VOLVO

Construction Equipment

Service Information

Document Title: **Electrical system, work instructions**	Function Group: **300**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Electrical system, work instructions

Batteries

1. Fully charged and satisfactory batteries must always be used when working on the electrical system.
2. Test the batteries with an acid tester. The battery isolator switch should be turned off.
3. When fitting a battery, make sure that the battery is connected with the correct polarity.
4. When changing batteries connected in series, they must have the same capacity. They should also be of the same age (equivalent) because the charge current required for a particular battery voltage changes with the battery age.
5. If booster battery is required when starting, the following instructions must be followed at all times; 191 Safety when working with batteries and 191 Starting with booster batteries.

Charging

1. Before performing any tests of the alternator or regulator, the batteries must be checked regarding insulation, loose contacts, and corrosion. Check the alternator belts.
2. "Safe" connections shall be used to prevent sparks and voltage transients. A disconnected cable may result in destruction of both alternator and regulator.
3. Never disconnect the leads from the alternator while the engine is running as this could damage the alternator and regulator.
4. Connecting the terminals of the alternator to ground can damage the alternator and regulator

Components

When removing or fitting components in the electrical system, the chassis connection should be interrupted or the battery isolator switch should be turned off.

Electric welding

For electric welding work on the machine or on attachments on machine:

- the voltage must be turned off with battery isolator switch
- all connectors in the central electrics shall be unplugged to avoid damaging the machine's electronics.
- Connect the ground connection of the welder directly to the part to be welded.

NOTE!

Welding on the cab is not permitted as it invalidates the cab's approval to FOPS and ROPS .

Document Title: **Electrical system, description**	Function Group: **300**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Electrical system, description

The voltage in the electrical system is 12 volts. The battery (G1) and battery isolation switch (Q1) are located to the right in the engine compartment.

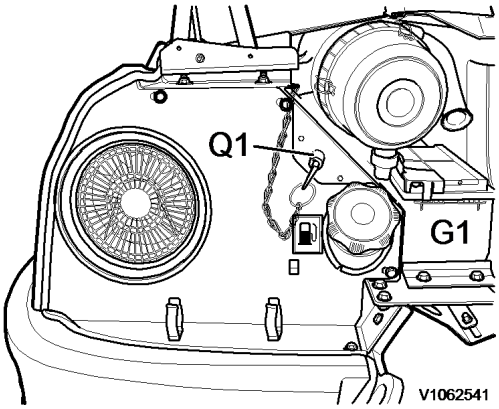

Figure 1

G1 Battery
Q1 Battery isolation switch

The machine electrics consist of an instrument panel and central power supply system (ZE) via which the cables are connected to one another. driving information, control lights and warning lights are displayed in the instrument panel.

The central power supply system (ZE) is located behind the service cover, on the right (arrow). The indication plate “safety coating” is located on the inside of the cover.

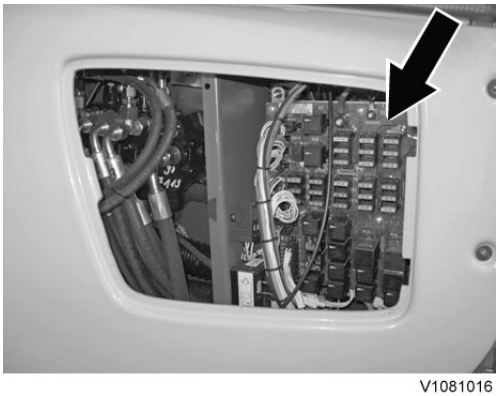

Figure 2

VOLVO

Construction Equipment

Service Information

Document Title: **Instrument panel, description**	Function Group: **300**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Instrument panel, description

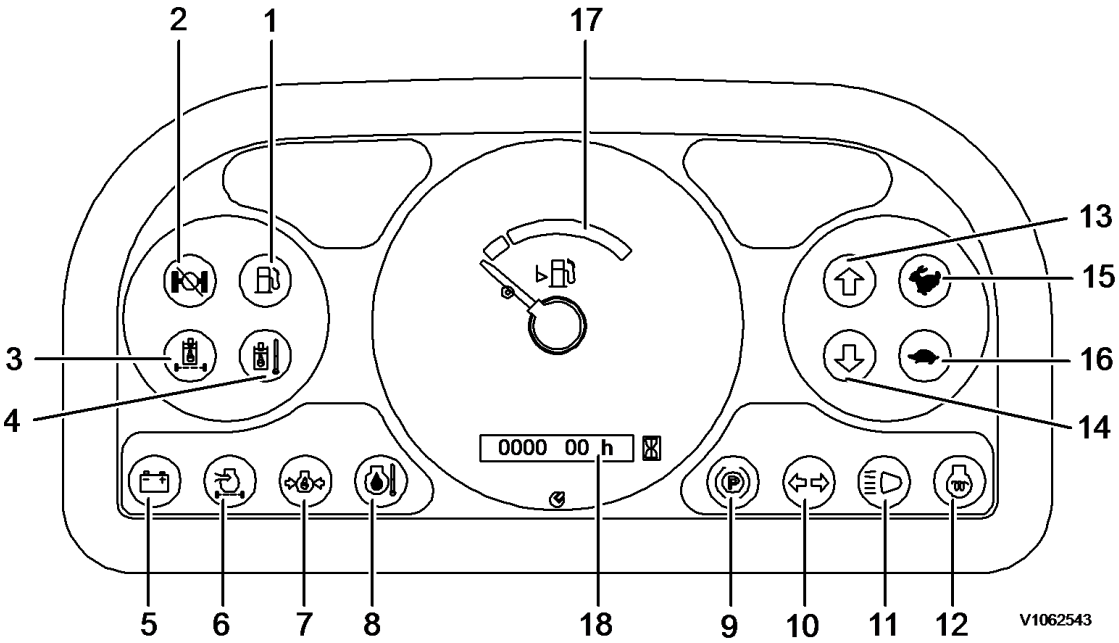

Figure 1

1. Fuel level (reserve)
2. Differential lock
3. Hydraulic oil filter
4. Hydraulic oil temperature
5. Battery charge control
6. Air cleaner indicator
7. Engine oil pressure
8. Engine temperature
9. Handbrake
10. Direction indicator
11. High beams
12. Preheating
13. Forward travel
14. Backup
15. Gear range “2” (hare)
16. Gear range “1” (tortoise)
17. Fuel level indicator
18. Hour meter

NOTE!
The warning buzzer sounds as an acoustic warning signal when limits are reached (only with engine running)

- Engine temperature
- Engine oil pressure

- Hydraulic oil temperature
- Hydraulic oil filter
- Air cleaner indicator
- Handbrake/operating instructions

Document Title:	Function Group:	Information Type:	Date:
Battery, description	**310**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Battery, description

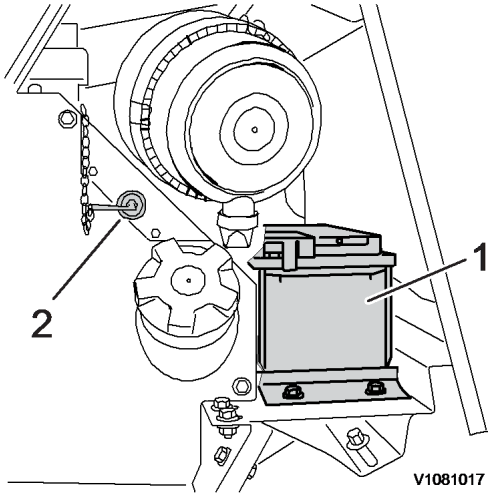

Figure 1

The battery (1) and battery isolator switch (2) are located in the battery box on the right side of the engine compartment. The original battery fitted to the machine is totally impermeable and absolutely maintenance-free. It may only be replaced with a battery with identical technological features. This excludes danger to operators from acid or acid vapours even if the machine rolls over.

The function of the battery isolator switch is to disconnect the the machine's electrical system from the battery voltage when the machine is not used or during maintenance and repair work.

The battery must be in good condition when troubleshooting the system. If needed, charge the battery with a battery charger. If the battery can no longer take the charge, replace the battery.

Document Title:	Function Group:	Information Type:	Date:
Battery, charging	**310**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Battery, charging

WARNING

Hydrogen gas is formed during battery charging. Hydrogen gas is flammable and may be explosive. A short circuit, open flame or spark near the battery can cause a powerful explosion. Therefore, ventilate well. Never smoke near batteries.

- Batteries must only be charged using a battery charger.
- Check the battery terminal connections and make sure that they are adequately tightened and free from corrosion and dirt.
- Check the battery voltage when the batteries are at rest (before starting). Each battery must be at least half-charged.

NOTICE

Always turn off the current to the battery charger before disconnecting the charging clamps.

WARNING

Corrosive sulphuric acid

The battery electrolyte includes corrosive sulphuric acid. Electrolyte spilled on bare skin must be removed immediately. Wash with soap and plenty of water. If electrolyte gets into your eyes or any other sensitive body part, rinse immediately with plenty of water and seek immediate medical attention.

Document Title: **Alternator, removing**	Function Group: **321**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Alternator, removing

Op nbr 321-003

1. Place the machine in service position.
2. Switch off the battery connection switch.
3. Remove grease gun and air flow guide plate (1).

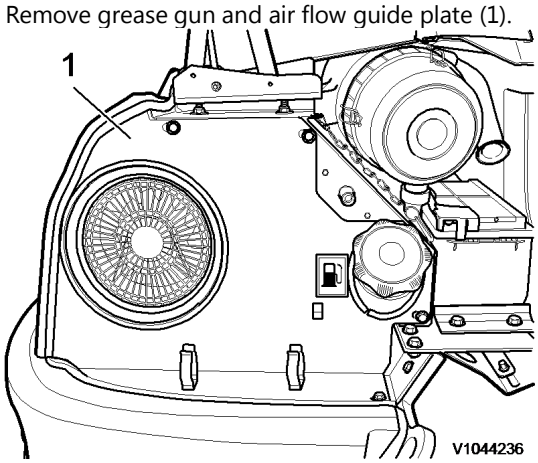

Figure 1

4. Release fixing bolt for V-belt tension roller and relieve load on tension roller.

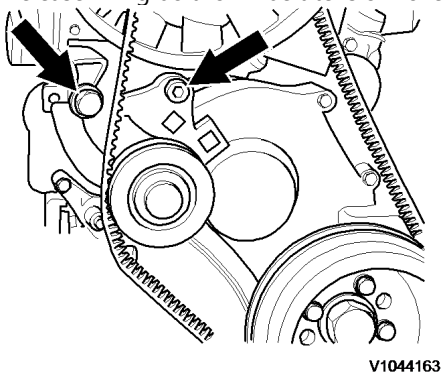

Figure 2

5. Remove rubber seal from fan casing and remove V-belt.
6. Remove air duct cover.

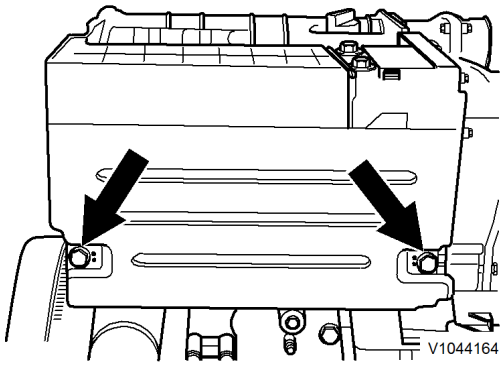

Figure 3

7. Disconnect alternator connecting cable.

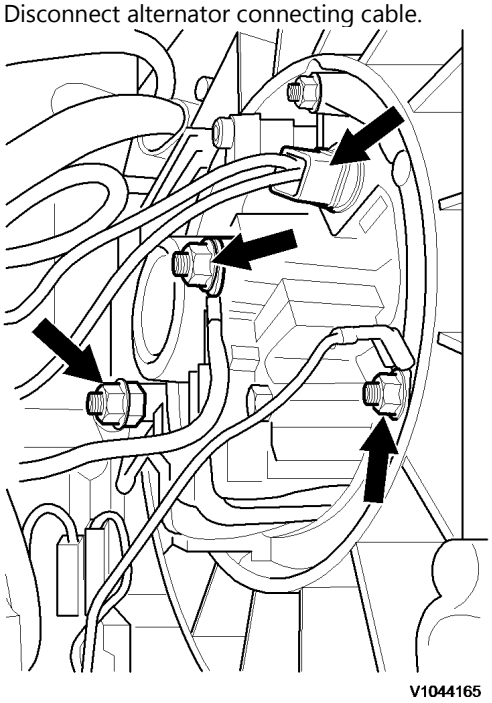

Figure 4

8. Remove fan casing.

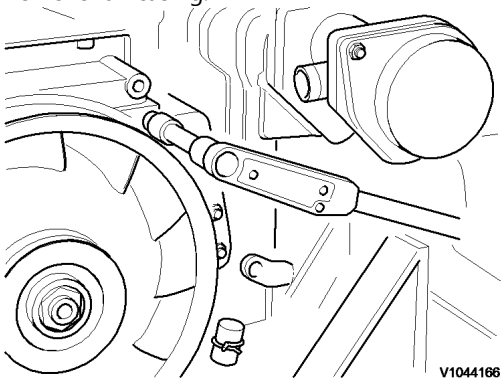

Figure 5

9. Remove air duct.

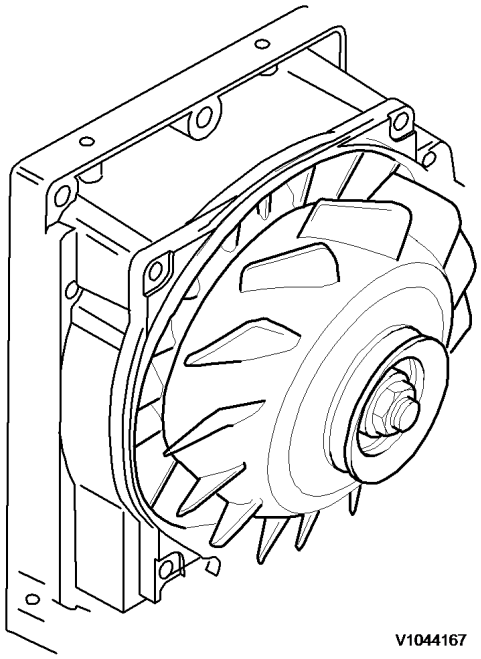

Figure 6

10. Unscrew fixing nut (1), remove V-belt pulley (2) and fan wheel (3).

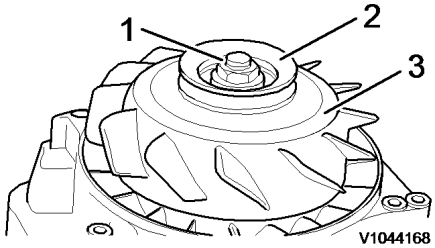

Figure 7

11. Remove spacer (1) and guide washer (2).

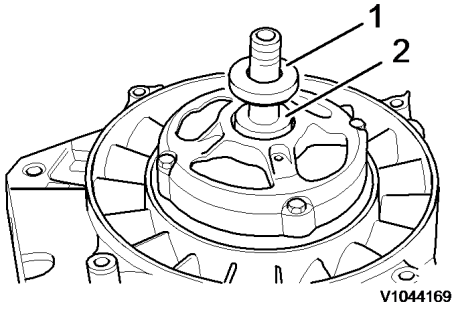

Figure 8

12. Unscrew alternator fixing nuts and press alternator out of air duct.

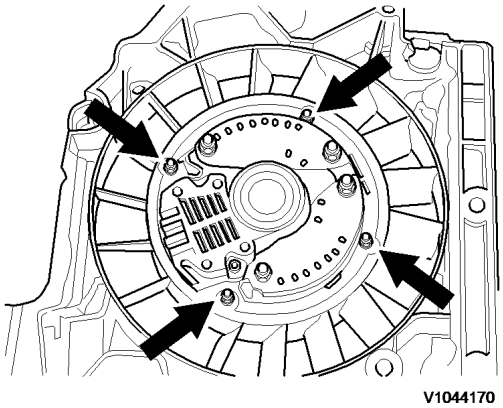

Figure 9

NOTE!
Visually inspect all parts removed and replace if necessary.

Document Title: **Alternator, installing**	Function Group: **321**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Alternator, installing

Op nbr 321-004

1. Insert alternator in air duct.
   NOTE!
   Note installation direction.

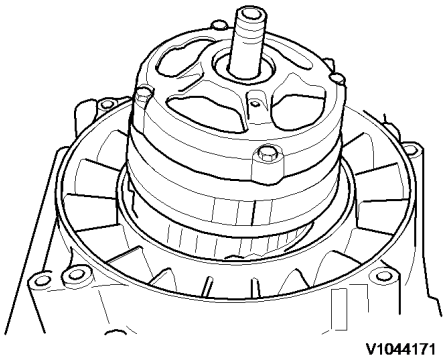

Figure 1

2. Tighten alternator fixing nuts with a tightening torque of **4 Nm (3 lbf ft)**.

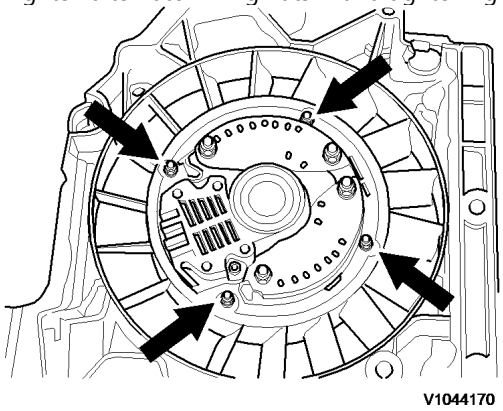

Figure 2

3. Fit guide washer (2) and spacer (1).

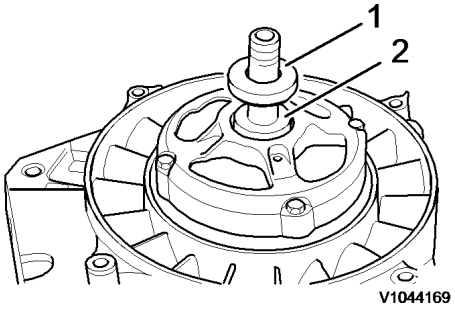

Figure 3

NOTE!
The recessed side of the guide washer (2) must face the alternator.

4. Install fan wheel (3) and V-belt pulley (2) and attach with fixing nut (1). Tightening torque **50 Nm (36.9 lbf ft)**.

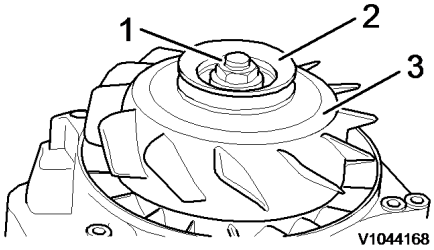

Figure 4

5. Connect charging current line (B+) to alternator and insert correctly with cable passage in air duct casing.

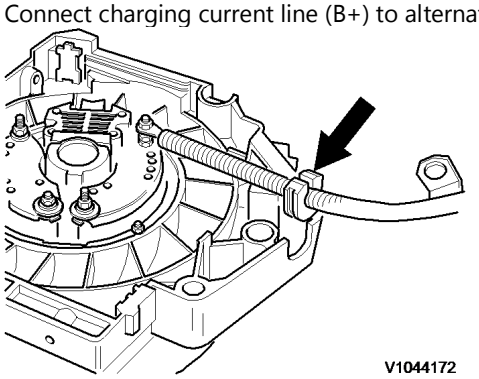

Figure 5

6. Attach and fasten air duct, tightening torque **22 Nm (16 lbf ft)**.

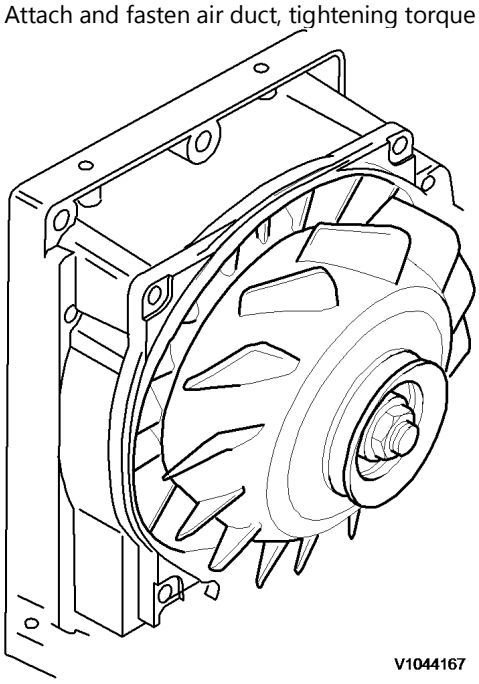

Figure 6

7. Connect alternator connecting cable.

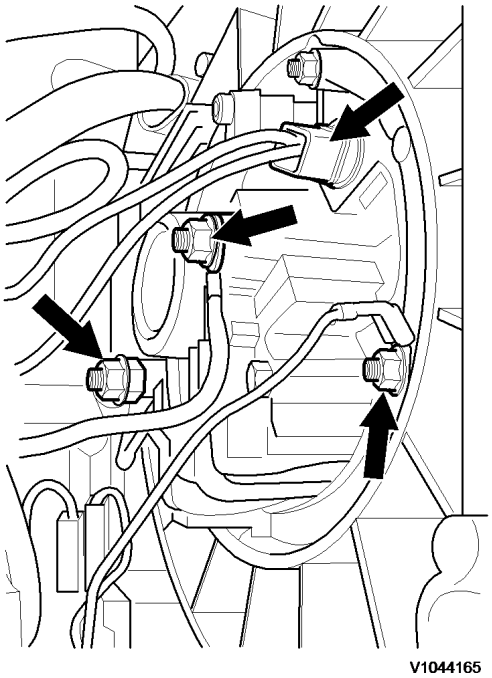

Figure 7

NOTE!
Ensure correct terminal allocation else damage can be caused to the electrical system.

8. Attach and fasten fan casing, tightening torque **22 Nm (16 lbf ft)**.

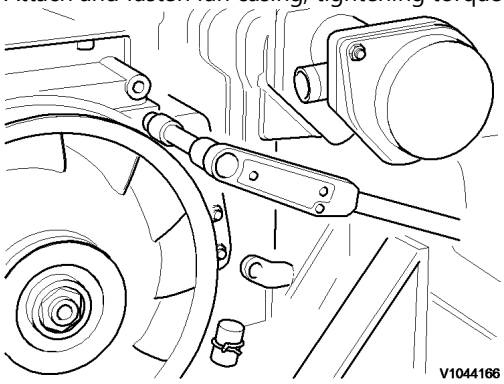

Figure 8

NOTE!
Measure play between fan wheel and fan casing.

min. 0.2 mm (0.08 in)

max. 0.8 mm (0.3 in)

9. Fit V-belt and attach rubber seal to fan casing.

10. Tighten V-belt. Tighten tension roller fixing bolts, tightening torque **45 Nm (33 lbf ft)**.

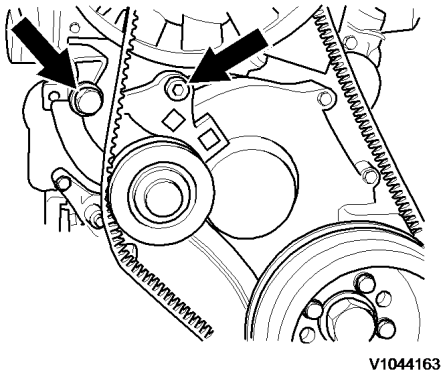

Figure 9

11. Check the V-belt tension.
    V-belt tension:
    Pretension after first installation 450 N
    Retighten under load 350 ± 20 N

12. Install air duct cover.

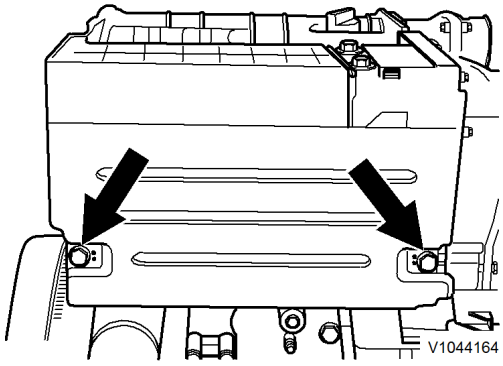

Figure 10

13. Install air flow guide plate (1) and insert the grease gun.

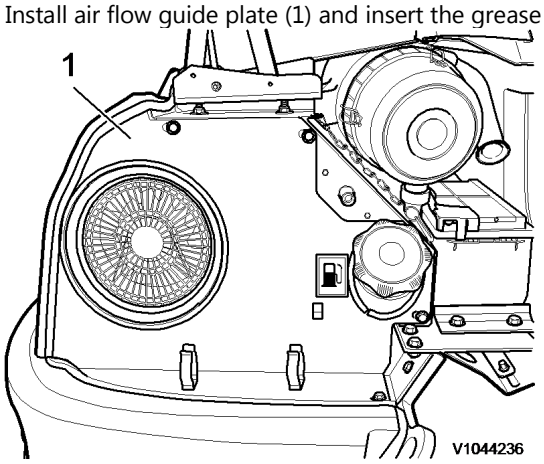

Figure 11

Document Title: **Starter motor, replacing**	Function Group: **331**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Starter motor, replacing

Op nbr 331-018

1. Place the machine in service position.
2. Switch off the battery connection switch.
3. Disconnect charging current line (B+) to starter.

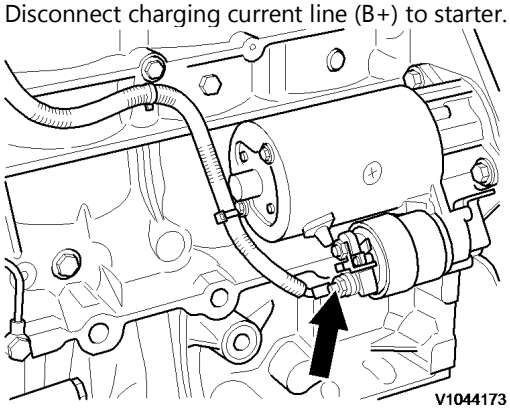

Figure 1

4. Unscrew starter fixing bolts.

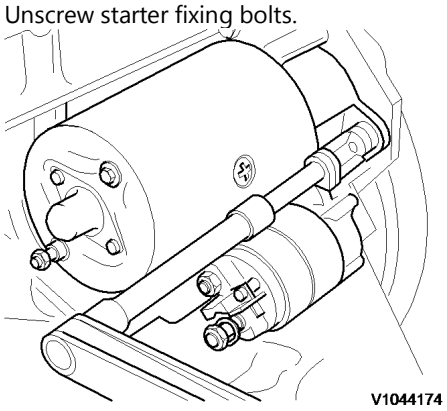

Figure 2

5. Remove starter in direction of fan.

Installing

6. Attach starter and tighten bolts with a torque of **43.5 Nm (32.1 lbf)**

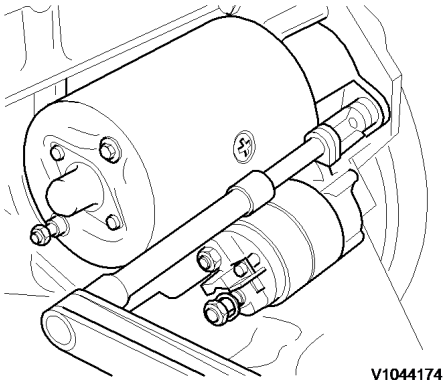

Figure 3

7. Screw charging current line (B+) to starter and tighten with a torque of **15 Nm (11 lbf)**.

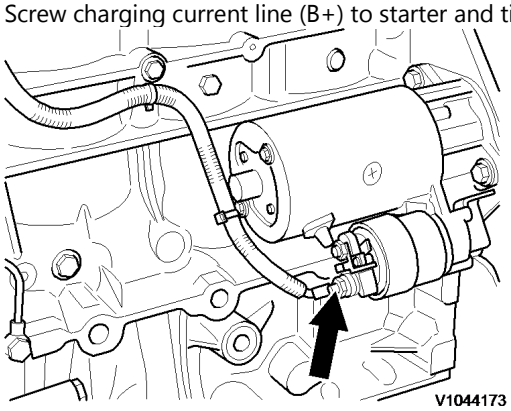

Figure 4

Document Title:	Function Group:	Information Type:	Date:
Air preheating, description	**333**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Air preheating, description

The purpose of electric air preheating is to heat the air in the induction pipe when the engine starts. The warm air makes starting easier in very low temperatures and reduces white smoke development on cold start.

When the ignition key is turned to Position I, the preheat element (temperature-dependent) switches on and the "Preheat" check lamp lights. The check lamp remains lit until the preheat element is switched off.

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Overview lighting, devices	**350**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Overview lighting, devices

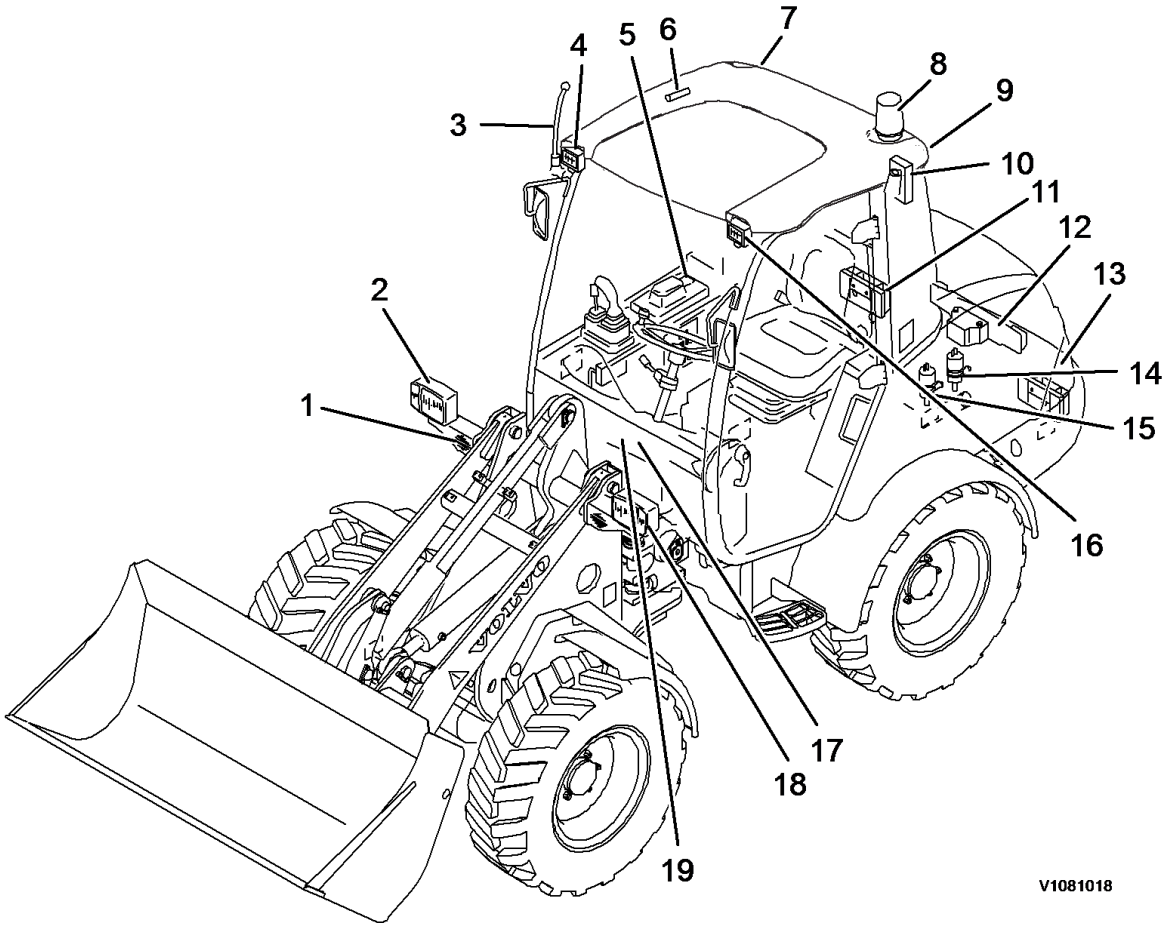

Figure 1

1 Vehicle horn (H6)
2 Headlamp / direction indicator right (E30, E31, E32, E33)
3 Radio antenna (W1)
4 Work light, front right (E11)
5 Radio (B50)
6 Interior light (E15)
7 Worklight, rear right (E13)
8 Beacon lamp (E14)
9 Worklight, rear left (E12)
10 Rear wiper motor (M2)
11 Rear light right (E50, E51, E52, E53)
12 Reversing alarm (E55, H1)
13 Rear light left (E40, E41, E42, E43)
14 Rear screenwash pump (M8)
15 Front screenwash pump (M7)
16 Work light, front left (E11)
17 Front wiper motor (M1)
18 Headlamp / direction indicator left (E20, E21, E22, E23)
19 Heater fan

Document Title: **Lighting, description**	Function Group: **350**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Lighting, description

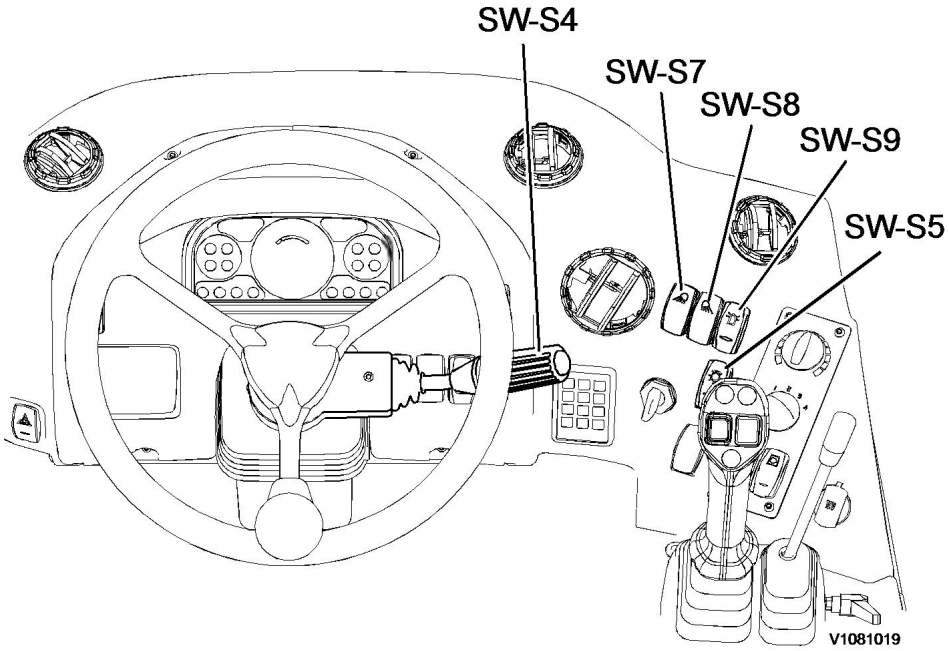

Figure 1

Headlights

The headlights are switched on and off with the switch (SW-S5) on the instrument panel. When switched on, the function LED and the symbol also illuminate.

- Switch pressed = Parking light and instrument lighting switched on. This function is also available with the ignition switched off.
- Switch pressed again = Headlights switched on. This function is available only with the ignition switched on.

Switch between high and low beam with the switch (SW-S4) on the steering column switch.

- Pull lever towards steering wheel = high beam/low beam.

A check lamp on the instrument panel indicates that high beams are on.

See 370 Wiring diagram 8

Work lights front

The work lights are switched on and off with the switch (SW-S7) on the instrument panel. When switched on, the function LED and the symbol also illuminate.

- Switch pressed = Front work lights on.

The work lights can only be activated together with the parking lights.

See 370 Wiring diagram 12

Work lights roof

The rear work lights are switched on and off with the switch (SW-S8) on the instrument panel. When switched on, the function LED and the symbol also illuminate.

- Switch pressed = Front work lights on.

The work lights can only be activated together with the parking lights.

See 370 Wiring diagram 13

Rotating beacon

The rotating beacon (LA-E14) is switched on and off with the switch (SW-S9) on the instrument panel. When switched on, the function LED and the symbol also illuminate.

- Switch pressed = Rotating beacon on.

If the ignition is switched off when the rotating beacon lamp is switched on, the rotating beacon lamp remains on.

See 370 Wiring diagram 13

Document Title:	Function Group:	Information Type:	Date:
Windscreen wiper front, replacing motor	**363**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Windscreen wiper front, replacing motor

Op nbr 363-002

1. Place the machine in service position.
   NOTE!
   If the windscreen wipers malfunction due to a wiper motor problem or a problem prevents the wiper arms from returning to the park position, make sure that the windscreen wiper is switched off to enable replacement of the wiper motor or adjustment of the wipers to the park position.

2. Switch off the battery disconnect switch.

Removing

3. Raise the cover and unscrew the fixing nut (1).

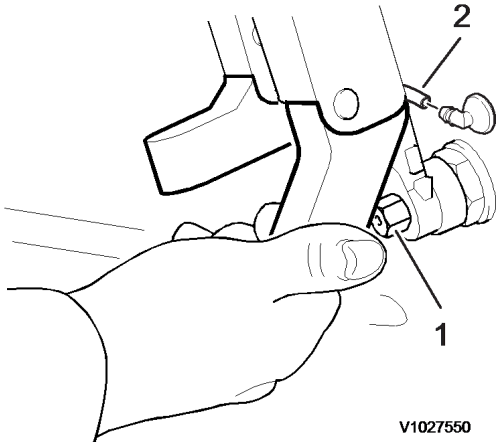

Figure 1

4. Detach the washer fluid hose (2) from the connection.

5. Remove the wiper arm rearwards.

6. Unscrew the nut (1) and remove the plastic washer (2).

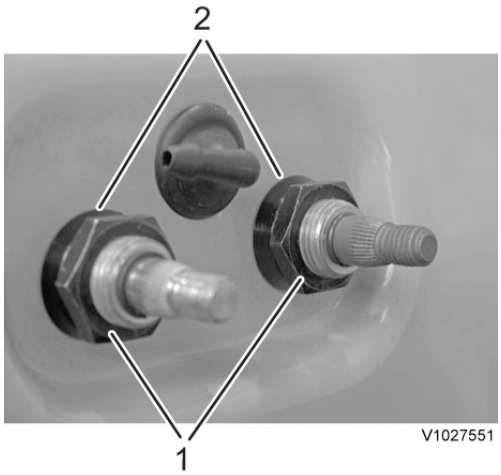

Figure 2

7. Remove the right-hand side panel (1).

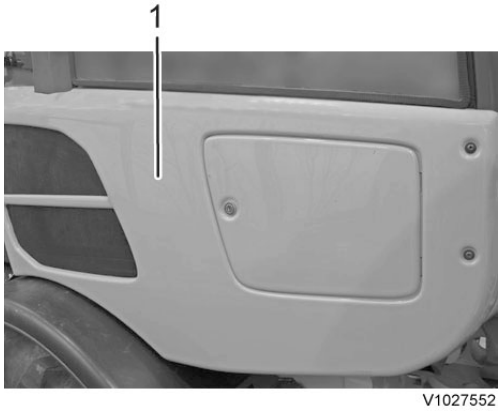

Figure 3
Side panel, right

8. Unscrew the instrument panel attaching nut (1). The attaching nut (1) is located above the central electrics.

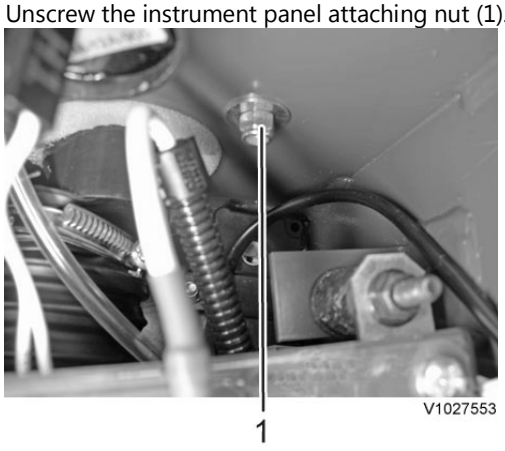

Figure 4

9. Unscrew the instrument panel attaching nut (2). The attaching nut (2) is located above the inching brake pedal.

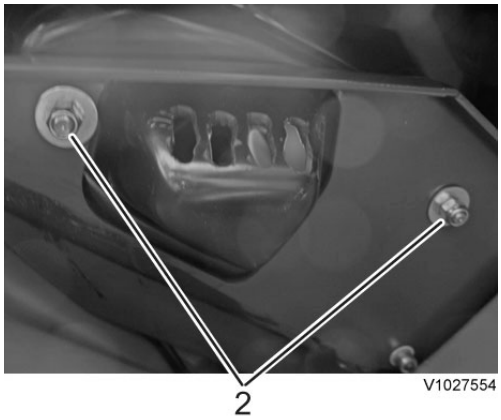

Figure 5

10. Remove the body-bound rivet (3) at the instrument panel.

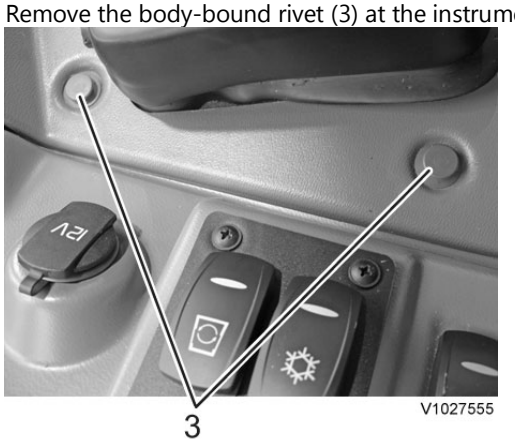

Figure 6

11. Raise the instrument panel until there is free access to the wiper motor.

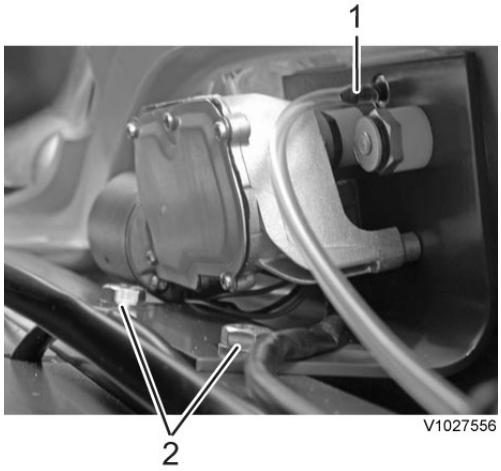

Figure 7

12. Detach the washer fluid hose (1) from the connection and unscrew the bolt (2).
13. Remove the wiper motor and disconnect the pin plug connection.

Figure 8

Installing

14. Attach a new wiper motor to the bracket.

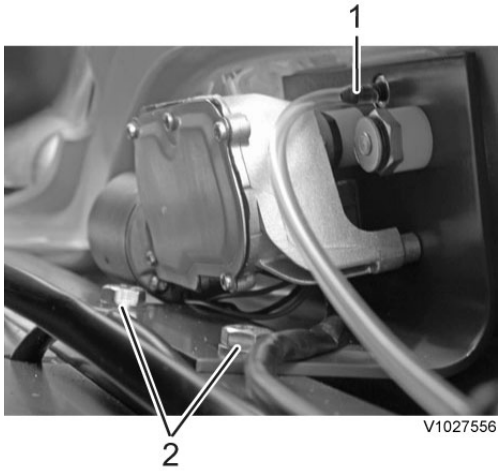

Figure 9

15. Connect the pin plug connection and position the wiper motor at the windscreen.
16. Attach the washer fluid hose (1) and fasten the bolt (2).
17. Fit the plastic washer (2) and fasten the nut (1).

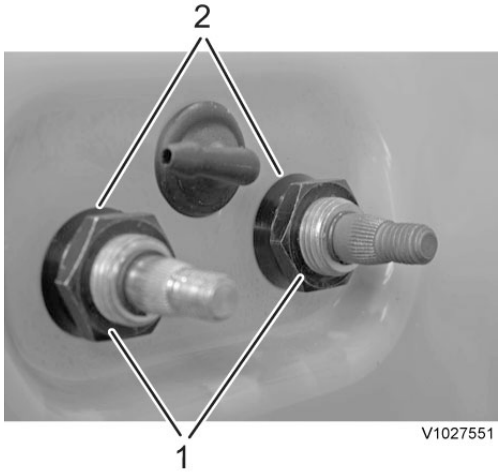

Figure 10

18. Install the wiper arm in the right position so that the wiper blades sit in the parked position. Tighten the fixing nut (1) and fold down the cover.

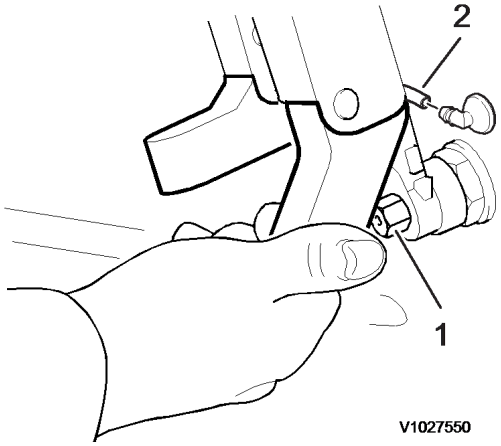

Figure 11

19. Attach the washer fluid hose (2).

20. Route the washer fluid hose and the cable so that they do not become pinched when the instrument panel is repositioned.

21. Reposition the instrument panel and screw into place. Fit body-bound rivet.
    NOTE!
    Make sure that the air duct seal under the instrument panel is properly positioned.

22. Install the right-hand side panel (1).

23. Check the functionality of the windscreen wiper and washer.

Document Title: **Instrument panel, electrical circuit**	Function Group: **364**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Instrument panel, electrical circuit

Connector, instrument panel A5

The connector A5 is located on the back of the instrument panel.

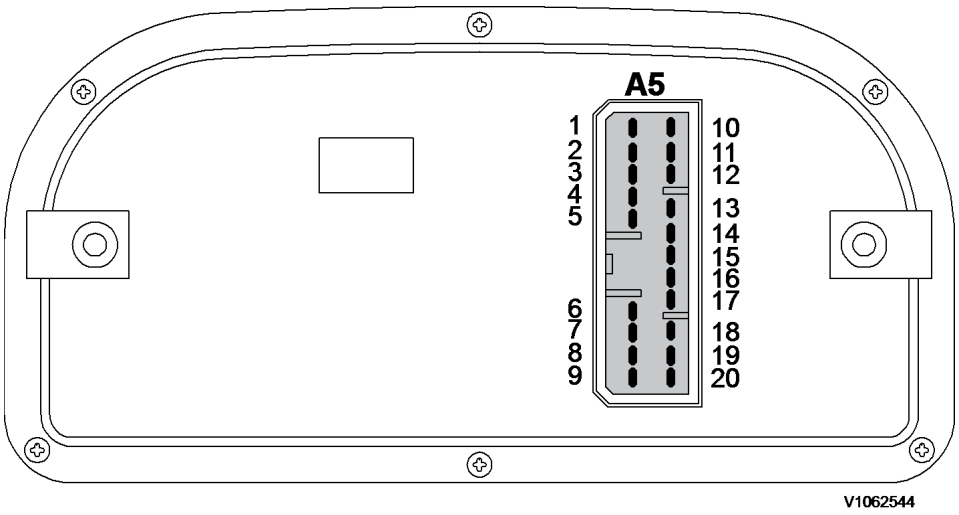

Figure 1
Connector, instrument panel A5

PIN	Description	Horn
1	Engine oil pressure control lamp	Negative
2	Air filter check lamp	Negative
3	Check lamp, alternator charge	Negative
4	Check lamp, gear "2"	Positive
5	Check lamp, reverse drive	Positive
6	Fuel level indicator	ohm
7	Instrument lighting (+)	+ Lighting
8	Ground	
9	Supply (+ ignition lock)	
10	Check lamp, forward drive	Positive
11	Check lamp, differential lock	Positive
12	Check lamp, fuel reserve	Negative
13	Check lamp, high beams	Positive
14	Check lamp, hydraulic oil filter	Negative
15	Check lamp, gear "1"	Positive
16	Check lamp, preheating	Negative
17	Check lamp, hydraulic oil temperature	Negative
18	Check lamp, direction indicator	Negative
19	Check lamp, handbrake	Negative

20	Engine temperature check lamp	Negative

VOLVO
Construction Equipment

Service Information

Document Title: **Marking connector/pin description**	Function Group: **364**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Marking connector/pin description

Connectors on circuit board, central electrics

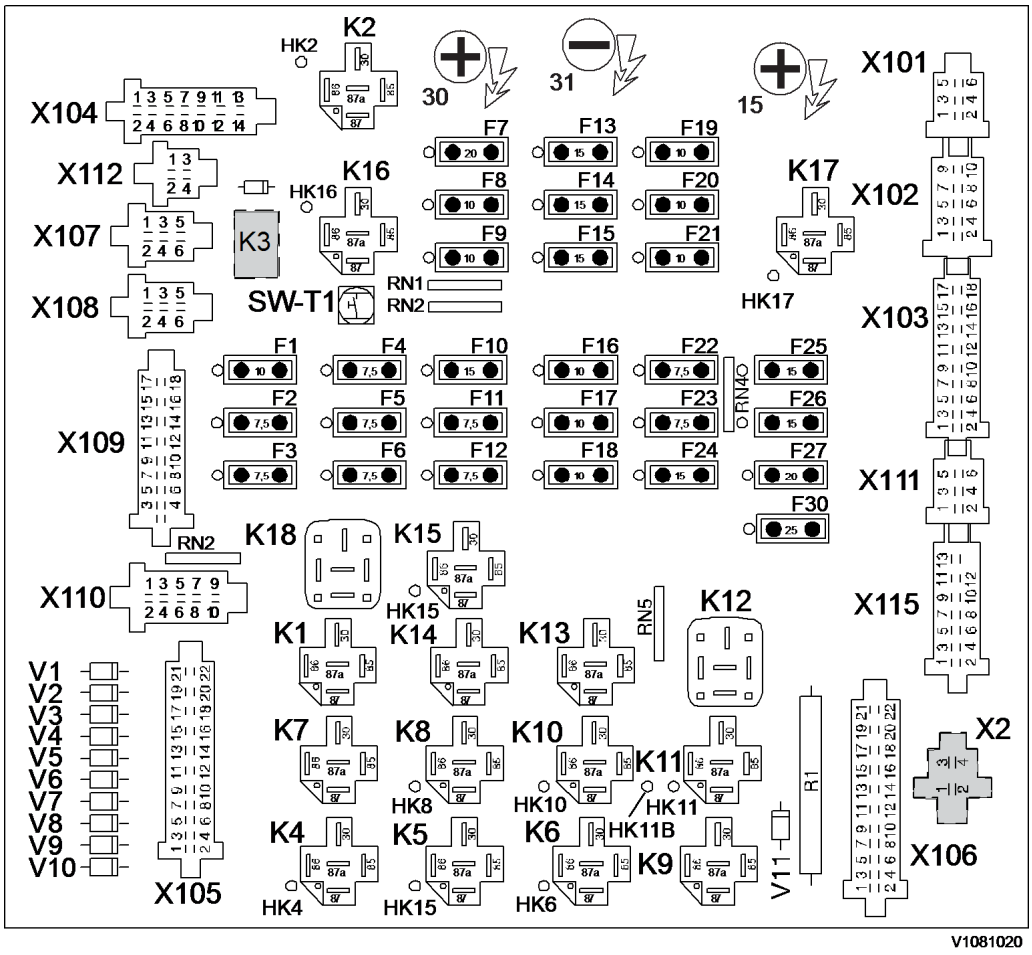

Figure 1
Circuit board, central electrics

Connector X101						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X101/01	INPUT	Wiper motor, front	MO-M1	31b		via SW-S4, RE-K12
X101/02	OUTPUT	Wiper motor, front	MO-M1	53a	F21	via SW-S4, RE-K12
X101/03	OUTPUT	Wiper motor, front stage I	MO-M1	53c I	F21	via SW-S4, RE-K12
X101/04	OUTPUT	Wiper motor, front stage II	MO-M1	53b II	F21	via SW-S4, RE-K12
X101/05	OUTPUT	Wiper motor, front	MO-M1	31		via SW-S4, RE-K12
X101/06		not used				

Connector X102

Plug/PIN	Signal	Function	Description	Clamp	Fuse	Comment
X102/01	INPUT	Ignition	SW-S1	Term. 50	F1	
X102/02	INPUT	Ignition	SW-S1	Term. 50	F1	
X102/03	OUTPUT	Hazard switch	SW-S2	Term. 30	F19	
X102/04	INPUT	Hazard switch	SW-S2	Term. 49		
X102/05	OUTPUT	Hazard warning flasher switch, attachment locking	SW-S2 SW-S29	Term. 15	F14	MA-Y23
X102/06	OUTPUT	Warning buzzer	SA-H1	Term. 31		
X102/07	OUTPUT	Warning buzzer	SA-H1	Input	F16	via RE-K7
X102/08	INPUT	Hazard switch	SW-S2	L		
X102/09	OUTPUT	Hazard switch	SW-S2	Term. 49a		
X102/10	INPUT	Hazard switch	SW-S2	R		

Connector X103						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X103/01	INPUT	Wiper switch, rear	SW-S6	Term. 3+6	F20	MO-M2
X103/02	OUTPUT	Light control switch	SW-S5	Term. 30	F24	LA-E40, LA-E22,LA-E50, LA-E32
X103/03	OUTPUT	Light control switch	SW-S5	Term. 15	F27	LA-E20, LA-E30
X103/04	OUTPUT	Wiper switch, rear	SW-S6	Term. 2 +10		MO-M2
X103/05	INPUT	Light switch, output	SW-S5	Term. 58		LA-E40, LA-E22,LA-E50, LA-E32
X103/06	OUTPUT	Wiper switch, rear	SW-S6	Term. 1		MO-M2
X103/07	INPUT	Wiper switch, rear	SW-S6	Term. 5		MO-M2
X103/08	OUTPUT	Worklight switch, front	SW-S7		F25	LA-E10, LA-E11
X103/09	OUTPUT	Worklight switch, front	SW-S7		F25	
X103/10	OUTPUT	Worklight switch, rear	SW-S8		F26	LA-E12, LA-E13
X103/11	OUTPUT	Worklight switch, rear	SW-S8		F26	
X103/12	OUTPUT	Beacon switch	SW-S9	Term. 30	F09	LA-E14
X103/13	OUTPUT	Switch, seat heating		Term. 15	F10	
X103/14	INPUT	Light control switch	SW-S6	Term. 56		
X103/15	OUTPUT	Optional equipment		Term. 15	F14	max. 10A
X103/16		not used				
X103/17		not used				
X103/18		not used				

Connector X104						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X104/01	OUTPUT	Power socket (1-pin)	PO-X20		F08	
X104/02	OUTPUT	Switch, heating fan, air conditioning (optional equipment)	110	Term. 15	F07	via RE-K2, SW-S17
X104/03	OUTPUT	Switch, mirror heater (optional equipment)		Term. 15	F07	from RE-K2, SW-S2
X104/04		Ground				
X104/05		Ground				
X104/06	OUTPUT	Brake light switch	SE-B21	(+)	F18	
X104/07	INPUT	Handbrake, control switch	SE-B22	(-)		LC-L5, SA-H1

X104/08	INPUT	Brake light switch	SE-B21		F18	
X104/09	OUTPUT	Sweeper unit, inductive sensor, power unit shut-off (optional equipment)	MO-M4	Term. 15	F13	SW-S27, SE-B32
X104/10	OUTPUT	Adhesive magnet, 3rd hydraulic function with 2 lever control Proportional control, with 1 lever control (optional equipment)	MA-Y3 CU9141	Term. 15	F18	CU9141 integrated in 1 lever control
X104/11	OUTPUT	Radio	RC-B50	Term. 15	F11	
X104/12	OUTPUT	Radio	RC-B50		F22	
X104/13		Radio (earth)	RC-B50			
X104/14		Ground				

Connector X105						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X105/01	OUTPUT	Solenoid valve, engine stop, exhaust gas recirculation components	MA-Y6, SE-B19, MA-Y23		F01	
X105/02	OUTPUT	Travel forward solenoid	MA-Y6	Term. 87	F16	via RE-K5, SW-S12
X105/03	OUTPUT	Travel reverse solenoid	MA-Y9	Term. 87	F16	via RE-K6, SW-S13
X105/04	OUTPUT	Solenoid valve, direction valve	MA-Y10	Term. 87	F16	via RE-K8, SW-S13
X105/05	OUTPUT	Solenoid valve, track motor, Q - max.1/2	MA-Y7	Term. 87	F16	via RE-K11, SW-S10
X105/06	OUTPUT	Solenoid valve, track motor, Q max.	MA-Y11	Term. 87	F16	via RE-K11, SW-S10
X105/07	OUTPUT	Washer pump, front	MO-M7	term. 53c	F21	via RE-K12, SW-S4
X105/08	OUTPUT	Washer pump, rear	MO-M8		F17	from SW-S6
X105/09	INPUT	Engine oil pressure switch	SE-B7			LC-L3, SA-H1
X105/10	INPUT	Engine temperature switch 64° C (147° F)	SE-B10			RE-K22
X105/11	INPUT	Air filter control switch	SE-B11			LC-L2, SA-H1
X105/12	INPUT	Hydraulic filter control switch	SE-B13			LC-L11, SA-H1
X105/13	INPUT	Warning switch, hydraulic oil temperature 95° C (203° F)	SE-B17			LC-L12, SA-H1
X105/14	INPUT	Alternator (optional equipment)	AL-G3	Term. W		
X105/15	INPUT	Signal, glow control	LC-L8	(-)		from RE-K21
X105/16	INPUT	Alternator D+	AL-G3	D+		
X105/17	OUTPUT	Cooling fan relay, oil cooler supply	RE-K22	Term. 86	F16	
X105/18	OUTPUT	Glow time control relay, supply	RE-K21	Term. 6	F18	for RE-K21
X105/19	OUTPUT	Starter	MO-M5	Term. 50	F30	via RE-K1
X105/20	OUTPUT	Starter	MO-M5	Term. 50	F30	via RE-K1
X105/21	OUTPUT	Diff. lock solenoid valve	MA-Y13	Term. 87	F17	via RE-K14, SW-S14
X105/22	OUTPUT	Reversing alarm (optional equipment)	SA-H39	Term. 87	F16	via RE-K6, SW-S13

Connector X106						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X106/01	OUTPUT	Check lamp, forward drive	LC-L13	(+)		via RE-K5, SW-S12
X106/02	OUTPUT	Check lamp, reverse drive	LC-L15	(+)		via RE-K6, SW-S13
X106/03	OUTPUT	Check lamp, gear "1"	LC-L16	(+)		via RE-K11, SW-S10
X106/04	OUTPUT	Check lamp, gear "2	LC-L14	(+)		via RE-K11, SW-S10
X106/05	OUTPUT	Direction indicator check lamp	LC-L6	(+)		via RE-K13, SW-S4,

						SW-S2
X106/06	OUTPUT	Handbrake check lamp	LC-L5	(-)		via RE-K9
X106/07	OUTPUT	Engine oil pressure check lamp	LC-L3	(-)		SE-B7
X106/08	OUTPUT	Engine temperature check lamp	LC-L4	(-)		SE-B6
X106/09	OUTPUT	Air filter check lamp	LC-L2	(-)		SE-B11
X106/10	OUTPUT	Hydraulic oil filter check lamp	LC-L11	(-)		SE-B13
X106/11	OUTPUT	Instrument lighting		(+)	F12	
X106/12	OUTPUT	High beam check lamp	LC-L7	(+)	F06	
X106/13	OUTPUT	Glow check lamp	LC-L8	(-)		from RE-K21
X106/14	OUTPUT	Tank indicator signal PWM		(f)		SE-B12
X106/15	OUTPUT	Tank reserve check lamp	LC-L10	(-)		SE-B12
X106/16	OUTPUT	Earth, instrument panel		(0)		
X106/17	OUTPUT	Voltage feed, instrument panel		(+)	F18	
X106/18	OUTPUT	Differential lock check lamp	LC-L9	(+)		via RE-K14, SW-S14
X106/19	OUTPUT	Battery charge, check lamp	LC-L1	(+)		AL-G3
X106/20	OUTPUT	Hydraulic oil temperature	LC-L12	(-)		SE-S17
X106/21		not used				
X106/22		not used				

Connector X107						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X107/01	OUTPUT	Solenoid valve, switching 3rd/4th function (optional)	MA-Y23	Term. 87	F17	via RE-K15, SW-S15
X107/02	OUTPUT	not used				
X107/03	OUTPUT	not used				
X107/04	OUTPUT	Solenoid valve, power unit shut-off / engine brake (optional equipment)	MA-Y37, MA-Y40		F20	RE-K18
X107/05		Ground				
X107/06		not used				

Connector X108						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X108/01	OUTPUT	Parking light rear, left	LA-E40		F04	from SW-S5
X108/02	OUTPUT	Parking light rear, right	LA-E50		F05	from SW-S5
X108/03	OUTPUT	Brake light, left	LA-E42		F18	from SW-B21
X108/04	OUTPUT	Flasher rear, left	LA-E41		F14	from SW-S4
X108/05	OUTPUT	Flasher rear, right	LA-E51		F14	from SW-S4
X108/06	OUTPUT	Brake light rear, right	LA-E52		F18	from SW-B21

Connector X109						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X109/01	OUTPUT	Parking light front, left	LA-E22		F04	from SW-S5
X109/02	OUTPUT	Parking light front, right	LA-E32		F05	from SW-S5
X109/03	OUTPUT	High beam, left	LA-E21		F06	from SW-S4
X109/04	OUTPUT	High beam, right	LA-E31		F23	from SW-S4
X109/05	OUTPUT	Low beam, left	LA-E20		F02	from SW-S4
X109/06	OUTPUT	Low beam, right	LA-E30		F03	from SW-S4

X109/07	OUTPUT	Flasher, left	LA-E23		F14	from SW-S4
X109/08	OUTPUT	Flasher, left trailer power socket (optional equipment)			F14	from SW-S4
X109/09	OUTPUT	Flasher, right	LA-E33		F14	from SW-S4
X109/10	OUTPUT	Flasher, right trailer power socket (optional equipment)			F14	from SW-S4
X109/11	OUTPUT	Parking light, left trailer power socket (optional equipment)			F04	from SW-S5
X109/12	OUTPUT	Parking light, right trailer power socket (optional equipment)			F05	from SW-S5
X109/13	OUTPUT	Boom suspension system BSS (optional)		Term. 15	F10	via SW-S28
X109/14	OUTPUT	Boost pump (optional equipment)	MA-Y17	Term. 15	F10	via SW-S25
X109/15	OUTPUT	Horn	SA-H6		F21	
X109/16	OUTPUT	Ground				
X109/17		not used				
X109/18		not used				

Connector X110						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X110/01	OUTPUT	Multifunction lever, voltage feed			F16	via RE-K7
X110/02	INPUT	Multifunction lever - neutral signal	SW-S11			to RE-K4
X110/03	INPUT	Multifunction lever - forwards signal	SW-S12			to RE-K5
X110/04	INPUT	Multifunction lever - backwards signal	SW-S13			to RE-K6
X110/05	INPUT	Multifunction lever - gears 1 and 2	SW-S10			to RE-K11
X110/06	INPUT	Multifunction lever - differential lock	SW-S14			to RE-K14
X110/07	INPUT	Multifunction lever, switching 3rd/4th function with 1 lever control (optional equipment)	SW-S15			to RE-K15
X110/08		not used				
X110/09		not used				
X110/10		not used				

Connector X111						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X111/01	OUTPUT	Interior light	LA-E15	Term. 30	F22	
X111/02	OUTPUT	Wiper motor, rear	MO-M2	Term. 53		from SW-S6
X111/03	INPUT	Wiper motor, rear	MO-M2	Term. 31b		from SW-S6
X111/04	OUTPUT	Wiper motor, rear	MO-M2	Term. 53a	F20	from SW-S6
X111/05		Ground	MO-M2	Term. 31		
X111/06		not used				

Connector X112						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X112/01	OUTPUT	Tank sensor, voltage feed	SE-B12	+12 V	F20	
X112/02	OUTPUT	Ground	SE-B12	Gnd.		
X112/03	INPUT	Tank sensor signal	SE-B12	Sign.		PWM signal

X112/04	INPUT	Tank sensor warning contact	SE-B12	res.		to LC-L10

Connector X115						
Plug/PIN	**Signal**	**Function**	**Description**	**Clamp**	**Fuse**	**Comment**
X115/01	INPUT	Steering column switch, horn	SW-S4	H	F21	to SA-H6
X115/02	OUTPUT	Steering column switch, wiper front	SW-S4	Term. 15		via RE-K12, MO-M1
X115/03	OUTPUT	Steering column switch, indicate	SW-S4	Term. 49a		via RE-K13
X115/04	INPUT	Steering column switch, wash-wipe	SW-S4	Term. 53c		to MO-M7
X115/05	INPUT	Steering column switch, dipped beam	SW-S4	Term. 56b		to LA-E20, LA-E30
X115/06	INPUT	Steering column switch, interval	SW-S4	J		via RE-K12, MO-M1
X115/ AUS07	INPUT	Steering column switch, headlight flasher	SW-S4	Term. 15/1	F19	Term. 30
X115/08	INPUT	Steering column switch, indicate right	SW-S4	R	F14	
X115/09	OUTPUT	Steering column switch, high beams	SW-S4	Term. 56a		LA-E21, LA-E31
X115/10	INPUT	Steering column switch, indicate left	SW-S4	L	F14	
X115/11	INPUT	Steering column switch, parking position	SW-S4	Term. 31b		via RE-K12, MO-M1
X115/12	INPUT	Steering column switch, gear “2”	SW-S4	Term. 53b		via RE-K12, MO-M1
X115/13	INPUT	Steering column switch, gear “1”	SW-S4	Term. 53		via RE-K12, MO-M1
X115/14	INPUT	Steering column switch, dipped beam	SW-S4	Term. 56	F27	

Document Title: **Marking connectors/cables**	Function Group: **364**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Marking connectors/cables

Pin-side (male)	Function	Comment	Wiring diagram
X12	Worklight, front left	2 pol.	
X12.1	Worklight, front right	2 pol.	
X13	Rear worklight / rotary beacon	3pol.	
X14	Wiper motor, rear	4 pol.	
X15	Rear worklight	2 pol.	
X16	Rotary beacon, rear	1 pol.	
X17	Interior light	1 pol.	
X18	Magnetic detent, auxiliary lever		
X20	12V power outlet		
X24	Tank sensor	4 pol. in engine compartment	
X26	Motor port	9 pol. in engine compartment	
X27	Relay group	9 pol. in engine compartment	
X29	Clutch, air conditioning (optional equipment)	1 pol. in engine compartment	
X31	Headlight, left-hand	6 pol.	
X32	Headlight, right-hand	6 pol.	
X34	Air conditioning (optional)	1 pol.	
X35	Courtesy light (all optional switches)	2 pol.	
X38	Frost monitor, air conditioning (optional equipment)	2 pol.	
X39	Reversing alarm (optional equipment)	2 pol.	
X40	Engine stop	1 pol.	
X41	W contact, alternator	1 pol.	
X45	Inductive sensor, boom suspension system BSS (optional)	Located in front frame	
X46	Inductive sensor/valves, boom suspension system BSS (optional)	Located in central electrics service room	
X50	Steering column switch (S4), right	6 pol.	
X51	Steering column switch (S4), right	8 pol.	
X54	Spare plug	2 pol. in engine compartment	
X55	Spare plug at central electrics	1 pol.	
X56	Rear light, left		
X57	Rear light, right		
X59	Switch, courtesy light (optional equipment)	2 pol.	

X73	Mirror heater (optional equipment)	1 pol. in central electrics service room	
X74	Mirror heater left (optional equipment)	2 pol.	
X75	Mirror heater right (optional equipment)	2 pol.	
X76	4th hydraulic circuit (optional equipment)	1 pol.	
X77	Switch, sweeper unit (optional equipment)	1 pol.	
X78	GPS / GSM (optional equipment)	12 pol. / 18 pol.	
X86	Inductive sensor, power unit shut-off (optional equipment)		
X87	Solenoid valve, power unit shut-off (optional equipment)		
X93	GPS / GSM (optional equipment)	8 pol.	

VOLVO
Construction Equipment

Service Information

Document Title: **Cable markings**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Cable markings

All leads are marked according to the circuit diagram. The 1st to 3rd digits are the designation of the main component. The last two digits are the pin designation.

Example
11512: Connector 115, Pin 12
2702: Connector 27, Pin 02
601: Solenoid Y6, Pin 01
208: Relay K2, Pin 08

A position figure is allocated to each pin of a connector. The start and end of the lead have the same position figure. The position figures are given next to the pins on the connector. To find a lead end, search in the lead set for the position figure allocated at the lead start.

Example (see diagram)
Connection to **M8,**Lead **801,**Pin **01**has position figure **209**
The same position figure **209** is found at the connection to connector**X112,** lead **11209,** pin **09.**

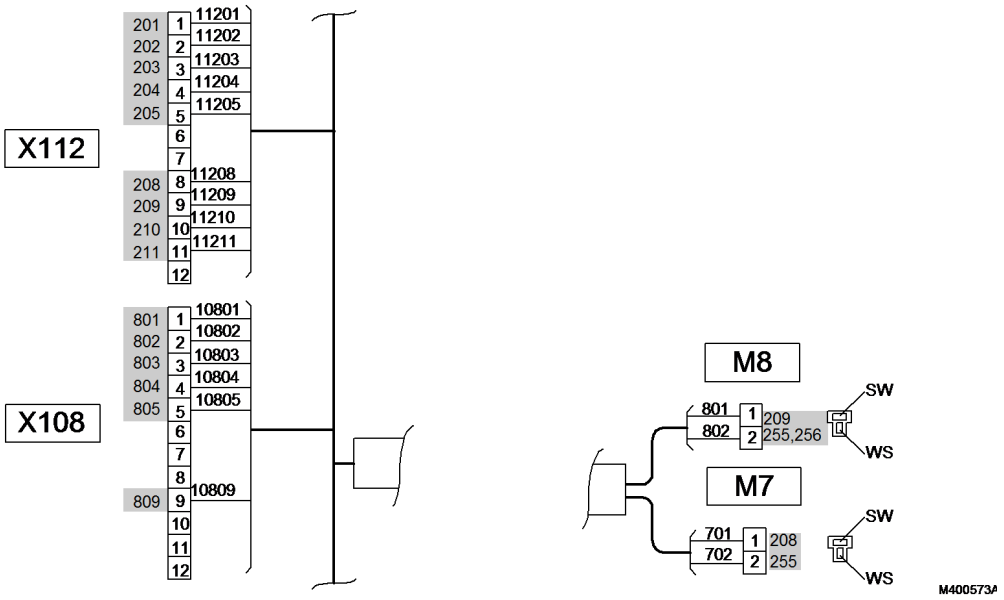

Figure 1

Connections within the leads

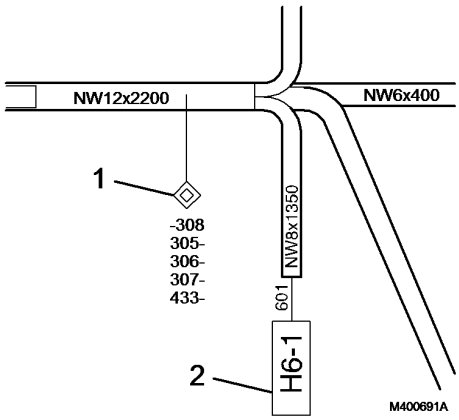

Figure 2

1. Splice point
2. Horn

Connections between leads are indicated by a splice point.

The leads listed with position figures at the splice point are connected together.

The line before/after a position figure means that it is an incoming/outgoing lead.

The designation means: Connection of lead **601** to component **H6** (horn), terminal **1**.

Optional equipment

NOTE!

The current paths of optional equipment are shown in the wiring diagram as **dotted**lines **(-----)**.

Coding Connectors/Leads

The wiring diagram shows leads with colour coding:

Colour coding

BK = black = ⊥ (ground)

WH = white (with figures) = functions

RD = red = B+

Plus connection

130 Battery (+)

Minus connection

131 Battery (-) **before** battery isolator switch **Q1**
231 Battery (-) **after** battery isolator switch **Q1**

Grounding point marking

31C Cab ground
31E Engine ground
31R Rear frame ground
31PCB Central electrics ground

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Construction Equipment

Service Information

Document Title: **Component list: Alternator, batteries, capacitors, electronic units, voltage outlet**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Alternator, batteries, capacitors, electronic units, voltage outlet

Description	Function	Wiring diagram
AL-G3	Alternator	370 Wiring diagram 1
BA-G1	Battery	370 Wiring diagram 1
CU9141	Control 3rd/4th function proportional, integrated in control lever	370 Wiring diagram 21
PO-X20	Socket	370 Wiring diagram 8
R9141	Potentiometer, flux control	370 Wiring diagram 21
RC-B50	Radio	370 Wiring diagram 16
R1	Multiplier, alternator	370 Wiring diagram 3

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Construction Equipment

Service Information

Document Title: **Component list: Fuses**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Fuses

Description	A	Function	Wiring diagram
FU-F01	10	Engine stop	370 Wiring diagram 1
FU-F02	7.5	Low beam, left	370 Wiring diagram 9
FU-F03	7.5	Low beam, right	370 Wiring diagram 9
FU-F04	7.5	Parking light left	370 Wiring diagram 11
FU-F05	7.5	Parking light right	370 Wiring diagram 11
FU-F06	7.5	High beams right, high beams check lamp	370 Wiring diagram 9
FU-F07	20	Fan - heating	370 Wiring diagram 8 370 Wiring diagram 22
FU-F08	10	Power socket, 1-pin	370 Wiring diagram 8
FU-F09	10	Rotating beacon	370 Wiring diagram 8
FU-F10	15	Fuse, optional equipment	370 Wiring diagram 17 370 Wiring diagram 18 370 Wiring diagram 19
FU-F11	7.5	Radio term.15	370 Wiring diagram 16
FU-F12	7.5	Instrument lighting	370 Wiring diagram 6 370 Wiring diagram 14
FU-F13	15	Sweeper unit	370 Wiring diagram 18 370 Wiring diagram 19
FU-F14	15	Direction indicators	370 Wiring diagram 9
FU-F15	15	Fuse, optional equipment	370 Wiring diagram 15
FU-F16	10	Power unit	370 Wiring diagram 3
FU-F17	10	Differential lock, changeover valve	370 Wiring diagram 11 370 Wiring diagram 15
FU-F18	10	Brake light, preheating control, float position	370 Wiring diagram 2 370 Wiring diagram 12
FU-F19	10	Hazard warning / headlight flasher	370 Wiring diagram 8
FU-F20	10	Wash-wipe rear, fuel tank sensor	370 Wiring diagram 7
FU-F21	10	Wash-wipe front	370 Wiring diagram 6
FU-F22	7.5	Inside lighting, radio term. 30	370 Wiring diagram 8
FU-F23	7.5	High beam, left	370 Wiring diagram 9
FU-F24	15	Light switch entry term. 30	370 Wiring diagram 8
FU-F25	15	Front worklight	370 Wiring diagram 11
FU-F26	15	Rear worklight	370 Wiring diagram 11
FU-F27	20	Light switch entry term. 15	370 Wiring diagram 8
FU-F28 [T1]	25	Air conditioning (optional)	370 Wiring diagram 20
FU-F29[a]	5	Air conditioning control (optional)	370 Wiring diagram 20
FU-F30	25	Starter	370 Wiring diagram 1
FU-F100 [T2]	60	Glow plug	370 Wiring diagram 2

FU-F101[b]	40	Fan motor - oil cooler	370 Wiring diagram 2

[T1] Located in central electrics service room

[T2] Located in fuse box in engine compartment

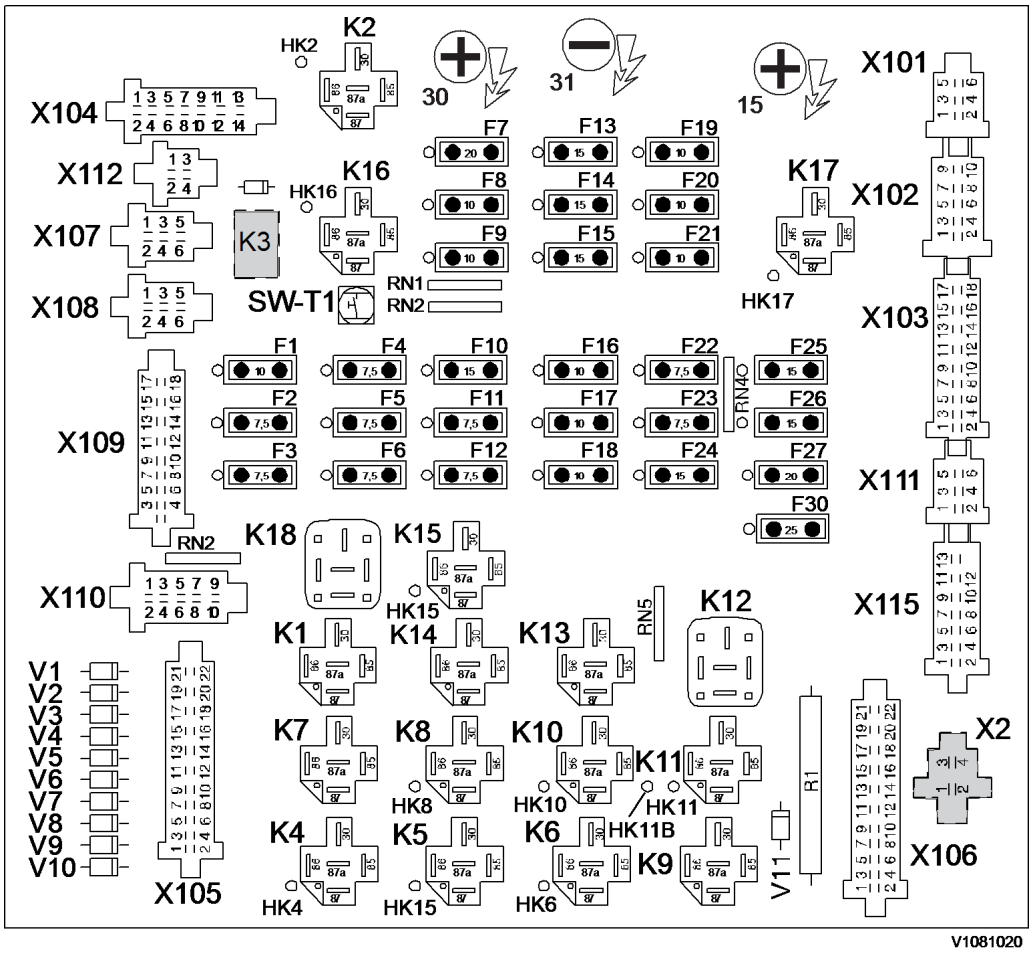
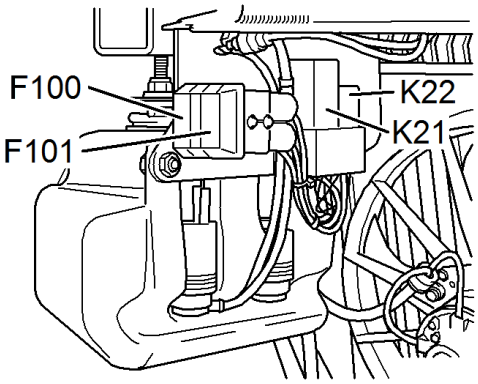


Figure 1
Fuses and relays on the circuit board, central electrics



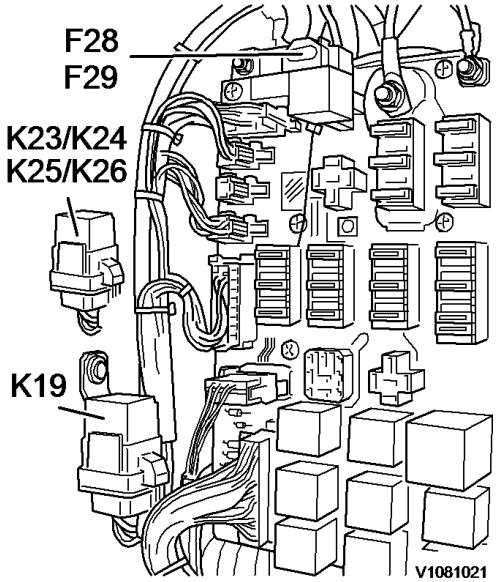


Figure 2
Fuses and relays in the engine compartment and in the central electrics service room

Functionality check of fuses (term. 30) via button SW-T1

When actuating button SW-T1 on the board, all power circuits fed directly from the battery (term. 30) are checked. Fuses: F7, F8, F9, F19, F22, F24, function LEDs must come on.

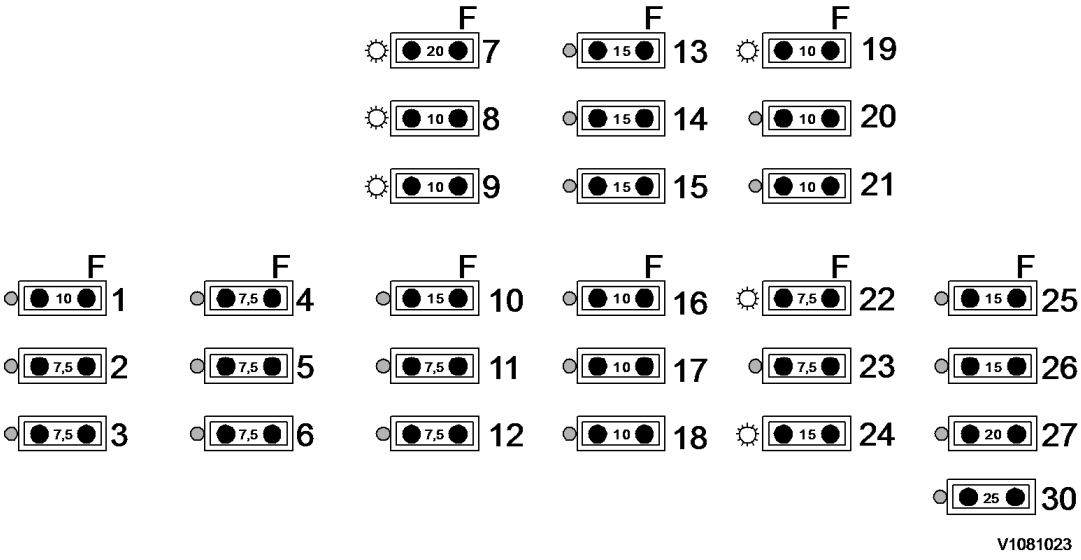


Figure 3
Upon actuation of button SW-T1

If the ignition is switched on (ignition key in position "1"), all day consumer fuses are switched on. Fuses: F1, F10, F11, F13, F14, F15, F16, F17, F18, F20, F21, F27, function LEDs must come on.

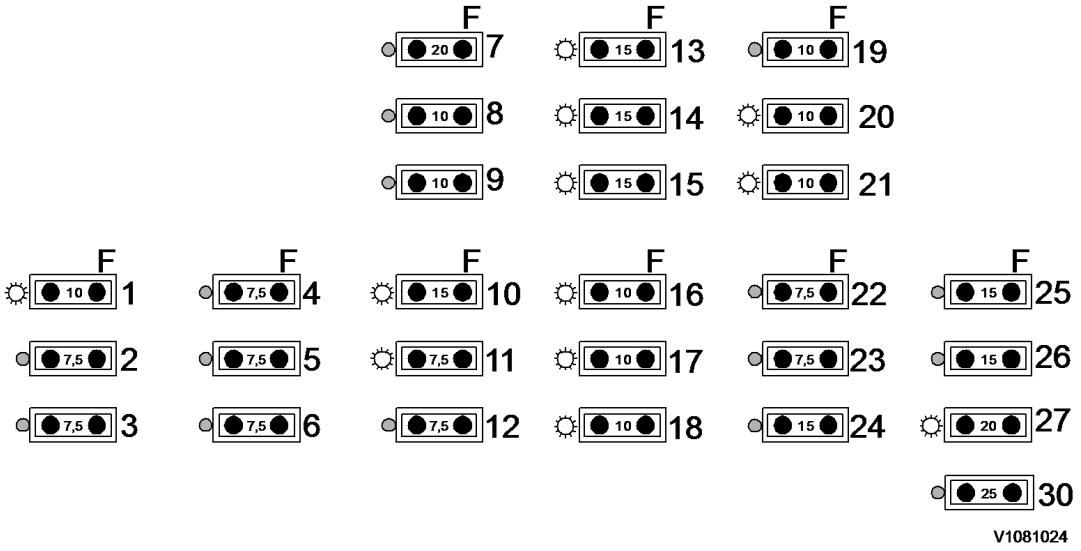


Figure 4
Ignition key in position "1"

Upon actuation of the light switch in position "1" = parking light and instrument lighting, fuses F4, F5, F12, F25, F26 are checked. Function LEDs must come on.

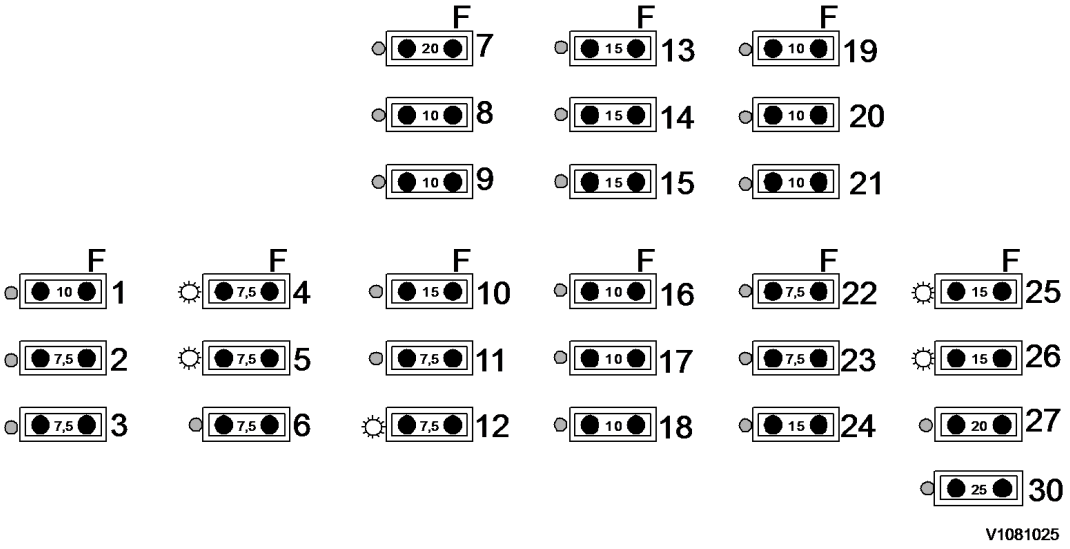


Figure 5
Upon actuation of light switch in position "1"

Upon actuation of the light switch in position "2" = dipped beam, fuses F2 and F3 are checked.

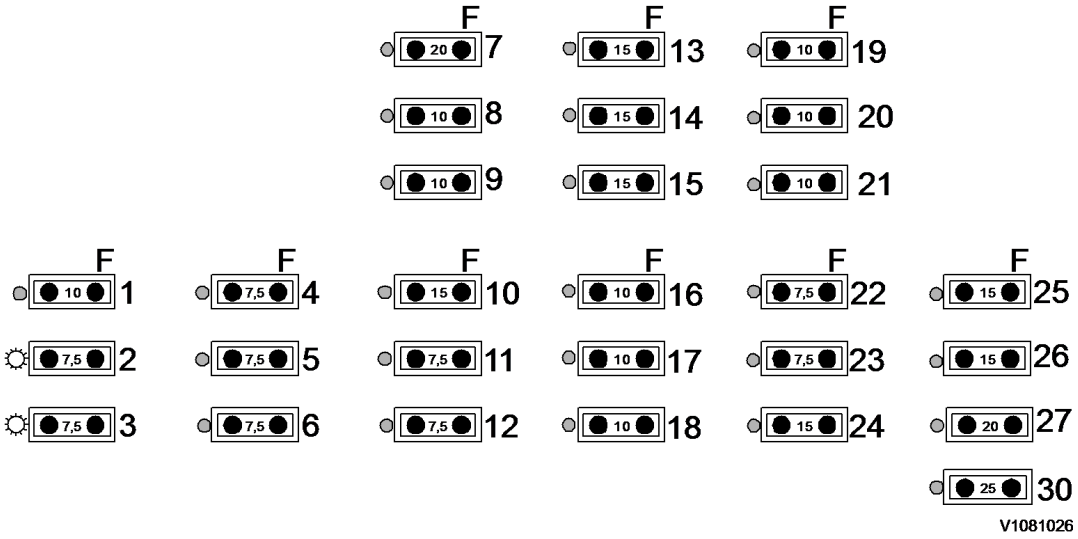


Figure 6
Upon actuation of light switch in position "2"

With high beams switched on, fuses F23 and F6 are checked. Function LEDs must come on.

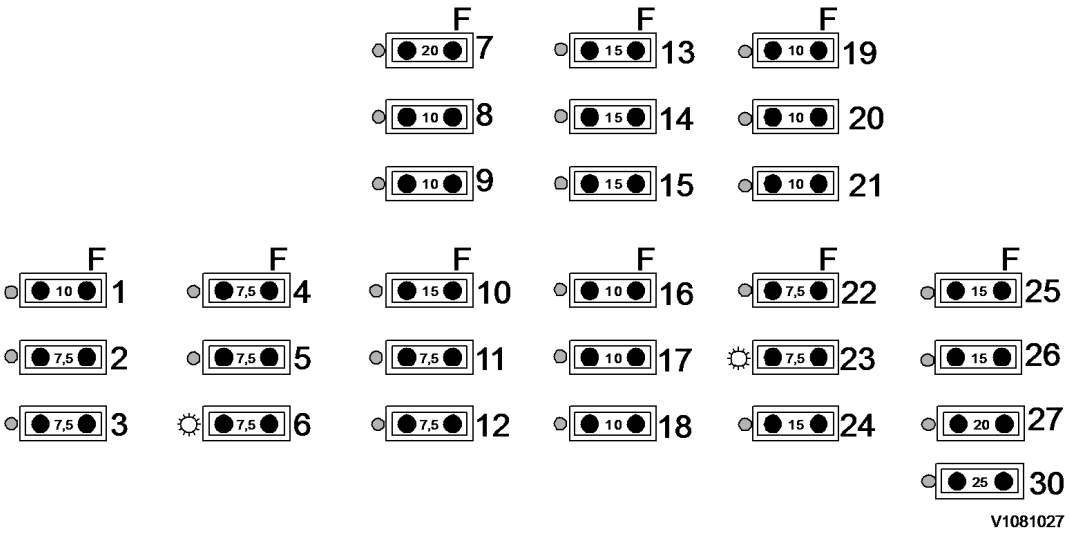


Figure 7
With high beams switched on

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Service Information

Document Title: **Component list: Relays**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Relays

Description	Function	Wiring diagram
RE-K1	Starter	370 Wiring diagram 1
RE-K2	Heater fan	370 Wiring diagram 8 370 Wiring diagram 22
RE-K3	Stop solenoid, only with anti-theft device (optional)	
RE-K4	Neutral position	370 Wiring diagram 3
RE-K5	Forward travel	370 Wiring diagram 3
RE-K6	Backup	370 Wiring diagram 4
RE-K7	D + activation term. 15	370 Wiring diagram 3
RE-K8	Directional valve	370 Wiring diagram 4
RE-K9	Handbrake - warning buzzer	370 Wiring diagram 5
RE-K10	Directional valve (hold function)	370 Wiring diagram 4
RE-K11	Step relay, hydrostatic motor, 1st/2nd gear	370 Wiring diagram 4
RE-K12	Interval wiper front	370 Wiring diagram 6
RE-K13	Direction indicators	370 Wiring diagram 10
RE-K14	Differential lock	370 Wiring diagram 15
RE-K15	Switching, 3rd/4tf function (optional)	370 Wiring diagram 15
RE-K16	Special function, 2 lever control (optional)	370 Wiring diagram 15
RE-K17	Worklight	370 Wiring diagram 11
RE-K18	Frequency dependent power unit shut-off (optional)	370 Wiring diagram 18 370 Wiring diagram 19
RE-K19 [T1] ⓘ	Air conditioning system	370 Wiring diagram 20
RE-K21 [T2] ⓘ	Glow time control	370 Wiring diagram 2
RE-K22 (b)	Fan motor - oil cooler	370 Wiring diagram 2
RE-K23 (a)	Valve, boom suspension system BSS (optional)	
RE-K24 (a)	Transport position, boom suspension system BSS (optional)	370 Wiring diagram 18
RE-K25 (a)	Frequency dependent, boom suspension system BSS (optional)	370 Wiring diagram 18
RE-K26 (a)	Rear worklight with reverse gear (optional)	

[T1] Relays in central electrics service room

[T2] Relay in engine compartment

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Construction Equipment

Service Information

Document Title: **Component list: Heating coils, instruments, service socket**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Heating coils, instruments, service socket

Description	Function	Wiring diagram
HE-E2	Glow plug	370 Wiring diagram 2

Document Title: **Component list: Lights**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Lights

Description	Function	Wiring diagram
LA-ILL	Lighting, instrument panel	370 Wiring diagram 14
LA-E10	Worklight, front left (optional)	370 Wiring diagram 12
LA-E11	Worklight, front right (optional)	370 Wiring diagram 12
LA-E12	Worklight, rear left (optional)	370 Wiring diagram 13
LA-E13	Worklight, rear right (optional)	370 Wiring diagram 13
LA-E14	Rotating beacon (optional)	370 Wiring diagram 13
LA-E15	Interior light	370 Wiring diagram 8
LA-E20	Headlight left, low beams	370 Wiring diagram 9
LA-E21	Headlight left, high beams	370 Wiring diagram 9
LA-E22	Parking light, front left	370 Wiring diagram 9
LA-E23	Flasher, front left	370 Wiring diagram 9
LA-E30	Headlight right, low beams	370 Wiring diagram 9
LA-E31	Headlight right, high beams	370 Wiring diagram 9
LA-E32	Parking light front, right	370 Wiring diagram 9
LA-E33	Flasher, front right	370 Wiring diagram 9
LA-E40	Rear light, left parking light	370 Wiring diagram 11
LA-E41	Tail light left, indicator	370 Wiring diagram 11
LA-E42	Rear light, left stop light	370 Wiring diagram 11
LA-E50	Tail light right, marker light	370 Wiring diagram 11
LA-E51	Tail light right, indicator	370 Wiring diagram 11
LA-E52	Tail light right, brake light	370 Wiring diagram 11
LA-E54	Number plate lighting (optional)	
LA-E55	Reversing warning light (optional)	
LA-E55	Marker light, sweeper unit left (optional)	
LA-E61	Marker light, sweeper unit right (optional)	
LA-E62	Flasher, sweeper unit left (optional)	
LA-E63	Flasher, sweeper unit right (optional)	
LC-1	Check lamp, switch boom suspension system activation (BSS) (optional)	
LC-L1	Check lamp, alternator	370 Wiring diagram 1 370 Wiring diagram 14
LC-L2	Check lamp, air filter, maintenance display	370 Wiring diagram 5 370 Wiring diagram 14
LC-L3	Engine oil pressure check lamp	370 Wiring diagram 5 370 Wiring diagram 14
LC-L4	Check lamp, engine oil temperature	370 Wiring diagram 5 370 Wiring diagram 14
LC-L5	Check lamp, handbrake	370 Wiring diagram 5 370 Wiring diagram 14

LC-L6	Check lamp, direction indicator	370 Wiring diagram 10 370 Wiring diagram 14
LC-L7	Check lamp, high beams	370 Wiring diagram 9 370 Wiring diagram 14
LC-L8	Check lamp, preheating	370 Wiring diagram 2 370 Wiring diagram 14
LC-L9	Check lamp, differential lock	370 Wiring diagram 15
LC-L10	Check lamp, fuel reserve	370 Wiring diagram 14
LC-L11	Check lamp, hydraulic oil filter maintenance display	370 Wiring diagram 5 370 Wiring diagram 14
LC-L12	Hydraulic oil temperature indicator lamp	370 Wiring diagram 5 370 Wiring diagram 14
LC-L13	Check lamp, direction of travel "Forwards"	370 Wiring diagram 3 370 Wiring diagram 14
LC-L14	Check lamp, gear 2	370 Wiring diagram 4 370 Wiring diagram 14
LC-L15	Check lamp, direction of travel "Backwards"	370 Wiring diagram 4 370 Wiring diagram 14
LC-L16	Check lamp, gear 1	370 Wiring diagram 4 370 Wiring diagram 14
LC-S28	Check lamp, courtesy light switch, boom suspension system (BSS) (optional)	

Document Title: **Component list: Solenoid valves**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Solenoid valves

Description	Function	Wiring diagram
MA-Y3	Adhesive magnet, 3rd hydraulic function (only with 2 lever control)	370 Wiring diagram 12
MA-Y5	Solenoid valve, attachment bracket locking	370 Wiring diagram 22
MA-Y6	Solenoid valve, engine shut-off	370 Wiring diagram 1
MA-Y7	Solenoid valve, Q-max 1/2	370 Wiring diagram 4
MA-Y8	Solenoid valve, hydrostatic pump, forward drive	370 Wiring diagram 3
MA-Y9	Solenoid valve, hydrostatic pump, reverse drive	370 Wiring diagram 4
MA-Y10	Solenoid valve, hydrostatic motor, direction slide	370 Wiring diagram 4
MA-Y11	Solenoid valve, hydrostatic motor Q-max.	370 Wiring diagram 4
MA-Y13	Solenoid valve, differential lock	370 Wiring diagram 15
MA-Y14	Solenoid valve, accumulator charge, boom suspension system (BSS) (optional)	370 Wiring diagram 18
MA-Y15	Solenoid valve, lift cylinder head connection valve, BSS (optional)	370 Wiring diagram 18
MA-Y16	Solenoid valve, lift cylinder bar compensation, BSS (optional)	370 Wiring diagram 18
MA-Y17	Solenoid valve, boost pump	370 Wiring diagram 17
MA-Y22	Magnet clutch, air conditioning compressor	370 Wiring diagram 20
MA-Y23	Switch valve, exhaust gas recirculation	370 Wiring diagram 1
MA-Y33	Solenoid valve, 4th hydraulic circuit	370 Wiring diagram 15
MA-Y39	Solenoid valve, negative compensation (L25F only)	370 Wiring diagram 1
MA-Y40	Solenoid valve, power unit shut-off	370 Wiring diagram 19

Document Title: **Component list: PWM valves**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: PWM valves

Description	Function	Wiring diagram
PWM9105	Valve, 3rd hydraulic function (+)	370 Wiring diagram 21
PWM9106	Valve, 3rd hydraulic function (-)	370 Wiring diagram 21

Document Title: **Component list, Motors**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list, Motors

Description	Function	Wiring diagram
MO-M1	Wiper motor, front	370 Wiring diagram 6
MO-M2	Wiper motor, rear	370 Wiring diagram 7
MO-M3	Fan motor, heating	370 Wiring diagram 20
MO-M4	Sweeper unit	370 Wiring diagram 17
MO-M5	Starter	370 Wiring diagram 1
MO-M6	Fan motor, oil cooler	370 Wiring diagram 3
MO-M7	Washer pump, front	370 Wiring diagram 6
MO-M8	Washer pump, rear	370 Wiring diagram 7
MO-M9	Servo motor, recirculation air	370 Wiring diagram 20
MO-M12	Fan motor, air conditioning condenser	370 Wiring diagram 20

Document Title: **Component list, Sounders**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list, Sounders

Description	Function	Wiring diagram
SA-H1	Warning buzzer	370 Wiring diagram 3
SA-H6	Signal	370 Wiring diagram 6
SA-H39	Back-up alarm unit	370 Wiring diagram 4
LR	Loudspeaker, left	370 Wiring diagram 16
RR	Loudspeaker, right	370 Wiring diagram 16

Document Title: **Component list, Sensors**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list, Sensors

Description	Function	Wiring diagram
SE9147	Ball switch, 3rd/4th hydraulic function, only with 1 lever control (optional)	370 Wiring diagram 20
SE–B04	Inductive switch, limit switch (optional)	370 Wiring diagram 18
SE-B05	Inductive switch, boom suspension system BSS (optional)	
SE-B06	Dual sensor, engine temperature	370 Wiring diagram 5
SE-B07	Pressure switch, engine oil pressure	370 Wiring diagram 5
SE–B08	Inductive sensor, gearbox rpm (optional)	370 Wiring diagram 18
SE-B09	Pressure switch, air conditioning (optional)	370 Wiring diagram 20
SE-B10	Temperature switch, hydraulic oil	370 Wiring diagram 2
SE-B11	Control switch, air filter	370 Wiring diagram 5
SE-B12	Fuel level sensor	370 Wiring diagram 14
SE-B13	Control switch, hydraulic oil filter	370 Wiring diagram 5
SE-B17	Temperature switch, hydraulic oil	370 Wiring diagram 5
SE-B18	Temperature switch, air conditioning (optional)	370 Wiring diagram 20
SE-B19	Control rod travel sensor, exhaust gas recirculation	370 Wiring diagram 1
SE-B32	Inductive sensor, power unit shut-off	370 Wiring diagram 19

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Construction Equipment

Service Information

Document Title: **Component list: Switches**	Function Group: **370**	Information Type: **Service Information**	Date: **2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Component list: Switches

Description	Function	Wiring diagram
SW-Q1	Battery isolator switch	370 Wiring diagram 1
SW-S1	Ignition	370 Wiring diagram 1
SW-S2	Hazard switch	370 Wiring diagram 13
SW-S3	Air conditioning (optional)	370 Wiring diagram 20
SW-S4	Steering column switch, wiper / direction indicator / lights / horn	370 Wiring diagram 6 370 Wiring diagram 9 370 Wiring diagram 10
SW-S5	Light switch, parking light, dipped beam	370 Wiring diagram 8
SW-S6	Switch, windscreen wiper - washing pump, rear	370 Wiring diagram 7
SW-S7	Switch, front worklight	370 Wiring diagram 12
SW-S8	Switch, worklight rear	370 Wiring diagram 13
SW-S9	Switch, rotating warning beacon	370 Wiring diagram 13
SW-S10	Pushbutton, power unit 1st/2nd gear	370 Wiring diagram 3
SW-S11	Pushbutton, power unit neutral	370 Wiring diagram 3
SW-S12	Pushbutton, power unit forwards	370 Wiring diagram 3
SW-S13	Pushbutton, power unit backwards	370 Wiring diagram 3
SW-S14	Pushbutton, differential lock	370 Wiring diagram 3
SW-S15	Pushbutton, switching 3rd/4th function with 1 lever control	370 Wiring diagram 3
SW-S16	Pushbutton, switching 3rd/4th function with 2 lever control	370 Wiring diagram 15
SW-S17	Fan switch, heating	370 Wiring diagram 20
SW-S19	Switch, reversing alarm	
SW-S20	Switch, mirror heating	370 Wiring diagram 22
SW-B21	Brake light switch	370 Wiring diagram 12
SW-B22	Control switch, handbrake	370 Wiring diagram 5
SW-S25	Switch, boost pump	370 Wiring diagram 17
SW-S26	Switch, 3rd hydraulic circuit Bobtach (optional)	
SW-S27	Water pump, sweeper unit (optional)	370 Wiring diagram 17
SW-S28	Switch, boom suspension system activation (BSS) (optional)	370 Wiring diagram 18
SW-S29	Switch, attachment bracket locking	370 Wiring diagram 22
SW-S30	Switch, recirculation air	370 Wiring diagram 20
SW-9147	Pushbutton, hold function, 3rd/4th function with 1 lever control	370 Wiring diagram 21
SW-T1	Key, functionality check of fuses (term. 30) on central electrics circuit board	

Component location, switches

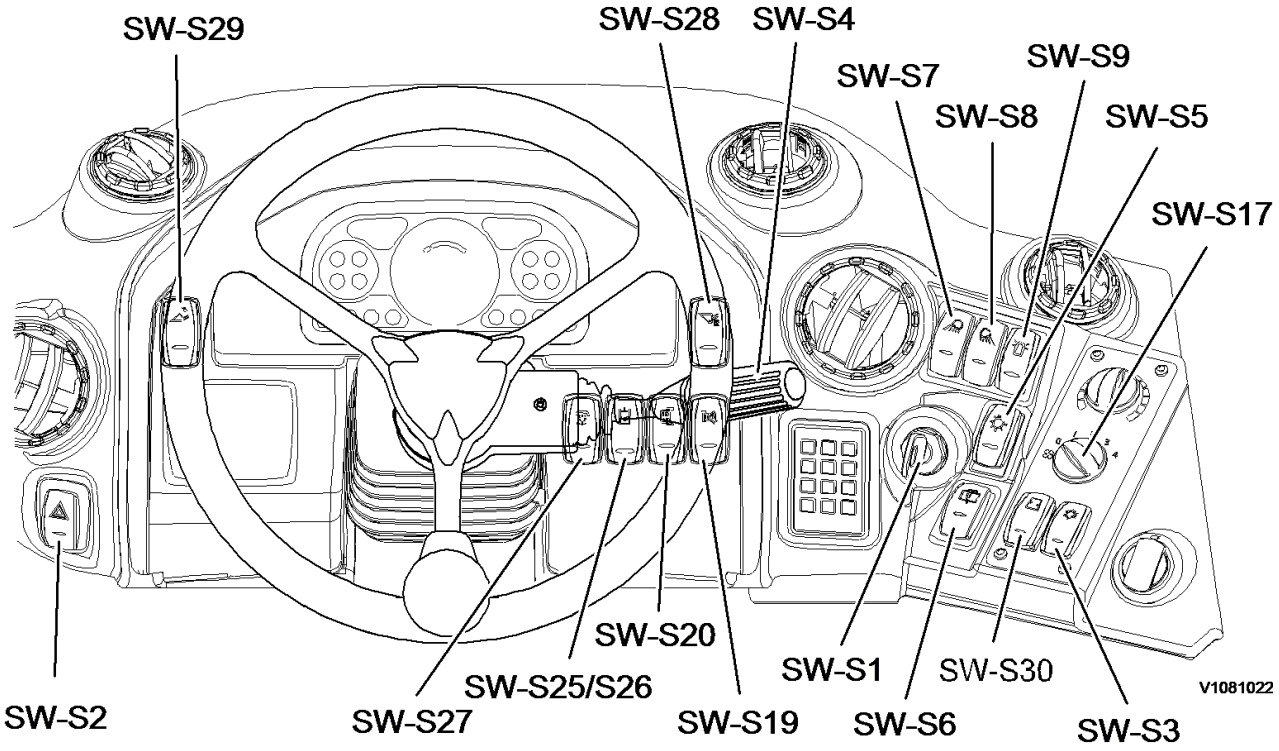

Figure 1
Component location, switches

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 1	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 1

Circuit diagram, engine start

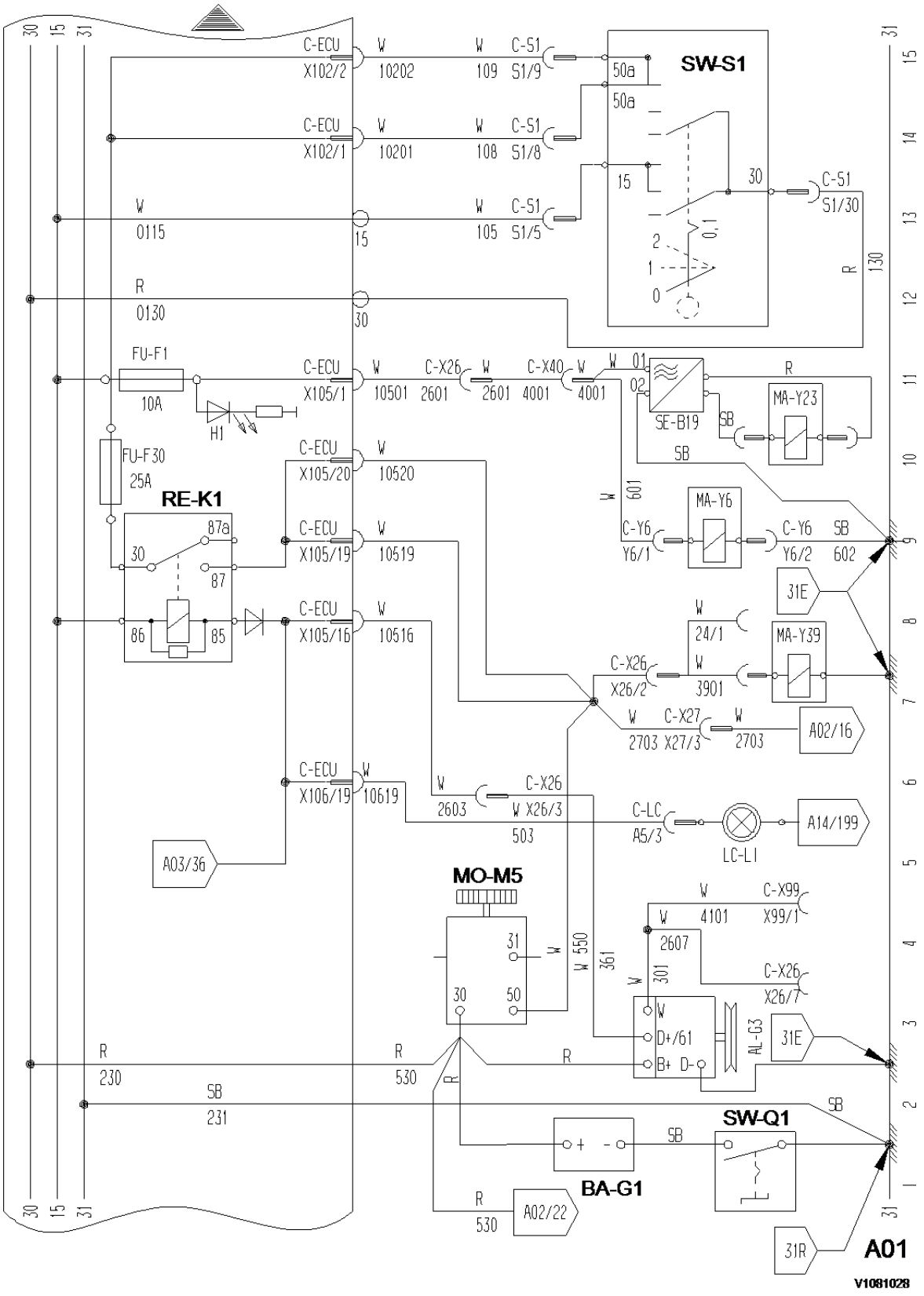

Figure 1
Circuit diagram, engine start

Component list: circuit diagram, engine start	
Description	**Function**
AL-G3	Alternator
BA-G1	Battery

SW-Q1	Battery isolator switch
FU-F01	Engine stop
FU-F30	Starter
LC-L1	Check lamp, alternator
MA-Y6	Solenoid valve, engine shut-off
MA-Y23	Switch valve, exhaust gas recirculation
MA-Y39	Negative compensation (L25F only)
MO-M5	Starter
RE-K1	Starter
SE-B19	Control rod travel sensor, exhaust gas recirculation
SW-S1	Ignition

Component position

The battery **BA-G1** and battery isolator switch **SW-Q1** are on the right in the engine compartment.

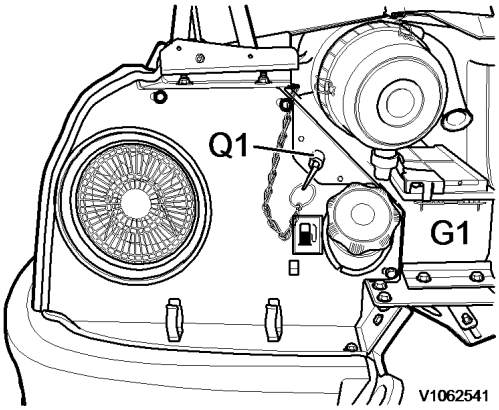

Figure 2

MA-Y6 Solenoid valve, engine shut-off
MA-Y39 Negative compensation (on L25F only)

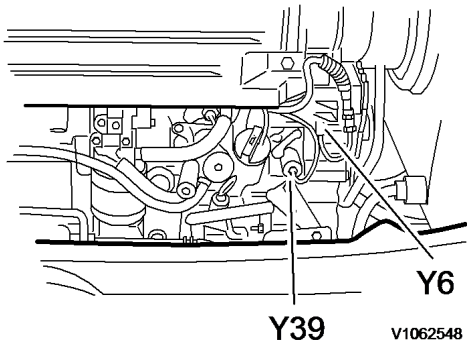

Figure 3

SE-B19 Control rod travel sensor, exhaust gas recirculation
MA-Y23 Switch valve, exhaust gas recirculation

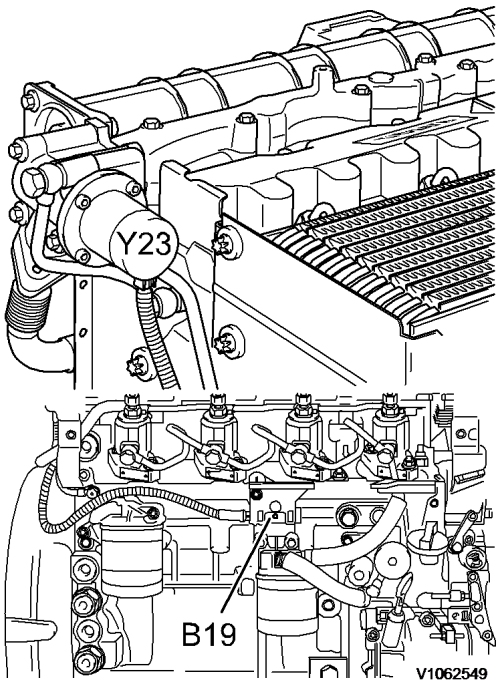

Figure 4

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 2	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 2

Circuit diagram, preheating, fan control

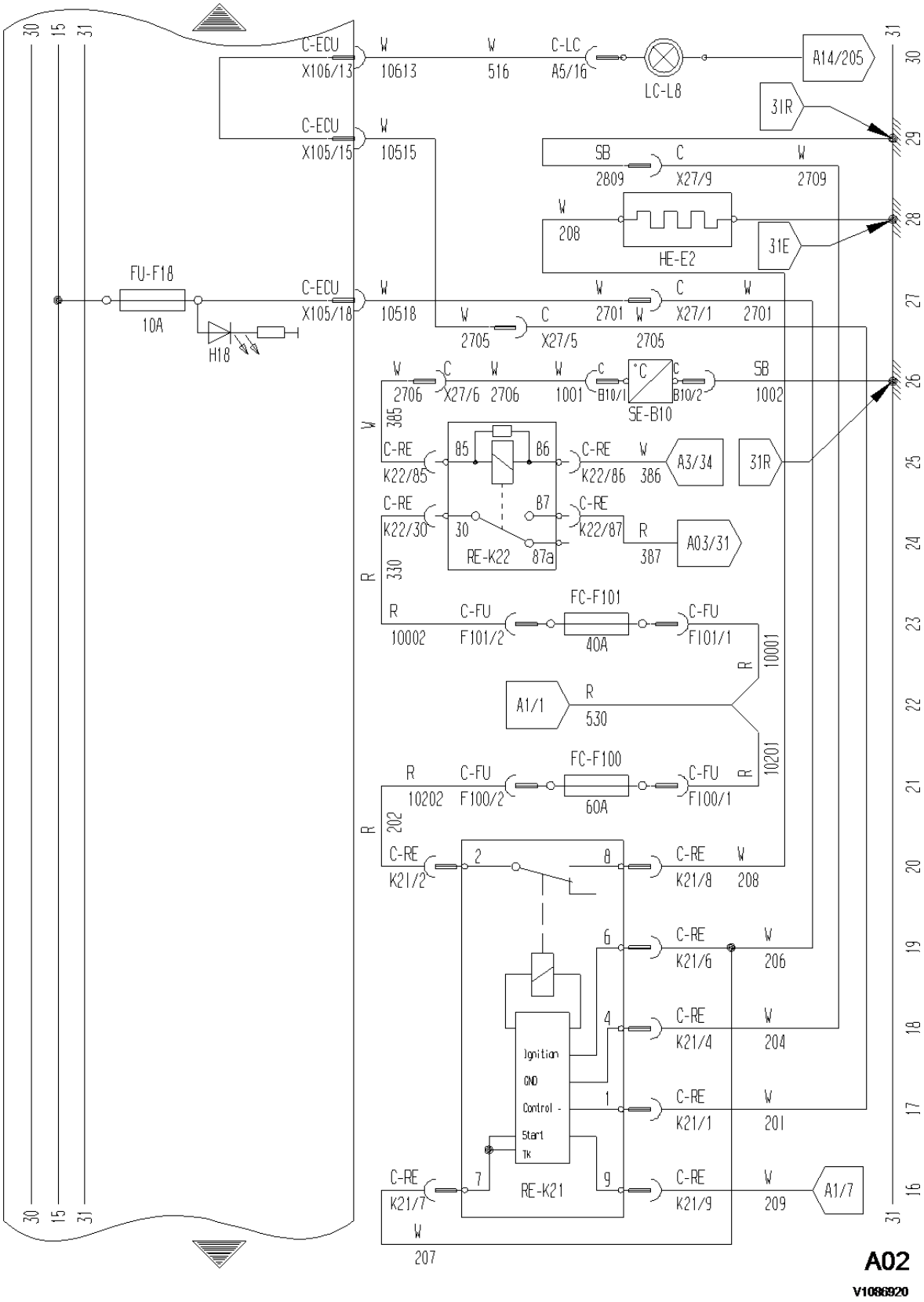

Figure 1
Circuit diagram, preheating, fan control

Component list: circuit diagram, preheating, fan control	
Description	**Function**
FU-F18	Preheating control
FU-F100	Fuse, Glow plug

FU-F101	Fuse, fan motor - oil cooler
HE-E2	Glow plug
LC-L8	Check lamp preheating
RE-K21	Glow time control relay
RE-K22	Fan relay oil cooler
SE-B10	Temperature switch, engine oil

Component position

HE-E2 Glow plug

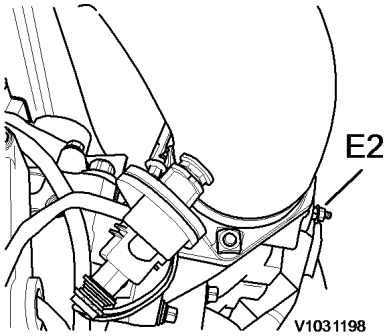

Figure 2

SE-B10 Temperature switch, hydraulic oil

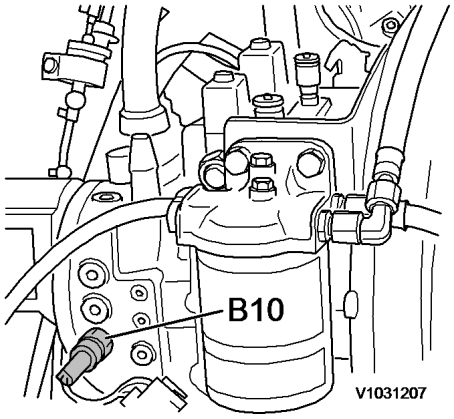

Figure 3

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 3	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 3

Circuit diagram 1, power unit

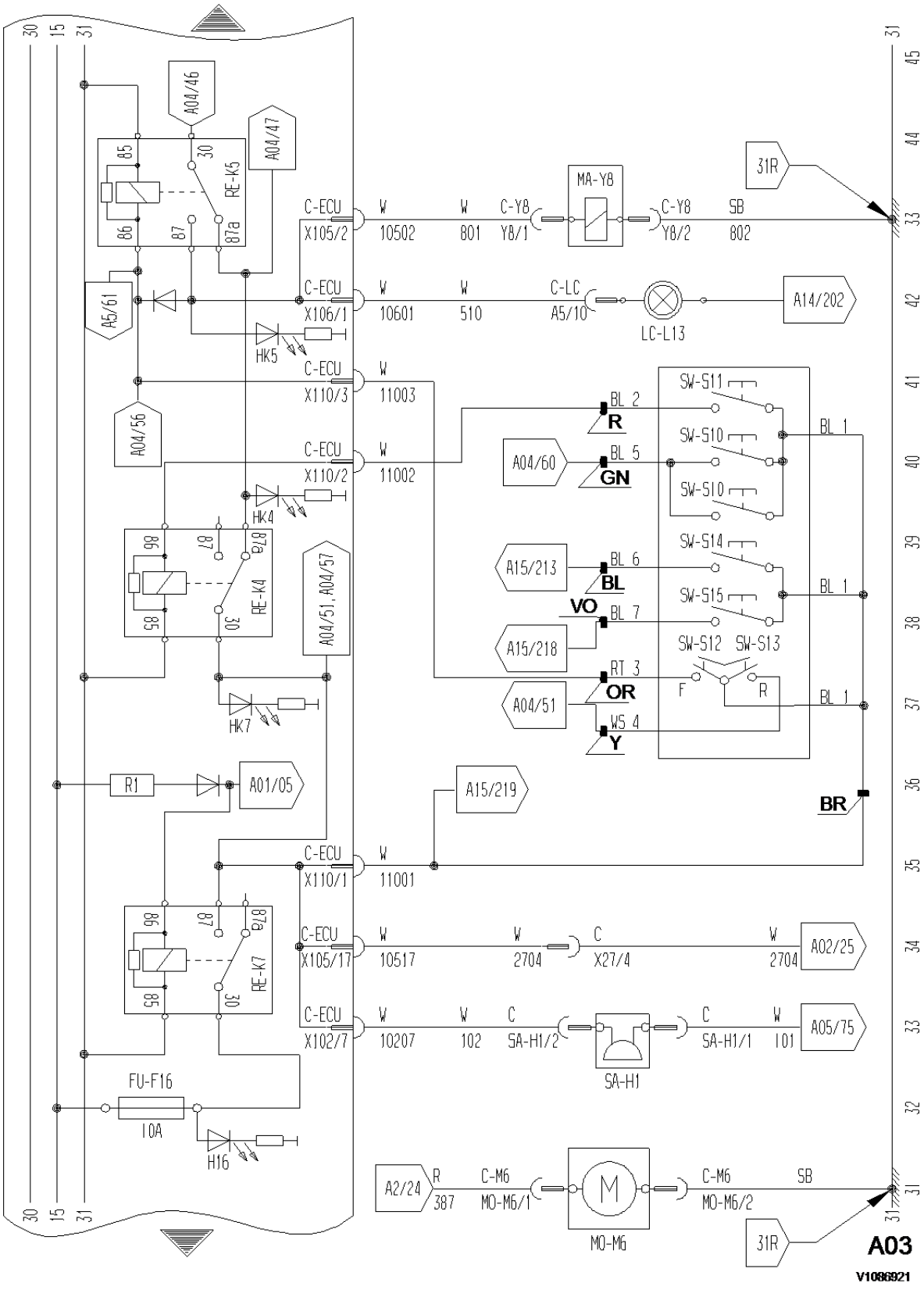

Figure 1
Circuit diagram 1, power unit

Component list: circuit diagram 1, power unit	
Description	**Function**
R1	Multiplier, alternator
FU-F16	Fuse, operating instruction

LC-L13	Check lamp, “forward drive”
MA-Y8	Solenoid valve, travelling pump - Forwards
MO-M6	Fan motor oil cooler
RE-K4	Power unit, “Neutral"
RE-K5	Power unit, “Forwards”
RE-K7	D+ activation
SA-H1	Warning buzzer
SW-S10	Pushbutton, power unit 1st/2nd gear
SW-S11	Pushbutton, power unit ”neutral”
SW-S12	Pushbutton, power unit “forwards”
SW-S13	Pushbutton, power unit “backwards”
SW-S14	Pushbutton, power unit, differential lock
SW-S15	Pushbutton, switching 3rd/4th function with 1 lever control

Component position

2 lever control
SW-S10 Pushbutton, power unit 1st/2nd gear
SW-S11 Pushbutton, power unit “Neutral”
SW-S12 Pushbutton, power unit “Forwards”
SW-S13 Pushbutton, power unit “Backwards”
SW-S14 Pushbutton, power unit differential lock

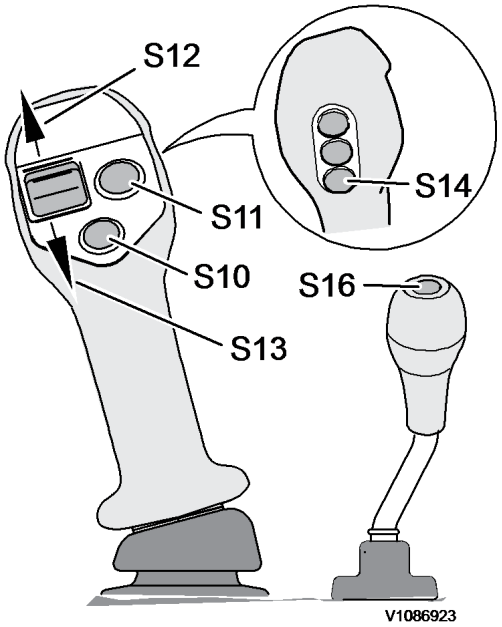

Figure 2
2 lever control

1 lever control
SW-S10 Pushbutton, power unit 1st/2nd gear
SW-S11 Pushbutton, power unit “Neutral”
SW-S12 Pushbutton, power unit “Forwards”
SW-S13 Pushbutton, power unit “Backwards”
SW-S14 Pushbutton, power unit differential lock
SW-S15 Pushbutton, switching 3rd/4th function

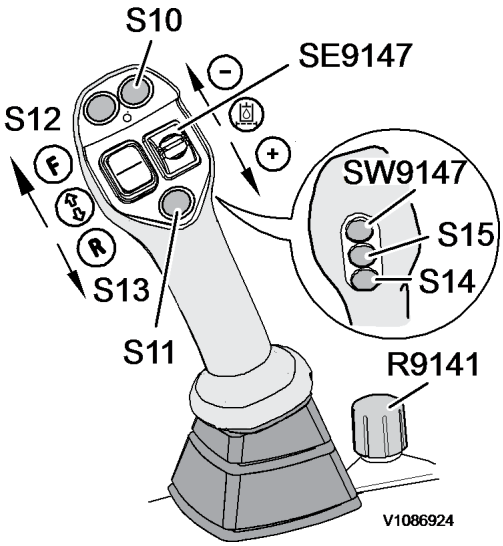

Figure 3
1 lever control

The solenoid valves **MA-Y8** and **MA-Y9** are located on the hydrostatic pump.
MA-Y8 Solenoid valve, hydrostatic pump - forward drive
MA-Y9 Solenoid valve, hydrostatic pump - reverse drive

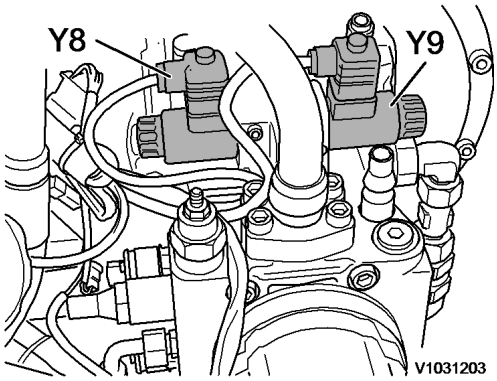

Figure 4

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 4	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 4

Circuit diagram 2, power unit

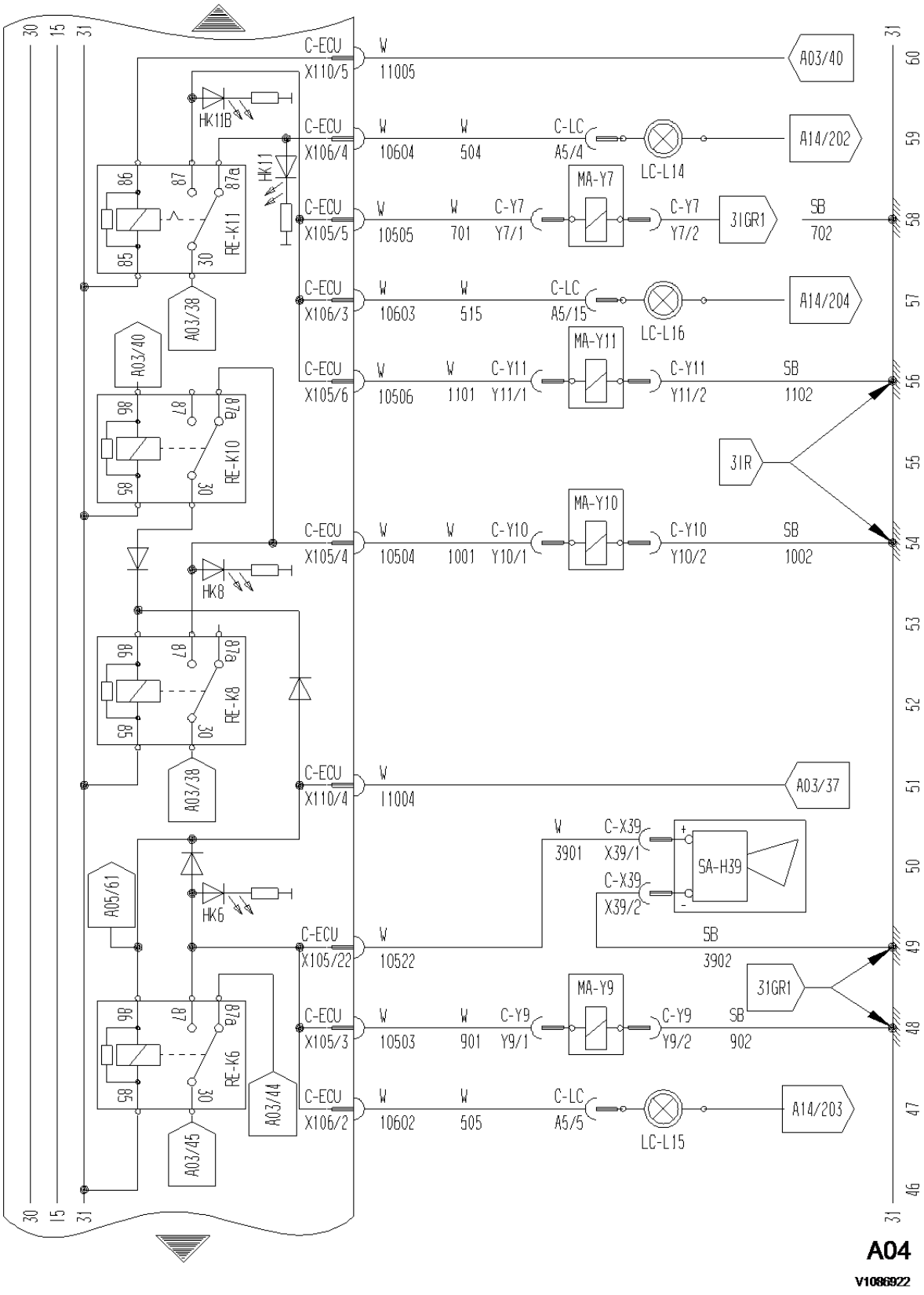

Figure 1
Circuit diagram 2, power unit

Component list: circuit diagram 2, power unit	
Description	**Function**
LC-L14	Check lamp, gear “2”
LC-L15	Check lamp, direction of travel “Backwards”

LC-L16	Check lamp, gear “1”
MA-Y7	Solenoid valve, Q-max 1/2
MA-Y9	Solenoid valve, travelling pump - Backwards
MA-Y10	Solenoid valve, track motor - direction slide
MA-Y11	Solenoid valve, track motor - Q-max.
RE-K6	Power unit “Backwards”
RE-K8	Directional valve
RE-K10	Directional valve (hold function)
RE-K11	Step relay - 1st/2nd gear
SA-H39	Back-up alarm unit

Component position

The solenoid valves **MA-Y8 and MA-Y9** are located on the hydrostatic pump.
MA-Y8 Solenoid valve, hydrostatic pump - forward drive
MA-Y9 Solenoid valve, hydrostatic pump - reverse drive

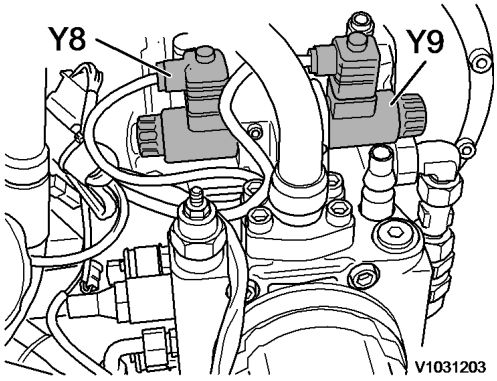

Figure 2

The solenoid valves are located on the hydrostatic motor.
MA-Y7 Solenoid valve, Q-max. 1/2
MA-Y10 Solenoid valve, hydrostatic motor - direction slide
MA-Y11 Solenoid valve, Q-max.

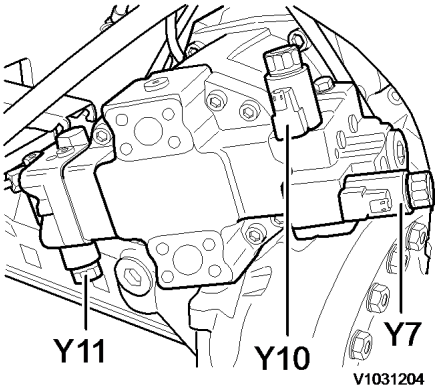

Figure 3

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 5	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 5

Circuit diagram, monitoring sensors

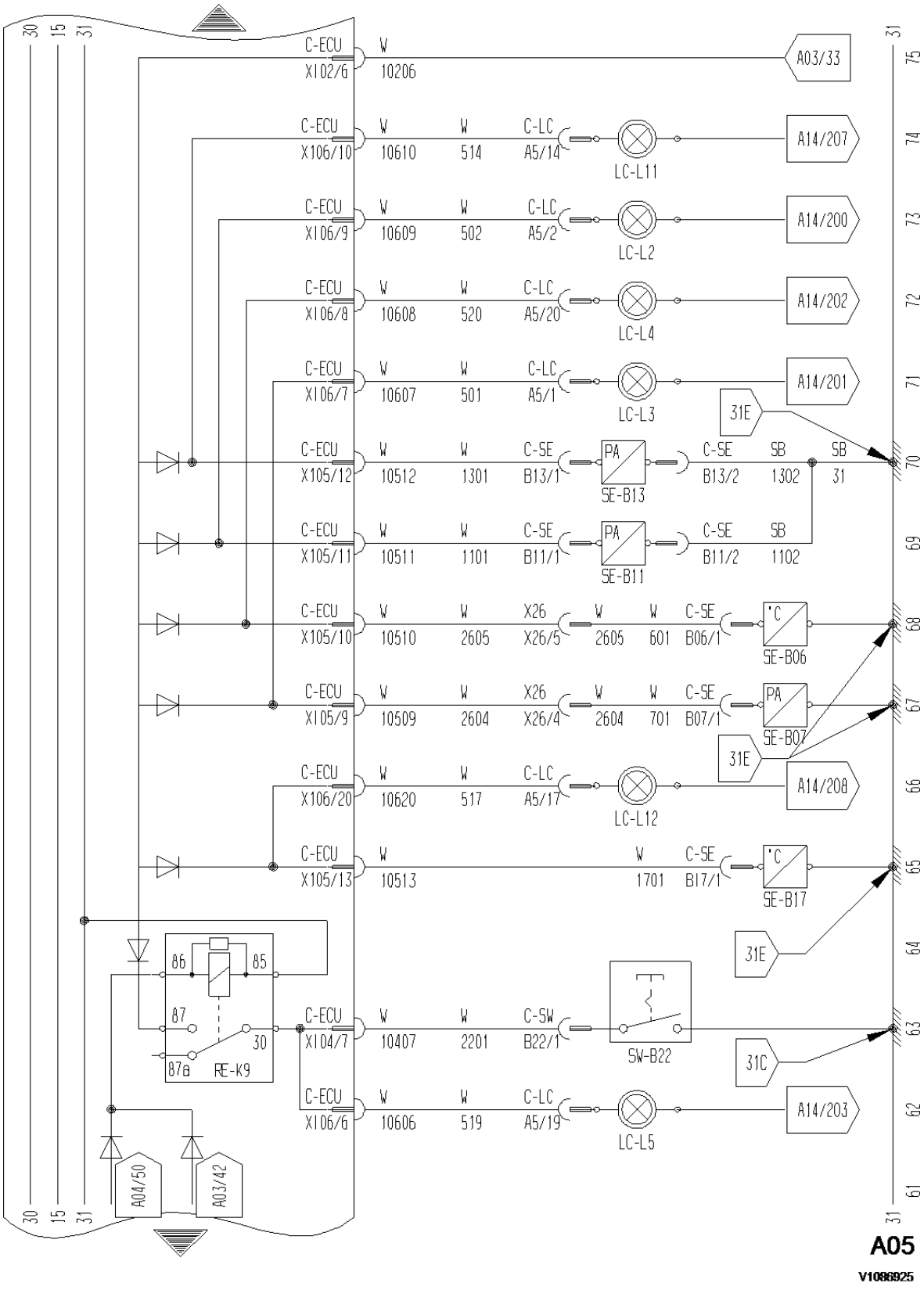

Figure 1
Circuit diagram, monitoring sensors

Component list: circuit diagram, monitoring sensors	
Description	**Function**
LC-L2	Check lamp, air filter, maintenance display
LC-L3	Engine oil pressure check lamp

LC-L4	Check lamp, engine oil temperature
LC-L5	Check lamp, handbrake check
LC-L11	Check lamp, hydraulic oil filter maintenance display
LC-L12	Hydraulic oil temperature indicator lamp
RE-K9	Relay, handbrake check warning buzzer
SE-B06	Dual sensor, engine temperature
SE-B07	Pressure switch, engine oil pressure
SE-B11	Control switch, air filter
SE-B13	Control switch, hydraulic oil filter
SE-B17	Control switch, hydraulic temperature
SW-B22	Control switch, handbrake

Component position

SE-B6 The dual sensor for engine temperature is behind the air flow guide plate.
SE-B7 Pressure switch, engine oil pressure

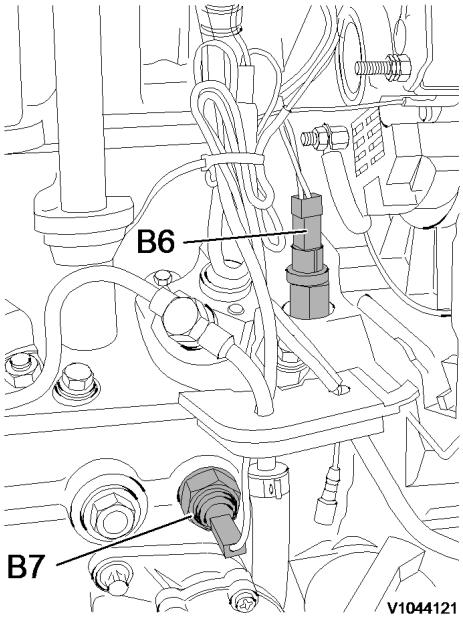

Figure 2

SE-B11 Control switch, air filter

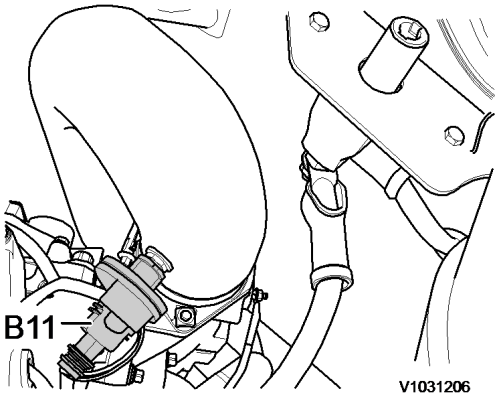

Figure 3

SE-B13 Control switch, hydraulic oil filter
SE-B17 Temperature switch, hydraulic oil

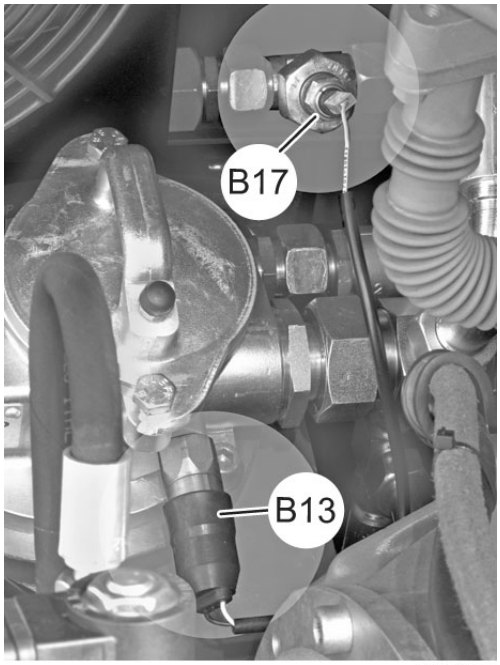

Figure 4

SW-B22 Control switch, handbrake

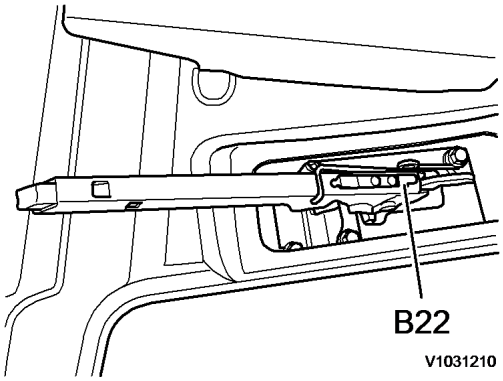

Figure 5

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 6	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 6

Circuit diagram, windscreen wiper, horn

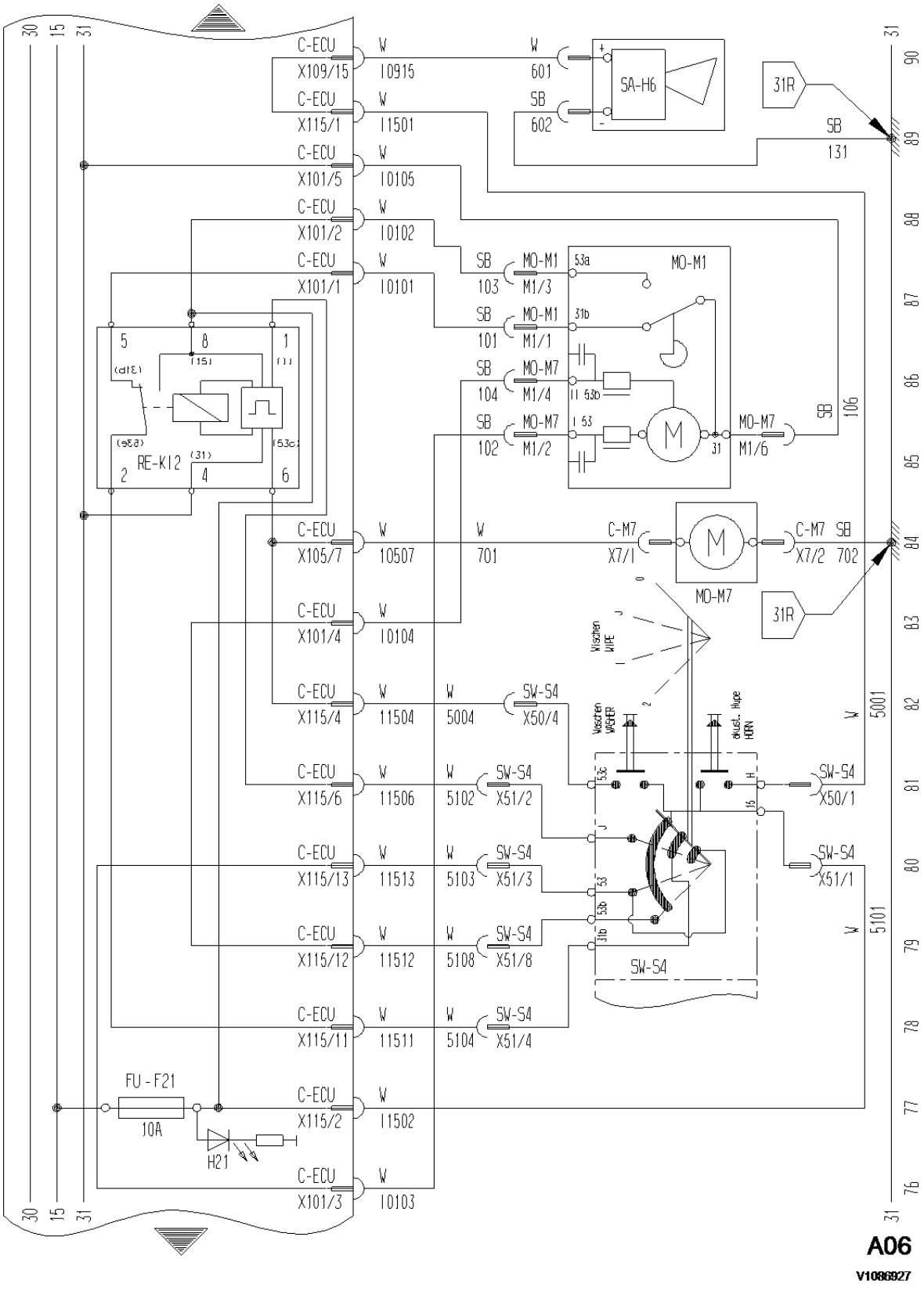

Figure 1
Circuit diagram, windscreen wiper, horn

Component list: circuit diagram, windscreen wiper, horn	
Description	**Function**
FU-F21	Fuse, wash-wipe, front
MO-M1	Wiper motor, front

MO-M7	Washer pump, front
RE-K12	Relay, interval wiper front
SA-H6	Signal
SW-S4	Steering column switch, wipe / direction indicator / lights / horn

Component position

MO-M1 The front wiper motor is located under the instrument panel.

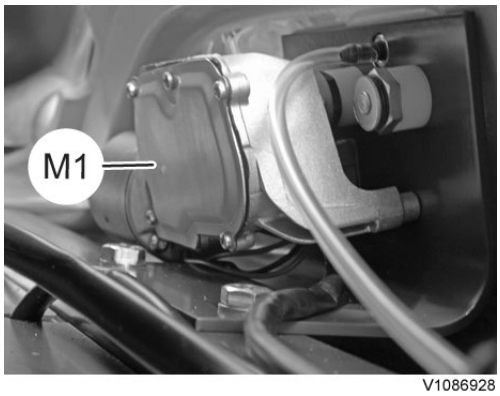

Figure 2

MO-M7 The washing pump is located at the washer fluid reservoir.

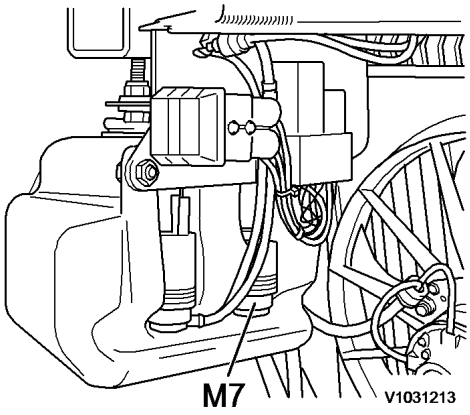

Figure 3

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 7	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 7

Circuit diagram, rear window washer

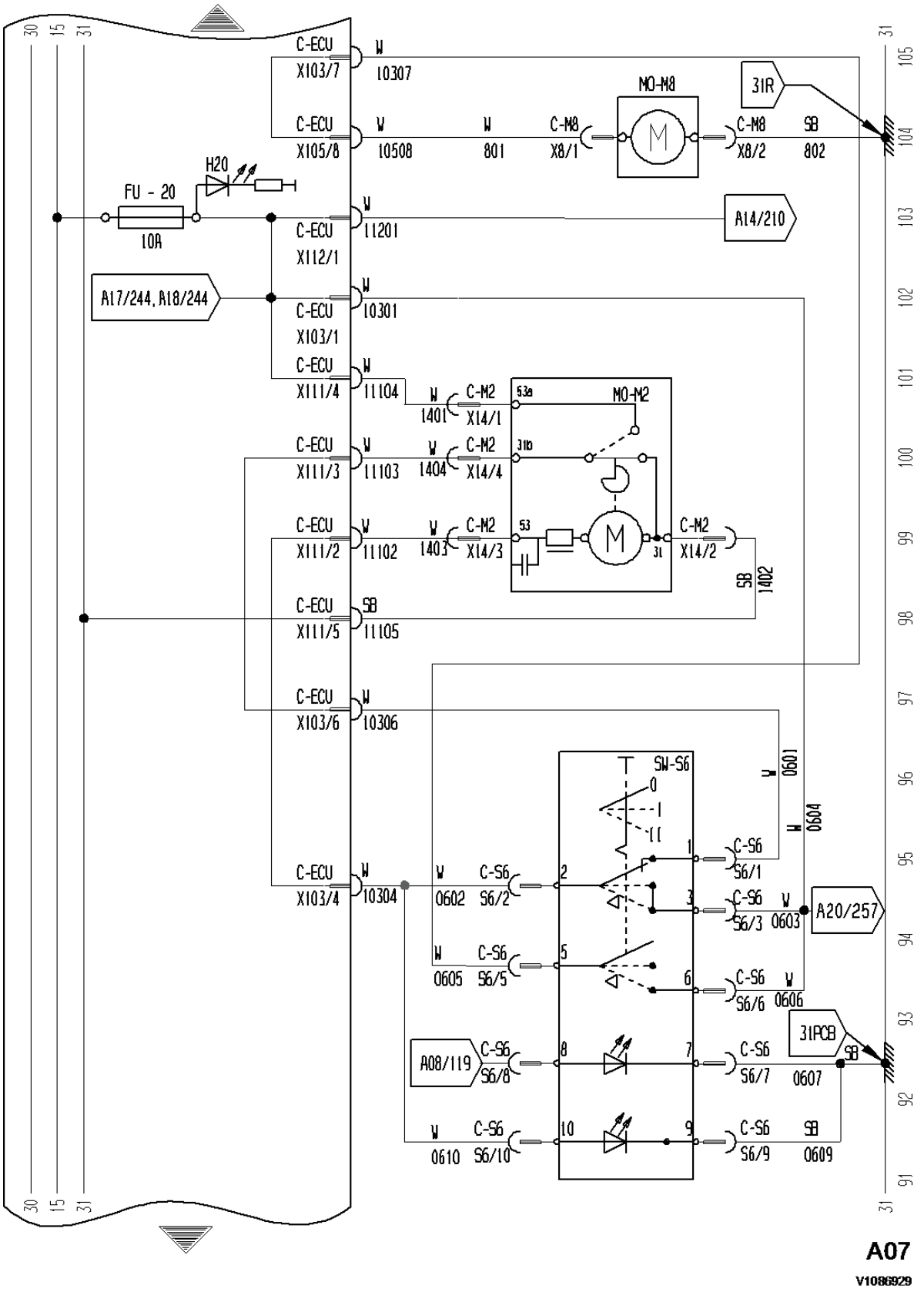

Figure 1
Circuit diagram, rear window washer

Component list: circuit diagram, rear window washer	
Description	**Function**
FU-F20	Fuse, wash-wipe rear

MO-M2	Wiper motor, rear
MO-M8	Washer pump, rear
SW-S6	Switch, windscreen wiper - washing pump, rear

Component position

MO-M8 The washing pump is located at the washer fluid reservoir.

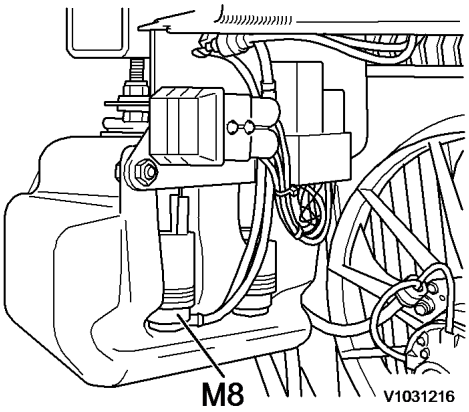

Figure 2

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 8	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 8

Circuit diagram, cab

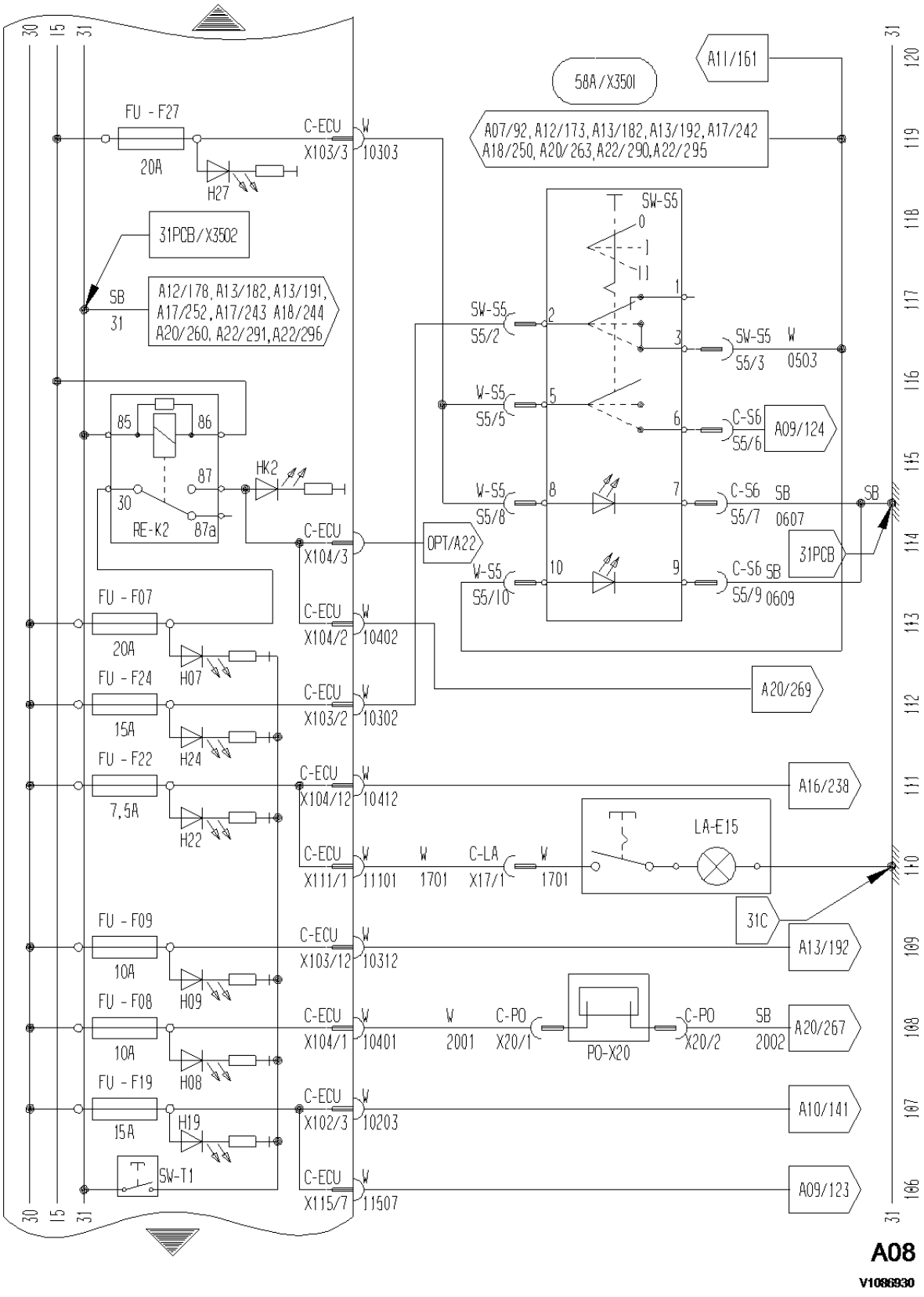

Figure 1
Circuit diagram, cab

Component list: circuit diagram, cab	
Description	**Function**
FU-F07	Fuse, fan - heating
FU-F08	Fuse, power socket (1-pin)

FU-F09	Fuse, side rotating beacon lamp
FU-F19	Fuse, hazard warning / headlight flasher
FU-F22	Fuse, inside lighting / radio
FU-F24	Fuse, light switch input term. 30
FU-F27	Fuse, light switch input term. 15
LA-E15	Interior light
OPT	Mirror heater (optional equipment)
PO-X20	Power socket (1-pin)
RE-K2	Relay, heater fan
SW-S5	Light switch, parking light - dipped beam

Component position

SW-S5 Light switch, parking light/dipped beam

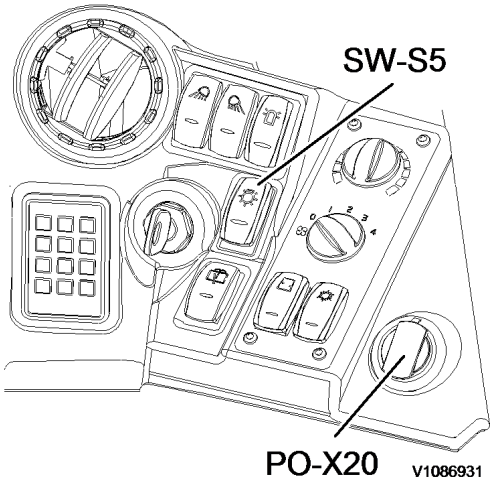

Figure 2

PO-X20 Power socket (1-pin)

NOTE!

Max. connection value $P_{max.}$ = 120 W

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 9	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 9

Circuit diagram, front lighting

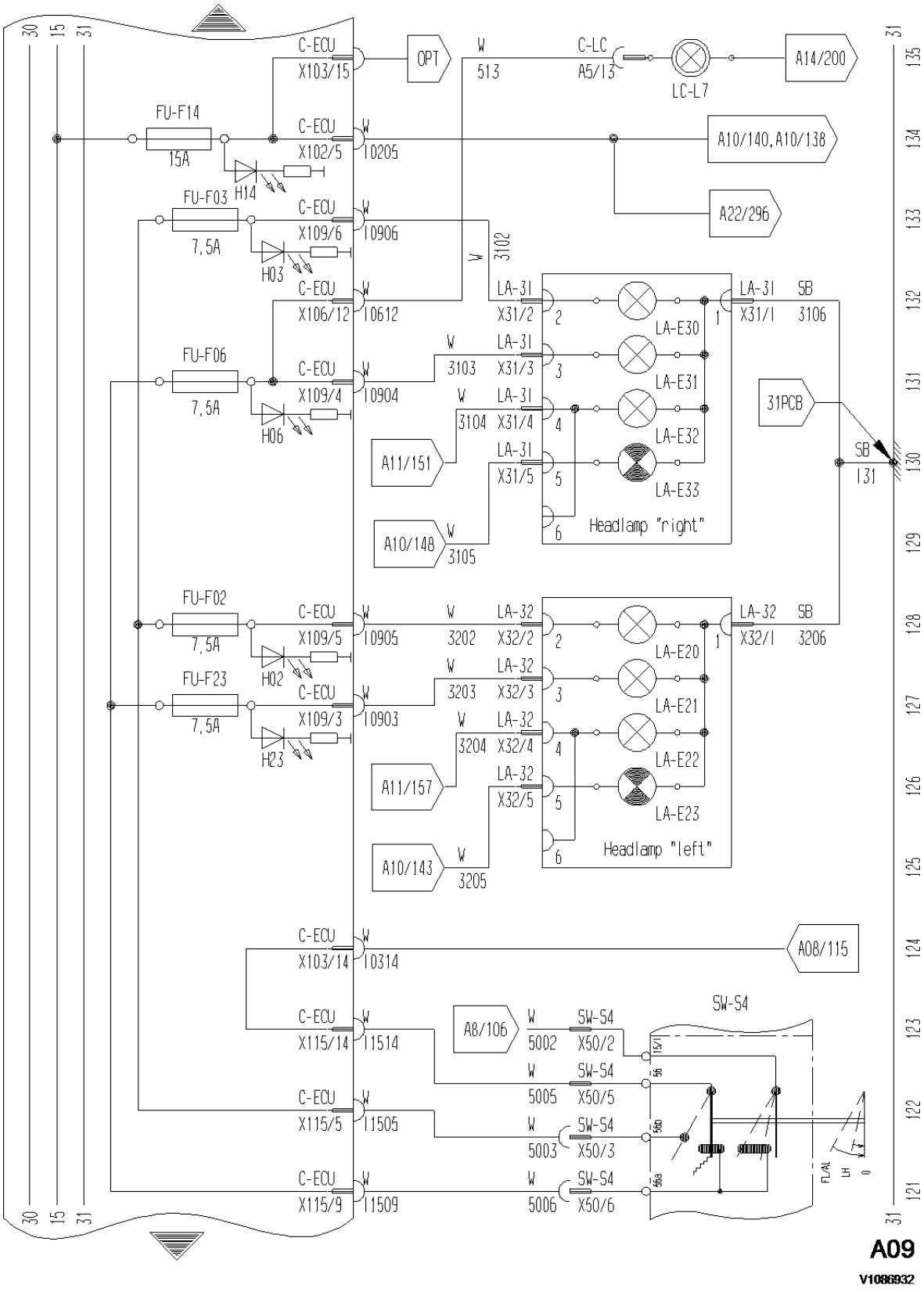

Figure 1
Circuit diagram, front lighting

Component list: circuit diagram, front lighting	
Description	**Function**
FU-F02	Fuse, low beams left
FU-F03	Fuse, low beams right

FU-F06	Fuse, high beams right, high beams check lamp
FU-F14	Fuse, hazard warning / direction indicator term. 15
FU-F23	Fuse, high beam left
LC-L7	Check lamp, high beams
LA-E30	Low beam, right
LA-E31	High beam, right
LA-E32	Parking light front, right
LA-E33	Direction indicator front, right
LA-E20	Low beam, left
LA-E21	High beam, left
LA-E22	Parking light front, left
LA-E23	Direction indicator front, left
SW-S4	Steering column switch, wiper / direction indicator / lights / horn

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 10	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 10

Circuit diagram, flashers

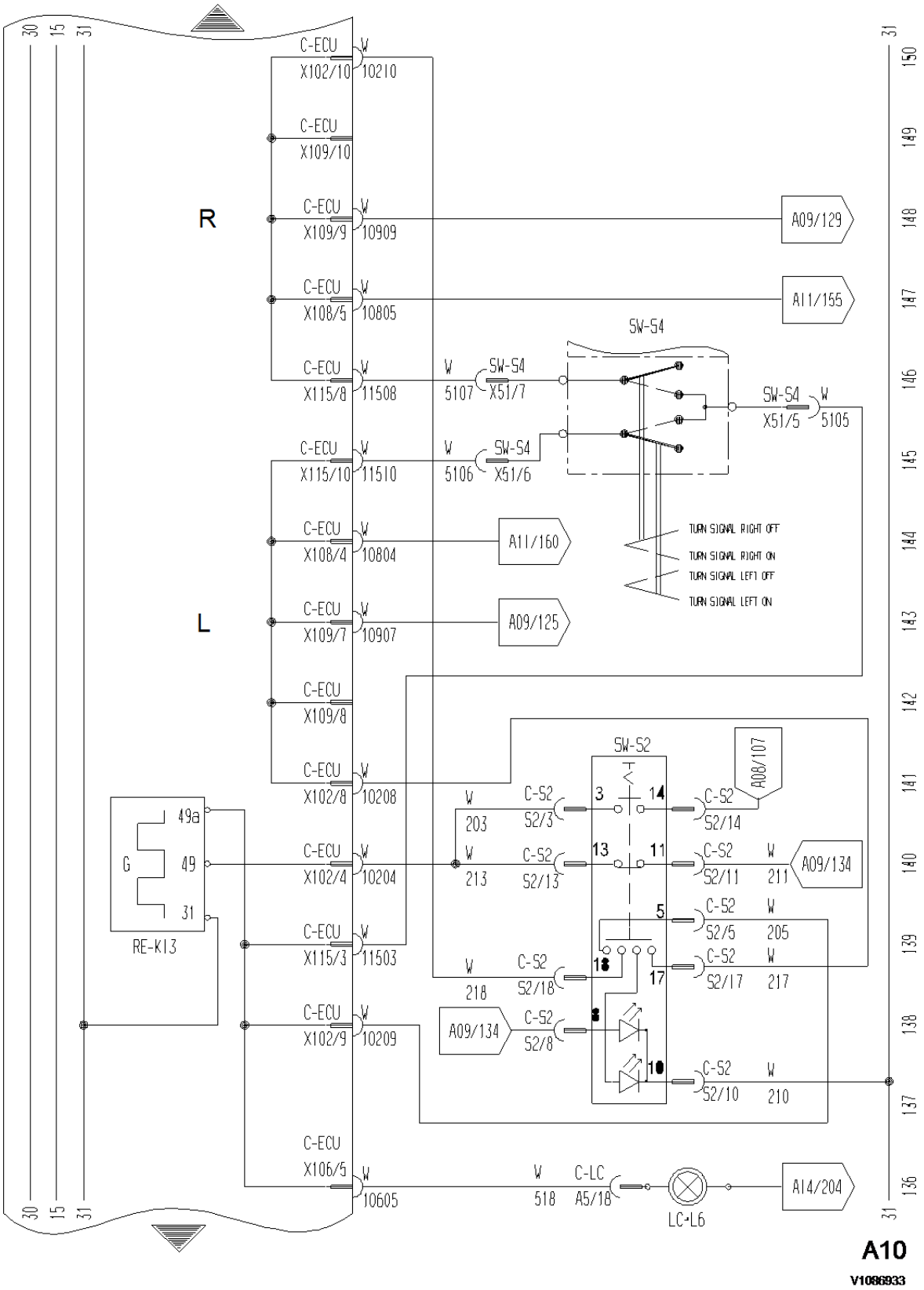

Figure 1
Circuit diagram, flashers

Component list: circuit diagram, flashers	
Description	**Function**
LC-L6	Check lamp, direction indicator
RE-K13	Relay, direction indicator

SW-S2	Hazard switch
SW-S4	Steering column switch, wiper / direction indicator / lights / horn

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 11	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 11

Circuit diagram, rear lighting

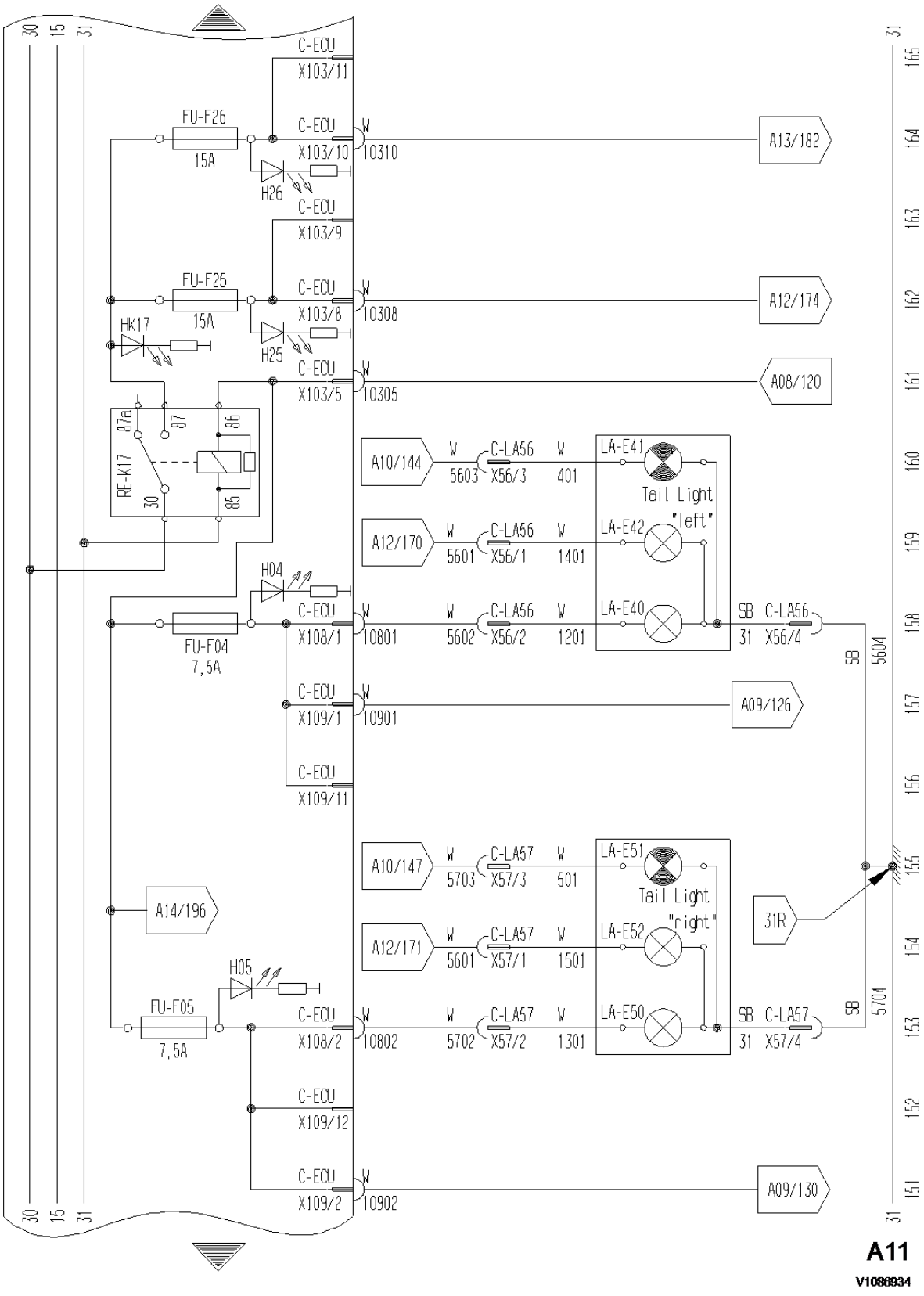

Figure 1
Circuit diagram, rear lighting

Component list: circuit diagram, rear lighting	
Description	**Function**
FU-F04	Fuse, parking light, left
FU-F05	Fuse, parking light, right

FU-F25	Fuse, worklight front
FU-F26	Fuse, worklight rear
LA-E40	Parking light rear, left
LA-E41	Direction indicator, left rear
LA-E42	Stop light, left
LA-E50	Parking light, rear right
LA-E51	Direction indicator, right rear
LA-E52	Stop light, right
RE-K17	Relay, worklight

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 12	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 12

Circuit diagram, front worklight / brake light

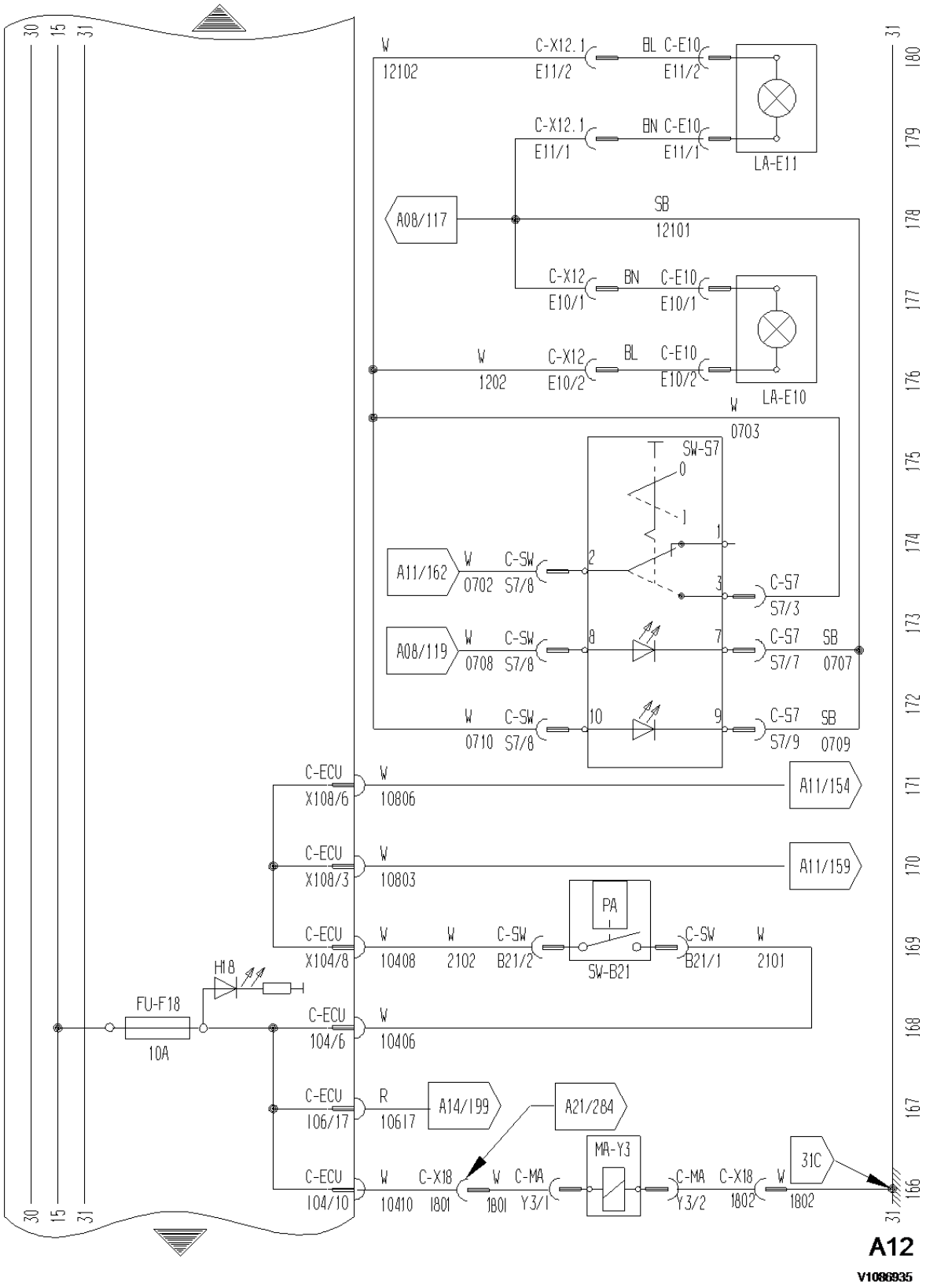


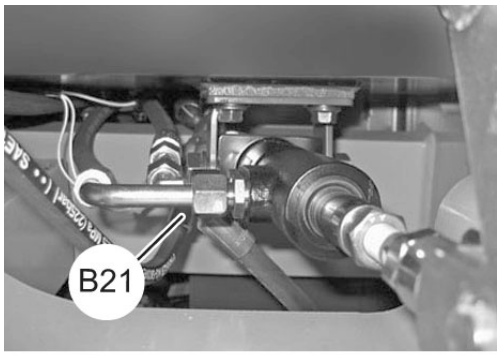
Figure 1
Circuit diagram, front worklight / brake light

Component list: circuit diagram, front worklight / brake light	
Description	**Function**
FU-F18	Fuse, brake light, preheating control, 3rd hydraulic function
LA-E10	Worklight, front left

LA-E11	Worklight, front right
SW-S7	Worklight switch, front
SW-B21	Brake light switch
MA-Y3	Adhesive magnet, 3rd hydraulic function (only with 2 lever control)

Component position

SW-B21 The brake light switch is located at the brake cylinder.



V1086936

Figure 2

MA-Y3 The adhesive magnet for 3rd hydraulic function is located at the main control valve.

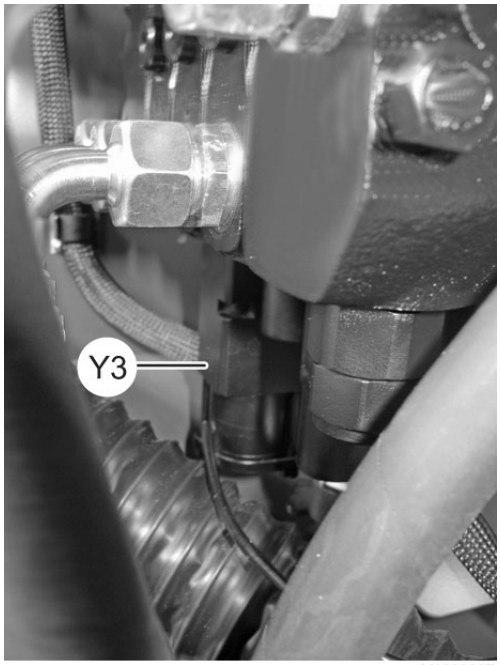


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Figure 3

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 13	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 13

Circuit diagram, rear worklight / rotating beacon lamp

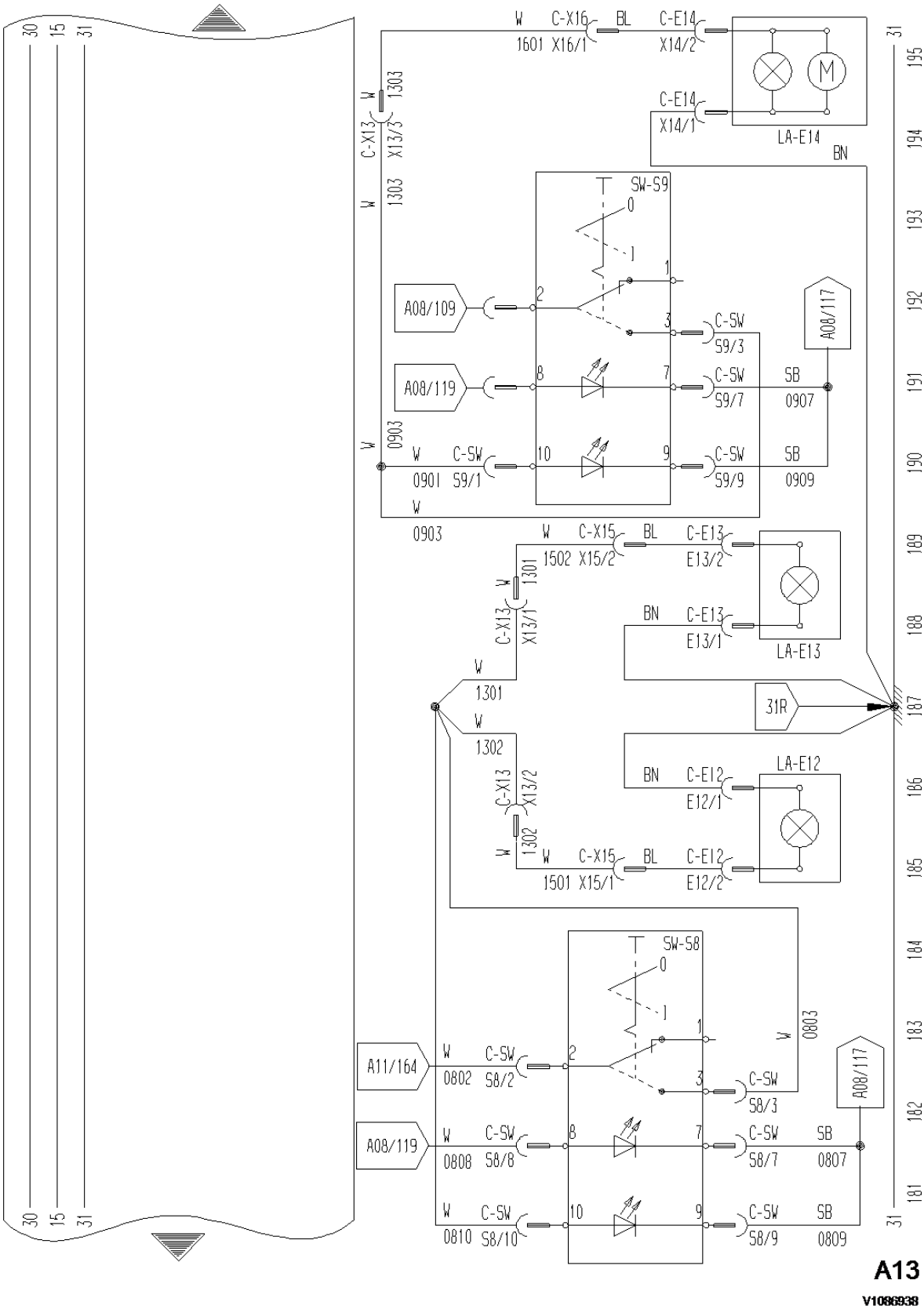

Figure 1
Circuit diagram, rear worklight / rotating beacon lamp

Component list: circuit diagram, rear worklight / rotating beacon lamp	
Description	**Function**
LA-E12	Work light - rear left

LA-E13	Work light - rear right
LA-E14	Rotating beacon
SW-S8	Worklight switch, rear
SW-S9	Beacon switch

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Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 14	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 14

Circuit diagram, instrument panel / fuel level sensor

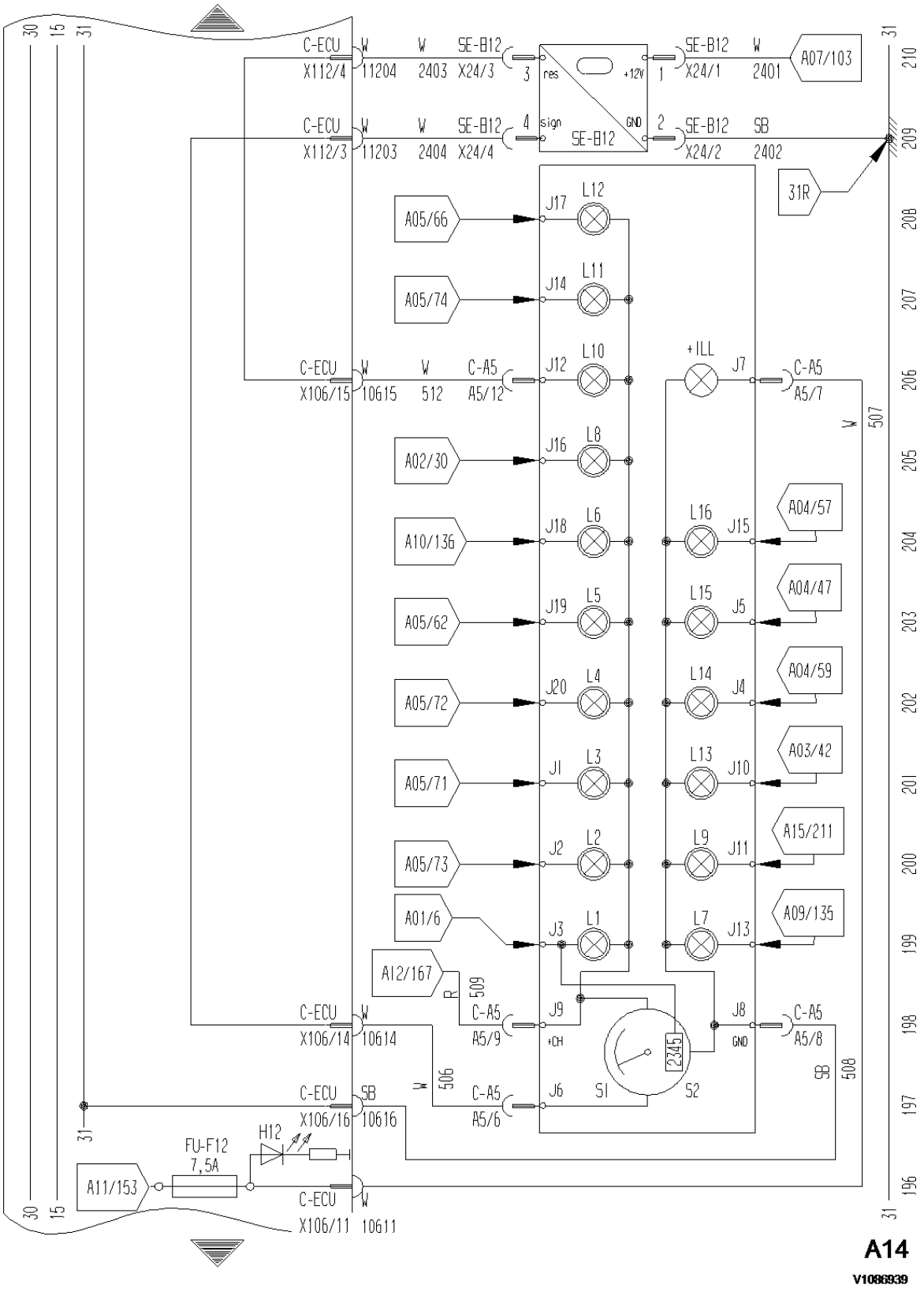


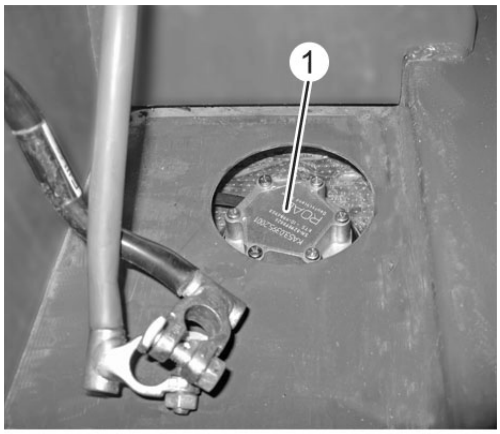
Figure 1
Circuit diagram, instrument panel / fuel level sensor

Component list: circuit diagram, instrument panel / fuel level sensor	
Description	**Function**
FU-F12	Fuse, instrument lighting
IM-S1	Fuel display

IM-S2	Hour meter
SE-B12	Fuel level sensor
LA-ILL	Instrument lighting
LC-L1	Check lamp, alternator
LC-L2	Check lamp, air filter, maintenance display
LC-L3	Engine oil pressure check lamp
LC-L4	Check lamp, engine oil temperature
LC-L5	Check lamp, handbrake check
LC-L6	Check lamp, direction indicator
LC-L7	Check lamp, high beams
LC-L8	Check lamp preheating
LC-L10	Check lamp, fuel reserve
LC-L11	Check lamp hydraulic oil filter
LC-L12	Check lamp, hydraulic oil temperature
LC-L13	Check lamp, direction of travel “Forwards”
LC-L14	Check lamp, gear “2”
LC-L15	Check lamp, direction of travel “Backwards”
LC-L16	Check lamp, gear “1”

Component position

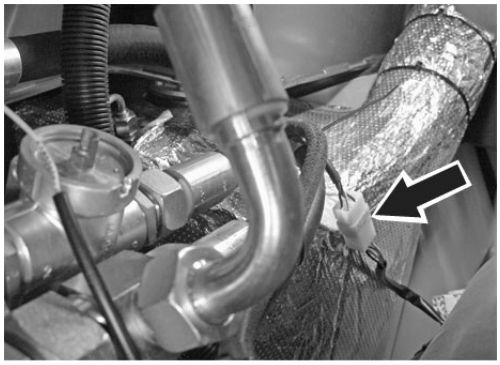
SE-B12 The fuel level sensor (1) is located under the battery.



V1080957

Figure 2

The electric pin plug connection **X24** (arrow) of the fuel level sensor is located in the engine compartment.



V1027568

Figure 3

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Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 15	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 15

Circuit diagram, differential lock / switching 3rd/4th hydraulic function

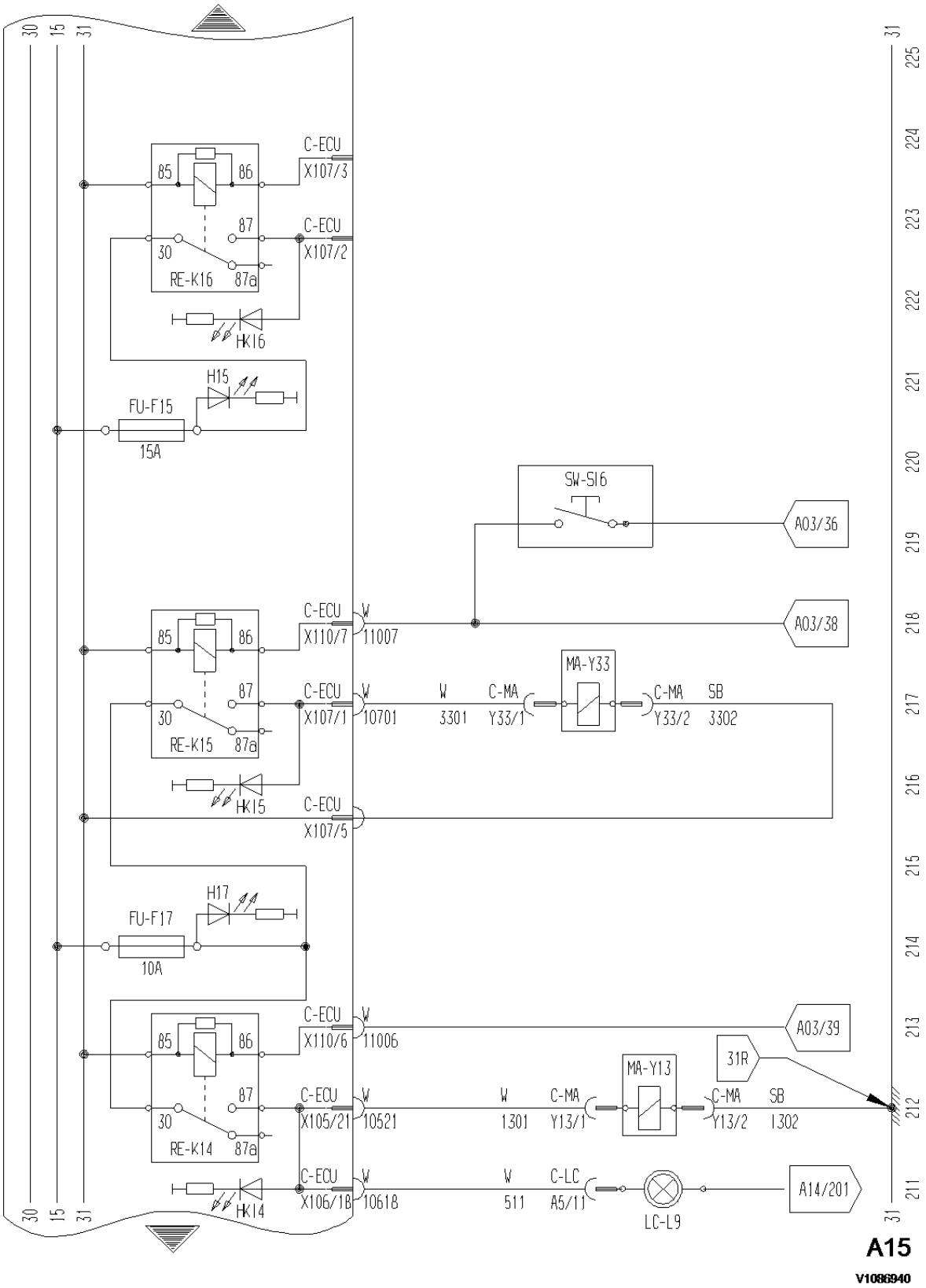

Figure 1
Circuit diagram, differential lock / switching 3rd/4th hydraulic function

Component list: circuit diagram, differential lock / switching 3rd/4th hydraulic function	
Description	**Function**
FU-F15	Fuse, optional hydraulic function
FU-F17	Fuse, differential lock, lift switch

LC-L9	Check lamp, differential lock
MA-Y13	Diff. lock solenoid valve
MA-Y33	Solenoid valve, switching 3rd/4th hydraulic function (optional)
RE-K14	Relay, differential lock
RE-K15	Relay, switching 3rd/4th hydraulic function
RE-K16	Relay, special function, 2 lever control
SW-S16	Pushbutton, switching 3rd/4th hydraulic function with 2 lever control

Component position

MA-Y13 The differential lock solenoid valve is located on the rear axle in the direction of travel, right.

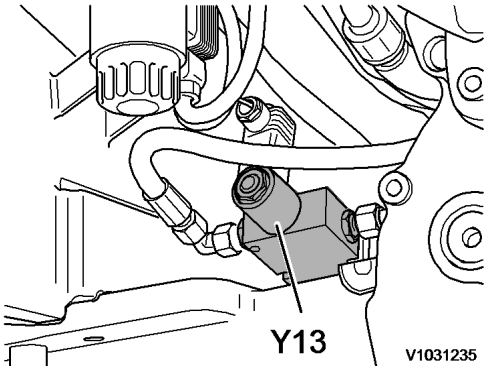

Figure 2

MA-Y33 The solenoid valve for switching 3rd/4th hydraulic function is located in articulated joint area on the left on the front frame.

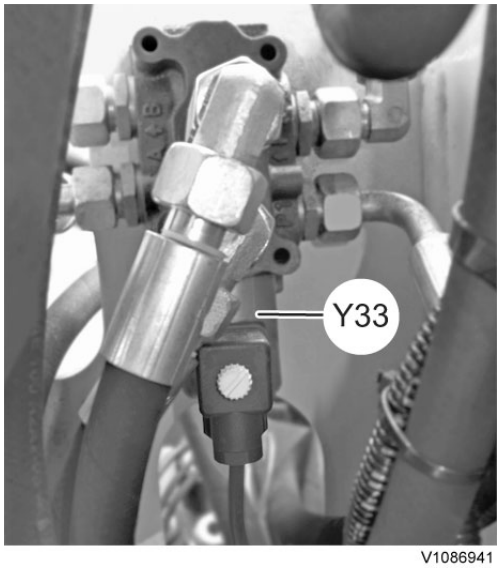

Figure 3

SW-S16 Pushbutton, switching 3rd/4th hydraulic function with 2 lever control.

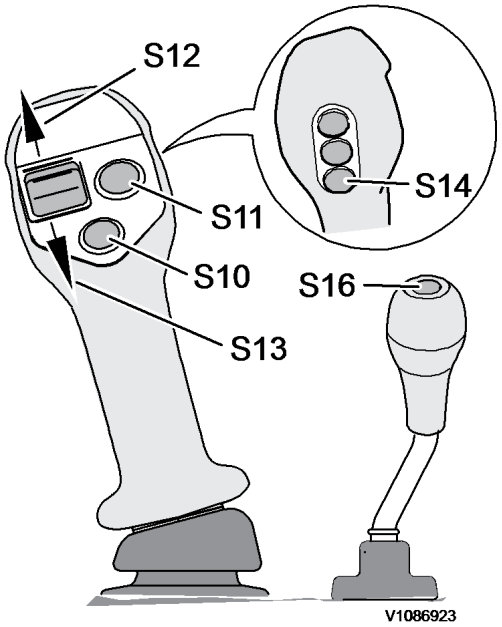

Figure 4

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 16	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 16

Circuit diagram, radio

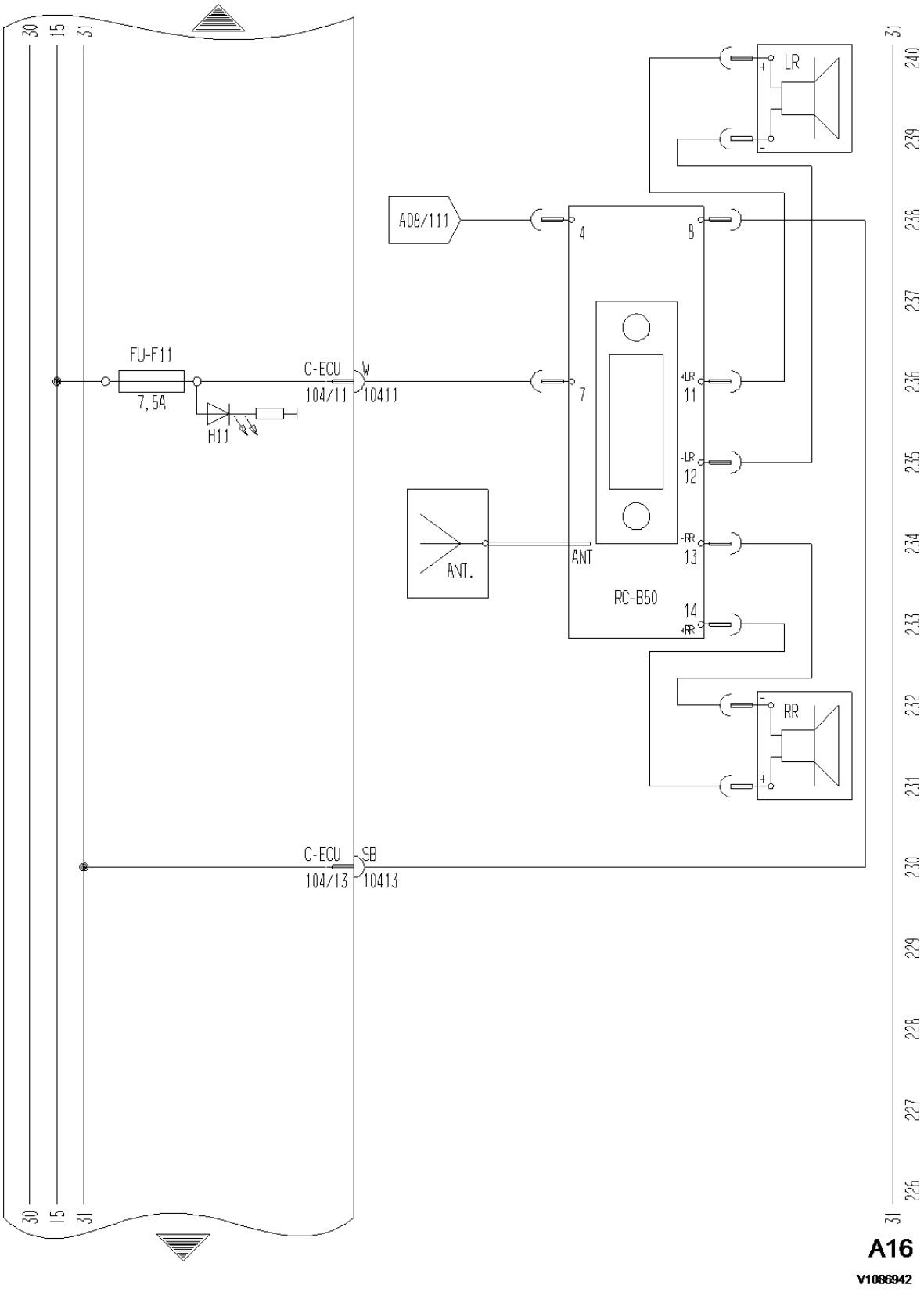

Figure 1
Circuit diagram, radio

Component list: circuit diagram, radio	
Description	**Function**
FU-F11	Fuse, radio term. 15
LR	Speaker, left

RC-B50	Radio
RR	Speaker, right

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 17	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 17

Circuit diagram, boost pump / sweeper unit / seat heating (optional equipment)

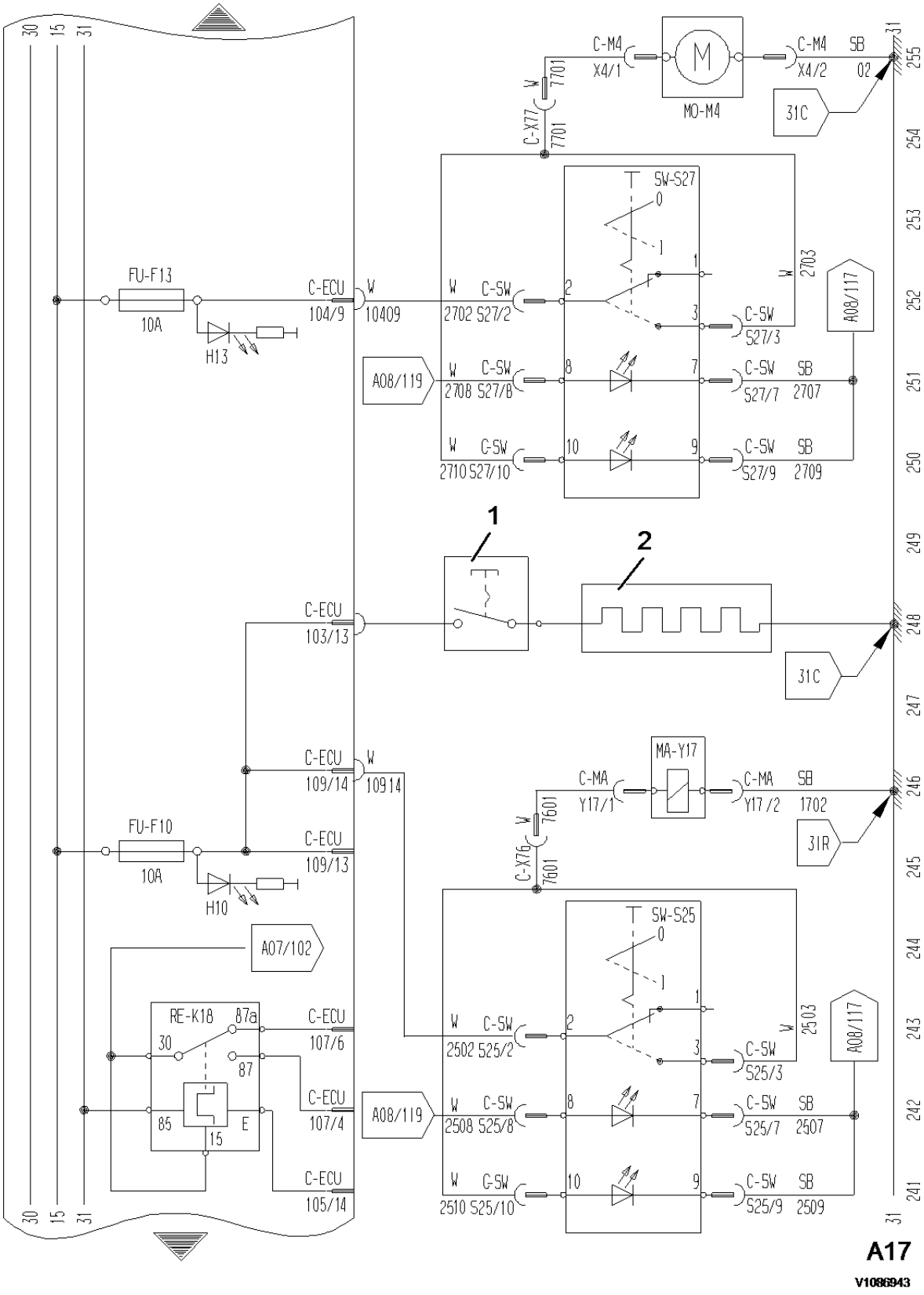

Figure 1
Circuit diagram, boost pump / sweeper unit / seat heating

Component list: circuit diagram, boost pump / sweeper unit / seat heating	
Description	**Function**
1	Switch, seat heating (in left armrest)
2	Heating element

FU-F10	Fuse, optional equipment
MO-M4	Sweeper unit
MA-Y17	Solenoid valve, boost pump
SW-S25	Switch, boost pump
SW-S27	Switch, sweeper unit water pump

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 18	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 18

Circuit diagram, boom suspension system / BSS (optional)

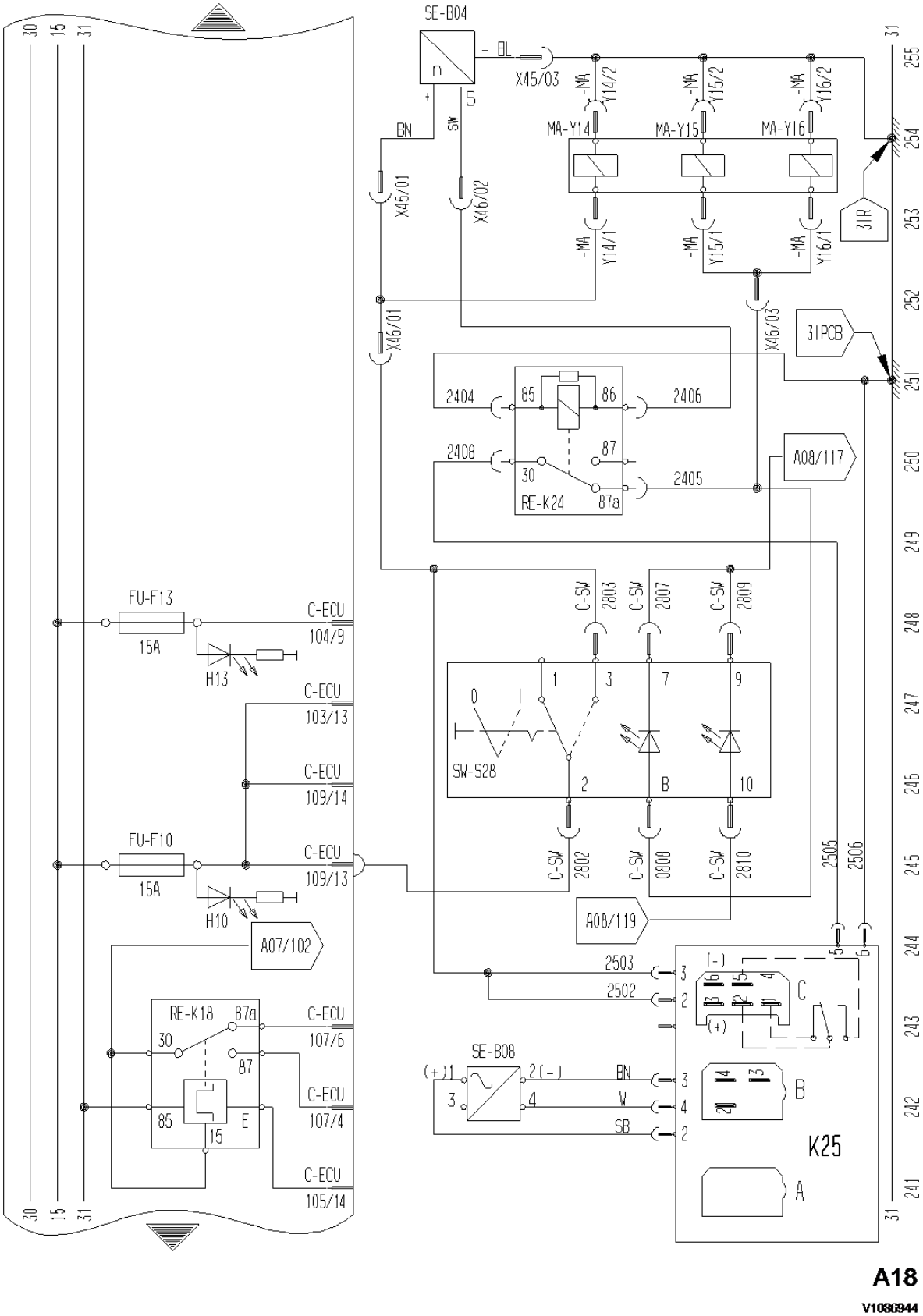

Figure 1
Wiring diagram, boom suspension system BSS

Component list: circuit diagram, boom suspension system (BSS)	
Description	**Function**
FU-F10	Fuse, optional equipment

FU-F13	Fuse, road sweeper
MA-Y14	Solenoid valve, accumulator charge
MA-Y15	Solenoid valve, lift cylinder head connection valve
MA-Y16	Solenoid valve, lift cylinder rod compensation
RE-K18	Frequency dependent power unit shut-off
RE-K24	Relay, lifting bracket suspension
RE-K25	Frequency relay, lifting bracket suspension
SE–B04	Inductive switch lift end shut-off
SE–B08	Inductive sensor, gearbox rpm
SW-S28	Switch, lifting bracket suspension activation

Component position

The valve block for the boom suspension system is located on the left side of the front frame.
MA-Y14 Solenoid valve, accumulator charge
MA-Y15 Solenoid valve, lift cylinder head connection valve
MA-Y16 Solenoid valve, lift cylinder rod compensation

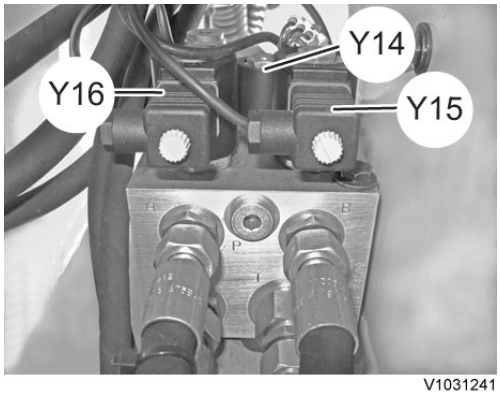

Figure 2

SE-B04 Inductive switch lift end shut-off

Figure 3

SE-B08 Inductive sensor, gearbox rpm

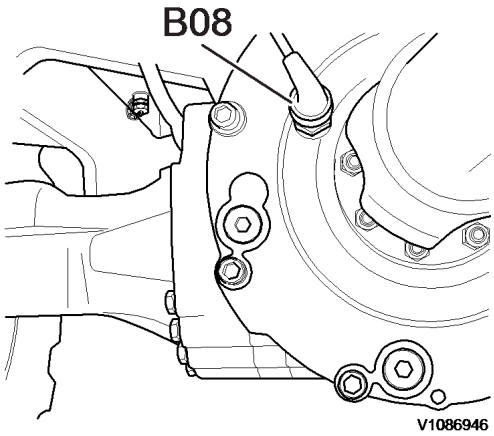

Figure 4

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 19	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 19

Circuit diagram, operator seat suspension and heating / power unit shut-off (optional equipment)

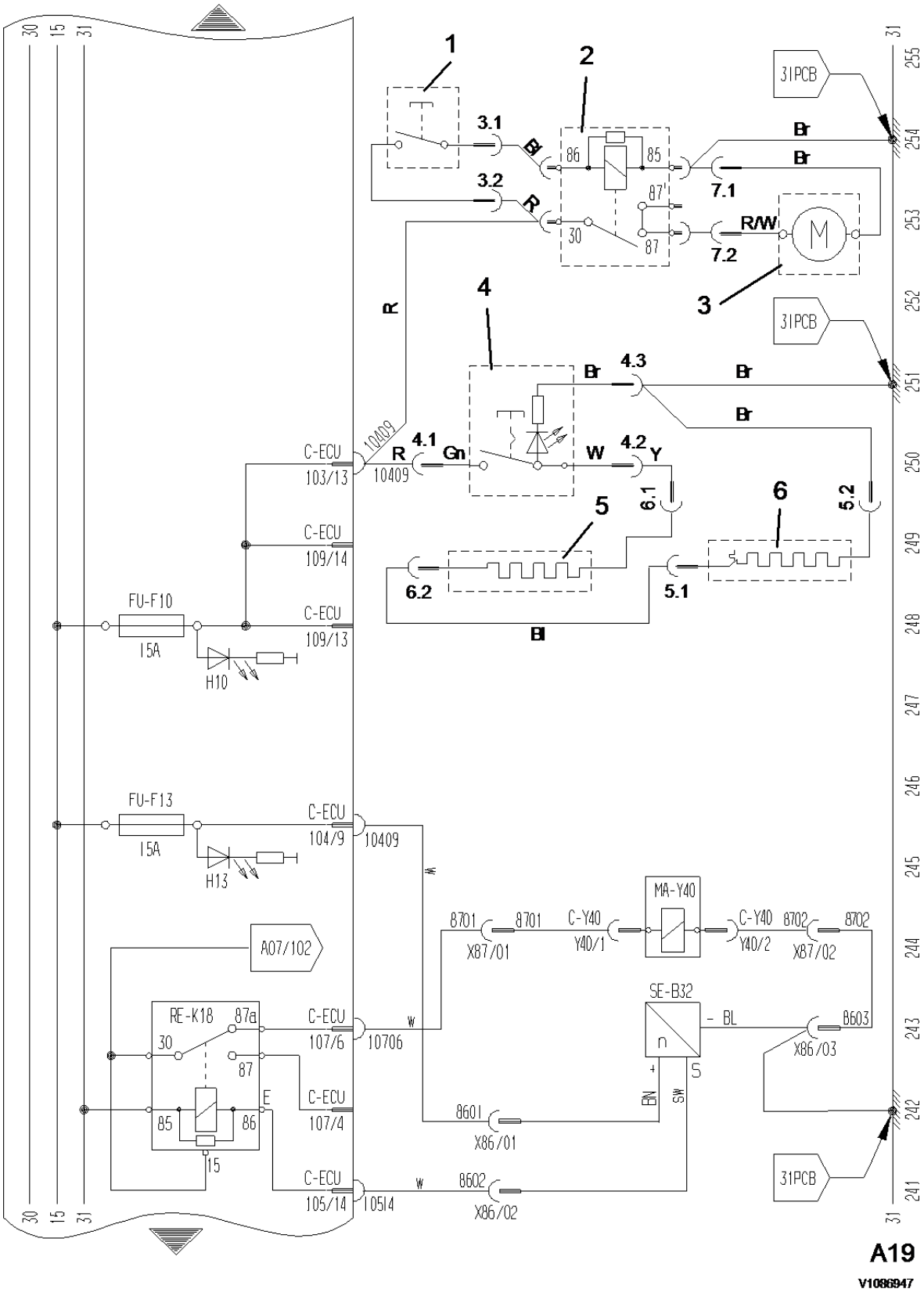

Figure 1
Circuit diagram, operator seat suspension and heating / power unit shut-off

Component list: circuit diagram, operator seat suspension and heating / power unit shut-off	
Description	**Function**
1	Switch, compressor
2	Relay, compressor

3	Compressor
4	Switch, seat heating
5	Heating element, backrest
6	Heating element, seat
FU-F10	Fuse, optional equipment
FU-F13	Fuse, inductive sensor for power unit shut-off
MA-Y40	Solenoid valve, power unit shut-off
RE-K18	Relay, power unit shut-off
SE-B32	Inductive sensor, power unit shut-off

Component position

SE-B32 Inductive sensor, power unit shut-off

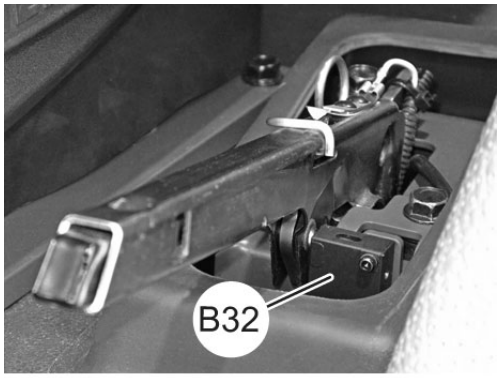

Figure 2

MA-Y40 Solenoid valve, power unit shut-off.

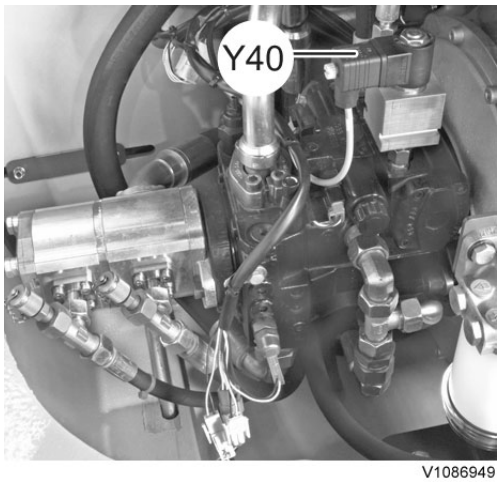

Figure 3

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 20	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 20

Circuit diagram, heating / air conditioning (optional)

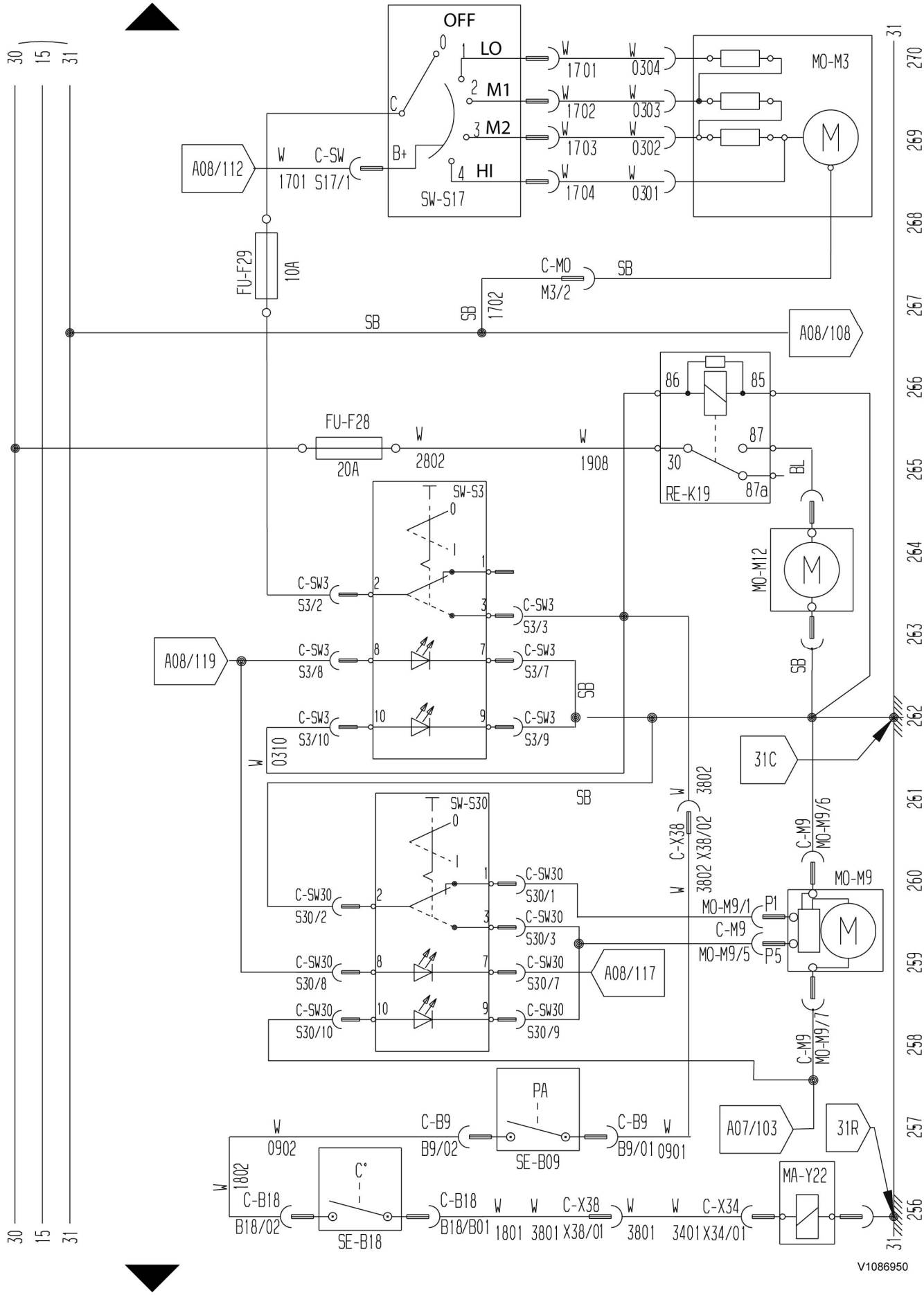
OFF
LO
M1
M2
HI
SW-S17
A08/112
C-SW
S17/1
MO-M3
FU-F29
10A
C-MO
M3/2
A08/108
FU-F28
20A
2802
1908
RE-K19
SW-S3
MO-M12
A08/119
C-SW3
S3/2
S3/3
S3/8
S3/7
S3/10
S3/9
0310
31C
SW-S30
C-X38
X38/02
3802
C-M9
MO-M9/6
MO-M9
MO-M9/1
P1
MO-M9/5
P5
S30/1
S30/2
S30/3
S30/8
S30/7
S30/10
S30/9
A08/117
MO-M9/7
PA
SE-B09
B9/02
B9/01
0902
0901
A07/103
31R
1802
B18/02
SE-B18
B18/B01
1801
3801
X38/01
3401
X34/01
MA-Y22
30
15
31
V1086950

Figure 1

Circuit diagram, heating / air conditioning

Component list: circuit diagram, heating / air conditioning	
Description	**Function**
FU-F28	Fuse, air conditioning
FU-F29	Fuse, air conditioning control
RE-K19	Air conditioning system
MA-Y22	Magnet clutch, air conditioning compressor
MO-M3	Fan motor heating
MO-M12	Fan motor, air conditioning condenser
SE-B09	Pressure switch, air conditioning
SE-B18	Temperature switch, air conditioning
SW-S3	Switch, air conditioning
SW-S17	Fan switch, heating
MO-M09	Servo motor, recirculation air
SW-S30	Switch, recirculation air

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 21	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 21

Circuit diagram, 3rd/4th hydraulic function proportional (optional equipment)

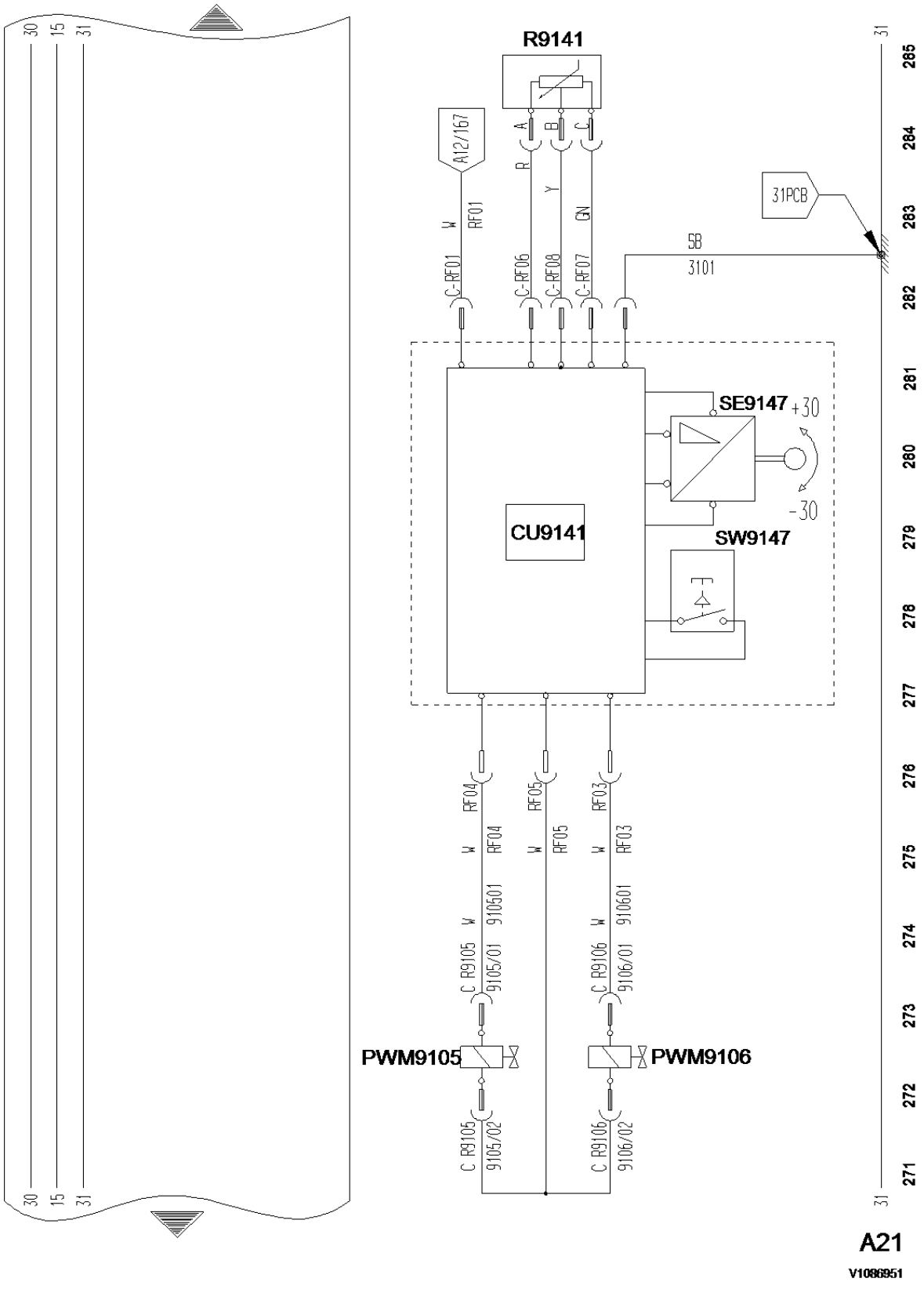

Figure 1
Circuit diagram, 3rd/4th hydraulic function proportional

Component list: circuit diagram, 3rd/4th hydraulic function proportional	
Description	**Function**
CU9141	Proportional control, 3rd/4th hydraulic function (integrated in control lever)
R9141	Potentiometer, flux control

SE9147	Rolling selector, 3rd/4th hydraulic function
SW9147	Hold function key, 3rd/4th hydraulic function
PWM9105	Valve, 3rd hydraulic function (+)
PWM9106	Valve, 3rd hydraulic function (-)

Component position

R9141 Potentiometer, flux control
SE9147 Rolling selector, 3rd/4th hydraulic function
SW9147 Hold function key, 3rd/4th hydraulic function

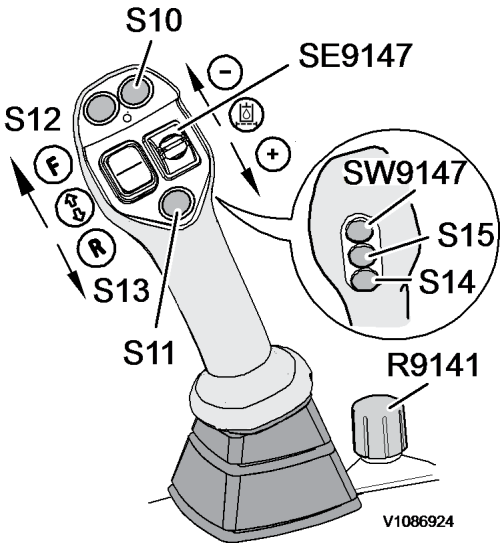

Figure 2

PWM9105 Valve, 3rd hydraulic function (+)
PWM9106 Valve, 3rd hydraulic function (-)

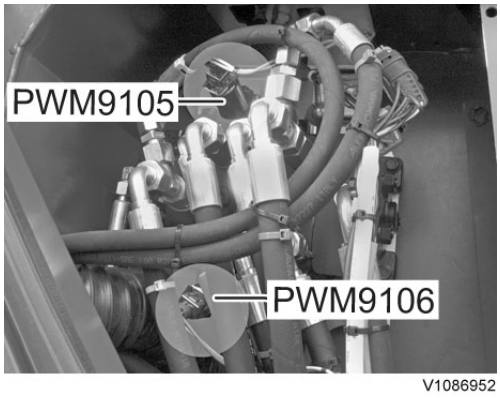

Figure 3

VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Wiring diagram 22	**370**	**Service Information**	**2014/3/8 0**
Profile: **CWL, L25F [GB]**			

Wiring diagram 22

Circuit diagram, attachment locking / heated exterior mirrors

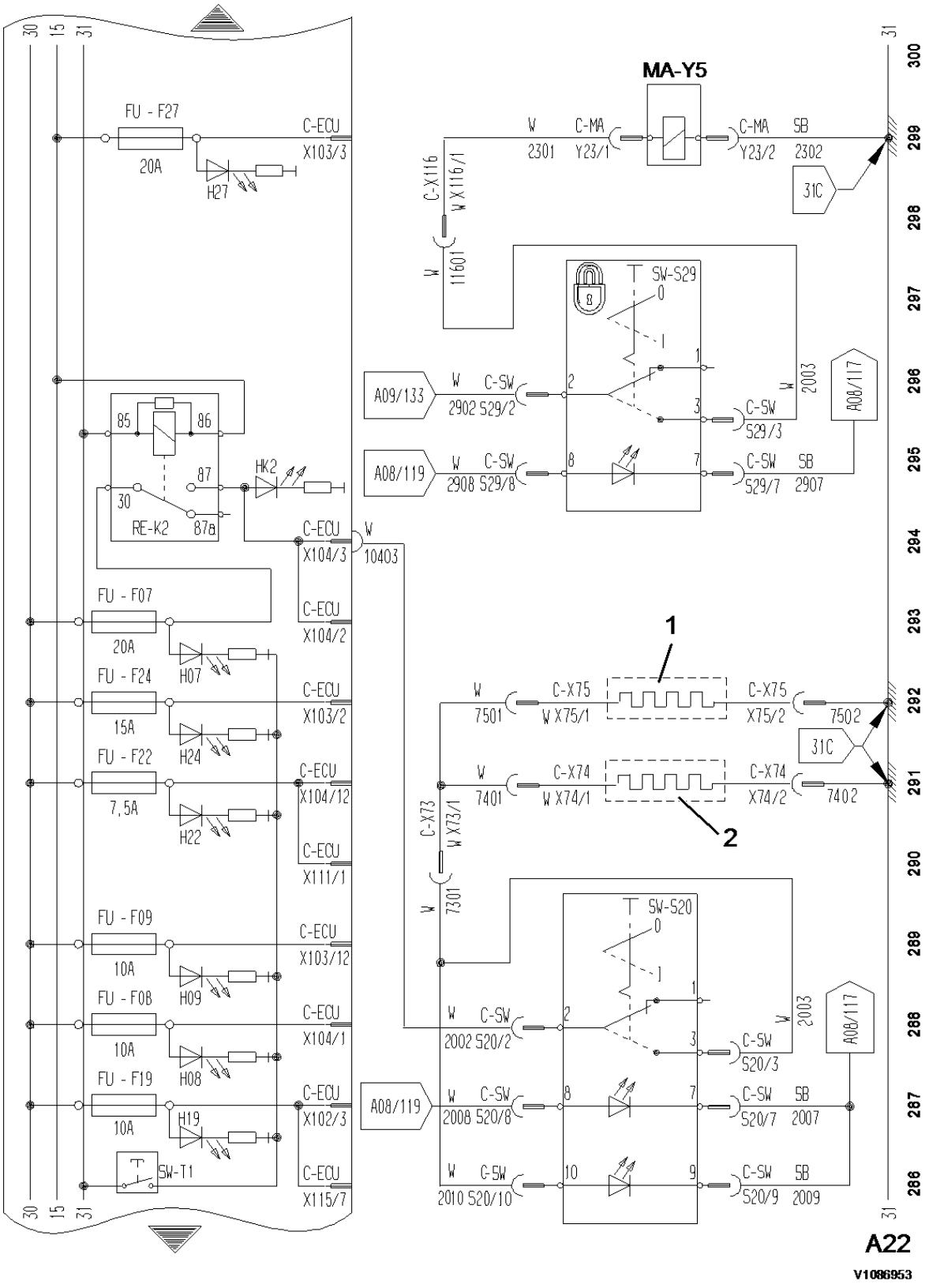

Figure 1
Circuit diagram, attachment locking / heated exterior mirrors

Component list: circuit diagram, attachment locking / heated exterior mirrors	
Description	**Function**
FU-F07	Fuse, fan - heating
RE-K2	Relay, fan - heating / heated exterior mirrors

MA-Y5	Solenoid valve, attachment locking
SW-S20	Switch, heated exterior mirrors
SW-S29	Switch, attachment bracket locking
1	Heated exterior mirror, right
2	Heated exterior mirror, left

Many thanks for your purchase.
Happy every day.