

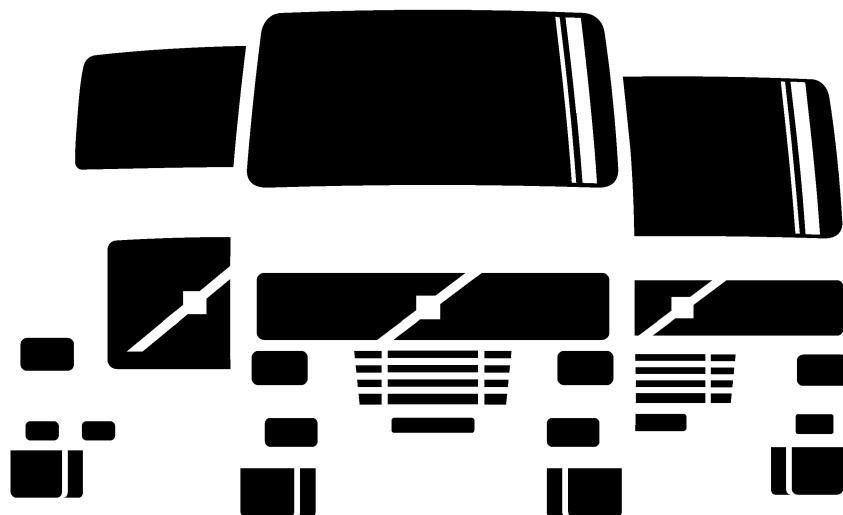
# Service Manual Trucks

Group **37**  
Release **01**

Wiring diagram

FM9, FM12, FH12, FH16, NH12 VERSION2

FM, FH CHID A610059–  
FM, FH CHID B411901–



# Foreword

The descriptions and service procedures contained in this manual are based on designs and methods studies carried out up to September 05.

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: 20037631**

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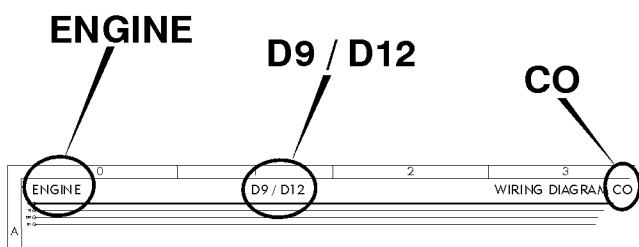
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ENG18353

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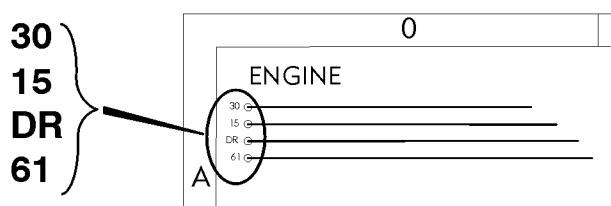
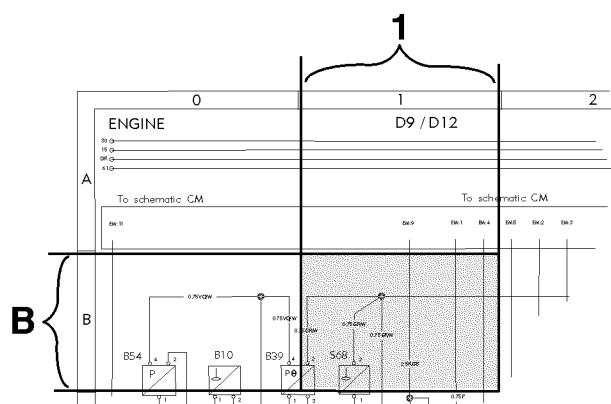
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# Example of wiring diagram



Component wiring diagram title, variant/subtitle and symbol.

Coordinates (B 1).



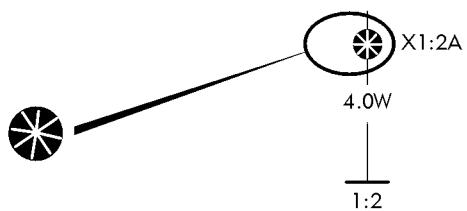
30 Voltage battery, kl.30.

15 Voltage with starter key in drive position, kl.15.

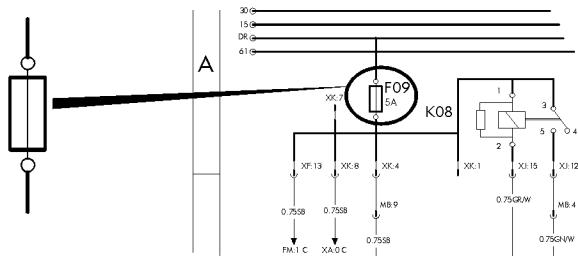
DR Voltage with starter key in drive position, preheat position and start position, kl.DR.

61 Voltage when alternator charges, kl.61.

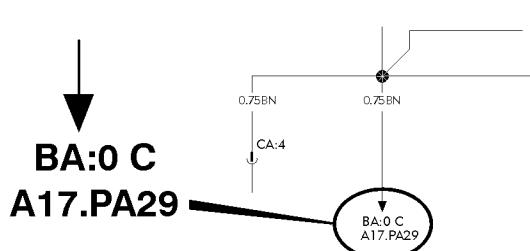
Splice.

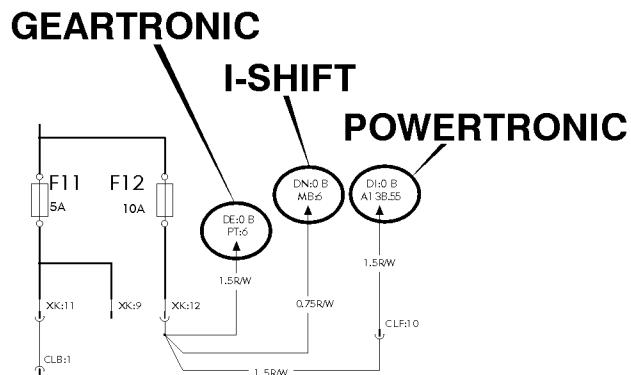


Fuse.

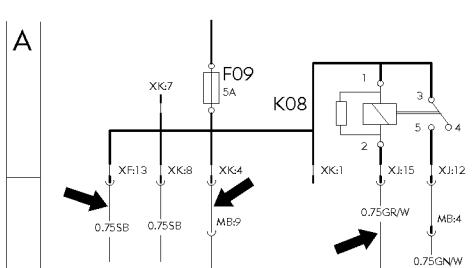
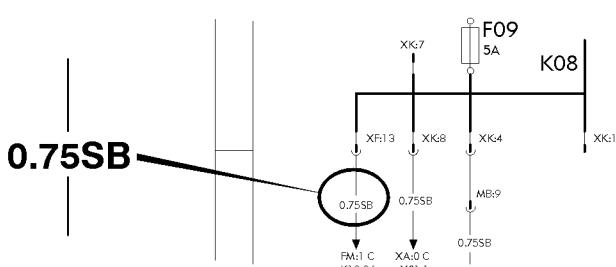
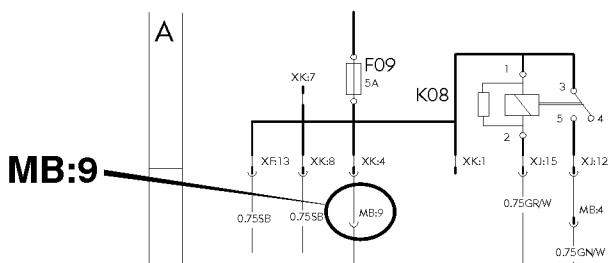
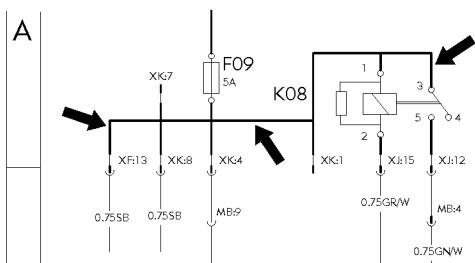
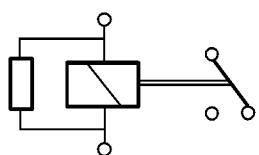
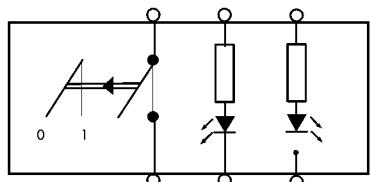


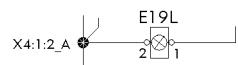
Reference arrow, for diagram BA, coordinates 0 C, component A17, connector PA pin 29.



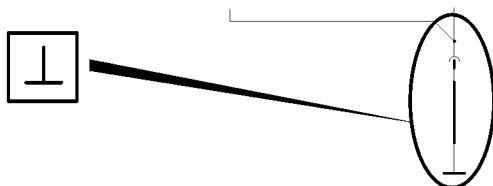


The maximum of variants are drawn, think about that all wires and components are not standard for all markets or vehicle models.

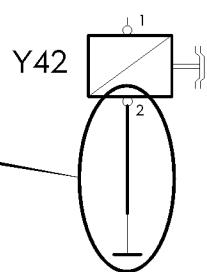




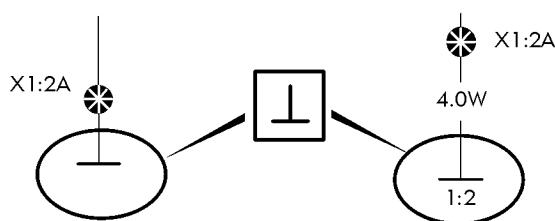
Earth connection point 4, earth connection 1 and wire 2.



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.

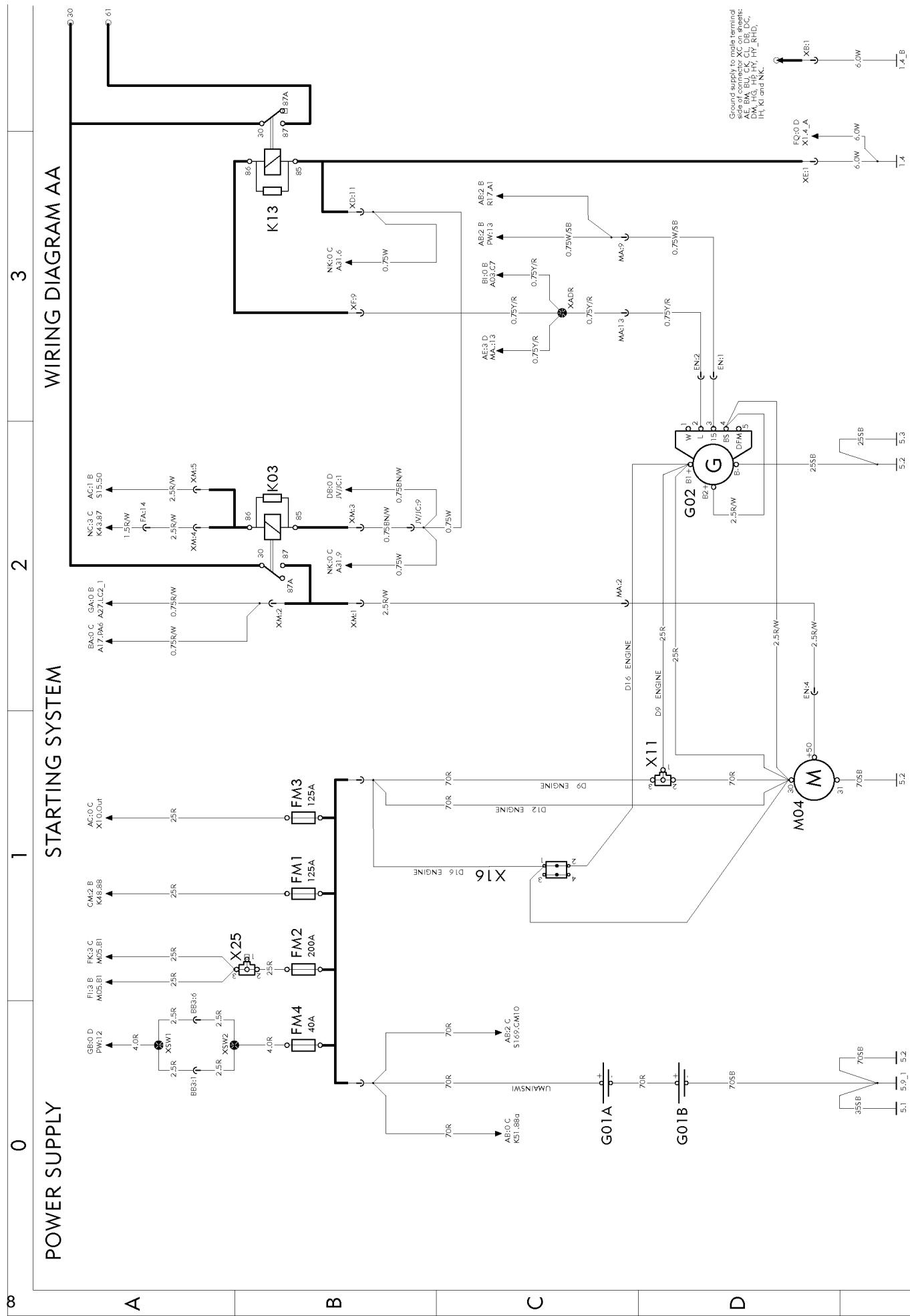
# Component wiring diagram index

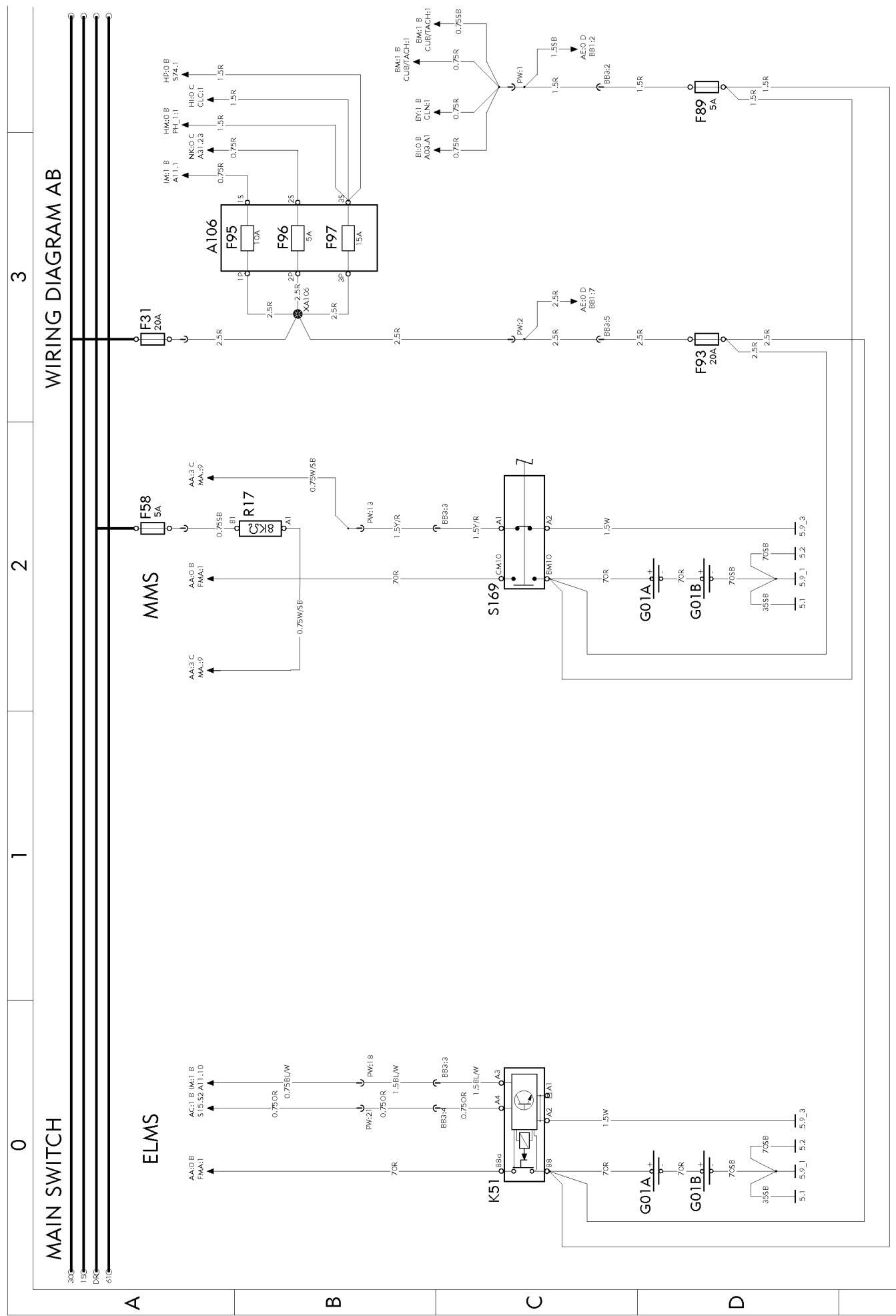
|           |   |         |
|-----------|---|---------|
| <b>AA</b> | Power supply, starting system .....                       | page 8  |
| <b>AB</b> | Remote main switch .....                                  | page 9  |
| <b>AC</b> | Power distribution .....                                  | page 10 |
| <b>AE</b> | ADR, main switch .....                                    | page 11 |
| <b>BA</b> | Vehicle ECU .....   | page 12 |
| <b>BE</b> | ACC Adaptive cruise control .....                         | page 13 |
| <b>BI</b> | Instrument cluster .....                                  | page 14 |
| <b>BM</b> | Tachograph in dash .....                                  | page 15 |
| <b>BN</b> | Tachograph in shelf .....                                 | page 16 |
| <b>BU</b> | Dynafleet .....   | page 17 |
| <b>BX</b> | FMS Gateway .....   | page 18 |
| <b>BY</b> | Volvo link (VERS-SAM) .....                               | page 19 |
| <b>CM</b> | Engine interface .....                                    | page 20 |
| <b>CO</b> | Engine D9 .....   | page 21 |
|           | Engine D12 .....  | page 22 |
|           | Engine D16 .....  | page 23 |
| <b>CP</b> | ISX functions, 12V trailer ABS converter (AUS only) ..... | page 24 |
| <b>CS</b> | Engine ISX (AUS only) .....                               | page 25 |
| <b>DB</b> | Gear selector ECU (GEARTRONIC) .....                      | page 26 |
| <b>DC</b> | Gear selector ECU (I-SHIFT/POWERTRONIC) .....             | page 27 |
| <b>DE</b> | Geartronic automatic gearshift .....                      | page 28 |
| <b>DI</b> | Powertronic .....   | page 29 |
| <b>DM</b> | Retarder manual gearshift .....                           | page 30 |
| <b>DN</b> | I-shift .....   | page 31 |
| <b>DQ</b> | Power take off .....                                      | page 32 |
| <b>DU</b> | Diff-lock .....   | page 33 |
| <b>EE</b> | ABS basic, D-version .....                                | page 34 |
| <b>EI</b> | ABS/ASR D-version .....                                   | page 35 |
| <b>EO</b> | EBS ECU .....   | page 36 |
| <b>EP</b> | EBS modulators .....                                      | page 37 |
| <b>FA</b> | Air-suspension .....                                      | page 38 |
| <b>FG</b> | Load indikator .....                                      | page 39 |
| <b>FI</b> | Bogie lift A-ride .....                                   | page 40 |
| <b>FK</b> | Bogie lift A-ride with axle load limiter .....            | page 41 |
| <b>FM</b> | Axle lock, self steered axle .....                        | page 42 |
| <b>FO</b> | Electronic steered axle .....                             | page 43 |
| <b>FP</b> | Hydraulic steered axle .....                              | page 44 |

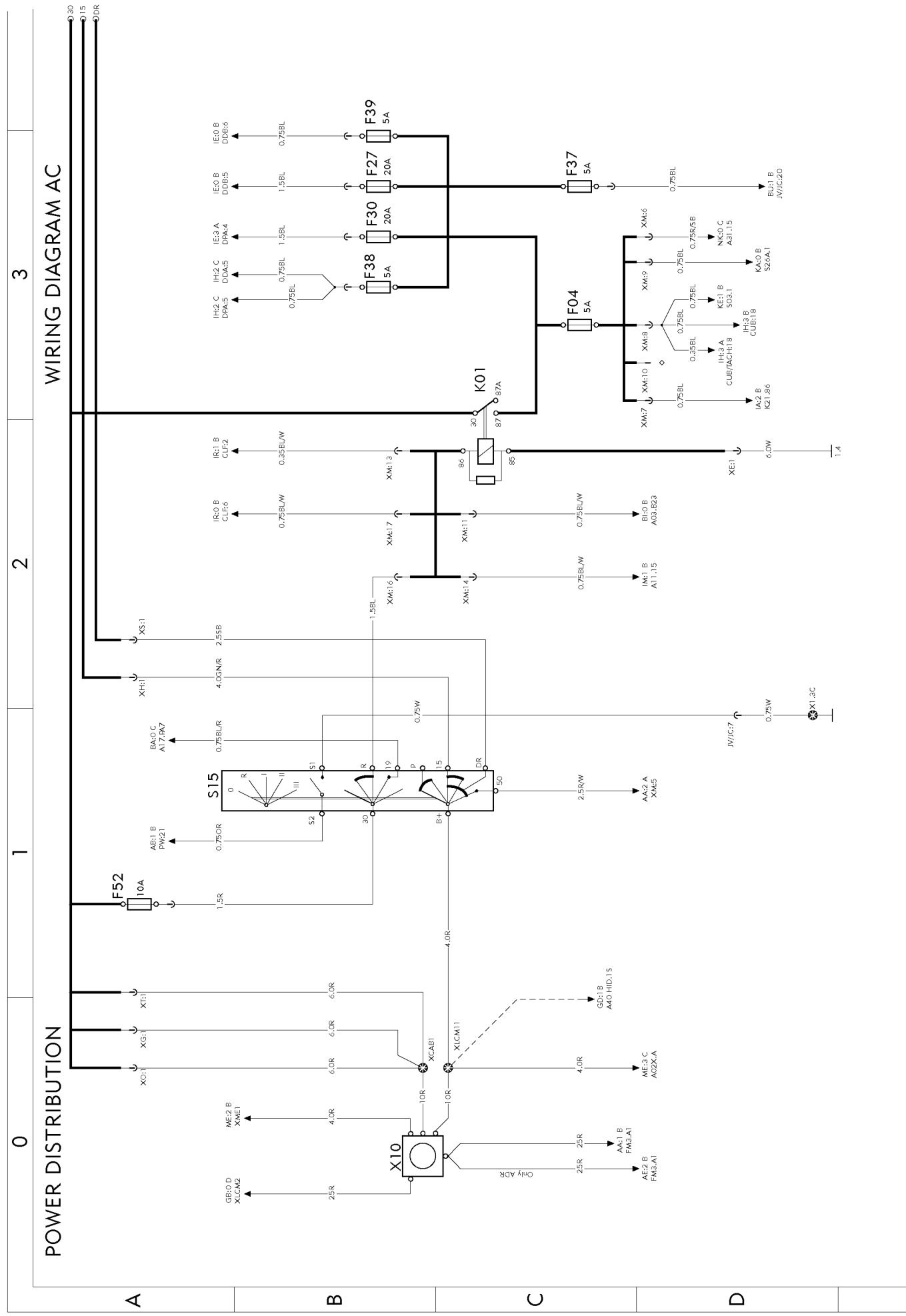
|           |   |         |
|-----------|---|---------|
| <b>FQ</b> | Air dryer .....                                 | page 45 |
| <b>FU</b> | Central lubrication system .....                | page 46 |
| <b>GA</b> | LCM head lights .....                           | page 47 |
| <b>GB</b> | LCM trailer .....                               | page 48 |
| <b>GC</b> | LCM rear lights .....                           | page 49 |
| <b>GD</b> | HID lamps .....                                 | page 50 |
| <b>GE</b> | Rear lights overhang .....                      | page 51 |
| <b>GF</b> | Rear lights, India/Korea .....                  | page 52 |
| <b>GG</b> | Trailer connections, RIGID .....                | page 53 |
| <b>GH</b> | Trailer connections, TRACTOR .....              | page 54 |
| <b>GI</b> | LCM head lights (VERS-SAM TYPE-N) .....         | page 55 |
| <b>GK</b> | Trailer connections (AUS only) .....            | page 56 |
| <b>GM</b> | Wiper, washer .....                             | page 57 |
| <b>GQ</b> | Horn .....                                      | page 58 |
| <b>GU</b> | Headlights adjust .....                         | page 59 |
| <b>HG</b> | Climate unit, CU,-BAS,-MCC,-ECC .....           | page 60 |
| <b>HI</b> | Air heater .....                                | page 61 |
| <b>HM</b> | Water heater .....                              | page 62 |
| <b>HP</b> | Short stop cab heater .....                     | page 63 |
| <b>HY</b> | Climat unit, CU,-HEAT,-ACMAN,-ACAUT. ....       | page 64 |
| <b>HZ</b> | Air cooler, Brazil .....                        | page 65 |
| <b>IA</b> | El. heated/adj. seat .....                      | page 66 |
| <b>IE</b> | El. heat/adj. mirrors, El. window winders ..... | page 67 |
| <b>IF</b> | Foldable mirror bracket .....                   | page 68 |
| <b>IH</b> | Interior light .....                            | page 69 |
| <b>IM</b> | Central locking, immobiliser .....              | page 70 |
| <b>IQ</b> | El. sunroof, cig. lighter, refrigerator .....   | page 71 |
| <b>IR</b> | 12V power supply .....                          | page 72 |
| <b>IS</b> | SWM, SRS. Air-bag .....                         | page 73 |
| <b>IU</b> | Radio .....                                     | page 74 |
| <b>IX</b> | Integrated telephone .....                      | page 75 |
| <b>IZ</b> | Backup camera .....                             | page 76 |
| <b>KA</b> | Cab tilt .....                                  | page 77 |
| <b>KE</b> | Load light, 5:th wheel lamp .....               | page 78 |
| <b>KI</b> | Light sign .....                                | page 79 |
| <b>KM</b> | Beacon warning light .....                      | page 80 |
| <b>ME</b> | Extra fuse block, key switch relay .....        | page 81 |
| <b>NA</b> | Body builder (BB), auxsw-6 and swapbody .....   | page 82 |

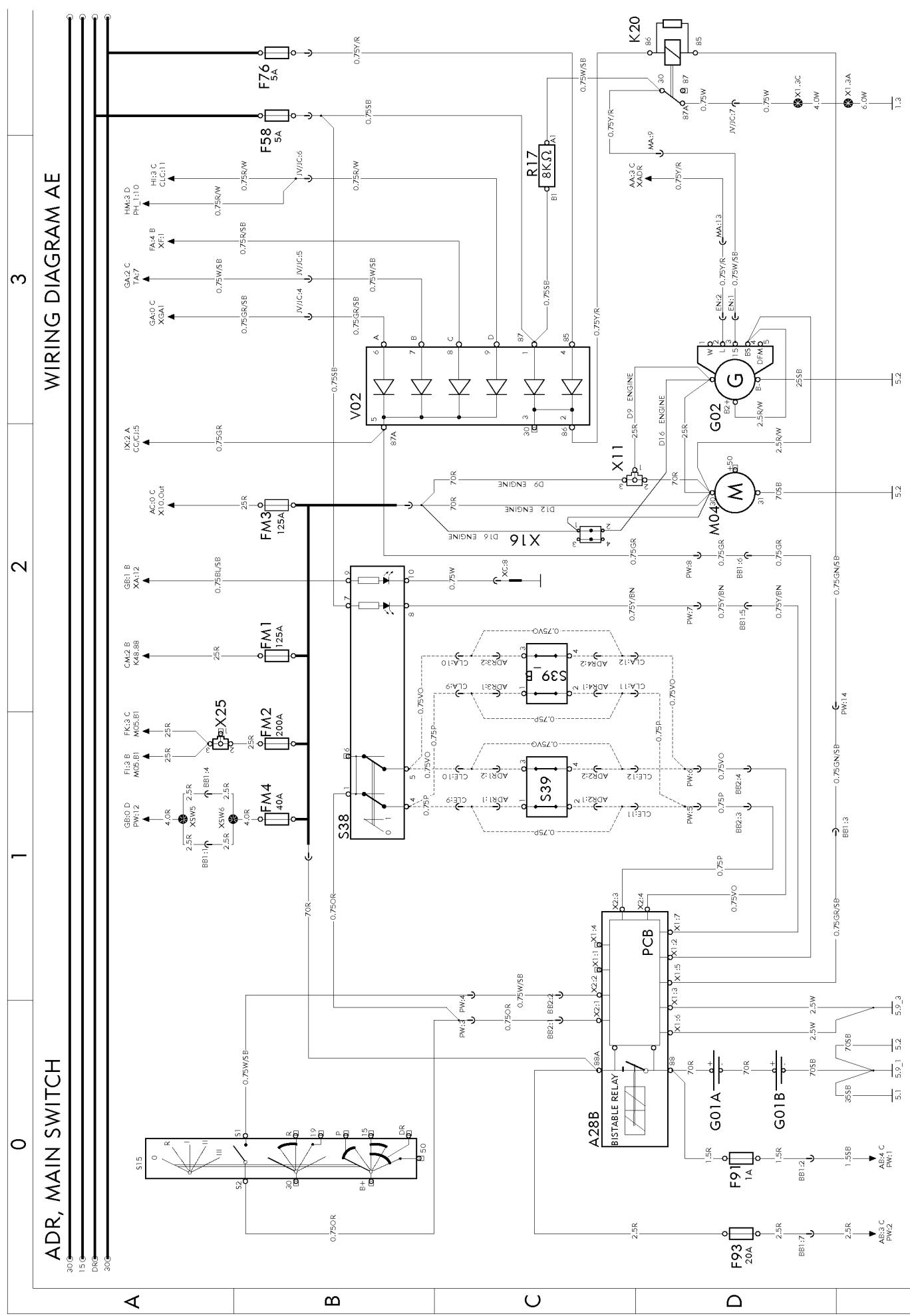
|           |   |         |
|-----------|---|---------|
| <b>NC</b> | Body builder (BB), ELCE-CK, BBM, PTO2 ..... | page 83 |
| <b>NI</b> | Extra spotlamps front/roof, max 4x70W ..... | page 84 |
| <b>NK</b> | Burglar alarm .....                         | page 85 |
| <b>NU</b> | Body builder (BB), DUAL-SPEED .....         | page 86 |
| <b>OA</b> | Tyre pressure monitoring (TPM) .....        | page 87 |
| <b>XA</b> | Bus J1708/J1587 .....                       | page 88 |
| <b>XB</b> | Bus J1939 .....                             | page 89 |

# Component wiring diagrams

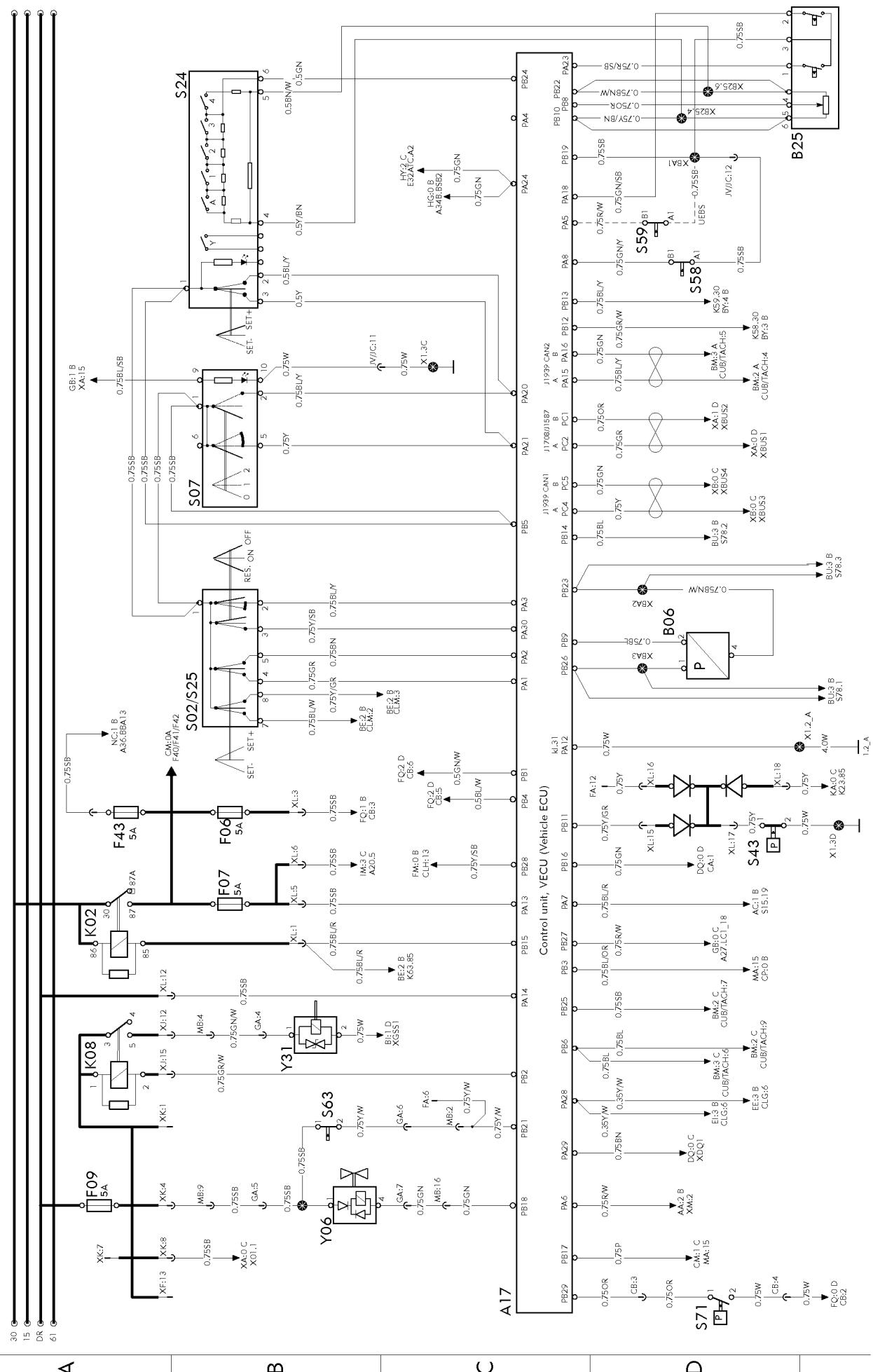


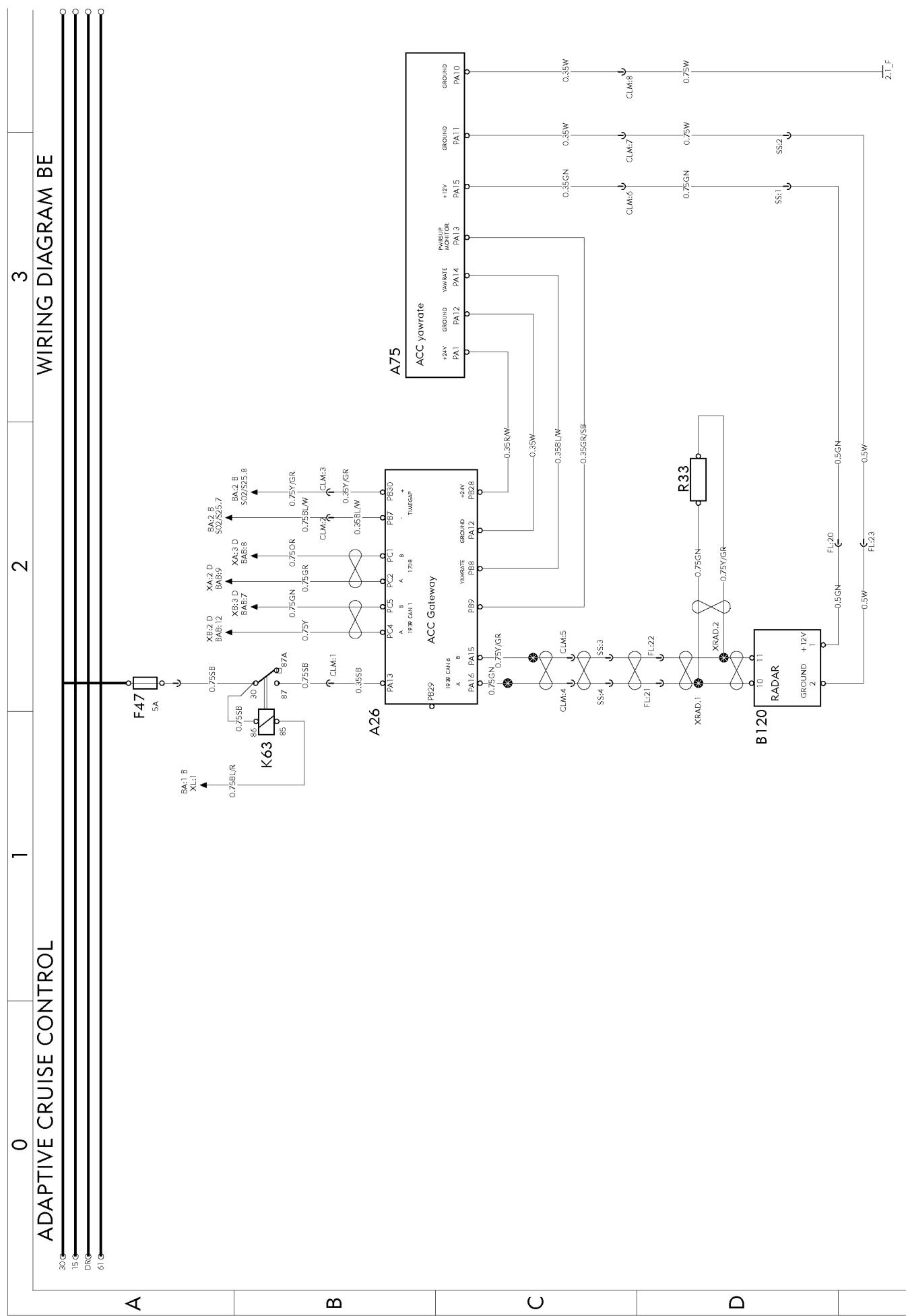






WIRING DIAGRAM BA

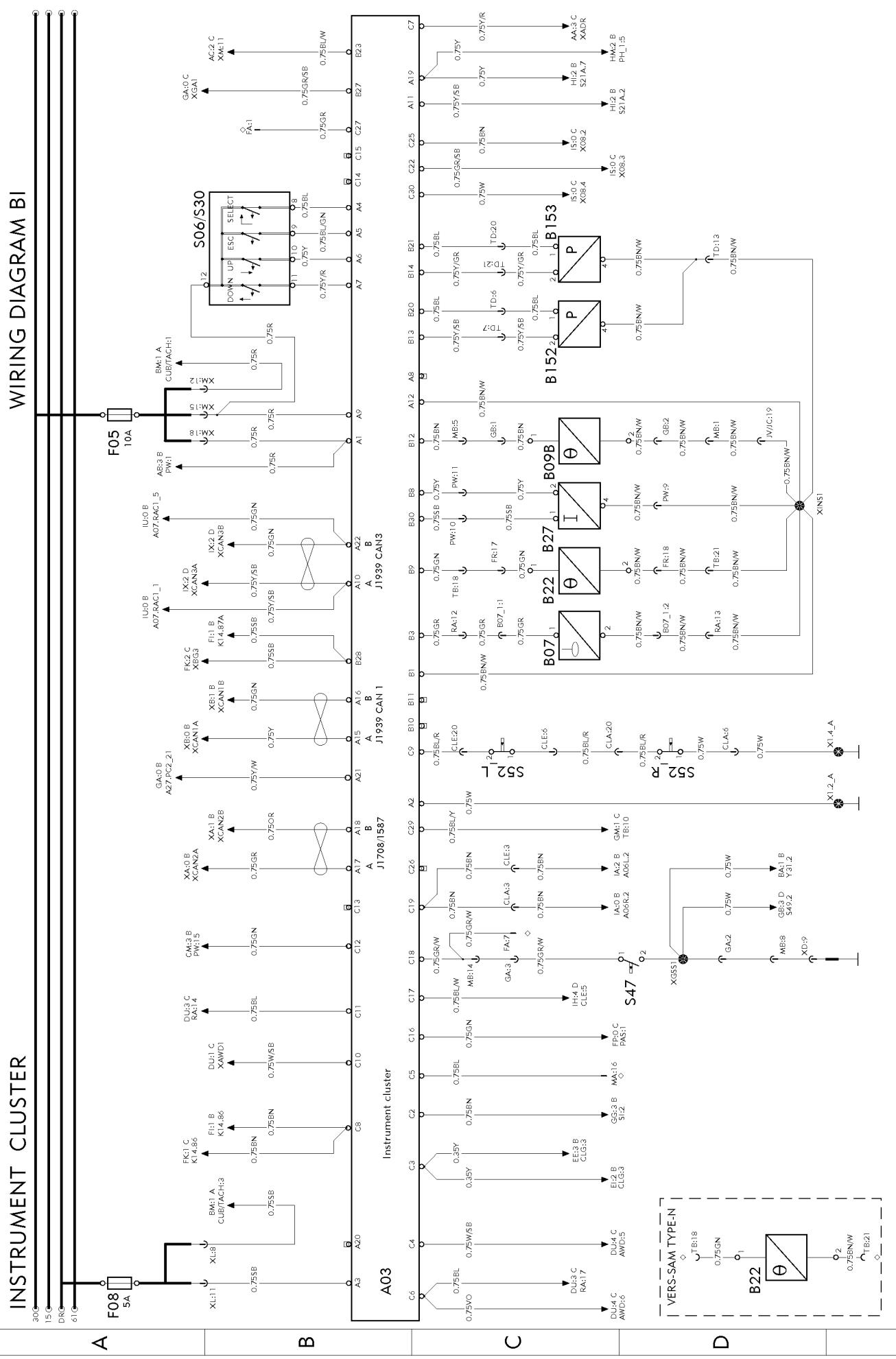


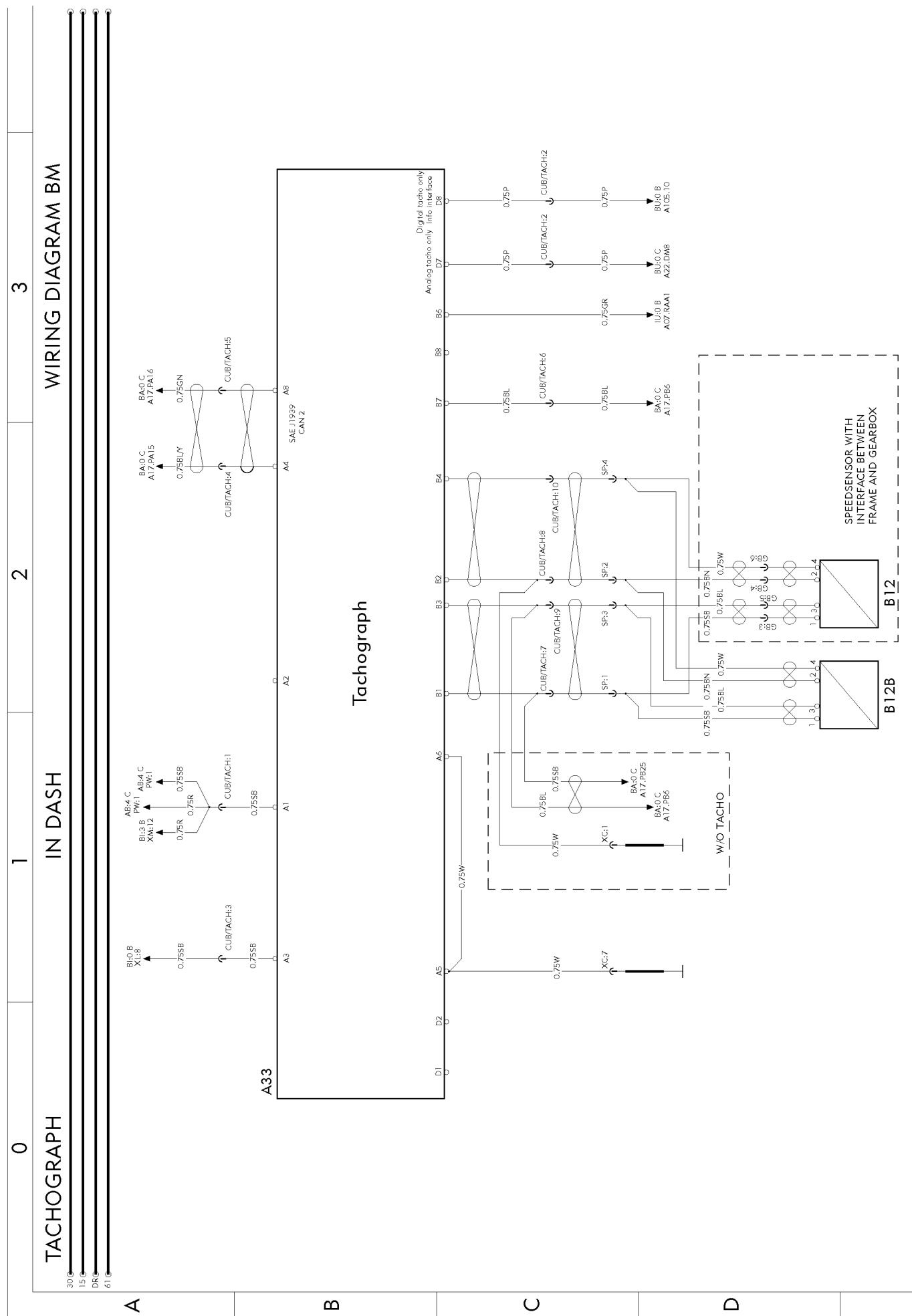


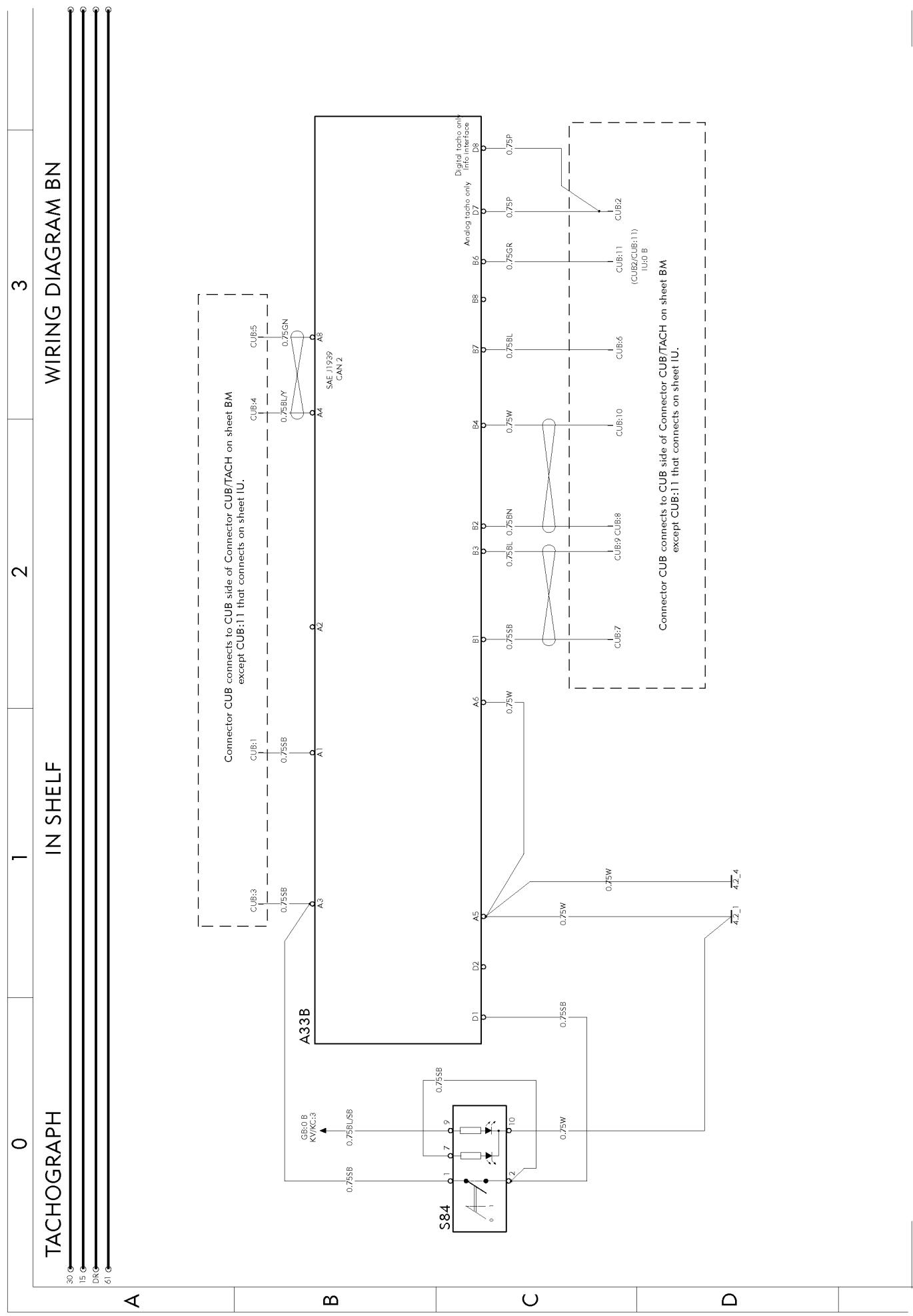
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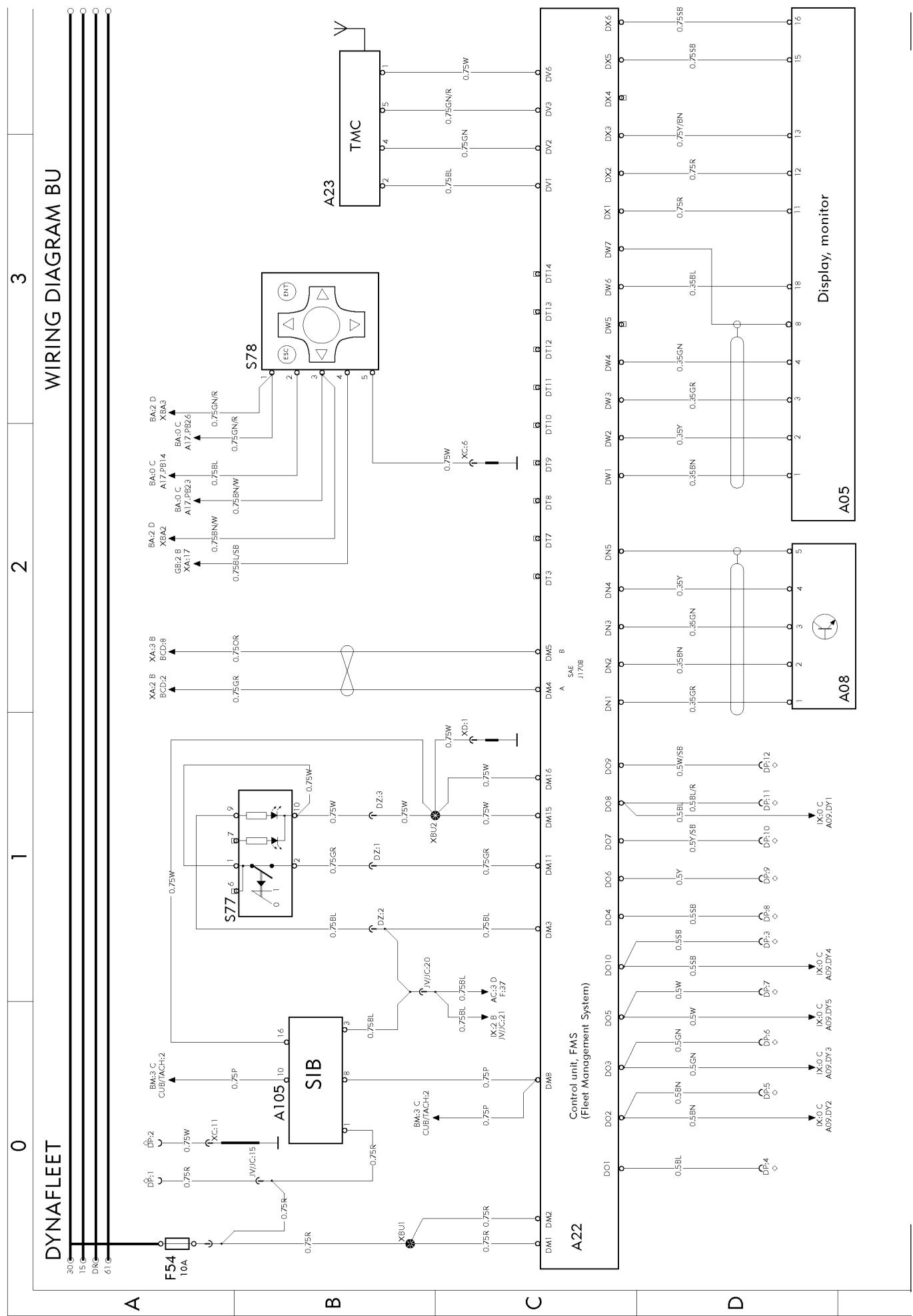
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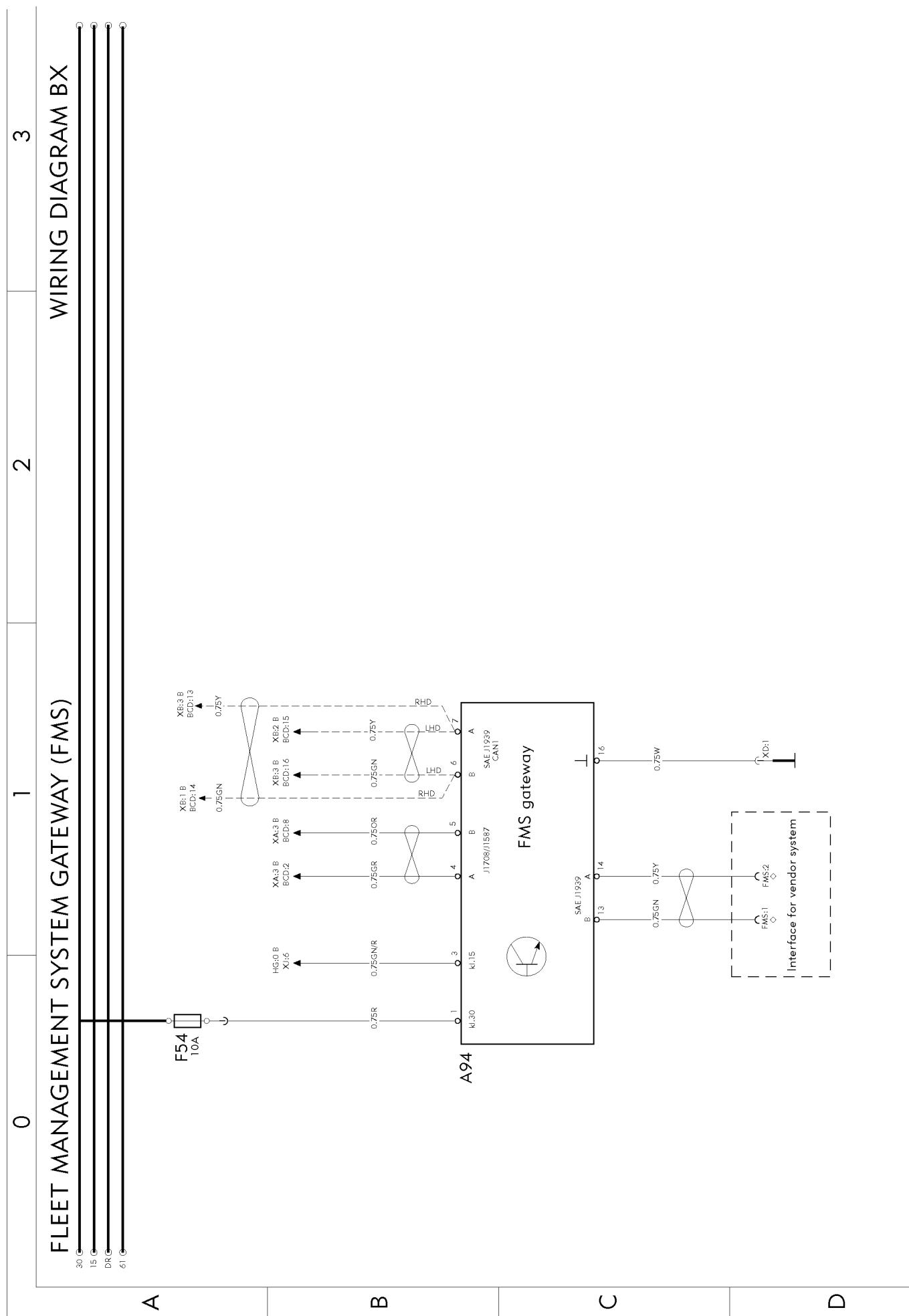
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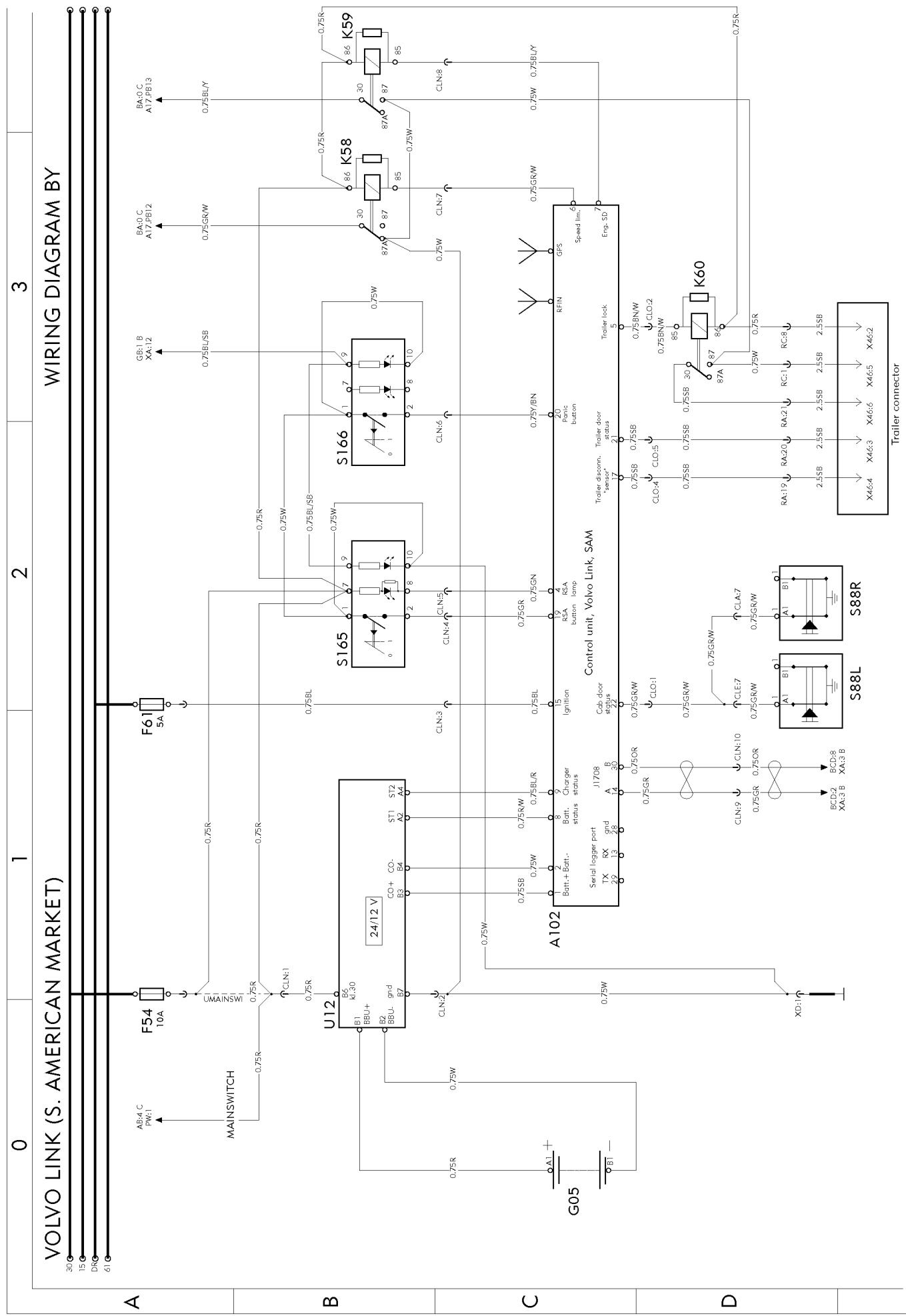


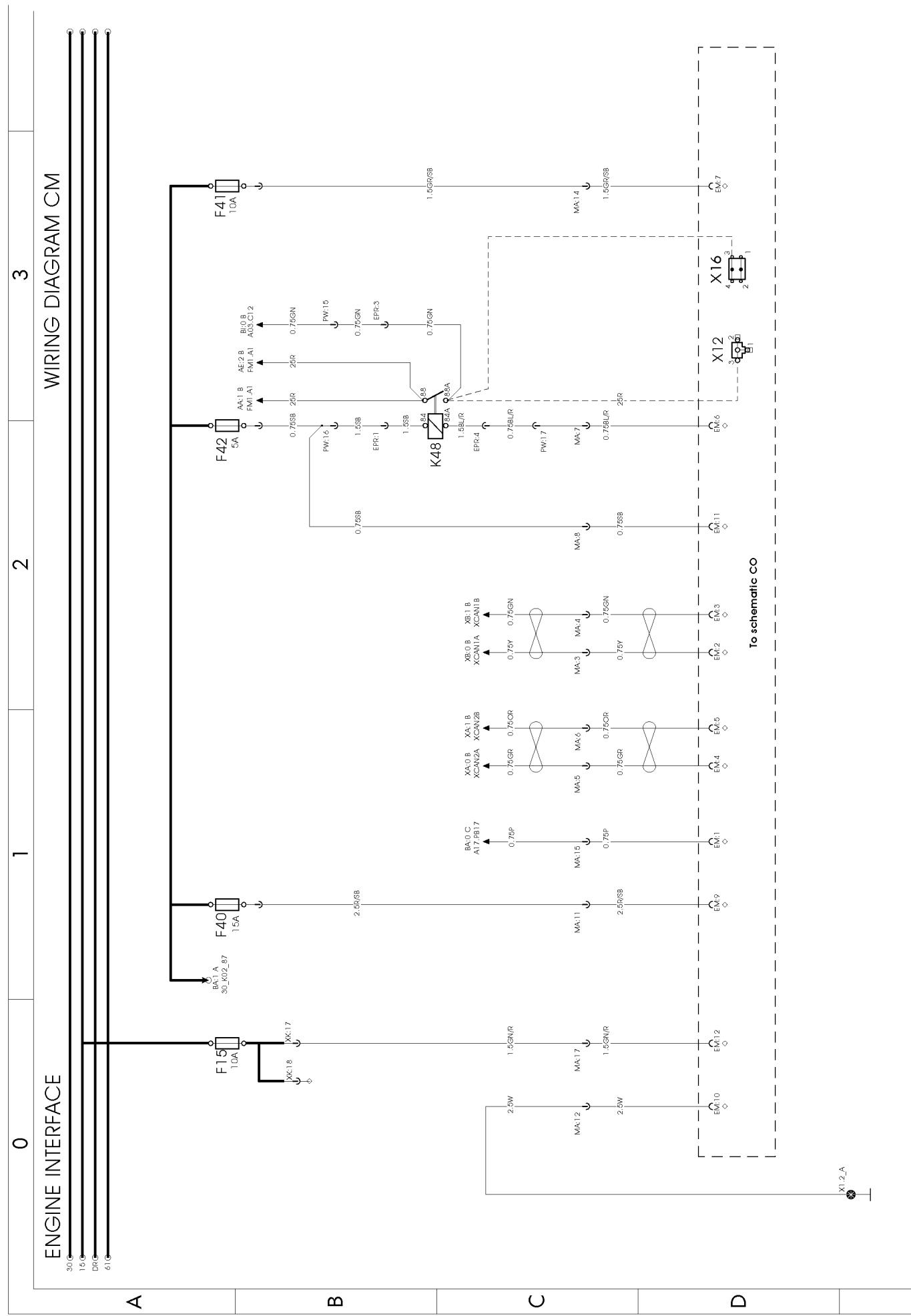


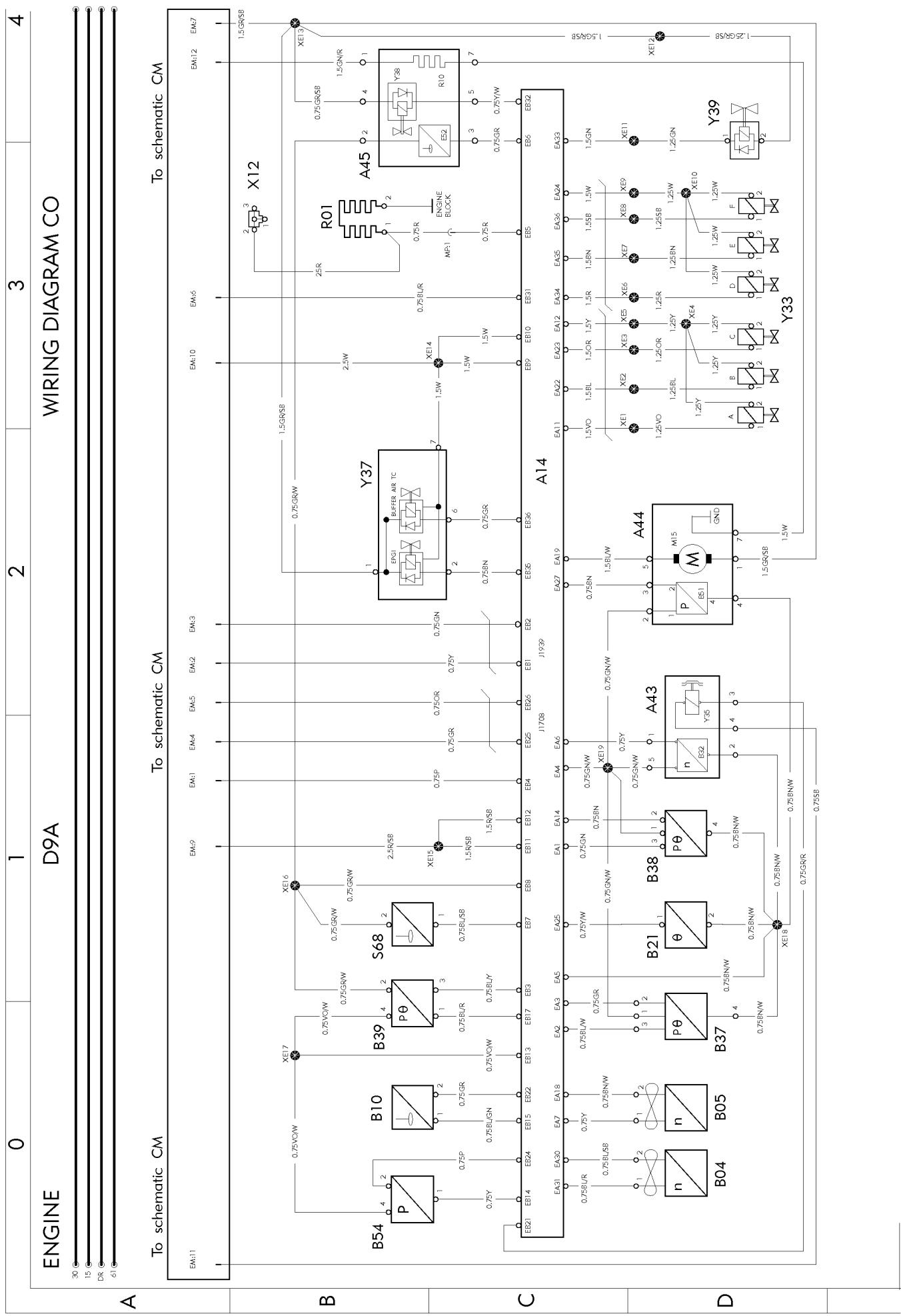


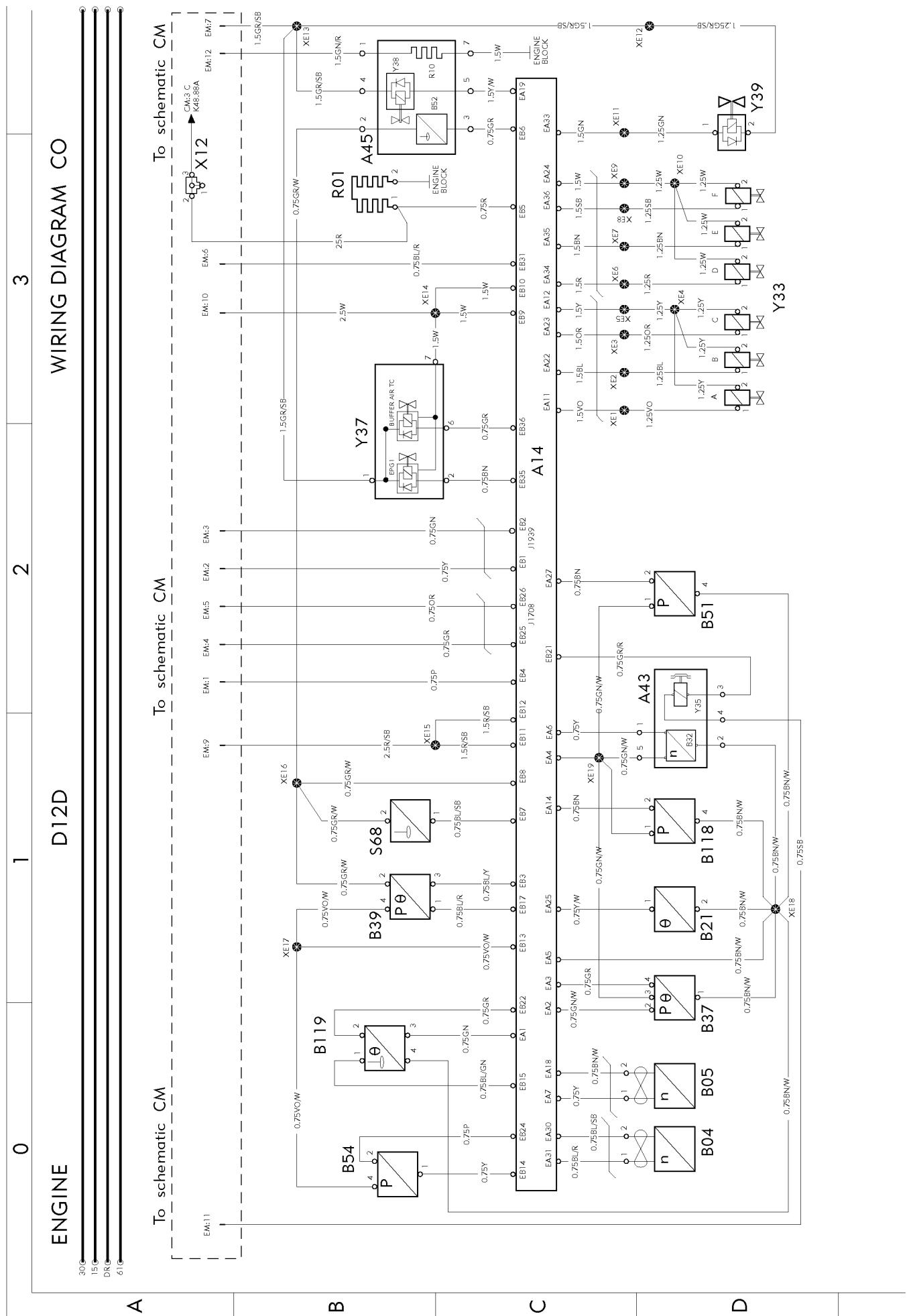


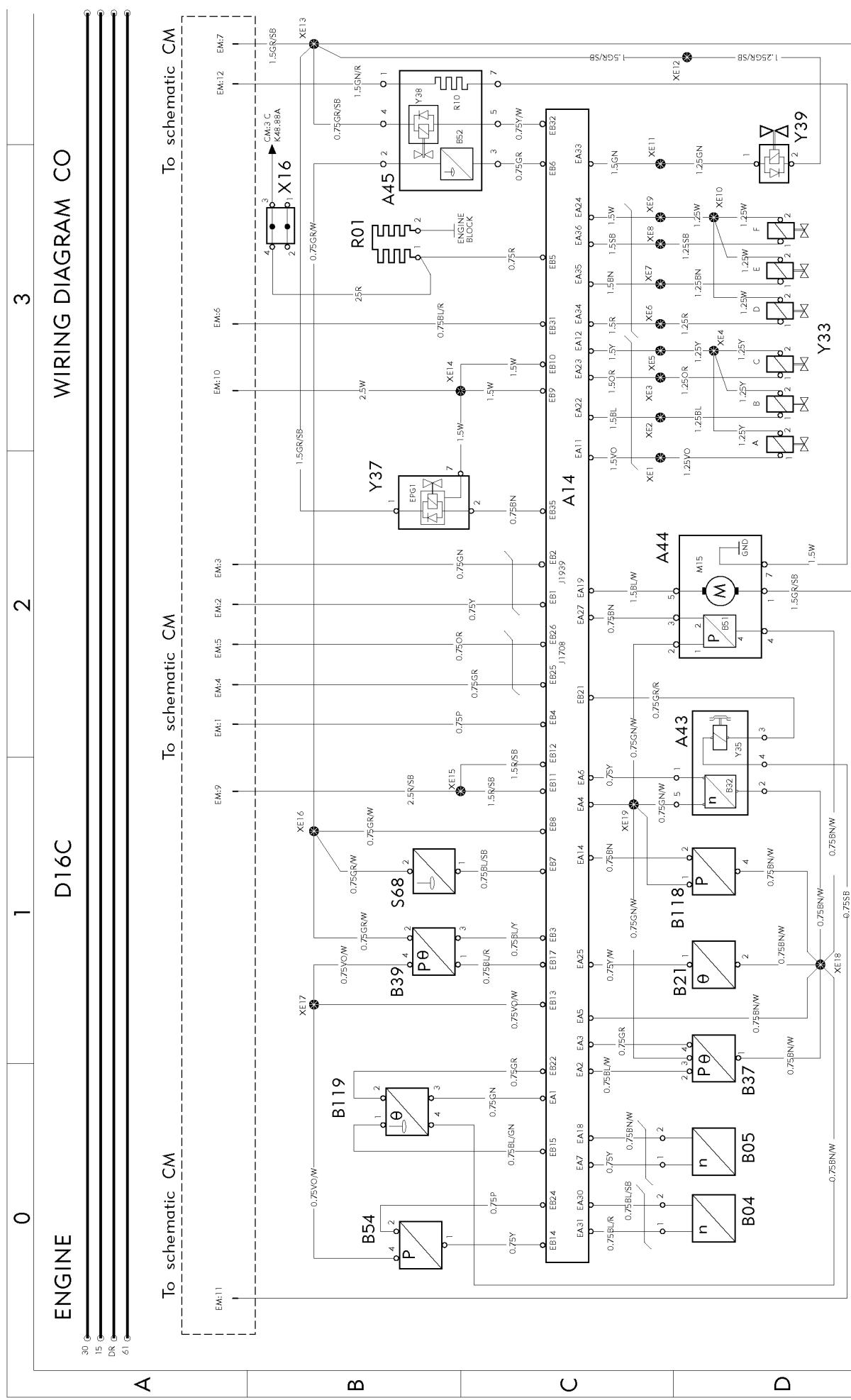


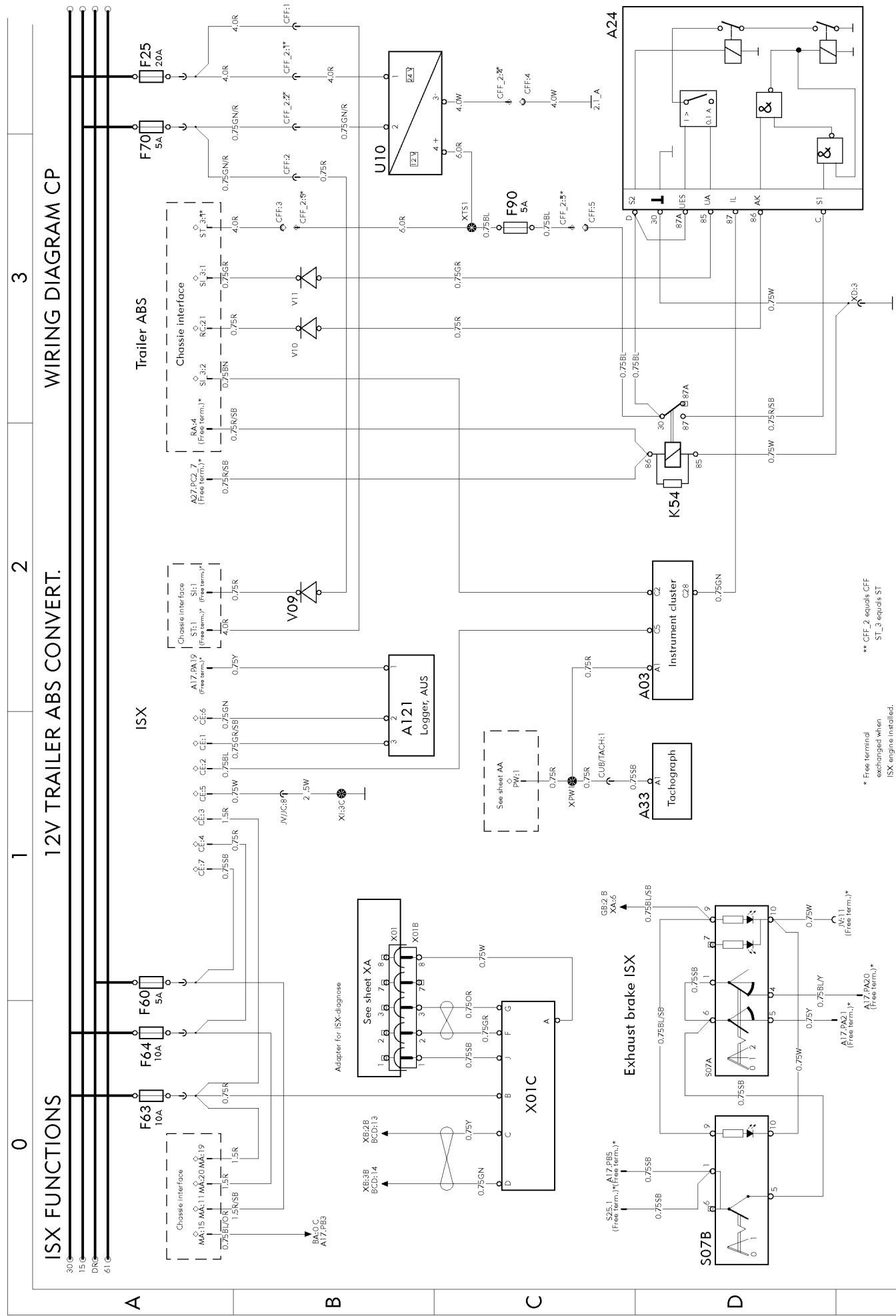










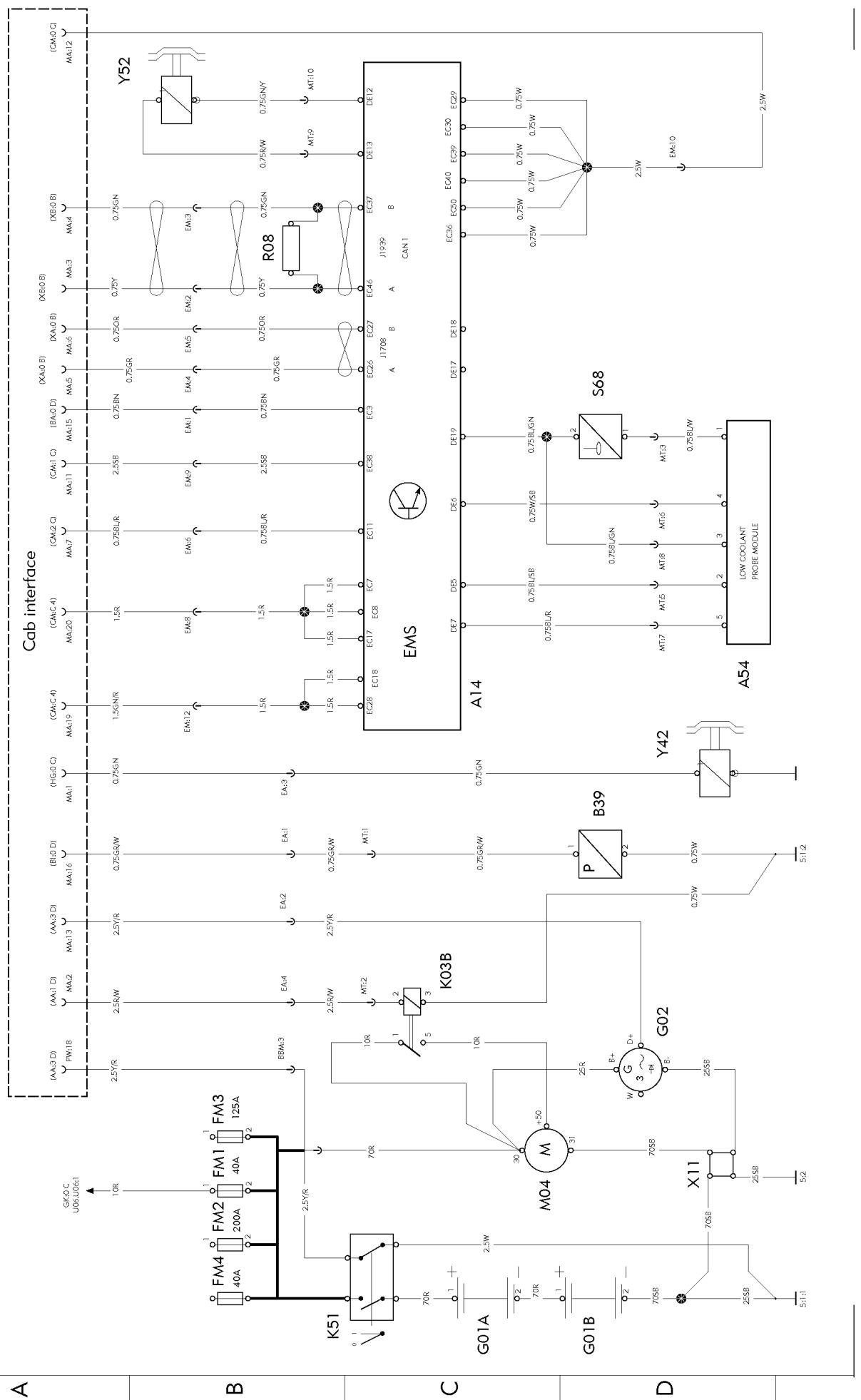


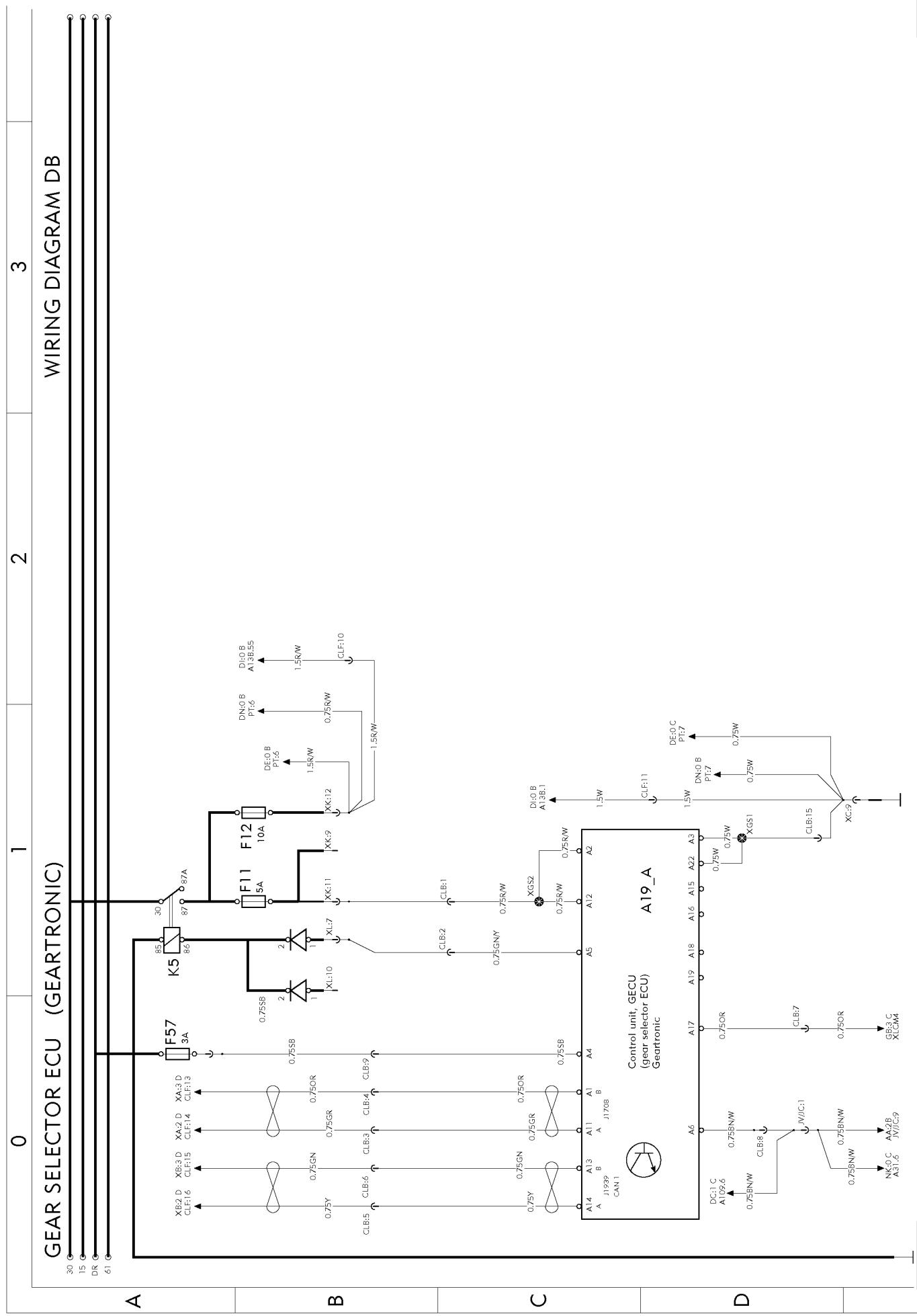
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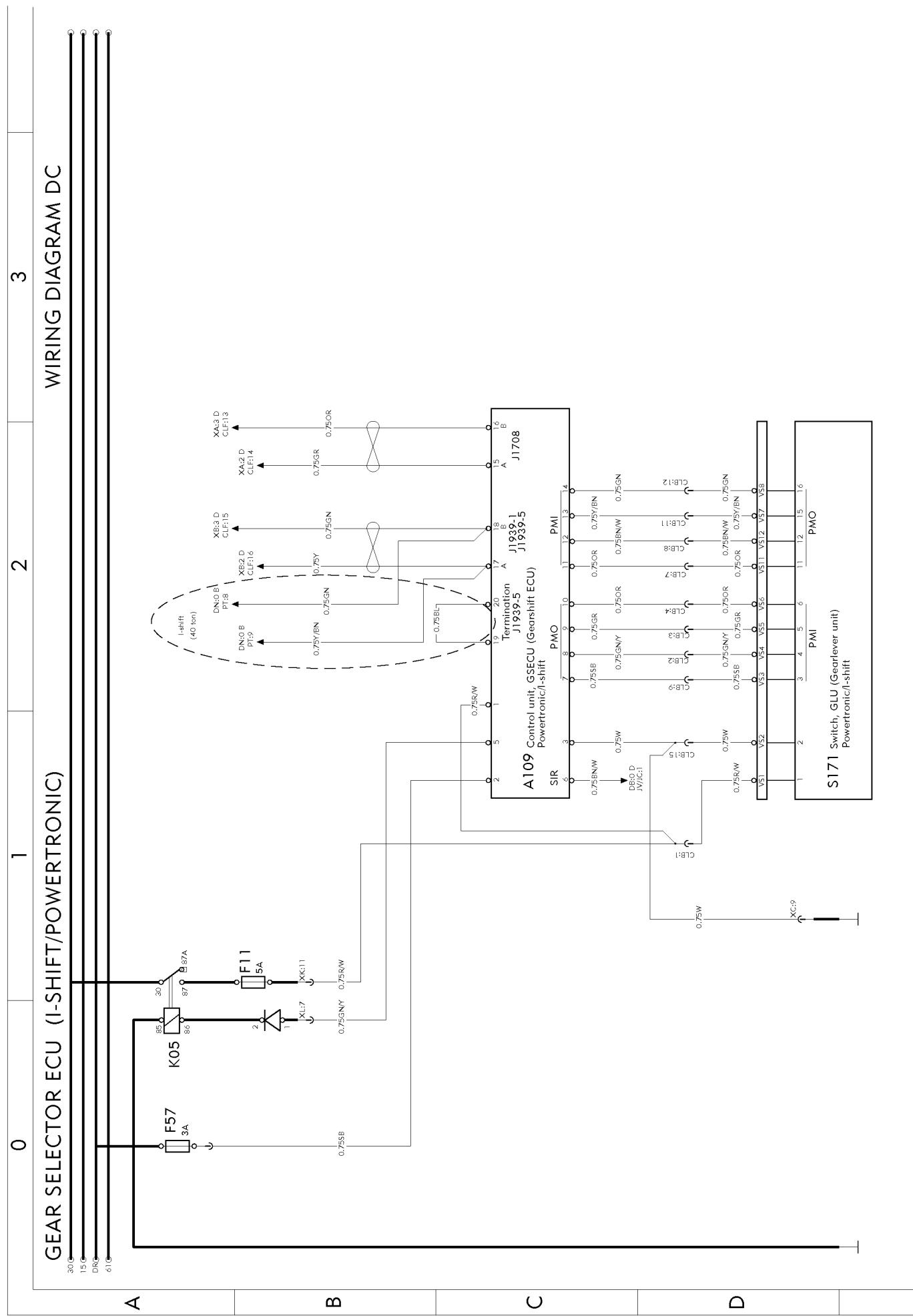
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ENGINE ISX (AUS ONLY)







## GEARTRONIC

## AUTOMATIC GEARSHIFT

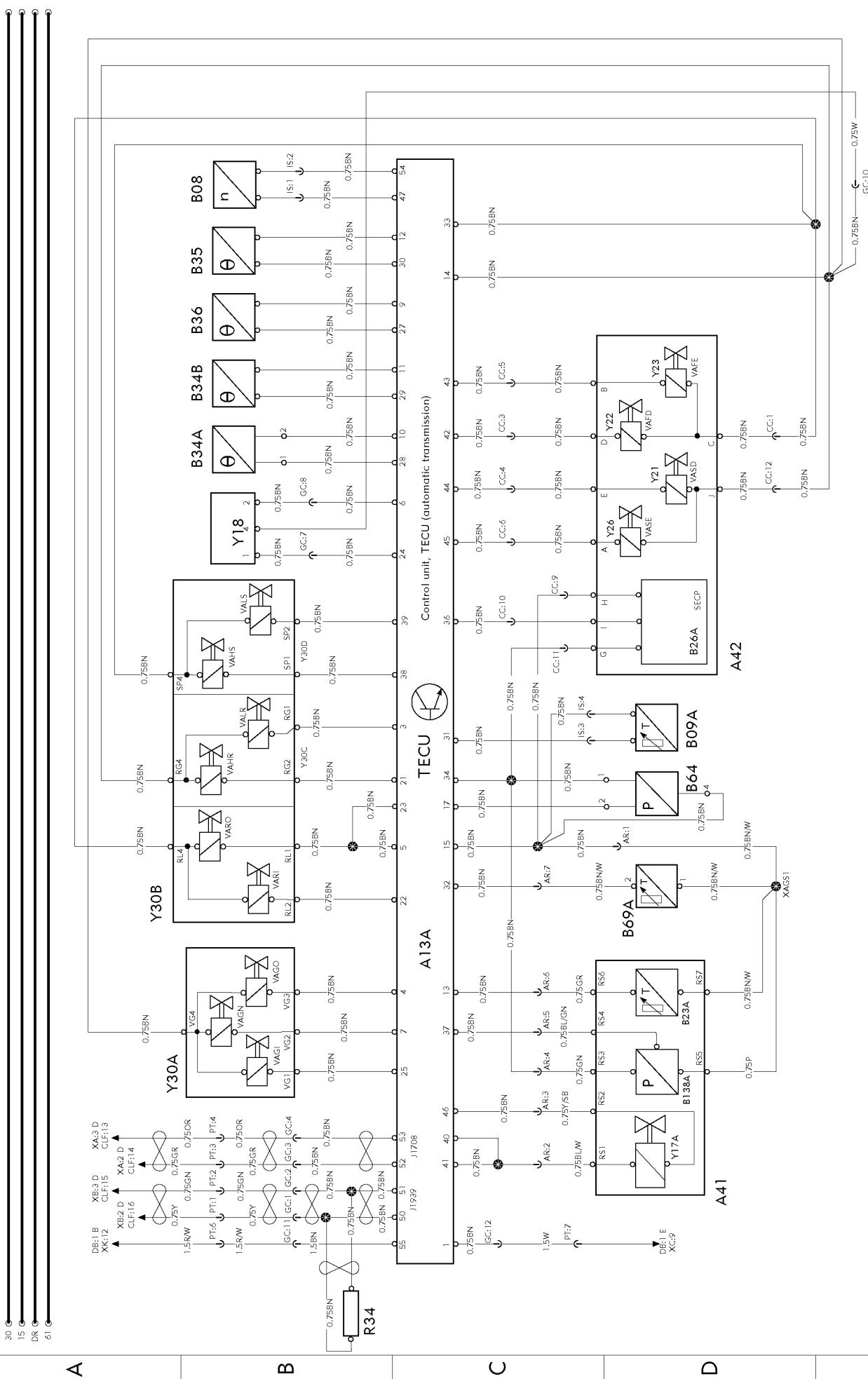
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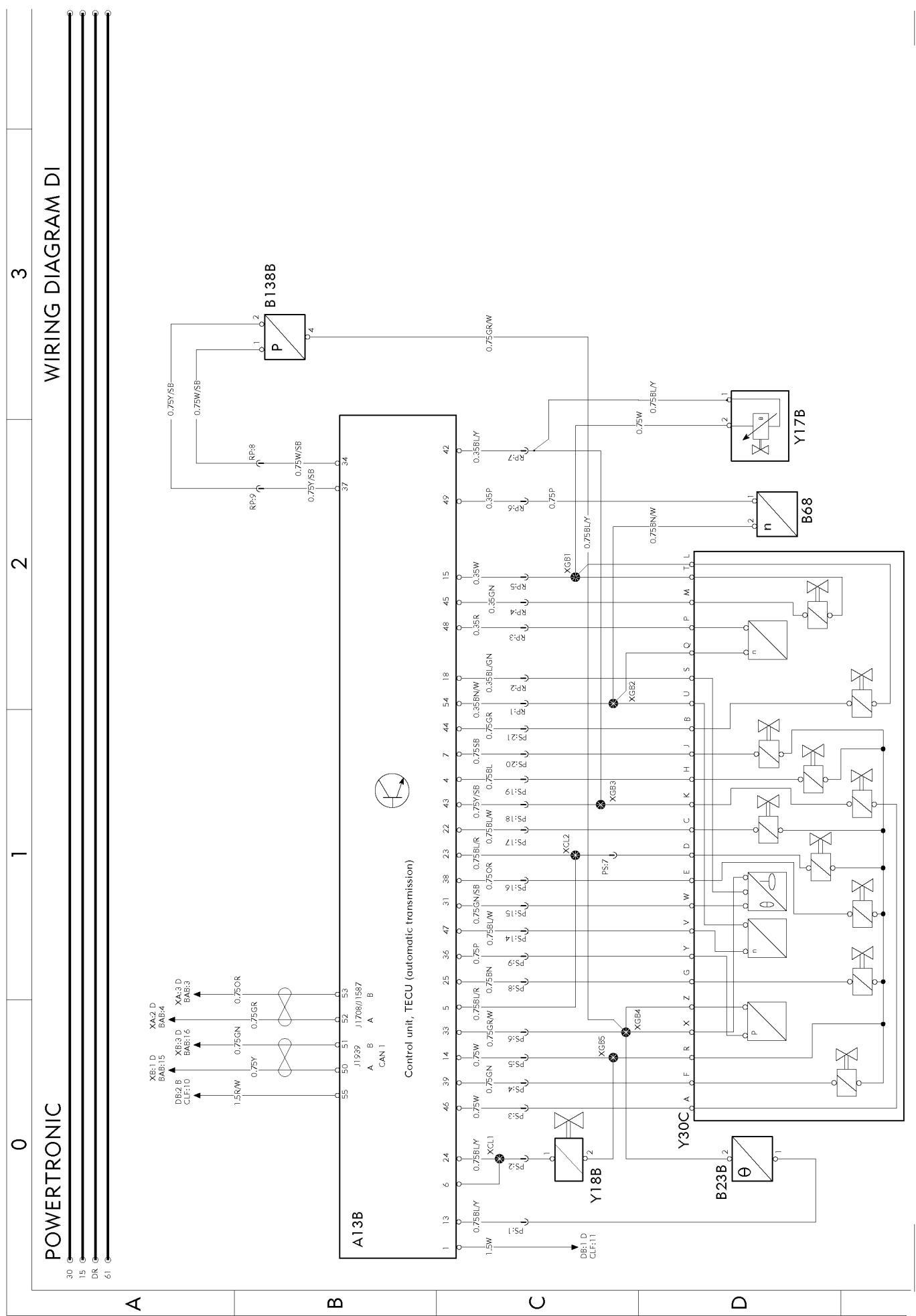
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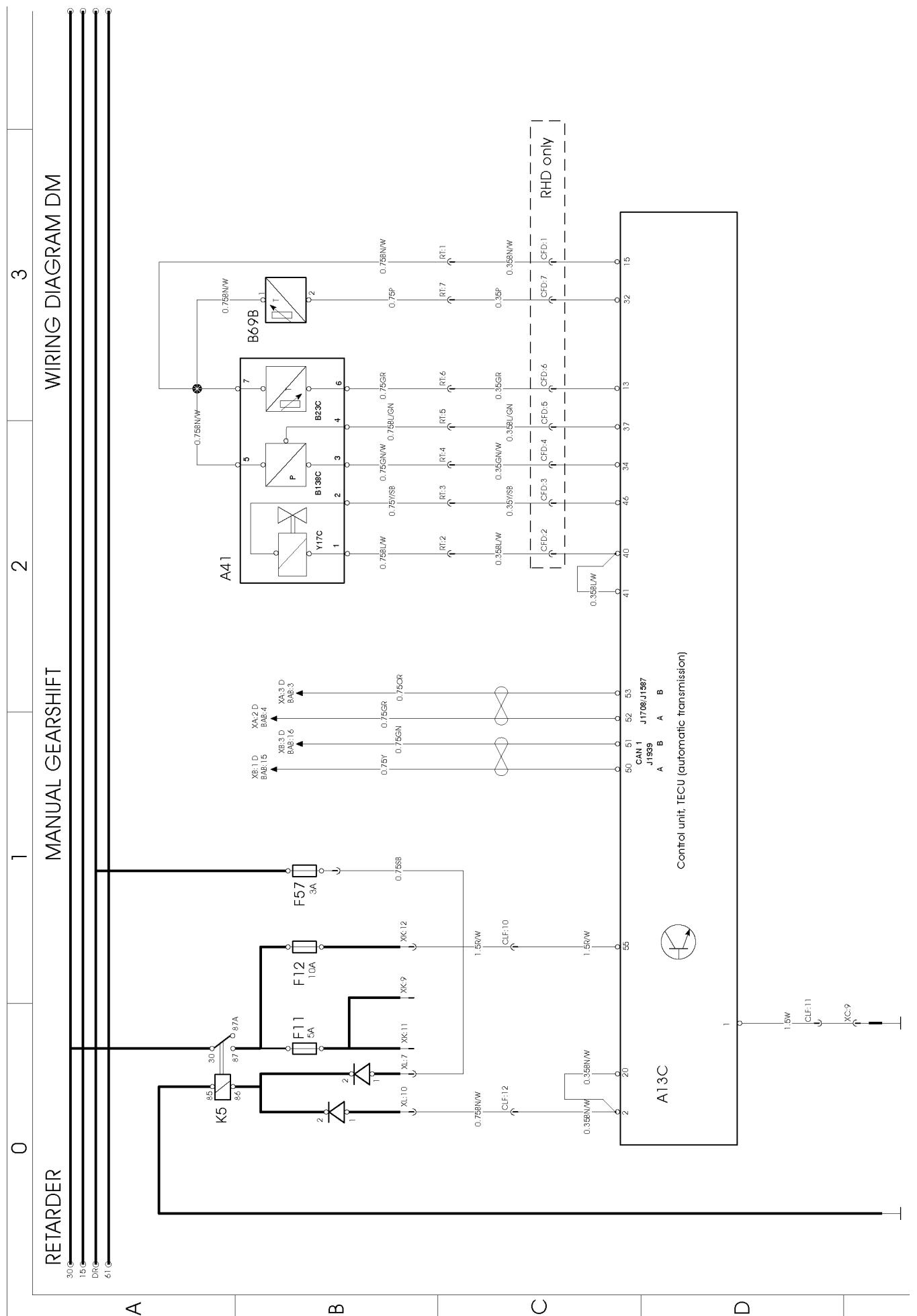
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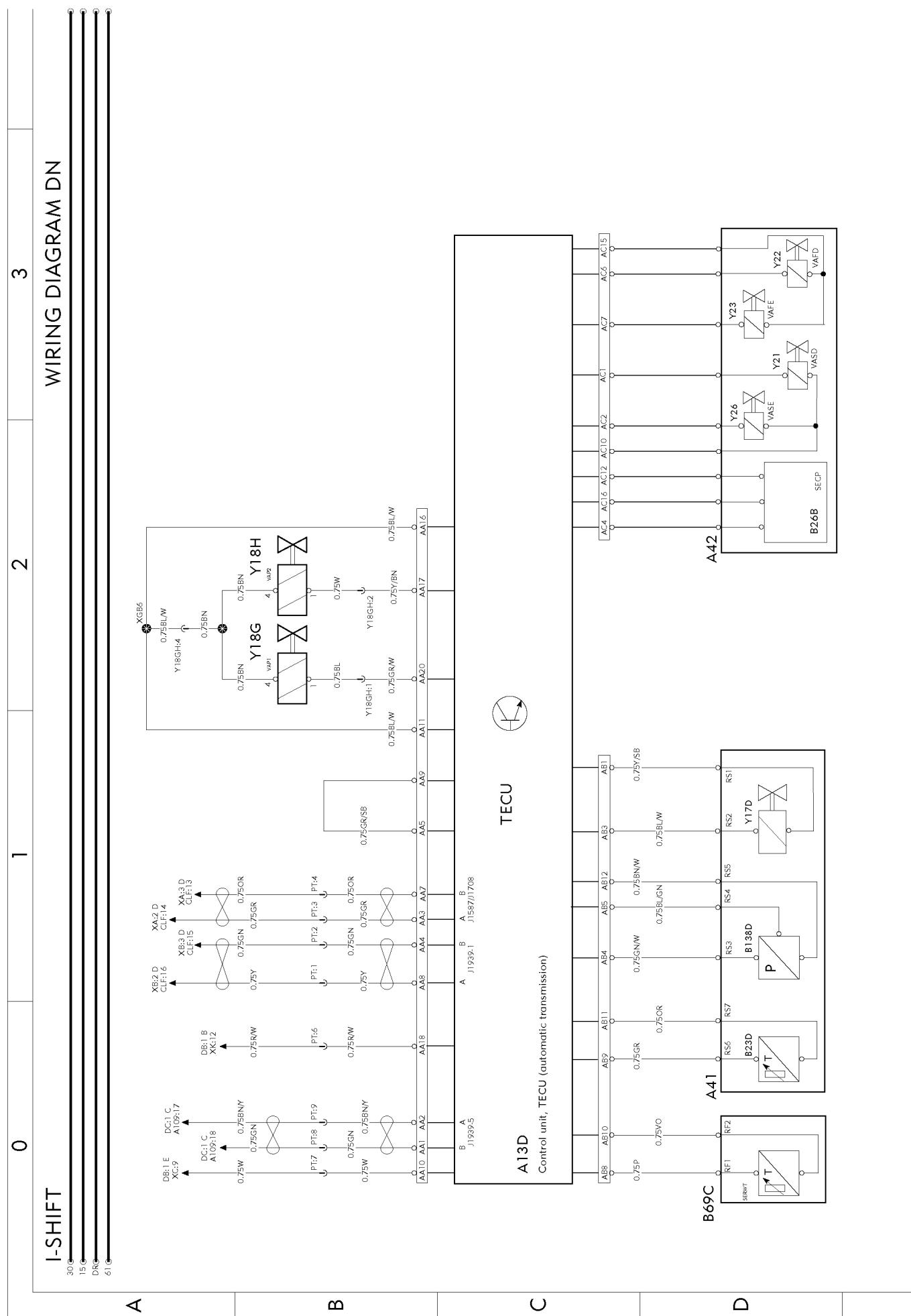
## WIRING DIAGRAM DE

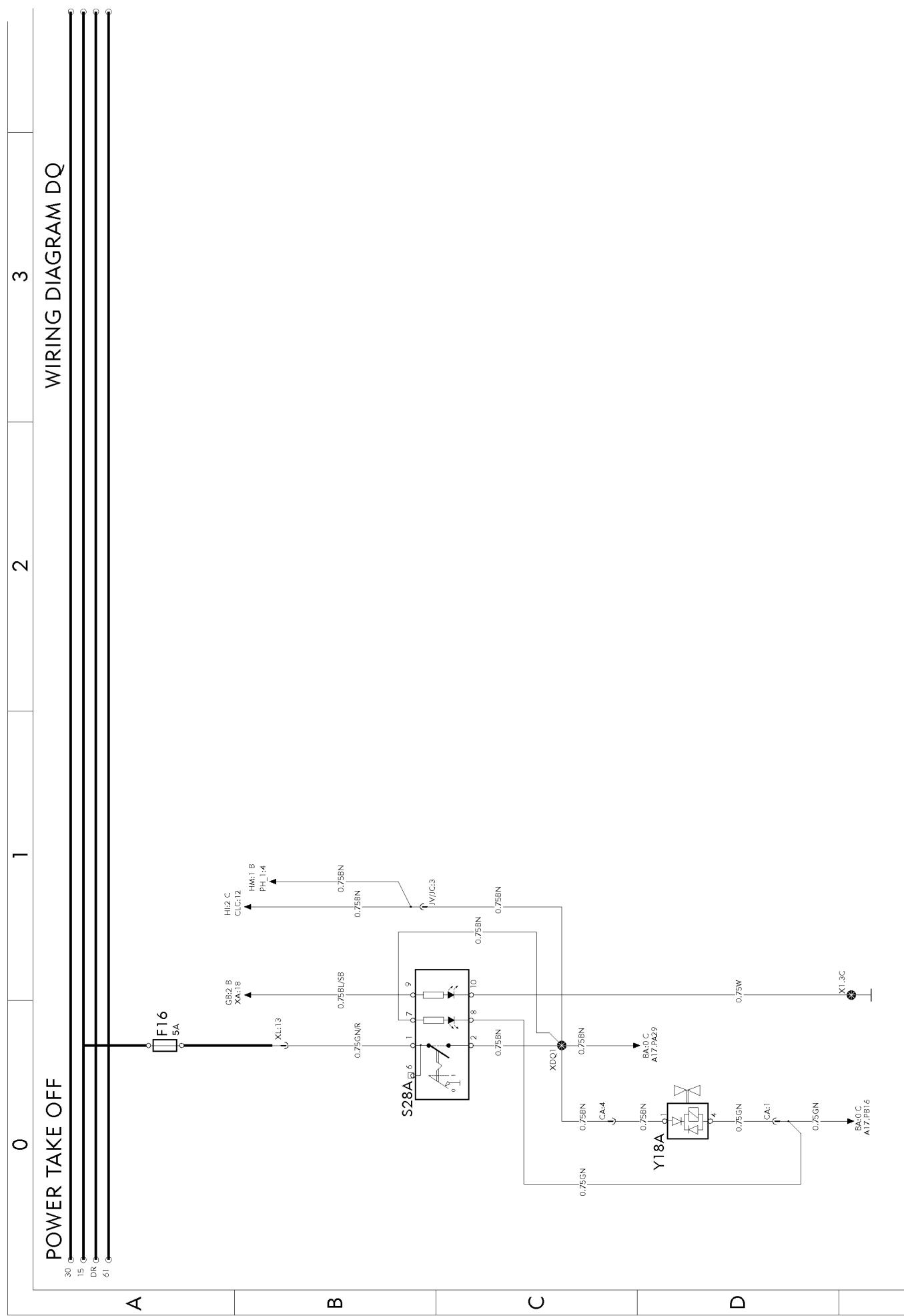
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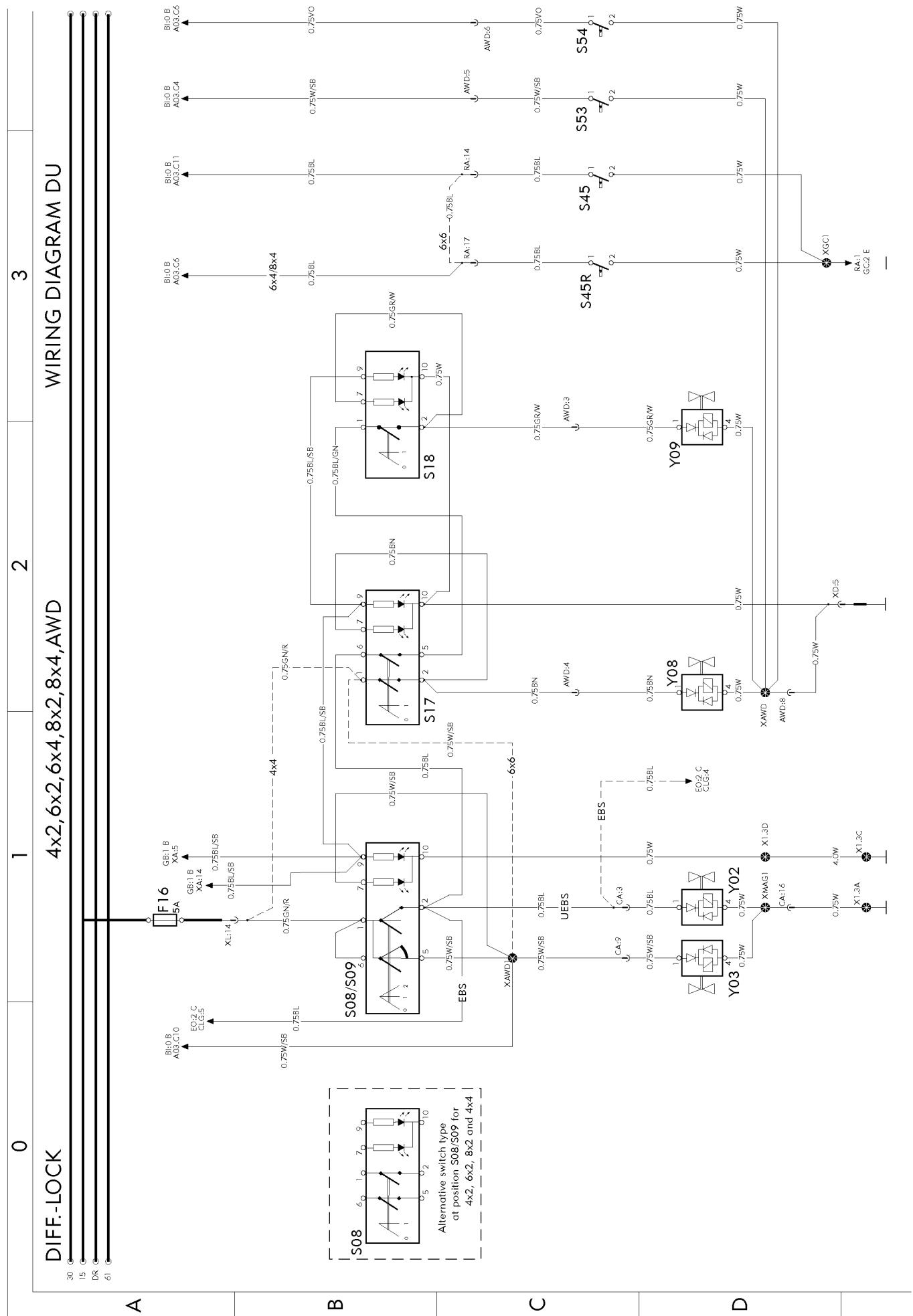


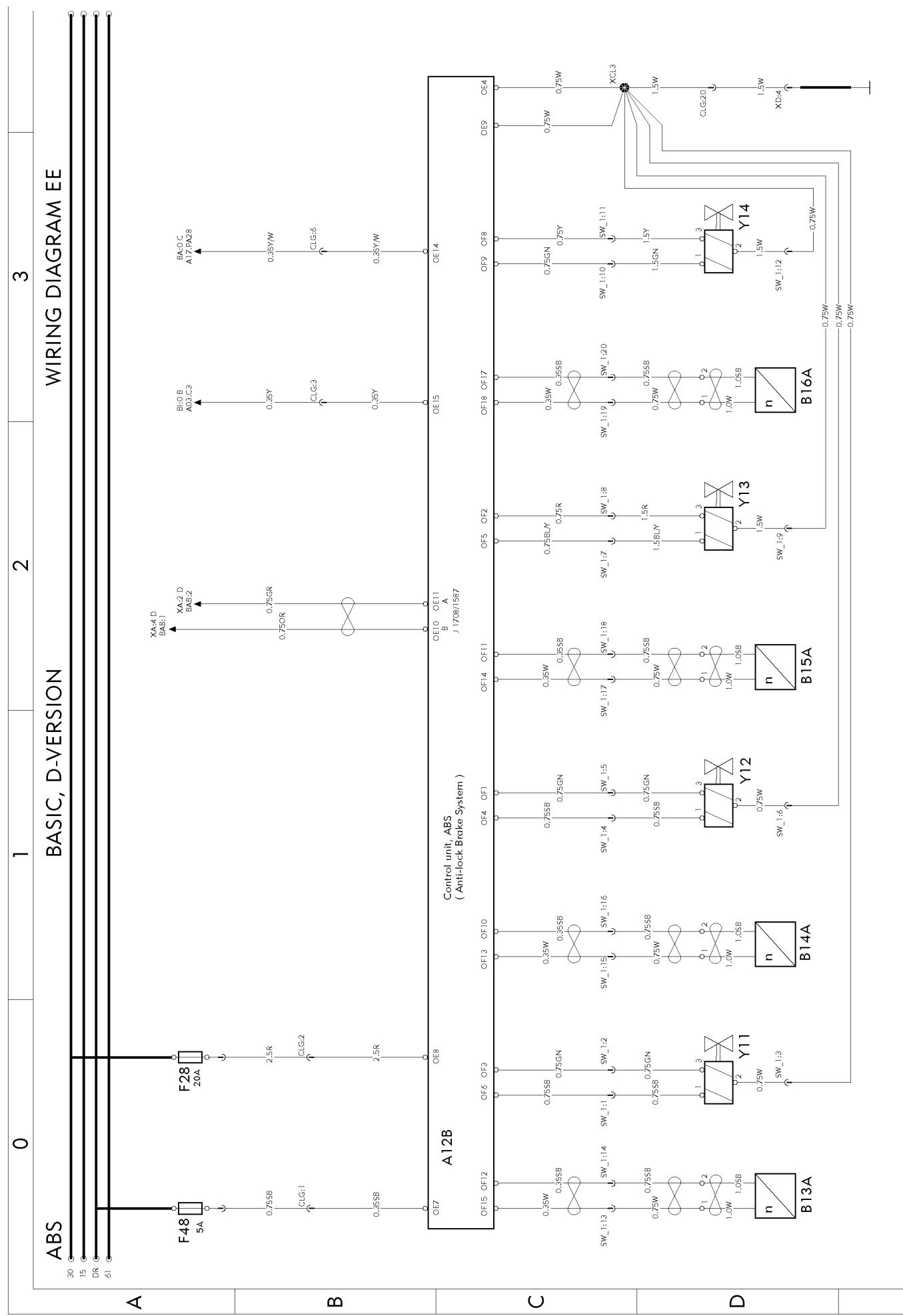


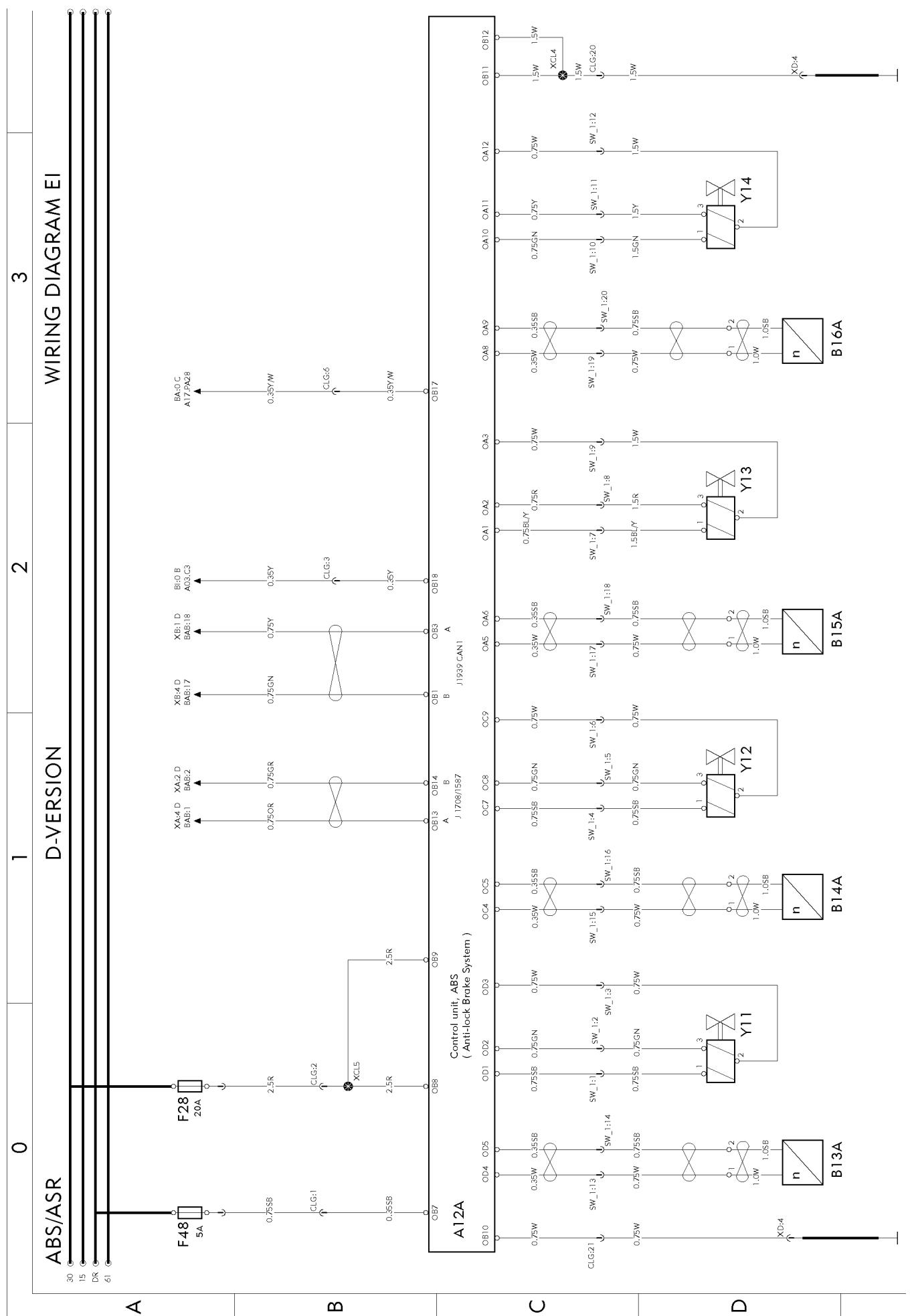


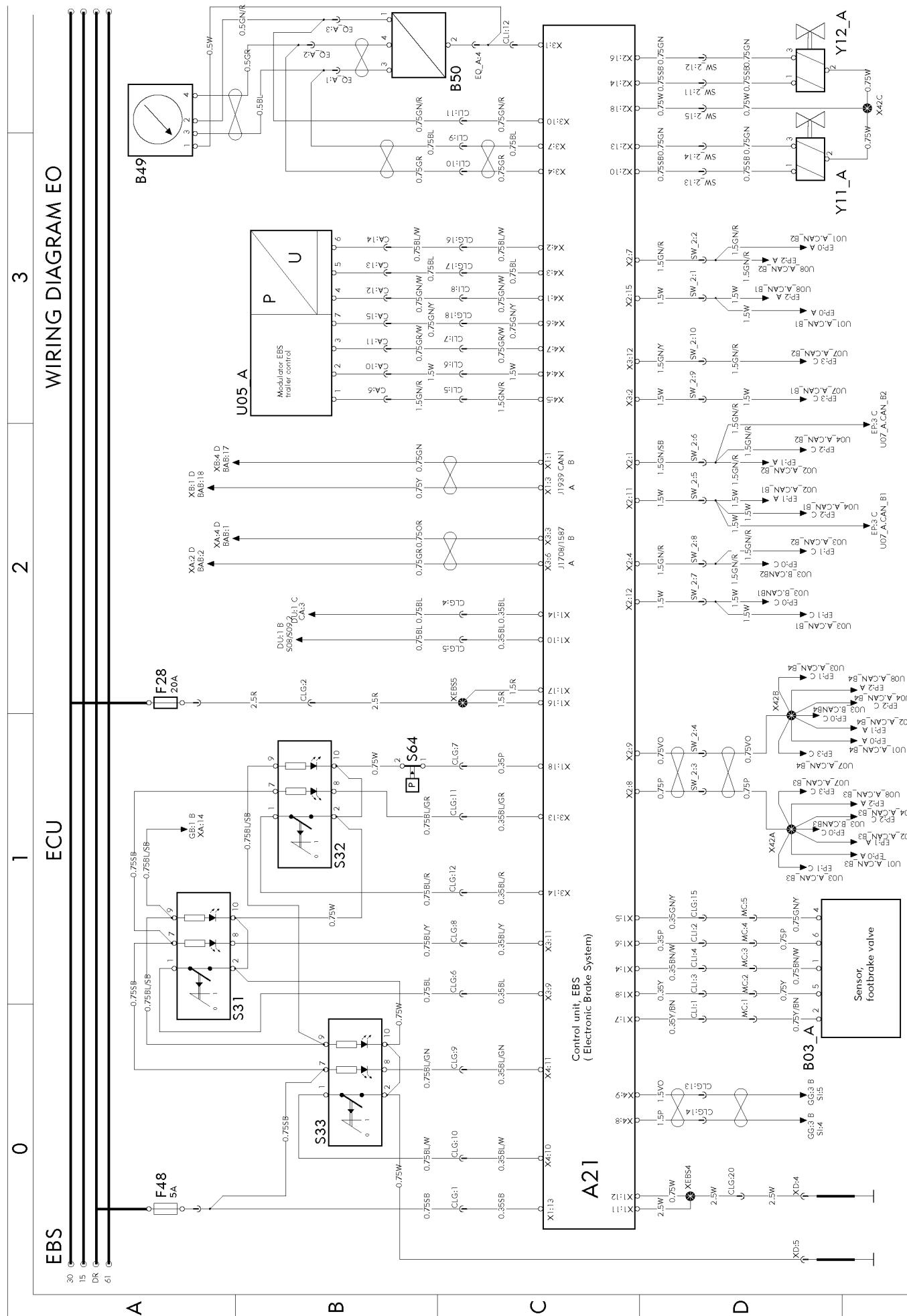


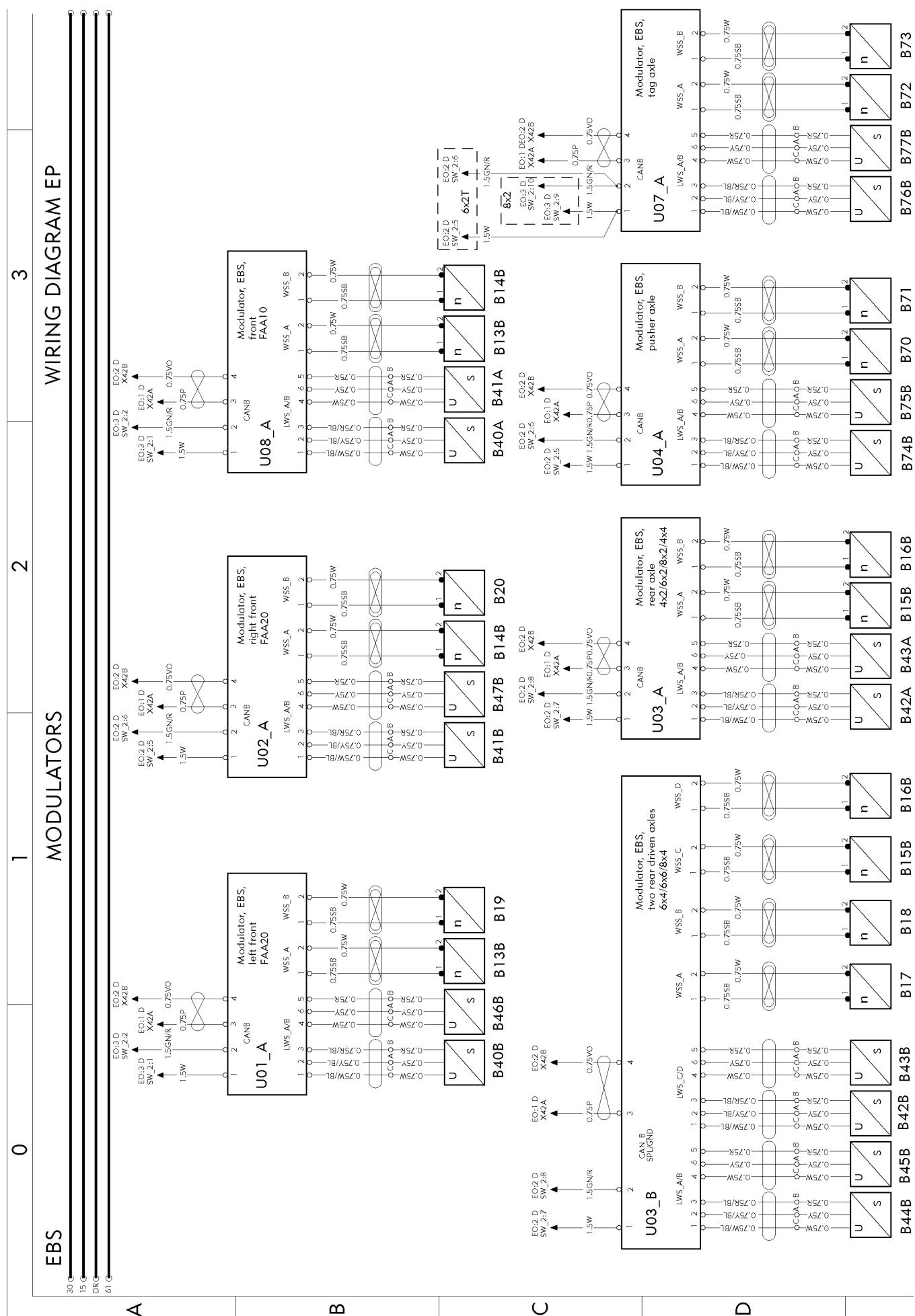












AIR-SUSPENSION

38

WIRING DIAGRAM FA

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38

PROGRAM EA

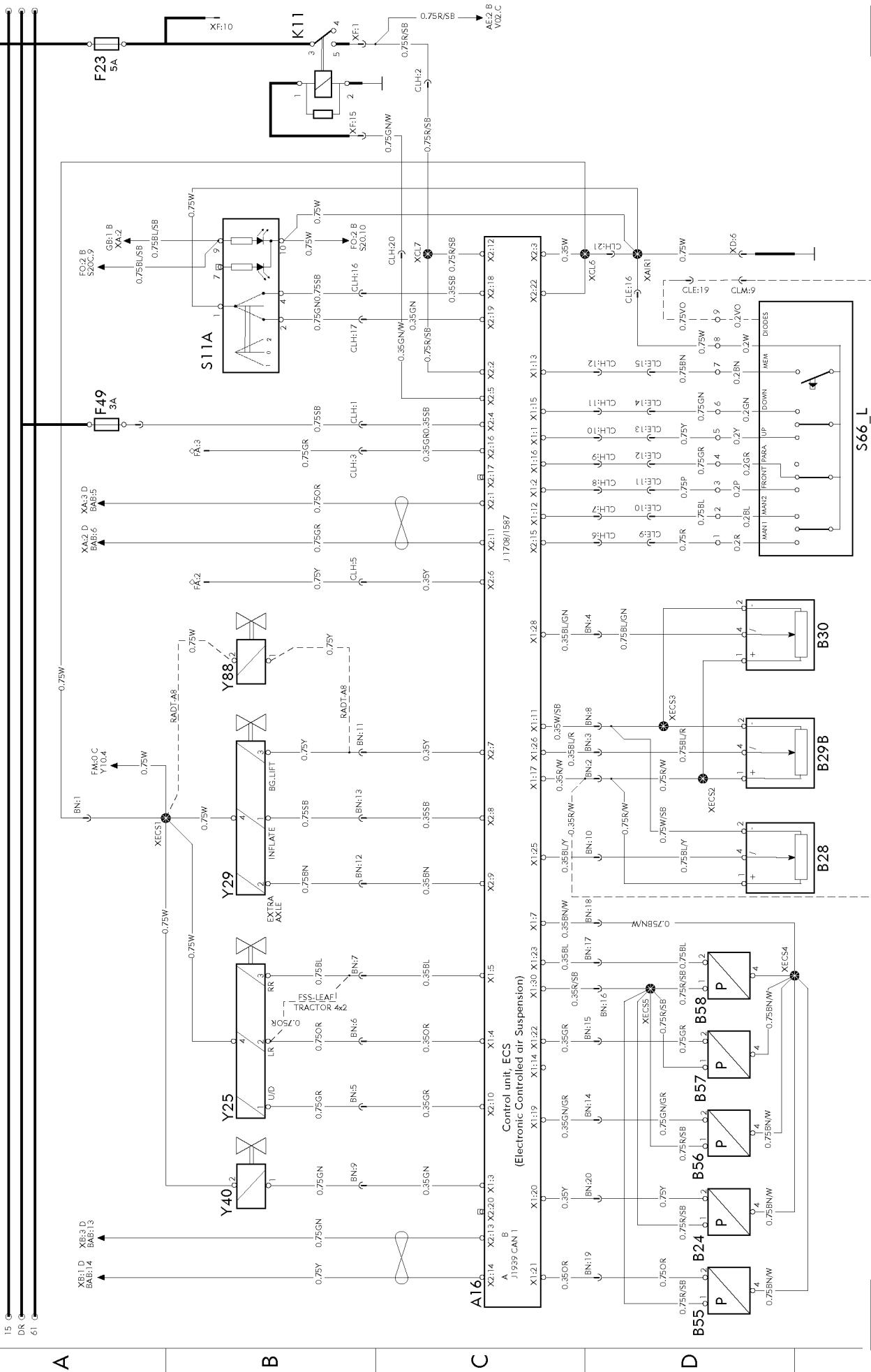
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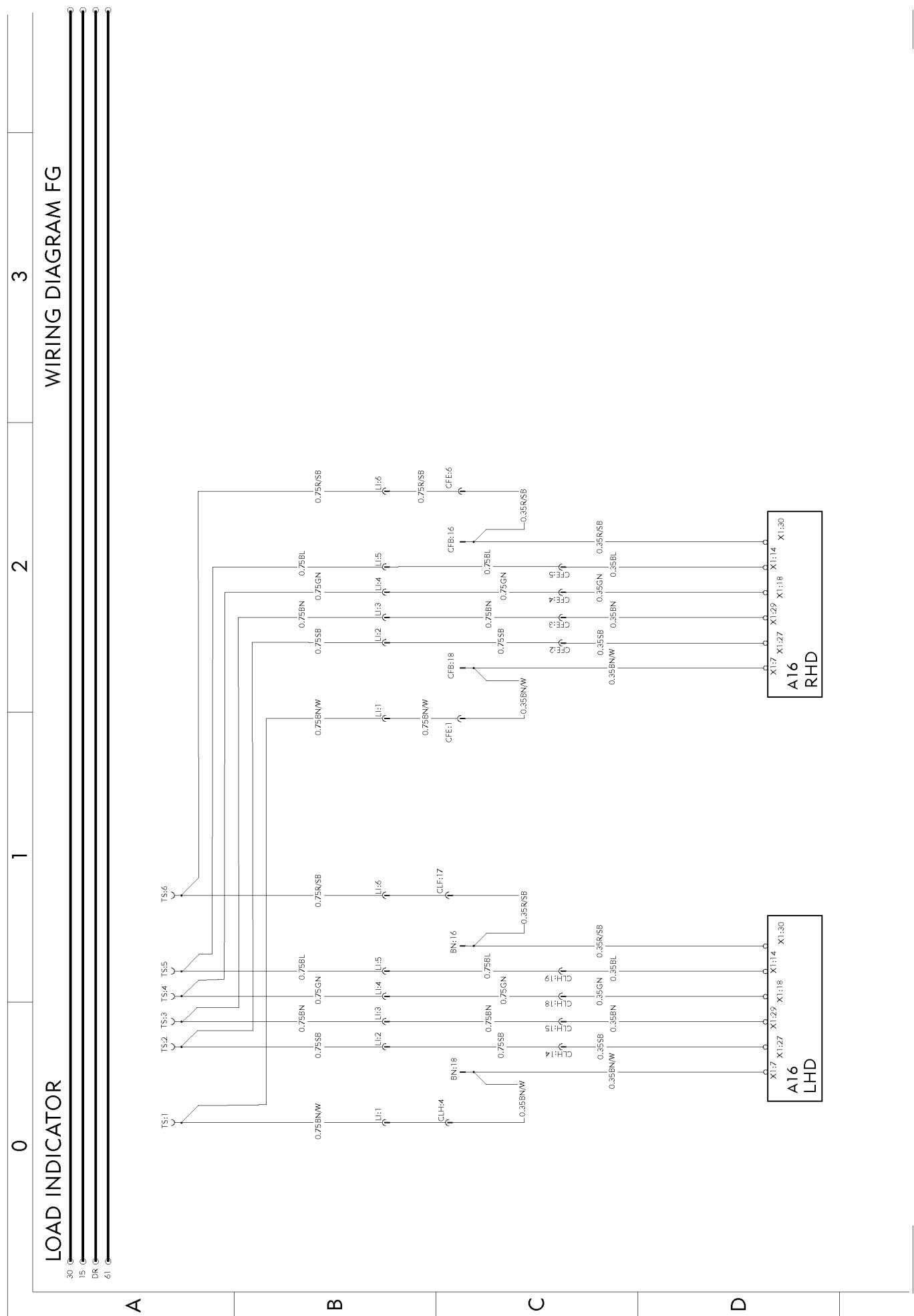
PROGRAM EA

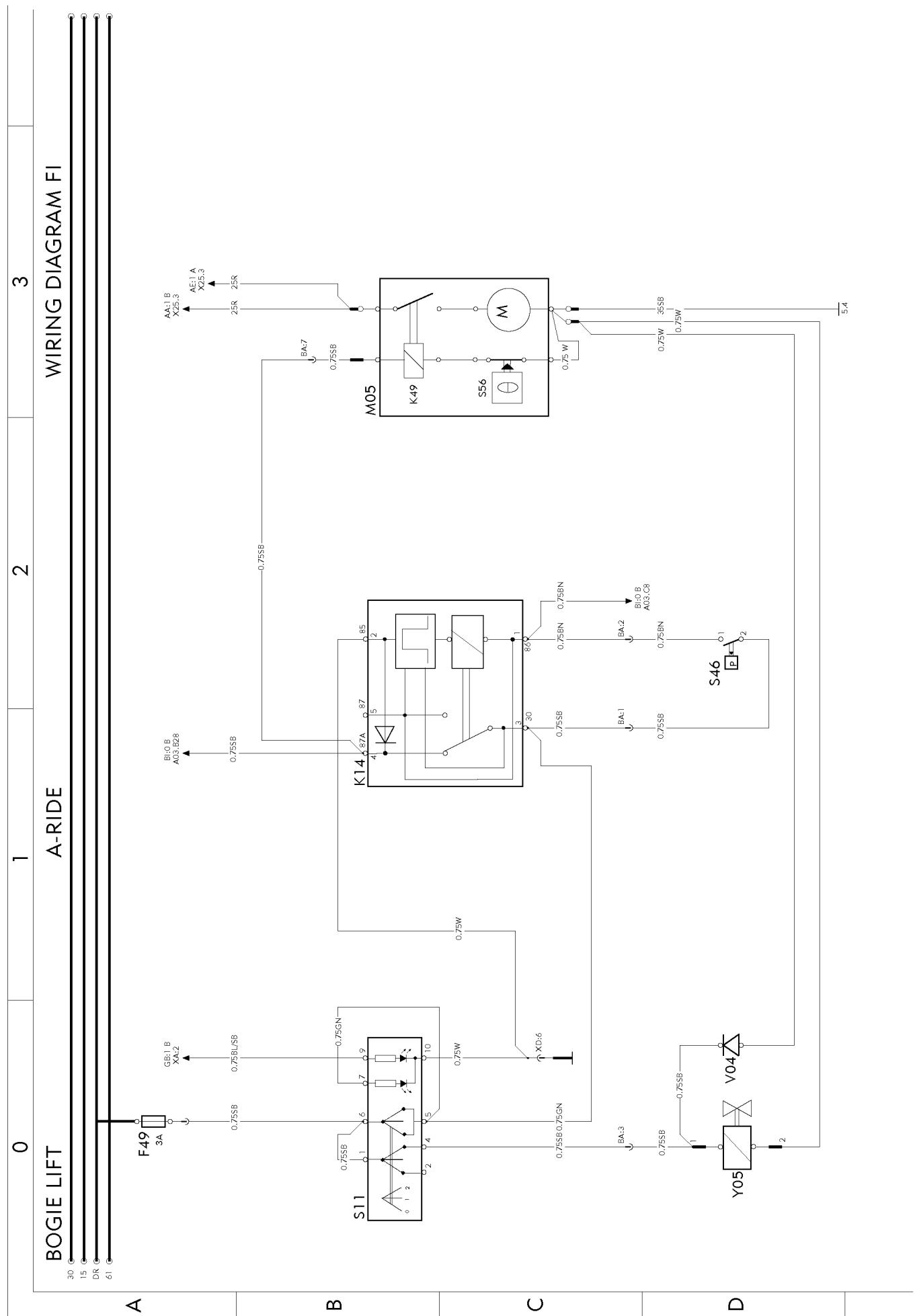
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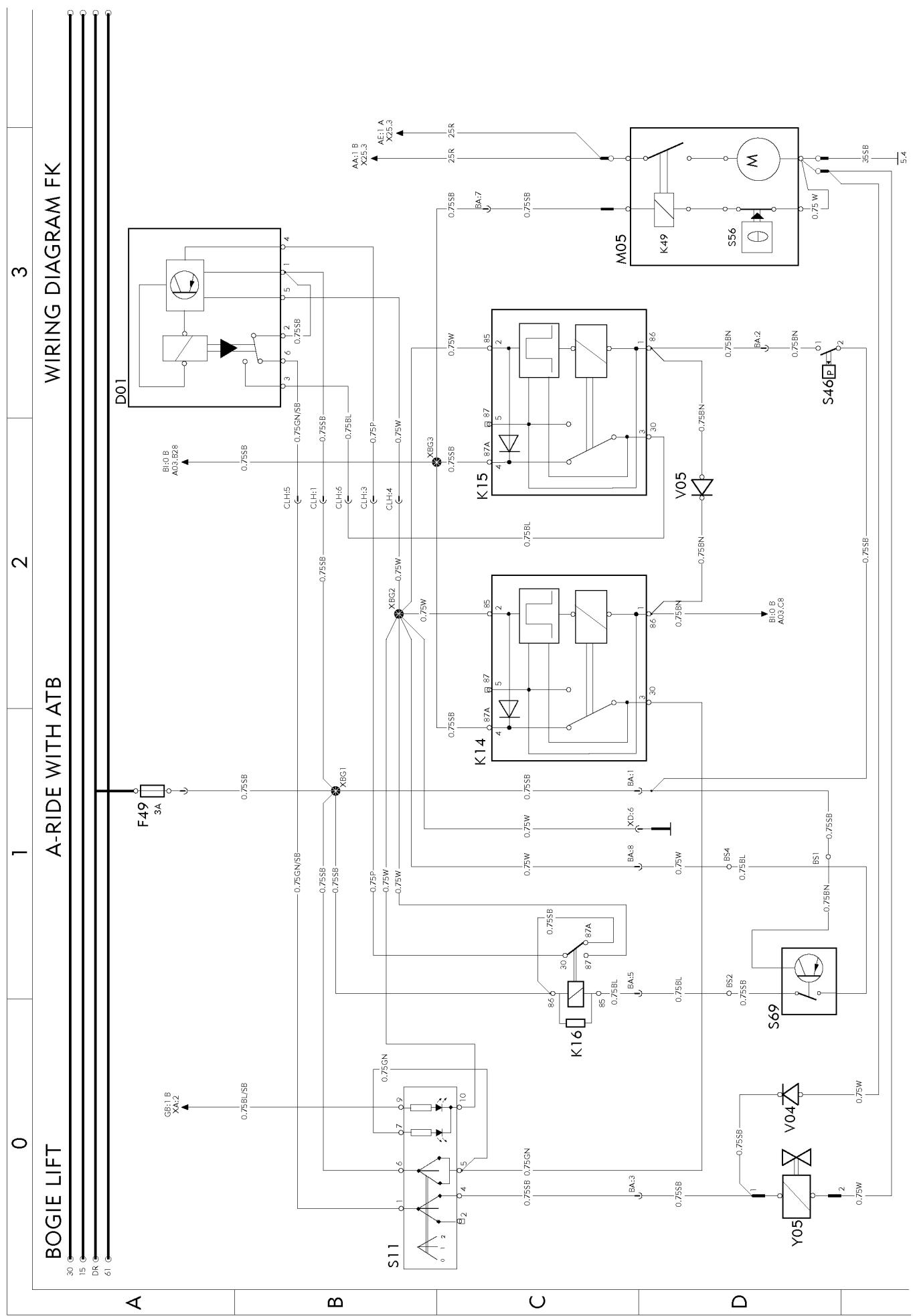
PROGRAM EA

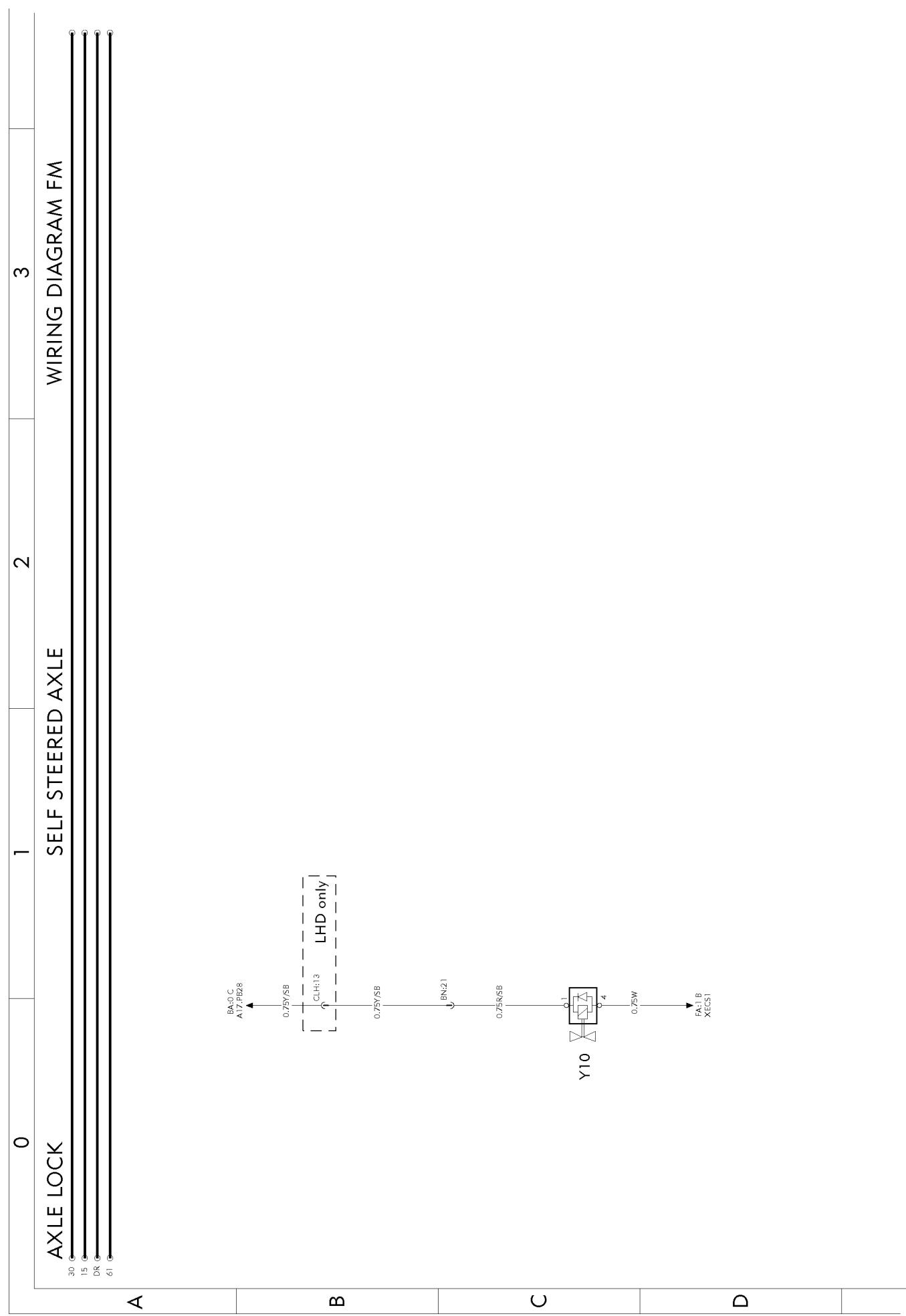
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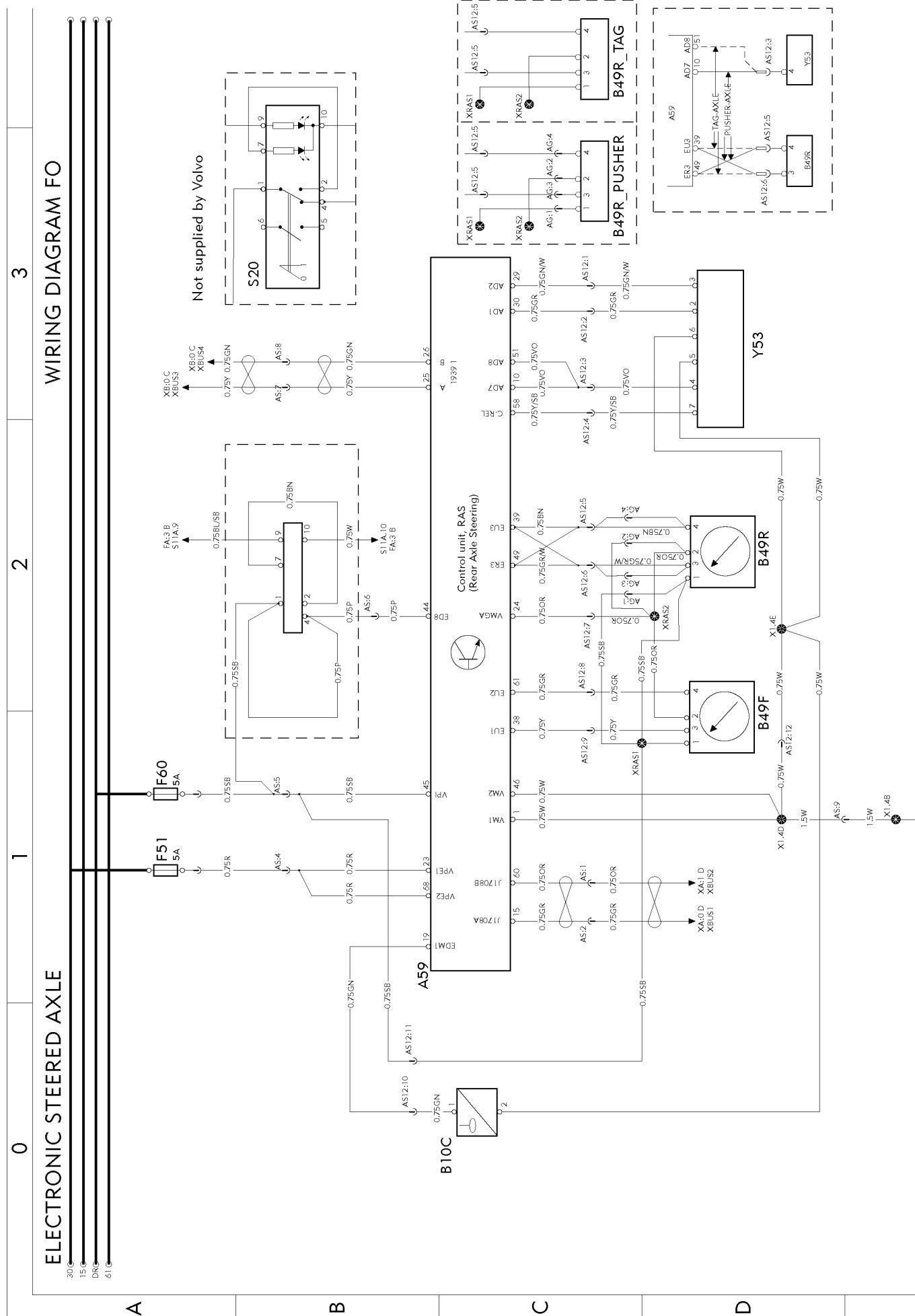


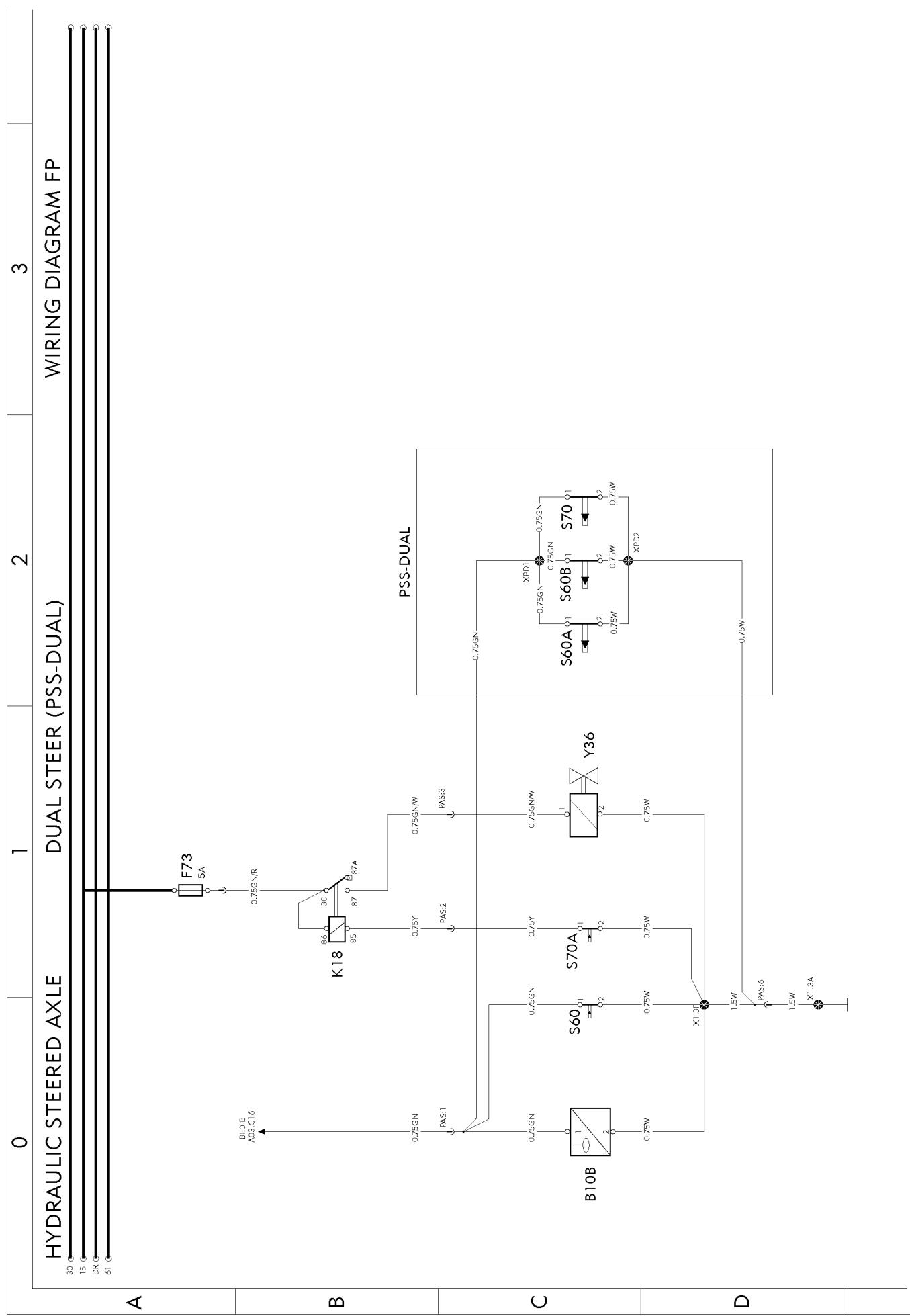


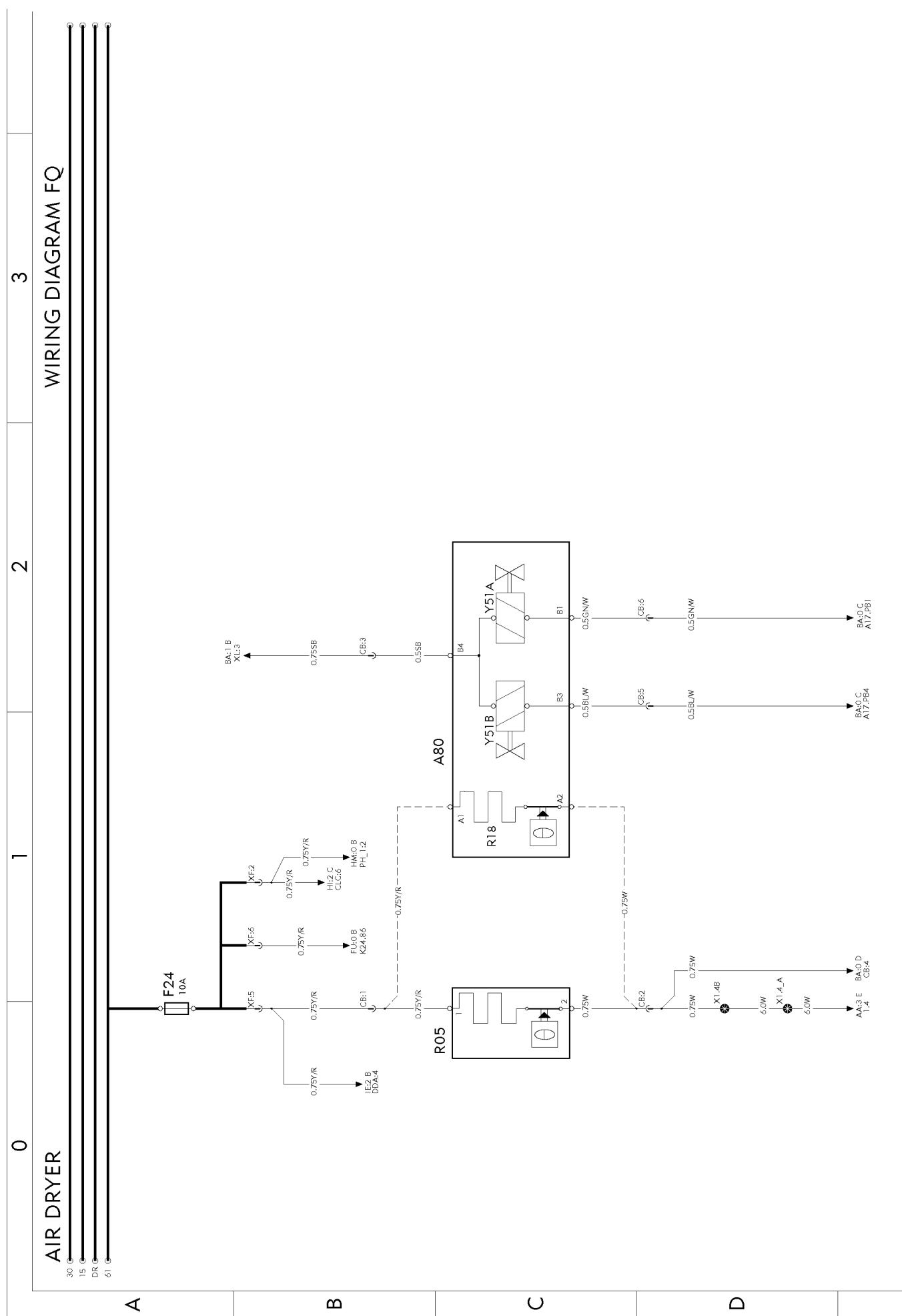


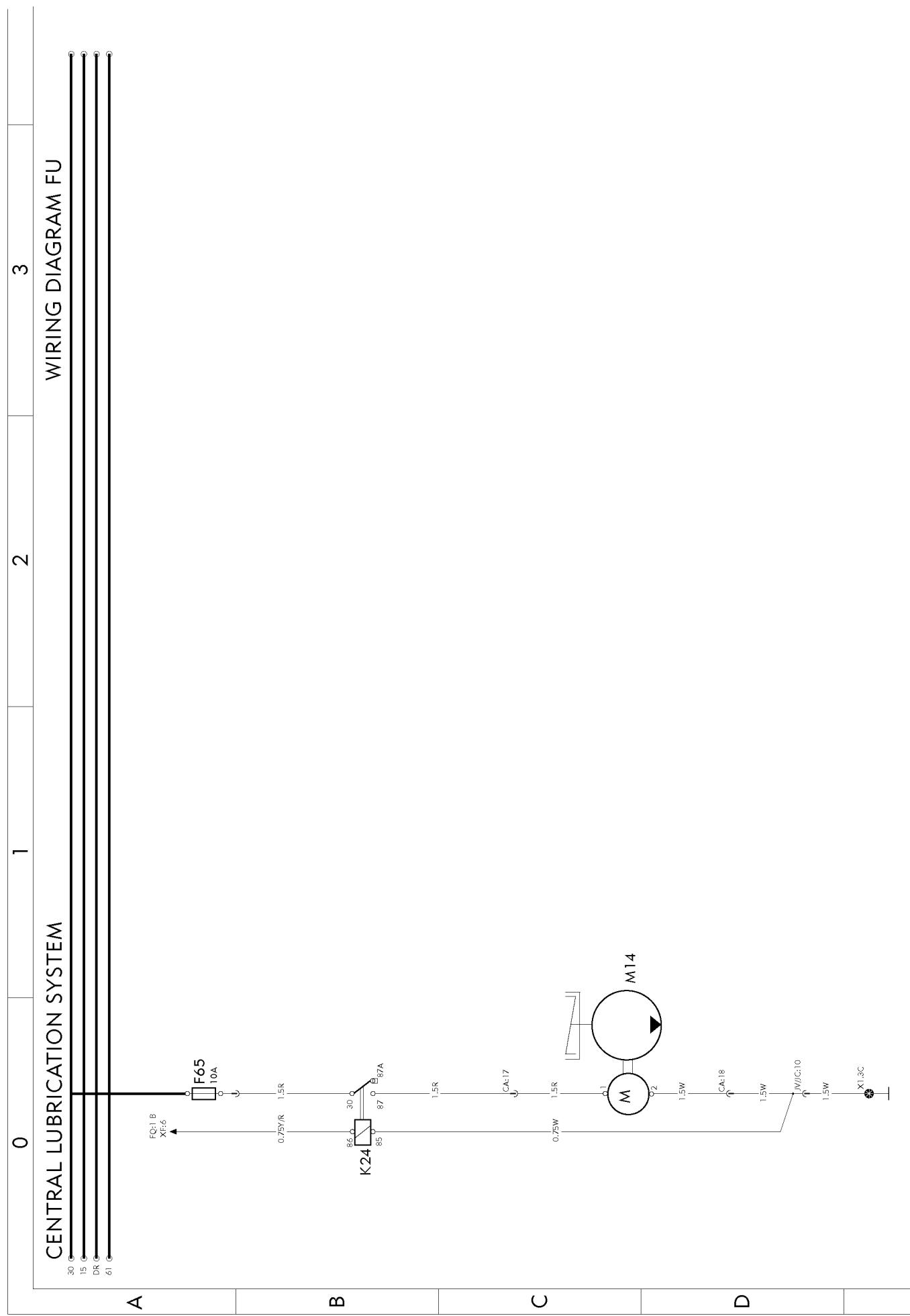


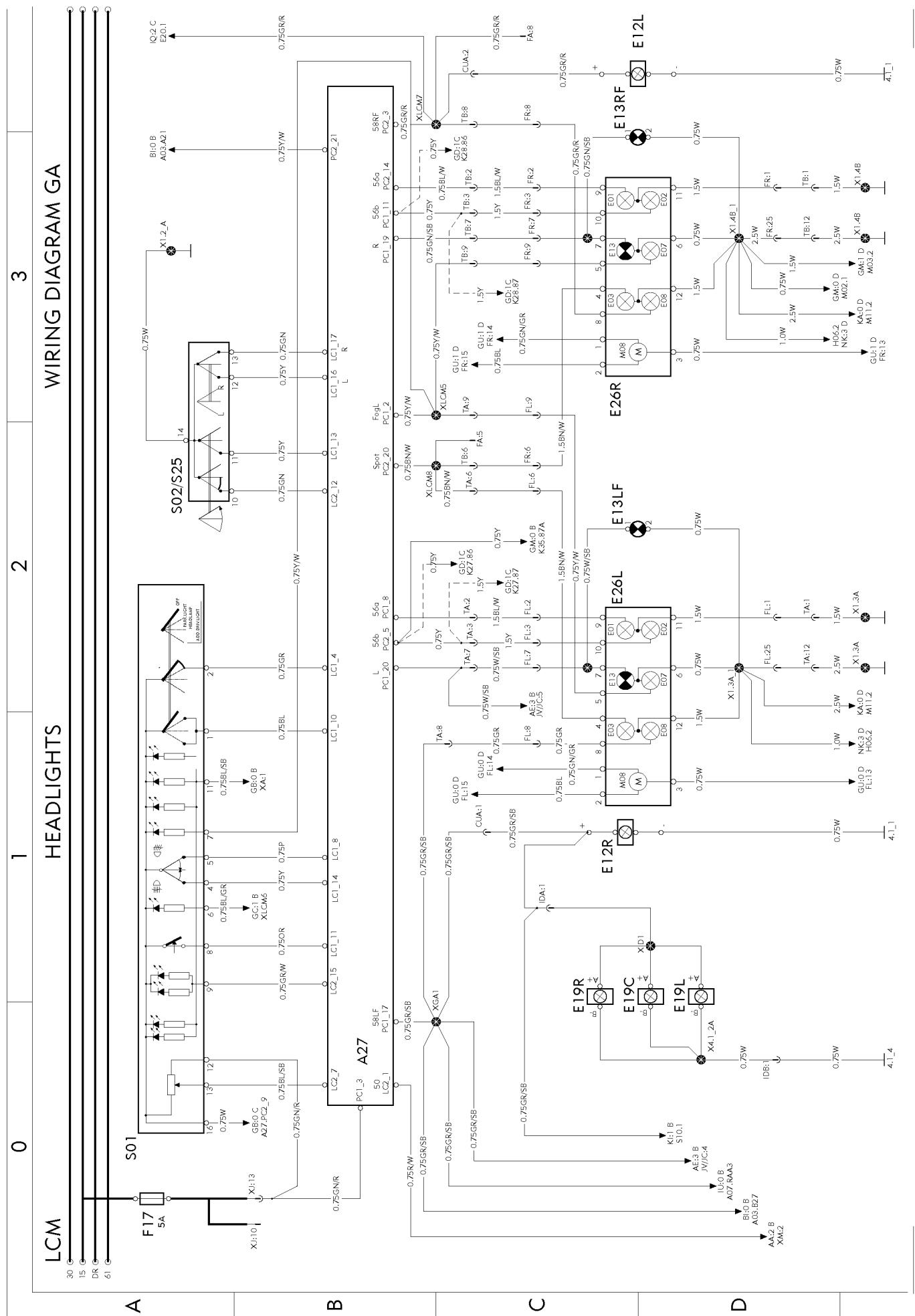












WIRING DIAGRAM GB

TRAILER

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WIRING DIAGRAM GB

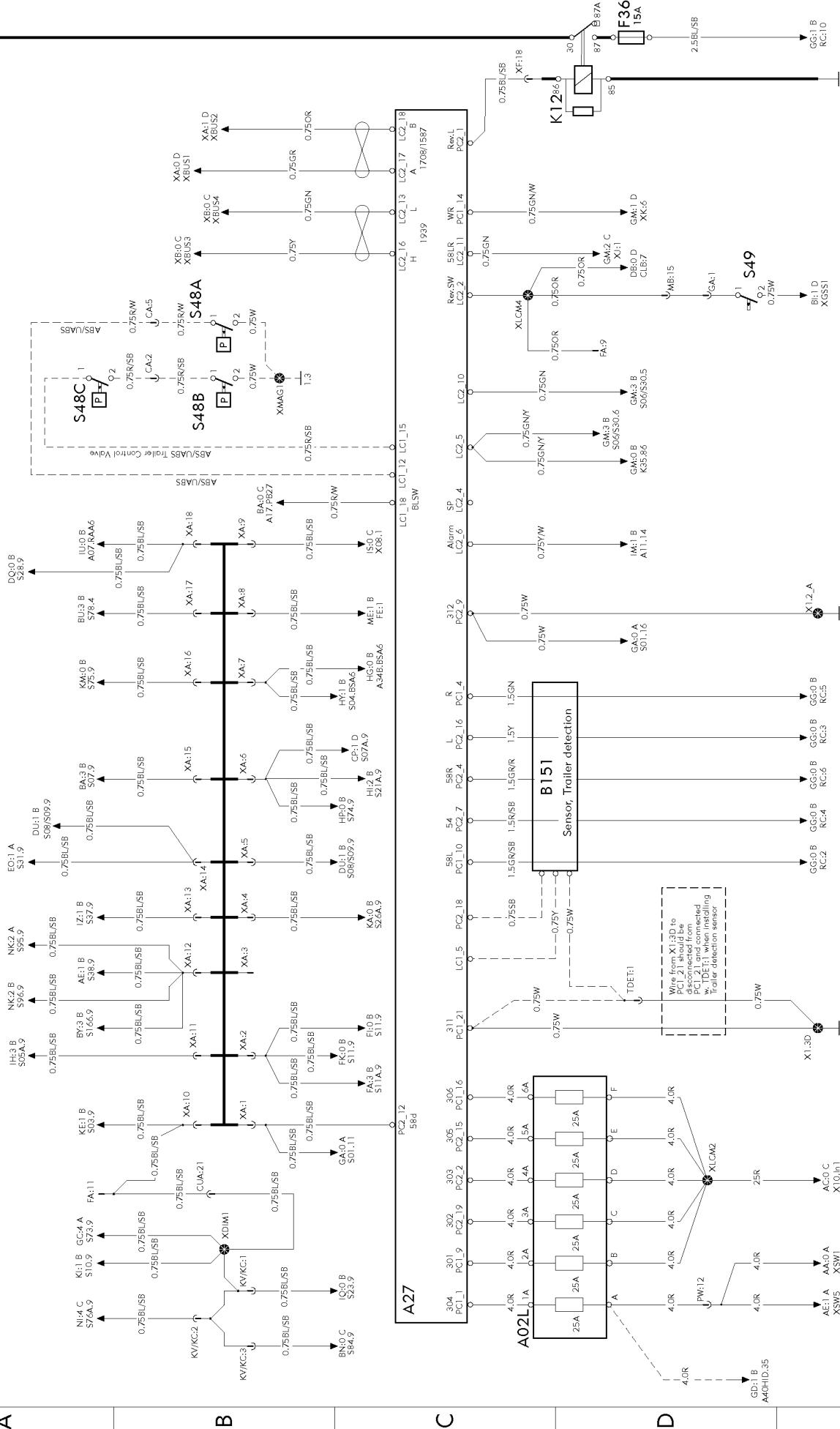
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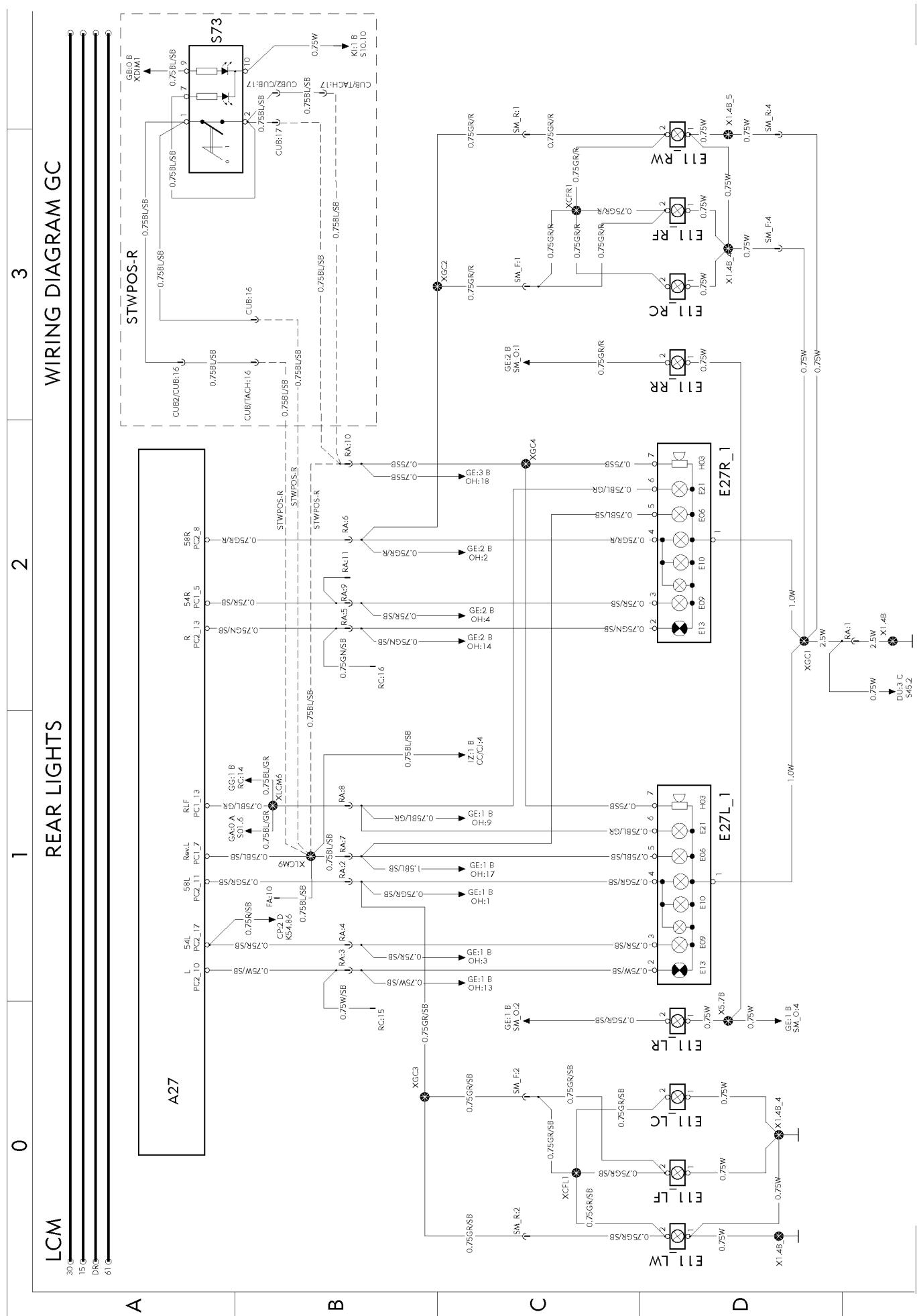
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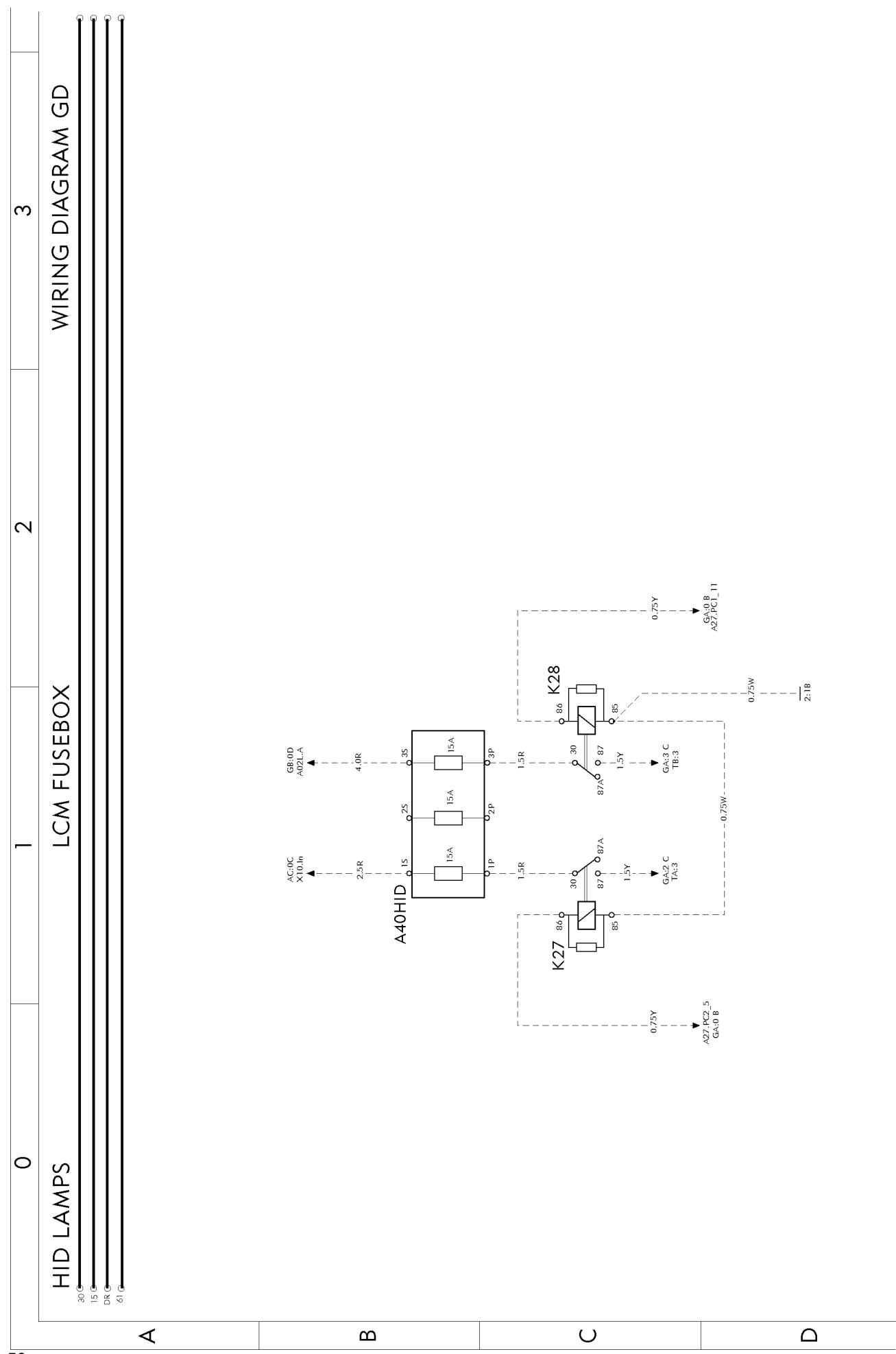
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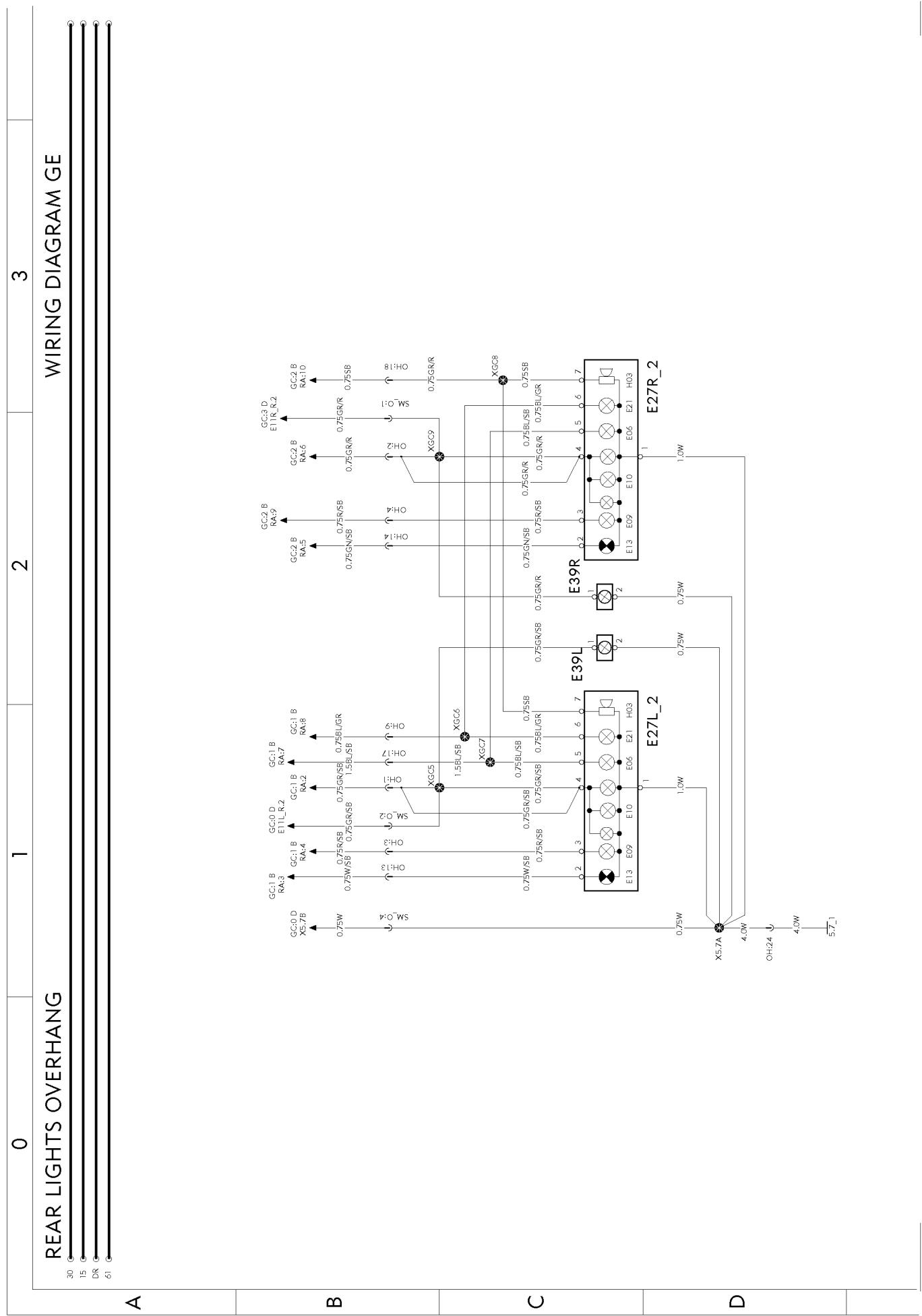
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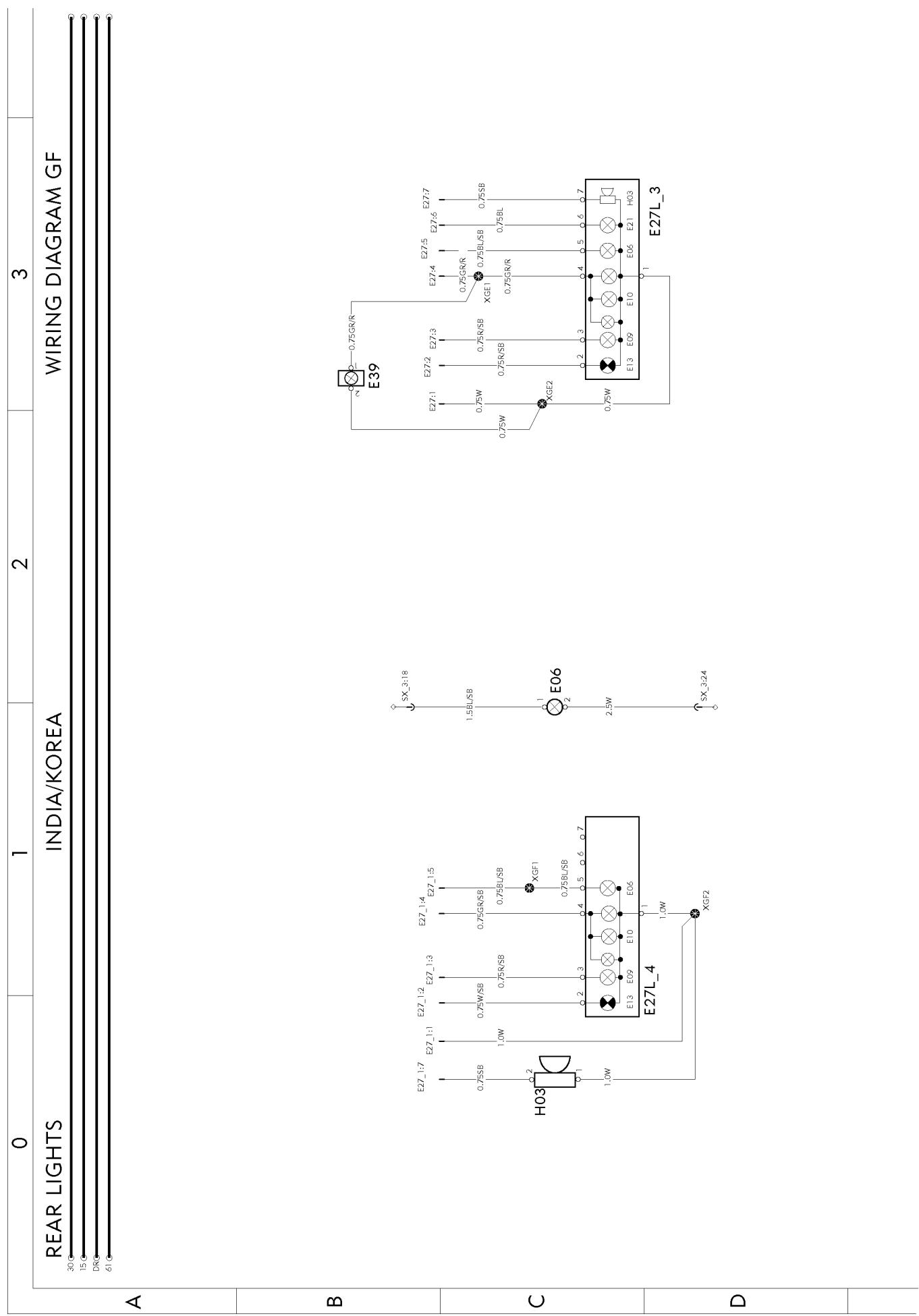
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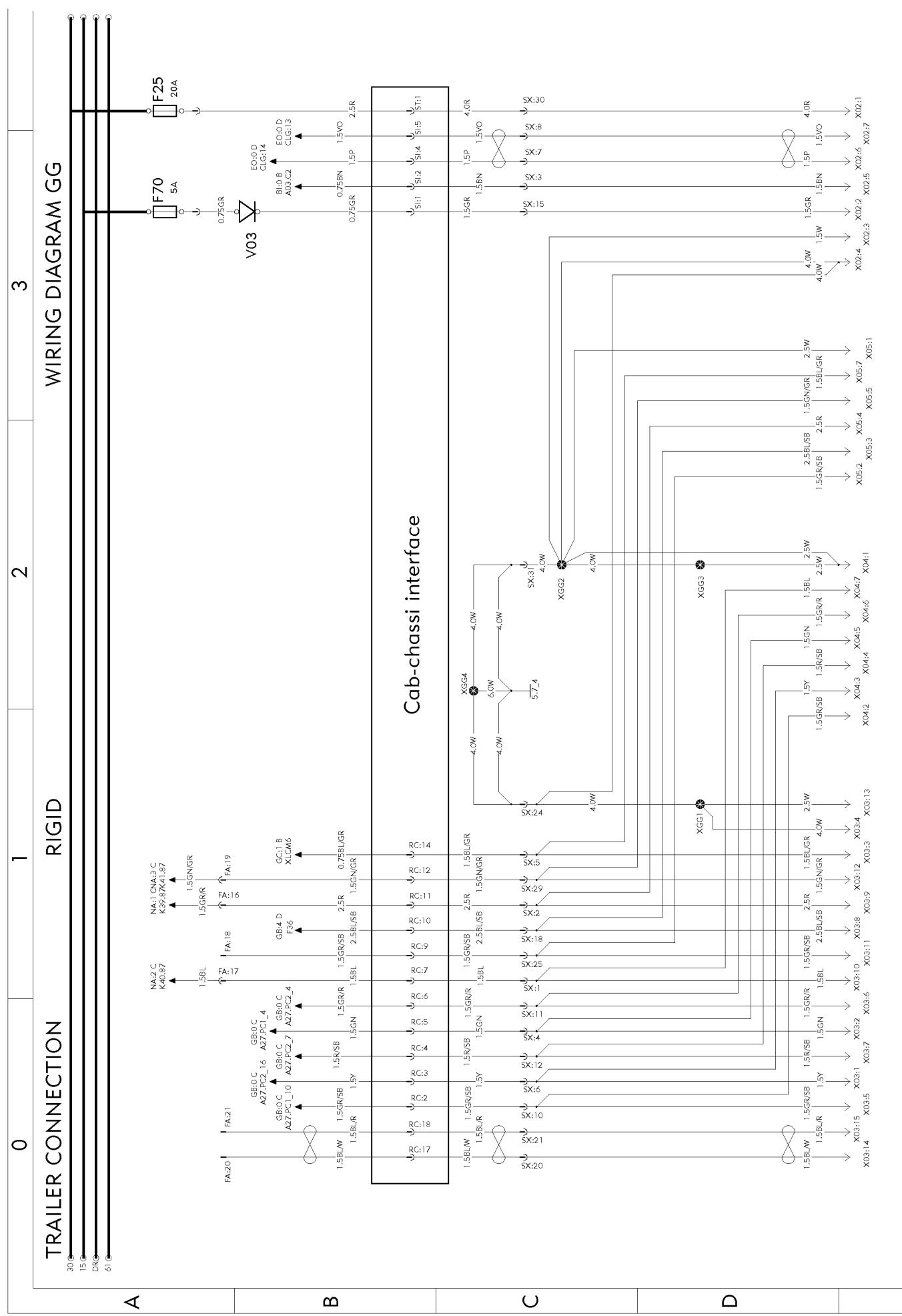


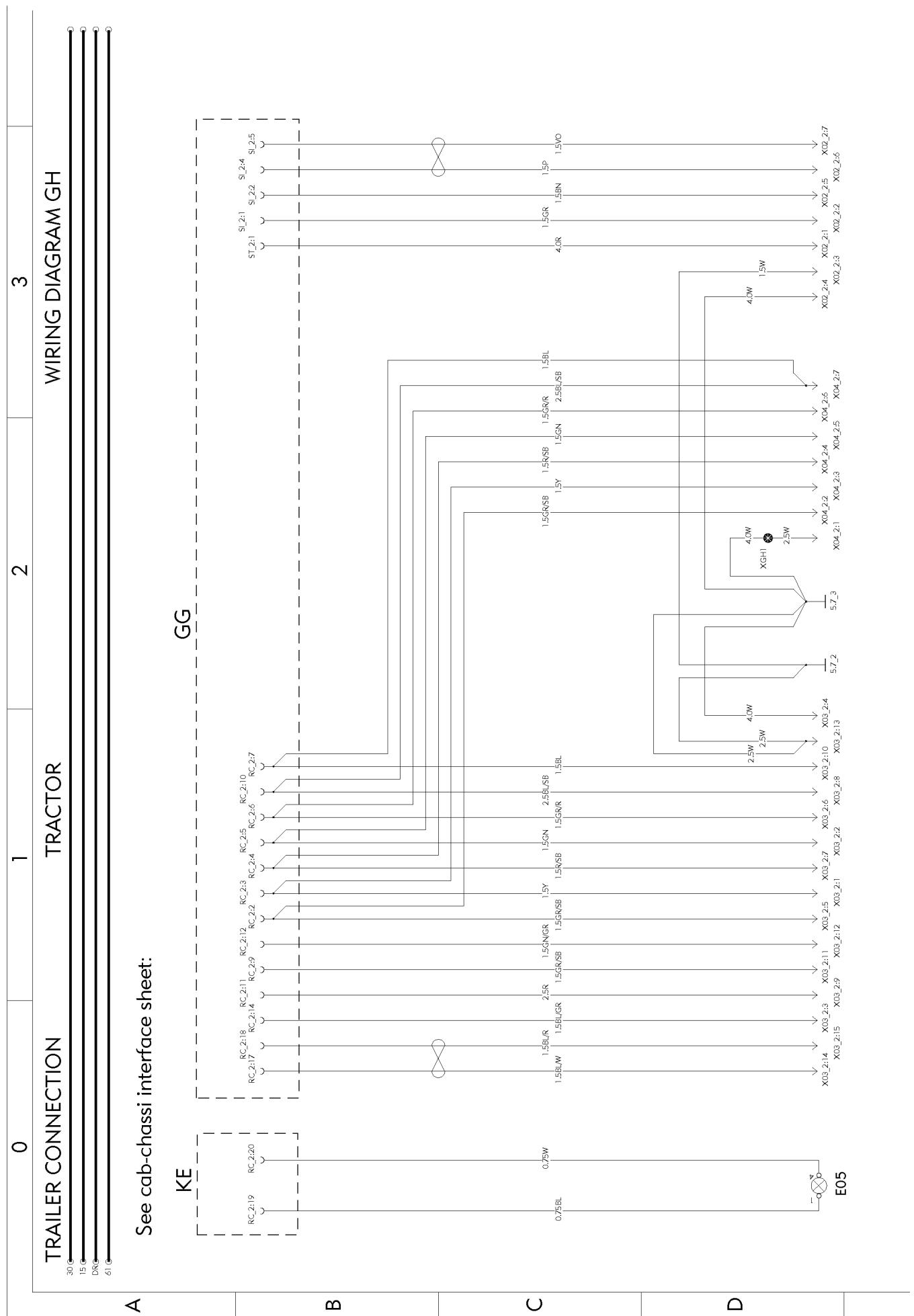


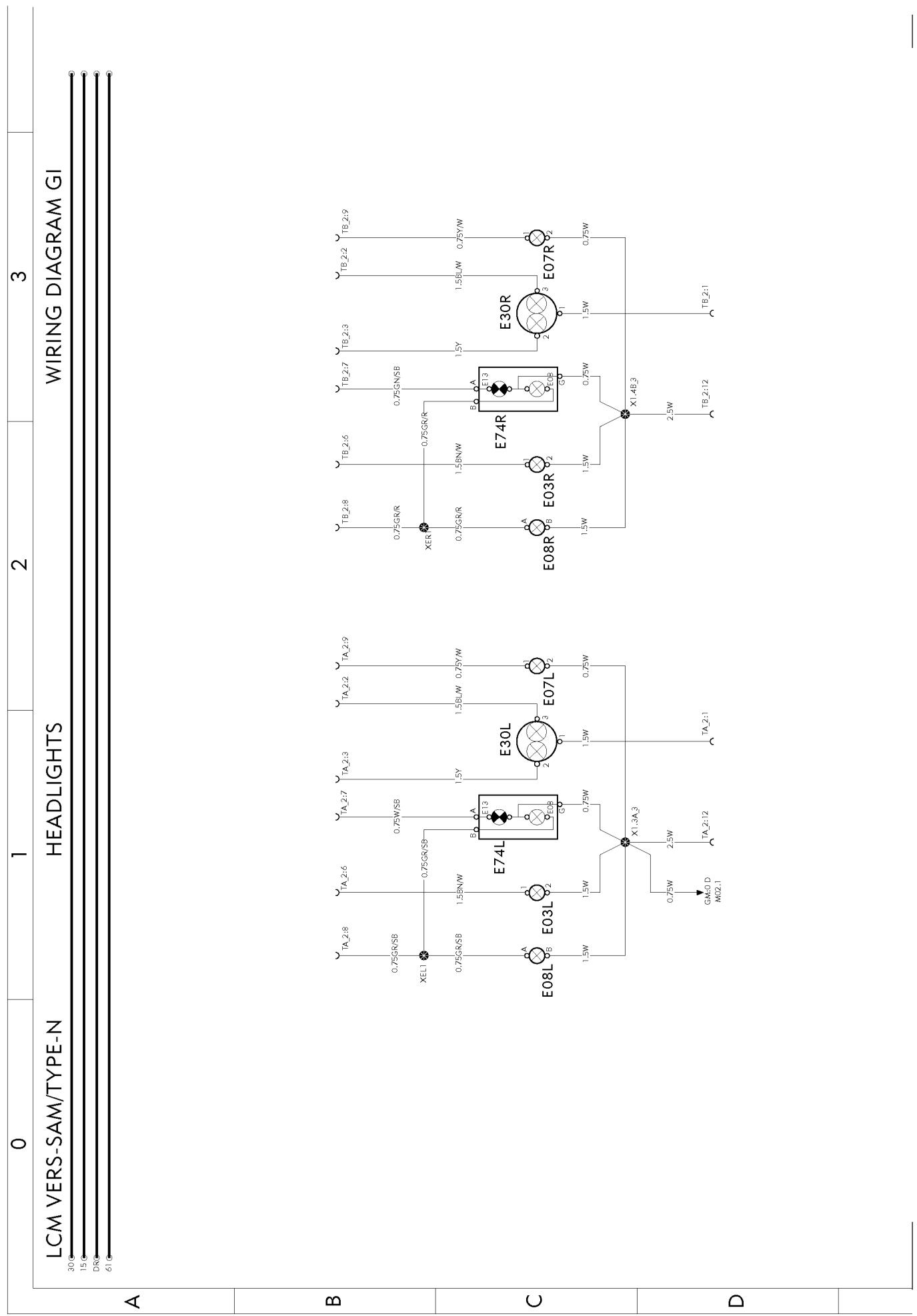






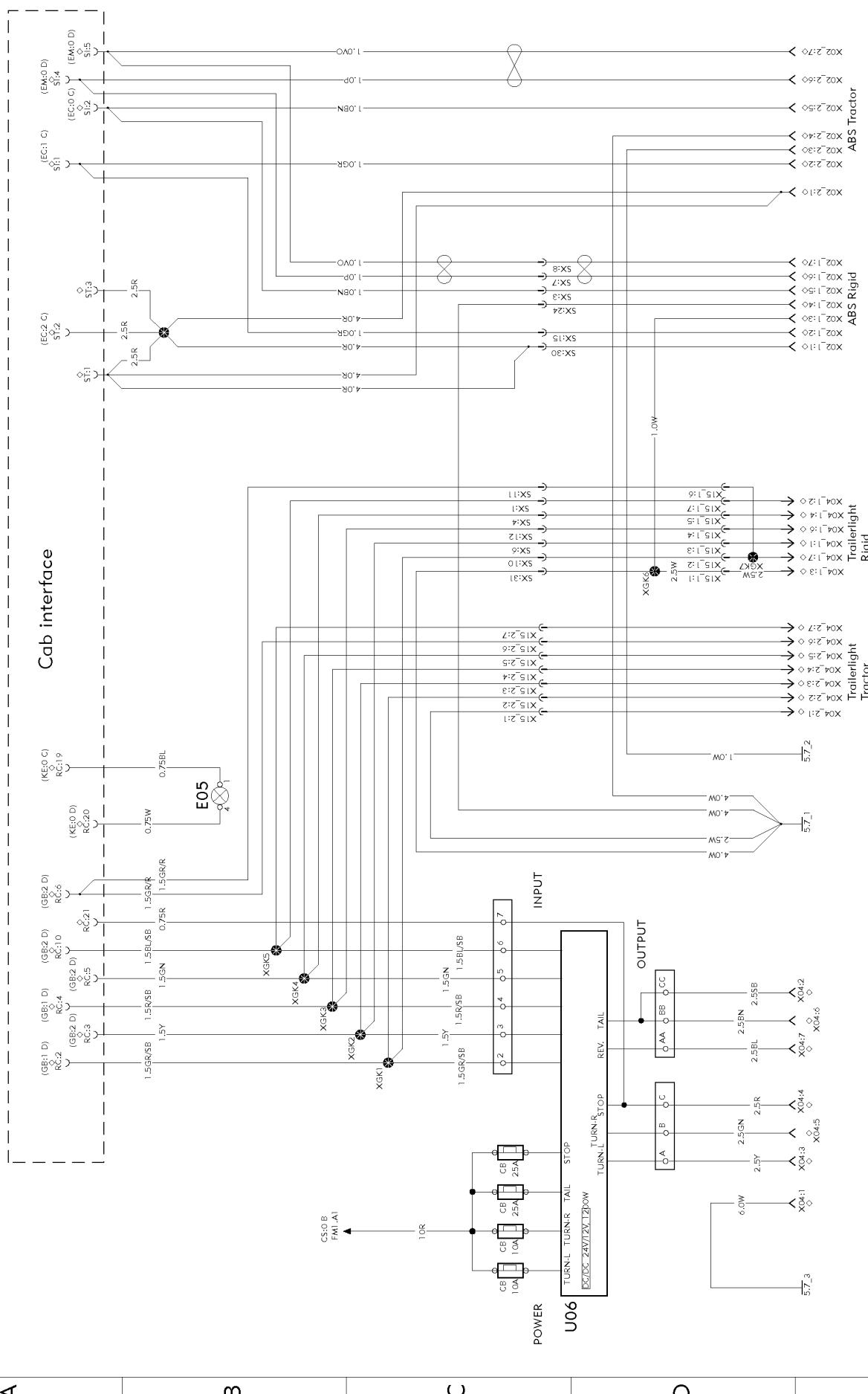


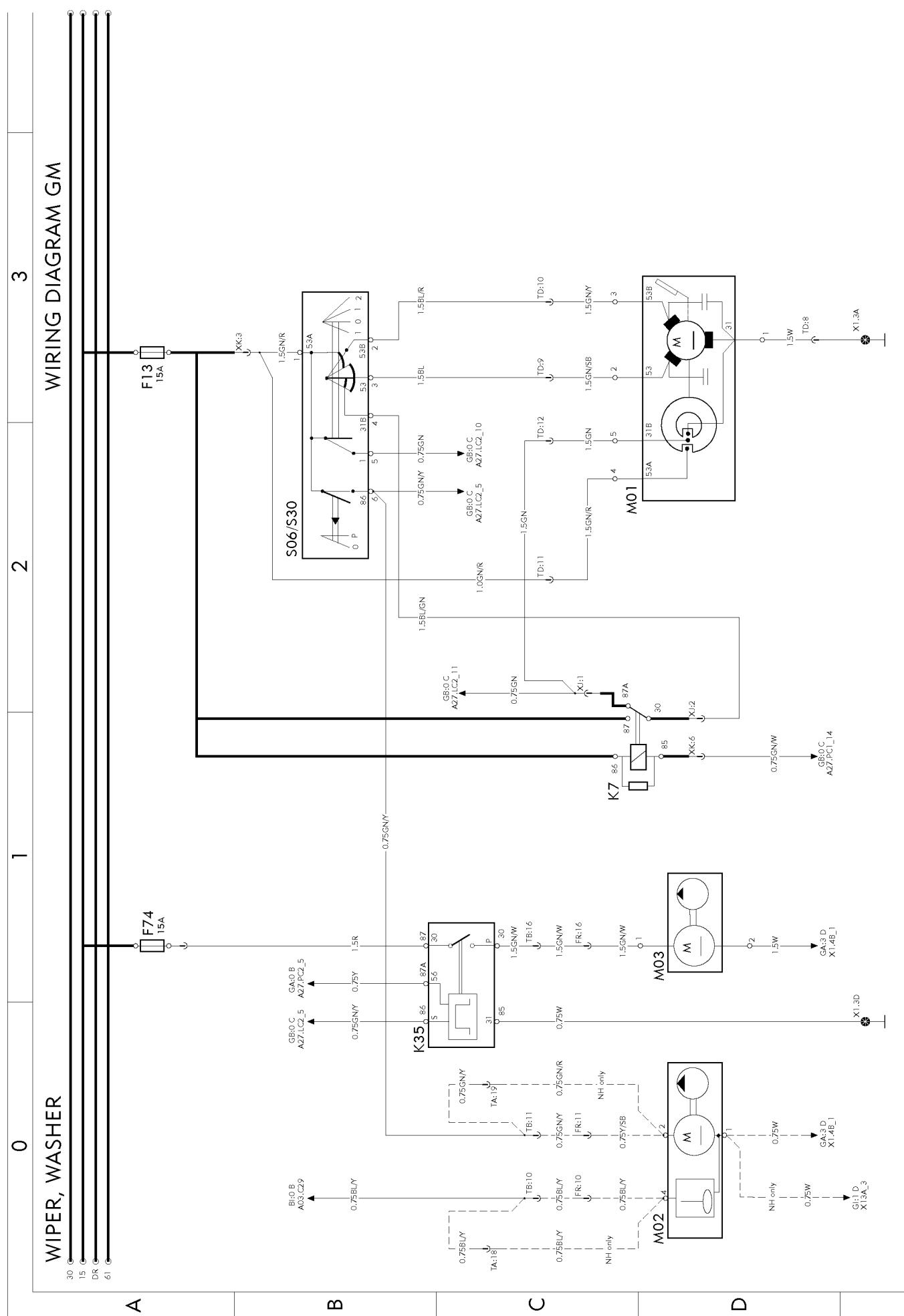


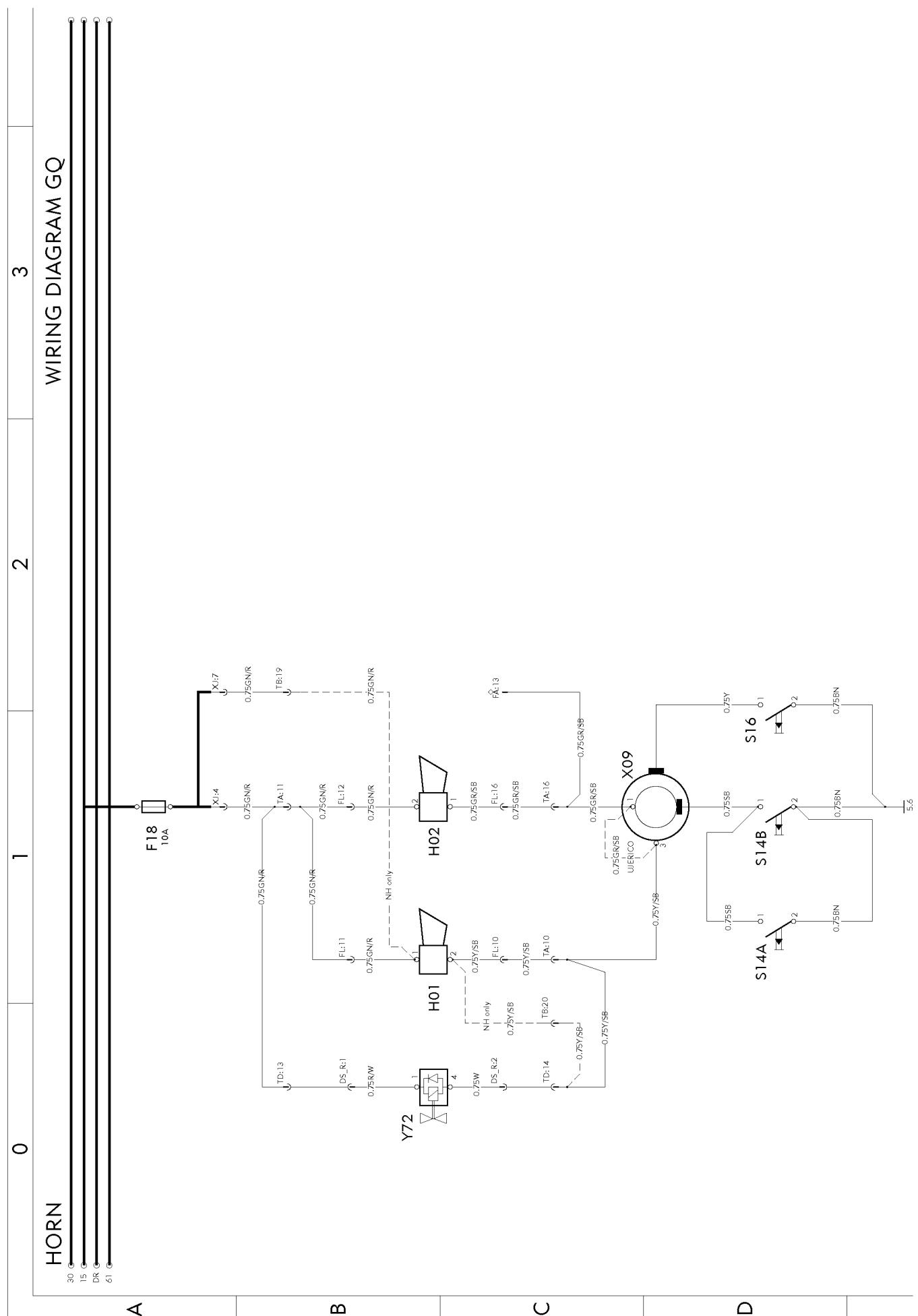


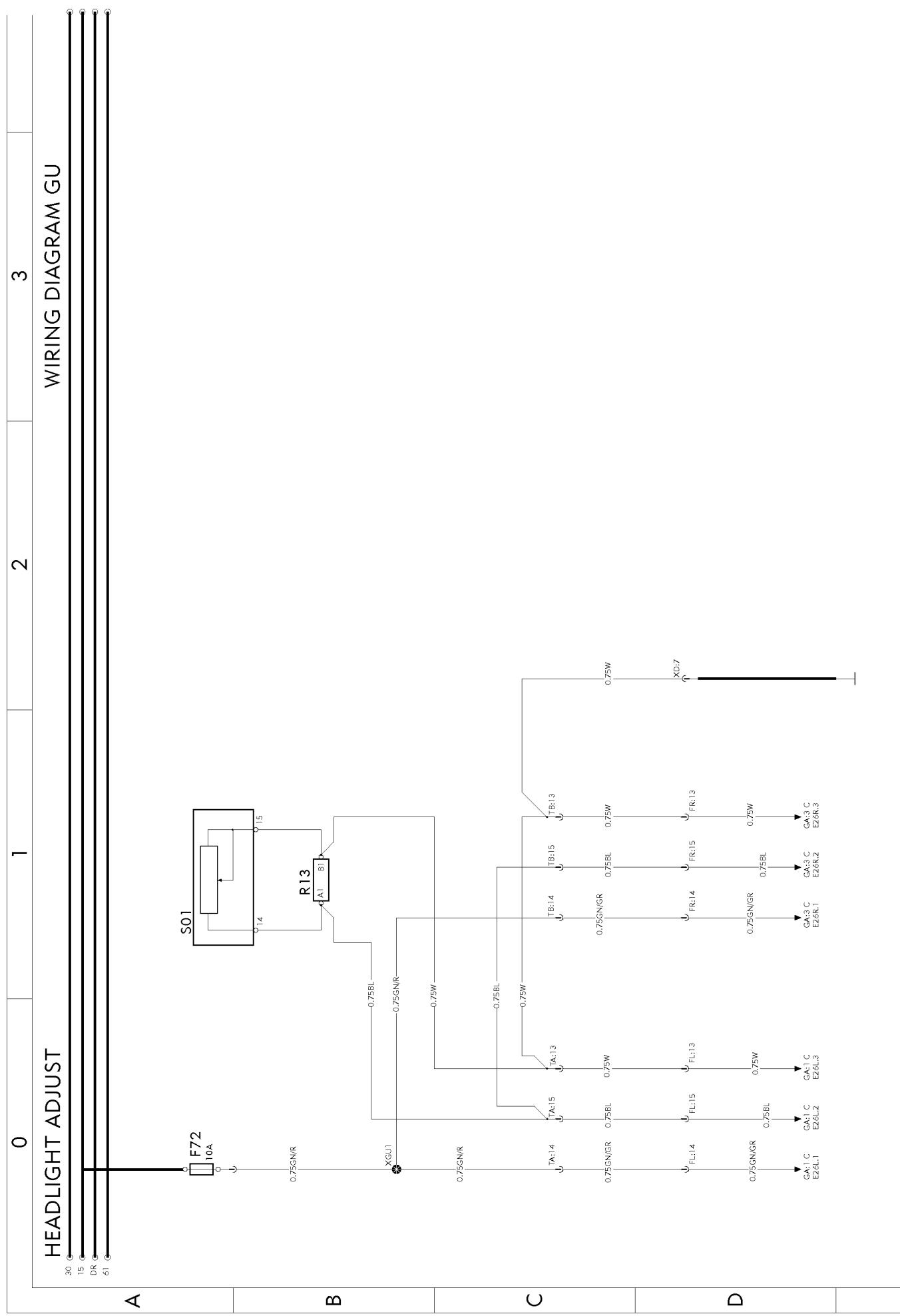
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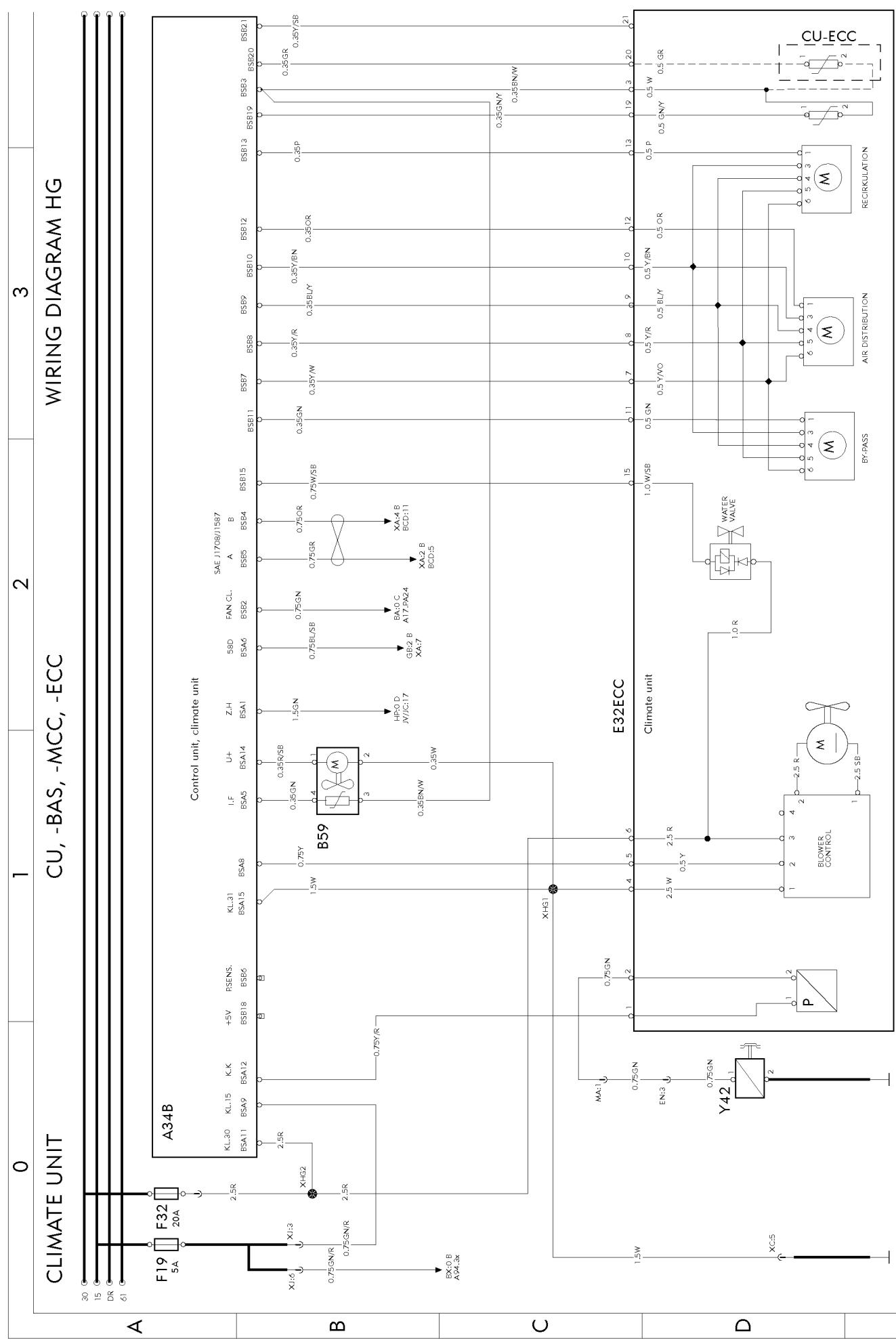
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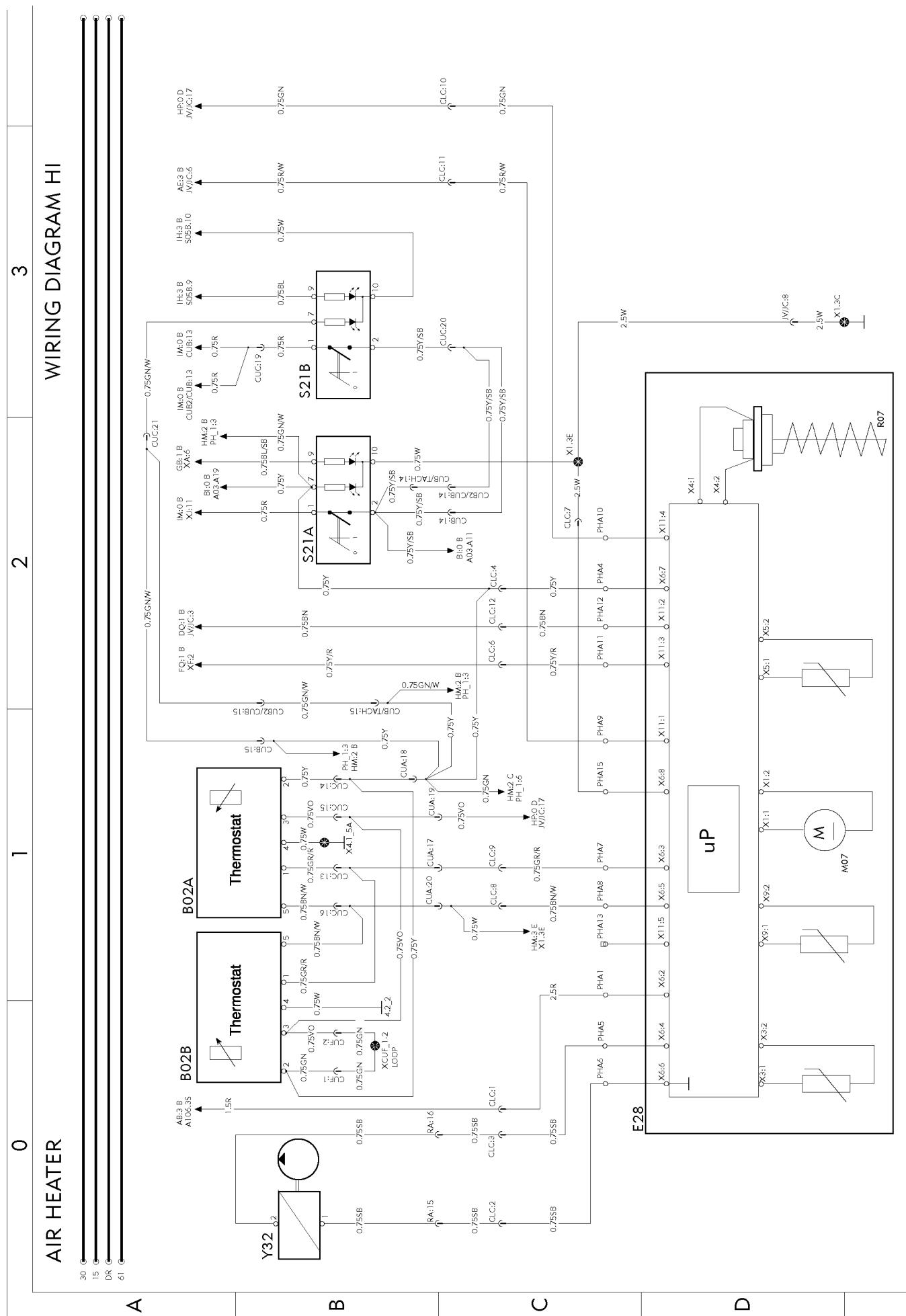












## WATER HEATER

62

WIRING DIAGRAM HM

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WIRING DIAGRAM HM

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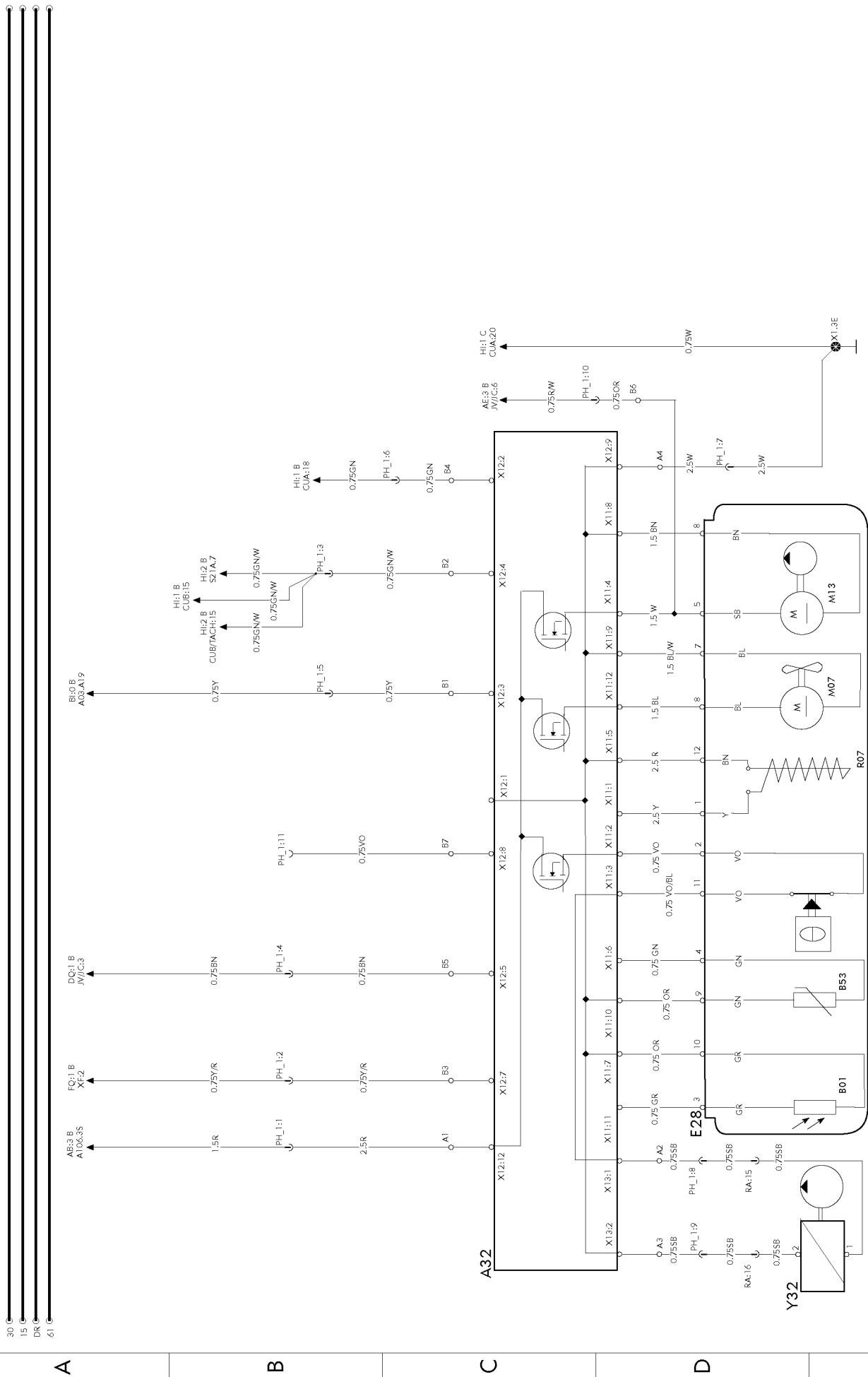
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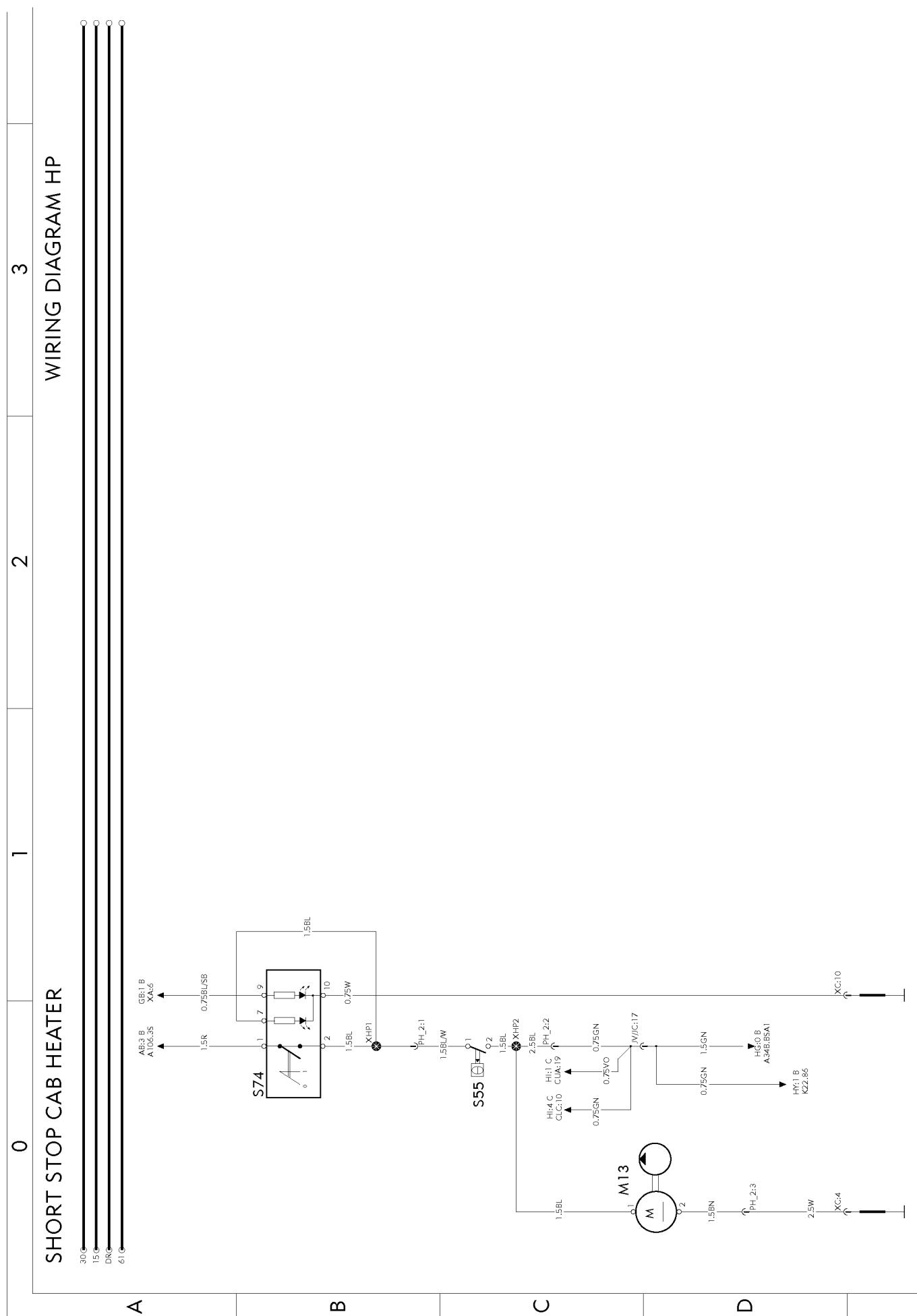
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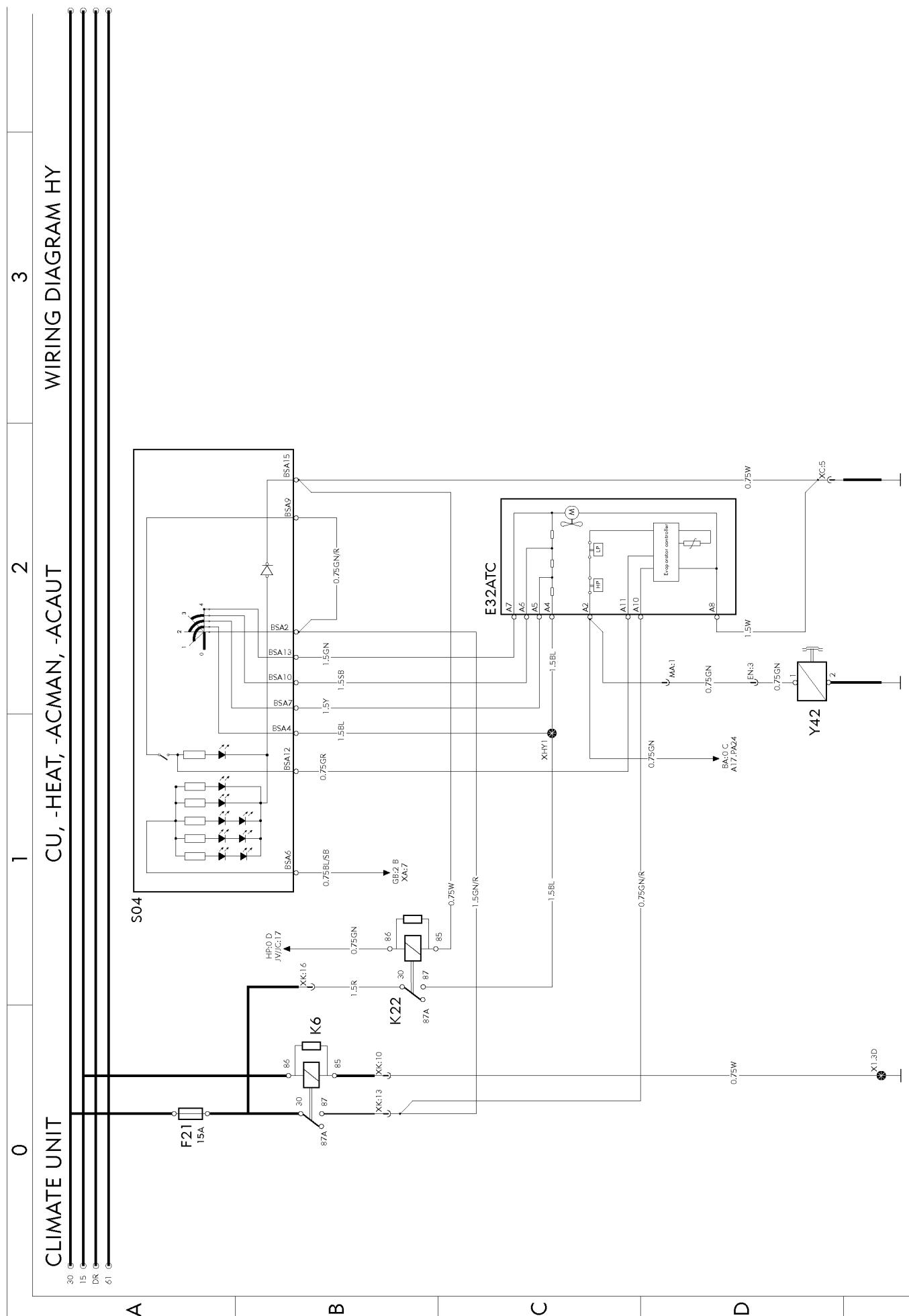
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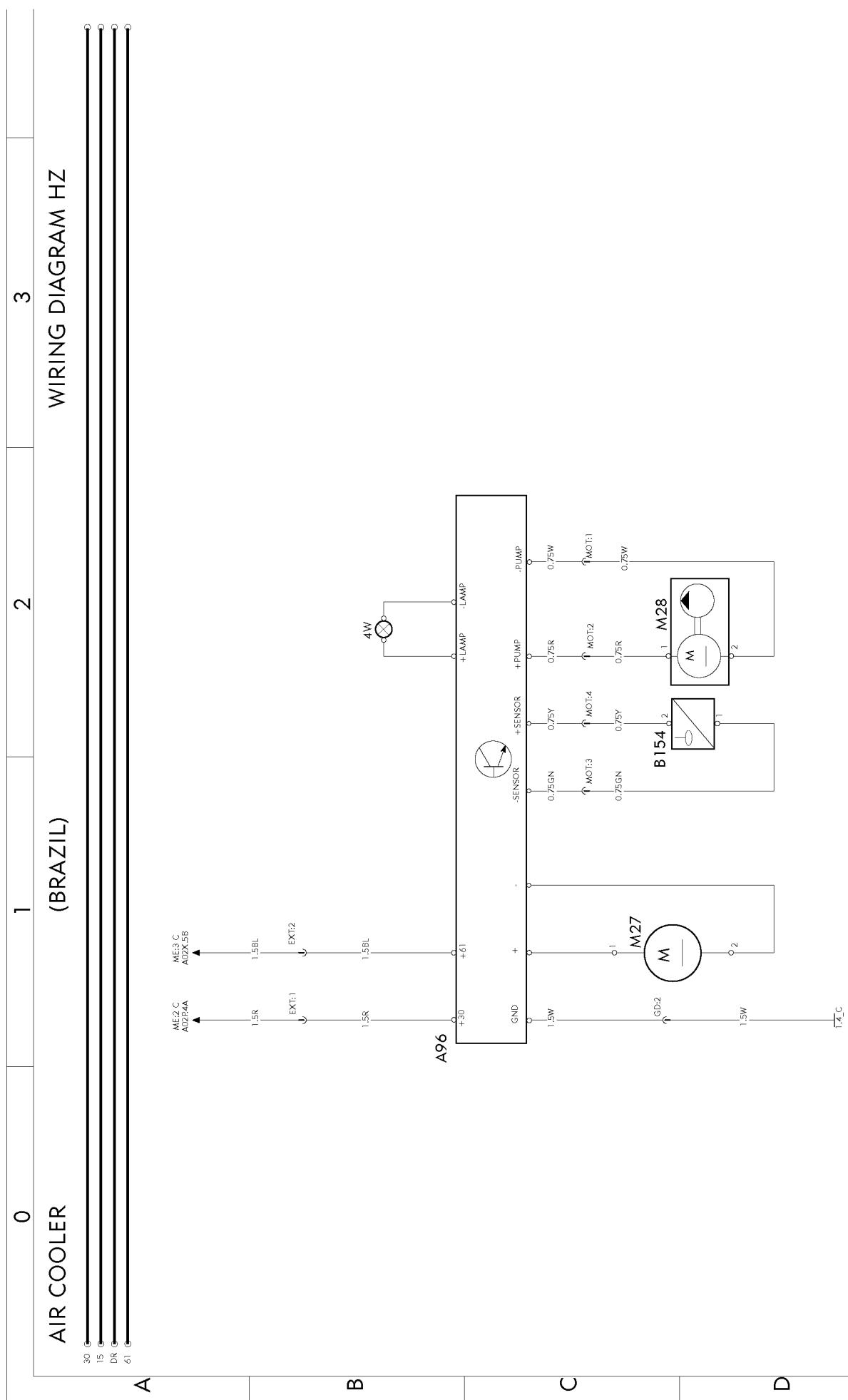
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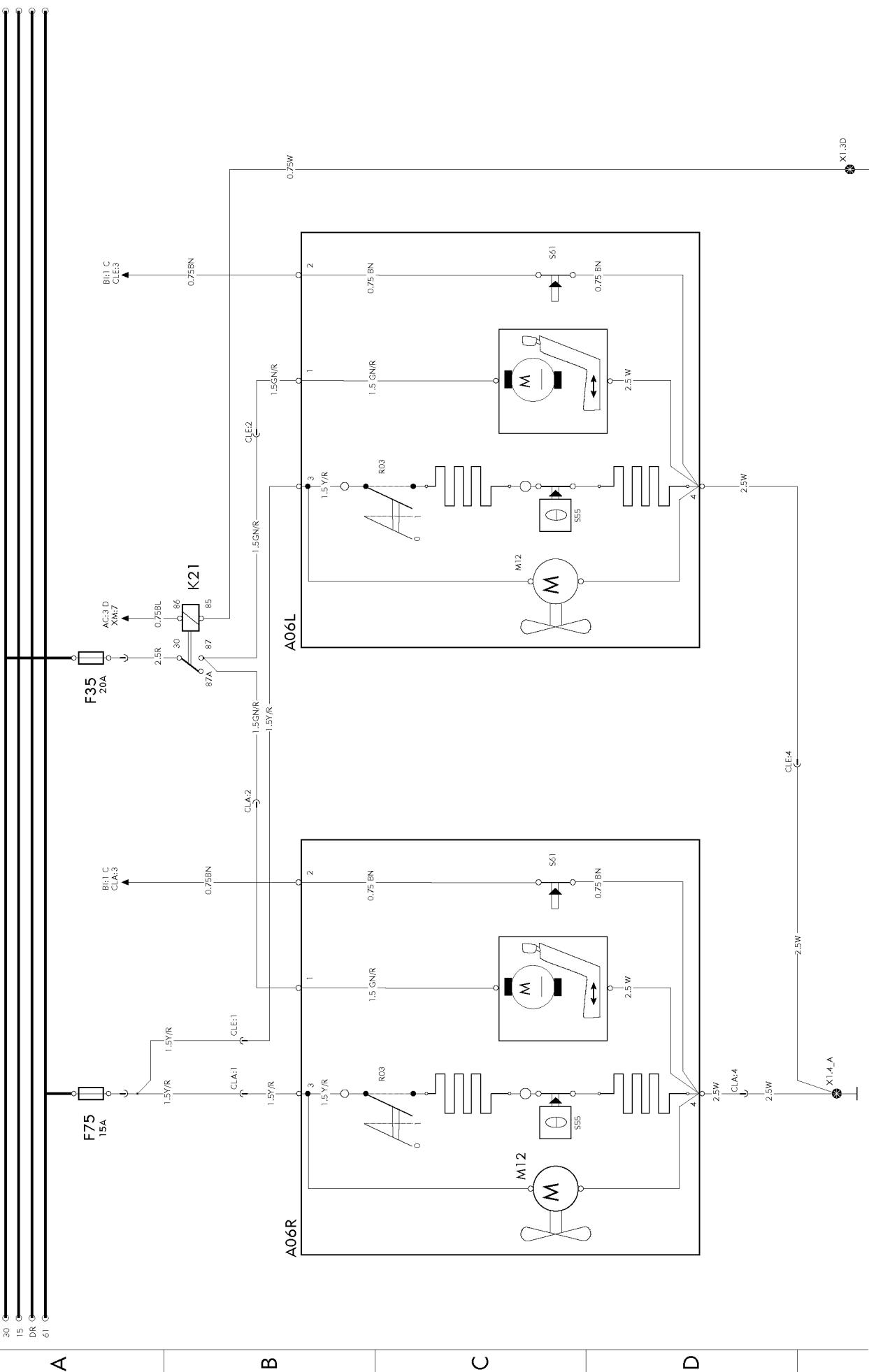


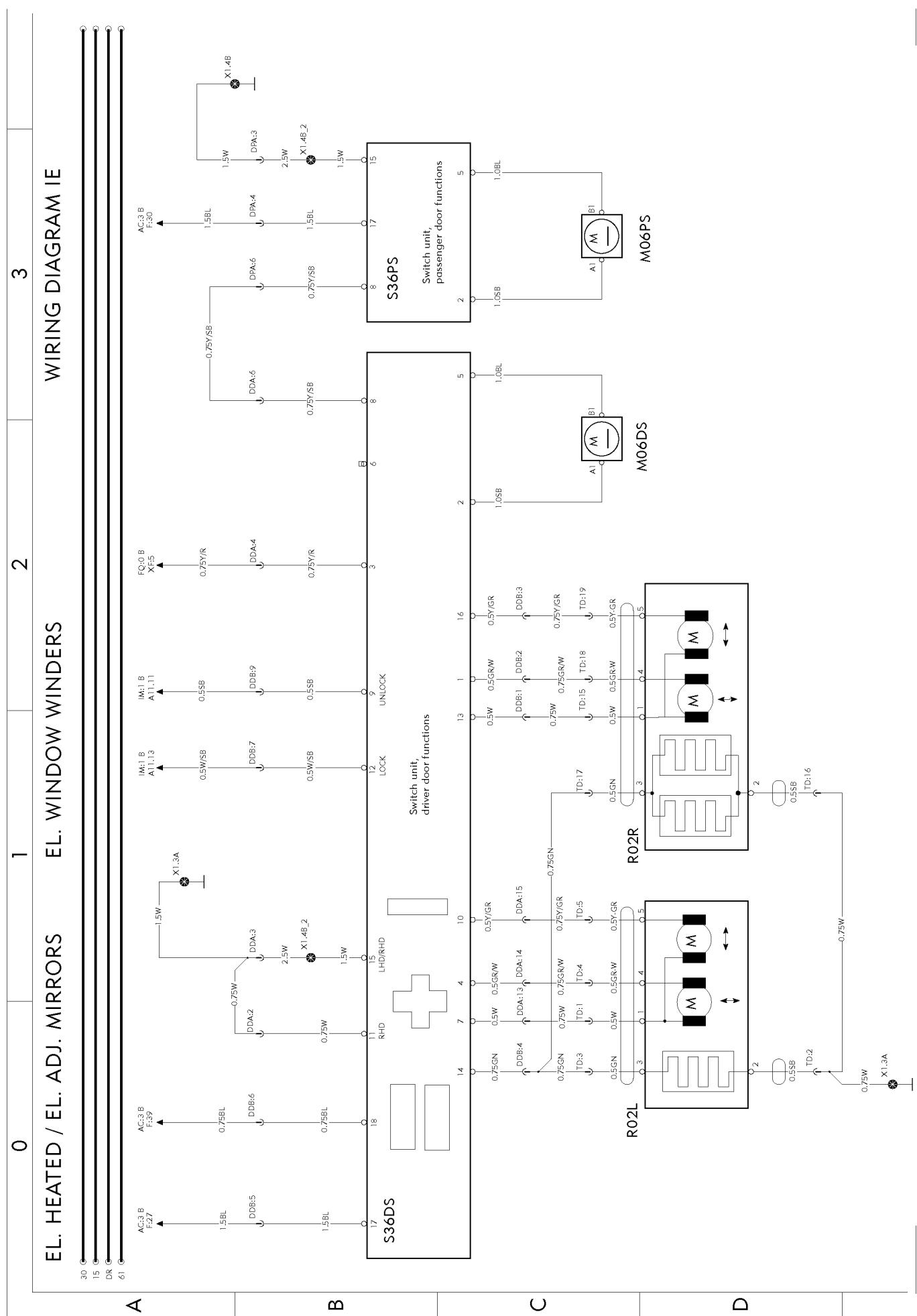




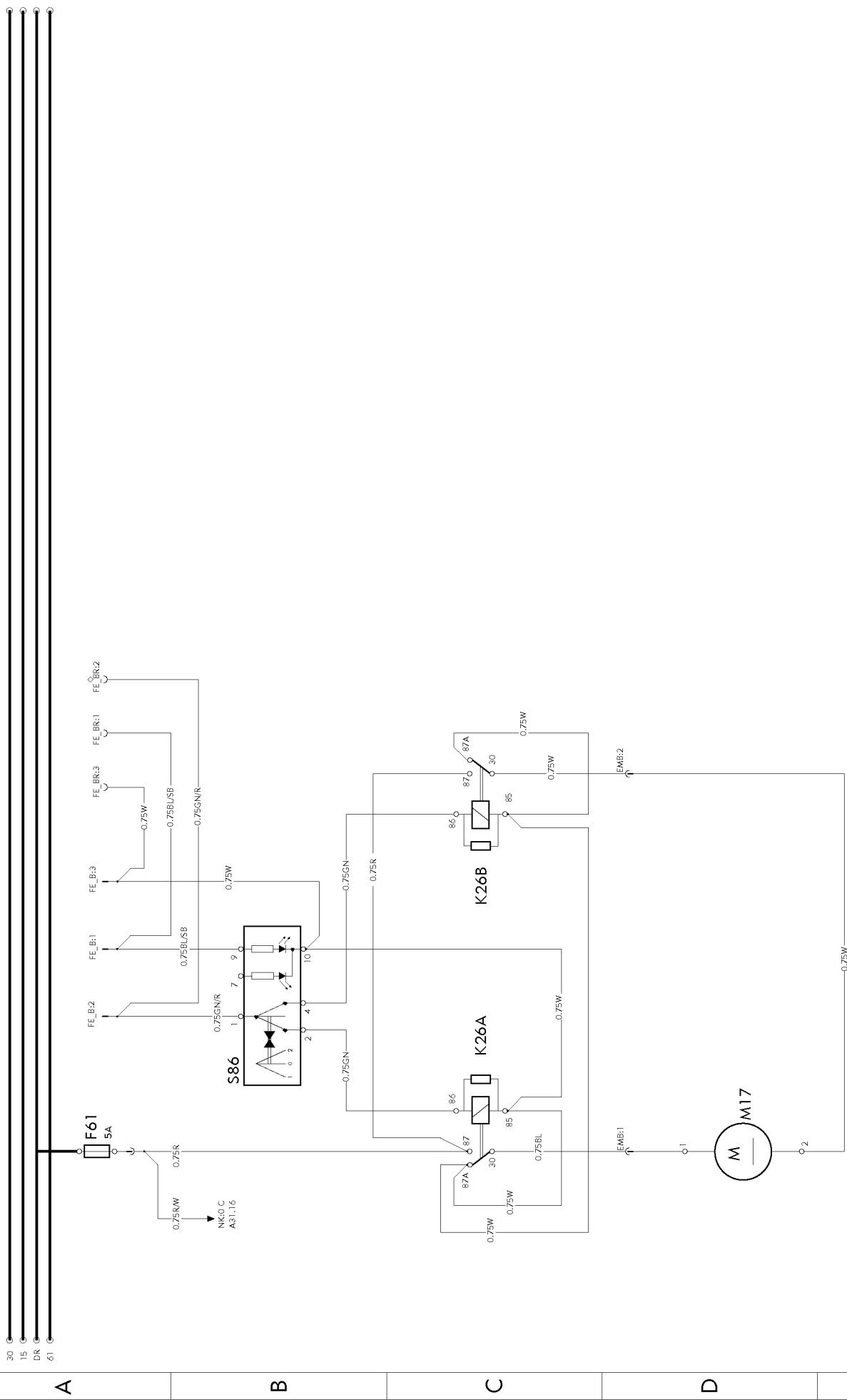


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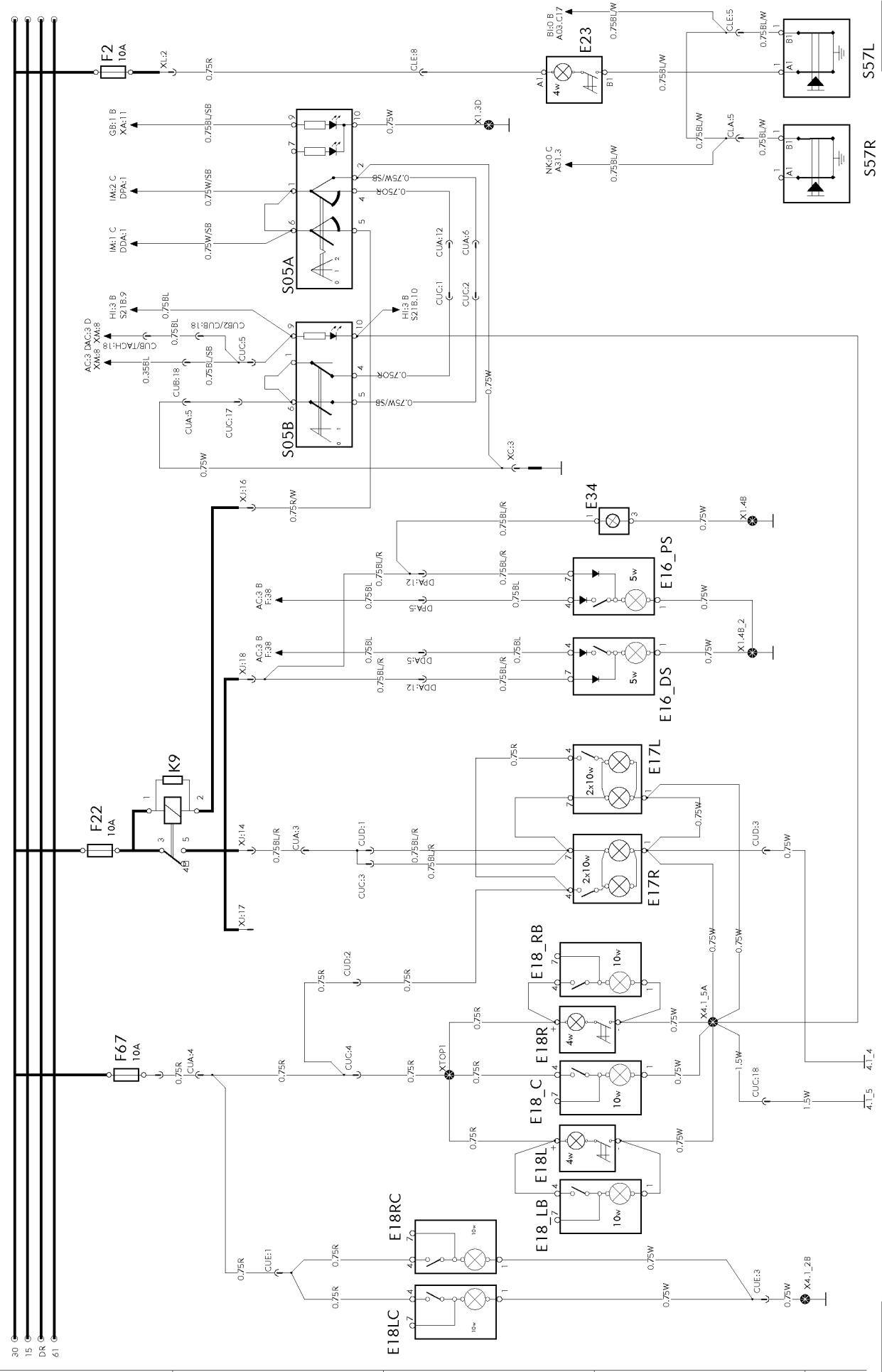




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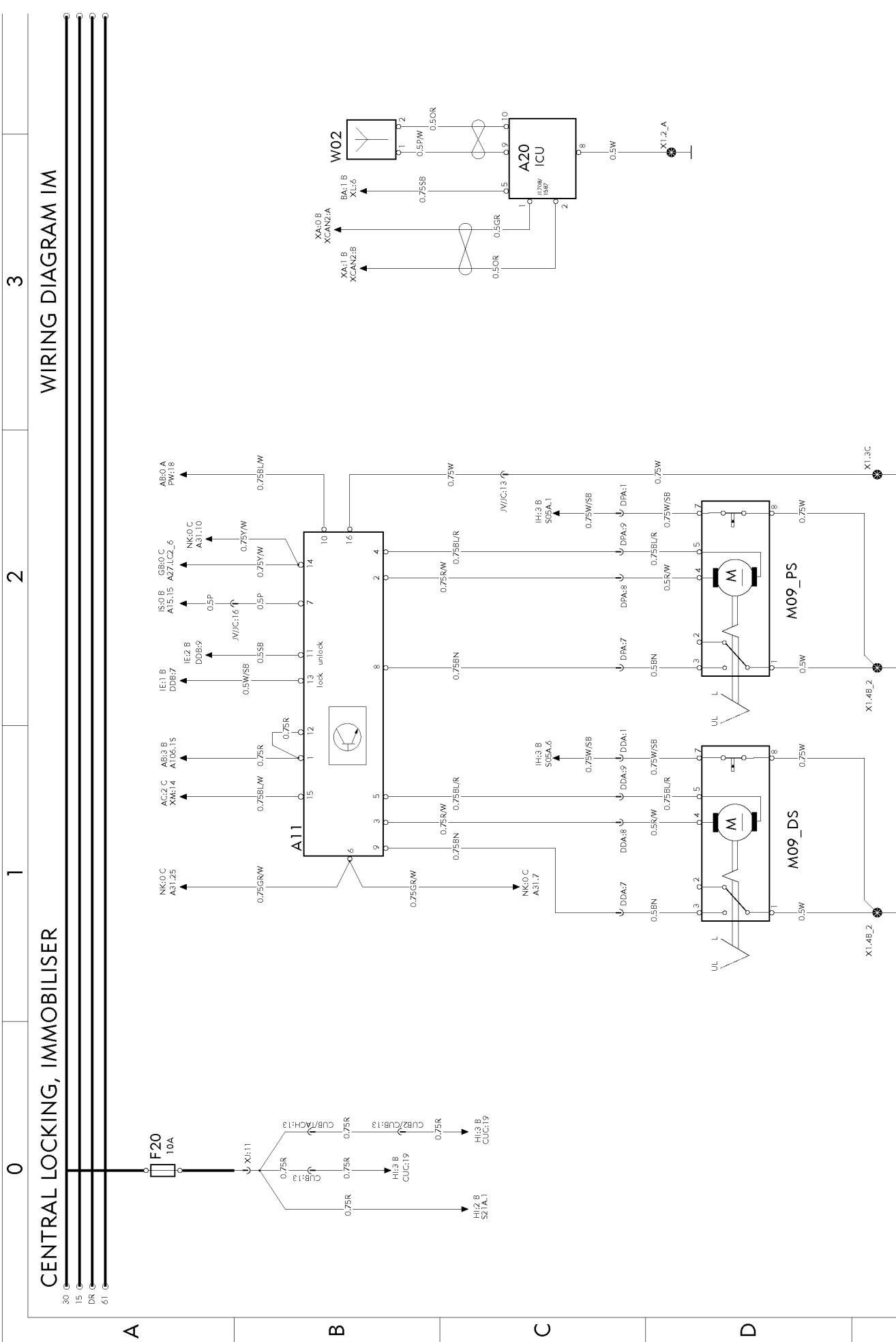
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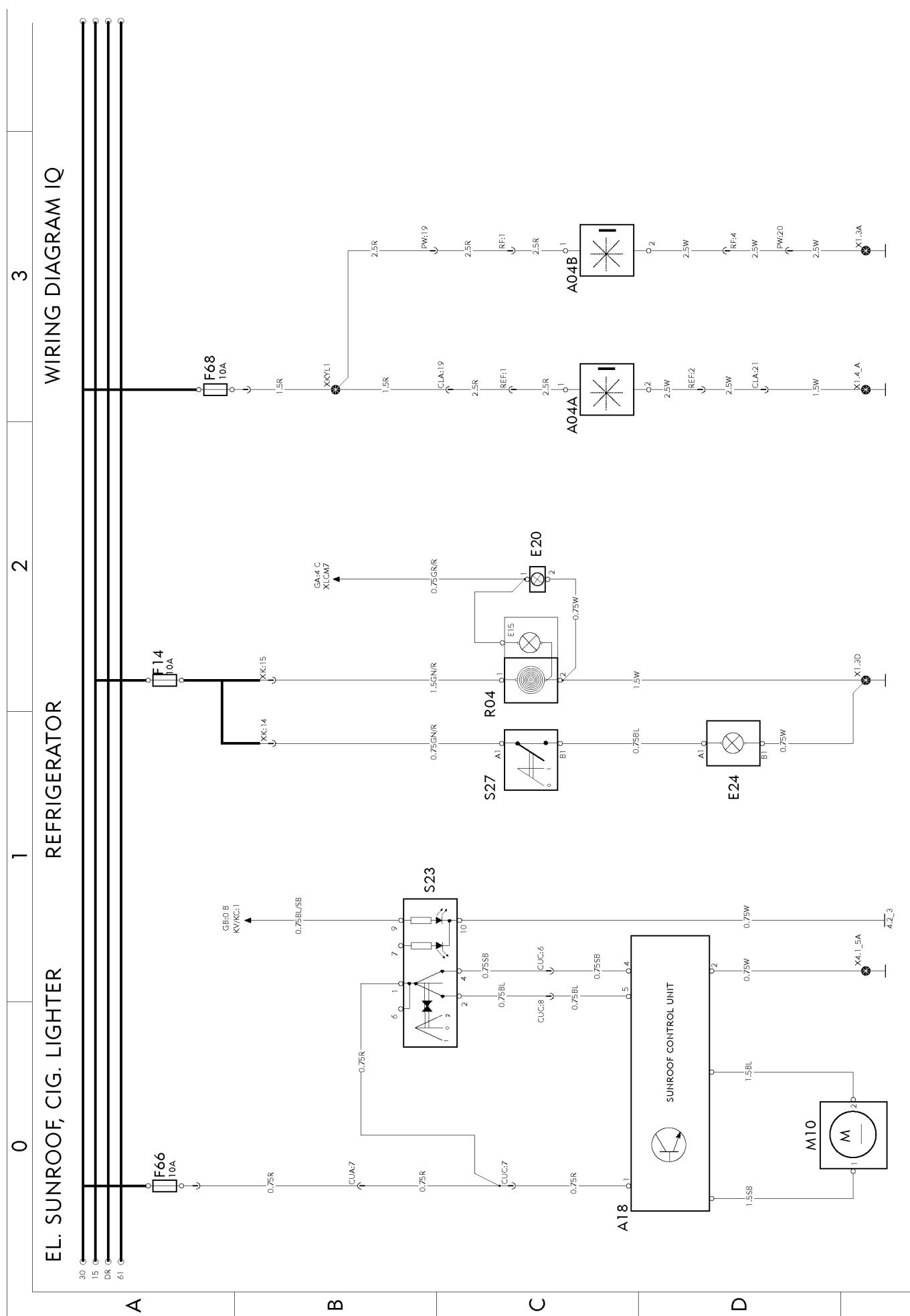


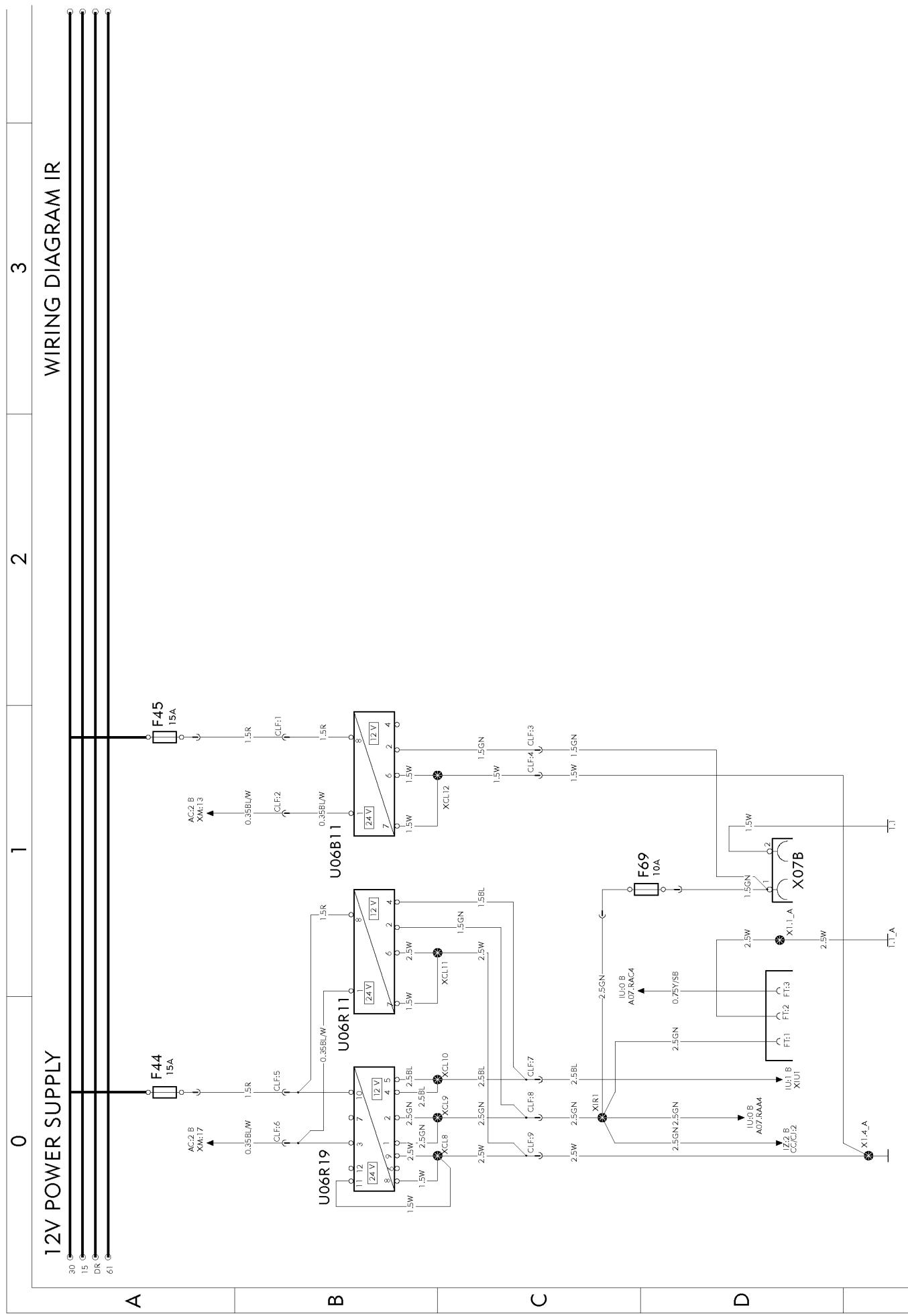
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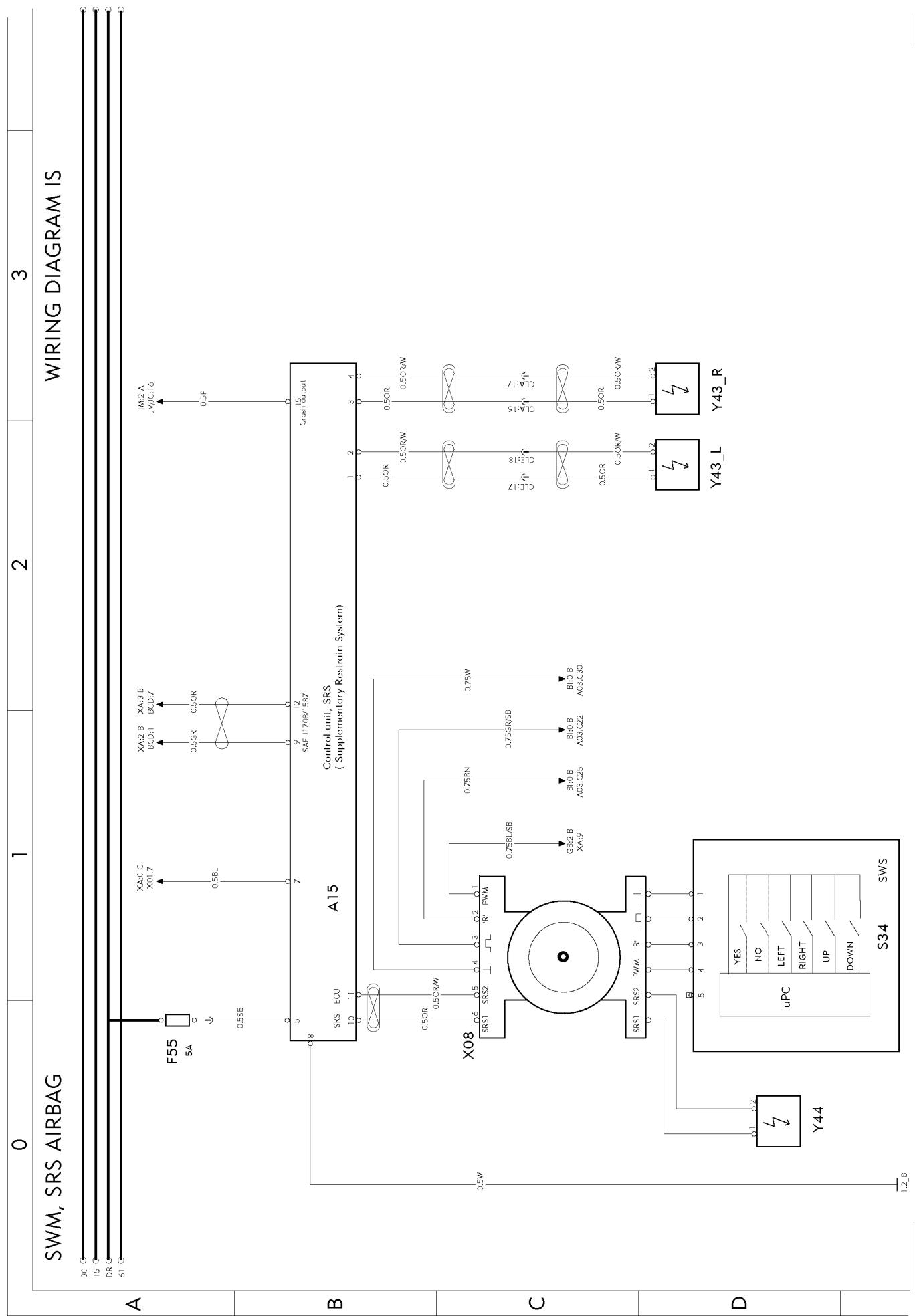
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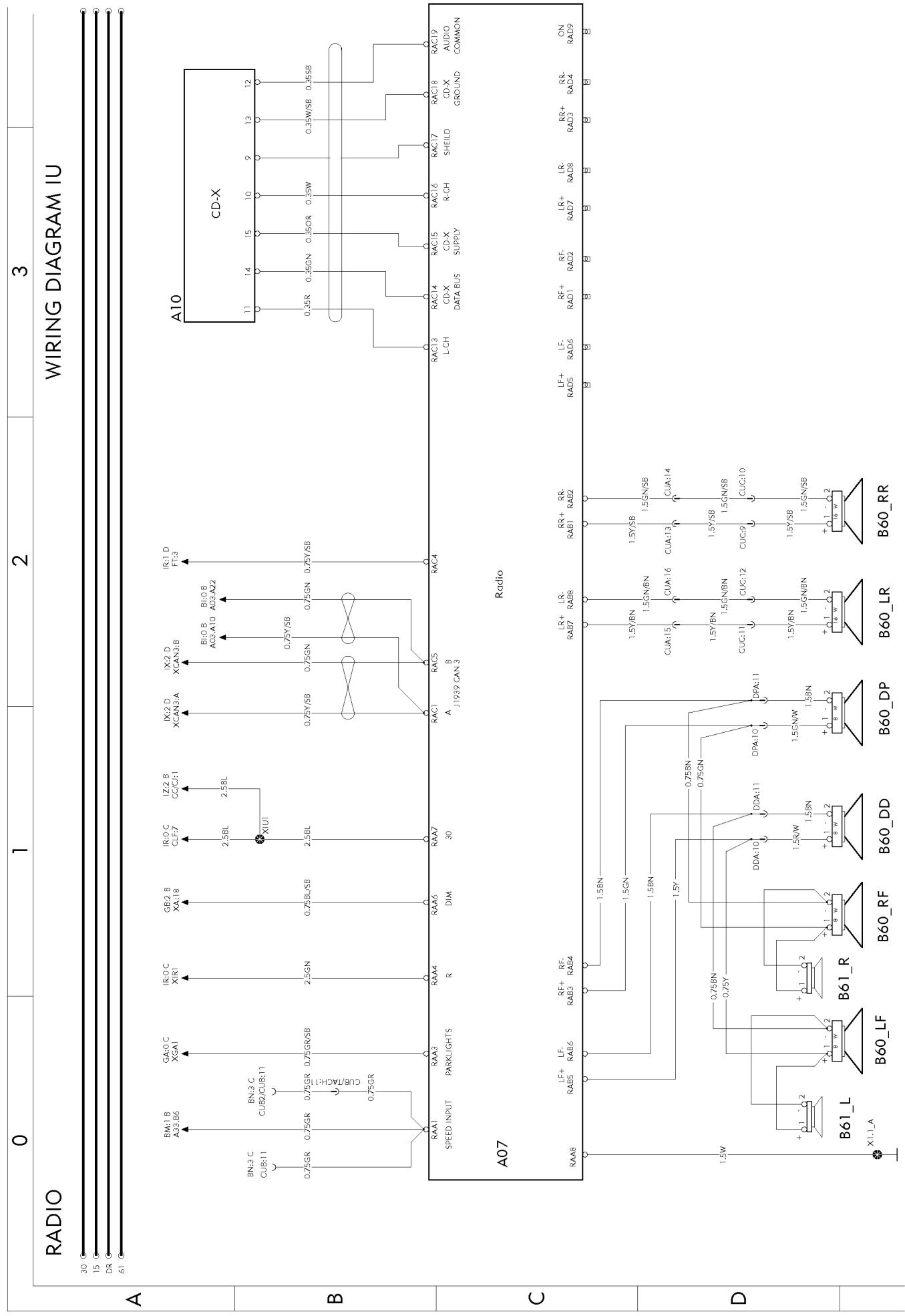
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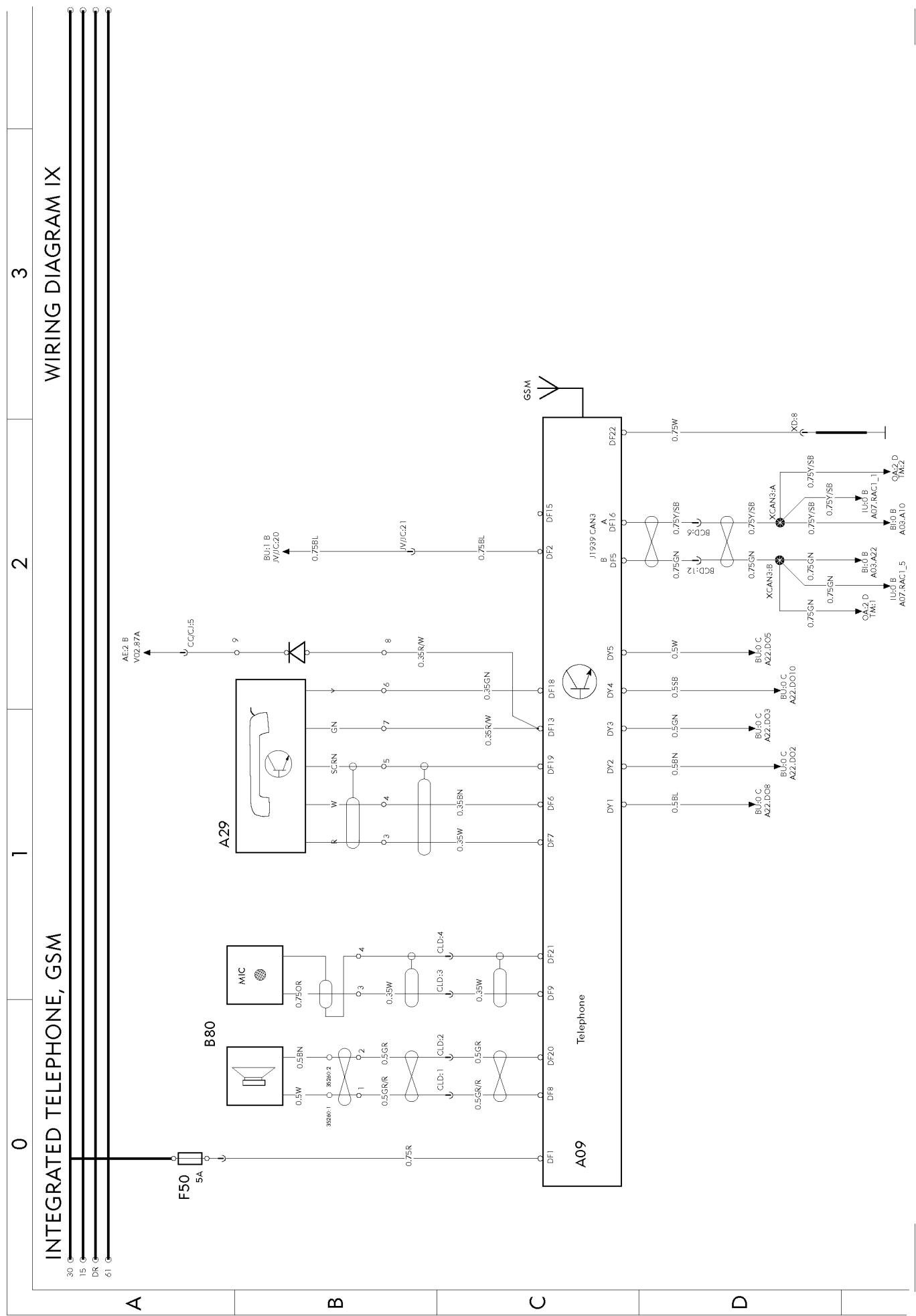


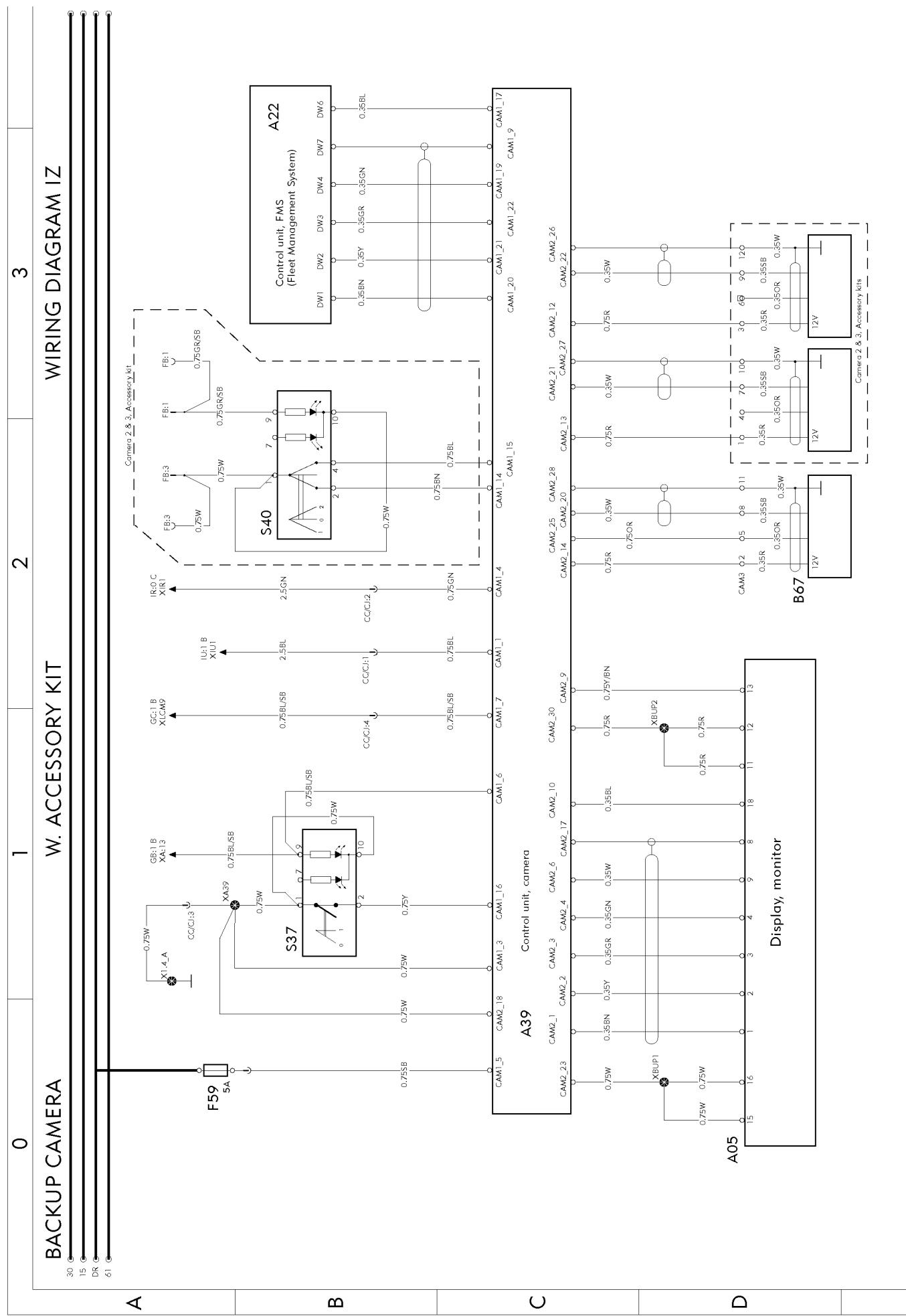


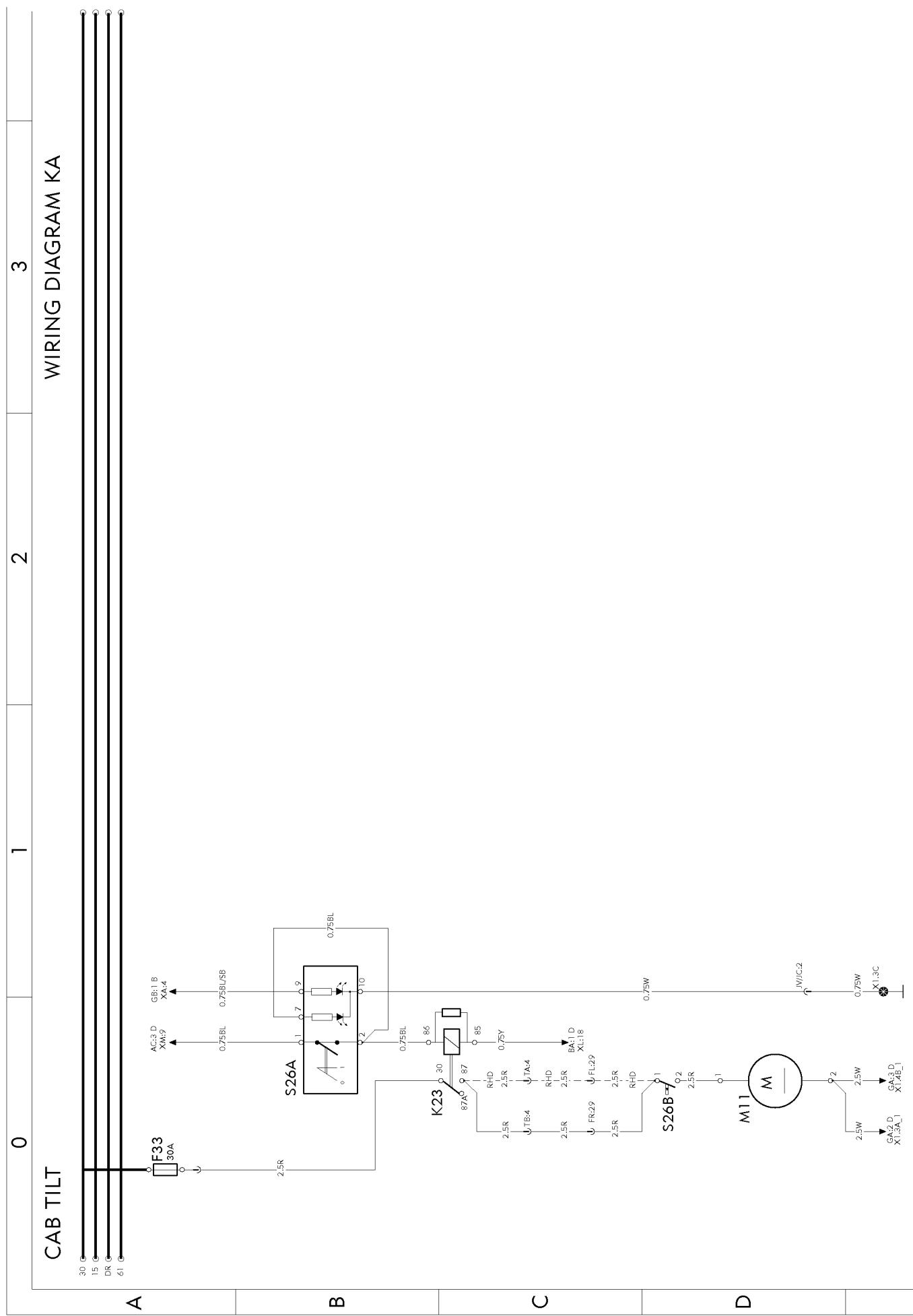


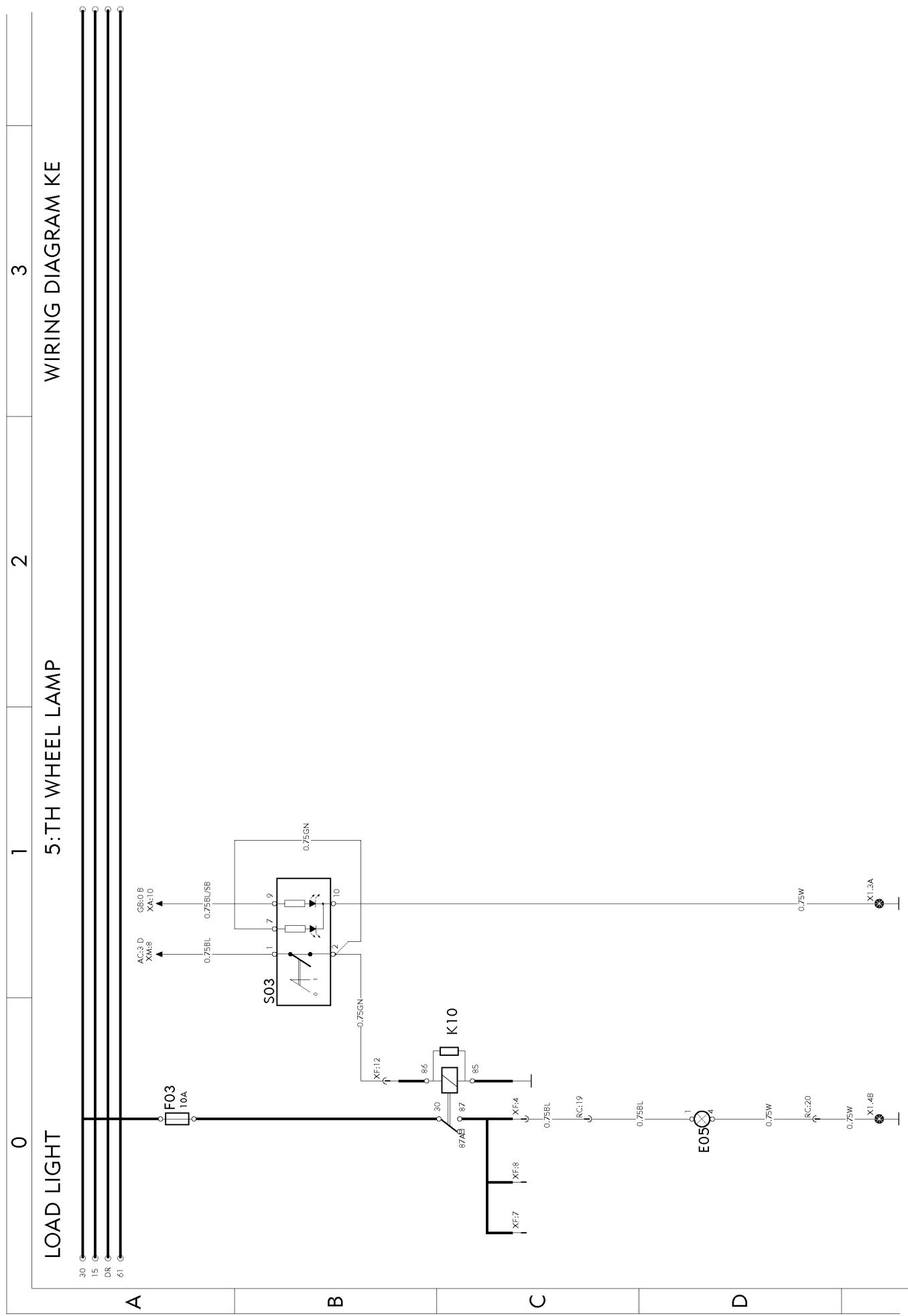


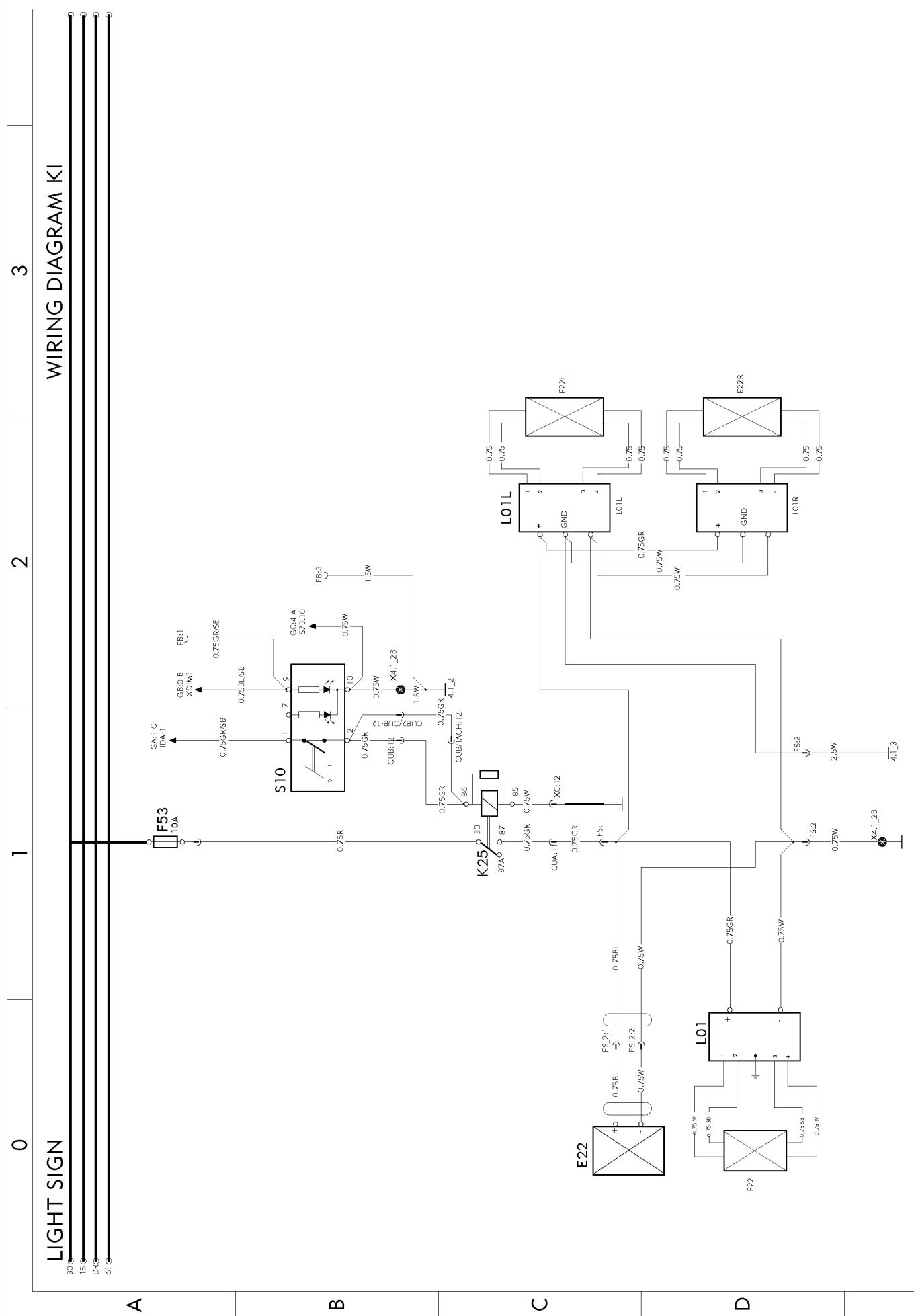


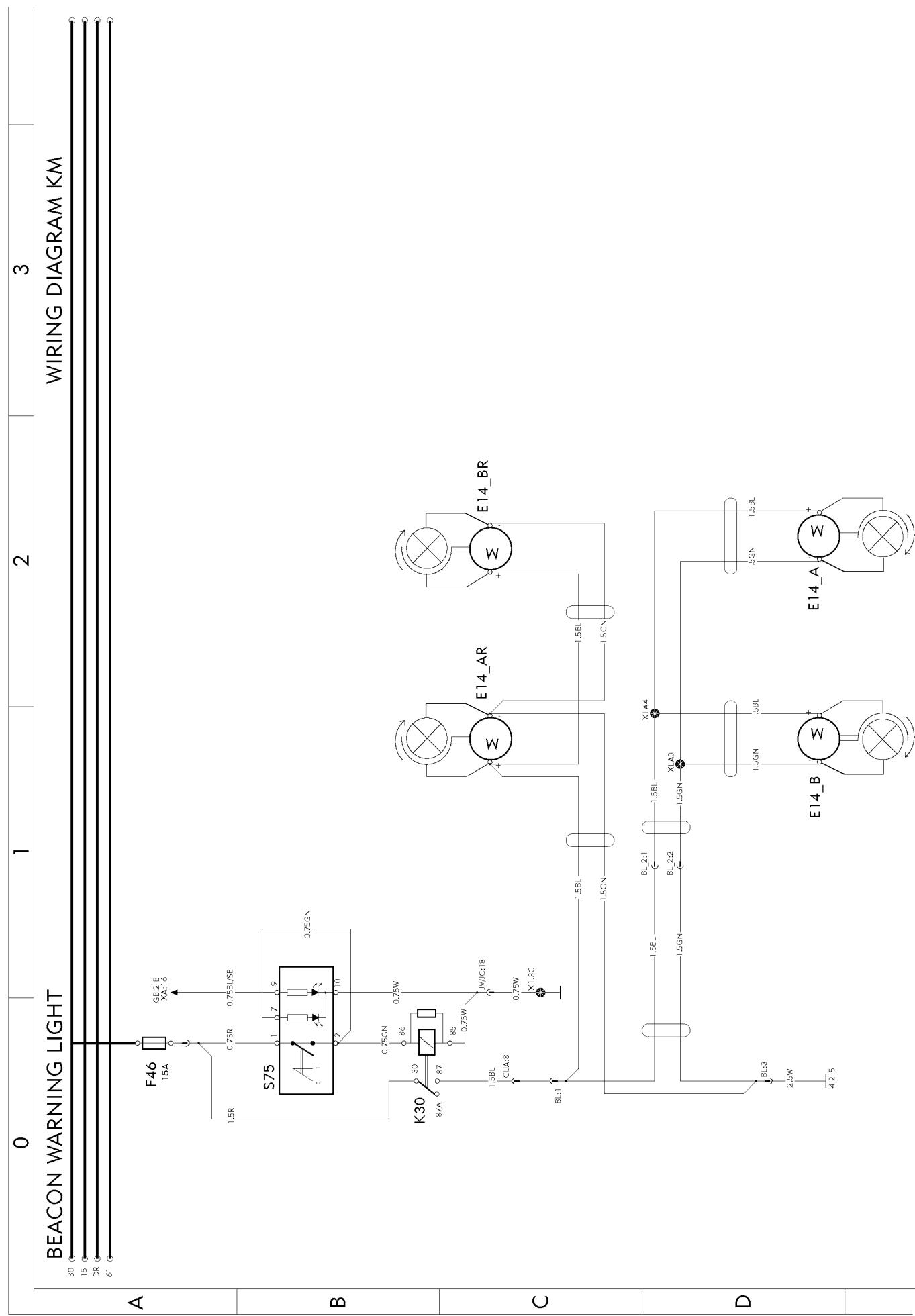


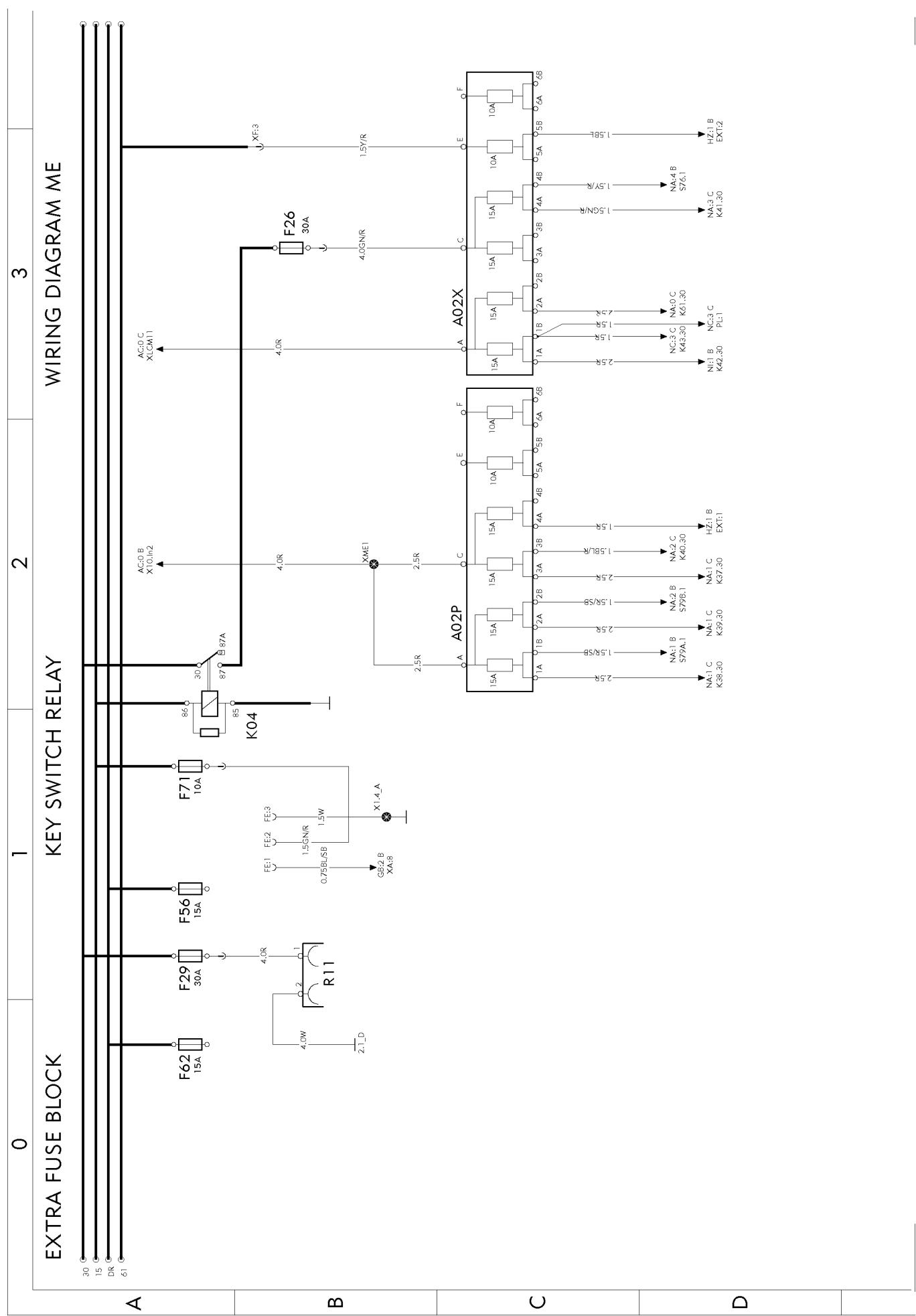


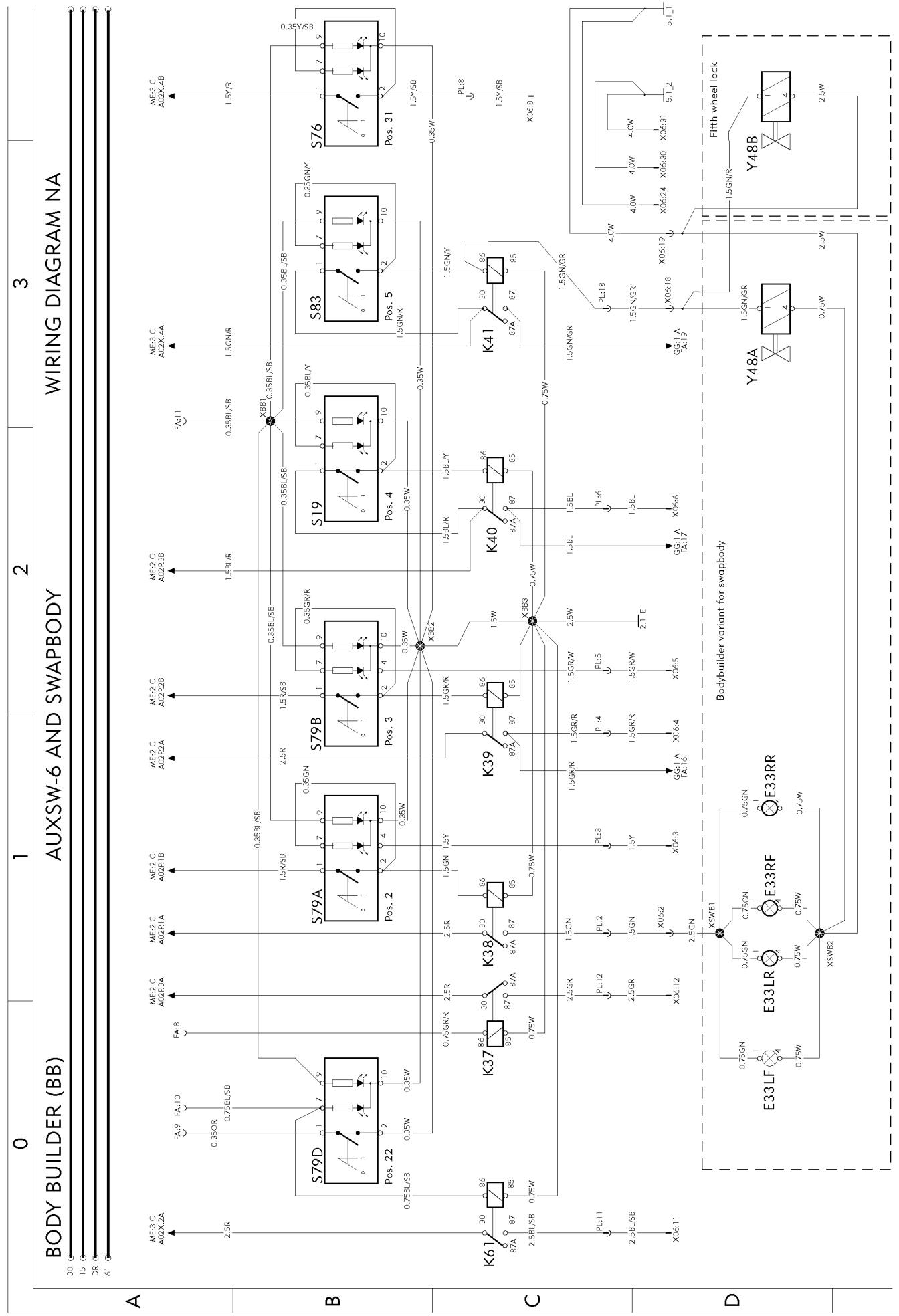


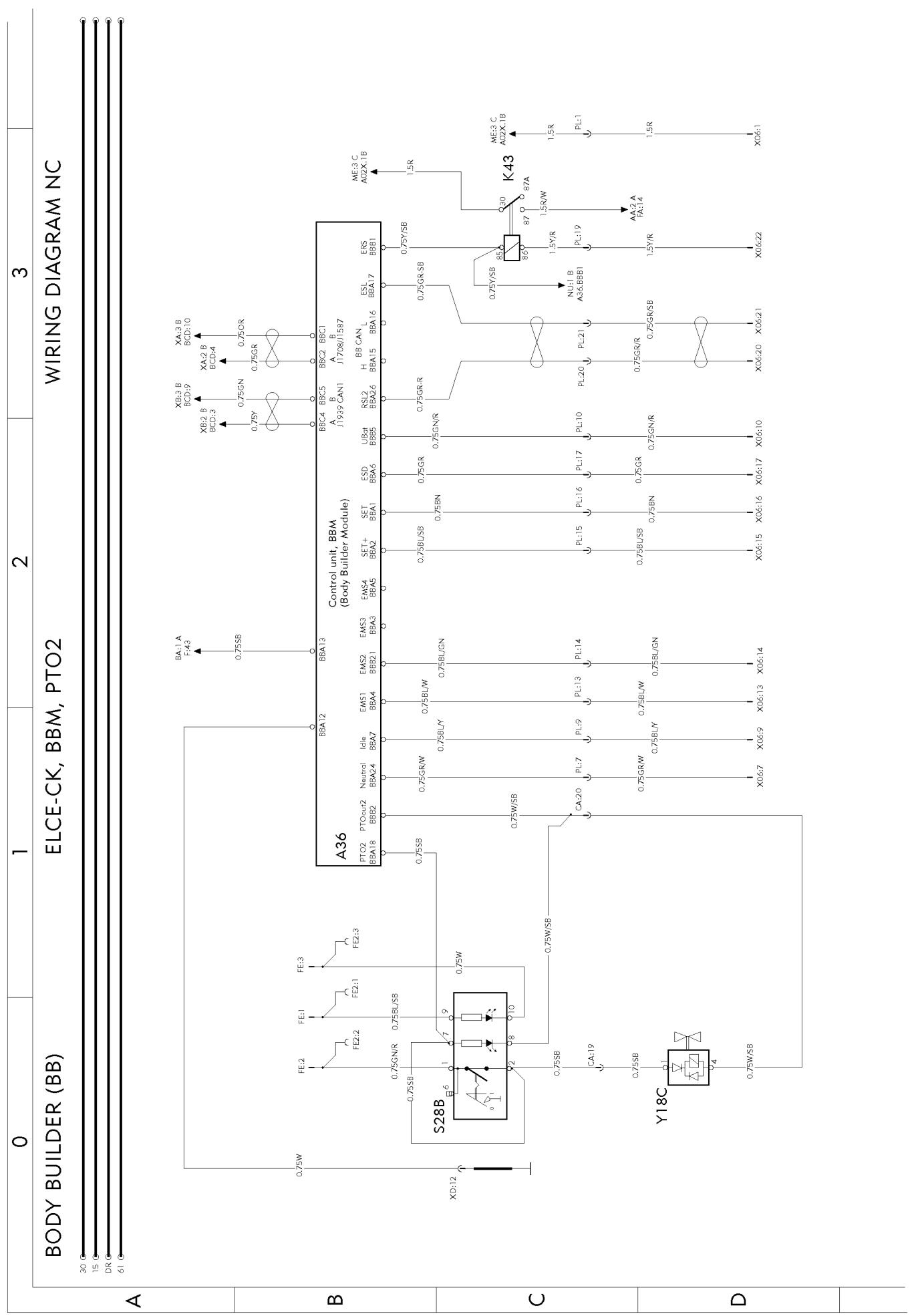


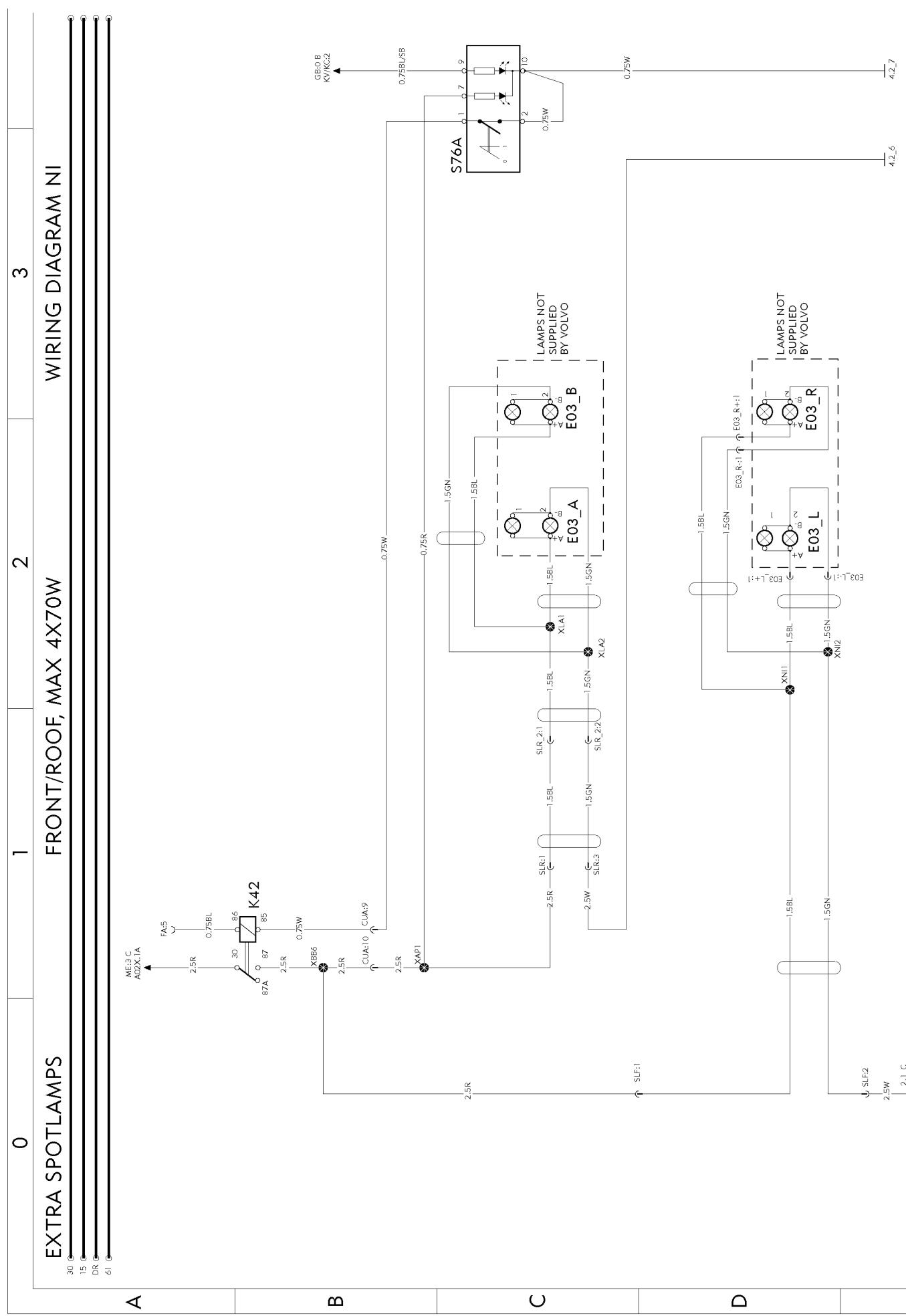


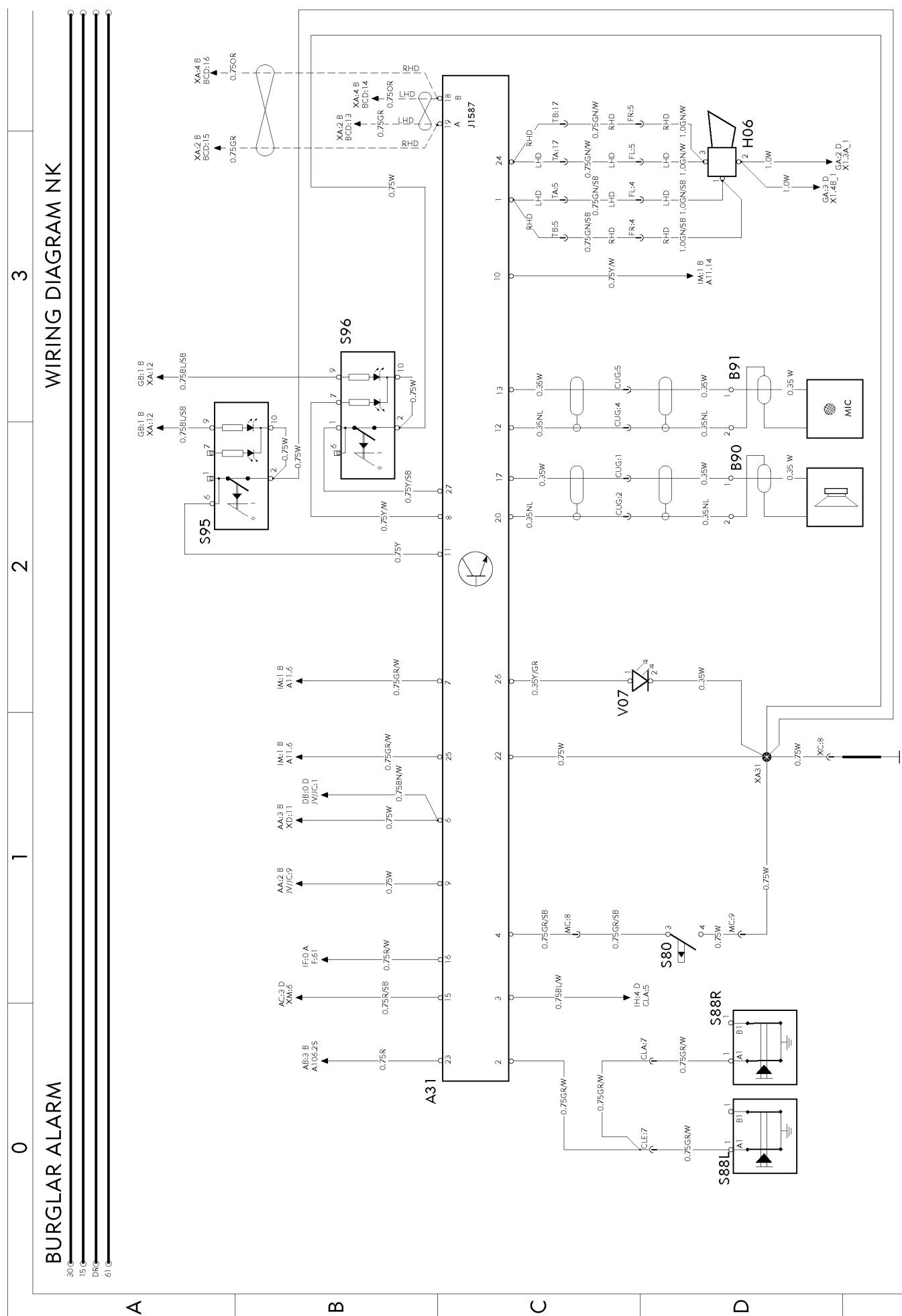


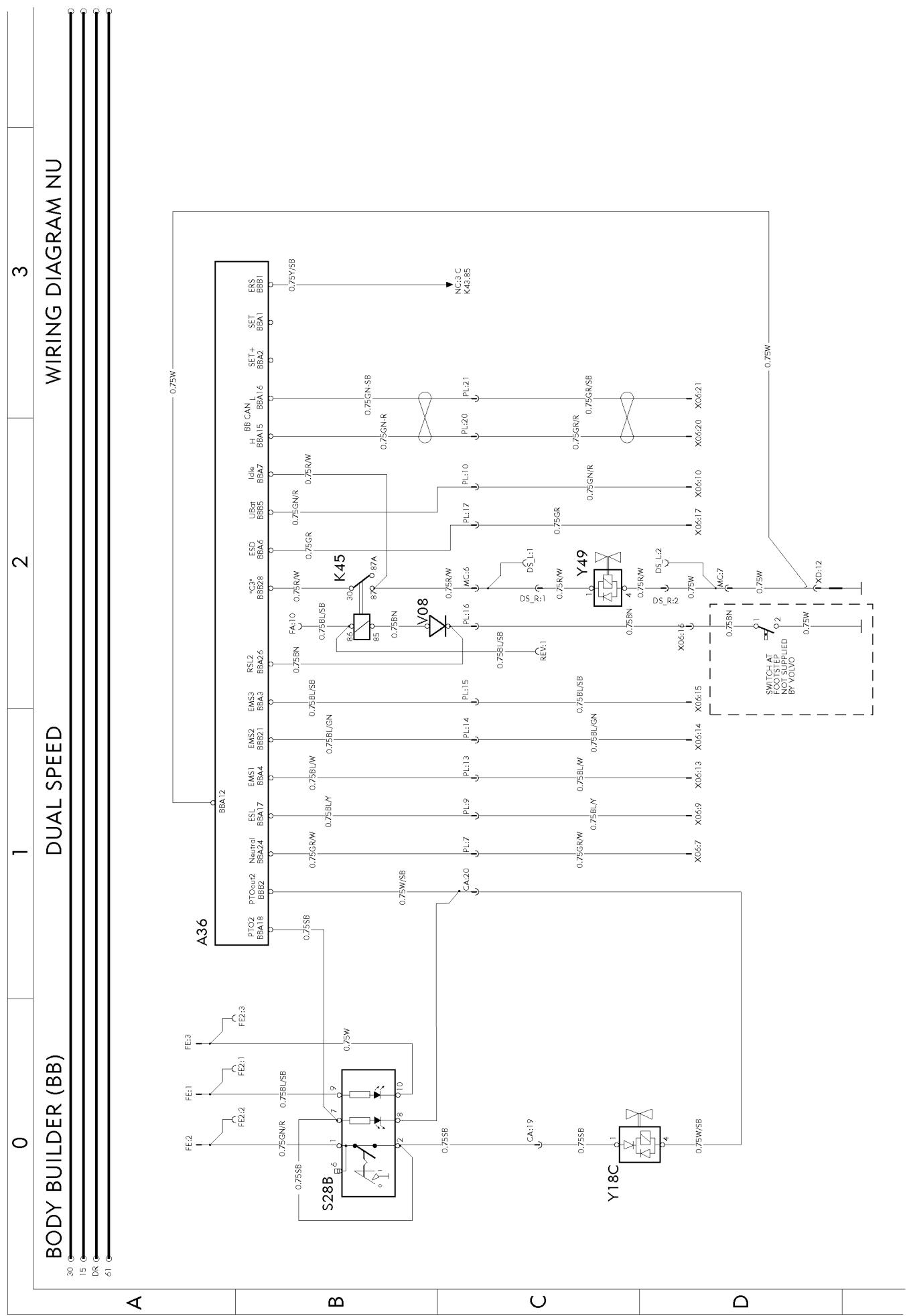


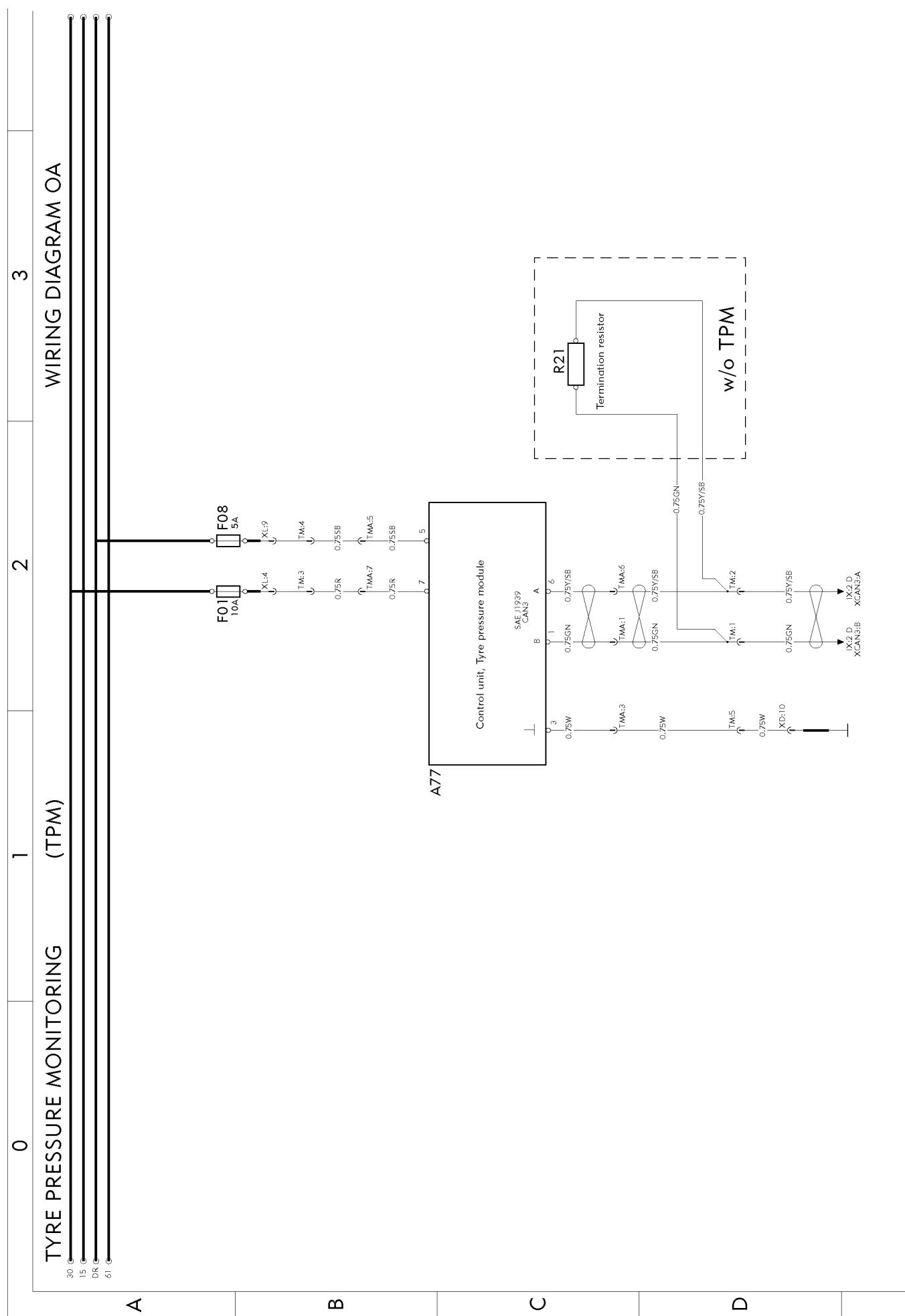


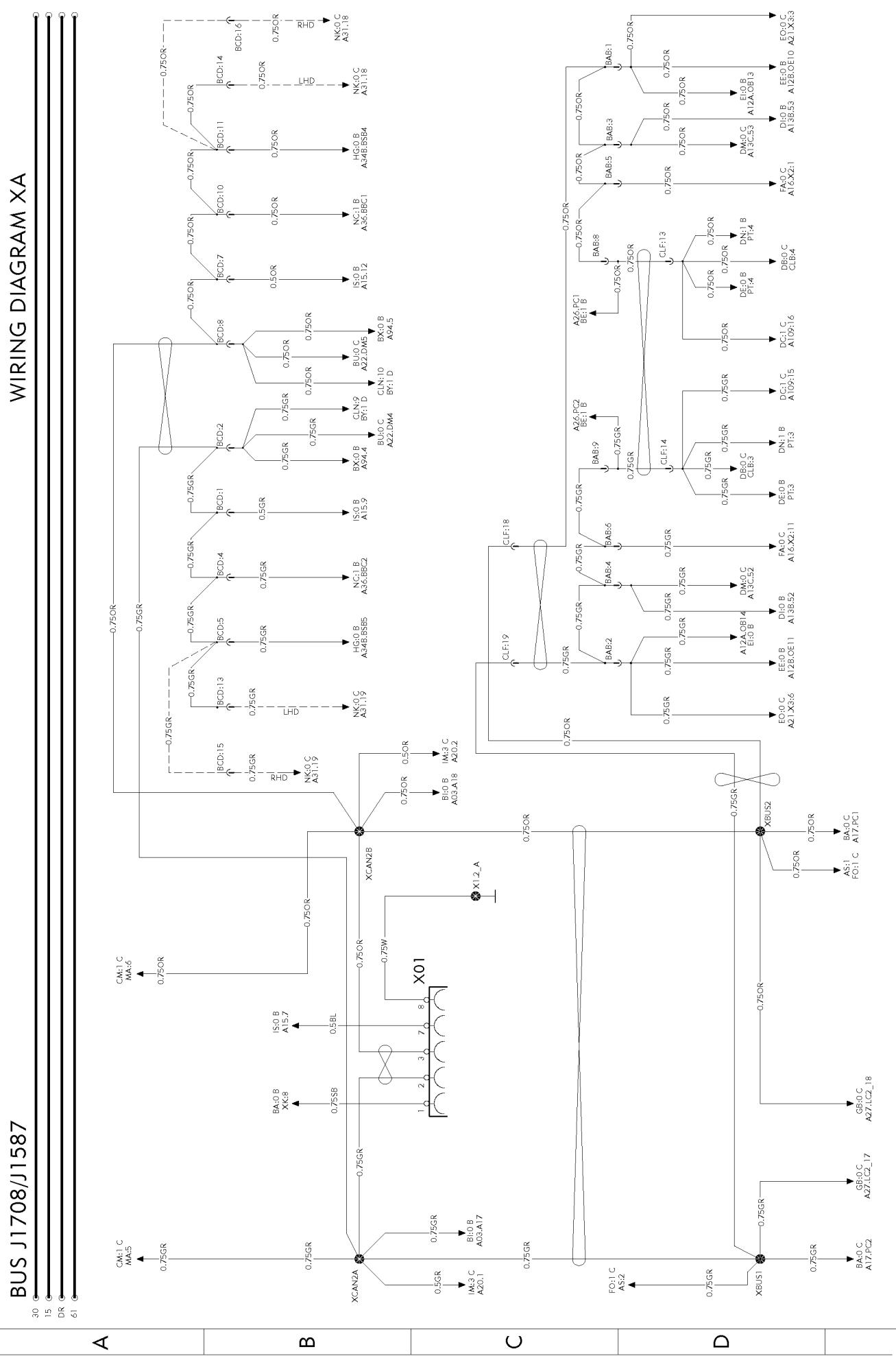


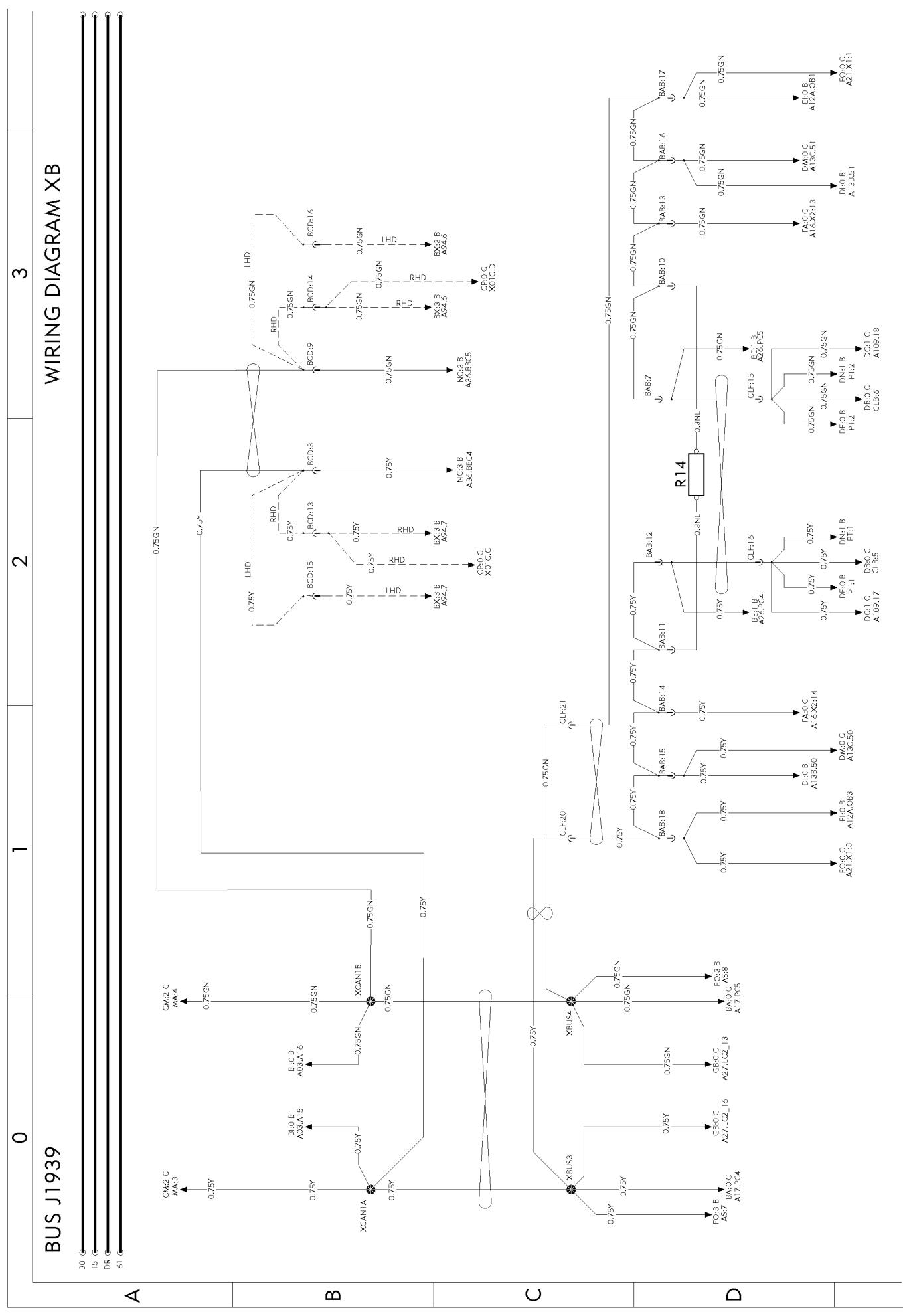








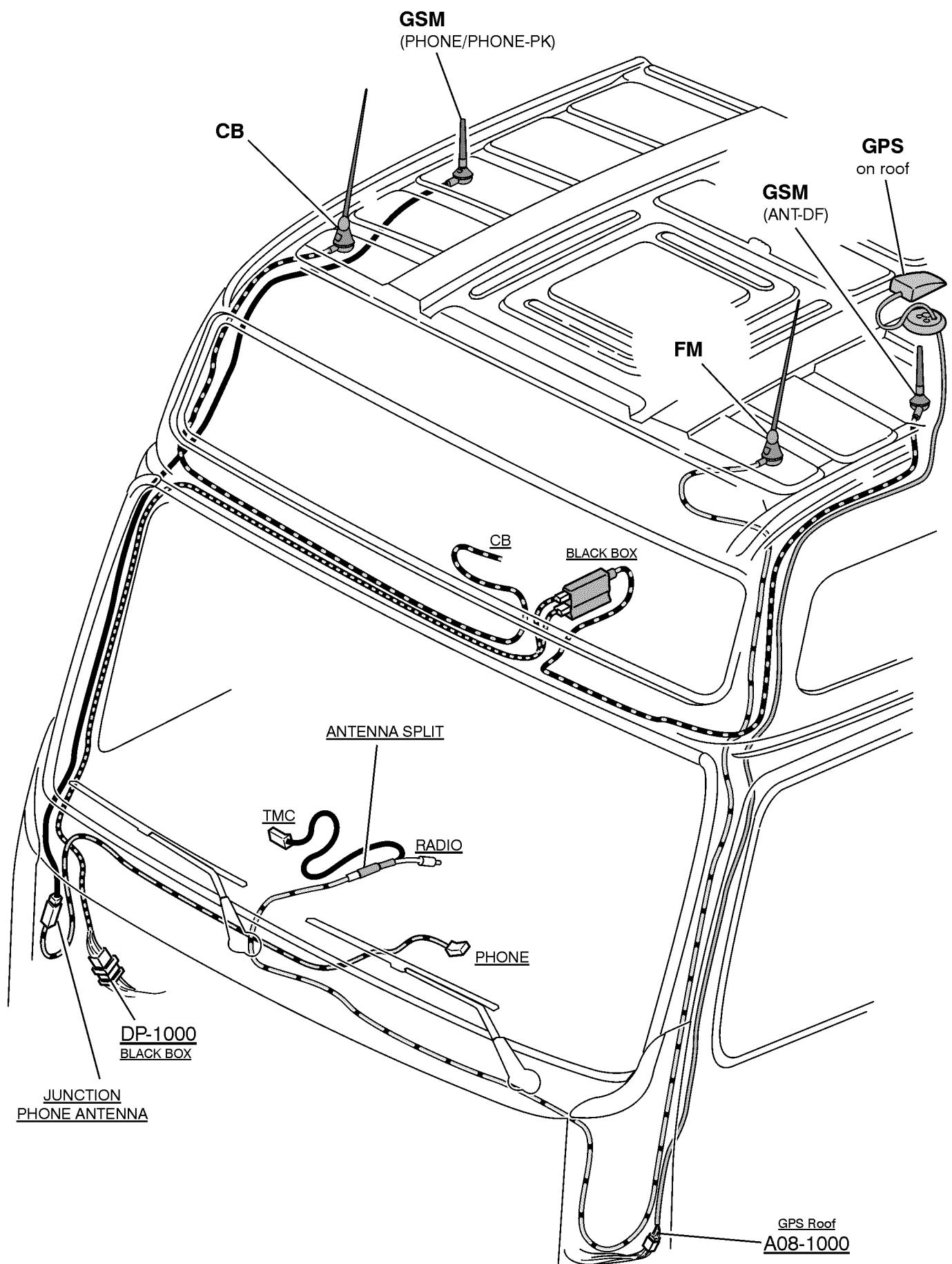
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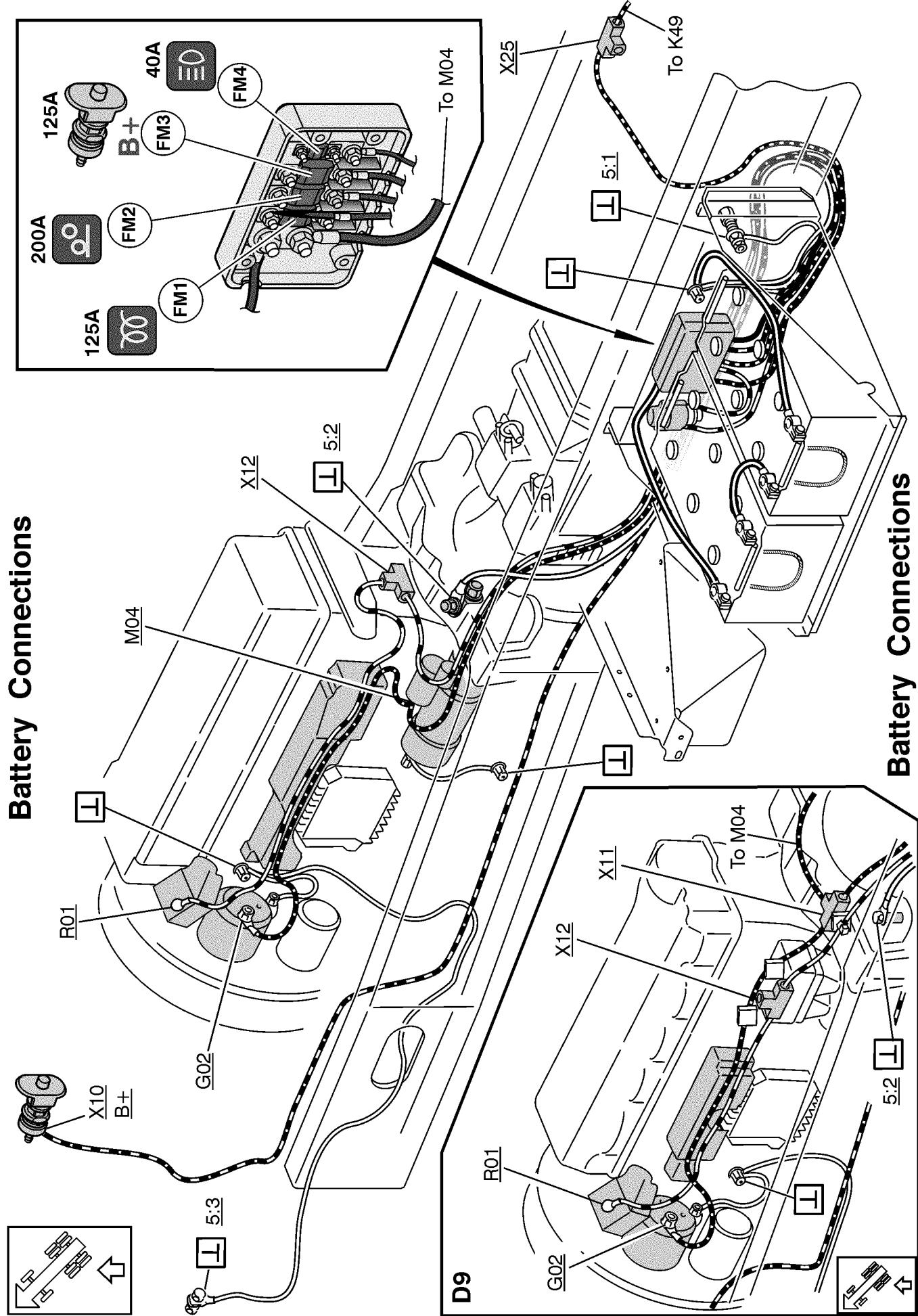


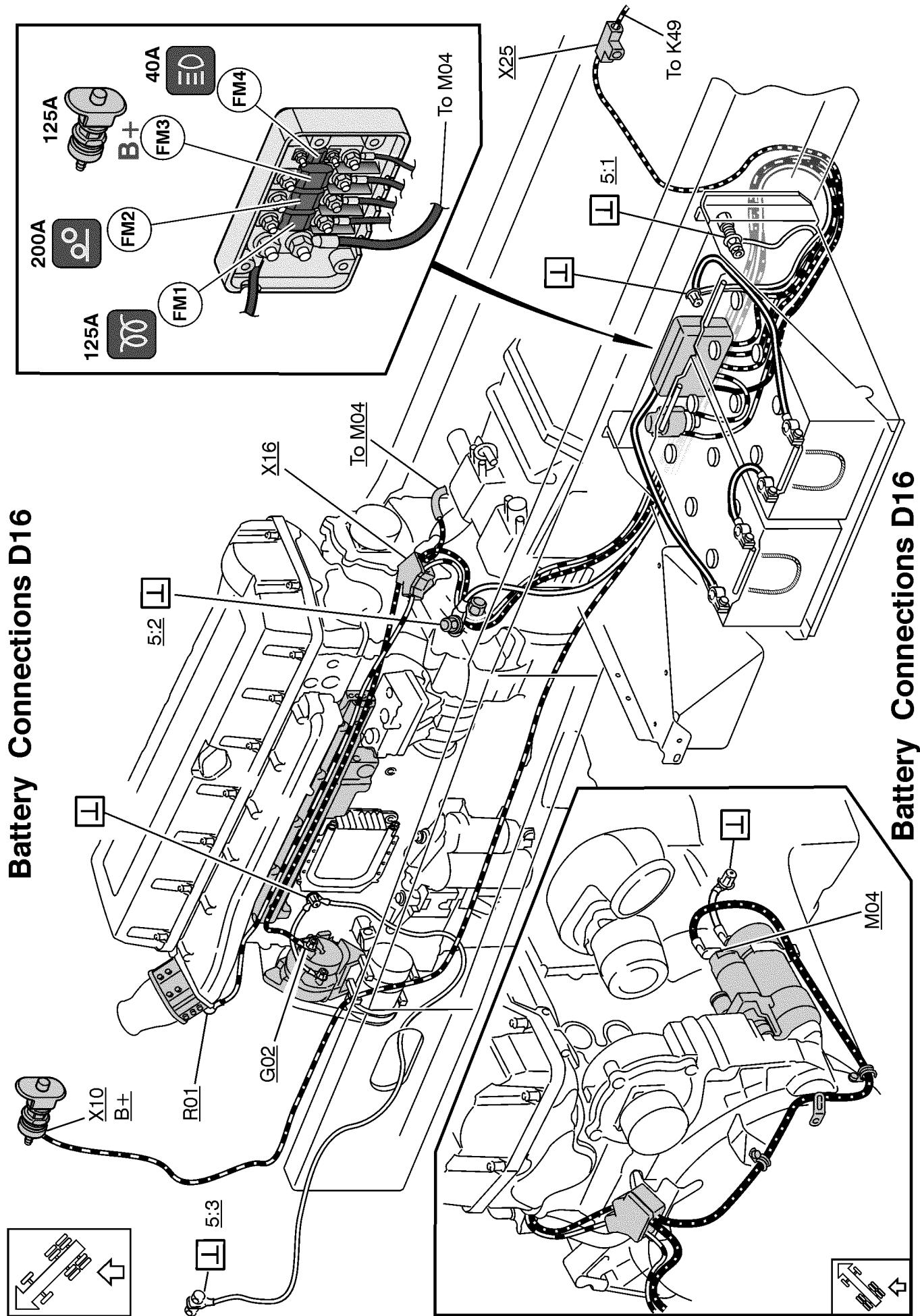
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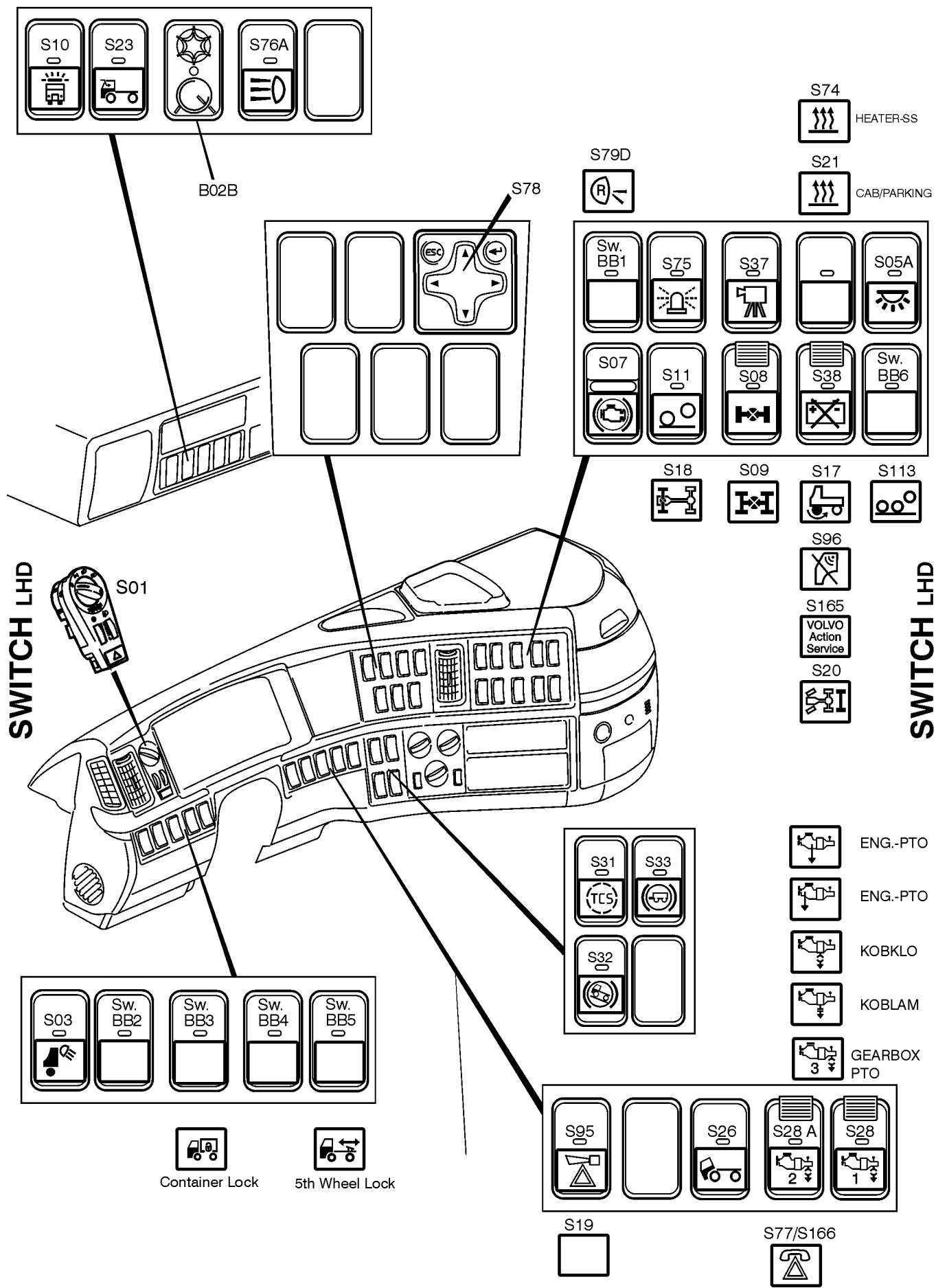
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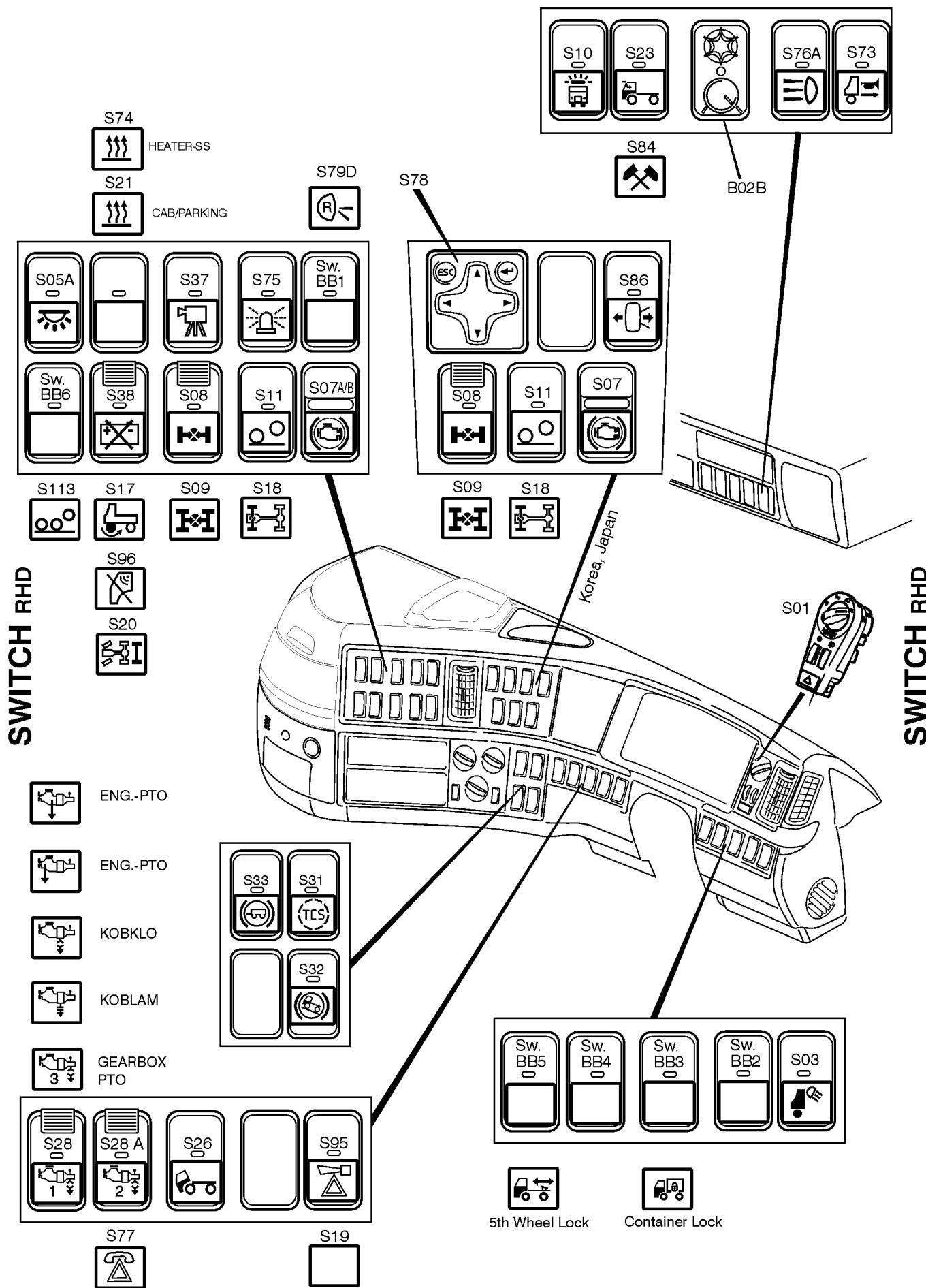
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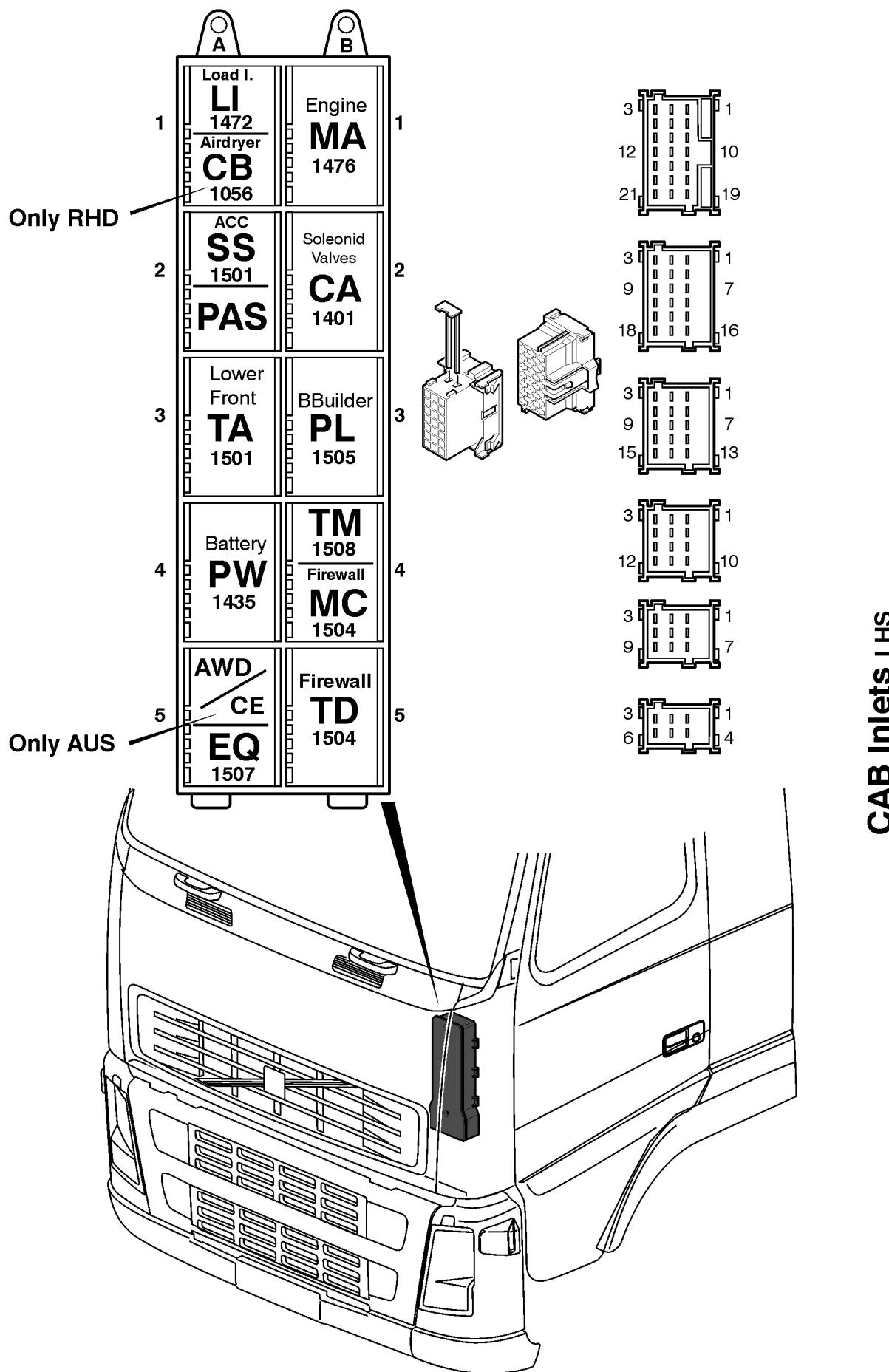


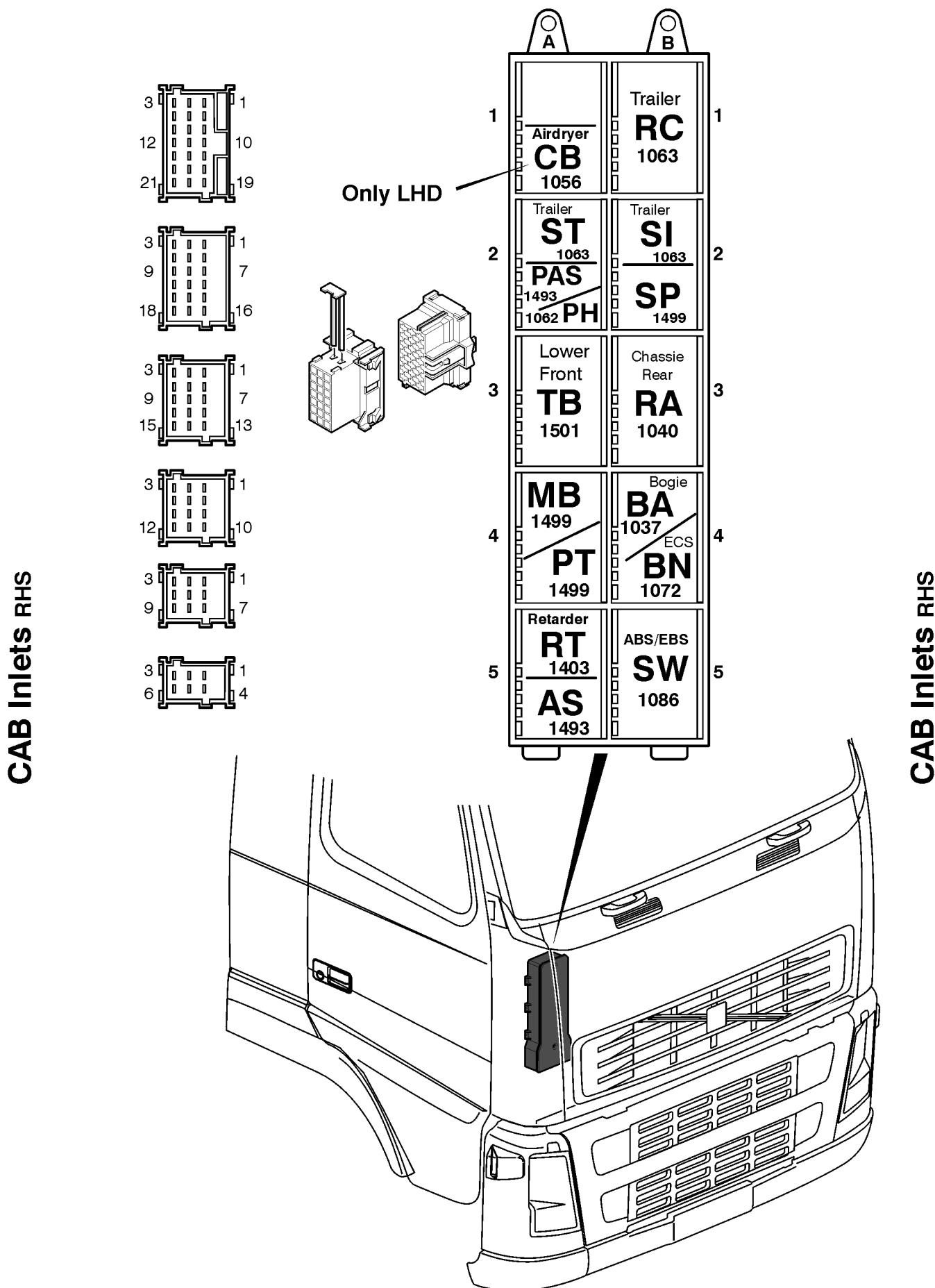


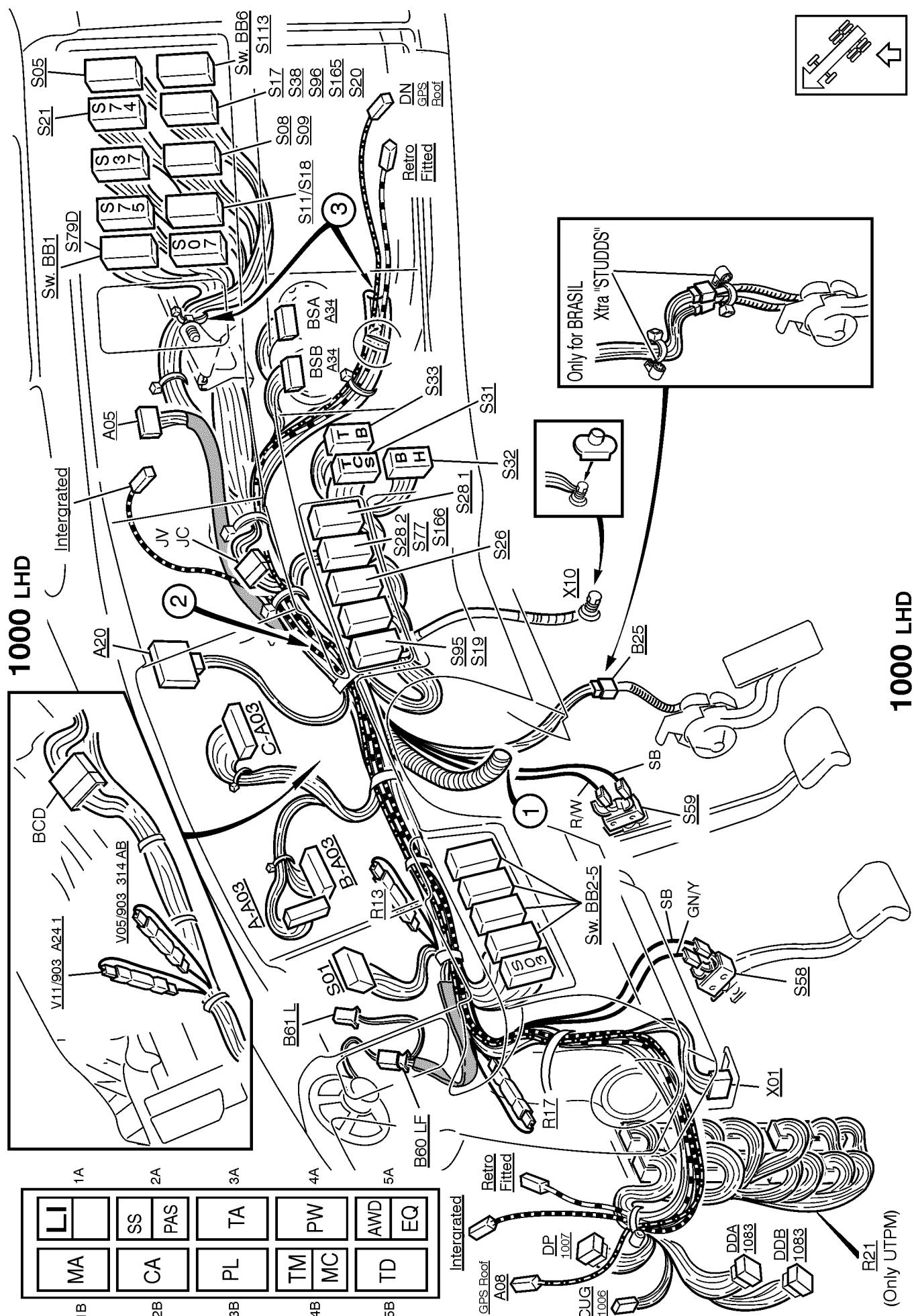


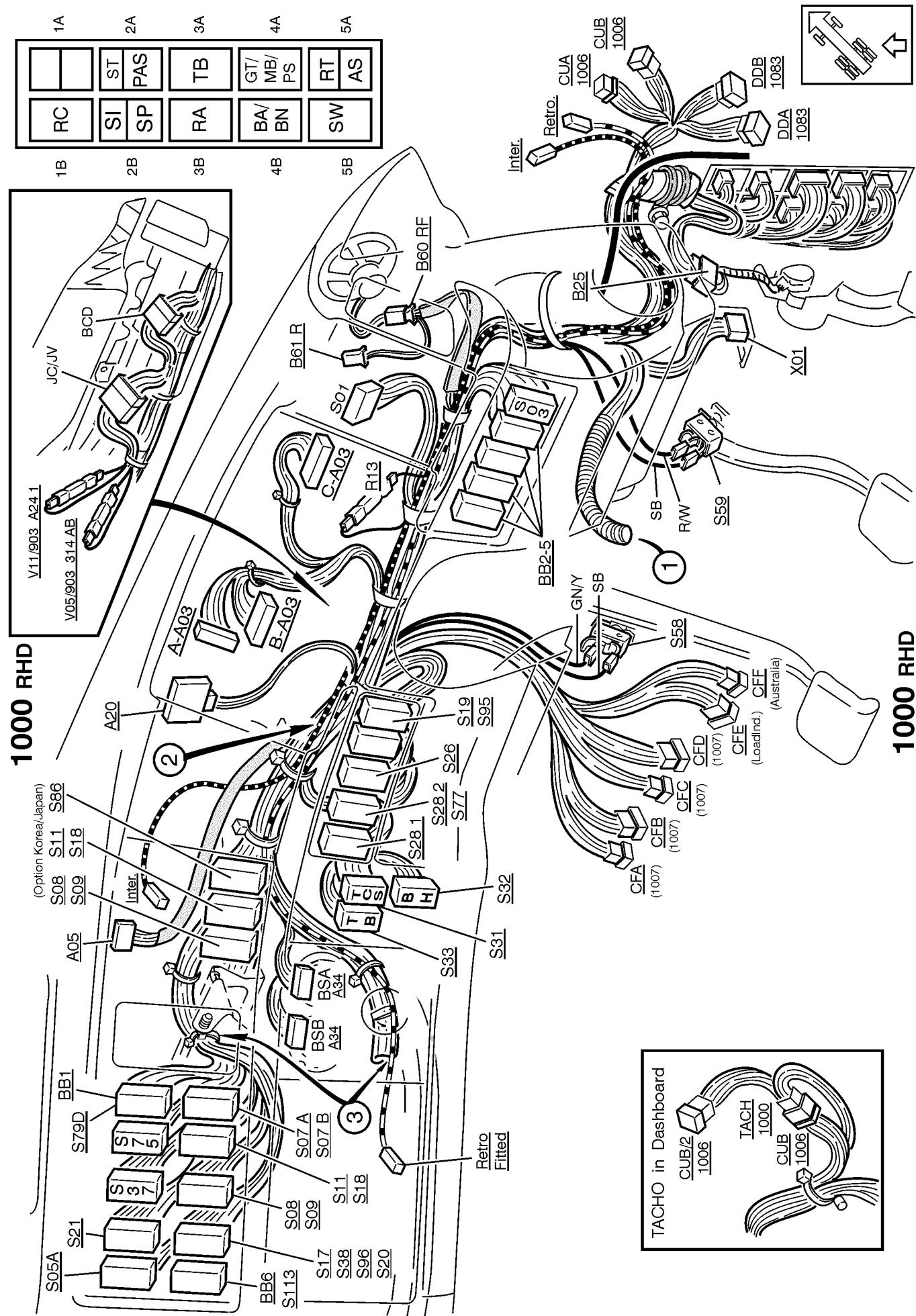


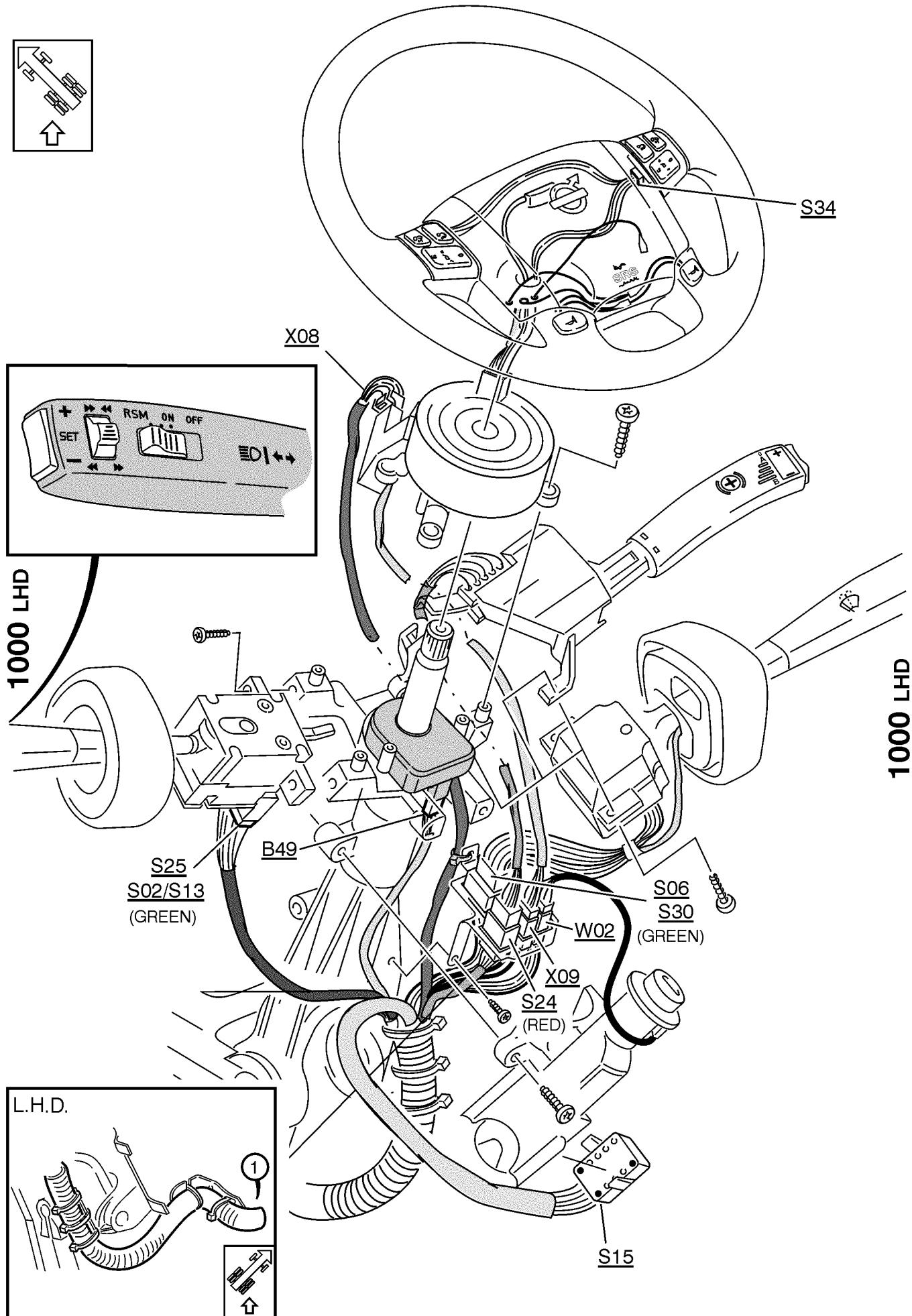


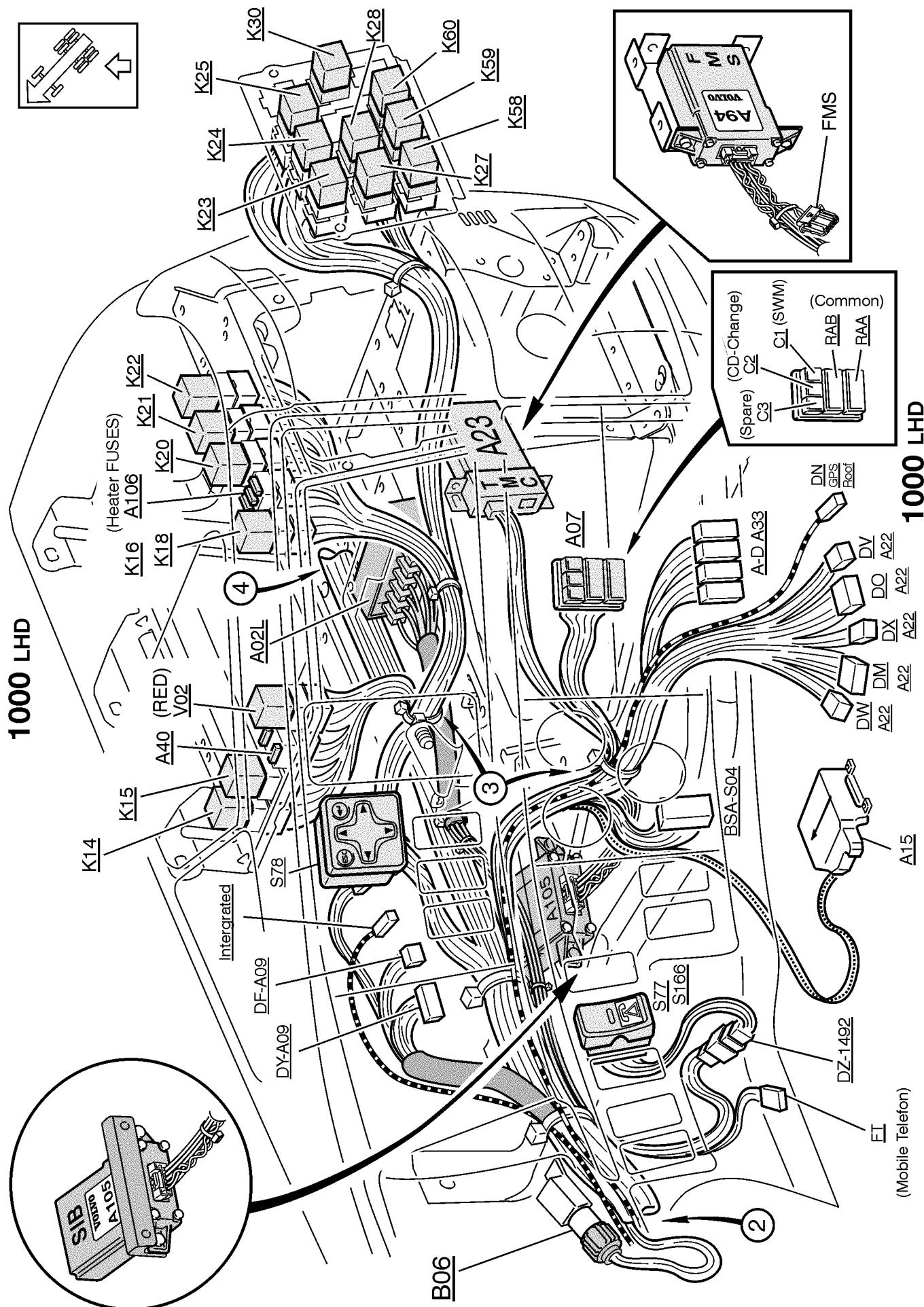
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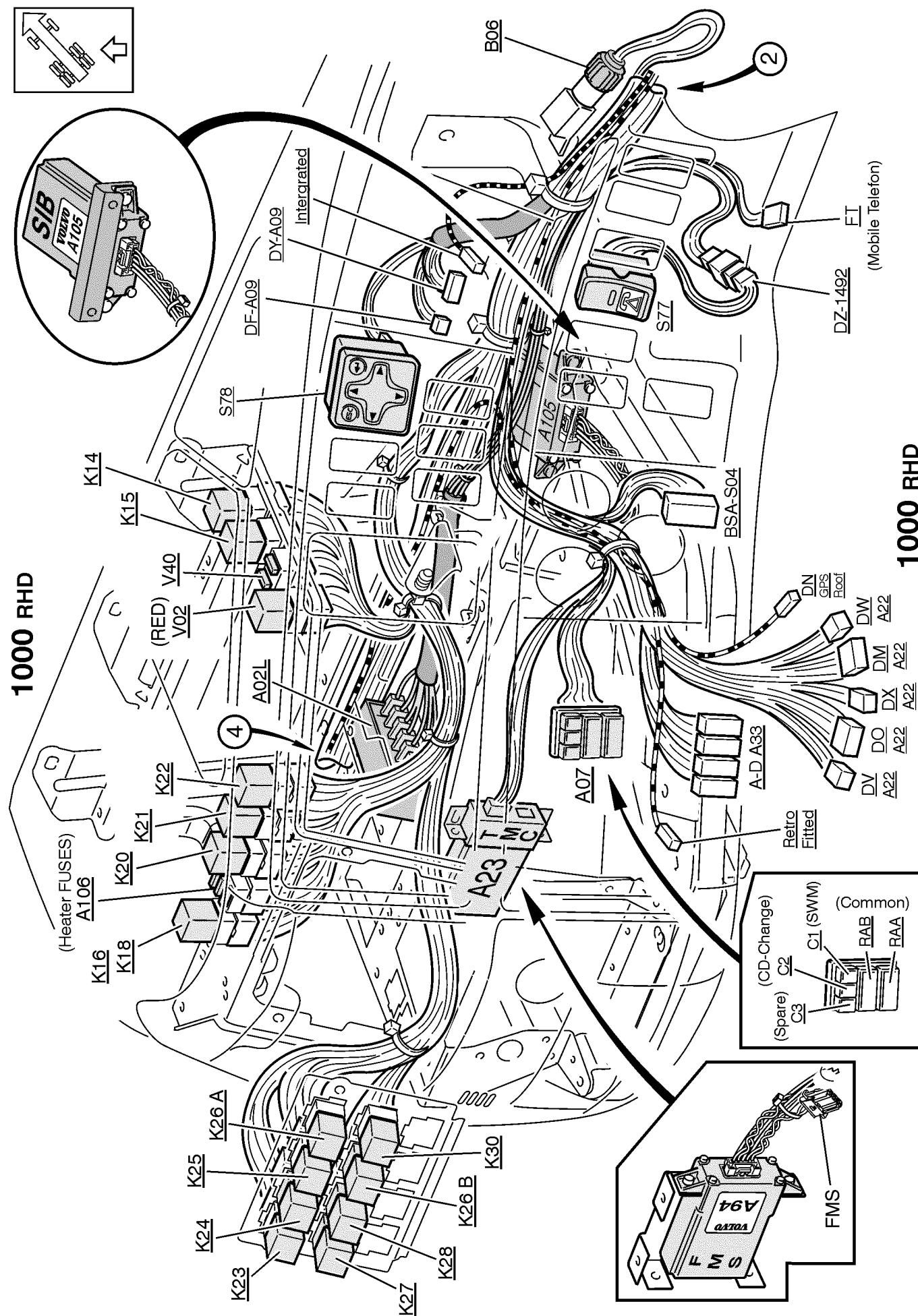


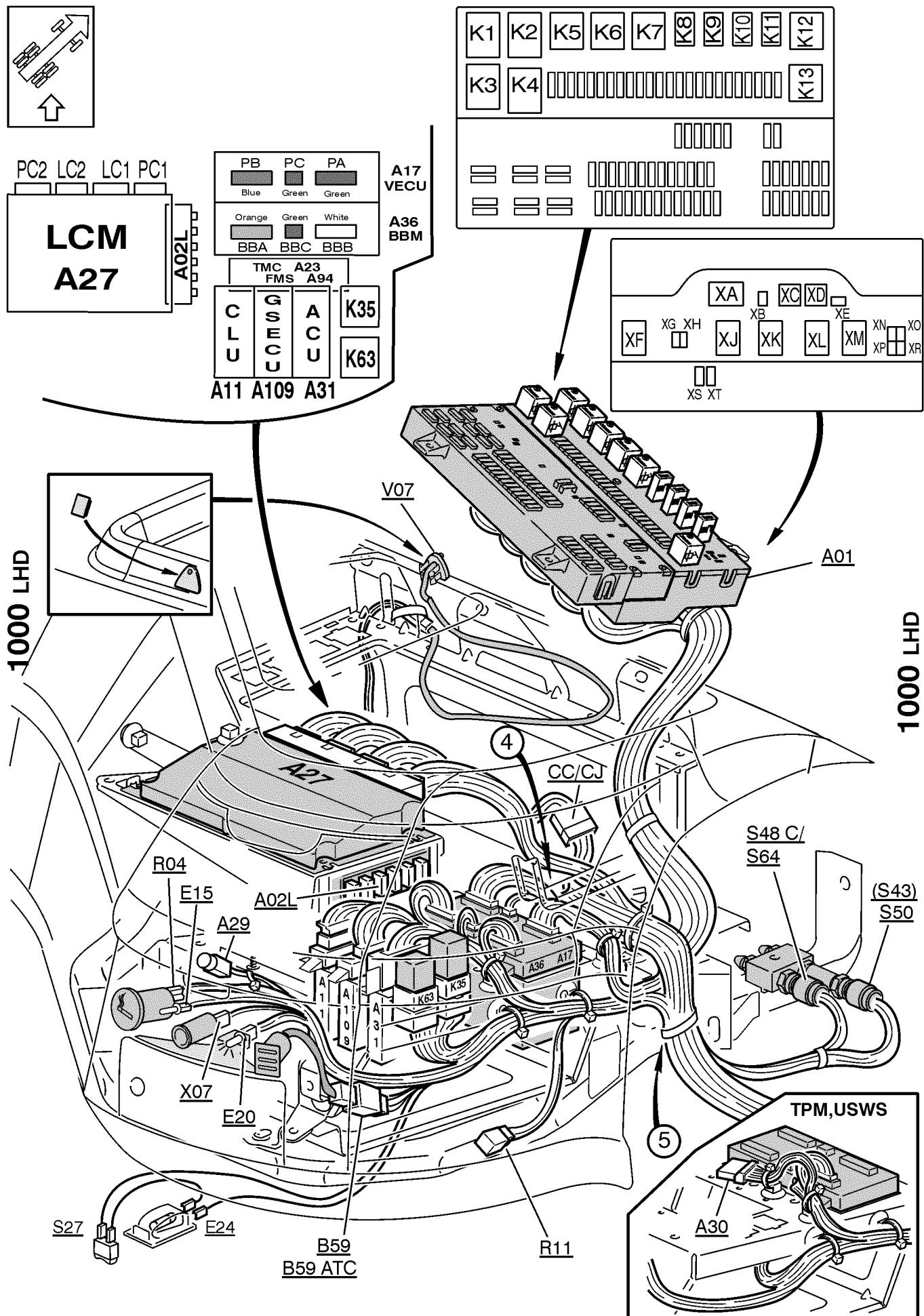


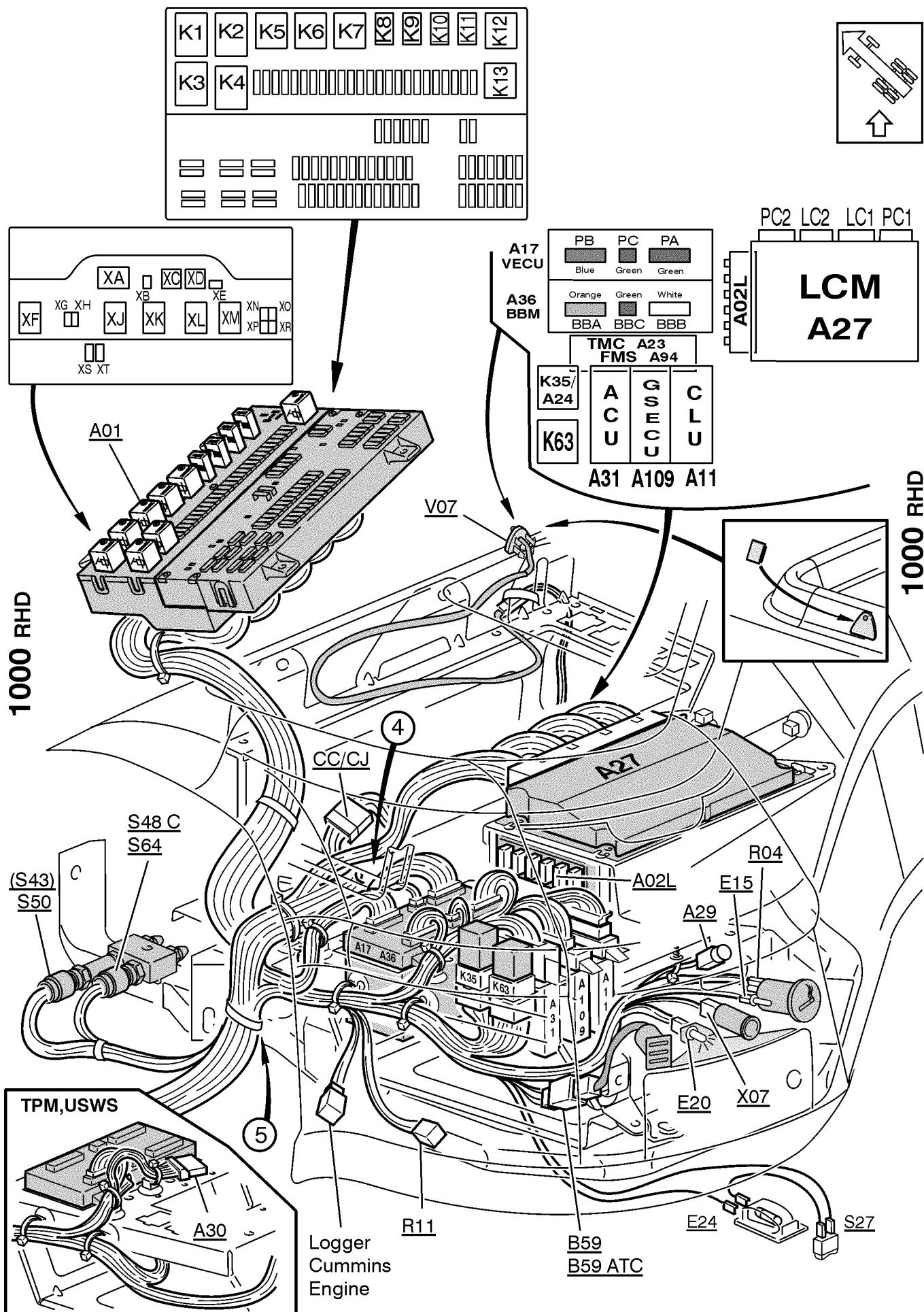


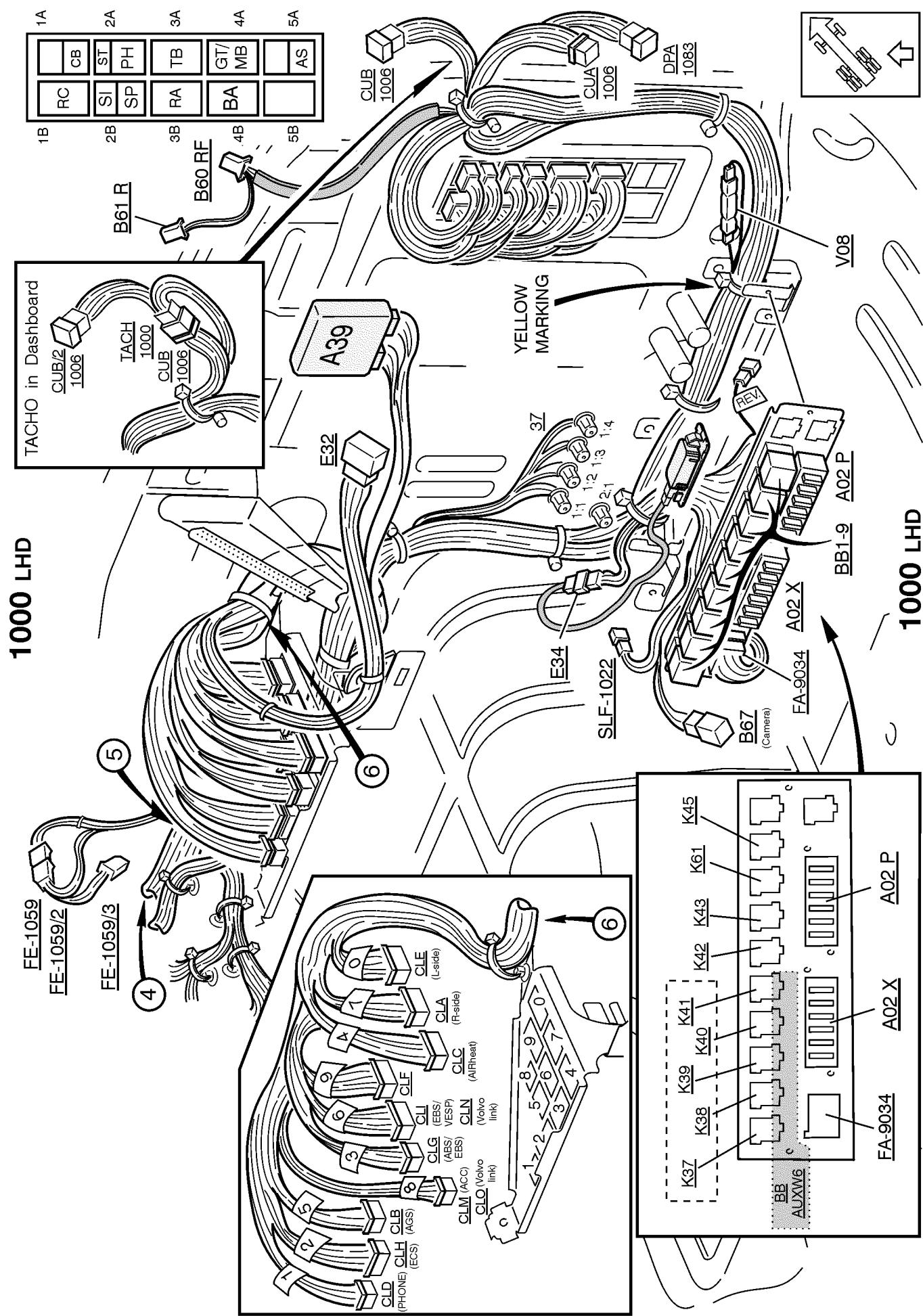


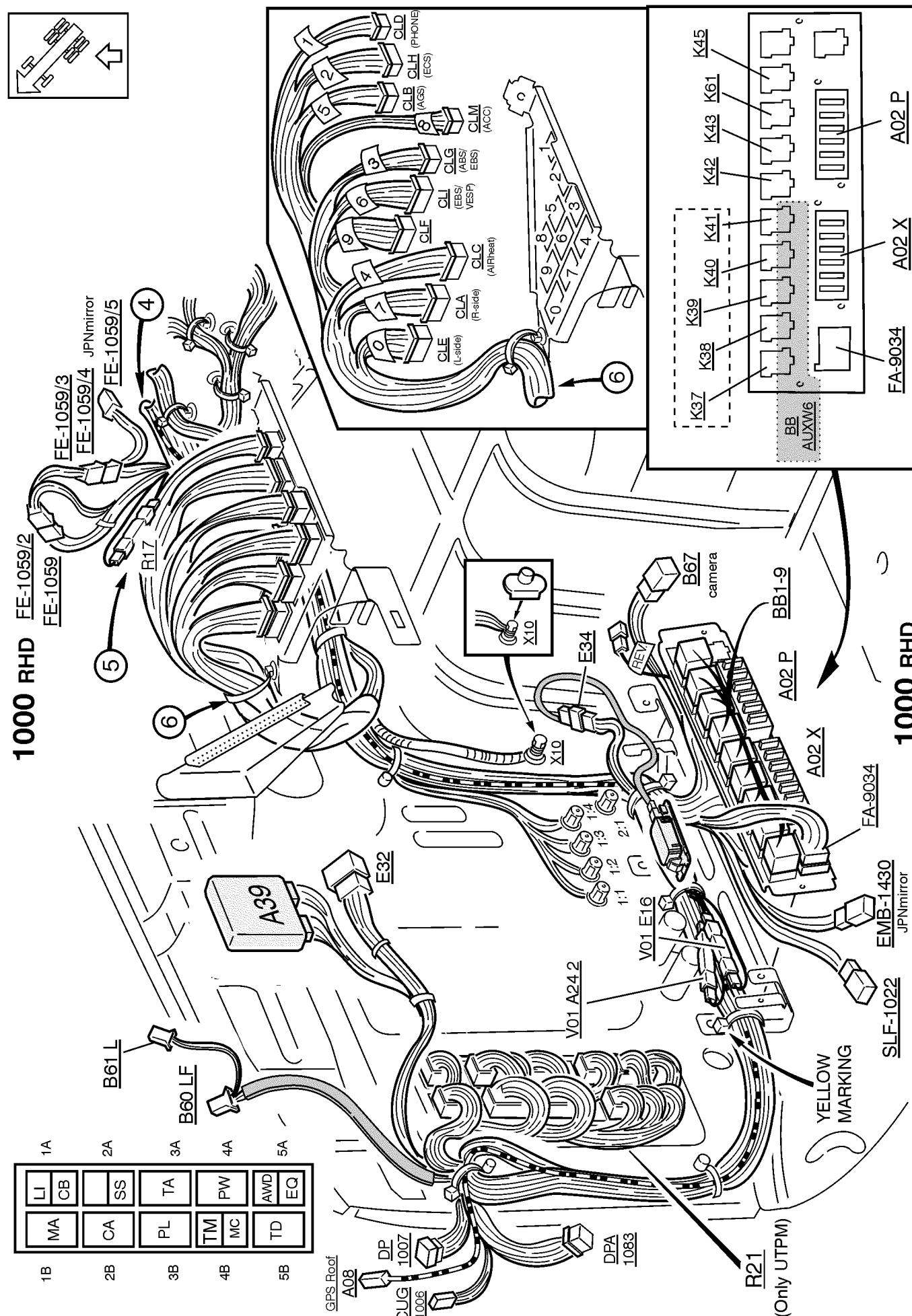


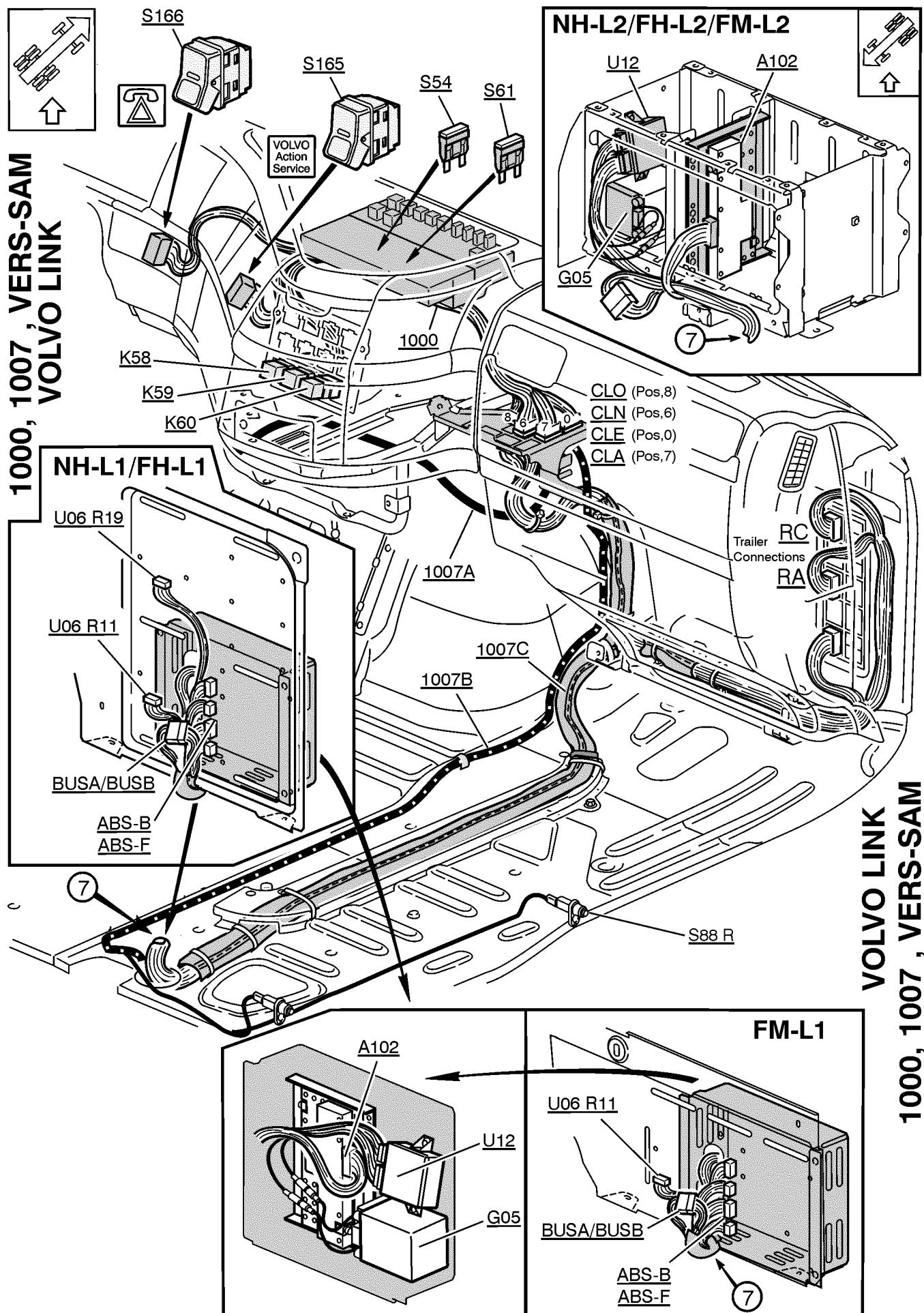


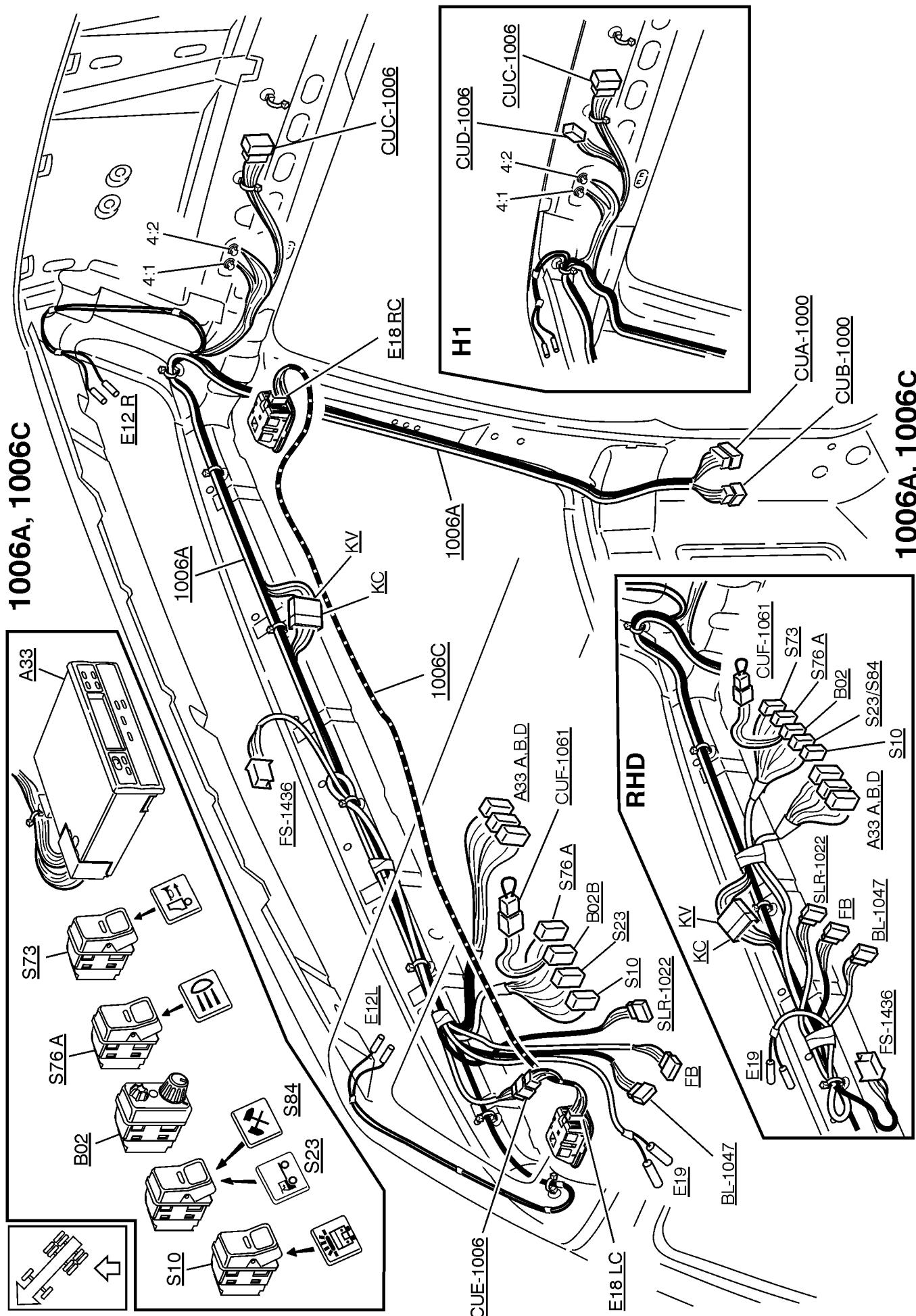


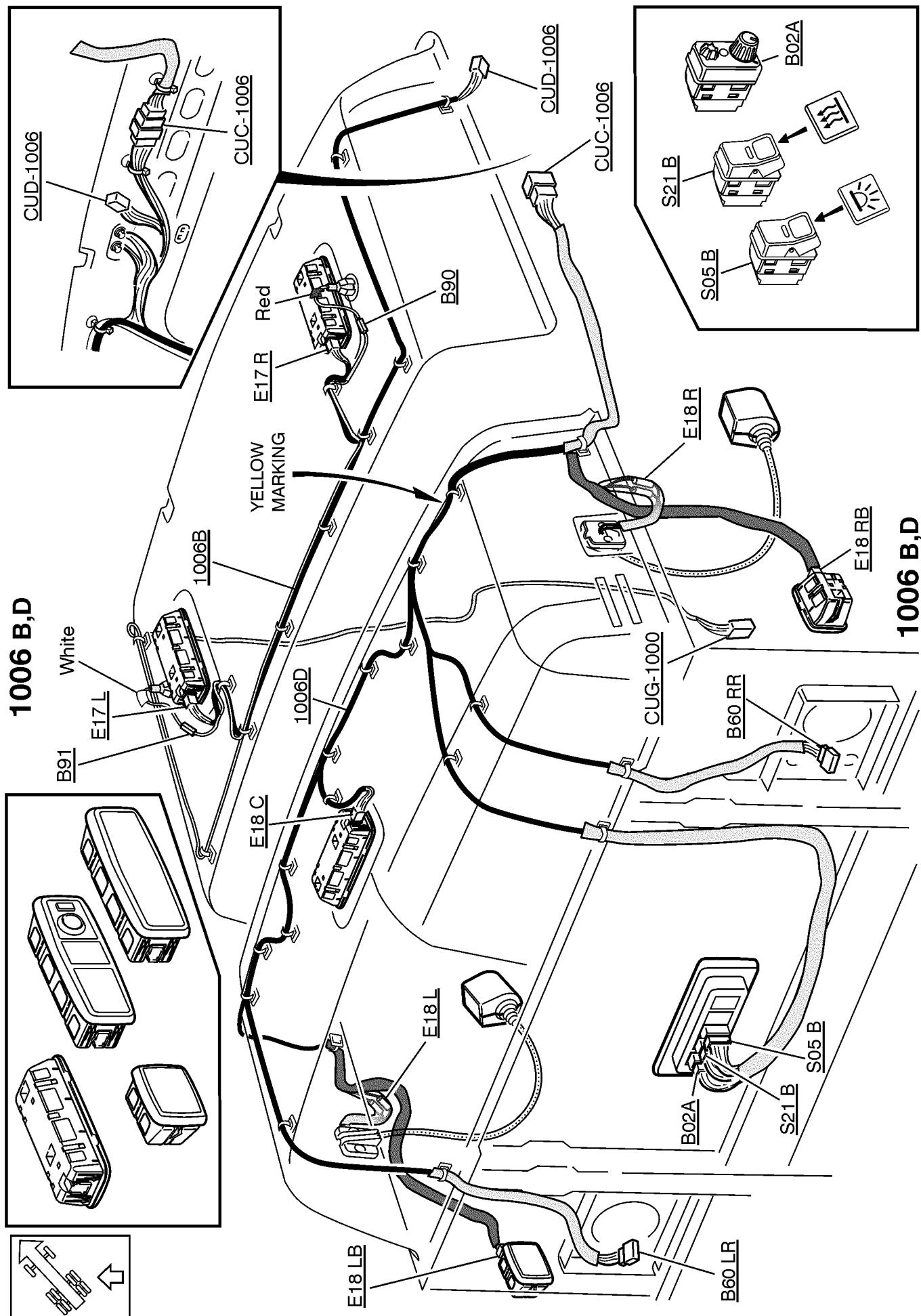


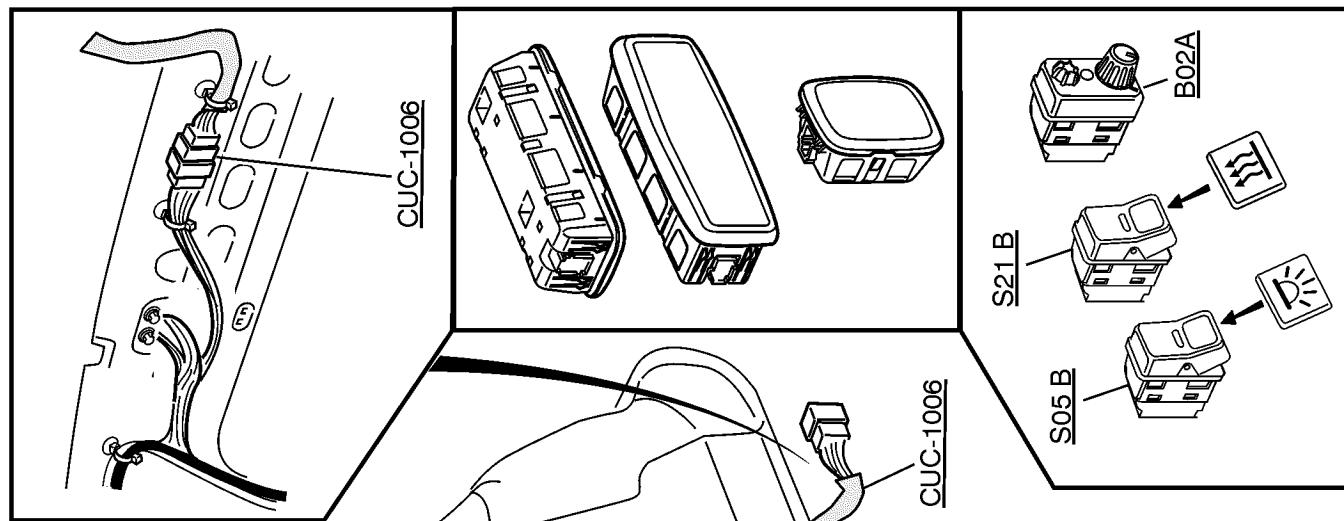
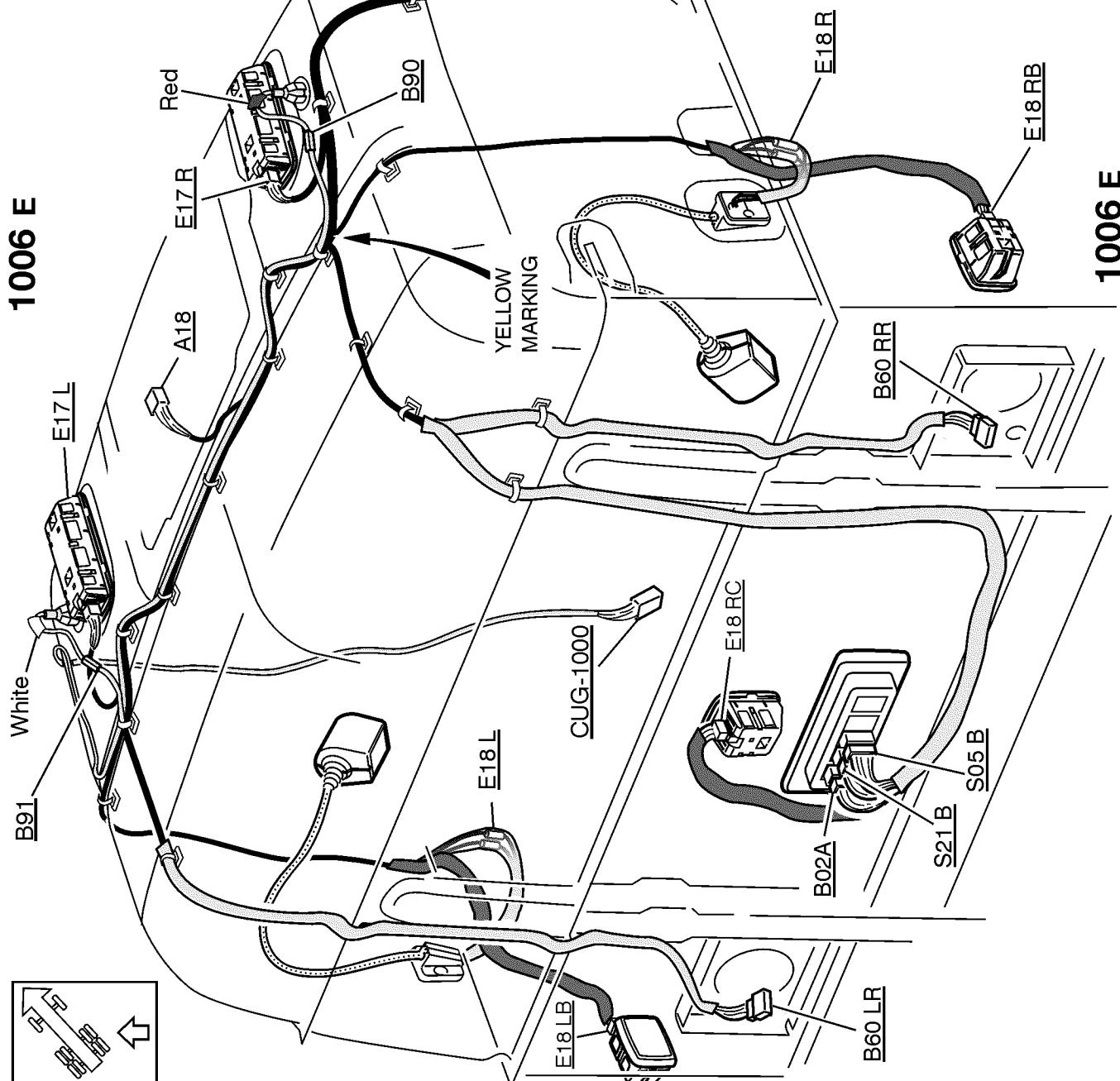


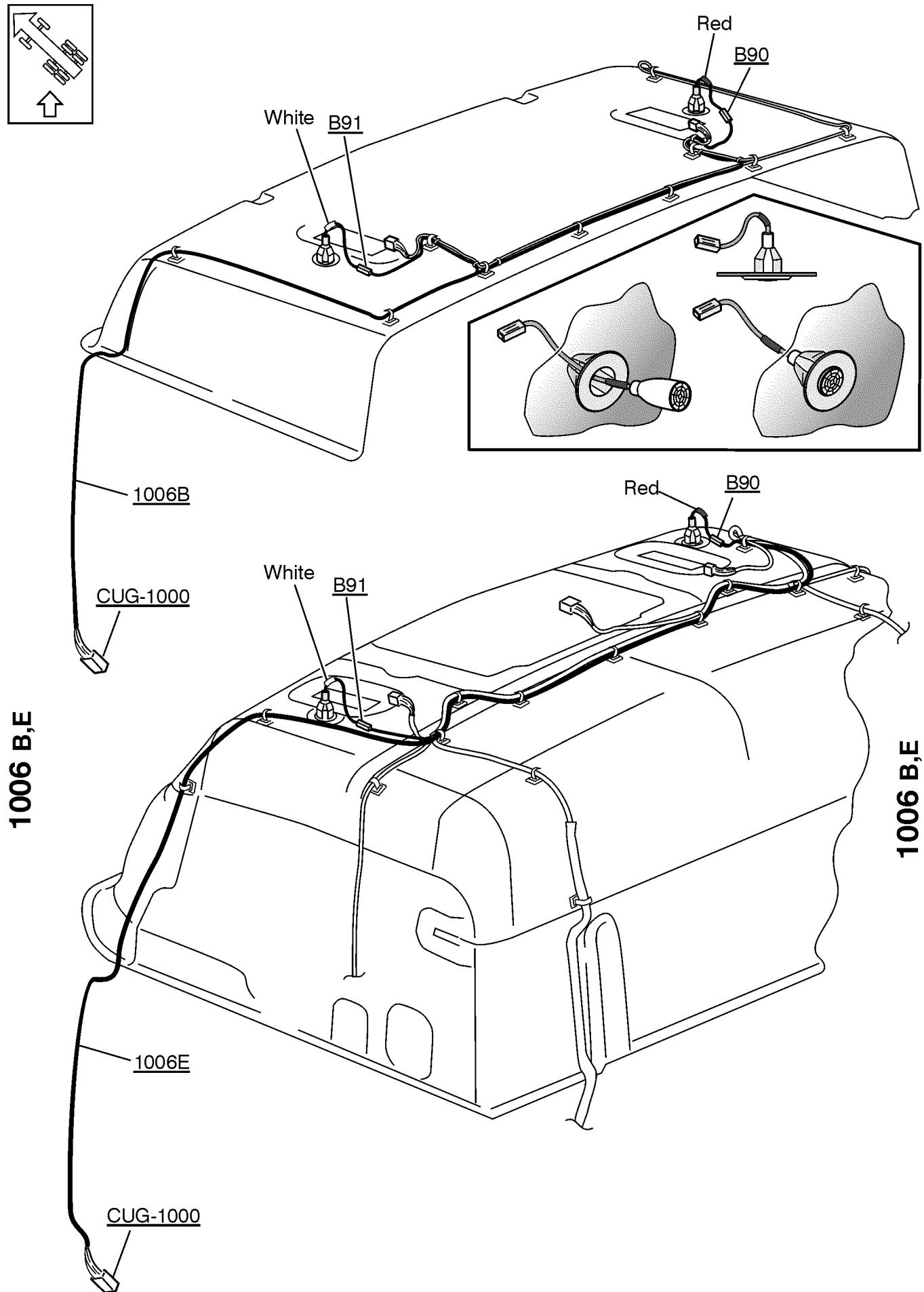


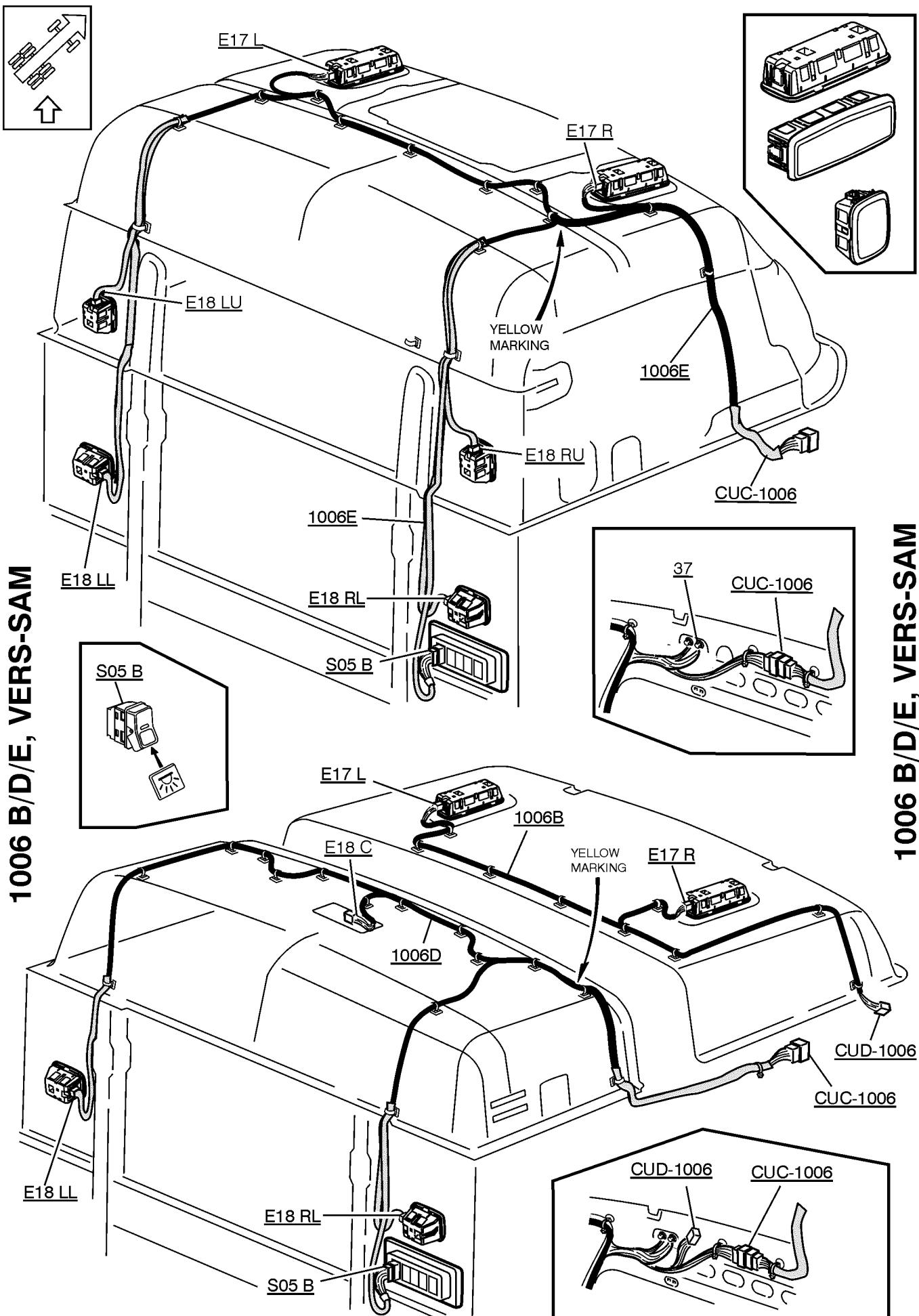


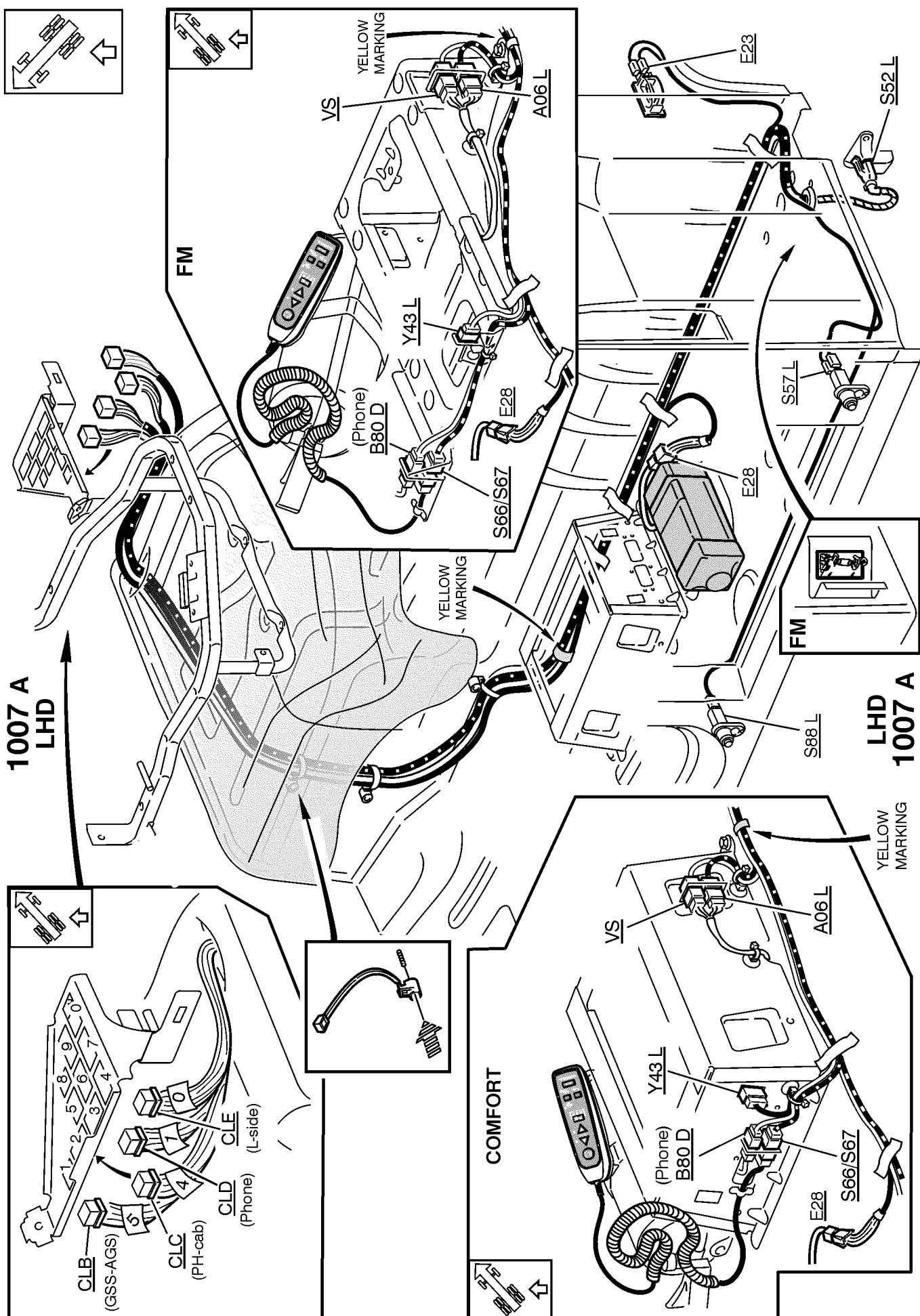


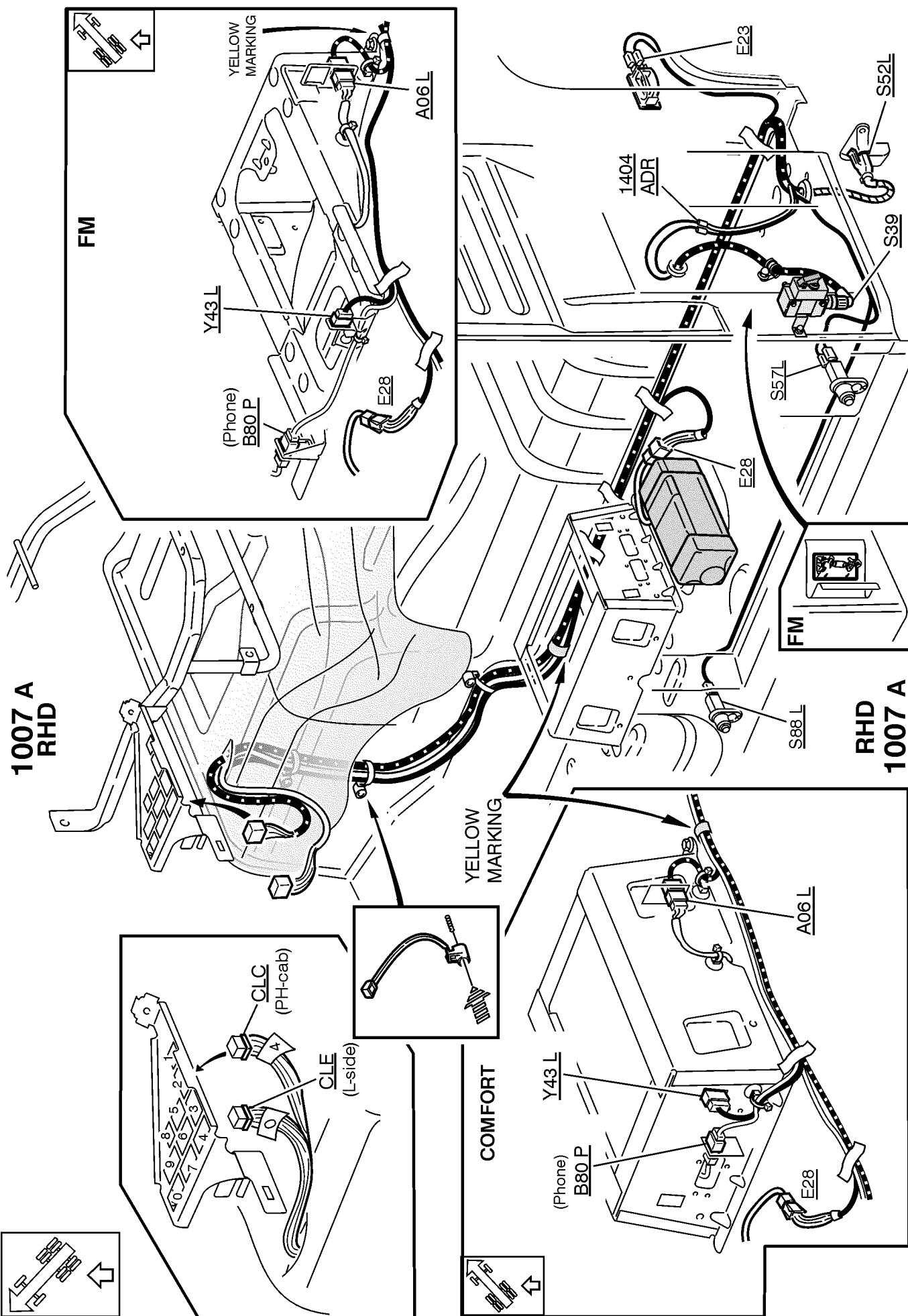


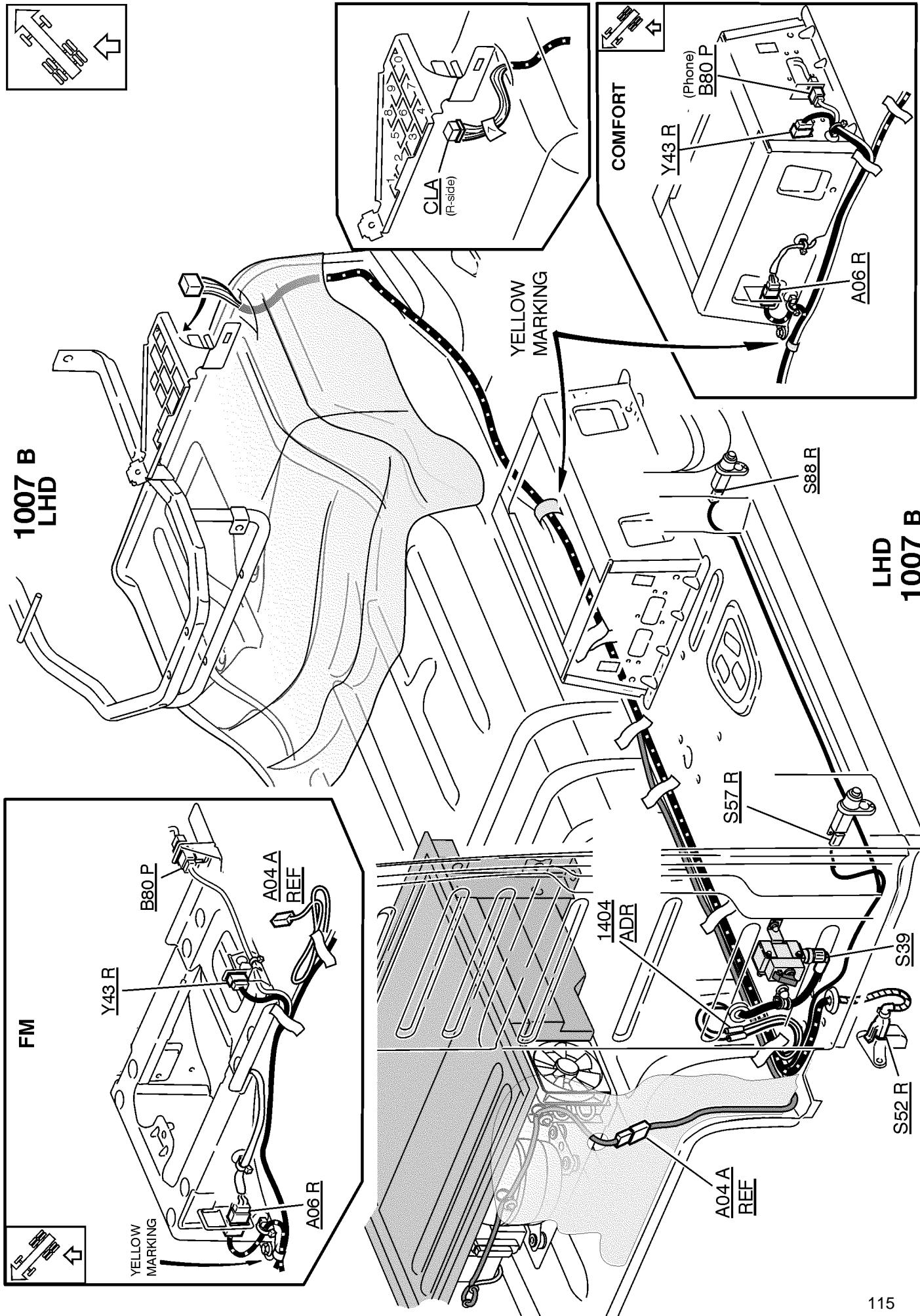
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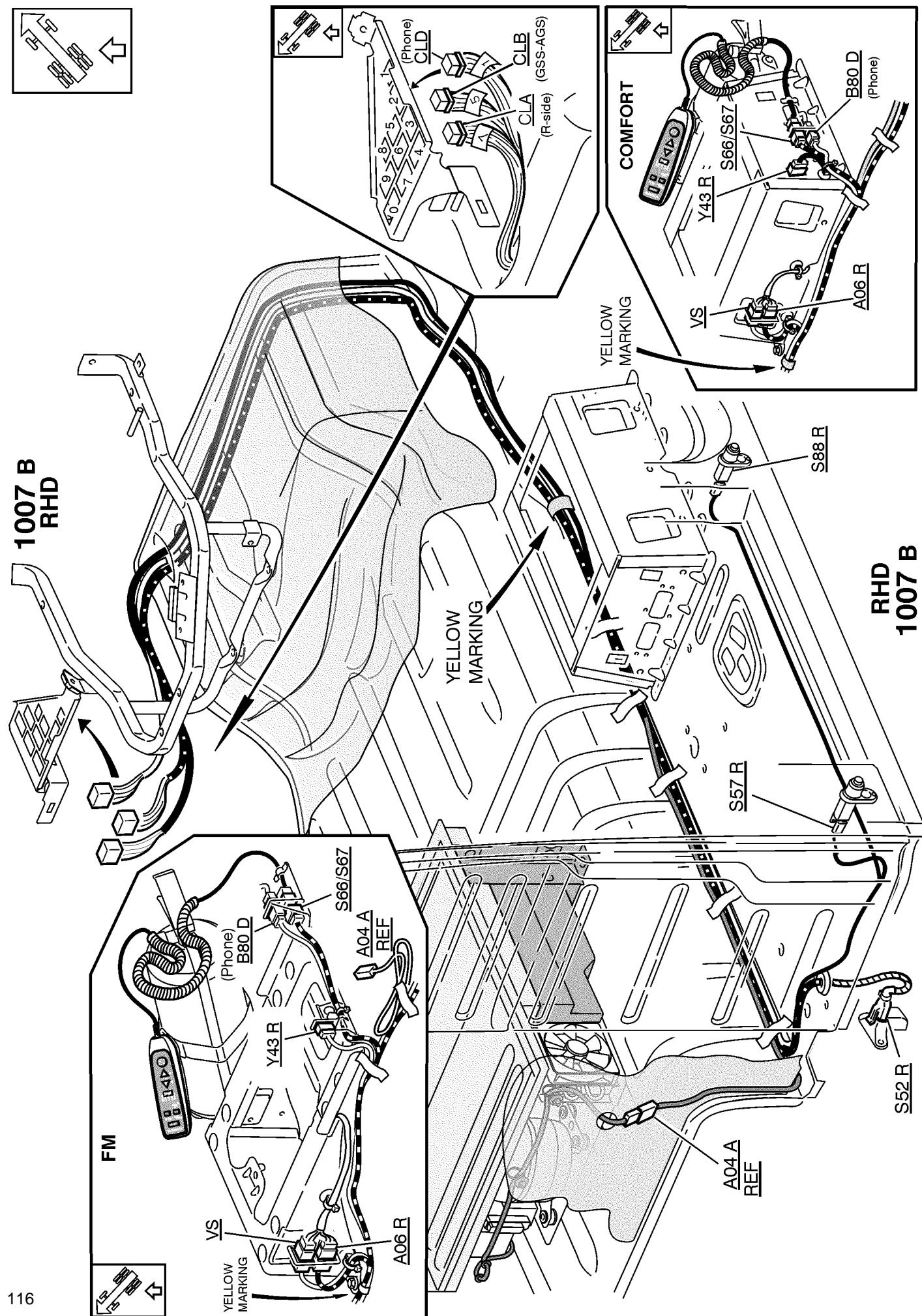


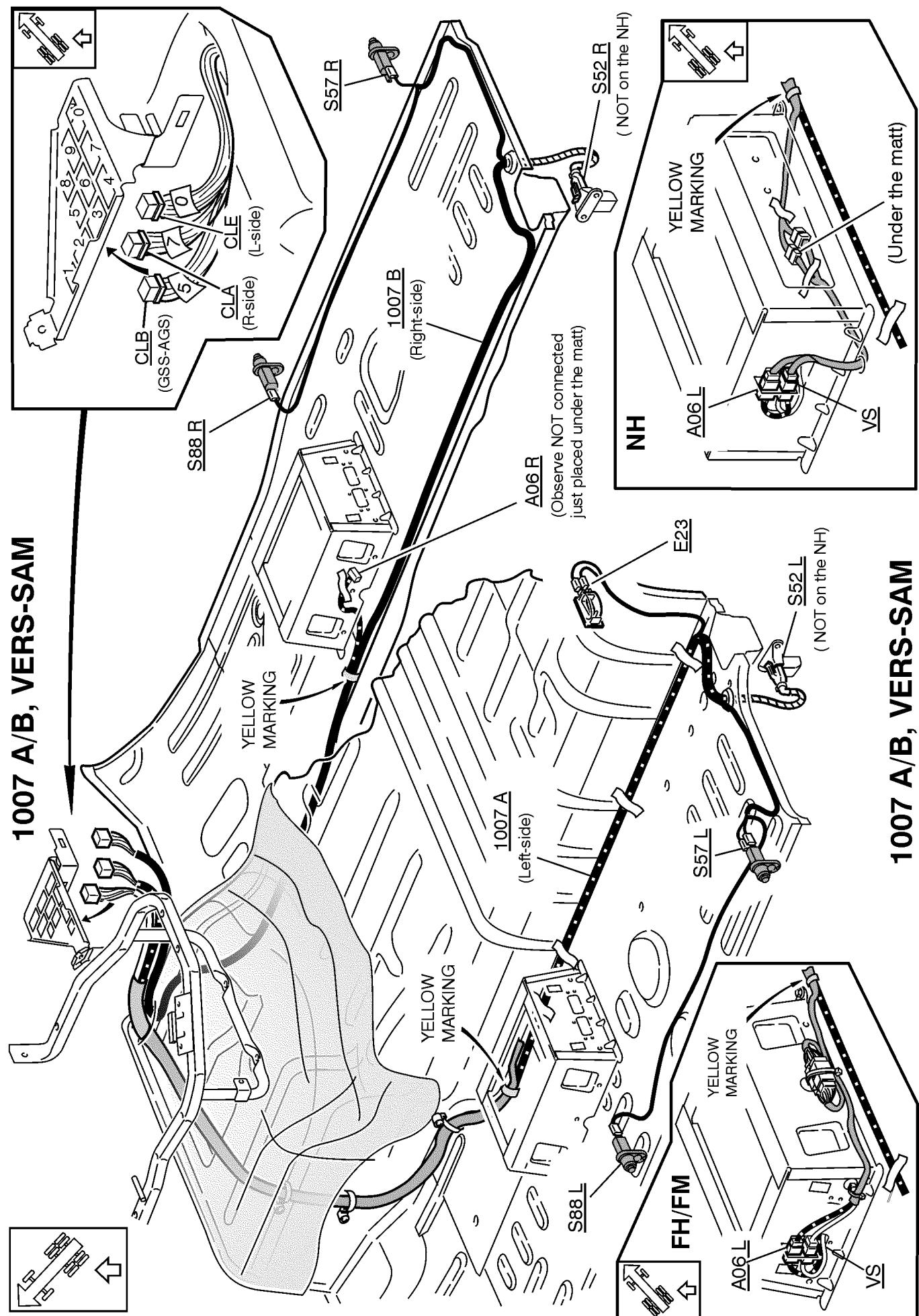


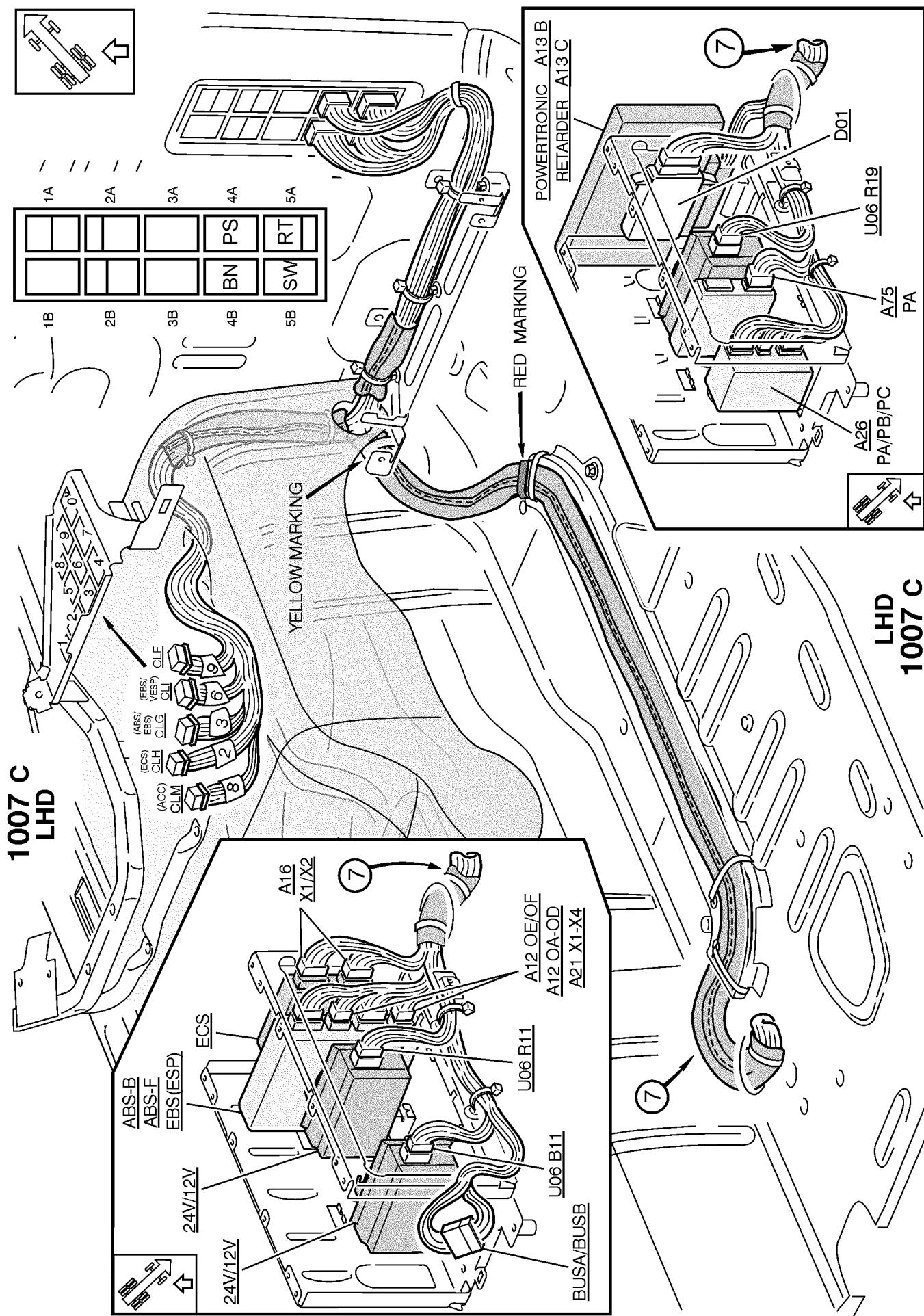


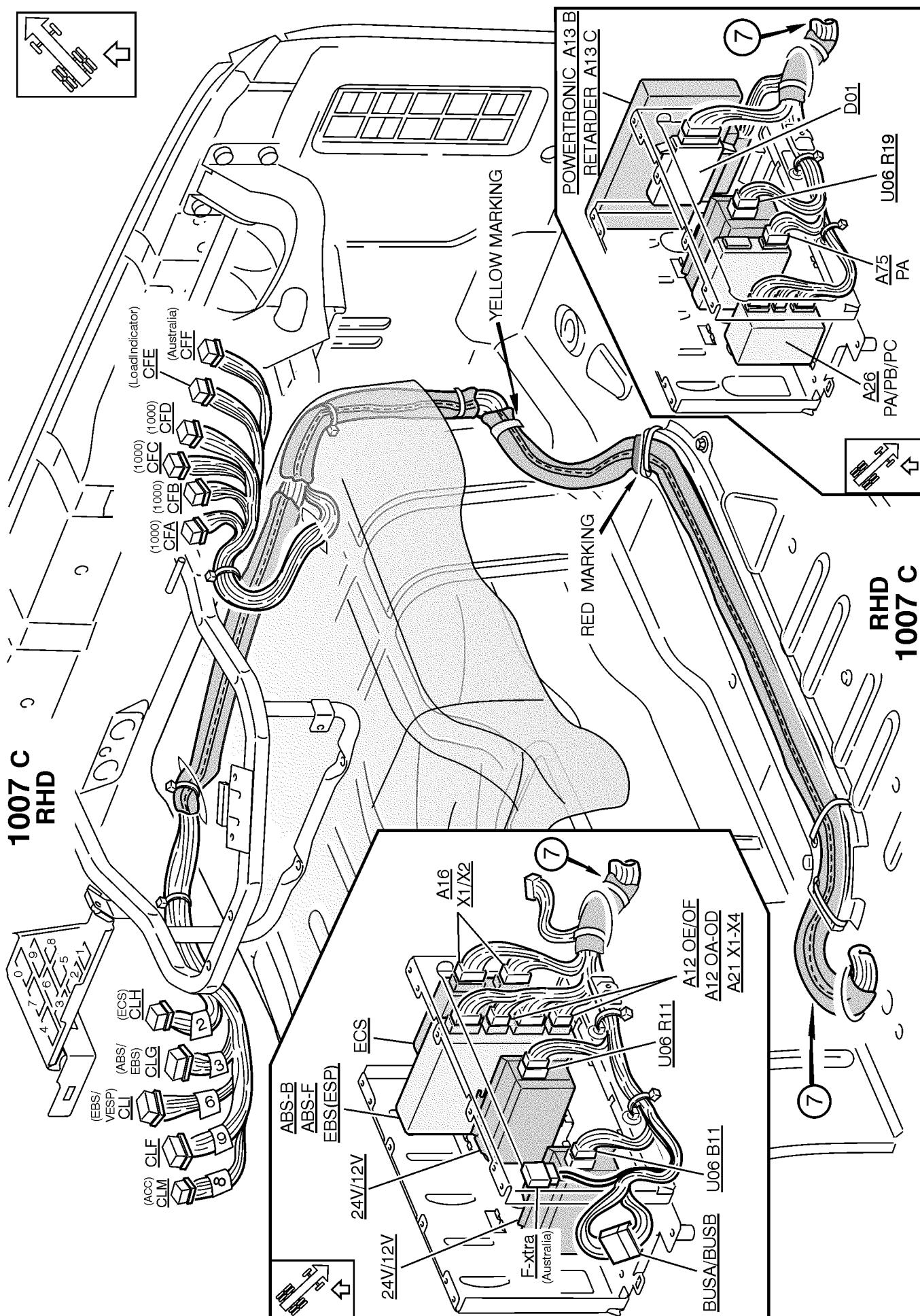


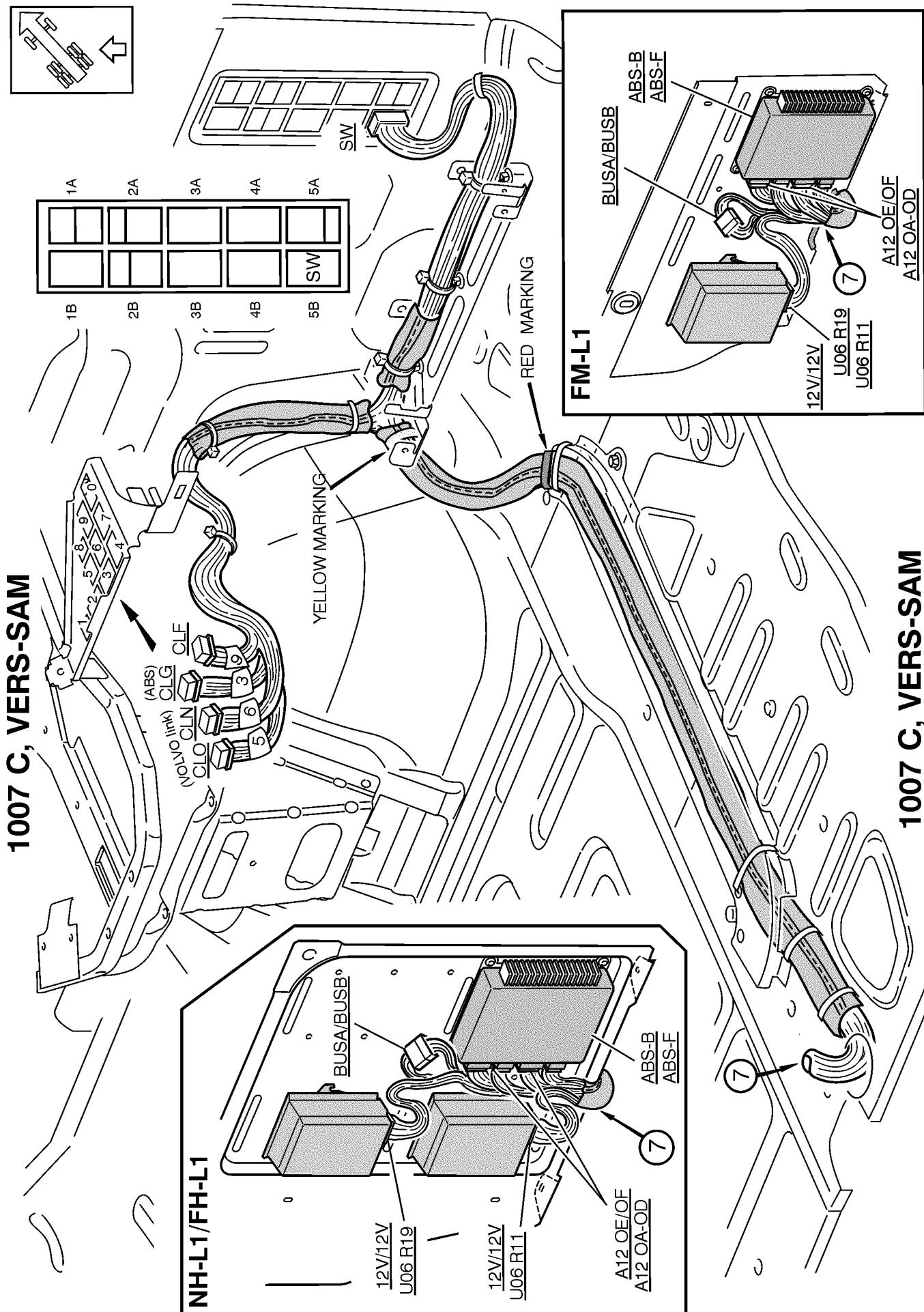


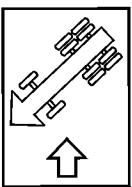






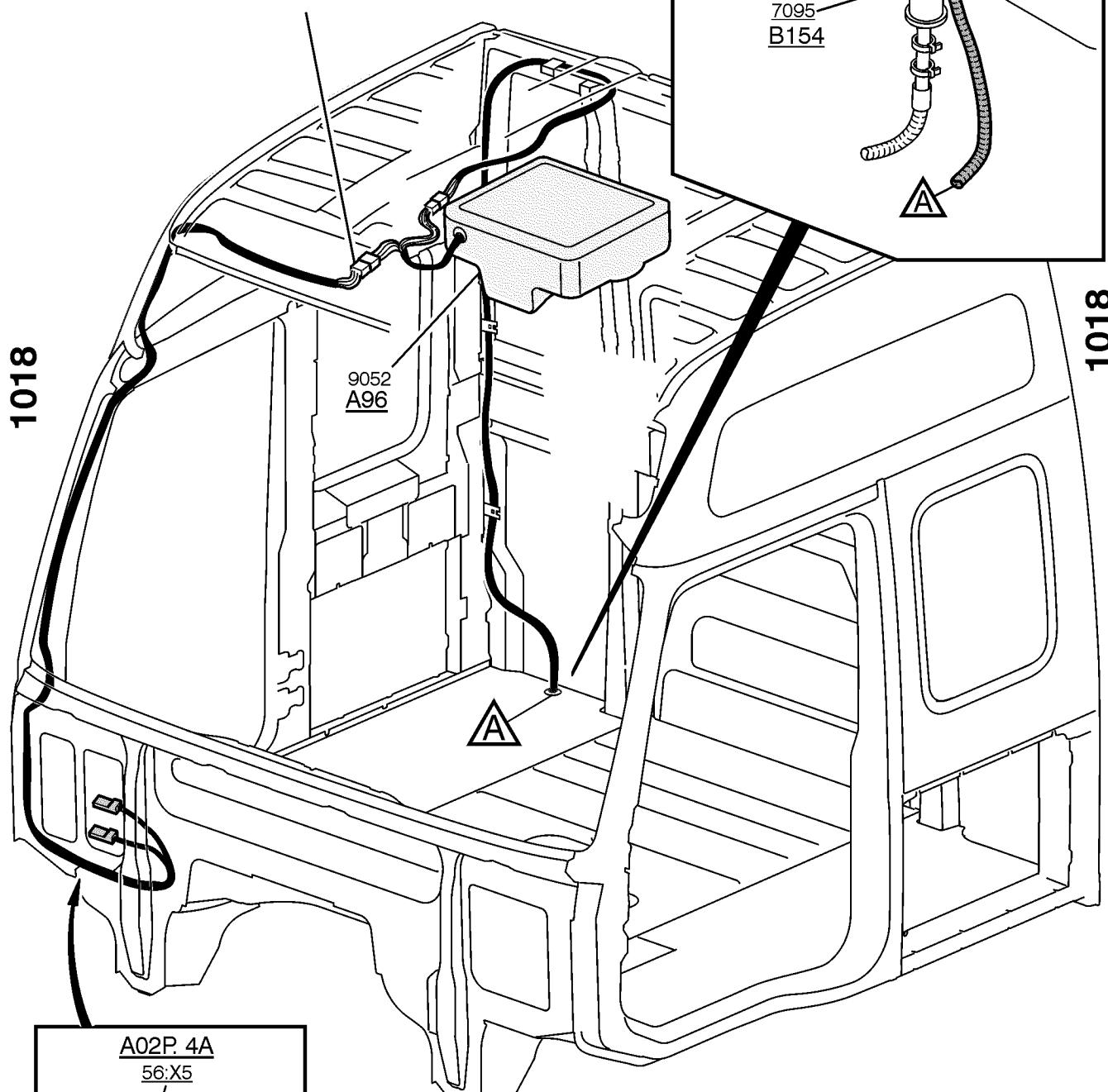




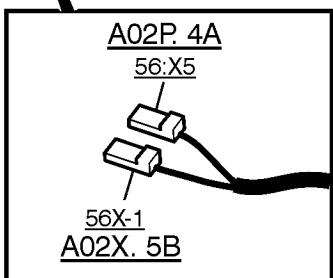


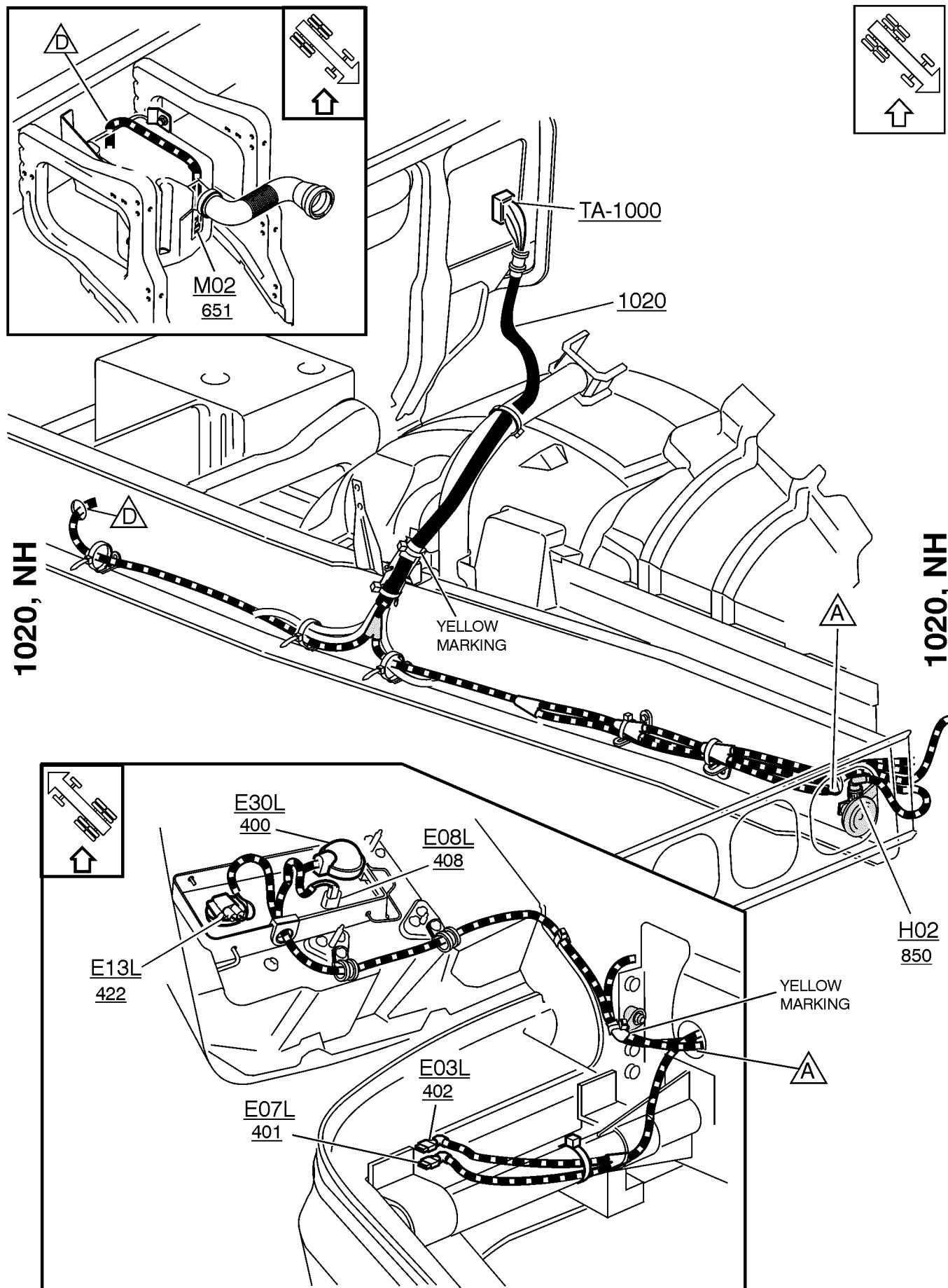
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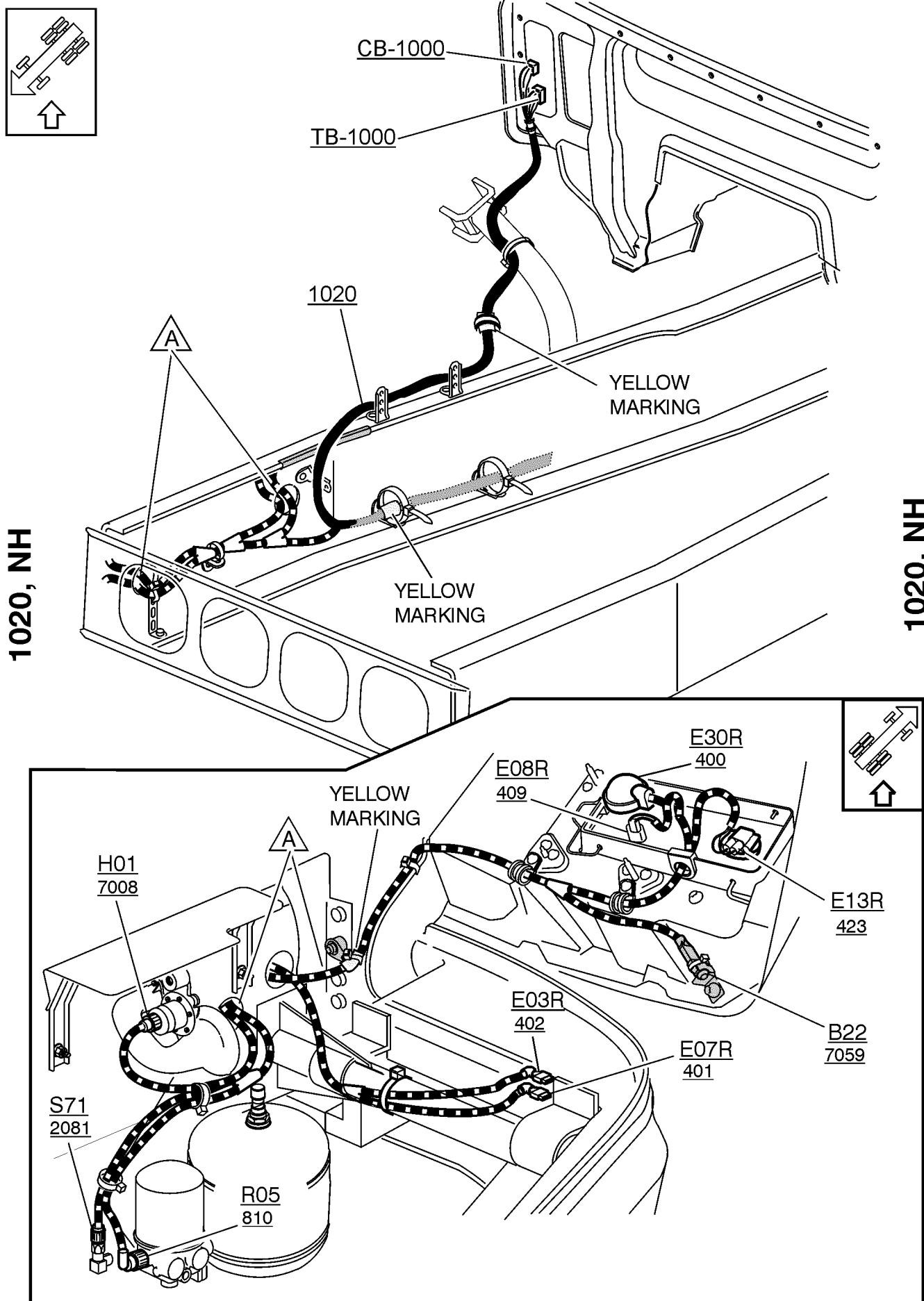
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EXT:1

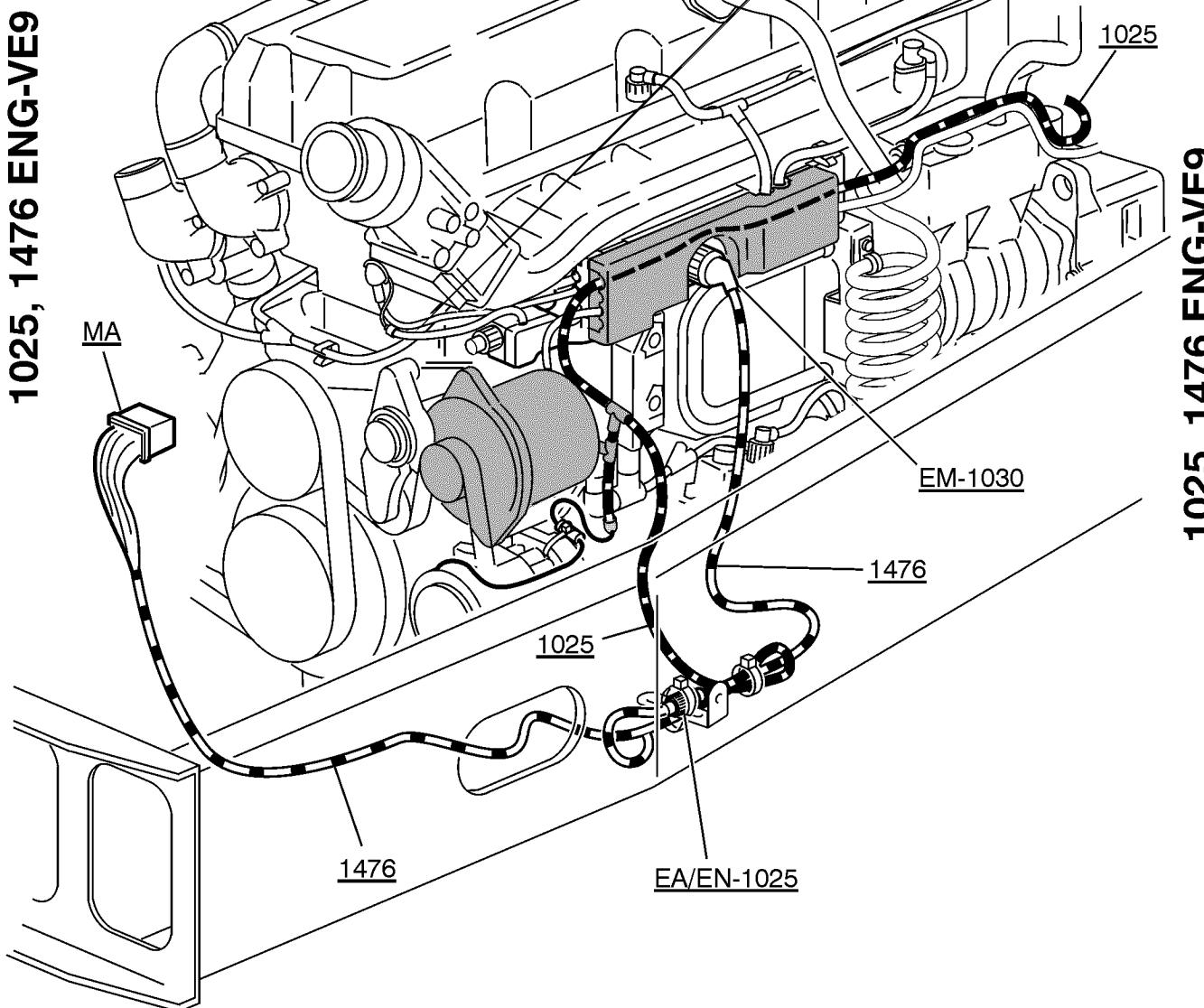
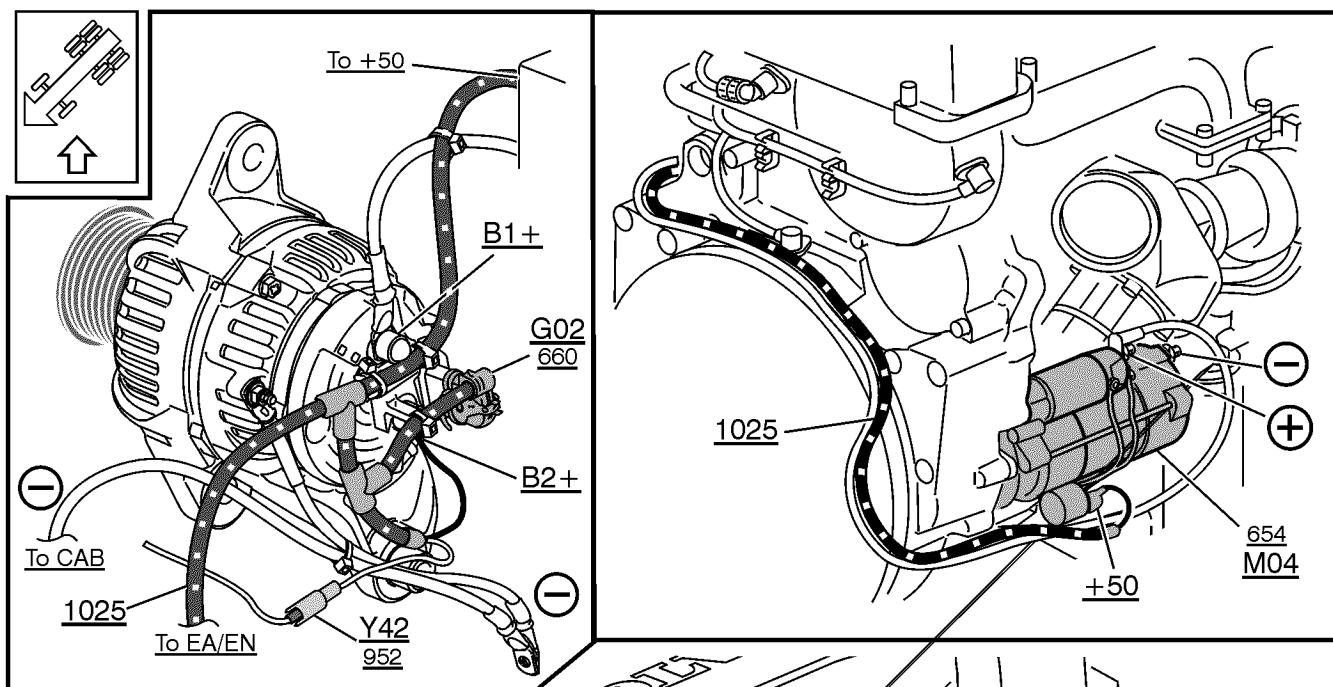
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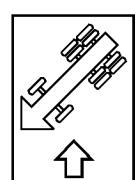
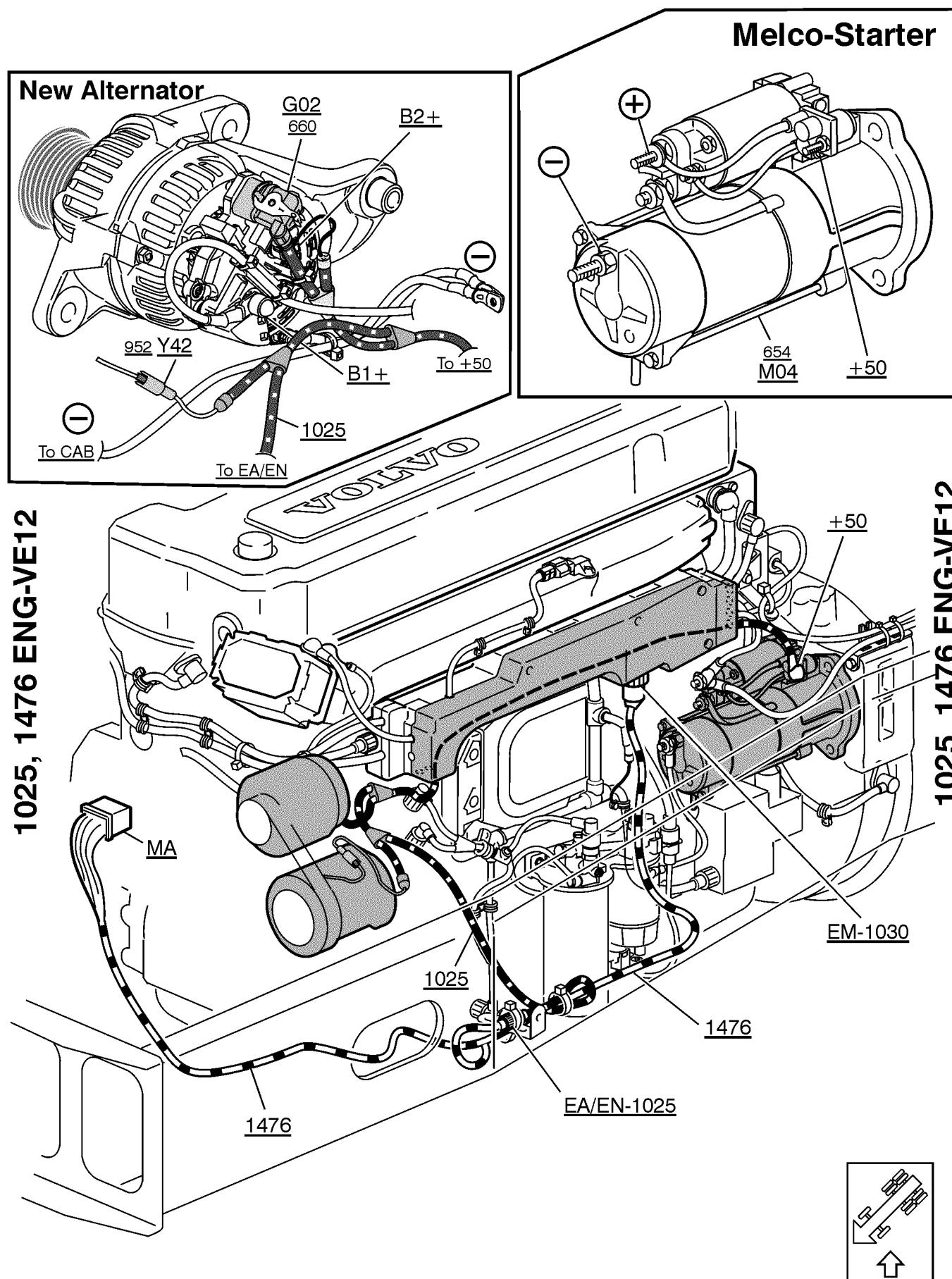
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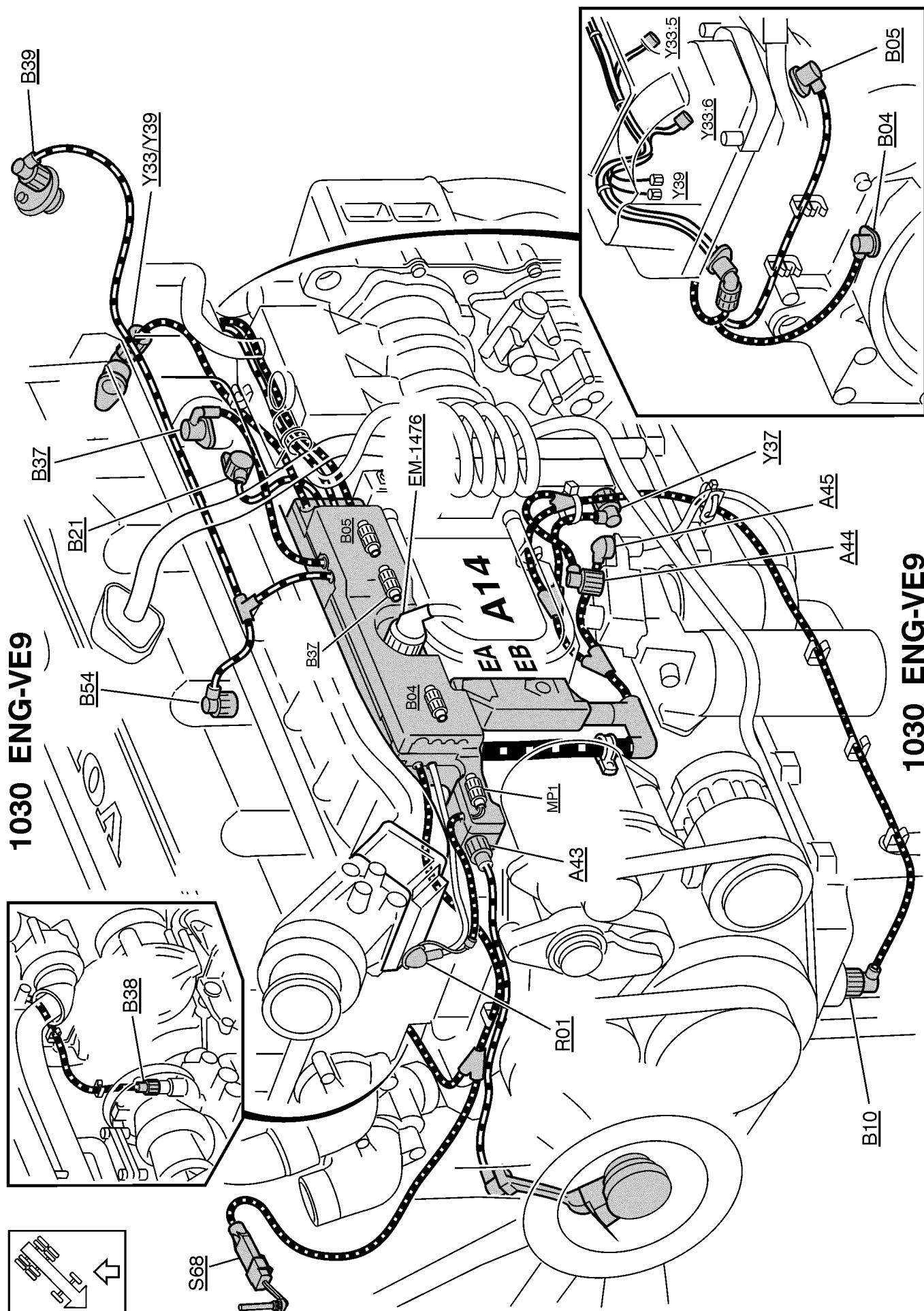


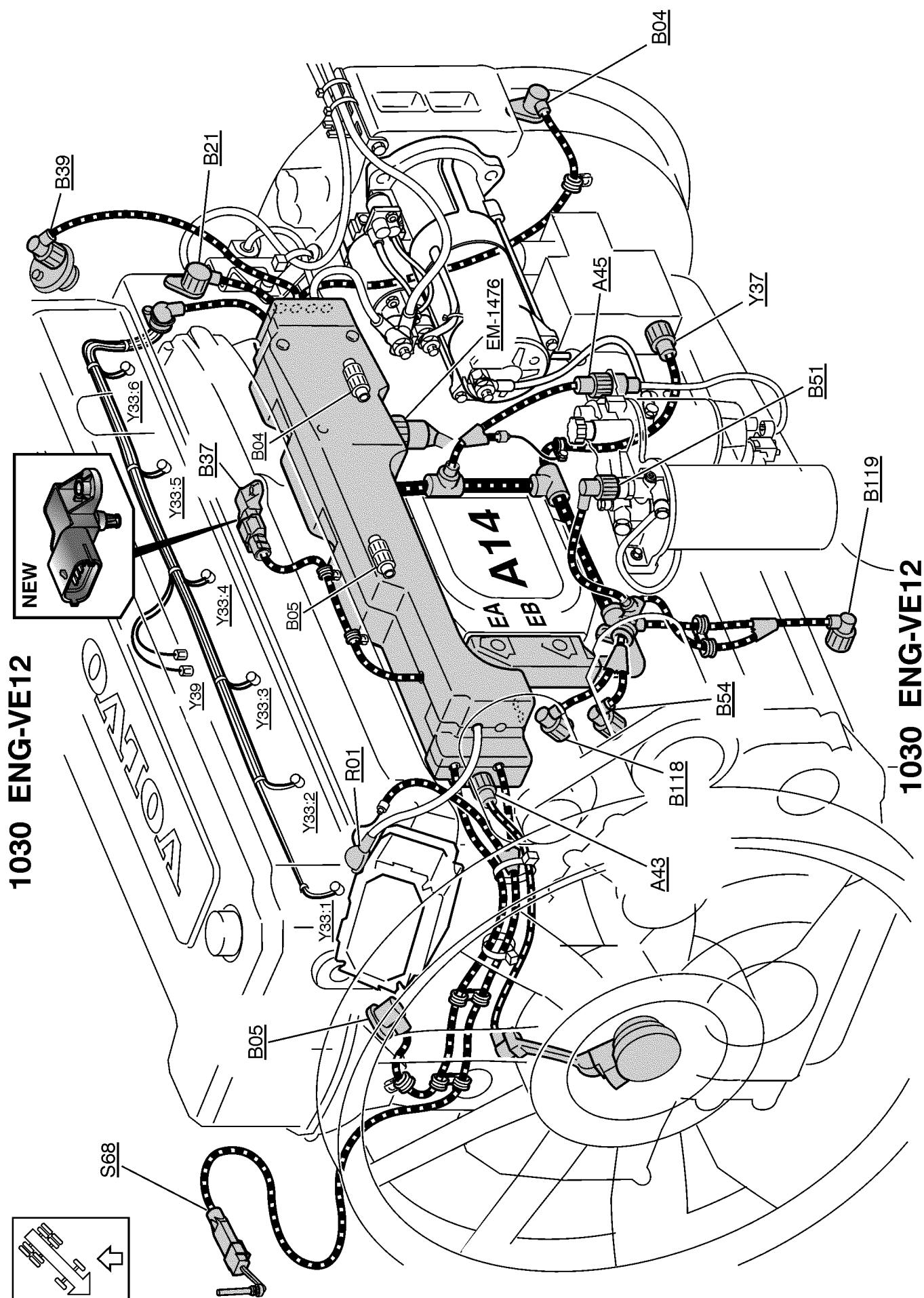


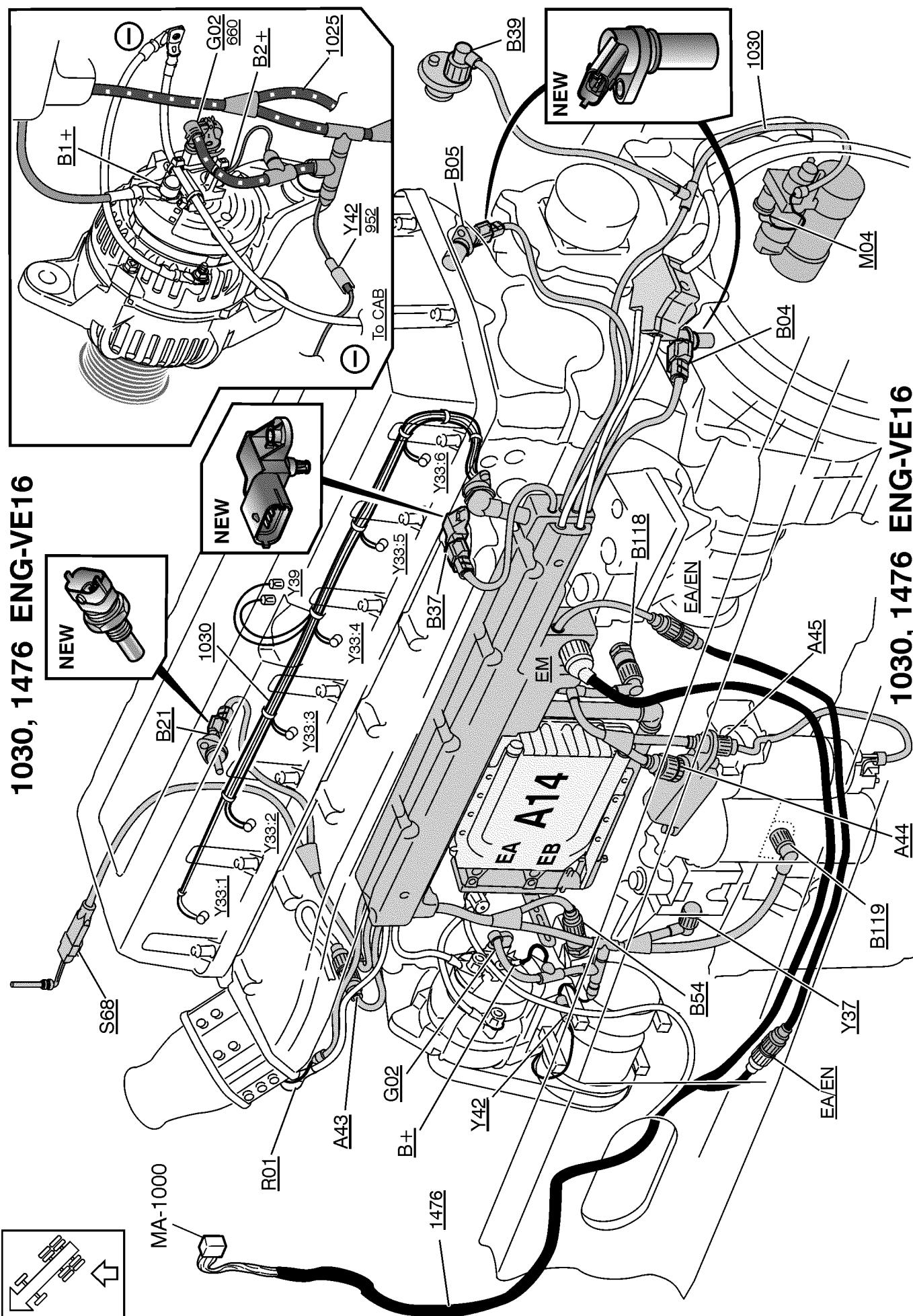


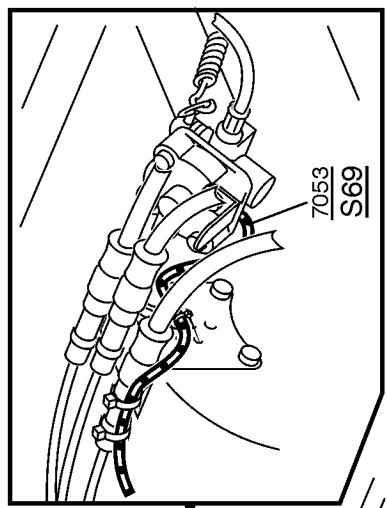
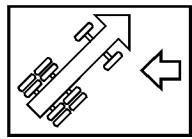


T3017723

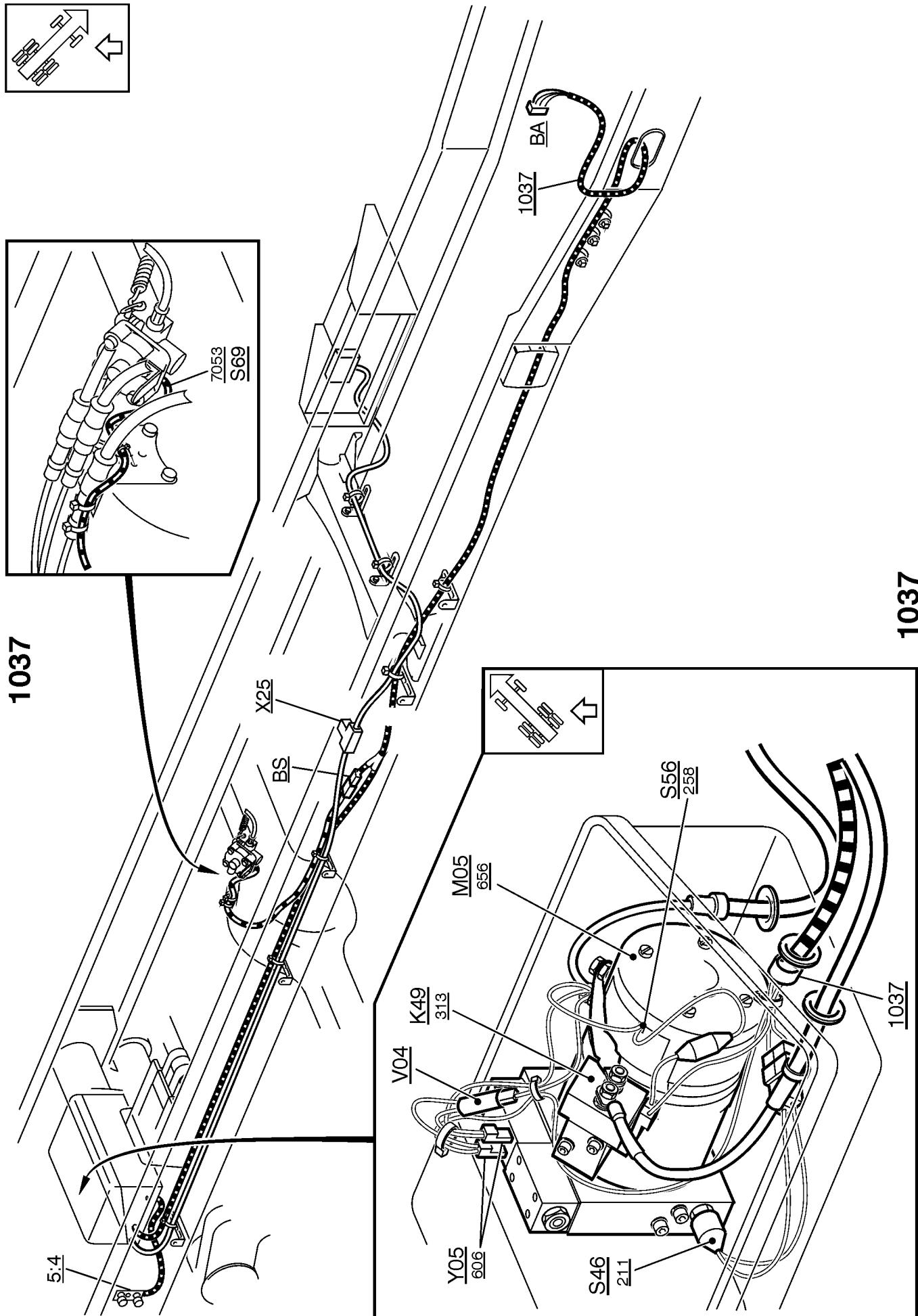




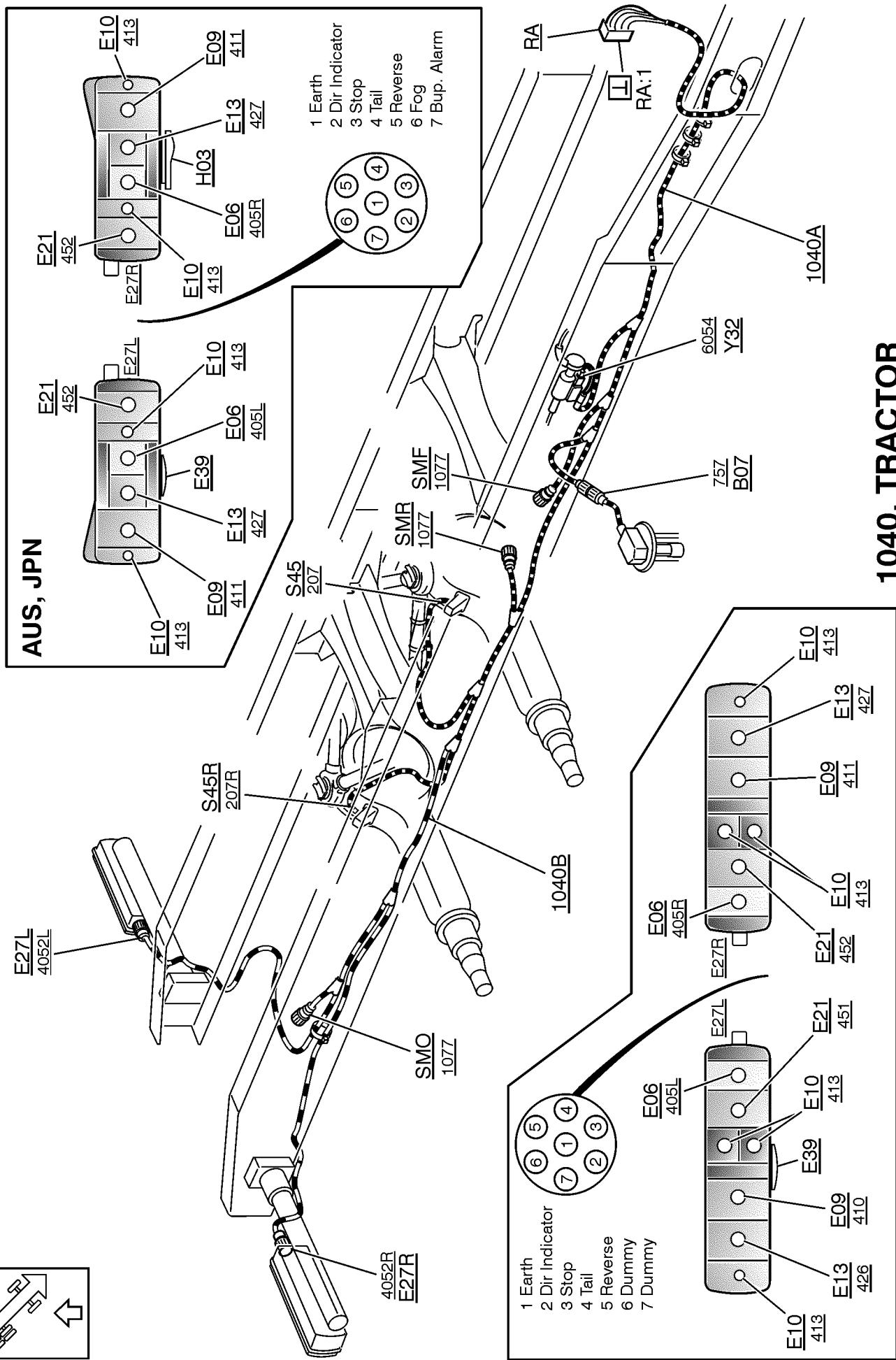


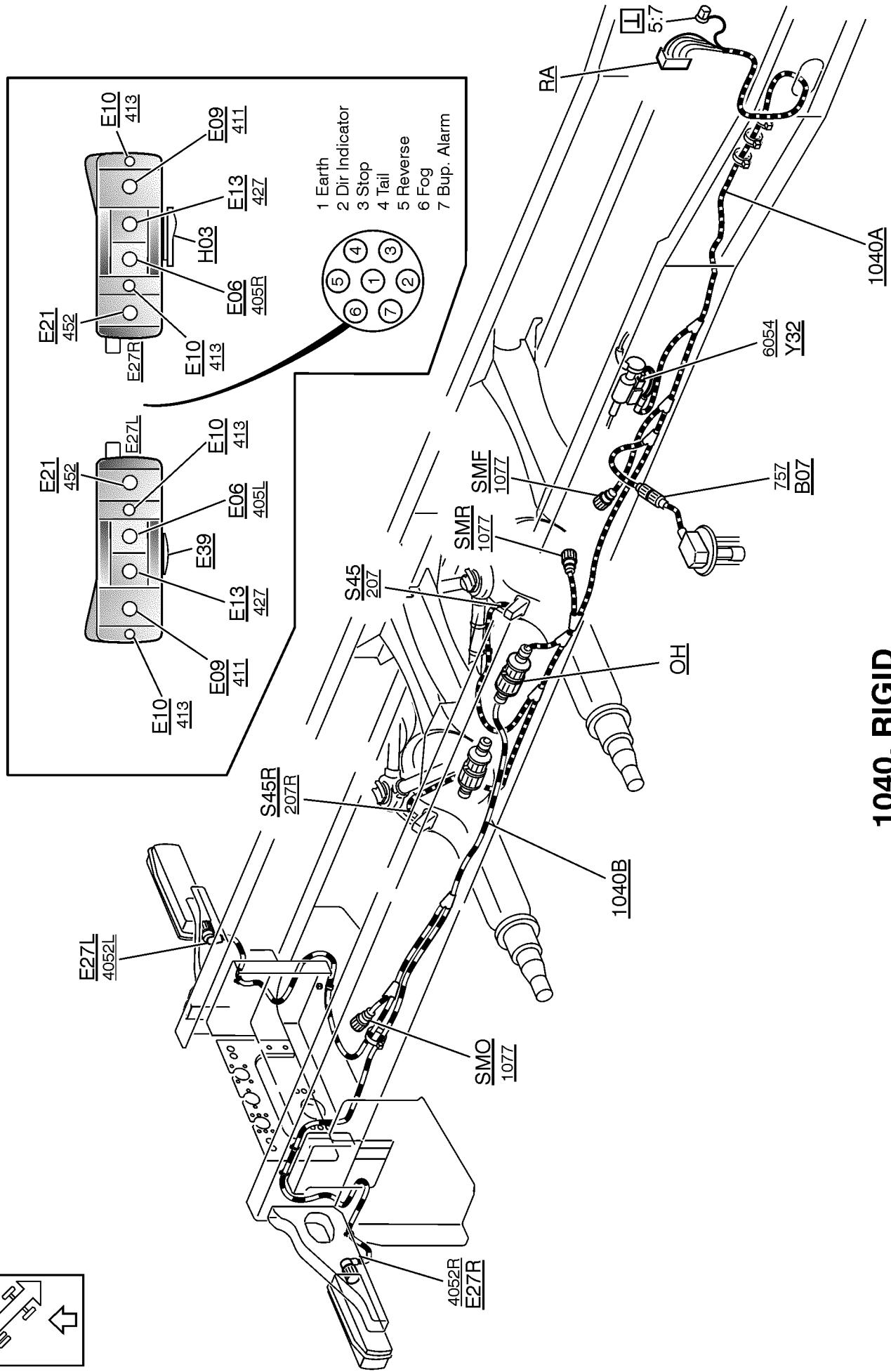


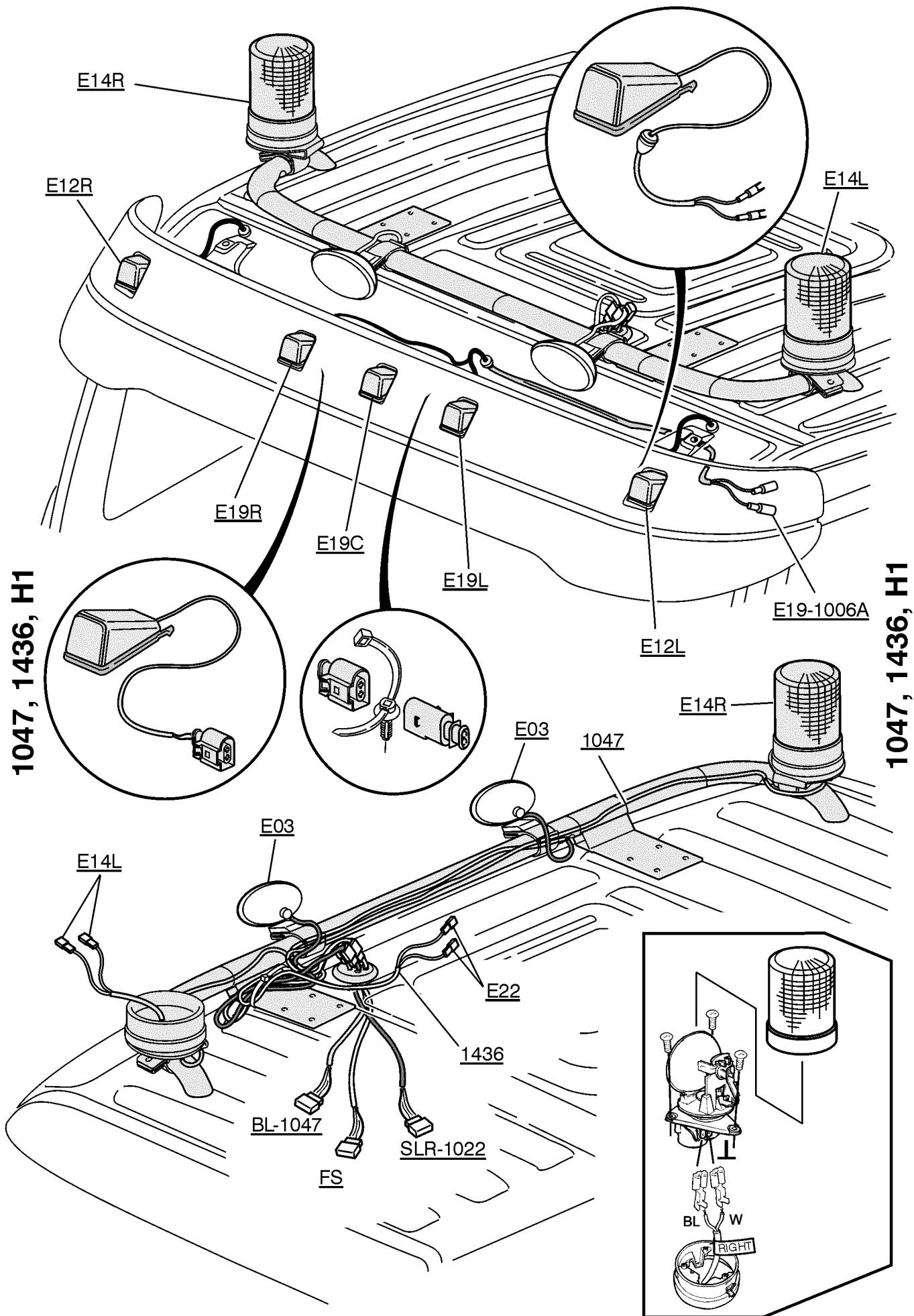
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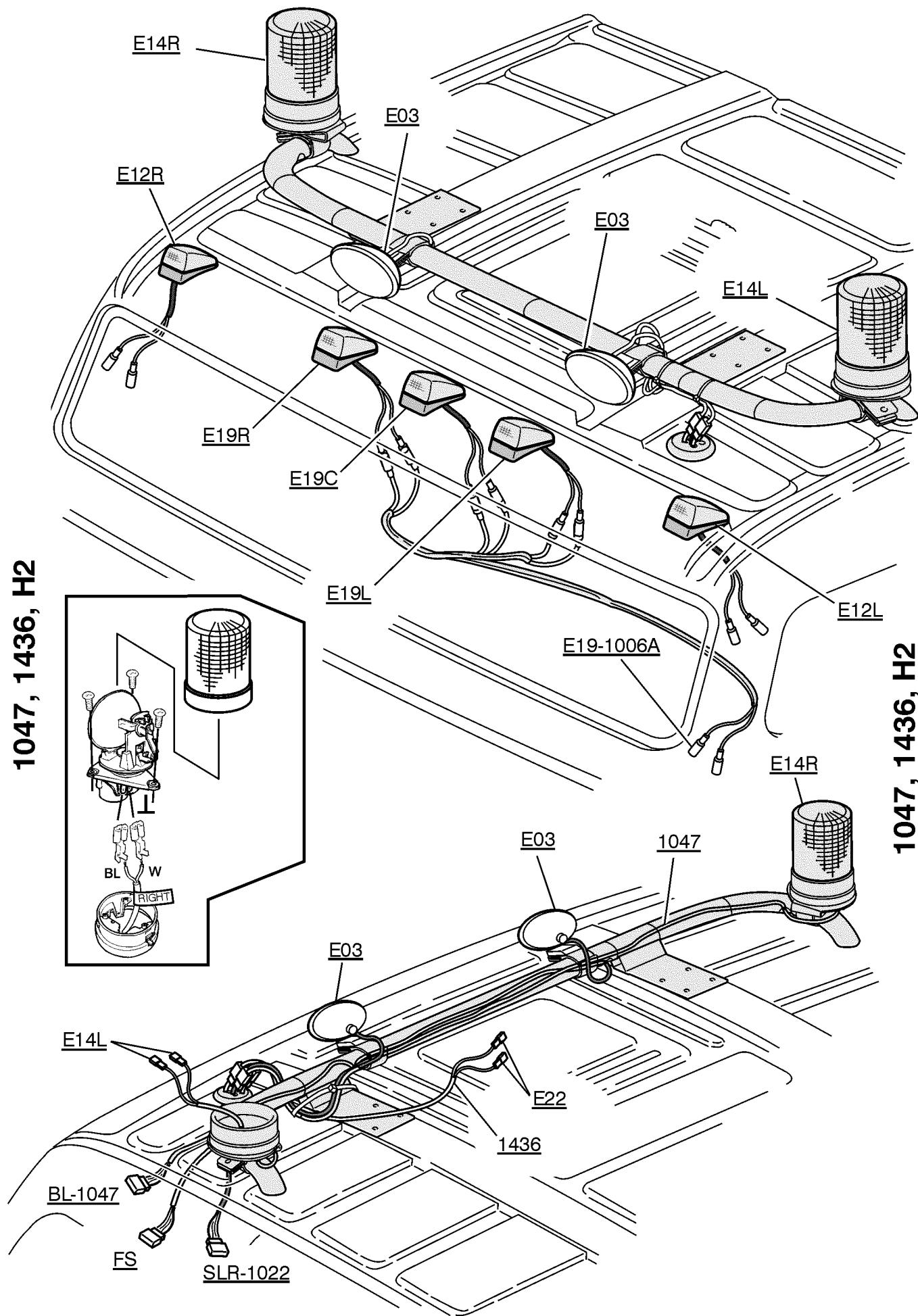


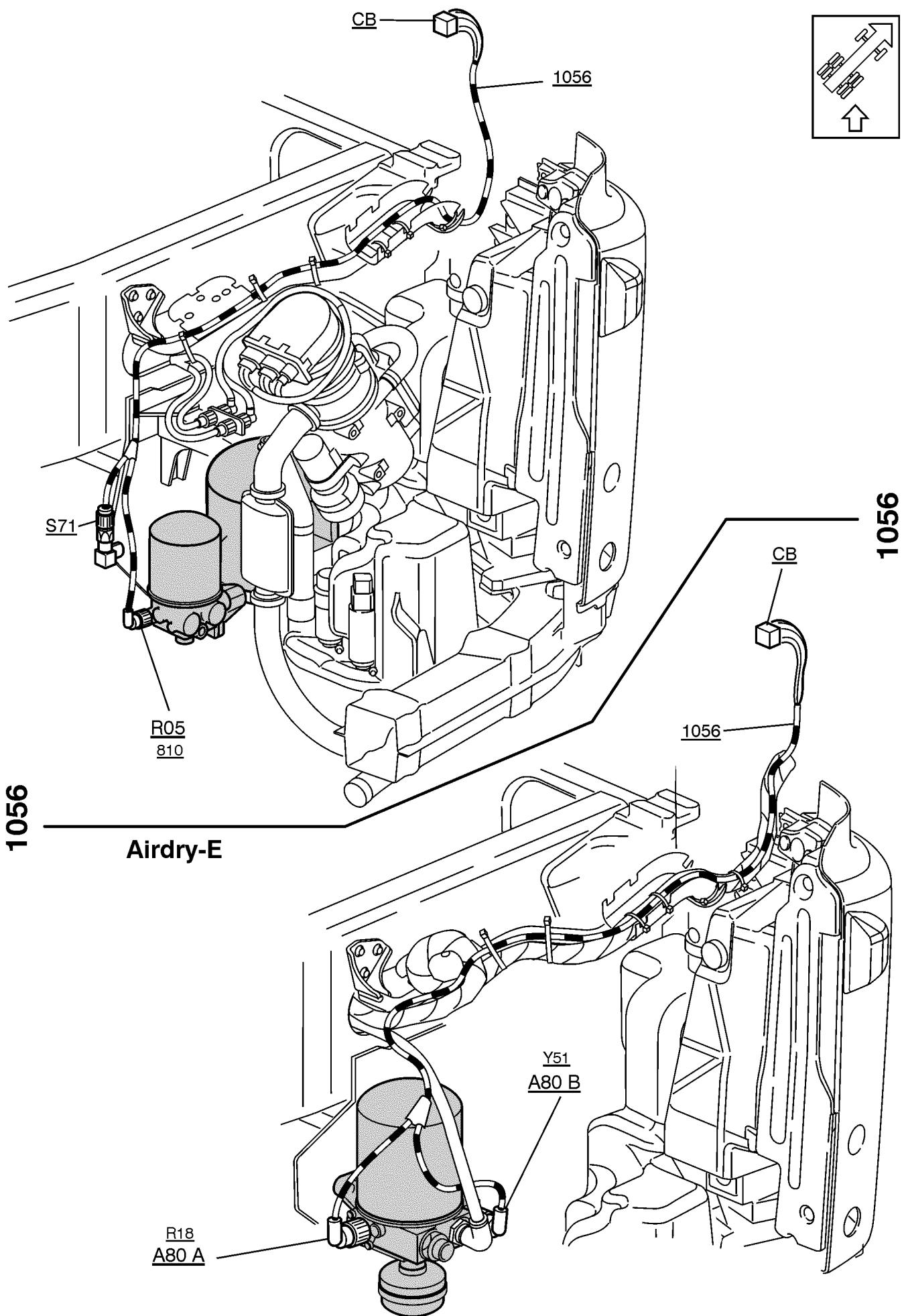
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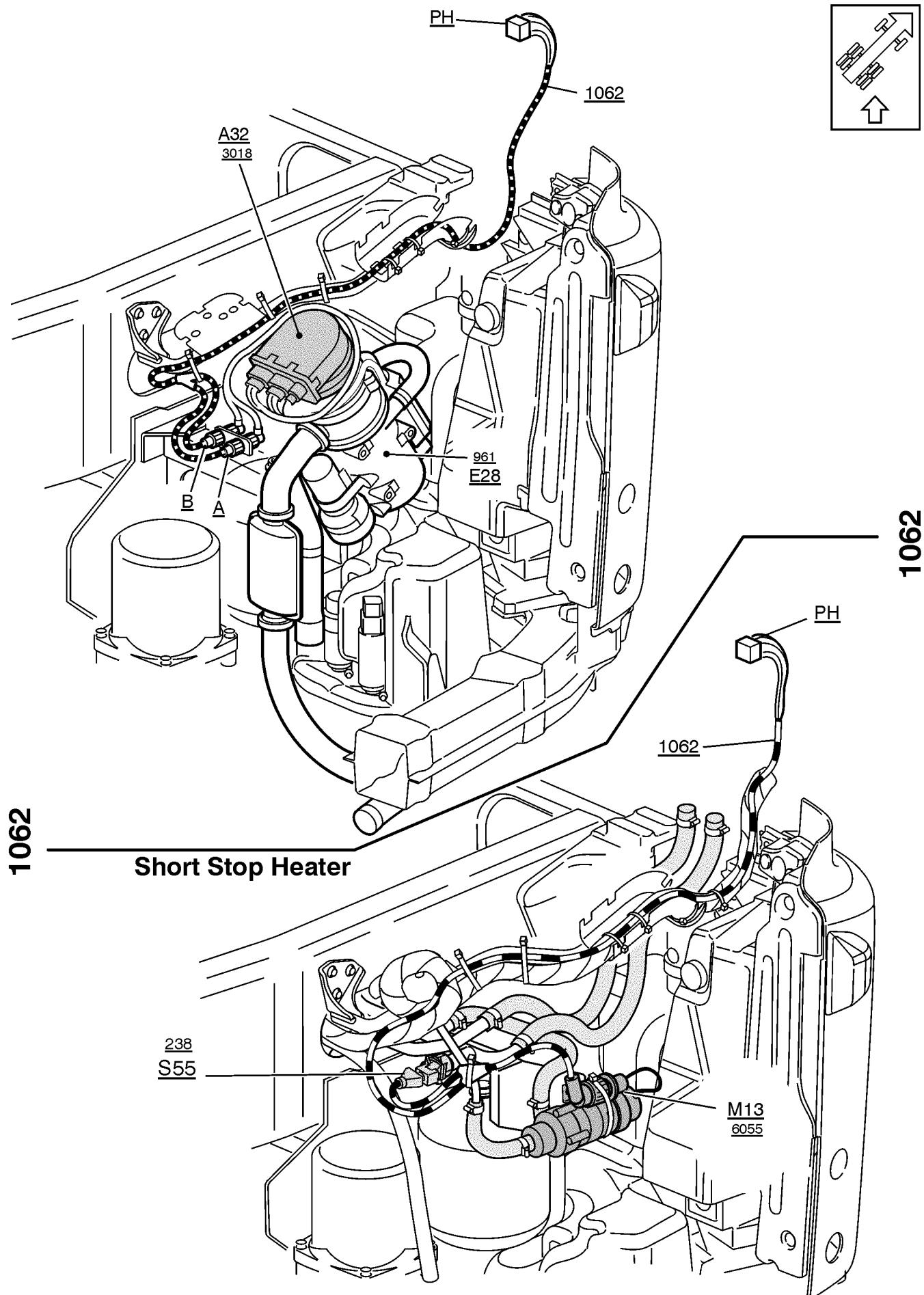
**1040, TRACTOR**

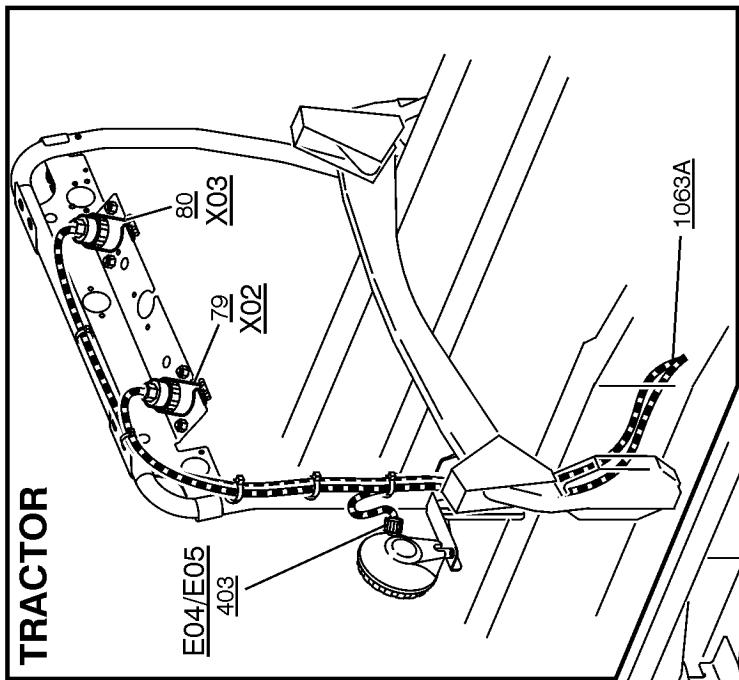
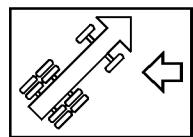
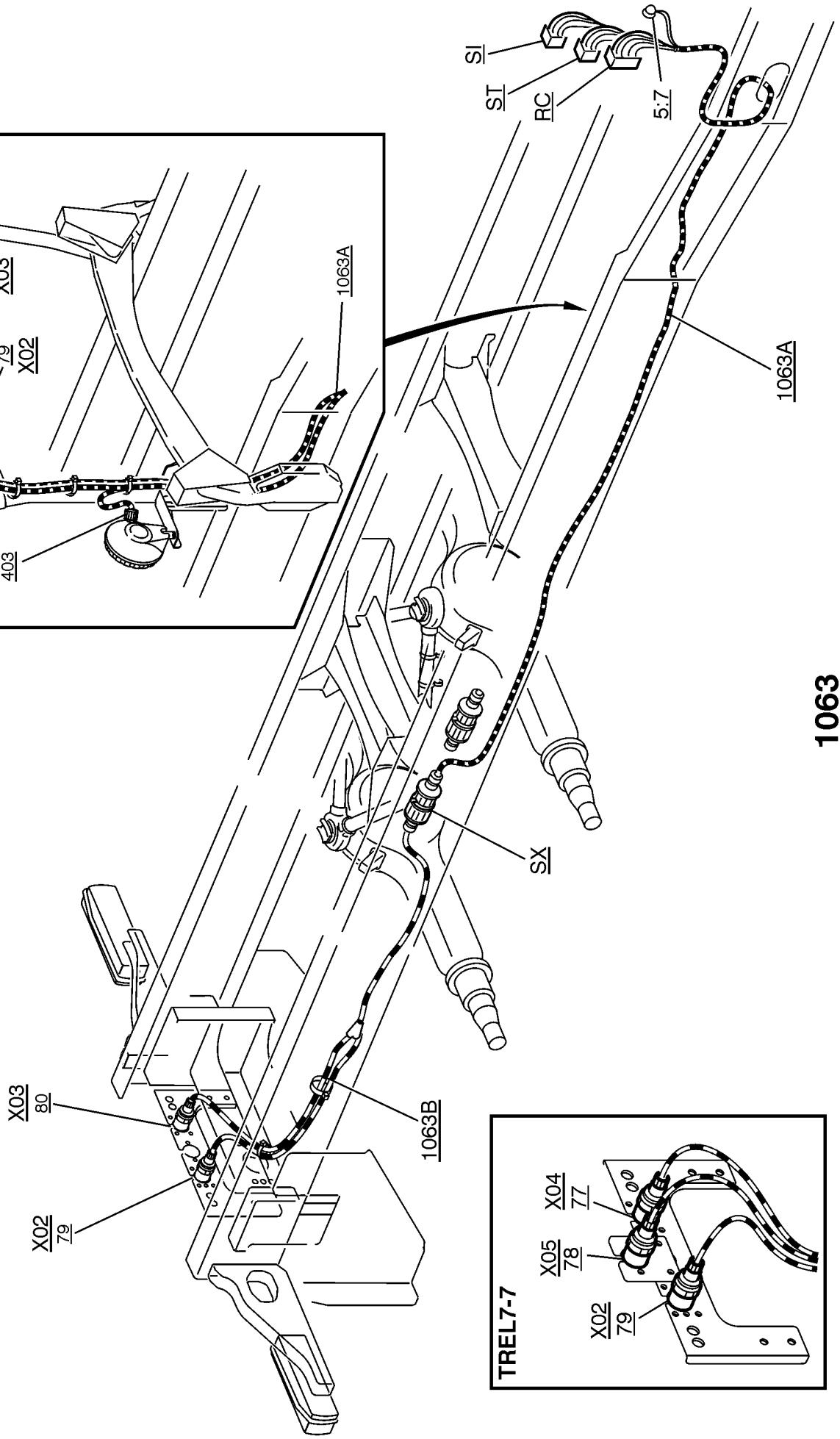
**1040, RIGID****1040, RIGID**

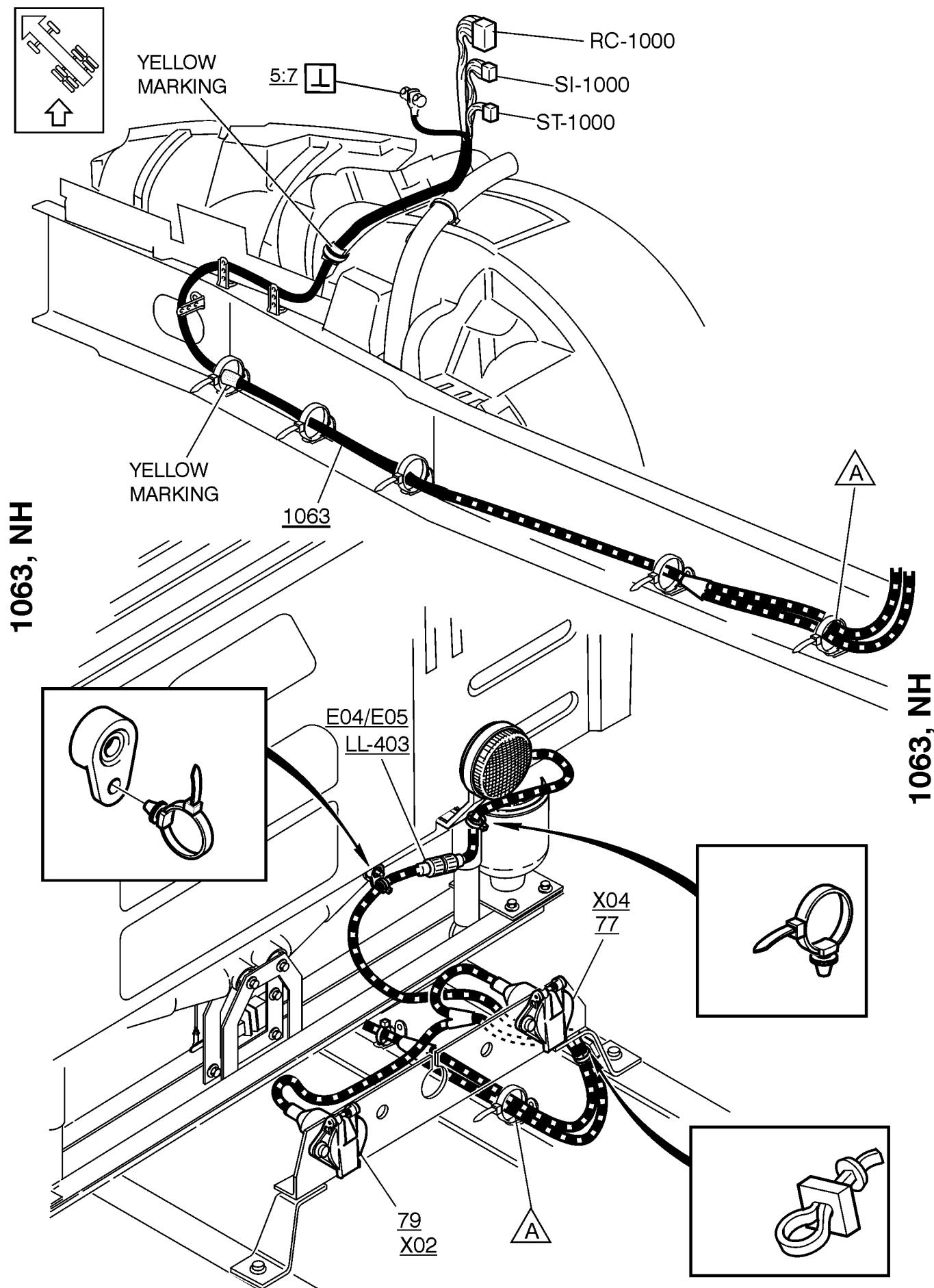


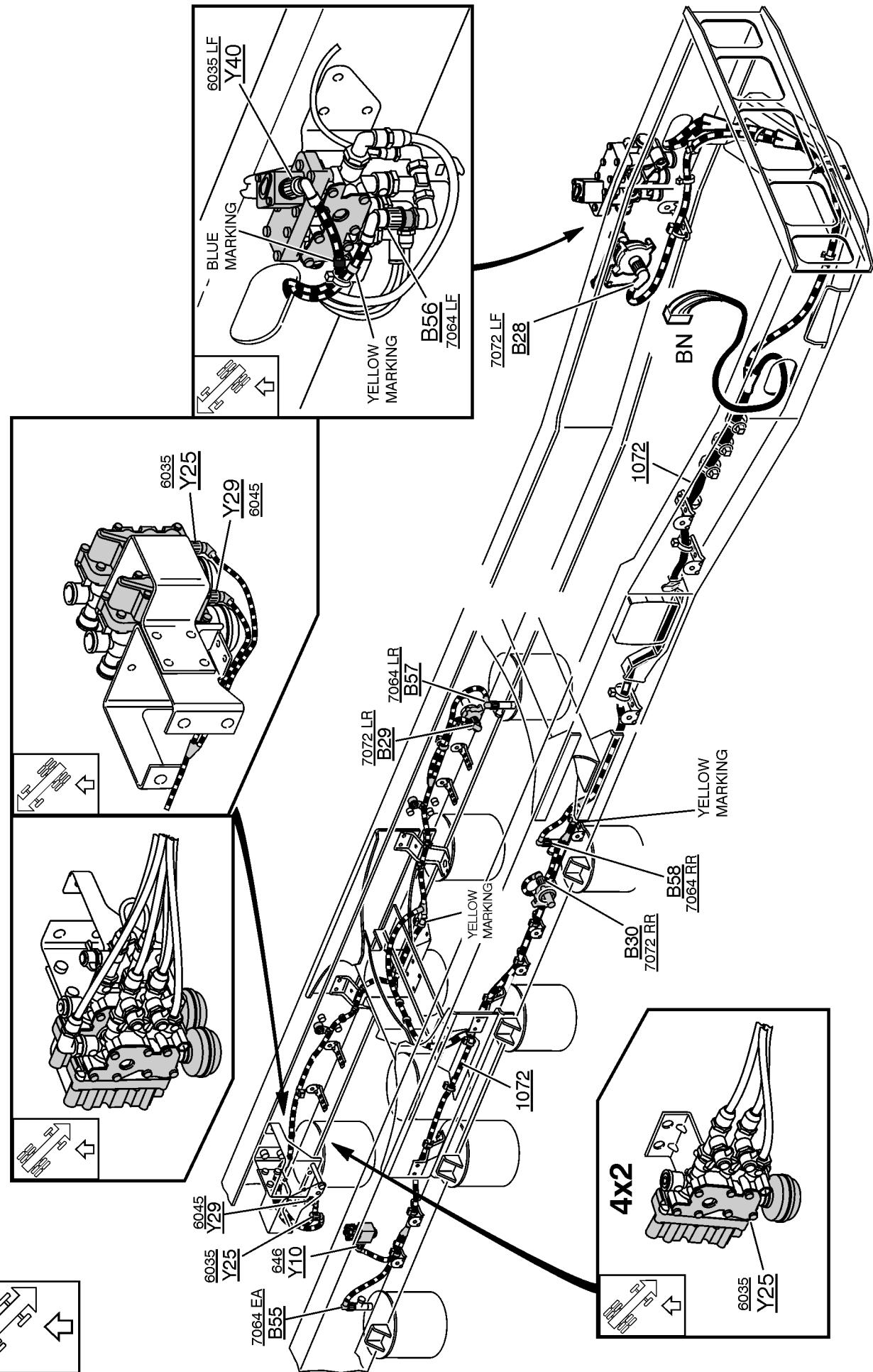
**1047, 1436, H2****1047, 1436, H2**

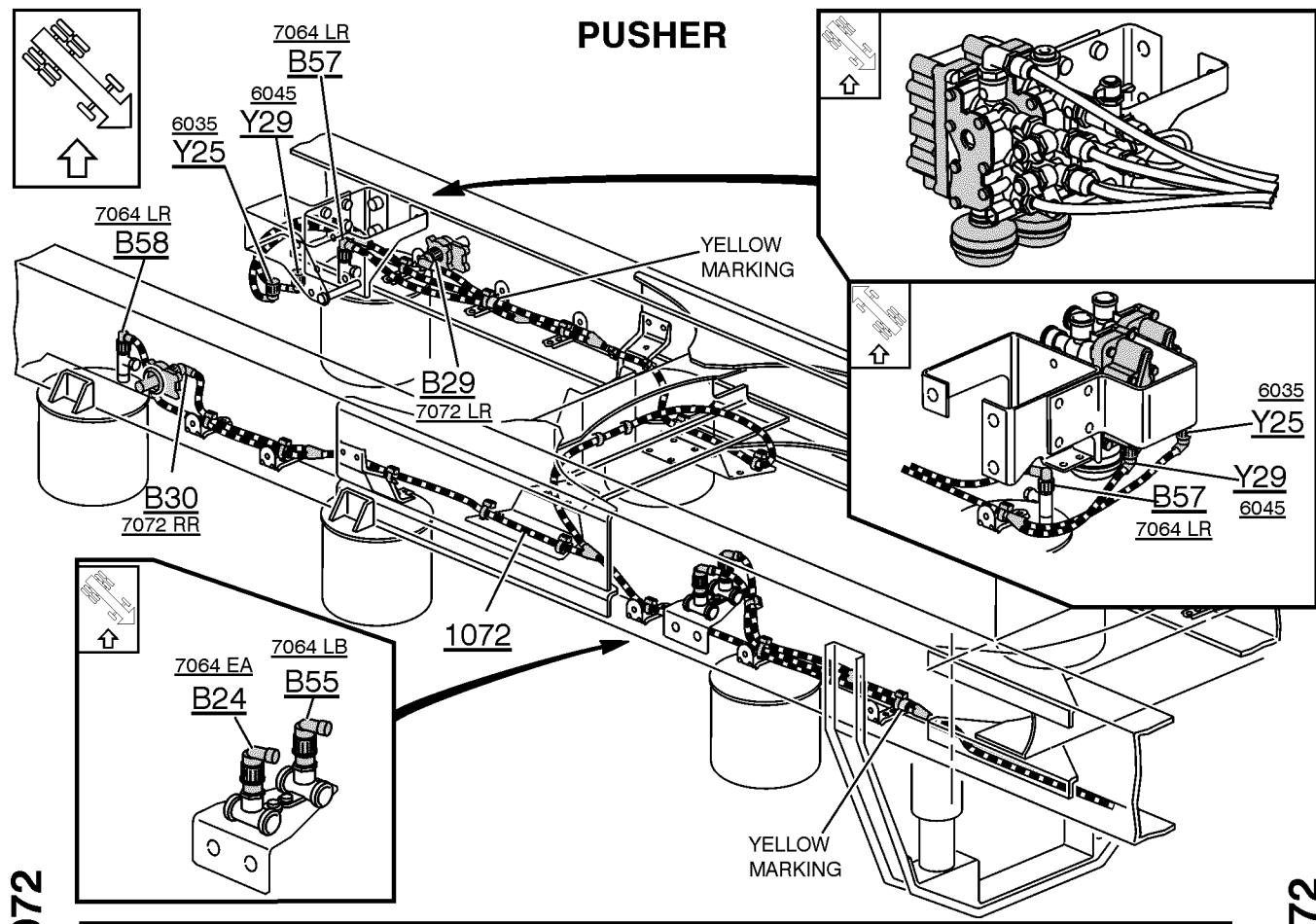




**1063**

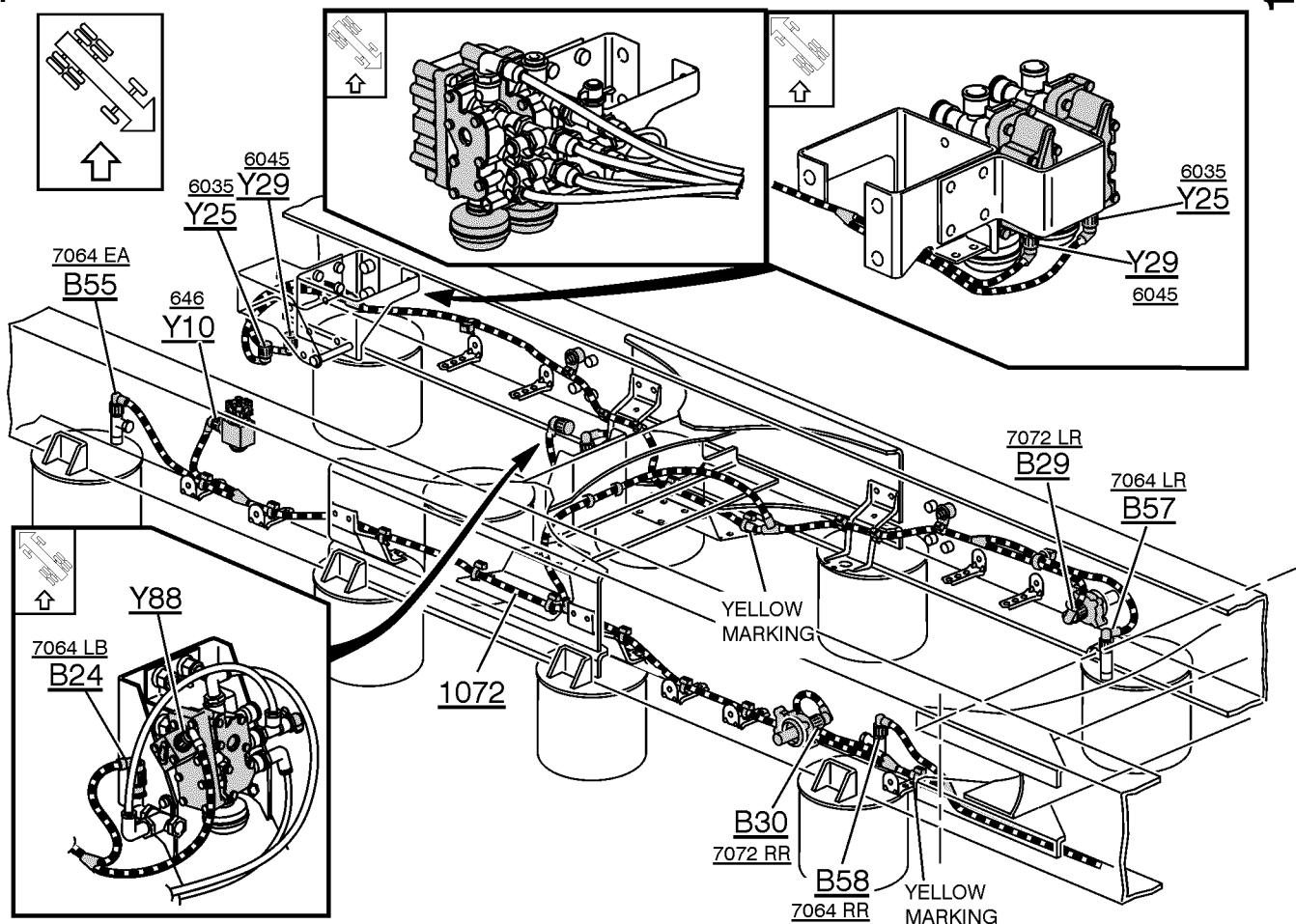


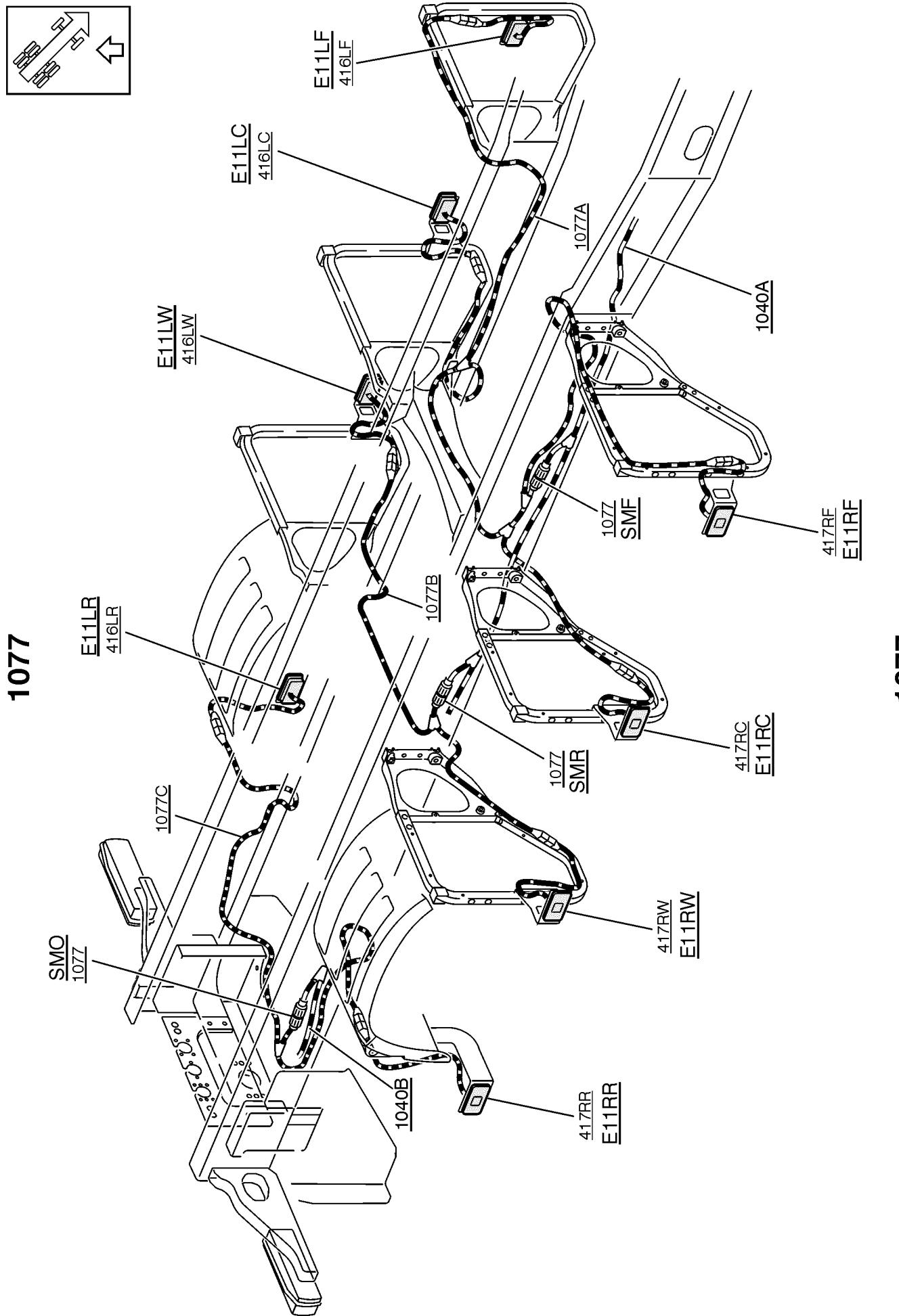
**1072****1072**



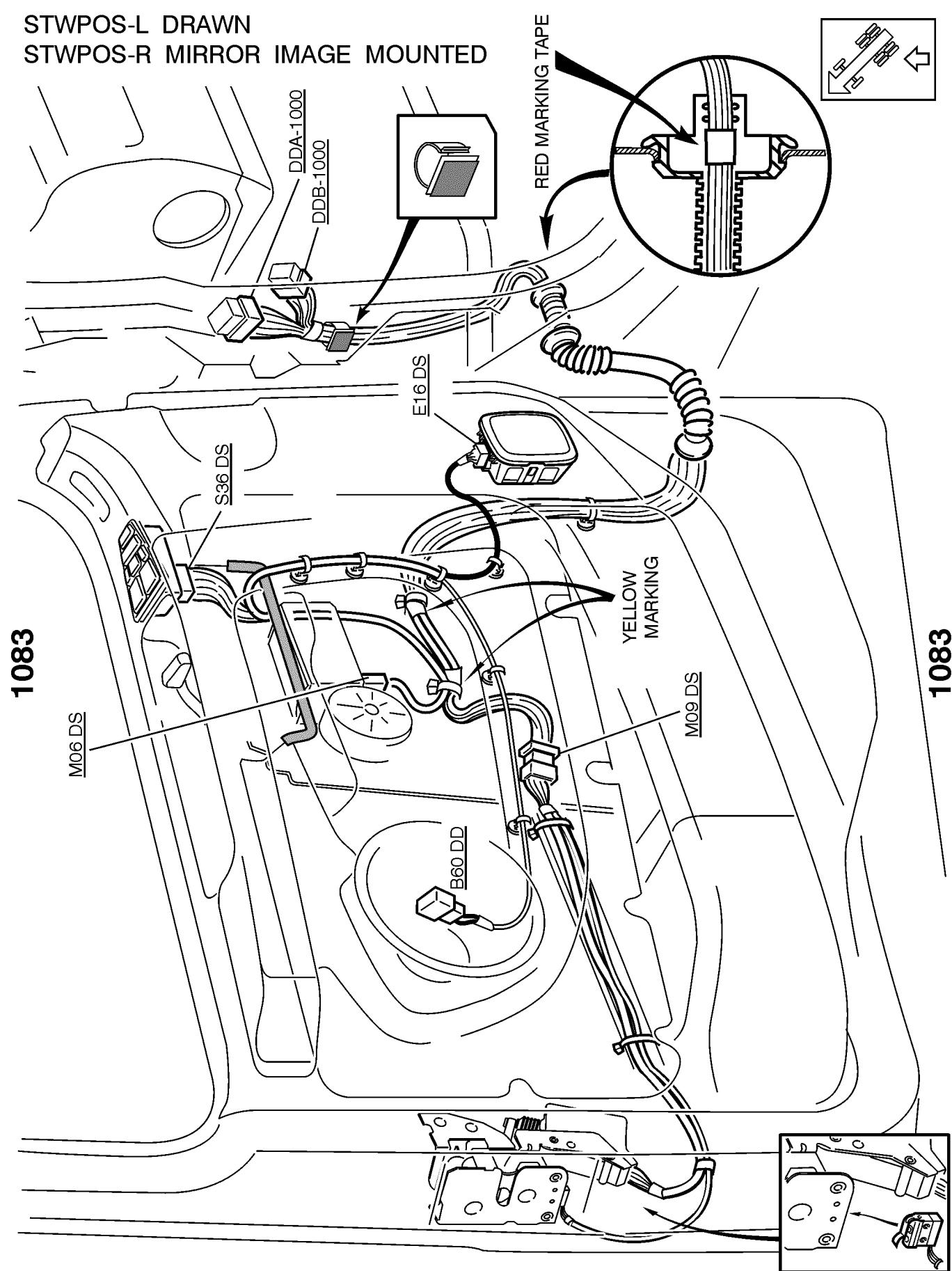
1072

1072

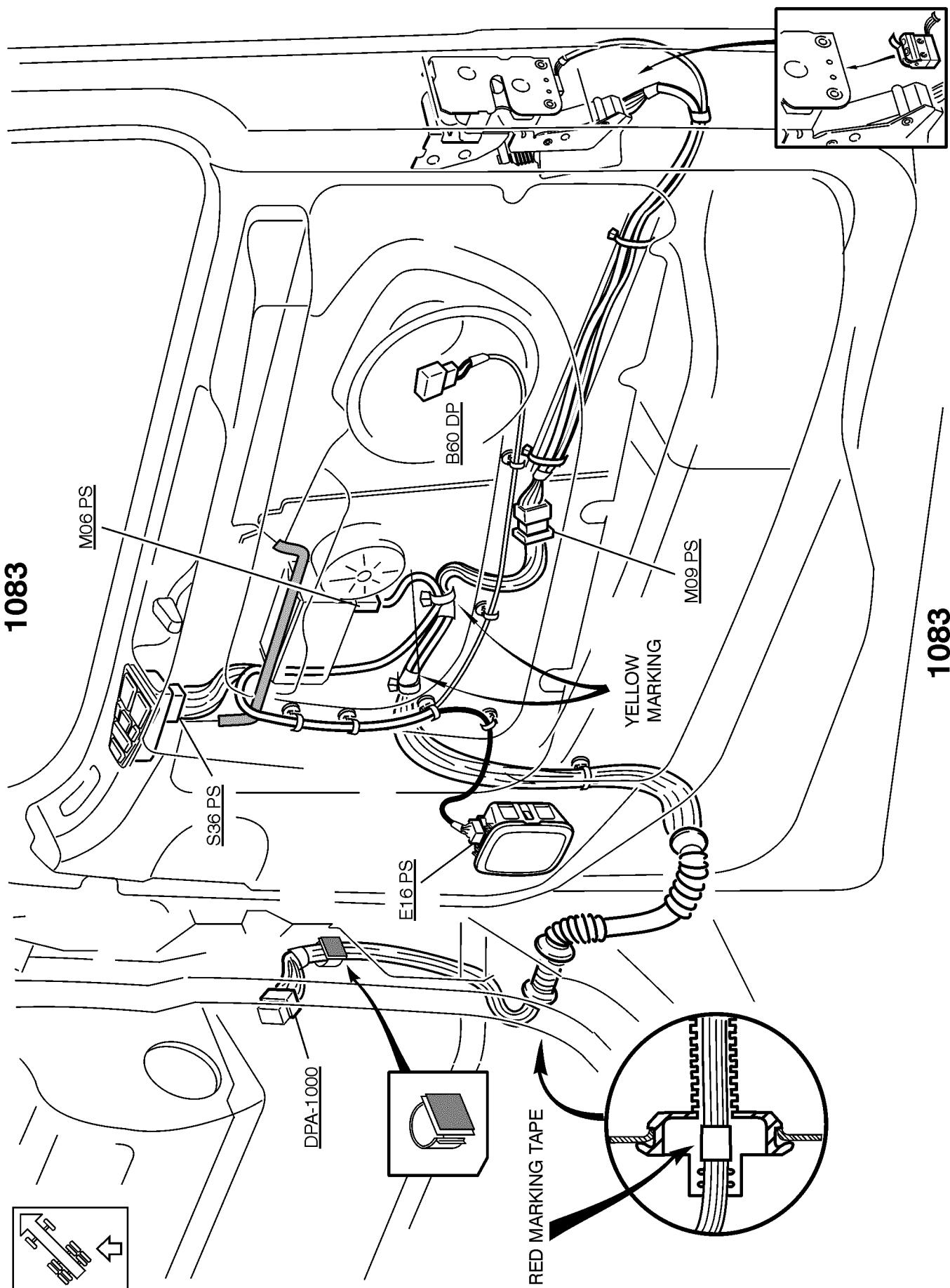
**TAG**

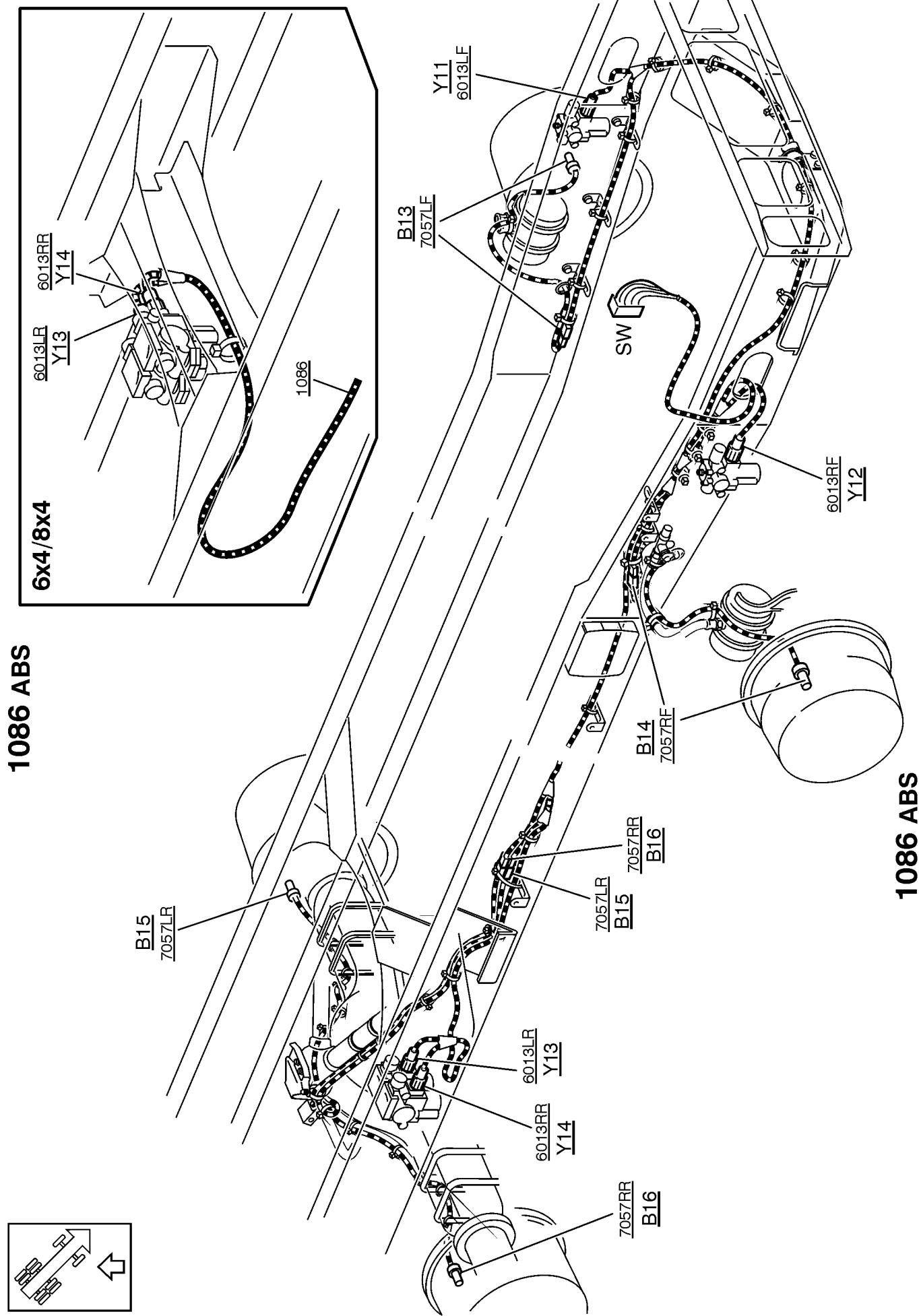


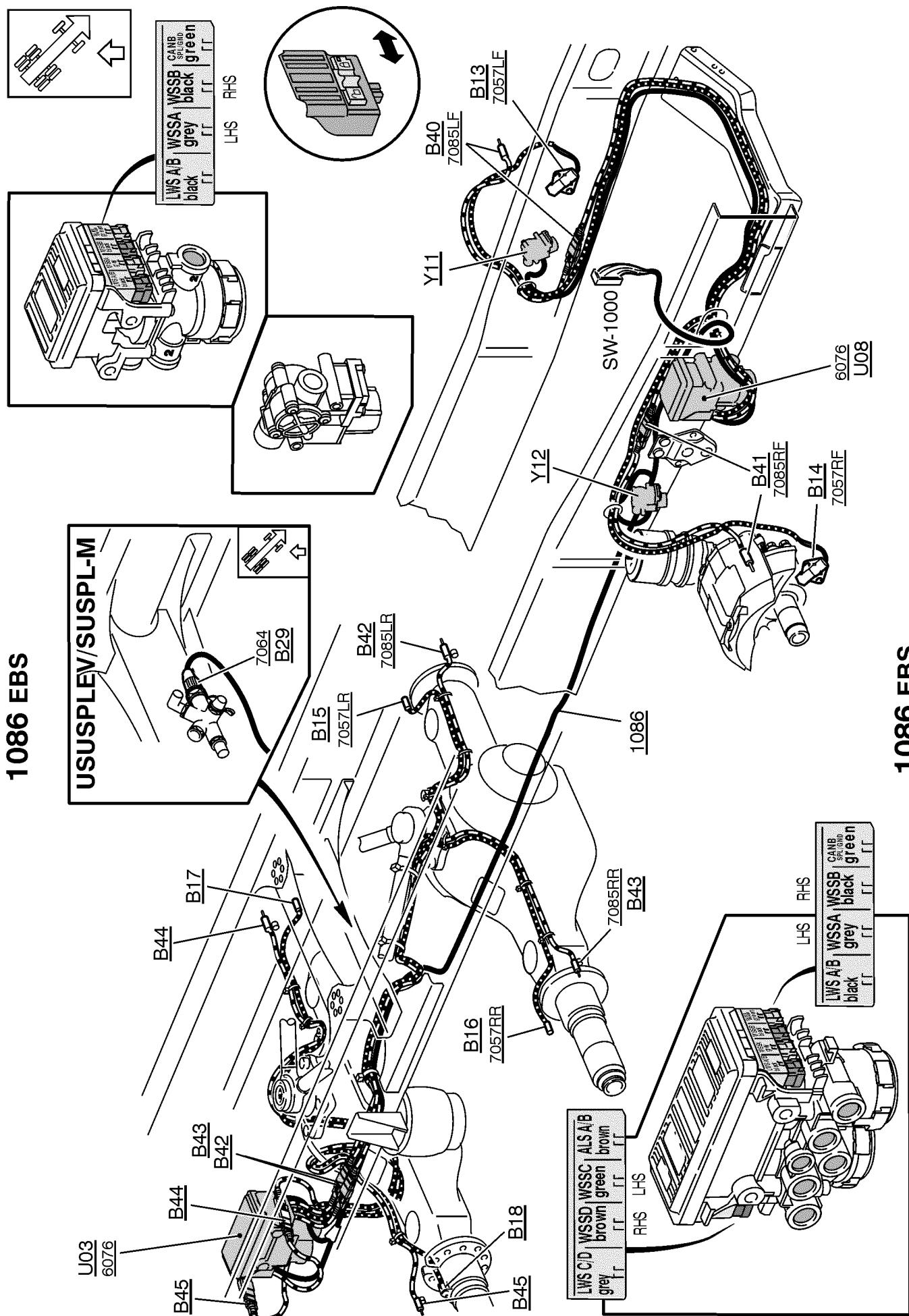
**STWPOS-L DRAWN  
STWPOS-R MIRROR IMAGE MOUNTED**

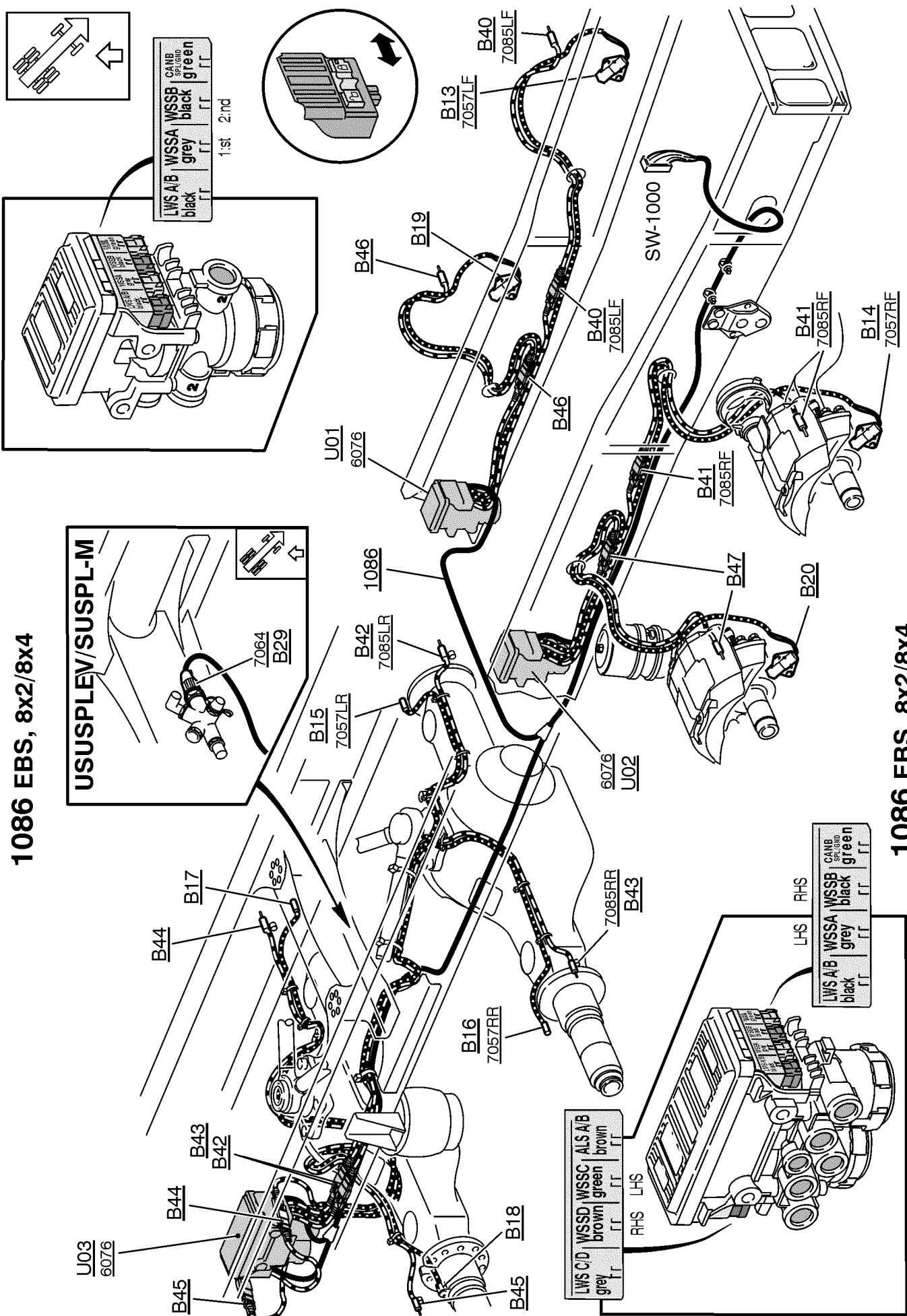


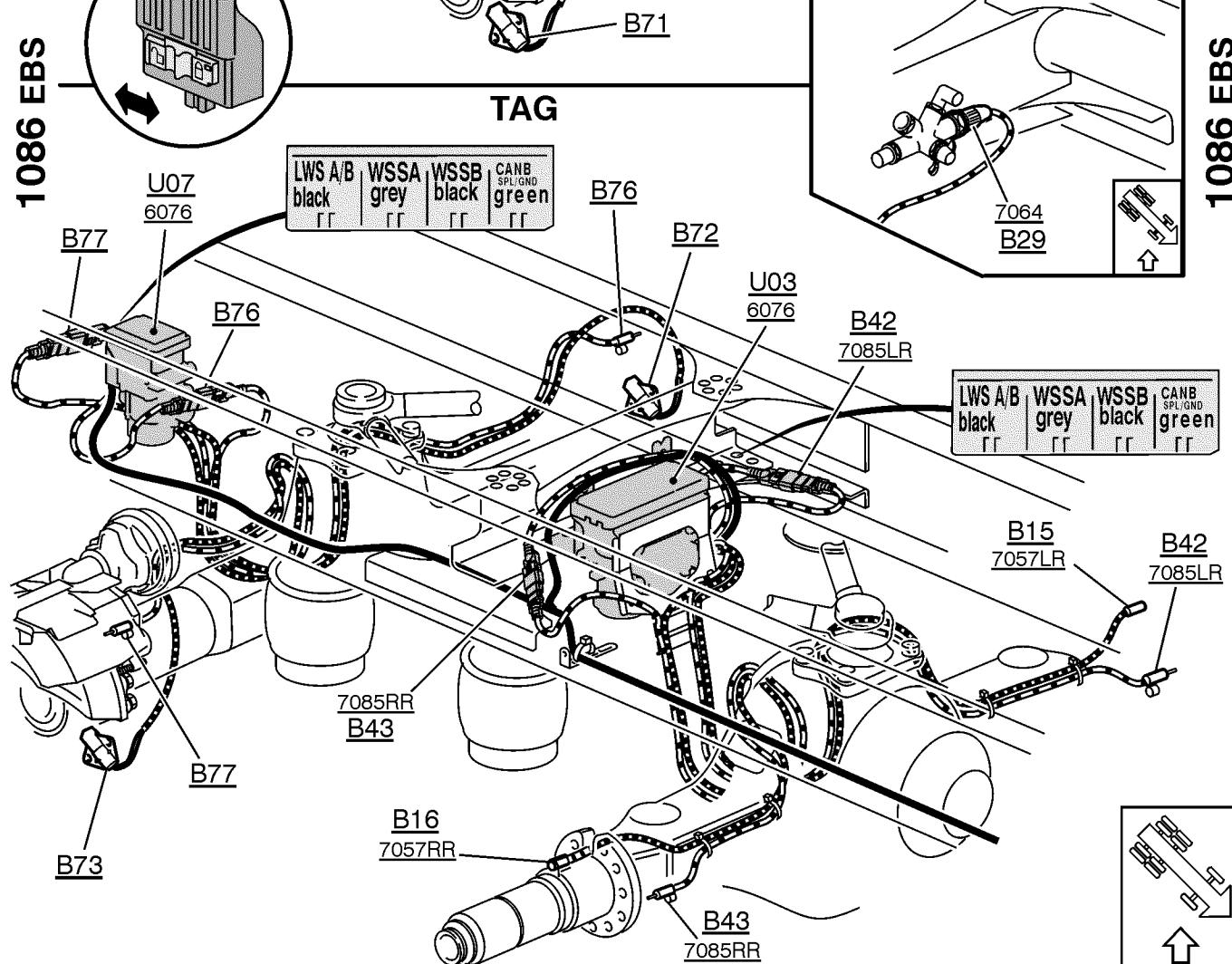
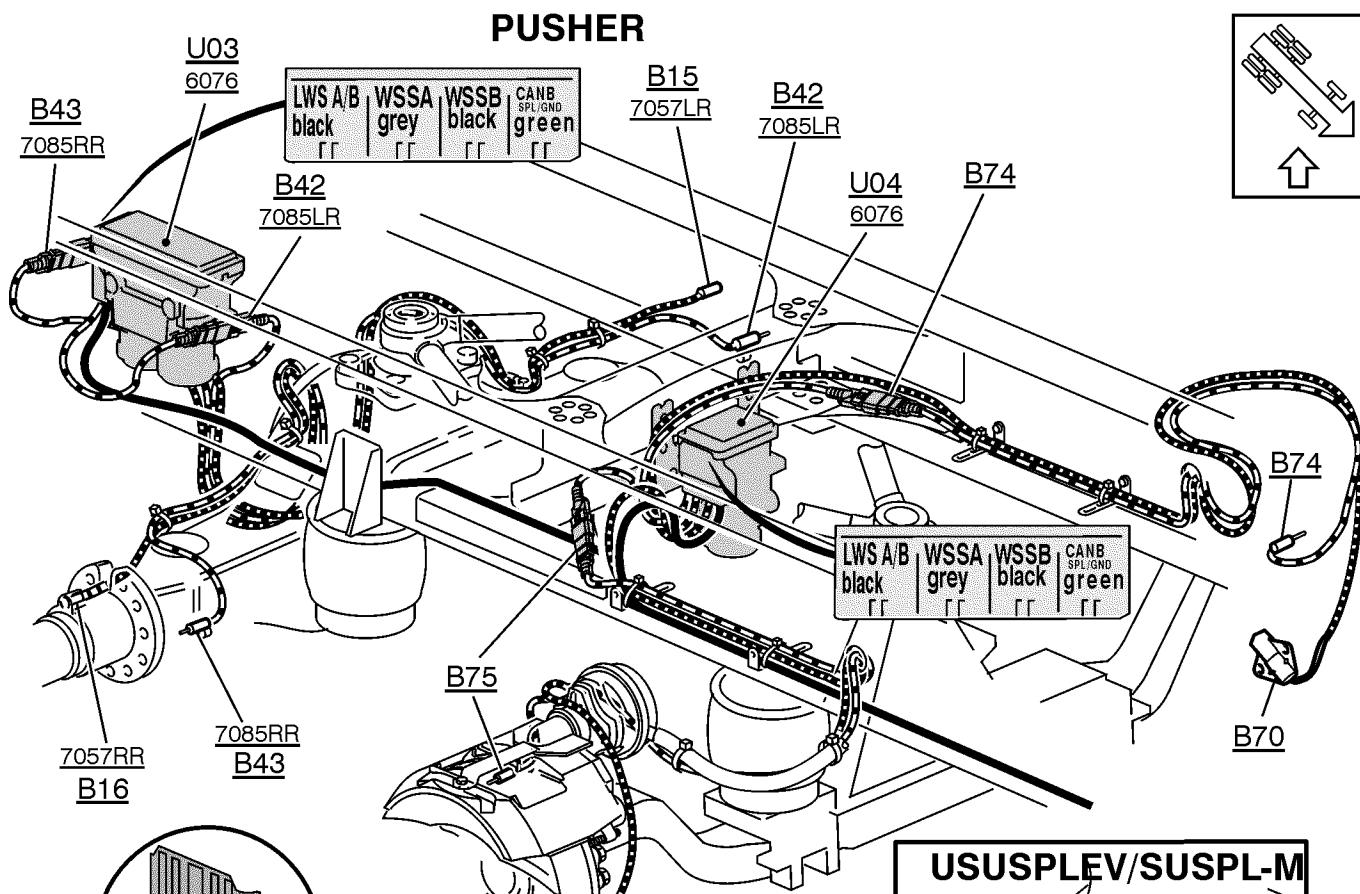
**STWPOS-L DRAWN  
STWPOS-R MIRROR IMAGE MOUNTED**

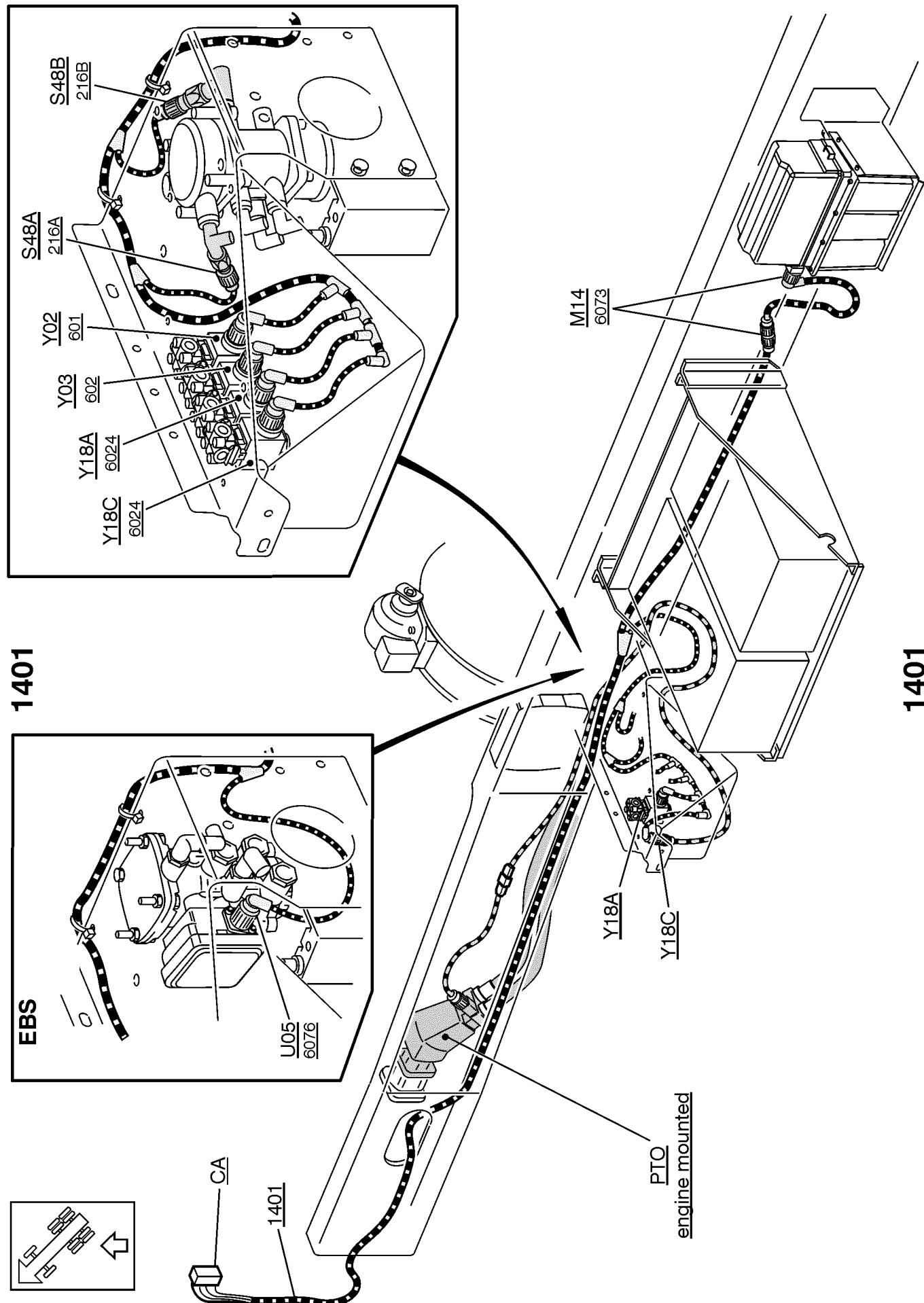


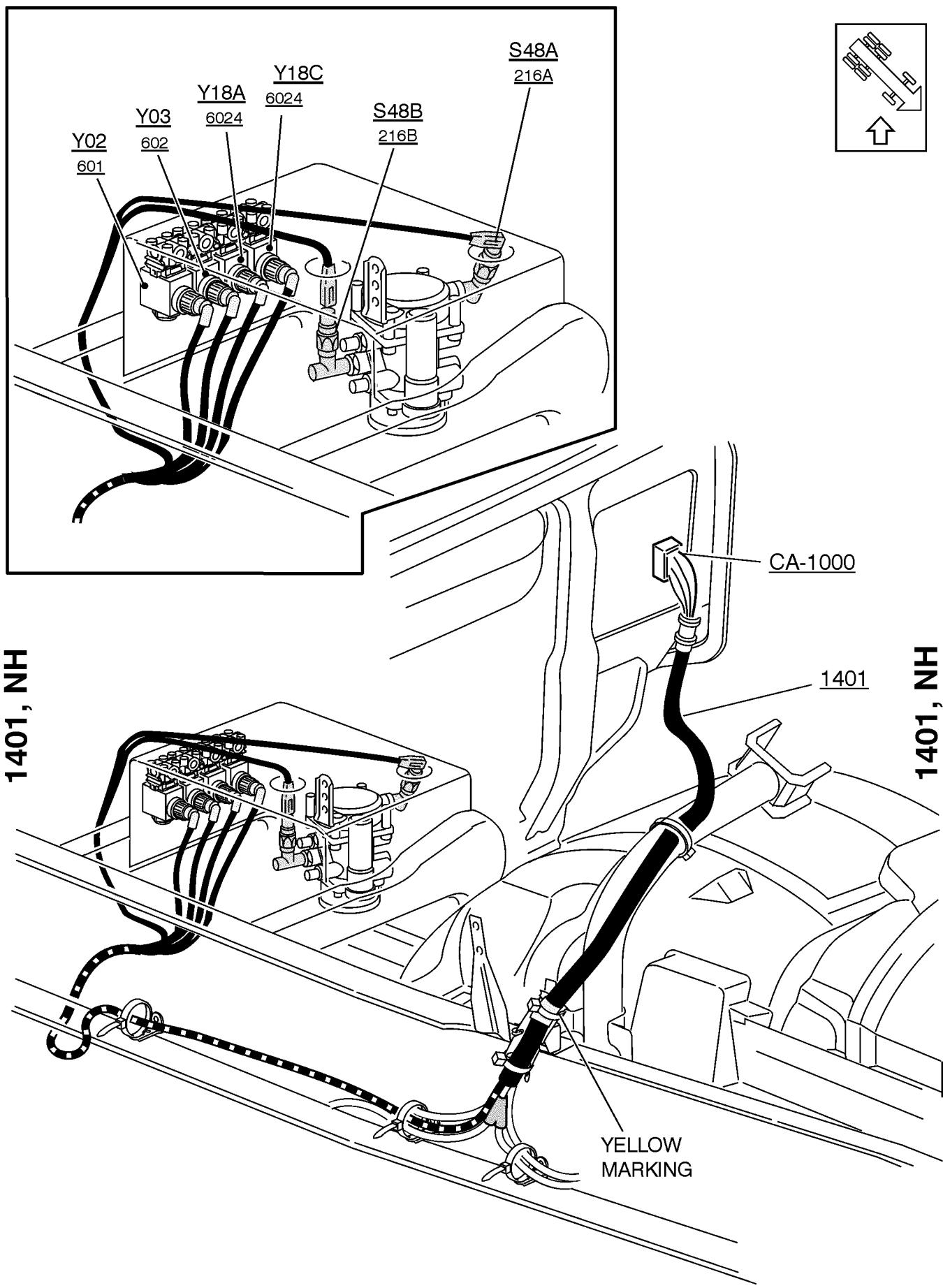
**1086 ABS**

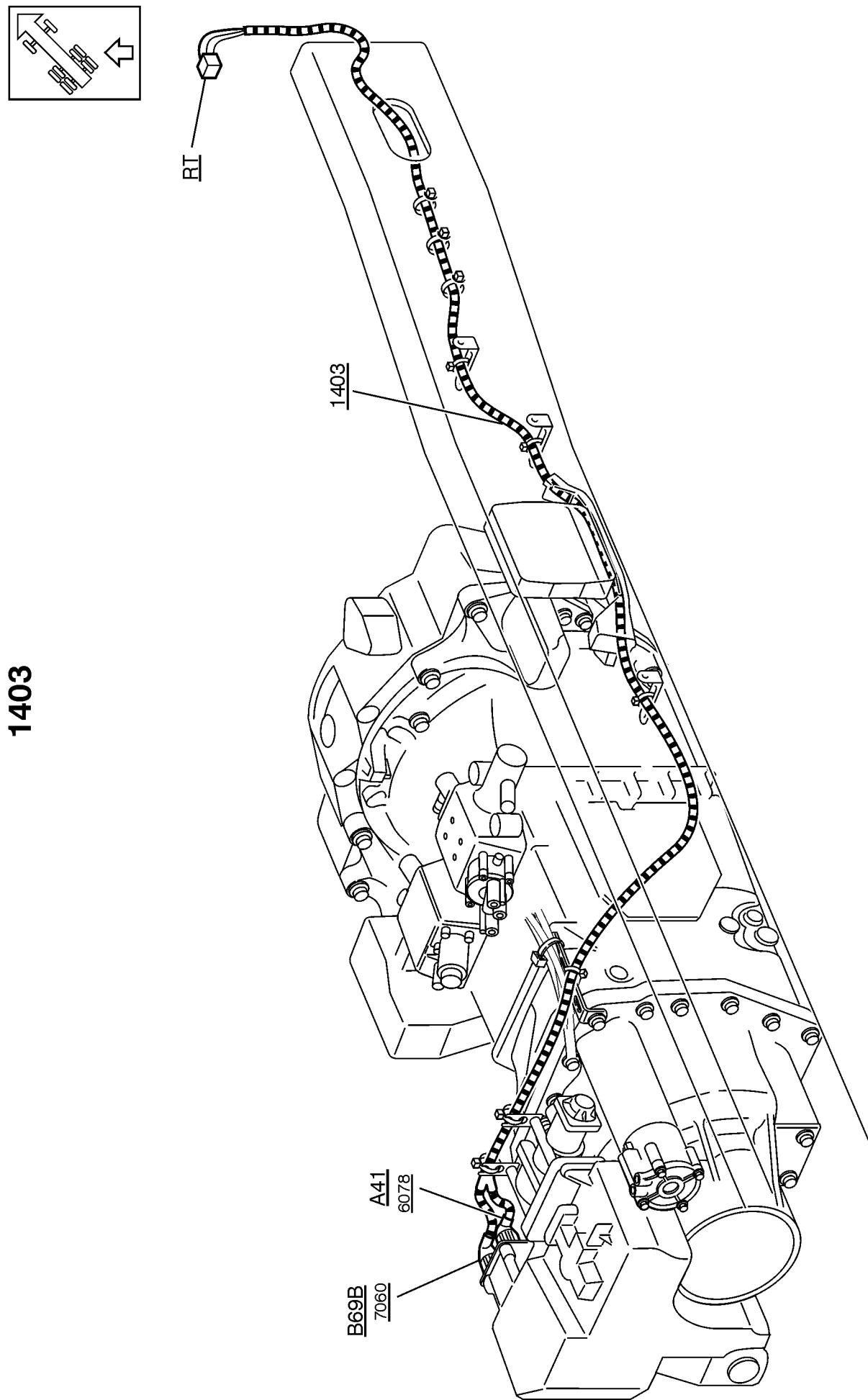


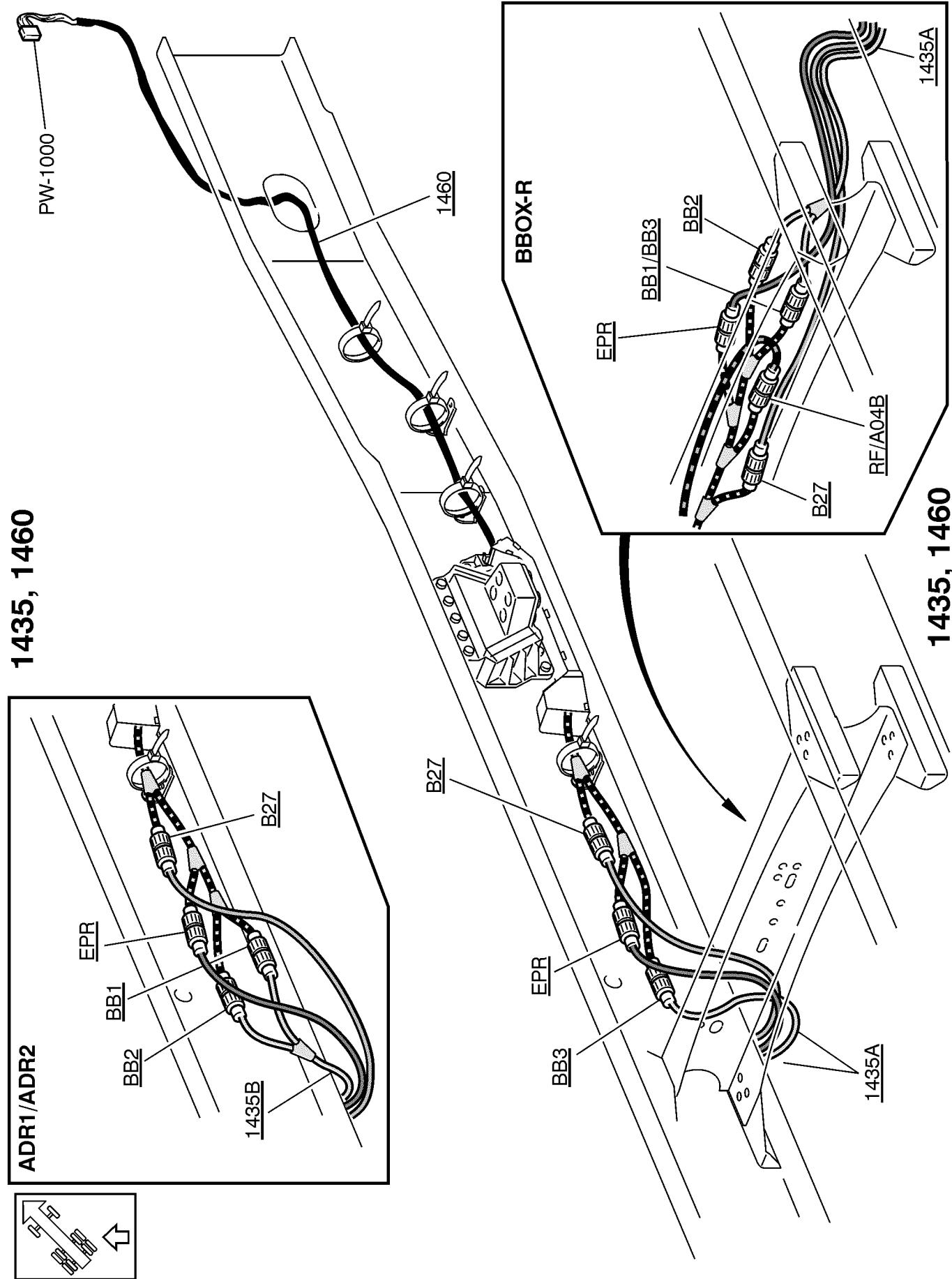


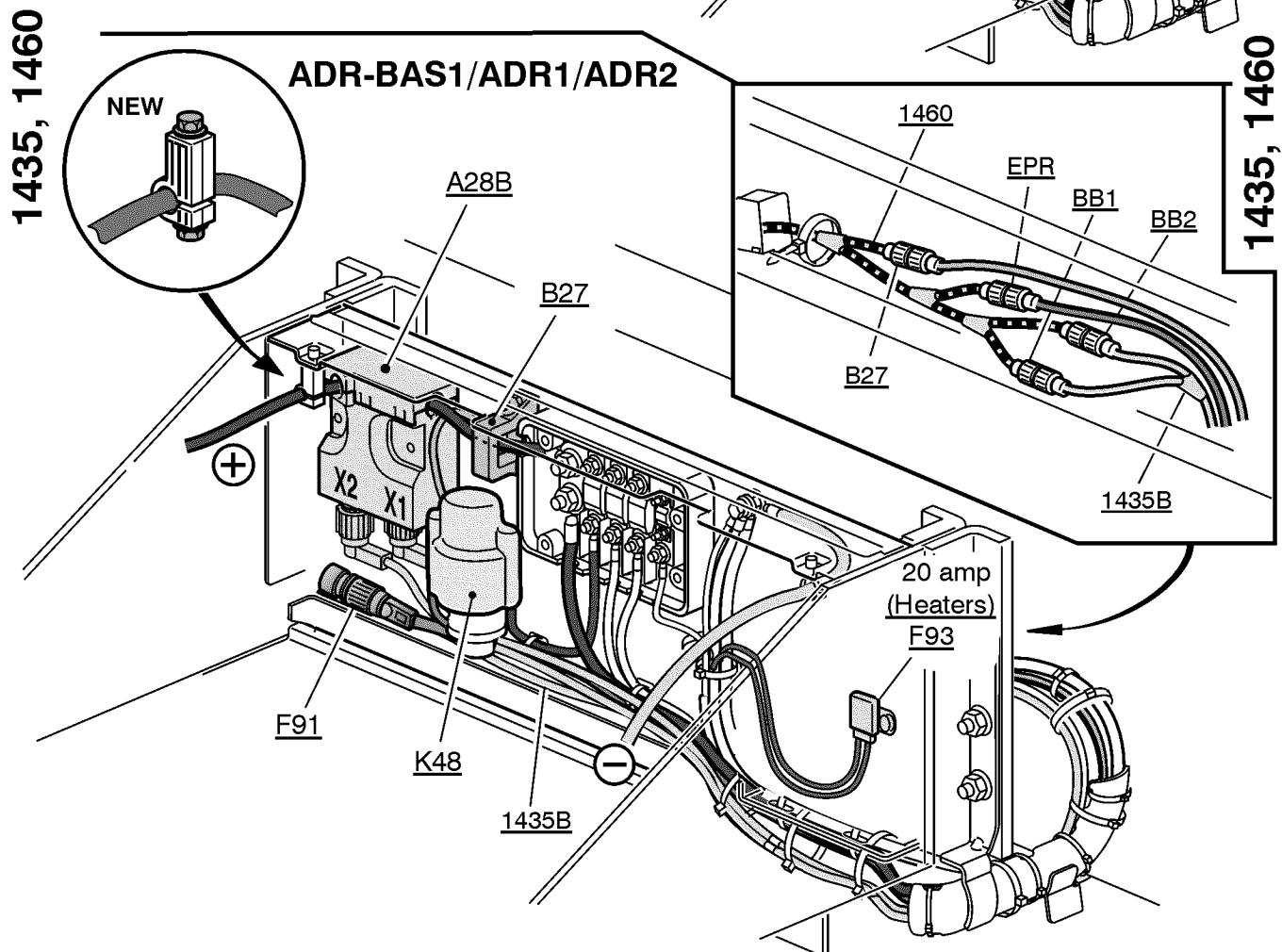
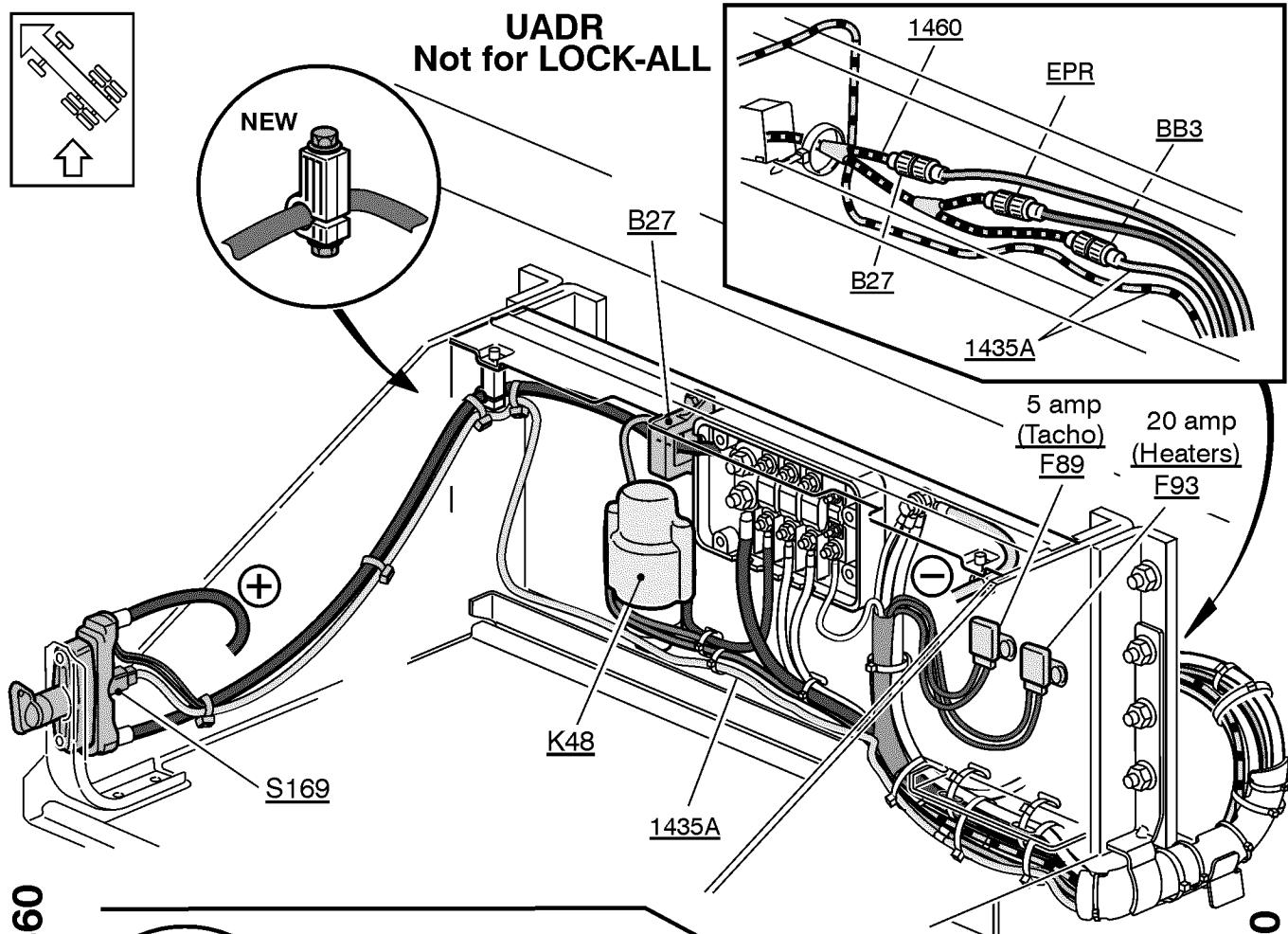


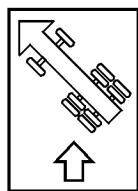
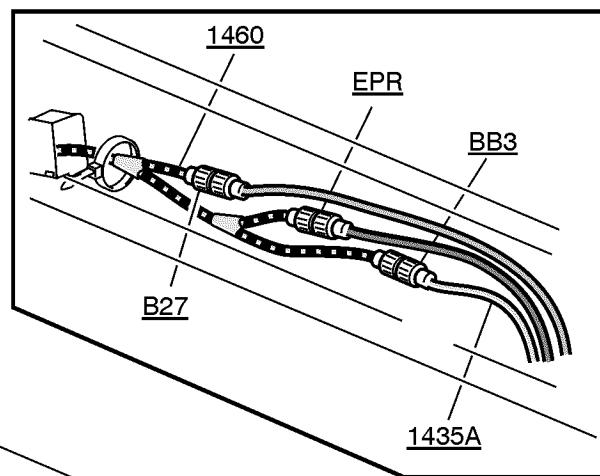
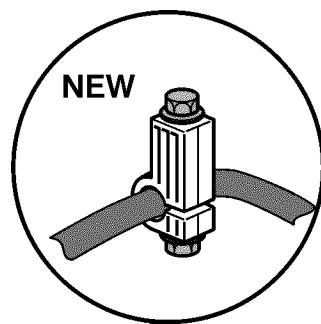
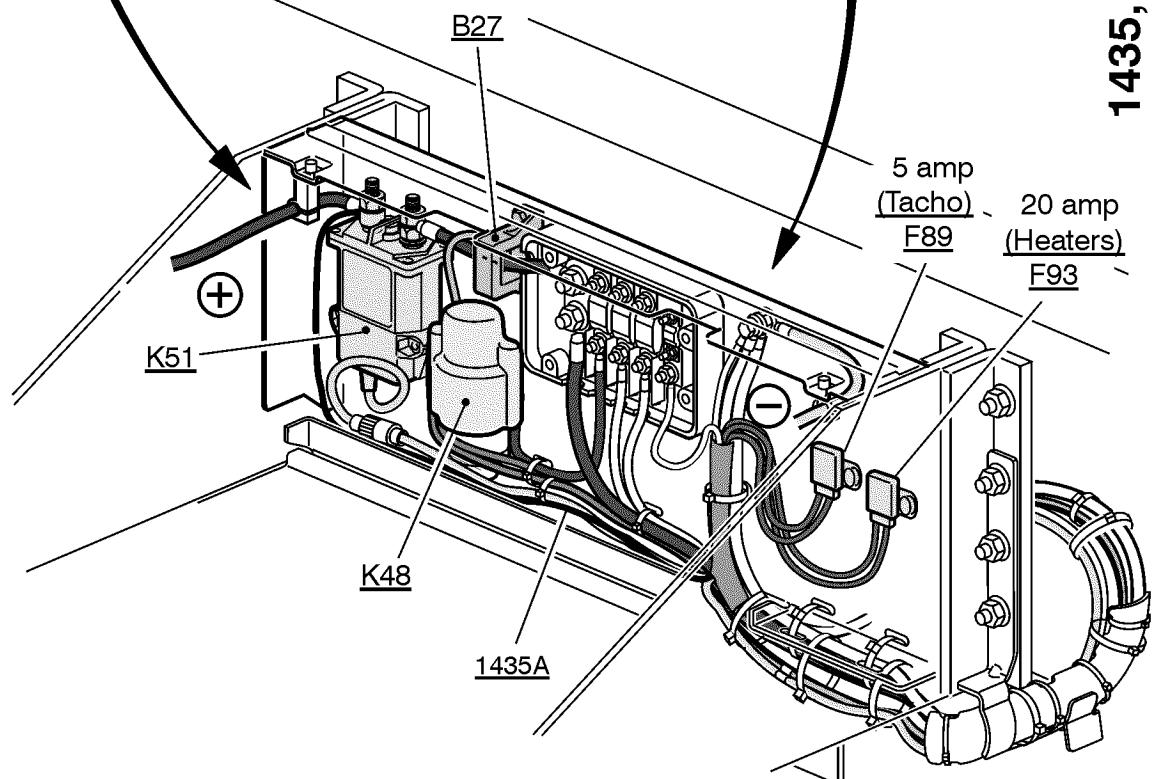


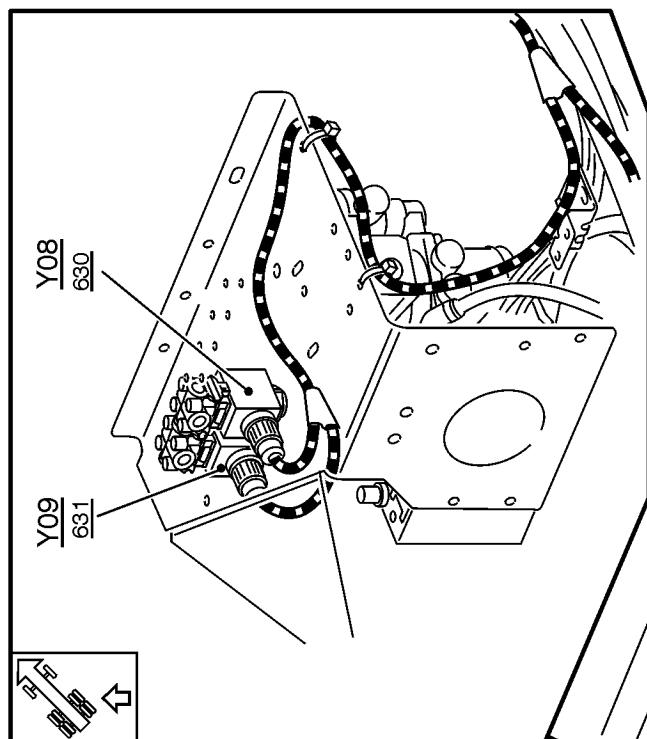
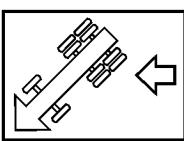




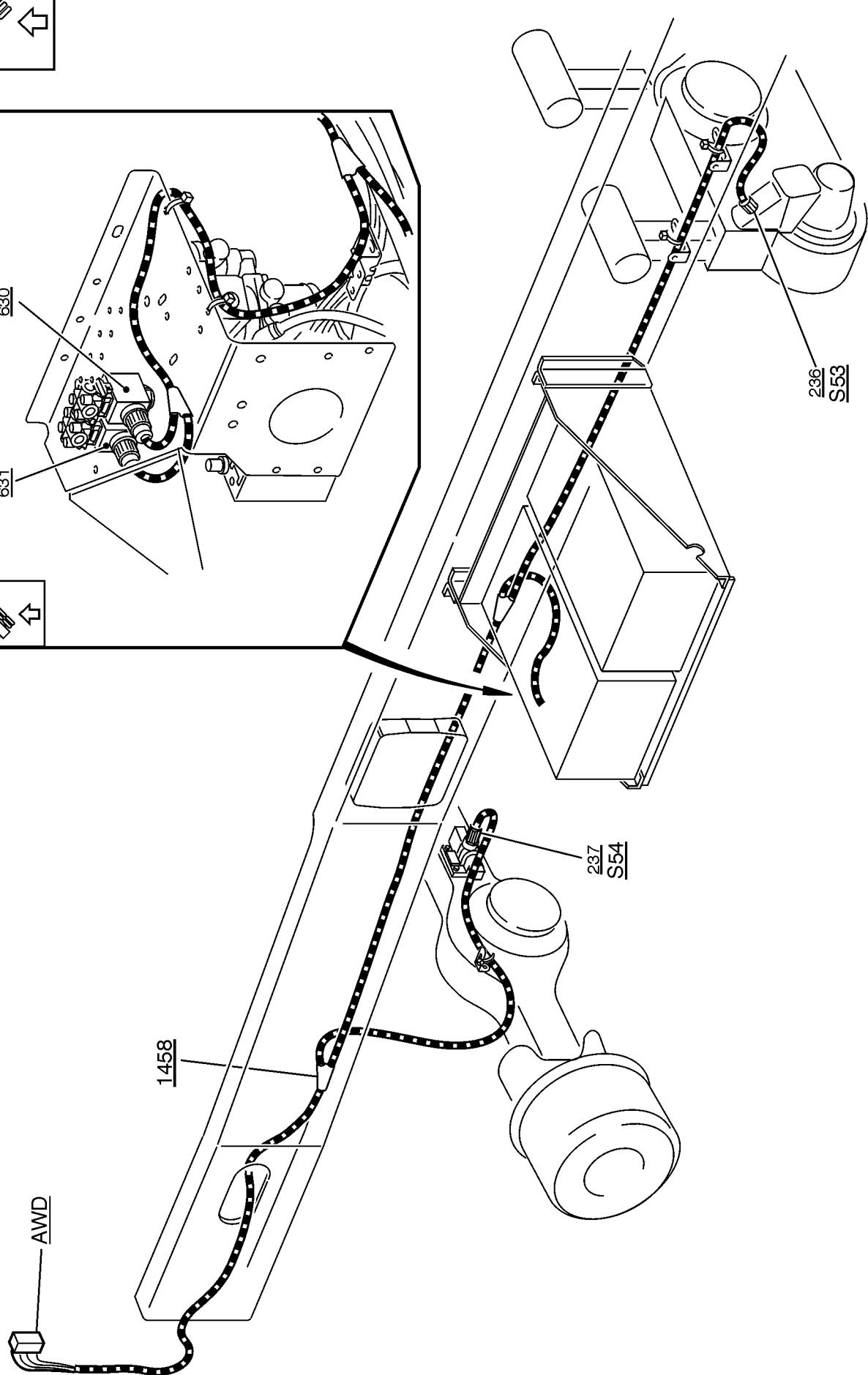




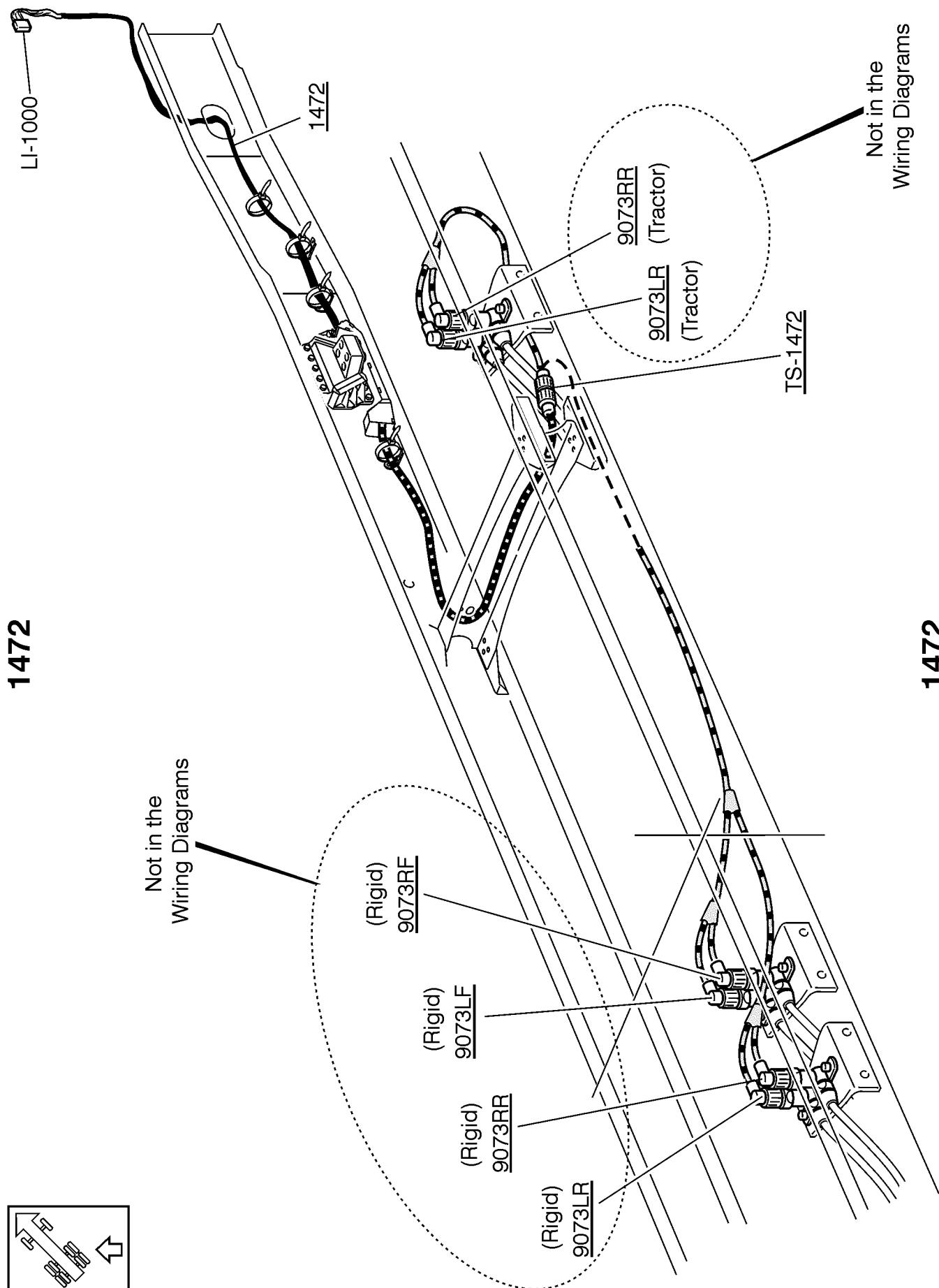
**MAINSWI, LOCK-ALL****1435, 1460****1435, 1460**



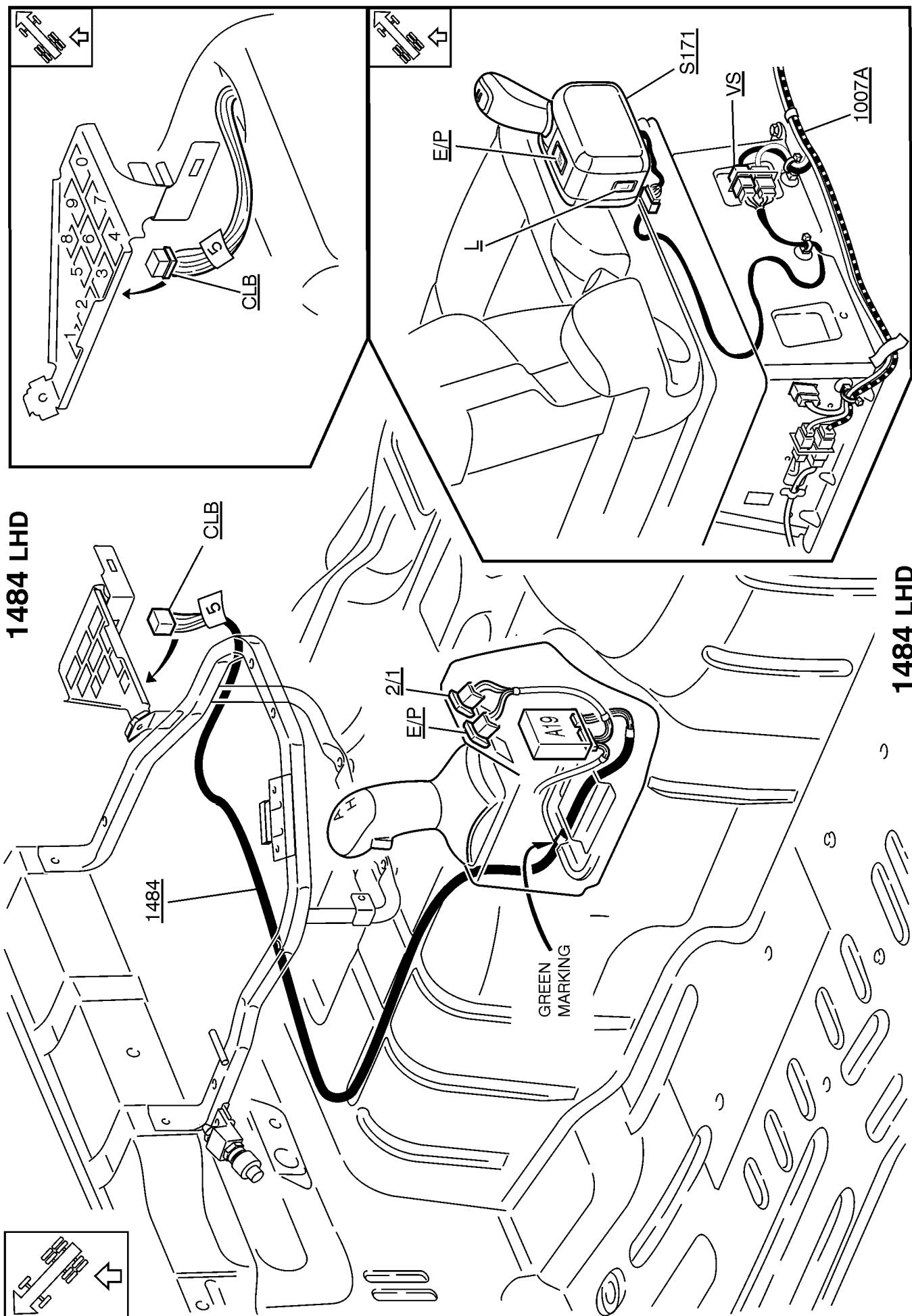
1458

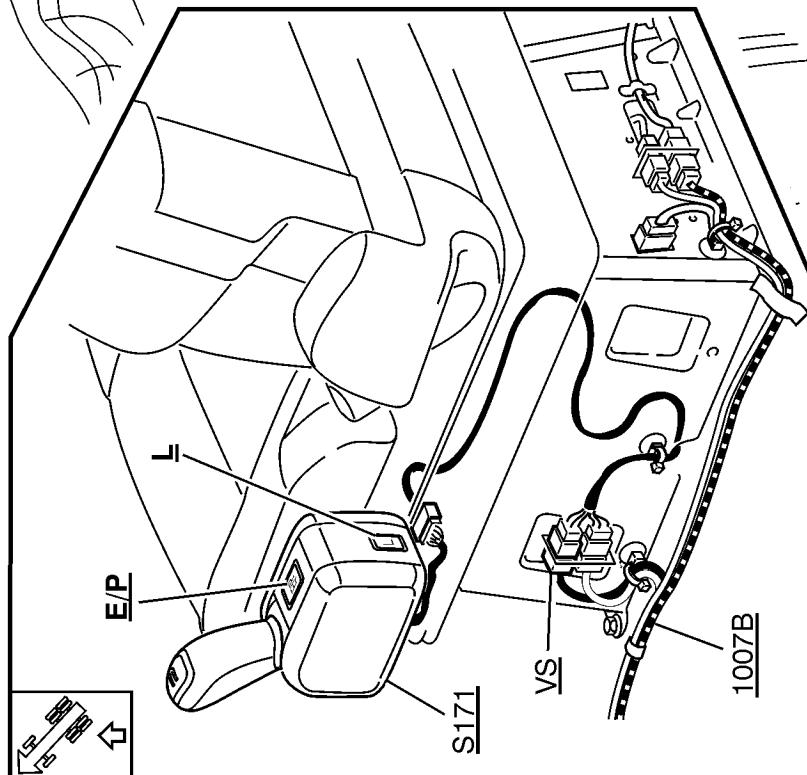
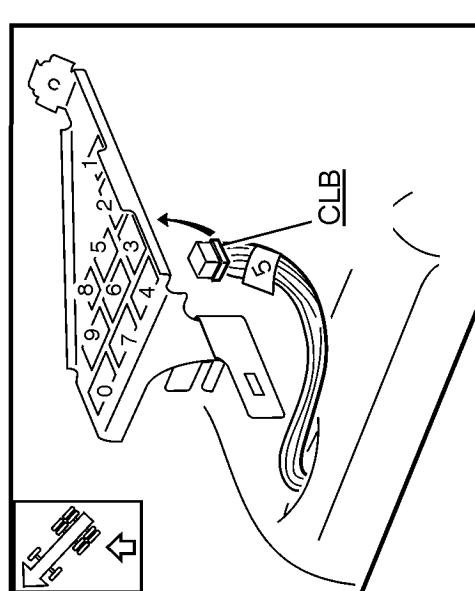
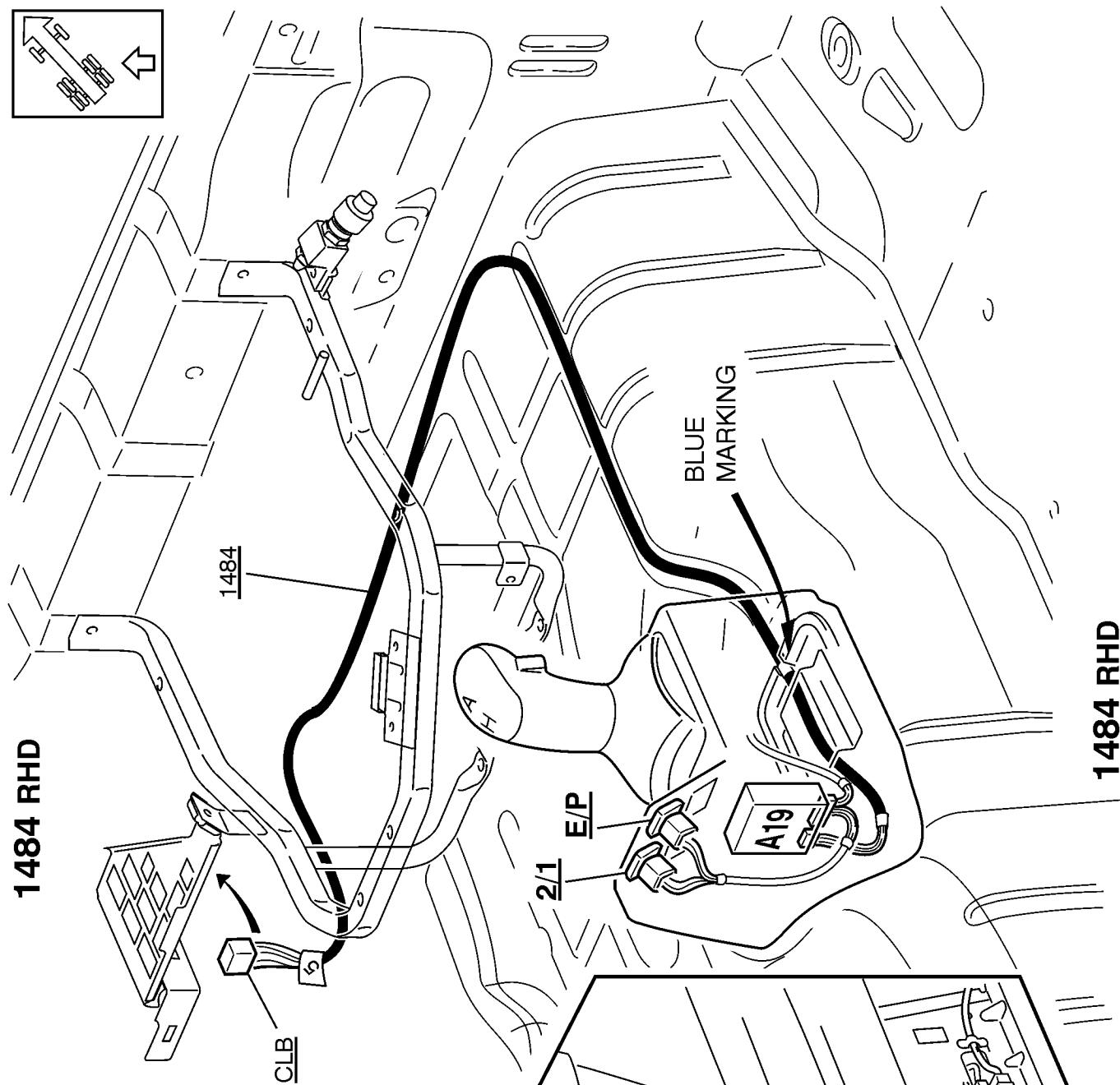


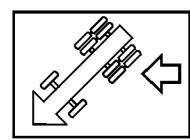
1458



T3016441

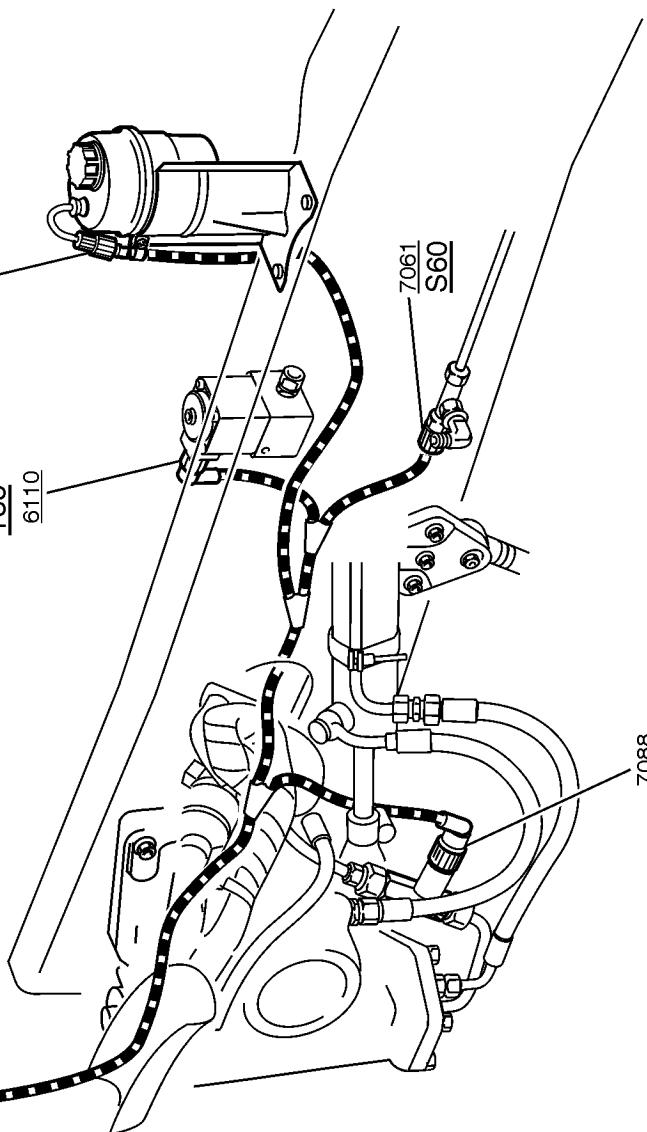






1493 LHD, RSTS-HY

PAS-1000

B10B  
763Y36  
61107061  
S607088  
S70A

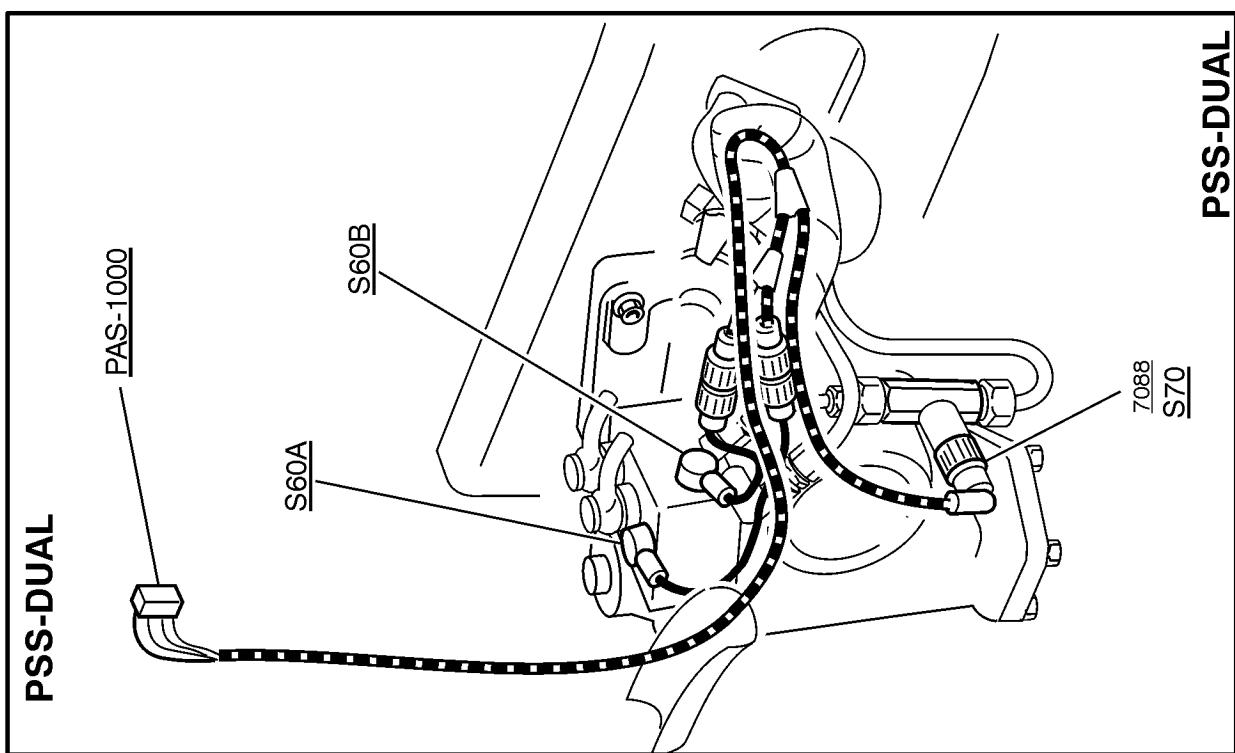
1493 LHD, RSTS-HY

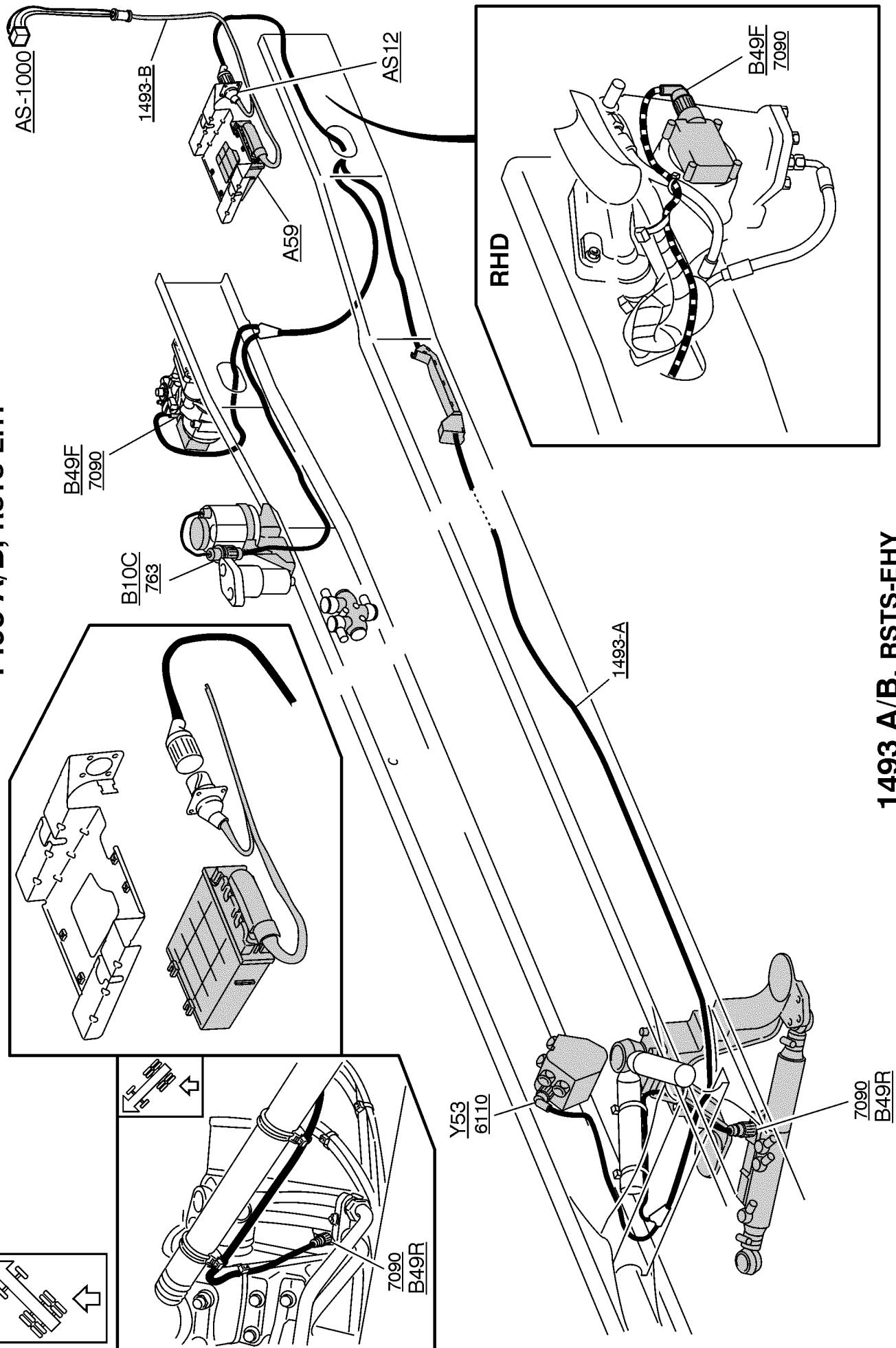
PSS-DUAL

PAS-1000

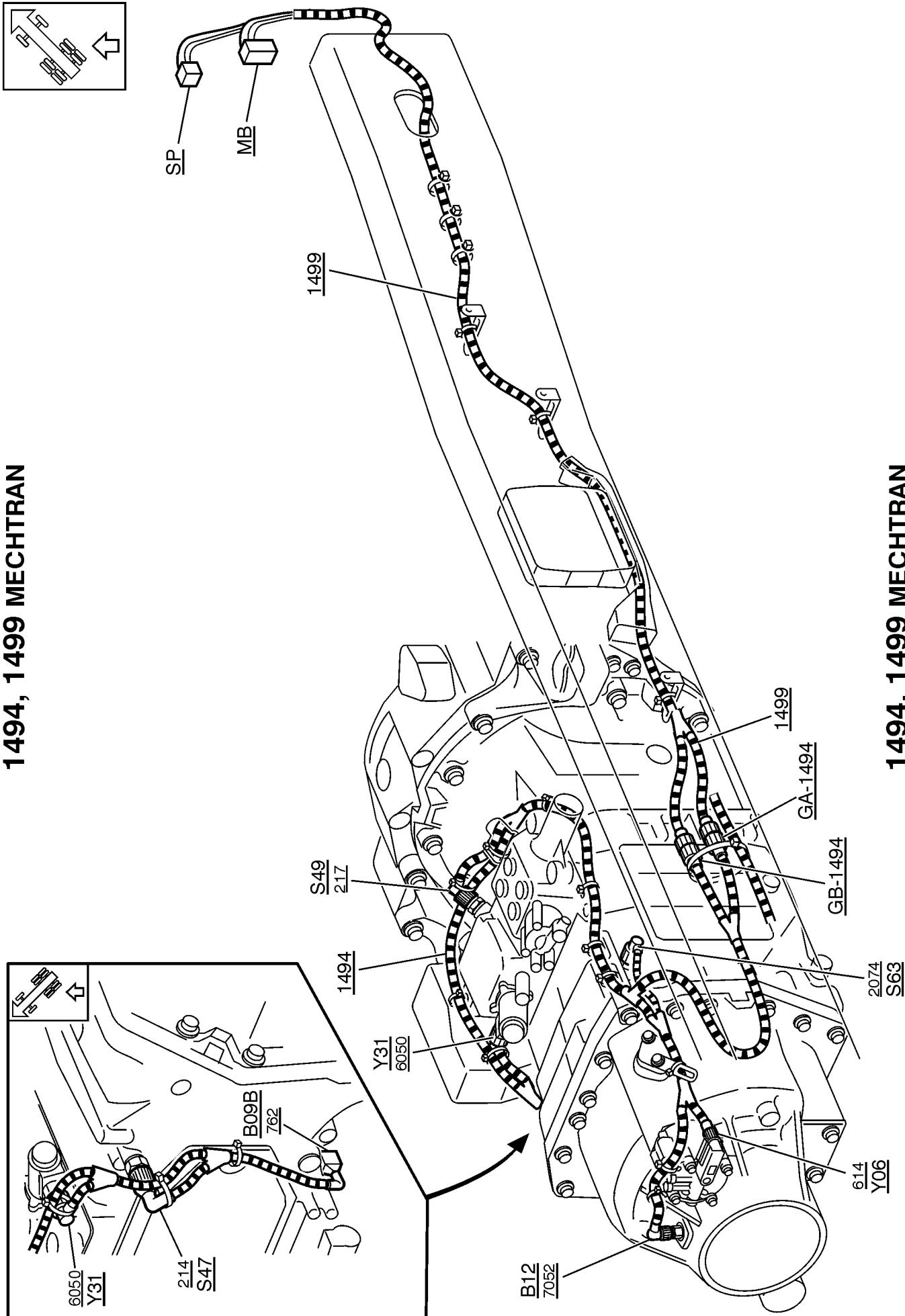
S60B

S60A

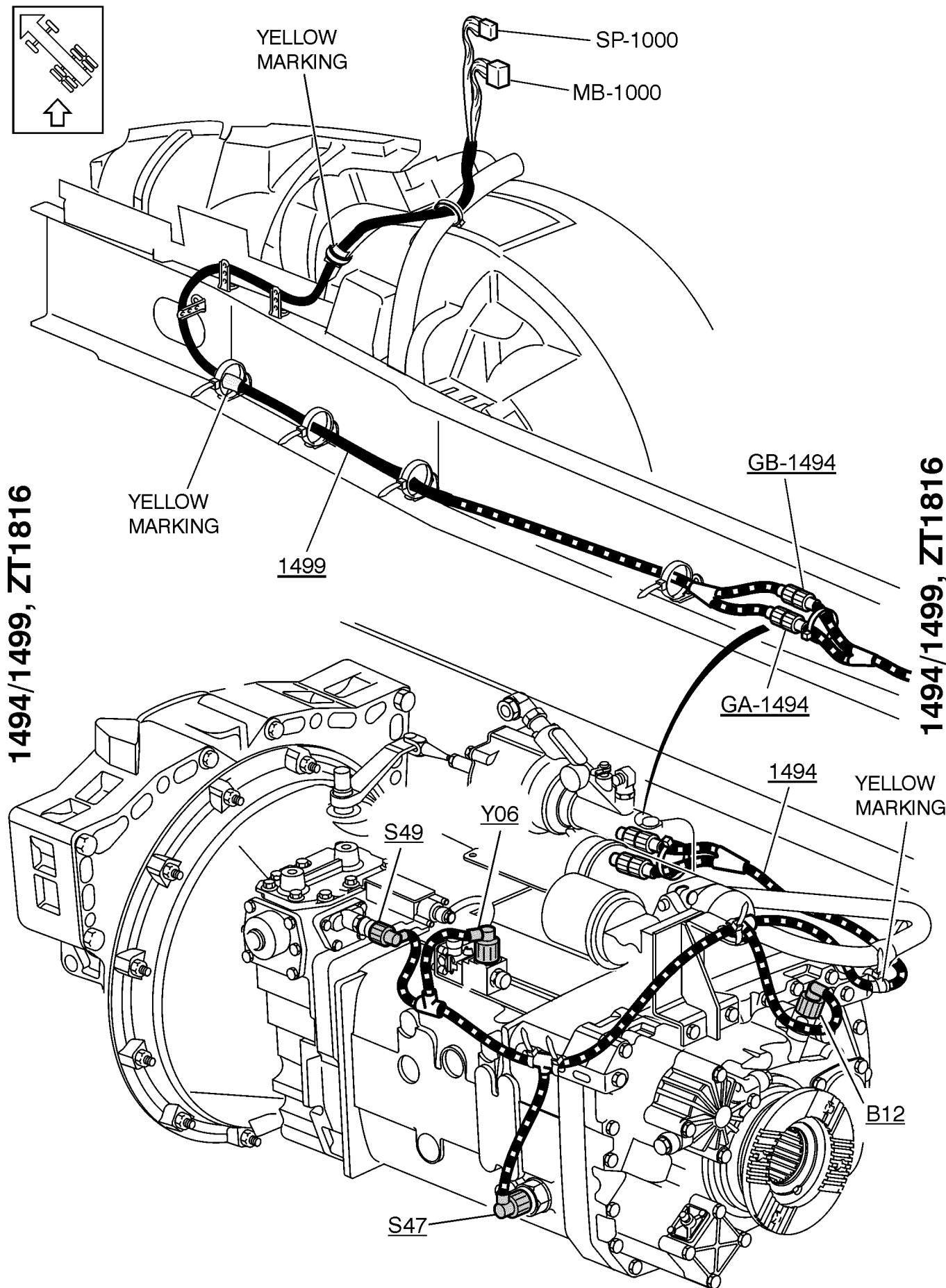
7088  
S70

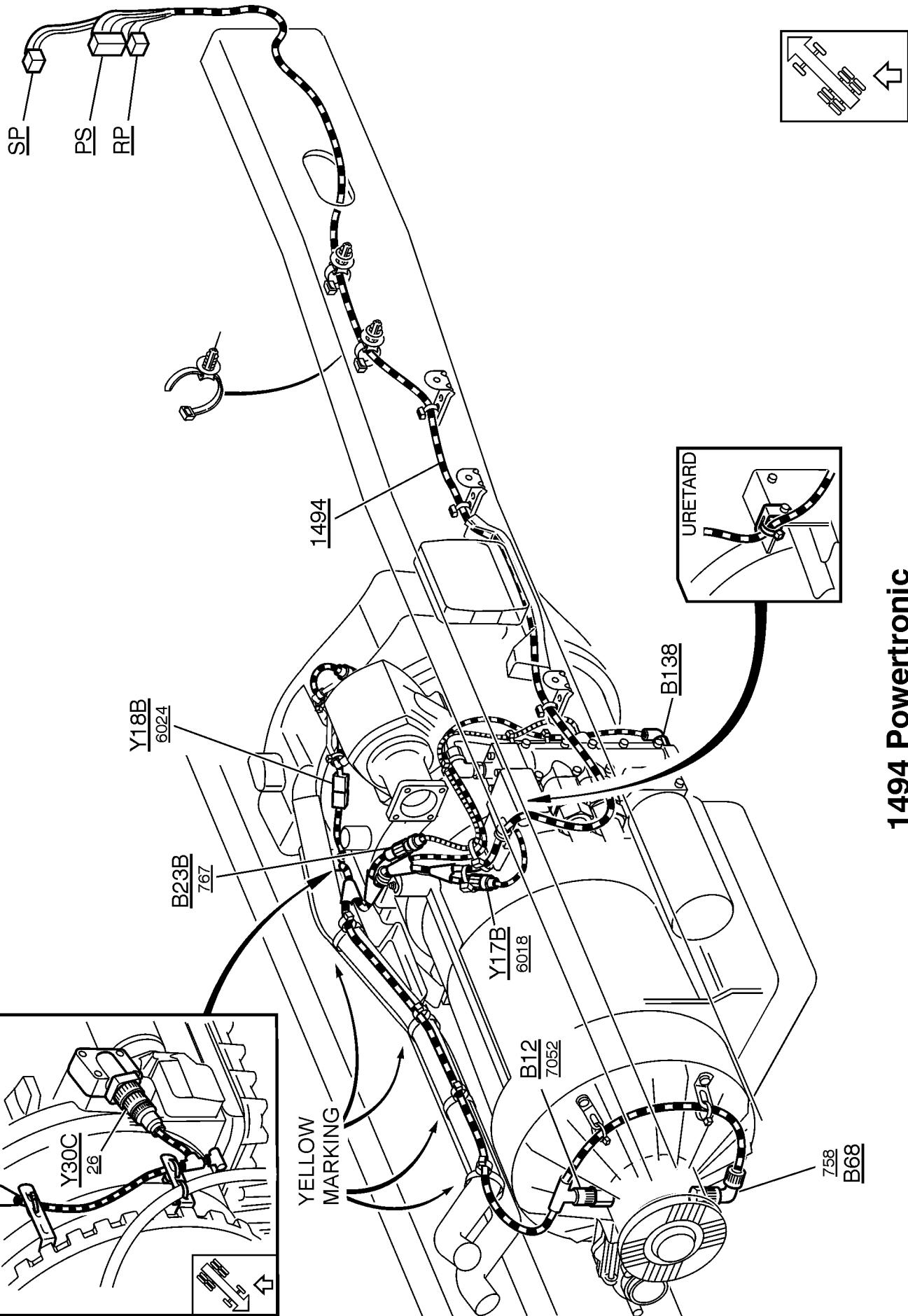
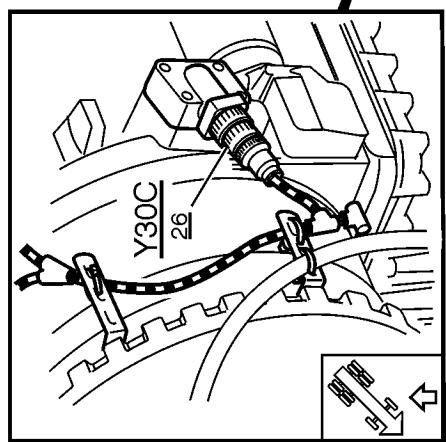
**1493 A/B, RSTS-EHY**

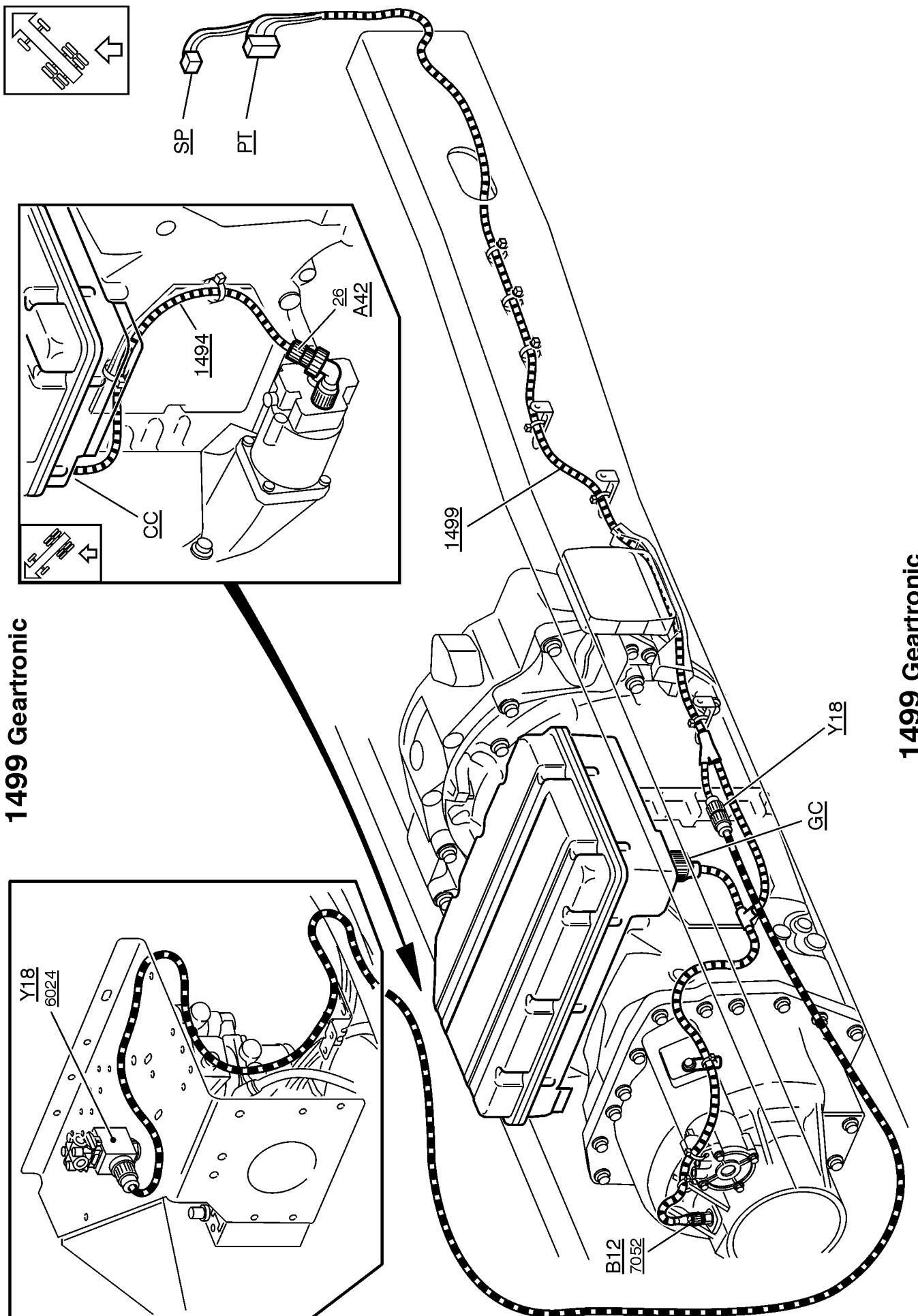
1494, 1499 MECHTRAN

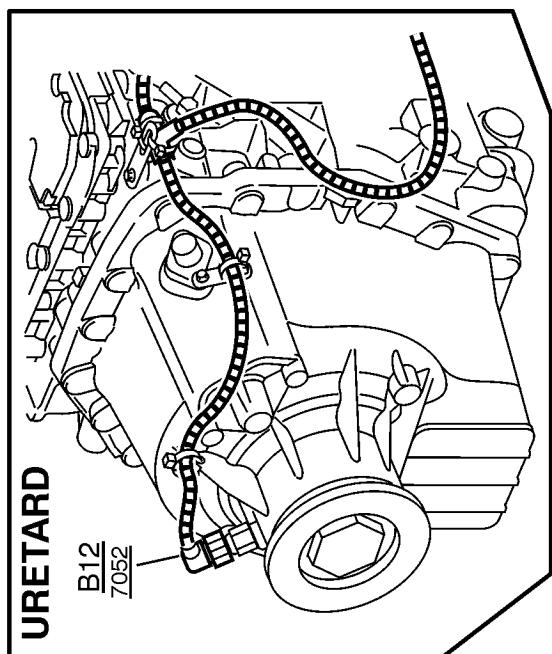
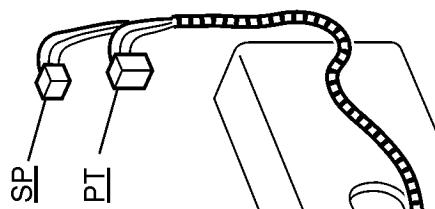
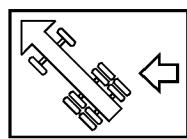


1494, 1499 MECHTRAN

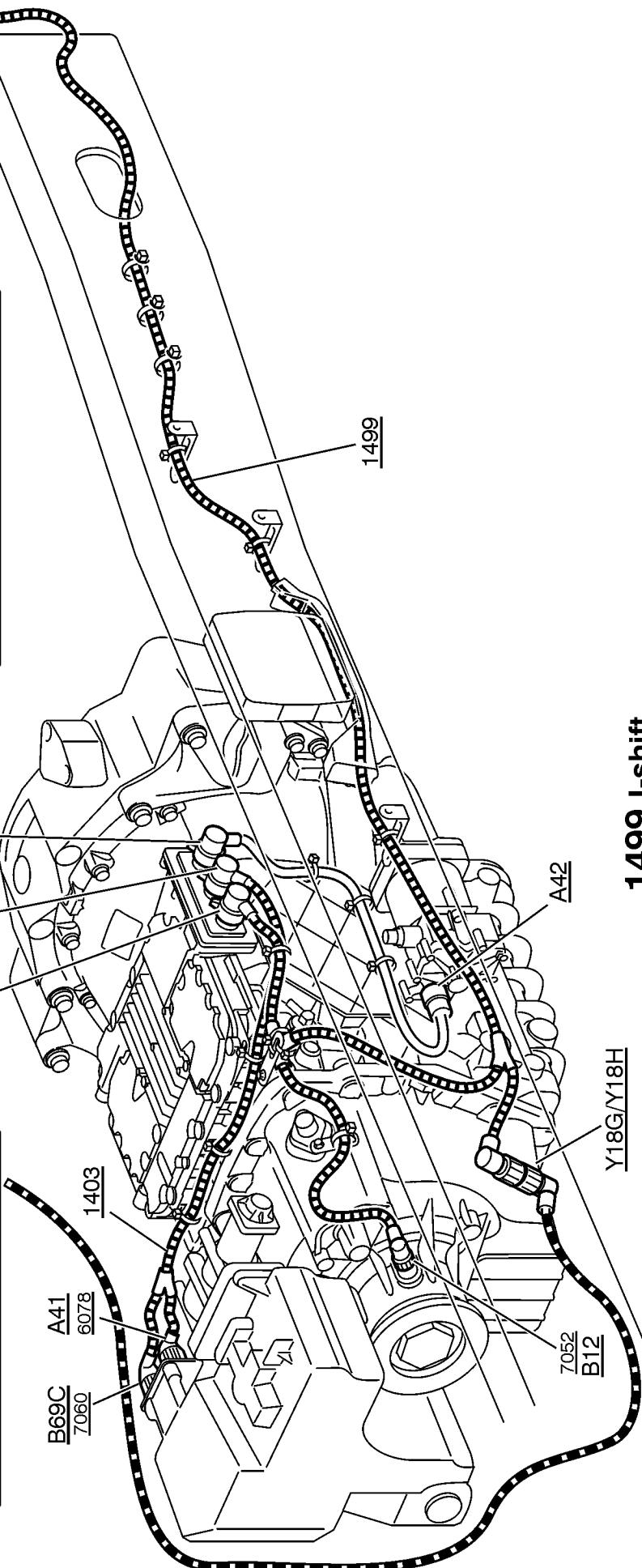
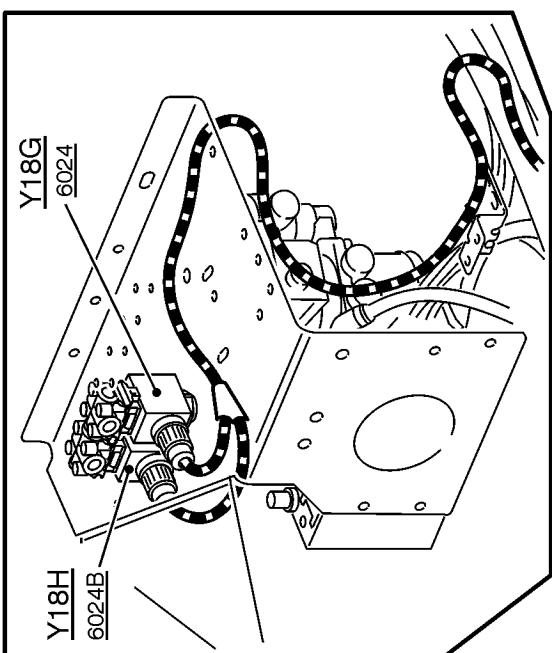


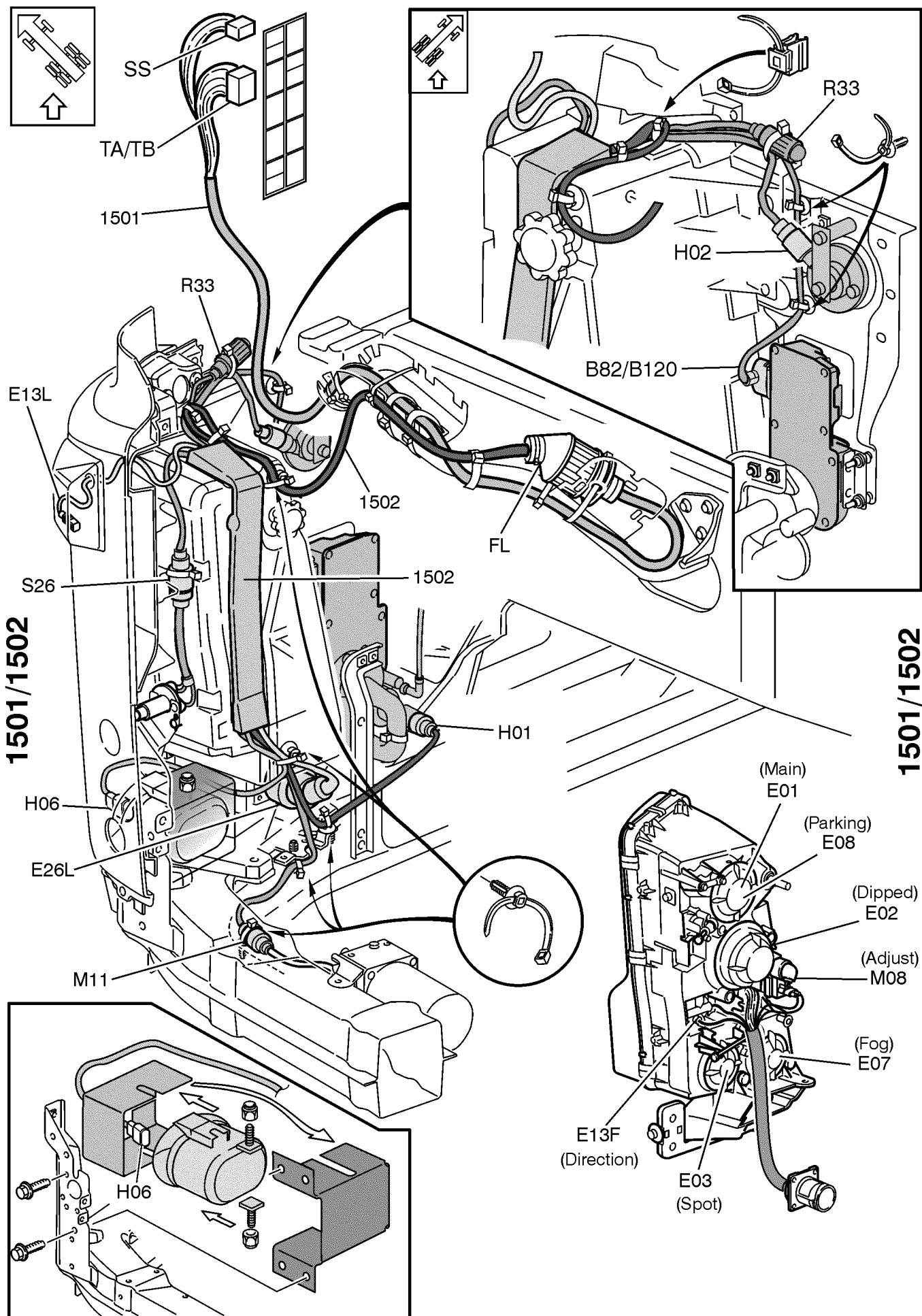
**1494 Powertronic****1494 Powertronic**

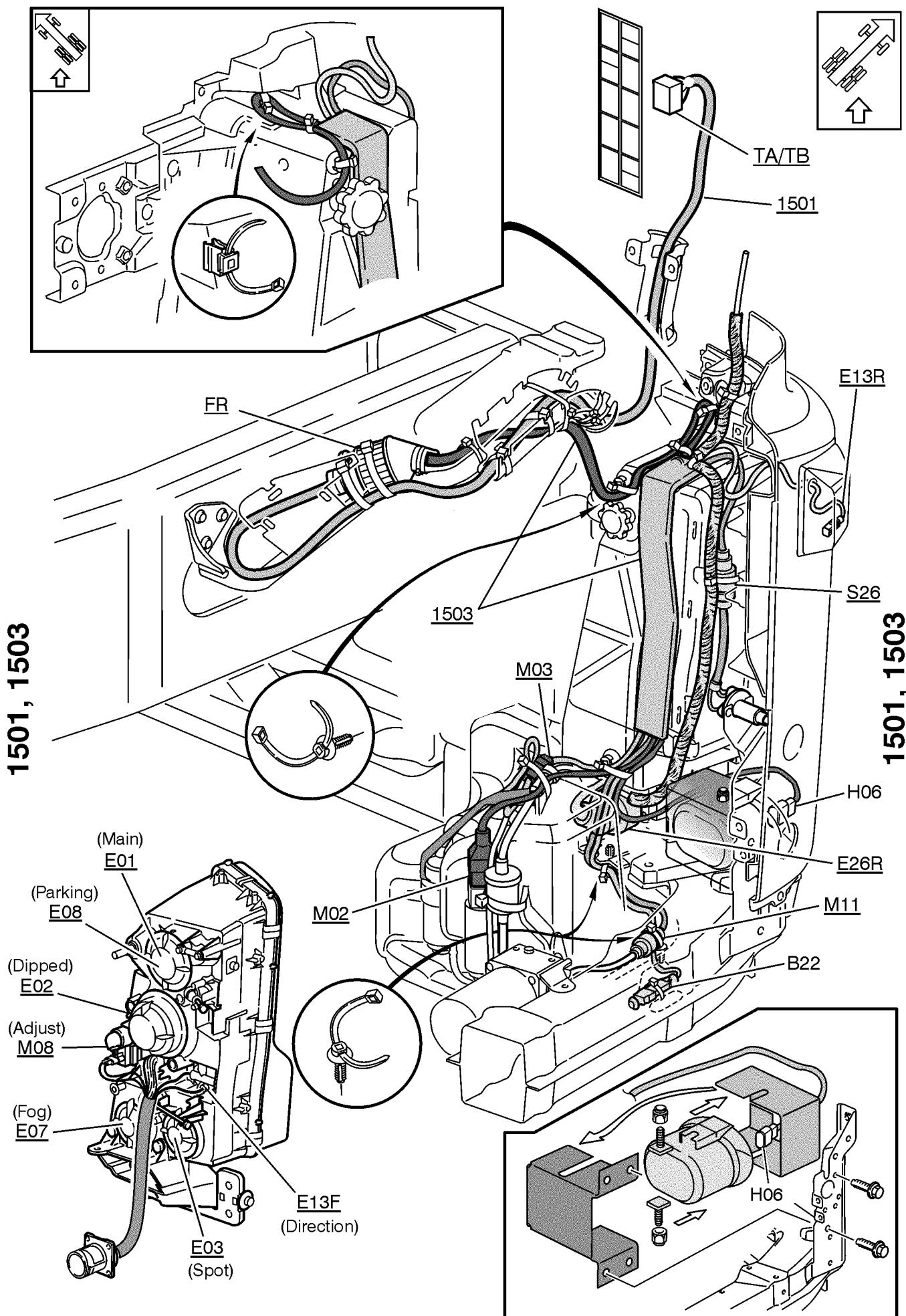


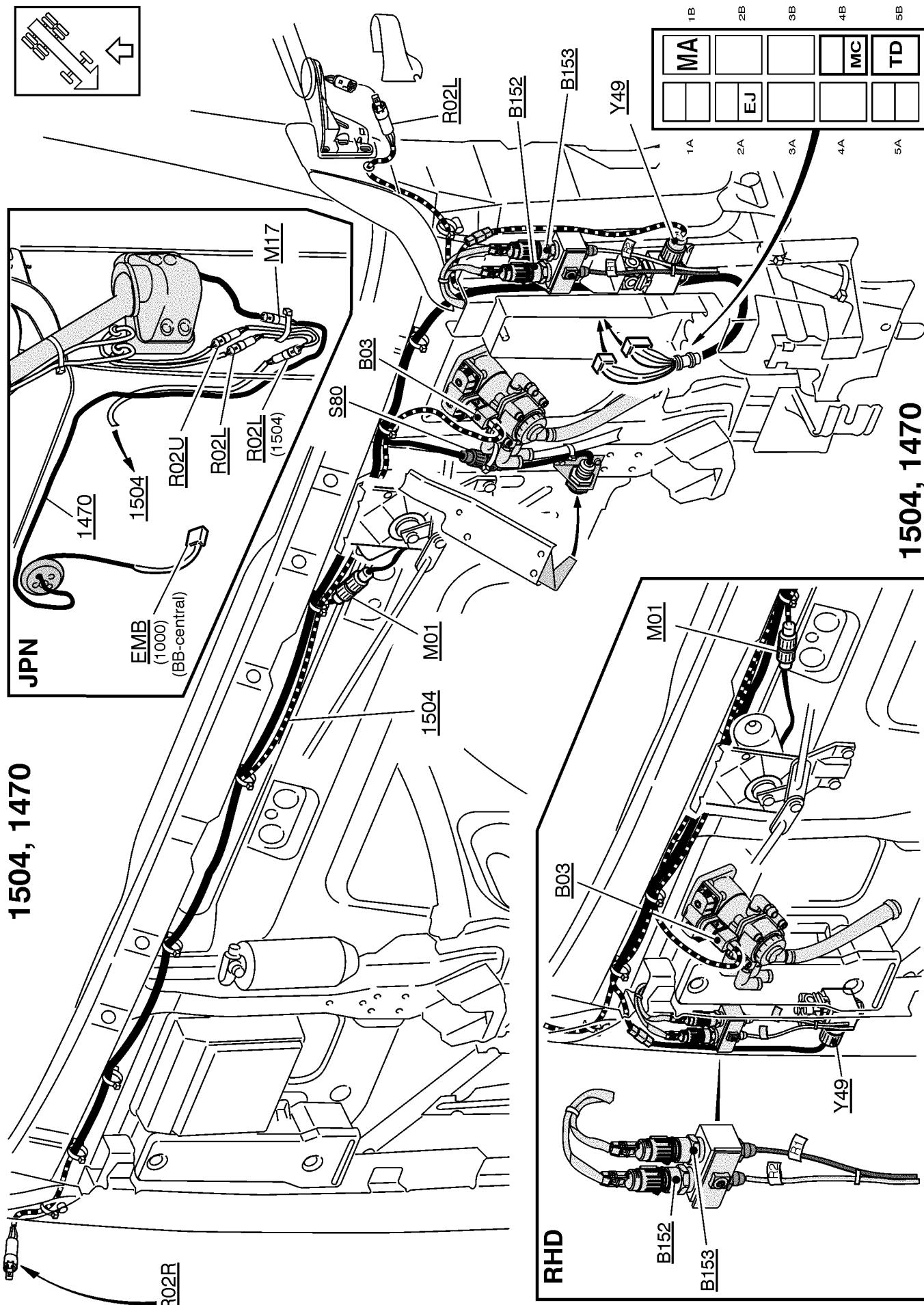


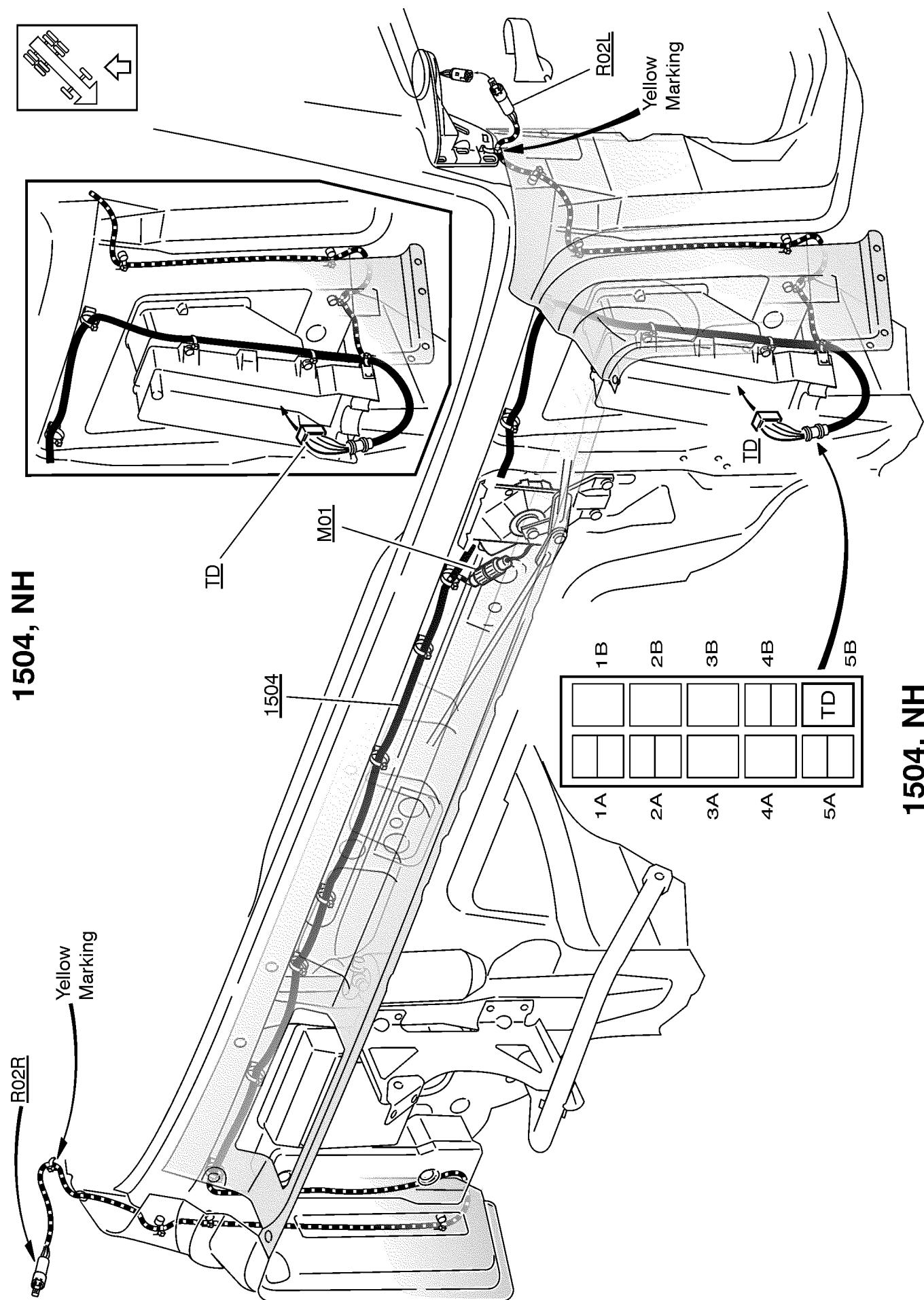
1499 I-shift

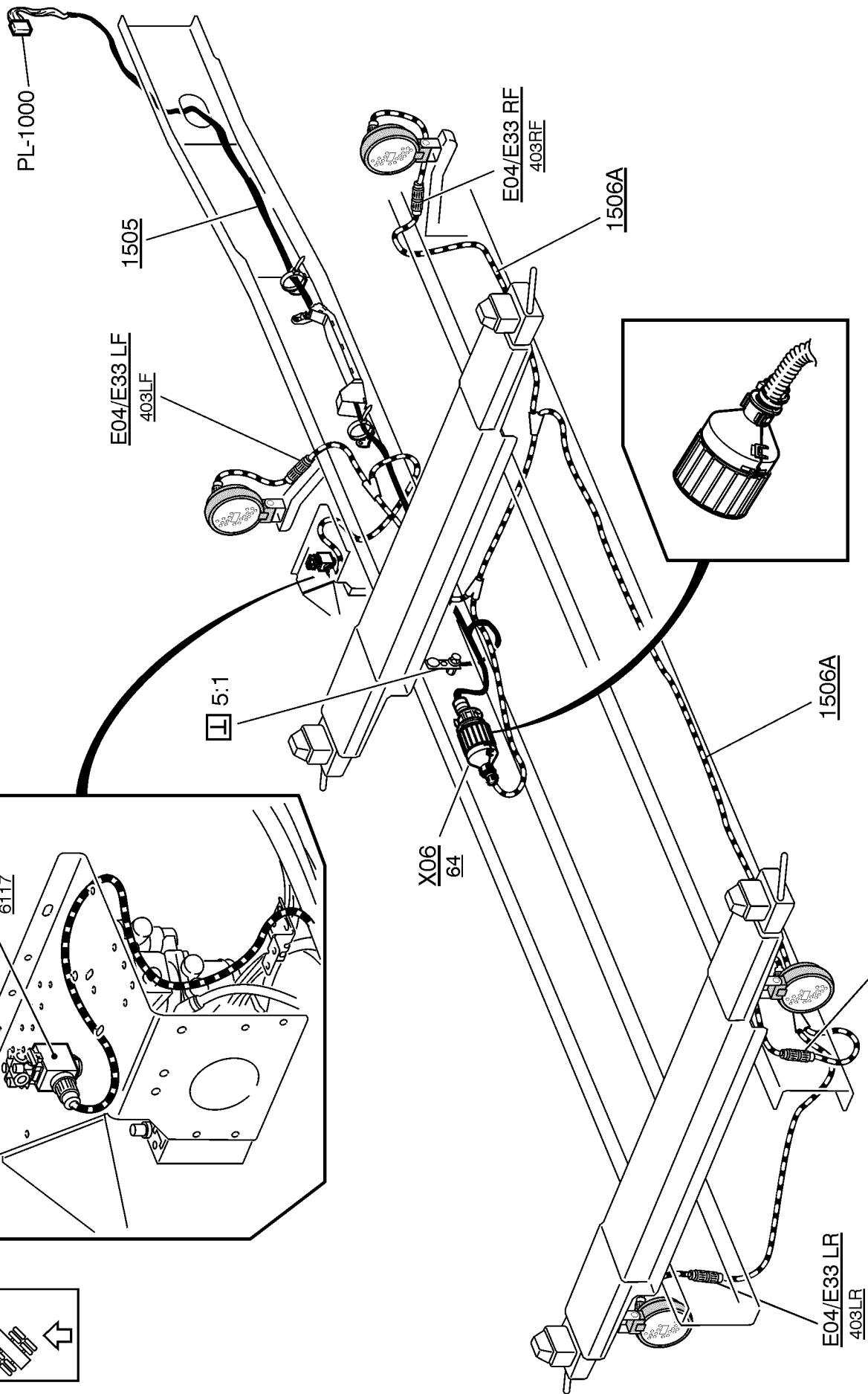
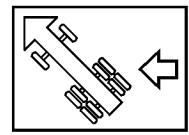
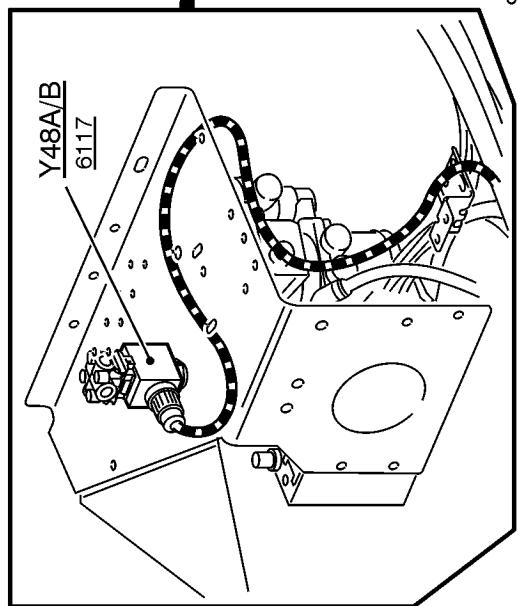


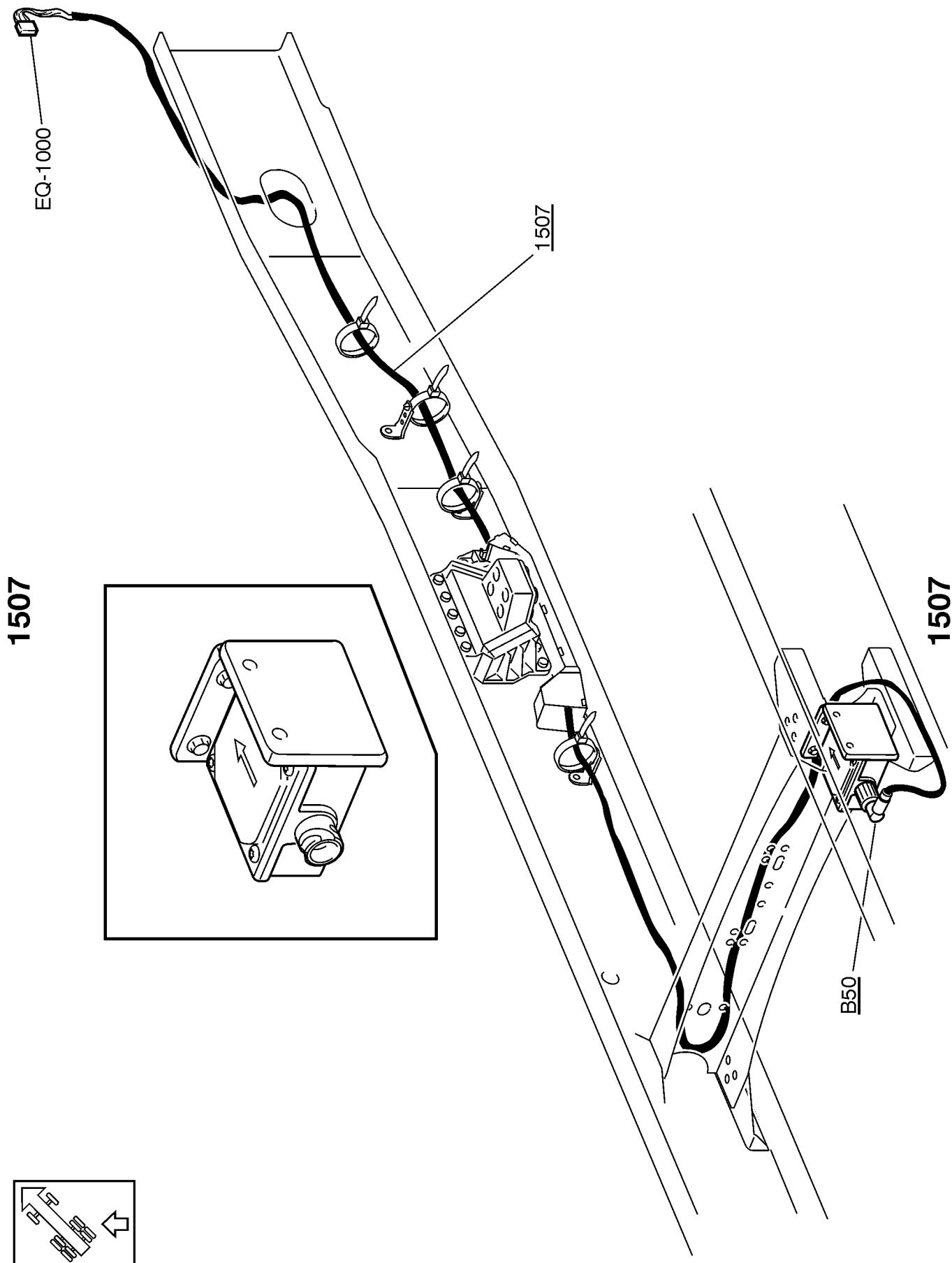


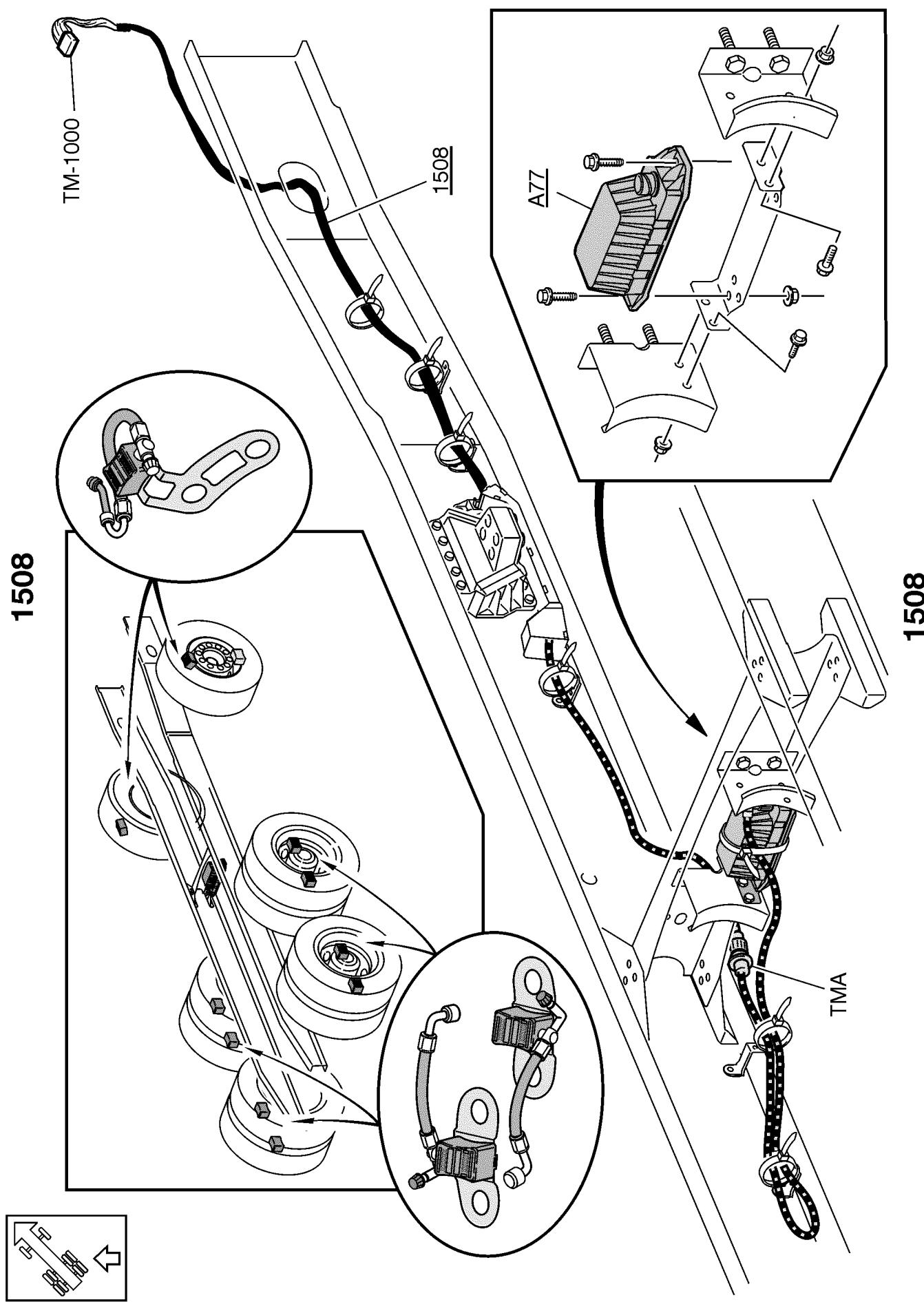






**1505/1506A**



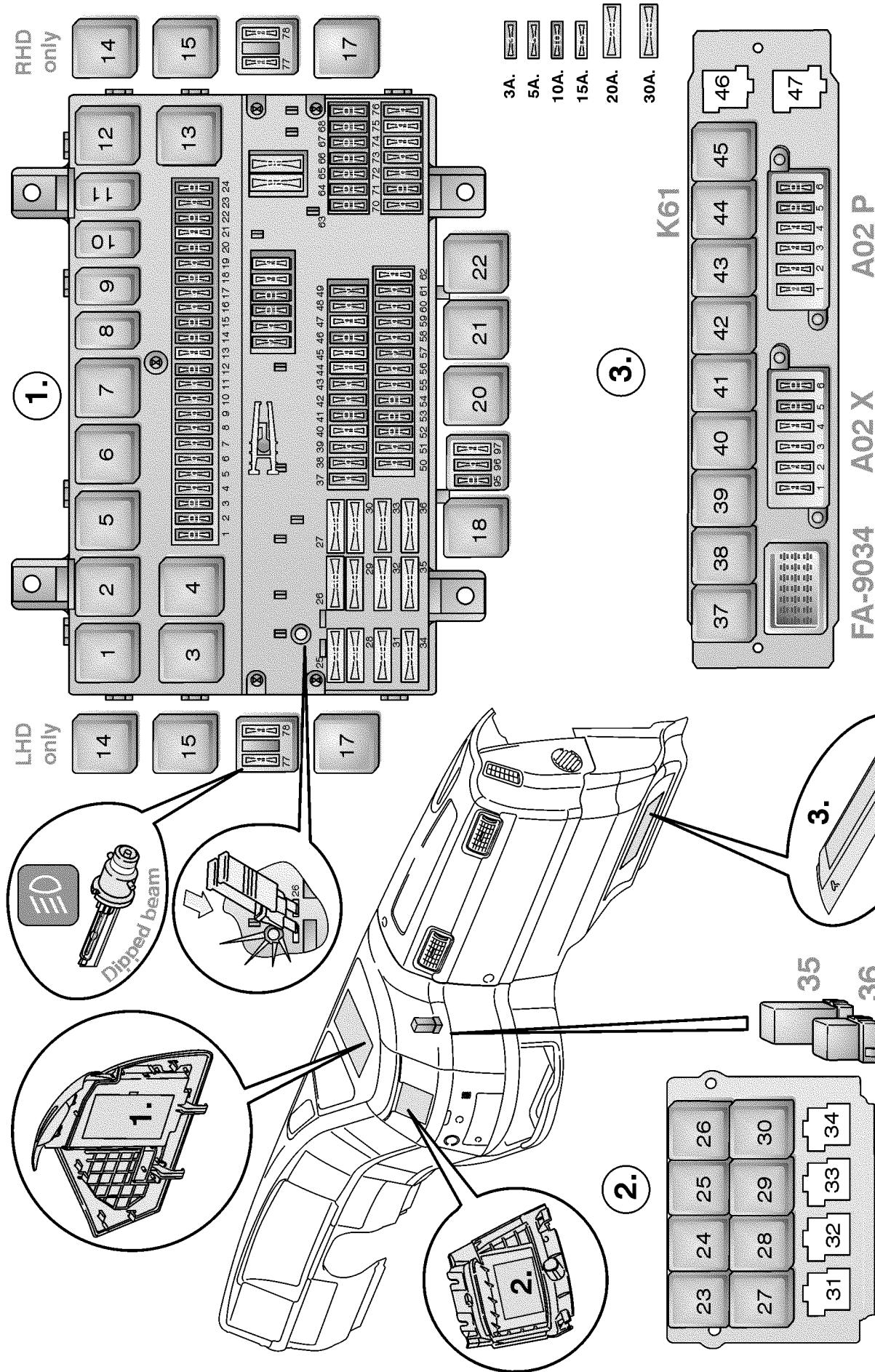


## Fuses

|     |  |                          |     |  |                          |
|-----|--|--------------------------|-----|--|--------------------------|
| F1  | TPM (Tyre pressure Monitoring)   | (OA:2 A)                 | F33 | EI. cab tilt .....   | (KA:0 A)                 |
| F2  | Luggage compartment illumination .....                                 | (IH:4 A)                 | F35 | EI. adjustable seat .....  | (IA:2 A)                 |
| F3  | Loadlight, 5:th wheel lamp ...   | (KE:0 A)                 | F36 | Reverse lamp circuit trailer .....                                 | (GB:4 D)                 |
| F4  | Key switch, radiopos. ....   | (AC:3 D)                 | F37 | Dynafleet .....  | (AC:3 C)                 |
| F5  | Instrumentation, (kl.30) .....   | (BI:3 A)                 | F38 | Instep lamps .....   | (AC:3 B)                 |
| F6  | Air dryer .....  | (BA:1 B)                 | F39 | EI. adjustable rear view mirrors ..                                | (AC:3 B)                 |
| F7  | Vehicle ECU, immobiliser ...   | (BA:1 B)                 | F40 | Engine ECU .....   | (CM:1 A)                 |
| F8  | Instrumentation, TPM (Tyre Pressure Monitoring) .....                  | (BI:0 A/ OA:2 A)         | F41 | Engine solenoid valves, el. fuel pump .....                        | (CM:3 A)                 |
| F9  | Range-, area-inhibitors .....  | (BA:0 A)                 | F42 | Engine preheating relay, cooling fan clutch .....                  | (CM:2 A)                 |
| F11 | Gear selector ECU .....  | (DB:1 B/ DC:1 B/ DM:0 B) | F43 | BBM (body builder module) .....                                    | (BA:1 A)                 |
| F12 | Transmission ECU/retarder ..   | (DB:1 B/ DM:1 B)         | F44 | Voltage converter for radio, 12V outlet .....                      | (IR:0 A)                 |
| F13 | Windscreen wiper .....   | (GM:3 A)                 | F45 | Supplementary voltage converter, 12V outlet .....                  | (IR:1 A)                 |
| F14 | Cigarette lighter, centre section storage lamp .....                   | (IQ:2 A)                 | F46 | Beacon warning light .....   | (KM:0 A)                 |
| F15 | Water separator heater and water drain .....                           | (CM:0 A)                 | F47 | ACC .....  | (BE:2 A)                 |
| F16 | Differential lock, power take off .....                                | (DQ:0 A/ DU:1 A)         | F48 | ABS/EBS, EBS switches .....  | (EE:0 A/ EI:0 A/ EO:0 A) |
| F17 | LCM control .....  | (GA:0 A)                 | F49 | Air suspension/A-ride/tag axle ....                                | (FA:3 A/ FK:1 A/ FI:0 A) |
| F18 | Horn, solenoid valve for air horn .....                                | (GQ:1 A)                 | F50 | Telephone .....  | (IX:0 A)                 |
| F19 | Climate unit, FMS gateway ..   | (HG:0 A)                 | F51 | Hydraulic steered axle .....                                       | (FO:1 A)                 |
| F20 | Central locking, parking heater control .....                          | (IM:0 A)                 | F52 | Control circuit engine preheating, radio position relay .....      | (AC:1 A)                 |
| F21 | Fan, climate unit .....  | (HY:0 A)                 | F53 | Light sign .....   | (KI:1 A)                 |
| F22 | Interior lamps .....   | (IH:1 A)                 | F54 | Dynafleet, FMS gateway .....                                       | (BU:0 A/ BX:0 A/ BY:1 A) |
| F23 | Air suspension .....   | (FA:4 A)                 | F55 | SRS airbag, safety belt tensioner .....                            | (IS:0 A)                 |
| F24 | EI. heated air dryer, parking heater ADR/TRS, el. heated mirrors ..... | (FQ:0 A)                 | F56 | Free .....   | (ME:1 A)                 |
| F25 | Supply ABS/EBS trailer .....   | (GG:4 A/ CP:4 A)         | F57 | Gear selector ECU/retarder .....                                   | (DB:0 A/ DC:0 A/ DM:1 B) |
| F26 | Body builder fuse box .....  | (ME:3 B)                 | F58 | ADR/TRS, D+ short circuit relay ..                                 | (AB:2 A/ AE:4 B)         |
| F27 | EI. window winder lhs, el. heated mirrors .....                        | (AC:3 B)                 | F59 | Rear view camera .....   | (IZ:0 A)                 |
| F28 | Supply ABS/EBS truck .....   | (EE:0 A/ EI:0 A/ EO:2 A) | F60 | Hydraulic steered axle, ISX-functions (AUS only) .....             | (CP:1 A/ FO:1 A)         |
| F29 | Coffee maker .....   | (ME:1 A)                 | F61 | Foldable rear view mirror arm, Japan, burglar alarm, Volvo link .. | (BY:2 A/ IF:0 A)         |
| F30 | EI. window winder, rhs .....   | (AC:3 B)                 | F62 | Free .....   | (ME:0 A)                 |
| F31 | Main fuse for fuses 95–97 .....  | (AB:3 A)                 | F63 | Free/ISX-functions (AUS only) ....                                 | (CP:0 A)                 |
| F32 | ECC climate unit .....   | (HG:0 A)                 | F64 | Free/ISX-functions (AUS only) ....                                 | (CP:0 A)                 |

|     |  |                     |     |  |                     |
|-----|--|---------------------|-----|--|---------------------|
| F65 | Central lubrication system .....       | (FU:0 A)            | F90 | 12V converter, ABS trailer/info-module ..... | (CP:3 C)            |
| F66 | Roof hatch .....                       | (IQ:0 A)            | F91 | Tachograph, ADR .....                        | (AE:0 D)            |
| F67 | Reading lamps, bedlamps .....          | (IH:0 A)            | F93 | Main (not main switch dependent) .....       | (AB:3 D/<br>AE:0 D) |
| F68 | Refrigerator .....                     | (IQ:3 A)            | F95 | Central door lock .....                      | (AB:3 B)            |
| F69 | 12-volt outlet .....                   | (IR:1 C)            | F96 | Burglar alarm .....                          | (AB:3 B)            |
| F70 | Trailer ABS/EBS, (kl.15) .....         | (CP:4 A/<br>GG:3 A) | F97 | Parking heater .....                         | (AB:3 B)            |
| F71 | Extra equipment .....                  | (ME:1 A)            | FM1 | Fuse, main, preheating .....                 | (AA:1 B/<br>AE:2 B) |
| F72 | Headlamp level regulation system ..... | (GU:0 A)            | FM2 | Fuse, main, bogie lift/extra equipment ..... | (AA:1 B/<br>AE:1 B) |
| F73 | Hydraulic steered axle .....           | (FP:1 A)            | FM3 | Fuse, main, cab and chassis .....            | (AA:1 B/<br>AE:2 B) |
| F74 | Headlamp high-pressure washer .....    | (GM:1 A)            | FM4 | Fuse, main, light, back-up .....             | (AA:0 B/<br>AE:1 B) |
| F75 | El. heated seat .....                  | (IA:0 A)            |     |  |                     |
| F76 | ADR/TRS, D+ short circuit relay ..     | (AE:4 B)            |     |  |                     |
| F89 | Tachograph .....                       | (AB:4 D)<br>(1435)  |     |  |                     |

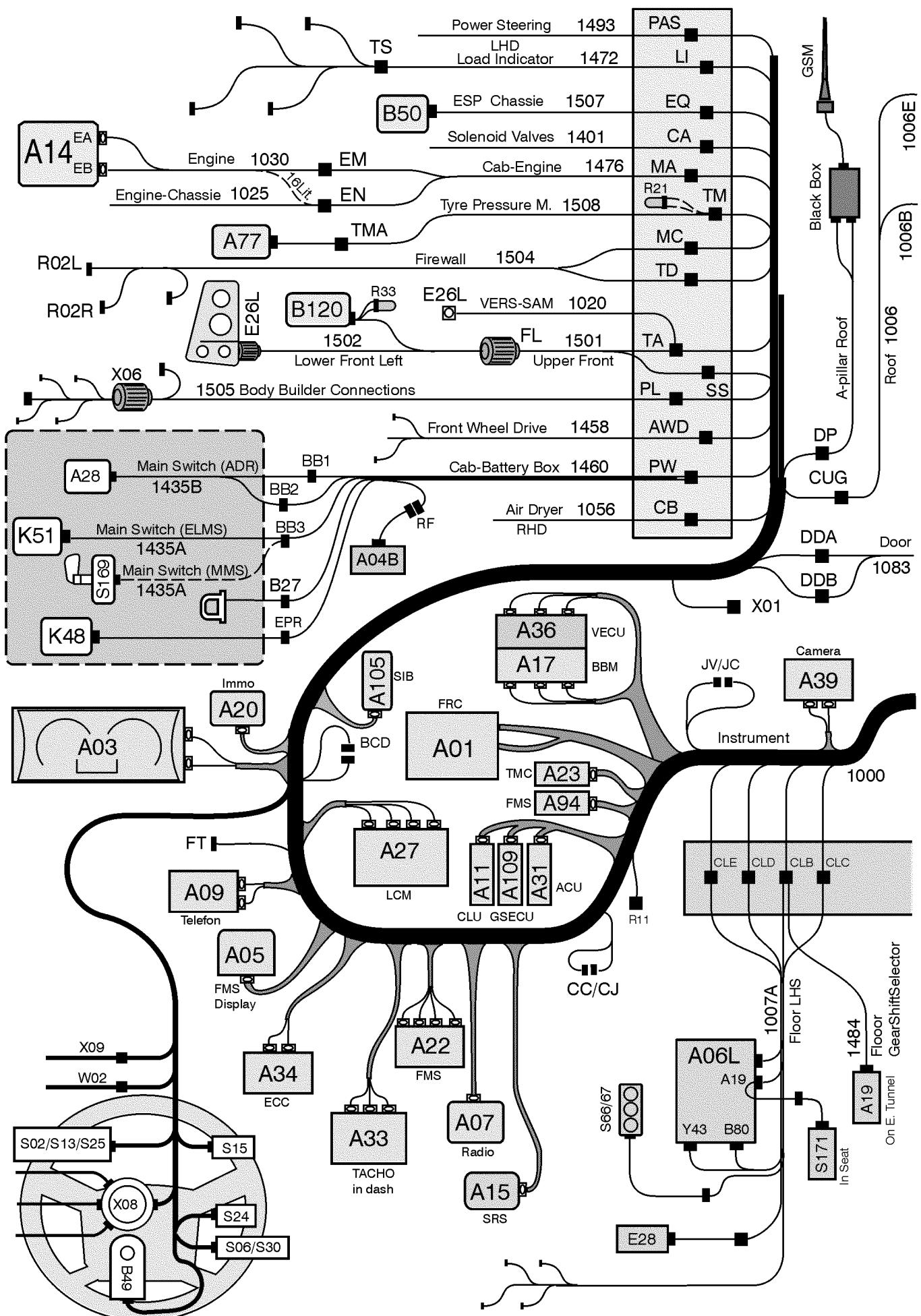
# Relays

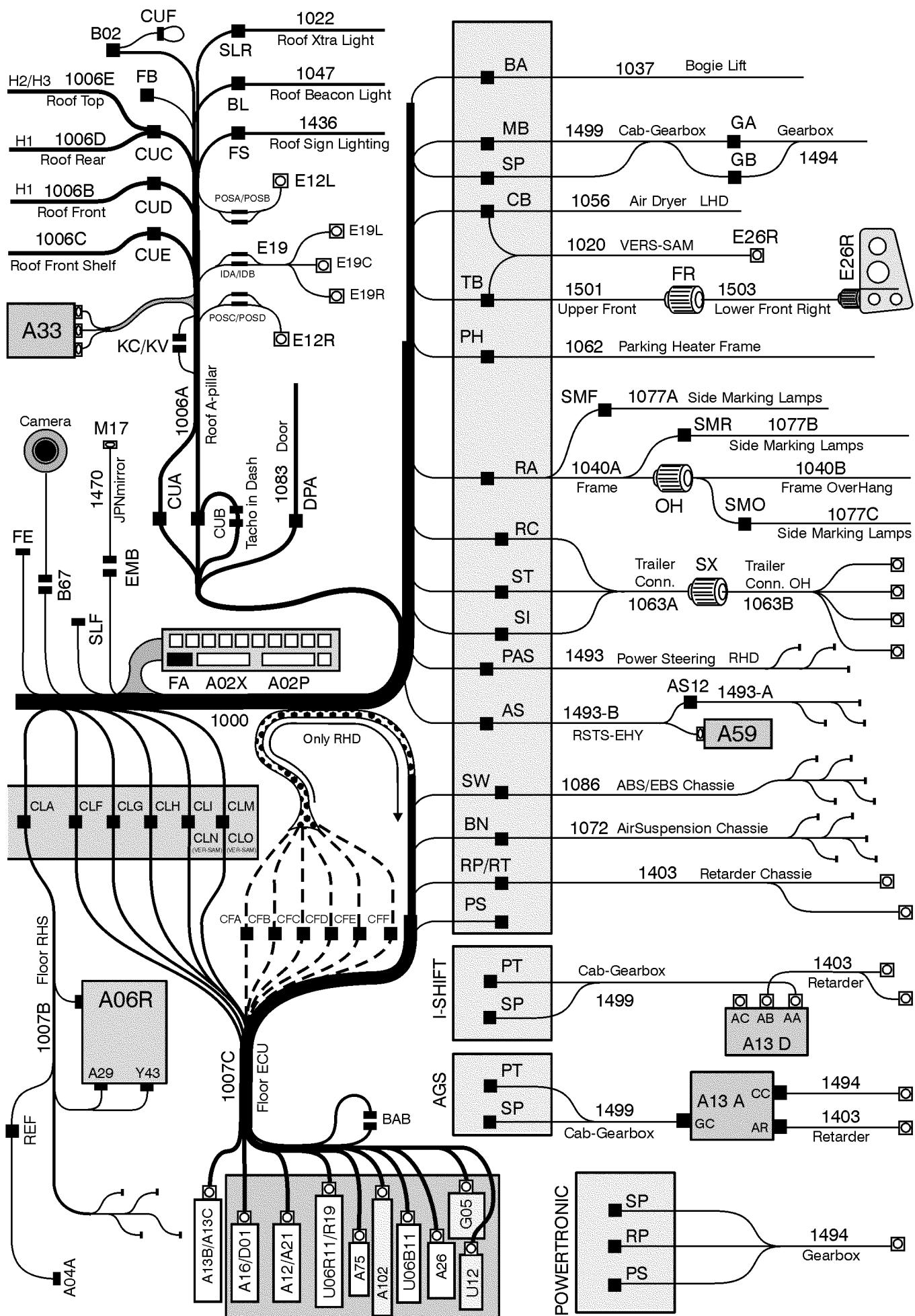


|      |  |                          |   |                  |
|------|--|--------------------------|---|------------------|
| K1   | Relay, starting switch, radio position .....                       | (AC:3 C)                 | K26B Relay, foldable rear view mirror arm, Japan .....                | (IF:1 C)         |
| K2   | Relay, EMS (Engine Management System) .....                        | (BA:1 A)                 | K27 Relay, gas discharge lamp, dipped beam, lhs .....                 | (GD:1 C)         |
| K3   | Relay, starter motor .....   | (AA:2 B)                 | K28 Relay, gas discharge lamp, dipped beam, rhs .....                 | (GD:1 C)         |
| K3B  | Relay, starter motor, Cummins ...                                  | (CS:1 C)                 | K30 Relay, beacon warning light .....                                 | (KM:0 B)         |
| K4   | Relay, body builder fuse box (kl.15) .....                         | (ME:2 A)                 | K35 Relay, headlamp high pressure wash .....                          | (GM:0 B)         |
| K5   | Relay, automatic transmission ....                                 | (DB:1 A/ DC:0 A/ DM:0 A) | K37 Relay, parking light .....  | (NA:1 C)         |
| K6   | Relay, fan climate unit .....                                      | (HY:0 B)                 | K38 Relay, body builder preparation, swapbody lamps .....             | (NA:1 C)         |
| K7   | Relay, intermittent wiper .....                                    | (GM:1 C)                 | K39 Relay, body builder preparation, plough light, spotlights .....   | (NA:1 C)         |
| K8   | Relay, gearbox area inhibitor .....                                | (BA:1 A)                 | K40 Relay, body builder preparation ..                                | (NA:2 C)         |
| K9   | Relay, interior lamps .....  | (IH:1 A)                 | K41 Relay, body builder preparation, swapbody .....                   | (NA:3 C)         |
| K10  | Relay, fifth wheel-, working-light                                 | (KE:0 C)                 | K42 Relay, body builder preparation, spotlights .....                 | (NI:1 B)         |
| K11  | Relay, air suspension .....  | (FA:4 B)                 | K43 Relay, body builder preparation, external start .....             | (NC:3 C)         |
| K12  | Relay, reverse light, trailer .....                                | (GB:4 D)                 | K45 Relay, body builder preparation, dual speed, extra foglight ..... | (NU:2 B)         |
| K13  | Relay, alternator controlled .....                                 | (AA:4 B)                 | K48 Power relay, engine preheating ...                                | (CM:2 B)         |
| K14  | Time delay relay, bogie lift, A-ride                               | (FI:1 B/ FK:1 C)         | K49 Power relay, bogie lift motor .....                               | (FI:3 B/ FK:3 D) |
| K15  | Time delay relay, bogie lift, A-ride, with axle load limiter ..... | (FK:2 C)                 | K51 Power relay, battery main switch .                                | (AB:0 C)         |
| K16  | Relay, bogie lift, A-ride, with axle load limiter .....            | (FK:1 C)                 | K54 Relay, 12V ABS Trailer .....                                      | (CP:2 D)         |
| K18  | Relay, hydraulic steered axle .....                                | (FP:1 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)         |
| K23  | Relay, cab tilt .....  | (KA:0 C)                 | K63 Relay, ACC Adaptive cruise control                                | (BE:2 B)         |
| K24  | Relay, central lubrication .....                                   | (FU:0 B)                 |   |                  |
| K25  | Relay, light sign .....  | (KI:1 C)                 |   |                  |
| K26A | Relay, foldable rear view mirror arm, Japan .....                  | (IF:0 C)                 |   |                  |

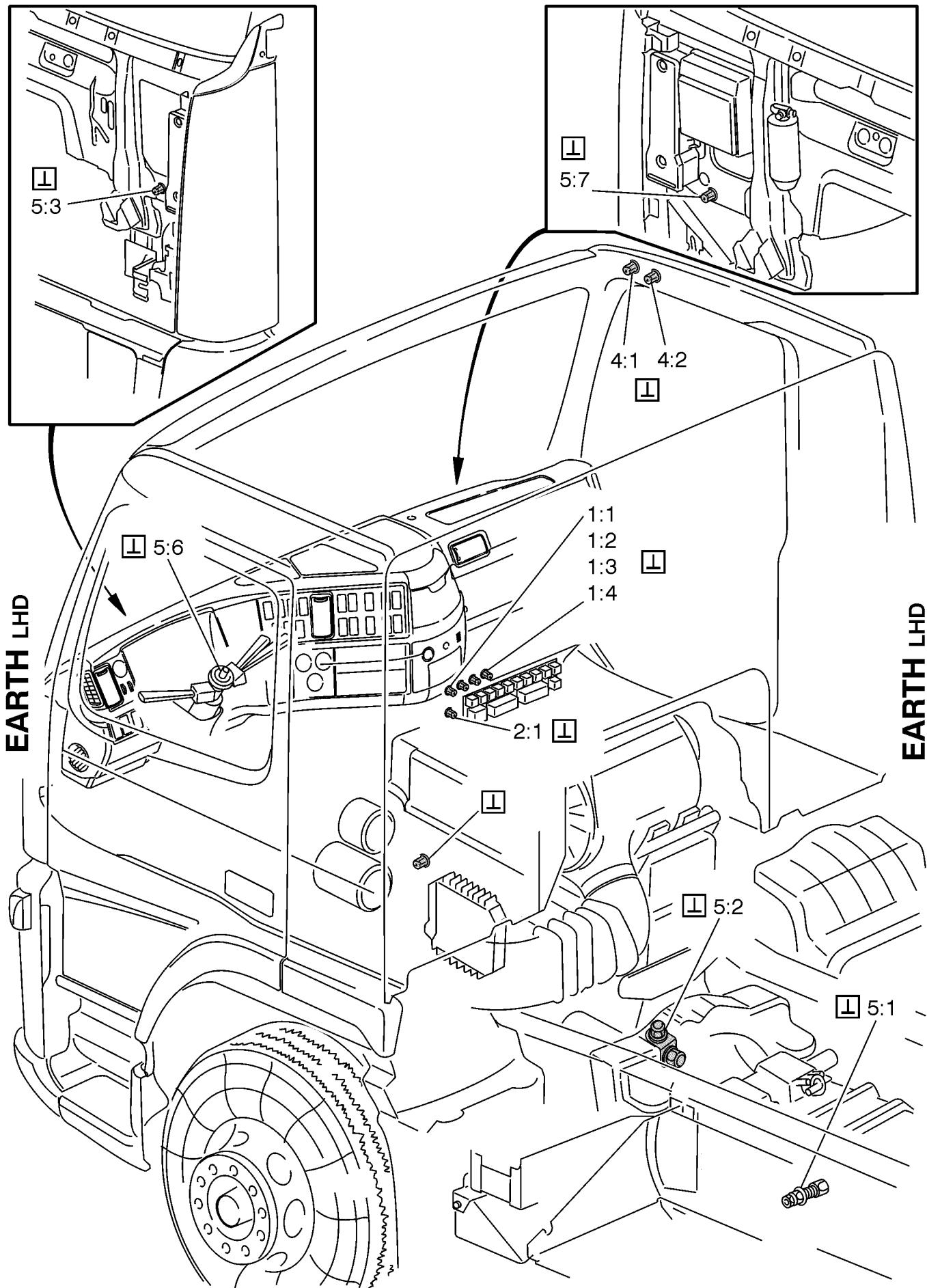
# Wiring harness illustration index

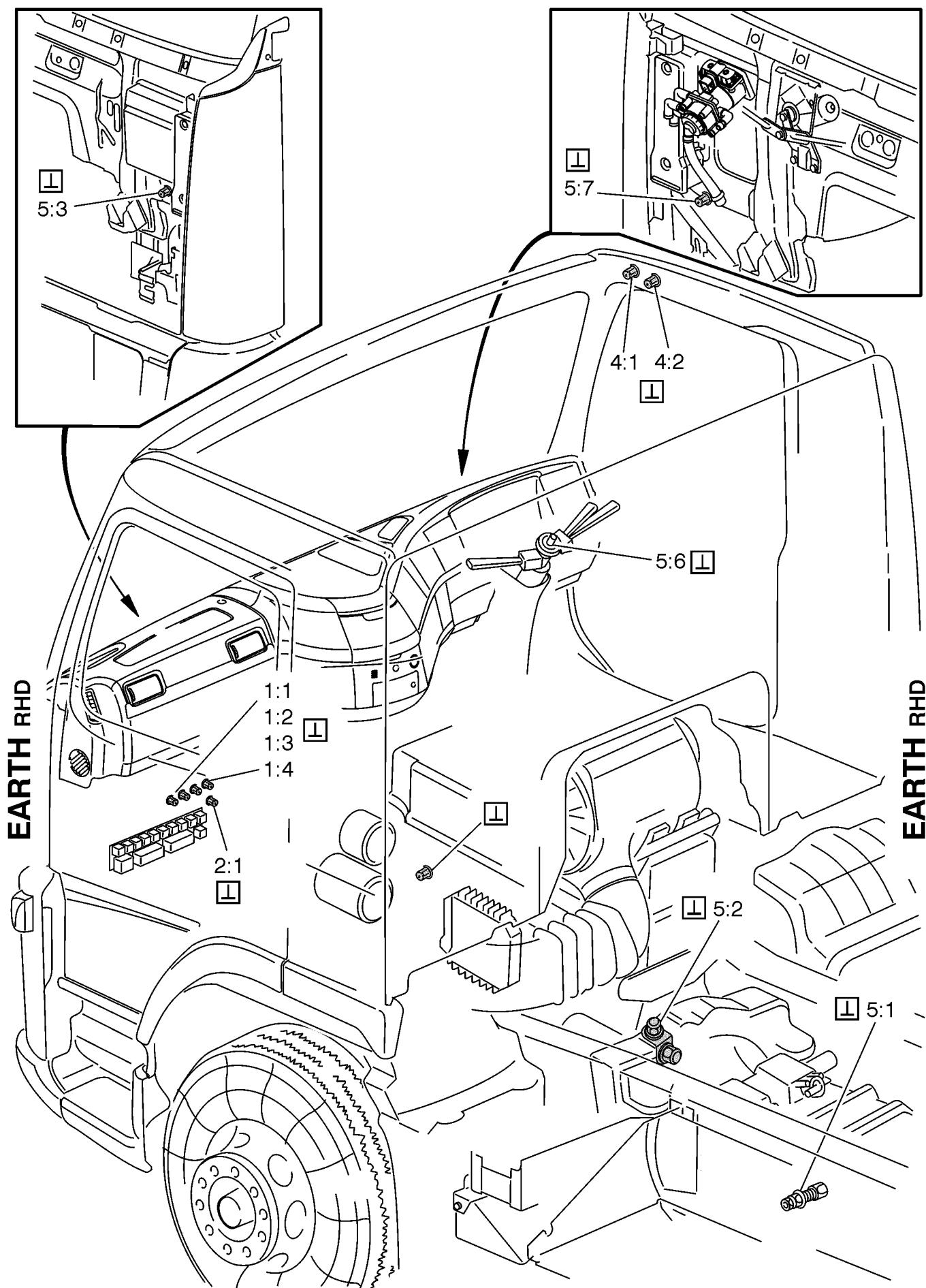
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| 1007 | Wiring harness, floor .....                     | page 113 |
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| 1020 | Wiring harness, cowl .....                      | page 122 |
| 1025 | Wiring harness, engine-chassi .....             | page 124 |
| 1030 | Wiring harness, engine .....                    | page 126 |
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| 1040 | Wiring harness, frame .....                     | page 130 |
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| 1056 | Wiring harness, air dryer .....                 | page 134 |
| 1062 | Wiring harness, parking heater, frame .....     | page 135 |
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| 1435 | Wiring harness, main switch .....               | page 150 |
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## Earth connections





## List of earth connections

|       |          |       |          |       |          |
|-------|----------|-------|----------|-------|----------|
| 1:1   | (IR:1 E) | 4:1_5 | (IH:0 E) | 5:2   | (AE:0 E) |
| 1:1_A | (IR:1 E) | 4:2_1 | (BN:0 D) | 5:2   | (AE:2 E) |
| 1:2_A | (BA:2 E) | 4:2_1 | (BN:1 D) | 5:2   | (AE:3 E) |
| 1:2_B | (IS:0 E) | 4:2_2 | (HI:0 B) | 5:3   | (AA:3 E) |
| 1:3   | (AE:4 E) | 4:2_3 | (IQ:1 E) | 5:4   | (FI:3 D) |
| 1:4   | (AA:3 E) | 4:2_4 | (BN:1 D) | 5:4   | (FK:3 E) |
| 1:4   | (AC:2 D) | 4:2_5 | (KM:0 D) | 5:6   | (GQ:1 E) |
| 1:4_B | (AA:4 E) | 4:2_6 | (NI:3 E) | 5:7_1 | (GE:1 D) |
| 1:4_C | (HZ:1 D) | 4:2_7 | (NI:4 E) | 5:7_2 | (GH:2 D) |
| 2:1_A | (CP:4 C) | 5:1   | (AA:0 E) | 5:7_3 | (GH:2 D) |
| 2:1_C | (NI:0 E) | 5:1   | (AB:0 D) | 5:7_4 | (GG:2 C) |
| 2:1_D | (ME:0 B) | 5:1   | (AB:2 D) | 5:9_1 | (AA:0 E) |
| 2:1_E | (NA:2 D) | 5:1   | (AE:0 E) | 5:9_1 | (AB:0 D) |
| 2:1_F | (BE:4 E) | 5:1_1 | (NA:4 D) | 5:9_1 | (AB:2 D) |
| 4:1_1 | (GA:1 E) | 5:1_2 | (NA:4 D) | 5:9_1 | (AE:0 E) |
| 4:1_1 | (GA:4 E) | 5:2   | (AA:0 E) | 5:9_3 | (AB:0 D) |
| 4:1_2 | (KI:2 B) | 5:2   | (AA:1 E) | 5:9_3 | (AB:2 D) |
| 4:1_3 | (KI:1 E) | 5:2   | (AA:2 E) |       |          |
| 4:1_4 | (GA:0 E) | 5:2   | (AB:0 D) |       |          |
| 4:1_4 | (IH:1 E) | 5:2   | (AB:2 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) | CA:1    | (DQ:0 D) |
| ADR3:2  | (AE:2 C) | BAB:16 | (XB:3 D) | CA:2    | (GB:3 B) |
| ADR4:1  | (AE:2 C) | BAB:17 | (XB:4 D) | CA:3    | (DU:1 C) |
| ADR4:2  | (AE:2 C) | BAB:18 | (XB:1 D) | CA:4    | (DQ:0 C) |
| AG:1    | (FO:2 D) | BB1:1  | (AE:1 A) | CA:5    | (GB:3 B) |
| AG:2    | (FO:2 D) | BB1:2  | (AE:0 D) | CA:6    | (EO:3 B) |
| AG:3    | (FO:2 D) | BB1:3  | (AE:1 E) | CA:9    | (DU:1 C) |
| AG:4    | (FO:2 D) | BB1:4  | (AE:1 A) | CA:10   | (EO:3 B) |
| AR:1    | (DE:1 D) | BB1:5  | (AE:2 D) | CA:11   | (EO:3 B) |
| AR:2    | (DE:0 C) | BB1:6  | (AE:2 D) | CA:12   | (EO:3 B) |
| AR:3    | (DE:0 C) | BB1:7  | (AE:0 D) | CA:13   | (EO:3 B) |
| AR:4    | (DE:0 C) | BB2:1  | (AE:0 C) | CA:14   | (EO:3 B) |
| AR:5    | (DE:1 C) | BB2:2  | (AE:1 C) | CA:15   | (EO:3 B) |
| AR:6    | (DE:1 C) | BB2:3  | (AE:1 D) | CA:16   | (DU:1 D) |
| AR:7    | (DE:1 C) | BB2:4  | (AE:1 D) | CA:17   | (FU:0 C) |
| AS:1    | (FO:1 C) | BB3:1  | (AB:0 B) | CA:18   | (FU:0 D) |
| AS:2    | (FO:1 C) | BB3:2  | (AB:1 C) | CA:19   | (NC:0 C) |
| AS:4    | (FO:1 B) | BB3:3  | (AB:1 D) | CA:19   | (NU:0 C) |
| AS:5    | (FO:1 B) | BB3:3  | (AB:2 C) | CA:20   | (NC:1 C) |
| AS:6    | (FO:2 B) | BB3:4  | (AB:0 B) | CA:20   | (NU:1 C) |
| AS:7    | (FO:3 B) | BB3:5  | (AB:3 C) | CB:1    | (FQ:0 B) |
| AS:8    | (FO:3 B) | BB3:6  | (AB:0 B) | CB:2    | (FQ:0 D) |
| AS:9    | (FO:1 E) | BCD:1  | (XA:2 B) | CB:3    | (BA:0 D) |
| AS12:1  | (FO:3 C) | BCD:2  | (XA:3 B) | CB:3    | (FQ:2 B) |
| AS12:2  | (FO:3 C) | BCD:3  | (XB:0 B) | CB:4    | (BA:0 D) |
| AS12:3  | (FO:3 C) | BCD:4  | (XA:2 B) | CB:5    | (FQ:2 D) |
| AS12:4  | (FO:3 C) | BCD:5  | (XA:2 B) | CB:6    | (FQ:2 D) |
| AS12:5  | (FO:2 C) | BCD:6  | (IX:2 D) | CC/CJ:1 | (IZ:2 B) |
| AS12:6  | (FO:2 C) | BCD:7  | (XA:3 B) | CC/CJ:2 | (IZ:2 B) |
| AS12:7  | (FO:2 C) | BCD:8  | (XA:3 B) | CC/CJ:3 | (IZ:1 A) |
| AS12:8  | (FO:2 C) | BCD:9  | (XB:0 B) | CC/CJ:4 | (IZ:1 B) |
| AS12:9  | (FO:1 C) | BCD:10 | (XA:3 B) | CC/CJ:5 | (IX:2 A) |
| AS12:10 | (FO:0 B) | BCD:11 | (XA:4 B) | CC:1    | (DE:3 D) |
| AS12:11 | (FO:0 B) | BCD:12 | (IX:2 D) | CC:3    | (DE:3 C) |
| AS12:12 | (FO:1 D) | BCD:13 | (XA:2 B) | CC:4    | (DE:2 C) |
| AWD:3   | (DU:2 C) | BCD:14 | (XA:4 B) | CC:5    | (DE:3 C) |
| AWD:4   | (DU:2 C) | BCD:15 | (XB:0 C) | CC:6    | (DE:2 C) |
| AWD:5   | (DU:4 C) | BCD:16 | (XB:0 C) | CC:9    | (DE:2 C) |
| AWD:6   | (DU:4 C) | BL:1   | (KM:0 C) | CC:10   | (DE:2 C) |
| AWD:8   | (DU:2 D) | BL:3   | (KM:0 D) | CC:11   | (DE:2 C) |
| B07_1:1 | (BI:2 C) | BL_2:1 | (KM:1 D) | CC:12   | (DE:2 D) |
| B07_1:2 | (BI:2 D) | BL_2:2 | (KM:1 D) | CE:1    | (CP:1 A) |
| BA:1    | (FI:1 C) | BL:3:1 | (KM:0 C) | CE:2    | (CP:1 A) |
| BA:1    | (FK:1 D) | BN:1   | (FA:1 A) | CE:3    | (CP:1 A) |
| BA:2    | (FI:2 C) | BN:2   | (FA:1 D) | CE:4    | (CP:1 A) |
| BA:2    | (FK:3 D) | BN:3   | (FA:1 D) | CE:5    | (CP:1 A) |
| BA:3    | (FI:0 C) | BN:4   | (FA:2 D) | CE:6    | (CP:1 A) |
| BA:3    | (FK:0 D) | BN:5   | (FA:0 B) | CE:7    | (CP:1 A) |
| BA:5    | (FK:1 D) | BN:6   | (FA:1 B) | CFB:16  | (FG:2 C) |
| BA:7    | (FI:3 B) | BN:7   | (FA:1 B) | CFB:18  | (FG:2 C) |
| BA:7    | (FK:3 C) | BN:8   | (FA:2 D) | CFD:1   | (DM:3 C) |
| BA:8    | (FK:1 D) | BN:9   | (FA:0 B) | CFD:2   | (DM:2 C) |
| BAB:1   | (XA:4 D) | BN:10  | (FA:1 D) | CFD:3   | (DM:2 C) |
| BAB:2   | (XA:2 D) | BN:11  | (FA:1 B) | CFD:4   | (DM:2 C) |
| BAB:3   | (XA:3 D) | BN:12  | (FA:1 B) | CFD:5   | (DM:2 C) |
| BAB:4   | (XA:2 D) | BN:13  | (FA:1 B) | CFD:6   | (DM:3 C) |
| BAB:5   | (XA:3 D) | BN:14  | (FA:0 D) | CFD:7   | (DM:3 C) |
| BAB:6   | (XA:2 D) | BN:15  | (FA:1 D) | CFE:1   | (FG:1 C) |
| BAB:7   | (XB:3 D) | BN:16  | (FA:1 D) | CFE:2   | (FG:2 C) |
| BAB:8   | (XA:3 C) | BN:16  | (FG:1 C) | CFE:3   | (FG:2 C) |
| BAB:9   | (XA:2 C) | BN:17  | (FA:1 D) | CFE:4   | (FG:2 C) |
| BAB:10  | (XB:3 D) | BN:18  | (FA:1 D) | CFE:5   | (FG:2 C) |

|          |          |        |          |        |          |
|----------|----------|--------|----------|--------|----------|
| CFE:6    | (FG:2 C) | CLC:7  | (HI:3 C) | CLG:6  | (EE:3 B) |
| CFF:1    | (CP:4 B) | CLC:8  | (HI:1 C) | CLG:6  | (EI:3 B) |
| CFF:2    | (CP:3 B) | CLC:9  | (HI:1 C) | CLG:6  | (EO:1 C) |
| CFF:3    | (CP:3 B) | CLC:10 | (HI:4 C) | CLG:7  | (EO:1 C) |
| CFF:4    | (CP:4 C) | CLC:11 | (HI:3 C) | CLG:8  | (EO:1 C) |
| CFF:5    | (CP:3 C) | CLC:12 | (HI:2 C) | CLG:9  | (EO:0 C) |
| CFF_2:1  | (CP:4 B) | CLD:1  | (IX:0 C) | CLG:10 | (EO:0 C) |
| CFF_2:2  | (CP:4 B) | CLD:2  | (IX:0 C) | CLG:11 | (EO:1 C) |
| CFF_2:3  | (CP:3 B) | CLD:3  | (IX:1 C) | CLG:12 | (EO:1 C) |
| CFF_2:4  | (CP:4 C) | CLD:4  | (IX:1 C) | CLG:13 | (EO:0 D) |
| CFF_2:5  | (CP:3 C) | CLE:1  | (IA:1 B) | CLG:14 | (EO:0 D) |
| CLA:1    | (IA:0 B) | CLE:2  | (IA:3 B) | CLG:15 | (EO:1 D) |
| CLA:2    | (IA:1 B) | CLE:3  | (BI:1 C) | CLG:16 | (EO:3 C) |
| CLA:3    | (BI:1 C) | CLE:4  | (IA:1 E) | CLG:17 | (EO:3 C) |
| CLA:4    | (IA:0 D) | CLE:5  | (IH:4 D) | CLG:18 | (EO:3 C) |
| CLA:5    | (IH:4 D) | CLE:6  | (BI:3 C) | CLG:20 | (EE:4 D) |
| CLA:6    | (BI:3 D) | CLE:7  | (BY:2 D) | CLG:20 | (EI:4 C) |
| CLA:7    | (BY:2 D) | CLE:7  | (NK:0 D) | CLG:20 | (EO:0 D) |
| CLA:7    | (NK:0 D) | CLE:8  | (IH:4 C) | CLG:21 | (EI:0 C) |
| CLA:9    | (AE:2 C) | CLE:9  | (AE:1 C) | CLH:1  | (FA:3 B) |
| CLA:10   | (AE:2 C) | CLE:9  | (FA:2 D) | CLH:1  | (FK:2 B) |
| CLA:11   | (AE:2 C) | CLE:10 | (AE:1 C) | CLH:2  | (FA:4 C) |
| CLA:12   | (AE:2 C) | CLE:10 | (FA:2 D) | CLH:3  | (FA:2 B) |
| CLA:16   | (IS:3 C) | CLE:11 | (AE:1 C) | CLH:3  | (FK:2 B) |
| CLA:17   | (IS:3 C) | CLE:11 | (FA:2 D) | CLH:4  | (FG:0 C) |
| CLA:19   | (IQ:3 C) | CLE:12 | (AE:1 C) | CLH:4  | (FK:2 B) |
| CLA:20   | (BI:3 D) | CLE:12 | (FA:2 D) | CLH:5  | (FA:2 B) |
| CLA:21   | (IQ:3 D) | CLE:13 | (FA:3 D) | CLH:5  | (FK:2 B) |
| CLB:1    | (DB:1 C) | CLE:14 | (FA:3 D) | CLH:6  | (FA:2 D) |
| CLB:1    | (DC:1 D) | CLE:15 | (FA:3 D) | CLH:6  | (FK:2 B) |
| CLB:2    | (DB:1 C) | CLE:16 | (FA:3 D) | CLH:7  | (FA:2 D) |
| CLB:2    | (DC:2 D) | CLE:17 | (IS:2 C) | CLH:8  | (FA:2 D) |
| CLB:3    | (DB:0 C) | CLE:18 | (IS:2 C) | CLH:9  | (FA:2 D) |
| CLB:3    | (DC:2 D) | CLE:19 | (FA:3 D) | CLH:10 | (FA:3 D) |
| CLB:4    | (DB:0 C) | CLE:20 | (BI:3 C) | CLH:11 | (FA:3 D) |
| CLB:4    | (DC:2 D) | CLF:1  | (IR:1 B) | CLH:12 | (FA:3 D) |
| CLB:5    | (DB:0 B) | CLF:2  | (IR:1 B) | CLH:13 | (FM:0 B) |
| CLB:5    | (DC:0 B) | CLF:3  | (IR:1 C) | CLH:14 | (FG:0 C) |
| CLB:5    | (XB:2 E) | CLF:4  | (IR:1 C) | CLH:15 | (FG:0 C) |
| CLB:6    | (DB:0 B) | CLF:5  | (IR:0 B) | CLH:16 | (FA:3 B) |
| CLB:6    | (DC:0 B) | CLF:6  | (IR:0 B) | CLH:17 | (FA:3 B) |
| CLB:6    | (XB:2 E) | CLF:7  | (IR:0 C) | CLH:18 | (FG:1 C) |
| CLB:7    | (DB:0 D) | CLF:8  | (IR:0 C) | CLH:19 | (FG:1 C) |
| CLB:7    | (DC:2 D) | CLF:9  | (IR:0 C) | CLH:20 | (FA:3 C) |
| CLB:8    | (DB:0 D) | CLF:10 | (DB:2 B) | CLH:21 | (FA:3 D) |
| CLB:8    | (DC:2 D) | CLF:10 | (DM:1 C) | CLI:1  | (EO:0 D) |
| CLB:9    | (DB:0 C) | CLF:11 | (DB:1 D) | CLI:2  | (EO:1 D) |
| CLB:9    | (DC:2 D) | CLF:11 | (DM:0 D) | CLI:3  | (EO:1 D) |
| CLB:11   | (DB:3 C) | CLF:12 | (DM:0 C) | CLI:4  | (EO:1 D) |
| CLB:11   | (DC:2 D) | CLF:13 | (XA:3 D) | CLI:5  | (EO:3 C) |
| CLB:12   | (DC:2 D) | CLF:14 | (XA:2 D) | CLI:6  | (EO:3 C) |
| CLB:15   | (DB:1 D) | CLF:15 | (XB:3 D) | CLI:7  | (EO:3 C) |
| CLB:15   | (DC:2 D) | CLF:16 | (XB:2 D) | CLI:8  | (EO:3 C) |
| CLB_2:1  | (DC:1 D) | CLF:17 | (FG:1 C) | CLI:9  | (EO:3 C) |
| CLB_2:2  | (DC:2 D) | CLF:18 | (XA:2 C) | CLI:10 | (EO:3 C) |
| CLB_2:3  | (DC:2 D) | CLF:19 | (XA:2 C) | CLI:11 | (EO:4 C) |
| CLB_2:4  | (DC:2 D) | CLF:20 | (XB:1 C) | CLI:12 | (EO:4 C) |
| CLB_2:7  | (DC:2 D) | CLF:21 | (XB:1 C) | CLM:1  | (BE:1 B) |
| CLB_2:8  | (DC:2 D) | CLG:1  | (EE:0 B) | CLM:2  | (BE:1 B) |
| CLB_2:9  | (DC:2 D) | CLG:1  | (EI:0 B) | CLM:3  | (BE:2 B) |
| CLB_2:11 | (DC:2 D) | CLG:1  | (EO:0 C) | CLM:4  | (BE:1 C) |
| CLB_2:12 | (DC:2 D) | CLG:2  | (EE:0 B) | CLM:5  | (BE:1 C) |
| CLB_2:15 | (DC:2 D) | CLG:2  | (EI:0 B) | CLM:6  | (BE:3 C) |
| CLC:1    | (HI:0 C) | CLG:2  | (EO:2 B) | CLM:7  | (BE:3 C) |
| CLC:2    | (HI:0 C) | CLG:3  | (EE:3 B) | CLM:8  | (BE:3 C) |
| CLC:3    | (HI:0 C) | CLG:3  | (EI:2 B) | CLM:9  | (FA:3 D) |
| CLC:4    | (HI:2 C) | CLG:4  | (EO:2 C) | CLN:1  | (BY:1 B) |
| CLC:6    | (HI:2 C) | CLG:5  | (EO:2 C) | CLN:2  | (BY:1 C) |

|             |          |             |          |          |          |
|-------------|----------|-------------|----------|----------|----------|
| CLN:3       | (BY:2 C) | CUB:17      | (GC:3 B) | DP:6     | (BU:0 D) |
| CLN:4       | (BY:2 C) | CUB:18      | (IH:3 B) | DP:7     | (BU:1 D) |
| CLN:5       | (BY:2 C) | CUB2/CUB:11 | (IU:0 B) | DP:8     | (BU:1 D) |
| CLN:6       | (BY:3 C) | CUB2/CUB:12 | (KI:1 B) | DP:9     | (BU:1 D) |
| CLN:7       | (BY:3 C) | CUB2/CUB:13 | (IM:0 B) | DP:10    | (BU:1 D) |
| CLN:8       | (BY:4 C) | CUB2/CUB:14 | (HI:2 C) | DP:11    | (BU:1 D) |
| CLN:9       | (BY:1 D) | CUB2/CUB:15 | (HI:2 B) | DP:12    | (BU:1 D) |
| CLN:10      | (BY:1 D) | CUB2/CUB:18 | (IH:3 B) | DPA:1    | (IM:2 C) |
| CLO:1       | (BY:2 D) | CUC:1       | (IH:3 C) | DPA:3    | (IE:3 B) |
| CLO:2       | (BY:3 D) | CUC:2       | (IH:3 C) | DPA:4    | (IE:3 B) |
| CLO:4       | (BY:2 D) | CUC:3       | (IH:1 B) | DPA:5    | (IH:2 C) |
| CLO:5       | (BY:2 D) | CUC:4       | (IH:0 B) | DPA:6    | (IE:3 B) |
| CUA:1       | (GA:1 C) | CUC:5       | (IH:3 B) | DPA:7    | (IM:2 C) |
| CUA:2       | (GA:4 C) | CUC:6       | (IQ:1 C) | DPA:8    | (IM:2 C) |
| CUA:3       | (IH:1 B) | CUC:7       | (IQ:0 C) | DPA:9    | (IM:2 C) |
| CUA:4       | (IH:0 B) | CUC:8       | (IQ:1 C) | DPA:10   | (IU:1 D) |
| CUA:5       | (IH:3 B) | CUC:9       | (IU:2 D) | DPA:11   | (IU:2 D) |
| CUA:6       | (IH:3 C) | CUC:10      | (IU:2 D) | DPA:12   | (IH:2 C) |
| CUA:7       | (IQ:0 B) | CUC:11      | (IU:2 D) | DS_L:1   | (NU:2 C) |
| CUA:8       | (KM:0 C) | CUC:12      | (IU:2 D) | DS_L:2   | (NU:2 D) |
| CUA:9       | (NI:1 B) | CUC:13      | (HI:1 B) | DS_R:1   | (GQ:0 B) |
| CUA:10      | (NI:1 B) | CUC:14      | (HI:1 B) | DS_R:1   | (NU:2 C) |
| CUA:11      | (KI:1 C) | CUC:15      | (HI:1 B) | DS_R:2   | (GQ:0 C) |
| CUA:12      | (IH:3 C) | CUC:16      | (HI:1 B) | DS_R:2   | (NU:2 D) |
| CUA:13      | (IU:2 D) | CUC:17      | (IH:3 B) | DZ:1     | (BU:0 B) |
| CUA:14      | (IU:2 D) | CUC:18      | (IH:0 D) | DZ:2     | (BU:1 B) |
| CUA:15      | (IU:2 D) | CUC:19      | (HI:3 B) | DZ:3     | (BU:1 B) |
| CUA:16      | (IU:2 D) | CUC:20      | (HI:3 C) | E03_L:-1 | (NI:2 D) |
| CUA:17      | (HI:1 C) | CUC:21      | (HI:2 A) | E03_L:+1 | (NI:2 D) |
| CUA:18      | (HI:1 B) | CUD:1       | (IH:1 B) | E03_R:-1 | (NI:2 D) |
| CUA:19      | (HI:1 C) | CUD:2       | (IH:1 B) | E03_R:+1 | (NI:2 D) |
| CUA:20      | (HI:1 C) | CUD:3       | (IH:1 D) | E27:1    | (GF:3 C) |
| CUA:21      | (GB:0 B) | CUE:1       | (IH:0 B) | E27:2    | (GF:3 C) |
| CUB/TACH:1  | (BM:1 A) | CUE:3       | (IH:0 D) | E27:3    | (GF:3 C) |
| CUB/TACH:2  | (BM:3 C) | CUF:1       | (HI:0 B) | E27:4    | (GF:3 C) |
| CUB/TACH:3  | (BM:1 A) | CUF:2       | (HI:0 B) | E27:5    | (GF:3 C) |
| CUB/TACH:4  | (BM:2 A) | CUG:1       | (NK:2 C) | E27:6    | (GF:3 C) |
| CUB/TACH:5  | (BM:3 A) | CUG:2       | (NK:2 C) | E27:7    | (GF:3 C) |
| CUB/TACH:6  | (BM:3 C) | CUG:4       | (NK:2 C) | E27_1:1  | (GF:0 C) |
| CUB/TACH:7  | (BM:2 C) | CUG:5       | (NK:3 C) | E27_1:2  | (GF:0 C) |
| CUB/TACH:8  | (BM:2 C) | DDA:1       | (IM:1 C) | E27_1:3  | (GF:1 C) |
| CUB/TACH:9  | (BM:2 C) | DDA:2       | (IE:0 B) | E27_1:4  | (GF:1 C) |
| CUB/TACH:10 | (BM:2 C) | DDA:3       | (IE:1 A) | E27_1:5  | (GF:1 C) |
| CUB/TACH:11 | (IU:0 B) | DDA:4       | (IE:2 B) | E27_1:7  | (GF:0 C) |
| CUB/TACH:12 | (KI:1 C) | DDA:5       | (IH:2 C) | EA:1     | (CS:1 B) |
| CUB/TACH:13 | (IM:0 B) | DDA:6       | (IE:3 B) | EA:2     | (CS:1 B) |
| CUB/TACH:14 | (HI:2 B) | DDA:7       | (IM:1 C) | EA:3     | (CS:2 B) |
| CUB/TACH:15 | (HI:2 B) | DDA:8       | (IM:1 C) | EA:4     | (CS:1 B) |
| CUB/TACH:16 | (GC:3 B) | DDA:9       | (IM:1 C) | EM:1     | (CM:1 D) |
| CUB/TACH:17 | (GC:3 B) | DDA:10      | (IU:1 D) | EM:1     | (CO:1 B) |
| CUB/TACH:18 | (IH:3 A) | DDA:11      | (IU:1 D) | EM:1     | (CS:3 B) |
| CUB:1       | (BN:1 B) | DDA:12      | (IH:2 C) | EM:2     | (CM:2 D) |
| CUB:2       | (BN:3 C) | DDA:13      | (IE:0 C) | EM:2     | (CO:2 B) |
| CUB:3       | (BN:1 B) | DDA:14      | (IE:1 C) | EM:2     | (CS:3 B) |
| CUB:4       | (BN:3 B) | DDA:15      | (IE:1 C) | EM:3     | (CM:2 D) |
| CUB:5       | (BN:3 B) | DDB:1       | (IE:1 C) | EM:3     | (CO:2 B) |
| CUB:6       | (BN:3 C) | DDB:2       | (IE:2 C) | EM:3     | (CS:3 B) |
| CUB:7       | (BN:2 C) | DDB:3       | (IE:2 C) | EM:4     | (CM:1 D) |
| CUB:8       | (BN:2 C) | DDB:4       | (IE:0 C) | EM:4     | (CO:1 B) |
| CUB:9       | (BN:2 C) | DDB:5       | (IE:0 B) | EM:4     | (CS:3 B) |
| CUB:10      | (BN:2 C) | DDB:6       | (IE:0 B) | EM:5     | (CM:1 D) |
| CUB:11      | (BN:3 C) | DDB:7       | (IE:1 B) | EM:5     | (CO:2 B) |
| CUB:11      | (IU:0 B) | DDB:9       | (IE:2 B) | EM:5     | (CS:3 B) |
| CUB:12      | (KI:1 B) | DP:1        | (BU:0 A) | EM:6     | (CM:2 D) |
| CUB:13      | (IM:0 B) | DP:2        | (BU:0 A) | EM:6     | (CO:3 B) |
| CUB:14      | (HI:2 C) | DP:3        | (BU:1 D) | EM:6     | (CS:2 B) |
| CUB:15      | (HI:1 B) | DP:4        | (BU:0 D) | EM:7     | (CM:3 D) |
| CUB:16      | (GC:3 A) | DP:5        | (BU:0 D) | EM:7     | (CO:4 B) |

|        |          |         |          |          |          |
|--------|----------|---------|----------|----------|----------|
| EM:8   | (CS:2 B) | FE_B:3  | (IF:1 A) | GB:1     | (BI:2 C) |
| EM:9   | (CM:1 D) | FE_BR:1 | (IF:2 A) | GB:2     | (BI:2 D) |
| EM:9   | (CO:1 B) | FE_BR:2 | (IF:2 A) | GB:3     | (BM:2 D) |
| EM:9   | (CS:3 B) | FE_BR:3 | (IF:1 A) | GB:4     | (BM:2 D) |
| EM:10  | (CM:0 D) | FE2:1   | (NC:1 B) | GB:5     | (BM:2 D) |
| EM:10  | (CO:3 B) | FE2:1   | (NU:0 B) | GB:6     | (BM:2 D) |
| EM:10  | (CS:3 D) | FE2:2   | (NC:0 B) | GC:1     | (DE:0 B) |
| EM:11  | (CM:2 D) | FE2:2   | (NU:0 B) | GC:2     | (DE:0 B) |
| EM:11  | (CO:0 B) | FE2:3   | (NC:1 B) | GC:3     | (DE:0 B) |
| EM:12  | (CM:0 D) | FE2:3   | (NU:0 B) | GC:4     | (DE:0 B) |
| EM:12  | (CO:4 B) | FL:1    | (GA:2 D) | GC:7     | (DE:2 B) |
| EM:12  | (CS:2 B) | FL:2    | (GA:2 C) | GC:8     | (DE:2 B) |
| EMB:1  | (IF:0 D) | FL:3    | (GA:2 C) | GC:10    | (DE:3 E) |
| EMB:2  | (IF:1 D) | FL:4    | (NK:3 D) | GC:11    | (DE:0 B) |
| EN:1   | (AA:3 D) | FL:5    | (NK:3 D) | GC:12    | (DE:0 C) |
| EN:1   | (AE:3 D) | FL:6    | (GA:2 C) | GD:2     | (HZ:1 C) |
| EN:2   | (AA:3 D) | FL:7    | (GA:2 C) | IDA:1    | (GA:1 C) |
| EN:2   | (AE:3 D) | FL:8    | (GA:1 C) | IDB:1    | (GA:0 D) |
| EN:3   | (HG:0 D) | FL:9    | (GA:3 C) | IS:1     | (DE:3 B) |
| EN:3   | (HY:2 D) | FL:10   | (GQ:1 C) | IS:2     | (DE:3 B) |
| EN:4   | (AA:2 D) | FL:11   | (GQ:1 B) | IS:3     | (DE:2 C) |
| EPR:1  | (CM:2 B) | FL:12   | (GQ:1 B) | IS:4     | (DE:2 C) |
| EPR:3  | (CM:3 B) | FL:13   | (GU:0 D) | JV/JC:1  | (DB:0 D) |
| EPR:4  | (CM:2 C) | FL:14   | (GU:0 D) | JV/JC:2  | (KA:1 D) |
| EQ_A:1 | (EO:4 B) | FL:15   | (GU:0 D) | JV/JC:3  | (DQ:1 B) |
| EQ_A:2 | (EO:4 B) | FL:16   | (GQ:1 C) | JV/JC:4  | (AE:3 B) |
| EQ_A:3 | (EO:4 B) | FL:20   | (BE:1 D) | JV/JC:5  | (AE:3 B) |
| EQ_A:4 | (EO:4 C) | FL:21   | (BE:1 D) | JV/JC:6  | (AE:3 B) |
| EXT:1  | (HZ:1 B) | FL:22   | (BE:1 D) | JV/JC:7  | (AC:1 D) |
| EXT:2  | (HZ:1 B) | FL:23   | (BE:1 E) | JV/JC:7  | (AE:4 D) |
| FA:1   | (BI:4 B) | FL:25   | (GA:2 D) | JV/JC:8  | (CP:1 B) |
| FA:2   | (FA:2 B) | FL:29   | (KA:0 C) | JV/JC:8  | (HI:3 D) |
| FA:3   | (FA:2 B) | FMS:1   | (BX:1 D) | JV/JC:9  | (AA:3 B) |
| FA:5   | (GA:2 C) | FMS:2   | (BX:1 D) | JV/JC:9  | (BA:0 C) |
| FA:5   | (NI:1 A) | FR:1    | (GA:3 D) | JV/JC:10 | (FU:0 D) |
| FA:6   | (BA:0 C) | FR:2    | (GA:3 C) | JV/JC:11 | (BA:3 C) |
| FA:7   | (BI:1 C) | FR:3    | (GA:3 C) | JV/JC:12 | (BA:3 D) |
| FA:8   | (GA:4 C) | FR:4    | (NK:3 D) | JV/JC:13 | (IM:2 C) |
| FA:8   | (NA:0 A) | FR:5    | (NK:4 D) | JV/JC:15 | (BU:0 B) |
| FA:9   | (GB:3 D) | FR:6    | (GA:2 C) | JV/JC:16 | (IM:2 A) |
| FA:9   | (NA:0 A) | FR:7    | (GA:3 C) | JV/JC:17 | (HP:0 D) |
| FA:10  | (GC:3 B) | FR:8    | (GA:4 C) | JV/JC:18 | (KM:1 C) |
| FA:10  | (NA:0 A) | FR:9    | (GA:3 C) | JV/JC:19 | (BI:2 D) |
| FA:10  | (NU:2 B) | FR:10   | (GM:0 C) | JV/JC:20 | (BU:1 B) |
| FA:11  | (GB:0 A) | FR:11   | (GM:0 C) | JV/JC:21 | (IX:2 B) |
| FA:11  | (NA:3 A) | FR:13   | (GU:1 D) | KV/KC:1  | (GB:0 B) |
| FA:12  | (BA:1 D) | FR:14   | (GU:1 D) | KV/KC:2  | (GB:0 B) |
| FA:13  | (GQ:2 C) | FR:15   | (GU:1 D) | KV/KC:3  | (GB:0 B) |
| FA:14  | (AA:2 A) | FR:16   | (GM:1 C) | LI:1     | (FG:0 B) |
| FA:16  | (GG:1 A) | FR:17   | (BI:2 C) | LI:2     | (FG:0 B) |
| FA:17  | (GG:1 A) | FR:18   | (BI:2 D) | LI:3     | (FG:0 B) |
| FA:18  | (GG:1 A) | FR:25   | (GA:3 D) | LI:4     | (FG:1 B) |
| FA:19  | (GG:1 A) | FR:29   | (KA:0 C) | LI:5     | (FG:1 B) |
| FA:20  | (GG:0 A) | FS:1    | (KI:1 C) | LI:6     | (FG:1 B) |
| FA:21  | (GG:0 A) | FS:2    | (KI:1 D) | MA:1     | (CS:2 A) |
| FB:1   | (KI:2 A) | FS:3    | (KI:1 D) | MA:1     | (HG:0 C) |
| FB:3   | (KI:2 B) | FS_2:1  | (KI:0 C) | MA:1     | (HY:2 D) |
| FE:1   | (ME:1 B) | FS_2:2  | (KI:0 D) | MA:2     | (AA:2 C) |
| FE:1   | (NC:0 B) | FT:1    | (IR:0 D) | MA:2     | (CS:1 A) |
| FE:1   | (NU:0 A) | FT:2    | (IR:0 D) | MA:3     | (CM:2 C) |
| FE:2   | (ME:1 B) | FT:3    | (IR:1 D) | MA:3     | (CS:3 A) |
| FE:2   | (NC:0 B) | GA:1    | (GB:3 D) | MA:4     | (CM:2 C) |
| FE:2   | (NU:0 A) | GA:2    | (BI:1 D) | MA:5     | (CM:1 C) |
| FE:3   | (ME:1 B) | GA:3    | (BI:1 C) | MA:5     | (CS:3 A) |
| FE:3   | (NC:1 B) | GA:4    | (BA:1 B) | MA:6     | (CS:3 A) |
| FE:3   | (NU:0 A) | GA:5    | (BA:0 B) | MA:7     | (CM:2 C) |
| FE_B:1 | (IF:1 A) | GA:6    | (BA:0 C) | MA:7     | (CS:2 A) |
| FE_B:2 | (IF:1 A) | GA:7    | (BA:0 C) | MA:8     | (CM:2 C) |

|       |          |         |          |       |          |
|-------|----------|---------|----------|-------|----------|
| MA:9  | (AC:4 D) | PAS:6   | (FP:0 D) | PT:3  | (DN:1 B) |
| MA:9  | (AE:4 D) | PH_1:1  | (HM:0 B) | PT:4  | (DE:0 B) |
| MA:11 | (CM:1 C) | PH_1:2  | (HM:0 B) | PT:4  | (DN:1 B) |
| MA:11 | (CP:0 A) | PH_1:3  | (HM:2 B) | PT:6  | (DE:0 B) |
| MA:11 | (CS:3 A) | PH_1:4  | (HM:1 B) | PT:6  | (DN:0 B) |
| MA:12 | (CM:0 C) | PH_1:5  | (HM:2 B) | PT:7  | (DE:0 D) |
| MA:12 | (CS:4 A) | PH_1:6  | (HM:2 C) | PT:7  | (DN:0 B) |
| MA:13 | (AA:3 D) | PH_1:7  | (HM:2 D) | PT:8  | (DN:0 B) |
| MA:13 | (AE:3 D) | PH_1:8  | (HM:0 D) | PT:9  | (DN:0 B) |
| MA:13 | (CS:1 A) | PH_1:9  | (HM:0 D) | PW:1  | (AB:4 C) |
| MA:14 | (CM:3 C) | PH_1:10 | (HM:3 D) | PW:2  | (AB:3 C) |
| MA:15 | (BA:0 D) | PH_1:11 | (HM:1 B) | PW:3  | (AE:0 C) |
| MA:15 | (CM:1 C) | PH_2:1  | (HP:0 B) | PW:4  | (AE:1 C) |
| MA:15 | (CP:0 A) | PH_2:2  | (HP:0 C) | PW:5  | (AE:1 D) |
| MA:15 | (CS:3 A) | PH_2:3  | (HP:0 D) | PW:6  | (AE:1 D) |
| MA:16 | (BI:0 D) | PL:1    | (NC:3 C) | PW:7  | (AE:2 D) |
| MA:16 | (CS:1 A) | PL:2    | (NA:1 C) | PW:8  | (AE:2 D) |
| MA:17 | (CM:0 C) | PL:3    | (NA:1 C) | PW:9  | (BI:2 D) |
| MA:17 | (CU:0 C) | PL:4    | (NA:1 C) | PW:10 | (BI:2 C) |
| MA:19 | (CP:0 A) | PL:5    | (NA:2 C) | PW:11 | (BI:2 C) |
| MA:19 | (CS:2 B) | PL:6    | (NA:2 C) | PW:12 | (GB:0 D) |
| MA:20 | (CP:0 A) | PL:7    | (NC:1 C) | PW:13 | (AB:2 B) |
| MA:20 | (CS:2 A) | PL:7    | (NU:1 C) | PW:14 | (AE:2 D) |
| MB:1  | (BI:2 D) | PL:8    | (NA:4 C) | PW:15 | (CM:3 B) |
| MB:2  | (BA:0 C) | PL:9    | (NC:1 C) | PW:16 | (CM:2 B) |
| MB:4  | (BA:1 B) | PL:9    | (NU:1 C) | PW:17 | (CM:2 C) |
| MB:5  | (BI:2 C) | PL:10   | (NC:2 C) | PW:18 | (AB:0 B) |
| MB:8  | (BI:1 D) | PL:10   | (NU:2 C) | PW:19 | (IQ:3 C) |
| MB:9  | (BA:0 B) | PL:11   | (NA:0 C) | PW:20 | (IQ:3 D) |
| MB:14 | (BI:1 C) | PL:12   | (NA:1 C) | PW:21 | (AB:0 B) |
| MB:15 | (GB:3 D) | PL:13   | (NC:2 C) | RA:1  | (GC:2 E) |
| MB:16 | (BA:0 C) | PL:13   | (NU:1 C) | RA:2  | (GC:1 B) |
| MC:1  | (EO:0 D) | PL:14   | (NC:2 C) | RA:3  | (GC:1 B) |
| MC:2  | (EO:1 D) | PL:14   | (NU:1 C) | RA:4  | (GC:1 B) |
| MC:3  | (EO:1 D) | PL:15   | (NC:2 C) | RA:5  | (GC:2 B) |
| MC:4  | (EO:1 D) | PL:15   | (NU:2 C) | RA:6  | (GC:2 B) |
| MC:5  | (EO:1 D) | PL:16   | (NC:2 C) | RA:7  | (GC:1 B) |
| MC:6  | (NU:2 C) | PL:16   | (NU:2 C) | RA:8  | (GC:1 B) |
| MC:7  | (NU:2 D) | PL:17   | (NC:2 C) | RA:9  | (GC:2 B) |
| MC:8  | (NK:1 C) | PL:17   | (NU:2 C) | RA:10 | (GC:2 B) |
| MC:9  | (NK:1 D) | PL:18   | (NA:3 C) | RA:11 | (GC:2 B) |
| MOT:1 | (HZ:2 C) | PL:19   | (NC:3 C) | RA:12 | (BI:2 C) |
| MOT:2 | (HZ:2 C) | PL:20   | (NC:3 C) | RA:13 | (BI:2 D) |
| MOT:3 | (HZ:1 C) | PL:20   | (NU:2 C) | RA:14 | (DU:3 C) |
| MOT:4 | (HZ:2 C) | PL:21   | (NC:3 C) | RA:15 | (HI:0 C) |
| MP:1  | (CO:3 C) | PL:21   | (NU:3 C) | RA:15 | (HM:0 D) |
| MT:1  | (CS:1 C) | PS:1    | (DI:0 C) | RA:16 | (HI:0 C) |
| MT:2  | (CS:1 C) | PS:2    | (DI:0 C) | RA:16 | (HM:0 D) |
| MT:3  | (CS:3 D) | PS:3    | (DI:0 C) | RA:17 | (DU:3 C) |
| MT:5  | (CS:2 D) | PS:4    | (DI:0 C) | RA:19 | (BY:2 D) |
| MT:6  | (CS:2 D) | PS:5    | (DI:0 C) | RC:1  | (BY:3 D) |
| MT:7  | (CS:2 D) | PS:6    | (DI:0 C) | RC:2  | (GG:0 B) |
| MT:8  | (CS:2 D) | PS:7    | (DI:1 C) | RC:2  | (GK:0 A) |
| MT:9  | (CS:4 B) | PS:8    | (DI:1 C) | RC:3  | (GG:0 B) |
| MT:10 | (CS:4 B) | PS:9    | (DI:1 C) | RC:3  | (GK:1 A) |
| OH:1  | (GE:1 B) | PS:14   | (DI:1 C) | RC:4  | (GG:0 B) |
| OH:2  | (GE:2 B) | PS:15   | (DI:1 C) | RC:4  | (GK:1 A) |
| OH:3  | (GE:1 B) | PS:16   | (DI:1 C) | RC:5  | (GG:0 B) |
| OH:4  | (GE:2 B) | PS:17   | (DI:1 C) | RC:5  | (GK:1 A) |
| OH:9  | (GE:1 B) | PS:18   | (DI:1 C) | RC:6  | (GG:0 B) |
| OH:13 | (GE:1 B) | PS:19   | (DI:1 C) | RC:6  | (GK:1 A) |
| OH:14 | (GE:2 B) | PS:20   | (DI:1 C) | RC:7  | (GG:1 B) |
| OH:17 | (GE:1 B) | PS:21   | (DI:1 C) | RC:8  | (BY:3 D) |
| OH:18 | (GE:3 B) | PT:1    | (DE:0 B) | RC:9  | (GG:1 B) |
| OH:24 | (GE:1 D) | PT:1    | (DN:1 B) | RC:10 | (GG:1 B) |
| PAS:1 | (FP:0 C) | PT:2    | (DE:0 B) | RC:10 | (GK:1 A) |
| PAS:2 | (FP:1 C) | PT:2    | (DN:1 B) | RC:11 | (GG:1 B) |
| PAS:3 | (FP:1 C) | PT:3    | (DE:0 B) | RC:12 | (GG:1 B) |

|         |          |         |          |         |          |
|---------|----------|---------|----------|---------|----------|
| RC:14   | (GG:1 B) | SM_F:2  | (GC:0 C) | SW_2:3  | (EO:1 D) |
| RC:15   | (GC:0 B) | SM_F:4  | (GC:3 D) | SW_2:4  | (EO:1 D) |
| RC:16   | (GC:2 B) | SM_O:1  | (GE:2 B) | SW_2:5  | (EO:2 D) |
| RC:17   | (GG:0 B) | SM_O:2  | (GE:1 B) | SW_2:6  | (EO:2 D) |
| RC:18   | (GG:0 B) | SM_O:4  | (GE:1 B) | SW_2:7  | (EO:2 D) |
| RC:19   | (GK:1 A) | SM_R:1  | (GC:3 C) | SW_2:8  | (EO:2 D) |
| RC:19   | (KE:0 C) | SM_R:2  | (GC:0 C) | SW_2:9  | (EO:3 D) |
| RC:20   | (GK:1 A) | SM_R:4  | (GC:3 D) | SX:1    | (GG:1 C) |
| RC:20   | (KE:0 D) | SP:1    | (BM:2 C) | SX:1    | (GK:2 C) |
| RC:21   | (CP:3 A) | SP:2    | (BM:2 C) | SX:2    | (GG:1 C) |
| RC:21   | (GK:1 A) | SP:3    | (BM:2 C) | SX:3    | (GG:3 C) |
| RC_2:2  | (GH:1 B) | SP:4    | (BM:2 C) | SX:3    | (GK:3 C) |
| RC_2:3  | (GH:1 B) | SS:1    | (BE:3 D) | SX:4    | (GG:0 C) |
| RC_2:4  | (GH:1 B) | SS:2    | (BE:3 D) | SX:4    | (GK:2 C) |
| RC_2:5  | (GH:1 B) | SS:3    | (BE:1 C) | SX:5    | (GG:1 C) |
| RC_2:6  | (GH:1 B) | SS:4    | (BE:1 C) | SX:6    | (GG:0 C) |
| RC_2:7  | (GH:1 B) | ST:1    | (GG:4 B) | SX:6    | (GK:2 C) |
| RC_2:9  | (GH:1 B) | ST:1    | (GK:3 A) | SX:7    | (GG:3 C) |
| RC_2:10 | (GH:1 B) | ST_2:1  | (GH:3 B) | SX:7    | (GK:3 C) |
| RC_2:11 | (GH:1 B) | ST_3:1  | (CP:3 A) | SX:8    | (GG:3 C) |
| RC_2:12 | (GH:1 B) | SW_1:1  | (EE:0 C) | SX:8    | (GK:3 C) |
| RC_2:14 | (GH:0 B) | SW_1:1  | (EI:0 C) | SX:10   | (GG:0 C) |
| RC_2:17 | (GH:0 B) | SW_1:2  | (EE:0 C) | SX:10   | (GK:2 C) |
| RC_2:18 | (GH:0 B) | SW_1:2  | (EI:0 C) | SX:11   | (GG:0 C) |
| RC_2:19 | (GH:0 B) | SW_1:3  | (EE:0 D) | SX:11   | (GK:2 C) |
| RC_2:20 | (GH:0 B) | SW_1:3  | (EI:1 C) | SX:12   | (GG:0 C) |
| REF:1   | (IQ:3 C) | SW_1:4  | (EE:1 C) | SX:12   | (GK:2 C) |
| REF:2   | (IQ:3 D) | SW_1:4  | (EI:1 C) | SX:15   | (GG:3 C) |
| REV:1   | (NU:2 C) | SW_1:5  | (EE:1 C) | SX:15   | (GK:3 C) |
| RF:1    | (IQ:3 C) | SW_1:5  | (EI:1 C) | SX:18   | (GG:1 C) |
| RF:4    | (IQ:3 D) | SW_1:6  | (EE:1 D) | SX:20   | (GG:0 C) |
| RP:1    | (DI:2 C) | SW_1:6  | (EI:1 C) | SX:21   | (GG:0 C) |
| RP:2    | (DI:2 C) | SW_1:7  | (EE:2 C) | SX:24   | (GG:1 C) |
| RP:3    | (DI:2 C) | SW_1:7  | (EI:2 C) | SX:24   | (GK:3 C) |
| RP:4    | (DI:2 C) | SW_1:8  | (EE:2 C) | SX:25   | (GG:1 C) |
| RP:5    | (DI:2 C) | SW_1:8  | (EI:2 C) | SX:29   | (GG:1 C) |
| RP:6    | (DI:2 C) | SW_1:9  | (EE:2 D) | SX:30   | (GG:4 C) |
| RP:7    | (DI:2 C) | SW_1:9  | (EI:2 C) | SX:30   | (GK:3 C) |
| RP:8    | (DI:2 B) | SW_1:10 | (EE:3 C) | SX:31   | (GG:2 C) |
| RP:9    | (DI:2 B) | SW_1:10 | (EI:3 C) | SX:31   | (GK:2 C) |
| RT:1    | (DM:3 C) | SW_1:11 | (EE:3 C) | TA:1    | (GA:2 D) |
| RT:2    | (DM:2 C) | SW_1:11 | (EI:3 C) | TA:2    | (GA:2 C) |
| RT:3    | (DM:2 C) | SW_1:12 | (EE:3 D) | TA:3    | (GA:2 C) |
| RT:4    | (DM:2 C) | SW_1:12 | (EI:3 C) | TA:4    | (KA:0 C) |
| RT:5    | (DM:2 C) | SW_1:13 | (EE:0 C) | TA:5    | (NK:3 C) |
| RT:6    | (DM:3 C) | SW_1:13 | (EI:0 C) | TA:6    | (GA:2 C) |
| RT:7    | (DM:3 C) | SW_1:14 | (EE:0 C) | TA:7    | (GA:2 C) |
| SI:1    | (GG:3 B) | SW_1:14 | (EI:0 C) | TA:8    | (GA:1 C) |
| SI:1    | (GK:3 A) | SW_1:15 | (EE:1 C) | TA:9    | (GA:3 C) |
| SI:2    | (GG:3 B) | SW_1:15 | (EI:1 C) | TA:10   | (GQ:1 C) |
| SI:2    | (GK:3 A) | SW_1:16 | (EE:1 C) | TA:11   | (GQ:1 B) |
| SI:4    | (GG:3 B) | SW_1:16 | (EI:1 C) | TA:12   | (GA:2 D) |
| SI:4    | (GK:4 A) | SW_1:17 | (EE:2 C) | TA:13   | (GU:0 C) |
| SI:5    | (GG:3 B) | SW_1:17 | (EI:2 C) | TA:14   | (GU:0 C) |
| SI:5    | (GK:4 A) | SW_1:18 | (EE:2 C) | TA:15   | (GU:0 C) |
| SI_2:1  | (GH:3 B) | SW_1:18 | (EI:2 C) | TA:16   | (GQ:1 C) |
| SI_2:2  | (GH:3 B) | SW_1:19 | (EE:3 C) | TA:17   | (NK:3 C) |
| SI_2:4  | (GH:3 B) | SW_1:19 | (EI:3 C) | TA:18   | (GM:0 C) |
| SI_2:5  | (GH:3 B) | SW_1:20 | (EE:3 C) | TA:19   | (GM:0 C) |
| SI_3:1  | (CP:3 A) | SW_1:20 | (EI:3 C) | TA_2:1  | (GI:1 D) |
| SI_3:2  | (CP:3 A) | SW_2:1  | (EO:3 D) | TA_2:2  | (GI:2 B) |
| SLF:1   | (NI:0 D) | SW_2:10 | (EO:3 D) | TA_2:3  | (GI:1 B) |
| SLF:2   | (NI:0 E) | SW_2:11 | (EO:4 D) | TA_2:6  | (GI:1 B) |
| SLR:1   | (NI:1 C) | SW_2:12 | (EO:4 D) | TA_2:7  | (GI:1 B) |
| SLR:2   | (NI:1 C) | SW_2:13 | (EO:3 D) | TA_2:8  | (GI:1 B) |
| SLR_2:1 | (NI:1 C) | SW_2:14 | (EO:3 D) | TA_2:9  | (GI:2 B) |
| SLR_2:2 | (NI:1 C) | SW_2:15 | (EO:4 D) | TA_2:12 | (GI:1 D) |
| SM_F:1  | (GC:3 C) | SW_2:2  | (EO:3 D) | TB:1    | (GA:3 D) |

|         |          |          |          |         |          |
|---------|----------|----------|----------|---------|----------|
| TB:2    | (GA:3 C) | X02:1    | (GK:3 E) | X04:3   | (GK:2 E) |
| TB:3    | (GA:3 C) | X02:2    | (GG:3 E) | X04:4   | (GG:2 E) |
| TB:4    | (KA:0 C) | X02:2    | (GK:3 E) | X04:4   | (GK:2 E) |
| TB:5    | (NK:3 C) | X02:3    | (GG:3 E) | X04:5   | (GG:2 E) |
| TB:6    | (GA:2 C) | X02:3    | (GK:3 E) | X04:5   | (GK:2 E) |
| TB:7    | (GA:3 C) | X02:4    | (GG:3 E) | X04:6   | (GG:2 E) |
| TB:8    | (GA:4 C) | X02:4    | (GK:3 E) | X04:6   | (GK:2 E) |
| TB:9    | (GA:3 C) | X02:5    | (GG:3 E) | X04:6   | (GG:2 E) |
| TB:10   | (GM:0 C) | X02:5    | (GK:3 E) | X04:7   | (GK:2 E) |
| TB:11   | (GM:0 C) | X02:6    | (GG:3 E) | X04_2:1 | (GH:2 D) |
| TB:12   | (GA:3 D) | X02:6    | (GK:3 E) | X04_2:2 | (GH:2 D) |
| TB:13   | (GU:1 C) | X02:7    | (GG:3 E) | X04_2:3 | (GH:2 D) |
| TB:14   | (GU:1 C) | X02:7    | (GK:3 E) | X04_2:4 | (GH:2 D) |
| TB:15   | (GU:1 C) | X02_2:1  | (GH:3 D) | X04_2:5 | (GH:2 D) |
| TB:16   | (GM:1 C) | X02_2:2  | (GH:3 D) | X04_2:6 | (GH:3 D) |
| TB:17   | (NK:4 C) | X02_2:3  | (GH:3 D) | X04_2:7 | (GH:3 D) |
| TB:18   | (BI:2 D) | X02_2:4  | (GH:3 D) | X05:1   | (GG:3 E) |
| TB:19   | (GQ:2 B) | X02_2:5  | (GH:3 D) | X05:2   | (GG:2 E) |
| TB:20   | (GQ:0 C) | X02_2:6  | (GH:3 D) | X05:3   | (GG:2 E) |
| TB:21   | (BI:2 D) | X02_2:7  | (GH:3 D) | X05:4   | (GG:2 E) |
| TB_2:1  | (GI:3 D) | X03:1    | (GG:0 E) | X05:5   | (GG:3 E) |
| TB_2:2  | (GI:3 B) | X03:2    | (GG:0 E) | X05:7   | (GG:3 E) |
| TB_2:3  | (GI:3 B) | X03:3    | (GG:1 E) | X06:1   | (NC:3 D) |
| TB_2:6  | (GI:2 B) | X03:4    | (GG:1 E) | X06:2   | (NA:1 D) |
| TB_2:7  | (GI:3 B) | X03:5    | (GG:0 E) | X06:3   | (NA:1 D) |
| TB_2:8  | (GI:2 B) | X03:6    | (GG:0 E) | X06:4   | (NA:1 D) |
| TB_2:9  | (GI:3 B) | X03:7    | (GG:0 E) | X06:5   | (NA:2 D) |
| TB_2:12 | (GI:3 D) | X03:8    | (GG:1 E) | X06:6   | (NA:2 D) |
| TB_2:18 | (BI:0 E) | X03:9    | (GG:1 E) | X06:7   | (NC:1 D) |
| TB_2:21 | (BI:0 D) | X03:10   | (GG:1 E) | X06:7   | (NU:1 D) |
| TD:1    | (IE:0 C) | X03:11   | (GG:1 E) | X06:8   | (NC:4 C) |
| TD:2    | (IE:0 D) | X03:12   | (GG:1 E) | X06:9   | (NC:1 D) |
| TD:3    | (IE:0 C) | X03:13   | (GG:1 E) | X06:9   | (NU:1 D) |
| TD:4    | (IE:1 C) | X03:14   | (GG:0 E) | X06:10  | (NC:2 D) |
| TD:5    | (IE:1 C) | X03:15   | (GG:0 E) | X06:10  | (NU:2 D) |
| TD:6    | (BI:3 C) | X03:2    | (GG:0 E) | X06:11  | (NA:0 D) |
| TD:7    | (BI:3 C) | X03:3    | (GG:1 E) | X06:12  | (NA:1 D) |
| TD:8    | (GM:3 D) | X03:4    | (GG:1 E) | X06:13  | (NC:2 D) |
| TD:9    | (GM:3 C) | X03:5    | (GG:0 E) | X06:13  | (NU:1 D) |
| TD:10   | (GM:3 C) | X03:6    | (GG:0 E) | X06:14  | (NC:2 D) |
| TD:11   | (GM:2 C) | X03:7    | (GG:0 E) | X06:14  | (NU:1 D) |
| TD:12   | (GM:2 C) | X03:8    | (GG:1 E) | X06:15  | (NC:2 D) |
| TD:13   | (BI:3 D) | X03:9    | (GG:1 E) | X06:15  | (NU:2 D) |
| TD:15   | (IE:1 C) | X03:10   | (GG:1 E) | X06:16  | (NC:2 D) |
| TD:16   | (IE:1 D) | X03:11   | (GG:1 E) | X06:16  | (NU:2 D) |
| TD:17   | (IE:1 C) | X03:12   | (GG:1 E) | X06:17  | (NC:2 D) |
| TD:18   | (IE:2 C) | X03:13   | (GG:1 E) | X06:17  | (NU:2 D) |
| TD:19   | (IE:2 C) | X03:15   | (GG:0 E) | X06:18  | (NA:3 D) |
| TD:20   | (BI:3 C) | X03_2:1  | (GH:1 D) | X06:19  | (NA:3 D) |
| TD:21   | (BI:3 C) | X03_2:2  | (GH:1 D) | X06:20  | (NC:3 D) |
| TDET:1  | (GB:1 D) | X03_2:3  | (GH:0 D) | X06:20  | (NU:2 D) |
| TM:1    | (OA:2 D) | X03_2:4  | (GH:1 D) | X06:21  | (NC:3 D) |
| TM:2    | (OA:2 D) | X03_2:5  | (GH:1 D) | X06:21  | (NU:3 D) |
| TM:3    | (OA:2 B) | X03_2:6  | (GH:1 D) | X06:22  | (NC:3 D) |
| TM:4    | (OA:2 B) | X03_2:7  | (GH:1 D) | X06:24  | (NA:3 D) |
| TM:5    | (OA:1 D) | X03_2:8  | (GH:1 D) | X06:30  | (NA:3 D) |
| TMA:1   | (OA:2 C) | X03_2:9  | (GH:1 D) | X06:31  | (NA:4 D) |
| TMA:3   | (OA:1 C) | X03_2:10 | (GH:1 D) | X46:2   | (BY:3 E) |
| TMA:5   | (OA:2 B) | X03_2:11 | (GH:1 D) | X46:3   | (BY:2 E) |
| TMA:6   | (OA:2 C) | X03_2:12 | (GH:1 D) | X46:4   | (BY:2 E) |
| TMA:7   | (OA:2 B) | X03_2:13 | (GH:1 D) | X46:5   | (BY:3 E) |
| TS:1    | (FG:0 A) | X03_2:14 | (GH:0 D) | X46:6   | (BY:3 E) |
| TS:2    | (FG:0 A) | X03_2:15 | (GH:0 D) | XA:1    | (GB:0 B) |
| TS:3    | (FG:0 A) | X04:1    | (GG:2 E) | XA:2    | (GB:1 B) |
| TS:4    | (FG:1 A) | X04:1    | (GK:2 E) | XA:3    | (GB:1 B) |
| TS:5    | (FG:1 A) | X04:2    | (GG:1 E) | XA:4    | (GB:1 B) |
| TS:6    | (FG:1 A) | X04:2    | (GK:2 E) | XA:5    | (GB:1 B) |
| X02:1   | (GG:4 E) | X04:3    | (GG:2 E) | XA:6    | (GB:1 B) |

|       |          |       |          |         |          |
|-------|----------|-------|----------|---------|----------|
| XA:7  | (GB:2 B) | XE:1  | (AA:3 D) | XK:16   | (HY:1 B) |
| XA:8  | (GB:2 B) | XE:1  | (AC:2 D) | XK:17   | (CU:0 B) |
| XA:9  | (GB:2 B) | XF:1  | (FA:4 B) | XK:18   | (CU:0 B) |
| XA:10 | (GB:0 B) | XF:2  | (FQ:1 B) | XL:1    | (BA:1 B) |
| XA:11 | (GB:1 B) | XF:3  | (ME:3 B) | XL:2    | (IH:4 B) |
| XA:12 | (GB:1 B) | XF:4  | (KE:0 C) | XL:3    | (BA:1 B) |
| XA:13 | (GB:1 B) | XF:5  | (FQ:0 B) | XL:4    | (OA:2 B) |
| XA:14 | (GB:1 B) | XF:6  | (FQ:1 B) | XL:5    | (BA:1 B) |
| XA:15 | (GB:1 B) | XF:7  | (KE:0 C) | XL:6    | (BA:1 B) |
| XA:16 | (GB:2 B) | XF:8  | (KE:0 C) | XL:7    | (DB:1 B) |
| XA:17 | (GB:2 B) | XF:9  | (AA:3 C) | XL:7    | (DM:0 B) |
| XA:18 | (GB:2 B) | XF:10 | (FA:4 B) | XL:8    | (BI:0 B) |
| XB:1  | (AA:4 D) | XF:12 | (KE:0 B) | XL:9    | (BI:0 B) |
| XC:1  | (BM:1 C) | XF:13 | (BA:0 B) | XL:9    | (OA:2 B) |
| XC:3  | (IH:2 C) | XF:15 | (FA:4 B) | XL:10   | (DB:1 B) |
| XC:4  | (HP:0 E) | XF:18 | (GB:3 C) | XL:10   | (DM:0 B) |
| XC:5  | (HG:0 D) | XG:1  | (AC:0 A) | XL:11   | (BI:0 B) |
| XC:5  | (HY:2 D) | XH:1  | (AC:2 A) | XL:12   | (BA:1 B) |
| XC:6  | (BU:2 C) | XJ:1  | (GM:2 C) | XL:13   | (DQ:0 B) |
| XC:7  | (BM:1 C) | XJ:2  | (GM:1 D) | XL:14   | (DU:1 B) |
| XC:8  | (AE:2 C) | XJ:3  | (HG:0 B) | XL:15   | (BA:1 D) |
| XC:8  | (NK:1 D) | XJ:4  | (GQ:1 A) | XL:16   | (BA:1 D) |
| XC:9  | (DB:1 E) | XJ:6  | (HG:0 B) | XL:17   | (BA:1 D) |
| XC:9  | (DM:0 E) | XJ:7  | (GQ:2 A) | XL:18   | (BA:1 D) |
| XC:10 | (HP:1 E) | XJ:10 | (GA:0 B) | XM:1    | (AA:2 B) |
| XC:11 | (BU:0 A) | XJ:11 | (IM:0 B) | XM:2    | (AA:2 B) |
| XC:12 | (KI:1 C) | XJ:12 | (BA:1 B) | XM:3    | (AA:2 B) |
| XD:1  | (BU:1 C) | XJ:13 | (GA:0 B) | XM:4    | (AA:2 A) |
| XD:1  | (BX:1 D) | XJ:14 | (IH:1 B) | XM:5    | (AA:3 A) |
| XD:1  | (BY:1 D) | XJ:15 | (BA:0 B) | XM:6    | (AC:3 D) |
| XD:2  | (CU:1 C) | XJ:16 | (IH:2 B) | XM:7    | (AC:3 D) |
| XD:3  | (CP:2 D) | XJ:17 | (IH:1 B) | XM:8    | (AC:3 D) |
| XD:4  | (EE:4 D) | XJ:18 | (IH:2 B) | XM:9    | (AC:3 D) |
| XD:4  | (EI:0 D) | XK:1  | (BA:0 B) | XM:10   | (AC:3 D) |
| XD:4  | (EI:4 D) | XK:3  | (GM:3 B) | XM:11   | (AC:2 C) |
| XD:4  | (EO:0 D) | XK:4  | (BA:0 B) | XM:12   | (BI:3 B) |
| XD:5  | (DU:2 E) | XK:6  | (GM:1 D) | XM:13   | (AC:2 B) |
| XD:5  | (EO:0 D) | XK:7  | (BA:0 A) | XM:14   | (AC:2 C) |
| XD:6  | (FA:3 D) | XK:8  | (BA:0 B) | XM:15   | (BI:3 B) |
| XD:6  | (FI:0 C) | XK:9  | (DB:1 B) | XM:16   | (AC:2 B) |
| XD:6  | (FK:1 D) | XK:9  | (DM:1 B) | XM:17   | (AC:2 B) |
| XD:7  | (GU:2 D) | XK:10 | (HY:0 B) | XM:18   | (BI:3 B) |
| XD:8  | (IX:2 D) | XK:11 | (DB:1 B) | XO:1    | (AC:0 A) |
| XD:9  | (BI:1 E) | XK:11 | (DM:0 B) | XS:1    | (AC:2 A) |
| XD:10 | (IS:1 D) | XK:12 | (DB:1 B) | XT:1    | (AC:1 A) |
| XD:10 | (OA:1 D) | XK:12 | (DM:1 B) | Y18GH:1 | (DN:2 B) |
| XD:11 | (AA:2 C) | XK:13 | (HY:0 B) | Y18GH:2 | (DN:2 B) |
| XD:12 | (NC:0 C) | XK:14 | (IQ:1 B) | Y18GH:4 | (DN:2 A) |
| XD:12 | (NU:2 D) | XK:15 | (IQ:2 B) |         |          |

# List of components

|         |   |       |   |
|---------|---|-------|---|
| A01     | Fuse and Relay Centre (1000)  | A41   | Component group transmission. Contains  |
| A02L    | Fuse holder, 6-fuses (GB:0 D) (1000)  |       | B23, B138 and Y17 (DN:0 D/DE:0 C/DM:2 B)  |
| A02P    | Fuse holder, 6-fuses (ME:2 C) (1000)  |       | (1403/1499)   |
| A02X    | Fuse holder, 6-fuses (ME:3 C) (1000)  | A42   | Component group transmission. Contains  |
| A03     | Instrument cluster (BI:0 B) (CP:2 D) (1000)   |       | B26, Y21, Y22, Y23 and Y26 (DN:2 D/DE:2 C)  |
| A04A    | Refrigerator (IQ:3 C) (1007B)   |       | (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/IZ:0 D) (1000)                           | A45   | Fuel pre filter (B52 water level sensor, R10 heater, Y38 water drain solenoid (CO:3 B) (1030) |
| A06L    | EI. adjustable seat (IA:2 B) (1007A)  | A44   | Fuel filter bracket (B51 fuel pressure sensor, M15 priming pump) (CO:2 D) (1030)              |
| A06R    | EI. adjustable seat (IA:0 B) (1007B)  |       | Control unit, Coolant level (CS:2 D)  |
| A07     | Radio (IU:0 B) (1000)   | A54   | Control unit, RAS (Rear Axle Steering) (FO:1 B) (1493)  |
| A08     | Control unit, GPS receiver (Global Positioning System) (BU:2 D) (1000)                  | A59   | Yawrate sensor and power supply unit, ACC (BE:2 C) (1007C)                                    |
| A09     | Telephone (IX:0 C) (1000)   | A75   | Control unit, Tyre pressure monitoring (OA:1 B) (1508)  |
| A10     | CD player (IU:3 B)  |       | Airdryer, electronical controlled (FQ:1 C) (1056)   |
| A11     | Control unit, door lock (IM:1 B) (1000)   | A94   | FMS Gateway, Fleet Management System (BX:0 B) (1000)  |
| A12A    | Control unit, ABS (Anti-lock Brake System) (EI:0 B) (1007C)                             | A96   | Control unit, Roof cooler (HZ:1 B) (1018)   |
| A12B    | Control unit, ABS (Anti-lock Brake System) (EE:0 B) (1007C)                             | A102  | Control unit, Volvo Link (VERS-SAM) (BY:1 C) (1000)   |
| A13A    | Control unit, TECU (automatic transmission) (DE:0 C)                                    | A105  | Serial Interface Box (BU:0 B) (1000)  |
| A13B    | Control unit, TECU (automatic transmission) (DI:0 B) (1007C)                            | A106  | Fuse holder, 3-fuses, not mainswitch dependent (AB:3 B) (1000)                                |
| A13C    | Control unit, TECU (automatic transmission) (DM:0 C) (1007C)                            | A109  | Control unit, GSECU (Gearshift ECU) (DC:1 C) (1000)   |
| A13D    | Control unit, TECU (automatic transmission) (DN:0 B)                                    | A121  | Logger, AUS (CP:1 B)  |
| A14     | Control unit, EMS (Engine Management System) (CO:2 C/CS:2 C) (1030)                     | B02A  | Thermostat, parking heater (HI:1 B) (1006A/1006E)   |
| A15     | Control unit, SRS (Supplementary Restraint System) (IS:0 B) (1000)                      | B02B  | Thermostat, parking heater (HI:0 B) (1006A/1006E)   |
| A16     | Control unit, ECS (Electronic Controlled air Suspension) (FA:0 C/FG:0 D/FG:2 D) (1007C) | B03_A | Sensor, footbrake valve (EO:0 D) (1504)   |
| A17     | Control unit, VECU (Vehicle ECU) (BA:0 C) (1000)  | B04   | Sensor, engine speed, crankshaft (CO:0 D) (1030)  |
| A18     | Control unit, roof hatch (IQ:0 C) (1006E)   | B05   | Sensor, engine speed, camshaft (CO:0 D) (1030)  |
| A19A    | Control unit, GECU (gear selector ECU) (Geartronic) (DB:1 C) (1007A/1007B/1484)         | B06   | Sensor, air pressure, air tank (BA:2 D) (1000)  |
| A20     | Control unit, Immobiliser (IM:3 C) (1000)   | B07   | Sensor, fuel level (BI:2 C) (1040)  |
| A21     | Control unit, EBS (Electronic Brake System) (EO:0 C) (1007C)                            | B08   | Sensor, input shaft speed, gearbox (DE:3 B)   |
| A22     | Control unit, FMS (Fleet Management System) (BU:0 C/IZ:3 B) (1000)                      | B09A  | Sensor, oil temperature, gearbox (DE:2 D)   |
| A23     | Control unit, FMS, TMC (Traffic Message Channel) (BU:3 B) (1000)                        | B09B  | Sensor, oil temperature, gearbox (BI:2 C) (1494)  |
| A24     | Control unit, information module trailer without ABS (CP:3 C)                           | B10   | Sensor, oil level (CO:0 B) (1030)   |
| A26     | Control unit, ACC (Adaptive Cruise Control) (BE:1 B) (1007C)                            | B10B  | Sensor, oil level (FP:0 C) (1493)   |
| A27     | Control unit, LCM (Light Control Module) (GB:0 C/GC:0 A/GA:0 B) (1000)                  | B10C  | Sensor, oil level (FO:0 C) (1493)   |
| A28B    | Control unit, ADR main switch, integrated power relay (AE:0 C) (1435B)                  | B12   | Sensor, tachograph/speedometer (BM:2 D) (1494)  |
| A29     | Telephone handset, secrecy receiver (IX:1 B) (1000)                                     | B12B  | Sensor, tachograph/speedometer (BM:1 D) (1494)  |
| A31     | Control unit, burglar alarm (NK:0 C) (1000)   | B13A  | Sensor, wheel speed, lhs. 1:st front axle (EI:0 D/EE:0 D) (1086)                              |
| A32     | Control unit, parking heater (HM:0 C) (1062)  | B13B  | Sensor, wheel speed, lhs. 1:st front axle (EP:1 B/EP:3 B) (1086)                              |
| A33     | Tachograph (BM:1 B) (CP:1 D) (1000)   | B14A  | Sensor, wheel speed, rhs. 1:st front axle (EI:1 D/EE:1 D) (1086)                              |
| A33B    | Tachograph (/BN:1 B) (1006)   | B14B  | Sensor, wheel speed, rhs. 1:st front axle (EP:2 B/EP:3 B) (1086)                              |
| A34B    | Control unit, climate unit (HG:0 B) (1000)  | B15A  | Sensor, wheel speed, lhs. 1:st driven rear axle (EI:2 D/EE:2 D) (1086)                        |
| A36     | Control unit, BBM (Body Builder Module) (NC:1 B/NU:1 B) (1000)                          | B15B  | Sensor, wheel speed, lhs. 1:st driven rear axle (EP:1 D/EP:2 D) (1086)                        |
| A39     | Control unit, camera (IZ:0 C) (1000)  | B16A  | Sensor, wheel speed, rhs. 1:st driven rear axle (EI:3 D/EE:3 D) (1086)                        |
| A40 HID | Fuse holder, 3-fuses (GD:1 C) (1000)  | B16B  | Sensor, wheel speed, rhs. 1:st driven rear axle (EP:1 D/EP:2 D) (1086)                        |
|         |   | B17   | Sensor, wheel speed, lhs. 2:nd driven rear axle (EP:1 D) (1086)                               |
|         |   | B18   | Sensor, wheel speed, rhs. 2:nd driven rear axle (EP:1 D) (1086)                               |

|      |   |        |  |
|------|---|--------|--|
| B19  | Sensor, wheel speed, lhs. 2:nd front axle (EP:1 B) (1086)                       | B58    | Sensor, air pressure, suspension bellows, rhs. rear (FA:1 D) (1072)    |
| B20  | Sensor, wheel speed, rhs. 2:nd front axle (EP:2 B) (1086)                       | B59    | Sensor, indoor temperature (HG:1 B) (1000)                             |
| B21  | Sensor, coolant temperature, engine (CO:1 D) (1030)                             | B60_DD | Loudspeaker (IU:1 D) (1083)  |
| B22  | Sensor, outdoor temperature (BI:2 C) (1503)                                     | B60_DP | Loudspeaker (IU:1 D) (1083)  |
| B23A | Sensor, oil temperature, retarder (DE:1 D)                                      | B60_LF | Loudspeaker (IU:0 D) (1000)  |
| B23B | Sensor, oil temperature, retarder (DI:0 D) (1494)                               | B60_LR | Loudspeaker (IU:2 D) (1006D/1006E)                                     |
| B24  | Sensor, air pressure, bogie lift bellow (FA:0 D) (1072)                         | B60_RF | Loudspeaker (IU:1 D) (1000)  |
|      |   | B60_RR | Loudspeaker (IU:2 D) (1006D/1006E)                                     |
| B25  | Sensor, accelerator pedal (BA:4 D) (1000)                                       | B61_L  | Loudspeaker, treble (IU:0 D) (1000)                                    |
| B26A | Sensor, clutch position (DE:2 D)  | B61_R  | Loudspeaker, treble (IU:1 D) (1000)                                    |
| B27  | Sensor, battery charging (BI:2 C) (1435A/1435B)                                 | B64    | Sensor, air pressure, valve unit gearbox (DE:1 D)                      |
| B28  | Sensor, chassi level, front axle (FA:1 D) (1072)                                | B67    | Rear view camera (IZ:2 D) (1000)                                       |
| B29B | Sensor, chassis level, lhs. rear axle (FA:1 D) (1072)                           | B68    | Sensor, output shaft speed, gearbox (DI:2 D) (1494)                    |
| B30  | Sensor, chassis level, rhs. rear axle (FA:2 D) (1072)                           | B69A   | Sensor, coolant temperature, retarder (DE:1 D)                         |
| B34A | Sensor, gear position (DE:2 B)  | B69B   | Sensor, coolant temperature, retarder (DM:3 B) (1403)                  |
| B34B | Sensor, gear position (DE:3 B)  | B69C   | Sensor, coolant temperature, retarder (DN:0 D) (1403)                  |
| B35  | Sensor, range gear position (DE:3 B)  | B70    | Sensor, wheel speed, lhs., pusher axle (EP:3 D) (1086)                 |
| B36  | Sensor, split gear position (DE:3 B)  | B71    | Sensor, wheel speed, rhs., pusher axle (EP:3 D) (1086)                 |
| B37  | Sensor, boost pressure and boost temperature (CO:0 D) (1030)                    | B72    | Sensor, wheel speed, lhs., tag axle (EP:4 D) (1086)                    |
| B38  | Sensor, oil pressure and oil temperature (CO:1 D) (1030)                        | B73    | Sensor, wheel speed, rhs., tag axle (EP:4 D) (1086)                    |
| B39  | Sensor, air filter pressure and air filter temperature (CO:1 B/CS:1 D) (1030)   | B74B   | Sensor, brake lining wear indicator, lhs., pusher axle (EP:2 D) (1086) |
| B40A | Sensor, brake lining wear indicator, lhs. 1:st front axle (EP:2 B) (1086)       | B75B   | Sensor, brake lining wear indicator, rhs., pusher axle (EP:3 D) (1086) |
| B40B | Sensor, brake lining wear indicator, lhs. 1:st front axle (EP:0 B) (1086)       | B76B   | Sensor, brake lining wear indicator, lhs., tag axle (EP:3 D) (1086)    |
| B41A | Sensor, brake lining wear indicator, rhs. 1:st front axle (EP:3 B) (1086)       | B77B   | Sensor, brake lining wear indicator, rhs., tag axle (EP:3 D) (1086)    |
| B41B | Sensor, brake lining wear indicator, rhs. 1:st front axle (EP:1 B) (1086)       | B80    | Handsfree, Loudspeaker, Microphone (IX:0 B) (1007A/1007B)              |
| B42A | Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:1 D) (1086) | B90    | Transmitter, movement sensor (NK:2 D) (1006B/1006E)                    |
| B42B | Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:0 D) (1086) | B91    | Receiver, movement sensor (NK:3 D) (1006B/1006E)                       |
| B42A | Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:1 D) (1086) | B118   | Sensor, oil pressure (CO:1 D) (1030)                                   |
| B42B | Sensor, brake lining wear indicator, rhs. 1:st driven rear axle (EP:0 D) (1086) | B119   | Sensor, oil level and oil temp (CO:0 B) (1030)                         |
| B43A | Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:2 D) (1086) | B120   | Radar ACC, Adaptive Cruise Control (BE:1 D) (1502)                     |
| B43B | Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:2 D) (1086) | B138A  | Sensor, Control pressure retarder (DE:0 D) (1494)                      |
| B43B | Sensor, brake lining wear indicator, lhs. 1:st driven rear axle (EP:2 D) (1086) | B138B  | Sensor, Control pressure retarder (DI:3 B) (1494)                      |
| B44B | Sensor, brake lining wear indicator, lhs. 2:nd driven rear axle (EP:0 D) (1086) | B151   | Sensor, trailer detection (GB:1 C)                                     |
| B45B | Sensor, brake lining wear indicator, rhs. 2:nd driven rear axle (EP:0 D) (1086) | B152   | Sensor, brake airpressure, front (BI:3 C)                              |
| B46B | Sensor, brake lining wear indicator, lhs. 2:nd front axle (EP:0 B) (1086)       | B153   | Sensor, brake airpressure, rear (BI:3 C)                               |
| B47B | Sensor, brake lining wear indicator, rhs. 2:nd front axle (EP:2 B) (1086)       | B154   | Sensor, water level roof cooler (HZ:2 C) (1018)                        |
| B49  | Sensor, steering angle (EO:3 A) (1000)  | D01    | Time delay relay, bogie lift, axle load limiter (FK:3 B) (1007C)       |
| B49F | Sensor, steering angle (FO:1 D) (1493)  | E01    | Lamp, full beams (GA:2 C/GA:3 C) (1502/1503)                           |
| B49R | Sensor, steering angle (FO:2 D) (1493)  | E02    | Lamp, dipped beams (GA:2 D/GA:3 D) (1502/1503)                         |
| B50  | Sensor, yaw-rate (EO:4 B) (1507)  | E03    | Lamp, spot light (GA:1 C/GA:3 C) (1502/1503)                           |
| B51  | Sensor, fuel pressure (CO:2 D) (1030)   | E03A   | Lamp, spot light (NI:2 C)  |
| B54  | Sensor, crank case pressure (CO:0 B) (1030)                                     | E03B   | Lamp, spot light (NI:2 C)  |
| B55  | Sensor, air pressure, suspension bellows, 3:th axle (FA:0 D) (1072)             | E03L   | Lamp, spot light (GI:1 C) (NI:2 D)                                     |
| B56  | Sensor, air pressure, suspension bellows, front axle (FA:0 D) (1072)            | E03R   | Lamp, spot light (GI:2 C) (NI:2 D)                                     |
| B57  | Sensor, air pressure, suspension bellows, lhs. rear (FA:0 D) (1072)             | E05    | Lamp, 5:th wheel light (KE:0 D/GH:0 D/GF:1 C) (1063)                   |
|      |   | E06    | Lamp, reversing light (GC:1 D/GC:2 D/GF:1 C) (1040)                    |
|      |   | E07    | Lamp, fog light (GA:1 C/GA:3 C) (1502/1503)                            |
|      |   | E07L   | Lamp, fog light (GI:1 C)   |
|      |   | E07R   | Lamp, fog light (GI:3 C)   |
|      |   | E08    | Lamp, parking light, front (GA:1 D/GA:3 D) (1502/1503)                 |
|      |   | E08L   | Lamp, parking light, front (GI:1 C)                                    |

|        |   |      |  |
|--------|---|------|--|
| E08R   | Lamp, parking light, front (GI:1 C)                         | E39R | Licence Plate Illumination (GE:2 C) (1040)                                   |
| E09    | Lamp, brake light (GC:1 D/GC:2 D) (1040)                    | E74L | Lamp, parking light front direction indicator (GI:1 C)                       |
| E10    | Lamp, tail light (GC:1 D/GC:2 D) (1040)                     | E74R | Lamp, parking light front direction indicator (GI:3 C)                       |
| E11_LC | Lamp, side marker light (GC:0 D) (1077)                     | G01A | Battery (AA:0 D/AB:1 D/AE:0 C/CS:0 C)  |
| E11_LF | Lamp, side marker light (GC:0 D) (1077)                     | G01B | Battery (AA:0 D/AB:1 D/AE:0 D/CS:0 D)  |
| E11_LR | Lamp, side marker light (GC:0 D) (1077)                     | G02  | Alternator (AA:3 D/AE:3 D/CS:1 D) (1025)                                     |
| E11_LW | Lamp, side marker light (GC:0 D) (1077)                     | G05  | Battery, backup Volvo Link (VERS-SAM) (BY:0 C) (1000)                        |
| E11_RC | Lamp, side marker light (GC:3 D) (1077)                     | H01  | Horn, air-operated (GQ:1 B) (1502)   |
| E11_RF | Lamp, side marker light (GC:3 D) (1077)                     | H02  | Horn (GQ:1 B) (1502)   |
| E11_RR | Lamp, side marker light (GC:3 D) (1077)                     | H03  | Reverse warner, acoustic (GF:0 C) (1040)                                     |
| E11_RW | Lamp, side marker light (GC:3 D) (1077)                     | H06  | Siren (NK:3 D) (1502/1503)   |
| E12L   | Lamp, roof position light (GA:4 C) (1006A)                  | K1   | Relay, starting switch, radio position (AC:3 C) (1000)                       |
| E12R   | Lamp, roof position light (GA:1 C) (1006A)                  | K2   | Relay, EMS (Engine Management System) (BA:1 A) (1000)                        |
| E13    | Lamp, direction indicator (GC:1 D/GC:2 D) (1040)            | K3   | Relay, starter motor (AA:2 B) (1000)   |
| E13LF  | Lamp, direction indicator (GA:2 C) (1502)                   | K3B  | Relay, starter motor, Cummins (CS:1 C)                                       |
| E13RF  | Lamp, direction indicator (GA:3 C) (1503)                   | K4   | Relay, body builder fuse box (kl.15) (ME:2 A) (1000)                         |
| E14_A  | Lamp, beacon warning lamp (KM:2 D) (1047)                   | K5   | Relay, automatic transmission (DB:1 A/DC:0 A/DM:0 A) (1000)                  |
| E14_AR | Lamp, beacon warning lamp (KM:1 C) (1047)                   | K6   | Relay, fan climate unit (HY:0 B) (1000)                                      |
| E14_B  | Lamp, beacon warning lamp (KM:1 D) (1047)                   | K7   | Relay, intermittent wiper (GM:1 C) (1000)                                    |
| E14_BR | Lamp, beacon warning lamp (KM:2 C) (1047)                   | K8   | Relay, gearbox area inhibitor (BA:1 A) (1000)                                |
| E15    | Lamp, cigarette lighter illumination (IQ:2 C) (1000)        | K9   | Relay, interior lamps (IH:1 A) (1000)  |
| E16_DS | Lamp, instep light (IH:2 C) (1083)                          | K10  | Relay, fifth wheel-, working-light (KE:0 C) (1000)                           |
| E16_PS | Lamp, instep light (IH:2 C) (1083)                          | K11  | Relay, air suspension (FA:4 B) (1000)  |
| E17L   | Lamp, interior light (IH:1 C) (1006B/1006E)                 | K12  | Relay, reverse light, trailer (GB:4 D) (1000)                                |
| E17R   | Lamp, interior light (IH:1 C) (1006B/1006E)                 | K13  | Relay, alternator controlled (AA:4 B) (1000)                                 |
| E18_C  | Lamp, reading light (IH:0 C) (1006D)                        | K14  | Time delay relay, bogie lift, A-ride (FI:1 B/FK:1 C) (1000)                  |
| E18_LB | Lamp, reading light (IH:0 C) (1006D/1006E)                  | K15  | Time delay relay, bogie lift, A-ride, with axle load limiter (FK:2 C) (1000) |
| E18_RB | Lamp, reading light (IH:1 C) (1006D/1006E)                  | K16  | Relay, bogie lift, A-ride, with axle load limiter (FK:1 C) (1000)            |
| E18L   | Lamp, reading light (IH:0 C) (1006D/1006E)                  | K18  | Relay, hydraulic steered axle (FP:1 B) (1000)                                |
| E18LC  | Lamp, reading light (IH:0 C) (1006C/1006E)                  | K20  | Relay, D+ short-circuit, (ADR-trucks only) (AE:4 D) (1000)                   |
| E18R   | Lamp, reading light (IH:1 C) (1006D/1006E)                  | K21  | Relay, el. adjustable seat (IA:2 B) (1000)                                   |
| E18RC  | Lamp, reading light (IH:0 C) (1006C)                        | K22  | Relay, climate fan, 1:st speed (by parking heater) (HY:1 B) (1000)           |
| E19C   | Lamp, identification light, roof (GA:0 C) (1006A/1436)      | K23  | Relay, cab tilt (KA:0 C) (1000)  |
| E19L   | Lamp, identification light, roof (GA:0 D) (1006A/1436)      | K24  | Relay, central lubrication (FU:0 B) (1000)                                   |
| E19R   | Lamp, identification light, roof (GA:0 C) (1006A/1436)      | K25  | Relay, light sign (KI:1 C) (1000)  |
| E20    | Lamp, ashtray illumination (IQ:2 C) (1000)                  | K26A | Relay, foldable rear view mirror arm, Japan (IF:0 C) (1000)                  |
| E21    | Lamp, rear fog light (GC:1 D/GC:2 D) (1040)                 | K26B | Relay, foldable rear view mirror arm, Japan (IF:1 C) (1000)                  |
| E22    | Lamp, roof sign illumination (KI:0 C) (1436)                | K27  | Relay, gas discharge lamp, dipped beam, lhs (GD:1 C) (1000)                  |
| E23    | Lamp, luggage compartment illumination (IH:4 C) (1007A)     | K28  | Relay, gas discharge lamp, dipped beam, rhs (GD:1 C) (1000)                  |
| E24    | Lamp, storage tray illumination (IQ:1 D) (1000)             | K30  | Relay, beacon warning light (KM:0 B) (1000)                                  |
| E26L   | Headlight module (GA:1 C) (1502)                            | K35  | Relay, headlamp high pressure wash (GM:0 B) (1000)                           |
| E26R   | Headlight module (GA:3 C) (1503)                            | K37  | Relay, parking light (NA:1 C) (1000)   |
| E27L_1 | Tail lamp module (GC:1 D) (1040)                            | K38  | Relay, body builder preparation, pressure sel./switch 2/free (NA:1 C) (1000) |
| E27L_2 | Tail lamp module (GE:1 C) (1040)                            | K39  | Relay, body builder preparation, plough light, spotlights (NA:1 C) (1000)    |
| E27L_3 | Tail lamp module (GF:3 C) (1040)                            | K40  | Relay, body builder preparation (NA:2 C) (1000)                              |
| E27L_4 | Tail lamp module (GF:0 C) (1040)                            | K41  | Relay, body builder preparation, swapbody (NA:3 C) (1000)                    |
| E27R_1 | Tail lamp module (GC:2 D) (1040)                            | K42  | Relay, body builder preparation, spotlights/free (NI:1 B) (1000)             |
| E27R_2 | Tail lamp module (GE:2 C) (1040)                            | K43  | Relay, body builder preparation, external start/free (NC:3 C) (1000)         |
| E28    | Parking heater (HI:0 C/HM:0 D) (1007A/1062)                 |      |  |
| E30L   | Lamp, full- and dipped beams (GI:1 C)                       |      |  |
| E30R   | Lamp, full- and dipped beams (GI:3 C)                       |      |  |
| E32ATC | Climate unit (HY:2 C) (1000)                                |      |  |
| E32ECC | Climate unit (HG:1 C) (1000)                                |      |  |
| E33LF  | Lamp, additional load lamps (revers lamps) (NA:0 D) (1506A) |      |  |
| E33LR  | Lamp, additional load lamps (revers lamps) (NA:1 D) (1506A) |      |  |
| E33RF  | Lamp, additional load lamps (revers lamps) (NA:1 D) (1506A) |      |  |
| E33RR  | Lamp, additional load lamps (revers lamps) (NA:1 D) (1506A) |      |  |
| E34    | Lamp, body builder centre light (IH:2 D) (1000)             |      |  |
| E39    | Licence Plate Illumination (GF:3 B)                         |      |  |
| E39L   | Licence Plate Illumination (GE:2 C) (1040)                  |      |  |

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|-------|--|-------|---|
| K45   | Relay, free reserved for body-builder (NU:2 B) (1000)                | S06   | Stalk switch, windscreen wiper, selector type (BI:3 B) (1000)                               |
| K48   | Power relay, engine preheating (CM:2 B) (1435A/1435B)                | S06   | Stalk switch, windscreen wiper, selector type (GM:3 B) (1000)                               |
| K49   | Power relay, bogie lift motor (FI:3 B/FK:3 D) (1037)                 | S07   | Switch, engine brake, selector type (BA:3 B) (1000)   |
| K51   | Power relay, battery main switch (AB:0 C/CS:0 C) (1435A)             | S07A  | Switch, engine brake, selector type (CP:0 D)  |
| K51_A | Power relay, battery main switch (AB:1 C) (1435A)                    | S07B  | Switch, engine brake, selector type (CP:0 D)  |
| K52   | Power relay, ADR battery main switch (AE:0 B) (1435B)                | S08   | Switch, differential gear lock, rear wheels (DU:1 B) (1000)                                 |
| K54   | Relay, 12V ABS Trailer (CP:2 D)                                      | S09   | Switch, differential gear locks, inter axles and rear wheels, selector type (DU:1 B) (1000) |
| K58   | Relay, speed limiter, Volvo link (BY:3 B) (1000)                     | S10   | Switch, sign light, roof (KI:1 B) (1006A)   |
| K59   | Relay, engine shut off, Volvo link (BY:4 B) (1000)                   | S11   | Switch, bogie lift, selector type (FI:0 B/FK:0 B) (1000)                                    |
| K60   | Relay, trailer lock, Volvo link (BY:3 D) (1000)                      |       | Switch, bogie lift, selector type (FA:3 B) (1000)   |
| K61   | Relay, auxiliary revers light, truck (NA:0 C) (1000)                 | S11A  | Switch, push button, horn (GQ:1 D)  |
| K63   | Relay, ACC Adaptive cruise control (BE:1 B)                          | S14A  | Switch, push button, horn (GQ:1 D)  |
| L01   | Reactor, light sign illumination (KI:0 D)                            | S14B  | Switch, starting (AC:1 B/AE:0 B) (1000)   |
| L01L  | Reactor, light sign illumination (KI:2 C)                            | S15   | Switch, push button, air horn (GQ:2 D)  |
| L01R  | Reactor, light sign illumination (KI:2 D)                            | S16   | Switch, front wheel drive (DU:2 B) (1000)   |
| M01   | Motor, windscreen wiper (GM:2 C) (1504)                              | S17   | Switch, differential gear lock, front (DU:2 B) (1000)                                       |
| M02   | Motor, windscreen washer pump (GM:0 D) (1503)                        | S18   | Switch, extra (NA:2 B)  |
| M03   | Motor, headlamp high pressure washer pump (GM:1 D) (1503)            | S19   | Switch, 3:rd axle lock (FO:2 B) (1000)  |
| M04   | Motor, starter motor (AA:2 D/AE:2 D/CS:0 C) (1025)                   | S21A  | Switch, parking heater (HI:2 B) (1000)  |
| M05   | Motor, hydraulic bogie lift pump unit (FI:3 B/FK:3 C) (1037)         | S21B  | Switch, parking heater (HI:3 B) (1006D/1006E)   |
| M06DS | Motor, window winder (IE:2 C) (1083)                                 | S23   | Switch, roof hatch, selector type (IQ:0 B) (1006A)  |
| M06PS | Motor, window winder (IE:3 C) (1083)                                 | S24   | Stalk switch, retarder, selector type (BA:3 B) (1000)                                       |
| M08   | Motor, levelling control, headlights (GA:1 C/GA:3 C) (1502/1503)     | S25   | Switch unit, cruise control (BA:2 B) (1000)   |
| M09DS | Motor, door lock (IM:1 D) (1083)                                     | S26A  | Switch, cab tilt pump (KA:0 B) (1000)   |
| M09PS | Motor, door lock (IM:2 D) (1083)                                     | S26B  | Switch, cab tilt pump (KA:0 D) (1502/1503)  |
| M10   | Motor, roof hatch (IQ:0 E)   | S27   | Switch, storage tray illumination (IQ:1 C) (1000)   |
| M11   | Motor, cab tilt pump (KA:0 D) (1502/1503)                            | S28A  | Switch, power take off (DQ:0 B) (1000)  |
| M13   | Motor, coolant pump, parking heater (HP:0 C) (1062)                  | S28B  | Switch, power take off (NC:0 C/NU:0 B) (1000)   |
| M14   | Motor, central lubrication pump (FU:0 C) (1401)                      | S30   | Switch unit, multi-function display (BI:3 B) (1000)   |
| M17   | Motor, foldable rear view mirror arm, Japan (IF:0 D) (1470)          | S31   | Switch, TCS (Traction Control System) (EO:1 A) (1000)                                       |
| M27   | Motor, roof cooler fan (HZ:1 C)                                      | S32   | Switch, brake hold (EO:1 B) (1000)  |
| M28   | Motor, washer, roof cooler (HZ:2 C) (1018)                           | S33   | Switch, trailer brake (EO:0 B) (1000)   |
| R01   | Heater, engine preheat (CO:3 B) (1030)                               | S36DS | Switch unit, steering wheel push buttons (IS:1 D) (1000)                                    |
| R02L  | Heater, rear-view mirror (IE:0 D) (1504)                             | S36PS | Switch unit, door functions (IE:0 B) (1083)   |
| R02R  | Heater, rear-view mirror (IE:1 D) (1504)                             | S37   | Switch unit, door functions (IE:3 B) (1083)   |
| R04   | Cigarette lighter (IQ:2 C) (1000)                                    | S38   | Switch, rear view camera, camera activation (IZ:1 B) (1000)                                 |
| R05   | Heater, air dryer (FQ:0 C) (1056)                                    |       | Switch, ADR, emergency switch, cab (AE:1 B) (1000)  |
| R08   | Termination resistor, CAN-bus (CS:3 B)                               | S39   | Switch, ADR, emergency switch, exterior (AE:1 C) (1007A)                                    |
| R11   | Heater, coffee maker (ME:1 B) (1000)                                 |       | Switch, ADR, emergency switch, exterior (AE:2 C) (1007B)                                    |
| R13   | Resistor, LCP headlight adjust (GU:1 B) (1000)                       | S39_B | Switch, rear view camera, camera selection (IZ:2 B)   |
| R14   | Termination resistor (XB:2 D)  |       | Pressure switch, parking brake indicator, NC. (BA:1 D) (1000)                               |
| R17   | Resistor (AB:2 B)  | S40   | Position switch, differential gear lock indicator, rear wheels, NC. or NO. (DU:3 C) (1040)  |
| R14B  | Termination resistor (DI:3 D)  | S43   | Position switch, differential gear lock indicator, rear wheels, NC. or NO. (DU:3 C) (1040)  |
| R17   | Resistor (AC:4 C/AE:4 C) (1000)                                      |       | Pressure switch, bogie lift indicator, NO. (FI:2 D/FK:3 E) (1037)                           |
| R18   | Heater, electronic controlled air dryer (FQ:1 C) (1056)              | S45   | Position switch, low split indicator, NO. (BI:1 D) (1494)                                   |
| R21   | Termination resistor (OA:3 C) (1000)                                 | S45R  | Pressure switch, brake light, NO. (ABS/UABS) (GB:3 B) (1401)                                |
| R33   | Termination resistor (BE:2 D) (1502)                                 |       | Pressure switch, brake light, NO. (ABS/UABS trailer control valve) (GB:3 B) (1401)          |
| R34   | Termination resistor (DE:0 B)  | S46   | Pressure switch, brake light, NO. (ABS/UABS trailer control valve) (GB:3 A) (1000)          |
| S01   | Switch, main lighting, selector type (GA:0 A/GU:1 B) (1000)          | S47   | Position switch, reverse lamps, NO (GB:3 D) (1494)  |
| S02   | Stalk switch, full-/dipped beam, direction indicator (GA:2 B) (1000) | S48A  |   |
| S03   | Switch, loading lamps/working lamps (KE:1 B) (1000)                  | S48B  |   |
| S04   | Switch unit, climate fan (HY:1 B)                                    |       |   |
| S05A  | Switch, interior light, selector type (IH:3 B) (1000)                | S48C  |   |
| S05B  | Switch, interior light, selector type (IH:3 B) (1006D/1006E)         | S49   |   |

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| S52_L | Proximity switch, cab lock, NO. (BI:1 C) (1007A)   | U03_B  | Modulator, EBS, rear axle (EP:0 C) (1086)                                    |
| S52_R | Proximity switch, cab lock, NO. (BI:1 D) (1007B)   | U04_A  | Modulator, EBS, pusher axle (EP:2 C) (1086)                                  |
| S53   | Position switch, front-wheel drive indication, NO. (DU:4 C) (1458)                         | U05_A  | Modulator, EBS, trailer (EO:3 B) (1401)                                      |
| S54   | Position switch, differential gear lock, front-wheels, NO. (DU:4 C) (1458)                 | U06B11 | Voltage converter (IR:1 B) (1007C)   |
| S55   | Thermal switch (HP:0 C) (1062)   | U06R11 | Voltage converter (IR:1 B) (1007C)   |
| S56   | Thermal switch, bogie lift, NC (FI:3 C/FK:3 D) (1037)                                      | U06R19 | Voltage converter (IR:0 B) (1007C)   |
| S57L  | Position switch, luggage compartment lighting, NC. (IH:4 D) (1007A)                        | U07_A  | Modulator, EBS, tag axle (EP:3 C) (1086)                                     |
| S57R  | Position switch, luggage compartment lighting, NC. (IH:3 D) (1007B)                        | U08_A  | Modulator, EBS, front (EP:2 A) (1086)  |
| S58   | Position switch, clutch pedal, NO. (BA:3 D) (1000)   | U10    | Voltage converter, 12V ABS Trailer (CP:4 B)                                  |
| S59   | Position switch, brake pedal, NO. (BA:3 D) (1000)  | U12    | Voltage converter, Volvo link, (VERS-SAM) (BY:1 B) (1000)                    |
| S60   | Pressure switch, oil, power steering, NC. (FP:0 C) (1493)                                  | V02    | Diode module (AE:2 B) (1000)   |
| S60A  | Pressure switch, oil, power steering, NC. (FP:2 C) (1493)                                  | V03    | Diode (GG:3 B)   |
| S60B  | Pressure switch, oil, power steering, NC. (FP:2 C) (1493)                                  | V04    | Diode (FI:0 D/FK:0 D) (1037)   |
| S63   | Position switch, low range gear (BA:0 B) (1494)  | V05    | Diode (FK:2 D)   |
| S64   | Pressure switch, air pressure, parking brake tank, NC. (EO:1 B) (1000)                     | V07    | LED, indicator, Alarm (NK:2 C) (1000)  |
| S66_L | Switch unit, ECS (electronic controlled susp.), full air suspension (FA:2 D) (1007A/1007B) | V08    | Diode (NU:2 B) (1000)  |
| S68   | Sensor, coolant level (CO:1 C/CS:3 D) (1030)   | V09    | Diode (CP:2 B)   |
| S69   | Proximity switch, bogie lift position, NO. (FK:1 D) (1037)                                 | V10    | Diode (CP:2 C)   |
| S70   | Position switch, flow sensor, power-steering, NC. (FP:2 C) (1493)                          | V11    | Diode (CP:3 C)   |
| S70A  | Position switch, flow sensor, power-steering, NC. (FP:1 C) (1493)                          | W02    | Antenna, immobiliser (IM:3 B) (1000)   |
| S71   | Pressure switch, compressor charging, NO. (BA:0 D) (1056)                                  | X01    | Connector, vehicle diagnostics (XA:0 C) (1000)                               |
| S73   | Switch, acoustic reverse warning (GC:4 A) (1006A)  | X01B   | Connector, vehicle diagnostics (CP:1 B)                                      |
| S74   | Switch, short stop cab heater (HP:0 B) (1000)  | X01C   | Connector, vehicle diagnostics (CP:0 C)                                      |
| S75   | Switch, beacon warning light (KM:0 B) (1000)   | X02    | Trailer connection, ABS/EBS (1063)   |
| S76   | Switch, spotlights (NA:4 B)  | X03    | Trailer connection, 15-pole unit (1063)                                      |
| S76A  | Switch, spotlights (NI:4 C) (1006A)  | X04    | Trailer connection, 7-pole unit, 24 N (1063)                                 |
| S77   | Switch, emergency call (BU:1 B) (1000)   | X05    | Trailer connection, 7-pole unit, 24 S (1063)                                 |
| S78   | Switch unit, TIS (Traffic Information System) (BU:3 B) (1000)                              | X06    | Connector, 31-pole, in lhs. frame side, for body builder preparations (1505) |
| S79A  | Switch, additional work lamps (revers lamps), manual turn on (NA:1 B)                      | X07B   | Socket, 12V (IR:1 D) (1000)  |
| S79B  | Switch, additional work lamps (revers lamps), manual turn on (NA:2 B)                      | X08    | Contact reel, air bag (IS:0 C) (1000)  |
| S79D  | Switch, additional work lamps (revers lamps), manual turn on (NA:0 B)                      | X09    | Slip contact, horn (GQ:1 C) (1000)   |
| S80   | Position switch, front hatch (NK:1 D) (1504)   | X10    | B+ pass through, cab (AC:0 B) (1000)   |
| S83   | Switch, container lock (NA:3 B)  | X11    | Power connector, engine (AA:2 D/AE:2 C/CS:0 D)                               |
| S84   | Switch, tachograph mode (BN:0 C) (1006)  | X12    | Power connector (CO:3 B/CM:3 D)  |
| S86   | Switch, foldable rear view mirror arm, Japan (IF:1 B) (1000)                               | X16    | Power connector, engine (CO:3 B/CM:3 D)                                      |
| S88L  | Position switch, door, NC (BY:2 D/NK:0 D) (1007A)  | X25    | Power connector, bogie lift/extra equipment (AA:1 B/AE:1 A)                  |
| S88R  | Position switch, door, NC (BY:2 D/NK:0 D) (1007B)  | Y02    | Solenoid valve, differential lock, rear wheels (DU:1 D) (1401)               |
| S95   | Switch, Panic alarm (NK:2 A) (1000)  | Y03    | Solenoid valve, differential lock, inter axles, rear (DU:1 D) (1401)         |
| S96   | Switch, Reduced set, Alarm (NK:2 B) (1000)   | Y05    | Solenoid valve, bogie lift (FI:0 D/FK:0 D) (1037)                            |
| S165  | Switch, Volvo Action Service, (VERS-SAM) (BY:2 B) (1000)                                   | Y06    | Solenoid valve, range inhibitor (BA:0 B) (1494)                              |
| S166  | Switch, panic alarm, Volvo link, (VERS-SAM) (BY:3 B) (1000)                                | Y08    | Solenoid valve, front-wheel drive (DU:2 D) (1458)                            |
| S169  | Switch, battery main switch (AB:2 C) (1435)  | Y09    | Solenoid valve, differential lock, front axle (DU:2 D) (1458)                |
| S171  | Switch, GLU (Gearlever unit) (DC:1 D) (1007A/1484)   | Y10    | Solenoid valve, 3:rd axle lock (FM:0 C) (1072)                               |
| U01_A | Modulator, EBS, left front (EP:0 A) (1086)   | Y11    | Solenoid valve unit, ABS, lhs. front (EE:0 D/El:0 D) (1086)                  |
| U02_A | Modulator, EBS, right front (EP:1 A) (1086)  | Y11_A  | Solenoid valve unit, ABS, lhs. front (EO:3 D) (1086)                         |
| U03_A | Modulator, EBS, rear axle (EP:1 C) (1086)  | Y12    | Solenoid valve unit, ABS, rhs. front (EE:1 D/El: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/El:2 D) (1086)                   |
|       |  | Y14    | Solenoid valve unit, ABS, rhs. rear (EE:3 D/El:3 D) (1086)                   |
|       |  | Y17A   | Solenoid valve, retarder (DE:0 D)  |
|       |  | Y17B   | Solenoid valve, retarder (DI:2 D) (1494)                                     |
|       |  | Y18    | Solenoid valve, PTO (Power Take Off) (DE:2 B) (1499)                         |
|       |  | Y18A   | Solenoid valve, PTO (Power Take Off) (DQ:0 D) (1401)                         |
|       |  | Y18B   | Solenoid valve, PTO (Power Take Off) (DI:0 C) (1494)                         |

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|------|--|------|---|
| Y18C | Solenoid valve, PTO (Power Take Off) (NC:0 D/NU:0 C)               | Y37  | Solenoid valve unit, AVU (CO:2 C) (1030)                                    |
| Y18G | Solenoid valve, PTO (Power Take Off) (DN:2 B) (1499)               | Y39  | Solenoid valve, VCB (CO:3 D) (1030)   |
| Y18H | Solenoid valve, PTO (Power Take Off) (DN:2 B) (1499)               | Y40  | Solenoid valve unit, front axle, air suspension (FA:0 B) (1072)             |
| Y21  | Solenoid valve, slow clutch disengage (DE:2 D)                     | Y42  | Clutch, magnetic, air conditioning compressor (HG:0 D/HY:2 D/CS:2 D) (1025) |
| Y22  | Solenoid valve, fast clutch disengage (DE:3 D)                     | Y43L | Seat belt tensioner, pyrotechnical (IS:2 D) (1007A)                         |
| Y23  | Solenoid valve, fast clutch engage (DE:3 D)                        | Y43R | Seat belt tensioner, pyrotechnical (IS:3 D) (1007B)                         |
| Y25  | Solenoid valve unit, level control, air suspension (FA:1 B) (1072) | Y44  | Air-bag, pyrotechnical (IS:0 D)   |
| Y26  | Solenoid valve, slow clutch control (DE:2 D)                       | Y48A | Solenoid valve, container lock (NA:3 D) (1506A)                             |
| Y29  | Solenoid valve unit, trailing axle (FA:1 B) (1072)                 | Y48B | Solenoid valve, fifth wheel lock (NA:4 D) (1506A)                           |
| Y30A | Solenoid valve unit, gearbox (DE:0 B)                              | Y49  | Solenoid valve, parking brake (NU:2 C) (1504)                               |
| Y30B | Solenoid valve unit, gearbox (DE:1 B)                              | Y51A | Solenoid valve, regeneration (FQ:2 C) (1056)                                |
| Y30C | Solenoid valve unit, gearbox (DI:0 D) (1494)                       | Y51B | Solenoid valve, compressor control (FQ:2 C) (1056)                          |
| Y31  | Solenoid valve, area inhibitor (BA:1 B) (1494)                     | Y52  | Clutch, magnetic, engine fan (CS:4 B)                                       |
| Y32  | Fuel dosing pump, parking heater (HI:0 B/HM:0 D) (1040)            | Y53  | Control valve block , RAS (FO:3 D) (1493)                                   |
| Y33  | Solenoid valve, UI (Unit Injectors) (CO:3 D) (1030)                | Y72  | Solenoid valve, Airhorn (GQ:0 B) (1504)                                     |
| Y36  | Solenoid valve, steerable axle (FP:1 C) (1493)                     | Y88  | Solenoid valve, trailing axle, air suspension, bogie lift (FA:2 B) (1072)   |

## Abbreviations

|                         |  |                |  |
|-------------------------|--|----------------|--|
| ABS .....               | Antilock brake system                                  | GSS-RC .....   | Range gear shifting, cable manoeuvred                  |
| ACC .....               | Adaptive cruise control                                | GSS-SRC .....  | Split and range gear shifting, cable manoeuvred        |
| ACU .....               | Alarm control unit                                     | ISX .....      | Engine variant (Australia only)                        |
| ADR-BAS1/<br>ADR1 ..... | ADR adaptation, 1 switch                               | JPN .....      | Japan  |
| ADR2 .....              | ADR adaptation, 2 switches                             | L .....        | Left   |
| AIRDRY-E .....          | Electric airdryer                                      | LCM .....      | Light control module                                   |
| ATB .....               | Axle load limiter                                      | L1H1 .....     | Short cab  |
| ATC .....               | Automatic temperature control                          | L2H1 .....     | Long cab   |
| AUS .....               | Australia  | L2H2 .....     | Long high cab (Globetrotter)                           |
| AUXSW-6 .....           | Wiring for six auxiliary switches for body building    | LF .....       | Left front   |
| AWD .....               | All wheel drive  | LHD .....      | Left hand drive  |
| BBM .....               | Body builder module                                    | LHS .....      | Left hand side   |
| BBOX-R .....            | Battery box right hand side                            | LOCK-ALL ..... | Central door lock and cut off electricity of truck     |
| CLU .....               | Central locking unit                                   | LR .....       | Left rear  |
| CU-ACAUT .....          | Air condition, automatic                               | MAINSWI .....  | Main switch  |
| CU-ACMAN .....          | Air condition, manual                                  | MECHTRAN ..... | Mechanical transmission                                |
| CU-BAS .....            | Basic version with stepper motor without air condition | MMS .....      | Mechanical main switch                                 |
| CU-ECC .....            | Electronic controlled climate control air condition    | PH-CAB .....   | Cab parking heater                                     |
| CU-HEAT .....           | Heater unit  | PH-ENGCA ..... | Engine and cab parking heater                          |
| CU-MCC .....            | Manual controlled climate control air condition        | PS .....       | Passenger side   |
| DS .....                | Driver side  | PSS-DUAL ..... | Power steering system dual                             |
| EBS .....               | Electronic brake system                                | PTO .....      | Power take off   |
| ECS .....               | Electronic controlled air suspension                   | R .....        | Right  |
| ELCE-CK .....           | Electrical complete kit for body builder               | RADT-A8 .....  | 6x2, air spring, 8 bellows, tag axle                   |
| ELMS .....              | Electrical main switch                                 | RADT-AR .....  | 6x2, leaf spring (A-ride)                              |
| ENG-VE9 .....           | Volvo engine 9 litre                                   | RF .....       | Right front  |
| ENG-VE12 .....          | Volvo engine 12 litre                                  | RHD .....      | Right hand drive                                       |
| ENG-VE16 .....          | Volvo engine 16 litre                                  | RHS .....      | Right hand side  |
| EPG .....               | Exhaust pressure governor                              | RIGID .....    | Platform or tipper truck                               |
| ESP .....               | Electronic stability program                           | RR .....       | Right rear   |
| FAA10 .....             | 1 front axle, non driven                               | RSTS-EHY ..... | Rear steering system, electrical controlled, hydraulic |
| FAA20 .....             | 2 front axle, non driven                               | RSTS-HY .....  | Rear steering system, hydraulic                        |
| FMS .....               | Fleet management system                                | SI-GRAF .....  | Tachograph   |
| FSS-LEAF .....          | Leaf suspension, front                                 | SI-GRAFR ..... | Tachograph   |
| GECU .....              | Gear selector electronic control unit                  | SI-SPEED ..... | Speedometer  |
| GSS-AGS .....           | Automatic gear shifting system                         | SPEED-DU ..... | Dual speed limiter                                     |
|                         |  | SRS .....      | Supplementary restrain system                          |
|                         |  | STWPOS-L ..... | Steering wheel position left hand side                 |

|                |  |                 |   |
|----------------|--|-----------------|---|
| STWPOS-R ..... | Steering wheel position right hand side                    | UALARMB .....   | Without alarm                           |
| SUSPL-EC ..... | Air suspension, electronic control system levelling device | UJERICOCO ..... | Without Jerico horn                     |
| SUSPL-M .....  | Air suspension, manual regulation levelling device         | UMAINSWI .....  | Without main switch                     |
| SWAPBODY ..... | Swap body  | URETARD .....   | Without retarder                        |
| SWM .....      | Steering wheel module                                      | USUSPLEV .....  | Without air suspension levelling device |
| TECU .....     | Transmission electronic control unit                       | USWS .....      | Without steering wheel switches         |
| TMC .....      | Traffic message channel                                    | UTPM .....      | Without tyre pressure monitoring        |
| TPM .....      | Tyre pressure monitoring                                   | VECU .....      | Vehicle electronic control unit         |
| TRACTOR .....  | Semi-trailer tractor                                       | VERS-SAM .....  | South American Version                  |
| TREL7-7 .....  | Trailer connectors 2x7-unit                                | ZT1816 .....    | Gearbox variant (South America only)    |
| UADR .....     | Without ADR adaptation                                     |                 |   |

## Cable colour code

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

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





**VOLVO**

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