Service manual

Dumper

DW20
DW30
DW40

Machine models	**D25-01/D25-02/D25-03**
Edition	**1.4**
Document order number	**1000424084**
Language	**en**

WACKER NEUSON

1.3 Explanation of symbols and abbreviations

Symbol

- Identifies a list
  - Identifies a subdivision of a list
  ➥ Description of a result

1. Identifies an activity
   Follow the order of the activity!
2. Continuation of an activity
   Follow the order of the activity!

A Identifies an alphabetical list

B Continuation of an alphabetical list

Cross-references: see page *1-1* (page)

Cross references: **7** (pos. no. or table no.)

Cross-references: *Fig. 2* (Fig. no. 1)

Cross references: *– see chapter “5 Operation” on page 5-1* (see chapter)

Cross references: *– see “Operation” on page 5-1* (– see text)

Equipment identifier of hydraulic component:
e.g. C001, L017, Y147,...

Information
Identifies an information that, when followed, provides for a more efficient and economical use of the vehicle.

Environment
Failure to observe the instructions identified by this symbol can cause damage to the environment.

1.7 Parking the vehicle

WARNING

Crushing hazard due to vehicle rolling away under its own weight after parking it!

Serious injury or death can be caused by not securing the vehicle.

► Secure vehicle (for example with wheel chocks).

WARNING

Crushing hazard due to tipping over of vehicle!

Serious injury or death can be caused by a vehicle tipping over.

► Lower the skip. At near-freezing temperatures, park the machine with the skip tilted to prevent material from freezing or ice from forming in the skip. Secure the skip with the maintenance prop.

► Park the vehicle for an extended period of time only with an empty skip.

► The subgrade must be horizontal, even, and have a high load-bearing capacity.

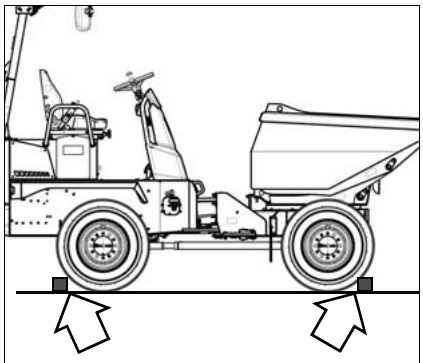


Fig. 15 (symbolic representation)

1. Park the vehicle on firm, level, and horizontal ground. The machine may be parked on a slope only if it cannot be avoided. Park the machine only transversely to the slope as you do so.
2. Lower the skip.
3. Select speed and apply the parking brake:

3TNV76, 403J-E17T	3TNV88
Set the governor for travel direction to **Neutral**.	Apply the parking brake.
Apply the parking brake.	Set the gear lever to the **1st speed**.

4. Stop the engine.
5. Remove the starting key and carry it with you.
6. Close and lock all covers and the door.
7. Secure the wheels accordingly (for example with wheel chocks).

Information

In order to prevent the formation of condensation water, fill the fuel tank daily after finishing work.

After towing variant 2

The pressure relief valves of the hydraulic pump must be activated and the parking brake must be activated for repair work after towing:

The hydraulic pump **A** is located under the base plate.

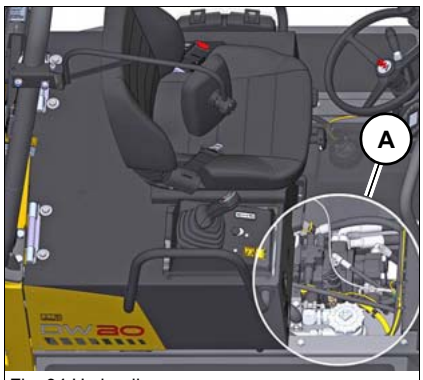


Fig. 34 Hydraulic pump access

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Secure the machine with chocks to prevent it from rolling.

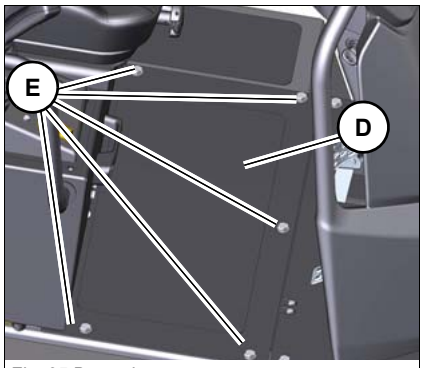


Fig. 35 Base plate

3. Loosen screws **E** and remove floor panel **D**.
   If the vehicle has a cab, remove the floor mat first.

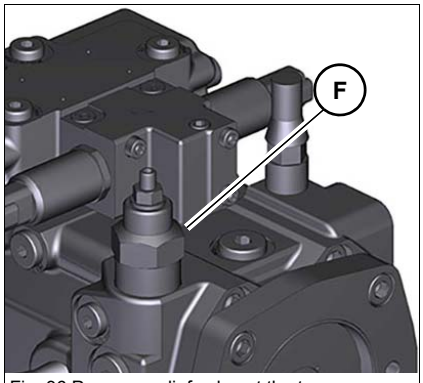


Fig. 36 Pressure relief valve at the top

4. Clean the area around the top pressure relief valve **F**.

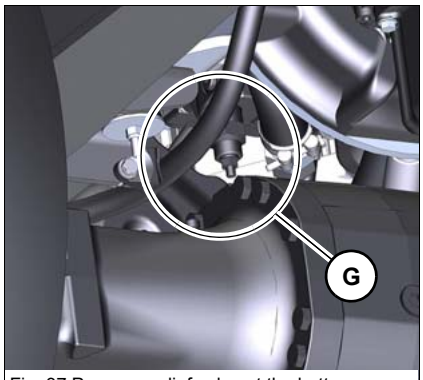


Fig. 37 Pressure relief valve at the bottom

5. Clean the area around the bottom pressure relief valve **G**.

1.11 Transporting the vehicle

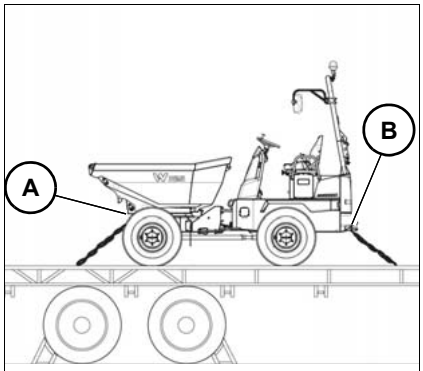


Fig. 48 Tying down the machine

1. Install the center-pivot prop – *see "Center-pivot prop" on page 1-28*
2. Firmly fasten the vehicle on the loading area with tie-down points **A** and **B** with slings of appropriate size. Comply with the specified angles and lengths according to the specifications – *see "Specifications for lashing" on page 1-34*. Cross over the lashing unit at the front and back. Observe the national and regional regulations.
3. The operator of the transport vehicle must observe the following before departure:
   - Permitted overall height, width and weight of the transport vehicle including the dumper.
   - The legal regulations of the countries where transport is to take place.

Information

The manufacturer's warranty shall not apply to accidents or damage caused by loading or transporting.

Tie-down points

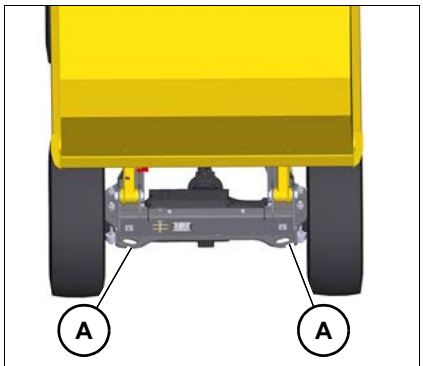


Fig. 49 Front tie-down points

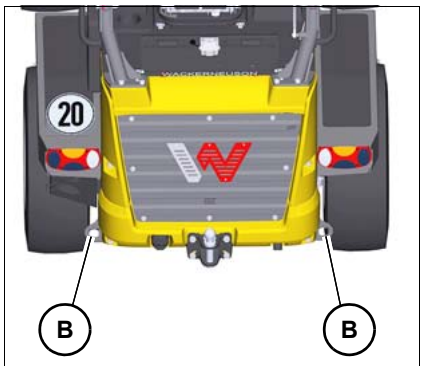


Fig. 50 Rear tie-down points

Position	Tie-down points	Quantity
A	Front left and right of front axle	2
B	Rear left and right of rear axle	2

2.4 Steering system

Engine vehicle type	DW20/DW30 3TNV76	DW30 3TNV88	DW30/40 403J-E17T
Design	hydrostatic, 2-speed		
Steering mode	Chassis articulation steering		
Power supply	Via gear pump		
Priority valve	External from steering valve		
Operating pressure	160 bar +/− 5 bar (2320.6 psi +/− 72.5 psi)		
Oil flow	33.4 l/min at 3210 rpm (8.8 gal/min at 3210 rpm)	30 l/min at 2890 rpm (7.9 gal/min at 2890 rpm)	30.9 l/min at 2800 rpm (8.2 gal/min at 2800 rpm)
Secondary pressure protection	220 bar (3190.8 psi)		
Filter	None		
Steering angle - design	36°		

Turning radius	DW20/DW30 3TNV76		DW30 3TNV88	DW30 403J-E17T	DW40 403J-E17T
Concrete mixer	--	--	--	3980 mm (13'-1")	--
Front skip	3700 mm (12'-2")	3900 mm (12'-10")		--	--
Swivel skip, asphalt skip				3980 mm (13'-1")	4030 mm (13'-3")
Swivel skip with self-loading unit		--	--	--	--
High swivel skip	3800 mm (12'-6")	--	--	3980 mm (13'-1")	--

Safety box sticker

Assignment (3TNV76)

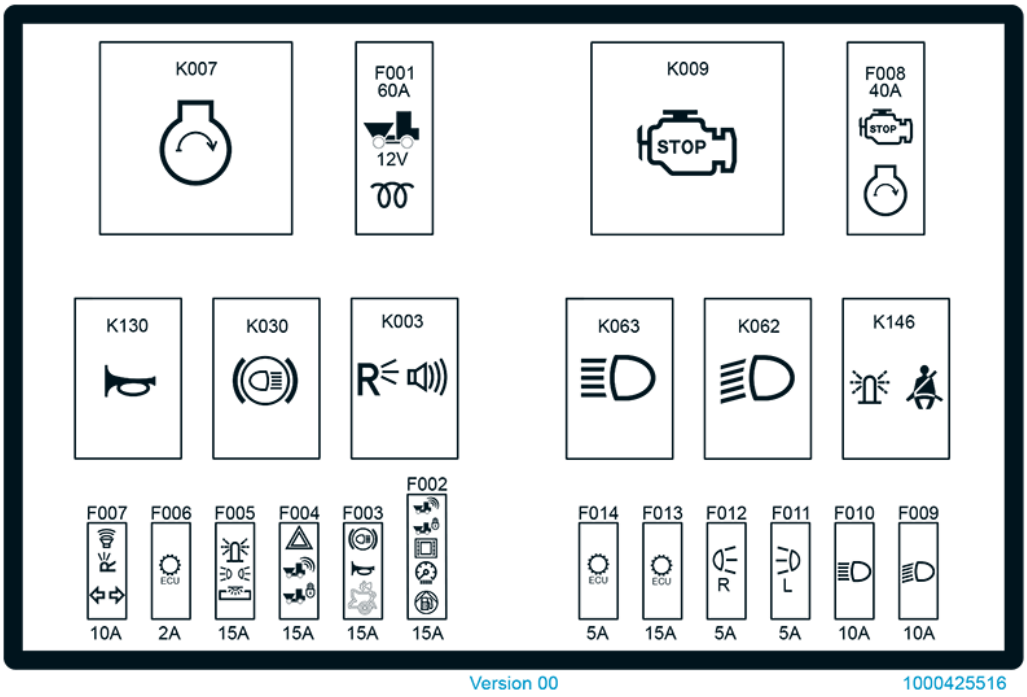


Fig. 55 Fuse box label DW20 and DW30 version 1

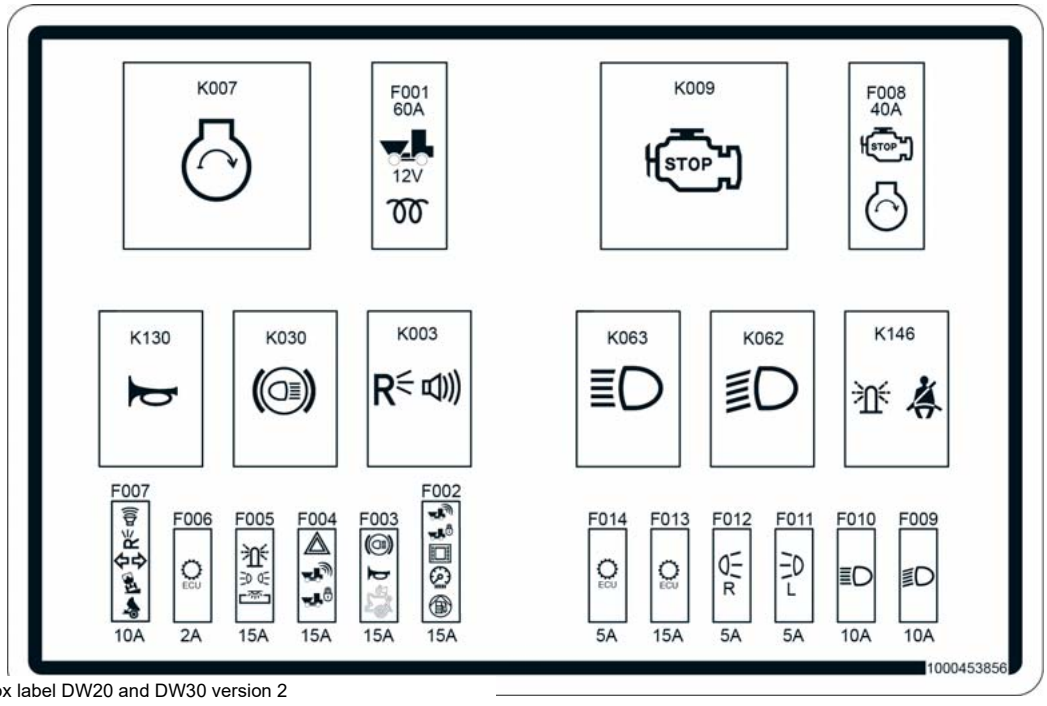


Fig. 56 Fuse box label DW20 and DW30 version 2

UNF thread Triple-Lok		
1 7/8-12	57 / 60	265 (195.5)
2 1/2-12	72	360 (265.5)

UNF thread O-Lok		
Thread (ORFS)	**Wrench size**	**Torque Nm (ft.lbs)**
9/16-18	17	25 (18.4)
11-16-16	21	40 (29.5)
13/16-16	24	57 (42)
1-14	29	85 (62.7)
1 3/16-12	35	123 (90.7)
1 7/16-12	41	160 (118)
1 11/16-12	48	205 (151.2)
2-12	--	278 (205)

Tightening torques for hydraulic threaded fittings (dry assembly)

Metric hose fittings for hydraulic applications (light execution, DKOL)				
Nominal Ø	**Outer Ø**	**Thread**	**Wrench size**	**Torque**
				Nm (ft.lbs.)
05	6L	M12X1.5	WS 14	15 (11)
06	8L	M14X1.5	WS 17	20 (14.7)
08	10L	M16X1.5	WS 19	40 (29.5)
10	12L	M18X1.5	WS 22	50 (36.8)
12	15L	M22X1.5	SW 27	75 (55.3)
16	18L	M26X1.5	SW 32	85 (62.7)
20	22L	M30X2	SW 36	100 (73.75)
25	28L	M36X2	SW 41	180 (132.7)
32	35L	M45X2	SW 55	220 (162.3)
40	42L	M52X2	SW 60	260 (191.8)

Galvanized and dry surface (O-ring slightly oiled). Torque tolerance: −10%

Values determined empirically and to be applied as approximate figures

	DW20 with front skip 3TNV76	DW30 with front skip 3TNV76, 3TNV88	DW20 with high swivel skip 3TNV76	DW30 with high swivel skip 403J-E17T
	mm (in/ft-in)	mm (in/ft-in)	mm (in/ft-in)	mm (in/ft-in)
L1	3788 (12'-5")	3788 (12'-5")	3755 (12'-4")	4156 (13'-8")
L2	3984 (13'-1")	3984 (13'-1")	3951 (12'-12')	4326 (14'-2")
L3	1882 (74)	1945 (77)	1945 (77)	2090 (82)
L4	1041 (41)	1041 (41)	1041 (41)	1156 (46)
L5	649 (26)	543 (21)	401 (16)	492 (19)
L6	--	--	3537 (11'-7")	3984 (13'-1")
L7	--	--	3733 (12'-3")	4155 (13'-8")
H1	2906 (9'-6")	2946 (9'-8")	2906 (9'-6")	3006 (9'-10")
H2	2760 (9'-1")	2799 (9'-2")	2757 2906 (9'-1")	2860 (9'-5")
H3	1873 (74)	1913 (75)	1873 (74)	1945 (77)
H4	205 (8)	233 (9)	1174 (46)	1268 (50)
H5	--	--	1248 (49)	1356 (53)
H6	--		1664 (66)	1841 (73)
H7	--		1746 (69)	1929 (76)
H8	2034 (80)	2074 (82)	3106 (10'-2")	3342 (10'-12")
H9	--		3596 (11'-10")	3915 (12'-10")
H10	217 (9)	257 (10)[1] 289 (11)[2]	217 (9)	257 (10)
H11	1433 (56)	1473 (58)	1563 (62)	1639 (65)
H12	1501 (59)	1541 (61)	1660 (65)	1735 (68)
H13	--	--	2053 (81)	2212 (87)
W1	1497 (59)	1730 (68)	1627 (64)	1780 (70)[3]
	--	--	--	1848 (73)[4]
W2	1230 (48)	1442 (57)	1360 (54)	1500 (59)
W3	914 (36)	914 (36)	914 (36)	994 (39)
W4	--	--	162 (6)	162 (6)
W5	--	--	1971 (78)	2128 (84)
W6	--	--	--	290 (11)[3]
	--	--	--	318 (13)[4]
	Front skip		High swivel skip	
	Degrees (°)	Degrees (°)	Degrees (°)	Degrees (°)
A1	48	48	46	46
A2	--	--	90	90

1. 3TNV76
2. 3TNV88
3. Tires: Mitas
4. Tires: ATG/Galaxy Mighty Mow

DW30 (3TNV88)

Application	Fluid/lubricant	Specification	Season/tem-perature	Capacities [1]
Diesel engine	Engine oil	API: CF, CF4, CI4 ACEA: E3, E4, E5 JASO: DH1	see engine oil types on page – *see "Engine oil types (3TNV76, 3TNV88)." on page 3-7*	6.7 liters (1.77 gal)
	Diesel fuel[2]	EN 590 (EU)[3]	Summer or winter diesel depending on outside tem-peratures	35 liters (9.25 gal)
		American Society for Testing & Materials (ASTM) D975 grade 1D S15 (USA)[4]		
		ASTM D975 grade 2D S15 (USA)[4]		
		BS 2869 class A1 (GB)[3]		
		BS 2869 class A2 (GB)[3]		
		GB252 (China)[5]		
Engine cooling system	Coolant[6]	Distilled water and anti-freeze ASTM D6210	Year-round	5.7 liters (1.51 gal)
Hydraulic oil reservoir	Hydraulic oil	Eurolub HVLP 46[7]	Year-round[2]	20 liters (5.28 gal)
	Biodegradable hydraulic oil[8]	Panolin HLP Synth 46 Fina Biohydran SE 46 BP Biohyd SE - S 46 Fuchs Plantosyn 3268		
Battery terminals	Acid-proof grease[9]	FINA Marson L2	Year-round	As required
Rear axle planetary drive	Gear oil (with LS additive)	UTTO[10]	Year-round	per 0.40 Liter (0.11 gal)
Rear axle central housing				5.0 liters (1.32 gal)
Front axle planetary drive				per 0.40 Liter (0.11 gal)
Front axle central housing				5.1 liters (1.35 gal)
Gearbox				0.60 liters (0.16 gal)
Manual transmission	Gearbox oil	80W-90		2.1 liters (0.55 gal)
Transfer gearbox				0.60 liters (0.16 gal)
Brake fluid	Hydraulic oil	Eurolub HVLP 46[8]	Year-round[2]	200 ml (12.2 in³)
	Biodegradable hydraulic oil[9]	Panolin HLP Synth 46		

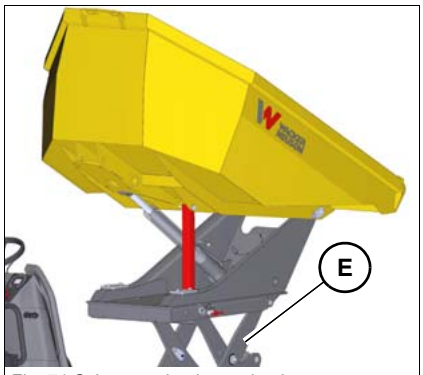


Fig. 71 Scissors raised completely

4. Scissor **E** must be raised completely so that it can be secured with the pin.

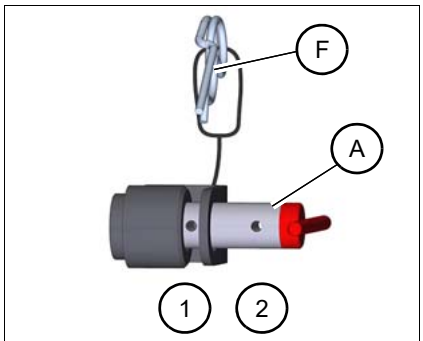


Fig. 72 Spring plug pin

5. Pull out the split pin **F** from bore 1, press pin **A** inwards and insert the split pin in bore 2.

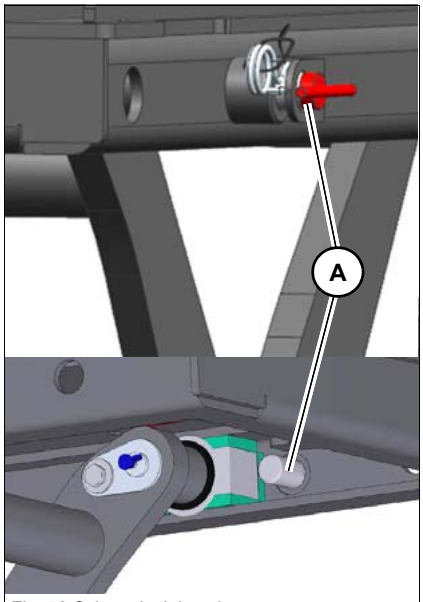


Fig. 73 Scissor lock inactive

6. The scissor is secured when the pin **A** is in the adjoining position.

Every 500 operating hours or once a year (Wacker Neuson service center)	
Change the engine oil[1]	*3-75*
Change the engine-oil filter[1]	*3-76*
Replace the fuel filter	*3-49*, *3-50*
Clean water separator (prefilter, 3TNV76, 3TNV88)	*3-46*
Replace water separator (prefilter, 403J-E17T)	*3-47*
Replace the hydraulic oil filter insert	*3-115*
Change V-belt (3TNV76, 3TNV88)	*3-96*
Check V-belt water pump-alternator-fan (403J-E17T)	*3-96*
Check and adjust parking brake and service brake	*3-140*
Drain the condensation water from the hydraulic oil reservoir	*3-116*
Check gearbox oil of drive, axles and manual gearbox and transfer gearbox	*3-124*, *3-126*, *3-127*
Clean the dust valve	*3-92*
Check the electric cables and connectors (cable and grounding connections, etc.)	*3-159*
Check the threaded fittings for tightness[2]	*3-164*
Check the engine cover lock and adjust if necessary.	*3-34*, *3-35*
Reset the maintenance meter	*3-165*
Option	
Check coupling and adjust if necessary (3TNV88)[3]	*3-130*
Clean the cab air filter	*3-92*
Check the oil level in the climatic compressor and the screw connections for tightness	*3-153*
Check the dehumidifier of the air conditioning system	*3-153*
Check the refrigerant level of the air conditioning system	*3-153*
All steps for maintenance once a day and once a week	See operator's manual and service manual

1. Replacement may be necessary before 500 o/h depending on engine load.
2. Check the screw connections and corresponding components/assemblies visually or manually (without using tools) for tightness. Readjust the screw connection in case of irregularities. Pay attention to adhesive connections as you do so!
3. Adjust maintenance interval depending on vehicle use.

Opening the engine cover

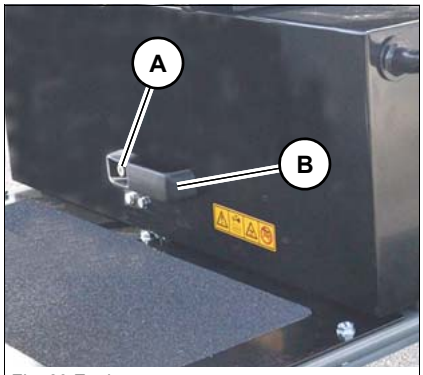


Fig. 80 Engine cover

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Turn the starting key in lock **A** anticlockwise.
3. Press lock **A** and pull handle **B**.

The engine cover is supported by two gas-filled spring devices.

Close the engine cover

1. Firmly pull engine cover downwards by handle **B** until the engine cover locks into place.
2. Turn the starting key in lock **A** clockwise.

Refueling with a stationary fuel pump

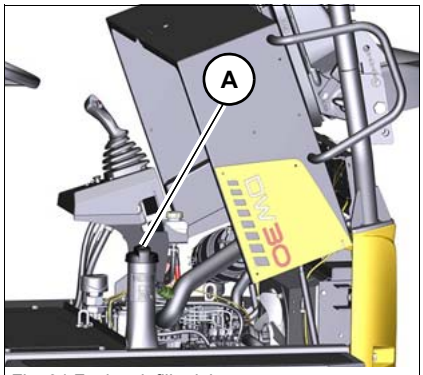


Fig. 94 Fuel tank filler inlet

ROPS

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Open the engine cover.
3. Open tank lock **A** slowly to release the pressure from the fuel tank.
4. Refuel.
5. Close tank lock **A**.

Even the smallest particles of dirt can cause increased engine wear, malfunctions in the fuel system and reduced effectiveness of the fuel filters.

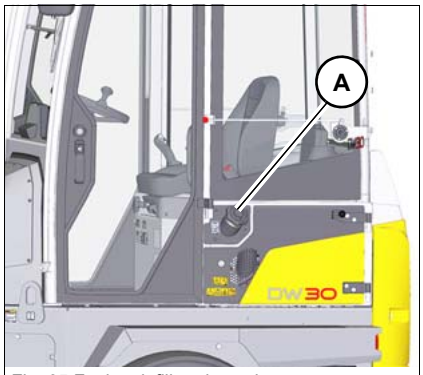


Fig. 95 Fuel tank filler pipe cab

Cab

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Open tank lock **A** slowly to release the pressure from the fuel tank.
3. Refuel.
4. Close and lock filler cap **A**.

Refueling from barrels

If refueling from barrels cannot be avoided, note the following points:

- Barrels must neither be rolled nor tilted before refueling.
- Protect the suction pipe opening of the barrel pump with a fine-mesh screen.
- Immerse the suction pipe opening down to a max. 15 cm (6 in) above the bottom of the barrel.
- Only fill the tank with filling aids (hopper or filling tube) with built-in filter.
- Keep all refueling containers clean.

Check and adjust valve clearance (3TNV76, 3TNV88)

Preparations:

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Open the engine cover or the maintenance cover **4**.
3. Interrupt the power supply – *see "Battery master switch" on page 3-39*.
4. Clean the area with a lint-free cloth.

Set the valve clearance

The standard valve clearance setting is performed on a cold engine:

➥ The ignition order is 1-3-2, ignition at 240° position of the crankshaft rotation.

Information

The first cylinder is located on the pump side at the flywheel end opposite the radiator.

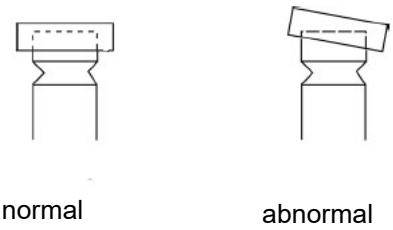


Fig. 110 Valve flap wear

1. Removing the cylinder-head cover
2. Turn the engine until the cylinder reaches the top dead center (OT) of the compression cycle.
   ➥ Both rocker arms are accessible.
   ➥ The intake and exhaust valves can be set in this position.
   ➥ The top dead center mark (indentation) can be seen on the flywheel.
3. Check the valve cap for abnormal wear

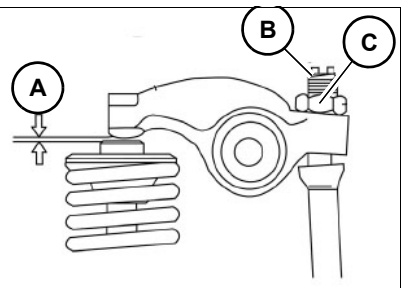


Fig. 111 Valve clearance

4. Check valve clearance **A** with a feeler gage
   ➥ Valve clearance: 0.15-0.25 mm (0.006 - 0.01")
5. It is necessary to adjust the valve clearance if it deviates – *see "Setting injection time" on page 3-64*.

8. An auxiliary means (fuel injection line with a transparent pipe) can be installed on the fuel injection line for precise observation
   ➥ This auxiliary means is not essential.
9. Position a spanner on the screw of the pulley (on the crankshaft).
10. Slowly turn clockwise until fuel is discharged from the opening of injection pump **A**.
11. Then slowly turn back approximately two more rotations until about 30° before top dead center.
12. Remove any bubbles at the opening of the injection pump with your finger so that the opening of the injection pump is about half full with fuel.
13. Slowly keep turning the crankshaft clockwise until the fuel level rises to the opening of injection pump **A**.
14. Stop the rotary motion immediately.
15. Read the degrees before top dead center by means of the indentation on the flywheel.
    ➥ Target: 20° +/- 1° before top dead center – *see "Marks on flywheel" on page 3-62*.
16. Dismantle tool if necessary.
17. Measure the injection time two to three times.
    ➥ If the specified value is reached, the injection time is correct.
    ➥ If the specified value varies, the injection time must be adjusted – *see "Setting injection time" on page 3-64*.
18. Check speed sensor and bushing for contaminants.
19. Reassemble the vehicle in reverse order.
20. Check the fuel system for leaks.
21. Start the engine.
    ➥ Verify speed indication at the display element.

Information

Bend the injection lines as you install them so they are not subject to tension once they are installed. Bleed the injection lines once they are installed.

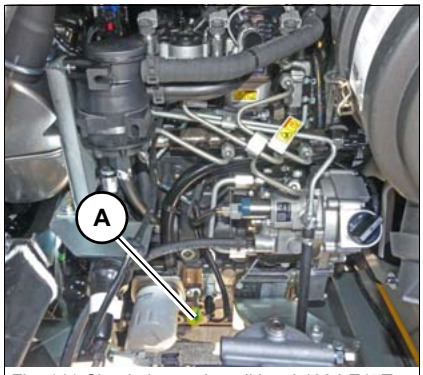


Fig. 141 Check the engine oil level 403J-E17T Cab (DW30/DW40)

Leakage check

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Open the engine cover or the maintenance cover 4.
3. Check the coolant hoses and the hose connections for leaks.
   ➥ No signs of leaking fluid may be visible.
   ➥ In case of damage, replace the hoses or re-establish the connections.
   ➥ Check the coolant level.
4. Close and lock the engine cover or the maintenance cover 4.

Check the antifreeze

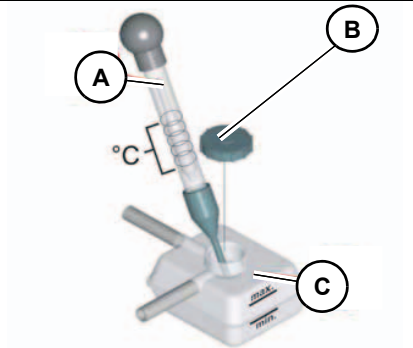


Fig. 157 Checking the antifreeze compound (symbolic representation)

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Open the engine cover or the maintenance cover 4.
3. Carefully unscrew filler cap **B** and release the pressure.
4. Open filler cap **B**.
5. Check the antifreeze compound.
   - With a suitable antifreeze measurement device **A** (for example, hydrometer or refractometer), remove the coolant from radiator **C** and check for frost resistance.
   ➥ Create mixing ratio according to the compound table – *see "Compound table" on page 2-10*.
   ➥ Add antifreeze if the mixing ratio is incorrect.
6. Close the filler cap.
7. Start the engine and let it warm up for about 5 – 10 minutes.
8. Check that the filler cap is not leaking.
9. Close and lock the engine cover or the maintenance cover 4.

Replace the radiator cap

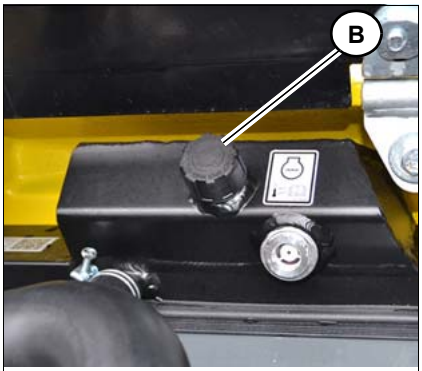


Fig. 158 Replace the radiator cap (symbolic representation)

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Let the engine and the coolant cool down.
3. Open the engine cover or the maintenance cover 4.
4. Carefully unscrew filler cap **B** and release the pressure.
5. Open and remove filler cap **B**.
6. Close the new filler cap **B**.
7. Close and lock the engine cover or the maintenance cover 4.
8. Check for tightness.

3.14 V-belt

WARNING

Only check or retension/replace the V-belt when the engine is stopped

Danger of injury!

- ► Stop the engine before performing inspection work in the engine compartment!
- ► Interrupting power supply
- ► Let the engine cool down.

Check the V-belt once a day, and retension it if necessary.

3TNV76, 3TNV88: Re-tension new V-belts after about 15 minutes of running time.

403J-E17T: Check tension for self-tensioning belt.

Preparations

1. Stop and park the machine. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Remove the starting key and carry it with you.
3. Let the engine cool down.
4. Open the engine cover or the maintenance cover 4.
5. Interrupt the power supply.

Check pressure of steering system

1. Connect the measuring instrument with measuring port **4** (L070).
   ➥ Use the pressure transducer with 0-600 bar (0-8702 psi).
   ➥ Ensure that no measuring lines can be damaged.
2. Move the governor for travel direction on the joystick to neutral position.
3. Start the engine.
4. Align vehicle straight.
5. Turn the steering wheel clockwise up to the stop (steer to the right) and keep the position.
   ➥ Check and make a note of the pressure at idling speed.
   ➥ Check and make a note of the pressure at maximum speed.
6. Turn the steering wheel anticlockwise up to the stop (steer to the left) and keep the position.
   ➥ Check and make a note of the pressure at idling speed.
   ➥ Check and make a note of the pressure at maximum speed.
7. Stop the engine.
8. Disconnect the measuring instrument from connection **4**.

Adding hydraulic oil

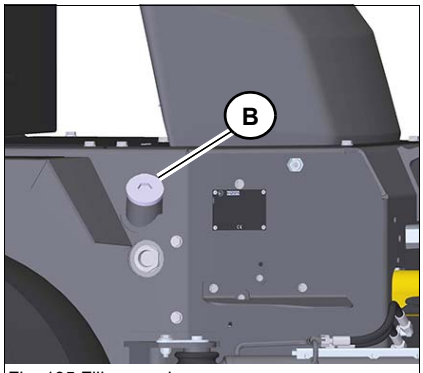


Fig. 195 Filler opening

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Let the engine cool down.
3. Release the pressure in the hydraulic system.
4. Clean the area around the filler opening with a lint-free cloth.
5. Open the cover **B** of the filler opening.
6. Remove filler opening cover.
   ➥ Check the hydraulic oil reservoir for dirt and clean it if necessary.
7. Add hydraulic oil until the oil level is approximately in the middle of the oil sight glass.
8. Put cover **B** into place and screw it on.
9. Start the engine and perform all hydraulic functions.
10. Stop the engine.
11. Check the hydraulic oil level and add oil if necessary.
12. Remove all hydraulic oil spills.

Environment

Use a suitable container to collect fluids and lubricants as they flow out and dispose of them in an environmentally friendly manner.

3.20 Axles/planetary drives/manual transmission/transfer gearboxes

DANGER

The components of the machine and the oil are still very hot after switching off the vehicle, danger of burns and injury.

- ► Wait until the axles have cooled down before taking up work.
- ► Slowly open the plug to release the pressure inside.

Information

Drain oil only after running the machine for a longer period of time!

Information

Do not lift the vehicle one-sided for the following tasks!

Leakage check

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Check the planetary drives, axles and transfer gearbox for leaks.

➥ In case of signs for leaked hydraulic oil, detect and seal the leak, repair or replace the damaged component:

➥ Check the oil level.

Checking the brake-fluid level

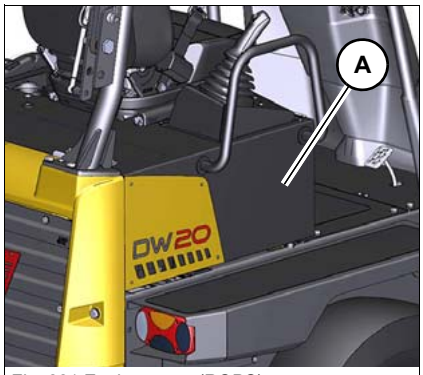


Fig. 221 Engine cover (ROPS)

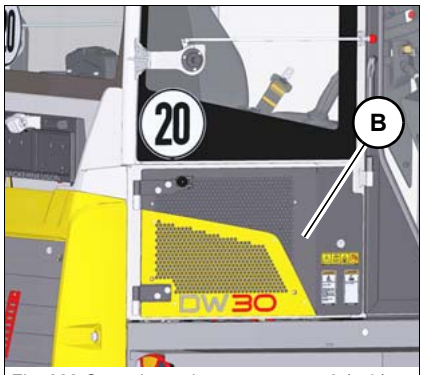
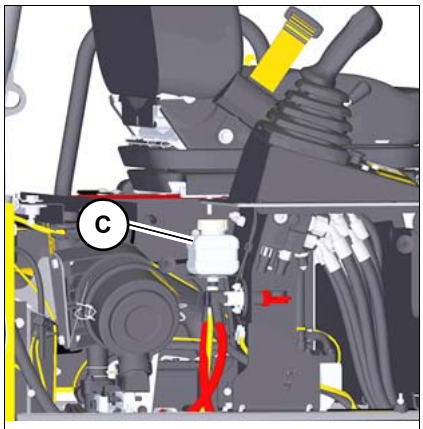


Fig. 222 Open the maintenance cover 3 (cab)



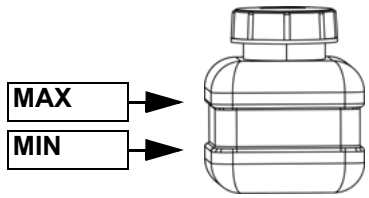


Fig. 223 Brake-fluid reservoir

The brake fluid reservoir is located on the right side of the vehicle under the engine cover **A** or behind the maintenance cover 3 (**B**).

1. Stop and park the vehicle. Stop the engine *– see "Parking the vehicle" on page 1-13*.
2. Open the engine cover or the maintenance cover 3.
3. Check electrolyte level at the brake fluid reservoir **C** .
   - ➥ The fluid level must be at least up to the MIN mark.
   - ➥ If the oil level is too low, add oil *– see "Replacing the brake fluid" on page 3-134* and bleed the braking system if necessary.
4. Close the engine cover or the maintenance cover 3.

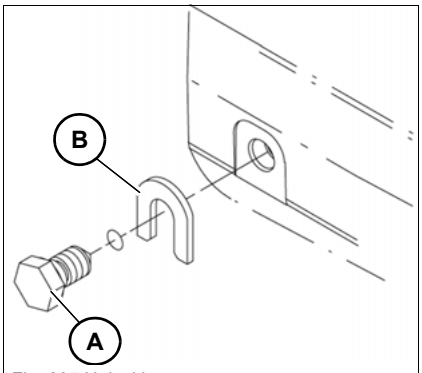


Fig. 235 Unlocking screws

4. Loosen the unlocking screws **A** and remove the shims **B**.
5. Reduce pressure in the brake circuit slowly to zero.
6. Screw in the unlocking screw **A** alternately as far as they will go.
   ➥ The electronic parking brake is disabled.


Fig. 236 Planetary gear cover

7. Dismantle planetary gear cover brake side.
8. Remove semi axle.

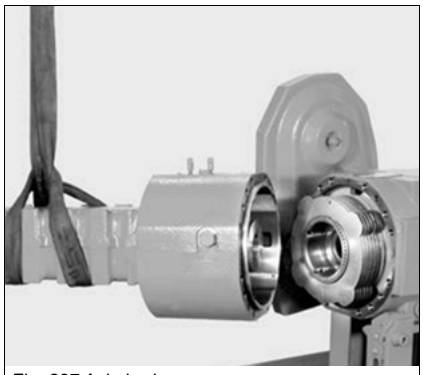


Fig. 237 Axle body

9. Secure axle body with lifting gear and remove screws.
10. Remove axle body and place vertically.


Fig. 238 Screws M12x45 with washer

11. Tighten the screws (M12x45) with washer till stop, to keep the belleville spring washers of the hydraulic parking brake pre-tensioned.
12. Remove the unlocking screws **A** of the hydraulic parking brake.
13. Loosen the screws tightened before in the same sequence and to the same extent.

Checking the air-conditioning compressor

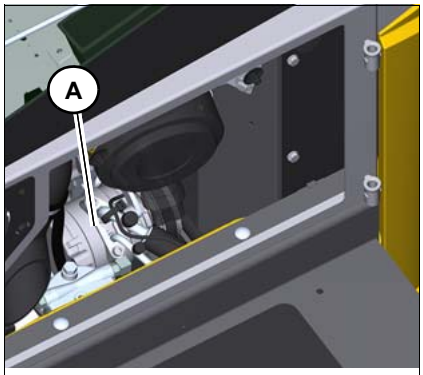


Fig. 261 Checking the air-conditioning compressor

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Let the engine cool down.
3. Open the maintenance cover 4.
4. Check the screw connections of air-conditioning compressor **A** for tightness.
5. Remove the refrigerant from the cooling circuit with a pump and refill– *see "Check and renew refrigerant and air conditioning compressor oil" on page 3-153*.
6. Close the maintenance cover 4.

Check and renew refrigerant and air conditioning compressor oil

NOTICE

The air conditioning system may only be filled by qualified personnel.

- ► Only use refrigerant R134a according to DIN 8960 .
- ► Fill the air conditioning system as described in the operator's manual of the manufacturer.
- ► Fill the air conditioning system with sufficient refrigerant. Ensure that no bubbles appear in the sight glass.

NOTICE

If the air conditioning compressor is replaced, no compressor oil must be added to the air conditioning system using the air conditioning filling device since the air conditioning compressor is prefilled at the factory.

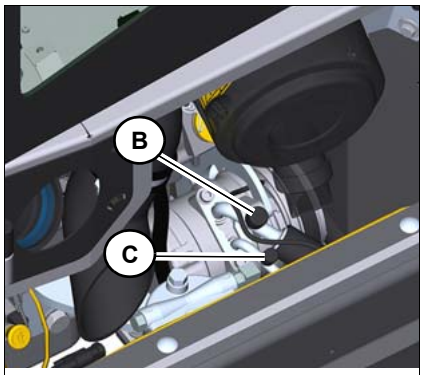


Fig. 262 Air-conditioning compressor protective caps

1. Stop and park the vehicle. Stop the engine – *see "Parking the vehicle" on page 1-13*.
2. Let the engine cool down.
3. Open the maintenance cover 4.
4. Remove protective caps at the connections **B** and **C**.
5. Connect the draining and filling device.
6. Remove the refrigerant from the cooling circuit with a pump and refill.

On the outside of the vehicle

Recommended aids:

- High-pressure cleaner
- Steam jet

Engine compartment

1. Park the vehicle in a wash bay or place suitable for washing.
2. Stop the engine.
3. Carry out cleaning.
4. Run the engine warm, so that residual water evaporates.

The following reasons in particular for a contaminant make it necessary to clean an engine:

- High dust content in the air
- Chaff and chopped straw around the engine
- Coolant leaks
- Lubricating oil leaks
- Fuel leaks

When cleaning the engine with a water or steam jet, make sure that there is no damage from the direct jet. This is especially applicable for:

- Electrical components and plug-and-socket connections
- Fuel injection pump
- Radiator grills
- Rotary shaft lip seals
- Air conditioning compressor
- Air filter
- Actuators (throttle valves, exhaust gas recirculation)

Clean the cooling system regularly to ensure cooling effect.

- Always keep radiator fins of the radiator, cylinders and cylinder heads, air intake and air duct clean and free.

Cleaning the seat belt

Always keep the seat belt clean, as coarse dirt can impair the proper functioning of the seat belt buckle.

Clean the seat belt (which remains fitted in the machine) with a mild soap solution only. Do not use chemical agents as they can destroy the fabric!

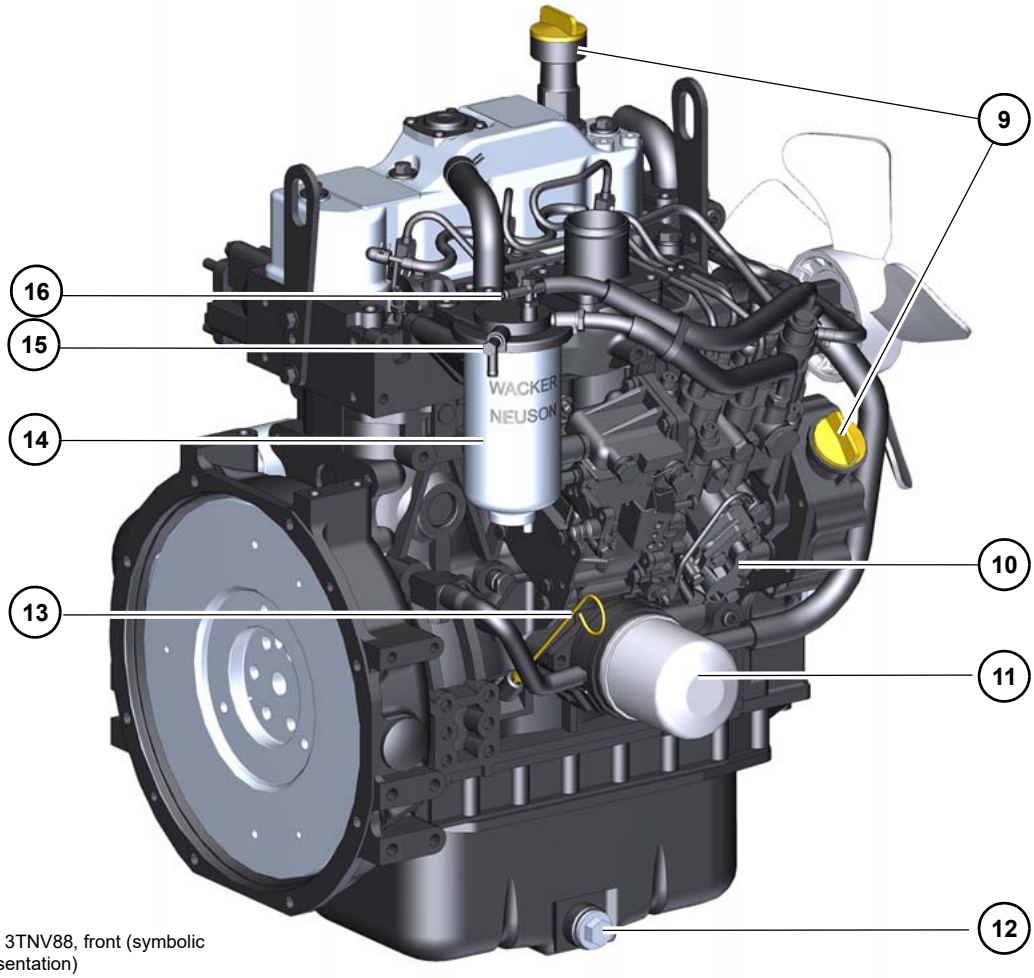


Fig. 275 Engine 3TNV88, front (symbolic representation)

Pos.	Description	Pos.	Description
9	Oil filler neck	13	Oil dipstick
10	Fuel injection pump	14	Main fuel filter
11	Engine oil filter cartridge	15	Fuel supply line
12	Engine oil drain plug	16	Fuel return line

5 Hydraulic system

5.1 Overview of hydraulic components (3TNV76,403J-E17T)

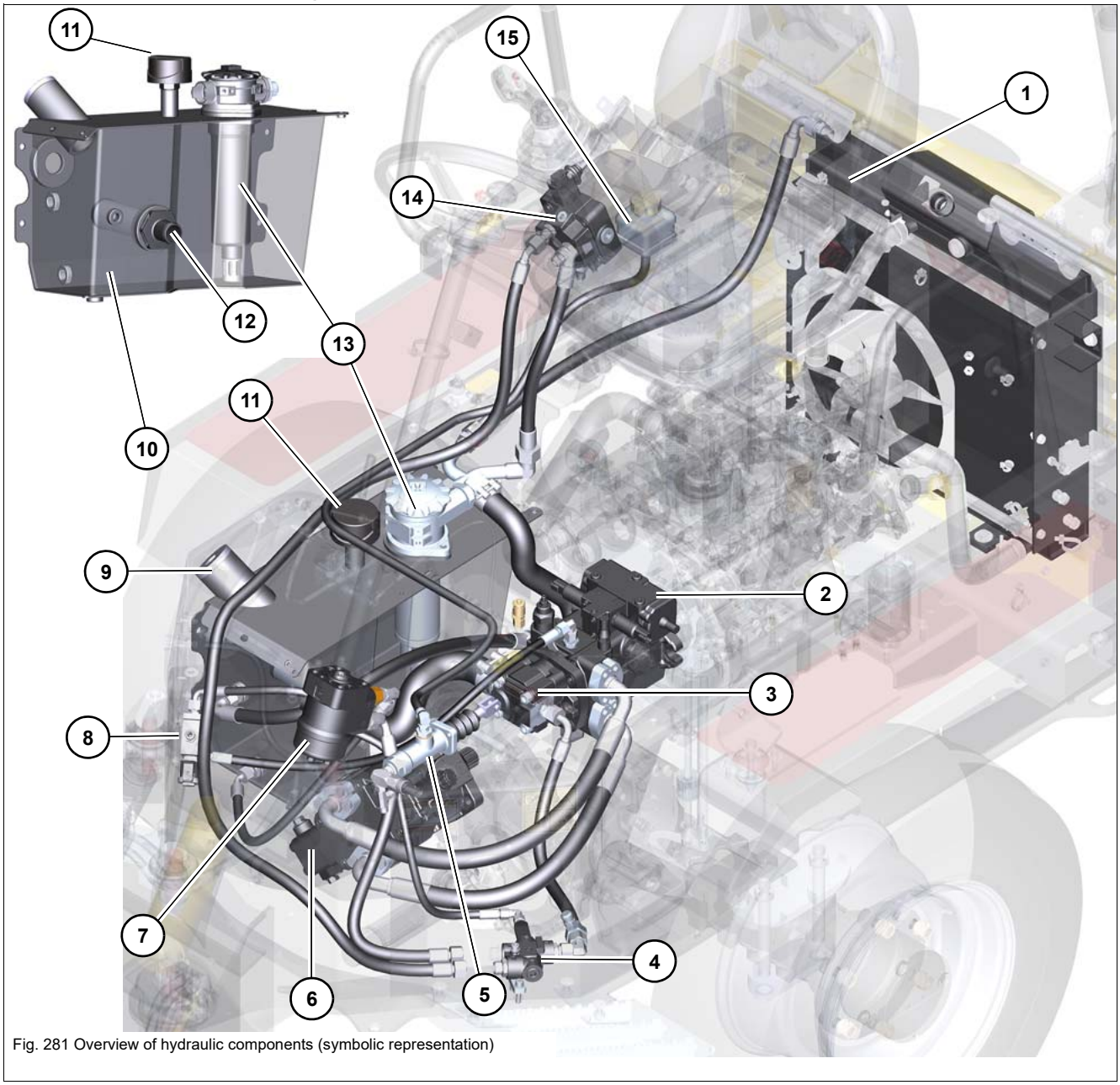


Fig. 281 Overview of hydraulic components (symbolic representation)

5.5 Brake cylinder (Z016)

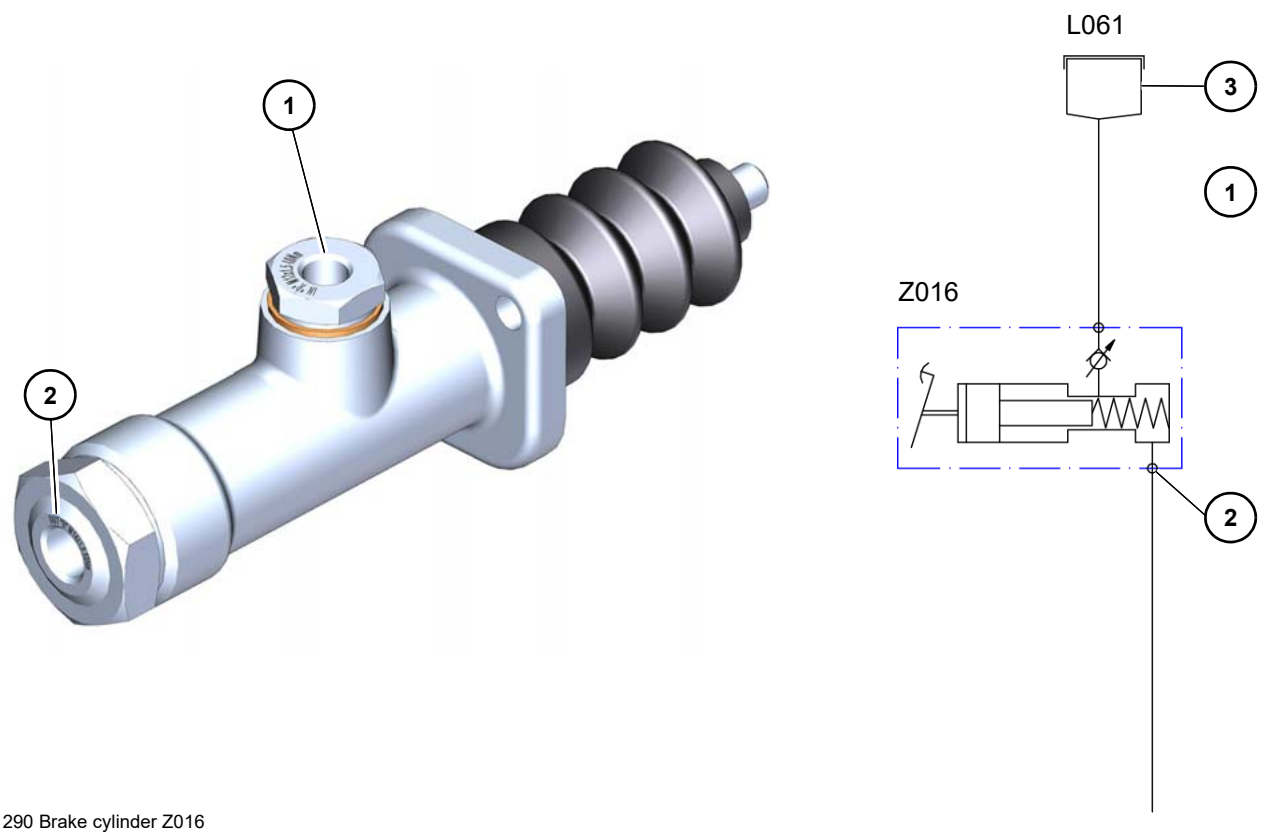
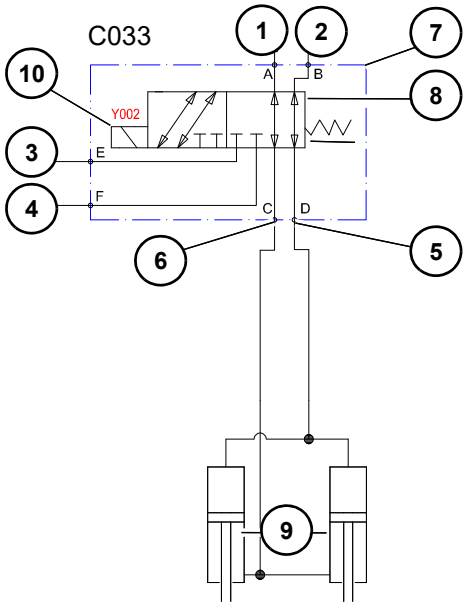


Fig. 290 Brake cylinder Z016

Pos.	BMK/ con-nection	Description
1	--	Supply line from brake-fluid reservoir
2	--	Rear axle brake line
3	L061	Brake-fluid reservoir

Changeover valve (C033) of self-loading unit



Z015 Loader unit cylinder bucket

Fig. 299 Diagram: changeover valve C033

Pos.	BMK/ connection	Description	Pos.	BMK/ connection	Description
1	A	Main valve block supply B2	6	C	Bucket rod side connection
2	B	Main valve block supply A2	7	C032	Changeover valve
3	E	Swivel right (B4)	8	--	6/2 multiple way valve
4	F	Swivel left (A4)	9	Z015	Swivel cylinder SLE
5	D	Bucket bas side connection	10	Y002	SLE changeover swivel bucket/ skip

Control equipment (403J-E17T)

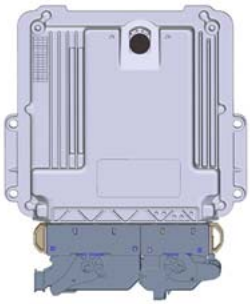


Fig. 309 Control gear N001 - drive electronics

N001 - drive electronics RC12-10/30

The control gear is located behind the right climbing aid and can be reached via the underside of the vehicle.

This controller processes the electronic signals for the hydraulically actuated functions.

A detailed representation can be found in the PIN allocation in the circuit diagram.

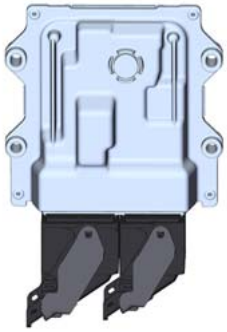


Fig. 310 Control gear T001.N005- diesel engine electronics

T001.N005 - Diesel engine electronics

The control unit is located behind the fuse box and can be reached via the underside of the vehicle.

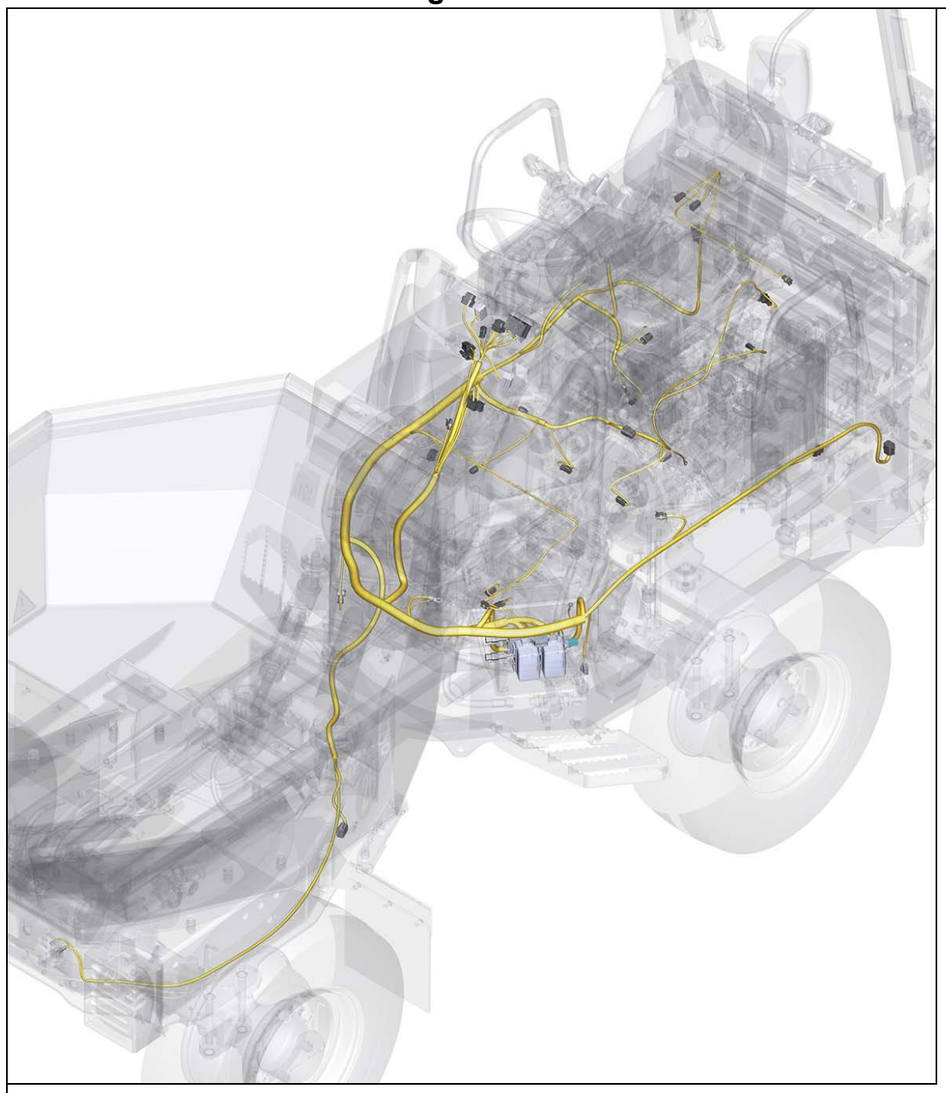
Fig. 311 Control unit P014 - indicating instrument

P014 - indicating instrument

The display unit is located in the control stand.

7 Wiring harnesses

7.1 Position of main wiring harness DW20 and DW30 ROPS (FRW1) up to serial no. WNCD2501CPAL00432



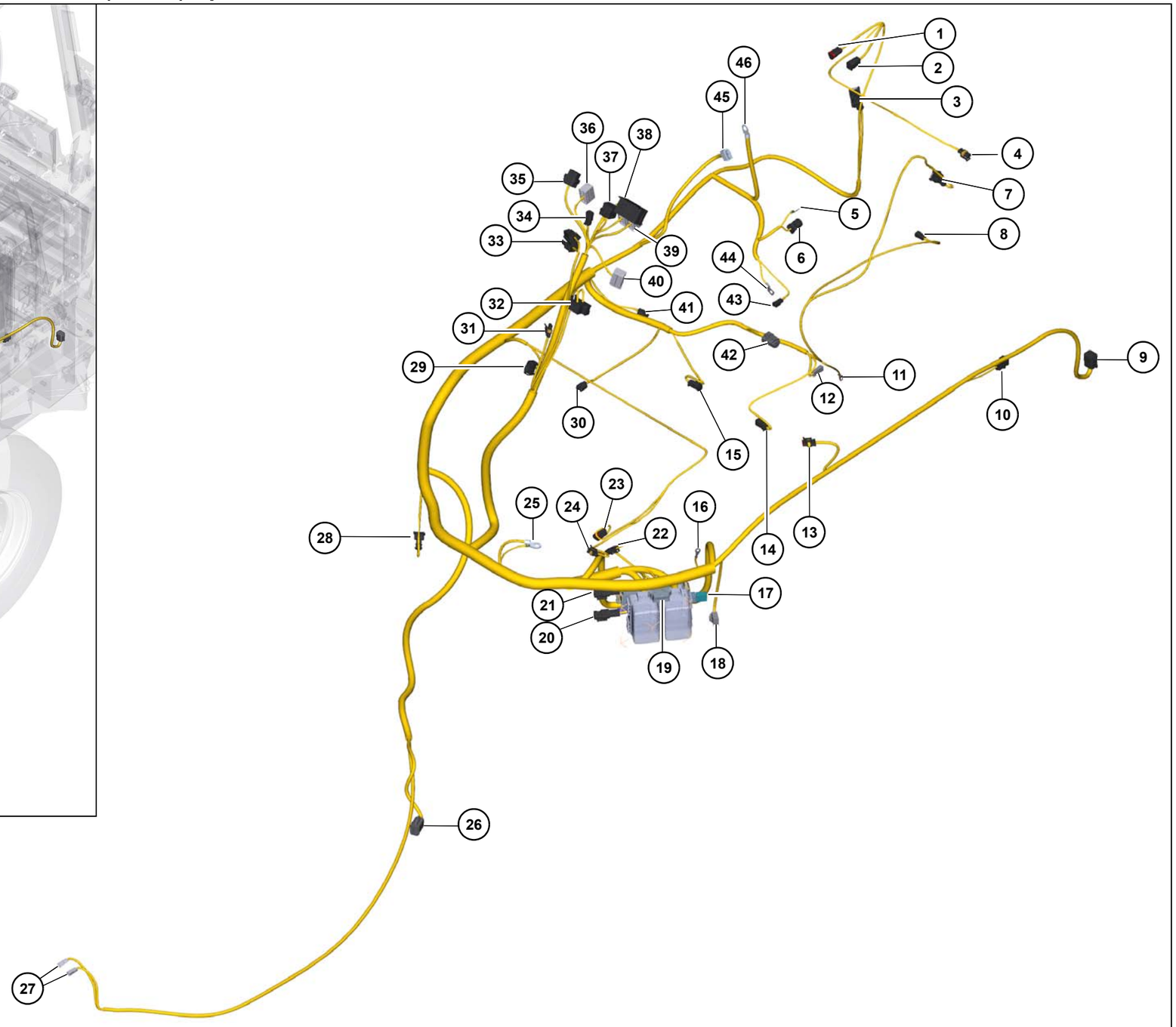


Fig. 337 Position of main wiring harness DW20 and DW30

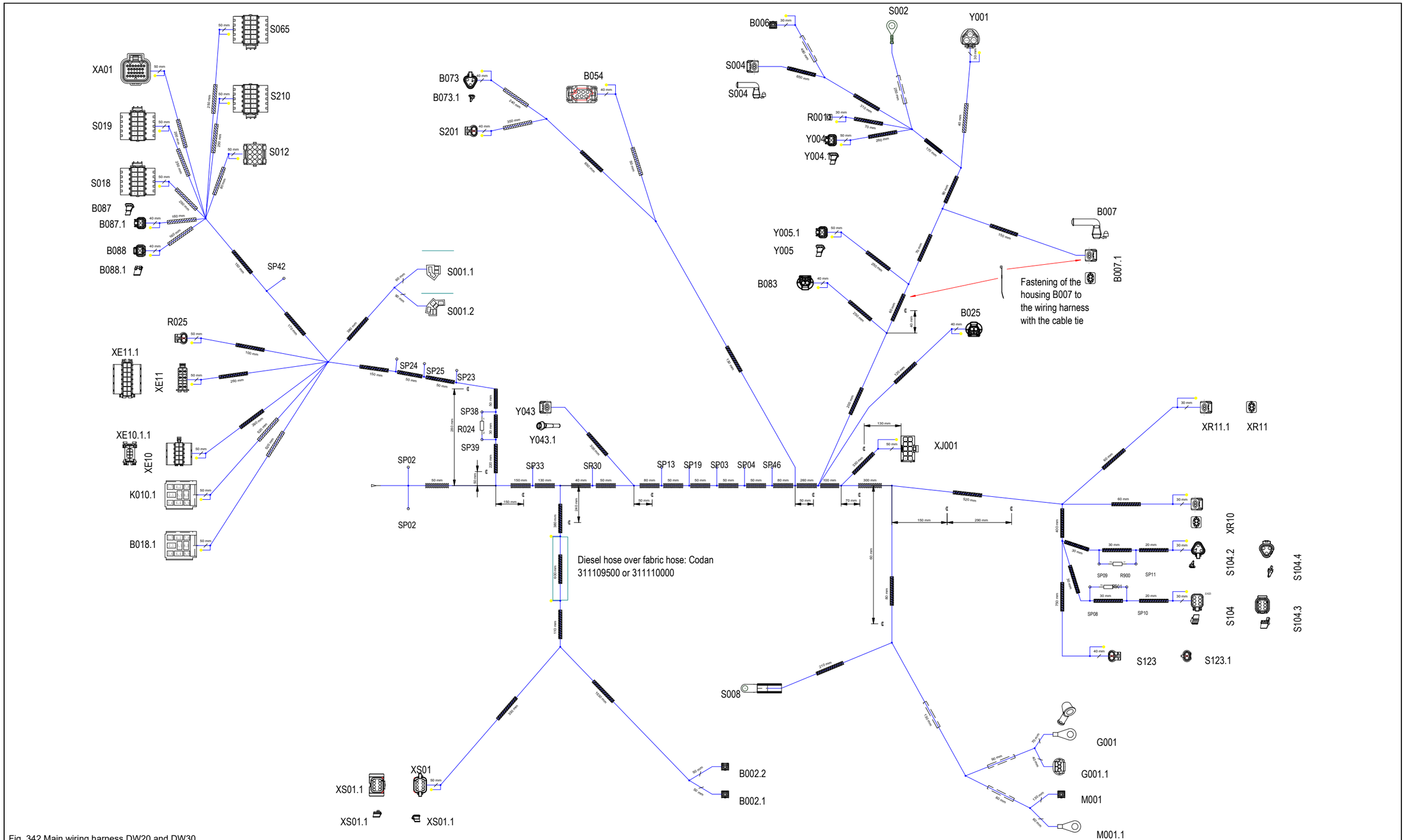
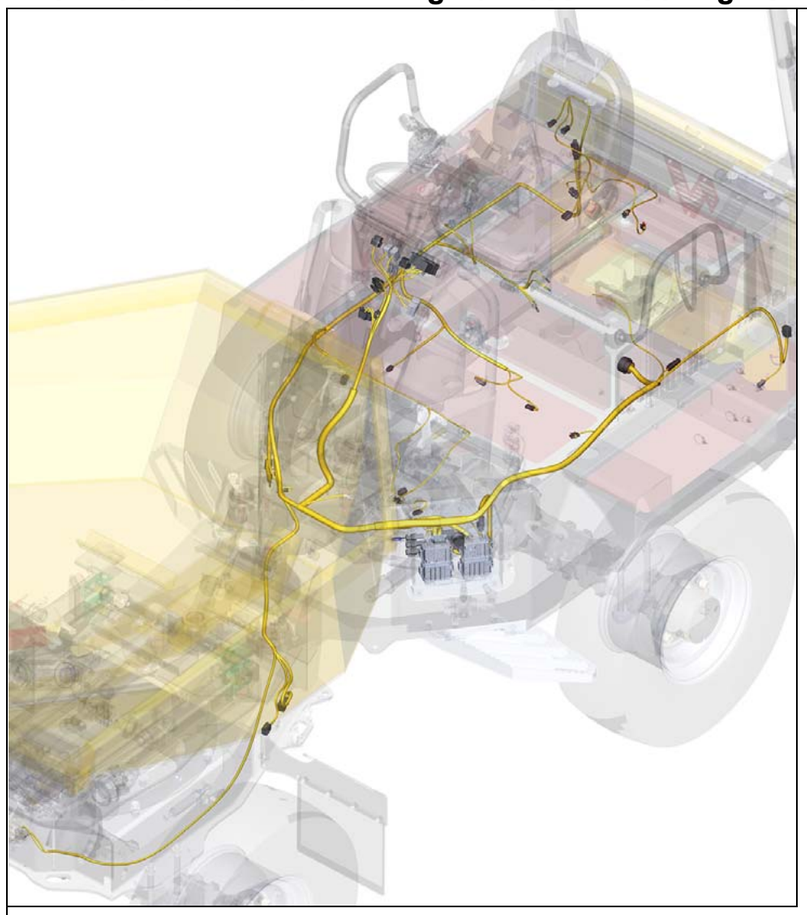


Fig. 342 Main wiring harness DW20 and DW30

191	SP21	FRW1	1	N001.1	FRW1	22	BK / 0.75	GND
192	SP21	FRW1	1	N001.1	FRW1	23	BK / 0.75	GND
193	SP21	FRW1	1	N001.2	FRW1	2	BK / 2.50	GND
194	SP21	FRW1	1	N001.2	FRW1	7	BK / 0.75	GND
195	SP21	FRW1	1	N001.2	FRW1	20	BK / 0.75	GND
196	SP21	FRW1	1	N001.2	FRW1	33	BK / 0.75	GND
197	SP21	FRW1	1	N001.2	FRW1	46	BK / 0.75	GND
198	SP22	FRW1	1	F100	FRW1	6.2	RD-WH / 1.50	F007
199	SP22	FRW1	1	F100	FRW1	3.1	RD-WH / 1.50	F007
200	SP23	FRW1	1	F100	FRW1	9.2	RD / 1.50	F004
201	SP23	FRW1	1	XE11	FRW1	5	RD / 0.75	F004
202	SP24	FRW1	1	XA01	FRW1	24	WHYE / 0.75	CAN0 High
203	SP24	FRW1	1	XE11	FRW1	2	WHYE / 0.75	CAN0 High
204	SP25	FRW1	1	XA01	FRW1	23	WHGN / 0.75	CAN0 Low
205	SP25	FRW1	1	XE11	FRW1	3	WHGN / 0.75	CAN0 Low
206	SP26	FRW1	1	XS03	FRW1	1	WHYE / 0.75	CAN0 High
207	SP27	FRW1	1	XS03	FRW1	2	WHGN / 0.75	CAN0 Low
208	SP28	FRW1	1	S019	FRW1	7	GY / 0.75	Turn indicator (right)
209	SP28	FRW1	1	S019	FRW1	3	GY / 0.75	Turn indicator (right)
210	SP29	FRW1	1	S019	FRW1	1	GY / 0.75	Turn indicator (left)
211	SP30	FRW1	1	F100	FRW1	5.5	BKBN / 0.75	Horn
212	SP30	FRW1	1	XJ001	FRW1	8	BKBN / 0.75	Horn
213	SP30	FRW1	1	S012	FRW1	10	BKBN / 0.75	Horn
214	SP31	FRW1	1	F100	FRW1	5.3	RD-WH / 0.75	F003
215	SP31	FRW1	1	F100	FRW1	4.1	RD-WH / 1.50	F003
216	SP33	FRW1	1	B001	FRW1	2	BK / 0.75	GND
217	SP33	FRW1	1	XA01	FRW1	21	BK / 0.75	GND
218	SP33	FRW1	1	XA01	FRW1	12	BK / 0.75	GND
219	SP33	FRW1	1	SP07	FRW1	1	BK / 2.50	GND
220	SP35	FRW1	1	F200	FRW1	1.1	RD / 6.00	12V30
221	SP36	FRW1	1	S018	FRW1	5	RD / 0.75	F005
222	SP36	FRW1	1	F100	FRW1	8.2	RD / 1.50	F005
223	SP37	FRW1	1	SP38	FRW1	1	OG / 0.75	Error lamp
224	SP37	FRW1	1	XA01	FRW1	17	OG / 0.75	Error lamp
225	SP37	FRW1	1	N001.2	FRW1	21	OG / 0.75	Error lamp
226	SP39	FRW1	1	SP33	FRW1	1	BK / 0.75	GND
227	SP40	FRW1	1	R810	FRW1	B	WHYE / 0.75	CAN1 High
228	SP41	FRW1	1	R810	FRW1	A	WHGN / 0.75	CAN1 Low
229	SP43	FRW1	1	F200	FRW1	7.2	RD / 2.50	F013
230	SP44	FRW1	1	F200	FRW1	6.2	RD / 1.50	F014
231	SP46	FRW1	1	N001.1	FRW1	46	YEBN / 0.75	GND_S1
232	V001	FRW1	1	SP12	FRW1	1	RD-WH / 0.75	F009
233	V001	FRW1	2	SP32	FRW1	1	BK / 0.75	GND
234	XA01	FRW1	13	S004	FRW1	1	PK / 0.75	Air filter
235	XA01	FRW1	4	B018	FRW1	6.4	OG / 0.75	Buzzer
236	XA01	FRW1	6	B001	FRW1	1	YE / 0.75	Fuel gauge
237	XA01	FRW1	8	K006	FRW1	4	PK / 0.75	Preheat lamp
238	XE10	FRW1	9	SP31	FRW1	1	RD-WH / 1.50	F003
239	XE10	FRW1	1	XE11	FRW1	4	RD-WH / 0.75	F009
240	XE10	FRW1	7	SP34	FRW1	1	BK / 0.75	GND
241	XE10	FRW1	2	S012	FRW1	1	GY / 0.75	Low beam
242	XE10	FRW1	3	S018	FRW1	1	VT / 0.75	Rotating beacon
243	XE11	FRW1	4	SP12	FRW1	1	RD-WH / 0.75	F009
244	XE11	FRW1	6	SP34	FRW1	1	BK / 0.75	GND
245	XE11.1	FRW1	8	XE11.1	FRW1	7	PK / 0.75	Start signal
246	XJ001	FRW1	7	SP12	FRW1	1	RD-WH / 0.75	F009
247	XJ001	FRW1	9	SP33	FRW1	1	BK / 0.75	GND
248	XJ001	FRW1	2	SP46	FRW1	1	YEBN / 0.50	GND_S1
249	XJ001	FRW1	1	SP19	FRW1	1	YE-WH / 0.75	Sensor Supply 1
250	XR10	FRW1	2	SP32	FRW1	1	BK / 0.75	GND
251	XR10	FRW1	1	S018	FRW1	B	VT / 0.75	Rotating beacon
252	XR11	FRW1	2	SP32	FRW1	1	BK / 1.00	GND
253	XS01	FRW1	5	SP29	FRW1	1	GY / 1.00	Turn indicator (left)
254	XS01	FRW1	4	SP28	FRW1	1	GY / 1.00	Turn indicator (right)
255	XS02	FRW1	5	SP29	FRW1	1	GY / 1.00	Turn indicator (left)
256	XS02	FRW1	4	SP28	FRW1	1	GY / 1.00	Turn indicator (right)
257	XS02	FRW1	6	SP16	FRW1	1	GY / 1.00	Reversing light
258	XS03	FRW1	3	R811	FRW1	B	WHYE / 0.75	CAN0 High
259	XS03	FRW1	4	R811	FRW1	A	WHGN / 0.75	CAN0 Low
260	XS03	FRW1	11	SP22	FRW1	1	RD-WH / 1.50	F007
261	XS03	FRW1	13	SP33	FRW1	1	BK / 0.75	GND
262	XS03	FRW1	7	N001.2	FRW1	10	YE / 0.75	Skip position red.
263	XS03	FRW1	10	N001.1	FRW1	70	YE / 0.75	Position of scissors
264	XS03	FRW1	9	N001.1	FRW1	65	YE / 0.75	Position of scissors red.
265	XS03	FRW1	5	N001.1	FRW1	42	YE / 0.75	Tilt sensor relay K1
266	XS03	FRW1	12	SP42	FRW1	1	YE-WH / 0.75	VSS_2
267	XS03.1	FRW1	1	XS03.1	FRW1	3	WHYE / 0.75	CAN0 High
268	XS03.1	FRW1	4	XS03.1	FRW1	2	WHGN / 0.75	CAN0 Low
269	Y001	FRW1	1	SP12	FRW1	1	RD-WH / 0.75	F009
270	Y001	FRW1	3	SP32	FRW1	1	BK / 3.00	GND
271	Y001	FRW1	2	F200	FRW1	2.3	RD-WH / 3.00	Stop solenoid
272	Y043	FRW1	2	N001.1	FRW1	83	BU / 0.75	Parking brake valve LS
273	Y098	FRW1	1	N001.1	FRW1	54	BU / 0.75	hydraulics engine

93	S065	FRW2	9	SP34	FRW2	1	BK / 0.75	GND
94	S065	FRW2	10	S065	FRW2	5	RD-WH / 0.75	VSS_2
95	S105	FRW2	2	F100	FRW2	2.2	PK / 0.75	Start signal
96	S123	FRW2	1	SP12	FRW2	1	RD-WH / 0.75	F009
97	S201	FRW2	1	SP31	FRW2	1	RD-WH / 0.75	F003
98	S201	FRW2	2	F100	FRW2	4.3	RD-WH / 0.75	Brake light
99	S218	FRW2	3	SP22	FRW2	1	RD-WH / 0.75	F007
100	SP01	FRW2	1	F100	FRW2	1.1	RD / 10.00	12V30
101	SP02	FRW2	1	S001.2	FRW2	5	RD-WH / 4.00	12V15
102	SP02	FRW2	1	S001.2	FRW2	6	RD-WH / 4.00	12V15
103	SP07	FRW2	1	GND	FRW2	1	BK / 6.00	GND
104	SP07	FRW2	1	SP33	FRW2	1	BK / 2.50	GND
105	SP12	FRW2	1	F100	FRW2	11.2	RD-WH / 2.50	F009
106	SP13	FRW2	1	G001.1	FRW2	1	PK / 1.00	Charge control
107	SP13	FRW2	1	XE11	FRW2	1	PK / 1.00	Charge control
108	SP14	FRW2	1	XS02	FRW2	2	GY / 0.75	Side markers, left
109	SP14	FRW2	1	XS01	FRW2	2	GY / 0.75	Side markers, left
110	SP14	FRW2	1	F200	FRW2	8.2	GY / 0.75	Side markers, left
111	SP15	FRW2	1	XS02	FRW2	3	GY / 0.75	Side markers, right
112	SP15	FRW2	1	F200	FRW2	9.2	GY / 0.75	Side markers, right
113	SP16	FRW2	1	XE10	FRW2	8	GY / 1.00	Reversing light
114	SP16	FRW2	1	XS02	FRW2	6	GY / 1.00	Reversing light
115	SP17	FRW2	1	XS01	FRW2	7	BK / 1.50	GND
116	SP17	FRW2	1	XS02	FRW2	7	BK / 1.50	GND
117	SP17	FRW2	1	XS02	FRW2	8	BK / 1.50	GND
118	SP22	FRW2	1	S019	FRW2	8	RD-WH / 1.50	F007
119	SP23	FRW2	1	F100	FRW2	9.2	RD / 1.50	F004
120	SP23	FRW2	1	XE11	FRW2	5	RD / 0.75	F004
121	SP31	FRW2	1	F100	FRW2	10.2	RD-WH / 1.50	F003
122	SP33	FRW2	1	XA01	FRW2	21	BK / 0.75	GND
123	SP33	FRW2	1	XA01	FRW2	12	BK / 0.75	GND
124	SP34	FRW2	1	SP07	FRW2	1	BK / 2.50	GND
125	SP34	FRW2	1	Y043	FRW2	2	BK / 0.75	GND
126	SP35	FRW2	1	F200	FRW2	1.1	RD / 6.00	12V30
127	SP36	FRW2	1	F100	FRW2	8.2	RD / 1.50	F005
128	SP36	FRW2	1	S018	FRW2	5	RD / 0.75	F005
129	V001	FRW2	1	SP12	FRW2	1	RD-WH / 0.75	F009
130	V001	FRW2	2	SP32	FRW2	1	BK / 0.75	GND
131	XA01	FRW2	3	SP13	FRW2	1	PK / 0.75	Charge control
132	XA01	FRW2	4	B018	FRW2	6.4	OG / 0.75	Buzzer
133	XA01	FRW2	6	B001	FRW2	1	YE / 0.75	Fuel gauge
134	XA01	FRW2	9	S065	FRW2	7	BU / 0.75	Switch parking brake
135	XA01	FRW2	13	S004	FRW2	1	PK / 0.75	Air filter
136	XA01	FRW2	20	SP12	FRW2	1	RD-WH / 0.75	F009
137	XE10	FRW2	2	S012	FRW2	1	GY / 0.75	Low beam
138	XE10	FRW2	7	SP34	FRW2	1	BK / 0.75	GND
139	XE11	FRW2	4	SP12	FRW2	1	RD-WH / 0.75	F009
140	XE11	FRW2	4	XE10	FRW2	1	RD-WH / 0.75	F009
141	XE11	FRW2	6	SP34	FRW2	1	BK / 0.75	GND
142	XE11	FRW2	8	S105	FRW2	1	PK / 0.75	Start signal
143	XE11.1	FRW2	8	XE11.1	FRW2	7	PK / 0.75	Start signal
144	XR10	FRW2	2	SP32	FRW2	1	BK / 0.75	GND
145	XR11	FRW2	2	SP32	FRW2	1	BK / 1.00	GND
146	XS01	FRW2	3	SP15	FRW2	1	GY / 0.75	Side markers, right
147	XS01	FRW2	4	SP28	FRW2	1	GY / 1.00	Turn indicator (right)
148	XS01	FRW2	5	SP29	FRW2	1	GY / 1.00	Turn indicator (left)
149	XS02	FRW2	4	SP28	FRW2	1	GY / 1.00	Turn indicator (right)
150	XS02	FRW2	5	SP29	FRW2	1	GY / 1.00	Turn indicator (left)
151	Y001	FRW2	1	SP12	FRW2	1	RD-WH / 0.75	F009
152	Y001	FRW2	2	F200	FRW2	2.3	RD-WH / 3.00	Stop solenoid
153	Y001	FRW2	3	SP32	FRW2	1	BK / 3.00	GND
154	Y043	FRW2	1	S065	FRW2	7	BU / 0.75	Switch parking brake

7.19 Position of main wiring harness DW30 High swivel skip ROPS (403J-E17T) (FRW6)



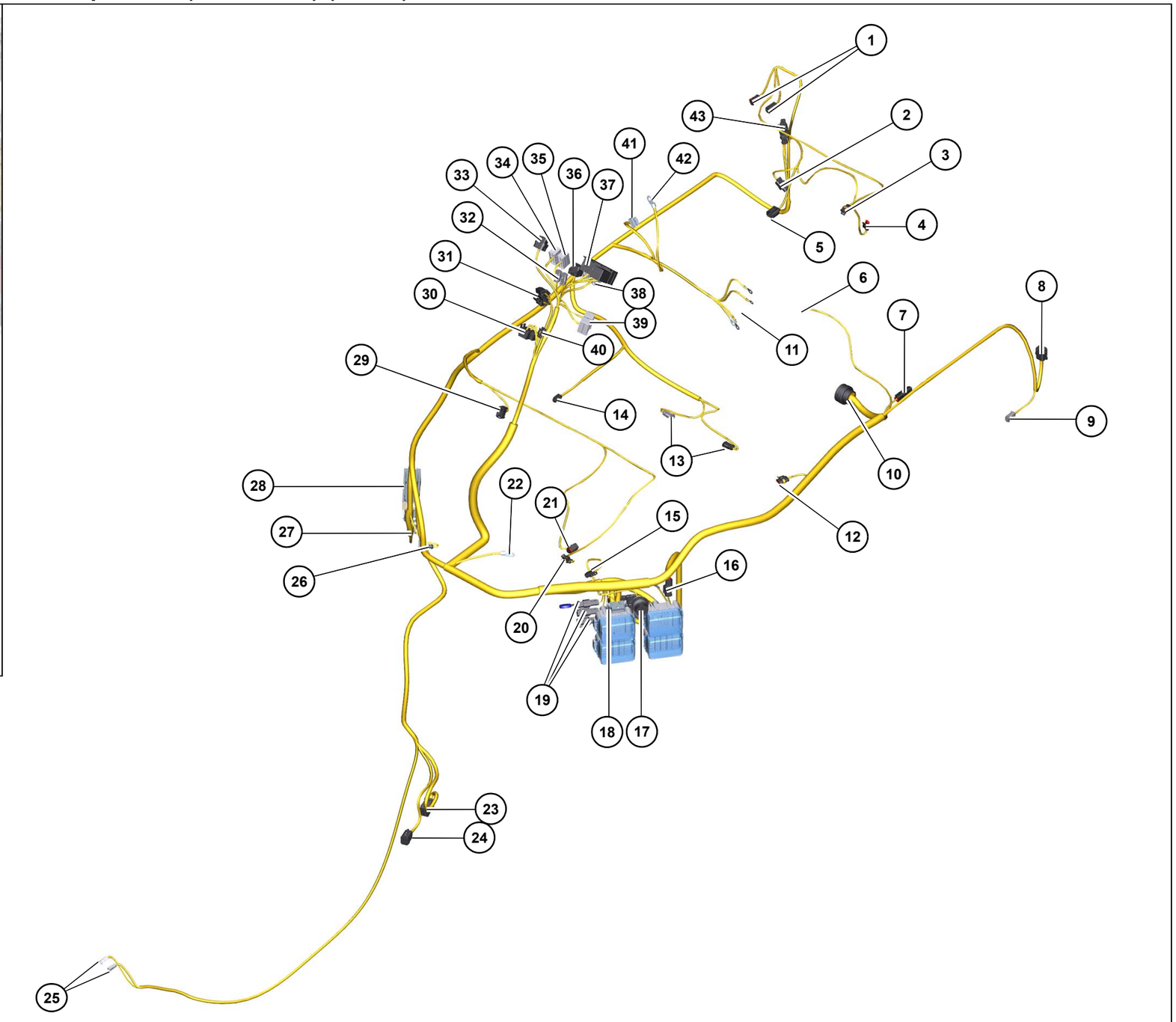


Fig. 353 Position of main wiring harness DW30 High swivel skip ROPS (403J-E17T)

Pos.	Connector	Function
1	M018	Air conditioning fan
2	XR10	Wiring harness rotating beacon connector
3	S104.1	Operator presence switch connector
	S104.2	
4	S123	Seat belt contact switch connector
5	S004	Air filter pressure switch connector
6	B021	Temperature sensor for intake air
7	R051	Crankcase ventilation heating
8	R001	Preheating system connector
9	R813	Engine terminator
10	XS02	Wiring harness connector rear
11	M009	Diesel pump
12	Y031	Magnetic clutch (compressor)
13	T1.T1.EIC	Motor wiring harness connection
14	G001	Cable lug alternator
	G001.1	Alternator connector
	M001	Starter engine connector
	M001.1	Starter lug
15	B001	Fuel gauge connector
16	Y004	Hydraulic pump back connector
17	Y005	Hydraulic pump front connector
18	S201	Service brake pressure switch connector
19	R812	Engine terminator
20	XE03	Diesel engine diagnostics connector
21	OBDII	Vehicle diagnostics connector OBDII
22	XE12	Electronics connector
23	Y098	Solenoid valve hydraulic motor setting connector
24	Y128	Throttle orifice solenoid valve
25	B073	Service brake pressure sensor connector
26	GND	GND
	GND2	GND
27	XS01	StVO Wiring harness connector front
28	B002.1	Connection horn
	B002.2	
29	Y043	Parking brake valve plug
30	Y075	Screen solenoid valve connector
31	N001.1	Drive electronics connector
	N001.2	
32	S052	Plug for the pressure switch of the air conditioning system
33	B083	Sensor of crankshaft speed connector
34	B054	Accelerator pedal connector
35	B088	Monitor system connector
	B087	Camera system connector
	XE10	Option connector
36	XE11	Option connector
37	S001.1	Pre-heating start switch connector
	S001.2	
38	GND3	GND
39	XA01	Display element connector
40	S210	Parking brake test switch
41	S119	Diesel particulate filter regeneration (DPF) switch connector (not installed)
42	S012	Steering column switch left connector
43	R025	Resistance connector
44	S212	Auto-stop switch
	S019	Hazard warning switch connector
45	S051	Air conditioning system switch connector
	S018	Rotating beacon switch connector
46	S015	Heating switch connector
	S065	Parking brake switch connector
47	XJ001	Joystick connector
48	B018	Buzzer connector
49	S008	Cable lug battery master switch
50	S054	Air conditioning system temperature switch connector
	M004	Fan

7.26 Main wiring harness DW30 High swivel skip cab (403J-E17T) (FRW3)

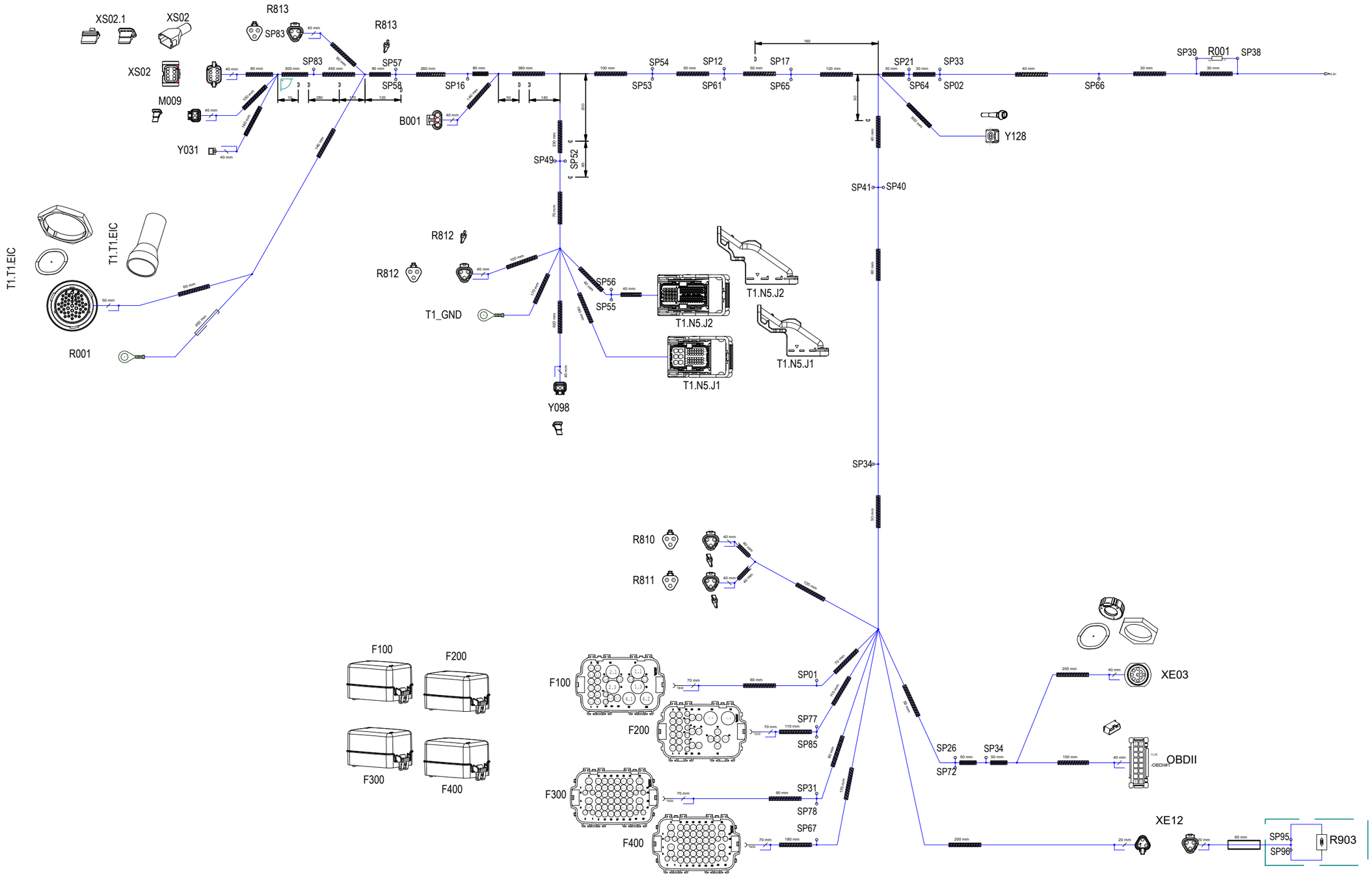
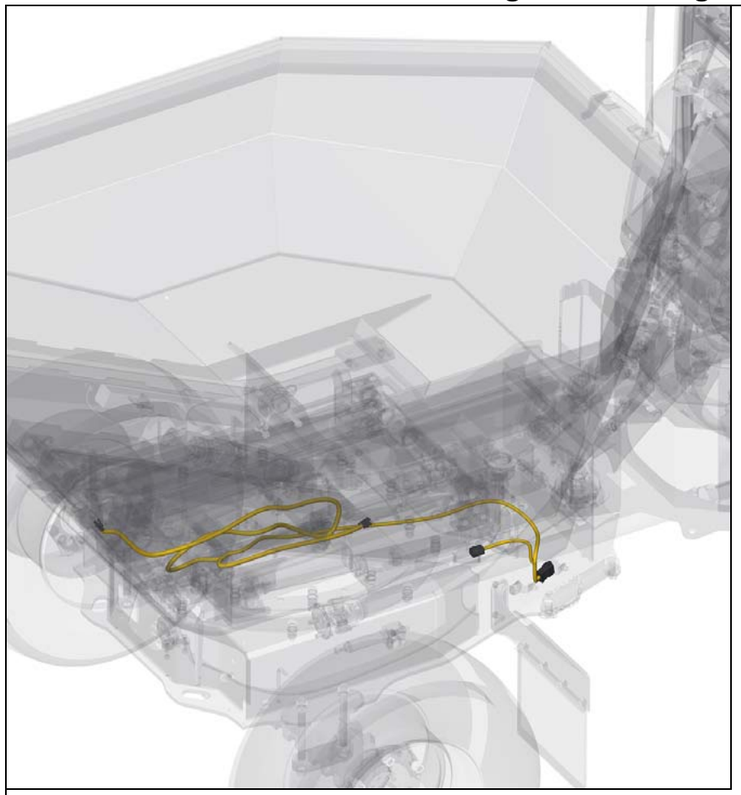
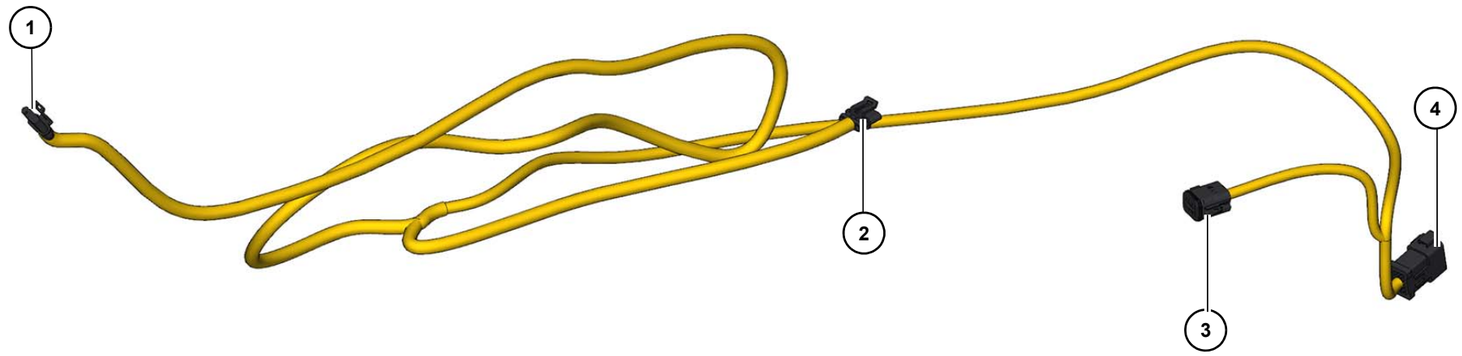


Fig. 360 Main wiring harness DW30 High swivel skip cab (403J-E17T)

7.31 Position of additional wiring harness high swivel skip (FBW4)





Pos.	Connector	Function
1	S211	Switch connection - skip position
2	S085	Switch connection position (high swivel skip) scissors
3	B126	Tilt sensor connection
4	XS03	Main wiring harness connection

Fig. 364 Position of additional wiring harness high swivel skip

7.44 Wiring harness StVO loader unit SLE (FBW2) from serial no. WNCD2501JPAL00204

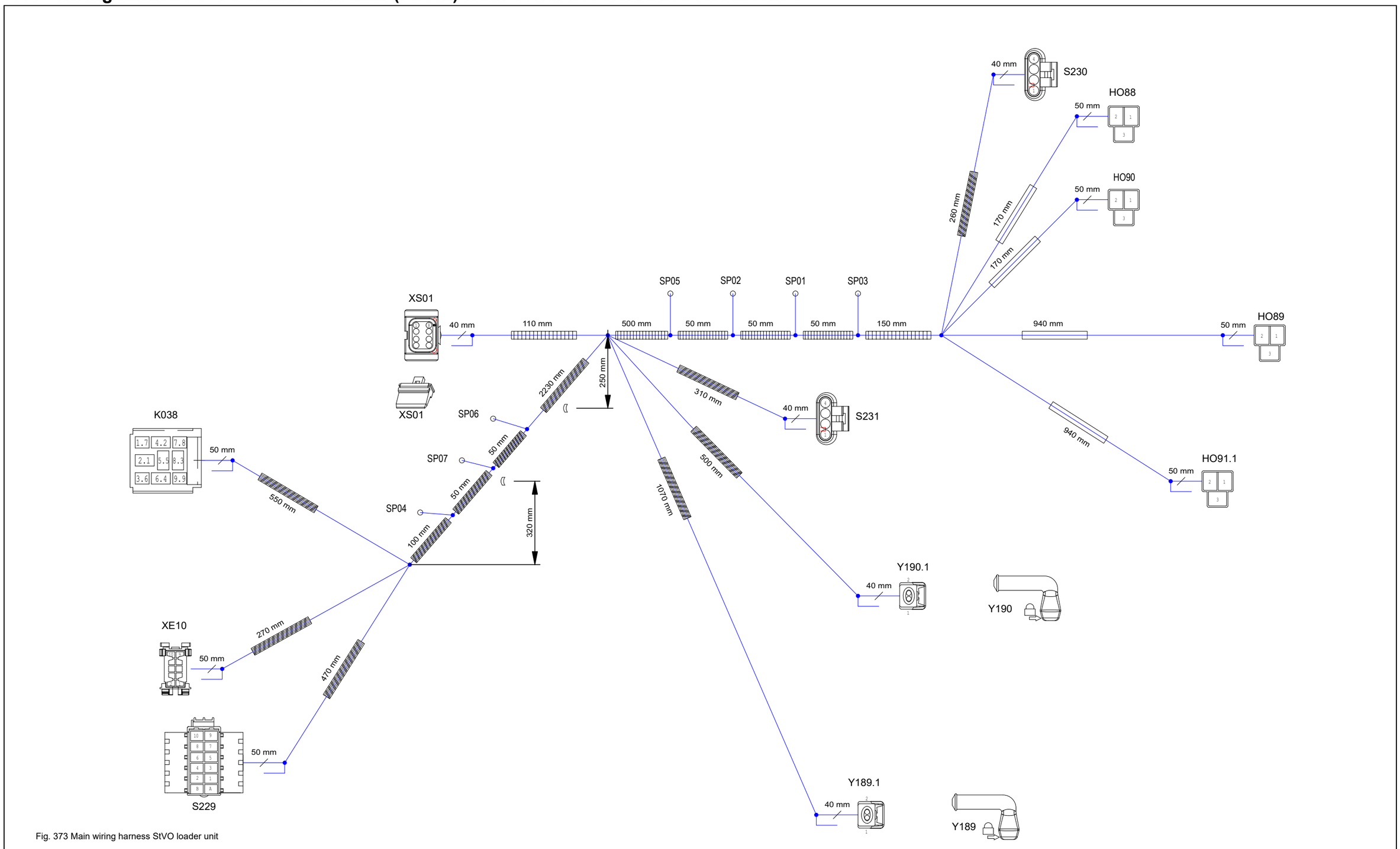


Fig. 373 Main wiring harness StVO loader unit

7.57 Wiring harness drive interlock telematics legend

nr.	Twisting	From	Pin	To	Pin	Color/mm²	Function
1		N018	1	XE11	6	Black / 0.75	GND
2		N018	5	XE11	1	Pink / 0.75	D+
3		N018	6	XE11	4	Red/White / 0.75	12V15
4		N018	12	XE11	5	Red / 0.75	12V30
5		XE05	7	XE11	5	Red / 0.75	12V30
6		XE05	8	XE11	4	Red/White / 0.75	12V15
7	1	XE05	9	XE11	2	White / 0.75	CAN H
8	1	XE05	10	XE11	3	White / 0.75	CAN L
9		XE05	11	XE11	6	Black / 0.75	GND
10	2	XE11	2	N018	2	White / 0.75	CAN H
11	2	XE11	3	N018	4	White / 0.75	CAN L
12		XE11	7	XE05	3	White / 0.75	Starter signal
13		XE11	8	XE05	4	White / 0.75	Starter signal
14		XE11	9	XE05	1	White / 0.75	12V15 ECU
15		XE11	10	XE05	2	White / 0.75	12V15 ECU

7.58 Wiring harness drive interlock telematics

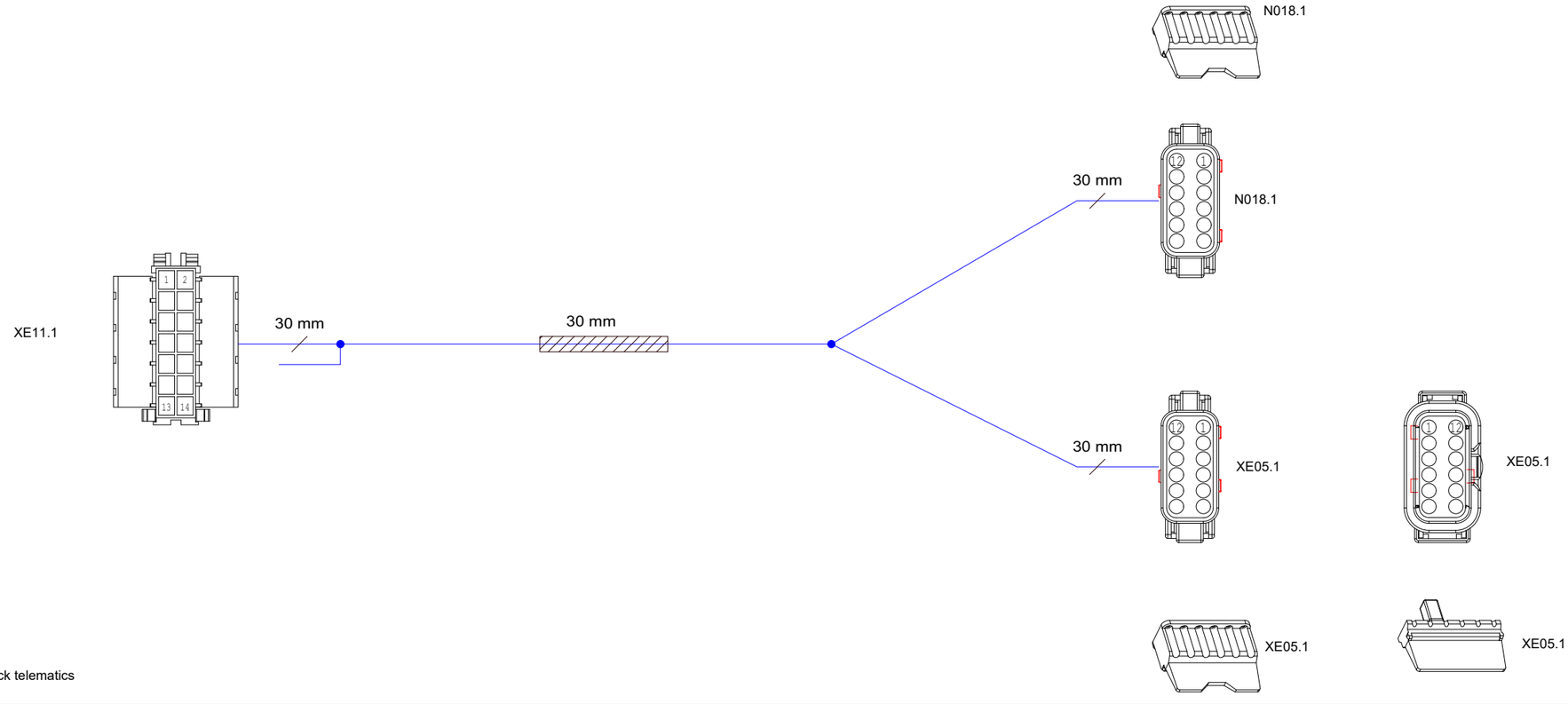


Fig. 381 Wiring harness drive interlock telematics

8.7 Hydraulics diagram DW30/DW40 (403J-E17T)

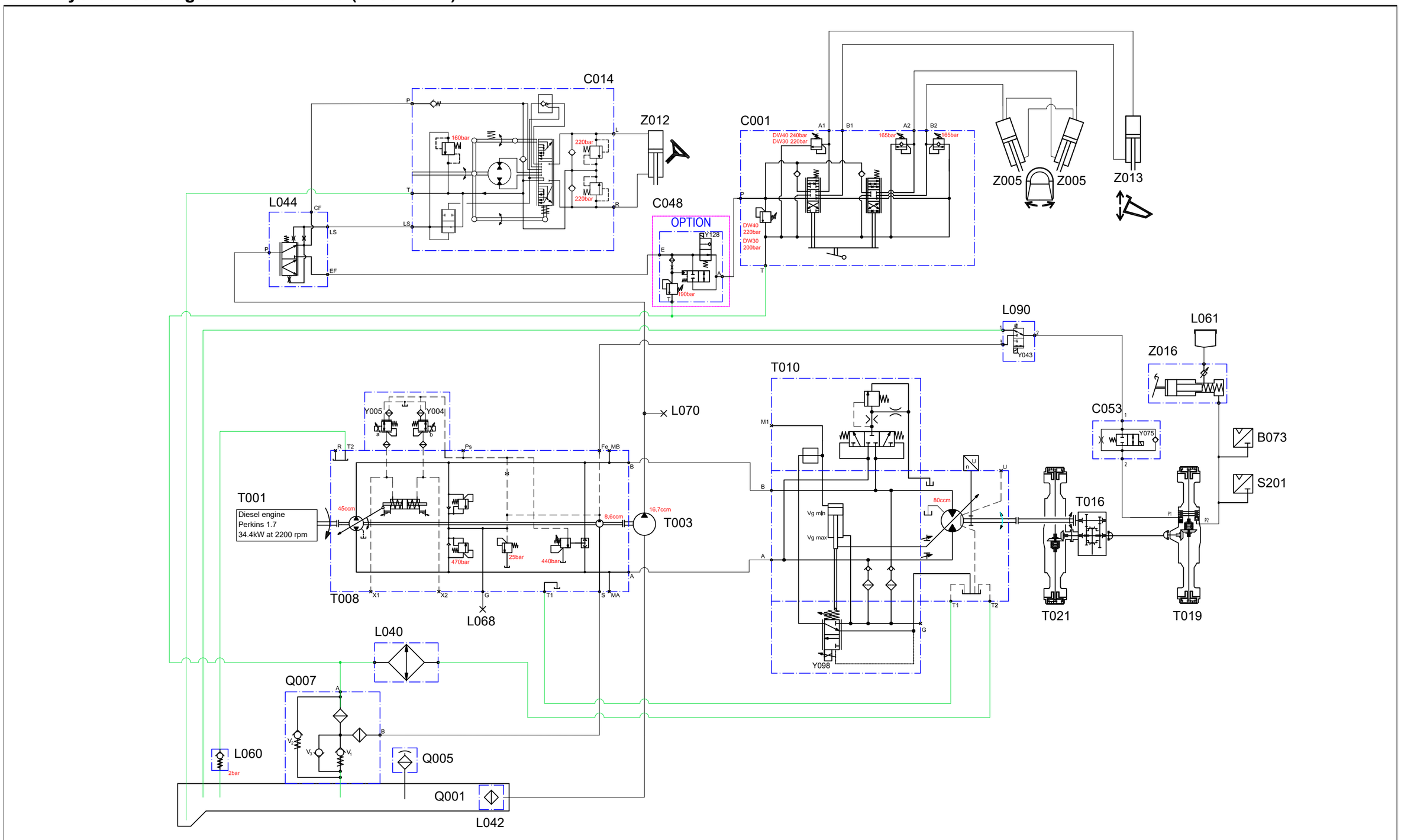
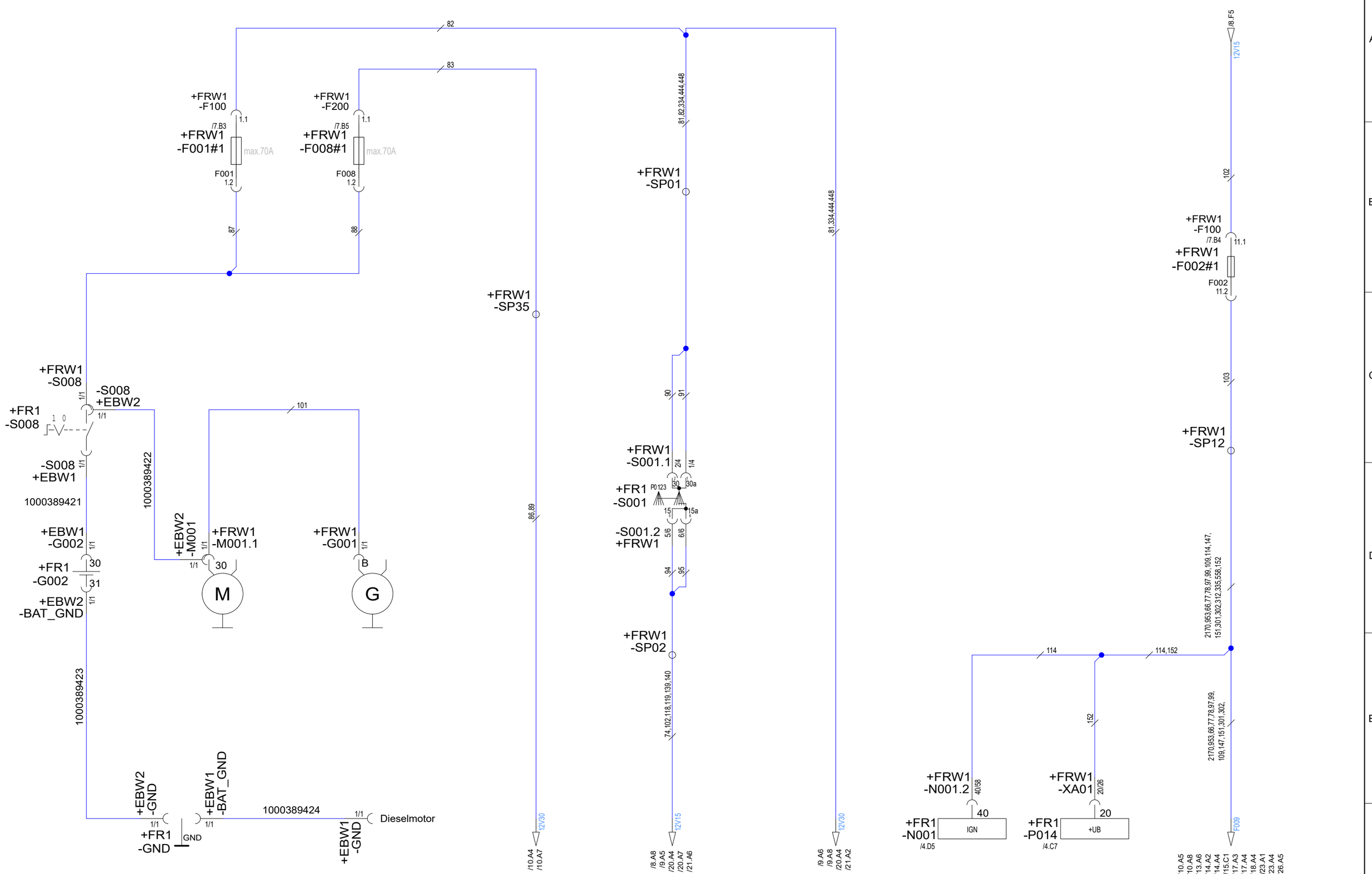


Fig. 388 Hydraulics diagram DW40/DW40 (404J-E17T)



project:	ED D25_Rexroth_01
active Option:	3TNV76 + SLE
replace for Mat.-Nr:	---
Version SAP:	02
Version DS:	01

Wacker Neuson Group
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4063 Hörsching
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User	10.12.2020	LNZleibg
Proved	10.12.2020	LNZleibg

Hauptversorgung
Hauptversorgung

Mat.-Nr. 1000426534
Doc.-Nr. 2060133071

Revision:	02
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Message No	700018338

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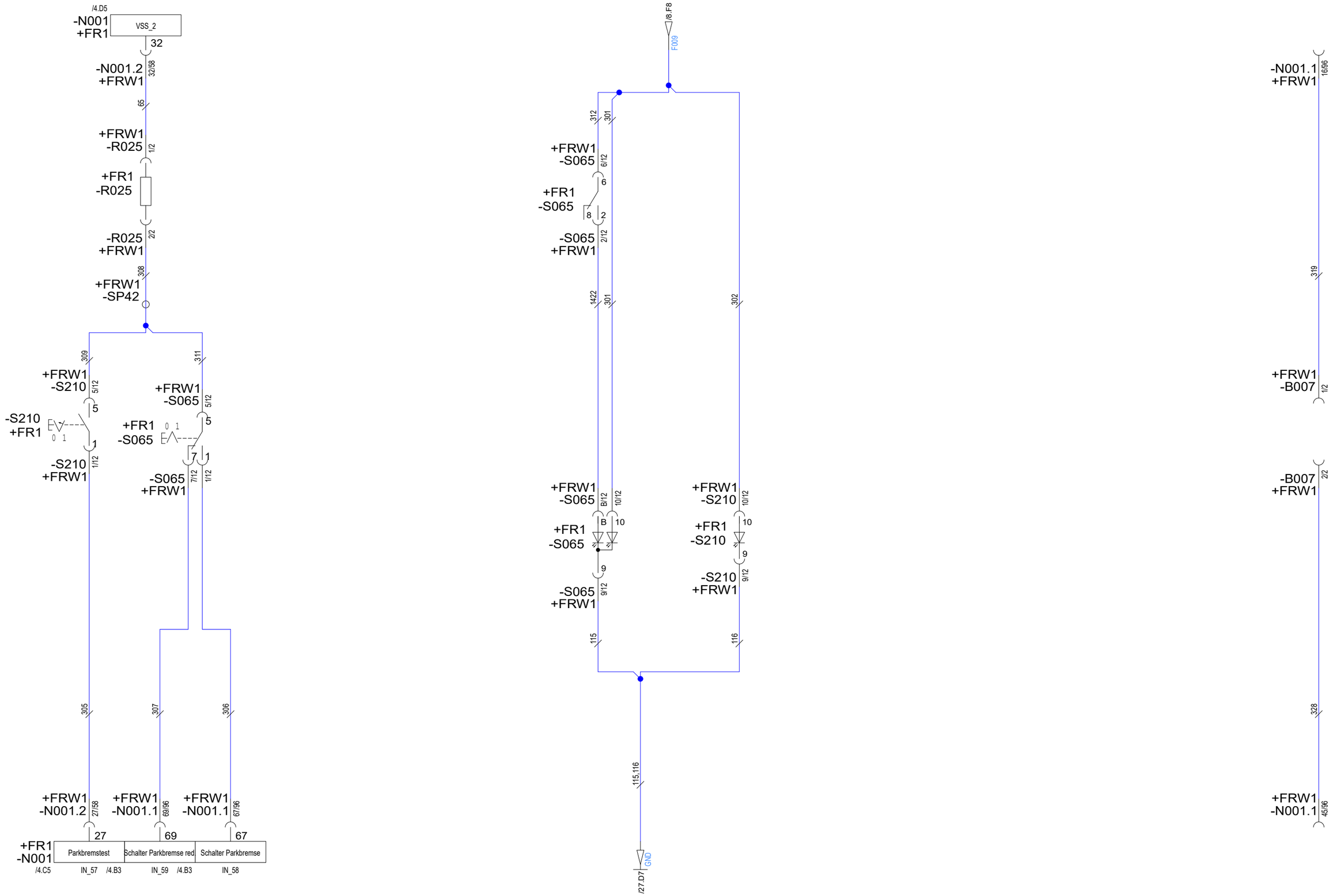
1613542506



project:	ED D25_Rexroth_01		
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replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

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Wacker Neuson Linz GmbH
4063 Hörsching
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User	10.12.2020	LNZleibg
Proved	10.12.2020	LNZleibg

Fahrfunktion

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

Revision:	02
replace for Rev.	01
Message No	700018338

18

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1613542506

DevDes	Location	Position	device designation	item number
-B001	+FRW1	/13.C1	connector Fuel gauge	1000051989
-B002	+FR1	/19.D7	Horn	1000269368
-B002.1	+FRW1	/19.D7	connector Horn	1000383151
-B002.2	+FRW1	/19.E7	connector Horn	1000383151
-B003	+FR1	/21.D8	Reversing warning system	1000170892
-B003	+RBW1	/21.E8	connector Reversing warning system	1000027438
-B006	+EN1	/12.C2	Temperature sender Engine	1000280078
-B006	+FRW1	/12.C2	connector Temperature sender Engine	1000383151
-B007	+FRW1	/17.C8	connector Temperature sensor Hydraulic oil	1000027410
-B018	+FR1	/13.C7	Buzzer	
-B018	+FRW1		connector Buzzer	1000101071
-B025	+FR1	/15.C7	Sensor Crankshaft speed	
-B025	+FRW1	/15.D7	connector Sensor Crankshaft speed	1000379245
-B054	+FR1	/15.A1	Accelerator pedal	1000303757
-B054	+FRW1	/15.B1	connector Accelerator pedal	1000105100
-B073	+FR1		Pressure sensor Inching pedal	1000303206
-B073	+FRW1	/15.C5	connector Pressure sensor Inching pedal	1000027429
-B083	+FR1	/15.C7	Speed sensor Motor Drive	
-B083	+FRW1	/15.D7	connector Speed sensor Motor Drive	1000379245
-B087	+FRW1	/13.C2	connector Additional monitor for cameras (Supply)	1000027438
-B088	+FRW1	/13.C3	connector Switchover Camera	1000027445
-BAT_GND	+EBW1	/7.F2	cable lug Earth	1000050031
-BAT_GND	+EBW2	/7.D1	Battery terminal Negative	1000089785
-E16	+RBW1	/21.E3	connector Numberplate light	1000027384
-E16.1	+RBW1	/21.E3	connector Numberplate light	1000027384
-E016.1	+FR1	/21.E3	Numberplate light	1000117390
-E016.2	+FR1	/21.E3	Numberplate light	1000117390
-E16.3	+RBW1	/21.E3	cable lug Numberplate light	1000096859
-E16.4	+RBW1	/21.E3	cable lug Numberplate light	1000096859
F001	+FRW1	/6.B2	Bracket relay / Fuse	1000385300
F002	+FRW1	/6.B2	Bracket relay / Fuse	1000385300

project:	ED D25_Rexroth_01	Wacker Neuson Group Wacker Neuson Linz GmbH 4063 Hörsching AUSTRIA			date	name	itemregister -
active Option:				User			Revision:
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Version SAP:	02	Version DS:					Message No
				Mat. -Nr. 1000426534		Doc. -Nr. 2060133071	28 / A3

circuit diagram D25

ROPS Bügel

3TNV76

Location designation:

FRW1 main harness DW20/DW30
FRW2 main harness DW30 LRC
FRW3 main harness DW30P/DW40 Cabin
FRW6 main harness DW30P/DW40 Rollbar

BAW1 Wiring harness illumination ROPS
BAW2 Wiring harness rotating beacon green

CBW1 Wiring harness Cabin

FBW1 Wiring harness rtro Drehkipper
FBW2 Wiring harness rtro SLE
FBW3 Wiring harness rtro Frontkipper
RBW1 Wiring harness rtro rear side

EBW1 battery cable
EBW2 battery cable

BA1 components illumination Rollbar
CB1 components Cabin
EN1 components Diesel engine
FB1 components rtro Front side
FR1 components Chassis

project:	ED D25_Rexroth_01		
active Option:	3TNV76		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

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Deckblatt

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

Revision:	02
replace for Rev.	01
Message No	700018338

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1607587734

Option Yanmar 3TNV76 -> None Diesel engine electronics

project:	ED D25_Rexroth_01		
active Option:	3TNV76		
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Version SAP:	02	Version DS:	01

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Proved	10.12.2020	LNZleibg

ECU Dieselmotor
ECU Dieselmotor

Mat. -Nr. 1000426534 | Doc. -Nr. 2060133071

Revision:	02
replace for Rev.	01
Message No	700018338

11

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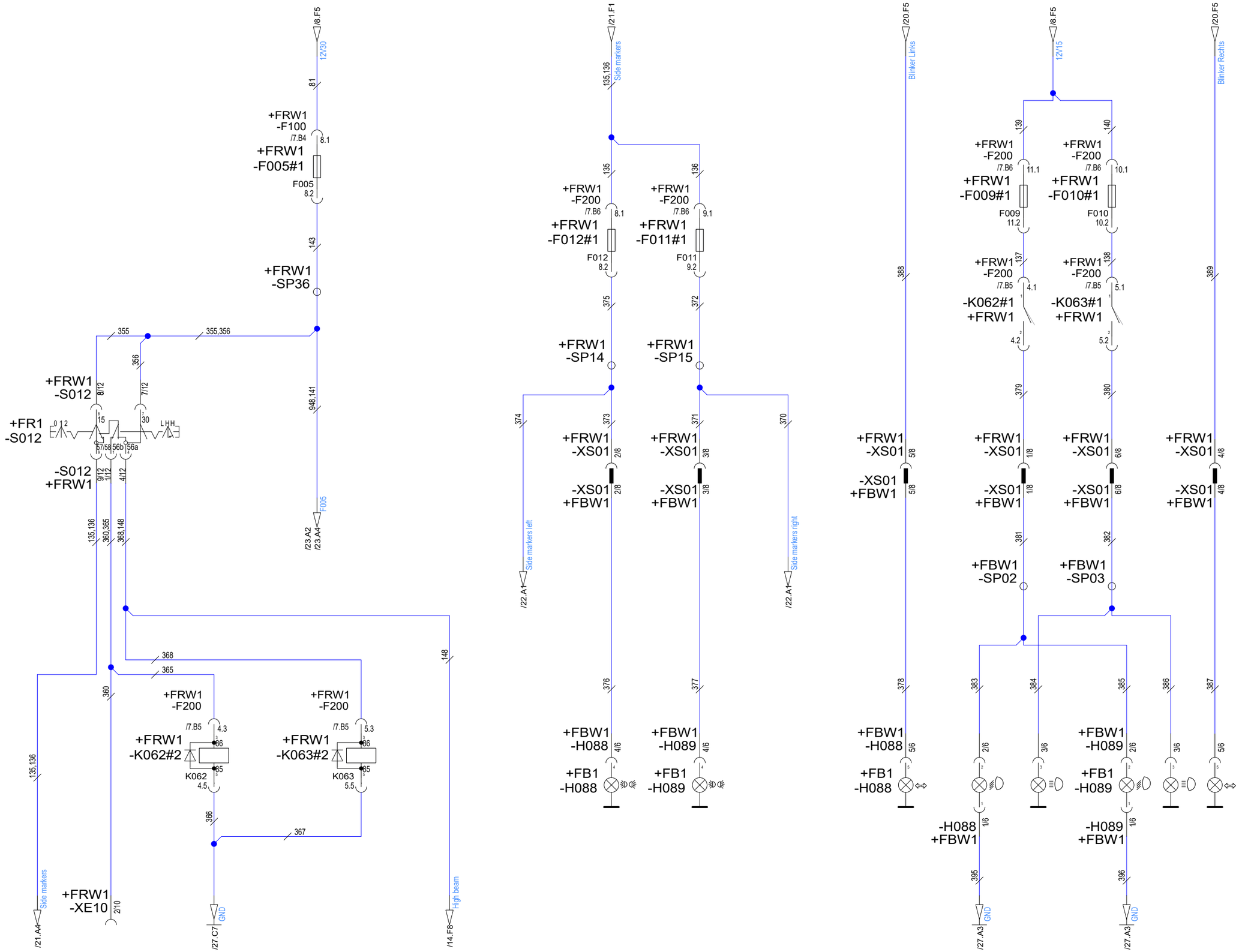
1615289723



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Version SAP:	02	Version DS:	01

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STVO Beleuchtung
Front

Mat.-Nr: 1000426534
Doc.-Nr: 2060133071

Revision:	02
replace for Rev.	01
Message No	700018338

21
A3

1615290746

DevDes	Location	Position	device designation	item number
-K003	+FRW1		Switching Relay Machine travel Reverse	1000394036
-K006	+FR1	/10.D2		1000005108
-K006	+FRW1	/10.D2		1000027356
-K007	+FRW1		High current relay start	1000353650
-K008	+FR1	/10.C5	Time relay 1s inlet solenoid	1000005108
-K008	+FRW1	/10.C5	Time relay 1s inlet solenoid	1000051986
-K009	+FRW1		Fuel inlet solenoid switching relay	1000353650
-K010	+FR1	/20.B2	Turn indicator relay	1000235517
-K010	+FRW1		relay socket Turn indicator relay	1000101071
-K030	+FRW1		Switching Relay Brake lights	1000394036
-K062	+FRW1		Switching Relay Low beam	1000394036
-K063	+FRW1		Switching Relay high beam	1000394036
-K130	+FRW1		Switching Relay Horn	1000394036
-K146	+FR1	/23.D1	Switching Relay Seat belt contact switch	1000394036
-M001	+EBW2	/8.D2	cable lug Starter Motor	1000050030
-M001	+FRW1	/10.E4	connector Starter Motor	1000383151
-M001.1	+FRW1	/8.D2	cable lug Starter Motor	1000107756
-M009	+FRW1	/13.D6	connector Fuel lift pump	1000367655
-N001	+FR1	/4.A1	Traction electronics	1000381095
-N001.1	+FRW1		connector Traction electronics	1000359522
-N001.2	+FRW1	/9.E6	connector Traction electronics	1000359480
-N001_GND	+FRW1	/27.A5	cable lug Traction electronics	1000096859
-OBDII	+FRW1	/15.F6	connector Vehicle diagnostics OBD II	1000325528
-P014	+FR1	/4.A7	Indicating instrument	1000285154
-P016	+FR1	/14.C2	Additional monitor for cameras	1000173577
-R001	+EN1	/10.E1		
-R001	+ENW1	/10.E1	Preheating system	1000176739
-R001	+FRW1	/10.E1	connector Preheating system	1000081742
-R024	+FRW1	/14.C6	Resistor 220 Ohm	1000433822
-R025	+FR1	/18.B1	Resistor 22 Ohm	
-R025	+FRW1	/18.B1	connector Resistor 22 Ohm	1000110449

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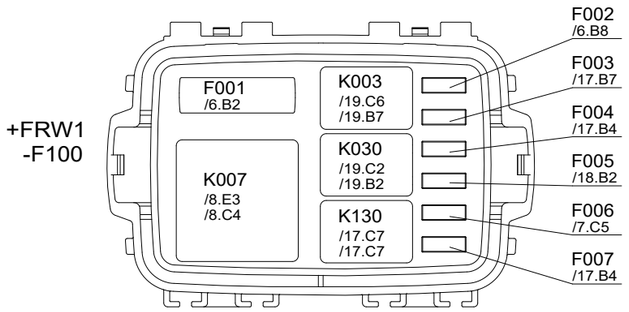
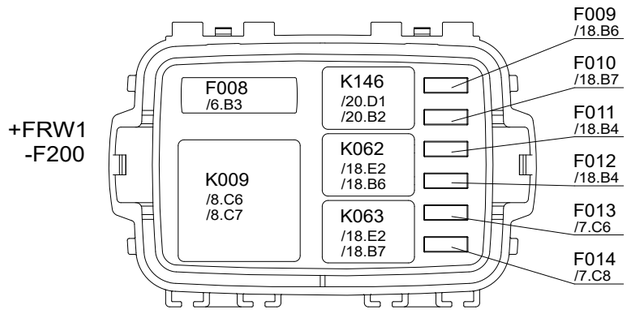
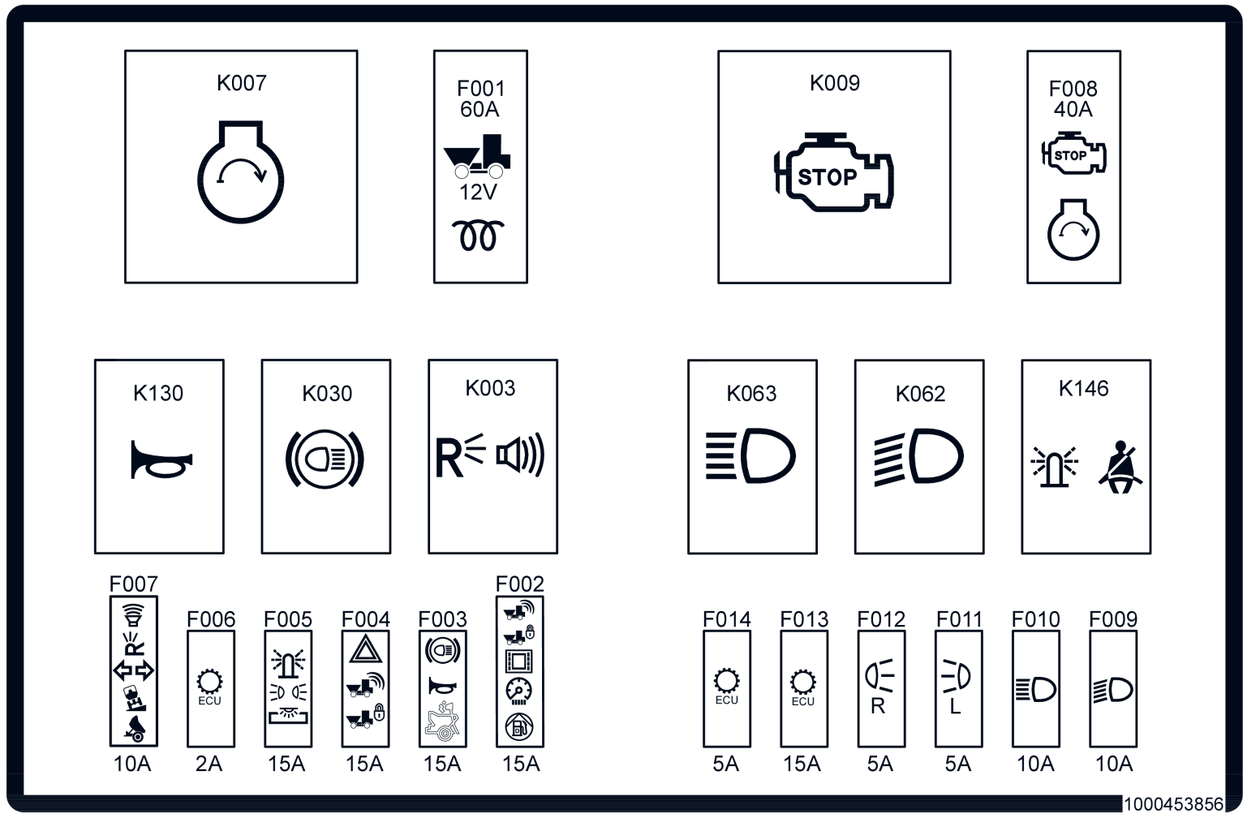
User			-	replace for Rev.	31
Proved			Mat. -Nr. 1000426534 / Doc. -Nr. 2060133071	Message No	A3







project:	\\wnad.		
active Option:	3TNV76 + HDK		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

Wacker Neuson Group
Wacker Neuson Linz GmbH
4063 Hörsching
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	date	name
User	14.12.2020	LNZleibg
Proved	14.12.2020	LNZleibg

Sicherungsbelegung
Sicherungsbelegung

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

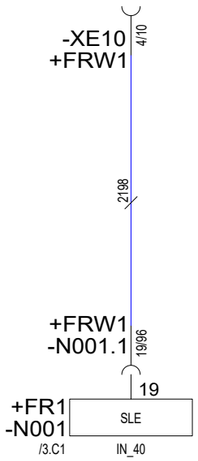
Revision:	02
replace for Rev.	01
Message No	700021120

5

A3

1615295980

Option Yanmar 3TNV76 -> None SLE / Auto-Stop



project:	\\wnad.		
active Option:	3TNV76 + HDK		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

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	date	name
User	14.12.2020	LNZleibg
Proved	14.12.2020	LNZleibg

SLE

Mat. -Nr. 1000426534

Doc. -Nr. 2060133071

Revision:	02
replace for Rev.	01

15

Message No
700021120

A3

1615295980

DevDes	Location	Position	device designation	item number
-G001.1	+FRW1	/10.E4	connector alternator	1000110537
-G002	+EBW1	/6.D1	Battery terminal Plus	1000089783
-G002	+FR1	/6.D1	Batterie	1000250323
-GND	+EBW1	/6.F3	Earth	1000050030
-GND	+EBW2	/6.F1	Earth	1000050031
-GND	+FR1	/6.F2	Earth	
-GND	+FRW1	/22.F1	Earth	1000346811
-GND	+FRW7	/22.F1	Earth	1000365194
-GND1	+FR1	/22.F1	Earth	
-GND1	+FRW7	/22.D1	Earth	1000096859
-GND2	+FRW7	/22.D1	Earth	1000050027
-H028	+BA1	/20.D4	Rotating beacon	1000314938
-H028.1	+BAW1	/20.D4	connector Rotating beacon	1000027435
-H028.2	+BAW1	/20.E4	connector Rotating beacon	1000095370
-H029	+BA1		Rotating beacon green	
-H029.1	+BAW2	/20.C2	connector Rotating beacon green	1000095370
-H029.2	+BAW2	/20.D2	connector Rotating beacon green	1000095370
-H078	+FR1	/19.E5	Combined rear left light	1000148542
-H078	+RBW1	/19.E5	connector Combined rear left light	1000027431
-H079	+FR1	/19.E7	Combined rear right light	1000148543
-H079	+RBW1	/19.E7	connector Combined rear right light	1000027431
-H088	+FB1	/18.E6	Combined front left light	1000276032
-H088	+FBW1	/18.E6	connector Combined front left light	1000027431
-H089	+FB1	/18.E7	Combined front left light	1000276034
-H089	+FBW1	/18.E7	connector Combined front left light	1000027431
K003	+FRW1	/5.B2	Bracket relay / Fuse	1000385300
K007	+FRW1	/5.B2	Bracket relay / Fuse	1000385300
K009	+FRW1	/5.B5	Bracket relay / Fuse	1000385300
K030	+FRW1	/5.B2	Bracket relay / Fuse	1000385300
K062	+FRW1	/5.B5	Bracket relay / Fuse	1000385300
K063	+FRW1	/5.B5	Bracket relay / Fuse	1000385300

project: \\wnad.
active Option:
replace for Mat.-Nr:
Version SAP: 02 Version DS:

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	date	name
User		
Proved		

itemregister
-
Mat. -Nr. 1000426534
Doc. -Nr. 2060133071

Revision:
replace for Rev.
Message No
25
A3

Option LRC -> None Diesel engine electronics / Traction electronics

project:	ED D25_Rexroth_01		
active Option:	3TNV88 (LRC)		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

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	date	name
User	10.12.2020	LNZleibg
Proved	10.12.2020	LNZleibg

Steuergeräte
Steuergeräte

Mat. -Nr. 1000426534 | Doc. -Nr. 2060133071

Revision:	02
replace for Rev.	01

Message No 700018338

4

A3

1607587722

Option LRC -> None CAN-Connection

project:	ED D25_Rexroth_01		
active Option:	3TNV88 (LRC)		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

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	date	name
User	10.12.2020	LNZleibg
Proved	10.12.2020	LNZleibg

CAN
CAN

Mat. -Nr. 1000426534 | Doc. -Nr. 2060133071

Revision:	02
replace for Rev.	01
Message No	700018338

14

A3

1613542506

Option Rollbar -> None Power outlet, Radio, Wiper!

project:	ED D25_Rexroth_01		
active Option:	3TNV88 (LRC)		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	01

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User	10.12.2020	LNZleibg
Proved	10.12.2020	LNZleibg

Wischer, Radio, Steckdose

Mat. -Nr. 1000426534

Doc. -Nr. 2060133071

Revision:	02
replace for Rev.	01

24

Message No 700018338

A3

1613542506

circuit diagram D25

DW30P / DW40 - Rollbar Version 00

403 J/F - E17T

LNZgrosl
12.01.2020

Location designation:

FRW1 main harness DW20/DW30
FRW2 main harness DW30 LRC
FRW3 main harness DW30P/DW40 Cabin
FRW6 main harness DW30P/DW40 Rollbar

BAW1 Wiring harness illumination ROPS
BAW2 Wiring harness rotating beacon green

CBW1 Wiring harness Cabin

FBW1 Wiring harness rtro Drehkipper
FBW2 Wiring harness rtro SLE
FBW3 Wiring harness rtro Frontkipper
RBW1 Wiring harness rtro rear side

EBW1 battery cable
EBW2 battery cable

BA1 components illumination Rollbar
CB1 components Cabin
EN1 components Diesel engine
FB1 components rtro Front side
FR1 components Chassis

project:	ED D25_Rexroth		
active Option:	403 J/F E17T + ROPS		
replace for Mat.-Nr:	---		
Version SAP:	00	Version DS:	---

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	date	name
User	xx.xx.2019	LNZgrosl
Proved	xx.xx.2019	LNZgrosl

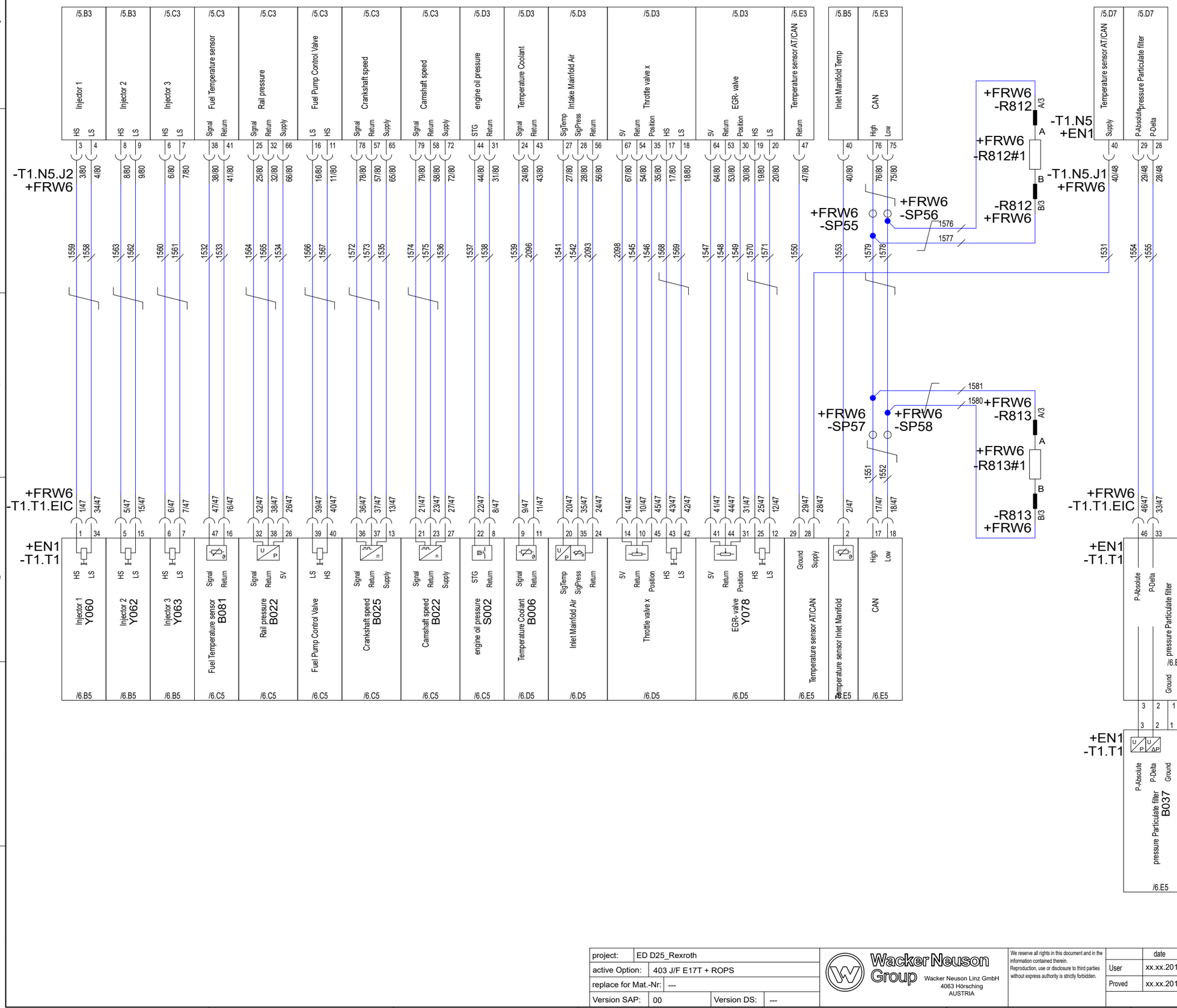
Deckblatt

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338

1 A3

1579586037



project:	ED D25_Rexroth		
active Option:	403 J/F E17T + ROPS		
replace for Mat.-Nr:	---		
Version SAP:	00	Version DS:	---

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	date	name
User	xx.xx.2019	LNZgrosl
Proved	xx.xx.2019	LNZgrosl

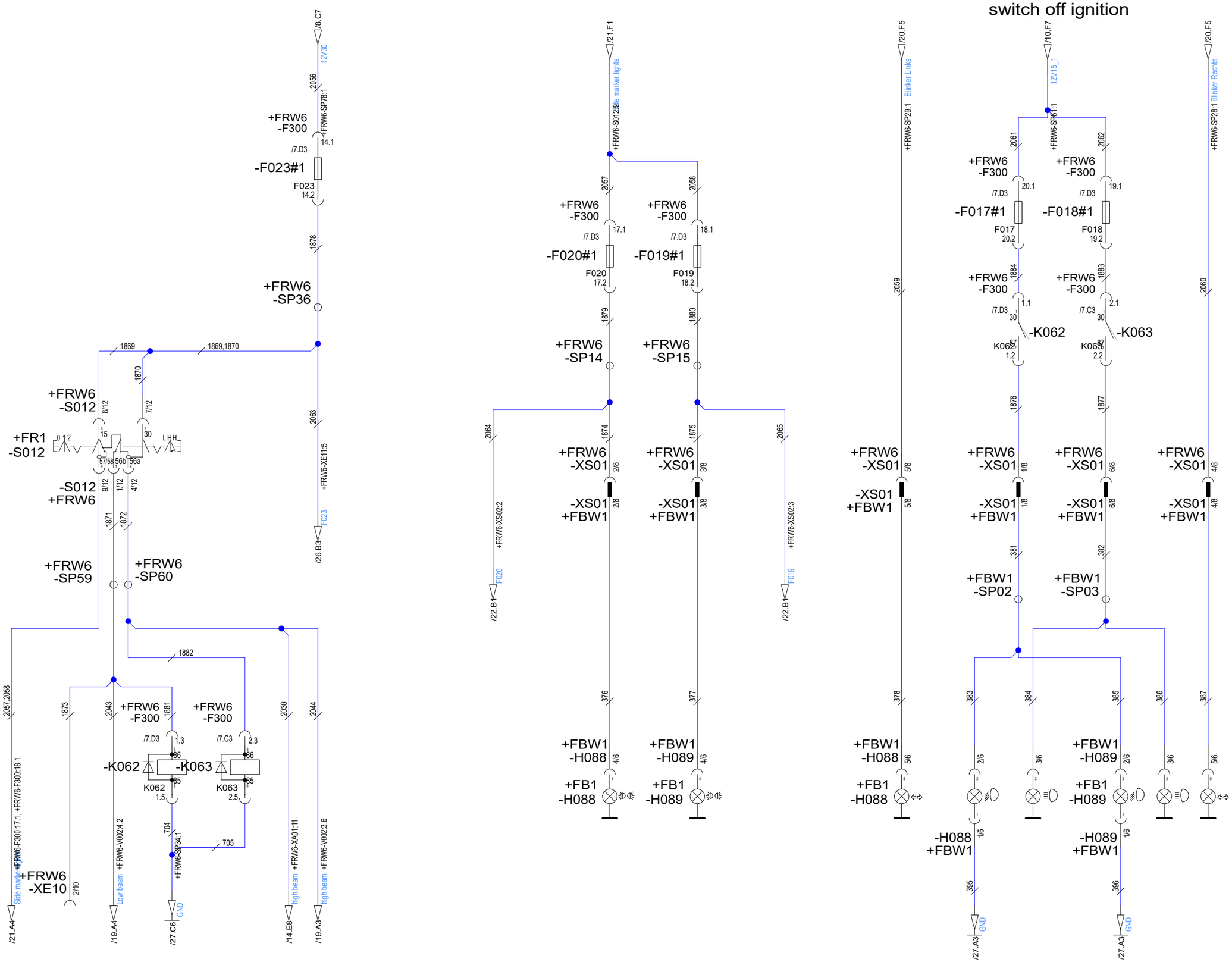
ECU Dieselmotor
ECU Dieselmotor

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

Revision: 00
replace for Rev. 00
Message No 700018338

11
A3

1580120206



project:	ED D25_Rexroth		
active Option:	403 J/F E17T + ROPS		
replace for Mat.-Nr:	---		
Version SAP:	00	Version DS:	---

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User	xx.xx.2019	LNZgrosl
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STVO Beleuchtung
Front

Mat.-Nr. 1000426534 | Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338

21

A3

1580120326

DevDes	Location	Position	device designation	item number
-H029.1	+BAW2	/23.C2	connector Rotating beacon green	1000095370
-H029.2	+BAW2	/23.D2	connector Rotating beacon green	1000095370
-H078	+FR1	/22.E5	Combined rear left light	1000148542
-H078	+RBW1	/22.E5	connector Combined rear left light	1000027431
-H079	+FR1	/22.E7	Combined rear right light	1000148543
-H079	+RBW1	/22.E7	connector Combined rear right light	1000027431
-H088	+FB1	/21.E6	Combined front left light	1000276032
-H088	+FBW1	/21.E6	connector Combined front left light	1000027431
-H089	+FB1	/21.E7	Combined front left light	1000276034
-H089	+FBW1	/21.E7	connector Combined front left light	1000027431
K001	+FRW6	/7.C4	Bracket relay / Fuse	1000385300
K003	+FRW6	/7.C4	Bracket relay / Fuse	1000385300
K005	+FRW6	/7.B3	Bracket relay / Fuse	1000385304
K007	+FRW6	/7.B3	Bracket relay / Fuse	1000385304
K011	+FRW6	/7.D6	Bracket relay / Fuse	1000385694
K011.1	+FRW6	/7.D6	Bracket relay / Fuse	1000385694
K012	+FRW6	/7.D6	Bracket relay / Fuse	1000385694
K030	+FRW6	/7.D3	Bracket relay / Fuse	1000385694
K042	+FRW6	/7.C4	Bracket relay / Fuse	1000385300
K062	+FRW6	/7.D3	Bracket relay / Fuse	1000385694
K063	+FRW6	/7.D3	Bracket relay / Fuse	1000385694
K088	+FRW6	/7.B3	Bracket relay / Fuse	1000385304
K114	+FRW6	/7.D6	Bracket relay / Fuse	1000385694
K130	+FRW6	/7.D3	Bracket relay / Fuse	1000385694
K131	+FRW6	/7.C4	Bracket relay / Fuse	1000385300
K146	+FRW6	/7.D6	Bracket relay / Fuse	1000385694
-K001	+FRW6	/19.C1	High-current relay	1000027074
-K003	+FRW6	/22.C6	Switching Relay Machine travel Reverse	1000394036
-K005	+FRW6	/10.C1	High-current relay Preheating system	1000353649
-K007	+FRW6	/10.C5	High current relay start	1000353649
-K010	+FR1	/20.B2	Turn indicator relay	1000235517

project: ED D25_Rexroth
active Option:
replace for Mat.-Nr:
Version SAP: 00 Version DS:

Wacker Neuson Group
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4063 Hörsching
AUSTRIA

	date	name
User		
Proved		

itemregister
-
Mat. -Nr. 1000426534
Doc. -Nr. 2060133071

Revision:
replace for Rev.
Message No
31
A3

Sheet	SheetName 1	SheetName 2
33	itemregister	-
34	itemregister	-
35	itemregister	-
36	itemregister	-
37	itemregister	-
38	itemregister	-
39	itemregister	-
40	itemregister	-

project:	ED D25_Rexroth		
active Option:			
replace for Mat.-Nr:			
Version SAP:	00	Version DS:	

Wacker Neuson Group
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AUSTRIA

	date	name
User		
Proved		

contents
-

Mat. -Nr. 1000426534

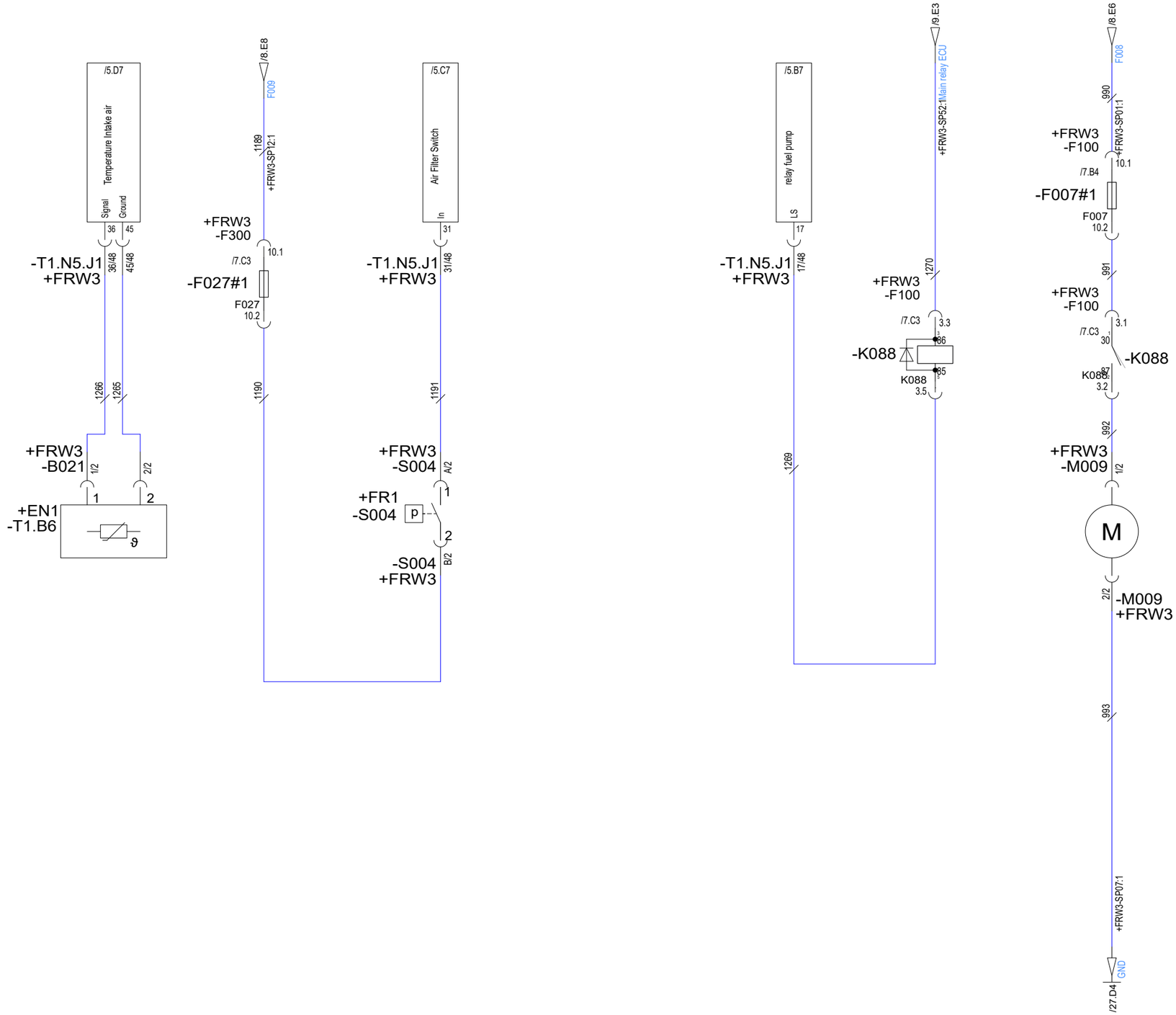
Doc. -Nr. 2060133071

Revision:	
replace for Rev.	
Message No	3
	A3

Temperature sensor intake

Dirty air filter

Fuel lift pump



project:	ED D25_Rexroth		
active Option:	403 J/F E17T + Kabine		
replace for Mat.-Nr:	---		
Version SAP:	00	Version DS:	---

Wacker Neuson Group
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AUSTRIA

	date	name
User	xx.xx.2019	LNZgrosl
Proved	xx.xx.2019	LNZgrosl

IO Dieselmotor
IO Dieselmotor

Mat.-Nr. 1000426534
Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338

13

A3

1580115327

Working lights

/8.E8 F009 1032 +FRW3-SP76:1
+FRW3 -S123 1/2
+FR1 -S123
-S123 +FRW3 2/2
1033
+FRW3 -F400
/7.D5 1.3
-K146 86 85
K146 1.5
1034
+FRW3-SP34:1
/27.C7 GND

/8.E8 F009 +FRW3-SP12:1 1025
+FRW3 -F400 19.1
/7.D5 -F036#1
F036 19.2
1026
+FRW3 -F400 1.1
/7.D5 30 -K146
K146 87 1.2
1027
+FRW3 -XR10 3/12
-XR10 +CBW1 3/12
1435
+CBW1 -H029.1 1/1
+BA1 -H029
-H029.2 +CBW1 1/1
1029

/8.C6 F008 +FRW3-SP77:1
+FRW3 -F300 977 13.1
/7.D3 -F024#1
F024 13.2
1015
+FRW3 -S018 5/12
+FR1 -S018 0 1 5 7 1
-S018 +FRW3 1/12
1018
-XE10 +FRW3 3/10
1019
+FRW3 -SP74 1021
1020
1021
+FRW3 -XR10 2/12
-XR10 +CBW1 2/12
1022
+CBW1 -H028.1 1/1
+BA1 -H028
-H028.2 +CBW1 1/1
1028
+CBW1 -SP06
1030

/8.E7 F009 +FRW3-SP75:1
1013
1020
+FRW3 -S018 B/12 10/12
+FR1 -S018 B 10
9
-S018 +FRW3 9/12
1024
/27.D7 GND

/10.F7 12V15_1 1170 +FRW3-SP61:1
+FRW3 -F200 11.1
/7.B6 -F014#1
F014 11.2
1171
+FRW3 -XR10 1/12
-XR10 +CBW1 1/12
1172
1437
+CBW1 -SP12
1436
1173
+CBW1 -S016 10/12 B/12
+FR1 -S016 10 B
9
-S016 +CBW1 9/12
1031
+CBW1 -S016 2/12
+FR1 -S016 2 1 0 6 8
-S016 +CBW1 6/12
1431
+CBW1 -SP04
1430
+CBW1 -E028 1/2
+BA1 -E028
-E028 +CBW1 2/2
1428
+CBW1 -SP01
1426
+CBW1 -XR10 8/12
-XR10 +FRW3 8/12
1187
+FRW3-SP32:1
/27.D3 GND
+CBW1 -S016 1/12
+FR1 -S016 1 3
-S016 +CBW1 3/12
1176
+CBW1 -SP02
1174
1175
+CBW1 -E007 1/2
+BA1 -E007
-E007 +CBW1 2/2
1424
+CBW1 -SP08
1427
1423
+CBW1 -E008 1/2
+BA1 -E008
-E008 +CBW1 2/2
+CBW1 -XR10 9/12
-XR10 +FRW3 9/12
1463
+FRW3-V002:7
Working light
/19.A2

+CBW1 -XR10 7/12
-XR10 +FRW3 7/12
1413
+FRW3-SP82:2
/27.D3 GND

1120,1121,1124,1443
+CBW1-SP09:1, +CBW1-M005:2, +CBW1-SP07:1, +CBW1-S020:9
/25.F1
/25.F6 GND

+FRW3-SP33:1
/27.D7 GND

project:	ED D25_Rexroth		
active Option:	403 J/F E17T + Kabine		
replace for Mat.-Nr:	---		
Version SAP:	00	Version DS:	---

Wacker Neuson Group
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4063 Hörsching
AUSTRIA

	date	name
User	xx.xx.2019	LNZgrosl
Proved	xx.xx.2019	LNZgrosl

Arbeitsbeleuchtung
Arbeitsbeleuchtung

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338
	23
	A3

1580115327

DevDes	Location	Position	device designation	item number
K146	+FRW3	/7.D6	Bracket relay / Fuse	1000385694
-K001	+FRW3	/19.C1	High-current relay	1000027074
-K003	+FRW3	/22.C6	Switching Relay Machine travel Reverse	1000394036
-K005	+FRW3	/10.C1	High-current relay Preheating system	1000353649
-K007	+FRW3	/10.C5	High current relay start	1000353649
-K010	+FR1	/20.B2	Turn indicator relay	1000235517
-K010	+FRW3		relay socket Turn indicator relay	1000101071
-K011	+FRW3	/24.E3	relay socket Switching Relay Air conditioning	1000394036
-K011.1	+FRW3	/24.E4	Switching Relay Air conditioning	1000394036
-K012	+FRW3	/24.C7	Switching Relay Air conditioning	1000394036
-K030	+FRW3	/22.C3	Switching Relay Brake lights	1000394036
-K042	+FRW3	/9.D2	Relay Motor Electronics	1000394036
-K062	+FRW3	/21.E2	Switching Relay Low beam	1000394036
-K063	+FRW3	/21.E2	Switching Relay high beam	1000394036
-K088	+FRW3	/13.C5	Switching Relay Fuel lift pump	1000394036
-K130	+FRW3	/20.C7	Switching Relay Horn	1000394036
-K131	+FRW3	/8.E5	Switching Relay 12V15	1000394036
-K146	+FRW3	/23.D1	Switching Relay Rotating beacon	1000394036
-M001	+EBW2	/8.D2	cable lug Starter Motor	1000050030
-M001	+FRW3	/10.E5	solenoid starter	1000364917
-M001.1	+FRW3	/8.D2	cable lug Starter Motor	1000107757
-M002	+CB1	/25.E2	Front wiper motor	1000253075
-M002	+CBW1	/25.E2	connector Front wiper motor	1000095337
-M004	+FR1	/24.E5	Heating fan	1000111971
-M004	+FRW3	/24.D5	connector Heating fan	1000095325
-M005	+CB1	/25.E3	Front wipe/wash pump	1000110420
-M005	+CBW1	/25.D3	connector Front wipe/wash pump	1000095323
-M009	+FRW3	/13.C6	connector Fuel lift pump	1000027438
-M018	+FR1	/24.D7	ventilator Air conditioning	1000110420
-M018	+FRW3	/24.E7	connector ventilator Air conditioning	1000263990
-MA	+FRW3	/18.D6	Travelling drive Pressure sensor	1000051989

project:	ED D25_Rexroth
active Option:	
replace for Mat.-Nr:	
Version SAP:	00
Version DS:	

Wacker Neuson Group
Wacker Neuson Linz GmbH
4063 Hörsching
AUSTRIA

	date	name
User		
Proved		

itemregister
-

Mat. -Nr. 1000426534
Doc. -Nr. 2060133071

Revision:
replace for Rev.
Message No

33
A3

Sheet	SheetName 1	SheetName 2
2	contents	-
3	contents	-
4	Steuergeräte	Steuergeräte
5	Steuergeräte	Steuergeräte
6	Steuergeräte	Steuergeräte
7	Sicherungsbelegung	Sicherungsbelegung
8	Hauptversorgung	Hauptversorgung
9	Versorgung Controller	Versorgung Controller
10	Vorglühen, Starten, Lastabsch.	
11	ECU Dieselmotor	ECU Dieselmotor
12	IO Dieselmotor	IO Dieselmotor
13	IO Dieselmotor	IO Dieselmotor
14	IO Display	IO Display
15	CAN	CAN
16	Fahrfunktion	
17	Fahrfunktion	
18	Fahrfunktion	
19	Auto Stop, SLE	
20	Überwachung Neigung, Mulde	
21	STVO Beleuchtung	Blinker
22	STVO Beleuchtung	Front
23	STVO Beleuchtung	Heck
24	Arbeitsbeleuchtung	Arbeitsbeleuchtung
25	Heizung, Klima	
26	Wischer, Radio, Steckdose	
27	Stecker Optionen	
28	Masseverteilung	
29	itemregister	-
30	itemregister	-
31	itemregister	-
32	itemregister	-

project:	\\wnad.		
active Option:			
replace for Mat.-Nr:			
Version SAP:	02	Version DS:	

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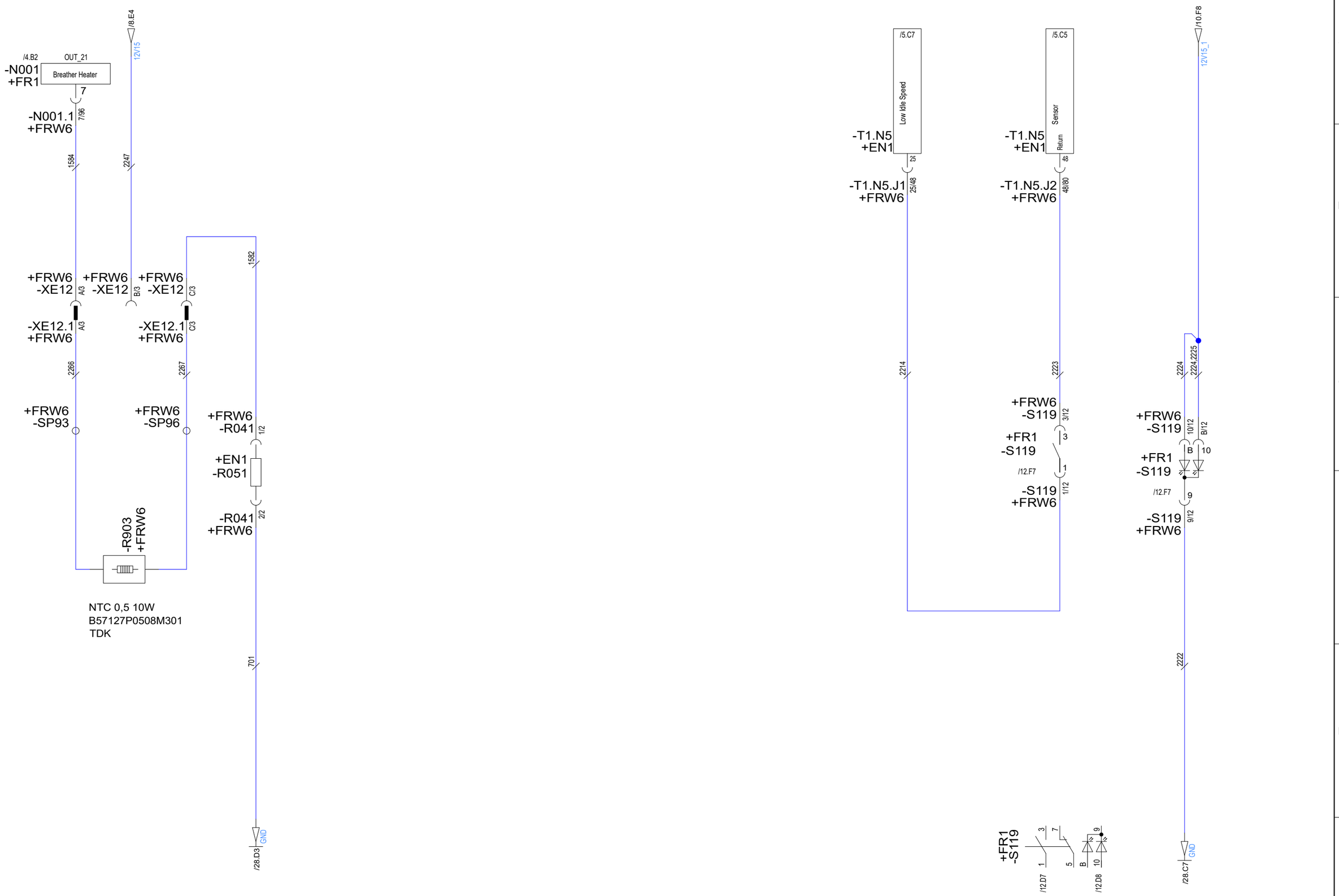
	date	name
User		
Proved		

contents
-

Mat. -Nr. 1000426534 | Doc. -Nr. 2060133071

Revision:
replace for Rev.
Message No

2
A3



project:	\\wnad.		
active Option:	403 J/F E17T + ROPS		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	02

Wacker Neuson Group
Wacker Neuson Linz GmbH
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AUSTRIA

	date	name
User	15.10.2020	LNZgrosl
Proved	15.10.2020	LNZhartp

IO Dieselmotor
IO Dieselmotor

Mat.-Nr. 1000426534
Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338

12
A3

1615317427

switch off ignition

/8.C7
12/30
2056
+FRW6
-F300
14.1
/7.C3
-F023#1
F023
14.2
1878
+FRW6
-SP36
1869
1869,1870
1870
+FRW6
-S012
8/12
7/12
+FR1
-S012
15
30
LHH
57/58
56b
56a
-S012
+FRW6
9/12
1/12
4/12
1871
1872
+FRW6
-SP59
+FRW6
-SP60
2063
F023
/27.B3
1882
2057 2058
1873
2043
+FRW6
-F300
1881
+FRW6
-F300
2030
2044
/7.C4
1.3
/7.B4
2.3
-K062
-K063
86
85
K062
1.5
K063
2.5
704
705
+FRW6
-XE10
2/10
Side marker lights
Low beam
GND
high beam
high beam
/22.A4
/19.A4
/28.C6
/14.E8
/19.A3

/22.F1
Side marker lights
2057
2058
+FRW6
-F300
17.1
/7.C3
-F020#1
F020
17.2
+FRW6
-F300
18.1
/7.C3
-F019#1
F019
18.2
1879
1880
+FRW6
-SP14
+FRW6
-SP15
2064
2065
1874
1875
+FRW6
-XS01
2/8
+FRW6
-XS01
3/8
-XS01
+FBW1
2/8
-XS01
+FBW1
3/8
F020
F019
/23.B3
/23.B3
376
377
+FBW1
-H088
4/6
+FBW1
-H089
4/6
+FB1
-H088
+FB1
-H089

/21.F5
Blinker Links
2059
+FRW6
-XS01
5/8
-XS01
+FBW1
5/8
/10.F7
12V15_1
2061
2062
+FRW6
-F300
20.1
/7.C3
-F017#1
F017
20.2
+FRW6
-F300
19.1
/7.C3
-F018#1
F018
19.2
1884
1883
+FRW6
-F300
1.1
/7.C4
30
-K062
K062
87
1.2
+FRW6
-F300
2.1
/7.C4
30
-K063
K063
87
2.2
1876
1877
+FRW6
-XS01
1/8
+FRW6
-XS01
6/8
-XS01
+FBW1
1/8
-XS01
+FBW1
6/8
381
382
+FBW1
-SP02
+FBW1
-SP03
/21.F5
Blinker Rechts
2060
+FRW6
-XS01
4/8
-XS01
+FBW1
4/8
378
383
384
385
386
387
+FBW1
-H088
5/6
+FB1
-H088
2/6
3/6
+FBW1
-H089
2/6
3/6
5/6
+FB1
-H089
-H088
+FBW1
1/6
-H089
+FBW1
1/6
395
396
GND
GND
/28.A3
/28.A3

project:	\\wnad.		
active Option:	403 J/F E17T + ROPS		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	02

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Wacker Neuson Linz GmbH
4063 Hörsching
AUSTRIA

	date	name
User	15.10.2020	LNZgrosl
Proved	15.10.2020	LNZhartp

STVO Beleuchtung
Front

Mat.-Nr. 1000426534
Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338

22
A3

1615317427

DevDes	Location	Position	device designation	item number
-H028	+BA1	/24.D4	Rotating beacon	1000314938
-H028.1	+BAW1	/24.D4	connector Rotating beacon	1000027435
-H028.2	+BAW1	/24.E4	connector Rotating beacon	1000095370
-H029	+BA1		Rotating beacon green	
-H029.1	+BAW2	/24.C2	connector Rotating beacon green	1000095370
-H029.2	+BAW2	/24.D2	connector Rotating beacon green	1000095370
-H078	+FR1	/23.E5	Combined rear left light	1000148542
-H078	+RBW1	/23.E5	connector Combined rear left light	1000027431
-H079	+FR1	/23.E7	Combined rear right light	1000148543
-H079	+RBW1	/23.E7	connector Combined rear right light	1000027431
-H088	+FB1	/22.E6	Combined front left light	1000276032
-H088	+FBW1	/22.E6	connector Combined front left light	1000027431
-H089	+FB1	/22.E7	Combined front left light	1000276034
-H089	+FBW1	/22.E7	connector Combined front left light	1000027431
K001	+FRW6	/7.B5	Bracket relay / Fuse	1000385300
K003	+FRW6	/7.B5	Bracket relay / Fuse	1000385300
K005	+FRW6	/7.A4	Bracket relay / Fuse	1000385304
K007	+FRW6	/7.A4	Bracket relay / Fuse	1000385304
K011	+FRW6	/7.C6	Bracket relay / Fuse	1000385694
K011.1	+FRW6	/7.C6	Bracket relay / Fuse	1000385694
K012	+FRW6	/7.C6	Bracket relay / Fuse	1000385694
K030	+FRW6	/7.C4	Bracket relay / Fuse	1000385694
K042	+FRW6	/7.B5	Bracket relay / Fuse	1000385300
K062	+FRW6	/7.C4	Bracket relay / Fuse	1000385694
K063	+FRW6	/7.C4	Bracket relay / Fuse	1000385694
K088	+FRW6	/7.A4	Bracket relay / Fuse	1000385304
K114	+FRW6	/7.C6	Bracket relay / Fuse	1000385694
K130	+FRW6	/7.C4	Bracket relay / Fuse	1000385694
K131	+FRW6	/7.B5	Bracket relay / Fuse	1000385300
K146	+FRW6	/7.C6	Bracket relay / Fuse	1000385694
-K001	+FRW6	/19.C1	High-current relay	1000027074

project: \\wnad.
active Option:
replace for Mat.-Nr:
Version SAP: 02 Version DS:

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	date	name
User		
Proved		

itemregister
-
Mat. -Nr. 1000426534
Doc. -Nr. 2060133071

Revision:
replace for Rev.
Message No
32
A3

Sheet	SheetName 1	SheetName 2
33	itemregister	-
34	itemregister	-
35	itemregister	-
36	itemregister	-
37	itemregister	-
38	itemregister	-
39	itemregister	-
40	itemregister	-
41	itemregister	-
42	itemregister	-

project:	\\wnad.		
active Option:			
replace for Mat.-Nr:			
Version SAP:	02	Version DS:	

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Wacker Neuson Linz GmbH
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	date	name
User		
Proved		

contents
-

Mat. -Nr. 1000426534

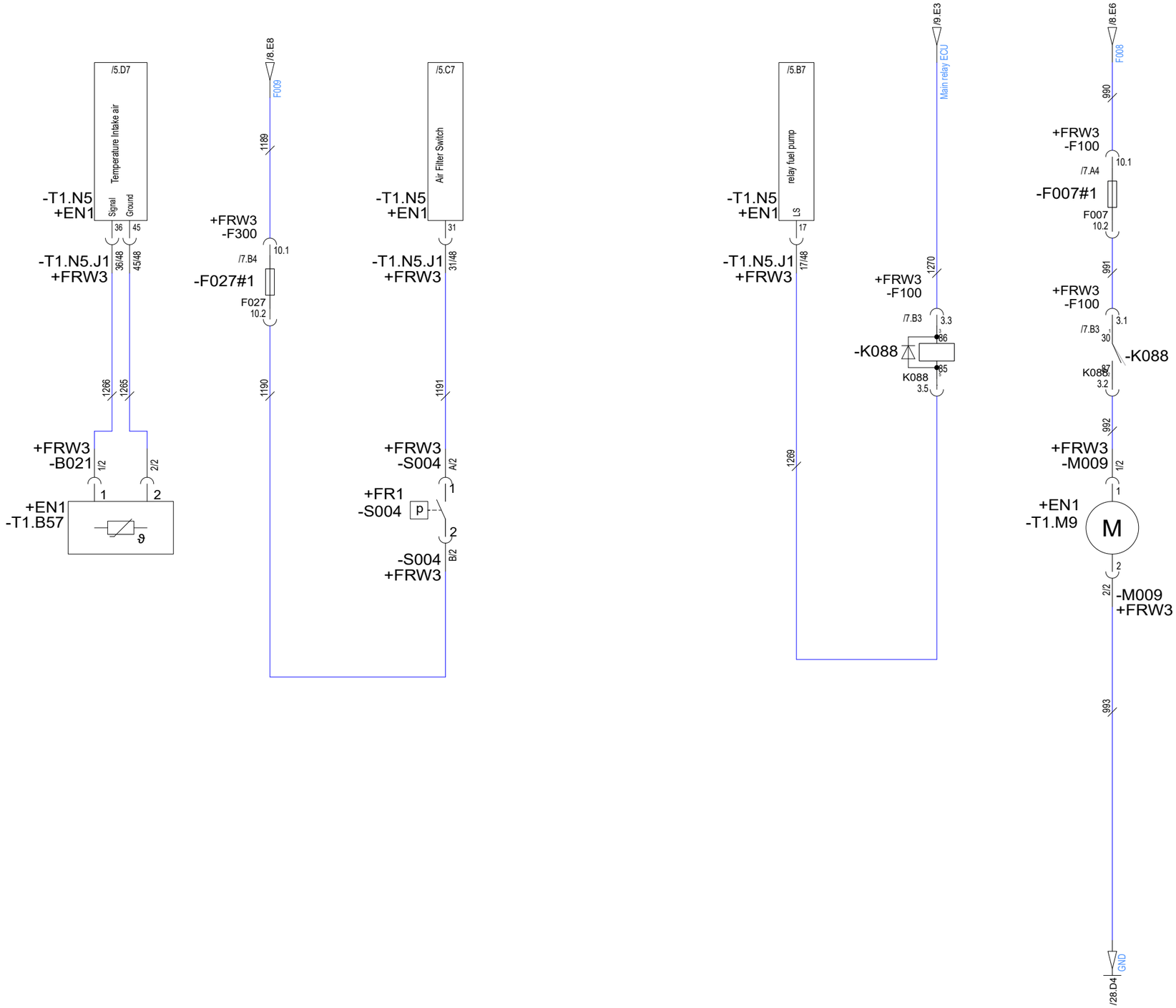
Doc. -Nr. 2060133071

Revision:	
replace for Rev.	
Message No	3
	A3

Temperature sensor intake

Dirty air filter

Fuel lift pump



project:	\\wnad.		
active Option:	403 J/F E17T + Kabine		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	02

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	date	name
User	15.10.2020	LNZgrosl
Proved	15.10.2020	LNZhartp

IO Dieselmotor
IO Dieselmotor

Mat.-Nr. 1000426534
Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338

13

A3

1615317427

KL15

/21.F8 F014 1040 +FRW3 -F300 /7.C3 4.1 30 -K030 87 K030 4.2 1052 +FRW3 -XS02 1/8 -XS02 +RBW1 1/8 424

/4.C4 OUT_26 -N001 +FR1 Bremslicht 93 -N001.1 +FRW3 93/96 1408 +FRW3 -F300 /7.B3 4.3 86 -K030 85 K030 4.5

/22.D3 F020 1405 +FRW3 -XS02 2/8 -XS02 +RBW1 2/8 426

/22.D5 F019 1404 3/8 -XS02 +RBW1 3/8 425

/21.F5 Blinker Rechts 1387 +FRW3 -XS02 4/8 -XS02 +RBW1 4/8 422

/21.F5 Blinker Links 1388 5/8 -XS02 +RBW1 5/8 423

/4.C4 OUT_25 -N001 +FR1 Rückwärts 94 -N001.1 +FRW3 94/96 1410 +FRW3 -F200 /7.B6 5.3 86 -K003 85 K003 5.5

/8.E8 F009 1035 +FRW3 -F200 7.1 /7.B6 -F010#1 F010 7.2 1036 +FRW3 -F200 /7.B6 5.1 30 -K003 87 K003 5.2 1037 +FRW3 -SP16 1038 +FRW3 -XS02 6/8 -XS02 +RBW1 6/8 427

1039 2249

424,428 +RBW1 -SP04 +RBW1 -SP03 +RBW1 -SP01 +RBW1 -SP02 +RBW1 -SP06 +RBW1 -SP05 418

+RBW1 -B003 2/2 +FR1 -B003 2 1 -B003 +RBW1 1/2 415

+FRW3 -XE10 8/10

428 429 430 432 431 417 +RBW1 -XX00 1/6 2/6 3/6 4/6 5/6 6/6 Power outlet Trailer 1000300747

1409 442 441 +RBW1 -E16 1/1 +FR1 -E016.1 +FR1 -E016.2 1/1 Chassis -E16.3 +RBW1 1/1 -E16.4 +RBW1 1/1 411 412

433 434 435 436 +RBW1 -H078 6/6 +FR1 -H078 H027 GND 5/6 H030 GND 3/6 E004 GND 1/6 H020 GND -H078 +RBW1 4/6 413

1411

437 438 439 440 +RBW1 -H079 5/6 +FR1 -H079 H021 GND 3/6 E002 GND 1/6 H031 GND 6/6 H025 GND -H079 +RBW1 4/6 414

/28.A4 GND /28.C6 GND /28.A3 GND /28.A3 GND /28.A4 GND /28.C6 GND /28.A3 GND /28.A3 GND /14.A3 Reversing light

project:	\\wnad.		
active Option:	403 J/F E17T + Kabine		
replace for Mat.-Nr:	---		
Version SAP:	02	Version DS:	02

Wacker Neuson Group
Wacker Neuson Linz GmbH
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	date	name
User	15.10.2020	LNZgrosl
Proved	15.10.2020	LNZhartp

STVO Beleuchtung
Heck

Mat.-Nr. 1000426534 Doc.-Nr. 2060133071

Revision:	00
replace for Rev.	00
Message No	700018338
	23
	A3

1615317427

DevDes	Location	Position	device designation	item number
-GND	+FR1	/8.F2	Earth	
-GND	+FRW3	/28.F1	Earth	1000346811
-GND1	+FR1	/28.F1	Earth	
-GND2	+FRW3	/28.F1	Earth	1000107754
-GND3	+FRW3	/28.D1	Earth Display	1000027435
-GND3.1	+FRW8	/28.D1	Earth Display	1000085008
-GND3.2	+FRW8	/28.C1	Earth Display	1000050027
-H028	+BA1	/24.D4	Rotating beacon	1000314938
-H028.1	+CBW1	/24.D4	connector Rotating beacon	1000027435
-H028.2	+CBW1	/24.E4	connector Rotating beacon	1000095370
-H029	+BA1		Rotating beacon green	
-H029.1	+CBW1	/24.C2	connector Rotating beacon green	1000027435
-H029.2	+CBW1	/24.D2	connector Rotating beacon green	1000095370
-H078	+FR1	/23.E5	Combined rear left light	1000148542
-H078	+RBW1	/23.E5	connector Combined rear left light	1000027431
-H079	+FR1	/23.E7	Combined rear right light	1000148543
-H079	+RBW1	/23.E7	connector Combined rear right light	1000027431
-H088	+FB1	/22.E6	Combined front left light	1000276032
-H088	+FBW1	/22.E6	connector Combined front left light	1000027431
-H089	+FB1	/22.E7	Combined front left light	1000276034
-H089	+FBW1	/22.E7	connector Combined front left light	1000027431
K001	+FRW3	/7.B5	Bracket relay / Fuse	1000385300
K003	+FRW3	/7.B5	Bracket relay / Fuse	1000385300
K005	+FRW3	/7.A4	Bracket relay / Fuse	1000385304
K007	+FRW3	/7.A4	Bracket relay / Fuse	1000385304
K011	+FRW3	/7.C6	Bracket relay / Fuse	1000385694
K011.1	+FRW3	/7.C6	Bracket relay / Fuse	1000385694
K012	+FRW3	/7.C6	Bracket relay / Fuse	1000385694
K030	+FRW3	/7.C4	Bracket relay / Fuse	1000385694
K042	+FRW3	/7.B5	Bracket relay / Fuse	1000385300
K062	+FRW3	/7.C4	Bracket relay / Fuse	1000385694

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9 Options

9.1 Drive interlock

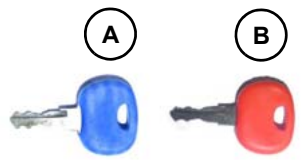

Fig. 390 Keys

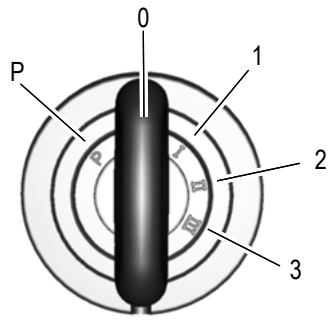

Fig. 391 Coding keys (symbolic representation)

A = starting key (blue)

For starting the vehicle. Scope of delivery includes 2 keys.

B = master key (red)

Information

Store the master key in a safe place. It is only used for coding new keys. All coded keys are deleted if the key remains in position 1 for more than 20 seconds.
A new immobilizer must be installed if the master key is lost.

The machine can be started without performing any further settings.

Coding a new key

1. Insert master key **B** in the starter.
2. Turn the starting key to position **1** for a maximum 5 seconds.
3. Turn the starting key to position **0**, remove master key **B** and put it at least 50 cm away from the starter.
4. Now insert the new key or the key requiring coding in the ignition lock and turn it to position **1** within 15 seconds.
5. This action registers the key.

The procedure is automatically canceled if no key requiring coding is detected by the system within 15 seconds. Several keys requiring coding can be inserted one after another in the starter. Each key must then remain at least 1 second in position **1**. Coding can be performed for a maximum 10 keys.

Deleting coded keys

Deleting coded keys is necessary whenever a coded key is lost.

The master key code is not deleted during deletion.

1. Insert master key **B** in the starter.
2. Turn the starting key to position **1** for a minimum 20 seconds.
3. All coded keys are deleted after 20 seconds, and all existing keys can be re-coded.

Supply (electrical system)	G	517550-517599		
Generator	G001	517550		
Battery	G002	517551		
Transformer	G003	517552		
Transformer II	G004	517553		
Transformer III	G005	517554		
Transformer IV	G006	517555		
Transformer V	G007	517556		
Transformer VI	G008	517557		
Transformer	G009	517558		
On-board battery charger	G011	517560		0x1A
USB charger	G012	517561		
On-board battery charger 2	G014	517563		0x8C
Li-ion traction battery with built-in controller	G015	517564		0x5B
On-board battery charger 3	G016	517565		0x8D
Indicator lights (electrical system)	**H**	**517600-517799**		
High beam indicator light	H001	517600		
Preheating indicator light	H002	517601		
Engine temperature indicator light	H003	517602		
Engine oil pressure indicator light	H004	517603		
Alternator charge function indicator light	H005	517604		
Air filter indicator light	H006	517605		
Hydraulic oil filter indicator light	H007	517606		
Hydraulic oil temperature indicator light	H008	517607		
Safe load indicator light	H009	517608		
Hose burst valve indicator light	H010	517609		
3rd control circuit indicator light	H011	517610		
Differential lock indicator light	H012	517611		
Check four-wheel steering	H013	517612		
Front axle steering indicator light	H014	517613		
Synchronism indicator light	H015	517614		
Forward travel indicator light	H016	517615		
Reverse travel indicator light	H017	517616		
Check parking brake	H018	517617		
Pressure accumulator indicator light (brake)	H019	517618		
Brake lights	H020	517619		
Brake lights	H021	517620		
Machine turn indicator light	H022	517621		
Rear attachment turn indicator light	H023	517622		
Front right turn indicator	H024	517623		
Rear right turn indicator	H025	517624		
Front left turn indicator	H026	517625		
Rear left turn indicator	H027	517626		

Fuel preheater	R009	519909		
Mirror heating	R010	519910		
Accelerator pedal	R011	519911		
Manual throttle	R012	519912		
Tilt in/out potentiometer	R013	519913		
Raise/lower potentiometer	R014	519914		
Raise/lower potentiometer signal 2	R014.2	521207		
Potentiometer (raise/lower right stabilizer leg)	R015	519915		
Potentiometer (raise/lower left stabilizer leg)	R016	519916		
Bus terminating resistance	R017	519917		
Bus terminating resistance	R018	519918		
Potentiometer (oil quantity for additional control circuit)	R019	519919		
Resistor for hydraulic motor speed sensor	R020	519920		
Pull up resistor	R021	519921		
Mirror heating	R022	519922		
Potentiometer for boom monitoring	R023	519923		
		519954		
Resistor	R024	519924		
Resistor	R025	519925		
Bus terminating resistance	R026	519926		
Bus terminating resistance	R027	519927		
Potentiometer for auxiliary hydraulics (joystick rocker switch)	R028	519928		
Potentiometer for 3rd control circuit (joystick rocker switch)	R029	519929		
Potentiometer (retract/extend potentiometer)	R030	519930		
DPF glow plug	R031	519931		
Heated seat	R032	519932		
Bus terminating resistance	R033	519933		
Bus terminating resistance	R034	519934		
120 Ohm resistance	R035	519935		
Levelling potentiometer	R036	519936		
		519955		
Resistor module	R037	519937		
Resistor module	R038	519938		
Air intake panel heater	R041	519942		
Heating (conveying module)	R042	519943		
Heating line (pressure line)	R043	519944		
Heating line (suction line)	R044	519945		
Heating line (return line)	R045	519946		
Window heating	R046	519947		
Potentiometer lifting arm monitoring signal 2	R023.2	519948		
Heating engine ventilation	R047	519949		
Heat Valve Control	R049	521201		
Resistor module	R050	521202		