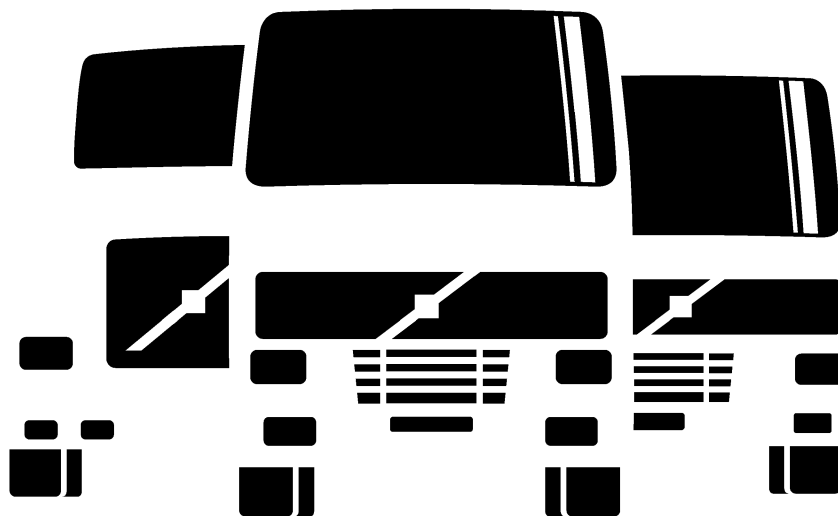


Service Manual Trucks

Group **37**

Electrical Schematic
VN, VHD VERSION2

From Build Date September 2004



Foreword

The descriptions and service procedures contained in this manual are based on designs and methods studies carried out up to December 2004.

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

The new edition of this manual will update the changes.

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

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

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

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

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

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

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

Volvo Trucks North America, Inc.
Greensboro, NC USA

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VN, VHD

Electrical Schematics

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

Also see:

[“Reference List: Fuses” page 147](#)

[“Reference List: Components” page 155](#)

[“Reference List: Inline Connectors” page 176](#)

[“Glossary” page 192](#)

[“Wire Color Codes” page 193](#)

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AD	Grounding (2 of 2)	Fig. 4: AD page 9
BA	Vehicle ECU (1 of 2)	Fig. 5: BA page 10
BB	Vehicle ECU (2 of 2)	Fig. 6: BB page 11
BC	Instrument cluster, Connectors A and B	Fig. 7: BC page 12
BD	Instrument cluster, Connector C	Fig. 8: BD page 13
BE	Instrumentation, Qualcomm	Fig. 9: BE page 14
BF	Instrumentation, Volvo Link	Fig. 10: BF page 15
BG	Bodybuilder Options, VHD	Fig. 11: BG page 16
BH	Road Relay	Fig. 12: BH page 17
BI	Bodybuilder Module	Fig. 13: BI page 18
BJ	Touch Lock	Fig. 14: BJ page 19
BK	Secondary Instrument Cluster	Fig. 15: BK page 20
CA	Engine Control Common	Fig. 16: CA page 21
CB	Engine Interface, D12	Fig. 17: CB page 22
CC	Engine Control, ISX and ICON	Fig. 18: CC page 23
CE	Fuel filter heater	Fig. 19: CE page 24
CF	Engine brake switches	Fig. 20: CF page 25
CH	Inside/outside air cleaner, VHD	Fig. 21: CH page 26
CI	Engine Control, Cummins ISX without ICON	Fig. 22: CI page 27
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DB	Transmission ECU, Autoshift II	Fig. 25: DB page 30

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EA	ABS ECU	Fig. 32: EA page 37
EB	Suspension ECU 6x2	Fig. 33: EB page 38
FA	Air Dryer / Heated Drain Valve	Fig. 34: FA page 39
FB	Lift Axle, VHD	Fig. 35: FB page 40
FC	Chassis Air Solenoids, VHD	Fig. 36: FC page 41
FD	Chassis Air Solenoids, VN	Fig. 37: FD page 42
FE	Central Tire Inflation system	Fig. 38: FE page 43
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GB	LCM Lighting Control Module (2 of 2)	Fig. 40: GB page 45
GC	Marker Lights	Fig. 41: GC page 46
GD	Driving / Signal Lights	Fig. 42: GD page 47
GE	Driving / Fog Lights	Fig. 43: GE page 48
GF	Tail Lights and Alarm	Fig. 44: GF page 49
GG	Back of Cab Lights, Daycabs	Fig. 45: GG page 50
GH	Back of Cab Lights, Sleeper cabs	Fig. 46: GH page 51
GI	Snowplow and Beacon Lights	Fig. 47: GI page 52
GP	Windshield Wiper/Washer	Fig. 48: GP page 53
GQ	Horn	Fig. 49: GQ page 54
HA	Climate Control Unit	Fig. 50: HA page 55
HB	Climate Control Unit, Bunk	Fig. 51: HB page 56
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HF	L3 Sleeper Functions without LECM	Fig. 55: HF page 60
HG	Sleeper Climate Control without LECM L3	Fig. 56: HG page 61
IA	Interior Courtesy Lights	Fig. 57: IA page 62
IB	Power Seats	Fig. 58: IB page 63
IC	Power Windows/Electric Mirrors	Fig. 59: IC page 64
ID	Power Windows/Mirrors without DCP	Fig. 60: ID page 65

IE	Door Functions/Internal Lights	Fig. 61: IE page 66
IF	Cigar Lighter/Auxiliary Power (Cab Front)	Fig. 62: IF page 67
IG	Smoke Detector	Fig. 63: IG page 68
JA	SRS Airbag	Fig. 64: JA page 69
JB	VORAD	Fig. 65: JB page 70
JC	Steering Wheel Module/Marker Interrupt Switches	Fig. 66: JC page 71
KA	Audio System, 4-speaker	Fig. 67: KA page 72
KB	Audio System, 6-speaker	Fig. 68: KB page 73
KC	Audio System, 6-speaker with subwoofer, TV Prep	Fig. 69: KC page 74
MA	Trailer Cable	Fig. 70: MA page 75
NA	Auxiliary switches	Fig. 71: NA page 76
XA	Diagnostics	Fig. 72: XA page 77

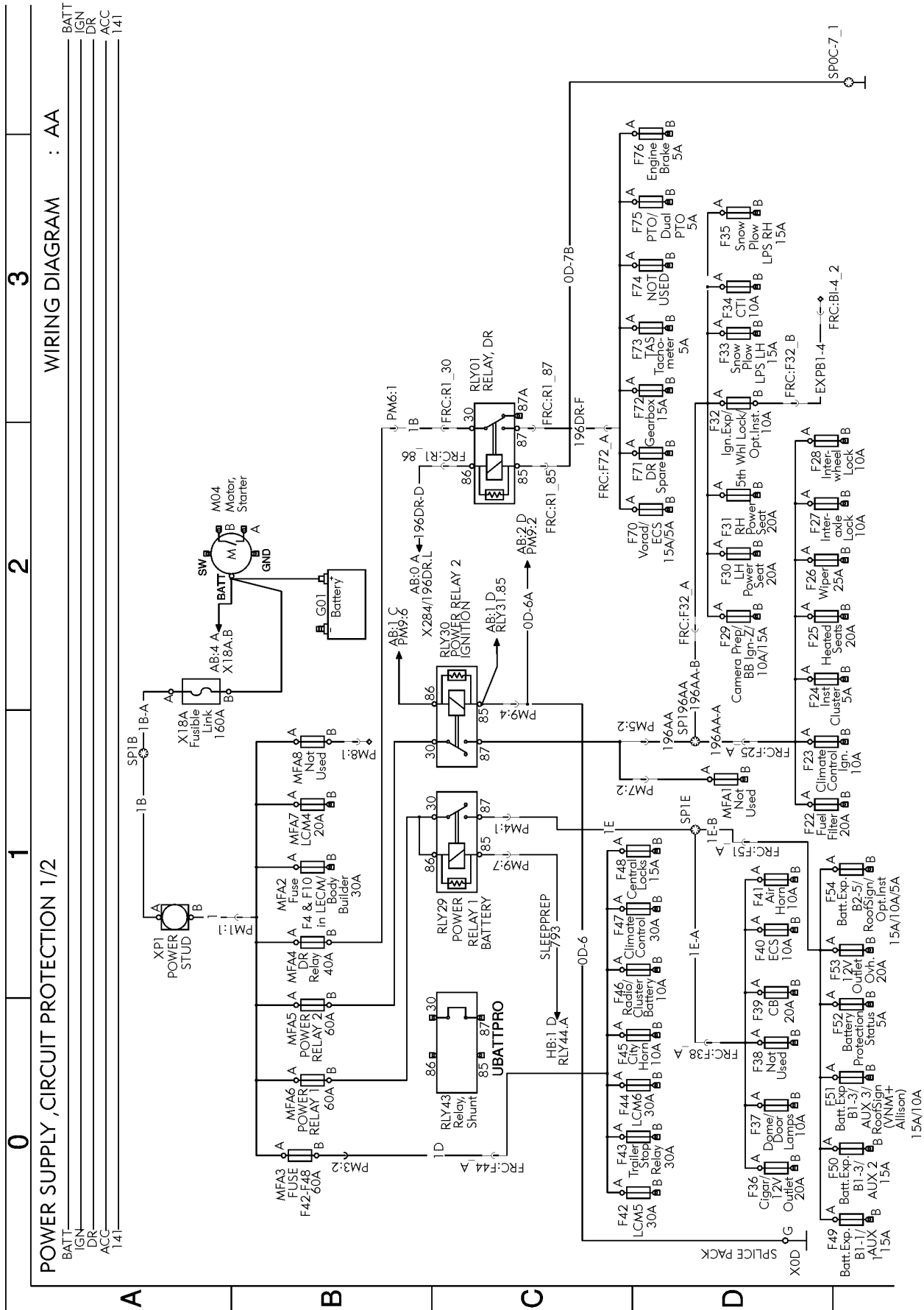


Fig. 1: AA

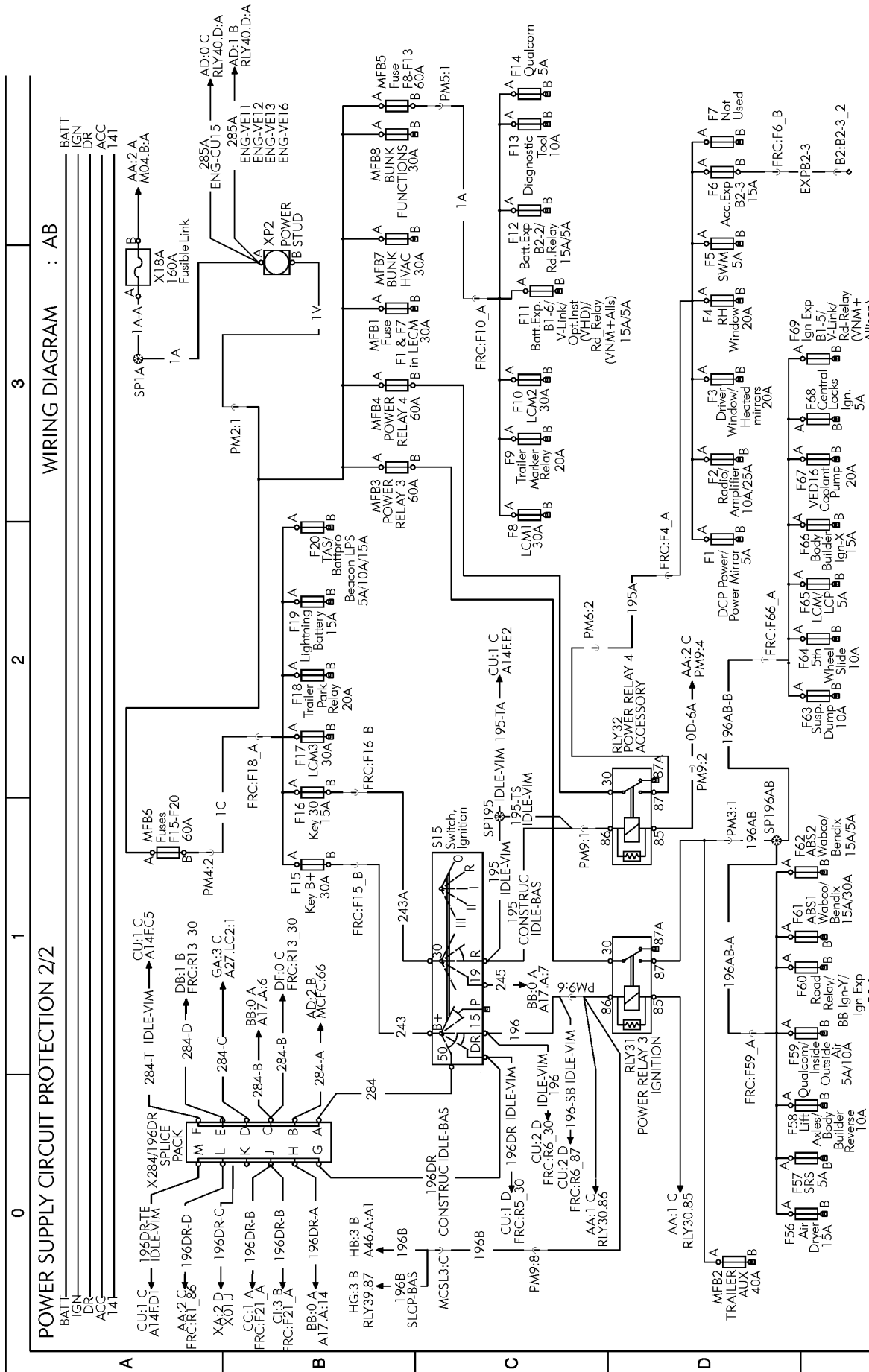


Fig. 2: AB

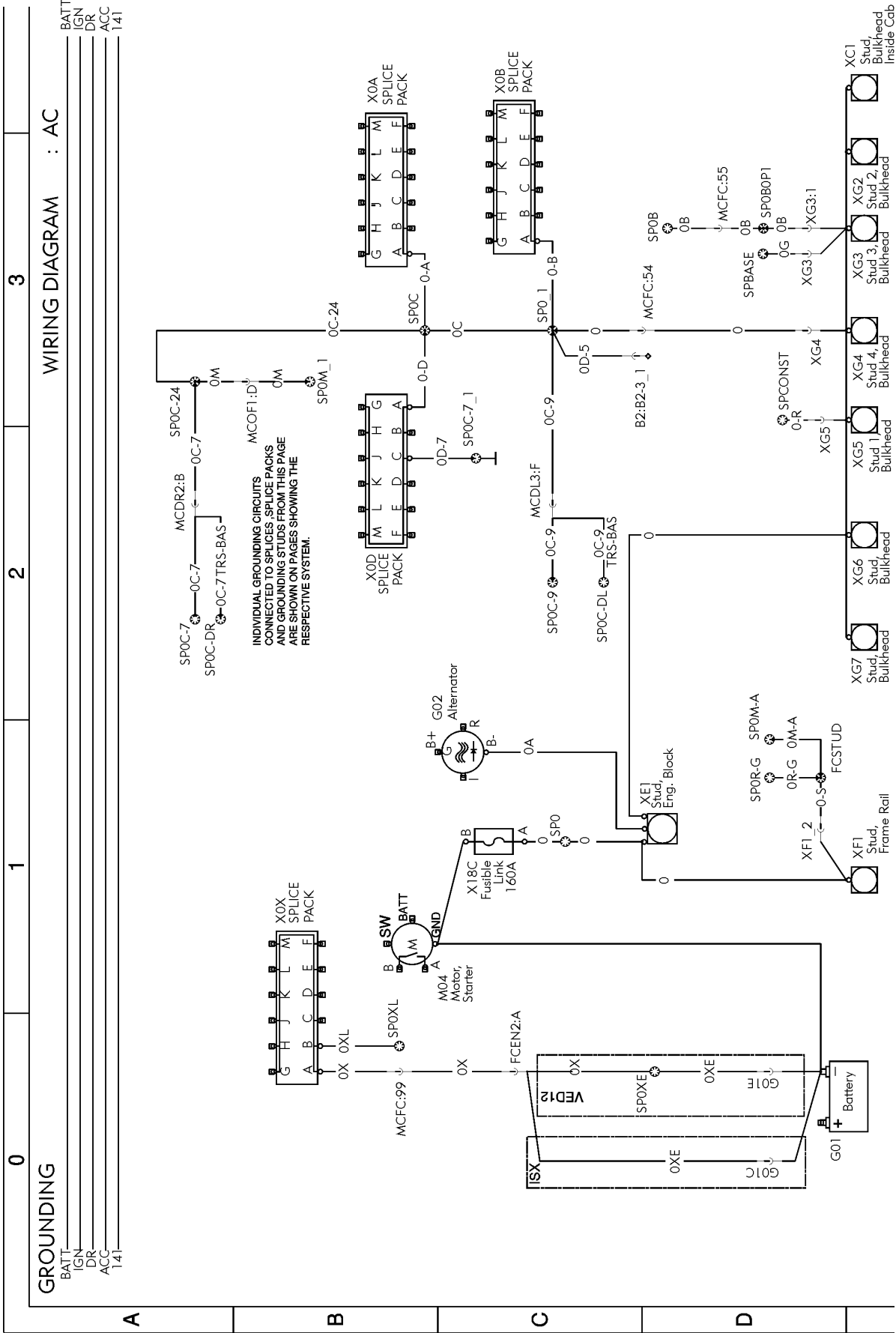


Fig. 3: AC

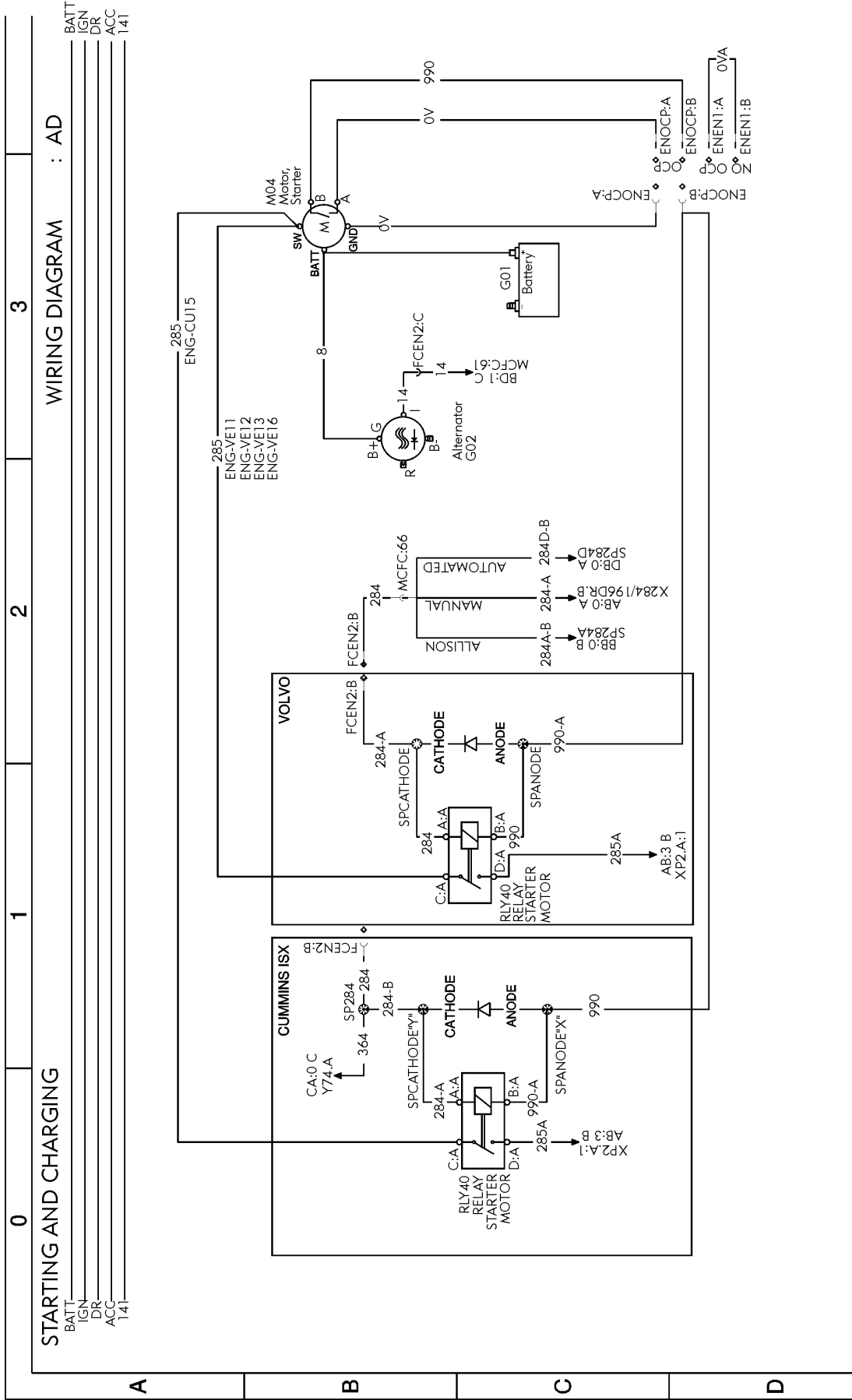


Fig. 4: AD

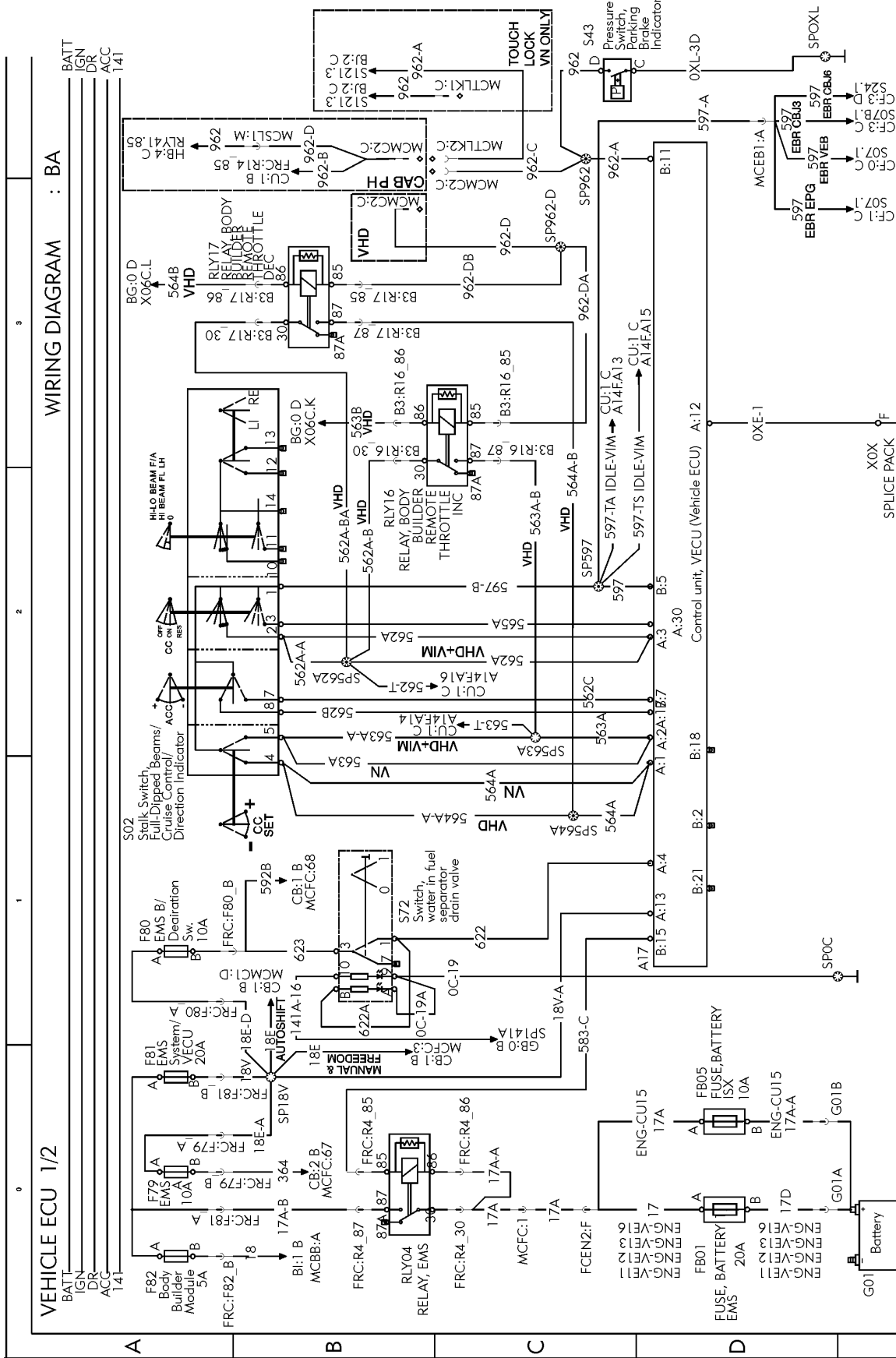


Fig. 5: BA

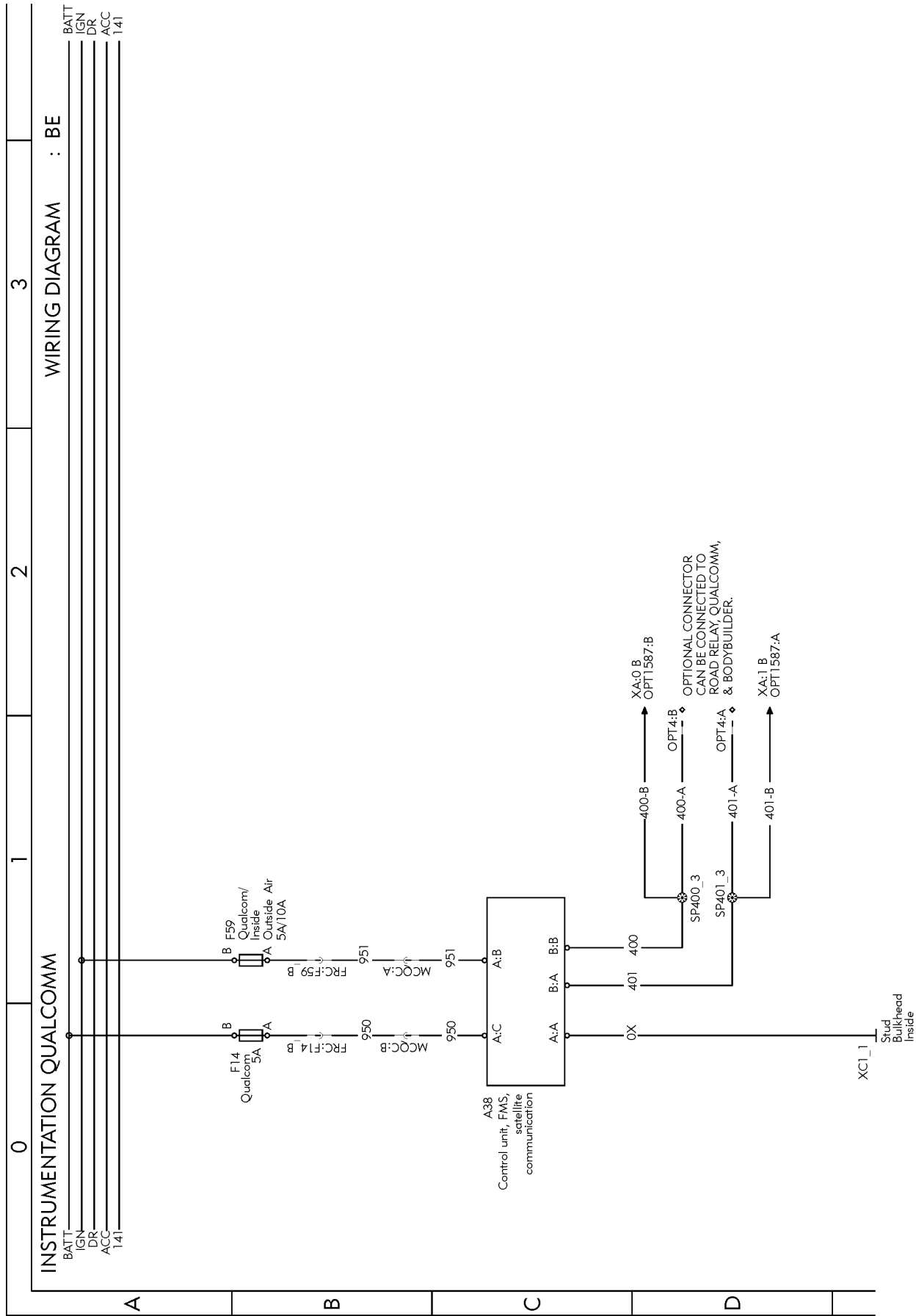


Fig. 9: BE

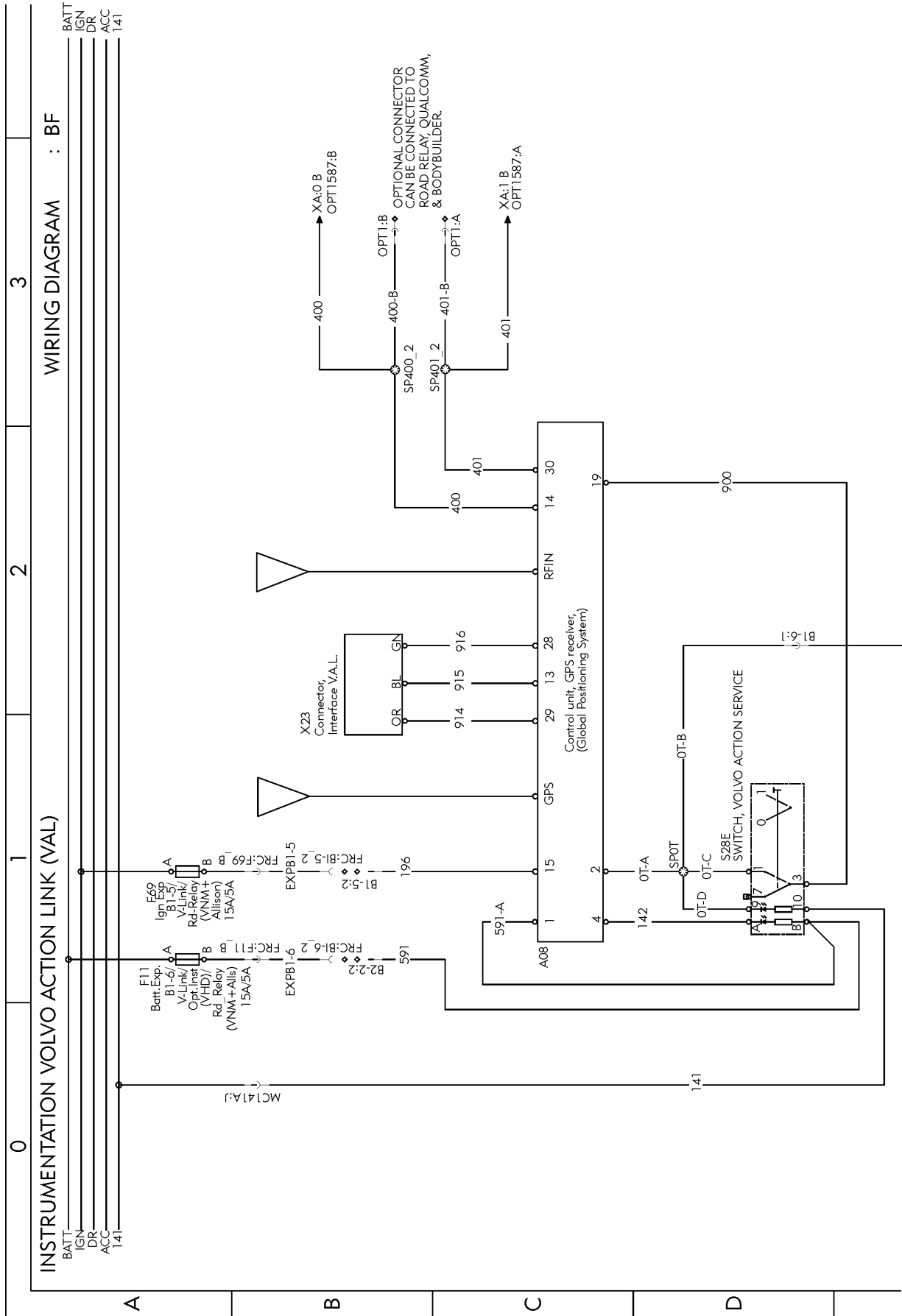


Fig. 10: BF

