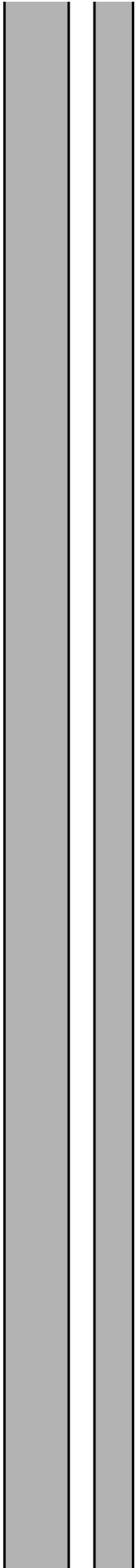


# 16:01-01

Issue 2 **en**

## **SCANIA**



# **Wiring diagram handbook**

**with list of components**

**For LHD and RHD trucks**

**1 585 347**

# Contents

General .....	1
ADR.....	2
List of components .....	4
Wiring diagrams .....	65
Connection diagram .....	66
Circuit diagram.....	68
Cable marking .....	71
Light bulbs.....	77
Location drawings .....	78

## General

This issue of the Wiring Diagram Handbook is applicable to both RHD and LHD chassis. All components of the electrical system are included in the list of components but some are missing from the component location drawings featured in the handbook. In regard to these components, please refer to the workshop booklet for the relevant equipment, such as ABS, for example.

The handbook's **List of components** contains details of all the components in the electrical system. These details cover:

- Component code
- Remarks (function, etc.)
- Reference to component location drawing
- Reference to wiring diagrams

See also "List of Components, Explanations" on page 5.

In the section on **Wiring Diagrams**, page 65, the difference between a circuit diagram and a connection diagram is explained as well as the uses of the different diagrams.

The **Connection Diagrams** section on page 66 covers all connection diagrams for basic electrical equipment as well as for optional equipment for the 4 series.

The **Circuit Diagrams, Basic electrical equipment** table on page 68 shows where different electrical functions (circuits) can be found in the circuit diagram. The table contains references to current paths (circuits) in the diagram.

The section entitled **Cable Markings** on page 71 explains the relationship between cable functions and markings.

A number of **Location Diagrams** show where the components are located in the vehicle. See page 78.

Note: The location of components on RHD chassis is the same as on LHD chassis except where cabs are concerned. The location of components inside and outside the cab is mirror-reversed on the LHD variant.

### **ADR**

ADR stands for European Agreement concerning the international carriage of **D**angerous goods by **R**oad. The intended purpose of the ADR is to ensure that the transportation of goods is carried out in such a way and by such vehicles that it neither causes road accidents nor aggravates their seriousness.

National laws have been passed in every country where the authorities issue detailed directives. The ADR regulation forms the basis of national legislation if the country in question is a signatory of the agreement. For complete and comprehensive rules, refer to the national authorities.

### **Regulations governing electrical equipment on ADR vehicles**

Regulations applicable to the electrical equipment in its entirety

#### **Cables**

Cables must be dimensioned so that overheating is prevented. The cable must be securely fastened and protected from stone damage, jolts and heat from the exhaust pipe.

#### **Batteries**

If the battery is not located under the bonnet, it must be securely fastened in a box of metal or other material of equivalent strength and with insulated inner walls. The box must be ventilated.

#### **Main battery switch**

Vehicles used for transporting flammable substances in tanks must be equipped with a switch located as close to the battery as possible. Controls for direct and remote operation of the switch should be mounted in the cab and outside the vehicle. Such controls must be easily accessible and clearly marked.

Regulations applicable to electrical equipment located behind the cab

#### **Cables**

Electric wiring should consist of cables, protected by seamless corrosion-resistant sheathing.

#### **Lighting**

Light bulbs with screw bases must not be used. Lamps which are not mounted in a protective recess in wall or roof must be protected from mechanical damage by a heavy-duty basket or wire-mesh grille.

## Scania's ADR vehicles

Scania's factory-fitted ADR vehicles incorporate the following technical features:

- A battery disconnecter, S40. Using this, the driver can cut off the vehicle's entire supply of electric power. The disconnecter is located at the rear of the cab on the driver's side. It can be operated either from inside the cab or outside it. Two versions of the ADR battery disconnecter are available: a single-pole version for LHD vehicles and a 2-pole version for RHD vehicles. The battery disconnecter is described in Component Manual 160611.
- A ventilated and internally insulated battery box. The battery terminals are protected by plastic covers.
- Heavy-duty insulation on cables in the chassis (not on cables in the cab).
- Sealed components on frame behind the cab.
- All earthing points on frame behind the cab are grouped at a grounding point underneath the cab.
- The tachograph is protected by a fused circuit. When the current is cut off by means of the battery disconnecter, a current limiter, E10, mounted in the battery box provides a weak current which is sufficient to power the tachograph.

## Two types of ADR electrical system

Two different types of electrical system occur on Scania ADR vehicles. One is a chassis-earthed system for LHD vehicles and the other a chassis-insulated system for RHD vehicles.

### Chassis earthed system

All earth cables behind the cab are routed and earthed in the frame under the cab. These vehicles are fitted with a single-pole current limiter.

### Chassis insulated system

All grounding points in the cab and on the chassis are insulated, i.e. connected to insulated terminal blocks. There are three exceptions to this where the ground cables are connected to the chassis:

- Fuel pick-up unit
- Coolant level sensor
- Horn relay

These components are earthed via a 315 mA fuse.

Chassis-insulated vehicles have a two-pole battery disconnecter.

## List of components

Code	Designation	Page
B	Make and break switches	6
C	Connectors	8
D	Diodes, resistors, potentiometers	28
E	Electronic control units	30
F	Fuses	32
G	Earth connections	35
H	Electrically heated apparatus	37
K	Diagnostics sockets	38
L	Lamps, lighting	38
M	Electric motors	43
N	Audio apparatus	44
O	Instruments	45
P	Power supply	45
R	Relays	46
S	Switches 9	52
T	Sensors, monitors	54
U	Aerials	57
V	Solenoid valves	58
W	Warning and indicator lamps	62

## Explanations

The list of components contains the following information:

1. Component code (B1)
2. Remarks. Designation and function (Brake lights switch).
3. Component location diagram. States the component location diagram where the component is shown (2, 5).
4. Connection diagram LHD, which begins on 16:02-0 (basic electrical equipment, LHD). Sheet No. (1) and coordinates (C8) are given.
5. Connection diagram RHD, which begins on 16:02-1 (basic electrical equipment, RHD). Sheet No. (1) and coordinates (C3) are given.
5. Circuit diagram RHD and LHD, for basic electrical equipment. The current path (circuit) number for the component is given.
6. Connection diagram for optional equipment, which begins on 16:04-. The diagram's last two digits are given (11).

Note: If there is no information, look in the booklet for the relevant equipment.

Example:

### B. Make and break switches

B	Remarks	Location drawing	F diagram LHD 16:02-0	F diagram RHD 16:02-1	Circuit diagram 16:03	F diagram equipment 16:04-
B1	Brake lights switch	2, 5	1-C8	1-C3	370	
						11

## Make and break switches

B	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
1	Brake lights switch, for EDC, Opticruise	2, 5	1-C8	1-C3	370	
4	End position sensor for A/C flap valve					11
5	End position sensor for A/C flap valve					11
6	Door switch, on driver's side	1	1-A8	1-B1	716	
7	Door switch, on passenger's side	1	4-F1	4-E8	713	
11	Differential lock, on rear axle 1	9	3-B2	3-A3		
12	Diferential lock, on rear axle 2		3-A2	3-A3		
13	Diferential lock, on bogie	9	3-B2	3-A3		
14	Low-gear all wheel drive, upper switch					28, 29
16	Reversing lights, on gearbox	9				21, 22, 23
17	Driver's seat, seat cushion					4, 5
18	Driver's seat, backrest					4, 5
19	Driver's seat, recline					4, 5
20	Passenger's seat, seat cushion					06
21	Passenger's seat, backrest					06
22	Passenger's seat, recline					06
23	VPS, by luggage compartment cover					08
24	VPS, by service cover					08
25	Accelerator-idling, for EDC, Ret, Opticruise	2, 5	1-B8	1-C3	375	



## Make and break switches

B	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
26	Accelerator-full throttle, for Opticruise	5				21
27	Clutch pedal lower position, Opticruise, GRS	5				21, 23
28	Lock indication, seat belt, driver's seat					4, 5
29	Retractable steps, LH side	1				03
30	Retractable steps, RH side	1				03
31	VPS, by bonnet, T cab					
32	Clutch pedal, upper position, EDC, Ret, Opticruise	2, 5	1-C8	1-C3	367	
33	VPS, by luggage compartment cover					
34	Brake pedal, for EDC	2, 5				51
35	EK power take-off					
36	Trailer brake control, for EDC	6				
39	Confirmation contact for low split GR/GRS900					23
41	Confirmation contact for high range Opticruise	9				21
42	Confirmation contact for low range Opticruise	9				
43	Confirmation contact for high split Opticruise	9				
44	Confirmation contact for low split Opticruise					
45	Confirmation contact for neutral position, GRSH gearbox					
49	Manual exhaust brake	5				53
68	All wheel drive, front wheel drive, lower switch					29

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
1	17	Headlamp, in pedal panel, RH side.	4	1-E8, 3-E6	1-E1, 3-E3		
2	17	Engine, on bulkhead, passenger side	2, 4	1-F1, 3-F6	1-F8, 3-F4		
3	17	In cab roof, passenger's side	3	4-D2	4-D7		
4	6	In cab roof, for radio, driver's side	3				
5	2	Horn	2	3-F6	3-D8		
6	3x6	Exhaust brake, White smoke limiter, Differential lock	4	1-D1, 3-D6	1-E8, 3-D4		
7	2	Air dryer	2	3-F6	3-E8		
8	17	In front panel, for brake lights, rear lights, differential lock, etc.	3	1-D1, 3-D6	1-D8, 3-D4		
9	12	Window lift, Door mirror, in door on passenger's side	5	1-C9, 3-C6	1-C8, 3-C4		
11	5	Spotlight, cab roof		4-F5	4-F4		
12	9	Seats and seat belt	5	1-C5	1-C4		
13	12	For cab roof	3	1-F2, 4-E2	1-F7, 4-F8		
14	12	Window lift, Door mirror, in door on driver's side	3, 5	1-B8, 3-B6	1-C1, 3-C3		
15	17	Headlamp, Brake monitors, Air dryer, Horn	4	1-D8, 3-D6	1-D1, 3-D3		
16	9	Electrically heated driver's seat, behind seat	3				05
17	9	Electrically heated passenger's seat, behind seat	3				06
18	3	In door on driver's side	5	1-A8, 3-A6	1-C1, 3-C3	544	
19	2	Step lighting	3	3-A7	3-A7	709	
20	2	Worklamp for fifth wheel coupling	5	1-B5	1-B4		

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
21	2	Step lighting, RH side	3	3-C2	3-C2	704	
22	9	Switch, windscreen wiper motor	5	1-C6	1-C3		
23	9	Switch for direction indicators, Main/dipped beam	2, 5	1-C6	1-B3		
24	3	Fan motor, in instrument panel for auxiliary heater	6	1-D5	1-D4	453	
25	3	Door, passenger's side	5	3-B6, 1-B1	1-B8, 3-B4	548	
26	12	Fan motor, Windscreen wiper, Coolant level sensor	5	1-C5	1-C4		
27	2	Air horn					
28	2	Inspection lamp socket 1. 24 V	5	1-D5	1-D4	319	
29	3	Window lift LH side	3	3-B7	3-A7		
30	3	Window lift LH side	3	3-A7	3-A7		
31	3	Switch, window liftRH side	3, 4	3-D2	3-C2		
32	3	Spare	3	3-C2	3-D2	591	
33	2	EDC					
35	2	EDC, cruise control					
36	2	Auxiliary heater, fuel pump					14
38	2	Sensor, engine oil pressure	4	3-E4	3-E5		
39	2	Monitor, engine oil pressure		3-E4	3-E5		
40	6	Windscreen wiper motor	2	1-F3			
41		Yoke (30-87a) for exhaust brake without ABS					53
42	5	Air conditioning					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
43	2	Air conditioning, shifting motor	5				
44	2	Air conditioning, magnetic clutch		3-F5	3-F5		
45	1	TC					
46	2	Clutch pedal lower position	5				21, 23
47	3	Clutch pedal upper position	2, 5	1-C8	1-C2		
48	3	Brake pedal	2, 5	1-C2	1-C2		
49	3	Power take-off 2					23
50	15	Junction box in rear crossmember	9	3-C9	3-C6		
51	5	Headlamp wiper motor LH side		3-F7	3-F7		
52	5	Headlamp wiper motor RH side		3-F2	3-F2		
53	2	ETC temperature sensor					12, 13
54	3	ETC potentiometer	5				12, 13
55	1	Terminal block + (3 screws) in front panel	4	1-E1, 3-E6	1-E8, 3-E4	9	
56	18	Distribution block for CAN signals	2, 5	1-C2	1-C7	64	
57	4	Power take-off 1					23
58	2	ELC air suspension 6x4	5	1-D5			
59	5	Direction indicators, Position lights, Headlamps LH side		3-F7	3-F7		
60	5	Direction indicators, Position lights, Headlamps RH side		3-F2	3-F2		
61	3	EDC, brake pedal	5				51

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
62	2	TC control EDC					
63	8	Webasto auxiliary heater					14
64	8	Webasto auxiliary heater					14
65	1	Auxiliary heater					
66	1	Auxiliary heater					
67	1	Air suspension, clamped joint in frame					42, 43, 44
68	1	Earthing, K diagnostics					
69	9	ETC, footroom passenger side	5				12, 13
70	3	Gearbox, on floor					22, 23
71	2	Gear lever					22, 23
72	3	Retarder					33
73	17	Tag axle lift /Axle weight limiter					45
74	2	Central lubrication					41
75	3	Axle weight limiter					45
76	4	Tag axle lift					45
77	1	Brake pressure monitors		3-D8	3-C8	124	
78	9	Air suspension	3,5				42, 43
79	2	ABS sensor, frontLH side					31, 37
80	2	ABS sensor, frontRH side					31, 37
81	2	ABS sensor, rearLH side	9				31, 32, 37

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
82	2	ABS sensor, rearRH side					31, 32, 37
83	3	ABS sensor, rearLH side (ADR)					
84	3	ABS sensor, rear RH side (ADR)					
85	17	Gearbox / Opticruise	4				21, 22, 23
86	17	Opticruise					21
87	3	ABS control valve, rear LH side	9				31, 37
88	3	ABS control valve, rear RH side	9				31, 37
89	3	Fan for auxiliary heater					14
90	17	Auxiliary heater					
91	9	Auxiliary heater	5				14
92	7	Trailer outlet for ABS	9				31, 32, 37
93	17	ABS, front wheels	4				31, 32, 37
94	17	ABS, drive wheels					31
95	3x6	ABS					31, 32, 37
96	3	TC, drive axle					
97	7	Opticruise					21
98	3	Retarder, potentiometer, brake pedal	5				33, 34
99	10	Opticruise, gearbox					21
100	1	Opticruise, gearbox					21
101	1	Opticruise, gearbox					21

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
102	2	ABS, flash sensor					
103	12	Auxiliary heater	5				14
104	3x6	ABS 6 circuit, rear	4				32, 37
105	9	For coachbuilder, bulkhead, passenger side	4	3-B6	3-B4		
106	1	Opticruise					21
107	5	EDC, below central electric unit	2,5				
108	1	Tag axle lift, unit box					45
109	1	Opticruise					
110	7	Trailer outlet ISO-1185		3-A3	3-A5	347	
112	18	2-circuit steering EDC					
113	9	Passenger seat with long legroom adjustment					
114	2	Differential lock	9	3-B2	3-B3		
115	2	Differential lock	9	3-B2	3-A3		
116	2	Differential lock	9	3-A2	3-A3		
117	1	Outline marker lamp, roof		4-F4	4-E5	393	
118	1	For earthing in cab roof		4-F2	4-F7	387	
119	1	For earthing in radio shelf		4-E4	4-E5	393	
120	1	For spotlight in cab roof		4-F4	4-F5	400	
121	12	Gear lever, under central electric unit	5				22, 23
122	10	GRS gearbox					23

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
123	7	GR gearbox					22
124	3	Exhaust brake, for switch	5				53, 54
126	1	Shunt 30+ in starter motor cable		3-D4	3-D5	5	
127	1	Shunt 30- in starter motor cable		3-D4	3-D6	7	
128	5	In cab roof	5		4-F8		
129	5	Door mirror LH door	3	3-C7	3-B7		
130	5	Door mirror RH door	3	3-E2	3-E2		
131	5	Central locking LH door	3	3-B7	3-B7		
132	5	Central locking driver's side	3	3-D2	3-D2		
133	2	Window lift passenger's side	3	3-B7	3-B7		
134	2	Window lift driver's side	3	3-D2	3-D2		
135	9	Lighting, roof shelf	3	4-C3	4-C7		
136	17	In bulkhead wall					
141	7	Retarder	9				
142	7	Opticruise Hall effect sensor					21
143	2	ABS sensor, 6 circuit LH side	9				32, 37
144	2	ABS sensor 6 circuit RH side	9				32, 37
145	5	Air suspension					
146	12	Opticruise, gear control, on floor					21
147	1	ETC					32, 37



## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
148	8	Radio, rear	3	4-B7	4-B1		
149	3	EK power take-off					23
150	5	Bunk reading light, upper	3	4-C6	4-D3		
151	5	Bunk reading light, lower	3	4-D6	4-D3		
152	3	EDC control rack, on engine	2, 4				51
153	2	EDC multi-actuator	2, 4				
154	3	EDC multi-actuator	2, 4				
155	2	Fuel shut-off	2, 4				
156	2	EDC engine temperature	2, 4				
157	2	EDC charge air temperature	2, 4				
158	3	EDC charge air pressure	2, 4				
159	2	EDC engine speed sensor 1	2, 4				
160	2	EDC engine speed sensor 2	2, 4				
161	3	EDC needle pressure sensor, on engine	2, 4				
163	9	Air suspension, control box	3				42, 43
164	2	Fuel level sensor		3-F3	3-E6		
165	1	Gearbox GR/GRS					22, 23
166	1	Solenoid valves EXB, (ADR)		3-F3	3-D6		53, 53
167	1	Fuel pick-up unit (ADR)			3-D6	145	
168	4	EBS brake pedal sensor					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
169	2	Side marker lights, RH side					
170	2	Side marker lights, RH side					
171	2	Side marker lights, RH side					
172	2	Side marker lights, LH side					
173	2	Side marker lights, LH side					
174	2	Side marker lights, LH side					
175	5	Reading lamp, Topline cab		4-E6	4-E3		
176	5	Reading lamp, Topline cab		4-E1	4-E8		
177	3	Differential lock	9	3-B3			
178	3	Differential lock		3-B3			
179	5	Differential lock	9				25, 29
180	2	12 V outlet in roof shelf	3	4-C5	4-C4	781	
181	2	Inspection lamp socket 2. 24 V	5	1-D5	1-D4	316	
182	8	Cab roof, roof hatch	3	4-E6	4-E3		
183	2	Battery disconnecter, tachograph					46, 47,-48
184	17	High cab, roof shelf		4-F6	4-F3		
185	2	Cab roof, roof shelf		4-E7	4-F2		
186	3	instrument panel, for roof hatch		4-F1, 1-F2			
187	8	On floor by rear wall in high cab		4-D1			16
188	17	EDC	2, 4				51

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
189	2	EDC/Retarder zero throttle	2, 5	1-B8	1-C2		
190	3	EDC potentiometer	2, 5				21, 51
191	3	Opticruise kick-down	5				21, 51
192	17	Retarder connection cab-frame	4				33, 34
193	2	Retarder temperature sensor T63 (ADR 3-pin)	9				33, 34
194	2-	Retarder temperature sensor T64 (ADR 3-pin)	9				33, 34
195	9	Retarder position sensor, brake pedal					
196	3	Retarder temperature sensor ADR	9				33, 34
197	3	Retarder temperature sensor ADR	9				33, 34
198	1	High cab, bunk		4-F2	4-F7	815	
199	1	High cab, bunk		4-E2	4-E7	816	
200	3	Scania Alert	3	4-F4	4-E6		
201	2	Roof shelf, Scania Alert	3				04
202	2	Opticruise, low-range					
203	2	Opticruise, high-range					
205	2	Trailer brake					
206	12	Opticruise					21, 51
207	1	Roof sign illumination		4-F7	4-F2	633	
208	1	Roof sign illumination		4-F7	4-F2	629	
209	1	Worklamp in cab roof	3	4-C6	4-C3	647	

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
210	1	Worklamp, Rotating beacon		4-C6	4-C3	643	
211	1	Rotating beacon		4-C6	4-C3	642	
212	2	Sleeping berth lamp	3	4-D6	4-D3		
213	1	Rotating beacon	3	4-F7	4-F2	638	
214	5	Courtesy lamp in cab	3	4-A4	4-A5		
215	5	Courtesy lamp in cab	3	4-A3	4-A6		
216	2	Outlet for mobile telephone in roof shelf	3	4-E1	4-E8	776	
217	2	CB radio in roof shelf	3	4-D8	4-E1	781	
218	8	Cab roof, timer for auxiliary heater		4-D8			
219	6	In electrically adjustable seat					4, 5
220	3	In electrically adjustable seat					
221	3	In electrically adjustable seat					
222	3	Spotlight switch, in cab roof	3	4-E4	4-D5		
223	3	Sign illumination switch, in cab roof	3	4-D4	4-D5		
224	3	Rotating beacon switch, in cab roof	3	4-C4	4-C6		
225	3	Worklamp switch, in cab roof	3	4-C4	4-C5		
226	3	Courtesy lamp in cab roof	3	4-D2	4-D7		
227	1	Bolt on engine					
228	2	Opticruise low-split					21
229	2	Opticruise high-split					21

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
230	1	Opticruise control					
231	1	Disc brake, wear indicator, front left					36
232	2	Disc brake, wear indicator, front right					
233	2	Disc brake, wear indicator, rear left					
234	2	Disc brake, wear indicator, rear right					
235	4	Disc brake, wear indicator, front left					
236	4	Disc brake, wear indicator, front right					
237	4	Disc brake, wear indicator, rear left					
238	4	Disc brake, wear indicator, rear right					
239	8	EDC, embedded joint					
240	1	EDC MS6					
241	2	VPS					61
242	2	VPS					
243	2	VPS					
244	2	VPS					
245	3	electrically adjustable driver's seat					4, 5

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
246	4	Electrically adjustable seat					06
247	3	Electrically adjustable passenger's seat					
248	4	Electrically adjustable passenger's seat					
249	6	Electrically adjustable passenger's seat					
250	3	Electrically adjustable passenger's seat					
251	3	Electrically adjustable passenger's seat					
252	5	Lighting in middle of roof shelf	3	4- C3	4-C6		
253	2	VPS pressure sensor in cab tilt					08
254	4	Eberspächer heater					15
255	2	Eberspächer heater					
256	8	Eberspächer heater					
257	8	GA851, in dashboard					
258	2	GA851, in dashboard					
259	17	GA851, in dashboard					
260	2	GA851, on lead to oil temperature sensor					
261	12	GA751/851					
262	3	GA751/851, by exhaust brake pedal					
263	31	GA751/851, main switch on gearbox					
264	16	GA751/851, extra switch on gearbox					
265	2	Trip meter and temperature gauge					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
266	3	VPS, for back-up battery					
267	1	VPS, in dashboard					
268	17	Air suspension	4				42, 43, 44
269	1	GA751/851					
270	1	GA751/851					
271	1	GA751/851					
272	1	GA751/851					
273	1	GA751/851					
274	1	GA751/851					
275	1	GA751/851					
276	1	GA751/851					
277	Housing 30-87	GA751/851					
278	2	GA751/851					
279	2	Flame start					55
280	2	Flame start					
281	2	Fuel heater					
282	2	Air conditioning					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
283	3	ABS 8x2, 8x4, front left					37
284	3	ABS 8x2, 8x4, front right					
285	2	Retractable steps, driver's side		3-E6	3-E7		03
286	2	Retractable steps, passenger's side		3-E2	3-E2		03
287	2	Refrigerator					07
289	9	Airbag					
290	3	Airbag, on RH side of steering column lock					
291	2	Airbag, on steering column					
292	1	On engine					
293	1	On engine					
294	2	Dual-circuit steering, front	4	3-D8	3-F3		
295	2	Dual-circuit steering, front		3-D8	3-F3		
296	2	Differential lock, front					28, 29
297	1	Differential lock					
298	17	All-wheel drive					
299	5	Airbag					
300	17	Bodywork wiring, on front panel					
301	Housing 30-87	Differential lock, all-wheel driven without ABS (RP29)					28, 29



## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
302	Housing 30-87a	Differential lock, all-wheel driven without ABS (RP30)					
303	2	VPS bonnet/service cover					08
304	12	Double cab					
305	9	Double cab					
306	9	Double cab					
307	12	Double cab, by B pillar					
308	12	Double cab, by B pillar					
309	2	Double cab					
312	3	Double cab, white					
313	3	Double cab, blue					
314	3	Double cab, yellow					
315	3	Double cab, green					
316	3	Double cab, red					
317	3	Double cab, RH side					
318	9	Double cab, LH side					
319	3	Double cab, in front shelf, green					
320	2	Double cab, in front shelf					
321	1	Double cab, step indication					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
322	2	Double cab, central locking					
323	2	Double cab, rear shelf LH side					
324	2	Double cab, rear top corner LH side					
325	2	Double cab, rear top corner RH side					
326	17	Double cab, rear shelf LH side					
327	17	Double cab, rear shelf RH side					
328	12	Double cab, bodywork equipment, passenger side					
329	9	Double cab, front shelf LH side					
330	4	Double cab, retractable steps LH side					
331	2	Double cab, retractable steps RH side					
332	2	Double cab, retractable steps LH side					
333	7	On gearbox					
334	2	On torque converter, for lock-up					
335	2	On torque converter, for sensor					
336	17	In bulkhead					
337	2	In dashboard					
338	2	VPS and lighting					
340	2	In driver's seat, seat-belt tensioner					
341	2	In passenger's seat, seat-belt tensioner					
342	4	EBS, wear sensor front left					36

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
343	4	EBS, wear sensor front right					36
344	4	EBS service brake valve					35
345	4	EBS, potentiometer in service brake valve					35
346	3	Double cab, rear door LH side					
347	3	Double cab, rear door LH side					
348	3	Double cab, rear door					
349	3	Double cab, rear door					
350	3	Double cab, rear door					
351	3	Double cab, rear door					
352	5	Double cab, central locking rear					
353	5	Double cab, central locking rear					
354	2	Double cab, step lighting LH side					
355	2	Double cab, step lighting RH side					
356	3	Double cab, rear window lift switch, LH side					
357	3	Double cab, rear window lift switch, RH side					
358	2	Plough lighting main beam, behind P2/L					
359	2	Plough lighting dipped beam, behind P2/L					
360	2	Plough lighting, between C1 and C15					
361	2	Plough lighting in bumper, beside P2/2					
362	2	Plough lighting position lamp, between 11 and 12 in P2					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
363	2	Plough lighting position lamp, between 12 and 13 in P2					
364	5	Plough lighting, behind service cover on passenger side					
365	5	Plough lighting, behind service cover on passenger side					
366	2	Plough lighting, behind service cover on passenger side					
367	2	Plough lighting, behind service cover on passenger side					
368	6	Opticruise, on gearbox ADR					
369	9	Opticruise, on gearbox ADR					
370	3	ABS modulating valve 6-circuit rear left	9				37
371	3	ABS modulating valve 6-circuit rear right	9				
372	1	50 supply, on engine					
373	2	Alternator 61 lead					
374	3	Side marker lights					
375	2	Auxiliary heater, stop-off heater T vehicle					
376	9	Plough lighting, LH side					
377	9	Plough lighting, RH side					
378	1	Cab roof, Korea only					
379	1	Cab roof, Korea only					
380	1	Cab roof, Korea only					
381	1	Cab roof, Korea only					
382	5	Cab roof, Korea only					

## C. Connectors

C	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
383	5	Cab roof, Korea only					
384	1	Opticruise, splice in wiring in frame					
385	1	Opticruise, splice in wiring in frame					
386	1	Opticruise, splice in wiring in frame					
387	1	Opticruise, splice in wiring in frame					
389	16	GA751/851, in dashboard					
390	9	GA751/851, under central electric unit					
391	3	GA751/851, hand lever for retarder					
392	3	GA751/851, pedal for retarder					
395	2	Extra power take-off, behind instrument cluster					
399	2	Extra power take-off, by P2/B					
400	2	Extra power take-off, by P2/B					
401	9	Opticruise, instrument panel					21
402	8	In wardrobe wall, on floor					
403	5	In rear cab wall, for Eberspächer					

### D. Diodes (d), resistors (r), potentiometers (p)

D	d/r/p	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
1	r	Heating fan	1	1-F4	1-F5	456	
2	d	Differential lock transfer box					28
3	d	Differential lock, rear axle					
4	d	Differential lock front axle					
5	d	Power take-off					
6	d	Mechanical air suspension					
7	d	Auxiliary heater in instrument panel					14
8	r						
10	d	Retarder disengagement					
11	d	White smoke limiter					
12	d	Exhaust brake disengagement					53
13	d	ABS					31, 32
14	d	Air suspension, in control box					
15	d	Activated retarder indicator lamp					33
16	d	Differential lock axle					24
17	d	Differential lock bogie					24
18	d	EDC in central electric unit	2, 8				33, 51, 54
19	d	Air suspension					
20	p	ETC, in instrument panel					12, 13
23	d	VPS door switches, in instrument panel					

**D. Diodes (d), resistors (r), potentiometers (p)**

D	d/r/p	Remarks	Location drawing	F diagram LHD 16.01-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
24	d	VPS, door switches, in instrument panel					
25	d	VPS, LED in shelf			4-C7	659	
26	d	VPS, LED in shelf			4-B7	661	
27	d	VPS, back-up battery, on floor					
28	d	Torque converter GRSH					
35	p	EDC accelerator sensor	2, 5				21, 61
37	p	Brake pedal sensor					33
39	p	EBS service brake valve					
41	d	Differential lock low gear					22
43	d	Exhaust brake disengagement					
44	d	Exhaust brake disengagement ABS					
45	d	For parking brake - power take-off EG, by R57					
46	d	For parking brake - power take-off EG, by instrument cluster					
47	r	GA851, for retarder, by brake pedal					
48	r	GA851, in retarder lever					
49	p	GA751/851, throttle pedal position,					
51	d	EG power take-off, 2nd parking brake, by R58					
52	d	EG power take-off, 2nd parking brake, by instrument cluster					

## E. Electronic control units

E	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram LHD+RHD 16:03	F diagram equipment 16:04-
1		Exhaust brake, White smoke limiter					21
2		Electric driver's seat					4, 5
3		Electric passenger's seat					
4		Pulse generator GR/GRS indicator lamp		1-E5	1-E3		155
5		Opticruise					21
6		Hall sensor Opticruise	9				21
7		VPS					08
8		Overrevving protection for GR/GRS	8				22
9	99	Webasto cab heater					14
10		Current limiter for battery disconnecter					46
11	30	Airbag, seat-belt tensioner					
12	35	EDC	2, 5				51
13	25	SLD (trucks without ABS/EDC)					52
14	99	EDC					
15		Control unit for EDC injection pump	2				51
16		Scania Alert					04
17	16	ETC					12, 13
18	35	ELC					42, 43
19		ID unit for trailer sensing, on central electric unit					
20	8	Torque converter GRSH900					



## E. Electronic control units

E	No. of pins	Remarks	Location drawing	F diagram LHD 16:01-	F diagram RHD 16:02-	K diagram LHD+RHD 16:03	F diagram equipment 16:04-
21	9	Tag axle lift	8				45
26	16	Flame start					55
28	34	GA751/851					
33		Radio		4-B8	4-C1	757	
34		Voltage divider for radio		4-C8	4-C1	763	
35		CB radio		4-D8	4-E1	781	
37	55	ABS 4-circuit	5				31, 37
38		Extra voltage divider		4-E8	4-E1	775	
39	55	Retarder	5				21, 33
43	55	EBS					
45		Pump unit ACL					41
46		Trailer sensing unit for ABS	8				32, 33, 37
47		ABS 6-circuit					32
48		GA851, coolant temperature in retarder					
49	31	GA, on gearbox					27

## F. Fuses

F	For basic electrical system		Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03
	Marking	Amperes					
			<b>Placed on central unit (P2)</b>	<b>8</b>	<b>02-C/F-8</b>	<b>12-C/F-8</b>	
1	15A	10A	Trip meter/temperature gauge, Tachograph, Instrument cluster, Buzzer, ABS diagnostics				191
2	15B	10A	Direction indicators, Axle weight limiter, SLD				326
3	15C	20A	Reversing light				355
4	15D	10A	Exhaust brake, White smoke limiter, Indicator lamps for optional equipment				99
5	15E	10A	Gearbox				95
6	15G	20A	ABS, Brake light				376
7	15H	10A	Tag axle lift, Differential lock, Power take-off, All wheel drive				73
8	15F	20A	Windscreen and headlamp wipers and washers, Intermittent wiper				419
9	15K	20A	Horn, Fan, A/C, ETC				468
10	15L	10A	Mechanical air suspension / ELC, 2 circuit steering, Retarder				80
11	15M	20A	Window lifts, LH side				586
12	15N	20A	Foglights front, Window lifts RH side				613
13	15P	30A	ABS on trailer				445
14	30A	10A	Tachograph, trip meter, temperature gauge, ELC, ACL, seats				194
15	30B	20A	Courtesy lamp, Central locking, Outlet for inspection lamp, Cigarette lighter, Interior lighting, Rotating beacon				710

## F. Fuses

F	For basic electrical system		Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03
	Marking	Amperes					
			<b>Placed on central unit (P2)</b>	<b>8</b>	<b>02-C/F-8</b>	<b>12-C/F-8</b>	
16	30C	20A	Diagnosis, spotlight				404
17	30D	20A	Radio equipment, seats				15
18	15R	20A	ABS valve relays				448
19	30E	20A	EDC power supply				513
20	15O	10	EDC control unit, fuel shut off				20
21	15S	30					498
22	61A	20	Electrically heated seats, rearview mirrors				65
23	15T	5	ABS control unit, trailer sensing				34
24	61C	20	Automatic headlamp adjustment, Air dryer				109
25	58B	10	Instrument lighting				313
26	58A	20	Worklamp, Roof sign illumination				240
27	58L	20	Position lamp on cab roof, Parking light LH side				252
28	58R	20	Parking light RH side				260
29	58C	20	Foglights front and rear				232
30	56AL	10	Main beam LH side				263
31	56AR	10	Spotlight, Main beam RH side				265
32	56BL	10	Dipped beam LH side				273
33	56BR	10	Electric headlamp adjustment, Dipped beam RH side				275

F1	Fuses for equipment		Remarks	Location drawing	F diagram LHD 16:02- 1-C5	F diagram RHD 16:02- 11-B5	K diagram LHD+RHD 16:03 36
	Marking	Amperes					
			<b>On extra central electric unit, beside P2</b>				
34	30F	20	Extra heater, fuel heater	8			
35	30G	10A	Short-stop heater, ETC				
36	15XD	10	Flame start, PTO				
37	15XE	20	Fuel heater				
38	61D	10	Fuel heater, flame start				
39	61E	10	Battery heater, ACL				
<b>F2</b>	<b>Fuse panel 6-terminal</b>		<b>On extra central electric unit, beside P2</b>				<b>49</b>
40	30H	20A	Flame start	8	1-B4		
41	30K	10A	Opticruise		1-B4		
42	BA	5	Seats, seat belts		1-B4		
43	58D	20A	Optional equipment		1-A4		
44	15XF	20	Optional equipment		1-A4		
45	15XG	10A	Optional equipment		1-A4		
<b>F3</b>	<b>Fuse panel 6-terminal</b>			8			
<b>F7</b>	1-terminal		In-line fuse for VPS back-up battery				
<b>F8</b>	1-terminal		Battery disconnecter, not ADR		16:04-48		
<b>F10</b>	2-terminal	10	Unit box for tag axle lift		16:04-45		

**g: Earth connections**

<b>G</b>	<b>Remarks</b>	<b>Location drawing</b>	<b>F diagram LHD 16:02-</b>	<b>F diagram RHD 16:02-</b>	<b>K diagram 16:03</b>	<b>F diagram equipment 16:04-</b>
1	Instrument panel, LH side	5	1-A7	1-B3		
2	Instrument panel, RH side	2, 5	1-A7	1-B3		
3	Instrument panel, RH side	5	1-B7	1-B3		
4	Instrument panel, to right of steering column	2, 5	1-B7	1-D2		
5	Instrument panel, to right of steering column	5	1-C7	1-D2		
6	Instrument panel, in centre	5	1-C7	1-A6		
7	Instrument panel, in centre	5	1-C7	1-B6		
8	Instrument panel, in centre	5	1-D7	1-B6	510	
9	Instrument panel, to left of central electric unit	5	1-E2	1-E7		
10	Instrument panel, to right of central electric unit	5	1-E2	1-E7		
11	Instrument panel, to left of central electric unit	5	1-E2	1-E7		
12	Instrument panel, RH side		1-C4	1-C5	516	
13	Lead-in screw terminal block in front panel	2	1-E1, 3-E6	1-E8, 3-E4		
18	On mounting plate under central electric unit		1-B5	1-B4	522	
20	Earth braid cab - frame	4	3-C6	3-B3		
21	By headlamp RH side	4	3-C6	3-F6		
22	By headlamp LH side	4	3-C6	3-F6		
23	By headlamp RH side			3-F3		03
26	Alternator - Engine	4, 9	3-D5	3-D5	10	

**g: Earth connections**

<b>G</b>	<b>Remarks</b>	<b>Location drawing</b>	<b>F diagram LHD 16:02-</b>	<b>F diagram RHD 16:02-</b>	<b>K diagram 16:03</b>	<b>F diagram equipment 16:04-</b>
27	Starter motor		3-E4	3-E5		
28	Gearbox - frame					22
29	Engine - frame		3-D3	3-D6	528	
30	Braid cab - frame, LH side		3-C7	3-B3	524	
31	For solenoid valves in frame	4, 9	3-F3	3-E6		
32	Frame - battery	9	3-D3	3-D7	3	
33	Frame, single-pole battery disconnecter ADR					
34	Engine block, D14		3-D4	3-D5	527	
35	Engine block, D9, D11, D12		3-D4	3-D5	527	
36	Tag axle lift ADR					
37	Frame - starter motor frame member RH side	9	3-D5	3-D5	1	
38	Starter motor		3-D5		1	
39	Starter motor		3-D5		1	
40	Frame, Junction box (C50)	9	3-B4	3-B6		
41	For solenoid valves in frame, ADR	9	3-F3	3-E6		
42	In frame, for tag axle lift					4,5
43	Frame LH side, ADR			3-D6		
44	Engine - frame, 12-series engine without EDC		3-D3	3-D6	528	

## H. Electrically heated apparatus

H	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
1	Cigarette lighter	6	1-D3	1-D6	319	
2	Rearview mirror, electric heating, driver's side	1	3-C8	3-E1	531	
3	Rearview mirror, electric heating, passenger's side	1	3--D1	3-B8	537	
4	Air dryer	1	3-F6	3-E8	109	
5	Driver's seat - seat cushion	1				05
6	Passenger's seat - seat cushion	1				06
7	Driver's seat - backrest	1				05
8	Passenger's seat - backrest	1				06
9	Wide-angle mirror, passenger's side	1	3-D1	3-B8	534	
10	Glow plug for flame start					55
12	Webasto auxiliary heater					14
13	Control unit, Eberspächer auxiliary heater					16
14	Detonation unit for airbag					
15	Fuel heater					17
16	Detonator for seat-belt driver's side					
17	Detonator for seat-belt passenger's side					

## K. Diagnostics socket

K	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	Diagnostics socket P, on P2, 16-pin	8				01
2	For GA gearboxes, under P2, 12-pin					27

## L. Lamps

L	Remarks	Lamp code	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
1	Headlamp, dipped beam, LH side	K	1	3-F8	3-F8	245	
2	Headlamp, dipped beam, RH side	K	1	3-F1	3-F1	265	
3	Headlamp, main beam, passenger side	K	1	3-F8	3-F8	245	
4	Headlamp, main beam, driver side	K	1	3-F1	3-F1	265	
7	Position/side marker light front, passenger side	R	1	3-F8	3-F8	250	
8	Position/side marker light front, driver side	R	1	3-F1	3-F1	260	
9	Direction indicator front, passenger side	H	1	3-F8	3-F8	328	
10	Direction indicator front, driver side	H	1	3-F1	3-F1	331	
11	Spotlight, passenger side	P	1	3-E8	3-E8	409	
12	Spotlight, driver side	P	1	3-E1	3-E1	412	
13	Foglight front, passenger side	H	1	3-E8	3-E8	219	
14	Foglight front, passenger side	H	1	3-E1	3-E1	222	
15	Worklamp front, passenger side, 70 W		1	4-B6	4-C3	649	
16	Worklamp 70 W, on cab roof		1	4-B7	4-C3-	652	



## L. Lamps

L	Remarks	Lamp code	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
17	Rotating beacon 85 W, on cab roof			4-C7	4-C3	641	
18	Symbol illumination for rheostat, instrument panel, panel a	M	7	1-E7	1-E2	295	
19	Symbol illumination in roof shelf	M		4-B2	4-B7	289	
20	Symbol illumination for oil temperature gauge retarder	M		4-B2	4-B7	289	
21	Symbol illumination in instrument panel, panel a	M	7	1-E7	1-E2	295	
22	Symbol illumination in instrument panel, panel a	M	7	1-E7	1-E2	295	
23	Symbol illumination in instrument panel, panel b	M		1-D3	1-D5	190	
25	Symbol illumination in fan distribution, panel c	M	7	1-D4	1-D5	283	
26	Symbol illumination in heater control, panel c	M	7	1-D4	1-D5	283	
27	light level control, panel d	M		1-D3	1-D6	283	
28	Symbol illumination instrument panel, air suspension	M					44
29	Symbol illumination in switch for air suspension, panel c	M	7	1-D4	1-D5	283	
30	Symbol illumination in switch, panel f	M	7	1-D3	1-D6	283	
31	Instrument lighting for axle weight gauge, panel e	A					
32	Step lighting, driver side	D	1	3-A8	3-A8	710	
33	Step lighting, passenger side	D	1	3-C1	3-C1	705	
35	Instrument lighting in instrument cluster	G	7	1-E6	1-E4	116	
36	Lighting fifth wheel coupling, rear cab wall	P		1-A5	1-A5	235	

## L. Lamps

L	Remarks	Lamp code	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
37	Direction indicator rear, driver side	H	9	3-A5	3-A7	326	
38	Direction indicator rear, passenger side	H	9	3-A4	3-A5	335	
39	Rear light, driver side	F	9	3-A5	3-A6	376	
40	Rear light, passenger side	F	9	3-A4	3-A5	381	
41	Brake light, driver side	H	9	3-A5	3-A6	363	
42	Brake light, passenger side	H	9	3-A4	3-A5	366	
43	Reversing light, driver side	H	9	3-A5	3-A6	357	
44	Fog light rear, driver side	H	9	3-A5	3-A6	211	
45	Width marking light on cab roof, driver side	F	1	4-F4	4-F5	395	
46	Width marking light on cab roof, passenger side	F	1	4-F3	4-F6	392	
47	Number plate lighting, lh side	E					
48	Number plate lighting, rh side	E					
49	Symbol illumination for Opticruise, panel e	M					21
50	Symbol illumination for gearbox, panel e	M					
51	Sign illumination, roof			4-F8	4-F1	628	
52	Reading lamp, driver side	E	1	4-B5	4-A4	672	
53	Reading lamp, passenger side	E	1	4-B3	4-A6	668	
54	General lighting, driver side	C	1	4-A5	4-A4	678	
55	General lighting, passenger side	C	1	4-A3	4-A6	681	
56	Bunk lamp, lower bunk	E	1	4-D7	4-D3	730	

## L. Lamps

L	Remarks	Lamp code	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
57	Symbol illumination in roof shelf, panel g	M	1	4-C3	4-B7	289	
58	Bunk lamp, upper bunk	E	1	4-D7	4-D3	727	
59	Reading lamp, general lighting	E		4-C3	4-B7	664	
60	Symbol illumination, panel e	M					
61	Reading lamp	E		4-E7	4-E3	721	
62	Reading lamp, Topline cab	E		4-E1	4-E8	735	
63	Spotlight, driver side	P	1	4-F5	4-F5	400	
64	Spotlight, passenger side	P	1	4-F3	4-F6	403	
65	Rotating beacon, cab roof, 85W			4-E8	4-F1	637	
67	Side marker light rear, rh side	F					
68	Side marker light rear, lh side	F					
69	Side marker light front, rh side	F					
70	Side marker light front, LH side	F					
71	Reading lamp, double cab rear, driver side	E					
72	Reading lamp, double cab rear, passenger side	E					
73	General lighting, double cab rear, driver side	C					
74	General lighting, double cab rear, passenger side	C					
75	Double cab rear, centre	E					
76	Door lighting, double cab roof, driver side	E					
77	Door lighting, double cab roof, passenger side	E					

## L. Lamps

L	Remarks	Lamp code	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
78	Step lighting, double cab rear, driver side	D					
79	Step lighting, double cab rear, passenger side	D					
80	Fluorescent tube, double cab roof, rear						
81	Symbol illumination, double cab, switch in rear shelf	M					
82	Symbol illumination, double cab, switch in rear shelf	M					
83	Symbol illumination, double cab, switch in rear shelf	M					
91	Reversing light, passenger side	H	9	3-A4	3-A5	360	
92	Foglight, rear, passenger side	H	9	3-A4	3-A5	213	
93	Width marking light, rear light, driver side	F	9	3-A5	3-A6	374	
94	Width marking light, rear light, passenger side	F	9	3-A4	3-A5		
95	Lighting, number plate, driver side	F	9	3-A5	3-A5		
106	Symbol illumination, retarder, panel B	M					33
109	Symbol illumination, oil temperature gauge	M					
111	Switch, double cab, fluorescent tube rear						

## M. Electric motors

M	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	K diagram 16:03	F diagram equipment 16:04-
1	Starter motor	1	3-D4	3-D6	1	
2	Windscreen wiper motor	1	1-F4	1-F5	431	
3	Heating fan	1	1-F4	1-F5	465	
4	Shifting motor for air conditioning	1				11, 13
5	Headlamp wiper motor, LH side	1	3-E8	3-E8	435	
6	Headlamp wiper motor, RH side	1	3-E1	3-E1	440	
7	Windscreen washer motor	1	3-F6	3-E8	448	
8	Headlamp washer motor	1	3-E6	3-D8	444	
9	Window lift, driver's side		3-B8	3-B8		
10	Window lift, passenger's side		3-D1	3-D1		
11	Hydraulic pump for tag axle lift					45
12	Motor for electric roof hatch		4-F8	4-F1		
14	Motor for electrically adjustable door mirror		3-D1	3-C8		
15	Motor for cab tilt pump					
16	Fan motor					
17	Pump for stop-off heater					15
21	Headlamp level control, LH side		3-F8	3-F8	242	
22	Motor for headlamp level control, RH side		3-F1	3-F1	271	

## N. Audio apparatus

N	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	Buzzer, on central electric unit, relay position 10	8	2-F3	2-F3	186	
2	Horn	1	3-E6	3-D8	470	
3	Loudspeaker, driver side		4-C8	4-C1	754	
4	Loudspeaker, passenger side PR14/ T19 cab, centre PR19 cab		4-C8	4-C1	744	
5	Loudspeaker, CB radio		4-D8	4-D1	786	
6	Loudspeaker, driver side rear T19 cab, passenger side PR19 cab		4-C8	4-C1	748	
7	Loudspeaker, passenger side rear T19 cab		4-D8	4-D1	741	
8	Siren for VPS					08
9	Horn					08
10	Buzzer, warning signal when reversing					
11	Loudspeaker, CB radio, rear					

## O. Instruments

O	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	Instrument cluster		1-F7	1-F4	115	
3	Speedometer		1-F4	1-F5		
4	Tachograph		1-F4	1-F5	190	
5	Tachometer		1-E6	1-E4	151	
6	Fuel level gauge		1-E6	1-E3	148	
7	Temperature gauge for engine coolant		1-E6	1-E3	171	
8	Oil pressure gauge for engine		1-E6	1-E3	140	
9	Ammeter		1-E6	1-E3	129	
10	Air pressure gauge for brake circuit 1		1-E6	1-E3	127	
11	Air pressure gauge for brake circuit 2		1-E6	1-E3	121	
12	Timer for cab heater					14
13	Trip meter and outdoor temperature gauge	7				02
14	Oil temperature gauge for torque converter					
20	Oil temperature gauge for retarder					
21	Hour meter					

**P. Power transmission**

<b>P</b>	<b>Remarks</b>	<b>Location drawing</b>	<b>F diagram LHD 16:02-</b>	<b>F diagram RHD 16:02-</b>	<b>Circuit diagram 16:03</b>	<b>F diagram equipment 16:04-</b>
1	Batteries	9	3-D4	3-D6	3	
2	Central electric unit		1-C3, 2-F8	1-C6, 2-F8		
3	Alternator	1	3-D4	3-D6	9	
4	Battery for VPS back-up					08

**R. Relays**

<b>R</b>	<b>Remarks</b>	<b>Replay position</b>	<b>Location drawing</b>	<b>F diagram LHD 16:02-</b>	<b>F diagram RHD 16:02-</b>	<b>Circuit diagram 16:03</b>	<b>F diagram equipment 16:04-</b>
1	Direction indicator, direction indicator relay			1-D2	1-D7	327	
2	Power relay for starter motor			1-A2		24	08
4	Main and dipped beams	3	8	2-F6	2-F6	301	
5	Spotlights	21		1-B3	1-B6	410	
6	Spotlight	8		2-F4	2-F4	409	
7	ABS, control valve 1	17	8			367	32
8	Brake light	7	8	2-F4	2-F4		
9	Brake reduction for tag axle	17	8				31
10	Lamp check	33					
11	Disconnection of ABS on exhaust braking		8				53
12	ABS indicator lamp	19	8				32
13	ABS control valve	18	8				32



## R. Relays

R	Remarks	Replay position	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
14	15x supply to fuses	2	8	2-F6	2-F6	39	
15	Front fog lights	12	8	2-F2	2-F2	223	
16	Air conditioning	25	8				11
17	Torque converter						
18	Torque converter	20					
19	61 Supply	4	8	2-F5	2-F5	5	
20	15 supply	1	8	2-F7	2-F7	26	
21	58 Supply	5	8	2-F5	2-F5	234	
22	Windscreen wipers intermittent operation	6	8	2-F4	2-F4	427	
23	Air conditioning	24	8				11
24	Reversing light	11	8	2-F2	2-F2	358	
25	Rear fog light	13	8	2-F2	2-F2	211	
26	ELC load transfer	18	8				
27	White smoke limiter	23	8				
28	Fan	19	8	1-C3	1-C6	463	
29	Fan	20	8	1-C3	1-C6	456	
30	Radio (for wake-up and snooze)						
31	Auxiliary heater	26	8				14
32	Auxiliary heater	27	8				14
34	Supply, EDC	9	2, 8	2-F3	2-F3	510	
36	Auxiliary heater		8				14

## R. Relays

R	Remarks	Replay position	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
37	Electric roof hatch			4-C1	4-B8	820	
38	Electric roof hatch			4-B1	4-B8	824	
39	Background lighting in cab						
40	Background lighting in cab						
41	Disengagement of low-split on all-wheel-drive						
42	Power take-off	32					23
44	Tag axle lift, in unit box						45
45	Eberspächer						15
46	Fuel heater	33					
47	Front axle with air suspension						
48	Front axle with air suspension						
49	GA- gearbox, disengagement of retarder if fault in ABS						
50	GA- gearbox, engine brake/exhaust brake						
51	GA- gearbox, brake pedal position						
52	GA851R, retarder controlled by brake pedal						
54	GA851R, retarder indicator lamp						
55	Brake pressure test, (Australia only)	34					
56	Electric cab tilt pump						
57	Brake-dependent power take-off	32					
58	Brake-dependent power take-off 2	32					

## R. Relays

R	Remarks	Replay position	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
61	GA851R, retarder controlled brake lights						
63	All-wheel-drive, disengagement of differential lock						28
64	All-wheel-drive, disengagement of differential lock						28
71	GA- gearbox, start blocking						
72	GA- gearbox, neutral controlled power take-off						

## S. Switch

S	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	Lighting	6	1-F8	1-F1	305	
2	Traffic warning lamp	6	1-D7	1-D3	322	
3	Heating fan	6	1-E4	1-E5	454	
4	Starter lock		1-B7	1-B3	14	
5	Electrically heated rearview mirrors	6	1-D3	1-E6	531	
6	Exhaust brake effect					54
7	Electrically adjustable door mirror, driver side		1-D7	1-E2	546	
8	Rear fog light	6	1-F7	1-F2	213	
9	Front fog lights	6	1-F7	1-F2	417	
10	Spotlights	6	1-E7	1-E2		
12	Differential lock, rear axle	6	1-D4,		24	
13	Bogie differential lock					25
14	Tag axle lift	6				45
16	Air conditioning	6				11, 13
17	Exhaust brake on/off	6				33, 54
18	Fifth wheel lighting	6	1-E4	1-E5	234	
19	Instrument lighting	6	1-E8	1-E1	299	
20	Window lift for driver's door, on driver's door	6	3-B8	3-D1	591	
21	Window lift for passenger's door, on driver's door	3, 6	3-A8	3-C1	599	
22	Window lift for passenger door, on passenger door	3, 6	3-C1	3-A8	604	
23	Light level control	6	1-E3	1-E6	272	

## S. Switch

S	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
24	Windscreen wiper and washer		1-C7	1-C3	421	
25	Dipswitch, Direction indicators		1-C7	1-C3	338	
26	Horn		1-B7	1-B3	470	
27	Spotlight, high-level	6	4-D5	4-D5	404	
28	Air horn	6	1-D3	1-D6	475	
29	White smoke limiter	6				54
30	Power take-off 1 (EG)	6				21, -22
31	Power take-off 2 (EK)					21
32	Electric roof hatch, Topline cab		4-C1	4-C8	819	
33	Central locking, beside bunk in Topline cab		4-C1	4-C8	579	
34	General lighting, Topline cab		4-D1	4-C8	695	
35	General lighting, Topline cab		4-C5	4-B4	712	
36	Background lighting, in roof shelf					
37	Scania Alert, in centre of roof shelf					04
40	Battery disconnecter, single-pole, ADR		3-D3	3-D6		
41	Central locking, driver's side	3	3-B8	3-B8		
42	Central locking, passenger's side	3	3-D1	3-D1		
43	Retarder, potentiometer	6				33
44	Low/high split, in gear lever					23
45	Retarder, downhill speed control					33
46	SLD - Diagnostics					52

## S. Switch

S	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
47	ETC - Diagnostics					12, -13
48	ELC - Diagnostics					42, 43
49	Electric roof hatch		4-E6	4-E4		
51	EDC cruise control	2				51
52	EDC —Diagnostics	2				51
53	VPS —Diagnostics	6				08
54	Air suspension control box, on/off	6				49
56	Air suspension control box, rear bellows up/down	6				44
57	General lighting in cab	6	4-B5	4-B4		
58	Worklamp	6	4-C5	4-C4	646	
59	Rotating beacon	6	4-D5	4-C4	637	
60	Sign illumination	6	4-D5	4-D4	628	
61	Short-stop heater					15
62	Fuel heater					17
63	High/low range, in gear lever					22
64	Torque converter					
65	High-mounted headlamps, instrument panel E					
66	Parking brake dependent power take-off, panel D					
67	Parking brake dependent power take-off 2, panel D					
71	Driver's seat heating					4-5
72	Driver's seat height adjustment					4-5

## S. Switch

S	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
75	Air suspension, raised driving position					42, 44
76	Passenger seat, height adjustment					
77	Passenger seat, heating					
83	Low gear in transfer box					28
84	Neutral position in transfer box					28
85	Differential lock in transfer box					28
88	Diagnostics - Opticruise					21
90	TC, driving program "Off road"					31, 37
91	Retarder on/off, by brake pedal	6				33, 34
92	CB radio, Mobile telephone		4-E8	4-E1	770	
93	EBS "Off road"					
94	EBS					
95	ABS/TC -Diagnostics					
96	Retarder - Diagnostics					33, 34
100	Opticruise, program selector Normal/Hill					21
101	Opticruise, driving mode selector					21
104	ELC, normal level 1 - 2					
105	ELC, tag axle lift - load transfer	6				43
106	ELC, load transfer with time limit					
107	ELC, control box					42, 43,
108	ELC, load transfer without time limit					

## S. Switch

S	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
109	Foot-operated retarder, on dashboard					
110	Fluorescent tube rear					
111	Double cab, turning off cab lighting					
113	Double cab, fan in cab roof					
114	Double cab, fan in cab roof					
115	Double cab, turning off cab lighting					
116	Double cab, electric cab tilt pump					
117	Double cab, electric cab tilt pump					
118	Double cab, siren and rotating beacon					
300	White smoke limiter					

## T. Sensors and monitors

T	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	Sensor/monitor for low brake pressure front circuit	1	3-D8	3-D8	125	
2	Sensor/monitor for low brake pressure rear circuit	1	3-C8	3-C8	117	
3	Monitor for parking brake applied	1	1-D7	1-D3	181	
4	Monitor for low brake pressure in parking brake for trailer		3-C8	3-C8	122	
6	Monitor for low coolant level in A/C					11
7	Monitor, low temperature in A/C			11		



## T. Sensors and monitors

T	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
8	Monitor, low coolant level	1	1-E4	1-E5	173	
9	Sensor/monitor, engine oil pressure	1, 4	3-E4	3-E6	136	
10	Sensor, engine coolant temperature		3-E4	3-F6	172	
11	Sensor, ABS/EBS, LH front wheel					31, 32, 37
12	Sensor, ABS/EBS, RH front wheel					31, 32, 37
13	Sensor, ABS/EBS, LH drive wheel (the rearmost on 6x4)	9				31, 32, 37
14	Sensor, ABS/EBS, RH front wheel (the rearmost on 6x4)	9				31, 32, 37
16	Sensor, fuel level		3-F3	3-E6	146	
17	Sensor, speed, on flywheel	9				21, 22, 23
18	Monitor, low hydraulic pressure in steering					62
20	Pulse sensor for tachograph, on gearbox	9				21, 22,-23
21	Thermostat, in driver's seat					4, 5
22	Level sensor, in driver's seat					4, 5
23	Thermostat, in passenger's seat					06
24	Monitor, air pressure in bellows, tag axle					
25	Monitor, air pressure in bellows, drive axle					
26	Thermostat, in auxiliary heater					14
27	Sensor, outside temperature	1	3-E8	3-D8		
28	Sensor, ABS, 3rd axle LH side	9				32, 37
29	Level sensor, in passenger's seat					06
30	Sensor, ABS, 3rd axle RH side	9				32, 37

## T. Sensors and monitors

T	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
31	Sensor, charge air pressure	2				51
32	Givare, laddlufttemperatur	2				51
33	Sensor, coolant temperature EDC	1, 2				51
34	Sensor, load limiter					45
37	Temperature sensor, ETC exhaust temperature					12, 13
39	Wear sensor, EBS, LH front					36
40	Wear sensor, EBS, RH front					36
41	Wear sensor, EBS, LH rear					36
42	Wear sensor, EBS, RH rear					36
45	Monitor, tag axle lift, high oil pressure					45
46	Pressure sensor, EBS, air bellows LH rear					36
47	Sensor, charge air pressure/temperature					
55	Flow monitor, 2-circuit steering, circuit 1					61
56	Flow monitor, 2-circuit steering, circuit 2					61
61	Sensor, retarder oil temperature					
63	Sensor, retarder coolant temperature 1	9				33, 34
64	Sensor, retarder coolant temperature 2	9				33, 34
68	Sensor, oil pressure 14-series engine	1	3-E4	3-E5	141	
69	Monitor, oil pressure 14-series engine	1	3-E4	3-E6	141	
70	Pressure sensor, ELC drive axle	9				43
71	Pressure monitor, ELC tag axle	9				43

## T. Sensors and monitors

T	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
72	Distance sensor, ELC level front axle					43
73	Distance sensor, ELC level rear axle	9				43
74	Sensor, EDC engine speed 1	1				51
75	Sensor, EDC engine speed 2	1, 2				51
76	Sensor, EDC needle position					51
77	Sensor, engine coolant temperature					55
78	Sensor, cab tilting (for VPS)	9				08
79	Sensor, retarder coolant temperature					
80	Sensor, retarder oil temperature					

## U. Aerials

U	Remarks	Location drawing	F diagram LHD	F diagram RHD	Circuit diagram	F diagram equipment 16:04-
1	Radio, driver's side		4-C7	4-C3	756	
2	CB radio, passenger's side		4-F2	4-F7	784	
3	VPS, in dashboard					
4	Refrigerator					07
5	VPS remote controls					08
6	Coil for airbag					

## V. Solenoid valves, control valves

V	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	Exhaust brake, proportional valve		3-E3	3-E6		54
2	A/C compressor, magnetic clutch	1	3-F4	3-F6		
3	ABS LH front wheel					31, 32, 37
4	ABS RH front wheel					31, 32, 37
5	ABS LH drive wheel	9				31, 32, 37
6	ABS RH drive wheel	9				31, 32, 37
7	Air suspension, brake reduction	9				31, 32, 37
8	Driver's seat, height adjustment					4-5
9	Driver's seat, seat-belt buckle					4-5
10	Axle differential lock, engagement	9	3-B2	3-A3		24
11	Bogie differential lock, engagement	9				25
12	Bogie differential lock, disengagement					
13	Power take-off 1 (EG)	9				21, -22, -23
14	EDC pump injector 1					56
15	EDC pump injector 2					56
16	EDC pump injector 3					56
17	Exhaust brake	9	3-E3	3-E6		53
18	Passenger's seat, height adjustment					06
19	Passenger's seat, seat-belt buckle					06

## V. Solenoid valves, control valves

V	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
20	Opticruise, lateral stroke right	9				21
21	Opticruise, lateral stroke left	9				21
22	Opticruise, neutral	9				21
23	Opticruise, longitudinal stroke rear	9				21
24	Opticruise, longitudinal stroke forward	9				21
25	Exhaust brake, noise limitation		3-E3, 53, -54	3-E6		
26	Pump injector 2					56
27	Pump injector 4					56
28	Pump injector 6					56
29	Pump injector 7					56
30	Pump injector 8					56
32	Air suspension, parking brake "off"					42, 43
33	Air suspension, level control "off"					
34	Air suspension, raised driving position	9				44
35	Air suspension, mechanical, rear bellows up	9				44
36	Air suspension, mechanical, rear bellows down	9				44
37	Air suspension, mechanical, 1/0 manual control rear	9				44
38	Air suspension, mechanical, evacuation bellows tag axle					
39	Air suspension, mechanical, disengagement bellows tag axle					
40	Air suspension, mechanical, tag axle lift					

## V. Solenoid valves, control valves

V	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
41	Auxiliary heater, dosage pump					
42	EDC. by-pass valve					
43	Power take-off EK					
44	Air horn		1-A5	1-A4	476	
45	EDC, fuel shut-off		3-F4	3-F5	29	
46	ABS 3rd axle LH side	9				
47	ABS 3rd axle RH side	9				
49	Tag axle down					45
50	Tag axle up					45
51	ELC, 4x2 up/down	9				42
52	ELC, front axle up/down	9				42
53	ELC, rear axle up/down	9				42
54	ELC, rear axle up/down	9				42, 43
55	ELC, tag axle up/down	9				43
56	ELC, rear bellows up/down	9				
58	Flame start					55
59	ETC, water valve					12, 13
60	Retractable steps, driver's side					
61	Retractable steps, passenger's side					
62	Gearbox, low/high split					21, 23

## V. Solenoid valves, control valves

V	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
63	Gearbox, low/high range					21, 23
64	Gearbox, interlock against split gear-changing					23
65	Front axle, differential lock engagement					28
66	Low gear					28
67	Neutral position					28
68	Transfer box, differential lock engagement					28
69	White smoke limiter		3-E3			
70	Torque converter, lock-up					
74	Retarder on/off	9				33, 34
75	Retarder, accumulator tank	9				33, 34
76	Retarder, proportional valve	9				33, 34
77	Opticruise, high split	9				21
78	Opticruise, high range	9				21
81	TC	9				23, 37
82	EBS, LH side front					35
83	EBS, RH side front					35
84	EBS, LH side rear					35
85	EBS, RH side rear					35
88	SLD and ABS, proportional valve					31, 32, 37, 52

## W. Indicator lamps (k) warning lamps (v)

W	v/k	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
1	v	Direction indicator	7	1-F6	1-F3	165	
2	v	Charging	7	1-F6	1-F3	172	
3	v	TC	7	1-F6	1-F4	180	
4	v	Engine oil pressure	7	1-F6	1-F3	133	
5	v	Main beam	7	1-F6	1-F3	163	
6	v	Brake circuit 1+2	7	1-F6	1-F3	123	
7	v	Parking brake applied	7	1-F6	1-F3	182	
8	v	ABS on truck	7	1-F6	1-F3	178	
9	v	Direction indicator on trailer	7	1-F6	1-F3	166	
10	k	Power take-off	7	1-F6	1-F3	159	
11	k	Rear fog light	7	1-F6	1-F3	162	
12	k	Engine coolant level	7	1-F6	1-F3	174	
14	k	Differential lock	7	1-F6	1-F3	160	
15	k	ABS on trailer	7	1-F6	1-F3	179	
16	k	No ABS on trailer	7	1-F6	1-F3	176	
17		Diagnostics lamp for auxiliary heater	7				14
18	v	Disc brakes, pad wear					36
19	v	Steering, low oil pressure					62
21	k	Air suspension, manual control	7				44



## W. Indicator lamps (k) warning lamps (v)

W	v/k	Remarks	Location drawing	F diagram LHD 16:02-	F diagram RHD 16:02-	Circuit diagram 16:03	F diagram equipment 16:04-
22	k	Air suspension, load transfer	7				
23		Opticruise, gear indicator	7				21
25	v	Retarder	7	1-F6, 33, -34	1-F3	168	
26	k	Retractable steps	7				03
27	k	EDC Diagnostics	2, 7				51
28	v	Torque converter high oil temperature					
29	k	Torque converter engaged					
35	k	Flame start					55
36	k	Seat-belt buckle			1-E5		
38	v	NOT READY FOR CHANGING GEAR					
40	v	2-circuit steering, circuit 1	7				61
41	v	2-circuit steering, circuit 2	7				61
43	v	GRS, low gear split					23
51	v	ELC level	7				42, 43, 45
52	v	ELC function fault	7				42, 43, 45
53	v	ELC load transfer					42, 43, 45
54	v	ELC normal level					
55	k	Retarder activated, without ABS					33, 34
56	k	Retarder activated, GA851R					
57	v	Airbag/seat-belt fault					



## Wiring diagrams

There are two types of wiring diagram in the Scania Workshop Manual:

- Connection diagram
- Circuit diagram

### Connection diagram

The connection diagram shows which components are included in the electrical system and how these components are connected to each other via the wiring harness.

The components in all diagrams are drawn in resting position - switches not activated.

The connection diagram consists of a coordinate system. The horizontal axis runs from 1 to 8 and the vertical axis from A to F.

The connection diagram for basic equipment in the vehicle is divided into four sheets:

- 1 Instrument panel and cab
- 2 Central electric unit
- 3 Chassis and frame
- 4 Cab roof

The components in these diagrams are described in the list of components.

The connection diagram for optional equipment consists of one (sometimes two) sheets, depending on the size and complexity of the system. See page 66.

**Note:** The list of components for optional equipment is included in each diagram.

### Circuit diagram

The circuit diagram shows the electrical system divided into functional circuits. The diagram shows the component connections in each circuit, where the component's power supply comes from and where it is earthed. The circuit diagram gives no indication of the location of the components in the vehicle. The purpose of the diagram is to show the configuration of the circuits.

The components are placed in "current paths" or circuits which are oriented vertically in the diagram. The circuits are marked with their number in the lower margin of the diagram. The circuit numbers serve as a reference system between the diagram and the component list and between the individual components in the diagram.

To avoid having a tangle of cables crisscrossing the diagram, certain cables have been cut and terminate in a reference box. The reference box contains the number of the circuit where the cable continues.

The circuit diagram, which consists of seven sheets, is at present only available for the basic electrical system.

All circuits included in the circuit diagram are listed on page 68.

The text on the diagrams is in English only. A translation is provided at the end of the booklet.

## Connection diagrams

Part of electrical system	Diagram number	Insert number
<b>Basic electrical system</b>		<b>16:2</b>
Instrument panel	16:02-01/11	
Central electric unit	16:02-02/12	
Frame and engine	16:02-03/13	
Cab roof	16:02-04/14	
<b>Optional equipment</b>		<b>16:4</b>
Driver station		16:4-0
Diagnostics socket	16:04-01	
Trip meter and temperature gauge	16:04-02	
Indication retractable steps	16:04-03	
Scania Alert	16:04-04	
Seats, driver station	16:04-05	
Seats, passenger area	16:04-06	
Refrigerator	16:04-07	
VPS, alarm and theft protection	16:04-08	
AM/FM radio	16:04-09	
Heating system		16:4-1
Air conditioning (A/C)	16:04-11	
Electronic temperature control, ETC	16:04-12	
ETC + A/C	16:04-13	
Webasto 80 auxiliary heater	16:04-14	
Short-stop heater	16:04-15	
Eberspächer	16:04-16	
Fuel heater	16:04-17	
Gearboxes, gear-changing system		16:4-2
Opticruise	16:04-21	
GR900	16:04-22	
GRS900	16:04-23	
Differential locks 4x2, 6x2, 8x2	16:04-24	
Differential locks 6x4, 8x4	16:04-25	
GRS890 for 4x4, 6x6	16:04-26	
GA/GAE	16:04-27	
Differential locks 4x4	16:04-28	
Differential locks 6x6	16:04-29	

Brakes		16:3-3
ABS 4-circuit	16:04-31	
ABS 6-circuit	16:04-32	
Retarder	16:04-33	
Retarder with EEB	16:04-34	
EBS	16:04-35	
Wear indicator for disc brake	16:04-36	
ABS/TC Wabco "D"	16:04-37	
Trailer brake	16:04-38	
Frame, chassis, suspension		16:4-4
For bodywork	16:04-40	
Automatic chassis lubrication, ACL	16:04-41	
ELC 4x2 and 6x4 without load transfer, generation 1	16:04-42	
ELC 6x2, generation 1	16:04-43	
ELC 6x2, 6x2/4, 8x2, generation 2	16:14-43	
Air suspension 4x2 mechanically controlled, generation 1	16:04-44	
Air suspension 4x2 mechanically controlled, generation 2	16:14-44	
Tag axle lift, axle weight limiter	16:04-45	
ELC 6x4, 8x4 with load transfer	16:14-45	
ADR, single-pole battery disconnecter, LHD	16:04-46	
ADR, 2-pole battery disconnecter, RHD	16:04-47	
Single-pole battery disconnecter, not ADR	16:04-48	
Axle weight gauge	16:04-49	
Engine		16:4-5
EDC	16:04-51	
Speed limiter (SLD)	16:04-52	
Exhaust brake, manual, EXB	16:04-53	
Exhaust brake, electronic, EEB	16:04-54	
Flame start	16:04-55	
Steering		16:4-6
2-circuit steering	16:04-61	
Steered tag axle	16:04-62	

## Circuit diagram

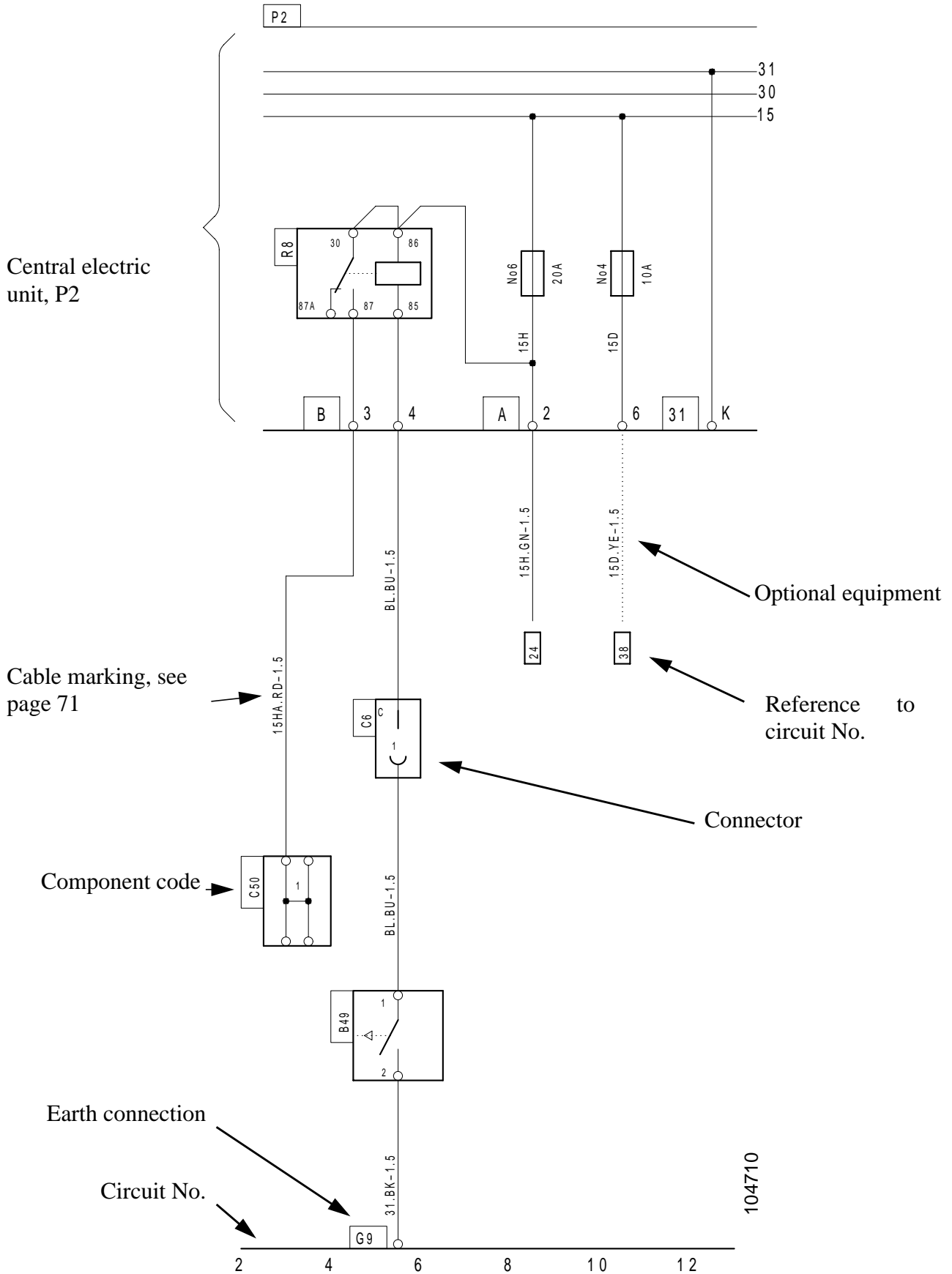
For basic electrical system (16:03-01)

Circuit	Sheet No.	Circuit
Starter motor	1	2
Alternator	1	10
Fuel shut-off	1	30
Fuses	1	50
C56	1	80
Air dryer	1	110
Instrument cluster	2	116 -200
Brake pressure monitors	2	120
Oil pressure monitor	2	130
Fuel level sensor	2	145
Coolant sensor	2	170
Tachograph	2	200
Rear fog light	3	210
Front fog lights	3	220
Lighting for fifth wheel coupling	3	235
Headlamps	3	240-270
Rheostat	3	275
Symbol illumination	3	285
Inspection lamp outlet	3	315
Traffic warning lamp	4	325
Direction indicator	4	335
Trailer coupling	4	350
Reversing light	4	360
Brake light	4	370
Rear light	4	380
Outline marker lamps	4	390
Spotlight	4	400
Windscreen wiper and washer	5	420-450
Heating fan	5	460
Horn	5	470
Exhaust brake	5	480
Earth connections	5	500

<b>Circuit</b>	<b>Sheet No.</b>	<b>Circuit</b>
Electrically heated rearview mirrors	6	530
Electrically adjustable rearview mirrors	6	550
Central locking	6	560
Electric window lifts	6	590
Roof sign illumination	7	630
Rotating beacon	7	640
Worklamp	7	650
Interior lighting	7	660-730
Courtesy lamp	7	705
Loudspeaker	7	740
FM/AM radio	7	755
Communications radio	7	780
Electric roof hatch	7	810

### Circuit diagram

Explanation of symbols in the diagram





# Cable marking

## General

The cables in the wiring diagram are marked according to a particular system. The marking covers function, colour and cross-section area (if not 0.75 mm).

The marking also provides information on where the cable is connected (address).

## Example of cable marking in wiring diagram

15D. BN — 1 +P2/8 —4

15D	Function
BN	Colour
1	Cross-sectional area of cable in mm <sup>2</sup> . <u>Note:</u> Standard cross-section = 0.75 mm <sup>2</sup> not given on diagram.
P2	Reference to component to which cable is connected.
8	Contact housing number
4	Pin No.

BK	black	YE	yellow
BN	brown	RD	red
OG	orange	GN	green
BU	blue	VT	violet
GY	grey	WH	white
PK	pink		

There are also cables marked with two colours, e.g. YE/WH. The above table explains all combinations occurring.

Marking	Function
15	Relay pull magnet, Lights switch
15/1	Starter switch, Lights switch
15A	Instrument cluster, Tachograph, Trip meter and temperature gauge
15B	Traffic warning lamp, SLD
15CB	Brake light, ELC
15CC	Reversing light
15D	Exhaust brake, White smoke limiter, Emergency steering 8x2, 8x4, Bypass
15DA	Exhaust brake, White smoke limiter
15E	Gearbox overrevving protection
15EL	Split interlock
15ER	High/Low - Range
15ES	High/Low - Split
15EV	High/Low - Range
15F	Windscreen wiper and washer, Headlamp wiper
15FA	Windscreen wiper motor
15FB	Windscreen wiper motor
15FC	Headlamp washer
15FD	Headlamp washer
15FJ	Windscreen wiper switch
15FS	Windscreen wiper switch
15G	Power take-off, Tag axle lift, All-wheel-drive, Differential lock, Load transfer 6x2/4
15GA	Power take-off 1 solenoid valve
15GAX	Power take-off 1 solenoid valve
15GB	Power take-off 1, indicator lamp
15GC	Front tag axle 8x2/4
15GD	Differential lock
15GF	Differential lock, independent operation

Marking	Function
15GL	Differential lock, low gear 4x4, 6x6
15GX	Extra power take-off 1, GA gearbox
15HA	Exhaust brake
15HB	ABS
15HC	Reversing light
15K	Horn, Fan, A/C, Electronic temperature control
15KA	A/C
15KB	ETC
15KC	Fan switch resistor
15KD	Fan switch resistor
15KE	Fan switch position 0
15KF	Fan switch, fan
15KG	Fan switch position 4
15KH	Fan switch resistor
15KJ	Fan switch
15L	Air suspension, cab suspension, retarder, brake reduction
15LA	Retarder, ABS
15LD	Brake reduction
15LE	Air suspension, raised lifting position
15LF	Air suspension, manual control rear
15LG	Air suspension, evacuation of tag axle bellows
15LH	Air suspension, rear bellows down
15LK	Air suspension, disconnection parking brake
15LL	Air suspension, manual control
15LM	Air suspension, disconnection of tag axle bellows
15LN	Air suspension evacuation tag axle bellows
15LP	Air suspension, air pressure, tag axle bellows

Marking	Function
15LR	Air suspension, rear bellows up
15LS	Air suspension, air pressure in drive axle bellows
15LX	Air suspension
15M	Window lift LH side
15N	Window lift RH side, Electric roof hatch
15NA	Front fog lights
15P	ABS on trailer
15R	High/Low - Range
15S	ABS control unit
15T	ABS trailer sensing unit
15U	EDC control unit
15X/87	Gearbox, supply to fuse panel F1, F2
15XA	EDC
15XAB	EDC
15XC	Automatic gearbox
15XD	Flame start, Power take-off EK, VPS
15XDA	Power take-off
15XE	Fuel heater
15XF	Optional equipment
15XG	Optional equipment
15XH	ABS
30	Battery +, Starter motor, Alternator, Central electric unit, Starter lock, Lights switch, Traffic warning light, Extra fuse panels F1, F2
30+, 30-	Shunt in ammeter winding
30A	Trip meter/temperature gauge, Tachograph, Central lubrication
30B	Step lighting, Central locking LH + RH side, Inspection light socket, Cigarette lighter, Supply for cab roof.

Marking	Function
30BA	Cab lighting
30BD	Rotating warning beacon
30BX1	Rotating beacon + siren
30CA	Spotlight, front + roof
30CB	Spotlight on roof
30D	Communications radio, Starter switch, Voltage divider
30DA	Communications radio
30DM	Voltage divider
30E	Fuse panel
30EA	Engine management
30F	Stop-off heater, Cab heater
30FA	Auxiliary heater
30G	Auxiliary cab heater
30GF	Auxiliary heater
30H	Flame start
30K	Fuel heater
30X1	Interior lighting double cab
30X2-4	Fan rear, double cab
30X5-7	Retractable steps, double cab
31	Earth (Earth connection)
31A	Tachograph earth
31B	Windscreen wiper motor earthing via switch
49	Traffic warning lamp
49A	Traffic warning light, flasher sensor
50	Start solenoid
50A	Start solenoid
53	Windscreen wipers
53A	Windscreen and headlamp wipers
53B	Windscreen wipers
54L	Direction indicator LH

Marking	Function
54R	Direction indicator RH
56	Dipswitch
56A	Main beam
56AL	Main beam left Spotlight
56ALA	Spotlights
56ALP	Plough headlamp
56ALX	Plough headlamp
56AR	Main beam right, indicator lamp main beam
56B	Dipped beam
56BL	LH dipped beam
56BLP	Plough headlamp
56BLX	Plough headlamp
56BR	Dipped beam right, foglight front
56BRP	Plough headlamp
56BRX	Plough headlamp
56S	Lights switch
58	Parking lights
58/87	Supply to fuse panel
58A	Worklamp, Roof sign illumination, Fifth wheel coupling illumination
58AA	Roof sign illumination
58AC	Fifth wheel coupling illumination
58AD	Worklamp
58B	Traffic warning lamp, Rheostat, Trip meter and temperature gauge
58BA	Rheostat, Symbol illumination
58BB	Background lighting
58BBR	Reduced background lighting
58C	Front fog lights
58CA	Rear fog light
58CB	Rear fog light
58CC	Front fog lights

Marking	Function
58D	Optional equipment
58L	Parking light LH side, Width marker lights RH and LH side
58P	Parking lights
58R	Parking light RH side
61	Alternator, Charge lamp, Start solenoid relay
61/87	Supply to fuse panel F1
61A	Electrically heated rearview mirrors, Electrically heated seats
61AA	Electrically heated rearview mirrors
61B	Battery heater, Opticruise, ACL
61C	Automatic height adjustment of headlamps, Air dryer
61CA	Resistor for automatic dipped beam
61CB	Resistor for automatic dipped beam
61D	Fuel heater, flame start
61E	ACL, Battery heater
300	Differential locks
301	Differential lock confirmation for trucks with ELC and load transfer
ABS WL	ABS warning lamp
AC1-6	A/C
AF	Air filter
AL	Tag axle lift
AS	Air suspension
ATC4	Temperature sensor
ATC5	Sensor for valve position
ATC9	Sensor,
ATC11	Sensor, exhaust temperature
ATC12	Water valve 1
ATC13	Water valve 2
ATC14	Heater

Marking	Function
ATC16	Lamp-flash code diagnosis ATC
B	Starter switch - fuse panel
BA	Fuse panel - seat belt
BO1-3	Double cab black-out
BP	Brake pressure
BP1	Brake pressure, brake circuit 1
BP2	Brake pressure, brake circuit 2
BR	Exhaust brake
BRS	Brake pressure, inverted signal
BS	Courtesy lamp
C	Indicator lamp direction indicator on vehicle
C2	Indicator lamp direction indicator on trailer
CAN	Control Area Network
CL	Cab lock, indication
CP	Clutch pedal, upper position
DBR	Retarder signal to ABS
DIAK	Diagnostics
DIAL	Diagnostics
DL	Central locking locked
DO	Central locking open
DM	Start solenoid
DS/DSB	Differential lock/ Bogie differential lock
EAA	Power take-off EK
EB1-4	Eberspächer
EBP	Engine brake program
EBS	Exhaust brake
EEB1	Proportional valve
EEB7	Power switch
EEB8	Noise baffle
EEB16	Switch automatic on/off

Marking	Function
ELC1-34	ELC control unit
ET	Outside temperature
EXB	Exhaust brake
EXB1	Exhaust brake
EDC1-55	EDC control unit
F	Fan
FD	Switching between main and dipped beam
FH	Fuel heater
FL	Main beam flasher
FS	Flame start
GA	Automatic gearbox
GL	General lighting in cab roof
GS	Speed sensor, output shaft
GS1-2	Road speed sensor
FACTO	Fuel quantity, EDC
H	Horn
HB17	Tachograph
HW	Hazard flashers
HWL	Indicator lamp, hazard flashers
K-DIA	Diagnostics
L-DIA	Diagnostics
L	Direction indicator, LH side
LB	ABS
LF	Direction indicator, front left
LR	Direction indicator, rear left
LS	Low split indication
LT	Direction indicator, trailer, left
M1LI	ABS control valve, 1st axle LH side in
M2RO	ABS control valve, 2nd axle RH side out

Marking	Function
M3RI	ABS control valve, 3rd axle RH side in
M2R31	ABS control valve, 2nd axle RH side earth
MH	Electrically adjustable rearview mirrors
MV	Electrically adjustable rearview mirrors
N3	Loudspeaker front, driver
N4	Loudspeaker front, passenger
N5	Loudspeaker front, CB radio
N6	Loudspeaker front/centre rear, driver's side
N7	Loudspeaker, centre
N11	Loudspeaker, CB radio, rear
OP	Engine oil pressure
OPG	Engine oil pressure
OPC1-55	Opticruise gearbox
PH	Short-stop heater
PB	Parking brake
PBX	Cab tilt double cab
PWM	Throttle pedal position signal from EDC
PWU	Window lift
PWD	Window lift
R	Direction indicator RH side
RA	Starter switch, for radio
RAA	Voltage converter for radio
RCL	Indicator lamp retractable steps
RET 1-55	Retarder
RF	Direction indicators, front right
RH1-4	Electric roof hatch
RHC	Electric roof hatch
RHO	Electric roof hatch

Marking	Function
RL	Reversing light
RR	Direction indicator rear right
RT	Direction indicators on trailer, right
SB	Seat belt
SD	Door switch
S2LI	ABS sensor, 2nd axle left in
S3RO	ABS sensor, 3rd axle right out
SLD	Speed limiter
SS1-4	GRS900 —tachograph
SS	Speed signal to C56/G1
SS6	Speed signal for SLD
STA	Steered tag axle
T	Fuel level
TACTO	Control rack position
TCI-3	TC traction control
TM	Trip meter
TRI-4	ABS trailer
W	Tachometer
WA	Webasto
WB	Webasto
WL	Coolant level
WTG	Coolant temperature
Z	Safety switch, throttle pedal sensor

## Light bulbs

Code	Function	Base	Power
A	Symbol lighting in instrument	W2.1x9 5d	2W
B		BA9s	2W
C	Interior lighting, general lighting	BA15s	15W
D	Step lighting	SV8.5	21W
E	Reading lamps, lower bunk lamp	BA15s	10W
F	Position lamp, rear light, width marking light	BA15s	5W
G	Indicator lamps in switches and heater control, indicator lamps for oil pressure, charging, instrument lighting in instrument cluster and speedometer	W2x4, 6d	1.2W
H	Direction indicators, reversing lights, brake lights, rear fog light	BA15s	21W
K	H4 headlight	P43t	75/70W
L	Bilux headlamp	P45t	55/50W
M	Indicator lamps in switches and heater control, indicator lamps for oil pressure, charging, instrument lighting in instrument cluster and speedometer	W2x4, 6d	1.2W
N		BA7s	3W
P	Spotlight	PK22s	70W
R	Outline marker lamp	BA15s	21W
S	Sign illumination on roof	BAY9s	21W
T		BA9s	12V 5W

# Location drawings

The following drawings show where the electric components are located on the chassis.

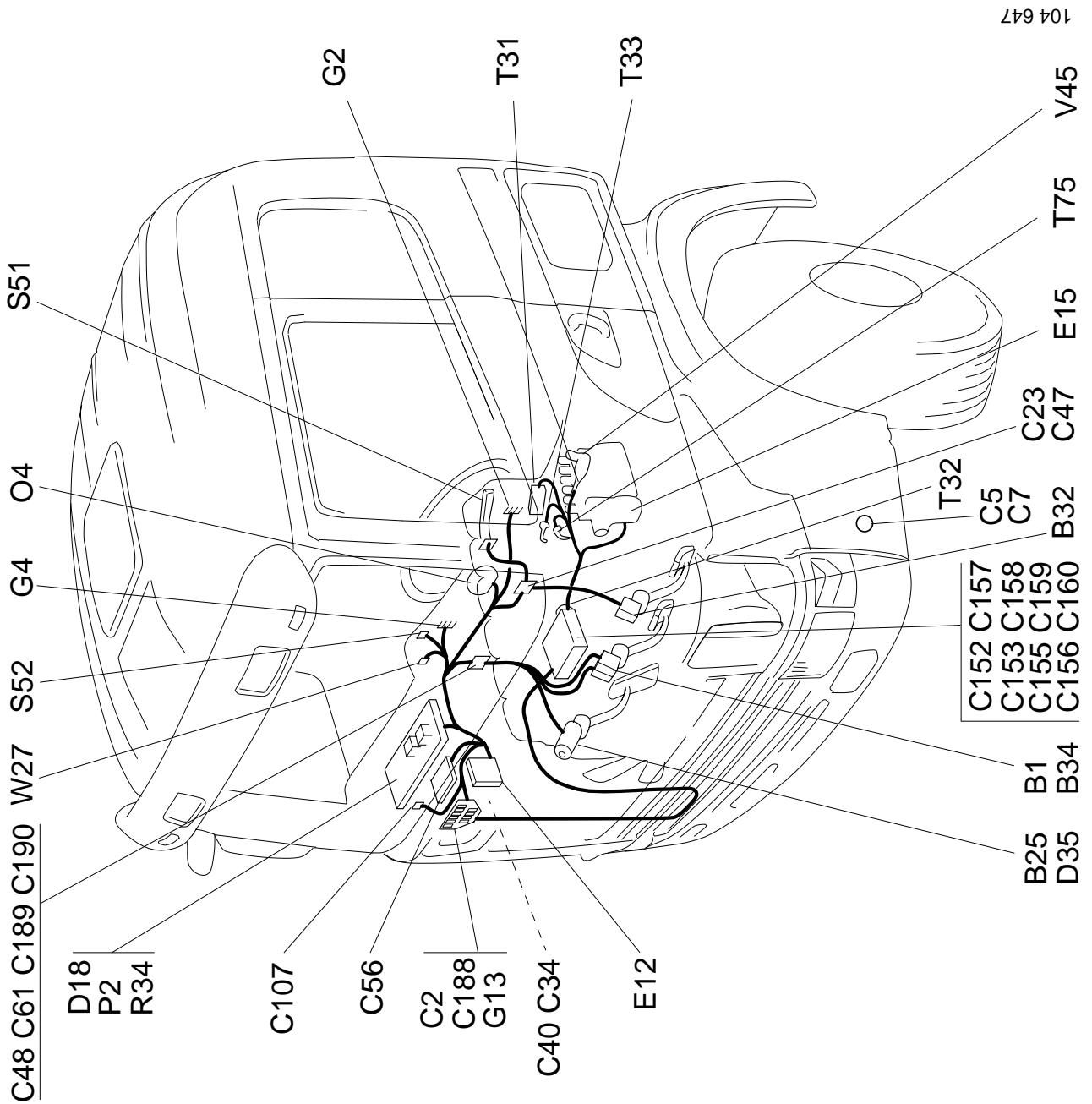
- 1 Components on cab.
- 2 Connectors on cab and under cab.
- 3 Connectors in cab roof and in doors.
- 4 Connectors on bulkhead.
- 5 Connectors and grounding points in instrument panel.
- 6 Switches on instrument panel, two drawings.
- 7 Warning lamps.
- 8 Relays in central electric unit.
- 9 Components on frame, seven drawings.





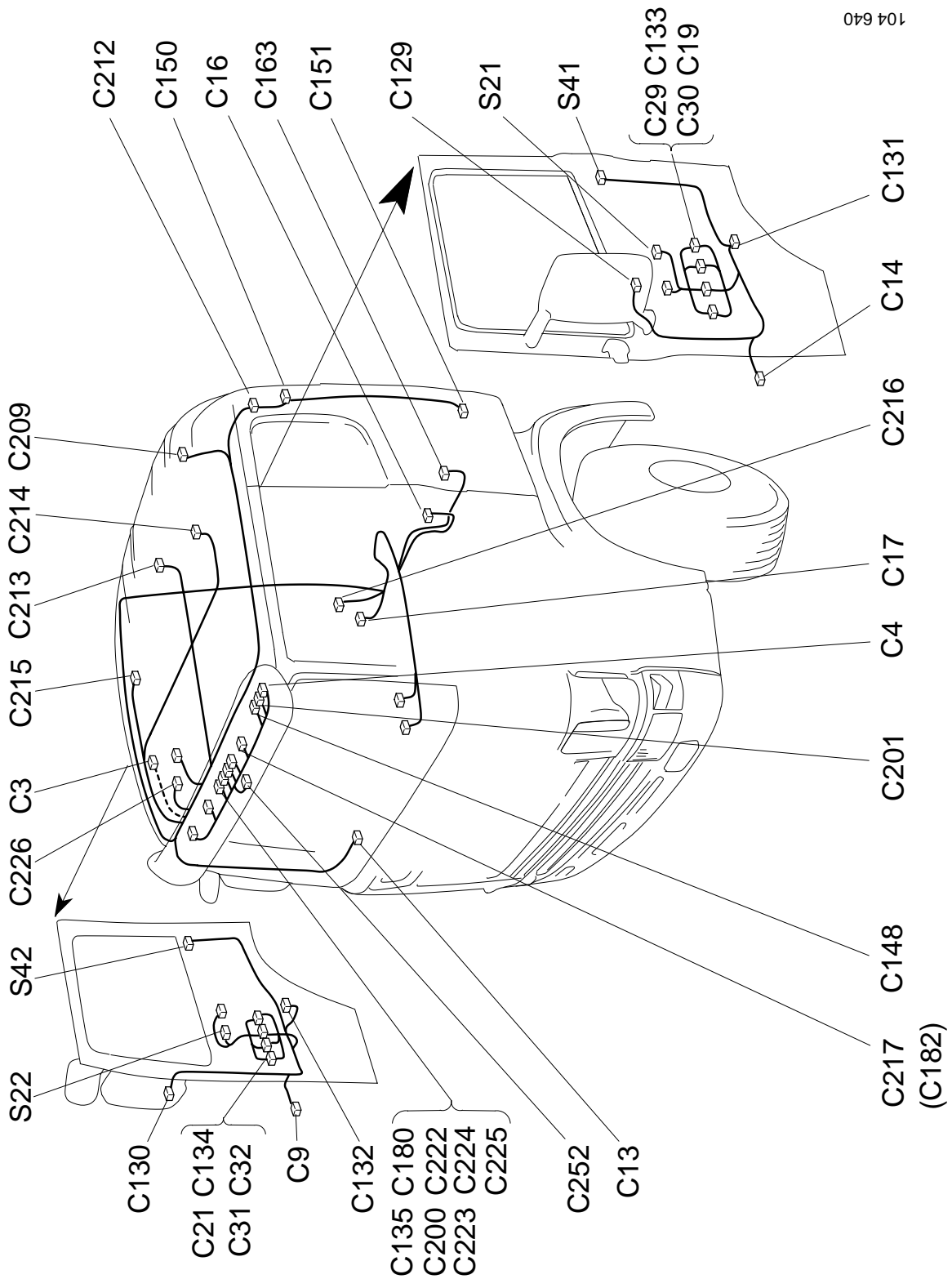
## 2.

The drawing shows a LHD vehicle. On RHD vehicles the components on the right-hand side are transferred to the left-hand side, and vice versa. The positions of the components relative to each other remain the same, however.



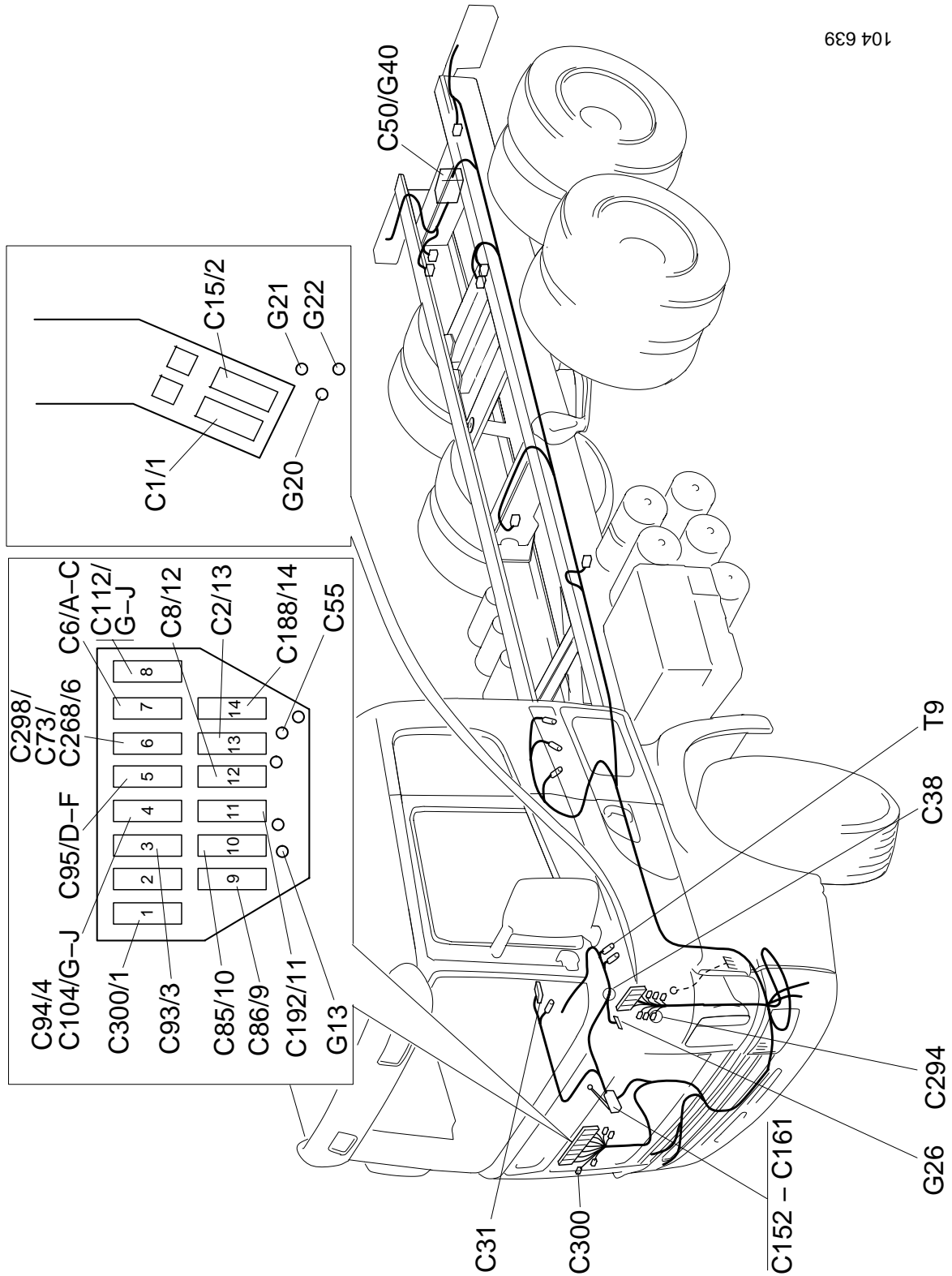
### 3.

The drawing shows a LHD vehicle. On RHD vehicles the components on the right-hand side are transferred to the left-hand side, and vice versa. The positions of the components relative to each other remain the same, however.



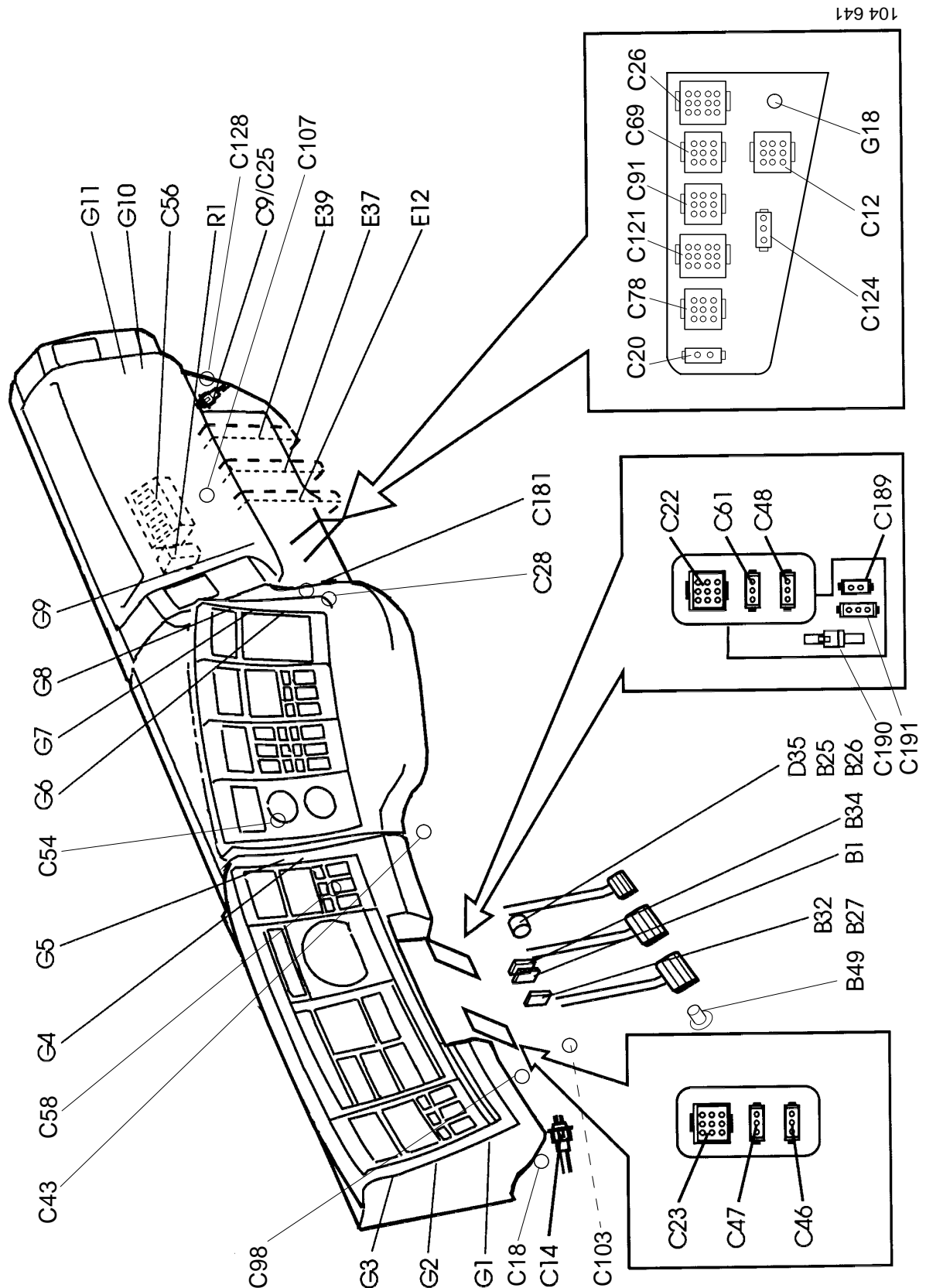
### 4.

The drawing shows a LHD vehicle. On RHD vehicles the components on the right-hand side are transferred to the left-hand side, and vice versa. The positions of the components relative to each other remain the same, however.



# 5.

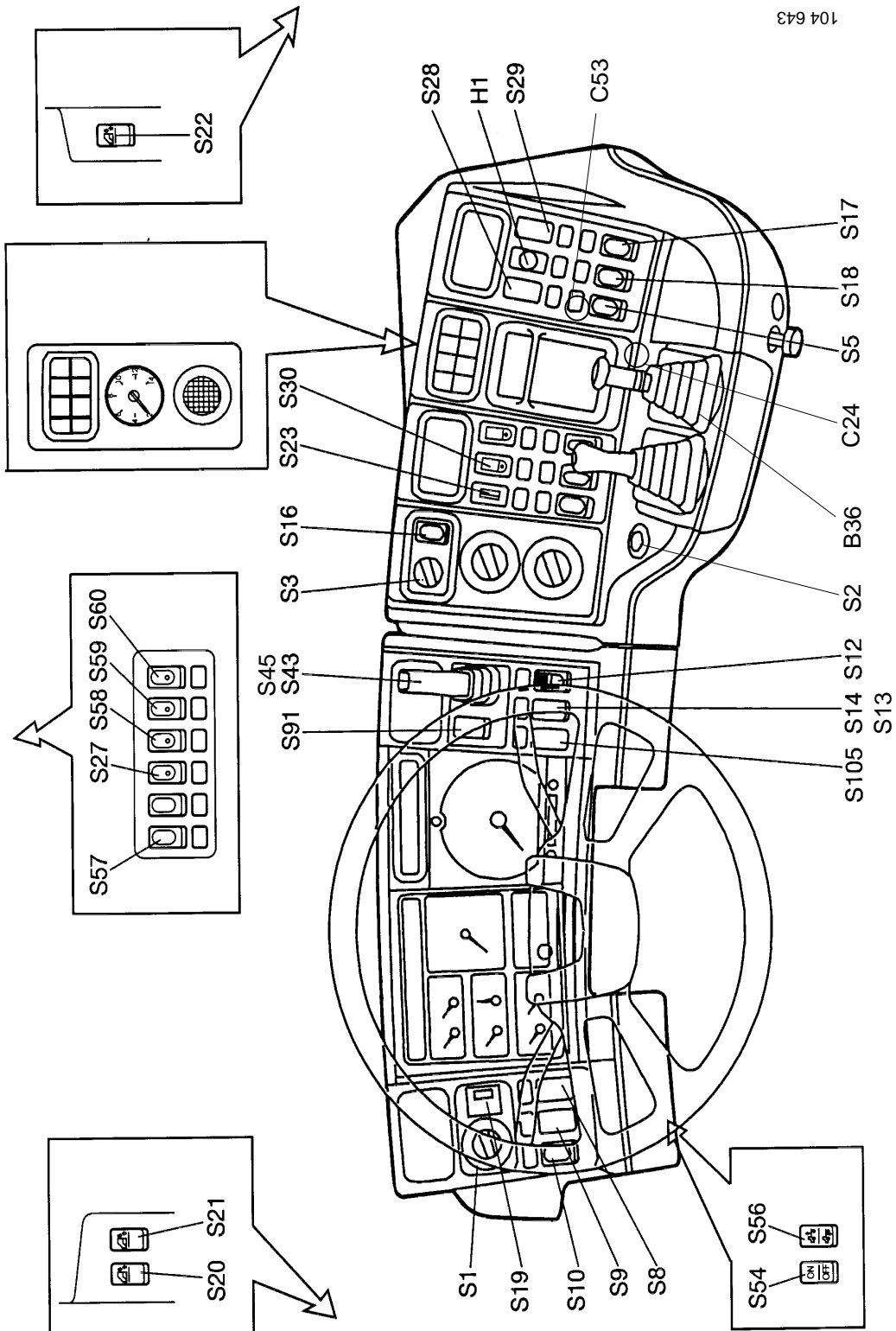
The drawing shows the instrument panel for a LHD vehicle. On RHD vehicles the components are located correspondingly.



104 641

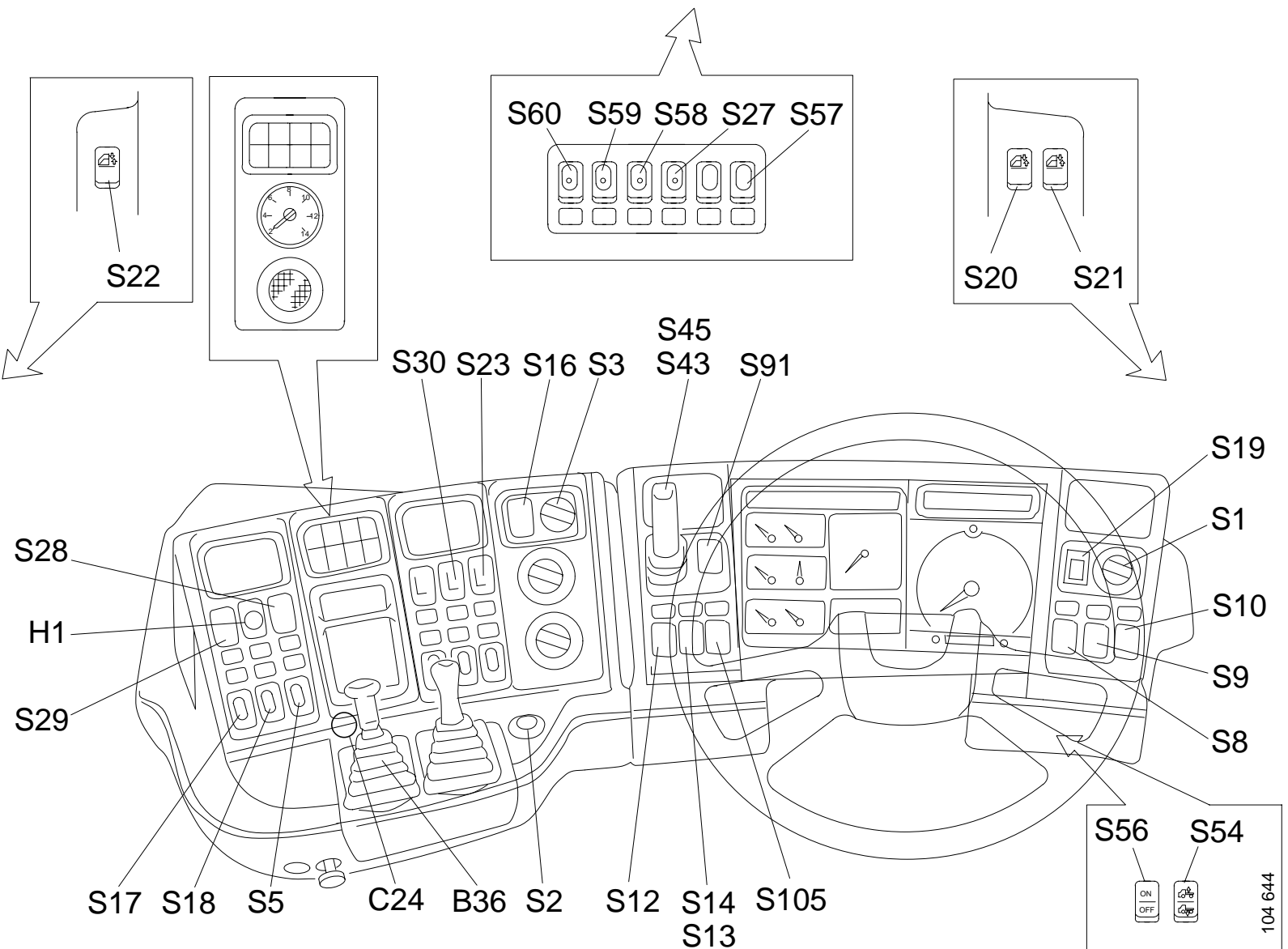
6a.

The drawing refers to a LHD vehicle.



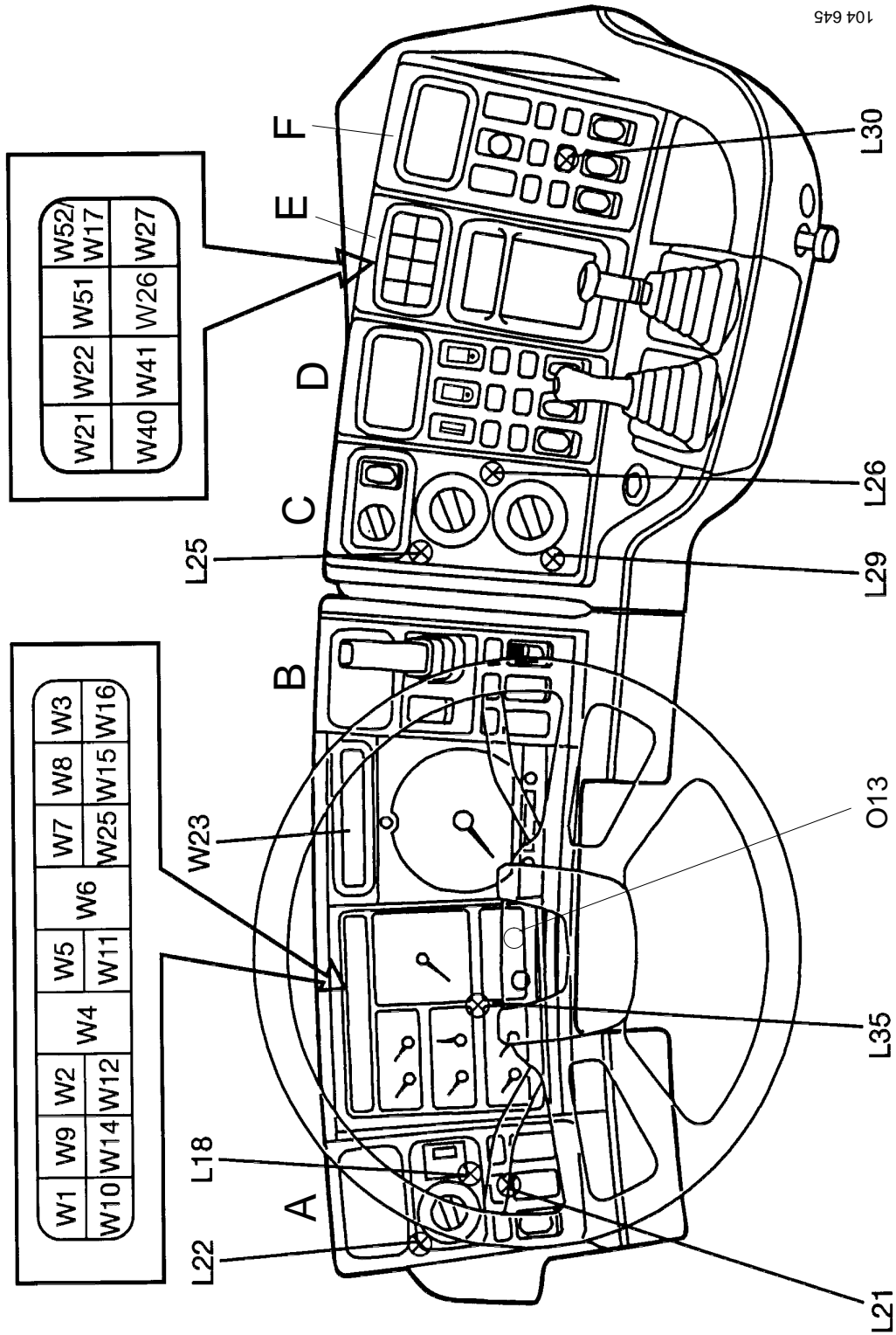
# 6b.

The drawing refers to a RHD vehicle.



7.

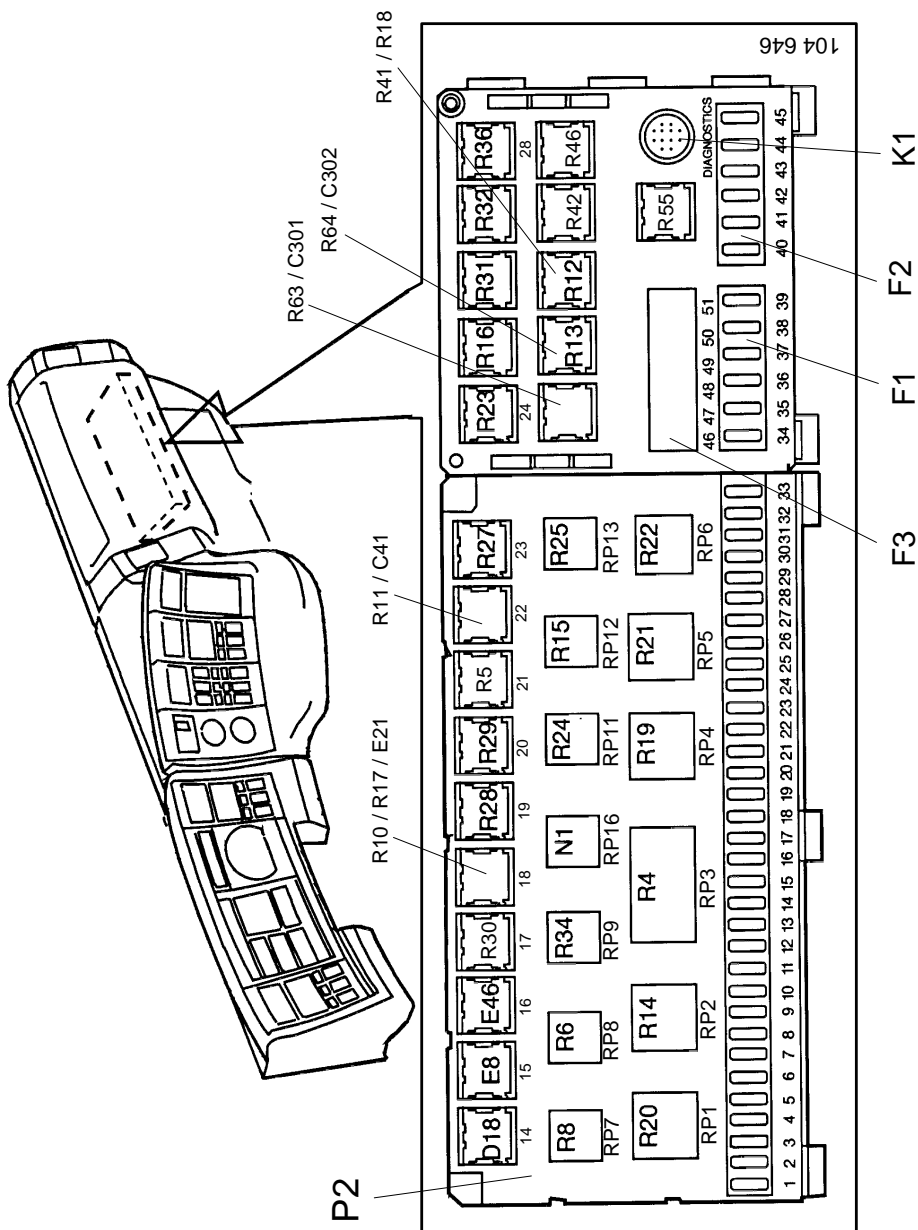
The drawing shows the instrument panel on a LHD vehicle. On RHD vehicles the instrument cluster is placed on the RH side. Panels A - F have the same relative positions.



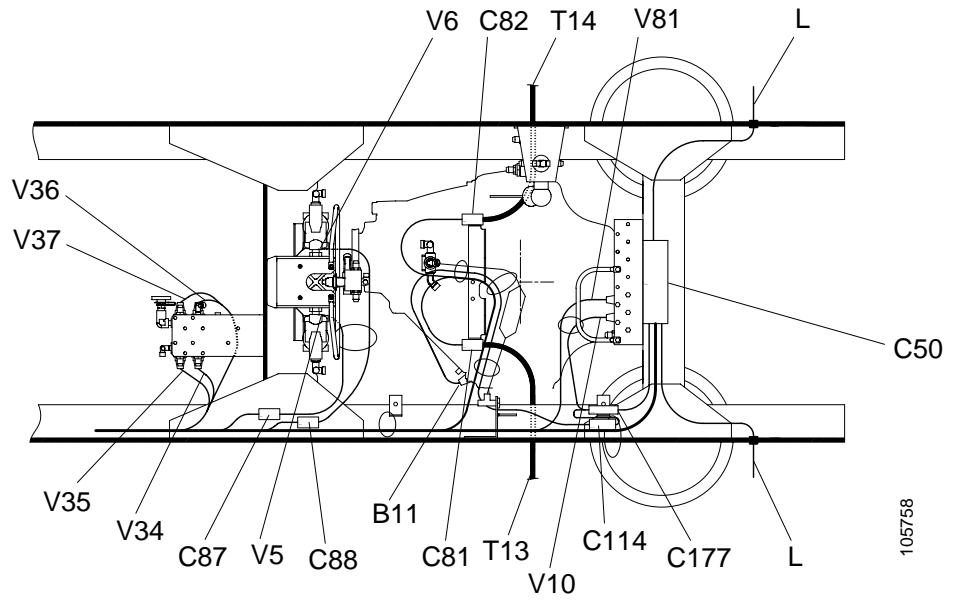


8.

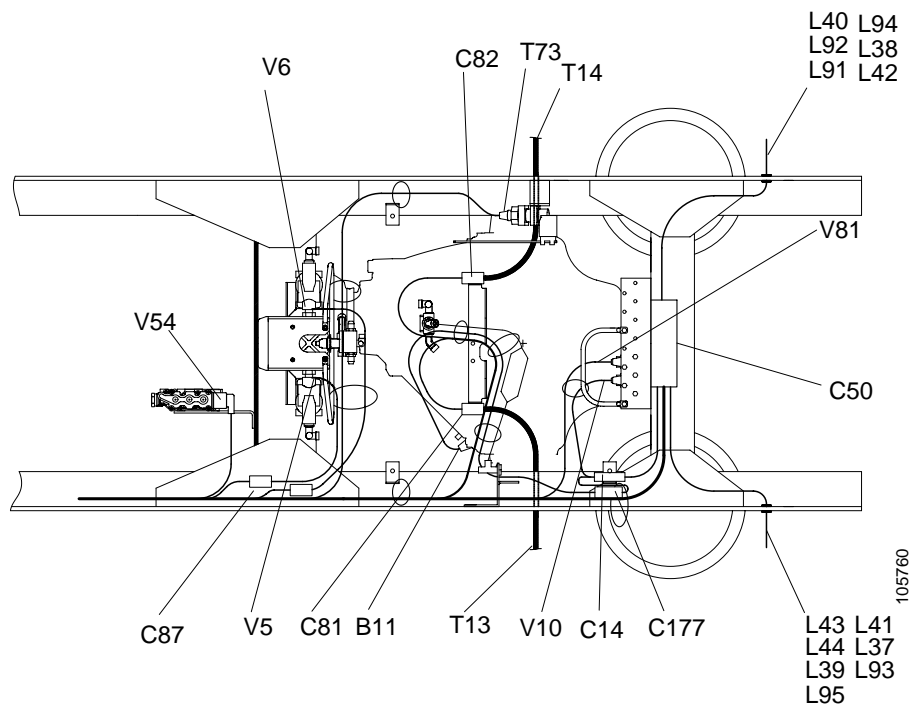
The components on the central electric unit are positioned identically on RHD and LHD vehicles.



9a.

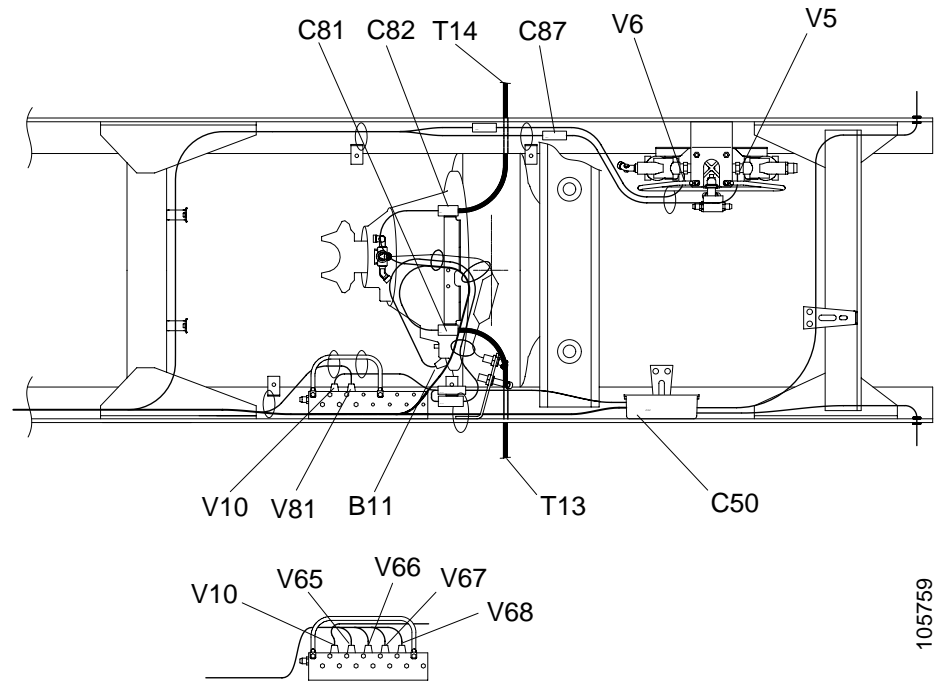


The drawing refers to 4x2 mechanical.



The drawing refers to 4x2A with ELC.

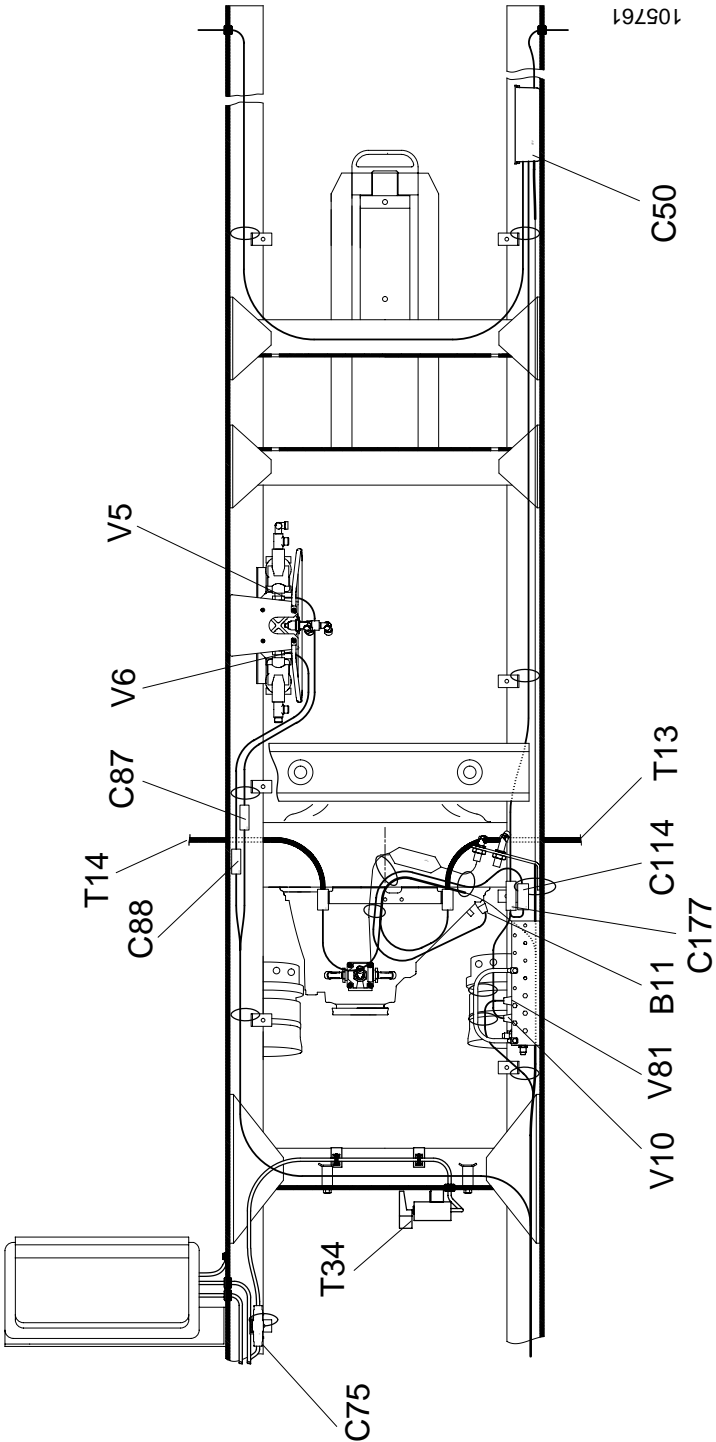
9b.



*The drawing refers to 4x2, 4x4 Z.*

9c.

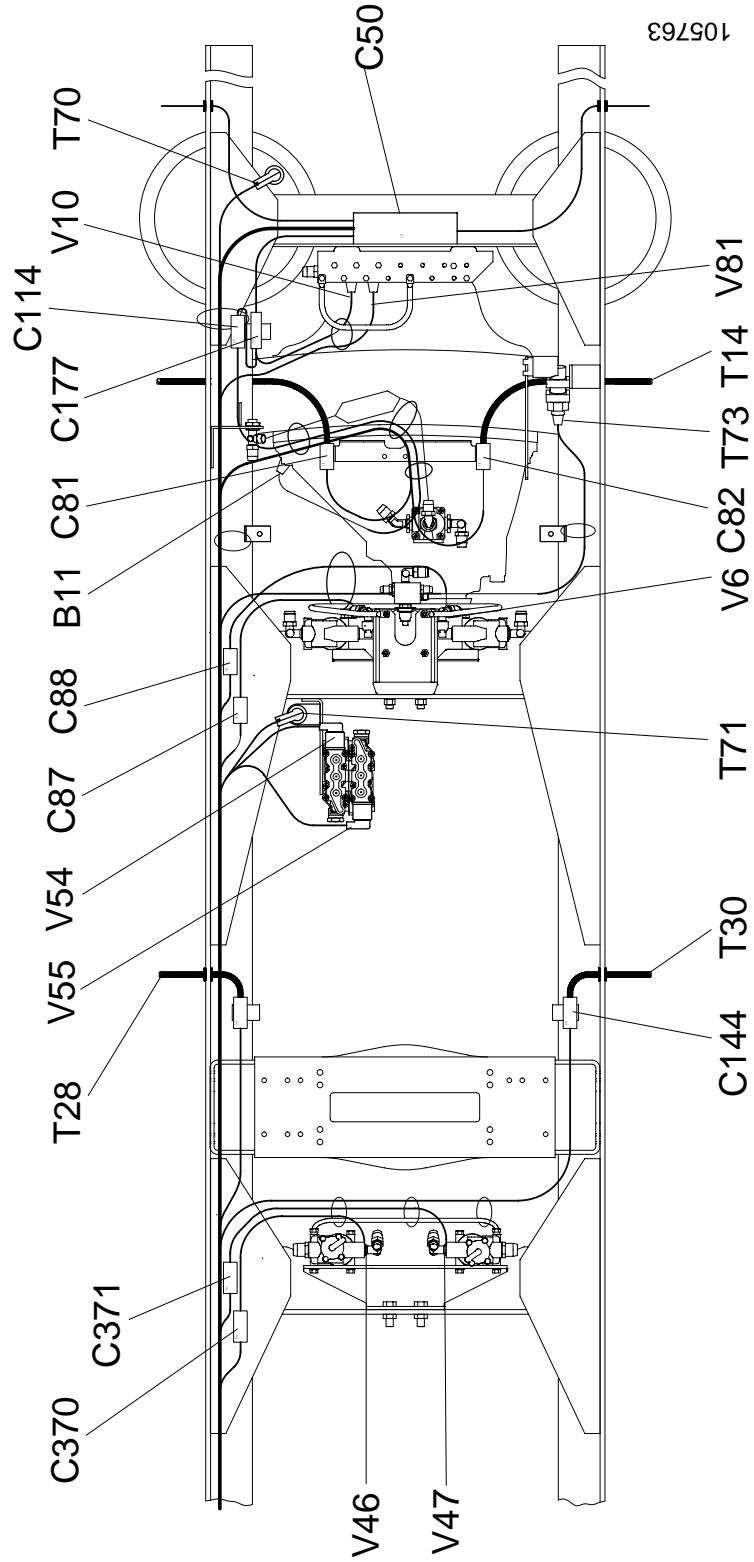
The drawing refers to 6x2, 8x2 Z.





9e.

The figure refers to 6x2/4 A/B.



9f.

The figure refers to 6x4 A/B, 8x4 A/B.

