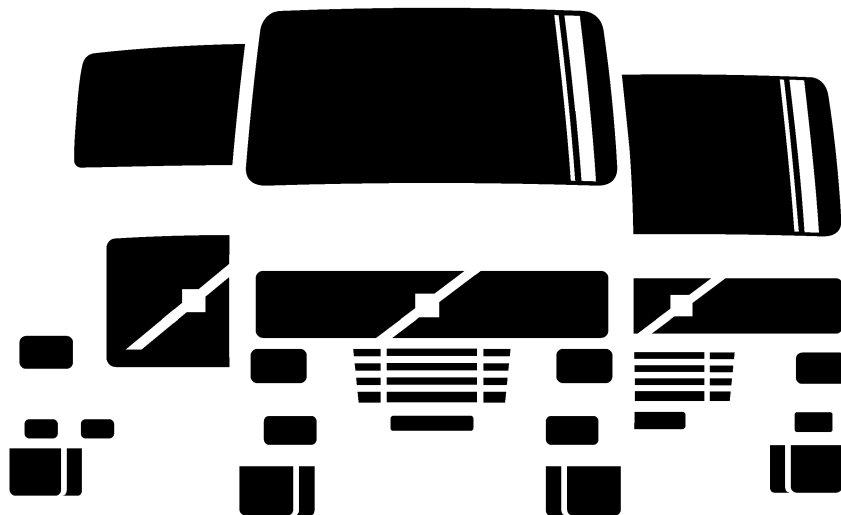


Service Manual Trucks

Group **37**
Wiring diagram
FH12, FH16 LHD



Foreword

The descriptions and service procedures contained in this manual are based on designs and methods studies carried out up to March 95.

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: TSP23665/1

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ENG01465

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Feedback	

Component wiring diagram FH12, FH16 LHD



AA

Starter system, current supply, engine preheating 24 V



BL

FH12, UI - unit injector, exhaust brake, exhaust pressure governor



BN

FH16, EDC - electronically controlled fuel injection, exhaust brake, exhaust pressure governor



CE

Full beams, dipped beams, parking lights, side marker lights, roof lights and tail lights



CG

Foglights



CH

Spotlights



CK

Brake lights



CL

Exhaust brake and compression brake



CN

Direction indicators, hazard warning lights



EA

Reversing lights



ED

Loading light, fifth wheel light



EJ

Roof sign (standard cab)



EK

Roof sign (high cab)



ER

Interior lights, instep lights, bunk lights and luggage compartment lights, 24 V socket



EV

Ashtray light, cigarette lighter



EX

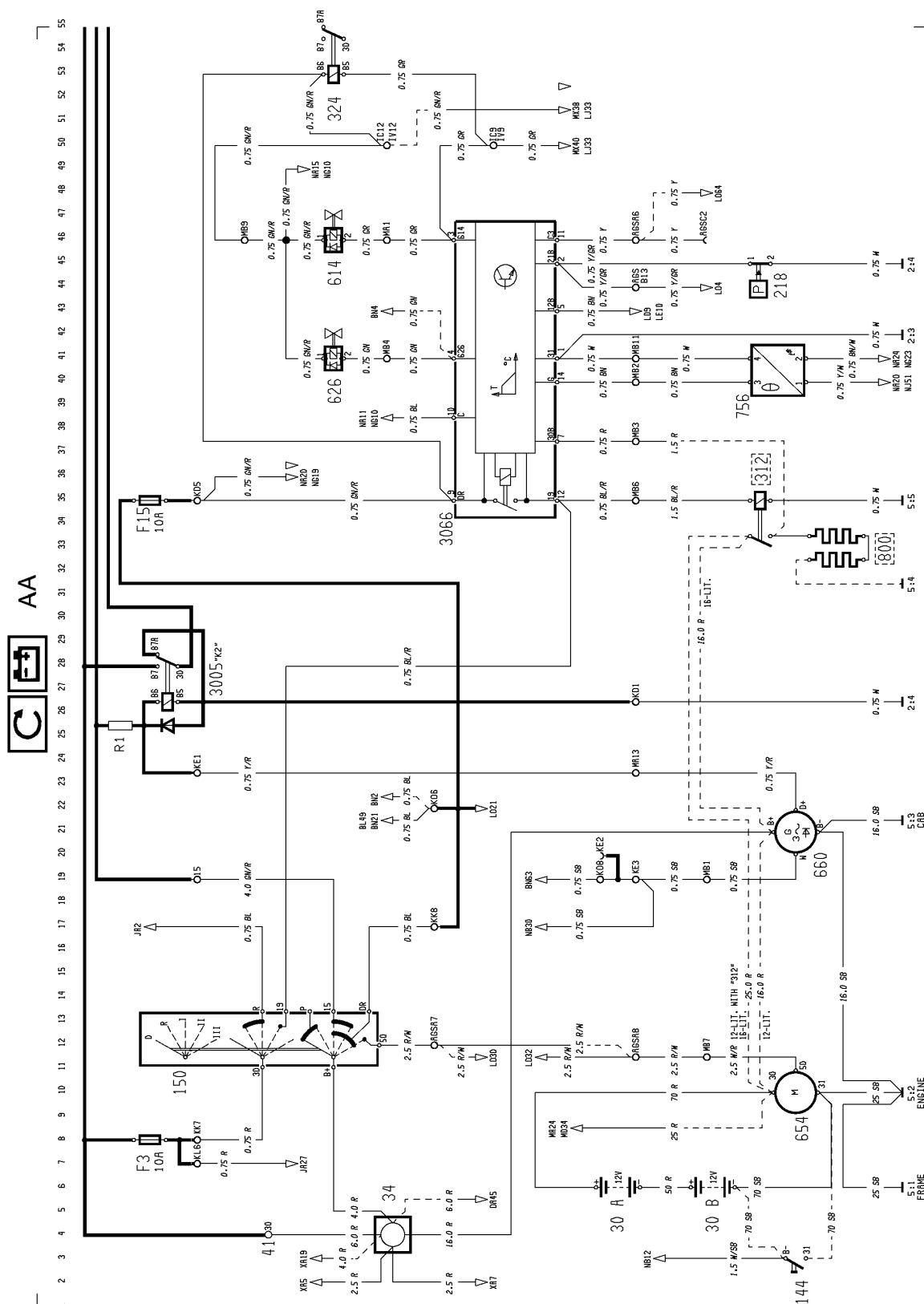
12 V socket

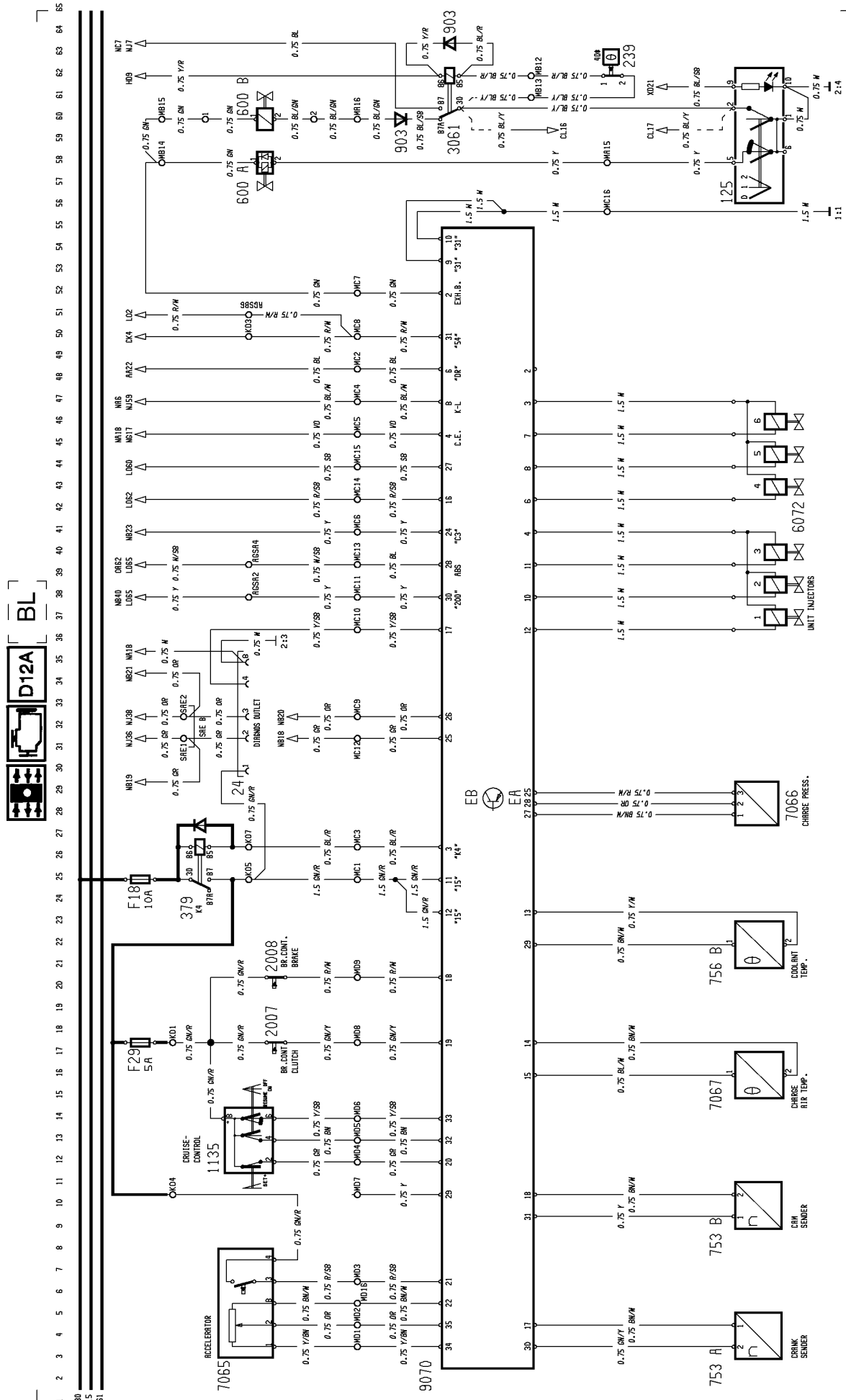
	FA	Horn
	FB	Reverse warner
	GA	Windscreen wipers and washers, headlamp wipers and washers
	HA	Air conditioning
	HB	Cab heater (DL1C)
	HC	Engine/cab heater (DW80)
	HD	Heated seat
	HE	Electrically adjustable seat
	HG	Electrically heated rearview mirror
	HH	Electrically operated rearview mirror
	HK	Air dryer
	HM	Fuel filter heater
	HP	Cab tilt unit
	JA	Radio, voltage converter, loudspeaker, alarm clock/timer
	KA	Electrically operated window winder
	KD	Seat belt
	KG	Electrically operated door lock

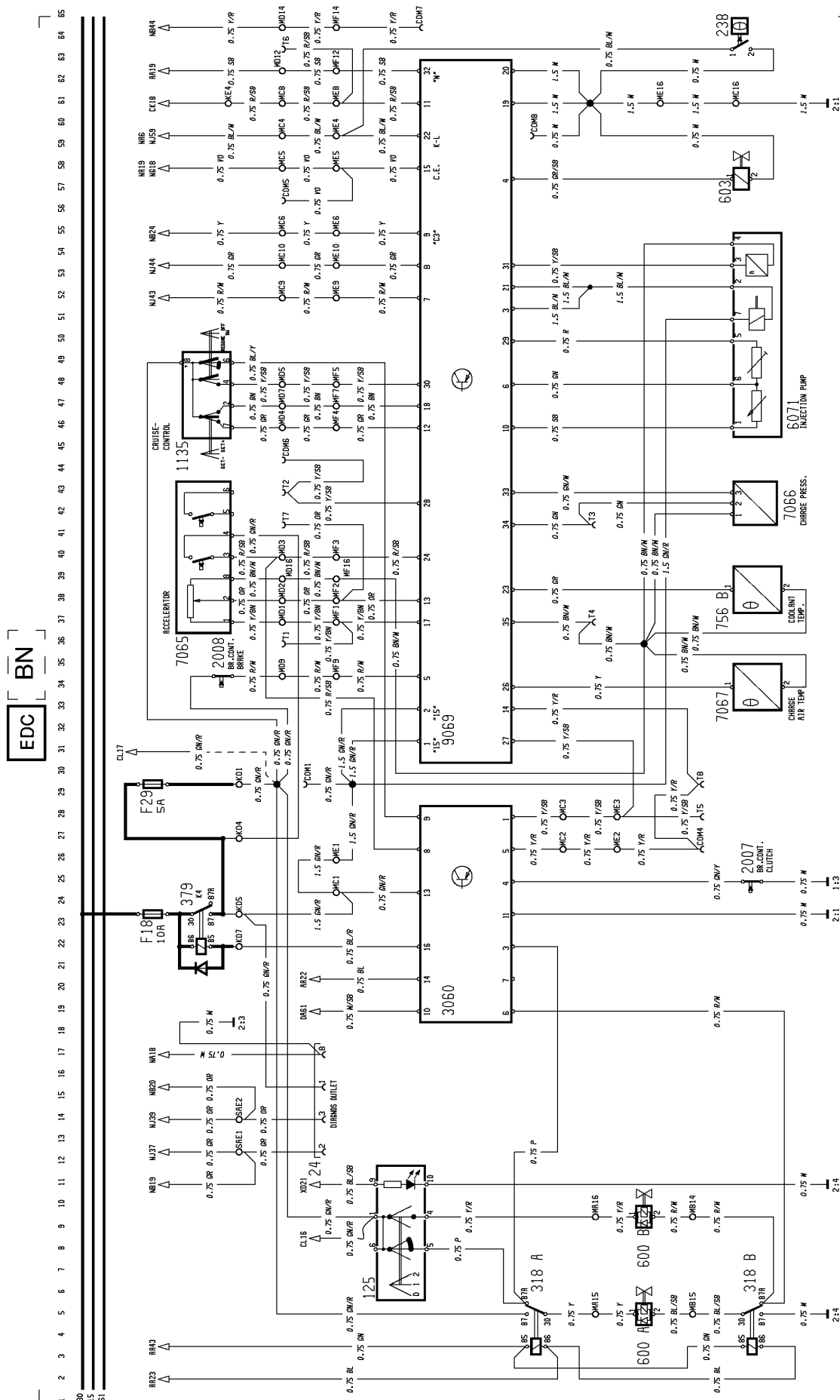
 KH	Central lock
 LD	Power take-off
 LE	Double power take-off
  L G	Diff. lock
 LJ	Lock, 3rd axle, bogie lift
 LL	Lock, 3rd axle
 LO	Geartronic
 MA	Bogie lift (hydraulic)
 MD	Bogie lift (hydraulic), with axle load limiter
 MN	Air suspension 4x2
  MP	Bogie lift, air suspension < 15 tonnes
  MQ	Air suspension 6x2 < 15 tonnes with time limitation
  MR	Bogie lift, pusher
  MS	Bogie lift, air suspension <15 tonnes

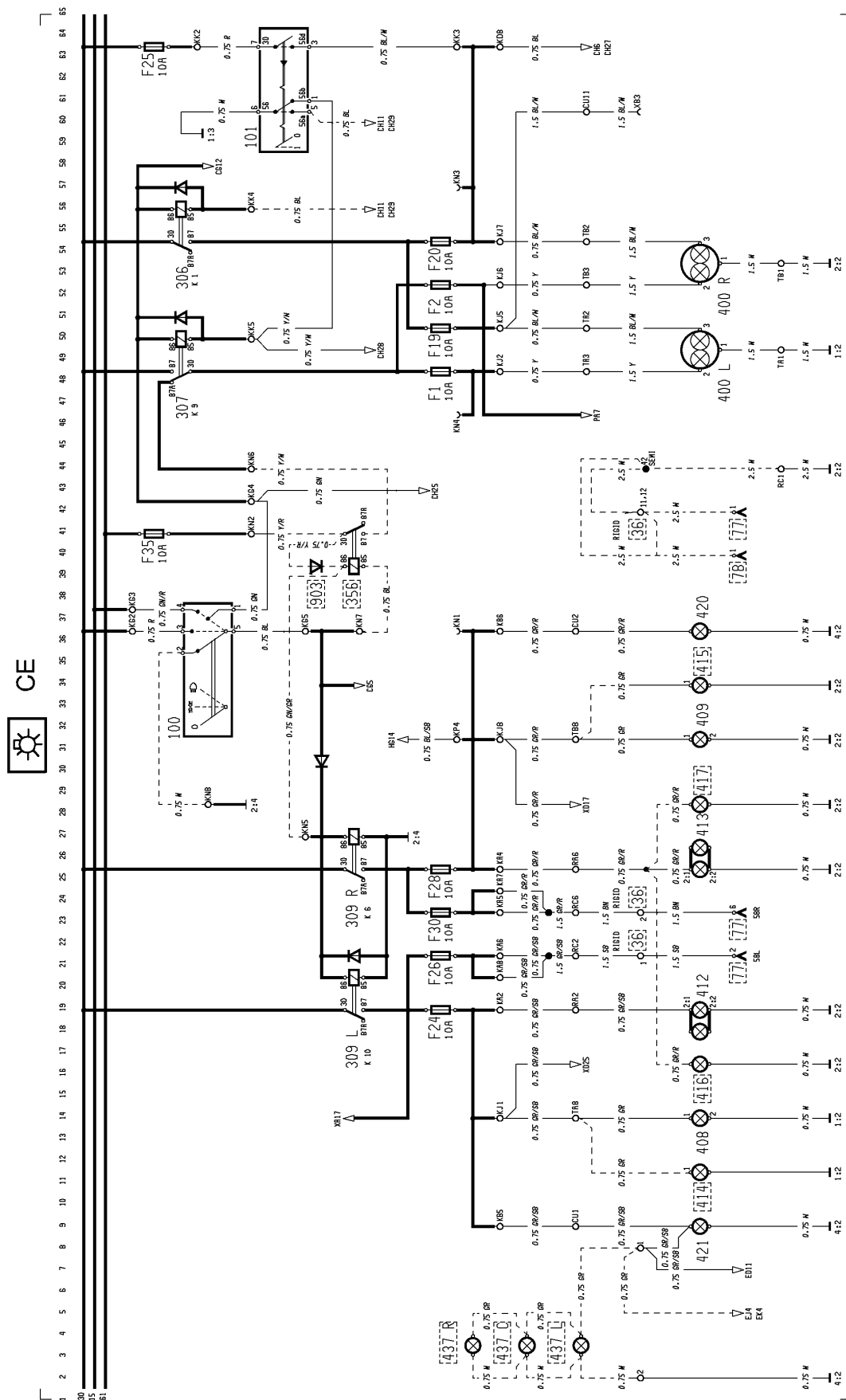
	MV	Drive axle load increase
	MW	Drive axle load increase with time limitation
	MX	Bogie press, 6x2 air suspension
	MY	Bogie load, 6x4 air suspension with time limitation
		NA Left-hand unit in instrument panel (standard design)
		NB Central unit in instrument panel
		NC Right-hand unit in instrument panel (standard design)
	NG	Left-hand unit in instrument panel (Driver Information System — DIS)
		 NJ Combination instrument (Driver Information System — DIS)
		OA Anti-lock brakes (ABS), 4-channel
	PA	Level control, headlights
	XA	Extra fuses
	XD	Connection of extra switch, rheostat
	ZA	Earth connections
	ZD	ADR (battery master switch, current limiter, emergency stop)
	 ZE	ADR cab heater (DL1C)

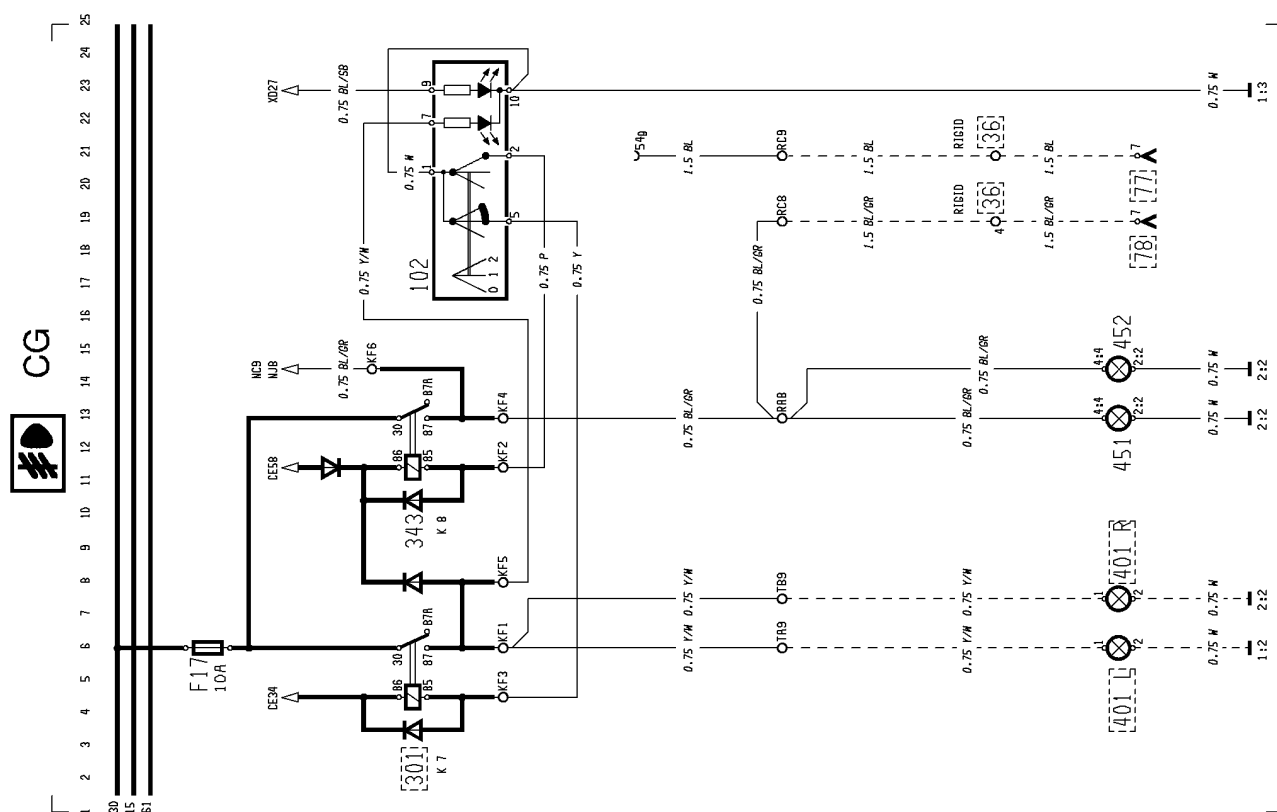
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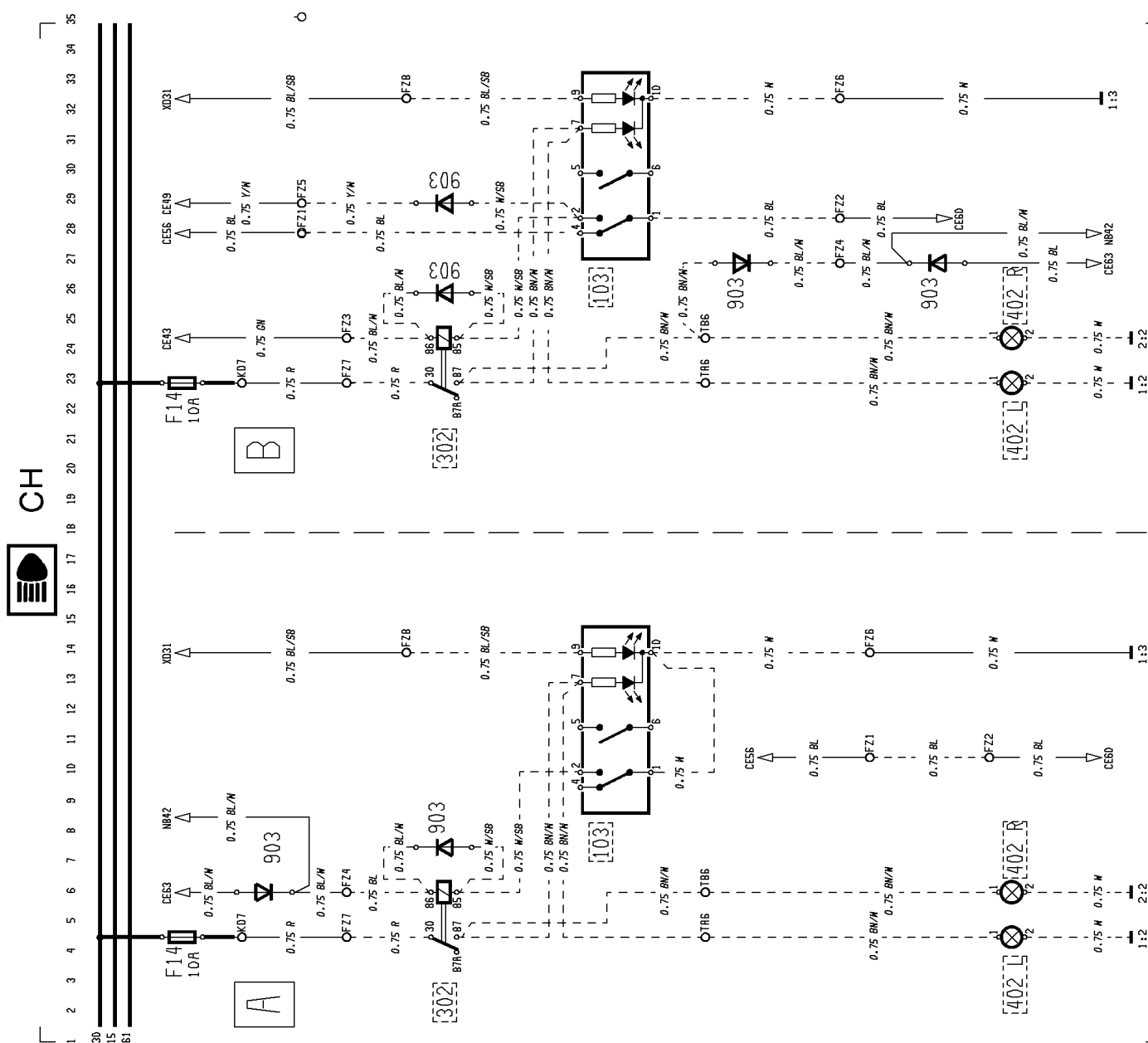


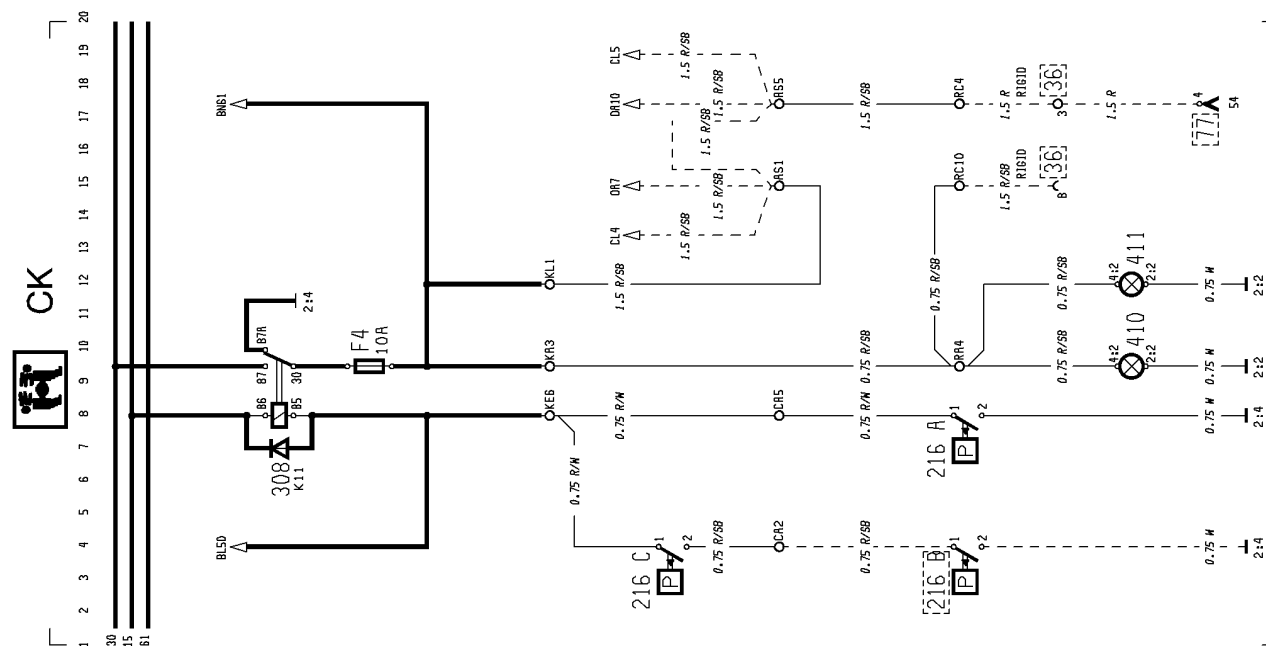


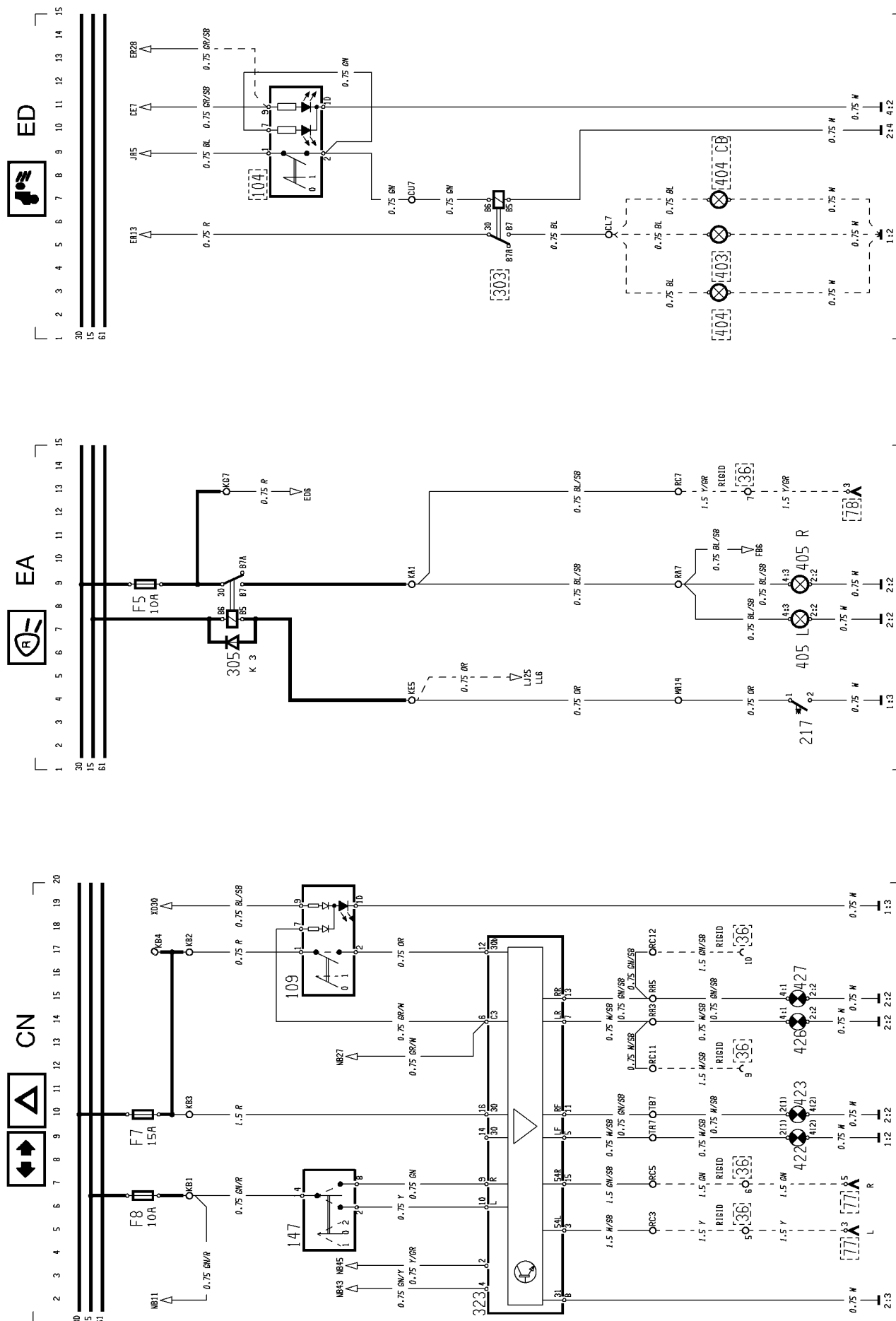


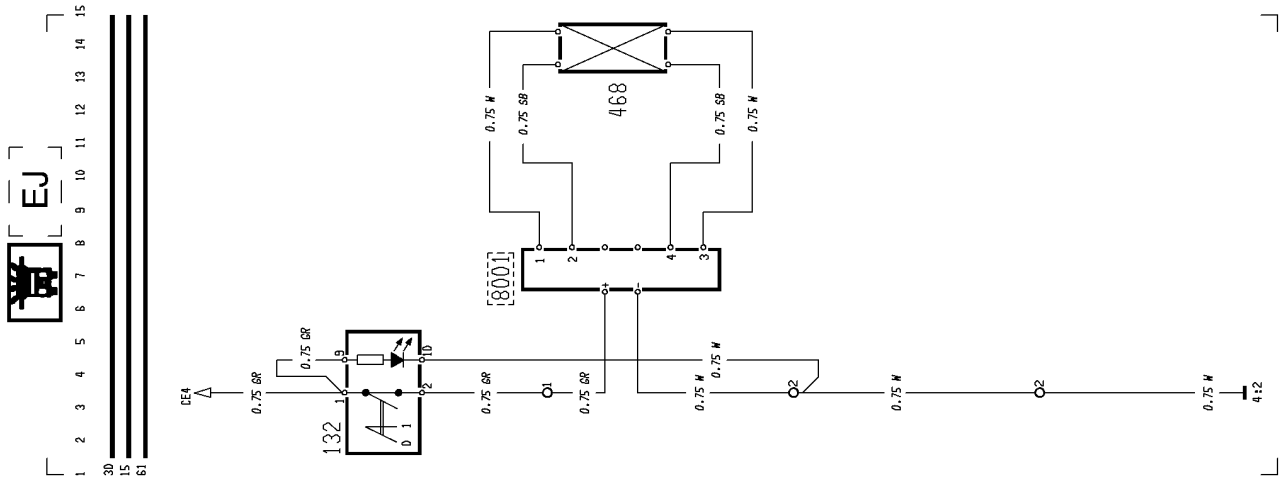
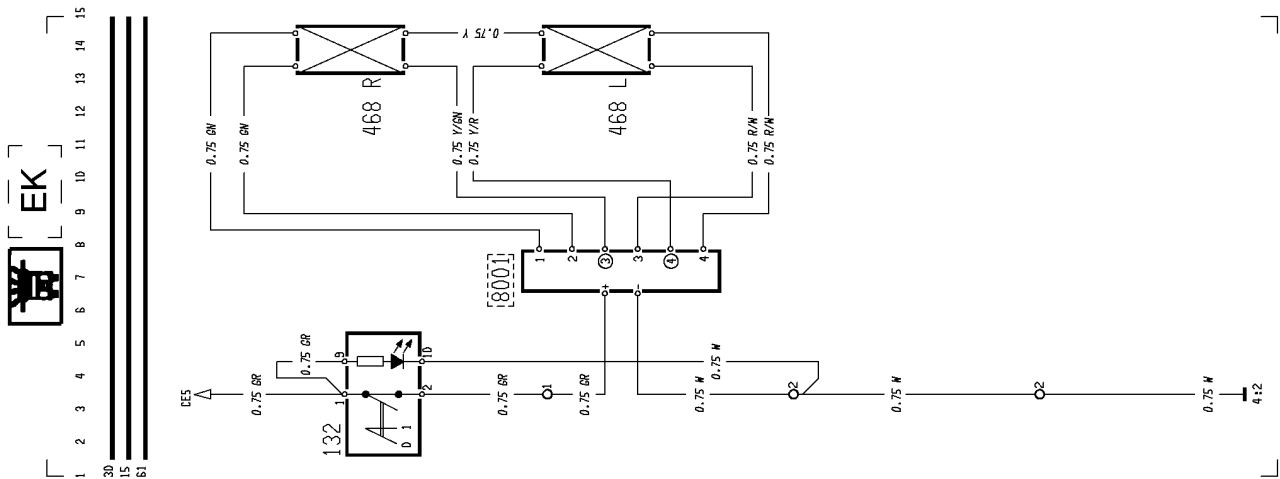


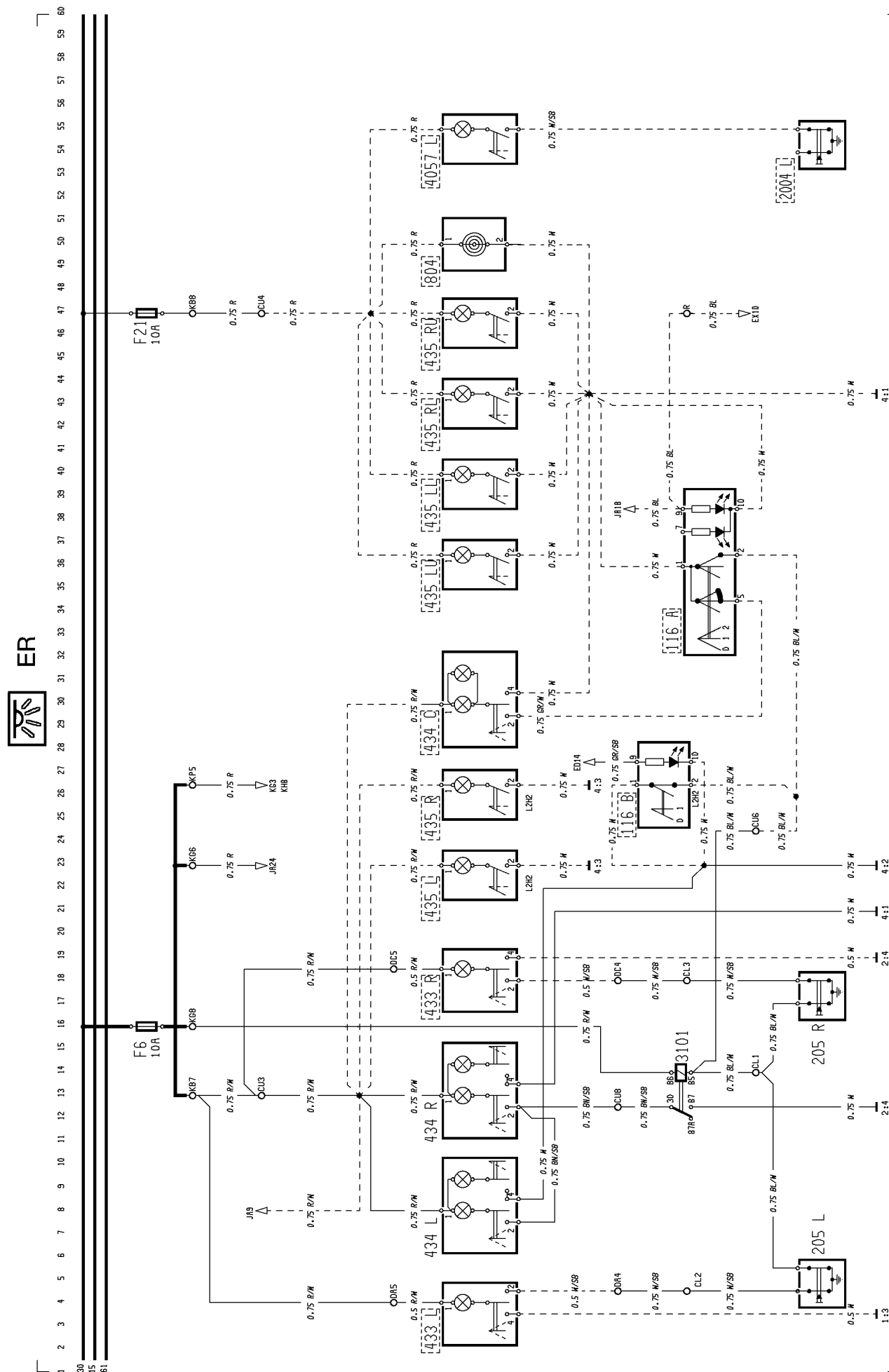


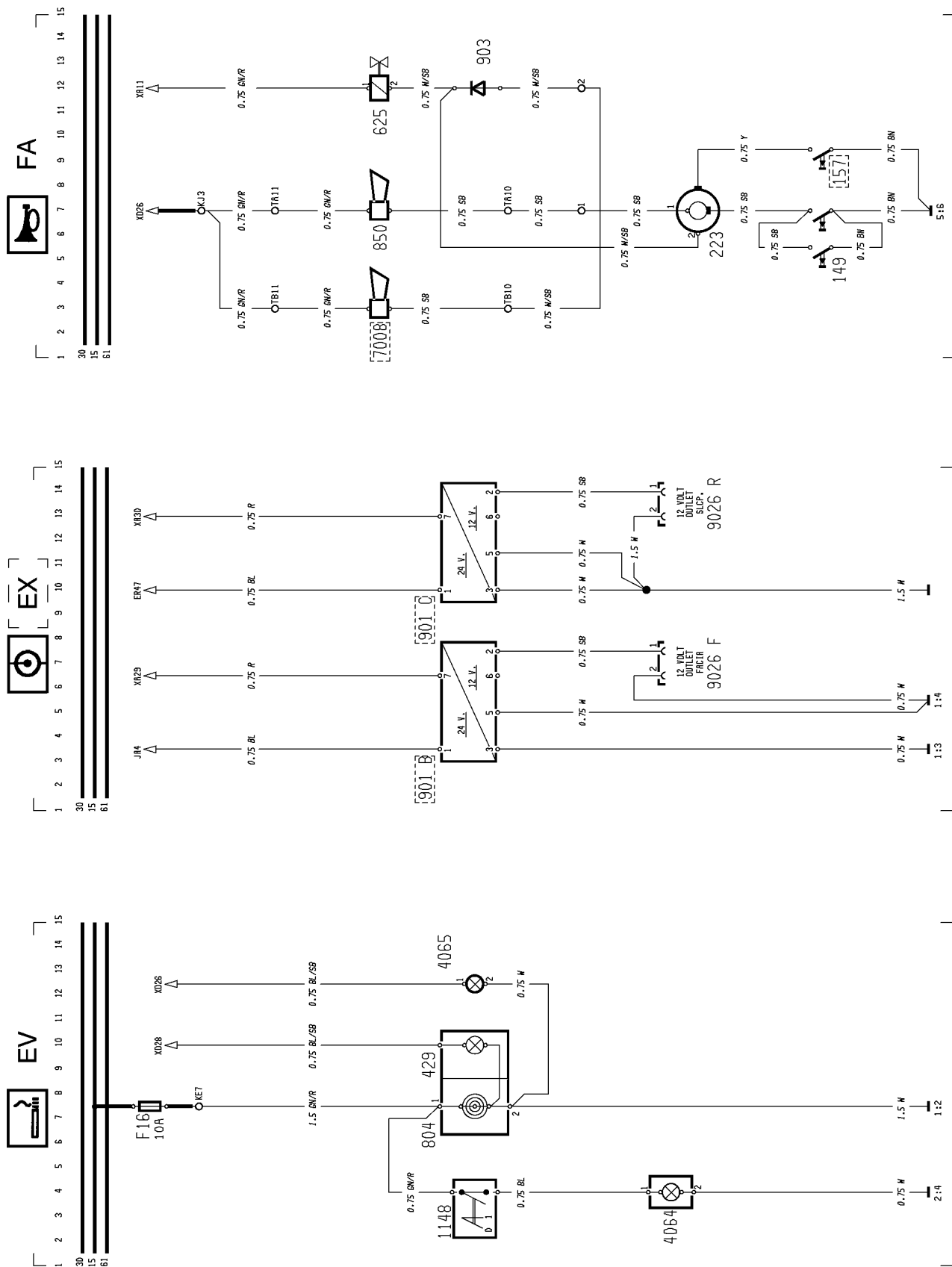


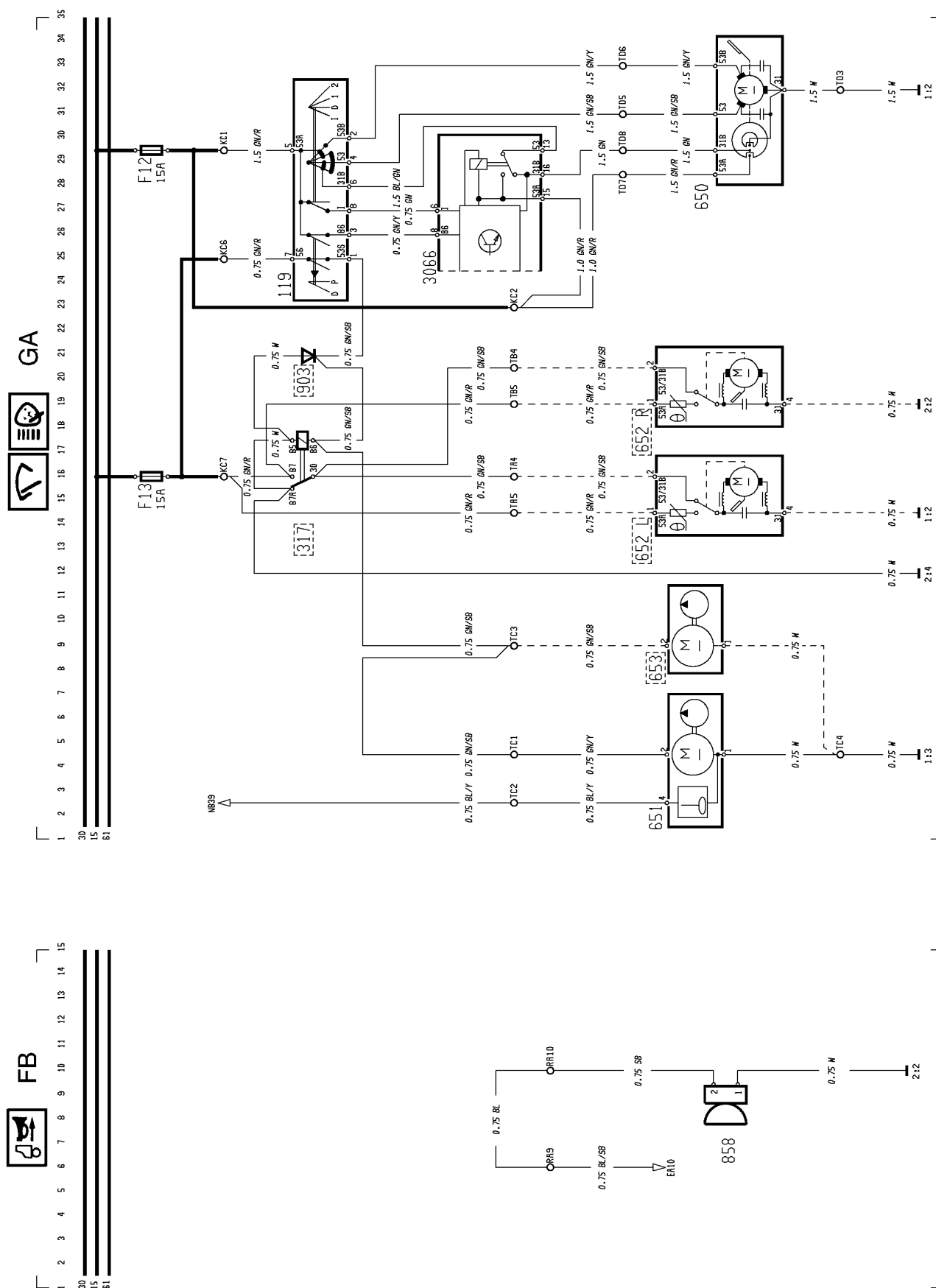


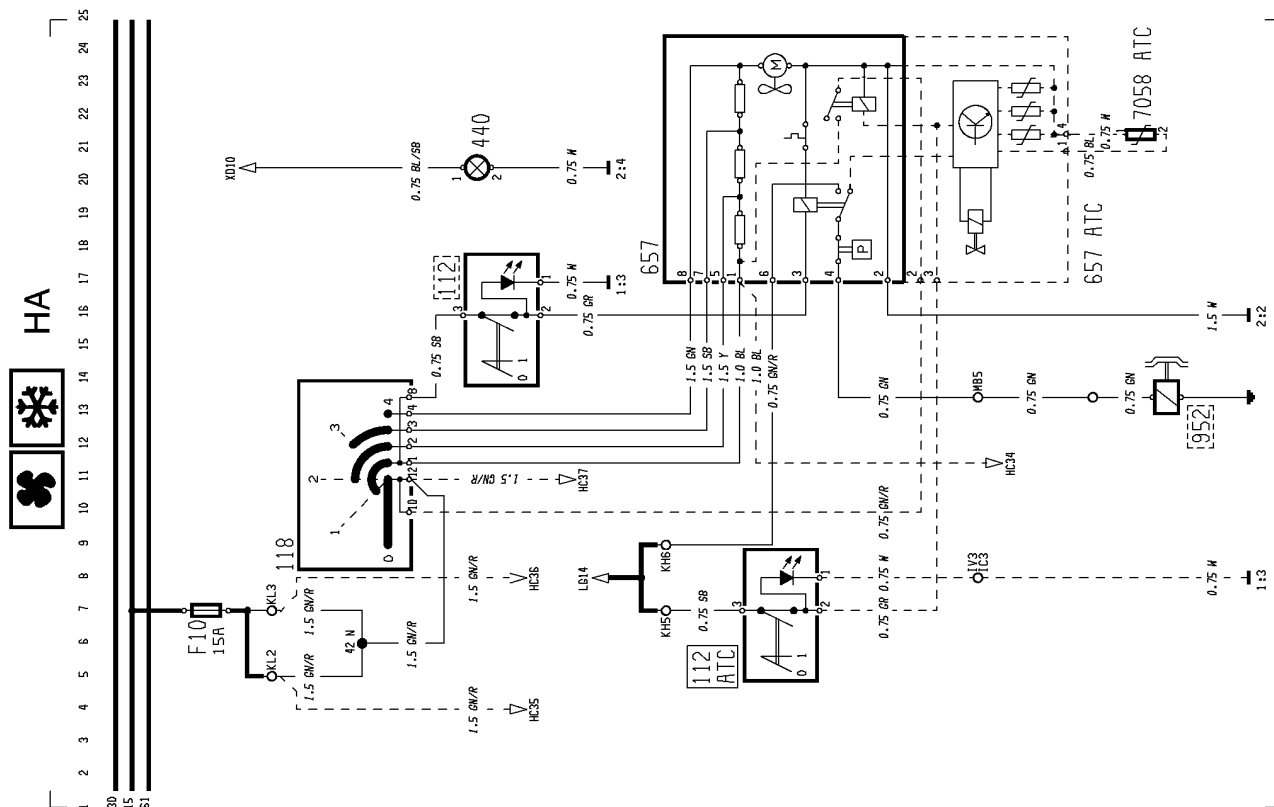


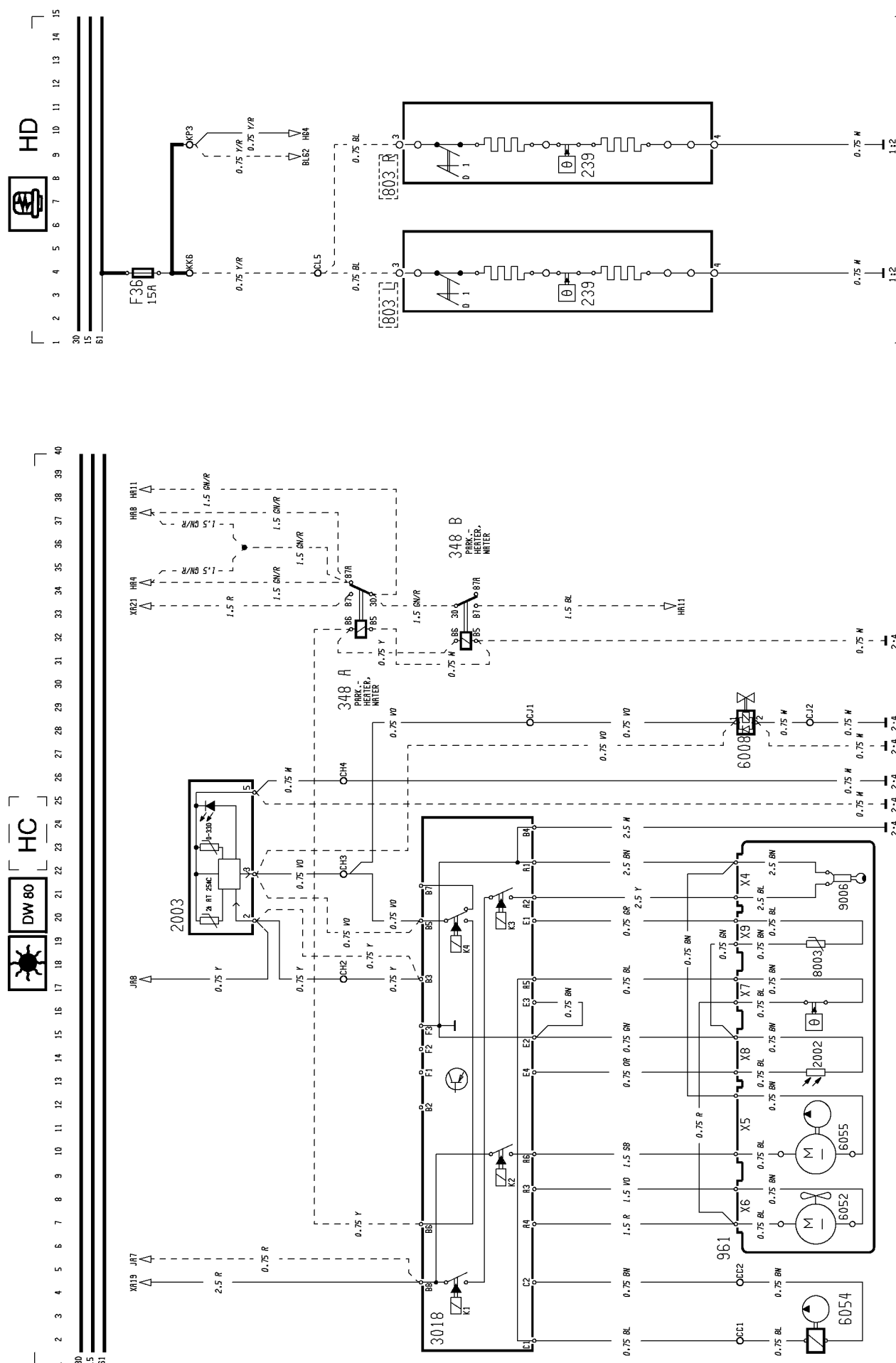


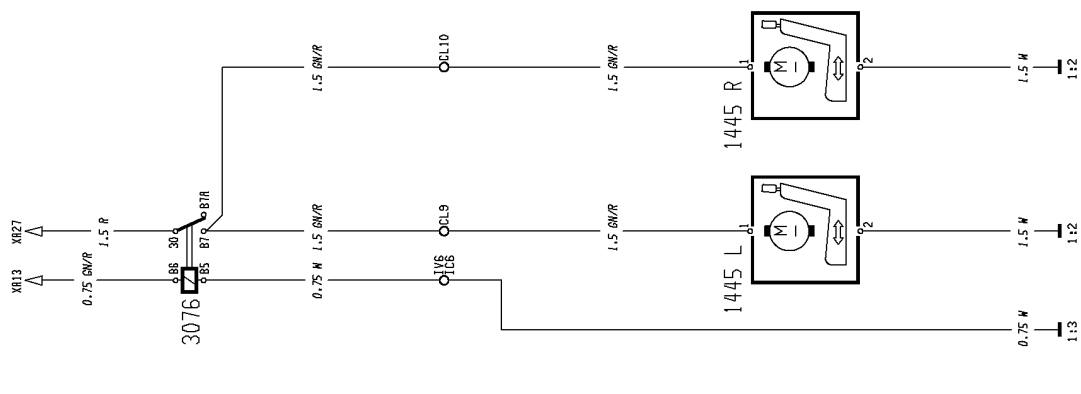
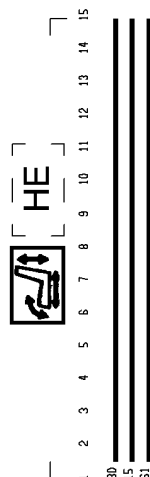
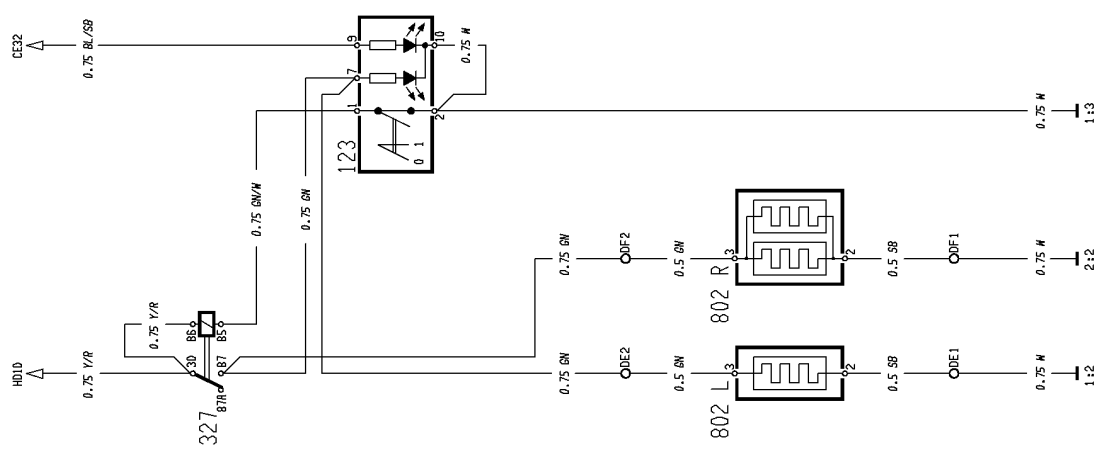
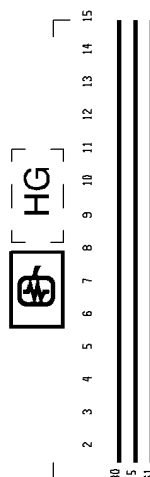
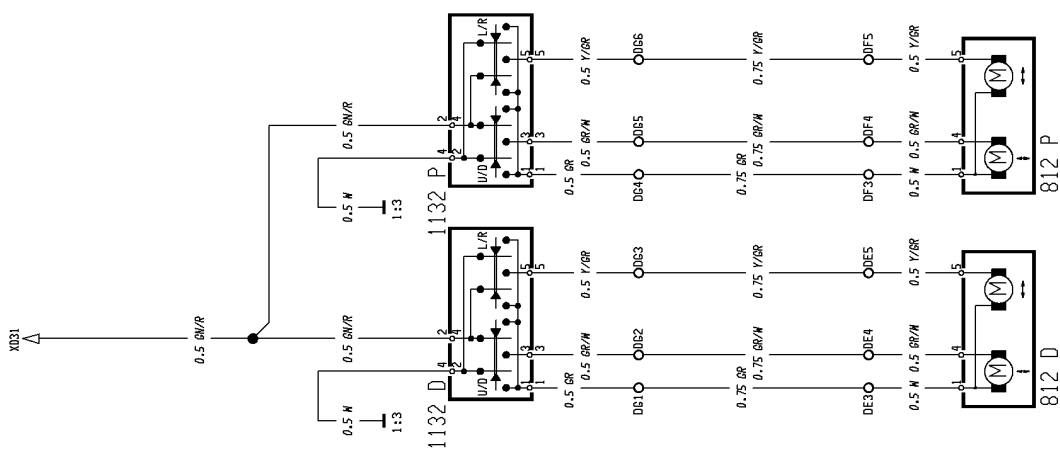
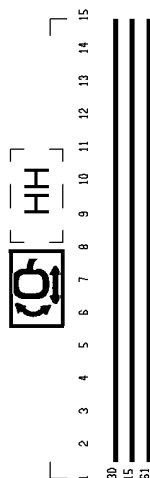


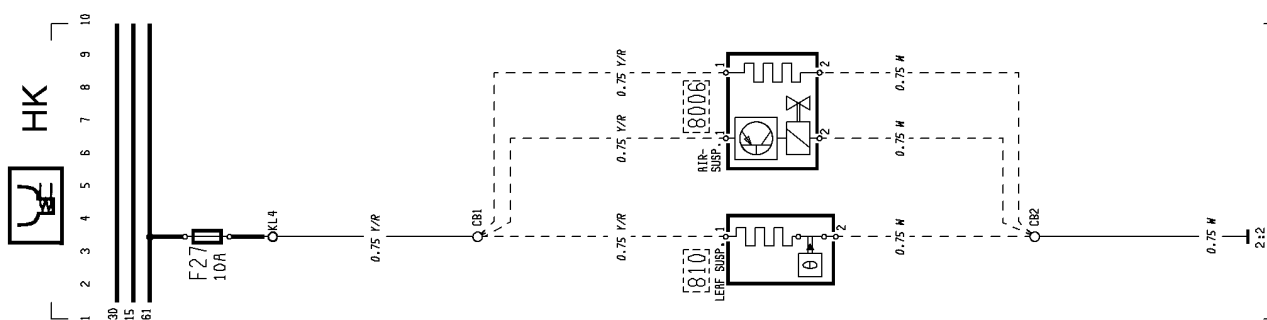
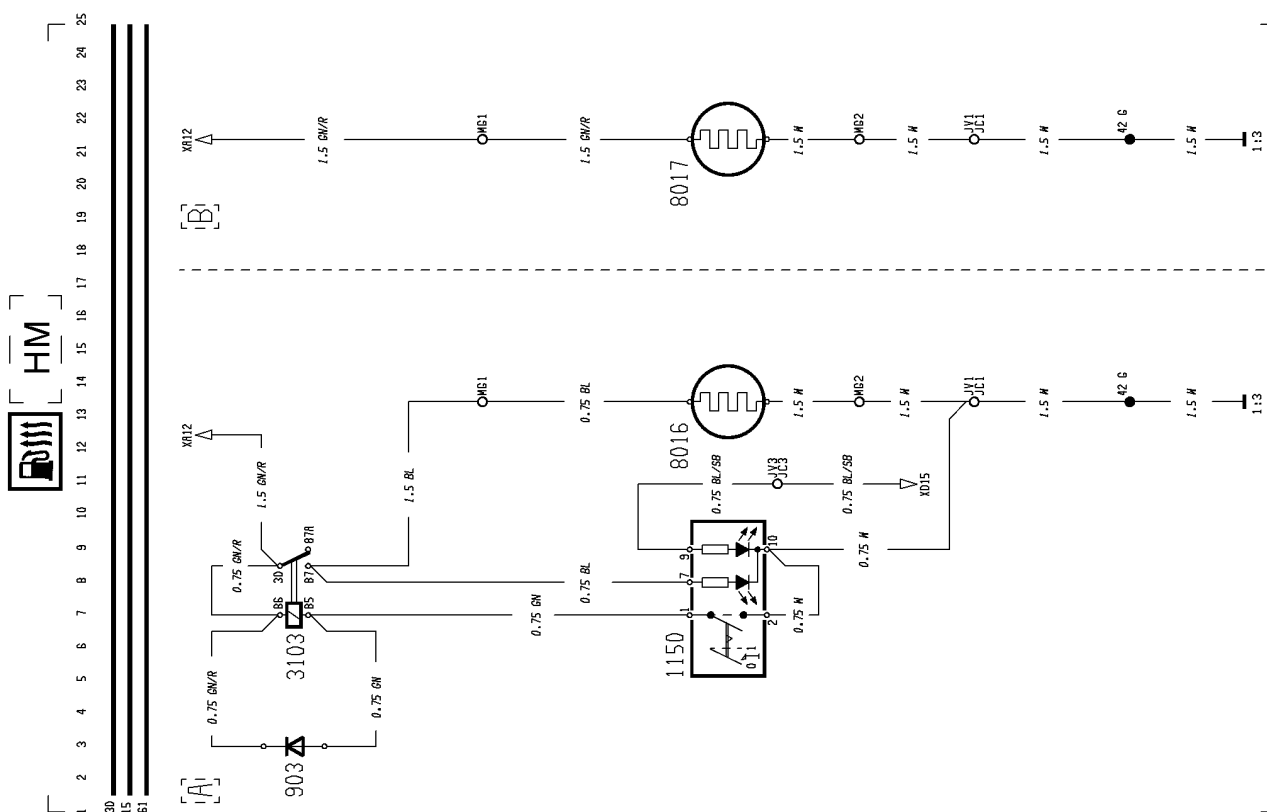
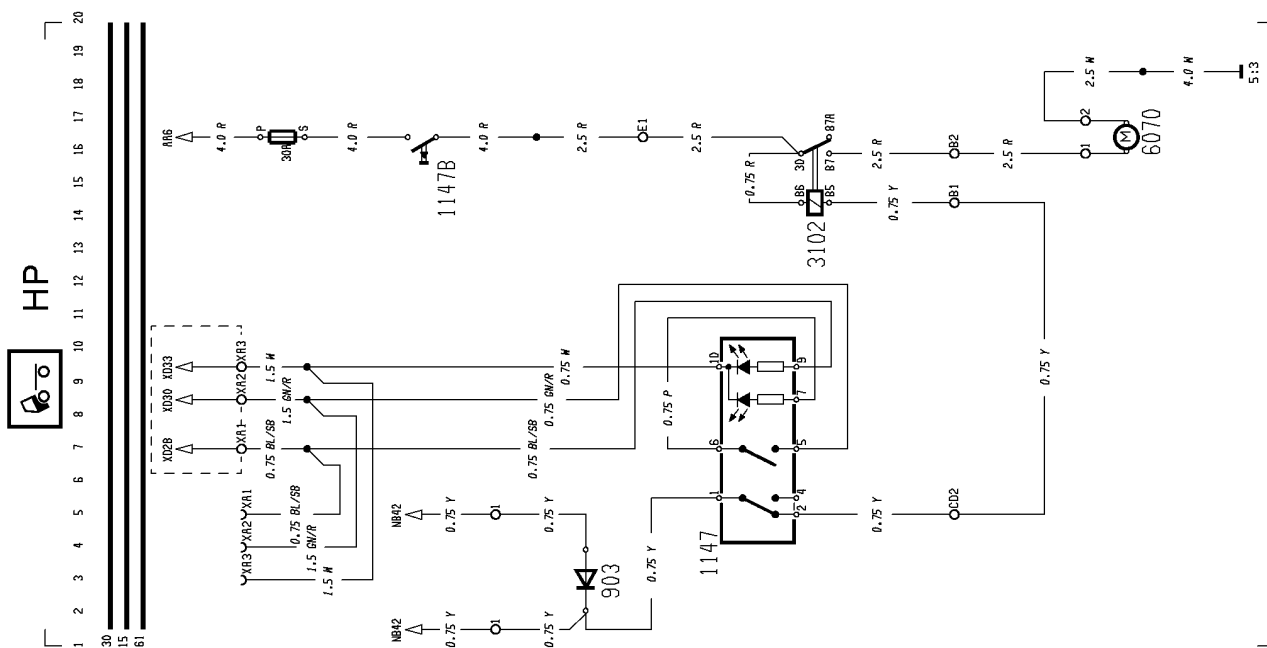




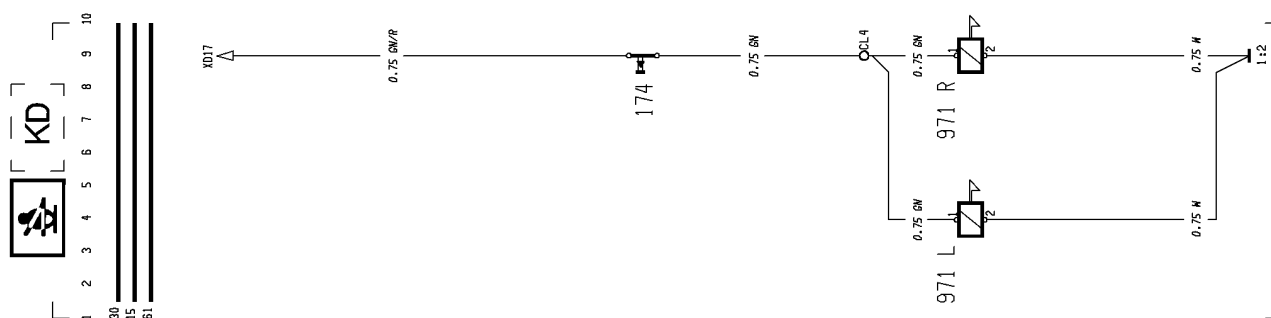


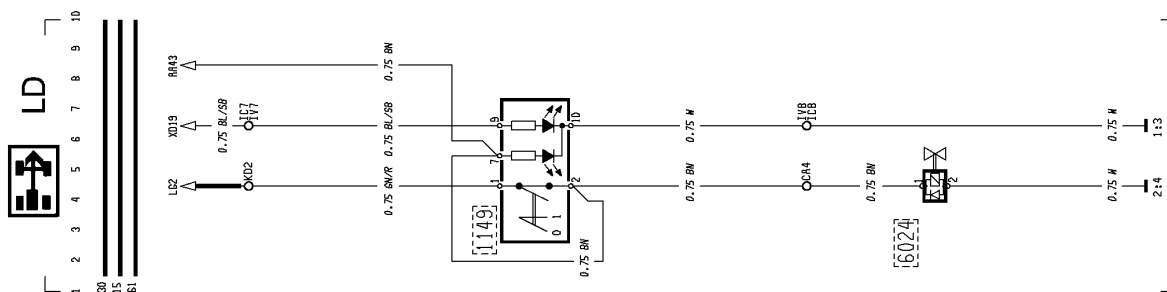
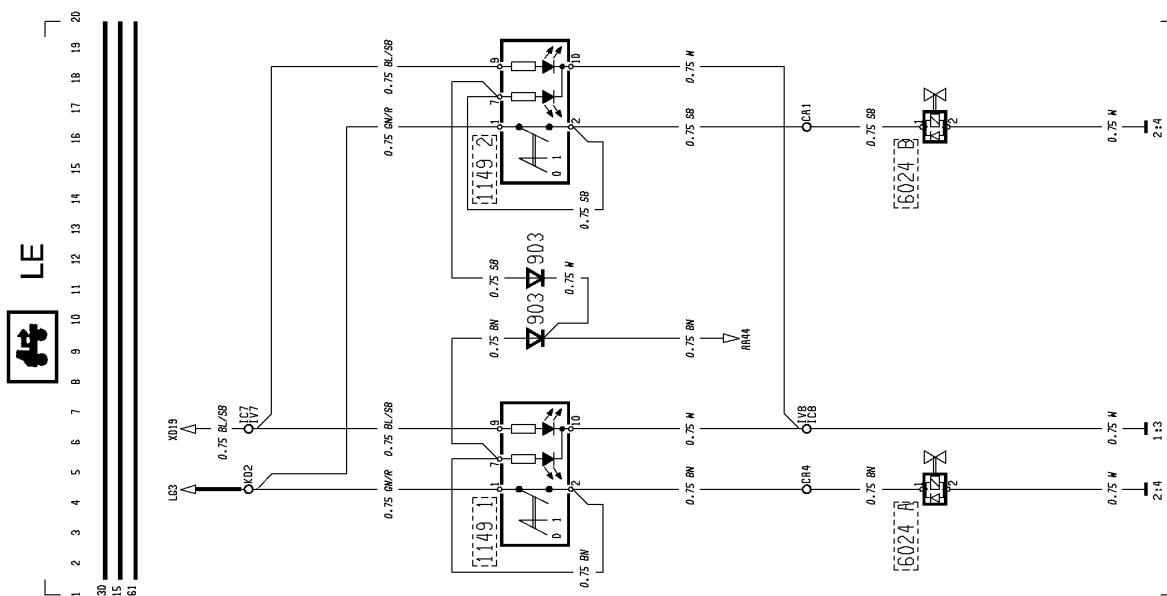
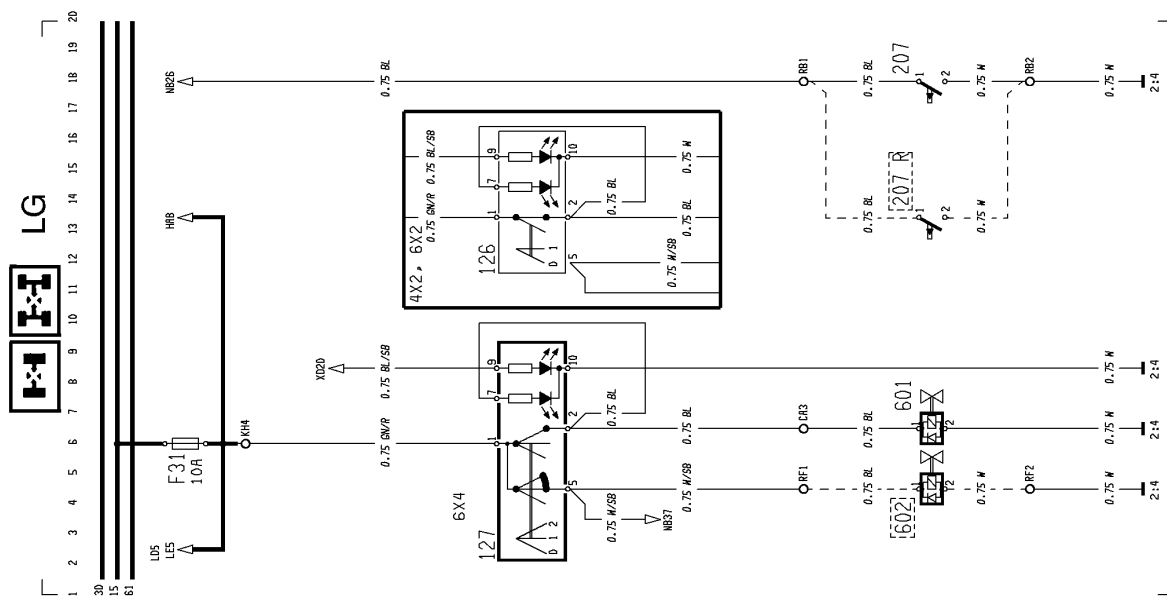


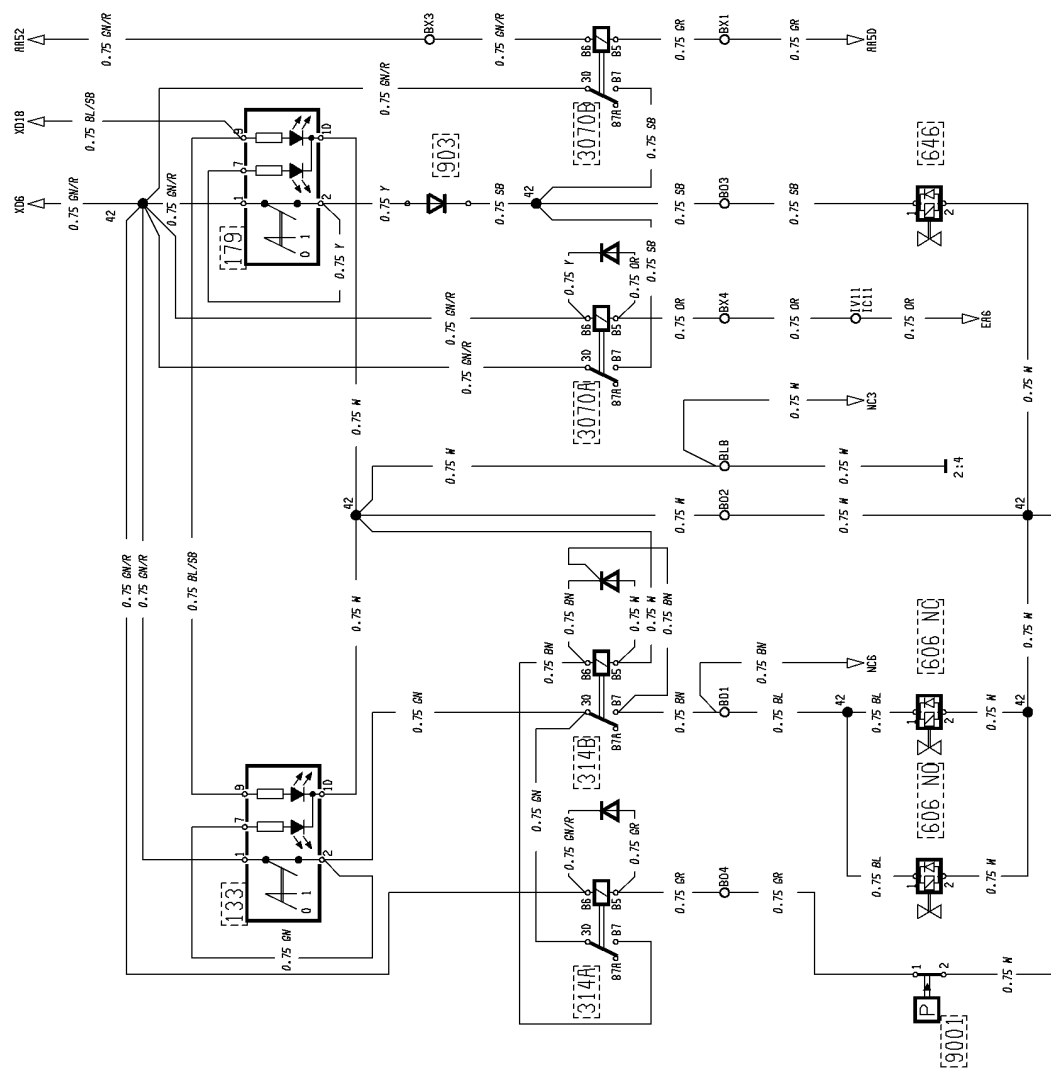
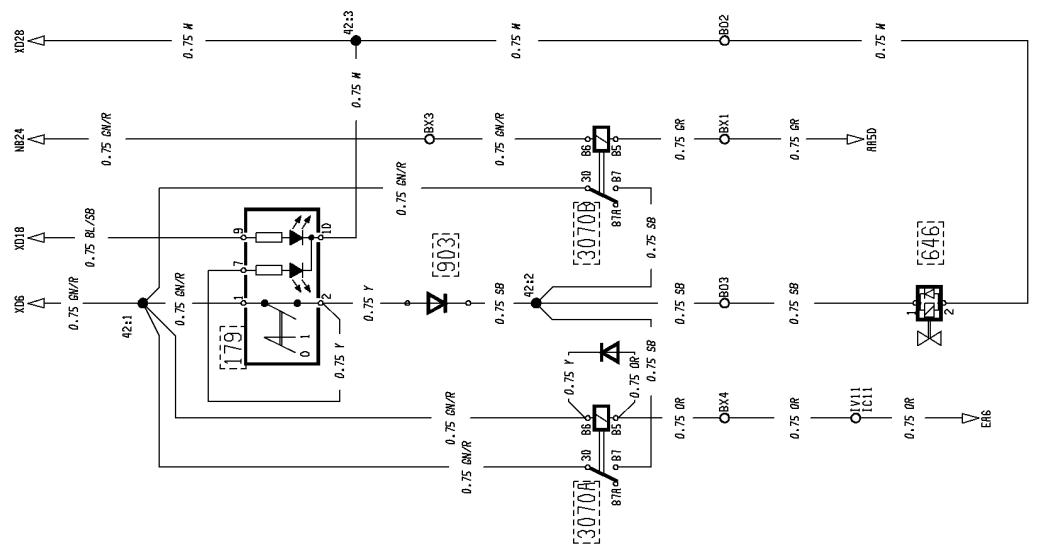
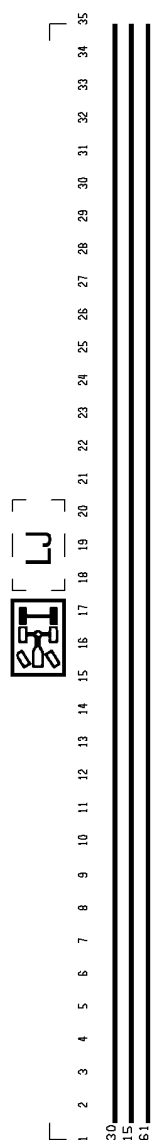
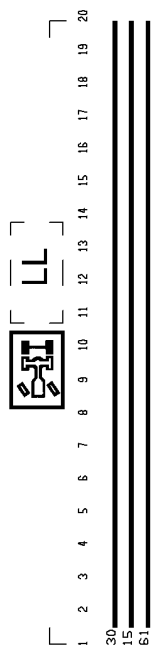


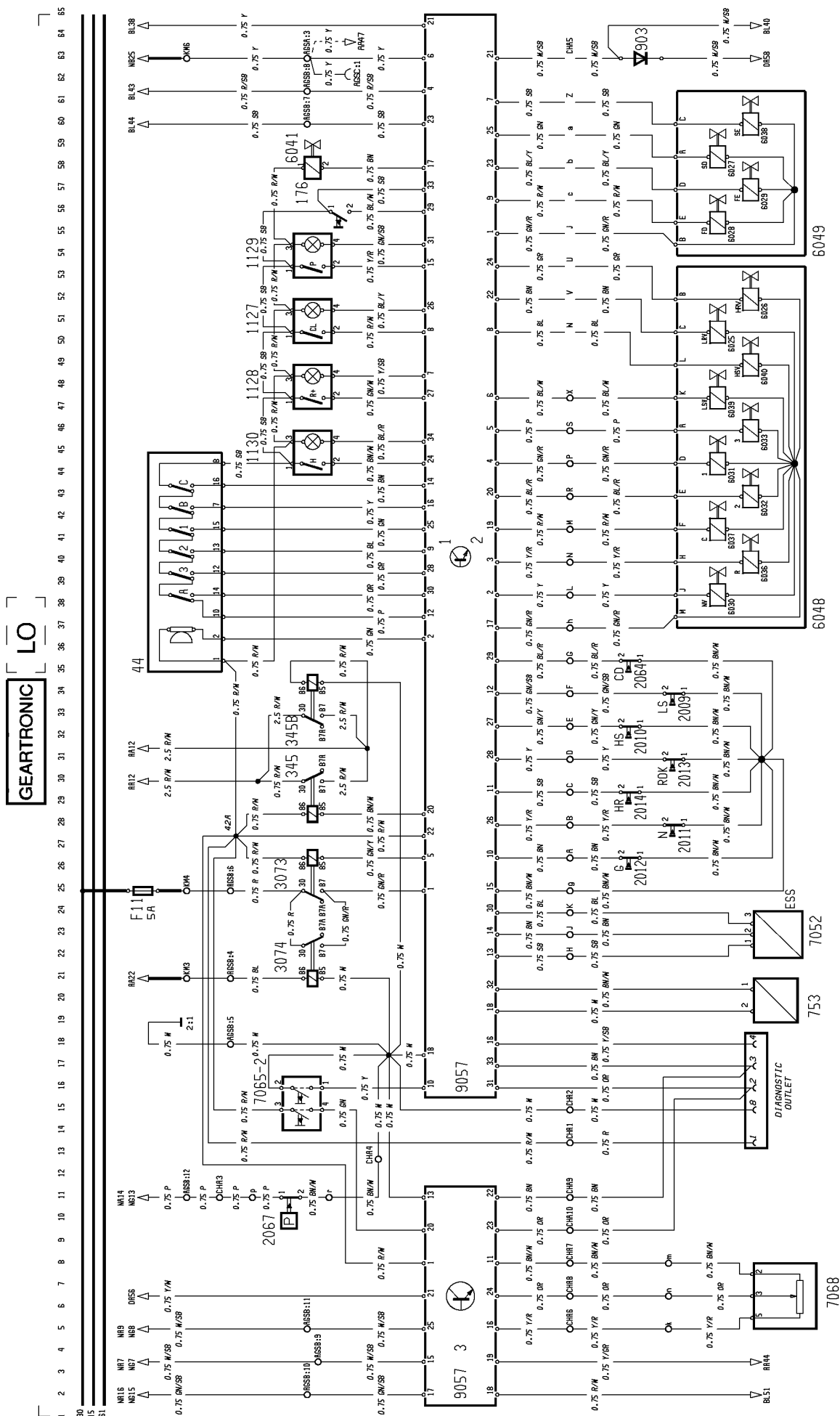


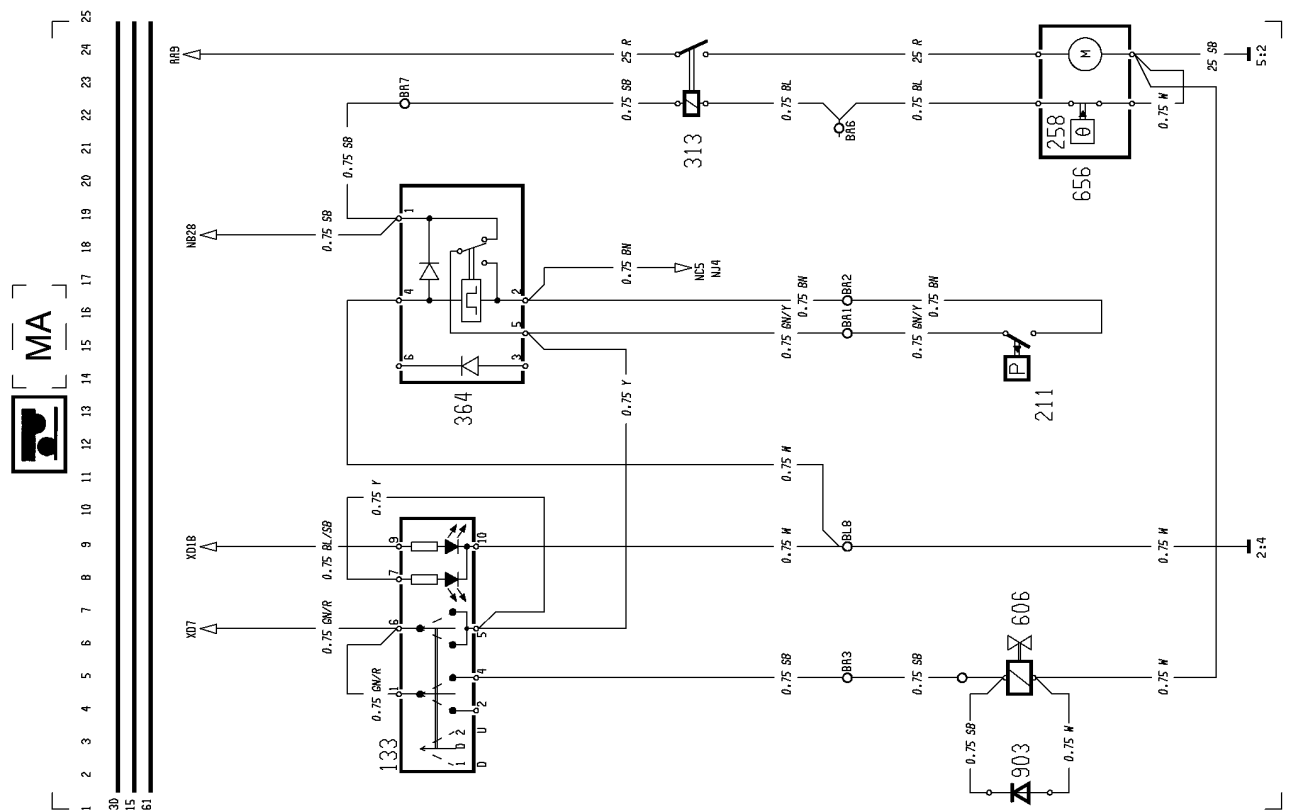




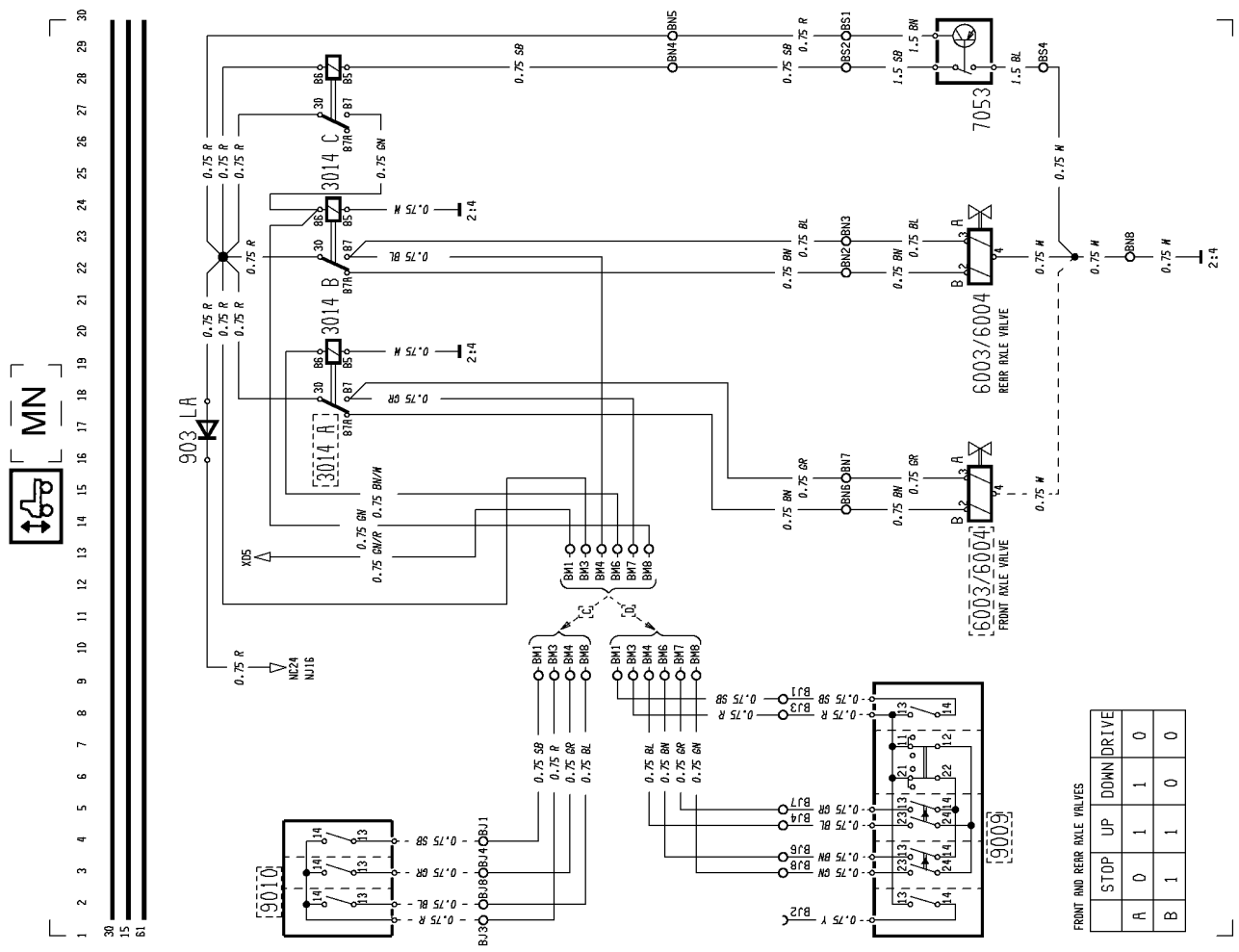




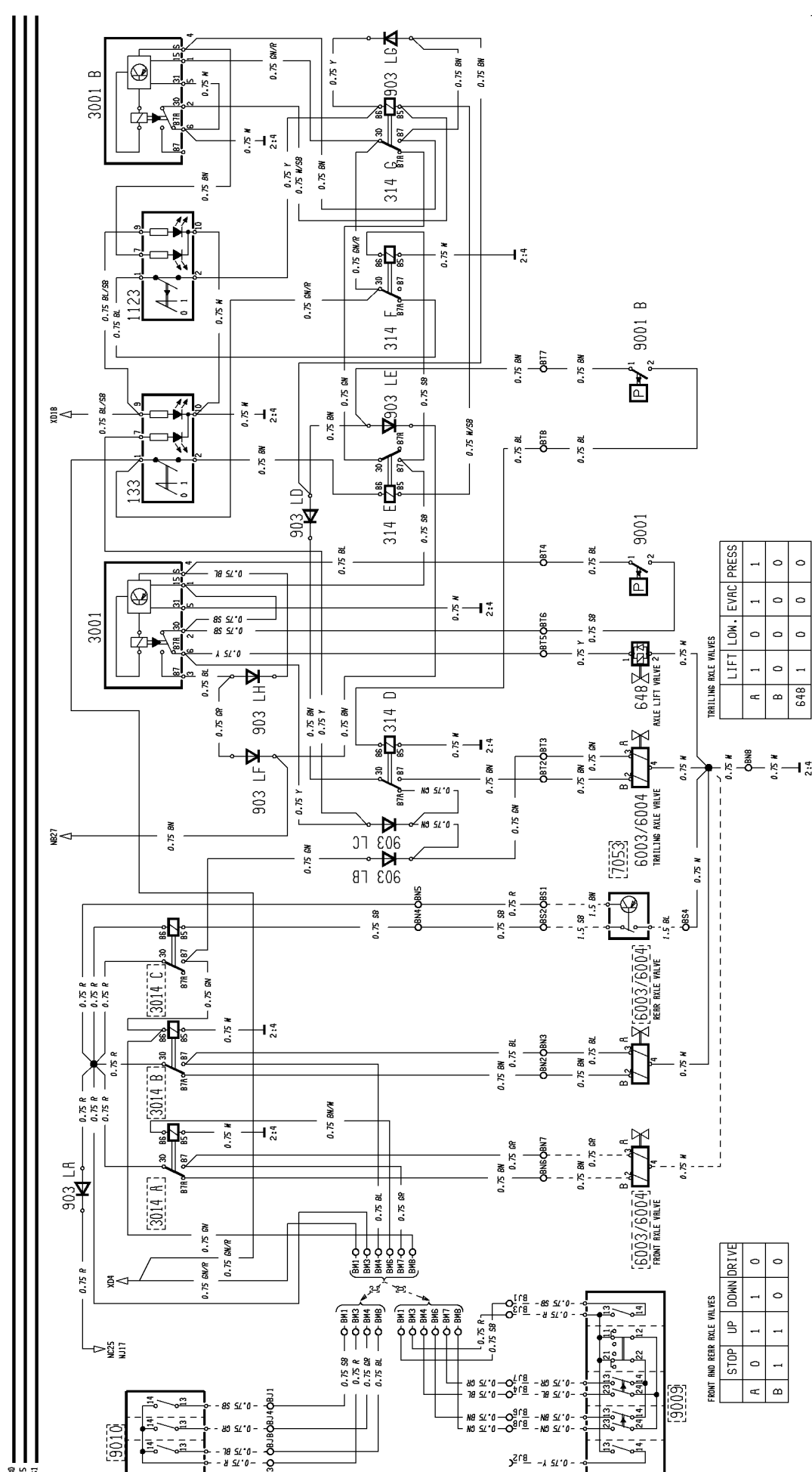
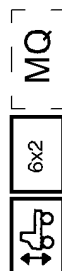




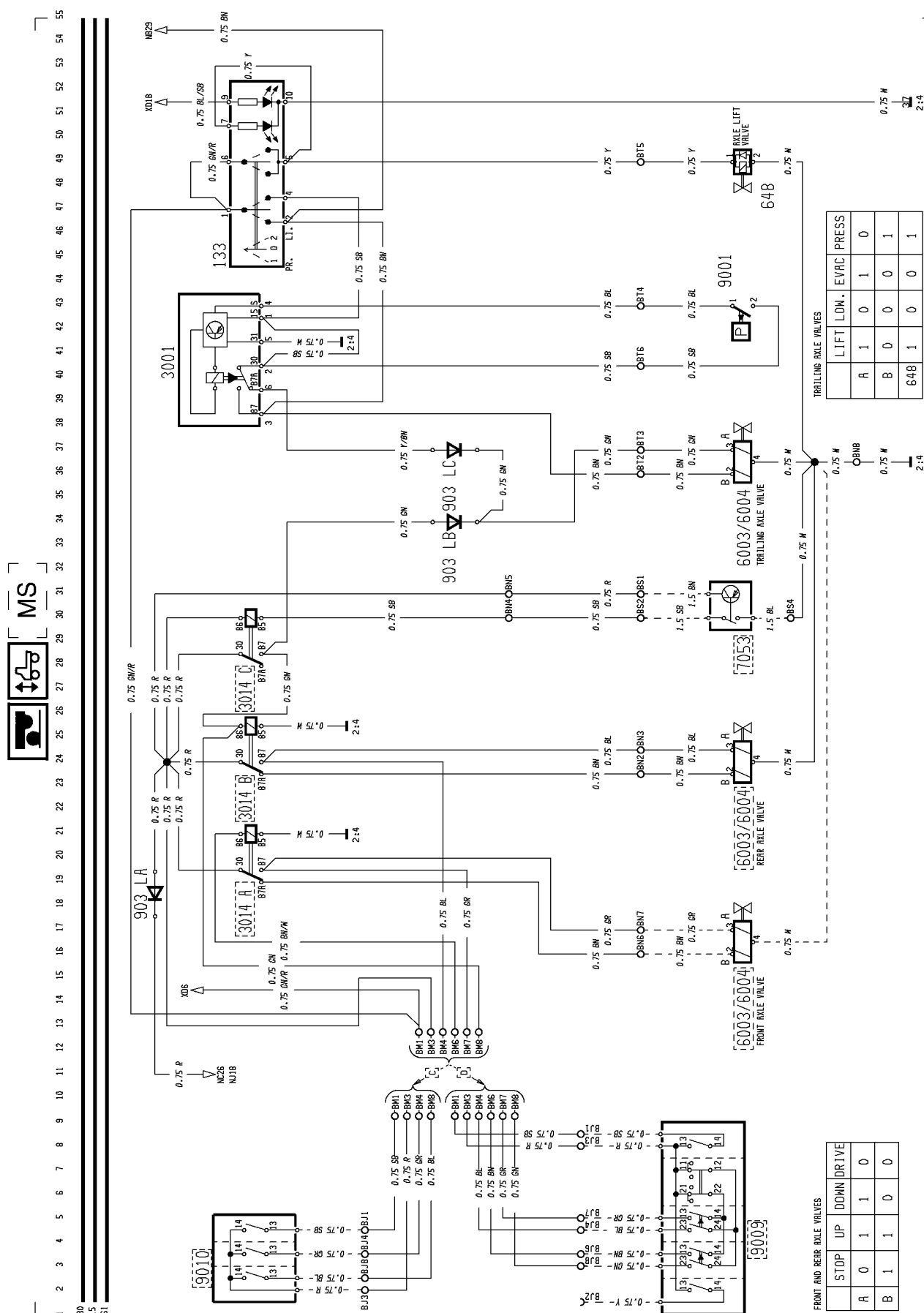


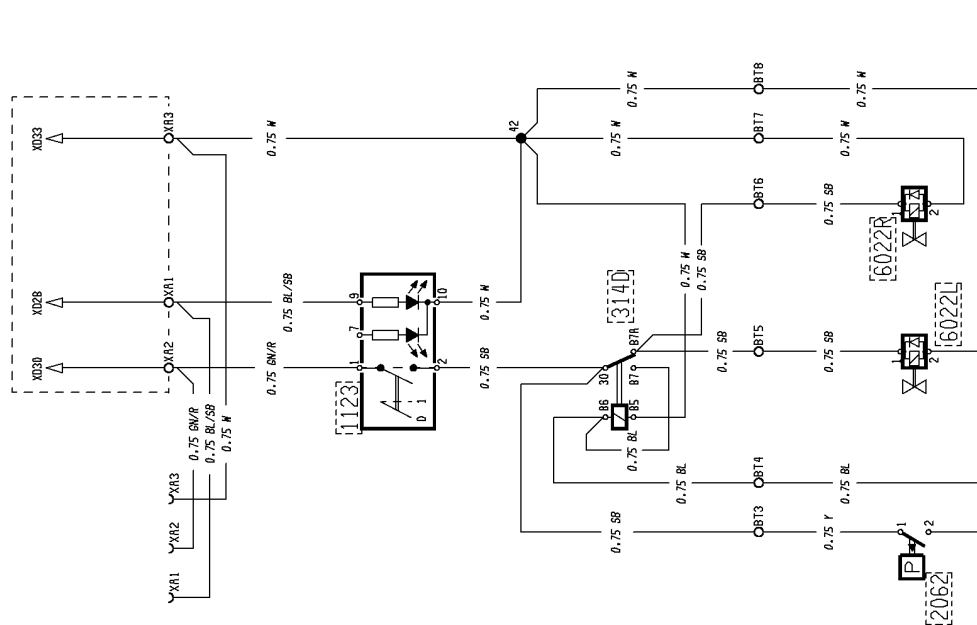
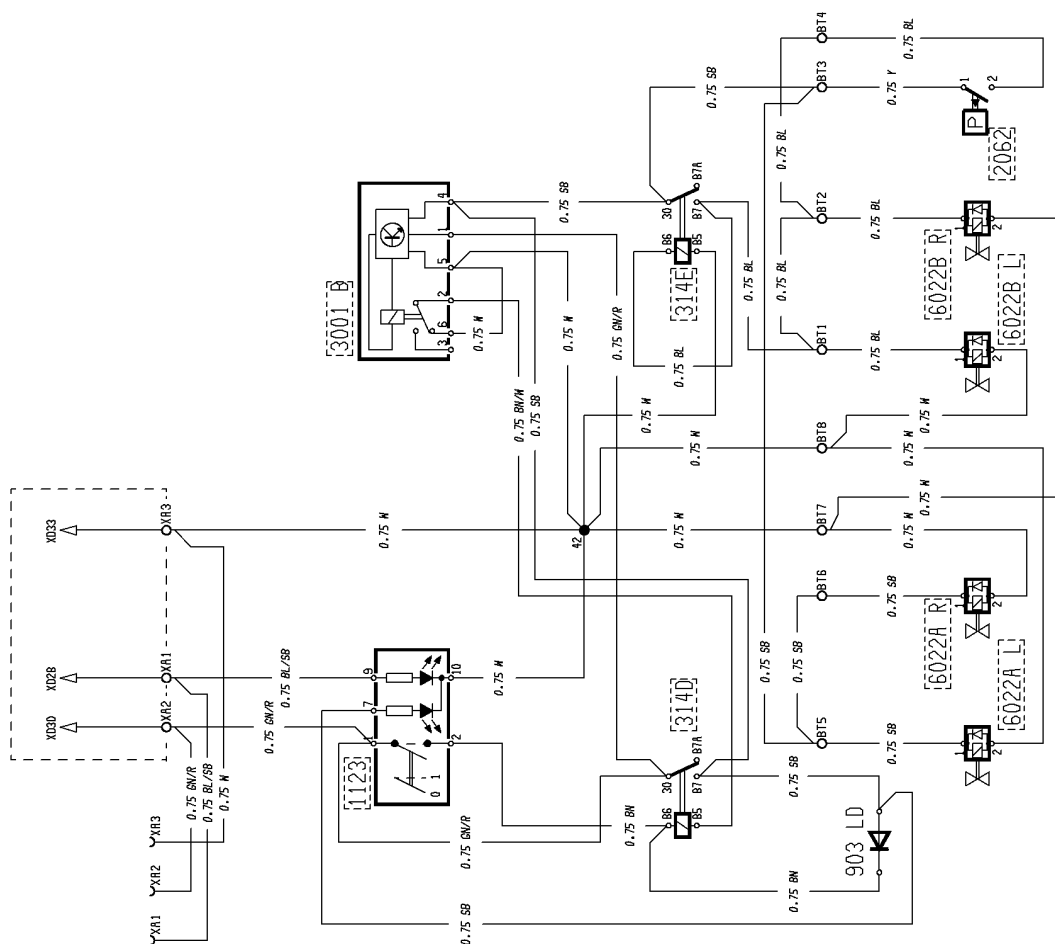


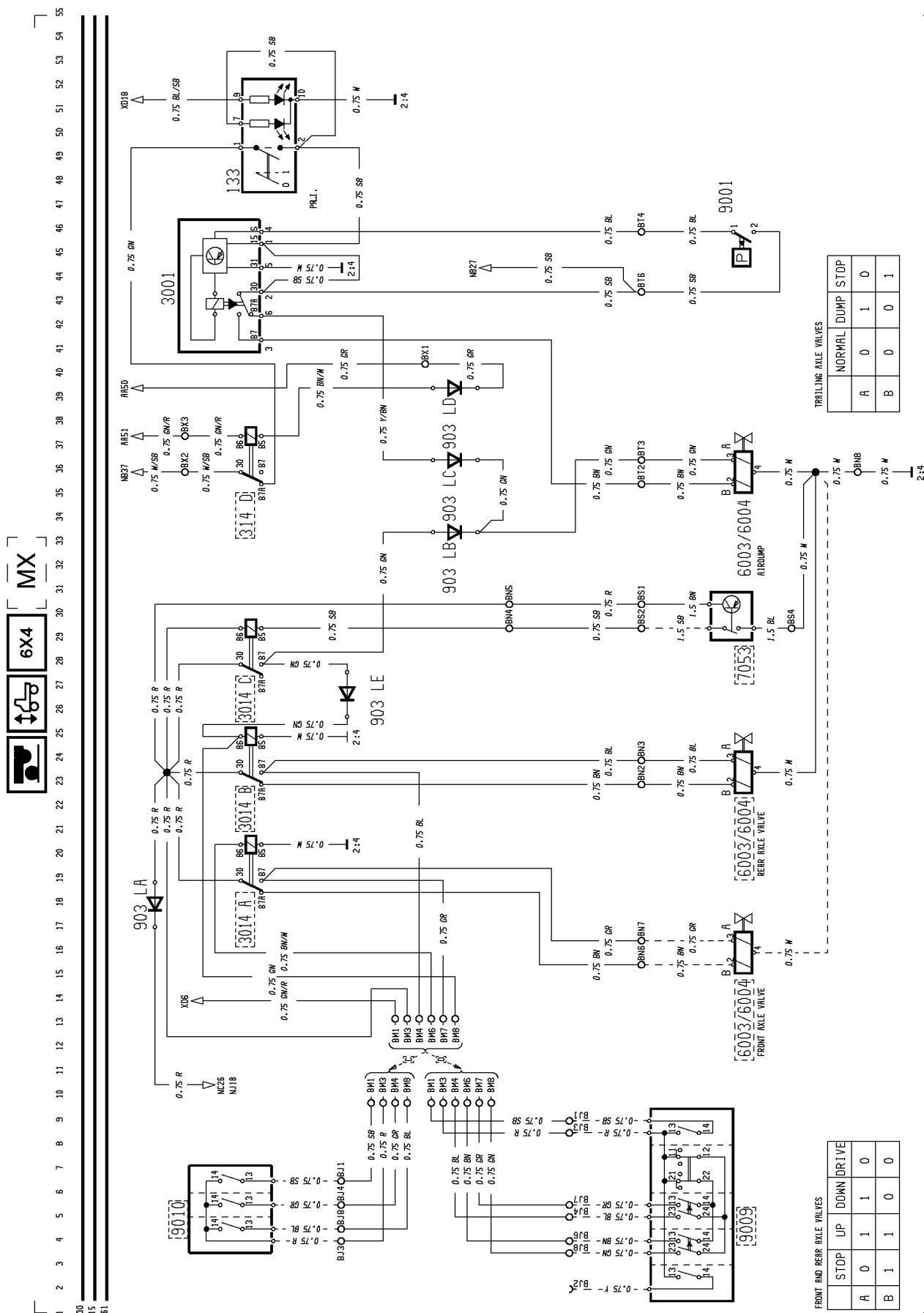










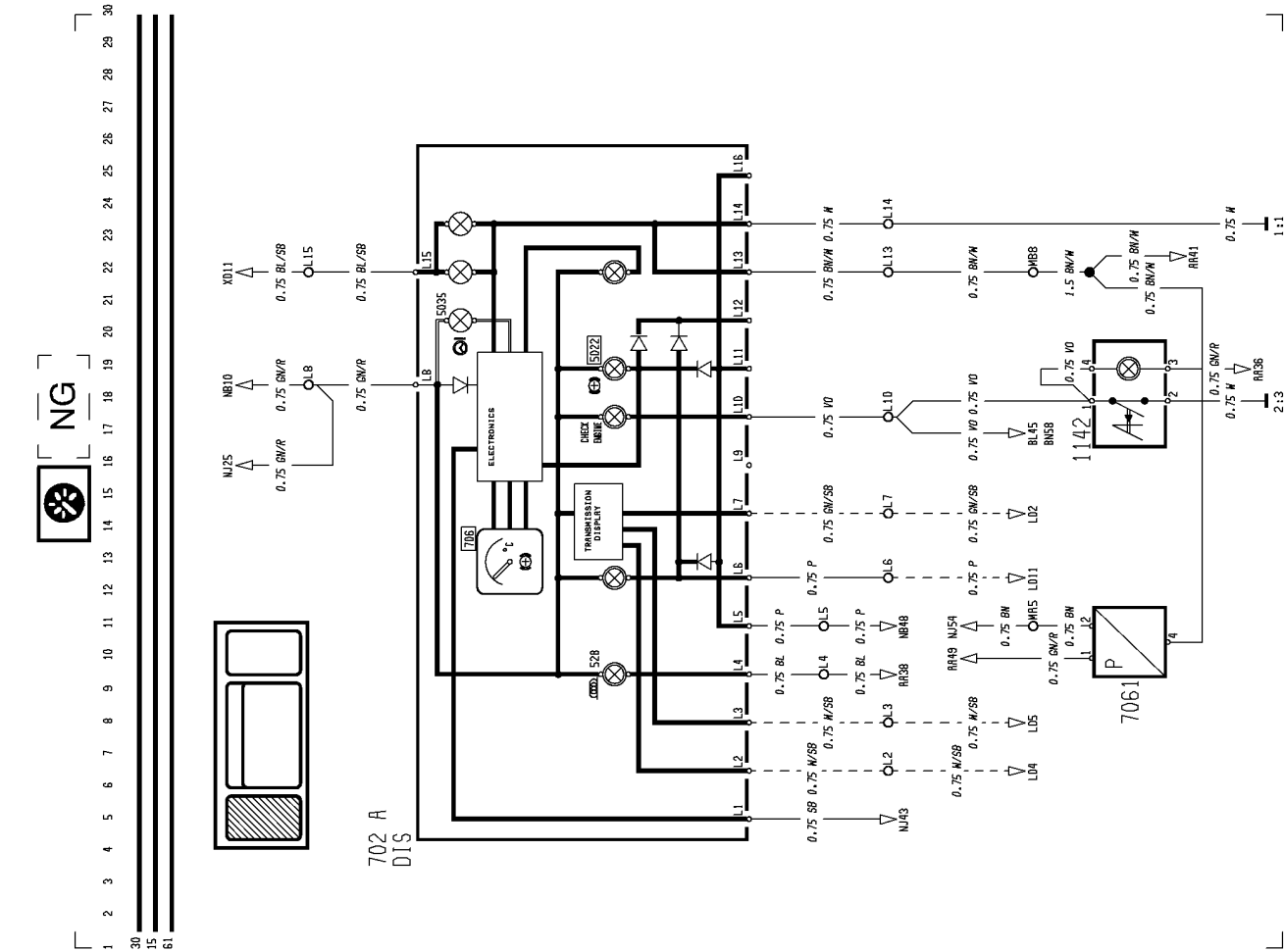


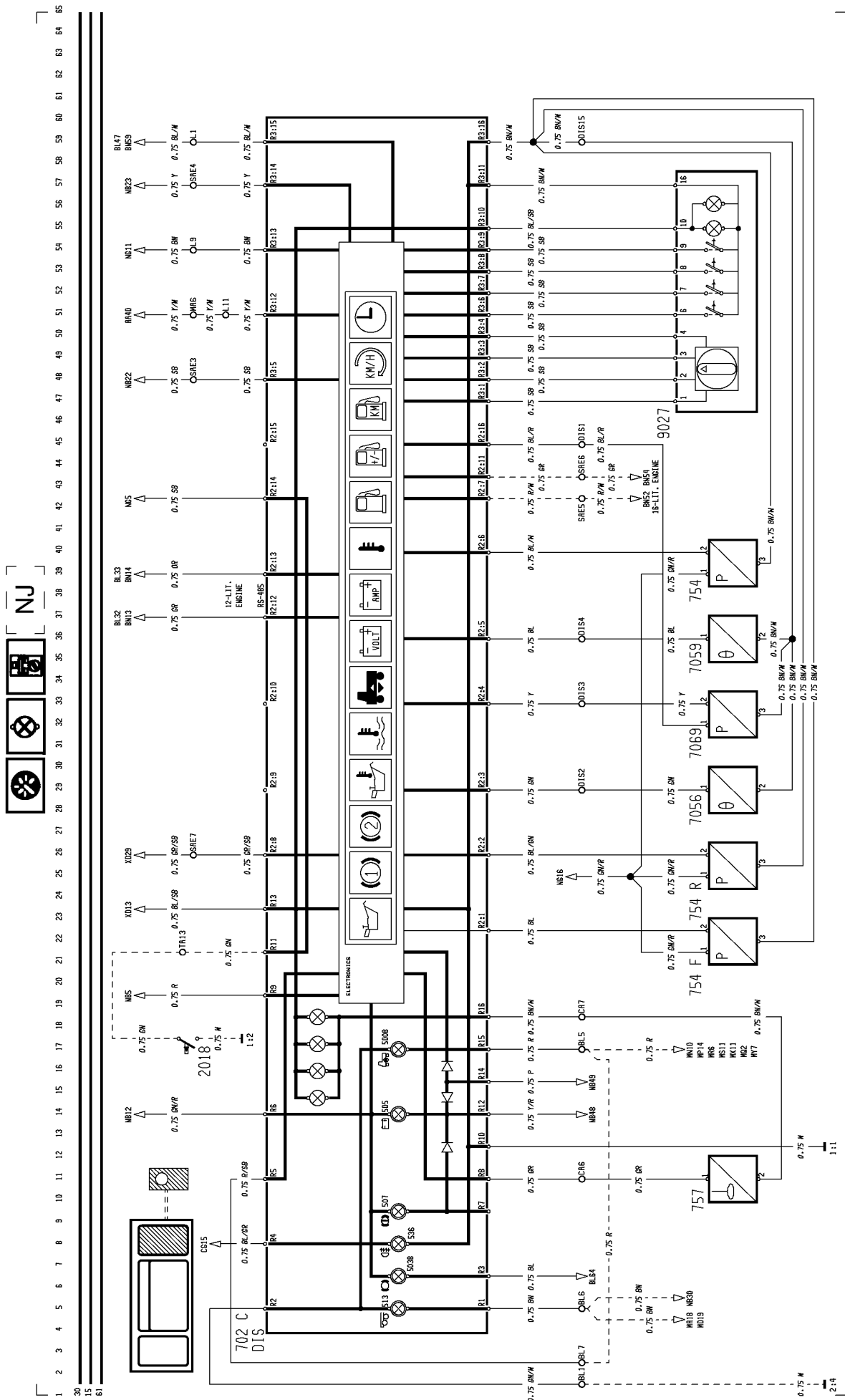


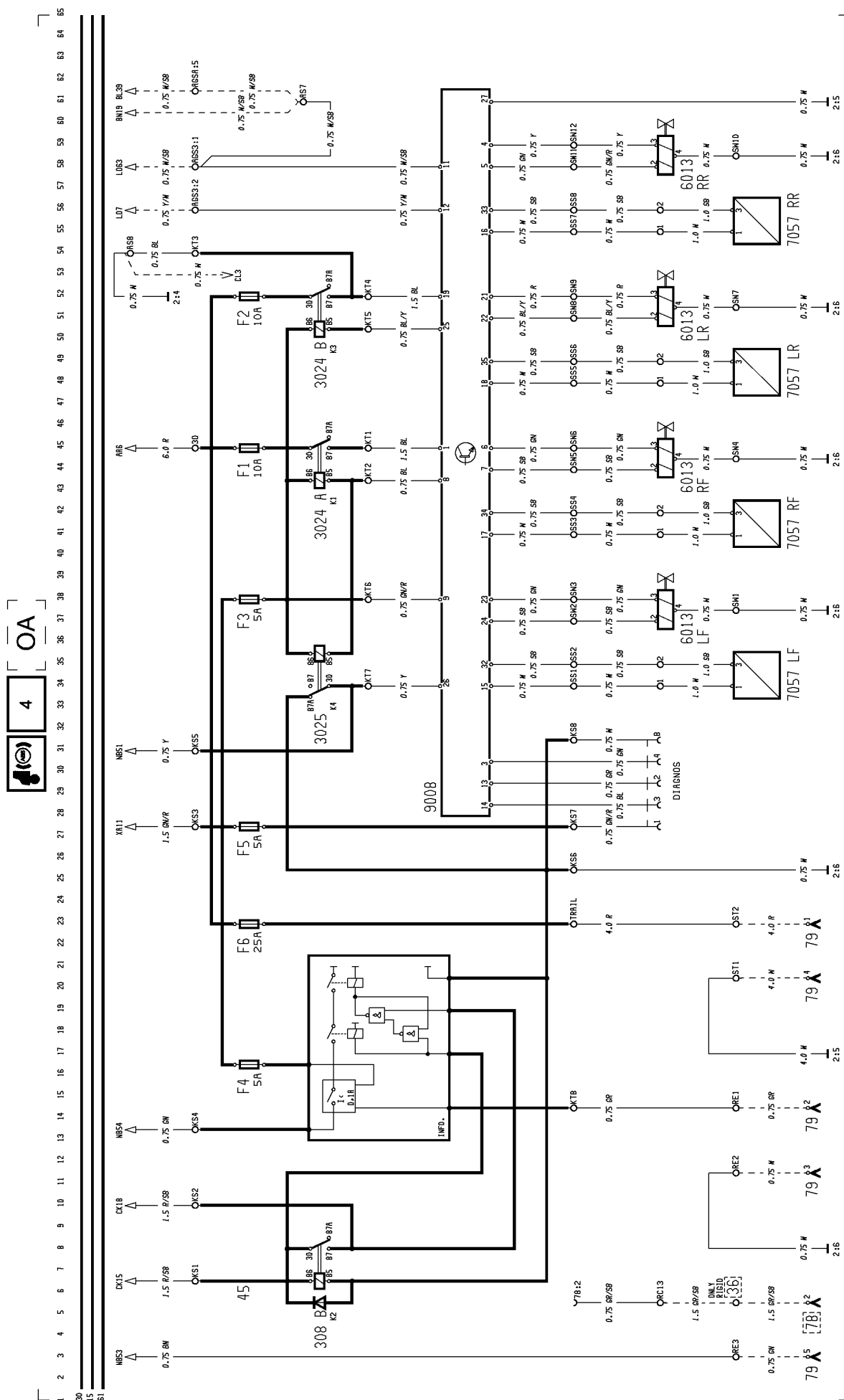






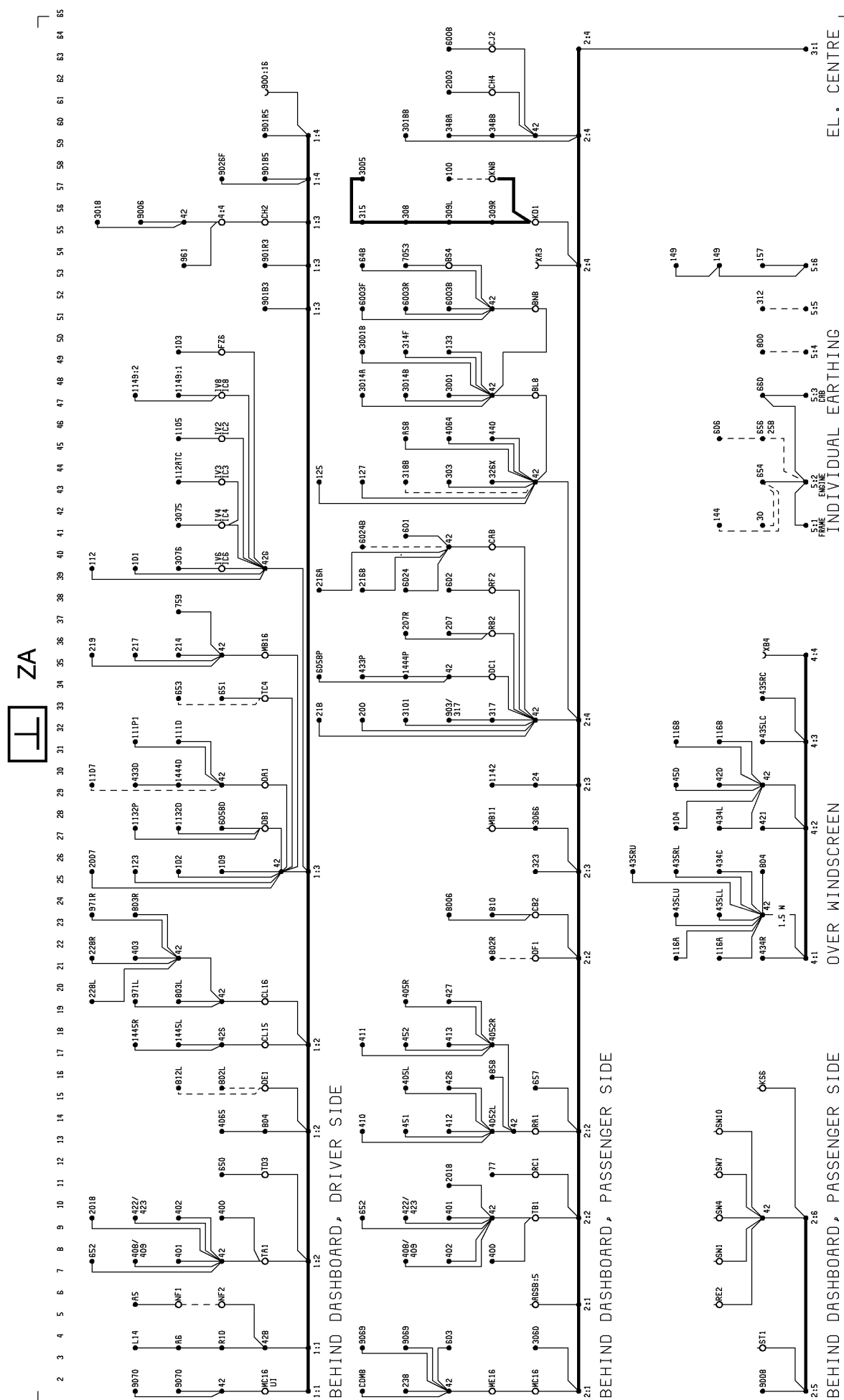






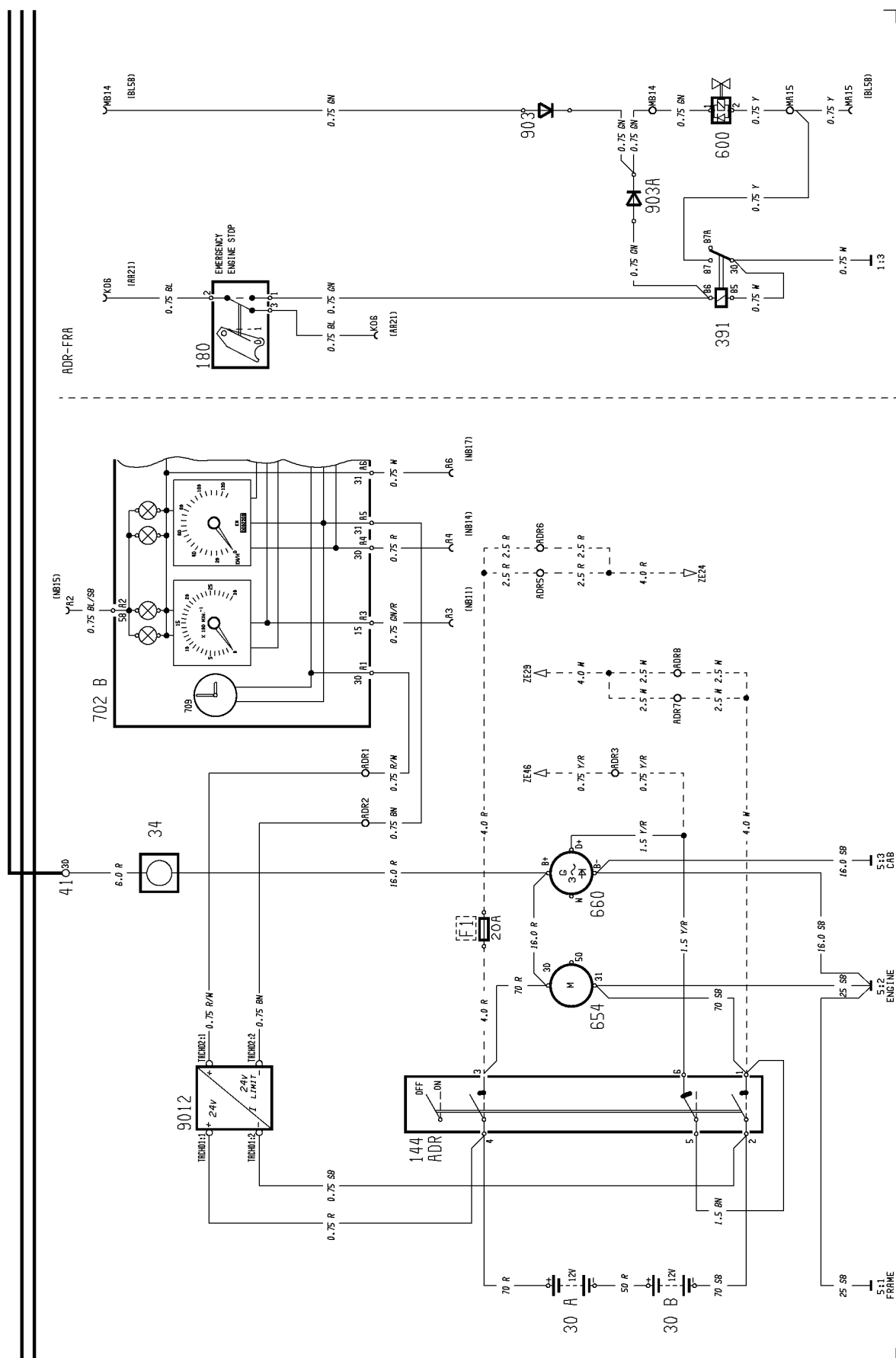


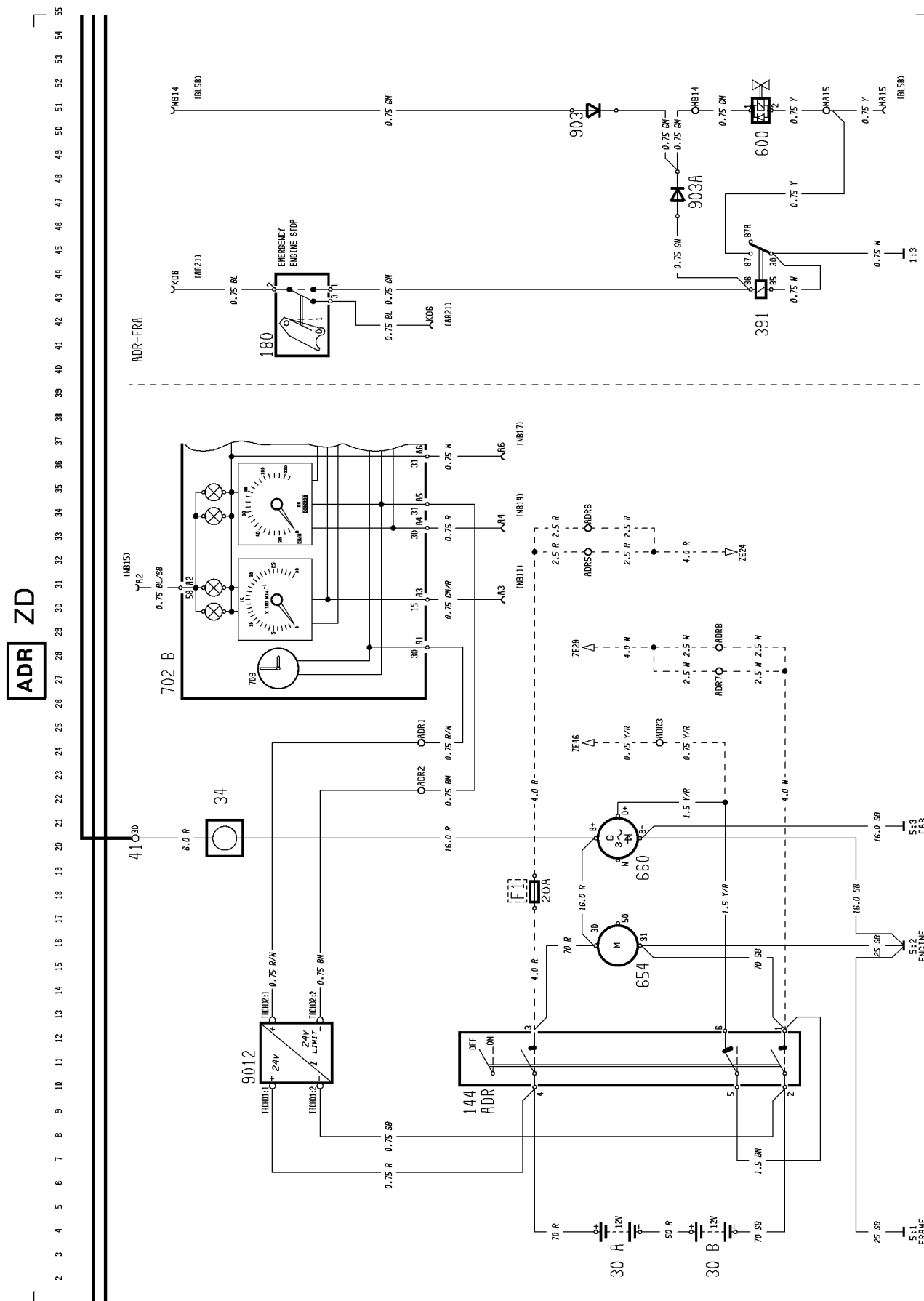




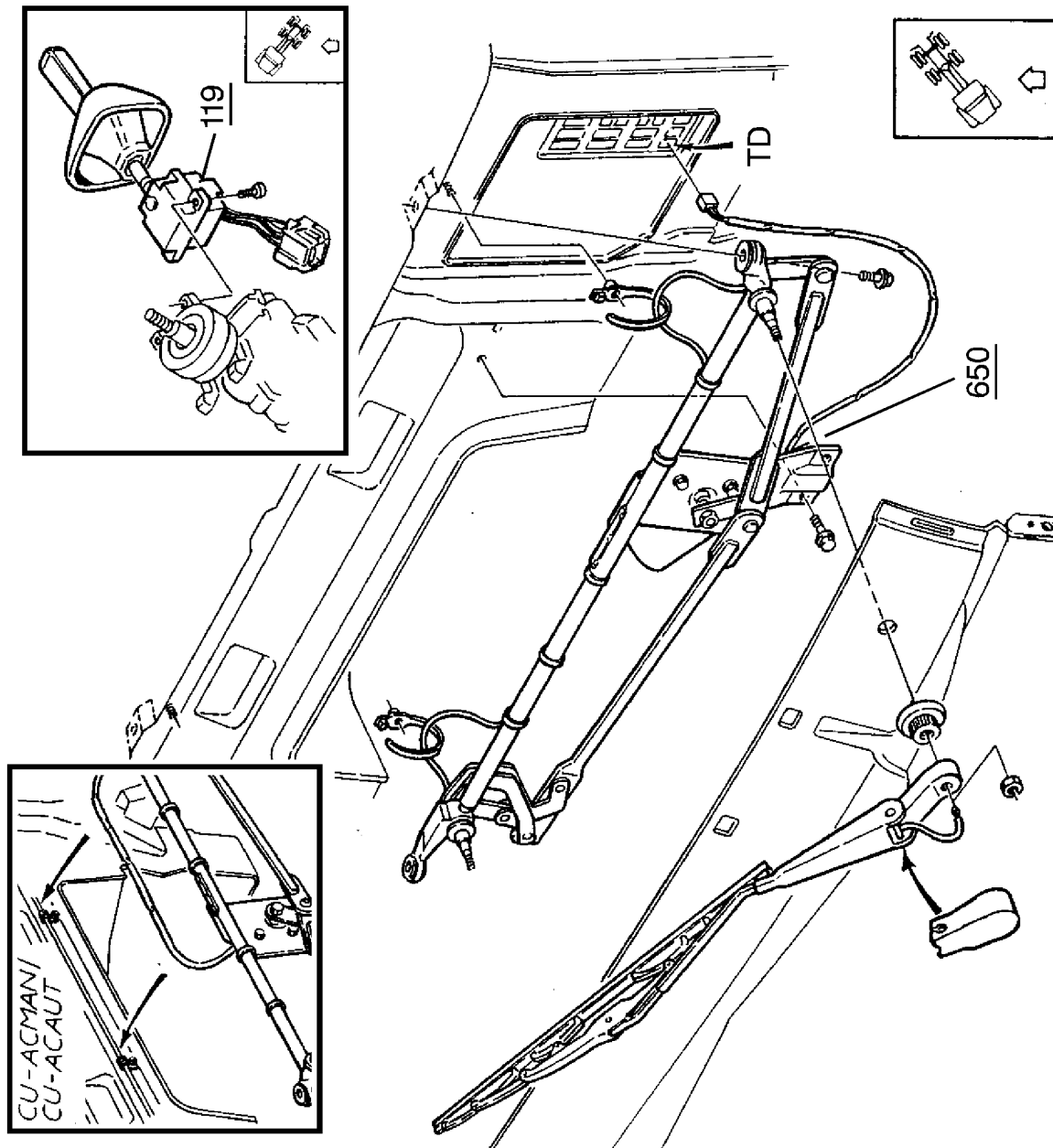


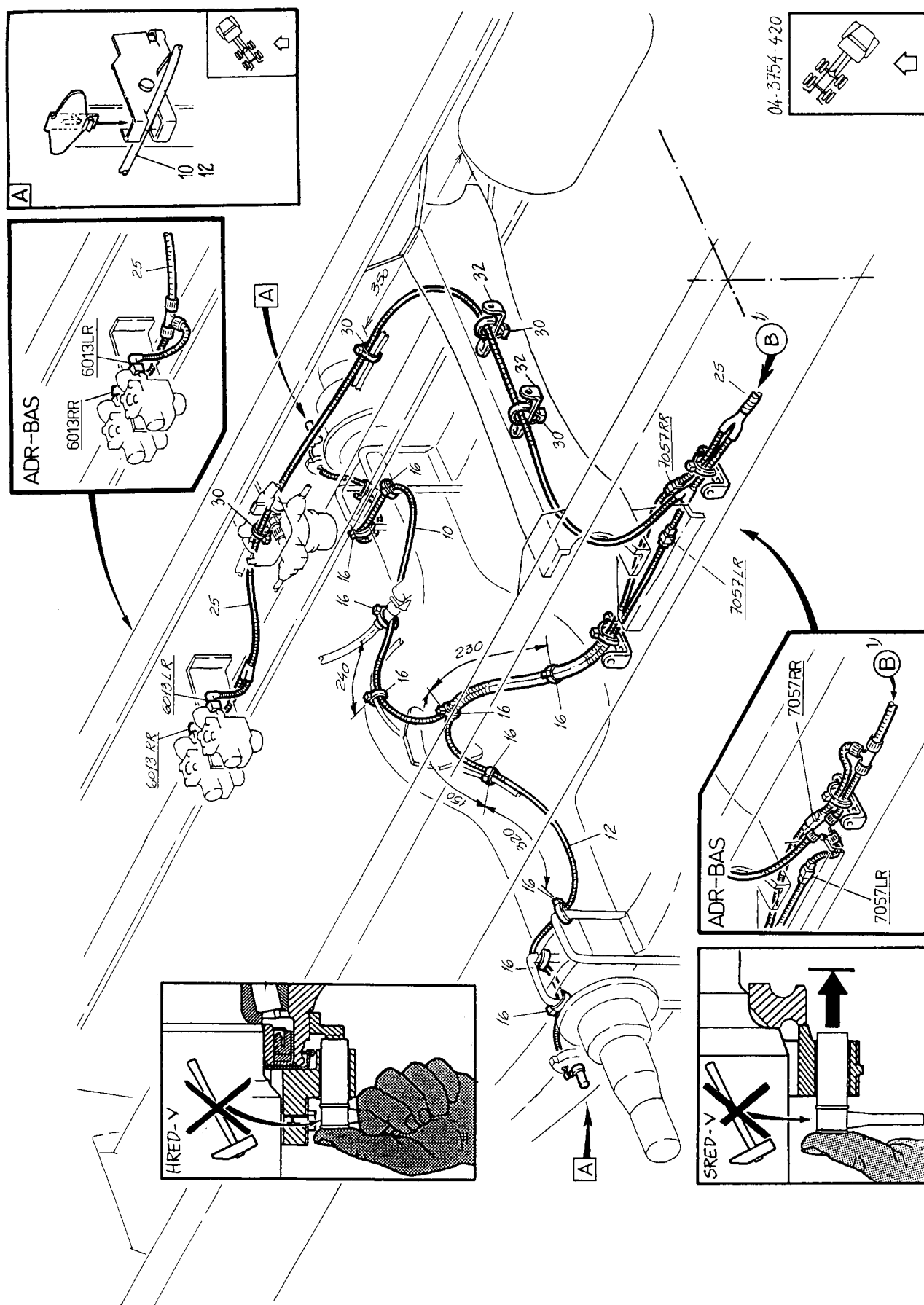
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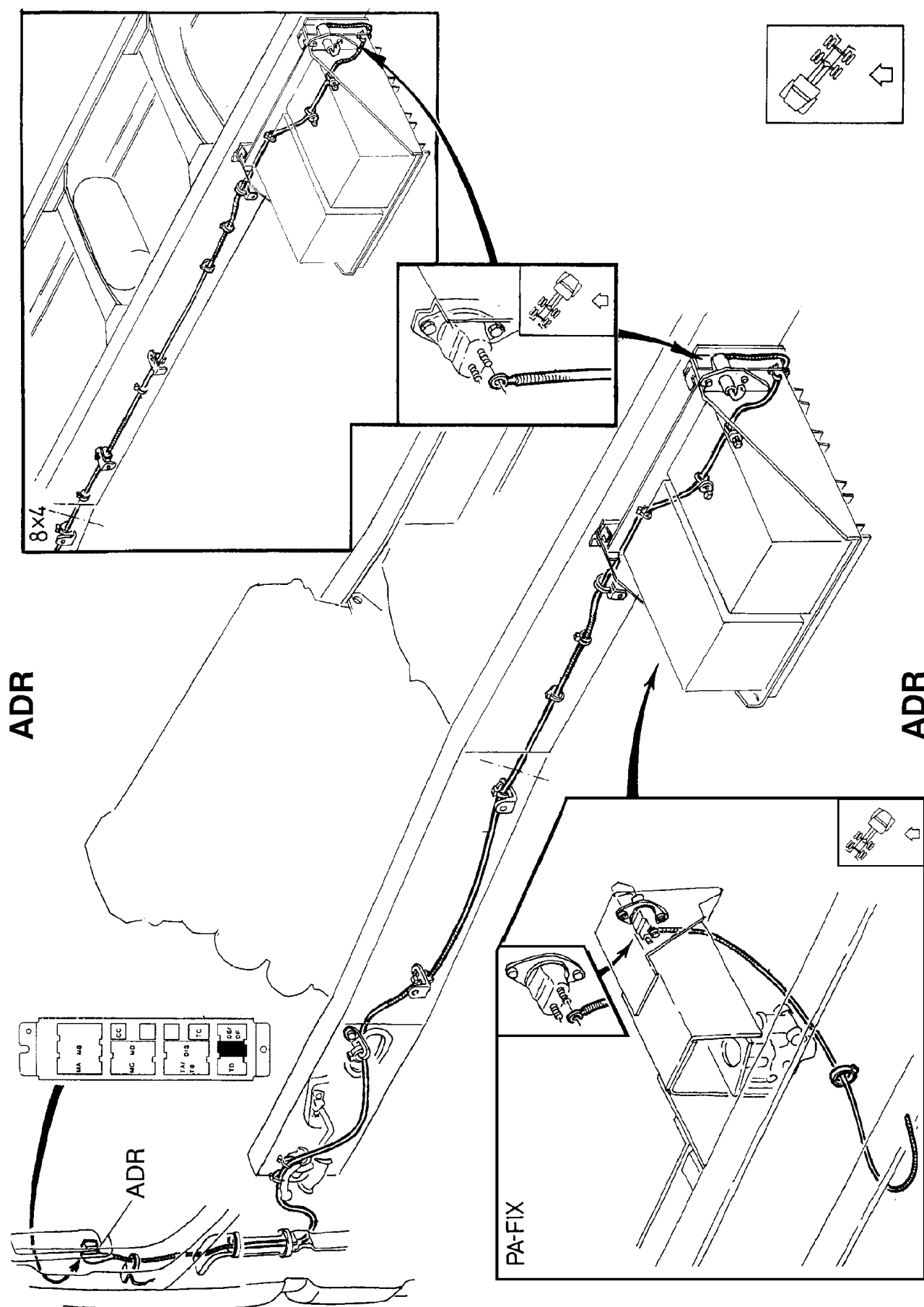


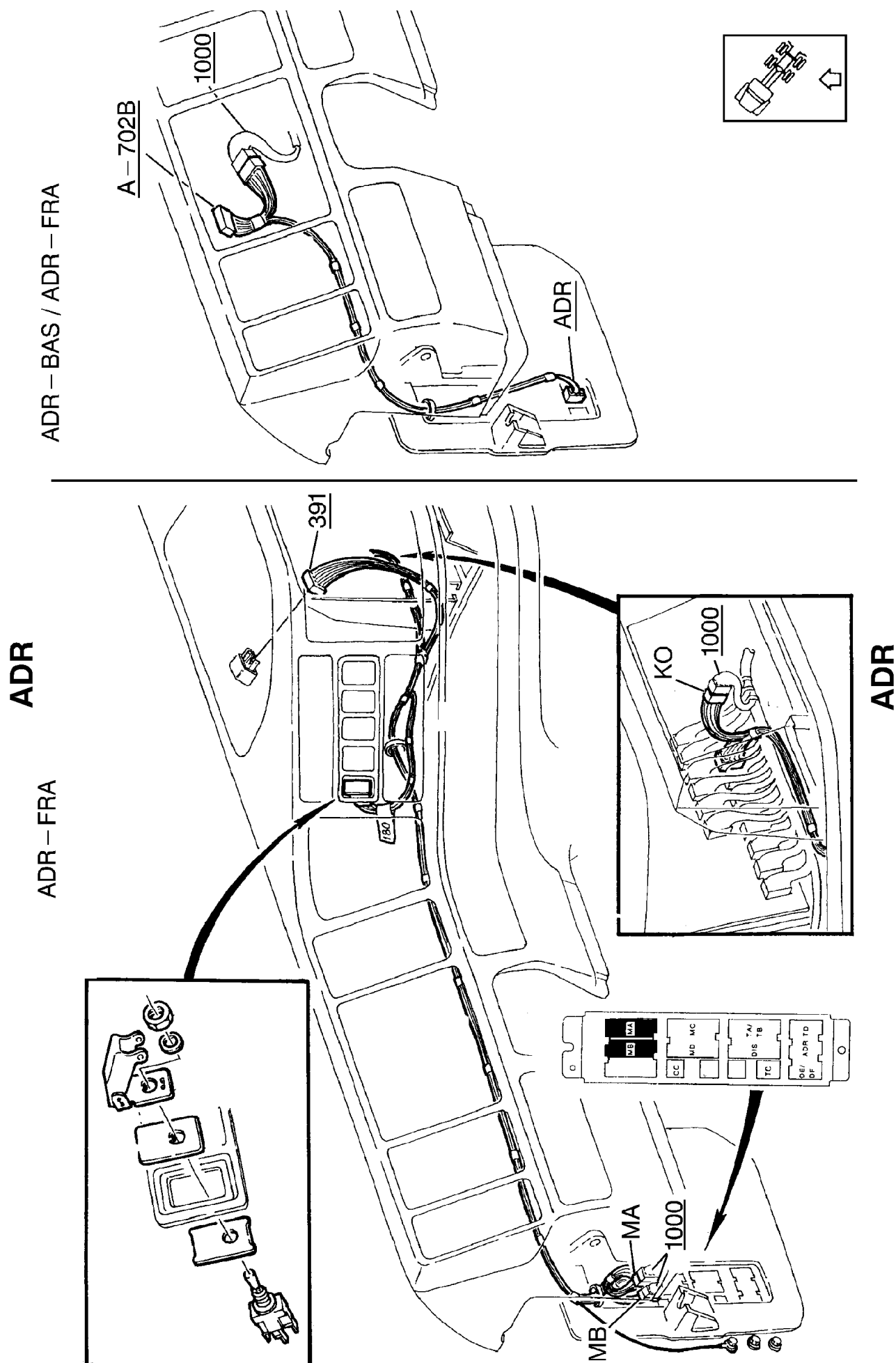


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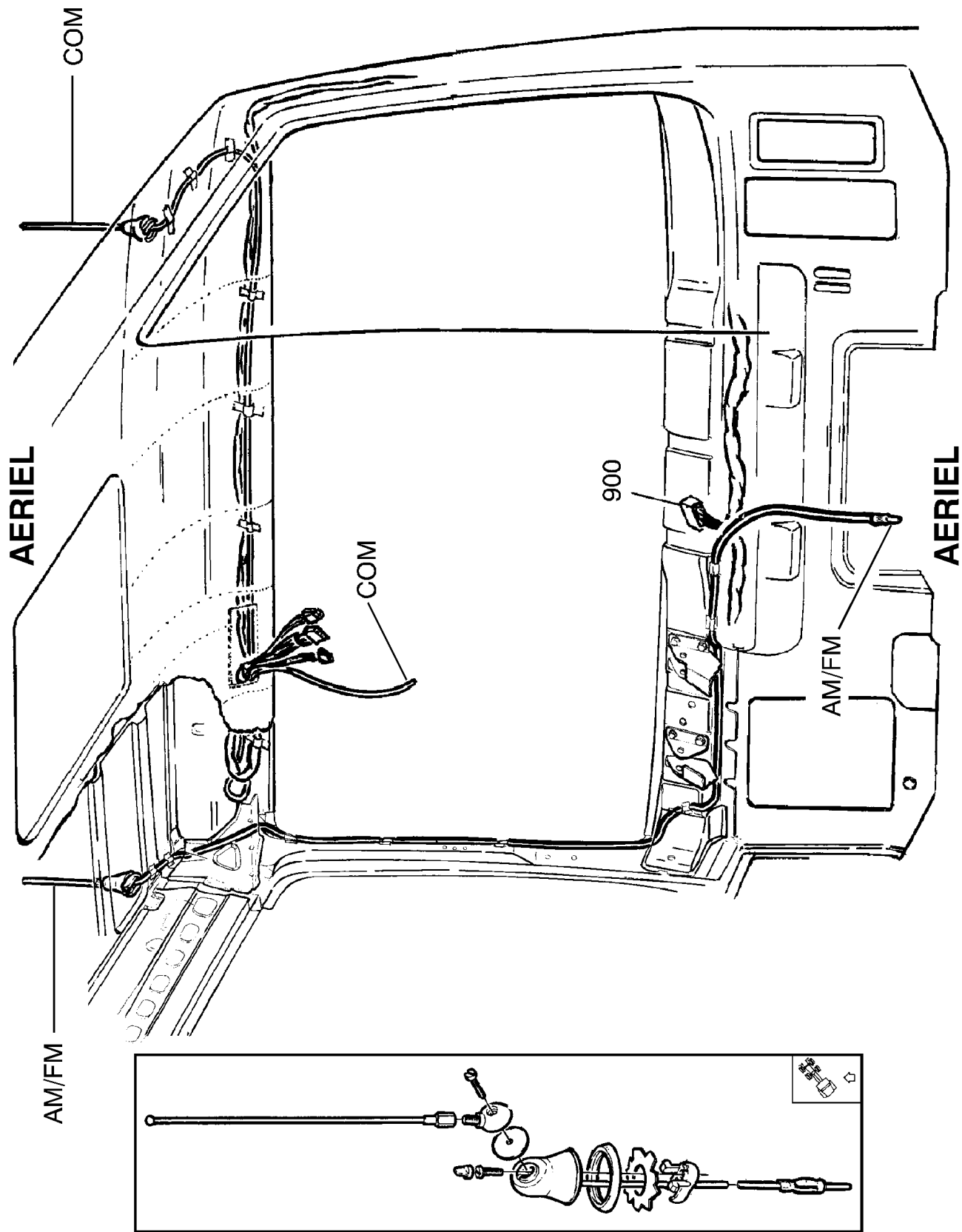


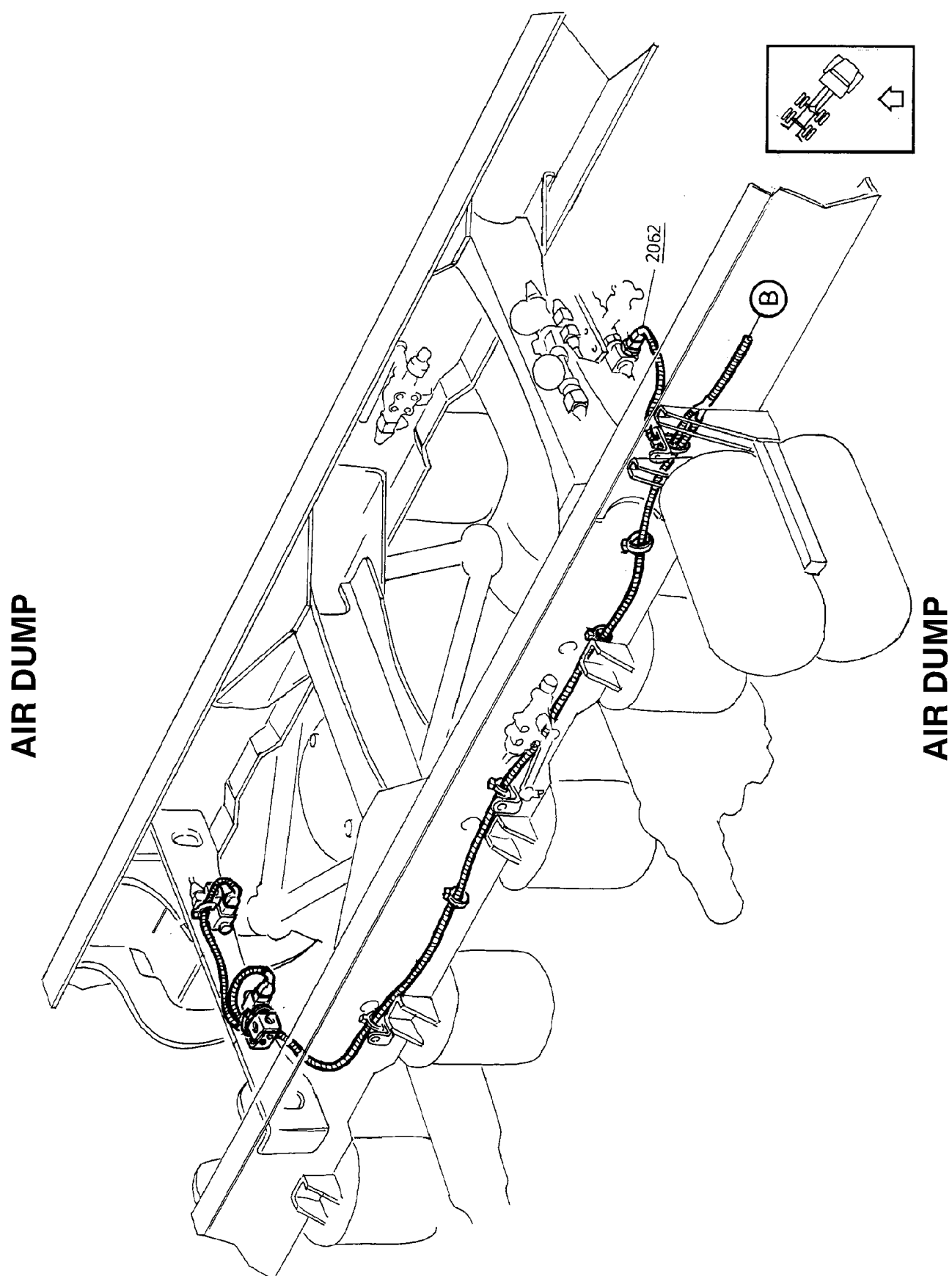






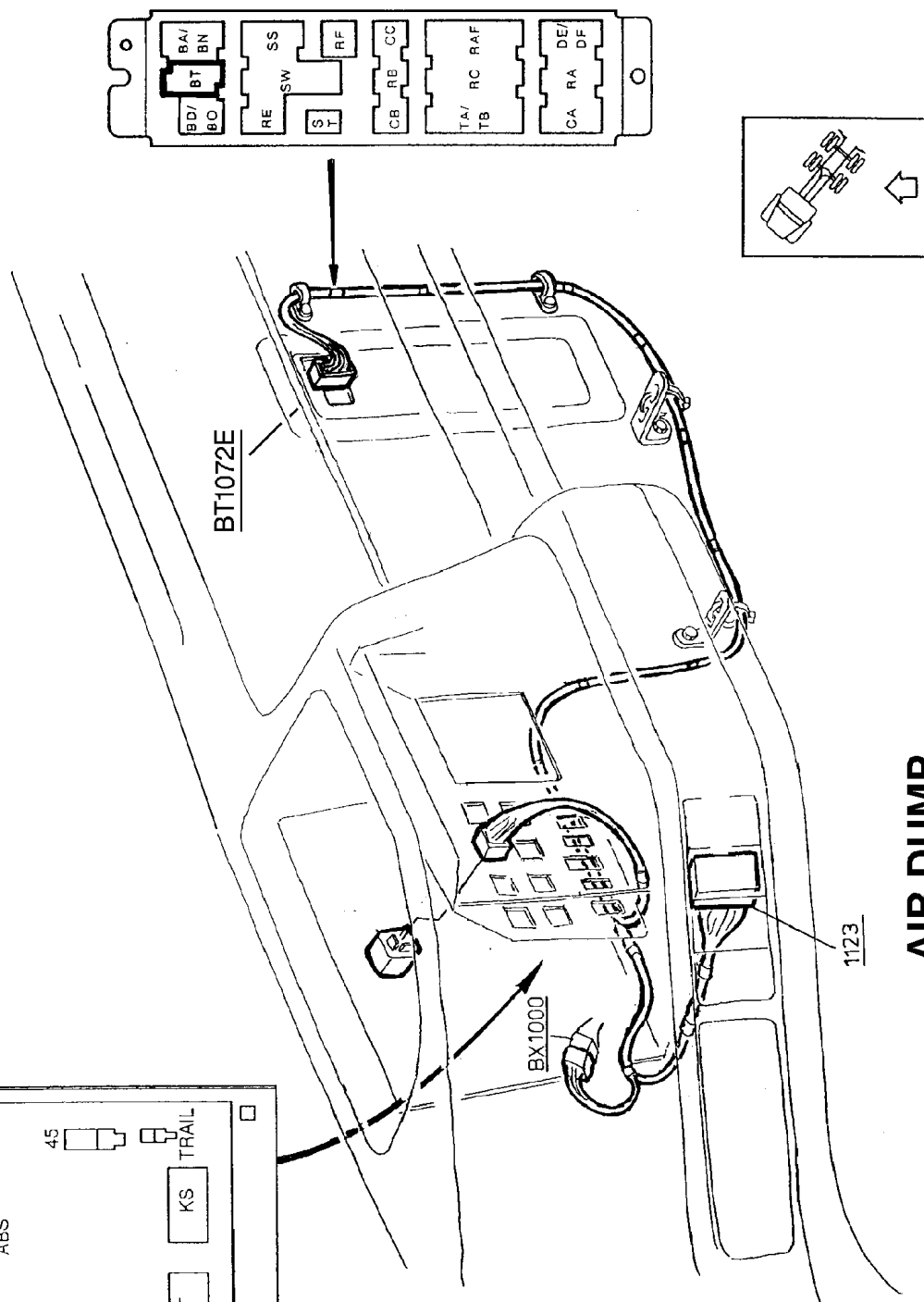
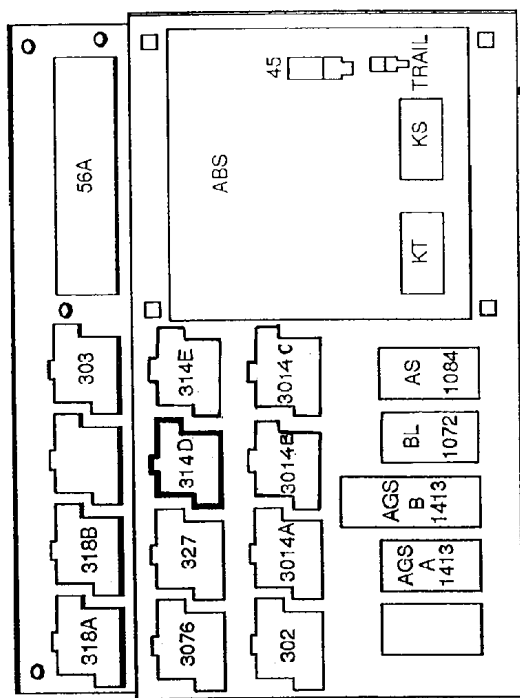






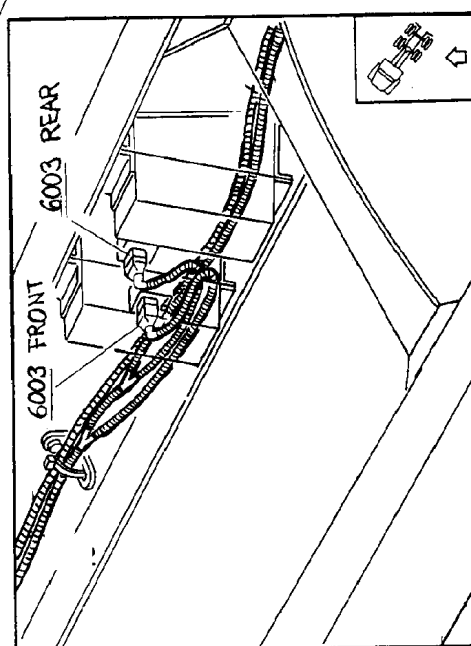
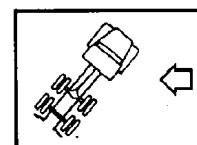
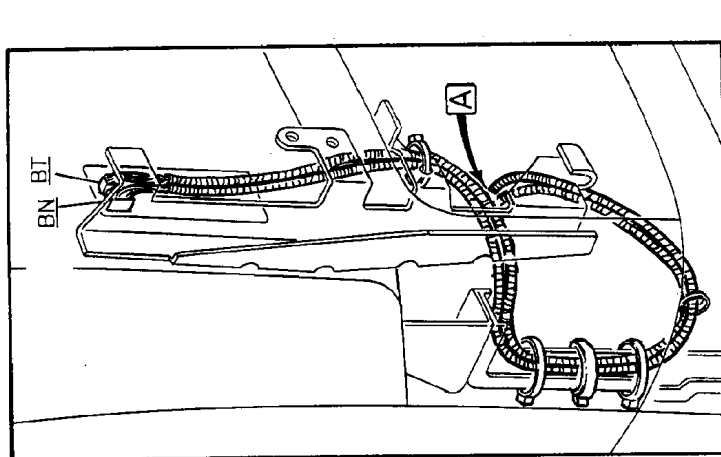
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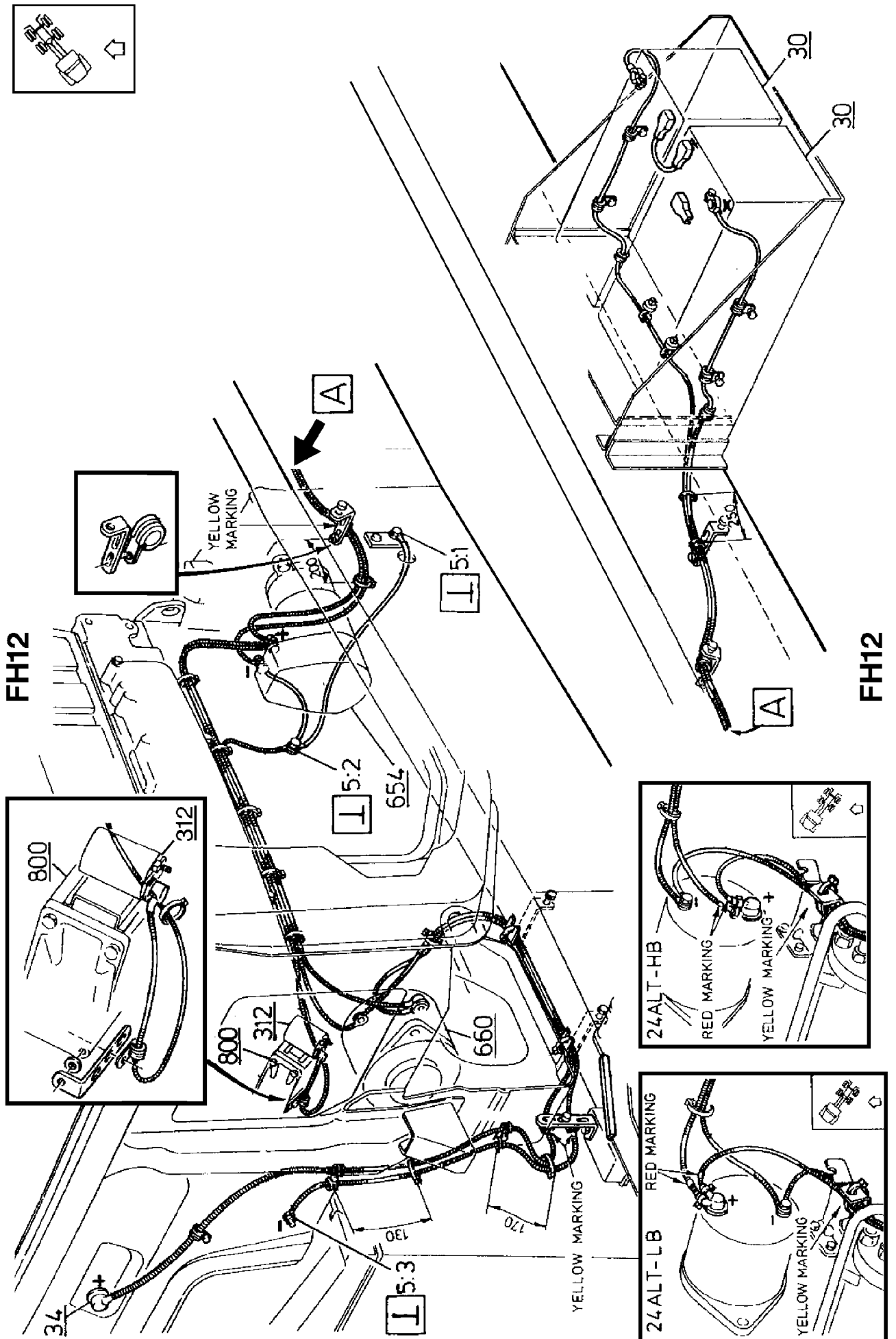
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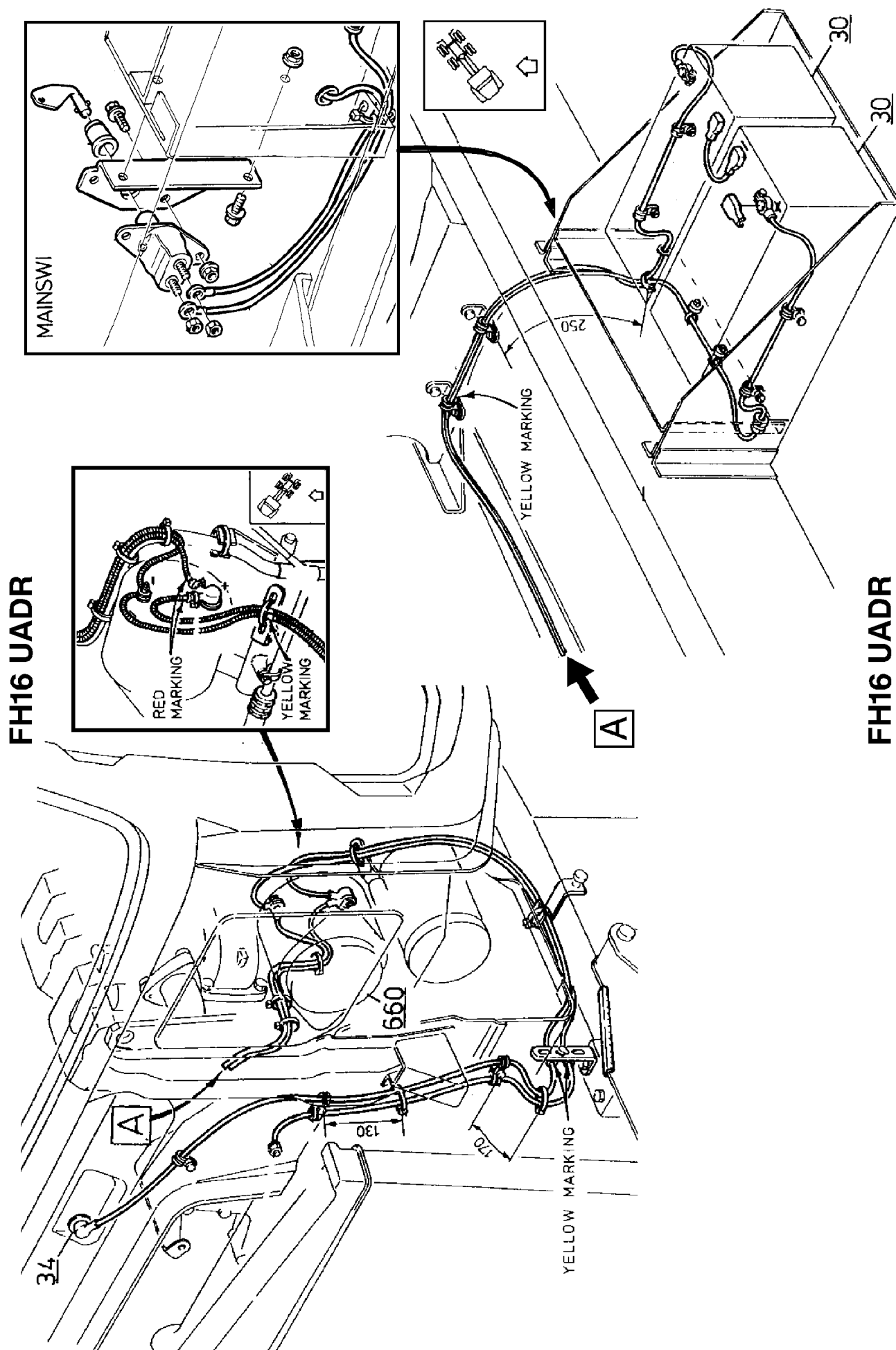


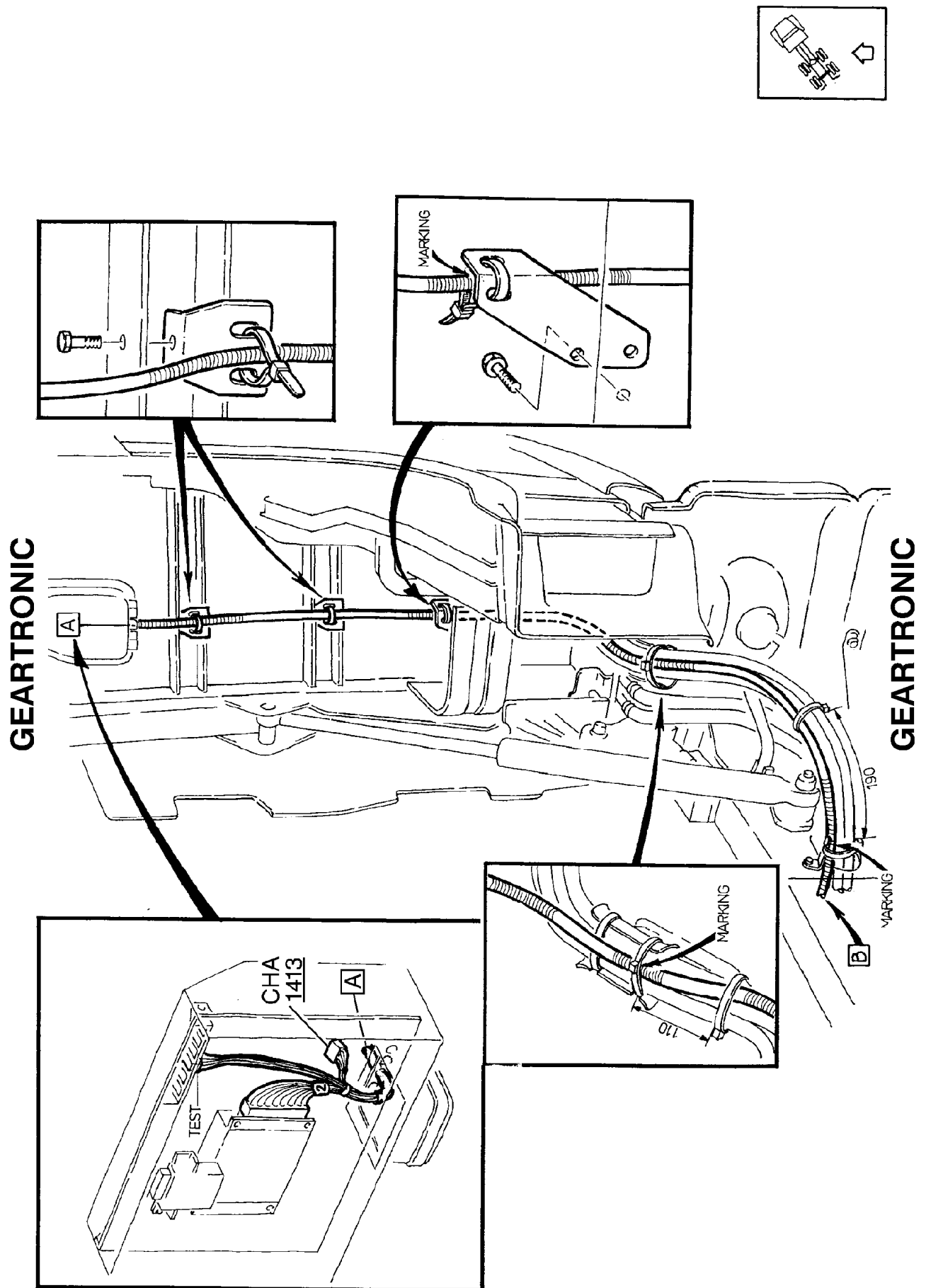
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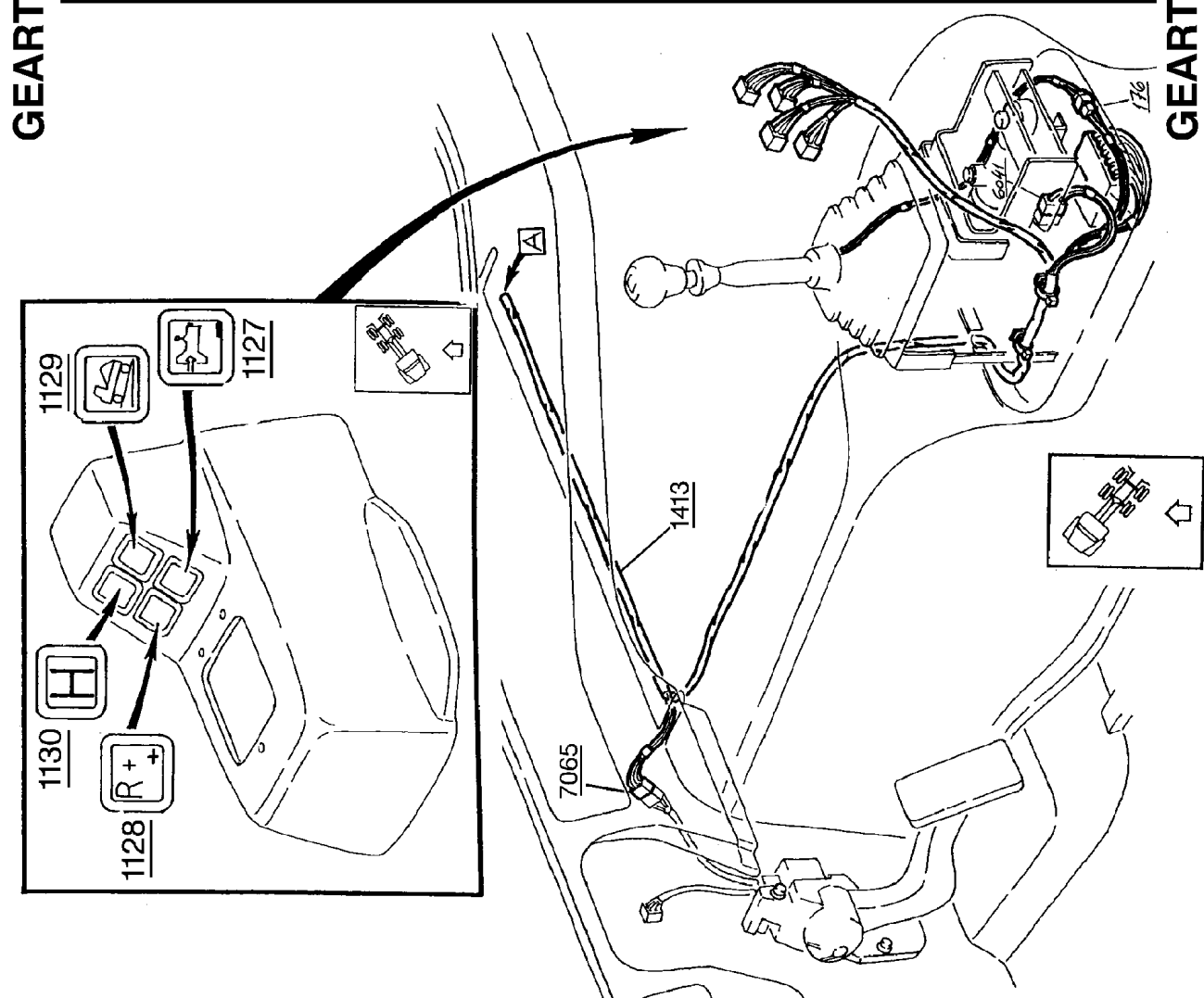
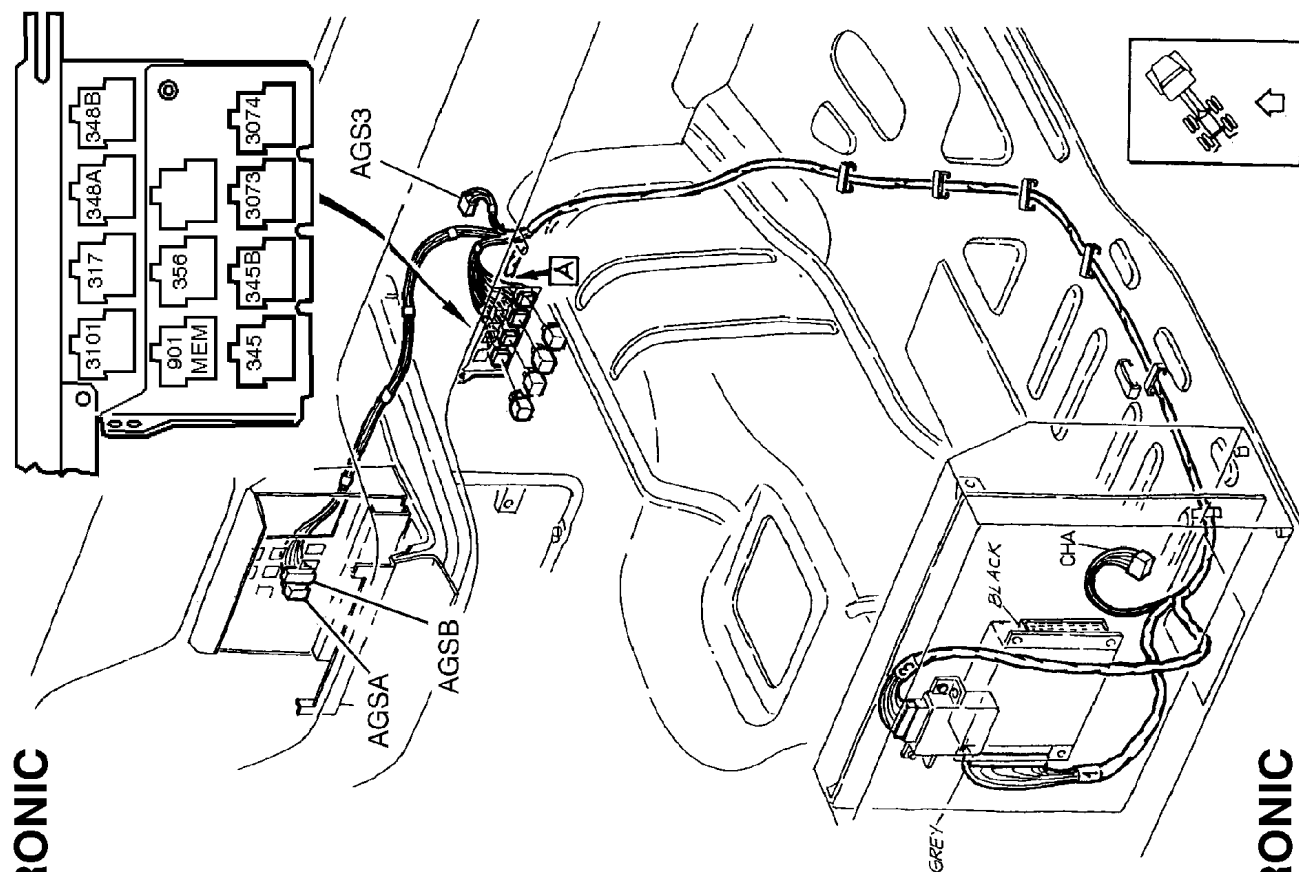
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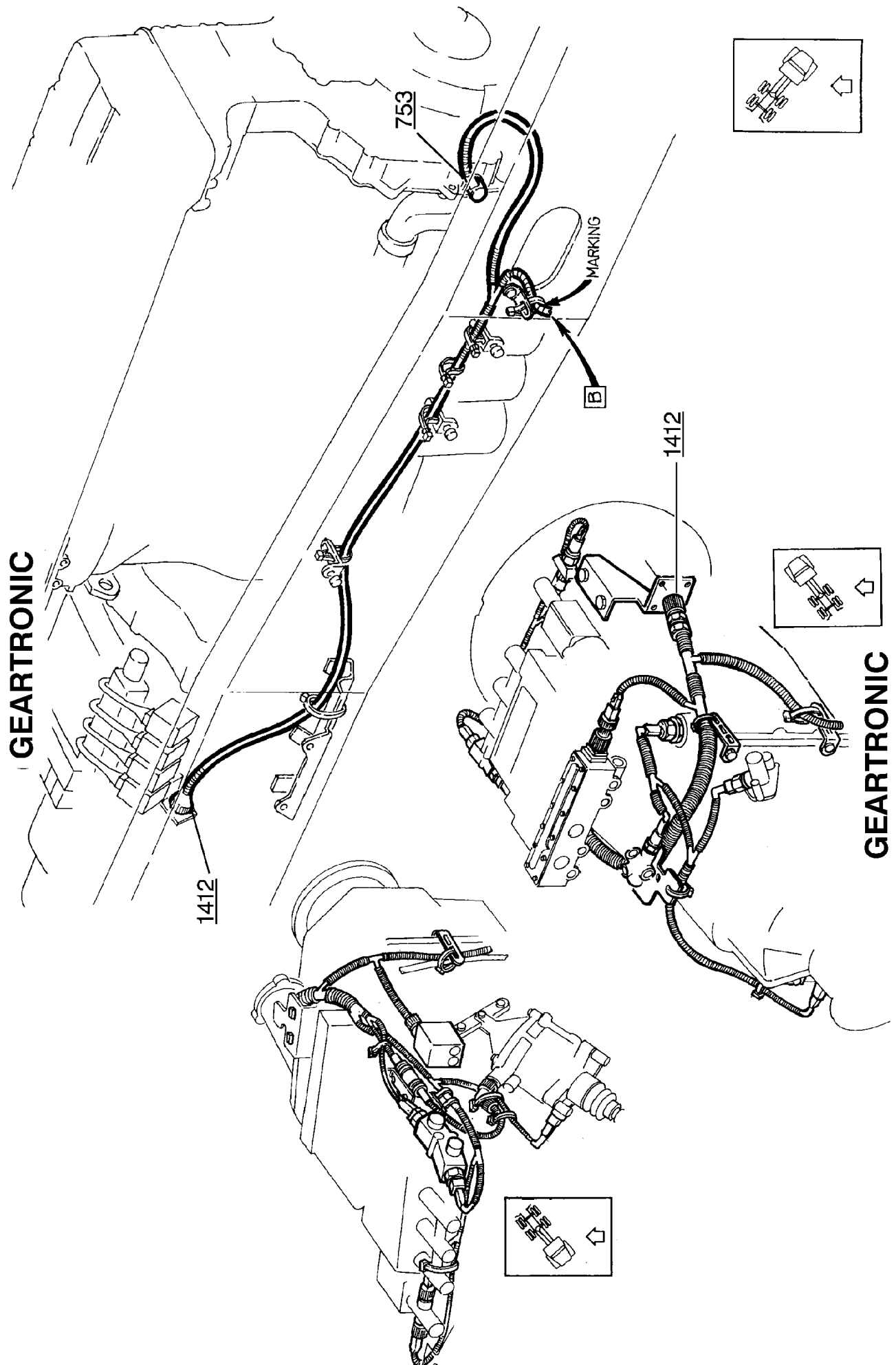


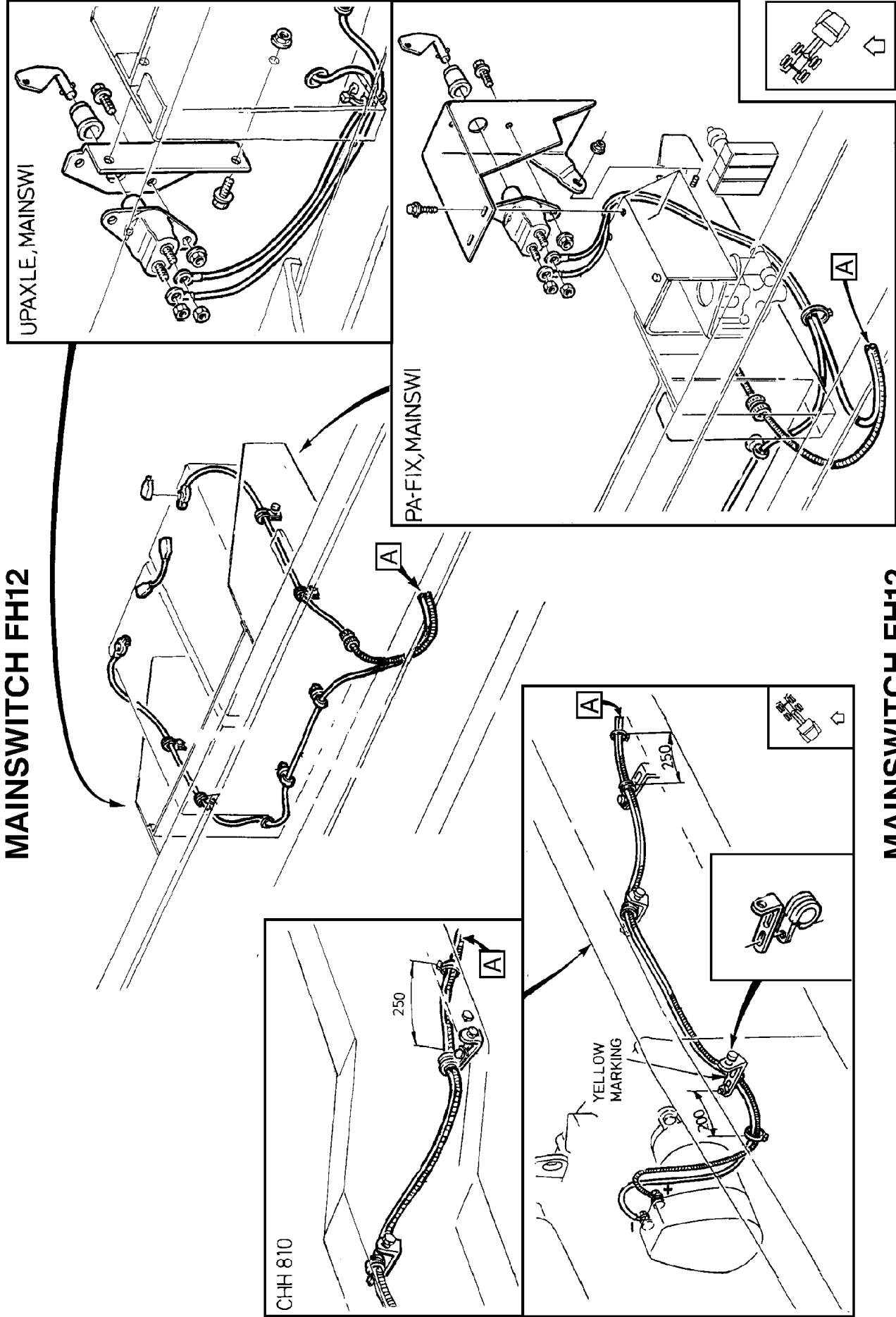


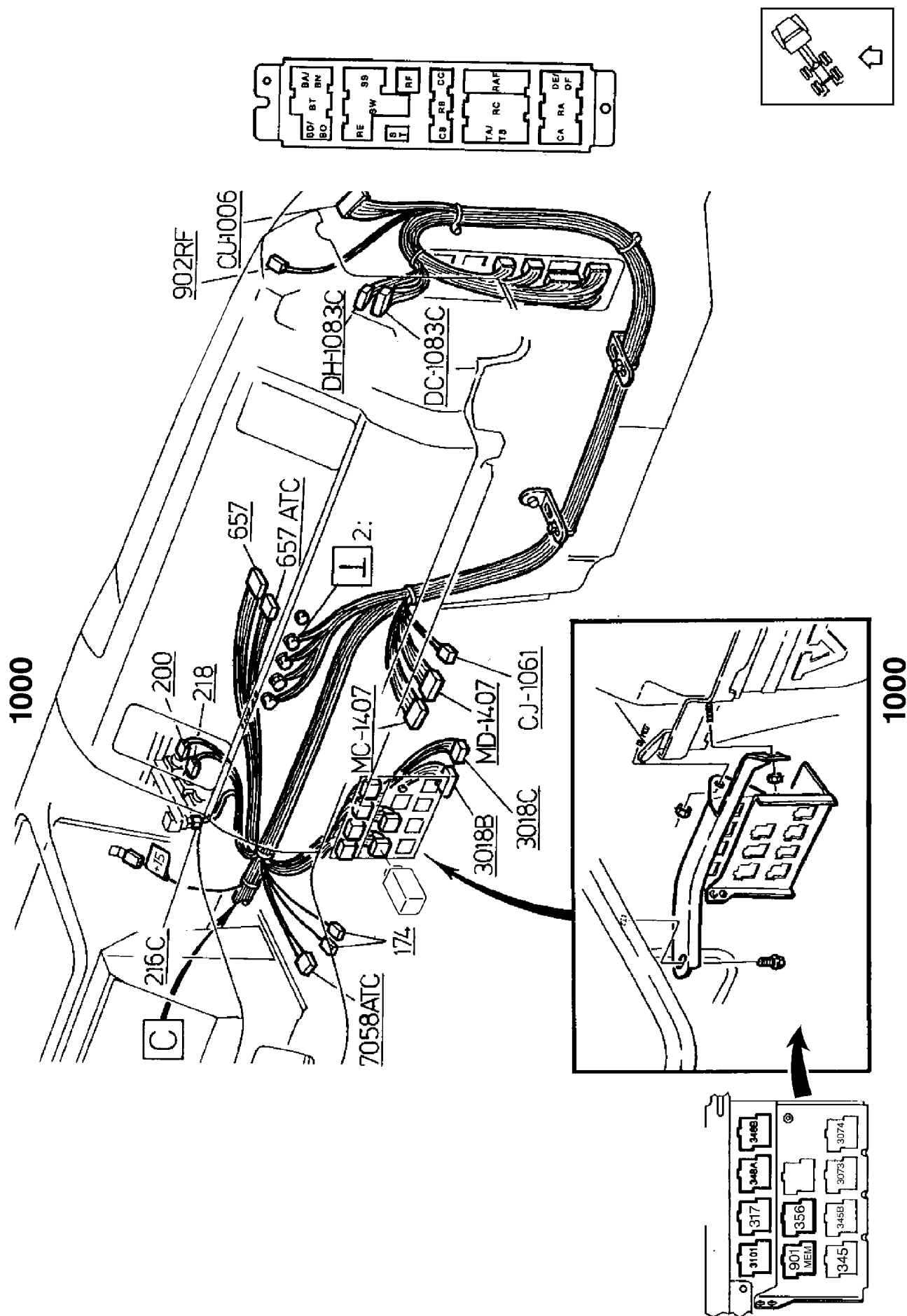




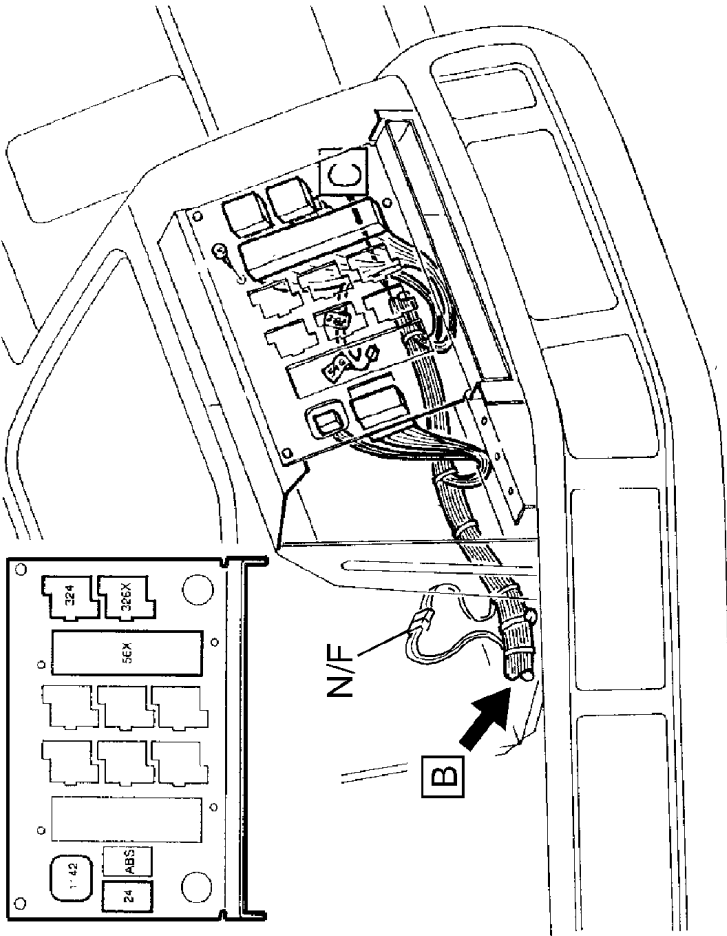




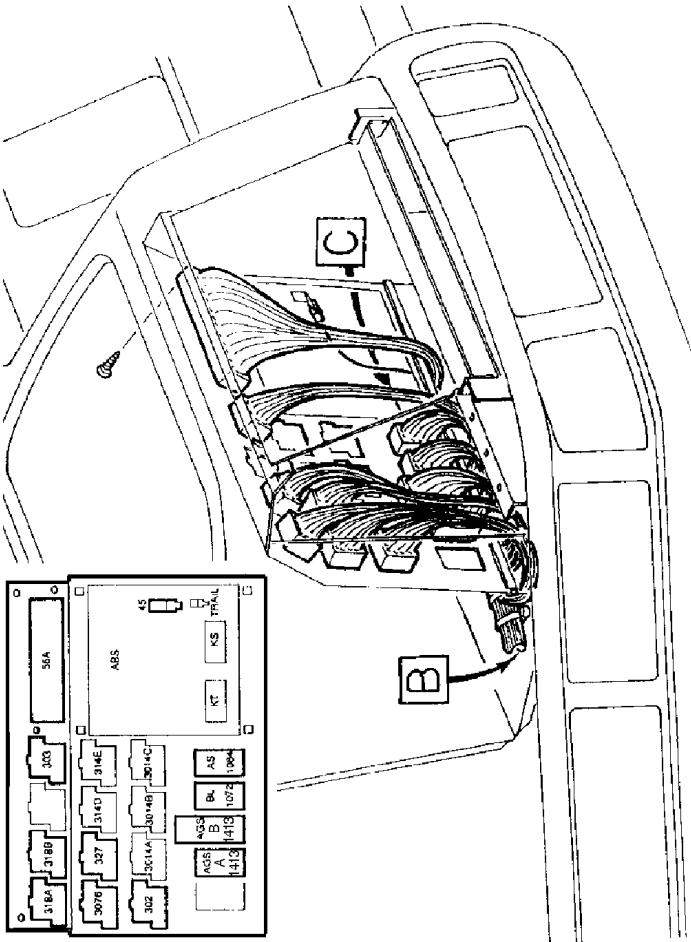




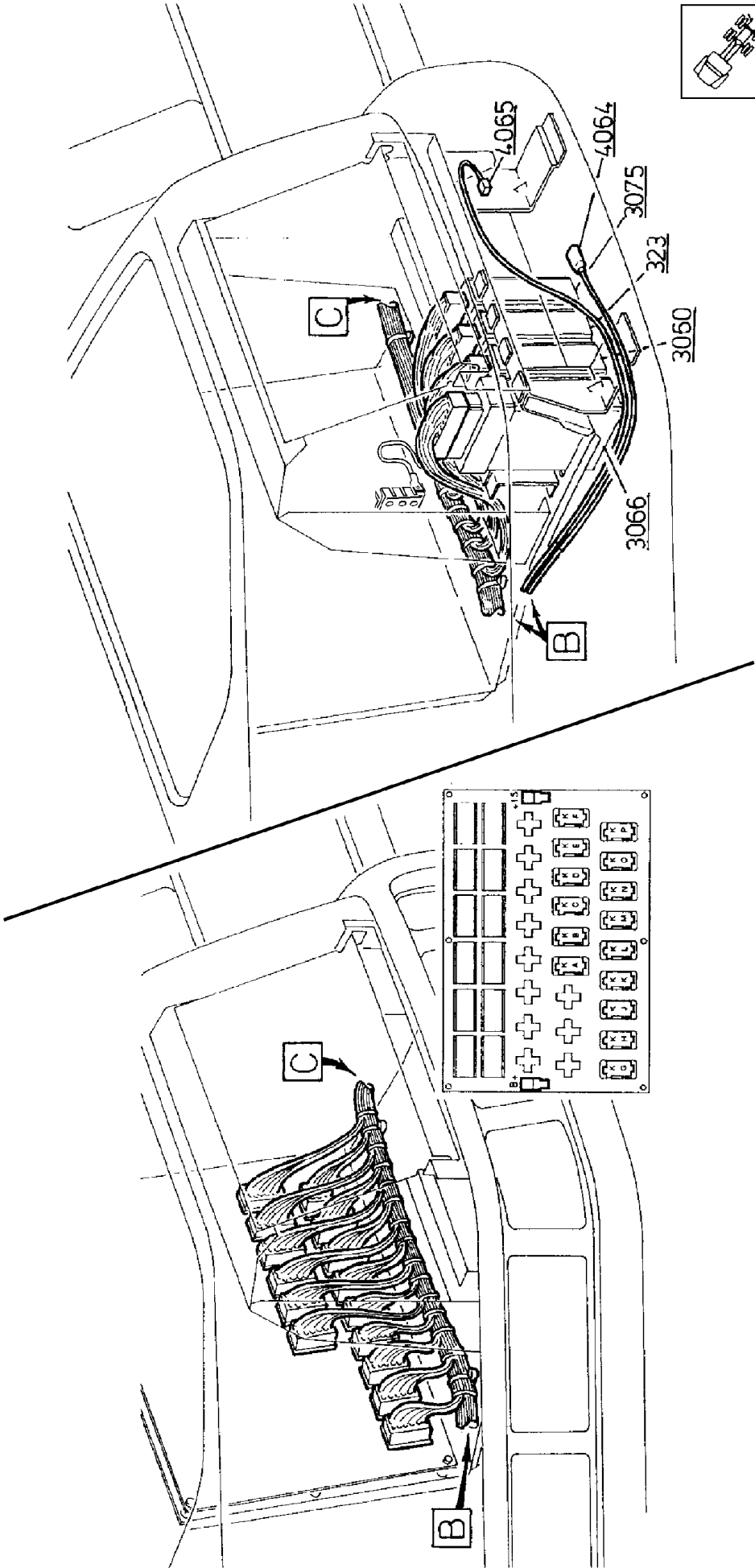
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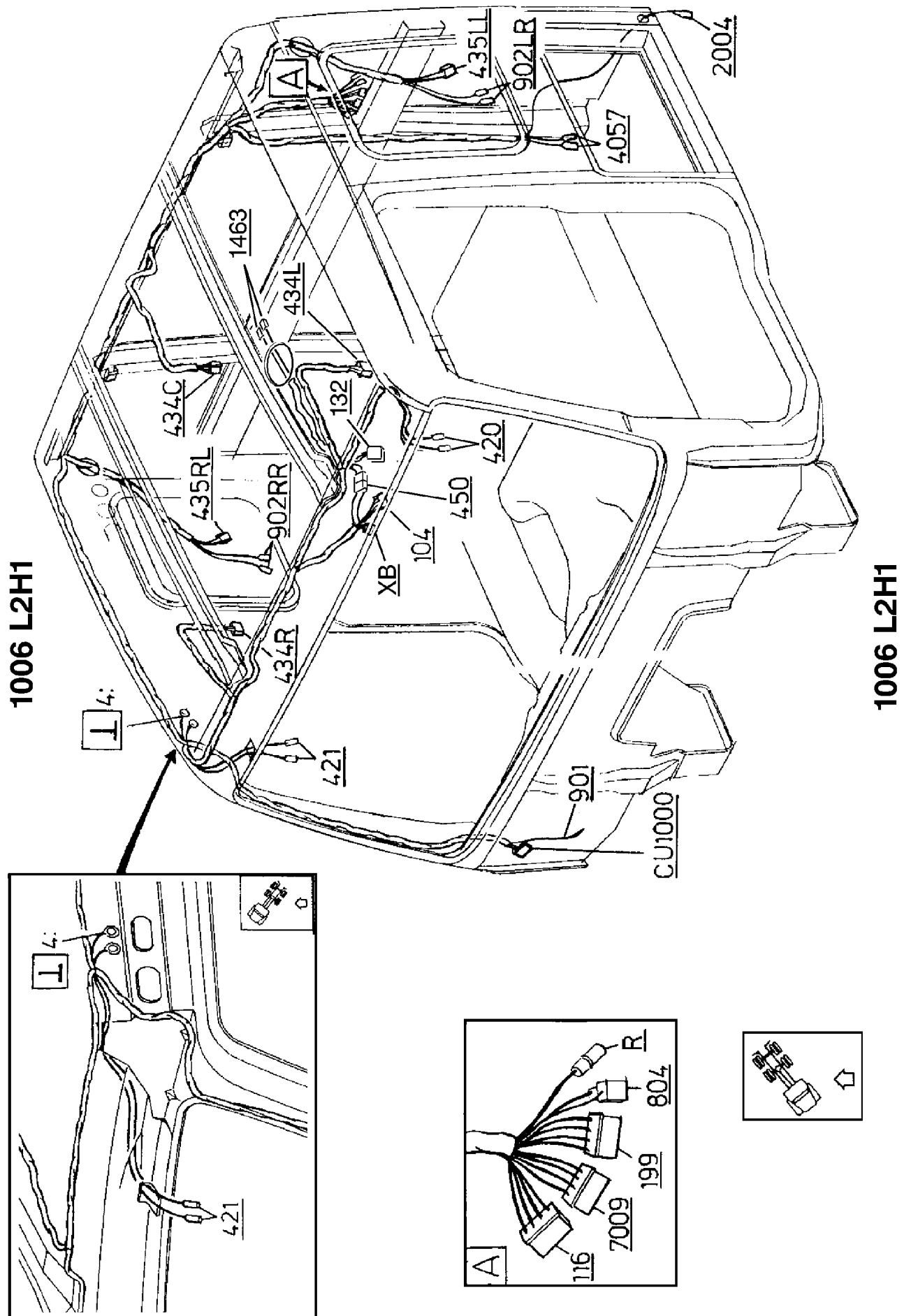


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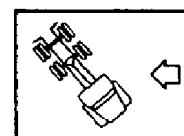
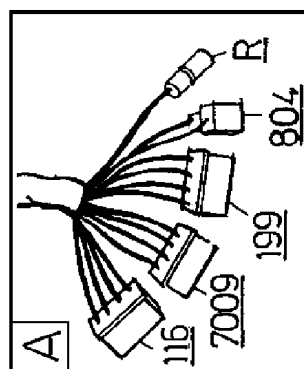
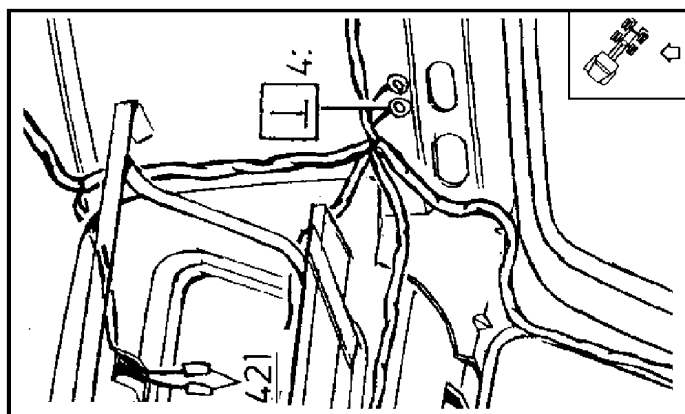
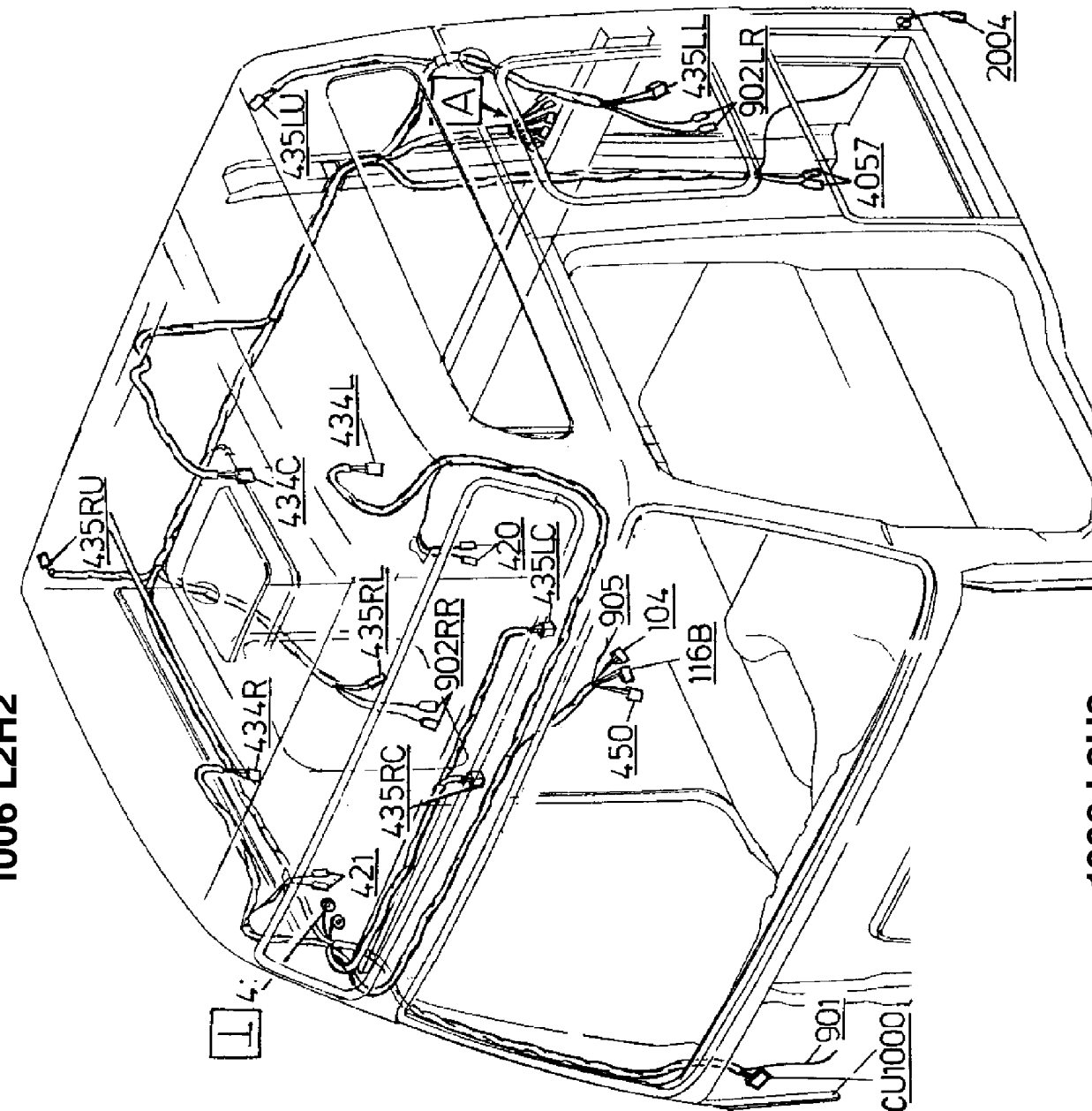
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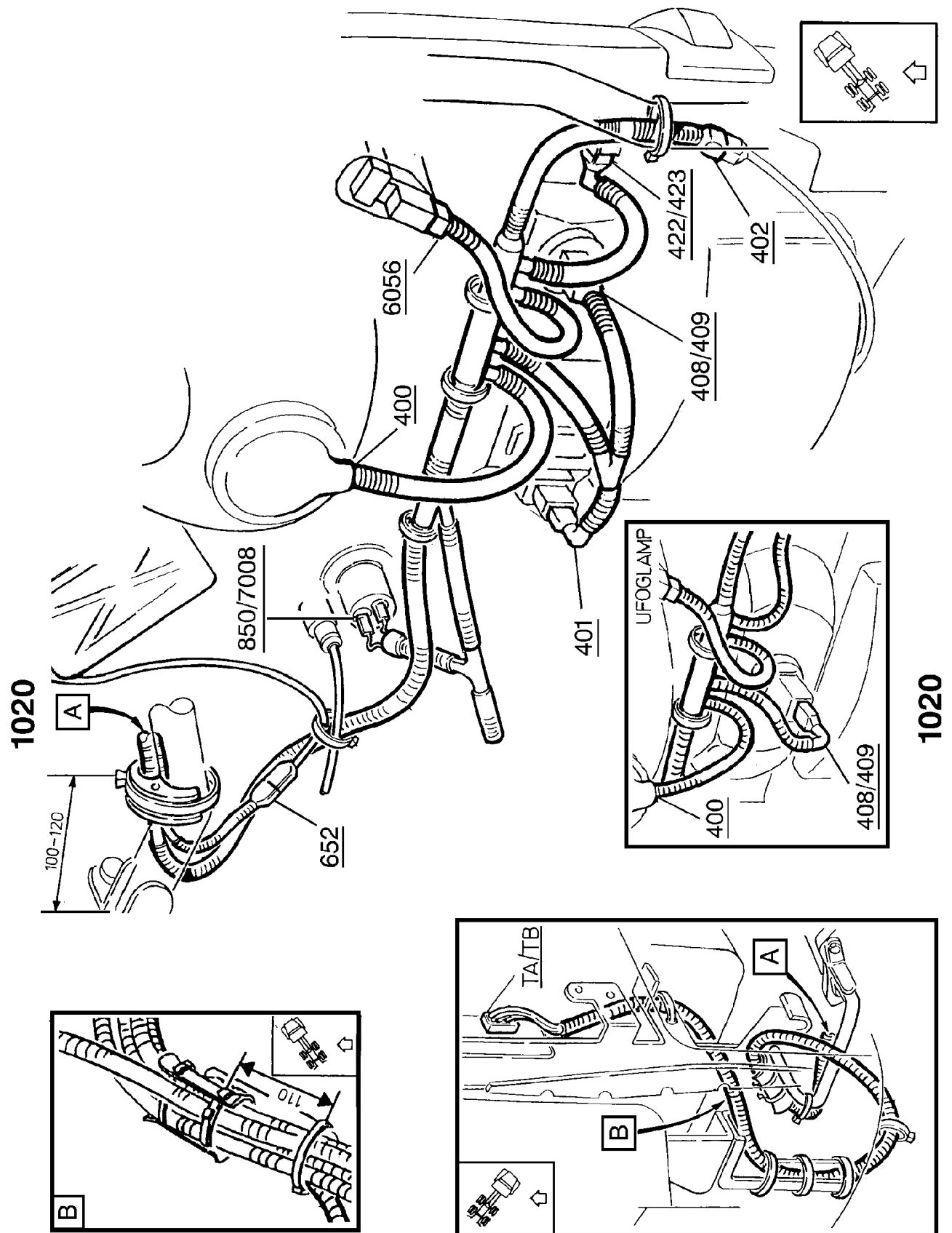


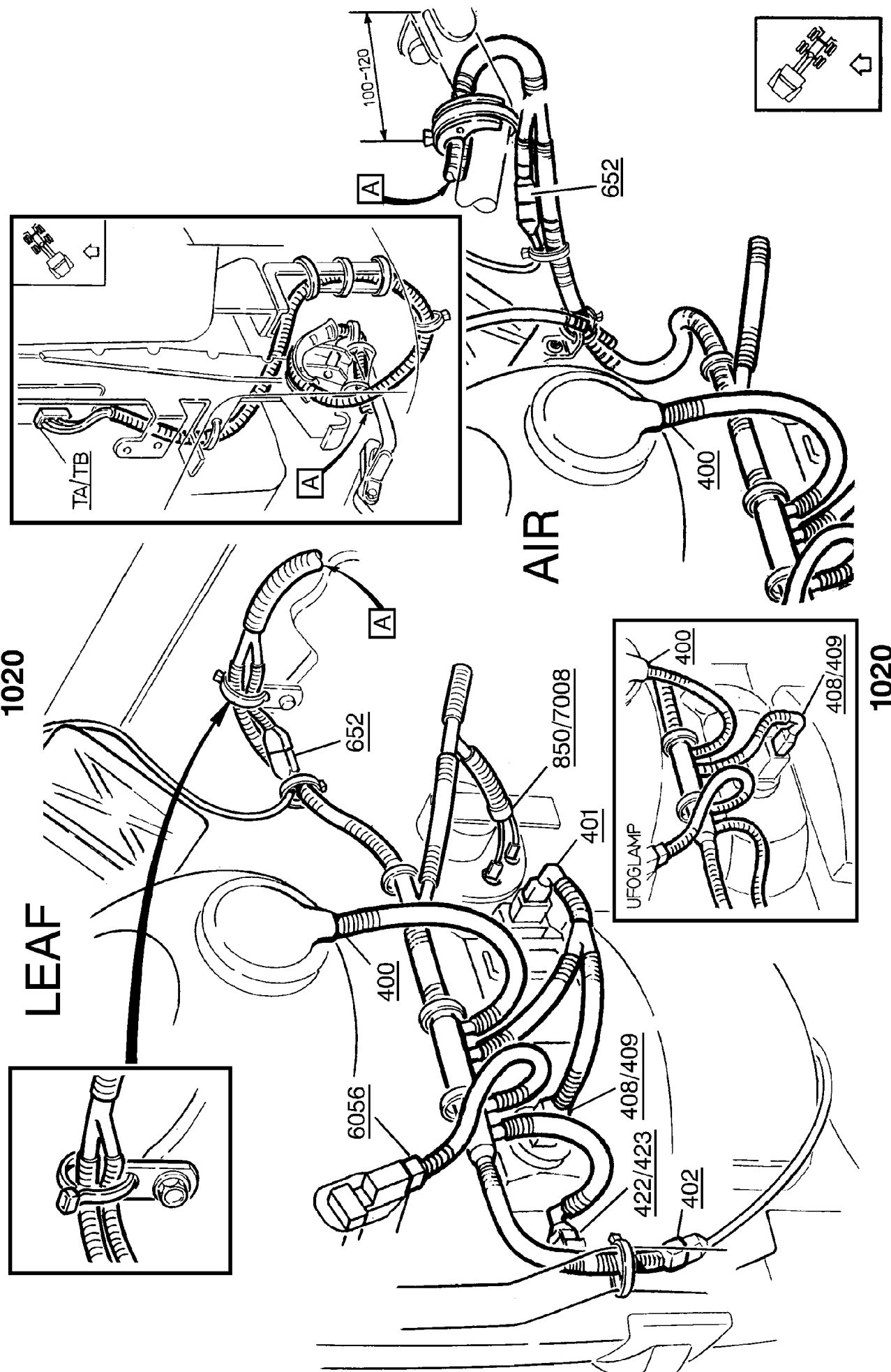


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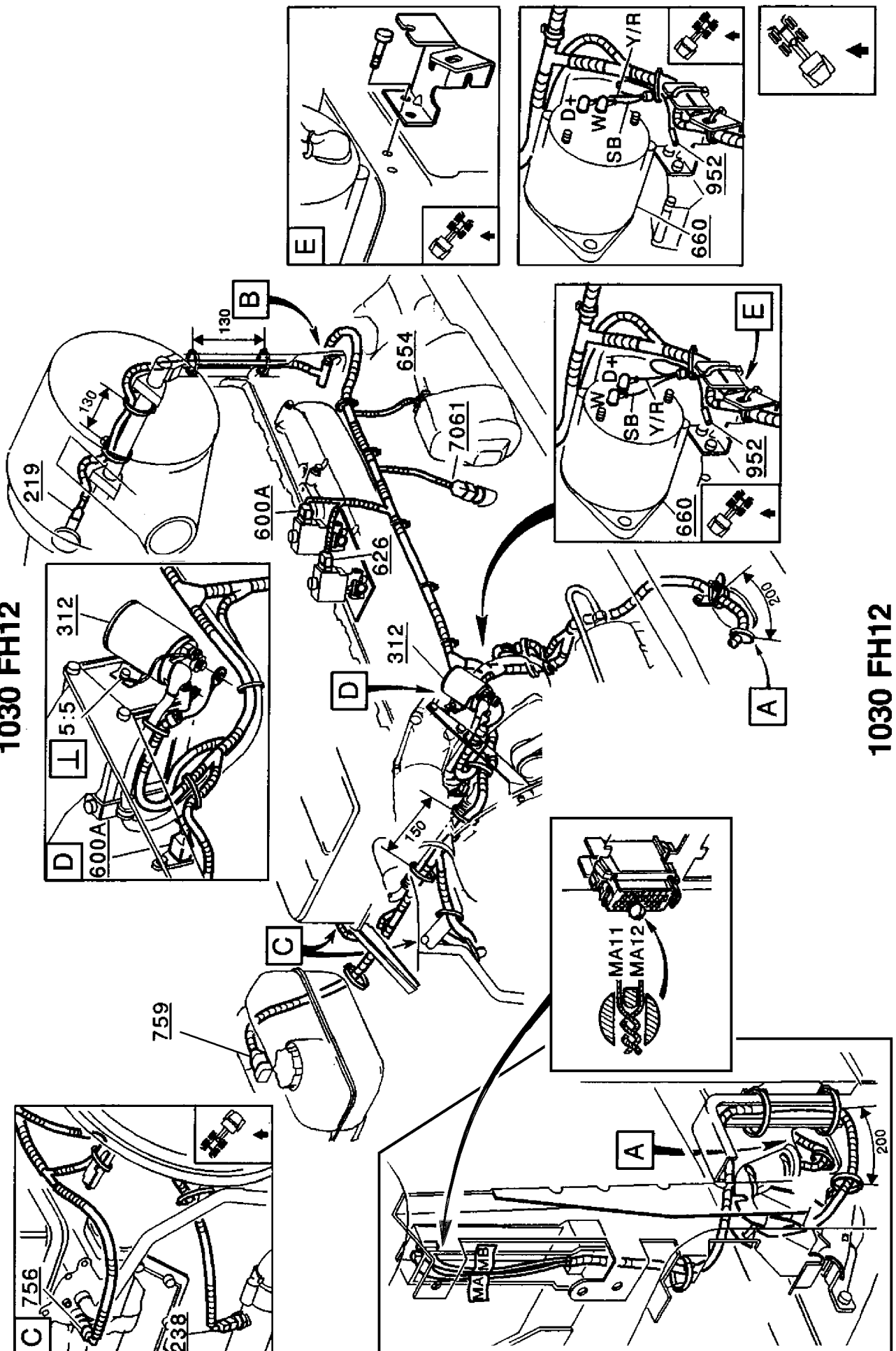
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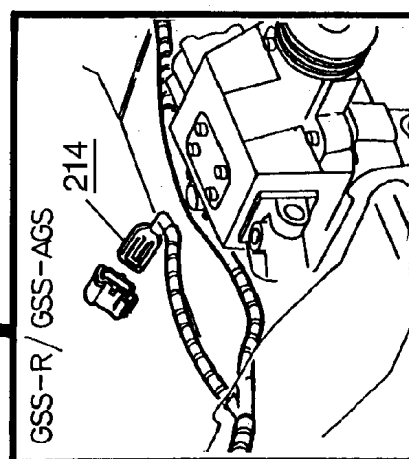
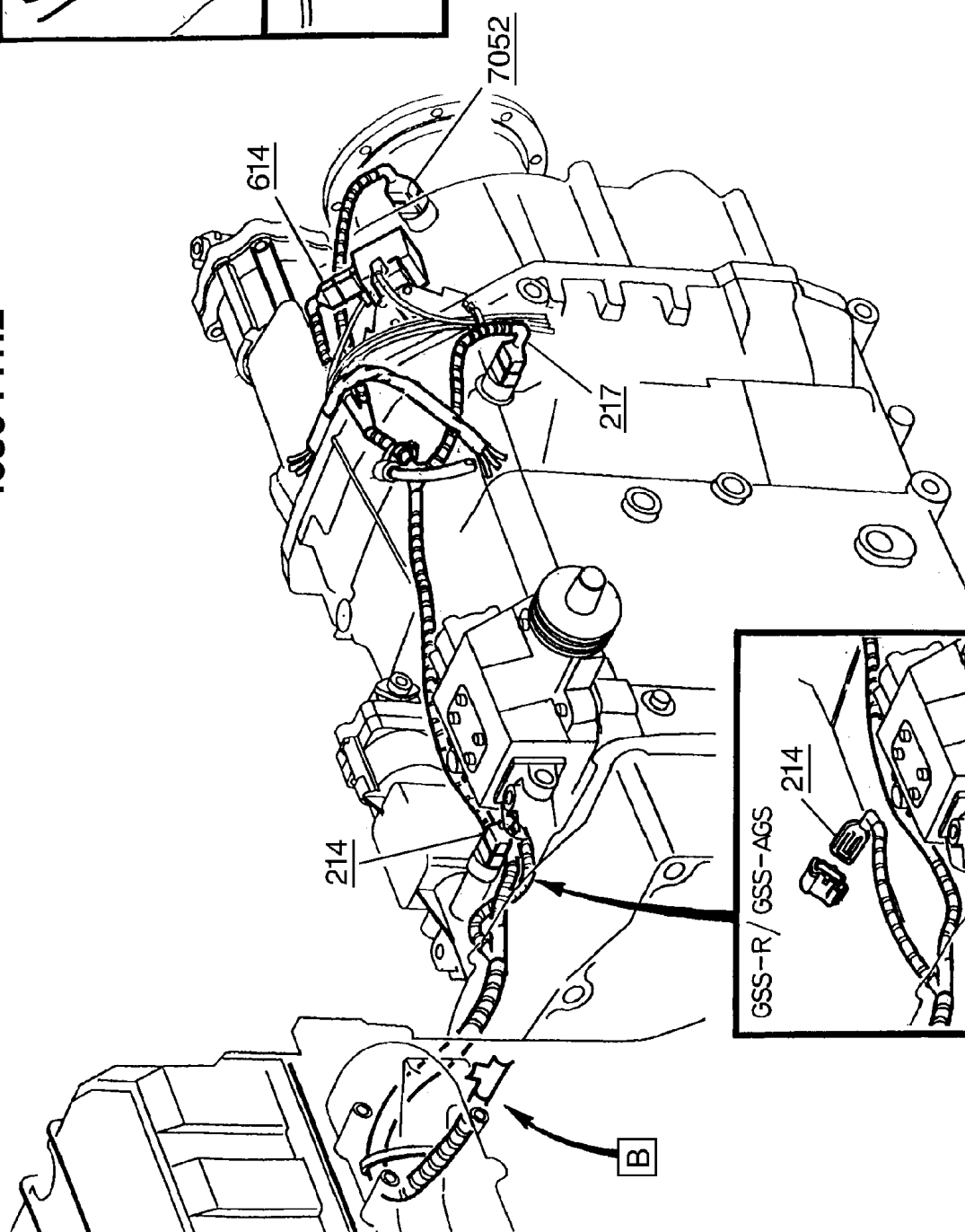
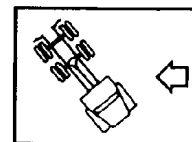
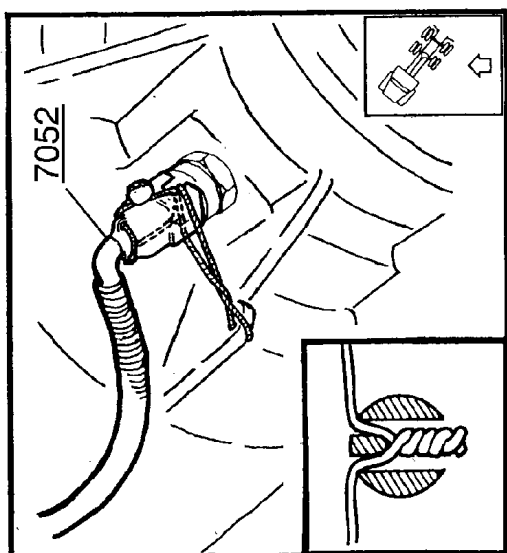
1030 FH12



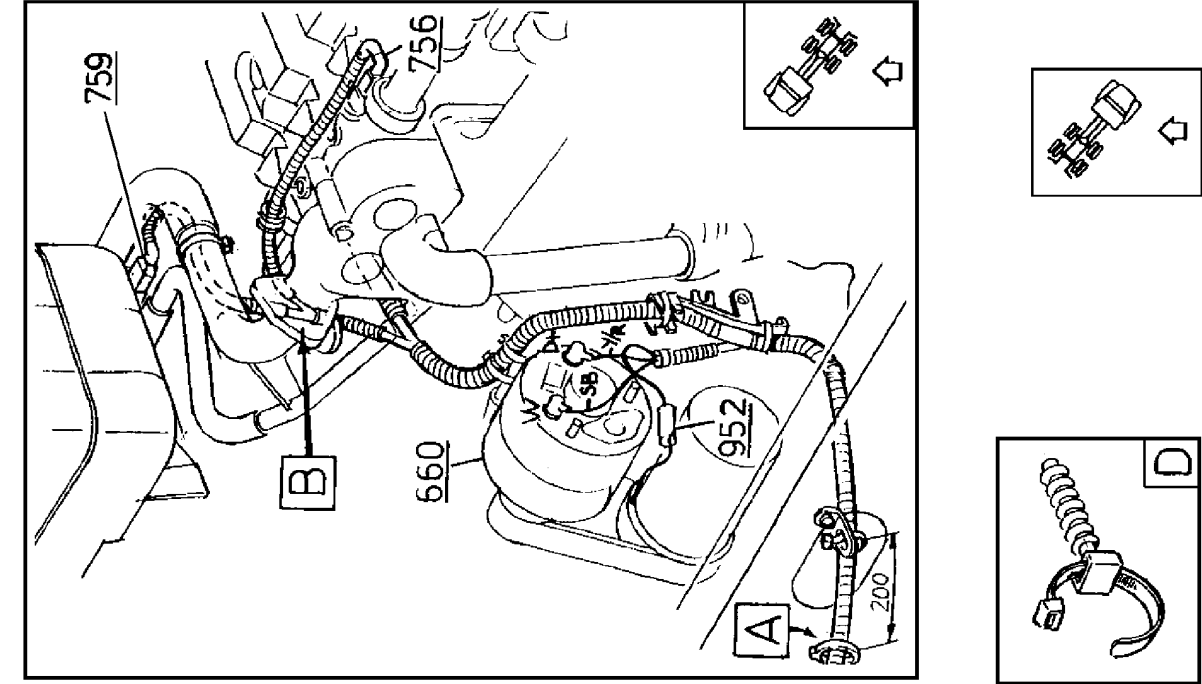
1030 FH12

1030 FH12

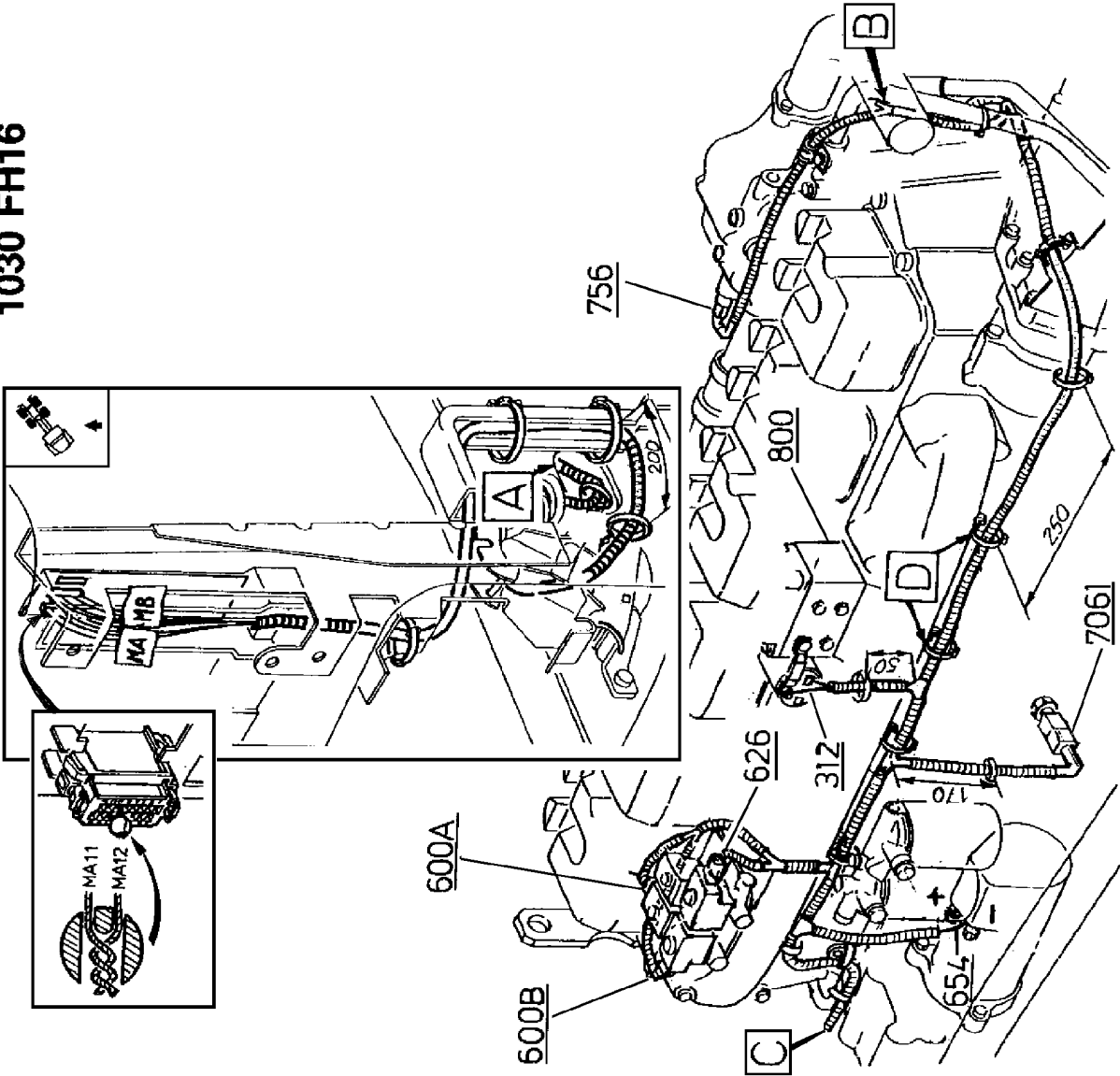
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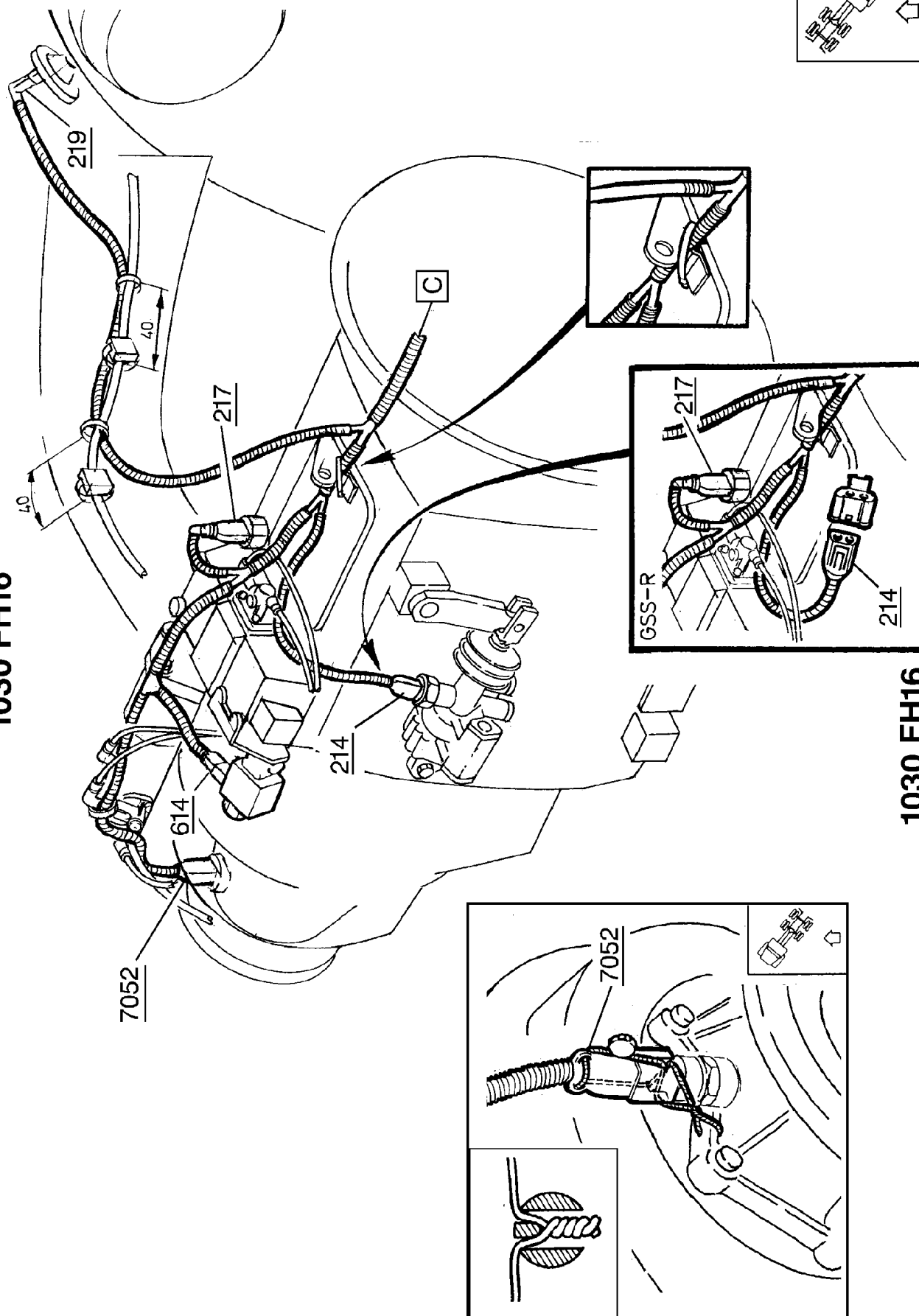


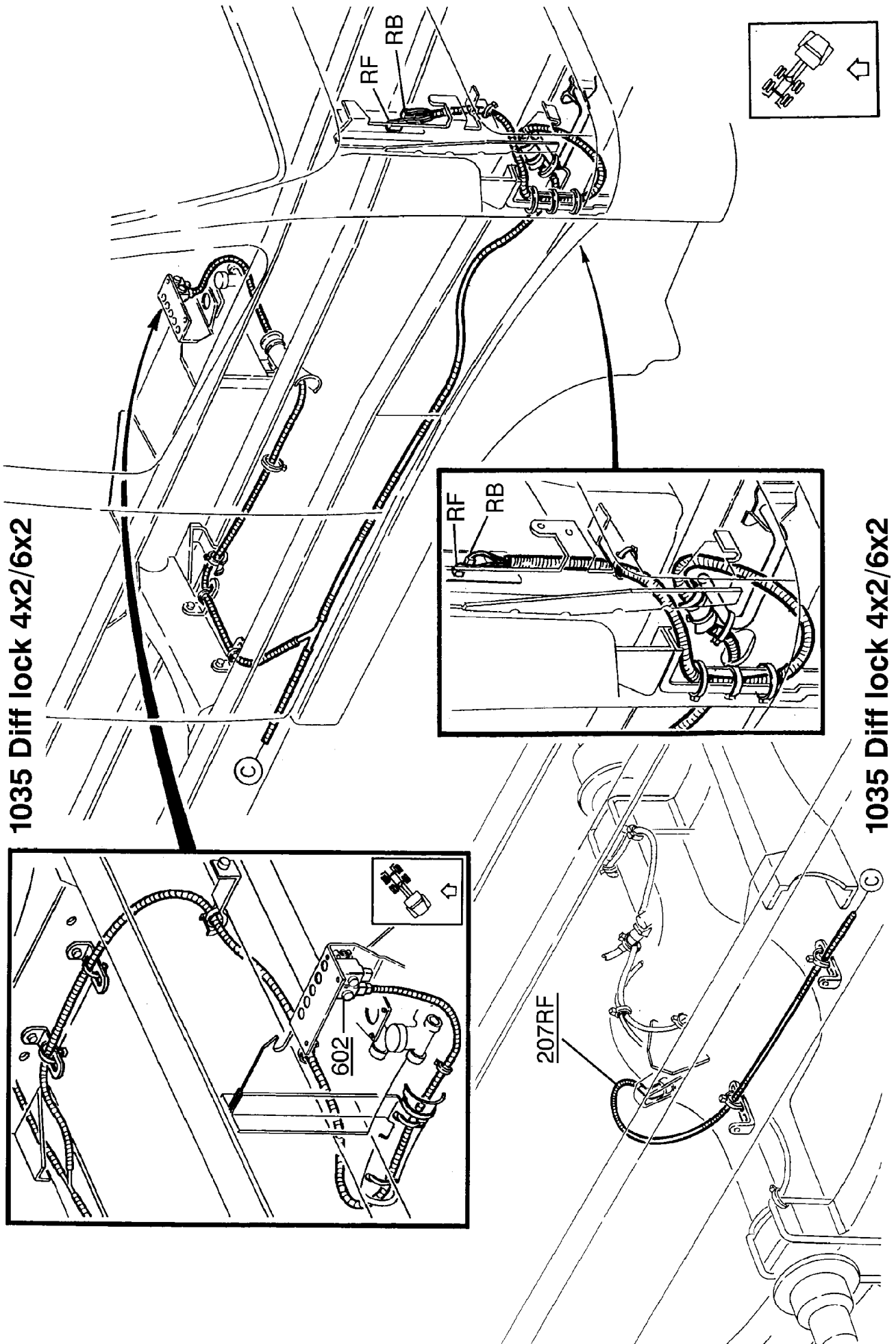
1030 FH16

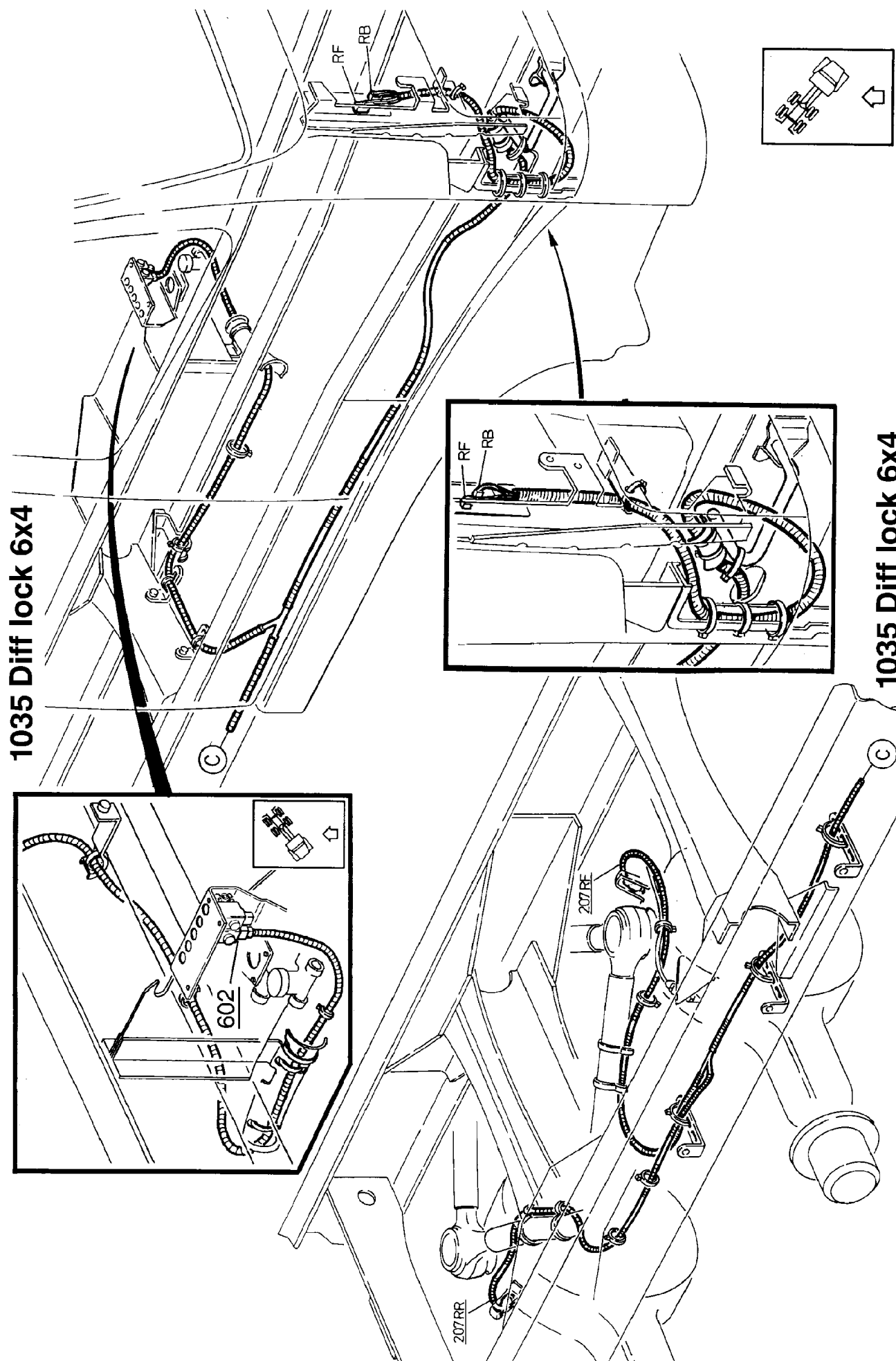


1030 FH16

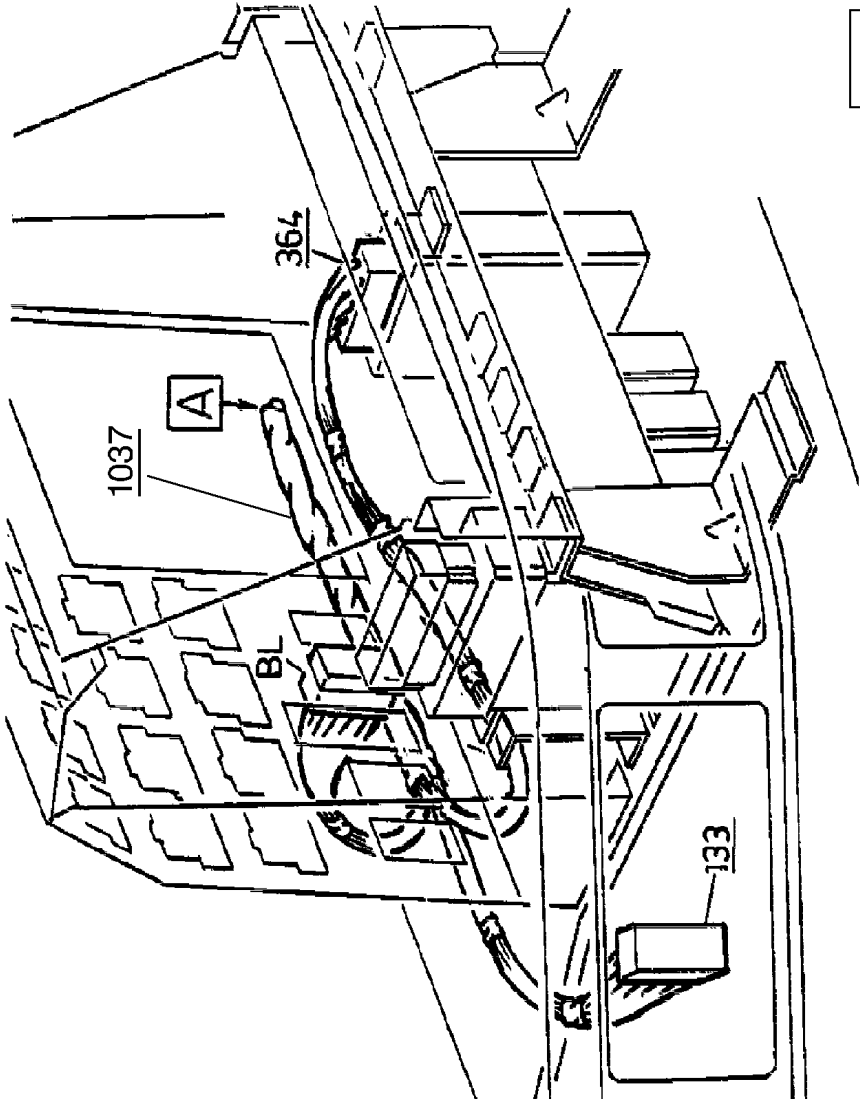


1030 FH16**1030 FH16**

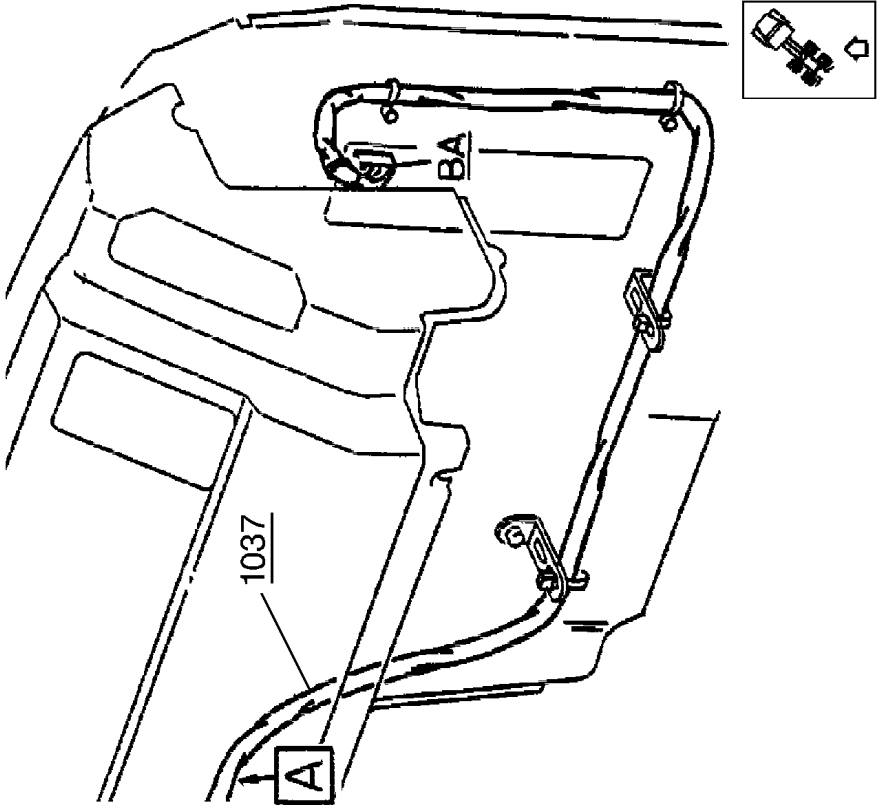




1037 MA

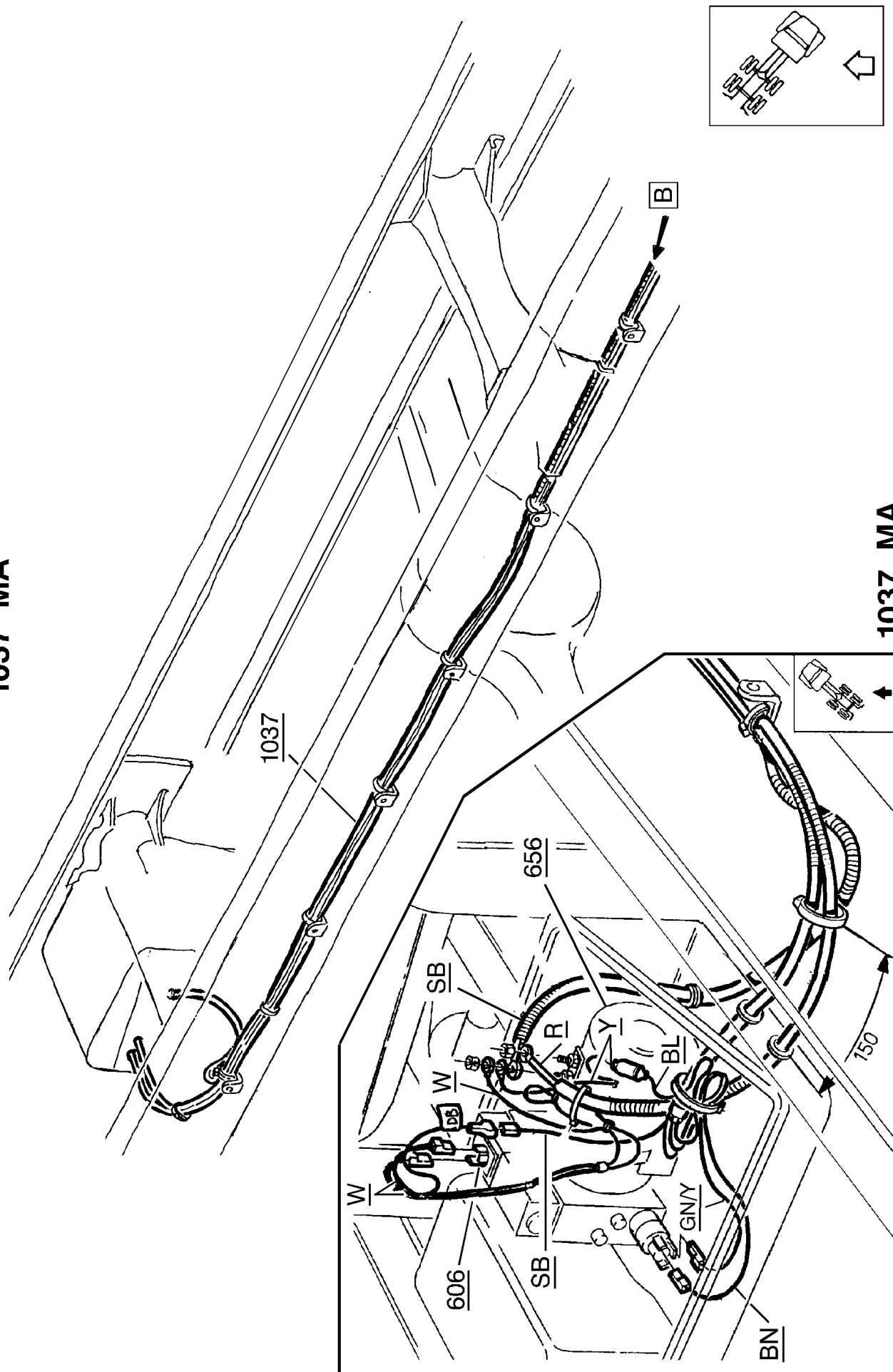


1037 MA



1037 MA

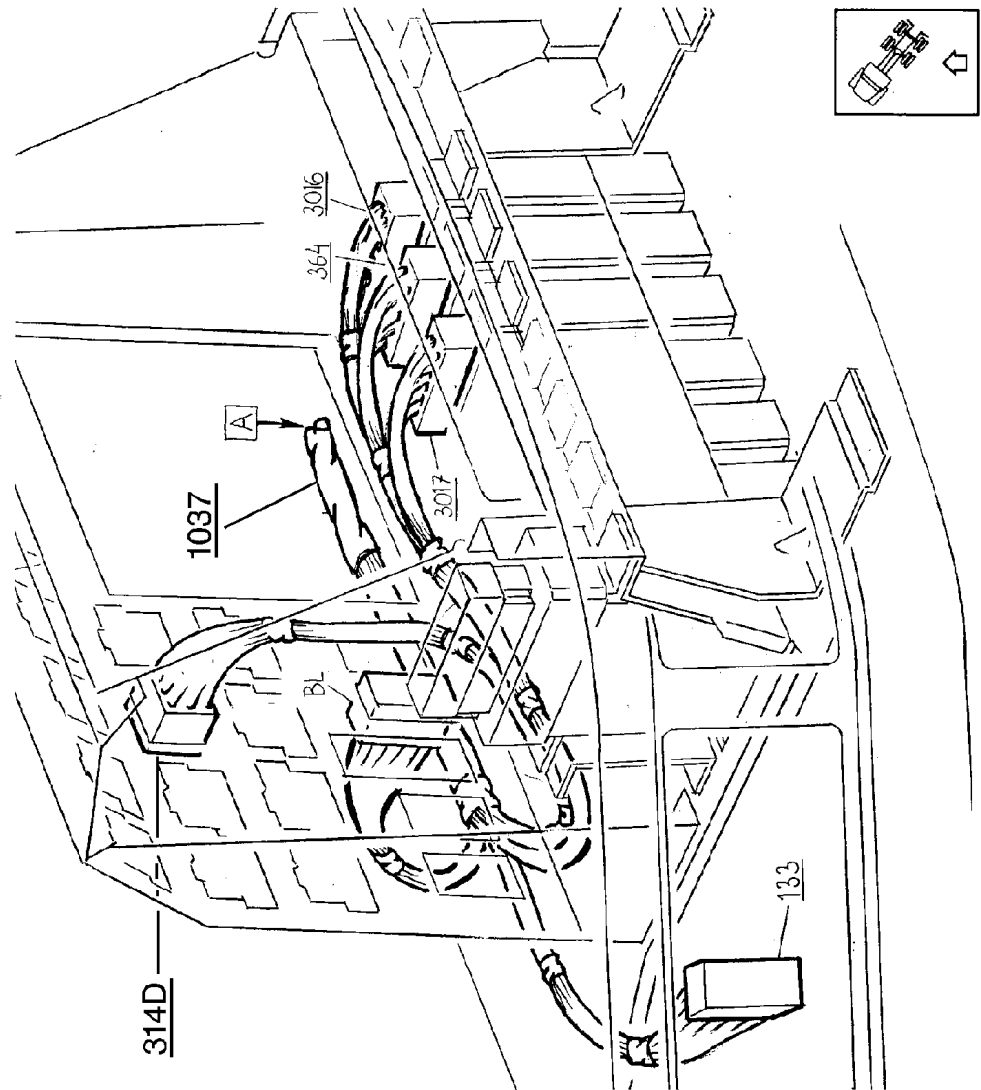
1037 MA



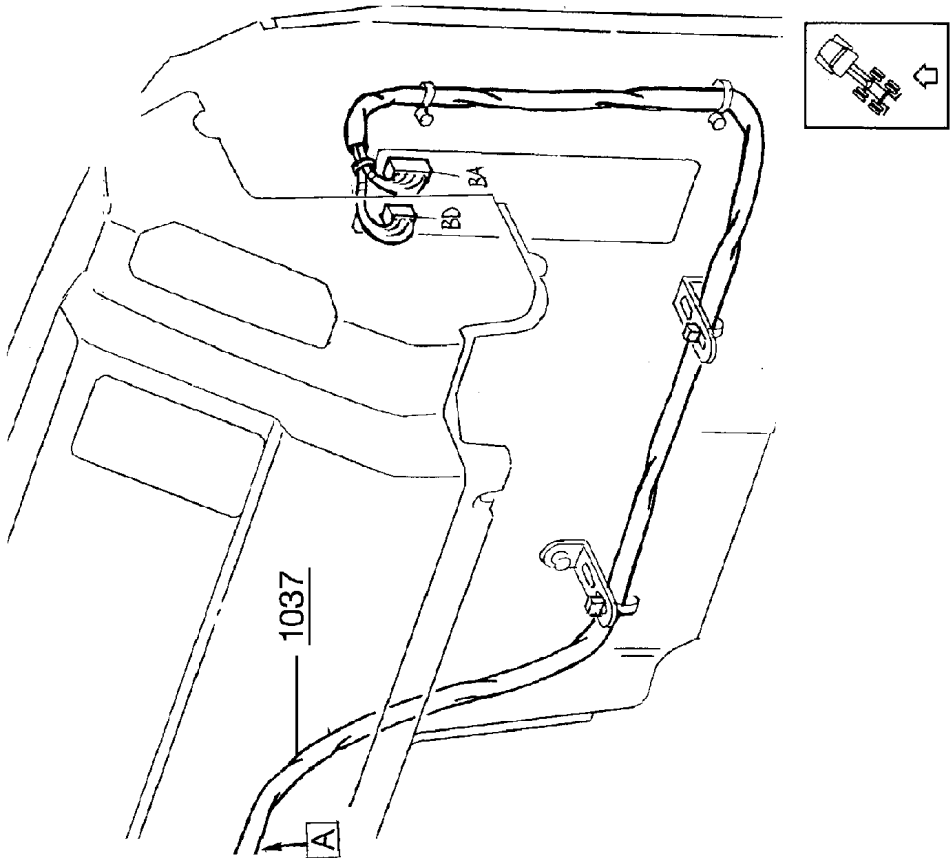


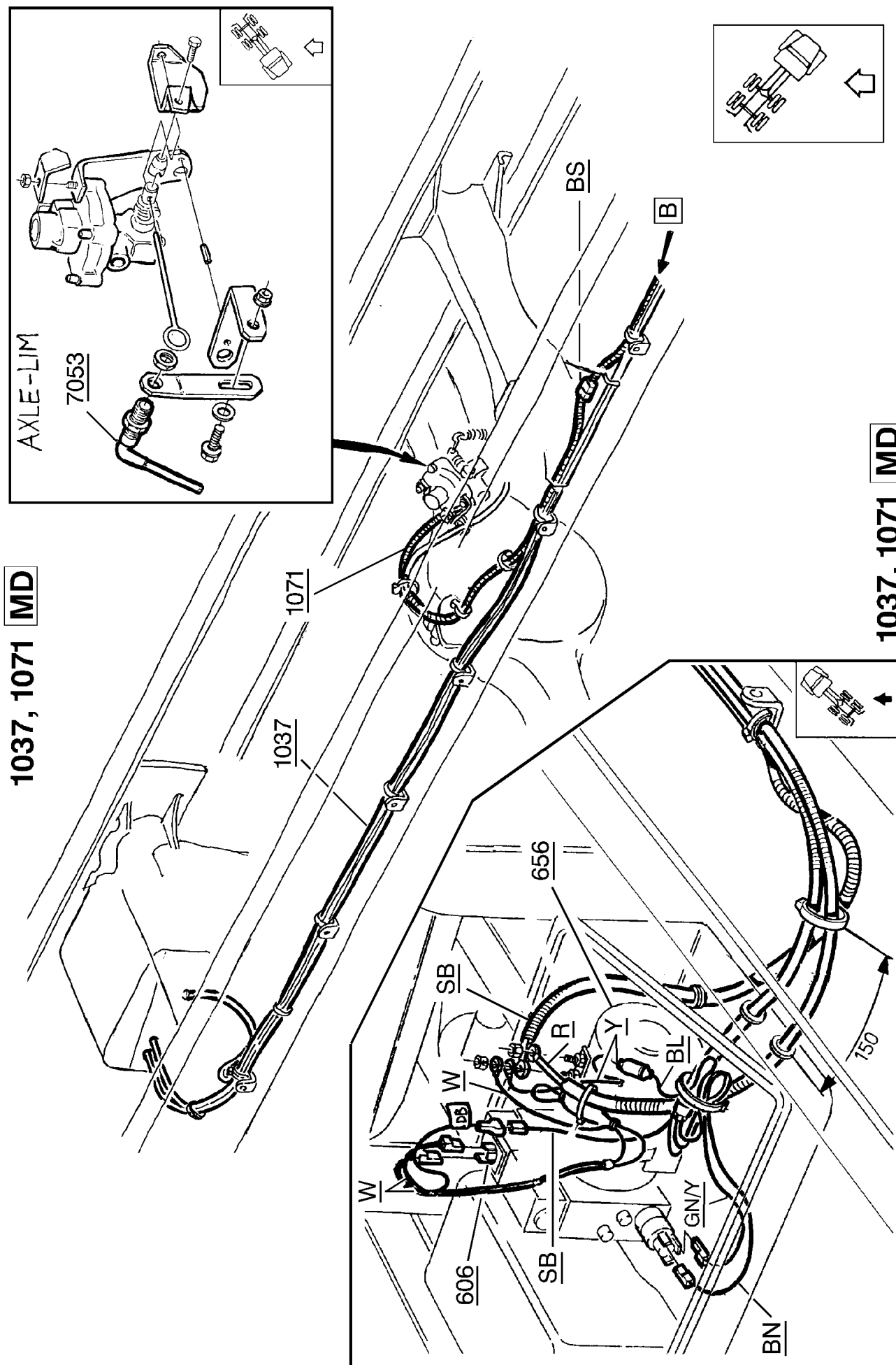


1037 MD

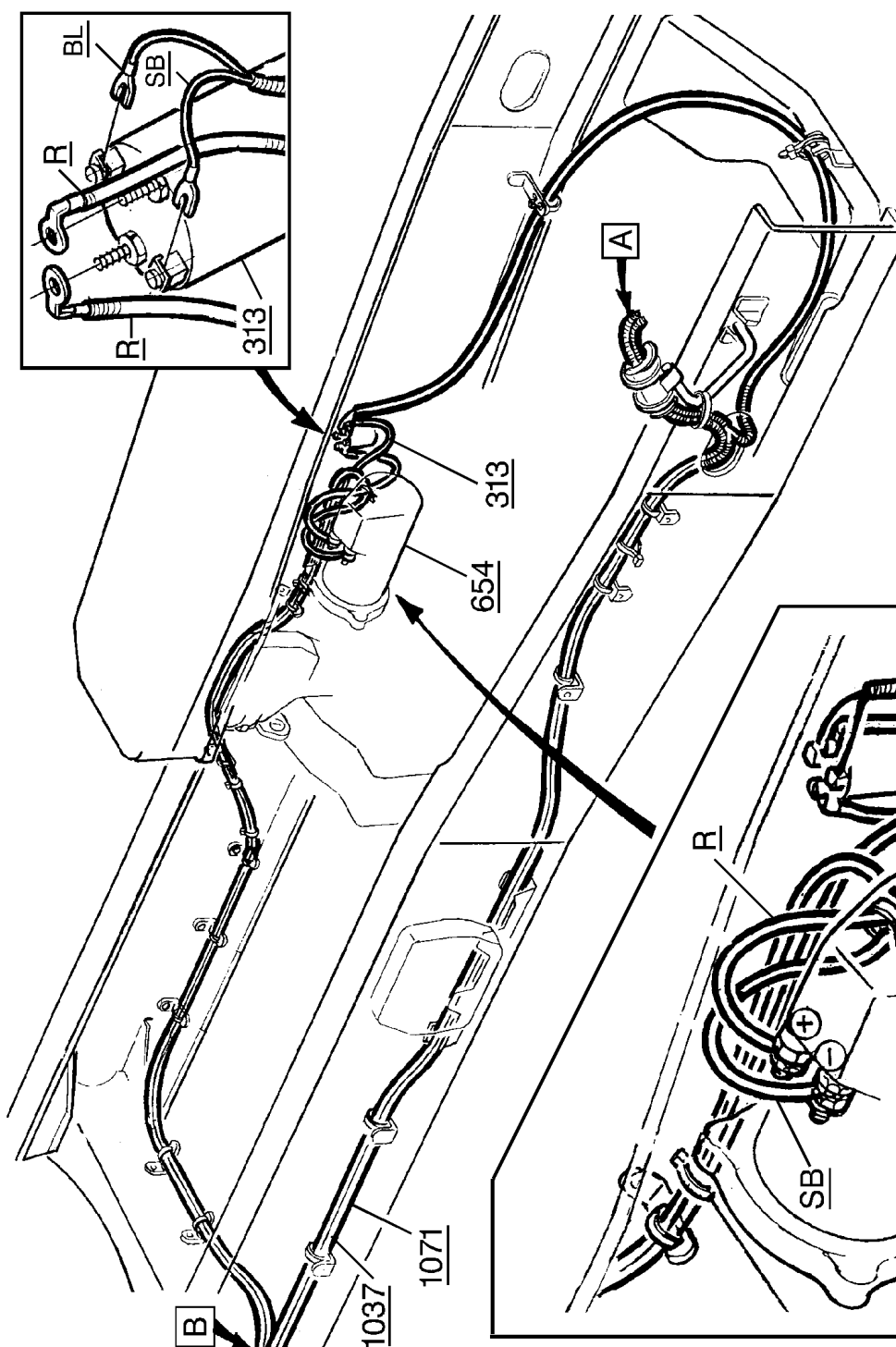


1037 MD

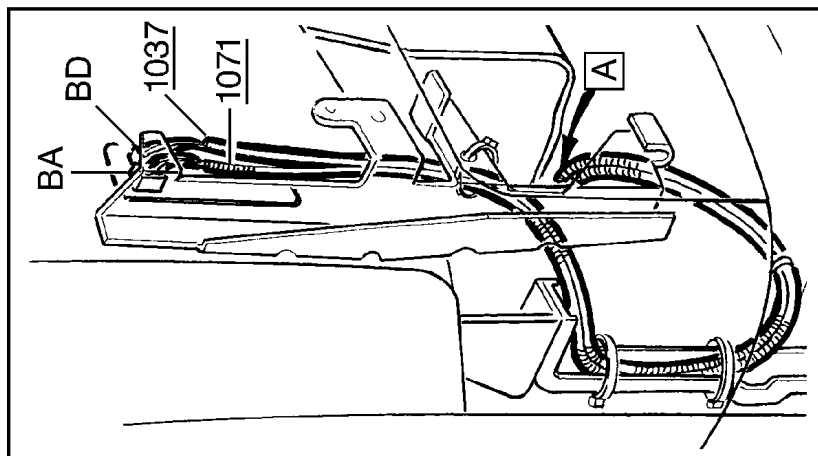
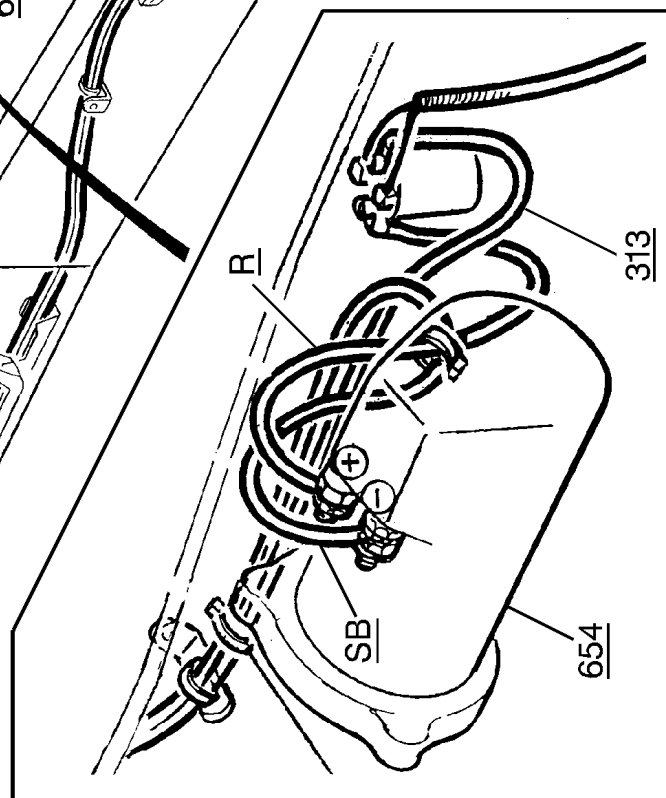




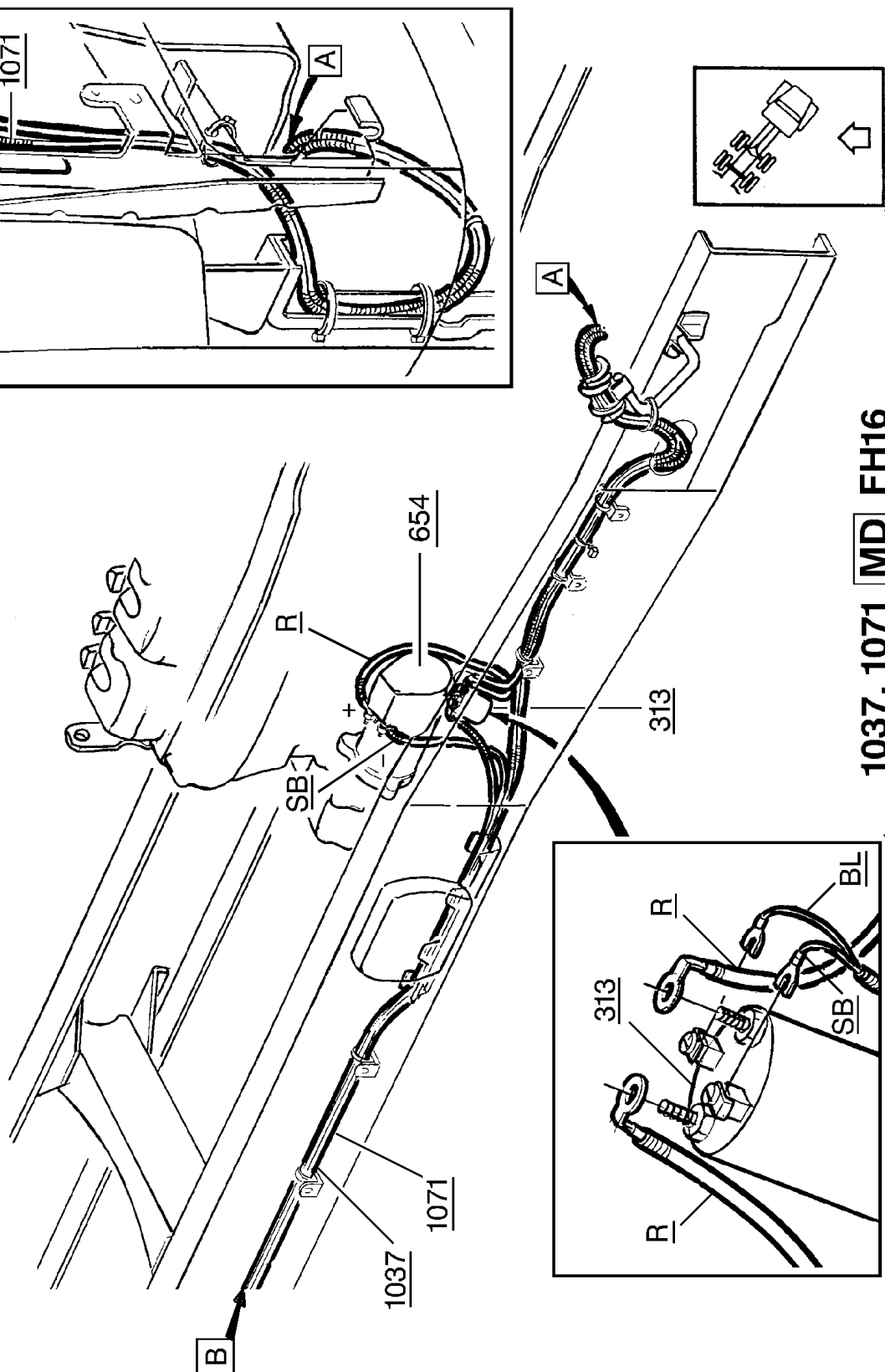
1037, 1071 MD FH12



1037, 1071 MD FH12

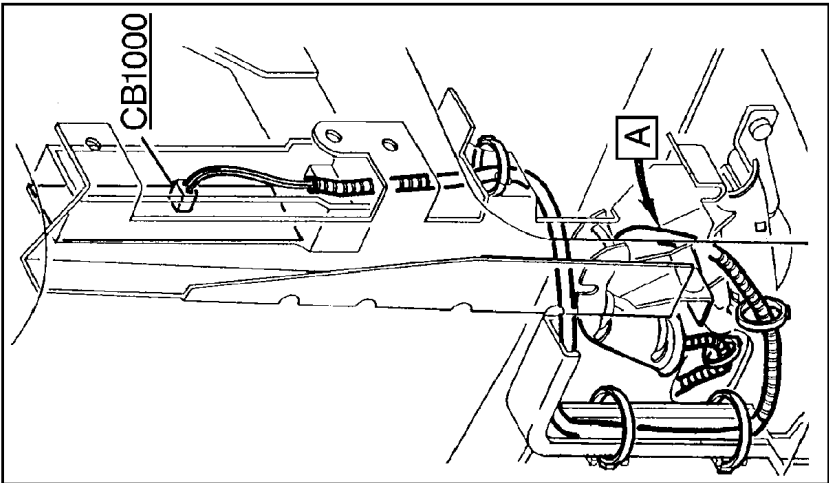


1037, 1071 MD FH16



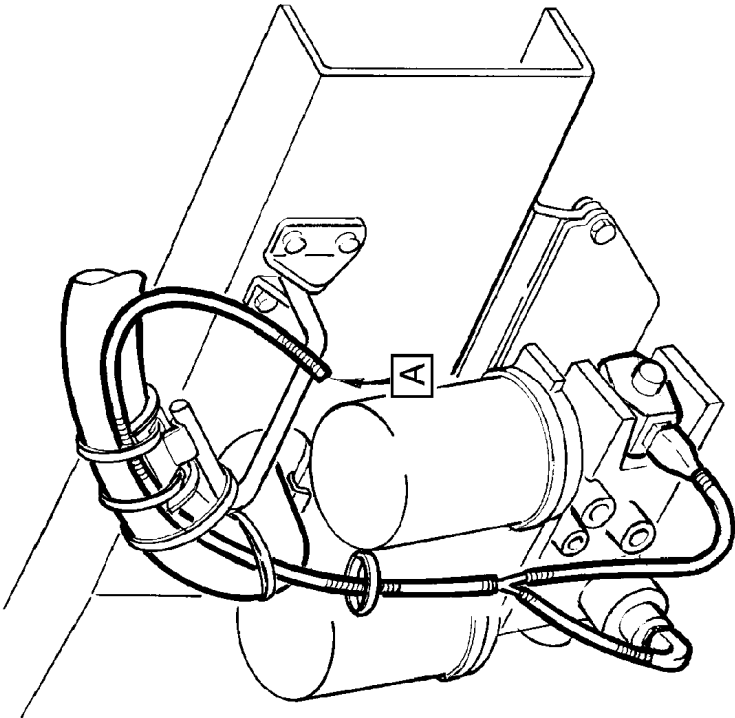
1037, 1071 MD FH16

1056 Air dryer

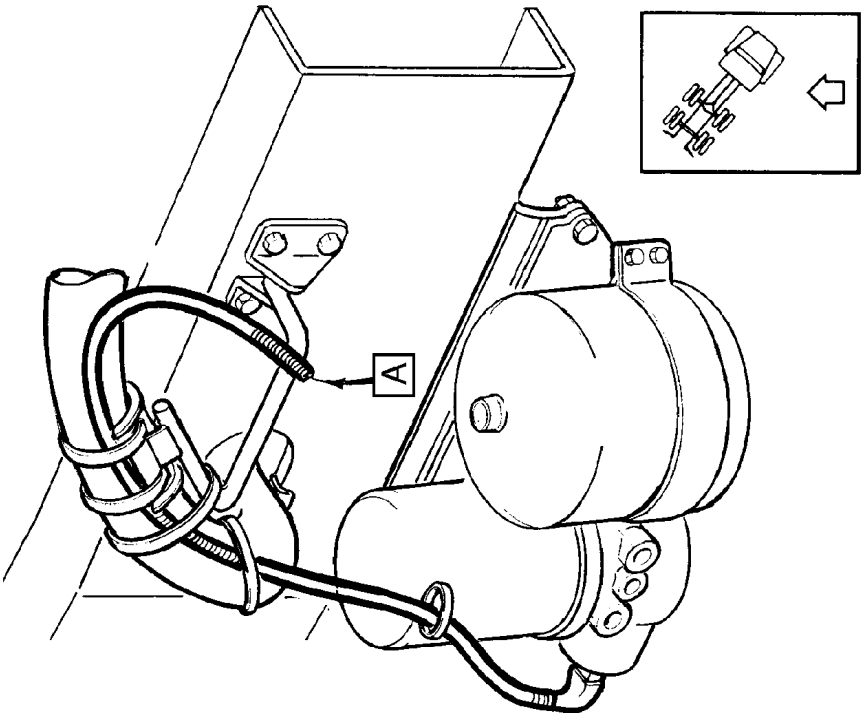


1056 Air dryer

RSS – AIR

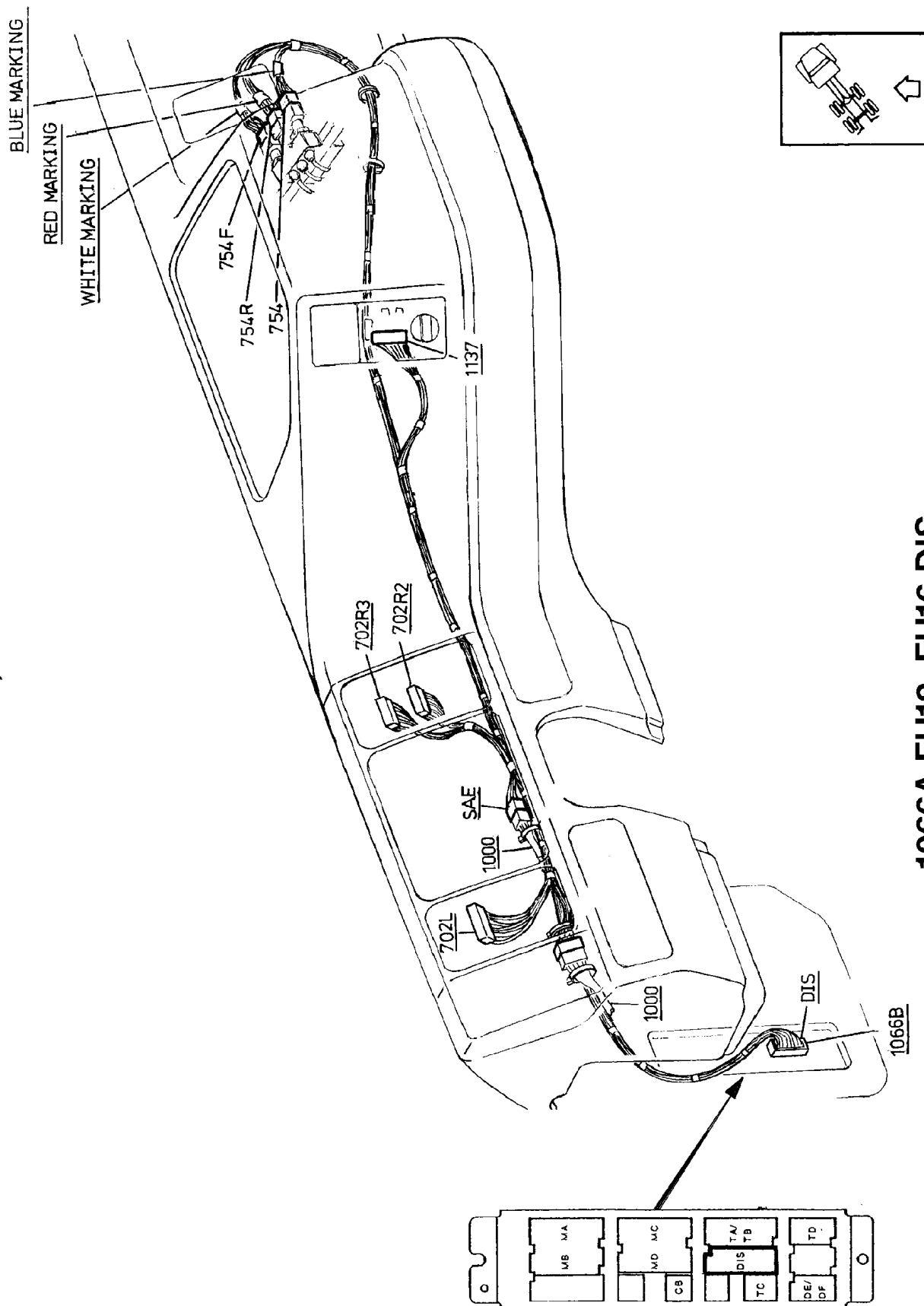


RSS – LEAF

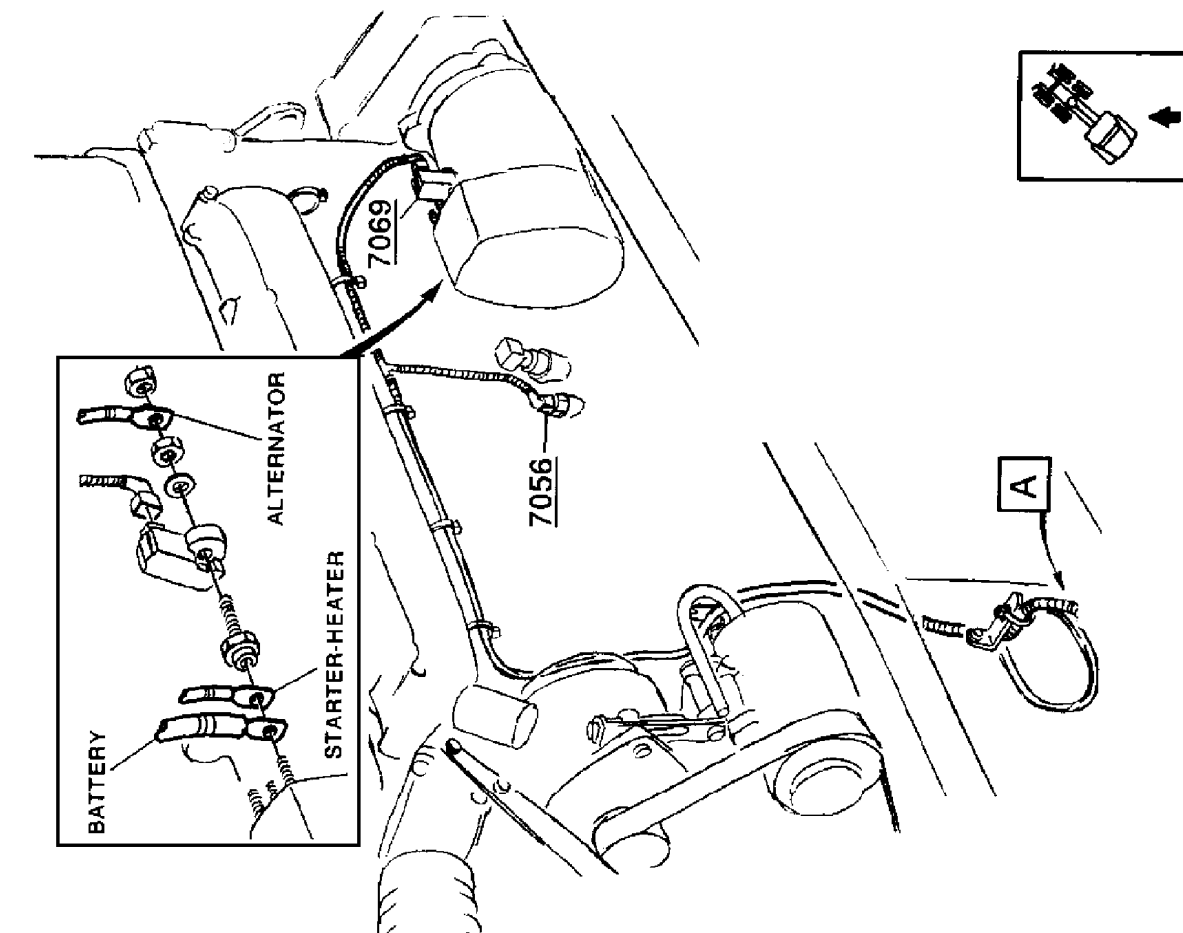


1066A FH12, FH16 DIS

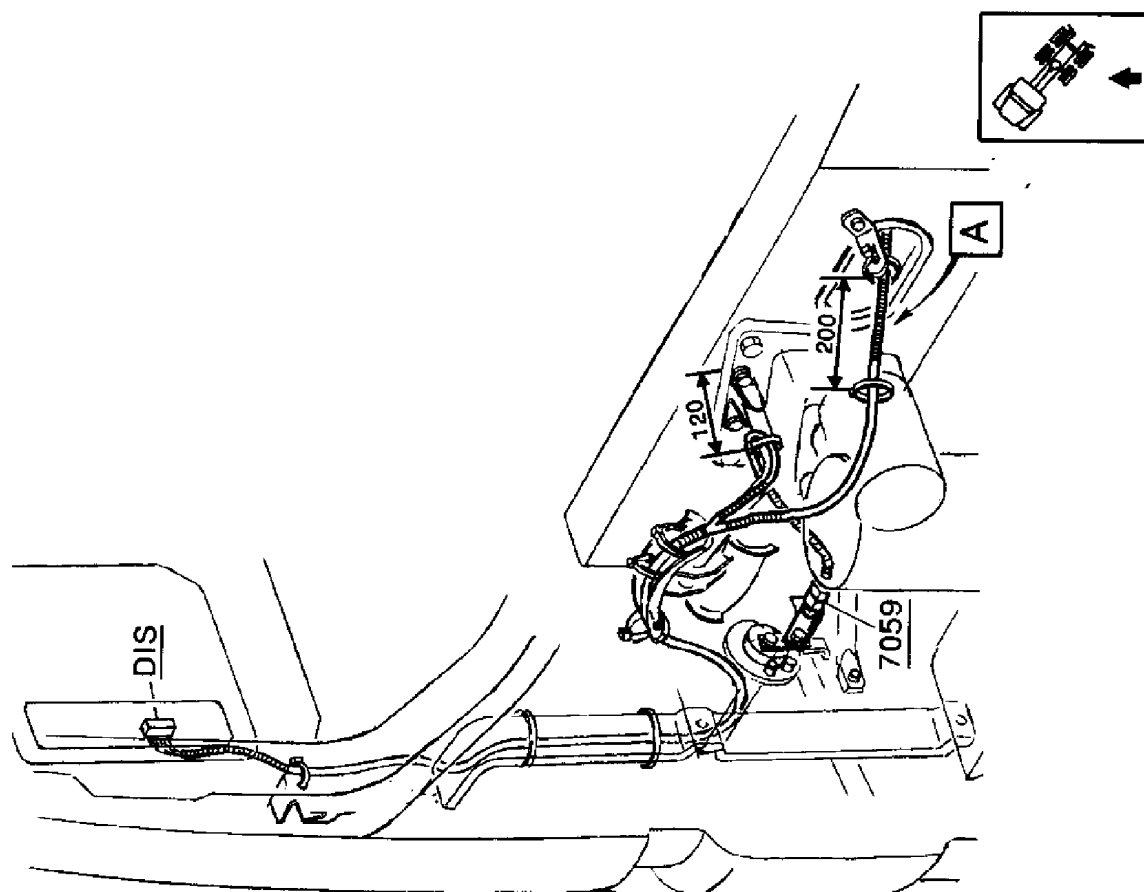
1066A FH12, FH16 DIS

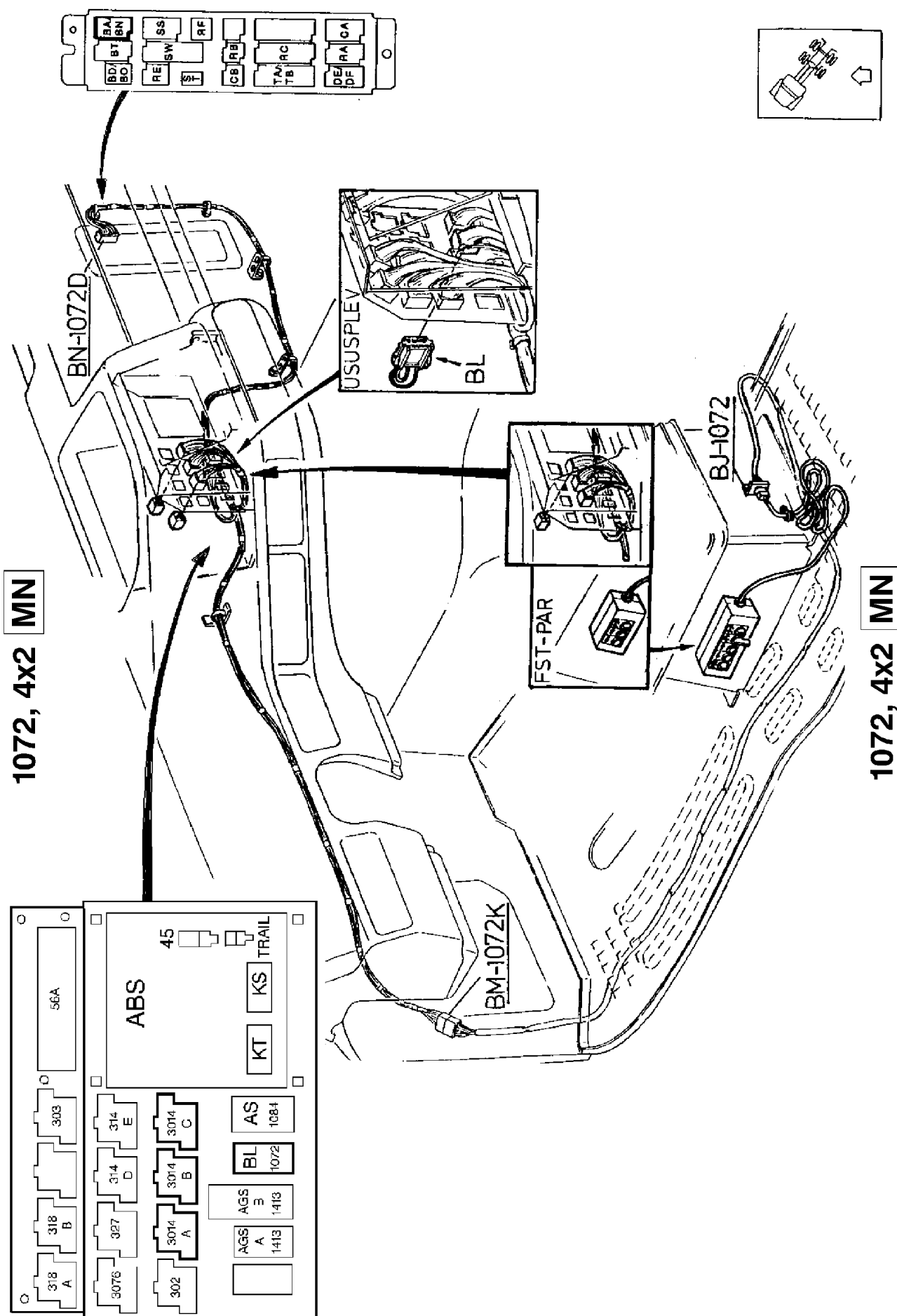


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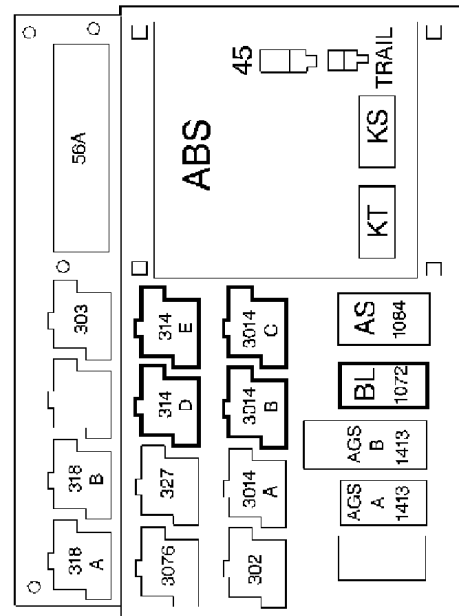


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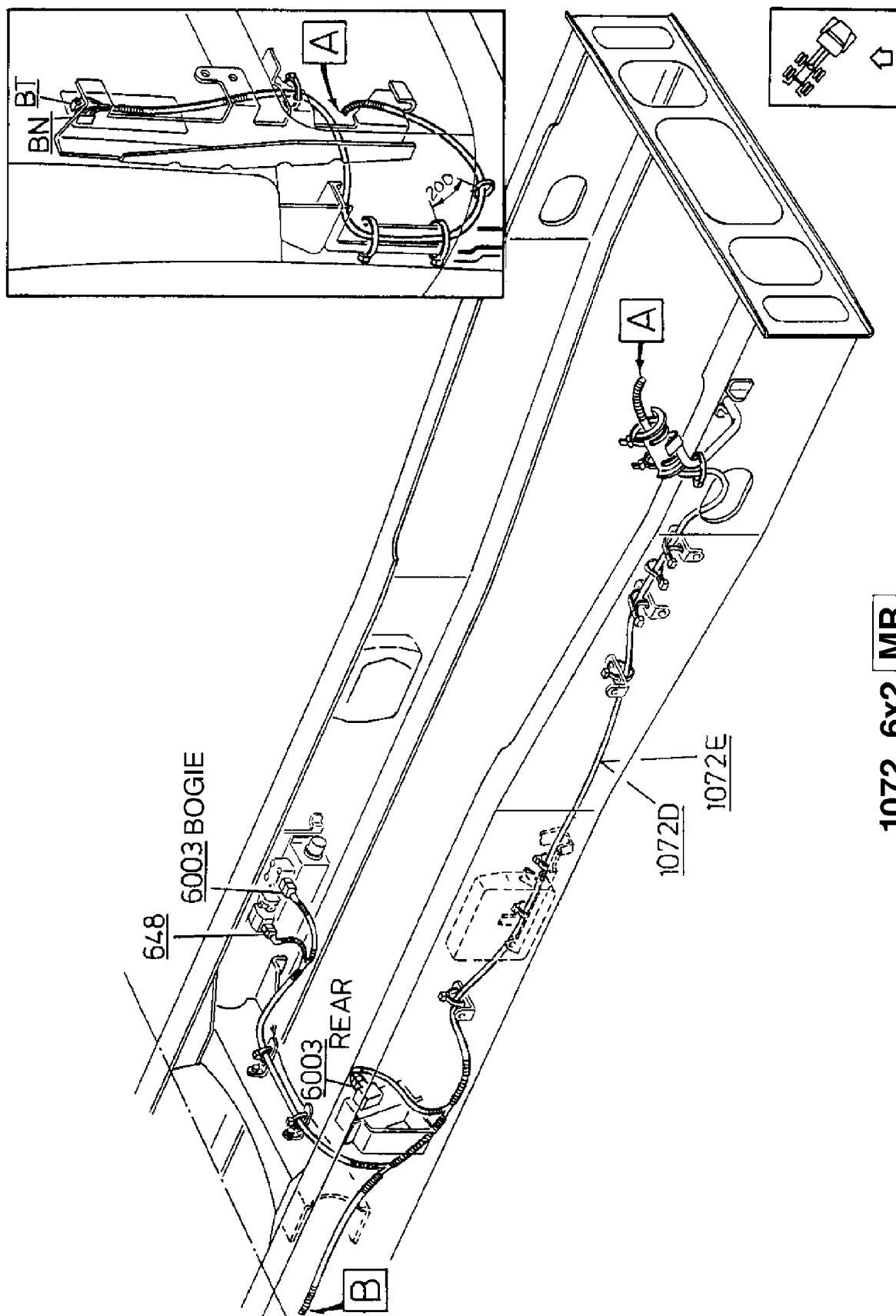




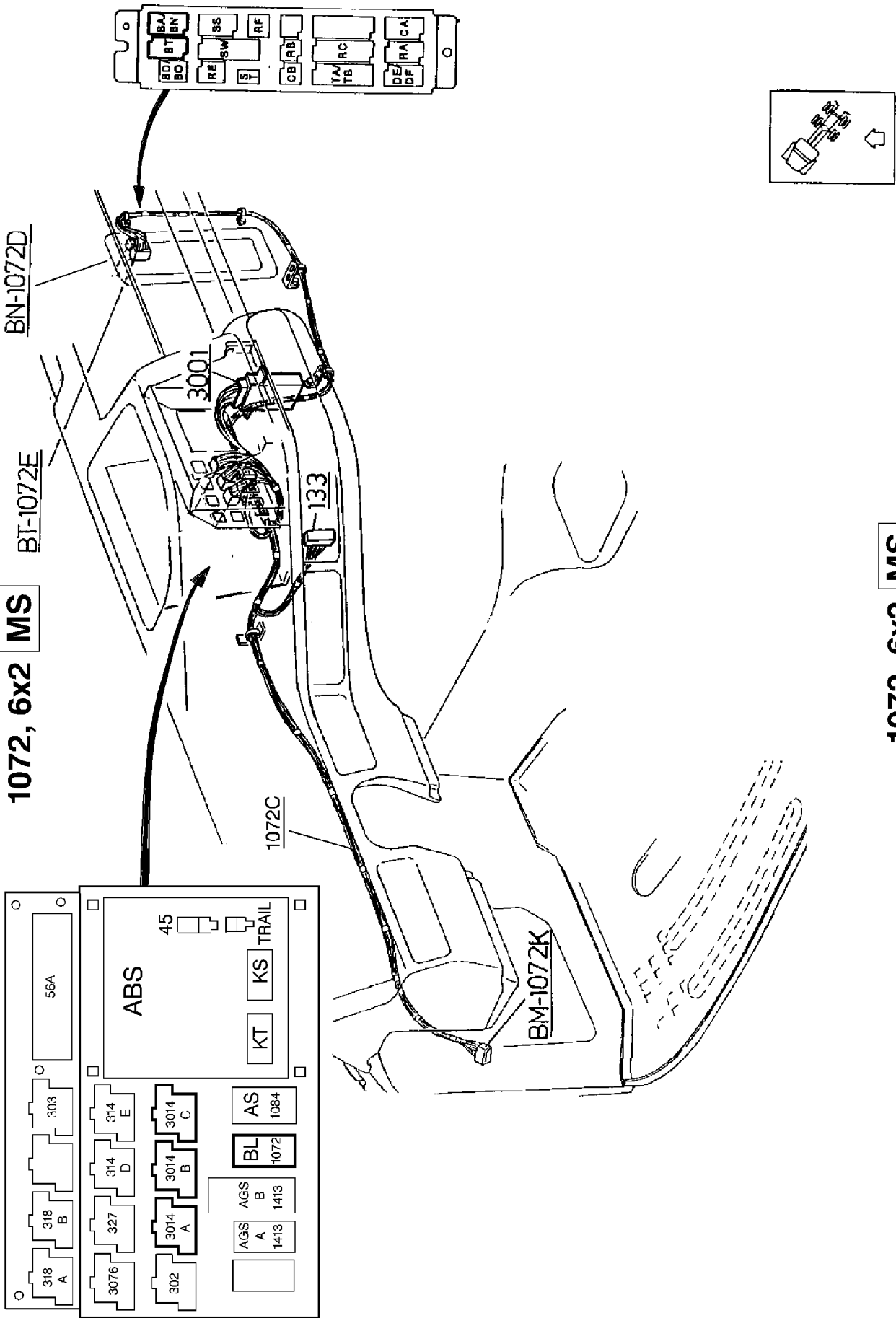


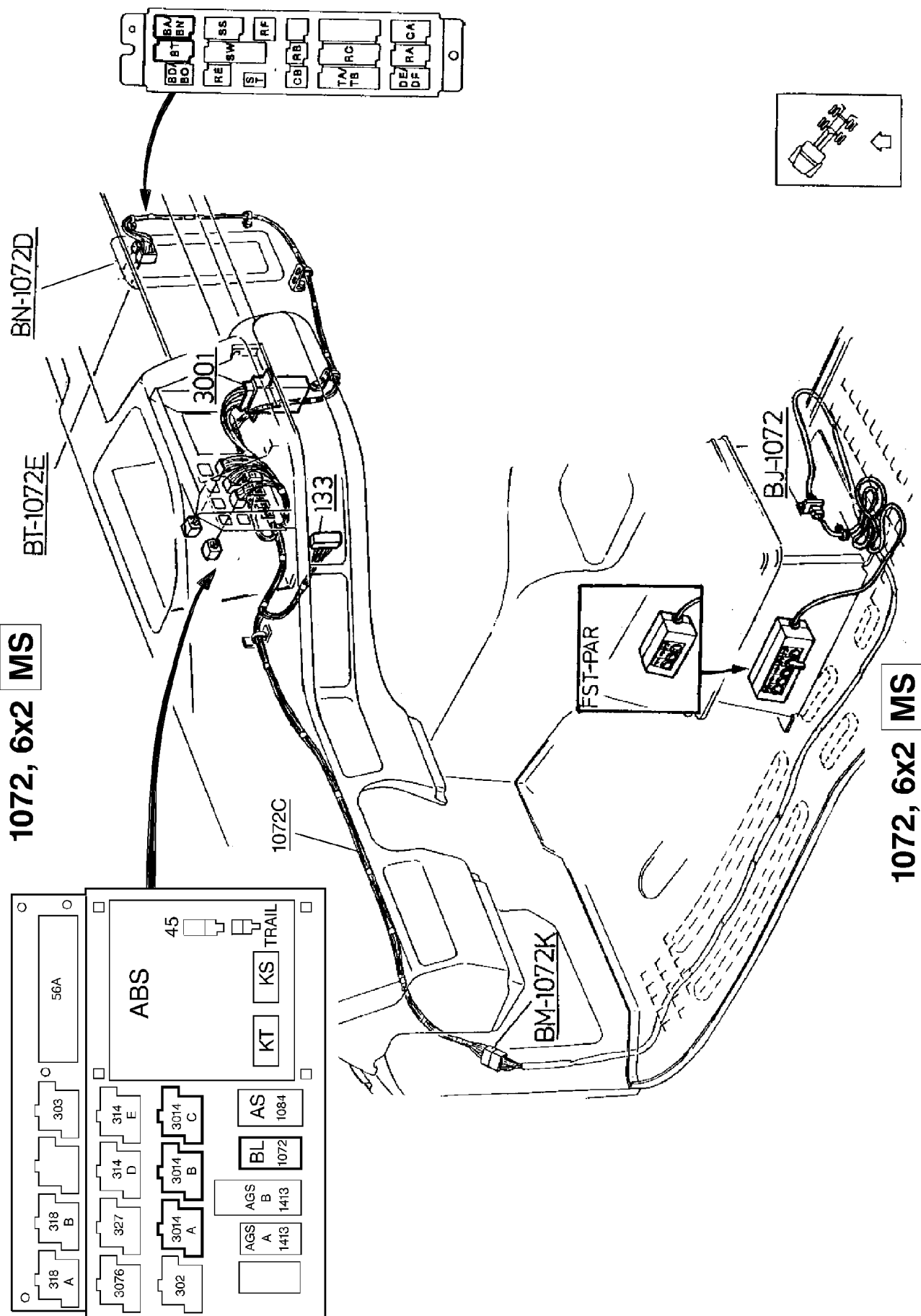


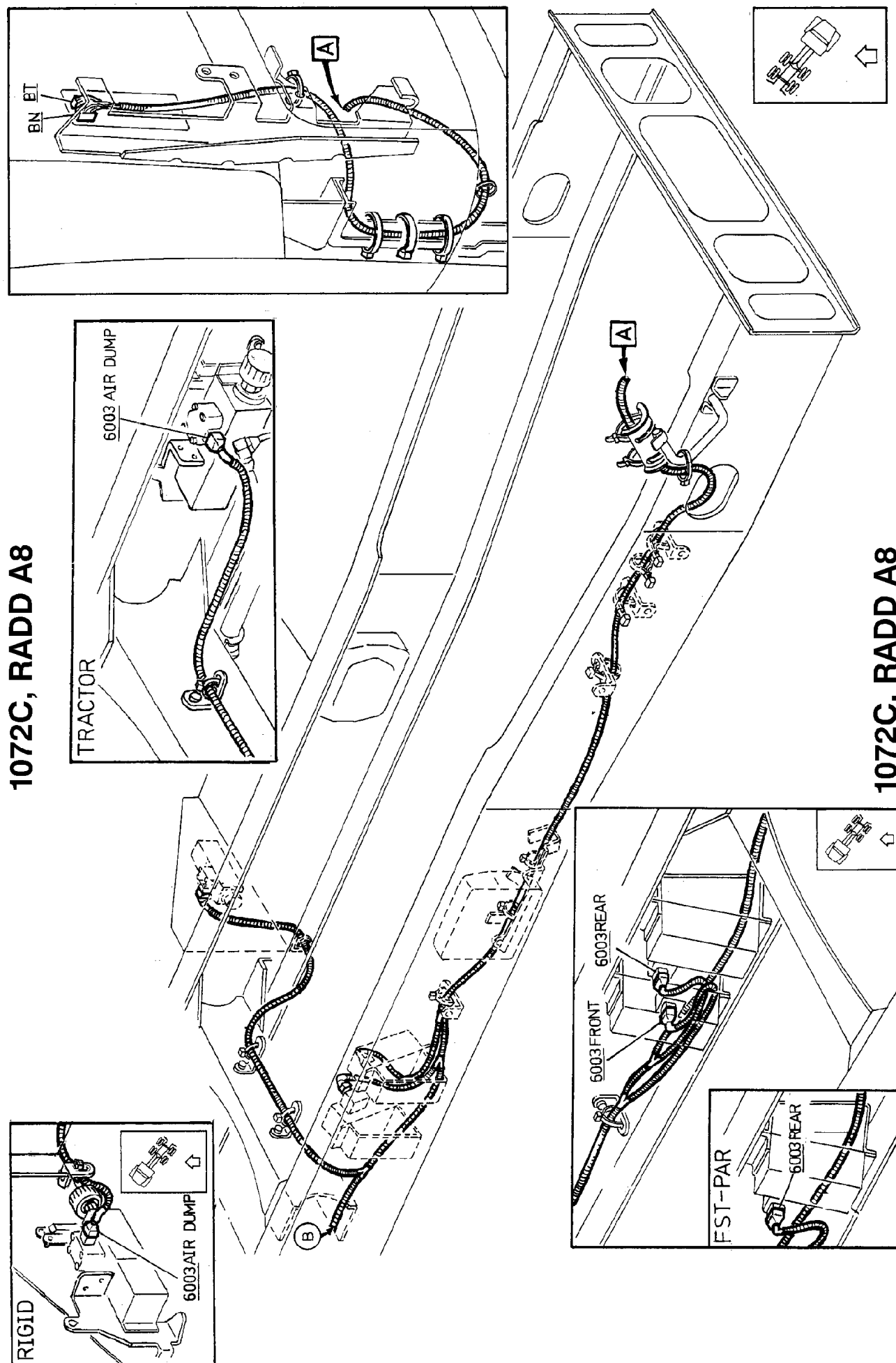
1072, 6x2 **MR**



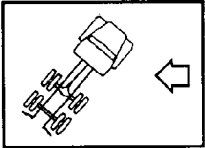
1072, 6x2 **MR**



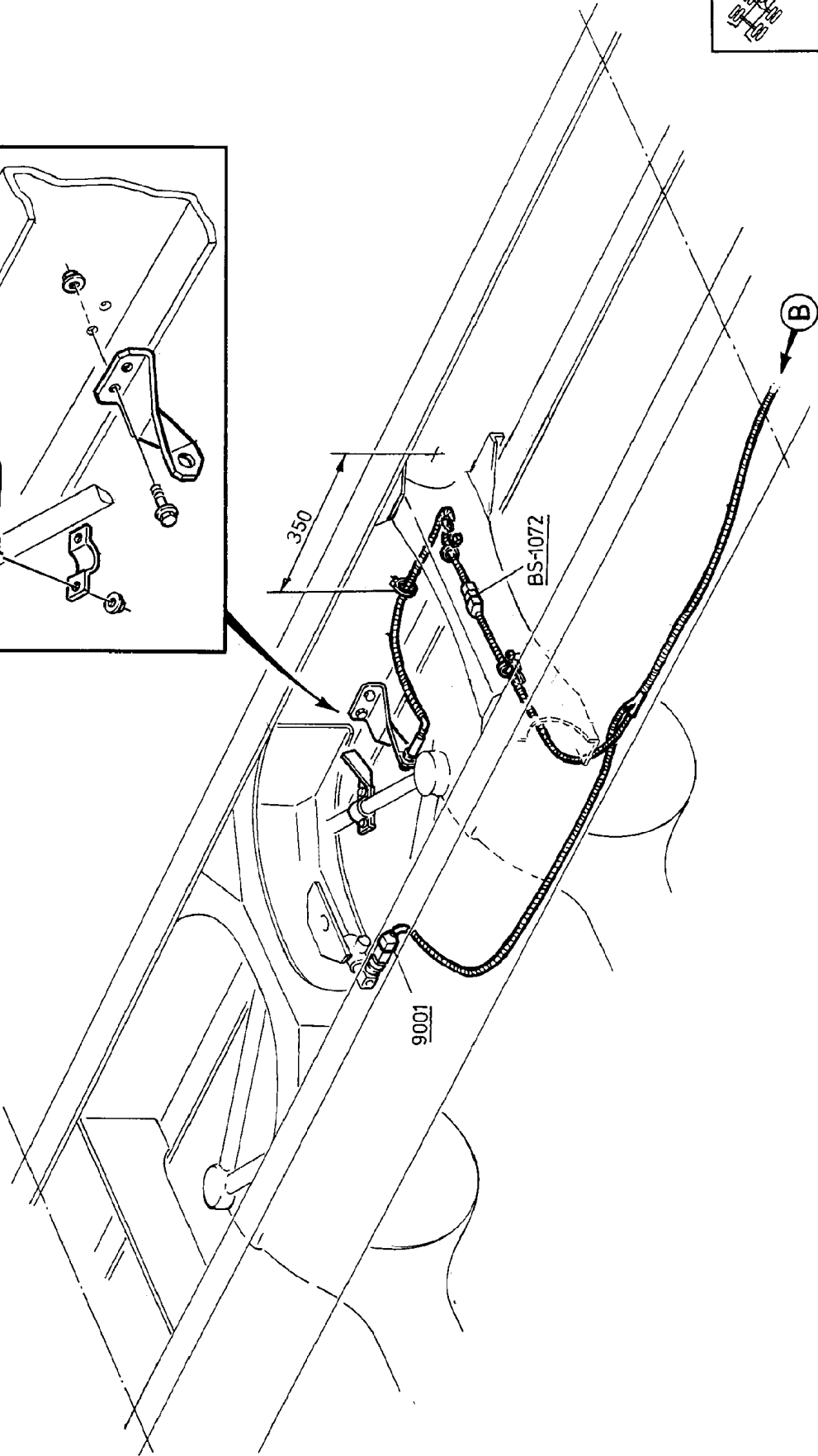
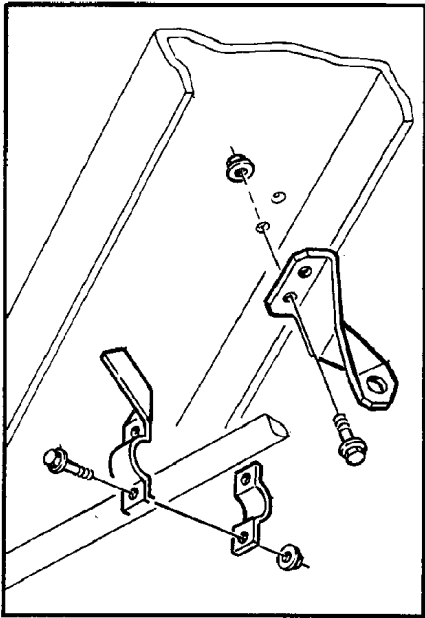




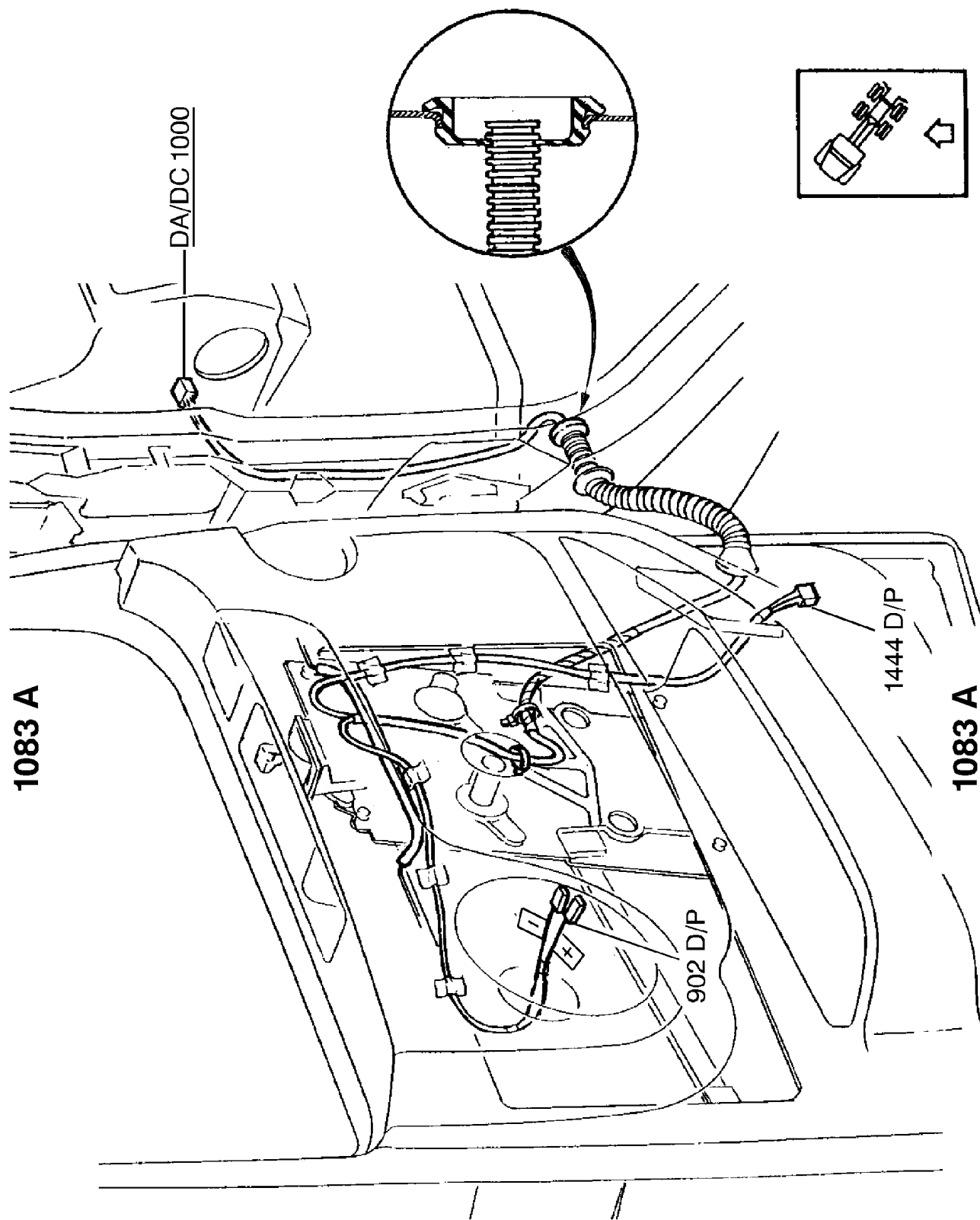


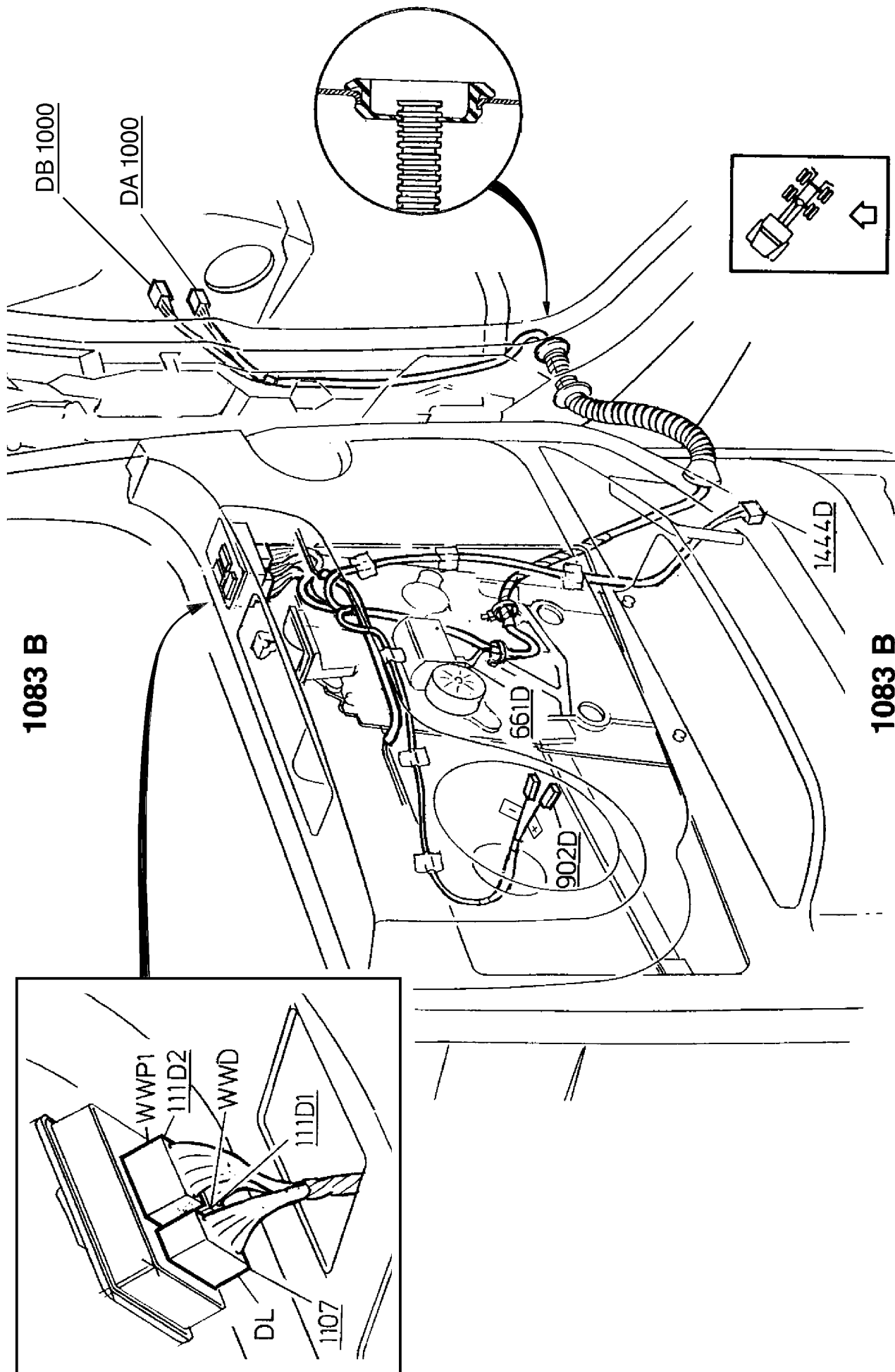


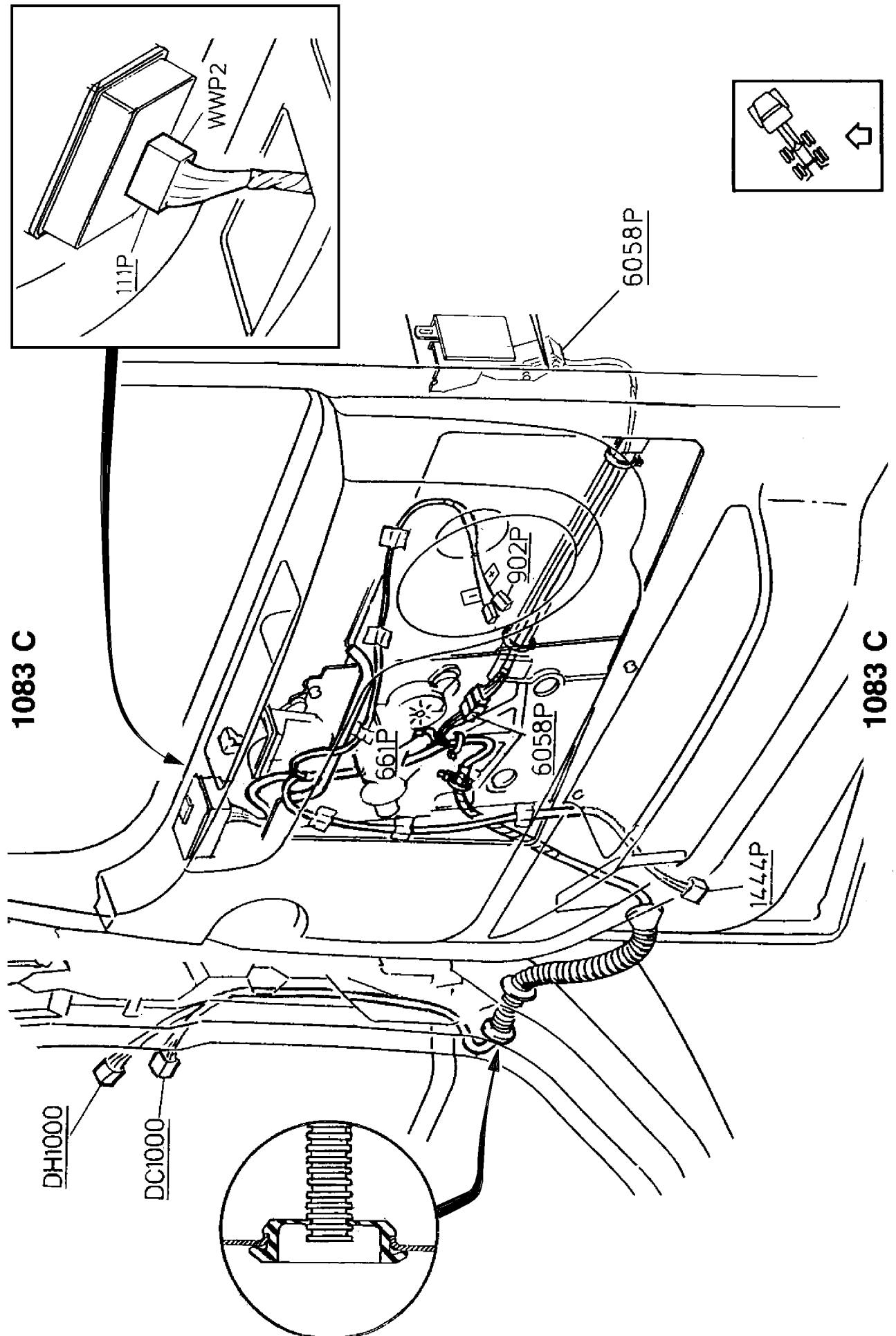
1072C, RADD A8

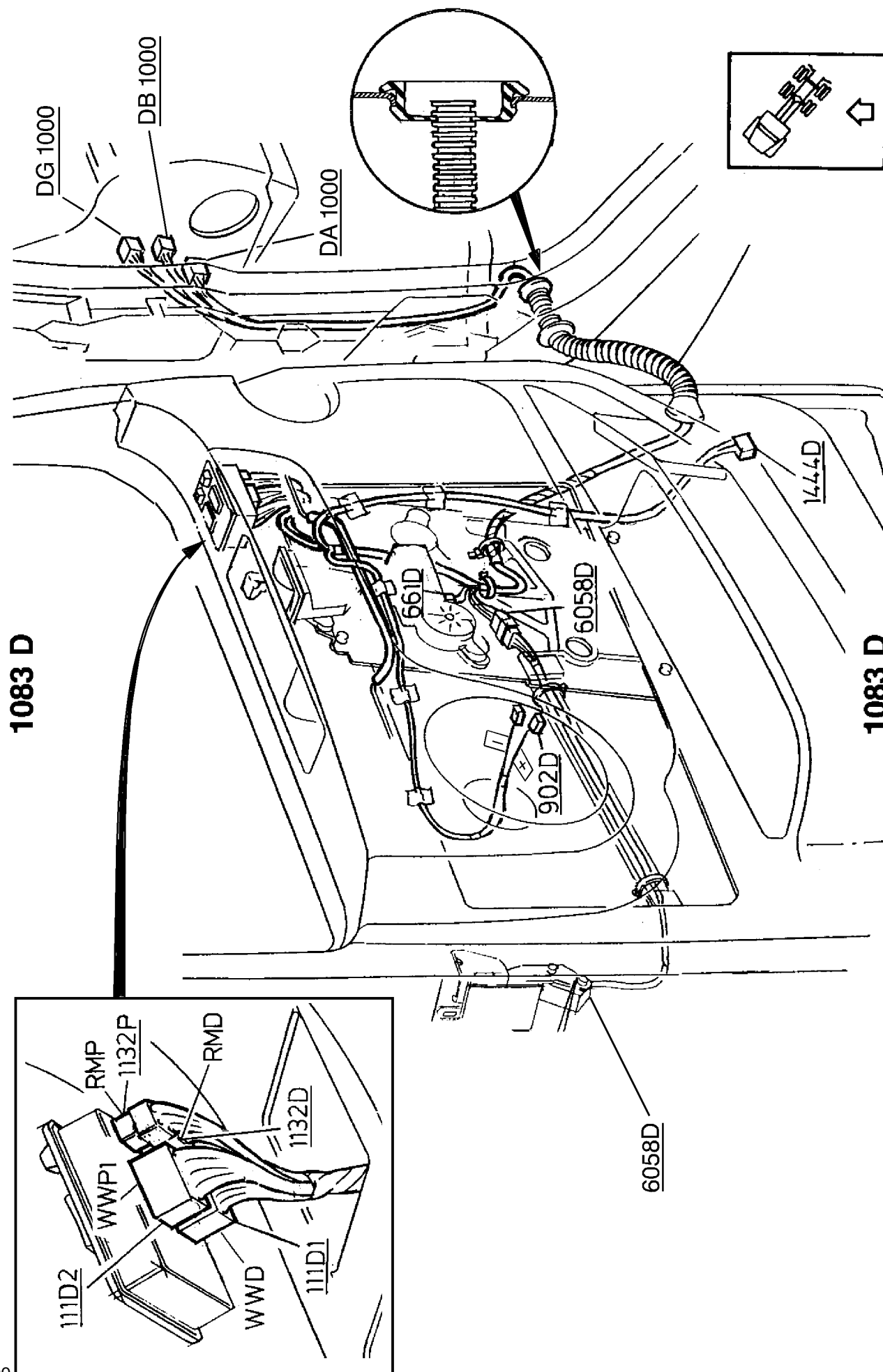


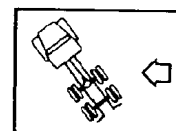
1072C, RADD A8

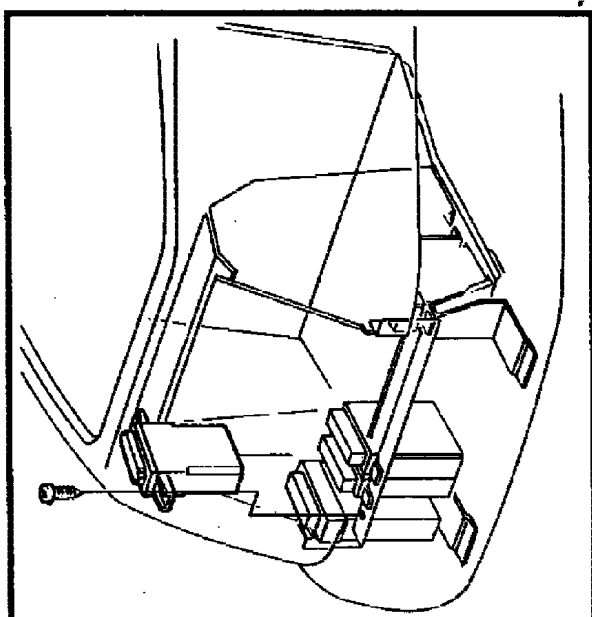
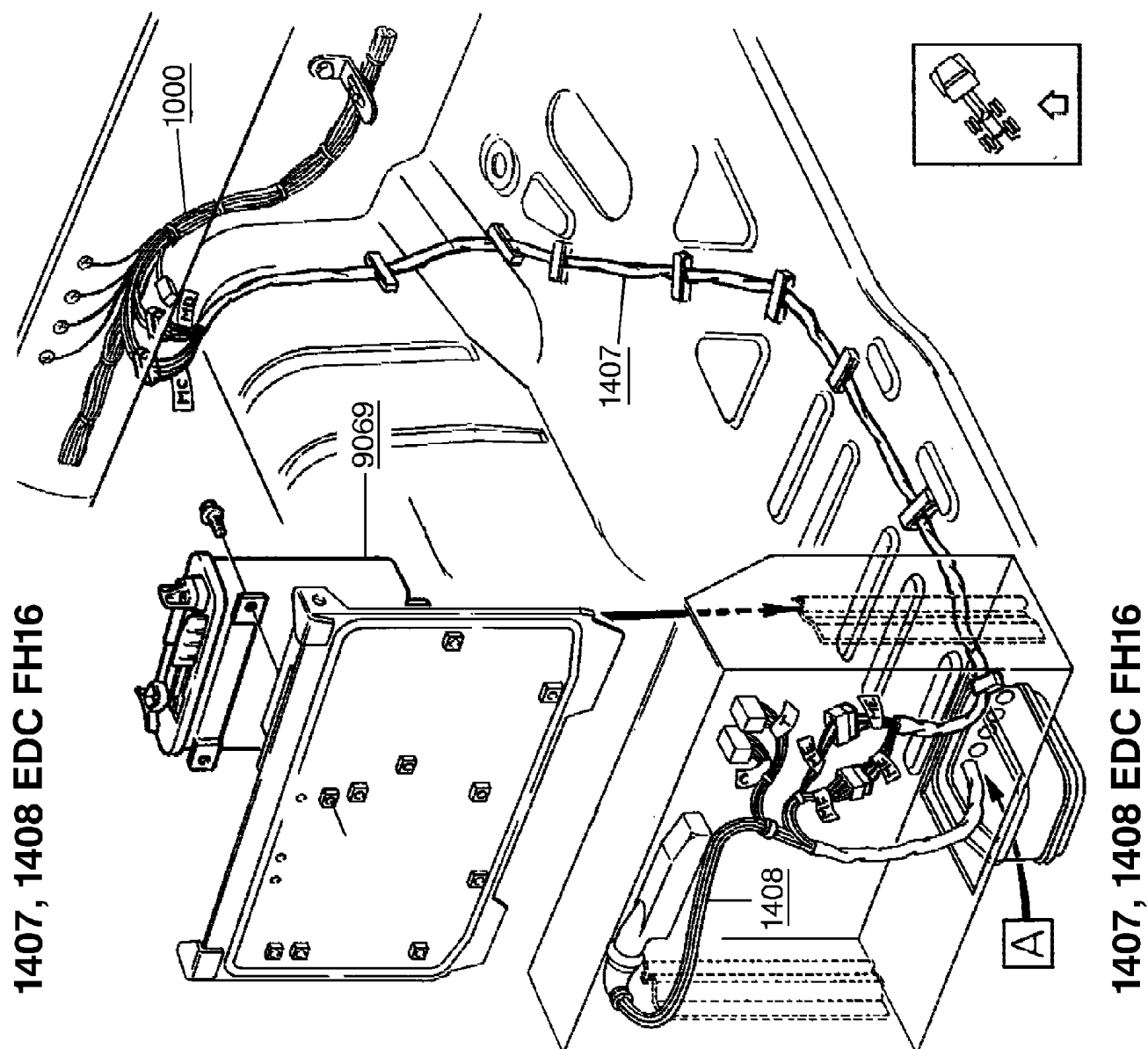


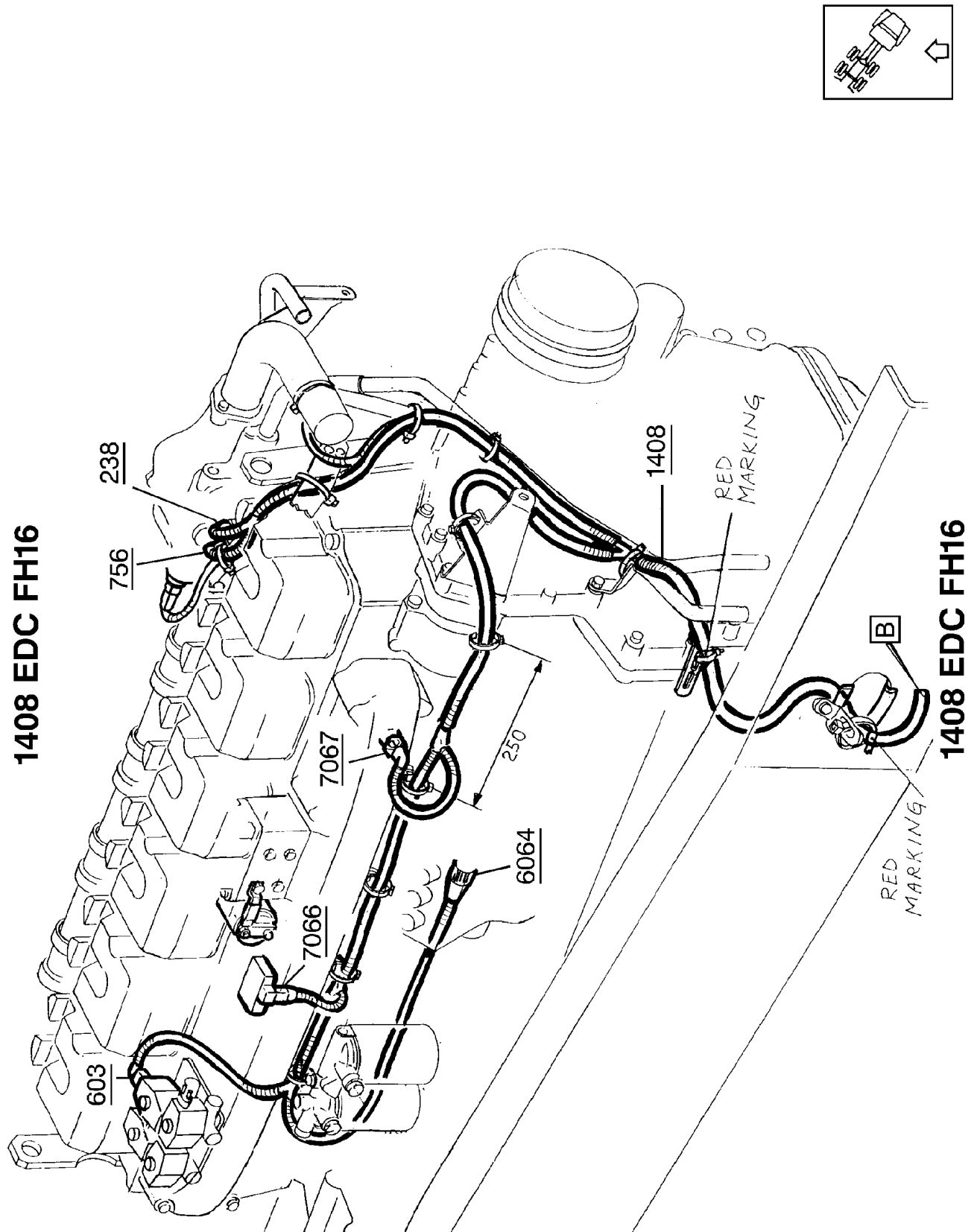


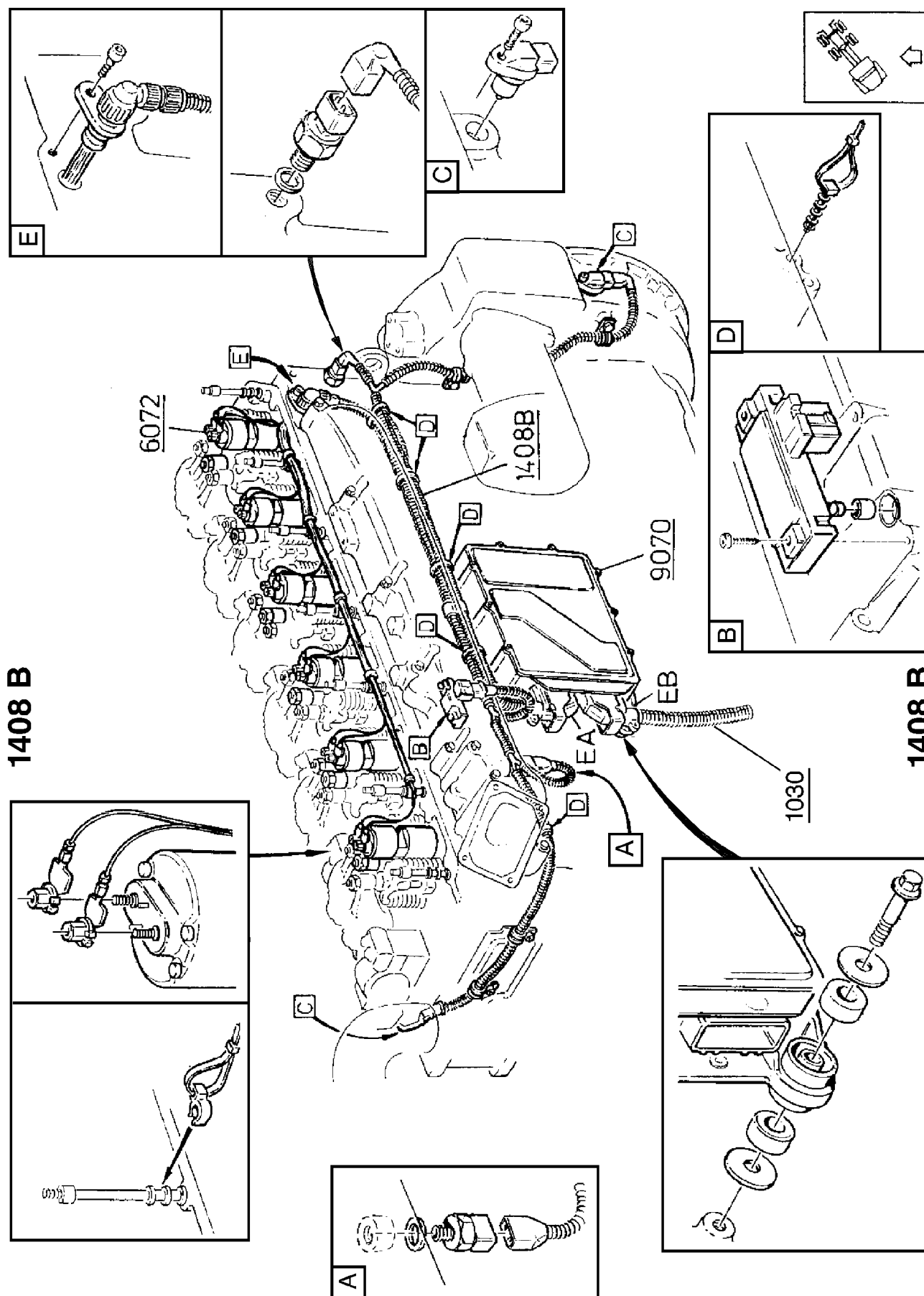


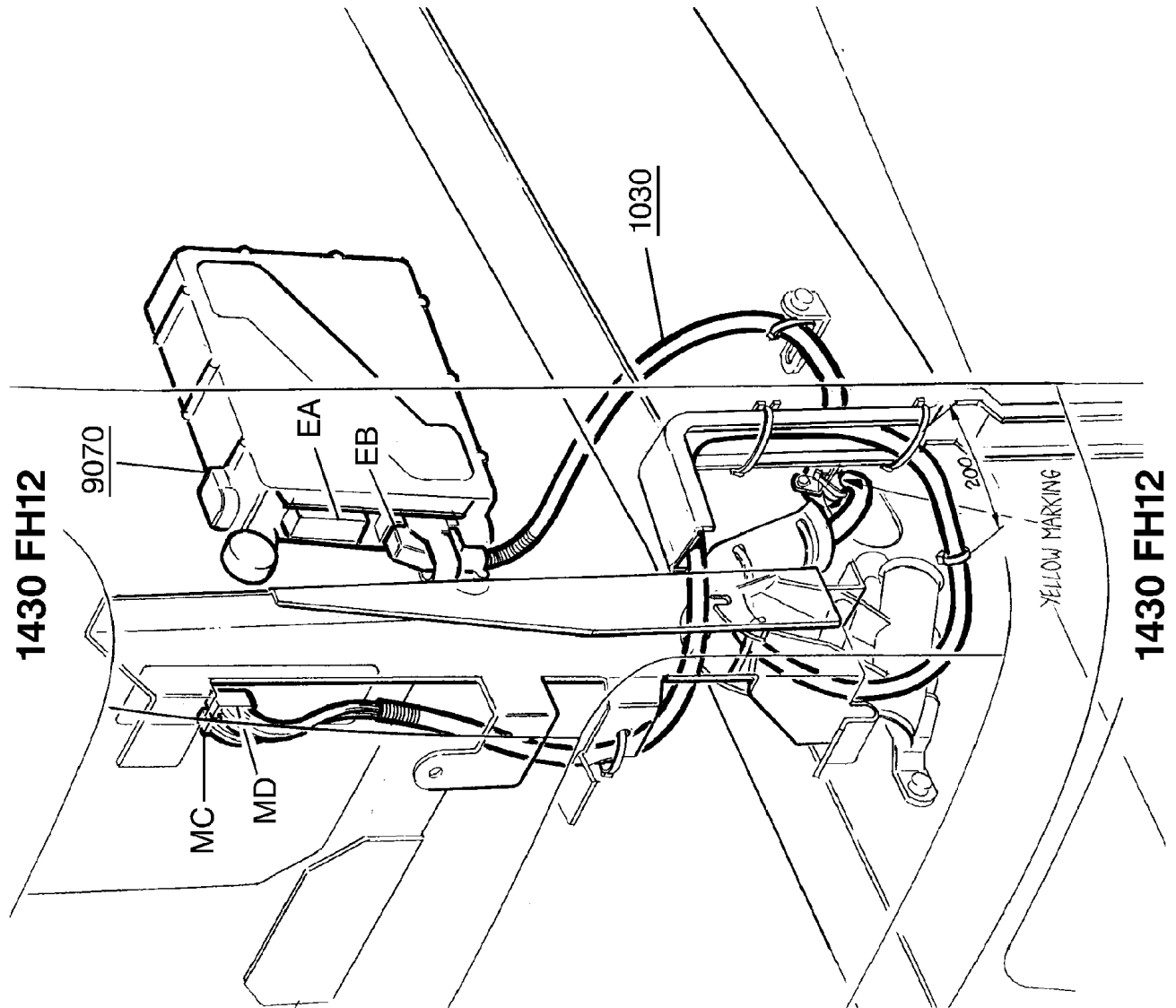
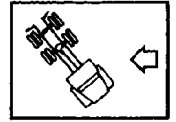


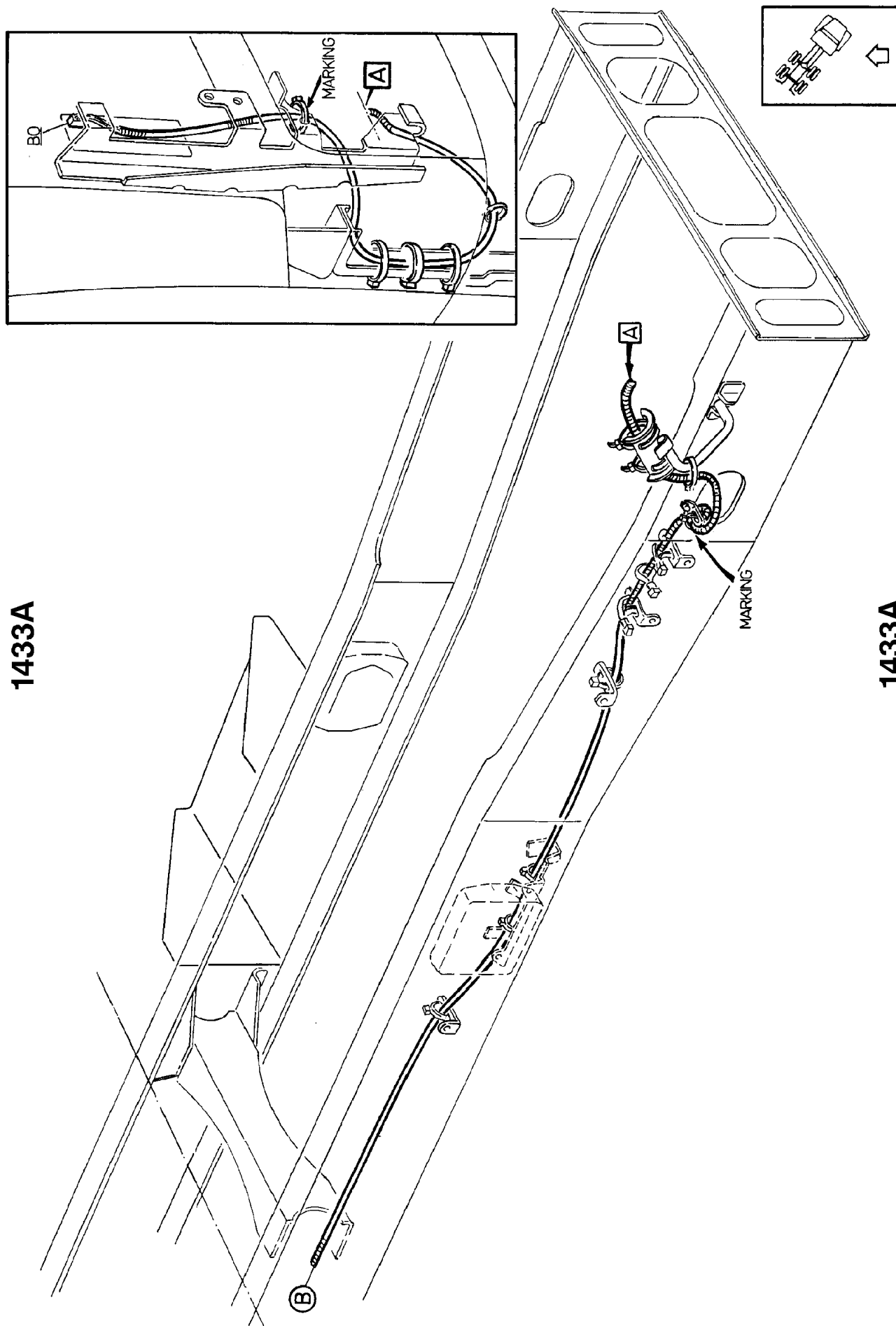




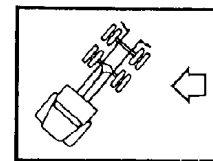
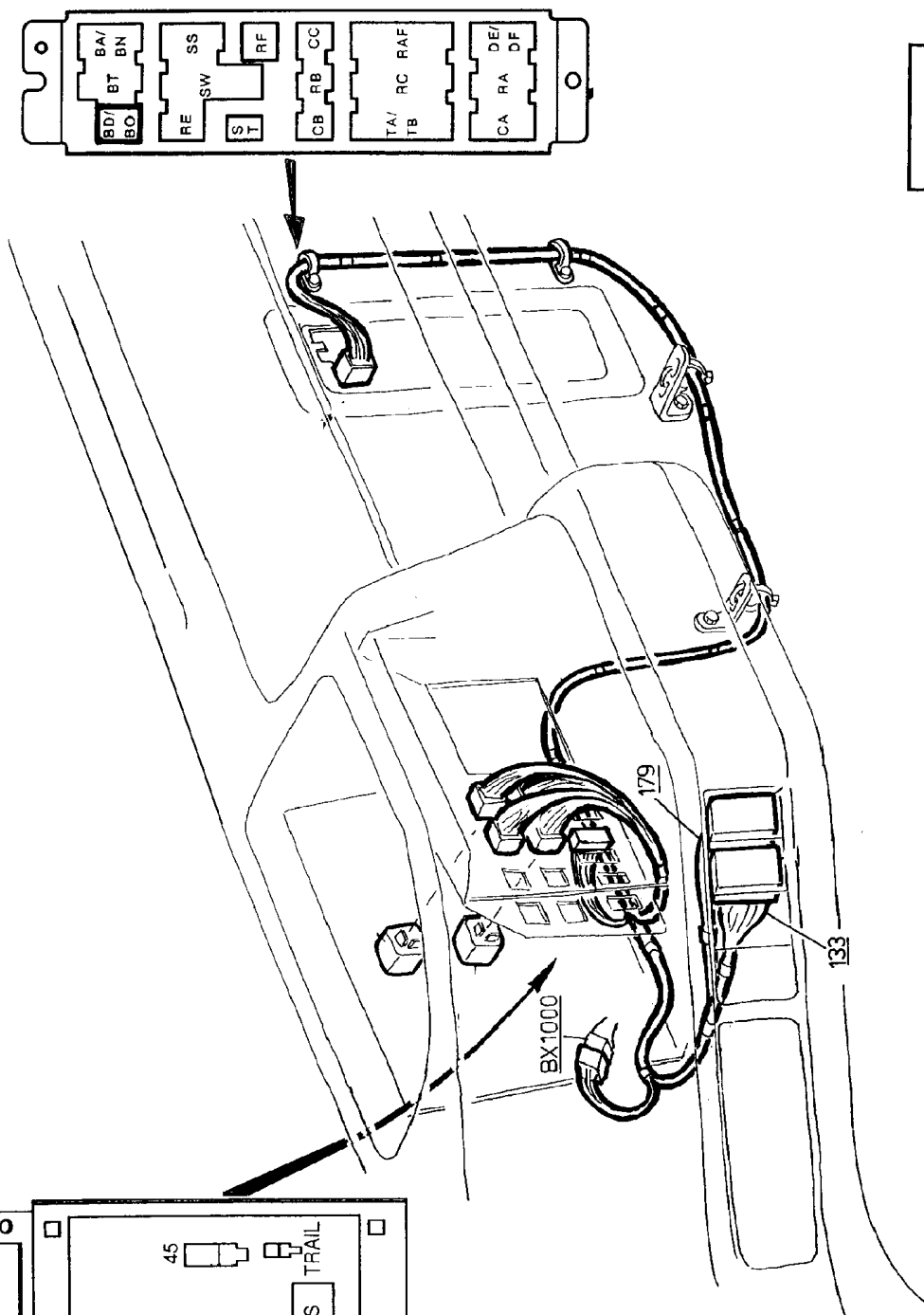
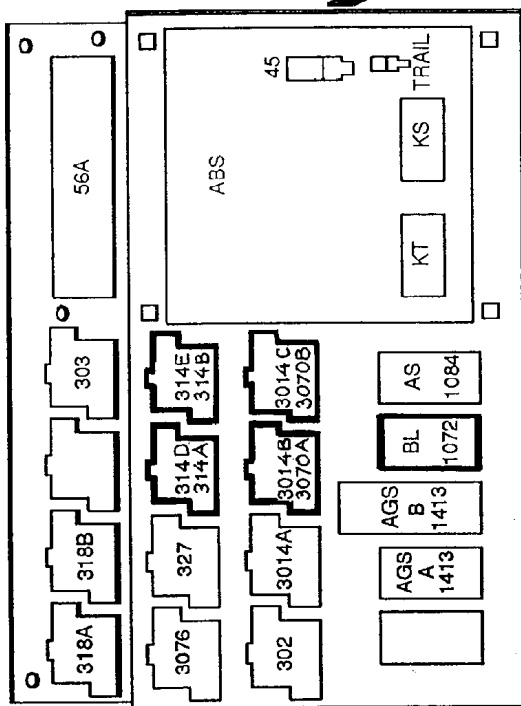








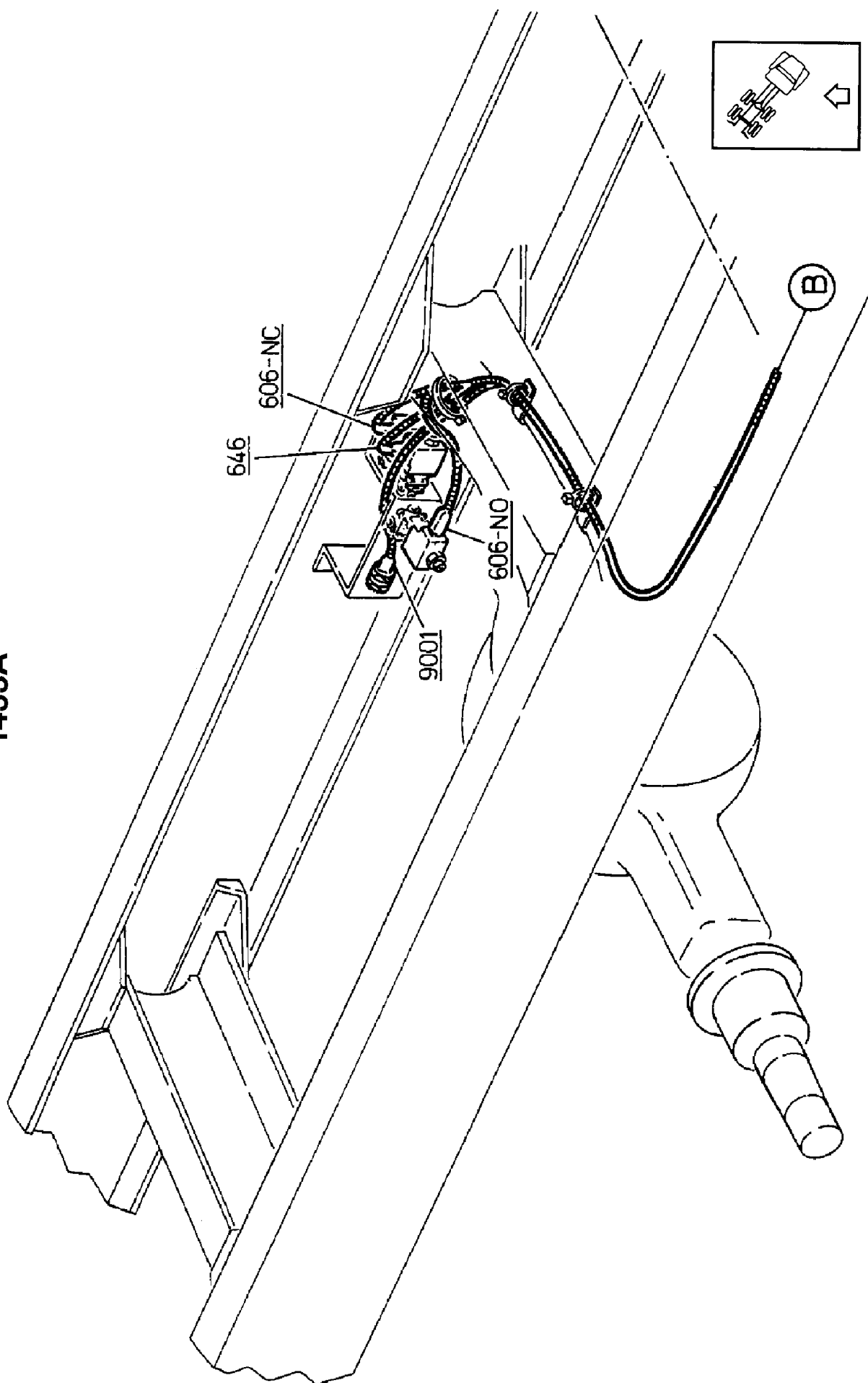
1433A



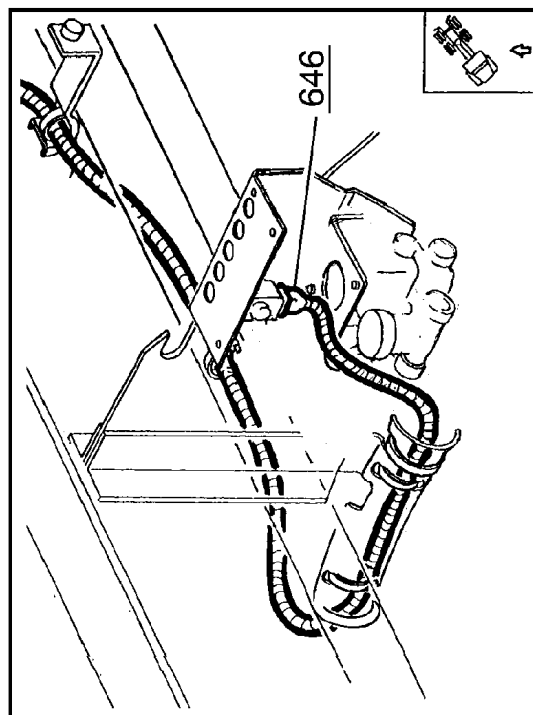
1433A

1433A

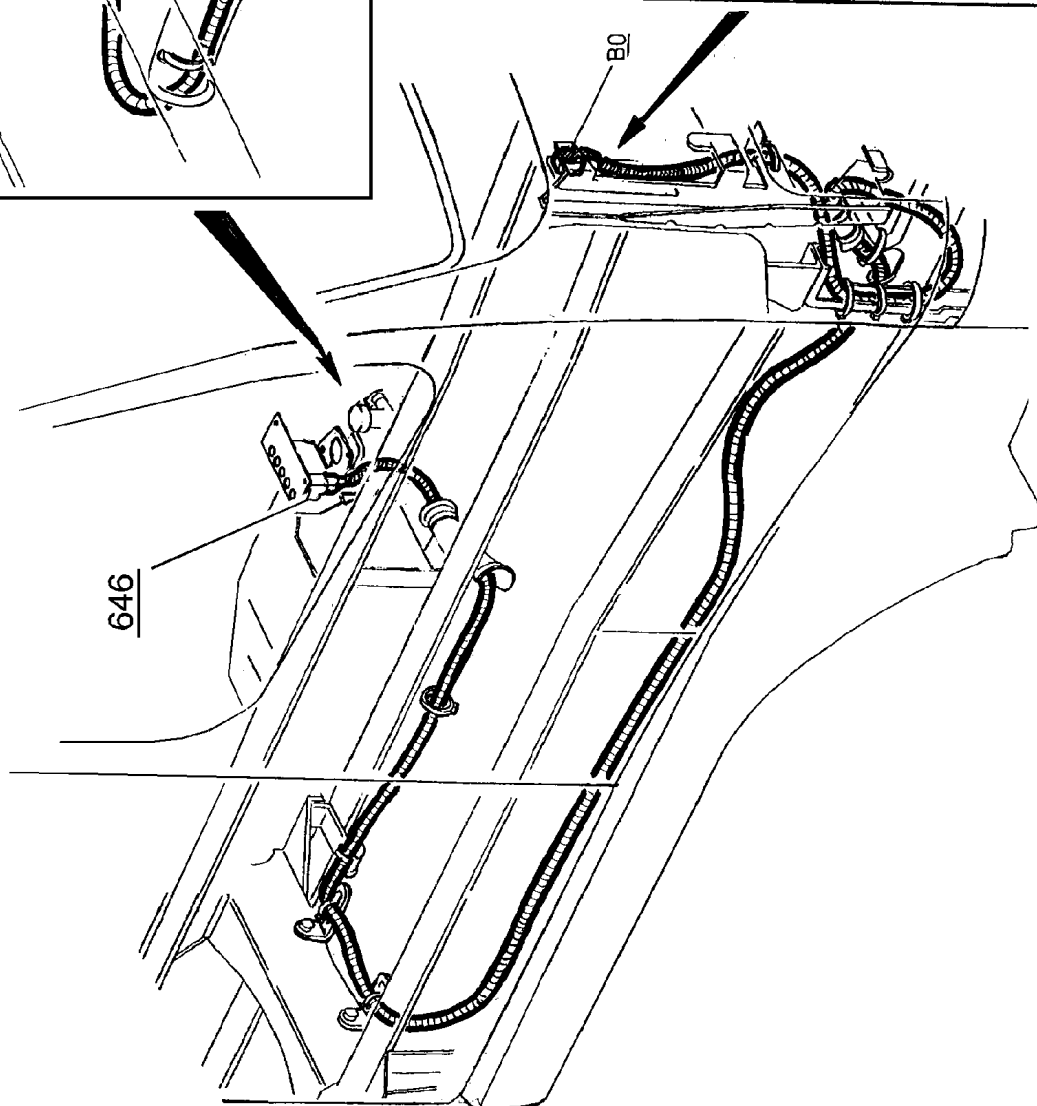
1433A



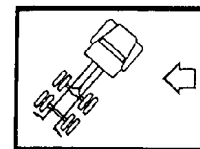
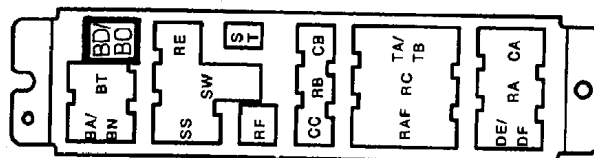
1433A AIR

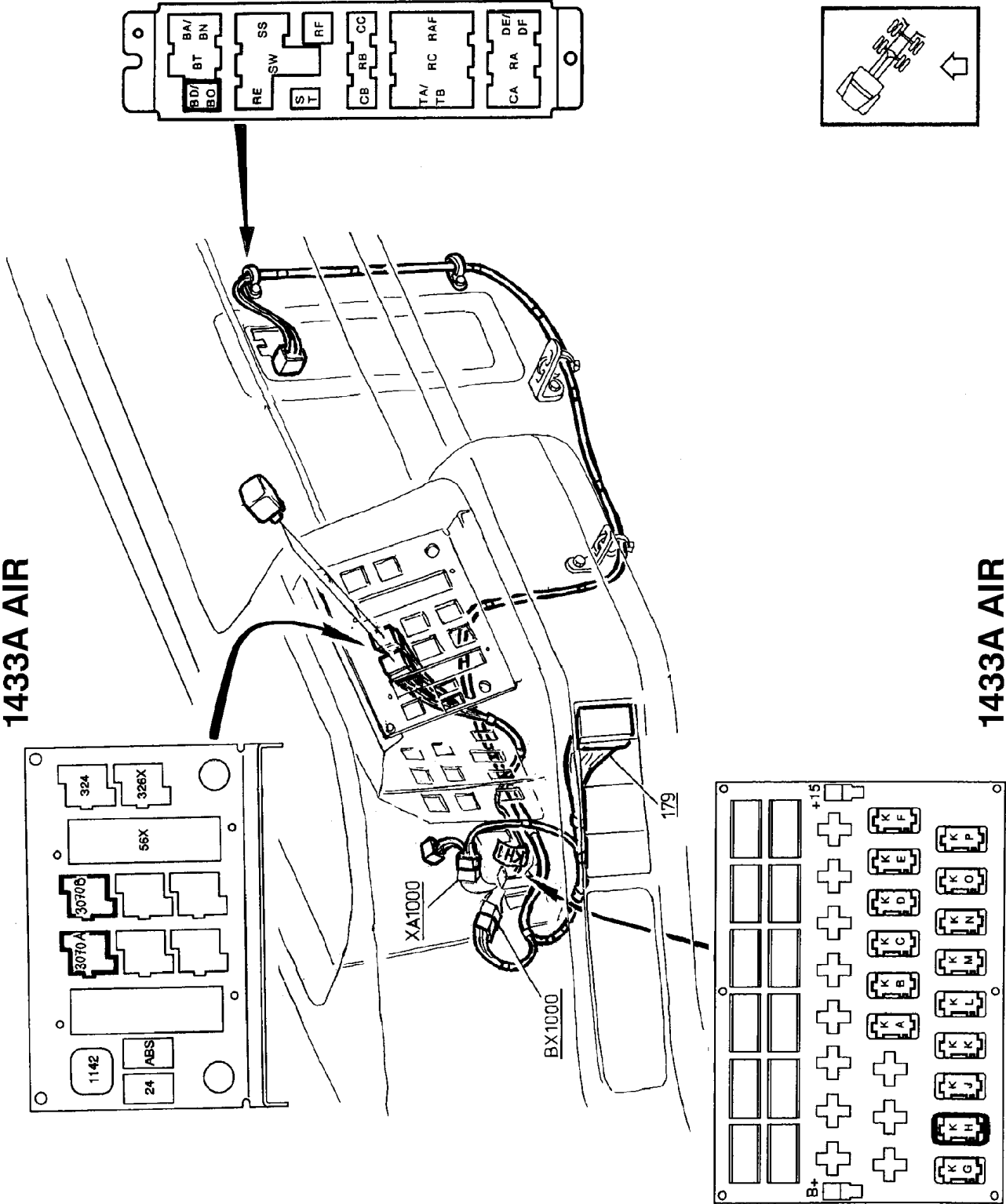


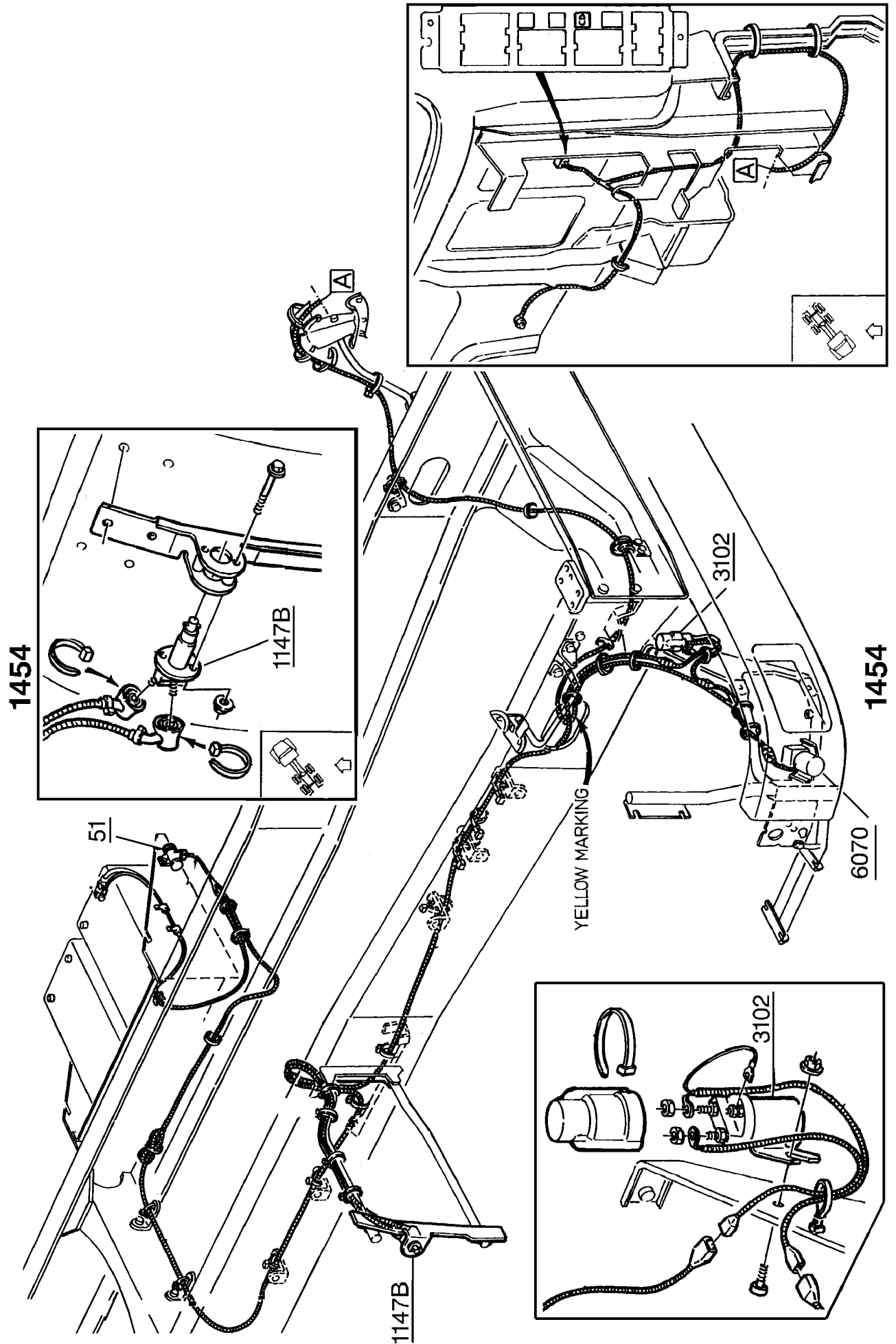
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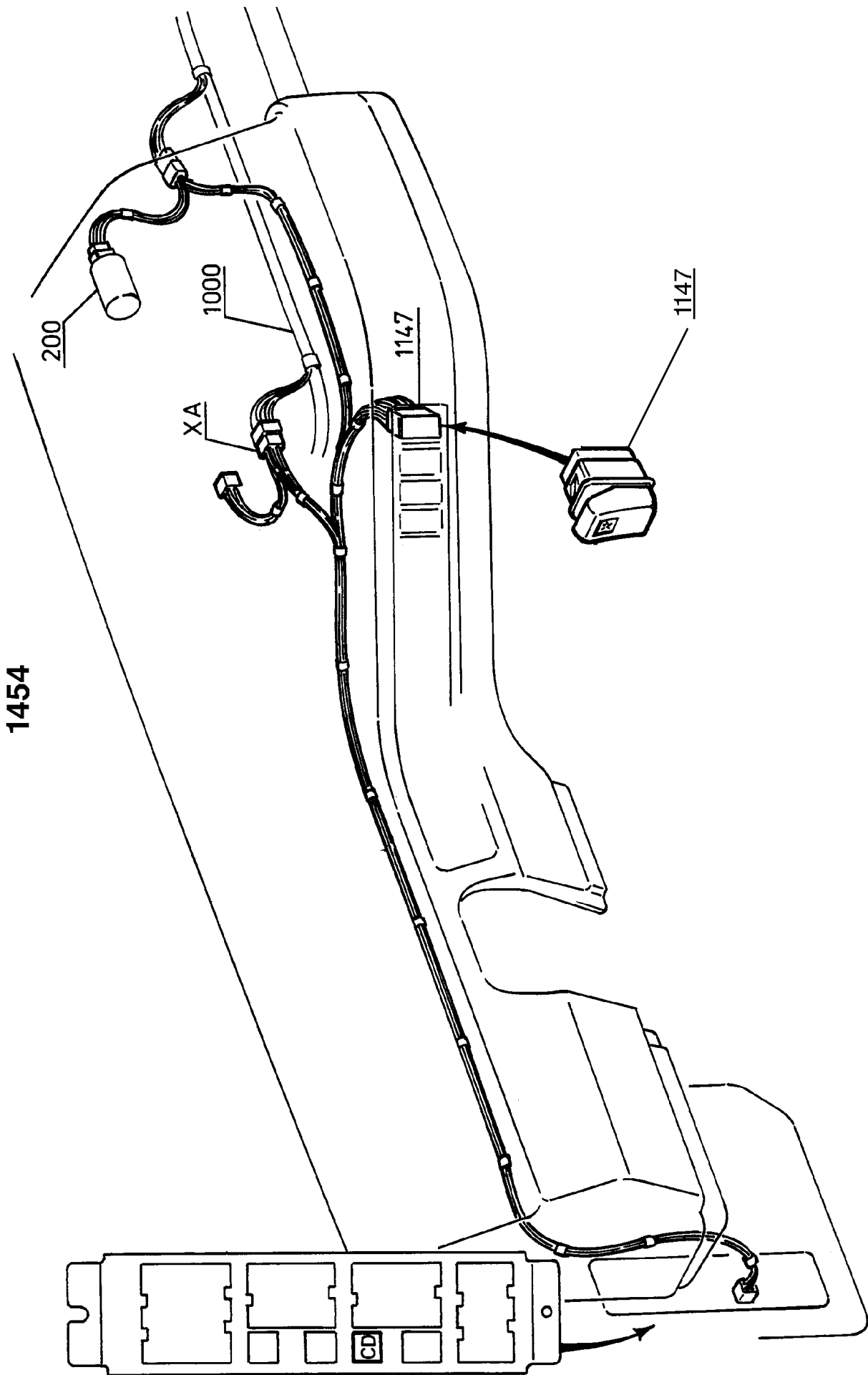


1433A AIR





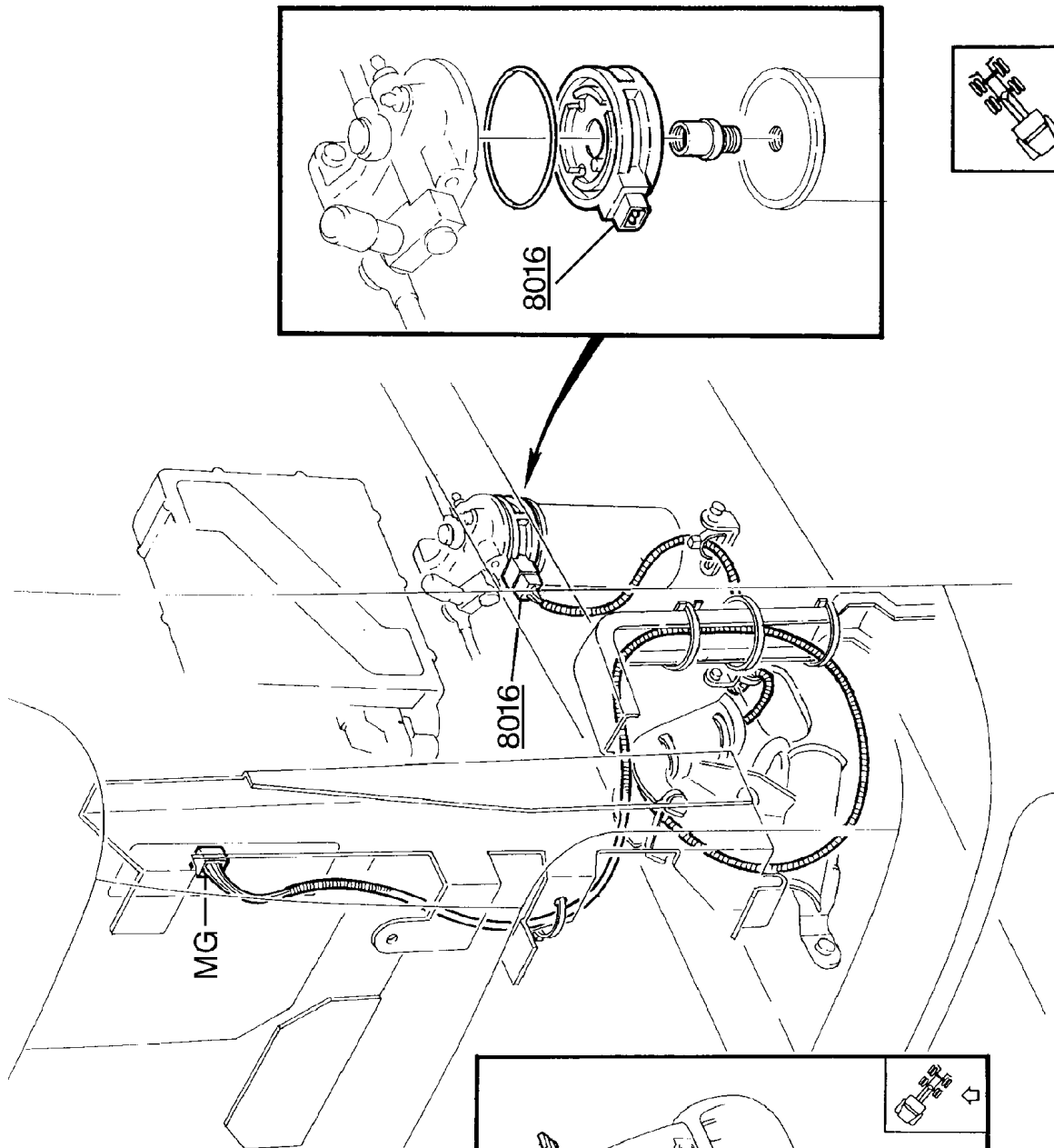




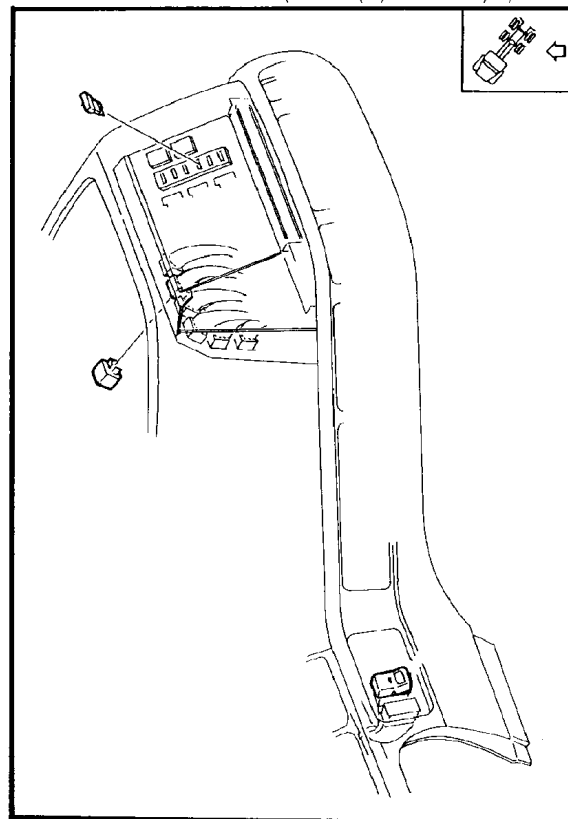
1454

1454

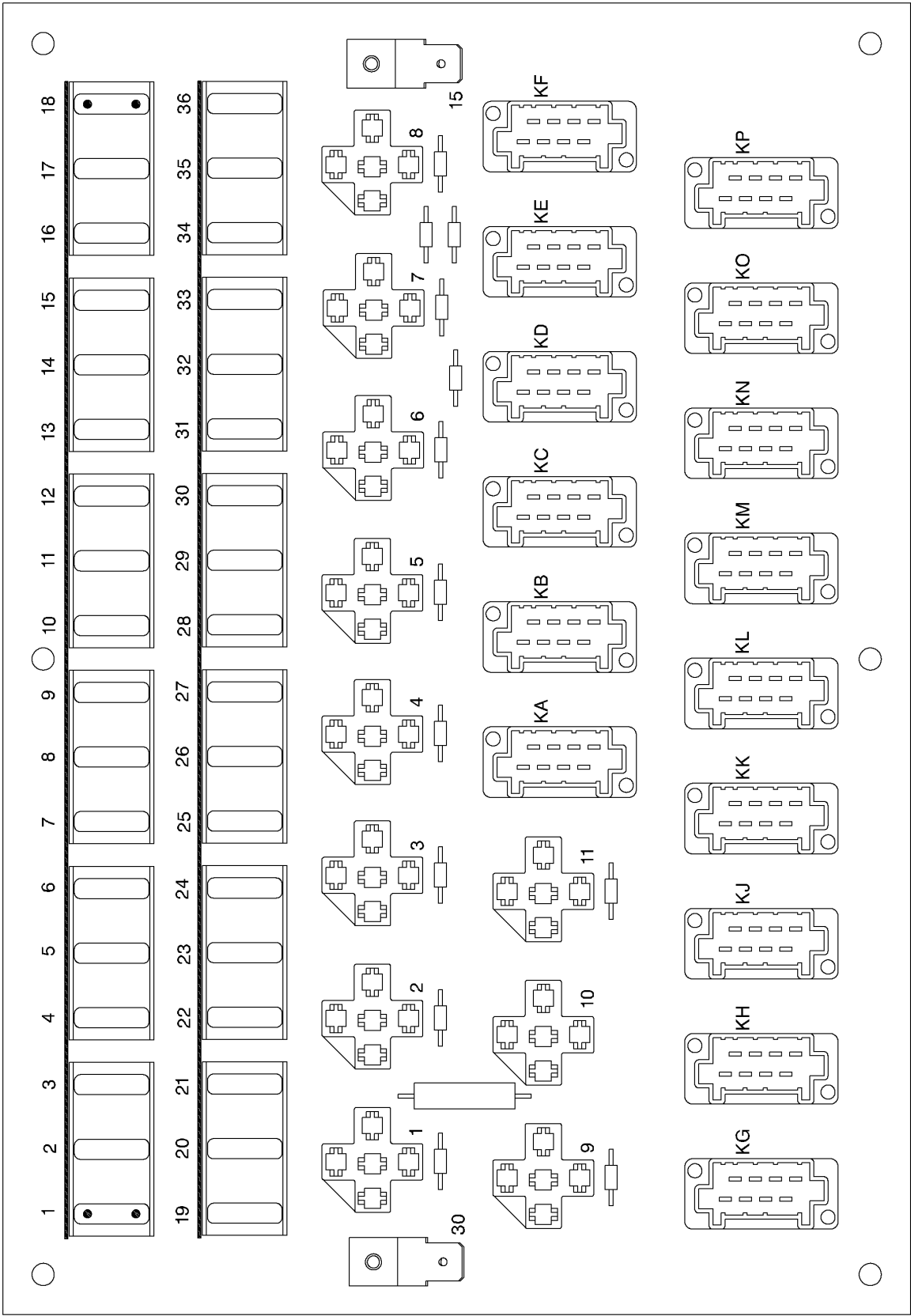
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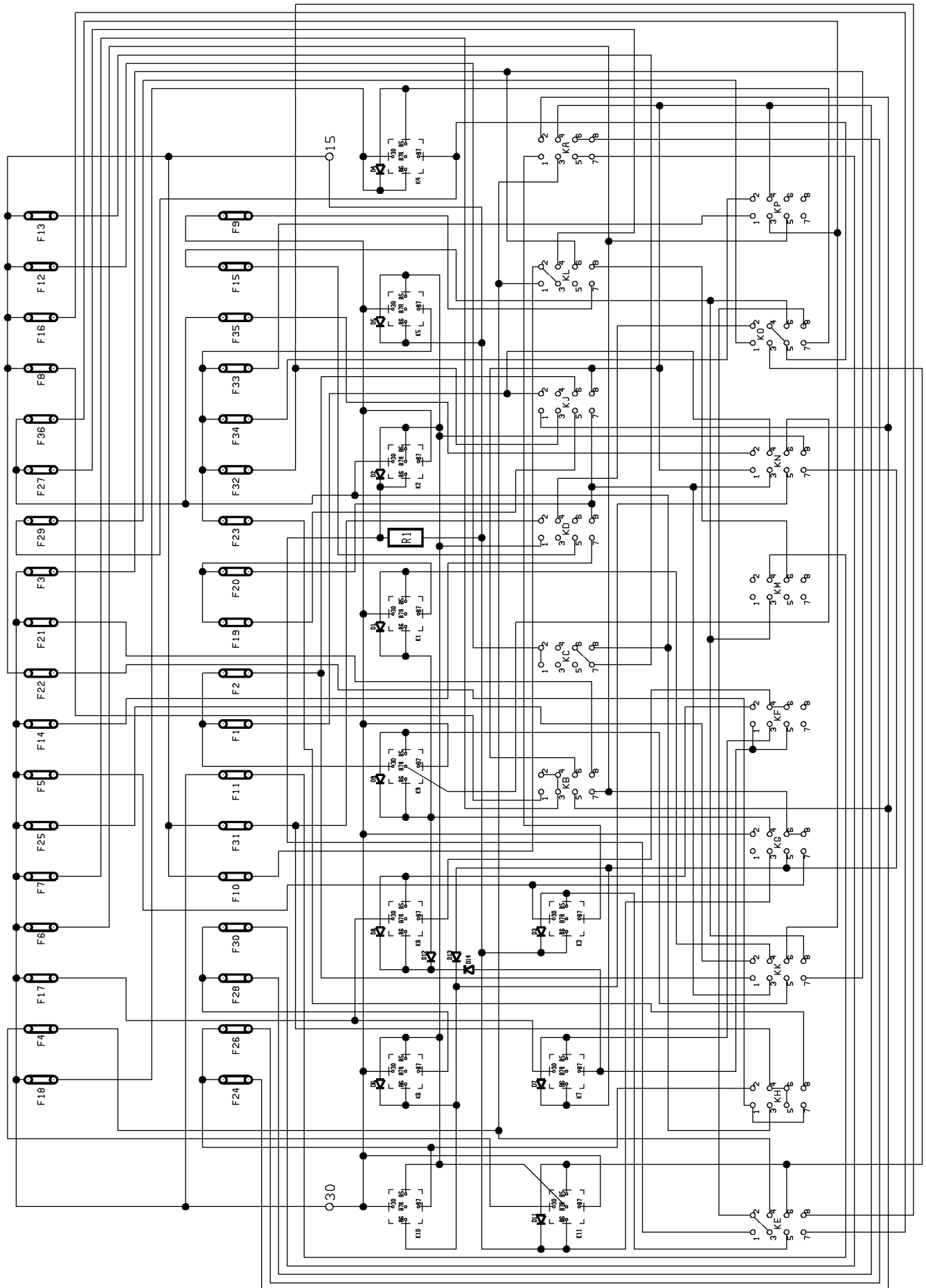


1469



Circuit board (32) electrical centre





Fuses on circuit board (32) electrical centre

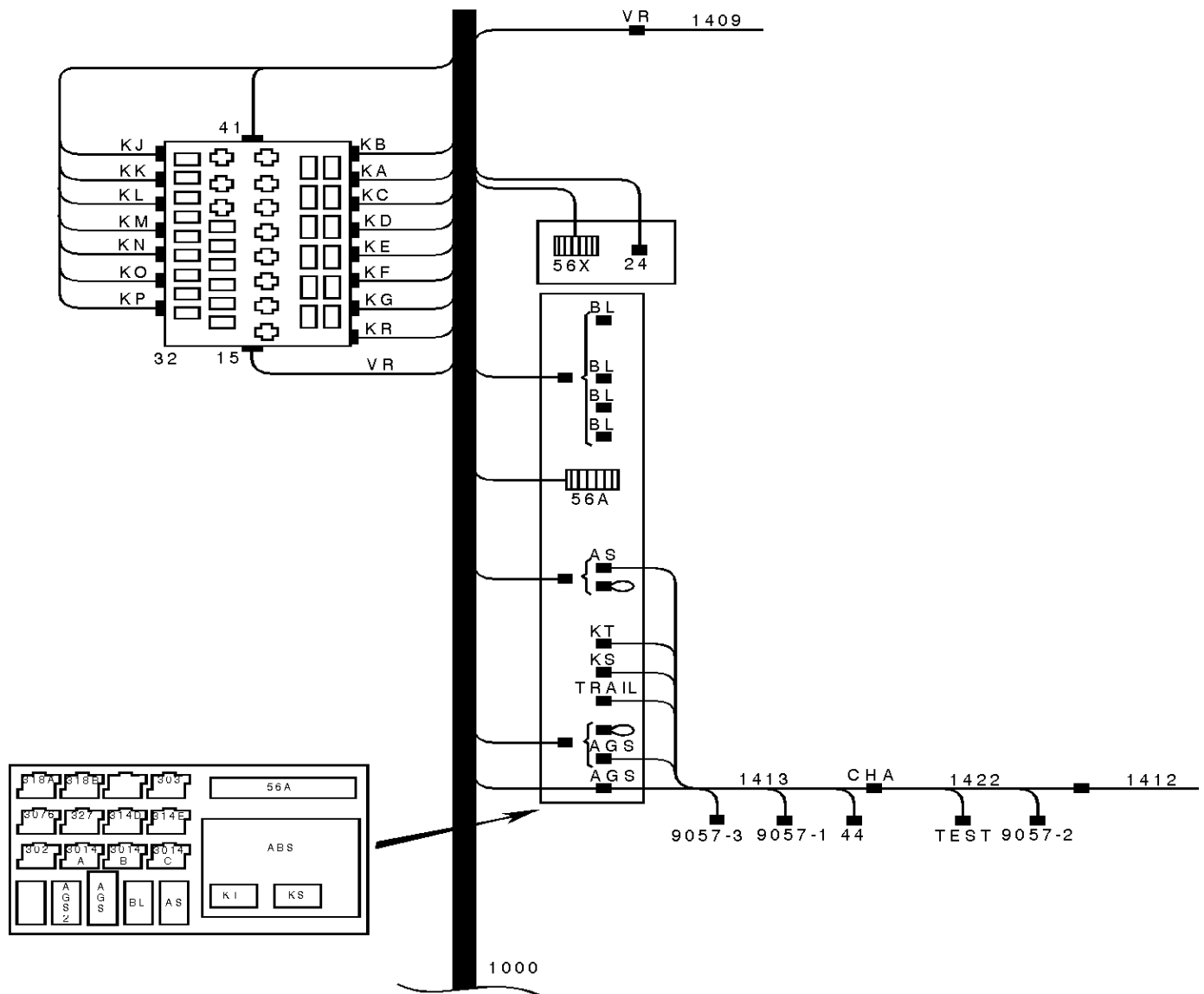
F1	Dipped beam, left	CE49,OA45	F19	Full beam, left	CE51
F2	Dipped beam, right	CE53,OA52	F20	Full beam, right	CE55
F3	Preheating, radio	AA8,OA38	F21	Bunk light, 24 V socket	ER47
F4	Brake light	CK10,OA17	F22		XD14
F5	Reversing light, loading light	EA9,OA28	F23	Air suspension, bogie lift	XD6
F6	Interior light, radio, door lock	ER16,OA23	F24	Parking light, left	CE19
F7	Direction indicator	CN10	F25	Full beam, spot light	CE64
F8	Direction indicator, instruments "15"	CN7	F26	Parking light, trailer, left	CE22
F9	Tachograph, clock, hazard warning lights	NB4	F27	Air dryer	HK4
F10	Air conditioning, fan motor ..	HA7	F28	Parking light, right, instrument light	CE26
F11	Automatic transmission	LO25	F29	EDC, UI "15"	VL18,BN30
F12	Windscreen wiper, windscreen washer	GA30	F30	Parking light, trailer, right	CE24
F13	Headlight wiper, headlight washer	GA16	F31	Diff. lock, power take-off, air conditioning	LG6
F14	Spotlight	CH5	F32	Horn, optional equipment	XD25
F15	Preheating	AA35	F33	El. window winder, driver's side ..	XD10
F16	Cigarette lighter	EV8	F34	El. operated mirrors, el. window winder, passenger, central lock ..	XD14
F17	Fog lights, front and rear	CG6	F35	DIM-DIP	CE41
F18	EDC, UI	BN24	F36	El. heated mirrors, el. heated seat	HD4

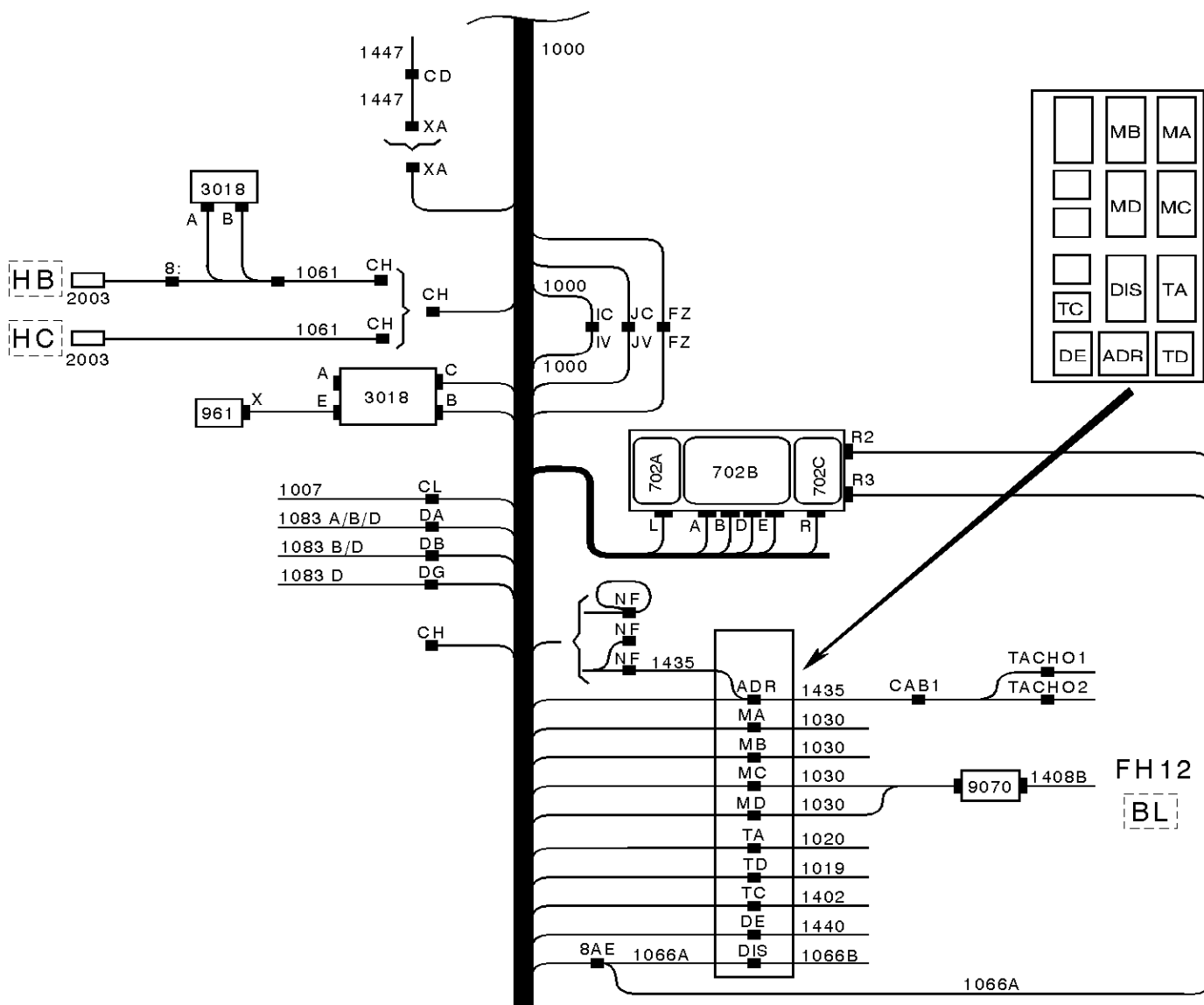
Relays on circuit board (32) electrical centre

301	Relay, fog lights	CG5	309	Relay, parking lights	CE9
302	Relay spot lights	CE60	315	Relay, starting switch	XD4
305	Relay, reversing lights	EA5	375	Relay, day running lights	CE33
306	Relay, full beams	CE28	3005	Alternator-controlled relay	AA26
308	Relay, brake lights	CK5			

Cable harnesses

1000	Cable harness, instruments
1006	Cable harness, cab, upper
1007	Cable harness, cab, lower
1017	Cable harness, parking heater, ADR
1019	Cable harness, windscreen wiper motor
1020	Cable harness, cowl
1030	Cable harness, engine
1035	Cable harness, diff. lock
1040	Cable harness, frame
1042	Cable harness, tail lights
1056	Cable harness, air dryer
1057	Cable harness, chassis
1059	Cable harness, switch, extra
1061	Cable harness, parking heater, cab
1062	Cable harness, parking heater, frame
1063	Cable harness, trailer connection
1066 (A-B)	Cable harness, Driver Information System (DIS)
1067	Cable harness, kneeling
1072	Cable harness, air suspension
1083 C	Cable harness, door
1402	Cable harness, extra components
1407	Cable harness, EDC/cab
1408	Cable harness, EDC/engine
1409	Cable harness, retarder - cab
1412	Cable harness, Geartronic — gearbox
1413	Cable harness, Geartronic — cab
1422	Cable harness, Geartronic — chassis
1433 (A-B)	Cable harness, bogie lift — locking, 3rd axle
1435	Cable harness, battery master switch
1440	Cable harness, el. operated rearview mirror
1468	Cable harness, water separator
1469	Cable harness, fuel filter heater





List of components

24	Connector socket, diagnostics (BL29,BN12)	111 P	Switch, window winder (KA10)
30 A	Battery (AA6)	111 P1	Switch, window winder (ZA32)
30 A	Battery (ZD4)	112	Switch, air conditioning (HA16)
30 B	Battery (AA6)	112	Switch, air conditioning (HA7)
30 A	Battery (ZD4)	112	Switch, air conditioning (ZA40)
34	Connector (AA4)	112 ATC	Switch, air conditioning (ZA44)
34	Connector (ZD21)	116 A	Switch, interior light (ER36, ZA22,)
36	Connector, tail lamp junction box (CE22)	116 B	Switch, interior light (ER27, ZA32)
36	Connector, tail lamp junction box (CE24)	118	Switch, fan (HA11)
36	Connector, tail lamp junction box (CE42)	119	Switch, windscreen wiper (GA25)
36	Connector, tail lamp junction box (CG19)	123	Switch, heated rearview mirror (HG12, ZA26)
36	Connector, tail lamp junction box (CG21)	125	Switch, exhaust brake (BL58)
36	Connector, tail lamp junction box (CK15)	125	Switch, exhaust brake (BN8, ZA44)
36	Connector, tail lamp junction box (CK18)	126	Switch, diff. lock wheels, rear (LG14)
36	Connector, tail lamp junction box (CN12)	127	Switch, diff. lock inter axles (LG6)
36	Connector, tail lamp junction box (CN17)	132	Switch, roof sign light (EJ4)
36	Connector, tail lamp junction box (CN5)	132	Switch, roof sign light (EK4)
36	Connector, tail lamp junction box (CN7)	133	Switch, bogie lift (EJ4)
36	Connector, tail lamp junction box (EA13)	133	Switch, bogie lift (MA5)
36	Connector, tail lamp junction box (OA6)	133	Switch, bogie lift (MD4)
36	Connector, tail lamp junction box (XA10)	133	Switch, bogie lift (MP53)
36	Connector, tail lamp junction box (XA23)	133	Switch, bogie lift (MQ46)
36	Connector, tail lamp junction box (XA6)	133	Switch, bogie lift (MR42)
41	+ "30" terminal, electrical centre (AA4)	133	Switch, bogie lift (MS47)
41	+ "30" terminal, electrical centre (ZD21)	133	Switch, bogie lift (MX50)
42	Joint sleeve	133	Switch, bogie lift (MY43)
44	Circuit board, gear lever carrier, Geartronic (LO36)	133	Switch, bogie lift (ZA50)
54	Fuse holder, 4-unit (CG21)	133	Switch, bogie lift (LJ8)
56 A	Fuse holder, 6-unit (XA19)	144	Switch, battery master switch (AA3)
56 X	Fuse holder, 6-unit (XA7)	144	Switch, battery master switch (ZA42)
77	Plug socket, 7-unit (CE42, ZA12)	144	Switch, battery master switch (ZD10)
77	Plug socket, 7-unit (CE24)	147	Switch, direction indicators (CN7)
77	Plug socket, 7-unit (CE42)	149	Switch, horn (FA6)
77	Plug socket, 7-unit (CN5)	149	Switch, horn (ZA54)
77	Plug socket, 7-unit (CK18)	150	Switch, starting switch (AA11)
77	Plug socket, 7-unit (CN7)	157	Switch, air horn (FA10, ZA54)
77	Plug socket, 7-unit (CE24)	174	Switch, lock, seat belt (KD9)
77	Plug socket, 7-unit (CG21)	176	Switch, SPLIT (LO56)
78	Extra plug socket, 7-unit (CE40)	179	Switch, 3rd axle lock (LJ28)
78	Extra plug socket, 7-unit (OA6)	179	Switch, 3rd axle lock (LL10)
78	Extra plug socket, 7-unit (EA13)	180	Switch, emergency switch (ZD44)
78	Extra plug socket, 7-unit (XA6)	1105	Switch, level control, headlights (PA10, ZA46)
78	Extra plug socket, 7-unit (XA23)	1107	Switch, door lock (KG8, ZA30)
78	Extra plug socket, 7-unit (XA10)	1123	Switch, air evacuation (MQ54)
78	Extra plug socket, 7-unit (CG19)	1123	Switch, air evacuation (MV10)
79	Plug socket, ABS (OA12)	1123	Switch, air evacuation (MW8)
79	Plug socket, ABS (OA15)	1132 D	Switch, el. operated rearview mirror (HH4, ZA28)
79	Plug socket, ABS (OA21)	1132 P	Switch, el. operated rearview mirror (HH10, ZA28)
79	Plug socket, ABS (OA23)	1134	Switch, reverse warner
79	Plug socket, ABS (OA3)	1135	Switch, cruise control (BL14)
100	Switch, headlights (CE36)	1135	Switch, cruise control (BN49)
100	Switch, headlights (ZA58)	1142	Switch, engine diagnostics (NA19,ZA30)
101	Switch, full beams and dipped beams (CE61)	1142	Switch, engine diagnostics (NG18)
101	Switch, full beams and dipped beams (ZA40)	1146	Switch, snooze function/radio (JA17)
102	Switch, fog lights (CG21)	1147	Switch, cab tilt pump (HP5)
102	Switch, fog lights (ZA26)	1147 B	Switch, cab tilt pump (HP17)
103	Switch, fog lights (CH10)	1148	Switch, storage compartment lighting (EV4)
103	Switch, spot lights (CH28)	1149	Switch, pto (LD5)
103	Switch, spot lights (ZA50)	1149 1	Switch, pto (LE5, ZA48)
104	Switch, loading light (ED9)	1149 2	Switch, pto (LE17, ZA48)
104	Switch, loading light (ZA28)	1150	Switch, fuel filter heater (HM7)
109	Switch, hazard warning lights (CN17)	200	Break contact, warning light, parking brake (NB41)
109	Switch, hazard warning lights (ZA26)	205 L	Break contact, interior light (ER5, ZE35)
111 D	Switch, window winder (ZA32)	205 R	Break contact, interior light (ER17)
111 D1	Switch, window winder (KA5)	207	Closing contact, indicator light, diff. lock, wheels (LG18)
111 D2	Switch, window winder (KA11)		

207 R	Closing contact, indicator light, diff. lock, wheels (LG14)	315	Relay, starting switch (XD3)
211	Closing contact, indicator light, bogie lift (MA16)	317	Relay, headlight wiper (GA16)
211	Closing contact, indicator light, bogie lift (MD27)	318 A	Relay, exhaust pressure governor (BN4)
214	Closing contact, indicator light, splitter (NB31)	318 B	Relay, exhaust pressure governor (BN4)
216 A	Closing contact, brake lights (CK8)	318 C	Relay, exhaust pressure governor (CL15)
216 B	Closing contact, brake lights (CK4)	323	Relay, flasher unit (CN3)
216 C	Closing contact, brake lights (CK4)	324	Relay, range inhibitor (AA53)
217	Closing contact, reversing lights (EA4)	326 X	Relay, extra fuse holder (XA3)
218	Break contact, exhaust pressure governor (AA45)	327	Relay, heated rearview mirror (HG4)
219	Closing contact, indicator light, air cleaner (NB33)	343	Relay, fog lights, rear (CG12)
223	Slip contact, horn (FA7)	345	Relay, start inhibitor (LO29)
228 L	Closing contact, cab lock (NB35)	345 B	Relay, start inhibitor (LO33)
228 R	Closing contact, cab lock (NB37)	348 A	Relay, fan (HC33)
238	Closing contact, thermal (BN64)	348 B	Relay, fan (HC32)
239	Break contact, thermal (BL62)	356	Relay, dipped beams (CE40)
258	Break contact, thermal, bogie lift (MA22, MD32)	364	Operating controls, bogie lift (MA15)
2002	Flame sensor, parking heater (HB21, HC13)	364	Operating controls, bogie lift (MD17)
2003	Thermostat, parking heater (HB5)	379	Relay, injection pump (BL25)
2003	Thermostat, parking heater (HC20)	379	Relay, injection pump (BN22)
2004	Break contact, lighting luggage compartment (ER54)	391	Relay, emergency switch (ZD49)
2007	Break contact, clutch pedal (BN25)	3001	Time relay, air-operated bogie (MP44)
2008	Break contact, brake pedal (BL21)	3001	Time relay, air-operated bogie (MQ36)
2008	Break contact, brake pedal (BN35)	3001	Time relay, air-operated bogie (MR33)
2009	Break contact, low split (LO34)	3001	Time relay, air-operated bogie (MS39)
2010	Break contact, high split (LO32)	3001	Time relay, air-operated bogie (MX42)
2011	Break contact, neutral (LO28)	3001 B	Time relay, air-operated bogie (MY34)
2012	Break contact, gear engaged (LO26)	3001 B	Time relay, air-operated bogie (MQ59)
2013	Break contact, range OK (LO31)	3001 B	Time relay, air-operated bogie (MW20)
2014	Break contact, high range (LO29)	3001 B	Time relay, air-operated bogie (MY50)
2018	Break contact, oil pressure, power steering (NC22, NJ17)	3004	Relay, parking heater (HB24)
2062	Closing contact, air evacuation (MV5)	3004	Relay, parking heater (ZE24)
2062	Closing contact, air evacuation (MW28)	3005	Alternator-controlled relay (AA27)
2064	Closing contact, clutch disengaged (LO35)	3014 A	Relay, level control (MN18)
2067	Closing contact, indicator light/air pressure (LO11)	3014 A	Relay, level control (MP21)
301	Relay, fog lights (CG5)	3014 A	Relay, level control (MQ15)
302	Relay, spot lights (CH25)	3014 A	Relay, level control (MS20)
303	Relay, loading light (ED6)	3014 A	Relay, level control (MX19)
305	Relay, reversing lights (EA8)	3014 A	Relay, level control (MY15)
306	Relay, full beams (CE55)	3014 B	Relay, level control (MN23)
307	Relay, dipped beams (CE48)	3014 B	Relay, level control (MP26)
308	Relay, brake lights (CK8)	3014 B	Relay, level control (MQ19)
308 B	Relay, brake lights (CL4)	3014 B	Relay, level control (MR15)
308 B	Relay, brake lights (OA7)	3014 B	Relay, level control (MS24)
309 L	Relay, parking lights (CE19)	3014 B	Relay, level control (MX24)
309 R	Relay, parking lights (CE26)	3014 B	Relay, level control (MY19)
312	Relay, starting heater (AA35)	3014 C	Relay, level control (MN27)
313	Relay, bogie lift motor (MA23)	3014 C	Relay, level control (MP31)
313	Relay, bogie lift motor (MD33)	3014 C	Relay, level control (MQ24)
314 A	Relay, bogie lift (LJ7)	3014 C	Relay, level control (MR20)
314 B	Relay, bogie lift (LJ12)	3014 C	Relay, level control (MS29)
314 D	Relay, bogie lift (LJ12)	3014 C	Relay, level control (MX28)
314 D	Relay, bogie lift (MD9)	3014 C	Relay, level control (MY24)
314 D	Relay, bogie lift (MX36)	3016	Relay, control device, bogie lift with axle-load limiter (MD25)
314 D	Relay, bogie lift (MP42)	3017	Time relay, axle-load limiter (MD16)
314 D	Relay, bogie lift (MQ36)	3018	Relay box, air suspension (HB6)
314 D	Relay, bogie lift (MY41)	3018	Relay box, air suspension (HC5)
314 D	Relay, bogie lift (MR32, MV10)	3018	Relay box, air suspension (ZA56)
314 D	Relay, bogie lift (MX32)	3018	Relay box, air suspension (ZE6)
314 D	Relay, bogie lift (MW8)	3023	Relay, information ABS (CL9)
314 E	Relay, bogie lift (MP45)	3024 A	Relay, solenoid control valve, ABS (OA44)
314 E	Relay, bogie lift (MR41)	3024 B	Relay, solenoid control valve, ABS (OA51)
314 E	Relay, bogie lift (MQ41)	3025	Relay, indicator lamp, ABS (OA34)
314 E	Relay, bogie lift (MW23)	3061	Relay, retarder (BL60)
314 F	Relay, bogie lift (MQ53)	3066	Combination relay, several functions (AA35)
314 G	Relay, bogie lift (MQ60)	3066	Combination relay, several functions (GA26)
		3070 A	Relay, locking, 3rd axle (LJ23)
		3070 A	Relay, locking, 3rd axle (LL5)

3070 B	Relay, locking, 3rd axle (LJ32)	501	Indicator lamp, direction indicator, trailer 1 (NB45)
3070 B	Relay, locking, 3rd axle (LL13)	503	Warning light, oil pressure, engine (NA23)
3073	Relay, Geartronic 1 (LO25)	504	Indicator light, full beams (NB42)
3074	Relay, Geartronic 2 (LO21)	505	Warning light, battery charging (NA22, NJ14)
3075	Relay, central lock (KG3)	507	Warning light, service brakes (NC13, NJ19))
3075	Relay, central lock (KH8)	508	Warning lamp, parking brake (NB40)
3076	Relay, adjustable seat (HE5)	510	Indicator light, diff. lock, rear wheels (NB26)
3101	Relay, interior lighting (ER13)	511	Indicator light, diff. lock, inter axles (NB37)
3102	Relay, cab tilt pump (HP15)	513	Indicator light, bogie lift (NC6, NJ5)
3103	Relay, fuel filter heater (HM7)	514	Indicator light, overdrive (NB31)
400 L	Bulb, full beams and dipped beams (CE49)	524	Indicator light, air cleaner (NB32)
400 R	Bulb, full beams and dipped beams (CE53)	528	Indicator light, preheating (NA11, NG9)
401 L	Bulb, fog lights (CG6)	536	Indicator light, rear fog light (NC10, NJ8)
401 R	Bulb, fog lights (CG8)	547	Central warning for indicator and warning lights (NB49)
402 L	Bulb, spot lights (CH23)		
402 L	Bulb, spot lights (CH5)	550	Warning light, cab lock (NB36)
402 R	Bulb, spot lights (CH25)	554	Warning light, coolant temperature (NA6)
402 R	Bulb, spot lights (CH6)	555	Warning light, coolant level (NB34)
403	Bulb, loading light (ED6)	5008	Indicator light, air suspension, manual position (NC25, NJ17)
404	Bulb, fifth wheel light (ED3)		
404 CB	Bulb, fifth wheel light (ED7)	5009	Indicator light, vehicle, ABS (NB51)
405 L	Bulb, reversing lights (EA8)	5010	Indicator light, trailer, ABS (NB52)
405 R	Bulb, reversing lights (EA9)	5017	Indicator light, trailer, ABS information (NB54)
408	Bulb, parking light, left front (CE14)	5022	Indicator light, retarder (NG19)
409	Bulb, parking light, right front (CE32)	5034	Indicator light, washer fluid level (NB39)
410	Bulb, brake light, left (CK10)	5035	Warning light, power steering, circuit 2 (NC23, NG20)
411	Bulb, brake light, right (CK12)		
412	Bulb, tail light, left (CE18)	600	Solenoid valve, exhaust brake (ZD51)
413	Bulb, tail light, right (CE26)	600 A	Solenoid valve, exhaust brake (BL58)
414	Bulb, side marker light, left front (CE12)	600 A	Solenoid valve, exhaust brake (BN5)
415	Bulb, side marker light, right front (CE34)	600 B	Solenoid valve, exhaust brake (BL60)
416	Bulb, side marker light, left centre (CE17)	600 B	Solenoid valve, exhaust brake (BN10)
417	Bulb, side marker light, right centre (CE29)	601	Solenoid valve, diff. lock, rear wheels (LG7)
420	Bulb, position light, roof, left (CE37)	602	Solenoid valve, diff. lock inter axles (LG5)
421	Bulb, position light, roof, right (CE9)	603	Solenoid valve, engine stop (BN58)
422	Bulb, direction indicator, left front (CN9)	606	Solenoid valve, bogie lift, up (MA5)
423	Bulb, direction indicator, right front (CN10)	606	Solenoid valve, bogie lift, up (MD5)
426	Bulb, direction indicator, left rear (CN14)	606 NC	Solenoid valve, bogie lift, up (LJ13)
427	Bulb, direction indicator, right rear (CN15)	606 NO	Solenoid valve, bogie lift, up (LJ8)
429	Bulb, cigarette lighter lighting (EV10)	614	Solenoid valve, range inhibitor (AA46)
433 L	Bulb, instep light (ER4)	625	Solenoid valve, air horn (FA12)
433 R	Bulb, instep light (ER19)	626	Solenoid valve, exhaust pressure governor (AA41)
434 C	Bulb, interior light (ER31)	646	Solenoid valve, 3rd axle lock (LJ28)
434 L	Bulb, interior light (ER8)	646	Solenoid valve, 3rd axle lock (LL10)
434 R	Bulb, interior light (ER13)	648	Solenoid valve, air-operated bogie (MP53)
435 L	Bulb, bunk light (ER23)	648	Solenoid valve, air-operated bogie (MQ37)
435 LL	Bulb, bunk light (ER40)	648	Solenoid valve, air-operated bogie (MR43)
435 LU	Bulb, bunk light (ER37)	648	Solenoid valve, air-operated bogie (MS49)
435 R	Bulb, bunk light (ER27)	650	Windscreen wiper motor (GA29)
435 RL	Bulb, bunk light (ER44)	651	Windscreen washer motor (GA3)
435 RU	Bulb, bunk light (ER47)	652 L	Headlight wiper motor (GA15)
437 C	Bulb, identification light, front (CE3)	652 R	Headlight wiper motor (GA19)
437 L	Bulb, identification light, front (CE3)	653	Headlight washer motor (GA9)
437 R	Bulb, identification light, front (CE3)	654	Starter motor (AA10)
440	Bulb, heater control light (HA21)	654	Starter motor (ZD16)
450	Bulb, roof sign light (ZA30)	656	Bogie lift motor (MA23)
451	Bulb, rear fog light, left (CG13)	656	Bogie lift motor (MD33)
452	Bulb, rear fog light, right (CG15)	657	Fan (heater) (HA17)
468	Fluorescent tube, roof sign light (EJ14)	660	Alternator with charging regulator (AA21)
468 L	Fluorescent tube, roof sign light (EK14)	660	Alternator with charging regulator (ZD21)
468 R	Fluorescent tube, roof sign light (EK14)	661 D	Window winder motor (KA5)
4052 L	Combination lamp, rear (ZA14)	661 P	Window winder motor (KA9)
4052 R	Combination lamp, rear (ZA18)	6003	Solenoid valve, level control (MN15)
4057 L	Lighting, storage compartment (ER55)	6003	Solenoid valve, level control (MN22)
4064	Bulb, storage tray light (EV4)	6003	Solenoid valve, level control (MP18)
4065	Bulb, ashtray light (EV13)	6003	Solenoid valve, level control (MP25)
4065	Bulb, ashtray light (ZA14)	6003	Solenoid valve, level control (MP42)
500	Indicator light, direction indicator, tractor (NB43)	6003	Solenoid valve, level control (MQ14)

6003	Solenoid valve, level control (MQ19)	754 F	Pressure sensor, air (NJ22)
6003	Solenoid valve, level control (MQ32)	754 R	Pressure sensor, air (NJ25)
6003	Solenoid valve, level control (MR15)	756	Temperature sensor, coolant (AA40)
6003	Solenoid valve, level control (MR32)	756 B	Temperature sensor, coolant (BL22)
6003	Solenoid valve, level control (MS16)	756 B	Temperature sensor, coolant (BN39)
6003	Solenoid valve, level control (MS24)	757	Fuel gauge sensor (NC15)
6003	Solenoid valve, level control (MS36)	757	Fuel gauge sensor (NJ11)
6003	Solenoid valve, level control (MX16)	759	Level indicator, coolant (NB43)
6003	Solenoid valve, level control (MX23)	7008	Air-operated horn (FA3)
6003	Solenoid valve, level control (MX36)	7009	Alarm clock/timer (JA8)
6003	Solenoid valve, level control (MY14)	7052	Sensor, speedometer (LO23)
6003	Solenoid valve, level control (MY19)	7052	Sensor, speedometer (NB20)
6003	Solenoid valve, level control (MY32)	7053	Inductive sensor, bogie lift (MD9)
6004	Solenoid valve, level control (MN15)	7053	Sensor, bogie lift (MN29)
6004	Solenoid valve, level control (MN22)	7053	Sensor, bogie lift (MP32)
6004	Solenoid valve, level control (MP18)	7053	Sensor, bogie lift (MQ25)
6004	Solenoid valve, level control (MP25)	7053	Sensor, bogie lift (MR21)
6004	Solenoid valve, level control (MP42)	7053	Sensor, bogie lift (MS30)
6004	Solenoid valve, level control (MQ14)	7053	Sensor, bogie lift (MX30)
6004	Solenoid valve, level control (MQ19)	7053	Sensor, bogie lift (MY25)
6004	Solenoid valve, level control (MQ32)	7056	Sensor, oil temperature, engine (NJ29)
6004	Solenoid valve, level control (MR15)	7057 LF	Sensor, pole wheel, ABS (OA34)
6004	Solenoid valve, level control (MR32)	7057 LR	Sensor, pole wheel, ABS (OA48)
6004	Solenoid valve, level control (MS16)	7057 RF	Sensor, pole wheel, ABS (OA41)
6004	Solenoid valve, level control (MS24)	7057 RR	Sensor, pole wheel, ABS (OA55)
6004	Solenoid valve, level control (MS36)	7058	Sensor, inner temperature (ZE5)
6004	Solenoid valve, level control (MX16)	7059	Sensor, outer temperature (NJ36)
6004	Solenoid valve, level control (MX23)	7061	Sensor, oil pressure (NA15)
6004	Solenoid valve, level control (MX36)	7061	Sensor, oil pressure (NG10)
6004	Solenoid valve, level control (MY14)	7065	Sensor, accelerator pedal (BL4)
6004	Solenoid valve, level control (MY19)	7065	Sensor, accelerator pedal (BN37)
6004	Solenoid valve, level control (MY32)	7065-2	Sensor, accelerator pedal (LO15)
6008	Water valve, parking heater (HC29)	7066	Sensor, turbo pressure (BL28)
6013	Solenoid control valve, ABS (OA37)	7066	Sensor, turbo pressure (BN42)
6013	Solenoid control valve, ABS (OA44)	7067	Sensor, intake air temperature, engine (BL16)
6013	Solenoid control valve, ABS (OA58)	7067	Sensor, intake air temperature, engine (BN34)
6022A L	Solenoid valve, air evacuation (MW8)	7068	Sensor, clutch position (LO6)
6022A R	Solenoid valve, air evacuation (MW13)	7069	Sensor, battery charging (NJ32)
6022B L	Solenoid valve, air evacuation (MW20)	800	Starting heater (AA33)
6022B R	Solenoid valve, air evacuation (MW24)	802 L	Heated rearview mirror (HG4)
6022L	Solenoid valve, air evacuation (MV10)	802 R	Heated rearview mirror (HG7)
6022R	Solenoid valve, air evacuation (MV15)	803 L	Heated seat (HD4)
6024	Solenoid valve, air evacuation (LD5)	803 R	Heated seat (HD10)
6024 A	Solenoid valve, air evacuation (LE5)	804	Cigarette lighter (ER50)
6024 B	Solenoid valve, pto (LE17)	804	Cigarette lighter (EV8)
6041	Solenoid valve, gear lever carrier (LO58)	805	Rheostat (XD18)
6048	Solenoid valve body, gearbox (LO38)	810	Heated air dryer (HK4)
6049	Solenoid valve body, clutch cylinder (LO55)	812 D	El. operated rearview mirror (HH3)
6054	Fuel pump, parking heater (HB2)	812 P	El. operated rearview mirror (HH10)
6054	Fuel pump, parking heater (HC2)	850	Horn (FA7)
6054	Fuel pump, parking heater (ZE2)	8001	Inductor, sign lighting (EJ8)
6056	Motor level control, headlights (PA10)	8001	Inductor, sign lighting (EK8)
6056	Motor, level control, headlights (PA4))	8006	Air dryer with time relay (HK7)
6058 D	Motor, door lock (KH5)	8016	Fuel filter heater (HM14)
6058 P	Motor, door lock (KG8)	8017	Water separator (HM22)
6058 P	Motor, door lock (KH13)	900	Radio (JA29)
6070	Motor, cab tilt pump (HP16)	900	Radio (JA8)
6071	Injection pump, EDC (BN46)	901	Voltage converter (JA27)
6072	Unit injectors (BL37)	901 B	Voltage converter (EX4)
702 A	DIS (NA17)	901 C	Voltage converter (EX10)
702 A	DIS (NG19)	901 R	Voltage converter (JA9)
702 B	DIS (NB15)	902 LD	Loudspeaker (JA12)
702 B	DIS (ZD29)	902 LD	Loudspeaker (JA33)
702 C	DIS (NJ5)	902 LF	Loudspeaker (JA27)
753	Engine, speed sensor (LO20)	902 LF	Loudspeaker (JA6)
753 A	Engine speed sensor, flywheel (BL4)	902 LR	Loudspeaker (JA18)
753 B	Sensor, cylinder identification, camshaft (BL10)	902 RD	Loudspeaker (JA15)
754	Pressure sensor, air (NJ39)	902 RD	Loudspeaker (JA36)

902 RF	Loudspeaker (JA30)	903 LD	Diode (MP50)
902 RF	Loudspeaker (JA9)	903 LD	Diode (MQ42)
902 RR	Loudspeaker (JA21)	903 LD	Diode (MR39)
903	Diode (BL60)	903 LD	Diode (MW4)
903	Diode (BL64)	903 LD	Diode (MX40)
903	Diode (CE40)	903 LD	Diode (MY47)
903	Diode (CH27)	903 LE	Diode (MP55)
903	Diode (CH27)	903 LE	Diode (MQ47)
903	Diode (CH29)	903 LE	Diode (MR44)
903	Diode (CH6)	903 LE	Diode (MY21)
903	Diode (FA12)	903 LF	Diode (MQ33)
903	Diode (GA21)	903 LG	Diode (MQ64)
903	Diode (HM3)	903 LH	Diode (MQ36)
903	Diode (HP2)	903A	Diode (ZD49)
903	Diode (JA14)	952	Magnetic clutch, air conditioning (HA14)
903	Diode (LE10)	961	Engine/cab heater (HB8)
903	Diode (LE12)	961	Engine/cab heater (HC7)
903	Diode (LJ28)	961	Engine/cab heater (ZE8)
903	Diode (LL10)	971 L	Lock, seat belt (KD4)
903	Diode (LO63)	971 R	Lock, seat belt (KD9)
903	Diode (MA2)	9001	Pressure monitor, bogie lift (LJ5)
903	Diode (MD2)	9001	Pressure monitor, bogie lift (MP49)
903	Diode (ZD51)	9001	Pressure monitor, bogie lift (MQ41)
903 302	Diode (CH26)	9001	Pressure monitor, bogie lift (MR38)
903 302	Diode (CH8)	9001	Pressure monitor, bogie lift (MS43)
903 LA	Diode (MN16)	9001	Pressure monitor, bogie lift (MX46)
903 LA	Diode (MP19)	9001	Pressure monitor, bogie lift (MY39)
903 LA	Diode (MQ13)	9001 B	Pressure monitor, bogie lift (MQ50)
903 LA	Diode (MR10)	9008	Control unit, ABS (OA34)
903 LA	Diode (MS18)	9009	Control box, air suspension, rigids (MN2)
903 LA	Diode (MX17)	9009	Control box, air suspension, rigids (MP2)
903 LA	Diode (MY13)	9009	Control box, air suspension, rigids (MQ2)
903 LB	Diode (MP36)	9009	Control box, air suspension, rigids (MS2)
903 LB	Diode (MQ28)	9009	Control box, air suspension, rigids (MX2)
903 LB	Diode (MR25)	9009	Control box, air suspension, rigids (MY2)
903 LB	Diode (MS34)	9012	Current limiter (ZD10)
903 LB	Diode (MX34)	9026 F	Socket, 12 V (EX7)
903 LB	Diode (MY28)	9026 R	Socket, 12 V (EX13)
903 LC	Diode (MP39)	9027	Control unit, Driver Information System (NJ47)
903 LC	Diode (MQ30)	9057	Control unit, Geartronic (LO16)
903 LC	Diode (MR28)	9057 3	Control unit, Geartronic (LO2)
903 LC	Diode (MS37)		
903 LC	Diode (MX37)		
903 LC	Diode (MY31)		

Abbreviations

D	Driver	KHH	High cay cab
P	Passenger	ATC	Automatic air conditioning
C	Centre	BGT-19	Bogie load 19 tonnes
F	Front	BLF-F	Leaf springs, front
L	Lower	CU-HEAT	Cab heater
U	Upper	"EG"	EC-market
L	Left	HB3200	Wheelbase 3200 mm
R	Right	ID-ljus	ID-light
LR	Left rear	INFOSYST	Driver Information System
LF	Left front	KONVSYST	Standard information system
LL	Left lower	LVA	Load-volume adapted
LU	Left upper	Not HBS3200	Not wheelbase 3200 mm
RR	Right rear	Reostat	Rheostat
RF	Right front	"S"	Sweden + other markets
RL	Right lower	UFSKR	Without tachograph
RU	Right upper		
LH	Sleeper cab		
KH	Day cab		

Cable colour code

PU	Purple
GN	Green
Y	Yellow
W	White
BL	Blue
GR	Grey
SB	Black
BN	Brown
R	Red

LBN	Light-brown
OR	Orange
VO	Violet
P	Pink
I	Ivory
LBL	Light-blue

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

Feedback

One of our objectives is that workshop personnel should have access to correct and appropriate service manuals where it concerns fault tracing, repairs and maintenance of Volvo vehicles.

In order to maintain the high standards of our literature, your opinions and experience when using this manual would be greatly appreciated.

If you have any comments or suggestions, make a copy of this page, write down your comments and send them to us, either via telefax or mailing directly to the address listed below.

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Comments/proposals

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Concerns Service Manual:

VOLVO

Volvo Truck Corporation

Göteborg, Sweden