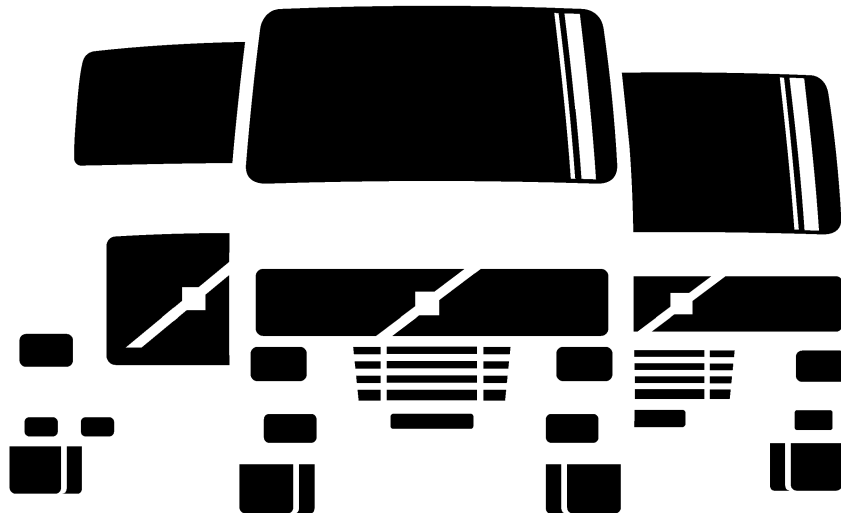


# Service Manual Trucks

Group **37**  
Release **03**

Wiring diagram  
FM, FH, NH12 VERSION2  
FM, FH CHID A622782–  
FM, FH CHID B433164–



# Foreword

The descriptions and service procedures contained in this manual are based on designs and methods studies carried out up to September 06.

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 judged 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 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 V.S.T.

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 Truck Corporation

Göteborg, Sweden

**Order number: 20177407**

**Repl: Service Manual Group 37 TSP20176779**

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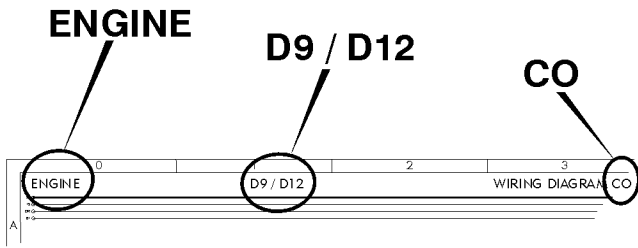
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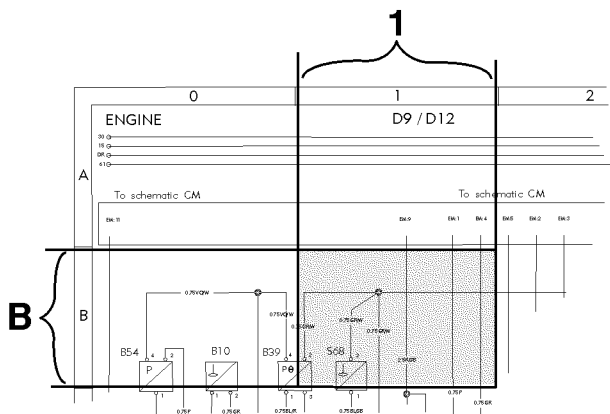
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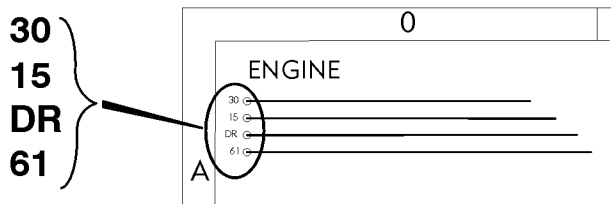
# Example of wiring diagram



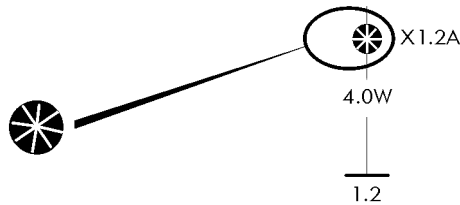
Component wiring diagram title, variant/subtitle and symbol.



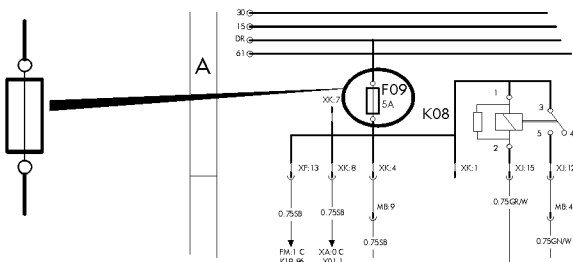
Coordinates (B 1).



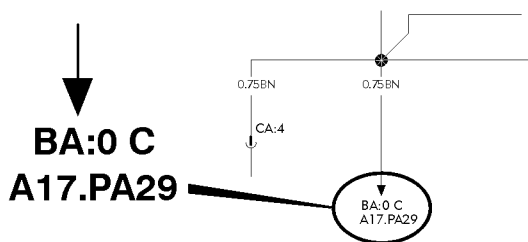
30 Voltage battery, kl.30.  
 15 Voltage with starter key in drive position, kl.15.  
 DR Voltage with starter key in drive position, preheat position and start position, kl.DR.  
 61 Voltage when alternator charges, kl.61.



Splice.

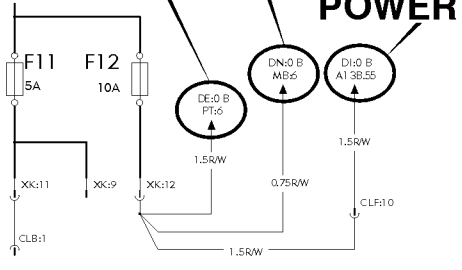


Fuse.

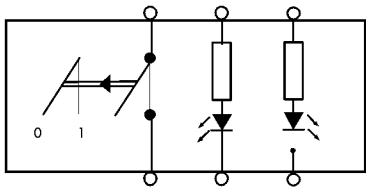


Reference arrow, for diagram BA, coordinates 0 C, component A17, connector PA pin 29.

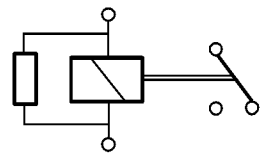
**GEARTRONIC**  
**I-SHIFT**  
**POWERTRONIC**



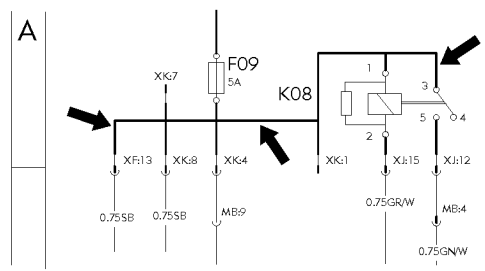
The maximum of variants are drawn, think about that all wires and components are not standard for all markets or vehicle models.



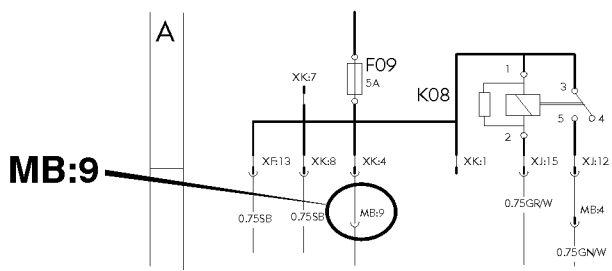
Switch.



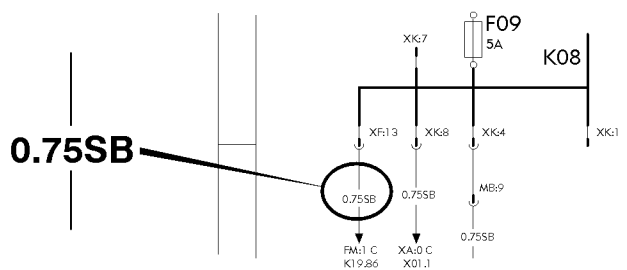
Relay.



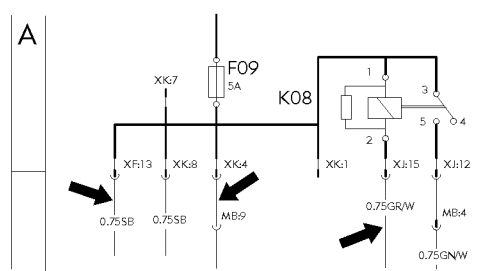
Conductor on circuit card.



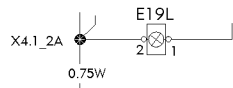
Connector MB terminal 9.



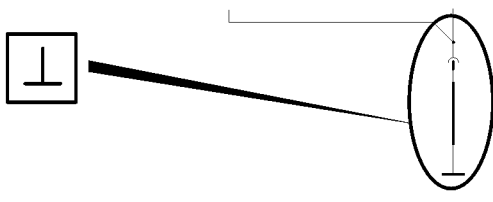
Wire area and colour.



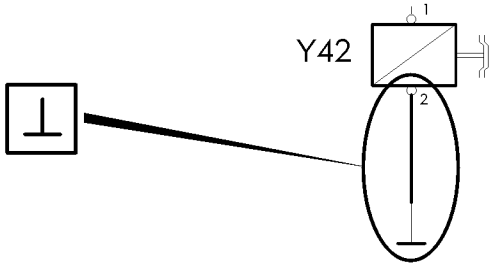
Thin lines, wires.



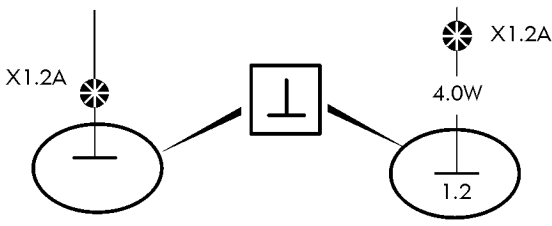
Earth connection point 4, earth connection 1 and wire 2.



Earth connection to circuit card.



Earth connection without wire.



Same splice can be drawn on several diagrams. The wire from the splice to the earth connection point will only be drawn and coded on one diagram. On the other diagrams will only the earth connection point be written besides the splice.

# Component wiring diagram index

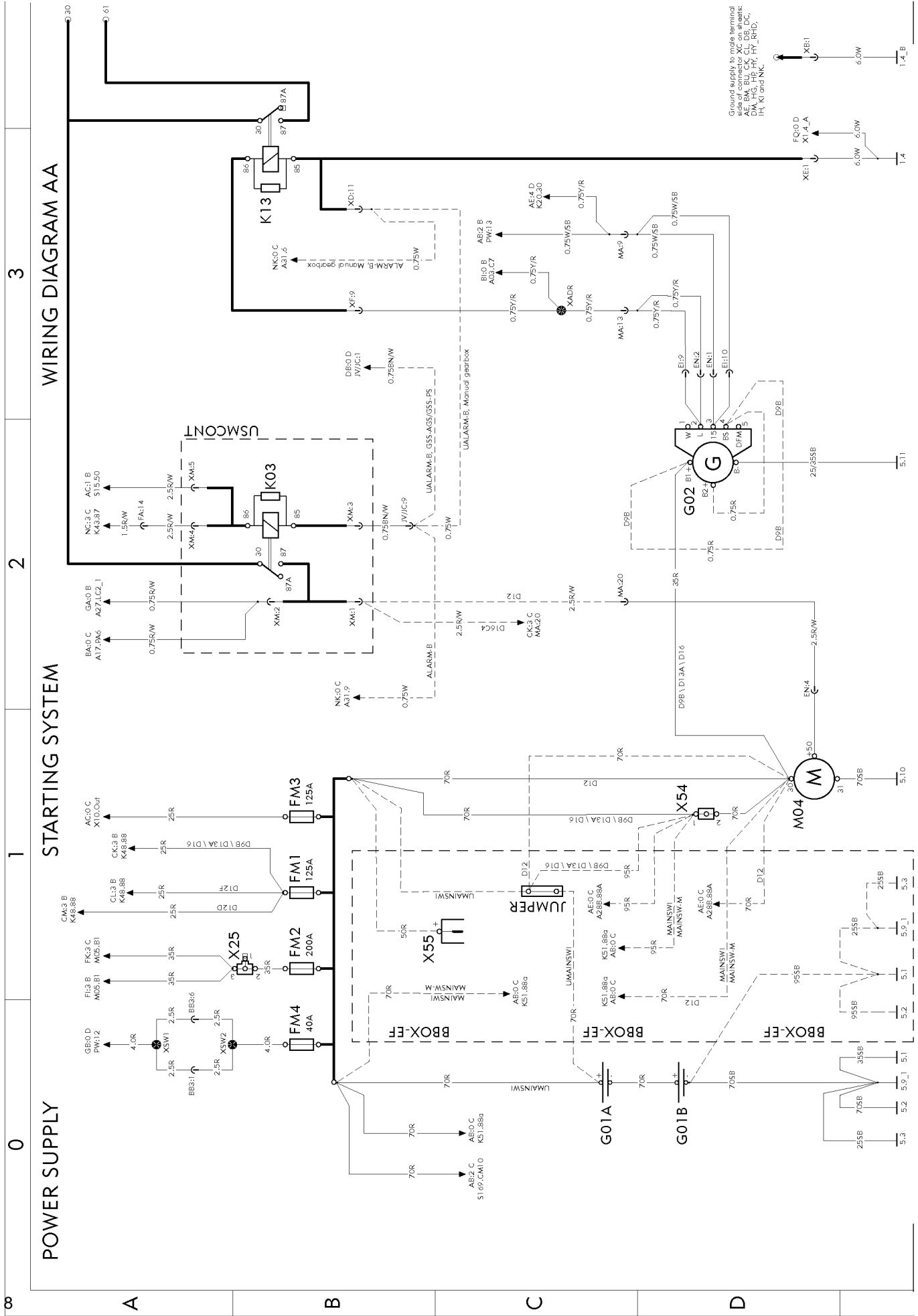
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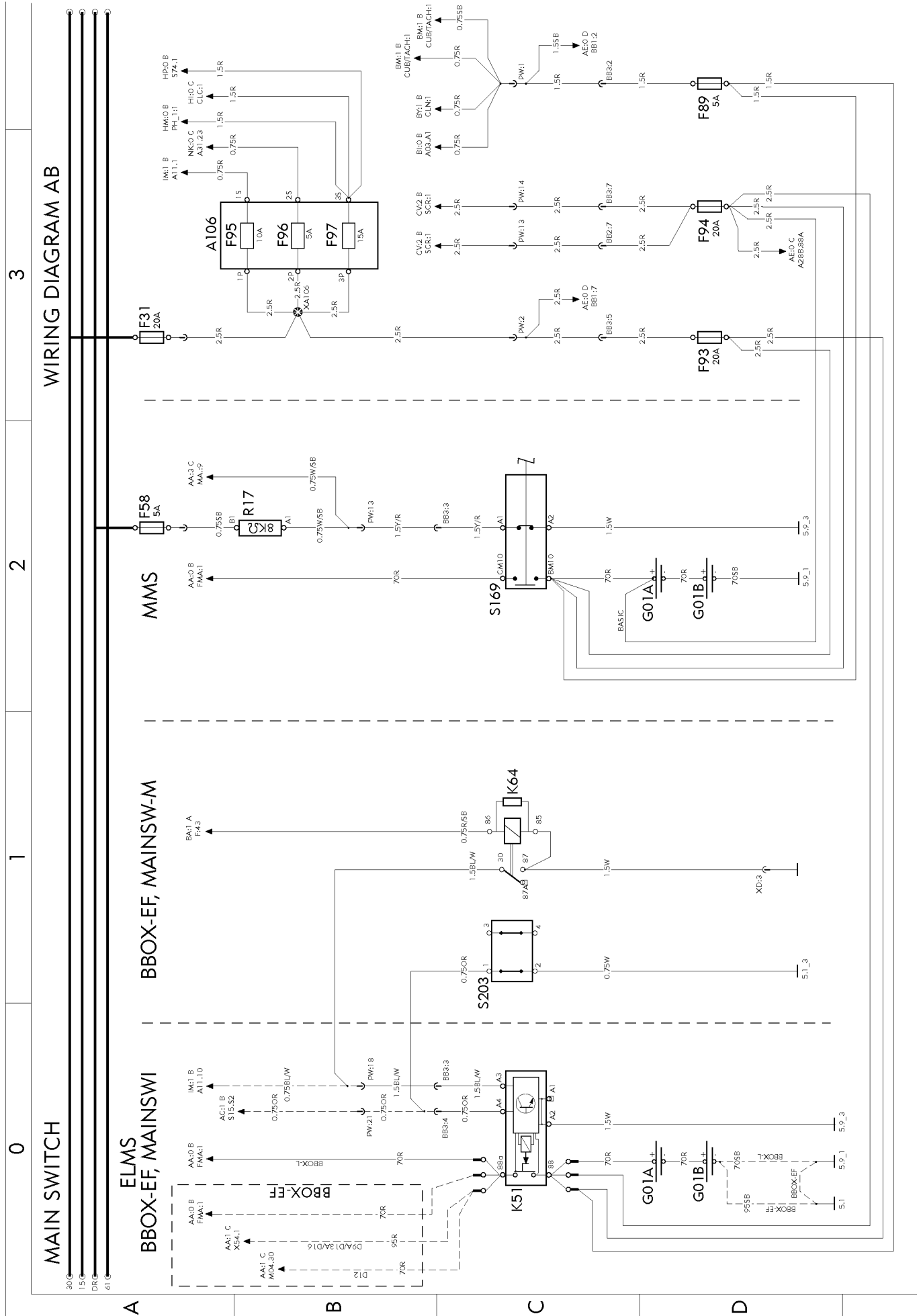
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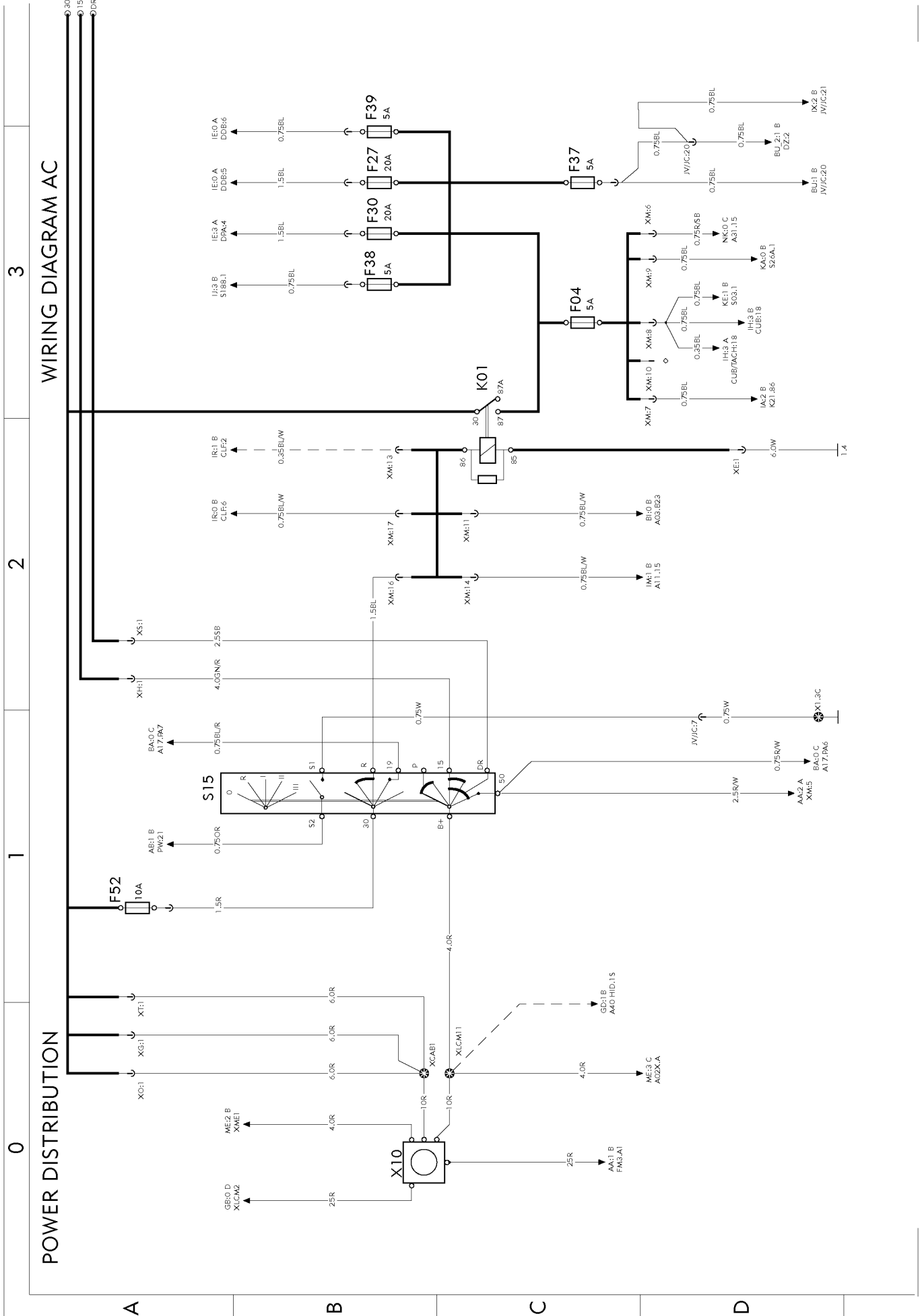


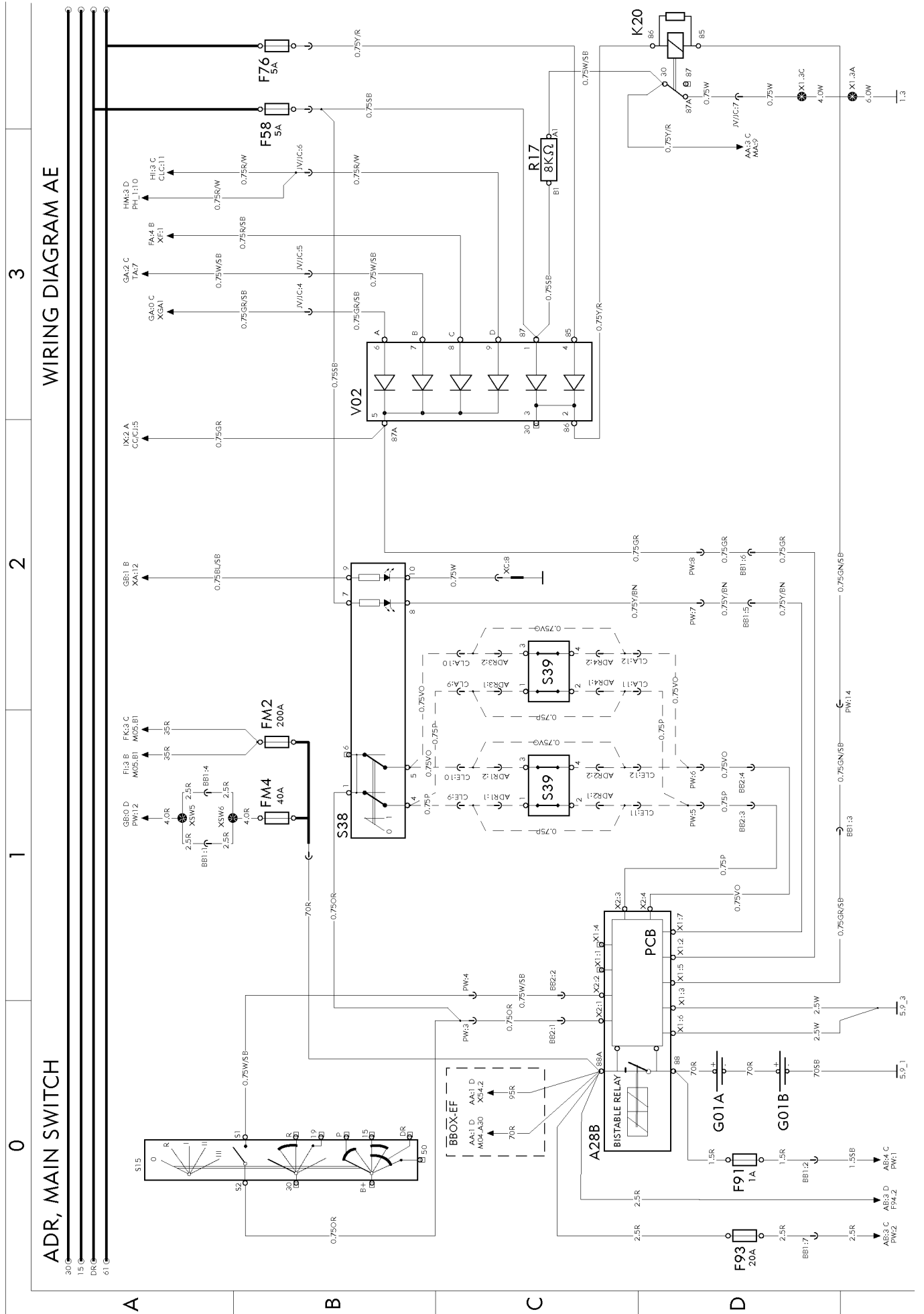
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# Component wiring diagrams









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2

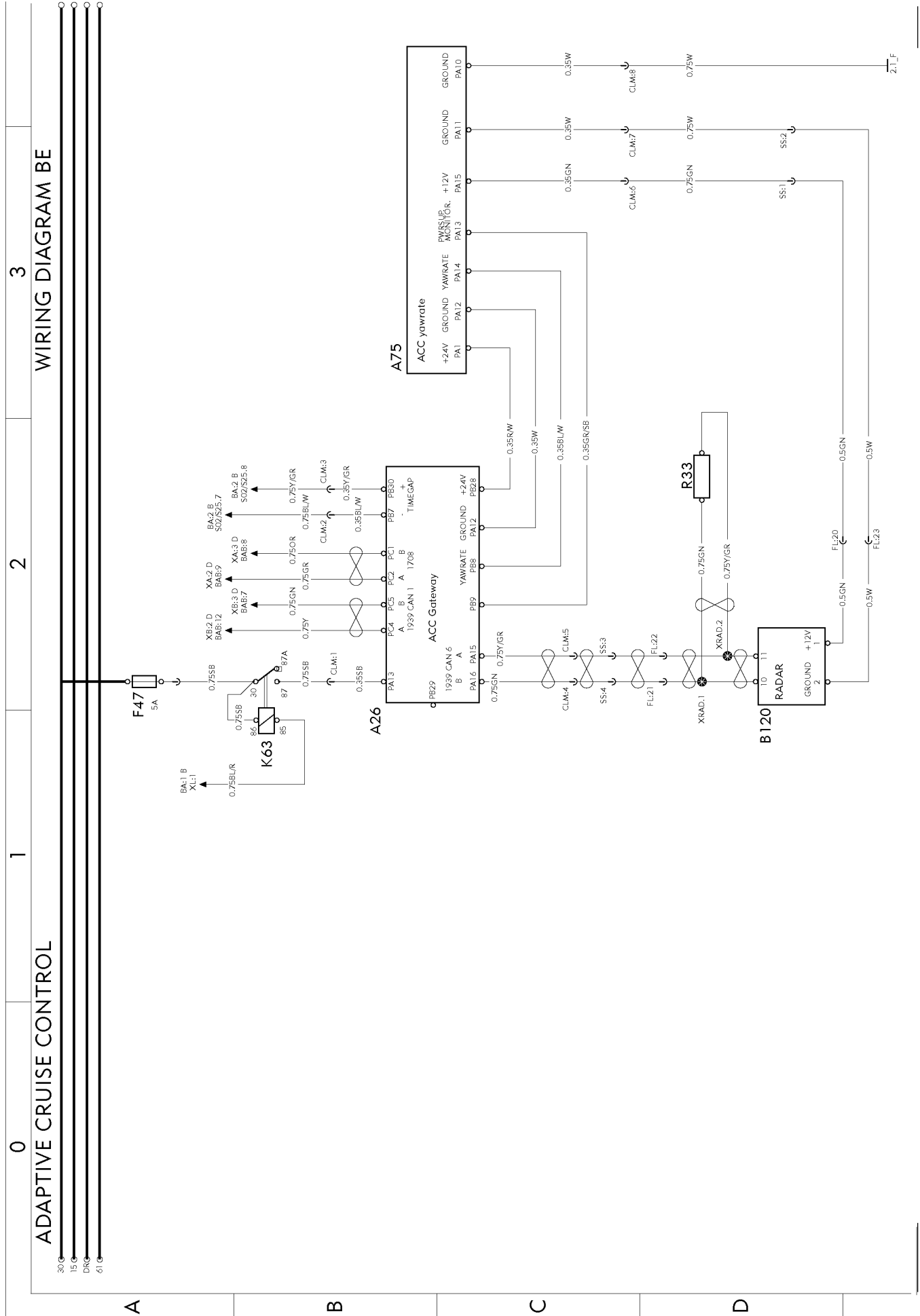
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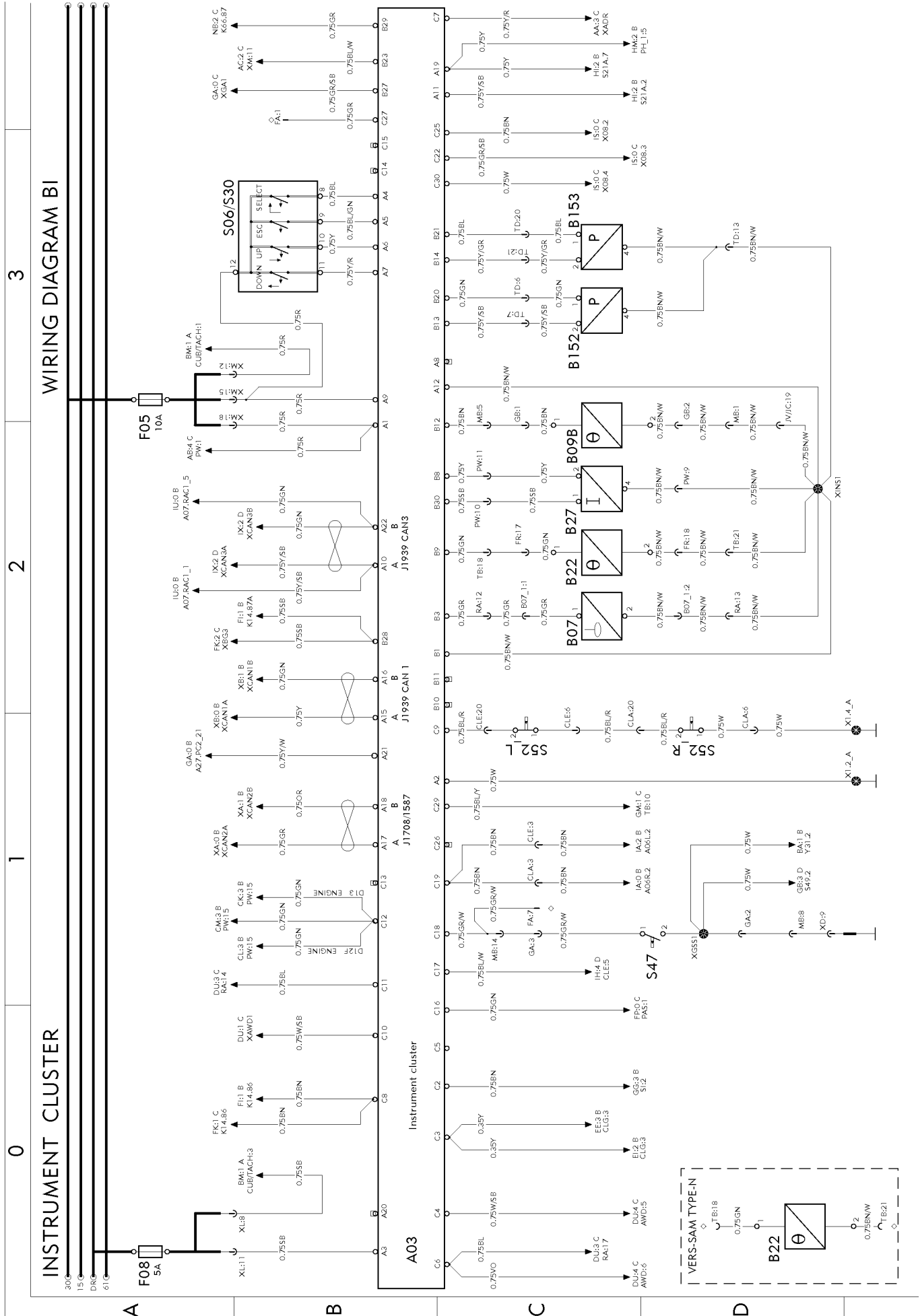
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WIRING DIAGRAM AE

ADR, MAIN SWITCH







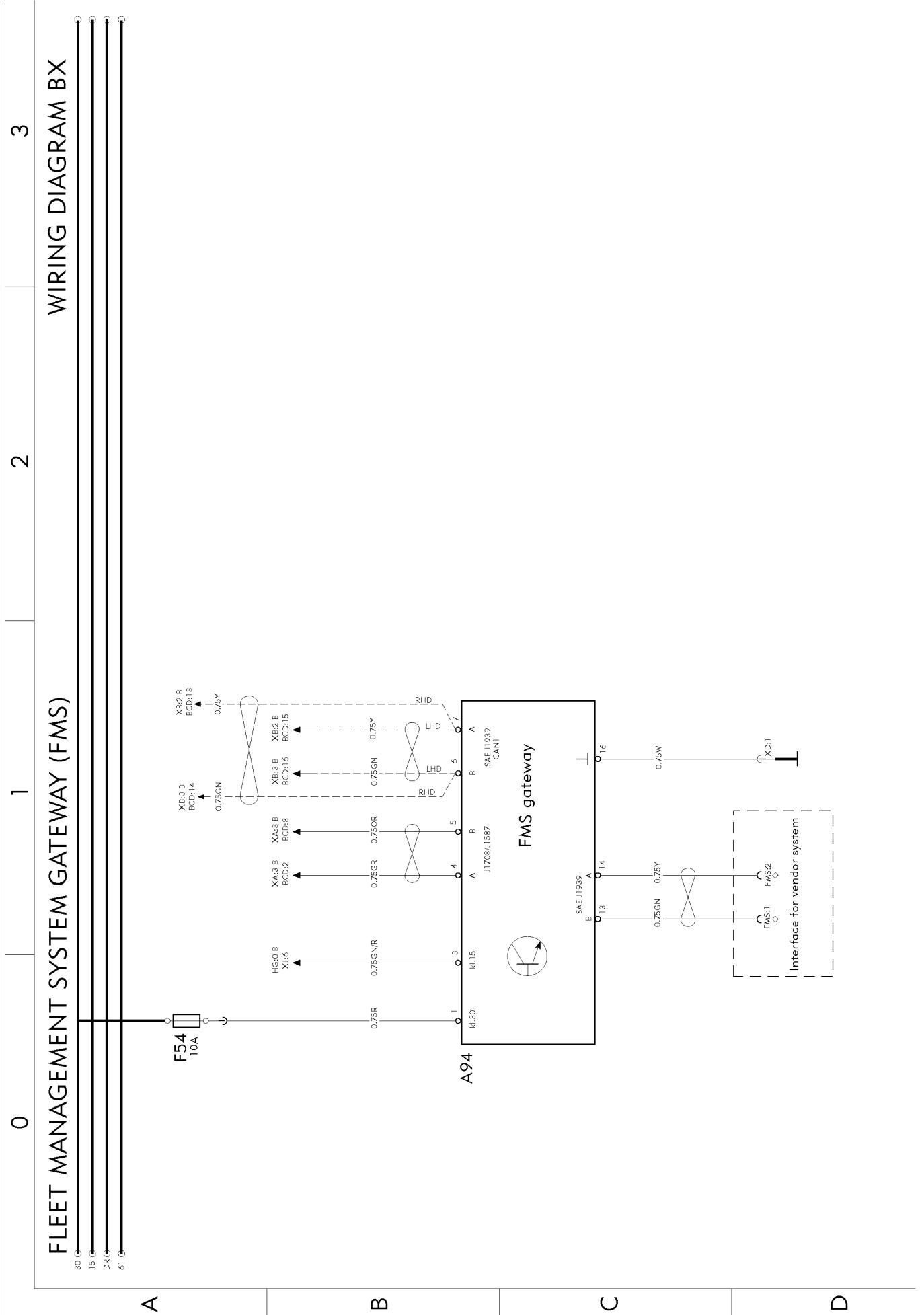




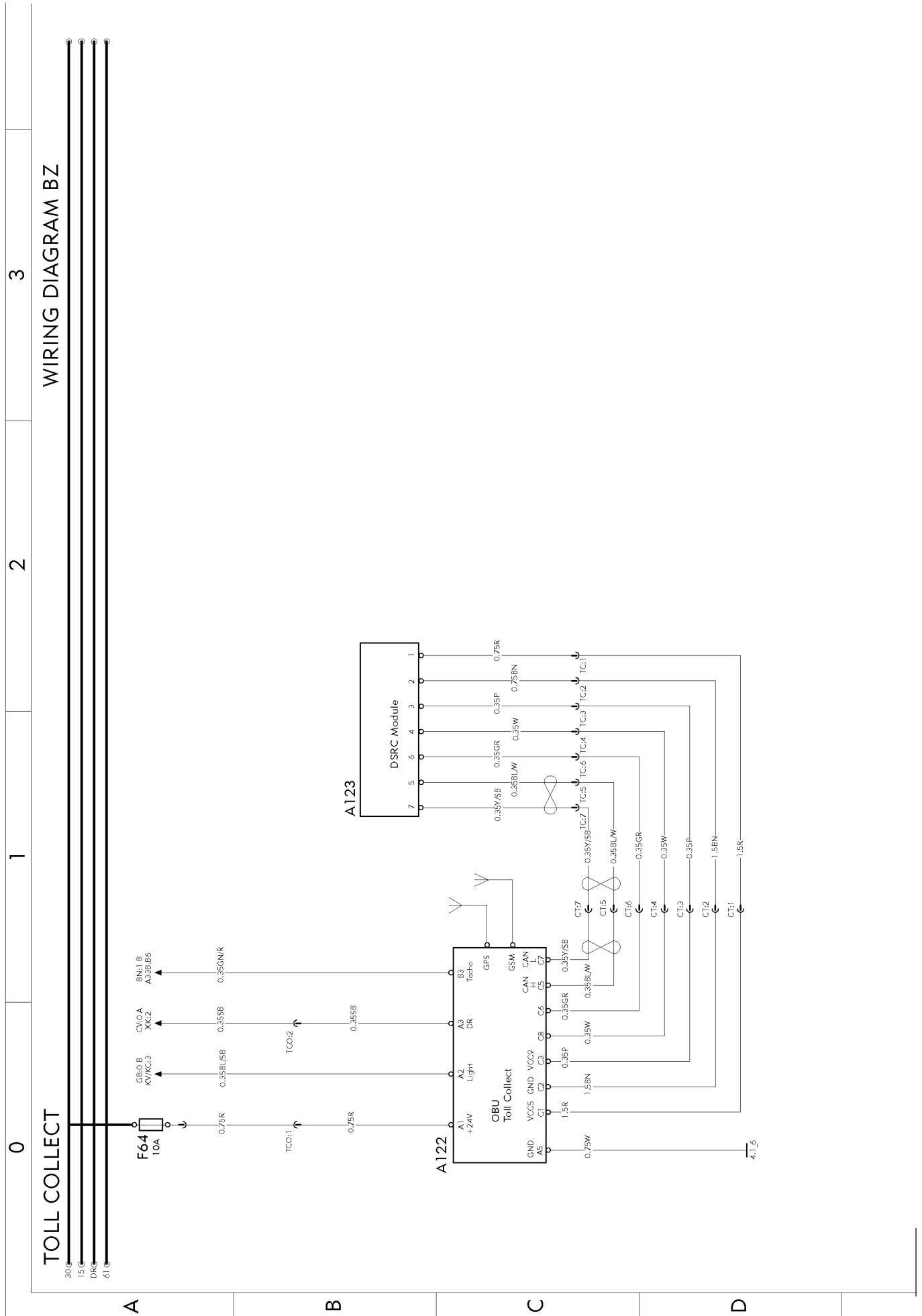


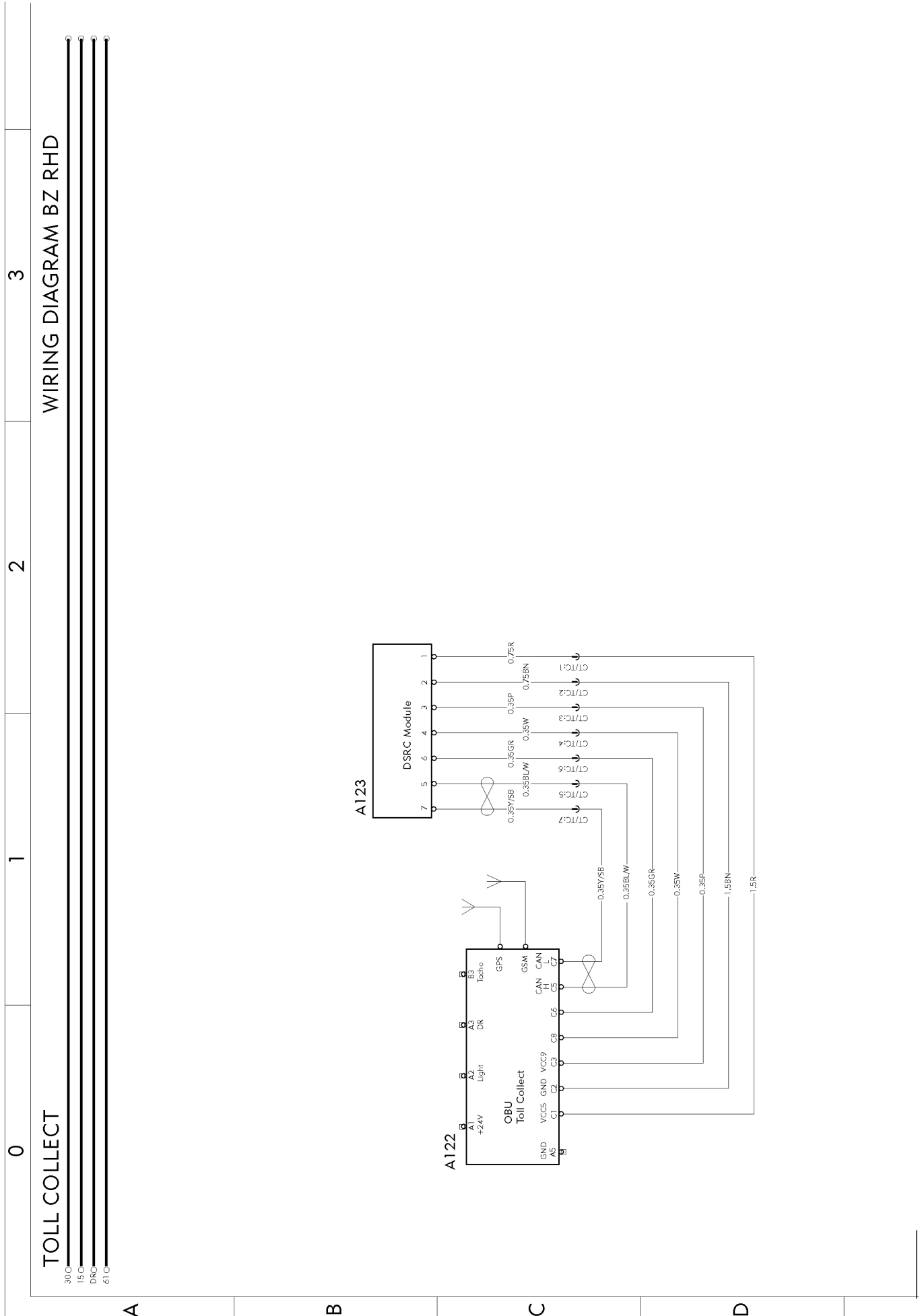




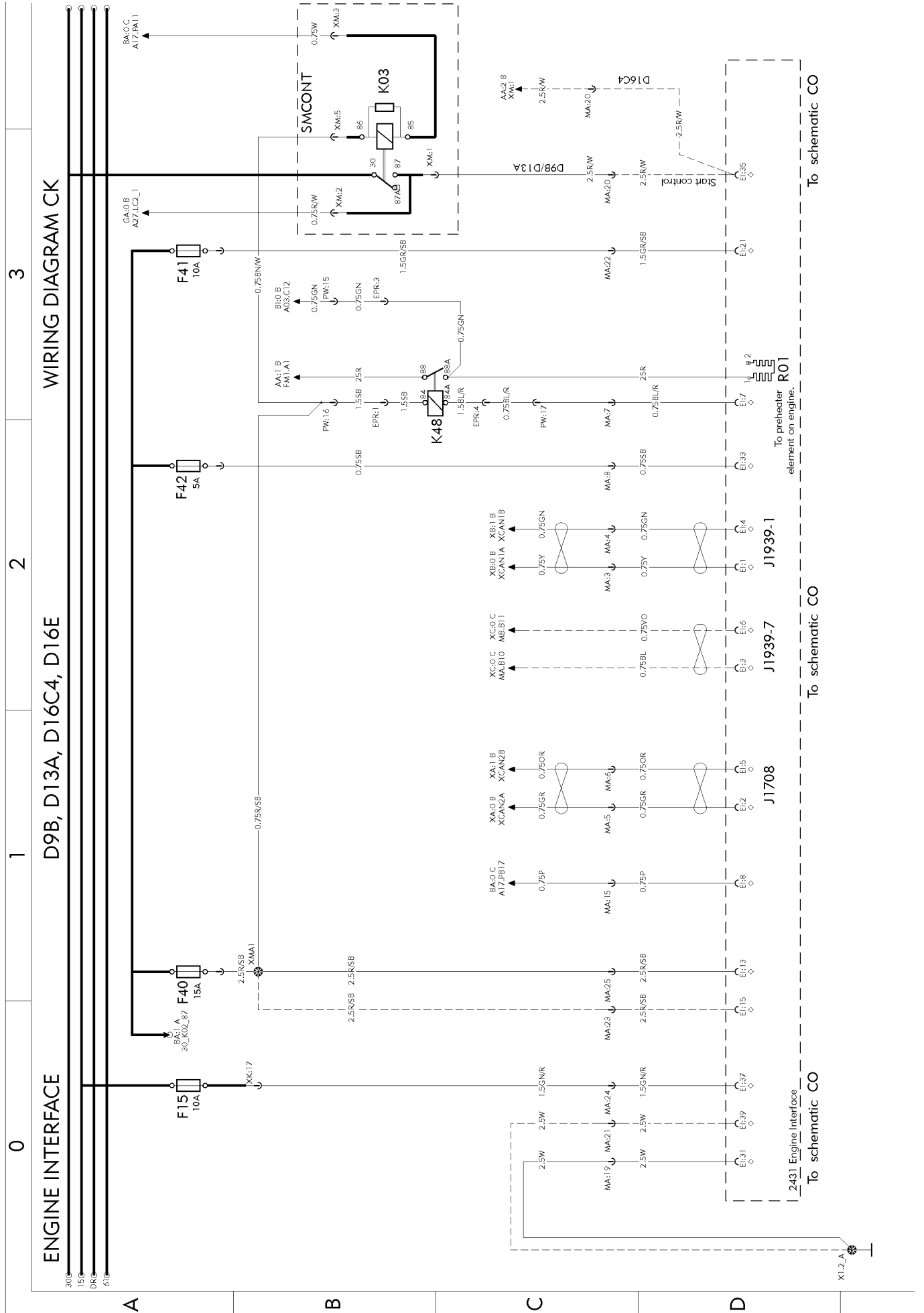




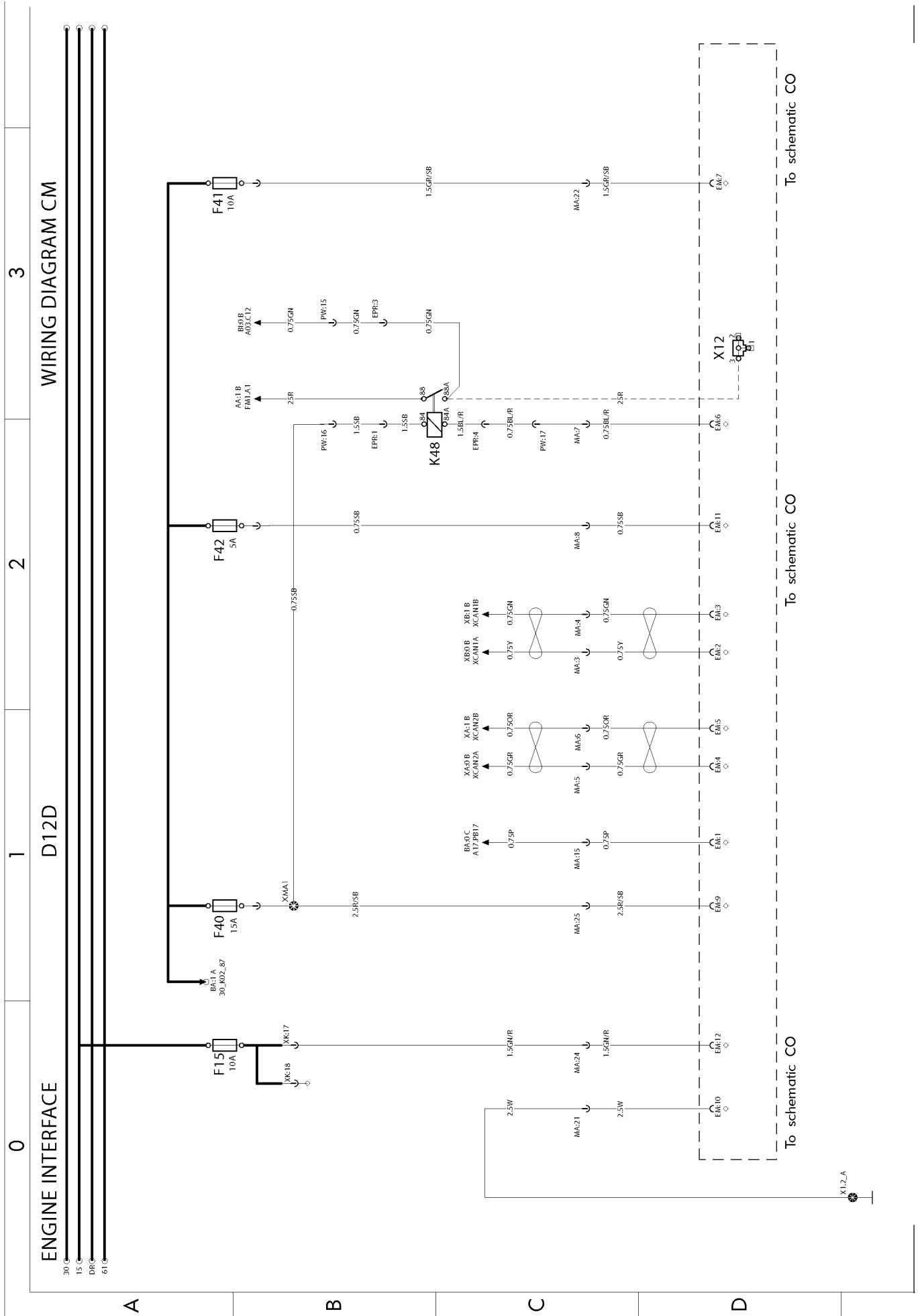














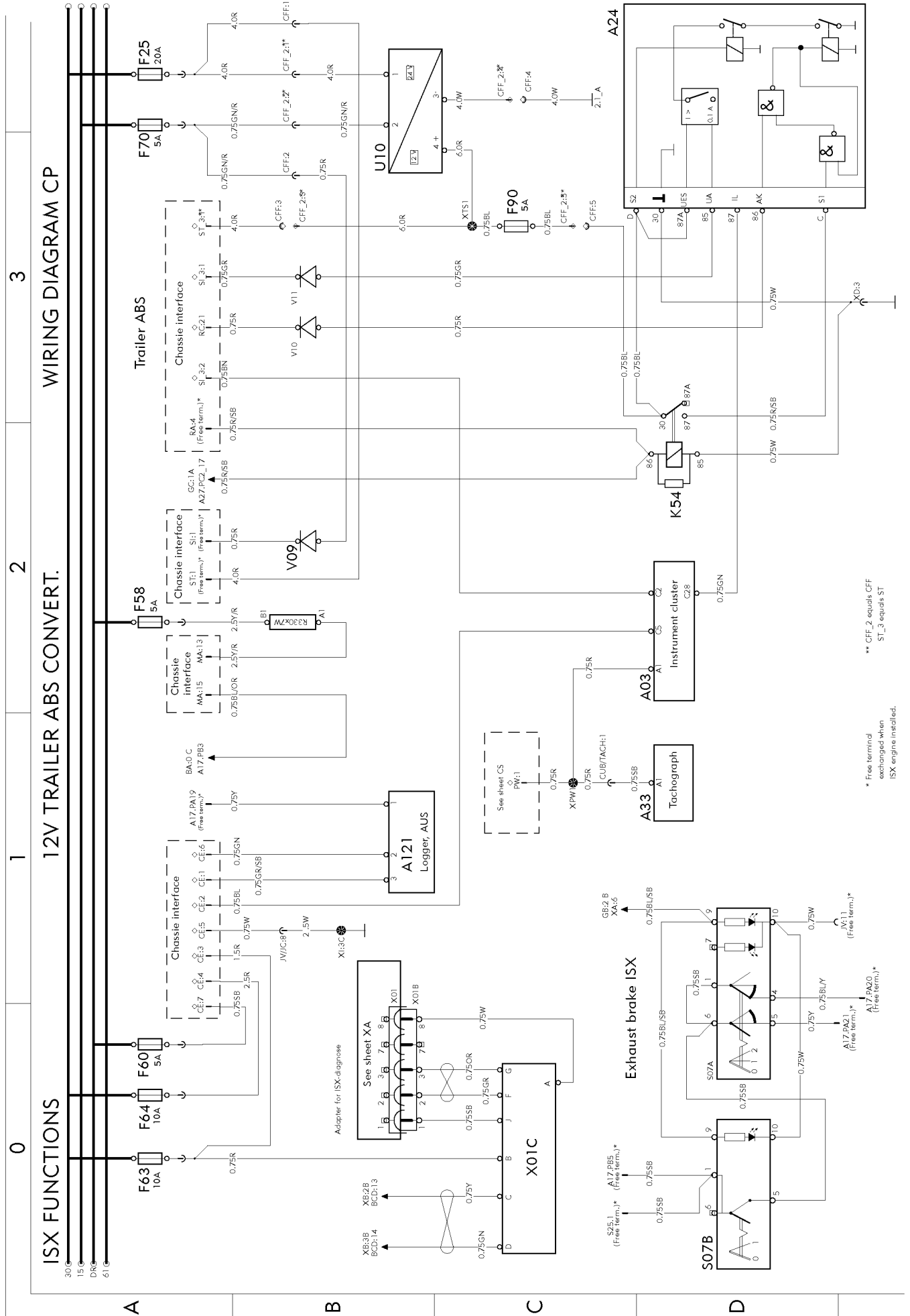


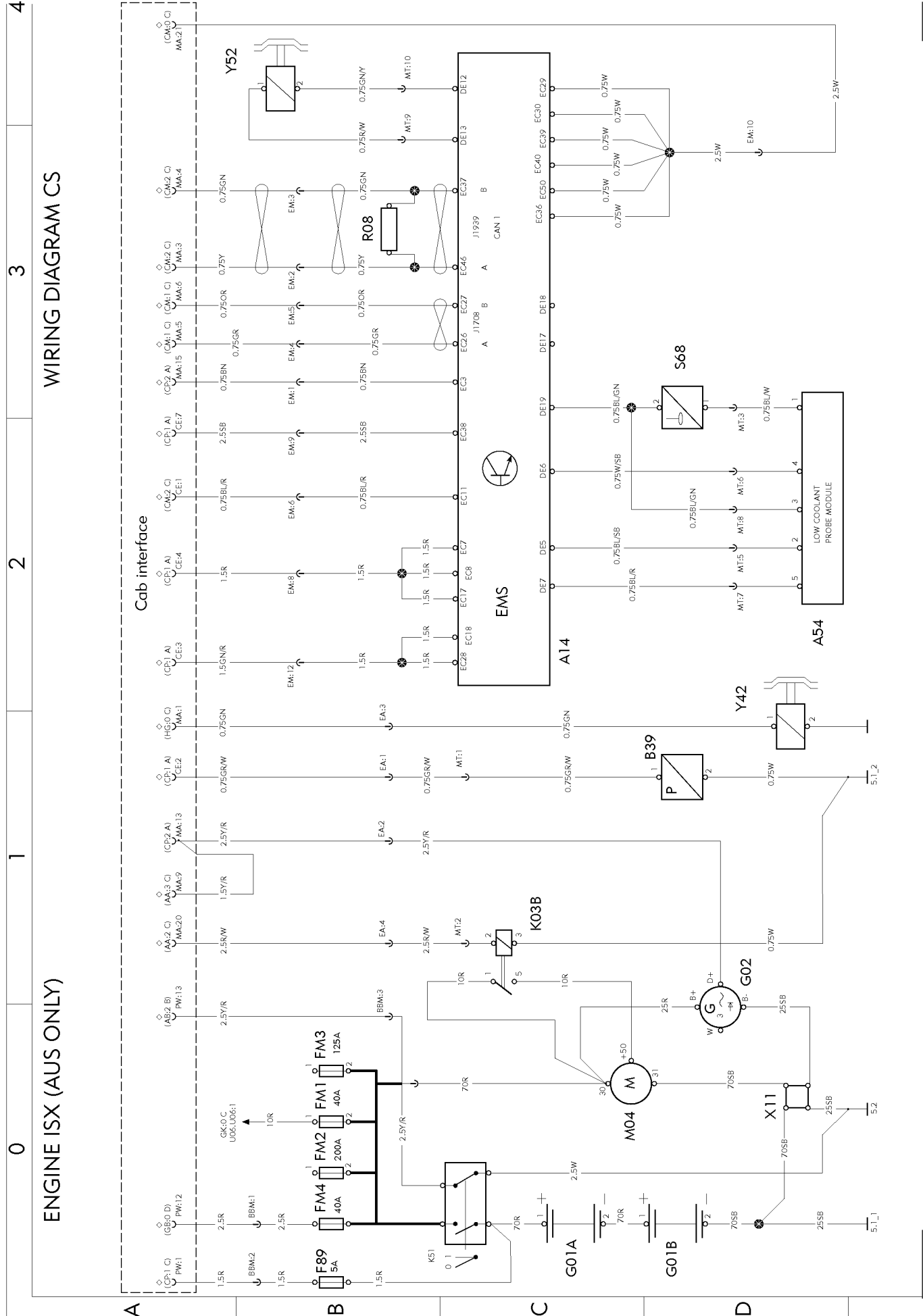






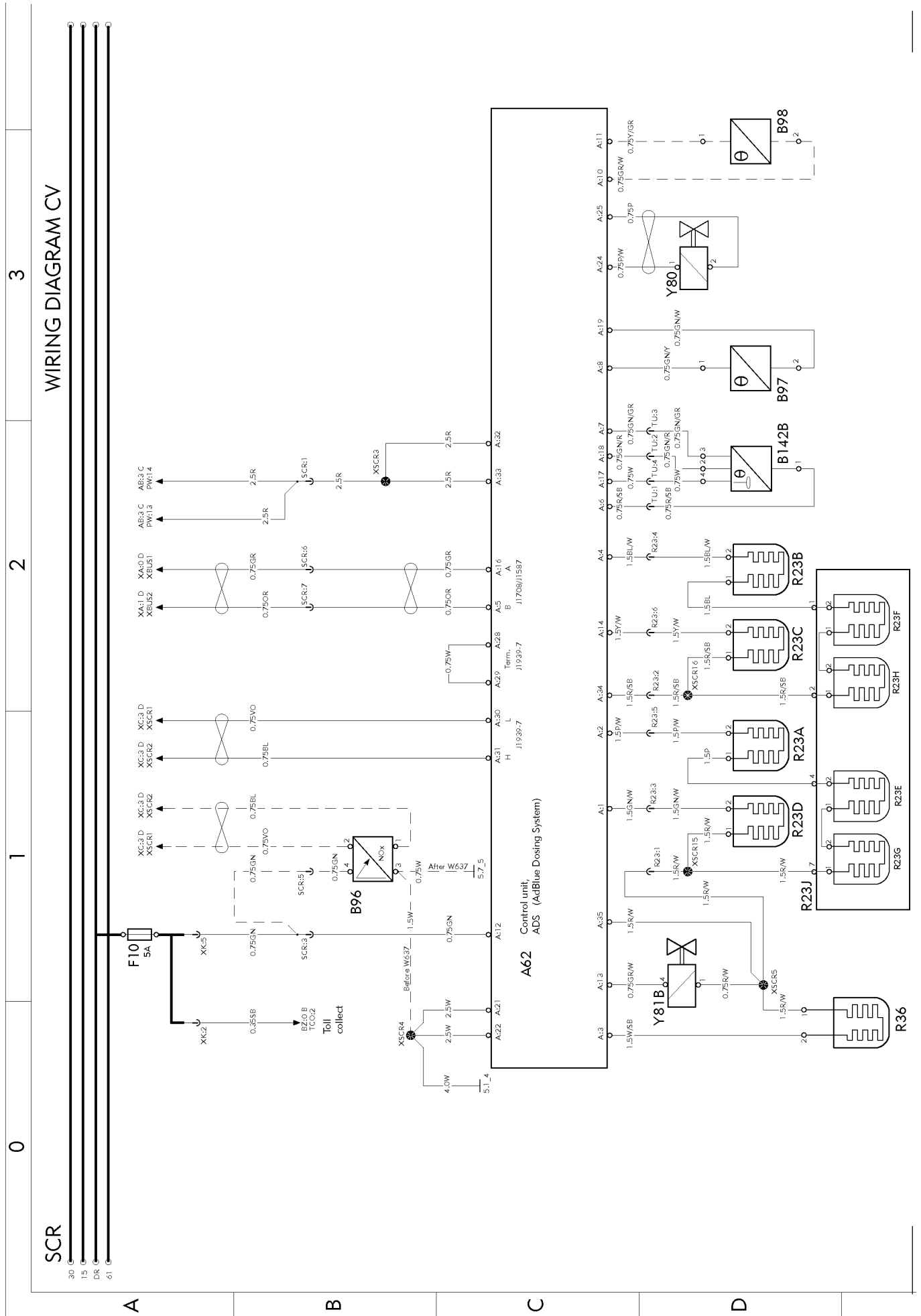






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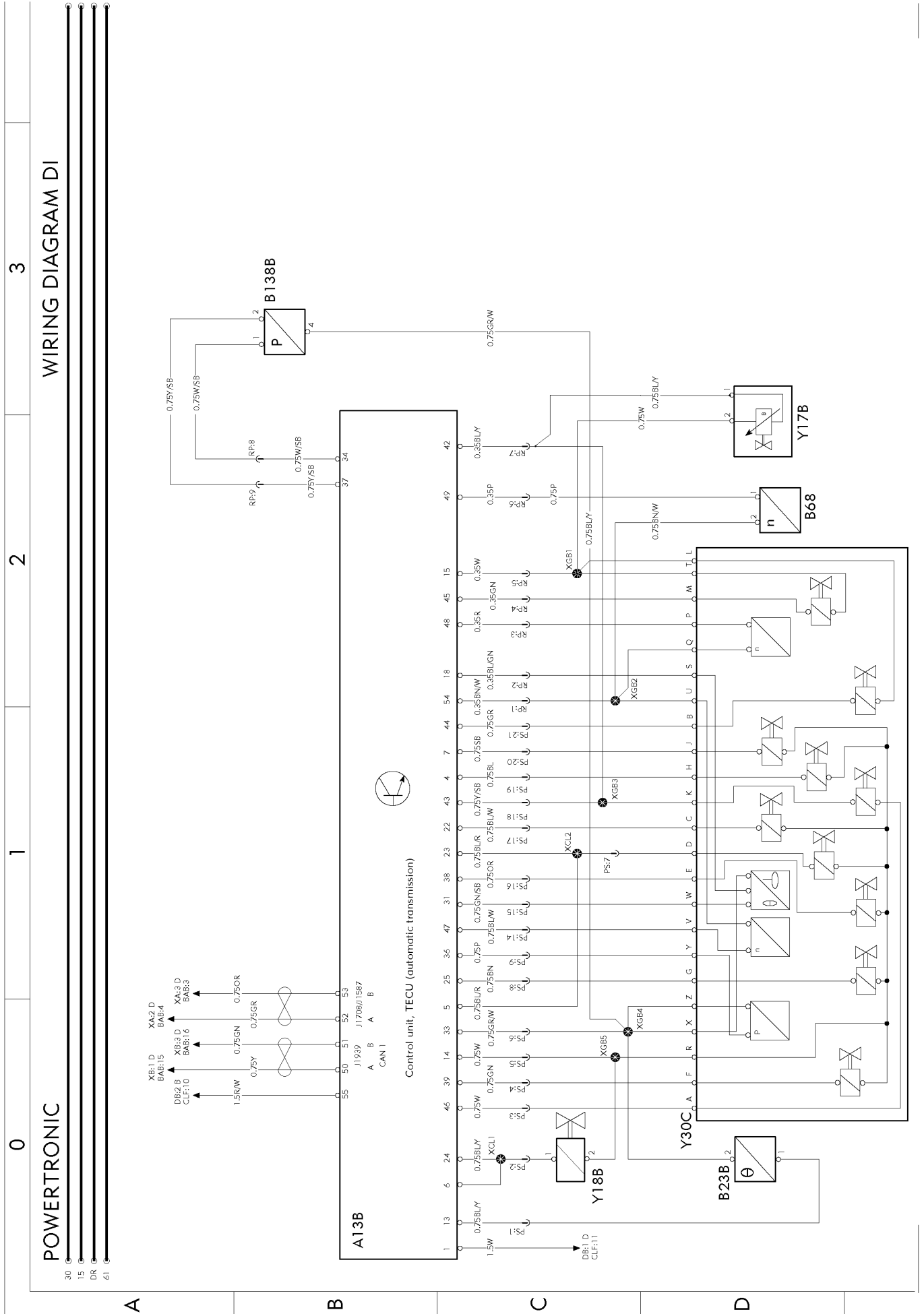
ENGINE ISX (AUS ONLY)

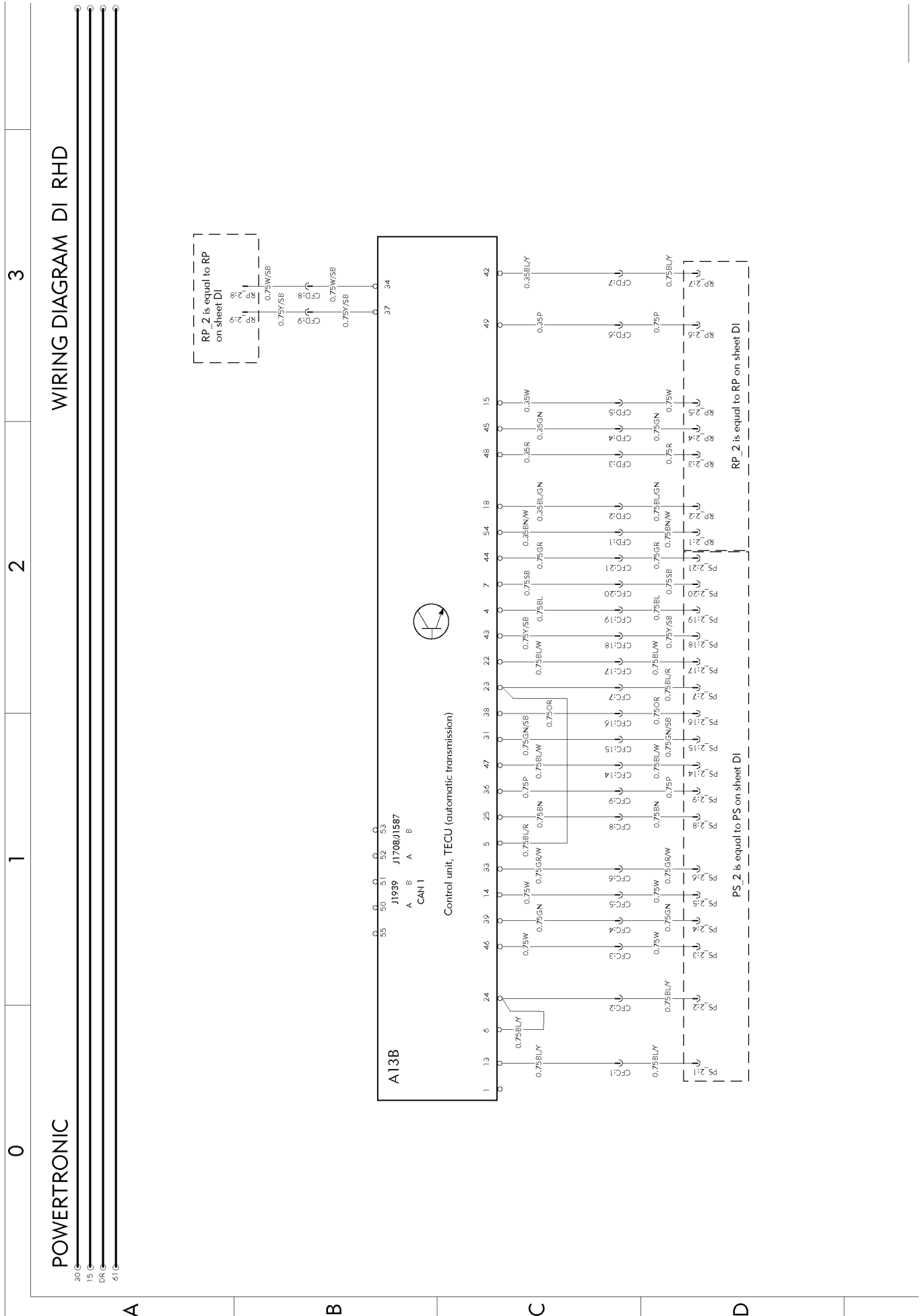










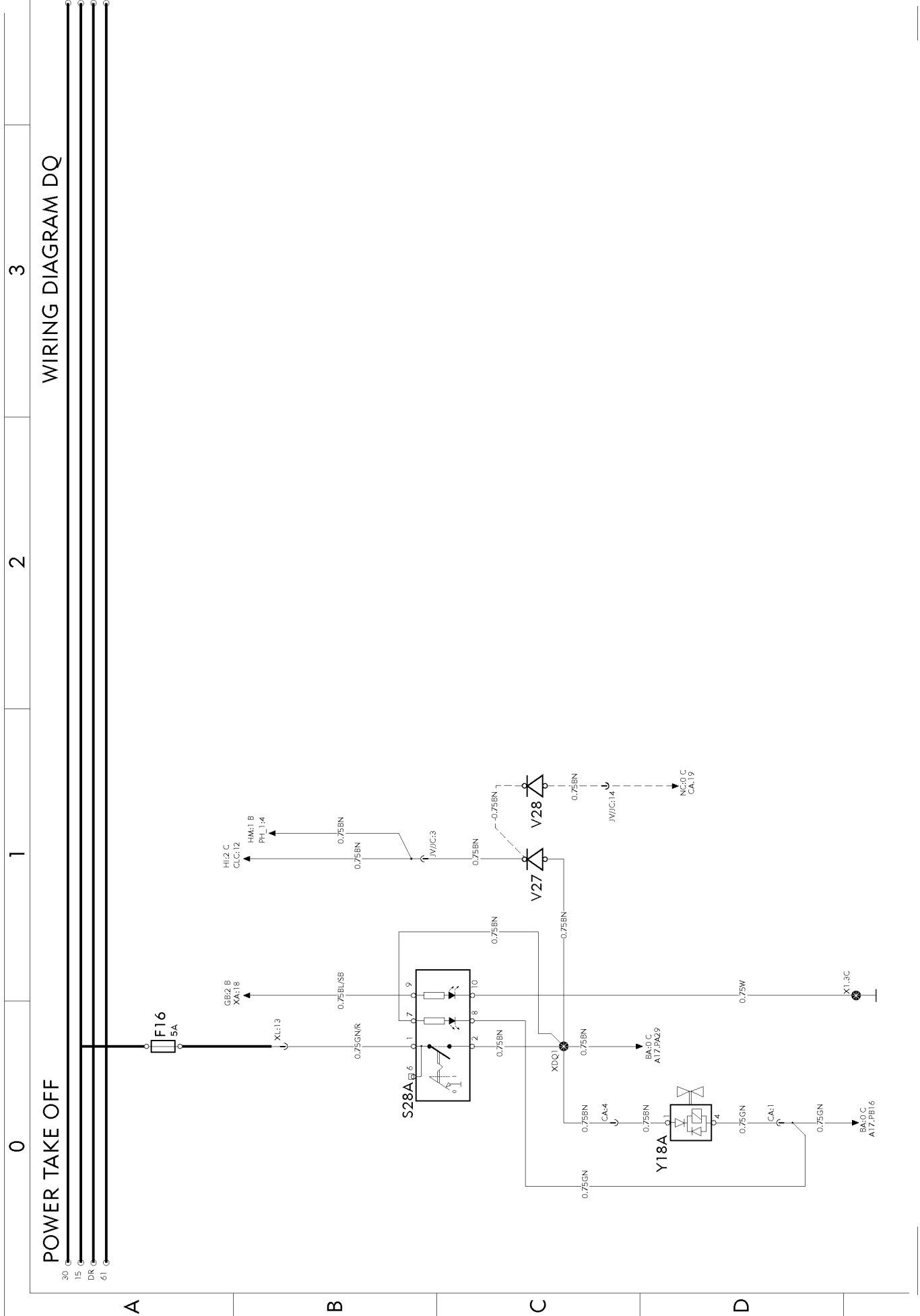






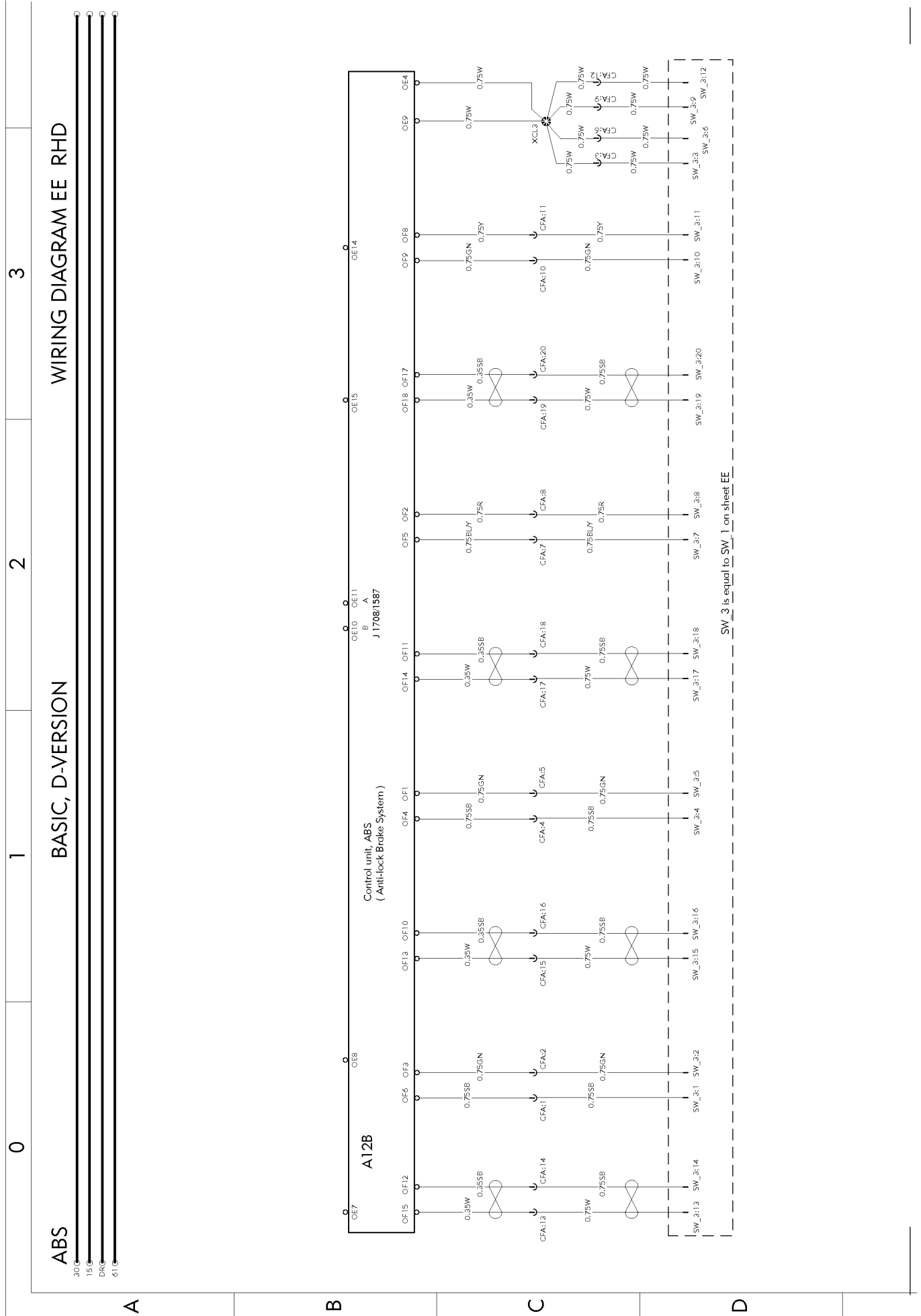


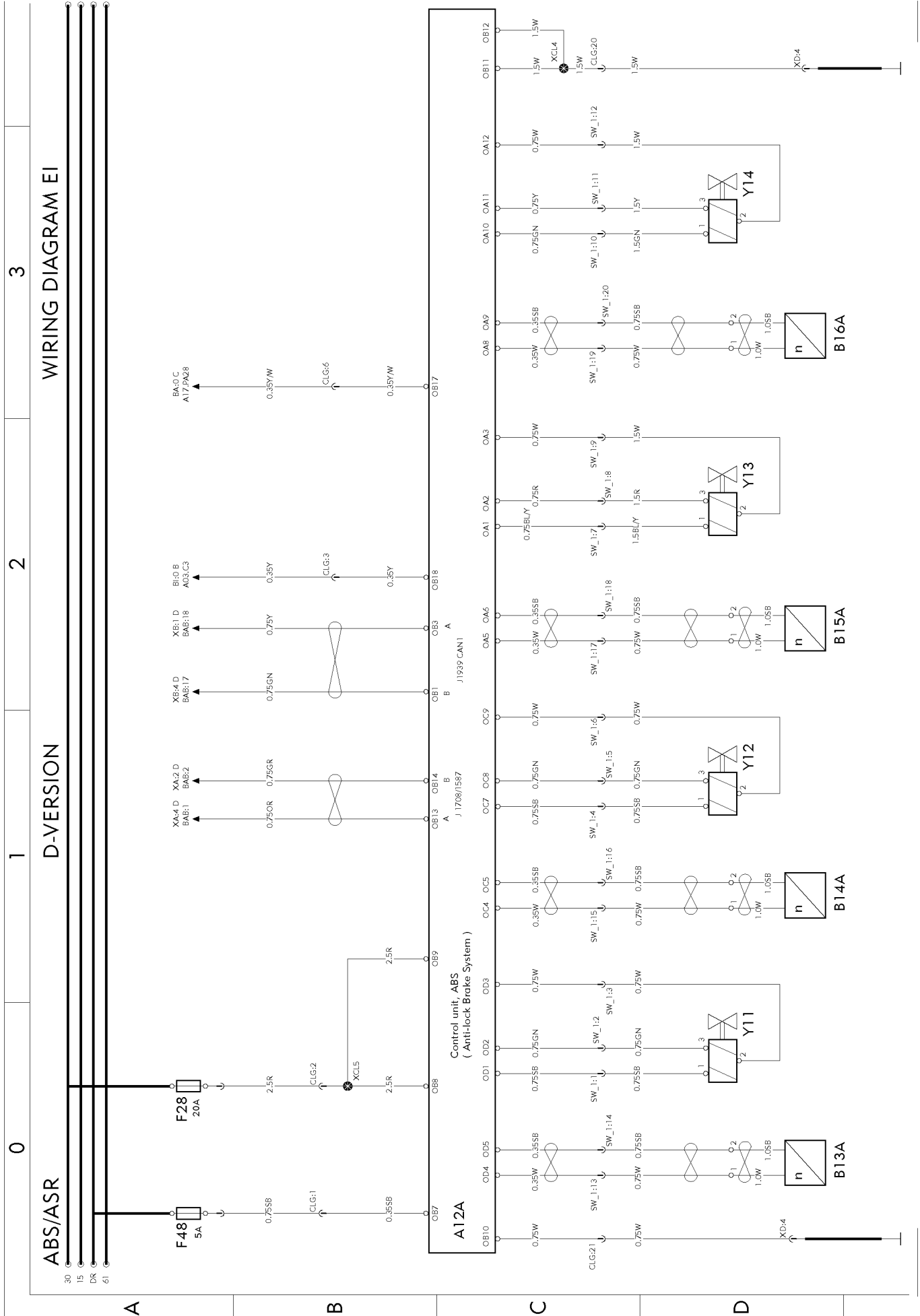




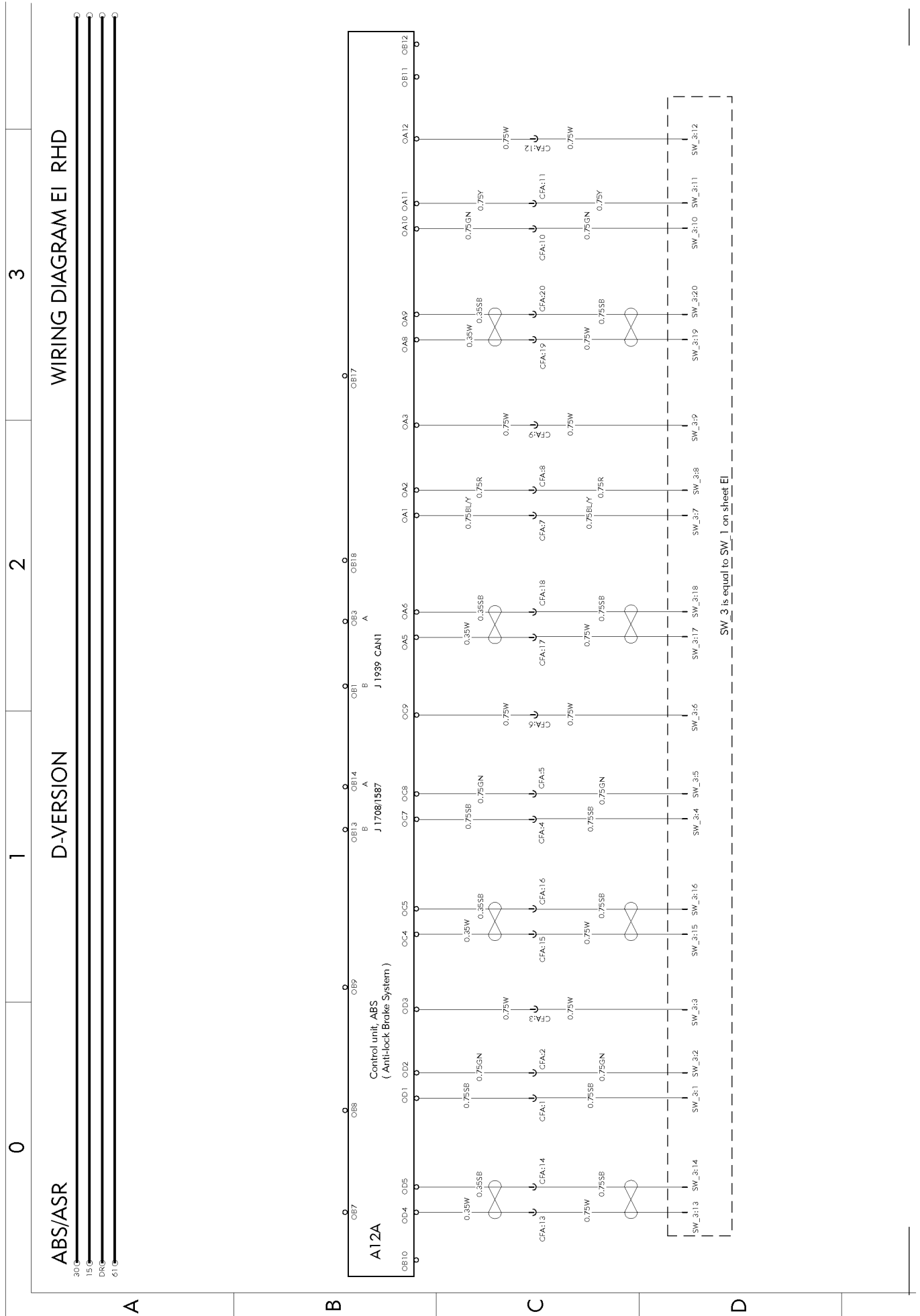


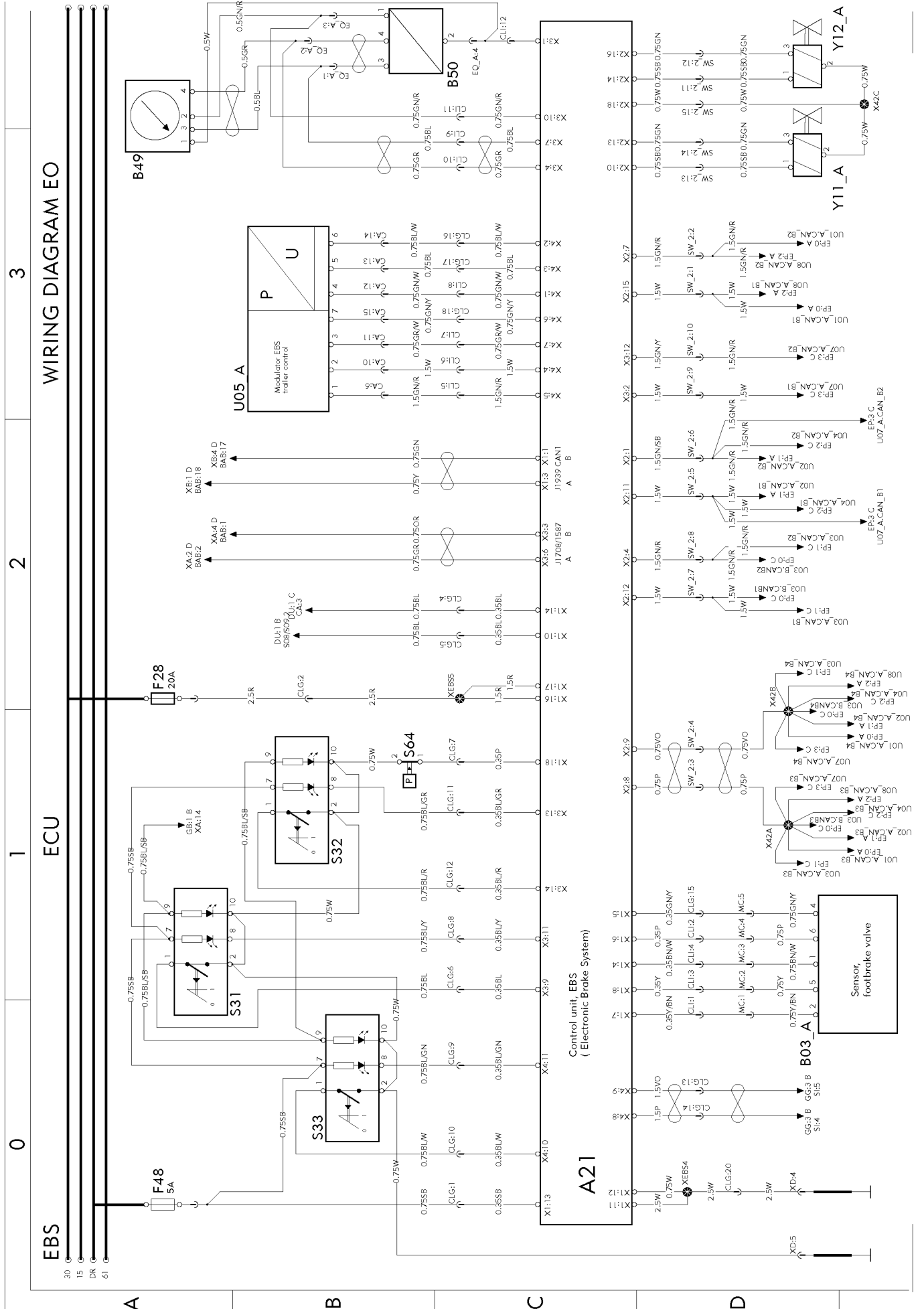










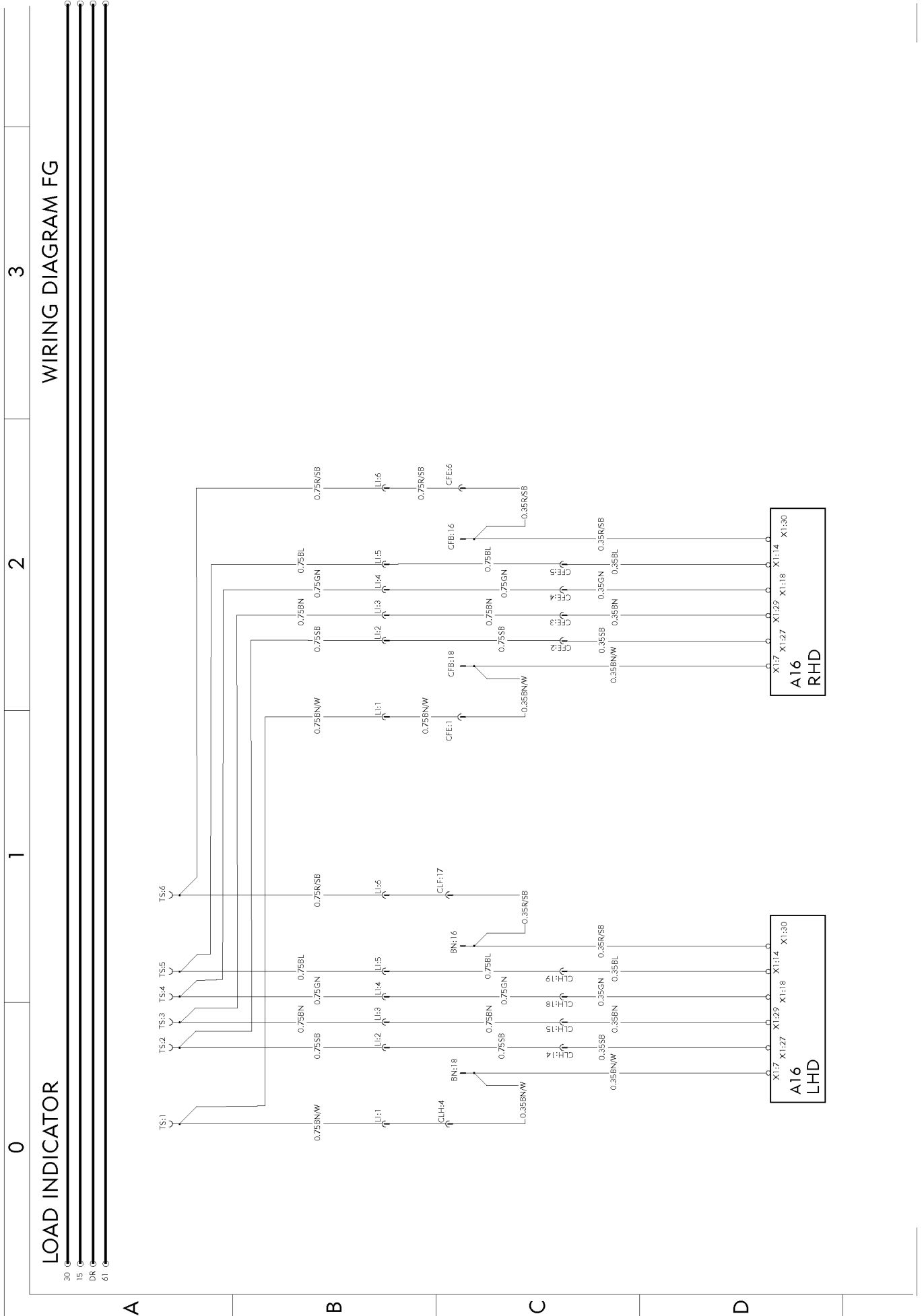








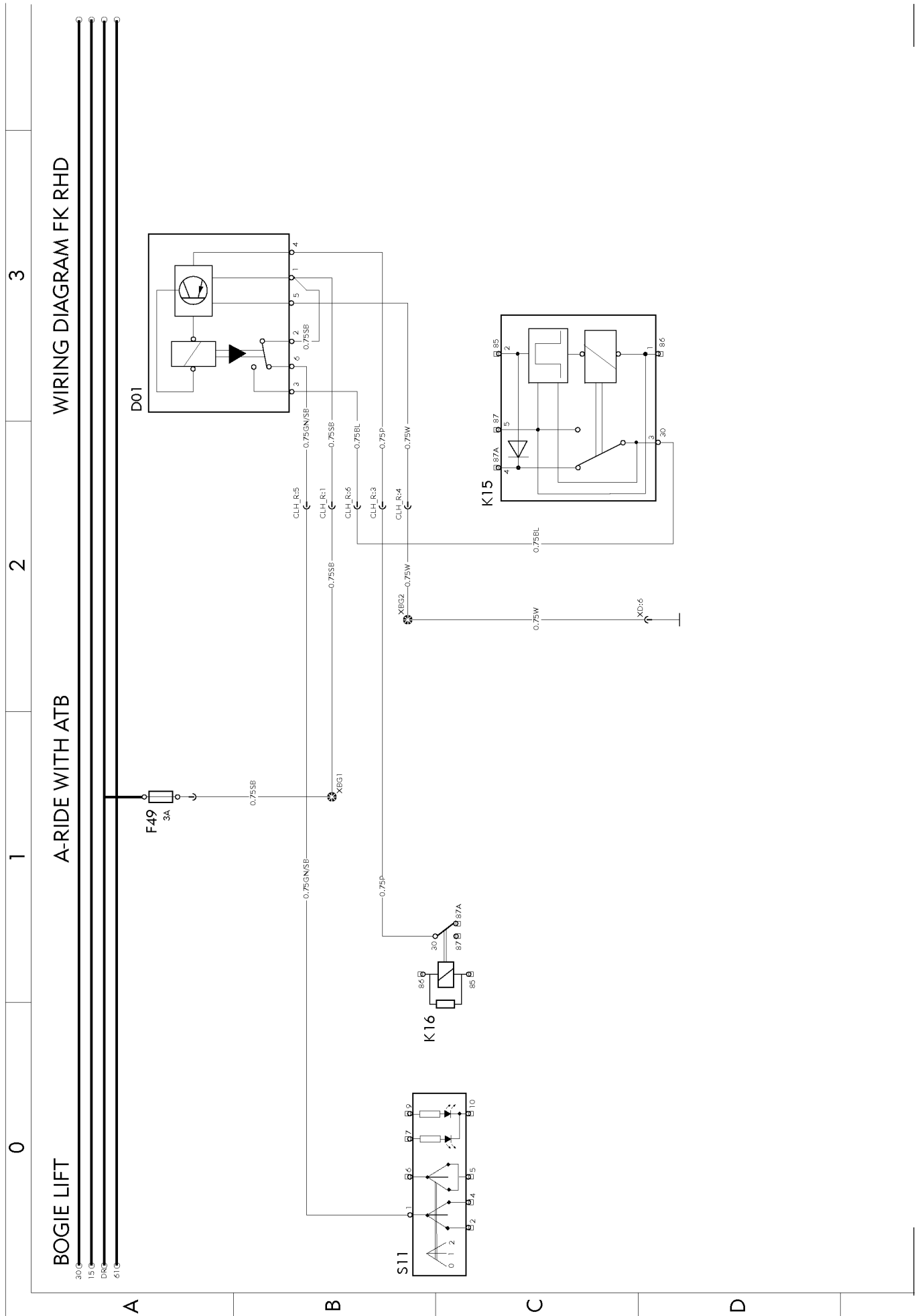


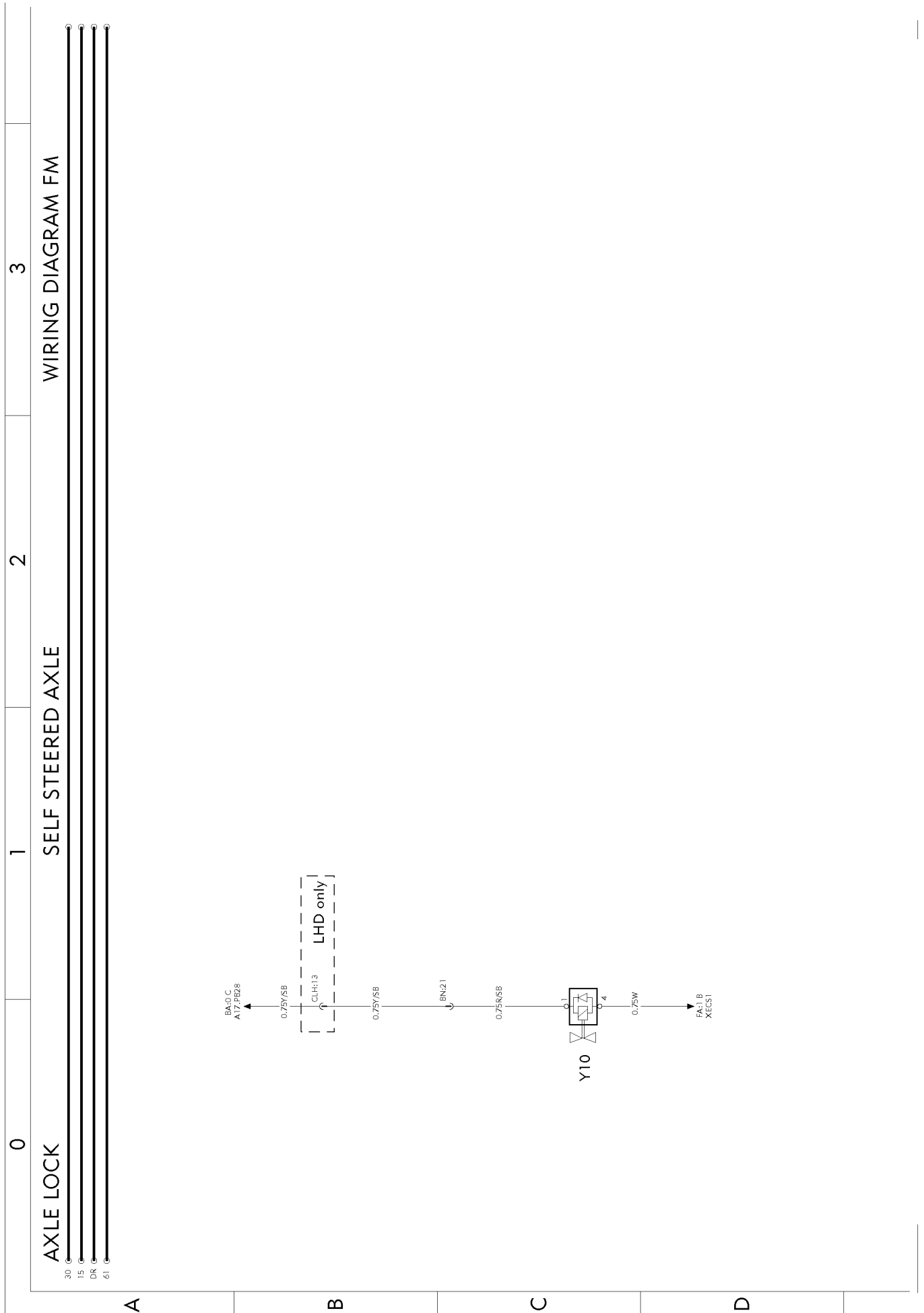


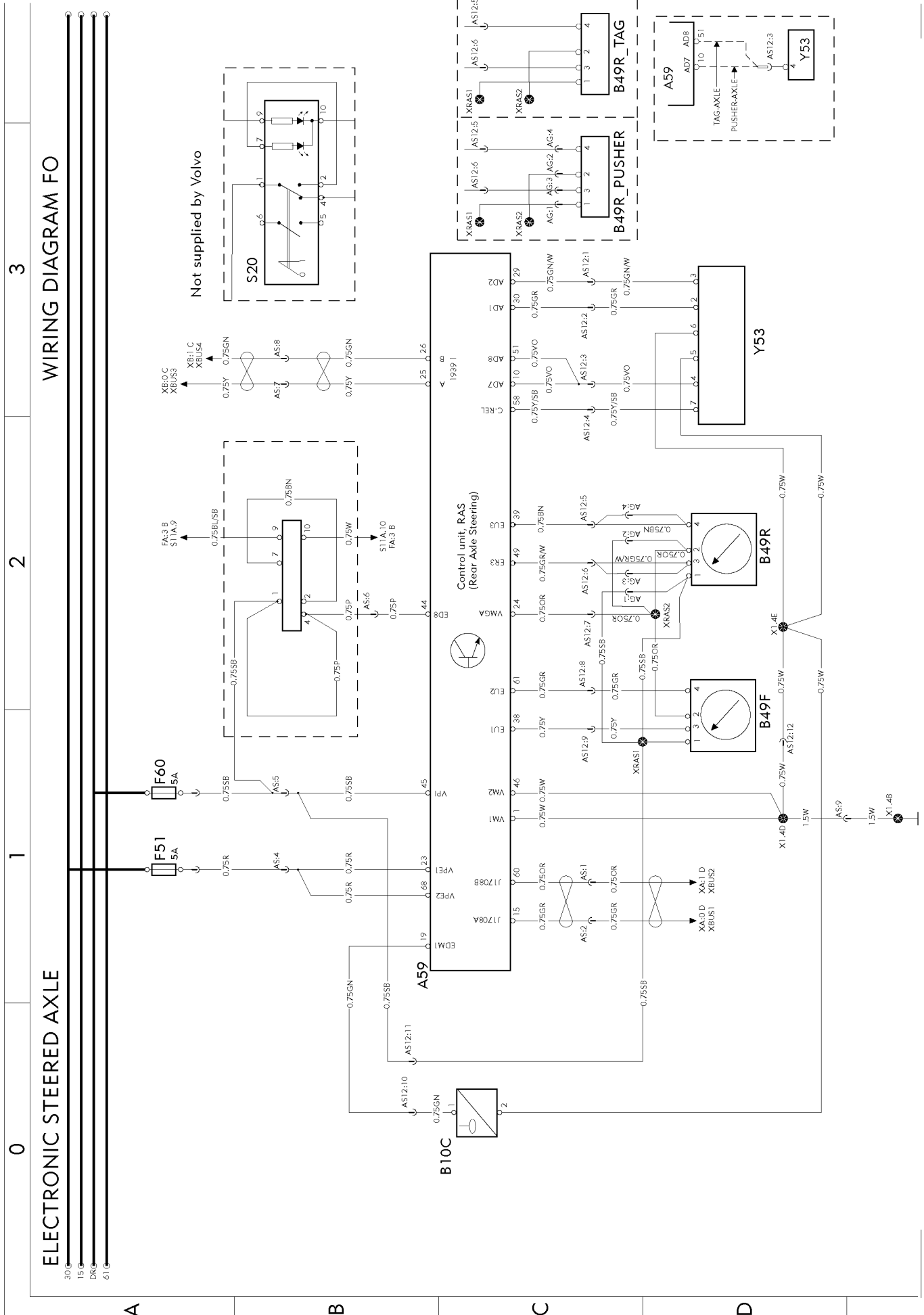


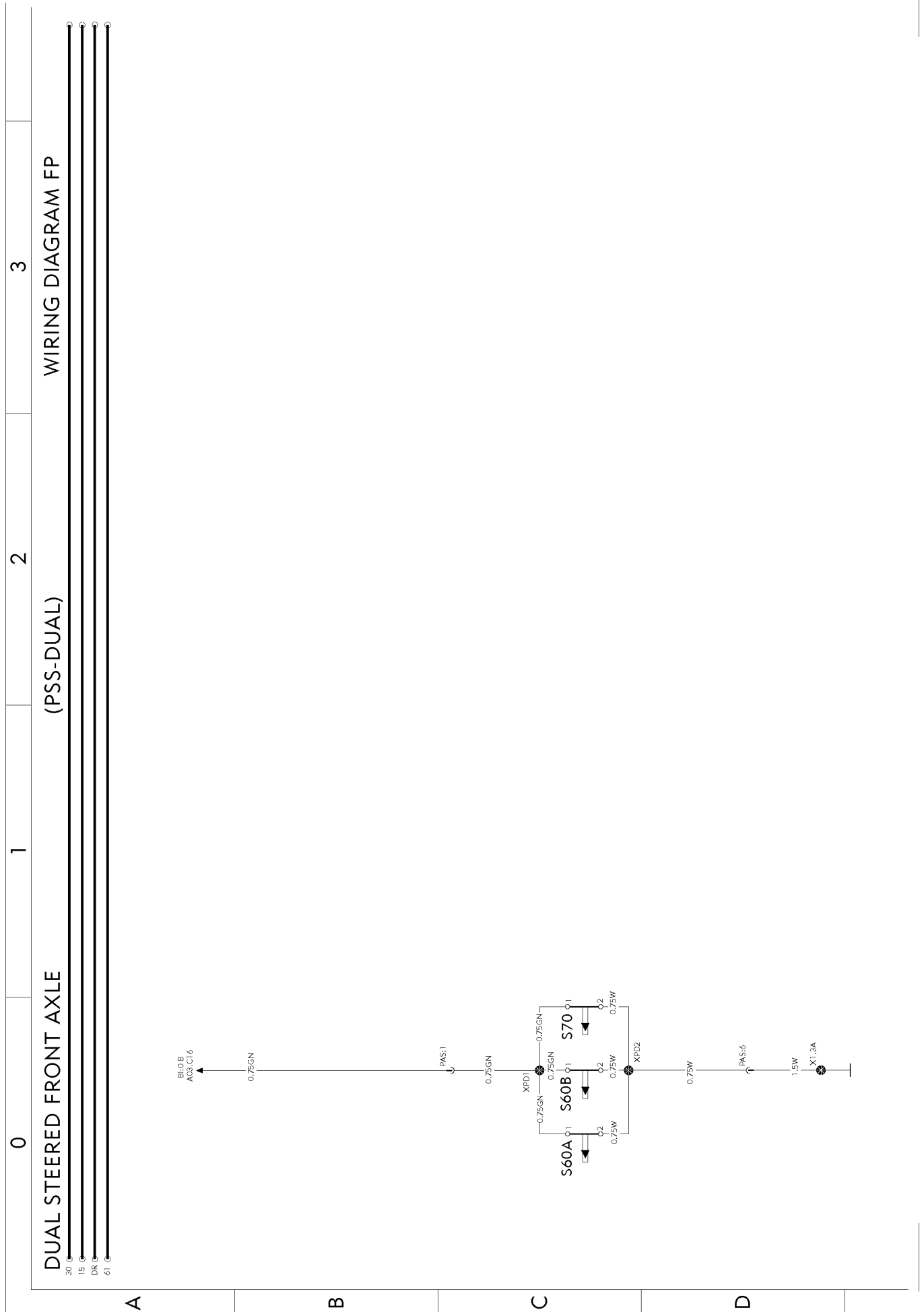


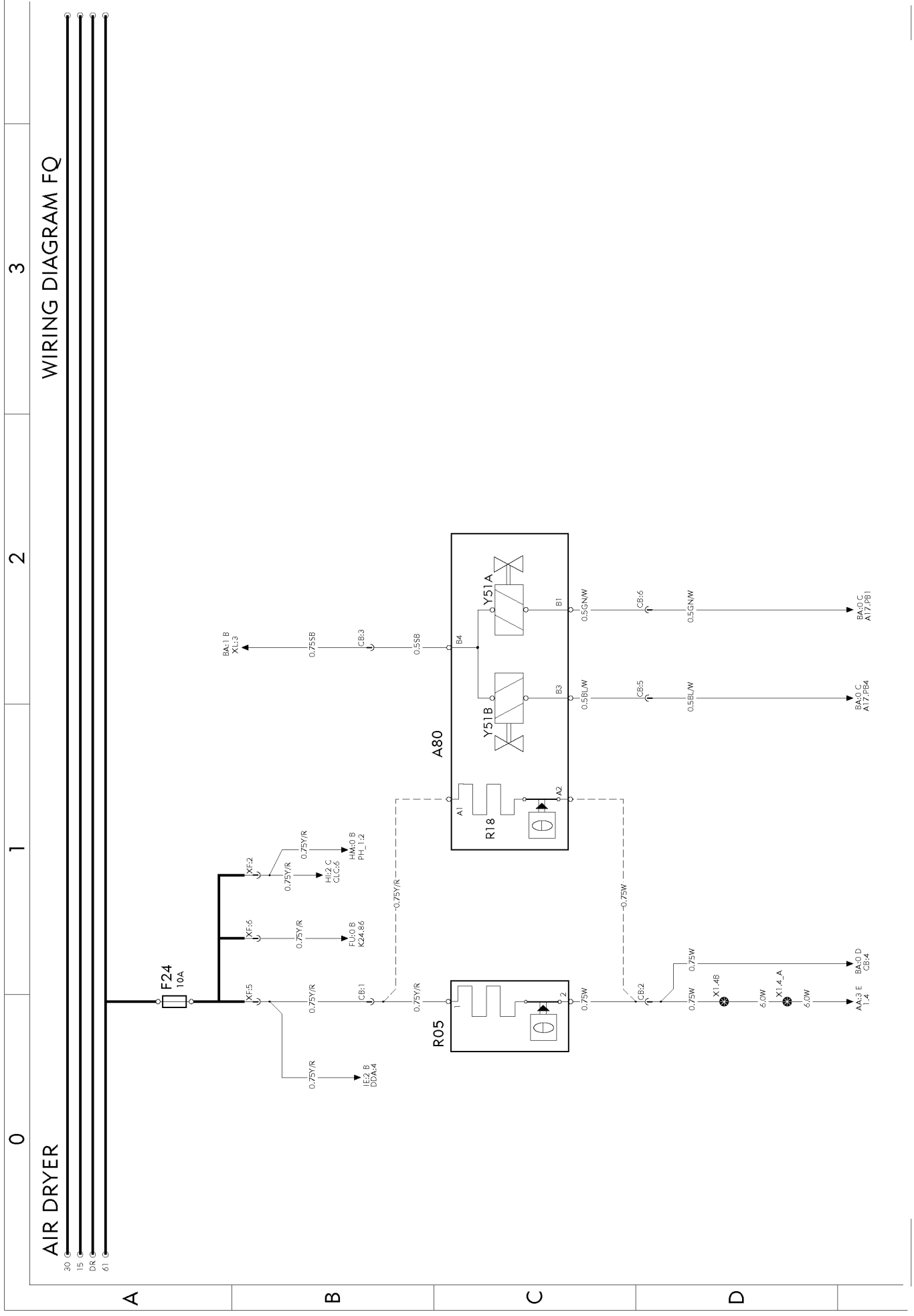


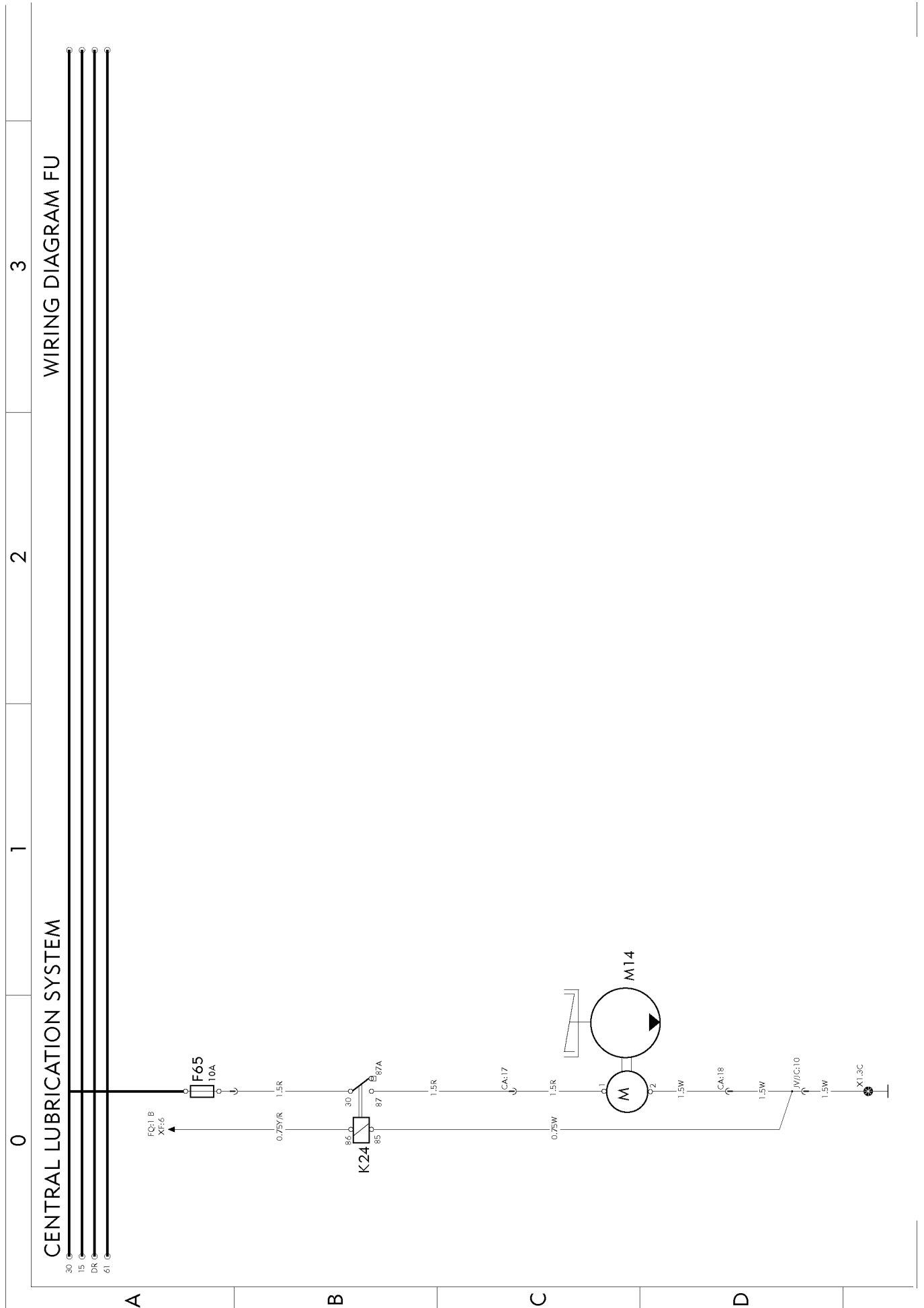


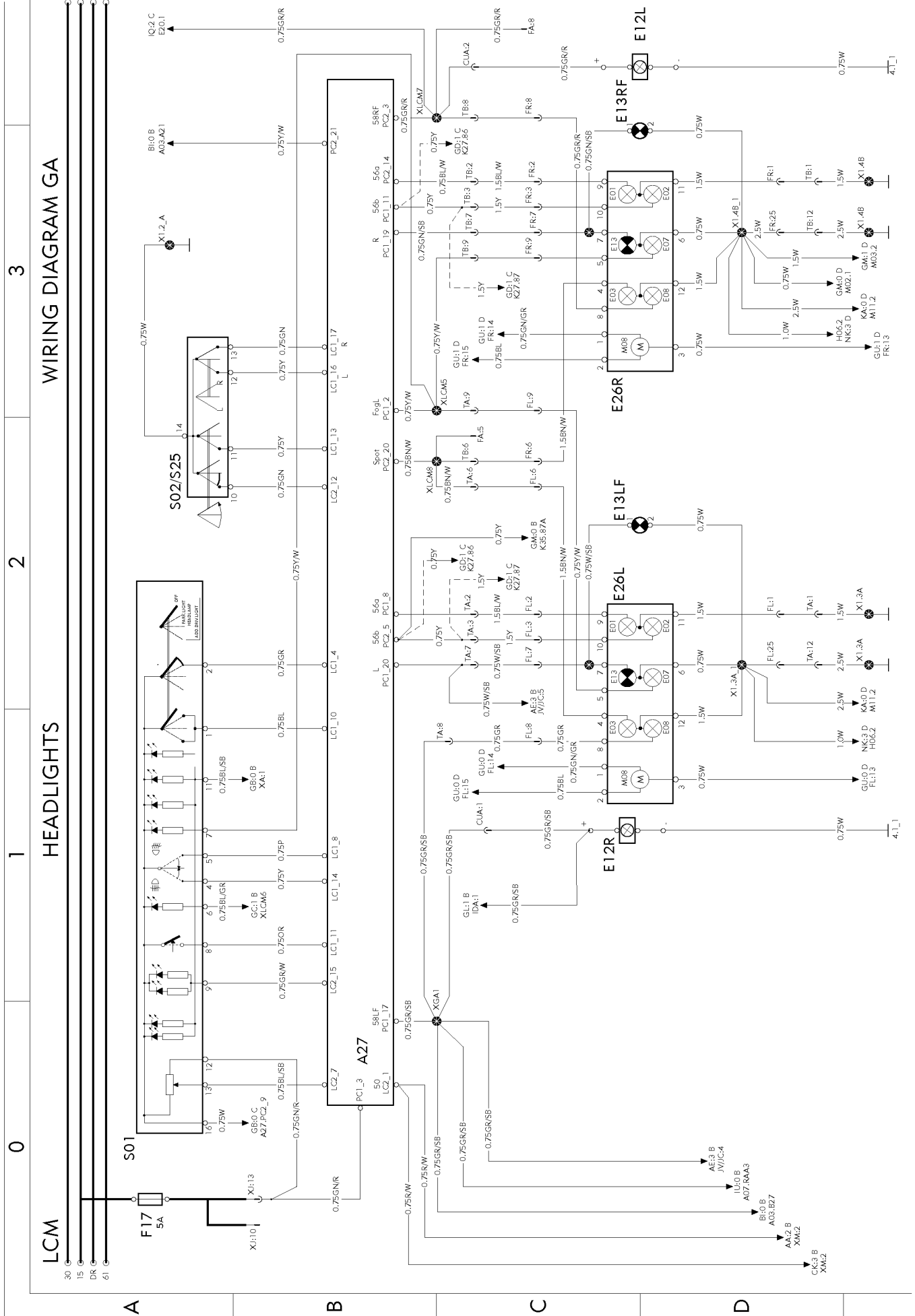








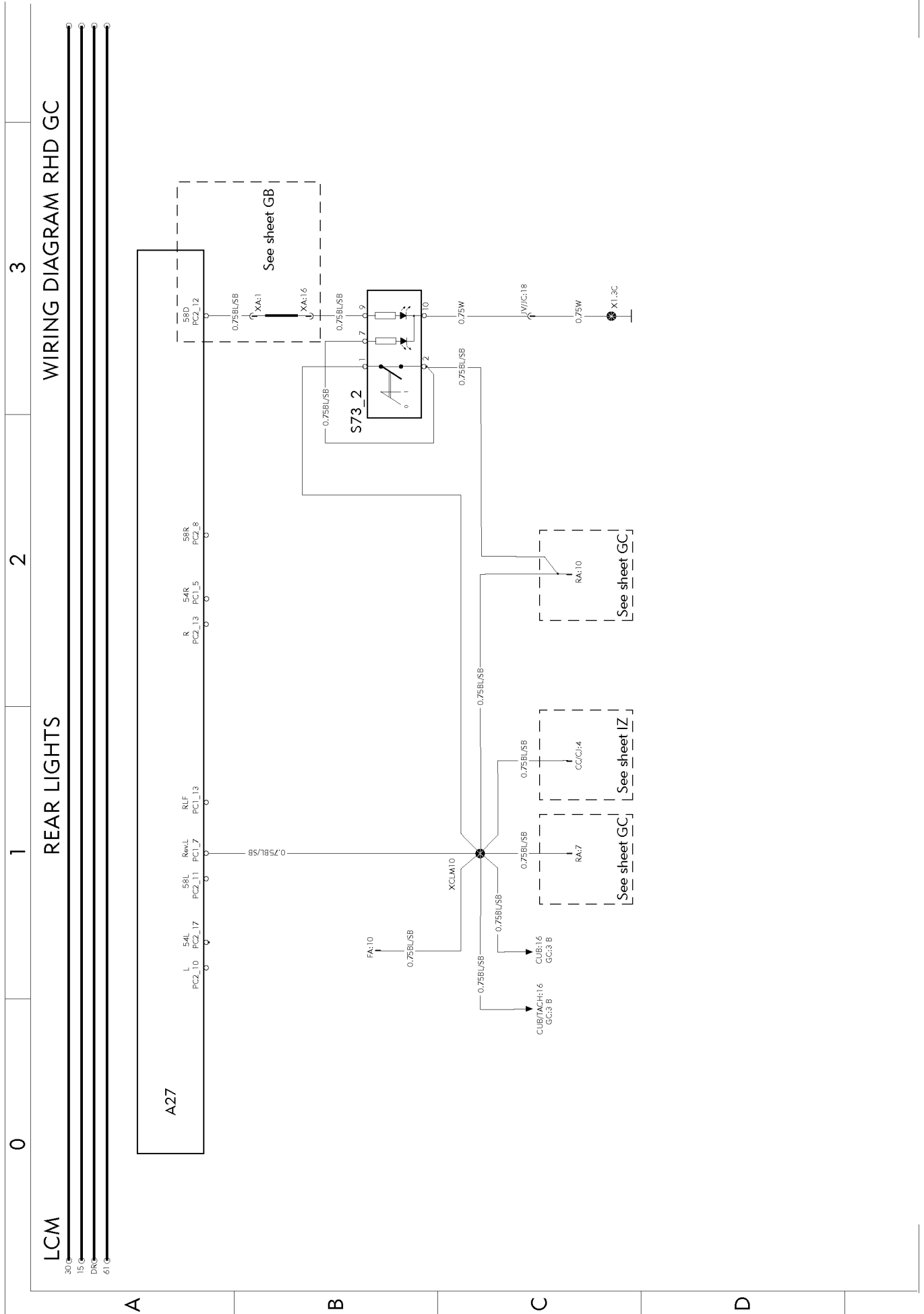


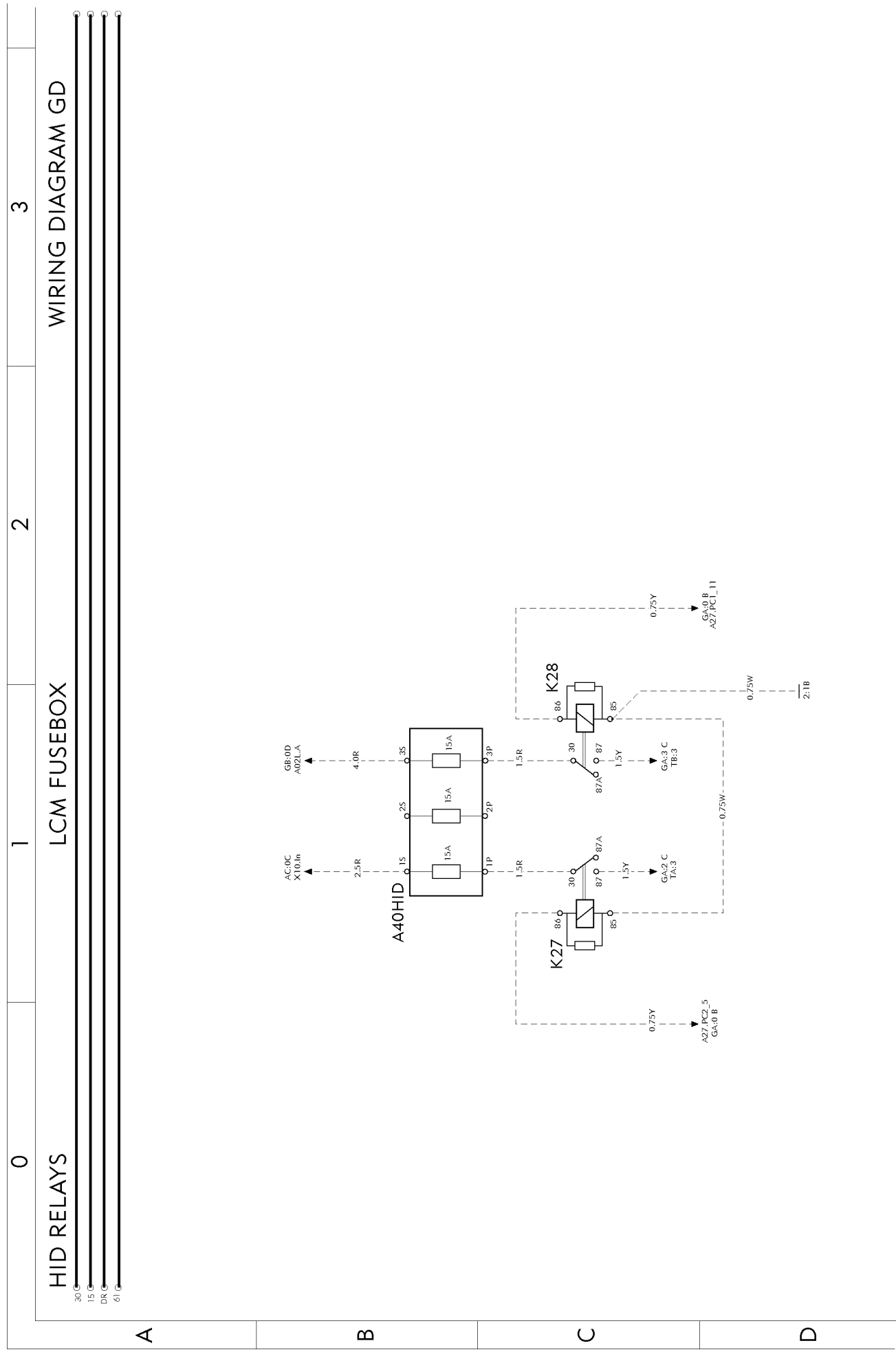


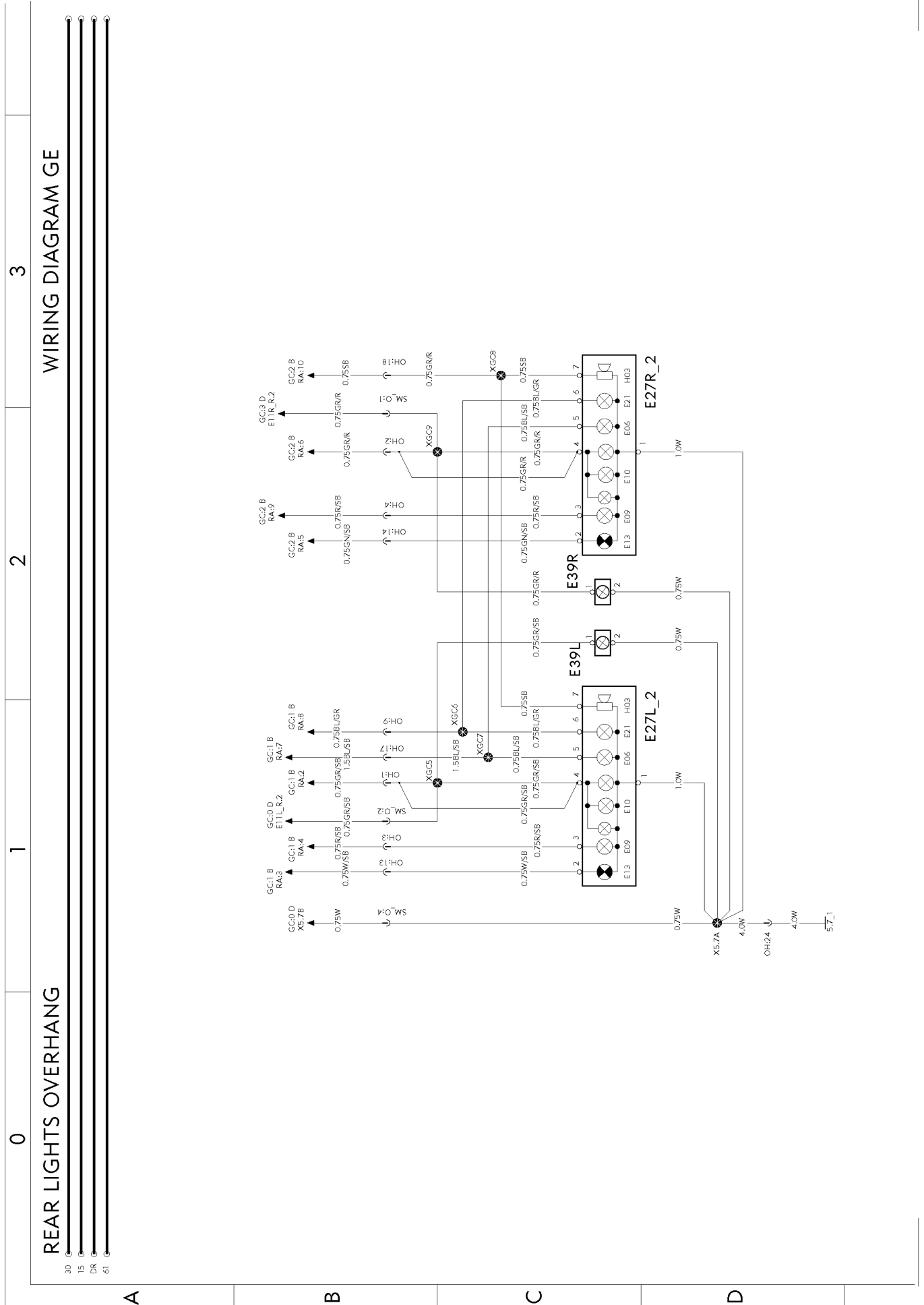


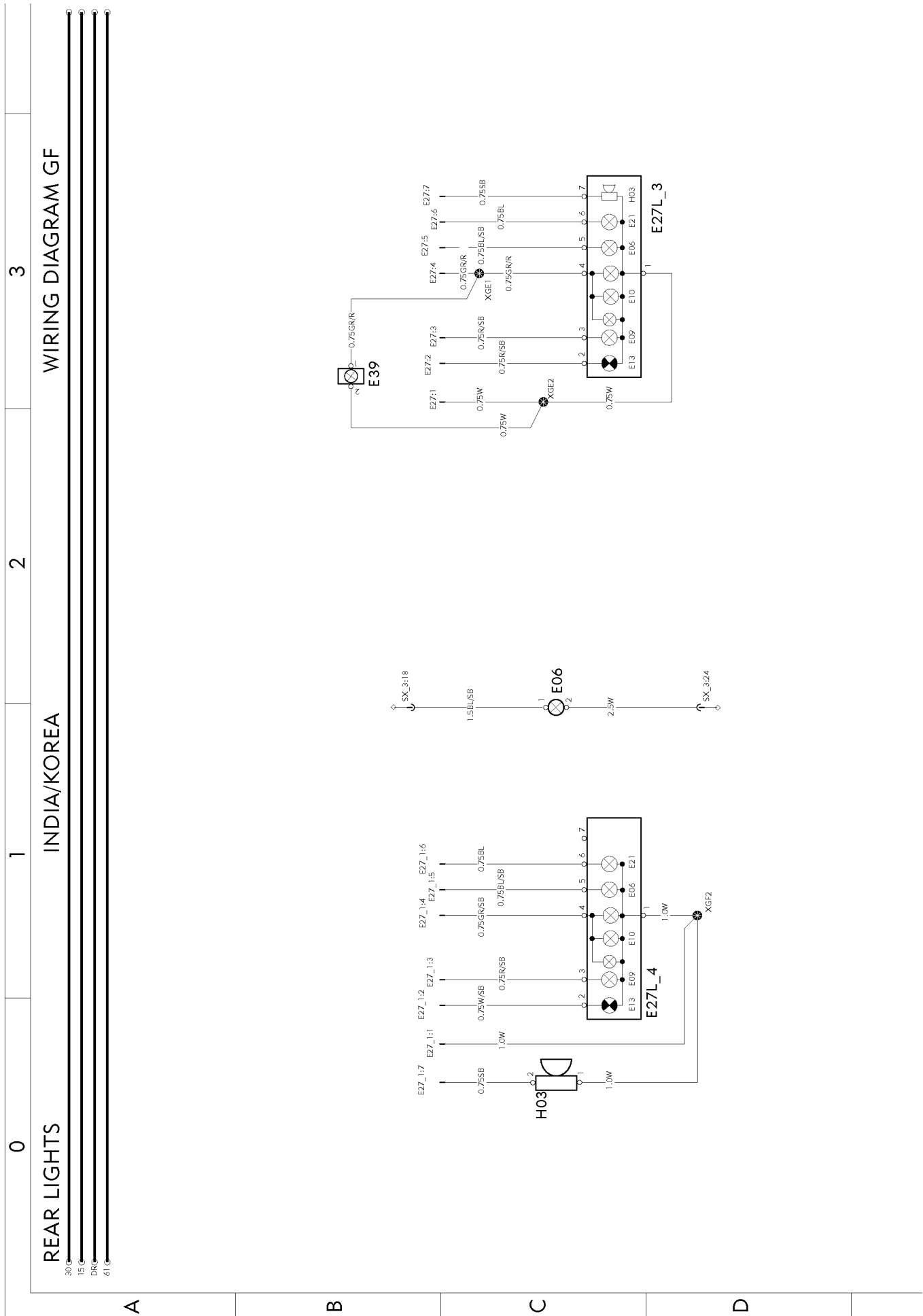








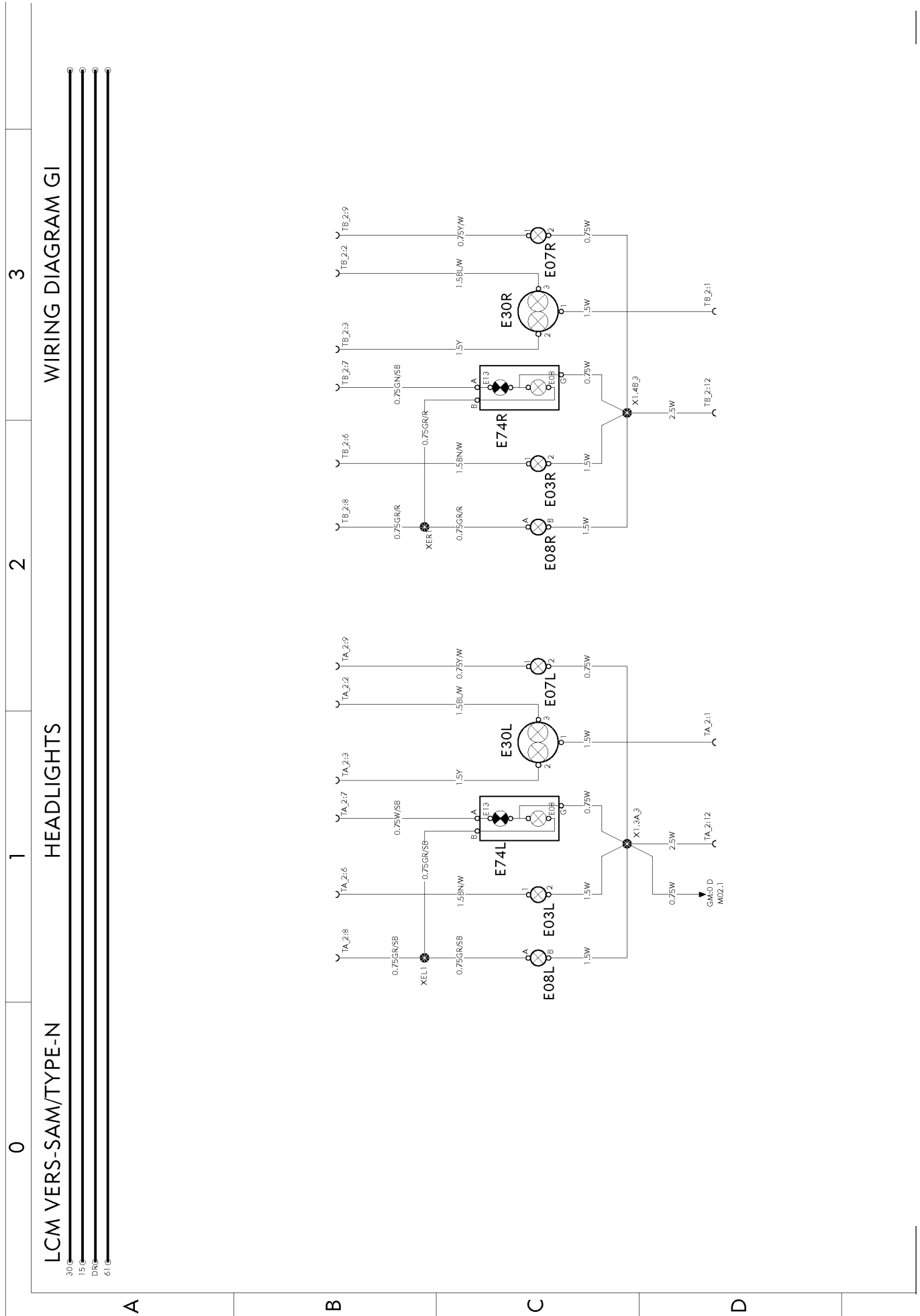


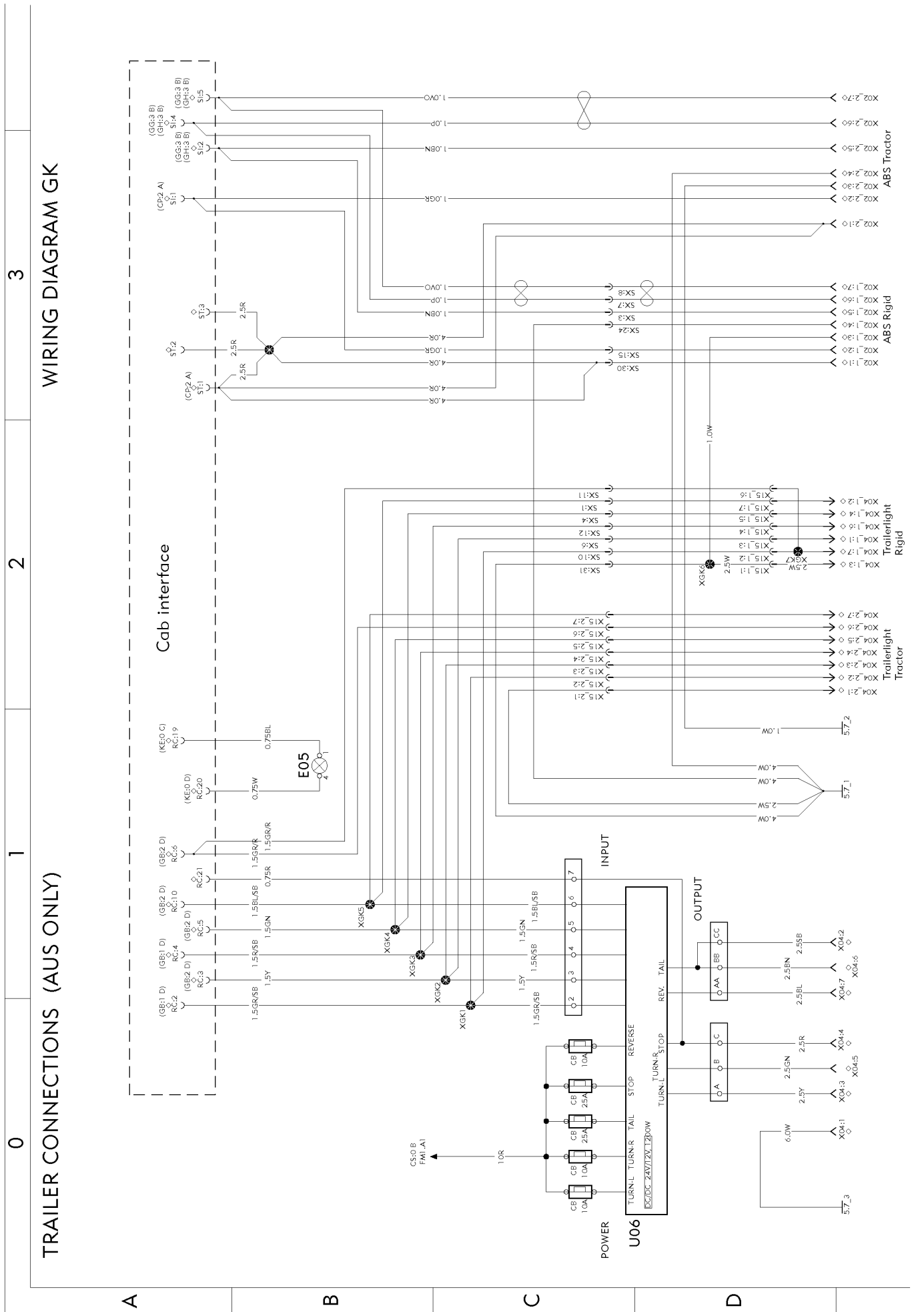


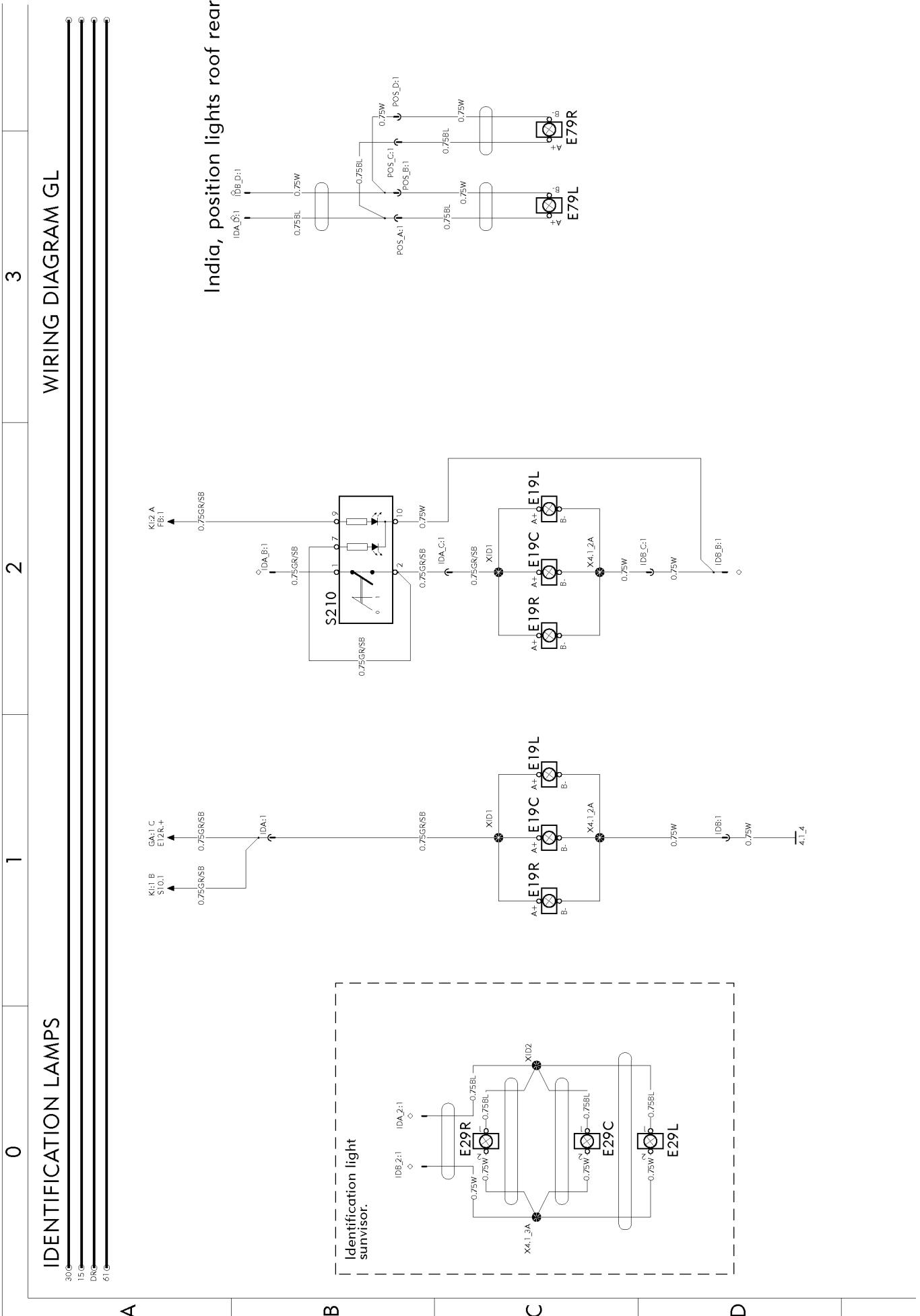




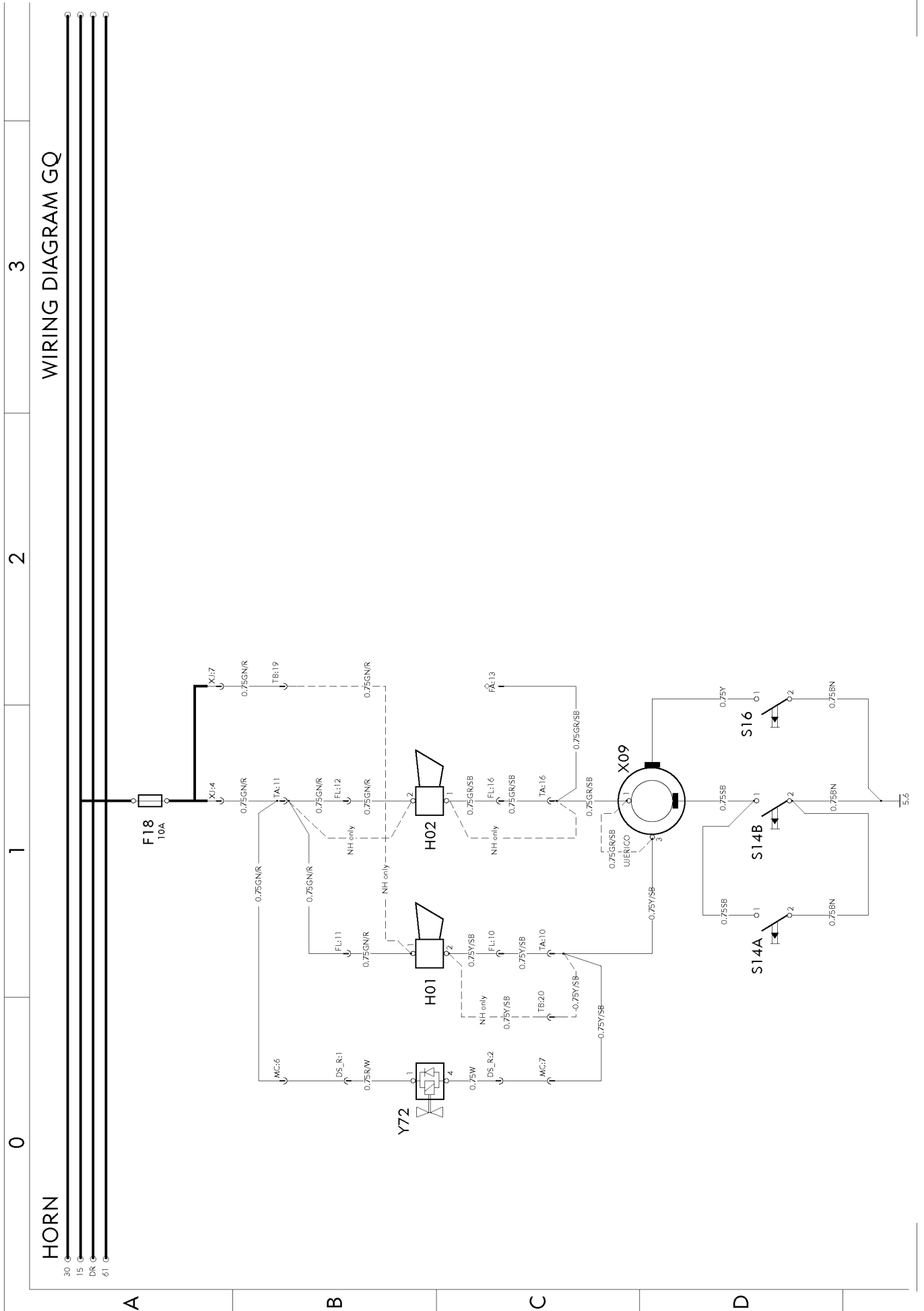


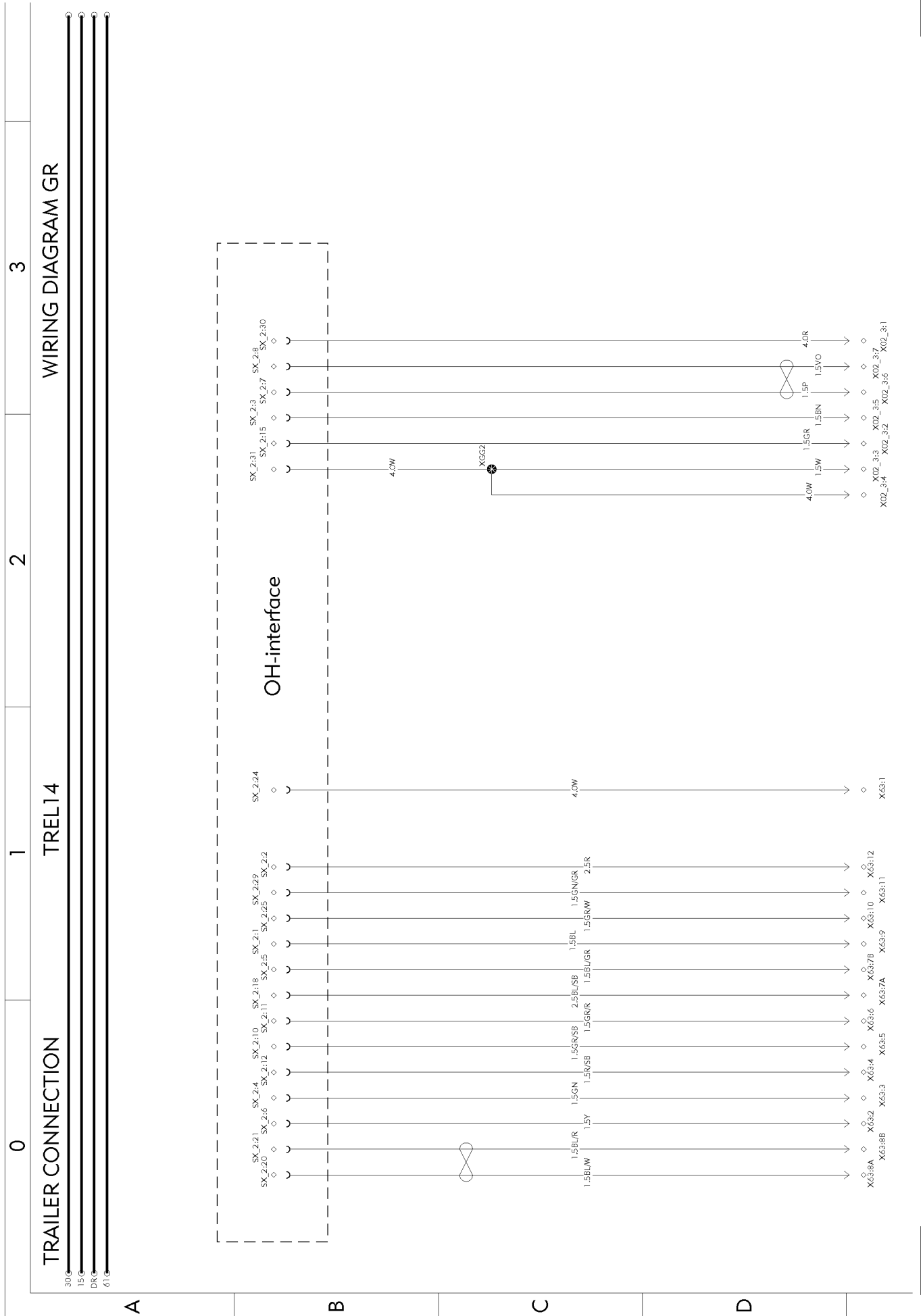


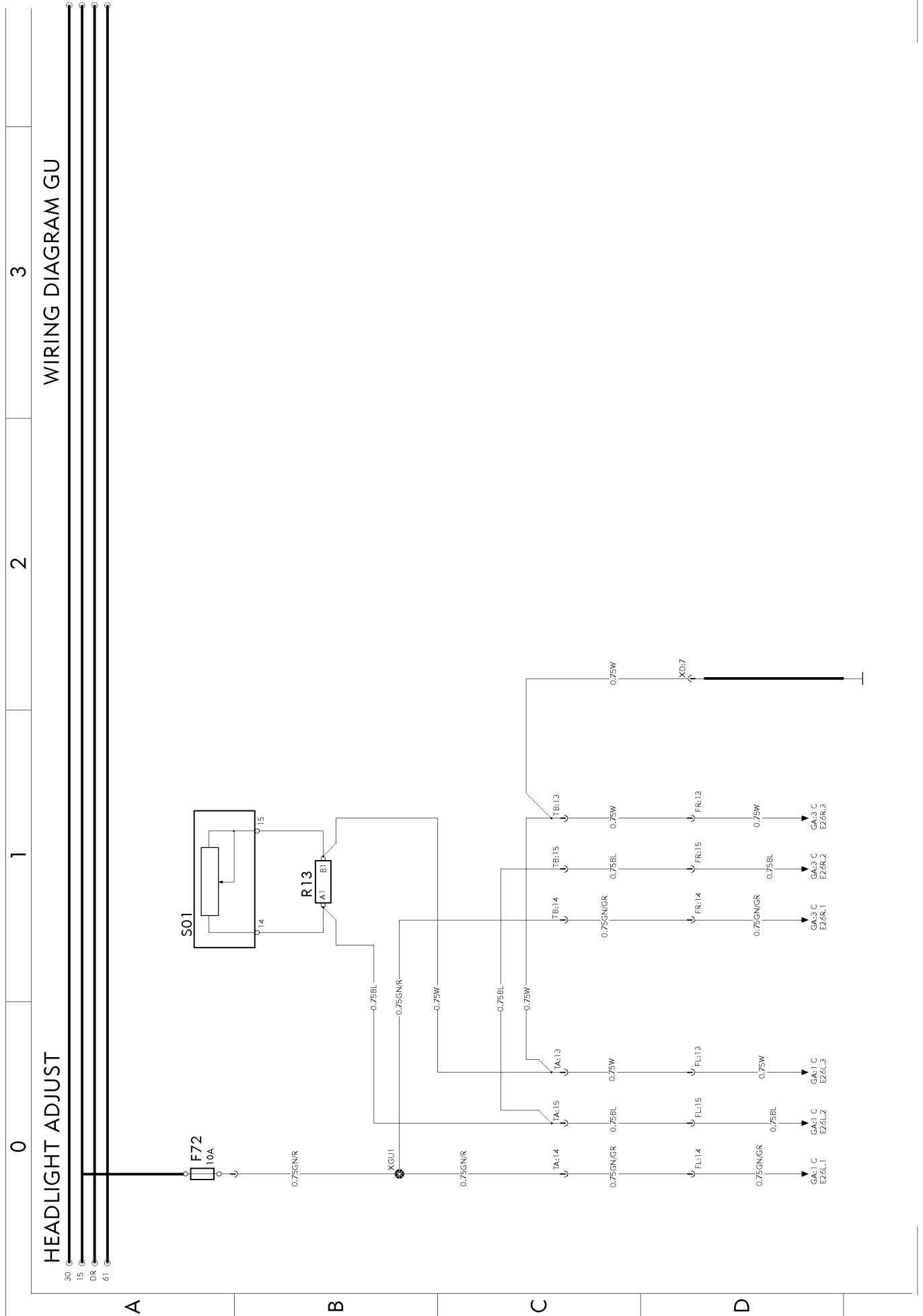


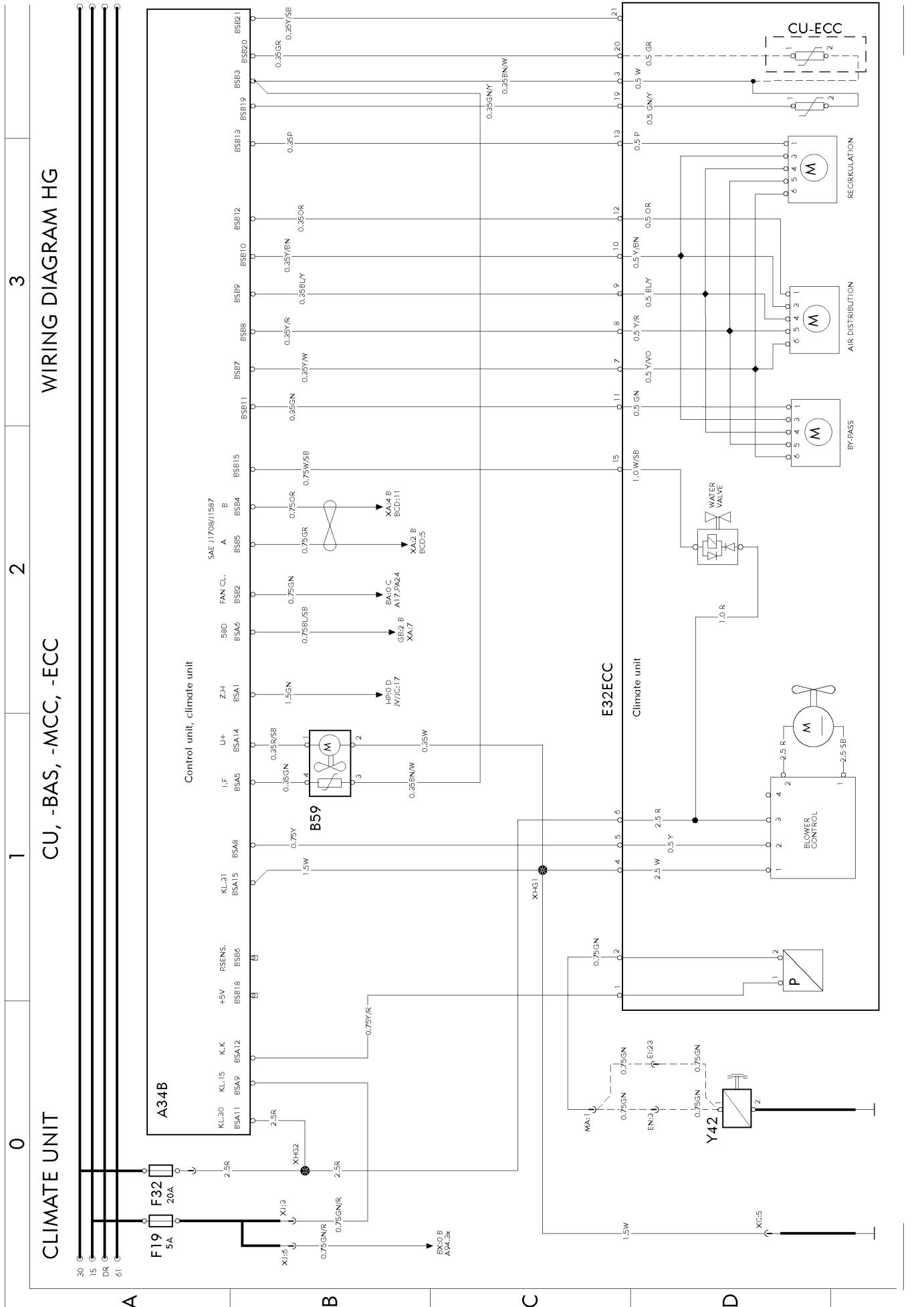




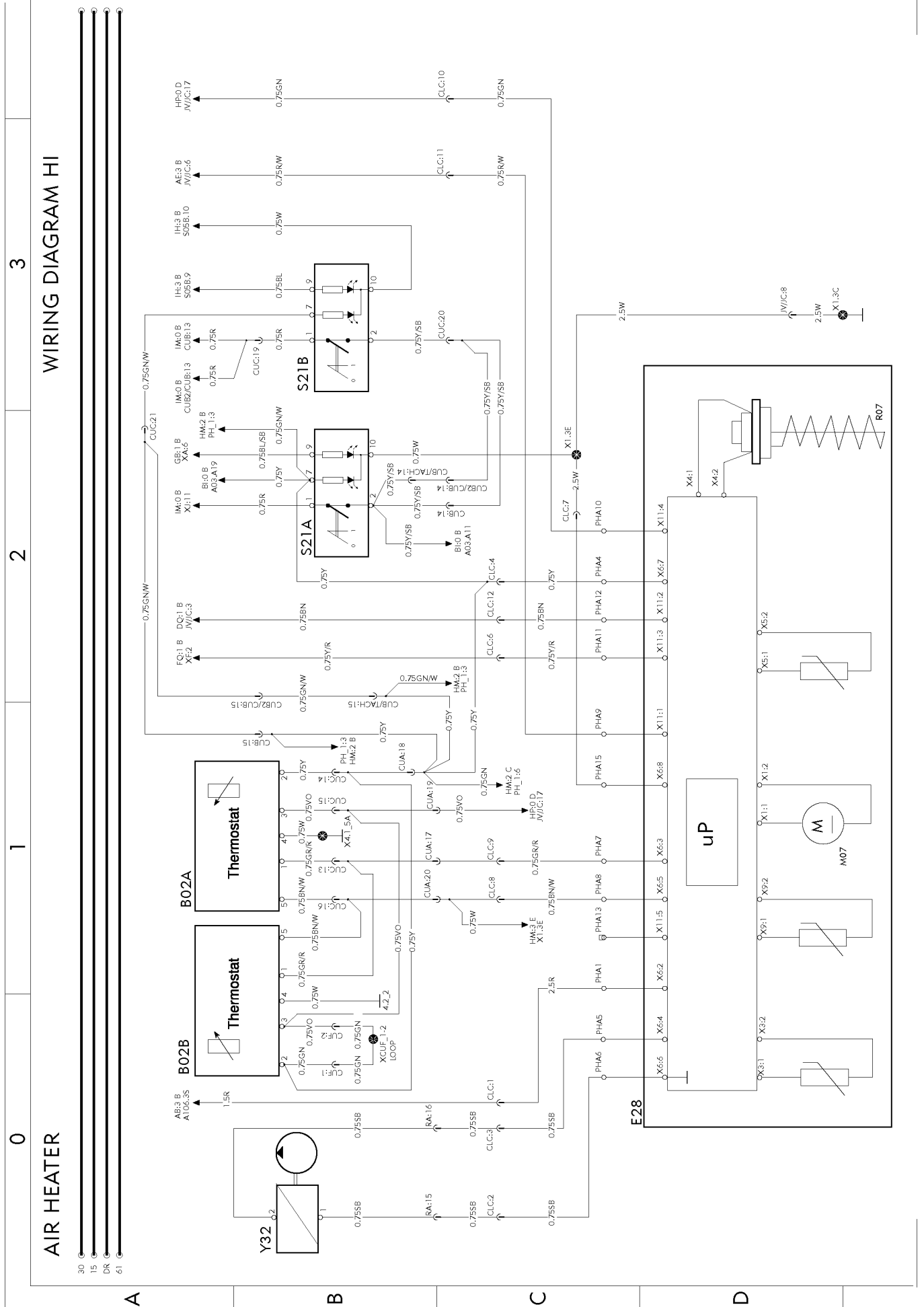


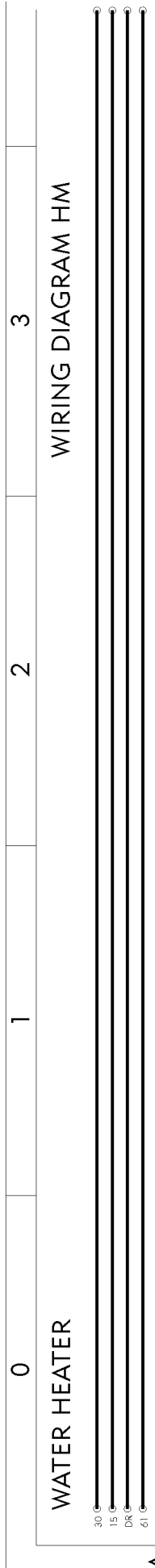






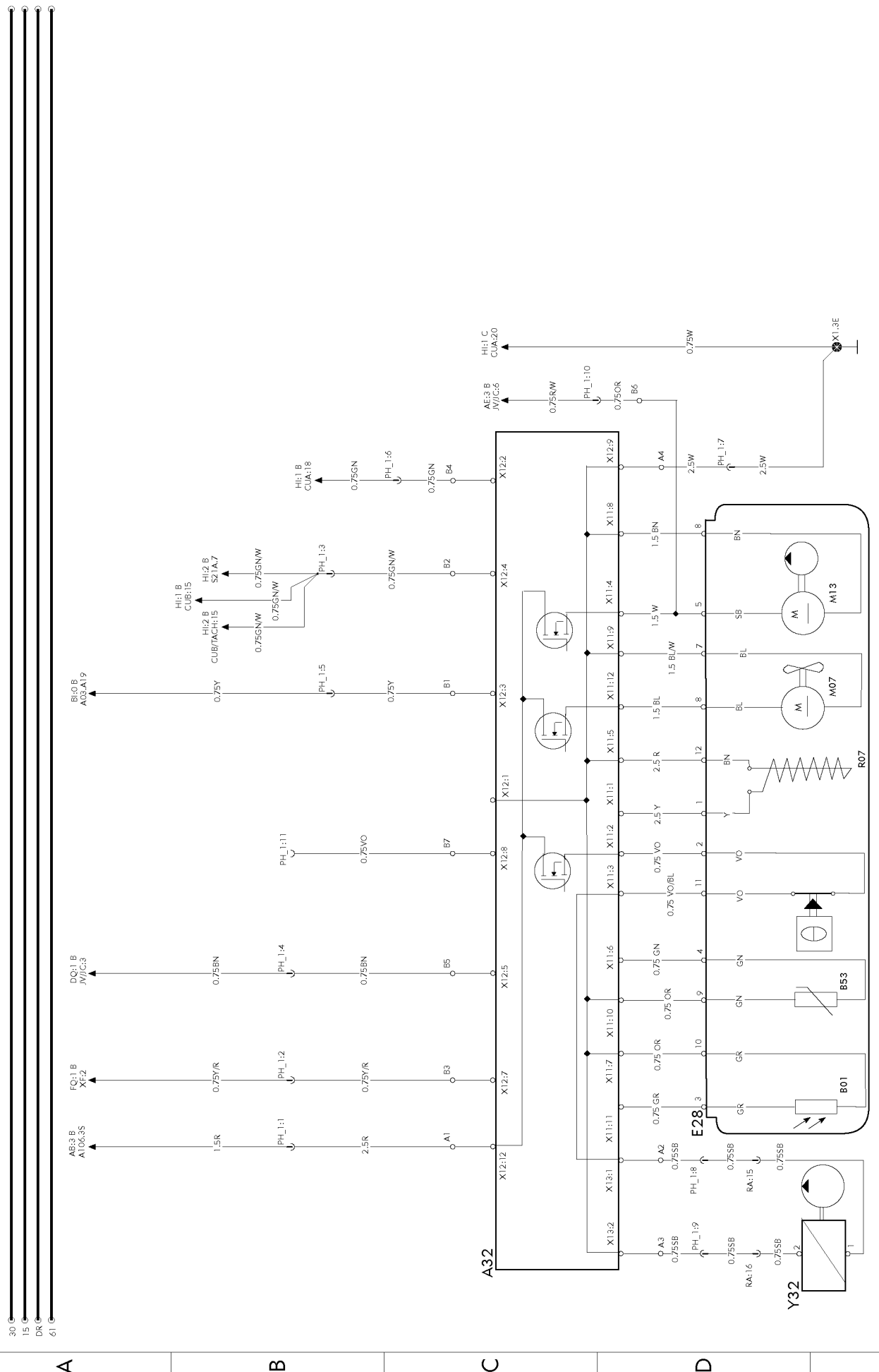






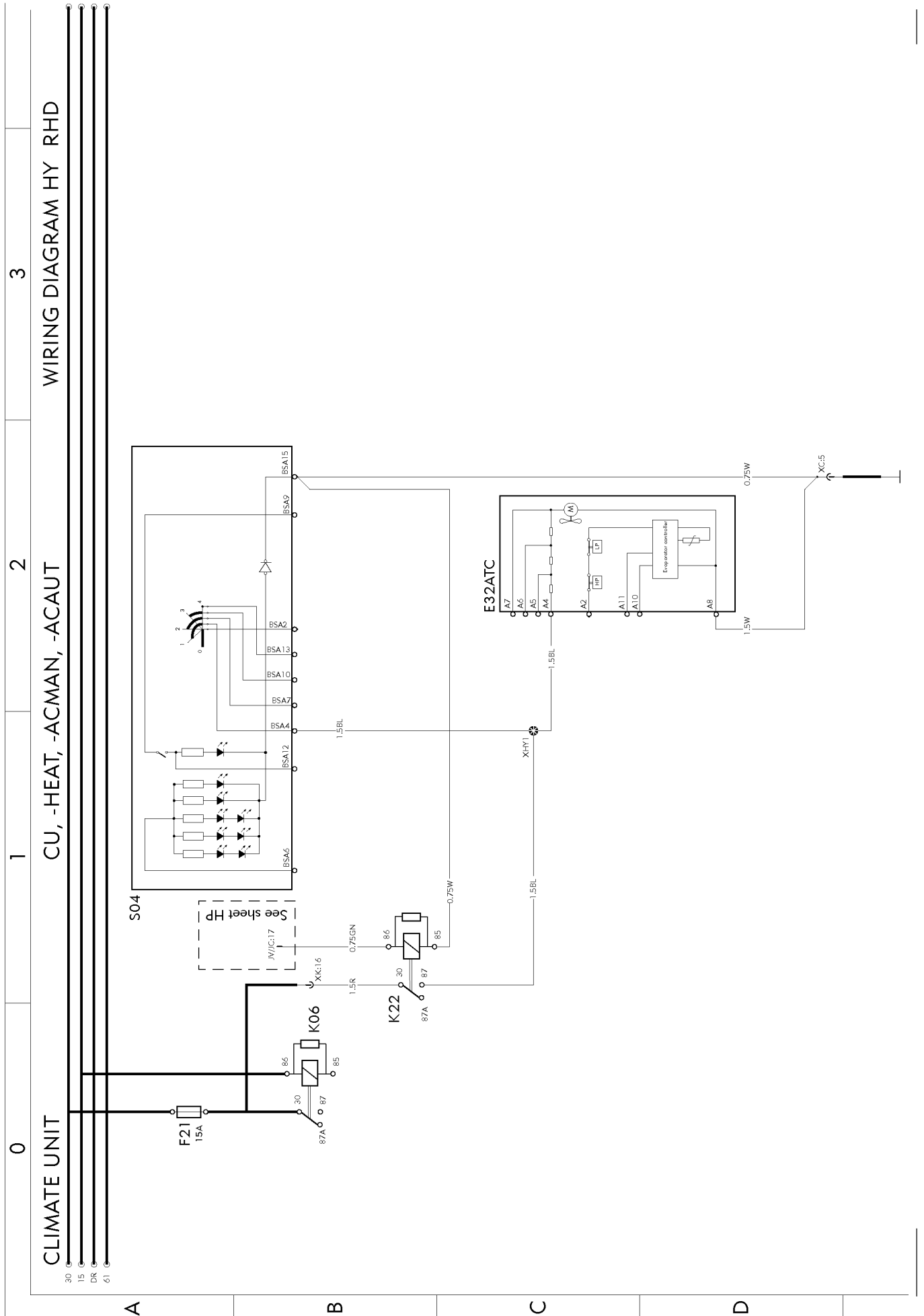
WIRING DIAGRAM HM

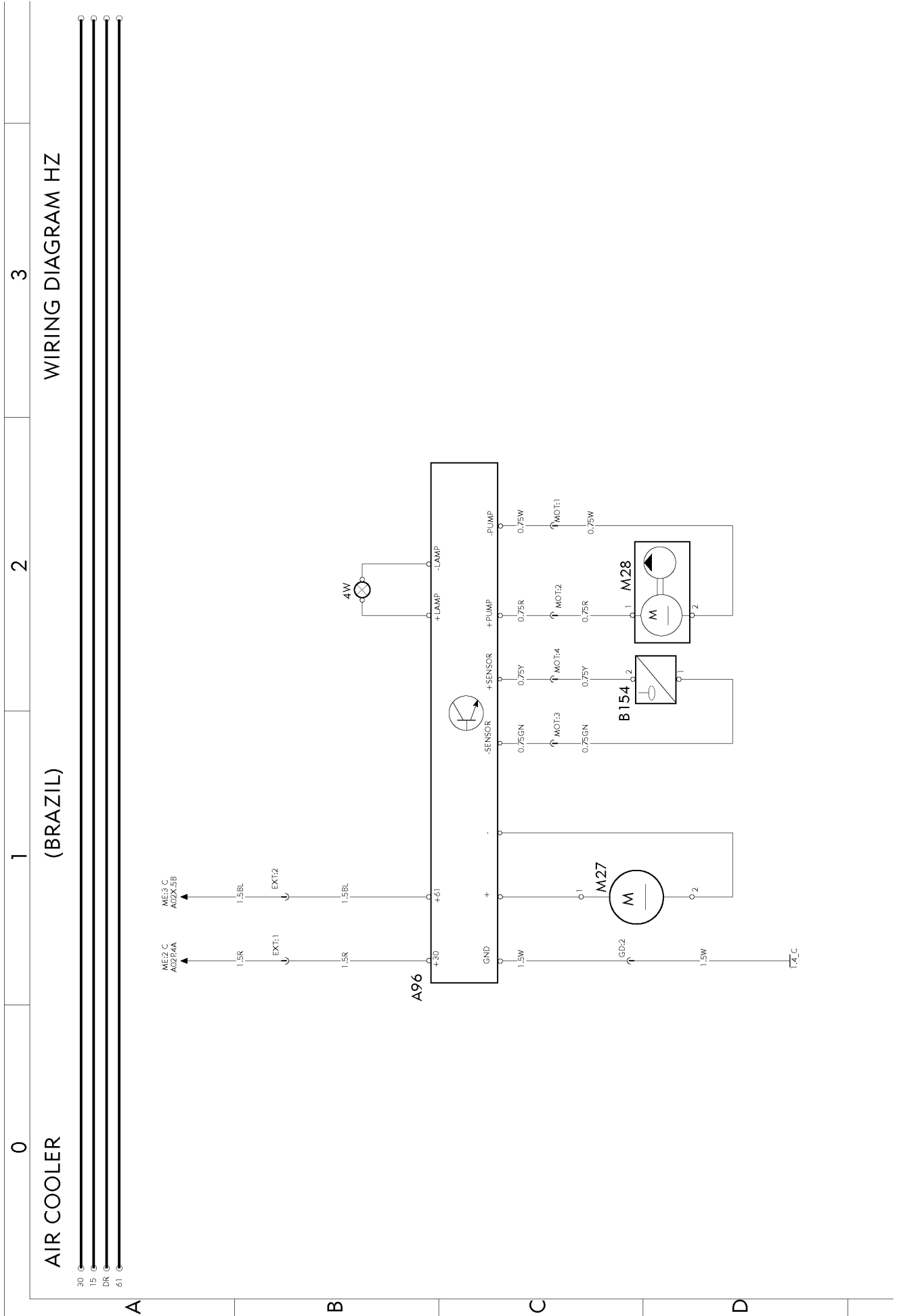
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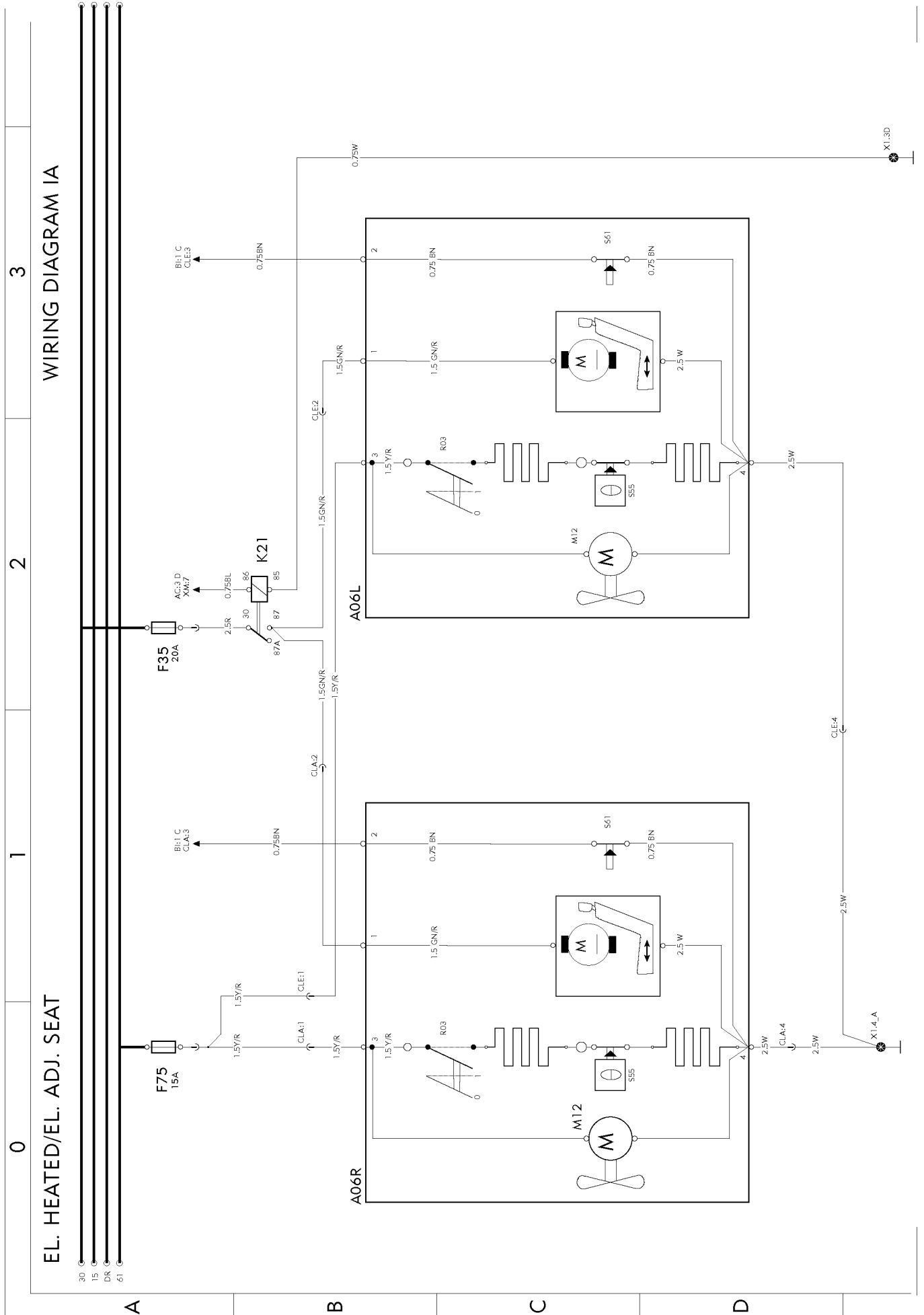






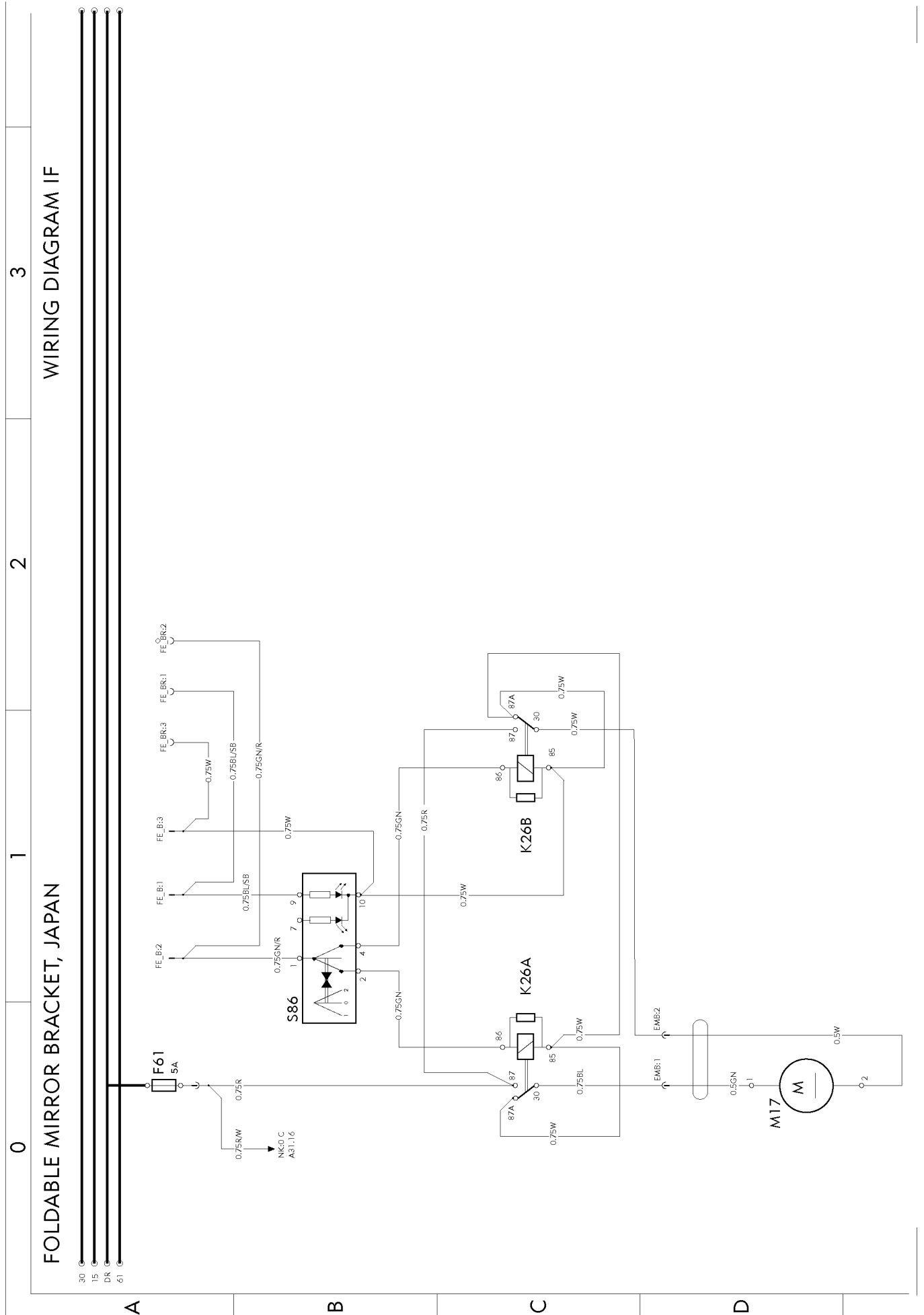


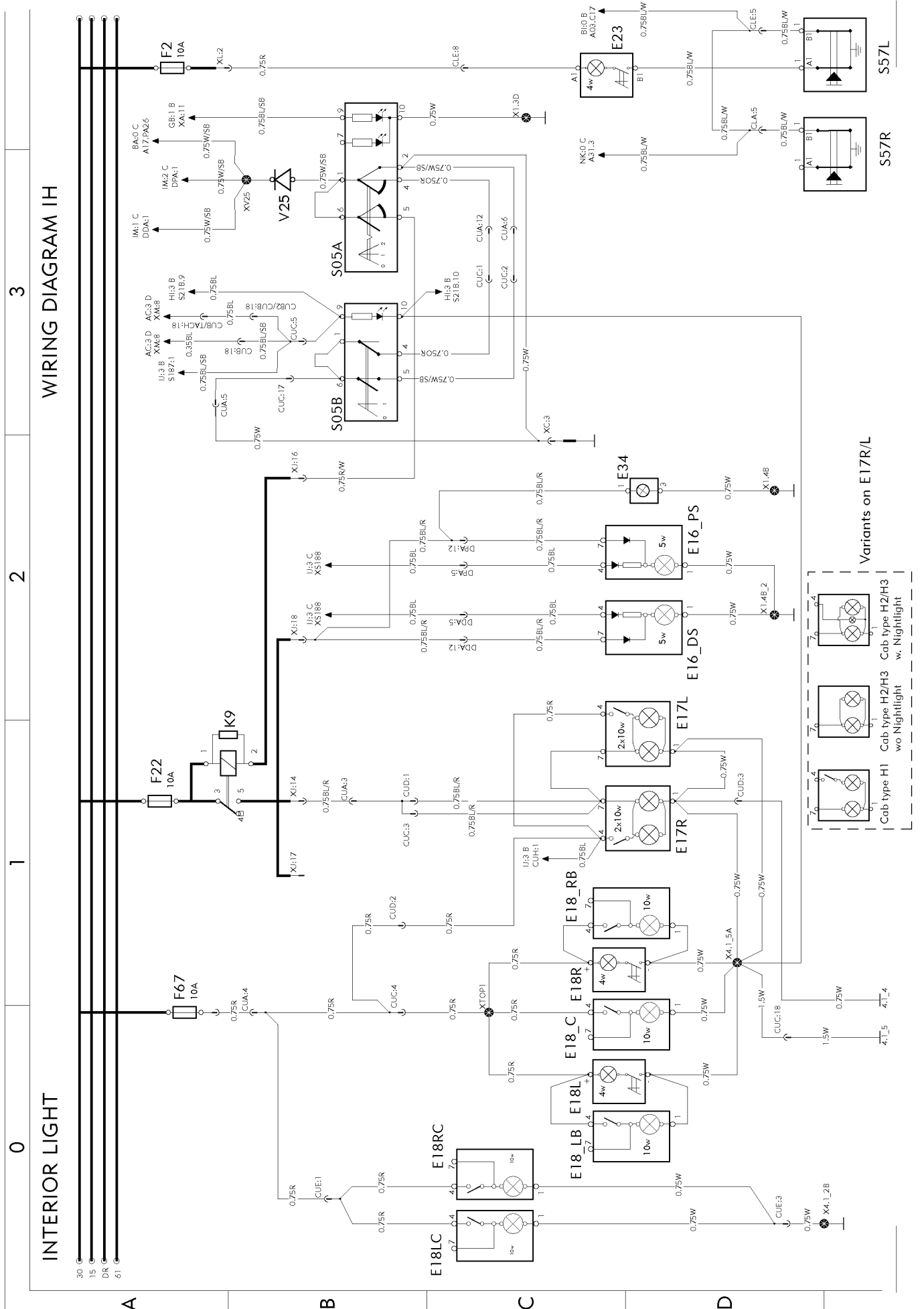


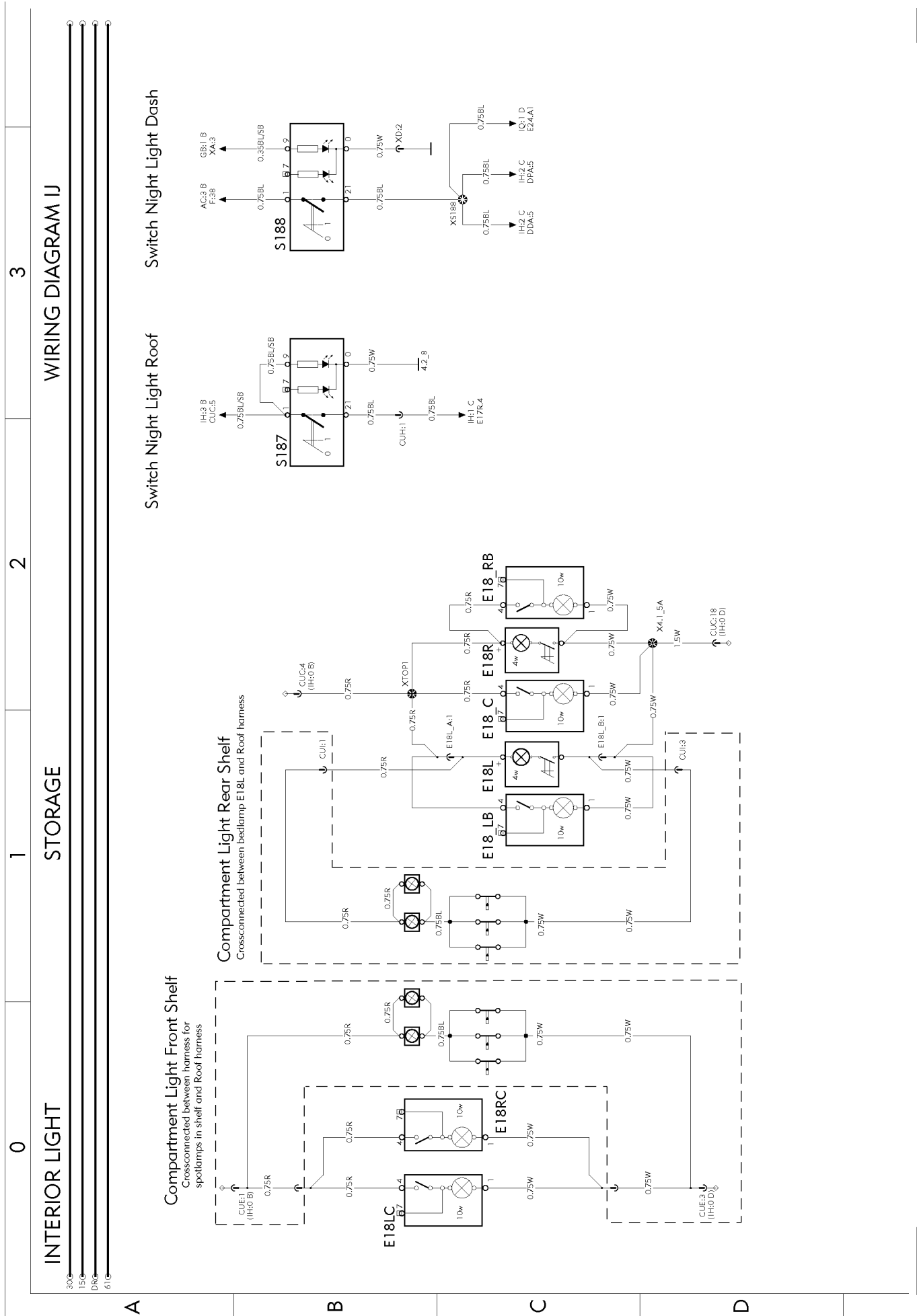




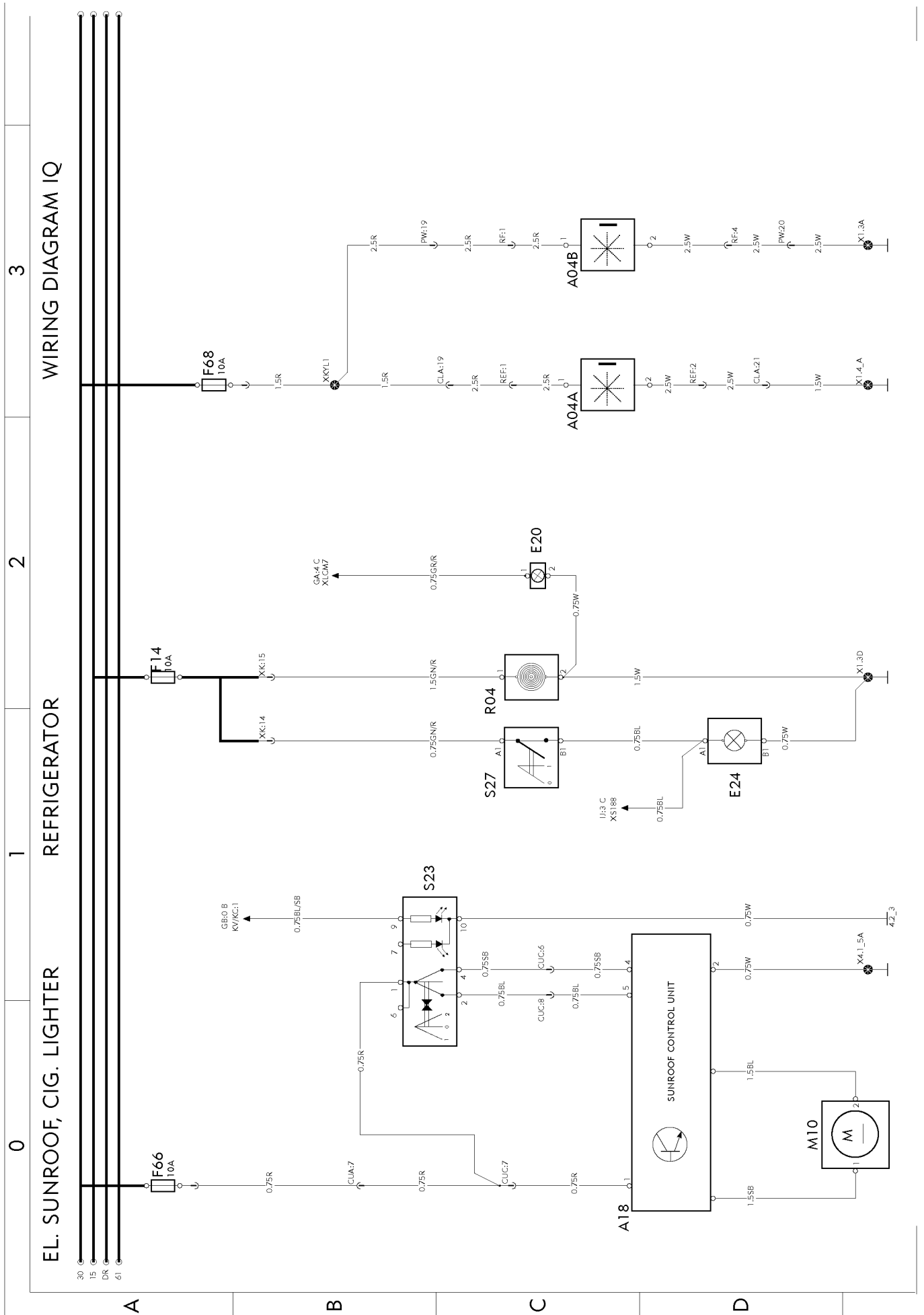












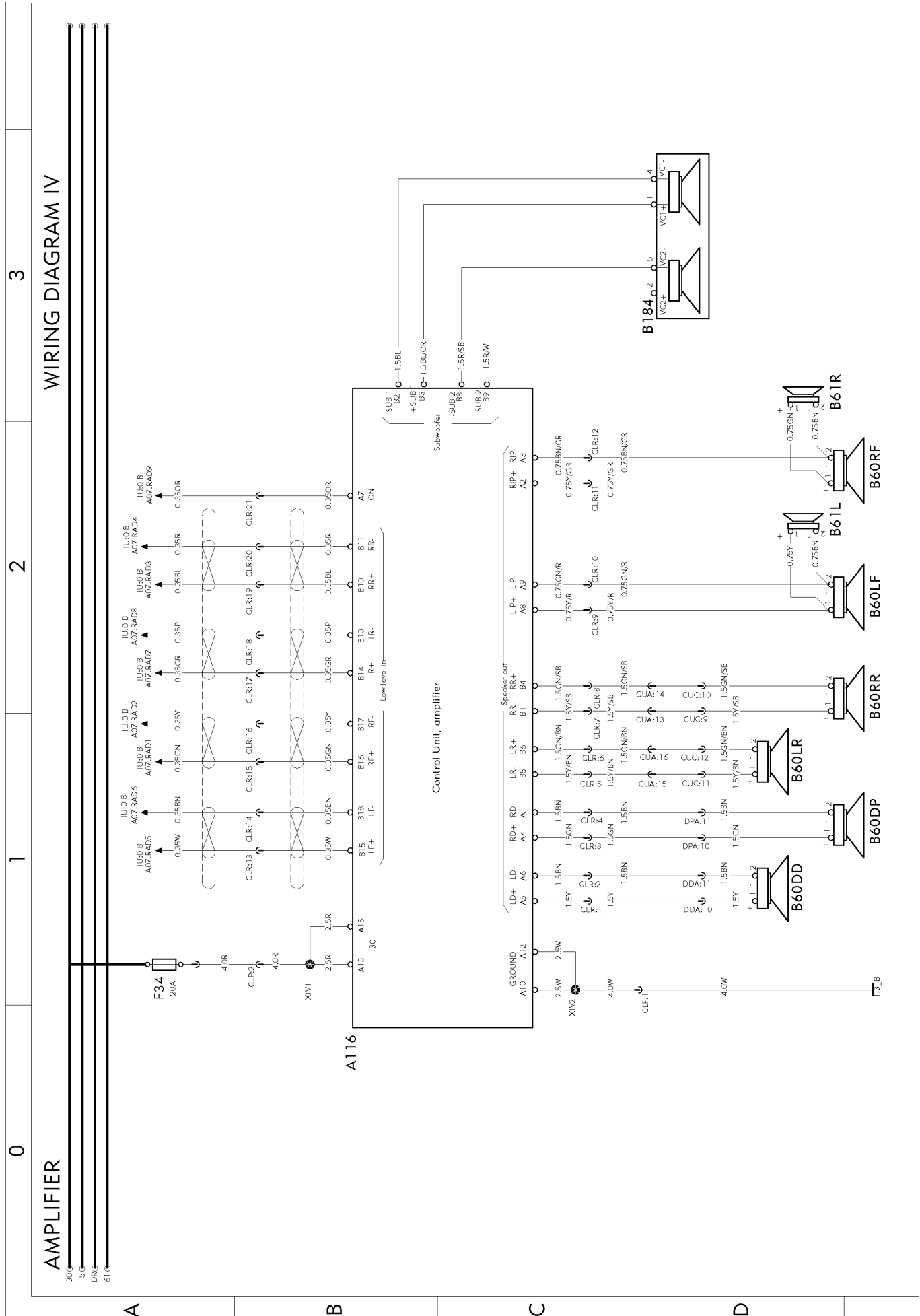


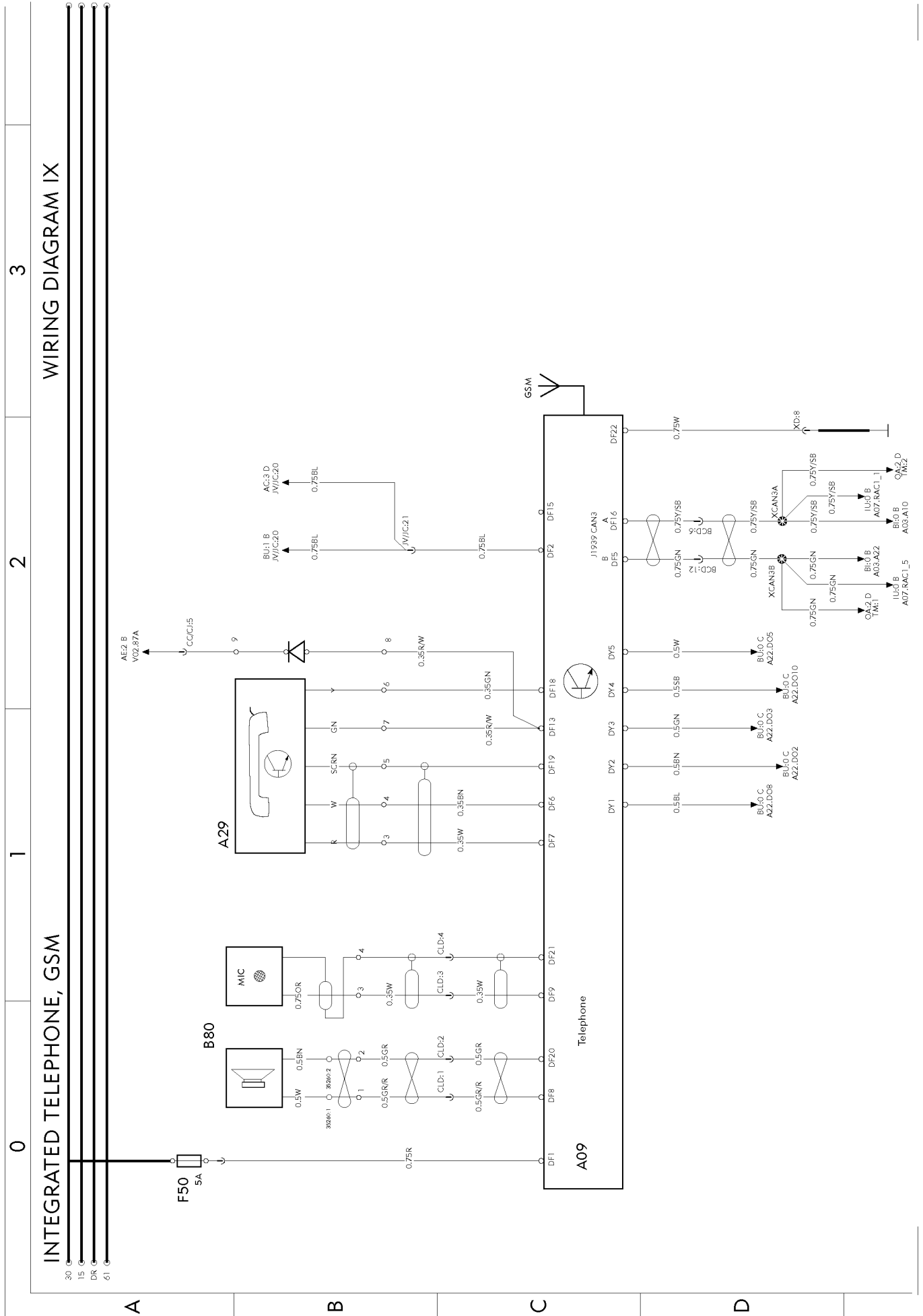


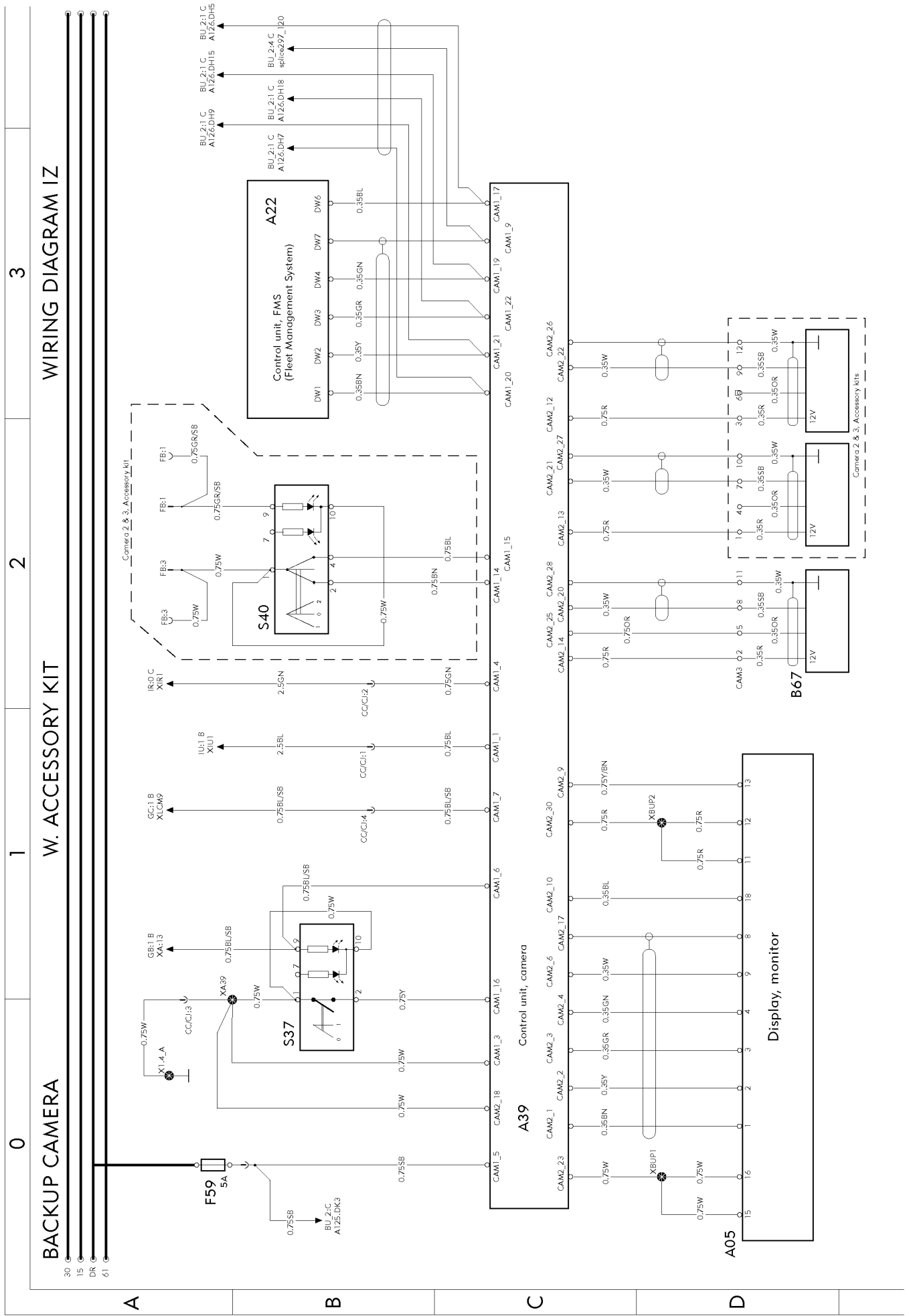


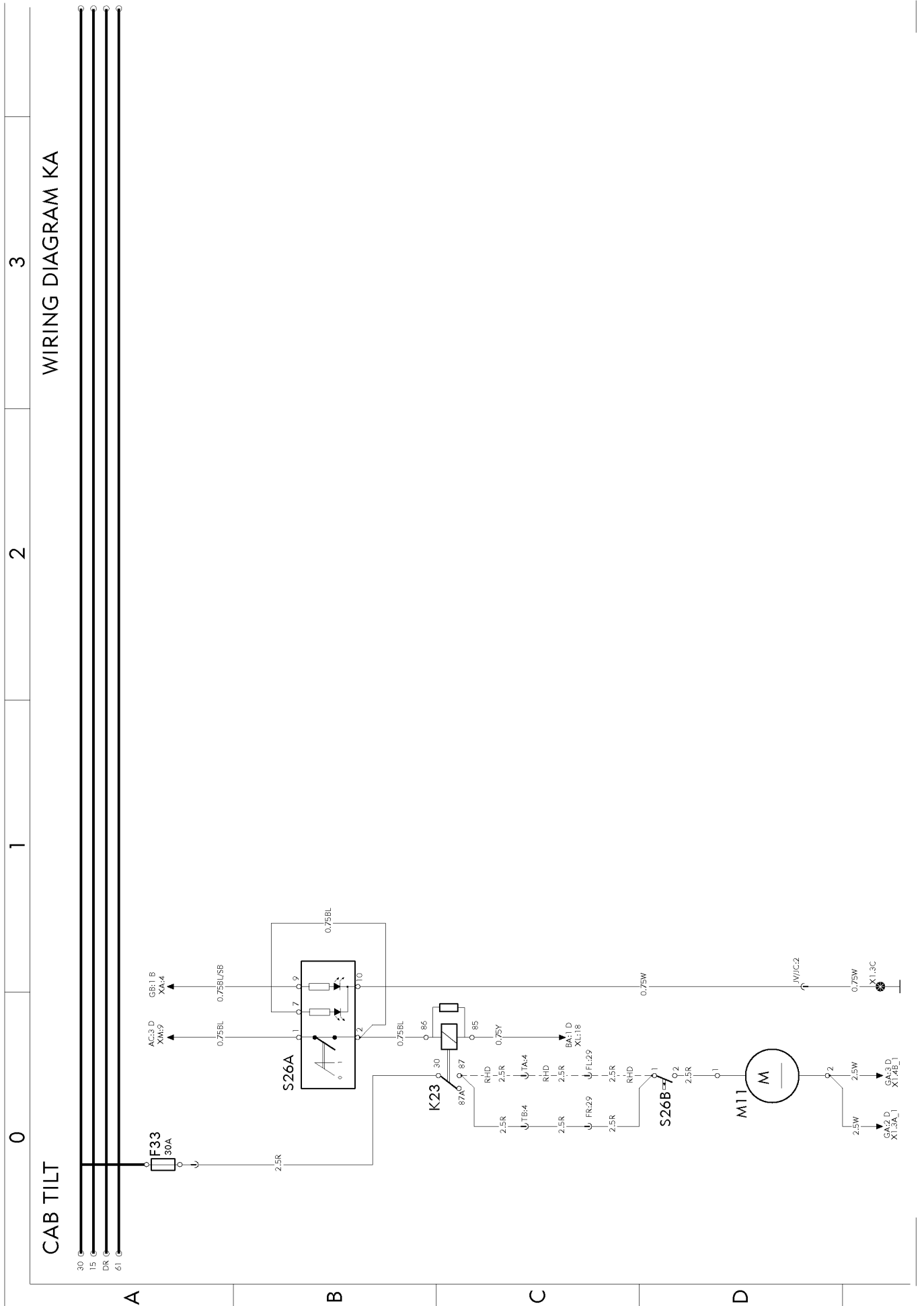


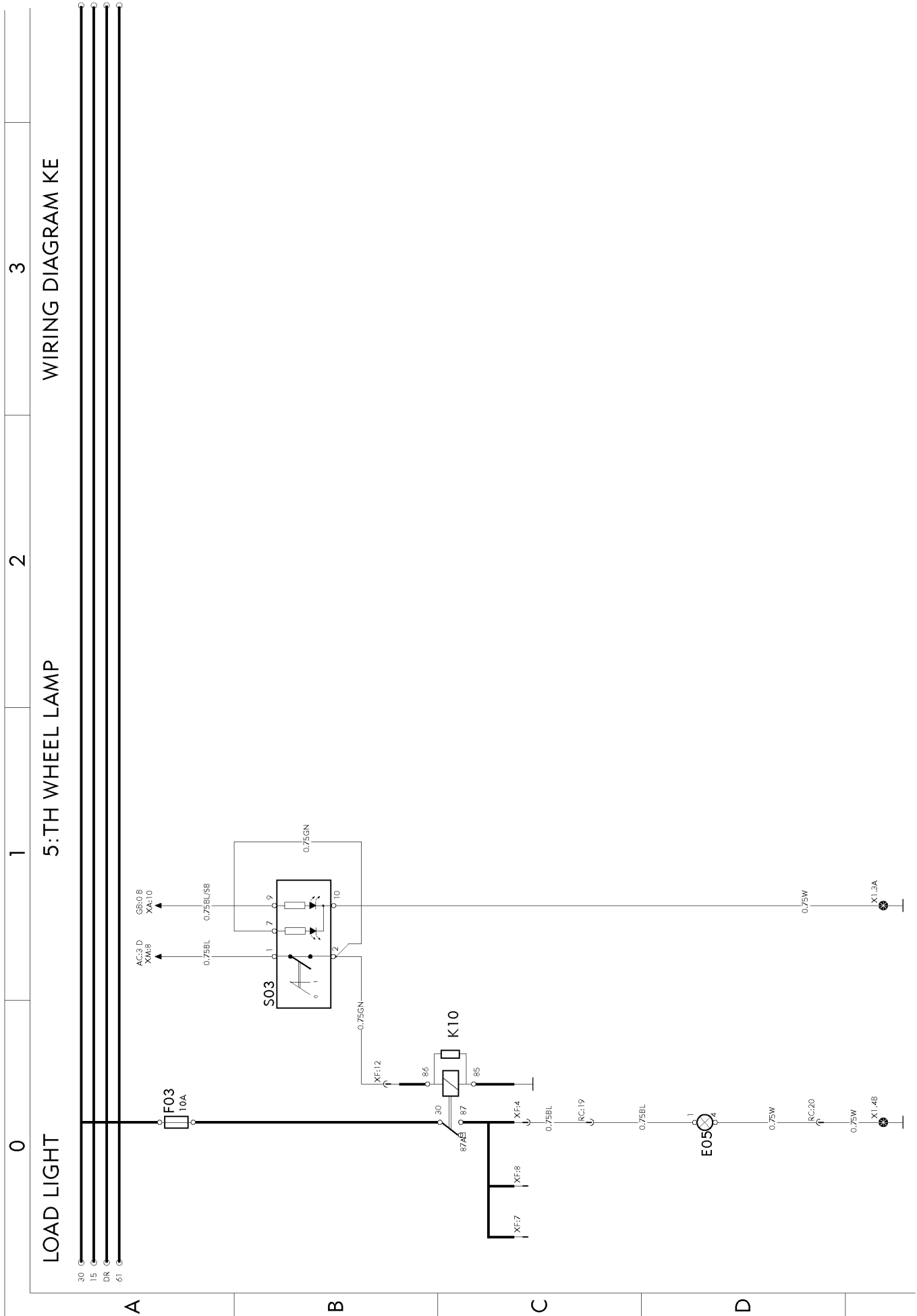


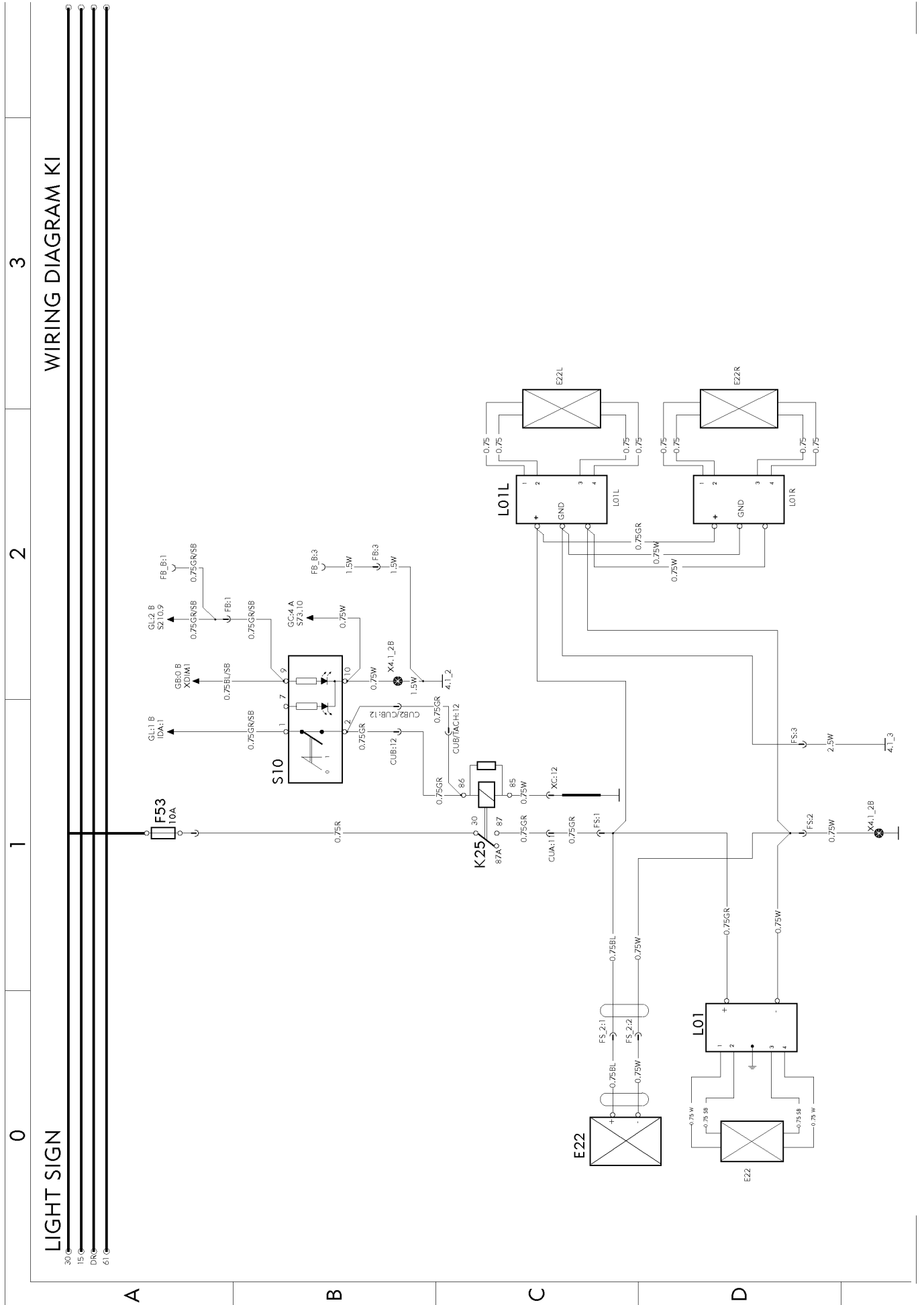












WIRING DIAGRAM KI

LIGHT SIGN

3

2

1

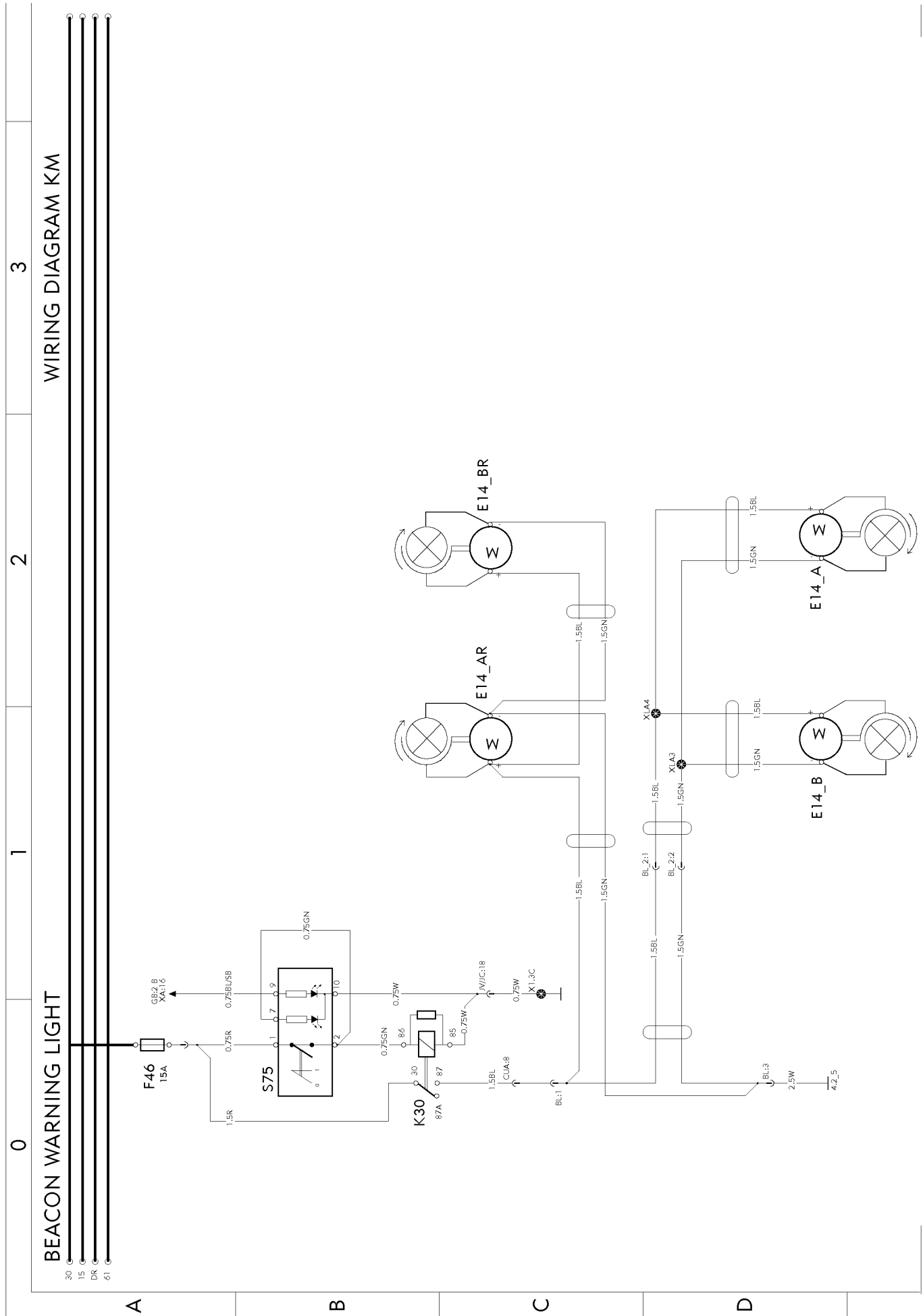
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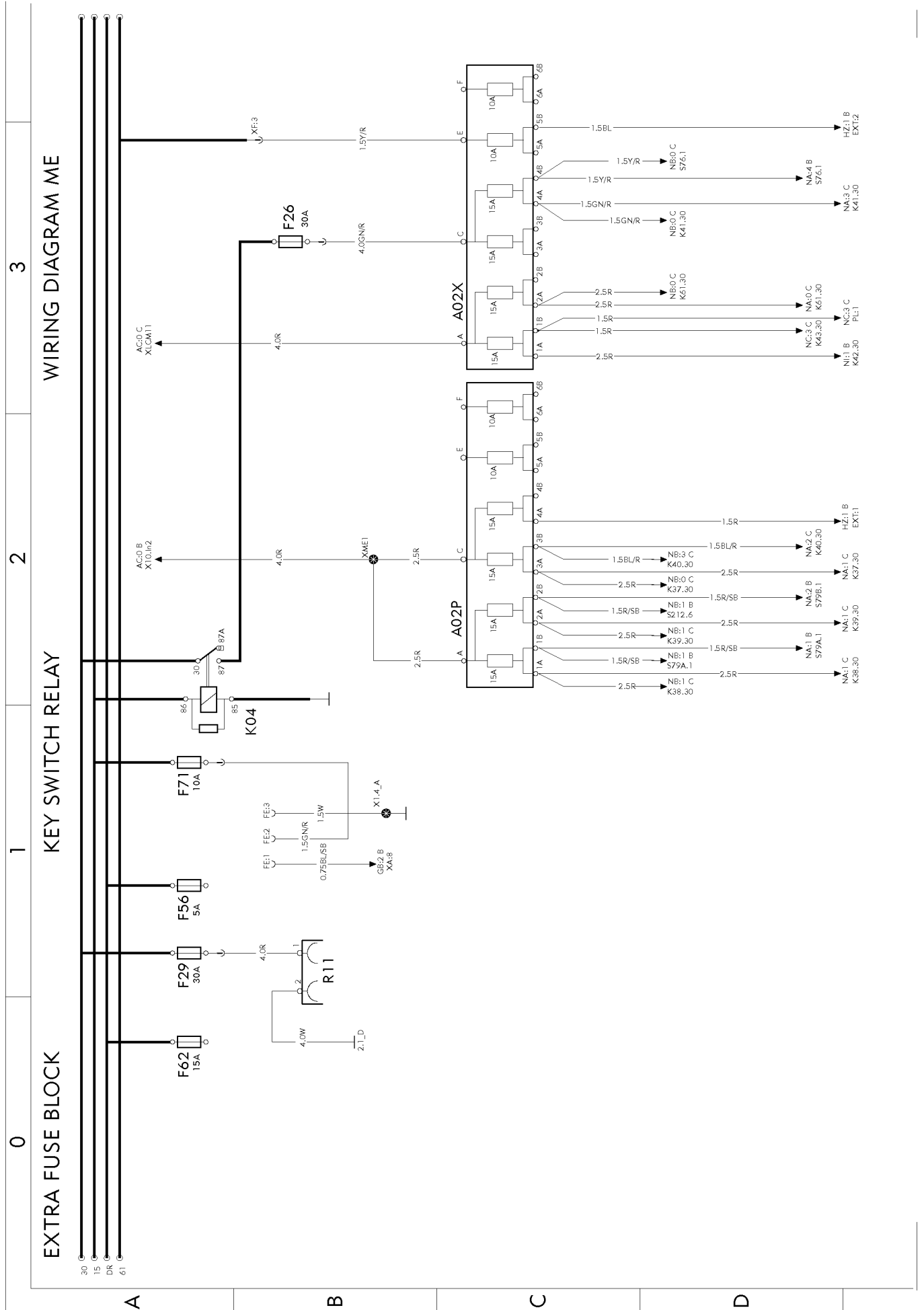
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C

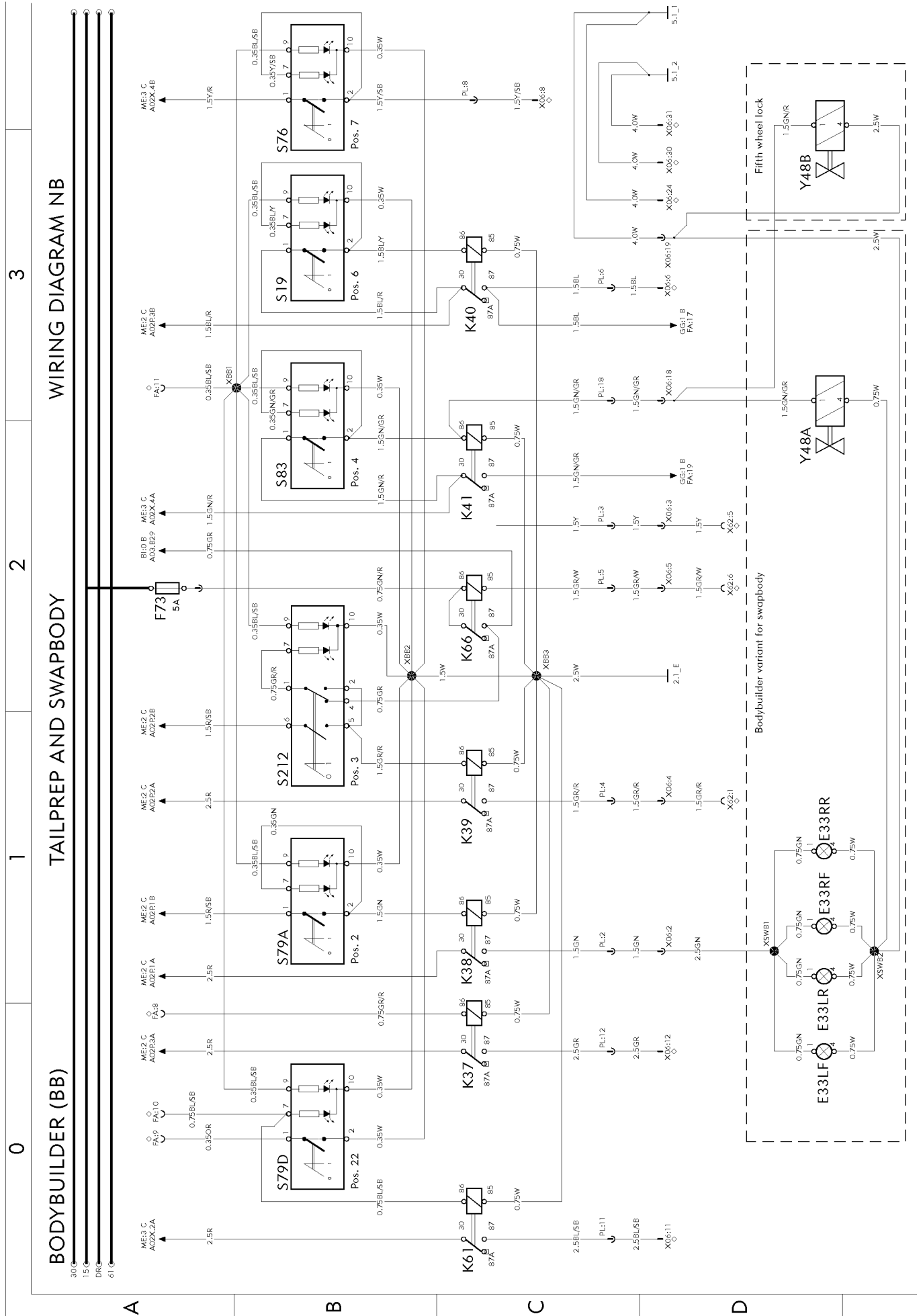
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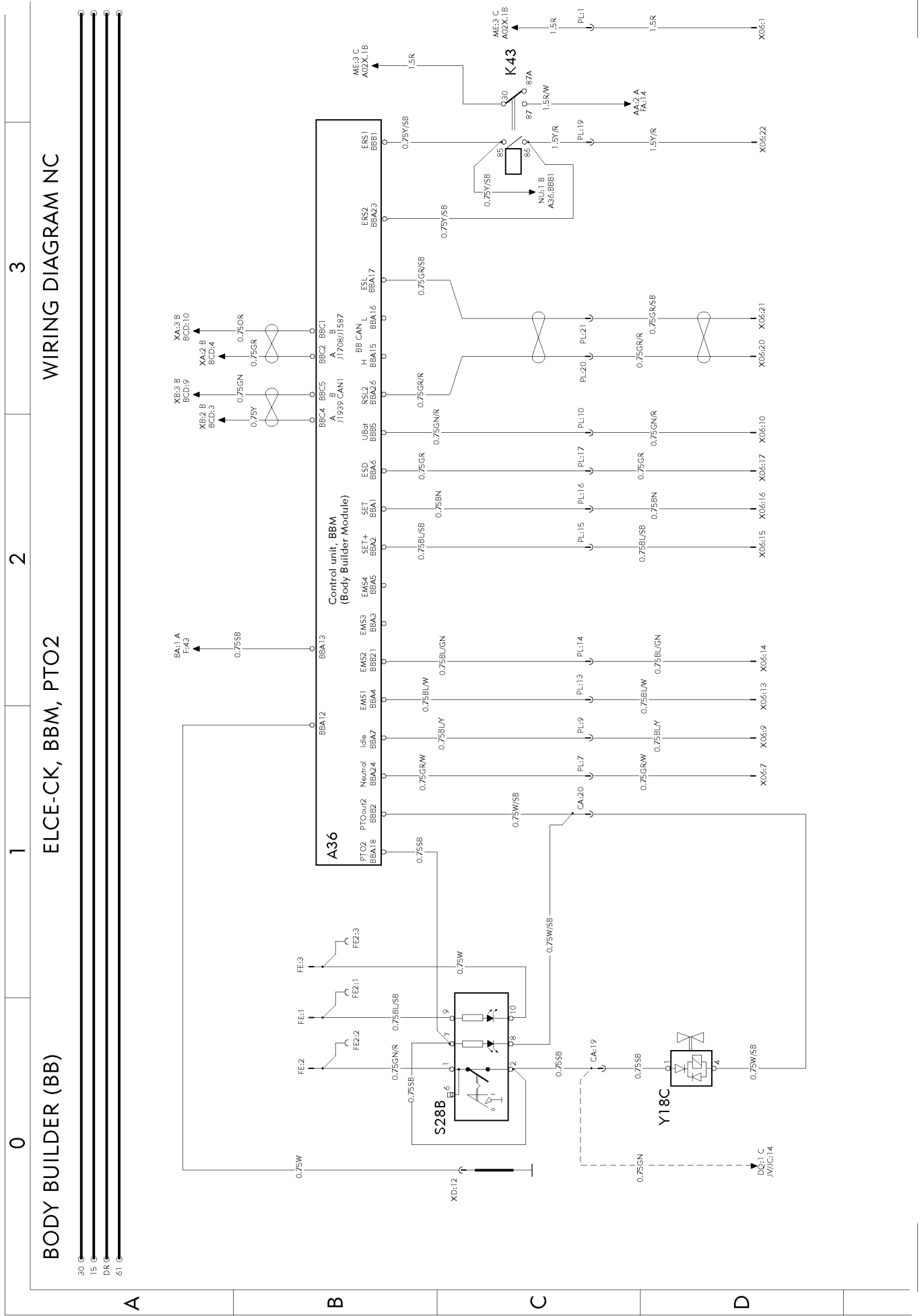




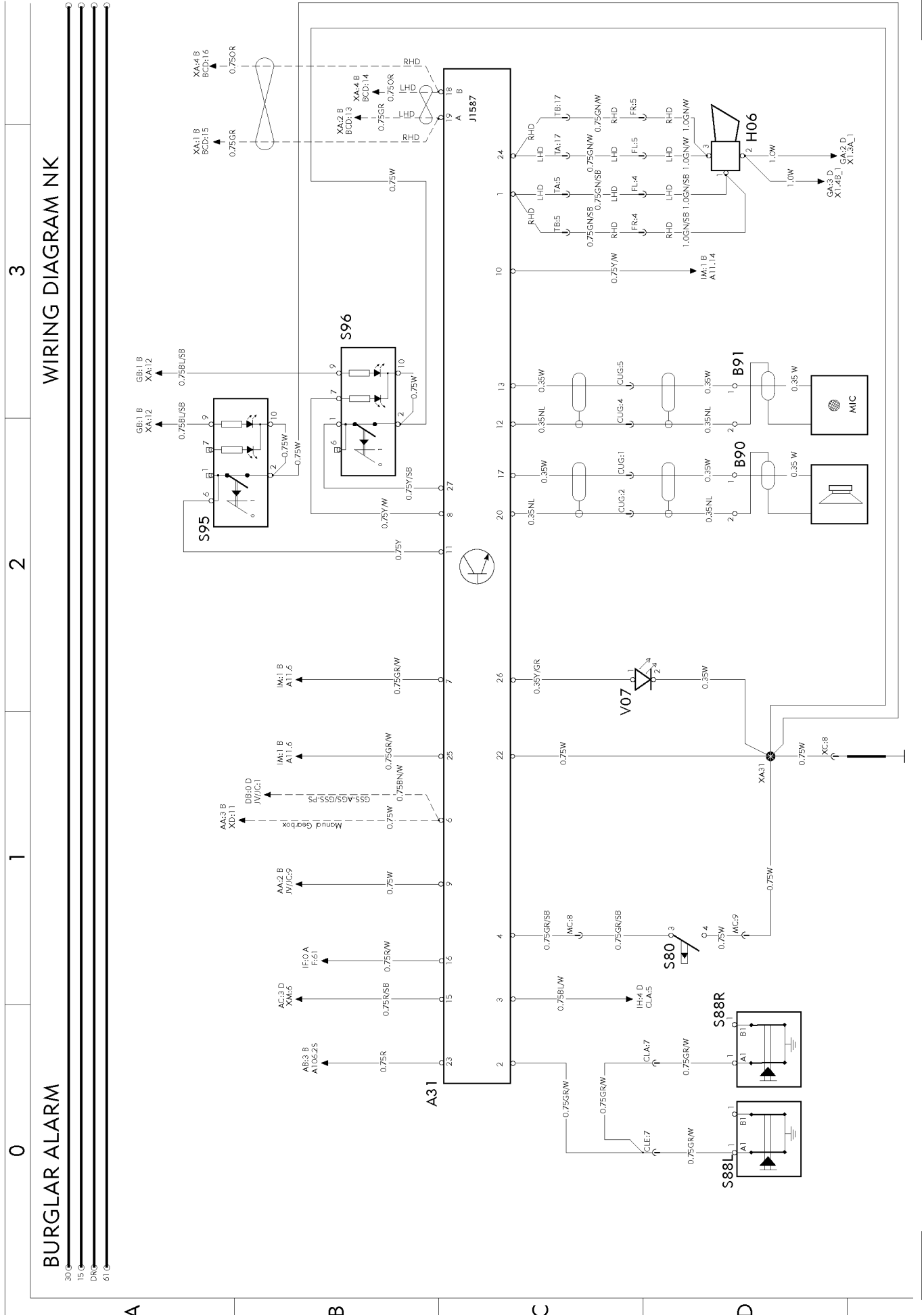


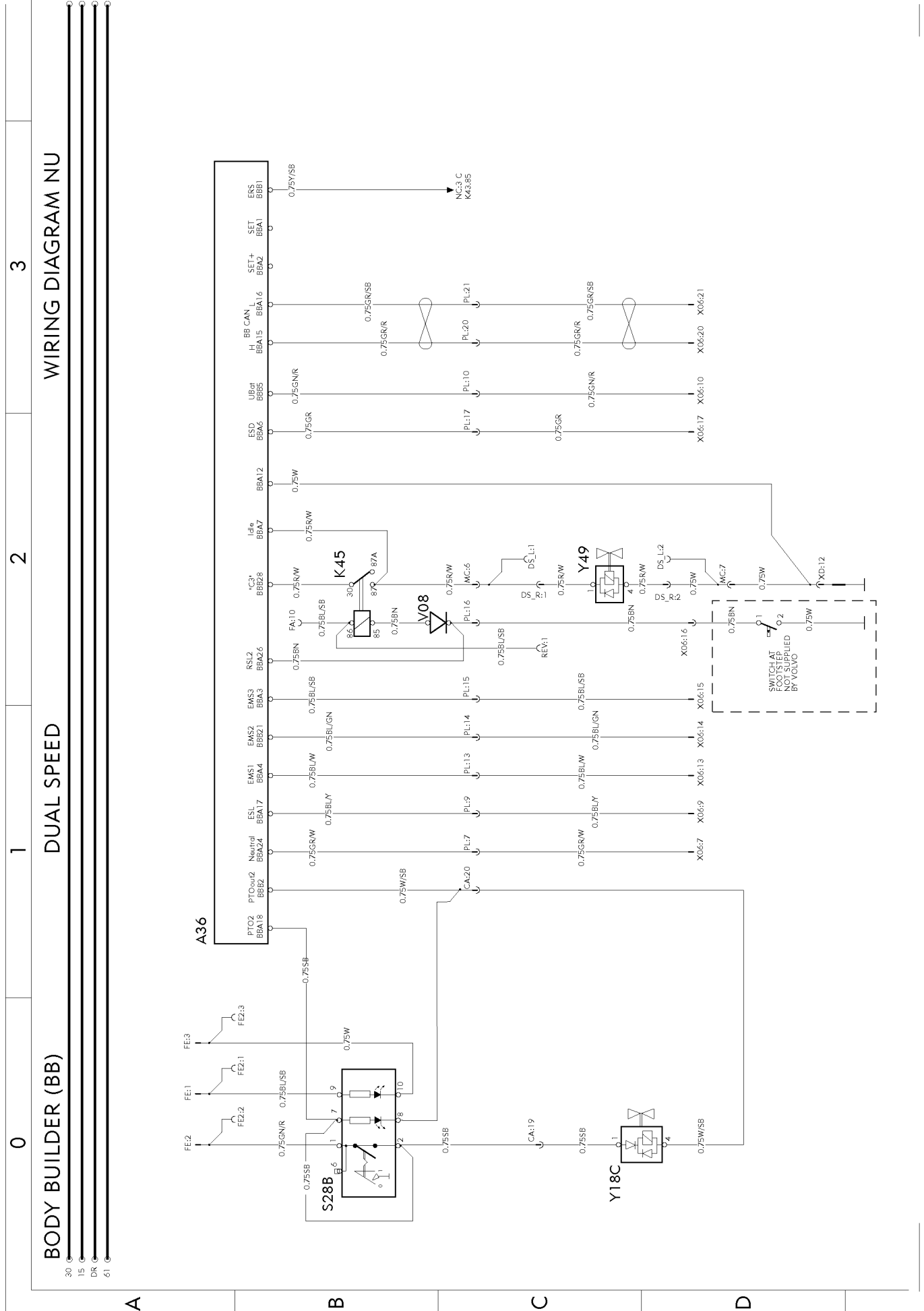


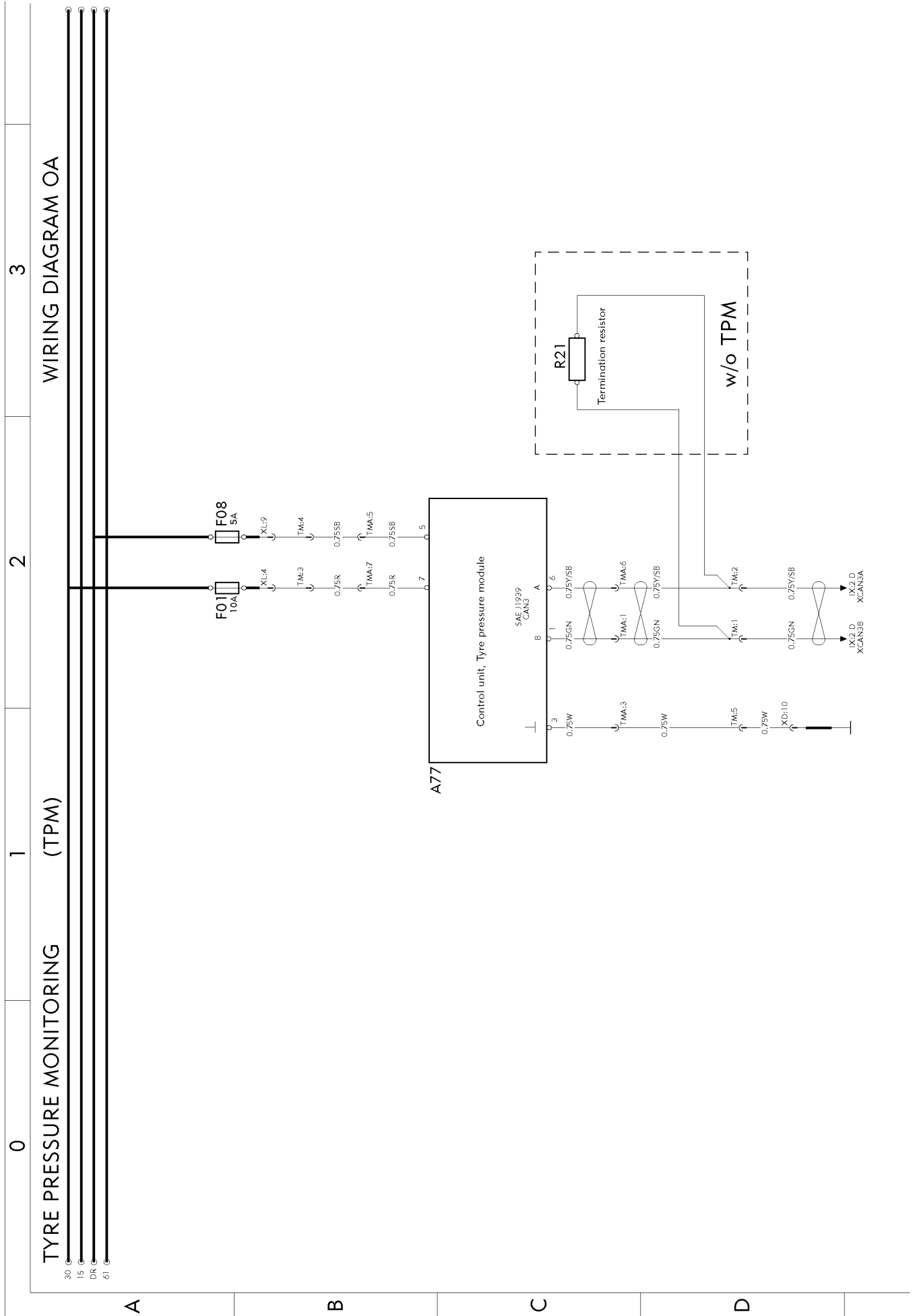




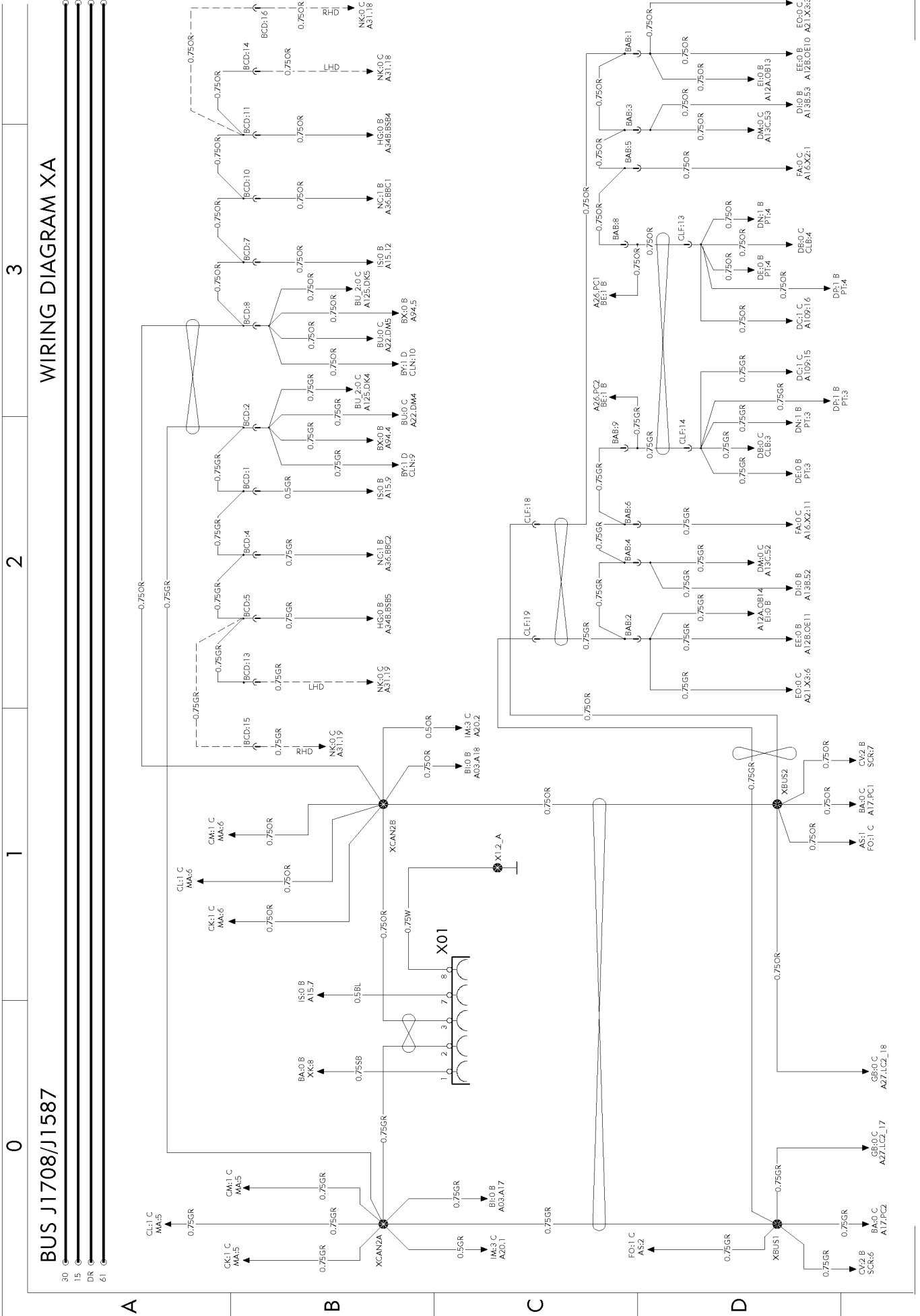


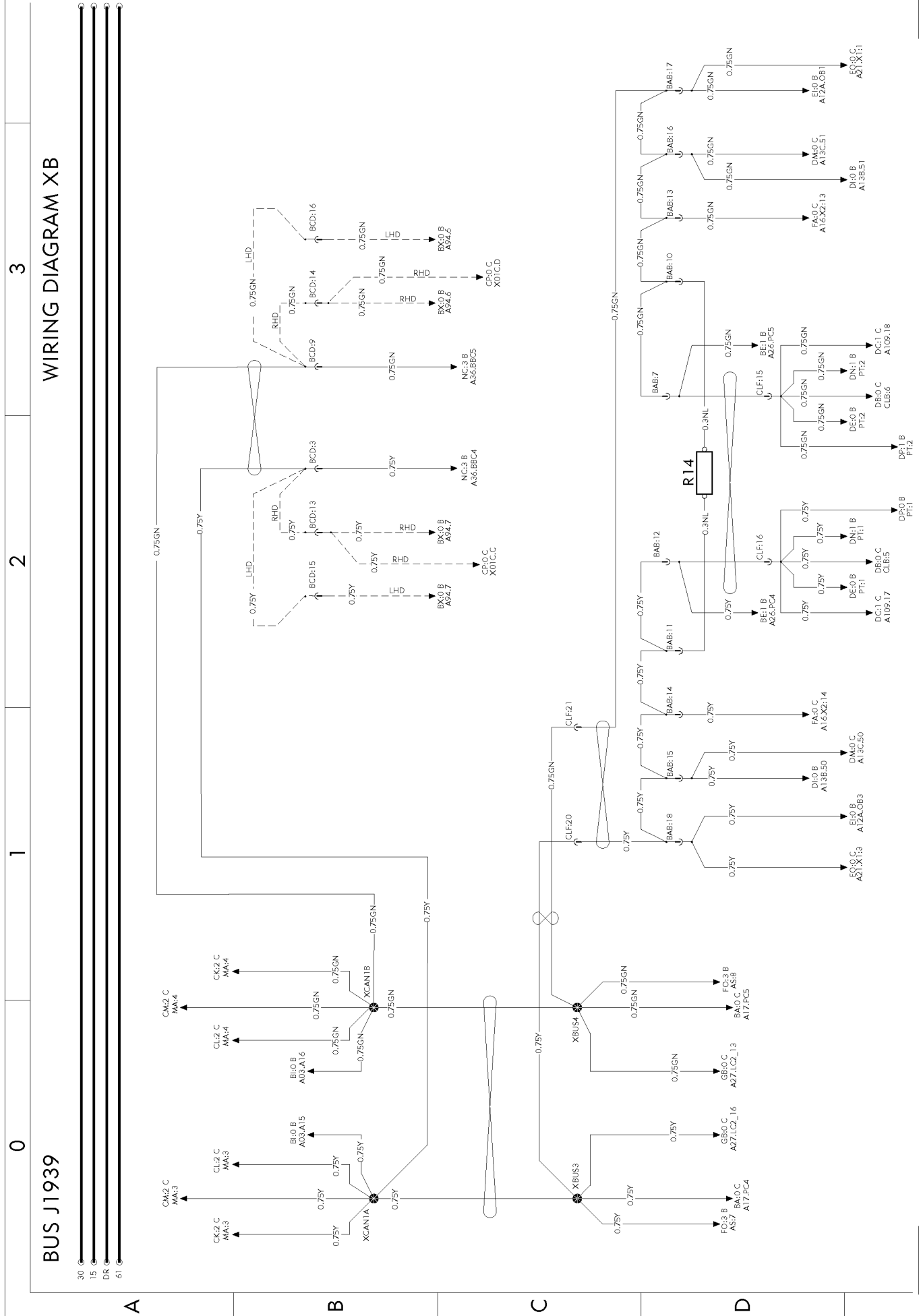




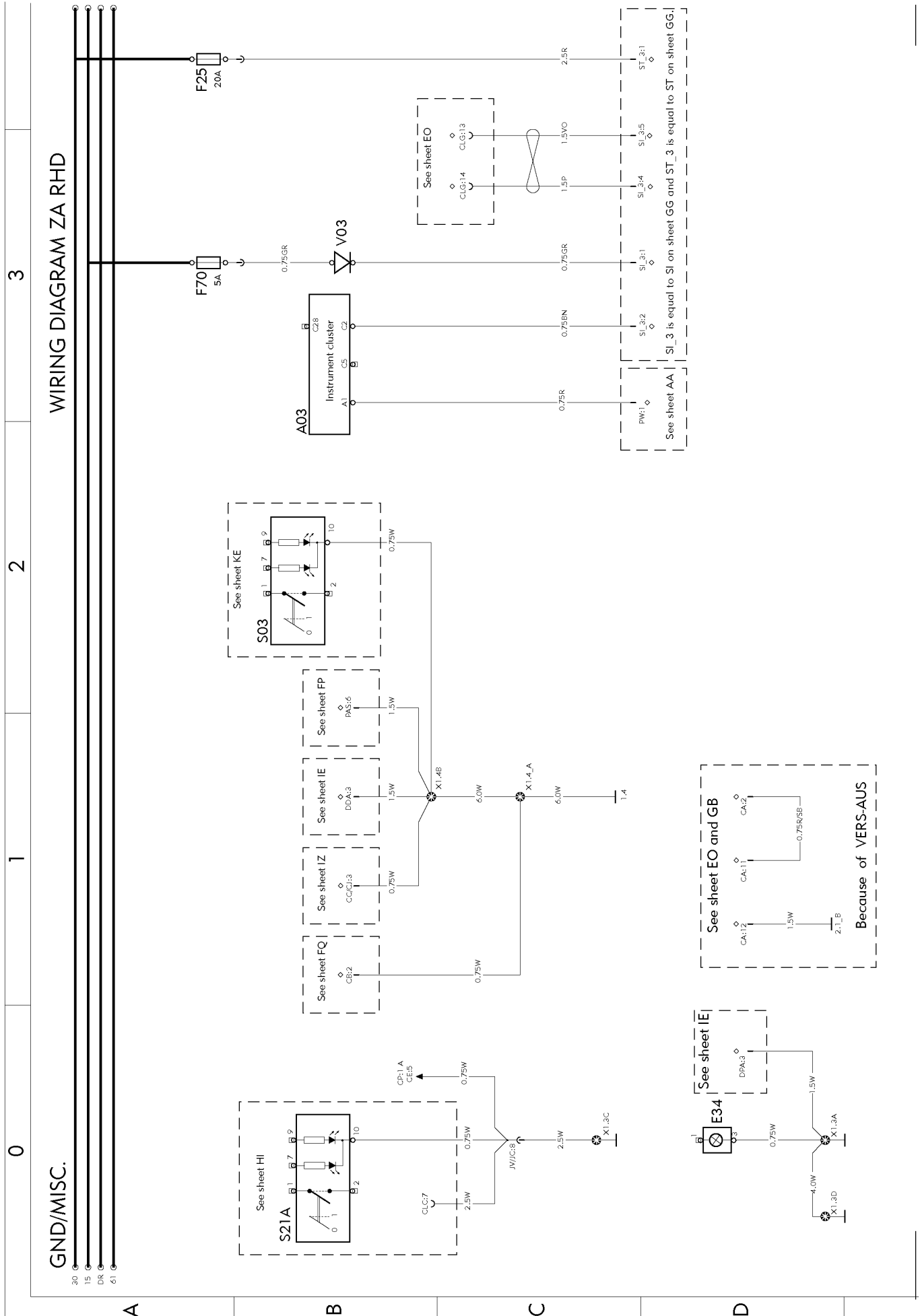










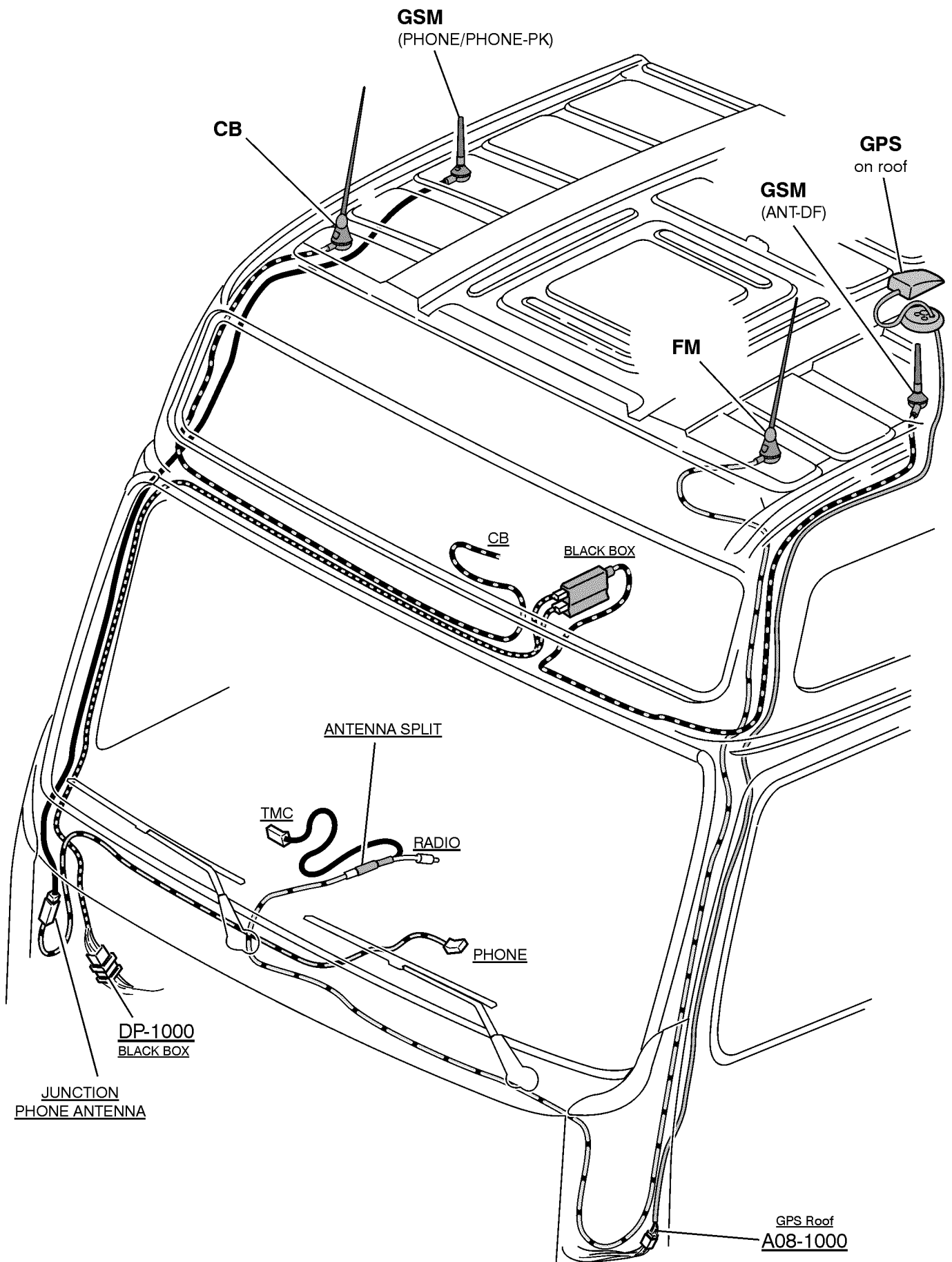


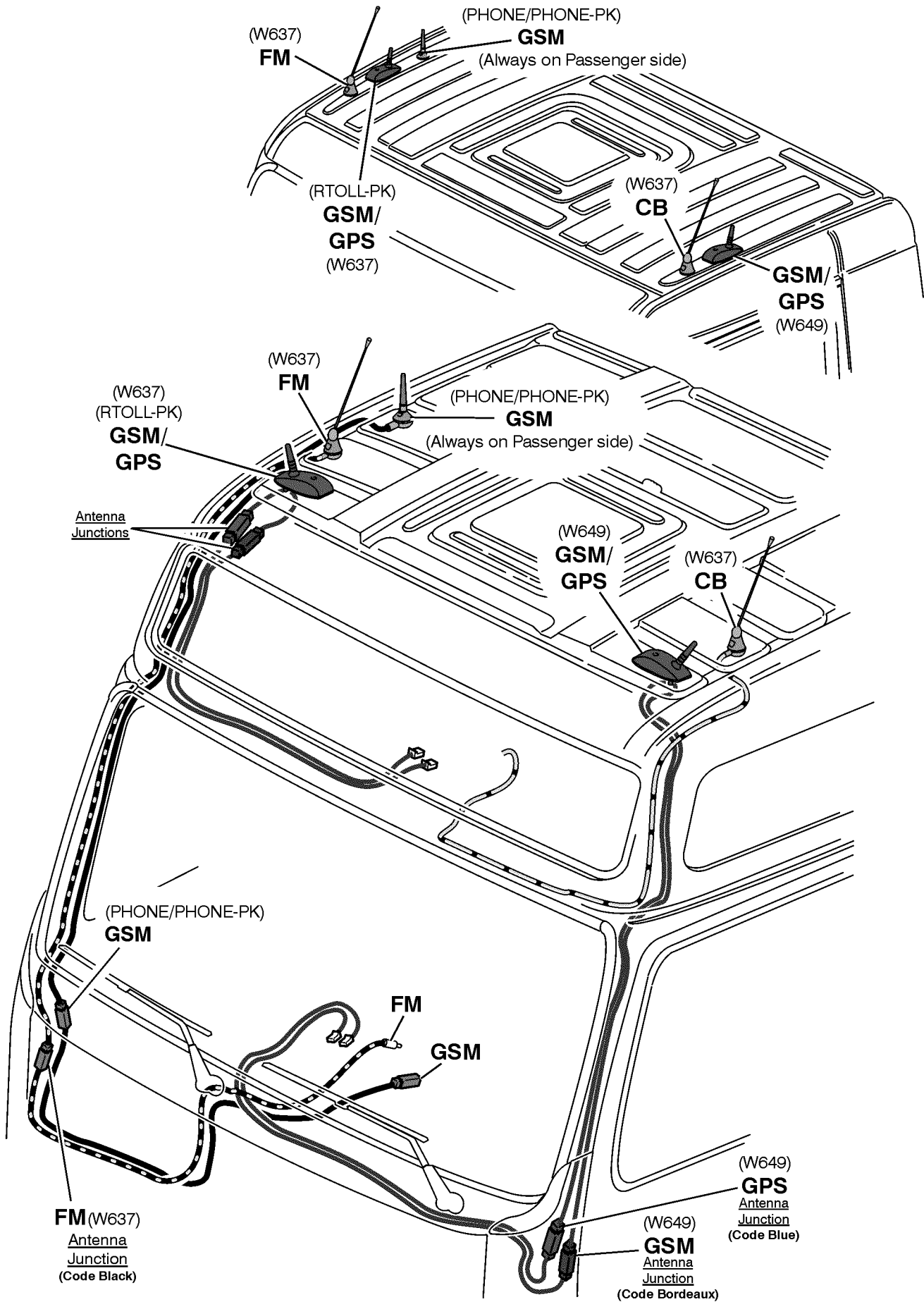
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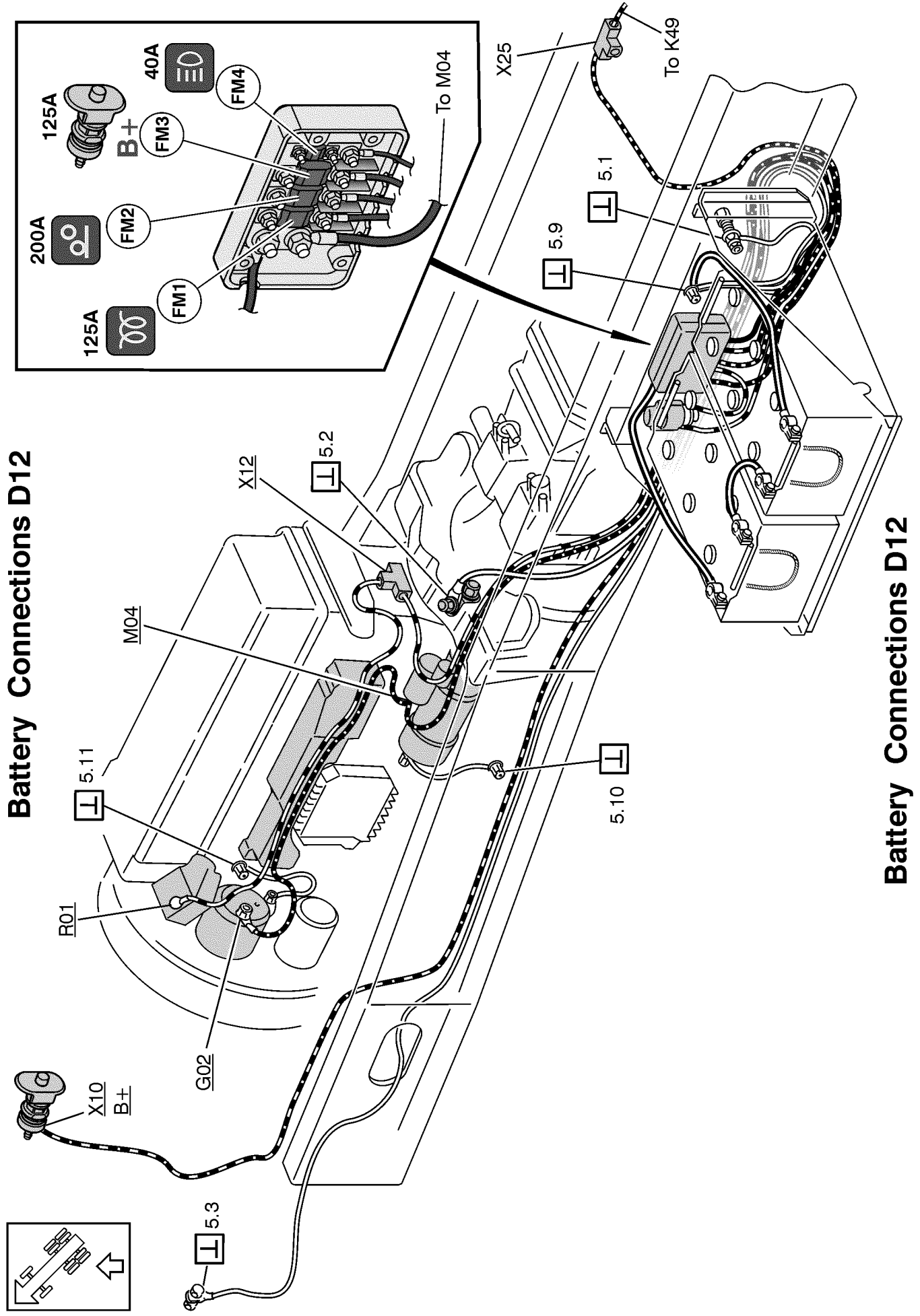
# Illustrations







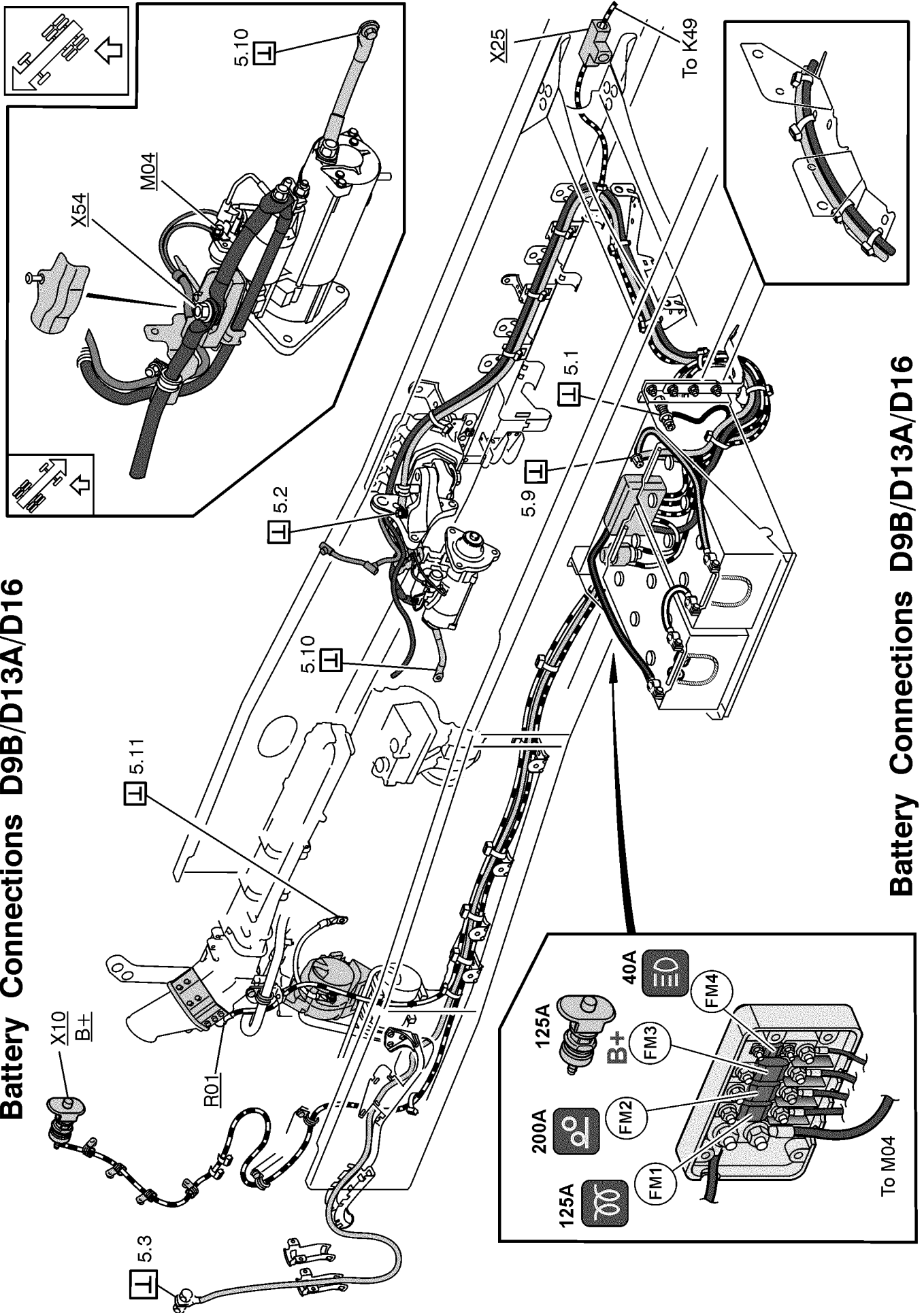




Battery Connections D12

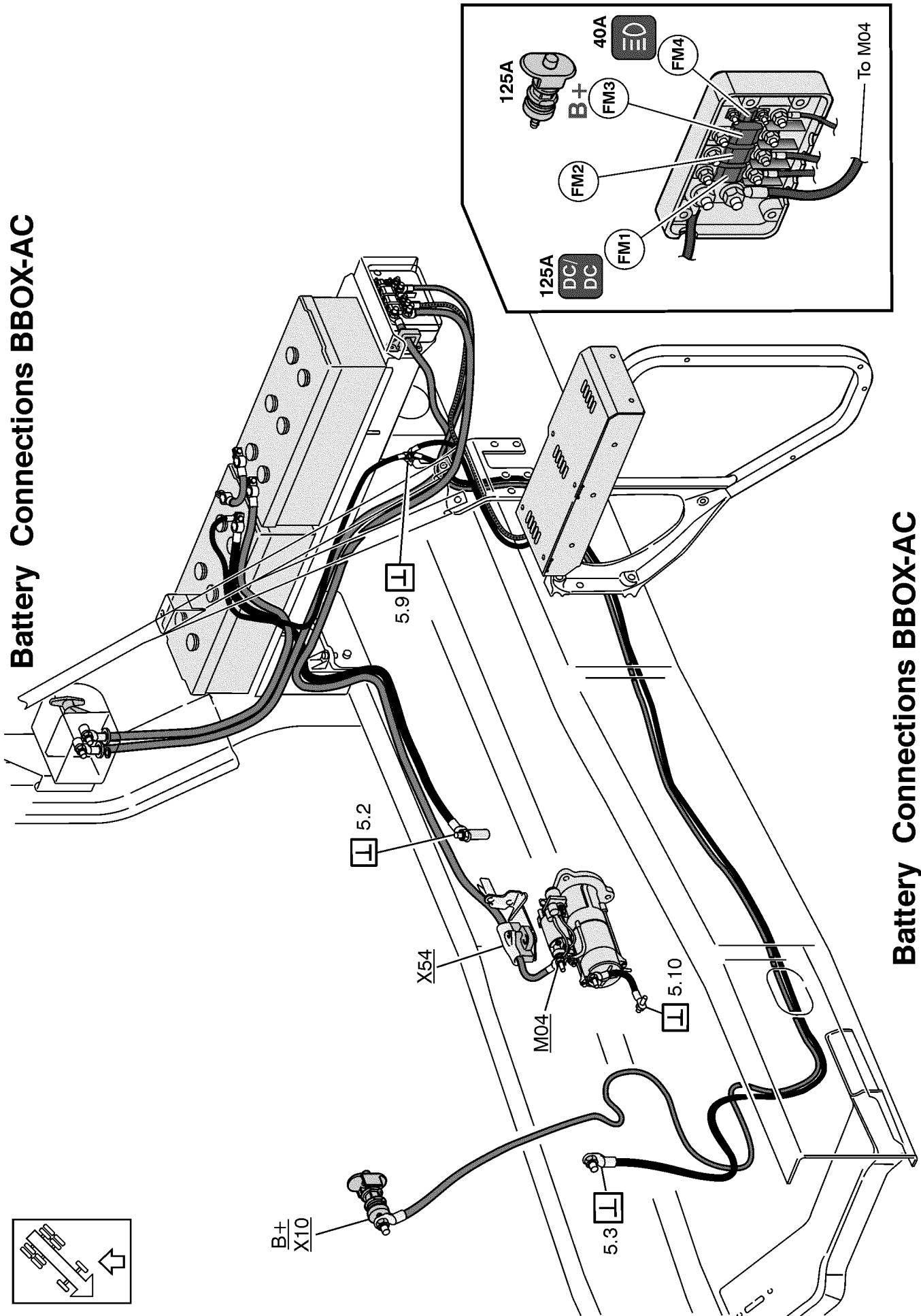
Battery Connections D12

# Battery Connections D9B/D13A/D16

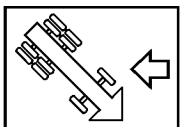


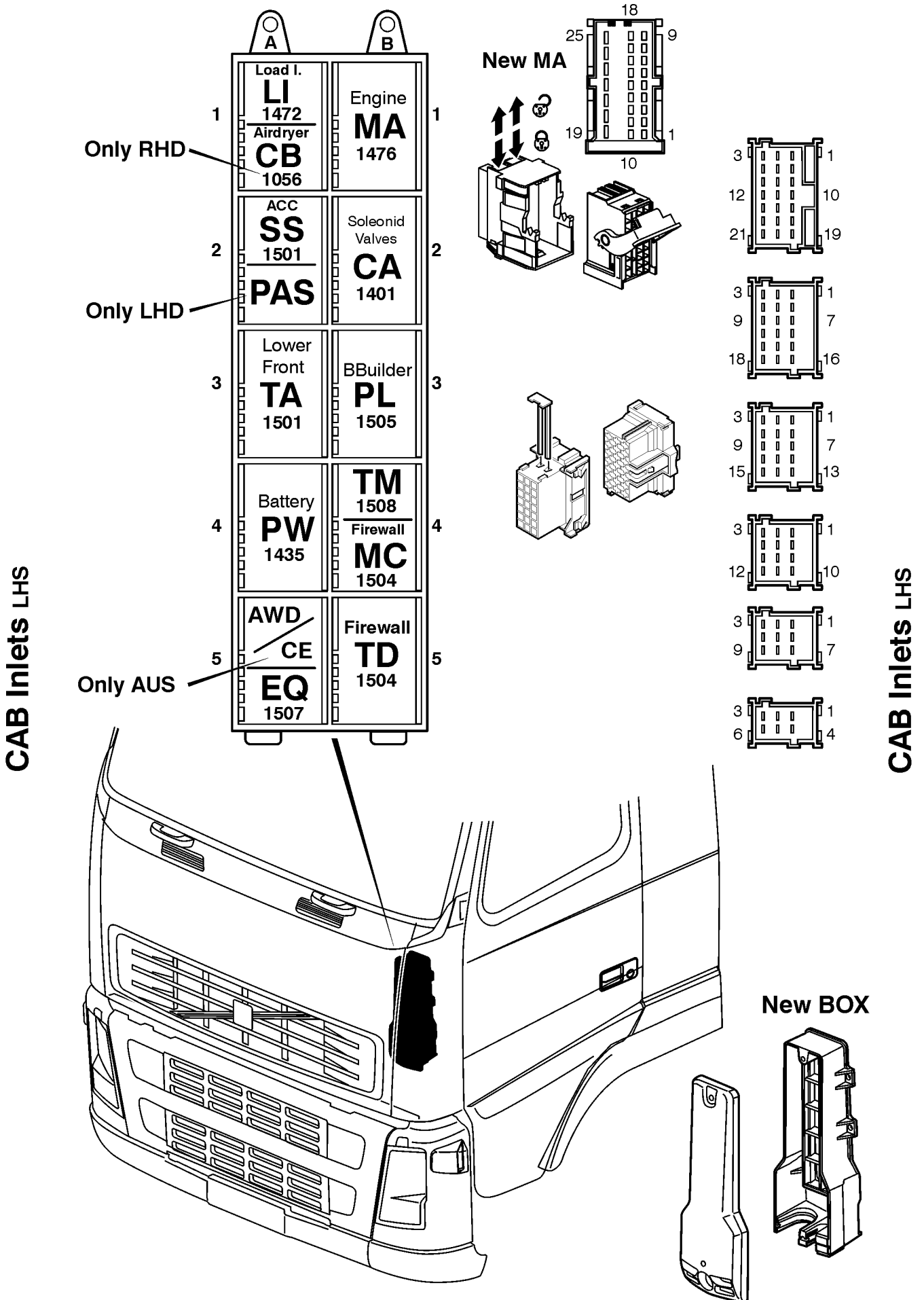
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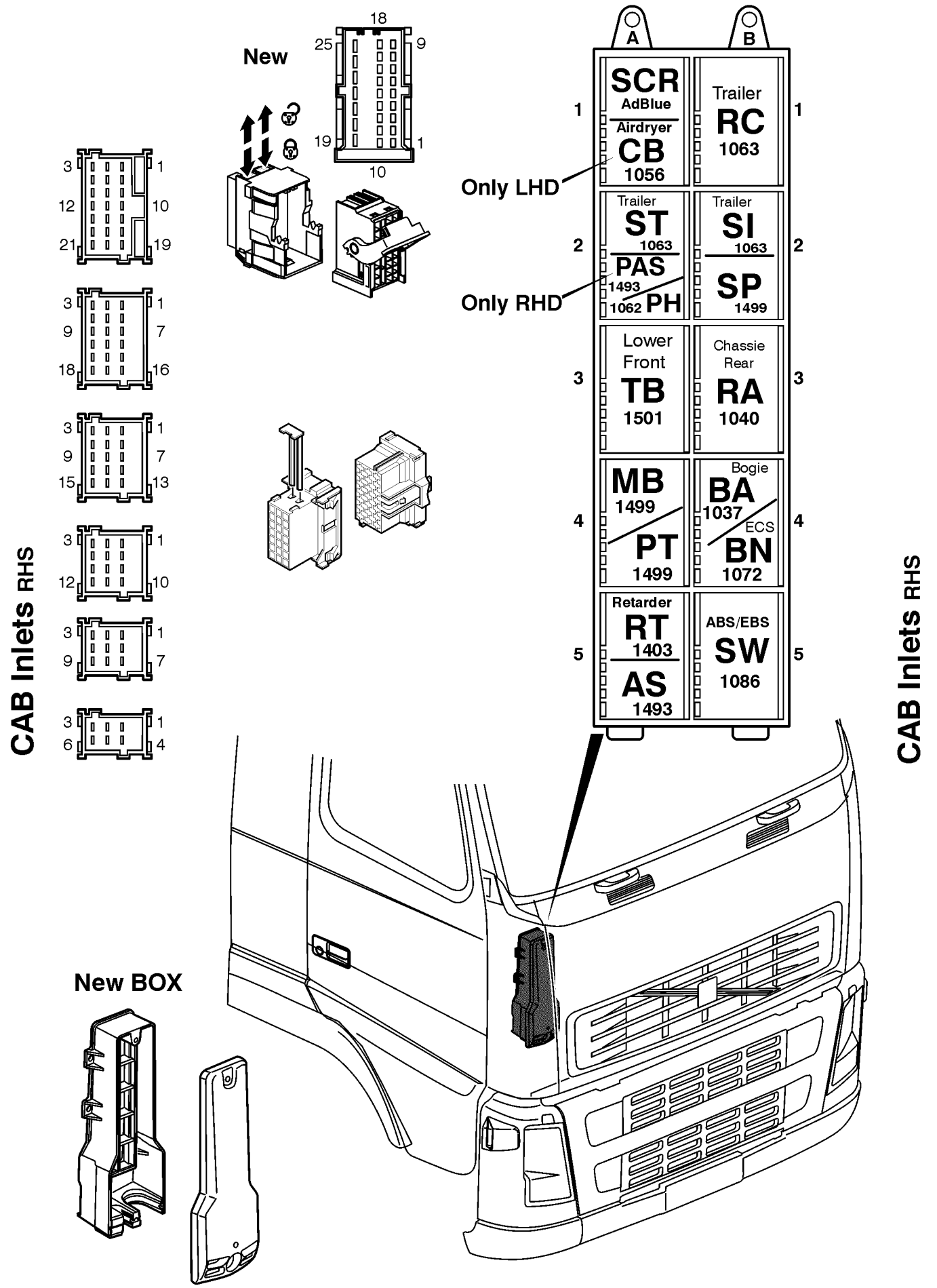
**Battery Connections BBOX-AC**



**Battery Connections BBOX-AC**



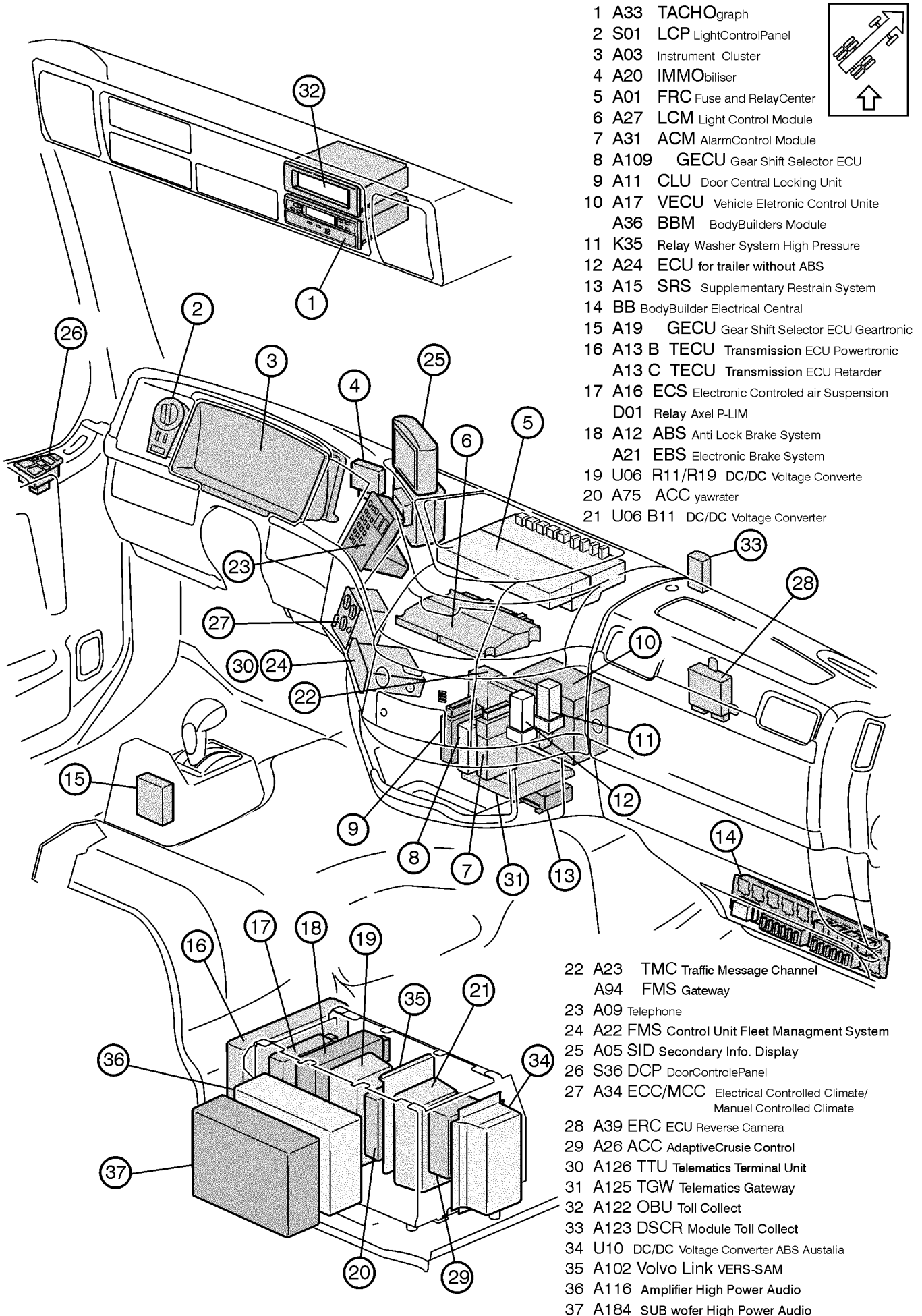




**CAB Inlets RHS**

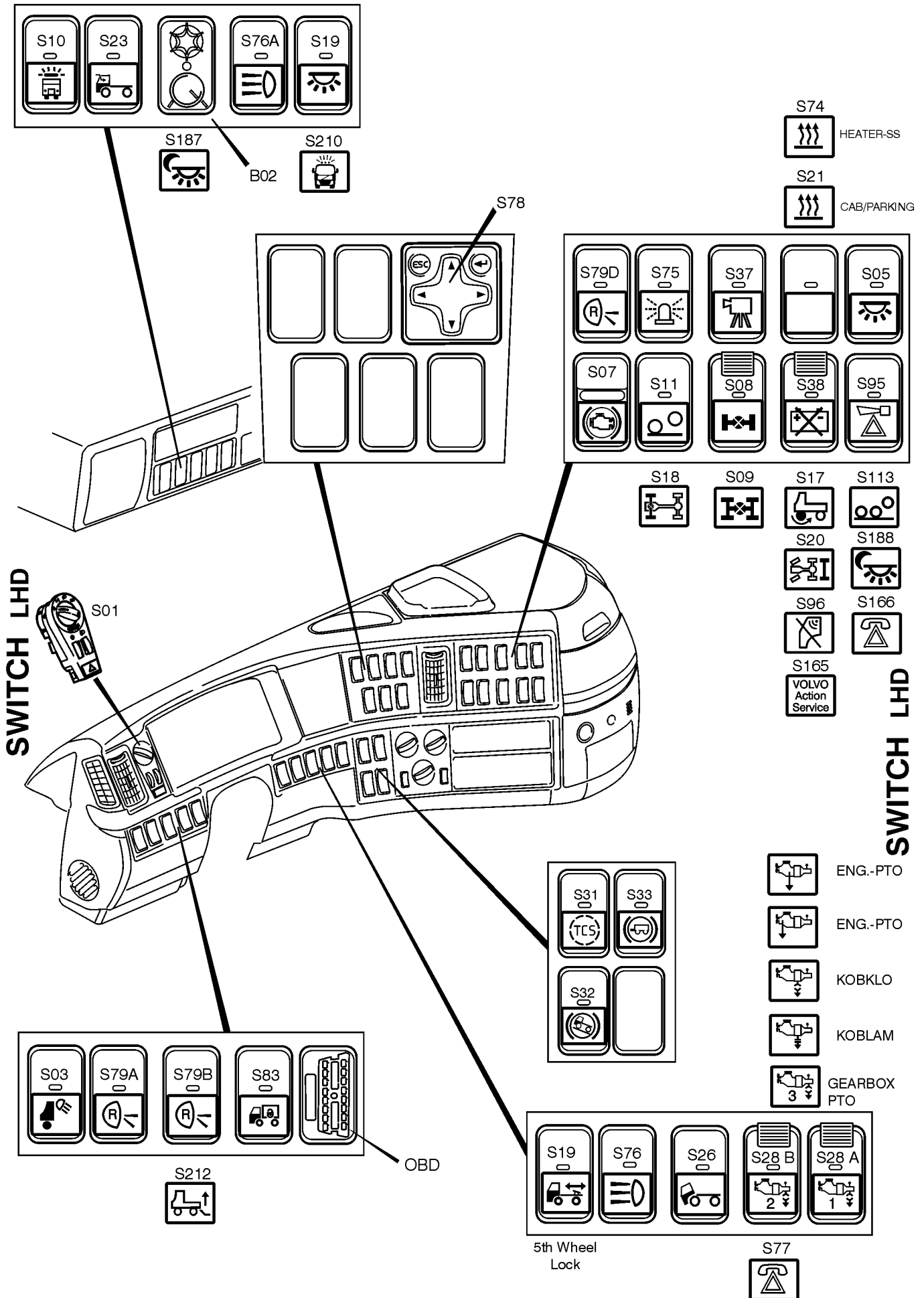
**CAB Inlets RHS**

**New BOX**



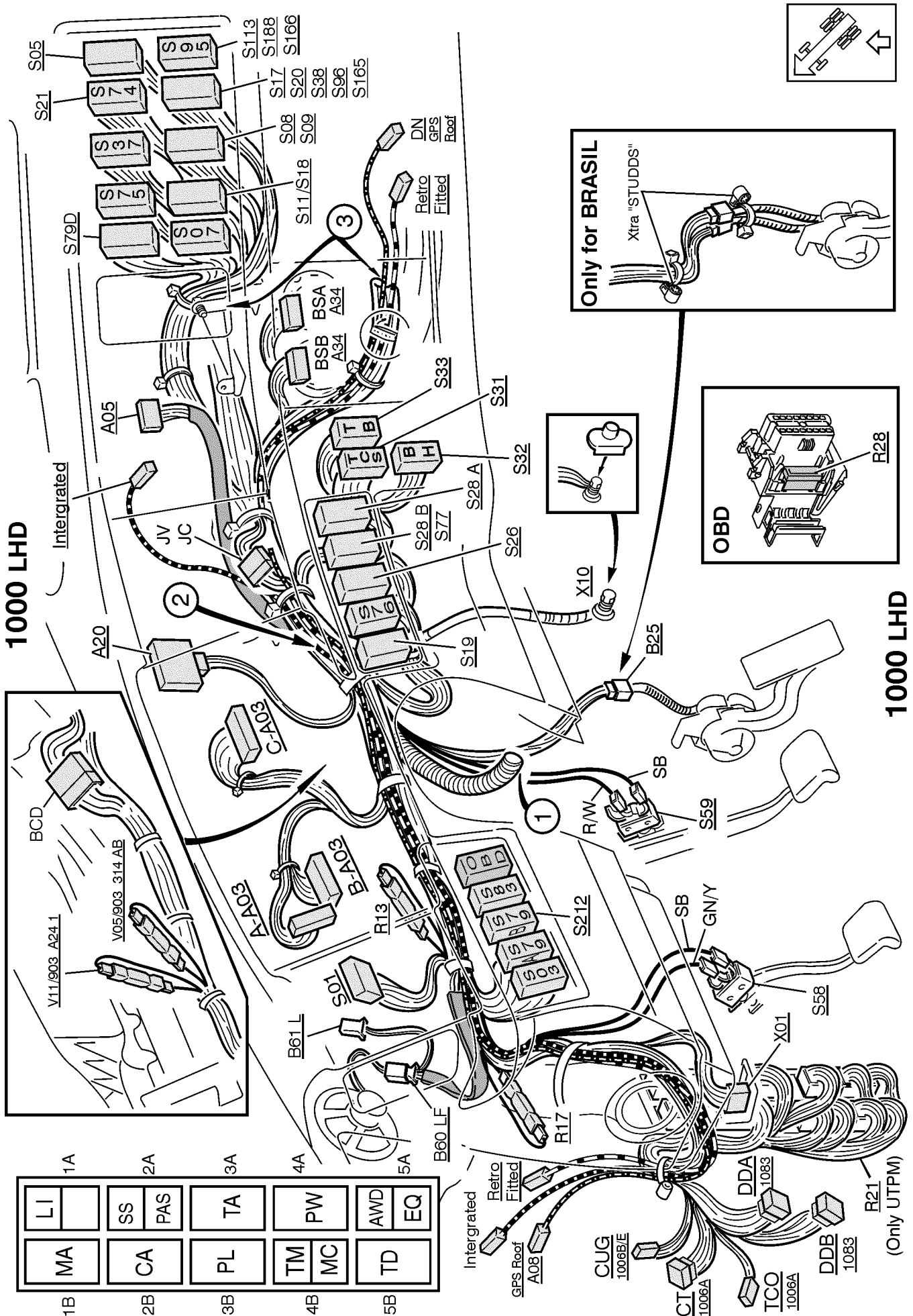
- 1 A33 TACHO<sub>graph</sub>
- 2 S01 LCP LightControlPanel
- 3 A03 Instrument Cluster
- 4 A20 IMMO<sub>biliser</sub>
- 5 A01 FRC Fuse and RelayCenter
- 6 A27 LCM Light Control Module
- 7 A31 ACM AlarmControl Module
- 8 A109 GECU Gear Shift Selector ECU
- 9 A11 CLU Door Central Locking Unit
- 10 A17 VECU Vehicle Eletronic Control Unite
- A36 BBM BodyBuilders Module
- 11 K35 Relay Washer System High Pressure
- 12 A24 ECU for trailer without ABS
- 13 A15 SRS Supplementary Restrain System
- 14 BB BodyBuilder Electrical Central
- 15 A19 GECU Gear Shift Selector ECU Geartronic
- 16 A13 B TECU Transmission ECU Powertronic
- A13 C TECU Transmission ECU Retarder
- 17 A16 ECS Electronic Controlled air Suspension
- D01 Relay Axel P-LIM
- 18 A12 ABS Anti Lock Brake System
- A21 EBS Electronic Brake System
- 19 U06 R11/R19 DC/DC Voltage Converte
- 20 A75 ACC yawrater
- 21 U06 B11 DC/DC Voltage Converter

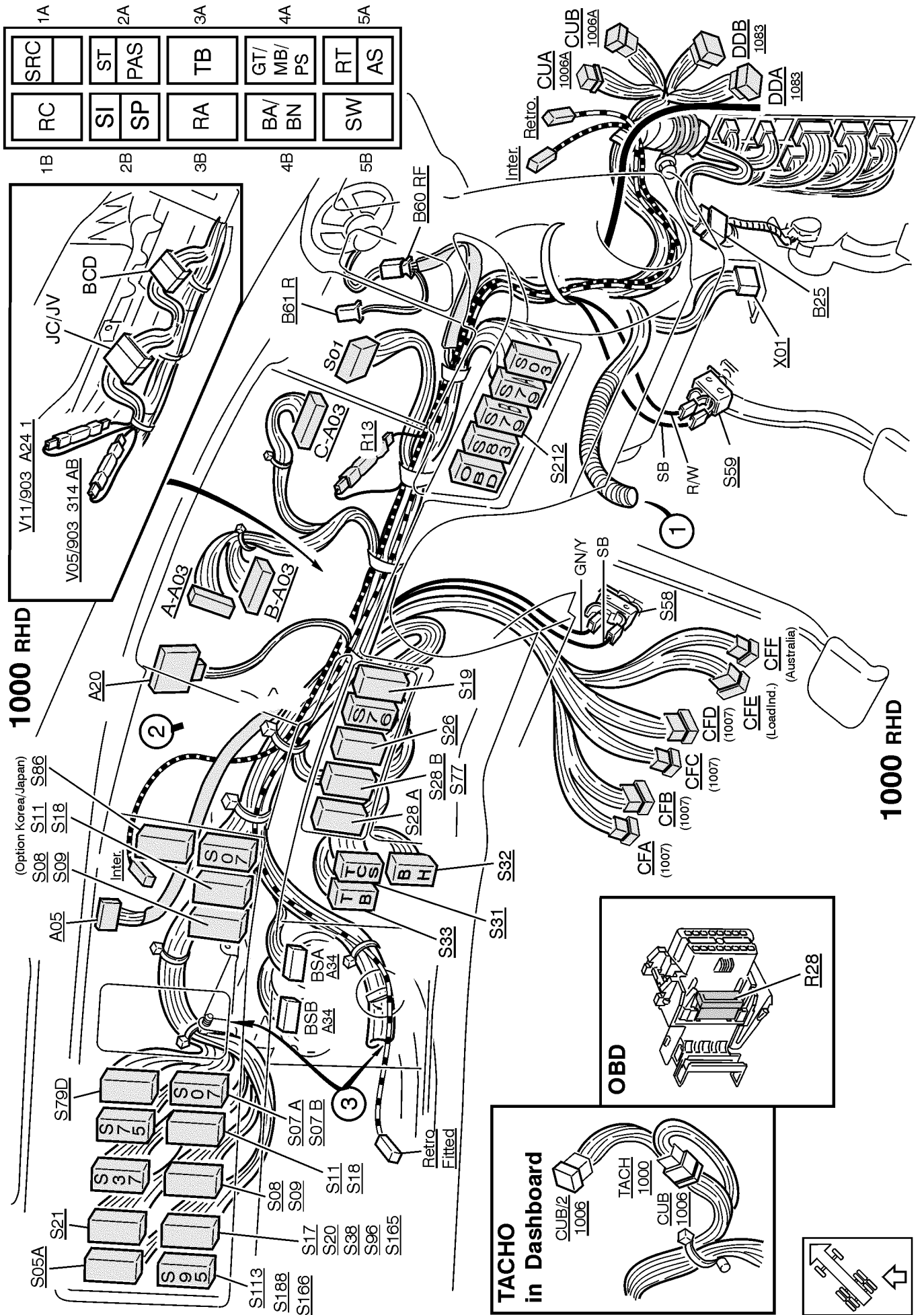
- 22 A23 TMC Traffic Message Channel
- A94 FMS Gateway
- 23 A09 Telephone
- 24 A22 FMS Control Unit Fleet Managment System
- 25 A05 SID Secondary Info. Display
- 26 S36 DCP DoorControlePanel
- 27 A34 ECC/MCC Electrical Controlled Climate/  
Manuel Controlled Climate
- 28 A39 ERC ECU Reverse Camera
- 29 A26 ACC AdaptiveCrusie Control
- 30 A126 TTU Telematics Terminal Unit
- 31 A125 TGW Telematics Gateway
- 32 A122 OBU Toll Collect
- 33 A123 DSCR Module Toll Collect
- 34 U10 DC/DC Voltage Converter ABS Austalia
- 35 A102 Volvo Link VERS-SAM
- 36 A116 Amplifier High Power Audio
- 37 A184 SUB wofer High Power Audio









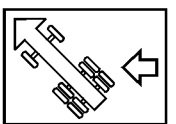
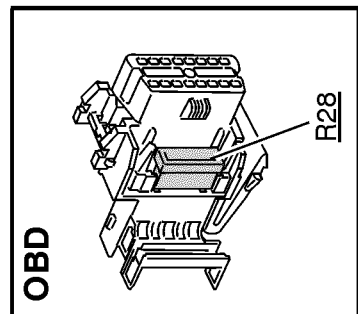
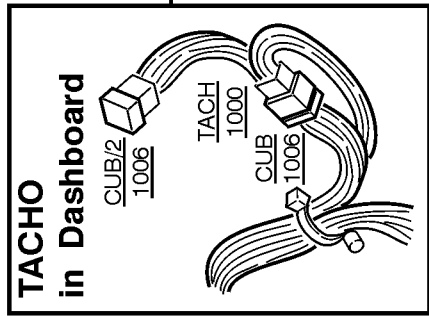


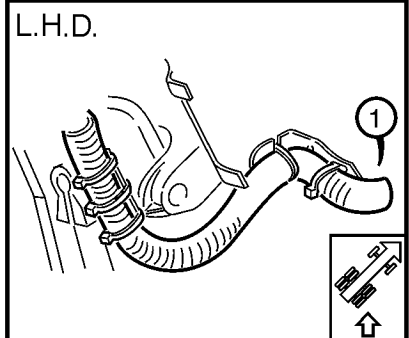
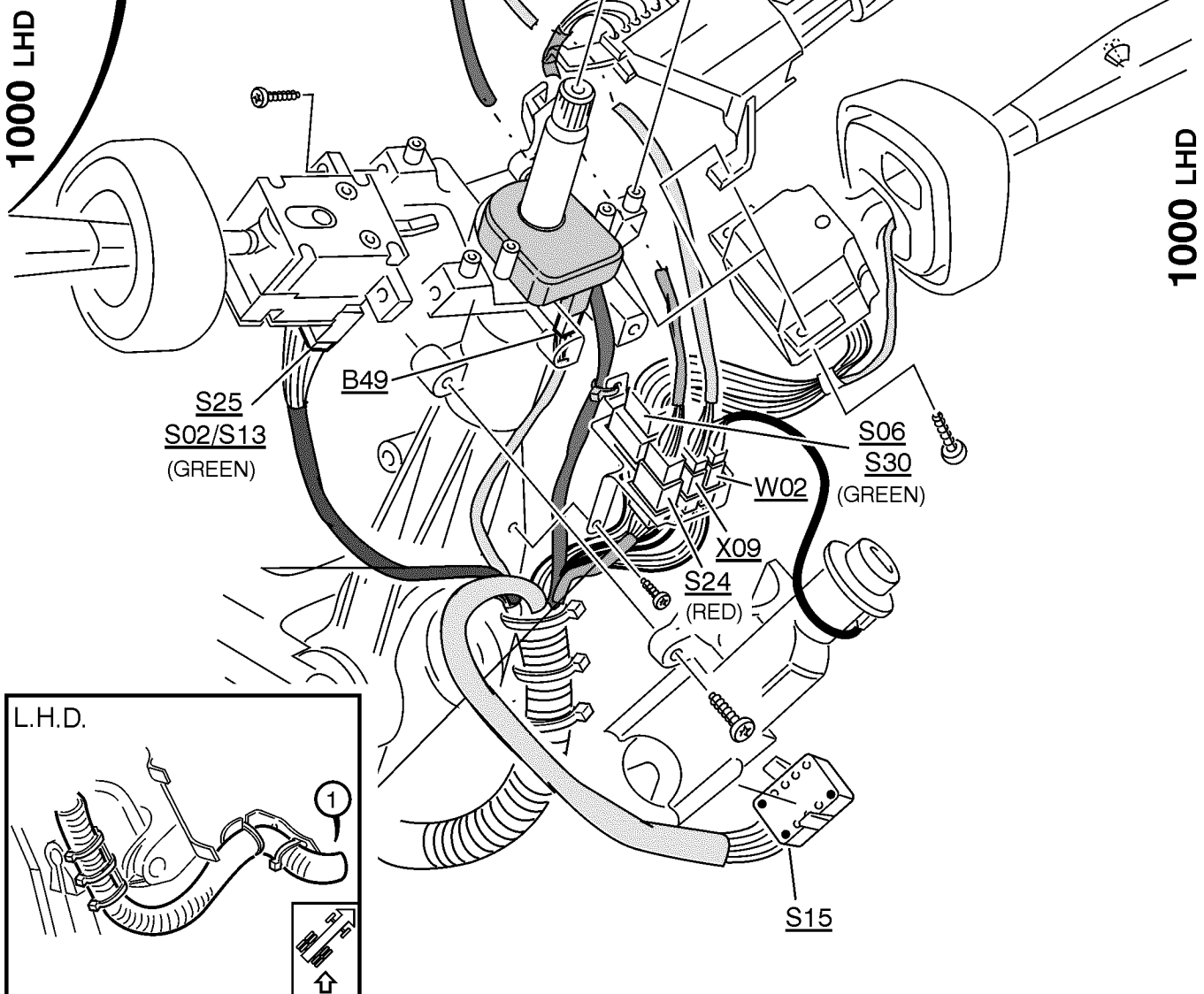
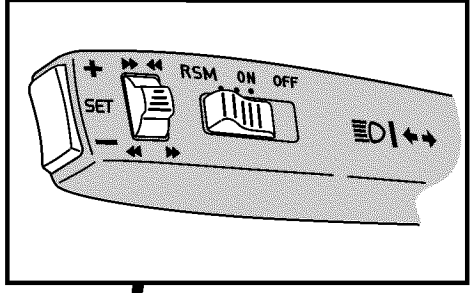
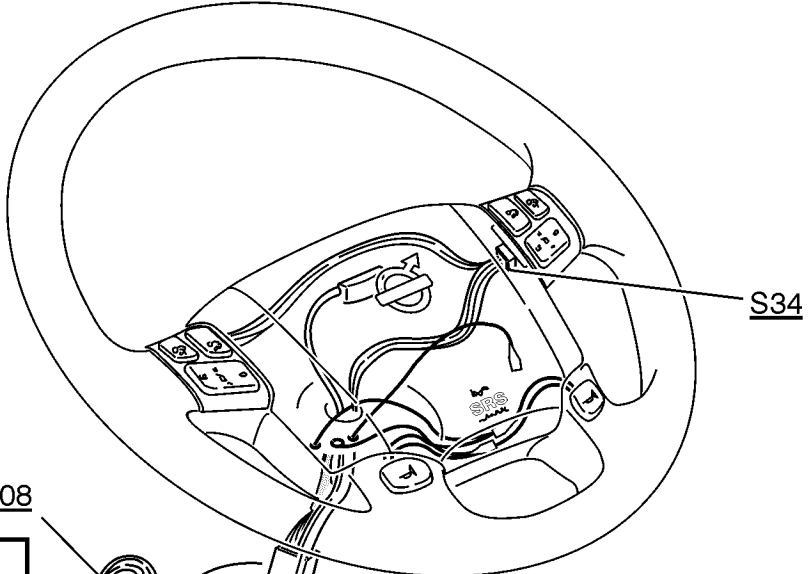
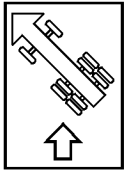
1A	2A	3A	4A	5A
SRC	ST	TB	GT/ MB/ PS	RT
RC	SI	RA	BA/ MB/ BN	AS
	SP			SW

**1000 RHD**

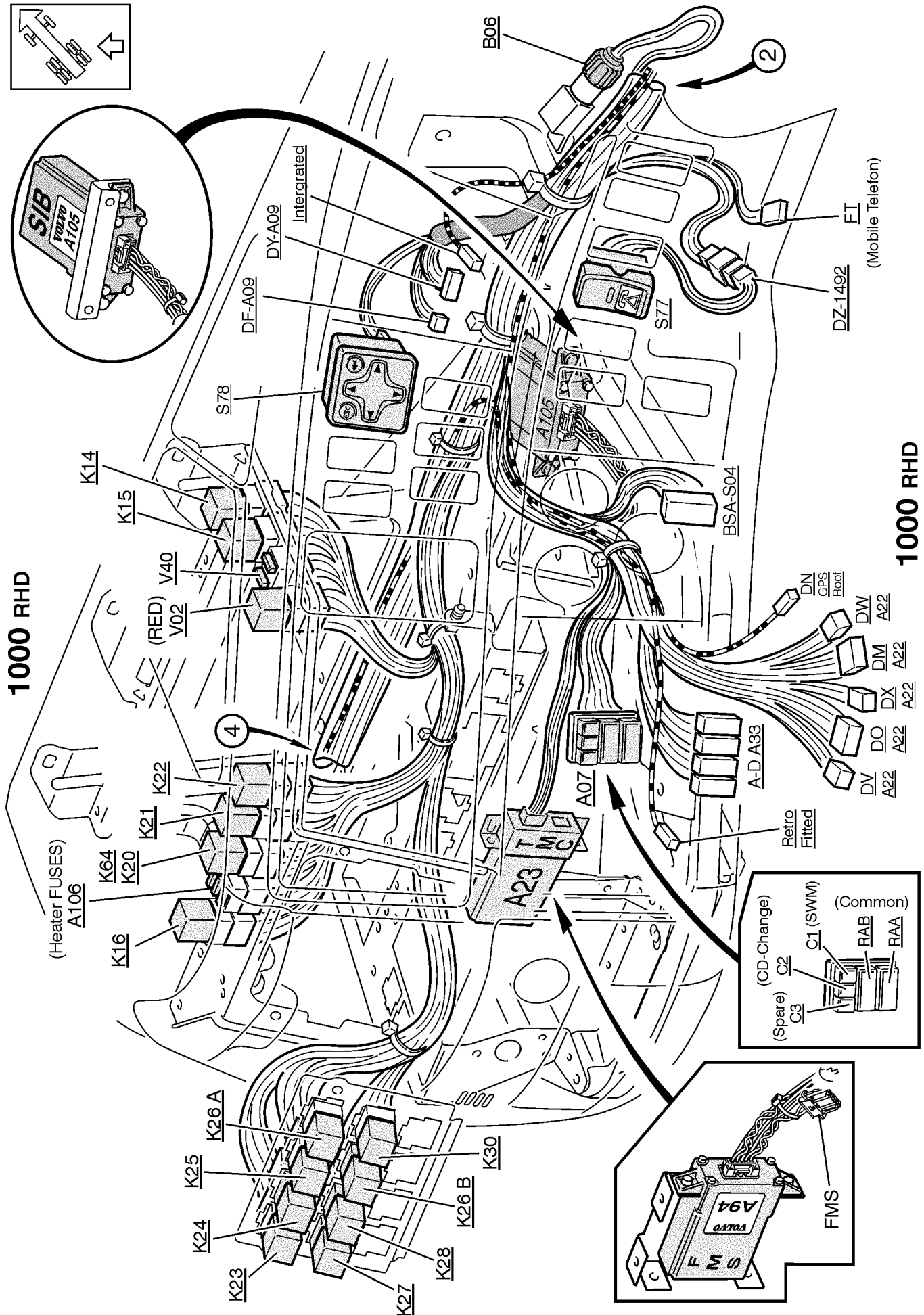
**1000 RHD**

(Option Korea/Japan)  
S08 S11 S86  
S09 S18



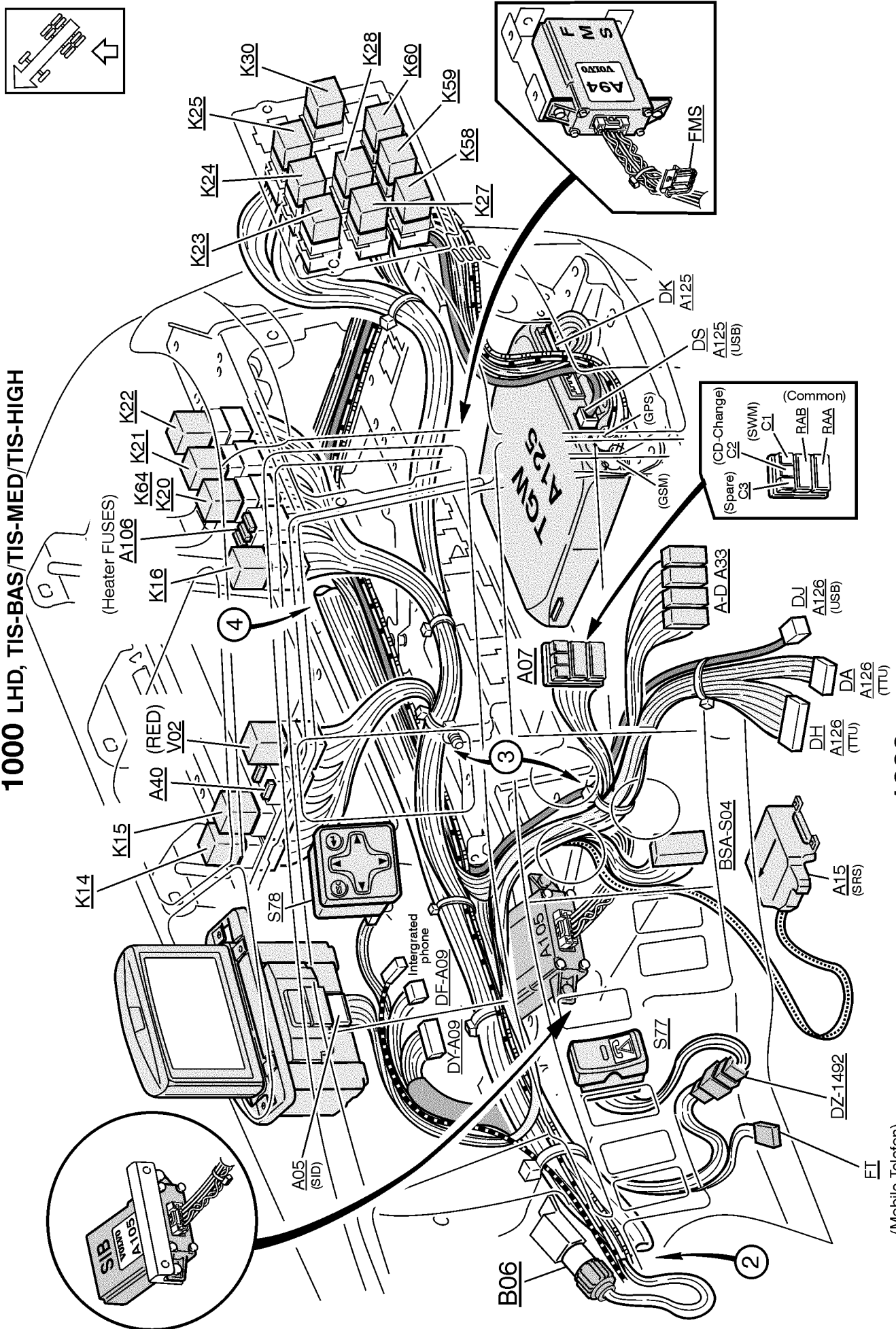


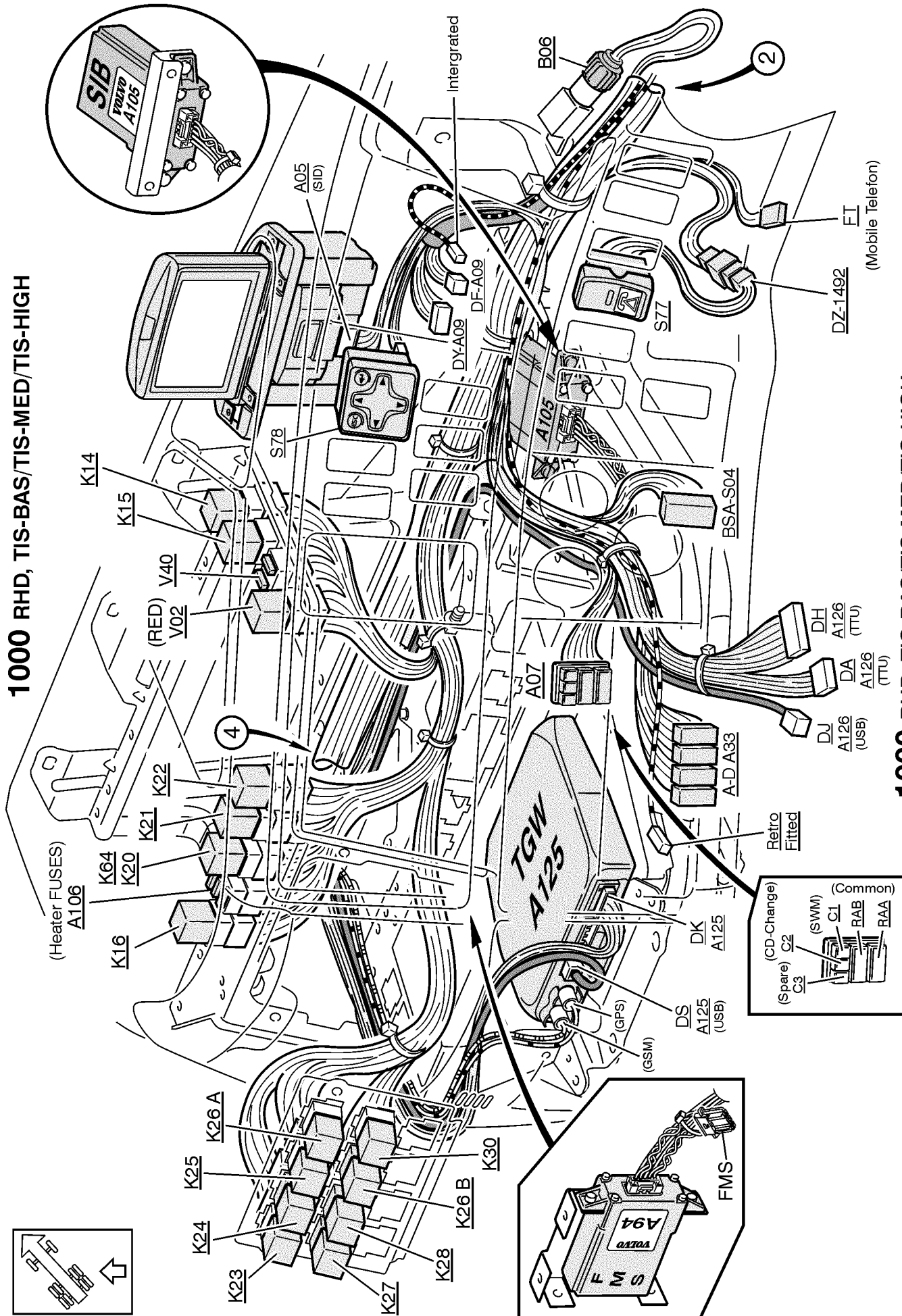




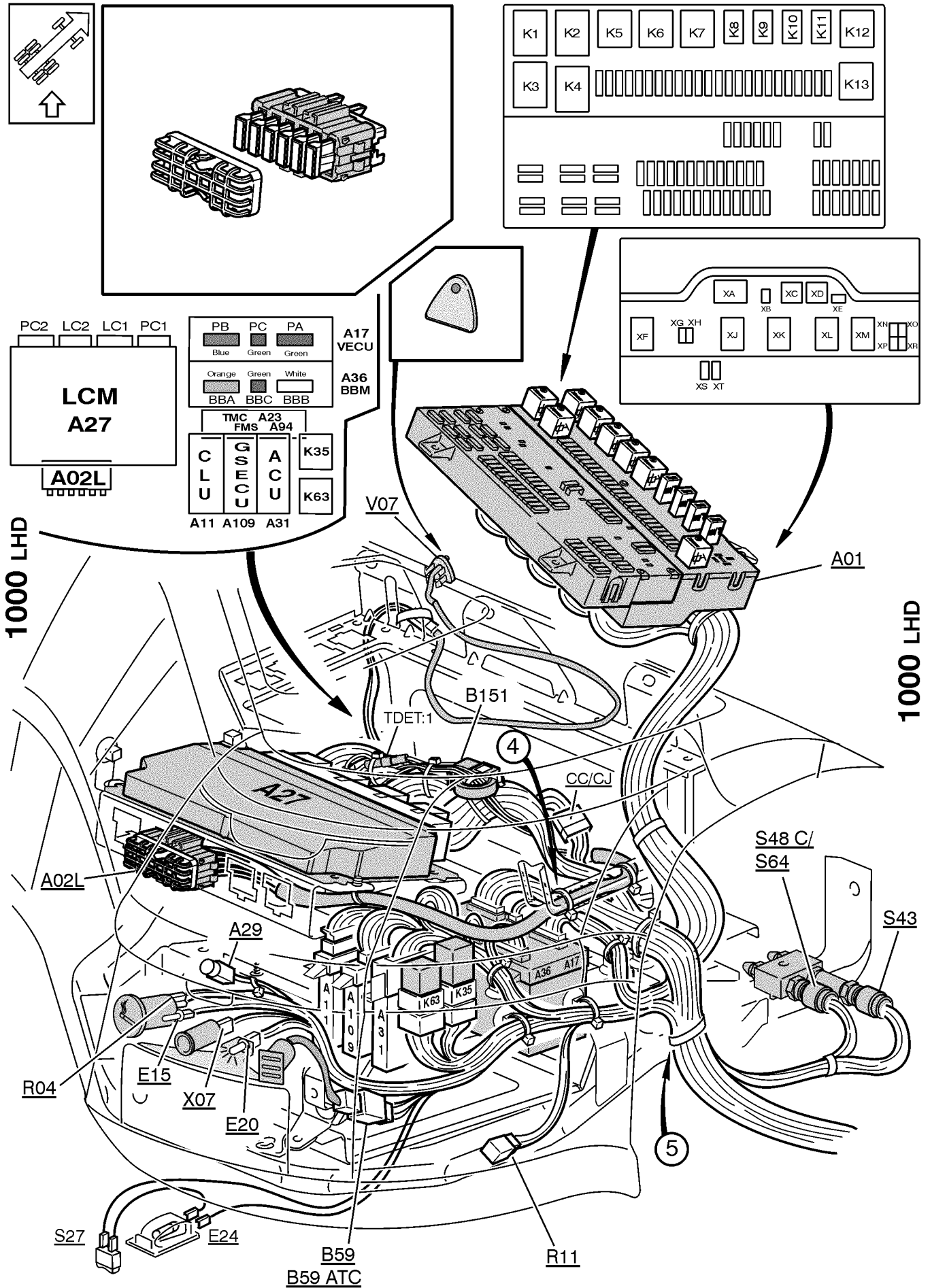
1000 LHD, TIS-BAS/TIS-MED/TIS-HIGH

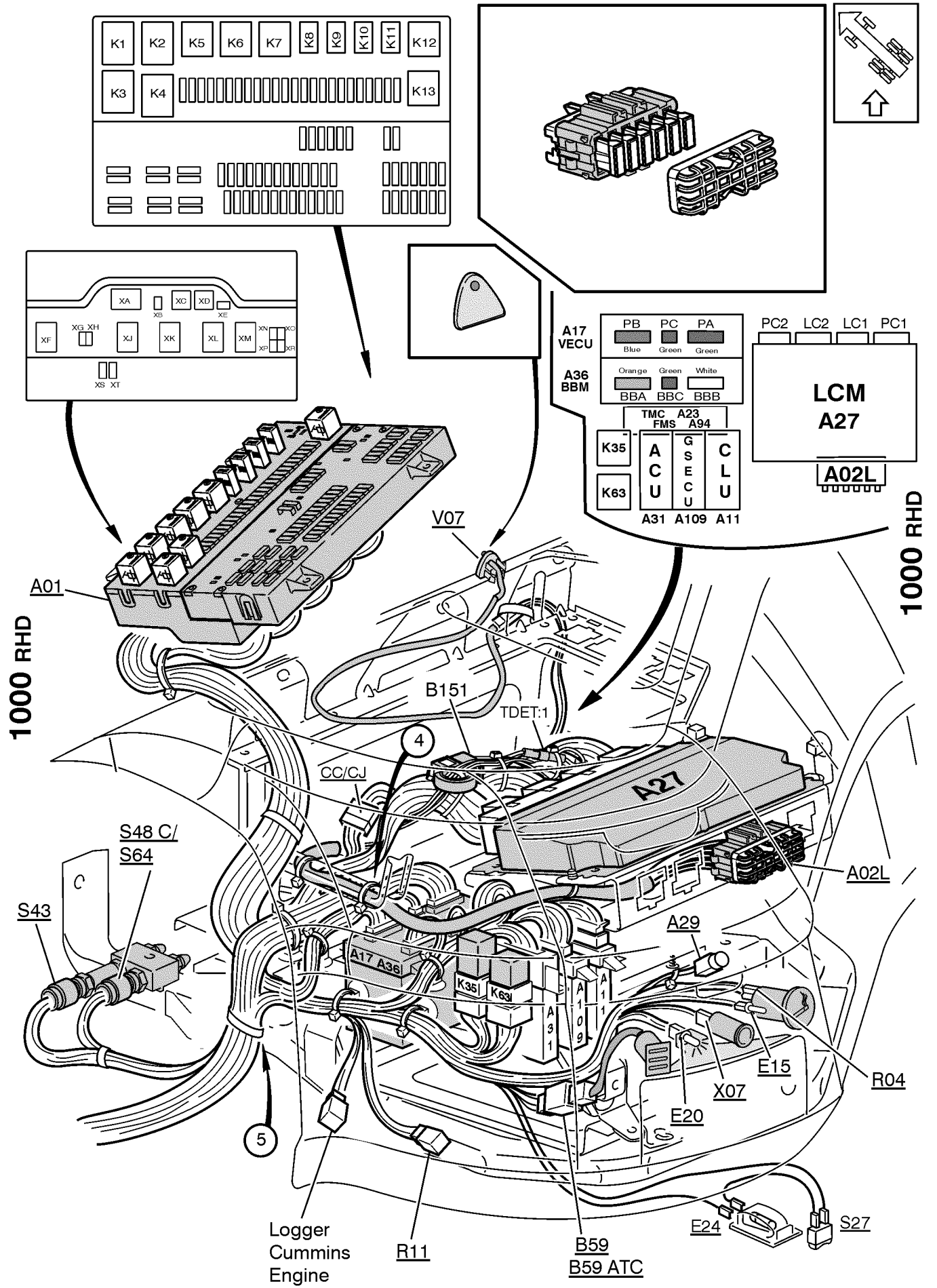
1000 LHD, TIS-BAS/TIS-MED/TIS-HIGH

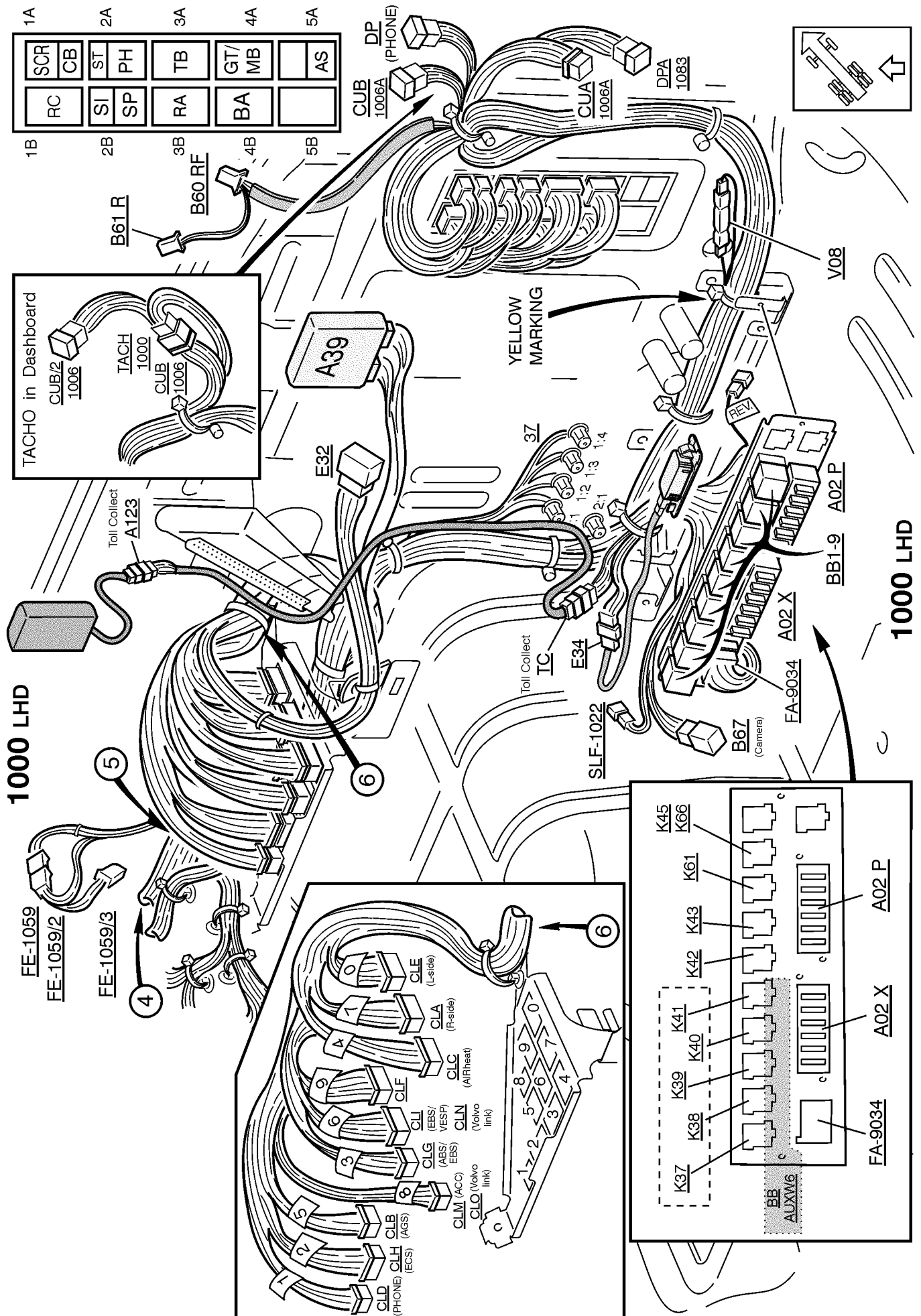


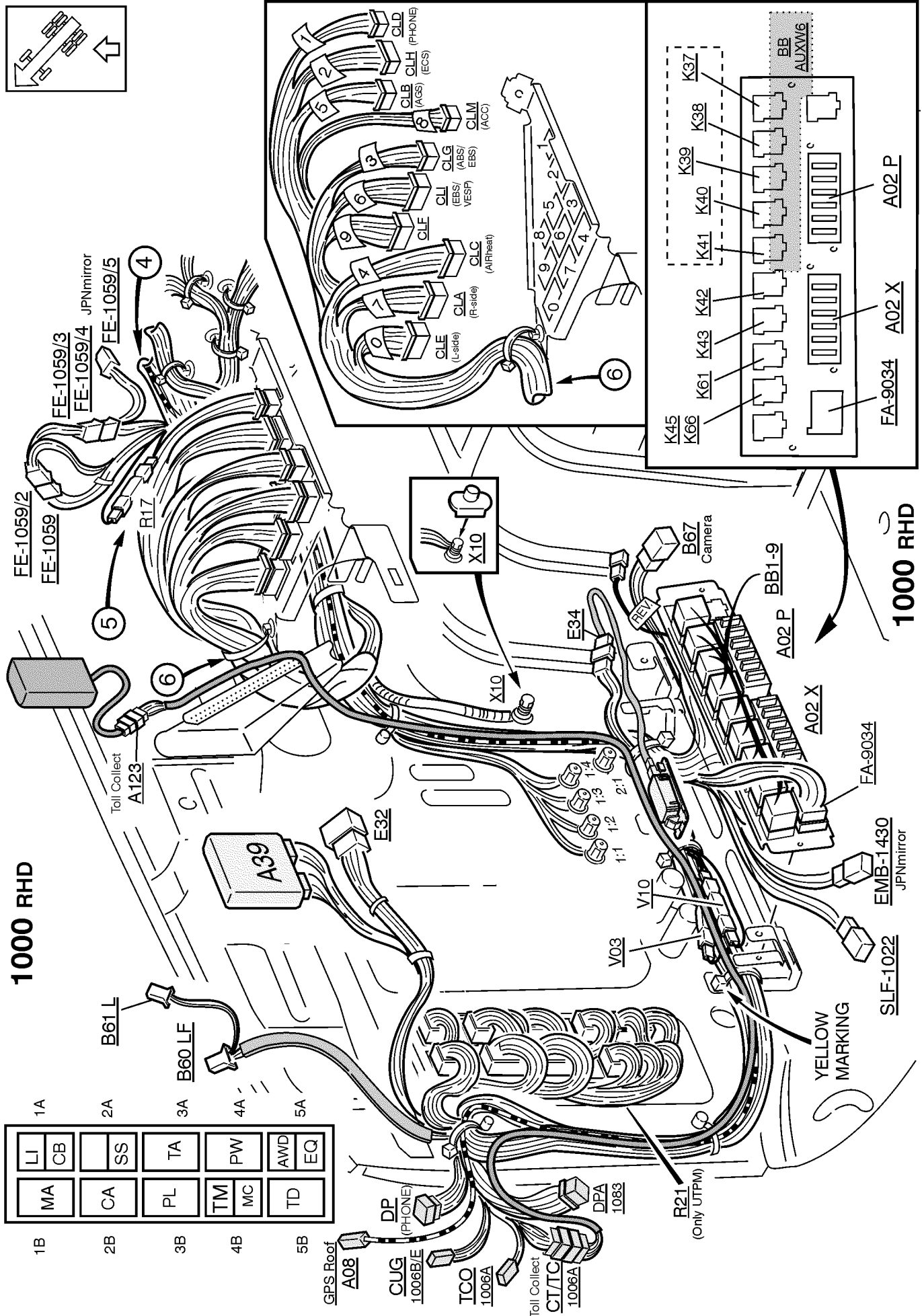


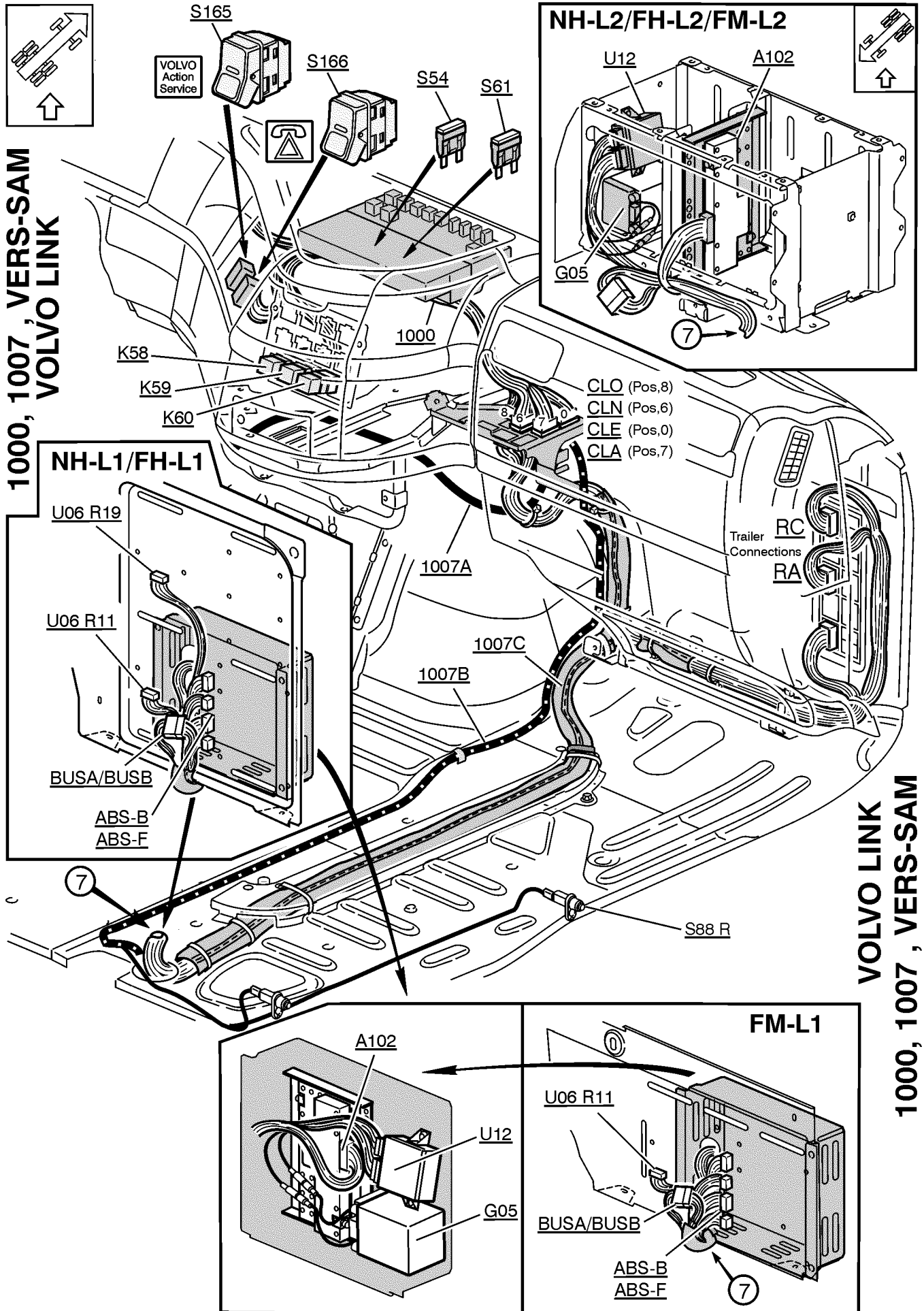


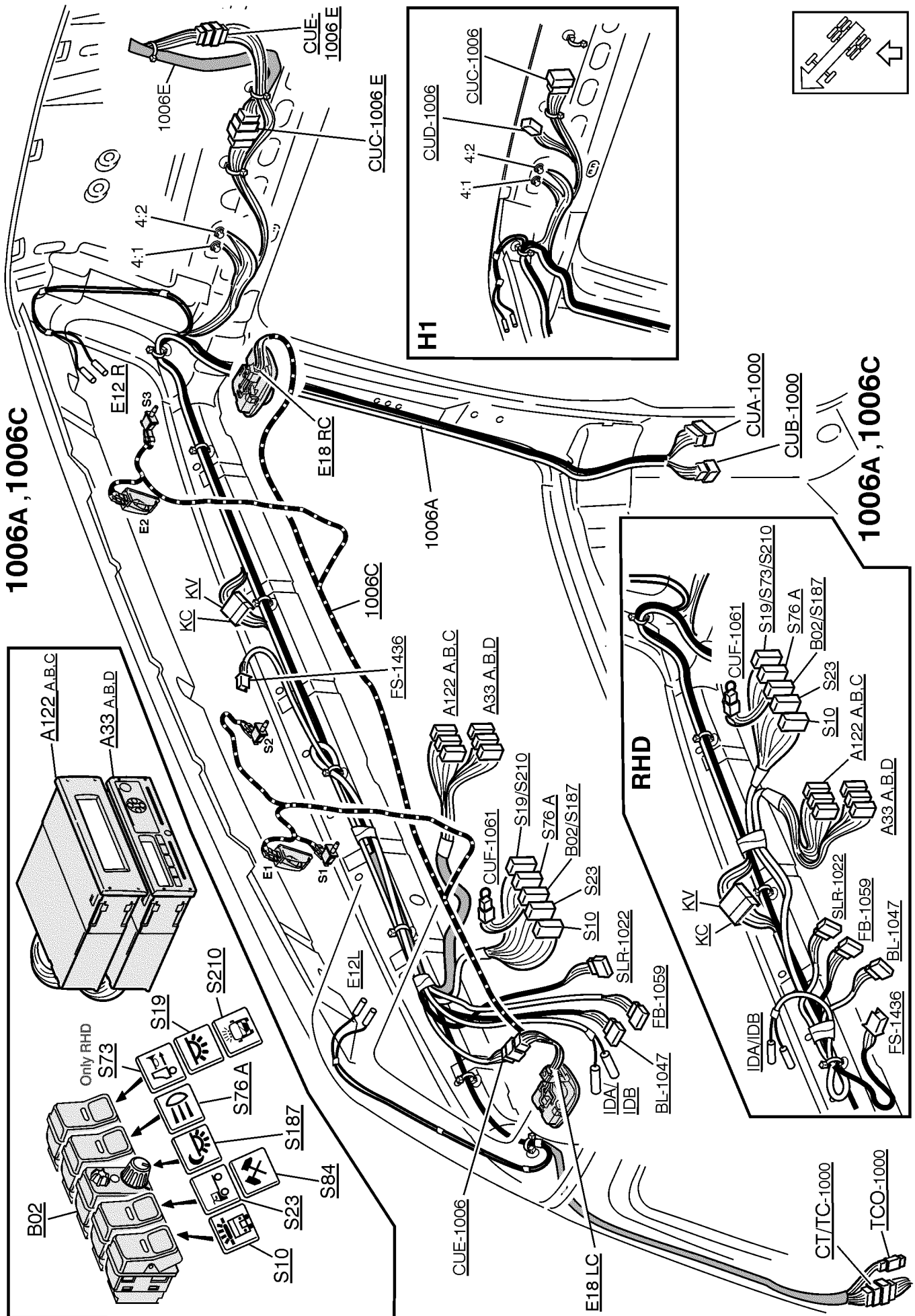


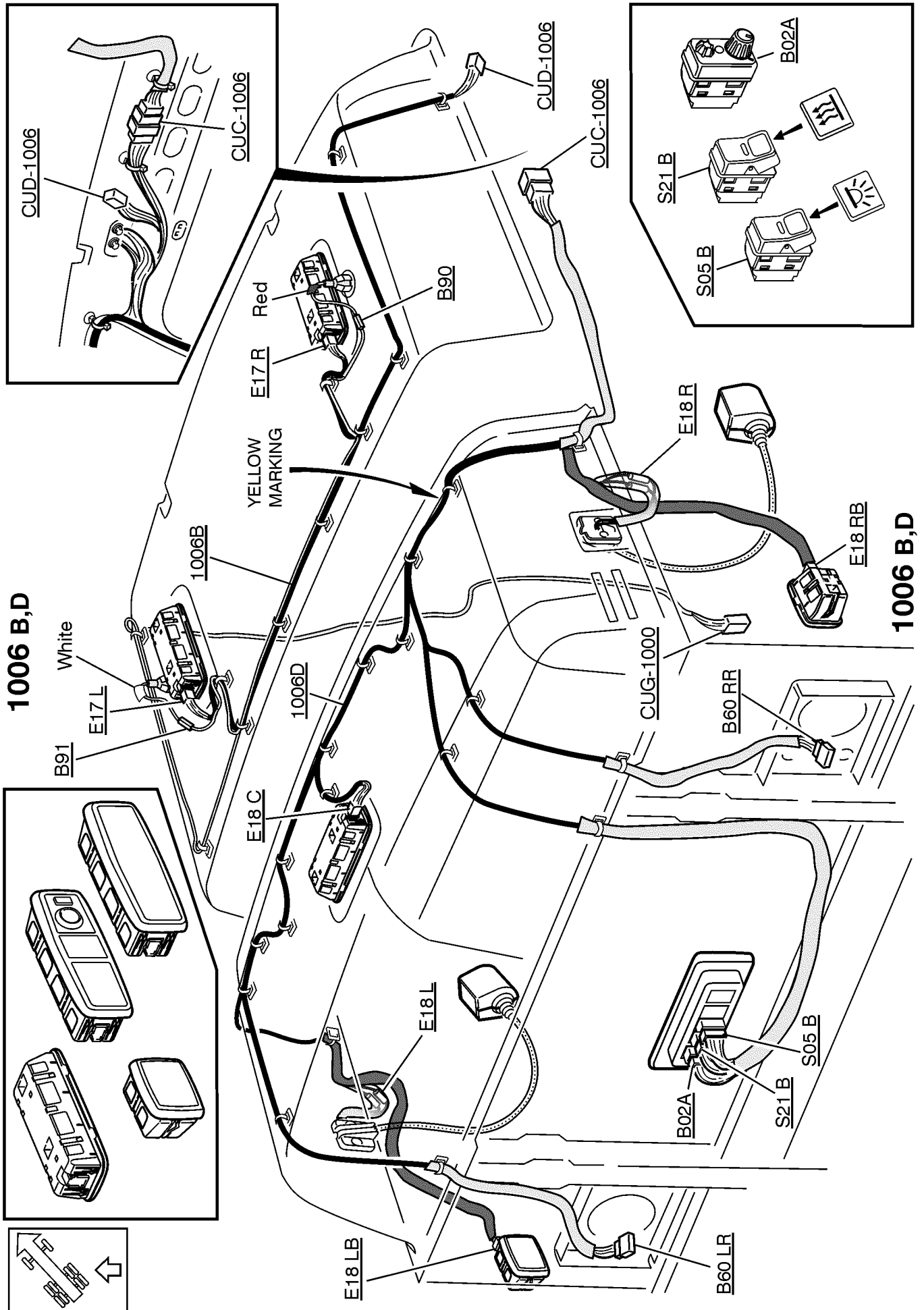


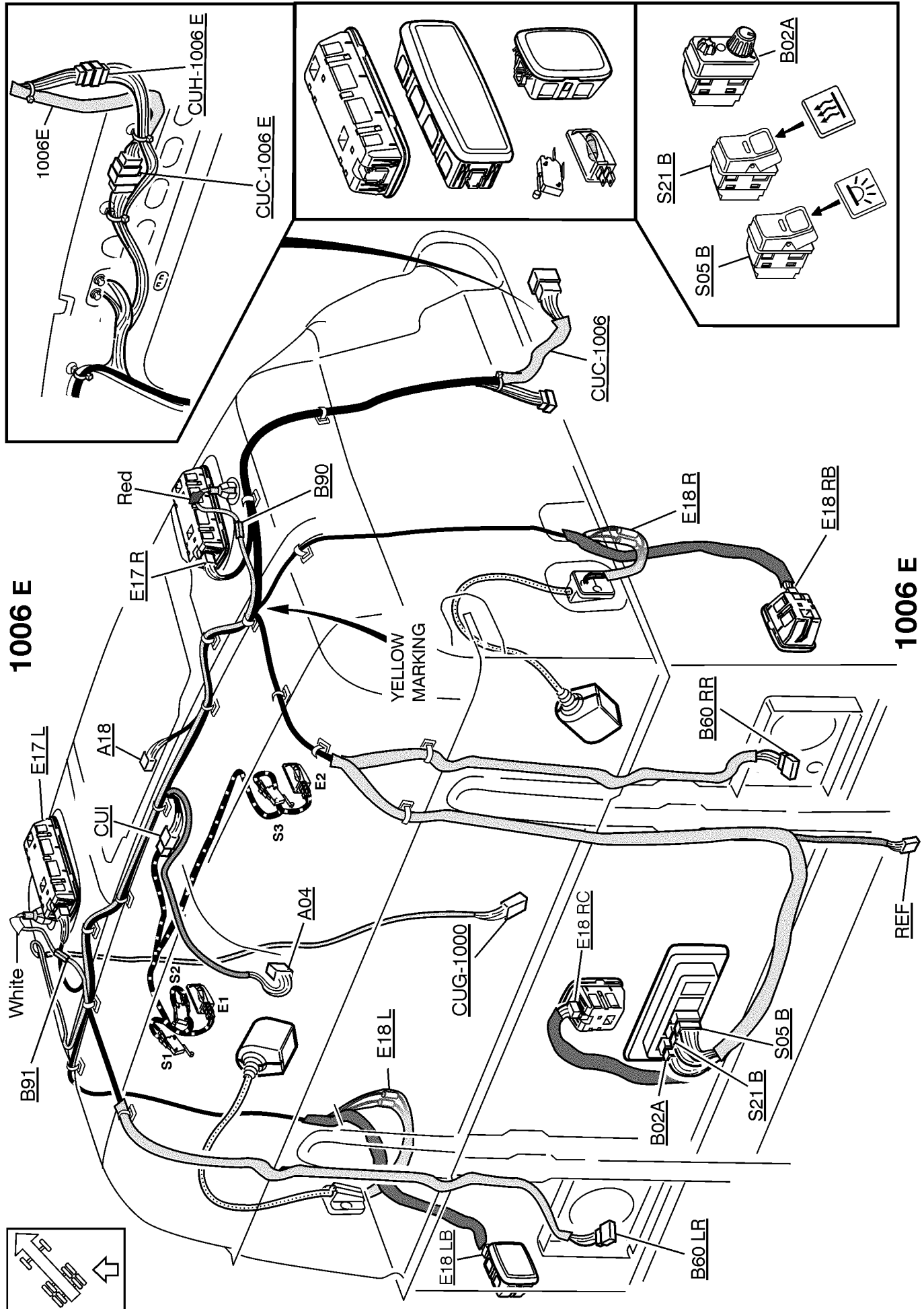




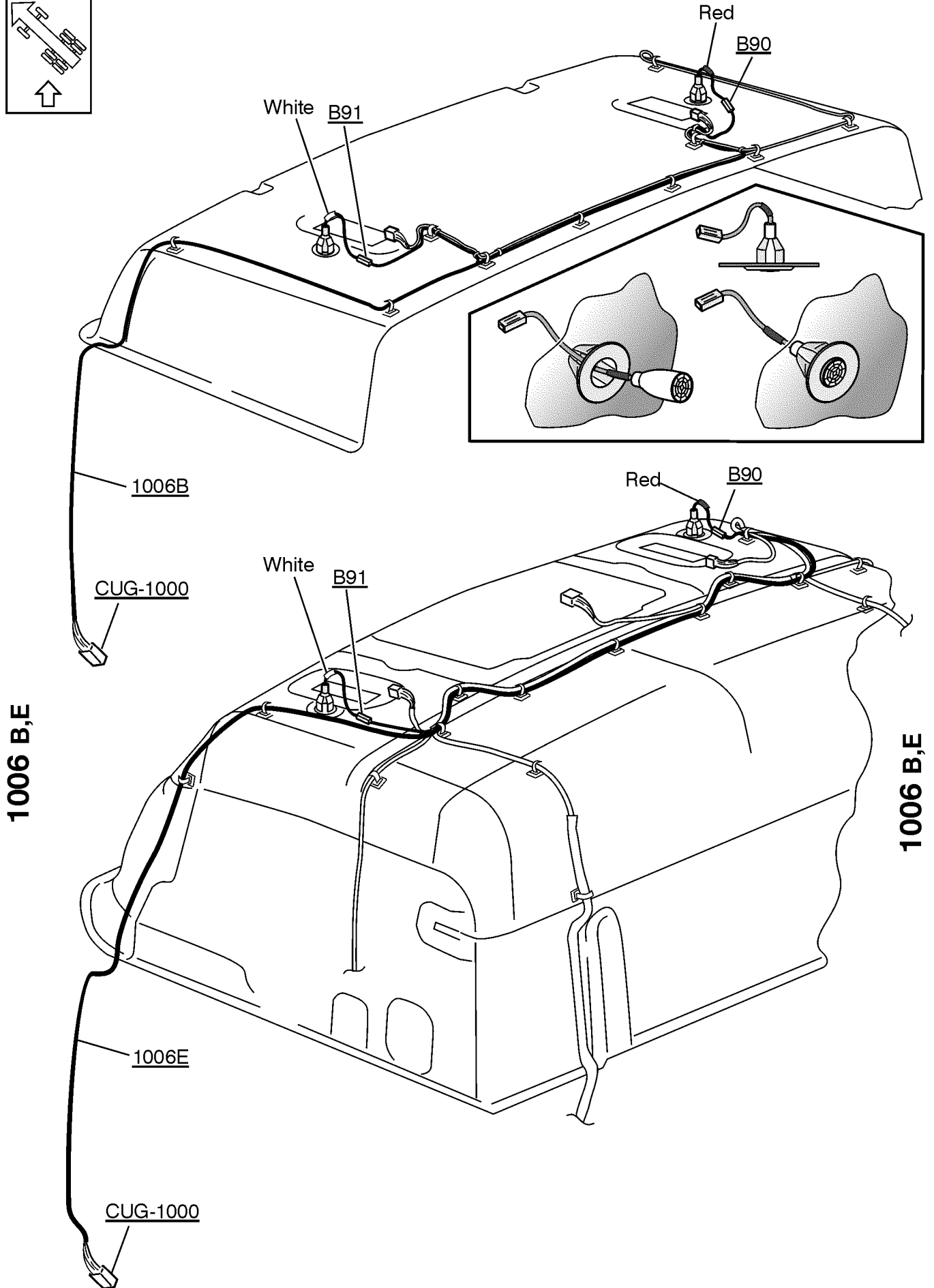
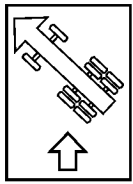


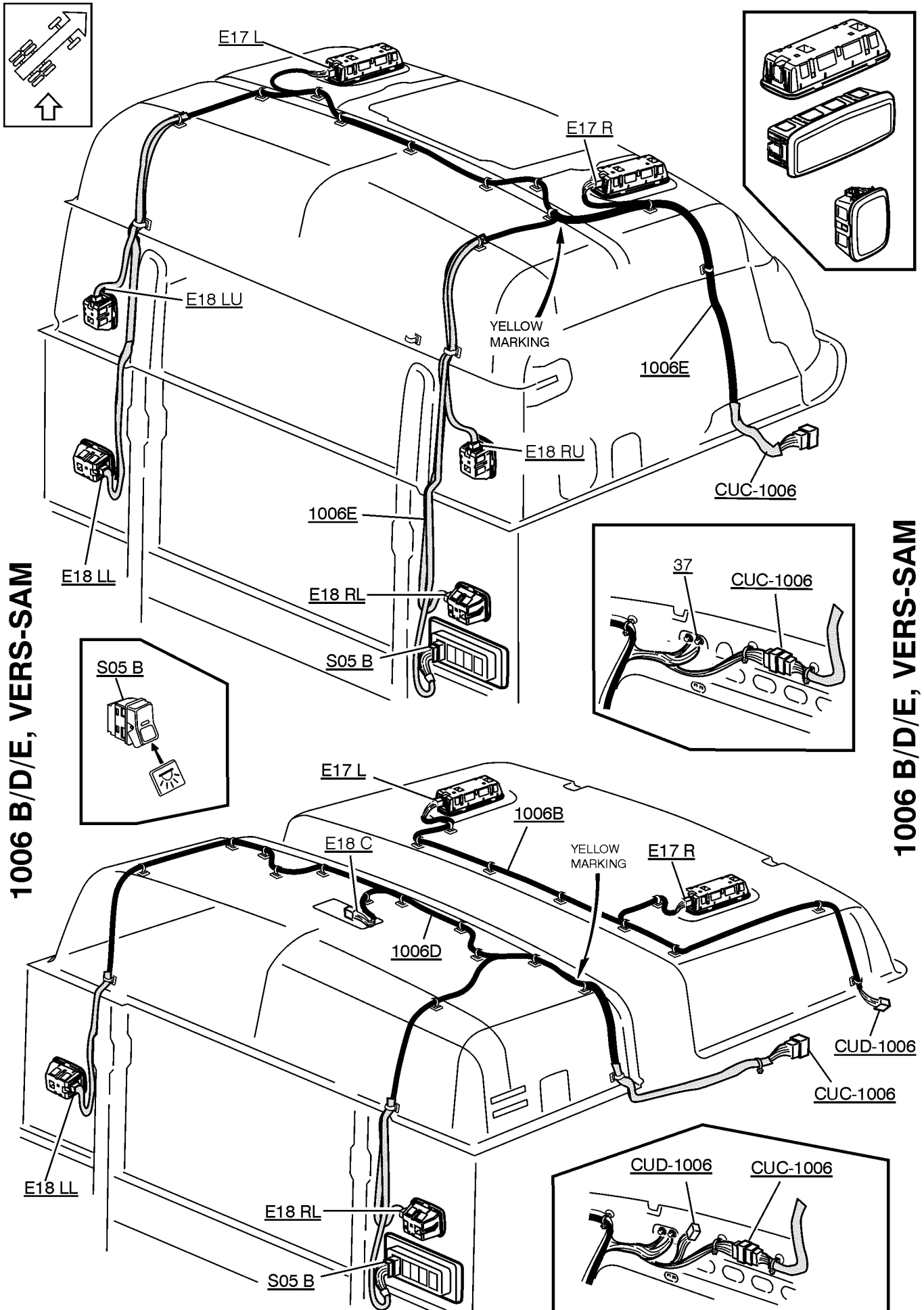


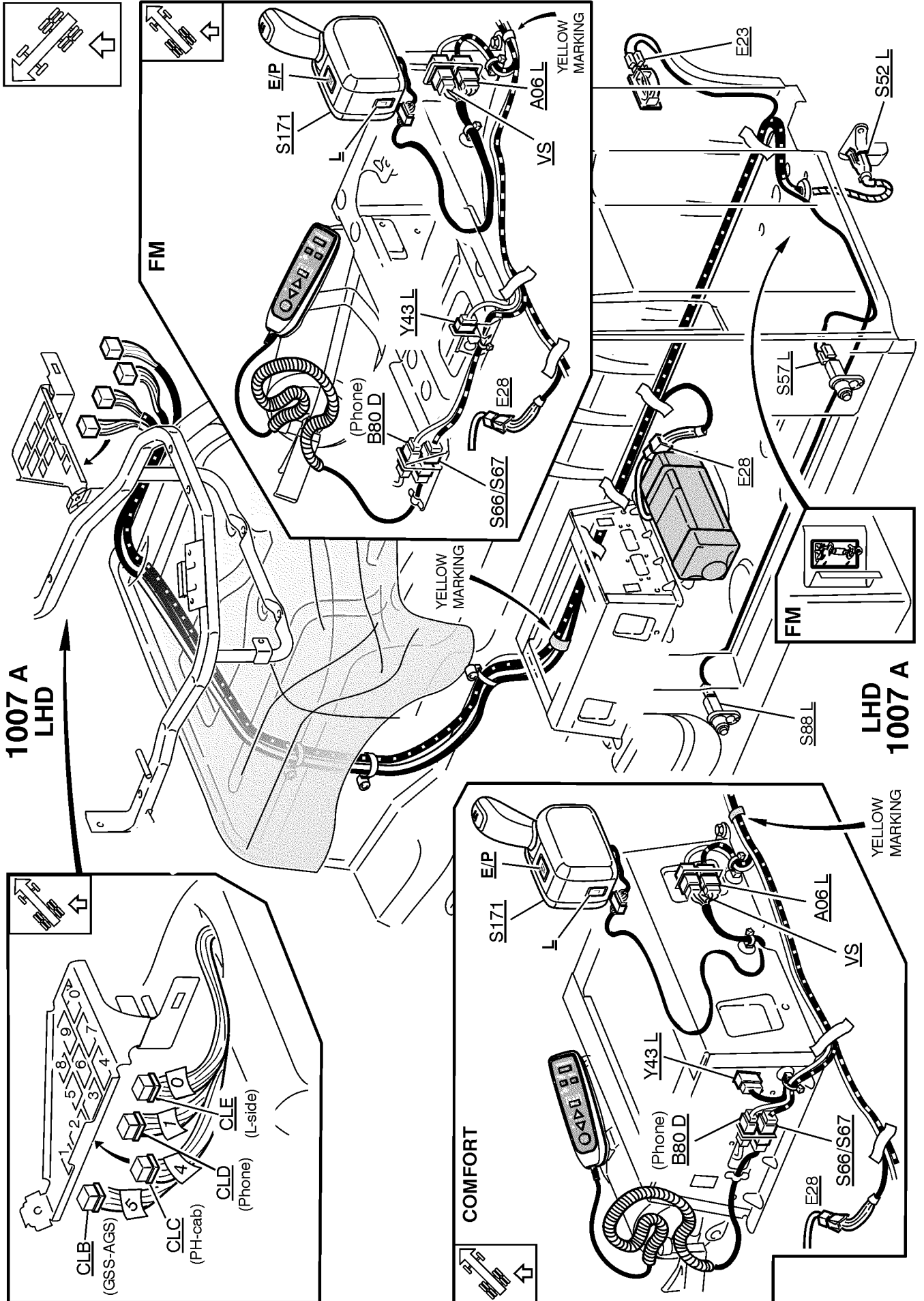


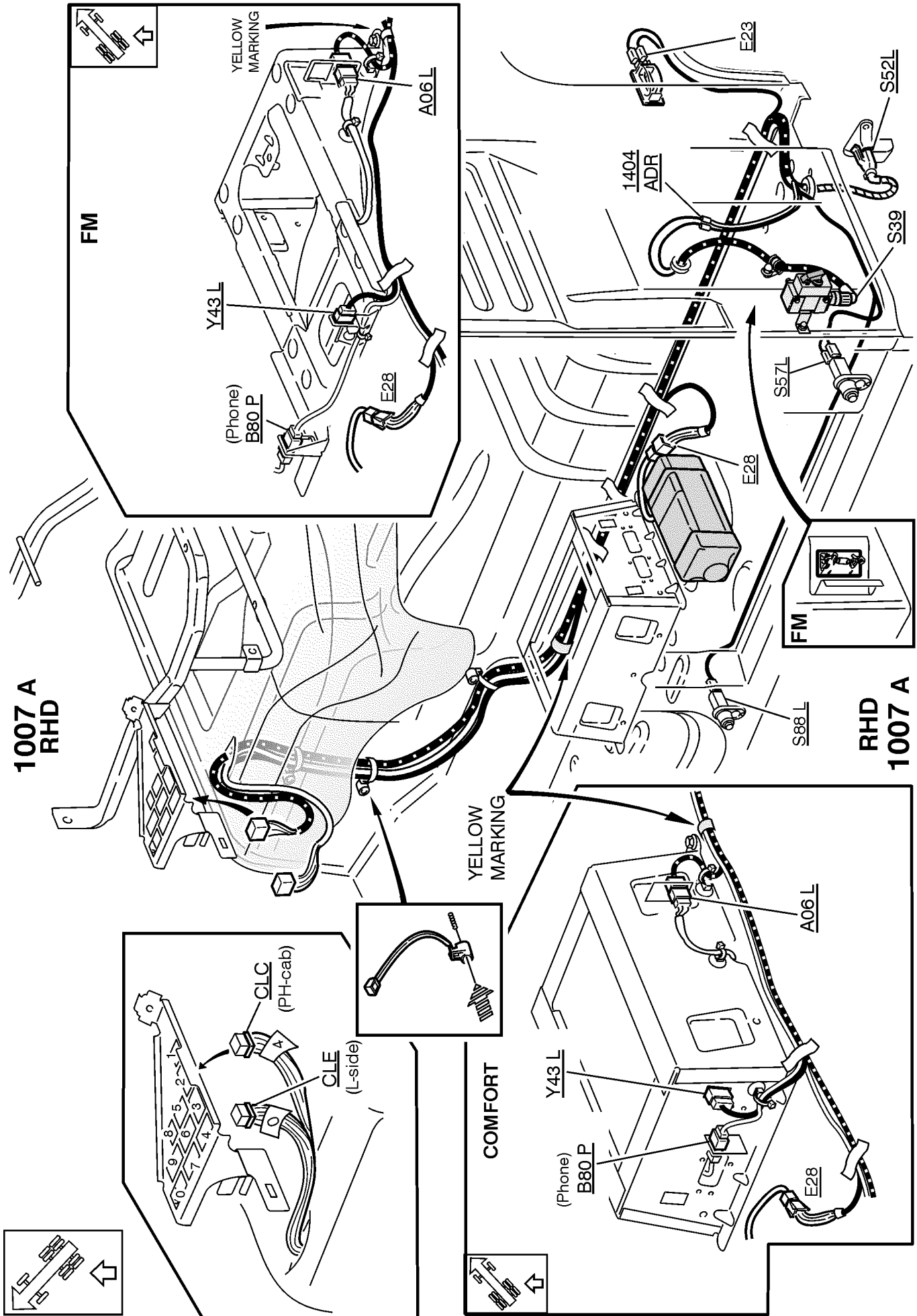


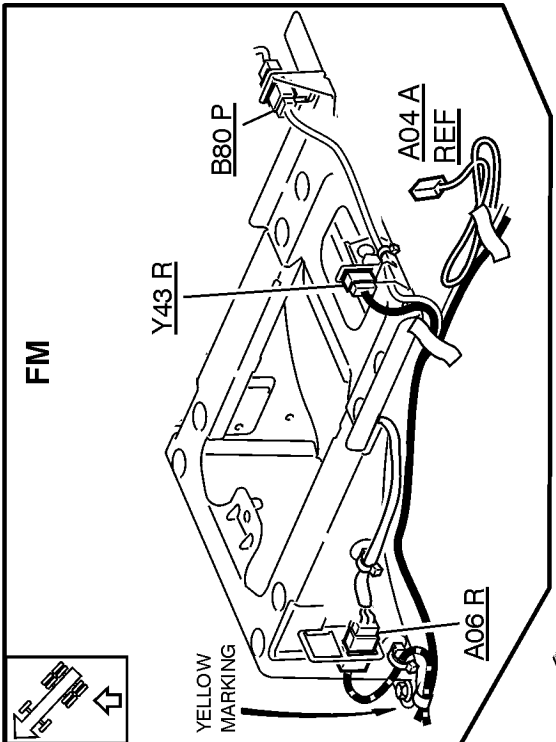
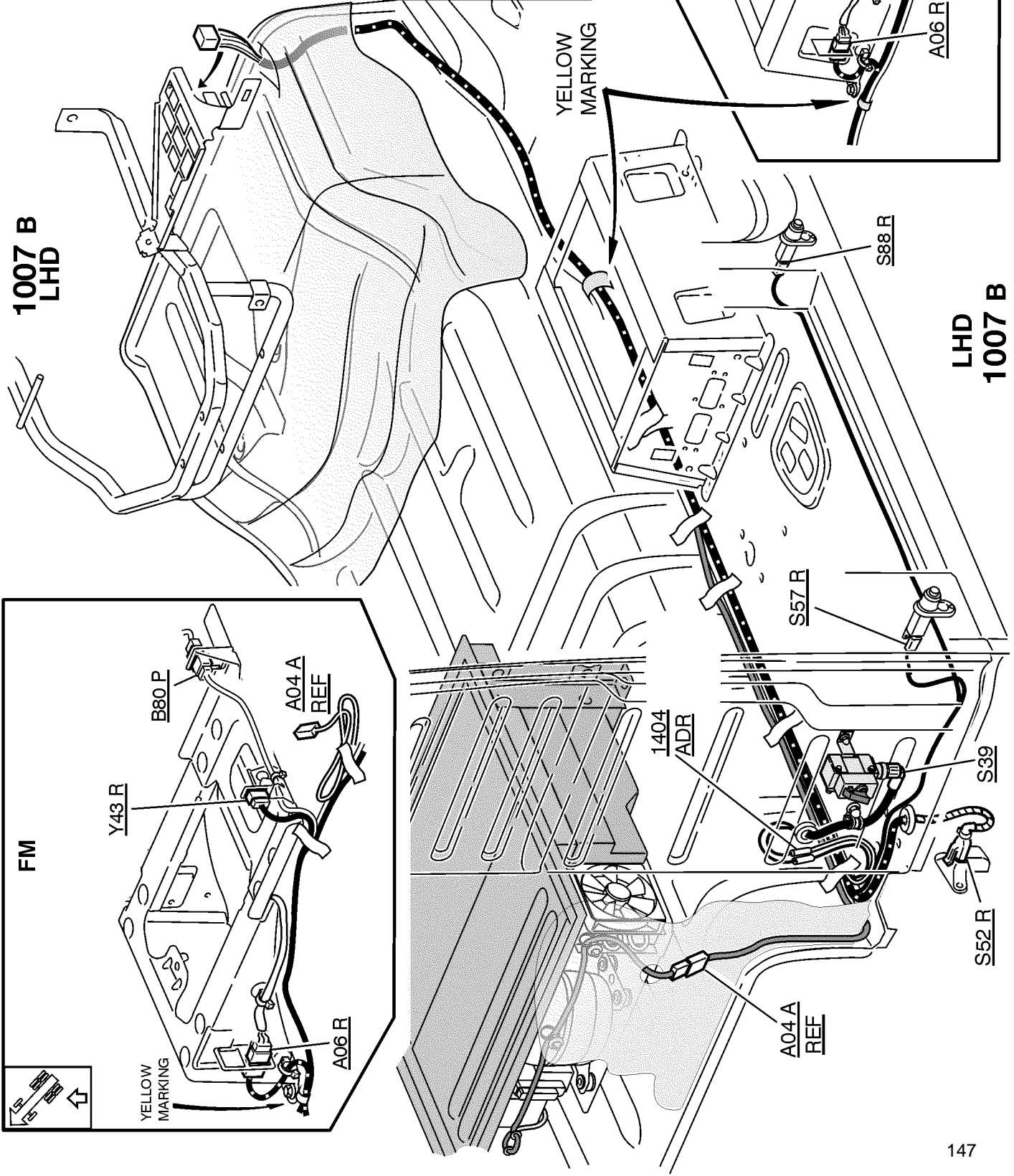
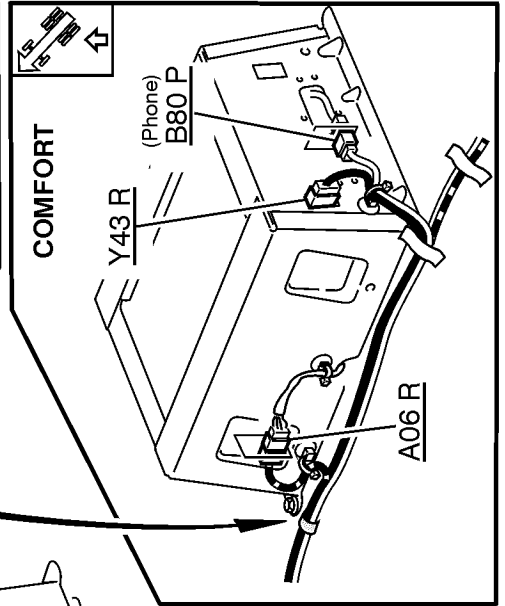
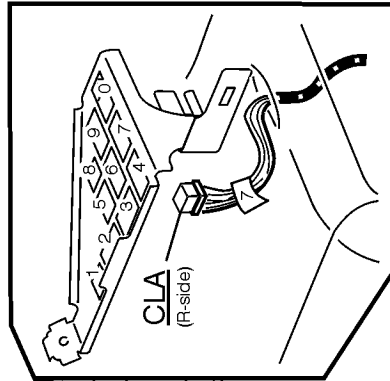
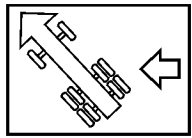


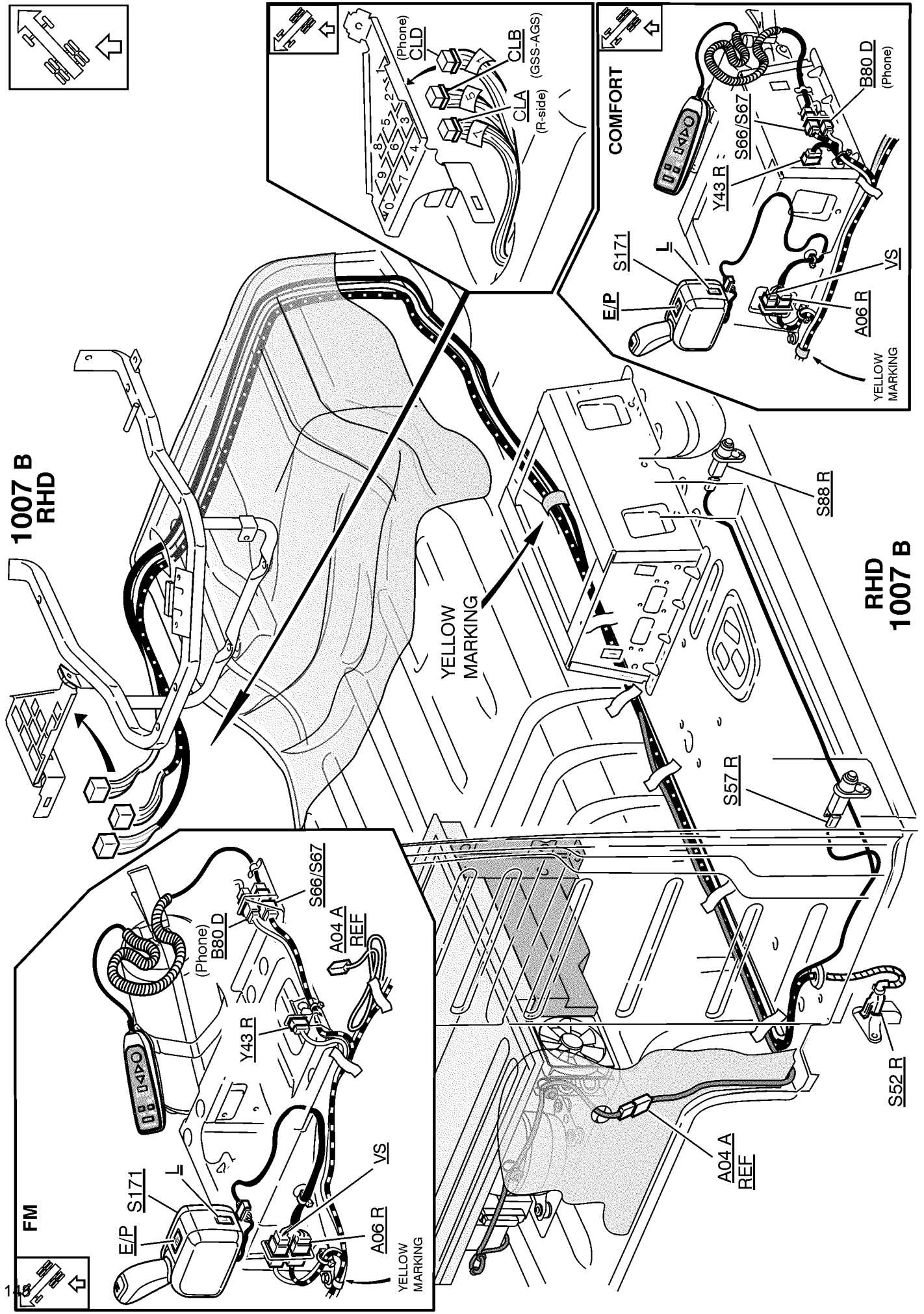


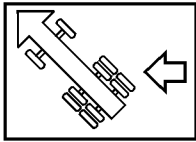




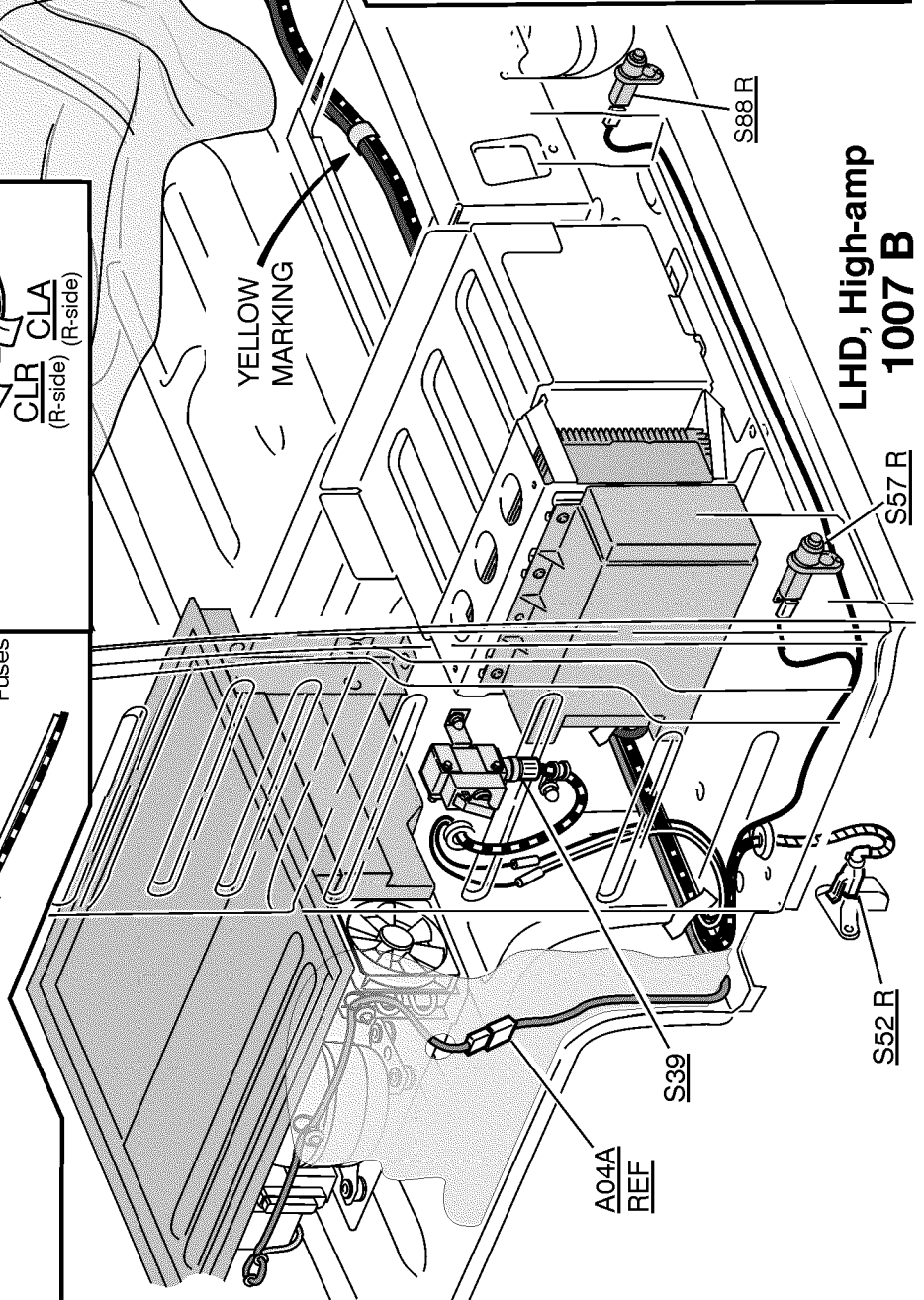
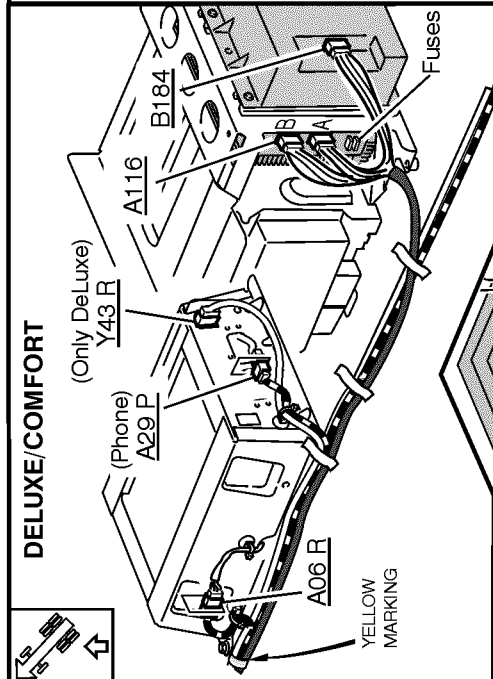
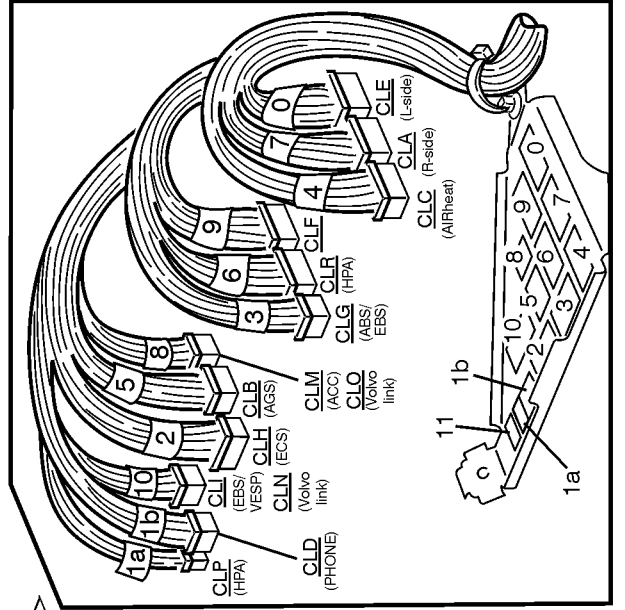
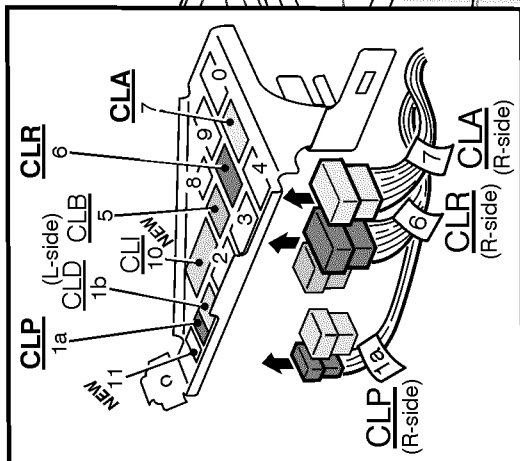








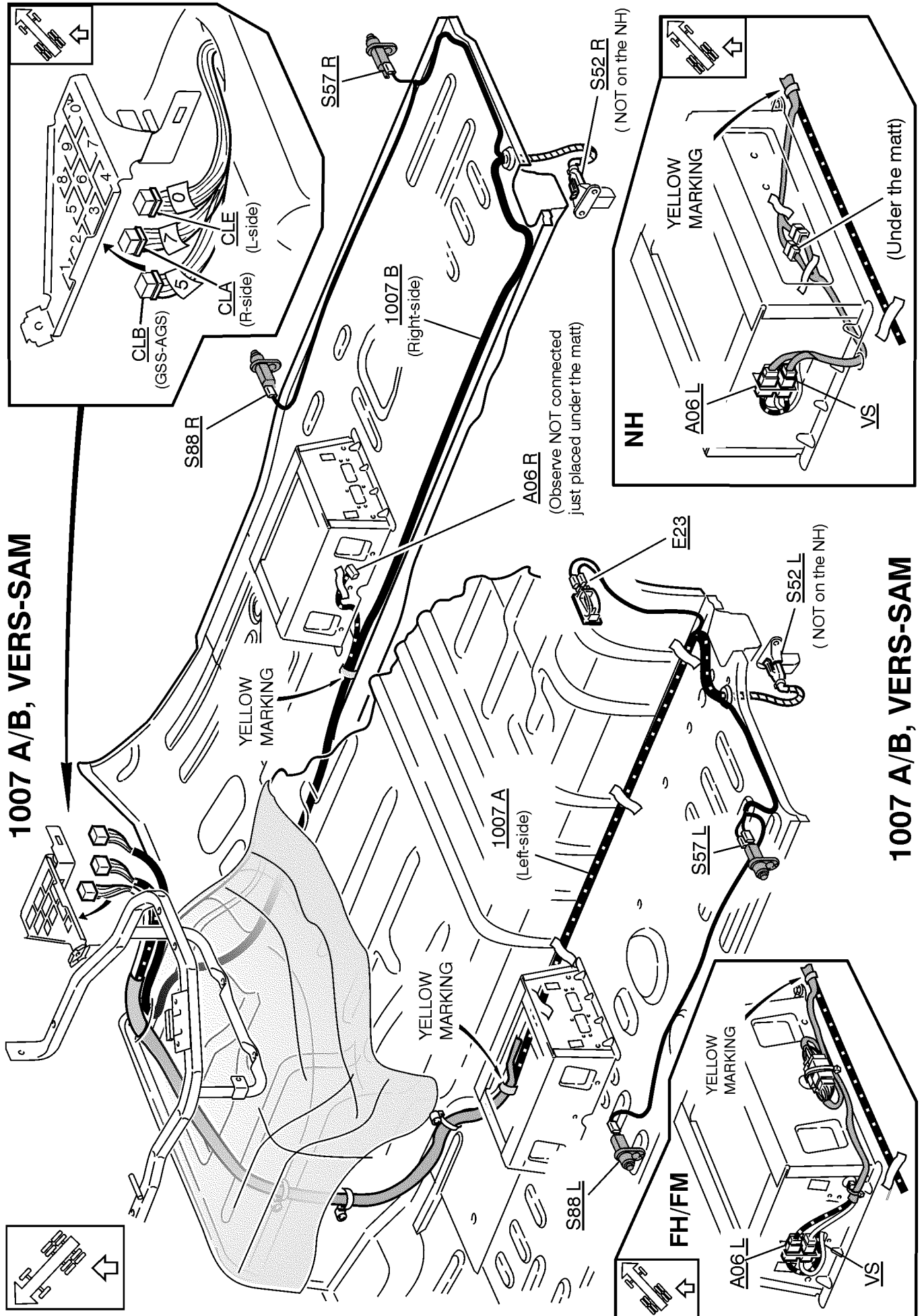
### 1007 B LHD, High-amp



### LHD, High-amp 1007 B

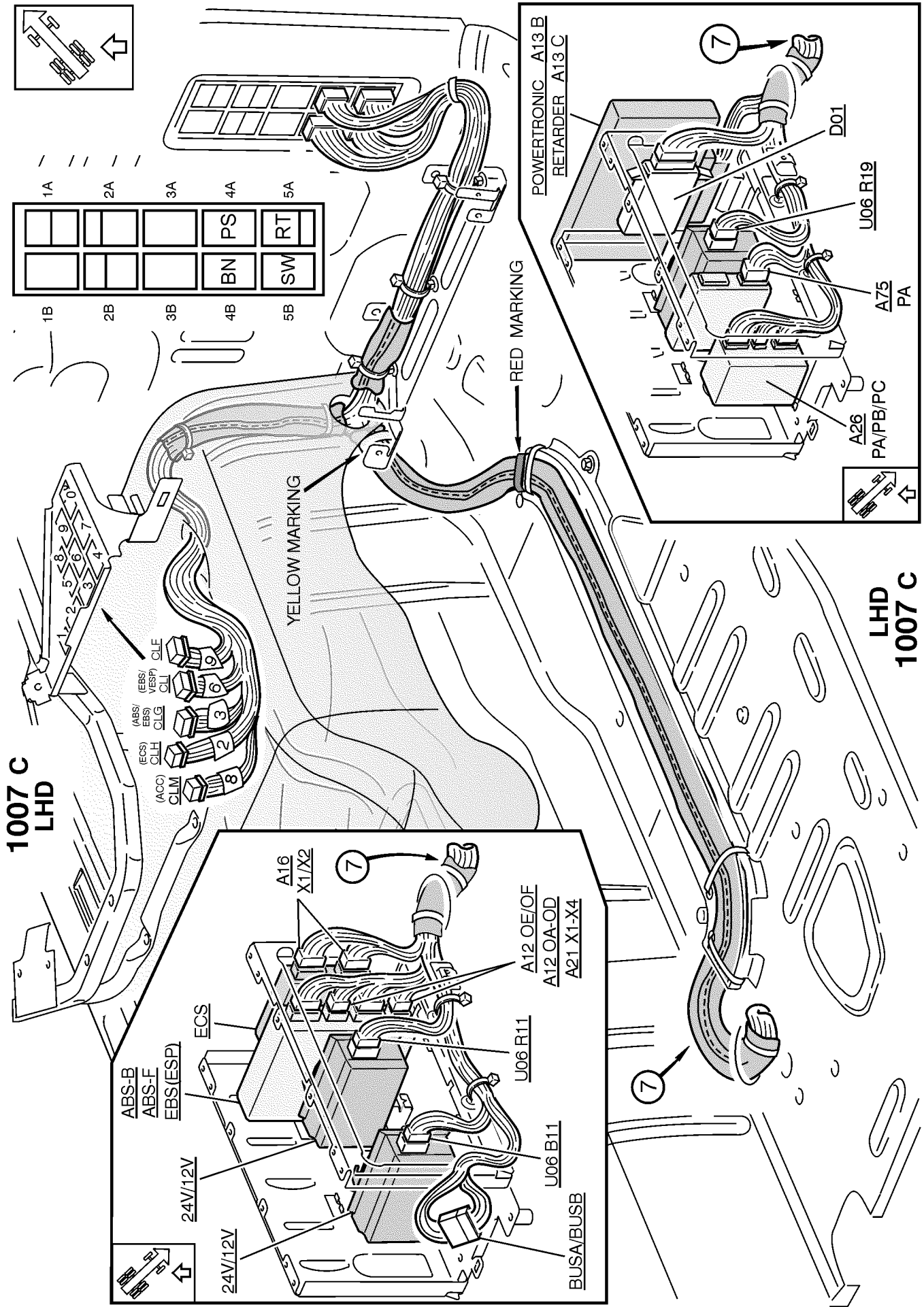




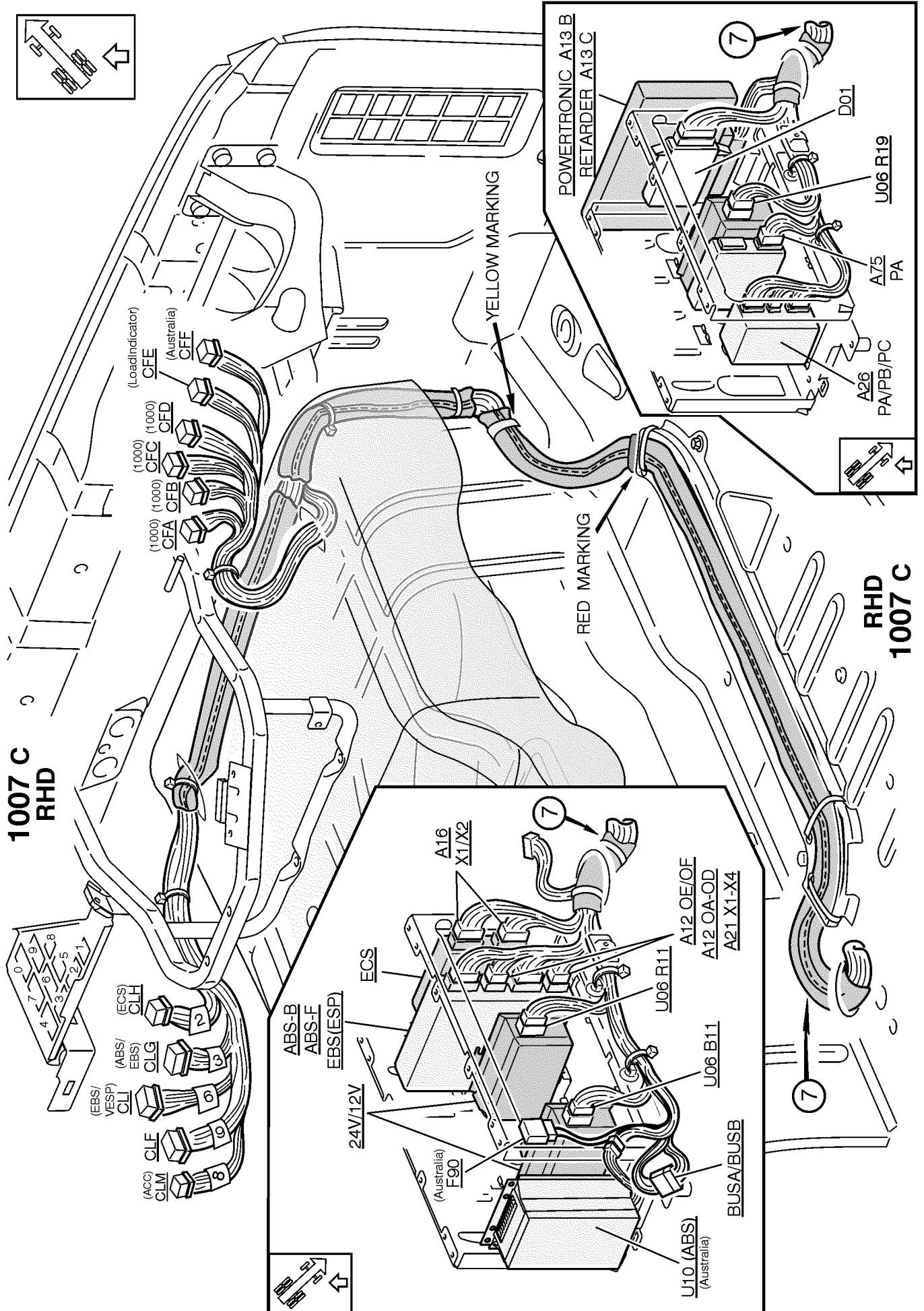


**1007 A/B, VERS-SAM**

**1007 A/B, VERS-SAM**

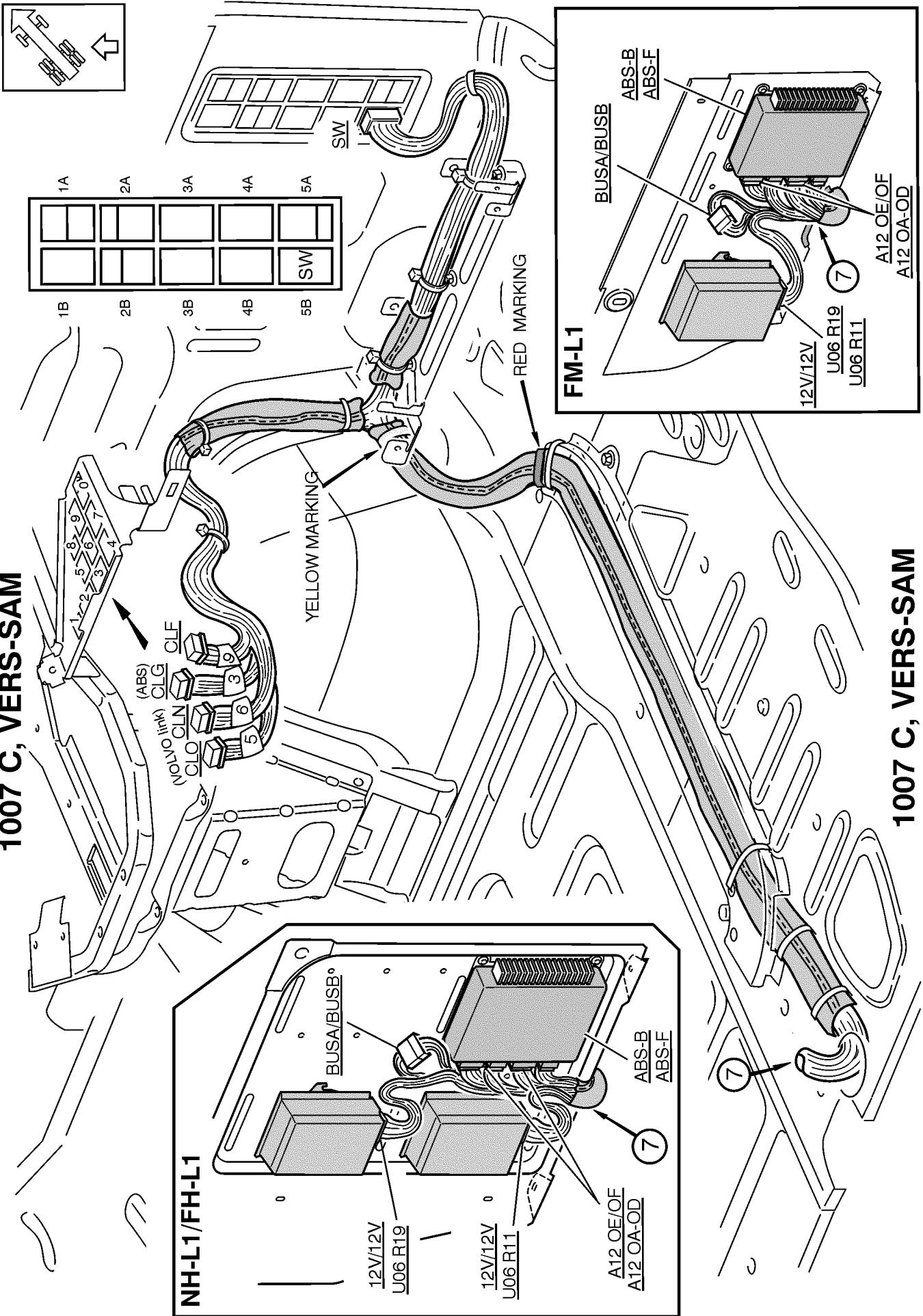


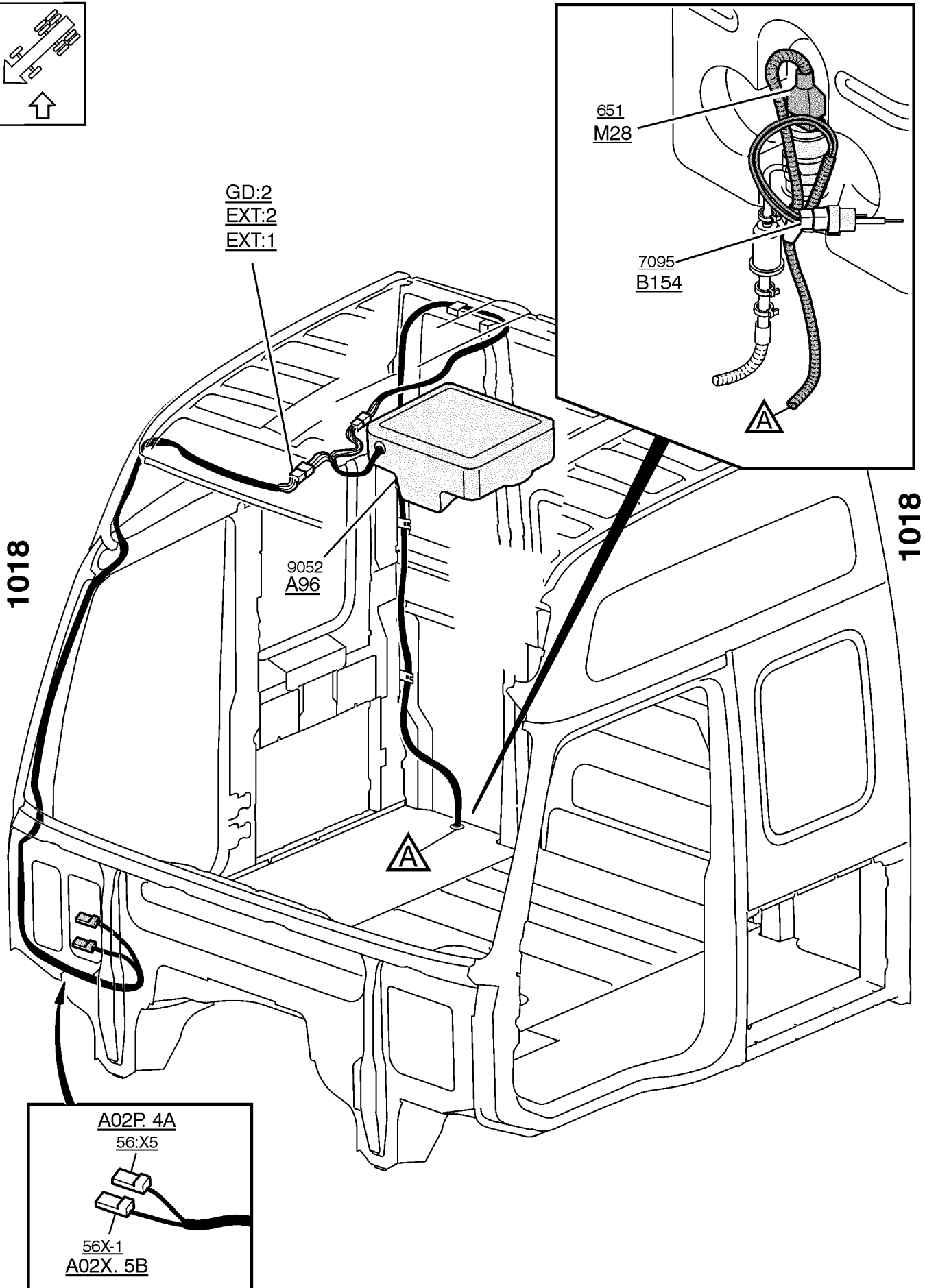
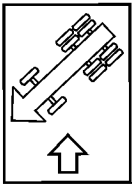
LHD  
1007 C

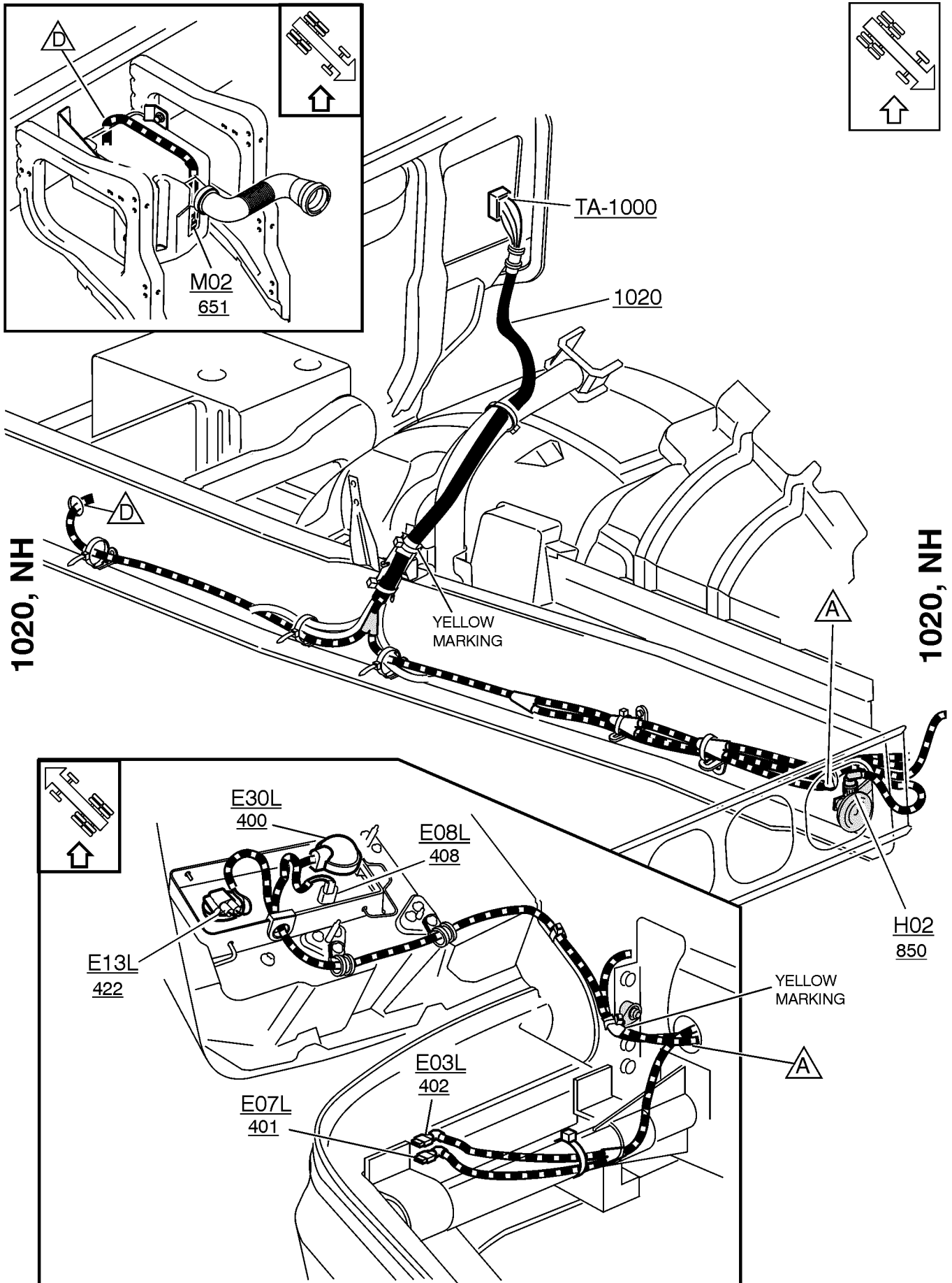


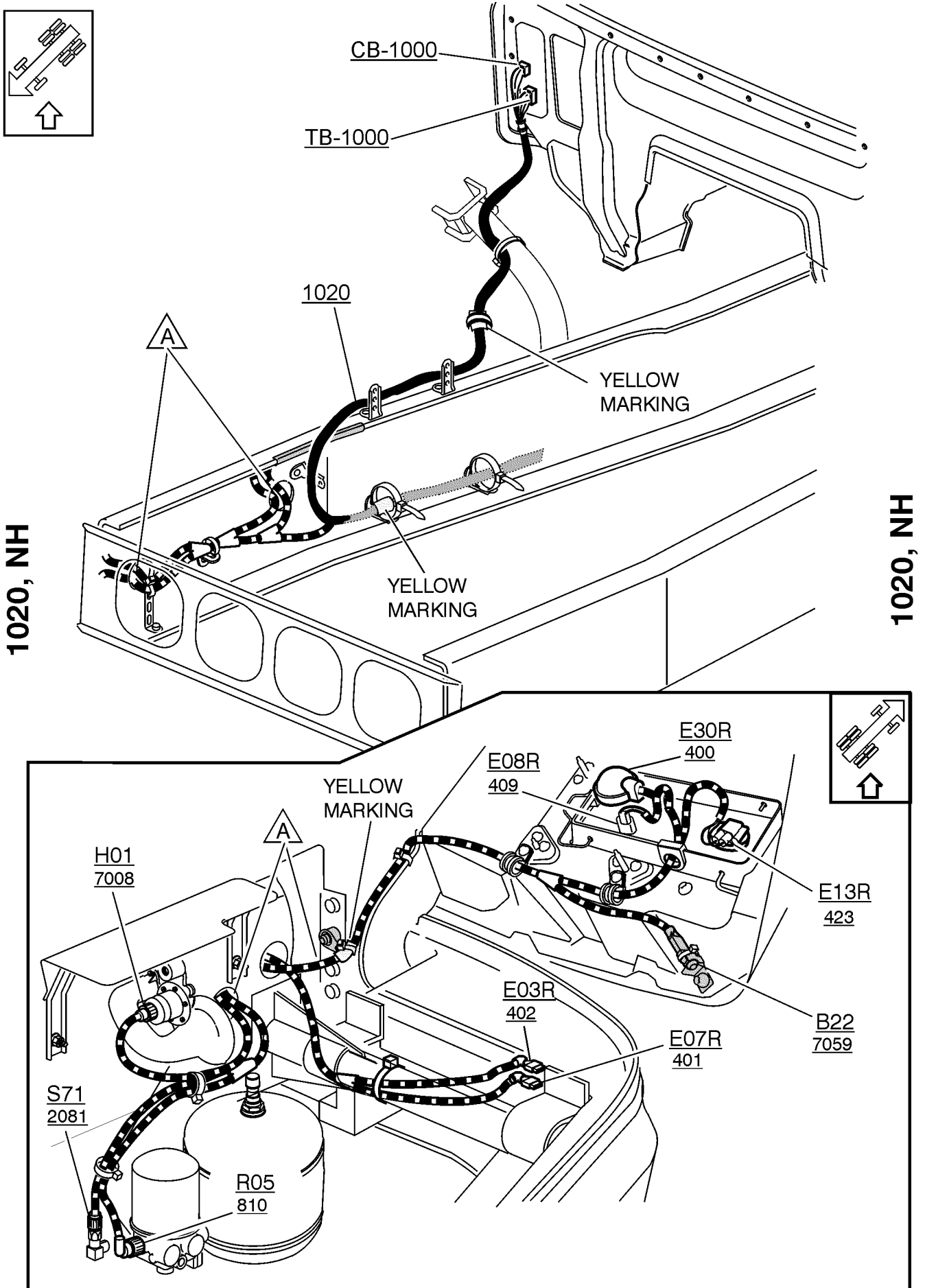
**1007 C, VERS-SAM**

**1007 C, VERS-SAM**



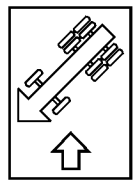
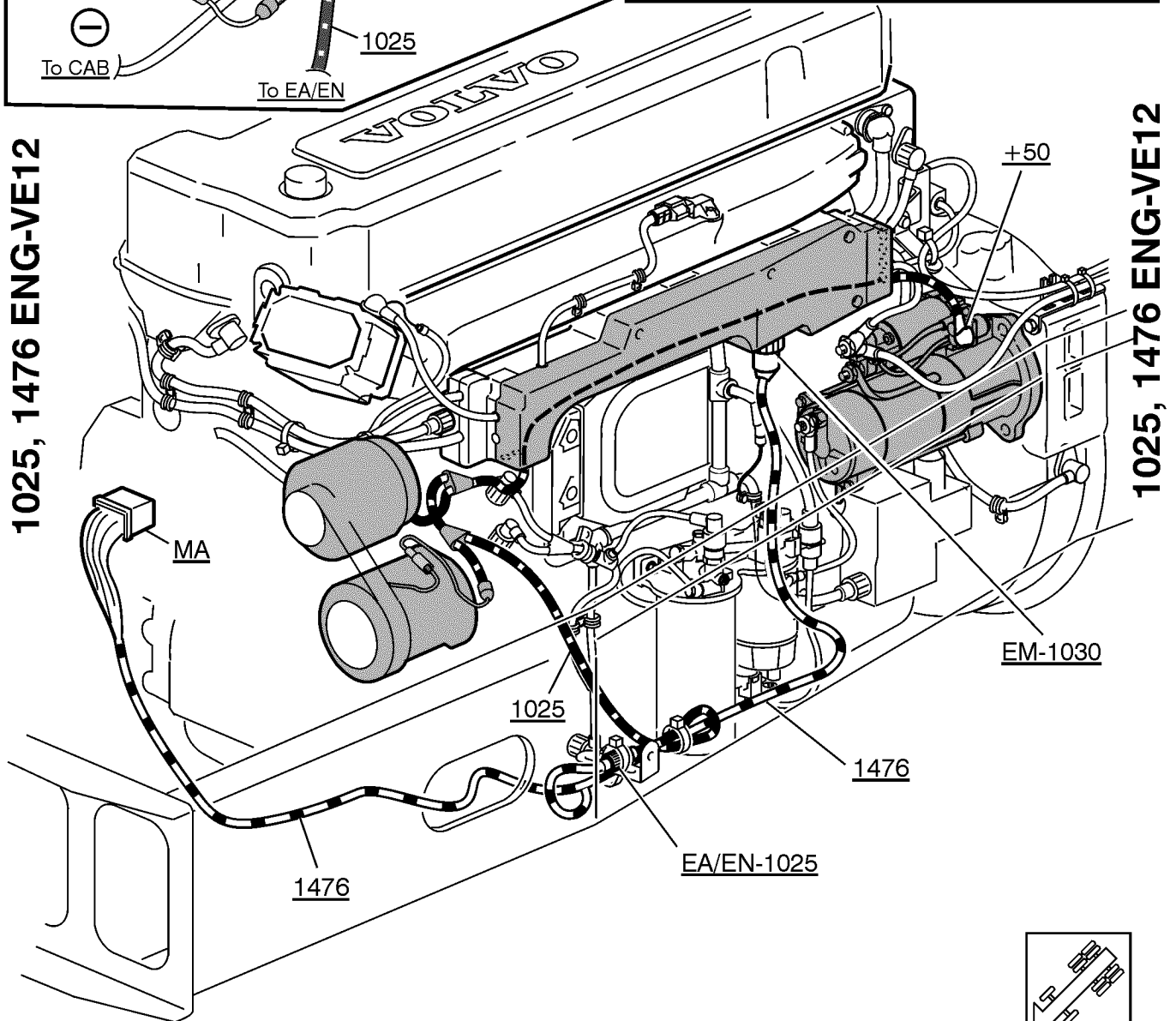
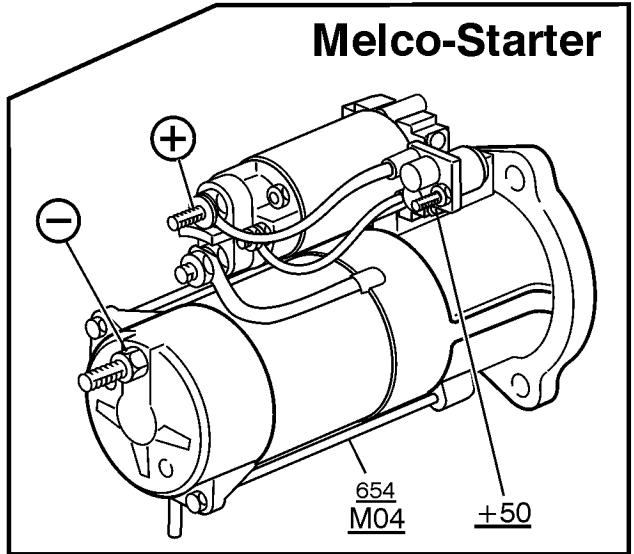
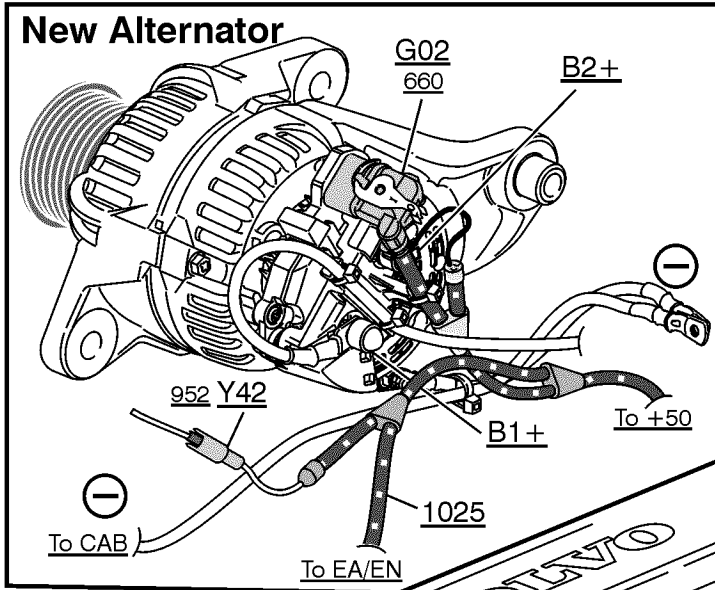




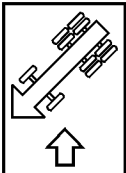
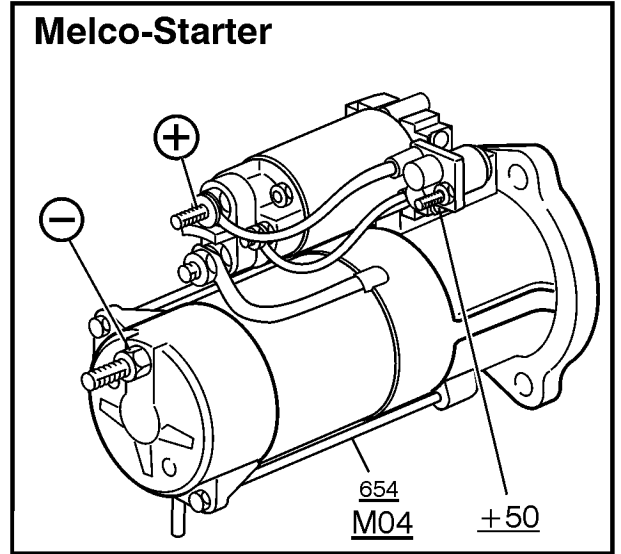
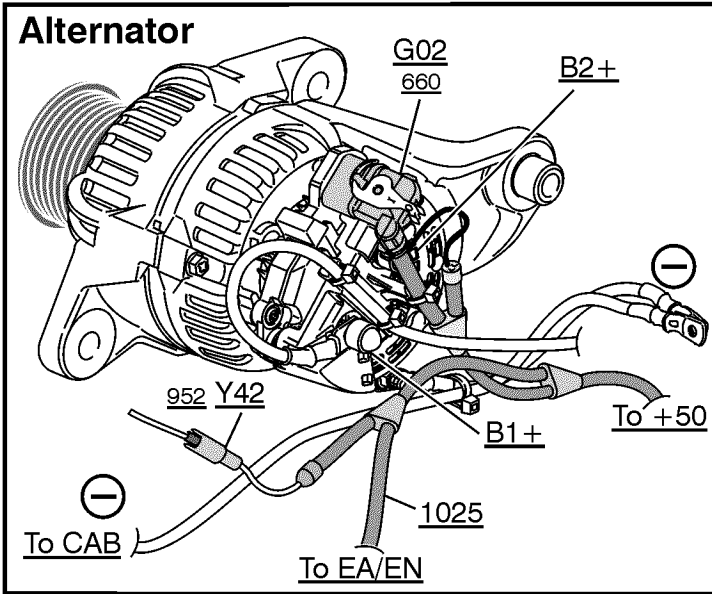


1020, NH

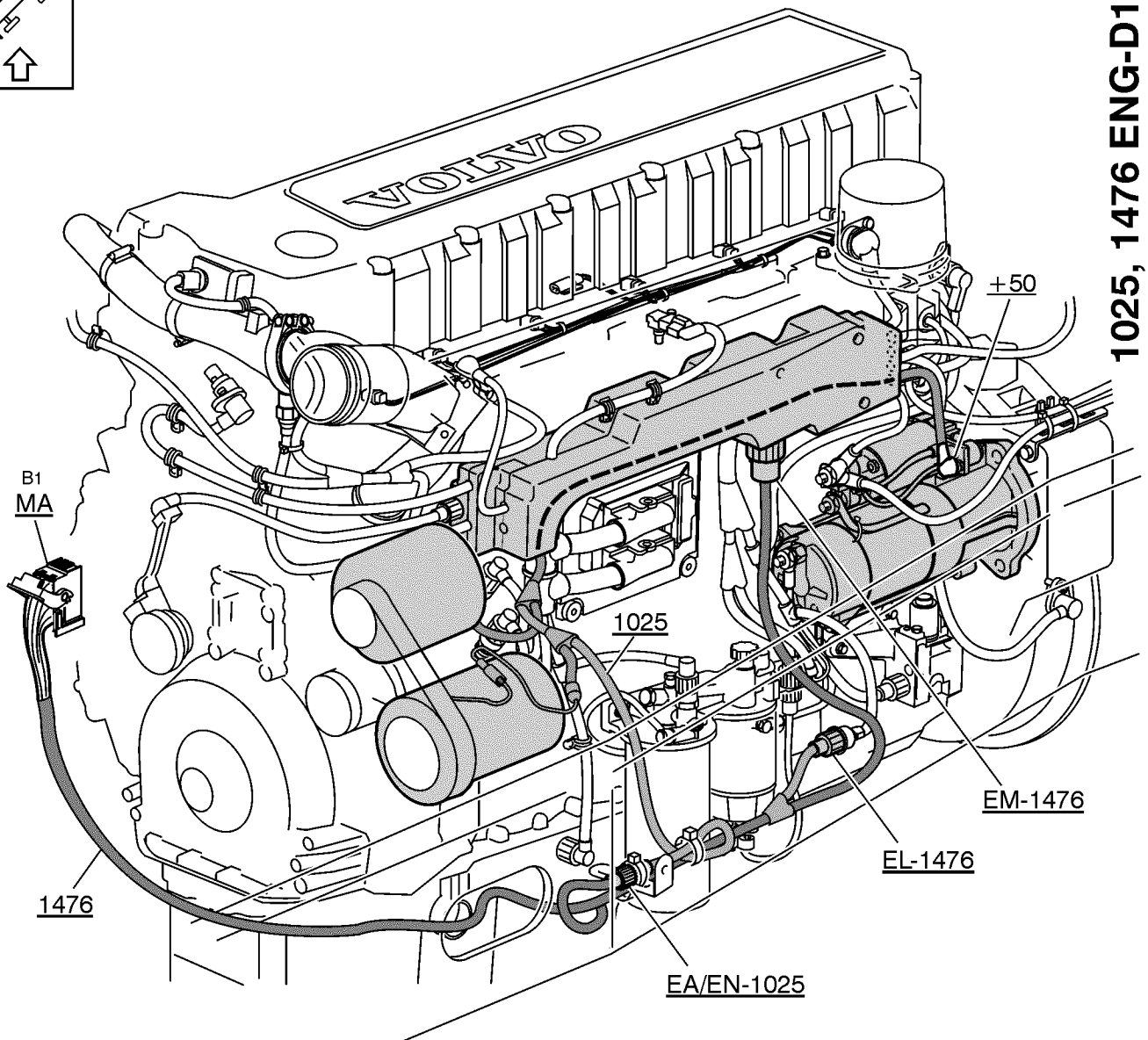
1020, NH







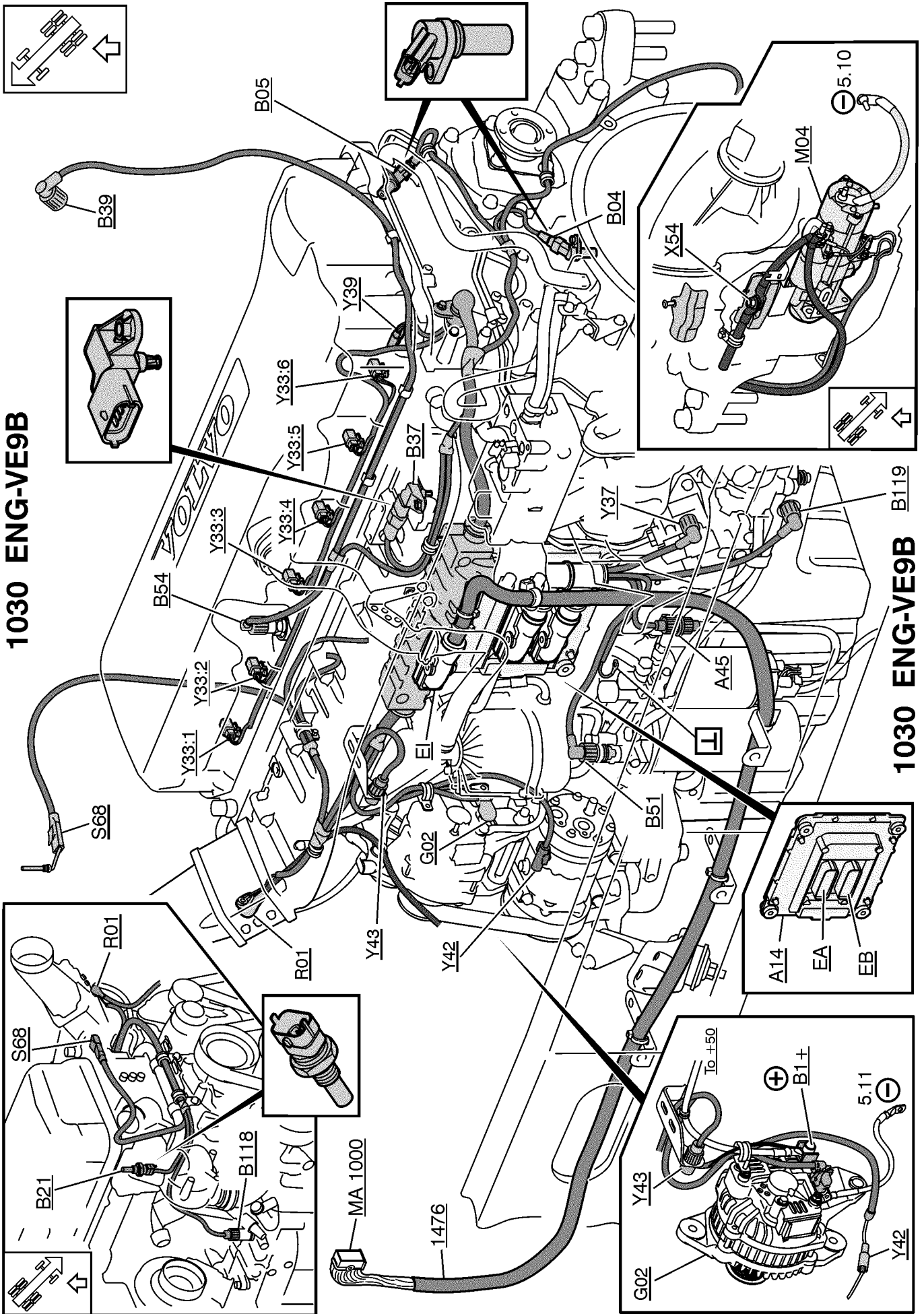
1025, 1476 ENG-D12F

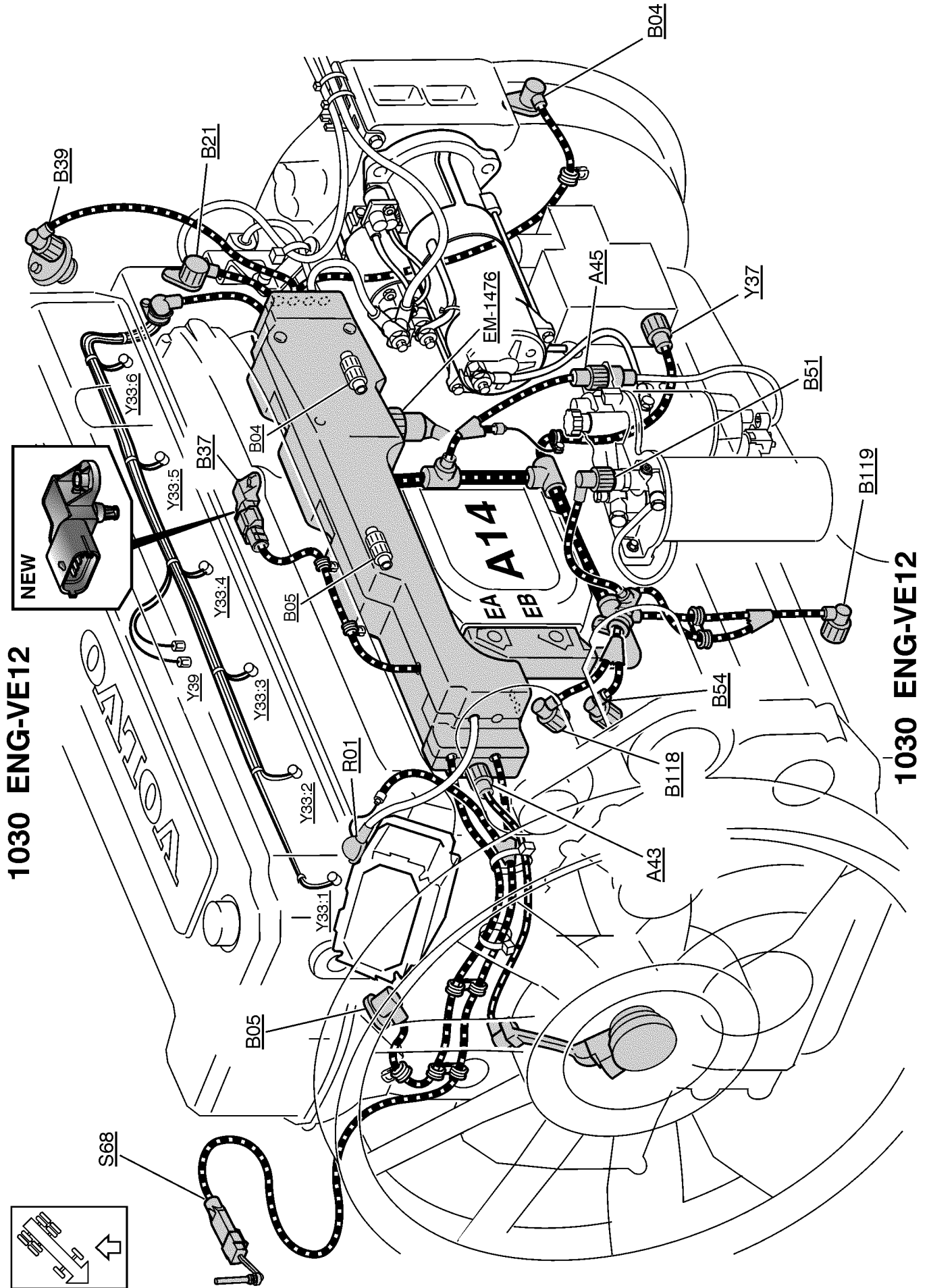


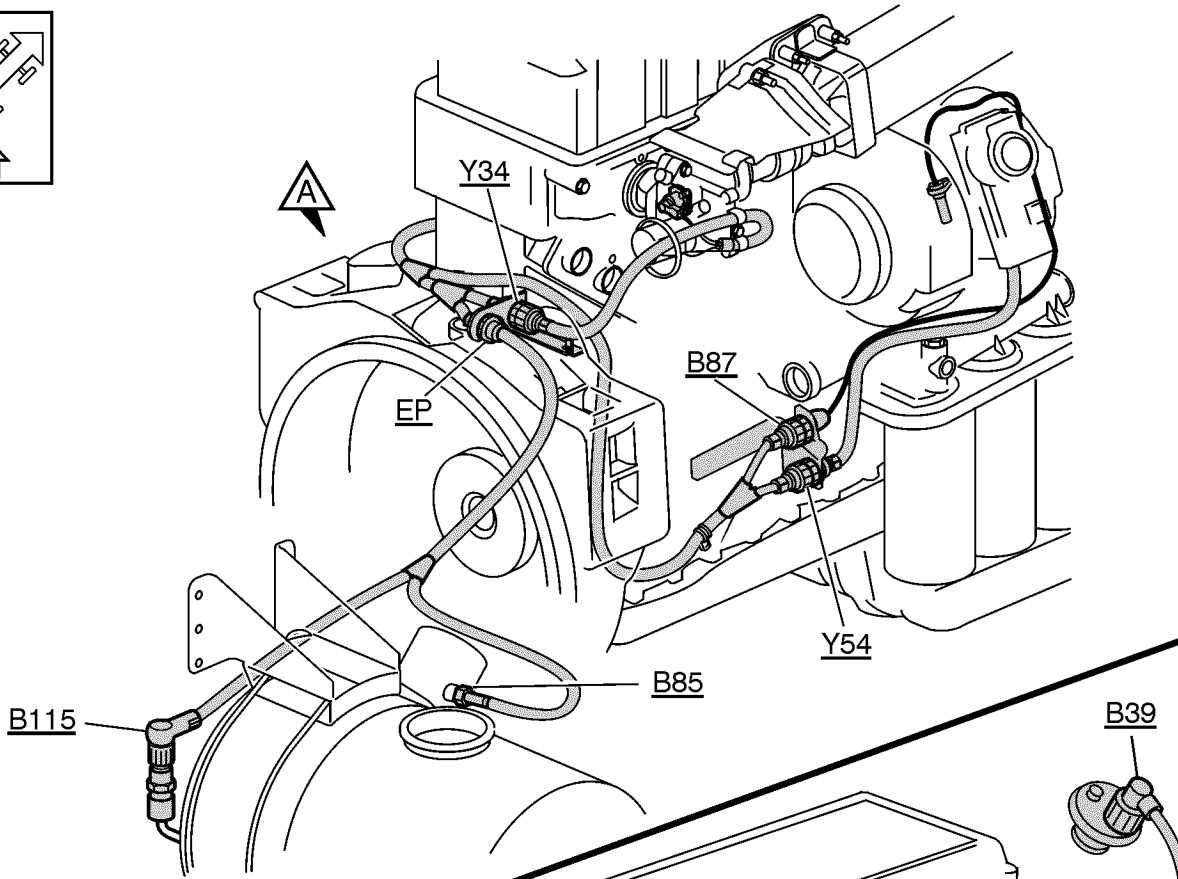
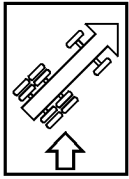
1025, 1476 ENG-D12F

1030 ENG-VE9B

1030 ENG-VE9B

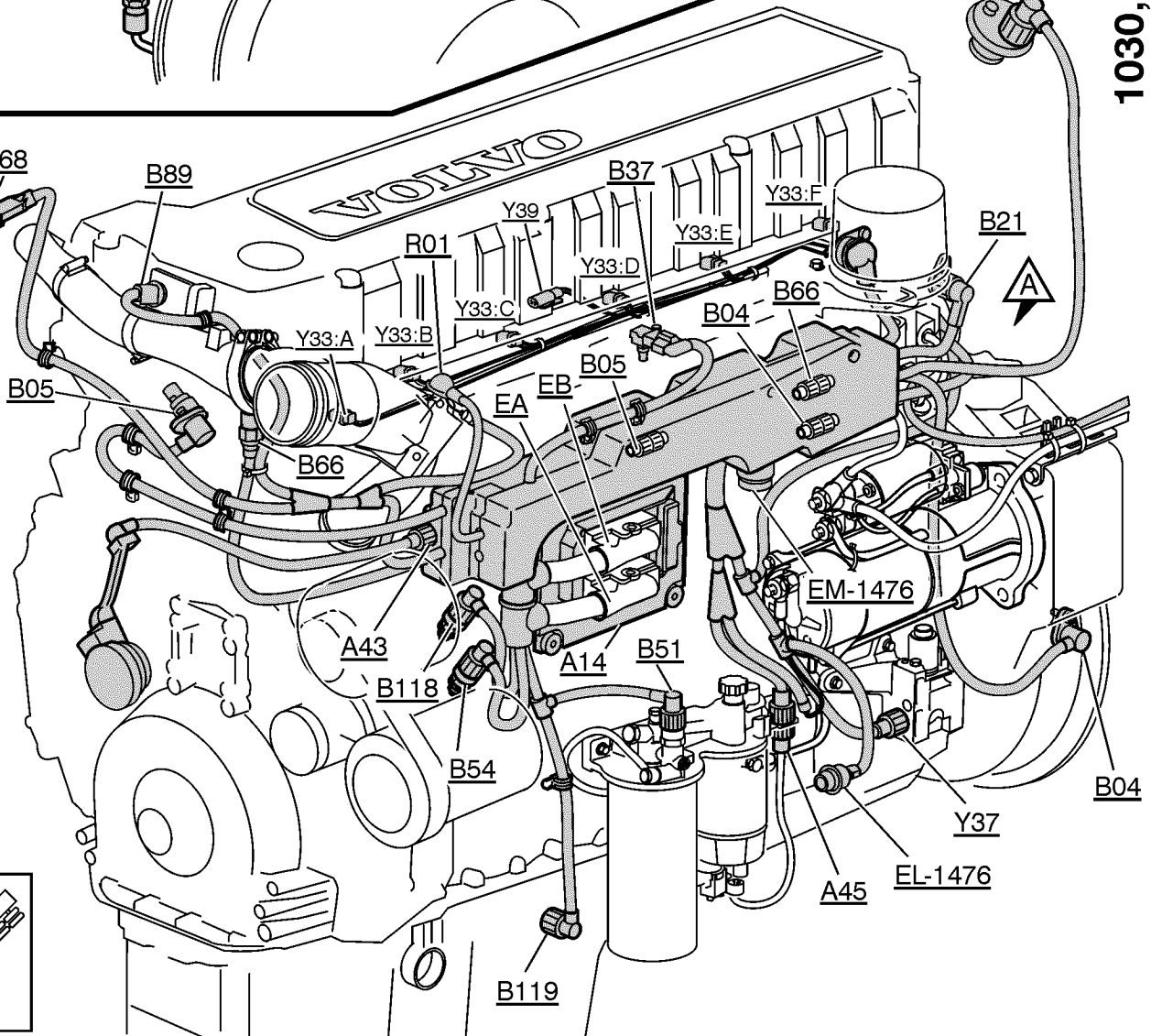
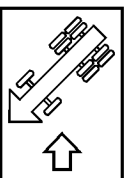


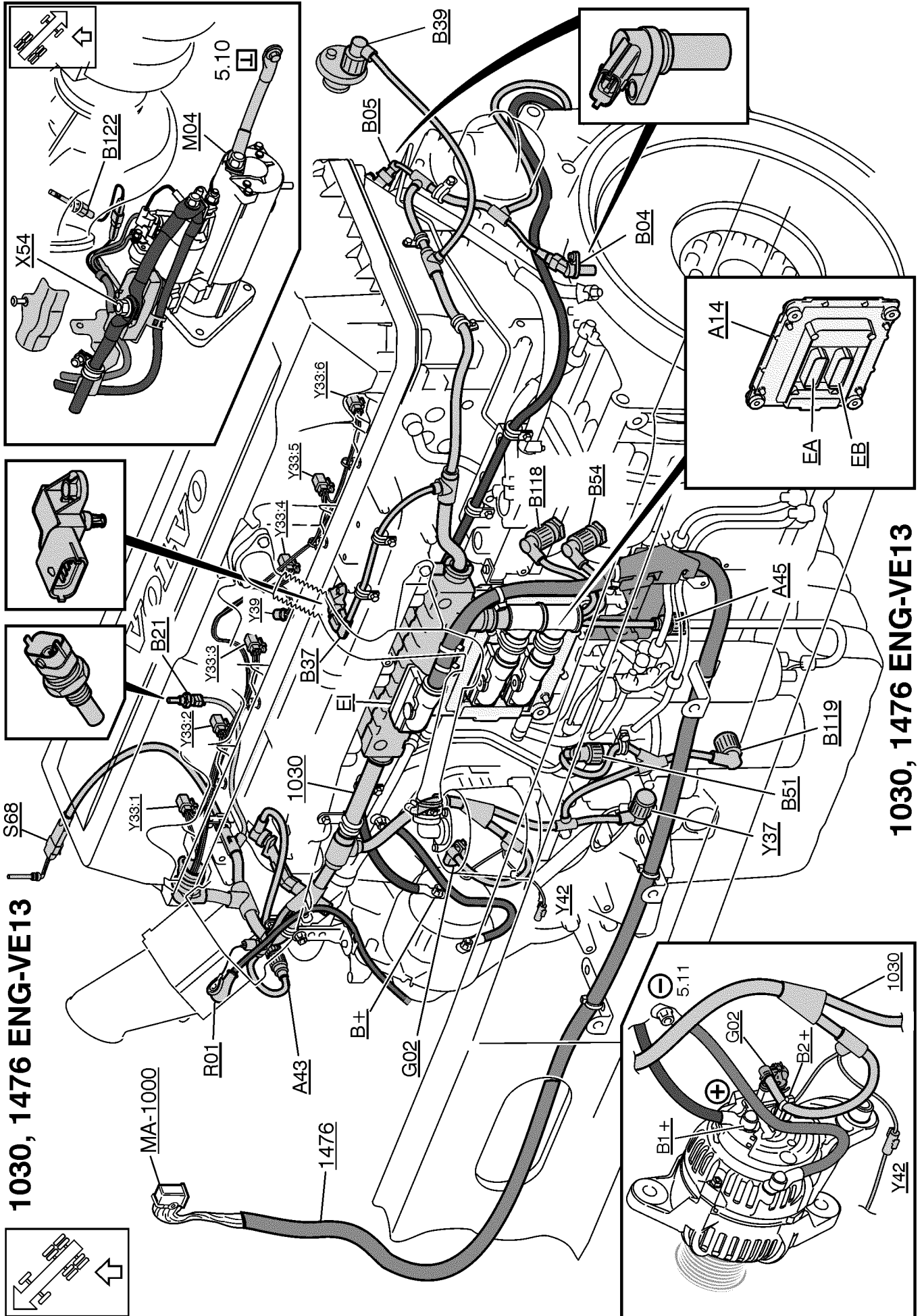




**1030, ENG-VE12F**

**1030, ENG-VE12F**

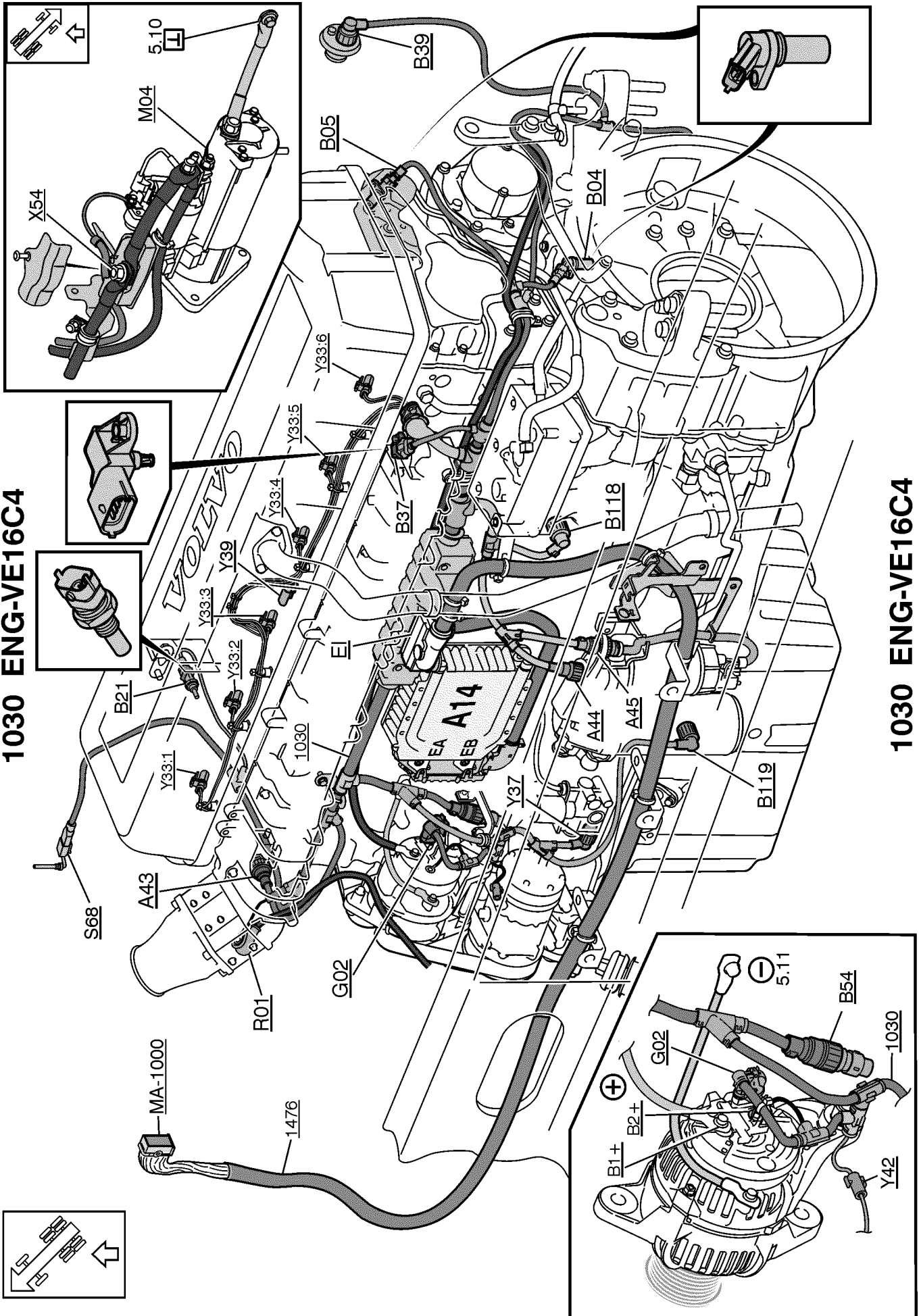


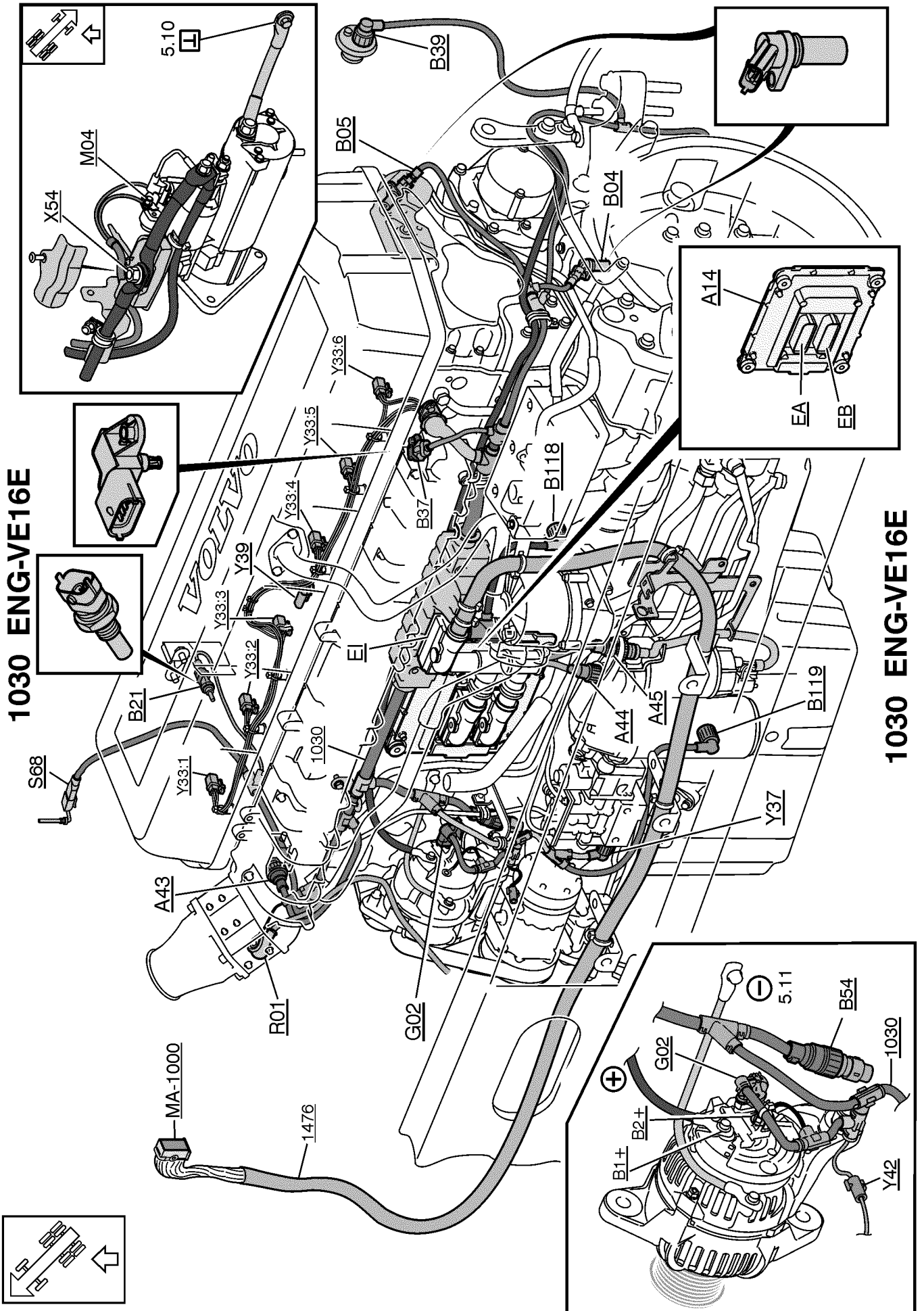


1030, 1476 ENG-VE13

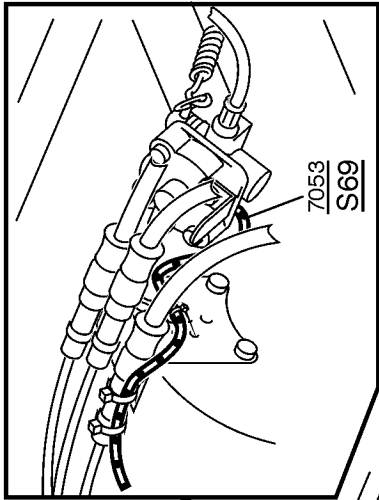
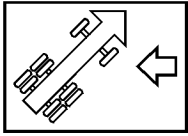
1030 ENG-VE16C4

1030 ENG-VE16C4

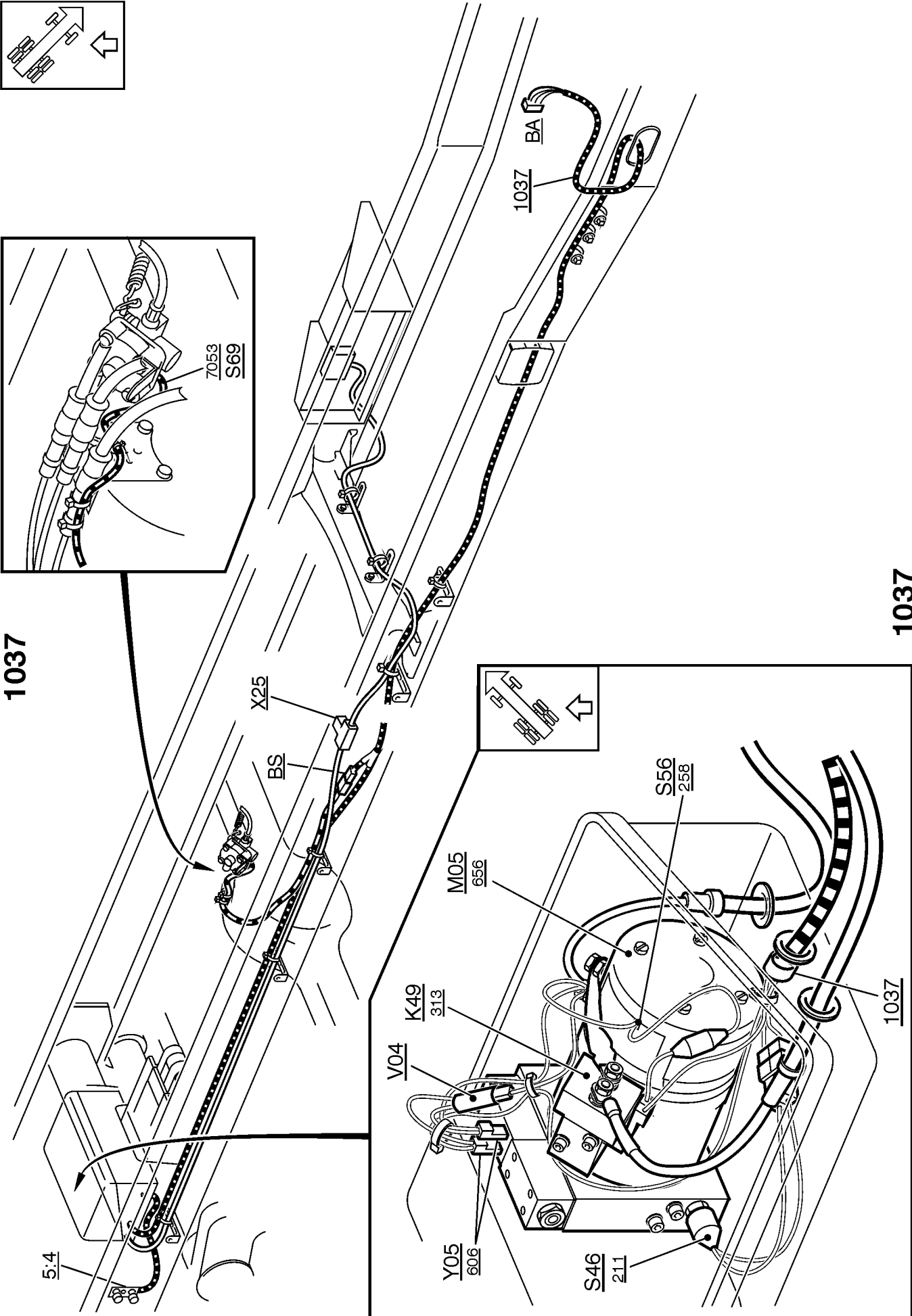




1030 ENG-VE16E



1037

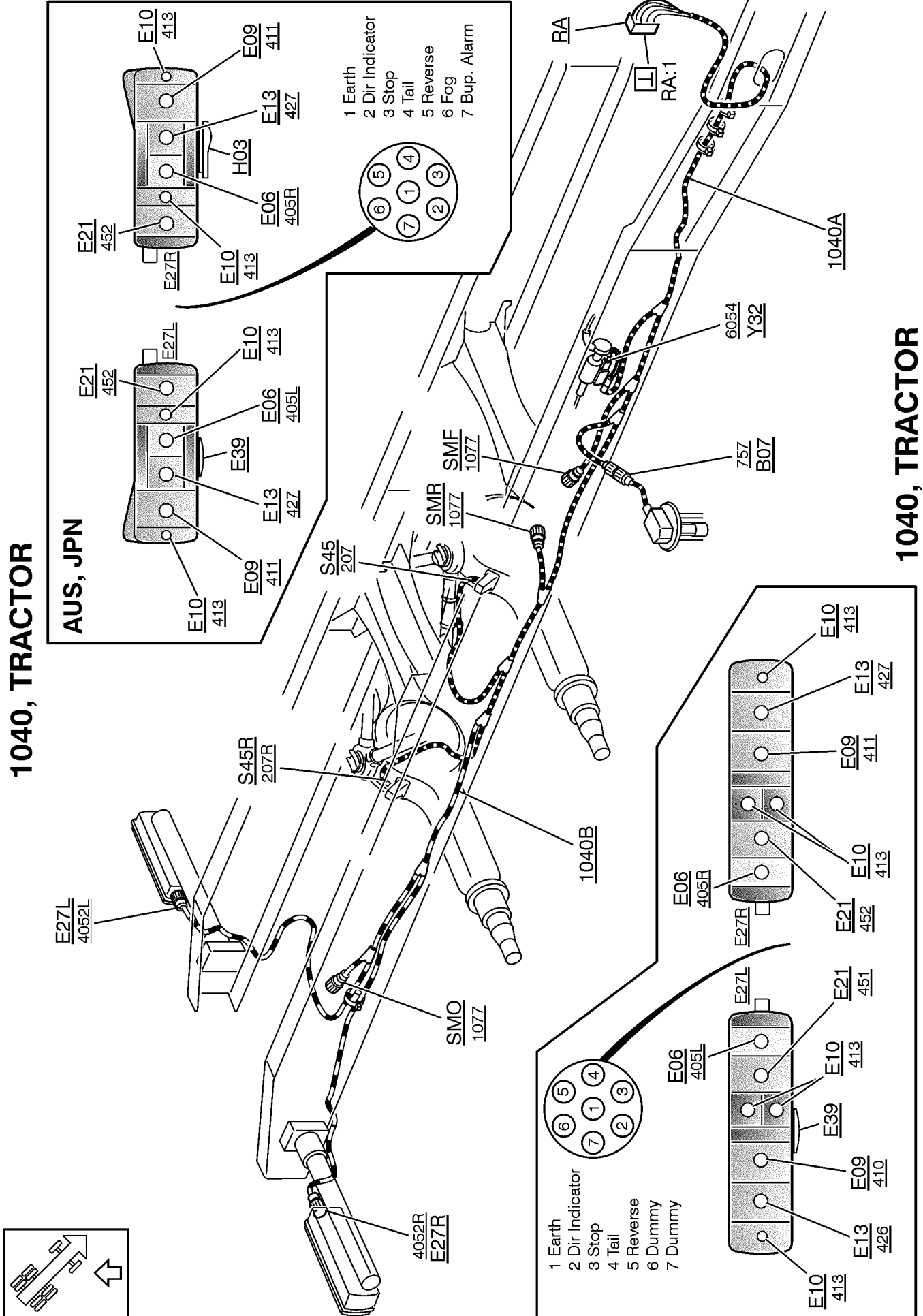


1037



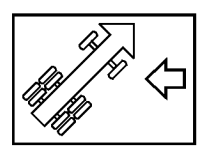
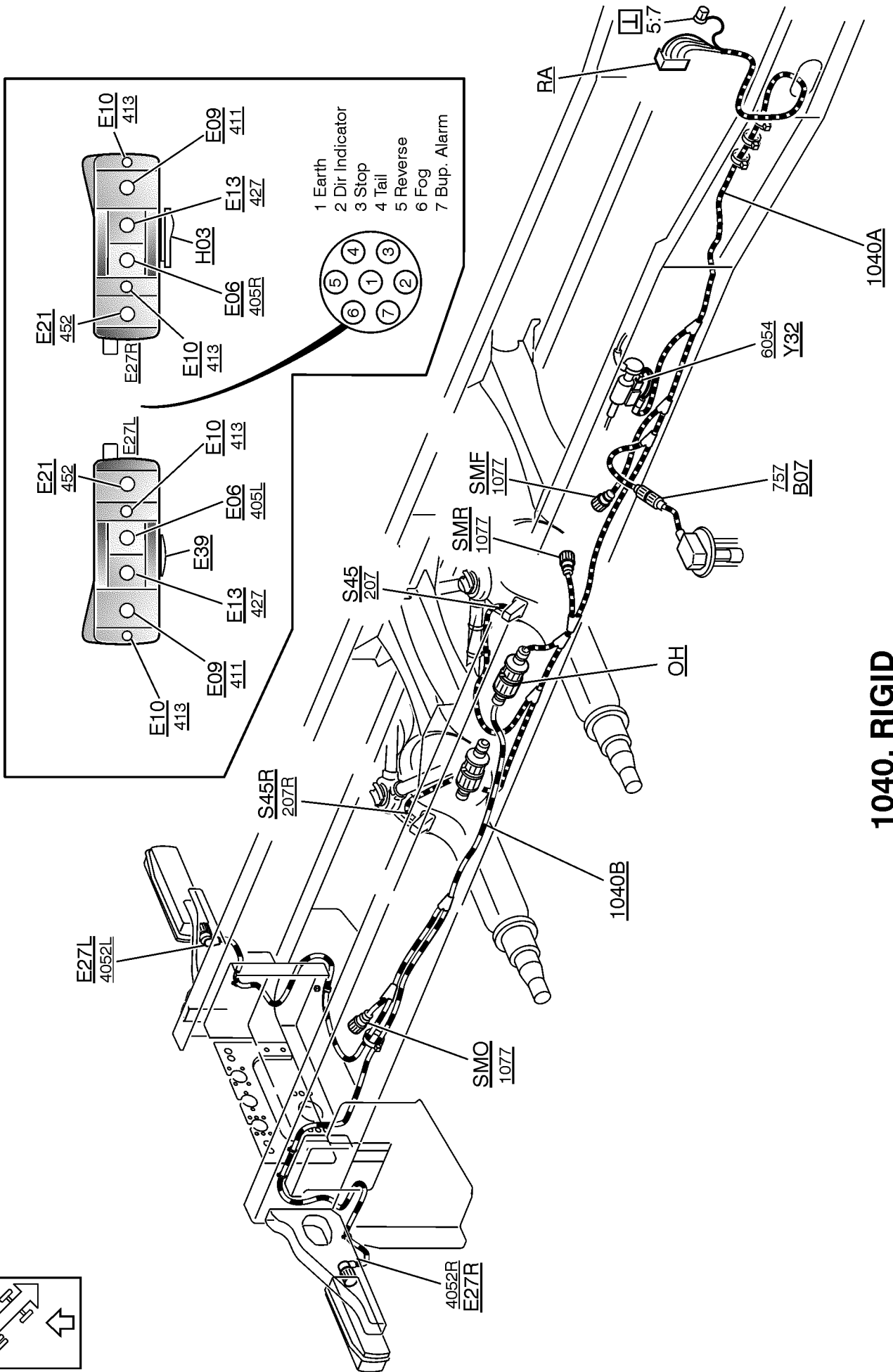
1040, TRACTOR

1040, TRACTOR



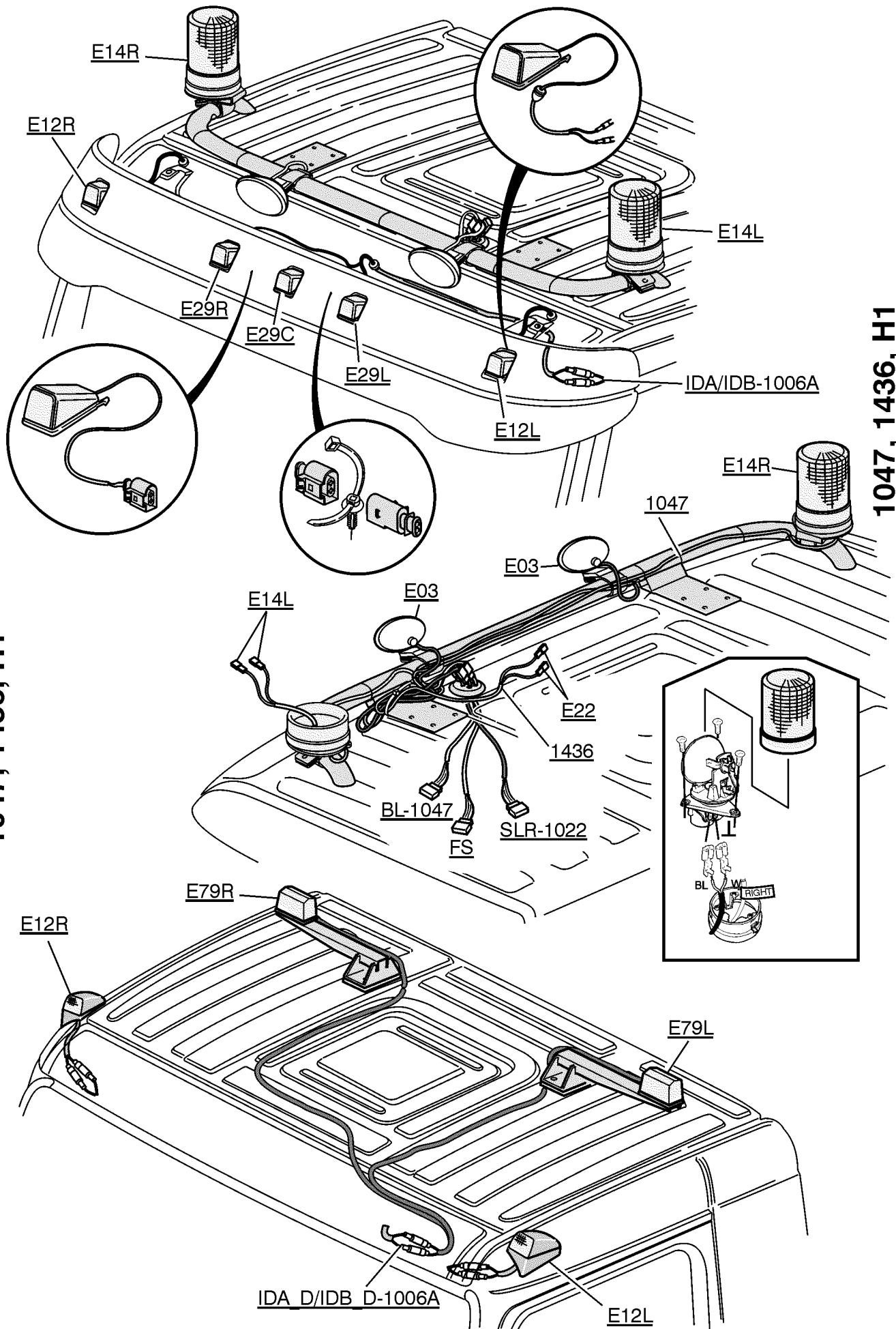
**1040, RIGID**

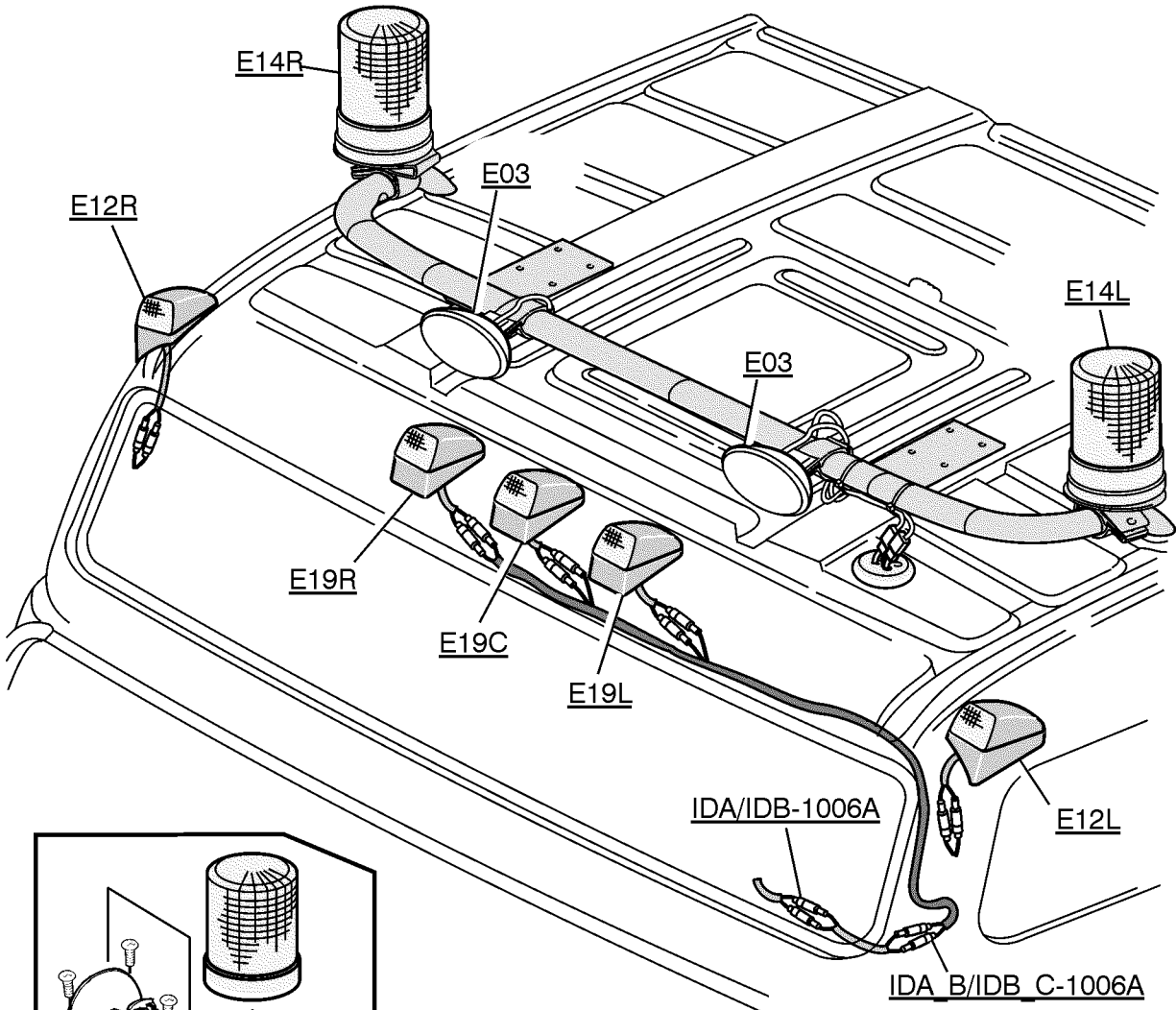
**1040, RIGID**



1047, 1436, H1

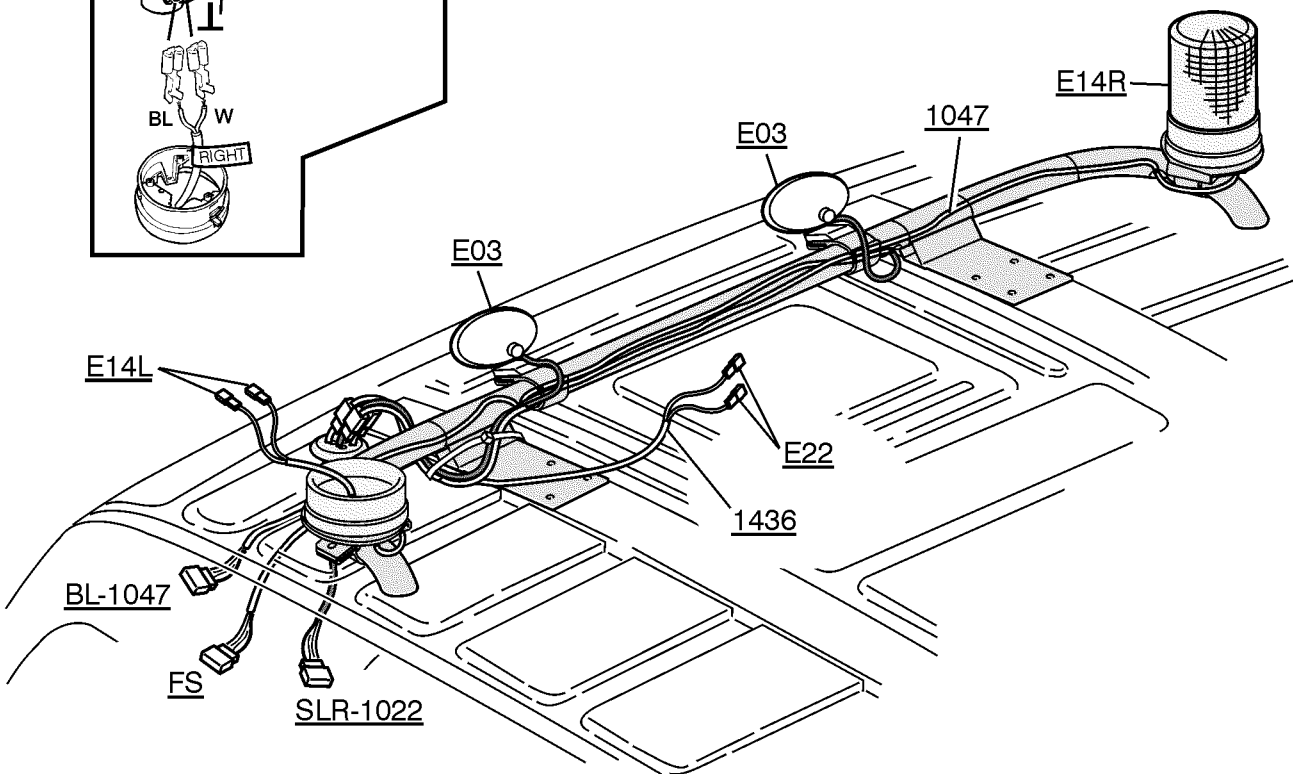
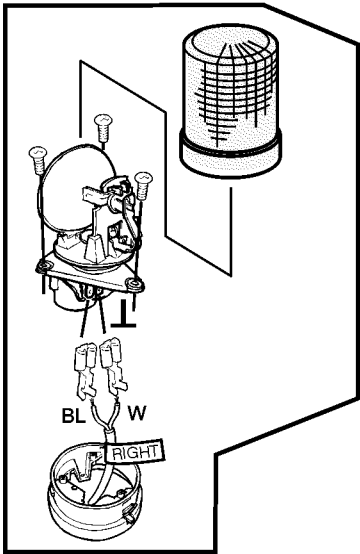
1047, 1436, H1

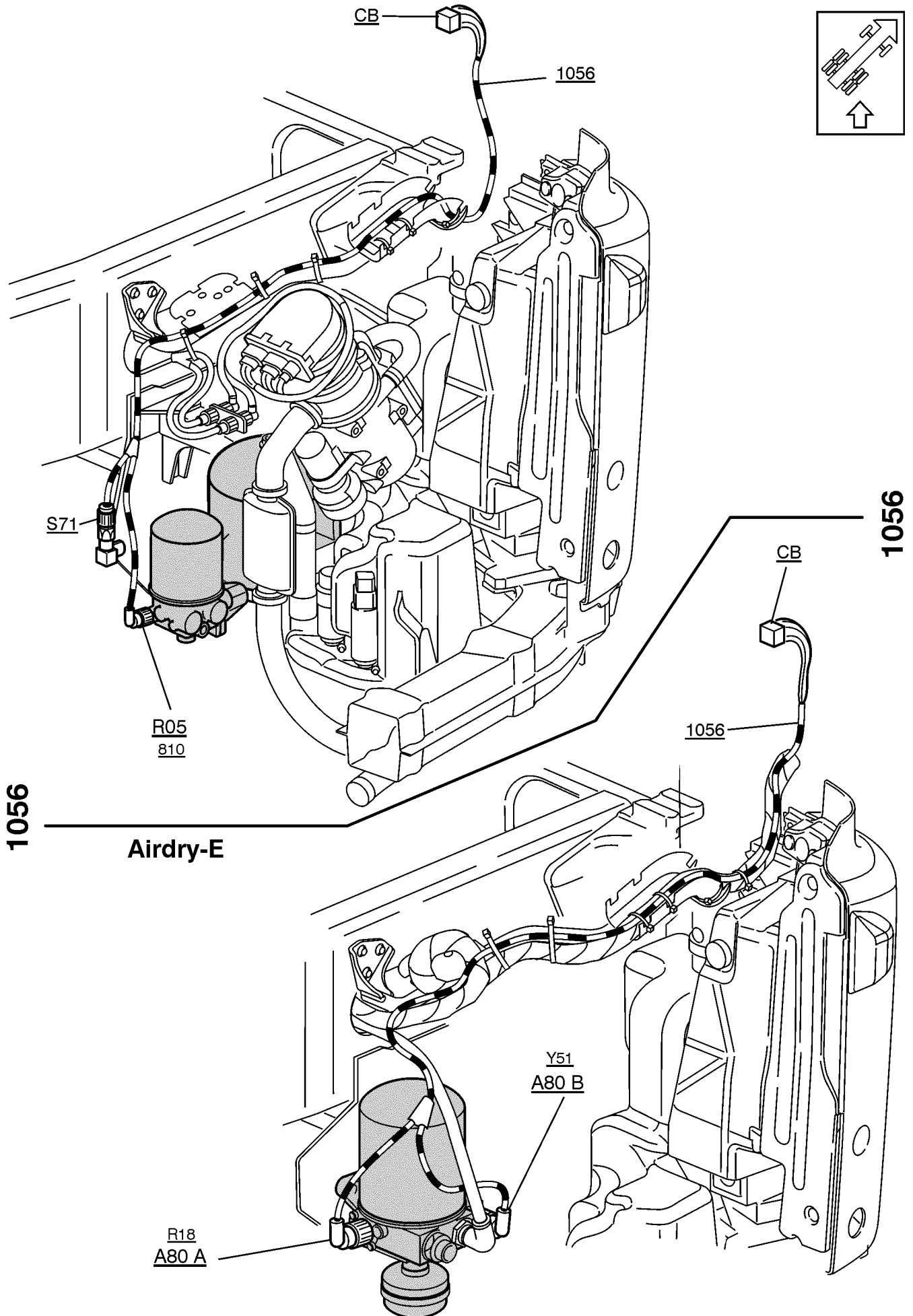


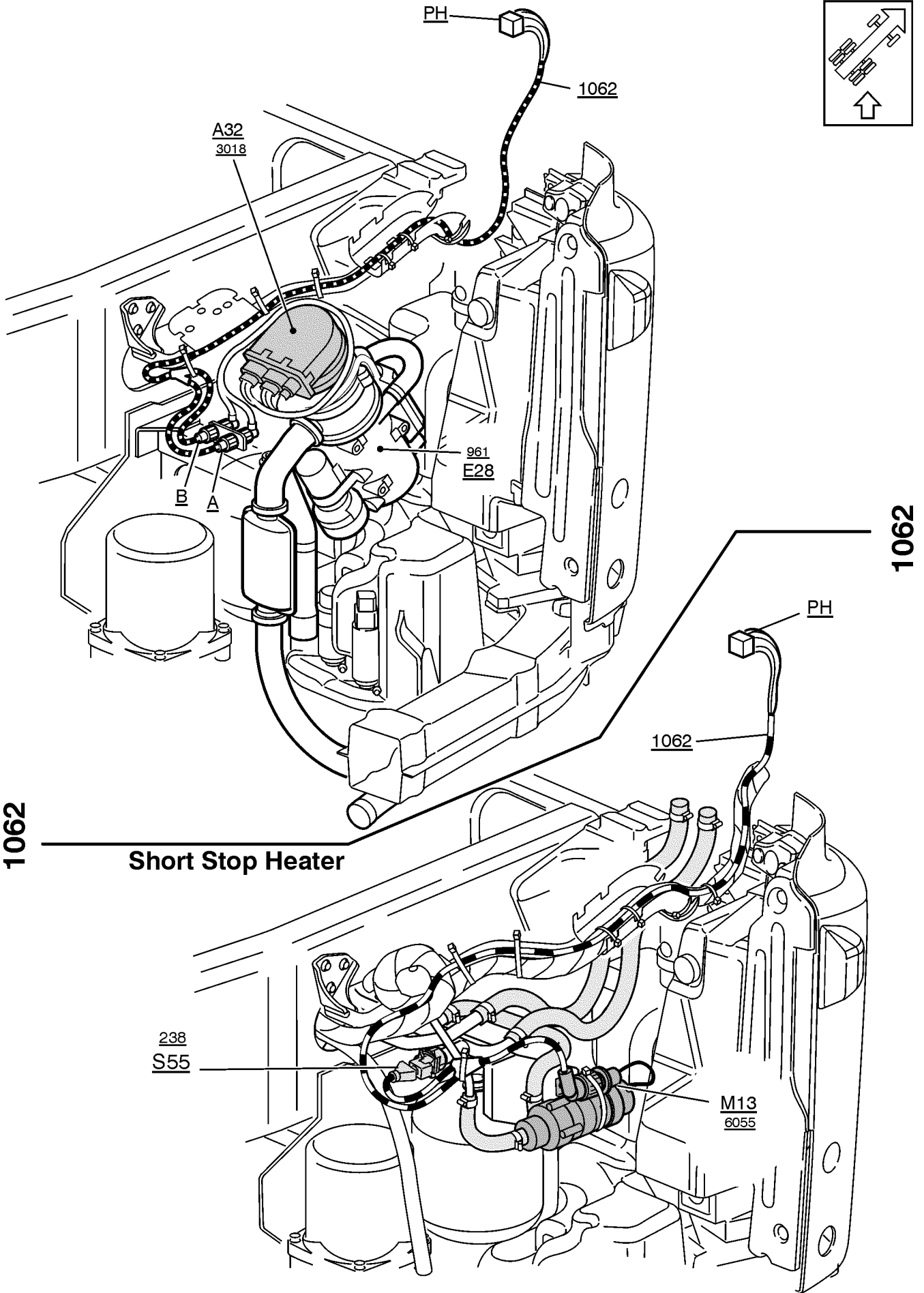


1047, 1436, H2

1047, 1436, H2



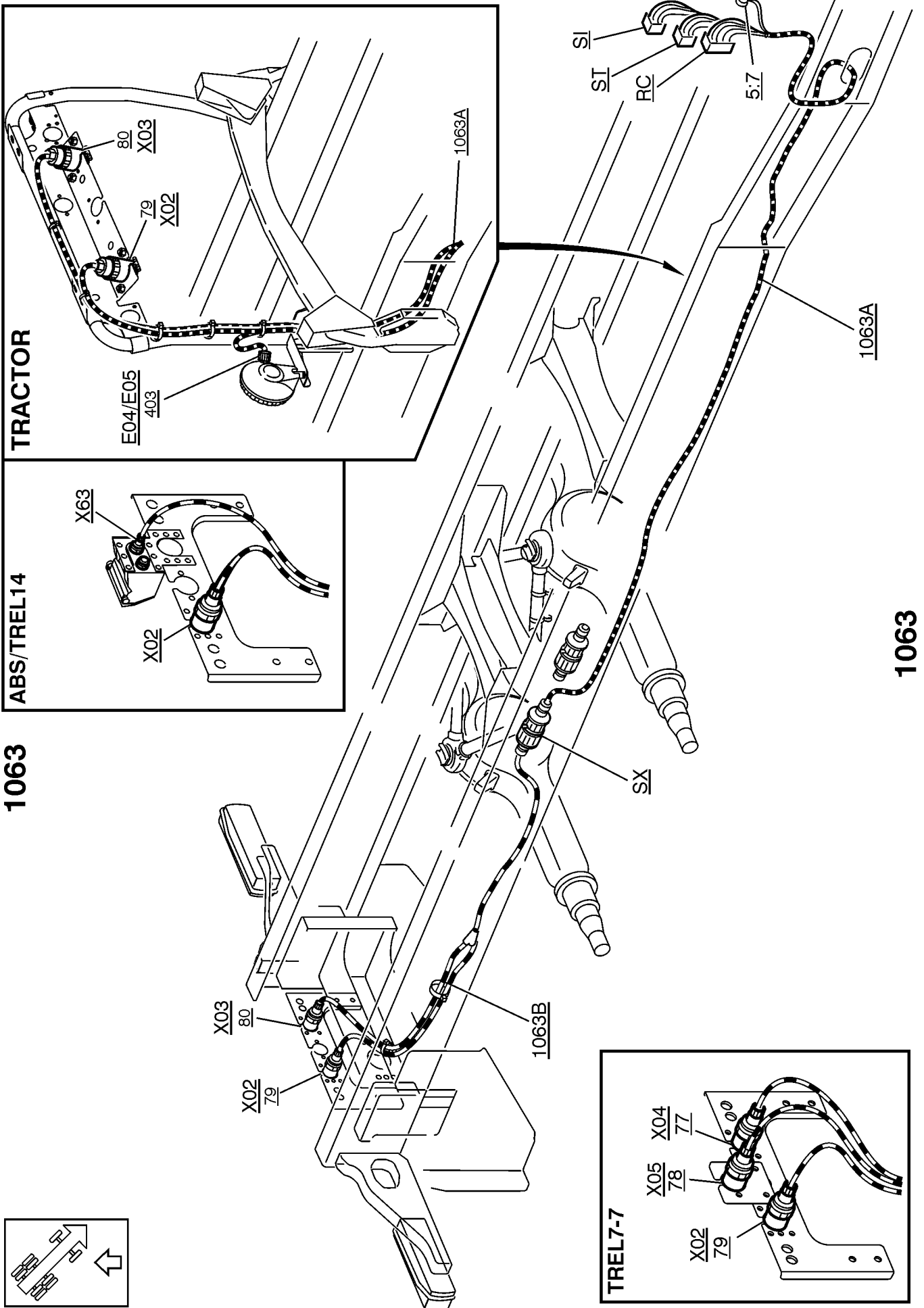




1062

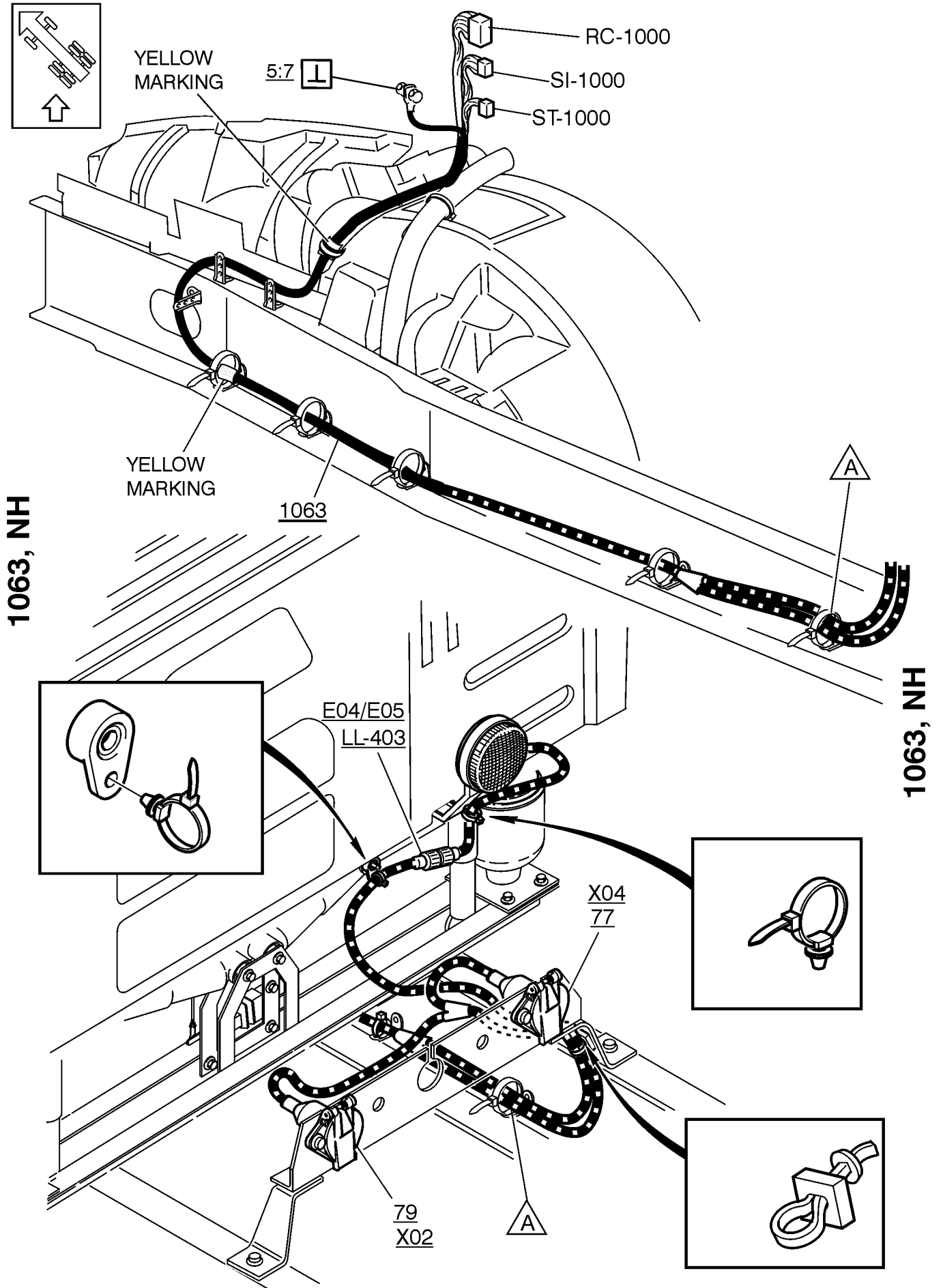
Short Stop Heater

1062



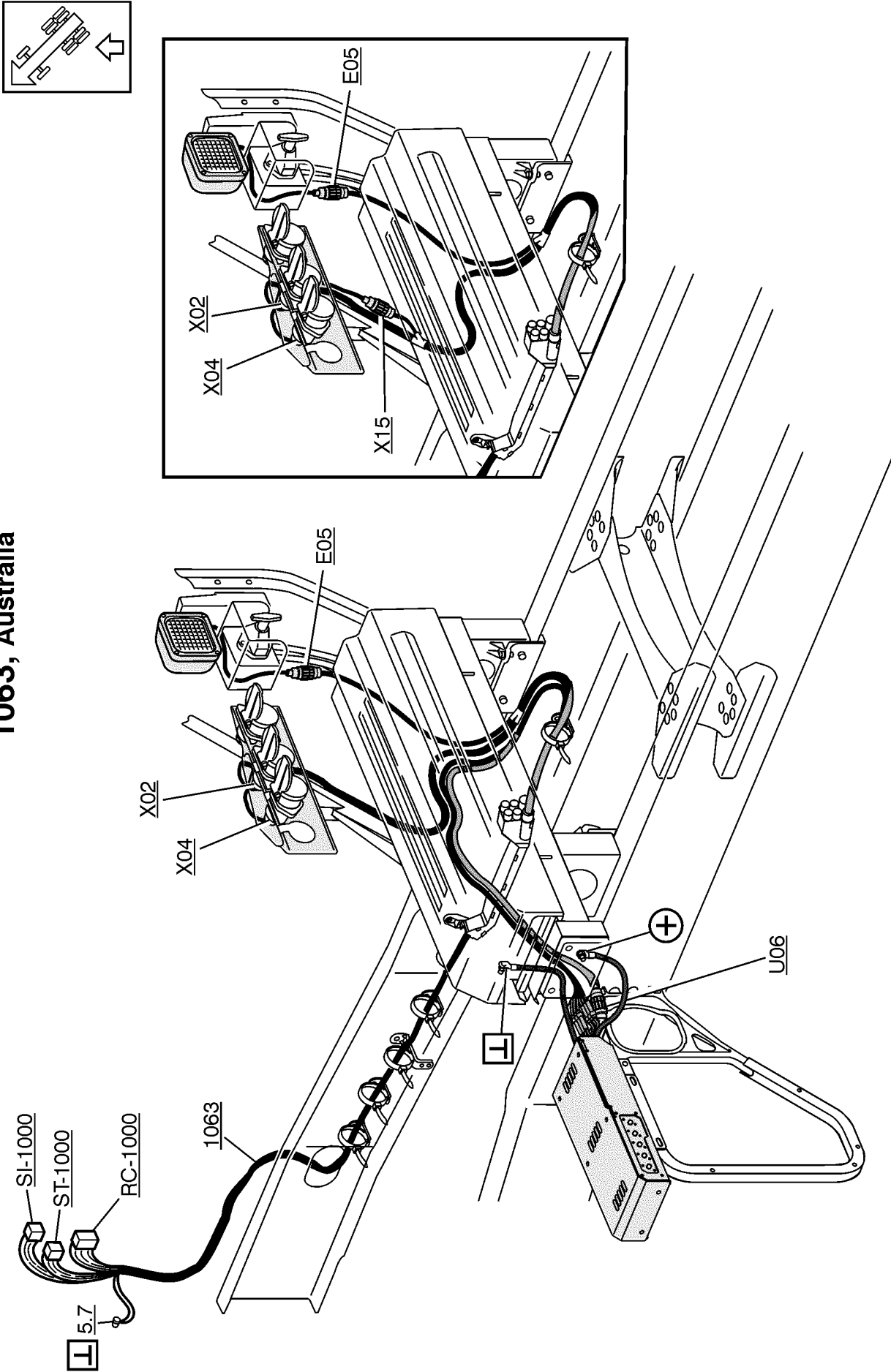
1063

1063

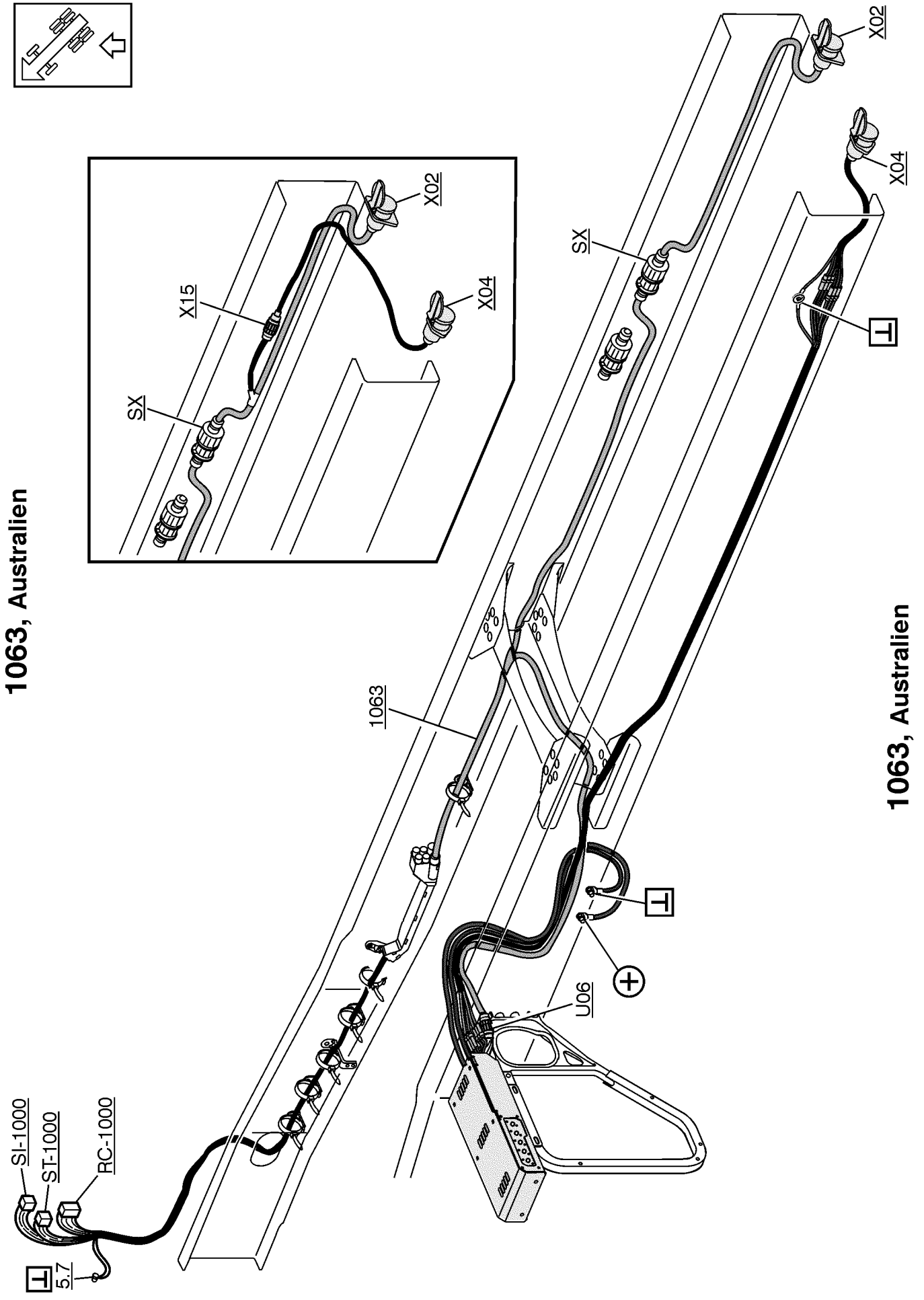




**1063, Australia**



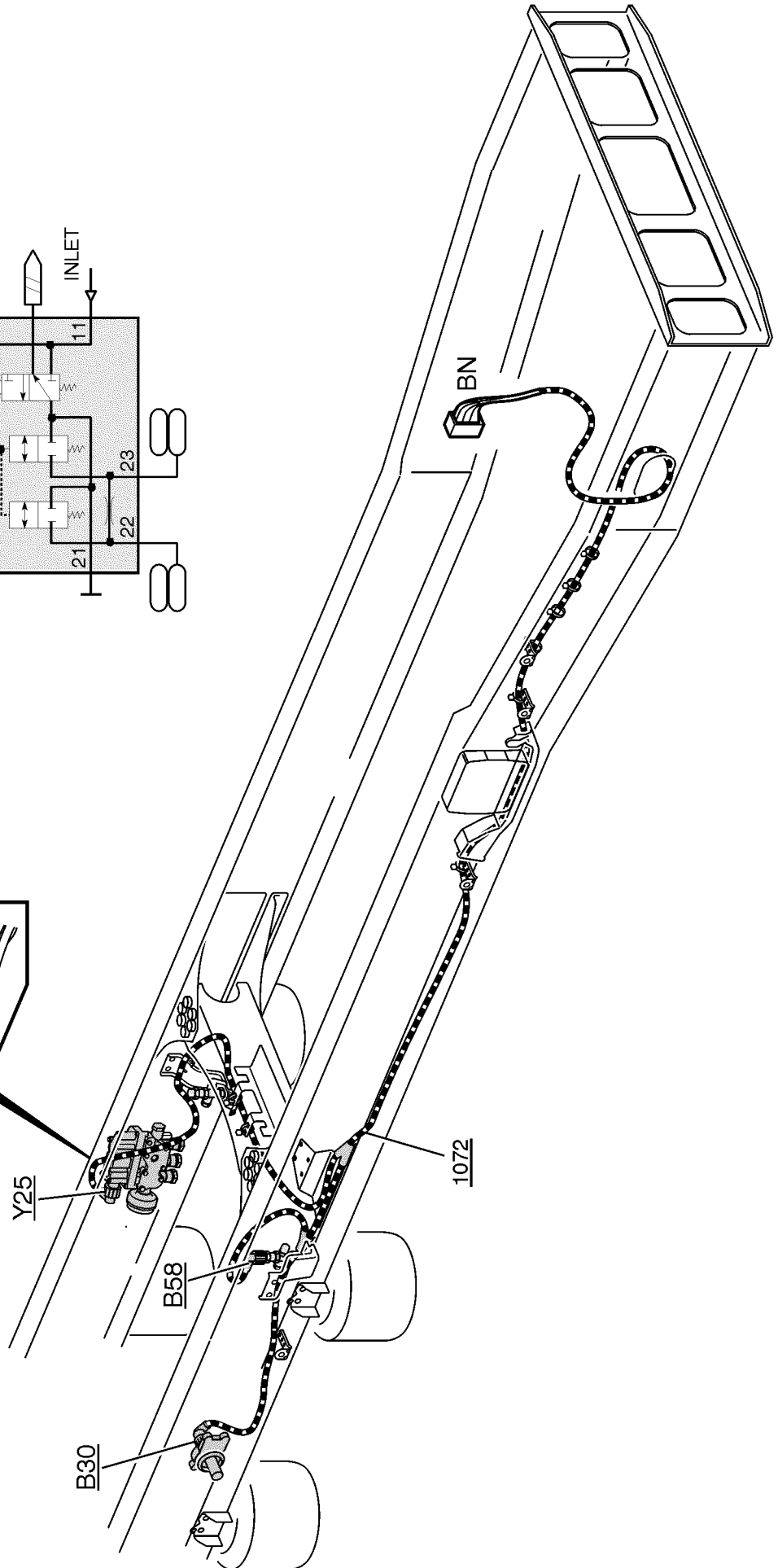
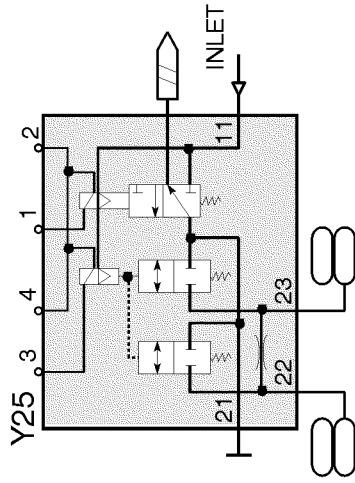
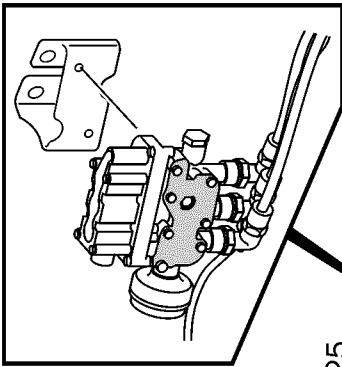
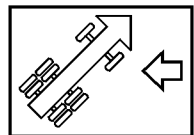
**1063, Australia**



1063, Australien

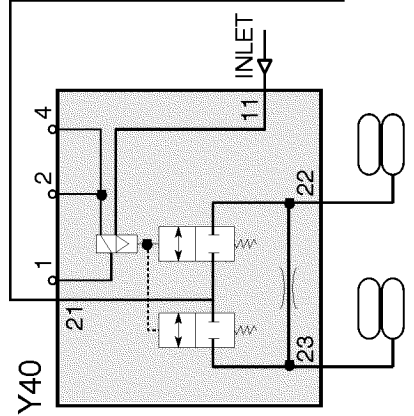
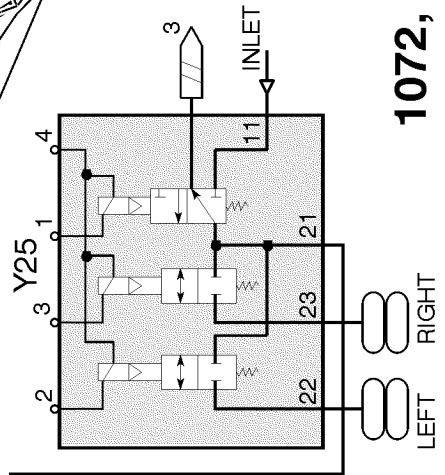
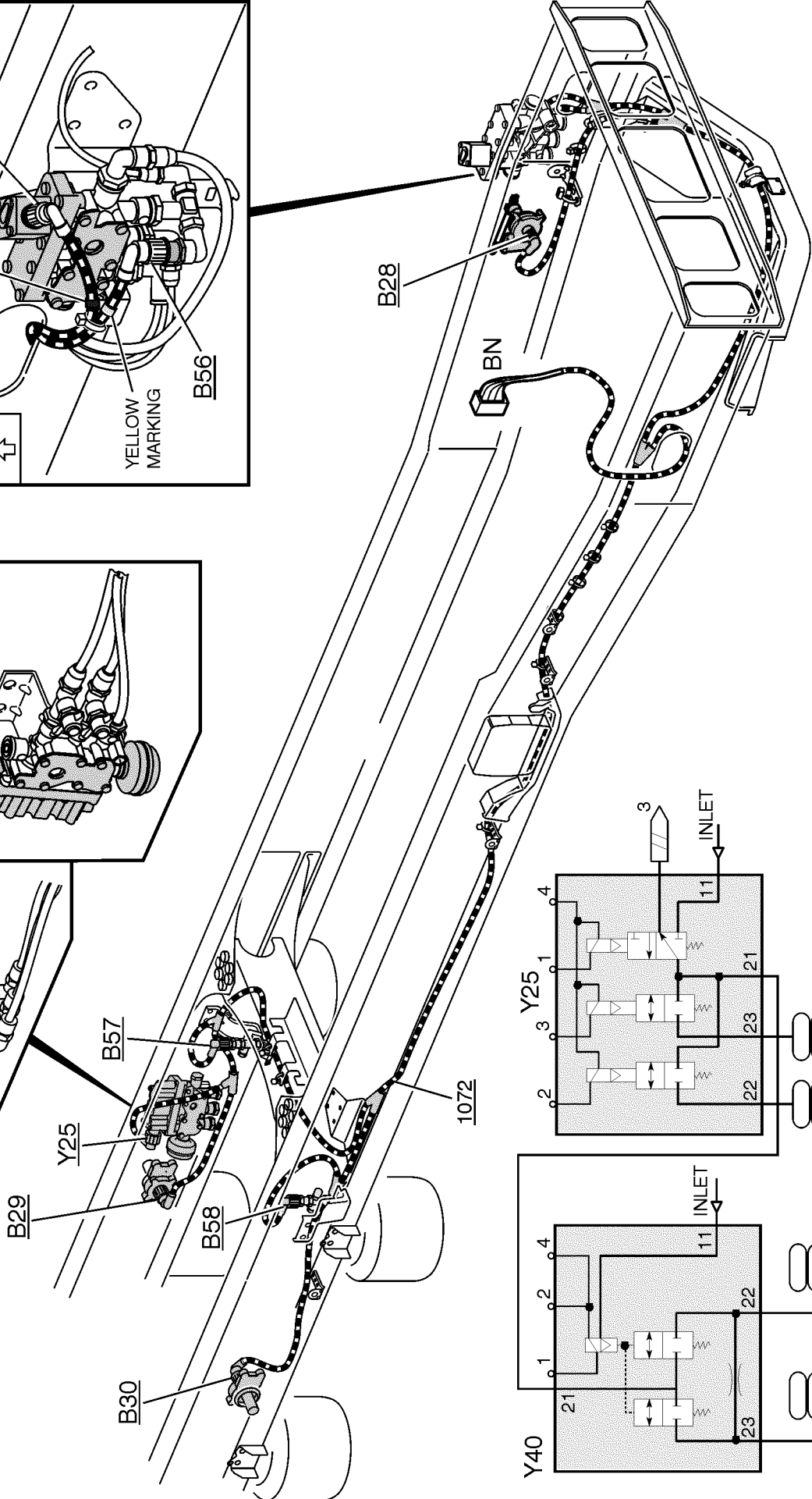
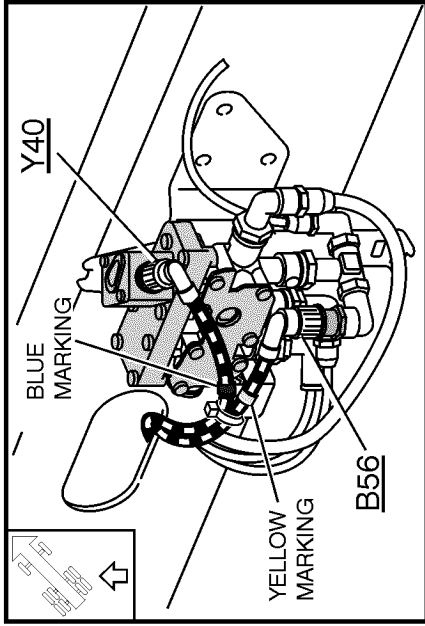
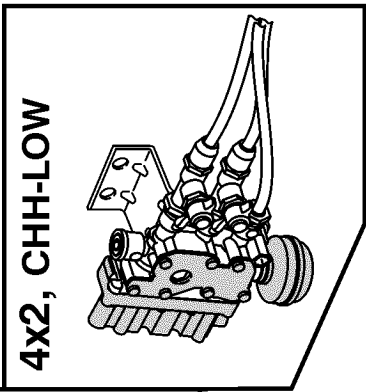
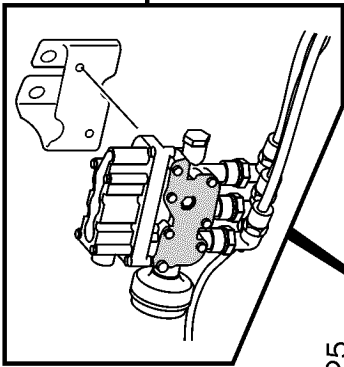
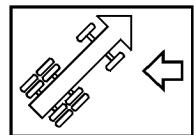
1063, Australien

**1072, RAD-A4, 1-Channel**



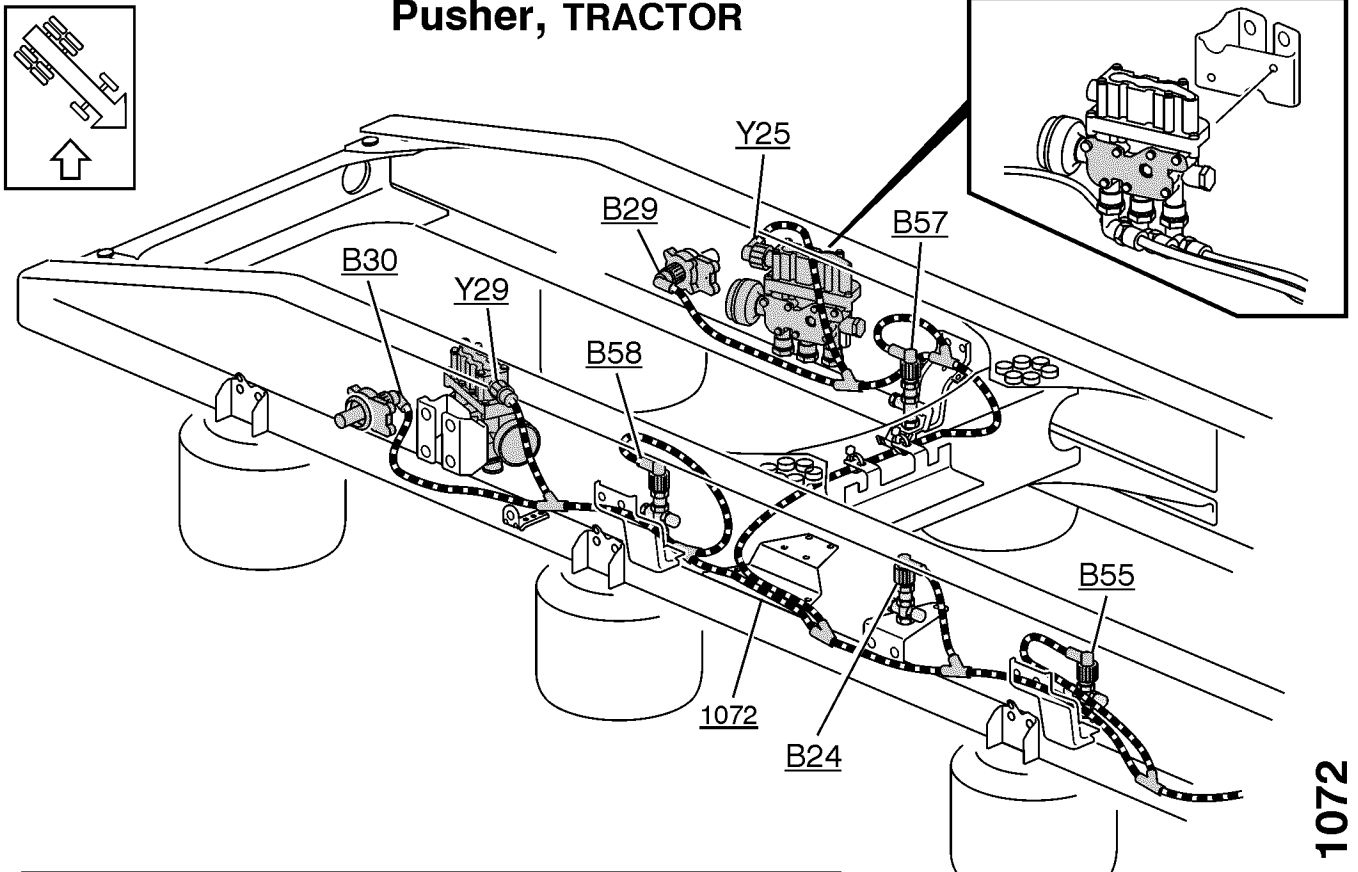
**1072, RAD-A4, 1-Channel**

**1072, RAD-A4, 2-Channel**



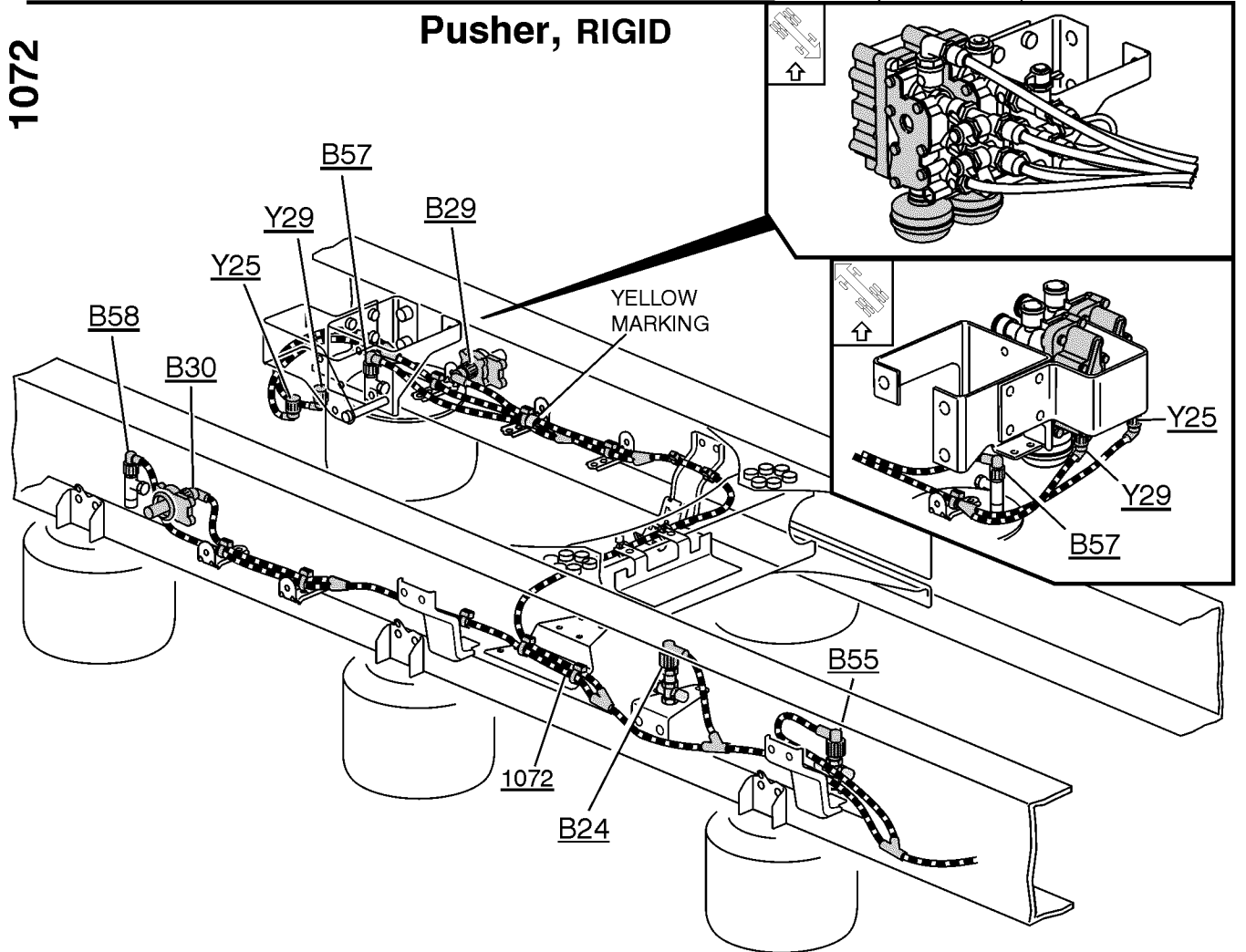
**1072, RAD-A4, 2-Channel**

### Pusher, TRACTOR



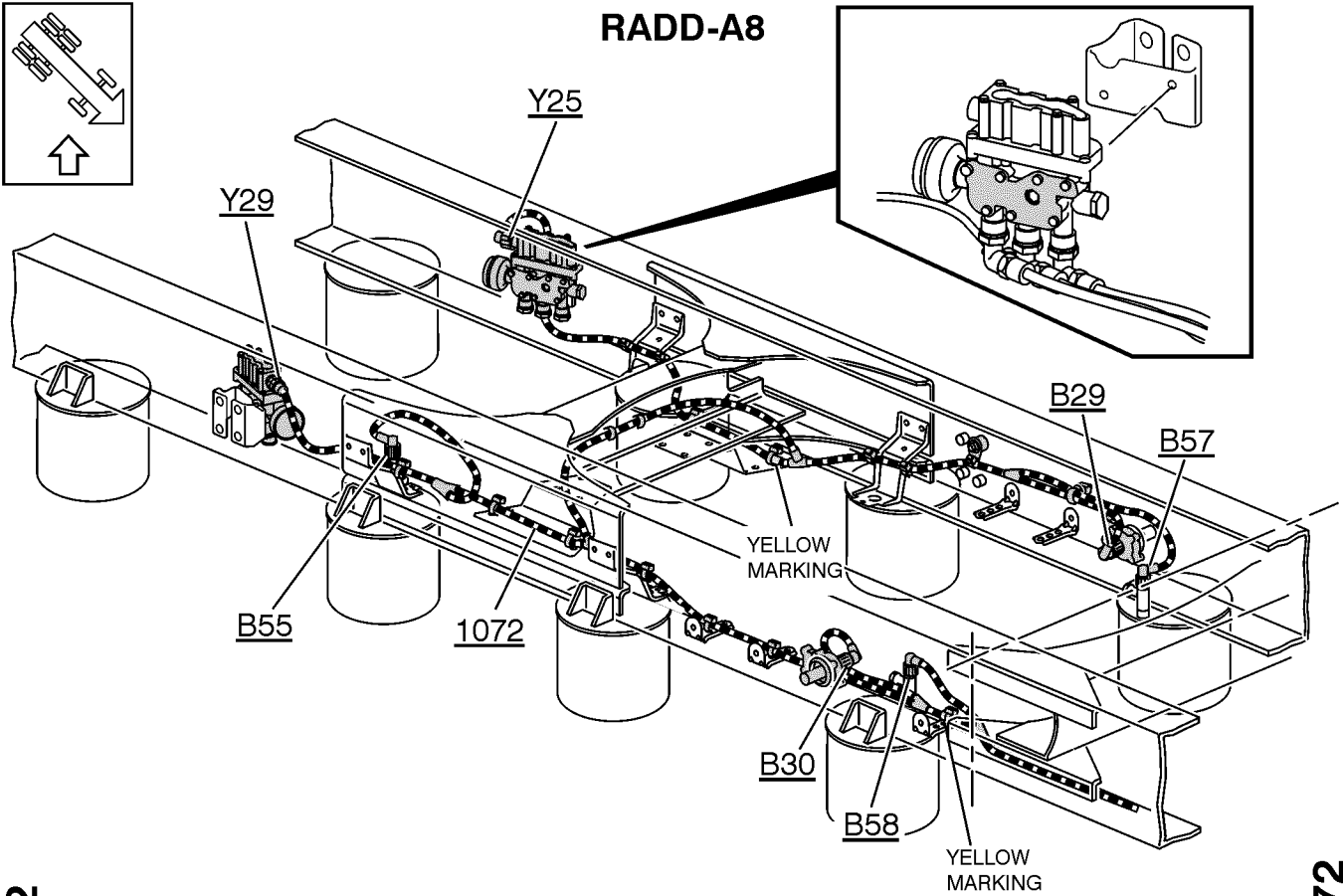
1072

### Pusher, RIGID

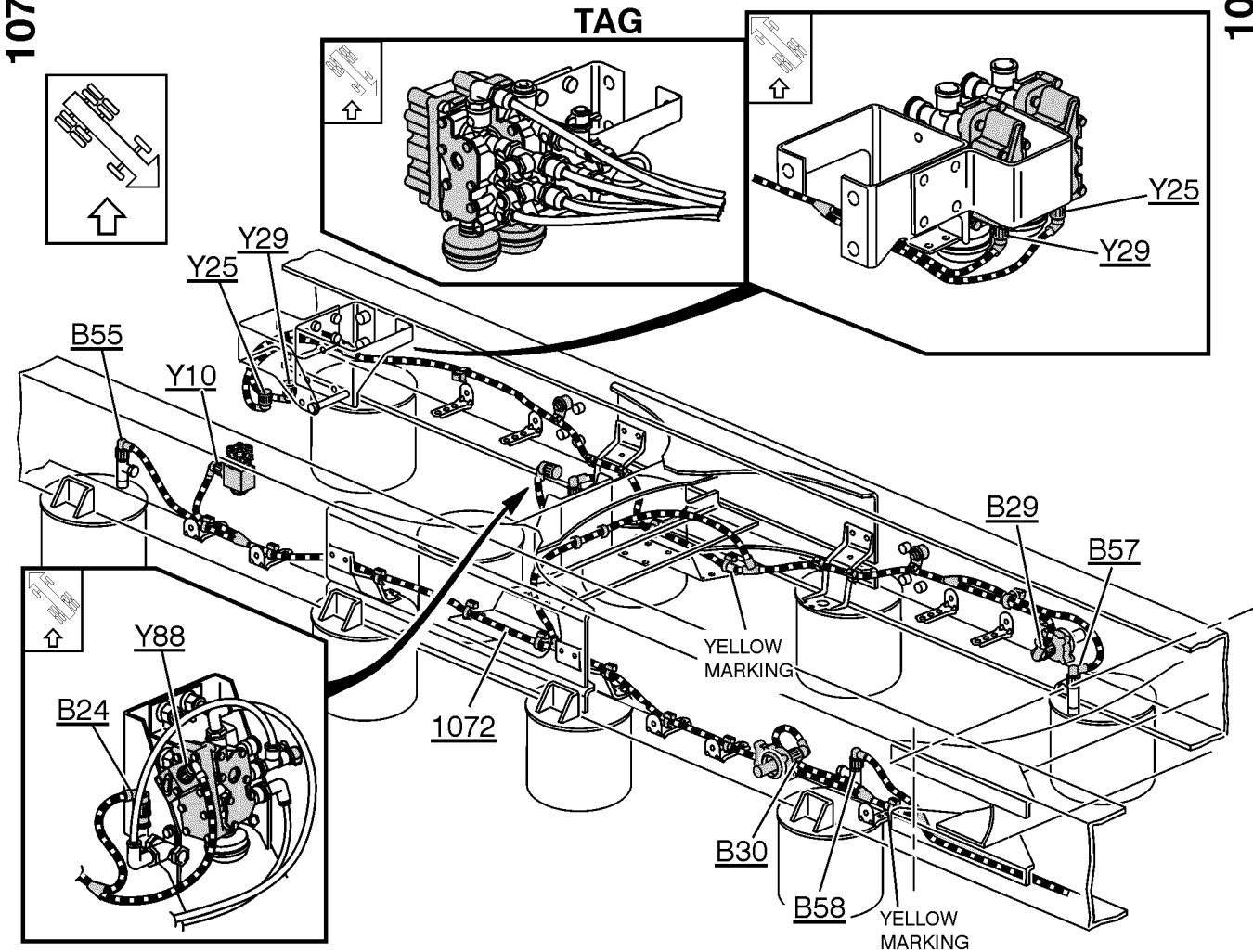


1072

### RADD-A8

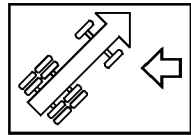


### TAG

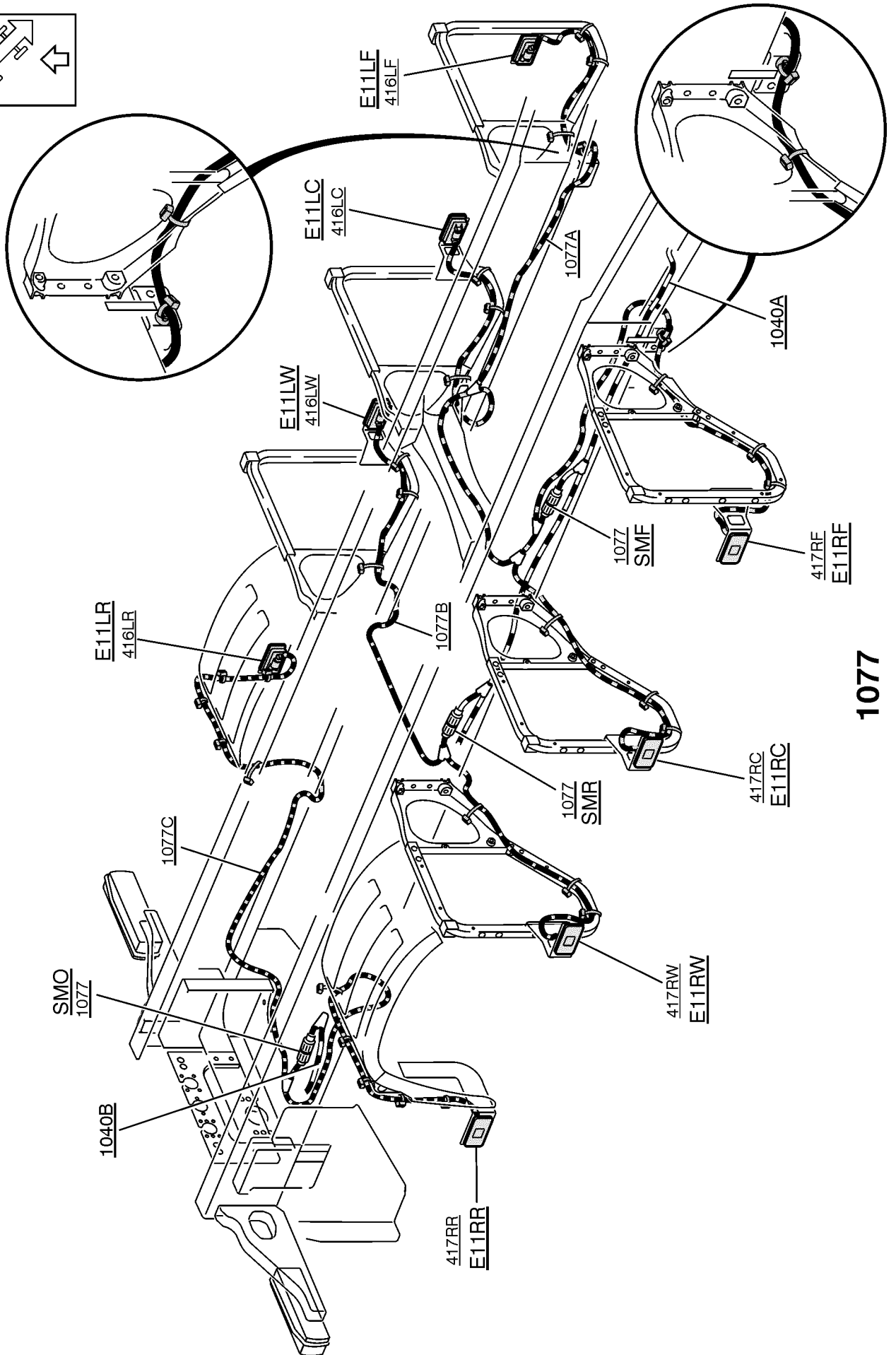


1072

1072

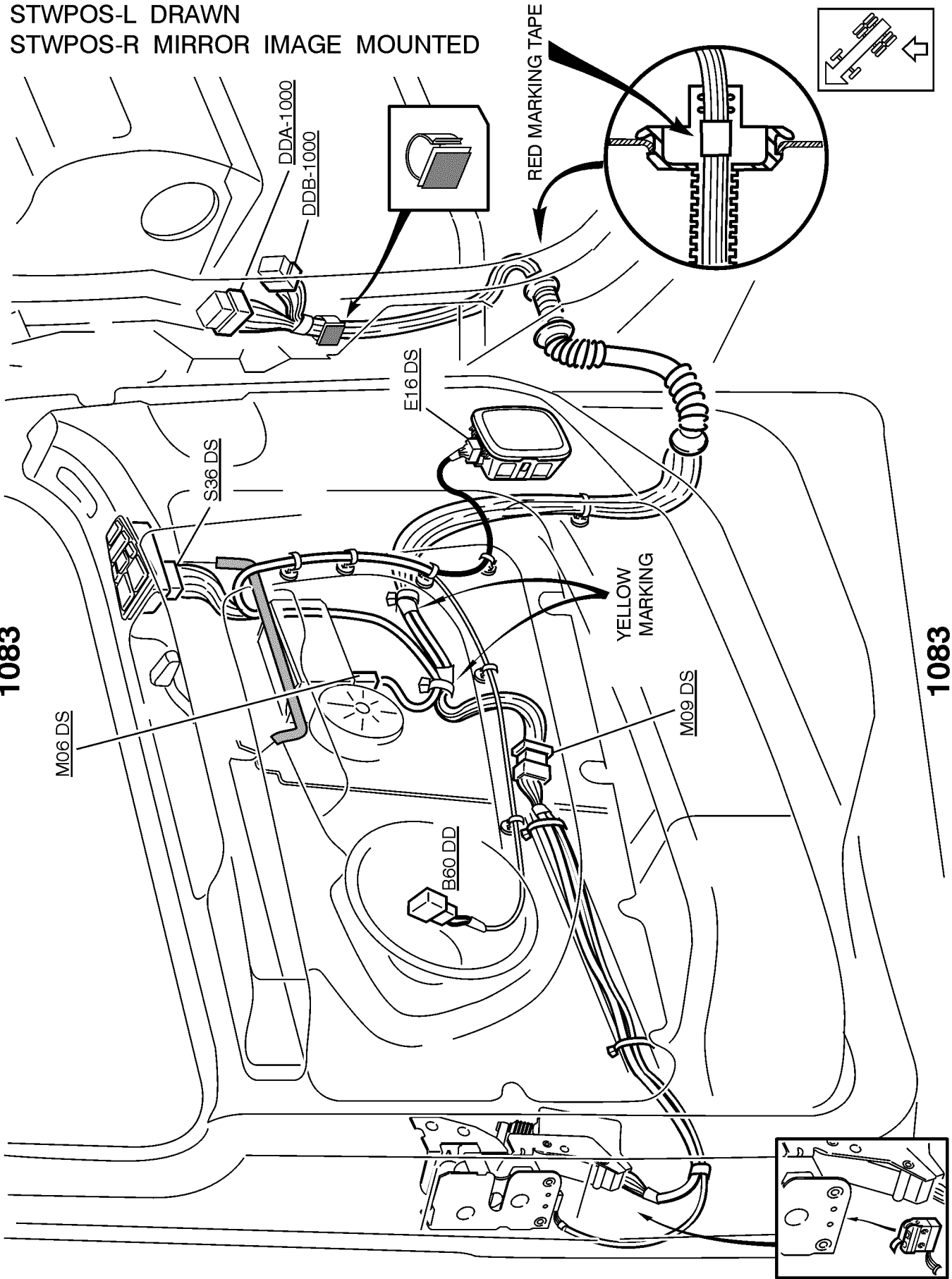


**1077**



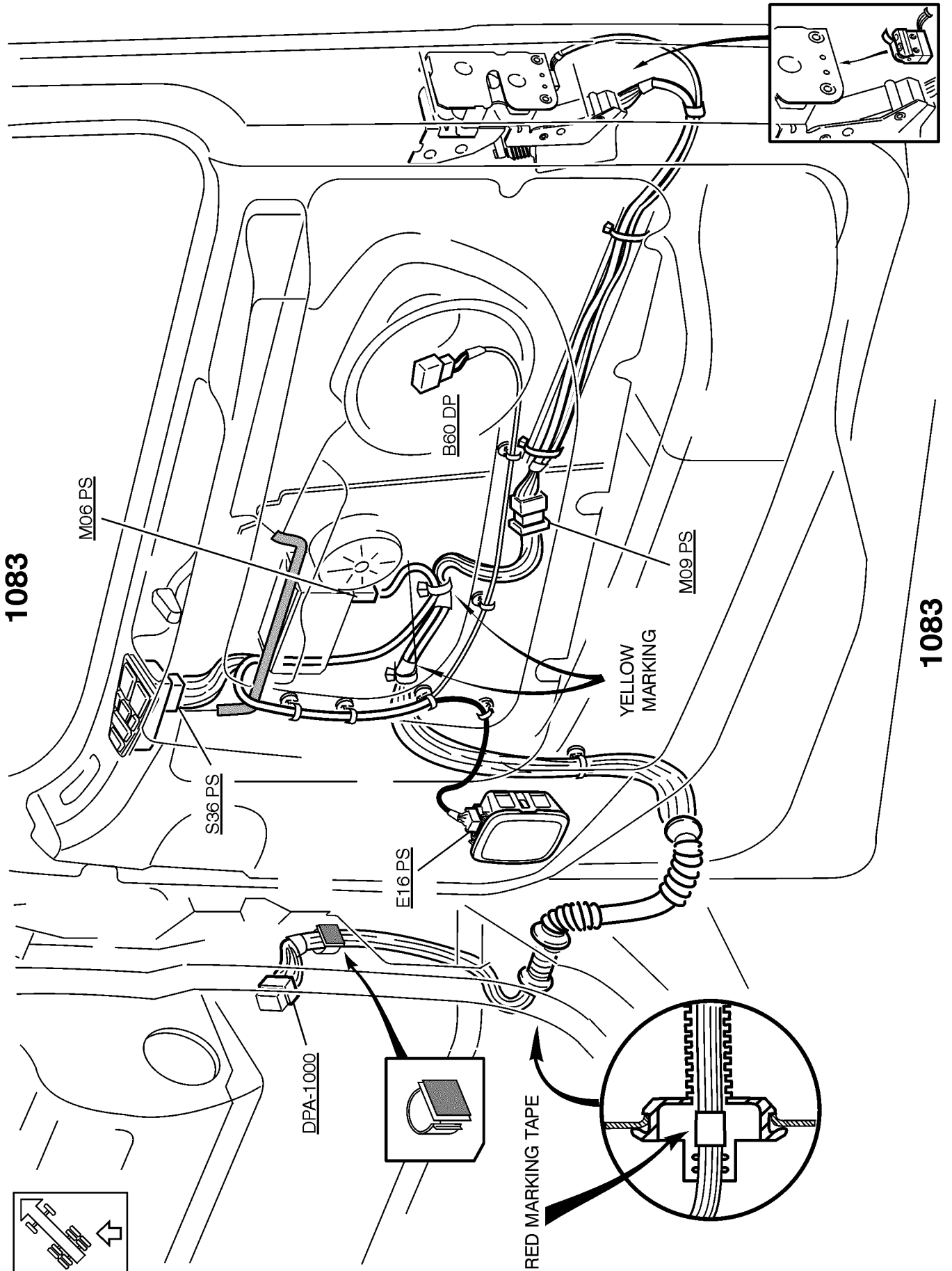
**1077**

STWPOS-L DRAWN  
STWPOS-R MIRROR IMAGE MOUNTED

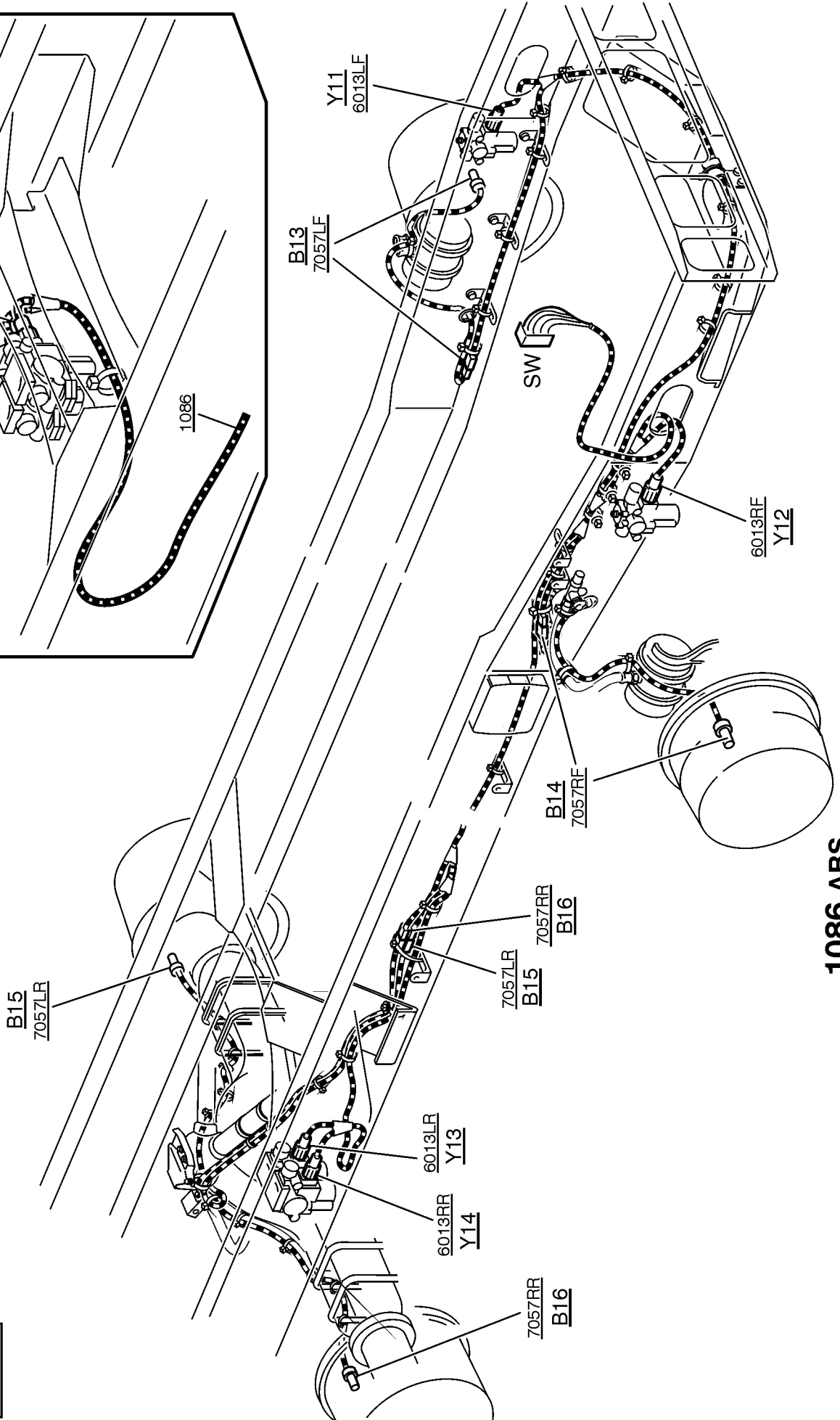
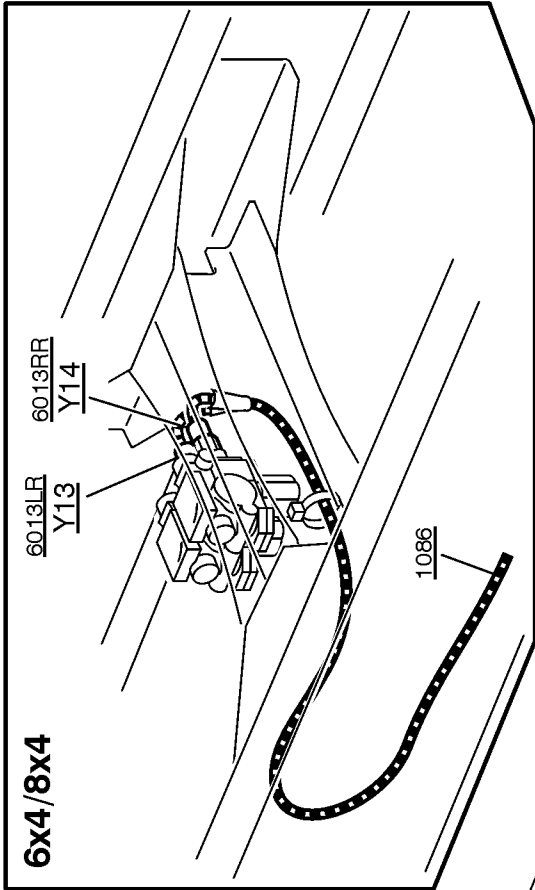
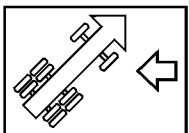




STWPOS-L DRAWN  
STWPOS-R MIRROR IMAGE MOUNTED



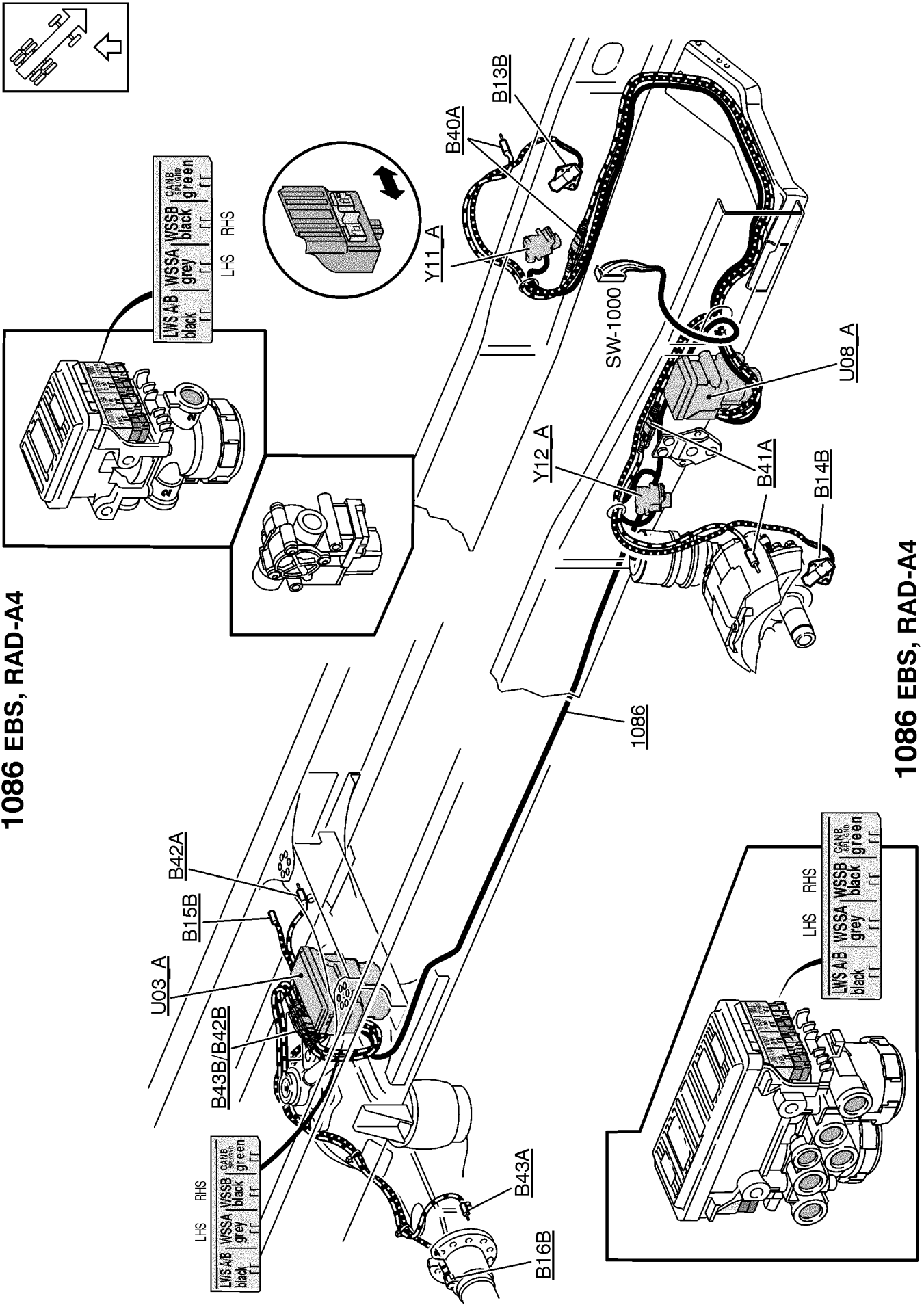
1086 ABS



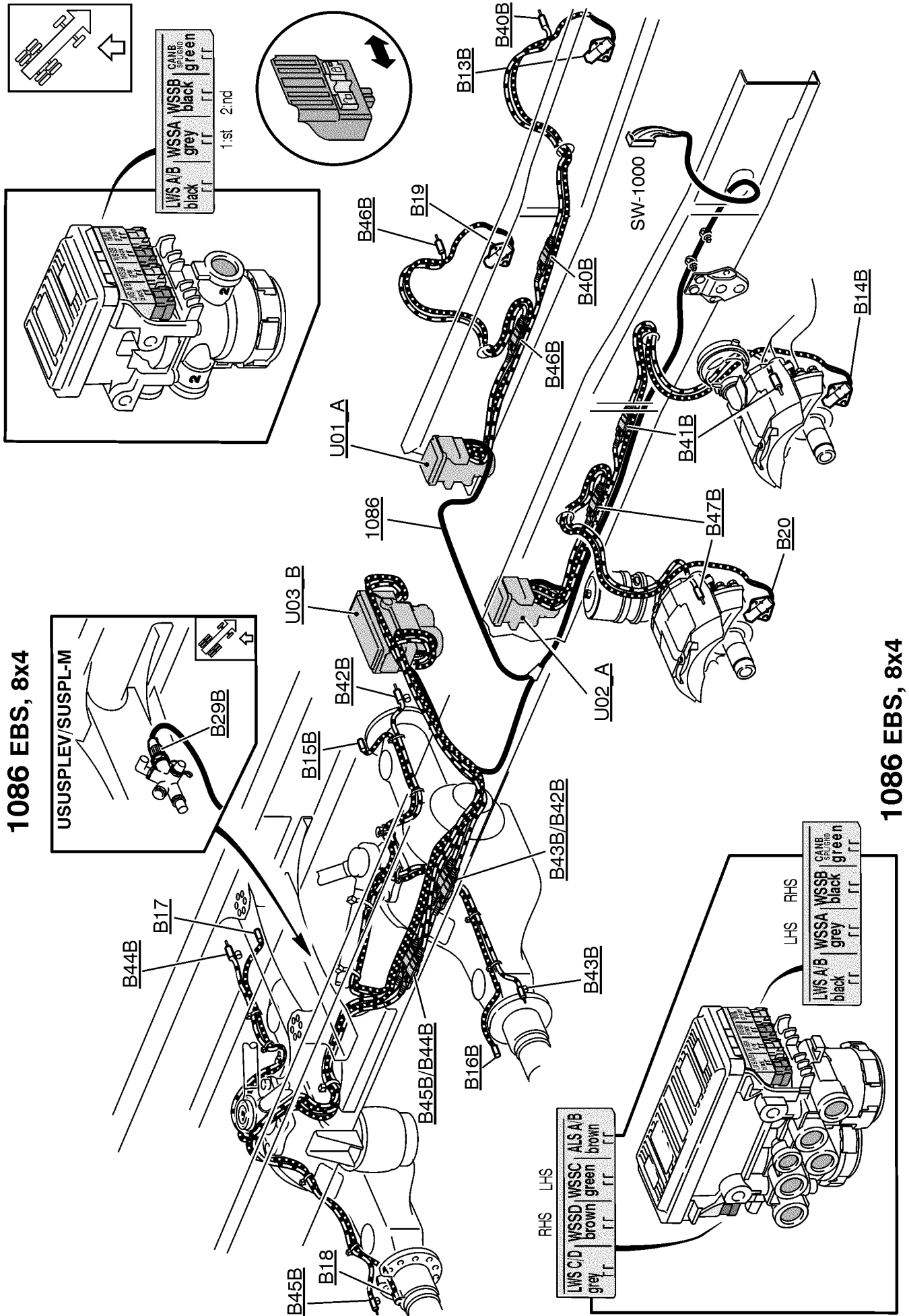
1086 ABS

**1086 EBS, RAD-A4**

**1086 EBS, RAD-A4**



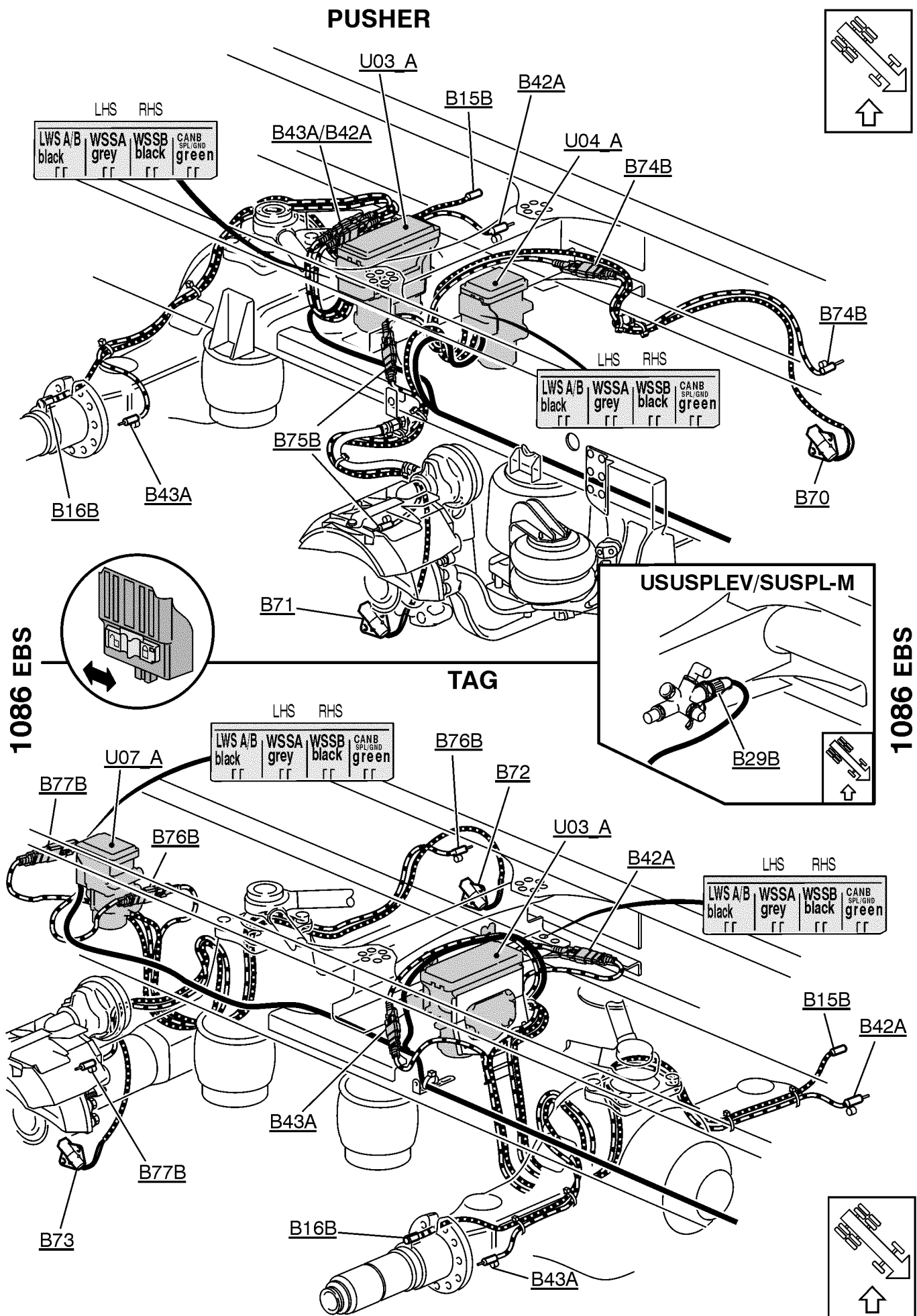


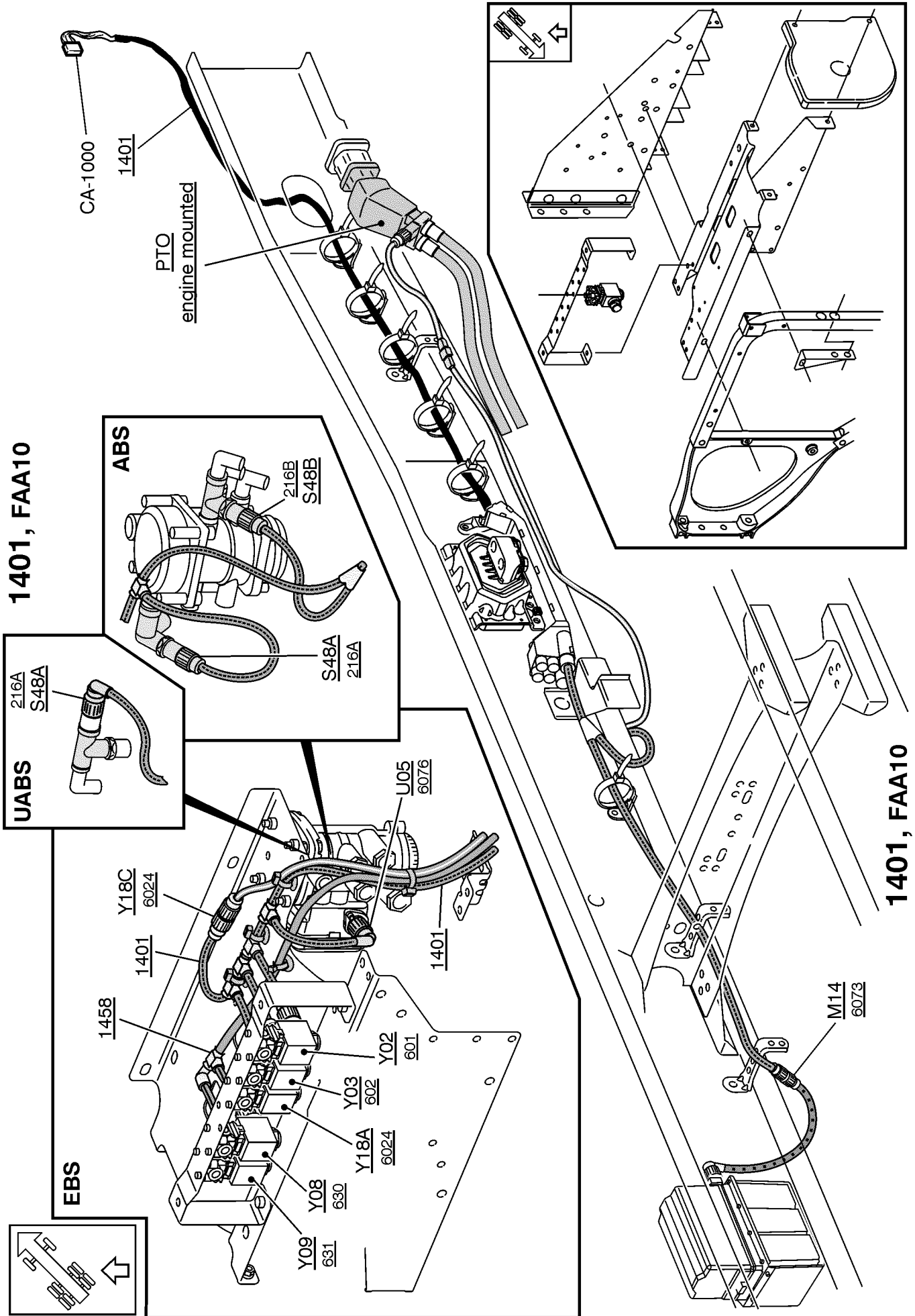


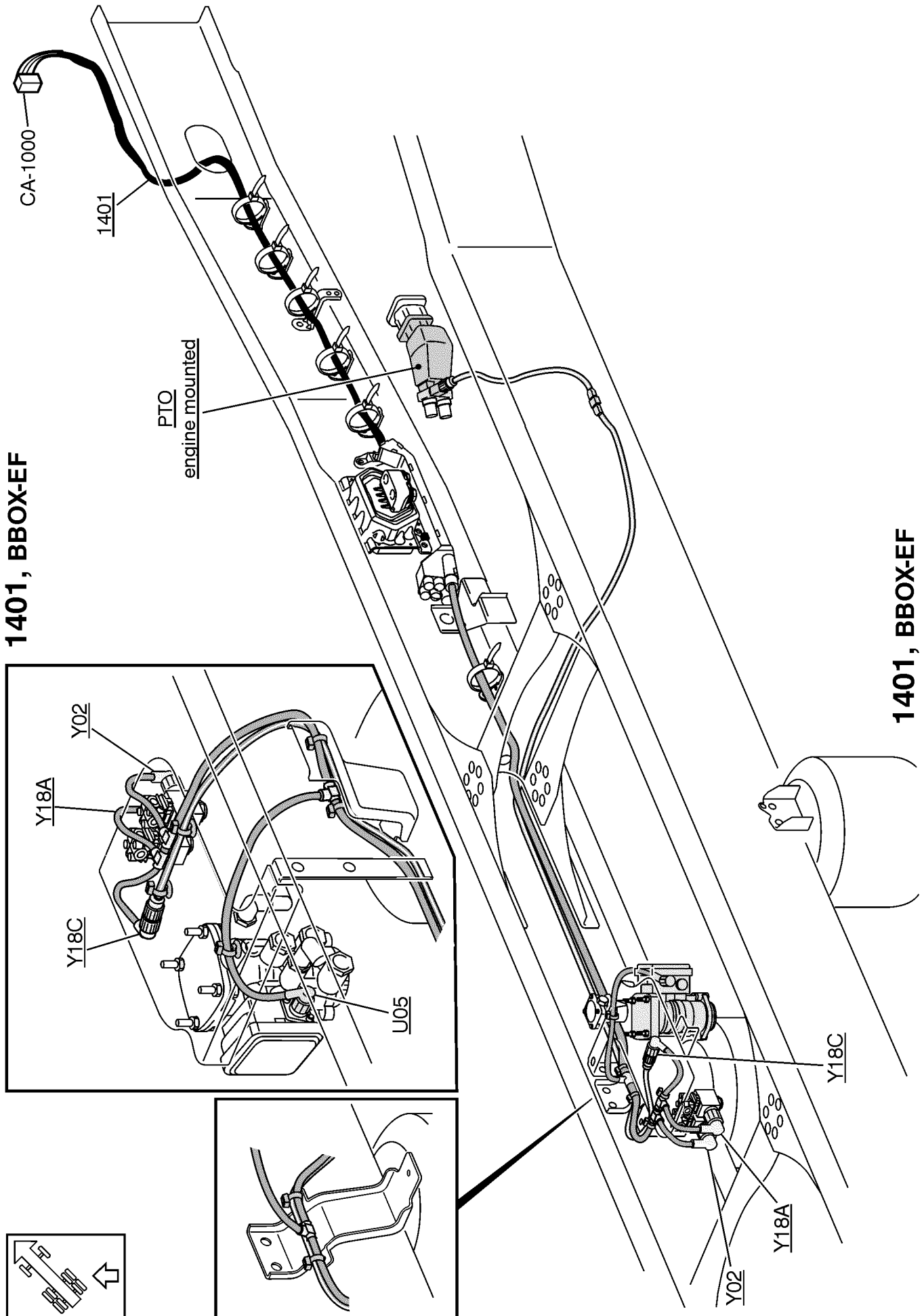
**1086 EBS, 8x4**

USUSPLEV/SUSPL-M

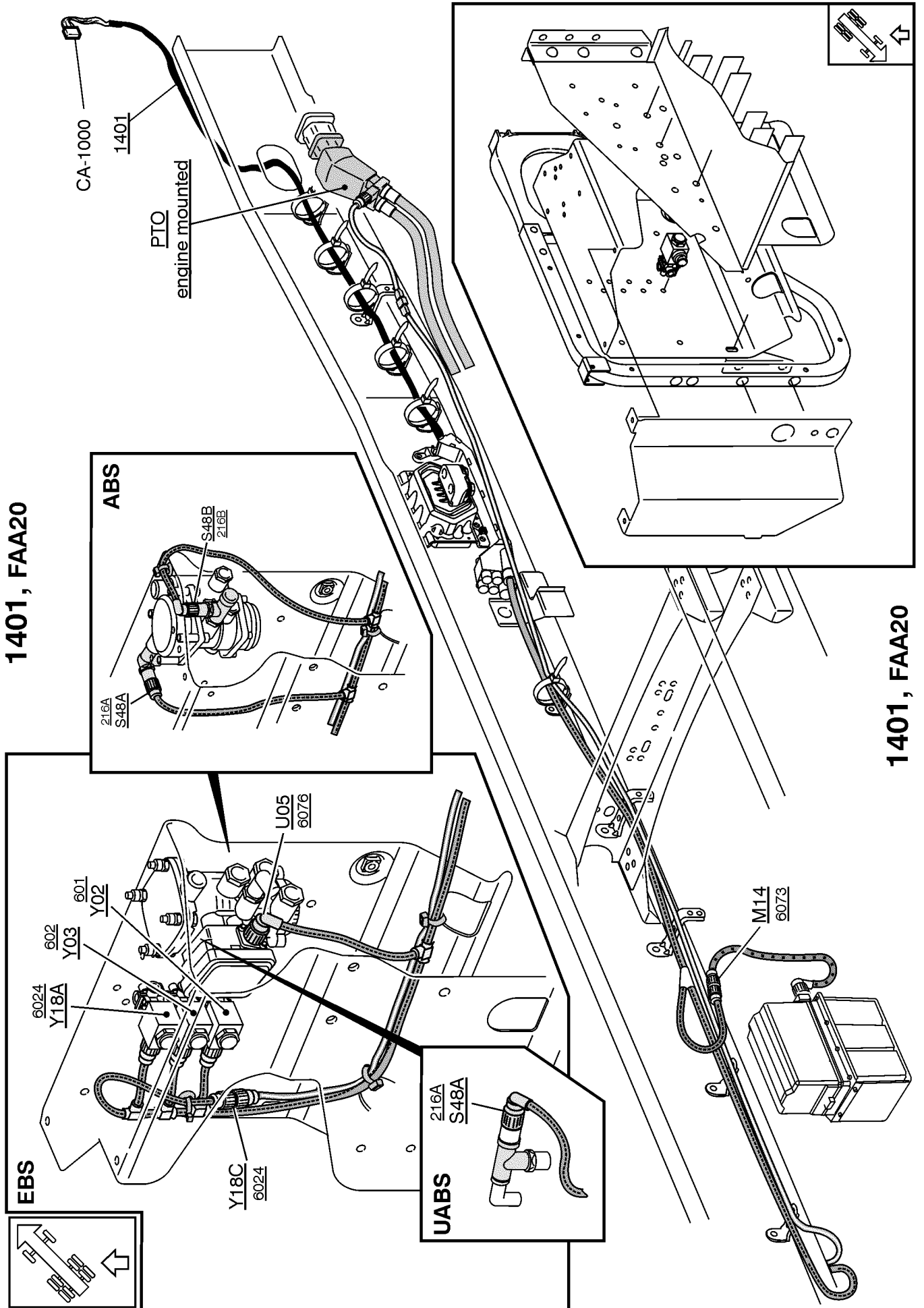
**1086 EBS, 8x4**

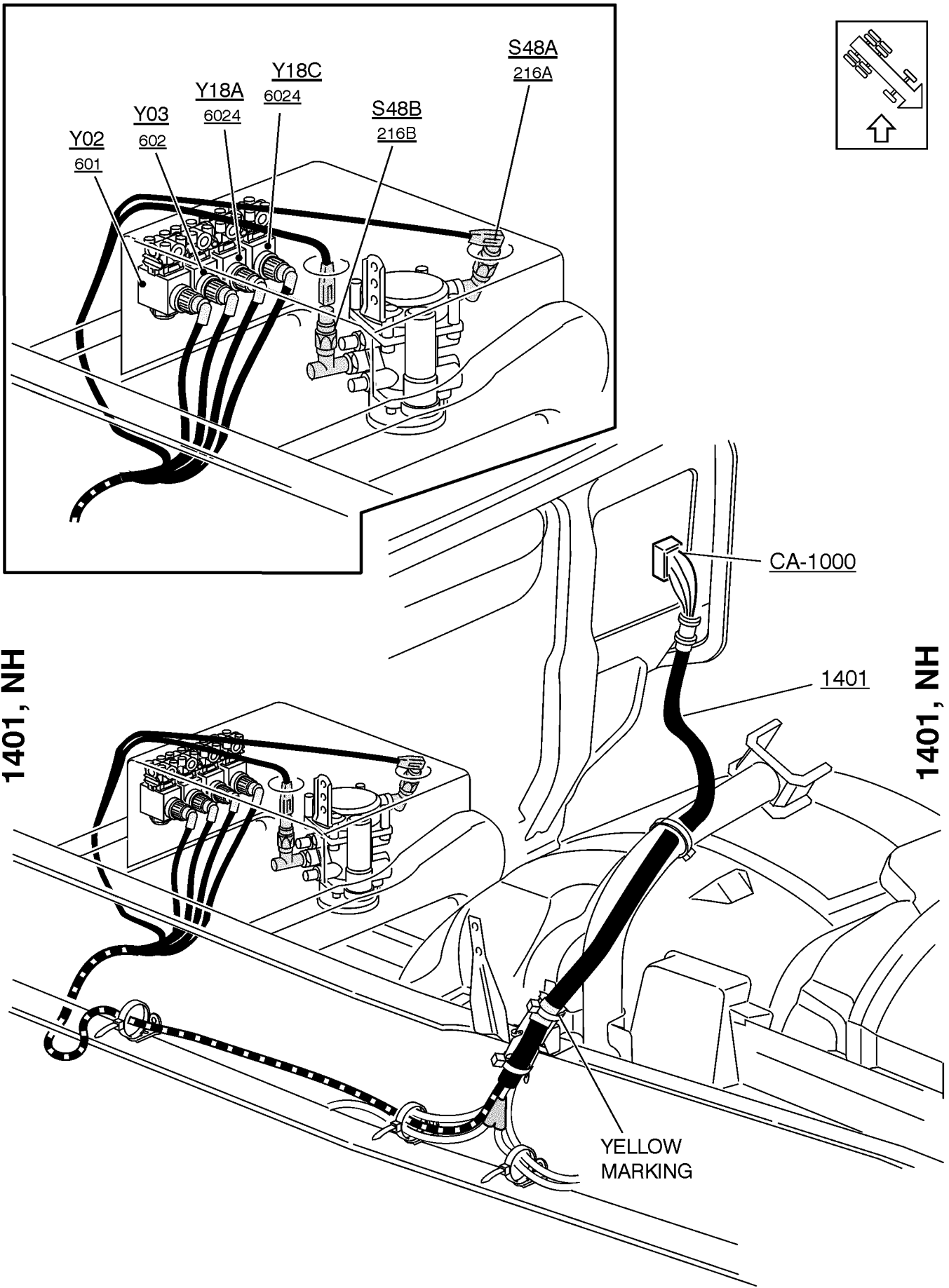


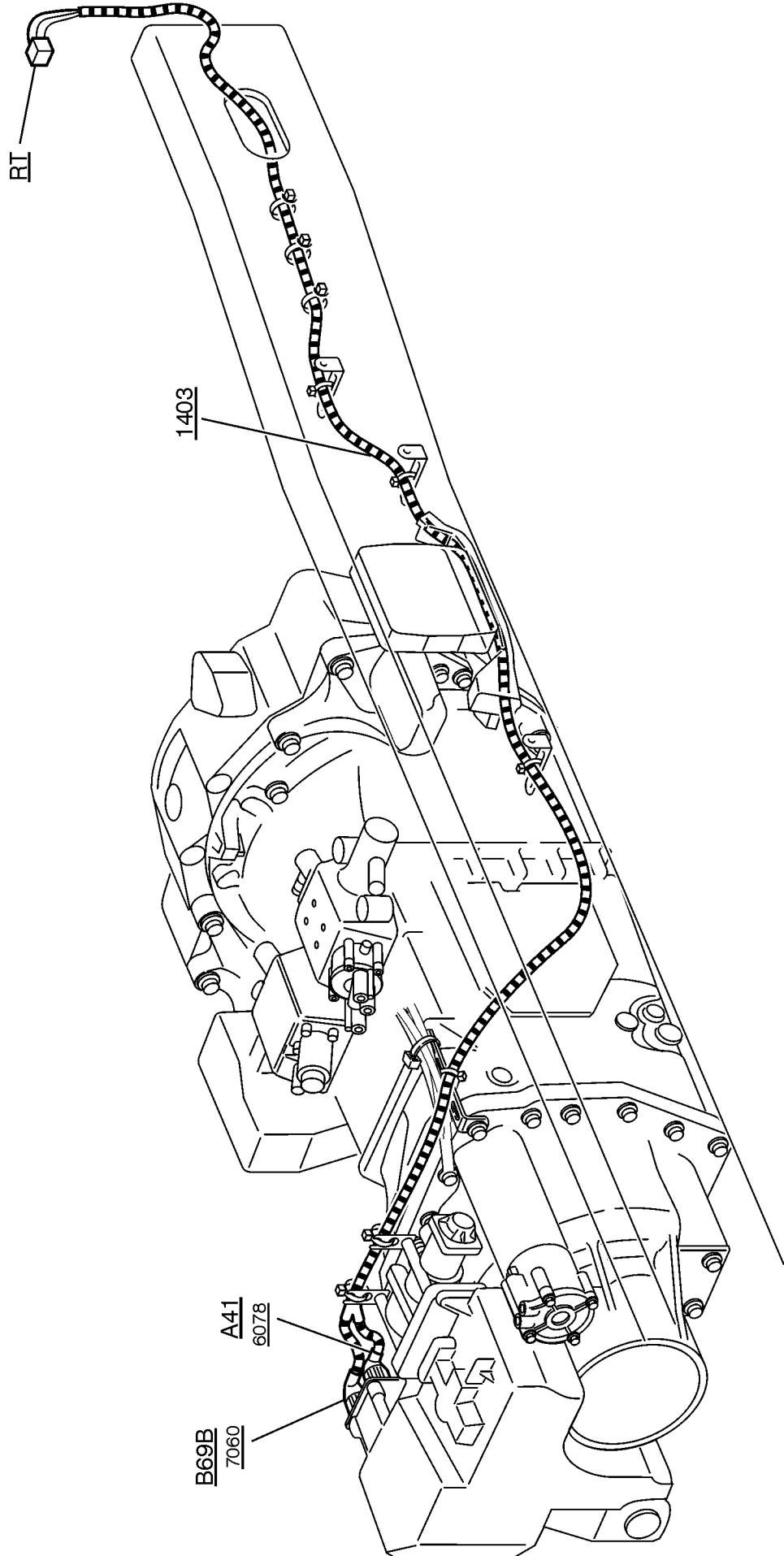
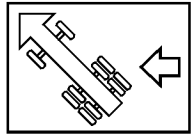






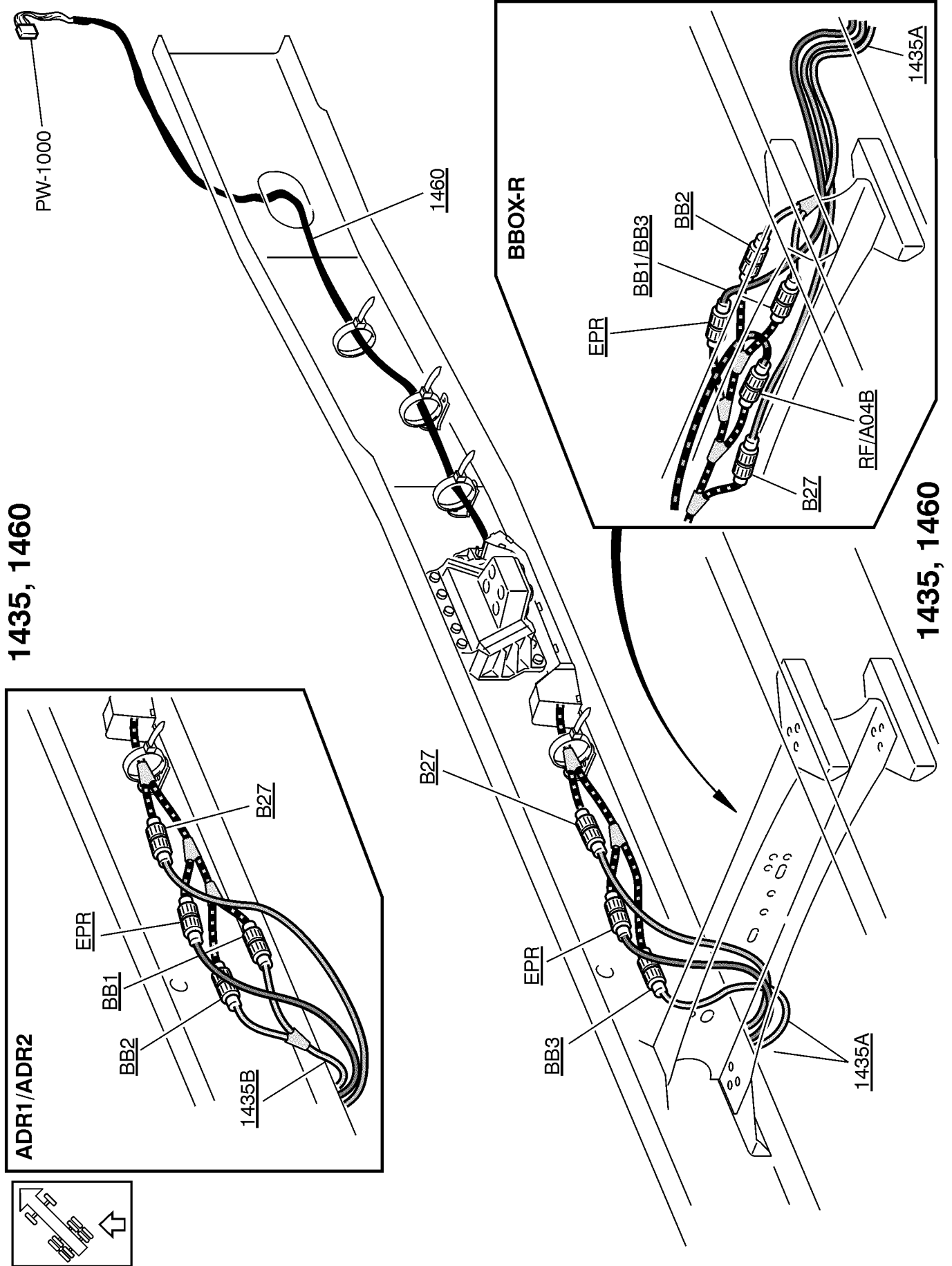






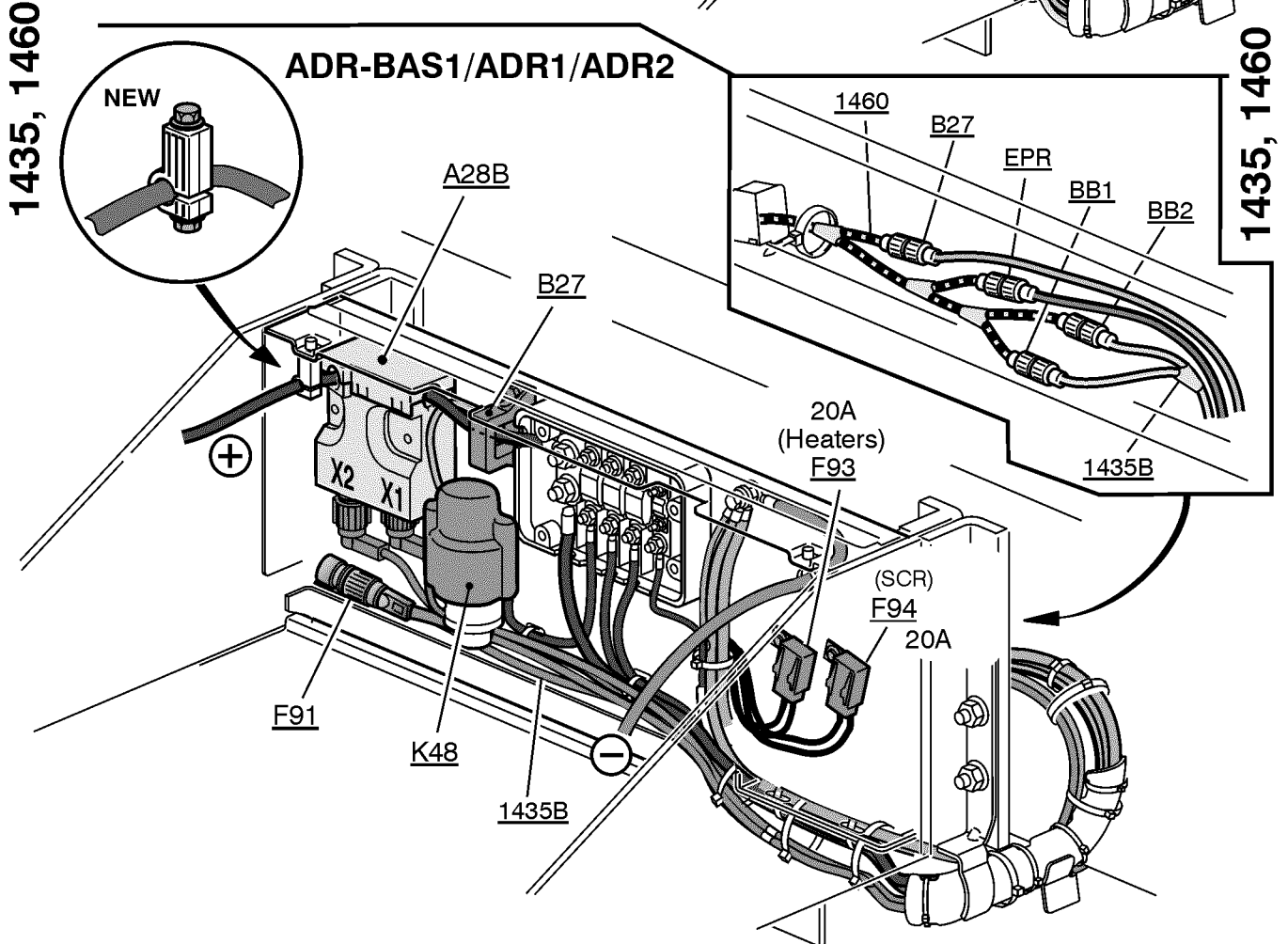
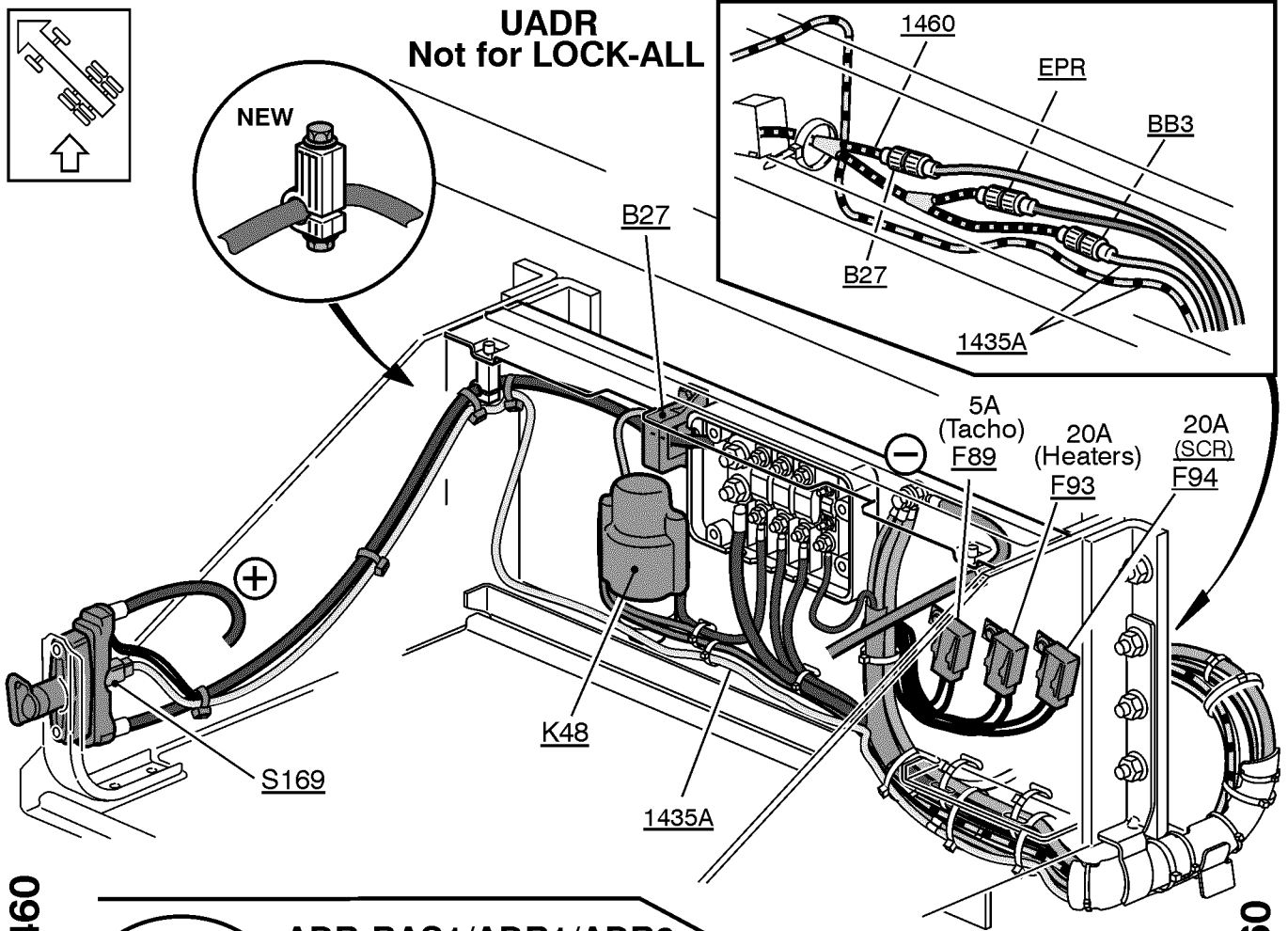
1403

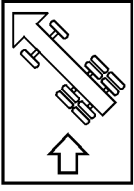
1403



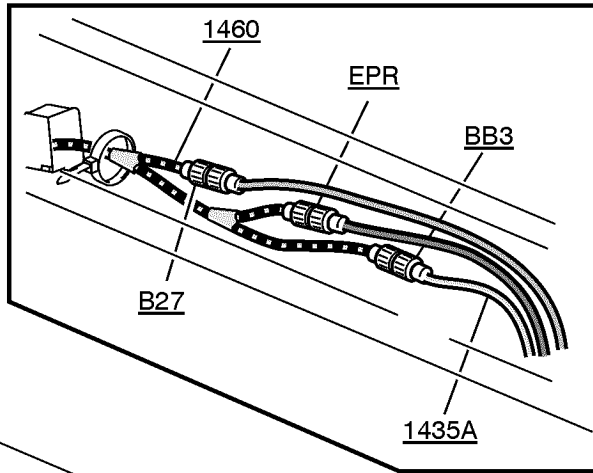
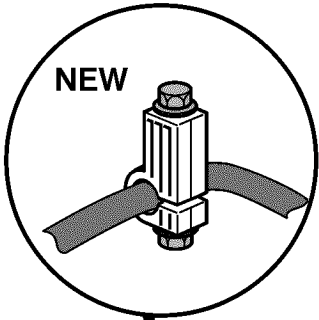
1435, 1460

1435, 1460



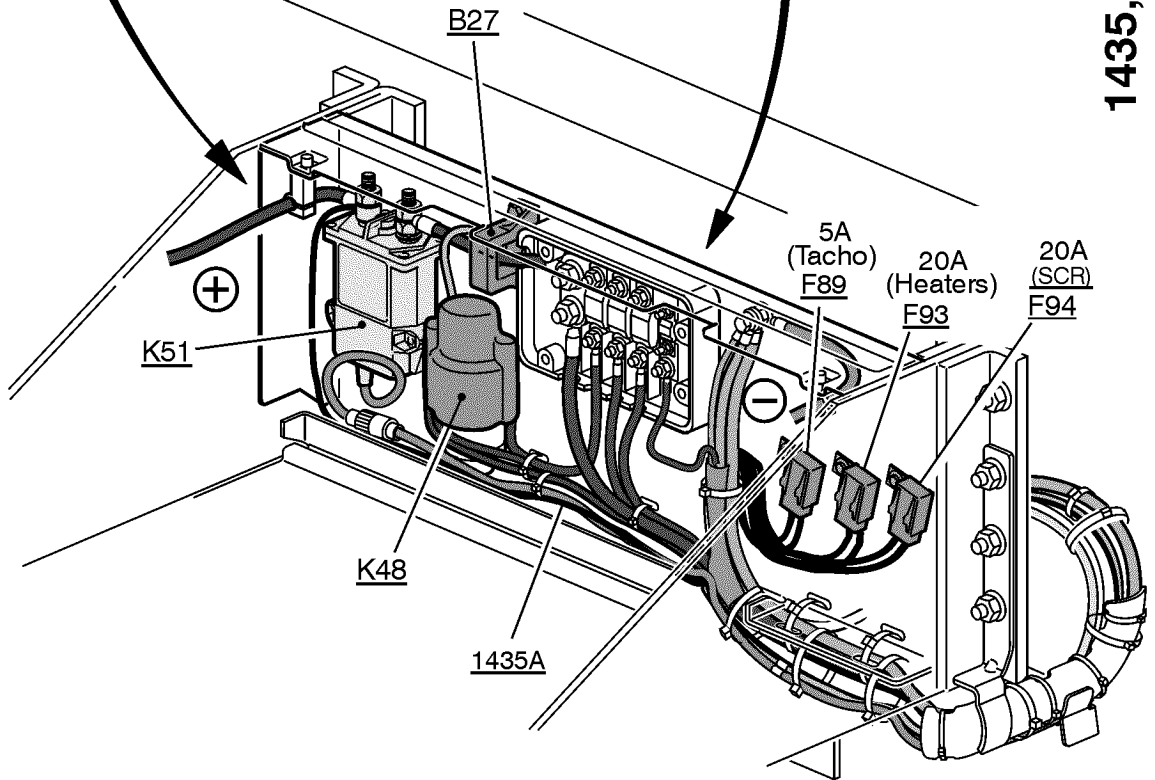


### MAINSWI, LOCK-ALL

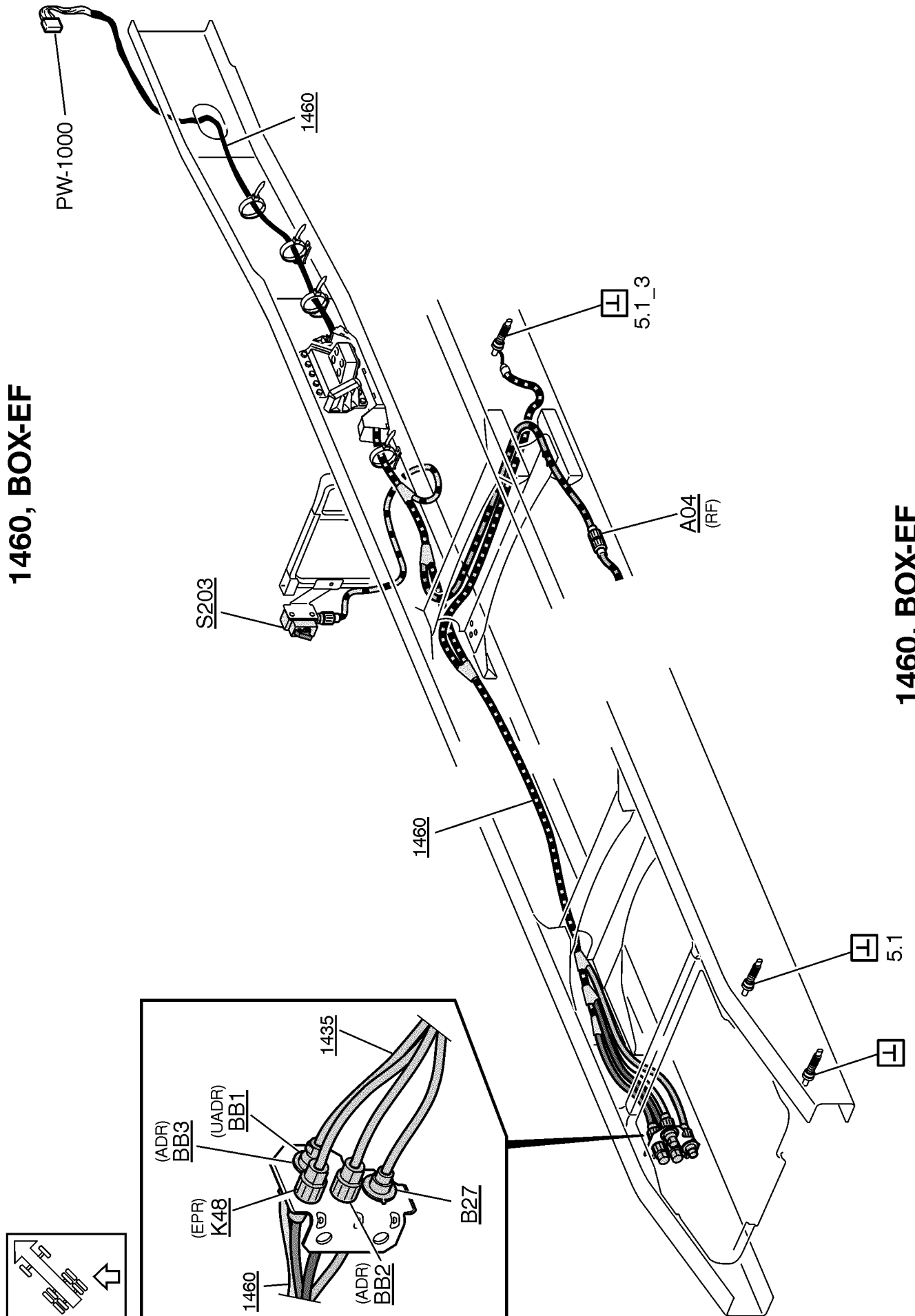


1435, 1460

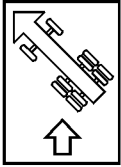
1435, 1460



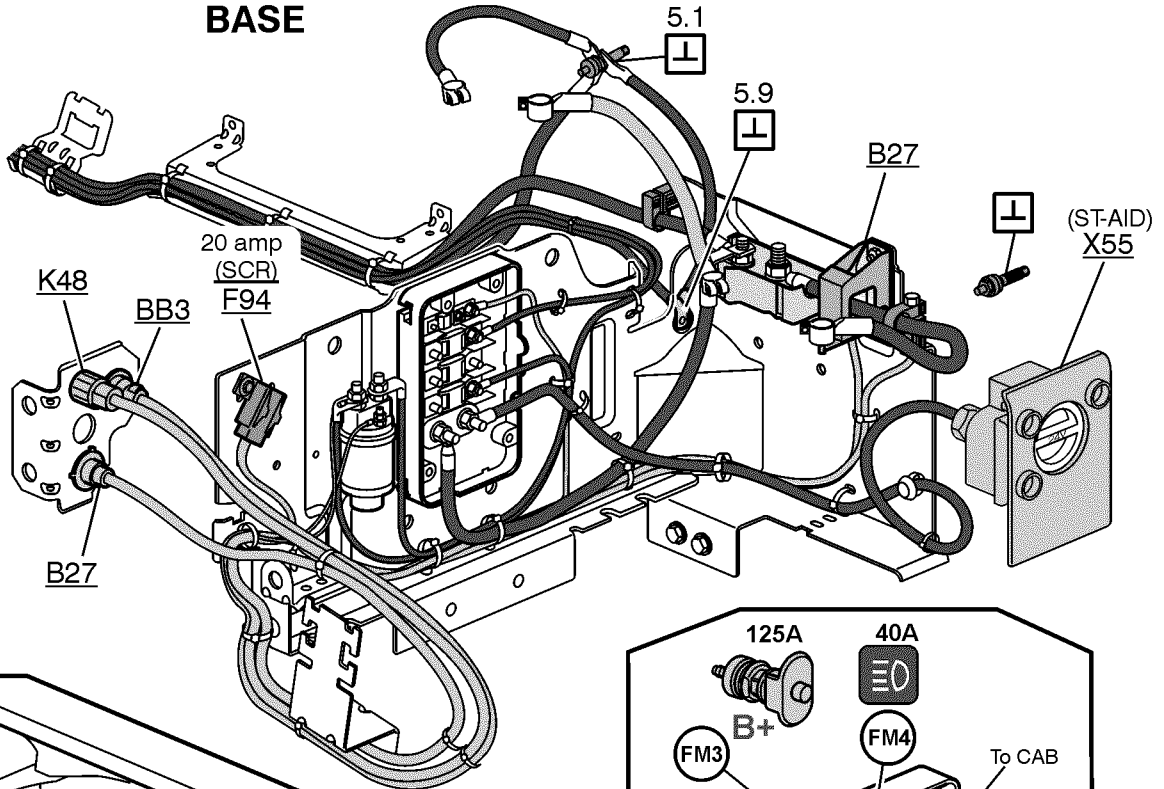
1460, BOX-EF



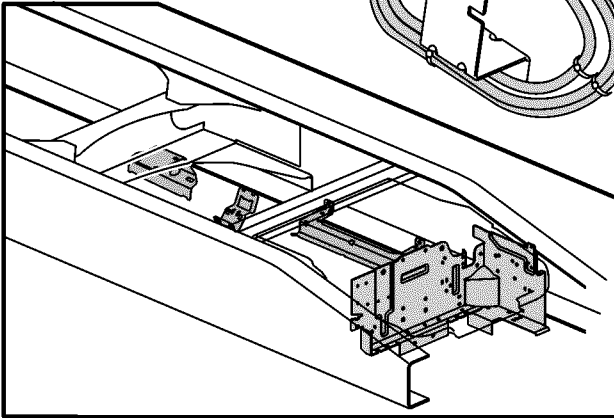
1460, BOX-EF



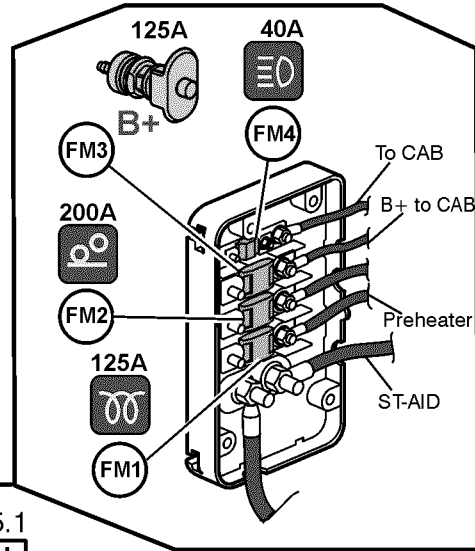
**BASE**



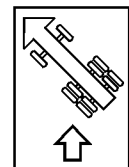
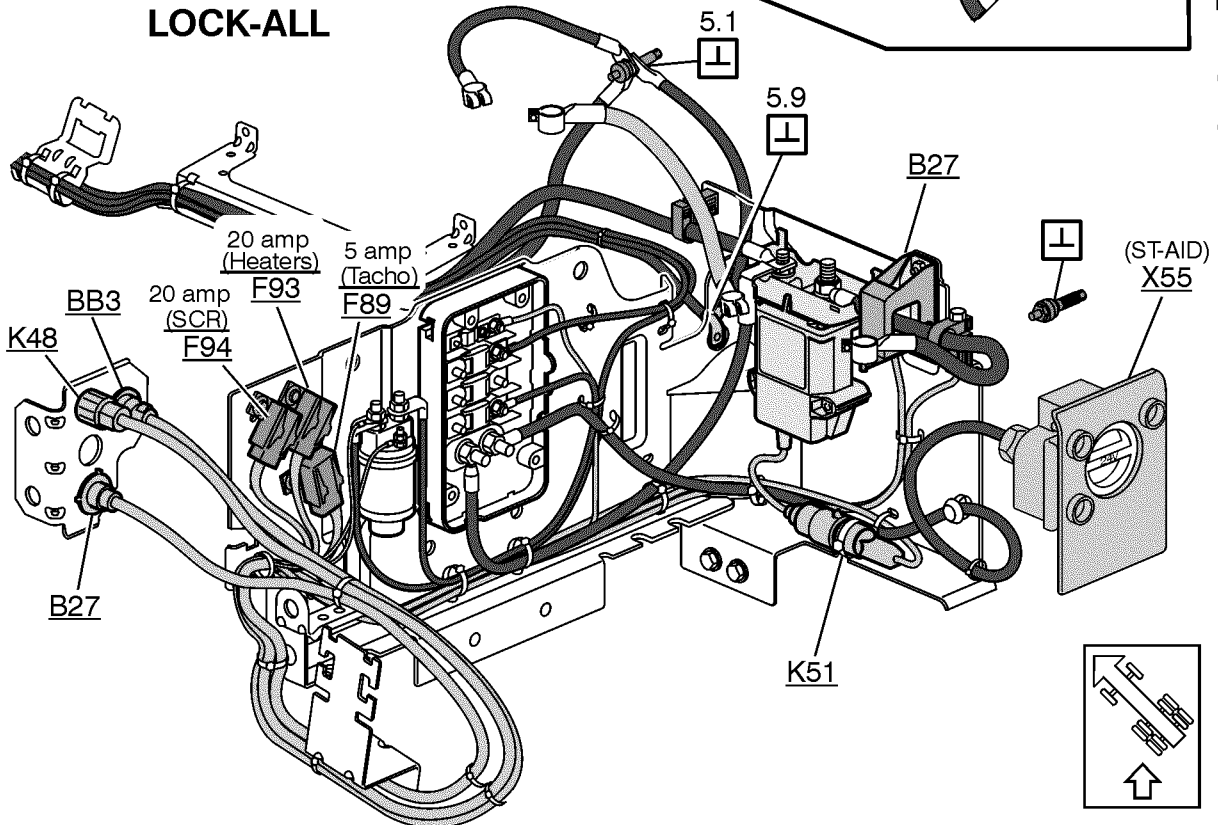
**1435, BBOX-EF**



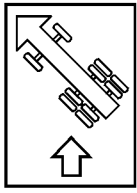
**LOCK-ALL**



**1435, BBOX-EF**

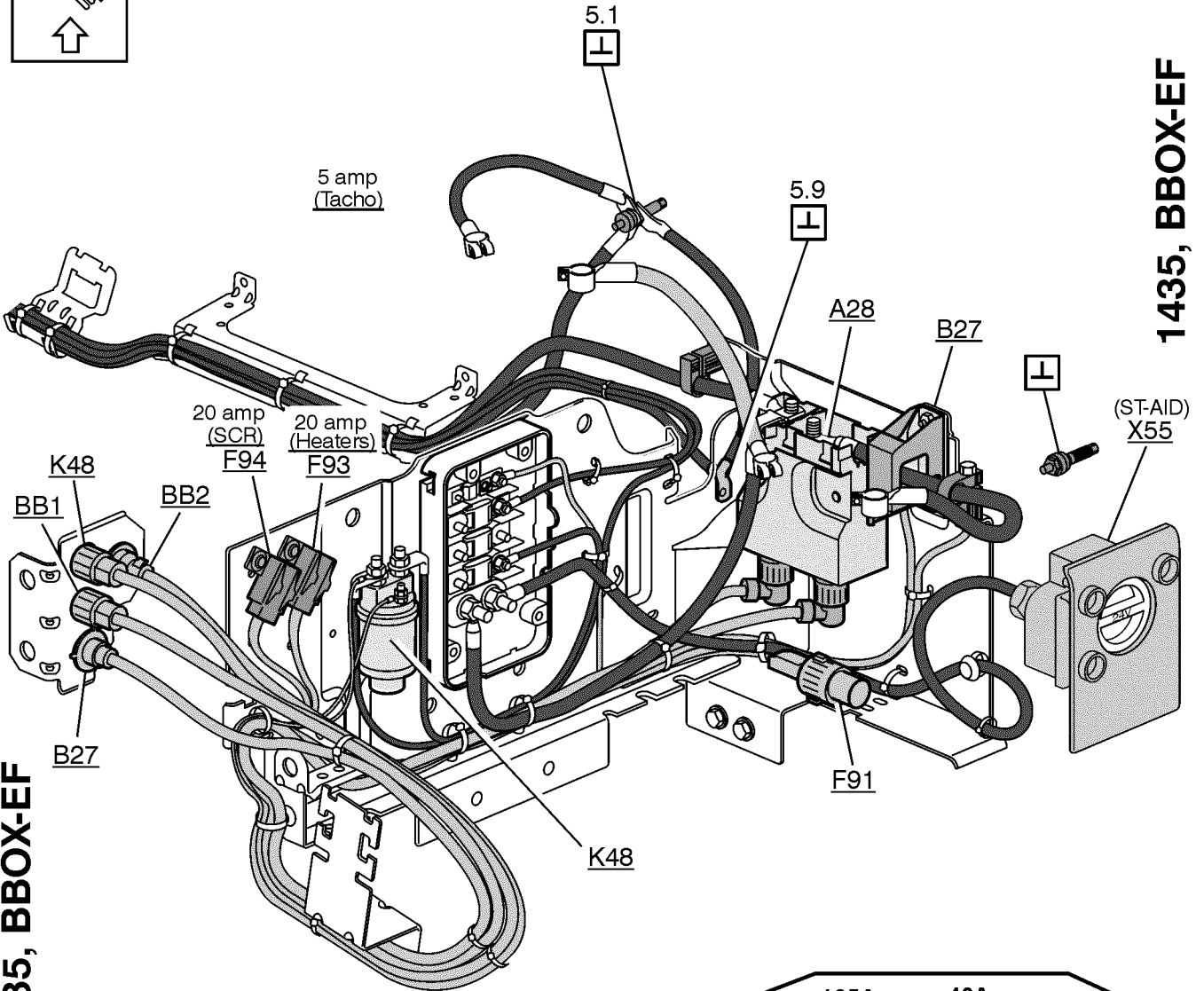




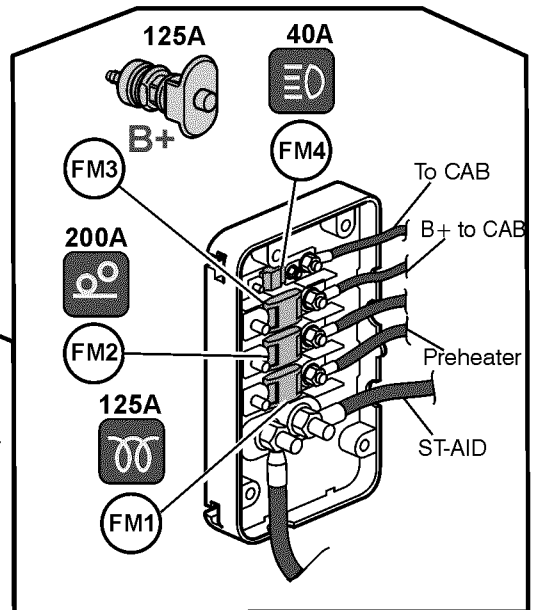
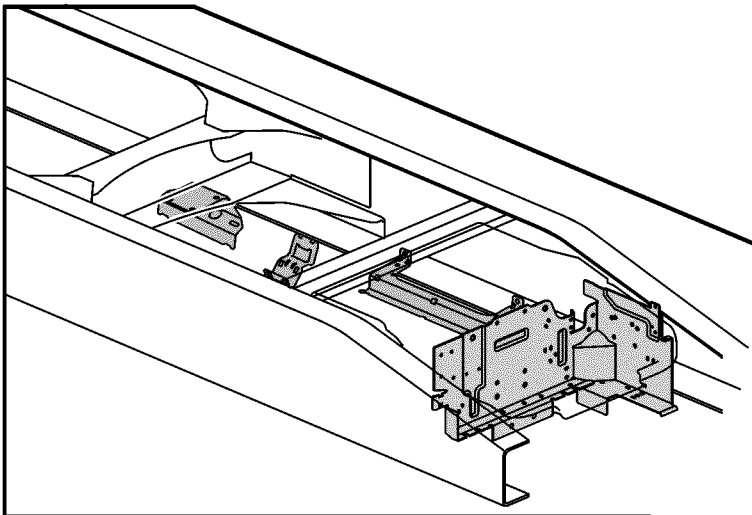


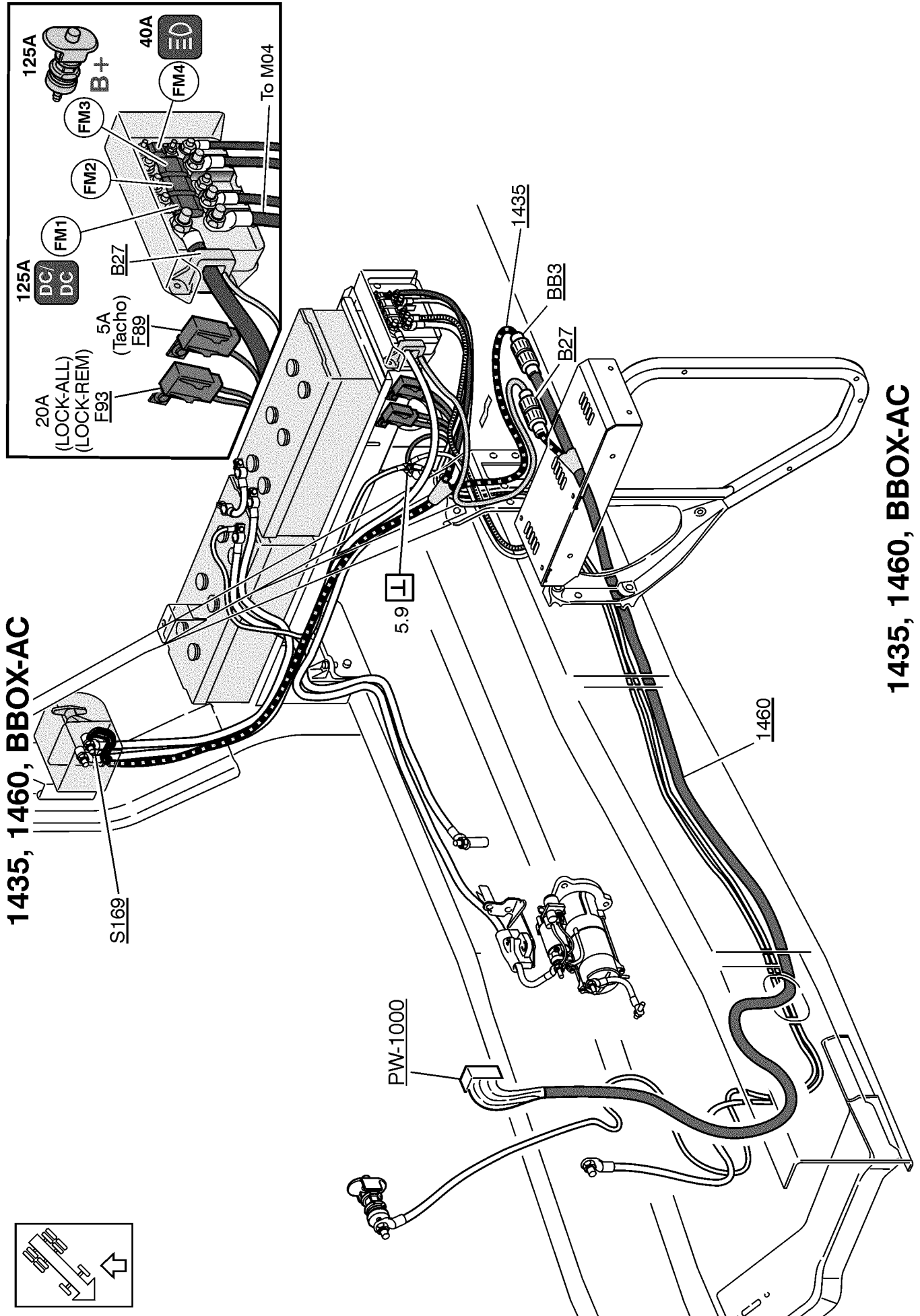
### ADR

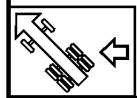
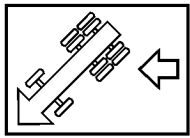
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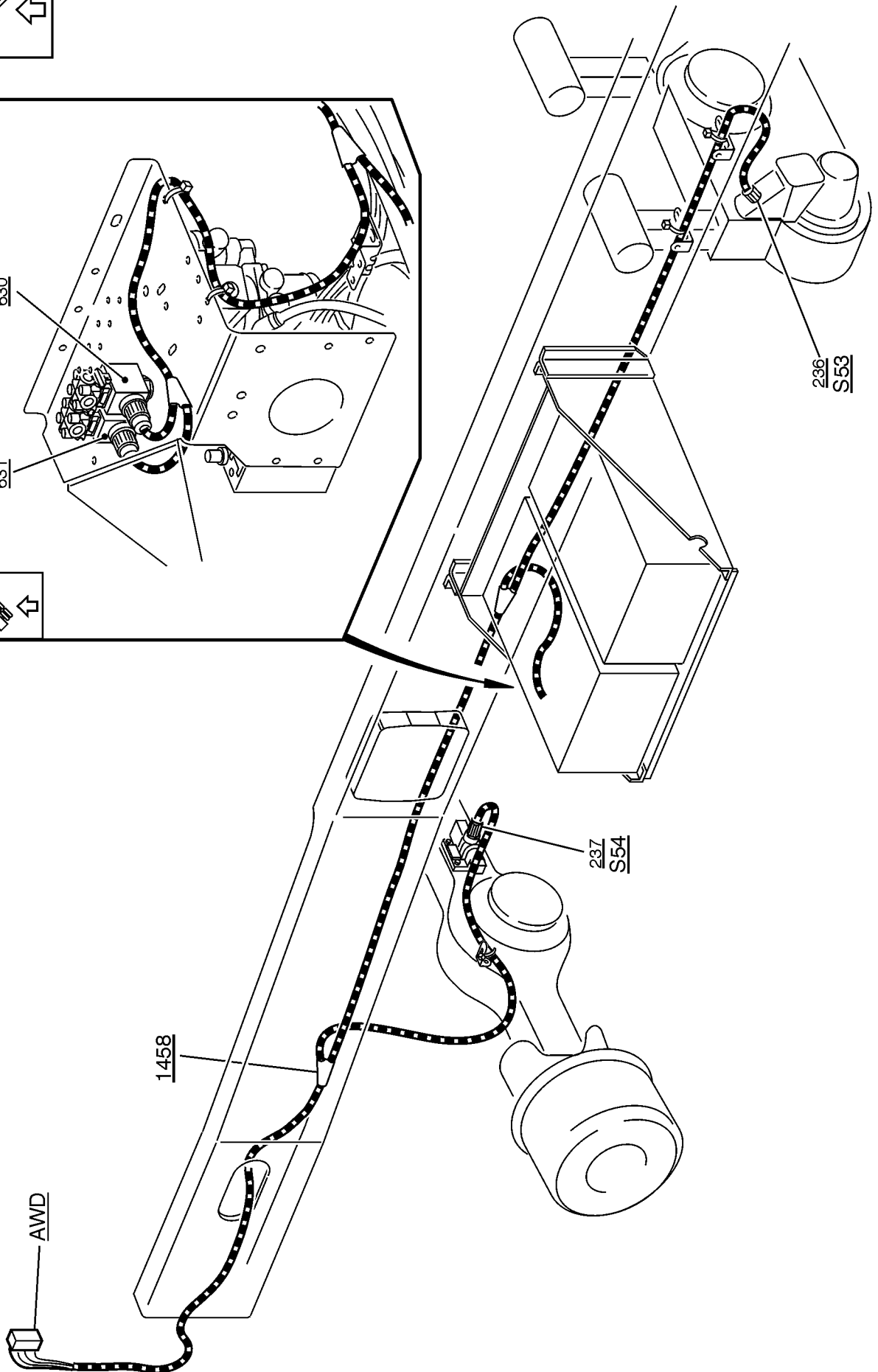
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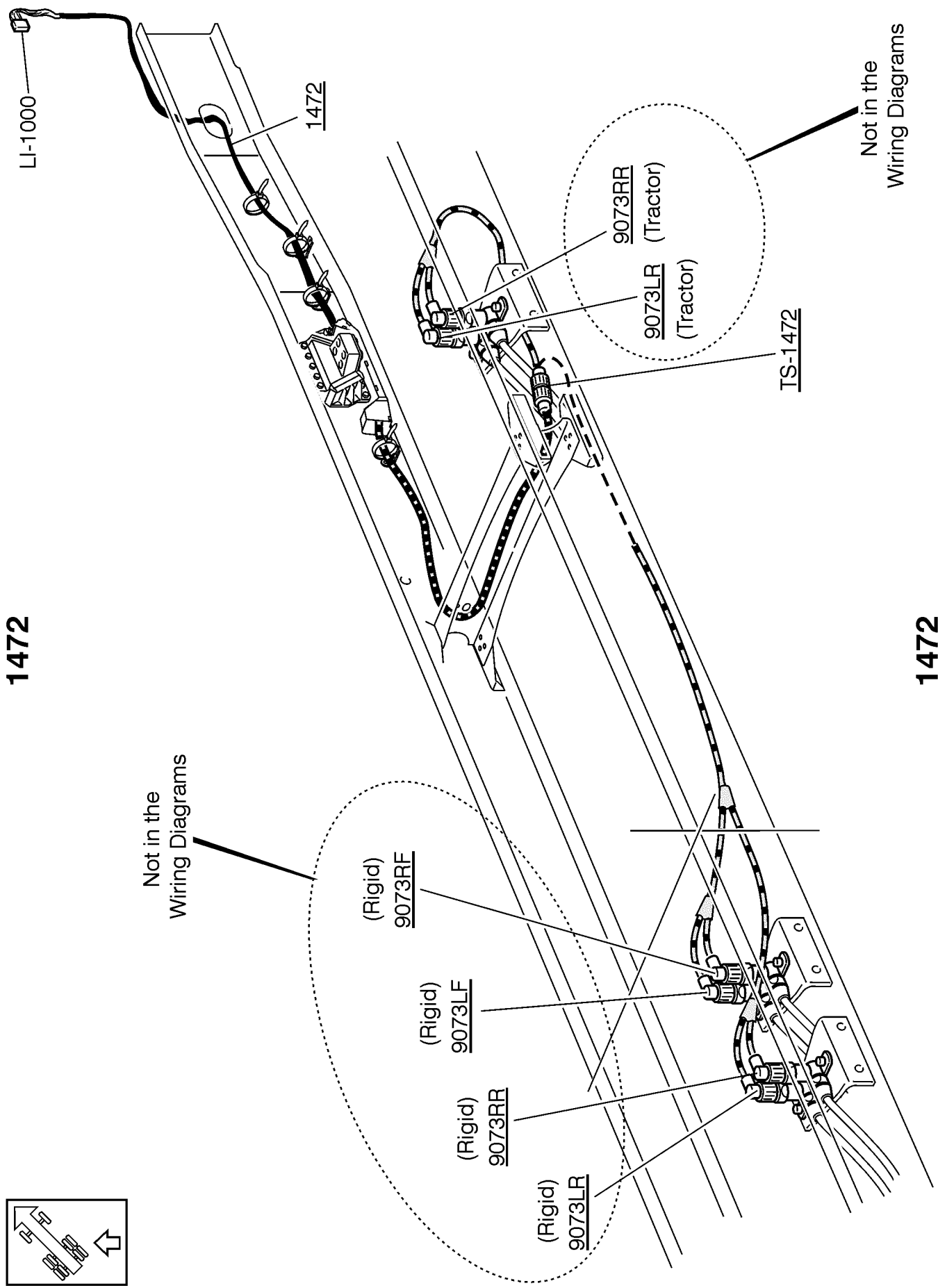




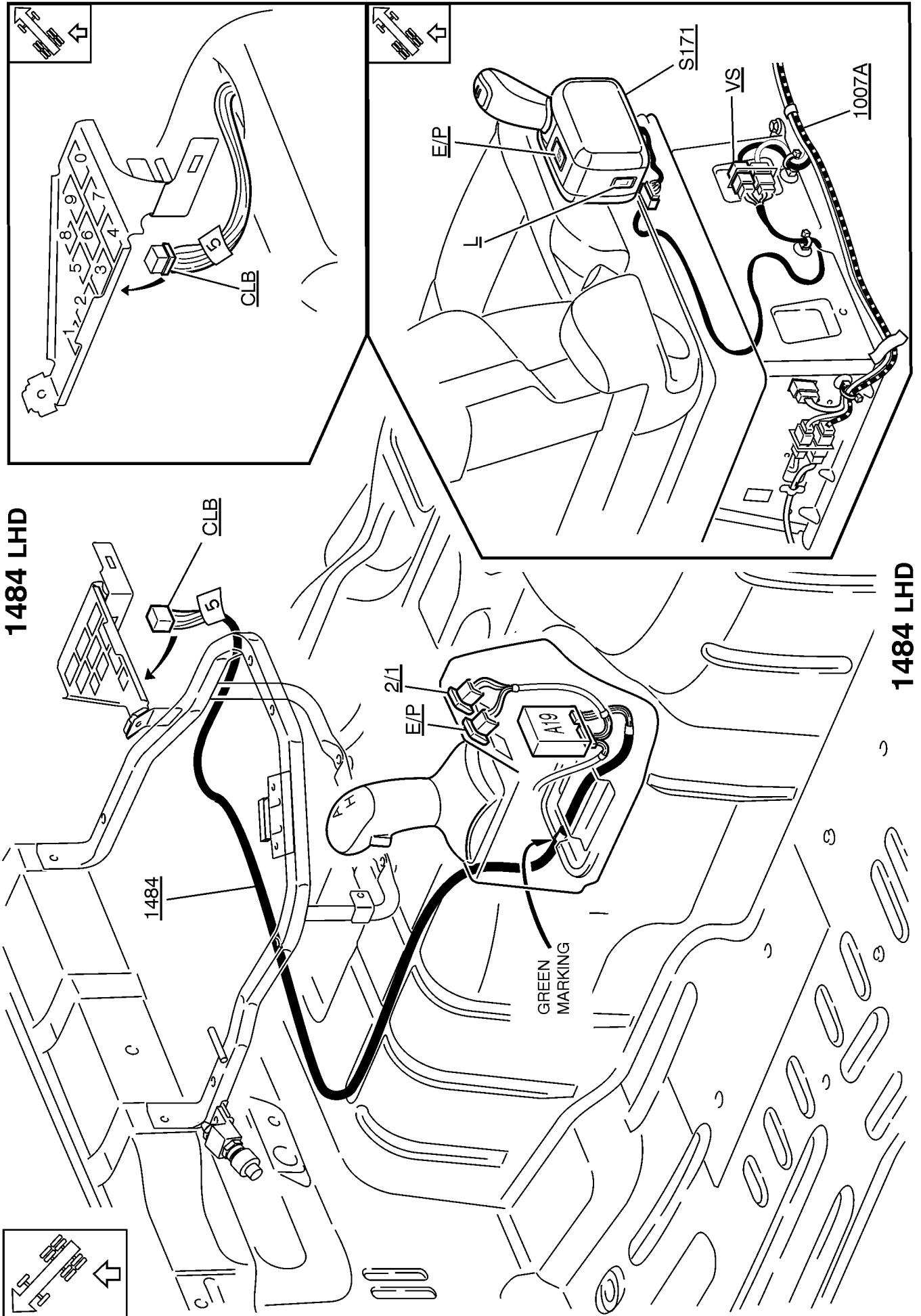
1458

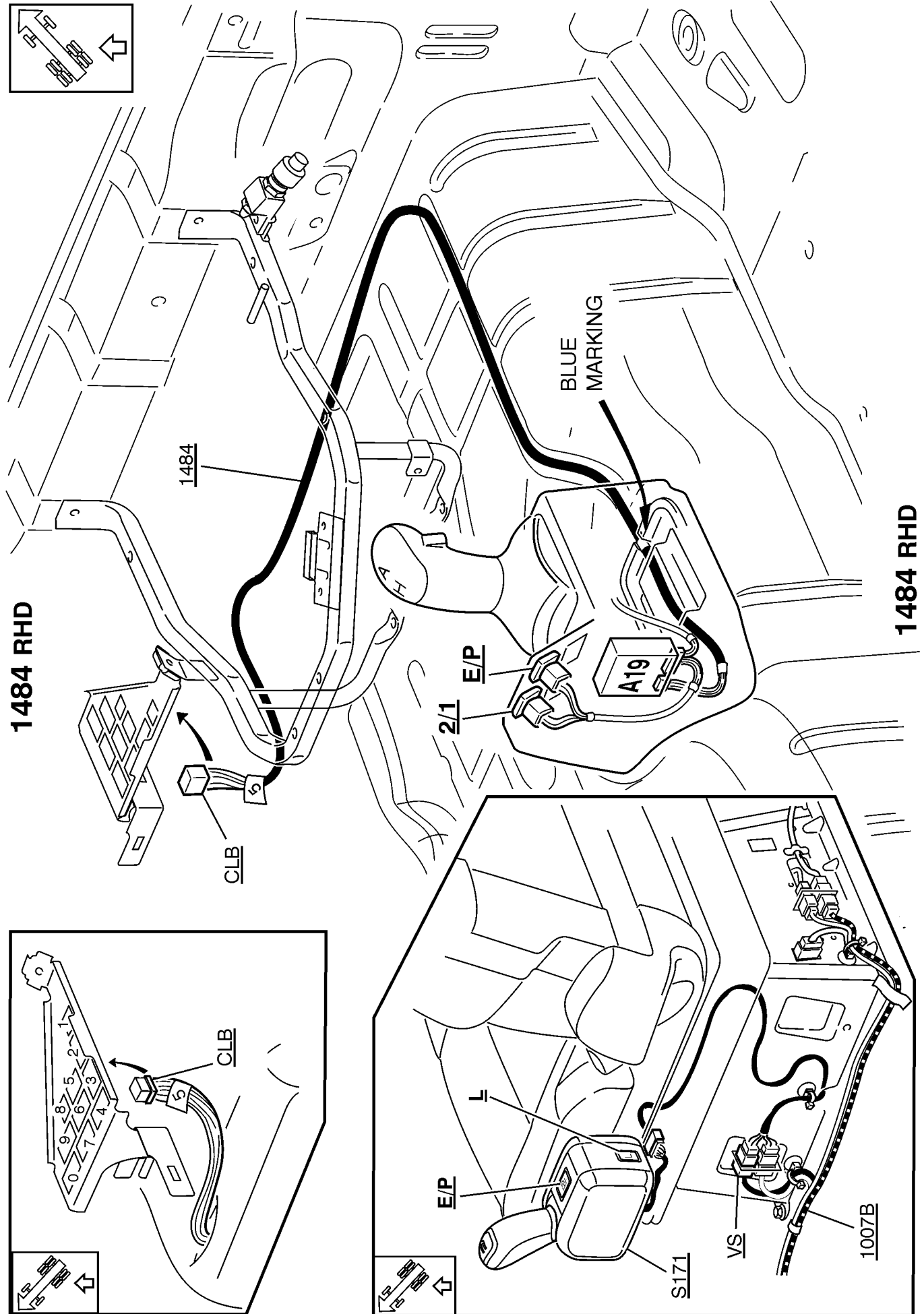


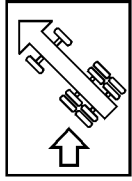
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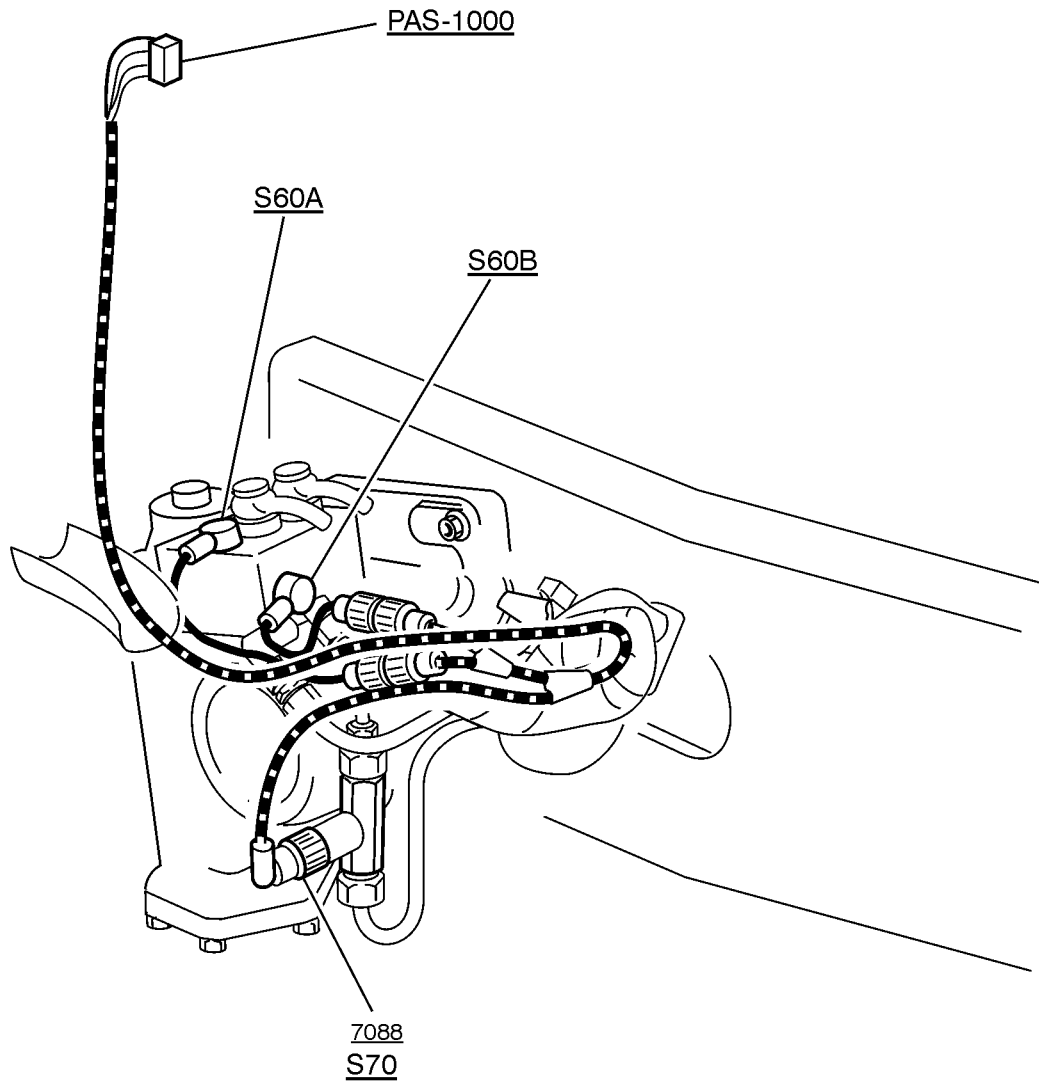
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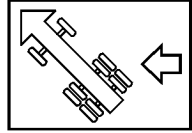




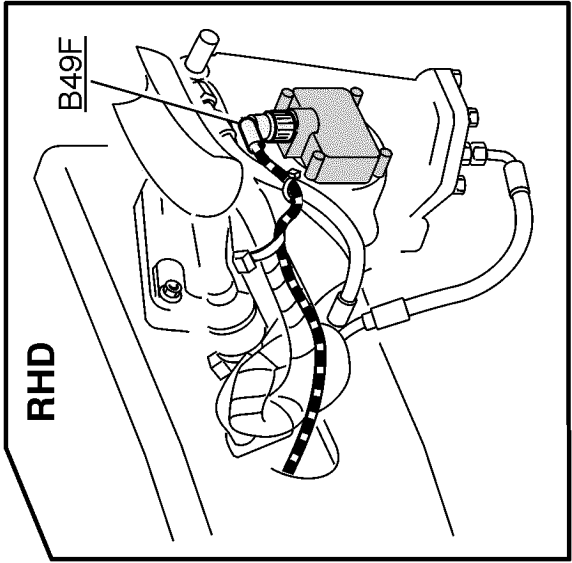
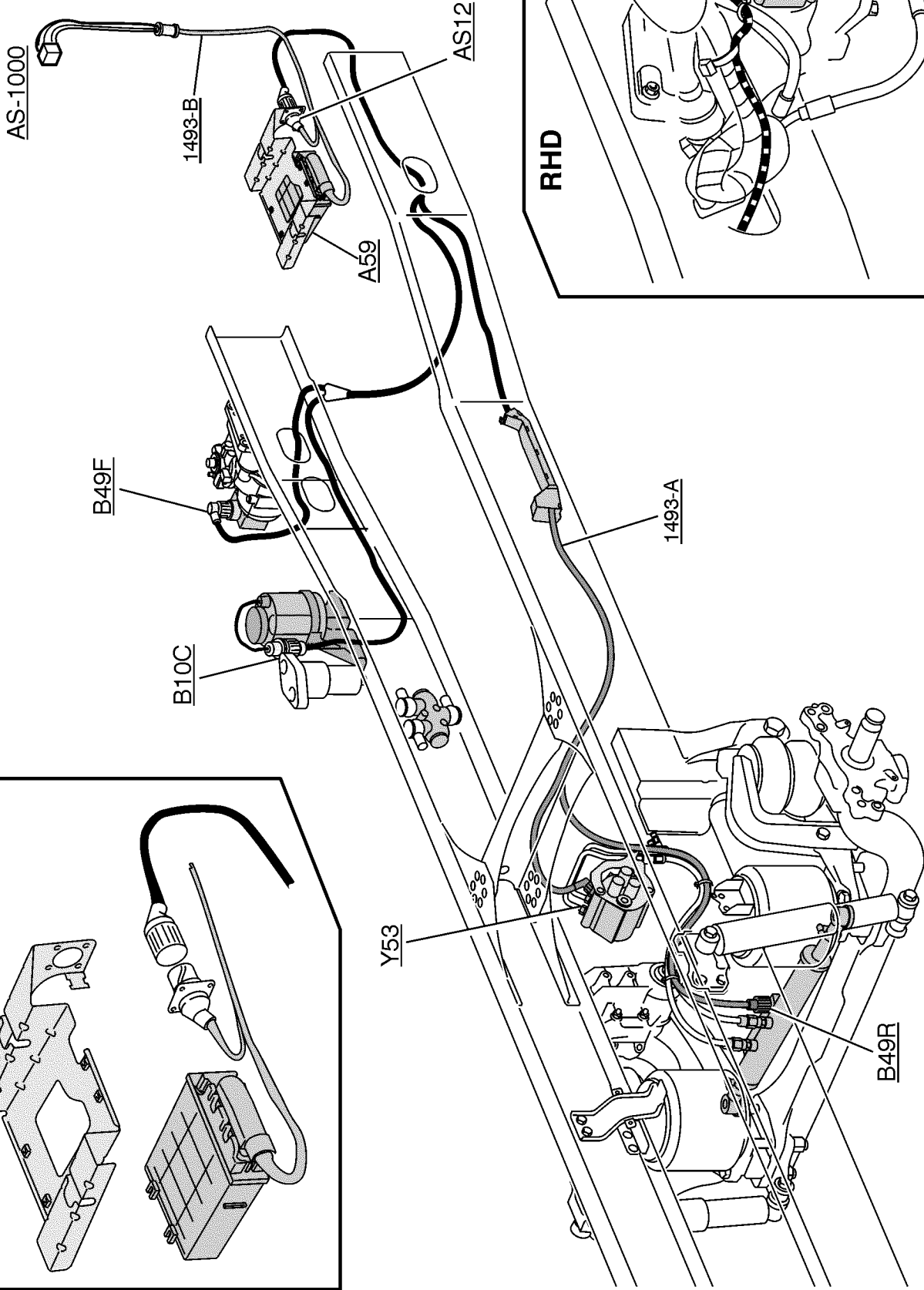
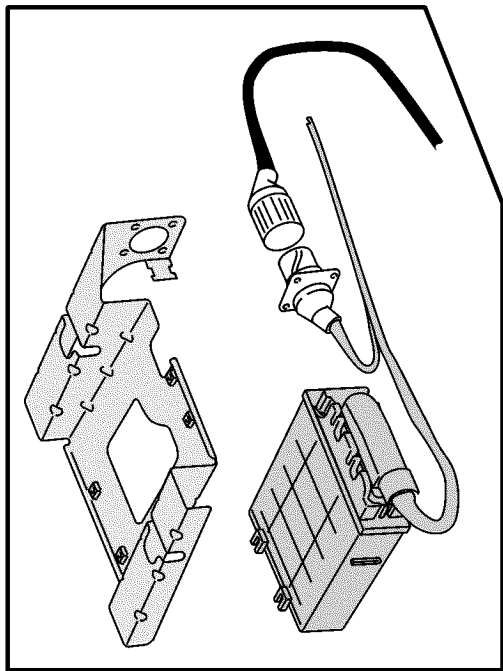
1493 LHD, PSS-DUAL



1493 LHD, PSS-DUAL



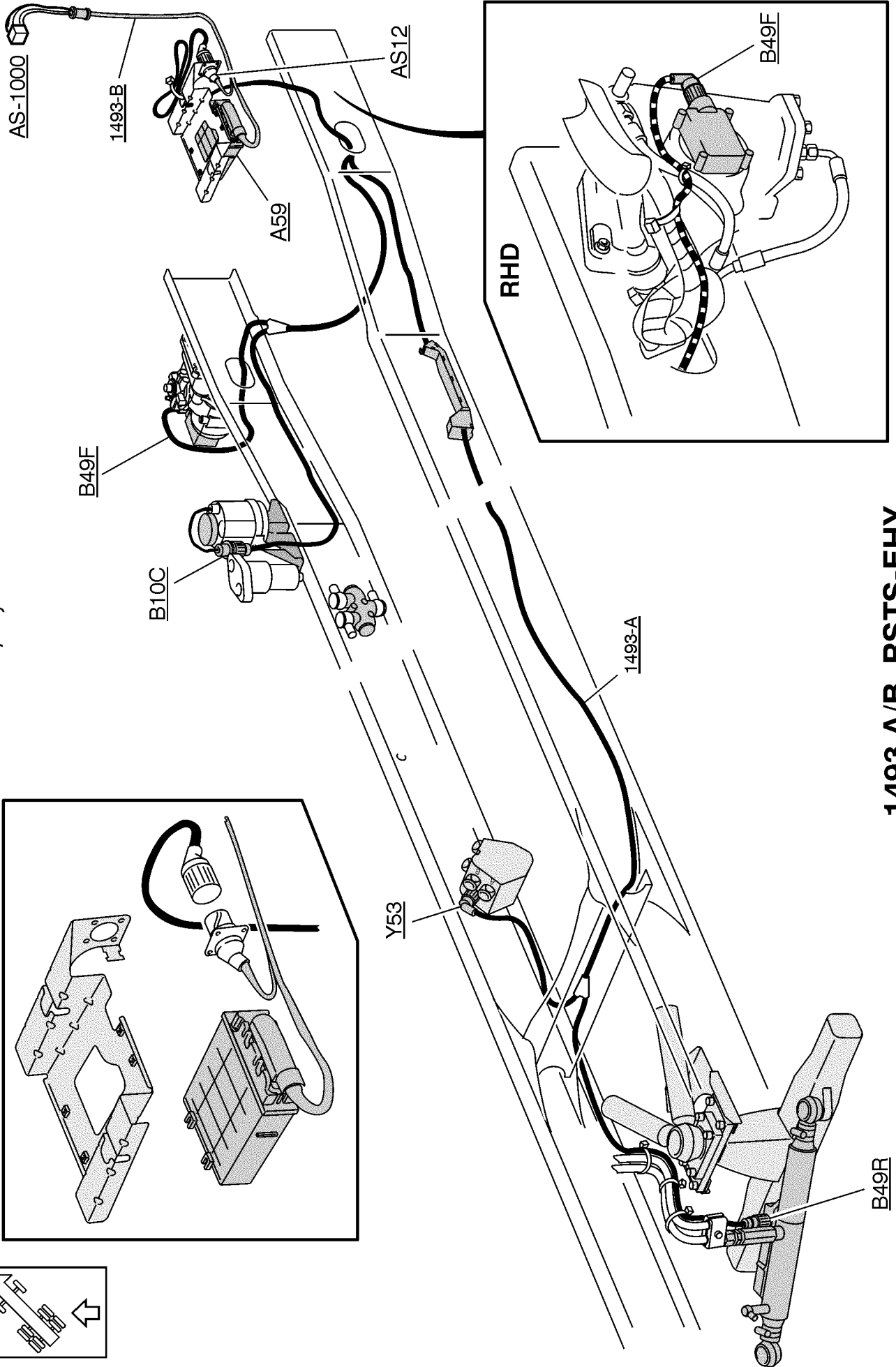
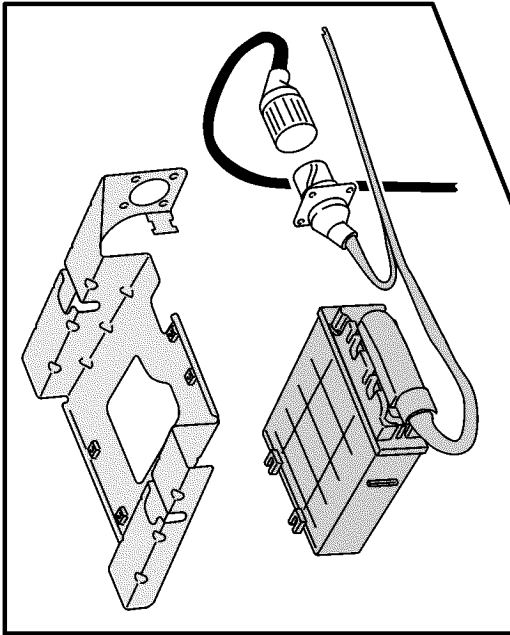
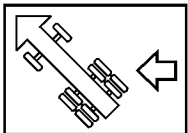
**1493 A/B, RSTS-EHY**



**1493 A/B, RSTS-EHY**



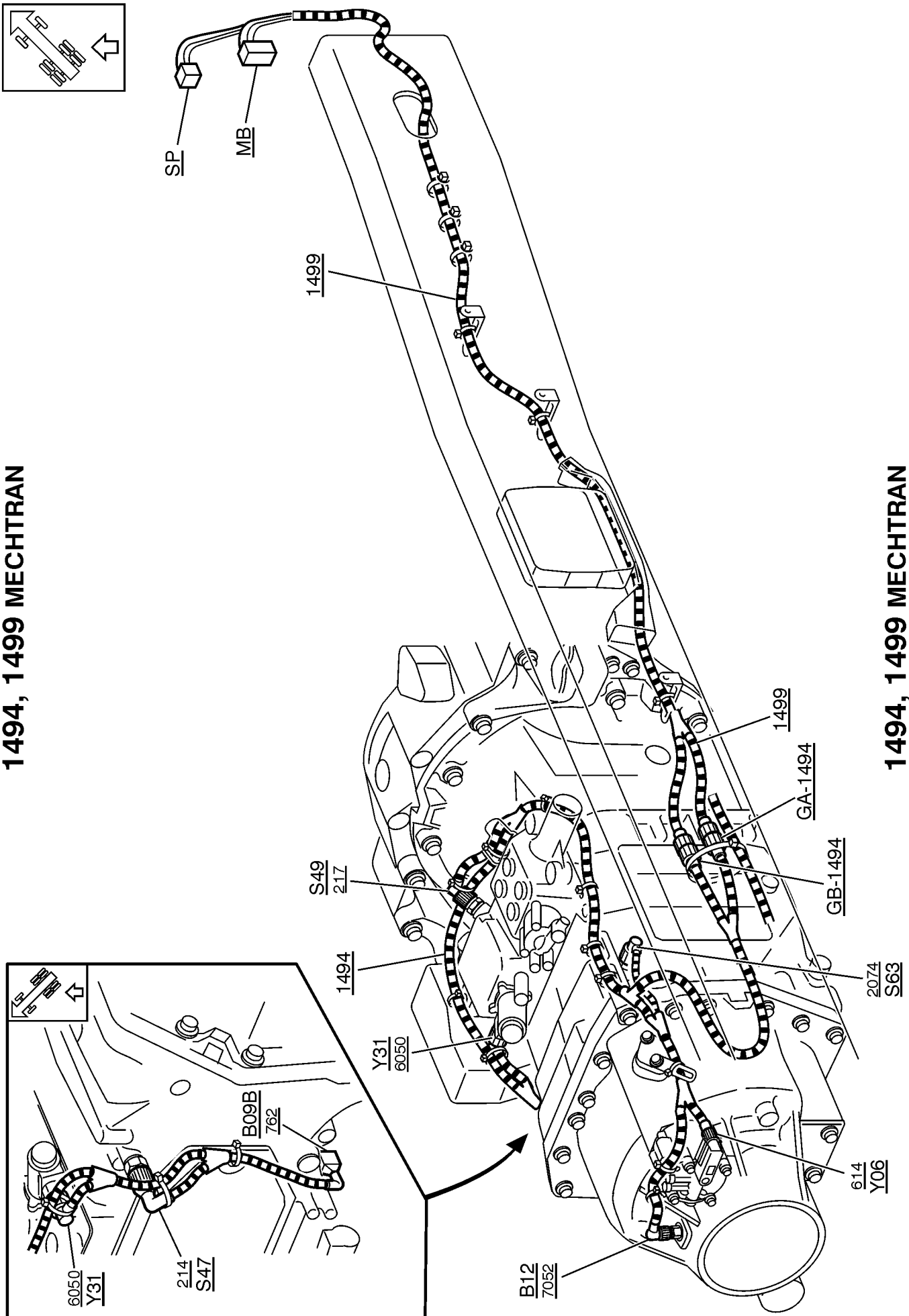
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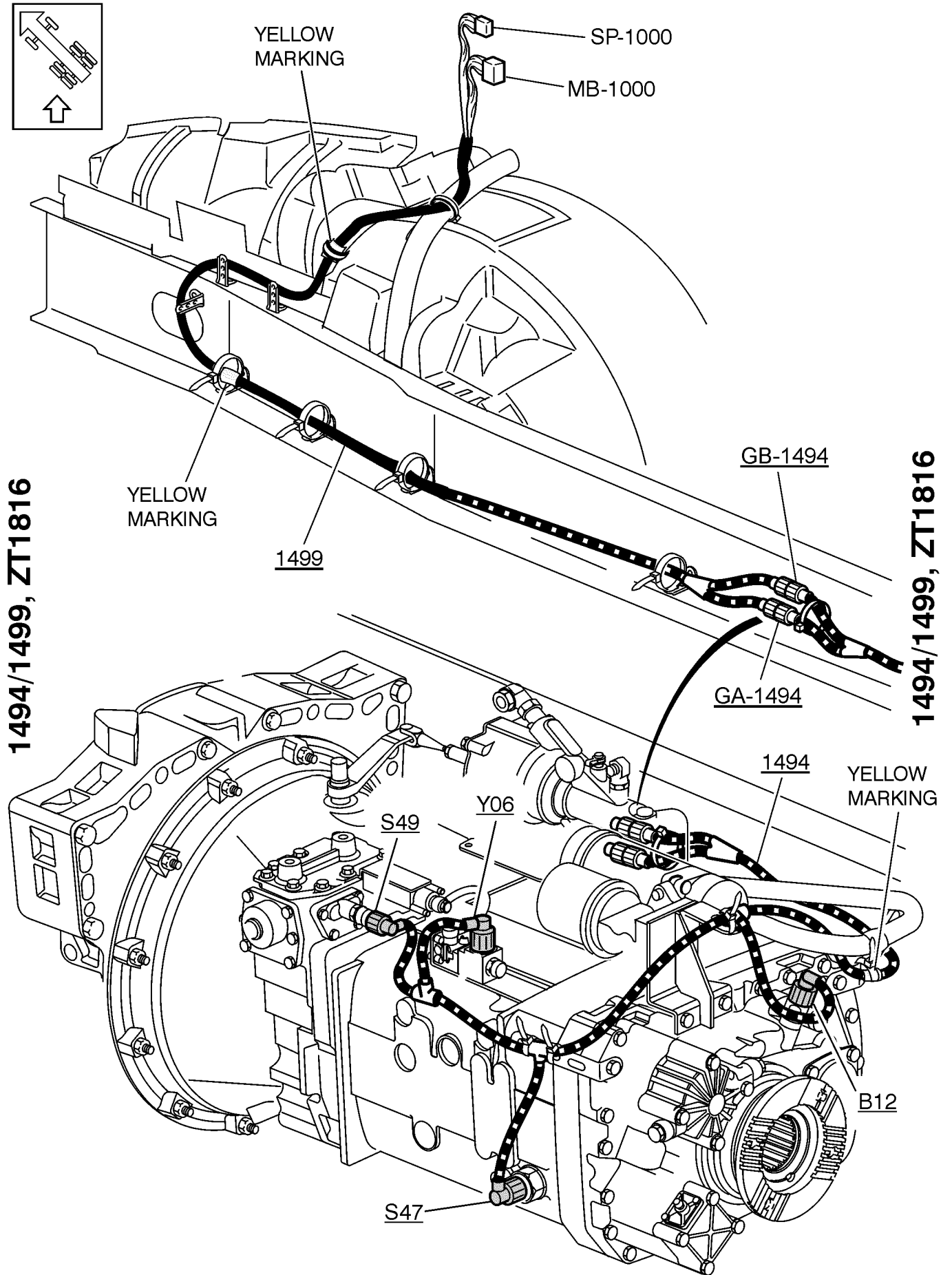


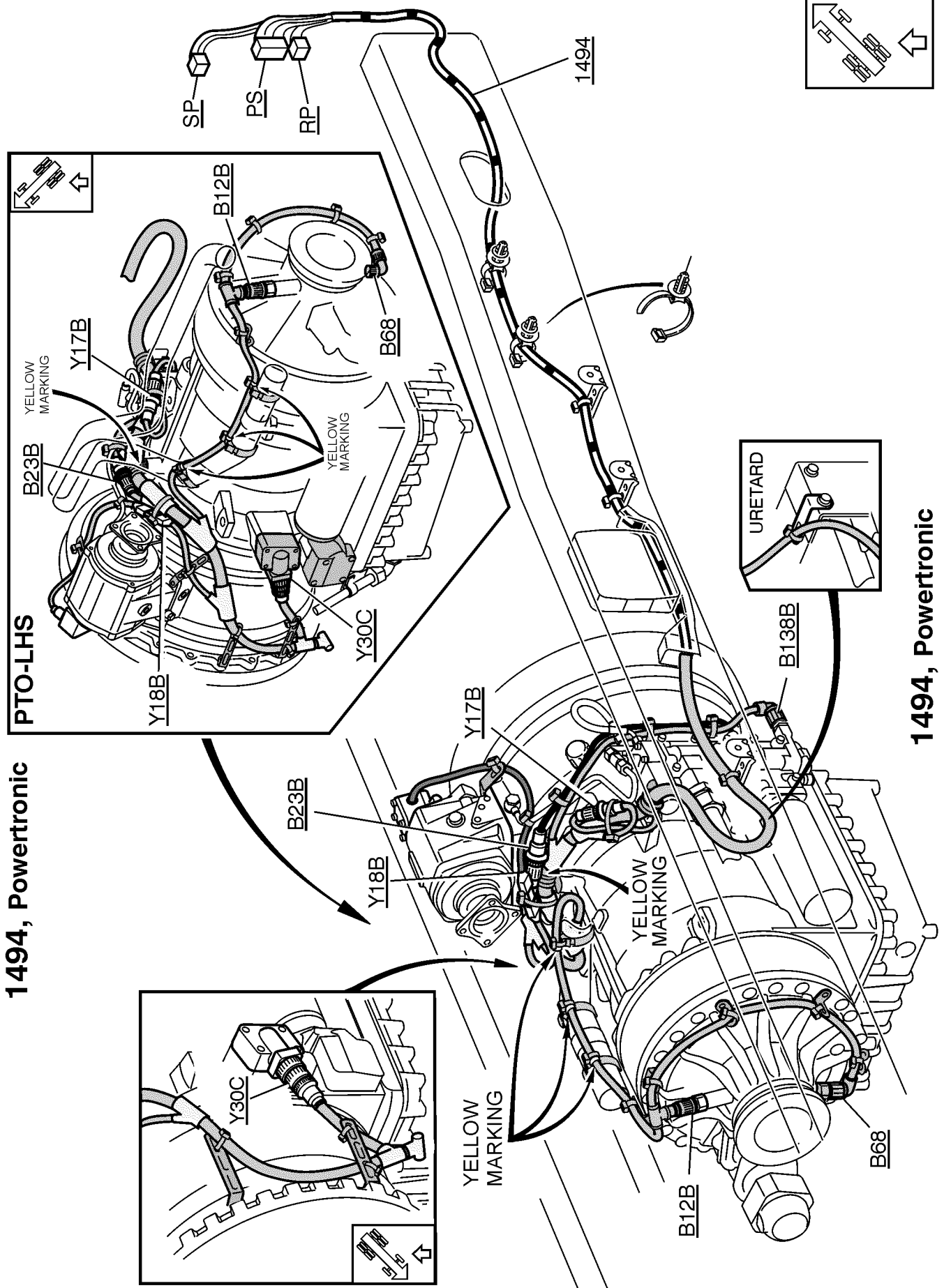
1493 A/B, RSTS-EHY

1494, 1499 MECHTRAN

1494, 1499 MECHTRAN



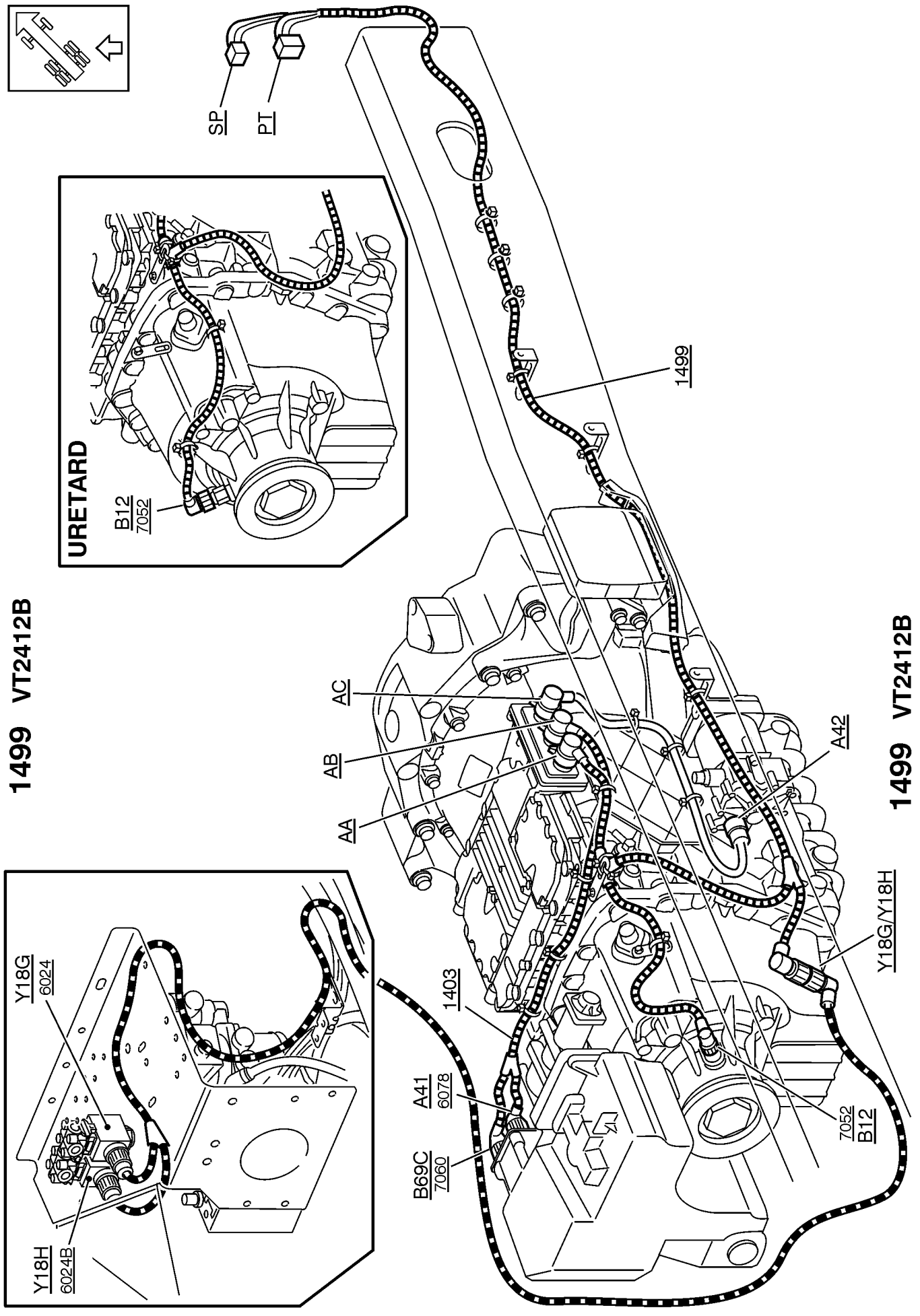




**1494, Powertronic**

**1494, Powertronic**

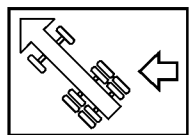
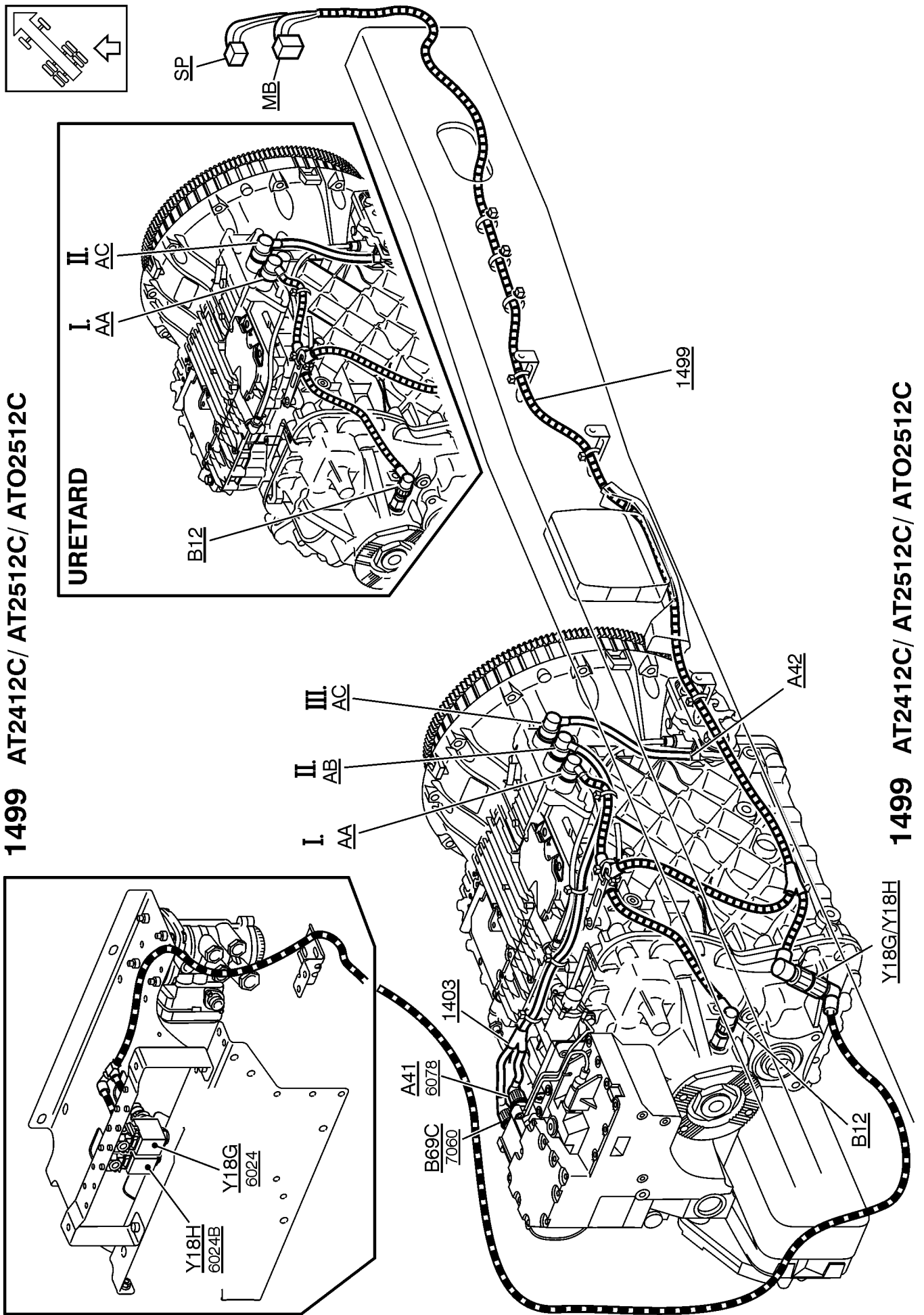
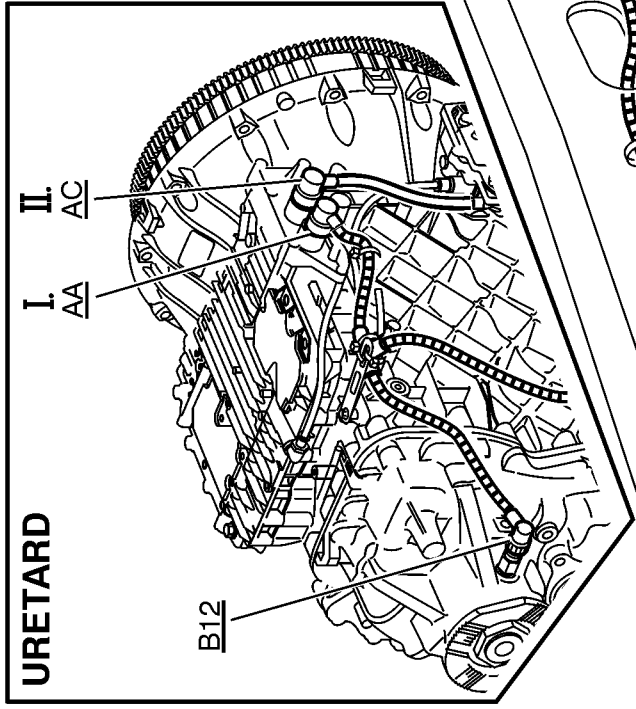
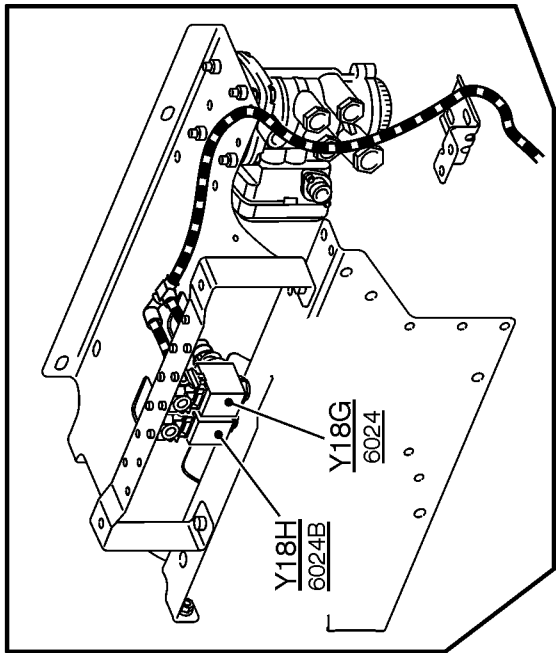




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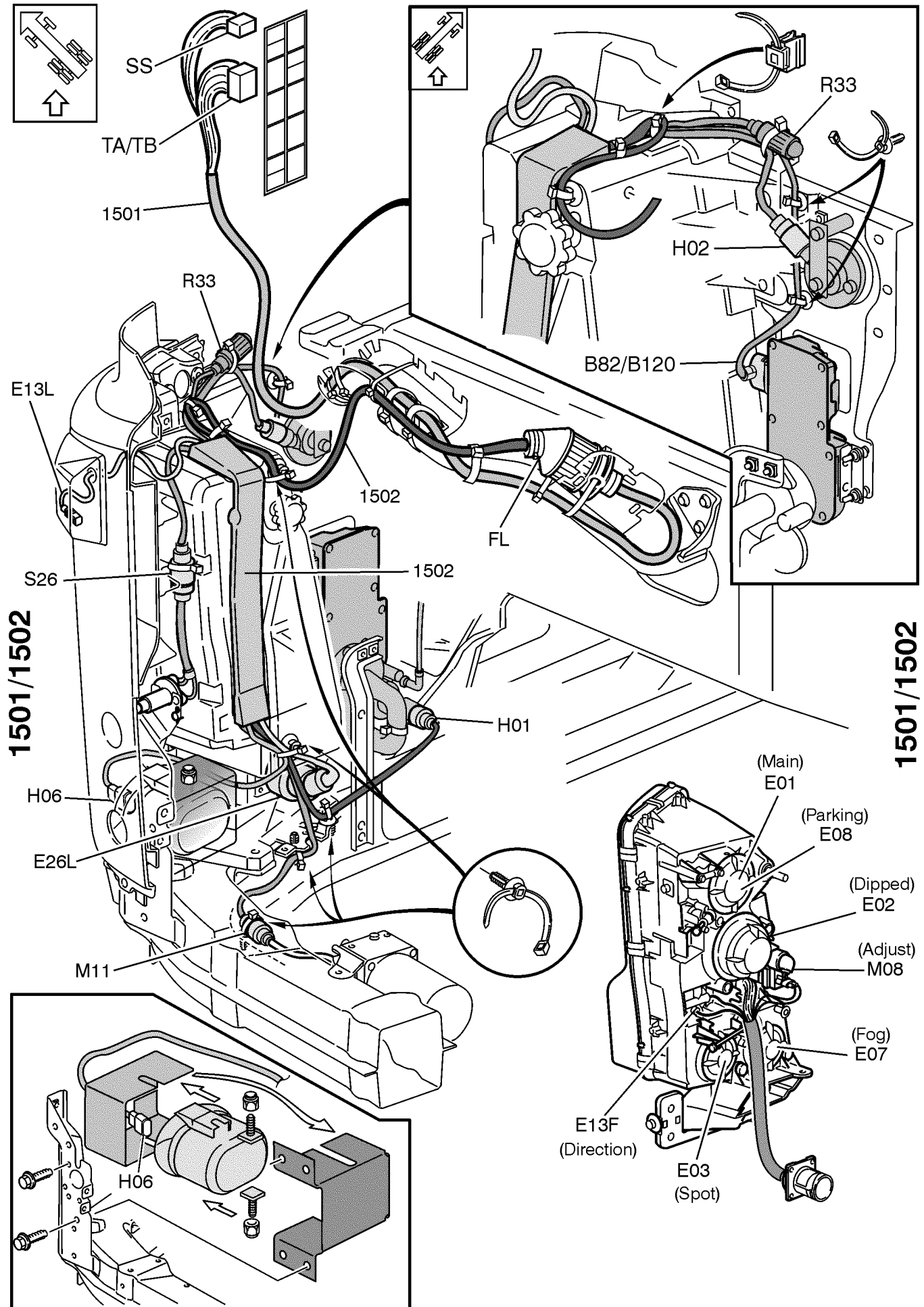
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1499 AT2412C/ AT2512C/ ATO2512C

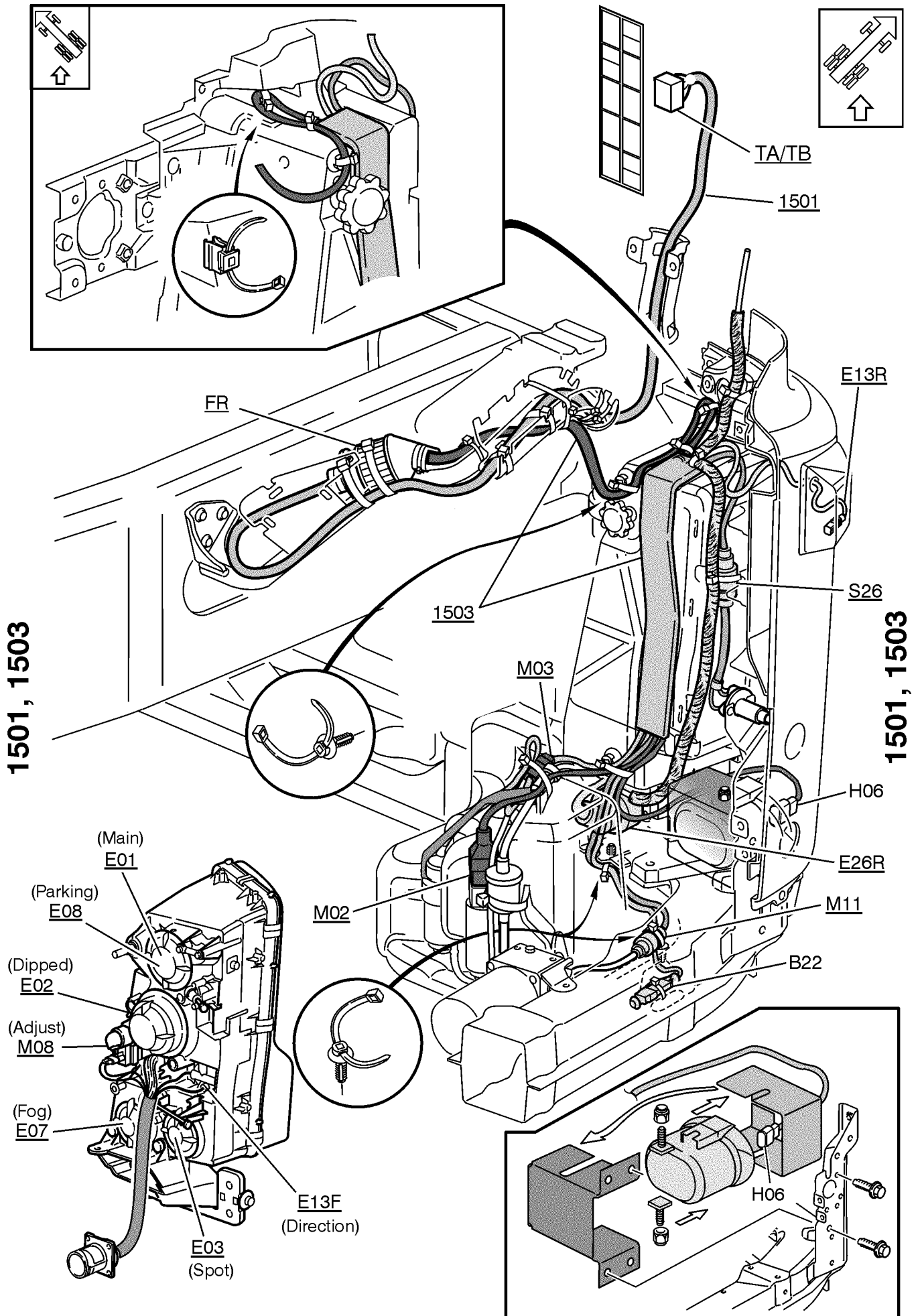


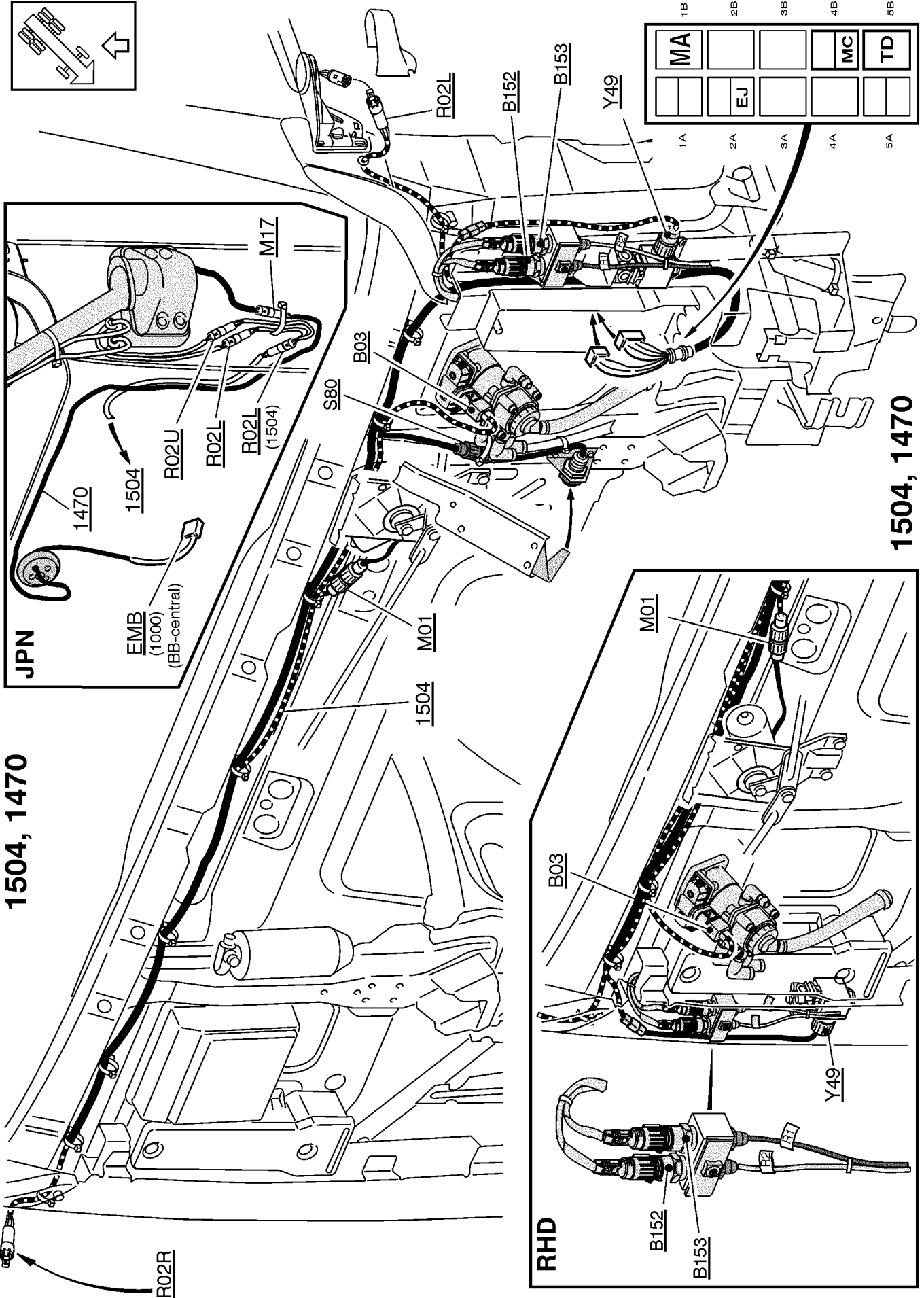
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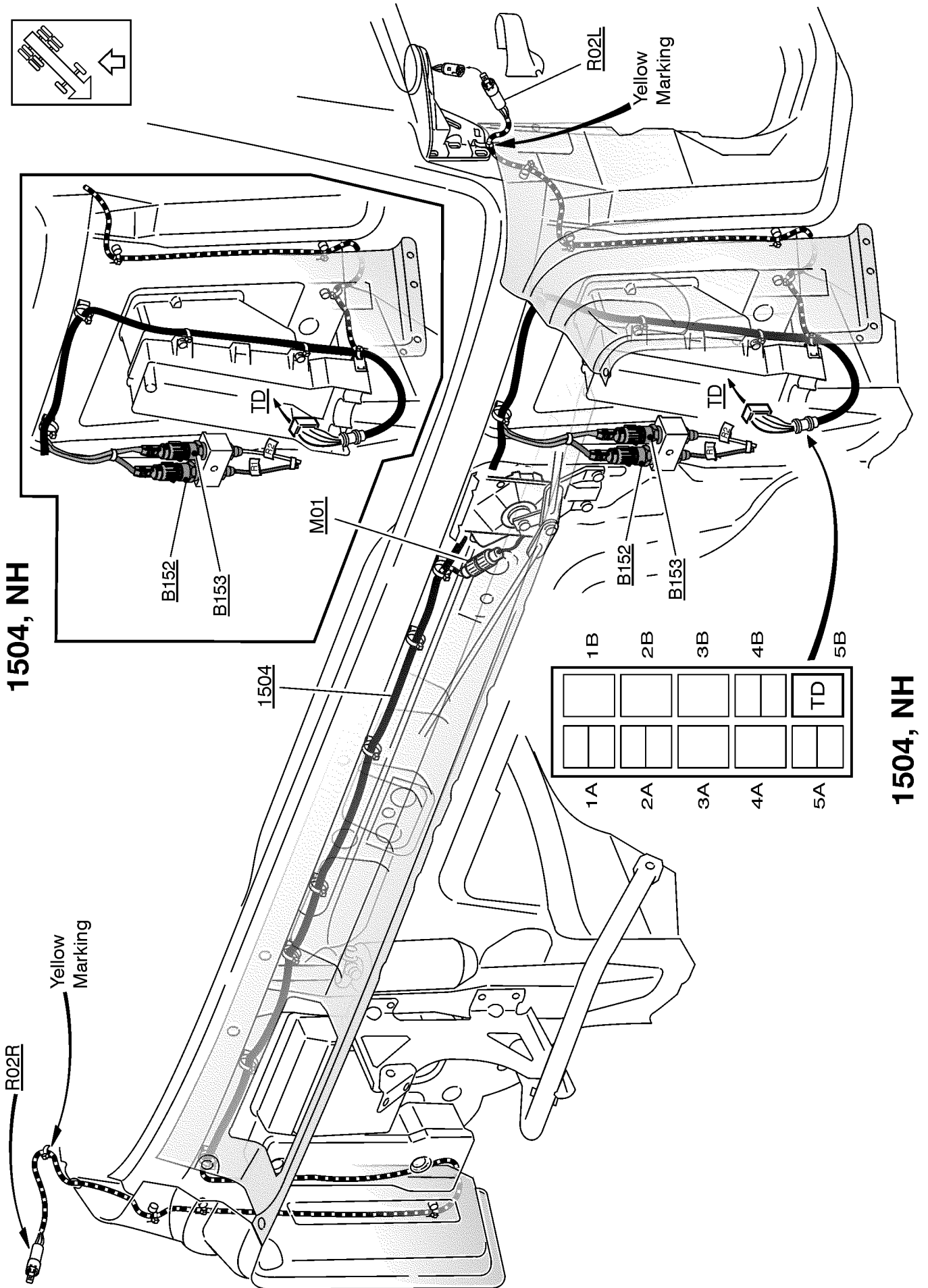
Y18G/Y18H

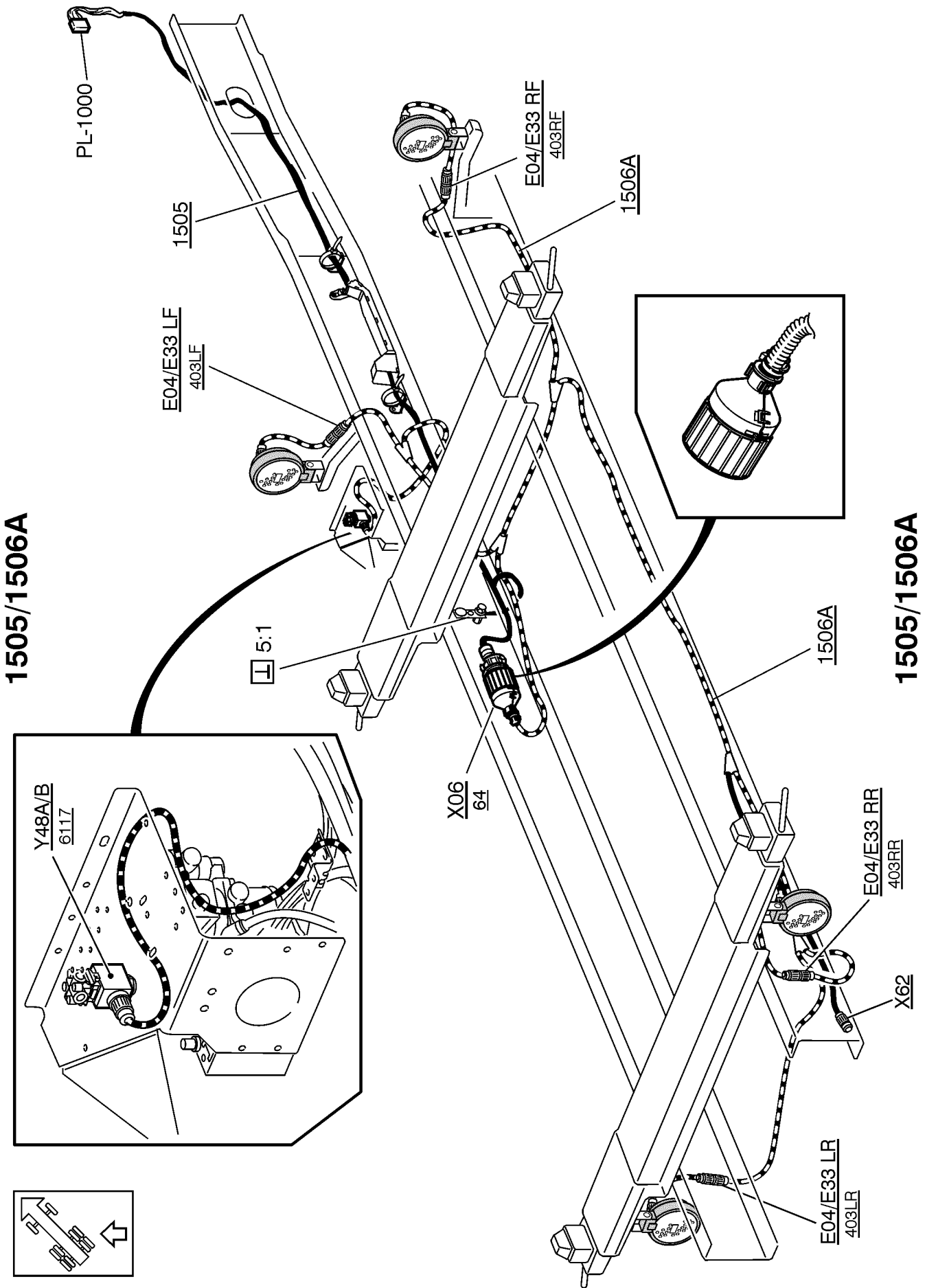


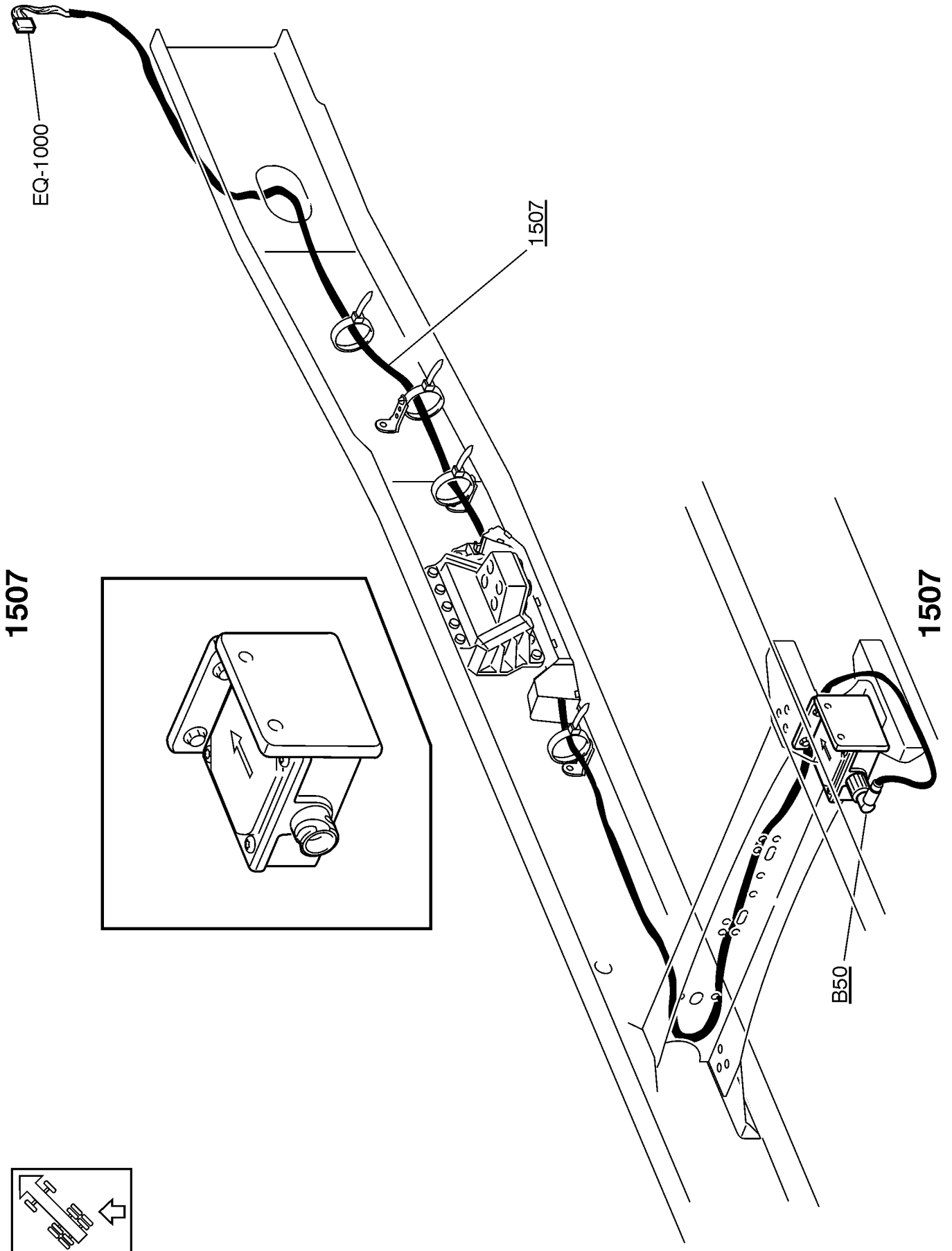


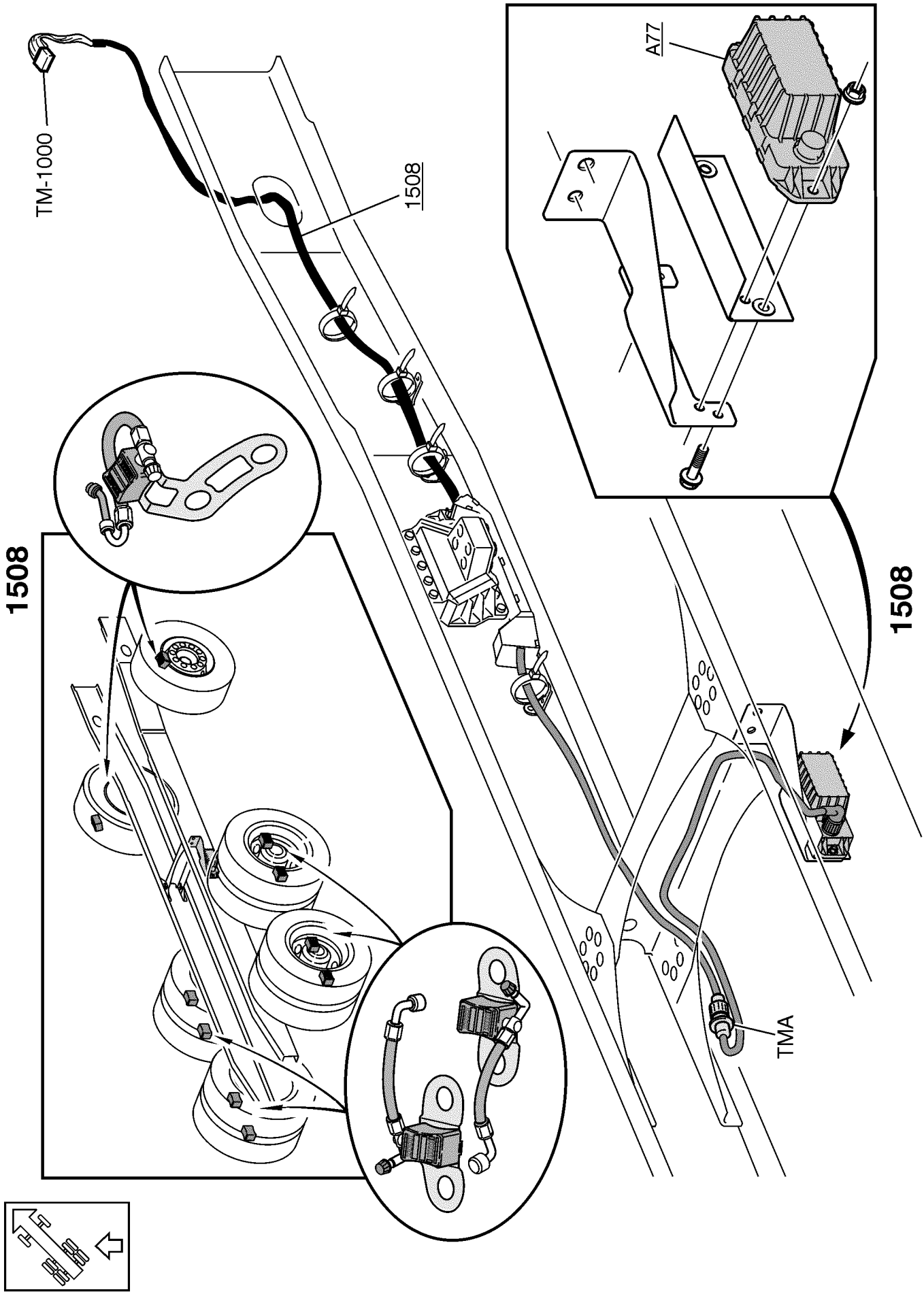


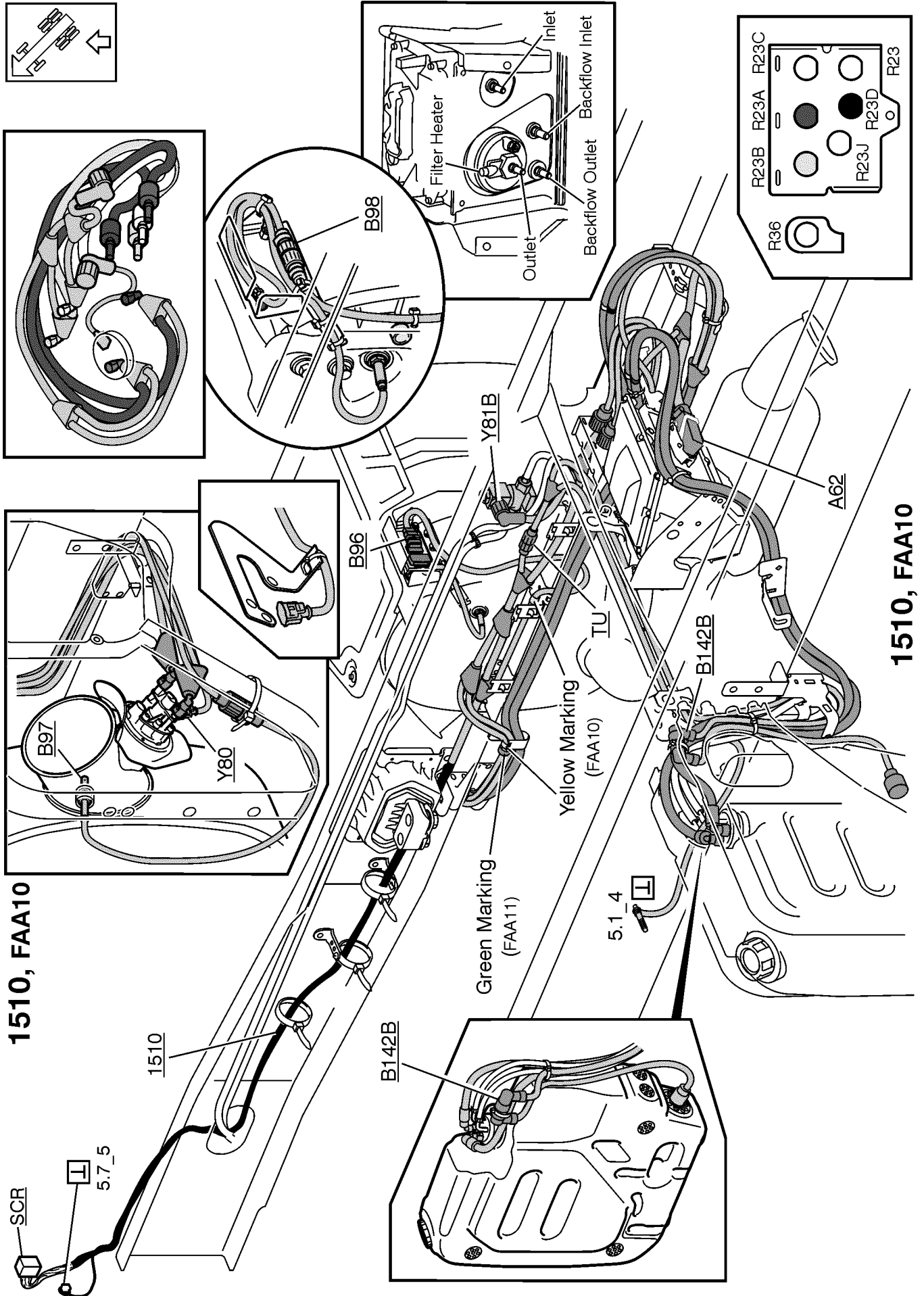




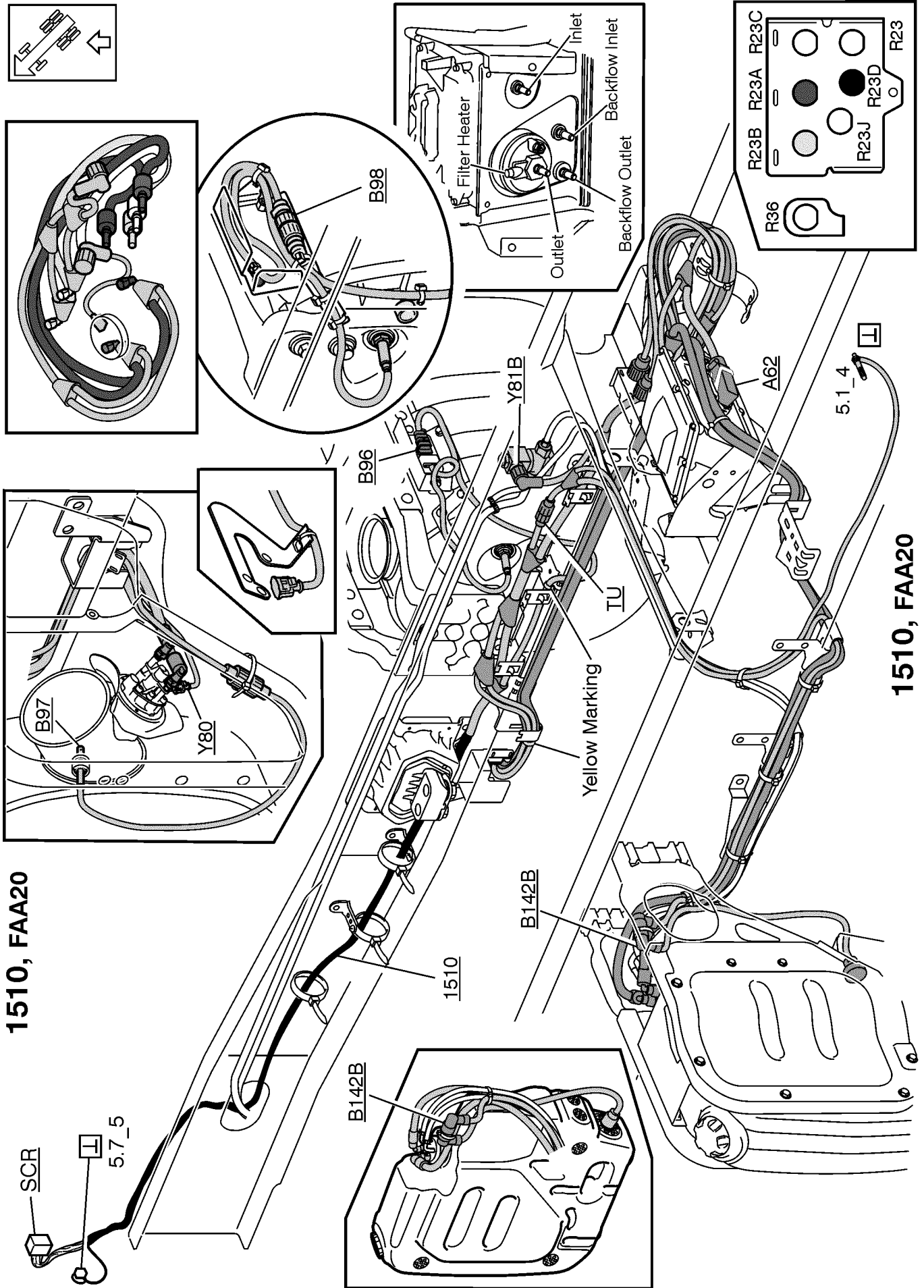








1510, FAA10



1510, FAA20

1510, FAA20

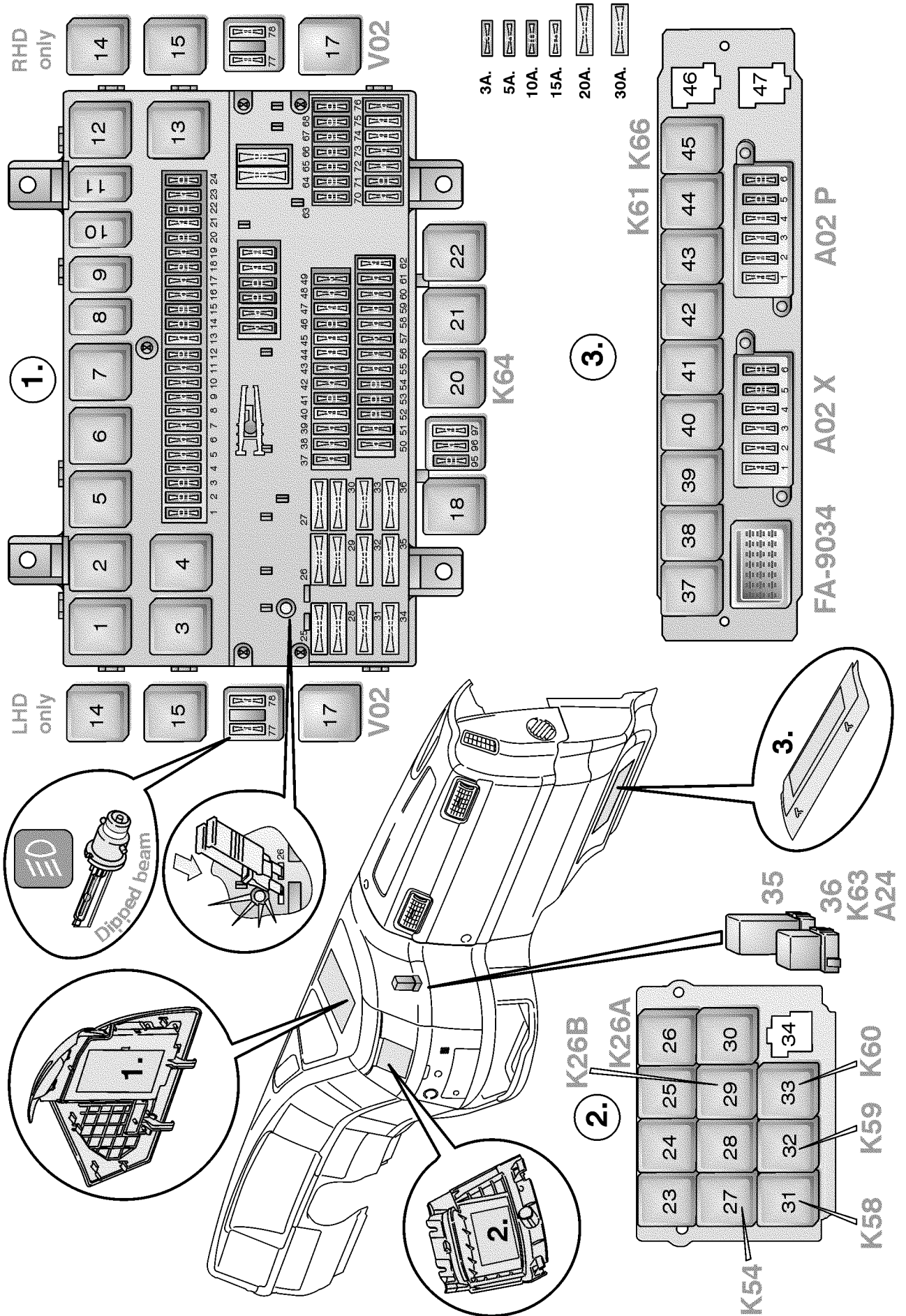


## Fuses

F1	TPM (Tyre pressure Monitoring)	(OA:2 A)	F30	El. window winder, rhs	(AC:3 B)
F2	Luggage compartment lamp	(IH:4 A)	F31	Main fuse for fuses 95–97	(AB:3 A)
F3	Loadlight, 5:th wheel lamp	(KE:0 A)	F32	ECC climate unit	(HG:0 A)
F4	Key switch, radiopos.	(AC:3 D)	F33	El. cab tilt	(KA:0 A)
F5	Instrumentation, (kl.30)	(BI:3 A)	F34	High power amplifier	(IV:1 A)
F6	Air dryer	(BA:1 B)	F35	El. adjustable seat	(IA:2 A)
F7	Vehicle ECU, immobiliser	(BA:1 B)	F36	Reverse lamp circuit trailer	(GB:4 D)
F8	Instrumentation, TPM (Tyre Pressure Monitoring), Tachograph	(BI:0 A/ OA:2 A)	F37	Dynafleet	(AC:3 C)
F9	Range-, area-inhibitors	(BA:0 A)	F38	Instep lamps	(AC:3 B)
F10	NOx sensor, Road toll system	(CV:1 A)	F39	El. adjustable rear view mirrors	(AC:3 B)
F11	Gear selector ECU	(DB:1 B/ DC:1 B/ DM:0 B)	F40	Engine ECU, engine preheating relay	(CK:1 A/ CL:1 A/ CM:1 A)
F12	Transmission ECU/retarder	(DB:1 B/ DM:1 B)	F41	Engine solenoid valves, el. fuel pump	(CK:3 A/ CL:3 A/ CM:3 A)
F13	Windscreen wiper	(GM:3 A)	F42	Cooling fan clutch	(CK:2 A/ CL:2 A/ CM:2 A)
F14	Cigarette lighter, centre section storage lamp	(IQ:2 A)	F43	BBM (body builder module), Man. main switch BBOX-EF	(BA:1 A)
F15	Water separator heater and water in fuel drain	(CK:0 A/ CL:0 A/ CM:0 A)	F44	Voltage converter for radio, 12V outlet	(IR:0 A)
F16	Differential lock, power take off	(DQ:0 A/ DU:1 A)	F45	Voltage divider for 12V. outlet	(IR:1 A)
F17	LCM control	(GA:0 A)	F46	Beacon warning light	(KM:0 A)
F18	Horn, solenoid valve for air horn	(GQ:1 A)	F47	ACC	(BE:2 A)
F19	Climate unit, FMS gateway	(HG:0 A)	F48	ABS/EBS, EBS switches	(EE:0 A/ EI:0 A/ EO:0 A)
F20	Parking heater control	(IM:0 A)	F49	Air suspension/A-ride	(FA:3 A/ FA RHD:3 A/ FK:1 A/ FK RHD:1 A/ FI:0 A)
F21	Fan, climate unit	(HY:0 A/ HY RHD:0 A)	F50	Telephone	(IX:0 A)
F22	Interior lamps	(IH:1 A)	F51	Hydraulic steered axle	(FO:1 A)
F23	Air suspension	(FA:4 A)	F52	Control circuit engine preheating, radio position relay	(AC:1 A)
F24	Air dryer, parking heater ADR, el. heated mirrors	(FQ:0 A)	F53	Light sign	(KI:1 A)
F25	Supply ABS/EBS trailer	(GG:4 A/ CP:4 A/ ZA RHD:4 A)	F54	Dynafleet, FMS gateway	(BU:0 A/ BU_2:0 A/ BX:0 A/ BY:1 A)
F26	Body builder fuse box	(ME:3 B)	F55	SRS airbag, safety belt tensioner	(IS:0 A)
F27	El. window winder lhs, el. heated mirrors	(AC:3 B)	F56	Free	(ME:1 A)
F28	Supply ABS/EBS truck	(EE:0 A/ EI:0 A/ EO:2 A)	F57	Gear selector ECU/retarder	(DB:0 A/ DC:0 A/ DM:1 B)
F29	Coffee maker	(ME:1 A)			

F58	ADR, D+ short circuit relay .....	(AB:2 A/ AE:4 B/ CP:2 A)	F74	Headlamp high-pressure washer	(GM:1 A)
F59	Rear view camera .....	(IZ:0 A)	F75	El. heated seat and el. ventilated seat .....	(IA:0 A)
F60	Hydraulic steered axle, used for Cummins ISX .....	(CP:1 A/ FO:1 A)	F76	ADR, D+ short circuit relay .....	(AE:4 B)
F61	Foldable rear view mirror arm, Japan, burglar alarm, Volvo link ..	(BY:2 A/ IF:0 A)	F89	Tachograph .....	(AB:4 D/ CS:0 B) (1435)
F62	Free .....	(ME:0 A)	F90	12V converter, ABS trailer/info-module .....	(CP:3 C)
F63	Free/used for Cummins ISX .....	(CP:0 A)	F91	Tachograph, ADR .....	(AE:0 D)
F64	Road toll system, used for Cummins ISX .....	(CP:0 A/ BZ:0 A)	F93	Main fuse for fuses 95–97 .....	(AB:3 D/ AE:0 D)
F65	Central lubrication system .....	(FU:0 A)	F94	AdBlue system .....	(AB:3 D)
F66	Roof hatch .....	(IQ:0 A)	F95	Central door lock .....	(AB:3 B)
F67	Reading lamps, bedlamps .....	(IH:0 A)	F96	Burglar alarm .....	(AB:3 B)
F68	Refrigerator .....	(IQ:3 A)	F97	Parking heater .....	(AB:3 B)
F69	12-volt outlet .....	(IR:1 C)	FM1	Fuse, main, preheating .....	(AA:1 B)
F70	Supply ABS/EBS trailer, (kl.15) ..	(CP:4 A/ GG:3 A/ ZA RHD:3 A)	FM2	Fuse, main, bogie lift/extra equipment .....	(AA:1 B/ AE:1 B)
F71	Extra equipment .....	(ME:1 A)	FM3	Fuse, main, cab and chassis .....	(AA:1 B)
F72	Headlamp level regulation system .....	(GU:0 A)	FM4	Fuse, main, LCM (Light Control Module) partly .....	(AA:0 B/ AE:1 B)
F73	Tail lift indication .....	(NB:2 A)			

# Relays



K1	Relay, starting switch, radio position .....	(AC:3 C)	K27	Relay, gas discharge lamp, dipped beam, lhs .....	(GD:1 C)
K2	Relay, EMS (Engine Management System) .....	(BA:1 A)	K28	Relay, gas discharge lamp, dipped beam, rhs .....	(GD:1 C)
K3	Relay, starter motor .....	(AA:2 B/ CK:4 B)	K30	Relay, beacon warning light .....	(KM:0 B)
K3B	Relay, starter motor, Cummins ...	(CS:1 C)	K35	Relay, headlamp high pressure wash .....	(GM:0 B)
K4	Relay, body builder fuse box (kl.15) .....	(ME:2 A)	K37	Relay, parking light .....	(NA:1 C/ NB:0 C)
K5	Relay, I-shift/Powertronic/Retarder .....	(DB:1 A/ DC:0 A/ DM:0 A)	K38	Relay, body builder preparation, swapbody lamps .....	(NA:1 C/ NB:1 C)
K6	Relay, fan climate unit .....	(HY:0 B/ HY RHD:0 B)	K39	Relay, body builder preparation, plough light, spotlights .....	(NA:1 C/ NB:1 C)
K7	Relay, intermittent wiper .....	(GM:1 C)	K40	Relay, body builder preparation ..	(NA:3 C/ NB:3 C)
K8	Relay, gearbox area inhibitor .....	(BA:1 A)	K41	Relay, body builder preparation, swapbody .....	(NA:2 C/ NB:2 C)
K9	Relay, interior lamps .....	(IH:1 A)	K42	Relay, body builder preparation, spotlights .....	(NI:1 B)
K10	Relay, fifth wheel-, working-light	(KE:0 C)	K43	Relay, body builder preparation, external start .....	(NC:3 C)
K11	Relay, air suspension .....	(FA:4 B)	K45	Relay, body builder preparation, dual speed .....	(NU:2 B)
K12	Relay, reverse light, trailer .....	(GB:4 D)	K48	Power relay, engine preheating ...	(CK:3 B/ CL:2 B/ CM:2 B)
K13	Relay, alternator controlled .....	(AA:4 B)	K49	Power relay, bogie lift motor .....	(FI:3 B/ FK:3 D)
K14	Time delay relay, bogie lift, A-ride	(FI:1 B/ FK:1 C)	K51	Power relay, battery main switch .	(AB:0 C)
K15	Time delay relay, bogie lift, A-ride, with axle load limiter .....	(FK:2 C/ FK RHD:2 C)	K54	Relay, 12V ABS Trailer .....	(CP:2 D)
K16	Relay, bogie lift, A-ride, with axle load limiter .....	(FK:1 C/ FK RHD:0 B)	K58	Relay, speed limiter, Volvo link ....	(BY:3 B)
K20	Relay, D+ short-circuit, (ADR-trucks only) .....	(AE:4 D)	K59	Relay, engine shut off, Volvo link	(BY:4 B)
K21	Relay, el. adjustable seat .....	(IA:2 B)	K60	Relay, trailer lock, Volvo link .....	(BY:3 D)
K22	Relay, climate fan, 1:st speed (by parking heater) .....	(HY:1 B)	K61	Relay, auxiliary reverse light, truck .....	(NA:0 C/ NB:0 C)
K22_RHD	Relay, climate fan, 1:st speed (by parking heater) .....	(HY RHD:0 B)	K63	Relay, ACC Adaptive cruise control .....	(BE:2 B)
K23	Relay, cab tilt .....	(KA:0 C)	K64	Relay, man. main switch BBOX-EF .....	(AB:1 C)
K24	Relay, central lubrication .....	(FU:0 B)	K65	Power relay, starter motor pre-relay .....	(CO:2 B)
K25	Relay, light sign .....	(KI:1 C)	K66	Relay, tail lift indication .....	(NB:2 C)
K26A	Relay, foldable rear view mirror arm, Japan .....	(IF:0 C)			
K26B	Relay, foldable rear view mirror arm, Japan .....	(IF:1 C)			

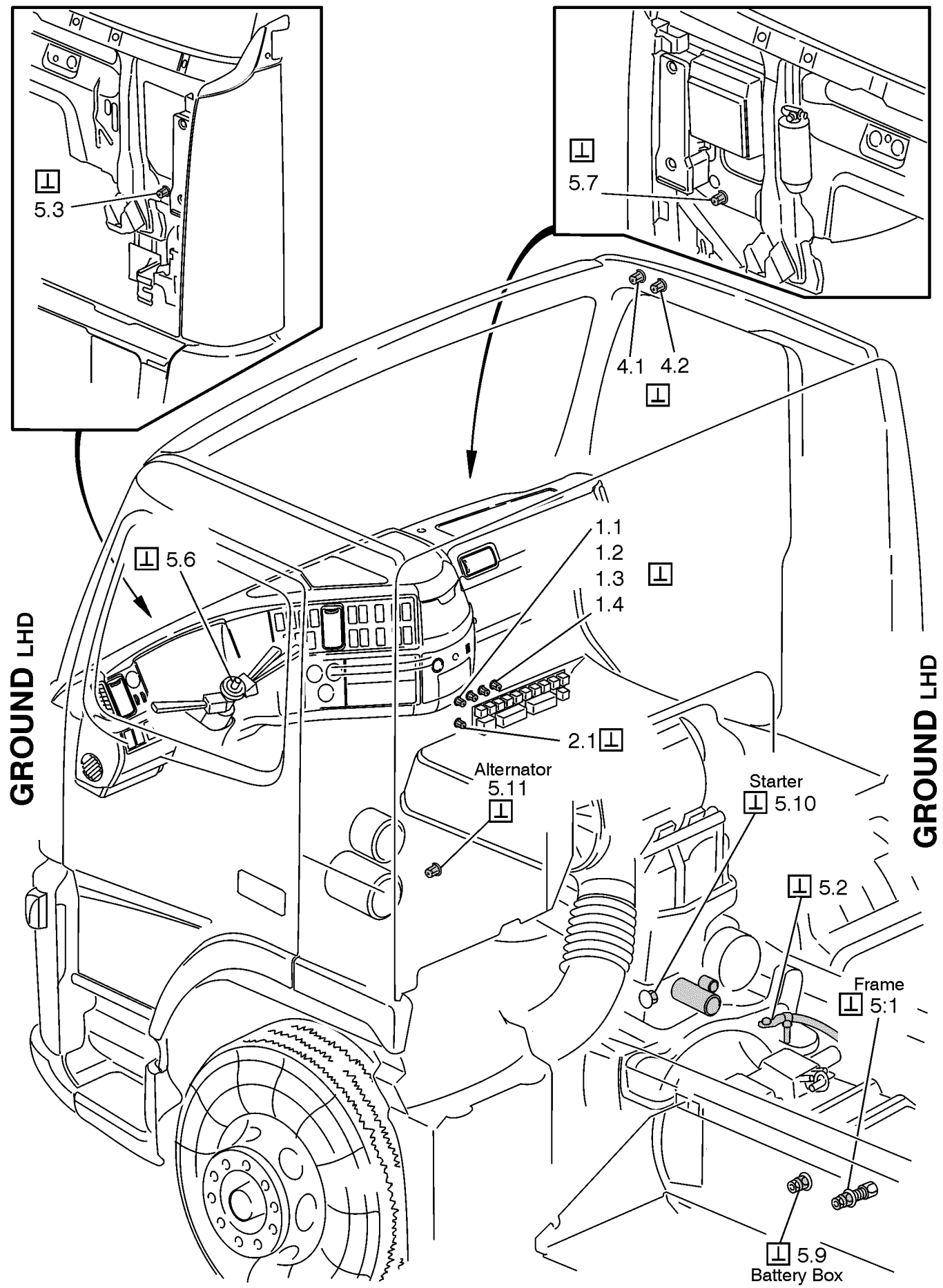
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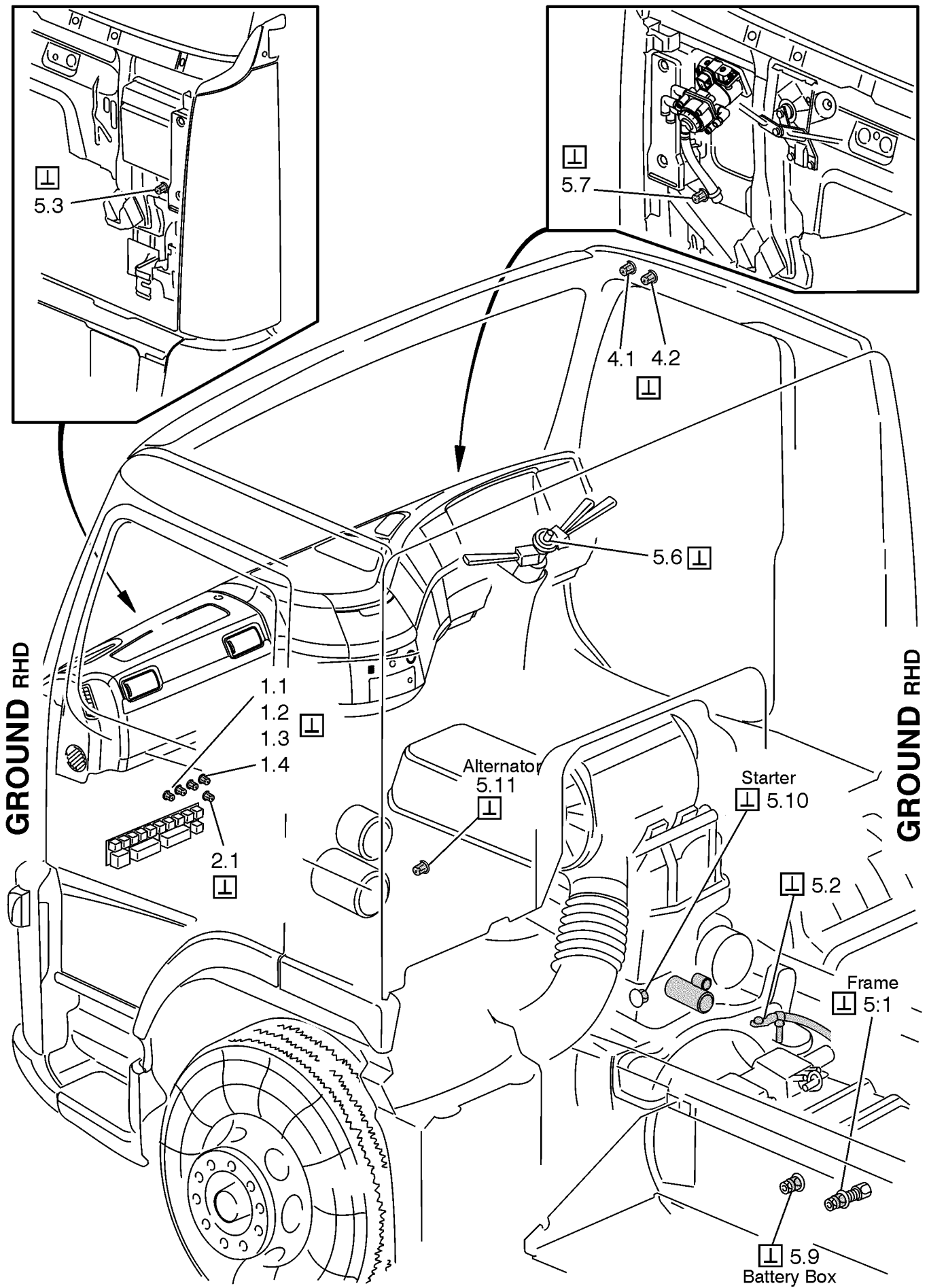




# Ground connections







T3019303

## List of ground connections

1.1	(IR:1 E)	4.1_2	(KI:2 B)	5.1_2	(NB:4 D)
1.1_A	(IR:1 E)	4.1_3	(KI:1 E)	5.1_3	(AB:1 D)
1.1_B	(BU_2:0 E)	4.1_4	(GL:1 D)	5.2	(AA:0 E)
1.1_C	(BU_2:2 E)	4.1_4	(IH:1 E)	5.3	(AA:0 E)
1.2_A	(BA:2 E)	4.1_5	(IH:0 E)	5.4	(FI:3 D)
1.2_B	(IS:0 E)	4.1_6	(BZ:0 D)	5.4	(FK:3 E)
1.3	(AE:4 E)	4.2_1	(BN:0 D)	5.6	(GQ:1 E)
1.4	(AA:3 E)	4.2_1	(BN:1 D)	5.7_1	(GE:1 D)
1.4	(AC:2 D)	4.2_2	(HI:0 B)	5.7_2	(GH:2 D)
1.4	(ZA RHD:1 C)	4.2_3	(IQ:1 E)	5.7_3	(GH:2 D)
1.4_B	(AA:4 E)	4.2_4	(BN:1 D)	5.7_4	(GG:2 C)
1.4_C	(HZ:1 D)	4.2_5	(KM:0 D)	5.7_5	(CV:0 C)
2.1_A	(CP:4 C)	4.2_6	(NI:3 E)	5.9_1	(AA:0 E)
2.1_B	(ZA RHD:1 D)	4.2_7	(NI:4 E)	5.9_1	(AB:0 D)
2.1_C	(NI:0 E)	4.2_8	(IJ:3 B)	5.9_1	(AB:2 D)
2.1_D	(ME:0 B)	5.1	(AA:0 E)	5.9_1	(AE:0 E)
2.1_E	(NA:2 D)	5.10	(AA:1 E)	5.9_3	(AB:0 D)
2.1_E	(NB:2 D)	5.11	(AA:2 E)	5.9_3	(AB:2 D)
2.1_F	(BE:4 E)	5.1_1	(NA:4 D)	5.9_3	(AE:0 E)
4.1_1	(GA:1 E)	5.1_1	(NB:4 D)		
4.1_1	(GA:4 E)	5.1_2	(NA:4 D)		

# List of connectors

ADR1:1	(AE:1 C)	BAB:11	(XB:2 D)	BN:18	(FG:0 C)
ADR1:2	(AE:1 C)	BAB:12	(XB:2 D)	BN:19	(FA:0 D)
ADR2:1	(AE:1 C)	BAB:13	(XB:3 D)	BN:20	(FA:0 D)
ADR2:2	(AE:1 C)	BAB:14	(XB:1 D)	BN:21	(FM:0 C)
ADR3:1	(AE:2 C)	BAB:15	(XB:1 D)	BN_2:1	(FA RHD:3 D)
ADR3:2	(AE:2 C)	BAB:16	(XB:3 D)	BN_2:2	(FA RHD:2 D)
ADR4:1	(AE:2 C)	BAB:17	(XB:4 D)	BN_2:3	(FA RHD:2 D)
ADR4:2	(AE:2 C)	BAB:18	(XB:1 D)	BN_2:4	(FA RHD:2 D)
AG:1	(FO:2 D)	BB1:1	(AE:1 A)	BN_2:5	(FA RHD:1 B)
AG:2	(FO:2 D)	BB1:2	(AE:0 D)	BN_2:6	(FA RHD:1 B)
AG:3	(FO:2 D)	BB1:3	(AE:1 E)	BN_2:7	(FA RHD:1 B)
AG:4	(FO:2 D)	BB1:4	(AE:1 A)	BN_2:8	(FA RHD:2 D)
AR:1	(DE:1 D)	BB1:5	(AE:2 D)	BN_2:9	(FA RHD:0 B)
AR:2	(DE:0 C)	BB1:6	(AE:2 D)	BN_2:10	(FA RHD:1 D)
AR:3	(DE:0 C)	BB1:7	(AE:0 D)	BN_2:11	(FA RHD:2 B)
AR:4	(DE:0 C)	BB2:1	(AE:0 C)	BN_2:12	(FA RHD:1 B)
AR:5	(DE:1 C)	BB2:2	(AE:1 C)	BN_2:13	(FA RHD:2 B)
AR:6	(DE:1 C)	BB2:3	(AE:1 D)	BN_2:14	(FA RHD:0 D)
AR:7	(DE:1 C)	BB2:4	(AE:1 D)	BN_2:15	(FA RHD:1 D)
AS:1	(FO:1 C)	BB3:1	(AB:0 B)	BN_2:16	(FA RHD:1 D)
AS:2	(FO:1 C)	BB3:2	(AB:1 C)	BN_2:17	(FA RHD:1 D)
AS:4	(FO:1 B)	BB3:3	(AB:1 D)	BN_2:18	(FA RHD:1 D)
AS:5	(FO:1 B)	BB3:3	(AB:2 C)	BN_2:19	(FA RHD:0 D)
AS:6	(FO:2 B)	BB3:4	(AB:0 B)	BN_2:20	(FA RHD:0 D)
AS:7	(FO:3 B)	BB3:5	(AB:3 C)	CA:1	(DQ:0 D)
AS:8	(FO:3 B)	BB3:6	(AB:0 B)	CA:2	(GB:3 B)
AS:9	(FO:1 E)	BCD:1	(XA:2 B)	CA:2	(ZA RHD:1 D)
AS12:1	(FO:3 C)	BCD:2	(XA:3 B)	CA:3	(DU:1 C)
AS12:2	(FO:3 C)	BCD:3	(XB:0 B)	CA:4	(DQ:0 C)
AS12:3	(FO:3 C)	BCD:4	(XA:2 B)	CA:5	(GB:3 B)
AS12:4	(FO:3 C)	BCD:5	(XA:2 B)	CA:6	(EO:3 B)
AS12:5	(FO:2 C)	BCD:6	(IX:2 D)	CA:9	(DU:1 C)
AS12:6	(FO:2 C)	BCD:7	(XA:3 B)	CA:10	(EO:3 B)
AS12:7	(FO:2 C)	BCD:8	(XA:3 B)	CA:11	(EO:3 B)
AS12:8	(FO:2 C)	BCD:9	(XB:0 B)	CA:11	(ZA RHD:1 D)
AS12:9	(FO:1 C)	BCD:10	(XA:3 B)	CA:12	(EO:3 B)
AS12:10	(FO:0 B)	BCD:11	(XA:4 B)	CA:12	(ZA RHD:1 D)
AS12:11	(FO:0 B)	BCD:12	(IX:2 D)	CA:13	(EO:3 B)
AS12:12	(FO:1 D)	BCD:13	(XA:2 B)	CA:14	(EO:3 B)
AWD:3	(DU:2 C)	BCD:14	(XA:4 B)	CA:15	(EO:3 B)
AWD:4	(DU:2 C)	BCD:15	(XB:0 C)	CA:16	(DU:1 D)
AWD:5	(DU:4 C)	BCD:16	(XB:0 C)	CA:17	(FU:0 C)
AWD:6	(DU:4 C)	BL:1	(KM:0 C)	CA:18	(FU:0 D)
AWD:8	(DU:2 D)	BL:3	(KM:0 D)	CA:19	(NC:0 C)
B07_1:1	(BI:2 C)	BL_2:1	(KM:1 D)	CA:19	(NU:0 C)
B07_1:2	(BI:2 D)	BL_2:2	(KM:1 D)	CA:20	(NC:1 C)
BA:1	(FI:1 C)	BL:3:1	(KM:0 C)	CA:20	(NU:1 C)
BA:1	(FK:1 D)	BN:1	(FA:1 A)	CB:1	(FQ:0 B)
BA:2	(FI:2 C)	BN:2	(FA:1 D)	CB:2	(FQ:0 D)
BA:2	(FK:3 D)	BN:3	(FA:1 D)	CB:2	(ZA RHD:1 B)
BA:3	(FI:0 C)	BN:4	(FA:2 D)	CB:3	(BA:0 D)
BA:3	(FK:0 D)	BN:5	(FA:0 B)	CB:3	(FQ:2 B)
BA:5	(FK:1 D)	BN:6	(FA:1 B)	CB:4	(BA:0 D)
BA:7	(FI:3 B)	BN:7	(FA:1 B)	CB:5	(FQ:2 D)
BA:7	(FK:3 C)	BN:8	(FA:2 D)	CB:6	(FQ:2 D)
BA:8	(FK:1 D)	BN:9	(FA:0 B)	CC/CJ:1	(IZ:2 B)
BAB:1	(XA:4 D)	BN:10	(FA:1 D)	CC/CJ:2	(IZ:2 B)
BAB:2	(XA:2 D)	BN:11	(FA:1 B)	CC/CJ:3	(IZ:1 A)
BAB:3	(XA:3 D)	BN:12	(FA:1 B)	CC/CJ:3	(ZA RHD:1 B)
BAB:4	(XA:2 D)	BN:13	(FA:1 B)	CC/CJ:4	(IZ:1 B)
BAB:5	(XA:3 D)	BN:14	(FA:0 D)	CC/CJ:4	(GC RHD:1 C)
BAB:6	(XA:2 D)	BN:15	(FA:1 D)	CC/CJ:5	(IX:2 A)
BAB:7	(XB:3 D)	BN:16	(FA:1 D)	CC:1	(DE:3 D)
BAB:8	(XA:3 C)	BN:16	(FG:1 C)	CC:3	(DE:3 C)
BAB:9	(XA:2 C)	BN:17	(FA:1 D)	CC:4	(DE:2 C)
BAB:10	(XB:3 D)	BN:18	(FA:1 D)	CC:5	(DE:3 C)

CC:6	(DE:2 C)	CFB:2	(FA RHD:2 C)	CFF_2:4	(CP:4 C)
CC:9	(DE:2 C)	CFB:3	(FA RHD:2 C)	CFF_2:5	(CP:3 C)
CC:10	(DE:2 C)	CFB:4	(FA RHD:2 C)	CLA:1	(IA:0 B)
CC:11	(DE:2 C)	CFB:5	(FA RHD:1 B)	CLA:2	(IA:1 B)
CC:12	(DE:2 D)	CFB:6	(FA RHD:1 B)	CLA:3	(BI:1 C)
CE:1	(CP:2 A)	CFB:7	(FA RHD:1 B)	CLA:4	(IA:0 D)
CE:2	(CP:1 A)	CFB:8	(FA RHD:2 C)	CLA:5	(IH:4 D)
CE:3	(CP:2 A)	CFB:9	(FA RHD:0 B)	CLA:6	(BI:3 D)
CE:4	(CP:2 A)	CFB:10	(FA RHD:1 C)	CLA:7	(BY:2 D)
CE:5	(CP:1 A)	CFB:11	(FA RHD:2 B)	CLA:7	(NK:0 D)
CE:6	(CP:1 A)	CFB:12	(FA RHD:1 B)	CLA:8	(FA RHD:2 D)
CE:7	(CP:2 A)	CFB:13	(FA RHD:2 B)	CLA:9	(AE:2 C)
CFA:1	(EE RHD:0 C)	CFB:14	(FA RHD:0 C)	CLA:9	(FA RHD:2 D)
CFA:1	(EI RHD:0 C)	CFB:15	(FA RHD:1 C)	CLA:10	(AE:2 C)
CFA:1	(EO RHD:3 C)	CFB:16	(FG:2 C)	CLA:10	(FA RHD:3 D)
CFA:2	(EE RHD:0 C)	CFB:16	(FA RHD:1 C)	CLA:11	(AE:2 C)
CFA:2	(EI RHD:0 C)	CFB:17	(FA RHD:1 C)	CLA:11	(FA RHD:3 D)
CFA:2	(EO RHD:3 C)	CFB:18	(FG:2 C)	CLA:12	(AE:2 C)
CFA:3	(EE RHD:3 C)	CFB:18	(FA RHD:1 C)	CLA:12	(FA RHD:3 D)
CFA:3	(EI RHD:1 C)	CFB:19	(FA RHD:0 C)	CLA:13	(FA RHD:3 D)
CFA:3	(EO RHD:1 C)	CFB:20	(FA RHD:0 C)	CLA:14	(FA RHD:3 D)
CFA:4	(EE RHD:1 C)	CFD:1	(DM:3 C)	CLA:15	(FA RHD:3 D)
CFA:4	(EI RHD:1 C)	CFC:1	(DI RHD:0 C)	CLA:16	(IS:3 C)
CFA:4	(EO RHD:1 C)	CFC:2	(DI RHD:1 C)	CLA:17	(IS:3 C)
CFA:5	(EE RHD:1 C)	CFC:3	(DI RHD:1 C)	CLA:18	(FA RHD:3 D)
CFA:5	(EI RHD:1 C)	CFC:4	(DI RHD:1 C)	CLA:19	(IQ:3 C)
CFA:5	(EO RHD:2 C)	CFC:5	(DI RHD:1 C)	CLA:20	(BI:3 D)
CFA:6	(EE RHD:3 C)	CFC:6	(DI RHD:1 C)	CLA:21	(IQ:3 D)
CFA:6	(EI RHD:1 C)	CFC:7	(DI RHD:2 C)	CLB:1	(DB:1 C)
CFA:6	(EO RHD:2 C)	CFC:8	(DI RHD:1 C)	CLB:1	(DC:1 D)
CFA:7	(EE RHD:2 C)	CFC:9	(DI RHD:1 C)	CLB:2	(DB:1 C)
CFA:7	(EI RHD:2 C)	CFC:14	(DI RHD:1 C)	CLB:2	(DC:2 D)
CFA:7	(EO RHD:2 C)	CFC:15	(DI RHD:1 C)	CLB:3	(DB:0 C)
CFA:8	(EE RHD:2 C)	CFC:16	(DI RHD:1 C)	CLB:3	(DC:2 D)
CFA:8	(EI RHD:2 C)	CFC:17	(DI RHD:2 C)	CLB:4	(DB:0 C)
CFA:8	(EO RHD:2 C)	CFC:18	(DI RHD:2 C)	CLB:4	(DC:2 D)
CFA:9	(EE RHD:4 C)	CFC:19	(DI RHD:2 C)	CLB:5	(DB:0 B)
CFA:9	(EI RHD:2 C)	CFC:20	(DI RHD:2 C)	CLB:5	(DC:0 B)
CFA:9	(EO RHD:3 C)	CFC:21	(DI RHD:2 C)	CLB:5	(XB:2 E)
CFA:10	(EE RHD:3 C)	CFD:1	(DI RHD:2 C)	CLB:6	(DB:0 B)
CFA:10	(EI RHD:3 C)	CFD:2	(DI RHD:2 C)	CLB:6	(DC:0 B)
CFA:10	(EO RHD:3 C)	CFD:2	(DM:2 C)	CLB:6	(XB:2 E)
CFA:11	(EE RHD:3 C)	CFD:3	(DI RHD:2 C)	CLB:7	(DB:0 D)
CFA:11	(EI RHD:3 C)	CFD:3	(DM:2 C)	CLB:7	(DC:2 D)
CFA:11	(EO RHD:4 C)	CFD:4	(DI RHD:2 C)	CLB:8	(DB:0 D)
CFA:12	(EE RHD:3 C)	CFD:4	(DM:2 C)	CLB:8	(DC:2 D)
CFA:12	(EI RHD:3 C)	CFD:5	(DI RHD:3 C)	CLB:9	(DB:0 C)
CFA:12	(EO RHD:4 C)	CFD:5	(DM:2 C)	CLB:9	(DC:2 D)
CFA:13	(EE RHD:0 C)	CFD:6	(DI RHD:3 C)	CLB:11	(DB:3 C)
CFA:13	(EI RHD:0 C)	CFD:6	(DM:3 C)	CLB:11	(DC:2 D)
CFA:13	(EO RHD:3 C)	CFD:7	(DI RHD:3 C)	CLB:12	(DC:2 D)
CFA:14	(EE RHD:0 C)	CFD:7	(DM:3 C)	CLB:15	(DB:1 D)
CFA:14	(EI RHD:0 C)	CFD:8	(DI RHD:3 B)	CLB:15	(DC:2 D)
CFA:14	(EOI RHD:3 C)	CFD:9	(DI RHD:3 B)	CLB_2:1	(DC:1 D)
CFA:15	(EE RHD:1 C)	CFE:1	(FG:1 C)	CLB_2:2	(DC:2 D)
CFA:15	(EI RHD:1 C)	CFE:2	(FG:2 C)	CLB_2:3	(DC:2 D)
CFA:15	(EO RHD:4 C)	CFE:3	(FG:2 C)	CLB_2:4	(DC:2 D)
CFA:16	(EE RHD:1 C)	CFE:4	(FG:2 C)	CLB_2:7	(DC:2 D)
CFA:16	(EI RHD:1 C)	CFE:5	(FG:2 C)	CLB_2:8	(DC:2 D)
CFA:17	(EE RHD:2 C)	CFE:6	(FG:2 C)	CLB_2:9	(DC:2 D)
CFA:17	(EI RHD:2 C)	CFF:1	(CP:4 B)	CLB_2:11	(DC:2 D)
CFA:18	(EE RHD:2 C)	CFF:2	(CP:3 B)	CLB_2:12	(DC:2 D)
CFA:18	(EI RHD:2 C)	CFF:3	(CP:3 B)	CLB_2:15	(DC:2 D)
CFA:19	(EE RHD:3 C)	CFF:4	(CP:4 C)	CLC:1	(HI:0 C)
CFA:19	(EI RHD:3 C)	CFF:5	(CP:3 C)	CLC:2	(HI:0 C)
CFA:20	(EE RHD:3 C)	CFF_2:1	(CP:4 B)	CLC:3	(HI:0 C)
CFA:20	(EI RHD:3 C)	CFF_2:2	(CP:4 B)	CLC:4	(HI:2 C)
CFB:1	(FA RHD:3 C)	CFF_2:3	(CP:3 B)	CLC:6	(HI:2 C)

CLC:7	(HI:3 C)	CLG:5	(EO:2 C)	CLI:1	(EO:0 D)
CLC:7	(ZA RHD:0 B)	CLG:6	(EE:3 B)	CLI:2	(EO:1 D)
CLC:8	(HI:1 C)	CLG:6	(EI:3 B)	CLI:3	(EO:1 D)
CLC:9	(HI:1 C)	CLG:6	(EO:1 C)	CLI:4	(EO:1 D)
CLC:10	(HI:4 C)	CLG:7	(EO:1 C)	CLI:5	(EO:3 C)
CLC:11	(HI:3 C)	CLG:8	(EO:1 C)	CLI:6	(EO:3 C)
CLC:12	(HI:2 C)	CLG:9	(EO:0 C)	CLI:7	(EO:3 C)
CLD:1	(IX:0 C)	CLG:10	(EO:0 C)	CLI:8	(EO:3 C)
CLD:2	(IX:0 C)	CLG:11	(EO:1 C)	CLI:9	(EO:3 C)
CLD:3	(IX:1 C)	CLG:12	(EO:1 C)	CLI:10	(EO:3 C)
CLD:4	(IX:1 C)	CLG:13	(EO:0 D)	CLI:11	(EO:4 C)
CLE:1	(IA:1 B)	CLG:13	(ZA RHD:3 C)	CLI:12	(EO:4 C)
CLE:2	(IA:3 B)	CLG:14	(EO:0 D)	CLM:1	(BE:1 B)
CLE:3	(BI:1 C)	CLG:14	(ZA RHD:3 C)	CLM:2	(BE:1 B)
CLE:4	(IA:1 E)	CLG:15	(EO:1 D)	CLM:3	(BE:2 B)
CLE:5	(IH:4 D)	CLG:16	(EO:3 C)	CLM:4	(BE:1 C)
CLE:6	(BI:3 C)	CLG:17	(EO:3 C)	CLM:5	(BE:1 C)
CLE:7	(BY:2 D)	CLG:18	(EO:3 C)	CLM:6	(BE:3 C)
CLE:7	(NK:0 D)	CLG:20	(EE:4 D)	CLM:7	(BE:3 C)
CLE:8	(IH:4 C)	CLG:20	(EI:4 C)	CLM:8	(BE:3 C)
CLE:9	(AE:1 C)	CLG:20	(EO:0 D)	CLM:9	(FA:3 D)
CLE:9	(FA:2 D)	CLG:21	(EI:0 C)	CLM:9	(FA RHD:1 C)
CLE:10	(AE:1 C)	CLH:1	(FA:3 B)	CLN:1	(BY:1 B)
CLE:10	(FA:2 D)	CLH:1	(FK:2 B)	CLN:2	(BY:1 C)
CLE:11	(AE:1 C)	CLH:2	(FA:4 C)	CLN:3	(BY:2 C)
CLE:11	(FA:2 D)	CLH:3	(FA:2 B)	CLN:4	(BY:2 C)
CLE:12	(AE:1 C)	CLH:3	(FK:2 B)	CLN:5	(BY:2 C)
CLE:12	(FA:2 D)	CLH:4	(FG:0 C)	CLN:6	(BY:3 C)
CLE:13	(FA:3 D)	CLH:4	(FK:2 B)	CLN:7	(BY:3 C)
CLE:14	(FA:3 D)	CLH:5	(FA:2 B)	CLN:8	(BY:4 C)
CLE:15	(FA:3 D)	CLH:5	(FK:2 B)	CLN:9	(BY:1 D)
CLE:16	(FA:3 D)	CLH:6	(FA:2 D)	CLN:10	(BY:1 D)
CLE:17	(IS:2 C)	CLH:6	(FK:2 B)	CLO:1	(BY:2 D)
CLE:18	(IS:2 C)	CLH:7	(FA:2 D)	CLO:2	(BY:3 D)
CLE:19	(FA:3 D)	CLH:8	(FA:2 D)	CLO:4	(BY:2 D)
CLE:20	(BI:3 C)	CLH:9	(FA:2 D)	CLO:5	(BY:2 D)
CLF:1	(IR:1 B)	CLH:10	(FA:3 D)	CLR:1	(IV:1 C)
CLF:2	(IR:1 B)	CLH:11	(FA:3 D)	CLR:2	(IV:1 C)
CLF:3	(IR:1 C)	CLH:12	(FA:3 D)	CLR:3	(IV:1 C)
CLF:4	(IR:1 C)	CLH:13	(FM:0 B)	CLR:4	(IV:1 C)
CLF:5	(IR:0 B)	CLH:14	(FG:0 C)	CLR:5	(IV:1 C)
CLF:6	(IR:0 B)	CLH:15	(FG:0 C)	CLR:6	(IV:1 C)
CLF:7	(IR:0 C)	CLH:16	(FA:3 B)	CLR:7	(IV:1 C)
CLF:8	(IR:0 C)	CLH:17	(FA:3 B)	CLR:8	(IV:2 C)
CLF:9	(IR:0 C)	CLH:18	(FG:1 C)	CLR:9	(IV:2 C)
CLF:10	(DB:2 B)	CLH:19	(FG:1 C)	CLR:10	(IV:2 C)
CLF:10	(DM:1 C)	CLH:20	(FA:3 C)	CLR:11	(IV:2 C)
CLF:11	(DB:1 D)	CLH:21	(FA:3 D)	CLR:12	(IV:2 C)
CLF:11	(DM:0 D)	CLH_R:1	(FA RHD:3 B)	CLR:13	(IV:1 B)
CLF:12	(DM:0 C)	CLH_R:1	(FK RHD:2 B)	CLR:14	(IV:1 B)
CLF:13	(XA:3 D)	CLH_R:2	(FA RHD:3 B)	CLR:15	(IV:1 B)
CLF:14	(XA:2 D)	CLH_R:3	(FA RHD:3 B)	CLR:16	(IV:1 B)
CLF:15	(XB:3 D)	CLH_R:3	(FK RHD:2 B)	CLR:17	(IV:2 B)
CLF:16	(XB:2 D)	CLH_R:4	(FK RHD:2 B)	CLR:18	(IV:2 B)
CLF:17	(FG:1 C)	CLH_R:5	(FA RHD:2 B)	CLR:19	(IV:2 B)
CLF:18	(XA:2 C)	CLH_R:5	(FK RHD:2 B)	CLR:20	(IV:2 B)
CLF:19	(XA:2 C)	CLH_R:6	(FA RHD:2 C)	CLR:21	(IV:2 B)
CLF:20	(XB:1 C)	CLH_R:6	(FK RHD:2 B)	CT:1	(BZ:1 D)
CLF:21	(XB:1 C)	CLH_R:7	(FA RHD:2 C)	CT:2	(BZ:1 D)
CLG:1	(EE:0 B)	CLH_R:8	(FA RHD:3 C)	CT:3	(BZ:1 D)
CLG:1	(EI:0 B)	CLH_R:9	(FA RHD:3 C)	CT:4	(BZ:1 D)
CLG:1	(EO:0 C)	CLH_R:10	(FA RHD:3 C)	CT:5	(BZ:1 C)
CLG:2	(EE:0 B)	CLH_R:11	(FA RHD:3 C)	CT:6	(BZ:1 C)
CLG:2	(EI:0 B)	CLH_R:16	(FA RHD:3 B)	CT:7	(BZ:1 C)
CLG:2	(EO:2 B)	CLH_R:17	(FA RHD:3 B)	CT/TC:1	(BZ RHD:2 C)
CLG:3	(EE:3 B)	CLH_R:12	(FA RHD:3 C)	CT/TC:2	(BZ RHD:2 C)
CLG:3	(EI:2 B)	CLH_R:20	(FA RHD:3 B)	CT/TC:3	(BZ RHD:1 C)
CLG:4	(EO:2 C)	CLH_R:21	(FA RHD:3 C)	CT/TC:4	(BZ RHD:1 C)

CT/TC:5	(BZ RHD:1 C)	CUB2/CUB:14	(HI:2 C)	DDB:3	(IE:2 C)
CT/TC:6	(BZ RHD:1 C)	CUB2/CUB:15	(HI:2 B)	DDB:4	(IE:0 C)
CT/TC:7	(BZ RHD:1 C)	CUB2/CUB:18	(IH:3 B)	DDB:5	(IE:0 B)
CUA:1	(GA:1 C)	CUC:1	(IH:3 C)	DDB:6	(IE:0 B)
CUA:2	(GA:4 C)	CUC:2	(IH:3 C)	DDB:7	(IE:1 B)
CUA:3	(IH:1 B)	CUC:3	(IH:1 B)	DDB:9	(IE:2 B)
CUA:4	(IH:0 B)	CUC:4	(IH:0 B)	DP:1	(BU:0 A)
CUA:5	(IH:3 B)	CUC:4	(IJ:2 B)	DP:2	(BU:0 A)
CUA:6	(IH:3 C)	CUC:5	(IH:3 B)	DP:3	(BU:1 D)
CUA:7	(IQ:0 B)	CUC:6	(IQ:1 C)	DP:4	(BU:0 D)
CUA:8	(KM:0 C)	CUC:7	(IQ:0 C)	DP:5	(BU:0 D)
CUA:9	(NI:1 B)	CUC:8	(IQ:1 C)	DP:6	(BU:0 D)
CUA:10	(NI:1 B)	CUC:9	(IU:2 D)	DP:7	(BU:1 D)
CUA:11	(KI:1 C)	CUC:9	(IV:2 D)	DP:8	(BU:1 D)
CUA:12	(IH:3 C)	CUC:10	(IU:2 D)	DP:9	(BU:1 D)
CUA:13	(IU:2 D)	CUC:10	(IV:2 D)	DP:10	(BU:1 D)
CUA:13	(IV:2 D)	CUC:11	(IU:2 D)	DP:11	(BU:1 D)
CUA:14	(IU:2 D)	CUC:11	(IV:1 D)	DP:12	(BU:1 D)
CUA:14	(IV:2 D)	CUC:12	(IU:2 D)	DPA:1	(IM:2 C)
CUA:15	(IU:2 D)	CUC:12	(IV:1 D)	DPA:3	(IE:3 B)
CUA:15	(IV:1 D)	CUC:13	(HI:1 B)	DPA:3	(ZA RHD:0 D)
CUA:16	(IU:2 D)	CUC:14	(HI:1 B)	DPA:4	(IE:3 B)
CUA:16	(IV:1 D)	CUC:15	(HI:1 B)	DPA:5	(IH:2 C)
CUA:17	(HI:1 C)	CUC:16	(HI:1 B)	DPA:6	(IE:3 B)
CUA:18	(HI:1 B)	CUC:17	(IH:3 B)	DPA:7	(IM:2 C)
CUA:19	(HI:1 C)	CUC:18	(IH:0 D)	DPA:8	(IM:2 C)
CUA:20	(HI:1 C)	CUC:18	(IJ:2 D)	DPA:9	(IM:2 C)
CUA:21	(GB:0 B)	CUC:19	(HI:3 B)	DPA:10	(IU:1 D)
CUB/TACH:1	(BM:1 A)	CUC:20	(HI:3 C)	DPA:10	(IU RHD:1 D)
CUB/TACH:2	(BM:3 C)	CUC:21	(HI:2 A)	DPA:10	(IV:1 D)
CUB/TACH:3	(BM:1 A)	CUD:1	(IH:1 B)	DPA:11	(IU:2 D)
CUB/TACH:4	(BM:2 A)	CUD:2	(IH:1 B)	DPA:11	(IU RHD:1 D)
CUB/TACH:5	(BM:3 A)	CUD:3	(IH:1 D)	DPA:11	(IV:1 D)
CUB/TACH:6	(BM:3 C)	CUE:1	(IH:0 B)	DPA:12	(IH:2 C)
CUB/TACH:7	(BM:2 C)	CUE:1	(IJ:0 A)	DS_L:1	(NU:2 C)
CUB/TACH:8	(BM:2 C)	CUE:3	(IH:0 D)	DS_L:2	(NU:2 D)
CUB/TACH:9	(BM:2 C)	CUE:3	(IJ:0 D)	DS_R:1	(GQ:0 B)
CUB/TACH:10	(BM:2 C)	CUF:1	(HI:0 B)	DS_R:1	(NU:2 C)
CUB/TACH:11	(IU:0 B)	CUF:2	(HI:0 B)	DS_R:2	(GQ:0 C)
CUB/TACH:12	(KI:1 C)	CUG:1	(NK:2 C)	DS_R:2	(NU:2 D)
CUB/TACH:13	(IM:0 B)	CUG:2	(NK:2 C)	DZ:1	(BU:0 B)
CUB/TACH:14	(HI:2 B)	CUG:4	(NK:2 C)	DZ:1	(BU_2:1 B)
CUB/TACH:15	(HI:2 B)	CUG:5	(NK:3 C)	DZ:2	(BU:1 B)
CUB/TACH:16	(GC:3 B)	CUH:1	(IJ:3 B)	DZ:2	(BU_2:1 B)
CUB/TACH:17	(GC:3 B)	CUI:1	(IJ:1 B)	DZ:3	(BU:1 B)
CUB/TACH:18	(IH:3 A)	CUI:3	(IJ:1 D)	DZ:3	(BU_2:1 B)
CUB:1	(BN:1 B)	DDA:1	(IM:1 C)	E03_L-:1	(NI:2 D)
CUB:2	(BN:3 C)	DDA:2	(IE:0 B)	E03_L+:1	(NI:2 D)
CUB:3	(BN:1 B)	DDA:3	(IE:1 A)	E03_R-:1	(NI:2 D)
CUB:4	(BN:3 B)	DDA:3	(ZA RHD:1 B)	E03_R+:1	(NI:2 D)
CUB:5	(BN:3 B)	DDA:4	(IE:2 B)	E18L_A:1	(J:1 C)
CUB:6	(BN:3 C)	DDA:5	(IH:2 C)	E18L_B:1	(J:1 C)
CUB:7	(BN:2 C)	DDA:6	(IE:3 B)	E27:1	(GF:3 C)
CUB:8	(BN:2 C)	DDA:7	(IM:1 C)	E27:2	(GF:3 C)
CUB:9	(BN:2 C)	DDA:8	(IM:1 C)	E27:3	(GF:3 C)
CUB:10	(BN:2 C)	DDA:9	(IM:1 C)	E27:4	(GF:3 C)
CUB:11	(BN:3 C)	DDA:10	(IU:1 D)	E27:5	(GF:3 C)
CUB:11	(IU:0 B)	DDA:10	(IU RHD:1 D)	E27:6	(GF:3 C)
CUB:12	(KI:1 B)	DDA:10	(IV:1 D)	E27:7	(GF:3 C)
CUB:13	(IM:0 B)	DDA:11	(IU:1 D)	E27_1:1	(GF:0 C)
CUB:14	(HI:2 C)	DDA:11	(IU RHD:1 D)	E27_1:2	(GF:0 C)
CUB:15	(HI:1 B)	DDA:11	(IV:1 D)	E27_1:3	(GF:1 C)
CUB:16	(GC:3 A)	DDA:12	(IH:2 C)	E27_1:4	(GF:1 C)
CUB:17	(GC:3 B)	DDA:13	(IE:0 C)	E27_1:5	(GF:1 C)
CUB:18	(IH:3 B)	DDA:14	(IE:1 C)	E27_1:7	(GF:0 C)
CUB2/CUB:11	(IU:0 B)	DDA:15	(IE:1 C)	EA:1	(CS:1 B)
CUB2/CUB:12	(KI:1 B)	DDB:1	(IE:1 C)	EA:2	(CS:1 B)
CUB2/CUB:13	(IM:0 B)	DDB:2	(IE:2 C)	EA:3	(CS:2 B)

EA:4	(CS:1 B)	EM:6	(CO:3 B)	FA:10	(NB:0 A)
EI:1	(CK:2 D)	EM:6	(CS:2 B)	FA:10	(NU:2 B)
EI:1	(CO:0 A)	EM:7	(CL:3 D)	FA:10	(NU:2 B)
EI:2	(CK:1 D)	EM:7	(CM:3 D)	FA:10	(GC RHD:1 B)
EI:2	(CO:0 A)	EM:7	(CO:4 B)	FA:11	(GB:0 A)
EI:3	(CK:2 D)	EM:8	(CS:2 B)	FA:11	(NA:3 A)
EI:3	(CO:0 A)	EM:9	(CL:1 D)	FA:11	(NB:3 A)
EI:4	(CK:2 D)	EM:9	(CM:1 D)	FA:12	(BA:1 D)
EI:4	(CO:0 A)	EM:9	(CO:1 B)	FA:13	(GQ:2 C)
EI:5	(CK:1 D)	EM:9	(CS:3 B)	FA:14	(AA:2 A)
EI:5	(CO:0 A)	EM:10	(CL:0 D)	FA:16	(GG:1 A)
EI:6	(CK:2 D)	EM:10	(CM:0 D)	FA:17	(GG:1 A)
EI:6	(CO:0 A)	EM:10	(CO:3 B)	FA:18	(GG:1 A)
EI:7	(CK:3 D)	EM:10	(CS:3 D)	FA:19	(GG:1 A)
EI:7	(CO:1 A)	EM:11	(CL:2 D)	FA:20	(GG:0 A)
EI:8	(CK:1 D)	EM:11	(CM:2 D)	FA:21	(GG:0 A)
EI:8	(CO:0 A)	EM:11	(CO:0 B)	FB:1	(KI:2 A)
EI:9	(AA:3 D)	EM:12	(CL:0 D)	FB:3	(KI:2 B)
EI:10	(AA:3 D)	EM:12	(CM:0 D)	FE:1	(ME:1 B)
EI:13	(CK:1 D)	EM:12	(CO:4 B)	FE:1	(NC:0 B)
EI:13	(CO:0 A)	EM:12	(CS:2 B)	FE:1	(NU:0 A)
EI:15	(CK:0 D)	EMB:1	(IF:0 D)	FE:2	(ME:1 B)
EI:15	(CO:0 A)	EMB:2	(IF:1 D)	FE:2	(NC:0 B)
EI:21	(CK:3 D)	EN:1	(AA:3 D)	FE:2	(NU:0 A)
EI:21	(CO:3 A)	EN:2	(AA:3 D)	FE:3	(ME:1 B)
EI:23	(HG:0 D)	EN:3	(HG:0 D)	FE:3	(NC:1 B)
EI:23	(HY:2 D)	EN:3	(HY:2 D)	FE:3	(NU:0 A)
EI:31	(CK:0 D)	EN:4	(AA:2 D)	FE_B:1	(IF:1 A)
EI:31	(CO:4 A)	EP:1	(CL:4 D)	FE_B:2	(IF:1 A)
EI:33	(CK:2 D)	EP:1	(CO:2 A)	FE_B:3	(IF:1 A)
EI:33	(CO:0A D)	EP:2	(CL:4 D)	FE_BR:1	(IF:2 A)
EI:33	(CK:2 D)	EP:2	(CO:1 A)	FE_BR:2	(IF:2 A)
EI:35	(CK:3 D)	EP:4	(CL:4 D)	FE_BR:3	(IF:1 A)
EI:35	(CO:2 A)	EP:4	(CO:1 A)	FE2:1	(NC:1 B)
EI:37	(CK:0 D)	EP:7	(CL:3 D)	FE2:1	(NU:0 B)
EI:37	(CO:3 A)	EP:7	(CO:2 A)	FE2:2	(NC:0 B)
EI:39	(CK:0 D)	EPR:1	(CK:3 B)	FE2:2	(NU:0 B)
EI:39	(CO:4 A)	EPR:1	(CL:3 B)	FE2:3	(NC:1 B)
EL:2	(CO:0 A)	EPR:1	(CM:2 B)	FE2:3	(NU:0 B)
EL:2	(CL:2 D)	EPR:3	(CK:3 B)	FL:1	(GA:2 D)
EL:3	(CL:1 D)	EPR:3	(CL:3 B)	FL:2	(GA:2 C)
EL:3	(CO:0 A)	EPR:3	(CM:3 B)	FL:3	(GA:2 C)
EL:4	(CL:1 D)	EPR:4	(CK:3 C)	FL:4	(NK:3 D)
EL:4	(CO:0 A)	EPR:4	(CL:3 C)	FL:5	(NK:3 D)
EL:6	(CL:0 D)	EPR:4	(CM:2 C)	FL:6	(GA:2 C)
EL:6	(CO:4 A)	EQ_A:1	(EO:4 B)	FL:7	(GA:2 C)
EM:1	(CL:1 D)	EQ_A:2	(EO:4 B)	FL:8	(GA:1 C)
EM:1	(CM:1 D)	EQ_A:3	(EO:4 B)	FL:9	(GA:3 C)
EM:1	(CO:1 B)	EQ_A:4	(EO:4 C)	FL:10	(GQ:1 C)
EM:1	(CS:3 B)	EXT:1	(HZ:1 B)	FL:11	(GQ:1 B)
EM:2	(CL:2 D)	EXT:2	(HZ:1 B)	FL:12	(GQ:1 B)
EM:2	(CM:2 D)	FA:1	(BI:4 B)	FL:13	(GU:0 D)
EM:2	(CO:2 B)	FA:2	(FA:2 B)	FL:14	(GU:0 D)
EM:2	(CS:3 B)	FA:2	(FA RHD:2 B)	FL:15	(GU:0 D)
EM:3	(CL:2 D)	FA:3	(FA:2 B)	FL:16	(GQ:1 C)
EM:3	(CM:2 D)	FA:3	(FA RHD:3 B)	FL:20	(BE:1 D)
EM:3	(CO:2 B)	FA:5	(GA:2 C)	FL:21	(BE:1 D)
EM:3	(CS:3 B)	FA:5	(NI:1 A)	FL:22	(BE:1 D)
EM:4	(CL:1 D)	FA:6	(BA:0 C)	FL:23	(BE:1 E)
EM:4	(CM:1 D)	FA:7	(BI:1 C)	FL:25	(GA:2 D)
EM:4	(CO:1 B)	FA:8	(GA:4 C)	FL:29	(KA:0 C)
EM:4	(CS:3 B)	FA:8	(NA:0 A)	FMS:1	(BX:1 D)
EM:5	(CL:1 D)	FA:8	(NB:0 A)	FMS:2	(BX:1 D)
EM:5	(CM:1 D)	FA:9	(GB:3 D)	FR:1	(GA:3 D)
EM:5	(CO:2 B)	FA:9	(NA:0 A)	FR:2	(GA:3 C)
EM:5	(CS:3 B)	FA:9	(NB:0 A)	FR:3	(GA:3 C)
EM:6	(CL:3 D)	FA:10	(GC:3 B)	FR:4	(NK:3 D)
EM:6	(CM:2 D)	FA:10	(NA:0 A)	FR:5	(NK:4 D)

FR:6	(GA:2 C)	JV/JC:8	(ZA RHD:0 C)	MA:20	(CK:3 C)
FR:7	(GA:3 C)	JV/JC:9	(AA:3 B)	MA:20	(CK:4 C)
FR:8	(GA:4 C)	JV/JC:9	(BA:0 C)	MA:20	(CS:1 A)
FR:9	(GA:3 C)	JV/JC:10	(FU:0 D)	MA:21	(CK:0 C)
FR:10	(GM:0 C)	JV/JC:11	(BA:3 C)	MA:21	(CL:0 C)
FR:11	(GM:0 C)	JV/JC:12	(BA:3 D)	MA:21	(CM:0 C)
FR:13	(GU:1 D)	JV/JC:13	(IM:2 C)	MA:21	(CS:0 C)
FR:14	(GU:1 D)	JV/JC:14	(DQ:1 C)	MA:22	(CK:3 C)
FR:15	(GU:1 D)	JV/JC:15	(BU:0 B)	MA:22	(CL:3 C)
FR:16	(GM:1 C)	JV/JC:16	(IM:2 A)	MA:22	(CM:3 C)
FR:17	(BI:2 C)	JV/JC:17	(HP:0 D)	MA:23	(CK:0 C)
FR:18	(BI:2 D)	JV/JC:17	(HY RHD:1 B)	MA:23	(CL:0 C)
FR:25	(GA:3 D)	JV/JC:18	(KM:1 C)	MA:24	(CK:0 C)
FR:29	(KA:0 C)	JV/JC:18	(GC RHD:3 C)	MA:24	(CL:0 C)
FS:1	(KI:1 C)	JV/JC:19	(BI:2 D)	MA:24	(CM:0 C)
FS:2	(KI:1 D)	JV/JC:20	(AC:3 D)	MA:25	(CK:1 C)
FS:3	(KI:1 D)	JV/JC:20	(BU:1 B)	MA:25	(CL:1 C)
FS_2:1	(KI:0 C)	JV/JC:21	(IX:2 B)	MA:25	(CM:1 C)
FS_2:2	(KI:0 D)	KV/KC:1	(GB:0 B)	MB:1	(BI:2 D)
FT:1	(IR:0 D)	KV/KC:2	(GB:0 B)	MB:2	(BA:0 C)
FT:2	(IR:0 D)	KV/KC:3	(GB:0 B)	MB:4	(BA:1 B)
FT:3	(IR:1 D)	LI:1	(FG:0 B)	MB:5	(BI:2 C)
GA:1	(GB:3 D)	LI:2	(FG:0 B)	MB:8	(BI:1 D)
GA:2	(BI:1 D)	LI:3	(FG:0 B)	MB:9	(BA:0 B)
GA:3	(BI:1 C)	LI:4	(FG:1 B)	MB:14	(BI:1 C)
GA:4	(BA:1 B)	LI:5	(FG:1 B)	MB:15	(GB:3 D)
GA:5	(BA:0 B)	LI:6	(FG:1 B)	MB:16	(BA:0 C)
GA:6	(BA:0 C)	MA:1	(CS:2 A)	MC:1	(EO:0 D)
GA:7	(BA:0 C)	MA:1	(HG:0 C)	MC:2	(EO:1 D)
GB:1	(BI:2 C)	MA:1	(HY:2 D)	MC:3	(EO:1 D)
GB:2	(BI:2 D)	MA:2	(AA:2 C)	MC:4	(EO:1 D)
GB:3	(BM:2 D)	MA:3	(CK:2 C)	MC:5	(EO:1 D)
GB:4	(BM:2 D)	MA:3	(CL:2 C)	MC:6	(GQ:0 B)
GB:5	(BM:2 D)	MA:3	(CM:2 C)	MC:6	(NU:2 C)
GB:6	(BM:2 D)	MA:3	(CS:3 A)	MC:7	(GQ:0 C)
GC:1	(DE:0 B)	MA:4	(CK:2 C)	MC:7	(NU:2 D)
GC:2	(DE:0 B)	MA:4	(CL:2 C)	MC:8	(NK:1 C)
GC:3	(DE:0 B)	MA:4	(CM:2 C)	MC:9	(NK:1 D)
GC:4	(DE:0 B)	MA:5	(CM:1 C)	MOT:1	(HZ:2 C)
GC:7	(DE:2 B)	MA:5	(CL:1 C)	MOT:2	(HZ:2 C)
GC:8	(DE:2 B)	MA:5	(CS:3 A)	MOT:3	(HZ:1 C)
GC:10	(DE:3 E)	MA:5	(CK:1 C)	MOT:4	(HZ:2 C)
GC:11	(DE:0 B)	MA:6	(CK:1 C)	MP:1	(CO:3 C)
GC:12	(DE:0 C)	MA:6	(CL:1 C)	MT:1	(CS:1 C)
GD:2	(HZ:1 C)	MA:6	(CM:1 C)	MT:2	(CS:1 C)
IDA:1	(GL:1 B)	MA:6	(CS:3 A)	MT:3	(CS:3 D)
IDA_2:1	(GL:0 B)	MA:7	(CK:3 C)	MT:5	(CS:2 D)
IDA_C:1	(GL:2 B)	MA:7	(CL:3 C)	MT:6	(CS:2 D)
IDA_D:1	(GL:3 A)	MA:7	(CM:2 C)	MT:7	(CS:2 D)
IDB:1	(GL:1 D)	MA:8	(CK:2 C)	MT:8	(CS:2 D)
IDB_2:1	(GL:0 B)	MA:8	(CL:2 C)	MT:9	(CS:4 B)
IDB_B:1	(GL:2 D)	MA:8	(CM:2 C)	MT:10	(CS:4 B)
IDB_C:1	(GL:2 D)	MA:9	(AC:4 D)	OBD:4	(XC:0 B)
IDB_D:1	(GL:3 A)	MA:9	(CS:1 A)	OBD:5	(XC:0 B)
IS:1	(DE:3 B)	MA:10	(XC:0 C)	OBD:6	(XC:1 B)
IS:2	(DE:3 B)	MA:11	(XC:0 C)	OBD:14	(XC:1 B)
IS:3	(DE:2 C)	MA:13	(AA:3 D)	OBD:16	(XC:0 B)
IS:4	(DE:2 C)	MA:13	(CP:2 A)	OBD:17	(XC:0 B)
JV/JC:1	(DB:0 D)	MA:13	(CS:1 A)	OBD:18	(XC:0 B)
JV/JC:2	(KA:1 D)	MA:15	(CK:1 C)	OH:1	(GE:1 B)
JV/JC:3	(DQ:1 B)	MA:15	(CL:1 C)	OH:2	(GE:2 B)
JV/JC:4	(AE:3 B)	MA:15	(CM:1 C)	OH:3	(GE:1 B)
JV/JC:5	(AE:3 B)	MA:15	(CP:2 A)	OH:4	(GE:2 B)
JV/JC:6	(AE:3 B)	MA:15	(CS:3 A)	OH:9	(GE:1 B)
JV/JC:7	(AC:1 D)	MA:16	(BI:0 D)	OH:13	(GE:1 B)
JV/JC:7	(AE:4 D)	MA:17	(CU:0 C)	OH:14	(GE:2 B)
JV/JC:8	(CP:1 B)	MA:19	(CK:0 C)	OH:17	(GE:1 B)
JV/JC:8	(HI:3 D)	MA:19	(CL:0 C)	OH:18	(GE:3 B)



OH:24	(GE:1 D)	PS:7	(DI:1 C)	PW:13	(CS:0 A)
PAS:1	(FP:0 C)	PS:8	(DI:1 C)	PW:14	(AE:2 D)
PAS:6	(FP:0 D)	PS:9	(DI:1 C)	PW:15	(CK:3 B)
PAS:6	(ZA RHD:1 B)	PS:14	(DI:1 C)	PW:15	(CLK:3 B)
PH_1:1	(HM:0 B)	PS:15	(DI:1 C)	PW:15	(CM:3 B)
PH_1:2	(HM:0 B)	PS:16	(DI:1 C)	PW:16	(CK:3 B)
PH_1:3	(HM:2 B)	PS:17	(DI:1 C)	PW:16	(CL:3 B)
PH_1:4	(HM:1 B)	PS:18	(DI:1 C)	PW:16	(CM:2 B)
PH_1:5	(HM:2 B)	PS:19	(DI:1 C)	PW:17	(CK:3 C)
PH_1:6	(HM:2 C)	PS:20	(DI:1 C)	PW:17	(CLK:3 C)
PH_1:7	(HM:2 D)	PS:21	(DI:1 C)	PW:17	(CM:2 C)
PH_1:8	(HM:0 D)	PS_2:1	(DI RHD:0 D)	PW:18	(AB:0 B)
PH_1:9	(HM:0 D)	PS_2:2	(DI RHD:0 D)	PW:19	(IQ:3 C)
PH_1:10	(HM:3 D)	PS_2:3	(DI RHD:1 D)	PW:20	(IQ:3 D)
PH_1:11	(HM:1 B)	PS_2:4	(DI RHD:1 D)	PW:21	(AB:0 B)
PH_2:1	(HP:0 B)	PS_2:5	(DI RHD:1 D)	R23:1	(CV:1 D)
PH_2:2	(HP:0 C)	PS_2:6	(DI RHD:1 D)	R23:2	(CV:2 D)
PH_2:3	(HP:0 D)	PS_2:7	(DI RHD:2 D)	R23:3	(CV:1 D)
PL:1	(NC:3 C)	PS_2:8	(DI RHD:1 D)	R23:4	(CV:2 D)
PL:2	(NA:1 C)	PS_2:9	(DI RHD:1 D)	R23:5	(CV:1 D)
PL:2	(NB:1 C)	PS_2:14	(DI RHD:1 D)	R23:6	(CV:3 D)
PL:3	(NA:1 C)	PS_2:15	(DI RHD:1 D)	RA:1	(GC:2 E)
PL:3	(NB:2 C)	PS_2:16	(DI RHD:1 D)	RA:2	(GC:1 B)
PL:4	(NA:1 C)	PS_2:17	(DI RHD:2 D)	RA:3	(GC:1 B)
PL:4	(NB:1 C)	PS_2:18	(DI RHD:2 D)	RA:4	(GC:1 B)
PL:5	(NA:2 C)	PS_2:19	(DI RHD:2 D)	RA:5	(GC:2 B)
PL:5	(NB:2 C)	PS_2:20	(DI RHD:2 D)	RA:6	(GC:2 B)
PL:6	(NA:3 C)	PS_2:21	(DI RHD:2 D)	RA:7	(GC:1 B)
PL:6	(NB:3 C)	PT:1	(DE:0 B)	RA:7	(GC RHD:1 C)
PL:7	(NC:1 C)	PT:1	(DN:1 B)	RA:8	(GC:1 B)
PL:7	(NU:1 C)	PT:1	(DP:0 B)	RA:9	(GC:2 B)
PL:8	(NA:4 C)	PT:2	(DE:0 B)	RA:10	(GC:2 B)
PL:8	(NB:4 C)	PT:2	(DN:1 B)	RA:10	(GC RHD:2 C)
PL:9	(NC:1 C)	PT:2	(DP:1 B)	RA:11	(GC:2 B)
PL:9	(NU:1 C)	PT:3	(DE:0 B)	RA:12	(BI:2 C)
PL:10	(NC:2 C)	PT:3	(DN:1 B)	RA:13	(BI:2 D)
PL:10	(NU:2 C)	PT:3	(DP:1 B)	RA:14	(DU:3 C)
PL:11	(NA:0 C)	PT:4	(DE:0 B)	RA:15	(HI:0 C)
PL:11	(NB:0 C)	PT:4	(DN:1 B)	RA:15	(HM:0 D)
PL:12	(NA:1 C)	PT:4	(DP:1 B)	RA:16	(HI:0 C)
PL:12	(NB:0 C)	PT:6	(DE:0 B)	RA:16	(HM:0 D)
PL:13	(NC:2 C)	PT:6	(DN:0 B)	RA:17	(DU:3 C)
PL:13	(NU:1 C)	PT:6	(DP:0 B)	RA:19	(BY:2 D)
PL:14	(NC:2 C)	PT:7	(DE:0 D)	RC:1	(BY:3 D)
PL:14	(NU:1 C)	PT:7	(DN:0 B)	RC:2	(GG:0 B)
PL:15	(NC:2 C)	PT:7	(DP:0 B)	RC:2	(GK:0 A)
PL:15	(NU:2 C)	PT:8	(DN:0 B)	RC:3	(GG:0 B)
PL:16	(NC:2 C)	PT:8	(XC:2 D)	RC:3	(GK:1 A)
PL:16	(NU:2 C)	PT:9	(DN:0 B)	RC:4	(GG:0 B)
PL:17	(NC:2 C)	PT:9	(XC:1 D)	RC:4	(GK:1 A)
PL:17	(NU:2 C)	PT:12	(XC:2 D)	RC:5	(GG:0 B)
PL:18	(NA:2 C)	PT:13	(XC:2 D)	RC:5	(GK:1 A)
PL:18	(NB:3 C)	PW:1	(AB:4 C)	RC:6	(GG:0 B)
PL:19	(NC:3 C)	PW:1	(CS:0 A)	RC:6	(GK:1 A)
PL:20	(NC:3 C)	PW:1	(ZA RHD:3 C)	RC:7	(GG:1 B)
PL:20	(NU:2 C)	PW:2	(AB:3 C)	RC:8	(BY:3 D)
PL:21	(NC:3 C)	PW:3	(AE:0 C)	RC:9	(GG:1 B)
PL:21	(NU:3 C)	PW:4	(AE:1 C)	RC:10	(GG:1 B)
POS_A:1	(GL:3 B)	PW:5	(AE:1 D)	RC:10	(GK:1 A)
POS_B:1	(GL:3 B)	PW:6	(AE:1 D)	RC:11	(GG:1 B)
POS_C:1	(GL:4 B)	PW:7	(AE:2 D)	RC:12	(GG:1 B)
POS_D:1	(GL:4 B)	PW:8	(AE:2 D)	RC:14	(GG:1 B)
PS:1	(DI:0 C)	PW:9	(BI:2 D)	RC:15	(GC:0 B)
PS:2	(DI:0 C)	PW:10	(BI:2 C)	RC:16	(GC:2 B)
PS:3	(DI:0 C)	PW:11	(BI:2 C)	RC:17	(GG:0 B)
PS:4	(DI:0 C)	PW:12	(CS:0 A)	RC:18	(GG:0 B)
PS:5	(DI:0 C)	PW:12	(GB:0 D)	RC:19	(GK:1 A)
PS:6	(DI:0 C)	PW:13	(AB:2 B)	RC:19	(KE:0 C)

RC:20	(GK:1 A)	SI_3:1	(CP:3 A)	SW_1:18	(EE:2 C)
RC:20	(KE:0 D)	SI_3:1	(ZA RHD:3 C)	SW_1:18	(EI:2 C)
RC:21	(CP:3 A)	SI_3:2	(CP:3 A)	SW_1:19	(EE:3 C)
RC:21	(GK:1 A)	SI_3:2	(ZA RHD:3 C)	SW_1:19	(EI:3 C)
RC_2:2	(GH:1 B)	SI_3:4	(ZA RHD:3 C)	SW_1:20	(EE:3 C)
RC_2:3	(GH:1 B)	SI_3:5	(ZA RHD:3 C)	SW_1:20	(EI:3 C)
RC_2:4	(GH:1 B)	SLF:1	(NI:0 D)	SW_2:1	(EO:3 D)
RC_2:5	(GH:1 B)	SLF:2	(NI:0 E)	SW_2:10	(EO:3 D)
RC_2:6	(GH:1 B)	SLR:1	(NI:1 C)	SW_2:11	(EO:4 D)
RC_2:7	(GH:1 B)	SLR:2	(NI:1 C)	SW_2:12	(EO:4 D)
RC_2:9	(GH:1 B)	SLR_2:1	(NI:1 C)	SW_2:13	(EO:3 D)
RC_2:10	(GH:1 B)	SLR_2:2	(NI:1 C)	SW_2:14	(EO:3 D)
RC_2:11	(GH:1 B)	SM_F:1	(GC:3 C)	SW_2:15	(EO:4 D)
RC_2:12	(GH:1 B)	SM_F:2	(GC:0 C)	SW_2:2	(EO:3 D)
RC_2:14	(GH:0 B)	SM_F:4	(GC:3 D)	SW_2:3	(EO:1 D)
RC_2:17	(GH:0 B)	SM_O:1	(GE:2 B)	SW_2:4	(EO:1 D)
RC_2:18	(GH:0 B)	SM_O:2	(GE:1 B)	SW_2:5	(EO:2 D)
RC_2:19	(GH:0 B)	SM_O:4	(GE:1 B)	SW_2:6	(EO:2 D)
RC_2:20	(GH:0 B)	SM_R:1	(GC:3 C)	SW_2:7	(EO:2 D)
REF:1	(IQ:3 C)	SM_R:2	(GC:0 C)	SW_2:8	(EO:2 D)
REF:2	(IQ:3 D)	SM_R:4	(GC:3 D)	SW_2:9	(EO:3 D)
REV:1	(NU:2 C)	SP:1	(BM:2 C)	SW_3:1	(EE RHD:0 D)
RF:1	(IQ:3 C)	SP:2	(BM:2 C)	SW_3:1	(EI RHD:0 D)
RF:4	(IQ:3 D)	SP:3	(BM:2 C)	SW_3:2	(EE RHD:0 D)
RP:1	(DI:2 C)	SP:4	(BM:2 C)	SW_3:2	(EI RHD:0 D)
RP:2	(DI:2 C)	SS:1	(BE:3 D)	SW_3:3	(EE RHD:3 D)
RP:3	(DI:2 C)	SS:2	(BE:3 D)	SW_3:3	(EI RHD:1 D)
RP:4	(DI:2 C)	SS:3	(BE:1 C)	SW_3:4	(EE RHD:1 D)
RP:5	(DI:2 C)	SS:4	(BE:1 C)	SW_3:4	(EI RHD:1 D)
RP:6	(DI:2 C)	ST:1	(GG:4 B)	SW_3:5	(EE RHD:1 D)
RP:7	(DI:2 C)	ST:1	(GK:3 A)	SW_3:5	(EI RHD:1 D)
RP:8	(DI:2 B)	ST_2:1	(GH:3 B)	SW_3:6	(EE RHD:3 D)
RP:9	(DI:2 B)	ST_3:1	(CP:3 A)	SW_3:6	(EI RHD:1 D)
RP_2:1	(DI RHD:2 D)	ST_3:1	(ZA RHD:4 C)	SW_3:7	(EE RHD:2 D)
RP_2:2	(DI RHD:2 D)	SW_1:1	(EE:0 C)	SW_3:7	(EI RHD:2 D)
RP_2:3	(DI RHD:2 D)	SW_1:1	(EI:0 C)	SW_3:8	(EE RHD:2 D)
RP_2:4	(DI RHD:2 D)	SW_1:2	(EE:0 C)	SW_3:8	(EI RHD:2 D)
RP_2:5	(DI RHD:3 D)	SW_1:2	(EI:0 C)	SW_3:9	(EE RHD:4 D)
RP_2:6	(DI RHD:3 D)	SW_1:3	(EE:0 D)	SW_3:9	(EI RHD:2 D)
RP_2:7	(DI RHD:3 D)	SW_1:3	(EI:1 C)	SW_3:10	(EE RHD:3 D)
RP_2:8	(DI RHD:3 B)	SW_1:4	(EE:1 C)	SW_3:10	(EI RHD:3 D)
RP_2:9	(DI RHD:3 B)	SW_1:4	(EI:1 C)	SW_3:11	(EE RHD:3 D)
RT:1	(DM:3 C)	SW_1:5	(EE:1 C)	SW_3:11	(EI RHD:3 D)
RT:2	(DM:2 C)	SW_1:5	(EI:1 C)	SW_3:12	(EE RHD:4 D)
RT:3	(DM:2 C)	SW_1:6	(EE:1 D)	SW_3:12	(EI RHD:3 D)
RT:4	(DM:2 C)	SW_1:6	(EI:1 C)	SW_3:13	(EE RHD:0 D)
RT:5	(DM:2 C)	SW_1:7	(EE:2 C)	SW_3:13	(EI RHD:0 D)
RT:6	(DM:3 C)	SW_1:7	(EI:2 C)	SW_3:14	(EE RHD:0 D)
RT:7	(DM:3 C)	SW_1:8	(EE:2 C)	SW_3:14	(EI RHD:0 D)
SCR:1	(CV:2 B)	SW_1:8	(EI:2 C)	SW_3:15	(EE RHD:1 D)
SCR:3	(CV:1 B)	SW_1:9	(EE:2 D)	SW_3:15	(EI RHD:1 D)
SCR:5	(CV:1 B)	SW_1:9	(EI:2 C)	SW_3:16	(EE RHD:1 D)
SCR:6	(CV:2 B)	SW_1:10	(EE:3 C)	SW_3:16	(EI RHD:1 D)
SCR:7	(CV:2 B)	SW_1:10	(EI:3 C)	SW_3:17	(EE RHD:2 D)
SCR:8	(XC:3 D)	SW_1:11	(EE:3 C)	SW_3:17	(EI RHD:2 D)
SCR:9	(XC:3 D)	SW_1:11	(EI:3 C)	SW_3:18	(EE RHD:2 D)
SI:1	(GG:3 B)	SW_1:12	(EE:3 D)	SW_3:18	(EI RHD:2 D)
SI:1	(GK:3 A)	SW_1:12	(EI:3 C)	SW_3:19	(EE RHD:3 D)
SI:2	(GG:3 B)	SW_1:13	(EE:0 C)	SW_3:19	(EI RHD:3 D)
SI:2	(GK:3 A)	SW_1:13	(EI:0 C)	SW_3:20	(EE RHD:3 D)
SI:4	(GG:3 B)	SW_1:14	(EE:0 C)	SW_3:20	(EI RHD:3 D)
SI:4	(GK:4 A)	SW_1:14	(EI:0 C)	SW_4:1	(EO RHD:3 C)
SI:5	(GG:3 B)	SW_1:15	(EE:1 C)	SW_4:2	(EO RHD:3 C)
SI:5	(GK:4 A)	SW_1:15	(EI:1 C)	SW_4:3	(EO RHD:1 C)
SI_2:1	(GH:3 B)	SW_1:16	(EE:1 C)	SW_4:4	(EO RHD:1 C)
SI_2:2	(GH:3 B)	SW_1:16	(EI:1 C)	SW_4:5	(EO RHD:2 C)
SI_2:4	(GH:3 B)	SW_1:17	(EE:2 C)	SW_4:6	(EO RHD:2 C)
SI_2:5	(GH:3 B)	SW_1:17	(EI:2 C)	SW_4:7	(EO RHD:2 C)

SW_4:8	(EO RHD:2 C)	TA:8	(GA:1 C)	TD:9	(GM:3 C)
SW_4:9	(EO RHD:3 C)	TA:9	(GA:3 C)	TD:10	(GM:3 C)
SW_4:10	(EO RHD:3 C)	TA:10	(GQ:1 C)	TD:11	(GM:2 C)
SW_4:11	(EO RHD:4 C)	TA:11	(GQ:1 B)	TD:12	(GM:2 C)
SW_4:12	(EO RHD:4 C)	TA:12	(GA:2 D)	TD:13	(BI:3 D)
SW_4:13	(EO RHD:3 C)	TA:13	(GU:0 C)	TD:15	(IE:1 C)
SW_4:14	(EO RHD:3 C)	TA:14	(GU:0 C)	TD:16	(IE:1 D)
SW_4:15	(EO RHD:4 C)	TA:15	(GU:0 C)	TD:17	(IE:1 C)
SX:1	(GG:1 C)	TA:16	(GQ:1 C)	TD:18	(IE:2 C)
SX:1	(GK:2 C)	TA:17	(NK:3 C)	TD:19	(IE:2 C)
SX:2	(GG:1 C)	TA:18	(GM:0 C)	TD:20	(BI:3 C)
SX:3	(GG:3 C)	TA:19	(GM:0 C)	TD:21	(BI:3 C)
SX:3	(GK:3 C)	TA_2:1	(GI:1 D)	TDET:1	(GB:1 D)
SX:4	(GG:0 C)	TA_2:2	(GI:2 B)	TDI:1	(GB:1 C)
SX:4	(GK:2 C)	TA_2:3	(GI:1 B)	TM:1	(OA:2 D)
SX:5	(GG:1 C)	TA_2:6	(GI:1 B)	TM:2	(OA:2 D)
SX:6	(GG:0 C)	TA_2:7	(GI:1 B)	TM:3	(OA:2 B)
SX:6	(GK:2 C)	TA_2:8	(GI:1 B)	TM:4	(OA:2 B)
SX:7	(GG:3 C)	TA_2:9	(GI:2 B)	TM:5	(OA:1 D)
SX:7	(GK:3 C)	TA_2:12	(GI:1 D)	TMA:1	(OA:2 C)
SX:8	(GG:3 C)	TB:1	(GA:3 D)	TMA:3	(OA:1 C)
SX:8	(GK:3 C)	TB:2	(GA:3 C)	TMA:5	(OA:2 B)
SX:10	(GG:0 C)	TB:3	(GA:3 C)	TMA:6	(OA:2 C)
SX:10	(GK:2 C)	TB:4	(KA:0 C)	TMA:7	(OA:2 B)
SX:11	(GG:0 C)	TB:5	(NK:3 C)	TS:1	(FG:0 A)
SX:11	(GK:2 C)	TB:6	(GA:2 C)	TS:2	(FG:0 A)
SX:12	(GG:0 C)	TB:7	(GA:3 C)	TS:3	(FG:0 A)
SX:12	(GK:2 C)	TB:8	(GA:4 C)	TS:4	(FG:1 A)
SX:15	(GG:3 C)	TB:9	(GA:3 C)	TS:5	(FG:1 A)
SX:15	(GK:3 C)	TB:10	(GM:0 C)	TS:6	(FG:1 A)
SX:18	(GG:1 C)	TB:11	(GM:0 C)	TU:1	(CV:2 D)
SX:20	(GG:0 C)	TB:12	(GA:3 D)	TU:2	(CV:2 D)
SX:21	(GG:0 C)	TB:13	(GU:1 C)	TU:3	(CV:2 D)
SX:24	(GG:1 C)	TB:14	(GU:1 C)	TU:4	(CV:2 D)
SX:24	(GK:3 C)	TB:15	(GU:1 C)	X02:1	(GG:4 E)
SX:25	(GG:1 C)	TB:16	(GM:1 C)	X02:1	(GK:3 E)
SX:29	(GG:1 C)	TB:17	(NK:4 C)	X02:2	(GG:3 E)
SX:30	(GG:4 C)	TB:18	(BI:2 D)	X02:2	(GK:3 E)
SX:30	(GK:3 C)	TB:19	(GQ:2 B)	X02:3	(GK:3 E)
SX:31	(GG:2 C)	TB:20	(GQ:0 C)	X02:3	(GK:3 E)
SX:31	(GK:2 C)	TB:21	(BI:2 D)	X02:4	(GG:3 E)
SX_2:1	(GR:1 B)	TB_2:1	(GI:3 D)	X02:4	(GK:3 E)
SX_2:2	(GR:1 B)	TB_2:2	(GI:3 B)	X02:5	(GG:3 E)
SX_2:3	(GR:2 B)	TB_2:3	(GI:3 B)	X02:5	(GK:3 E)
SX_2:4	(GR:0 B)	TB_2:6	(GI:2 B)	X02:6	(GG:3 E)
SX_2:5	(GR:1 B)	TB_2:7	(GI:3 B)	X02:6	(GK:3 E)
SX_2:6	(GR:0 B)	TB_2:8	(GI:2 B)	X02:7	(GG:3 E)
SX_2:7	(GR:3 B)	TB_2:9	(GI:3 B)	X02:7	(GK:3 E)
SX_2:8	(GR:3 B)	TB_2:12	(GI:3 D)	X02_2:1	(GH:3 D)
SX_2:10	(GR:0 B)	TB_2:18	(BI:0 E)	X02_2:2	(GH:3 D)
SX_2:11	(GR:0 B)	TB_2:21	(BI:0 D)	X02_2:3	(GH:3 D)
SX_2:12	(GR:0 B)	TC:1	(BZ:2 B)	X02_2:4	(GH:3 D)
SX_2:15	(GR:2 B)	TC:2	(BZ:2 B)	X02_2:5	(GH:3 D)
SX_2:18	(GR:1 B)	TC:3	(BZ:2 B)	X02_2:6	(GH:3 D)
SX_2:20	(GR:0 B)	TC:4	(BZ:1 B)	X02_2:7	(GH:3 D)
SX_2:21	(GR:0 B)	TC:5	(BZ:1 B)	X02_3:1	(GR:3 E)
SX_2:24	(GR:1 B)	TC:6	(BZ:1 B)	X02_3:2	(GR:2 E)
SX_2:25	(GR:1 B)	TC:7	(BZ:1 B)	X02_3:3	(GR:2 E)
SX_2:29	(GR:1 B)	TCO:1	(BZ:0 B)	X02_3:4	(GR:2 E)
SX_2:30	(GR:3 B)	TCO:2	(BZ:0 B)	X02_3:5	(GR:2 E)
SX_2:31	(GR:2 B)	TD:1	(IE:0 C)	X02_3:6	(GR:3 E)
TA:1	(GA:2 D)	TD:2	(IE:0 D)	X02_3:7	(GR:3 E)
TA:2	(GA:2 C)	TD:3	(IE:0 C)	X03:1	(GG:0 E)
TA:3	(GA:2 C)	TD:4	(IE:1 C)	X03:2	(GG:0 E)
TA:4	(KA:0 C)	TD:5	(IE:1 C)	X03:3	(GG:1 E)
TA:5	(NK:3 C)	TD:6	(BI:3 C)	X03:4	(GG:1 E)
TA:6	(GA:2 C)	TD:7	(BI:3 C)	X03:5	(GG:0 E)
TA:7	(GA:2 C)	TD:8	(GM:3 D)	X03:6	(GG:0 E)

X03:7	(GG:0 E)	X06:3	(NB:2 D)	XA:2	(GB:1 B)
X03:8	(GG:1 E)	X06:4	(NA:1 D)	XA:3	(GB:1 B)
X03:9	(GG:1 E)	X06:4	(NB:1 D)	XA:4	(GB:1 B)
X03:10	(GG:1 E)	X06:5	(NA:2 D)	XA:5	(GB:1 B)
X03:11	(GG:1 E)	X06:5	(NB:2 D)	XA:6	(GB:1 B)
X03:12	(GG:1 E)	X06:6	(NA:3 D)	XA:7	(GB:2 B)
X03:13	(GG:1 E)	X06:6	(NB:3 D)	XA:8	(GB:2 B)
X03:14	(GG:0 E)	X06:7	(NC:1 D)	XA:9	(GB:2 B)
X03:15	(GG:0 E)	X06:7	(NU:1 D)	XA:10	(GB:0 B)
X03:2	(GG:0 E)	X06:8	(NB:4 C)	XA:11	(GB:1 B)
X03:3	(GG:1 E)	X06:8	(NC:4 C)	XA:12	(GB:1 B)
X03:4	(GG:1 E)	X06:9	(NC:1 D)	XA:13	(GB:1 B)
X03:5	(GG:0 E)	X06:9	(NU:1 D)	XA:14	(GB:1 B)
X03:6	(GG:0 E)	X06:10	(NC:2 D)	XA:15	(GB:1 B)
X03:7	(GG:0 E)	X06:10	(NU:2 D)	XA:16	(GB:2 B)
X03:8	(GG:1 E)	X06:11	(NA:0 D)	XA:16	(GC RHD:3 B)
X03:9	(GG:1 E)	X06:11	(NB:0 D)	XA:17	(GB:2 B)
X03:10	(GG:1 E)	X06:12	(NA:1 D)	XA:18	(GB:2 B)
X03:11	(GG:1 E)	X06:12	(NB:0 D)	XB:1	(AA:4 D)
X03:12	(GG:1 E)	X06:13	(NC:2 D)	XC:1	(BM:1 C)
X03:13	(GG:1 E)	X06:13	(NU:1 D)	XC:2	(CK:1 B)
X03:15	(GG:0 E)	X06:14	(NC:2 D)	XC:2	(CL:1 B)
X03_2:1	(GH:1 D)	X06:14	(NU:1 D)	XC:3	(IH:2 C)
X03_2:2	(GH:1 D)	X06:15	(NC:2 D)	XC:4	(HP:0 E)
X03_2:3	(GH:0 D)	X06:15	(NU:2 D)	XC:5	(HG:0 D)
X03_2:4	(GH:1 D)	X06:16	(NC:2 D)	XC:5	(HY:2 D)
X03_2:5	(GH:1 D)	X06:16	(NU:2 D)	XC:5	(HY RHD:2 D)
X03_2:6	(GH:1 D)	X06:17	(NC:2 D)	XC:6	(BU:2 C)
X03_2:7	(GH:1 D)	X06:17	(NU:2 D)	XC:7	(BM:1 C)
X03_2:8	(GH:1 D)	X06:18	(NA:2 D)	XC:8	(AE:2 C)
X03_2:9	(GH:1 D)	X06:18	(NB:3 D)	XC:8	(NK:1 D)
X03_2:10	(GH:1 D)	X06:19	(NA:3 D)	XC:9	(DB:1 E)
X03_2:11	(GH:1 D)	X06:19	(NB:3 D)	XC:9	(DM:0 E)
X03_2:12	(GH:1 D)	X06:20	(NC:3 D)	XC:10	(HP:1 E)
X03_2:13	(GH:1 D)	X06:20	(NU:2 D)	XC:11	(BU:0 A)
X03_2:14	(GH:0 D)	X06:21	(NC:3 D)	XC:12	(KI:1 C)
X03_2:15	(GH:0 D)	X06:21	(NU:3 D)	XD:1	(BU:1 C)
X04:1	(GG:2 E)	X06:22	(NC:3 D)	XD:1	(BU_1:2 C)
X04:1	(GK:2 E)	X06:24	(NA:3 D)	XD:1	(BU_2:2 C)
X04:2	(GG:1 E)	X06:24	(NB:3 D)	XD:1	(BX:1 D)
X04:2	(GK:2 E)	X06:30	(NA:3 D)	XD:1	(BY:1 D)
X04:3	(GG:2 E)	X06:30	(NB:3 D)	XD:2	(CU:1 C)
X04:3	(GK:2 E)	X06:31	(NA:4 D)	XD:2	(IJ:3 B)
X04:4	(GG:2 E)	X06:31	(NB:4 D)	XD:3	(AB:1 D)
X04:4	(GK:2 E)	X46:2	(BY:3 E)	XD:3	(CP:2 D)
X04:5	(GG:2 E)	X46:3	(BY:2 E)	XD:4	(EE:4 D)
X04:5	(GK:2 E)	X46:4	(BY:2 E)	XD:4	(EI:0 D)
X04:6	(GG:2 E)	X46:5	(BY:3 E)	XD:4	(EI:4 D)
X04:6	(GK:2 E)	X46:6	(BY:3 E)	XD:4	(EO:0 D)
X04:6	(GG:2 E)	X62:1	(NB:1 D)	XD:5	(DU:2 E)
X04:7	(GK:2 E)	X62:5	(NB:2 D)	XD:5	(EO:0 D)
X04_2:1	(GH:2 D)	X62:6	(NB:2 D)	XD:6	(FA:3 D)
X04_2:2	(GH:2 D)	X63:1	(GR:1 E)	XD:6	(FI:0 C)
X04_2:3	(GH:2 D)	X63:2	(GR:0 E)	XD:6	(FK:1 D)
X04_2:4	(GH:2 D)	X63:3	(GR:0 E)	XD:6	(FK RHD:2 C)
X04_2:5	(GH:2 D)	X63:4	(GR:0 E)	XD:7	(GU:2 D)
X04_2:6	(GH:3 D)	X63:5	(GR:0 E)	XD:8	(IX:2 D)
X04_2:7	(GH:3 D)	X63:6	(GR:0 E)	XD:9	(BI:1 E)
X05:1	(GG:3 E)	X63:7A	(GR:0 E)	XD:10	(IS:1 D)
X05:2	(GG:2 E)	X63:7B	(GR:1 E)	XD:10	(OA:1 D)
X05:3	(GG:2 E)	X63:8A	(GR:0 E)	XD:11	(AA:2 C)
X05:4	(GG:2 E)	X63:8B	(GR:0 E)	XD:12	(NC:0 C)
X05:5	(GG:3 E)	X63:9	(GR:1 E)	XD:12	(NU:2 D)
X05:7	(GG:3 E)	X63:10	(GR:1 E)	XE:1	(AA:3 D)
X06:1	(NC:3 D)	X63:11	(GR:1 E)	XE:1	(AC:2 D)
X06:2	(NA:1 D)	X63:12	(GR:1 E)	XF:1	(FA:4 B)
X06:2	(NB:1 D)	XA:1	(GB:0 B)	XF:1	(FA RHD:3 B)
X06:3	(NA:1 D)	XA:1	(GC RHD:3 B)	XF:2	(FQ:1 B)

XF:3	(ME:3 B)	XK:7	(BA:0 A)	XL:16	(BA:1 D)
XF:4	(KE:0 C)	XK:8	(BA:0 B)	XL:17	(BA:1 D)
XF:5	(FQ:0 B)	XK:9	(DB:1 B)	XL:18	(BA:1 D)
XF:6	(FQ:1 B)	XK:9	(DM:1 B)	XM:1	(AA:2 B)
XF:7	(KE:0 C)	XK:10	(HY:0 B)	XM:1	(CK:3 B)
XF:8	(KE:0 C)	XK:11	(DB:1 B)	XM:2	(AA:2 B)
XF:9	(AA:3 C)	XK:11	(DM:0 B)	XM:2	(CK:3 B)
XF:10	(FA:4 B)	XK:12	(DB:1 B)	XM:3	(AA:2 B)
XF:12	(KE:0 B)	XK:12	(DM:1 B)	XM:3	(CK:4 B)
XF:13	(BA:0 B)	XK:13	(HY:0 B)	XM:4	(AA:2 A)
XF:15	(FA:4 B)	XK:14	(IQ:1 B)	XM:5	(AA:3 A)
XF:15	(FA RHD:3 B)	XK:15	(IQ:2 B)	XM:5	(CK:3 B)
XF:18	(GB:3 C)	XK:16	(HY:1 B)	XM:6	(AC:3 D)
XG:1	(AC:0 A)	XK:16	(HY RHD:0 B)	XM:7	(AC:3 D)
XH:1	(AC:2 A)	XK:17	(CK:0 B)	XM:8	(AC:3 D)
XJ:1	(GM:2 C)	XK:17	(CL:0 B)	XM:9	(AC:3 D)
XJ:2	(GM:1 D)	XK:17	(CU:0 B)	XM:10	(AC:3 D)
XJ:3	(HG:0 B)	XK:18	(CU:0 B)	XM:11	(AC:2 C)
XJ:4	(GQ:1 A)	XL:1	(BA:1 B)	XM:12	(BI:3 B)
XJ:6	(HG:0 B)	XL:2	(IH:4 B)	XM:13	(AC:2 B)
XJ:7	(GQ:2 A)	XL:3	(BA:1 B)	XM:14	(AC:2 C)
XJ:10	(GA:0 B)	XL:4	(OA:2 B)	XM:15	(BI:3 B)
XJ:11	(IM:0 B)	XL:5	(BA:1 B)	XM:16	(AC:2 B)
XJ:12	(BA:1 B)	XL:6	(BA:1 B)	XM:17	(AC:2 B)
XJ:13	(GA:0 B)	XL:7	(DB:1 B)	XM:18	(BI:3 B)
XJ:14	(IH:1 B)	XL:7	(DM:0 B)	XO:1	(AC:0 A)
XJ:15	(BA:0 B)	XL:8	(BI:0 B)	XS:1	(AC:2 A)
XJ:16	(IH:2 B)	XL:9	(BI:0 B)	XT:1	(AC:1 A)
XJ:17	(IH:1 B)	XL:9	(OA:2 B)	Y18GH:1	(DN:2 B)
XJ:18	(IH:2 B)	XL:10	(DB:1 B)	Y18GH:1	(DP:2 B)
XK:1	(BA:0 B)	XL:10	(DM:0 B)	Y18GH:2	(DN:2 B)
XK:2	(CV:0 A)	XL:11	(BI:0 B)	Y18GH:2	(DP:2 B)
XK:3	(GM:3 B)	XL:12	(BA:1 B)	Y18GH:4	(DN:2 A)
XK:4	(BA:0 B)	XL:13	(DQ:0 B)	Y18GH:4	(DP:2 A)
XK:5	(CV:1 A)	XL:14	(DU:1 B)		
XK:6	(GM:1 D)	XL:15	(BA:1 D)		

# List of components

A01	Fuse and Relay Centre (1000)	A36	Control unit, BBM (Body Builder Module) (NC:1 B/NU:1 B) (1000)
A02L	Fuse holder, 6-fuses (GB:0 D) (1000)	A39	Control unit, camera (IZ:0 C) (1000)
A02P	Fuse holder, 6-fuses (ME:2 C) (1000)	A40 HID	Fuse holder, 3-fuses (GD:1 C) (1000)
A02X	Fuse holder, 6-fuses (ME:3 C) (1000)	A41	Component group transmission. Contains B23, B138 and Y17 (DN:0 D/DE:0 C/DM:2 B/DP:0 D) (1403/1499)
A03	Instrument cluster (BI:0 B/CP:2 D/ZA RHD:2 B) (1000)	A42	Component group transmission. Contains B26, Y21, Y22, Y23 and Y26 (DN:2 D/DE:2 C) (1494/1499)
A04A	Refrigerator (IQ:3 C) (1007B)	A42_B	Component group transmission. Contains B26, Y21, Y22, Y23 and Y26 (DP:2 D) (1494/1499)
A04B	Refrigerator (IQ:3 C) (1460)	A43	Electric fan control (B32 fan speed sensor, Y35 visco clutch) (CO:1 D) (1030)
A05	Display, FMS (Fleet Management System) (BU:2 D/BU_2:2 E/IZ:0 D) (1000)	A44	Fuel filter bracket (B51 fuel pressure sensor, M15 priming pump) (CO:2 D) (CO:2 C) (1030)
A06L	El. adjustable seat (IA:2 B) (1007A)	A45	Fuel pre filter (B52 water level sensor, R10 heater, Y38 water drain solenoid (CO:3 B) (1030)
A06R	El. adjustable seat (IA:0 B) (1007B)	A54	Control unit, Coolant level (CS:2 D)
A07	Radio (IU:0 B/IU RHD:0 C) (1000)	A59	Control unit, RAS (Rear Axle Steering) (FO:1 B) (1493)
A08	Control unit, GPS receiver (Global Positioning System) (BU:2 D) (1000)	A62	Control unit, ADS (AdBlue Dosing System) (CV:1 C) (1510)
A09	Telephone (IX:0 C) (1000)	A75	Yawrate sensor and power supply unit, ACC (BE:2 C) (1007C)
A10	CD player (IU:3 B)	A77	Control unit, Tyre pressure monitoring (OA:1 B) (1508)
A11	Control unit, door lock (IM:1 B) (1000)	A80	Airdryer, electronical controlled (FQ:1 C) (1056)
A12A	Control unit, ABS (Anti-lock Brake System) (EI:0 B) (EI RHD:0 B) (1007C)	A94	Control unit, FMS Gateway (Fleet Management System) (BX:0 B) (1000)
A12B	Control unit, ABS (Anti-lock Brake System) (EE:0 B) (EE RHD:0 B) (1007C)	A96	Control unit, Roof cooler (HZ:1 B) (1018)
A13A	Control unit, TECU (automatic transmission) (DE:0 C)	A102	Control unit, Volvo Link (VERS-SAM) (BY:1 C) (1000)
A13B	Control unit, TECU (automatic transmission) (DI:0 B) (DI (1007C)	A105	Serial Interface Box (BU:0 B) (1000)
A13C	Control unit, TECU (automatic transmission) (DM:0 C) (1007C)	A106	Fuse holder, 3-fuses, not mainswitch dependent (AB:3 B) (1000)
A13D	Control unit, TECU (automatic transmission) (DN:0 B)	A109	Control unit, GSECU (Gearshift ECU) (DC:1 C) (1000)
A13E	Control unit, TECU (automatic transmission) (DP:0 C)	A116	Control unit, amplifier (IV:1 B) (1007B)
A14	Control unit, EMS (Engine Management System) (CO:2 C/CS:2 C) (1030)	A121	Logger, AUS (CP:1 B)
A15	Control unit, SRS (Supplementary Restrain System) (IS:0 B) (1000)	A122	Control unit, toll collect OBU (BZ:0 C/BZ RHD:0 C) (1006A)
A16	Control unit, ECS (Electronic Controlled air Suspension) (FA:0 C/FA RHD:0 C/FG:0 D/FG:2 D) (1007C)	A123	Control unit toll collect DSRC (BZ:1 B/BZ RHD:1 B)
A17	Control unit, VECU (Vehicle ECU) (BA:0 C) (1000)	A124	Component group engine (K65 power relay, starter motor pre-relay M04 starter motor) (CO:2 A)
A18	Control unit, roof hatch (IQ:0 C) (1006E)	A125	Control unit, TGW (Telematics Gateway) (BU_2:0 C) (1000)
A19A	Control unit, GECU (gear selector ECU) (Geartronic) (DB:1 C) (1007A/1007B/1484)	A126	Control unit, TTU (Telematics Terminal Unit) (BU_2:2 C) (1000)
A20	Control unit, Immobiliser (IM:3 C) (1000)	B02A	Thermostat, parking heater (HI:1 B) (1006A/1006E)
A21	Control unit, EBS (Electronic Brake System) (EO:0 C) (EO RHD:0 B) (1007C)	B02B	Thermostat, parking heater (HI:0 B) (1006A/1006E)
A22	Control unit, FMS (Fleet Management System) (BU:0 C/IZ:3 B) (1000)	B03_A	Sensor, footbrake valve (EO:0 D) (1504)
A23	Control unit, FMS, TMC (Traffic Message Channel) (BU:3 B) (1000)	B04	Sensor, engine speed, crankshaft (CO:0 D) (1030)
A24	Control unit, information module trailer without ABS (CP:3 C)	B05	Sensor, engine speed, camshaft (CO:0 D) (1030)
A26	Control unit, ACC (Adaptive Cruise Control) (BE:1 B) (1007C)	B06	Sensor, air pressure, air tank (BA:2 D) (1000)
A27	Control unit, LCM (Light Control Module) (GA:0 B/GB:0 C/GC:0 A/GC RHD:0 A) (1000)	B07	Sensor, fuel level (BI:2 C) (1040)
A28B	Control unit, ADR main switch, integrated power relay (AE:0 C) (1435B)	B08	Sensor, input shaft speed, gearbox (DE:3 B)
A29	Telephone handset, secrecy receiver (IX:1 B) (1000)	B09A	Sensor, oil temperature, gearbox (DE:2 D)
A31	Control unit, burglar alarm (NK:0 C) (1000)	B09B	Sensor, oil temperature, gearbox (BI:2 C) (1494)
A32	Control unit, parking heater (HM:0 C) (1062)	B10	Sensor, oil level (CO:0 B) (1030)
A33	Tachograph (BM:1 B) (CP:1 D) (1000)	B10C	Sensor, oil level (FO:0 C) (1493)
A33B	Tachograph (BN:1 B) (1006)	B12	Sensor, tachograph/speedometer (BM:2 D) (1494)
A34B	Control unit, climate unit (HG:0 B) (1000)	B12B	Sensor, tachograph/speedometer (BM:1 D) (1494)
		B13A	Sensor, wheel speed, lhs. 1:st front axle (EI:0 D/EE:0 D) (1086)

B13B	Sensor, wheel speed, lhs. 1:st front axle (EP:1 B/EP:3 B) (1086)	B47B	Sensor, brake lining wear indicator, rhs. 2:nd front axle (EP:2 B) (1086)
B14A	Sensor, wheel speed, rhs. 1:st front axle (EI:1 D/EE:1 D) (1086)	B49	Sensor, steering angle (EO:3 A) (1000)
B14B	Sensor, wheel speed, rhs. 1:st front axle (EP:2 B/EP:3 B) (1086)	B49F	Sensor, steering angle (FO:1 D) (1493)
B15A	Sensor, wheel speed, lhs. 1:st driven rear axle (EI:2 D/EE:2 D) (1086)	B49R	Sensor, steering angle (FO:2 D) (1493)
B15B	Sensor, wheel speed, lhs. 1:st driven rear axle (EP:1 D/EP:2 D) (1086)	B50	Sensor, yaw-rate (EO:4 B) (1507)
B16A	Sensor, wheel speed, rhs. 1:st driven rear axle (EI:3 D/EE:3 D) (1086)	B51	Sensor, fuel pressure (CO:2 D) (1030)
B16B	Sensor, wheel speed, rhs. 1:st driven rear axle (EP:1 D/EP:2 D) (1086)	B54	Sensor, crank case pressure (CO:0 B) (1030)
B17	Sensor, wheel speed, lhs. 2:nd driven rear axle (EP:1 D) (1086)	B55	Sensor, air pressure, suspension bellows, 3:rd axle (FA:0 D) (1072)
B18	Sensor, wheel speed, rhs. 2:nd driven rear axle (EP:1 D) (1086)	B56	Sensor, air pressure, suspension bellows, front axle (FA:0 D) (1072)
B19	Sensor, wheel speed, lhs. 2:nd front axle (EP:1 B) (1086)	B57	Sensor, air pressure, suspension bellows, lhs. rear (FA:0 D) (1072)
B20	Sensor, wheel speed, rhs. 2:nd front axle (EP:2 B) (1086)	B58	Sensor, air pressure, suspension bellows, rhs. rear (FA:1 D) (1072)
B21	Sensor, coolant temperature, engine (CO:1 D) (1030)	B59	Sensor, indoor temperature (HG:1 B) (1000)
B22	Sensor, outdoor temperature (BI:2 C) (1503)	B60DD	Loudspeaker (IU RHD:1 D/IV:1 D) (1083)
B23A	Sensor, oil temperature, retarder (DE:1 D)	B60DP	Loudspeaker (IU RHD:1 D/IV:1E) (1083)
B23B	Sensor, oil temperature, retarder (DI:0 D) (1494)	B60LF	Loudspeaker (IU RHD:0 D) (1000)
B24	Sensor, air pressure, bogie lift bellow (FA:0 D) (1072)	B60RF	Loudspeaker (IU RHD:1 D) (1000)
B25	Sensor, accelerator pedal (BA:4 D) (1000)	B60DD	Loudspeaker (IU:1 D) (1083)
B26A	Sensor, clutch position (DE:2 D)	B60DP	Loudspeaker (IU:1 D) (1083)
B27	Sensor, battery charging (BI:2 C) (1435A/1435B)	B60LF	Loudspeaker (IU:0 D/IV:2 E) (1000)
B28	Sensor, chassis level, front axle (FA:1 D) (1072)	B60LR	Loudspeaker (IU:2 D/IV:1 D) (1006D/1006E)
B29B	Sensor, chassis level, lhs. rear axle (FA:1 D) (1072)	B60RF	Loudspeaker (IU:1 D/IV:2 E) (1000)
B30	Sensor, chassis level, rhs. rear axle (FA:2 D) (1072)	B60RR	Loudspeaker (IU:2 D/IV:2 E) (1006D/1006E)
B34A	Sensor, gear position (DE:2 B)	B61L	Loudspeaker, treble (IU RHD:0 D/IV:2 D) (1000)
B34B	Sensor, gear position (DE:3 B)	B61R	Loudspeaker, treble (IU RHD:1 D/IV:3 D) (1000)
B35	Sensor, range gear position (DE:3 B)	B61L	Loudspeaker, treble (IU:0 D) (1000)
B36	Sensor, split gear position (DE:3 B)	B61_R	Loudspeaker, treble (IU:1 D) (1000)
B37	Sensor, boost pressure and boost temperature (CO:0 D) (1030)	B64	Sensor, air pressure, valve unit gearbox (DE:1 D)
B38	Sensor, oil pressure and oil temperature (CO:1 D) (1030)	B66	Sensor, temperature EGR (CO:0 D) (1030)
B39	Sensor, air filter pressure and air filter temperature (CO:1 B/CS:1 D) (1030)	B67	Rear view camera (IZ:2 D) (1000)
B40A	Sensor, brake lining wear indicator, lhs. 1:st front axle (EP:2 B) (1086)	B68	Sensor, output shaft speed, gearbox (DI:2 D) (1494)
B40B	Sensor, brake lining wear indicator, lhs. 1:st front axle (EP:0 B) (1086)	B69A	Sensor, coolant temperature, retarder (DE:1 D)
B41A	Sensor, brake lining wear indicator, rhs. 1:st front axle (EP:3 B) (1086)	B69B	Sensor, coolant temperature, retarder (DM:3 B) (1403)
B41B	Sensor, brake lining wear indicator, rhs. 1:st front axle (EP:1 B) (1086)	B69C	Sensor, coolant temperature, retarder (DN:0 D/DP:0 D) (1403)
B42A	Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:1 D) (1086)	B70	Sensor, wheel speed, lhs., pusher axle (EP:3 D) (1086)
B42B	Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:0 D) (1086)	B71	Sensor, wheel speed, rhs., pusher axle (EP:3 D) (1086)
B43A	Sensor, brake lining wear indicator, rhs. 1:st driven rear axle (EP:2 D) (1086)	B72	Sensor, wheel speed, lhs., tag axle (EP:4 D) (1086)
B43B	Sensor, brake lining wear indicator, rhs. 1:st driven rear axle (EP:2 D) (1086)	B73	Sensor, wheel speed, rhs., tag axle (EP:4 D) (1086)
B44B	Sensor, brake lining wear indicator, lhs. 2:nd driven rear axle (EP:0 D) (1086)	B74B	Sensor, brake lining wear indicator, lhs., pusher axle (EP:2 D) (1086)
B45B	Sensor, brake lining wear indicator, rhs. 2:nd driven rear axle (EP:0 D) (1086)	B75B	Sensor, brake lining wear indicator, rhs., pusher axle (EP:3 D) (1086)
B46B	Sensor, brake lining wear indicator, lhs. 2:nd front axle (EP:0 B) (1086)	B76B	Sensor, brake lining wear indicator, lhs., tag axle (EP:3 D) (1086)
		B77B	Sensor, brake lining wear indicator, rhs., tag axle (EP:3 D) (1086)
		B80	Handsfree, Loudspeaker, Microphone (IX:0 B) (1007A/1007B)
		B85	Sensor, temp, downstream particle filter (CL:3 B) (1030)
		B87	Sensor, turbo speed (CO:1 D) (1030)
		B89	Sensor, EGR diff. pressure (CO:0 D) (1030)
		B90	Transmitter, movement sensor (NK:2 D) (1006B/1006E)
		B91	Receiver, movement sensor (NK:3 D) (1006B/1006E)
		B96	Sensor, NOx (CAN based) (CV:1 B) (1510)
		B97	Sensor, exhaust temp (before catalyst) (CV:3 D) (1510)

B98	Sensor, exhaust temp (after catalyst) (CV:3 D) (1510)	E19C	Lamp, identification light, roof (GL:1 C/GL:2 C) (1006A/1436)
B115	Sensor, DPF pressure (CL:4 B) (1030)	E19L	Lamp, identification light, roof (GL:1 C/GL:2 C) (1006A/1436)
B118	Sensor, oil pressure (CO:1 D) (1030)	E19R	Lamp, identification light, roof (GL:1 C/GL:2 C) (1006A/1436)
B119	Sensor, oil level and oil temp (CO:0 B) (1030)	E20	Lamp, ashtray illumination (IQ:2 C) (1000)
B120	Radar ACC, Adaptive Cruise Control (BE:1 D) (1502)	E21	Lamp, rear fog light (GC:1 D/GC:2 D) (1040)
B122	Sensor, exhaust temp, engine mounted (CO:2 A) (1030)	E22	Lamp, roof sign illumination (KI:0 C) (1436)
B138A	Sensor, Control pressure retarder (DE:0 D) (1494)	E23	Lamp, luggage compartment illumination (IH:4 C) (1007A)
B138B	Sensor, Control pressure retarder (DI:3 B) (1494)	E24	Lamp, storage tray illumination (IQ:1 D) (1000)
B142B	Sensor, AdBlue level and temperature (CV:2 D) (1510)	E26L	Headlight module (GA:1 C) (1502)
B151	Sensor, trailer detection (GB:1 C) (1000)	E26R	Headlight module (GA:3 C) (1503)
B152	Sensor, brake airpressure, front (BI:3 C) (1504)	E27L_1	Tail lamp module (GC:1 D) (1040)
B153	Sensor, brake airpressure, rear (BI:3 C) (1504)	E27L_2	Tail lamp module (GE:1 C) (1040)
B154	Sensor, water level roof cooler (HZ:2 C) (1018)	E27L_3	Tail lamp module (GF:3 C) (1040)
B184	Loudspeaker, subwofer (IV:3 D) (1007B)	E27L_4	Tail lamp module (GF:0 C) (1040)
D01	Time delay relay, bogie lift, axle load limiter (FK:3 B/FK RHD:3 A) (1007C)	E27R_1	Tail lamp module (GC:2 D) (1040)
E01	Lamp, full beams (GA:2 C/GA:3 C) (1502/1503)	E27R_2	Tail lamp module (GE:2 C) (1040)
E02	Lamp, dipped beams (GA:2 D/GA:3 D) (1502/1503)	E28	Parking heater (HI:0 C/HM:0 D) (1007A/1062)
E03	Lamp, spot light (GA:1 C/GA:3 C) (1502/1503)	E29C	Lamp, external speed indication (GL:0 C) (1436)
E03A	Lamp, spot light (NI:2 C)	E29L	Lamp, external speed indication (GL:0 D) (1436)
E03B	Lamp, spot light (NI:2 C)	E29R	Lamp, external speed indication (GL:0 C) (1436)
E03L	Lamp, spot light (GI:1 C/NI:2 D)	E30L	Lamp, full- and dipped beams (GI:1 C)
E03R	Lamp, spot light (GI:2 C/NI:2 D)	E30R	Lamp, full- and dipped beams (GI:3 C)
E05	Lamp, 5:th wheel light (KE:0 D/GH:0 D/GF:1 C) (1063)	E32ATC	Climate unit (HY:2 C/HY RHD:2 C) (1000)
E06	Lamp, reversing light (GC:1 D/GC:2 D/GF:1 C) (1040)	E32ECC	Climate unit (HG:1 C) (1000)
E07	Lamp, fog light (GA:1 C/GA:3 C) (1502/1503)	E33LF	Lamp, additional load lamps (reverse lamps) (NA:0 D/NB:0 D) (1506A)
E07L	Lamp, fog light (GI:1 C)	E33LR	Lamp, additional load lamps (reverse lamps) (NA:1 D/NB:1 D) (1506A)
E07R	Lamp, fog light (GI:3 C)	E33RF	Lamp, additional load lamps (reverse lamps) (NA:1 D/NB:1 D) (1506A)
E08	Lamp, parking light, front (GA:1 D/GA:3 D) (1502/1503)	E33RR	Lamp, additional load lamps (reverse lamps) (NA:1 D/NB:1 D) (1506A)
E08L	Lamp, parking light, front (GI:1 C)	E34	Lamp, body builder centre light (IH:2 D/ZA RHD:0 D) (1000)
E08R	Lamp, parking light, front (GI:1 C)	E39	Lamp, Licence Plate Illumination (GF:3 B)
E09	Lamp, brake light (GC:1 D/GC:2 D) (1040)	E39L	Lamp, Licence Plate Illumination (GE:2 C) (1040)
E10	Lamp, tail light (GC:1 D/GC:2 D) (1040)	E39R	Lamp, Licence Plate Illumination (GE:2 C) (1040)
E11L_C	Lamp, side marker light (GC:0 D) (1077)	E74L	Lamp, parking light front direction indicator (GI:1 C)
E11L_F	Lamp, side marker light (GC:0 D) (1077)	E74R	Lamp, parking light front direction indicator (GI:3 C)
E11L_R	Lamp, side marker light (GC:0 D) (1077)	E79L	Lamp, roof position light, rear, left (GL:3 C) (1436)
E11L_W	Lamp, side marker light (GC:0 D) (1077)	E79R	Lamp, roof position light, rear, right (GL:4 C) (1436)
E11R_C	Lamp, side marker light (GC:3 D) (1077)	G01A	Battery (AA:0 D/AB:1 D/AE:0 C/CS:0 C)
E11R_F	Lamp, side marker light (GC:3 D) (1077)	G01B	Battery (AA:0 D/AB:1 D/AE:0 D/CS:0 D)
E11R_R	Lamp, side marker light (GC:3 D) (1077)	G02	Alternator (AA:3 D/CS:1 D) (1025)
E11R_W	Lamp, side marker light (GC:3 D) (1077)	G05	Battery, backup Volvo Link (VERS-SAM) (BY:0 C) (1000)
E12L	Lamp, roof position light (GA:4 C) (1006A)	H01	Horn, air-operated (GQ:1 B) (1502)
E12R	Lamp, roof position light (GA:1 C) (1006A)	H02	Horn (GQ:1 B) (1502)
E13	Lamp, direction indicator (GC:1 D/GC:2 D) (1040)	H03	Reverse warner, acoustic (GF:0 C) (1040)
E13LF	Lamp, direction indicator (GA:2 C) (1502)	H06	Siren (NK:3 D) (1502/1503)
E13RF	Lamp, direction indicator (GA:3 C) (1503)	K1	Relay, starting switch, radio position (AC:3 C) (1000)
E14_A	Lamp, beacon warning lamp (KM:2 D) (1047)	K2	Relay, EMS (Engine Management System) (BA:1 A) (1000)
E14_AR	Lamp, beacon warning lamp (KM:1 C) (1047)	K3	Relay, starter motor (AA:2 B/CK:4 B) (1000)
E14_B	Lamp, beacon warning lamp (KM:1 D) (1047)	K3B	Relay, starter motor, Cummins (CS:1 C)
E14_BR	Lamp, beacon warning lamp (KM:2 C) (1047)	K4	Relay, body builder fuse box (kl.15) (ME:2 A) (1000)
E16_DS	Lamp, instep light (IH:2 C) (1083)	K5	Relay, I-shift/Powertronic/Retarder (DB:1 A/DC:0 A/DM:0 A) (1000)
E16_PS	Lamp, instep light (IH:2 C) (1083)	K6	Relay, fan climate unit (HY:0 B/HY RHD:0 B) (1000)
E17L	Lamp, interior light (IH:1 C) (1006B/1006E)	K7	Relay, intermittent wiper (GM:1 C) (1000)
E17R	Lamp, interior light (IH:1 C) (1006B/1006E)	K8	Relay, gearbox area inhibitor (BA:1 A) (1000)
E18_C	Lamp, reading light (IH:0 C/IJ:1 C) (1006D)	K9	Relay, interior lamps (IH:1 A) (1000)
E18_LB	Lamp, reading light (IH:0 C/IJ:1 C) (1006D/1006E)	K10	Relay, fifth wheel-, working-light (KE:0 C) (1000)
E18_RB	Lamp, reading light (IH:1 C/IJ:2 C) (1006D/1006E)		
E18L	Lamp, reading light (IH:0 C/IJ:1 C) (1006D/1006E)		
E18LC	Lamp, reading light (IH:0 C/IJ:0 B) (1006C/1006E)		
E18R	Lamp, reading light (IH:1 C/IJ:2 C) (1006D/1006E)		
E18RC	Lamp, reading light (IH:0 C/IJ:0 B) (1006C)		



K11	Relay, air suspension (FA:4 B) (1000)	M03	Motor, headlamp high pressure washer pump (GM:1 D) (1503)
K12	Relay, reverse light, trailer (GB:4 D) (1000)	M04	Motor, starter motor (AA:1 D/CO:2 A/CS:0 C) (1025)
K13	Relay, alternator controlled (AA:4 B) (1000)	M05	Motor, hydraulic bogie lift pump unit (FI:3 B/FK:3 C) (1037)
K14	Time delay relay, bogie lift, A-ride (FI:1 B/FK:1 C) (1000)	M06DS	Motor, window winder (IE:2 C) (1083)
K15	Time delay relay, bogie lift, A-ride, with axle load limiter (FK:2 C/FK RHD:2 C) (1000)	M06PS	Motor, window winder (IE:3 C) (1083)
K16	Relay, bogie lift, A-ride, with axle load limiter (FK:1 C/FK RHD:0 B) (1000)	M08	Motor, levelling control, headlights (GA:1 C/GA:3 C) (1502/1503)
K20	Relay, D+ short-circuit, (ADR-trucks only) (AE:4 D) (1000)	M09DS	Motor, door lock (IM:1 D) (1083)
K21	Relay, el. adjustable seat (IA:2 B) (1000)	M09PS	Motor, door lock (IM:2 D) (1083)
K22	Relay, climate fan, 1:st speed (by parking heater) (HY:1 B) (1000)	M10	Motor, roof hatch (IQ:0 E)
K22	Relay, climate fan, 1:st speed (by parking heater) (HY RHD:1 B) (1000)	M11	Motor, cab tilt pump (KA:0 D) (1502/1503)
K23	Relay, cab tilt (KA:0 C) (1000)	M13	Motor, coolant pump, parking heater (HP:0 C) (1062)
K24	Relay, central lubrication (FU:0 B) (1000)	M14	Motor, central lubrication pump (FU:0 C) (1401)
K25	Relay, light sign (KI:1 C) (1000)	M17	Motor, foldable rear view mirror arm, Japan (IF:0 D) (1470)
K26A	Relay, foldable rear view mirror arm, Japan (IF:0 C) (1000)	M27	Motor, roof cooler fan (HZ:1 C)
K26B	Relay, foldable rear view mirror arm, Japan (IF:1 C) (1000)	M28	Motor, washer, roof cooler (HZ:2 C) (1018)
K27	Relay, gas discharge lamp, dipped beam, lhs (GD:1 C) (1000)	R01	Heater, engine preheat (CO:3 B) (1030)
K28	Relay, gas discharge lamp, dipped beam, rhs (GD:1 C) (1000)	R02L	Heater, rear-view mirror (IE:0 D) (1504)
K30	Relay, beacon warning light (KM:0 B) (1000)	R02R	Heater, rear-view mirror (IE:1 D) (1504)
K35	Relay, headlamp high pressure wash (GM:0 B) (1000)	R04	Cigarette lighter (IQ:2 C) (1000)
K37	Relay, parking light (NA:1 C/NB:0 C) (1000)	R05	Heater, air dryer (FQ:0 C) (1056)
K38	Relay, body builder preparation, pressure sel./switch 2/free (NA:1 C/NB:1 C) (1000)	R08	Termination resistor, CAN-bus (CS:3 B)
K39	Relay, body builder preparation, plough light, spotlights (NA:1 C/NB:1 C) (1000)	R11	Heater, coffee maker (ME:1 B) (1000)
K40	Relay, body builder preparation (NA:3 C/NB:3 C) (1000)	R13	Resistor, LCP headlight adjust (GU:1 B) (1000)
K41	Relay, body builder preparation, swapbody (NA:2 C/NB:2 C) (1000)	R14	Termination resistor (XB:2 D)
K42	Relay, body builder preparation, spotlights/free (NI:1 B) (1000)	R17	Resistor (AB:2 B/AE:3 C)
K43	Relay, body builder preparation, external start/free (NC:3 C) (1000)	R18	Heater, electronic controlled air dryer (FQ:1 C) (1056)
K45	Relay, body builder preparation, dual speed (NU:2 B) (1000)	R21	Termination resistor (OA:3 C) (1000)
K48	Power relay, engine preheating (CK:3 B/CL:2 B/CM:2 B) (1435A/1435B)	R23A	Heater, AdBlue hose (CV:1 D) (1510)
K49	Power relay, bogie lift motor (FI:3 B/FK:3 D) (1037)	R23B	Heater, AdBlue hose (CV:2 D) (1510)
K51	Power relay, battery main switch (AB:0 C/CS:0 C) (1435A)	R23C	Heater, AdBlue hose (CV:2 D) (1510)
K51_A	Power relay, battery main switch (AB:1 C) (1435A)	R23D	Heater, AdBlue hose (CV:1 D) (1510)
K52	Power relay, ADR battery main switch (AE:0 B) (1435B)	R23J	Heater, AdBlue hose (CV:1 D) (1510)
K54	Relay, 12V ABS Trailer (CP:2 D)	R28	Termination resistor, OBD (XC:0 A) (1000)
K58	Relay, speed limiter, Volvo link (BY:3 B) (1000)	R33	Termination resistor (BE:2 D) (1502)
K59	Relay, engine shut off, Volvo link (BY:4 B) (1000)	R34	Termination resistor (DE:0 B)
K60	Relay, trailer lock, Volvo link (BY:3 D) (1000)	R35	Termination resistor (XC:2 C)
K61	Relay, auxiliary revers light, truck (NA:0 C/NB:0 C) (1000)	R36	Heater, AdBlue filter housing (CV:0 E) (1510)
K63	Relay, ACC Adaptive cruise control (BE:1 B) (1000)	R39	Resistor, cummins alternator (CP:2 B)
K64	Relay, man. main switch BBOX-EF (AB:1 C) (1000)	S01	Switch, main lighting, selector type (GA:0 A/GU:1 B) (1000)
K65	Power relay, starter motor pre-relay (CO:2 B)	S02	Stalk switch, full-/dipped beam, direction indicator (GA:2 B) (1000)
K66	Relay, tail lift indication (NB:2 C) (1000)	S03	Switch, loading lamps/working lamps (KE:1 B/ZA RHD:2 B) (1000)
L01	Reactor, light sign illumination (KI:0 D)	S04	Switch unit, climate fan (HY:1 B/HY RHD:1 A) (1000)
L01L	Reactor, light sign illumination (KI:2 C)	S05A	Switch, interior light, selector type (IH:3 B) (1000)
L01R	Reactor, light sign illumination (KI:2 D)	S05B	Switch, interior light, selector type (IH:3 B) (1006D/1006E)
M01	Motor, windscreen wiper (GM:2 C) (1504)	S06	Stalk switch, windscreen wiper, selector type (BI:3 B/GM:3 B) (1000)
M02	Motor, windscreen washer pump (GM:0 D) (1503)	S07	Switch, engine brake, selector type (BA:3 B) (1000)
		S07A	Switch, engine brake, selector type (CP:0 D)
		S07B	Switch, engine brake, selector type (CP:0 D)
		S08	Switch, differential gear lock, rear wheels (DU:1 B) (1000)
		S09	Switch, differential gear locks, inter axles and rear wheels, selector type (DU:1 B) (1000)
		S10	Switch, sign light, roof (KI:1 B) (1006A)
		S11	Switch, bogie lift, selector type (FI:0 B/FK:0 B/FK RHD:0 B) (1000)

S11A	Switch, bogie lift, selector type (FA:3 B/FA RHD:3 A) (1000)	S58	Position switch, clutch pedal, NO. (BA:3 D) (1000)
S14A	Switch, push button, horn (GQ:1 D)	S59	Position switch, brake pedal, NO. (BA:3 D) (1000)
S14B	Switch, push button, horn (GQ:1 D)	S60A	Pressure switch, oil, power steering, NC. (FP:0 C) (1493)
S15	Switch, starting (AC:1 B/AE:0 B) (1000)	S60B	Pressure switch, oil, power steering, NC. (FP:0 C) (1493)
S16	Switch, push button, air horn (GQ:2 D)	S63	Position switch, low range gear (BA:0 B) (1494)
S17	Switch, front wheel drive (DU:2 B) (1000)	S64	Pressure switch, air pressure, parking brake tank, NC. (EO:1 B) (1000)
S18	Switch, differential gear lock, front (DU:2 B) (1000)	S66_L	Switch unit, ECS (electronic controlled susp.), full air suspension (FA:2 D) (1007A/1007B)
S19	Switch, extra (NA:3 B/NB:3 B)	S66_R	Switch unit, ECS (electronic controlled susp.), full air suspension (FA RHD:2 E) (1007A/1007B)
S20	Switch, 3:rd axle lock (FO:2 B) (1000)	S68	Sensor, coolant level (CO:1 C/CS:3 D) (1030)
S21A	Switch, parking heater (HI:2 B/ZA RHD:0 B) (1000)	S69	Proximity switch, bogie lift position, NO. (FK:1 D) (1037)
S21B	Switch, parking heater (HI:3 B) (1006D/1006E)	S70	Position switch, flow sensor, power-steering, NC. (FP:0 C) (1493)
S23	Switch, roof hatch, selector type (IQ:0 B) (1006A)	S71	Pressure switch, compressor charging, NO. (BA:0 D) (1056)
S24	Stalk switch, retarder, selector type (BA:3 B) (1000)	S73	Switch, acoustic reverse warning (GC:4 A) (1006A)
S25	Switch unit, cruise control (BA:2 B) (1000)	S73_2	Switch, acoustic reverse warning (GC RHD:3 B) (1006A)
S26A	Switch, cab tilt pump (KA:0 B) (1000)	S74	Switch, short stop cab heater (HP:0 B) (1000)
S26B	Switch, cab tilt pump (KA:0 D) (1502/1503)	S75	Switch, beacon warning light (KM:0 B) (1000)
S27	Switch, storage tray illumination (IQ:1 C) (1000)	S76	Switch, spotlights (NA:4 B/NB:4 B) (1000)
S28A	Switch, power take off (DQ:0 B) (1000)	S76A	Switch, spotlights (NI:4 C) (1006A)
S28B	Switch, power take off (NC:0 C/NU:0 B) (1000)	S77	Switch, emergency call (BU:1 B/BU_2:1 B) (1000)
S30	Switch unit, multi-function display (BI:3 B) (1000)	S78	Switch unit, TIS (Traffic Information System) (BU:3 B/BU_2:3 B) (1000)
S31	Switch, TCS (Traction Control System) (EO:1 A) (1000)	S79A	Switch, additional work lamps (reverse lamps), manual turn on (NA:1 B/NB:1 B) (1000)
S32	Switch, brake hold (EO:1 B) (1000)	S79B	Switch, additional work lamps (reverse lamps), manual turn on (NA:2 B) (1000)
S33	Switch, trailer brake (EO:0 B) (1000)	S79D	Switch, additional work lamps (reverse lamps), manual turn on (NA:0 B/NB:0 B) (1000)
S34	Switch unit, steering wheel push buttons (IS:1 D) (1000)	S80	Position switch, front hatch (NK:1 D) (1504)
S36DS	Switch unit, door functions (IE:0 B) (1083)	S83	Switch, container lock (NA:2 B/NB:2 B) (1000)
S36PS	Switch unit, door functions (IE:3 B) (1083)	S84	Switch, tachograph mode (BN:0 C) (1006)
S37	Switch, rear view camera, camera activation (IZ:1 B) (1000)	S86	Switch, foldable rear view mirror arm, Japan (IF:1 B) (1000)
S38	Switch, ADR, emergency switch, cab (AE:1 B) (1000)	S88L	Position switch, door, NC (BY:2 D/NK:0 D) (1007A)
S39	Switch, ADR, emergency switch, exterior (AE:1 C) (1007A)	S88R	Position switch, door, NC (BY:2 D/NK:0 D) (1007B)
S39	Switch, ADR, emergency switch, exterior (AE:2 C) (1007B)	S95	Switch, Panic alarm (NK:2 A) (1000)
S40	Switch, rear view camera, camera selection (IZ:2 B)	S96	Switch, Reduced set, Alarm (NK:2 B) (1000)
S43	Pressure switch, parking brake indicator, NC. (BA:1 D) (1000)	S165	Switch, Volvo Action Service, (VERS-SAM) (BY:2 B) (1000)
S45	Position switch, differential gear lock indicator, rear wheels, NC. or NO. (DU:3 C) (1040)	S166	Switch, panic alarm, Volvo link, (VERS-SAM) (BY:3 B) (1000)
S45R	Position switch, differential gear lock indicator, rear wheels, NC. or NO. (DU:3 C) (1040)	S169	Switch, battery main switch (AB:2 C) (1435)
S46	Pressure switch, bogie lift indicator, NO. (FI:2 D/FK:3 E) (1037)	S171	Switch, GLU (Gearlever unit) (DC:1 D) (1007)
S47	Position switch, low split indicator, NO. (BI:1 D) (1494)	S187	Switch, night driving light roof (IJ:2 B) (1006A)
S48A	Pressure switch, brake light, NO. (ABS/UABS) (GB:3 B) (1401)	S188	Switch, night driving light dash (IJ:2 B) (1000)
S48B	Pressure switch, brake light, NO. (ABS/UABS trailer control valve) (GB:3 B) (1401)	S203	Switch, BBOX-EF manual el/mek (AB:1 C) (1460)
S48C	Pressure switch, brake light, NO. (ABS/UABS trailer control valve) (GB:3 A) (1000)	S210	Switch, ID-lamps (GL:2 B) (1006A)
S49	Position switch, reverse lamps, NO (GB:3 D) (1494)	S212	Switch, tail lift (NB:1 B) (1000)
S52_L	Proximity switch, cab lock, NO. (BI:1 C) (1007A)	U01_A	Modulator, EBS, left front (EP:0 A) (1086)
S52_R	Proximity switch, cab lock, NO. (BI:1 D) (1007B)	U02_A	Modulator, EBS, right front (EP:1 A) (1086)
S53	Position switch, front-wheel drive indication, NO. (DU:4 C) (1458)	U03_A	Modulator, EBS, rear axle (EP:1 C) (1086)
S54	Position switch, differential gear lock, front-wheels, NO. (DU:4 C) (1458)	U03_B	Modulator, EBS, rear axle (EP:0 C) (1086)
S55	Thermal switch (HP:0 C) (1062)	U04_A	Modulator, EBS, pusher axle (EP:2 C) (1086)
S56	Thermal switch, bogie lift, NC (FI:3 C/FK:3 D) (1037)	U05_A	Modulator, EBS, trailer (EO:3 B) (1401)
S57L	Position switch, luggage compartment lighting, NC. (IH:4 D) (1007A)	U06B11	Voltage converter (IR:1 B) (1007C)
S57R	Position switch, luggage compartment lighting, NC. (IH:3 D) (1007B)	U06R11	Voltage converter (IR:1 B) (1007C)
		U06R19	Voltage converter (IR:0 B) (1007C)
		U07_A	Modulator, EBS, tag axle (EP:3 C) (1086)
		U08_A	Modulator, EBS, front (EP:2 A) (1086)
		U10	Voltage converter, 12V ABS Trailer (CP:4 B)

U12	Voltage converter, Volvo link, (VERS-SAM) (BY:1 B) (1000)	Y18	Solenoid valve, PTO (Power Take Off) (DE:2 B) (1499)
V02	Diode module (AE:2 B) (1000)	Y18A	Solenoid valve, PTO (Power Take Off) (DQ:0 D) (1401)
V03	Diode (GG:3 B)	Y18B	Solenoid valve, PTO (Power Take Off) (DI:0 C) (1494)
V04	Diode (FI:0 D/FK:0 D) (1037)	Y18C	Solenoid valve, PTO (Power Take Off) (NC:0 D/NU:0 C)
V05	Diode (FK:2 D)	Y18G	Solenoid valve, PTO (Power Take Off) (DN:2 B/DP:2 B) (1499)
V07	LED, indicator, Alarm (NK:2 C) (1000)	Y18H	Solenoid valve, PTO (Power Take Off) (DN:2 B/DP:2 B) (1499)
V08	Diode (NU:2 B) (1000)	Y21	Solenoid valve, slow clutch disengage (DE:2 D)
V09	Diode (CP:2 B)	Y22	Solenoid valve, fast clutch disengage (DE:3 D)
V10	Diode (CP:2 C)	Y23	Solenoid valve, fast clutch engage (DE:3 D)
V11	Diode (CP:3 C)	Y25	Solenoid valve unit, level control, air suspension (FA:1 B) (1072)
V25	Diode (IH:3 B)	Y26	Solenoid valve, slow clutch control (DE:2 D)
V27	Diode (DQ:1 C)	Y29	Solenoid valve unit, trailing axle (FA:1 B) (1072)
V28	Diode (DQ:1 C)	Y30A	Solenoid valve unit, gearbox (DE:0 B)
W02	Antenna, immobiliser (IM:3 B) (1000)	Y30B	Solenoid valve unit, gearbox (DE:1 B)
X01	Connector, vehicle diagnostics (XA:0 C) (1000)	Y30C	Solenoid valve unit, gearbox (DI:0 D) (1494)
X01B	Connector, vehicle diagnostics (CP:1 B)	Y31	Solenoid valve, area inhibitor (BA:1 B) (1494)
X01C	Connector, vehicle diagnostics (CP:0 C)	Y32	Fuel dosing pump, parking heater (HI:0 B/HM:0 D) (1040)
X02	Trailer connection, ABS/EBS (1063)	Y33	Solenoid valve, UI (Unit Injectors) (CO:3 D) (1030)
X03	Trailer connection, 15-pole unit (1063)	Y34	Control valve , EGR (Exhaust Gas Recirculation) (B65 sensor EGR valve position, M19 motor EGR control valve) (CO:1 B) (1030)
X04	Trailer connection, 7-pole unit, 24 N (1063)	Y37	Solenoid valve unit, AVU (CO:2 C) (1030)
X05	Trailer connection, 7-pole unit, 24 S (1063)	Y39	Solenoid valve, VCB (CO:3 D) (1030)
X06	Connector, 31-pole, in lhs. frame side, for body builder preparations (1505)	Y40	Solenoid valve unit, front axle, air suspension (FA:0 B) (1072)
X07B	Socket, 12V (IR:1 D) (1000)	Y42	Clutch, magnetic, air conditioning compressor (HG:0 D/HY:2 D/CS:2 D) (1025)
X08	Contact reel, air bag (IS:0 C) (1000)	Y43L	Seat belt tensioner, pyrotechnical (IS:2 D) (1007A)
X09	Slip contact, horn (GQ:1 C) (1000)	Y43R	Seat belt tensioner, pyrotechnical (IS:3 D) (1007B)
X10	B+ pass through, cab (AC:0 B) (1000)	Y44	Air-bag, pyrotechnical (IS:0 D)
X11	Power connector, engine (AA:2 D/CS:0 D)	Y48A	Solenoid valve, container lock (NA:3 D/NB:2 D) (1506A)
X12	Connector, Engine preheat power (CL:3 D/CM:3 D/CO:3 A)	Y48B	Solenoid valve, fifth wheel lock (NA:4 D/NB:3 D) (1506A)
X25	Power connector, bogie lift/extra equipment (AA:1 B)	Y49	Solenoid valve, parking brake (NU:2 C) (1504)
X54	Power connector, Engine (B+) (AA:1 D) (1030)	Y51A	Solenoid valve, regeneration (FQ:2 C) (1056)
X55	Plug, start aid (AA:1 C) (1435)	Y51B	Solenoid valve, compressor control (FQ:2 C) (1056)
Y02	Solenoid valve, differential lock, rear wheels (DU:1 D) (1401)	Y52	Clutch, magnetic, engine fan (CS:4 B)
Y03	Solenoid valve, differential lock, inter axles, rear (DU:1 D/ZA RHD:3 B) (1401)	Y53	Control valve block , RAS (FO:3 D) (1493)
Y05	Solenoid valve, bogie lift (FI:0 D/FK:0 D) (1037)	Y54	Control module VGT (Variable Geometry Turbine) (CO:1 B) (1030)
Y06	Solenoid valve, range inhibitor (BA:0 B) (1494)	Y72	Solenoid valve, Airhorn (GQ:0 B) (1504)
Y08	Solenoid valve, front-wheel drive (DU:2 D) (1458)	Y80	Solenoid valve, AdBlue dosing unit (CV:3 D) (1510)
Y09	Solenoid valve, differential lock, front axle (DU:2 D) (1458)	Y81B	Solenoid valve, AdBlue tank heating (CV:0 D) (1510)
Y10	Solenoid valve, 3:rd axle lock (FM:0 C) (1072)	Y88	Solenoid valve, trailing axle, air suspension, bogie lift (FA:2 B) (1072)
Y11	Solenoid valve unit, ABS, lhs. front (EE:0 D/EI:0 D) (1086)		
Y11_A	Solenoid valve unit, ABS, lhs. front (EO:3 D) (1086)		
Y12	Solenoid valve unit, ABS, rhs. front (EE:1 D/EI:1 D) (1086)		
Y12_A	Solenoid valve unit, ABS, rhs. front (EO:4 D) (1086)		
Y13	Solenoid valve unit, ABS, lhs. rear (EE:2 D/EI:2 D) (1086)		
Y14	Solenoid valve unit, ABS, rhs. rear (EE:3 D/EI:3 D) (1086)		
Y17A	Solenoid valve, retarder (DE:0 D)		
Y17B	Solenoid valve, retarder (DI:2 D) (1494)		

# Abbreviations

ABS .....	Antilock brake system	ESP .....	Electronic stability program
ACC .....	Adaptive cruise control	FAA10 .....	1 front axle, non driven
ACU .....	Alarm control unit	FAA20 .....	2 front axle, non driven
ADR-BAS1/ ADR1 .....	ADR adaptation, 1 switch	FMS .....	Fleet management system
ADR2 .....	ADR adaptation, 2 switches	FSS-LEAF .....	Leaf suspension, front
AIRDY-E .....	Electric airdryer	GSS-AGS .....	Automatic gear shifting system (Geartronic/l-shift)
ATB .....	Axle load limiter	GSS-PS .....	Automatic transmission, automatic gear shifting system (Powertronic)
ATC .....	Automatic temperature control	GSS-RC .....	Range gear shifting, cable manoeuvred
ATO2512C .....	Gearbox variant	GSS-SRC .....	Split and range gear shifting, cable manoeuvred
AT2412C .....	Gearbox variant	ISX .....	Engine variant (Australia only)
AT2512C .....	Gearbox variant	JPN .....	Japan
AUS .....	Australia	L .....	Left
AUXSW-6 .....	Wiring for six auxiliary switches for body building	LCM .....	Light control module
AWD .....	All wheel drive	L1H1 .....	Short cab
BBM .....	Body builder module	L2H1 .....	Long cab
BBOX-EF .....	Battery box end of frame	L2H2 .....	Long high cab (Globetrotter)
BBOX-R .....	Battery box right hand side	LF .....	Left front
CLU .....	Central locking unit	LHD .....	Left hand drive
CU-ACAUT .....	Air condition, automatic	LHS .....	Left hand side
CU-ACMAN .....	Air condition, manual	LOCK-ALL .....	Central door lock and cut off electricity of truck
CU-BAS .....	Basic version with stepper motor without air condition	LR .....	Left rear
CU-ECC .....	Electronic controlled climate control air condition	MAINSWI .....	Main switch
CU-HEAT .....	Heater unit	MECHTRAN .....	Mechanical transmission
CU-MCC .....	Manual controlled climate control air condition	MMS .....	Mechanical main switch
DS .....	Driver side	ODB .....	On Board Diagnostic
EBS .....	Electronic brake system	PH-CAB .....	Cab parking heater
ECS .....	Electronic controlled air suspension	PH-ENGCA .....	Engine and cab parking heater
ELCE-CK .....	Electrical complete kit for body builder	PS .....	Passenger side
ELMS .....	Electrical main switch	PSS-DUAL .....	Power steering system dual
EM-EC01 .....	European community 2001 level EURO3	PTO .....	Power take off
EM-JPN04 .....	Emission control Japan community 2004	R .....	Right
ENG-VE9 .....	Volvo engine 9 litre	RADT-A8 .....	6x2, air spring, 8 bellows, tag axle
ENG-VE12 .....	Volvo engine 12 litre	RADT-AR .....	6x2, leaf spring (A-ride)
ENG-VE13 .....	Volvo engine 13 litre	RF .....	Right front
ENG-VE16 .....	Volvo engine 16 litre	RHD .....	Right hand drive
EPG .....	Exhaust pressure governor	RHS .....	Right hand side
		RIGID .....	Platform or tipper truck
		RR .....	Right rear

RSTS-EHY .....	Rear steering system, electrical controlled, hydraulic	TIS-MAP .....	Transport information system, Map-system
SCR .....	Selective Catalyst Reduction	TIS-MED .....	Transport information system, Logg. Pos. and message
SI-GRAF .....	Tachograph	TMC .....	Traffic message channel
SI-GRAFR .....	Tachograph	TPM .....	Tyre pressure monitoring
SI-SPEED .....	Speedometer	TRACTOR .....	Semi-trailer tractor
SMCONT .....	Starter motor control	TREL7-7 .....	Trailer connectors 2x7-pole unit
SPEED-DU .....	Dual speed limiter	TREL14 .....	Trailer connectors 14-pole unit
SRS .....	Supplementary restrain system	TURB-HD .....	Turbo heavy duty design
STWPOS-L .....	Steering wheel position left hand side	UADR .....	Without ADR adaptation
STWPOS-R .....	Steering wheel position right hand side	UALARMB .....	Without alarm
SUSPL-EC .....	Air suspension, electronic control system levelling device	UJERICO .....	Without Jerico horn
SUSPL-M .....	Air suspension, manual regulation levelling device	UMAINSWI .....	Without main switch
SWAPBODY .....	Swap body	USMCONT .....	Without starter motor control
TECU .....	Transmission electronic control unit	URETARD .....	Without retarder
TIS-BAS .....	Transport information system, Logger and Positioning	USUSPLEV .....	Without air suspension levelling device
TIS-HIGH .....	Transport information system, Logg. Pos. and Adv. message system	UTPM .....	Without tyre pressure monitoring
TIS-LOG .....	Transport information system, Data-Logger	VECU .....	Vehicle electronic control unit
		VERS-SAM .....	South American Version
		VT2412B .....	Gearbox variant
		ZT1816 .....	Gearbox variant (South America only)

## Cable colour code

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 have two colours, this is written out like the following example: Y/R = Yellow/Red.



**VOLVO**

**Volvo Truck Corporation**

Göteborg, Sweden