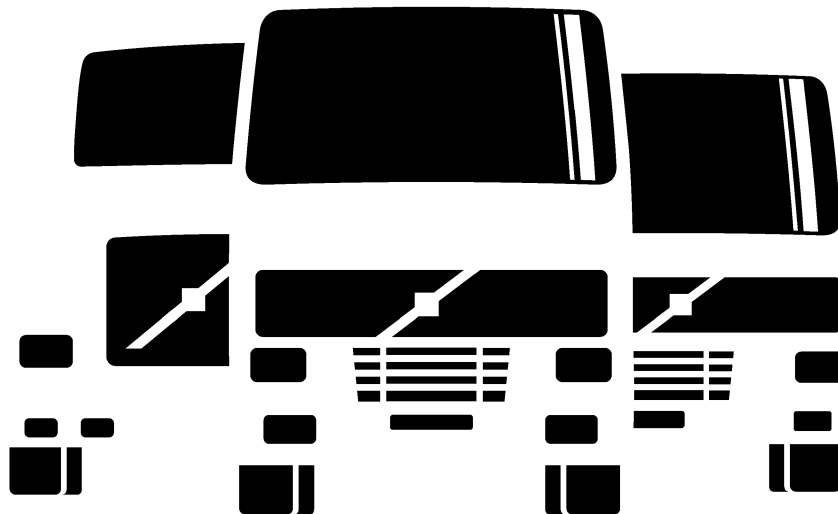


# Service Manual Trucks

Group **37**

Electrical Schematic  
VN, VHD VERSION2

From Build Date December 2004





# Foreword

The descriptions and service procedures contained in this manual are based on designs and methods studies carried out up to March 2005.

The products are under continuous development. Vehicles and components produced after the above date may therefore have different specifications and repair methods. When this is believed to have a significant bearing on this manual, supplementary service bulletins will be issued to cover the changes.

The new edition of this manual will update the changes.

In service procedures where the title incorporates an operation number, this is a reference to an V.S.T. (Volvo Standard Times).

Service procedures which do not include an operation number in the title are for general information and no reference is made to an V.S.T.

Each section of this manual contains specific safety information and warnings which must be reviewed before performing any procedure. If a printed copy of a procedure is made, be sure to also make a printed copy of the safety information and warnings that relate to that procedure. The following levels of observations, cautions and warnings are used in this Service Documentation:

**Note:** Indicates a procedure, practice, or condition that must be followed in order to have the vehicle or component function in the manner intended.

**Caution:** Indicates an unsafe practice where damage to the product could occur.

**Warning:** Indicates an unsafe practice where personal injury or severe damage to the product could occur.

**Danger:** Indicates an unsafe practice where serious personal injury or death could occur.

**Volvo Trucks North America, Inc.**  
Greensboro, NC USA

**Order number: PV776-20 023503**

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# VN, VHD

## Electrical Schematics

For instructions on using the schematics, see service information on “Wiring Diagram User Guide” in Group 37.

Also see:

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“Reference List: Components” page 159

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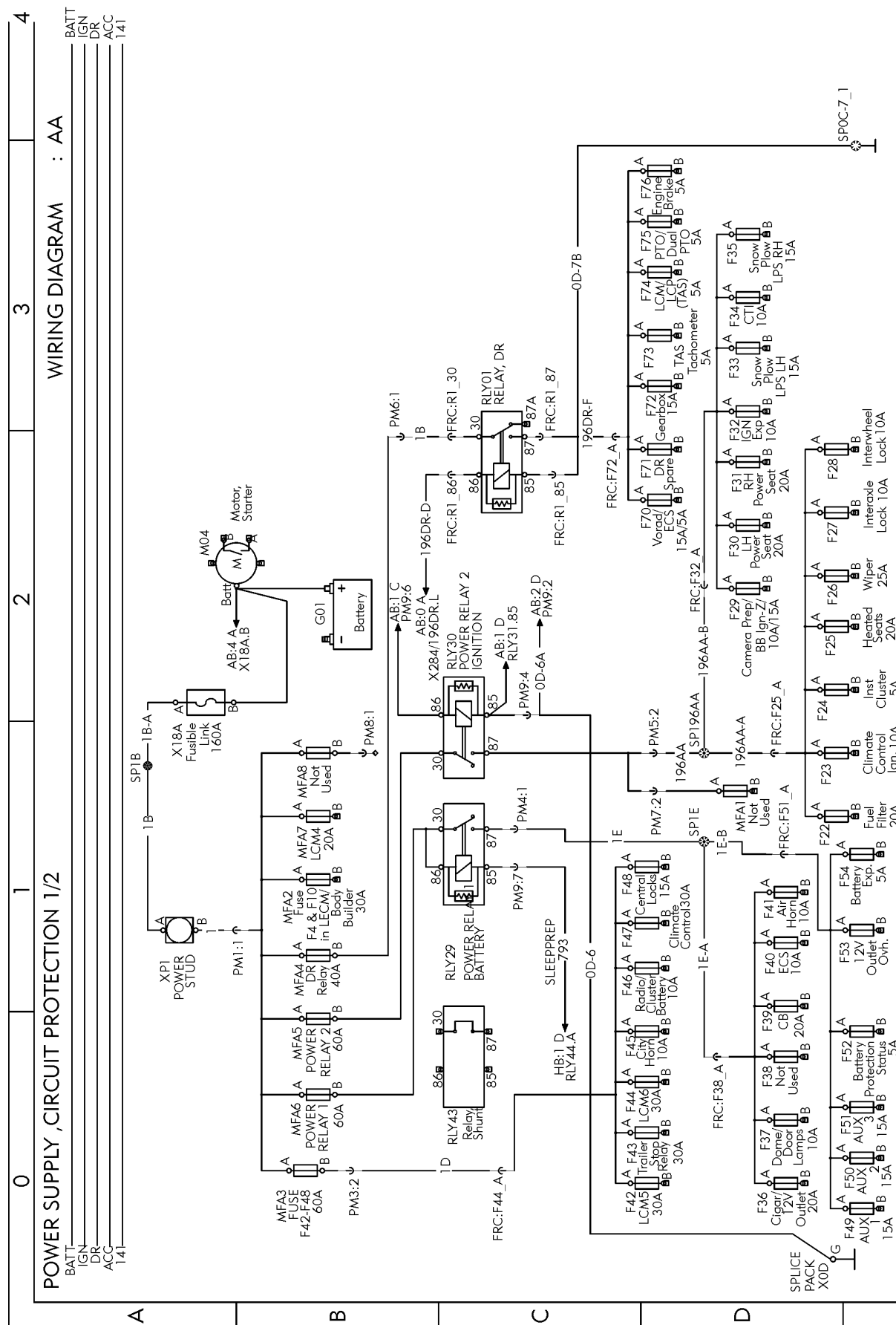


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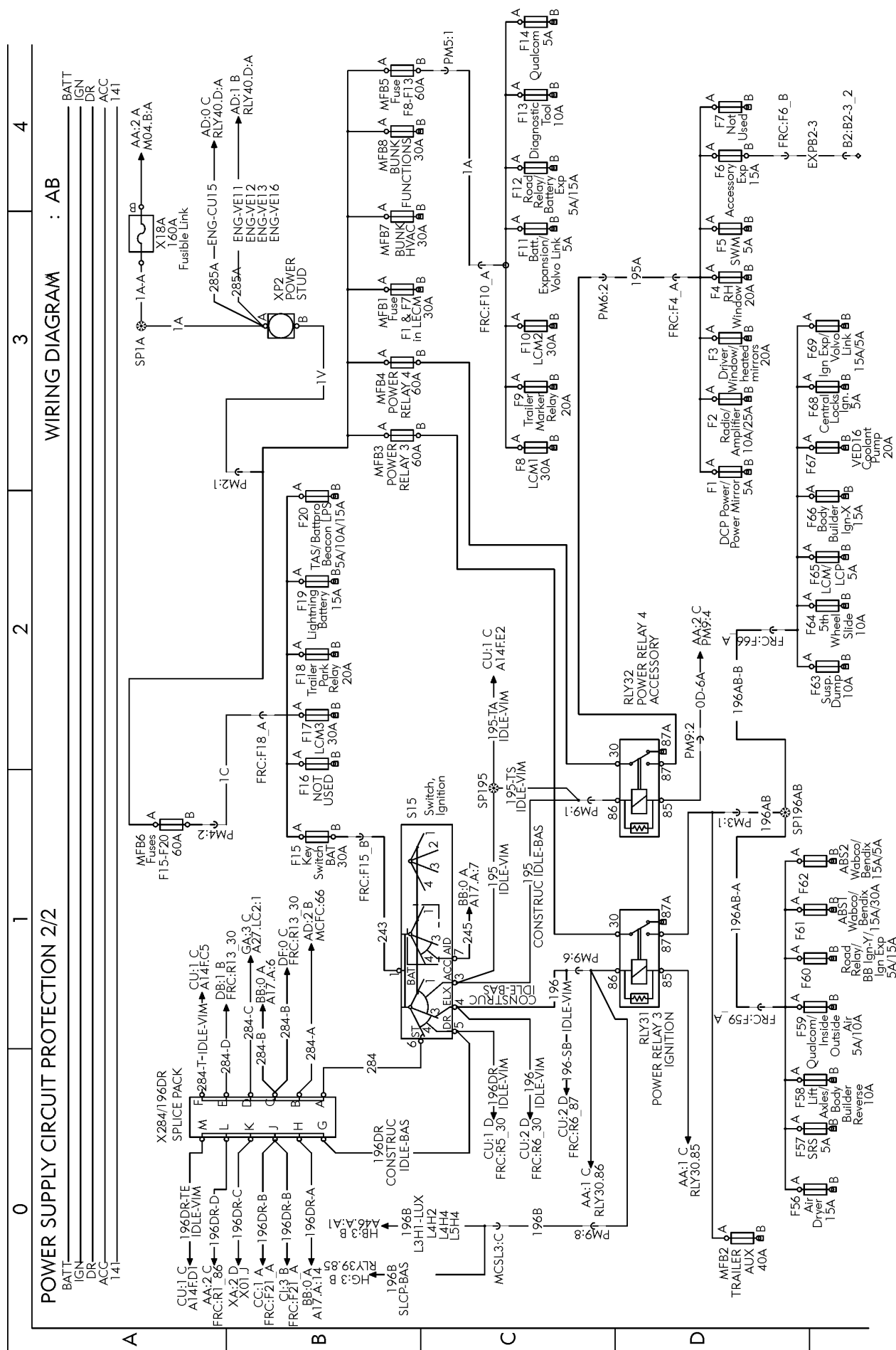


Fig. 2: AB

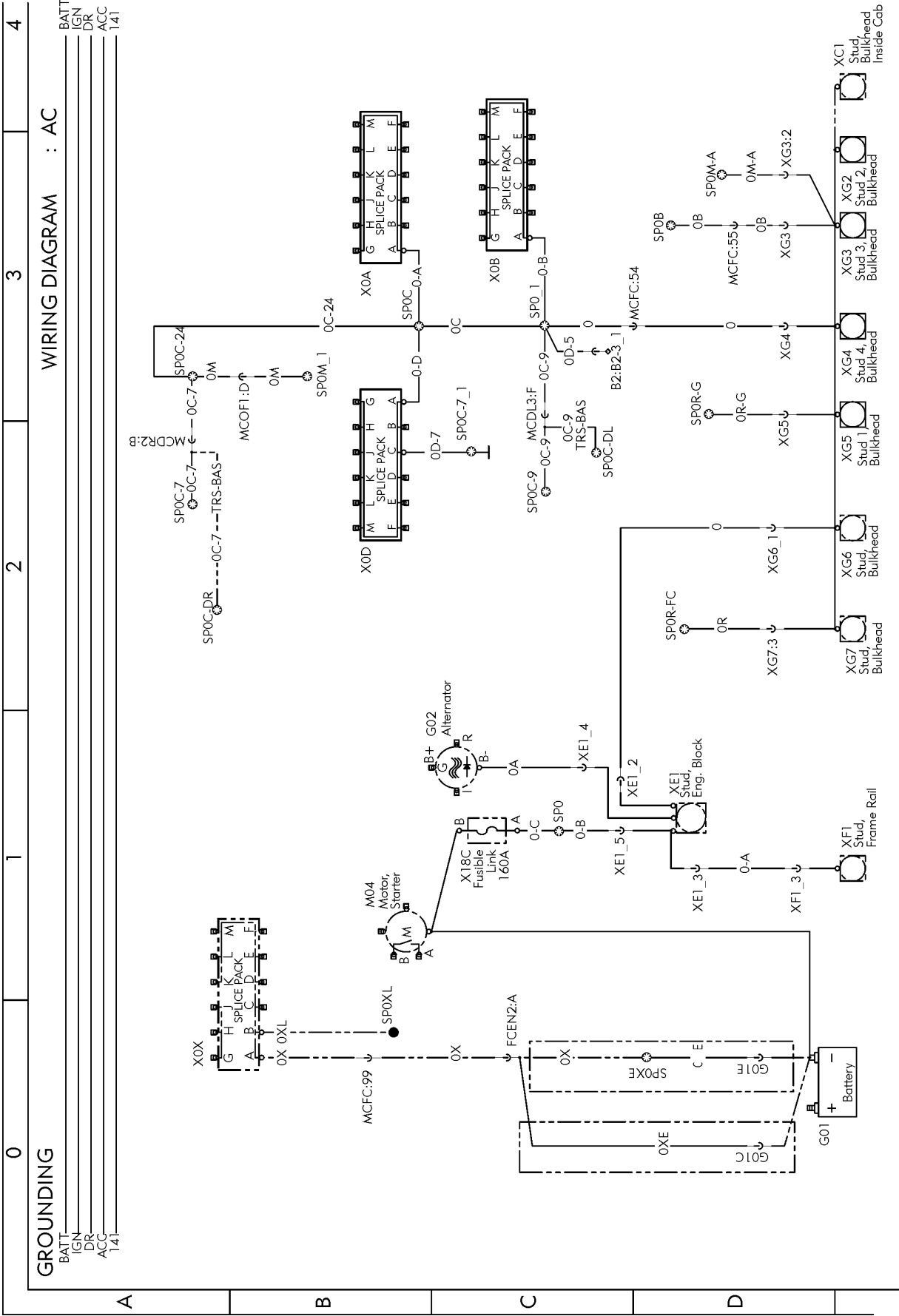


Fig. 3: AC

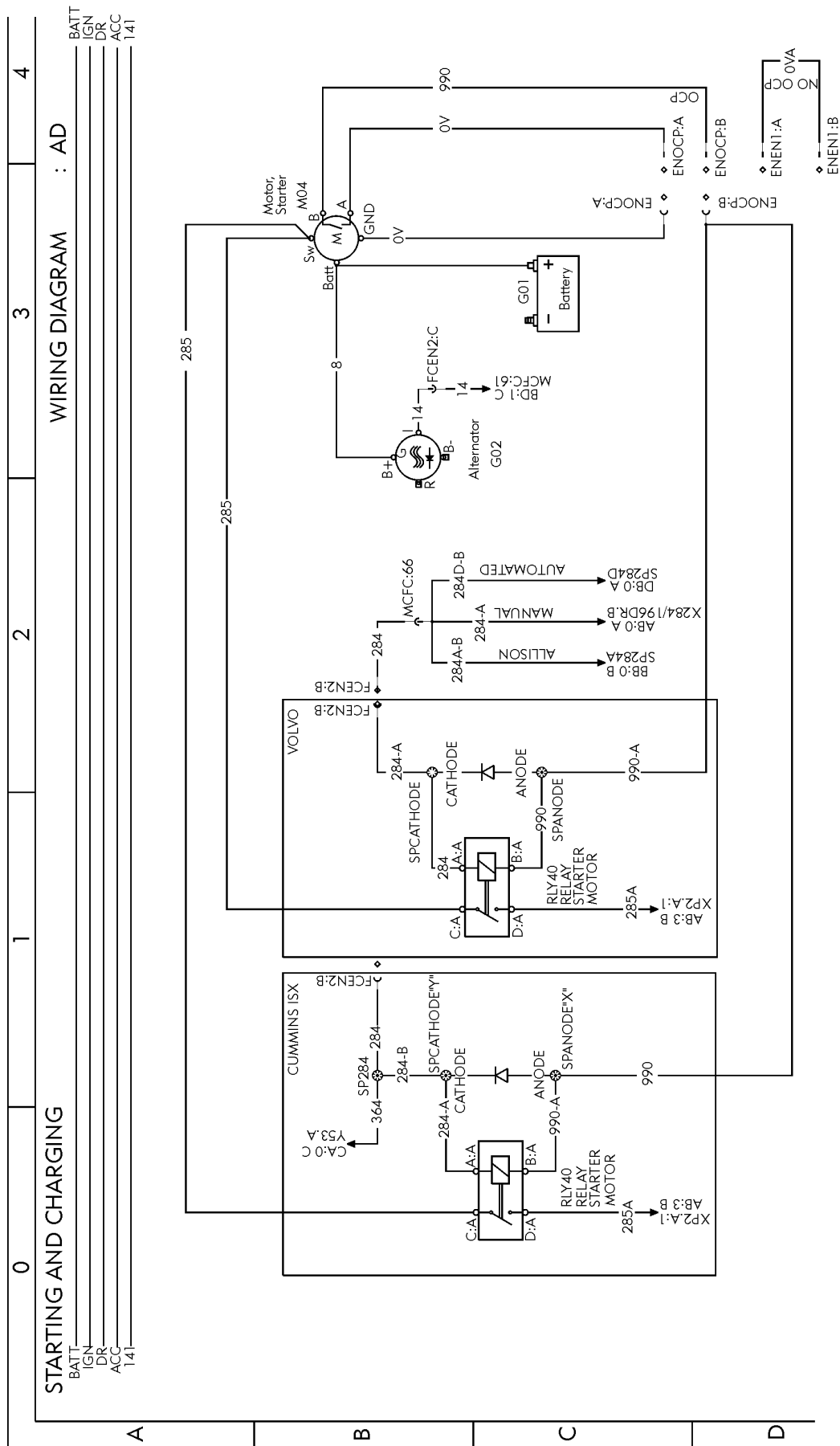


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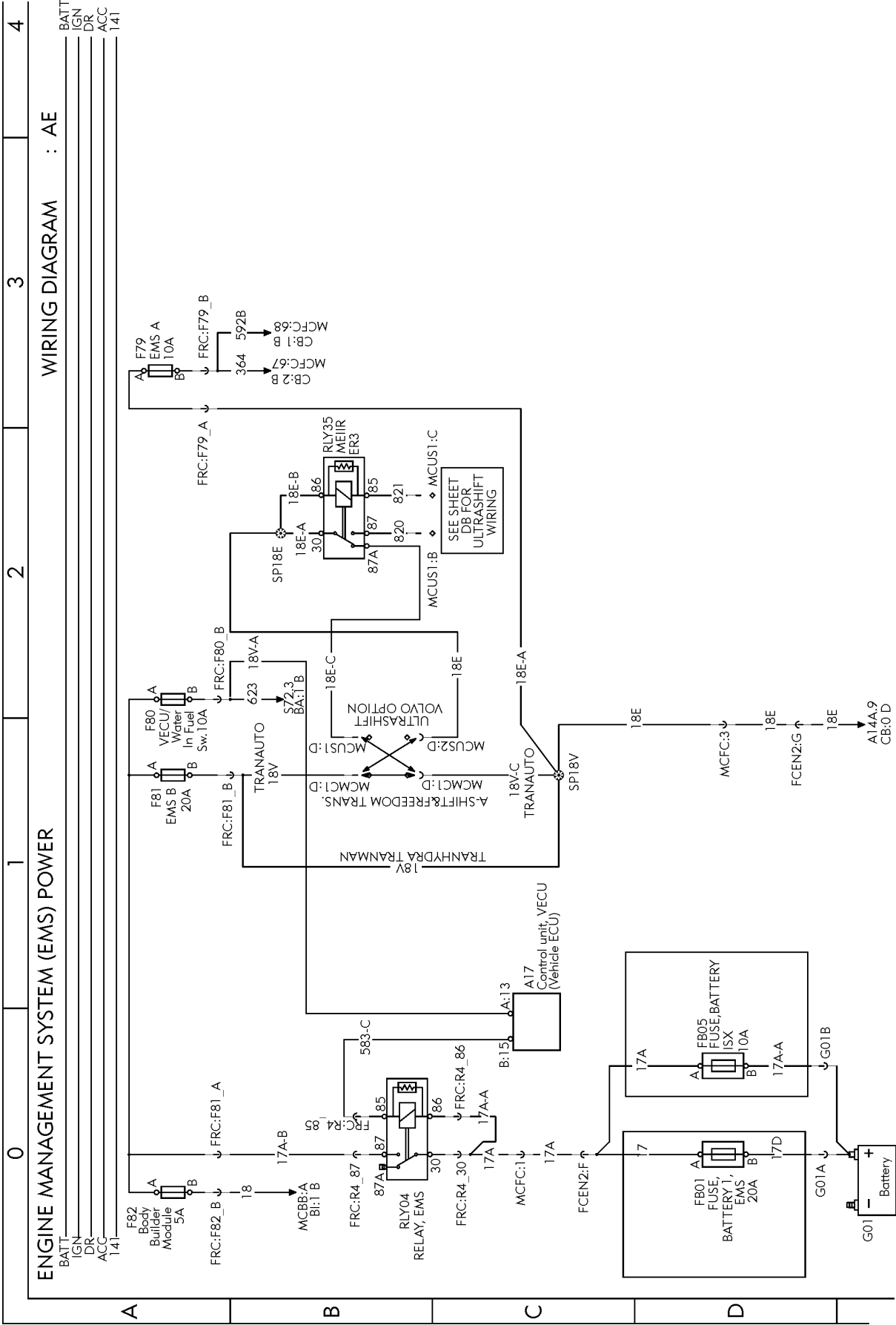


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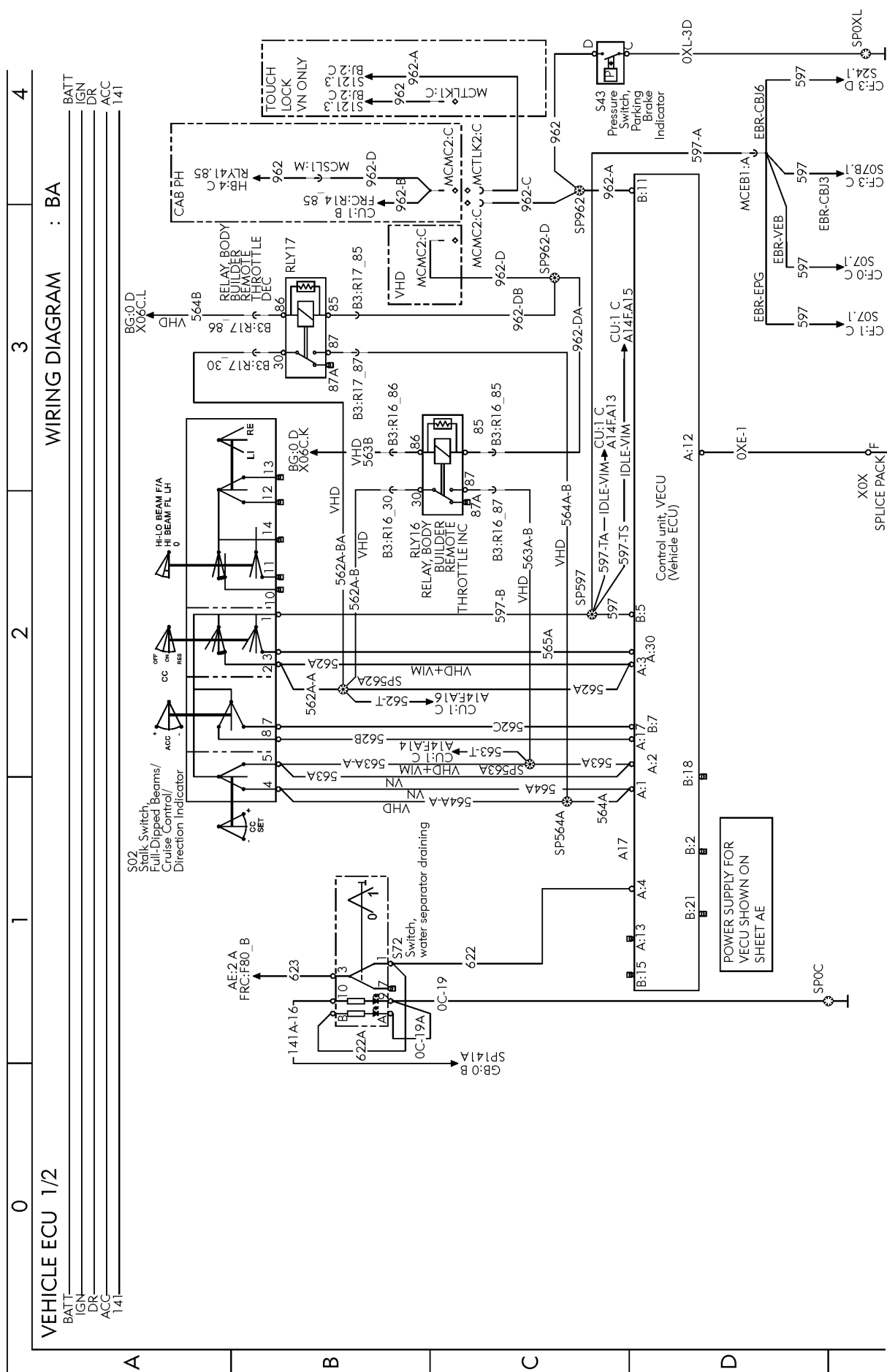
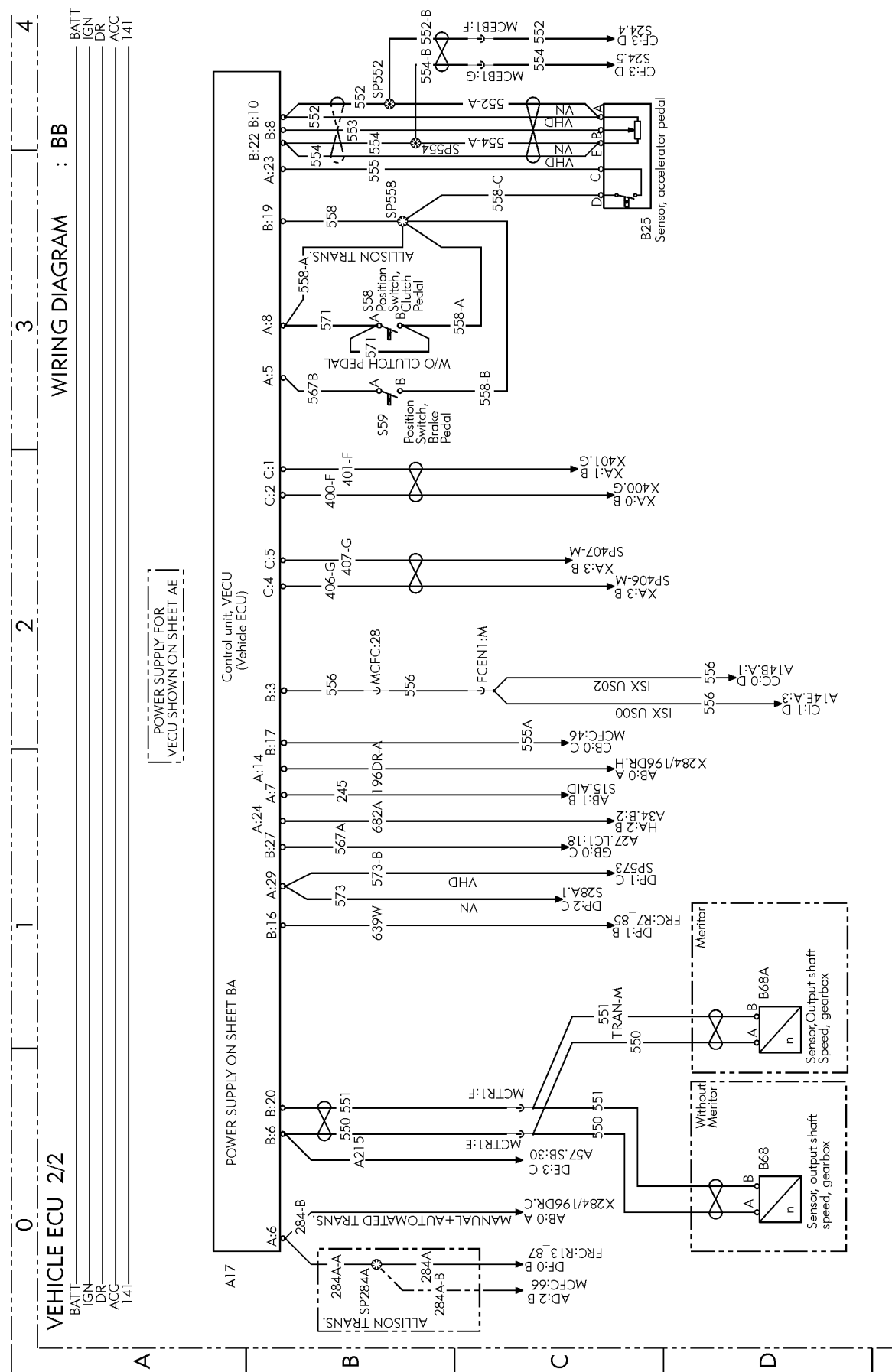
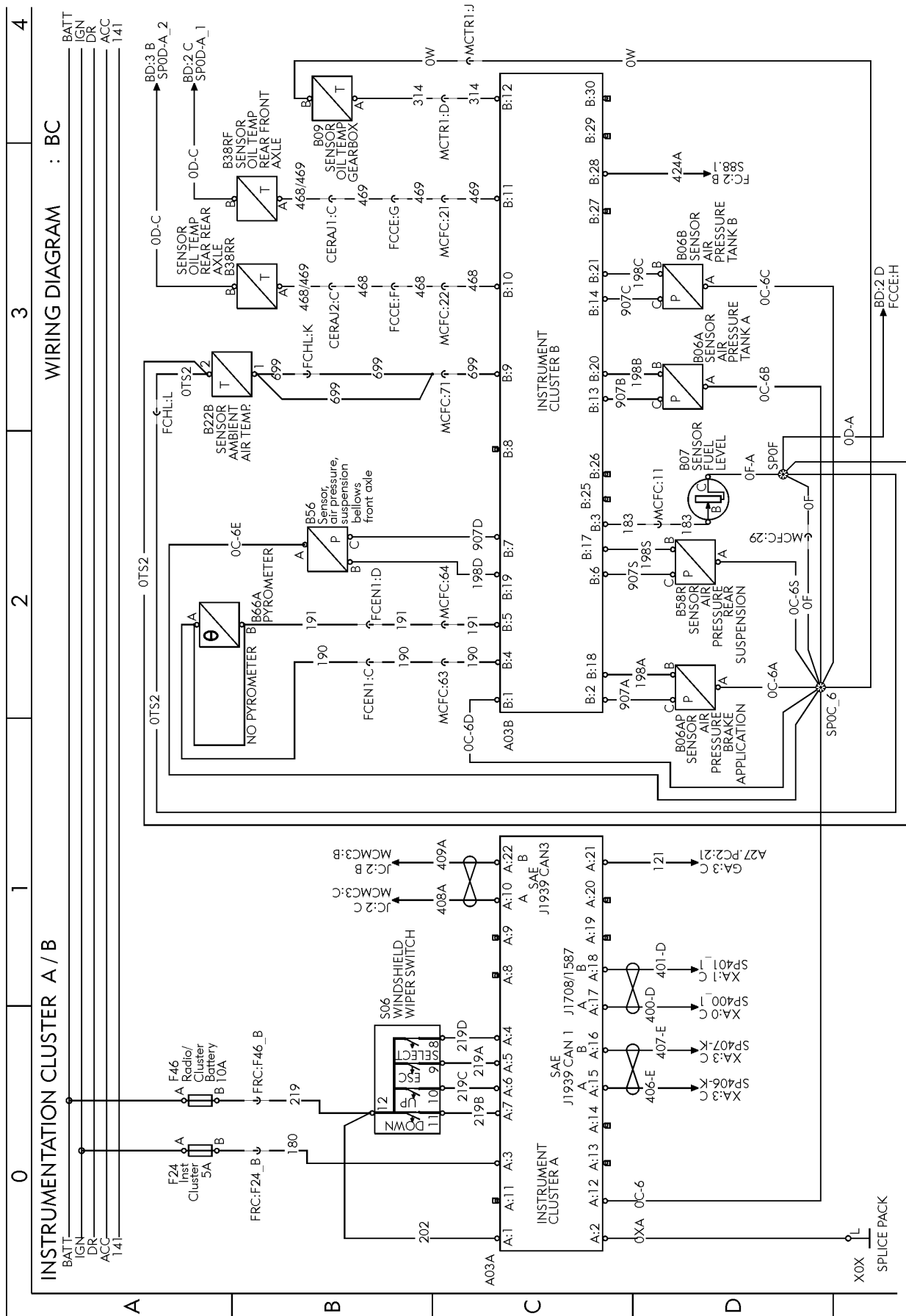


Fig. 6: BA







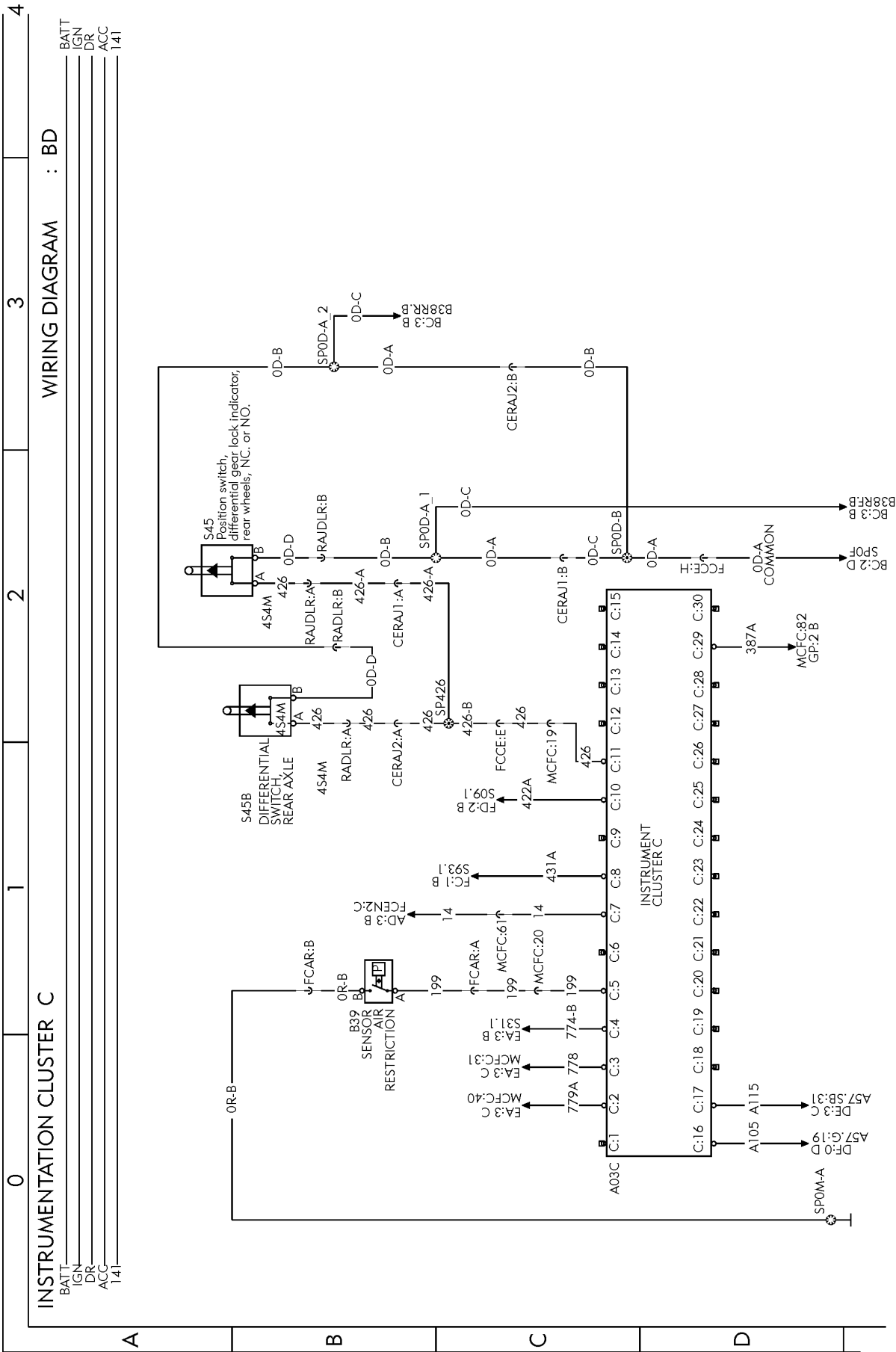


Fig. 9: BD

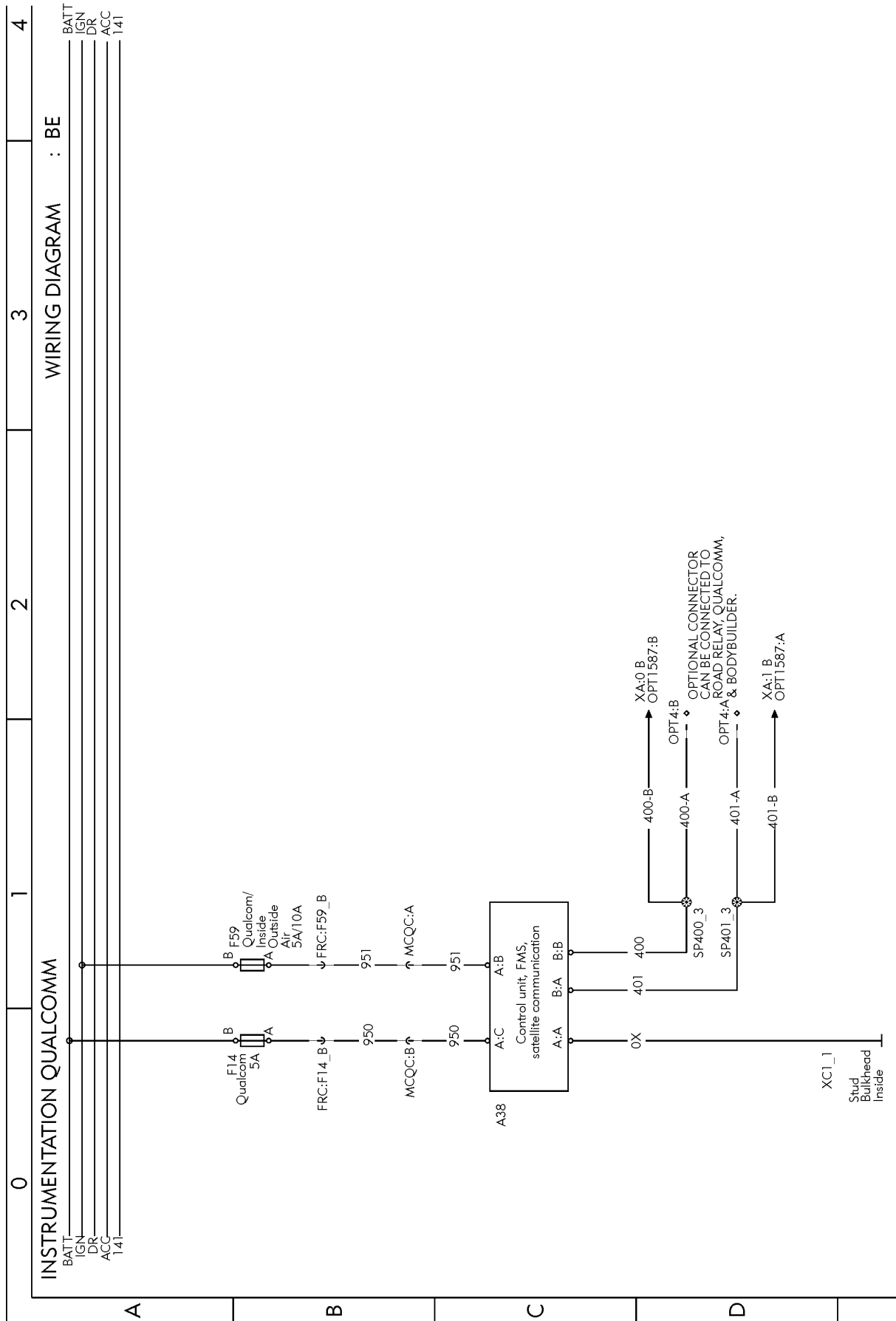


Fig. 10: BE

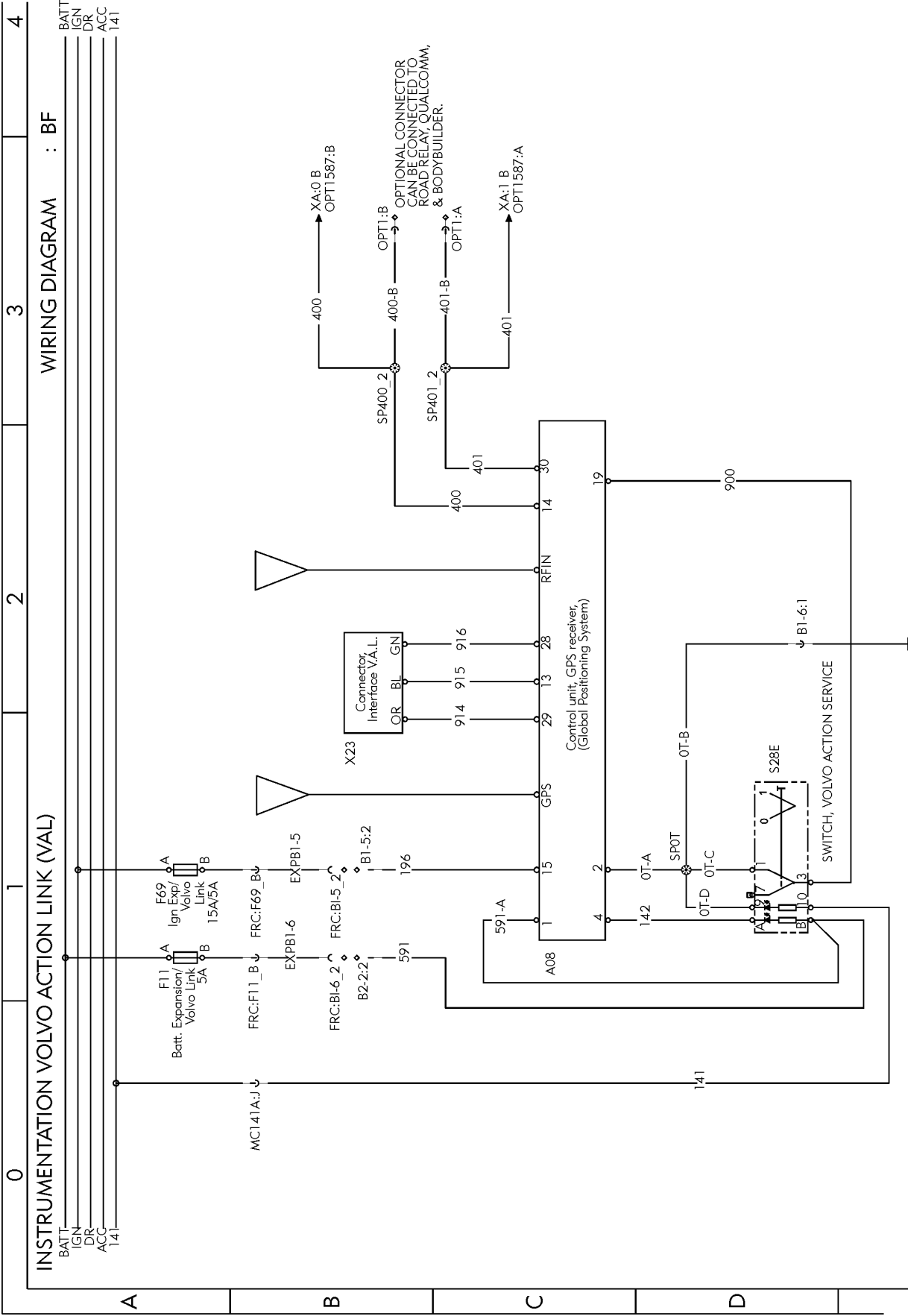


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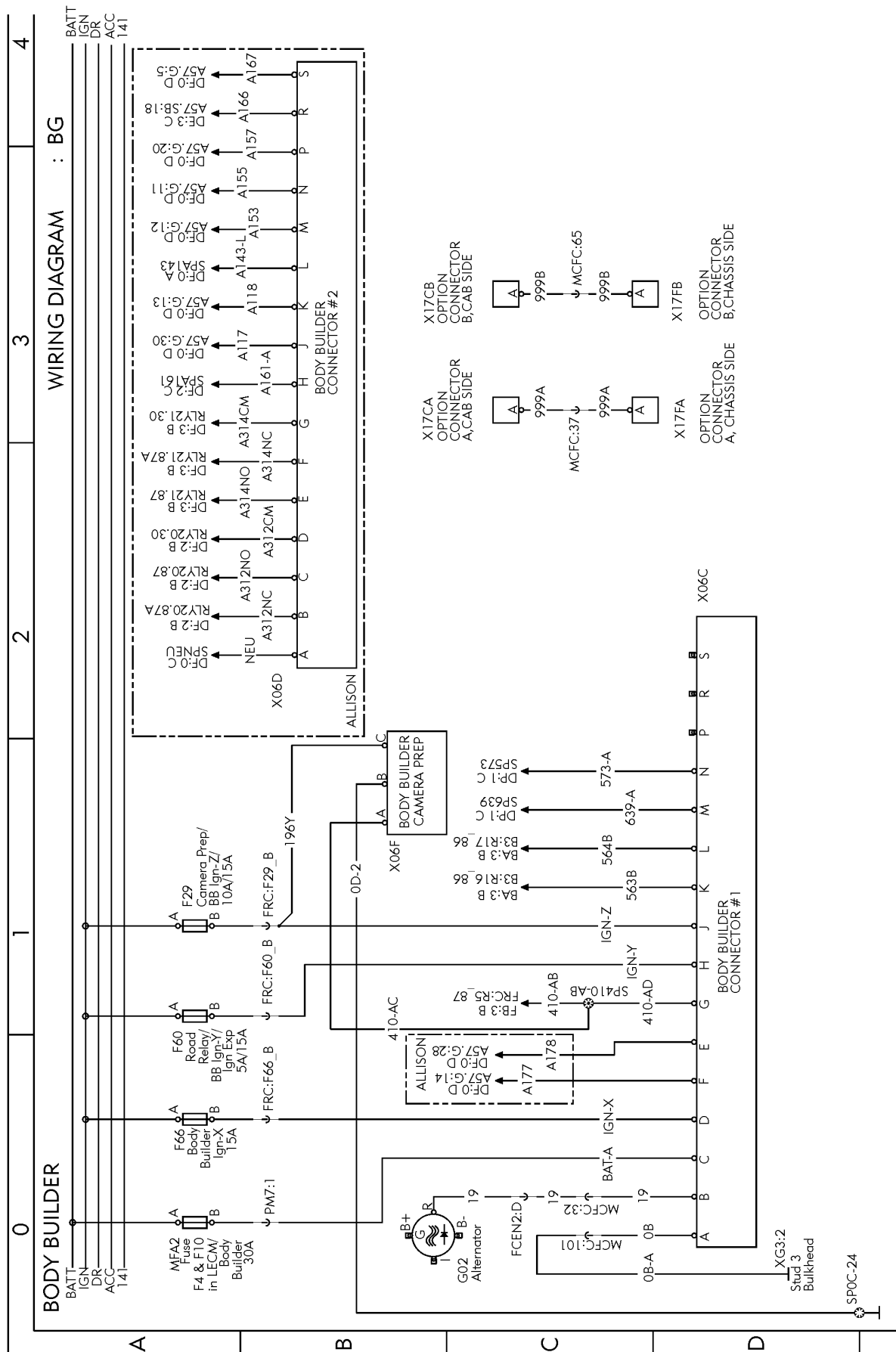
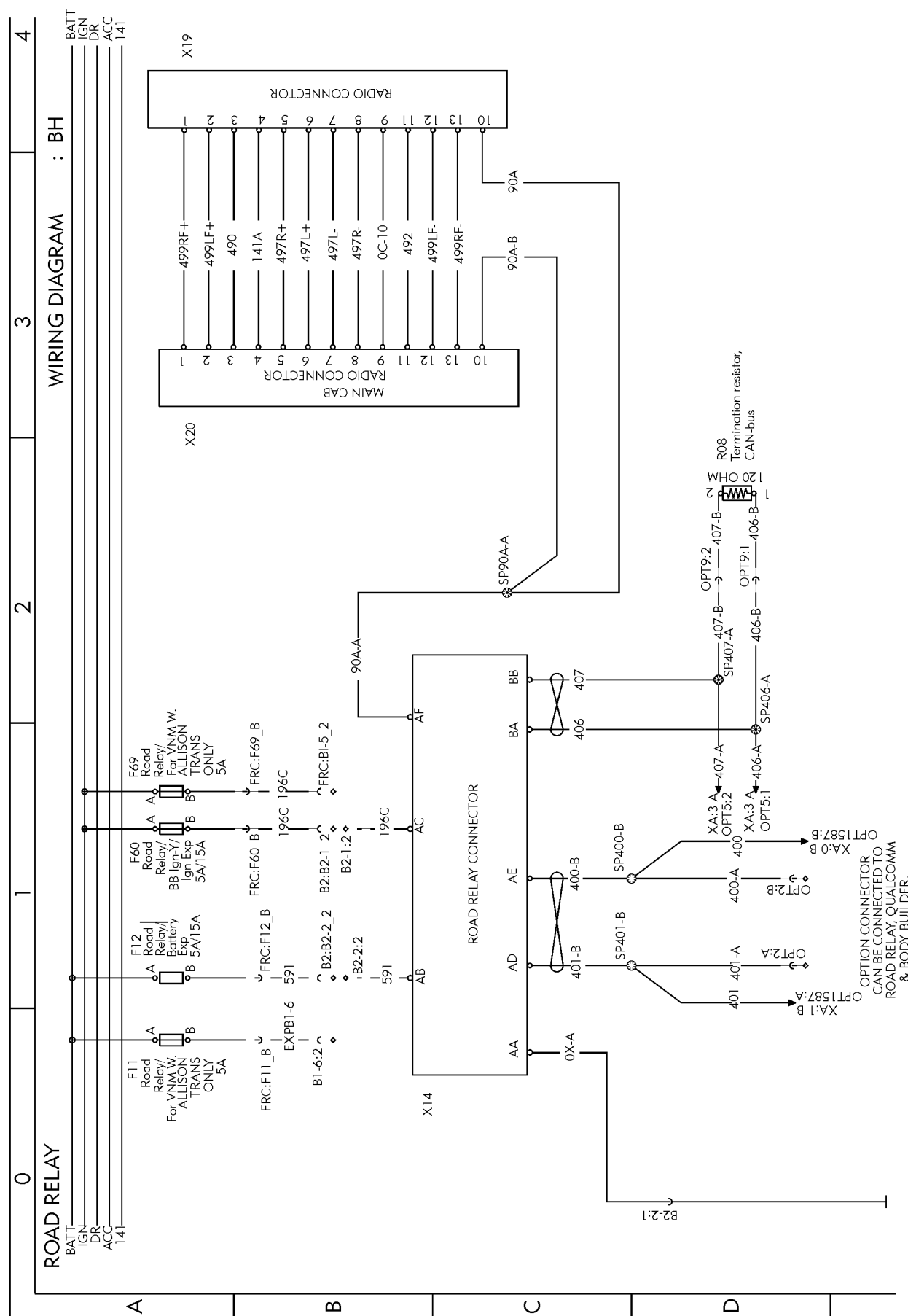


Fig. 12: BG



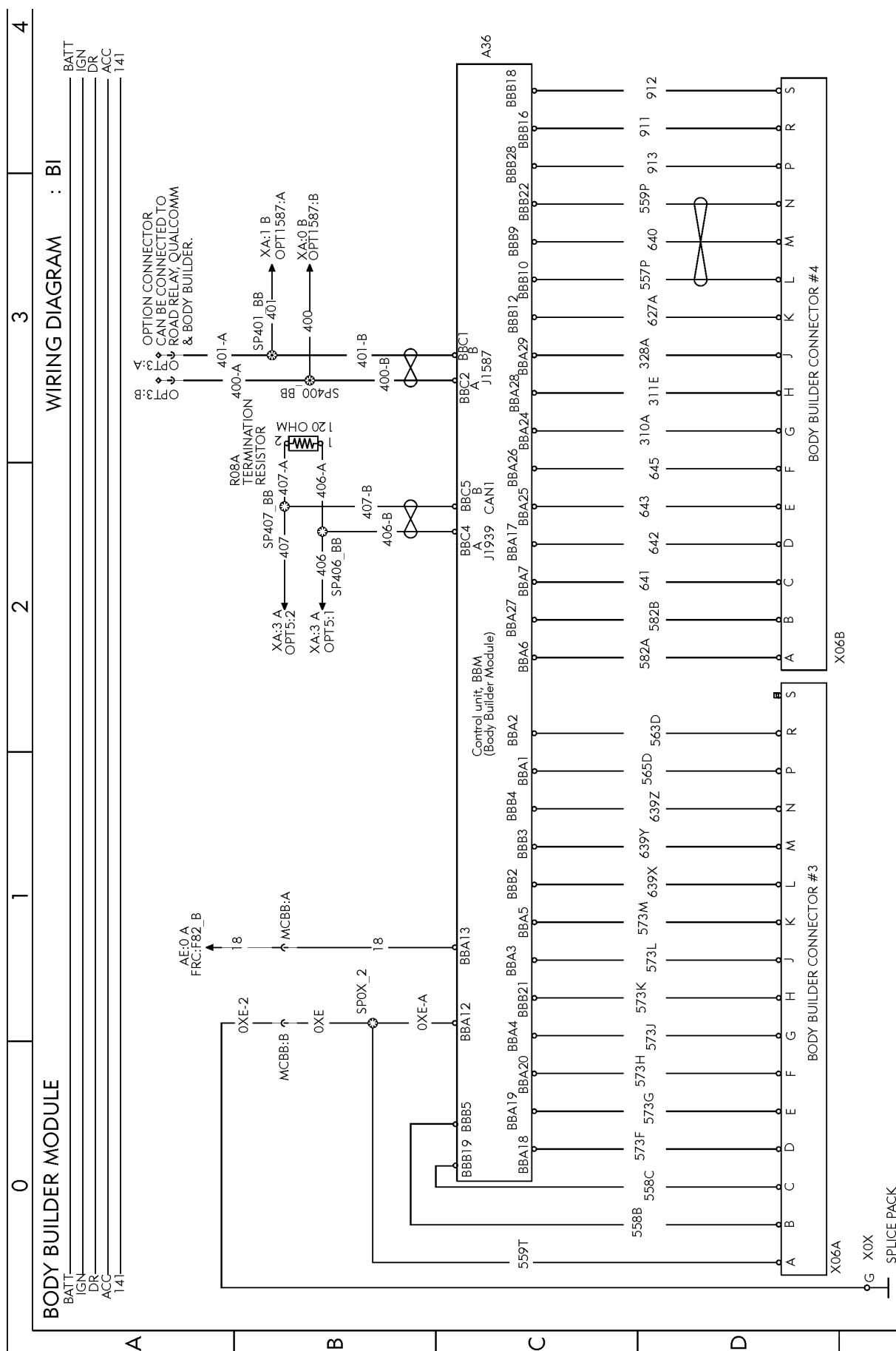


Fig. 14: BI

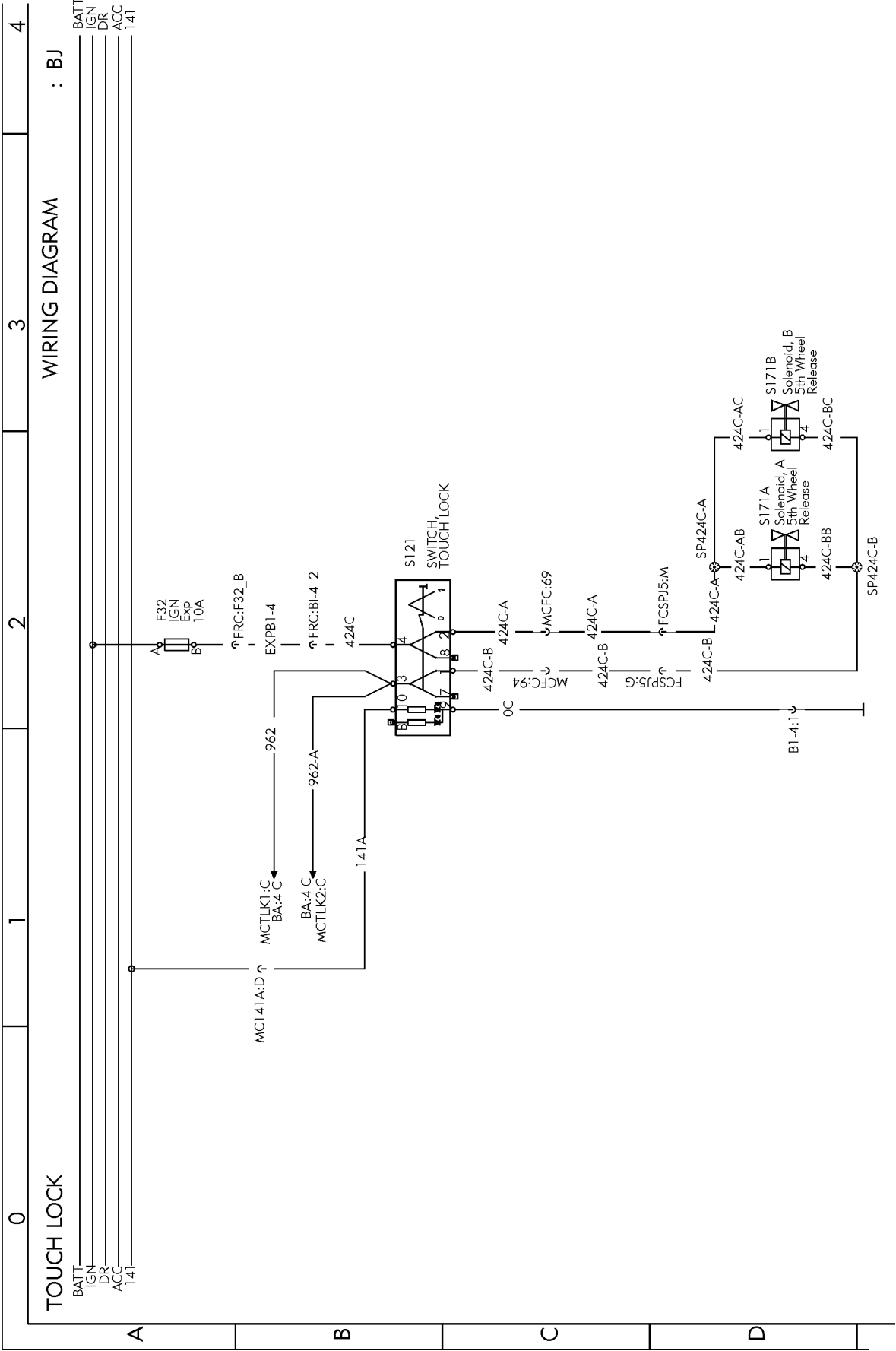


Fig. 15: BJ



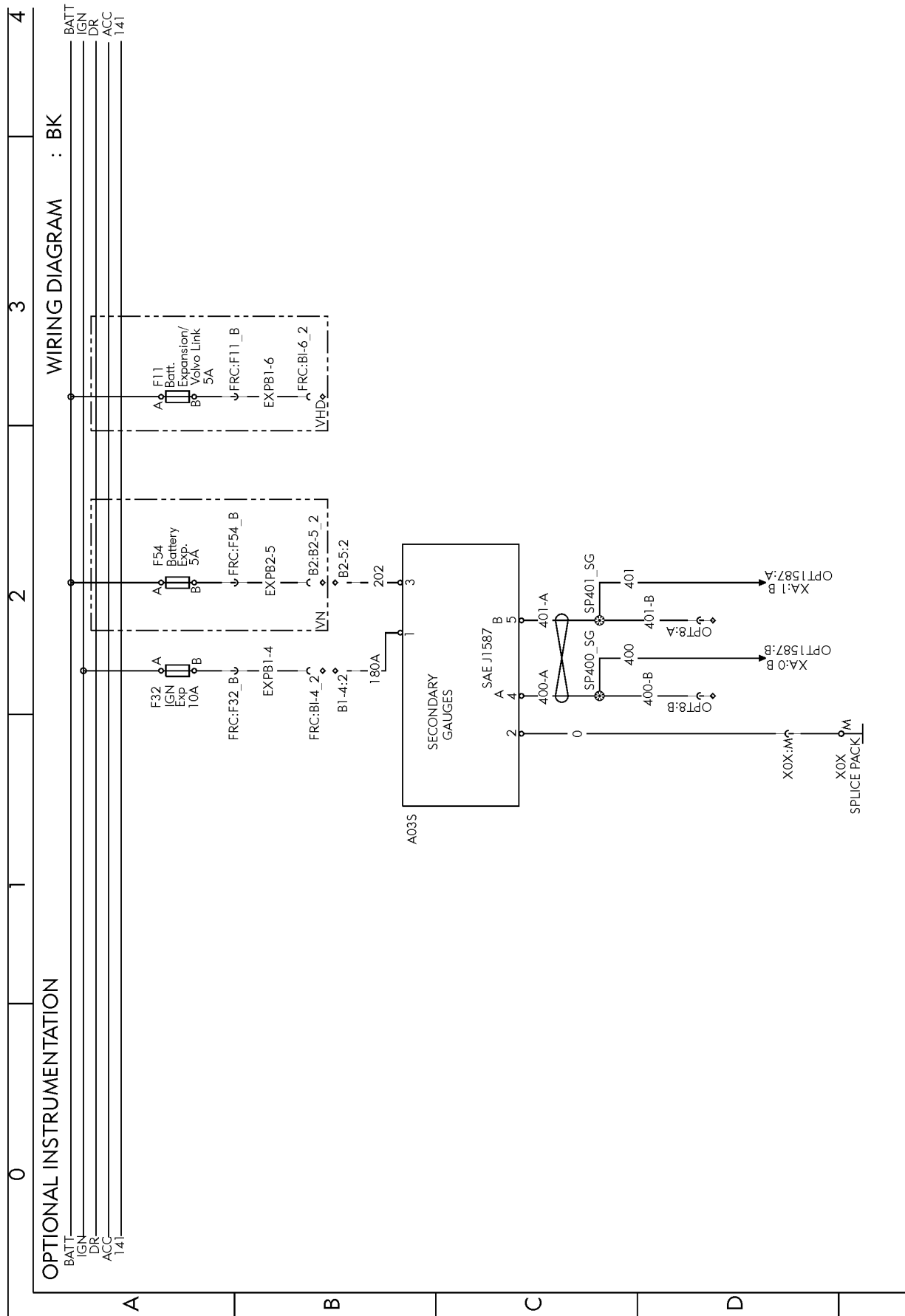


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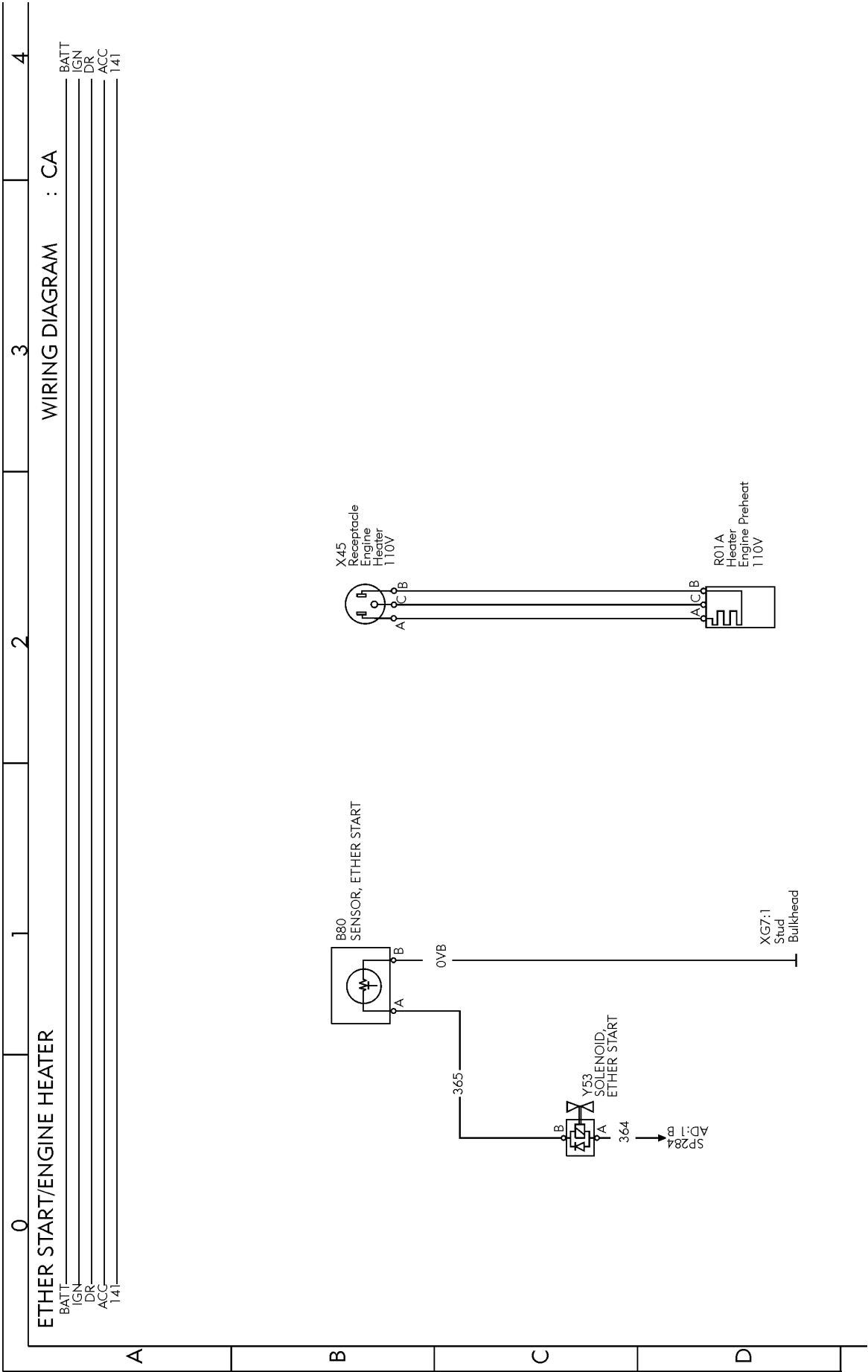


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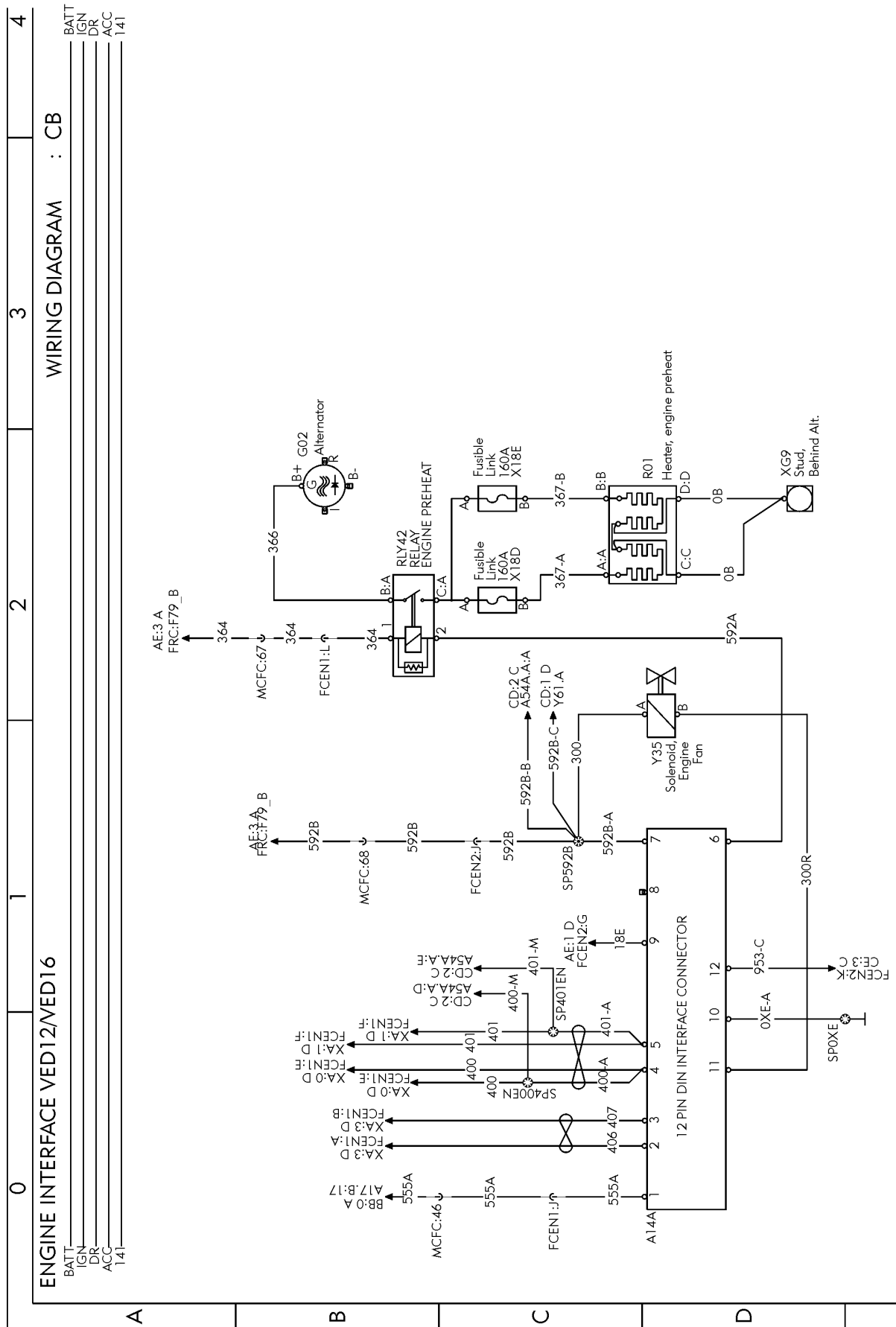


Fig. 18: CB

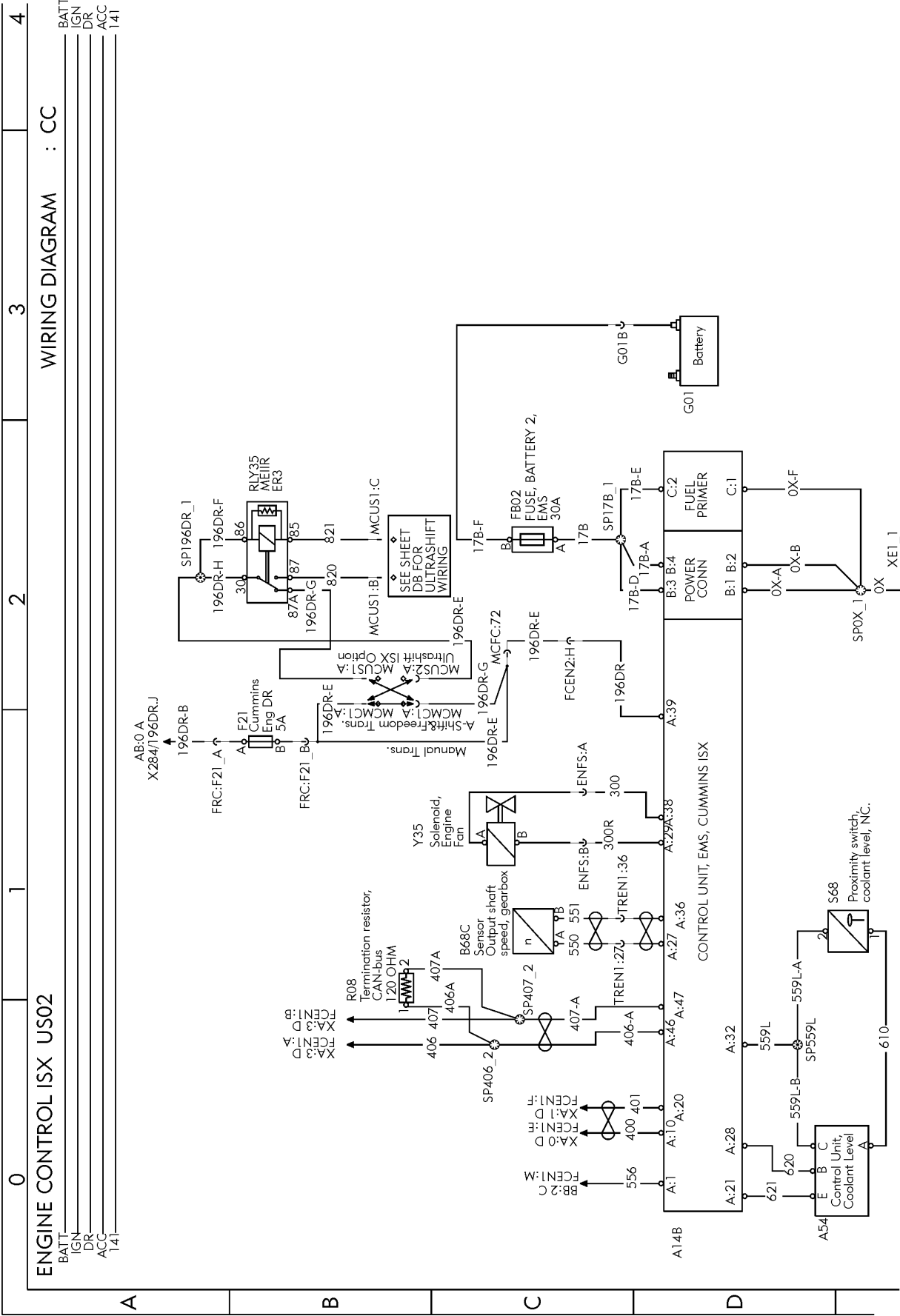


Fig. 19: CC

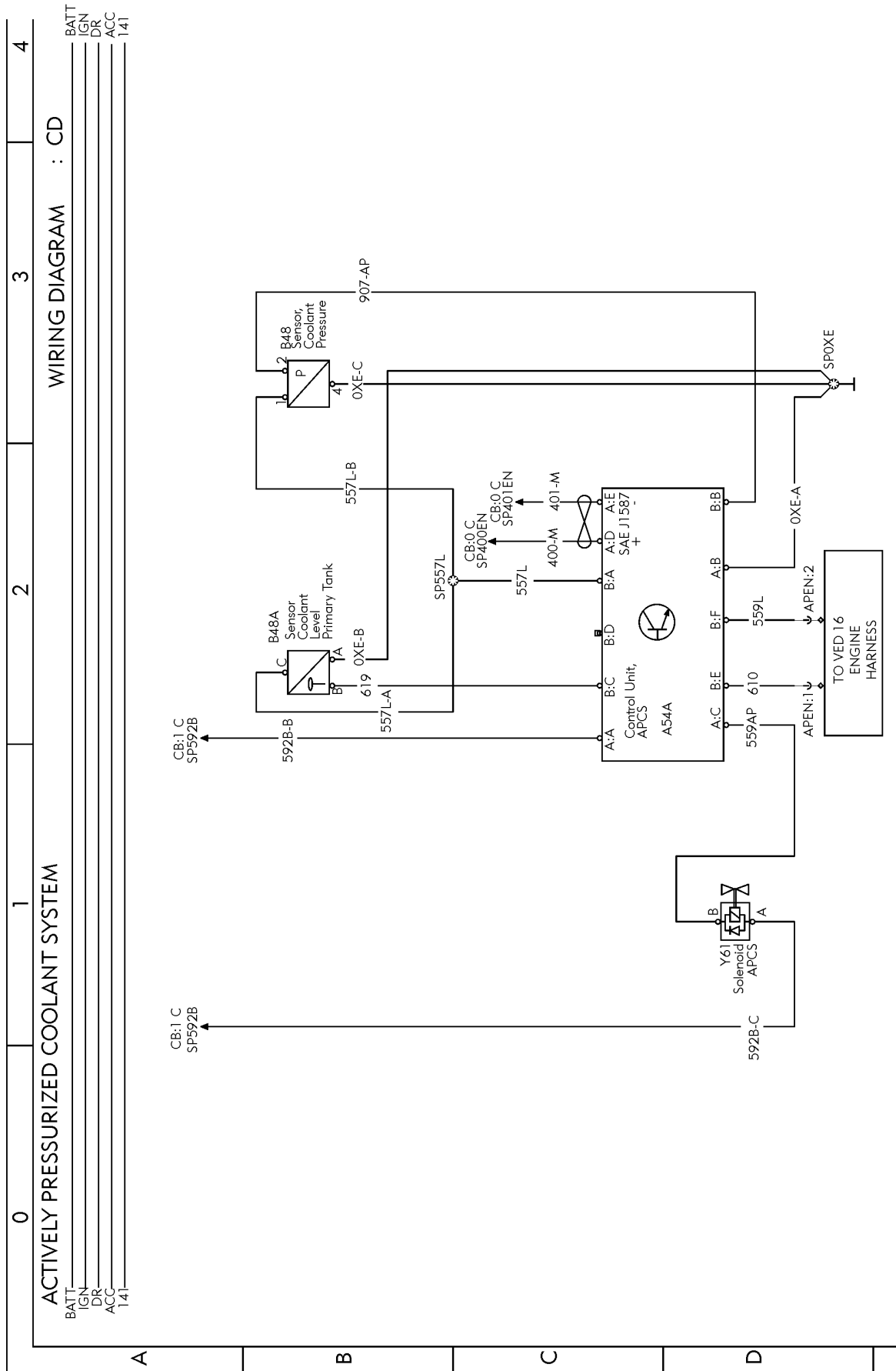


Fig. 20: CD

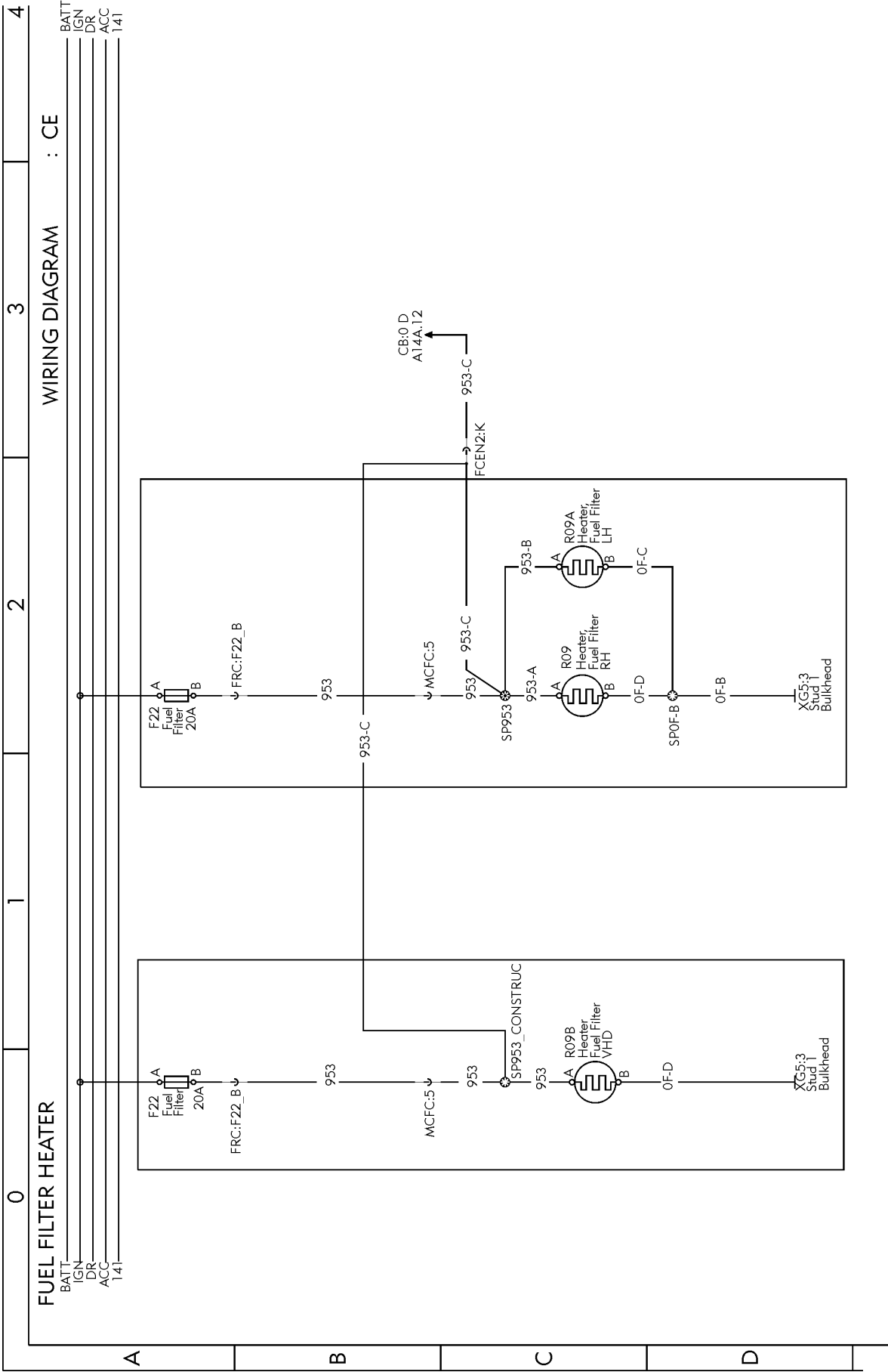


Fig. 21: CE

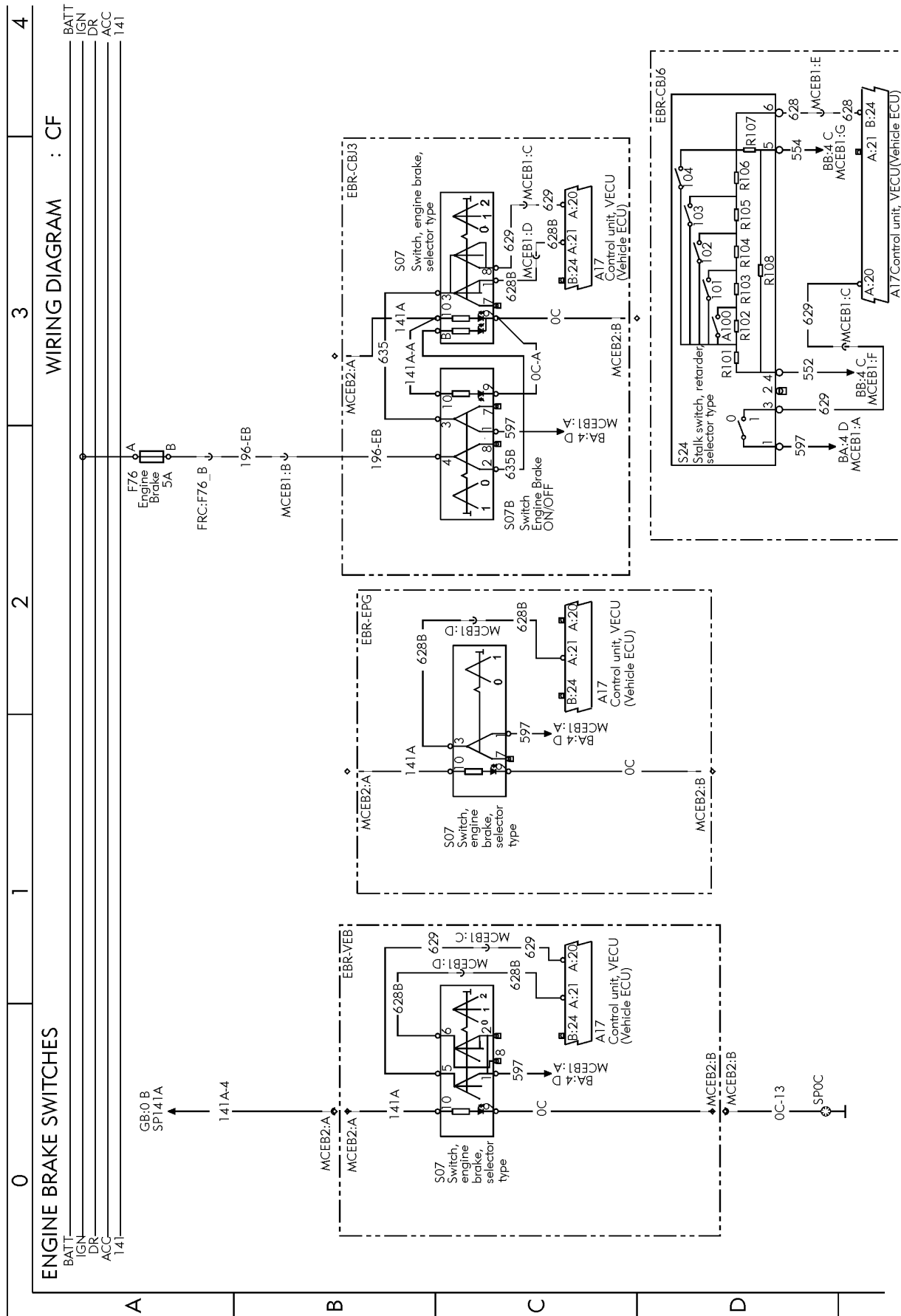


Fig. 22: CF

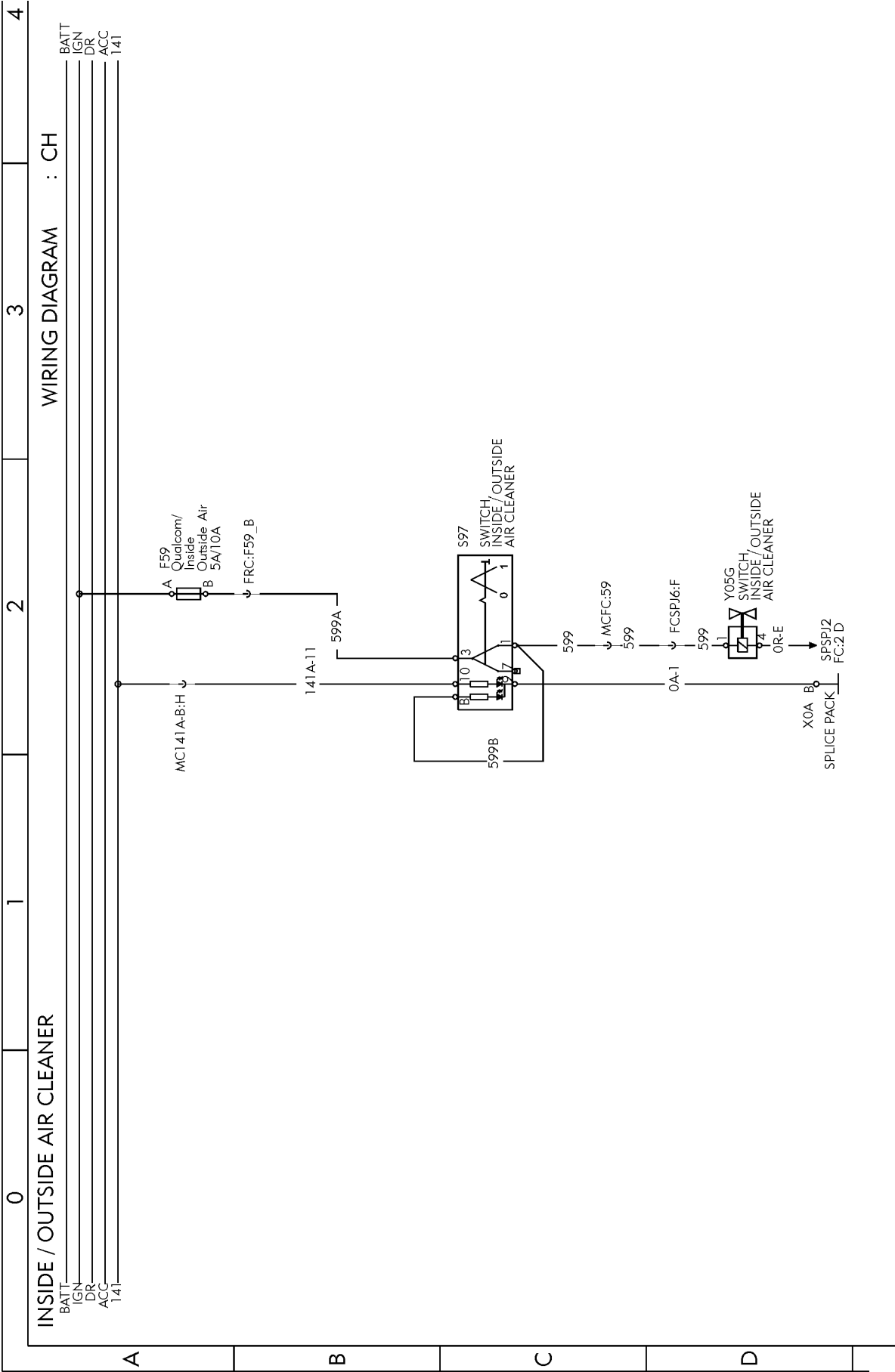


Fig. 23: CH



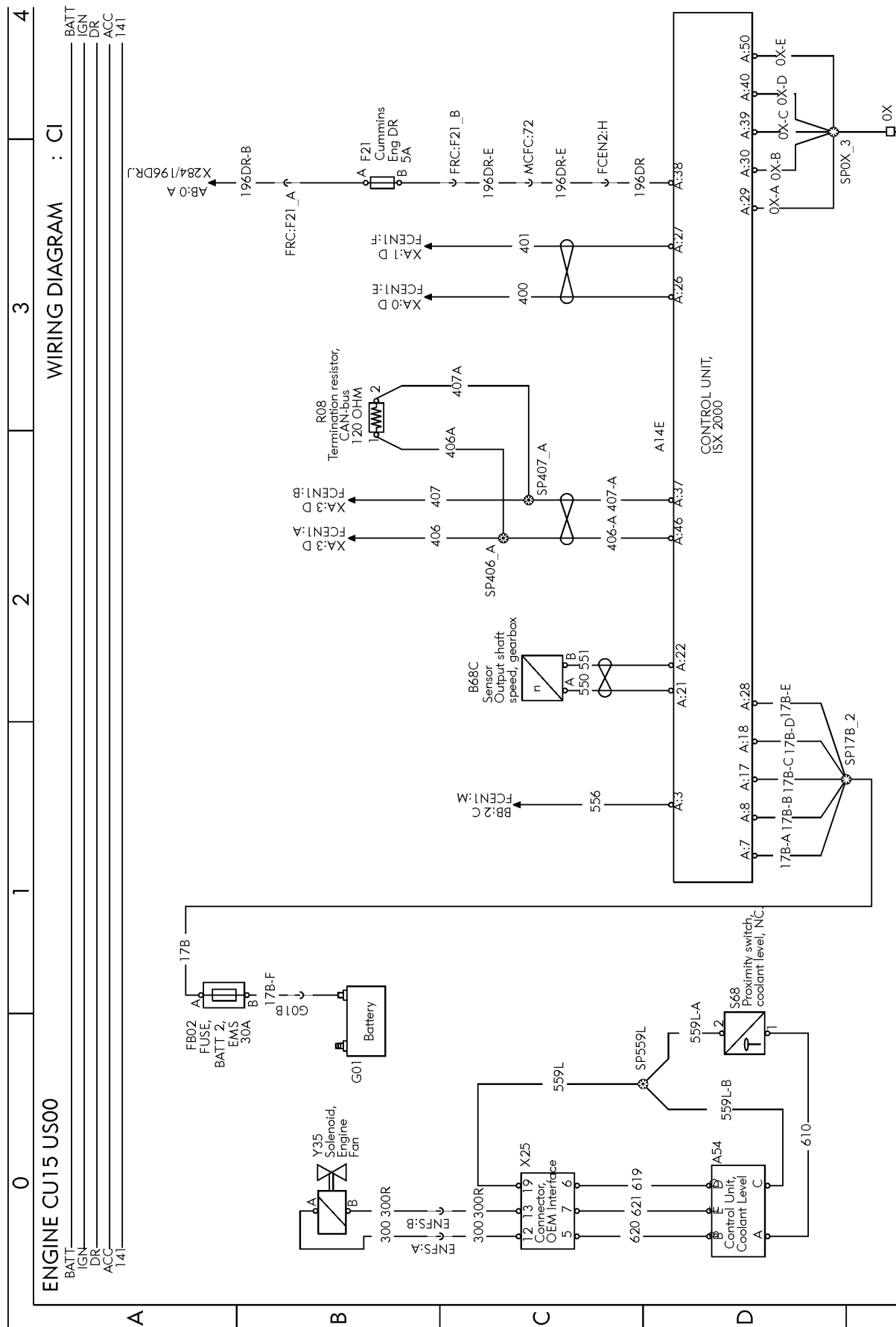
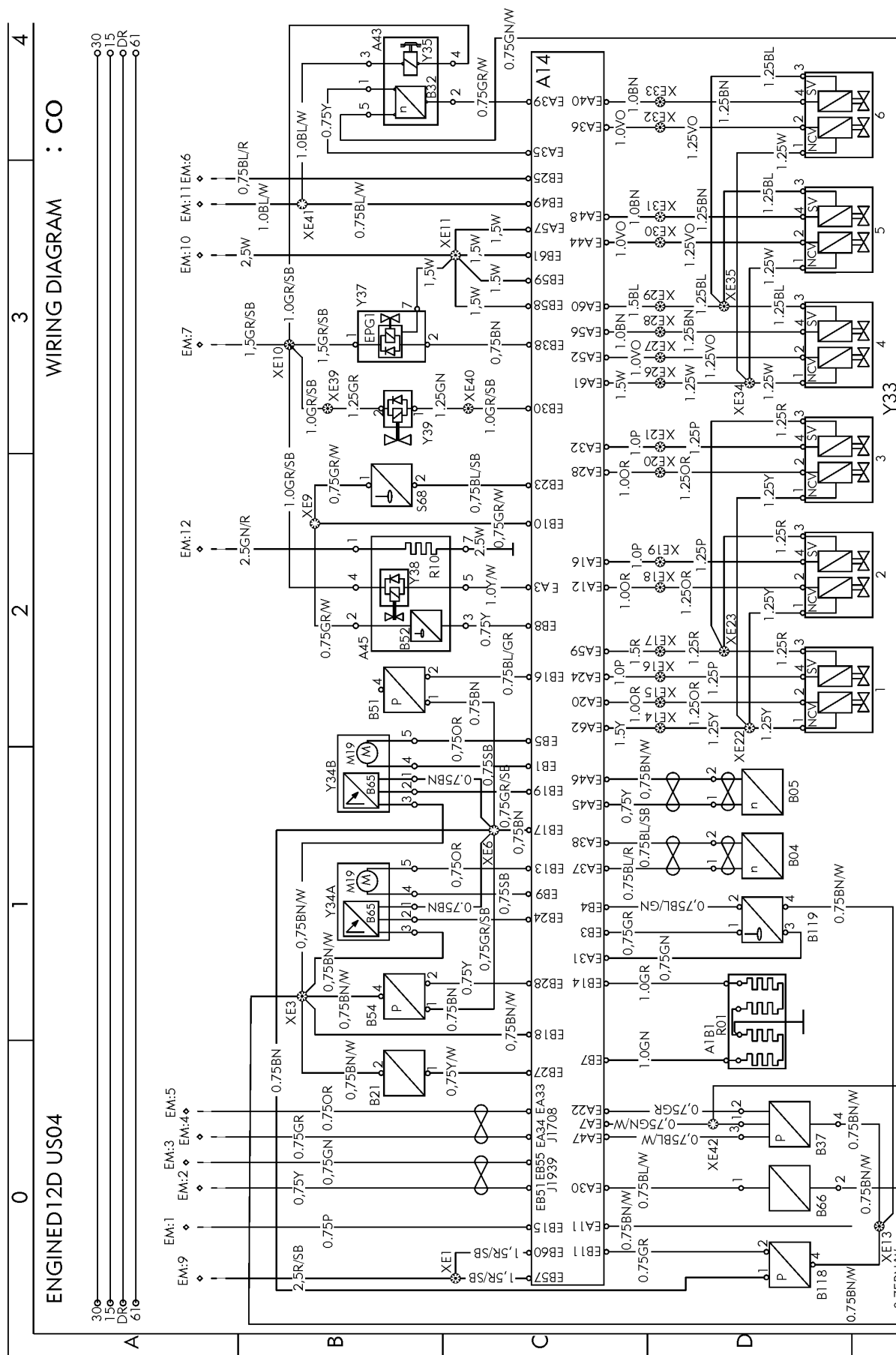


Fig. 24: CI



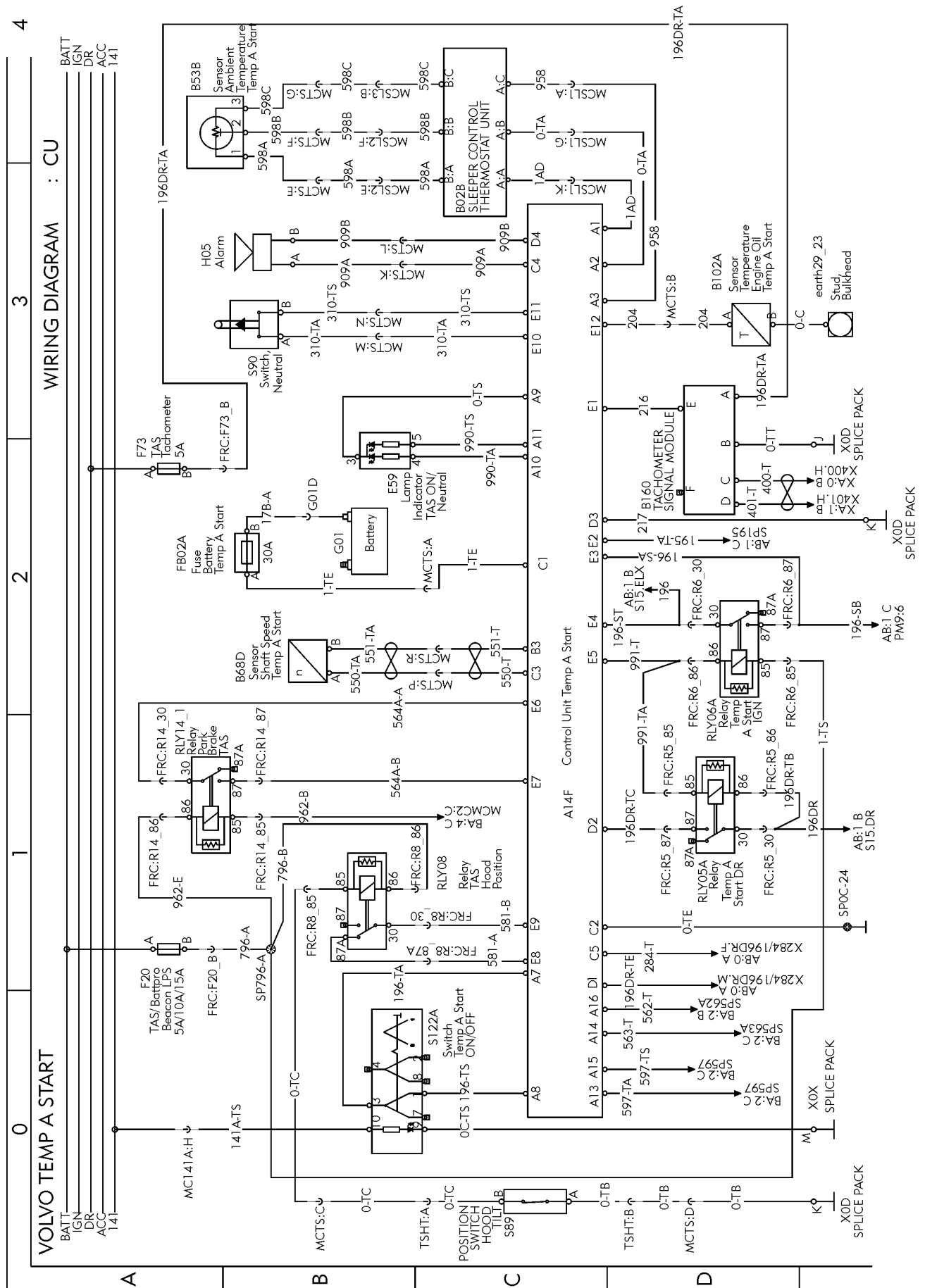
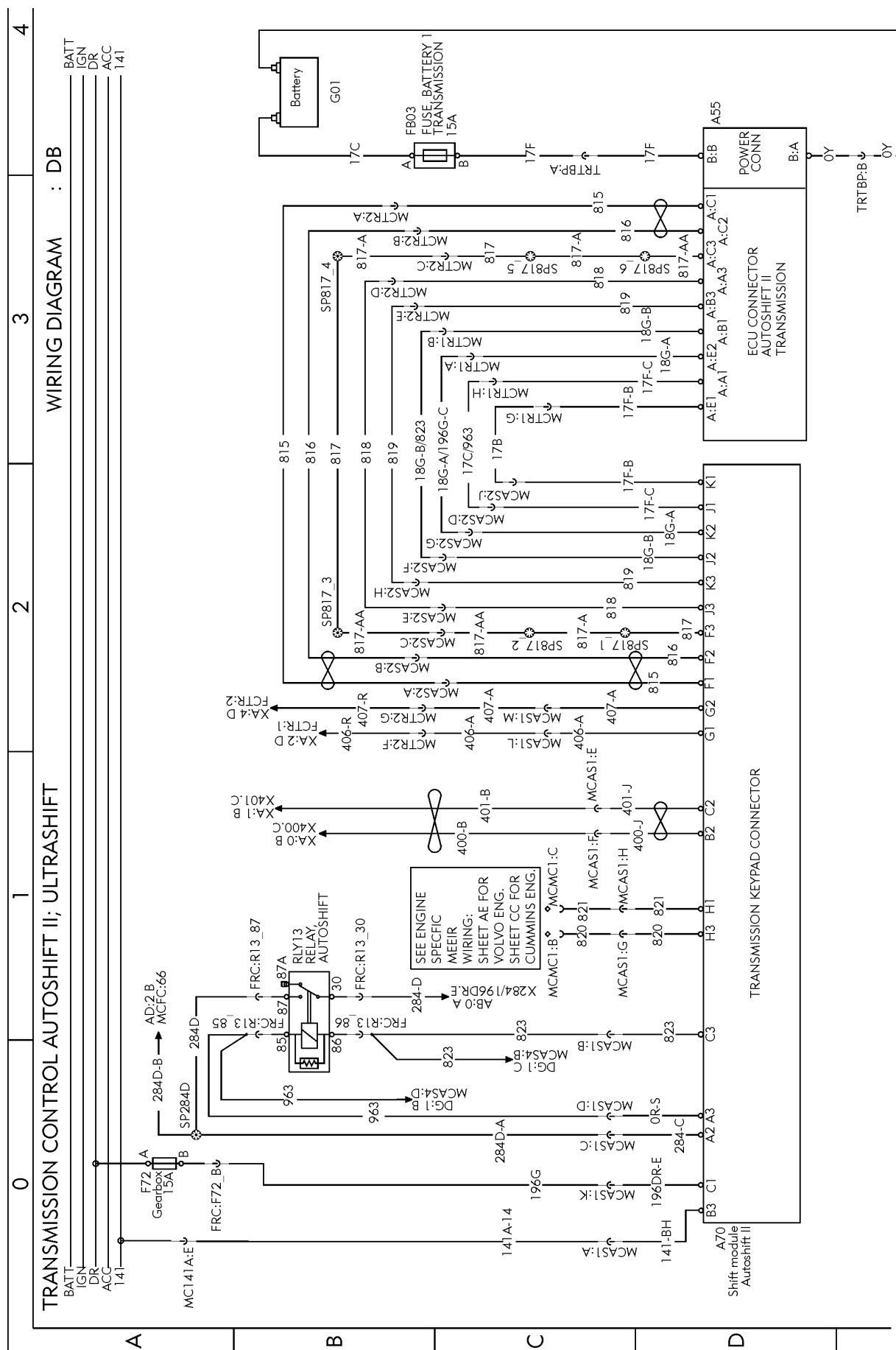


Fig. 26: CU



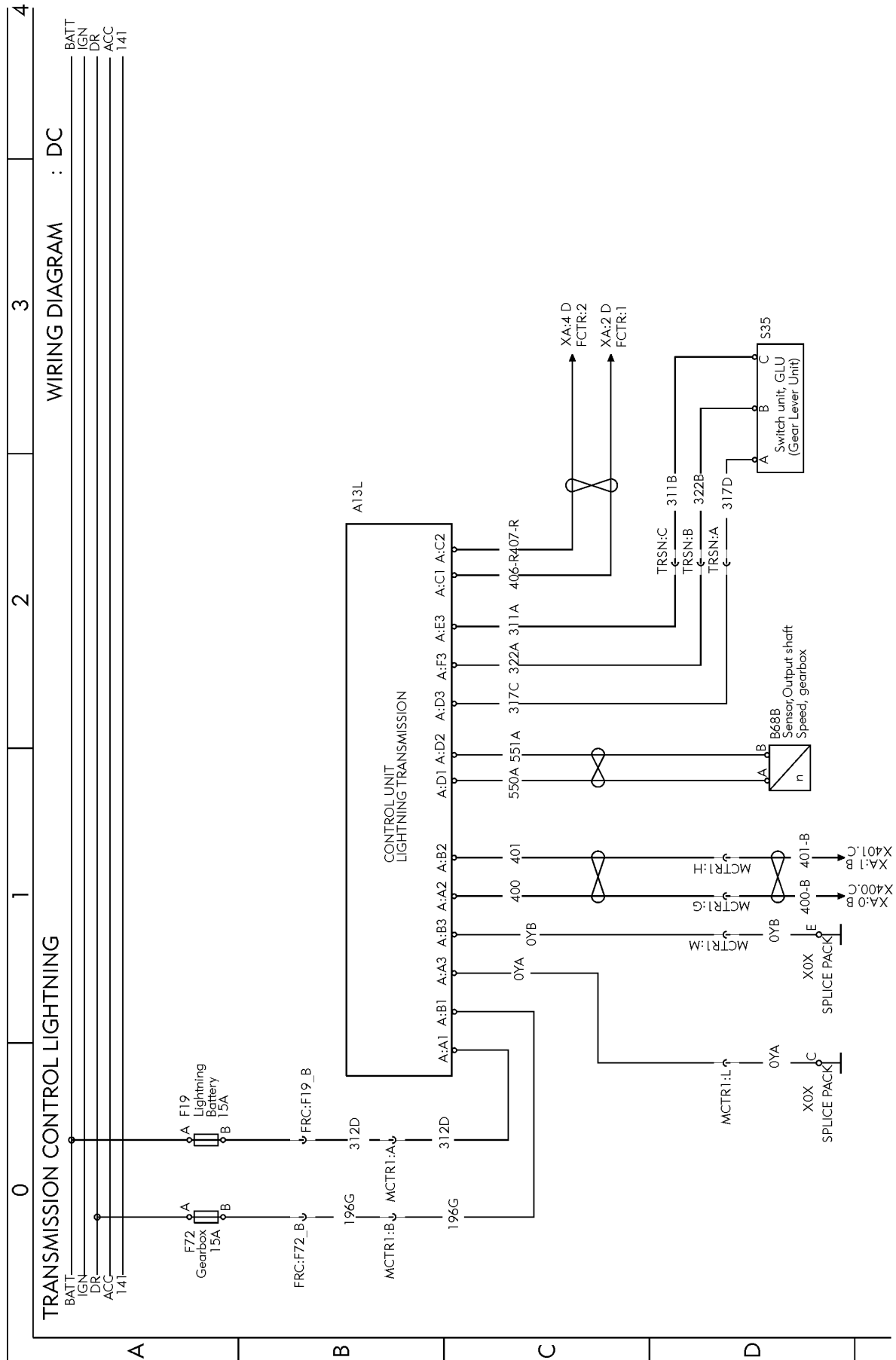


Fig. 28: DC

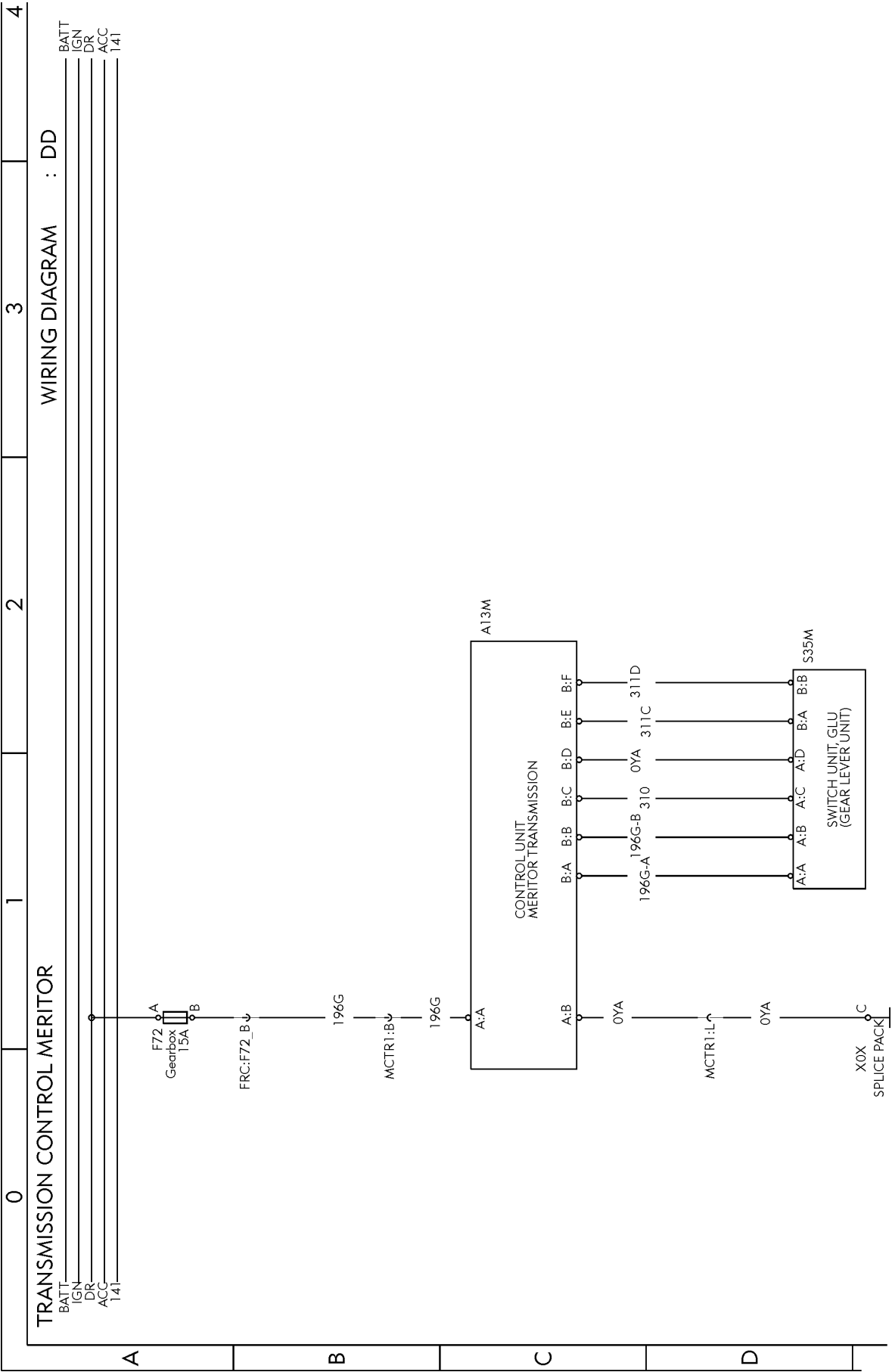


Fig. 29: DD

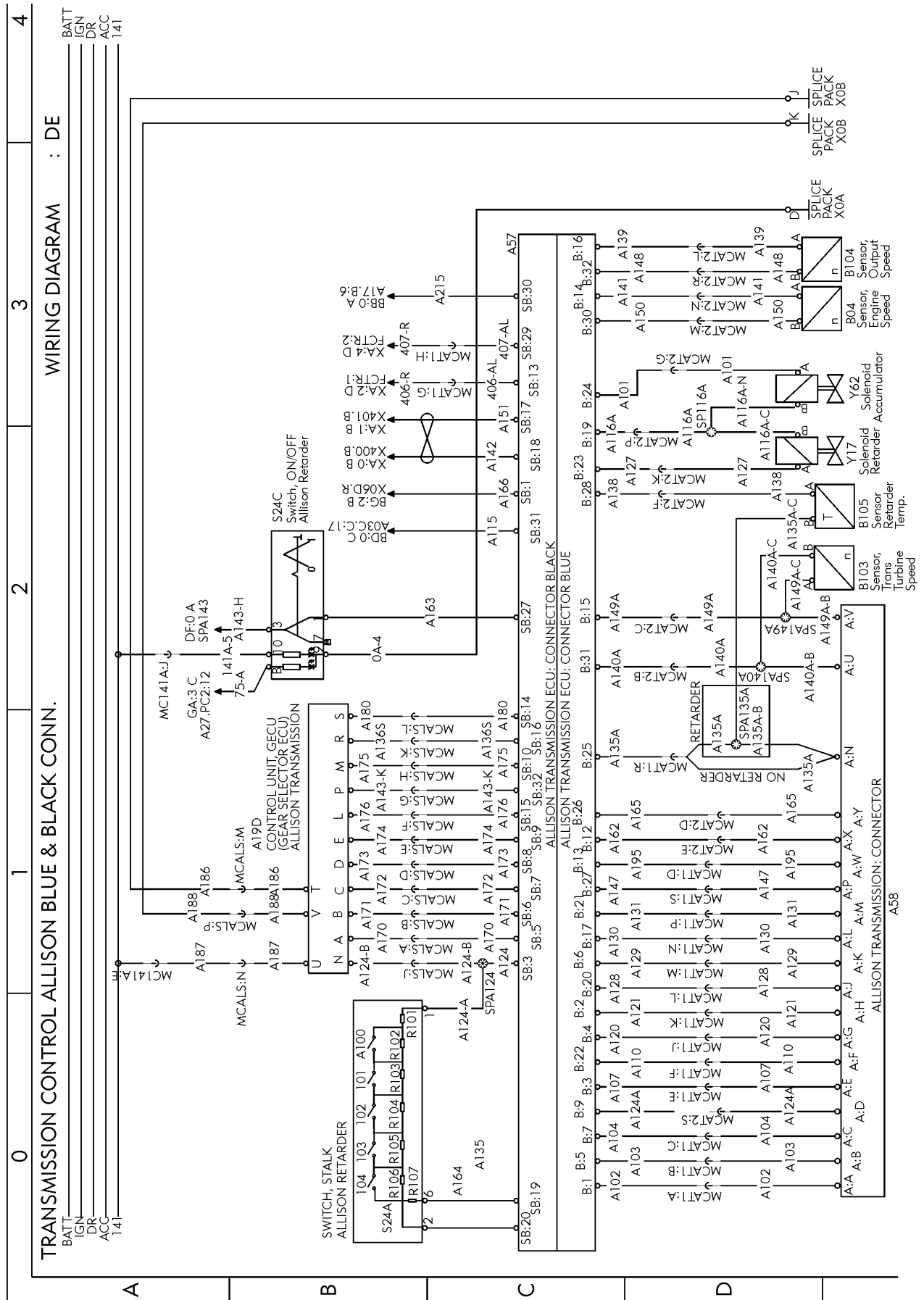
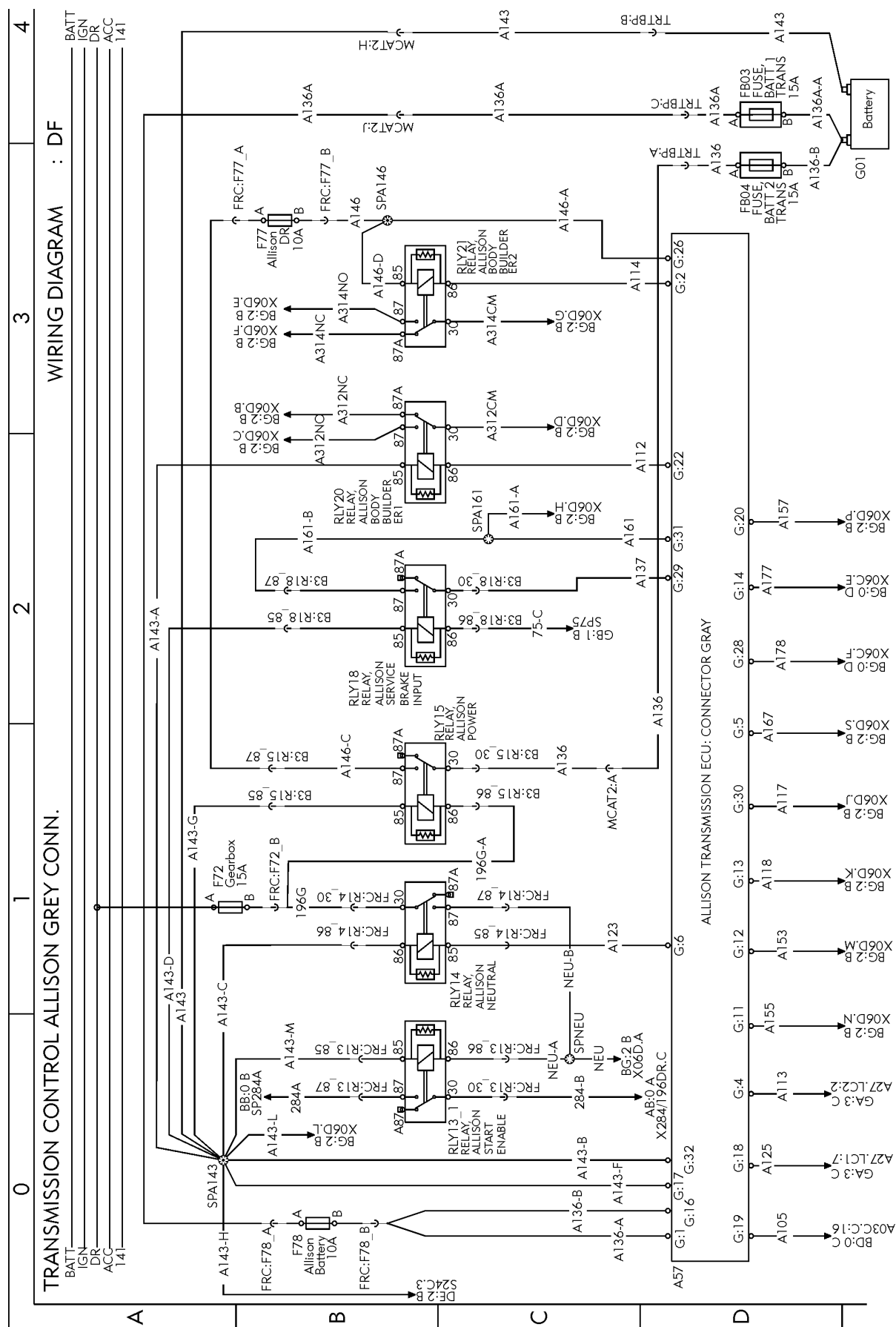


Fig. 30: DE





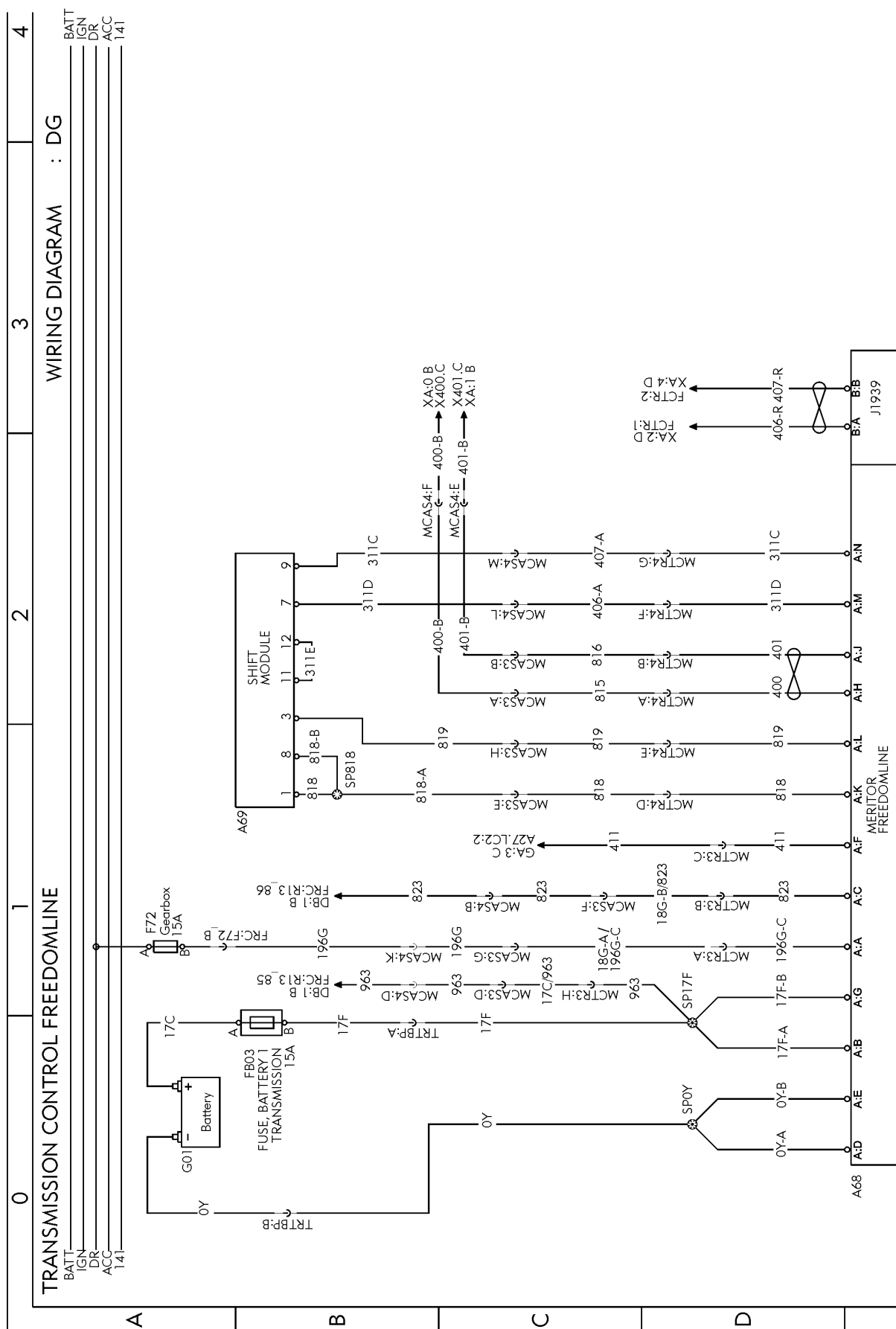


Fig. 32: DG

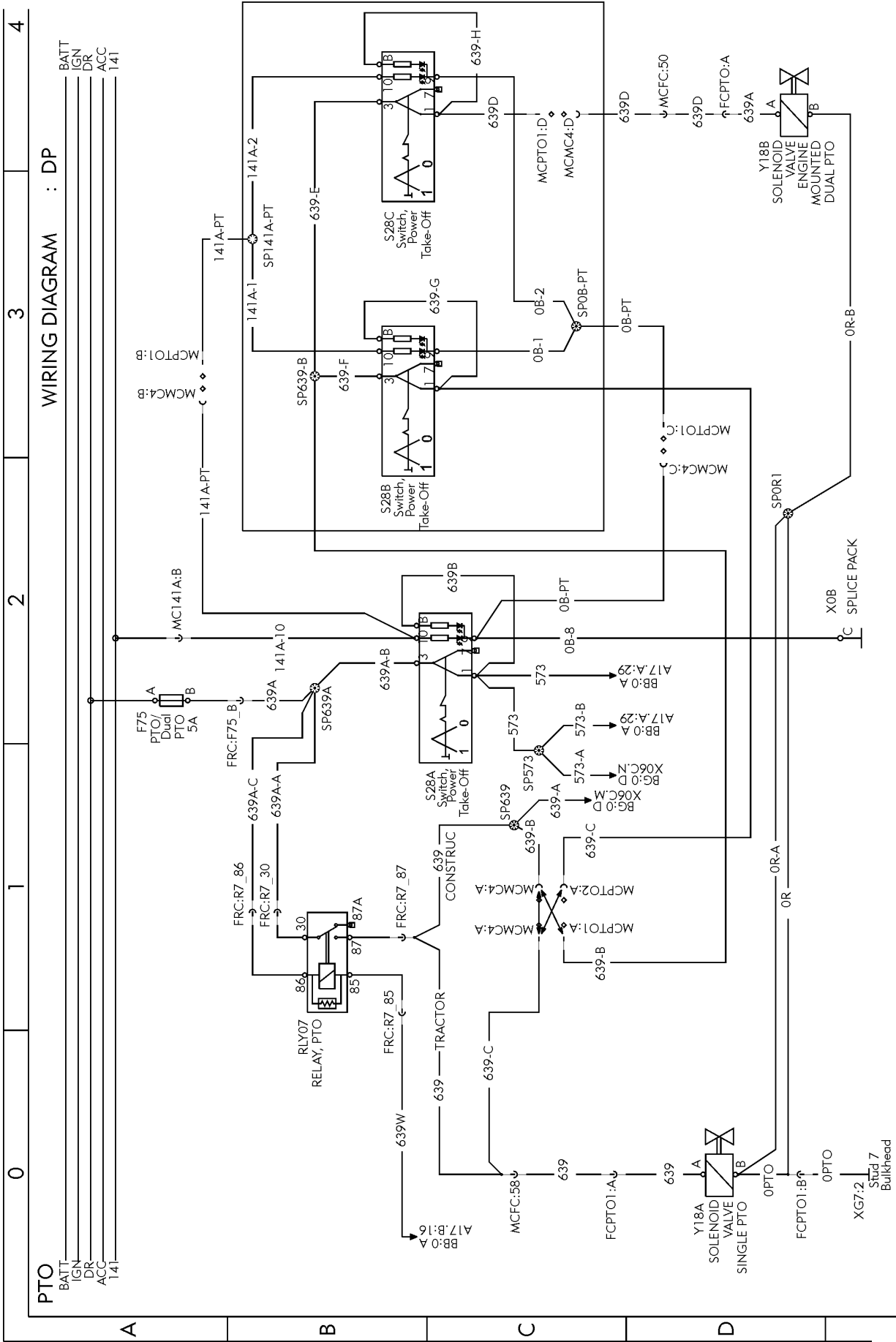


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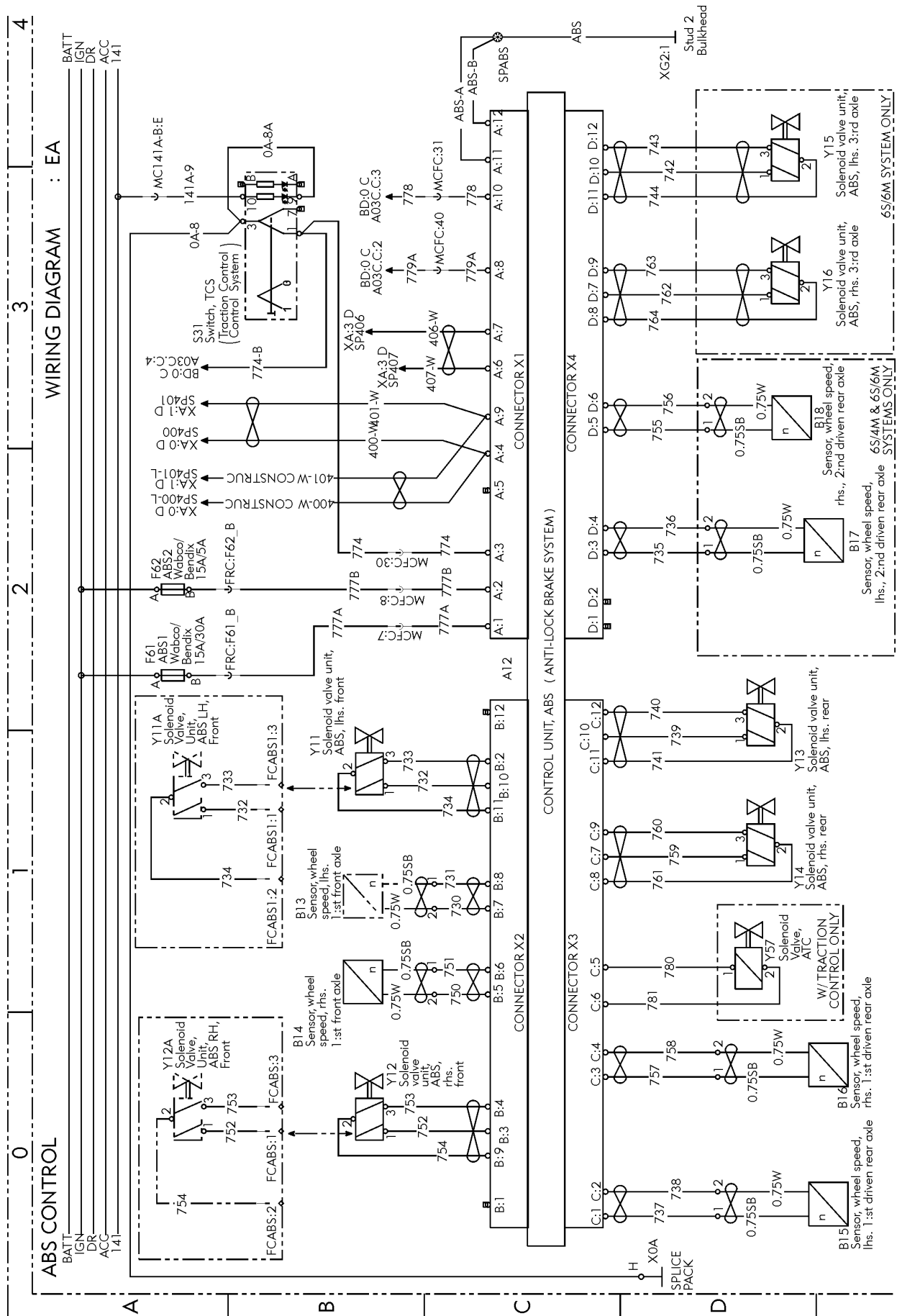
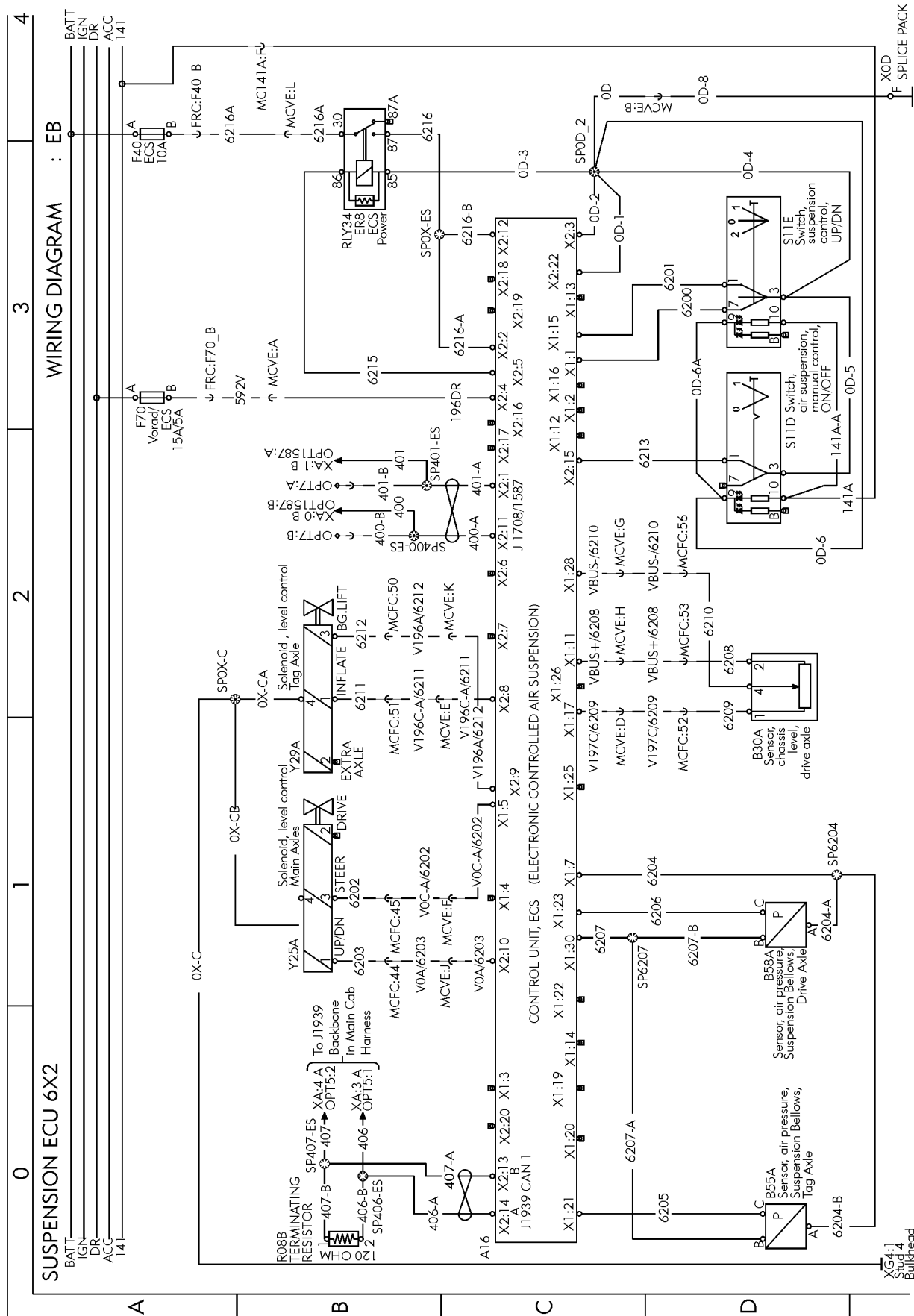


Fig. 34: EA



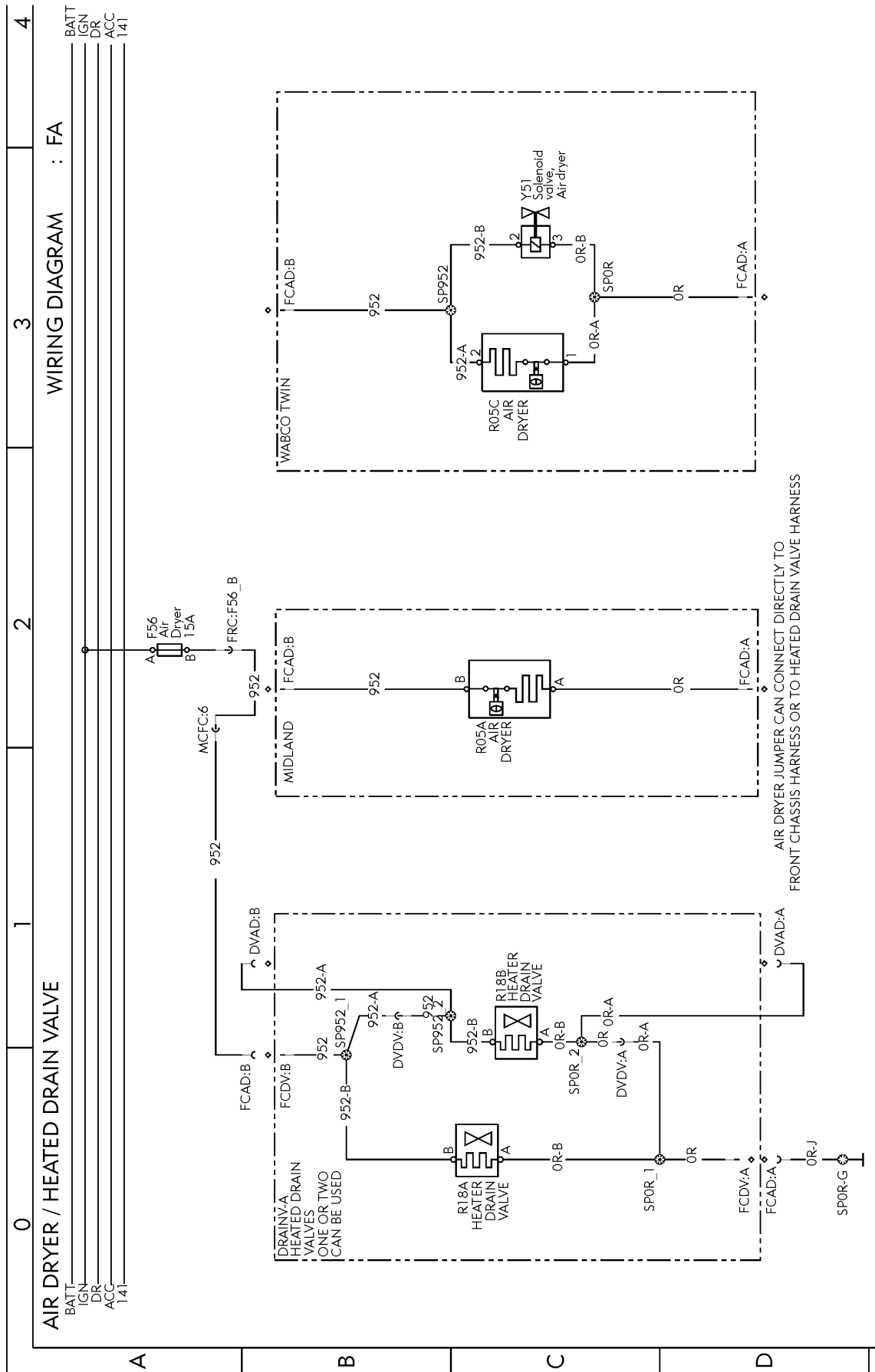


Fig. 36: FA

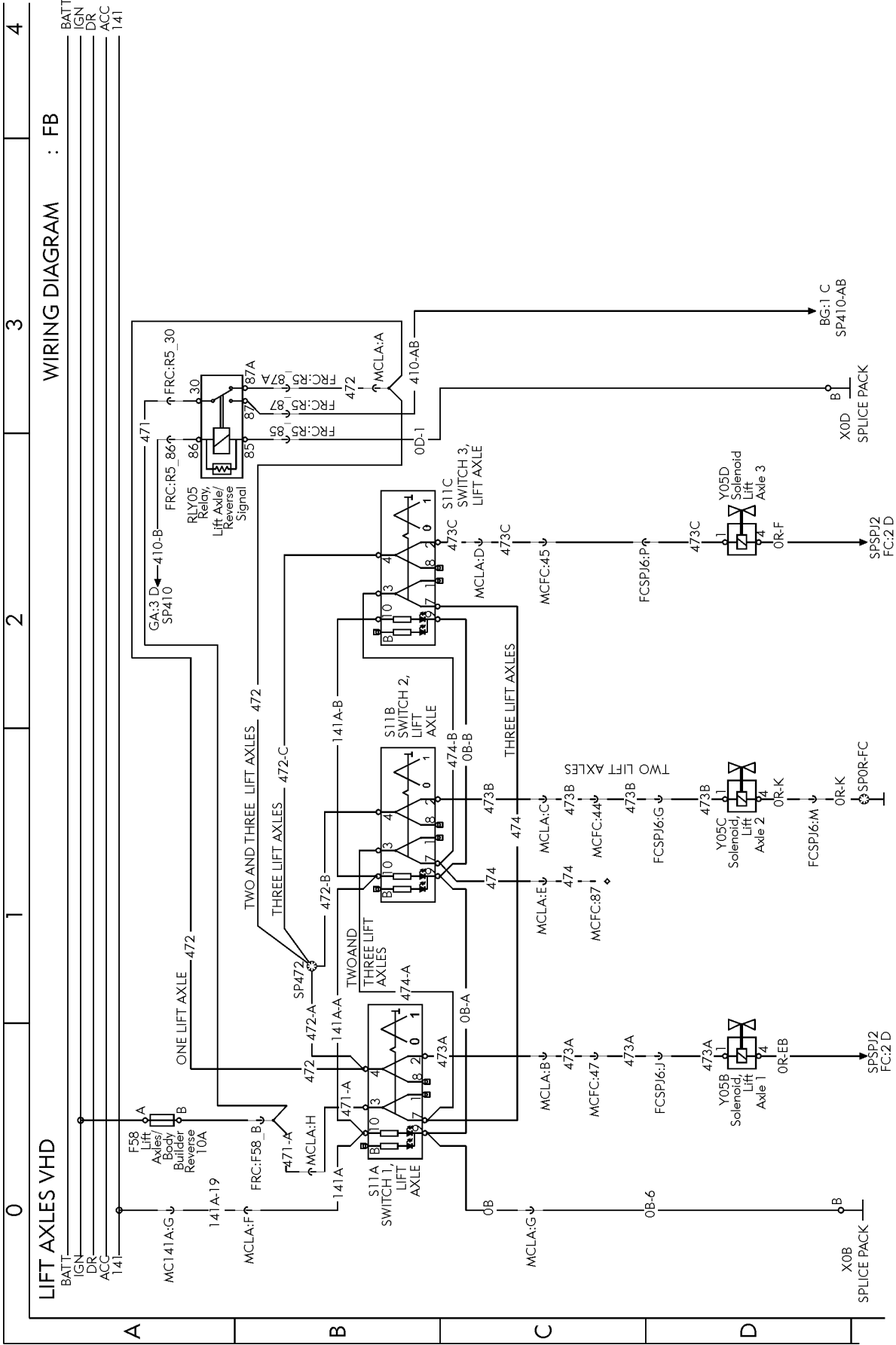


Fig. 37: FB

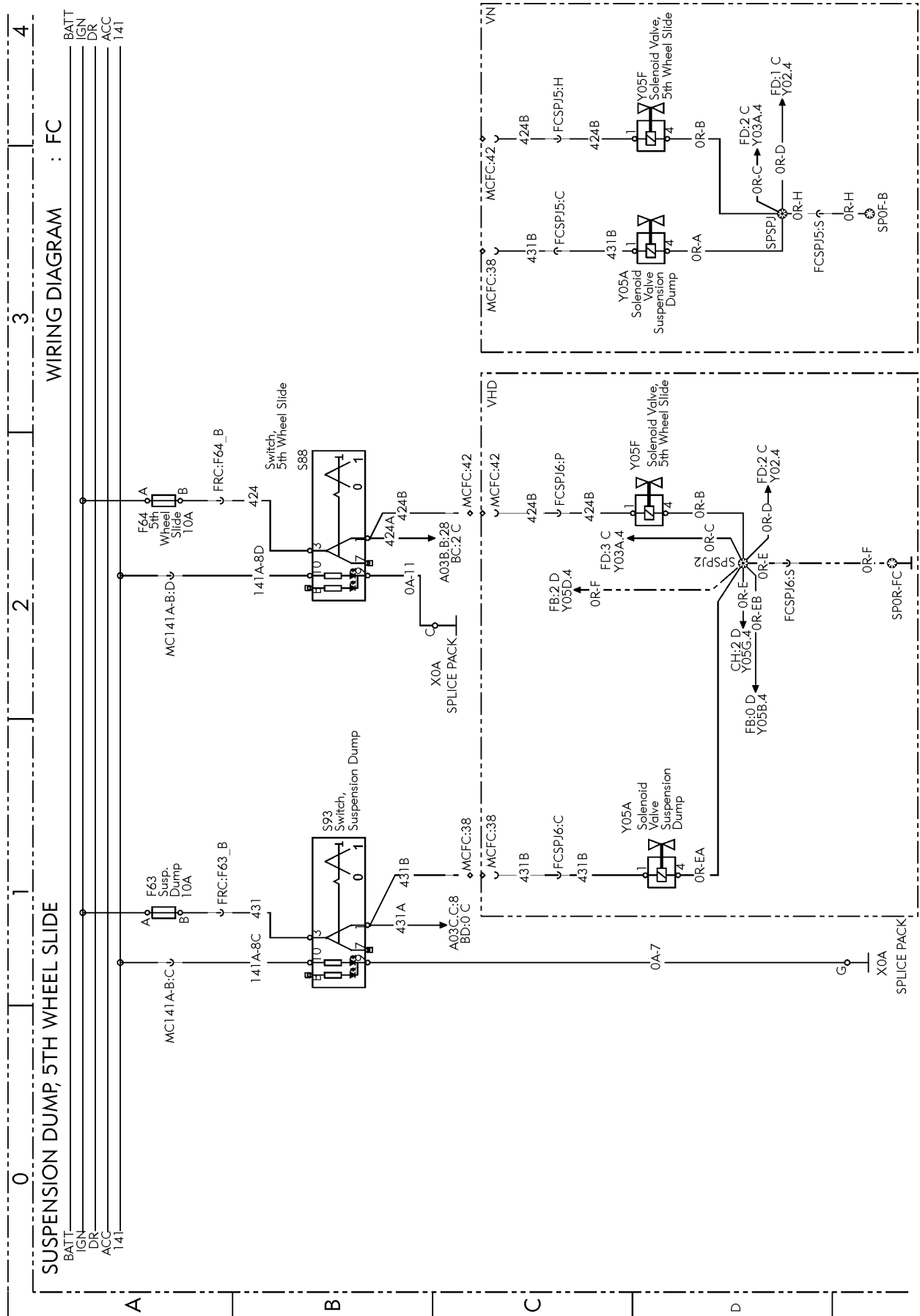


Fig. 38: FC

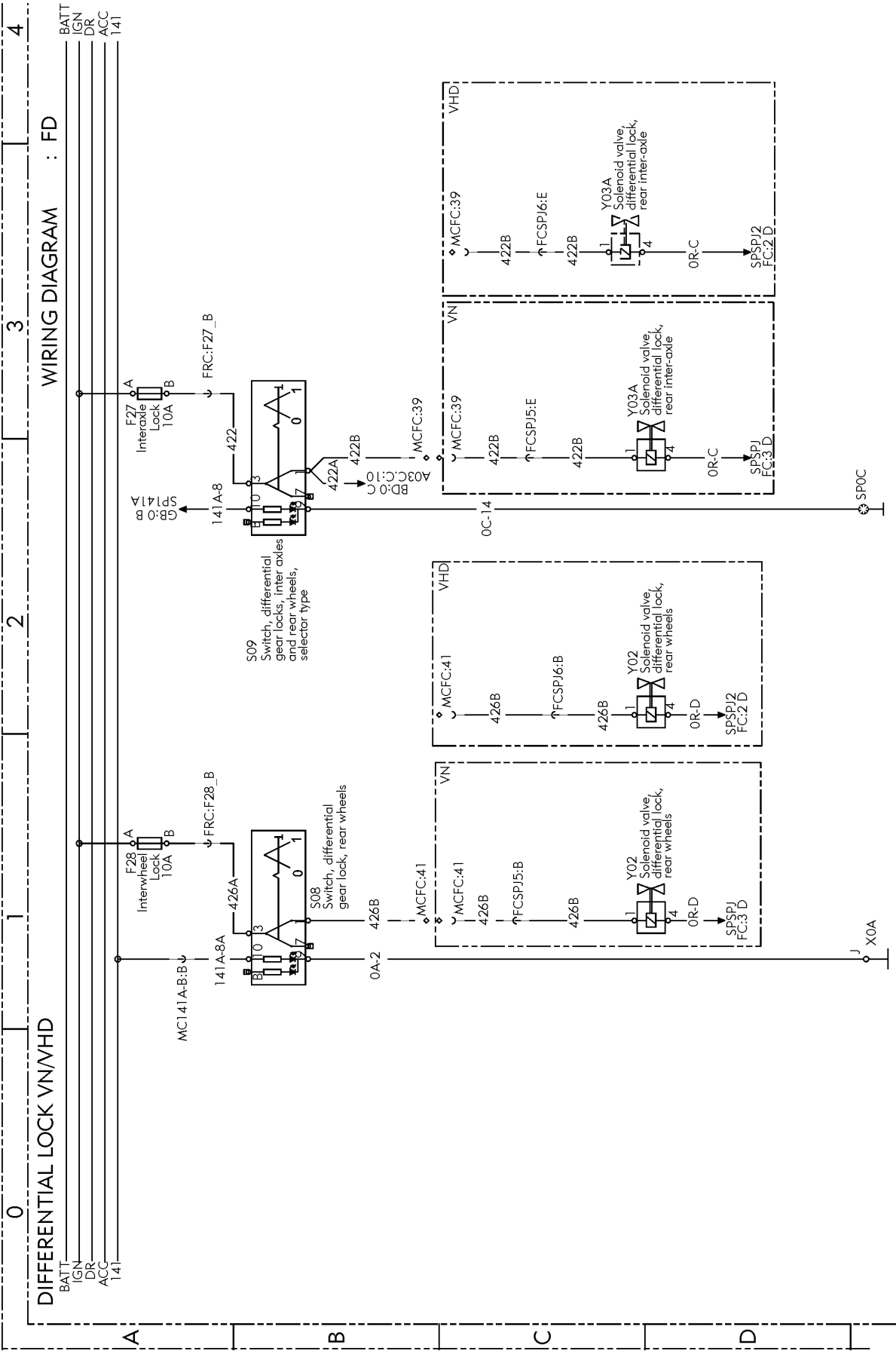


Fig. 39: FD



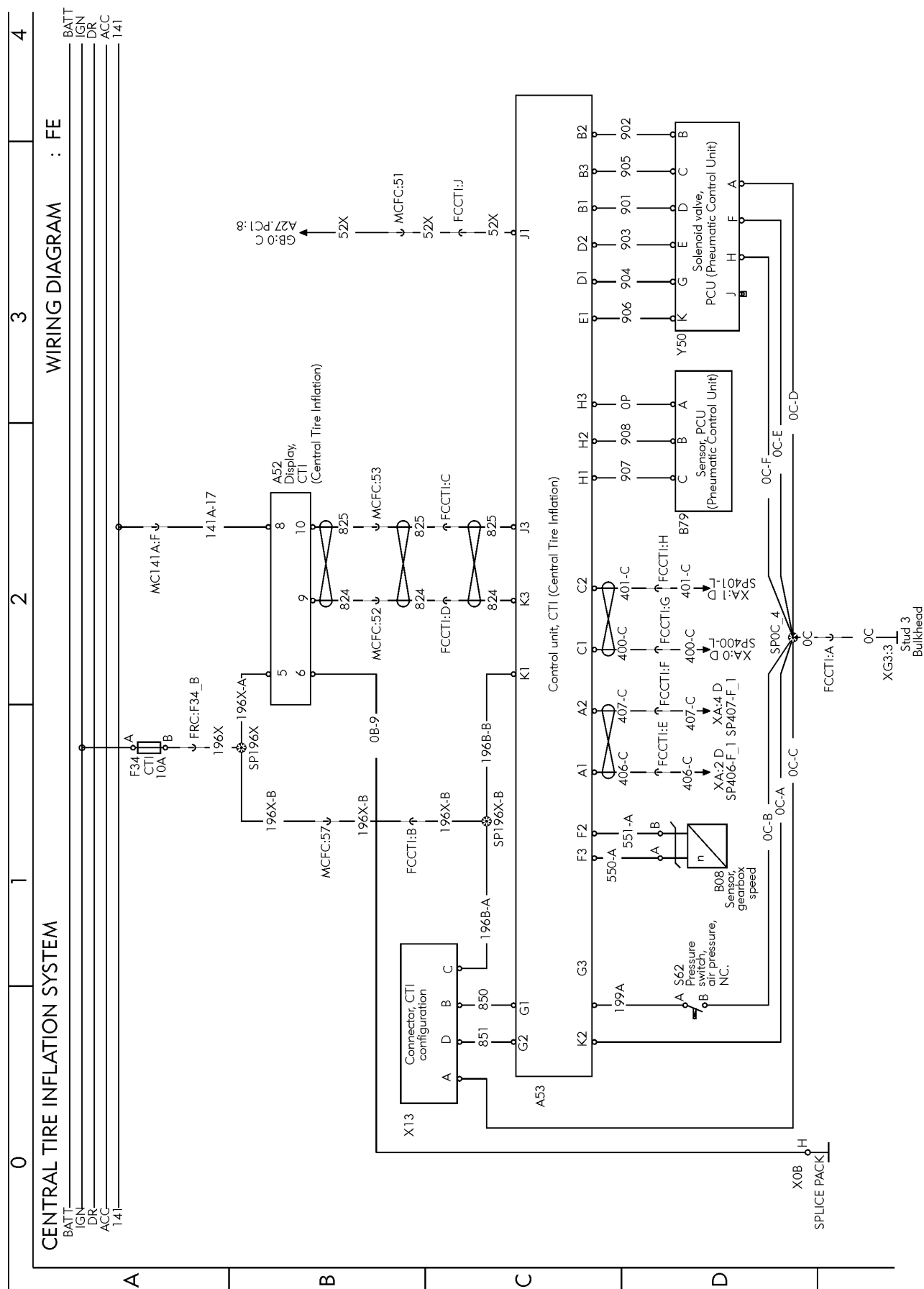
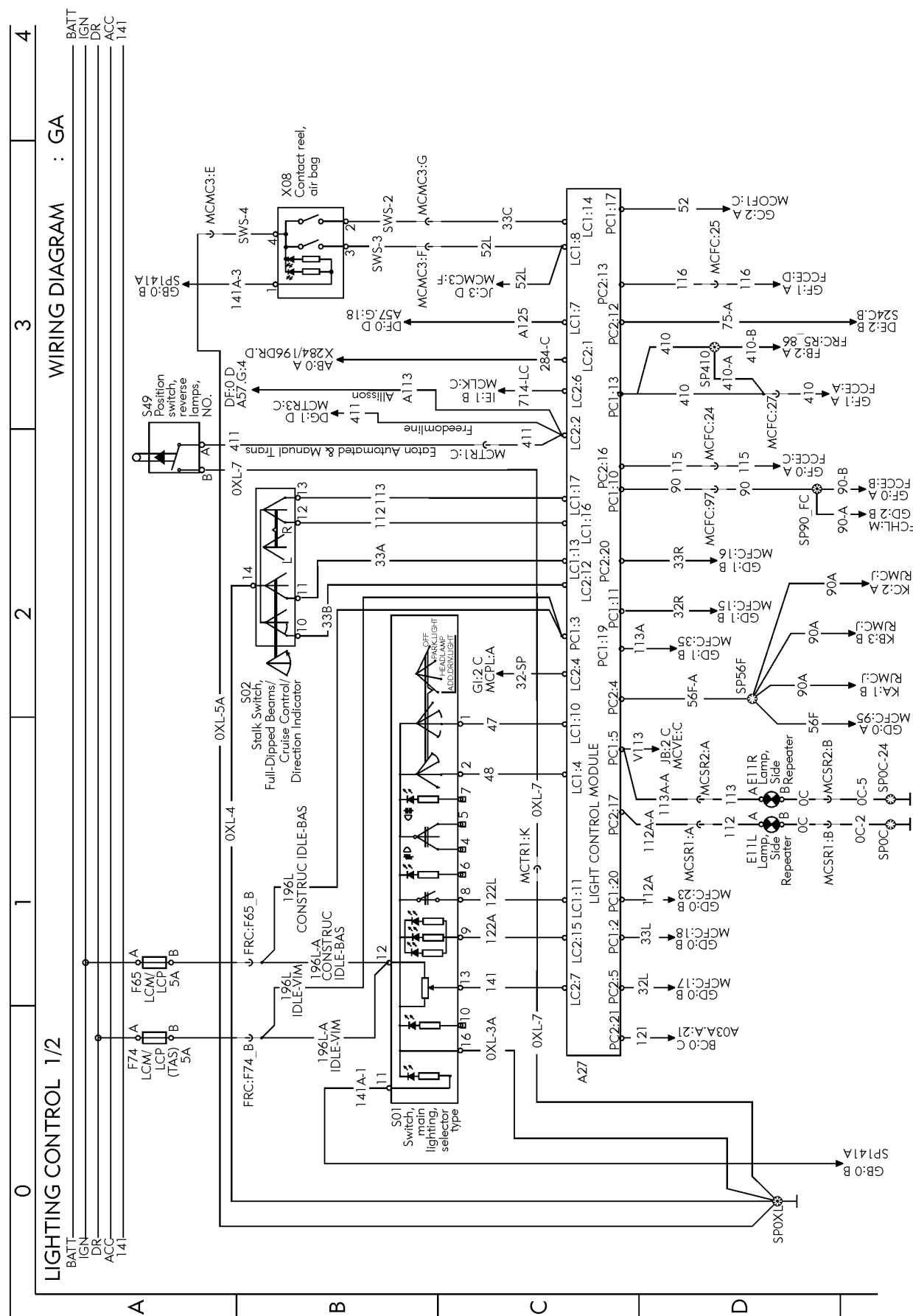


Fig. 40: FE



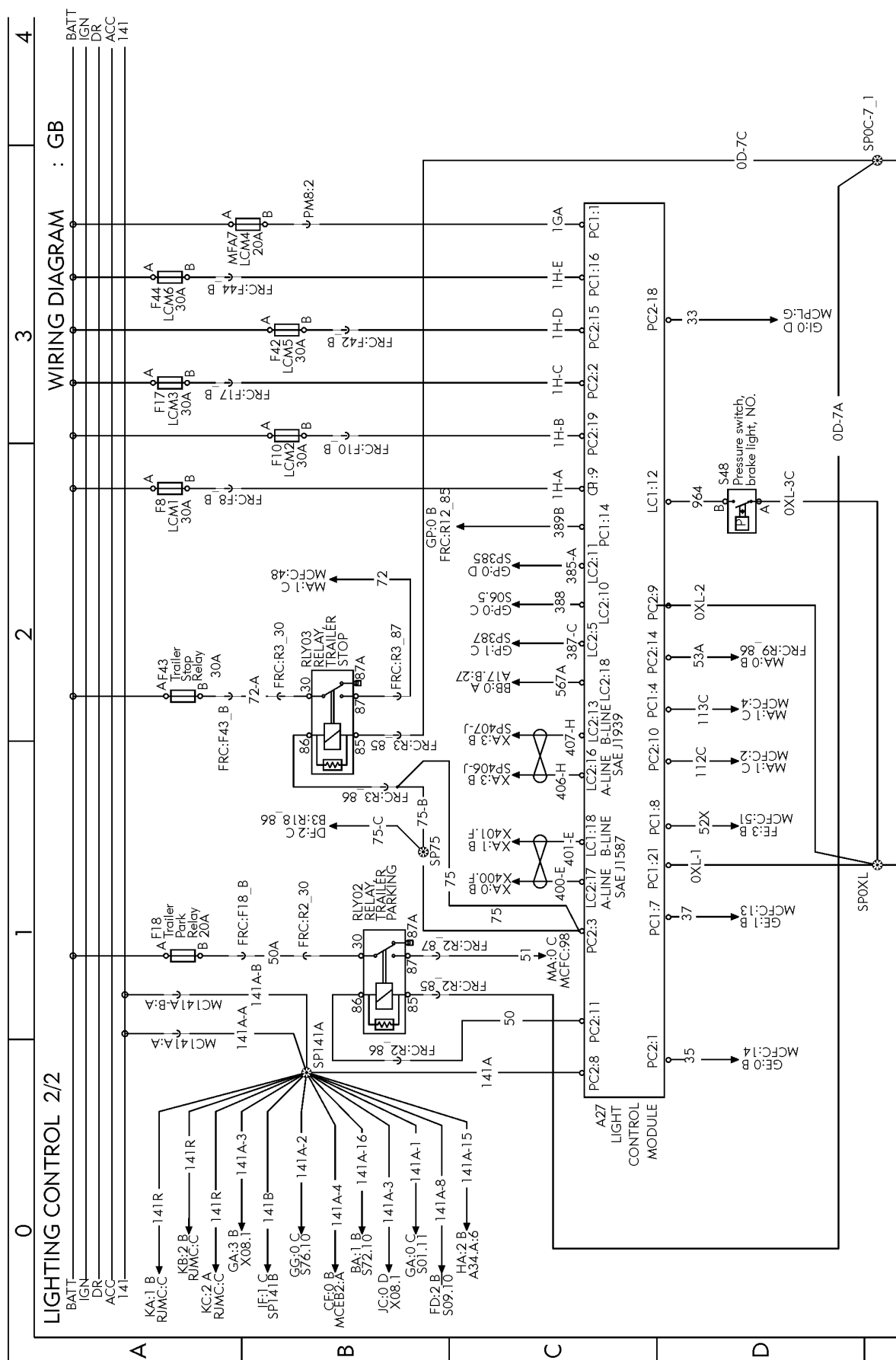
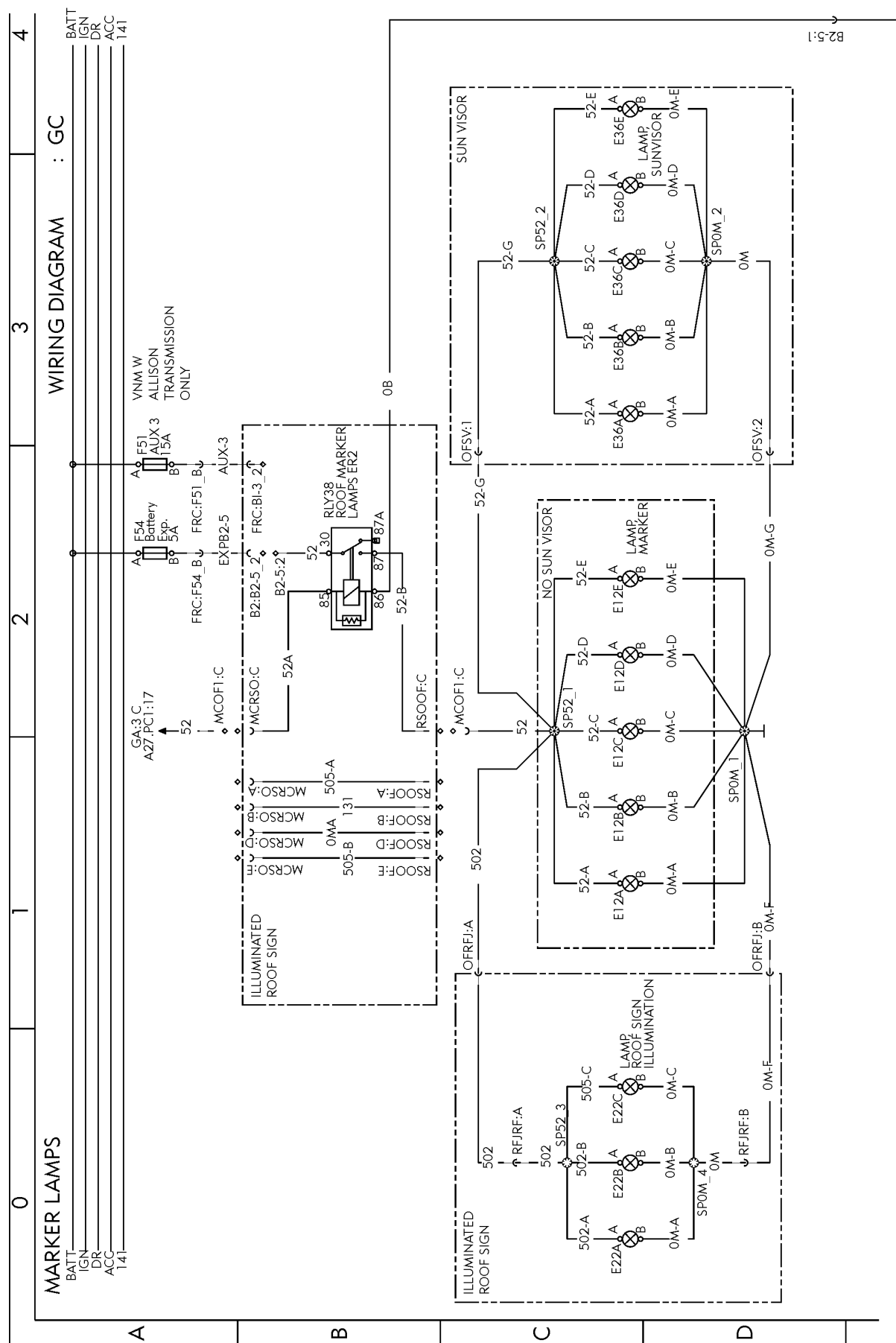


Fig. 42: GB



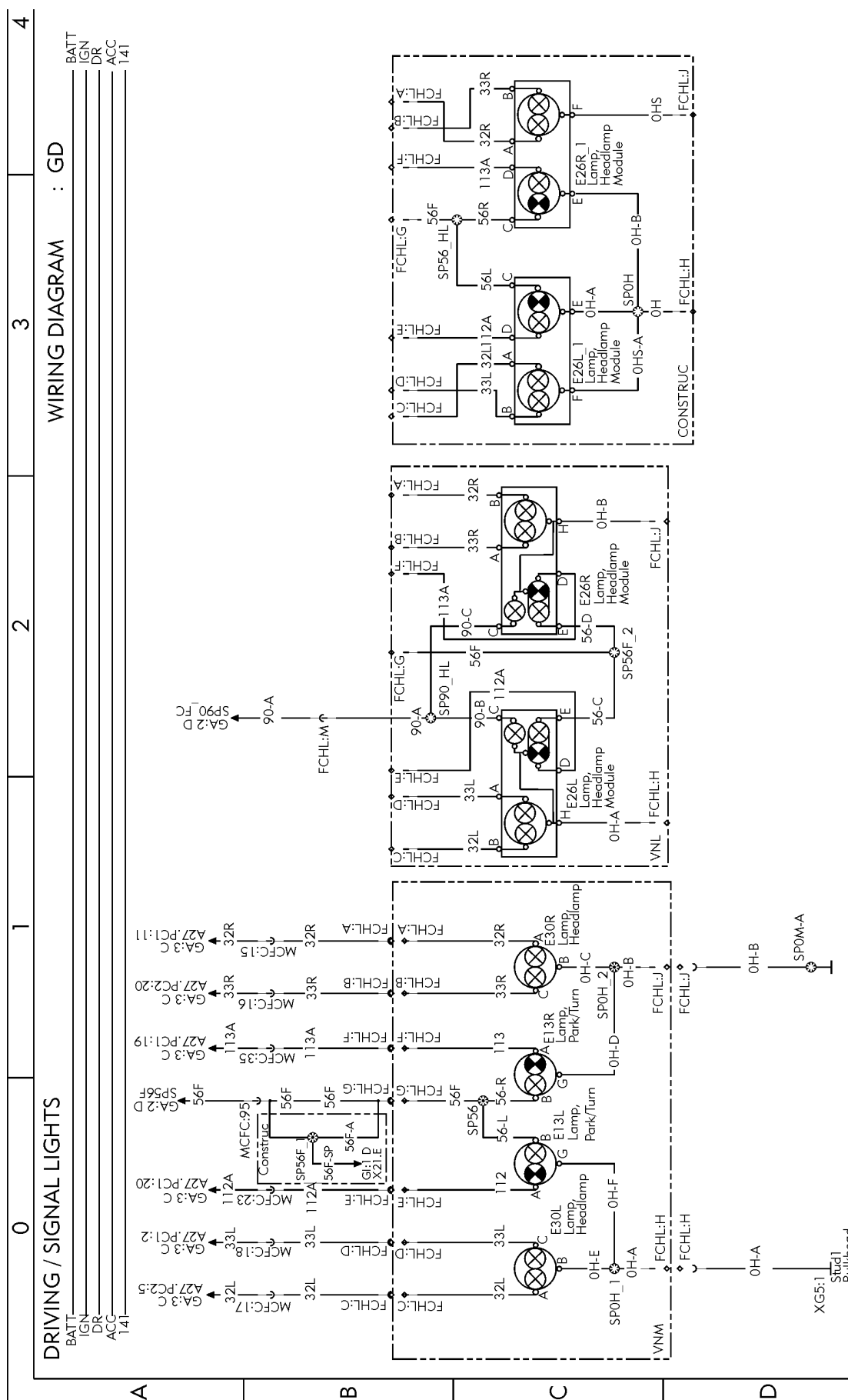
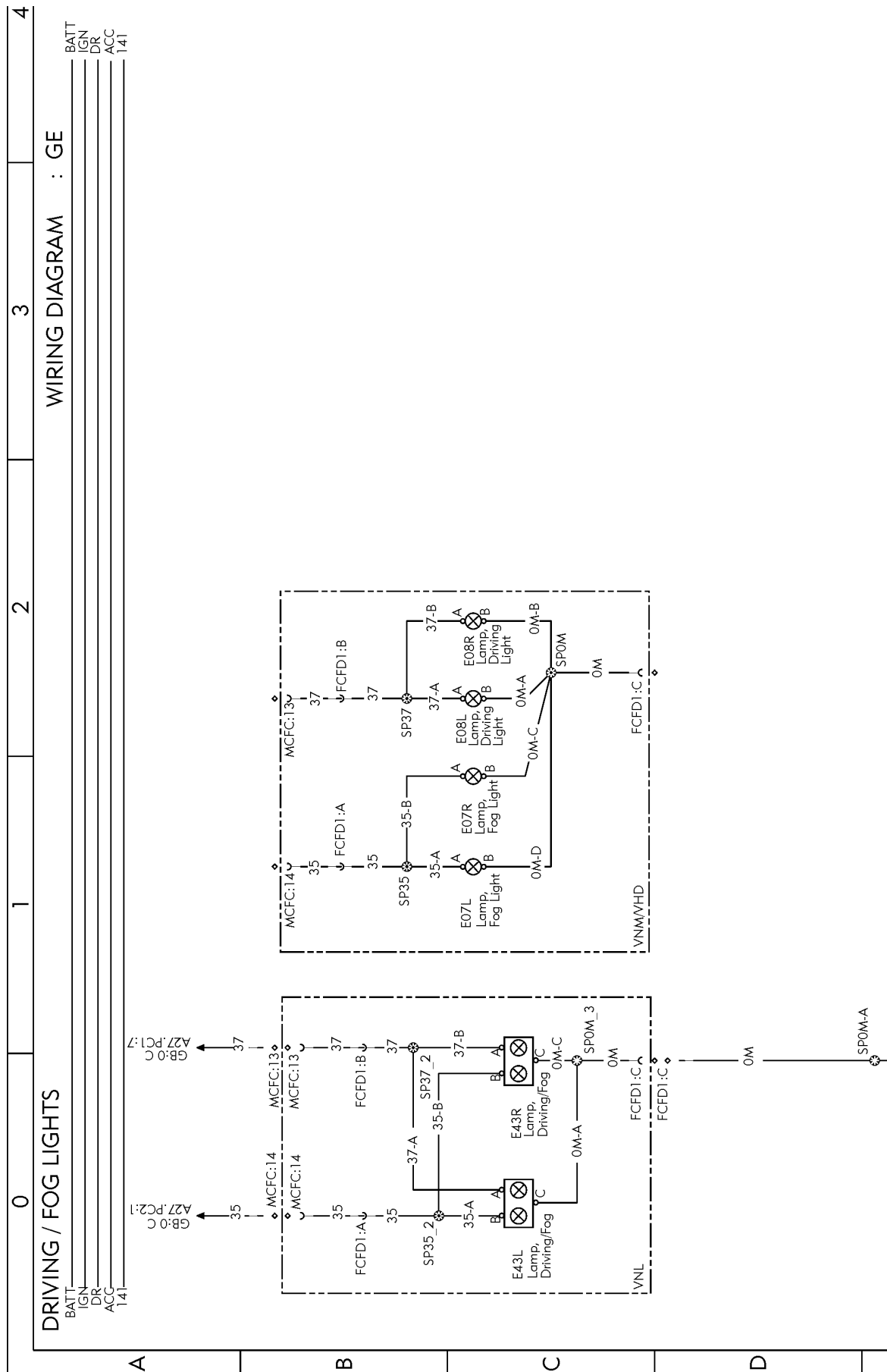


Fig. 44: GD



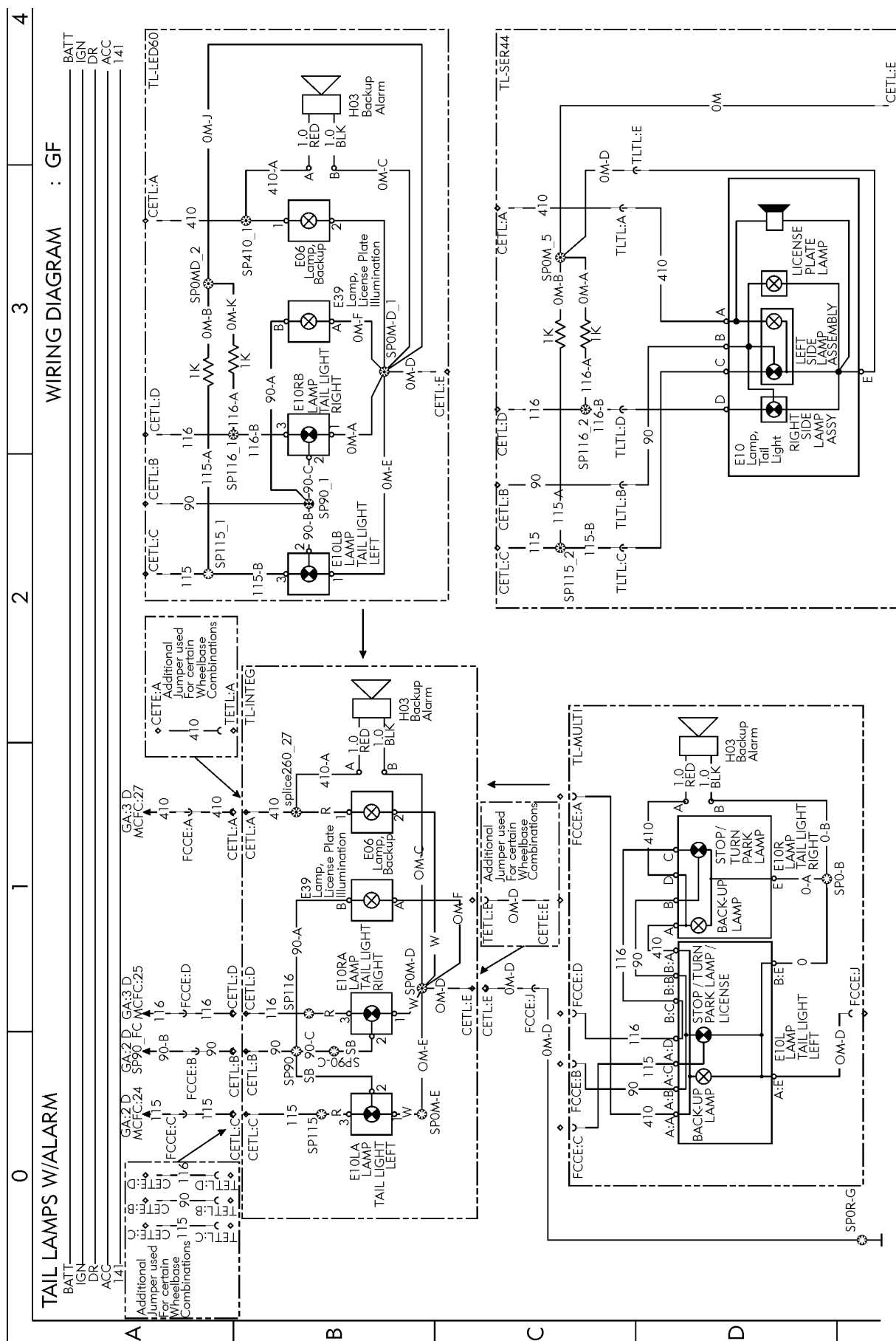
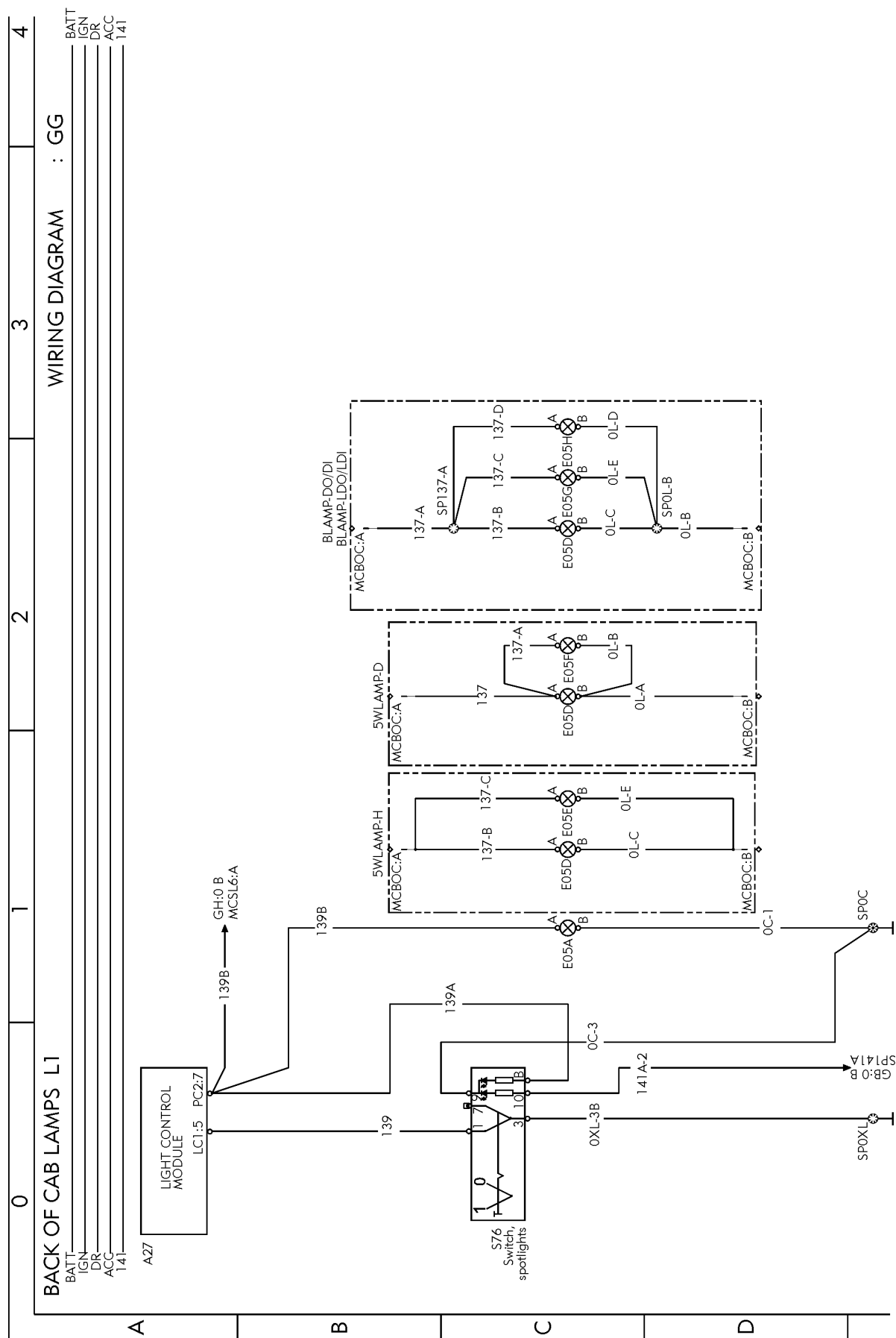


Fig. 46: GF





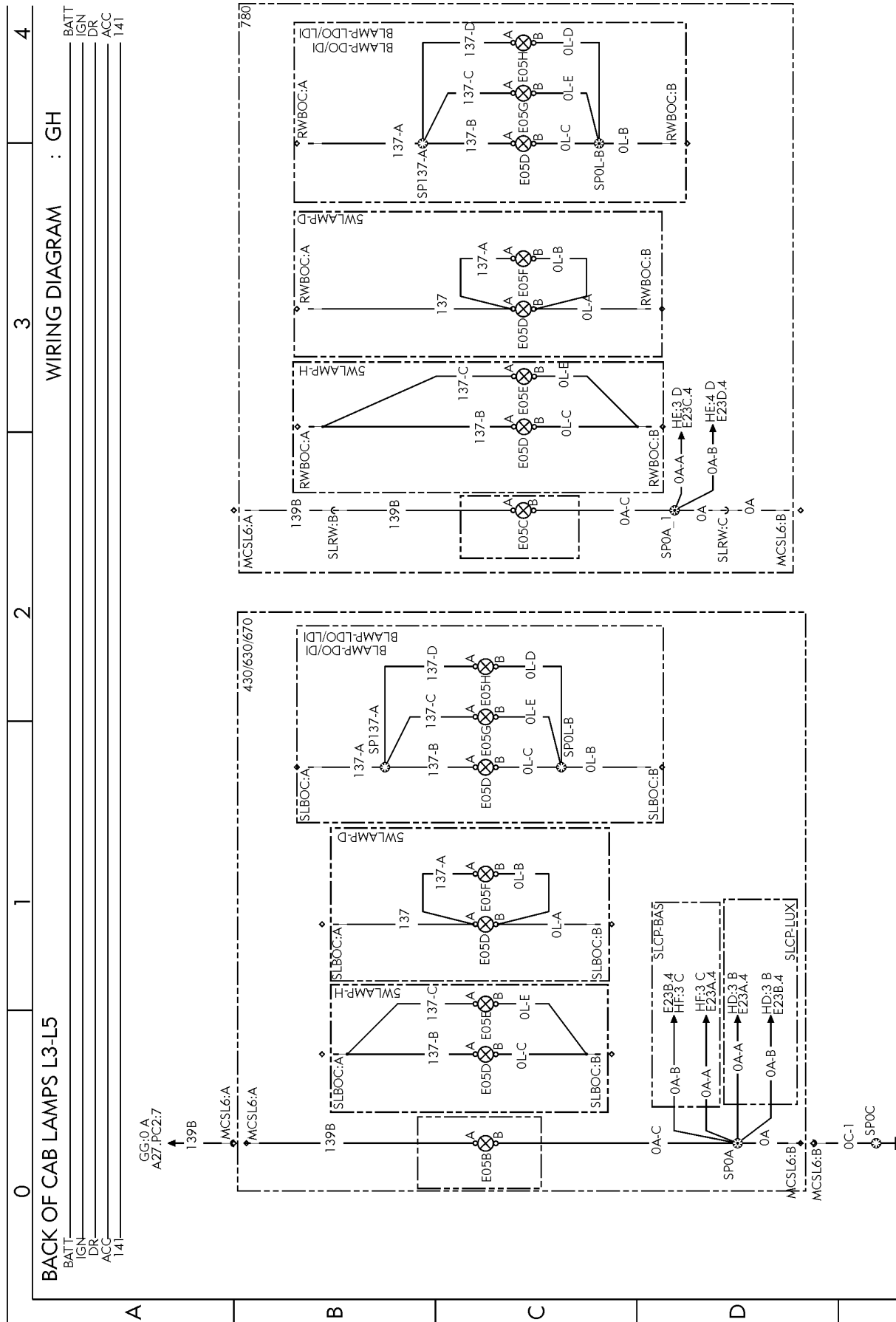
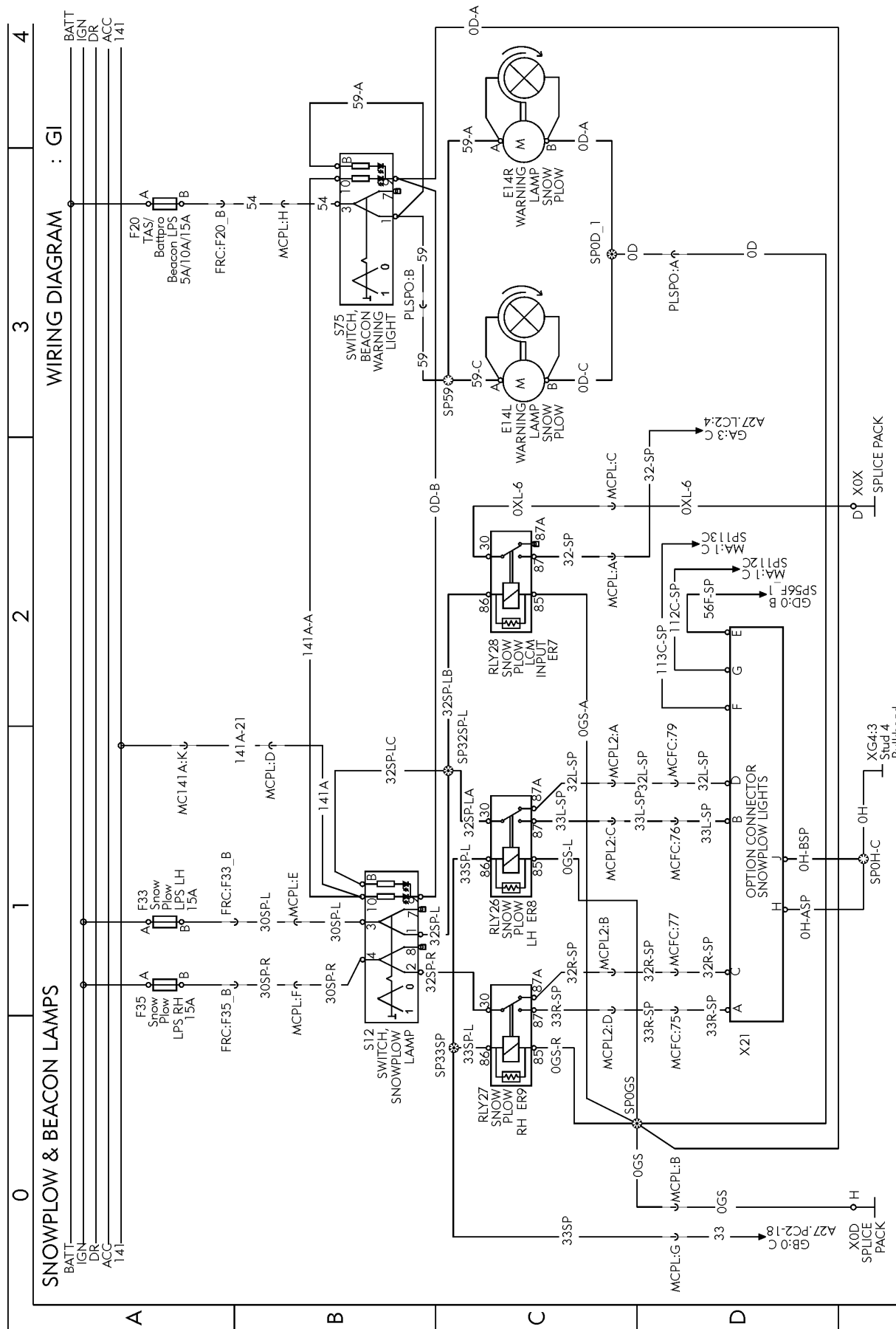


Fig. 48: GH



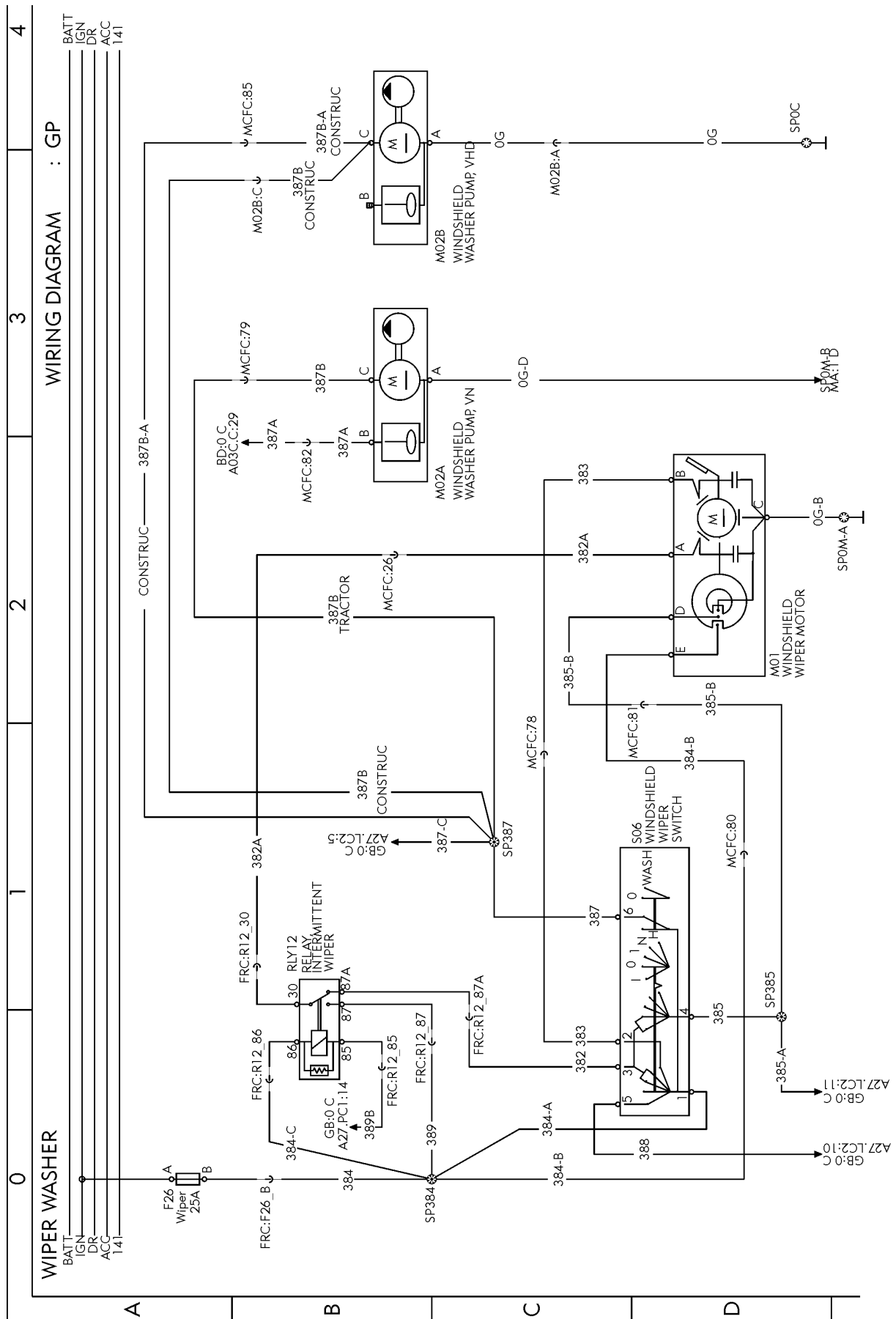


Fig. 50: GP

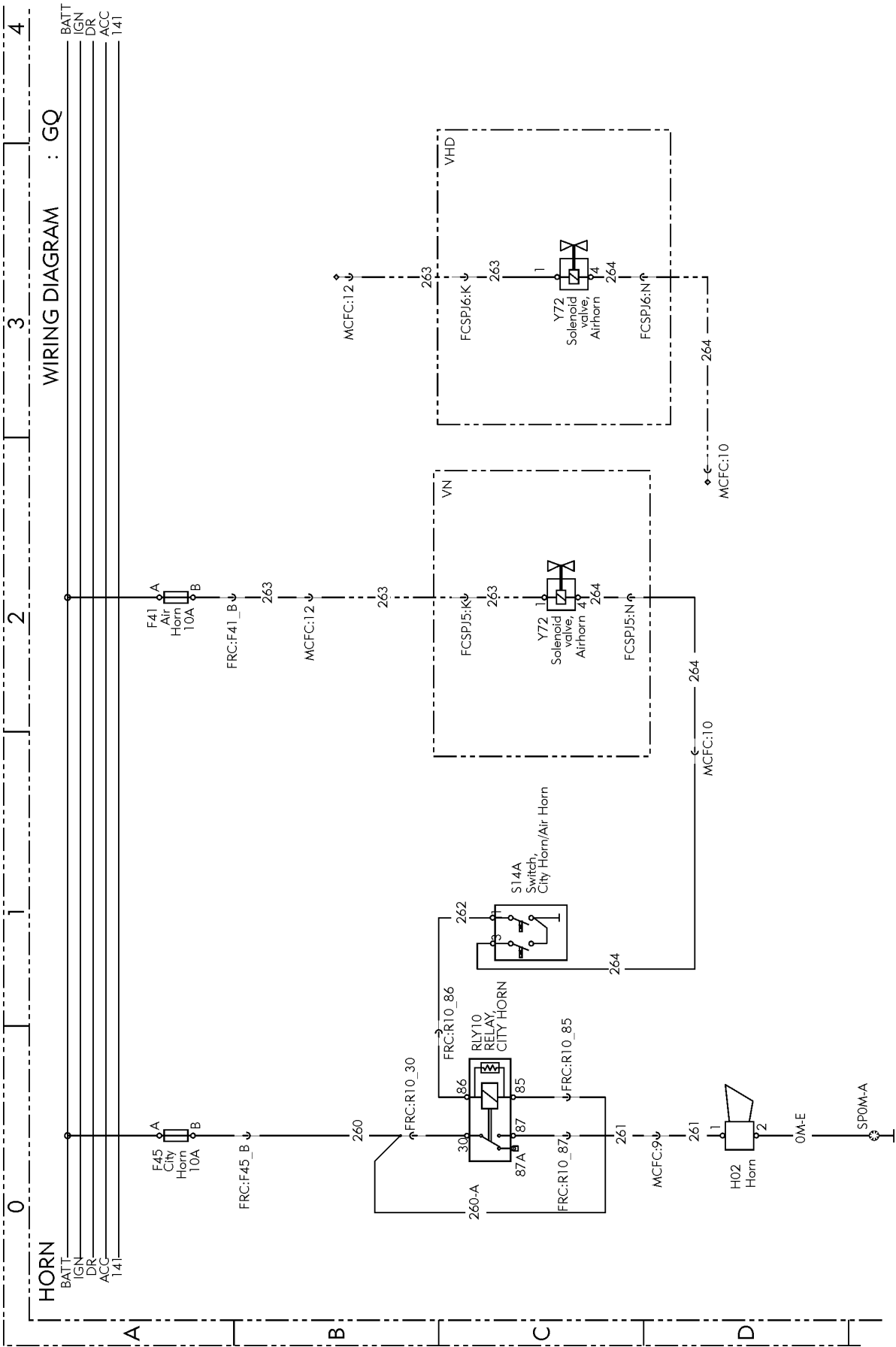


Fig. 51: GQ

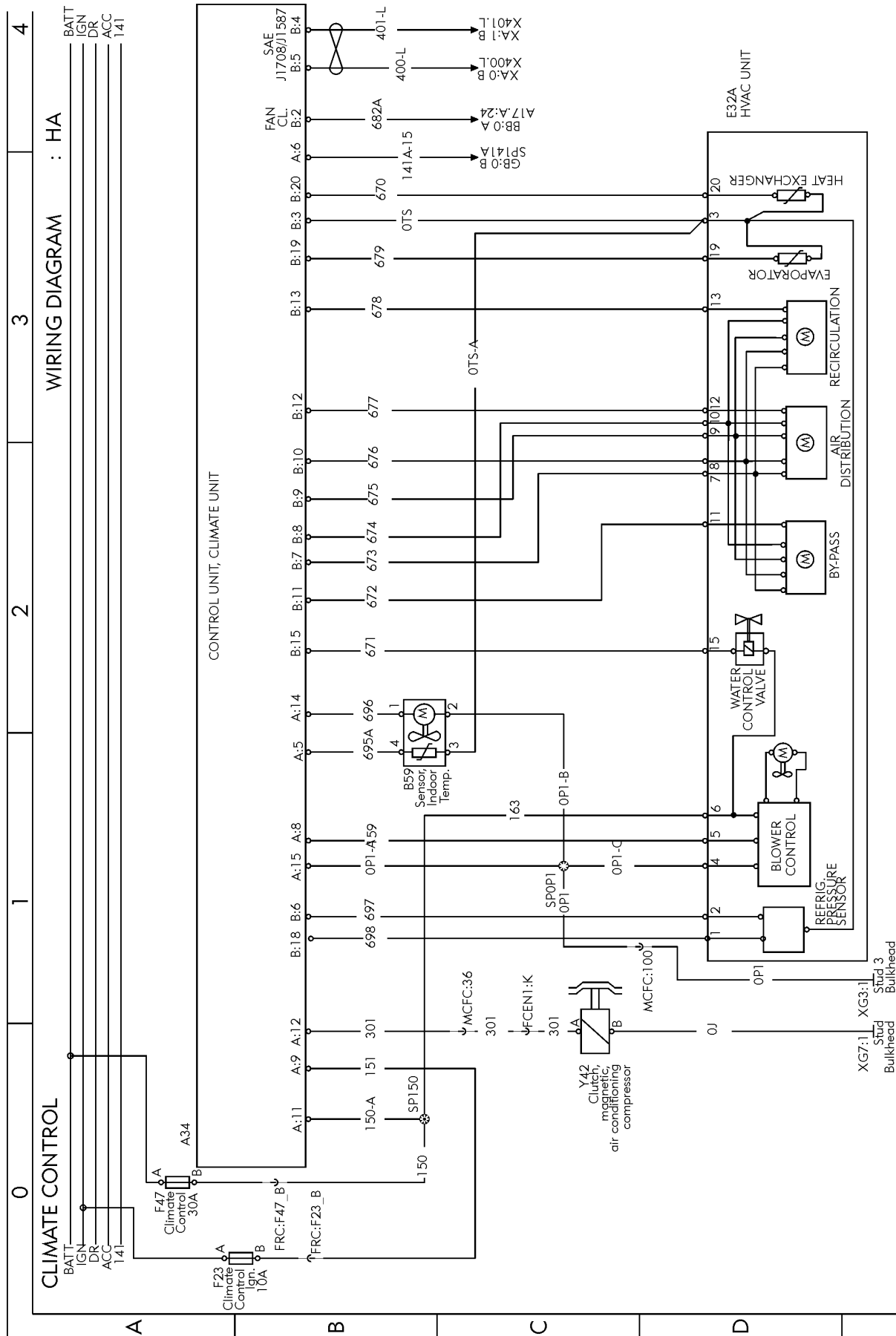
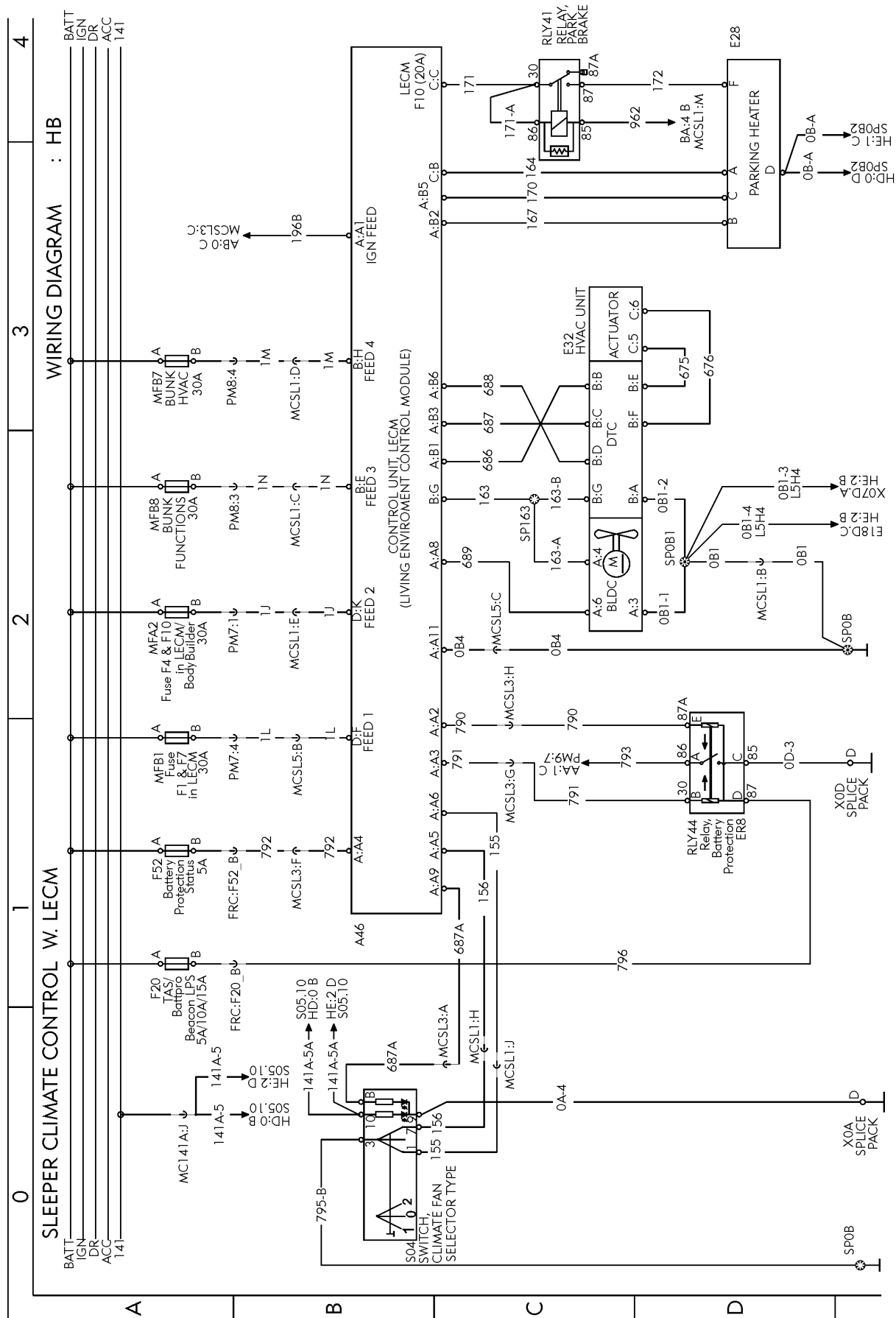


Fig. 52: HA



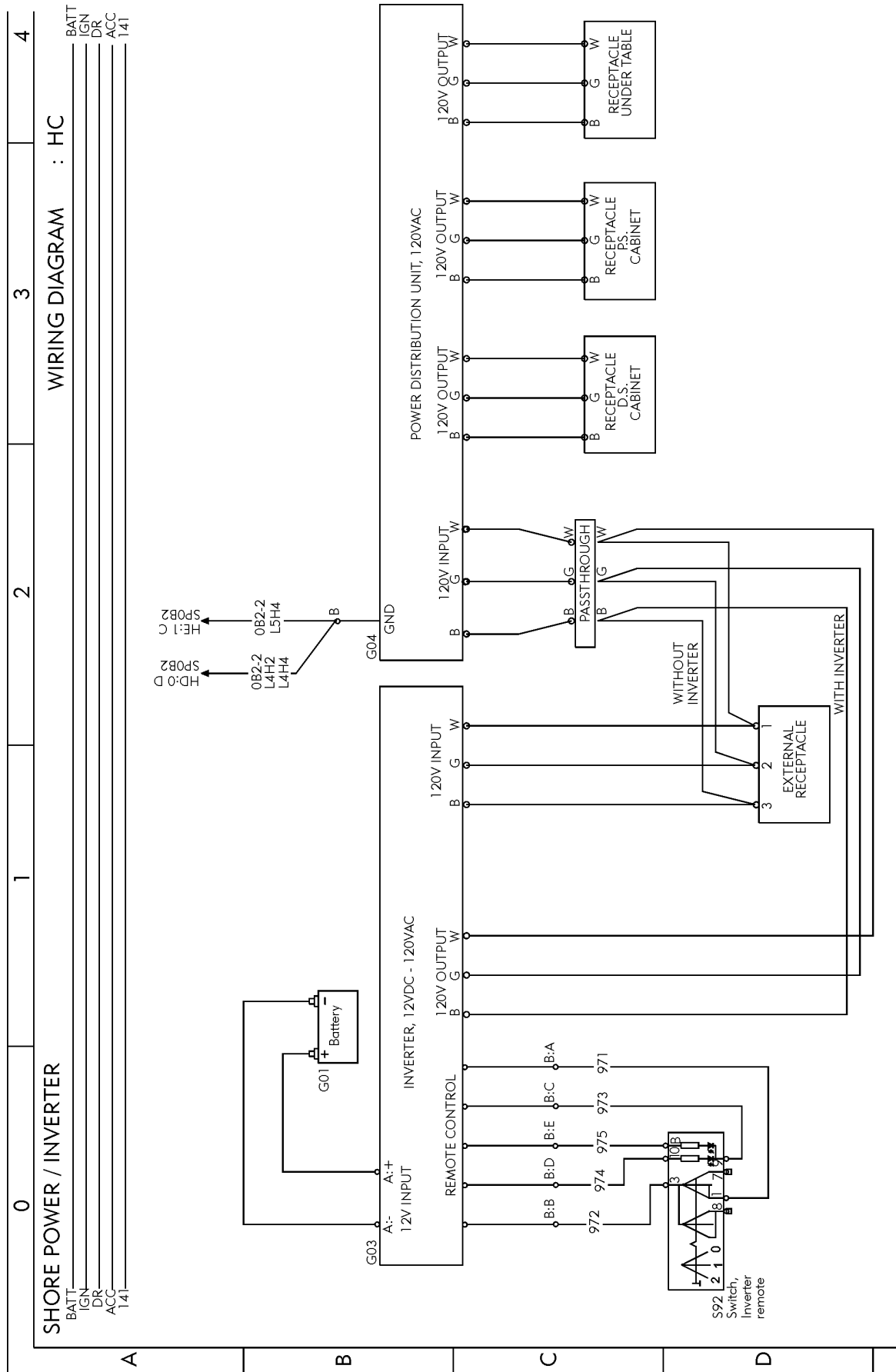


Fig. 54: HC

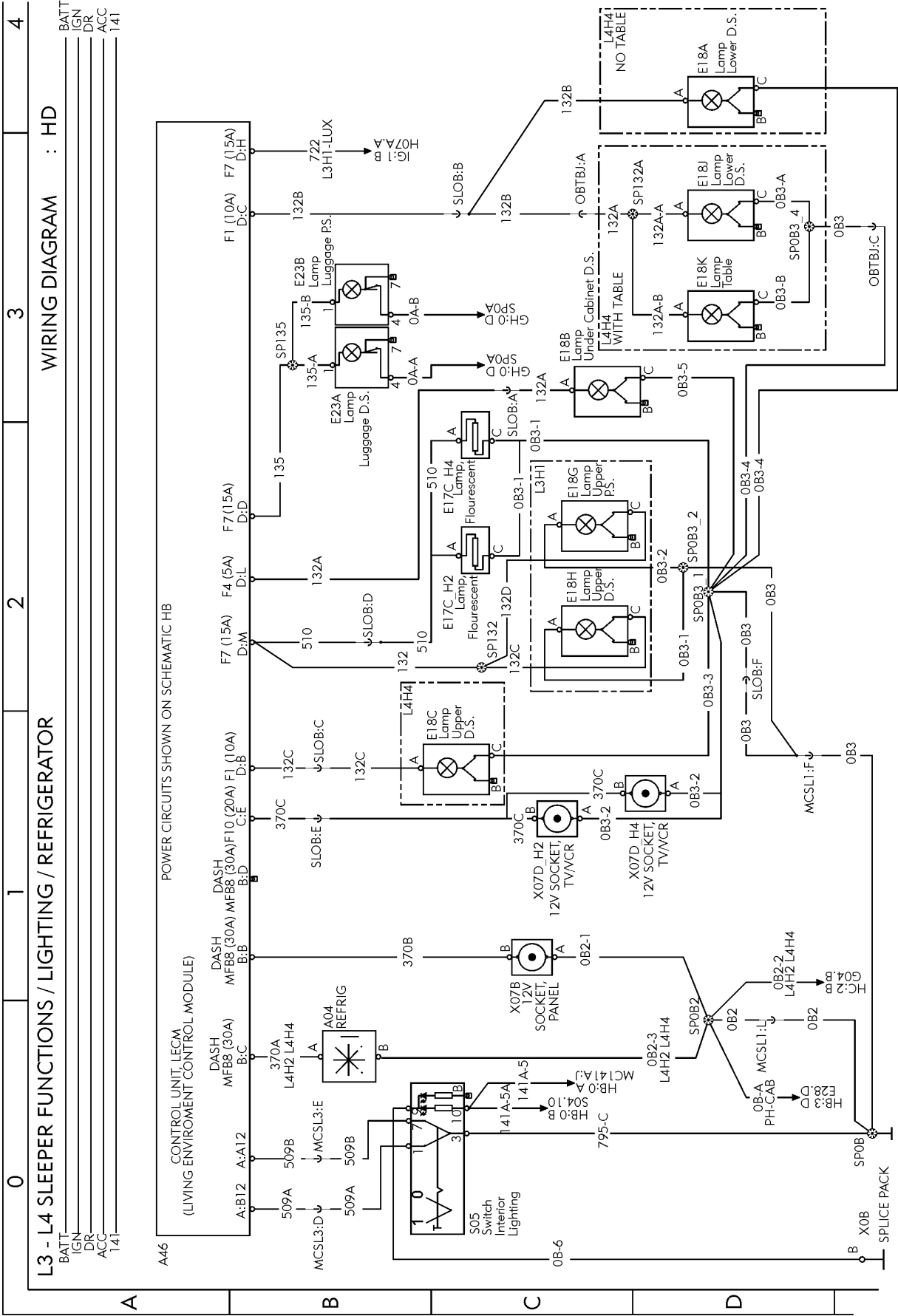


Fig. 55: HD



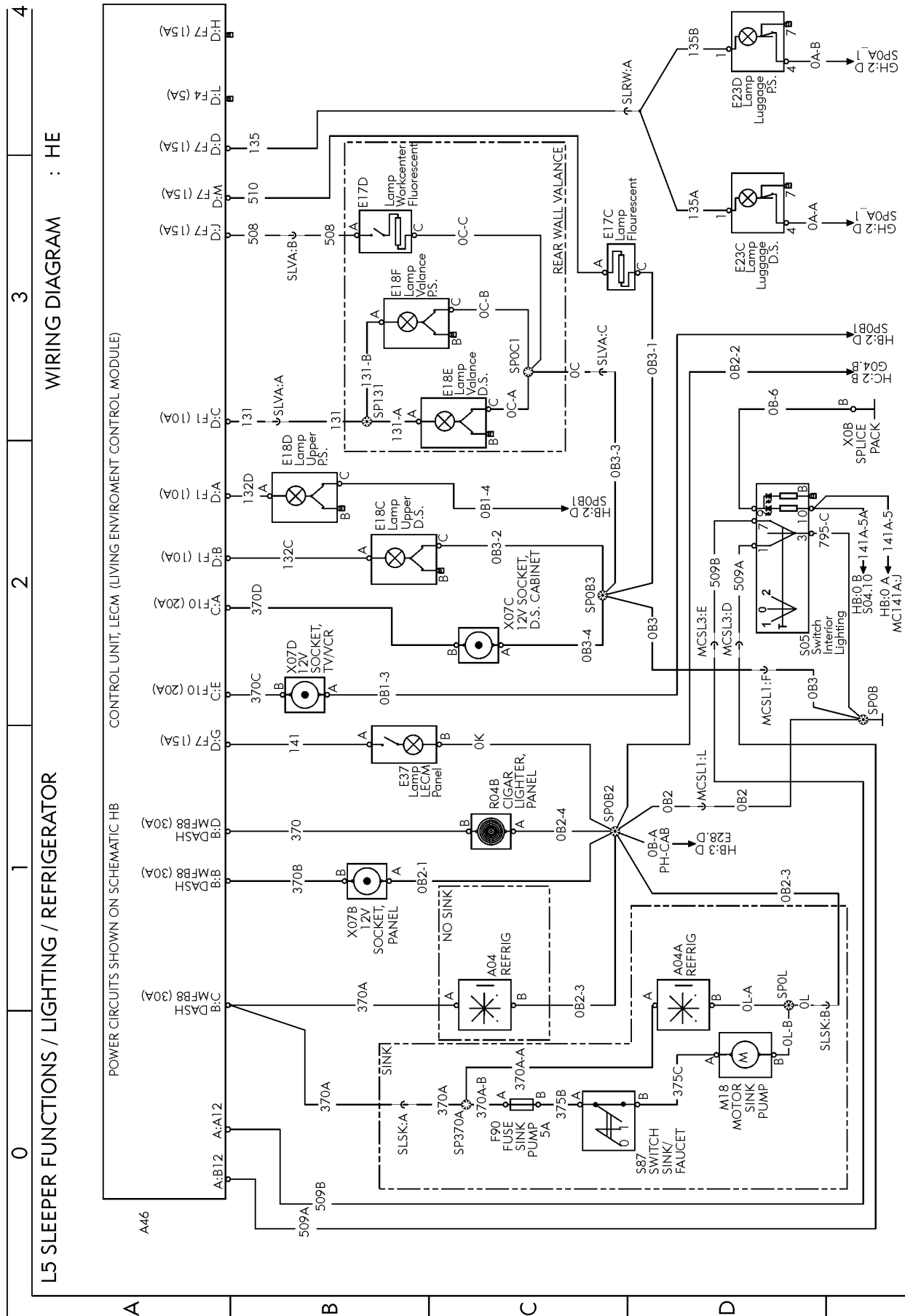


Fig. 56: HE

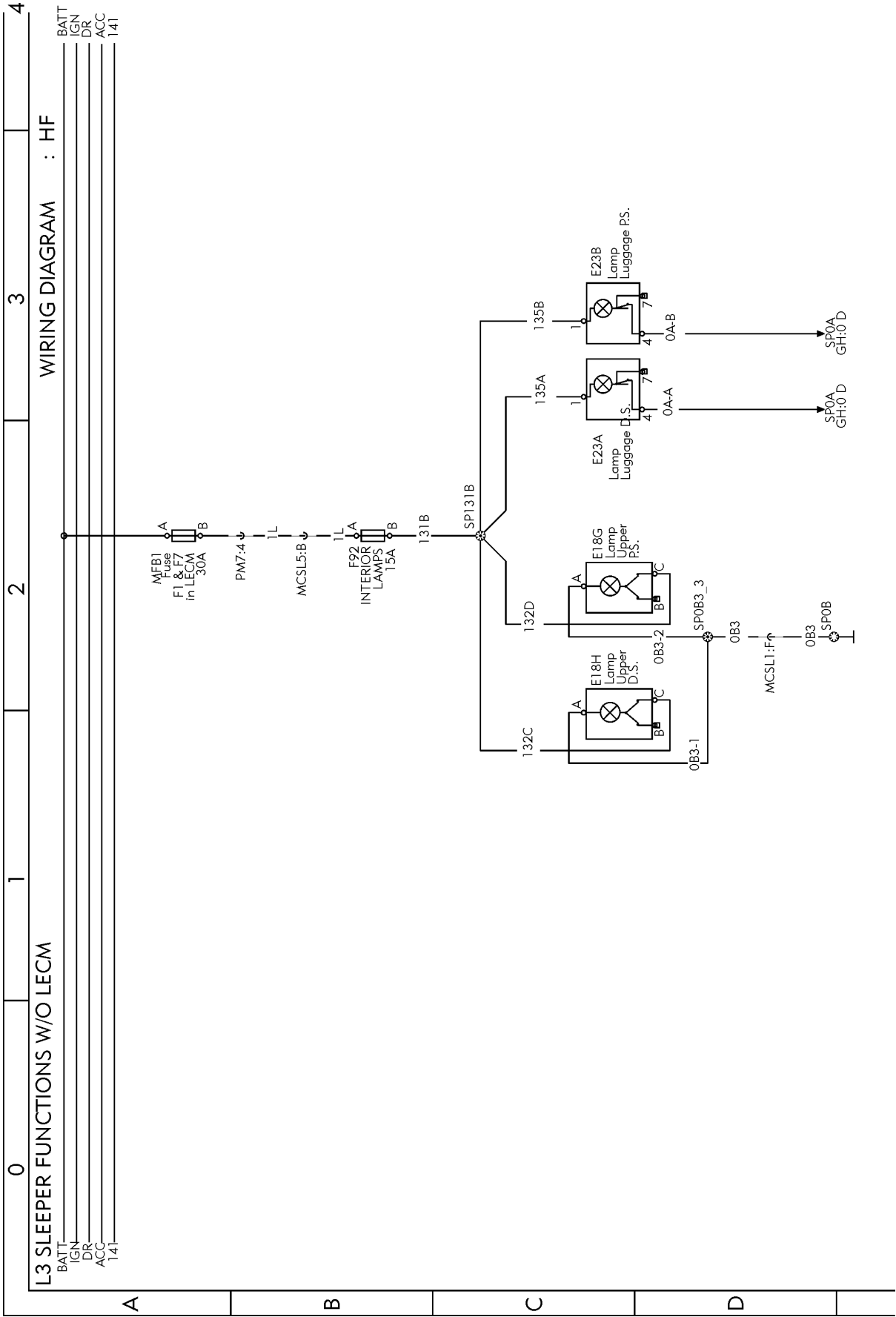


Fig. 57: HF

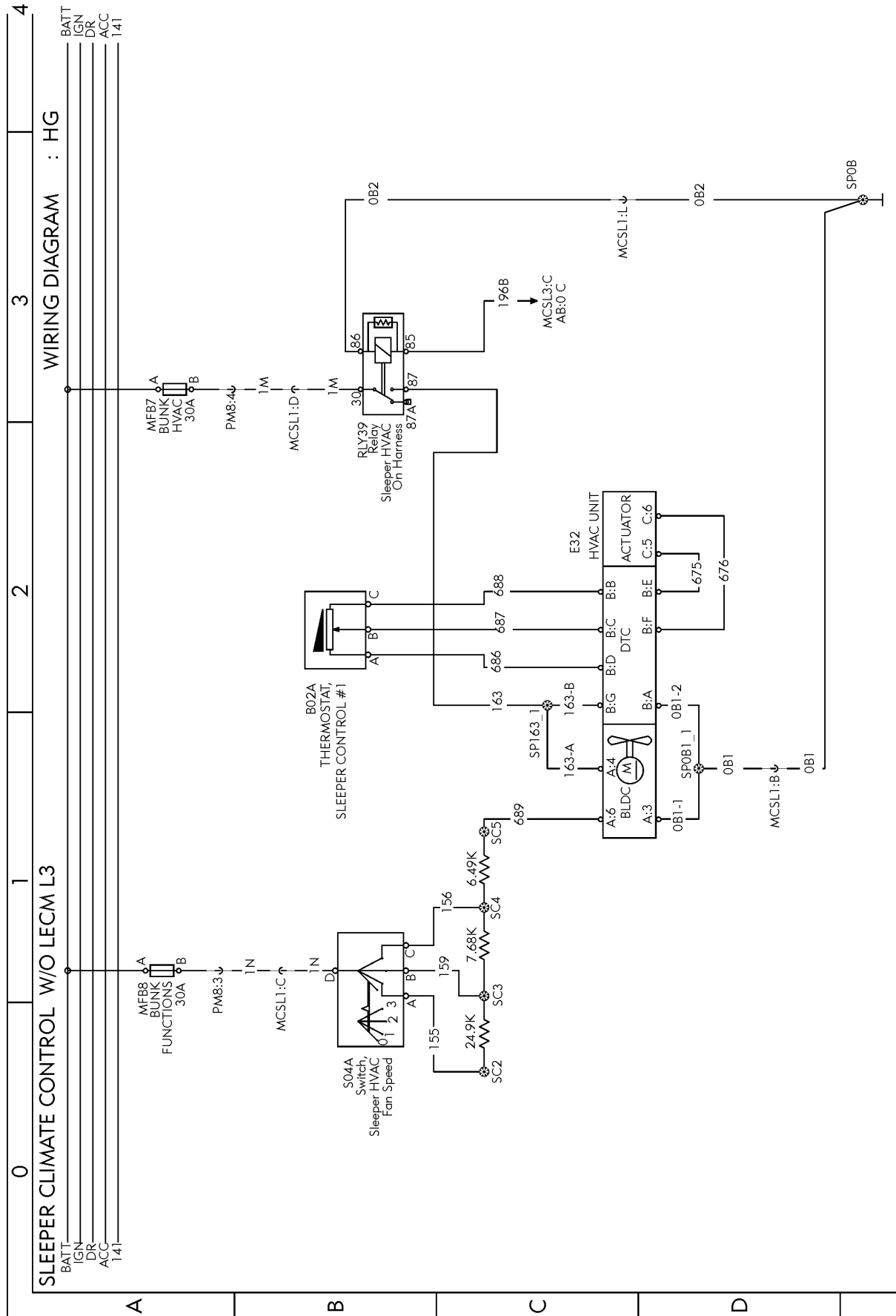
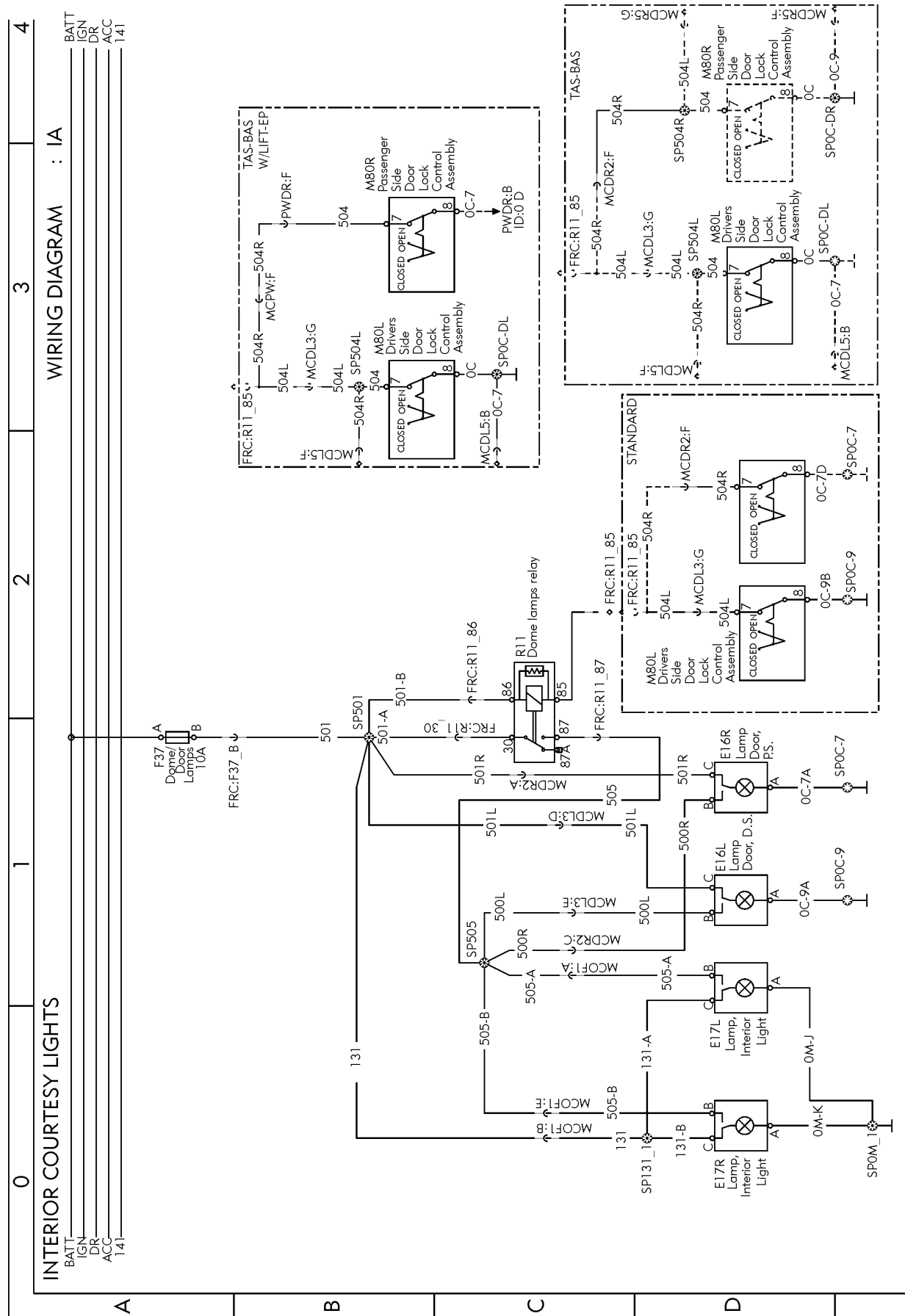


Fig. 58: HG



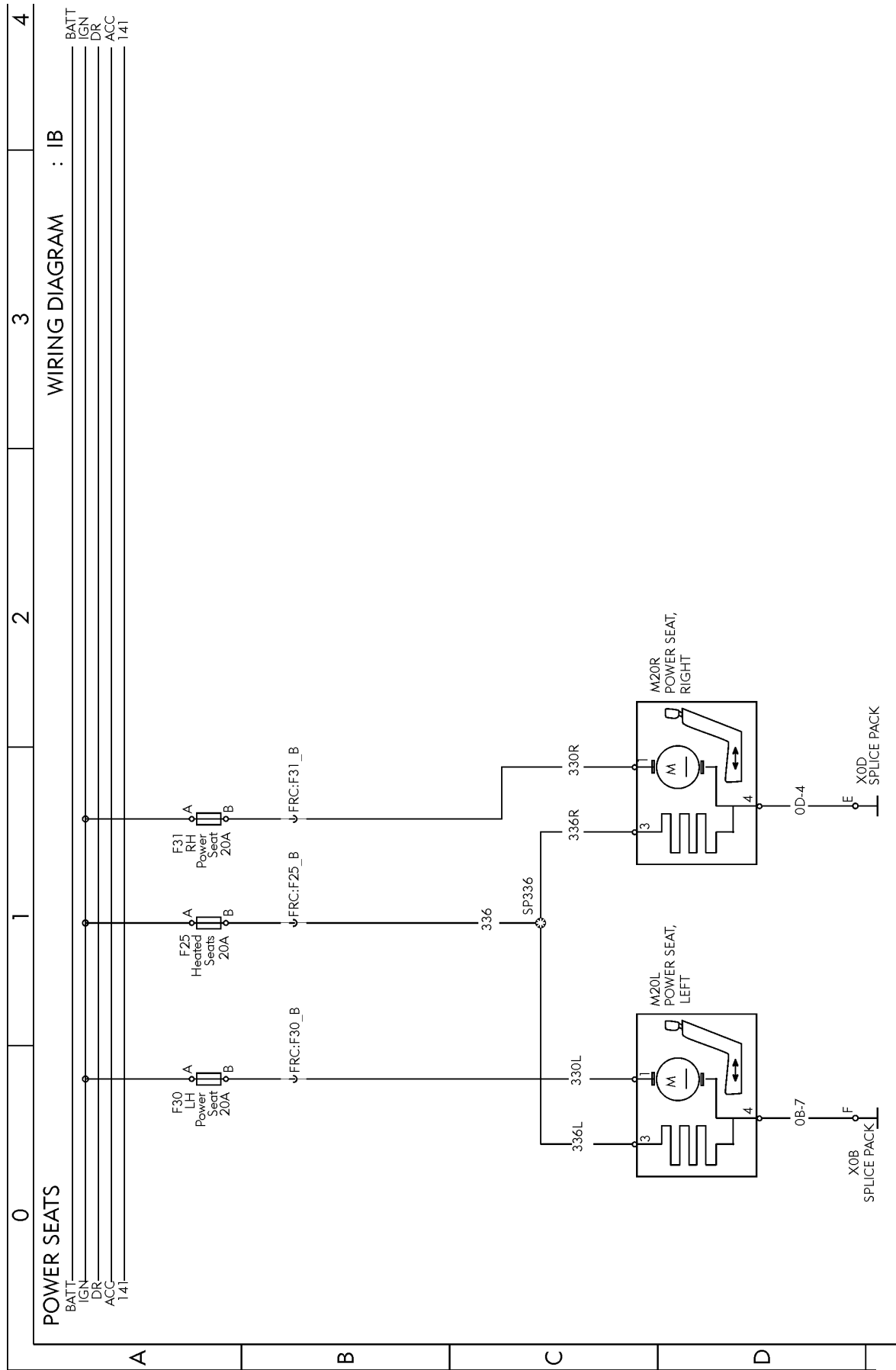


Fig. 60: IB

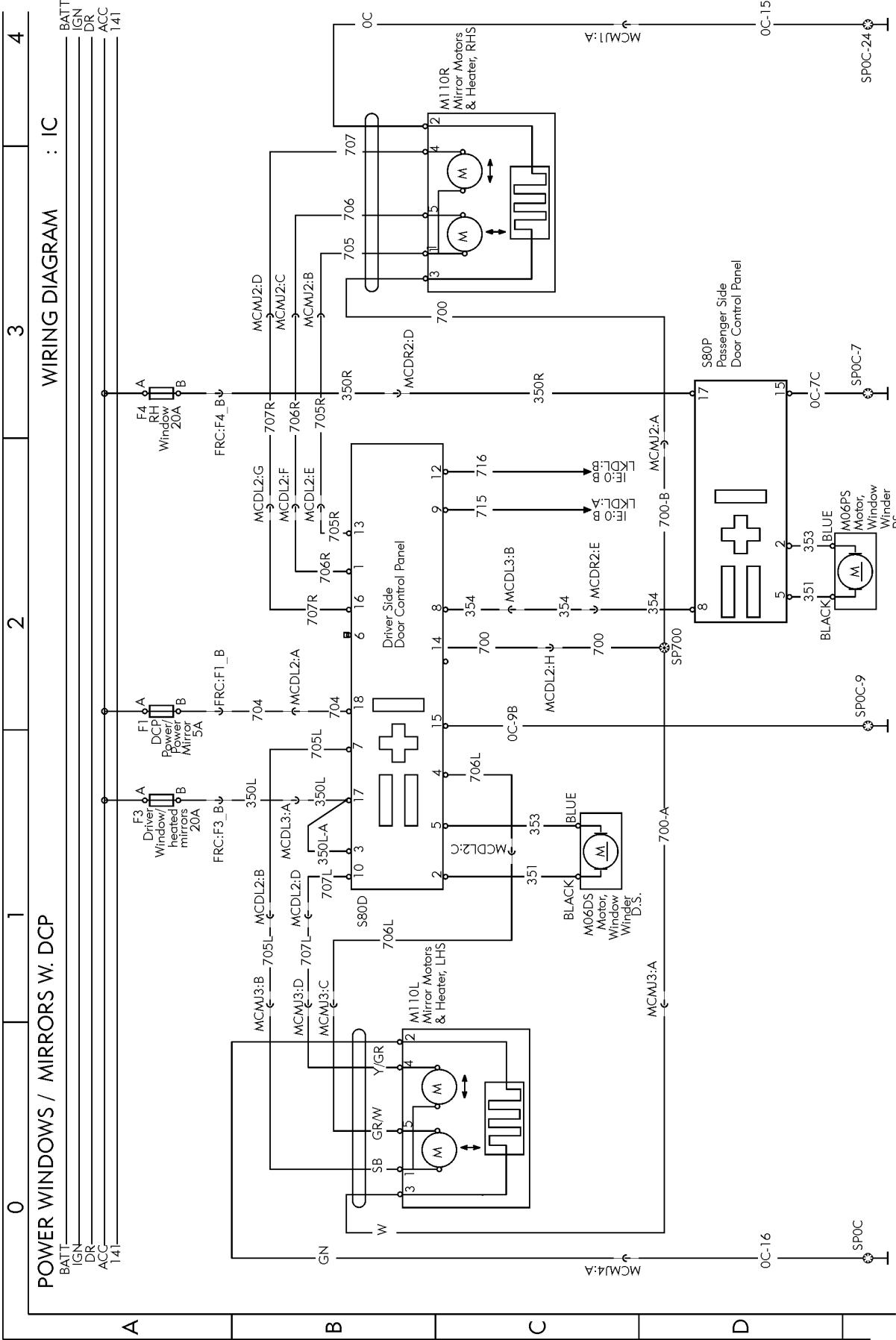


Fig. 61: IC

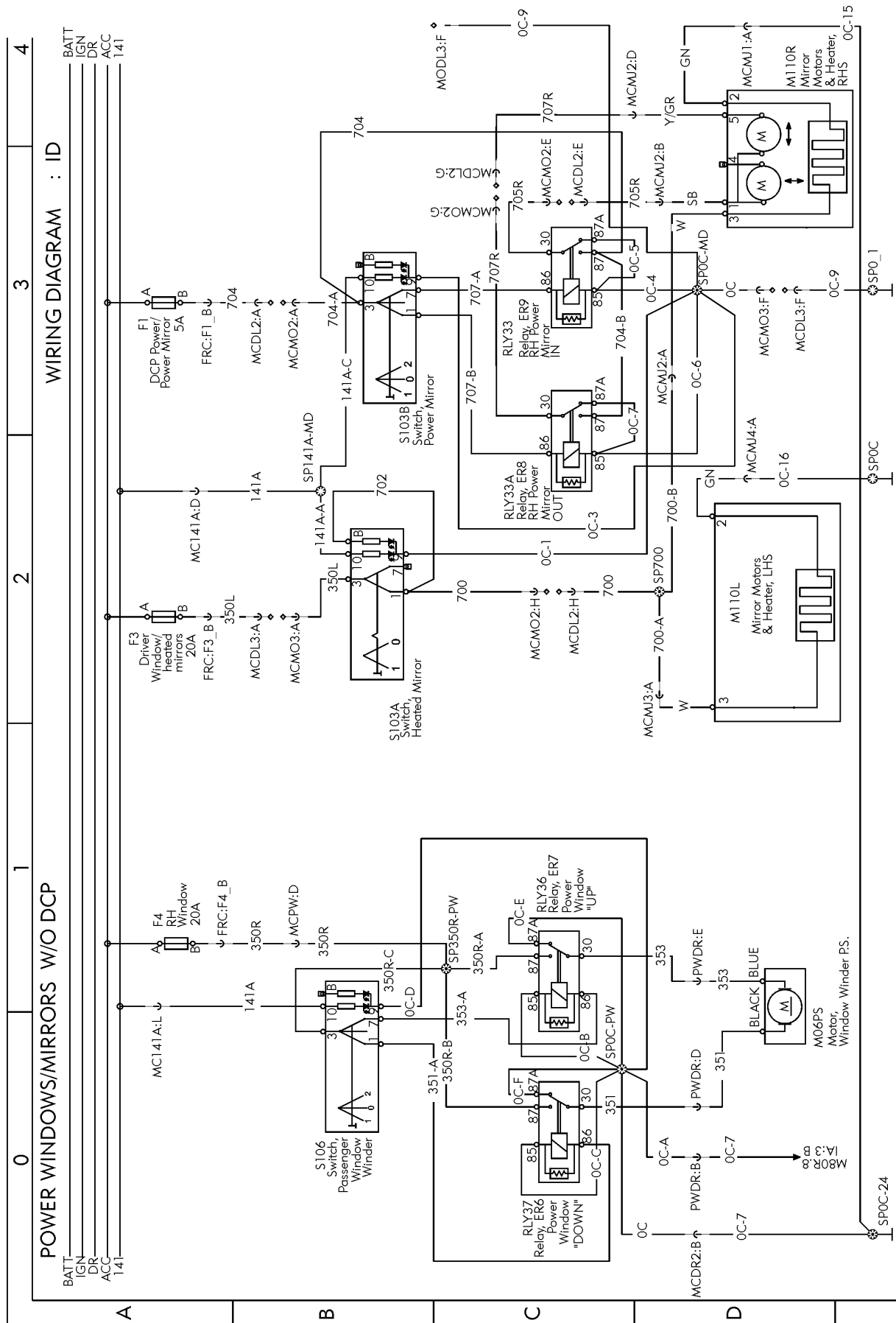


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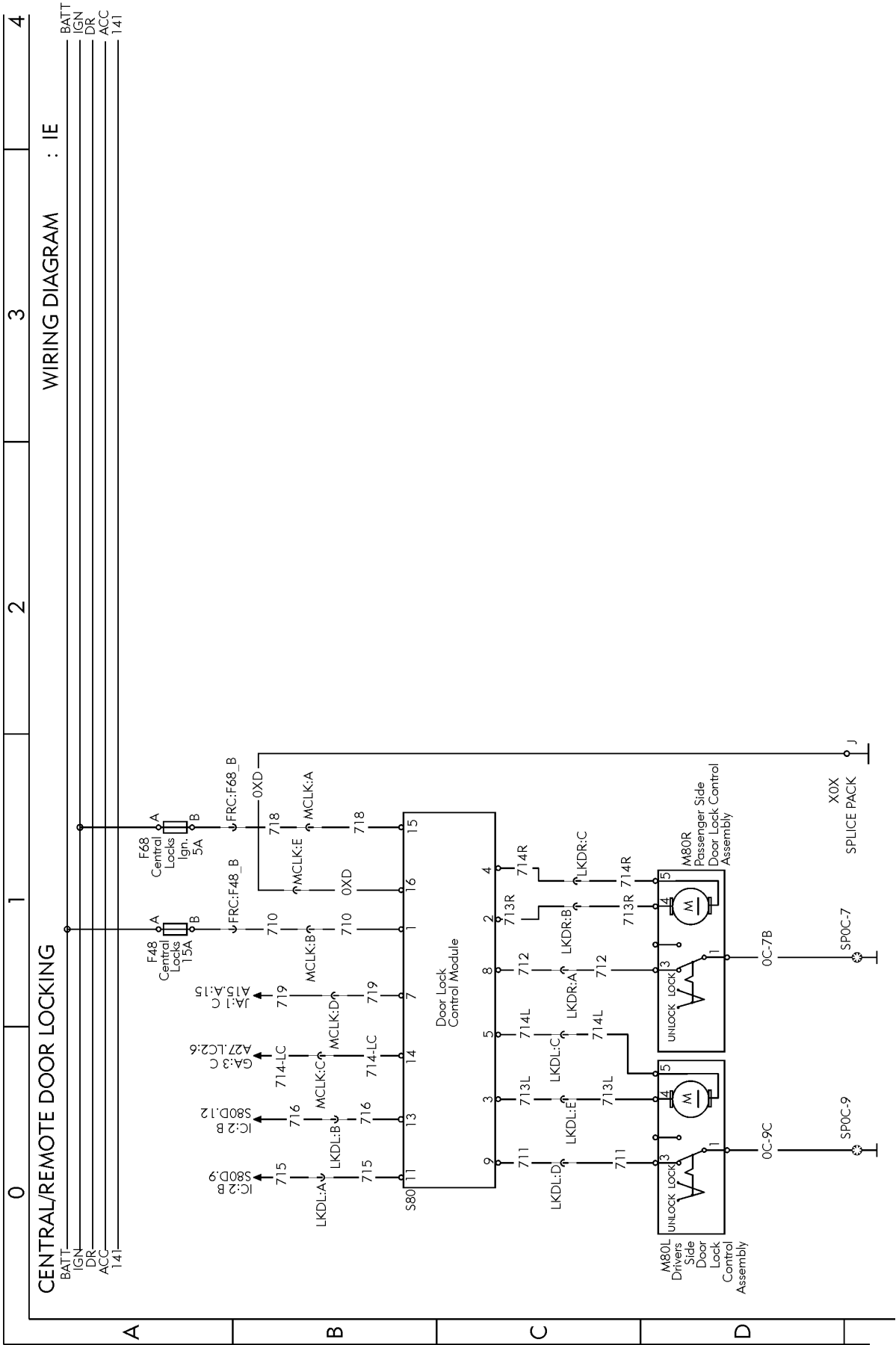


Fig. 63: IE



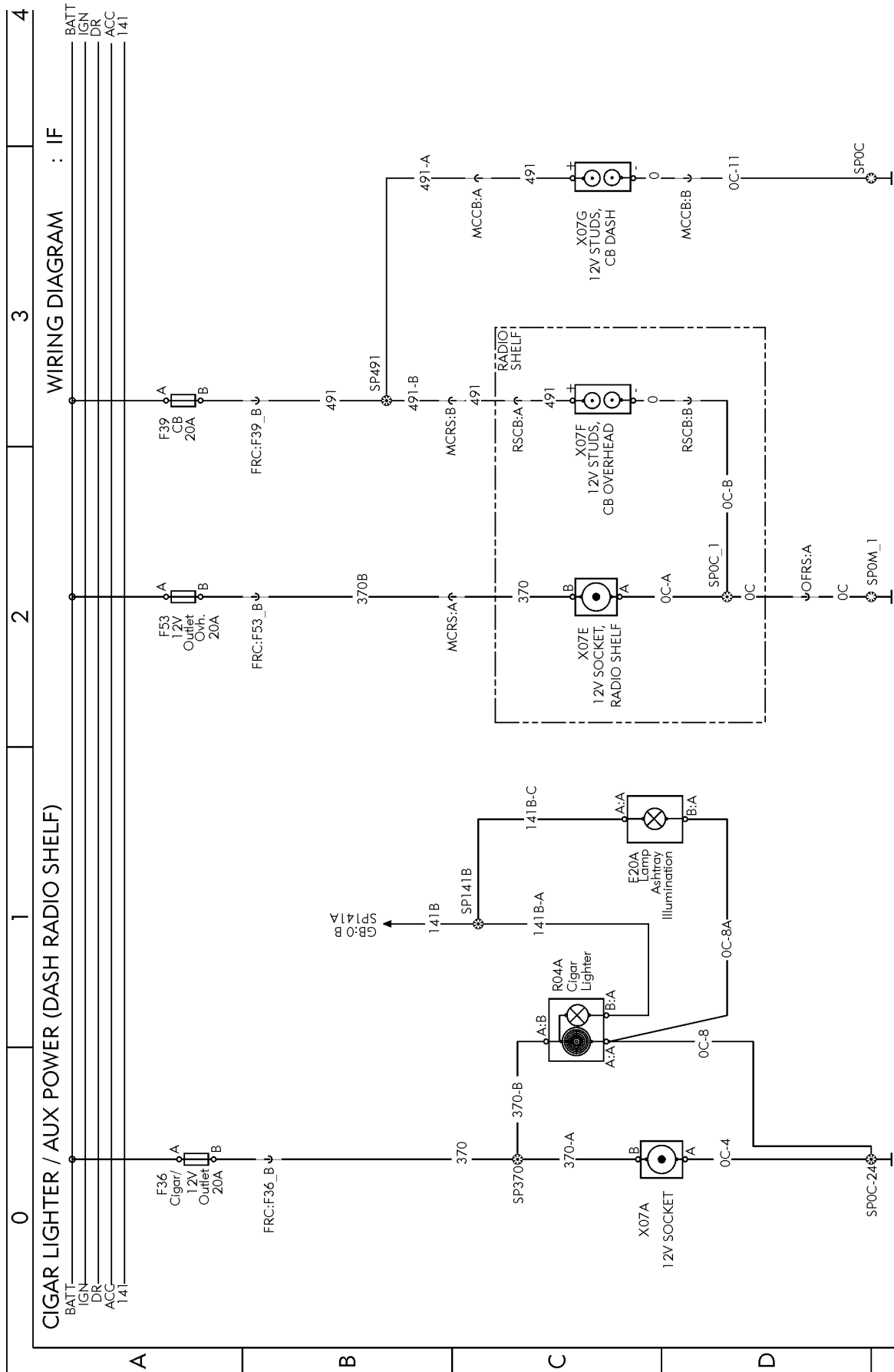


Fig. 64: IF

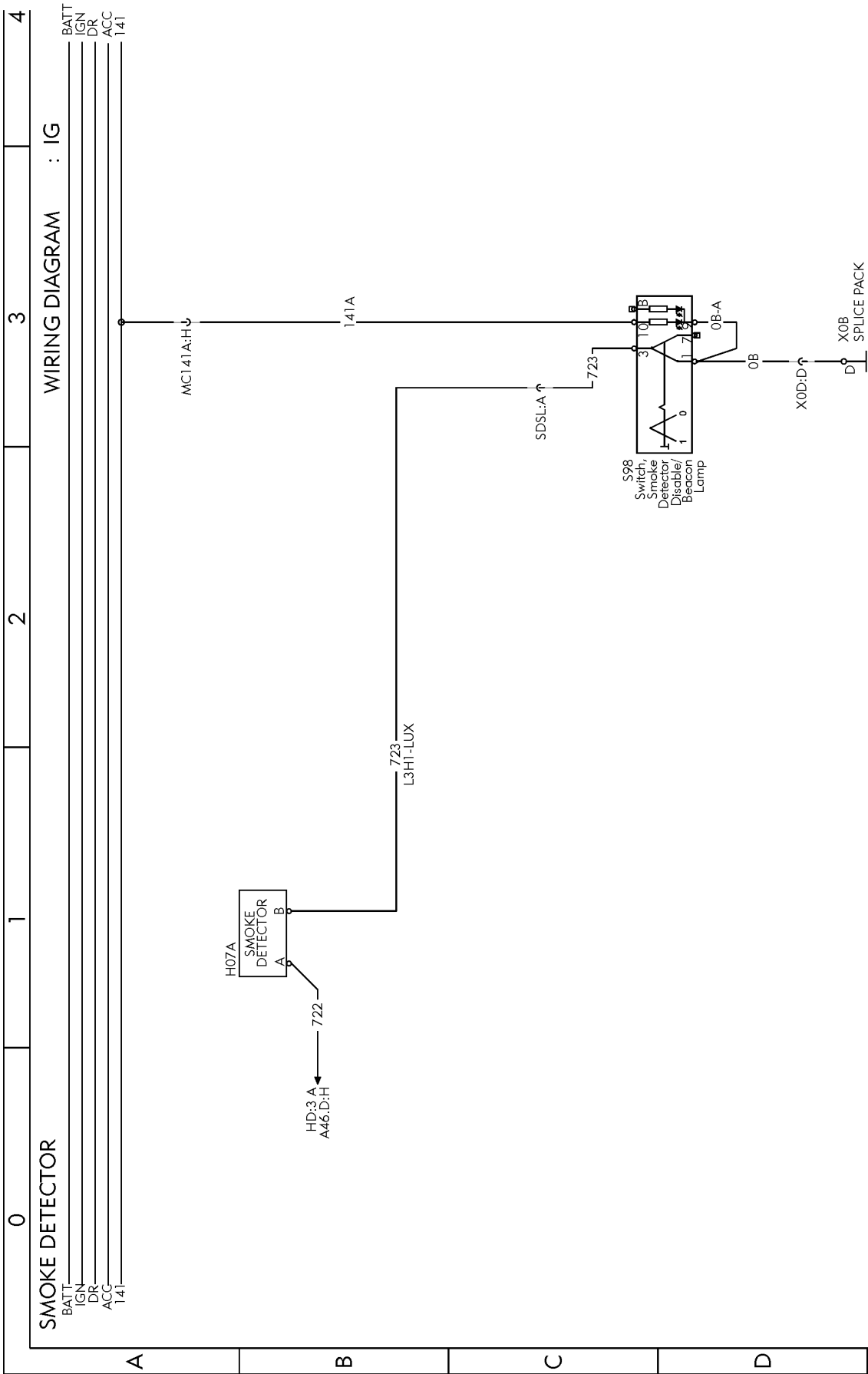


Fig. 65: IG

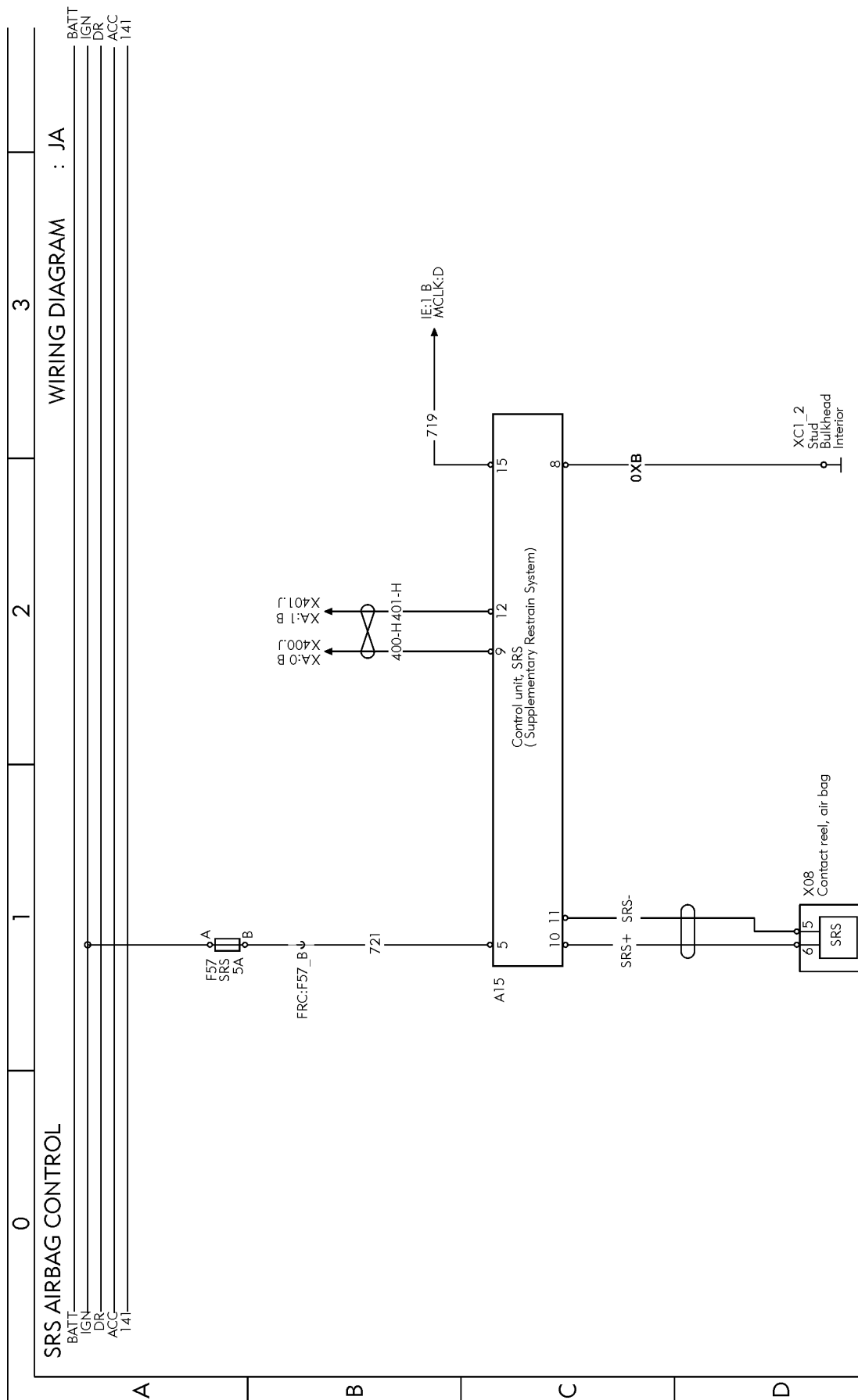
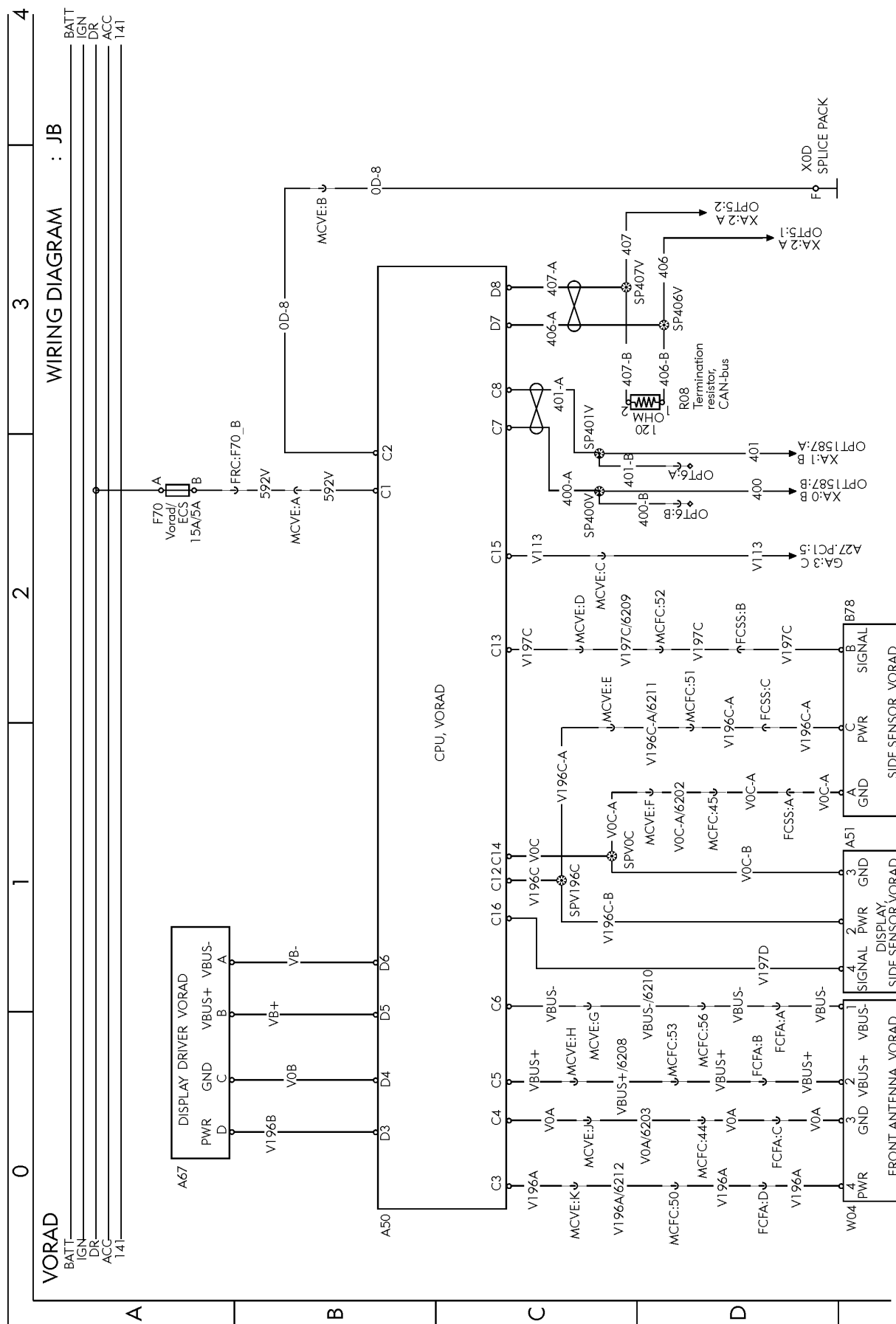


Fig. 66: JA



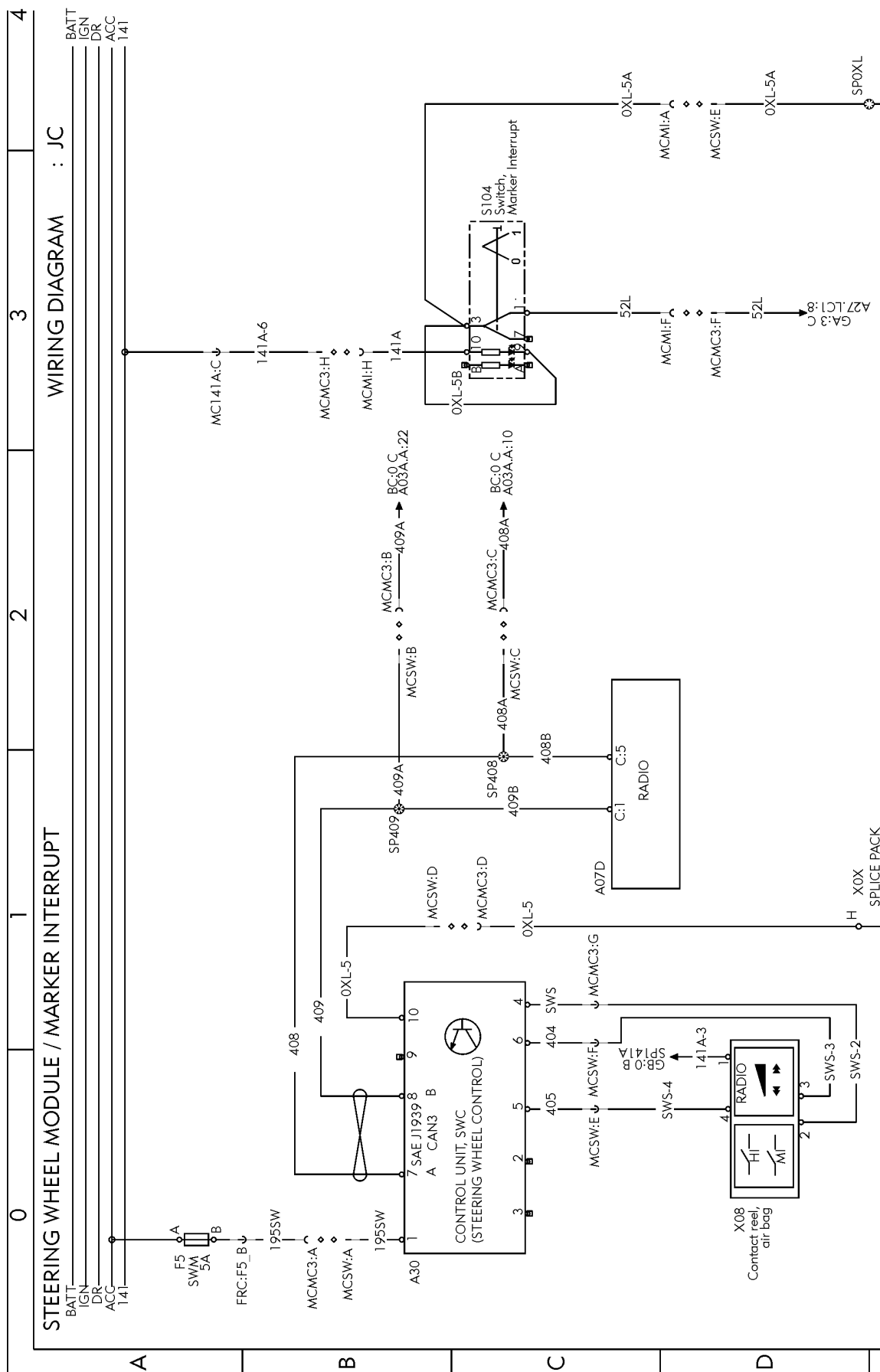
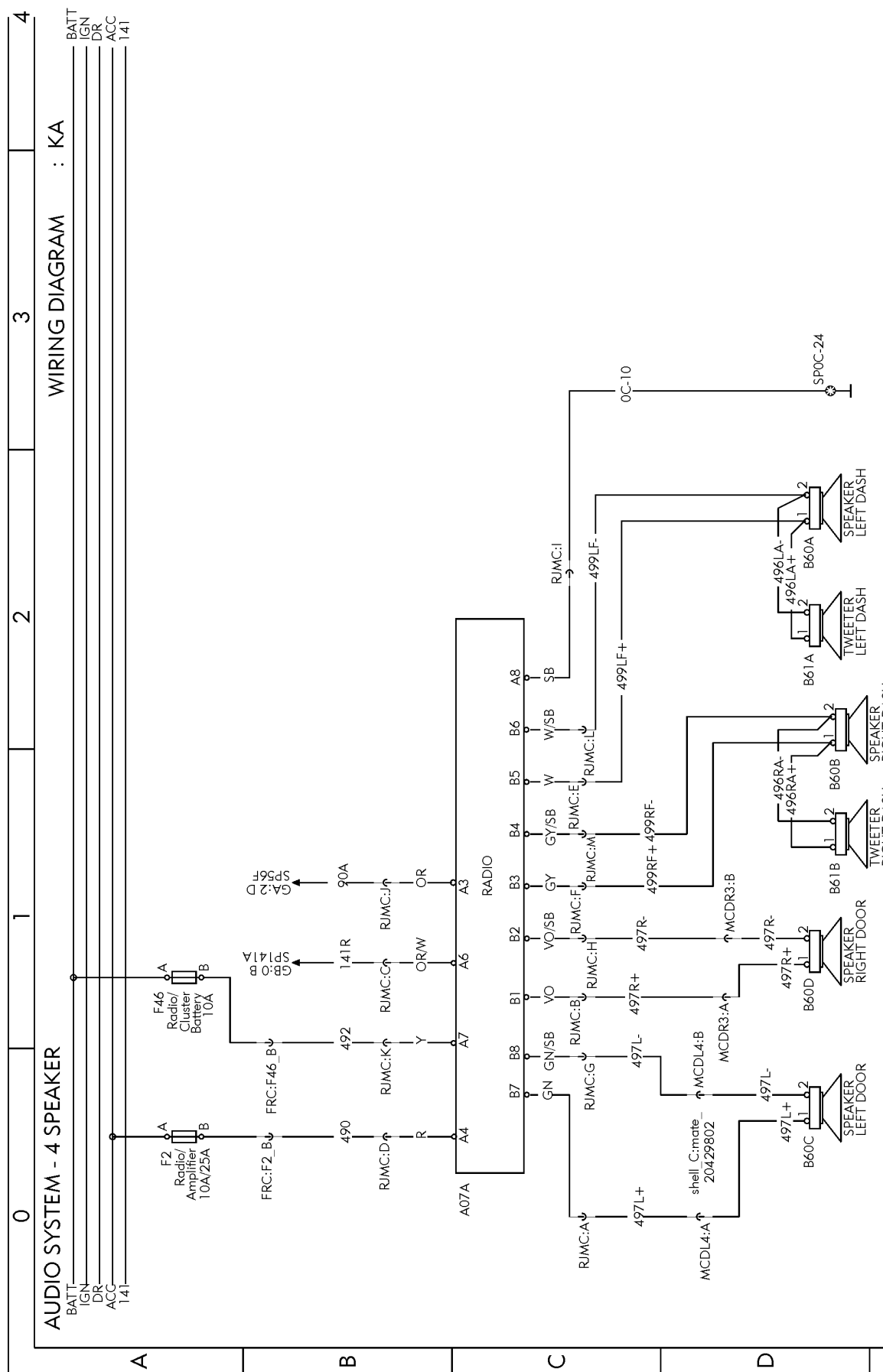


Fig. 68: JC



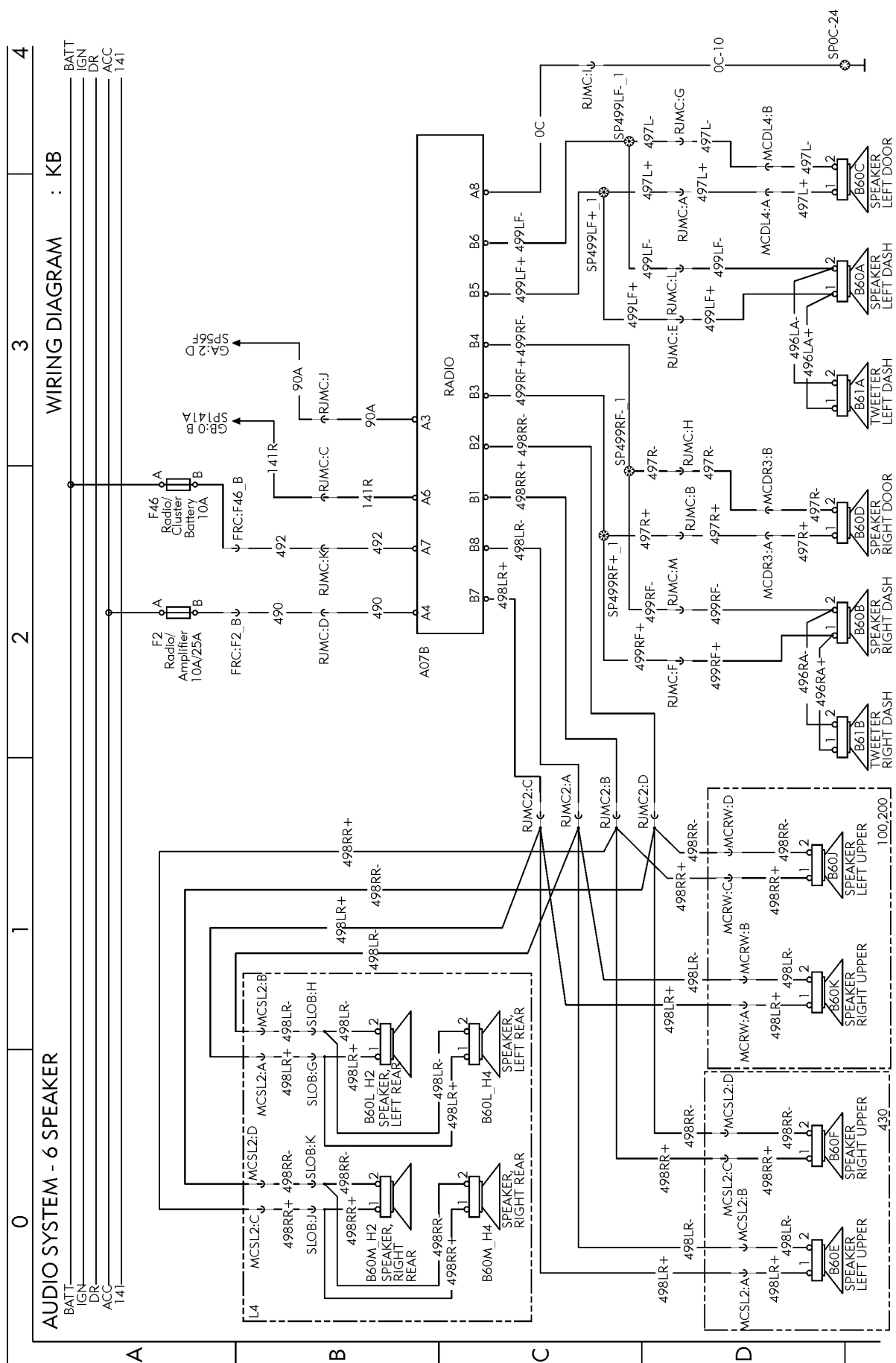
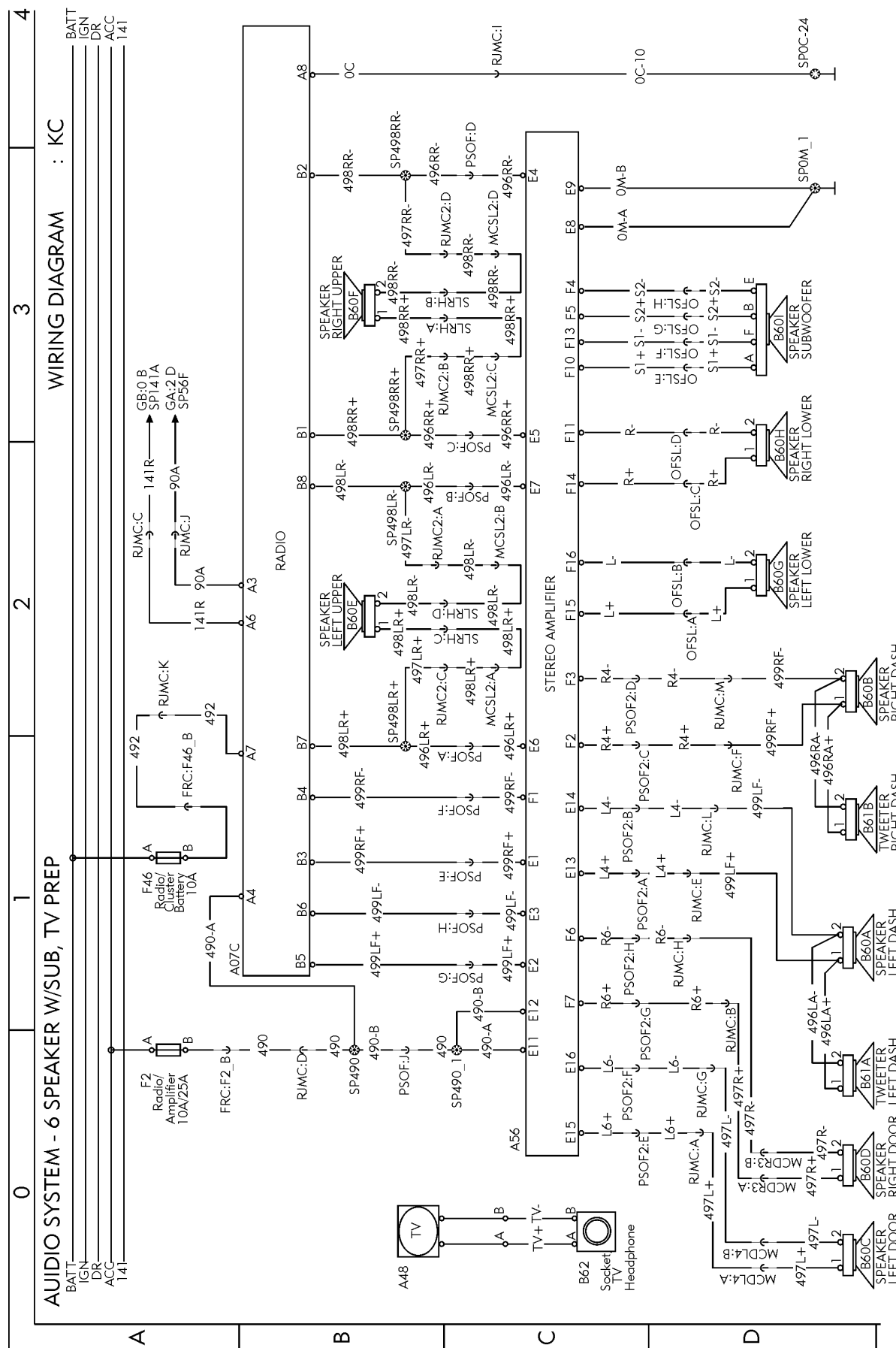


Fig. 70: KB





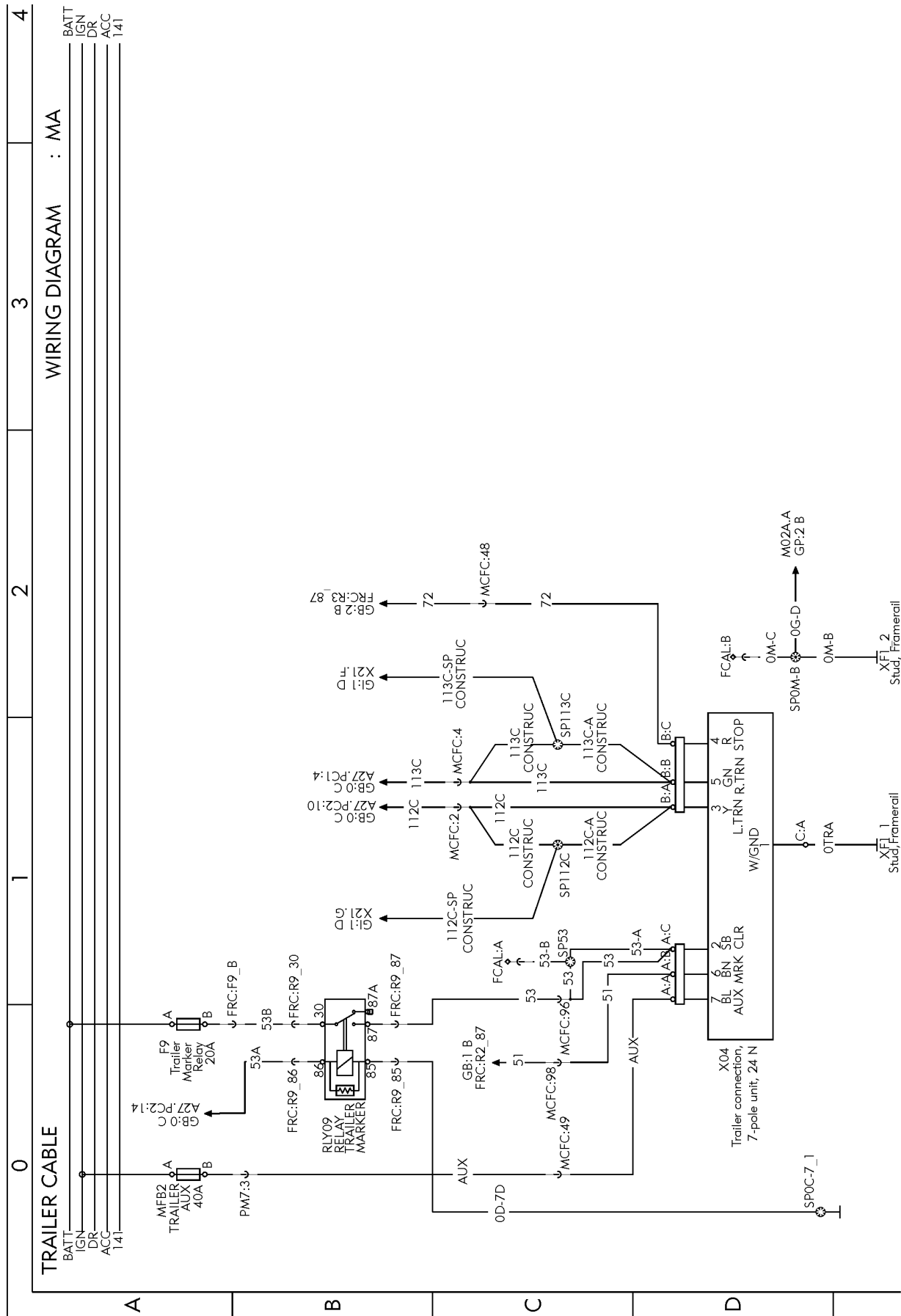


Fig. 72: MA

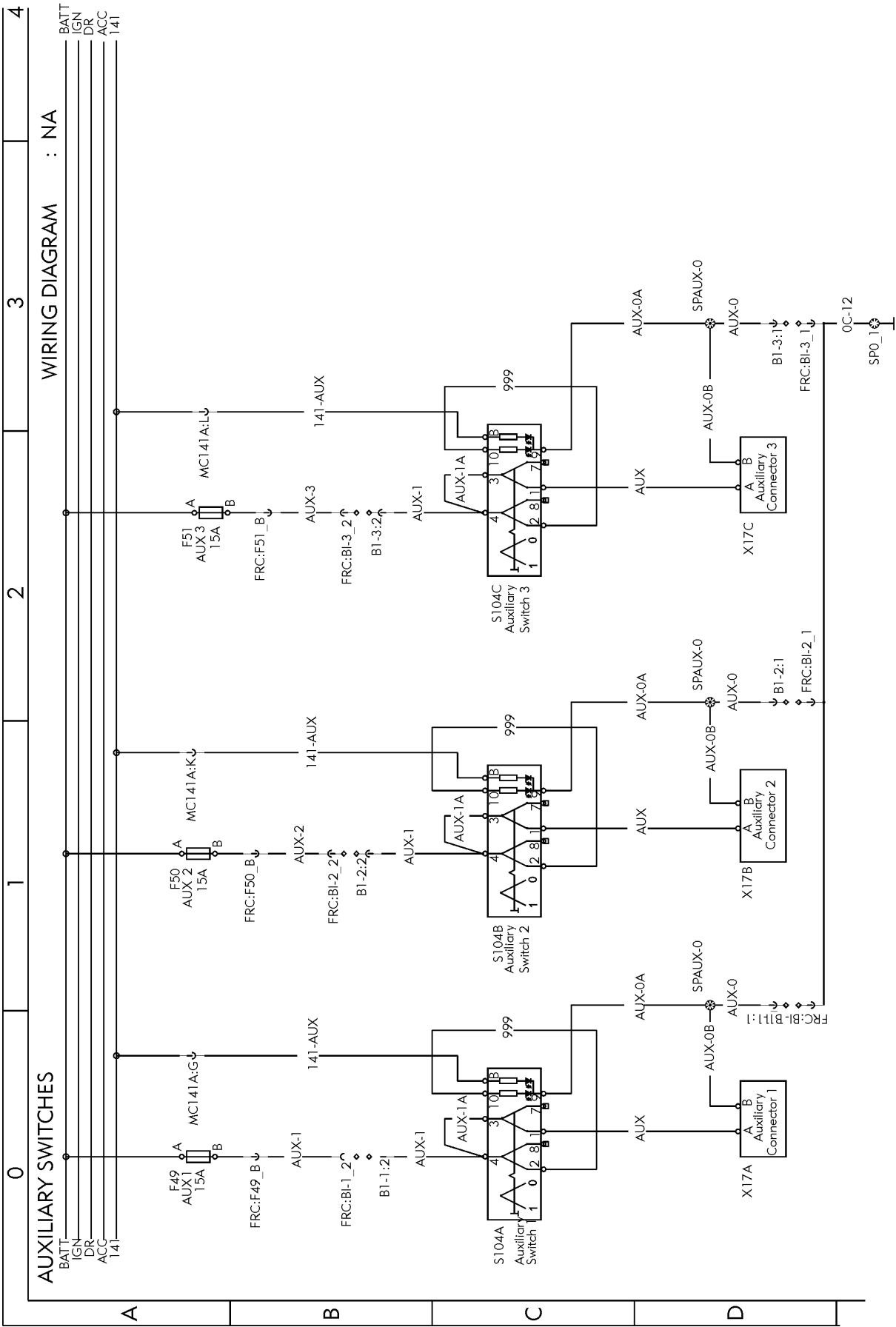


Fig. 73: NA

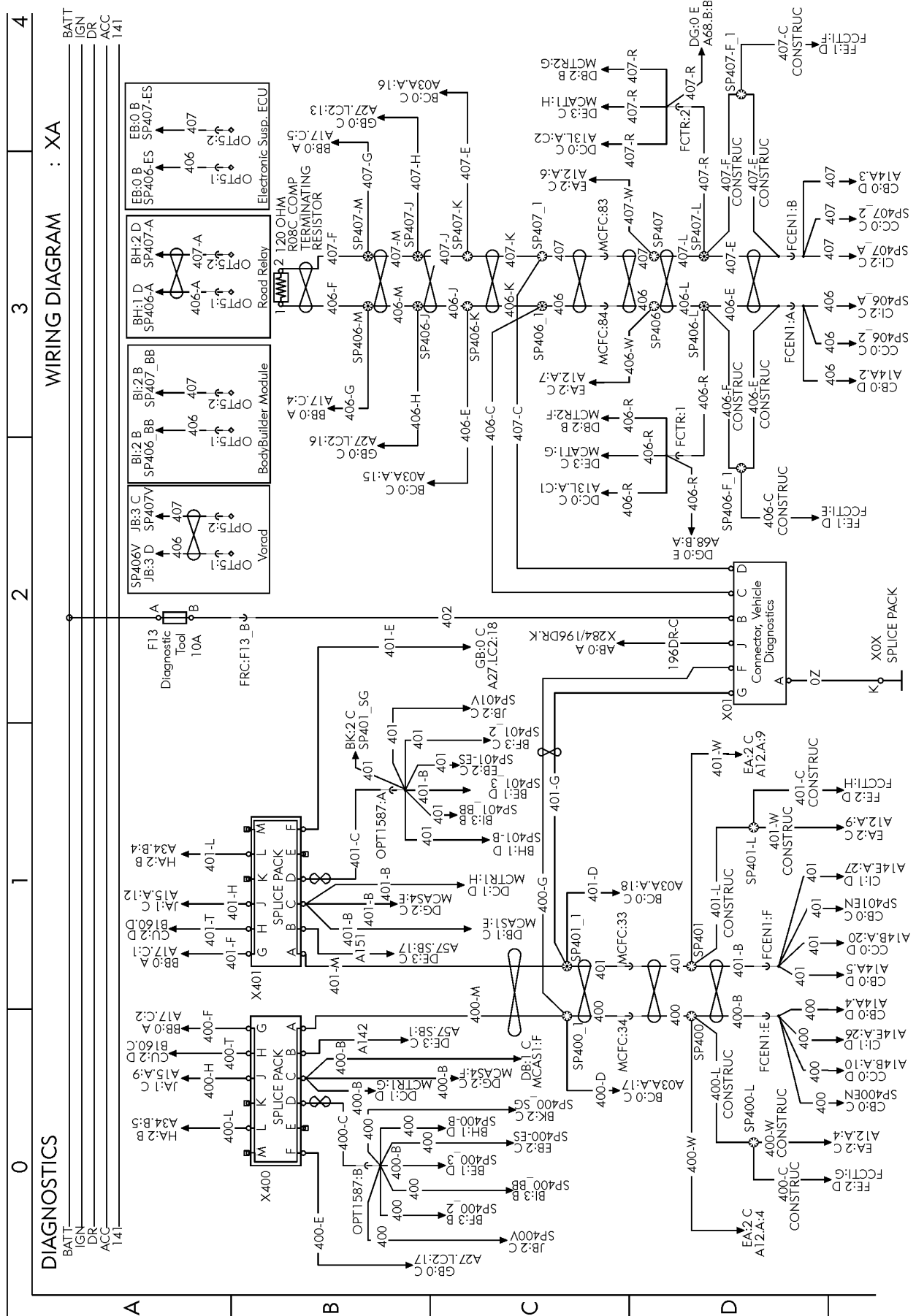


Fig. 74: XA



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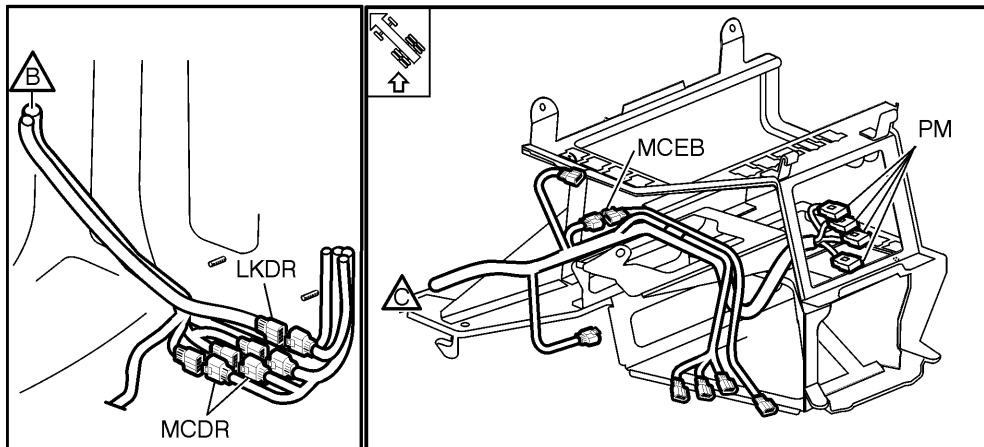
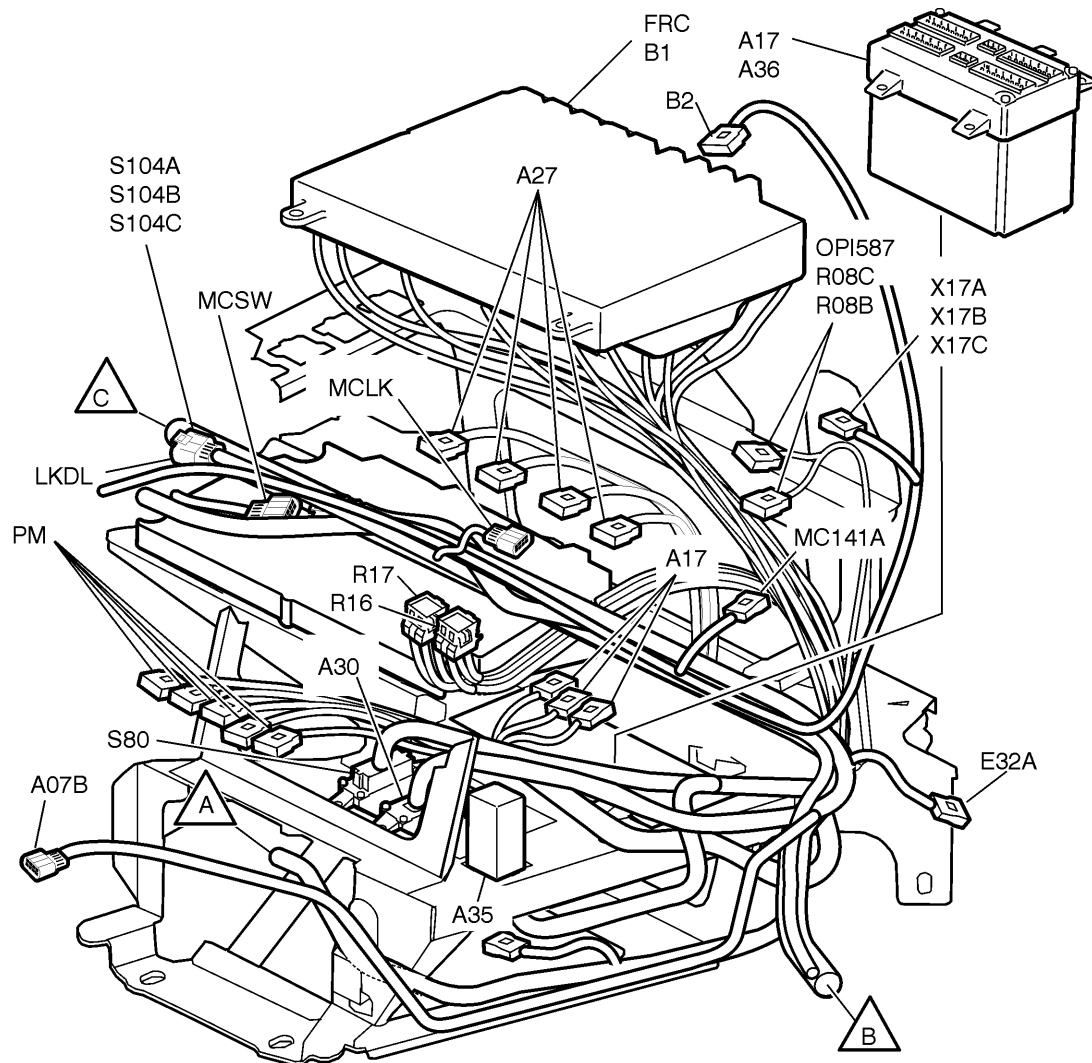
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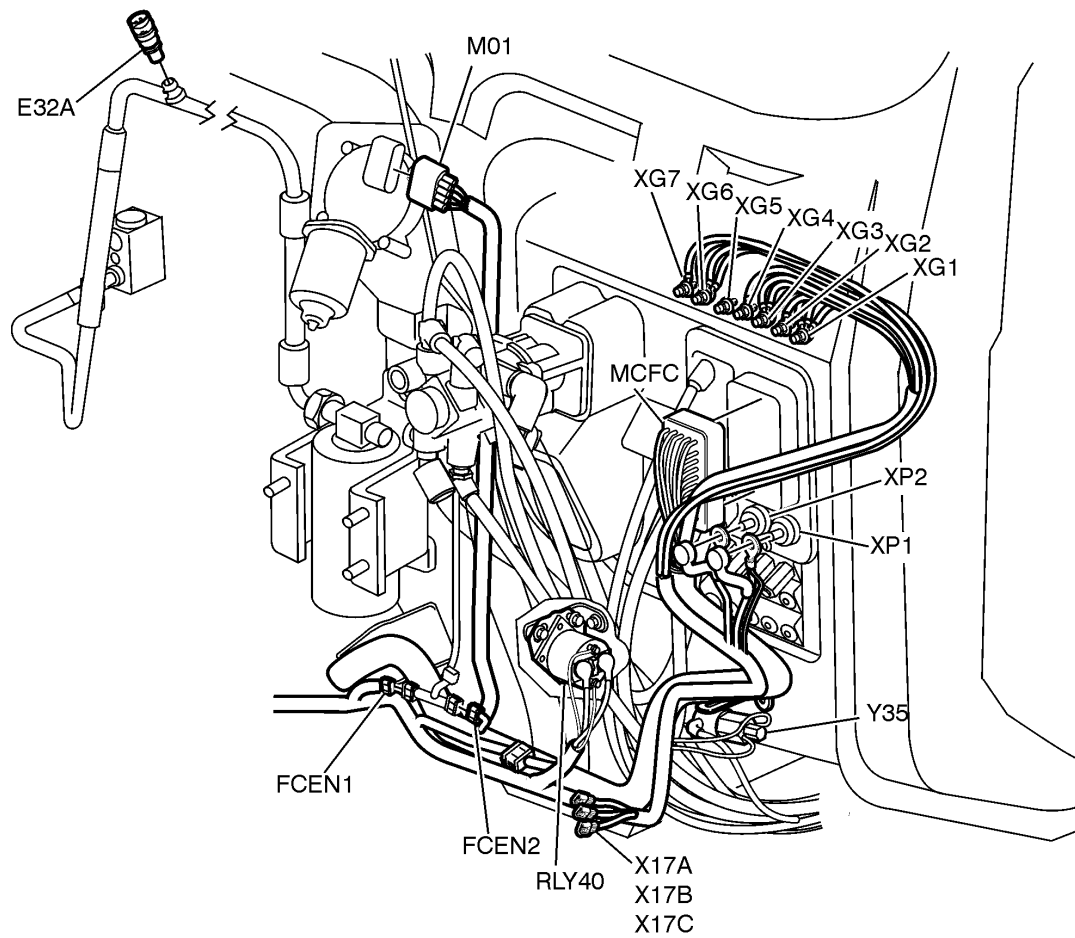
## Fuse and Relay Center, Main Cab Harness (including Bodybuilder Module)



W3005945

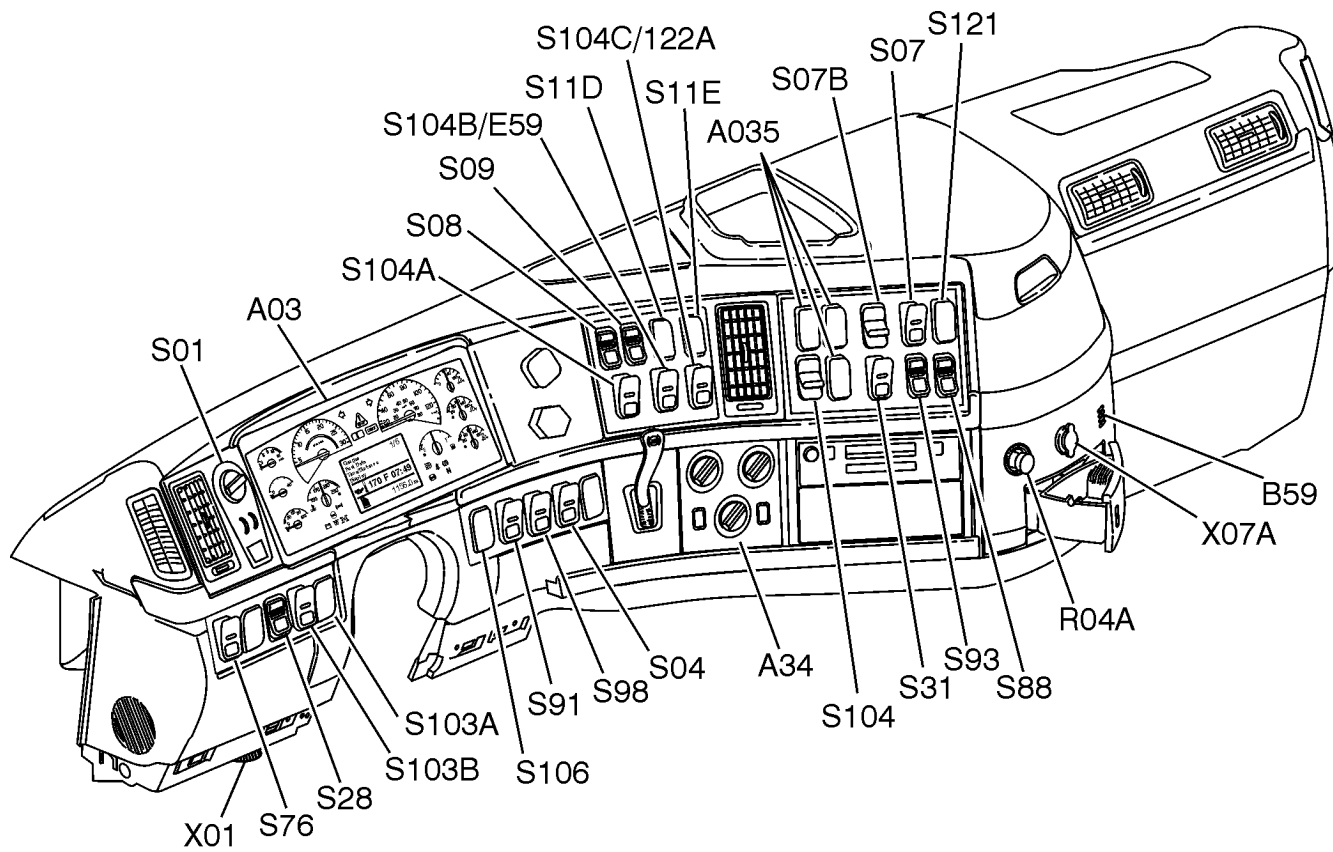


## Cab Wiring Passthrough



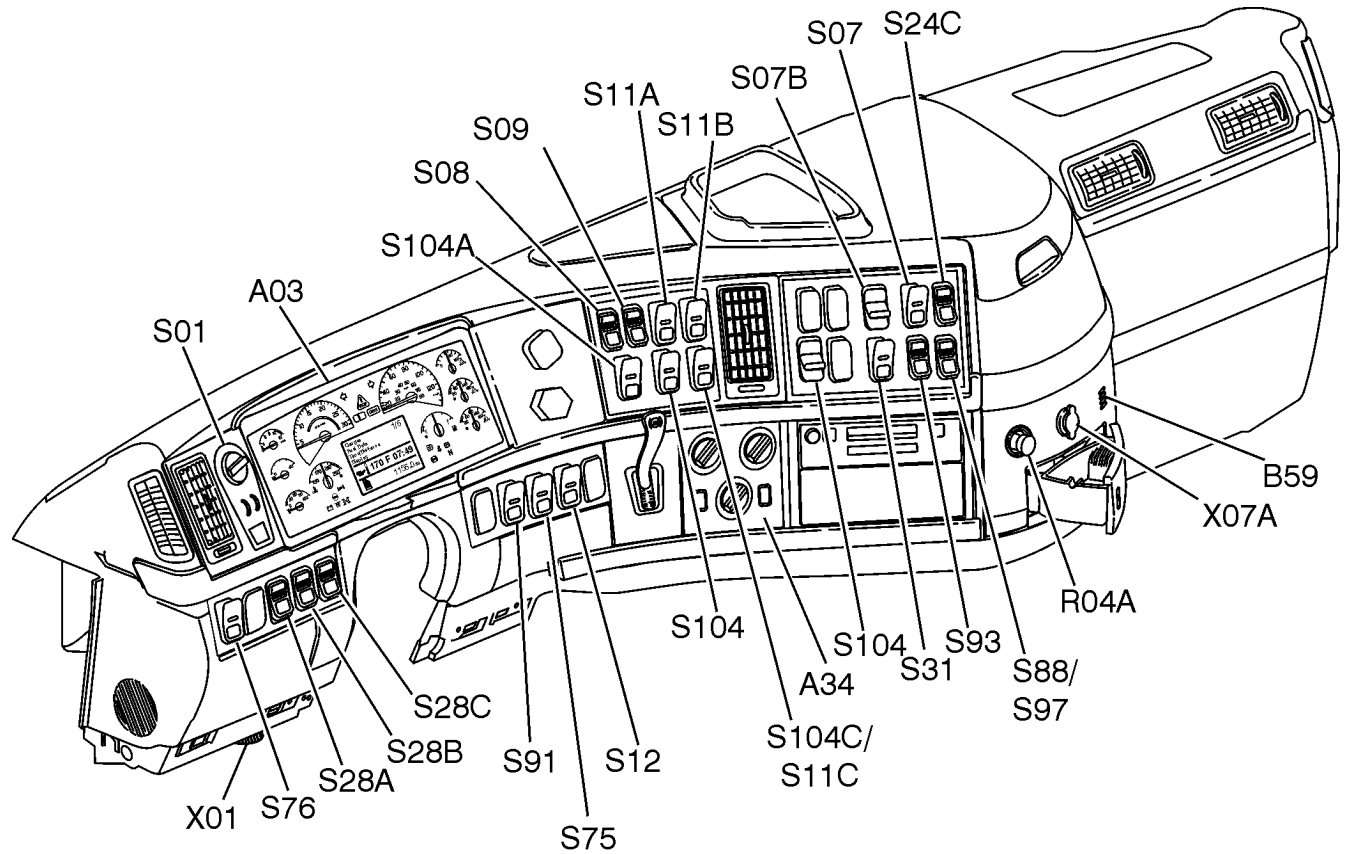
W3006623

## Dash Switches, VN



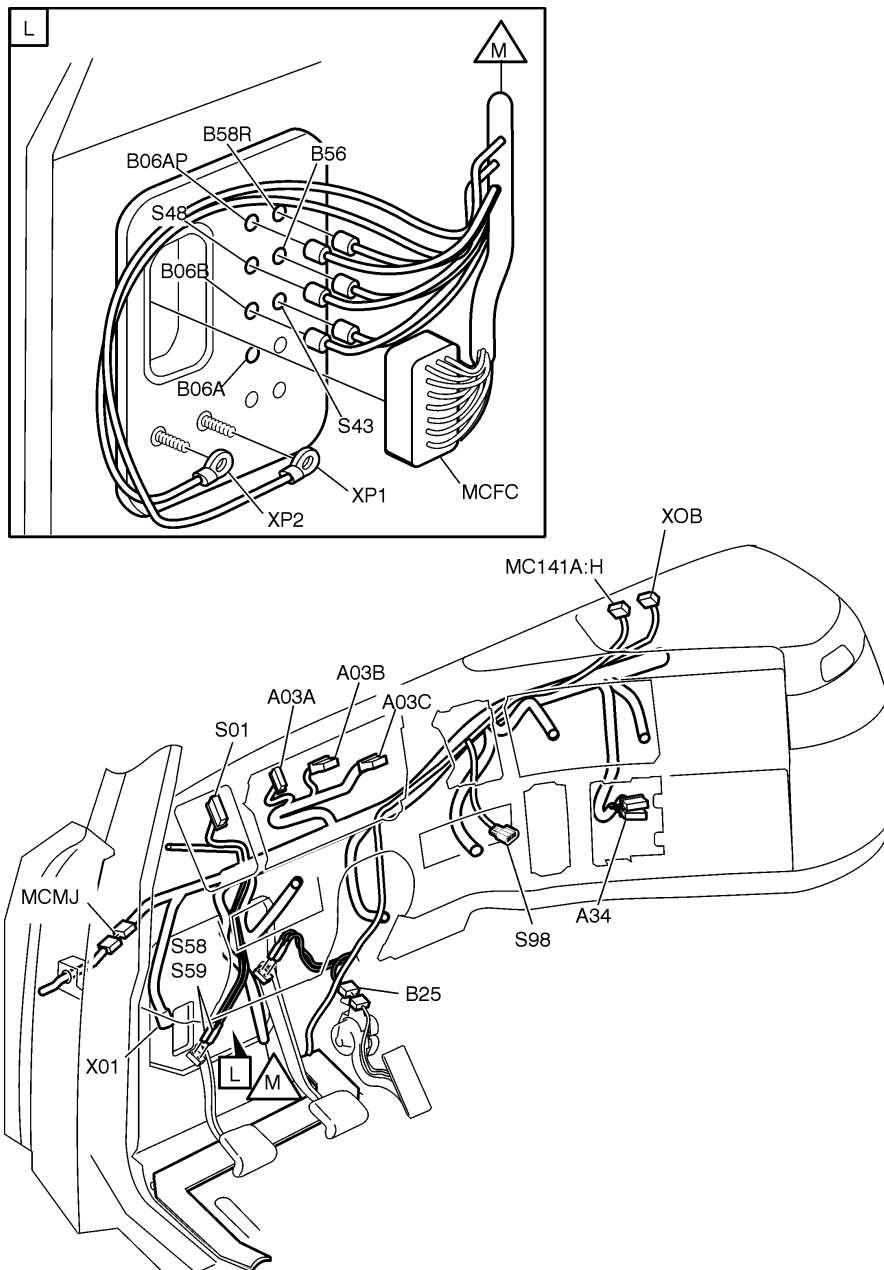
W3006718

## Dash Switches, VHD



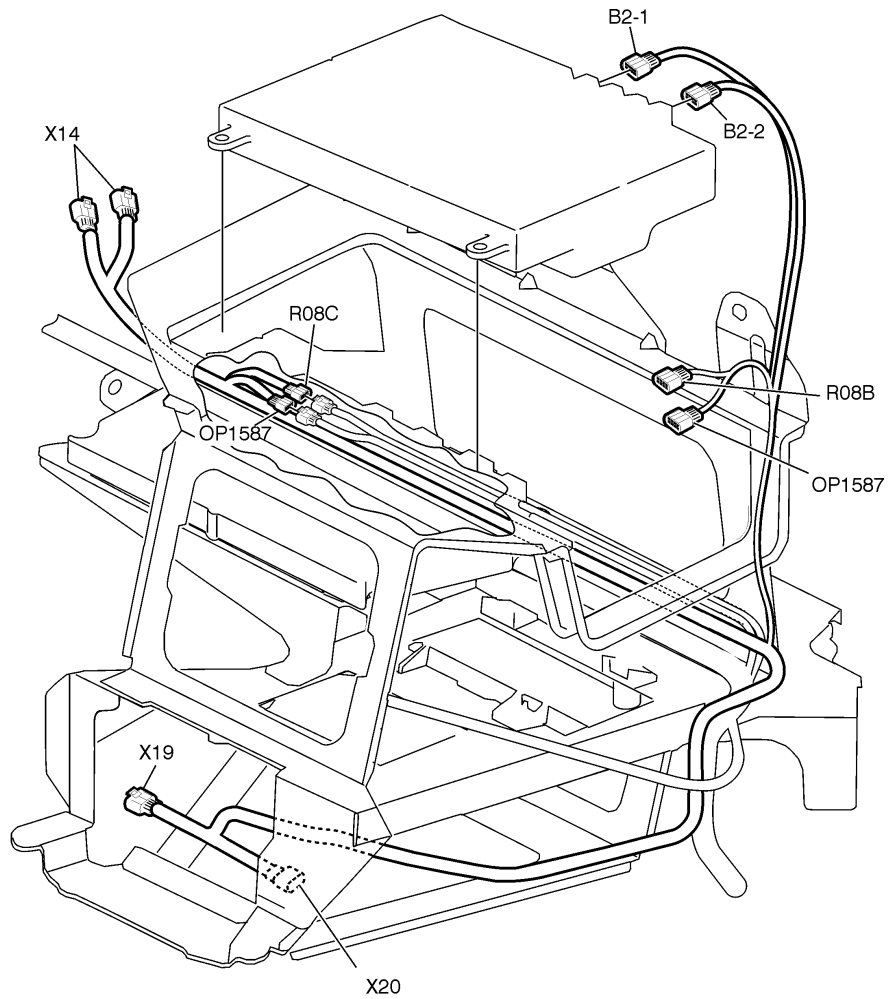
W3006719

## Dash Harness and Cab Wiring Passthrough



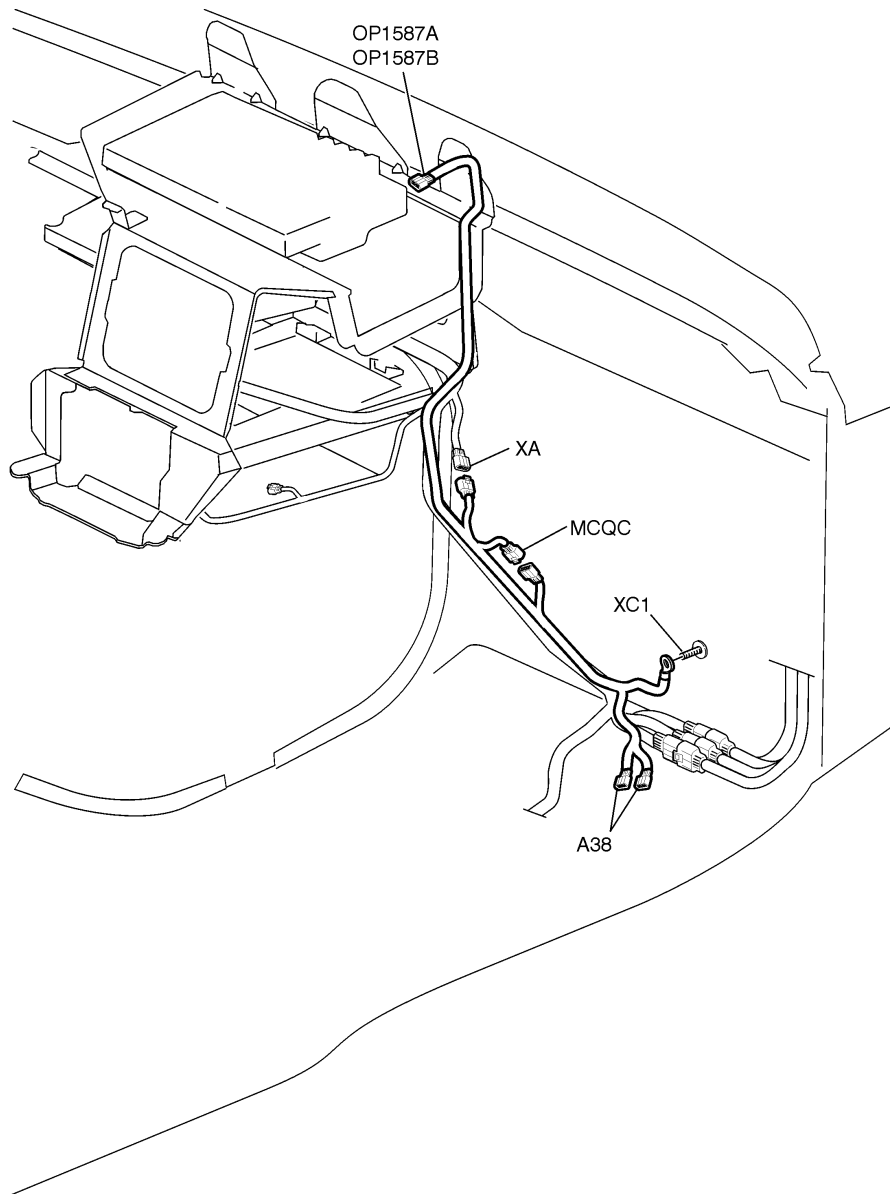
W3005946

## Dash Harness, Road Relay



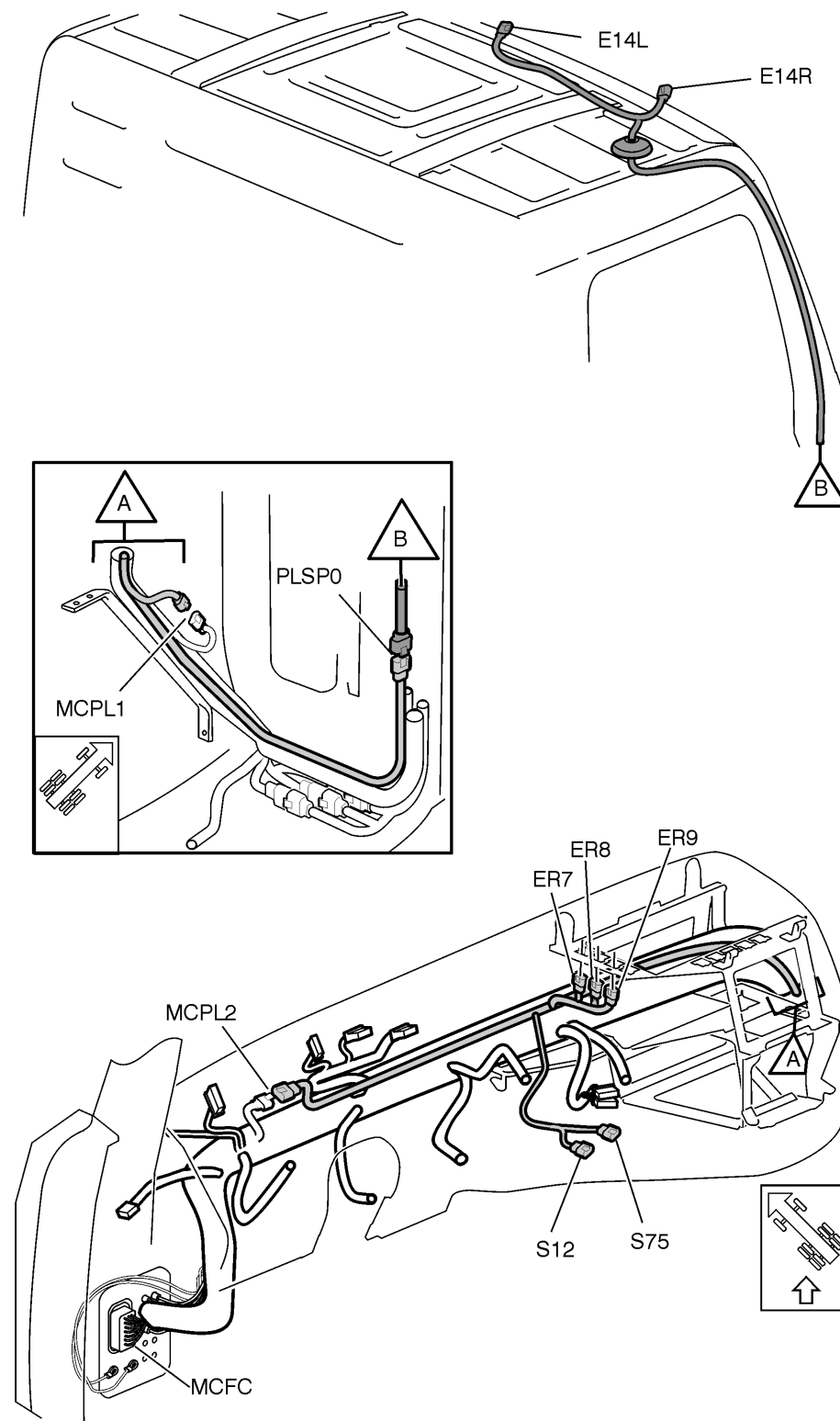
W3005947

## Dash Harness, Qualcomm



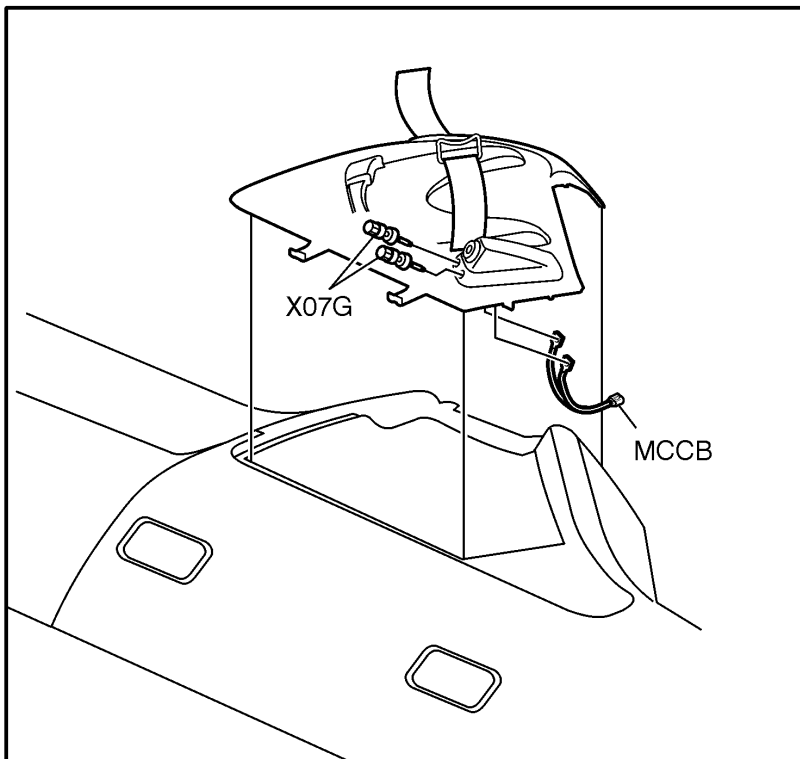
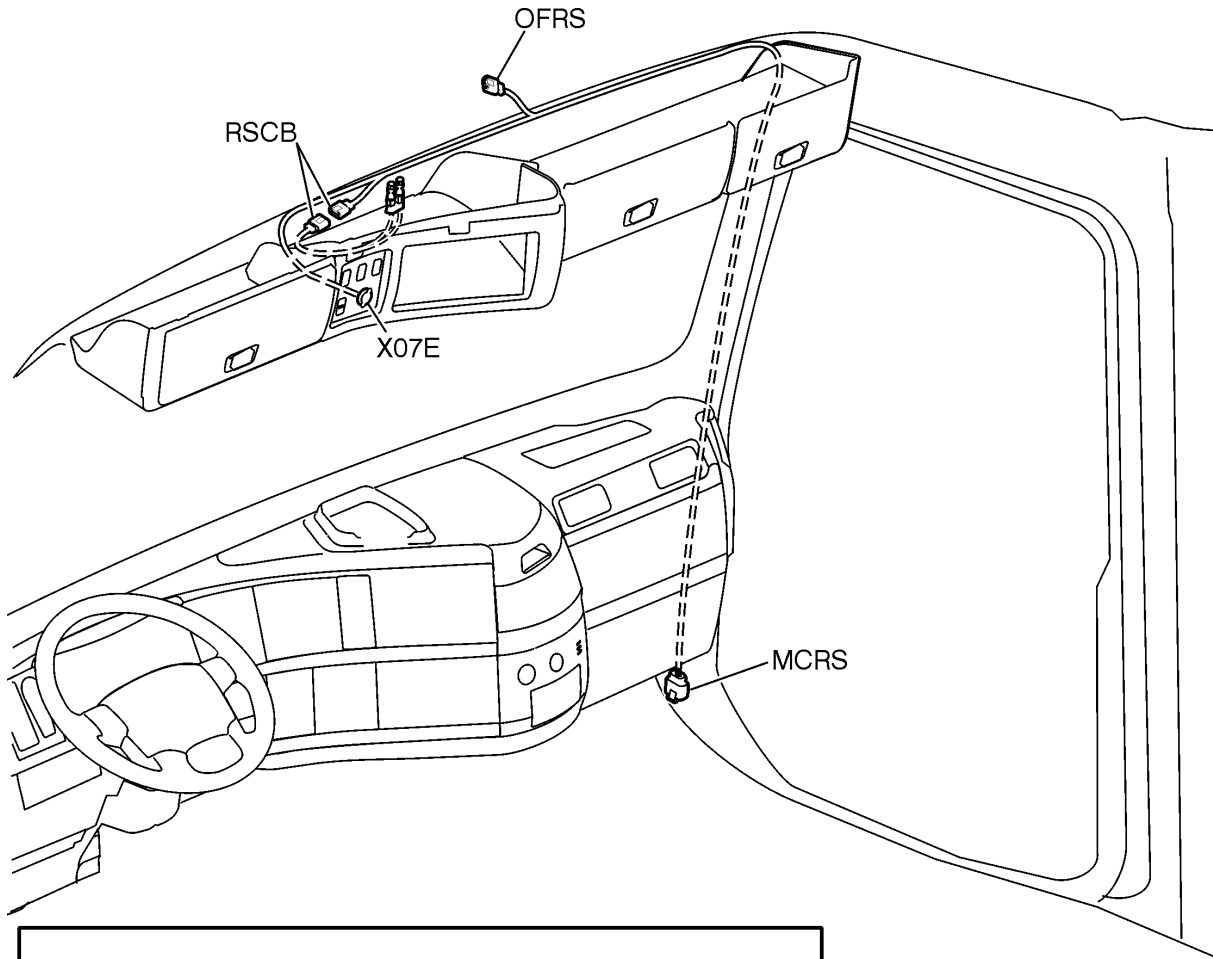
W3005948

## Dash Harness, Snow Plow/ Beacon Lights Option



W3006379

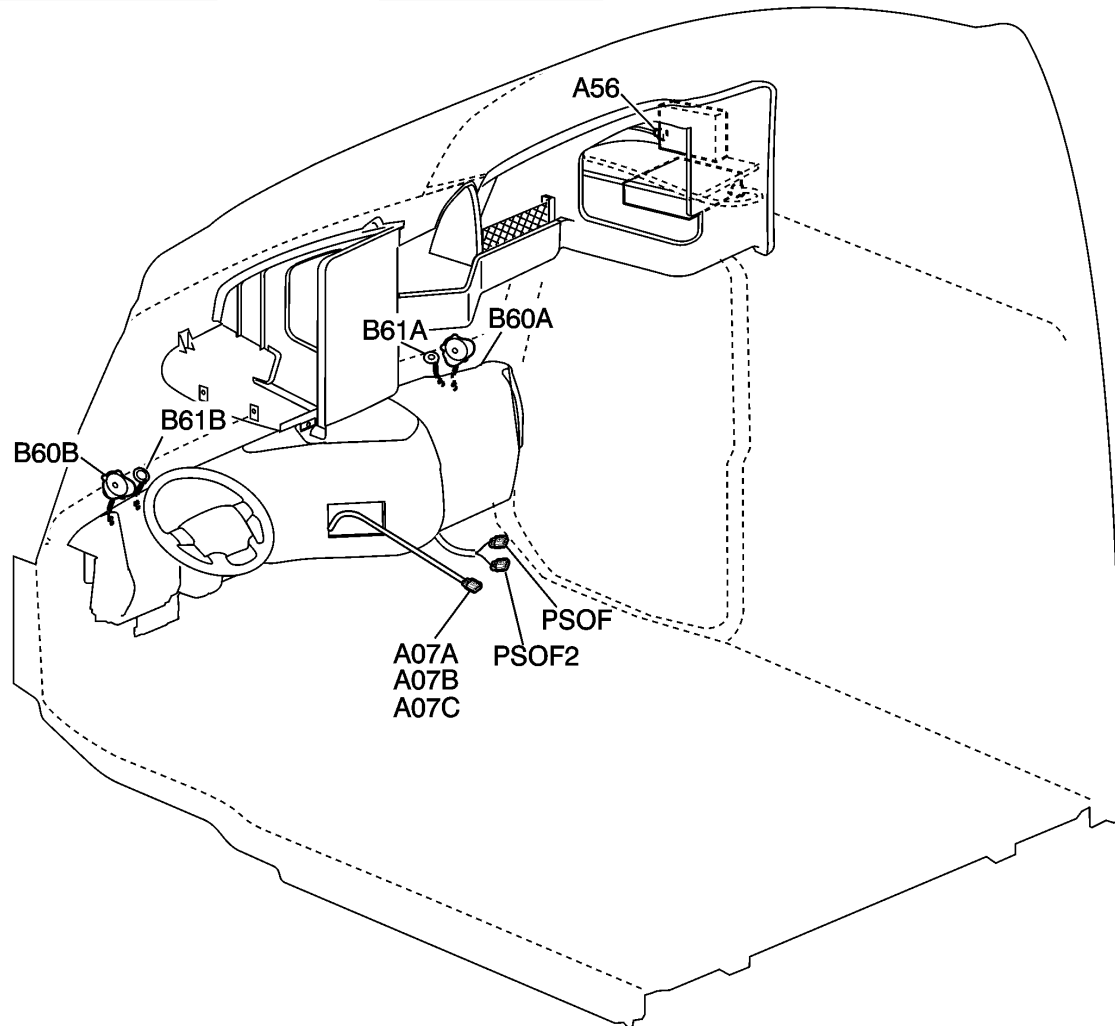
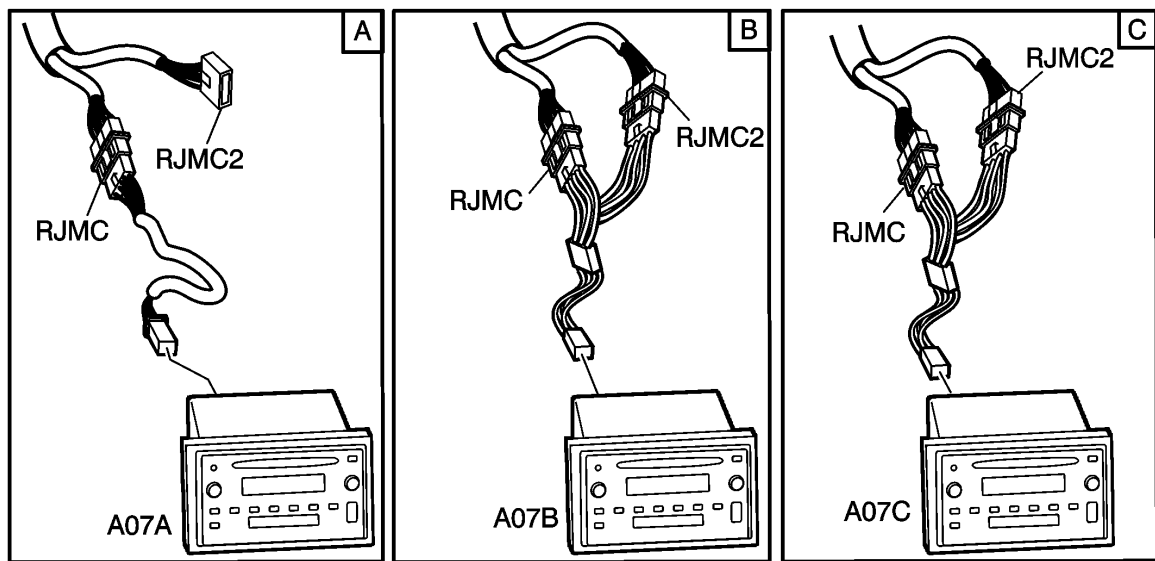
## Front Overhead Shelf/CB Power Harness



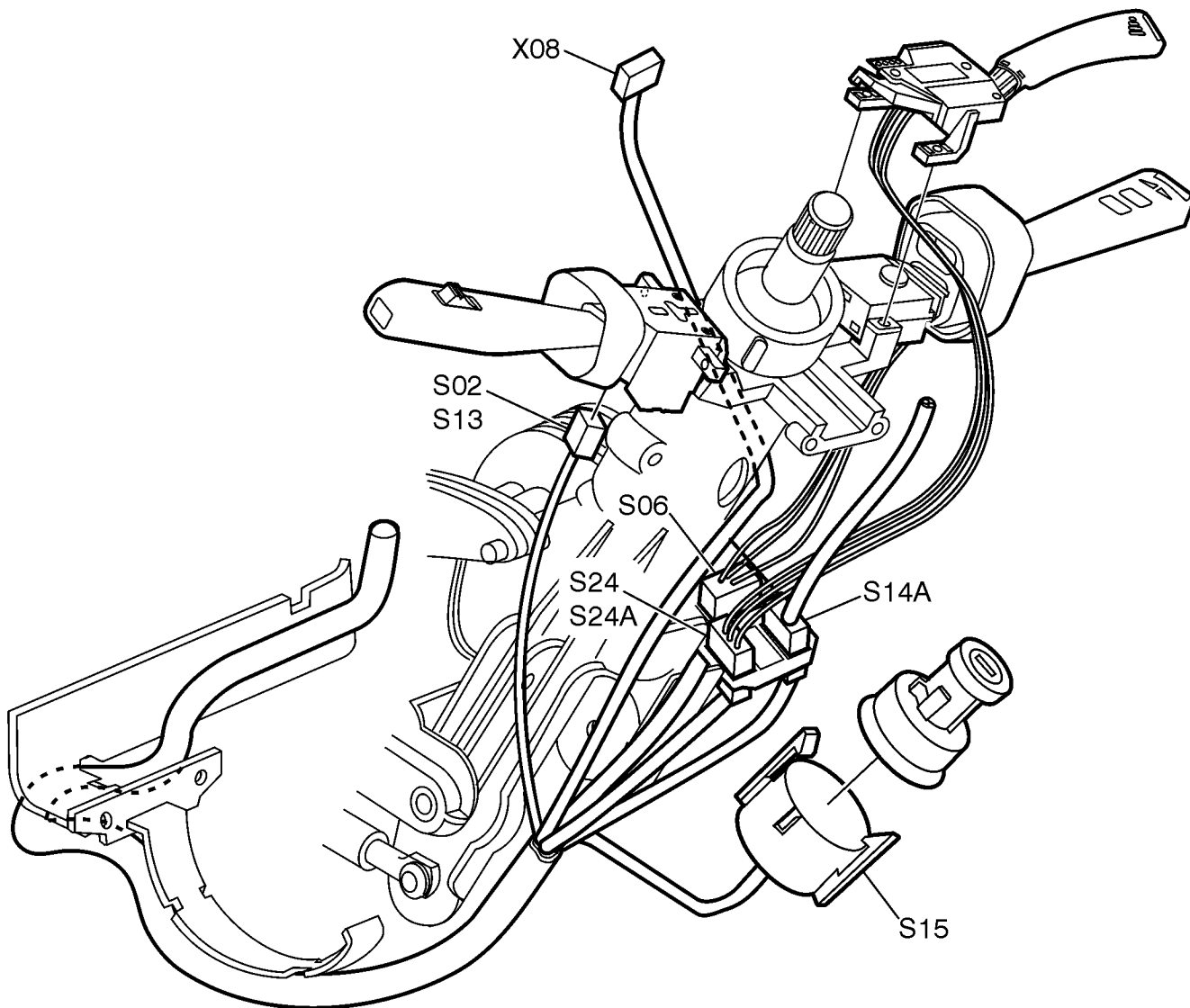
W3005899



## Radio Harness

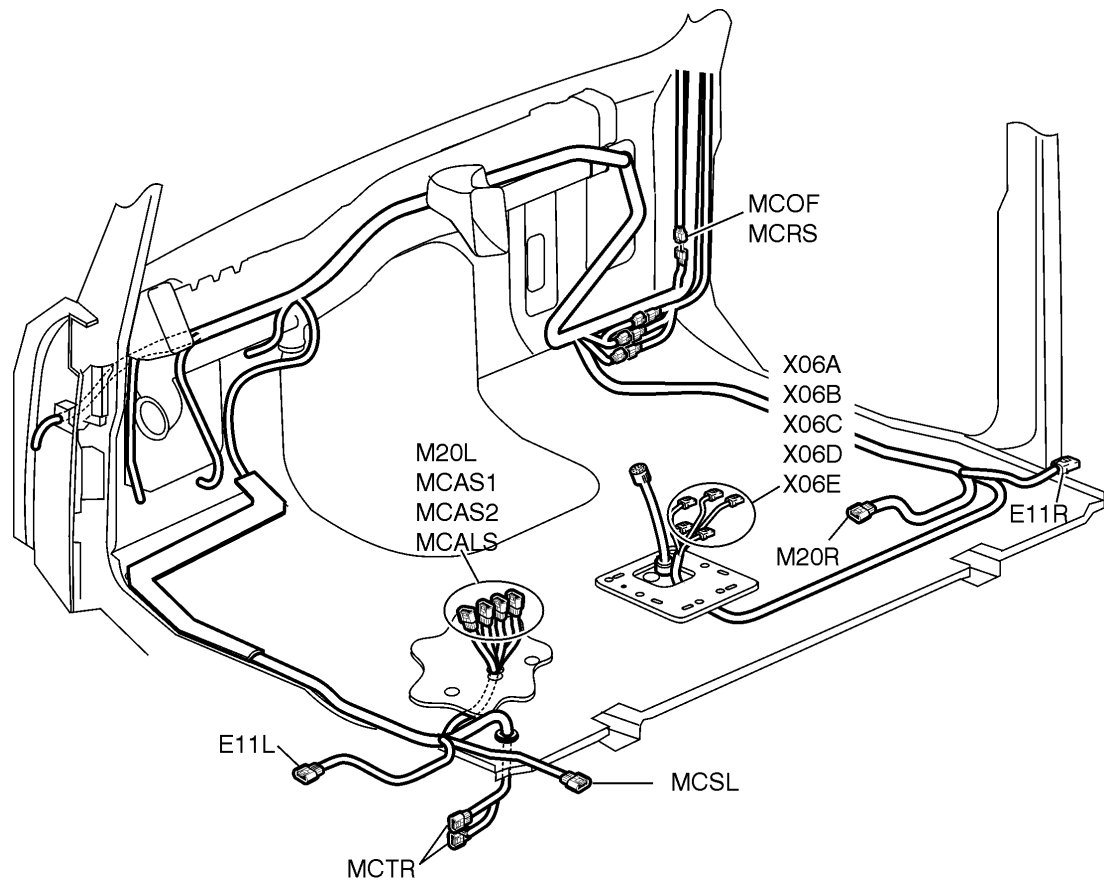


## Steering Column Harness, Including Stalk Switches



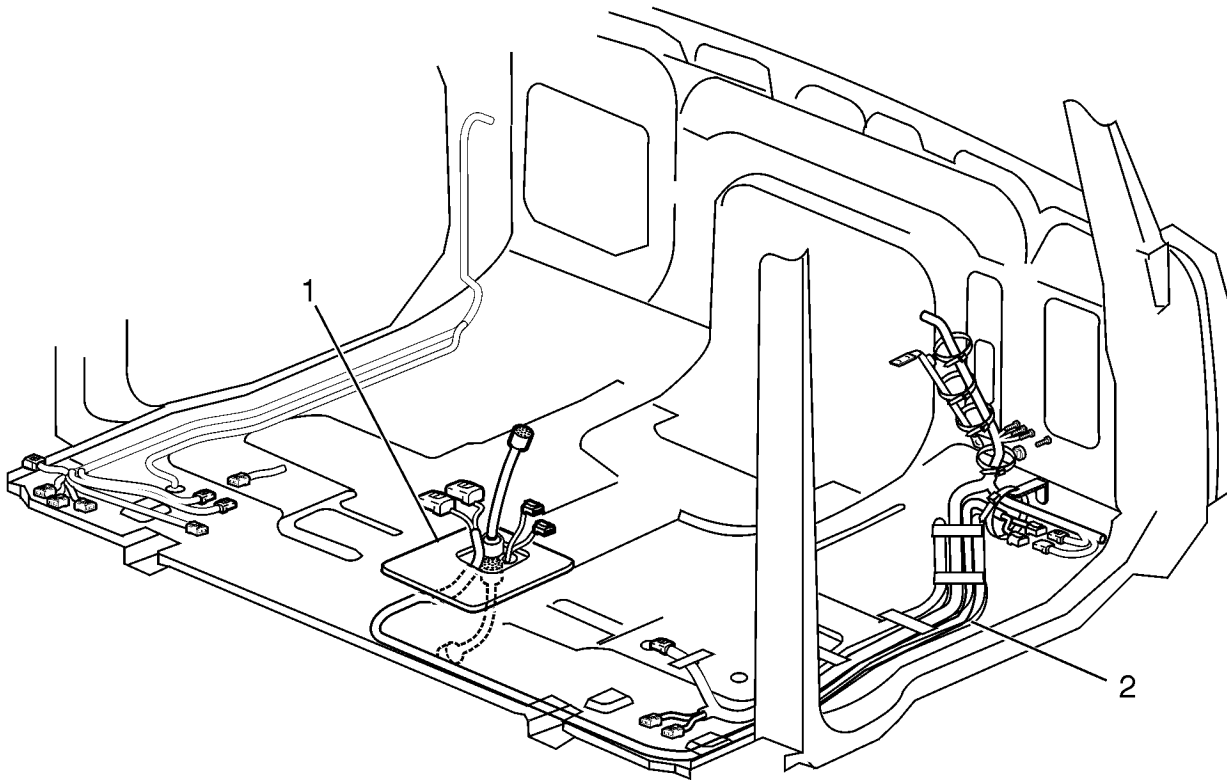
W3006722

## Cab Floor Harnesses, Front



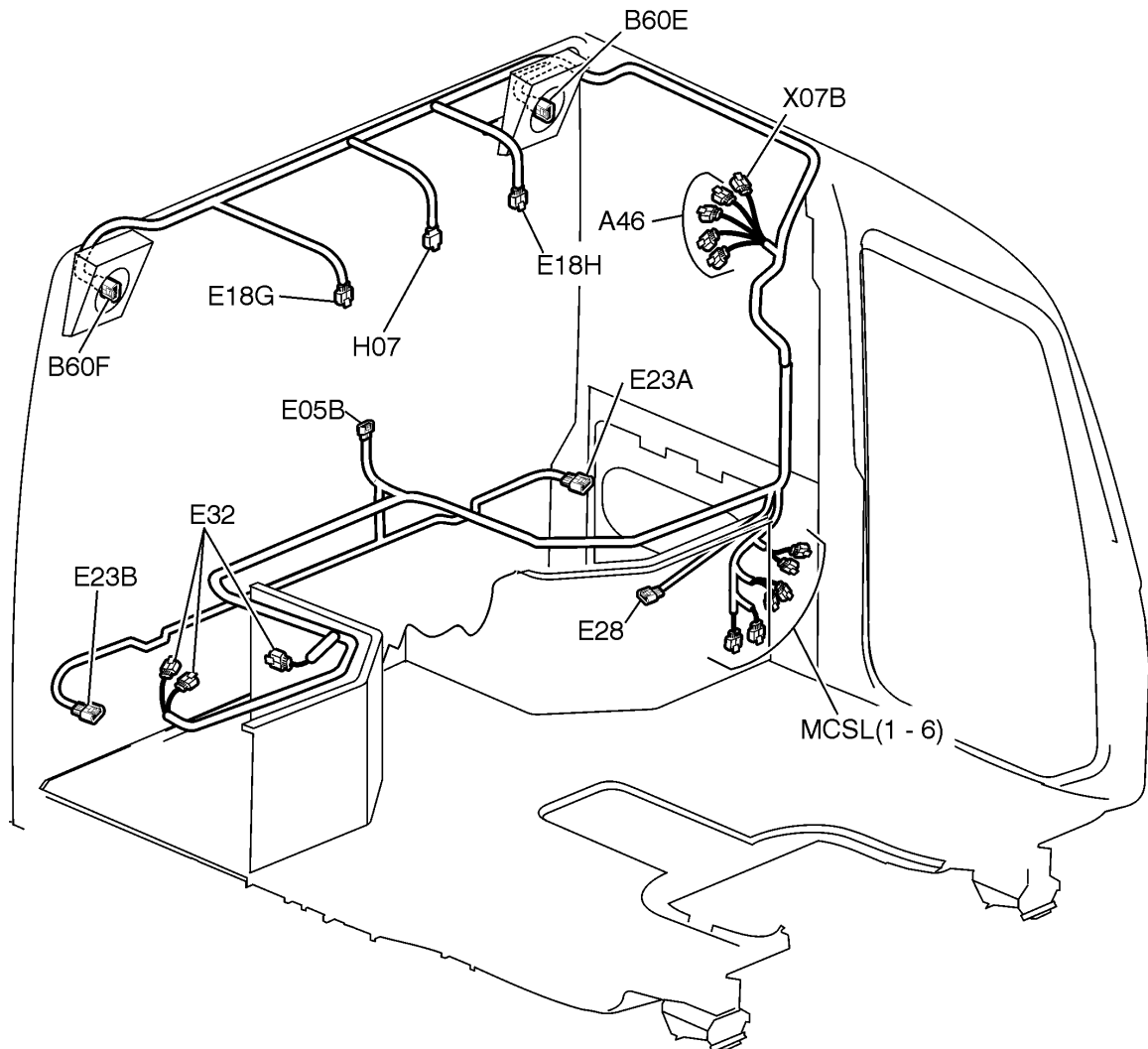
W3005950

## Cab Floor Harness, Bodybuilder Option (VHD)



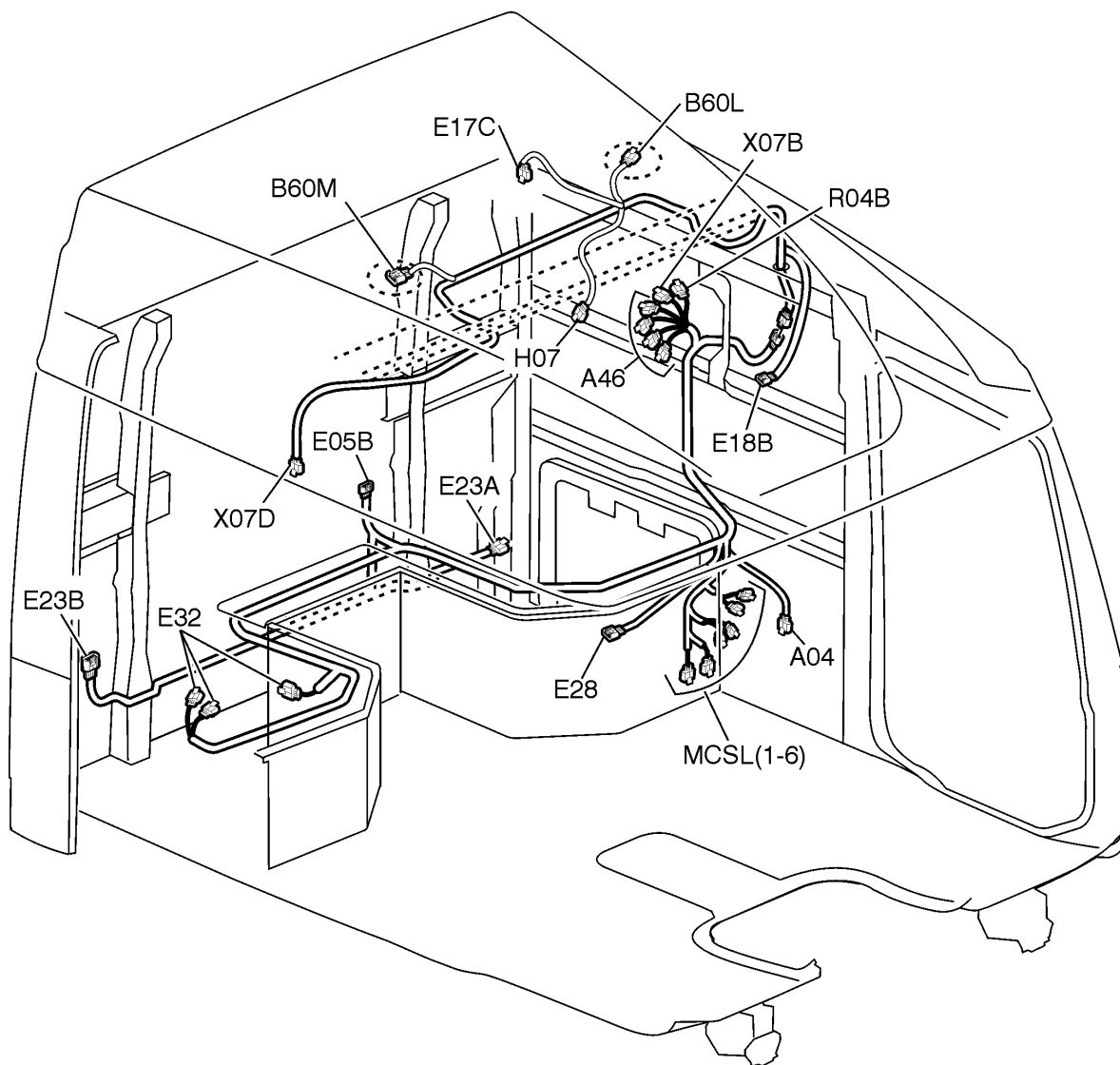
- 1 Bodybuilder Cab Floor Passthrough Harness
- 2 Bodybuilder Overlay Harness (either 2 or 4 connectors on each side)

W3006394

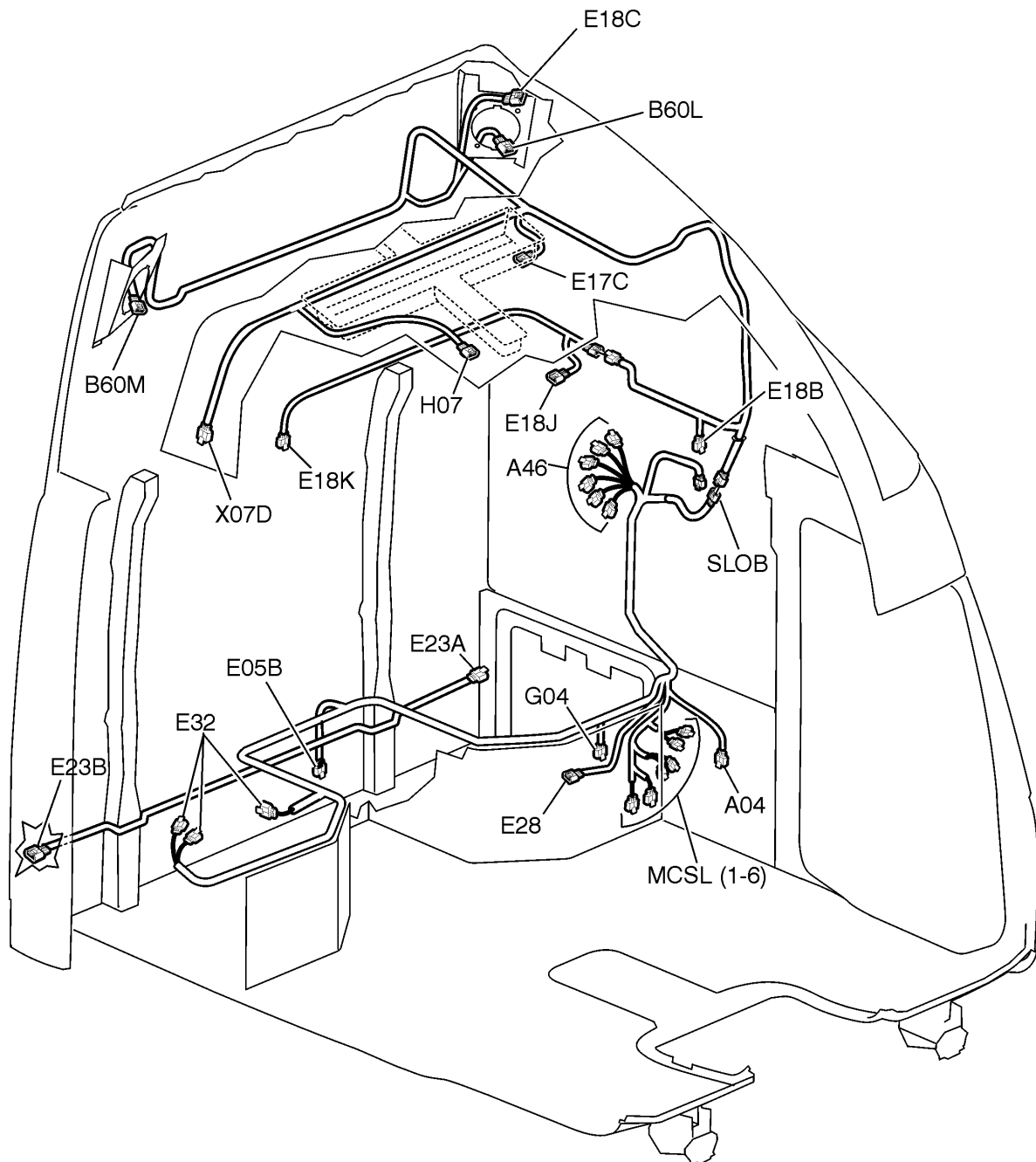
**Rear Cab Harness, VN430**

W3005902

## Rear Cab Harness, VN630

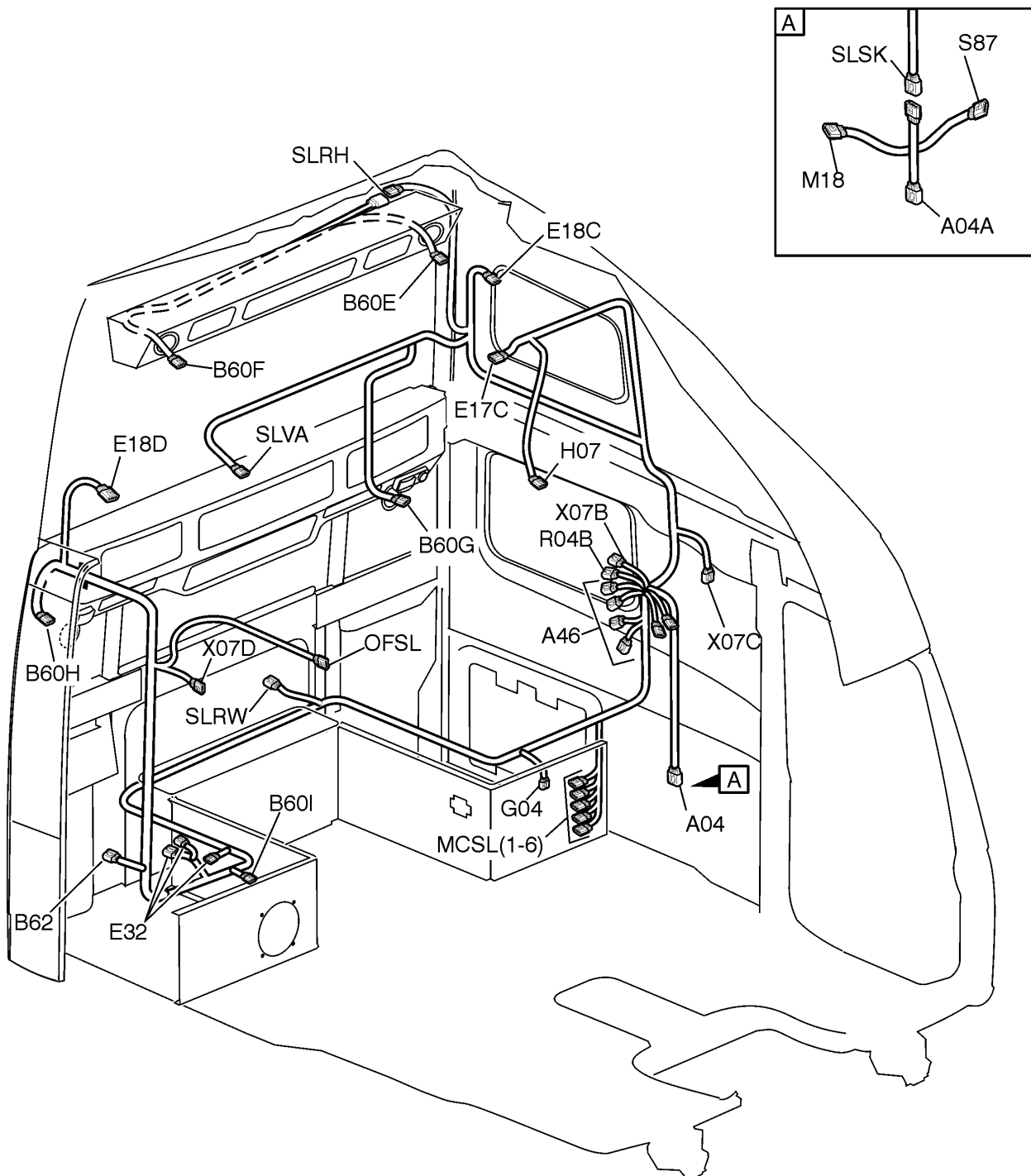


W3005896

**Rear Cab Harness, VN670**

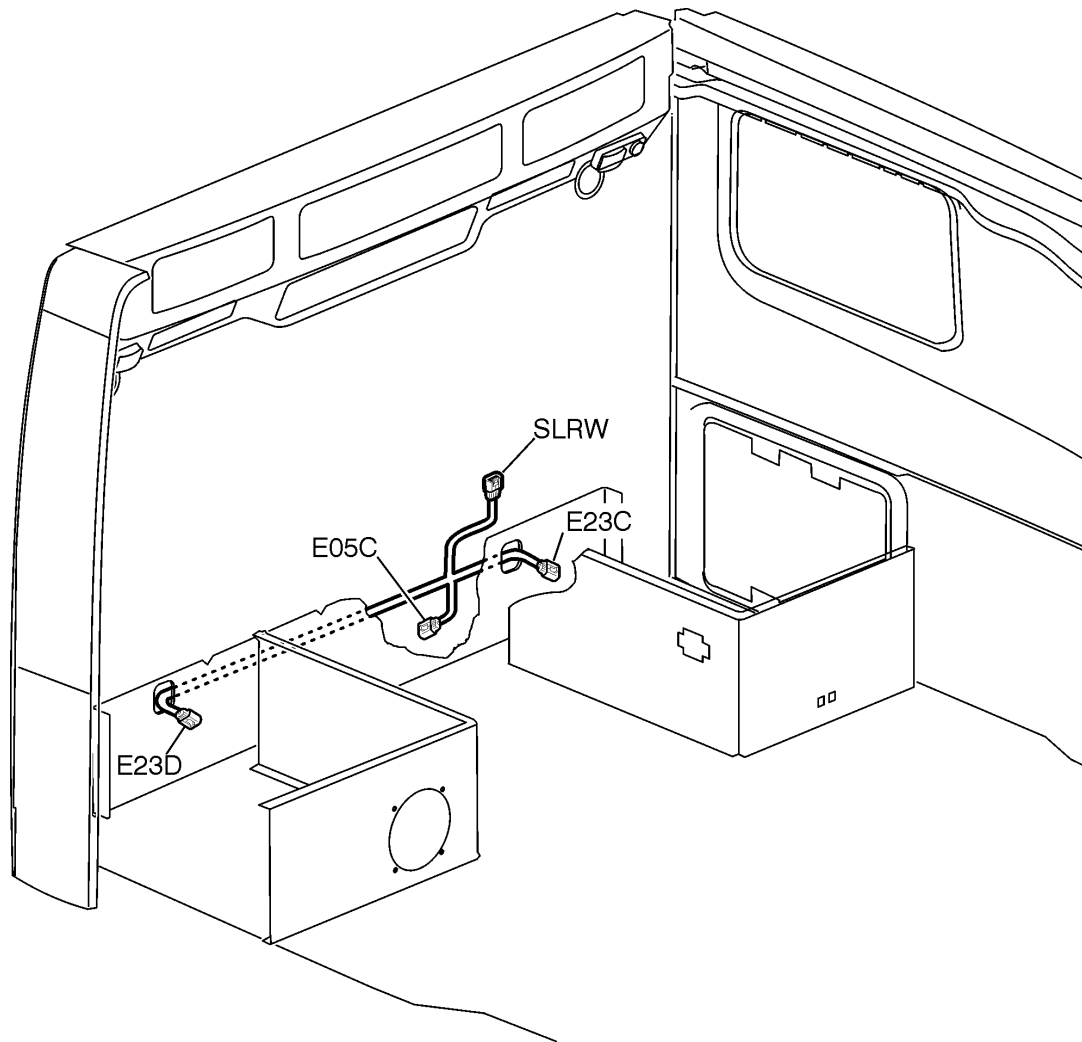
W3005887

## Rear Cab Harness, VN780



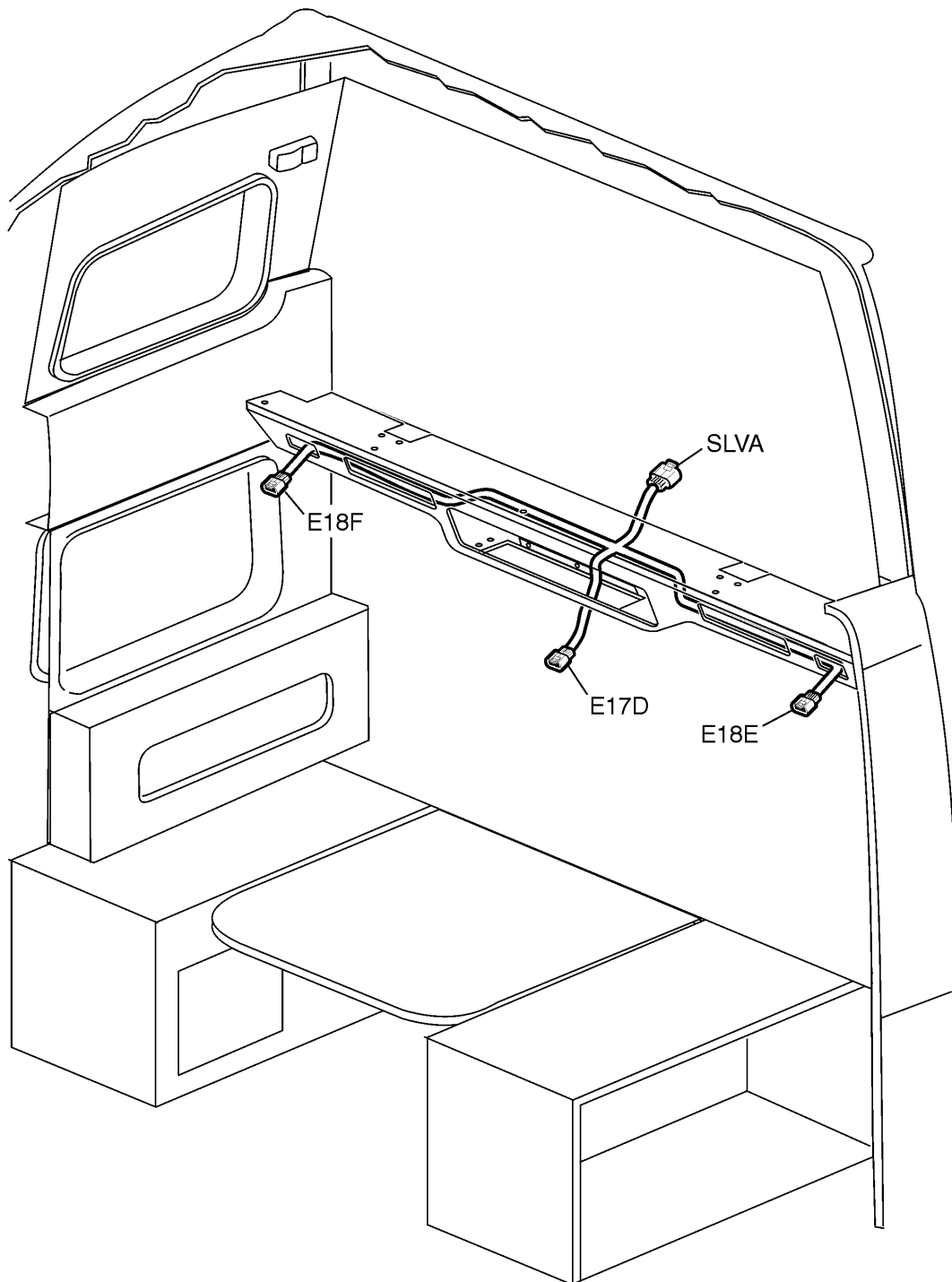
W3005889



**Rear Cab, Lower Wall Harness, VN780**

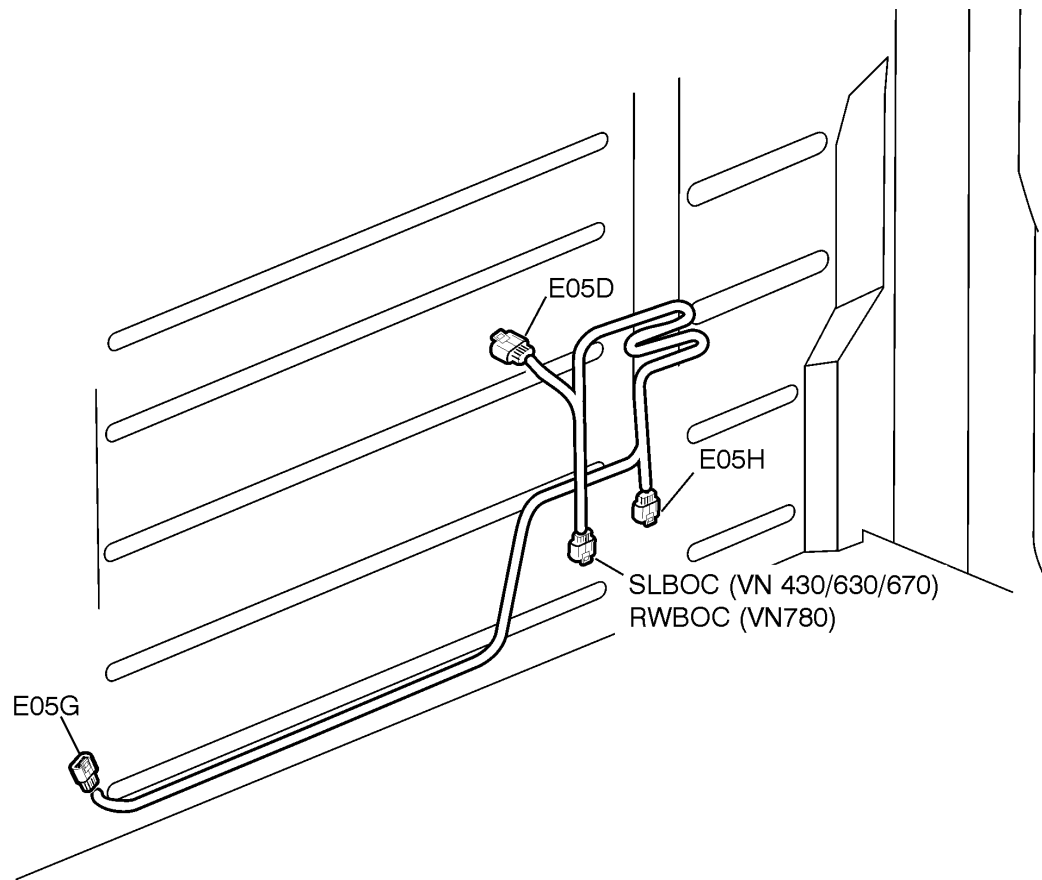
W3005888

## Rear Cab Valance Harness, VN780

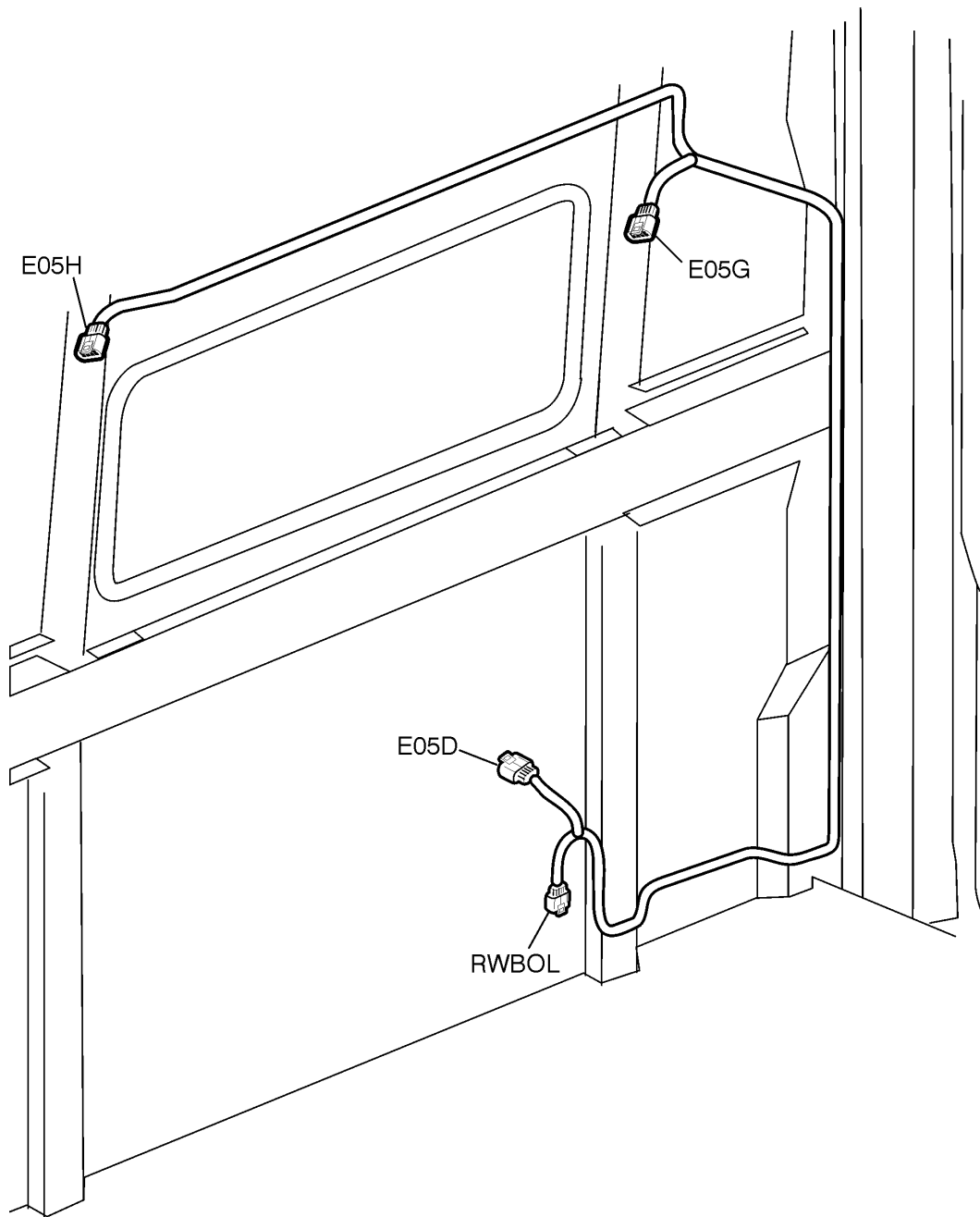


W3005936

## Rear Cab Harness, Back of Cab Lights (HDI/HDO Variant)

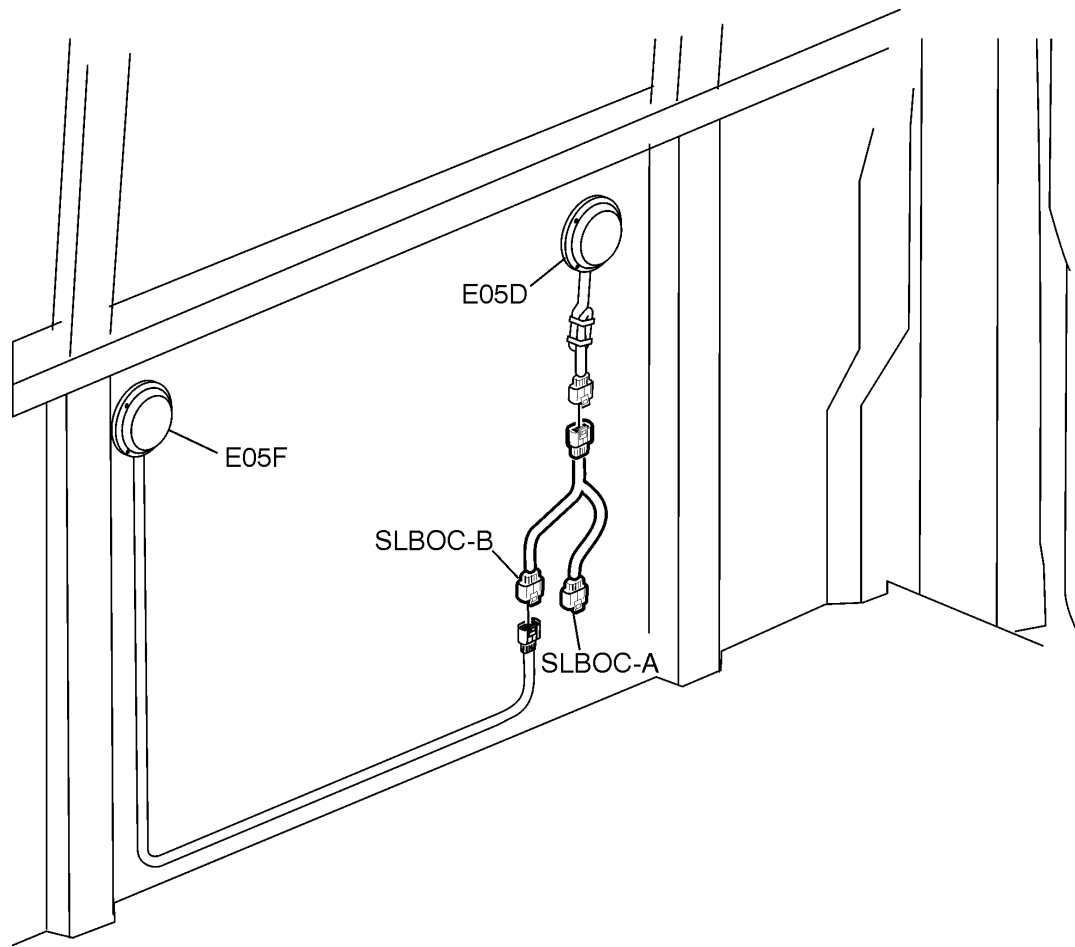


W3005905

**Rear Cab Harness, Back of Cab Lights (LDI/LDO Variant)**

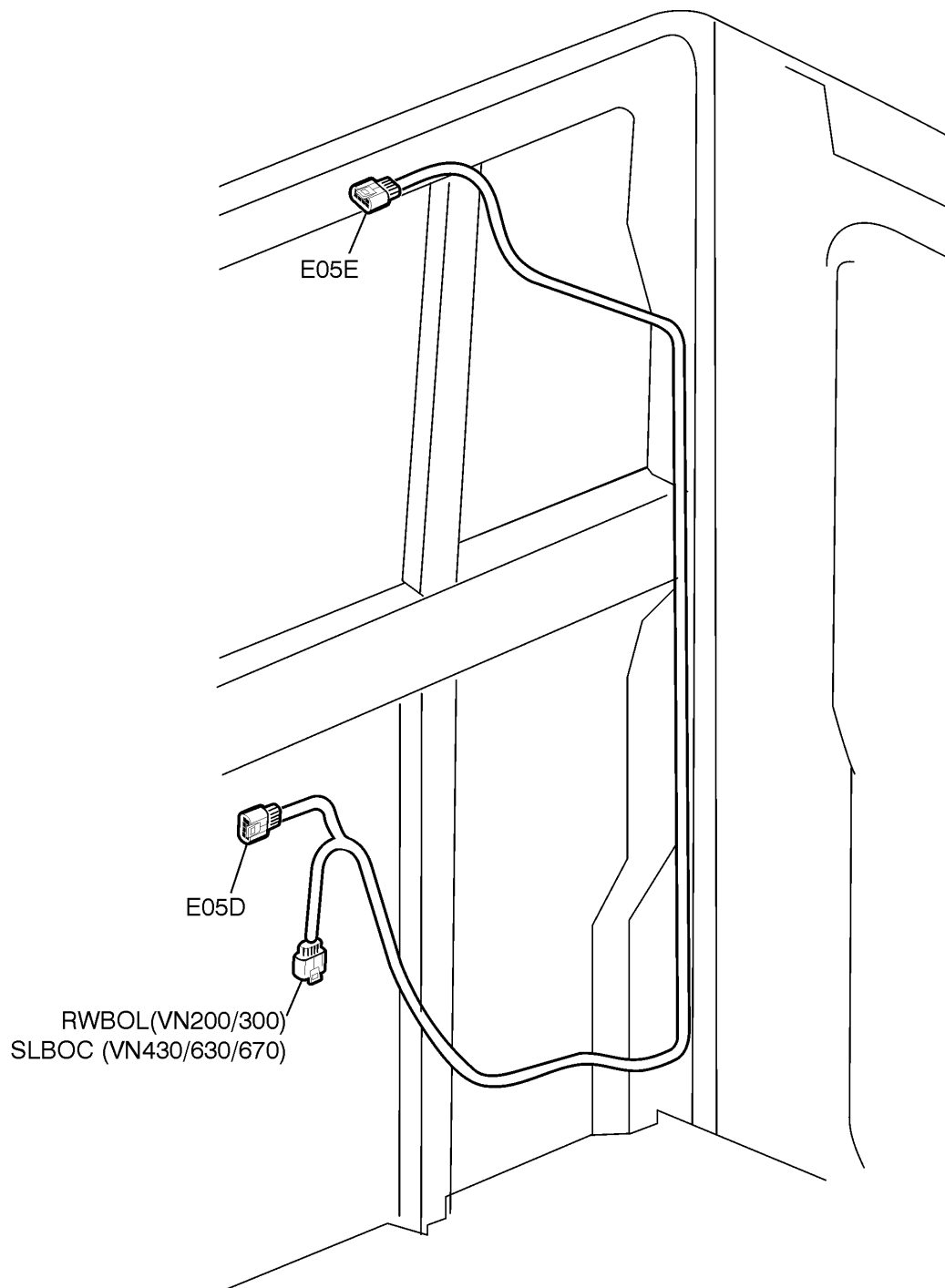
W3005903

## Rear Cab Harness, Fifth Wheel Light



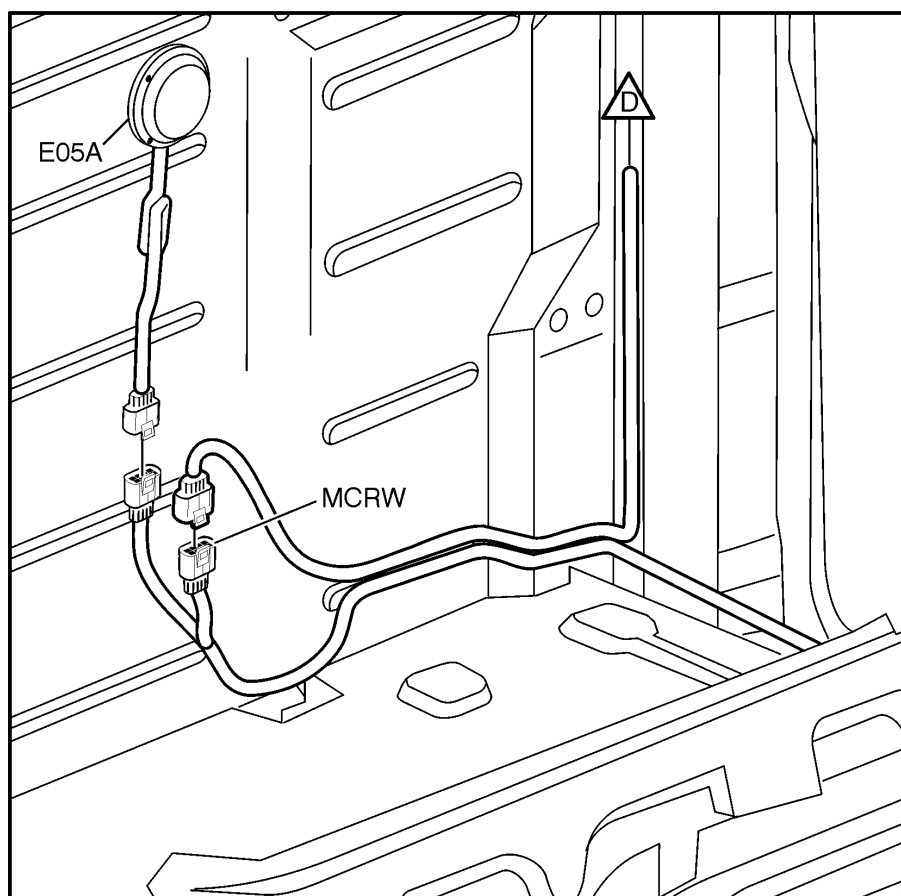
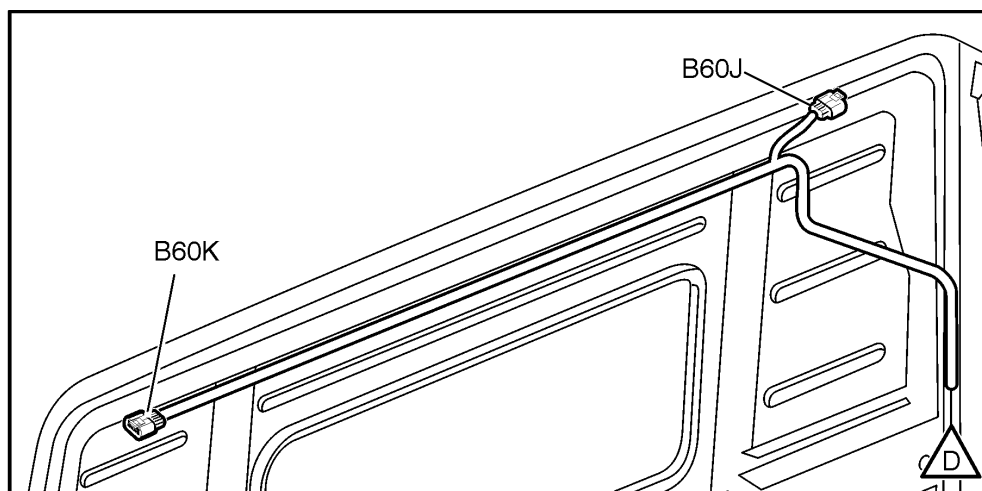
W3005906

## Rear Cab Harness, Fifth Wheel Light



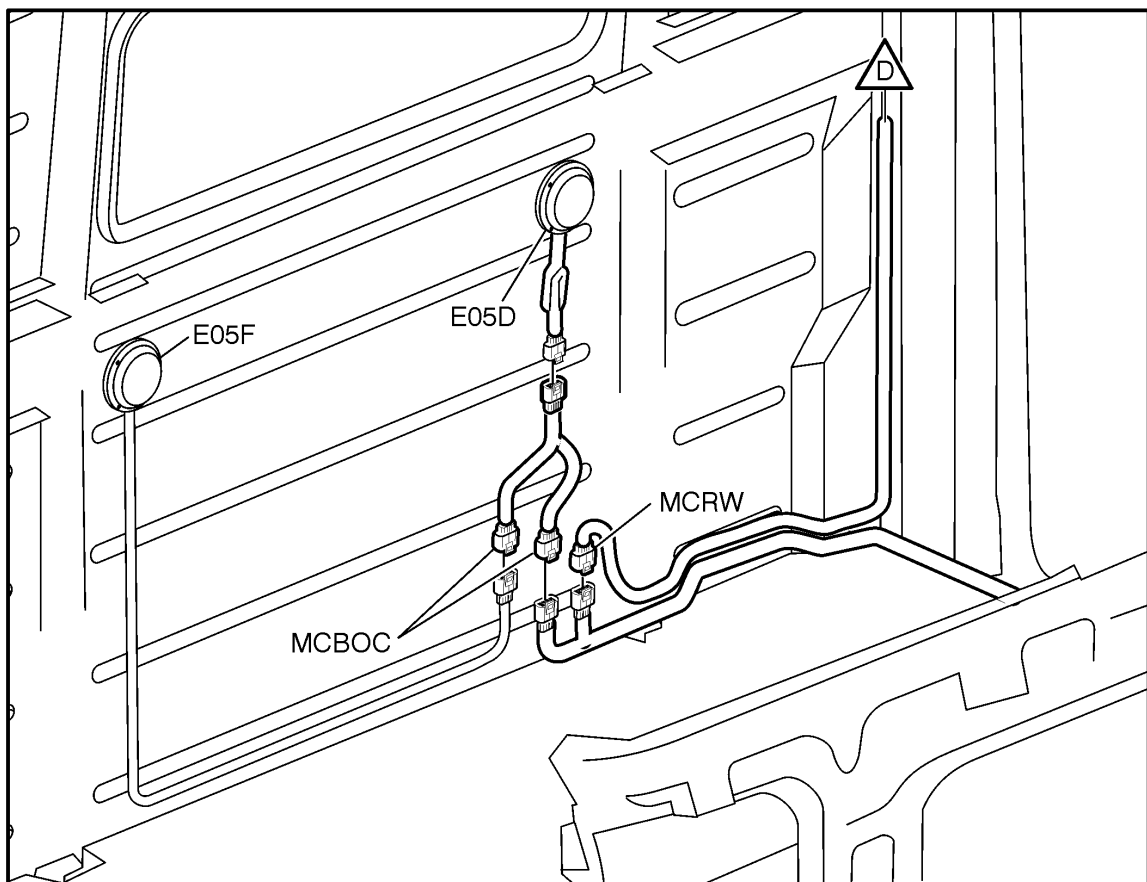
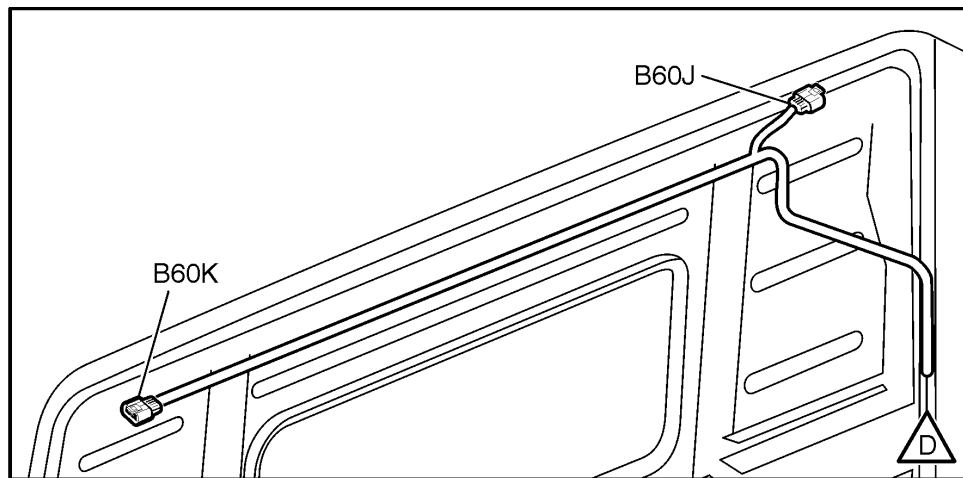
W3005904

## Rear Cab Harness, Fifth Wheel Light and Rear Speakers (Daycab)



W3005895

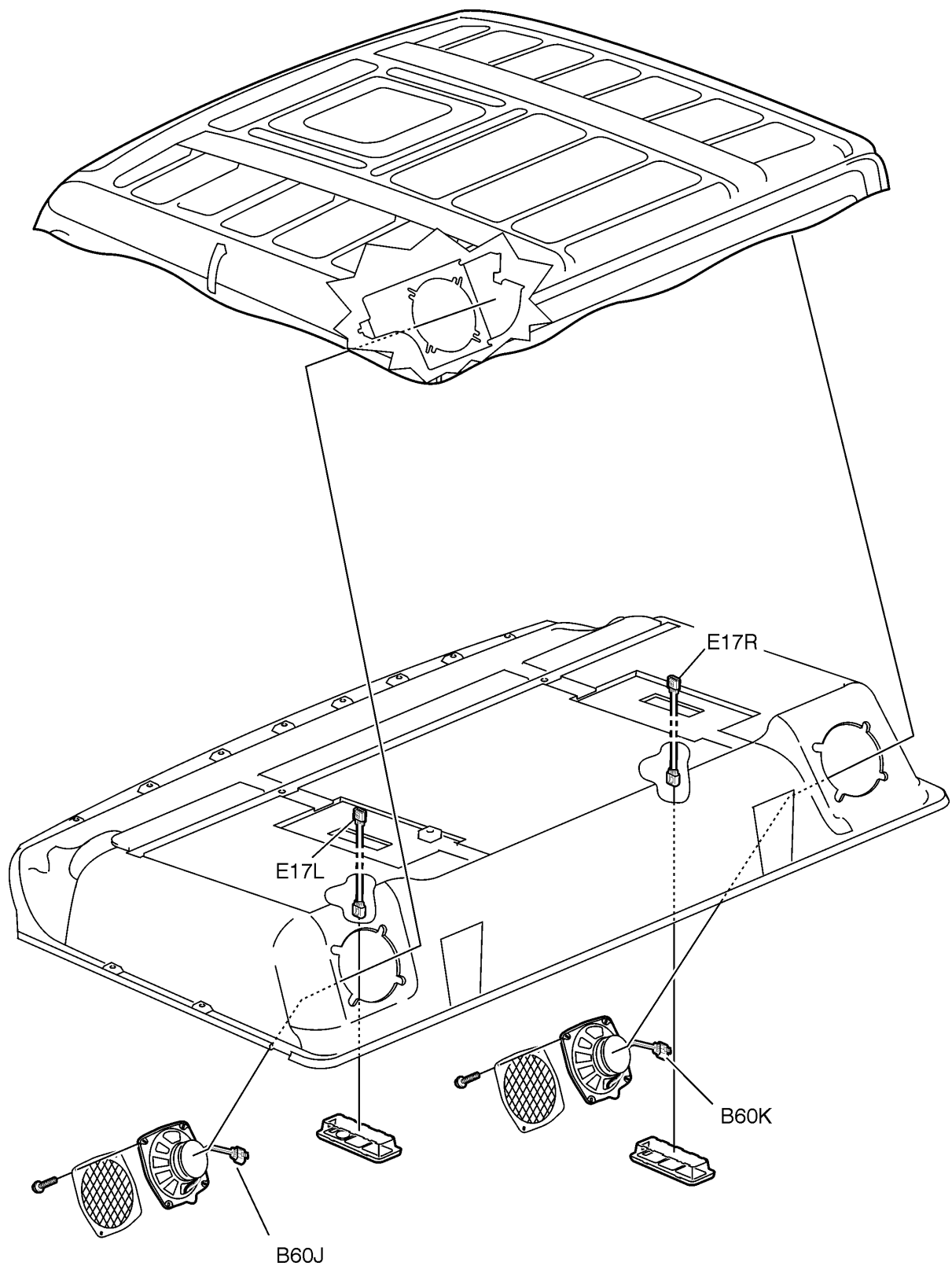
## Rear Cab Harness, Dual Fifth Wheel Light and Rear Speakers (Daycab)



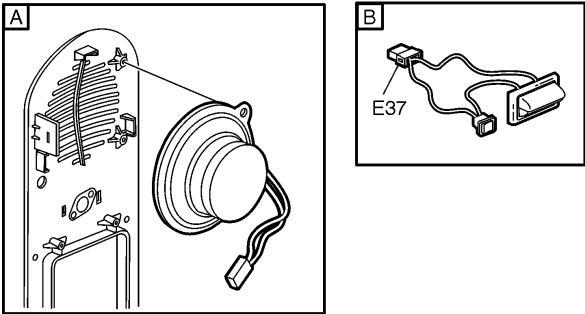
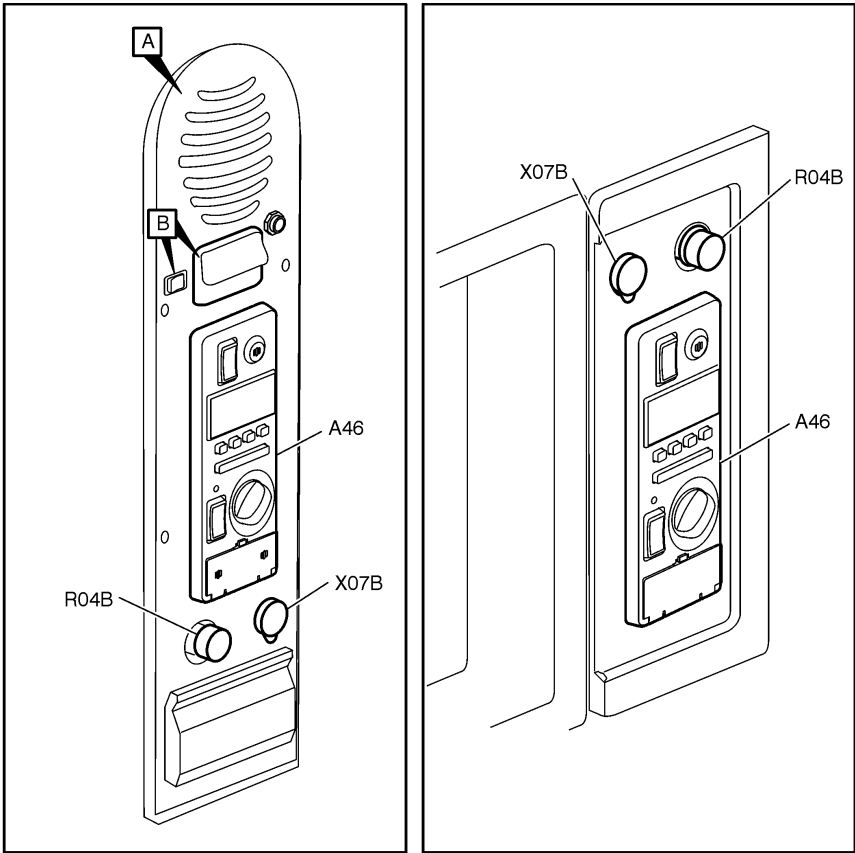
W3005897



## Rear Cab Harness, Overhead Lights and Rear Speaker Detail



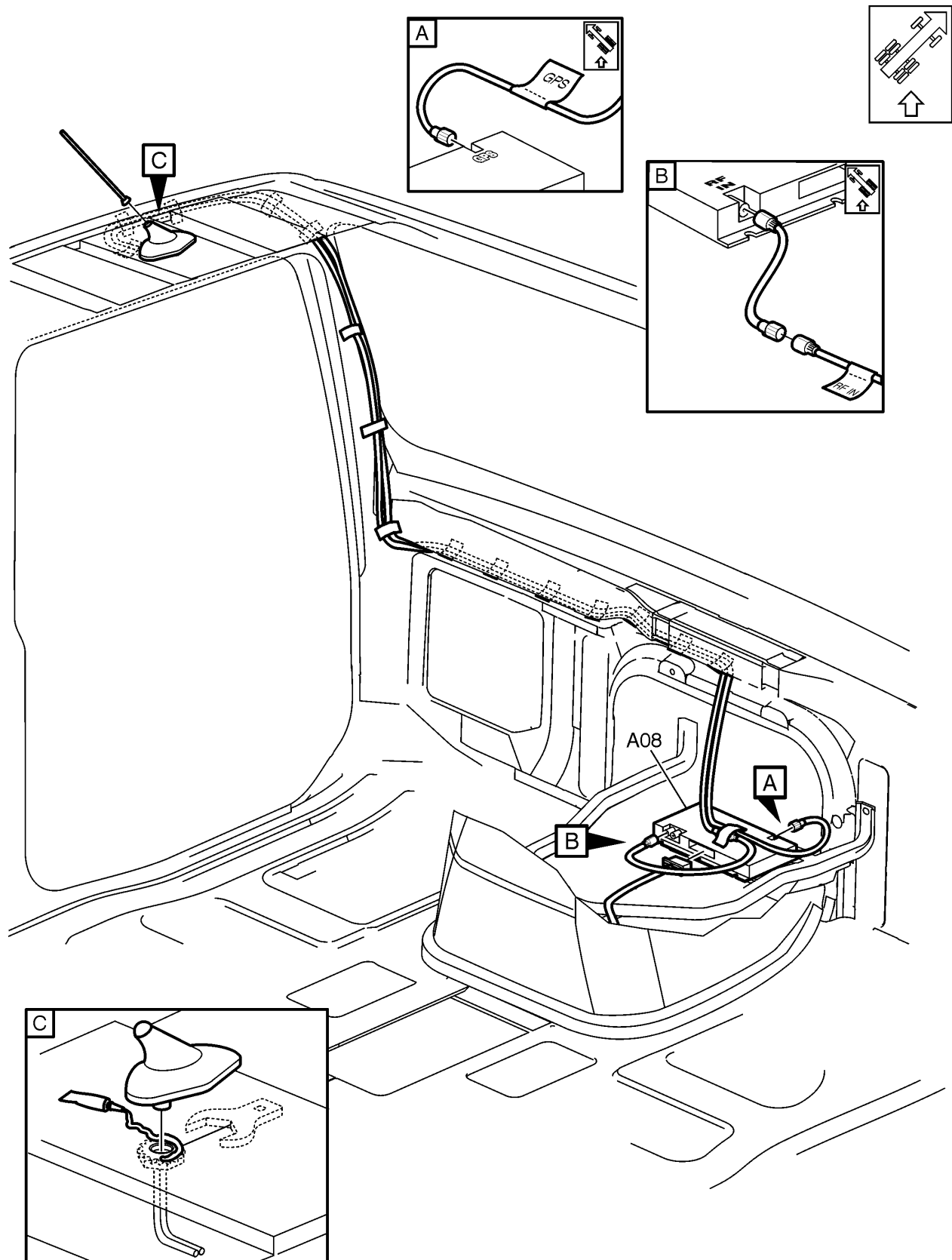
Sleeper Control Panel (LECM)



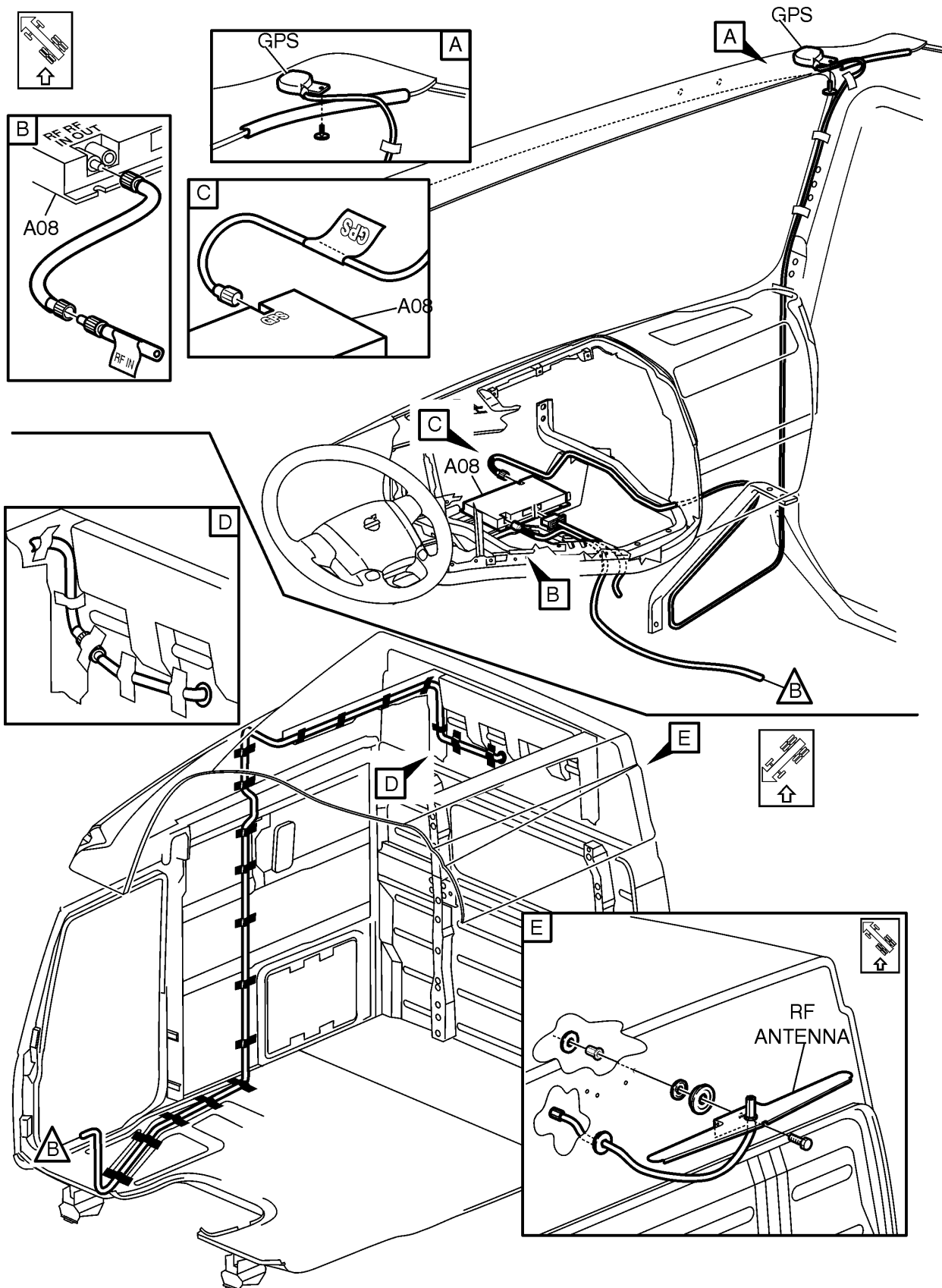
W3005951

## Volvo Link Harness and Antennas

## Volvo Link Harness and Antennas, Day Cab

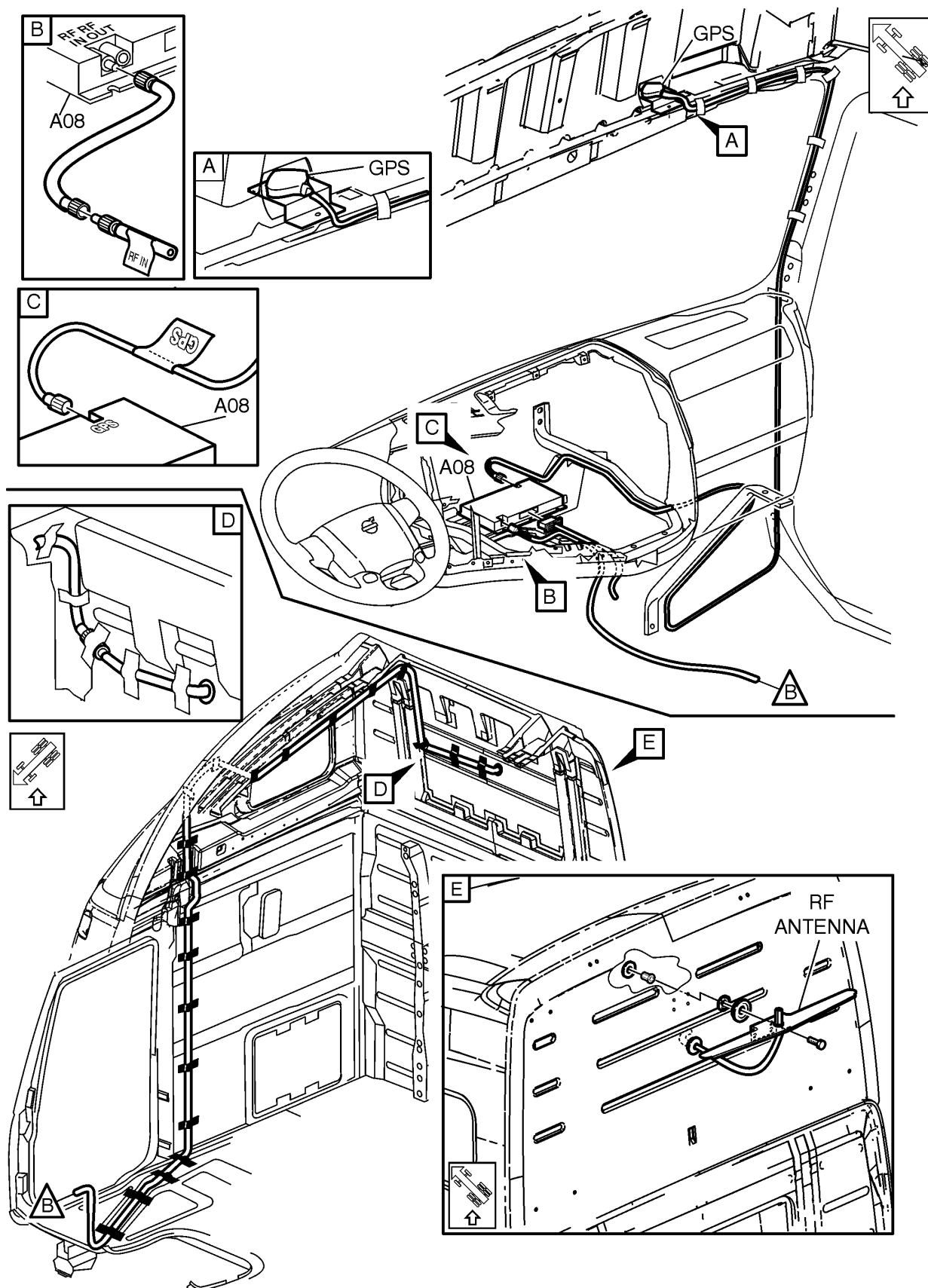


## Volvo Link Harness and Antennas, 630 Sleeper Cab



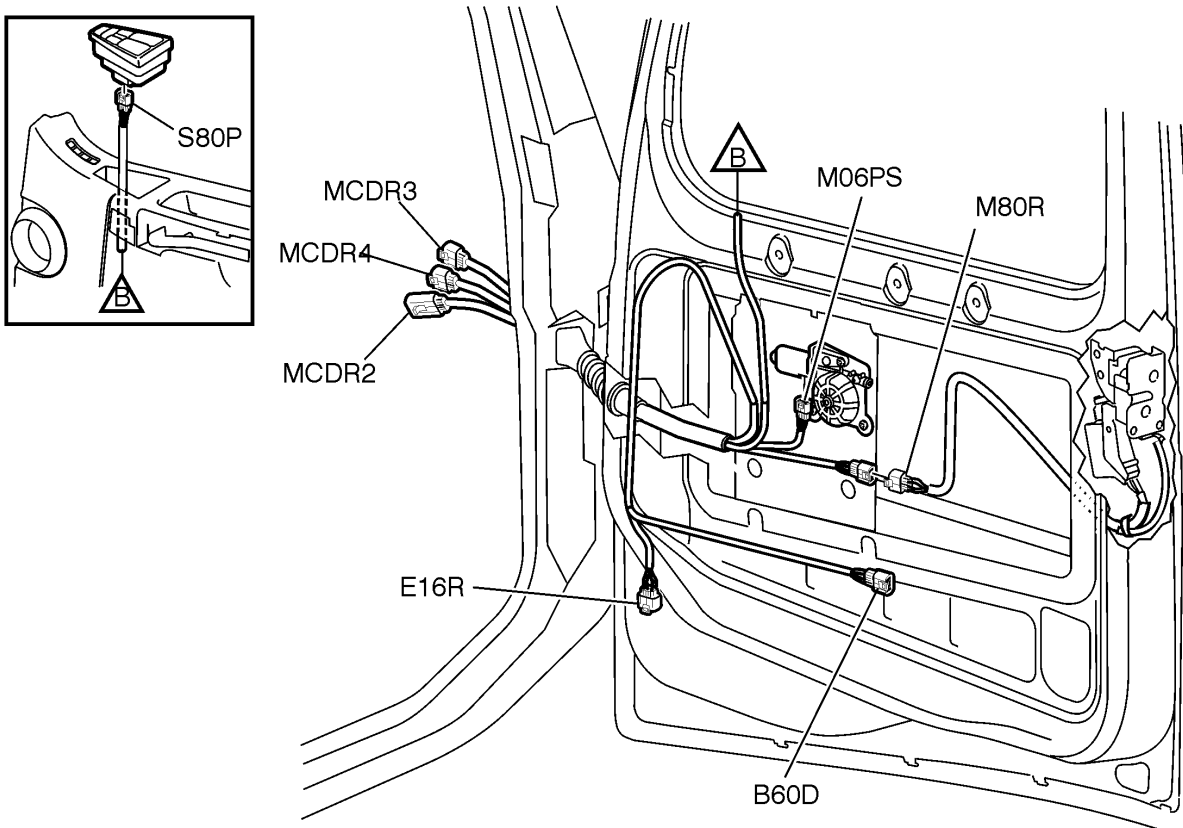
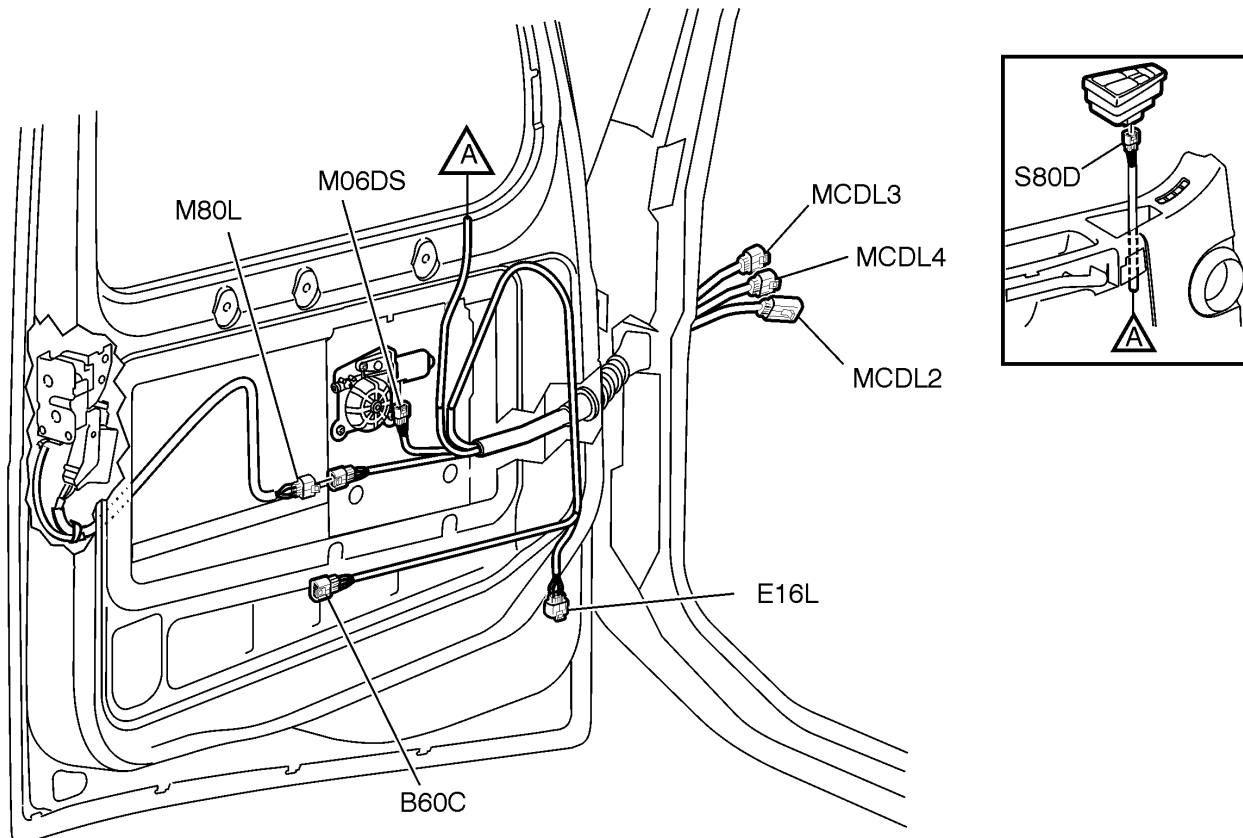
W3006396

## Volvo Link Harness and Antennas, 670/780 Sleeper Cab



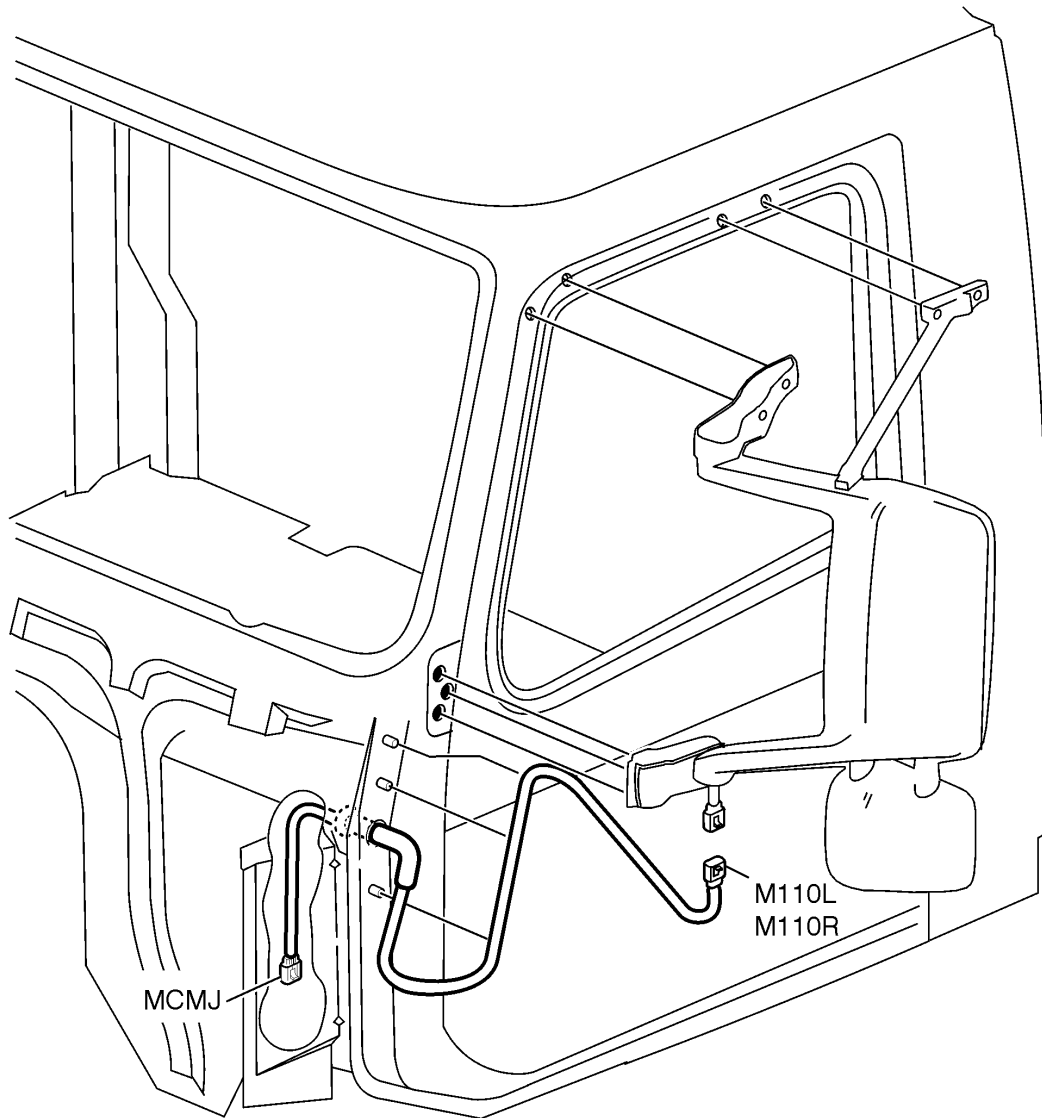
W3006397

## Door Harness

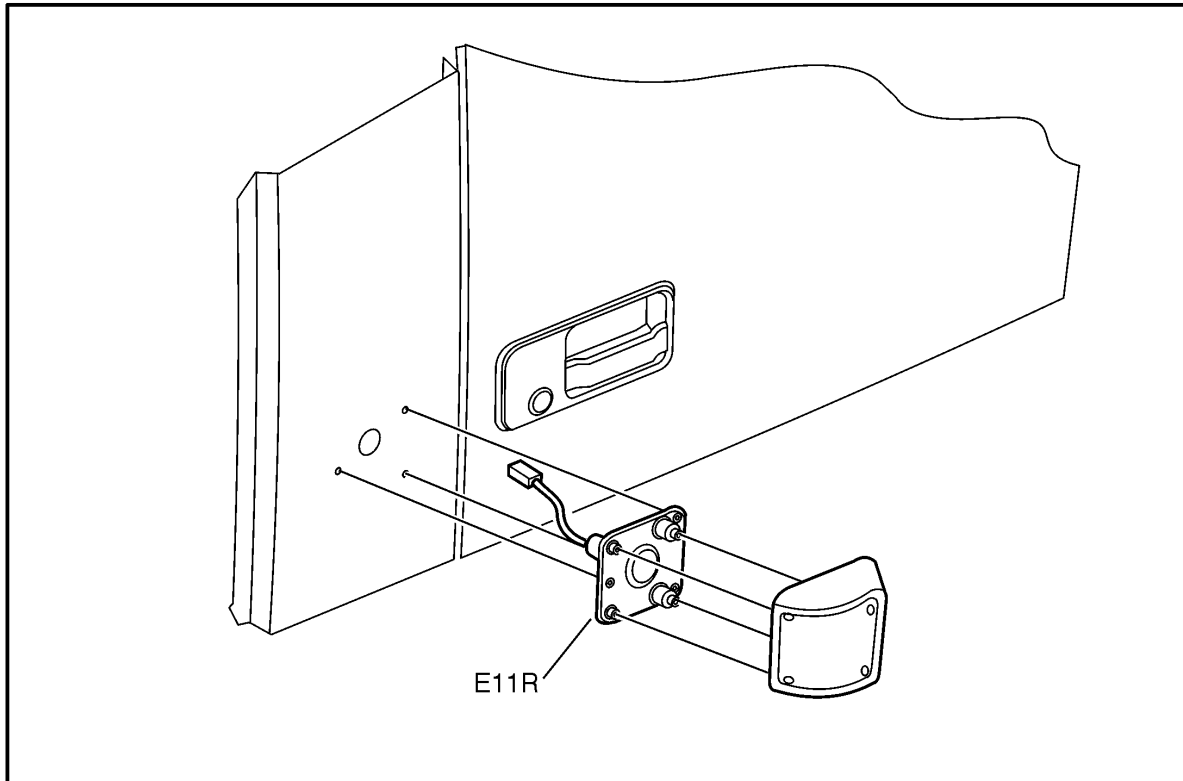
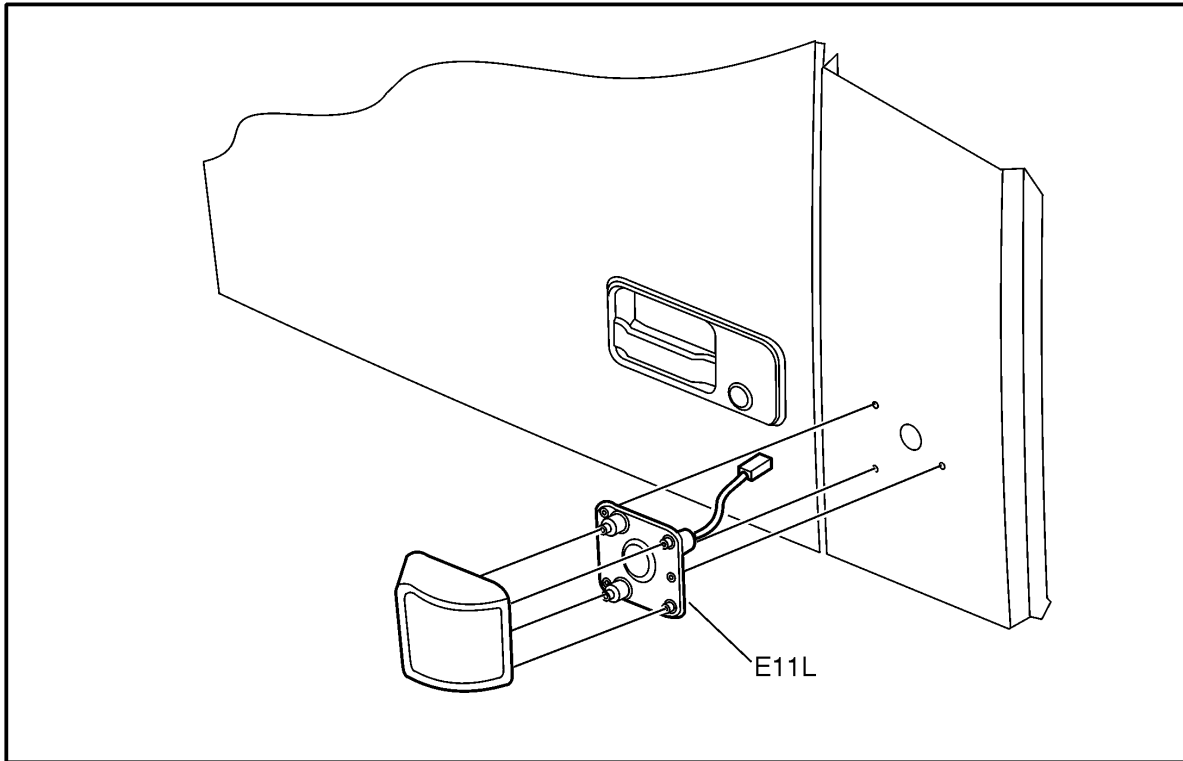


W3005921

## Side Mirrors

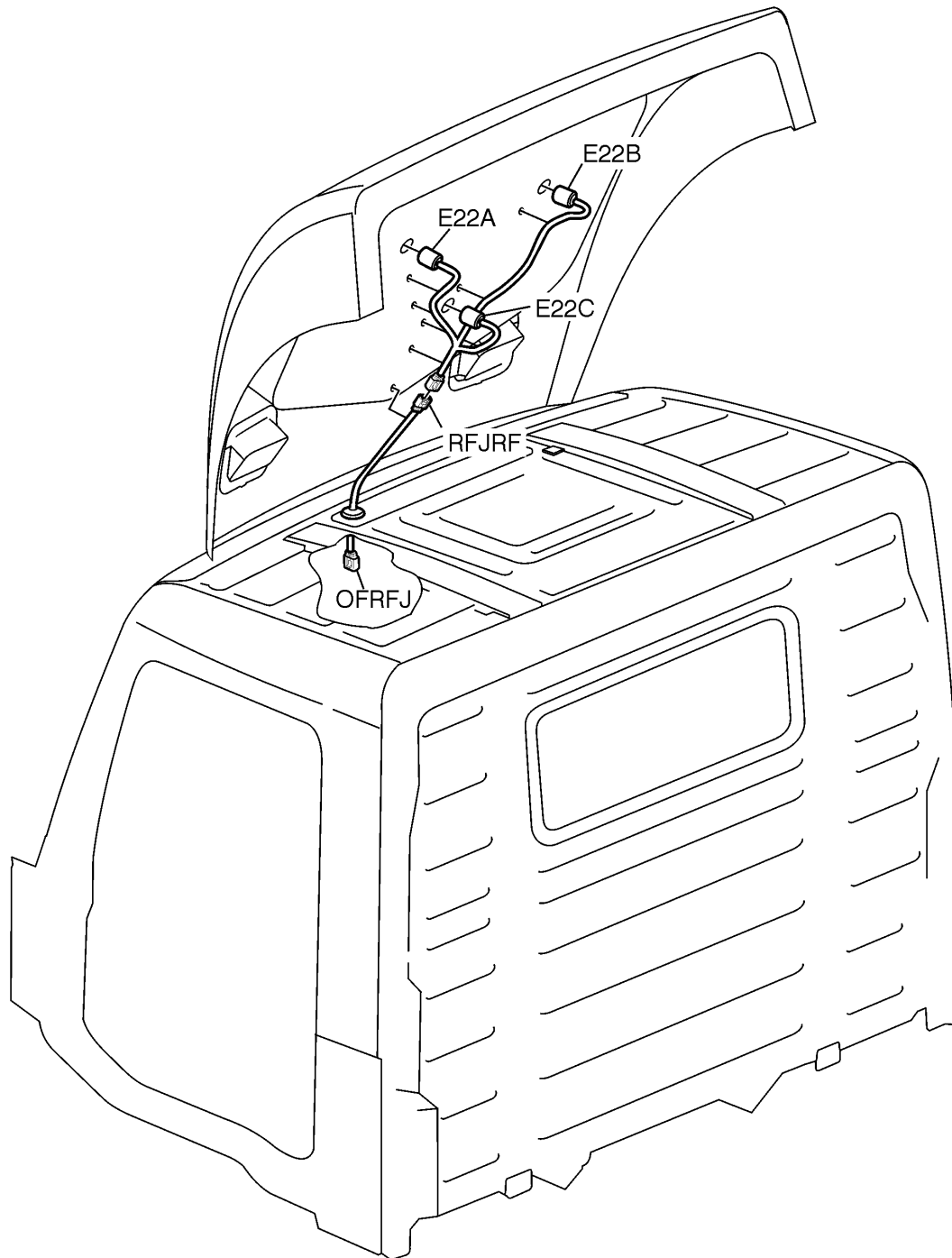


## Side Markers

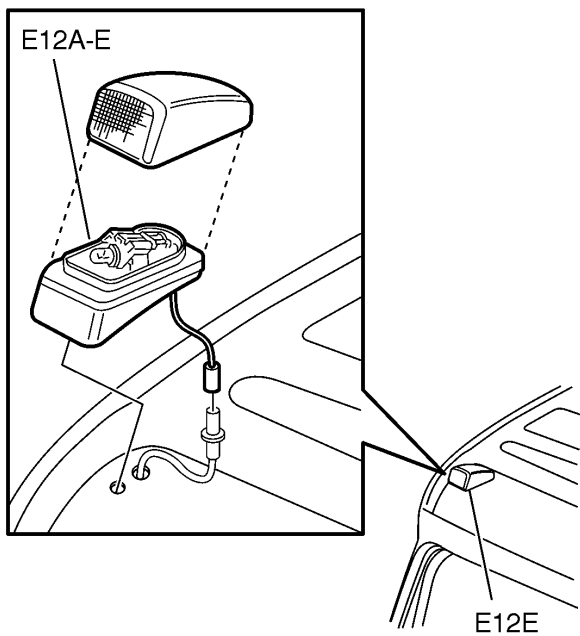
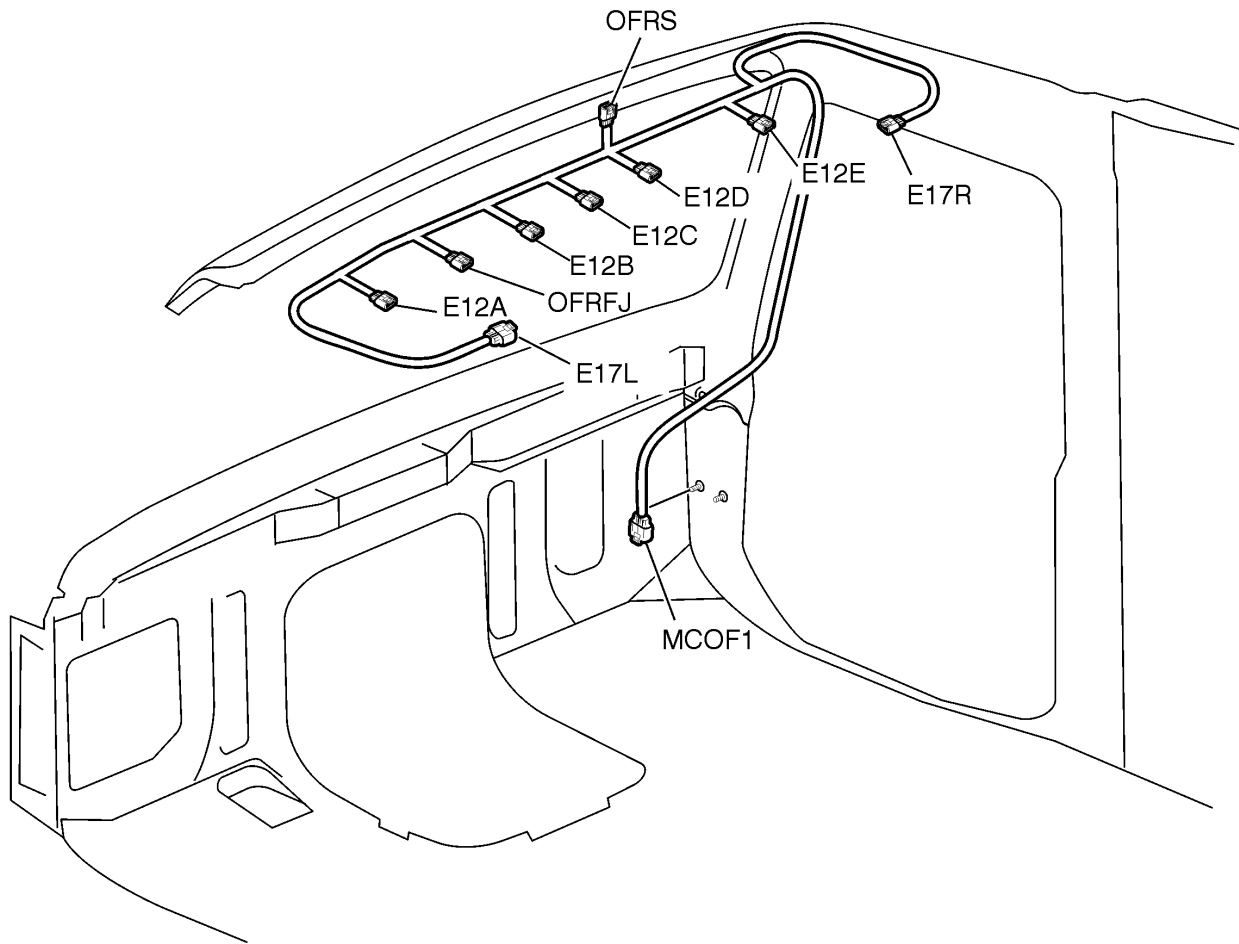




## Roof Sign Harness

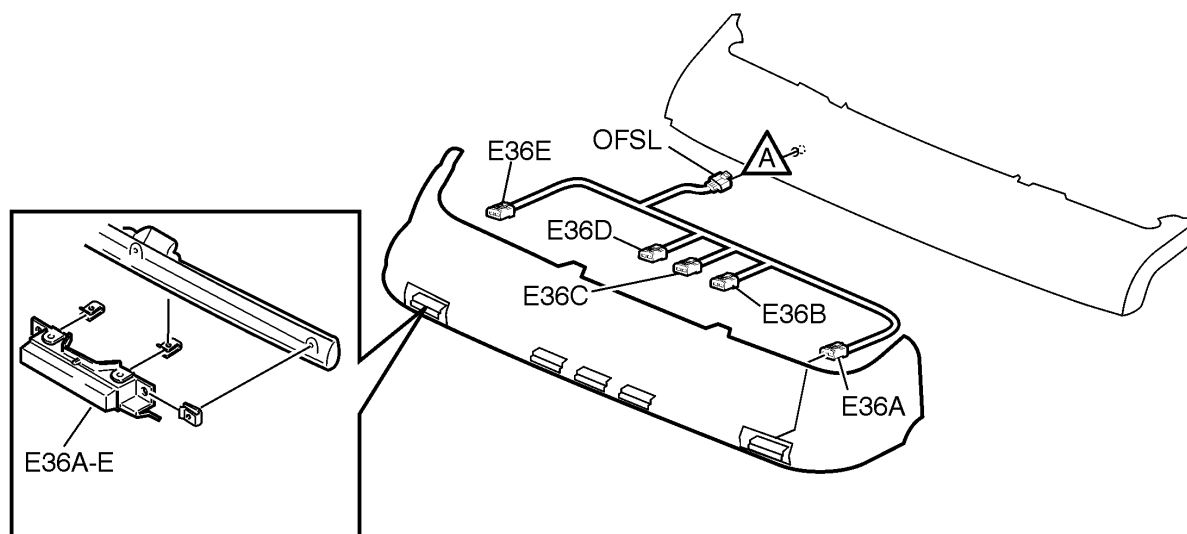
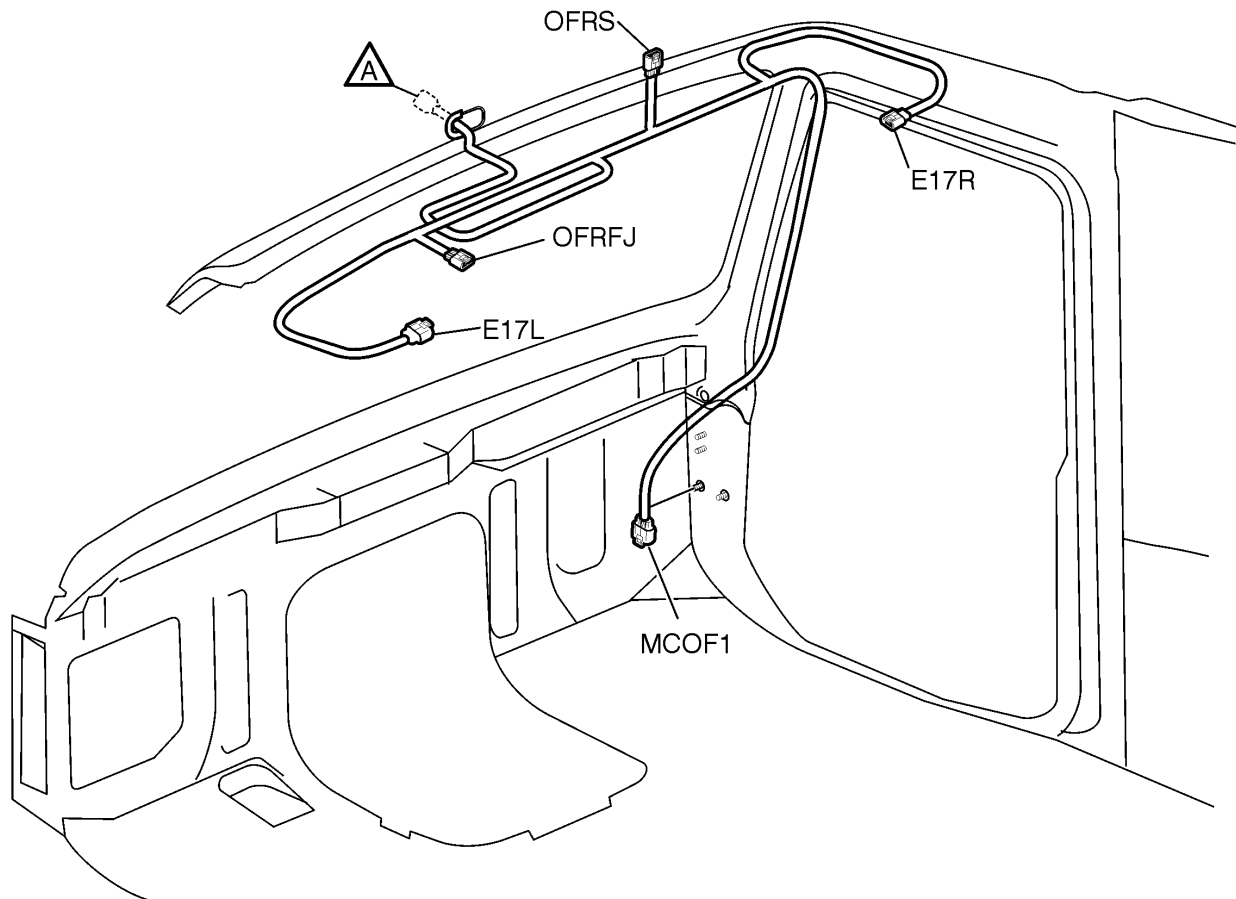


## Overhead Marker Lights



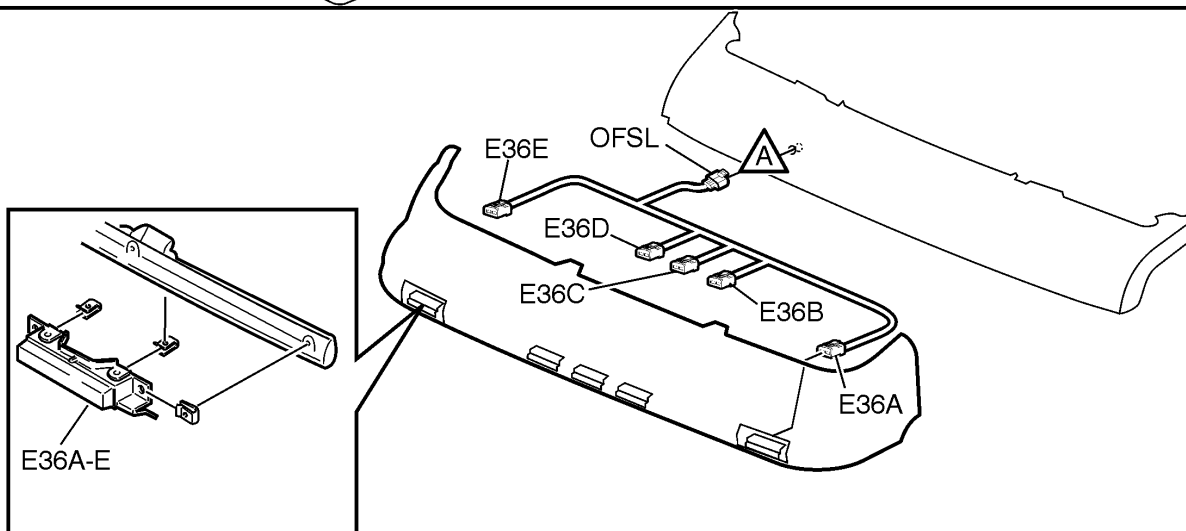
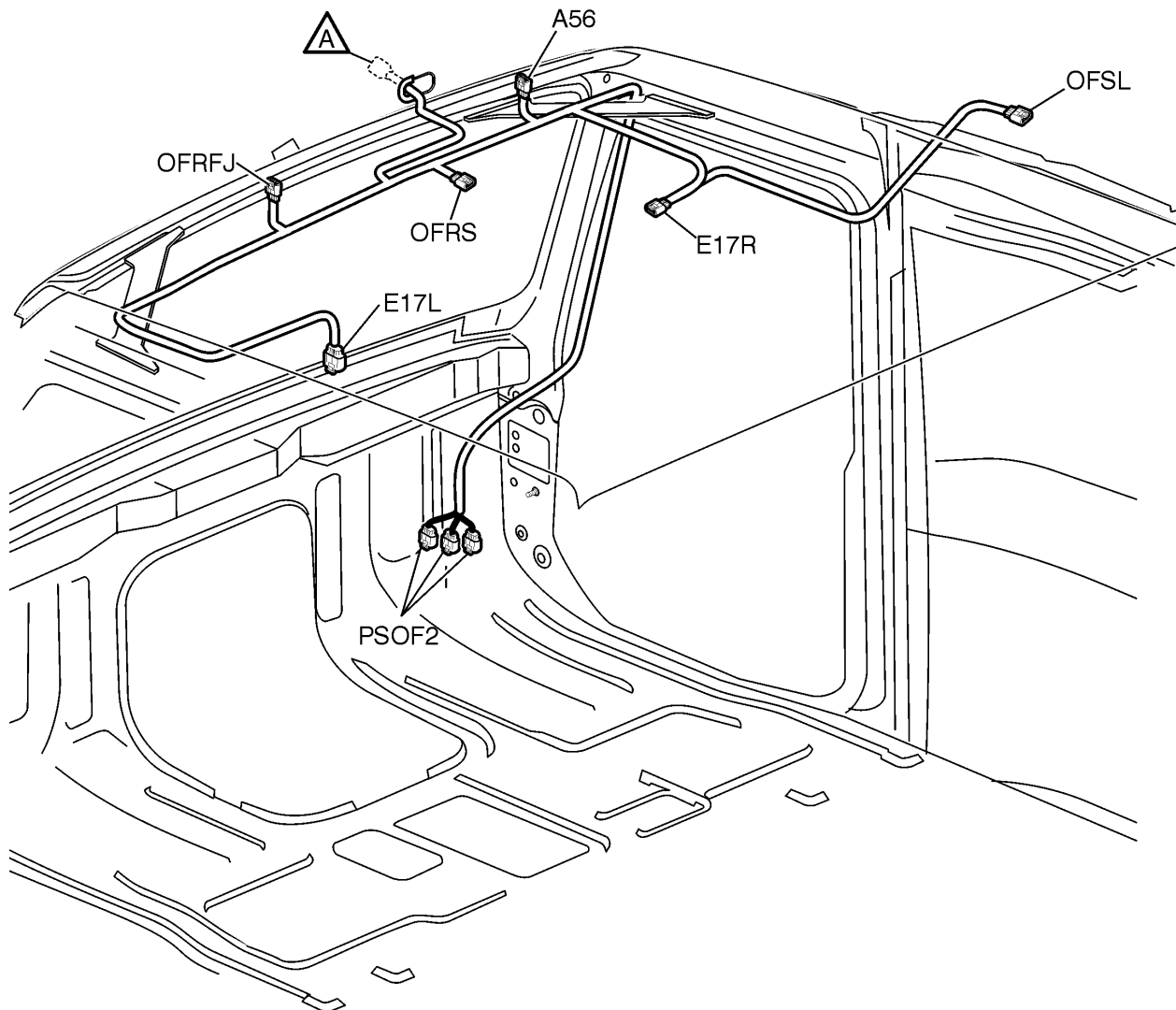
W3005924

## Sunvisor Harness (Daycab, VN430 and 630)

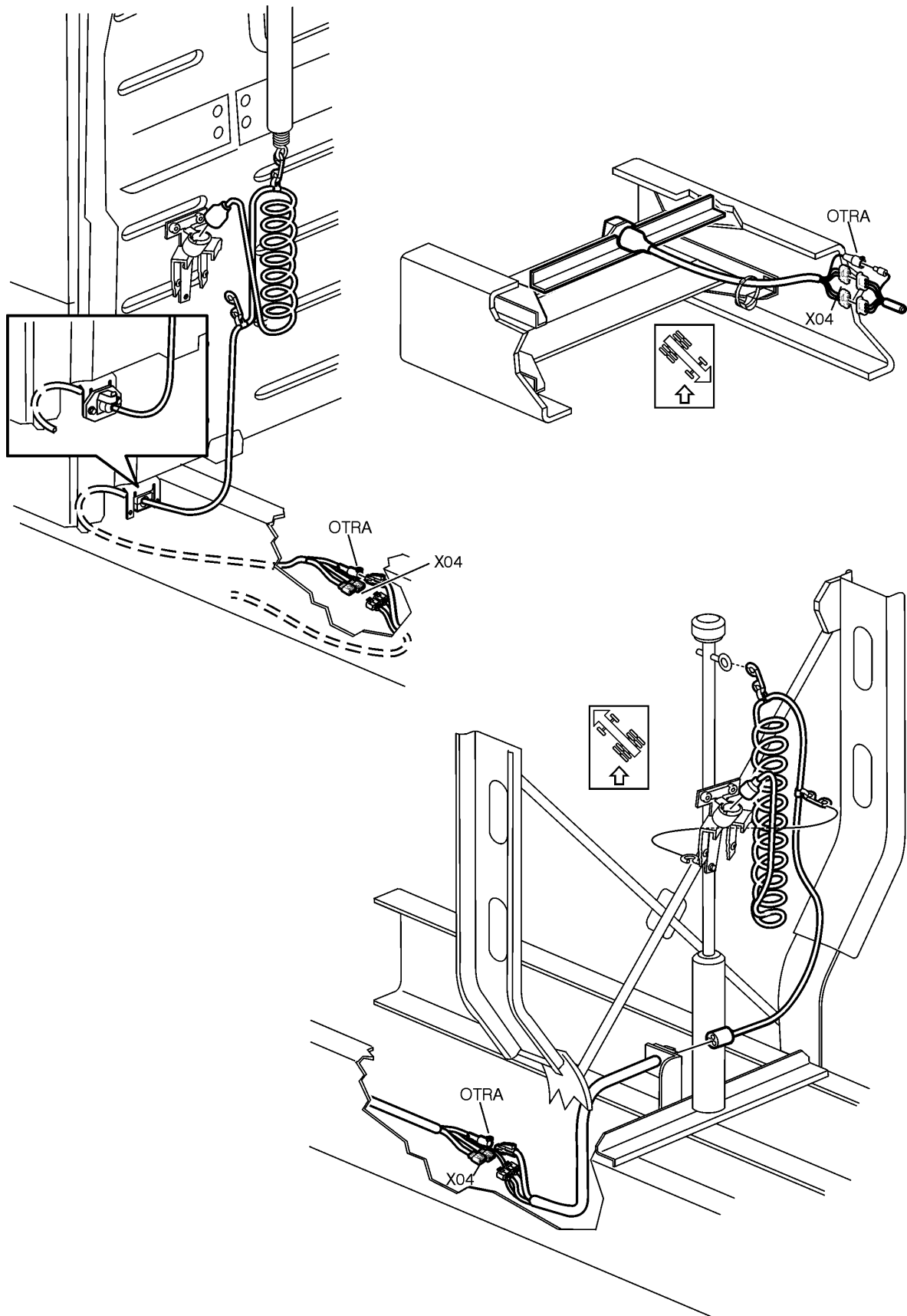


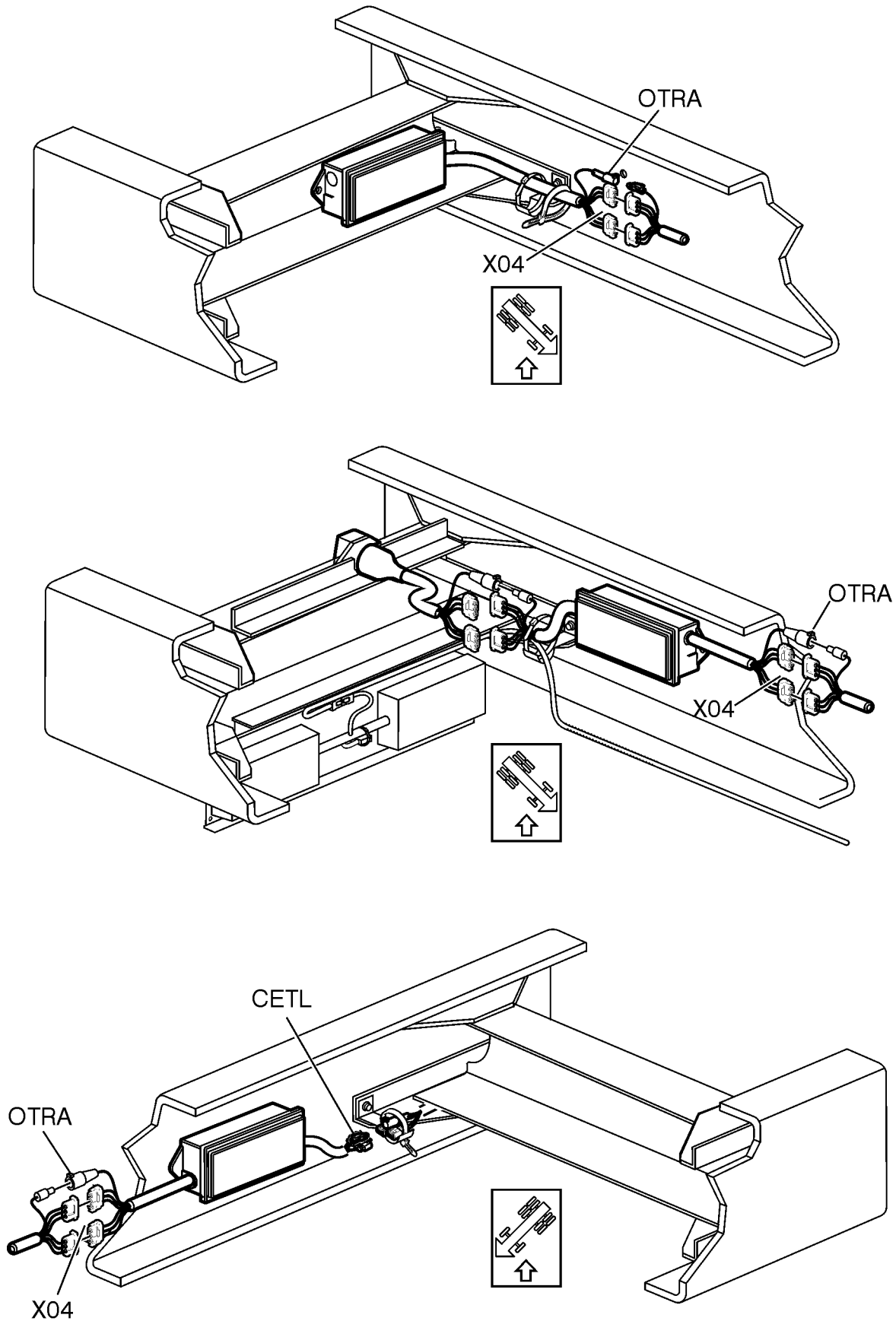
W3005925

## Sunvisor Harness (VN670 and 780)



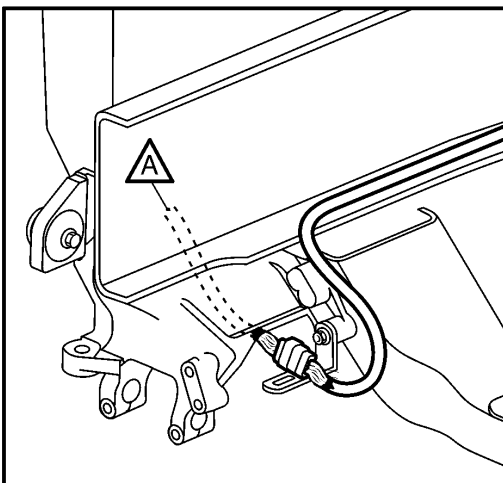
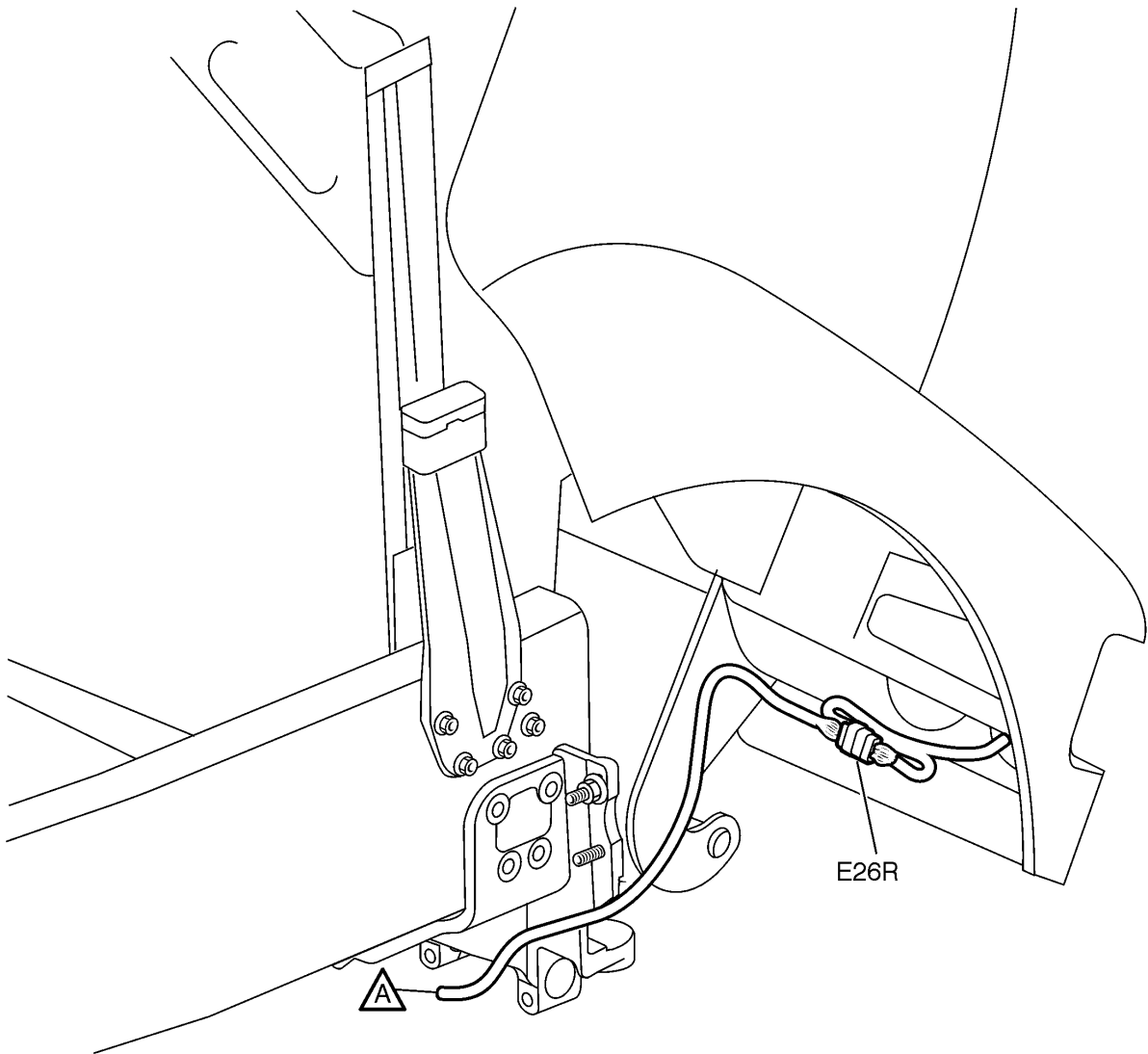
## Trailer Cable Connections



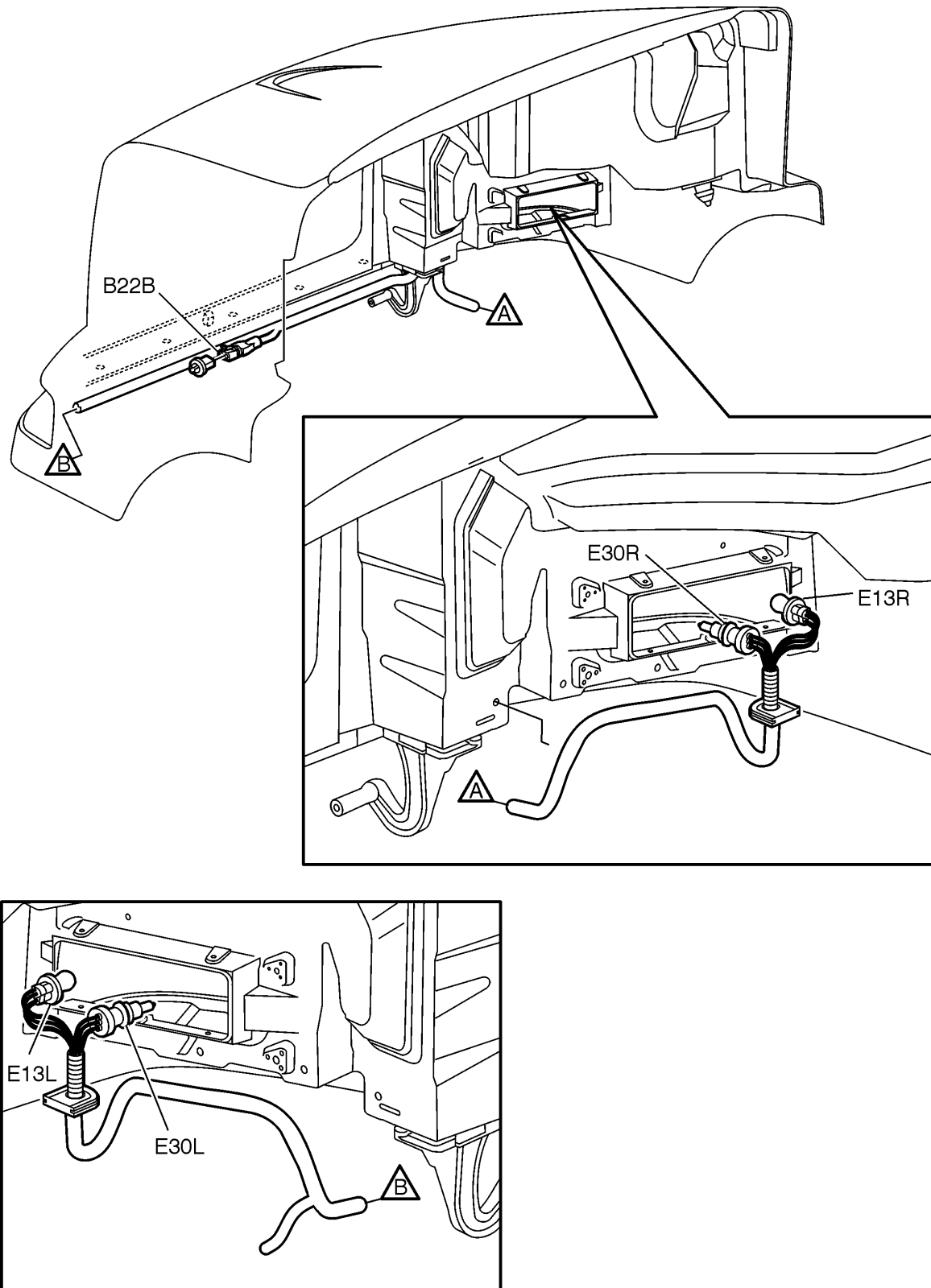
**Bodybuilder Box, VHD**

W3006369

## Headlight Harness, VHD



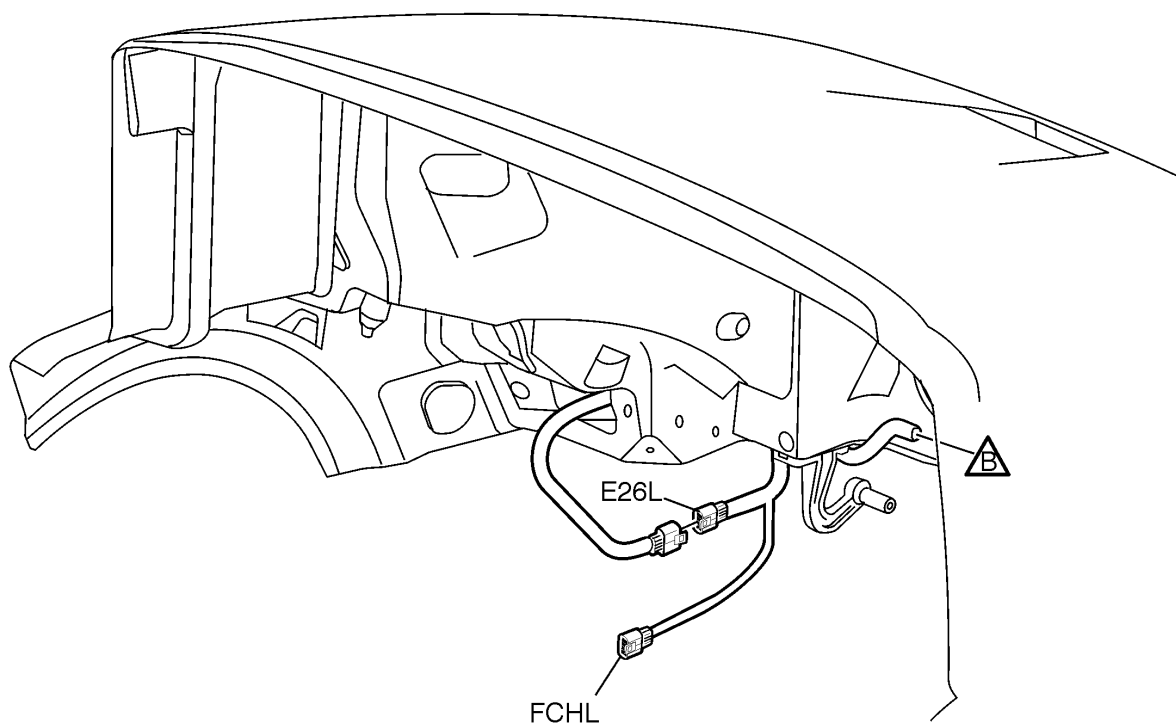
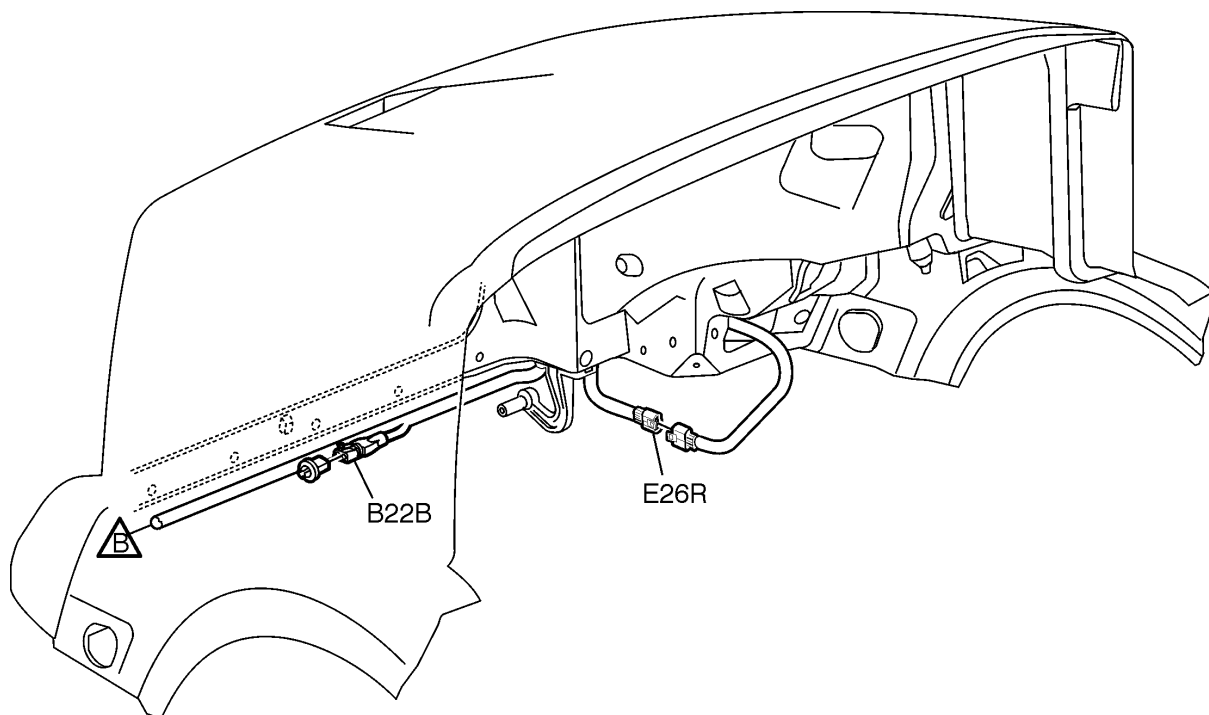
## Headlight Harness, VNM



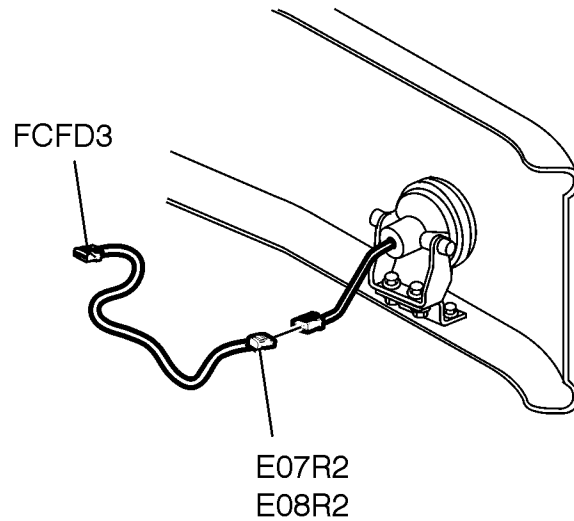
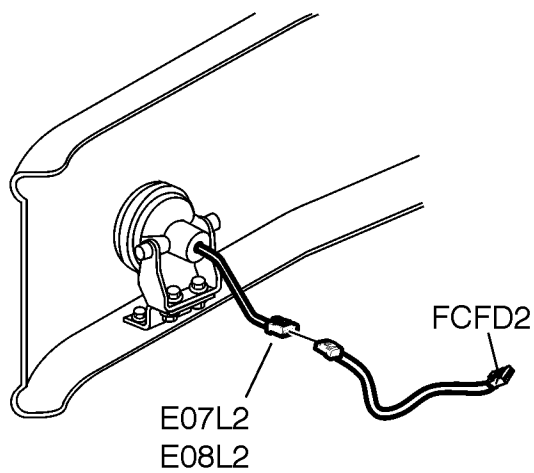
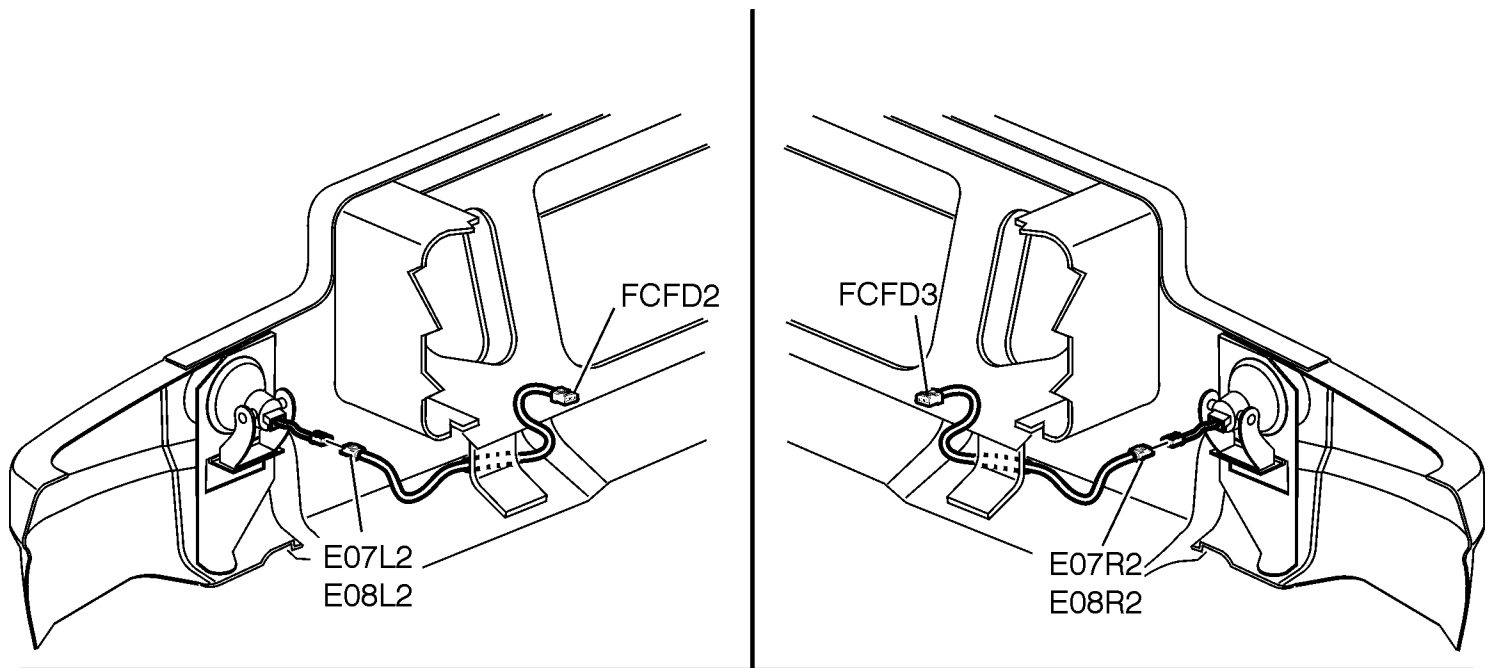
W3005901



## Headlight Harness, VNL

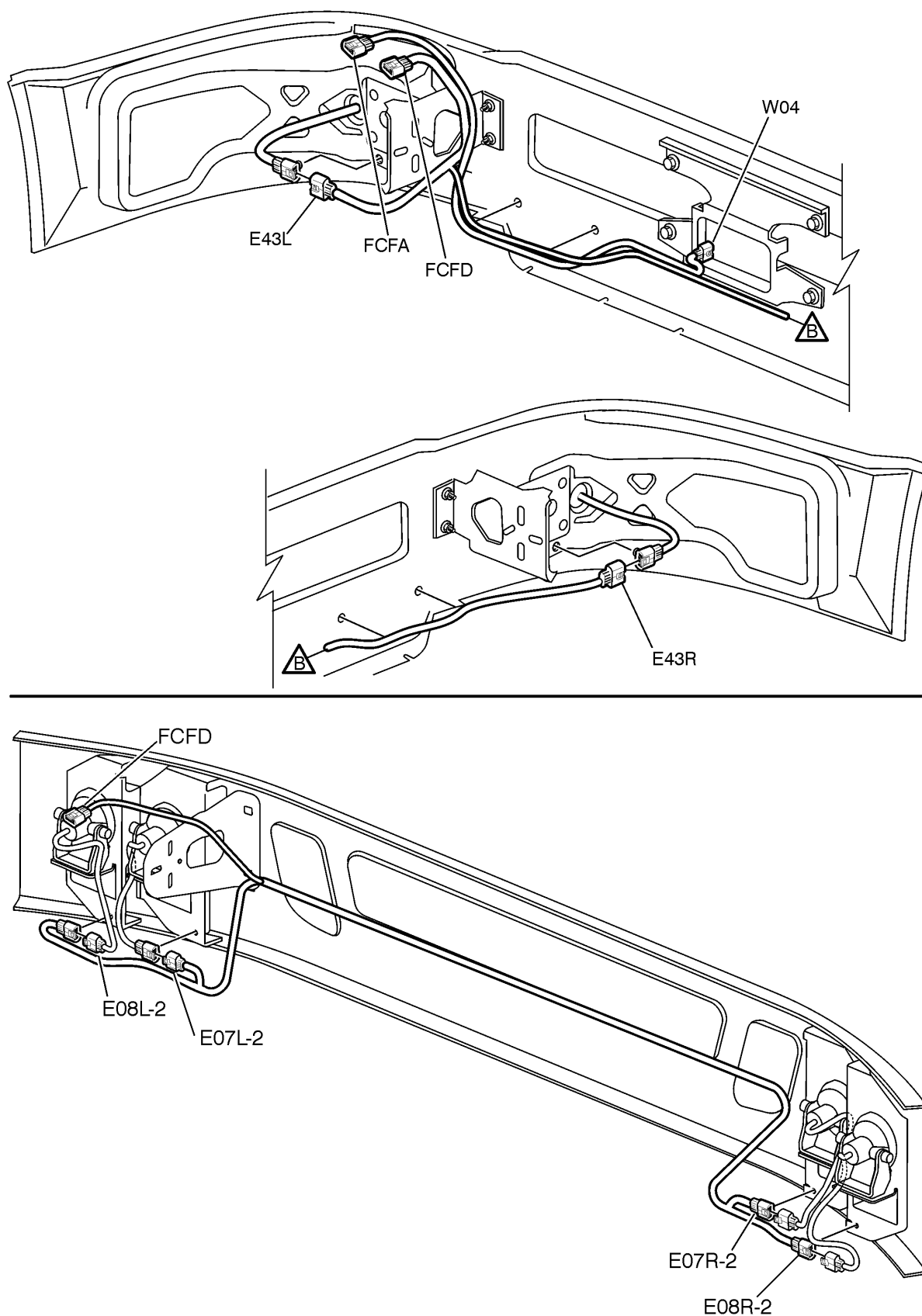


W3005898

**Fog and Driving Lights, VHD**

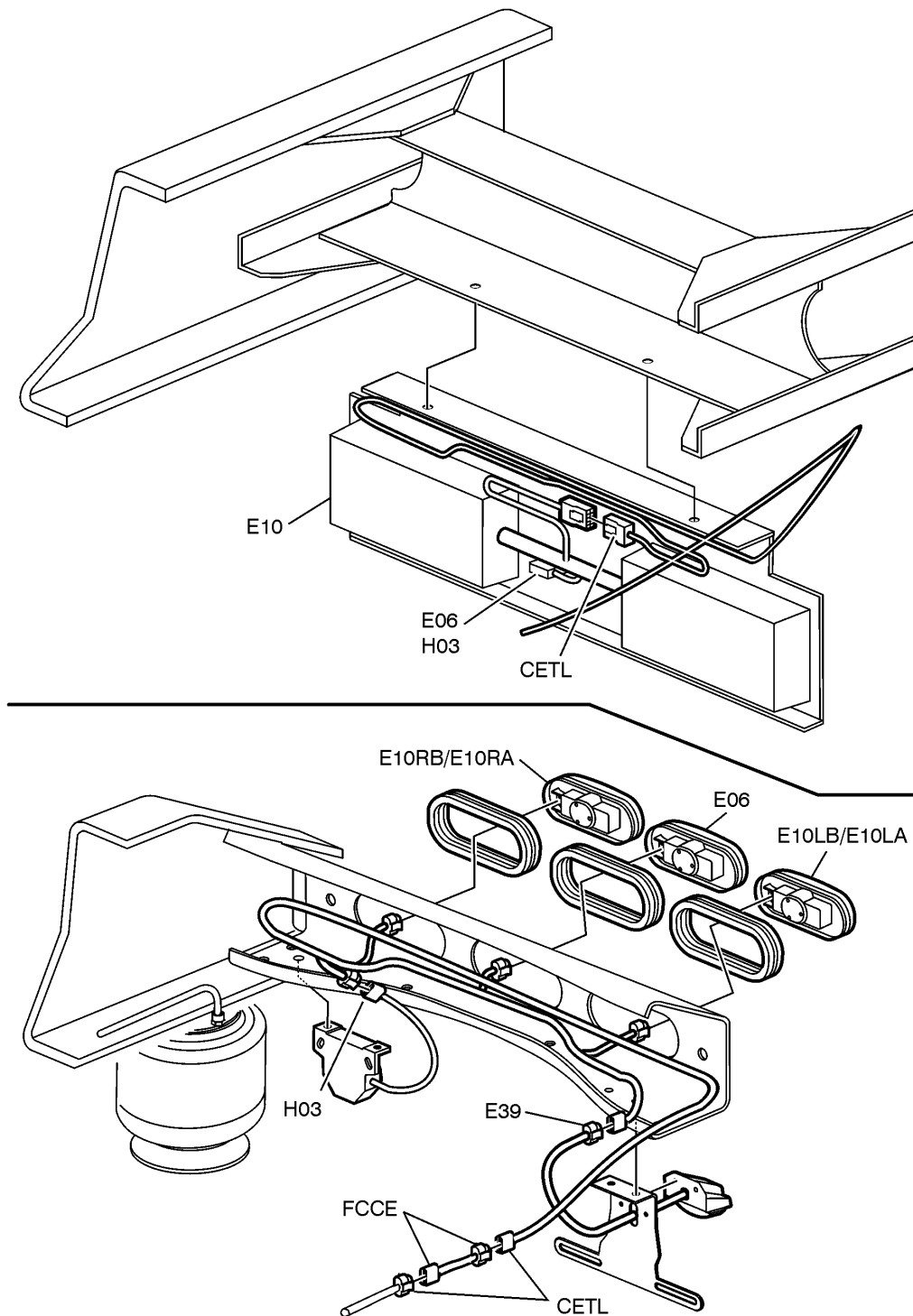
W3005952

## Fog and Driving Lights, VNL and VNM

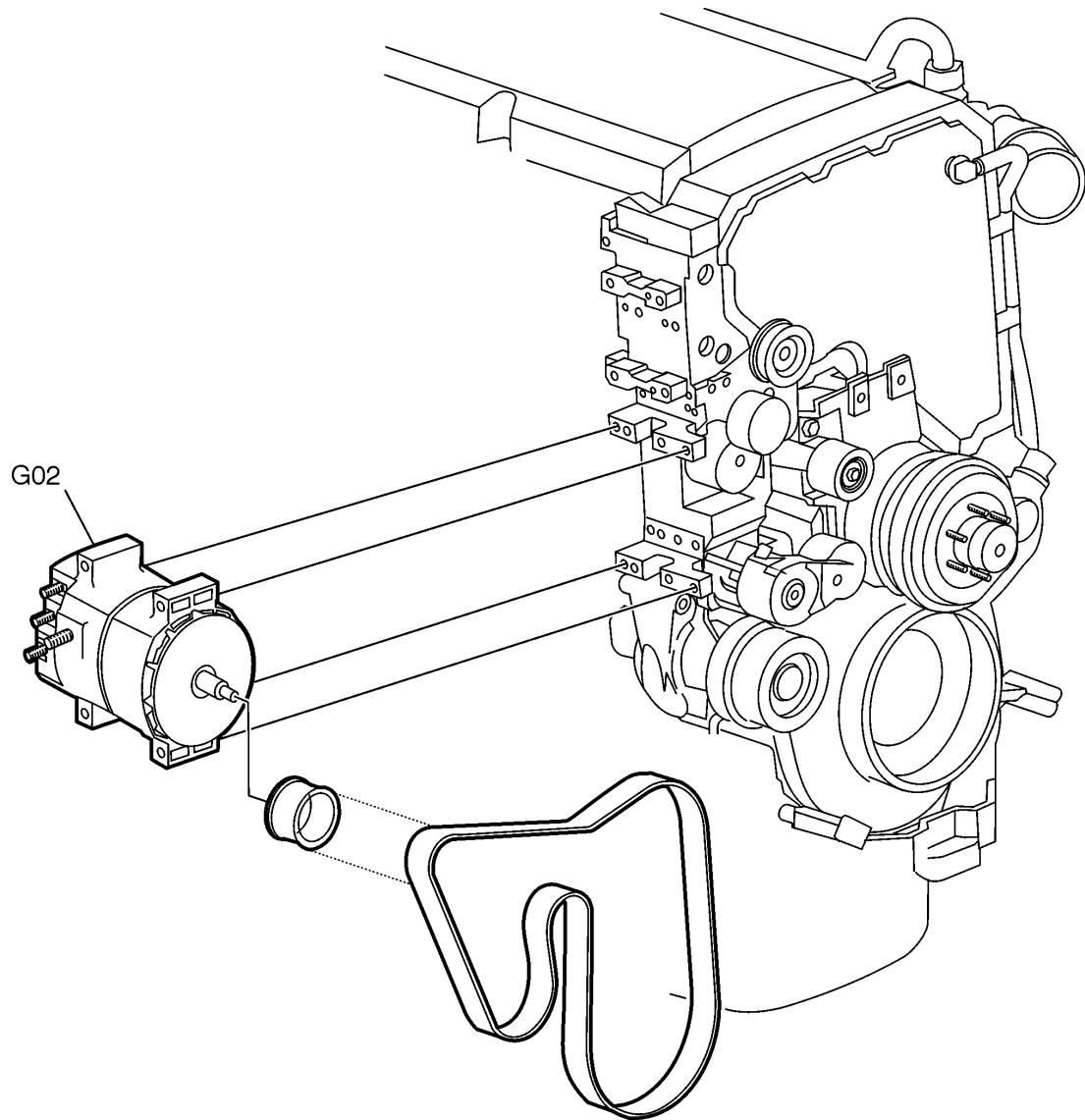


W3005933

## Tail lights

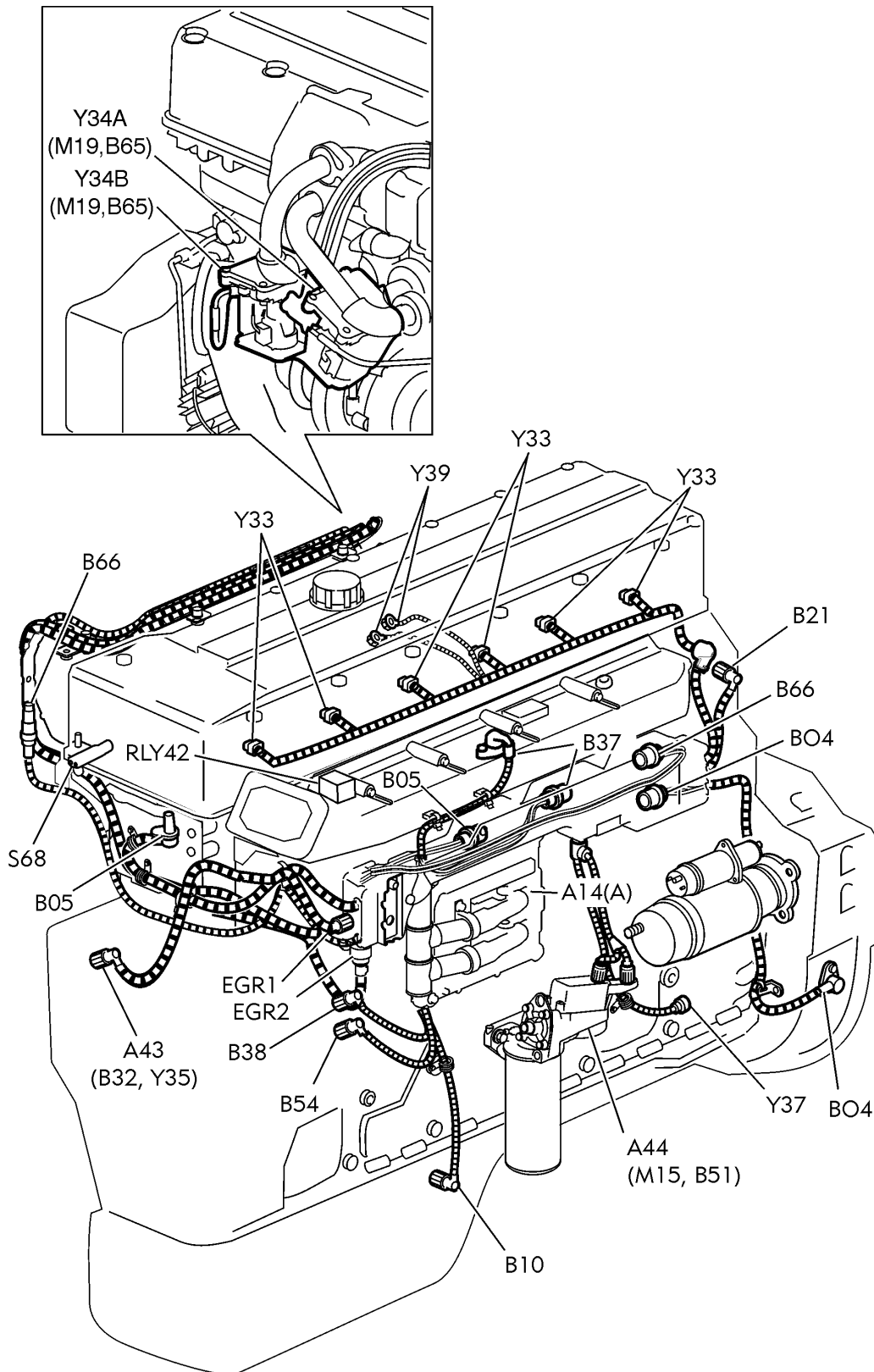


W3006624

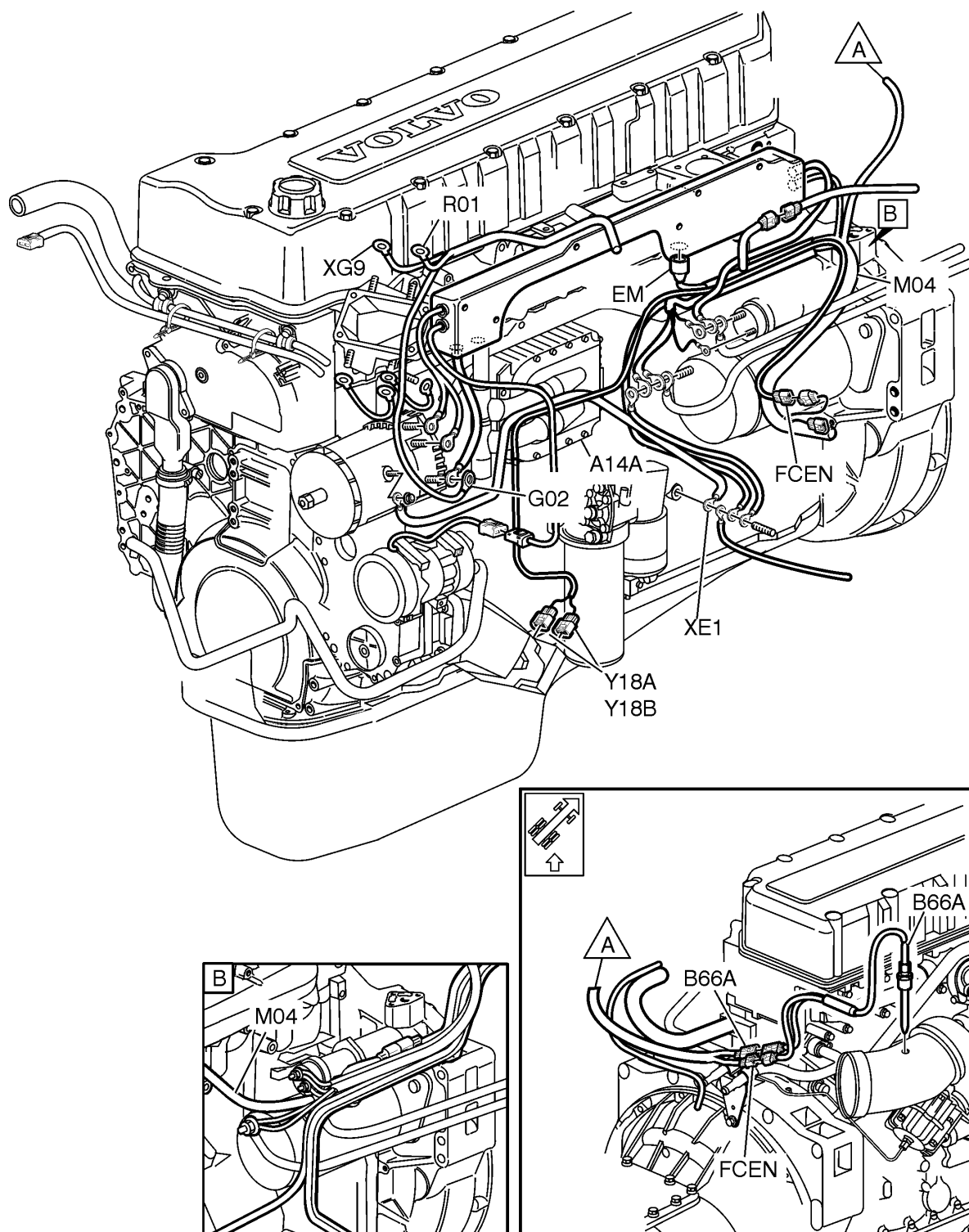
**Alternator (typical view)**

W3005908

## D12D

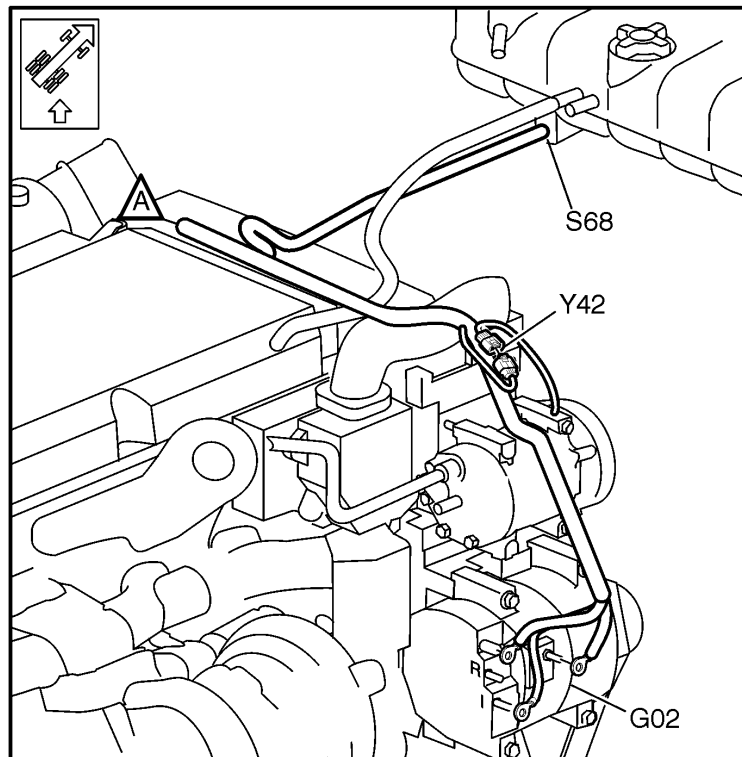
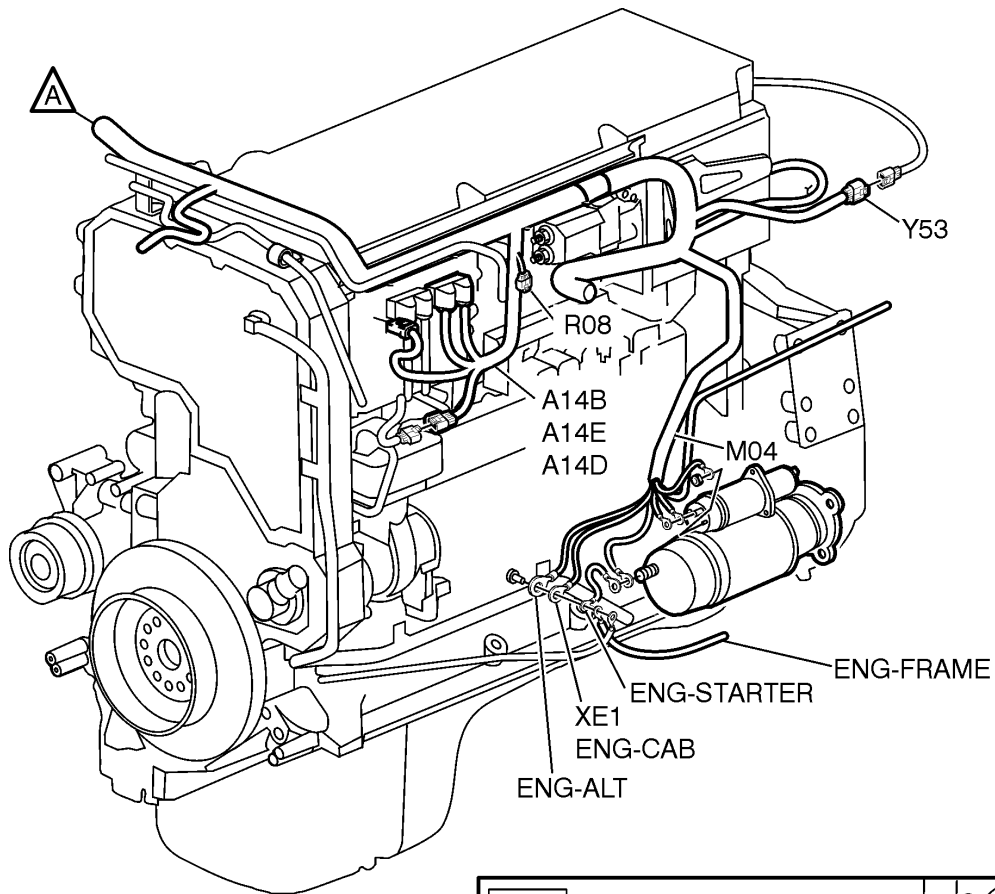


W3006510

**D12D (Continued)**

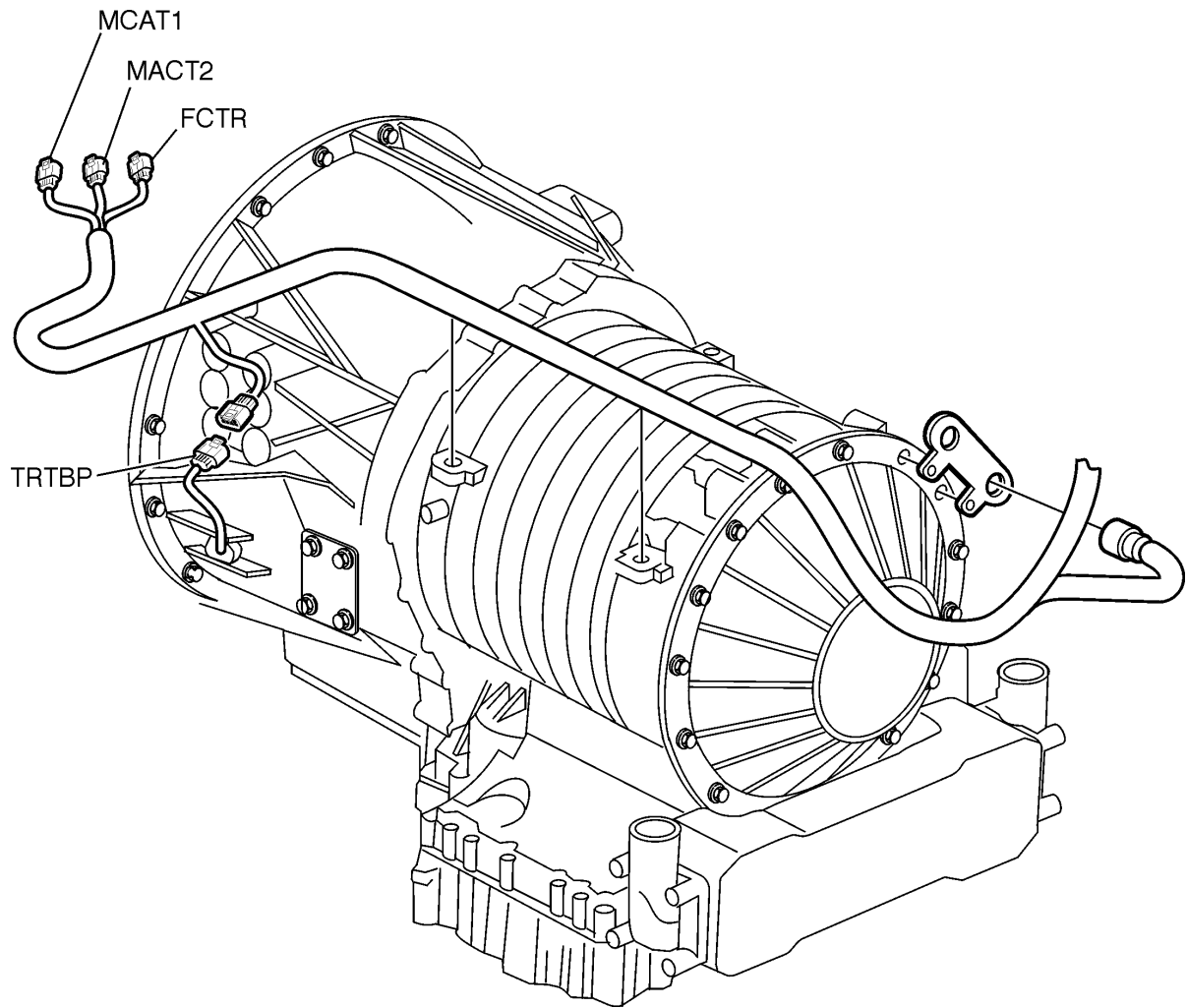
W3006513

## Engine, Cummins ISX



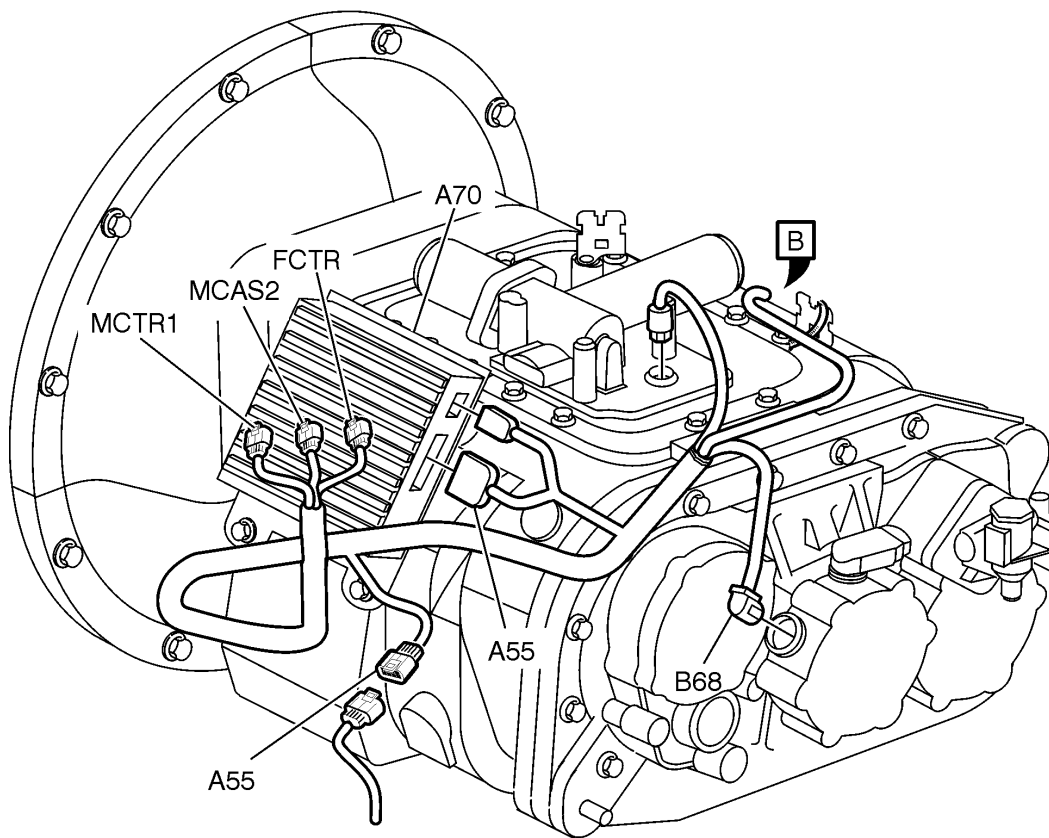
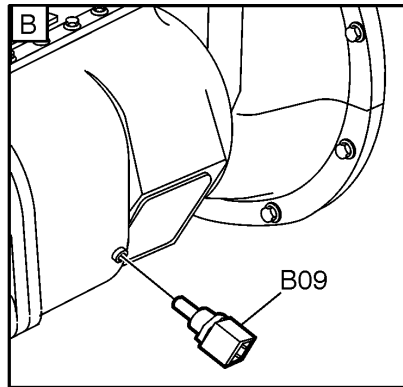
W3006509



**Allison HD Transmission, VHD (BBOX-LF)**

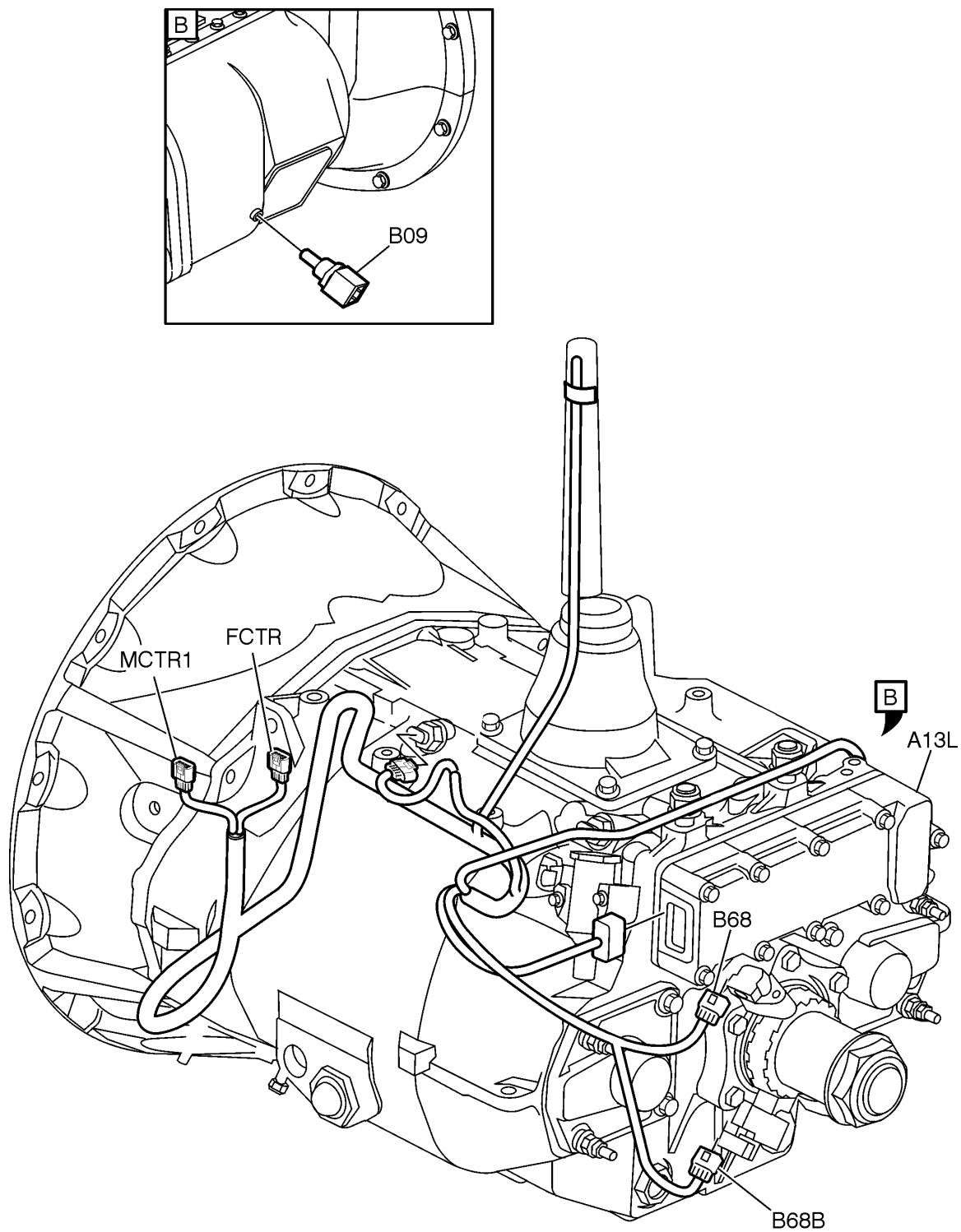
W3006626

## Eaton Autoshift II Transmission



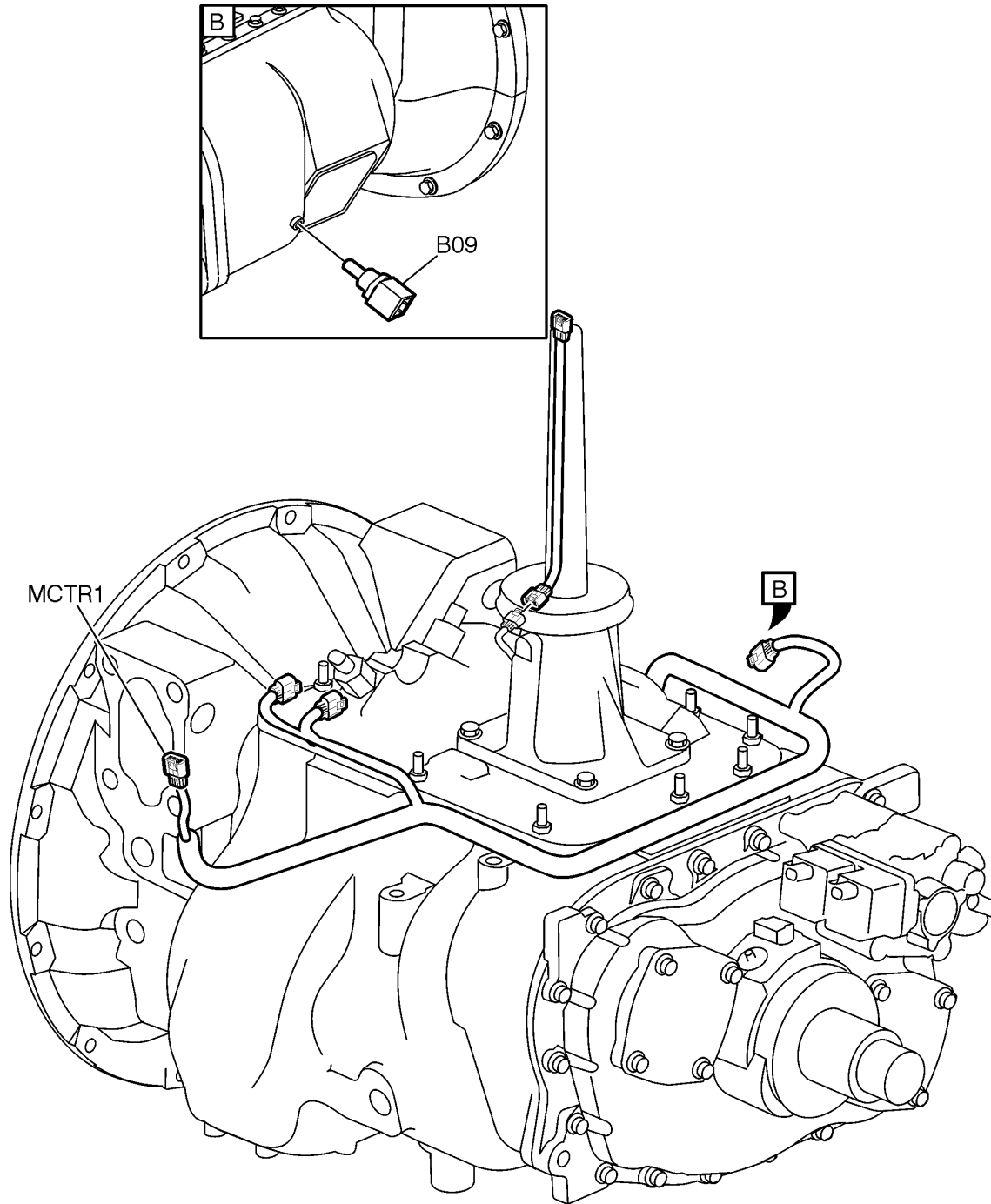
W3005890

## Eaton Lightning Transmission



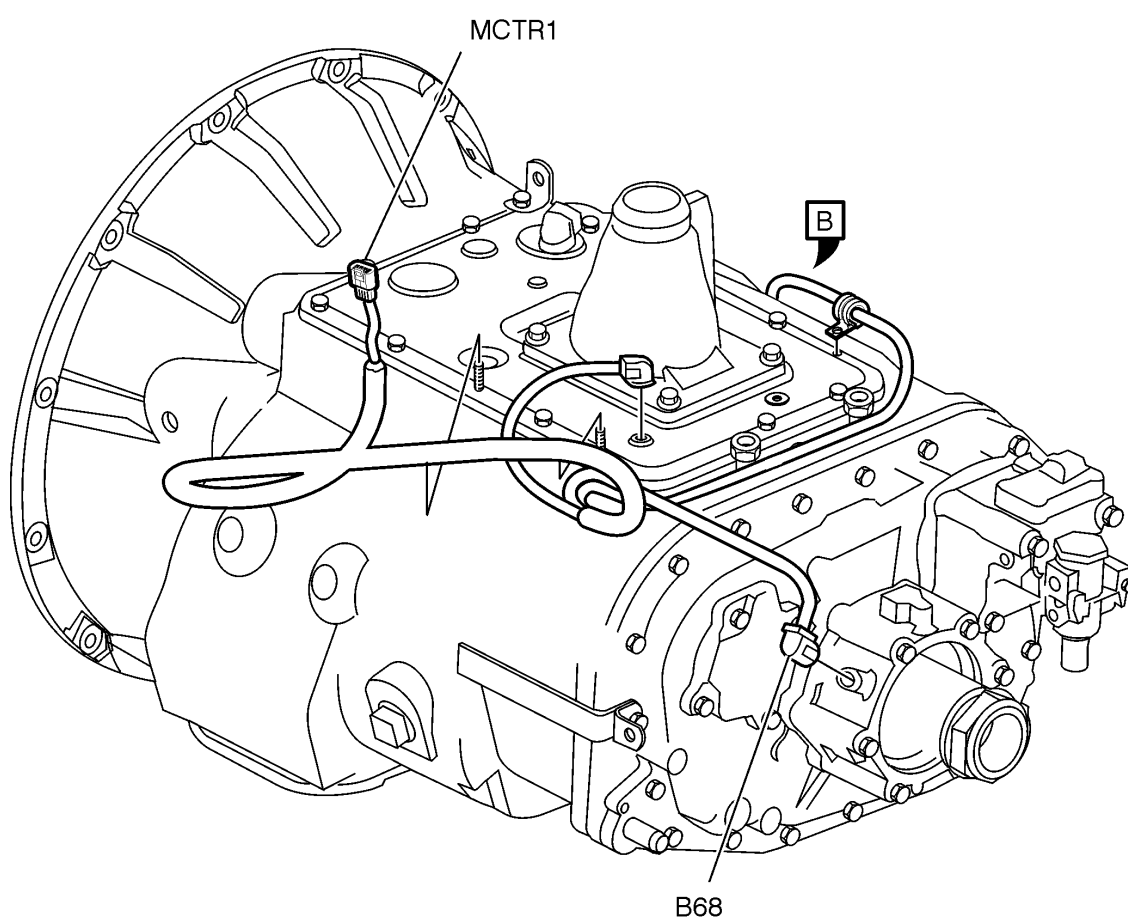
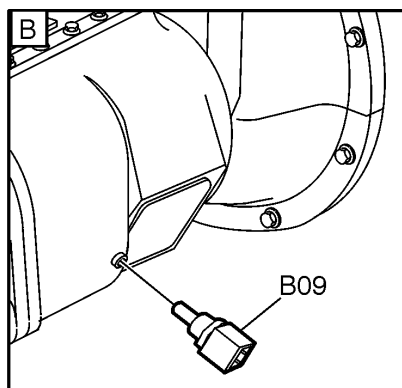
W3005891

## Meritor Transmission



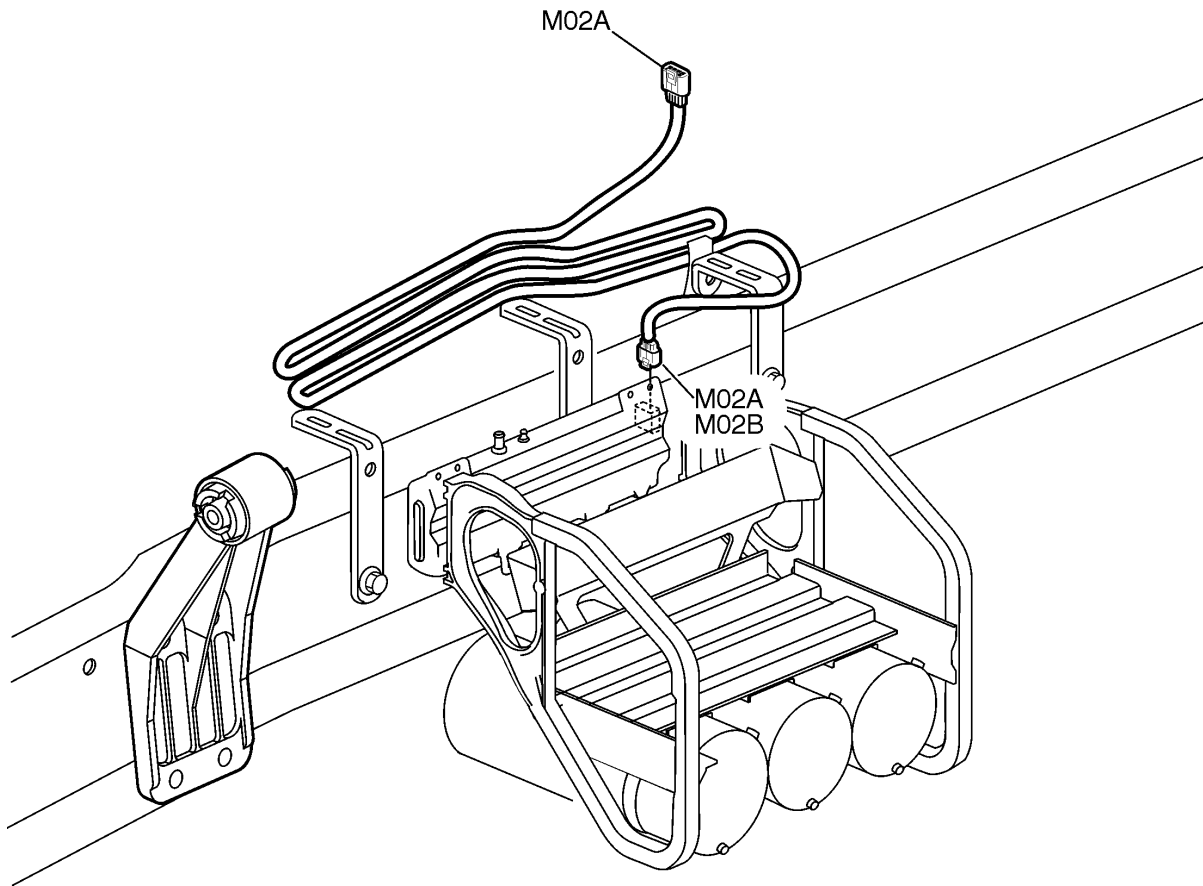
W3005892

## Eaton Fuller Transmission



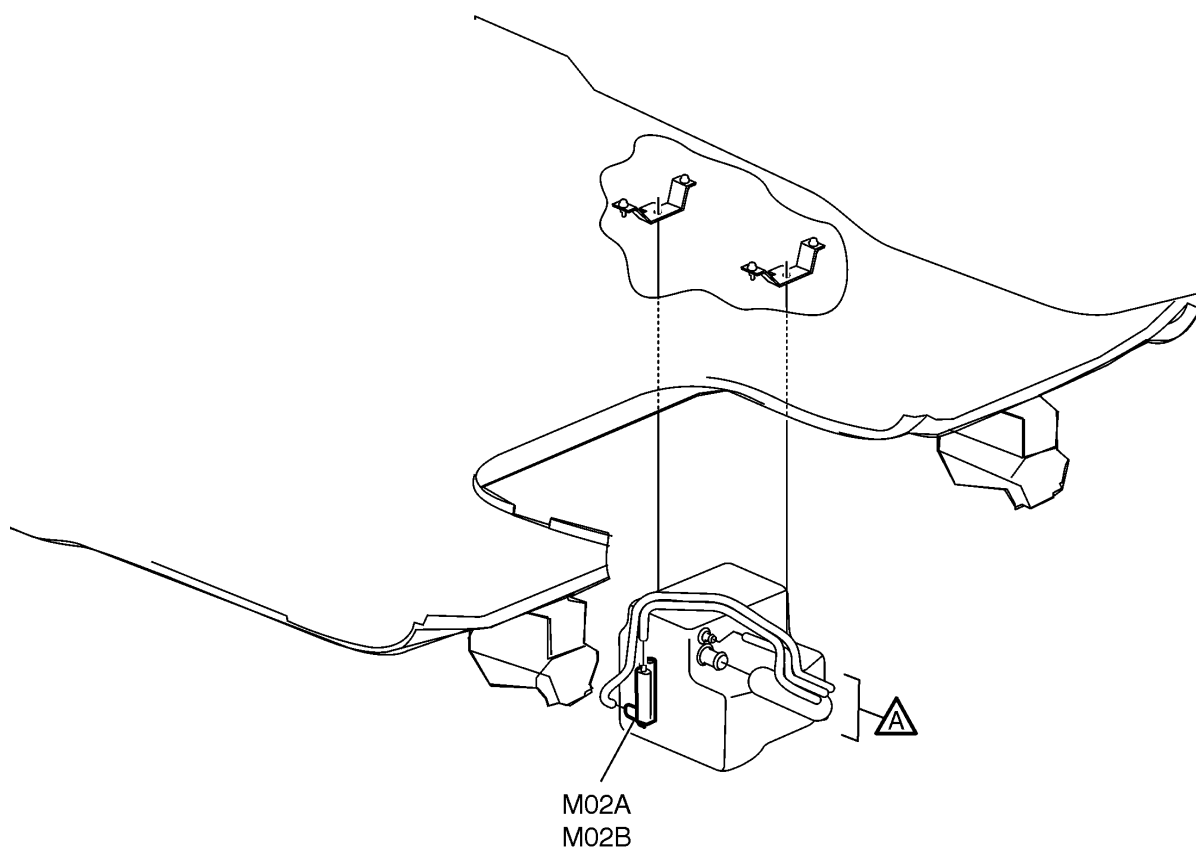
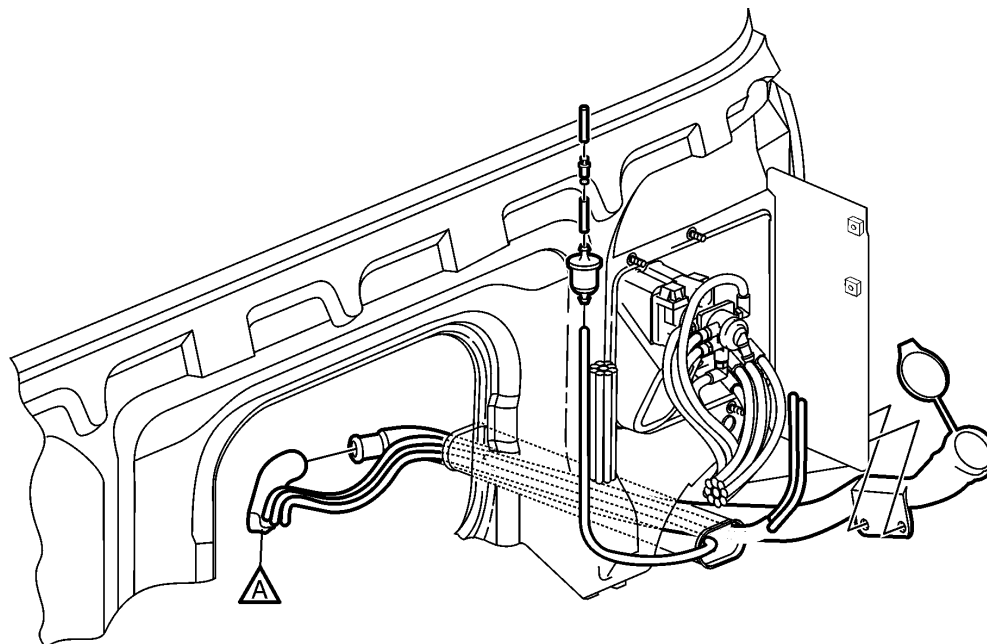
W3005893

## Washer Reservoir, VN



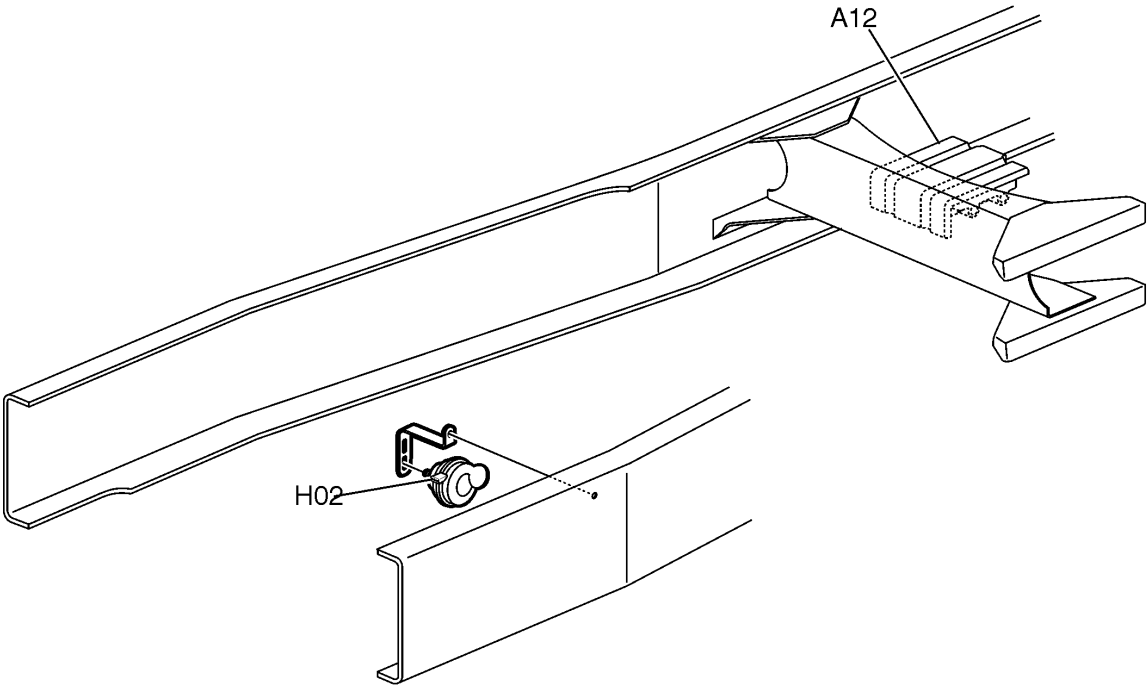
W3006627

## Washer Reservoir, VHD



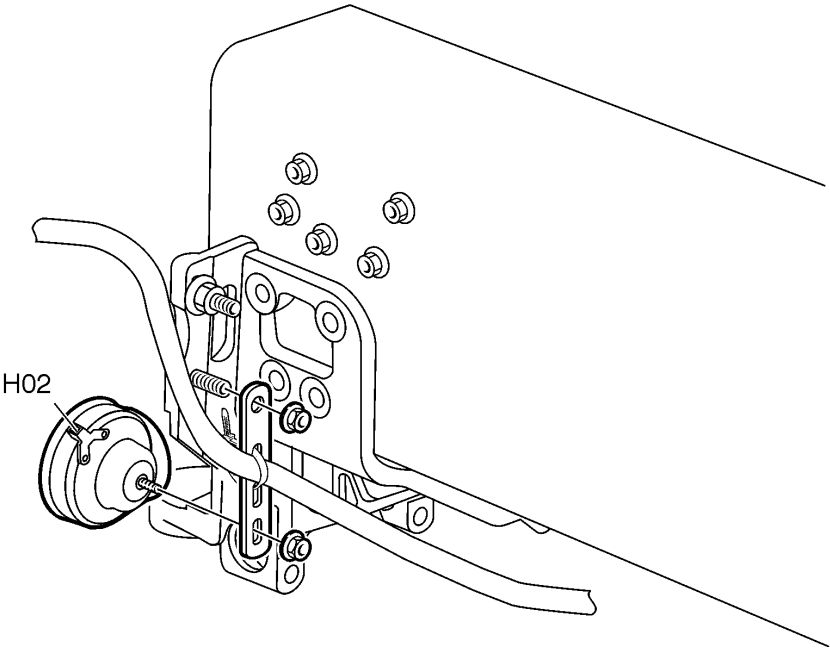
W3005910

Horn



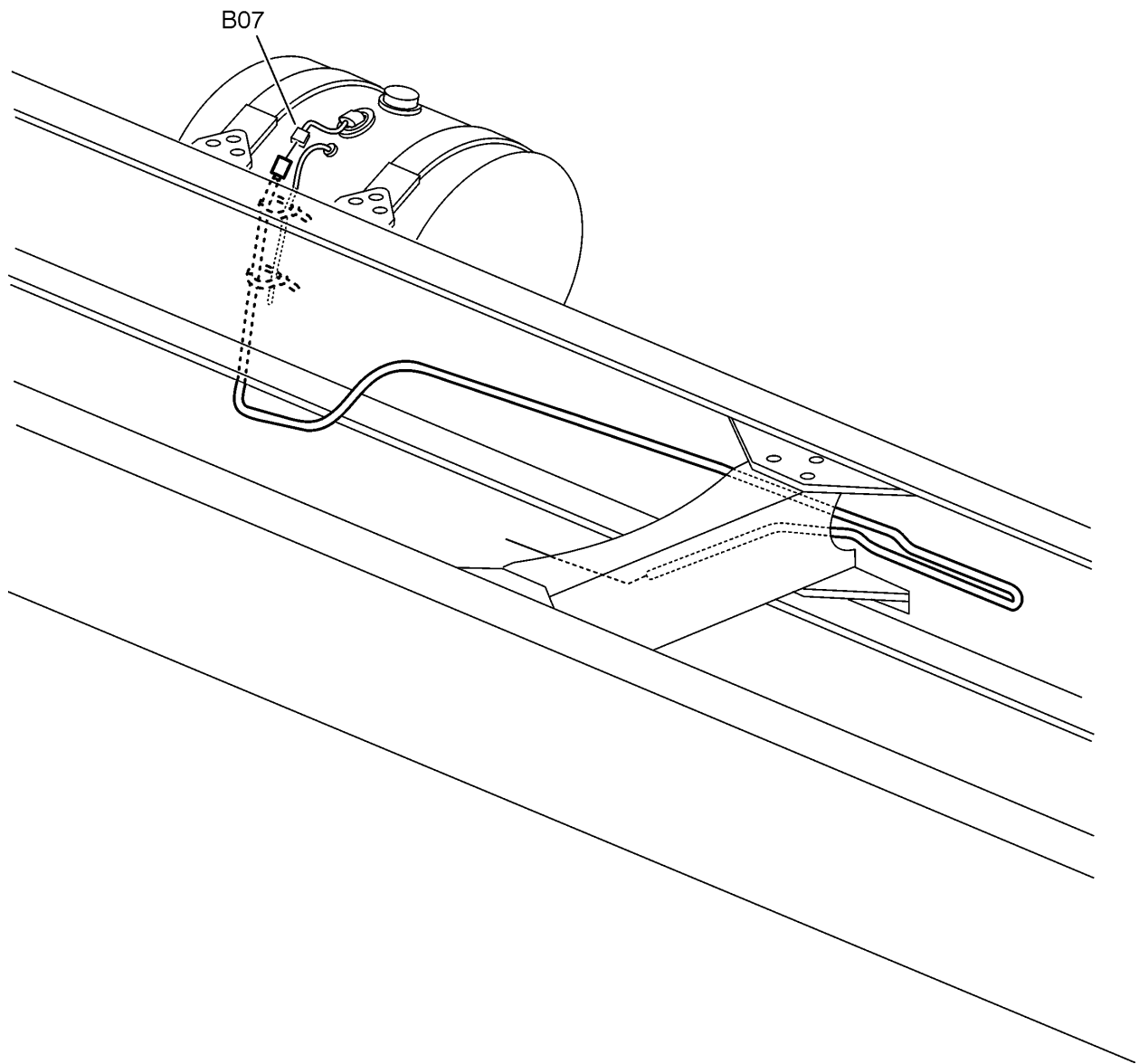
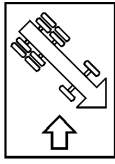
VN

VHD



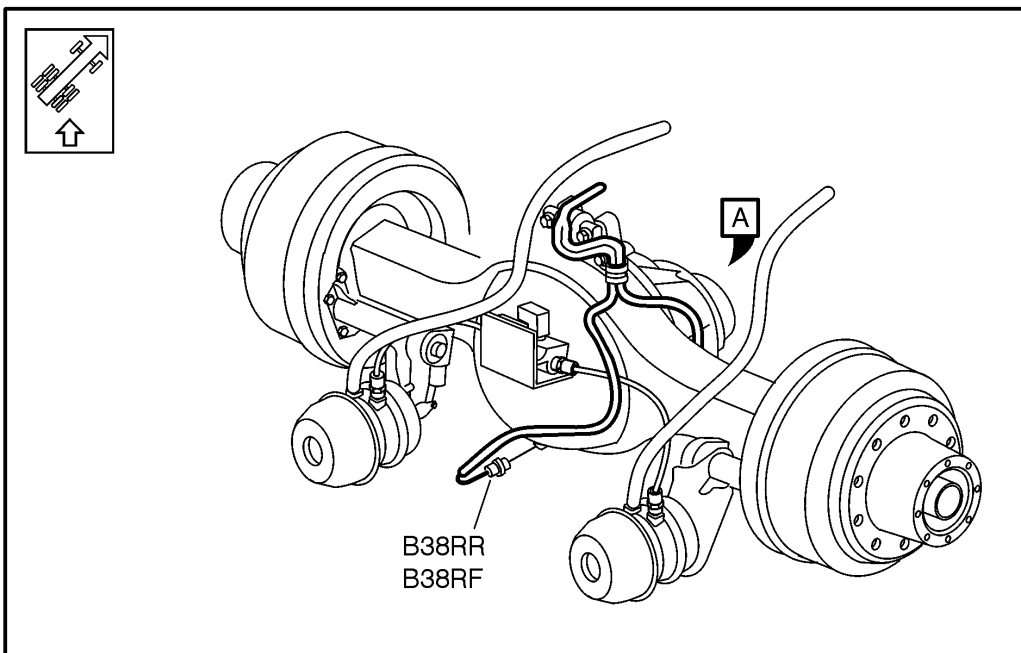
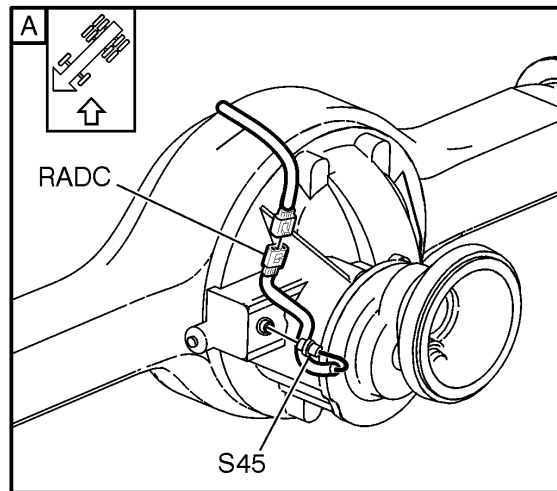


## Fuel Level Sensor

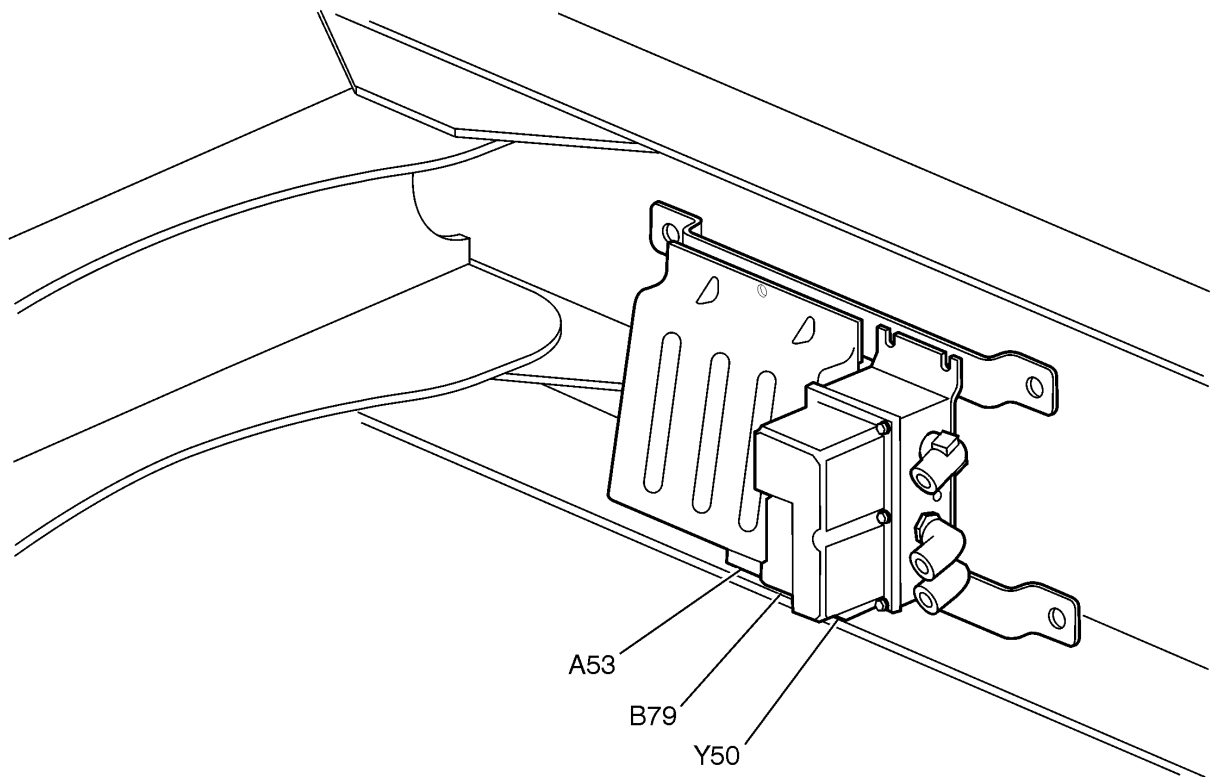


W3005909

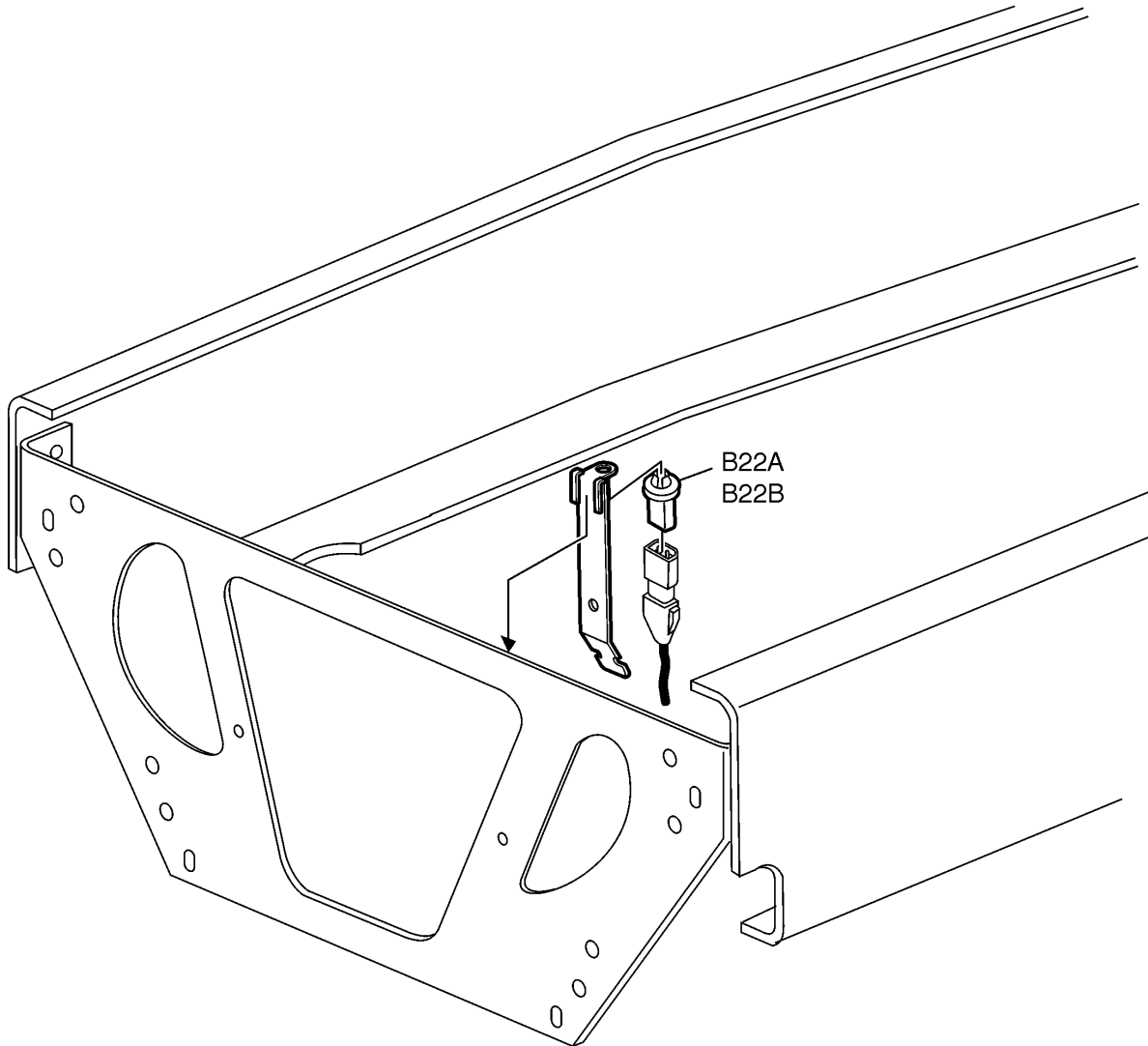
## Differential Lock/Axle Temperature



## Central Tire Inflation System

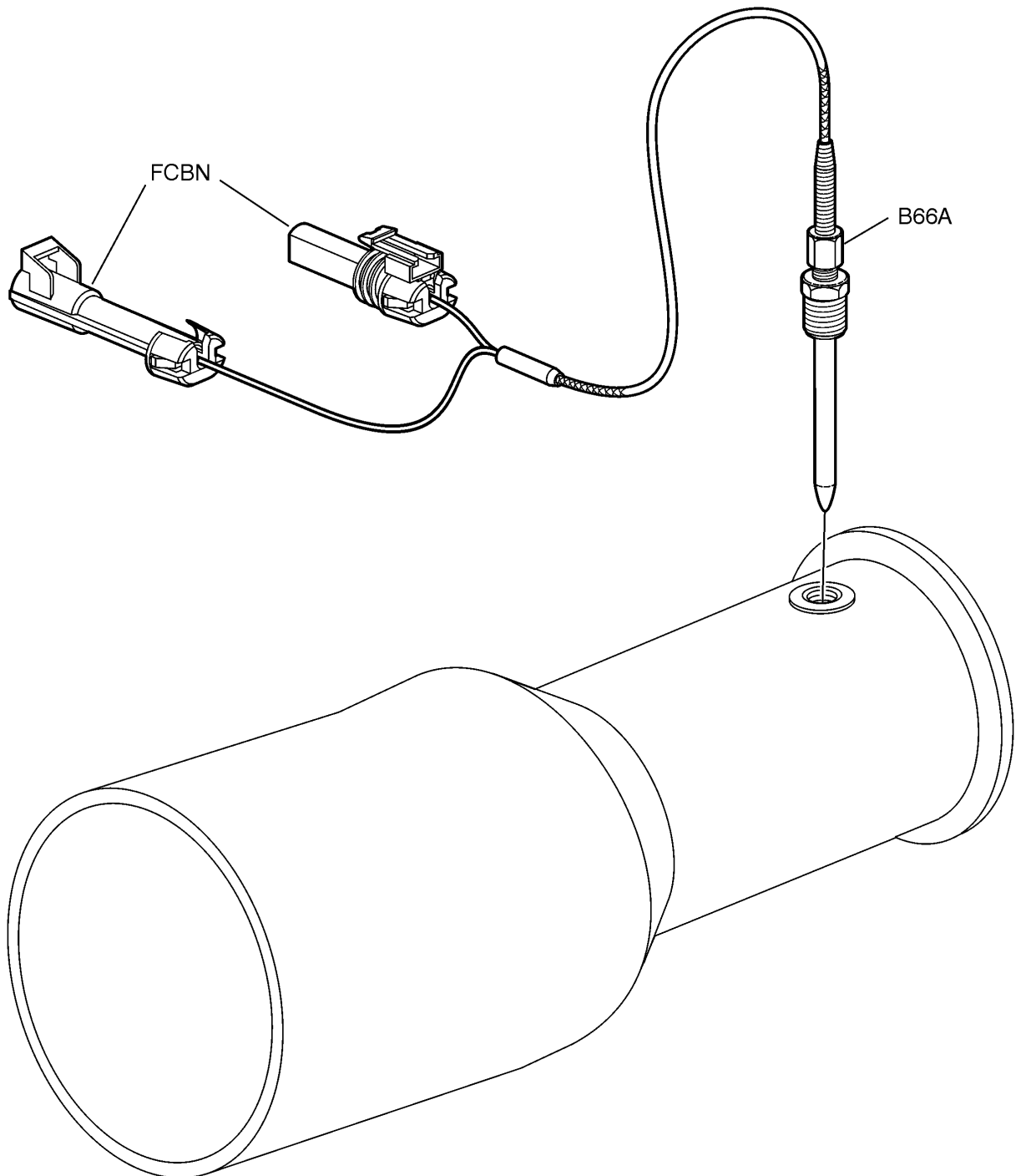
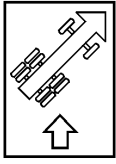


## Ambient Temperature Sensor

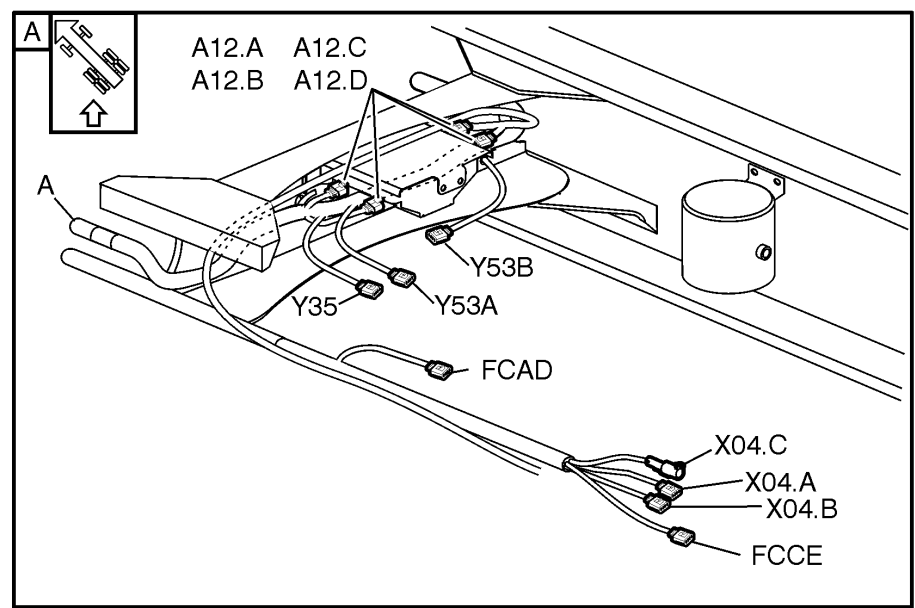
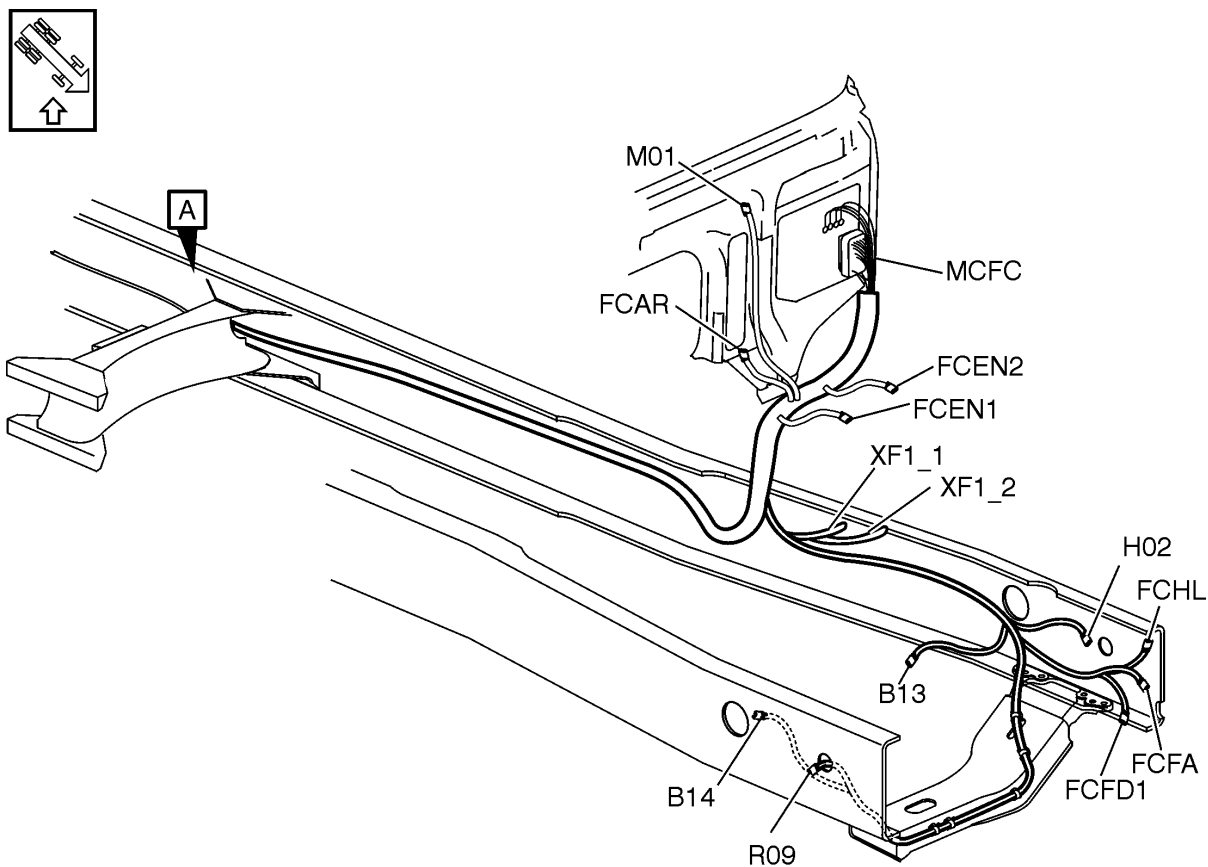


W3005931

## Pyrometer Sensor

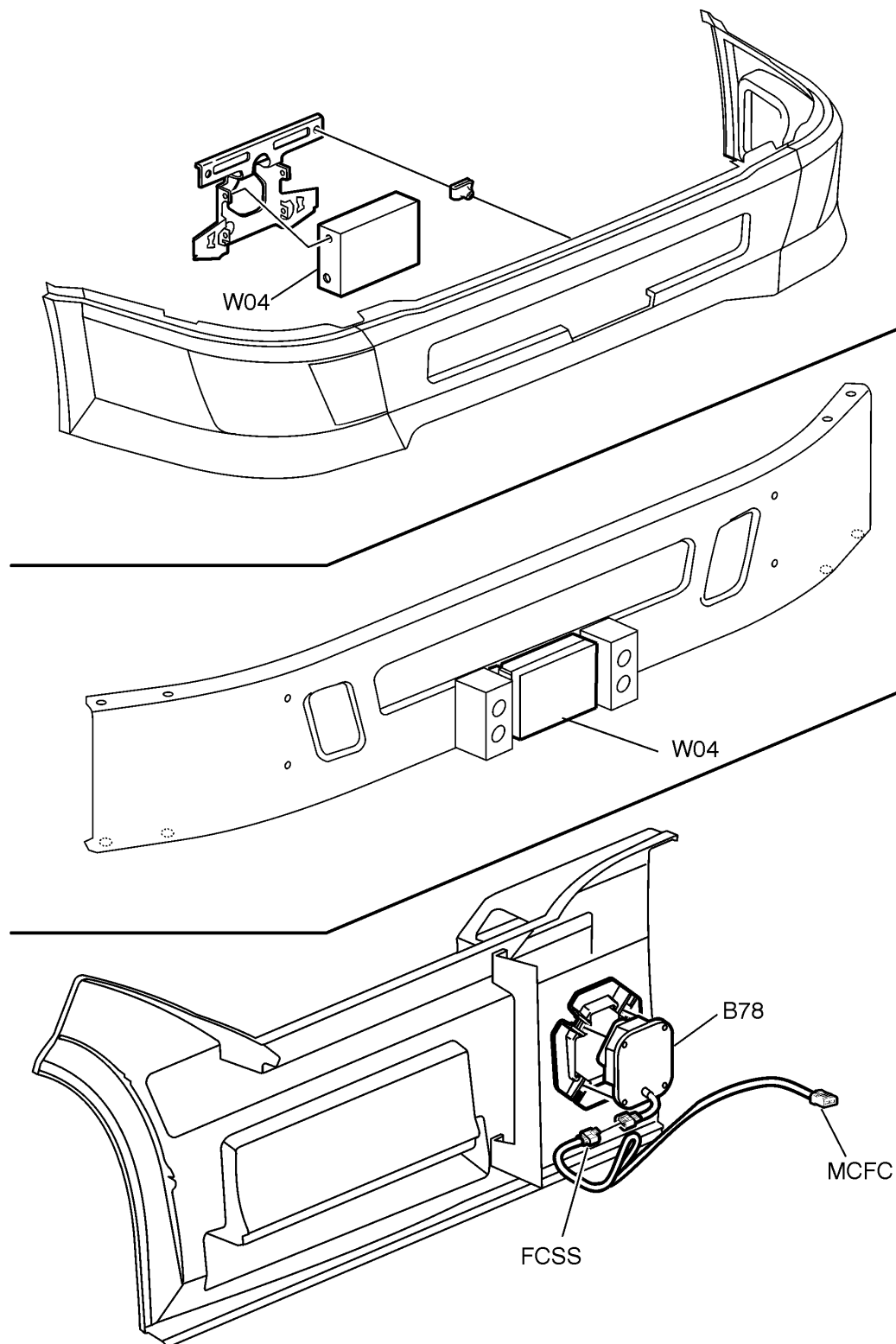


Chassis Harness



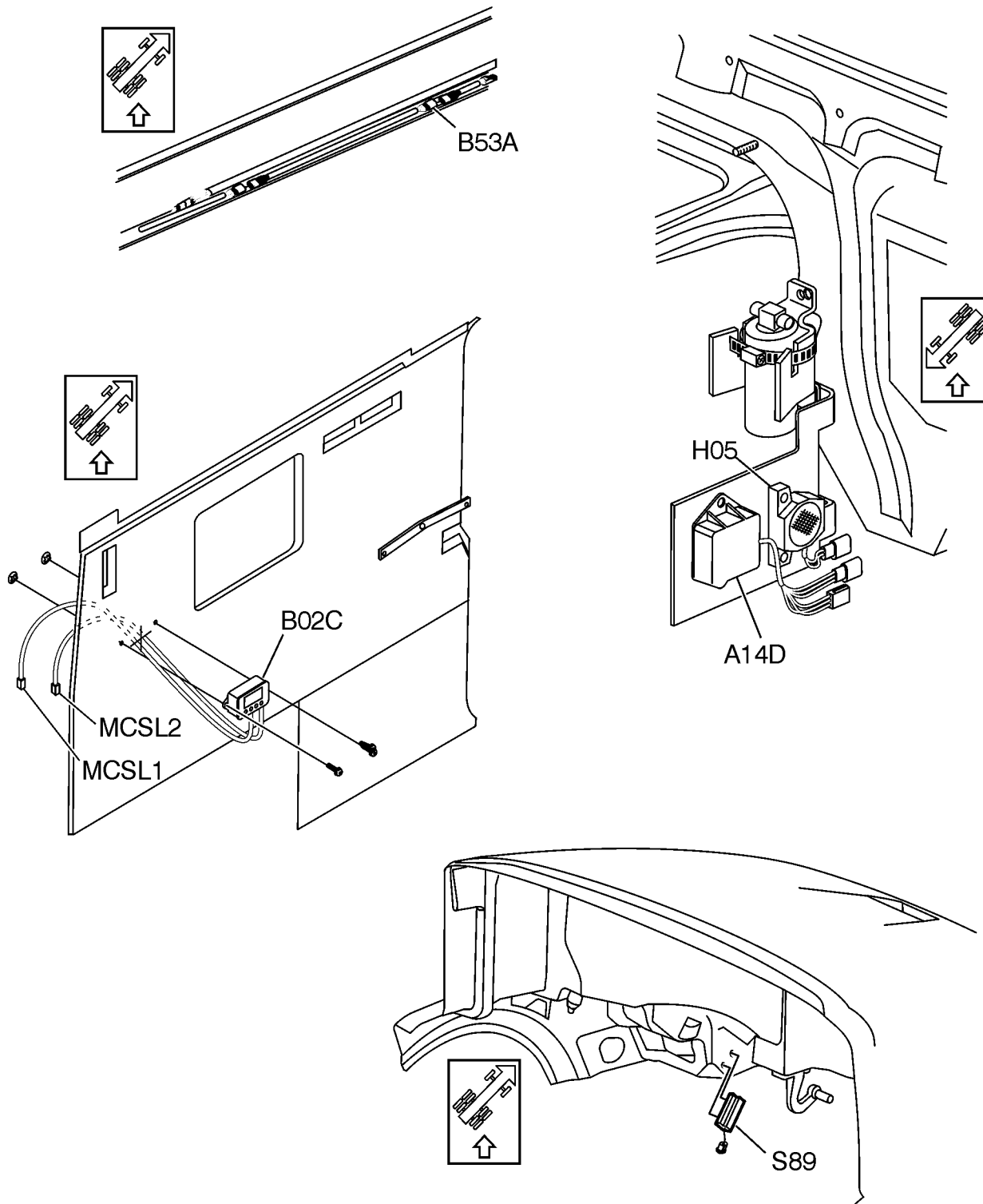
W3006628

## VORAD Antennas



W3006636

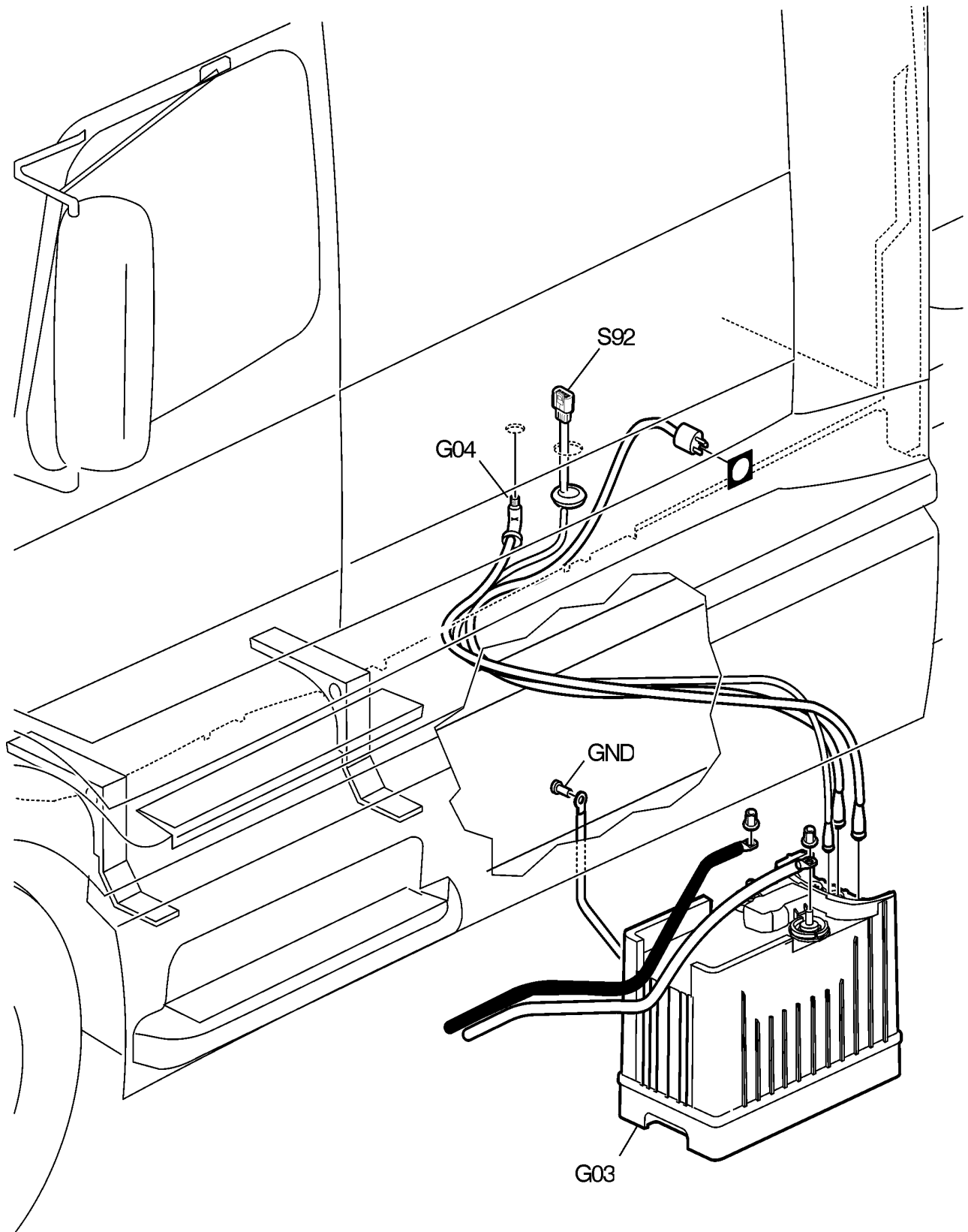
## ICON



W3006733



## Inverter



W2004614



# Reference

## Reference List: Fuses

Fuse	Circuit	Schematic
F1	DCP power /power mirror	{IC 2 A} Fig. 61: IC page 66 {AB 3 D} Fig. 2: AB page 7 {ID 3 A} Fig. 62: ID page 67
F2	Radio without Icon / Amp.	{KA 0 A} Fig. 69: KA page 74 {KB 2 A} Fig. 70: KB page 75 {KC 0 A} Fig. 71: KC page 76 {AB 3 D} Fig. 2: AB page 7
F3	Driver window/ heated mirrors	{IC 1 A} Fig. 61: IC page 66 {AB 3 D} Fig. 2: AB page 7 {ID 2 A} Fig. 62: ID page 67
F4	RH Window	{IC 3 A} Fig. 61: IC page 66 {AB 3 D} Fig. 2: AB page 7 {ID 1 A} Fig. 62: ID page 67
F5	Steering Wheel Module (SWM)	{JC 0 A} Fig. 68: JC page 73 {AB 3 D} Fig. 2: AB page 7
F6	Accessory expansion	{AB 4 D} Fig. 2: AB page 7
F7	Not Used	{AB 4 D} Fig. 2: AB page 7
F8	LCM1	{GB 2 A} Fig. 42: GB page 47 {AB 3 C} Fig. 2: AB page 7
F9	Trailer Marker Relay	{MA 0 A} Fig. 72: MA page 77 {AB 3 C} Fig. 2: AB page 7
F10	LCM2	{GB 2 B} Fig. 42: GB page 47 {AB 3 C} Fig. 2: AB page 7
F11	Battery Expansion/ Volvo Link	{BF 1 A} Fig. 11: BF page 16 {BH 0 A} Fig. 13: BH page 18 {AB 3 C} Fig. 2: AB page 7 {BK 2 A} Fig. 16: BK page 21
F12	Road Relay/Battery Expansion	{BH 1 A} Fig. 13: BH page 18 {AB 4 C} Fig. 2: AB page 7
F13	Diagnostic Tool	{XA 2 A} Fig. 74: XA page 79 {AB 4 C} Fig. 2: AB page 7

Fuse	Circuit	Schematic
F14	Qualcom	{BE 0 B} Fig. 10: BE page 15 {AB 4 C} Fig. 2: AB page 7
F15	Key B+	{AB 1 B} Fig. 2: AB page 7
F16	Key 30	{AB 2 B} Fig. 2: AB page 7
F17	LCM3	{GB 3 A} Fig. 42: GB page 47 {AB 2 B} Fig. 2: AB page 7
F18	Trailer park relay	{GB 1 A} Fig. 42: GB page 47 {AB 2 B} Fig. 2: AB page 7
F19	Lightning transmission (battery)	{DC 0 A} Fig. 28: DC page 33 {AB 2 B} Fig. 2: AB page 7
F20	Battery protection / Beacon lamps	{HB 1 A} Fig. 53: HB page 58 {GI 3 A} Fig. 49: GI page 54 {AB 2 B} Fig. 2: AB page 7 {CU 1 A} Fig. 26: CU page 31
F21	Cummins Engine DR	{CC 1 B} Fig. 19: CC page 24 {CI 3 B} Fig. 24: CI page 29
F22	Fuel filter	{AA 1 E} Fig. 1: AA page 6 {CE 0 A} Fig. 21: CE page 26 {CE 2 A} Fig. 21: CE page 26
F23	Climate Control ignition	{AA 1 E} Fig. 1: AA page 6 {HA 0 B} Fig. 52: HA page 57
F24	Instrument cluster	{AA 2 E} Fig. 1: AA page 6 {BC 0 A} Fig. 8: BC page 13
F25	Heated seat	{AA 2 E} Fig. 1: AA page 6 {IB 1 A} Fig. 60: IB page 65
F26	Windshield wiper	{AA 2 E} Fig. 1: AA page 6 {GP 0 A} Fig. 50: GP page 55
F27	Interaxle Lock	{AA 2 E} Fig. 1: AA page 6 {FD 3 A} Fig. 39: FD page 44
F28	Interwheel Lock	{AA 2 E} Fig. 1: AA page 6 {FD 1 A} Fig. 39: FD page 44
F29	Camera Prep / Body Builder Ignition Z	{AA 2 D} Fig. 1: AA page 6 {BG 1 A} Fig. 12: BG page 17
F30	LH Power Seat	{AA 2 D} Fig. 1: AA page 6 {IB 0 A} Fig. 60: IB page 65

Fuse	Circuit	Schematic
F31	RH Power Seat	{AA 2 D} Fig. 1: AA page 6 {IB 1 A} Fig. 60: IB page 65
F32	Ignition Expansion	{AA 3 D} Fig. 1: AA page 6 {BJ 2 A} Fig. 15: BJ page 20 {BK 2 A} Fig. 16: BK page 21
F33	Snow plow lamps LH	{AA 3 D} Fig. 1: AA page 6 {GI 1 A} Fig. 49: GI page 54
F34	Central tire inflation	{AA 3 D} Fig. 1: AA page 6 {FE 1 A} Fig. 40: FE page 45
F35	Snow plow lamps RH	{AA 3 D} Fig. 1: AA page 6 {GI 1 A} Fig. 49: GI page 54
F36	Cigar 12V Outlet	{AA 0 D} Fig. 1: AA page 6 {IF 0 A} Fig. 64: IF page 69
F37	Dome/Door Lamps	{AA 0 D} Fig. 1: AA page 6 {IA 1 A} Fig. 59: IA page 64
F38	Not Used	{AA 0 D} Fig. 1: AA page 6
F39	CB	{AA 1 D} Fig. 1: AA page 6 {IF 3 A} Fig. 64: IF page 69
F40	ECS	{AA 1 D} Fig. 1: AA page 6 {EB 4 A} Fig. 35: EB page 40
F41	Air Horn	{AA 1 D} Fig. 1: AA page 6 {GQ 2 A} Fig. 51: GQ page 56
F42	LCM5	{AA 0 D} Fig. 1: AA page 6 {GB 3 B} Fig. 42: GB page 47
F43	Trailer Stop Relay	{AA 0 D} Fig. 1: AA page 6 {GB 2 A} Fig. 42: GB page 47
F44	LCM6	{AA 0 D} Fig. 1: AA page 6 {GB 3 A} Fig. 42: GB page 47
F45	City Horn	{AA 0 D} Fig. 1: AA page 6 {GQ 0 A} Fig. 51: GQ page 56
F46	Radio/Cluster Battery	{AA 1 D} Fig. 1: AA page 6 {BC 0 A} Fig. 8: BC page 13 {KA 1 A} Fig. 69: KA page 74 {KB 2 A} Fig. 70: KB page 75 {KC 1 A} Fig. 71: KC page 76
F47	Climate Control	{AA 1 D} Fig. 1: AA page 6 {HA 0 A} Fig. 52: HA page 57

Fuse	Circuit	Schematic
F48	Central Locks	{AA 1 D} Fig. 1: AA page 6 {IE 1 A} Fig. 63: IE page 68
F49	AUX1	{AA 0 E} Fig. 1: AA page 6 {NA 0 A} Fig. 73: NA page 78
F50	AUX2	{AA 0 E} Fig. 1: AA page 6 {NA 1 A} Fig. 73: NA page 78
F51	AUX3	{AA 0 E} Fig. 1: AA page 6 {GC 2 A} Fig. 43: GC page 48 {NA 2 B} Fig. 73: NA page 78
F52	Battery protection status	{AA 0 E} Fig. 1: AA page 6 {HB 1 A} Fig. 53: HB page 58
F53	12V Outlet Ovh.	{AA 1 E} Fig. 1: AA page 6 {IF 2 A} Fig. 64: IF page 69
F54	Battery expansion	{AA 1 E} Fig. 1: AA page 6 {GC 2 A} Fig. 43: GC page 48 {BK 2 A} Fig. 16: BK page 21
F56	Air dryer	{FA 2 A} Fig. 36: FA page 41 {AB 0 E} Fig. 2: AB page 7
F57	SRS	{JA 1 B} Fig. 66: JA page 71 {AB 0 E} Fig. 2: AB page 7
F58	Lift Axles / Body builder reverse	{FB 0 A} Fig. 37: FB page 42 {AB 0 E} Fig. 2: AB page 7
F59	Qualcomm / Inside/Outside Air	{BE 1 B} Fig. 10: BE page 15 {CH 2 A} Fig. 23: CH page 28 {AB 1 E} Fig. 2: AB page 7
F60	Road Relay / Body Builder Ign-Y/Ing. Exp.	{BG 1 A} Fig. 12: BG page 17 {BH 1 A} Fig. 13: BH page 18 {AB 1 E} Fig. 2: AB page 7
F61	ABS1	{EA 2 A} Fig. 34: EA page 39 {AB 1 E} Fig. 2: AB page 7
F62	ABS2	{EA 2 A} Fig. 34: EA page 39 {AB 1 E} Fig. 2: AB page 7
F63	Susp. Dump	{FC 1 A} Fig. 38: FC page 43 {AB 2 E} Fig. 2: AB page 7
F64	5th Wheel Slide	{FC 2 A} Fig. 38: FC page 43 {AB 2 E} Fig. 2: AB page 7

Fuse	Circuit	Schematic
F65	Light Control Module / Light Control Panel	{GA 1 A} Fig. 41: GA page 46 {AB 2 E} Fig. 2: AB page 7
F66	Body Builder Ign-X	{BG 0 A} Fig. 12: BG page 17 {AB 2 E} Fig. 2: AB page 7
F67	VED16 Coolant Pump	{AB 3 E} Fig. 2: AB page 7
F68	Central lock Ign.	{IE 1 A} Fig. 63: IE page 68 {AB 3 E} Fig. 2: AB page 7
F69	Ign Expansion/ Volvo Link	{BF 1 A} Fig. 11: BF page 16 {BH 1 A} Fig. 13: BH page 18 {AB 3 E} Fig. 2: AB page 7
F70	Vorad/ECS	{AA 2 D} Fig. 1: AA page 6 {JB 2 A} Fig. 67: JB page 72 {EB 3 A} Fig. 35: EB page 40
F71	DR Spare	{AA 2 D} Fig. 1: AA page 6
F72	Gearbox	{AA 3 D} Fig. 1: AA page 6 {DB 0 A} Fig. 27: DB page 32 {DC 0 A} Fig. 28: DC page 33 {DD 1 A} Fig. 29: DD page 34 {DG 1 A} Fig. 32: DG page 37 {DF 1 B} Fig. 31: DF page 36
F73	ICON	{AA 3 D} Fig. 1: AA page 6 {CU 2 A} Fig. 26: CU page 31
F74	Radio with Icon / Amp.	{AA 3 D} Fig. 1: AA page 6 {GA 0 A} Fig. 41: GA page 46
F75	PTO/ Dual PTO	{AA 3 D} Fig. 1: AA page 6 {DP 2 A} Fig. 33: DP page 38
F76	Engine Brake	{AA 3 D} Fig. 1: AA page 6 {CF 2 A} Fig. 22: CF page 27
F77	Allison DR	{DF 3 B} Fig. 31: DF page 36
F78	Allison Battery	{DF 0 B} Fig. 31: DF page 36
F79	EMS A	{AE 3 A} Fig. 5: AE page 10
F80	VECU/Water in Fuel Sw.	{AE 2 A} Fig. 5: AE page 10
F81	EMS B	{AE 1 A} Fig. 5: AE page 10

Fuse	Circuit	Schematic
F82	Body Builder module	{AE 0 A} Fig. 5: AE page 10
F90	Fuel Sink pump	{HE 0 C} Fig. 56: HE page 61
F91	Not used	
F92	Interior Lamps	{HF 2 B} Fig. 57: HF page 62
FB01	FUSE, BATTERY 1, EMS	{AE 0 D} Fig. 5: AE page 10
FB02	FUSE, BATTERY 2, EMS	{CC 2 C} Fig. 19: CC page 24 {CI 1 A} Fig. 24: CI page 29
FB02A	FUSE, BATTERY Temp A Start	{CU 2 B} Fig. 26: CU page 31
FB03	FUSE, BATTERY 1 TRANSMISSION	{DB 4 B} Fig. 27: DB page 32 {DG 0 C} Fig. 32: DG page 37 {DF 3 D} Fig. 31: DF page 36
FB04	FUSE, BATTERY 2 TRANSMISSION	{DF 3 D} Fig. 31: DF page 36
FB05	FUSE, BATTERY ISX	{AE 0 D} Fig. 5: AE page 10



# Reference List: Relays

Relay	Circuit	Schematic
RLY01	RELAY, DR	{AA 2 C} Fig. 1: AA page 6
RLY02	RELAY, TRAILER PARKING	{GB 1 B} Fig. 42: GB page 47
RLY03	RELAY, TRAILER STOP	{GB 2 B} Fig. 42: GB page 47
RLY04	RELAY, EMS	{AE 0 B} Fig. 5: AE page 10
RLY05	RELAY, LIFT AXLE / REVERSE SIGNAL	{FB 3 B} Fig. 37: FB page 42
RLY05A	RELAY, Temp. A Start DR	{CU 1 D} Fig. 26: CU page 31
RLY06A	RELAY, Temp. A Start IGN	{CU 2 D} Fig. 26: CU page 31
RLY07	RELAY, PTO	{DP 1 B} Fig. 33: DP page 38
RLY08	RELAY TAS Hood Position	{CU 1 B} Fig. 26: CU page 31
RLY09	RELAY TRAILER MARKER	{MA 0 B} Fig. 72: MA page 77
RLY10	RELAY, CITY HORN	{GQ 0 C} Fig. 51: GQ page 56
RLY12	RELAY, INTERMITTENT WIPER	{GP 0 B} Fig. 50: GP page 55
RLY13	RELAY, AUTOSHIFT	{DB 1 B} Fig. 27: DB page 32
RLY13_1	RELAY, ALLISON START ENABLE	{DF 0 B} Fig. 31: DF page 36
RLY14	RELAY, ALLISON AUTONEUTRAL	{DF 1 B} Fig. 31: DF page 36
RLY14_1	RELAY, Park Brake TAS	{CU 1 A} Fig. 26: CU page 31
RLY15	RELAY, ALLISON POWER	{DF 1 B} Fig. 31: DF page 36
RLY16	RELAY, BODY BUILDER REMOTE THROTTLE INC	{BA 3 C} Fig. 6: BA page 11
RLY17	RELAY, BODY BUILDER REMOTE THROTTLE DEC	{BA 3 B} Fig. 6: BA page 11
RLY18	RELAY, ALLISON SERVICE BRAKE INPUT	{DF 2 B} Fig. 31: DF page 36
RLY20	RELAY, ALLISON BODY BUILDERER1	{DF 2 B} Fig. 31: DF page 36
RLY21	RELAY, ALLISON BODY BUILDERER2	{DF 3 B} Fig. 31: DF page 36
RLY26	SNOWPLOW LH ER8	{GI 1 C} Fig. 49: GI page 54
RLY27	SNOWPLOW RH ER9	{GI 0 C} Fig. 49: GI page 54
RLY28	SNOWPLOW LCM INPUTER7	{GI 2 C} Fig. 49: GI page 54
RLY29	POWER RELAY 1 BATTERY	{AA 1 C} Fig. 1: AA page 6
RLY30	POWER RELAY 2 IGNITION	{AA 1 C} Fig. 1: AA page 6
RLY31	POWER RELAY 3 IGNITION	{AB 1 D} Fig. 2: AB page 7
RLY32	POWER RELAY 4 ACCESSORY	{AB 1 D} Fig. 2: AB page 7
RLY33	Relay, ER9 Motorized Mirror IN	{ID 3 C} Fig. 62: ID page 67
RLY33A	Relay, ER8 Motorized Mirror OUT	{ID 3 C} Fig. 62: ID page 67
RLY34	ER8 ECS Power	{EB 3 B} Fig. 35: EB page 40
RLY35	MEIIR ER3	{CC 2 B} Fig. 19: CC page 24 {AE 2 B} Fig. 5: AE page 10
RLY36	Relay, ER7 Power Window "UP"	{ID 1 C} Fig. 62: ID page 67
RLY37	Relay, ER6 Power Window "DOWN"	{ID 0 C} Fig. 62: ID page 67
RLY38	Roof Marker Lamps ER2	{GC 2 B} Fig. 43: GC page 48
RLY39	Relay Sleeper HVAC On Harness	{HG 3 B} Fig. 58: HG page 63
RLY40	RELAY STARTER MOTOR	{AD 0 C} Fig. 4: AD page 9 {AD 1 B} Fig. 4: AD page 9
RLY41	RELAY, PARK BRAKE	{HB 4 C} Fig. 53: HB page 58

Relay	Circuit	Schematic
RLY42	RELAY ENGINE PREHEAT	{CB 2 B} Fig. 18: CB page 23
RLY43	Relay, Shunt	{AA 0 C} Fig. 1: AA page 6
RLY44	Relay, Battery Protection ER8	{HB 1 D} Fig. 53: HB page 58

# Reference List: Components

Component # and Description		Location
A03A	INSTRUMENT CLUSTER A	{BC 0 C} Fig. 8: BC page 13
A03B	INSTRUMENT CLUSTER B	{BC 2 C} Fig. 8: BC page 13
A03C	INSTRUMENT CLUSTER C	{BD 0 C} Fig. 8: BC page 13
A03S	Secondary Gauges	{BK 1 B} Fig. 16: BK page 21
A04	REFRIGERATOR	{HD 0 B} Fig. 55: HD page 60 {HE 1 C} Fig. 56: HE page 61
A04A	REFRIGERATOR	{HE 1 D} Fig. 56: HE page 61
A07A	RADIO	{KA 0 C} Fig. 69: KA page 74
A07B	RADIO	{KB 2 B} Fig. 70: KB page 75
A07C	RADIO	{KC 1 B} Fig. 71: KC page 76
A07D	RADIO	{JC 1 C} Fig. 68: JC page 73
A08	Control unit, GPS receiver, (Global Positioning System)	{BF 1 C} Fig. 11: BF page 16
A12	Control unit, ABS ( Anti-lock Brake System)	{EA 2 C} Fig. 34: EA page 39
A13L	CONTROL UNIT LIGHTNING TRANSMISSION	{DC 0 C} Fig. 28: DC page 33
A13M	CONTROL UNIT MERITOR TRANSMISSION	{DD 1 C} Fig. 29: DD page 34
A14	CONTROL UNIT, EMS (Engine Management System)	{CO 2 C} Fig. 25: CO page 30
A14A	CONTROL UNIT, EMS (Engine Management System)	{CB 0 D} Fig. 18: CB page 23
A14B	CONTROL UNIT, EMS, CUMMINS ISX	{CC 0 D} Fig. 19: CC page 24
A14E	CONTROL UNIT, ISX 2000 W/O ICON	{CI 1 D} Fig. 24: CI page 29
A14F	CONTROL UNIT, Temp. A Start	{CU 1 C} Fig. 26: CU page 31
A15	Control unit, SRS (Supplementary Restrain System)	{JA 1 C} Fig. 66: JA page 71
A16	Control Unit, ECS (Electronic Controlled Air Suspension)	{EB 0 C} Fig. 35: EB page 40
A07C	RADIO	{KC 1 B} Fig. 71: KC page 76
A16	Control unit, ECS (Electronic Controlled Air Suspension)	{EB 0 C} Fig. 35: EB page 40

Component # and Description		Location
A17	Control unit, VECU (Vehicle ECU)	{BA 1 D} Fig. 6: BA page 11 {BB 0 A} Fig. 7: BB page 12 {CF 3 E} Fig. 22: CF page 27 {CF 3 C} Fig. 22: CF page 27 {CF 3 E} Fig. 22: CF page 27 {CF 2 C} Fig. 22: CF page 27 {CF 1 C} Fig. 22: CF page 27 {AE 0 C} Fig. 5: AE page 10
A19D	CONTROL UNIT, GECU (GEAR SELECTOR ECU) ALLISON TRANSMISSION	{DE 1 B} Fig. 30: DE page 35
A27	LIGHT CONTROL MODULE	{GA 3 C} Fig. 41: GA page 46 {GG 0 A} Fig. 47: GG page 52 {GB 0 C} Fig. 42: GB page 47
A30	CONTROL UNIT, SWC (STEERING WHEEL CONTROL)	{JC 1 C} Fig. 68: JC page 73
A34	Control unit, climate unit	{HA 2 B} Fig. 52: HA page 57
A35	Control unit, remote receiver, door lock	{IE 3 B} Fig. 63: IE page 68
A36	Control unit, BBM (Body Builder Module)	{BI 0 C} Fig. 14: BI page 19
A38	Control unit, FMS, satellite communication	{BE 1 C} Fig. 10: BE page 15
A43	Electronic fan control (Including B32, Y35)	{CO 4 B} Fig. 25: CO page 30
A44	Fuel filter bracket (Including M15, B51)	
A45	Fuel pre filter	{CO 2 B} Fig. 25: CO page 30
A46	Control unit, LECM (Living Environment Control Module)	{HD 3 A} Fig. 55: HD page 60 {HB 3 B} Fig. 53: HB page 58 {HE 2 A} Fig. 56: HE page 61
A48	TV	{KC 0 C} Fig. 71: KC page 76
A50	CPU, Vorad	{JB 2 C} Fig. 67: JB page 72
A51	Display, Side Sensor Vorad	{JB 1 E} Fig. 67: JB page 72
A52	Display, CTI (Central Tire Inflation)	{FE 2 B} Fig. 40: FE page 45
A53	Control unit, CTI (Central Tire Inflation)	{FE 0 C} Fig. 40: FE page 45

Component # and Description		Location
A54	Control Unit, Coolant Level	{CC 0 E} Fig. 19: CC page 24 {CI 0 D} Fig. 24: CI page 29
A54A	Control Unit, APCS	{CD 2 C} Fig. 20: CD page 25
A55	AUTOSHIFT II TRANSMISSION	{DB 3 D} Fig. 27: DB page 32
A56	Stereo amplifier	{KC 0 C} Fig. 71: KC page 76
A57	CONTROL UNIT, ALLISON TRANSMISSION	{DE 3 C} Fig. 30: DE page 35 {DF 0 D} Fig. 31: DF page 36
A58	ALLISON TRANSMISSION	{DE 0 E} Fig. 30: DE page 35
A67	DISPLAY DRIVER VORAD	{JB 0 A} Fig. 67: JB page 72
A68	MERITOR FREEDOMLINE	{DG 0 E} Fig. 32: DG page 37
A69	SHIFT MODULE	{DG 1 B} Fig. 32: DG page 37
A70	Shift module Autoshift II	{DB 0 D} Fig. 27: DB page 32
B02A	THERMOSTAT, SLEEPER CONTROL #1	{HG 2 B} Fig. 58: HG page 63
B02B	THERMOSTAT, SLEEPER CONTROL #2	{CU 3 C} Fig. 26: CU page 31
B04	Sensor, engine speed, crankshaft	{CO 1 D} Fig. 25: CO page 30 {DE 3 D} Fig. 30: DE page 35
B05	Sensor, engine speed camshaft	{CO 1 D} Fig. 25: CO page 30
B06A	SENSOR AIR PRESSURE TANK A	{BC 3 D} Fig. 8: BC page 13
B06AP	SENSOR AIR PRESSURE BRAKE APPLICATION	{BC 2 D} Fig. 8: BC page 13
B06B	SENSOR AIR PRESSURE TANK B	{BC 3 D} Fig. 8: BC page 13
B07	SENSOR FUEL LEVEL	{BC 2 D} Fig. 8: BC page 13
B08	Sensor, gearbox speed	{FE 1 D} Fig. 40: FE page 45
B09	SENSOR OIL TEMP GEARBOX	{BC 4 B} Fig. 8: BC page 13
B10	Sensor, oil level	{CO 1 D} Fig. 25: CO page 30
B13	Sensor, wheel speed, lhs. 1:st front axle	{EA 1 C} Fig. 34: EA page 39

Component # and Description		Location
B14	Sensor, wheel speed, rhs. 1:st front axle	{EA 1 C} Fig. 34: EA page 39
B15	Sensor, wheel speed, lhs. 1:st driven rear axle	{EA 0 D} Fig. 34: EA page 39
B16	Sensor, wheel speed, rhs. 1:st driven rear axle	{EA 0 D} Fig. 34: EA page 39
B17	Sensor, wheel speed, lhs., 2:nd driven rear axle	{EA 2 D} Fig. 34: EA page 39
B18	Sensor, wheel speed, rhs., 2:nd driven rear axle	{EA 3 D} Fig. 34: EA page 39
B21	Sensor, coolant temperature, engine	{CO 0 B} Fig. 25: CO page 30
B22B	SENSOR AMBIENT AIR TEMP.	{BC 3 A} Fig. 8: BC page 13
B25	Sensor, accelerator pedal	{BB 4 C} Fig. 7: BB page 12
B30A	Sensor, chassis level, drive axle	{EB 2 D} Fig. 35: EB page 40
B32	Sensor, engine cooling, fan speed	{CO 4 B} Fig. 25: CO page 30
B37	Sensor, boost pressure and boost temperature	{CO 0 D} Fig. 25: CO page 30
B38	Sensor, oil pressure and oil temperature	{CO 0 D} Fig. 25: CO page 30
B38RF	SENSOR OIL TEMP REAR FRONT AXLE	{BC 3 B} Fig. 8: BC page 13
B38RR	SENSOR OIL TEMP REAR REAR AXLE	{BC 3 B} Fig. 8: BC page 13
B39	SENSOR AIR RESTRICTION	{BD 1 B} Fig. 9: BD page 14
B48	Sensor, coolant pressure	{CD 3 B} Fig. 20: CD page 25
B48A	Sensor coolant level, primary tank	{CD 2 B} Fig. 20: CD page 25
B51	Sensor, fuel pressure	{CO 2 B} Fig. 25: CO page 30
B52	Sensor, water level in fuel pre filter	{CO 2 B} Fig. 25: CO page 30
B53B	Sensor, Ambient Temp. Temp A Start	{CU 4 B} Fig. 26: CU page 31
B54	Sensor, crank case pressure	{CO 1 B} Fig. 25: CO page 30
B55A	Sensor, Air Pressure, Suspension	{EB 0 D} Fig. 35: EB page 40
B56	Sensor, Air Pressure, Suspension Spring, Front Axle	{BC 2 B} Fig. 8: BC page 13
B58A	Sensor, Air Pressure, Suspension Spring, Drive Axle	{EB 1 D} Fig. 35: EB page 40
B58R	Sensor, Air Pressure, Rear Suspension	{BC 2 D} Fig. 8: BC page 13

Component # and Description		Location
B59	Sensor, Indoor Temp.	{HA 2 B} Fig. 52: HA page 57
B60A	SPEAKER LEFT DASH	{KA 2 D} Fig. 69: KA page 74 {KB 3 D} Fig. 70: KB page 75 {KC 1 D} Fig. 71: KC page 76
B60B	SPEAKER RIGHT DASH	{KA 2 D} Fig. 69: KA page 74 {KB 2 D} Fig. 70: KB page 75 {KC 2 D} Fig. 71: KC page 76
B60C	SPEAKER LEFT DOOR	{KA 0 D} Fig. 69: KA page 74 {KB 3 D} Fig. 70: KB page 75 {KC 0 D} Fig. 71: KC page 76
B60D	SPEAKER RIGHT DOOR	{KA 1 D} Fig. 69: KA page 74 {KB 2 D} Fig. 70: KB page 75 {KC 0 D} Fig. 71: KC page 76
B60E	SPEAKER LEFT UPPER	{KB 0 D} Fig. 70: KB page 75 {KC 2 B} Fig. 71: KC page 76
B60F	SPEAKER RIGHT UPPER	{KB 0 D} Fig. 70: KB page 75 {KC 3 B} Fig. 71: KC page 76
B60G	SPEAKER LEFT LOWER	{KC 2 D} Fig. 71: KC page 76
B60H	SPEAKER RIGHT LOWER	{KC 2 D} Fig. 71: KC page 76
B60I	SPEAKER SUBWOOFER	{KC 3 D} Fig. 71: KC page 76
B60J	SPEAKER LEFT UPPER	{KB 1 D} Fig. 70: KB page 75
B60K	SPEAKER RIGHT UPPER	{KB 1 D} Fig. 70: KB page 75
B60L_H2	SPEAKER LEFT REAR	{KB 0 B} Fig. 70: KB page 75
B60L_H4	SPEAKER LEFT REAR	{KB 0 C} Fig. 70: KB page 75
B60M_H2	SPEAKER RIGHT REAR	{KB 0 B} Fig. 70: KB page 75
B60M_H4	SPEAKER RIGHT REAR	{KB 0 C} Fig. 70: KB page 75

Component # and Description		Location
B61A	TWEETER LEFT DASH	{KA 2 D} Fig. 69: KA page 74 {KB 3 D} Fig. 70: KB page 75 {KC 0 D} Fig. 71: KC page 76
B61B	TWEETER RIGHT DASH	{KA 1 D} Fig. 69: KA page 74 {KB 1 D} Fig. 70: KB page 75 {KC 1 D} Fig. 71: KC page 76
B62	Socket, TV Headphone	{KC 0 C} Fig. 71: KC page 76
B65	Sensor, EGR valve position	{CO 1 B} Fig. 25: CO page 30
B66	Sensor, EGR temperature	{BC 2 A} Fig. 8: BC page 13 {CO 0 D} Fig. 25: CO page 30
B66A	Pyrometer	{BC 2 A} Fig. 8: BC page 13
B68	Sensor, output shaft speed, gearbox	{BB 0 D} Fig. 7: BB page 12
B68A	Sensor, Output shaft Speed, gearbox	{BB 1 D} Fig. 7: BB page 12
B68B	Sensor, Output shaft Speed, gearbox	{DC 1 D} Fig. 28: DC page 33
B68C	Sensor Output Shaft Speed, Temp A Start	{CC 1 C} Fig. 19: CC page 24 {CI 2 C} Fig. 24: CI page 29
B68D	Sensor Output Shaft Speed, Gearbox	{CU 2 B} Fig. 19: CC page 24
B78	Side Sensor, Vorad	{JB 1 E} Fig. 67: JB page 72
B79	Sensor, PCU (Pneumatic Control Unit)	{FE 2 D} Fig. 40: FE page 45
B118	Sensor, oil pressure	{CO 0 D} Fig. 25: CO page 30
B119	Sensor, oil level and oil temp.	{CO 1 D} Fig. 25: CO page 30
B80	SENSOR, ETHER START	{CA 1 B} Fig. 17: CA page 22
E05A	LAMP 5TH WHEEL (L1)	{GG 1 C} Fig. 47: GG page 52
E05B	LAMP 5TH WHEEL (L3, L4)	{GH 0 C} Fig. 48: GH page 53
E05C	LAMP 5TH WHEEL (L5)	{GH 2 C} Fig. 48: GH page 53



Component # and Description		Location
E05D	LAMP 5TH WHEEL	{GG 2 C} Fig. 47: GG page 52 {GG 1 C} Fig. 47: GG page 52 {GG 1 C} Fig. 47: GG page 52 {GH 0 C} Fig. 48: GH page 53 {GH 3 C} Fig. 48: GH page 53 {GH 2 C} Fig. 48: GH page 53 {GH 3 C} Fig. 48: GH page 53 {GH 1 C} Fig. 48: GH page 53 {GH 1 C} Fig. 48: GH page 53
E05E	LAMP 5TH WHEEL	{GG 1 C} Fig. 47: GG page 52 {GH 0 C} Fig. 48: GH page 53 {GH 2 C} Fig. 48: GH page 53
E05F	LAMP 5TH WHEEL	{GG 2 C} Fig. 47: GG page 52 {GH 3 C} Fig. 48: GH page 53 {GH 1 C} Fig. 48: GH page 53
E05G	LAMP 5TH WHEEL	{GG 2 C} Fig. 47: GG page 52 {GH 3 C} Fig. 48: GH page 53 {GH 1 C} Fig. 48: GH page 53
E05H	LAMP 5TH WHEEL	{GG 2 C} Fig. 47: GG page 52 {GH 2 C} Fig. 48: GH page 53 {GH 3 C} Fig. 48: GH page 53
E06	Lamp, Backup	{GF 1 B} Fig. 46: GF page 51 {GF 3 B} Fig. 46: GF page 51
E07L	Lamp, Fog Light	{GE 1 C} Fig. 45: GE page 50
E07R	Lamp, Fog Light	{GE 1 C} Fig. 45: GE page 50
E08L	Lamp, Driving Light	{GE 2 C} Fig. 45: GE page 50
E08R	Lamp, Driving Light	{GE 2 C} Fig. 45: GE page 50
E10	Lamp, Tail Light	{GF 3 D} Fig. 46: GF page 51
E10L	LAMP TAIL LIGHT LEFT	{GF 0 D} Fig. 46: GF page 51
E10LA	LAMP TAIL LIGHT LEFT	{GF 0 B} Fig. 46: GF page 51
E10LB	LAMP TAIL LIGHT LEFT	{GF 2 B} Fig. 46: GF page 51
E10R	LAMP TAIL LIGHT RIGHT	{GF 1 D} Fig. 46: GF page 51

Component # and Description		Location
E10RA	LAMP TAIL LIGHT RIGHT	{GF 1 B} Fig. 46: GF page 51
E10RB	LAMP TAIL LIGHT RIGHT	{GF 3 B} Fig. 46: GF page 51
E11L	Lamp, Side Repeater	{GA 1 D} Fig. 41: GA page 46
E11R	Lamp, Side Repeater	{GA 1 D} Fig. 41: GA page 46
E12A	LAMP, MARKER	{GC 1 C} Fig. 43: GC page 48
E12B	LAMP, MARKER	{GC 1 C} Fig. 43: GC page 48
E12C	LAMP, MARKER	{GC 2 C} Fig. 43: GC page 48
E12D	LAMP, MARKER	{GC 2 C} Fig. 43: GC page 48
E12E	LAMP, MARKER	{GC 2 C} Fig. 43: GC page 48
E13L	Lamp, Park/Turn	{GD 0 C} Fig. 44: GD page 49
E13R	Lamp, Park/Turn	{GD 0 C} Fig. 44: GD page 49
E14L	WARNING LAMP SNOWPLOW	{GI 3 C} Fig. 49: GI page 54
E14R	WARNING LAMP SNOWPLOW	{GI 4 C} Fig. 49: GI page 54
E16L	Lamp Door, D.S.	{IA 1 D} Fig. 59: IA page 64
E16R	Lamp Door, P.S.	{IA 1 D} Fig. 59: IA page 64
E17C	Lamp Flourescent	{HE 3 C} Fig. 56: HE page 61
E17C_H2	Lamp Flourescent	{HD 2 C} Fig. 55: HD page 60
E17C_H4	Lamp Flourescent	{HD 2 C} Fig. 55: HD page 60
E17D	Lamp Workcenter Fluorescent	{HE 3 B} Fig. 56: HE page 61
E17L	Lamp, Interior Light	{IA 1 D} Fig. 59: IA page 64
E17R	Lamp, Interior Light	{IA 0 D} Fig. 59: IA page 64
E18A	Lamp Lower D.S.	{HD 4 D} Fig. 55: HD page 60
E18B	Lamp Under Cabinet D.S.	{HD 3 C} Fig. 55: HD page 60
E18C	Lamp Upper D.S.	{HD 1 C} Fig. 55: HD page 60 {HE 2 B} Fig. 56: HE page 61
E18D	Lamp Upper P.S.	{HE 2 B} Fig. 56: HE page 61
E18E	Lamp Valance D.S.	{HE 3 C} Fig. 56: HE page 61

Component # and Description		Location
E18F	Lamp Valance P.S.	{HE 3 B} Fig. 56: HE page 61
E18G	Lamp Upper P.S.	{HD 2 C} Fig. 55: HD page 60 {HF 2 C} Fig. 57: HF page 62
E18H	Lamp Upper D.S.	{HD 2 C} Fig. 55: HD page 60 {HF 2 C} Fig. 57: HF page 62
E18J	Lamp Lower D.S.	{HD 3 D} Fig. 55: HD page 60
E18K	Lamp Table	{HD 3 D} Fig. 55: HD page 60
E20A	Lamp Ashtray Illumination	{IF 1 C} Fig. 64: IF page 69
E22A	LAMP, ROOF SIGN ILLUMINATION	{GC 0 C} Fig. 43: GC page 48
E22B	LAMP, ROOF SIGN ILLUMINATION	{GC 0 C} Fig. 43: GC page 48
E22C	LAMP, ROOF SIGN ILLUMINATION	{GC 0 C} Fig. 43: GC page 48
E23A	Lamp Luggage D.S.	{HD 3 B} Fig. 55: HD page 60 {HF 3 C} Fig. 57: HF page 62
E23B	Lamp Luggage P.S.	{HD 3 B} Fig. 55: HD page 60 {HF 3 C} Fig. 57: HF page 62
E23C	Lamp Luggage D.S.	{HE 3 D} Fig. 56: HE page 61
E23D	Lamp Luggage P.S.	{HE 4 D} Fig. 56: HE page 61
E26L	Lamp, Headlamp Module	{GD 1 C} Fig. 44: GD page 49
E26L_1	Lamp, Headlamp Module	{GD 3 C} Fig. 44: GD page 49
E26R	Lamp, Headlamp Module	{GD 2 C} Fig. 44: GD page 49
E26R_1	Lamp, Headlamp Module	{GD 4 C} Fig. 44: GD page 49
E28	PARKING HEATER	{HB 3 D} Fig. 53: HB page 58
E30L	Lamp, Headlamp	{GD 0 C} Fig. 44: GD page 49
E30R	Lamp, Headlamp	{GD 1 C} Fig. 44: GD page 49
E32	HVAC UNIT	{HB 2 C} Fig. 53: HB page 58 {HG 2 C} Fig. 58: HG page 63
E32A	HVAC UNIT	{HA 2 D} Fig. 52: HA page 57
E36A	LAMP, SUNVISOR	{GC 3 C} Fig. 43: GC page 48

Component # and Description		Location
E36B	LAMP, SUNVISOR	{GC 3 C} Fig. 43: GC page 48
E36C	LAMP, SUNVISOR	{GC 3 C} Fig. 43: GC page 48
E36D	LAMP, SUNVISOR	{GC 3 C} Fig. 43: GC page 48
E36E	LAMP, SUNVISOR	{GC 4 C} Fig. 43: GC page 48
E37	Lamp LECM Panel	{HE 1 B} Fig. 56: HE page 61
E39	Lamp, License Plate Illumination	{GF 1 B} Fig. 46: GF page 51 {GF 3 B} Fig. 46: GF page 51
E43L	Lamp, Driving/Fog	{GE 0 C} Fig. 45: GE page 50
E43R	Lamp, Driving/Fog	{GE 1 C} Fig. 45: GE page 50
E59	Lamp Indicator TAS ON/Neutral	{CU 2 B} Fig. 26: CU page 31
G01	Battery	{AA 2 B} Fig. 1: AA page 6 {AC 0 D} Fig. 3: AC page 8 {DB 4 B} Fig. 27: DB page 32 {HC 0 B} Fig. 54: HC page 59 {CC 3 D} Fig. 19: CC page 24 {CI 1 B} Fig. 24: CI page 29 {DG 0 B} Fig. 32: DG page 37 {AD 3 C} Fig. 4: AD page 9 {CU 2 B} Fig. 26: CU page 31 {AE 0 E} Fig. 5: AE page 10
G01	Battery	{DF 3 E} Fig. 31: DF page 36
G01A	Battery Ring	{AE 0 E} Fig. 5: AE page 10
G01B	Battery Ring	{CC 3 D} Fig. 31: DF page 36 {CI 1 B} Fig. 24: CI page 29 {AE 0 E} Fig. 5: AE page 10
G01C	*opt*	{AC 0 D} Fig. 3: AC page 8
G01D	*opt*	{CU 2 B} Fig. 26: CU page 31
G01E	*opt*	{AC 0 D} Fig. 3: AC page 8
G02	Alternator	{AC 1 C} Fig. 3: AC page 8 {CB 2 B} Fig. 18: CB page 23 {BG 0 B} Fig. 12: BG page 17 {AD 3 B} Fig. 4: AD page 9

Component # and Description		Location
G03	Inverter, 12VDC - 120VAC	{HC 0 B} Fig. 54: HC page 59
G04	Power Distribution Unit, 120VAC	{HC 2 B} Fig. 54: HC page 59
H02	Horn	{GQ 0 D} Fig. 51: GQ page 56
H03	Backup Alarm	{GF 1 D} Fig. 46: GF page 51 {GF 1 B} Fig. 46: GF page 51 {GF 3 B} Fig. 46: GF page 51
H05	Alarm	{CU 3 B} Fig. 26: CU page 31
H07A	SMOKE DETECTOR	{IG 1 B} Fig. 65: IG page 70
M01	WINDSHIELD WIPER MOTOR	{GP 2 D} Fig. 64: IF page 69
M02A	WINDSHIELD WASHER PUMP, VN	{GP 2 B} Fig. 50: GP page 55
M02B	WINDSHIELD WASHER PUMP, VHD	{GP 3 B} Fig. 50: GP page 55
M04	Motor, Starter	{AA 2 A} Fig. 1: AA page 6 {AC 1 B} Fig. 3: AC page 8 {AD 3 B} Fig. 4: AD page 9
M06DS	Motor, Window Winder D.S.	{IC 1 C} Fig. 61: IC page 66
M06PS	Motor, Window Winder P.S.	{IC 2 D} Fig. 61: IC page 66 {ID 0 D} Fig. 62: ID page 67
M110L	Mirror Motors & Heater, LHS	{IC 0 B} Fig. 61: IC page 66 {ID 2 D} Fig. 62: ID page 67
M110R	Mirror Motors & Heater, RHS	{IC 3 B} Fig. 61: IC page 66 {ID 3 D} Fig. 62: ID page 67
M15	Motor, fuel priming pump	{CO 2 B} Fig. 25: CO page 30
M18	MOTOR SINK PUMP	{HE 0 D} Fig. 56: HE page 61
M19	Motor, EGR control valve	{CO 1 B} Fig. 25: CO page 30
M20L	POWER SEAT, LEFT	{IB 0 D} Fig. 60: IB page 65
M20R	POWER SEAT, RIGHT	{IB 1 D} Fig. 60: IB page 65
M80L	Drivers Side Door Lock Control Assembly	{IE 0 D} Fig. 63: IE page 68 {IA 3 B} Fig. 59: IA page 64 {IA 3 D} Fig. 59: IA page 64 {IA 2 D} Fig. 59: IA page 64

Component # and Description		Location
M80R	Passenger Side Door Lock Control Assembly	{IE 1 D} Fig. 63: IE page 68 {IA 3 B} Fig. 59: IA page 64 {IA 4 D} Fig. 59: IA page 64 {IA 3 D} Fig. 59: IA page 64
MFA1	Not Used	{AA 1 D} Fig. 1: AA page 6
MFA2	Fuse F4 & F10 in LECM/ Body Builder	{AA 1 B} Fig. 1: AA page 6 {HB 2 A} Fig. 53: HB page 58 {BG 0 A} Fig. 12: BG page 17
MFA3	FUSE F42-F48	{AA 0 B} Fig. 1: AA page 6
MFA4	DR Relay	{AA 1 B} Fig. 1: AA page 6
MFA5	POWER RELAY 2	{AA 0 B} Fig. 1: AA page 6
MFA6	POWER RELAY 1	{AA 0 B} Fig. 1: AA page 6
MFA7	LCM4	{AA 1 B} Fig. 1: AA page 6 {GB 3 B} Fig. 42: GB page 47
MFA8	Not Used	{AA 1 B} Fig. 1: AA page 6
MFB1	Fuse F1 & F7 in LECM	{HB 1 A} Fig. 53: HB page 58 {AB 3 C} Fig. 2: AB page 7 {HF 2 A} Fig. 57: HF page 62
MFB2	TRAILER AUX	{MA 0 A} Fig. 72: MA page 77 {AB 0 D} Fig. 2: AB page 7
MFB3	POWER RELAY 3	{AB 3 C} Fig. 2: AB page 7
MFB4	POWER RELAY 4	{AB 3 C} Fig. 2: AB page 7
MFB5	Fuse F8-F13	{AB 4 C} Fig. 2: AB page 7
MFB6	Fuses F15-F20	{AB 1 A} Fig. 2: AB page 7
MFB7	BUNK HVAC	{HB 3 A} Fig. 53: HB page 58 {AB 3 C} Fig. 2: AB page 7 {HG 3 A} Fig. 58: HG page 63
MFB8	BUNK FUNCTIONS	{HB 2 A} Fig. 53: HB page 58 {AB 4 C} Fig. 2: AB page 7 {HG 1 A} Fig. 58: HG page 63
R01	Heater, engine preheat	{CO 1 B} Fig. 25: CO page 30 {CB 2 C} Fig. 18: CB page 23
R01A	Heater, engine preheat 110V	{CA 2 D} Fig. 17: CA page 22
R04A	Cigar Lighter	{IF 1 C} Fig. 64: IF page 69
R04B	CIGAR LIGHTER, PANEL	{HE 1 C} Fig. 56: HE page 61
R05A	AIR DRYER	{FA 2 C} Fig. 36: FA page 41

Component # and Description		Location
R05B	AIR DRYER	{FA 2 C} Fig. 36: FA page 41
R05C	AIR DRYER	{FA 3 C} Fig. 36: FA page 41
R08	Termination resistor, CAN-bus	{CC 0 B} Fig. 19: CC page 24 {JB 3 D} Fig. 67: JB page 72 {BH 2 D} Fig. 13: BH page 18 {CI 2 B} Fig. 24: CI page 29
R08A	TERMINATION RESISTOR	{BI 3 B} Fig. 14: BI page 19
R08B	TERMINATING RESISTOR	{EB 0 B} Fig. 35: EB page 40
R08C_CPOMP	TERMINATING RESISTOR	{XA 3 B} Fig. 74: XA page 79
R09	Heater, Fuel Filter RH	{CE 2 C} Fig. 21: CE page 26
R09A	Heater, Fuel Filter LH	{CE 2 C} Fig. 21: CE page 26
R09B	Heater, Fuel Filter Construction	{CE 0 C} Fig. 21: CE page 26
R10	Heater, fuel pre filter	{CO 2 B} Fig. 25: CO page 30
R11	Dome Lamps Relay	{IA 1 C} Fig. 59: IA page 64
R18A	HEATER DRAIN VALVE	{FA 0 C} Fig. 36: FA page 41
R18B	HEATER DRAIN VALVE	{FA 1 C} Fig. 36: FA page 41
S01	Switch, main lighting, selector type	{GA 0 C} Fig. 41: GA page 46
S02	Stalk switch, full- / dipped beams	{BA 2 B} Fig. 6: BA page 11 {GA 2 B} Fig. 41: GA page 46
S04	SWITCH, CLIMATE FAN SELECTOR TYPE	{HB 0 B} Fig. 53: HB page 58
S04A	SWITCH, Sleeper HVAC Fan Speed	{HG 1 B} Fig. 58: HG page 63
S05	Switch Interior Lighting	{HD 0 B} Fig. 55: HD page 60 {HE 2 D} Fig. 56: HE page 61
S06	WINDSHIELD WIPER SWITCH	{BC 1 C} Fig. 8: BC page 13 {GP 0 C} Fig. 50: GP page 55

Component # and Description		Location
S07	Switch, engine brake, selector type	{CF 3 C} Fig. 22: CF page 27 {CF 1 C} Fig. 22: CF page 27 {CF 0 C} Fig. 22: CF page 27
S07B	Switch Engine Brake ON/OFF	{CF 3 C} Fig. 22: CF page 27
S08	Switch, differential gear lock, rear wheels	{FD 1 B} Fig. 39: FD page 44
S09	Switch, differential gear locks, inter axles and rear wheels, selector type	{FD 2 B} Fig. 39: FD page 44
S103A	Switch, Heated Mirror	{ID 2 B} Fig. 62: ID page 67
S103B	Switch, Motorized Mirror	{ID 3 B} Fig. 62: ID page 67
S104	Switch, Marker Interrupt	{JC 3 C} Fig. 68: JC page 73
S104A	Auxiliary Switch 1	{NA 0 C} Fig. 73: NA page 78
S104B	Auxiliary Switch 2	{NA 1 C} Fig. 73: NA page 78
S104C	Auxiliary Switch 3	{NA 2 C} Fig. 73: NA page 78
S106	Switch, Passenger Window Winder	{ID 1 B} Fig. 62: ID page 67
S11A	SWITCH 1, LIFT AXLE	{FB 0 B} Fig. 37: FB page 42
S11B	SWITCH 2, LIFT AXLE	{FB 1 C} Fig. 37: FB page 42
S11C	SWITCH 3, LIFT AXLE	{FB 2 C} Fig. 37: FB page 42
S11D	Switch, Air Suspension, Manual Control, ON/OFF	{EB 2 D} Fig. 35: EB page 40
S11E	Switch, Suspension Control, UP/DN	{EB 3 D} Fig. 35: EB page 40
S12	SWITCH, SNOWPLOW LAMP	{GI 1 B} Fig. 49: GI page 54
S121	SWITCH, TOUCH LOCK	{BJ 2 C} Fig. 15: BJ page 20
S122A	Switch Temp A Start ON/OFF	{CU 0 C} Fig. 26: CU page 31
S14A	Switch, City Horn/Air Horn	{GQ 1 C} Fig. 51: GQ page 56
S15	Switch, Ignition	{AB 1 B} Fig. 2: AB page 7
S24	Stalk switch, retarder, selector type	{CF 3 D} Fig. 22: CF page 27
S24A	SWITCH, STALK ALLISON RETARDER	{DE 0 C} Fig. 30: DE page 35
S24C	Switch, ON/OFF Allison Retarder	{DE 2 B} Fig. 30: DE page 35
S28A	Switch, Power Take-Off	{DP 2 C} Fig. 33: DP page 38



Component # and Description		Location
S28B	Switch, Power Take-Off	{DP 3 C} Fig. 33: DP page 38
S28C	Switch, Power Take-Off	{DP 4 C} Fig. 33: DP page 38
S28E	SWITCH, VOLVO ACTION SERVICE	{BF 1 D} Fig. 11: BF page 16
S31	Switch, TCS ( Traction Control System )	{EA 3 B} Fig. 34: EA page 39
S35	Switch unit, GLU (Gear Lever Unit)	{DC 2 D} Fig. 28: DC page 33
S35M	SWITCH UNIT, GLU (GEAR LEVER UNIT)	{DD 1 D} Fig. 29: DD page 34
S43	Pressure Switch, Parking Brake Indicator	{BA 4 D} Fig. 6: BA page 11
S45	Position switch, differential gear lock indicator, rear wheels, NC. or NO.	{BD 2 B} Fig. 9: BD page 14
S45B	DIFFERENTIAL SWITCH, REAR AXLE	{BD 2 B} Fig. 9: BD page 14
S48	Pressure switch, brake light, NO.	{GB 2 D} Fig. 42: GB page 47
S49	Position switch, reverse lamps, NO.	{GA 2 B} Fig. 41: GA page 46
S58	Position Switch, Clutch Pedal	{BB 3 B} Fig. 7: BB page 12
S59	Position Switch, Brake Pedal	{BB 3 B} Fig. 7: BB page 12
S62	Pressure switch, air pressure, NC.	{FE 0 D} Fig. 40: FE page 45
S68	Proximity switch, coolant level, NC.	{CO 2 B} Fig. 25: CO page 30 {CC 1 E} Fig. 19: CC page 24 {CI 0 D} Fig. 24: CI page 29
S72	Switch, Water in Fuel Separator Drain Valve	{BA 1 B} Fig. 6: BA page 11
S75	SWITCH, BEACON WARNING LIGHT	{GI 3 B} Fig. 49: GI page 54
S76	Switch, spotlights	{GG 0 C} Fig. 47: GG page 52
S80	Door Lock Control Module	{IE 0 B} Fig. 63: IE page 68
S80D	Driver Side Door Control Panel	{IC 2 B} Fig. 61: IC page 66
S80P	Passenger Side Door Control Panel	{IC 2 D} Fig. 61: IC page 66
S87	SWITCH SINK/ FAUCET	{HE 0 C} Fig. 56: HE page 61
S88	Switch, 5th Wheel Slide	{FC 2 B} Fig. 38: FC page 43
S89	Position Switch, Hood Tilt	{CU 0 C} Fig. 26: CU page 31

Component # and Description		Location
S90	Switch, Neutral	{CU 3 B} Fig. 26: CU page 31
S92	Switch, Inverter remote	{HC 0 D} Fig. 54: HC page 59
S93	Switch, Suspension Dump	{FC 1 B} Fig. 38: FC page 43
S97	SWITCH, INSIDE / OUTSIDE AIR CLEANER	{CH 2 C} Fig. 23: CH page 28
S98	Switch, Smoke Detector Disable/Beacon Lamp	{IG 3 D} Fig. 65: IG page 70
S171A	Solenoid, A 5th Wheel Release	{BJ 2 D} Fig. 15: BJ page 20
S171B	Solenoid, B 5th Wheel Release	{BJ 2 D} Fig. 15: BJ page 20
W04	Front Antenna, Vorad	{JB 0 E} Fig. 67: JB page 72
X01	Connector, Vehicle Diagnostics	{XA 2 D} Fig. 74: XA page 79
X04	Trailer connection, 7-pole unit, 24 N	{MA 1 D} Fig. 72: MA page 77
X06A	BODY BUILDER CONNECTOR #3	{BI 1 D} Fig. 14: BI page 19
X06B	BODY BUILDER CONNECTOR #4	{BI 3 D} Fig. 12: BG page 17
X06C	BODY BUILDER CONNECTOR #1	{BG 0 D} Fig. 12: BG page 17
X06D	BODY BUILDER CONNECTOR #2	{BG 2 B} Fig. 12: BG page 17
X06F	BODY BUILDER CAMERA PREP	{BG 1 B} Fig. 12: BG page 17
X07A	12V SOCKET	{IF 0 C} Fig. 64: IF page 69
X07B	12V SOCKET, PANEL	{HD 1 C} Fig. 55: HD page 60 {HE 1 B} Fig. 56: HE page 61
X07C	12V SOCKET, D.S. CABINET	{HE 2 C} Fig. 56: HE page 61
X07D	12V SOCKET, TV/VCR	{HE 2 B} Fig. 56: HE page 61
X07D_H2	12V SOCKET, TV/VCR	{HD 1 C} Fig. 55: HD page 60
X07D_H4	12V SOCKET, TV/VCR	{HD 1 C} Fig. 55: HD page 60
X07E	12V SOCKET, RADIO SHELF	{IF 2 C} Fig. 64: IF page 69
X07F	12V STUDS, CB OVERHEAD	{IF 3 C} Fig. 64: IF page 69
X07G	12V STUDS, CB DASH	{IF 3 C} Fig. 64: IF page 69

Component # and Description		Location
X08	Contact reel, air bag	{GA 3 B} Fig. 41: GA page 46 {JA 1 D} Fig. 66: JA page 71 {JC 0 D} Fig. 68: JC page 73
X0A	SPLICE PACK	{HB 0 E} Fig. 53: HB page 58 {AC 3 B} Fig. 3: AC page 8 {FD 1 D} Fig. 39: FD page 44 {DE 3 D} Fig. 30: DE page 35 {CH 2 D} Fig. 23: CH page 28 {FC 2 C} Fig. 38: FC page 43 {FC 1 D} Fig. 38: FC page 43
X0B	SPLICE PACK	{HD 0 E} Fig. 55: HD page 60 {AC 3 C} Fig. 3: AC page 8 {DP 2 E} Fig. 33: DP page 38 {IB 0 D} Fig. 60: IB page 65 {DE 3 D} Fig. 30: DE page 35 {DE 3 D} Fig. 30: DE page 35 {IG 3 D} Fig. 65: IG page 70 {FE 0 D} Fig. 40: FE page 45 {FB 0 D} Fig. 37: FB page 42 {HE 3 E} Fig. 56: HE page 61
X0D	SPLICE PACK	{AA 0 D} Fig. 1: AA page 6 {HB 1 E} Fig. 53: HB page 58 {AC 3 B} Fig. 3: AC page 8 {GI 0 D} Fig. 49: GI page 54 {IB 1 D} Fig. 60: IB page 65 {JB 4 D} Fig. 67: JB page 72 {FB 3 D} Fig. 37: FB page 42 {EB 3 E} Fig. 35: EB page 40 {CU 0 D} Fig. 26: CU page 31 {CU 3 D} Fig. 26: CU page 31 {CU 2 D} Fig. 26: CU page 31

Component # and Description		Location
X0X	SPLICE PACK	{BA 2 E} Fig. 6: BA page 11 {IE 2 D} Fig. 63: IE page 68 {AC 0 B} Fig. 3: AC page 8 {XA 1 E} Fig. 74: XA page 79 {GI 3 E} Fig. 49: GI page 54 {DC 1 D} Fig. 28: DC page 33 {DC 0 D} Fig. 28: DC page 33 {JC 1 D} Fig. 68: JC page 73 {DD 0 E} Fig. 29: DD page 34 {BI 0 D} Fig. 14: BI page 19 {BK 1 D} Fig. 16: BK page 21 {CU 0 D} Fig. 26: CU page 31
X13	Connector, CTI configuration	{FE 0 C} Fig. 40: FE page 45
X14	ROAD RELAY CONNECTOR	{BH 0 C} Fig. 13: BH page 18
X17A	Auxiliary Connector 1	{NA 0 D} Fig. 73: NA page 78
X17B	Auxiliary Connector 2	{NA 1 D} Fig. 73: NA page 78
X17C	Auxiliary Connector 3	{NA 2 D} Fig. 73: NA page 78
X17CA	OPTION CONNECTOR A,CAB SIDE	{BG 3 C} Fig. 12: BG page 17
X17CB	OPTION CONNECTOR B,CAB SIDE	{BG 3 C} Fig. 12: BG page 17
X17FA	OPTION CONNECTOR A, CHASSIS SIDE	{BG 3 C} Fig. 12: BG page 17
X17FB	OPTION CONNECTOR B,CHASSIS SIDE	{BG 3 C} Fig. 12: BG page 17
X18A	Fusible Link	{AA 2 B} Fig. 1: AA page 6 {AB 4 A} Fig. 2: AB page 7
X18C	Fusible Link	{AC 1 C} Fig. 3: AC page 8
X18D	Fusible Link	{CB 2 C} Fig. 18: CB page 23
X18E	Fusible Link	{CB 2 C} Fig. 18: CB page 23
X19	RADIO CONNECTOR	{BH 4 B} Fig. 13: BH page 18
X20	MAIN CAB RADIO CONNECTOR	{BH 3 B} Fig. 13: BH page 18
X21	OPTION CONNECTOR SNOWPLOW LIGHTS	{GI 1 D} Fig. 49: GI page 54
X23	Connector, Interface V.A.L.	{BF 2 B} Fig. 11: BF page 16

Component # and Description		Location
X25	Connector, OEM Interface	{CI 0 C} Fig. 24: CI page 29
X284/196DR	SPLICE PACK	{AB 0 A} Fig. 2: AB page 7
X400	SPLICE PACK	{XA 0 B} Fig. 74: XA page 79
X401	SPLICE PACK	{XA 1 B} Fig. 74: XA page 79
X45	Receptacle Engine Heater 110V	{CA 2 B} Fig. 17: CA page 22
XE1	Stud, Engine Block	{AC 1 D} Fig. 3: AC page 8
XP1	POWER STUD	{AA 1 A} Fig. 1: AA page 6
XP2	POWER STUD	{AB 3 B} Fig. 2: AB page 7
Y02	Solenoid valve, differential lock, rear wheels	{FD 2 C} Fig. 39: FD page 44 {FD 1 C} Fig. 39: FD page 44
Y03A	Solenoid valve, differential lock, rear inter axle	{FD 3 C} Fig. 39: FD page 44 {FD 2 C} Fig. 39: FD page 44
Y05A	Solenoid valve, suspension dump	{FC 3 D} Fig. 38: FC page 43 {FC 1 D} Fig. 38: FC page 43
Y05B	Solenoid, Lift Axle 1	{FB 0 D} Fig. 37: FB page 42
Y05C	Solenoid, Lift Axle 2	{FB 1 D} Fig. 37: FB page 42
Y05D	Solenoid, Lift Axle 3	{FB 2 D} Fig. 37: FB page 42
Y05F	Solenoid Valve, 5th Wheel Slide	{FB 4 D} Fig. 37: FB page 42 {FC 2 D} Fig. 38: FC page 43
Y05G	Switch, Inside/Outside Air Cleaner	{CH 2 D} Fig. 23: CH page 28
Y11	Solenoid valve unit, ABS, lhs. front	{EA 1 B} Fig. 34: EA page 39
Y11A	Solenoid valve unit, ABS, lhs. front	{EA 1 B} Fig. 34: EA page 39
Y12	Solenoid valve unit, ABS, rhs. front	{EA 0 B} Fig. 34: EA page 39
Y12A	Solenoid valve unit, ABS, rhs. front	{EA 0 B} Fig. 34: EA page 39
Y13	Solenoid valve unit, ABS, lhs. rear	{EA 1 D} Fig. 34: EA page 39
Y14	Solenoid valve unit, ABS, rhs. rear	{EA 1 D} Fig. 34: EA page 39
Y15	Solenoid valve unit, ABS, lhs. 3:rd axle	{EA 3 D} Fig. 34: EA page 39

Component # and Description		Location
Y16	Solenoid valve unit, ABS, rhs. 3:rd axle	{EA 3 D} Fig. 34: EA page 39
Y17	Solenoid Retarder	{DE 2 D} Fig. 30: DE page 35
Y18A	SOLENOID VALVE SINGLE PTO	{DP 0 D} Fig. 33: DP page 38
Y18B	SOLENOID VALVE ENGINE MOUNTED DUAL PTO	{DP 4 D} Fig. 33: DP page 38
Y25A	Solenoid, Level Control Main Axles	{EB 1 B} Fig. 35: EB page 40
Y29A	Solenoid, Level Control Tag Axle	{EB 2 B} Fig. 35: EB page 40
Y33	Solenoid valves, UI (Unit Injector)	{CO 2 D} Fig. 25: CO page 30
Y34A	Control valve, EGR (Exhaust Gas Recirculation) (Including M19, B65)	{CO 1 B} Fig. 25: CO page 30
Y34B	Control valve, EGR (Exhaust Gas Recirculation) (Including M19, B65)	{CO 2 B} Fig. 25: CO page 30
Y35	Solenoid valve engine cooling fan	{CO 4 B} Fig. 25: CO page 30 {CC 1 C} Fig. 19: CC page 24 {CB 2 D} Fig. 18: CB page 23 {CI 0 B} Fig. 24: CI page 29
Y37	AVU (Air Valve Unit)	{CO 3 B} Fig. 25: CO page 30
Y42	Clutch, magnetic, air conditioning compressor	{HA 1 C} Fig. 52: HA page 57
Y50	Solenoid valve, PCU (Pneumatic Control Unit)	{FE 3 D} Fig. 40: FE page 45
Y51	Solenoid valve, Air dryer	{FA 3 C} Fig. 36: FA page 41
Y53	SOLENOID PACK, Ether Start	{CA 0 C} Fig. 17: CA page 22
Y57	Solenoid Valve, ACT	{EA 1 D} Fig. 34: EA page 39
Y61	Solenoid APCS	{CD 1 D} Fig. 20: CD page 25
Y62	Solenoid Accumulator	{DE 3 D} Fig. 30: DE page 35
Y72	Solenoid Valve, Airhorn	{GQ 3 C} Fig. 51: GQ page 56 {GQ 2 C} Fig. 51: GQ page 56
earth15_27	*opt*	{BH 0 E} Fig. 13: BH page 18
earth16_27	*opt*	{BJ 2 D} Fig. 15: BJ page 20
earth17_27	*opt*	{GC 4 E} Fig. 43: GC page 48

Component # and Description		Location
earth28_23	*opt*	{BF 2 E} Fig. 11: BF page 16
earth29_23	Stud, Bulkhead*	{CU 3 E} Fig. 26: CU page 31
MC141A:D	*opt*	{BJ 1 B} Fig. 15: BJ page 20 {ID 2 A} Fig. 62: ID page 67
MC141A:F	*opt*	{EB 4 B} Fig. 35: EB page 40
MC141A:G	*opt*	{NA 0 A} Fig. 73: NA page 78
MC141A:H	*opt*	{IG 3 A} Fig. 65: IG page 70
MC141A:J	*opt*	{BF 0 B} Fig. 11: BF page 16
MC141A:K	*opt*	{NA 1 A} Fig. 73: NA page 78
MC141A:L	*opt*	{NA 3 A} Fig. 73: NA page 78
MCFC:69	*opt*	{BJ 2 C} Fig. 15: BJ page 20
MCFC:94	*opt*	{BJ 2 C} Fig. 15: BJ page 20
TREN1:27	*opt*	{CC 1 D} Fig. 19: CC page 24
TREN1:36	*opt*	{CC 1 D} Fig. 19: CC page 24
X0X:D	*opt*	{IG 3 D} Fig. 65: IG page 70
X0X:M	*opt*	{BK 1 D} Fig. 16: BK page 21
XC1	Stud, Bulkhead Inside Cab	{AD 4 E} Fig. 4: AD page 9
XC1_1	Stud, Bulkhead Inside	{BE 0 E} Fig. 10: BE page 15
XC1_2	Stud, Bulkhead Interior	{JA 2 D} Fig. 66: JA page 71
XE1:5	Stud, Engine Block	{CU 3 E} Fig. 26: CU page 31
XE1_1	Stud, Engine Block	{CC 2 E} Fig. 19: CC page 24 {CI 4 E} Fig. 24: CI page 29
XE1_2	*opt*	{AC 1 C} Fig. 3: AC page 8
XE1_3	*opt*	{AC 1 D} Fig. 3: AC page 8
XE1_4	*opt*	{AC 1 C} Fig. 3: AC page 8
XE1_5	*opt*	{AC 1 D} Fig. 3: AC page 8
XF1	Stud, Framerrail	{AC 1 E} Fig. 3: AC page 8
XF1_1	Stud, Framerrail	{MA 1 E} Fig. 72: MA page 77

Component # and Description		Location
XF1_2	Stud, Framerrail	{MA 1 E} Fig. 72: MA page 77
XF1_3	*opt*	{AC 1 D} Fig. 3: AC page 8
XG2	Stud 2, Bulkhead	{AC 3 E} Fig. 3: AC page 8
XG2:1	Stud 2, Bulkhead	{EA 4 D} Fig. 34: EA page 39
XG3	Stud 3, Bulkhead	{AC 3 D} Fig. 3: AC page 8
XG3	Stud 3, Bulkhead	{AC 3 E} Fig. 3: AC page 8
XG3:1	Stud 3 Bulkhead	{HA 1 E} Fig. 52: HA page 57
XG3:2	Stud 3 Bulkhead	{AC 3 D} Fig. 3: AC page 8 {BG 0 D} Fig. 12: BG page 17
XG3:3	Stud 4, Bulkhead	{FE 2 E} Fig. 40: FE page 45
XG4	Stud 4, Bulkhead	{AC 3 D} Fig. 3: AC page 8
XG4	Stud 4, Bulkhead	{AC 3 E} Fig. 3: AC page 8
XG4:1	Stud 4, Bulkhead	{EB 0 E} Fig. 35: EB page 40
XG4:3	Stud 4, Bulkhead	{GI 1 E} Fig. 49: GI page 54
XG5	Stud 1, Bulkhead	{AC 3 D} Fig. 3: AC page 8
XG5	Stud 1, Bulkhead	{AC 3 E} Fig. 3: AC page 8
XG5:1	Stud 1, Bulkhead	{GD 0 D} Fig. 44: GD page 49
XG5:3	Stud 1, Bulkhead	{CE 0 D} Fig. 21: CE page 26 {CE 2 D} Fig. 21: CE page 26
XG6	Stud, Bulkhead	{AC 2 E} Fig. 3: AC page 8
XG6:1	*opt*	{AC 2 D} Fig. 3: AC page 8
XG7	Stud, Bulkhead	{AC 2 E} Fig. 3: AC page 8
XG7:1	Stud, Bulkhead	{HA 1 E} Fig. 52: HA page 57 {CA 1 D} Fig. 17: CA page 22
XG7:2	Stud, Bulkhead	{DP 0 E} Fig. 33: DP page 38



Component # and Description		Location
XG7:3	Stud, Bulkhead	{AC 2 D} Fig. 3: AC page 8
XG9	Stud, Behind Alt.	{CB 2 D} Fig. 18: CB page 23

## Reference List: Inline Connectors

Inline connectors are named by combining a set of harness abbreviations. The first abbreviation represents the feeding harness. In some cases, more than one connector is between two harnesses. In this case a number is added to the end of the abbreviation.

Example:

**MCSL2:3**      Main Cab and Sleeper Harness Inline, Connector 2, Pin 3

**MCSL4:C**      Main Cab and Sleeper Harness Inline, Connector 4, Pin C

Harness Abbreviations (Examples)			
NAME	HARNESS	NAME	HARNESS
AD	AIR DRIER	PL	SNOWPLOW OVERLAY
ALS	ALLISON SELECTOR - GEAR	PM	POWER MODULE
AR	AIR RESTRICTION JUMPER	PS	PREMIUM SOUND OVERLAY
AS	AUTOSHIFT	PTO	POWER TAKE-OFF
AT	ALLISON TRANSMISSION	QC	QUALCOMM
B	EXPANSION BLOCK	RA	REAR AXLE
BB	BODY BUILDER DASH OVERLAY	RAJ	REAR AXLE JUMPER
BOC	BACK OF CAB LAMP JUMPER	RF	ROOF SIGN
BP	BATTERY POWER - ENGINE	RFJ	ROOF SIGN JUMPER
CB	C.B. STUDS JUMPER	RH	REAR WALL HEADER
CE	CHASSIS EXTENSION	RJ	RADIO JUMPER
DL	DOOR - LEFT	RS	RADIO SHELF PREP.
DLR	DIFFERENTIAL LOCK	RW	REAR WALL
DR	DOOR - RIGHT	SK	SINK/FAUCET PUMP
DV	DRAIN VALVE HEATER	SL	SLEEPER
EB	ENGINE BRAKE JUMPER	SN	SHIFT KNOB
EN	ENGINE	SP	SPEAKER JUMPER
FA	FRONT ANTENNA	SPJ	SOLENOID PACK JUMPER
FC	FRONT CHASSIS	SPO	SNOWPLOW OPTION
FCJ	FUEL COOLER JUMPER	SS	SIDE SENSOR (VORAD)
FD	FOG AND DRIVING LAMPS	SSO	SPEED SIGNAL OPTION (NO HARNESS)
FRC	FUSE AND RELAY CENTER	SV	SUNVISOR
HL	HEADLIGHT	SW	STEERING WHEEL SWITCHES
IJ	ICON JUMPER	TBJ	TABLE LAMP JUMPER
LA	LIFT AXLE OVERLAY	TBP	TRANSMISSION BATTERY POWER
LK	DOOR LOCK OVERLAY	TL	TAILLIGHT
MC	MAIN CAB	TR	TRANSMISSION
MI	MARKER INTERRUPT	TSJ	TEMP SWITCH JUMPER
MJ	MIRROR JUMPER	TT	TRANSMISSION TEMP
OB	OVERHEAD BUNK	VA	REAR WALL VALANCE
OCP	OVERCRANK PROTECTION	VE	VORAD/Electronic Control Suspension System
OF	OVERHEAD FRONT		
OPT	OPTION CONNECTOR IN DASH		

Harness Abbreviations (Examples)			
NAME	HARNESS	NAME	HARNESS
PHC	PREHEATER, CUMMINS		
PHV	PREHEATER, VOLVO		
PJ	PREHEAT JUMPER		

## List of Connectors

Inline Connector	Location		
APEN:1	{CD 2 D} Fig. 20: CD page 25	CETE:C	{GF 0 A} Fig. 46: GF page 51
APEN:2	{CD 2 D} Fig. 20: CD page 25	CETE:D	{GF 0 A} Fig. 46: GF page 51
B1-1:1	{NA 1 D} Fig. 73: NA page 78	CETE:E	{GF 1 C} Fig. 46: GF page 51
B1-1:2	{NA 0 B} Fig. 73: NA page 78	CETL:A	{GF 3 C} Fig. 46: GF page 51
B1-2:1	{NA 2 D} Fig. 73: NA page 78		{GF 3 A} Fig. 46: GF page 51
B1-2:2	{NA 1 B} Fig. 73: NA page 78		{GF 1 B} Fig. 46: GF page 51
B1-3:1	{NA 3 D} Fig. 73: NA page 78		{GF 1 B} Fig. 46: GF page 51
B1-3:2	{NA 2 B} Fig. 73: NA page 78	CETL:B	{GF 2 C} Fig. 46: GF page 51
B1-4:1	{BJ 2 D} Fig. 15: BJ page 20		{GF 2 A} Fig. 46: GF page 51
B1-4:2	{BK 2 B} Fig. 16: BK page 21		{GF 0 B} Fig. 46: GF page 51
B1-5:2	{BF 1 B} Fig. 11: BF page 16	CETL:C	{GF 0 B} Fig. 46: GF page 51
B1-6:1	{BF 2 D} Fig. 11: BF page 16		{GF 2 C} Fig. 46: GF page 51
B1-6:2	{BH 0 B} Fig. 13: BH page 18		{GF 2 A} Fig. 46: GF page 51
B2:B2-1_2	{BH 1 B} Fig. 13: BH page 18		{GF 0 B} Fig. 46: GF page 51
B2:B2-2_2	{BH 1 B} Fig. 13: BH page 18		{GF 0 B} Fig. 46: GF page 51
B2:B2-3_1	{AC 3 C} Fig. 3: AC page 8		{GF 2 C} Fig. 46: GF page 51
B2:B2-3_2	{AB 4 E} Fig. 2: AB page 7		{GF 2 A} Fig. 46: GF page 51
B2:B2-5_2	{GC 2 B} Fig. 43: GC page 48		{GF 0 B} Fig. 46: GF page 51
	{BK 2 B} Fig. 16: BK page 21	CETL:D	{GF 3 C} Fig. 46: GF page 51
B2-1:2	{BH 1 B} Fig. 13: BH page 18		{GF 3 A} Fig. 46: GF page 51
B2-2:1	{BH 0 D} Fig. 13: BH page 18		{GF 1 B} Fig. 46: GF page 51
B2-2:2	{BF 1 B} Fig. 11: BF page 16		{GF 1 B} Fig. 46: GF page 51
	{BH 1 B} Fig. 13: BH page 18		{GF 1 B} Fig. 46: GF page 51
B2-5:1	{GC 4 D} Fig. 43: GC page 48	CETL:E	{GF 4 E} Fig. 46: GF page 51
B2-5:2	{GC 2 B} Fig. 43: GC page 48		{GF 3 C} Fig. 46: GF page 51
	{BK 2 B} Fig. 16: BK page 21		{GF 1 C} Fig. 46: GF page 51
B3:R15_30	{DF 1 C} Fig. 31: DF page 36	DVAD:A	{FA 1 D} Fig. 36: FA page 41
B3:R15_85	{DF 1 B} Fig. 31: DF page 36	DVAD:B	{FA 1 B} Fig. 36: FA page 41
B3:R15_86	{DF 1 C} Fig. 31: DF page 36	DVDV:A	{FA 1 C} Fig. 36: FA page 41
B3:R15_87	{DF 1 B} Fig. 31: DF page 36	DVDV:B	{FA 1 B} Fig. 36: FA page 41
B3:R16_30	{BA 3 B} Fig. 6: BA page 11	ENEN1:A	{AD 4 D} Fig. 4: AD page 9
B3:R16_85	{BA 3 C} Fig. 6: BA page 11	ENEN1:B	{AD 4 D} Fig. 4: AD page 9
B3:R16_86	{BA 3 B} Fig. 6: BA page 11	ENFS:A	{CC 1 C} Fig. 19: CC page 24
B3:R16_87	{BA 3 C} Fig. 6: BA page 11		{CI 0 C} Fig. 24: CI page 29
B3:R17_30	{BA 3 B} Fig. 6: BA page 11	ENFS:B	{CC 1 C} Fig. 19: CC page 24
B3:R17_85	{BA 3 B} Fig. 6: BA page 11		{CI 0 C} Fig. 24: CI page 29
B3:R17_86	{BA 3 B} Fig. 6: BA page 11	ENOC:P:A	{AD 4 C} Fig. 4: AD page 9
B3:R17_87	{BA 3 B} Fig. 6: BA page 11		{AD 3 C} Fig. 4: AD page 9
B3:R18_30	{DF 2 C} Fig. 31: DF page 36	ENOC:P:B	{AD 4 D} Fig. 4: AD page 9
B3:R18_85	{DF 2 B} Fig. 31: DF page 36		{AD 3 D} Fig. 4: AD page 9
B3:R18_86	{DF 2 C} Fig. 31: DF page 36	FCABS:1	{EA 0 B} Fig. 34: EA page 39
B3:R18_87	{DF 2 B} Fig. 31: DF page 36	FCABS:2	{EA 0 B} Fig. 34: EA page 39
CERAJ1:A	{BD 2 B} Fig. 9: BD page 14	FCABS:3	{EA 0 B} Fig. 34: EA page 39
CERAJ1:B	{BD 2 C} Fig. 9: BD page 14	FCABS:1:1	{EA 1 B} Fig. 34: EA page 39
CERAJ1:C	{BC 3 B} Fig. 8: BC page 13	FCABS:1:2	{EA 1 B} Fig. 34: EA page 39
CERAJ2:A	{BD 2 B} Fig. 9: BD page 14	FCAD:A	{FA 3 D} Fig. 36: FA page 41
CERAJ2:B	{BD 3 C} Fig. 9: BD page 14		{FA 2 D} Fig. 36: FA page 41
CERAJ2:C	{BC 3 B} Fig. 8: BC page 13		{FA 0 D} Fig. 36: FA page 41
CETE:A	{GF 2 A} Fig. 46: GF page 51	FCAD:B	{FA 3 B} Fig. 36: FA page 41
CETE:B	{GF 0 A} Fig. 46: GF page 51		{FA 2 B} Fig. 36: FA page 41
			{FA 0 B} Fig. 36: FA page 41
		FCAL:A	{MA 1 C} Fig. 72: MA page 77
		FCAL:B	{MA 1 B} Fig. 72: MA page 77
		FCAR:A	{BD 1 C} Fig. 9: BD page 14
		FCAR:B	{BD 1 B} Fig. 9: BD page 14

<b>FCCE:A</b>	{GF 1 C} Fig. 46: GF page 51	<b>FCHL:B</b>	{GD 1 B} Fig. 44: GD page 49
	{GF 1 A} Fig. 46: GF page 51		{GD 4 B} Fig. 44: GD page 49
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<b>SP817_6</b>	{DB 3 D} Fig. 27: DB page 32	<b>XE10</b>	{CO 3 B} Fig. 25: CO page 30
		<b>XE11</b>	{CO 3 C} Fig. 25: CO page 30



<b>XE13</b>	{CO 0 D} Fig. 25: CO page 30	<b>XE28</b>	{CO 3 D} Fig. 25: CO page 30
<b>XE14</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE29</b>	{CO 3 D} Fig. 25: CO page 30
<b>XE15</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE30</b>	{CO 3 D} Fig. 25: CO page 30
<b>XE16</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE31</b>	{CO 3 D} Fig. 25: CO page 30
<b>XE17</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE32</b>	{CO 4 D} Fig. 25: CO page 30
<b>XE18</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE33</b>	{CO 4 D} Fig. 25: CO page 30
<b>XE19</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE34</b>	{CO 3 D} Fig. 25: CO page 30
<b>XE20</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE35</b>	{CO 3 D} Fig. 25: CO page 30
<b>XE21</b>	{CO 3 D} Fig. 25: CO page 30	<b>XE39</b>	{CO 3 B} Fig. 25: CO page 30
<b>XE22</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE40</b>	{CO 3 C} Fig. 25: CO page 30
<b>XE23</b>	{CO 2 D} Fig. 25: CO page 30	<b>XE41</b>	{CO 3 B} Fig. 25: CO page 30
<b>XE26</b>	{CO 3 D} Fig. 25: CO page 30	<b>XE42</b>	{CO 0 D} Fig. 25: CO page 30
<b>XE27</b>	{CO 3 D} Fig. 25: CO page 30		

# Glossary

AD	Air Dryer	FC	Front Chassis
ABS .....	Antilock brake system	FD	Fog and Driving Lamps
AL	Additional Lighting	FRC	Fuse and Relay Center
ALS	Allison Selector-Gear	FS	Fan Solenoid
AP	Actively Pressurized Cooling System	HL .....	Headlight
AR	Air Restriction Jumper	HT	Hood Tilt Switch
AS	Autoshift	LA	Lift Axle Overlay
AT	Allison Transmission	LCM .....	Light control module
ATC .....	Automatic temperature control	L1H1 .....	Day cab
AUXSW-6 .....	Wiring for six auxiliary switches for body building	L3H1 .....	Medium cab, VN430
AWD .....	All wheel drive	L4H2 .....	Long high cab, VN630
B	Expansion Block	L4H4	Long high cab, VN670
BB	Bodybuilder Dash Overlay	L5	Long high cab, VN780
BBM .....	Bodybuilder module	LECM	Living Environment Control Module (Sleeper Control Panel)
BBOX .....	Battery box	LF .....	Left front
BOC	Back of Cab Lamp Jumper	LHD .....	Left hand drive
CLU .....	Central locking unit	LH .....	Left hand side
CU-BAS .....	Basic version with stepper motor without air condition	LK	Door Lock Overlay
CU-ECC .....	Electronic controlled climate control air condition	LR .....	Left rear
CU-HEAT .....	Heater unit	MC	Main Cab
CU-MCC .....	Manual controlled climate control air condition	MECHTRAN .....	Mechanical transmission
CB	C. B. Studs Jumper	MI	Marker Interrupt
CE	Chassis Extension	MJ	Mirror Jumper
CTI	Central Tire Inflation	MO	Mirror Overlay
DL	Door, Left	M02	Washer Pump Motor Jumper
DLR	Differential Lock	MUF-HOR	Horizontal muffler
DR	Door, Right	OB	Overhead Bunk
DV	Drain Valve, Heater	OCP	Overcrank Protection
EB	Engine Brake Jumper	OF	Overhead Front
EBR-EPG	EPG (Exhaust Pressure Governor)	OPT	Optional Datalink
EBR-EXH	Exhaust Brake	PL	Snow Plow Overlay
EBR-VEB	Volvo Engine Brake	PH-CAB .....	Cab parking heater
ELCE-CK .....	Electrical complete kit for body builder	PM	Power Module
EN .....	Engine	PS	Premium Sound Overlay
FA	Front Antenna (Vorad)	PTO .....	Power take off
		PW	Power Window
		QC	Qualcomm
		RA	Rear axle
		RAJ	Rear axle jumper

RCU .....	Remote control unit	STWPOS-R .....	Steering wheel position right hand side
RF .....	Roof sign	SV	Sunvisor
RFJ	Roof sign jumper	SW	Steering wheel switches overlay
RH .....	Rear wall header	SWM .....	Steering wheel module
RJ	Radio jumper	TBJ	Table lamp jumper
RR .....	Right rear	TBP	Transmission battery power
RS	Radio shelf prep.	TE	Tail light extension
RSO	Roof sign overlay	TL	Tail light
RW	Rear wall	TLK	Touch lock overlay
SD	Smoke detector	TR	Transmission
SK	Sink/faucet pump	TS	Temp. A Start overlay
SL	Sleeper	US	Ultrashift
SN	Shift knob	VA	Rear wall valance
SPJ	Solenoid pack jumper	VE	Vorad/ECS overlays
SPO	Snow plow overhead	VECU .....	Vehicle electronic control unit
SR	Side repeater	VL or VAL	Volvo Link Satellite Communication System
SRS .....	Supplementary restraint system		
SS	Side sensor (Vorad)		
STWPOS-L .....	Steering wheel position left hand side		

# Wire Color Codes

BL .....	Blue
BN .....	Brown
GN .....	Green
GR .....	Grey
OR .....	Orange
P .....	Pink
R .....	Red
SB .....	Black
VO .....	Violet
W .....	White
Y .....	Yellow

**Note:** If a wire has two colors, it is written like the following example: Y/R = Yellow/Red.









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