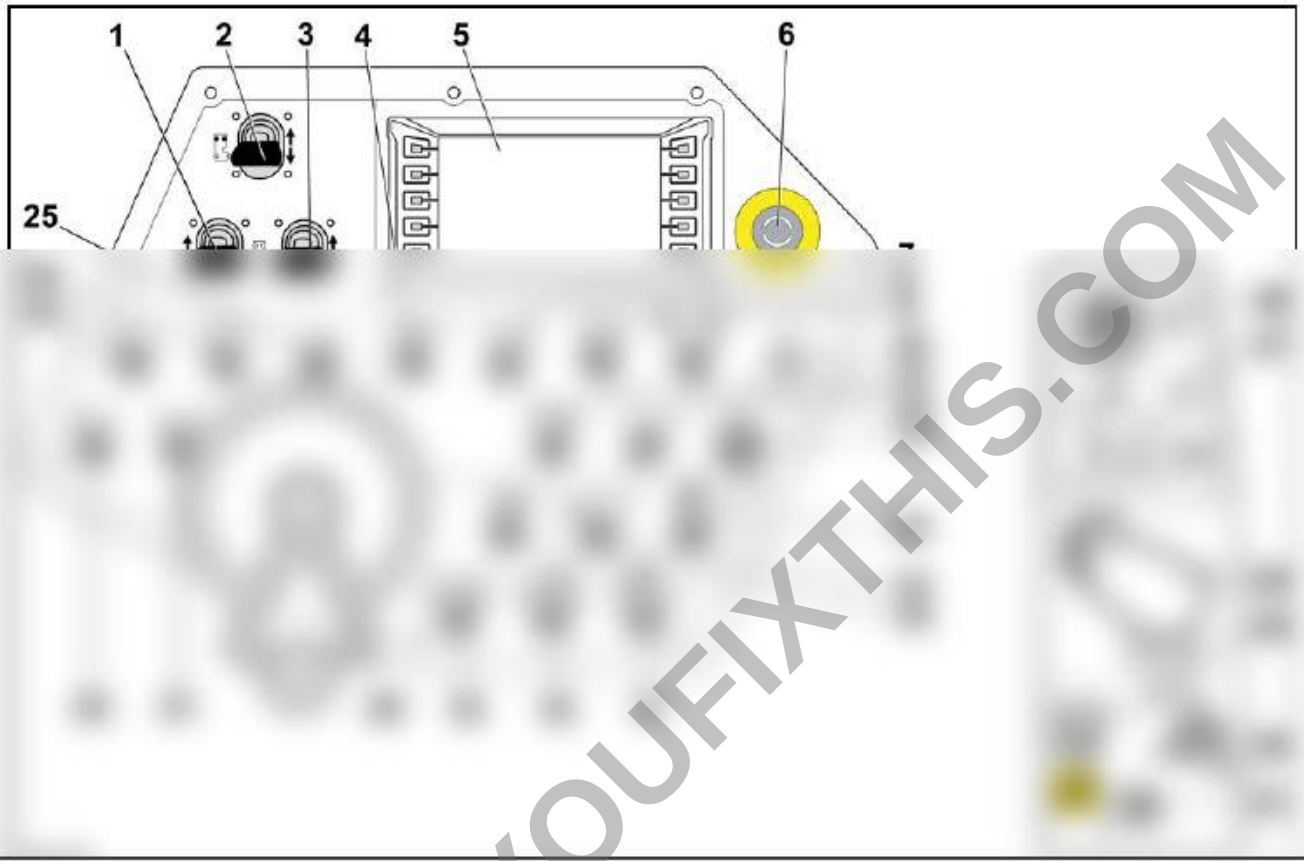
3.1 Component overview - Electrics

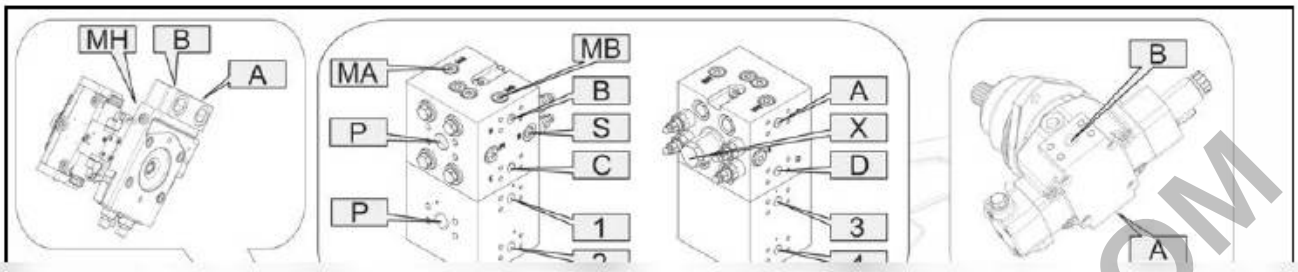


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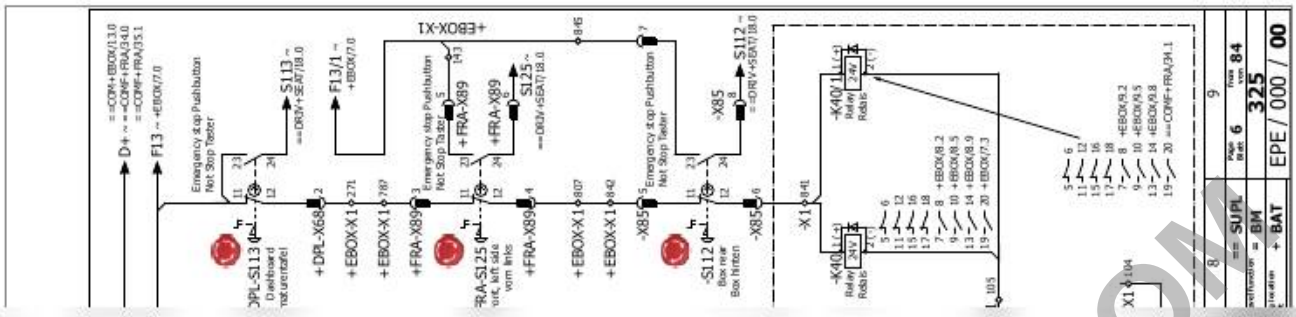
Travel system - Hydraulics



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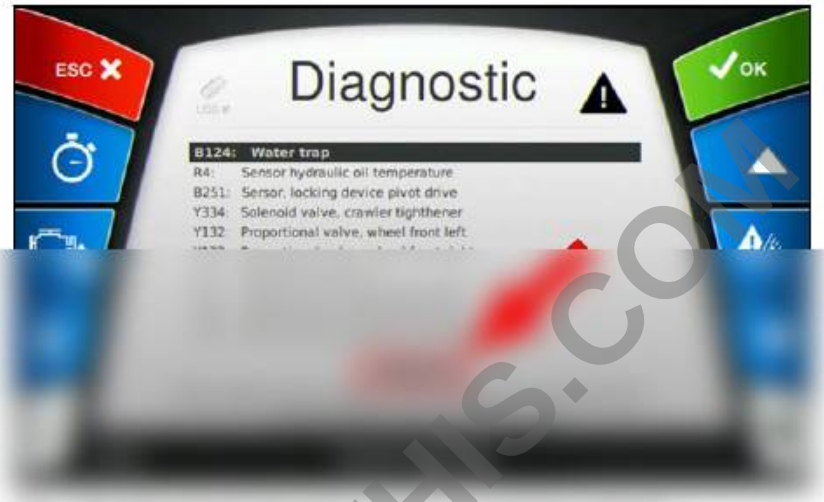
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4.3 Fault codes

ESX error code - list



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Pos.	Status	Action to be taken
C	Cutting tool with uneven, cut off wear	If the cutting tool is in this condition, the holder must perhaps also be changed, because the cutting tool cannot rotate.
D	Cutting tool showing uneven wear	The cutting tool must be replaced immediately.
E	Tool tip with eroded body.	The cutting tool must be replaced immediately.
F	Tool tip broken off.	The cutting tool must be replaced immediately.

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Montageanweisung für Anziehdrehmomente
Assembly guidelines for tightening torques

1. **Schaftschrauben** (nach N 08.001)

Die Werte gelten für Schaftschrauben mit metrischem ISO-Gewinde nach DIN 13 Teil 13, sowie Kopfauflagemaßen nach DIN 912 Zylinderschrauben, DIN 931 Sechskantschrauben mit Schaft bzw. DIN 933 Sechskantschrauben mit Gewinde bis Kopf.

1. **Bolts** (to N 08.001)

The values stated are valid for bolts with metric ISO threads to DIN 13 part 13, as well as head areas to DIN 912 socked head cap screws, DIN 931 hexagon bolt or DIN 933 hexagon bolts with threads up to the head.



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1.2.1.2 Safety regulations and environmental protection regulations for handling diesel fuel

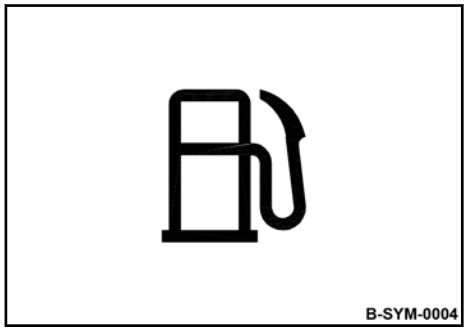


Fig. 1

WARNING!

Danger of burning by ignited diesel fuel!

– Do not allow diesel fuel to come into contact with hot components.
– Smoking and open fire is prohibited!
– Wear your personal protective outfit (protective gloves, protective clothing).

CAUTION!

Health hazard caused by contact with diesel fuel!

– Wear your personal protective outfit (protective gloves, protective clothing).
– Do not inhale any fuel fumes.
– Avoid contact.

CAUTION!

Danger of slipping on spilled diesel fuel!

– Immediately bind spilled diesel fuel with an oil-binding agent.

ENVIRONMENT!

Diesel fuel is an environmentally hazardous substance

– Always keep diesel fuel in proper containers.
– Immediately bind spilled diesel fuel with an oil-binding agent.
– Dispose of diesel fuel and fuel filters according to regulations.

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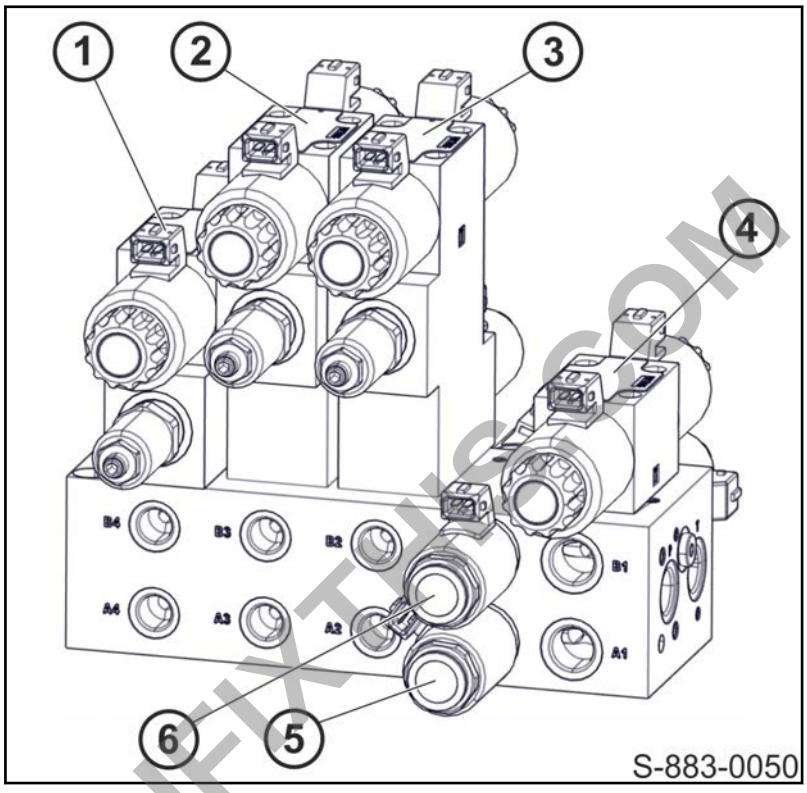


Fig. 23: Valve block for milling box control - view 1

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4.2.10 Functional conditions - Switch on conveyor belt

Function	Machine status
Switch on conveyor belt	Diesel engine running

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Error code ESX	Operating means		Description of fault
1000327	B200	Signal for post adjustment rear right	Special instruction
1000328	B200	Signal for post adjustment rear right	Data valid, but above normal operating range - minor infringement of range
1000329	B200	Signal for post adjustment rear right	Data valid, but above normal operating range - moderate infringement of range

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Error code ESX	Operating means		Description of fault
1001298	Y256	Solenoid valve, height adjustment rear right up	Malfunctioning device or component
1001299	Y256	Solenoid valve, height adjustment rear right up	Not calibrated
1001300	Y256	Solenoid valve, height adjustment rear right up	Special instruction

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Error code ESX	Operating means		Description of fault
1004485	Y248	Solenoid valve, change in sense of rotation	Not calibrated
1004486	Y277	Solenoid valve, hold-down up	Voltage above normal range or short circuit to (+) potential
1004487	Y277	Solenoid valve, hold-down up	Voltage below normal range or short circuit to ground

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6.5 Exhaust gas cleaning

Why exhaust gas cleaning?

The combustion of fuels in diesel engines results in the creation of nitrogen oxides (NO_x) on the one hand, and soot particles on the other. Both are not actually desired as exhaust fume constituents and are therefore filtered out of the exhaust gas with the help of various systems, or by chemical processes respectively.

6.5.1 Exhaust gas recirculation

Description

Exhaust gas recirculation (EGR) is required to reduce the nitrogen oxide emission. In diesel engines the EGR is one of the most important measures for reducing the nitrogen oxide emissions.

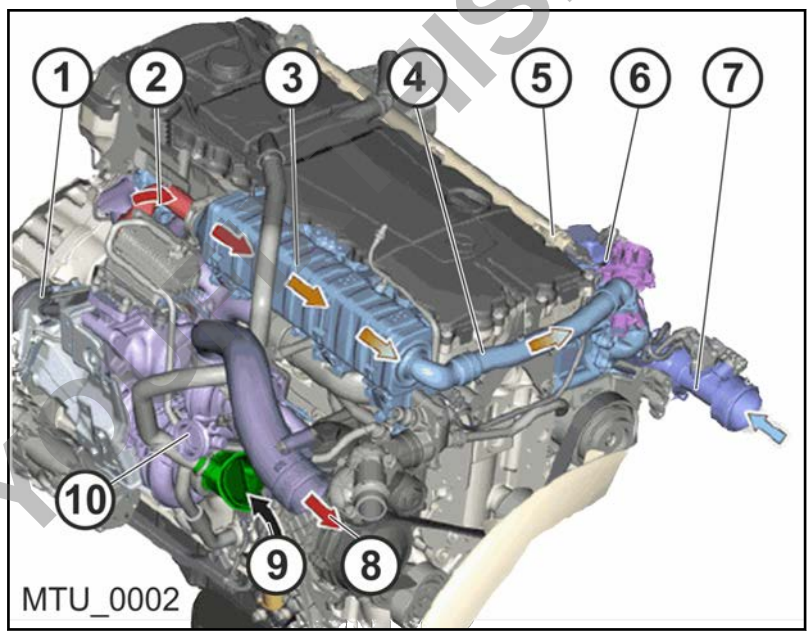


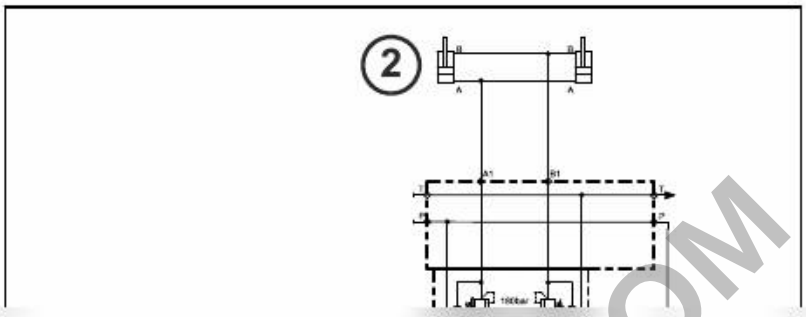
Fig. 106

1 Exhaust pipe
2 Exhaust line
3 Exhaust gas recirculation cooler
4 Exhaust recirculation line (cold)
5 Mixer housing
6 Exhaust gas recirculation actuator
7 Charge air pipe
8 Charge air from intercooler (hot)
9 Charge air from intercooler (cold)
10 Exhaust turbo charger

Function

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8.1 drive unit

8.1.1 Description

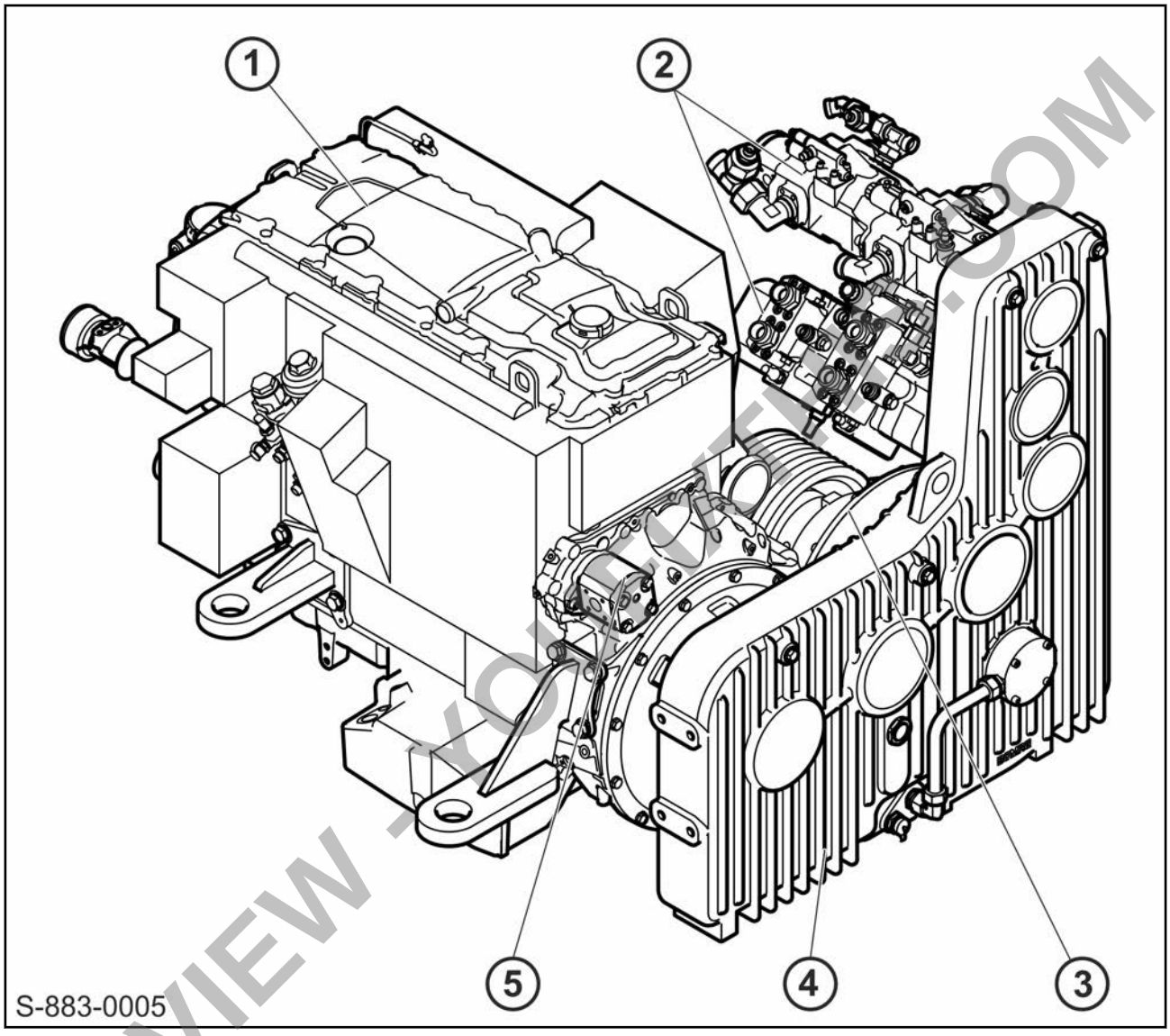


Fig. 184: Overview of drive unit

The drive unit mainly consists of:

- The diesel engine (1) *'General MTU 6R 1000' on page 252*
- The pump lines (2) *'Position of hydraulic pumps' on page 49*
- The clutch for the milling drive (3)
- The pump transfer case (4)
- Additional hydraulic pumps on PTO connections (5)

Description of drive unit

The diesel engine (1) drives the pump transfer case (4) directly. This gearbox on the one hand carries the coupling (3) to switch the milling drum on or off, and on the other hand the two pump lines (2) for the supply of the hydraulic system.

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8.5 Undercarriage

8.5.1 Description

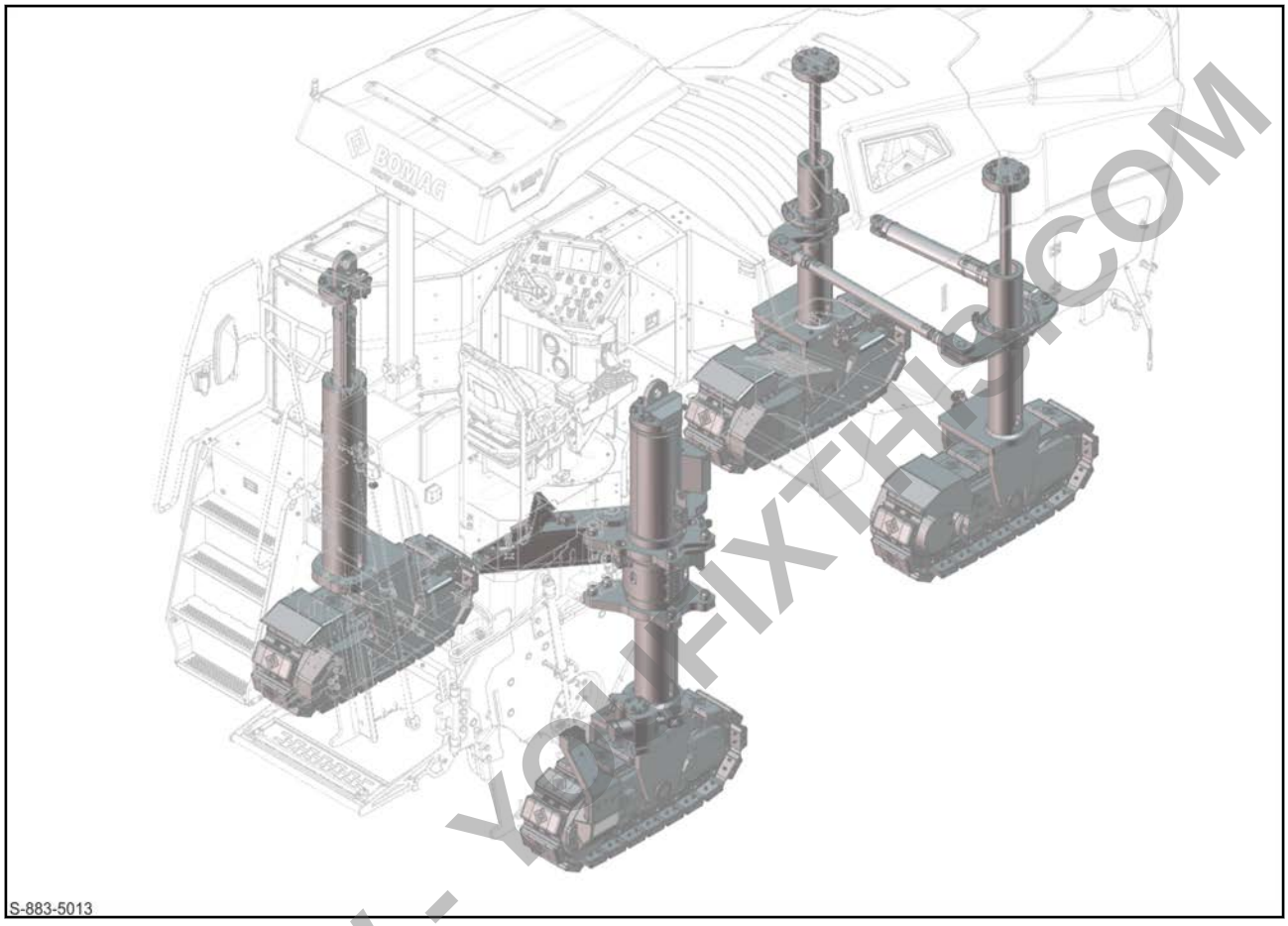


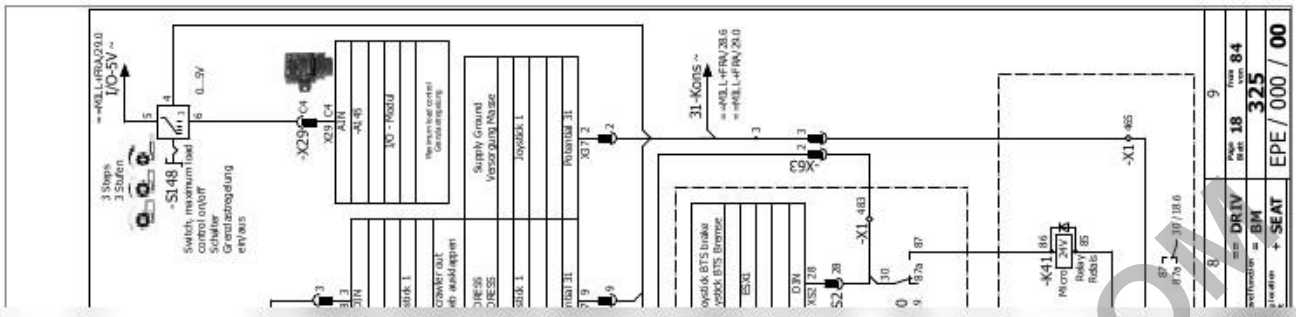
Fig. 260: Overview of crawler assembly

Description

The machine is equipped with four track chain drives. They serve the purpose of moving the machine, setting the cutting depth and compensate unevenness. All track chain drives are generally of the same design.

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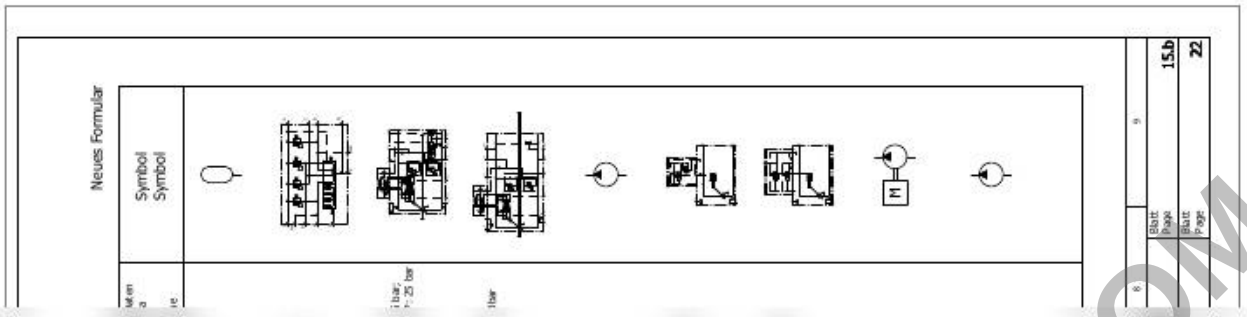


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Hydraulic diagram 310



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⚠ GEFAHR

Feuergefahr

Hydraulische Druckflüssigkeit ist brennbar.

- Halten Sie offenes Feuer von der Verstellpumpe fern.

⚠ DANGER

Danger of fire

Hydraulic fluid is inflammable.

- Keep open fires away from the variable pump.

⚠ WARNUNG

Gehörschäden

Die Geräuschemission von Axialkolbenmaschinen ist u.a. von Drehzahl, Betriebsdruck und Einbauverhältnissen abhängig. Es ist damit zu rechnen, dass der Schalldruckpegel bei normalen Einsatzbedingungen über 70 dBA steigt. Dies kann zu Gehörschäden führen.

- Schützen Sie sich stets mit Gehörschutz bei Arbeiten in der Nähe der Axialkolbenmaschine während des laufenden Betriebs.

⚠ WARNING

Danger of hearing loss

The noise emission produced by axial piston units depends on speed, operating pressure, and installation. During normal application conditions, over 70 dBA can be anticipated. This can lead to hearing damage.

- Always wear hearing protection when working in the vicinity of the variable pump during operation.

⚠ WARNUNG

Umweltschäden

Druckflüssigkeiten sind wassergefährdende Flüssigkeiten. Das Austreten von Druckflüssigkeiten kann zu Grundwasservergiftung und Bodenverseuchung führen.

- Bringen Sie unter der Axialkolbenmaschine eine Auffangwanne an.
- Beseitigen Sie Leckstellen unverzüglich.
- Es sind stets die nationalen Gesetze und Vorschriften zu beachten. In Deutschland sind hydraulische Maschinen bzw. Anlagen „Anlagen zum Umgang mit wassergefährdenden Stoffen im Sinne des Wasserhaushaltsgesetzes (WHG)“. Beachten Sie in diesem Zusammenhang besonders §1 und §19 WHG (§19g, 19i, 19l).
- Weitere Informationen zum richtigen Umgang mit Rexroth-Hydraulikprodukten finden Sie in unseren Druckschriften „Allgemeine Produktinformationen für Hydraulikprodukte“, RD 90 220 und „Umweltschonende, biologisch schnell abbaubare Druckflüssigkeiten HEPG, HEES für Axialkolbenmaschinen“, RD 90 221.

⚠ WARNING

Risk of damage to the environment

Hydraulic fluid leakage leads to contamination of the ground and ground water.

- A basin for catching any hydraulic fluid must be placed under the variable pump.
- Leaks must be cleaned up immediately.
- In Europe, hydraulic systems are considered “Systems using water-threatening substances” in the sense of the Water Management Law (WHG).Therefore, pay special attention to §1 and §19 WHG(§19g, 19i, 19l). Additionally pay attention to any national regulations and norms.
- For further information regarding the correct use of Bosch Rexroth hydraulic products, see the publications RE 90 220 “Mineral-oil Based Pressure Fluids” and RE 90 221 “Environmentally Acceptable Hydraulic Fluids HEES, HEPG, HETG for Axial Piston Units“, RD 90 221.

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3 Produktbeschreibung

Dieses Kapitel gibt Ihnen einen allgemeinen Überblick über die Funktionalität der Rexroth A6VM Verstellmotor.

Machen Sie sich mit den Inhalten dieses Kapitels vertraut, bevor Sie mit Arbeiten an einer Verstellmotor beginnen.

3.1 Typschild

Die Verstellmotor ist am Typschild zu identifizieren:

3 Product Description

This chapter provides a general overview of the functionality of the A6VM variable displacement motor.

You should be familiar with the contents of this chapter before starting any work on the variable displacement motor.

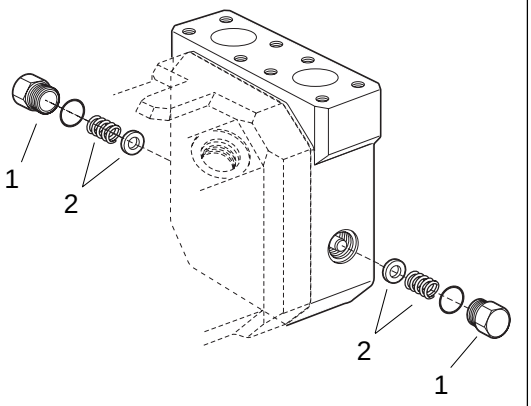
3.1 Name Plate

The variable displacement motor can be identified on its type plate:

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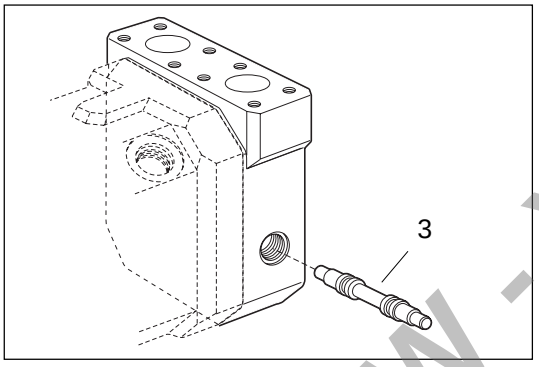
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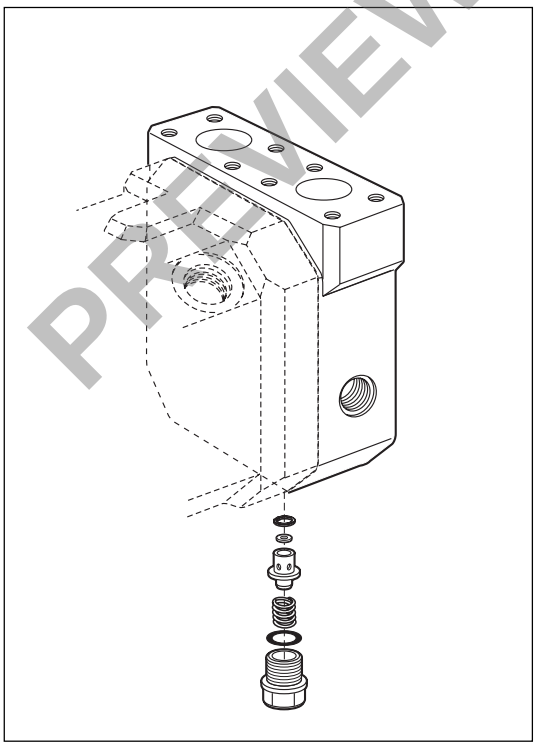
47 Beidseitig Schrauben 1 lösen und Federn mit Scheiben 2 entnehmen.

Loosen screws 1, take out springs and shims 2.



48 Spülschieber 3 vorsichtig zu einer Seite heausdrücken.

Take out spool carefully.



49 Verschlußschraube Speisedruckventil 4 lösen, Feder und Einsatz entnehmen.

Loosen the screw of the boost valve and take out the spring and the cartridge.

Montage in umgekehrter Reihenfolge!

Assembling by opposite steps!

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Pumpe montieren
Assembly of the pump



Schrauben über Kreuz anziehen.
Verdrillschraube auf Markierung drehen.

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