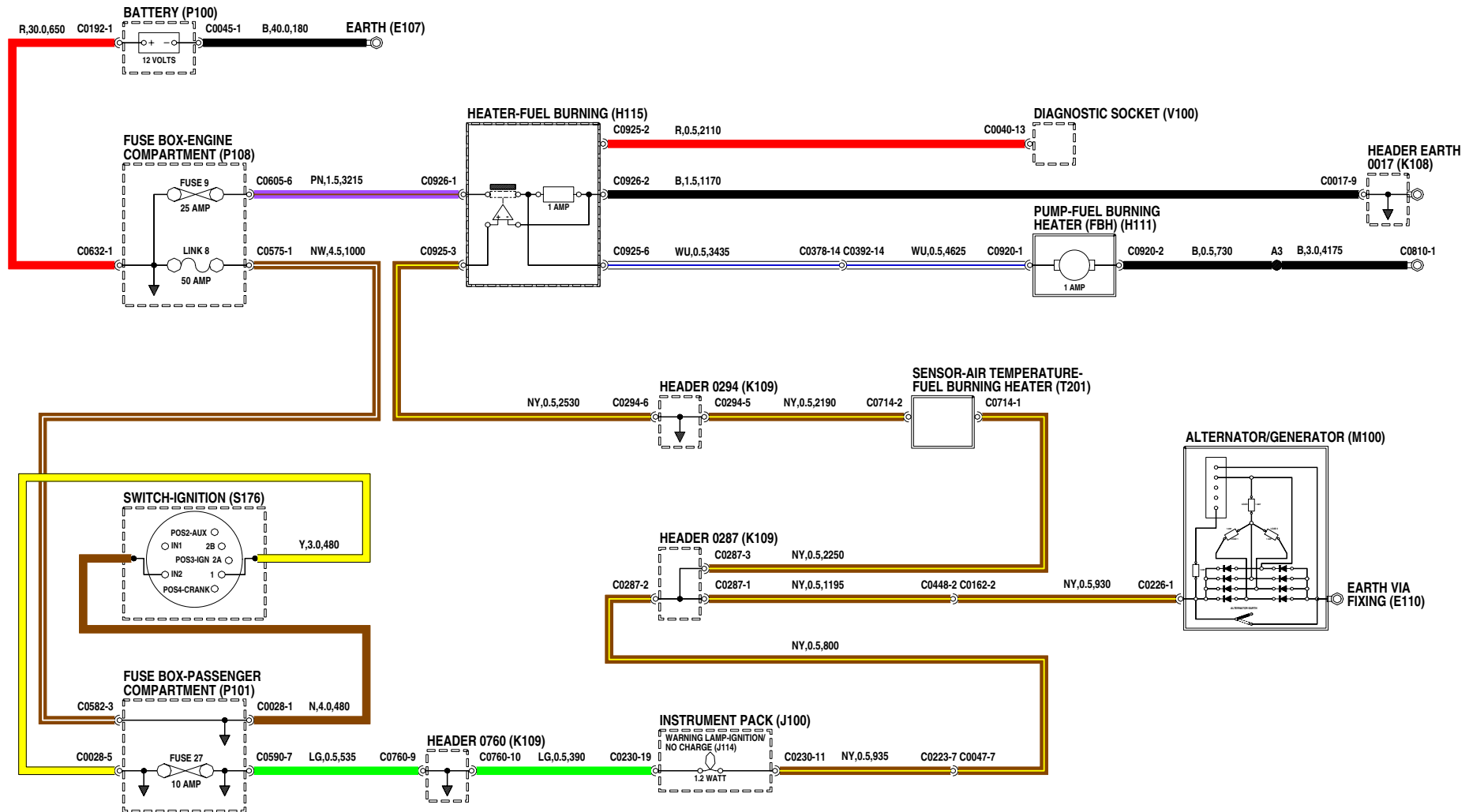


HEATER BLOWER

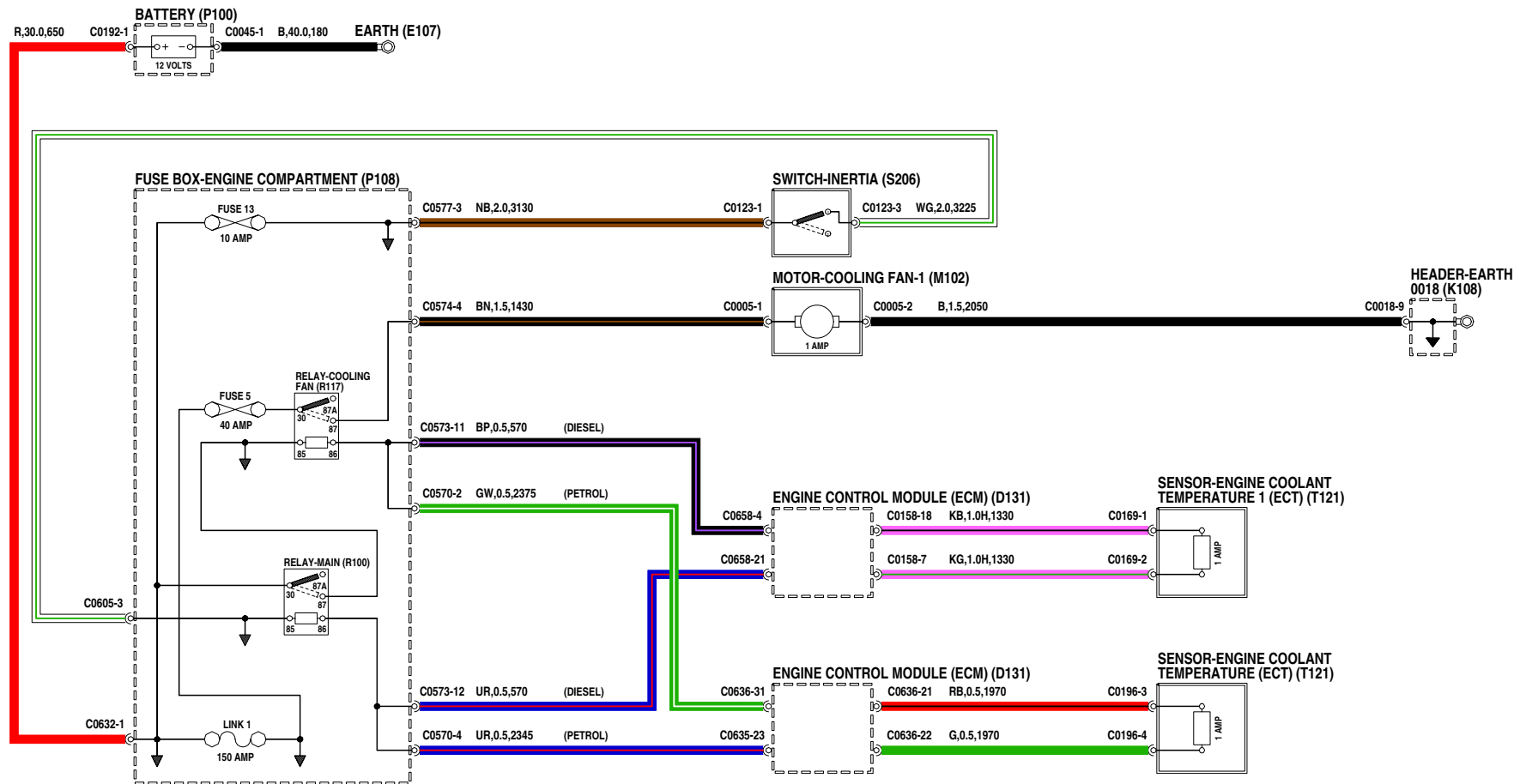


VWR108400-1of1

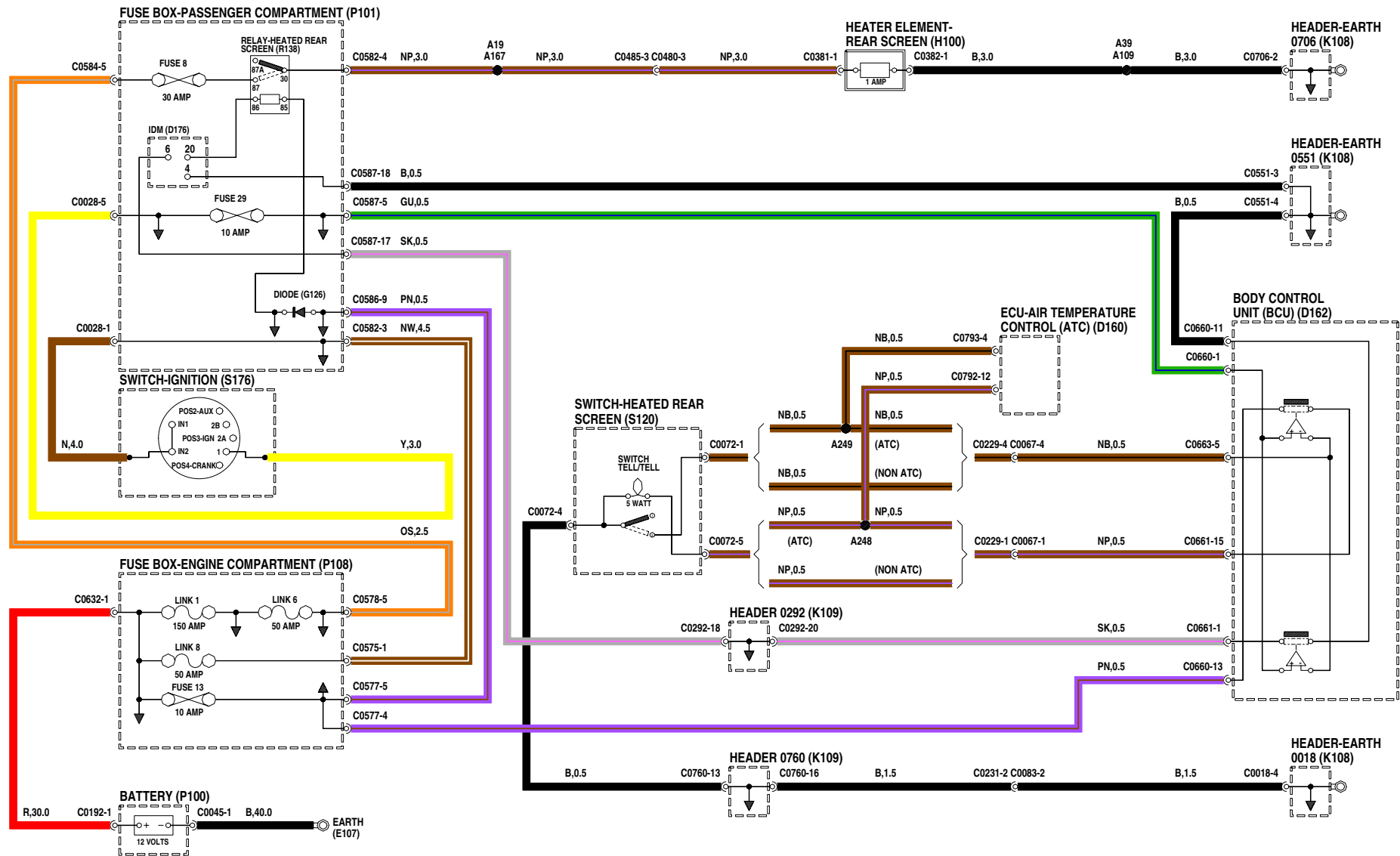
FUEL BURNING HEATER (FBH)



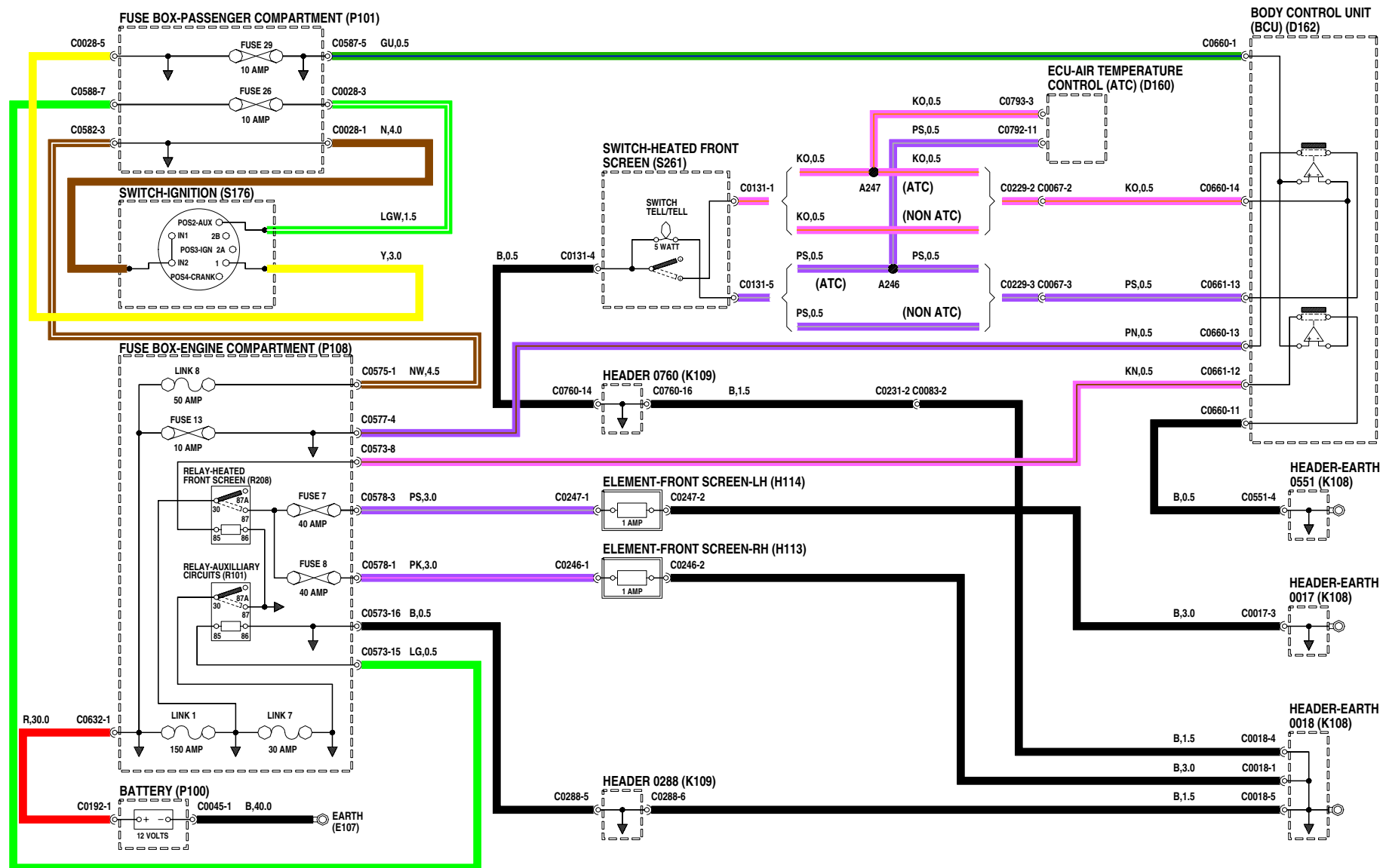
COOLING FANS



HEATED REAR WINDOW (HRW)

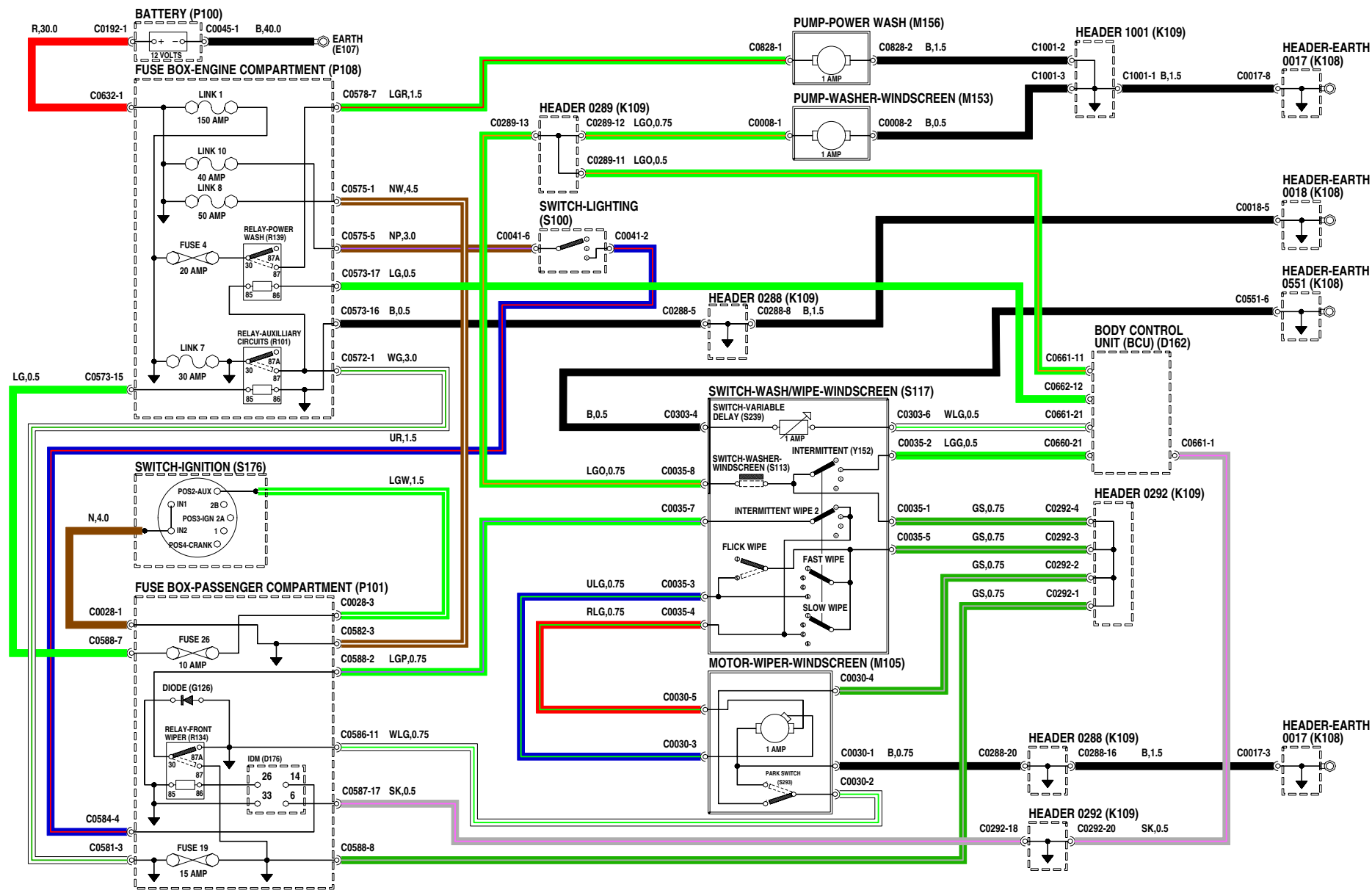


HEATED FRONT SCREEN



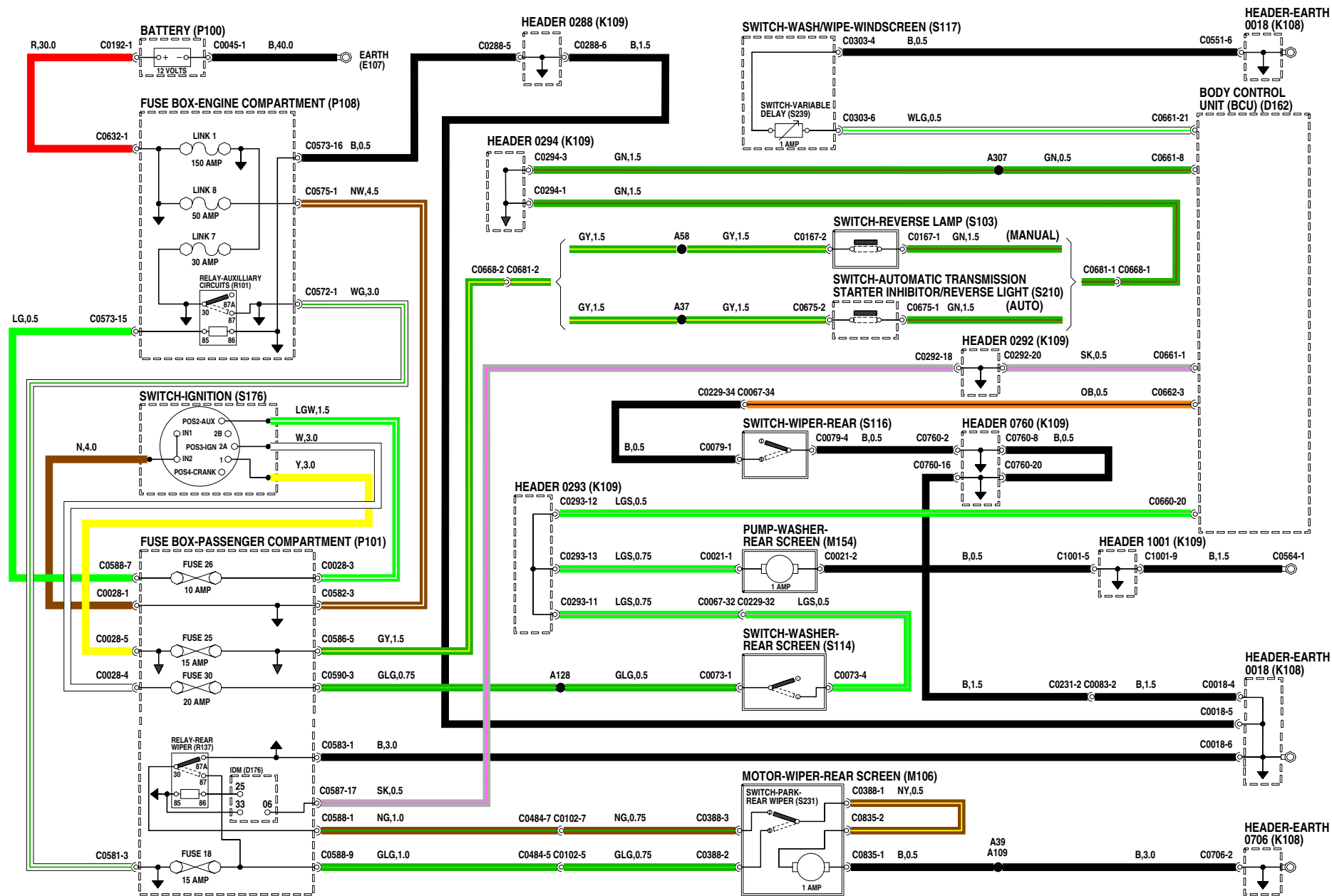
VWR108380-1a1

WIPERS AND WASHERS FRONT

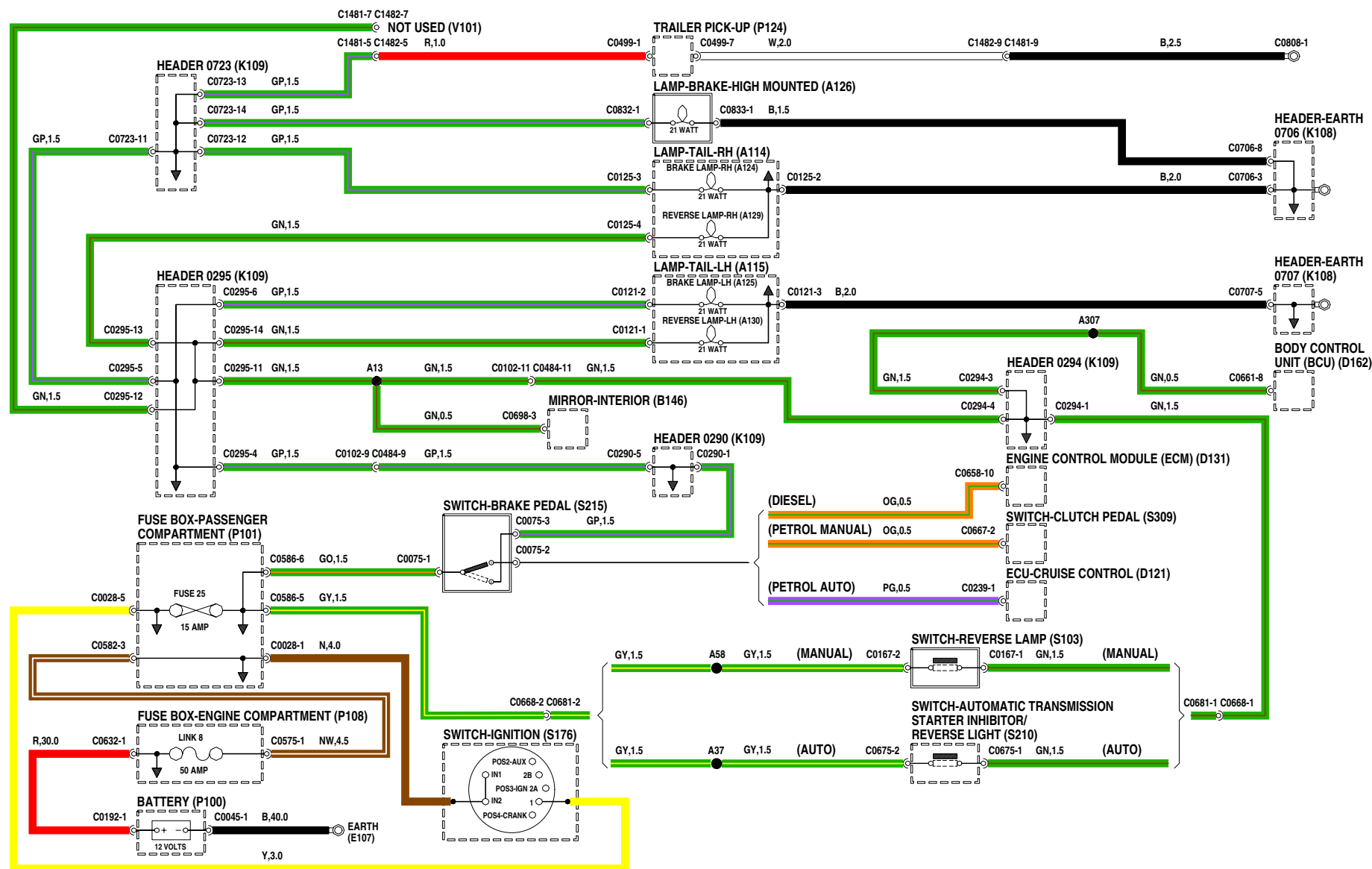


VWR108650-1of1

WIPERS AND WASHERS REAR



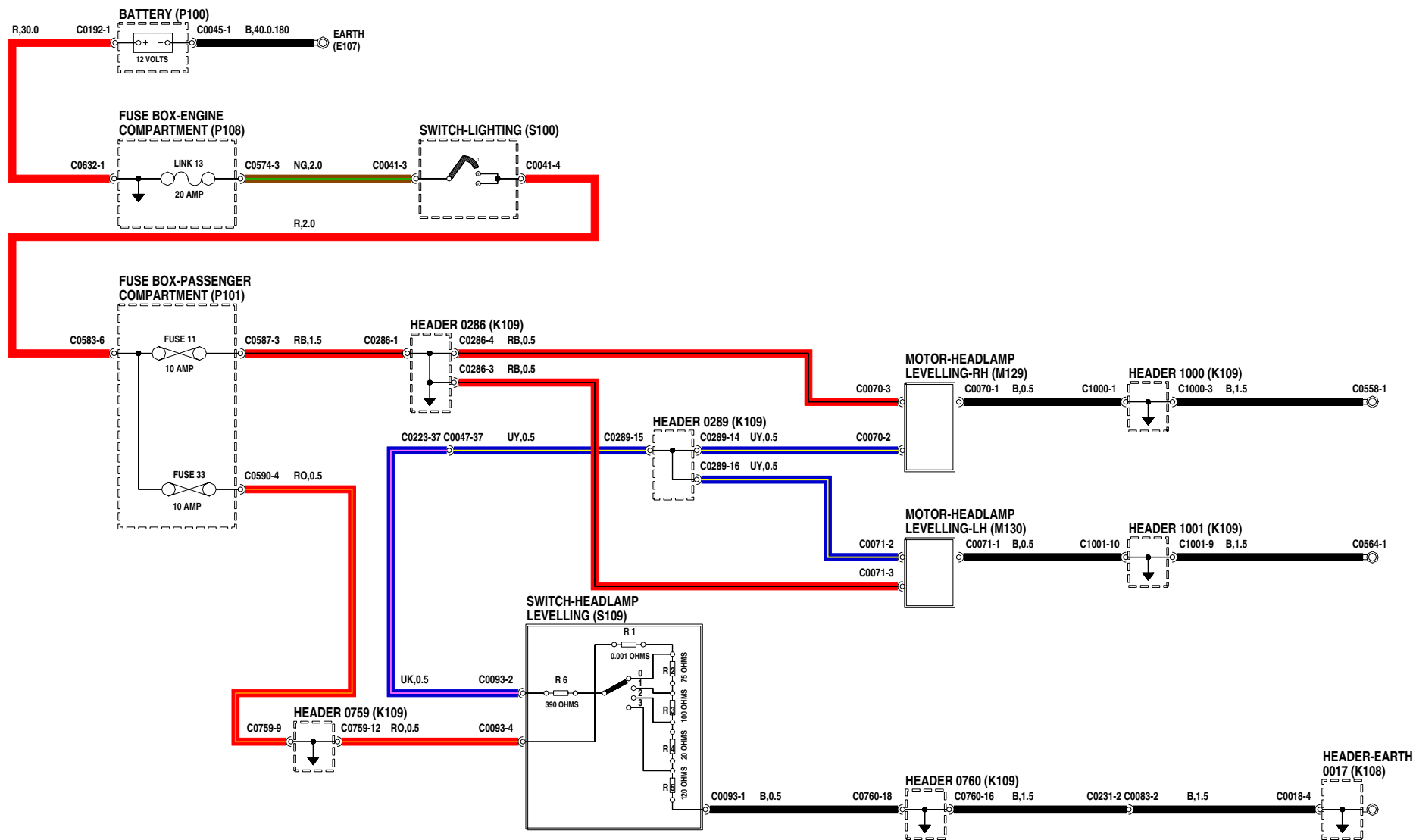
EXTERIOR LAMPS BRAKE AND REVERSE LAMPS



VWR108160-1a1

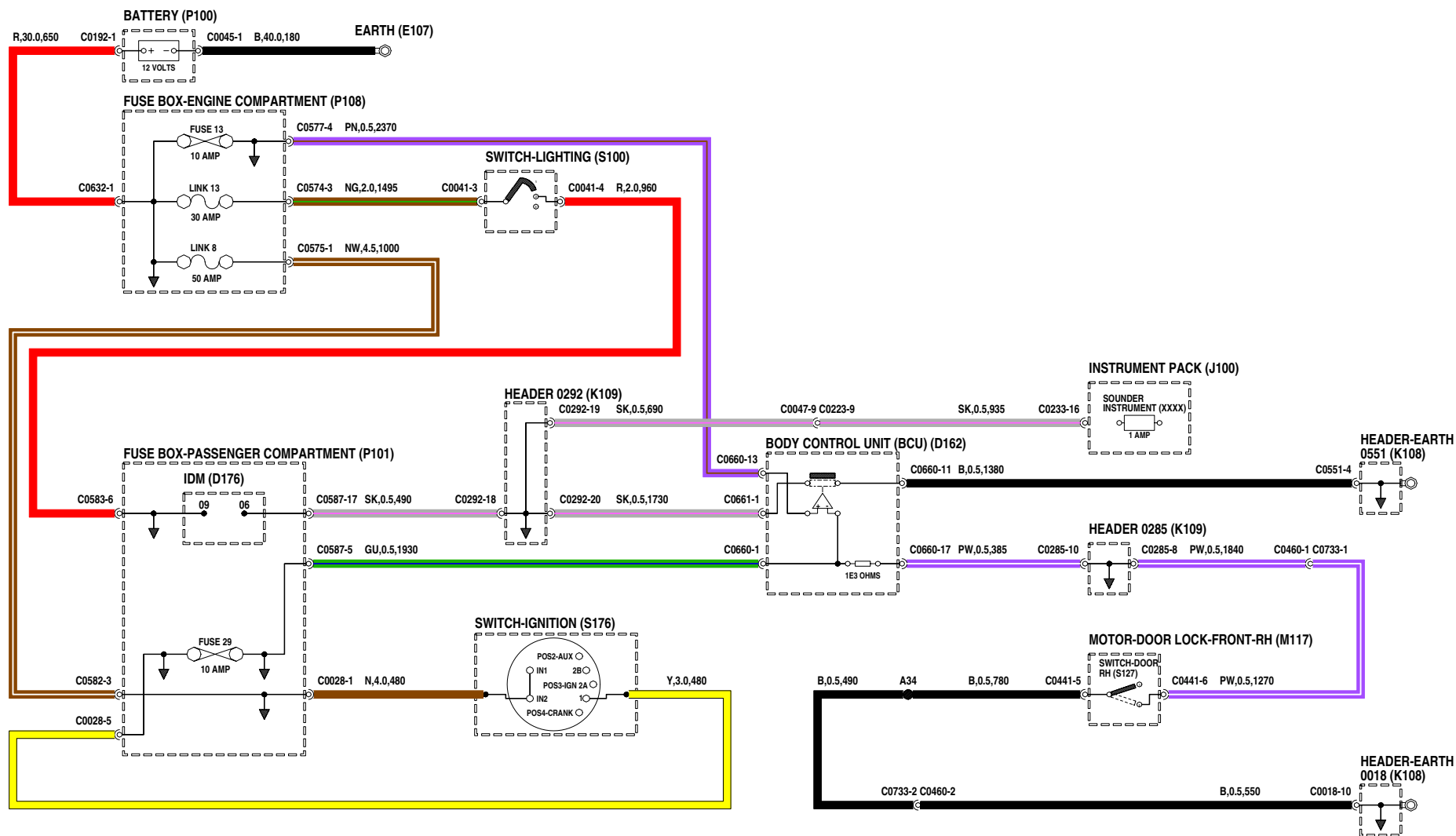
EXTERIOR LAMPS

HEADLAMP LEVELLING

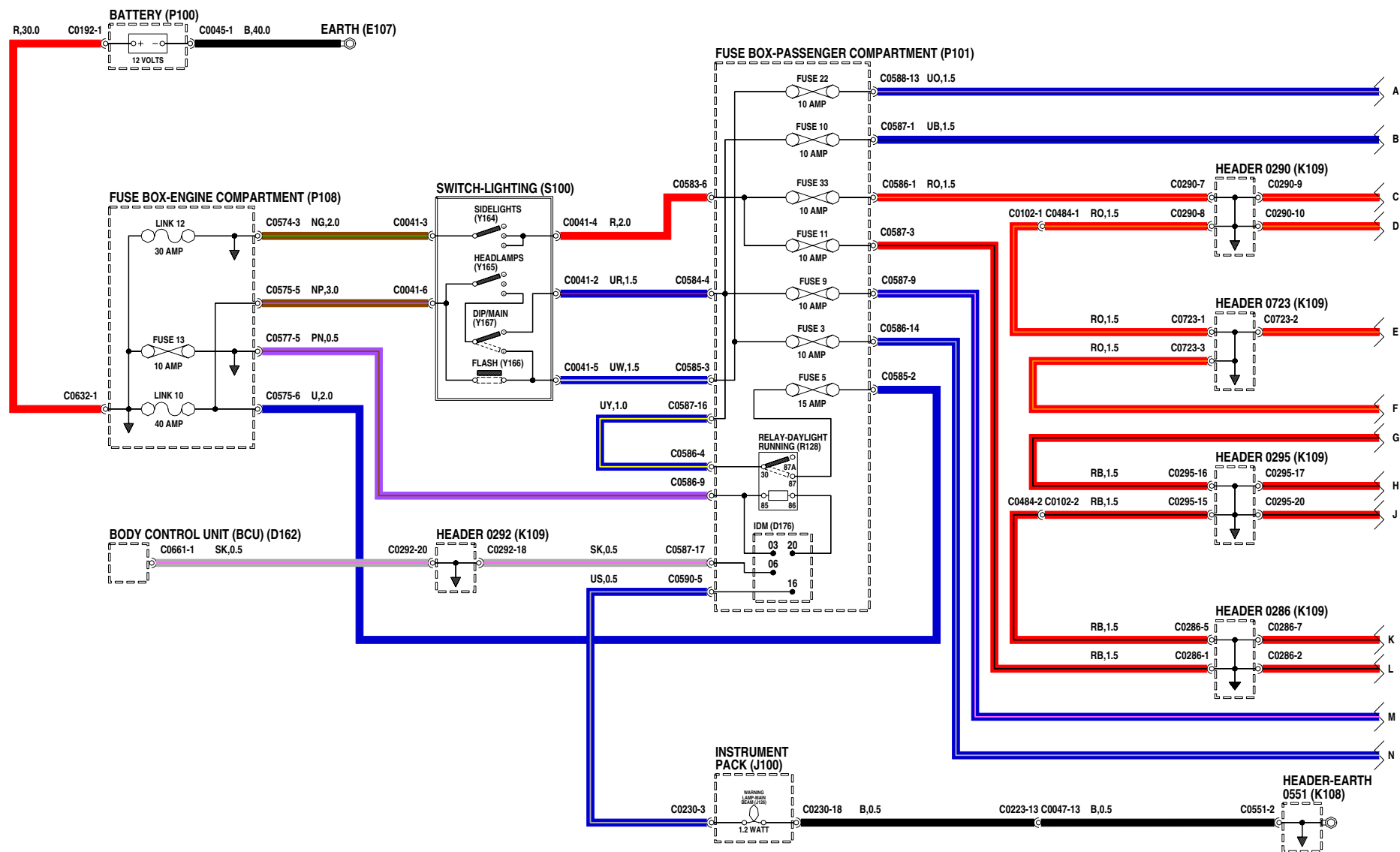


VWR108370-1of1

EXTERIOR LAMPS LIGHTS ON ALARM

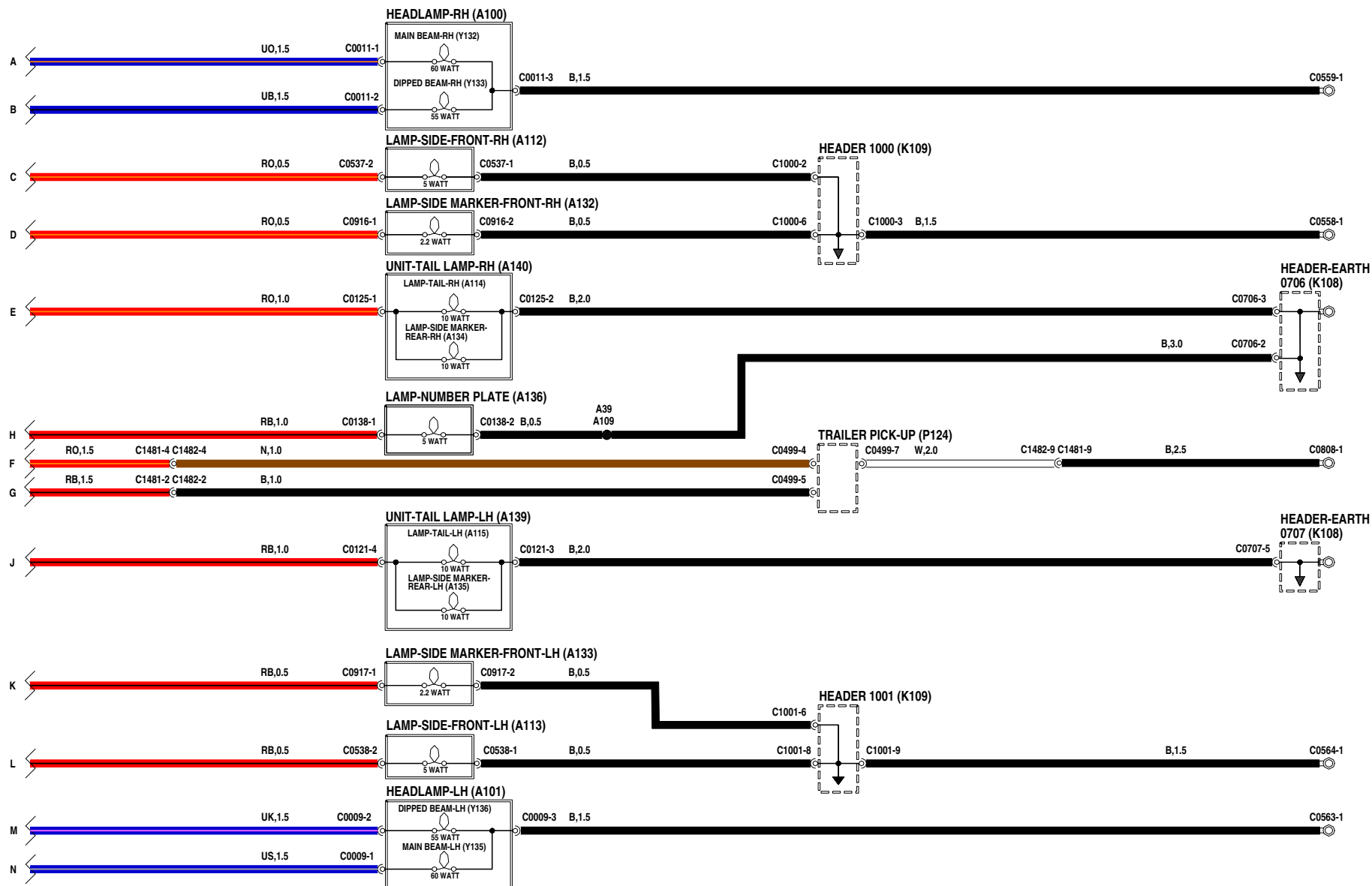


EXTERIOR LAMPS HEAD, SIDE AND TAIL LAMPS



EXTERIOR LAMPS

HEAD, SIDE AND TAIL LAMPS

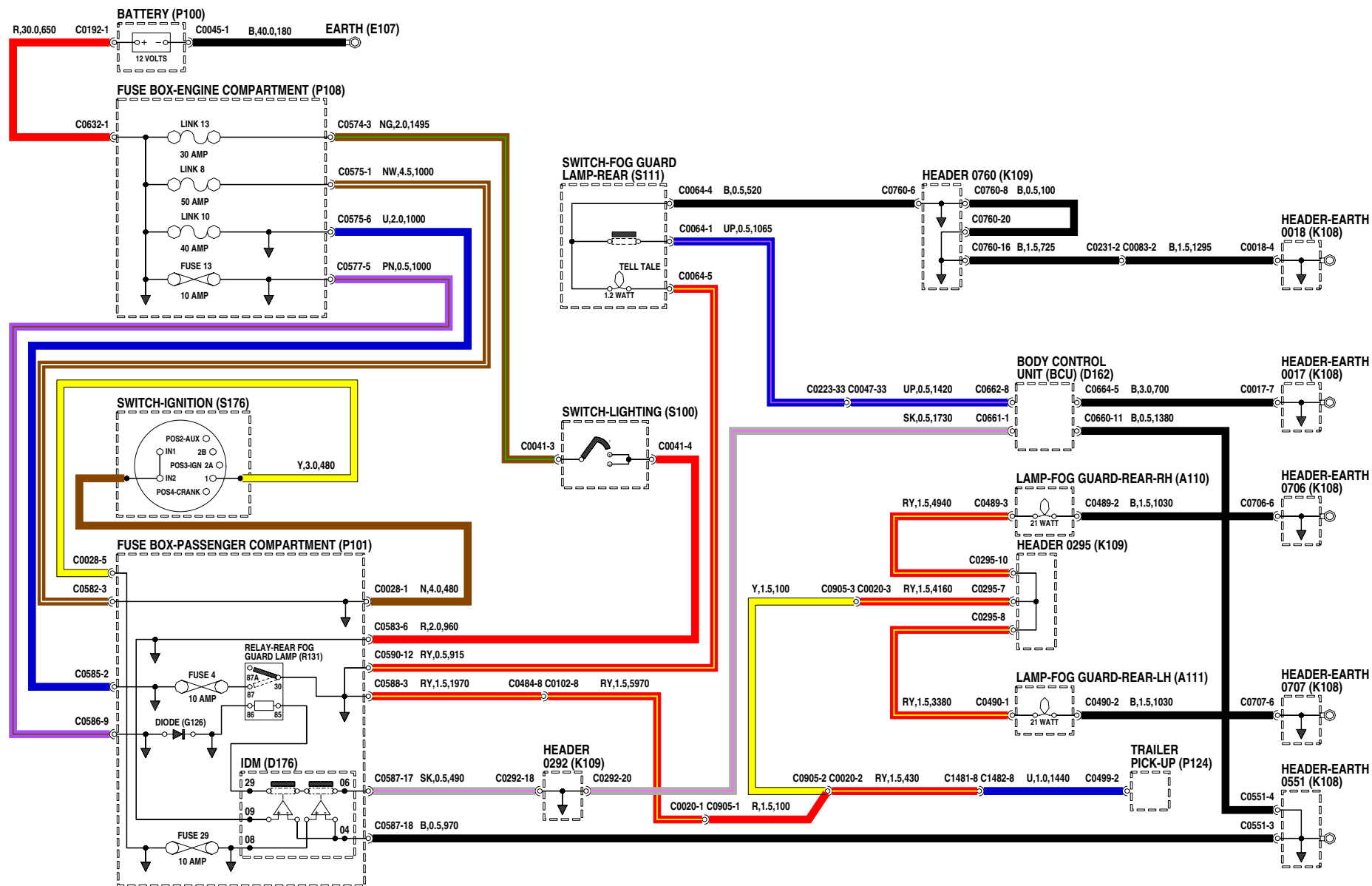


VWR108330-2x2



EXTERIOR LAMPS

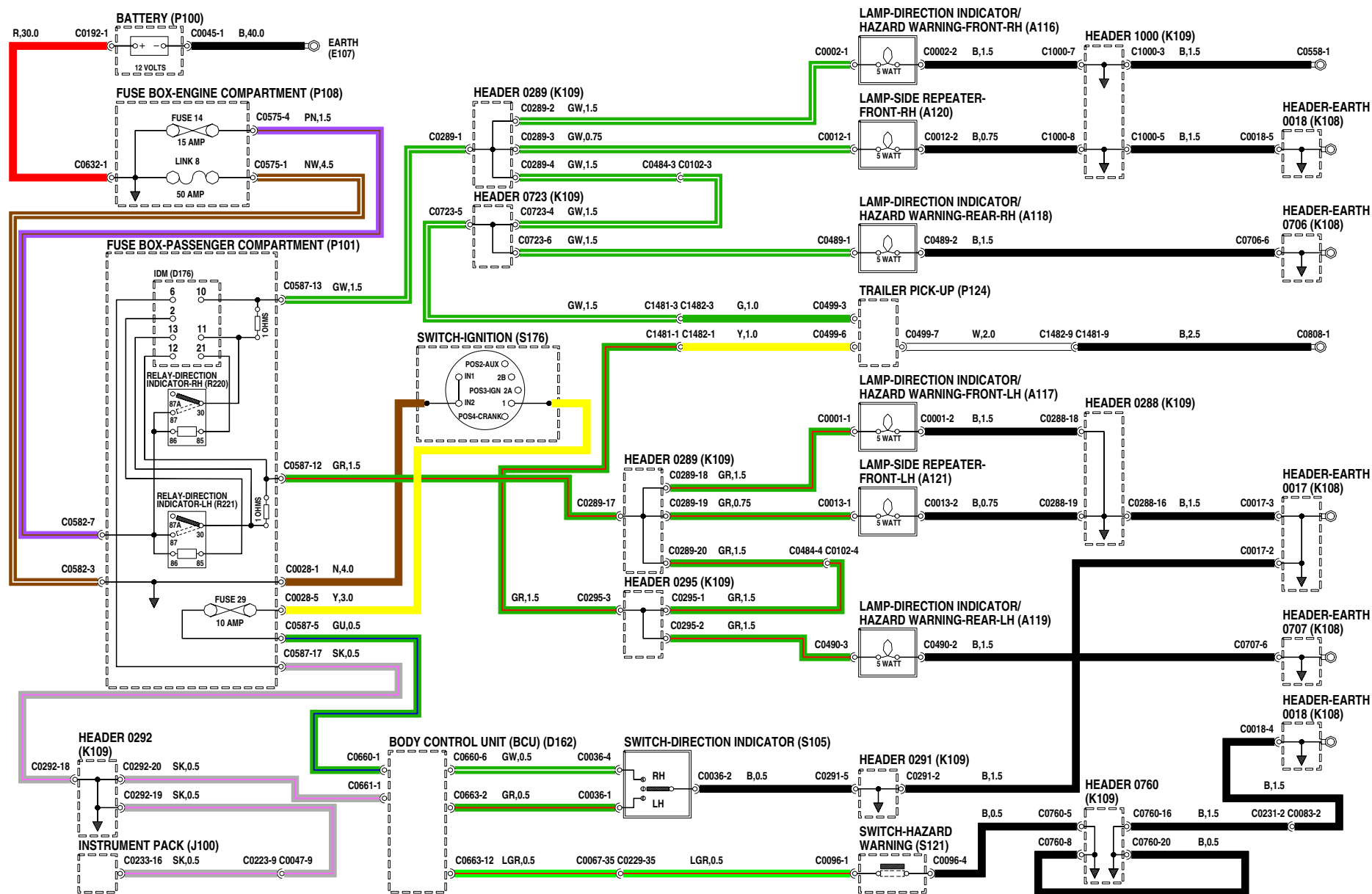
REAR FOG GUARD LAMPS



VWR108300-1of1

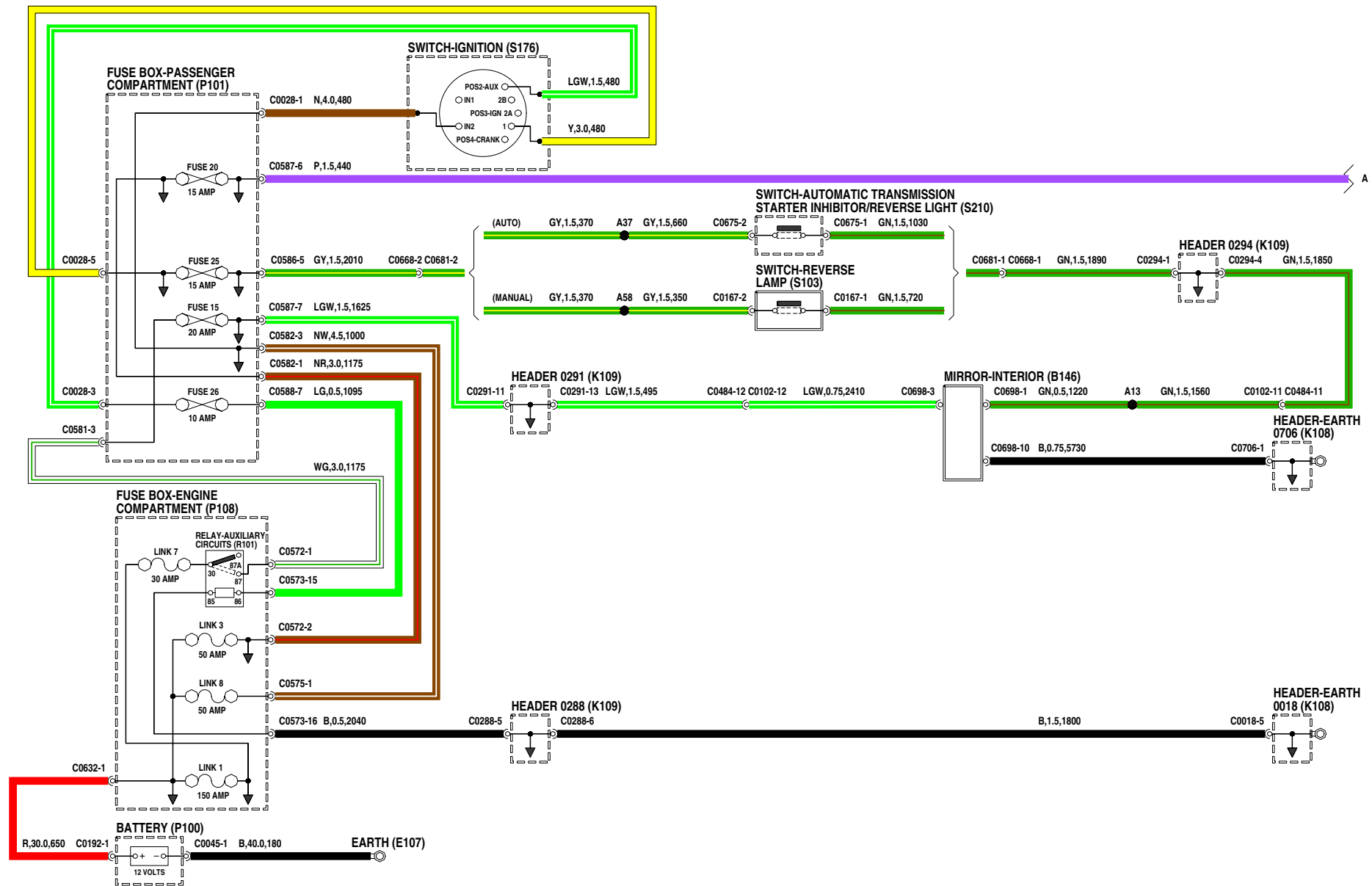
EXTERIOR LAMPS

DIRECTION INDICATOR/HAZARD WARNING LAMPS



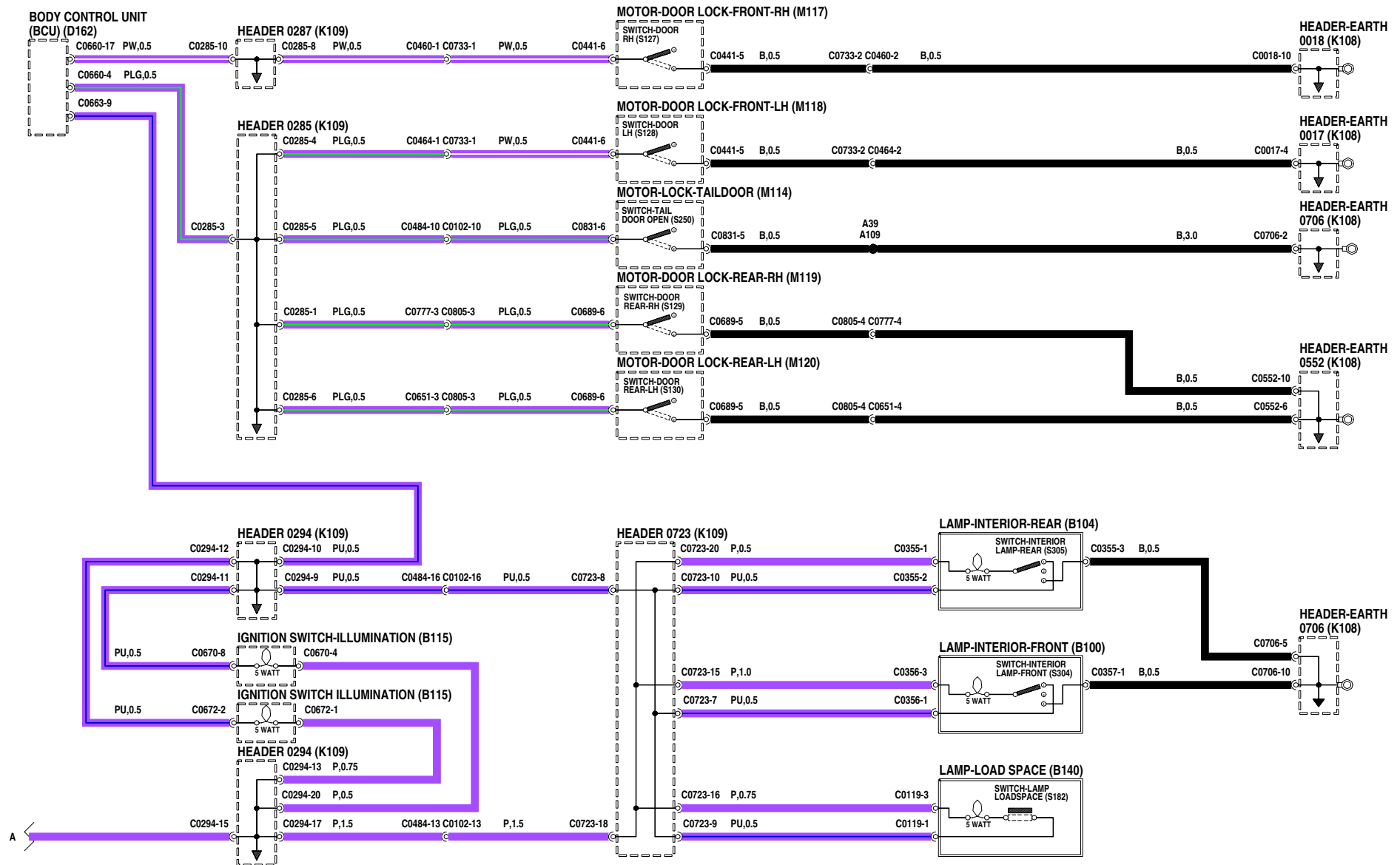
VWR108460-1a11

INTERIOR LAMPS



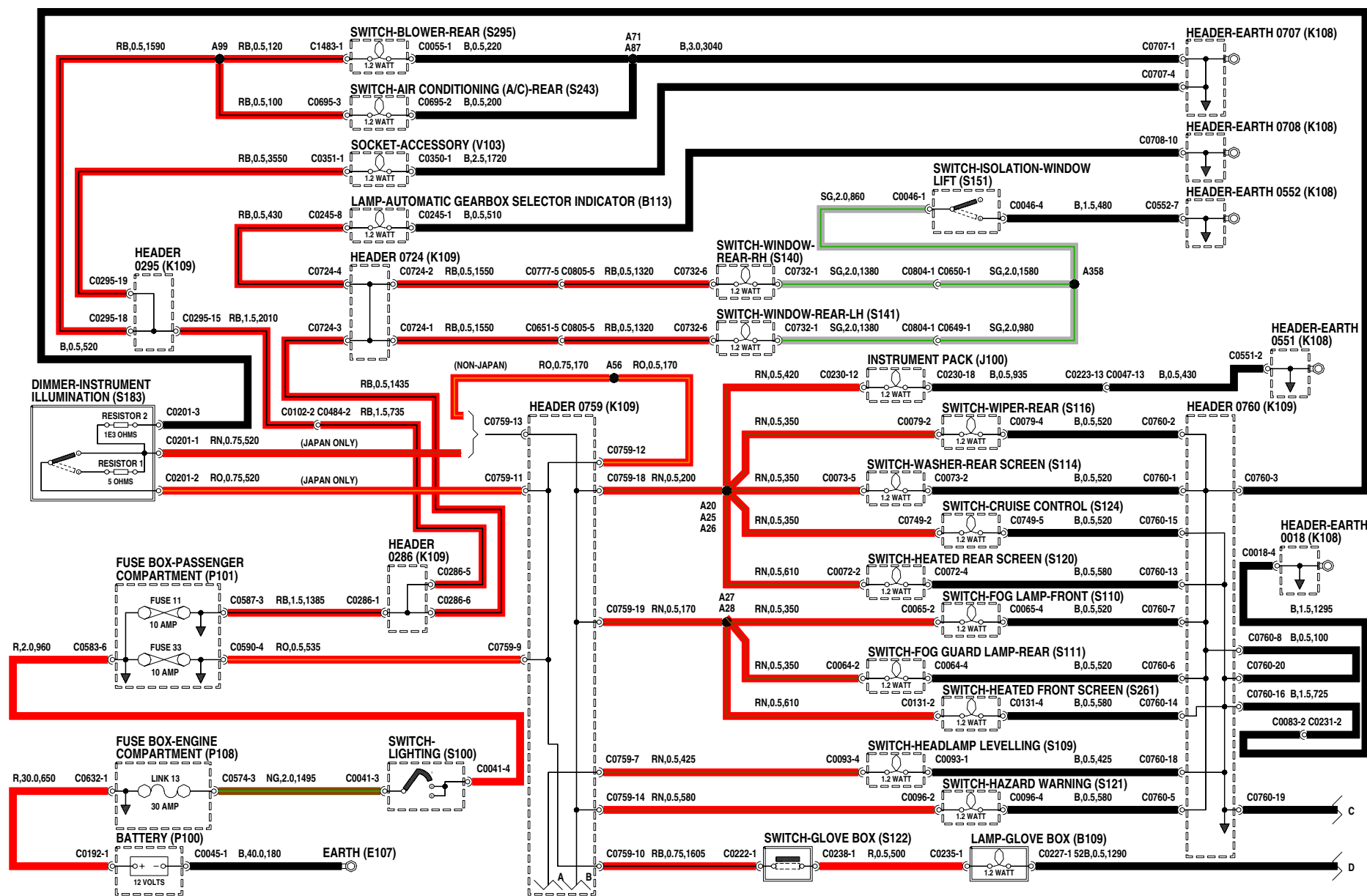
VWR108490-1of2

INTERIOR LAMPS



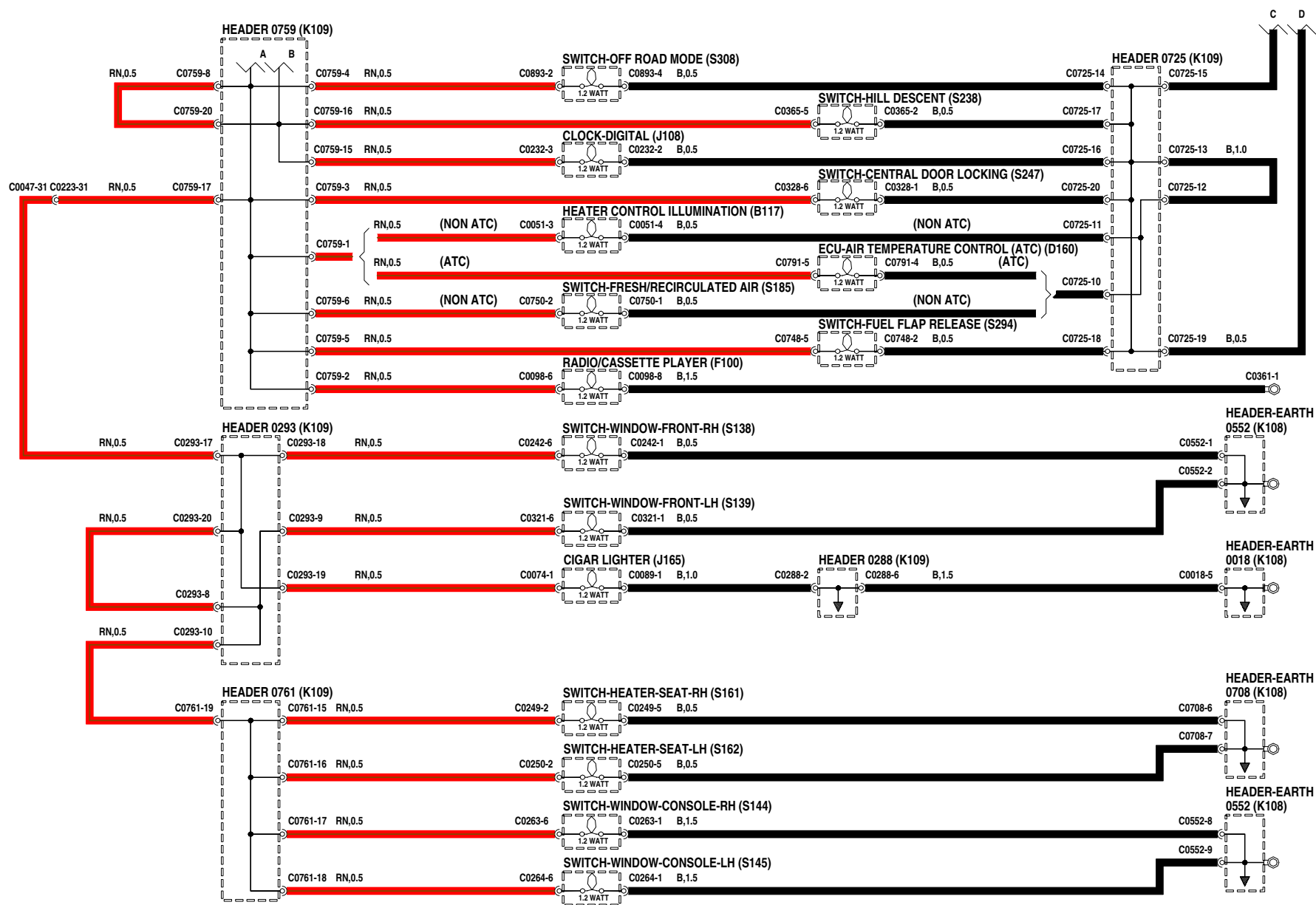
VWR108490-2x2

INTERIOR ILLUMINATION



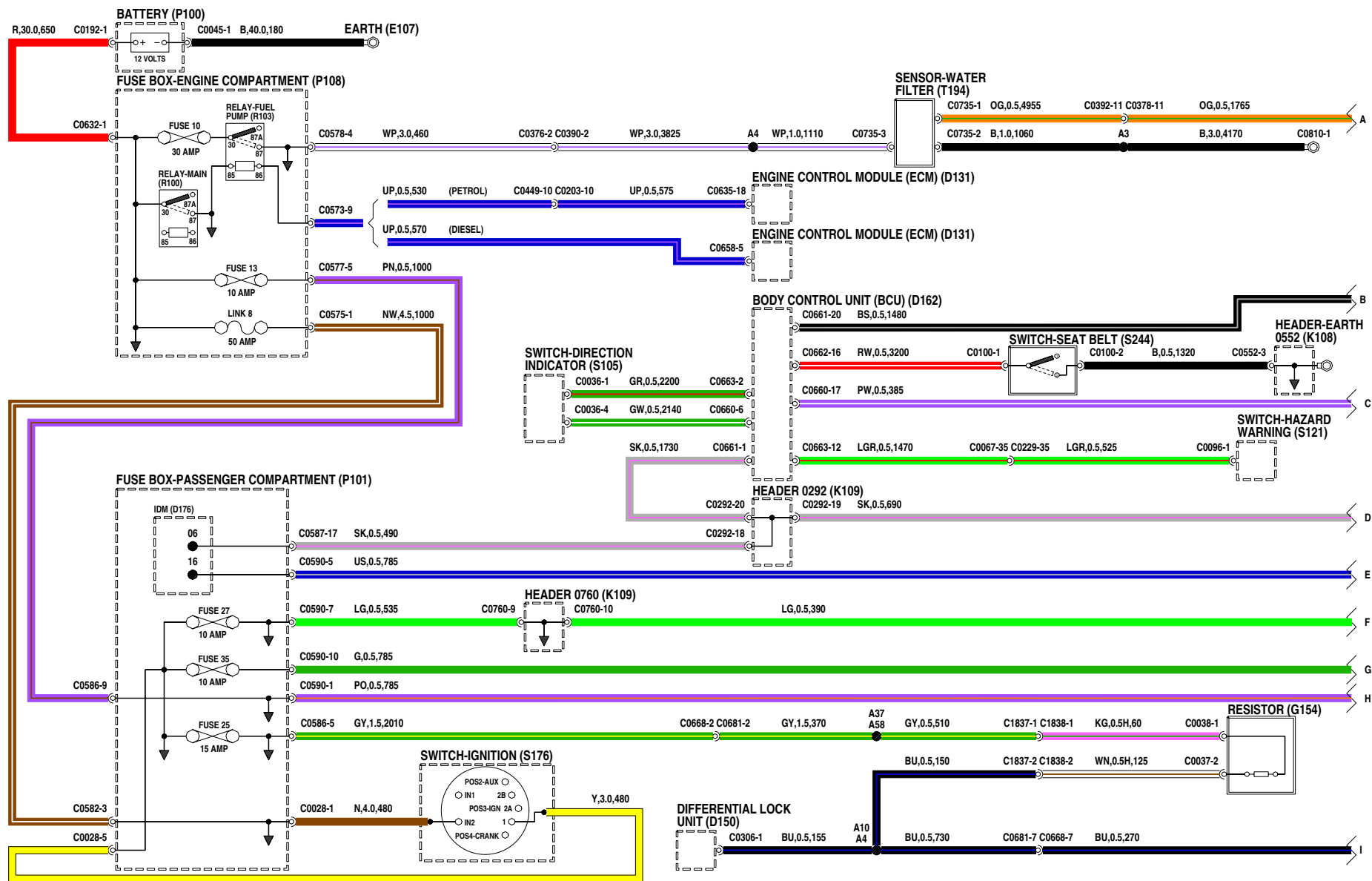
VWR108480-1-02

INTERIOR ILLUMINATION



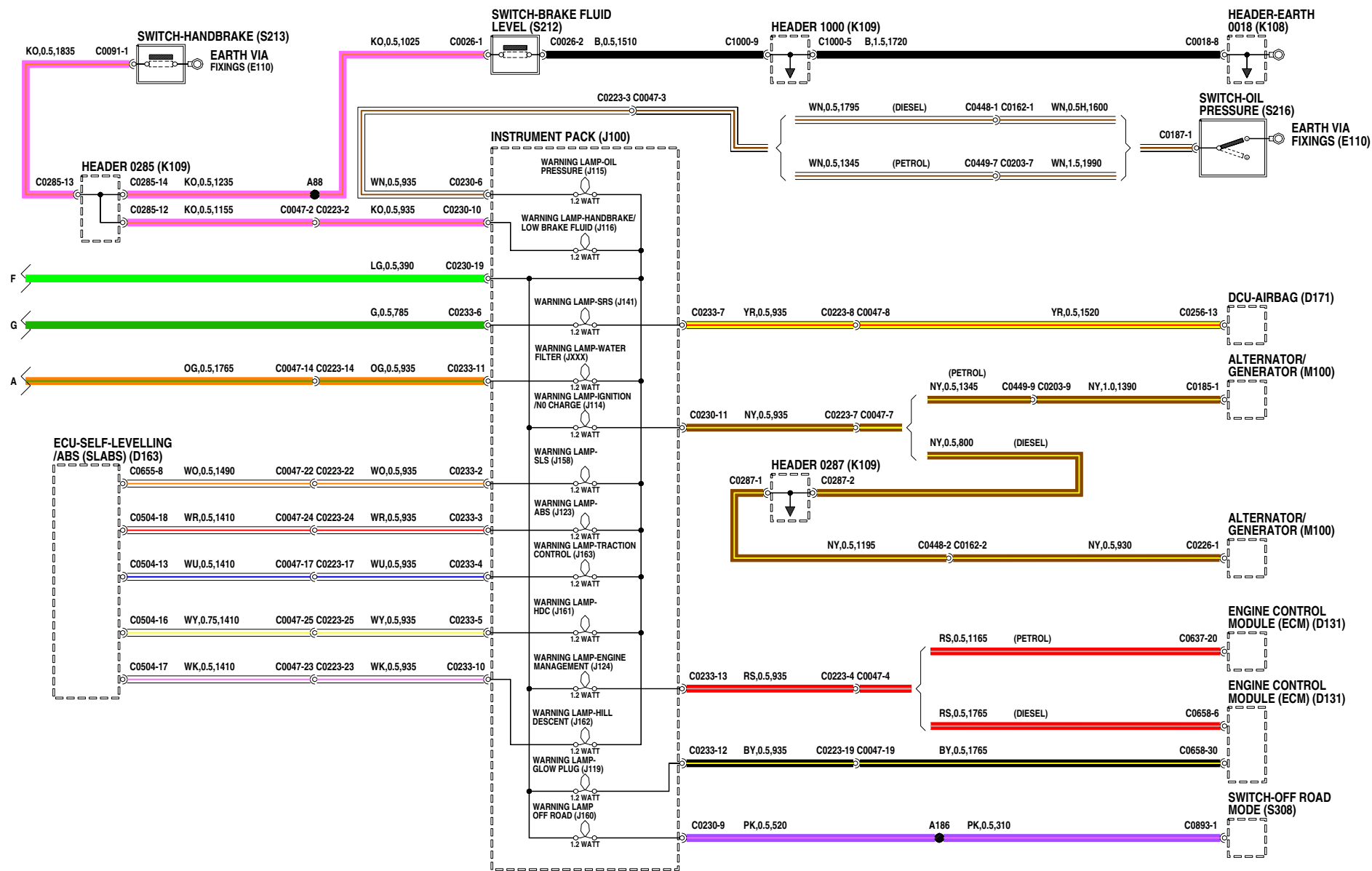
VWR108480-2a/2

INSTRUMENTS



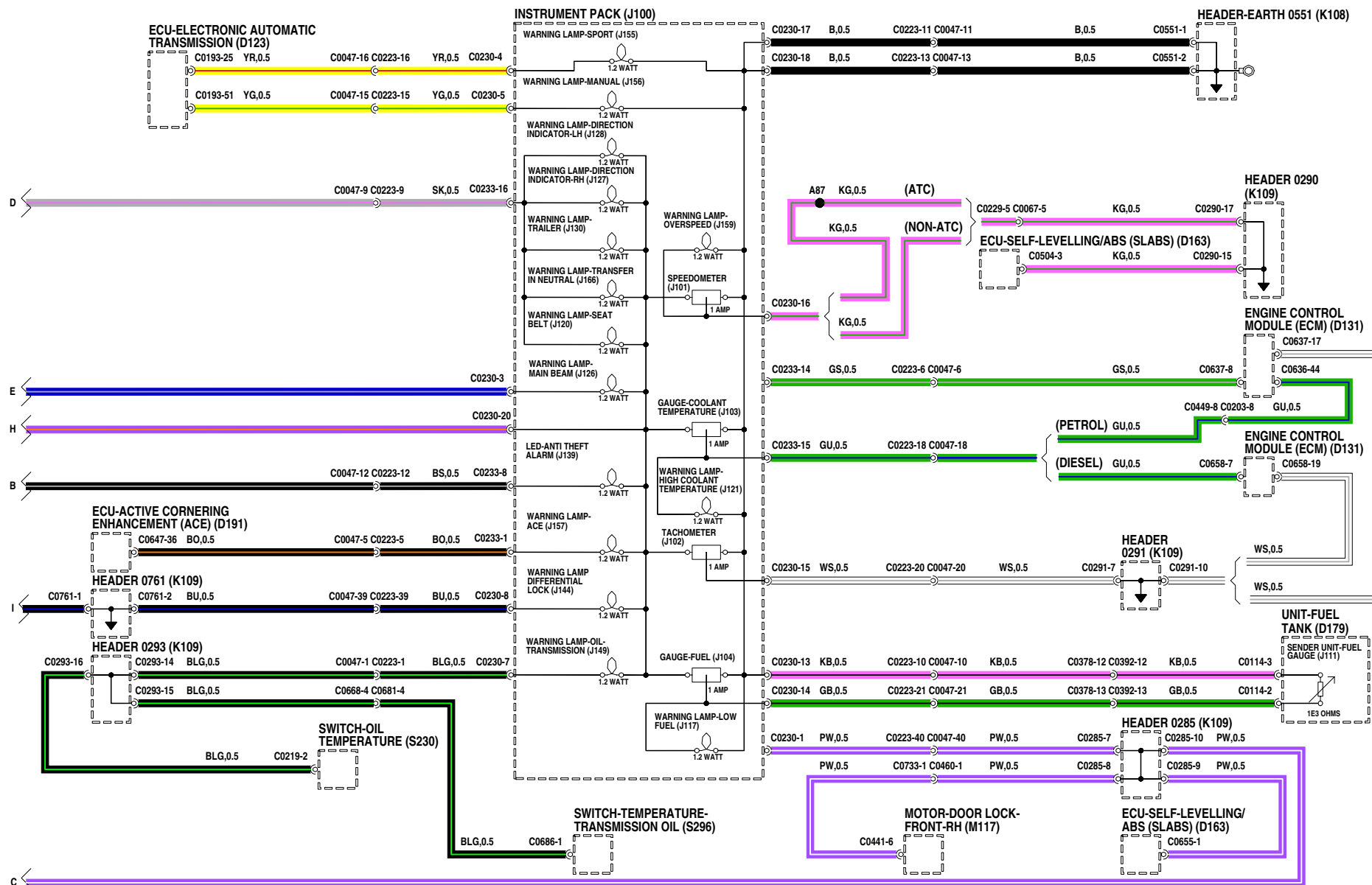
VWR108470-1of3

INSTRUMENTS



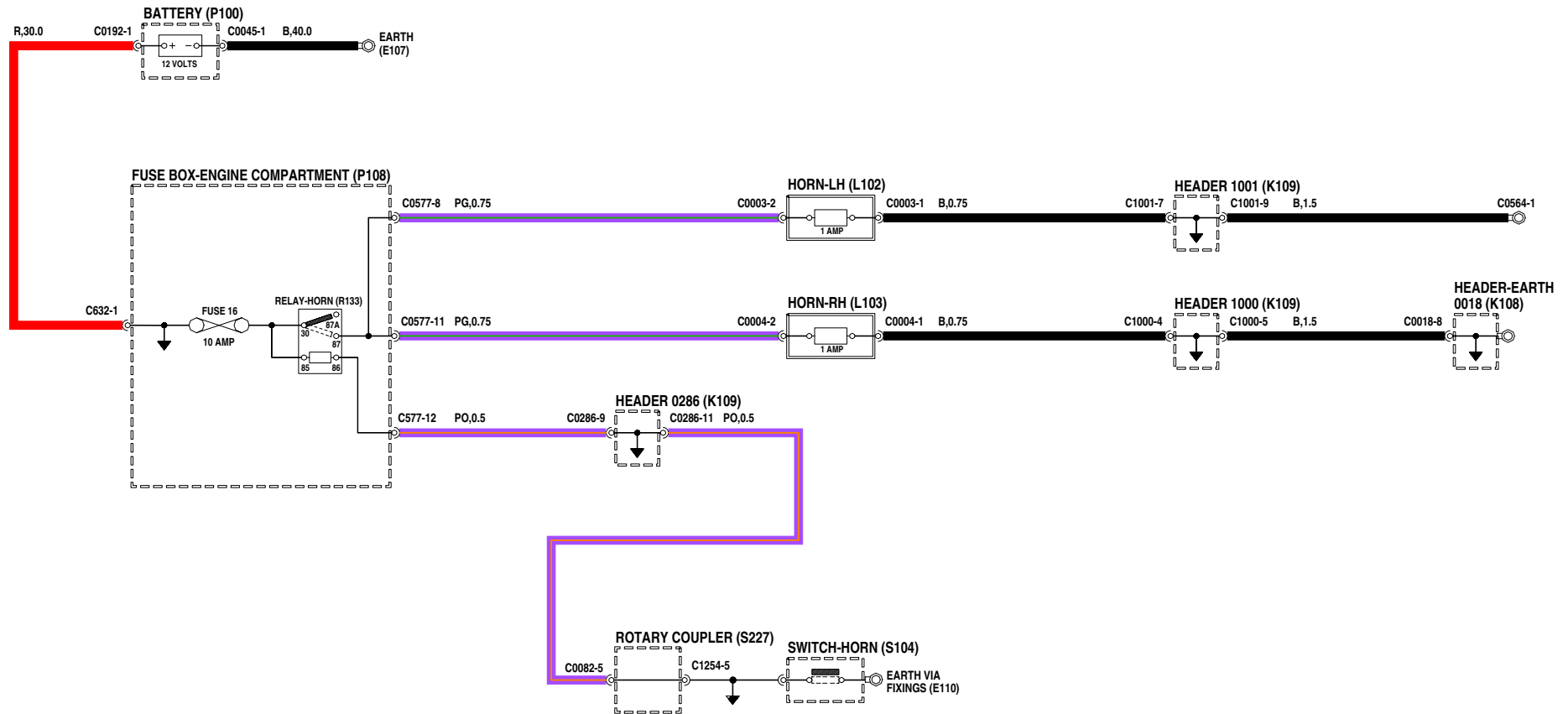
VWR108470-2a03

INSTRUMENTS

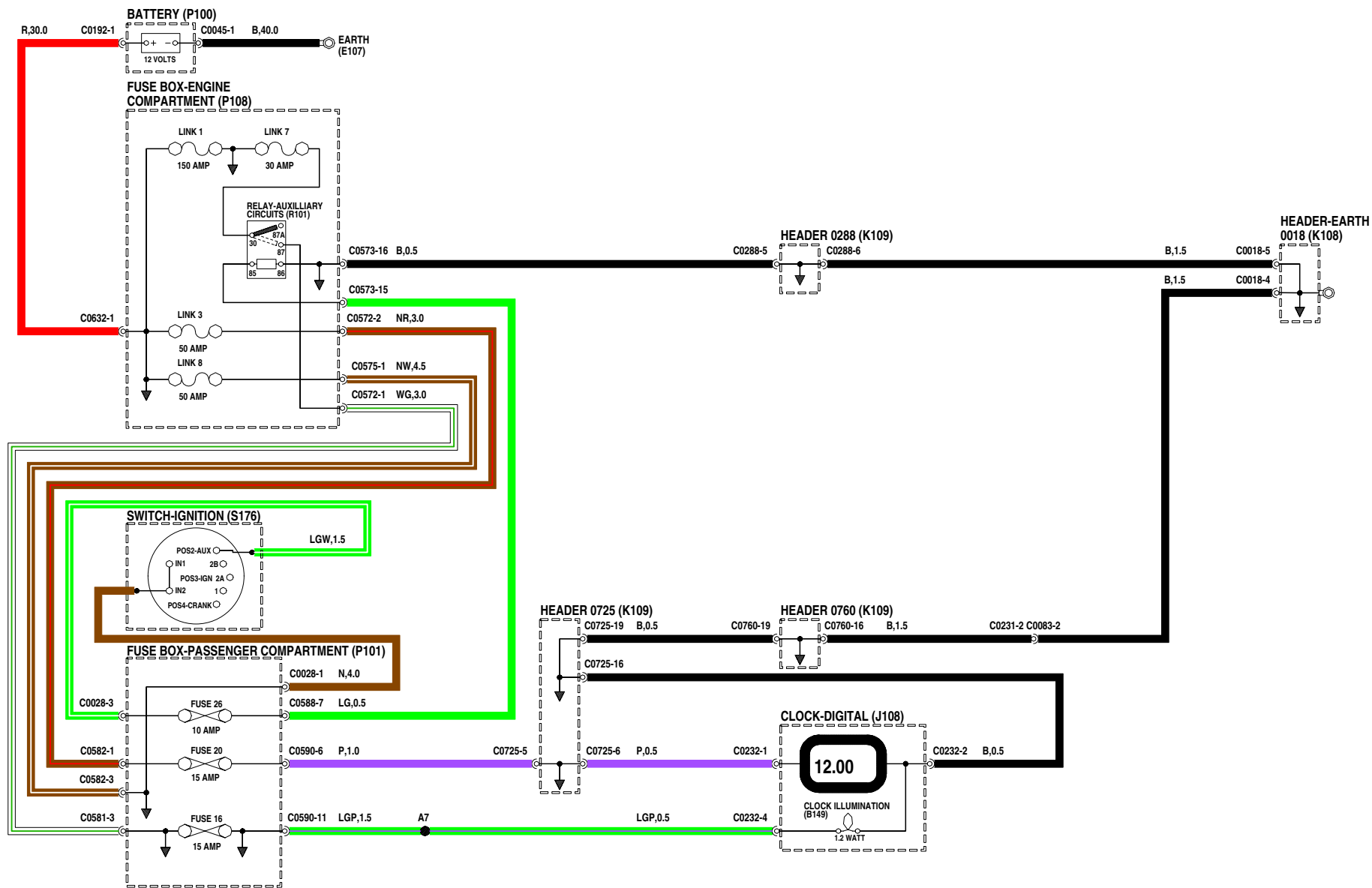


VWR108470-3a/3

HORNS

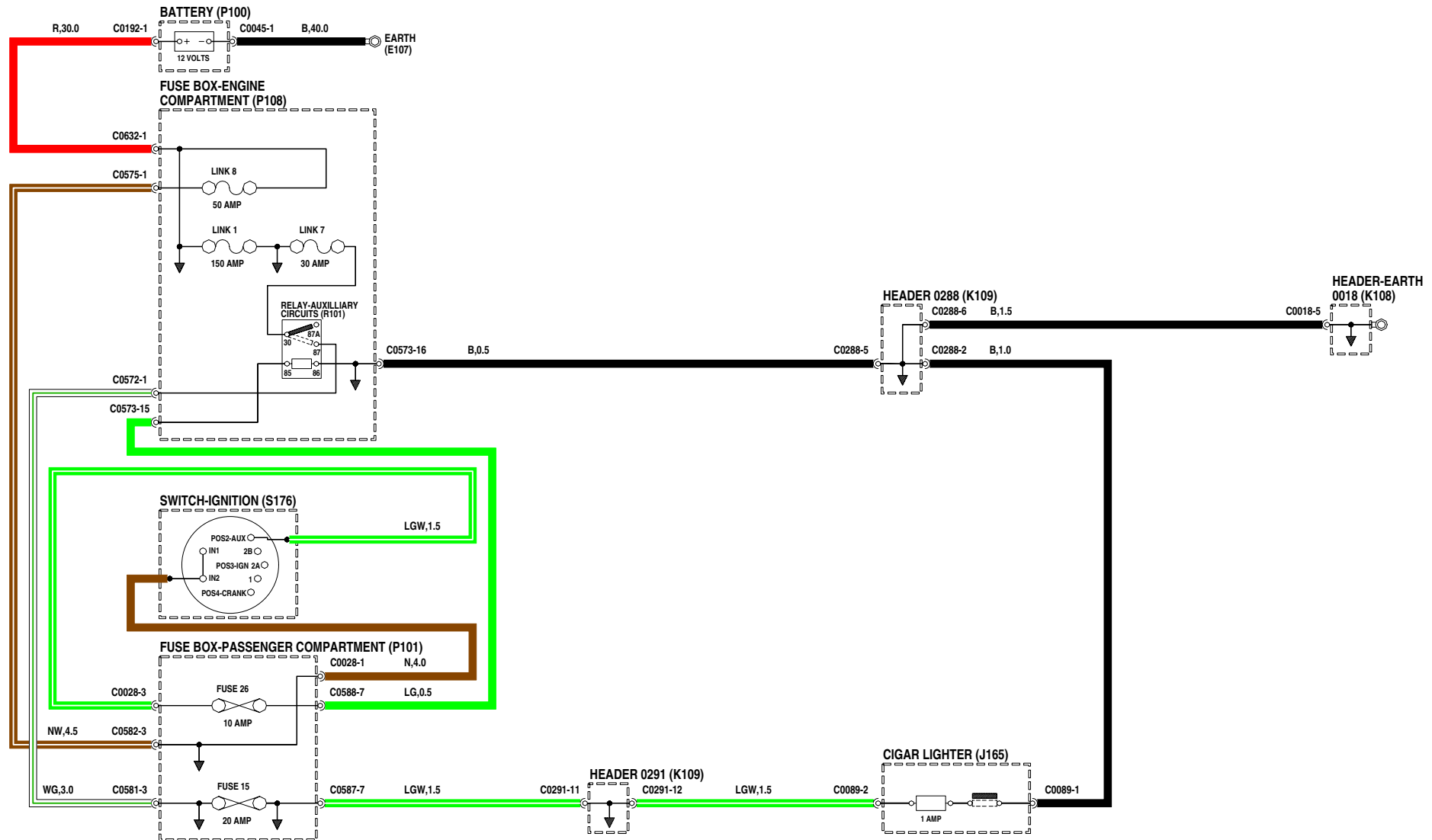


CLOCK

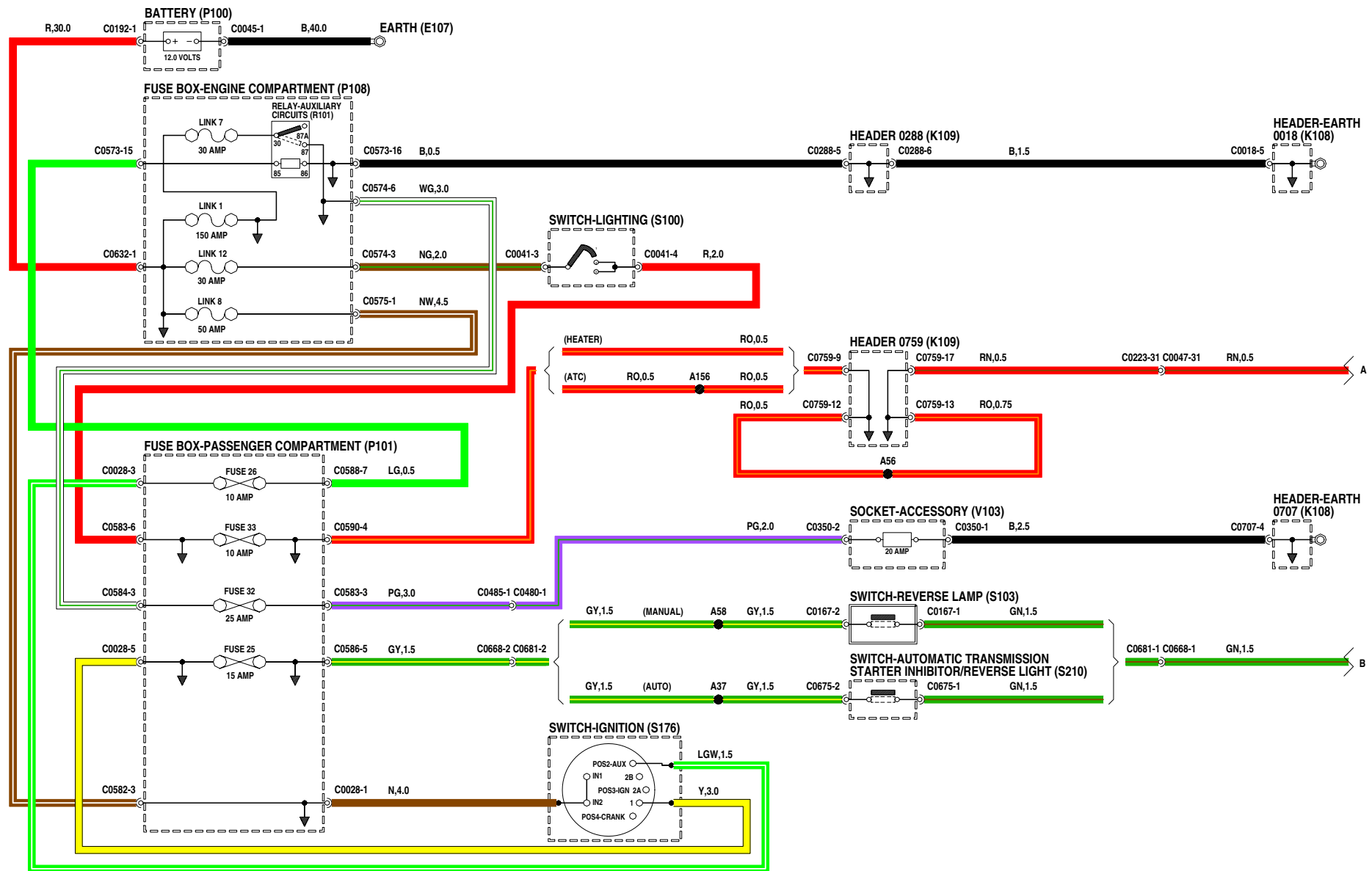


VWR108200-1a11

CIGAR LIGHTER

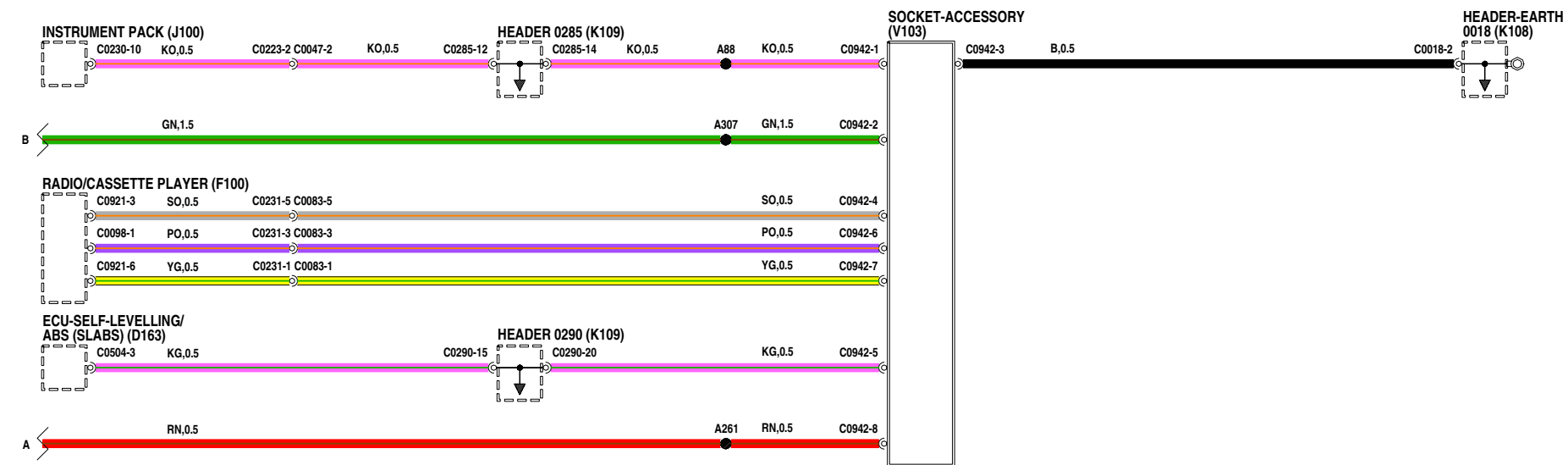


ACCESSORY SOCKET



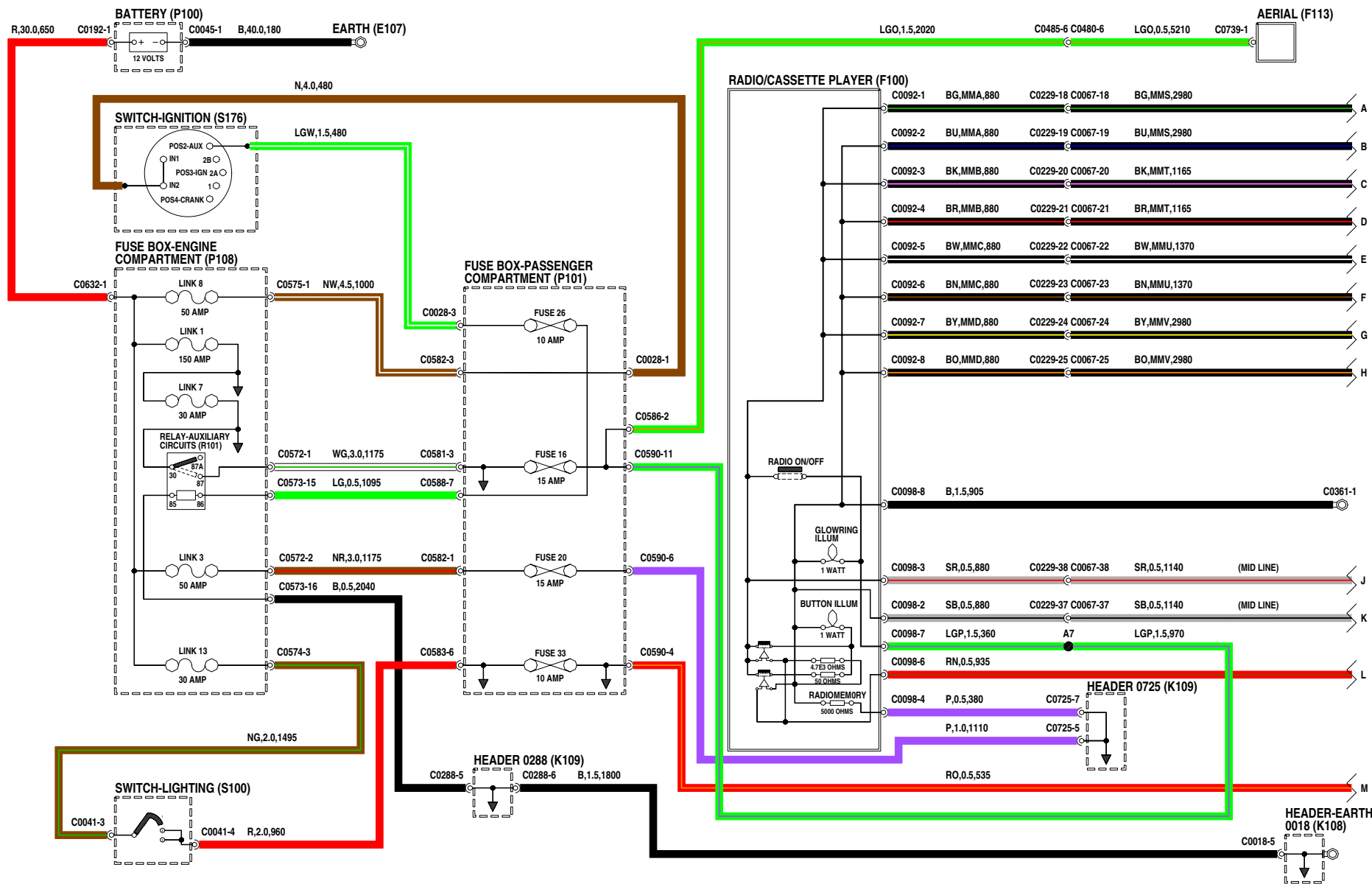
VWR108120-1of2

ACCESSORY SOCKET



AUDIO SYSTEMS

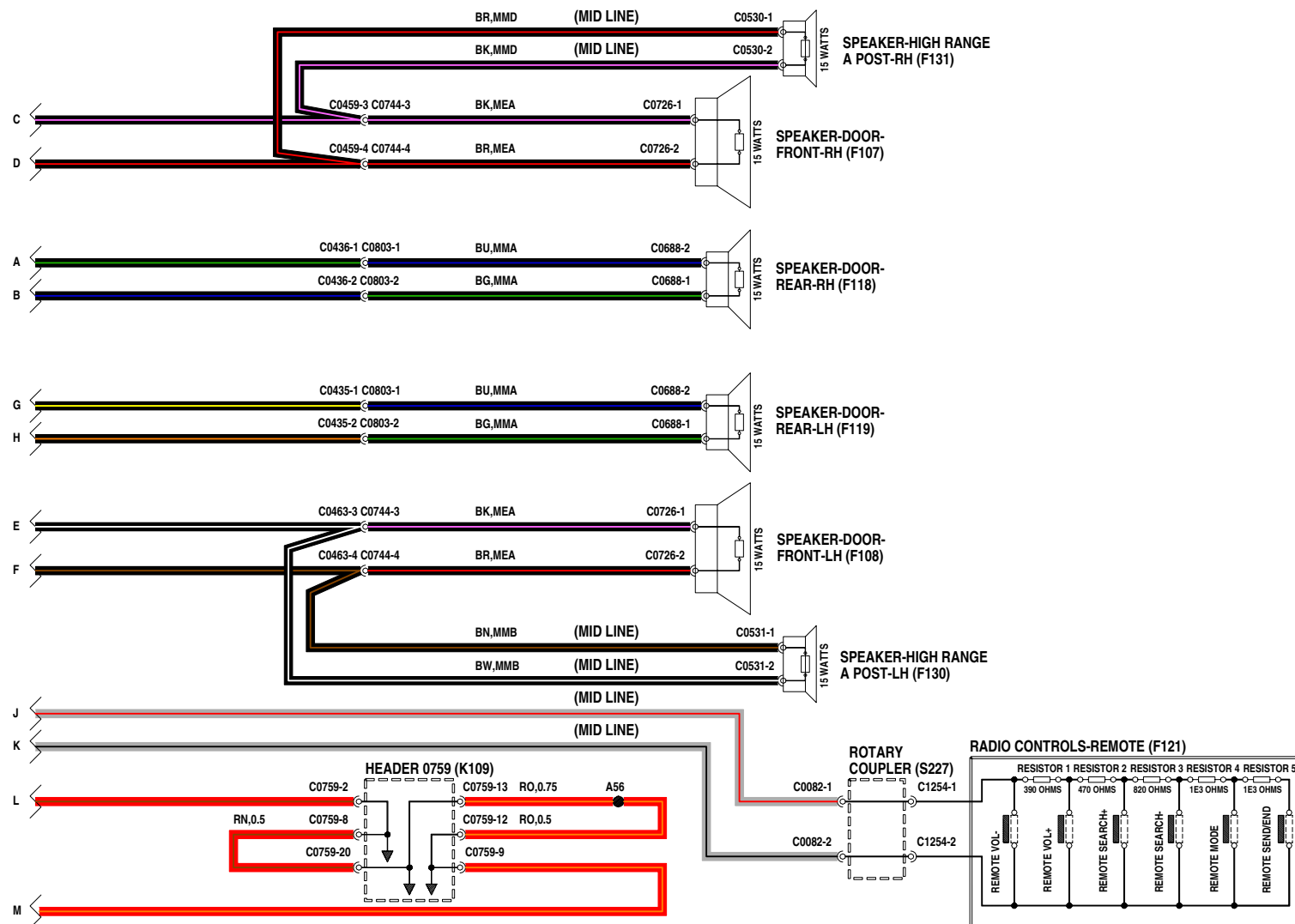
BASE AND MID LINE



VWR108420-1of2

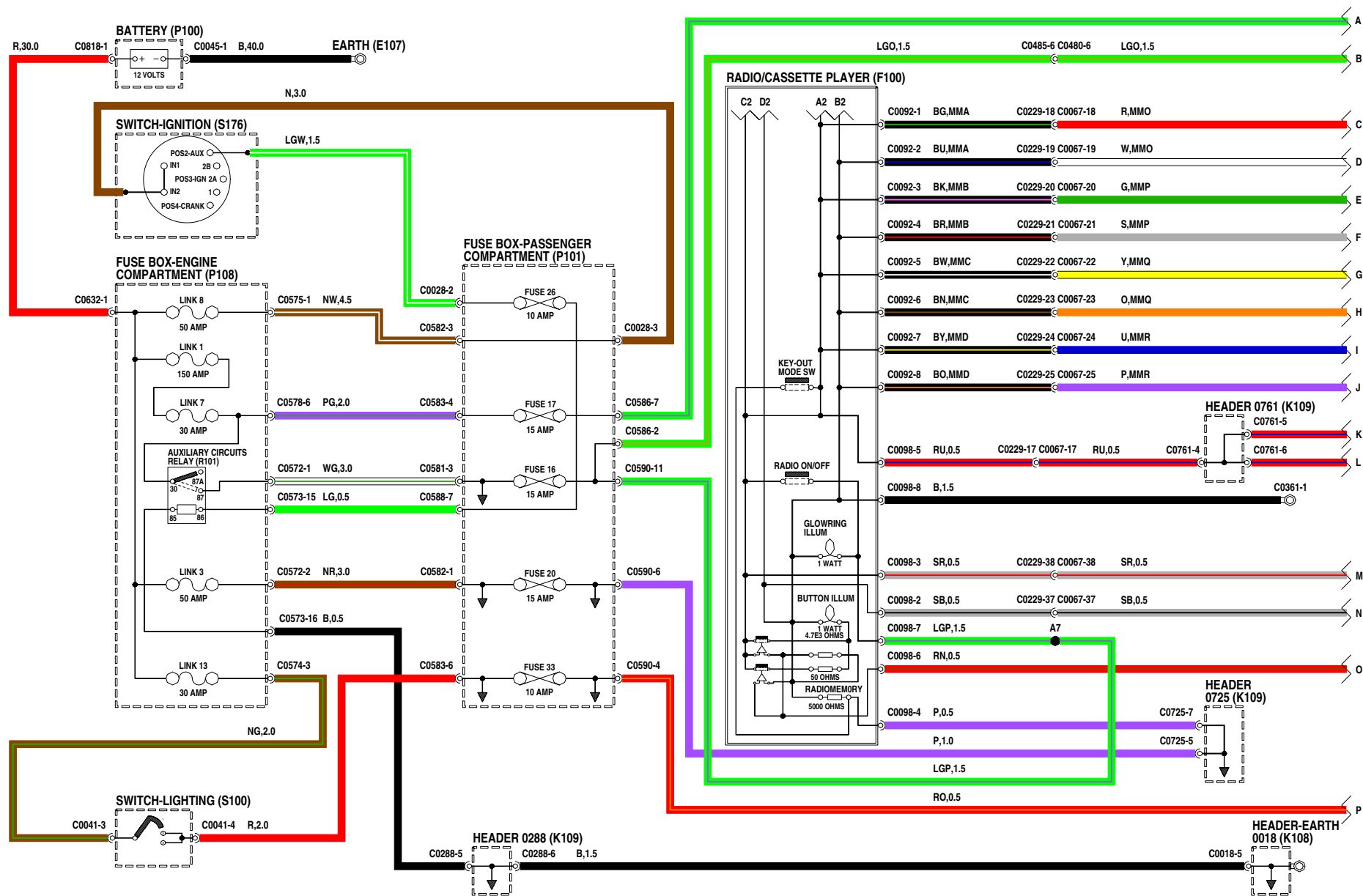
AUDIO SYSTEMS

BASE AND MID LINE



AUDIO SYSTEMS

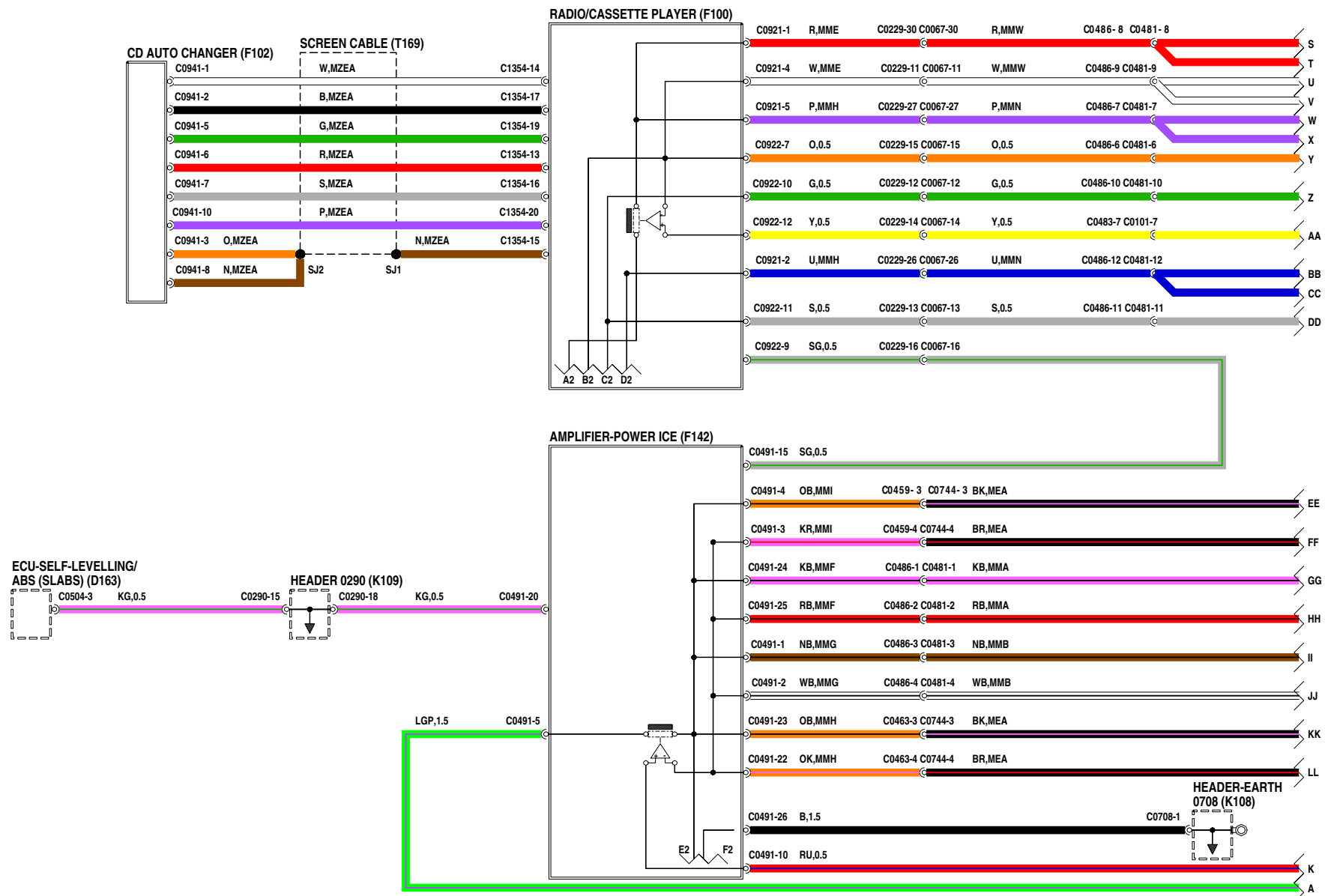
HIGH-LINE - HARMAN AMPLIFIER



VWR108440-1of4

AUDIO SYSTEMS

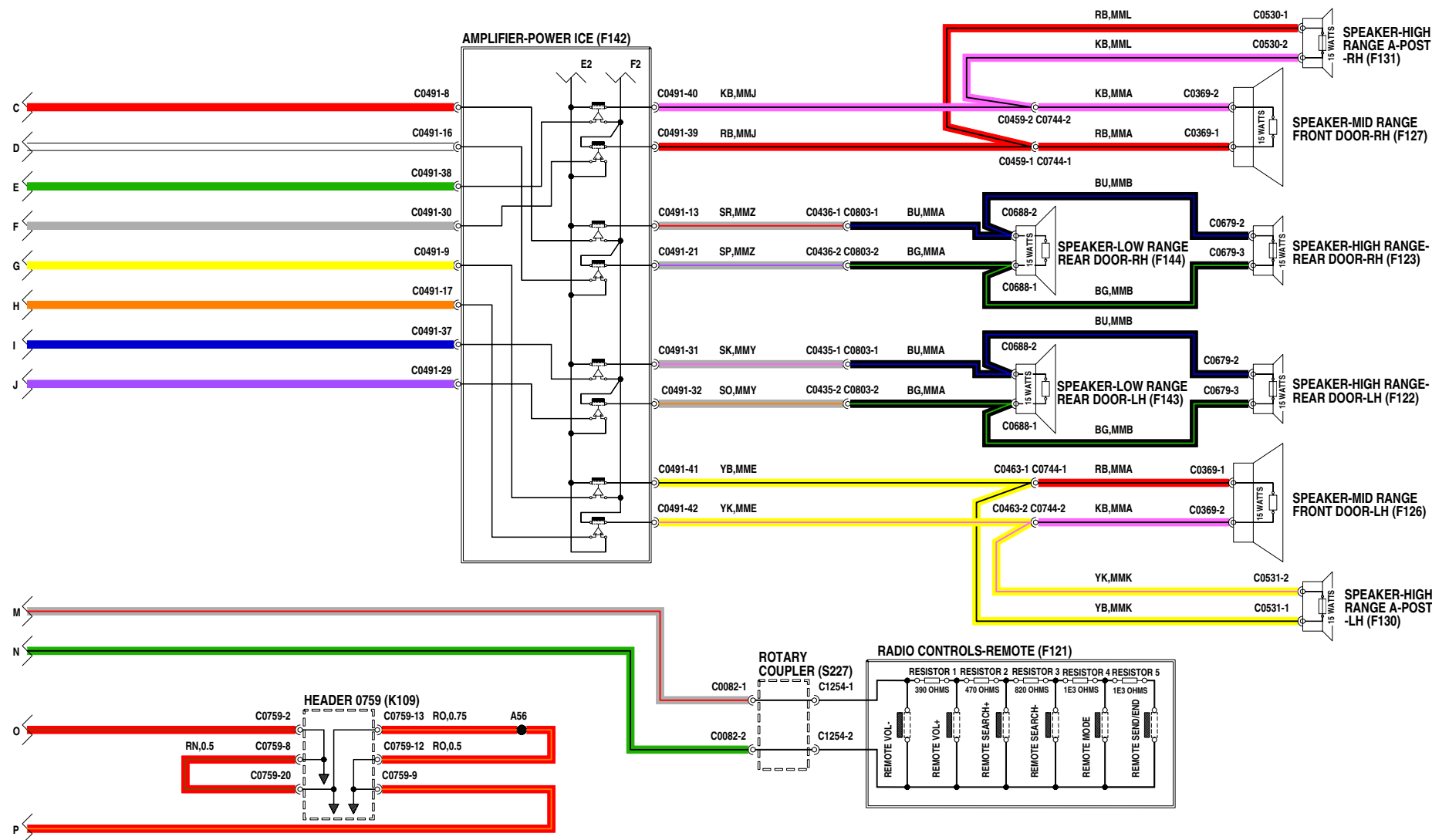
HIGH LINE - HARMAN AMPLIFIER



VWR108440 2x13

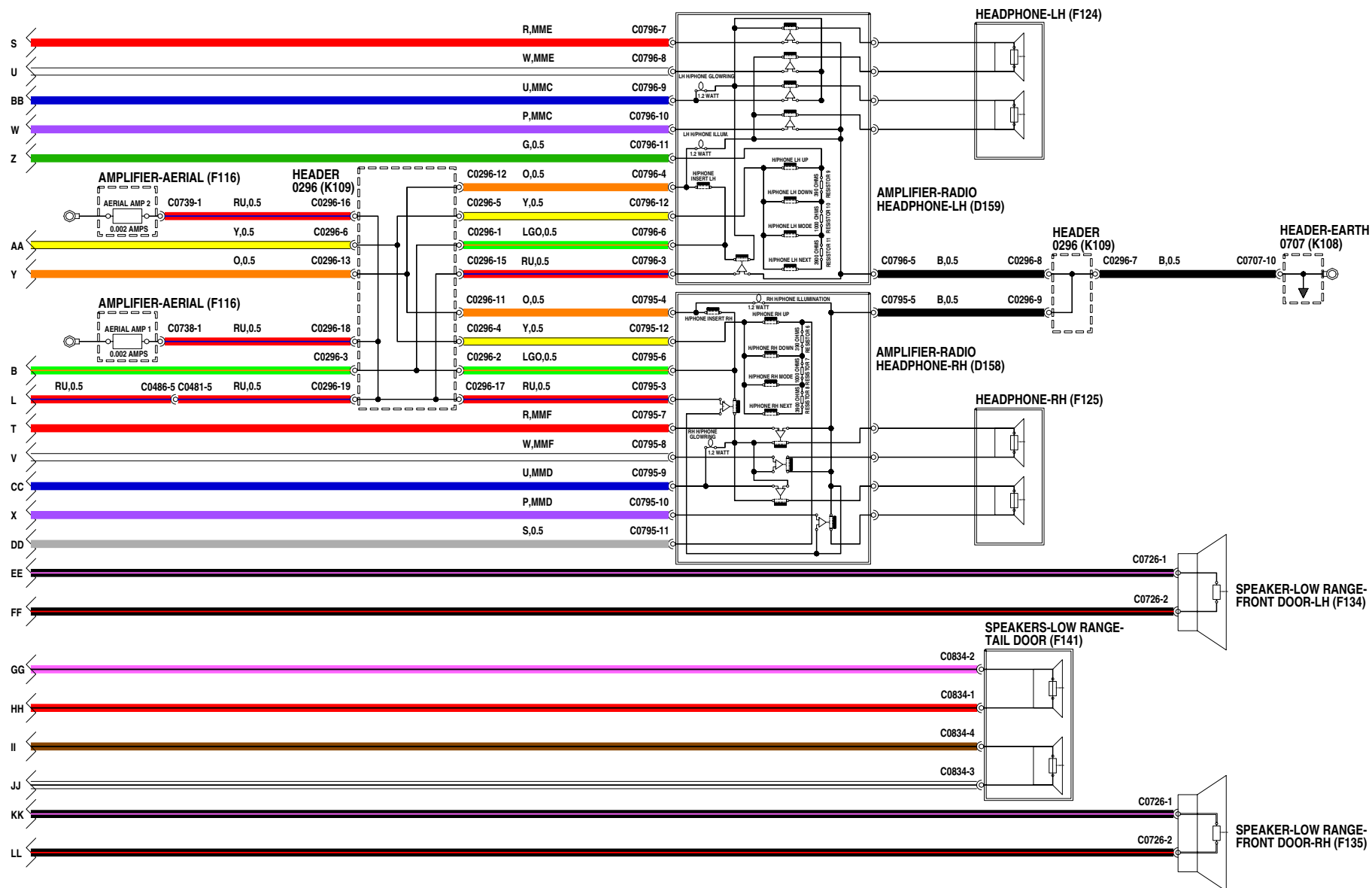
AUDIO SYSTEMS

HIGH LINE - HARMAN AMPLIFIER



AUDIO SYSTEMS

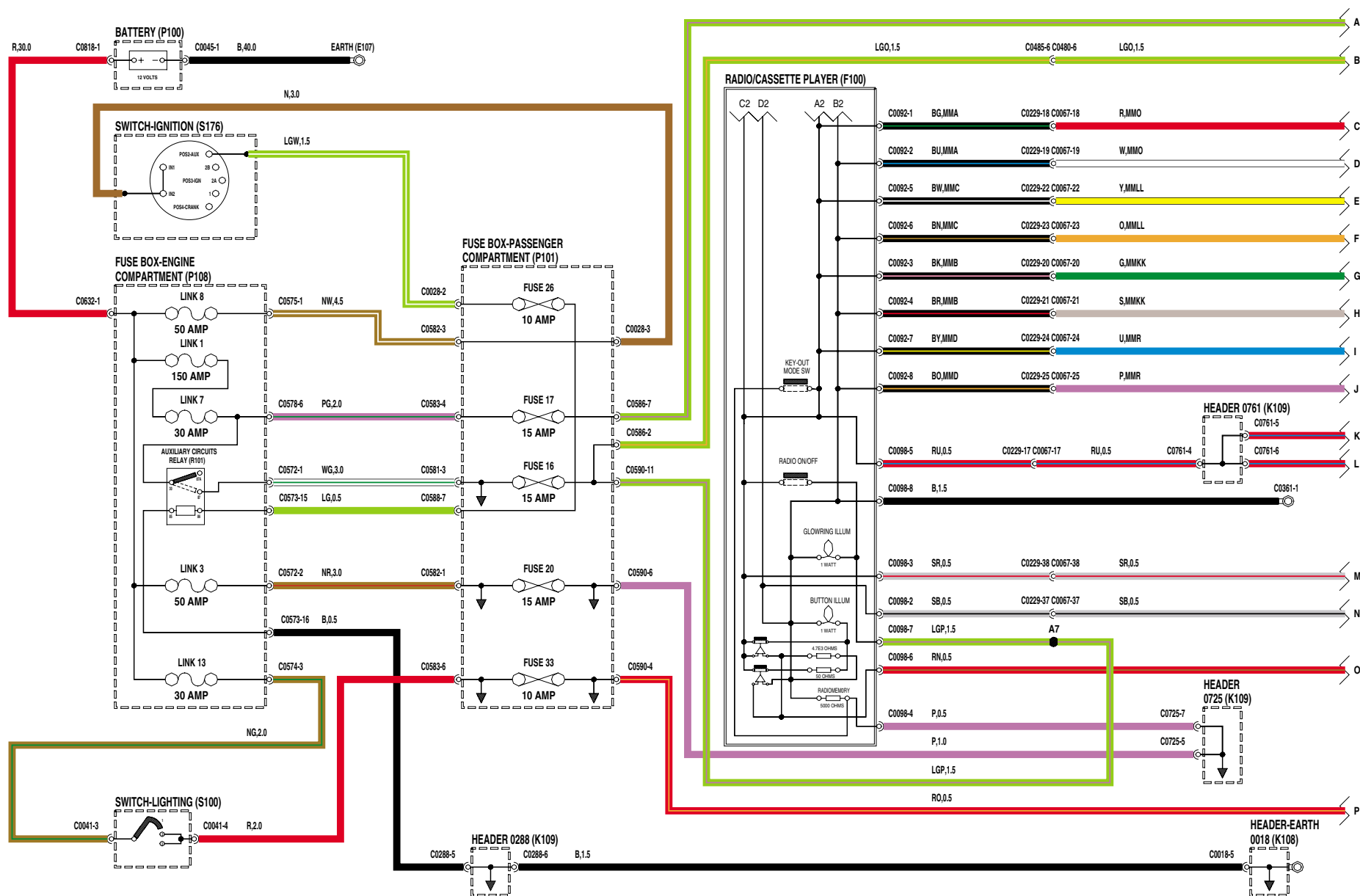
HIGH-LINE - HARMAN AMPLIFIER



VWR108440-4of4

AUDIO SYSTEMS

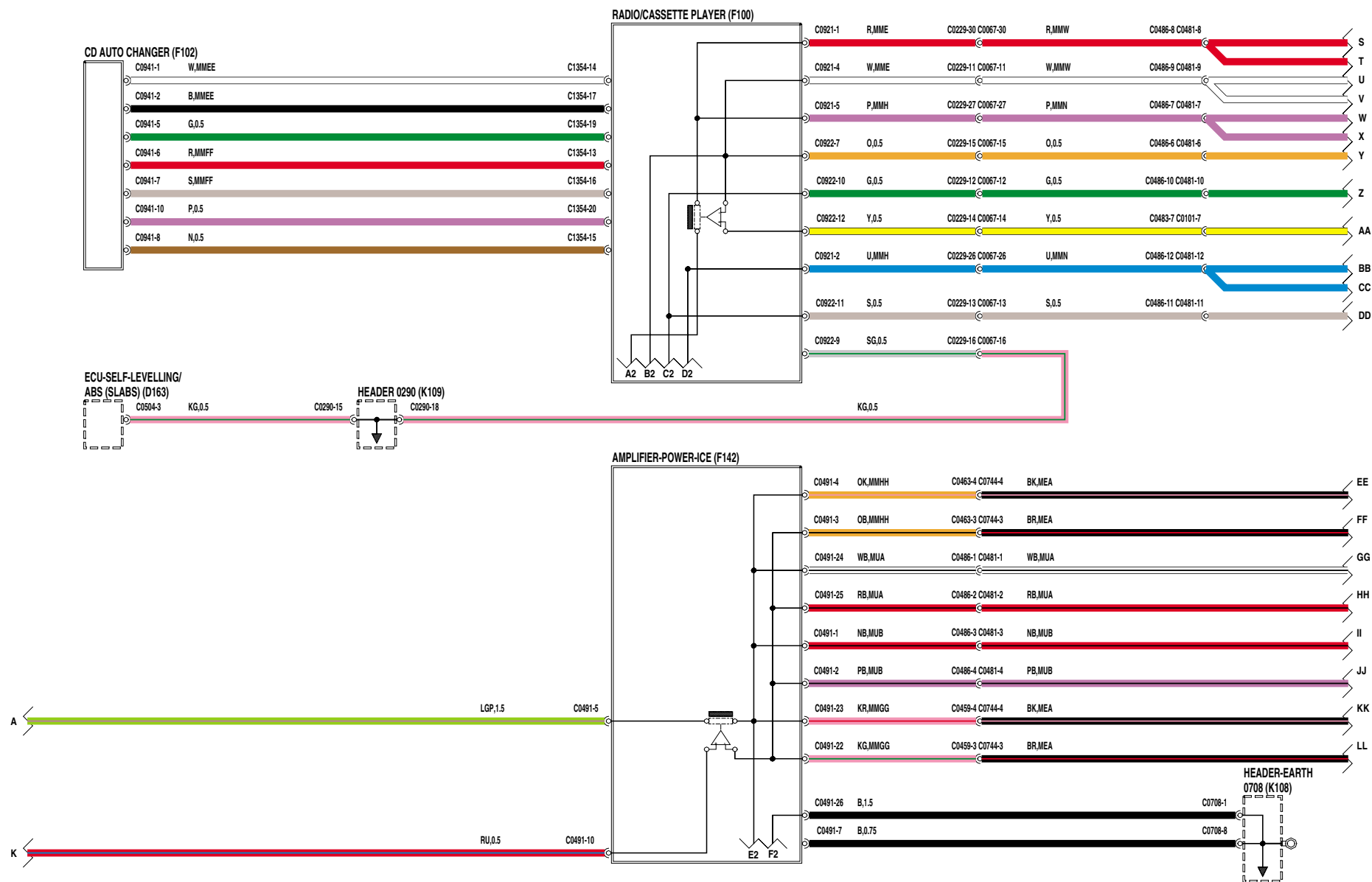
HIGH LINE - LEAR AMPLIFIER



VWR001480-A-01

AUDIO SYSTEMS

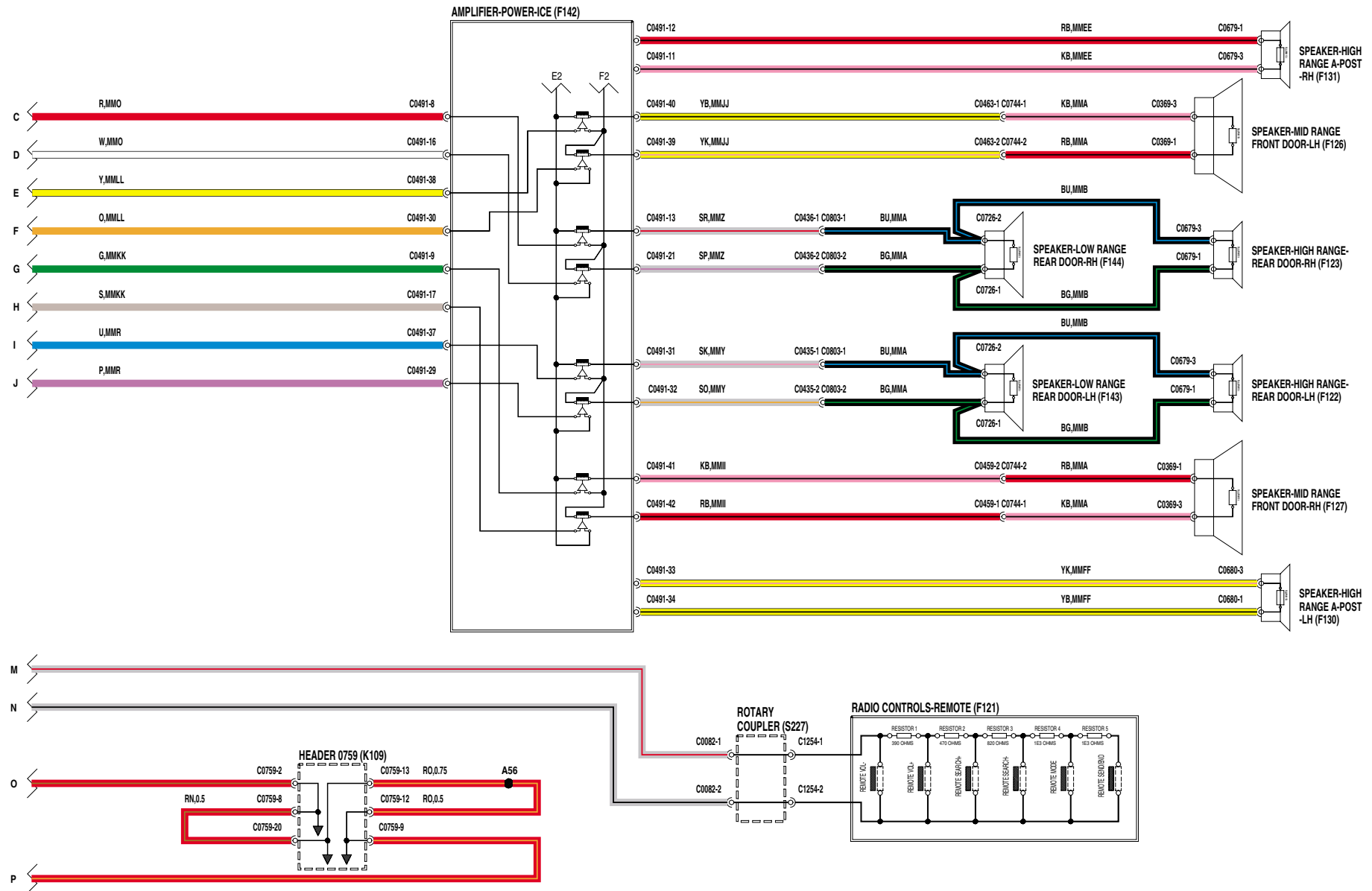
HIGH LINE - LEAR AMPLIFIER



VWR001480-A-02

AUDIO SYSTEMS

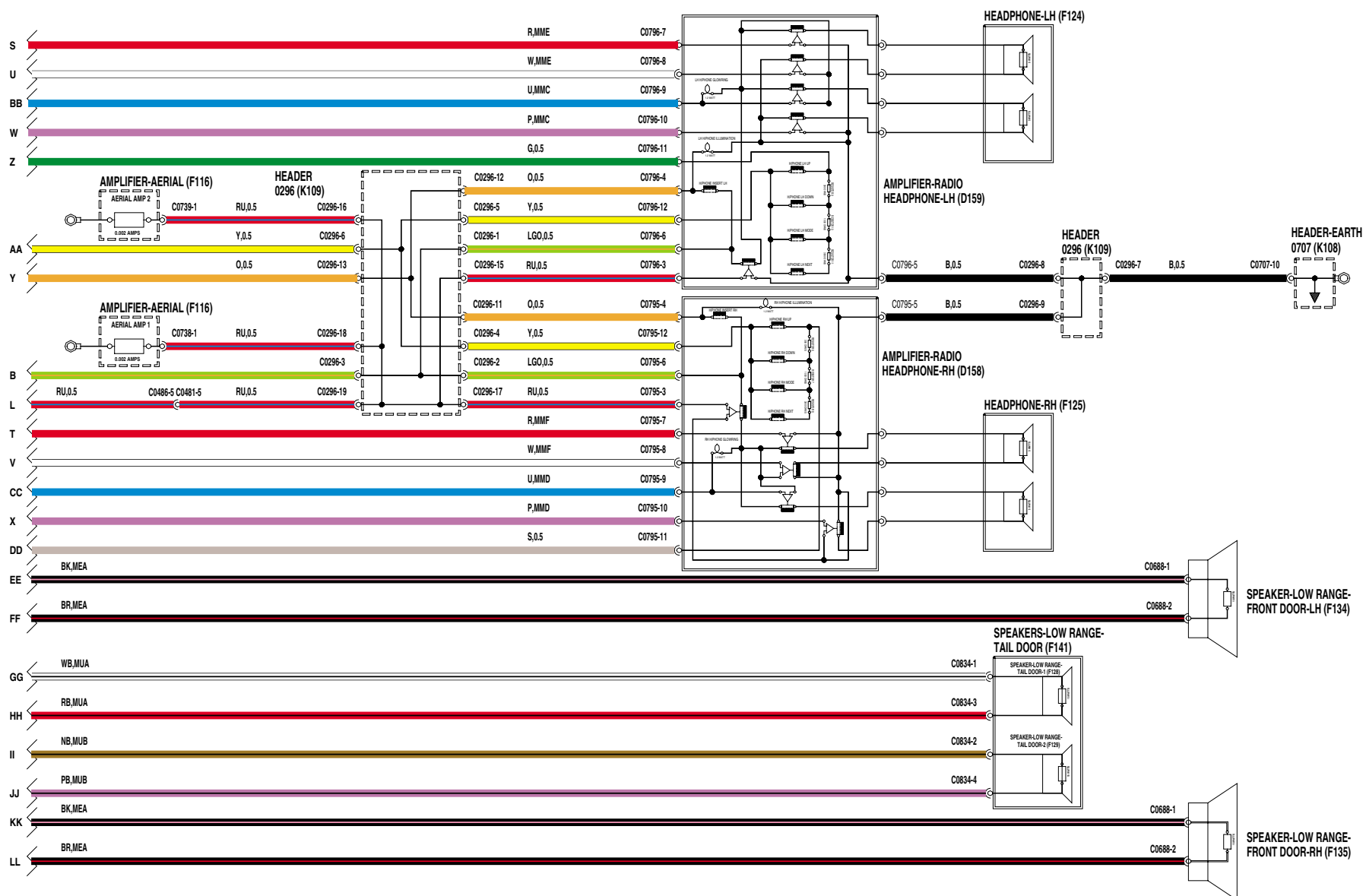
HIGH LINE - LEAR AMPLIFIER



VWR001480-A-03

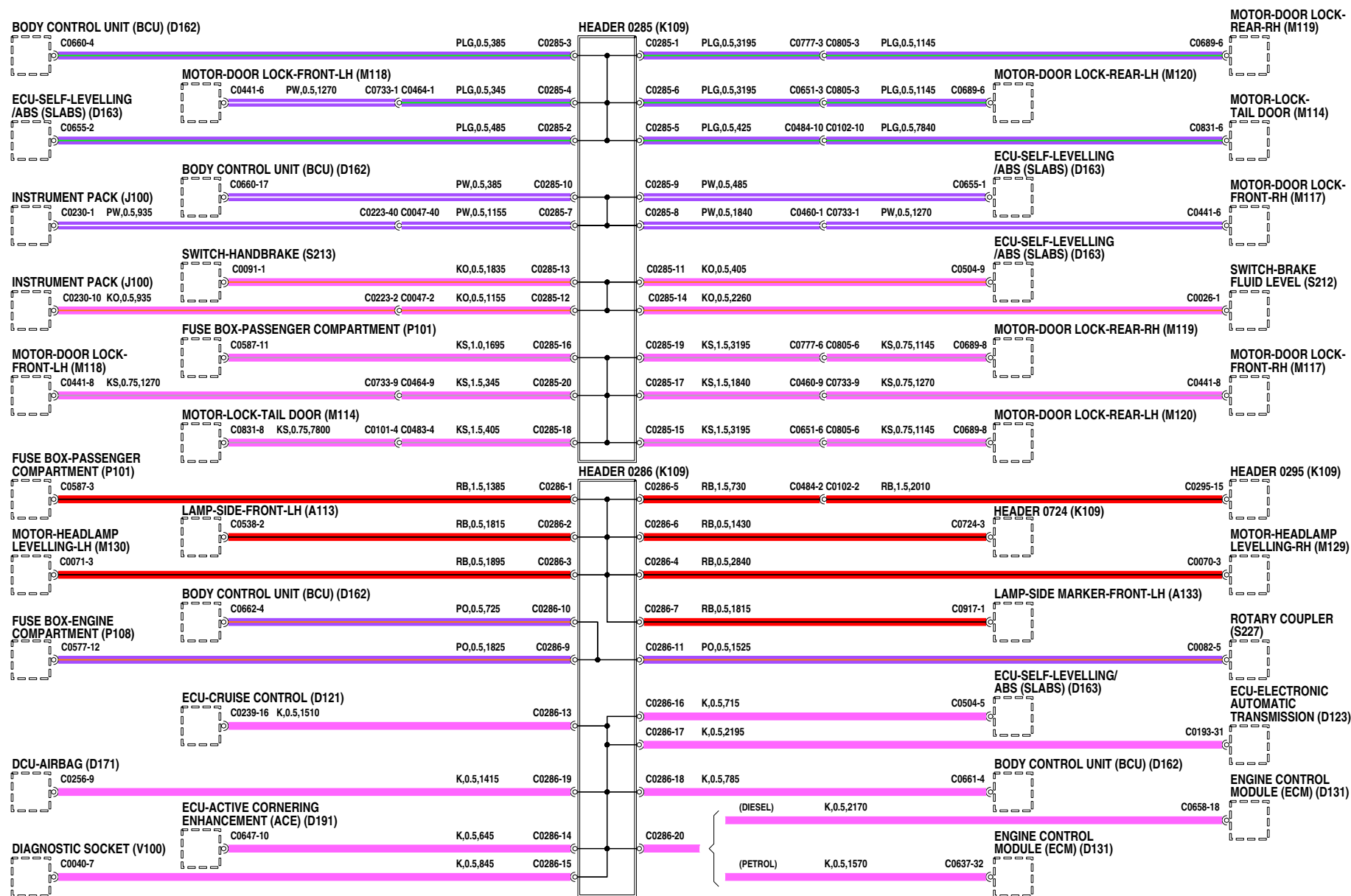
AUDIO SYSTEMS

HIGH LINE - LEAR AMPLIFIER



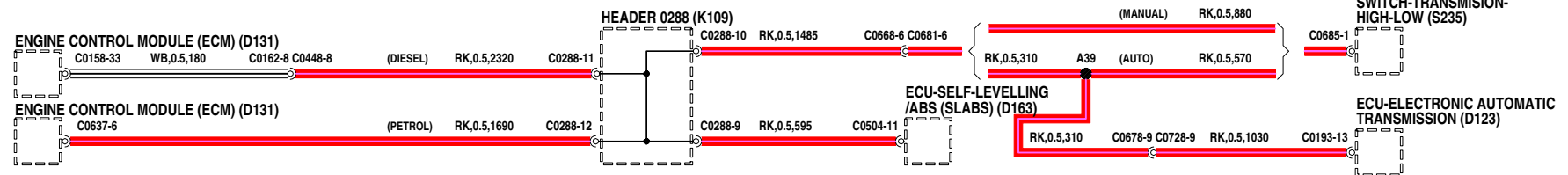
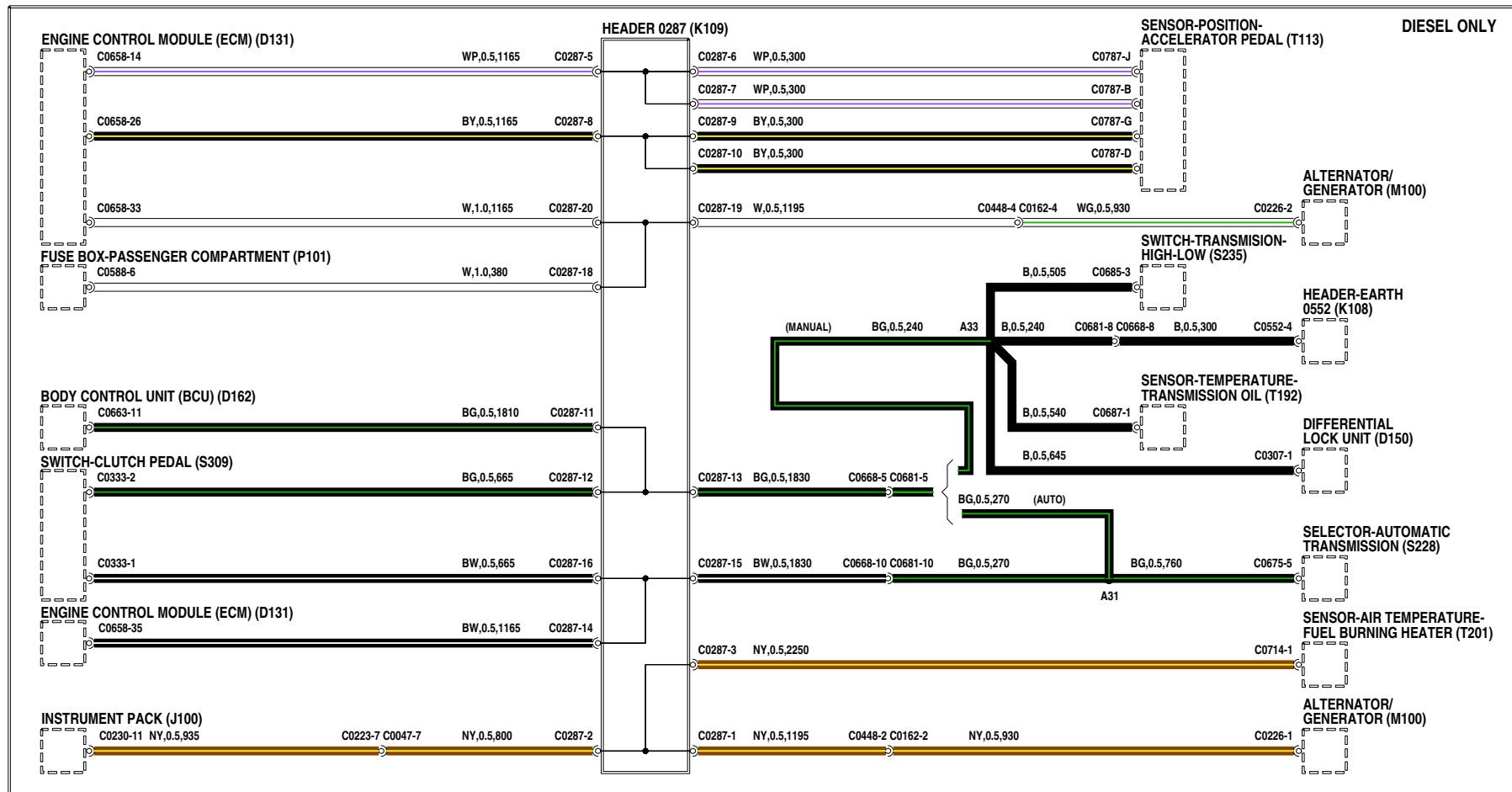
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HEADER JOINTS

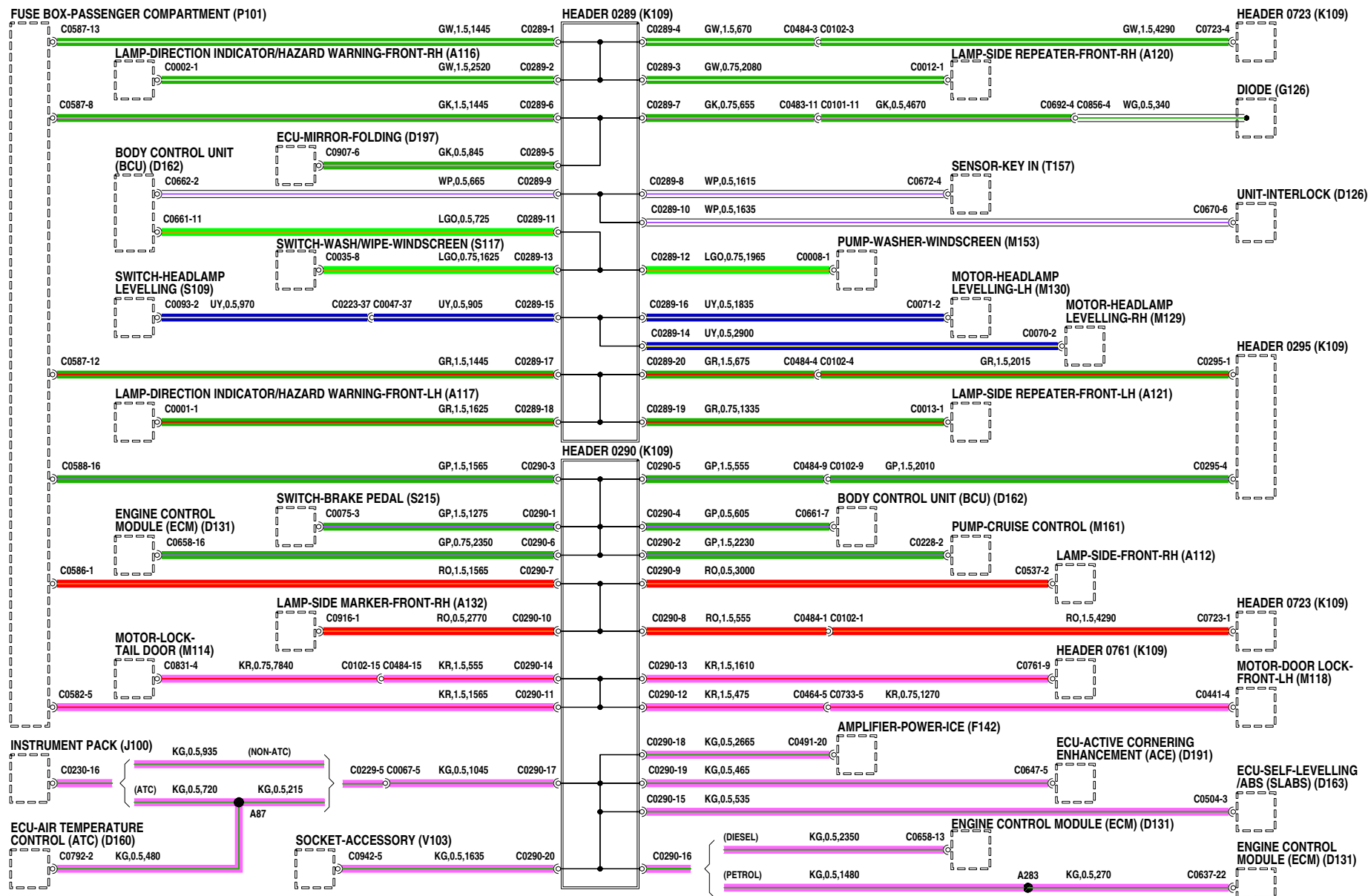


VWR108380-1 of 9

HEADER JOINTS

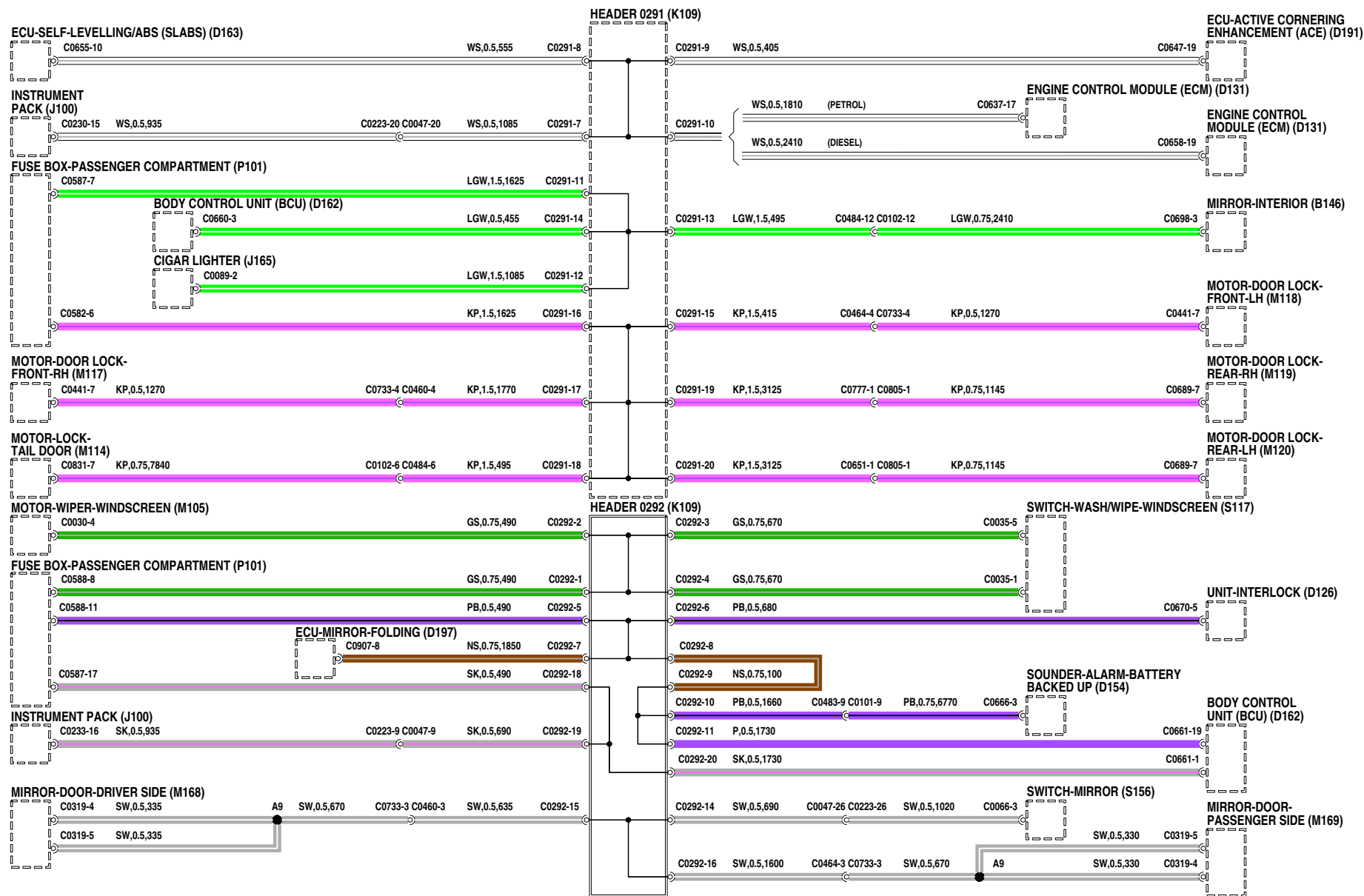


HEADER JOINTS



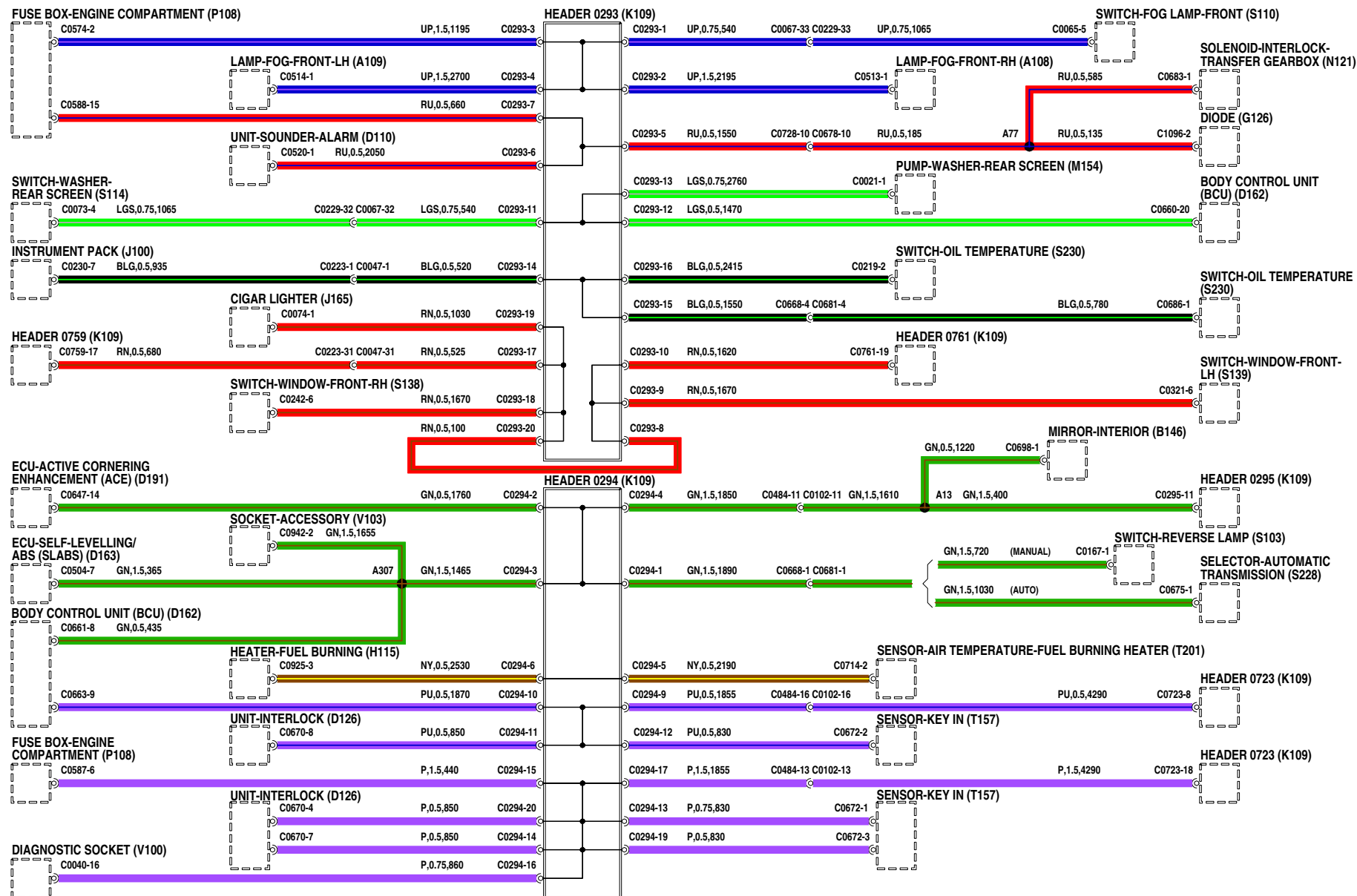
VWR108380-3of9

HEADER JOINTS



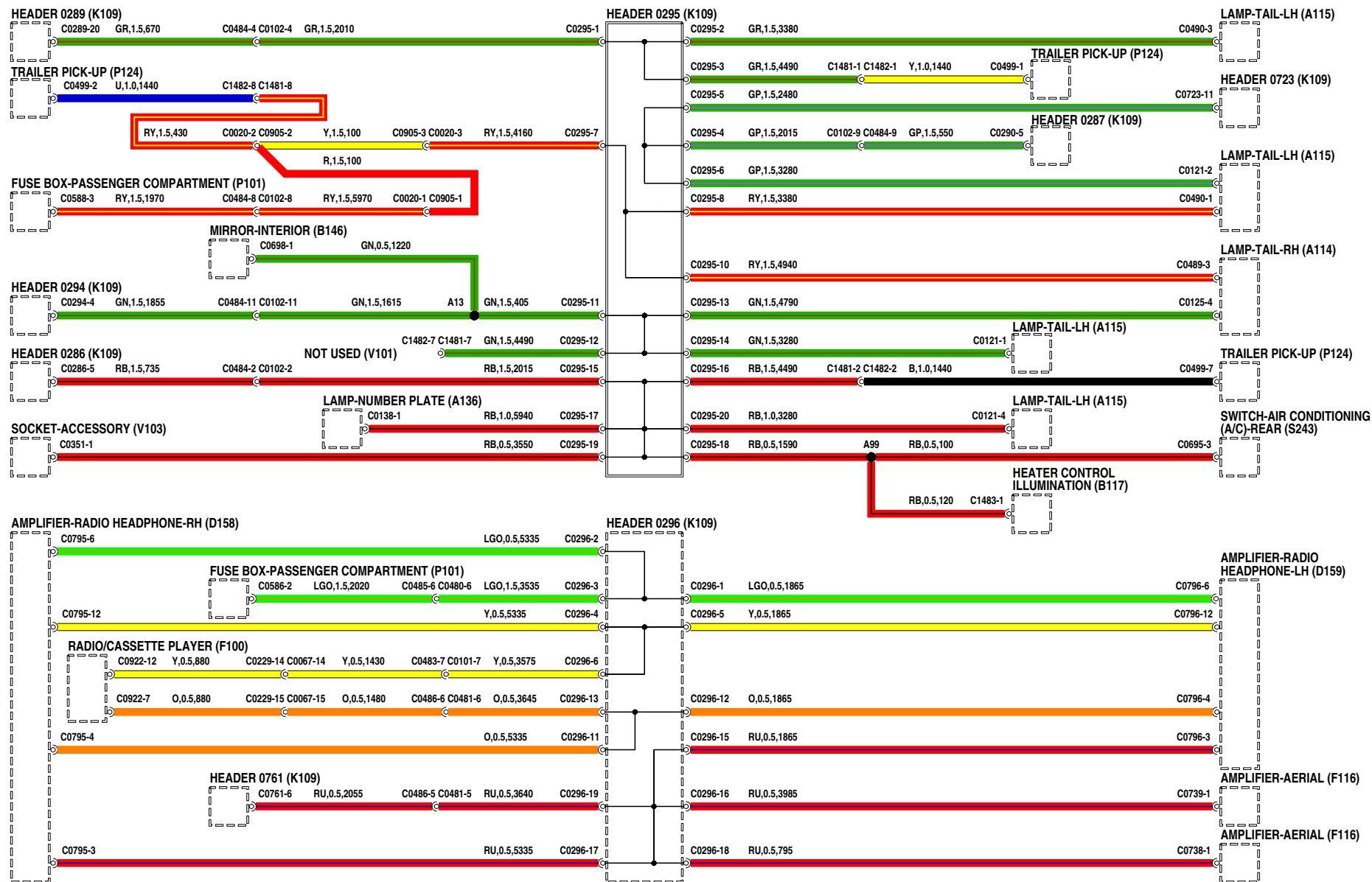
VWR108380-4-019

HEADER JOINTS



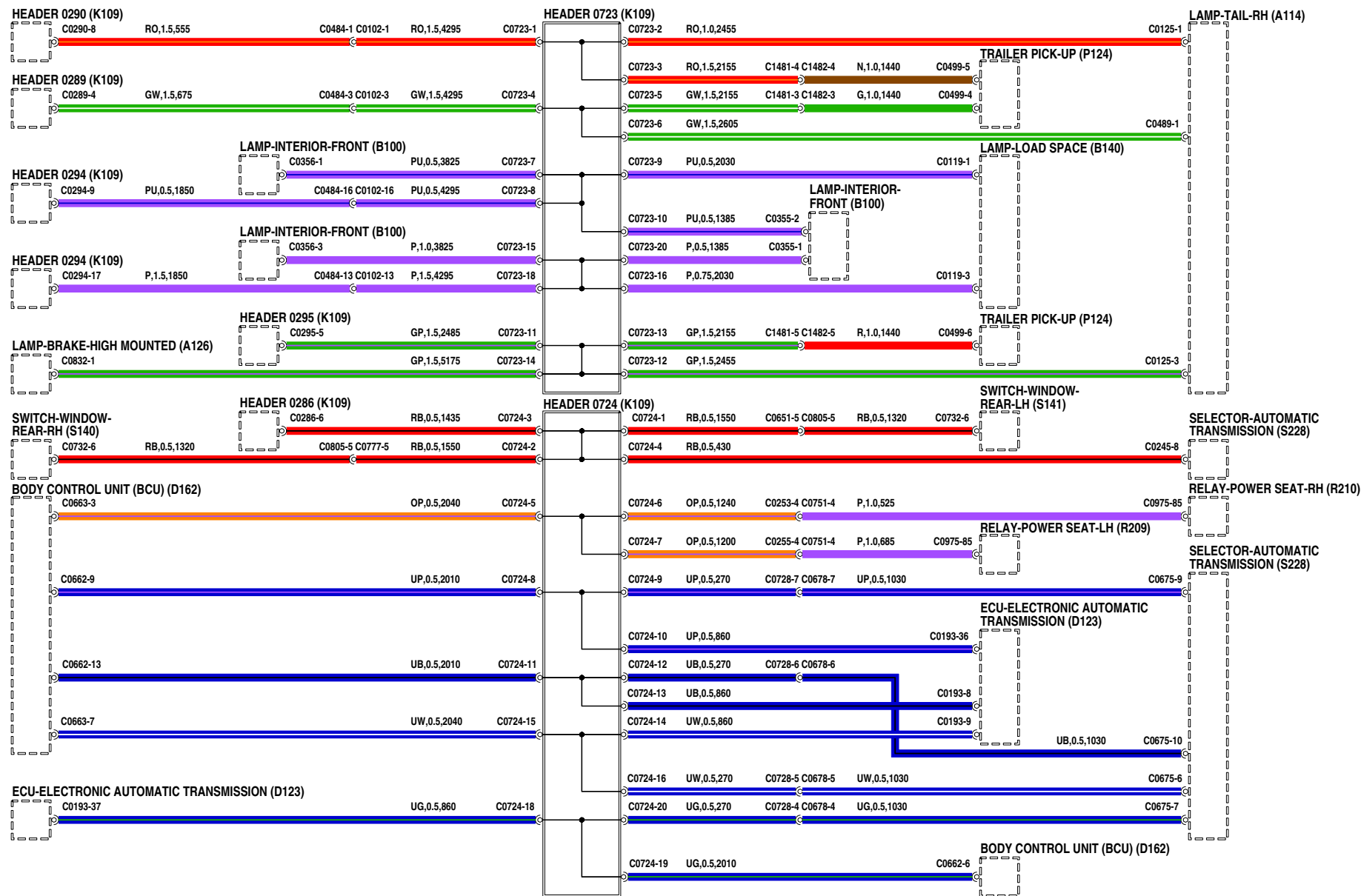
VWR108380-5019

HEADER JOINTS



VWR108380-6019

HEADER JOINTS



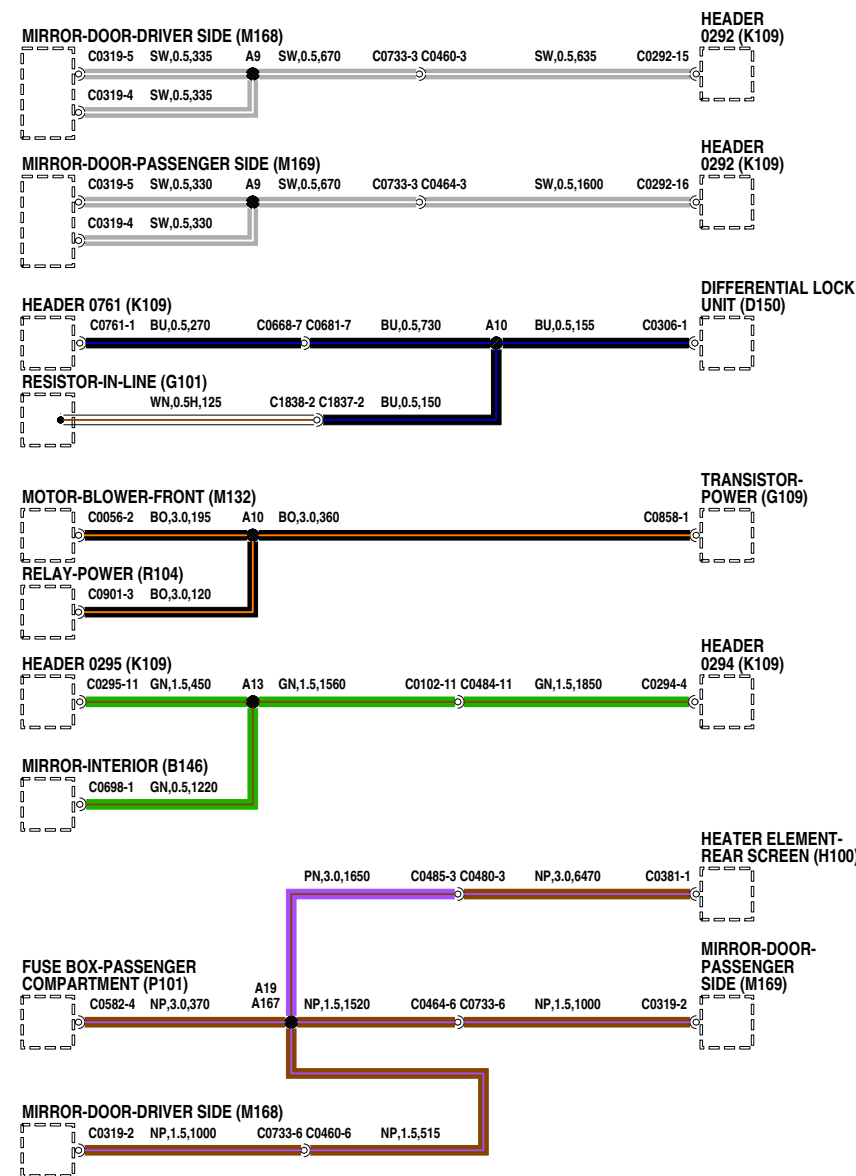
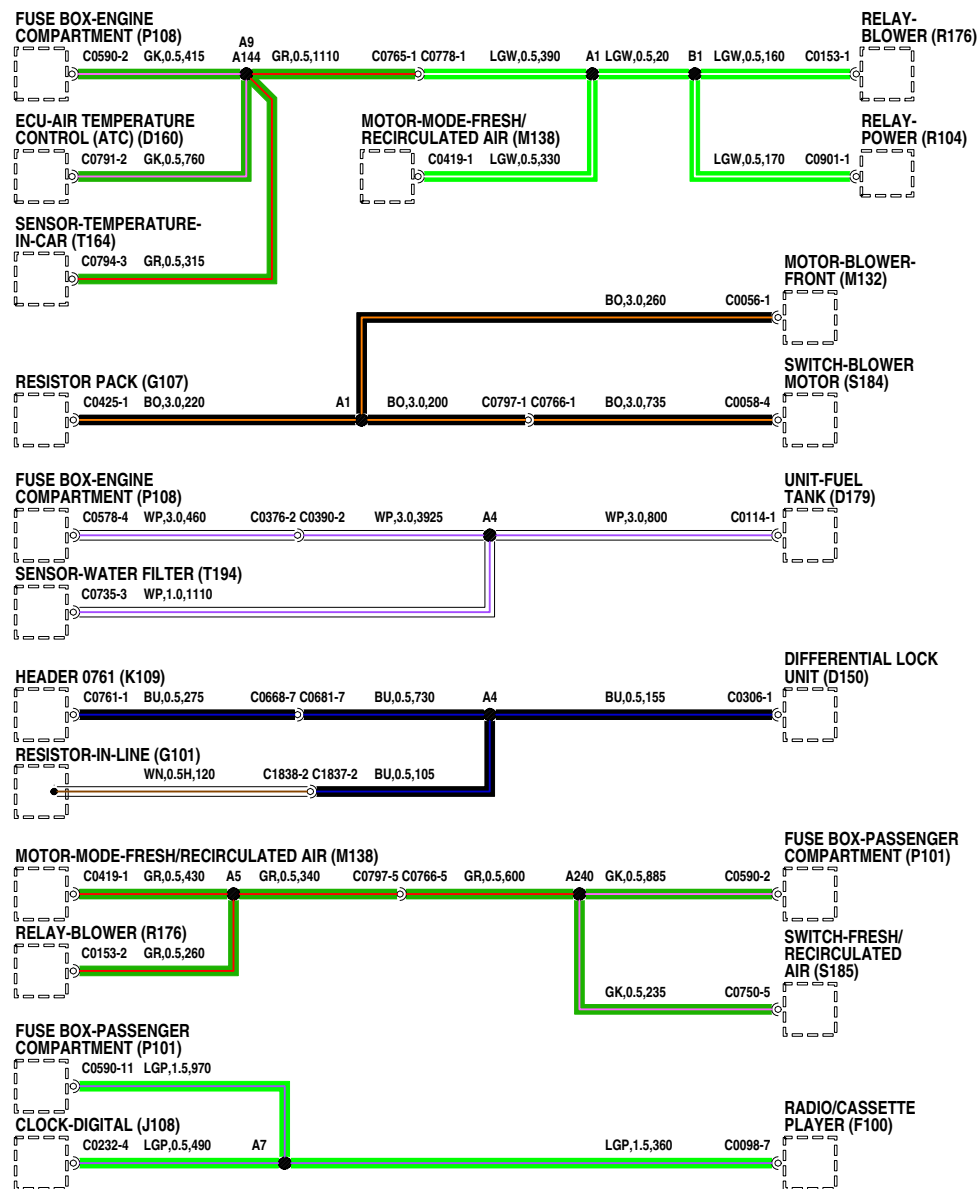
VWR108360-7of9



HEADER JOINTS

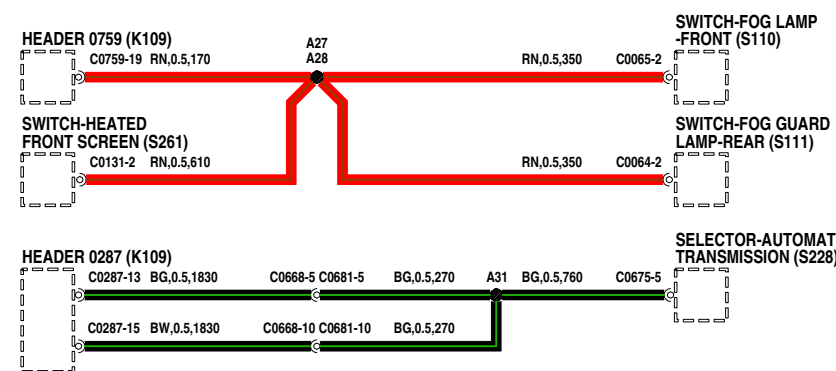
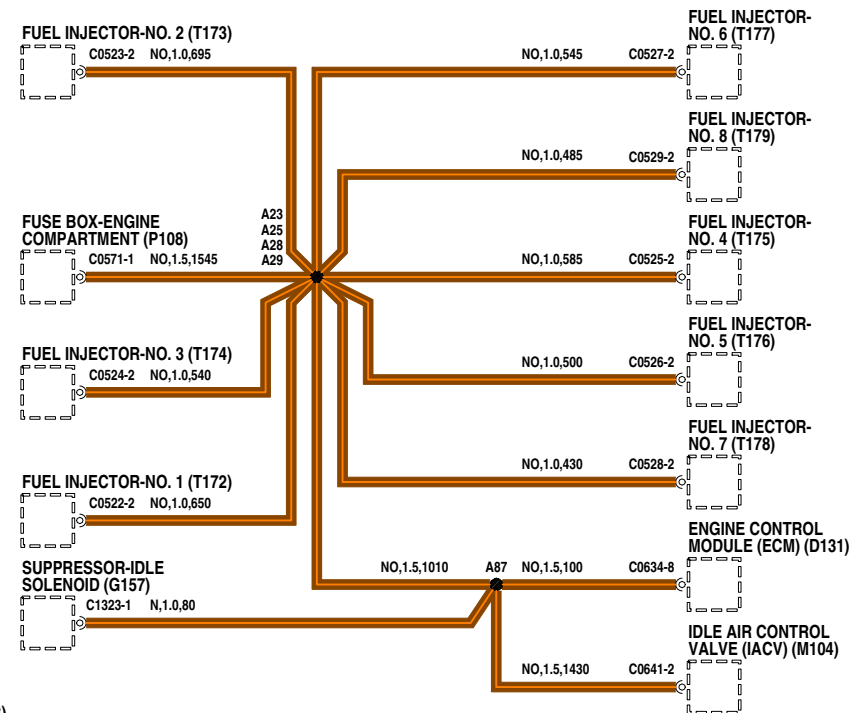
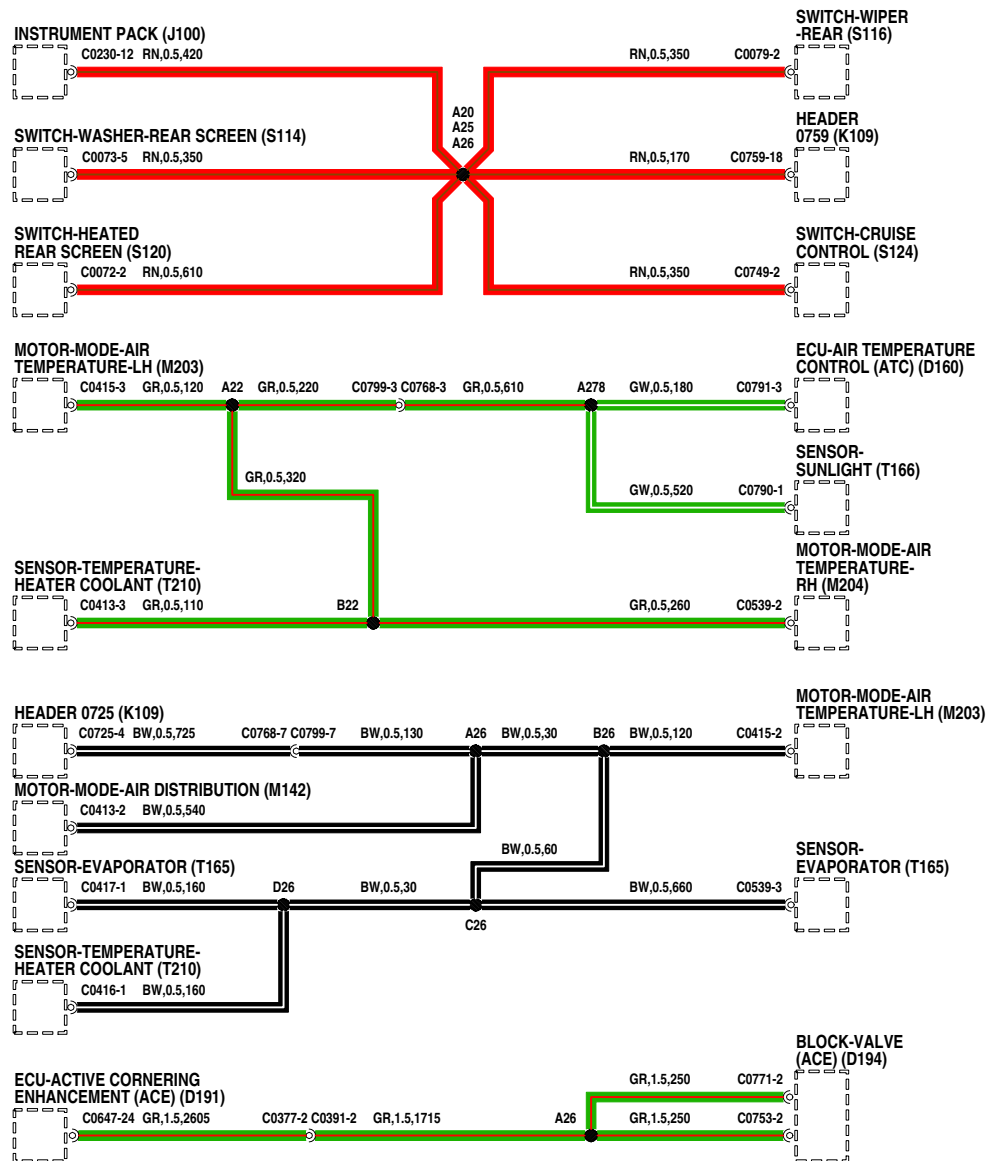


SPLICES AND CENTRE TAPS

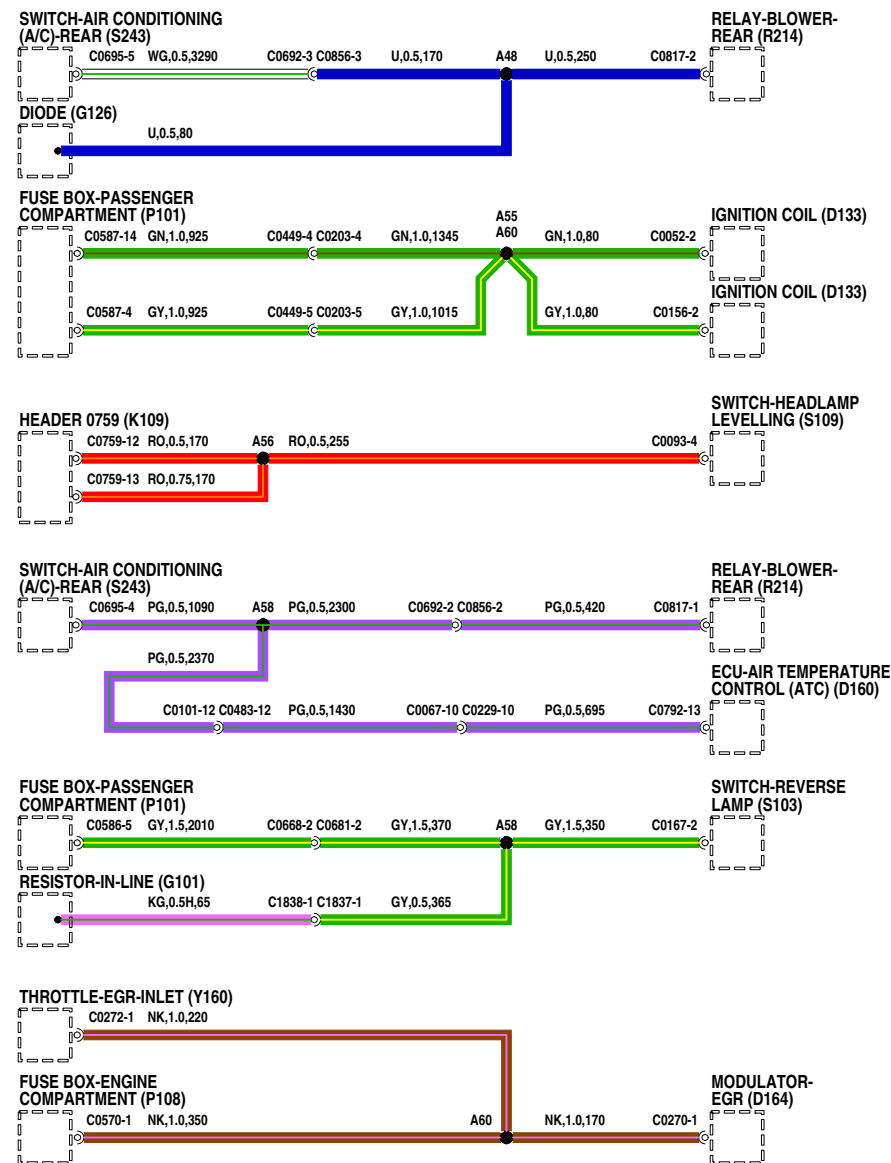
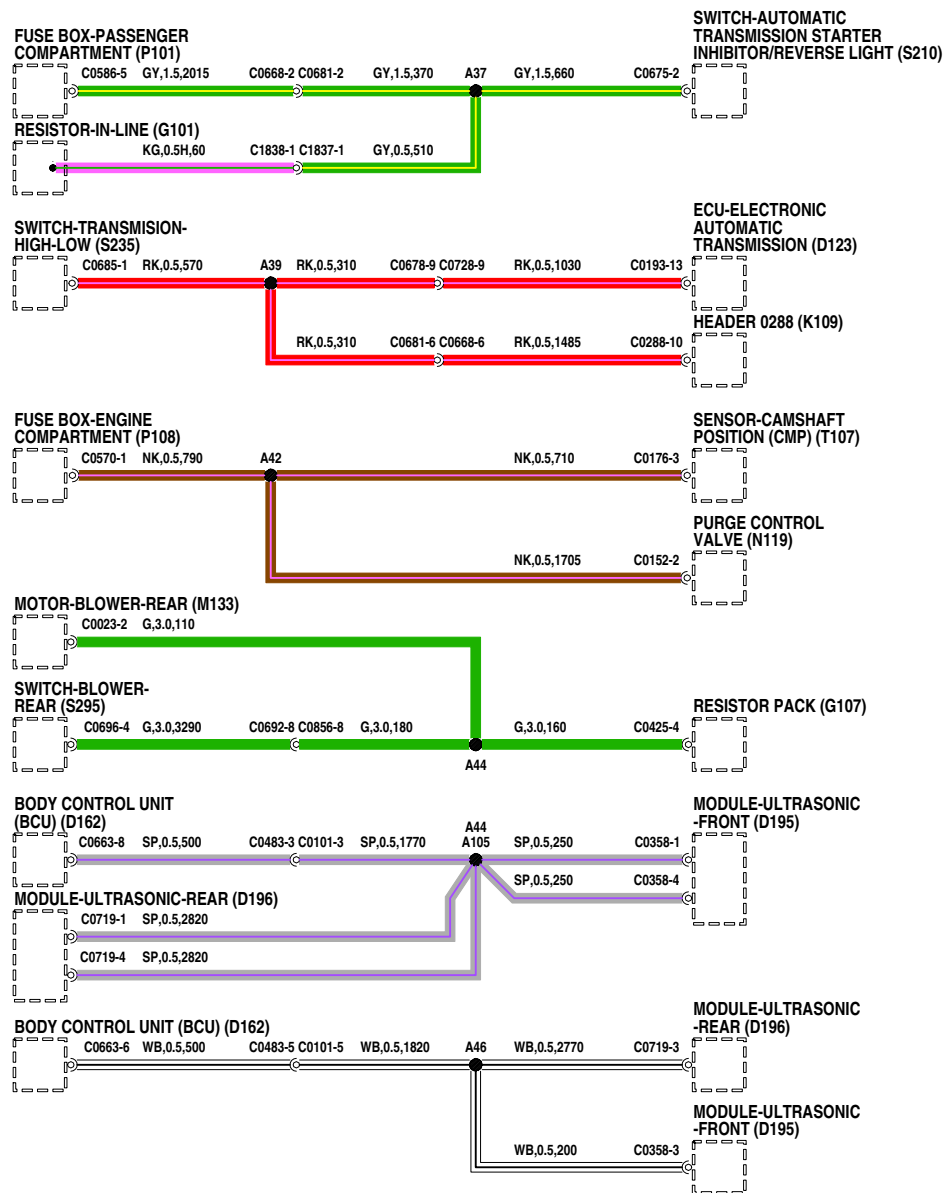


VWR108550-1a05

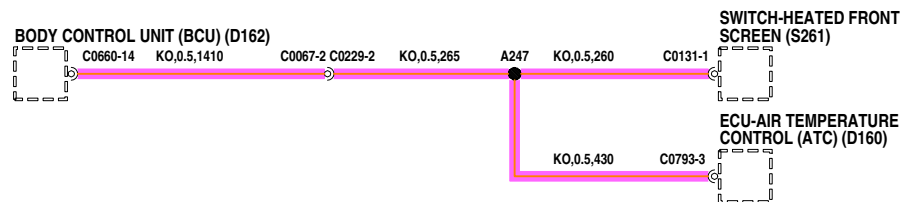
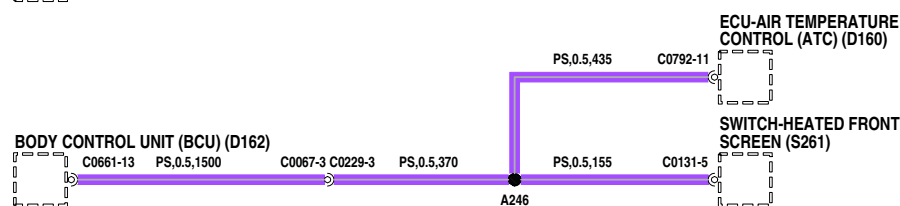
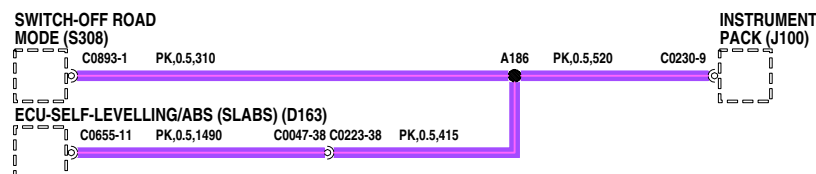
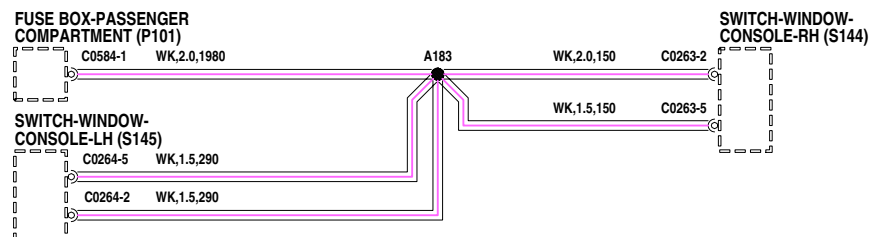
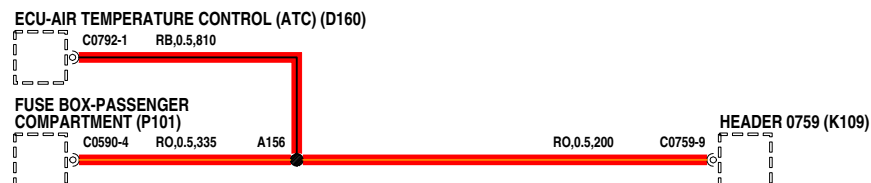
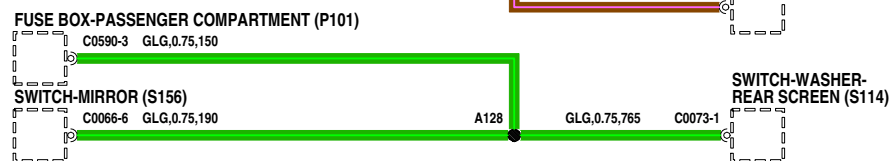
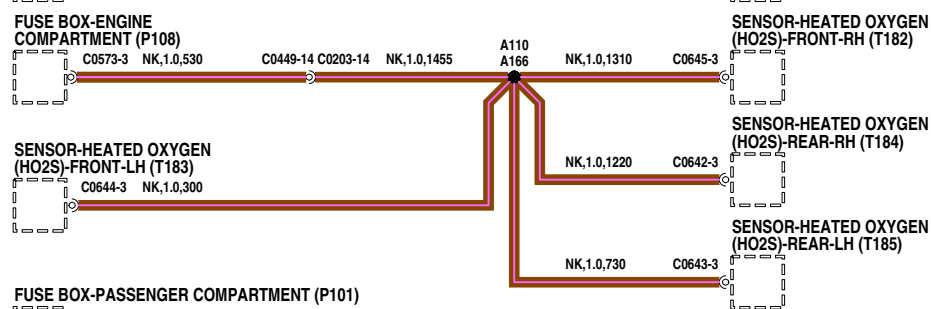
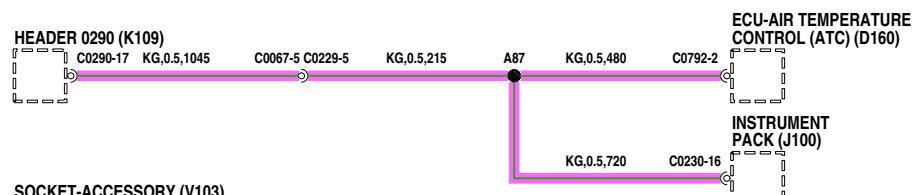
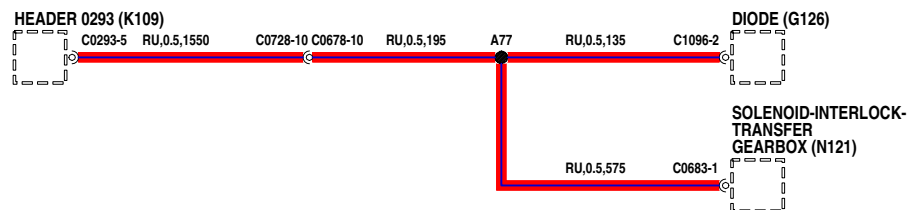
SPLICES AND CENTRE TAPS



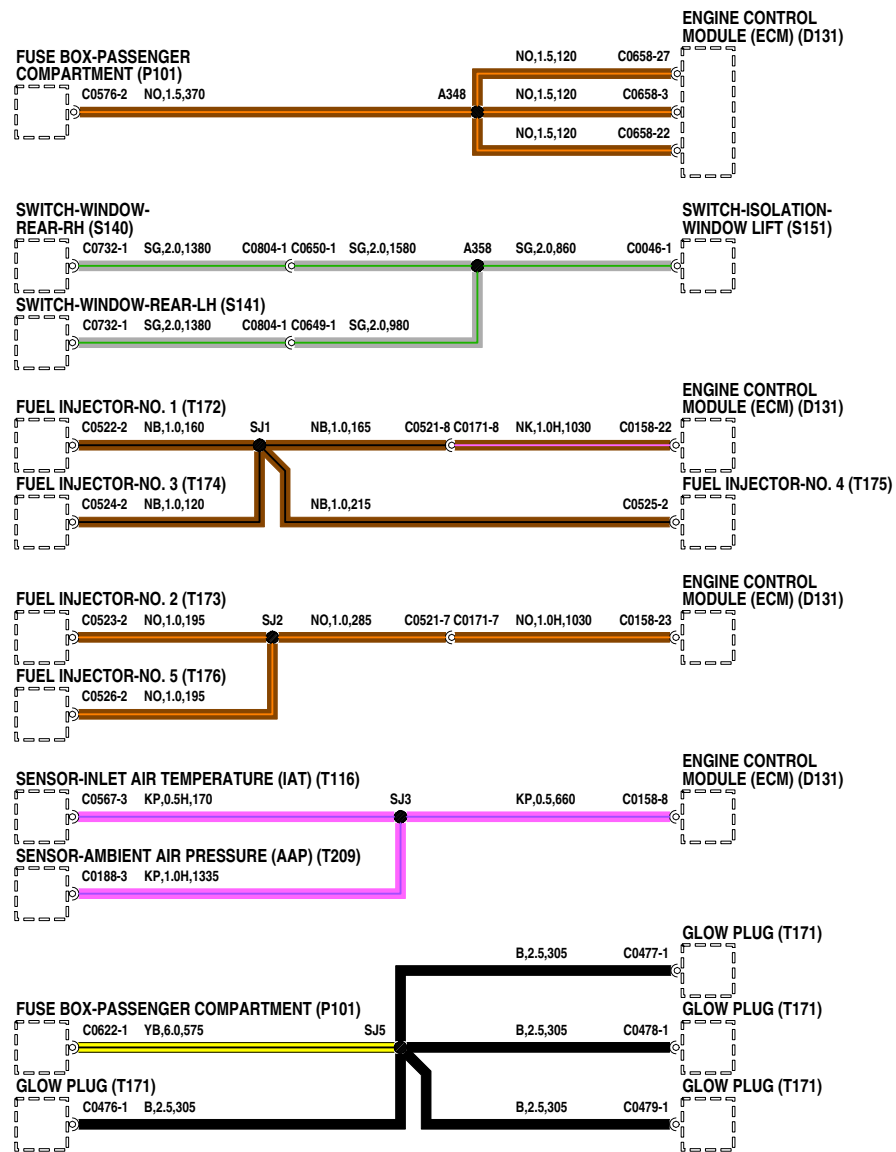
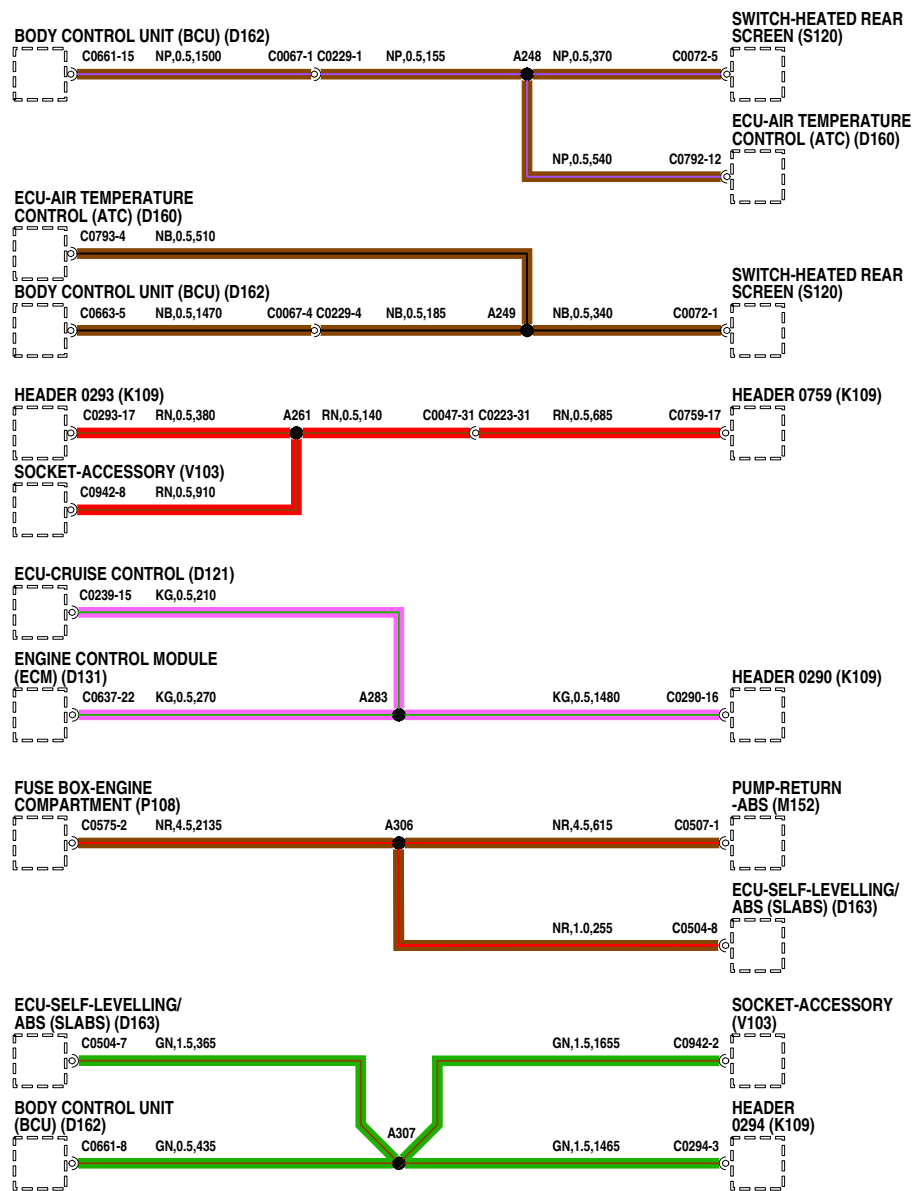
SPLICES AND CENTRE TAPS



SPLICES AND CENTRE TAPS



SPLICES AND CENTRE TAPS



VWR108550-5a15