4.3 Fault codes

ESX error code - list

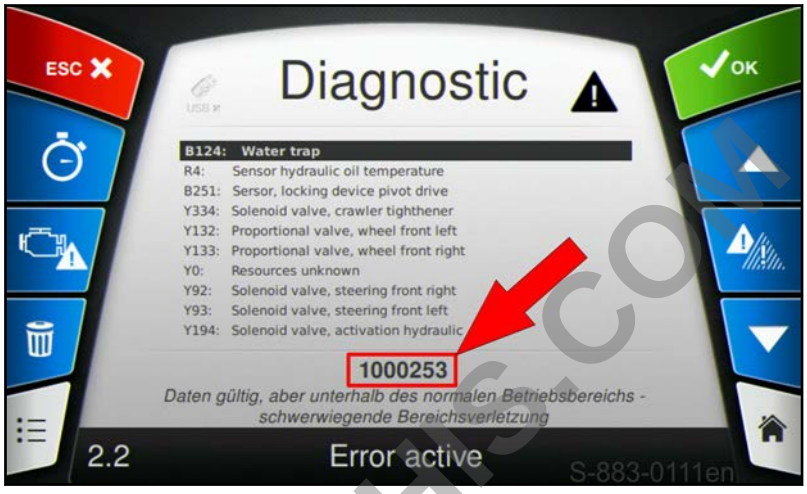


Fig. 46: Example fault code reading in machine display

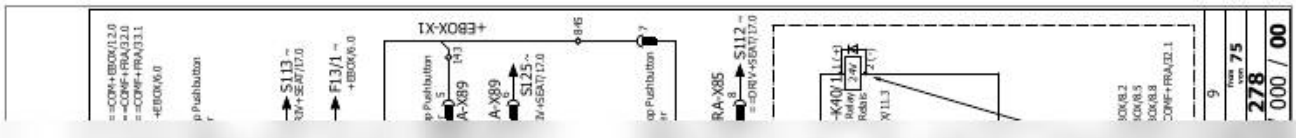
The fault codes can be read in the display of the machine.

Error code ESX	Operating means		Description of fault
1000000	A034	Control unit	Data valid, but above normal operating range - severe infringement of range
1000001	A034	Control unit	Data valid, but below normal operating range - severe infringement of range
1000002	A034	Control unit	Data change erratically or incorrectly
1000003	A034	Control unit	Voltage above normal range or short circuit to (+) potential
1000004	A034	Control unit	Voltage below normal range or short circuit to ground
1000005	A034	Control unit	Current too low or interruption of power
1000006	A034	Control unit	Current too low or short circuit to ground
1000007	A034	Control unit	Mechanical system does not respond or is not adjusted
1000008	A034	Control unit	Frequency, pulse width or period duration not normal
1000009	A034	Control unit	Updating rate not normal
1000010	A034	Control unit	Signal change not normal
1000011	A034	Control unit	Unknown cause
1000012	A034	Control unit	Malfunctioning device or component
1000013	A034	Control unit	Not calibrated
1000014	A034	Control unit	Special instruction

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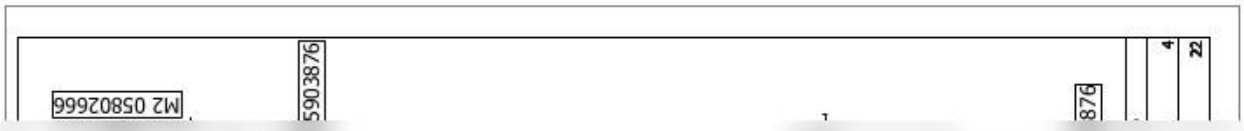
Circuit diagrams



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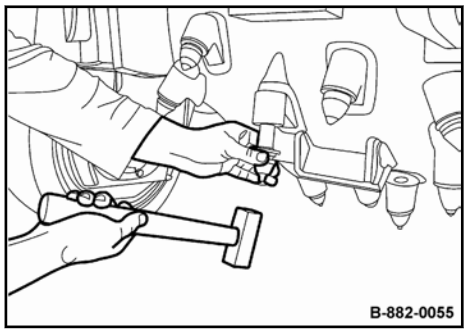


Fig. 162

6. Knock in the new cutting tools fully with a copper or plastic hammer and check whether the cutting tool can rotate freely.

8.3.2.3 Changing the milling drum

Protective equipment:
- Protective gloves
- Safety shoes

1. Park the machine horizontally on level and firm ground.
2. Swivel in the crawler track drive.
3. Move the scraper to maintenance position.
4. Turn the ignition key to position "0" and pull it out.

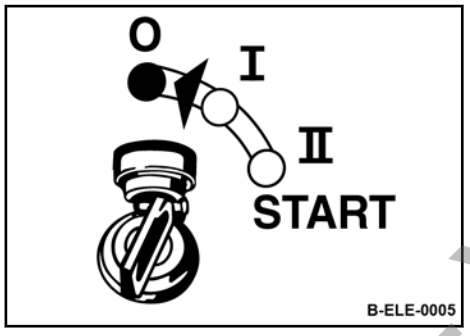


Fig. 163

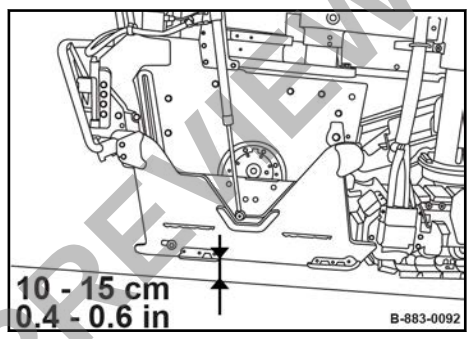


Fig. 164

5. Lift or lower the machine at the rear, until the milling box door is approx. 10 - 15 cm (0.4 - 0.6 in) above the ground.

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28 **S55** - Travel lever
29 **S54** - Travel speed range selector switch milling
30 **S159** - Rotary switch for operating modes milling/transport
31 **S148** - Rotary switch milling speed

Installation location of control unit MTU

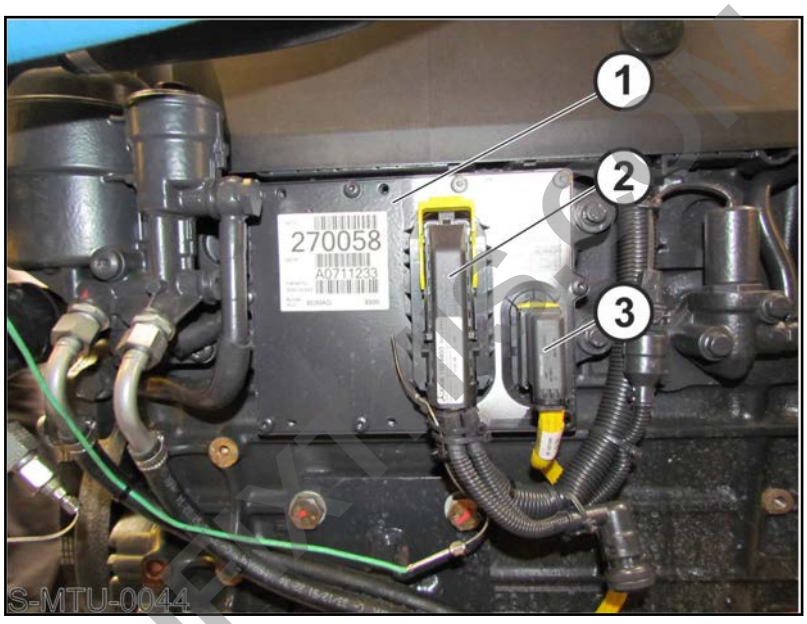


Fig. 13

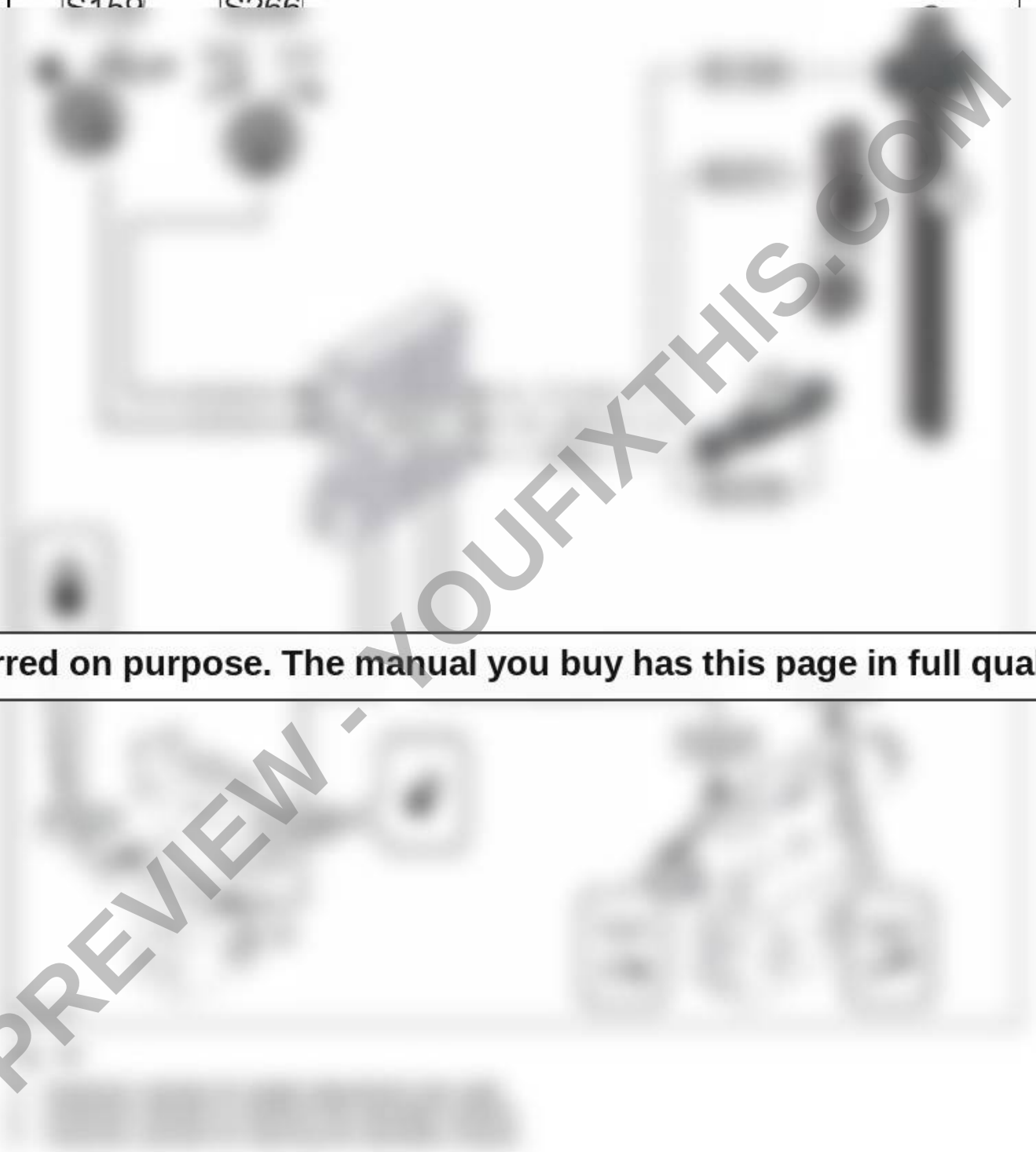
1 Electronic engine management system
2 Connection of engine control (MR)
3 Connection of the adaptation module (ADM)

The engine control unit is located on the front of the engine, when viewed in travel direction.

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Slewable chassis - Electrics diagram



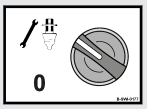
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4.2.25 Functional conditions - Tool change

Function	Machine status
Approach tool change position	Possible under any operating condition

Conditions		Switch/sensor			Valve		
		Designation	Terminal	Nominal value	Designation	Terminal	Nominal value
=	Operating the tool change switch	**S56** 	X1:847	≥ 24V	**K50**	K50:86	≥ 24V

Result

The machine changes to a secure condition:

- The travel system is switched off (the solenoid valves for the travel system are **isolated** from the power supply)
- The parking brake is applied
- The milling drum is disengaged
  - The clutch solenoid is no longer energized
  - If the `Pause` function is active, it will be switched off
- The belt tensioner for the milling drive belt is slackened. Diesel engine unable to transfer drive torque.
- All other still active functions (conveyor belt, water injection, extraction, ...) will be switched off
- The machine is lifted by the posts
- The post adjustment is deactivated:
  - The post solenoids are no longer energized
  - The lowering brakes are closed
- The scraper is raised to maximum position (the mechanical interlock engages, the limit switch of the scraper is actuated)
- Lateral and rear warning lamps flash
- The side doors are raised to maximum position and locked in this position
- The diesel engine is shut down (warning lamps are deactivated)
- The motor-pump unit and the associated hydraulic valves are released to drive the milling drum
- The selector switch `Rotor rotation forwards/reverse` is enabled

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Error code ESX	Operating means		Description of fault
1000735	S266	Switch, folding of wheel	Data valid, but above normal operating range - moderate infringement of range
1000736	S266	Switch, folding of wheel	Data valid, but below normal operating range - minor infringement of range
1000737	S266	Switch, folding of wheel	Data valid, but below normal operating range - moderate infringement of range
1000738	S269	Control lever for height adjustment rear left	Data valid, but above normal operating range - severe infringement of range
1000739	S269	Control lever for height adjustment rear left	Data valid, but below normal operating range - severe infringement of range
1000740	S269	Control lever for height adjustment rear left	Data change erratically or incorrectly
1000741	S269	Control lever for height adjustment rear left	Voltage above normal range or short circuit to (+) potential
1000742	S269	Control lever for height adjustment rear left	Voltage below normal range or short circuit to ground
1000743	S269	Control lever for height adjustment rear left	Current too low or interruption of power
1000744	S269	Control lever for height adjustment rear left	Current too low or short circuit to ground
1000745	S269	Control lever for height adjustment rear left	Signal change not normal
1000746	S269	Control lever for height adjustment rear left	Unknown cause
1000747	S269	Control lever for height adjustment rear left	Malfunctioning device or component
1000748	S269	Control lever for height adjustment rear left	Not calibrated
1000749	S269	Control lever for height adjustment rear left	Special instruction
1000750	S269	Control lever for height adjustment rear left	Data valid, but above normal operating range - minor infringement of range
1000751	S269	Control lever for height adjustment rear left	Data valid, but above normal operating range - moderate infringement of range
1000752	S269	Control lever for height adjustment rear left	Data valid, but below normal operating range - minor infringement of range
1000753	S269	Control lever for height adjustment rear left	Data valid, but below normal operating range - moderate infringement of range
1000754	S270	Control lever for height adjustment rear right	Data valid, but above normal operating range - severe infringement of range
1000755	S270	Control lever for height adjustment rear right	Data valid, but below normal operating range - severe infringement of range

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Error code ESX	Operating means		Description of fault
1001538	Y284	Valve, lower right side door	Signal change not normal
1001539	Y284	Valve, lower right side door	Unknown cause
1001540	Y284	Valve, lower right side door	Malfunctioning device or component
1001541	Y284	Valve, lower right side door	Not calibrated
1001542	Y284	Valve, lower right side door	Special instruction
1001543	Y284	Valve, lower right side door	Data valid, but above normal operating range - minor infringement of range
1001544	Y284	Valve, lower right side door	Data valid, but above normal operating range - moderate infringement of range
1001545	Y284	Valve, lower right side door	Data valid, but below normal operating range - minor infringement of range
1001546	Y284	Valve, lower right side door	Data valid, but below normal operating range - moderate infringement of range
1001547	Y284	Valve, lower right side door	Received data / network faulty
1001548	Y284	Valve, lower right side door	Data drifting upwards
1001549	Y284	Valve, lower right side door	Data drifting downwards
1001550	Y285	Valve side plate right floating position	Data valid, but above normal operating range - severe infringement of range
1001551	Y285	Valve side plate right floating position	Data valid, but below normal operating range - severe infringement of range
1001552	Y285	Valve side plate right floating position	Data change erratically or incorrectly
1001553	Y285	Valve side plate right floating position	Voltage above normal range or short circuit to (+) potential
1001554	Y285	Valve side plate right floating position	Voltage below normal range or short circuit to ground
1001555	Y285	Valve side plate right floating position	Current too low or interruption of power
1001556	Y285	Valve side plate right floating position	Current too low or short circuit to ground
1001557	Y285	Valve side plate right floating position	Mechanical system does not respond or is not adjusted
1001558	Y285	Valve side plate right floating position	Frequency, pulse width or period duration not normal
1001559	Y285	Valve side plate right floating position	Updating rate not normal
1001560	Y285	Valve side plate right floating position	Signal change not normal
1001561	Y285	Valve side plate right floating position	Unknown cause

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5.2.3 Operating the camera

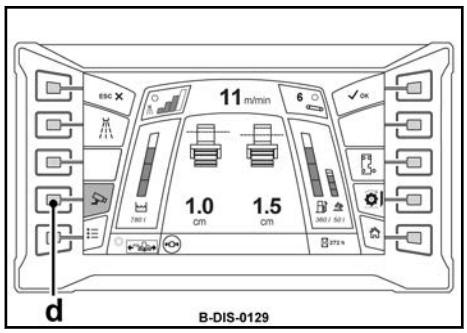


Fig. 60

1. Press the selection button **d**.

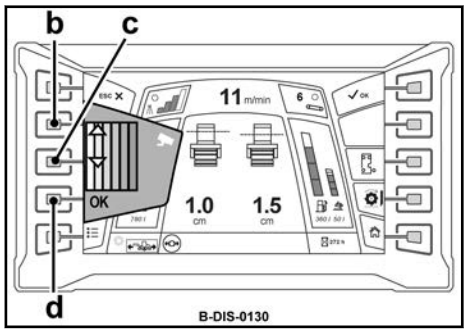


Fig. 61

2. Press the selection buttons **b** or **c** to choose the desired camera.
3. Press the selection button **d** to confirm the chosen camera.
   ⇨ The selected camera fills the display.

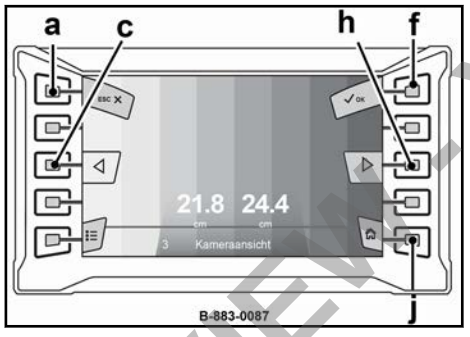


Fig. 62

4. Press the selection buttons **c** or **h** to toggle between the cameras.
5. Press selection buttons **a**, **f** or **j** to exit the camera view.

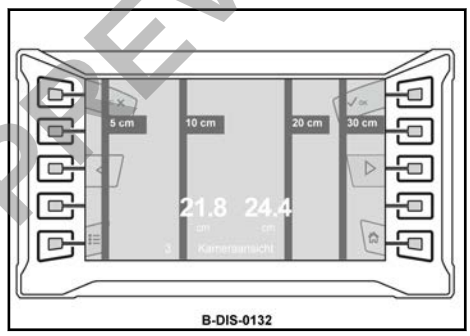


Fig. 63

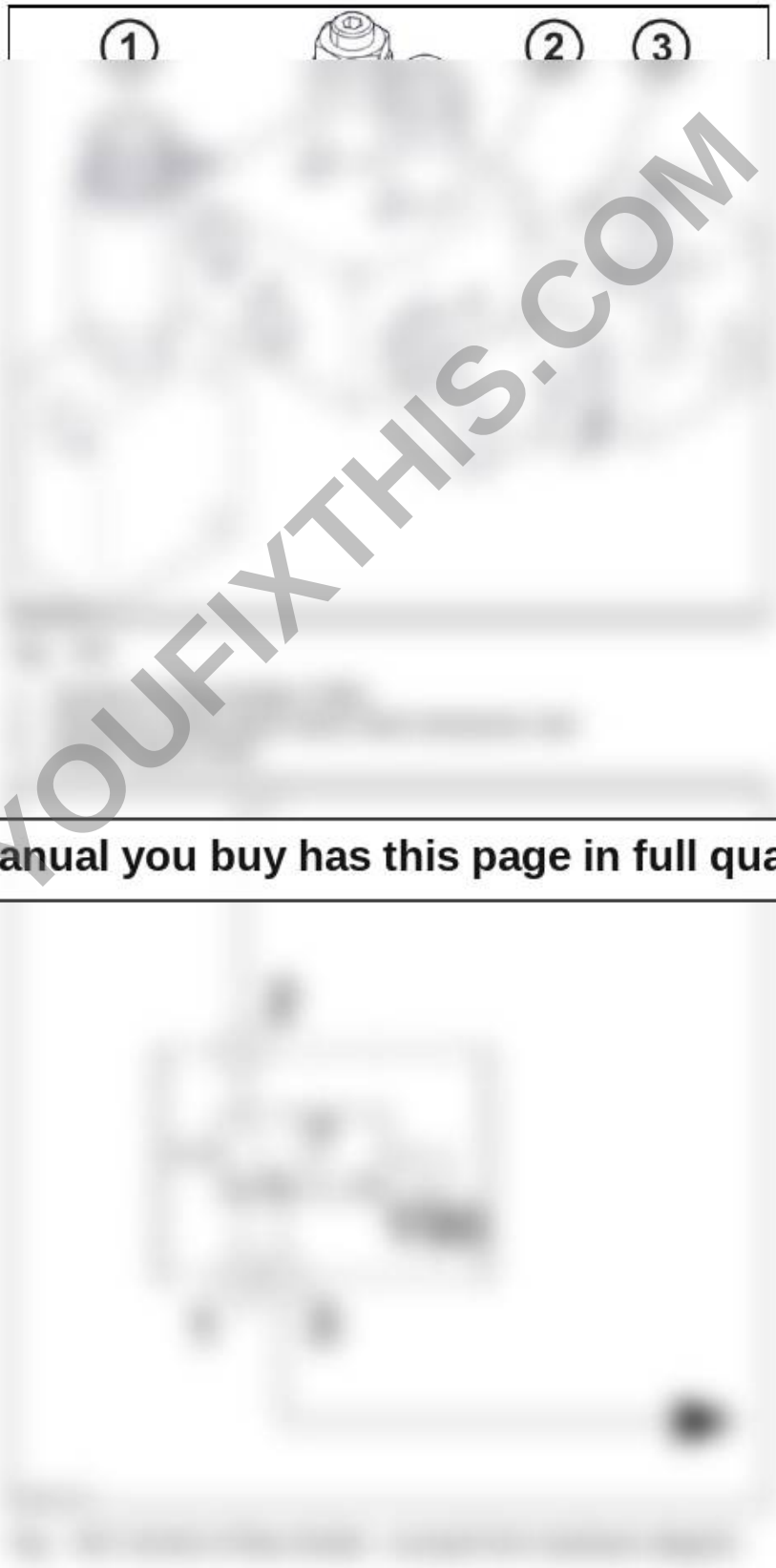
With the side plate camera *(optional equipment)* selected, additional markings for the diameter of the cutting circuit of the milling drum are displayed.

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7.1 Component description

Control for flow divider

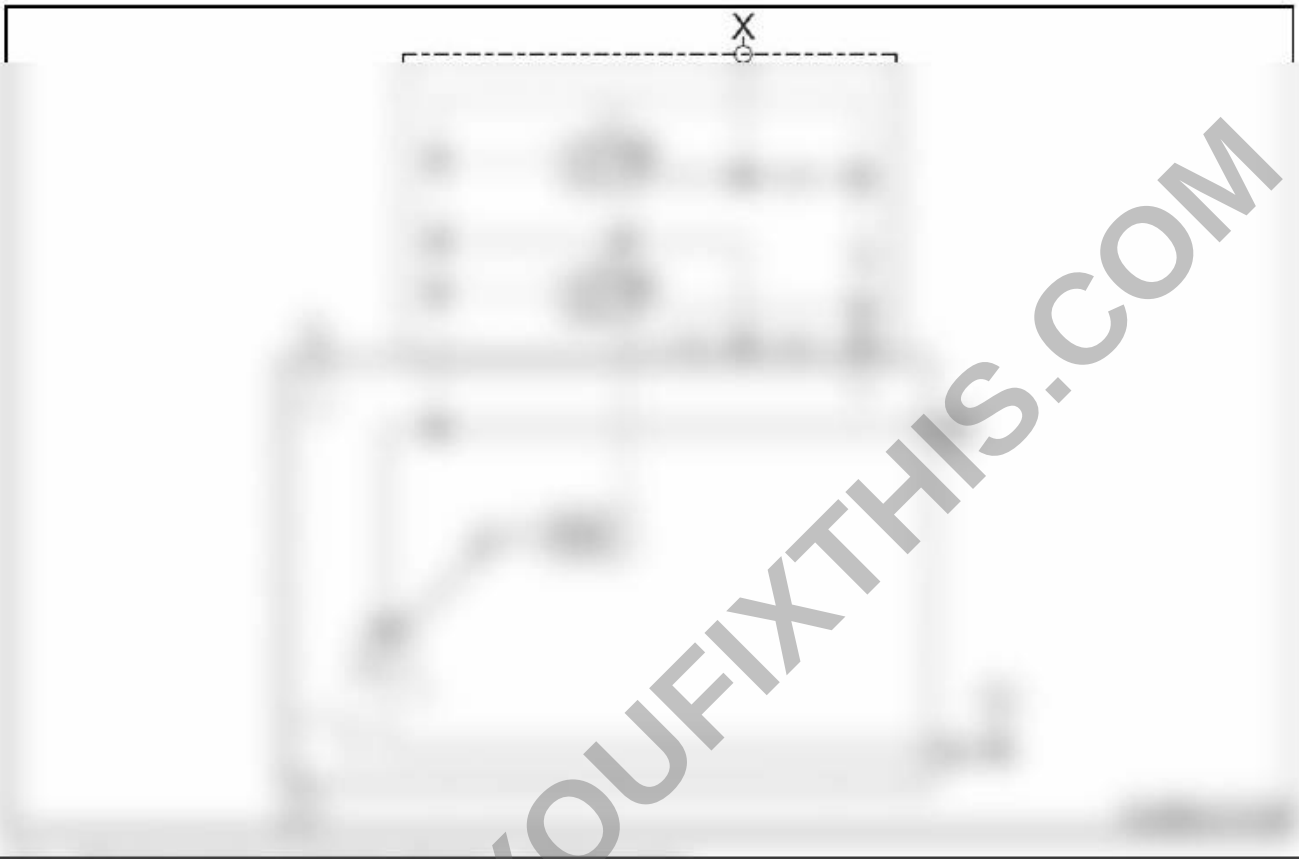


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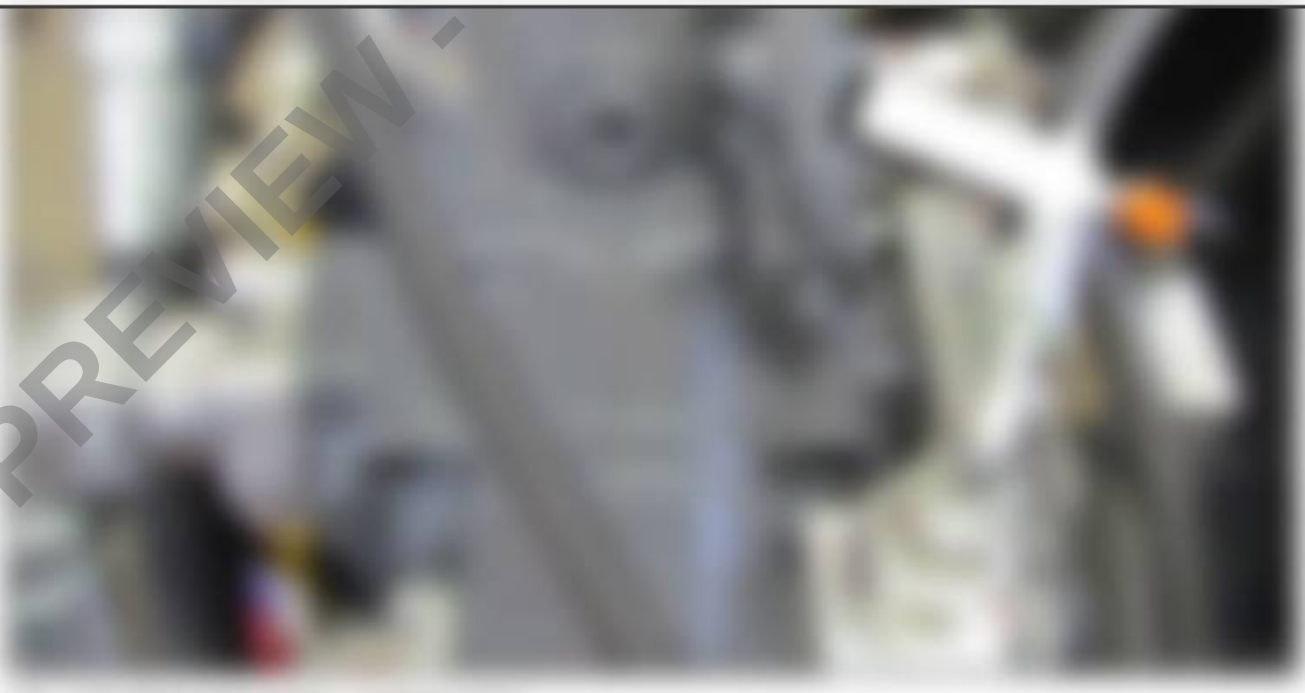
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7.5 Working pump



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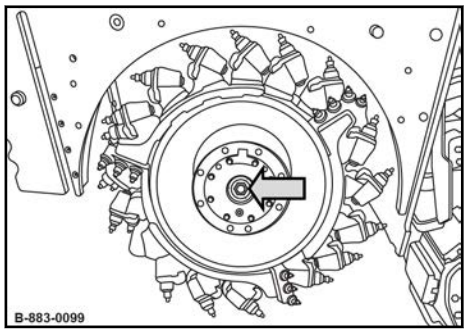


Fig. 180

25. Reassemble and fasten the central nut for the milling drum, tightening torque 700 Nm (516 ft·lbf).

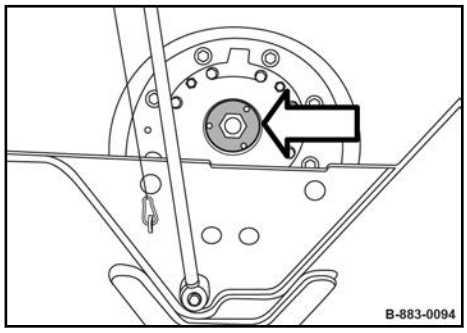


Fig. 181

26. Assemble and fasten the locking plate for the central nut on the milling drum.

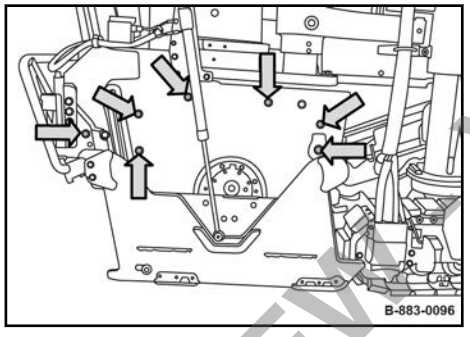


Fig. 182

27. Close and screw on the milling box door.

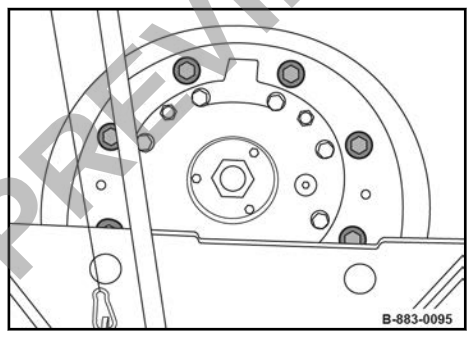


Fig. 183

28. Tighten the fastening screws on the inner rim of the milling box door.

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The extraction system mainly consists of:

- the air duct (1)
- a flexible hose (2)
- the fan housing (3)
- the baffle plate (4)

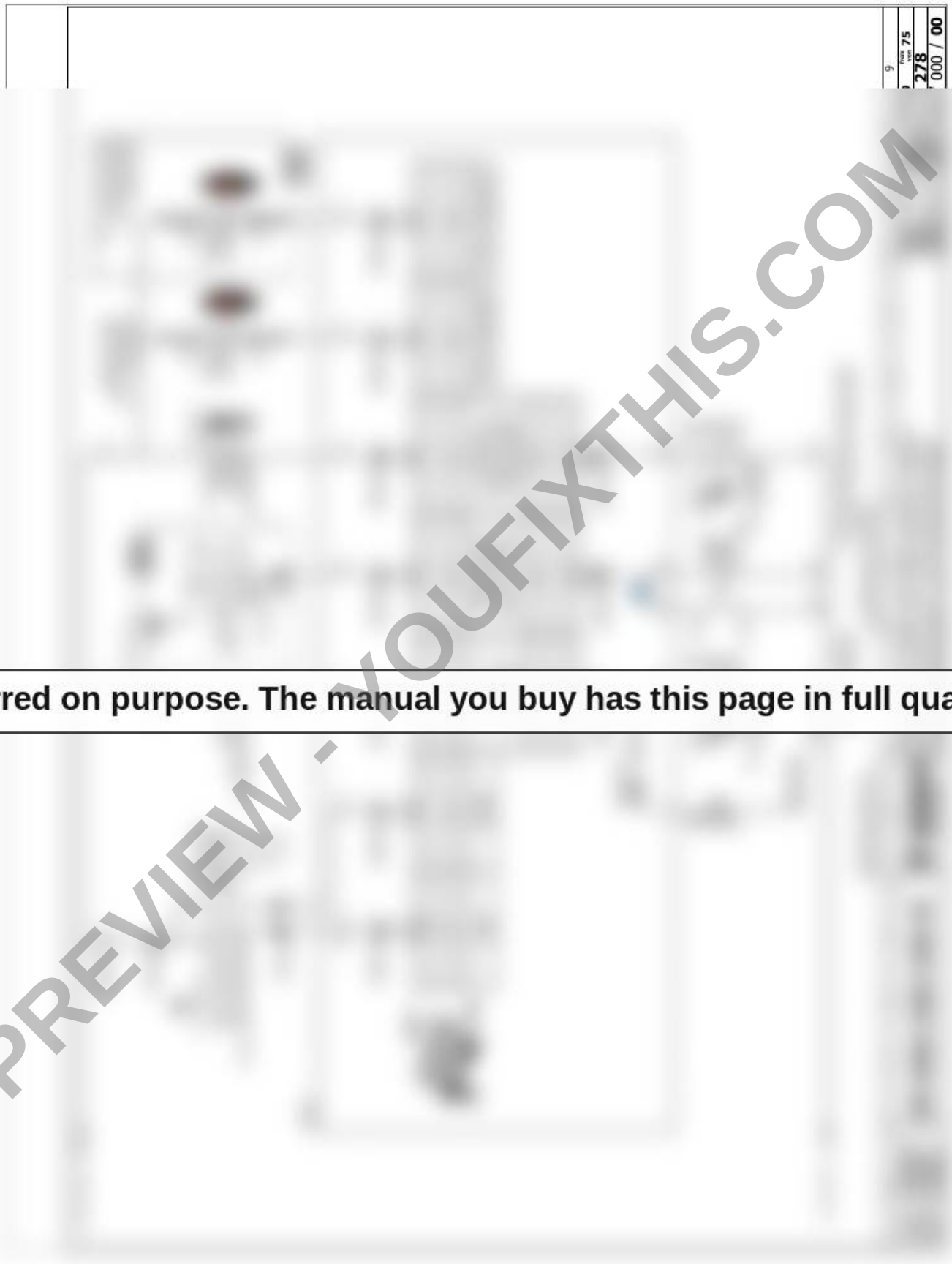
Description of function

The fan inside the fan housing (3) is driven by a hydraulic motor. This generates a vacuum above the inner conveyor belt, at the air duct (1), which extracts the dust from this location.

The dust is conveyed through the flexible hose (2) through the fan housing to the baffle plate (4), where it is blown onto the outer conveyor belt and dumped together with the milled material.

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Plug overview
Steckerübersicht

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X33/A	=BM+FRA	connector conveyor belt Stecker Förderband

Contact Kontakt	Page Blatt	Path Pfad
1	28	4
2	28	4
3	28	4
4	28	4
5	28	4
6	28	4
7	28	4
8	26	8
9	26	9
10	26	8
11	28	4
12	28	4

Type Typ: ILME

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X33/B	=BM+FRA	connector conveyor belt Stecker Förderband

Contact Kontakt	Page Blatt	Path Pfad
1	28	4
2	28	4
3	28	4
4	28	4

Type Typ: ILME

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X34	=BM+CONV	Connector camera Stecker Kamera

Contact Kontakt	Page Blatt	Path Pfad
1	28	5
2	28	4
3	28	5
4	28	5
5	28	5

Type Typ: Kabeldose Mini DIN W

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X35	=BM+SEAT	connector seat heating Stecker Sitzheizung

Contact Kontakt	Page Blatt	Path Pfad
1	33	9
2	33	9

Type Typ: AMP 2-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X36	=BM+FRA	Connector sensor side plate Stecker Sensor Seitenschild

Contact Kontakt	Page Blatt	Path Pfad
1	25	3
2	25	3

Type Typ: Deutsch DTM 2-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X37	=BM+SEAT	Connector, drive joystick Stecker Fahrhebel

Contact Kontakt	Page Blatt	Path Pfad
1	17	3
2	17	9
3	17	6
5	17	6
6	12	8
7	12	8
8	17	5
9	17	8
10	17	7
11	17	4

Type Typ: Deutsch DT 12-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X38	=BM+SEAT	Connector, drive joystick Stecker Fahrhebel

Contact Kontakt	Page Blatt	Path Pfad
3	17	8
7	17	7

Type Typ: Deutsch DT 8-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X40	=BM+FRA	Connector chain drive Stecker Fahrkette

Contact Kontakt	Page Blatt	Path Pfad
1	18	2
2	18	2
3	18	2
4	18	3
5	18	4
6	18	4

Type Typ: Deutsch DT 6-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X41	=BM+FRA	Connector chain drive Stecker Fahrkette

Contact Kontakt	Page Blatt	Path Pfad
1	18	4
2	18	4
3	18	4
4	18	4
5	18	5
6	18	5

Type Typ: Deutsch DT 6-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X42	=BM+FRA	Connector chain drive Stecker Fahrkette

Contact Kontakt	Page Blatt	Path Pfad
1	18	6
2	18	6
3	18	6
4	18	6
5	18	6
6	18	6

Type Typ: Deutsch DT 6-pol.

Designation Bezeichnung	Mounting location Einbauort	Function text Funktionstext
X46	=BM+DPL	connector control lever Stecker Steuerhebel

Contact Kontakt	Page Blatt	Path Pfad
1	22	1
2	22	1

Type Typ: Deutsch DTM 3-pol.

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0	1	2	3	4	5	6	7	8	9
Created Erstellt: M. Werner 08.09.2014 Checked Geprüft: M. Vogt 08.09.2014	BM 1000/1200/1300-35		BOMAG FAYAT GROUP	Plug diagram Steckerplan				Higher-level function Anlage = Function Funktion == Mounting location Einbauort +	Page Blatt 64 from von 75 278 EPE / 000 / 00

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