PEN01618-00

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC3400-11M0

SERIAL NUMBERS 36301 and up

⚠ WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine.
This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

KOMATSU

1.7 DIVISION OF THE BINDER

Part 1:

Foreword

Part 2:

Safety Instructions

Part 3:

Operation Manual

Part 4:

Lubrication- and Maintenance Manual

Part 5:

Depending on the volume of Part 3 a second binder "Volume 2" is being delivered with the excavator. This binder contains the Assembly Procedure Manual for the excavator specification booklet, service literature for the power unit (diesel motor or electric motor) and for special equipment. The electrical- and hydraulic diagrams are attached in the pocket of the front cover.

Refer to the "TABLE OF CONTENTS VOLUME 2 BINDER" for details.

Read the manuals before You Start the motors.

Before operating the excavator, familiarize yourself with its instruments and controls.

Observe the instructions in these manuals for:

your personal SAFETY

Operating SAFETY, and

READY and EFFICIENT PERFORMANCE of your KOMATSU Hydraulic Mining excavator.

Periodic preventive inspections and maintenance are the surest means of keeping the excavator in proper working order. Prompt detection and correction of minor irregularities, and immediate replacement of worn out or broken parts will prevent failures and avoid expenses.

Replace damaged graphics and symbols.

Observe safety precautions to prevent injury and damage.

If you have any questions concerning this literature please contact

Komatsu Germany GmbH

Service Information
Department 8151.40
P.O. Box 18 03 61
D - 40570 Düsseldorf
GERMANY

4.13 EVERY 250 OPERATING HOURS OR MONTHLY 4-404
4.13.1 AIR CONDITIONING 4-405
4.13.2 AIR CONDITIONING COMPRESSOR - CHECK DRIVE BELT TENSION 4-405
4.13.3 AIR CONDITIONING FOR OPERATOR'S CAB - CHECK REFRIGERANT LEVEL 4-409
4.13.4 SIGNAL HORN COMPRESSOR - CHECK 4-411
4.13.5 HYDRAULIC OIL COOLER FAN MOTOR - CHECK FOR LEAKAGE 4-411
4.13.6 RADIATOR FAN MOTOR - CHECK FOR LEAKAGE 4-411
4.13.7 TRACK FRAME CONNECTING BOLTS 4-413
4.13.8 WINDSHIELD WASHER SYSTEM - CHECK FLUID LEVEL 4-415
4.13.9 CHANGING ENGINE OIL AND REPLACING ENGINE OIL FILTERS 4-417
4.13.10 BATTERIES - CHECK FLUID LEVEL 4-419
4.14 EVERY 500 OPERATING HOURS OR MONTHLY 4-422
4.14.1 PTO (PUMP DISTRIBUTOR GEAR) MAIN PUMP DRIVE SHAFT HOUSINGS - CHECK OIL LEVEL 4-423
4.14.2 FUEL TANK - DRAIN CONDENSATION 4-427
4.14.3 CRAWLER TRACK - INSPECTION 4-429
4.14.4 GROUND CABLES OF ENGINE, PRELUBRICATION PUMP AND ALTERNATOR - CHECK FOR CORRECT CONNECTION 4-435
4.14.5 GROUND CABLE OF OPERATOR'S CAB - CHECK FOR CORRECT CONNECTION 4-437
4.14.6 EMERGENCY LOWERING OF STAIRWAY - TEST FUNCTIONALITY 4-441
4.14.7 EMERGENCY ESCAPE LADDERS 4-443
4.14.8 CLEANING AIR CONDITIONER FILTERS 4-445
4.14.9 REPLACING FUEL FILTERS 4-449
4.15 EVERY 1000 OPERATING HOURS OR EVERY 6 MONTHS 4-451
4.15.1 CHANGING AIR CONDITION CONDENSER 4-451
4.15.2 CRITICAL BOLT CONNECTIONS 4-453
4.15.3 HYDRAULIC SYSTEM - FILTER SERVICE 4-459
4.15.4 PTO (PUMP DISTRIBUTOR GEAR), SLEW GEARS AND TRAVEL GEARS - OIL SAMPLE ANALYSIS 4-475
4.15.5 SIGNAL HORN COMPRESSOR - CLEAN AND LUBRICATE 4-477
4.15.6 MACHINERY HOUSE DOORS - INSPECT AND LUBRICATE DOOR HINGES 4-479
4.15.7 ALL OTHER HINGES AND AREAS TO LUBRICATE 4-481
4.15.8 EMERGENCY ENGINE STOP SWITCHES - TEST FUNCTIONALITY 4-483
4.15.9 EMERGENCY ENGINE SHUTDOWN SYSTEM ACTUATED FROM GROUND MAN - TEST FUNCTIONALITY 4-485
4.15.10 ELECTRICAL EQUIPMENT - MAINTENANCE 4-487
4.15.11 RETIGHTENING LIP AND SIDE SHROUD J-BOLT 4-487
4.15.12 CHECKING AND RELEASING GAS IN THE ACCUMULATOR FOR CONTROL CIRCUIT 4-490
4.15.13 CHECK FUNCTION OF ACCUMULATOR FOR CONTROL CIRCUIT 4-491
4.16 EVERY 2000 OPERATING HOURS OR YEARLY 4-494
4.16.1 HYDRAULIC SYSTEM - CHANGE PULSATION DAMPER 4-495
4.16.2 PREVENTATIVE MAINTENANCE (PM) CLINIC - PERFORM TEST 4-503
4.16.3 HYDRAULIC HOSES - CHECK CONDITION 4-505
4.16.4 EMERGENCY ESCAPE ROUTE FROM OPERATOR'S CAB 4-507
4.17 EVERY 3000 OPERATING HOURS HOWEVER AT LEAST ONCE A YEAR 4-508
4.17.1 TRACK TENSIONING SYSTEM- CHECK ACCUMULATORS 4-509
4.17.2 PTO (PUMP DISTRIBUTOR GEAR) - CHANGE OIL 4-517
4.17.3 FLEXIBLE COUPLING - VISUAL CHECK 4-519
4.17.4 CRITICAL BOLT CONNECTIONS 4-521

NOTICE

Before carrying out grinding or welding work on the excavator, remove any flammable materials.

- Fire caused by accumulation of flammable material.
  Remove any dry leaves, chips, pieces of paper, coal dust, or any other flammable materials accumulated or affixed around the motors, exhaust manifold, muffler or battery, or inside the under covers.
- Fire coming from electrical wiring
  Short circuits in the electrical system can cause fire. To prevent fire, always observe the following:
  - Keep all electrical connections clean and securely tightened.
  - Check the wiring every day for looseness or damage. Tighten any loose connectors or wiring clamps. Repair or replace any damaged wiring.
- Fire coming from piping
  Check that all hose and tube clamps, guards, and cushions are securely fixed in position.
  If they are loose, they may vibrate during operation and rub against other parts. There is a danger that this may lead to damage to the hoses and cause high pressure oil to spurt out, leading to fire, personal injury, or death.
- Explosion caused by lighting equipment
  - When checking fuel, oil, battery electrolyte, or coolant, always use lighting with anti-explosion specifications.
  - When taking the electrical power for the lighting from the excavator itself, follow the instructions of this manual.
- Fire from blocked heating
  - Do not block the front of the intake or output of the heating system or heated air.

⚠ WARNING

RISK OF EXPOLSION AND FIRE!

Welding, flame-cutting and grinding work on the excavator increases the risk of explosion and fire which may result in serious injury or death.

All relevant safety measures must be followed and only under expressly obtained authorization.
Special care must be taken before welding, flame-cutting and grinding operations are carried out on the counterweight. The filling of the counterweight chambers can create explosive gases which will accumulate in the chambers of the counterweight.
These gases must be expelled before welding, flame-cutting and grinding operations are carried out on the counterweight.

REMARKS: Contact your Komatsu distributor for information on expelling the gases from the counterweight chambers.

⚠ WARNING

RISK OF EXPLOSION!

Substances and objects igniting can lead to fire or explosion resulting in serious injury or death.
Before carrying out welding, flame-cutting and grinding operations, clean the excavator and its surroundings from dust and other flammable substances and make sure that the premises are adequately ventilated as there is a risk of explosion.

2.4.11.11 VENTILATION OF ENCLOSED AREAS

⚠ WARNING

POISONOUS FUMES!

Unventilated areas where poisonous fumes can accumulate can kill.
Always ensure adequate ventilation.

Fig. 2-21:

– Operate internal combustion motors and fuel operated heating systems only on adequately ventilated premises. Before starting the excavator on enclosed premises, make sure that there is sufficient ventilation.
  Observe the regulations in force at the respective site.
– If it is necessary to start the motor within an enclosed area, or when handling fuel, flushing oil, or paint, open the doors and windows to ensure that adequate ventilation is provided to prevent gas poisoning.

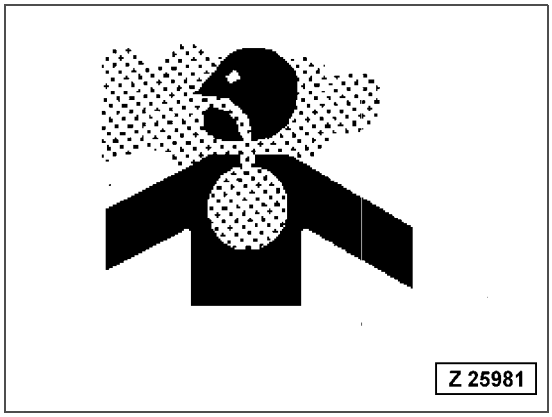


Fig. 2-21

2.5.1.2 STOP MOTOR FOR MAINTENANCE

Fig. 2-37:

– Stop the excavator on firm, level ground.
– Select a place where there is no hazard of falling rocks or landslides, or of flooding if the land is low.
– Lower the work equipment completely to the ground and stop the motor.

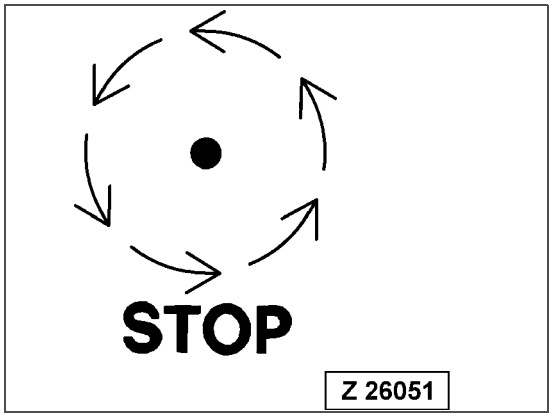


Fig. 2-37

– Turn the main key switch to the ON position. Operate the work equipment control lever back and forth, left and right at the full stroke 2 to 3 times to eliminate the remaining internal pressure in the hydraulic circuit, and then push up lock lever (Fig. 2-38) to the LOCK position (L).
– Check that the battery main switch is off and main power is not conducted. (Wait for approx. one minute after activating the motor STOP switch and press the horn switch. If the horn does not sound, it is not activated.)

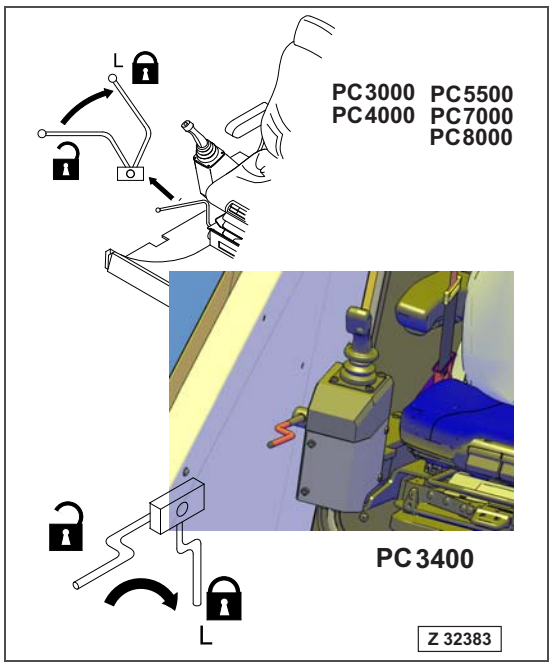


Fig. 2-38

2.5.3.2 HANDLING HIGH PRESSURES HOSES OR PIPES

⚠ WARNING

FLUID UNDER HIGH PRESSURE!

The hydraulic system is always under internal pressure and can lead to serious injury when leaking. When inspecting or replacing piping or hoses, always check that the pressure in the hydraulic circuit has been released.

– If any loose bolts are found, stop work and tighten to the specified torque. If any damaged hoses are found, stop operations immediately and contact your Komatsu distributor.

Replace the hose if any of the following problems are found.

– Damaged or leaking hydraulic fitting.
– Frayed or cut covering or exposed reinforcement wire layer.
– Covering swollen in places.
– Twisted or crushed movable portion.
– Foreign material embedded in covering.

2.5.3.3 REPLACEMENT OF HOSE LINES

Hydraulic hoses are subjected to natural aging. Hence, their usable lifetime is limited to maximum 6 years.

NOTICE

The maximum permissible storage time of hydraulic hoses must be observed.

– This storage period is part of the usable lifetime and must be considered when installing a new hose line. If, for example, a hose line with a one year storage time is to be installed, the remaining service life of the hose line must be considered. All hose lines are marked with the date of production.
– Hose lines considered as Safety Critical Parts have to be replaced earlier. Refer to the chapter “Lubrication and Maintenance Schedule” in the MAINTENANCE section of the Operation and Maintenance Manual for further information.

All hydraulic hoses of the excavator have to be replaced when their service life has expired, even if there is no visible damage. Refer to the chapter “Lubrication and Maintenance Schedule” in the MAINTENANCE section of the Operation and Maintenance Manual for further information.

NOTICE

Repairs on hydraulic hoses and pipes are not allowed. Use ONLY GENUINE Komatsu replacement hose and pipe lines.

2.5.3.4 INSPECTION OF HOSE LINES

Inspect all hoses, hose lines and fittings carefully during the course of the daily walk-around inspection. Check for leaks and damages. Beware of pinhole leakages. Replace damaged parts without delay.

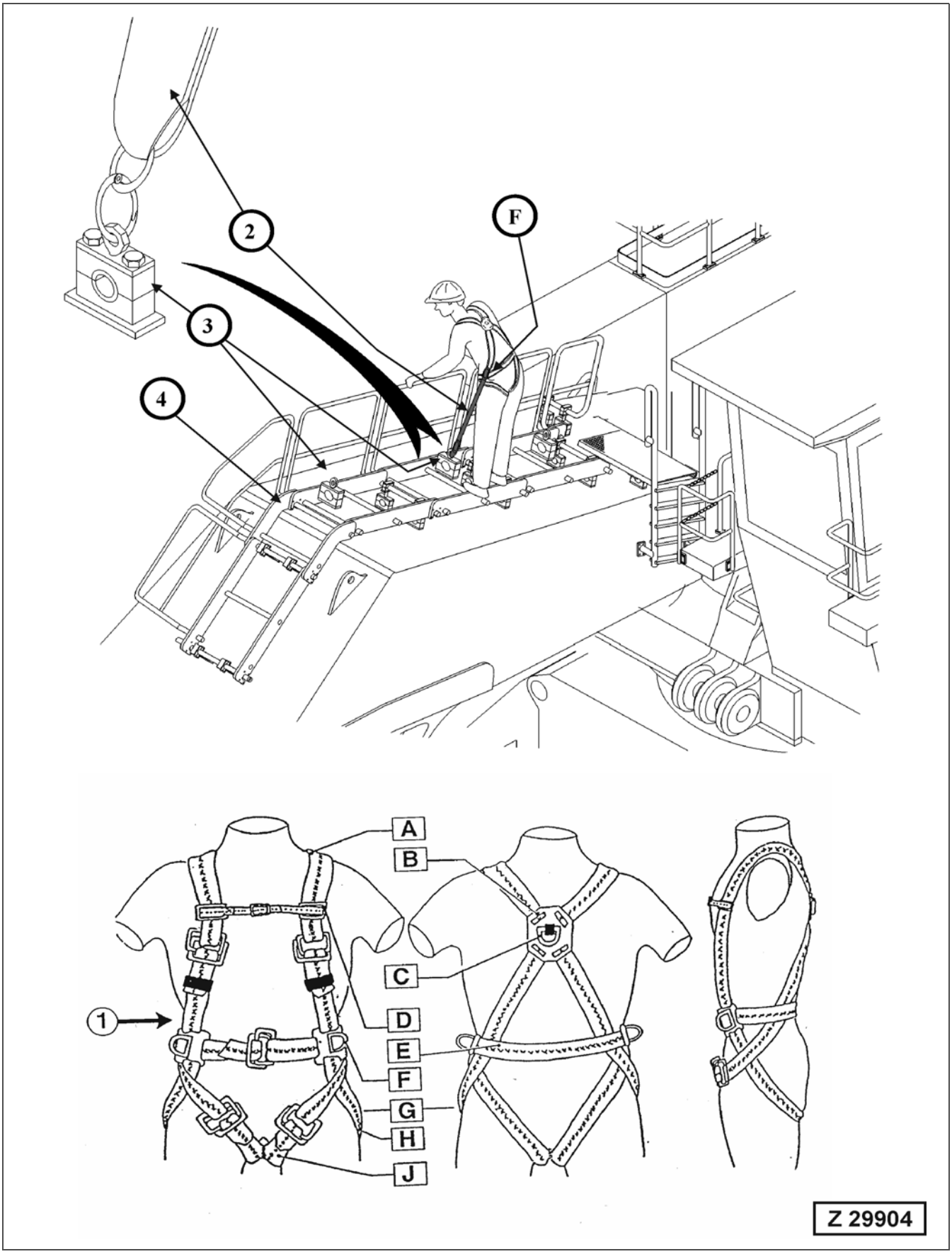


Fig. 2-57

Beware of toxic gases. (Electrically driven excavators only)
Fig. 2-63
Part number 518 690 98
Do not enter the cab base or the high voltage area after the fire suppression system has been activated as the inhaling of noxious gases from the suppression system is extremely harmful.

REMARKS: This sign exists three times for the PC3000E and is also to find on the column between the double door entrance.

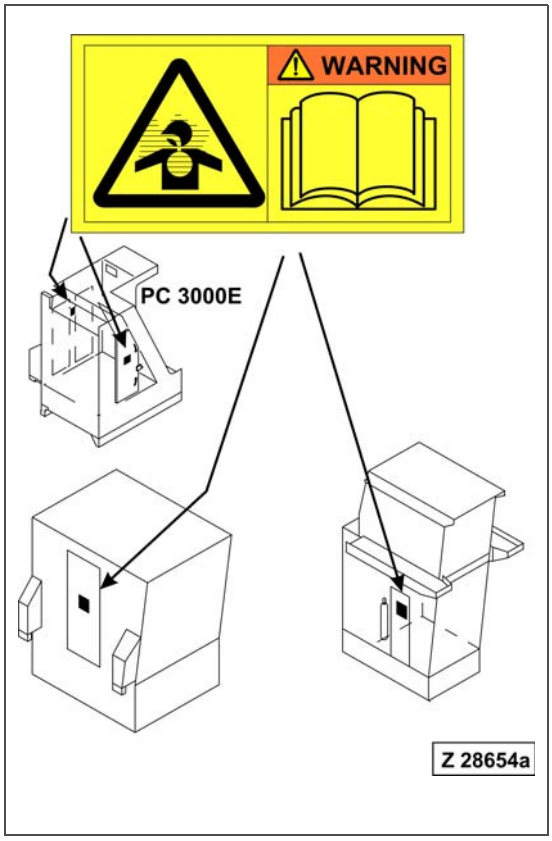


Fig. 2-63

1. **Starter terminals are live**
   Fig. 2-64
   Part number 09842A0362
   Never attempt to start the motor by shorting the starter terminals. For more information, see "PRECAUTIONS AT JOBSITE" on page 2-20 **and the chapter "Starting the motors" in the "Operation" section of the Operation and Maintenance Manual.**

Avoid inadvertent contact with the starters.

2. **Hot surfaces**
   Part number 09817A01103

Positioned on each side of the engine manifold

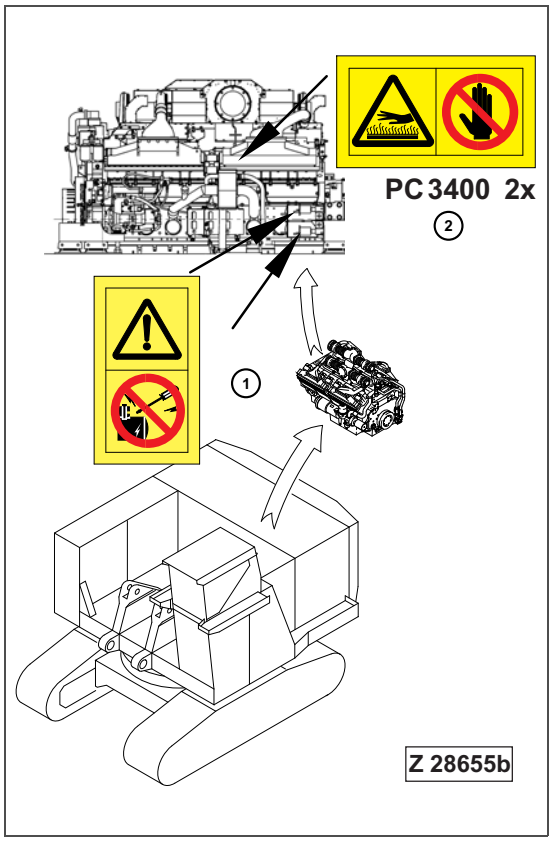


Fig. 2-64

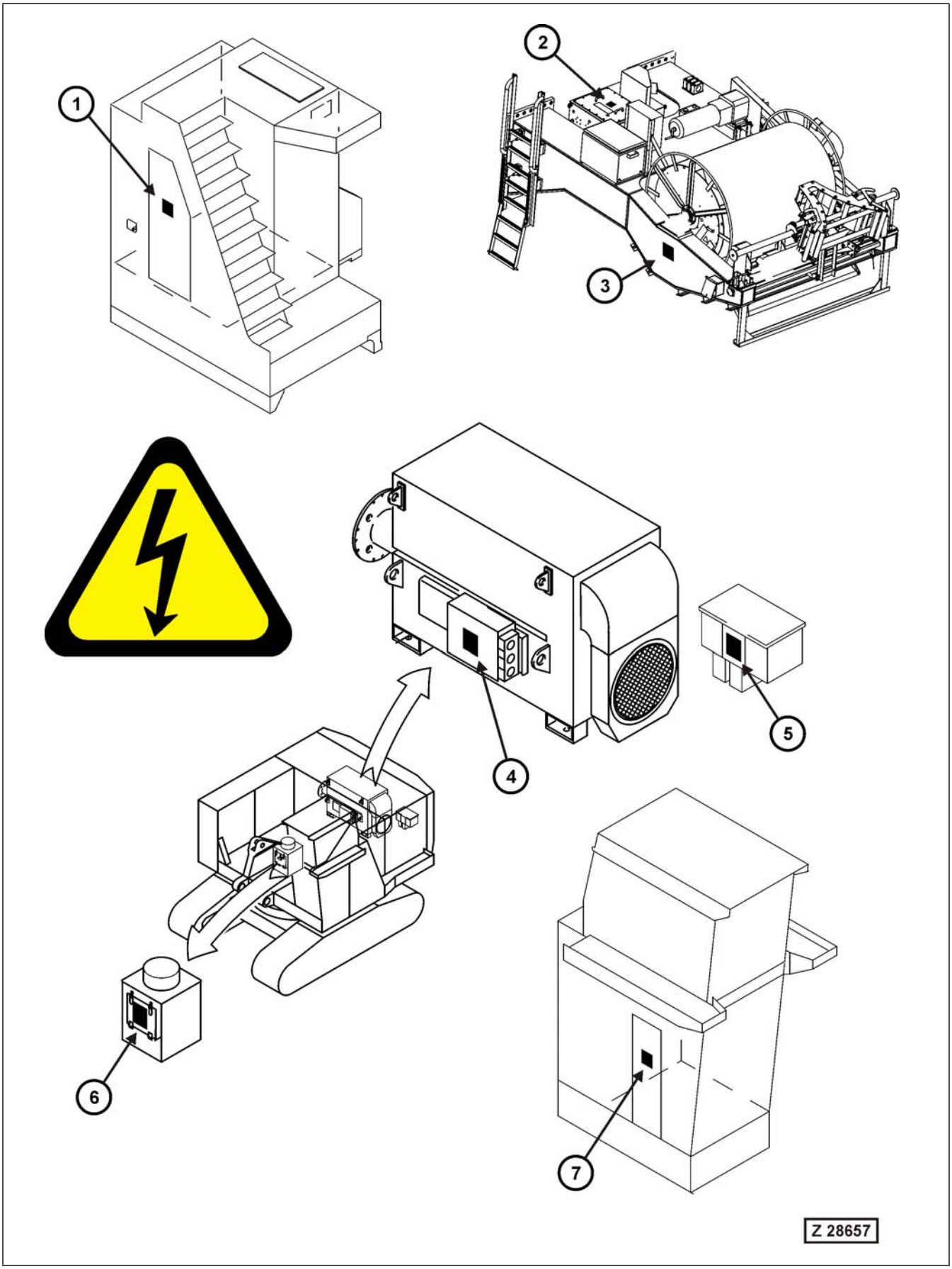


Fig. 2-79

No welding before reading the manual
Fig. 2-87
Part number **518 660 98**
Welding should only be carried out when the safety instructions have been fully complied with. Refer to "PRECAUTION WHEN WELDING" on page 2-44 and the section "Weld Repairs" in the "Maintenance" section of the Operation and Maintenance Manual.

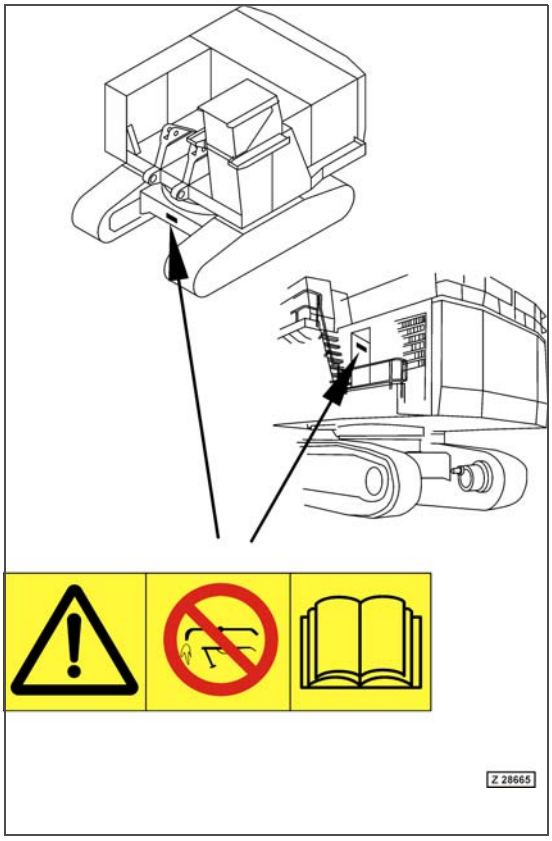


Fig. 2-87

Keep clear of the excavator
Fig. 2-88
Part number **09133A6481, 09133A3281**
Always remain clear of the excavator when it is in operation.

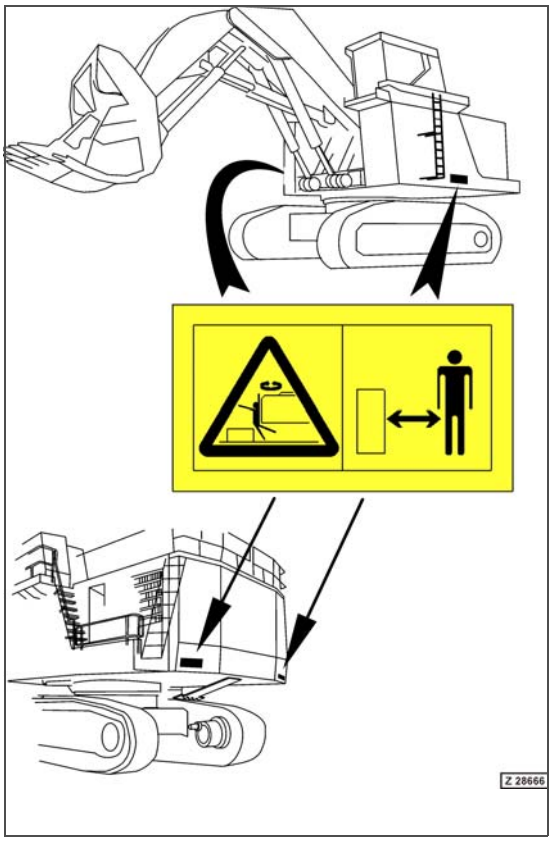


Fig. 2-88

3.2.2.1 MACHINERY HOUSE

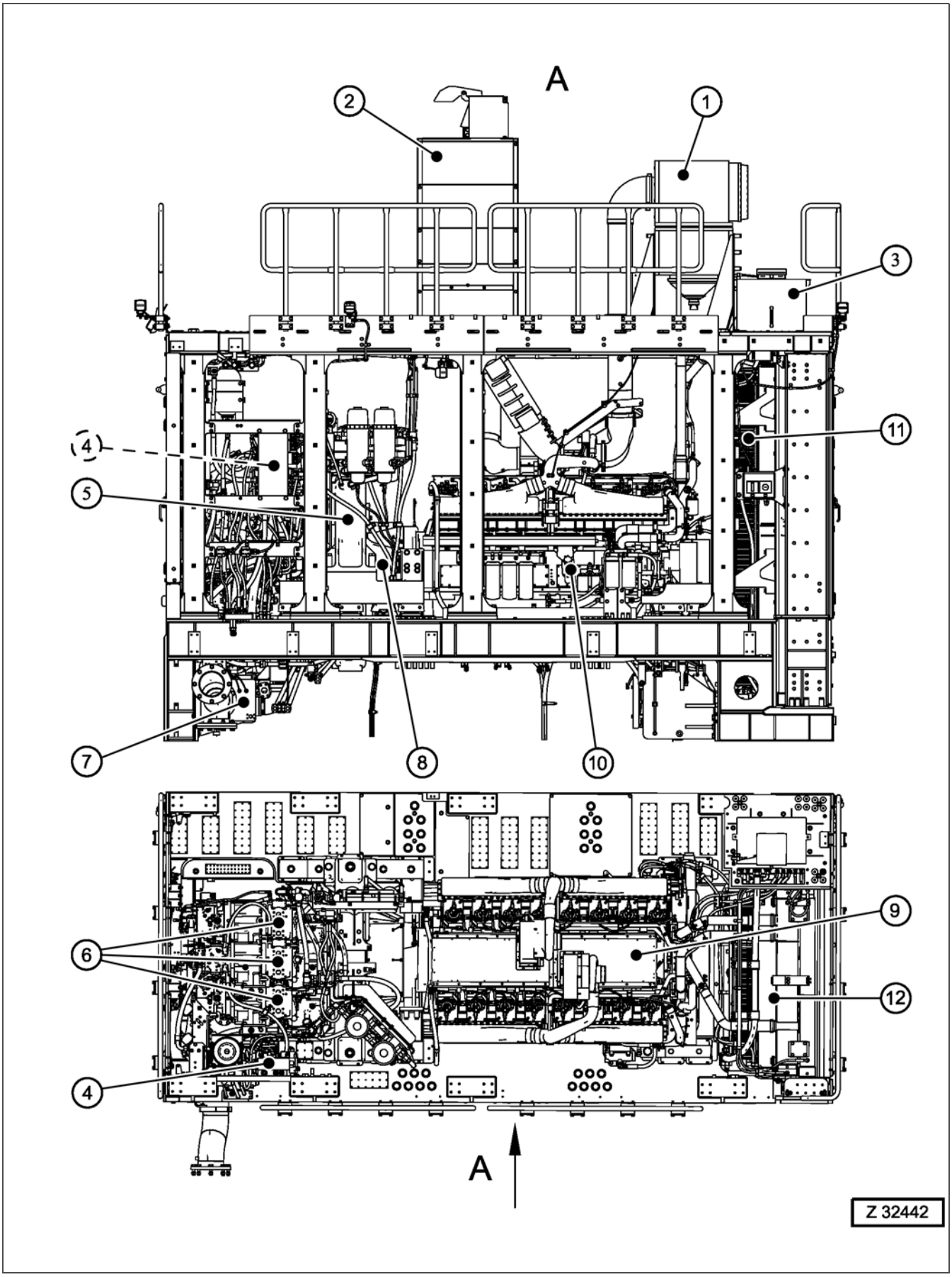


Fig. 3-4

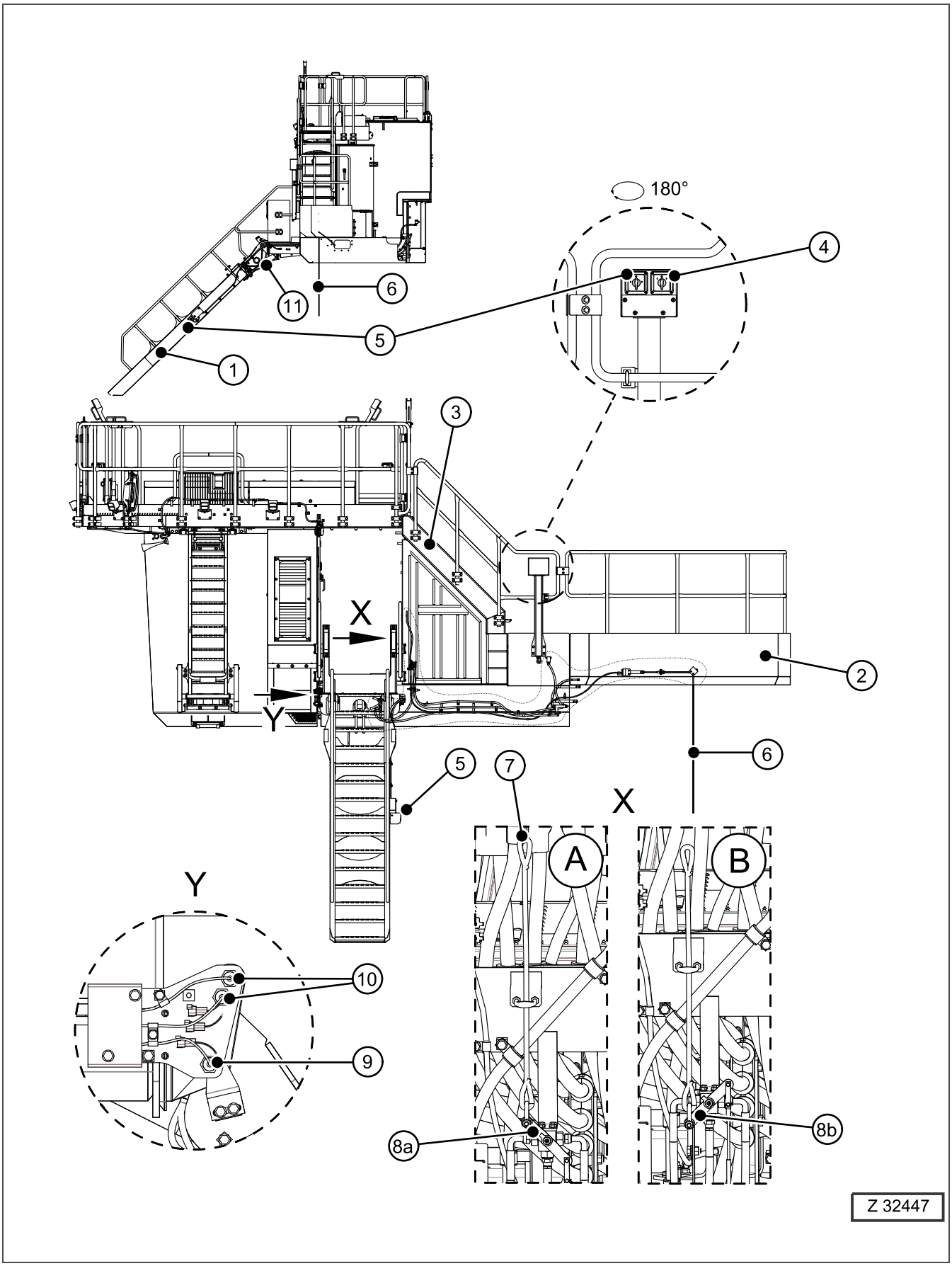


Fig. 3-11

3.2.5 BOOM ACCESS LADDER AND WALKWAY

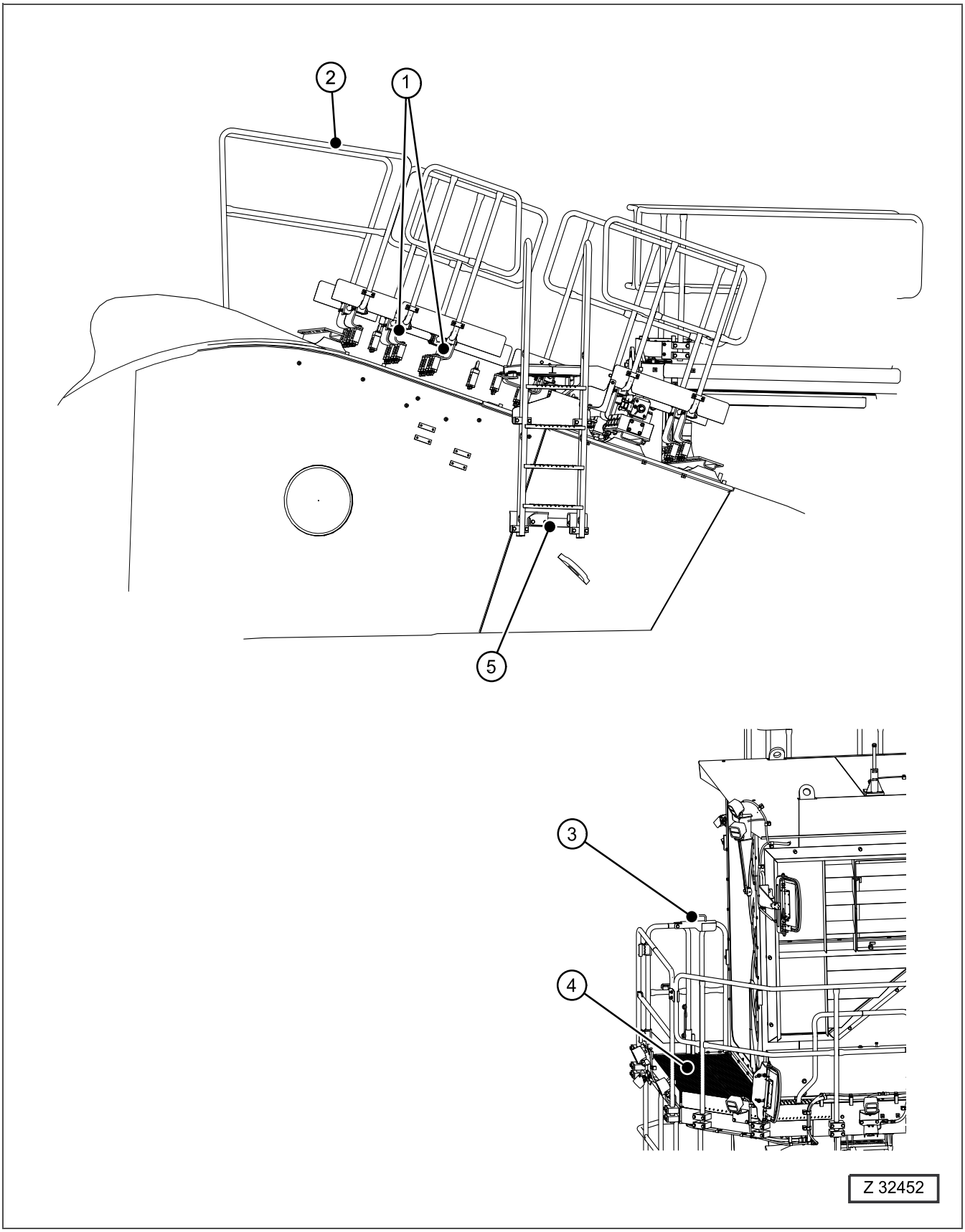


Fig. 3-17

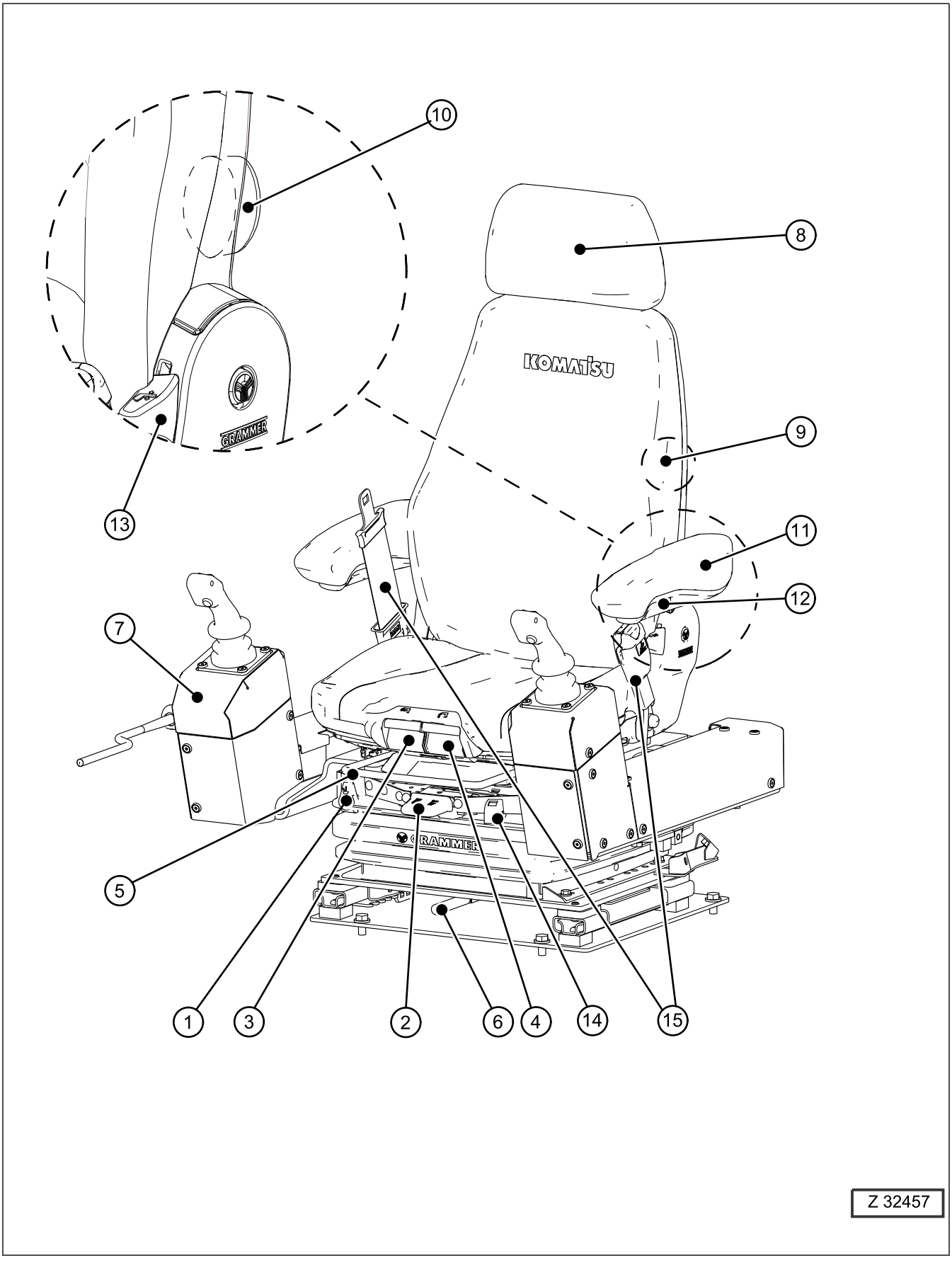


Fig. 3-22

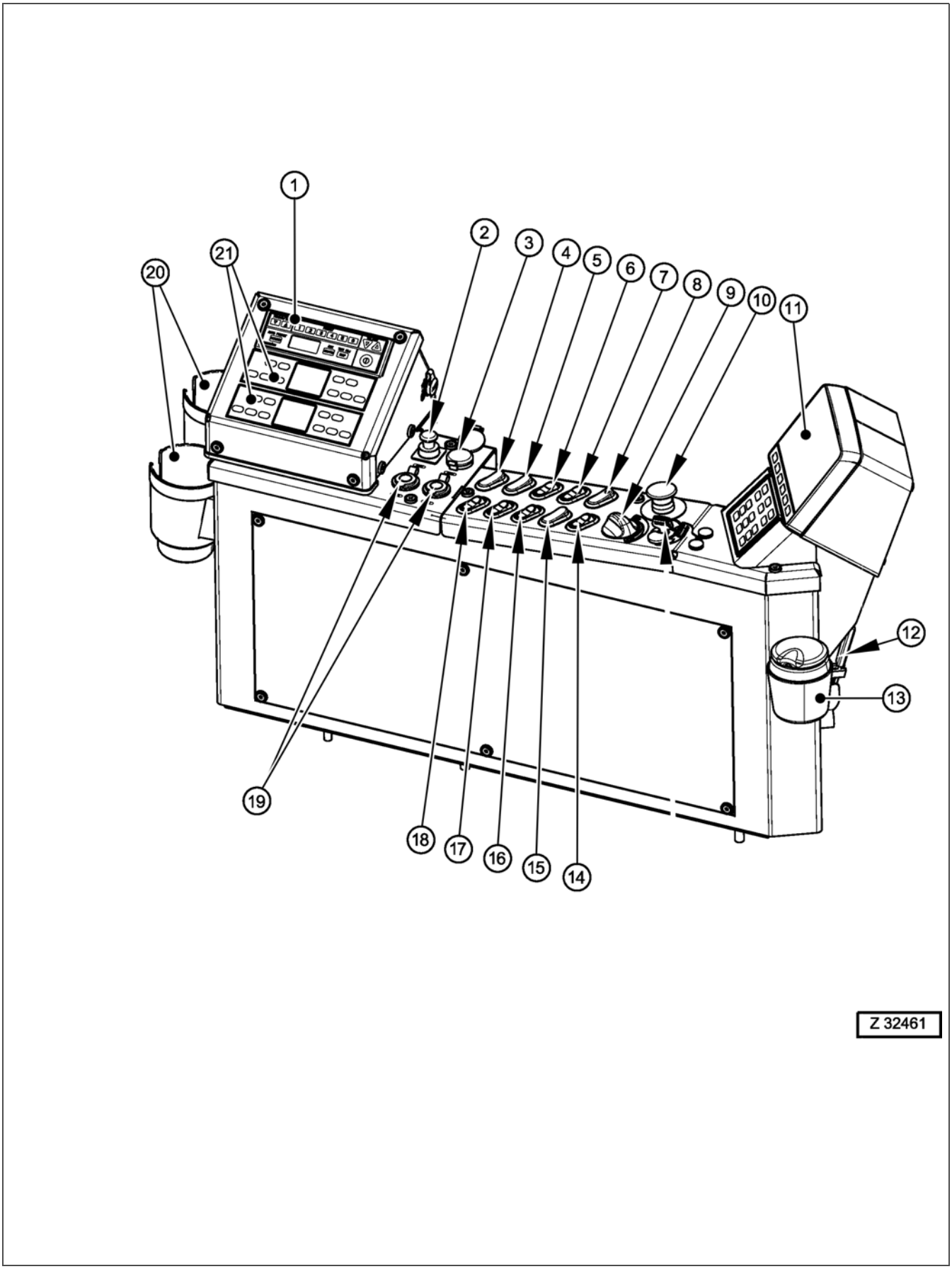


Fig. 3-28

	Hydraulic oil temperature
	Fuel level

3.4.7.3 LANGUAGE

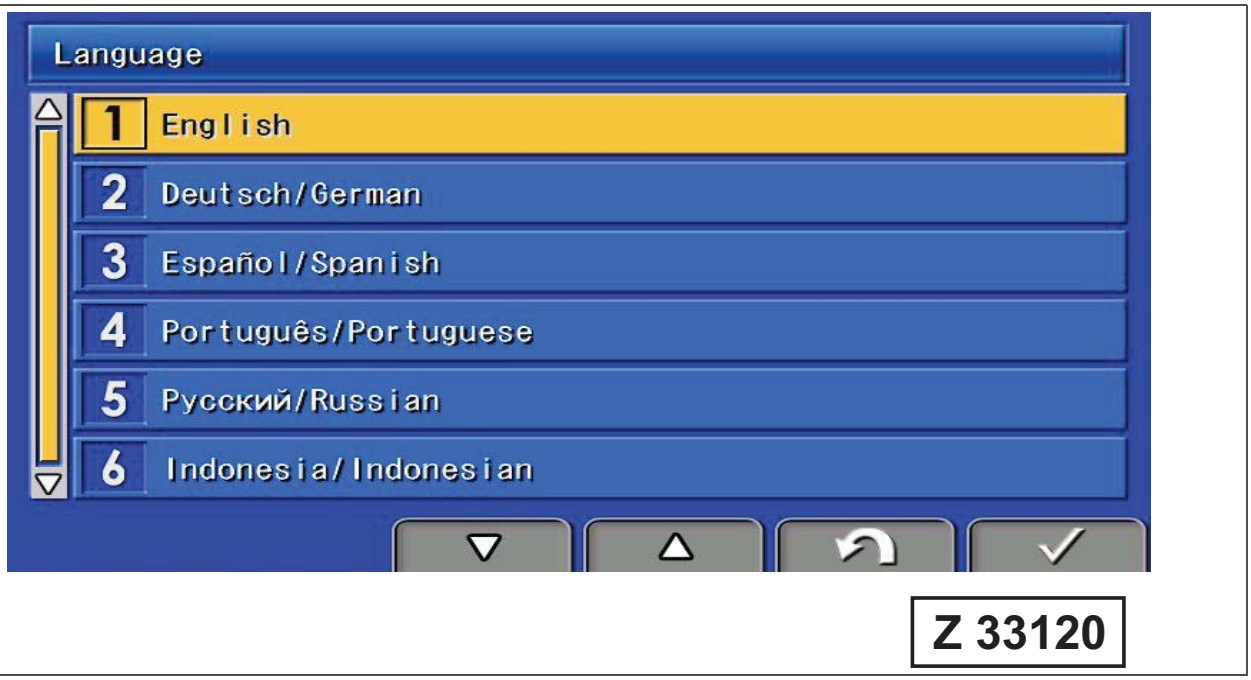


Fig. 3-47

F3 - Scroll down button

F4 - Scroll up button

F5 - Standard monitor display button, switches back to the Monitor Setting Screen.

F6 - Enter

To select a language scroll with F3 and F4 to the preferred language and confirm with F6.#

3.4.8 MESSAGE

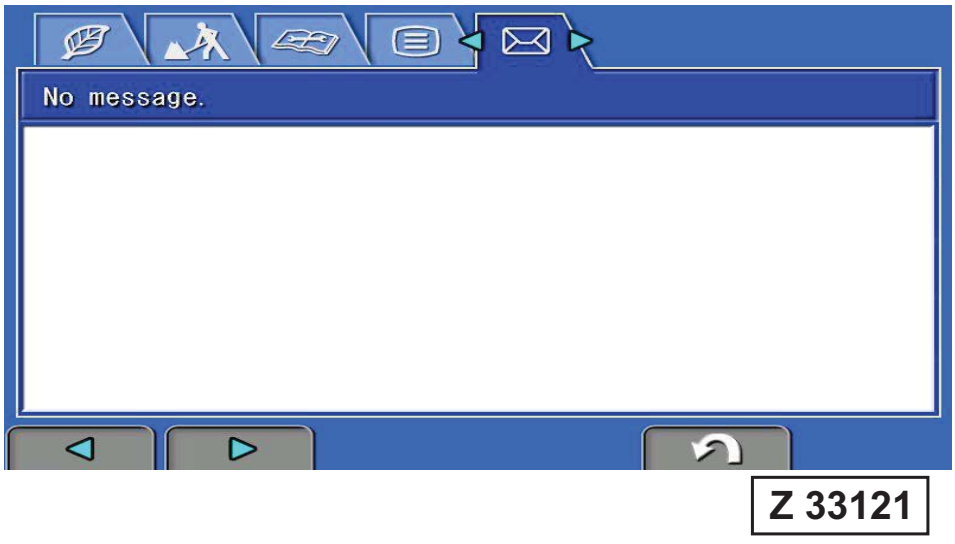
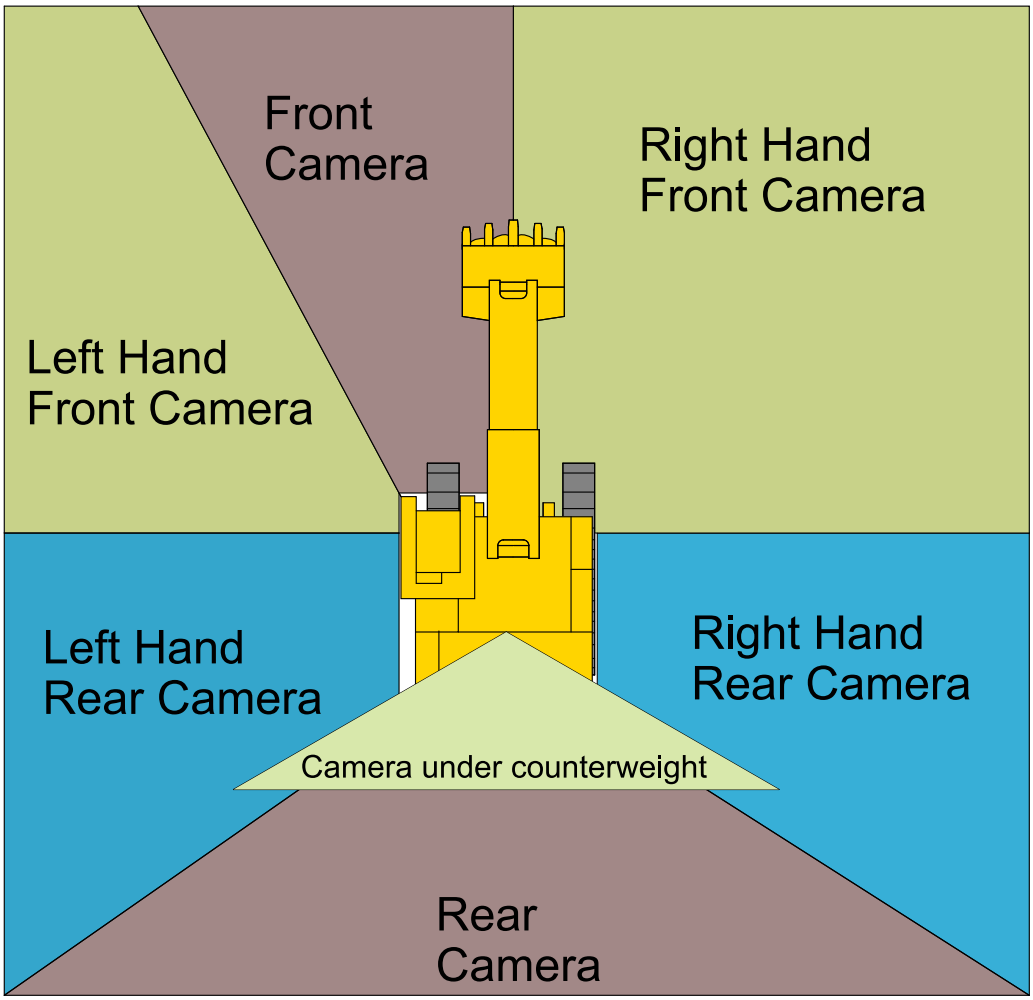
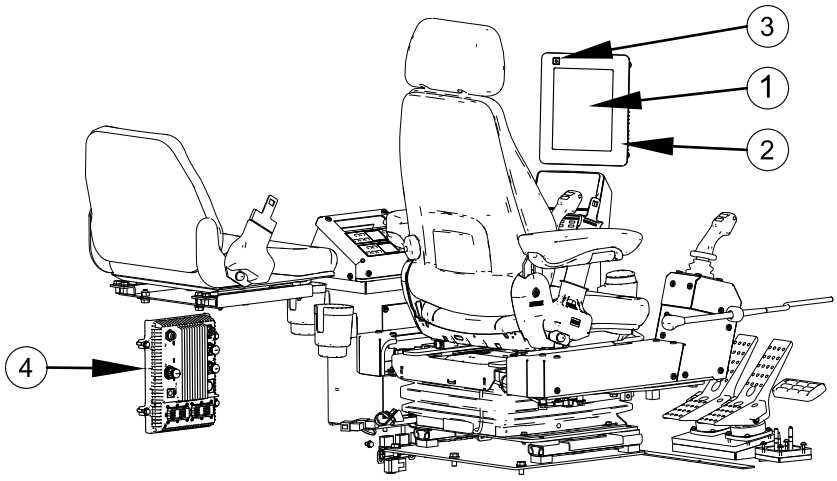


Fig. 3-48

Messages from the Komatsu distributor are displayed in this menu. If there are new messages, an envelope icon will be displayed on the main screen (on page 3-157):

– Envelope icon lights green: unread message, refer to chapter 3.4.8.1





Z 33073

Fig. 3-57

3.5.9.3 STAND-BY MODE

See Fig. 3-66

There are two versions of the stand-by mode.he system goes into stand-by when the start key is switched off.

KomVision shuts down automatically after 2 hours when the stand-by mode is active.

Stand-by mode A is shown until the machine is switched off.

Stand-by mode B is shown when the operator switches KomVision off manually using the icon (1).

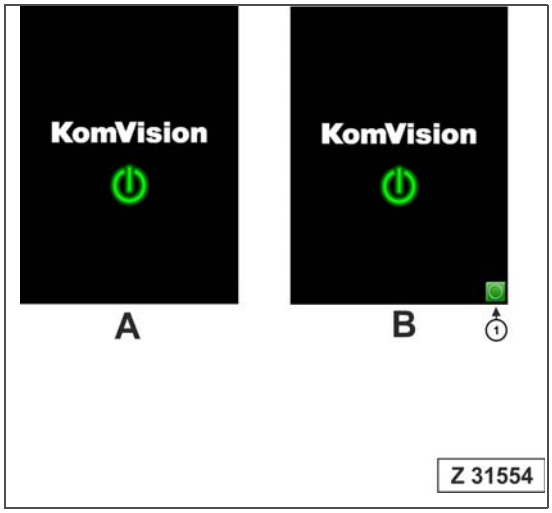


Fig. 3-66

3.5.9.4 SYSTEM STATUS LAMP

The system state is displayed with LED display (green) of the system status lamp (1) which is installed on the monitor separately from the KomVision monitor.

System is in operation

– Lamp is green.

System is in preparation

– Lamp flashes in green

System is off

– Not lit

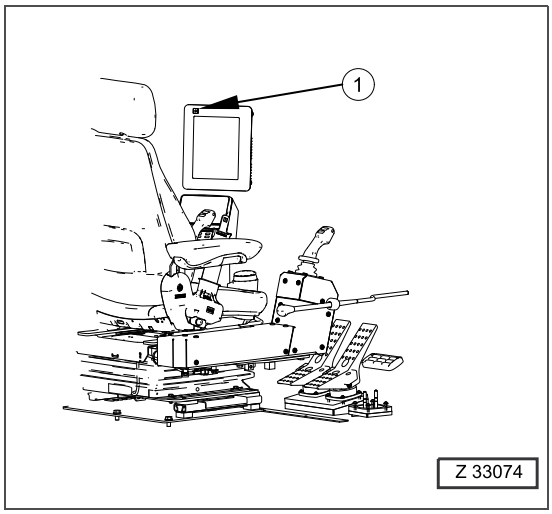
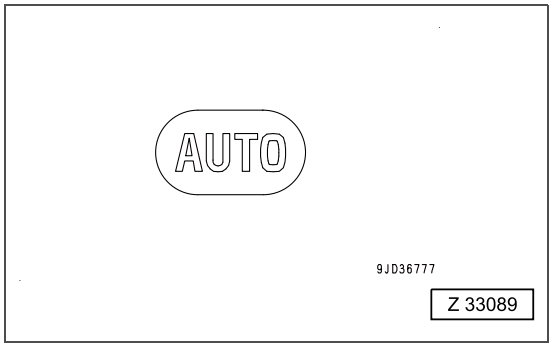


Fig. 3-67

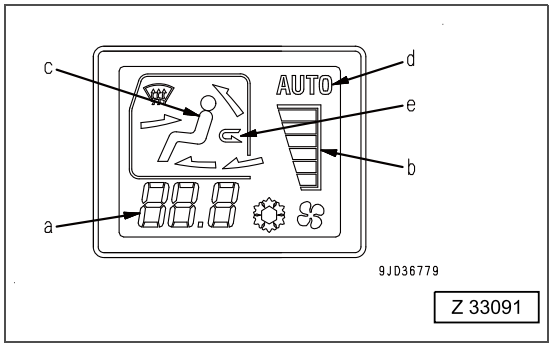
3.6.5.9 METHOD FOR AUTOMATIC OPERATION

1. Turn the auto switch on.

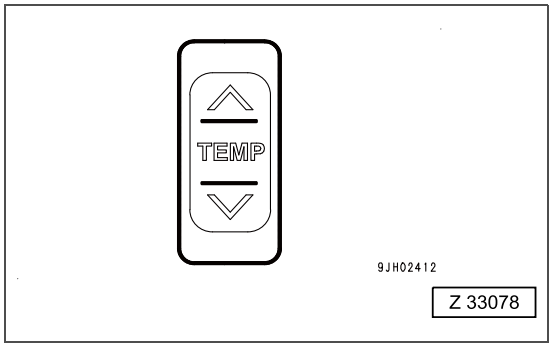
– At this time, the auto light switch lights up



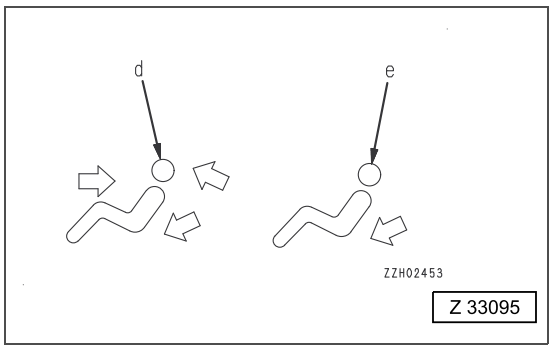
The set temperature (a) and air flow (b) are displayed



2. Use the temperature control switch to set the desired temperature.
3. The air flow, combination of vents and selection of fresh or recirculated air is automatically selected according to the set temperature and the air conditioner is operated automatically to provide the set temperature.



REMARKS: When vent display monitor (c) displays (d) or (e) and the engine coolant temperature is low, the air flow is automatically limited to prevent cold air from blowing out.

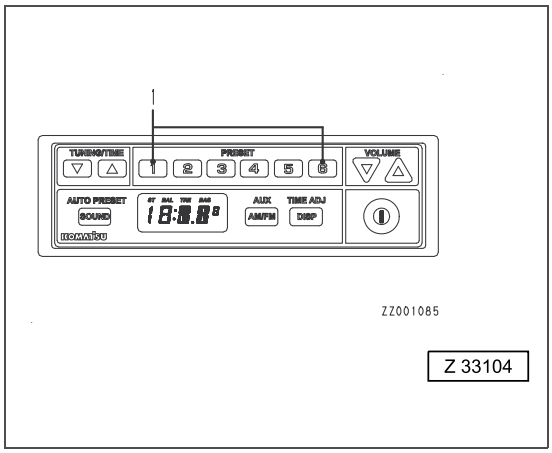


3.7.13 METHOD FOR REGISTERING PRESET

– Hold down one of the 1 to 6 preset buttons (1) while listening to the radio.

– Example

  – While a frequency i displayed, keep pressing button 1 of the preset button (1) and the preset number "P-1" is displayed. After the preset number flashes 3 times, the frequency is displayed and then registered to preset number "P-1".



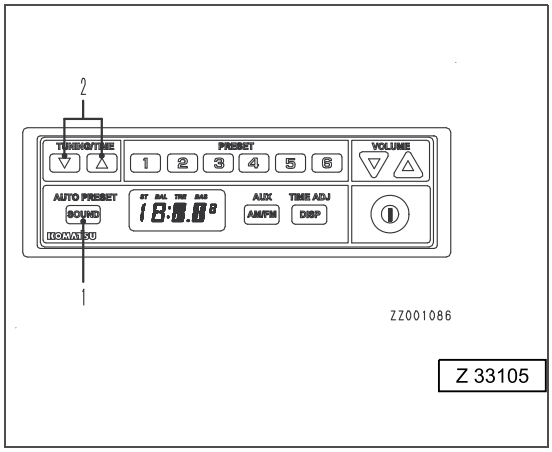
Z 33104

3.7.14 METHOD FOR ADJUSTING BALANCE

1. Press sound control button (1) to light up "BAL" on the display
   You can adjust the sound balance
2. Press tuning/time adjustment button (2) to adjust the sound balance

– Press the upward arrow button and the speaker output on the R side increases by 1 (R1 to R7)

– Press the downward arrow button and the speaker output on the L side increases by 1 (R1 to R7)



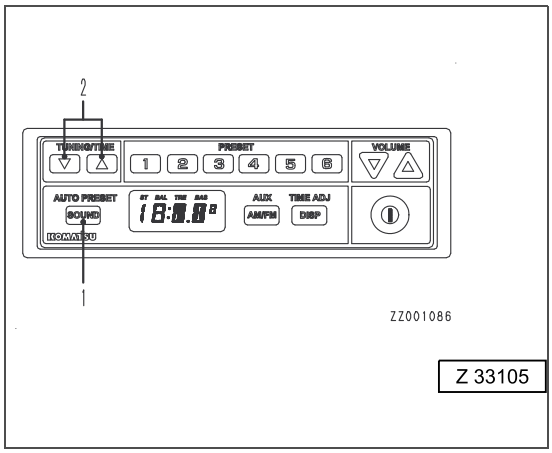
Z 33105

3.7.15 METHOD FOR ADJUSTING TREBLE

1. Press sound control button (1) to light up "TRE" on the display
   You can adjust the sound treble
2. Press tuning/time adjustment button (2) to adjust the treble

– Press the upward arrow button and the treble increases by 1 (max. +7)

– Press the downward arrow button and the treble decreases by 1 (Min. -7)



Z 33105

3.9 ELECTRICAL EQUIPMENT IN CAB BASE

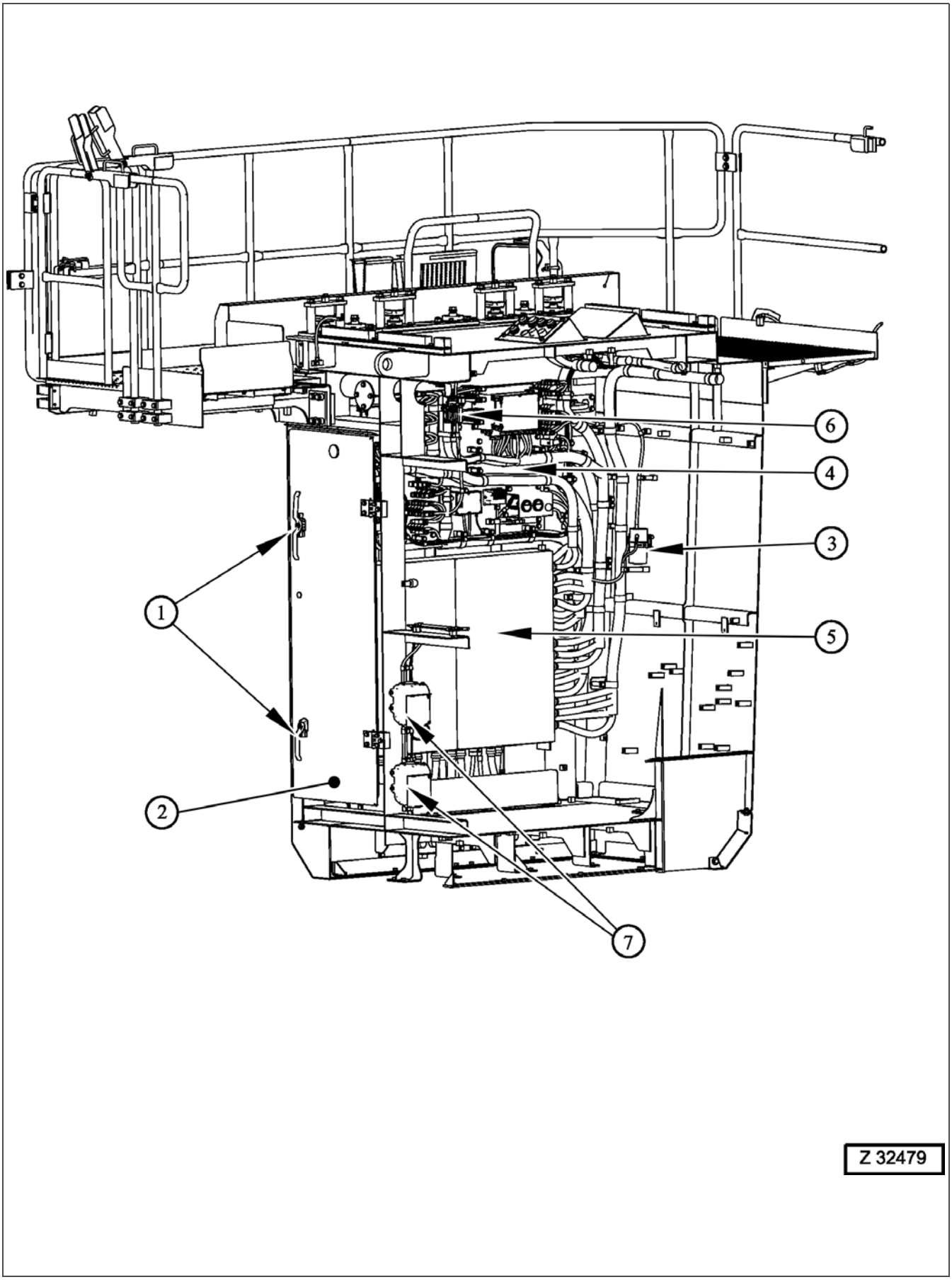


Fig. 3-85

3.11 STARTING THE ENGINE

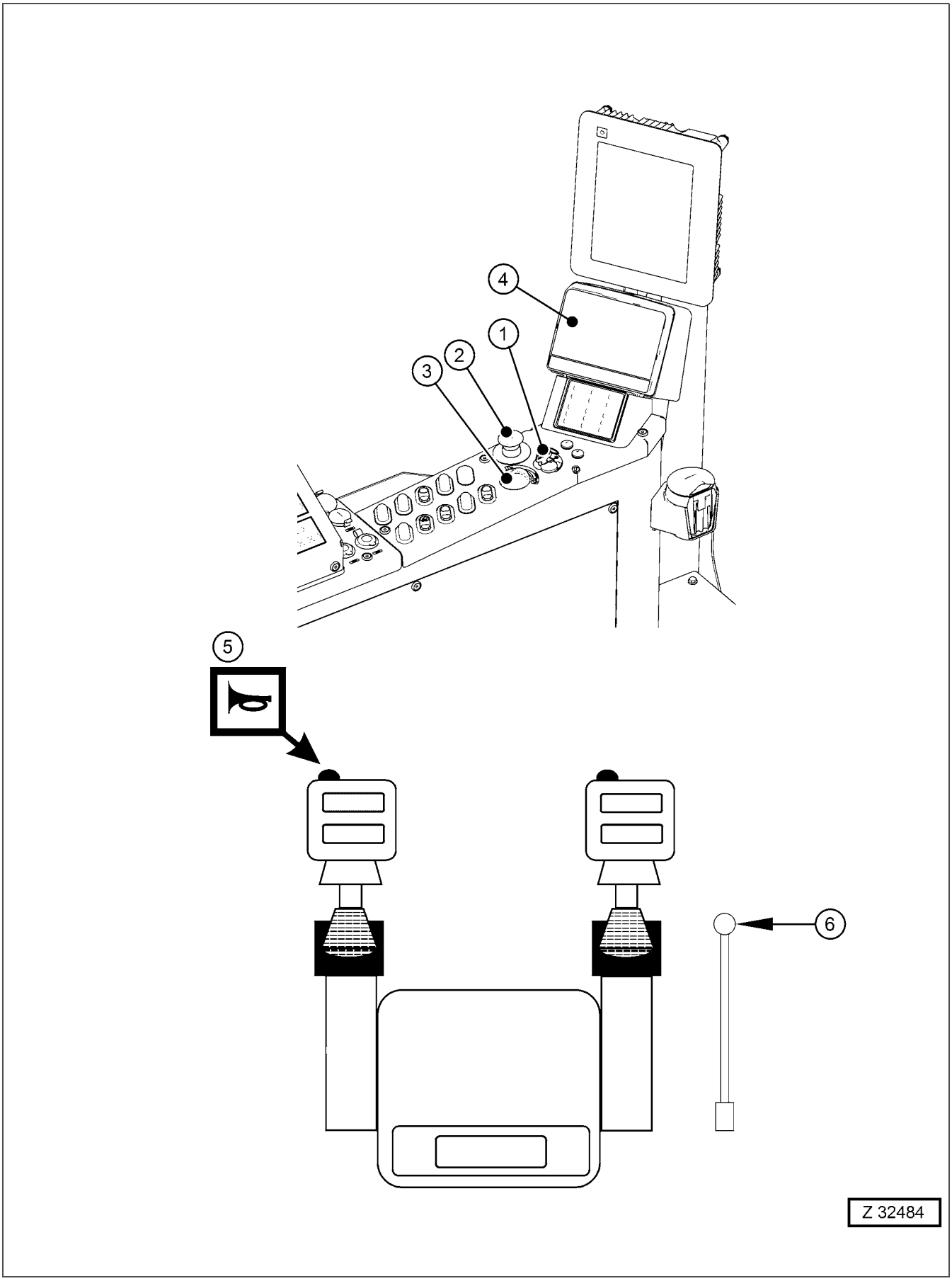


Fig. 3-91

⚠ WARNING

MAKE SURE THE AREA AROUND THE EXCAVATOR IS CLEAR!

Anyone in the area of the excavator must be warned that the excavator is about to move, otherwise serious injury or death may occur.

Before moving, sound the signal horn to make your intention clear.

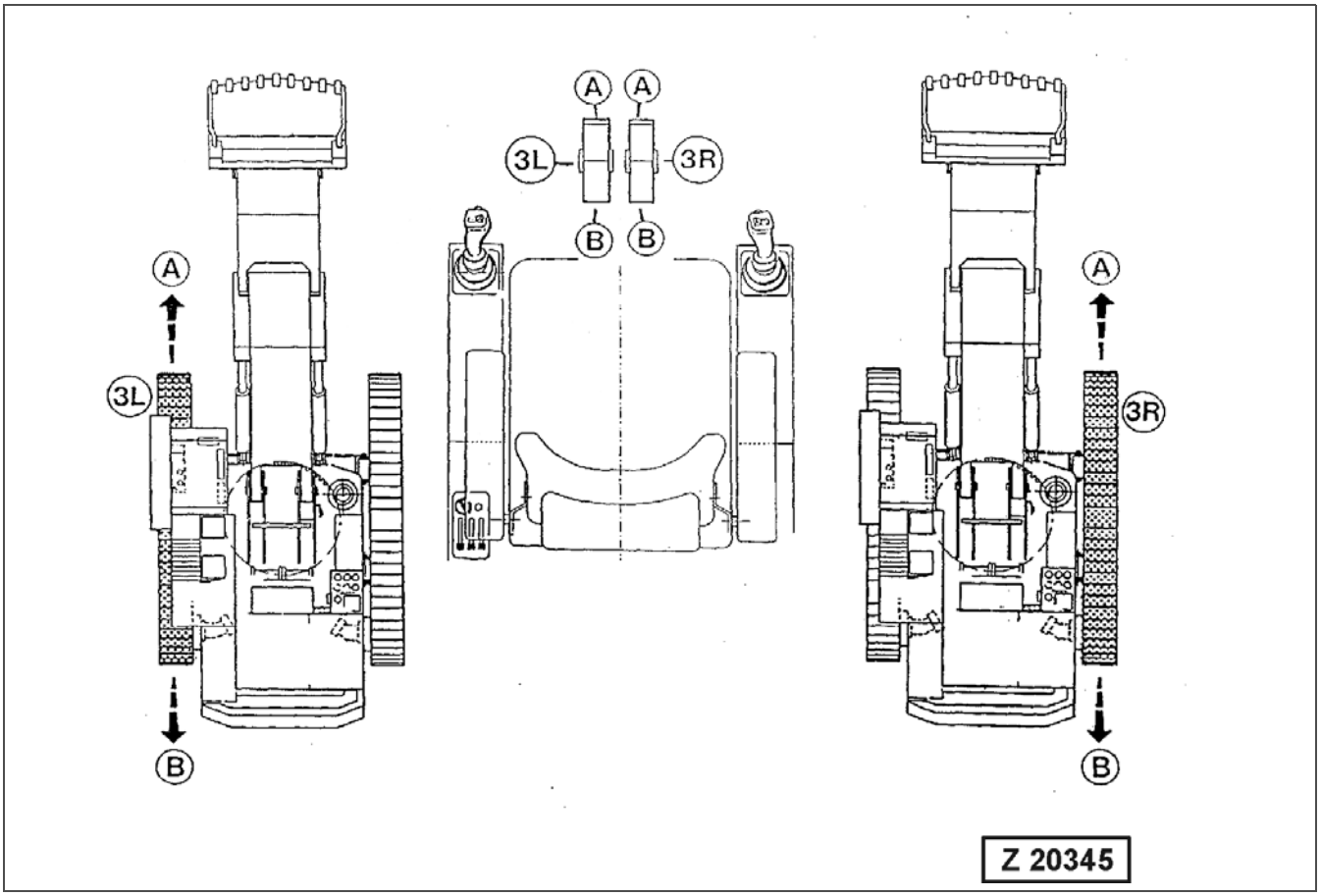


Fig. 3-98

Regulate travel speed by depressing the pedals more or less. Apply slew brake as necessary.

For braking the excavator release pedals (3L and 3R)
DO NOT reduce engine speed for braking, otherwise travel motors and gears could be damaged.

⚠ WARNING

TRAVELING ON SLOPES!

There is the risk that the excavator may tip over when traveling on slopes causing serious injury or death. traveling on a slope requires special care. Plan your work so that the excavator travels up- and downhill parallel to the grade. The superstructure must be parallel with the undercarriage and the working attachment must face to the front in travel direction. The travel gears must be at the rear in the direction of travel. (max. gradient is 28°)

DO NOT use the FAST TRAVEL SPEED RANGE when traveling on a slope.

For maximum stability carry the bucket as close to ground level as possible. Operate the travel control pedals sensitively. Avoid jerky acceleration and deceleration of travel motions. Travel speed must be conform to the ground conditions.

NOTICE

The control pattern shown below is set as standard ex-works. Variations may exist. Please check and confirm if the control pattern is implemented on your excavator.

Fig. 3-107 shows the pattern for the left hand control lever.

.

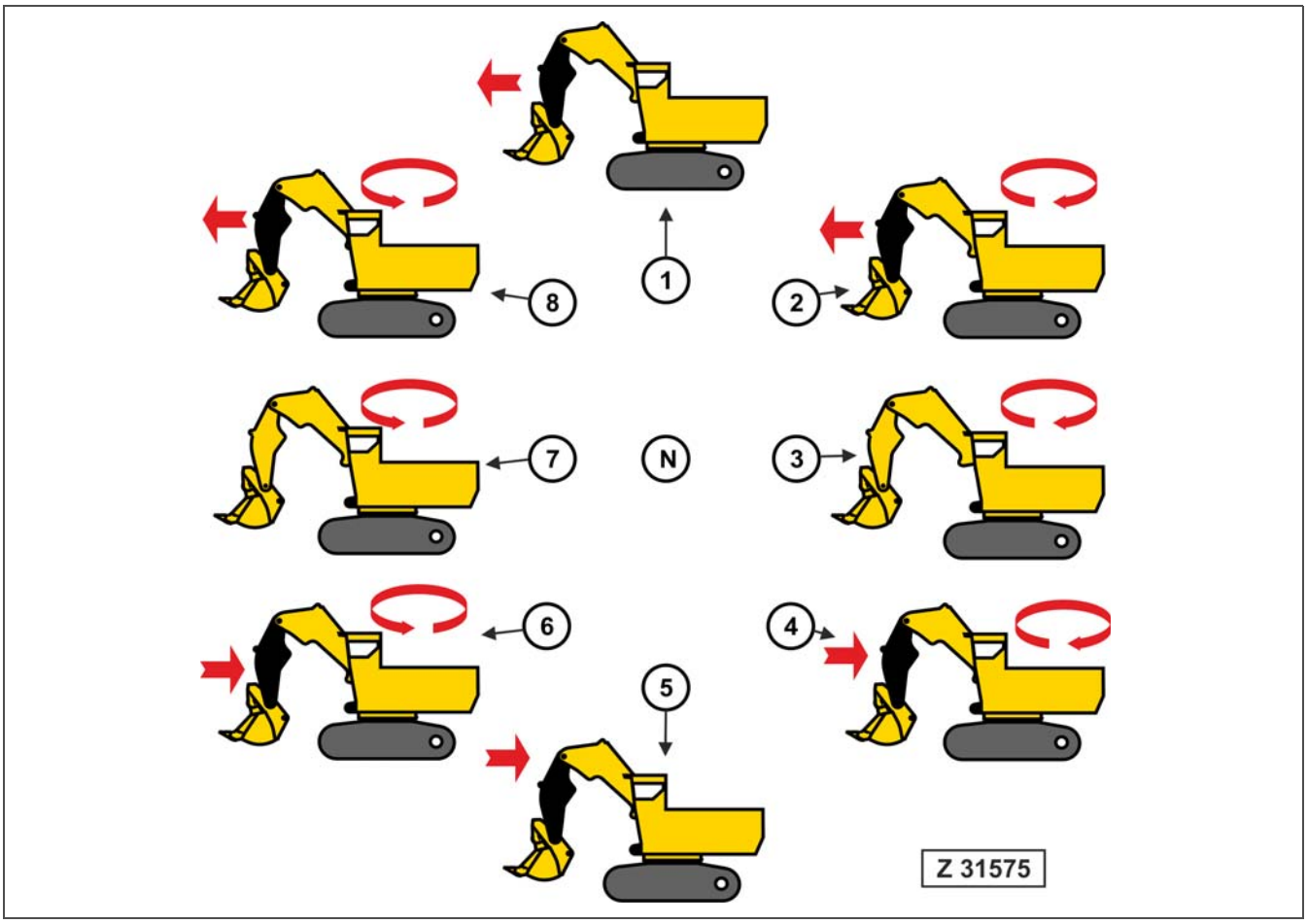


Fig. 3-107

Legend for Fig. 3-107

(N)	Neutral position	(5)	Retracting stick
(1)	Extending stick (away from excavator)	(6)	Retracting stick and slewing to the left
(2)	Extending stick and slewing to the right	(7)	Slewing to the left
(3)	Slewing to the right	(8)	Extending stick and slewing to the left
(4)	Retracting stick (towards excavator) and slewing to the right		

3.17 STOPPING THE ENGINE

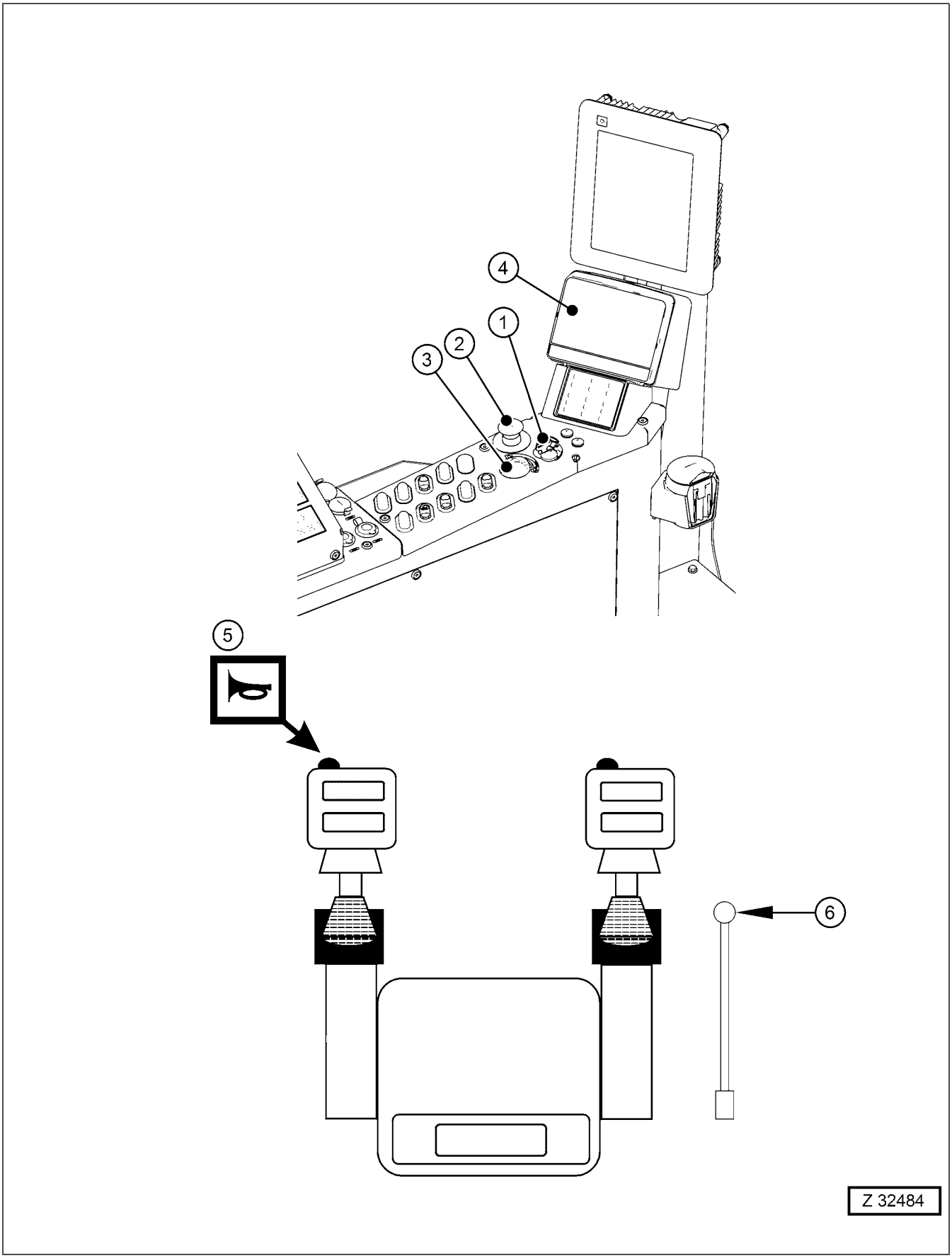


Fig. 3-124

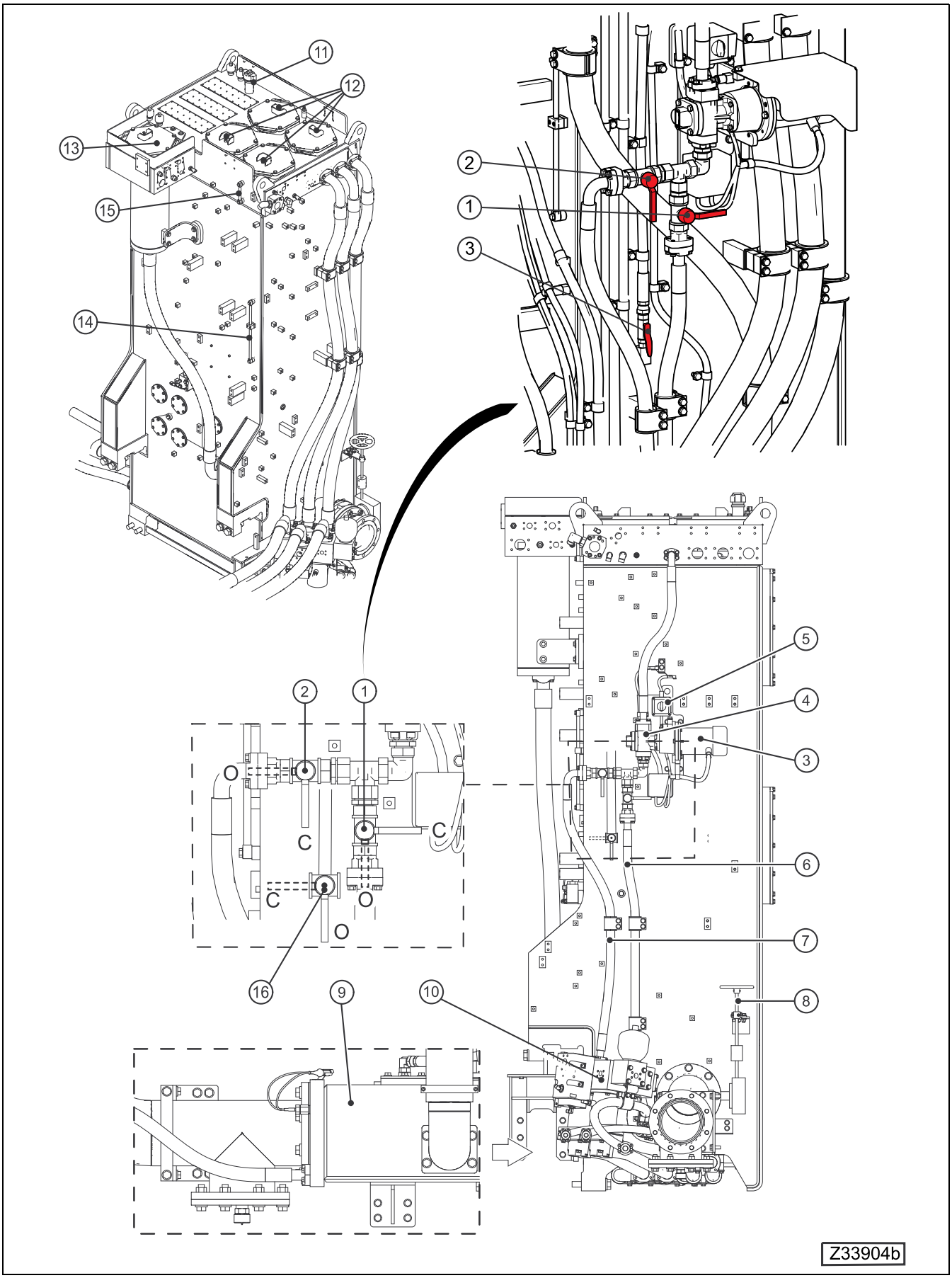


Fig. 3-131

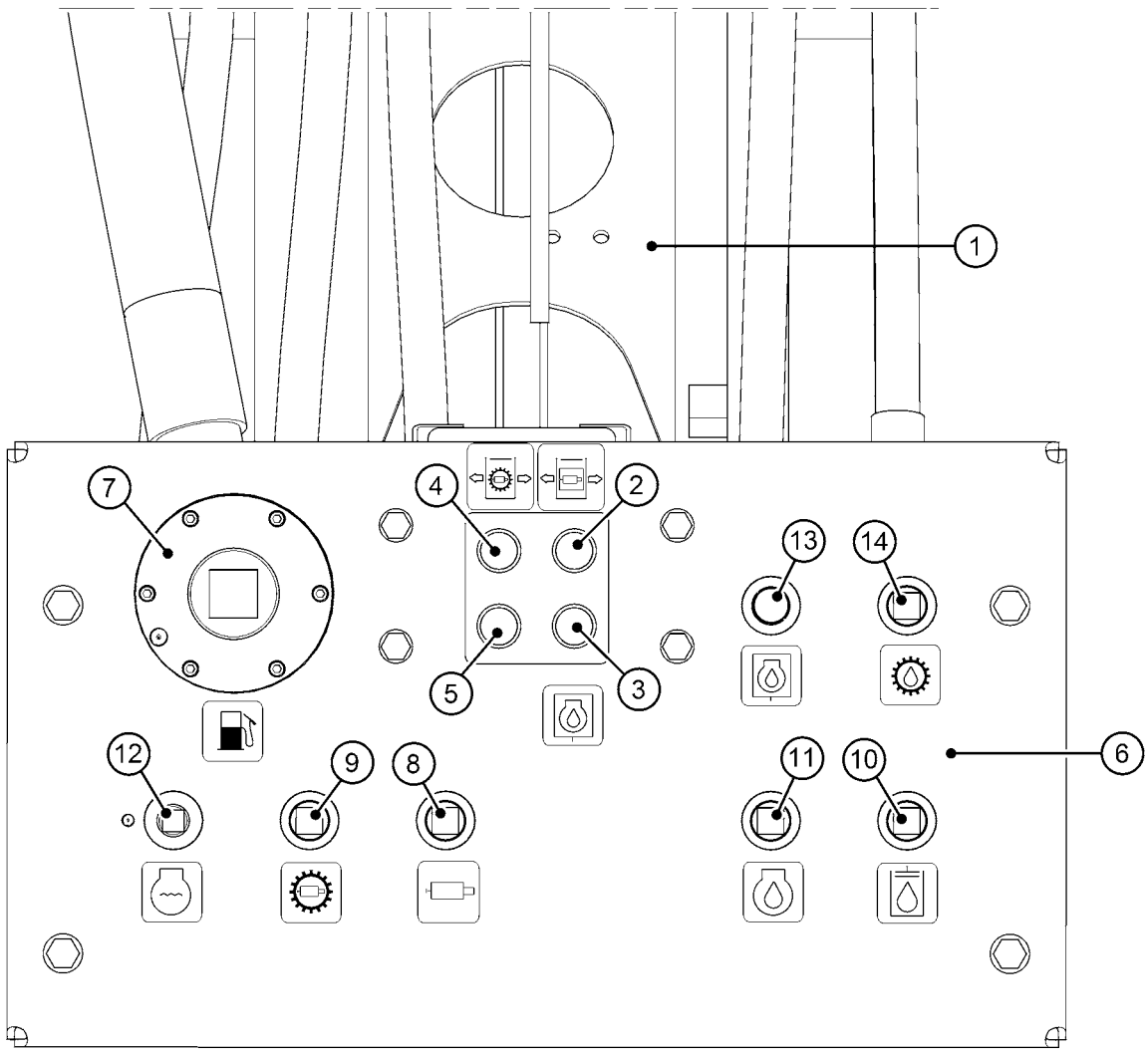


Fig. 3-136

3.23 RETRIEVAL PROCEDURE

NOTE! Before starting retrieval measures, inform the responsible safety department.

Check for fuel or oil spillage.

Observe the local fire prevention- and safety regulations.

Contact your Komatsu distributor station for all the necessary instructions for safe and economic retrieval procedures of your excavator

NOTICE

Select the sequence of retrieval steps with regard to the stability of the excavator. It must be prevented that the removal of main components impairs the stability of the excavator

REMARKS: The Assembly Procedure Manual contains information of component weights and instructions for correct lifting procedures.

4.3 FLUIDS AND LUBRICANTS

4.3.1 FLUIDS AND LUBRICANTS FOR MODERATE AND HOT CLIMATES

Point of Lubrication	Lubricant type	Ambient temp °C	Viscosity or stiffness	Standard
Engines	Refer to the Engine manufacturer's manual for specifications of engine oil, coolant and fuel. See note *2) Komatsu Genuine Engine Oils (EO15W 40 and EO 10W 30) are accepted by the engine manufacturer for use.			
Hydraulic System	Hydraulic oil See note *3)	- 20 to + 11	22	DIN 51524 -2 HLP) and -3 (HVLP). For values for Komatsu Genuine Hydraulic Oils, see "Recommended Hydraulic Oils" on page 4-301
		-14 to + 21	32	
		- 6 to + 31	46	
		0 to + 40	68	
		+ 5 to + 48	100	
Travel gears, Final drives and slew gears	Gear oil CLP See note *4)	-15 to + 50	CLP 220	DIN 51517-3 (CLP)
Brake housings and Motor adapter housings of travel gears and slew gears *3)	Engine oil	all	SAE 10	
	or Hydraulic oil		HLP 22 or HLP 32	DIN 51524-2 (HLP) and -3 (HVLP)
PTO lube oil	Gear oil CLP see note *5)	-15 to + 50	CLP 150	DIN 51517- 3 (CLP)
Pump drive shaft housing	hydraulic oil	all seasons	Viscosity 32	DIN 51524 -2 HLP) and -3 (HVLP).
Central Lubrication System	Multi-Purpose Grease MPG	Refer to the lubricant specifications in volume 2 binder for the recommended MPGs or see the latest version of the service bulletin AH10529		
Slew Circle Pinion Lubrication System	Open gear Lubricant	Refer to the lubricant specifications in volume 2 binder for the recommended MPGs or see the latest version of the service bulletin AH11501		
Track rollers and carrier roller, and	Grease	-40 to +40	Castrol Tribol GR 3020/1000-000 PD. See note *1)	
idler wheels	Oil	all seasons	Shell Omala GX220	
Air conditioning system	Refrigerant		R 134a	The Air Conditioning is prepared for Refrigerant R134a only. See note *6)
Refrigerant compressor	Special oil			

4.6.4 PERIODIC SERVICING SCHEDULE

4.6.4.1 INITIAL CHECKS

Service Point	Service	See page
Working attachment	Injector check	4-325
Slew ring	Injector check	4-327
Center frame and raceway of slew ring	Injector check	4-329
Stairway	Injector check	4-333
Slew ring bolts	check torque	4-337
Crawler bolts	check torque	4-339
Service arm	Injector check	4-335

4.6.4.2 WHEN NECESSARY

Service Point	Service	See page
Hydraulics	Oil change (after bad oil analysis)	4-345
Hydraulics	Filling	4-348
Engine Air Cleaners	Maintenance	4-355
Slew circle toothing	Immediately apply grease if bare spots are visible	4-359
Automatic lubrication systems	Replace or fill grease containers Clean or replace filter elements	4-361
Guide wheels	If leakage occurs, replace floating seals and fill with gear oil CLP 220	4-363
Wear package	Replacing	4-364
Air conditioning	Maintenance	4-371
Radiator	Check seals	4-374
Bucket lips and shrouds	Check	4-487

4.6.4.3 EVERY 10 OPERATING HOURS OR DAILY

Service Point	Service	See page
Excavator	Walk-around inspection	4-377
Radiator	Check coolant level	4-381
Track groups	Clean	4-381
Boom	Check ladder and walkway	4-383
Electrical Equipment	Visual check	4-383
Emergency escape from cab	Visual check	4-387

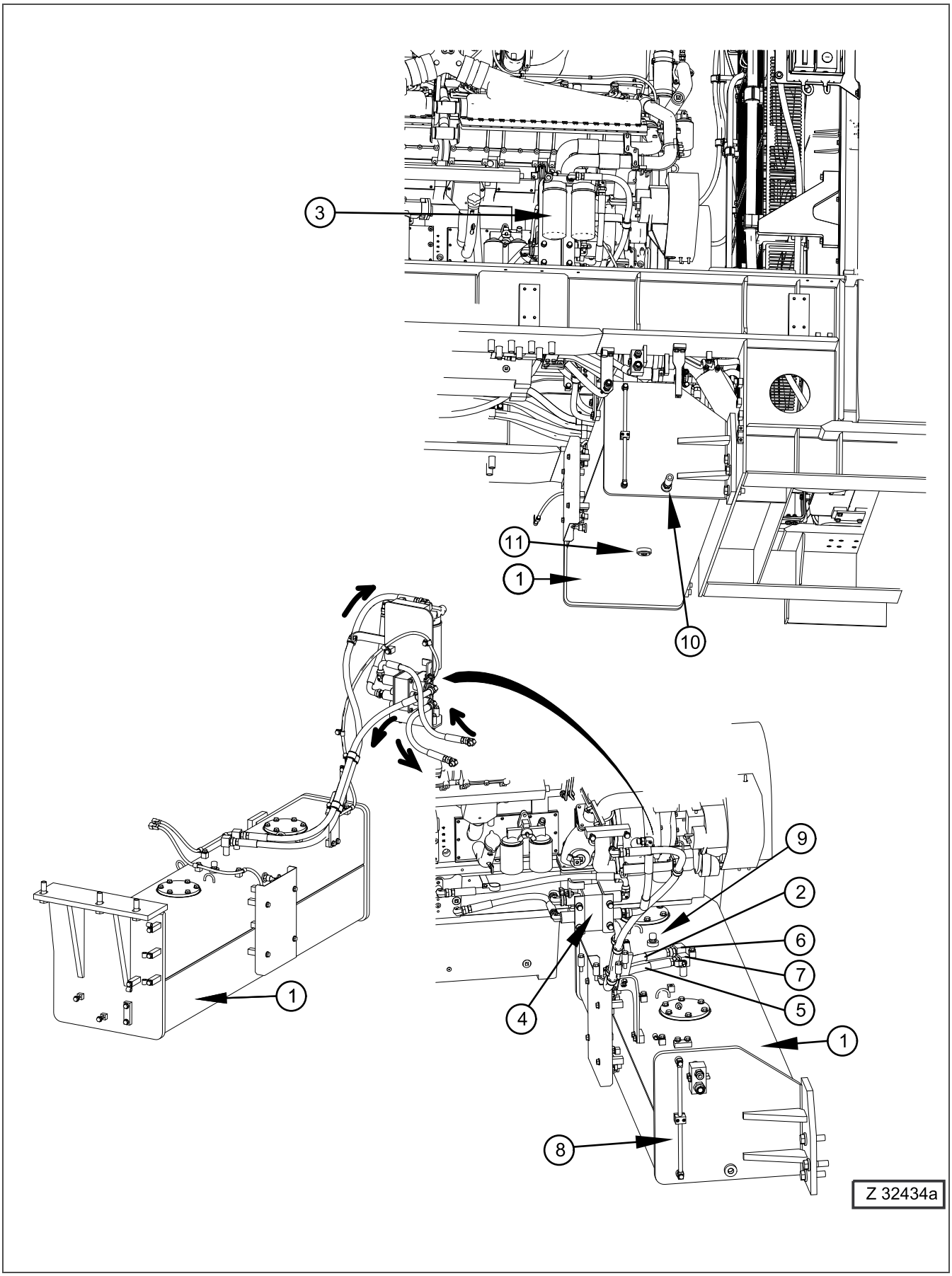


Fig. 4-142

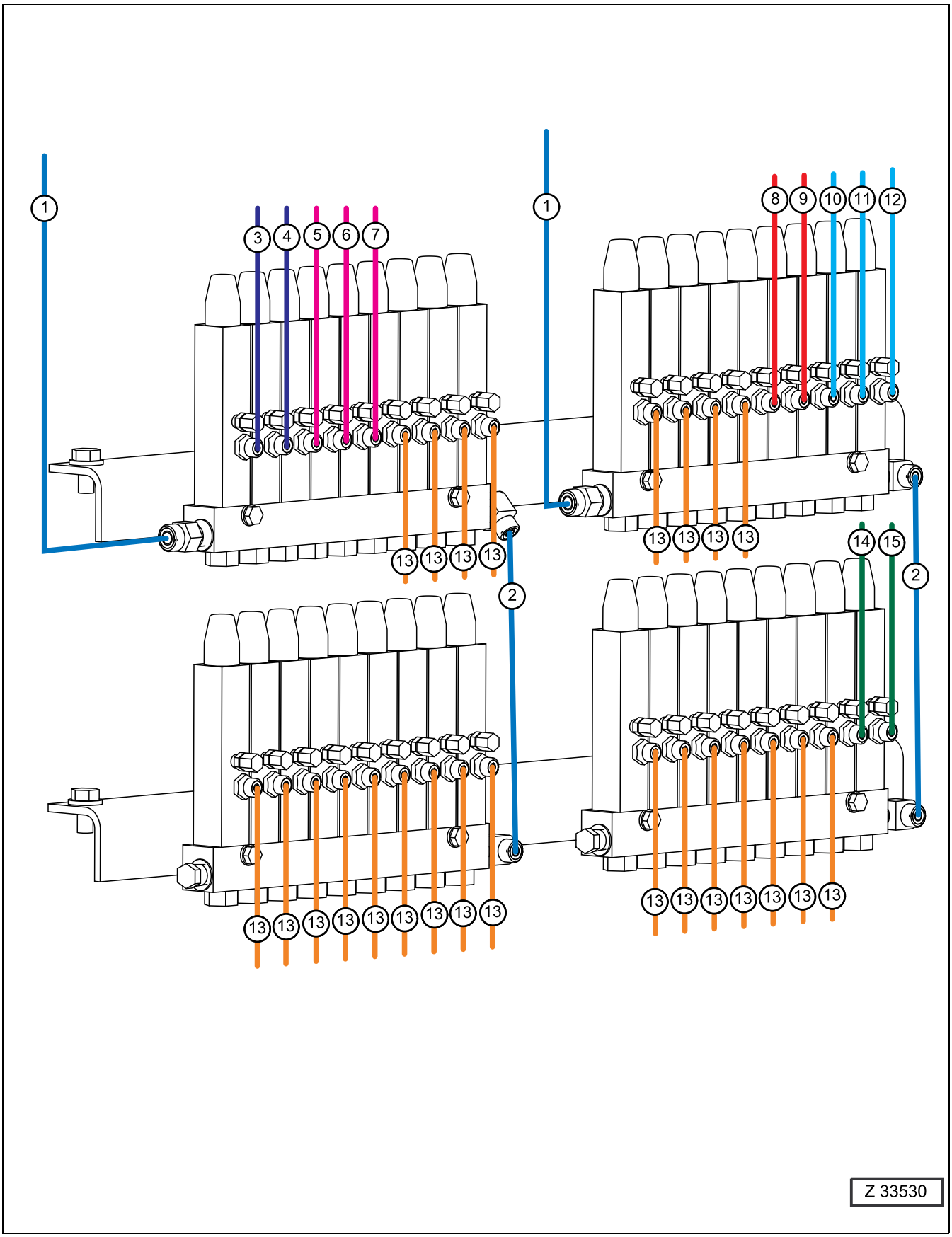


Fig. 4-147

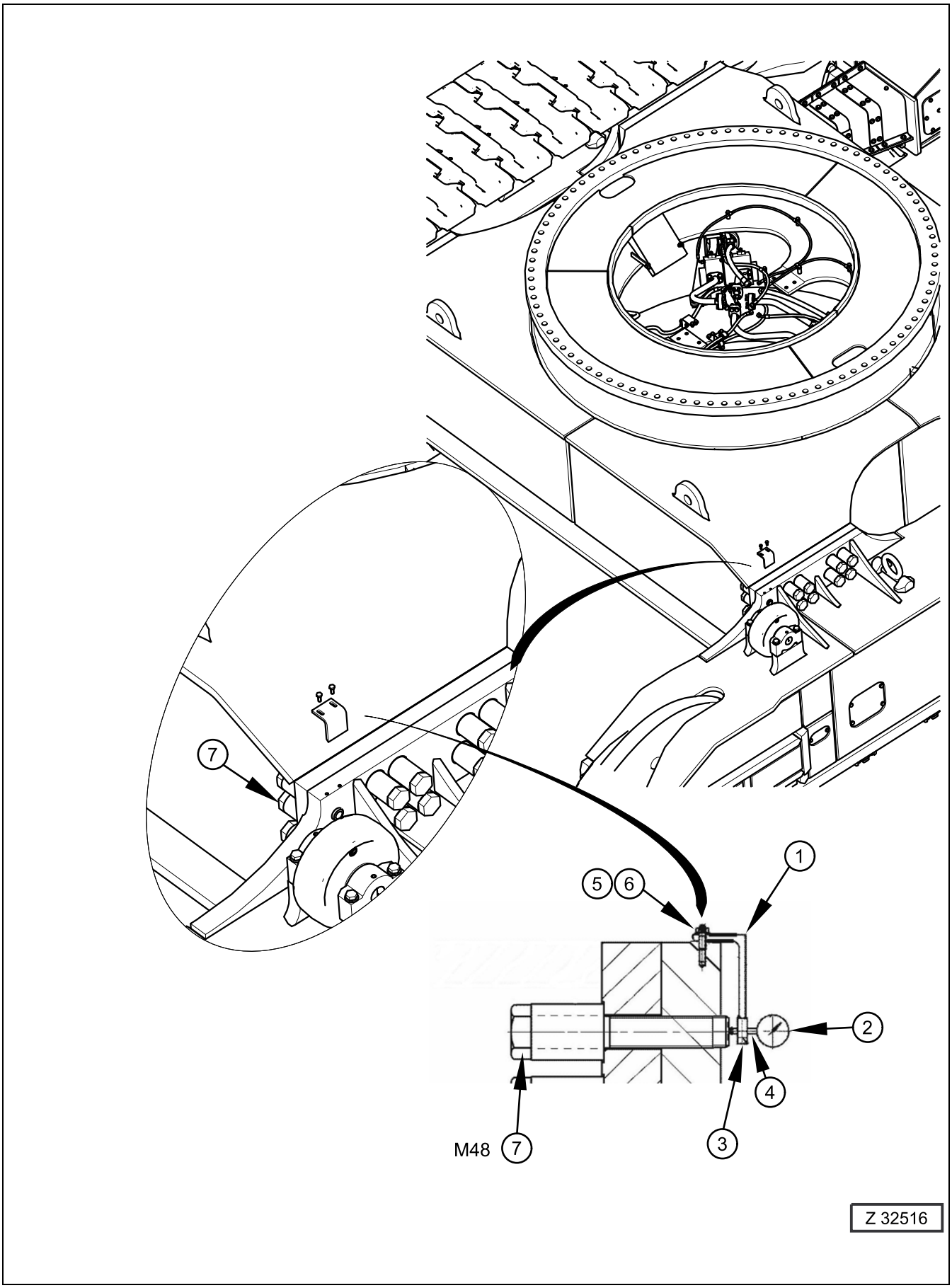


Fig. 4-152

4.10.2.1 BLEEDING THE MAIN AND AUXILIARY PUMPS.

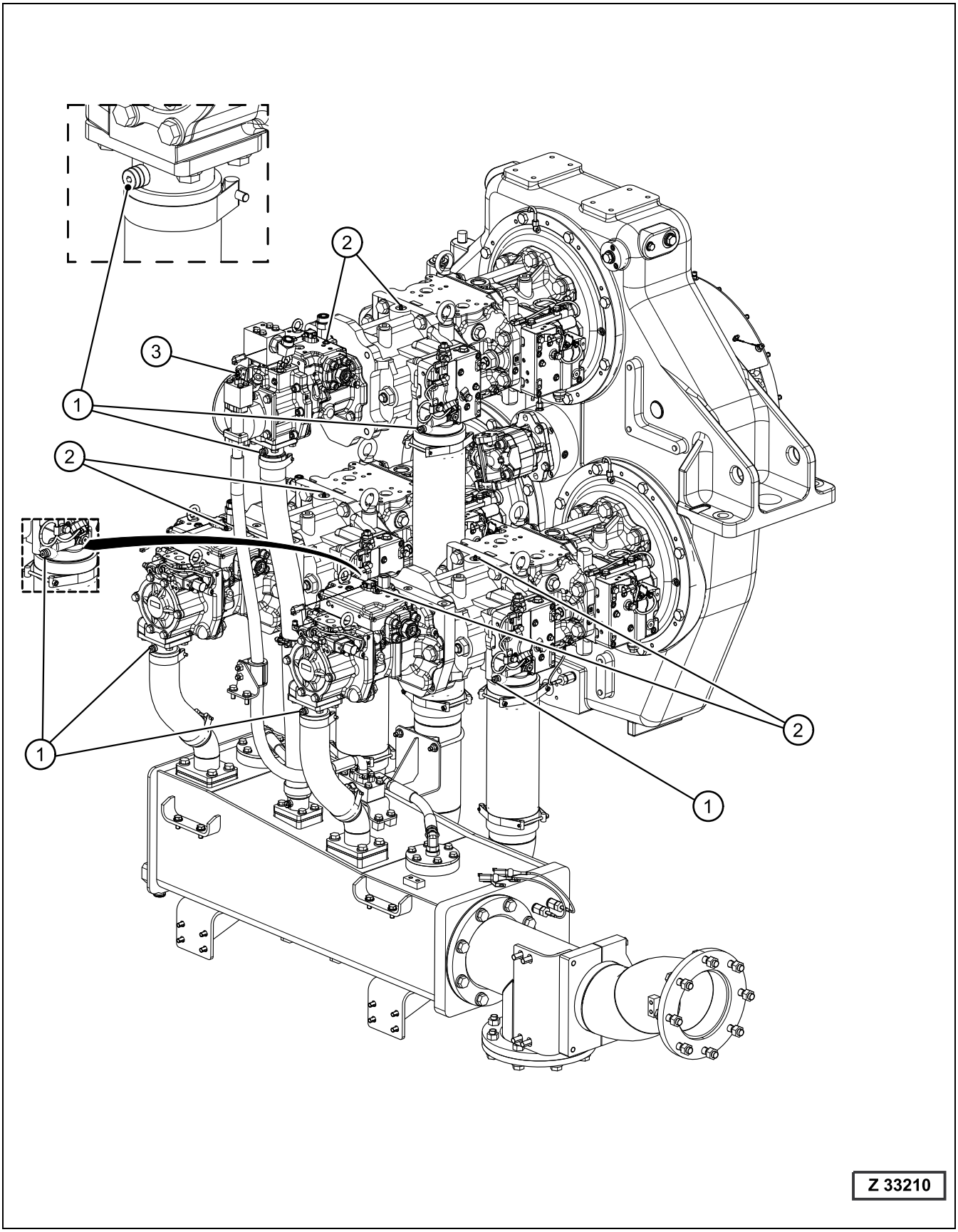


Fig. 4-157

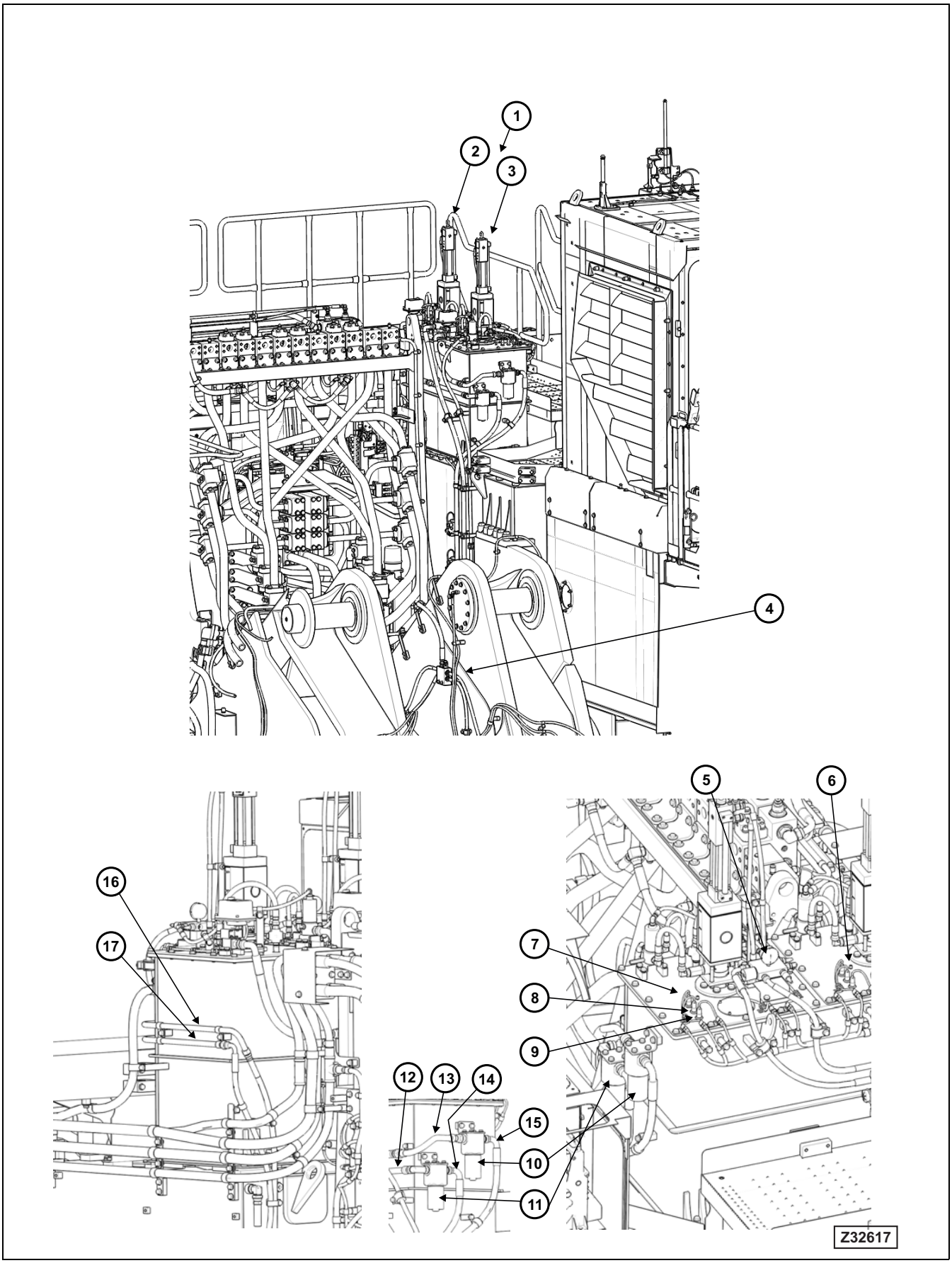


Fig. 4-161

Slide shroud forward to remove.

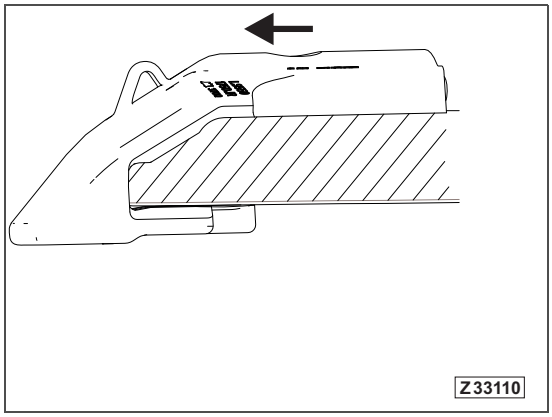


Fig. 4-179

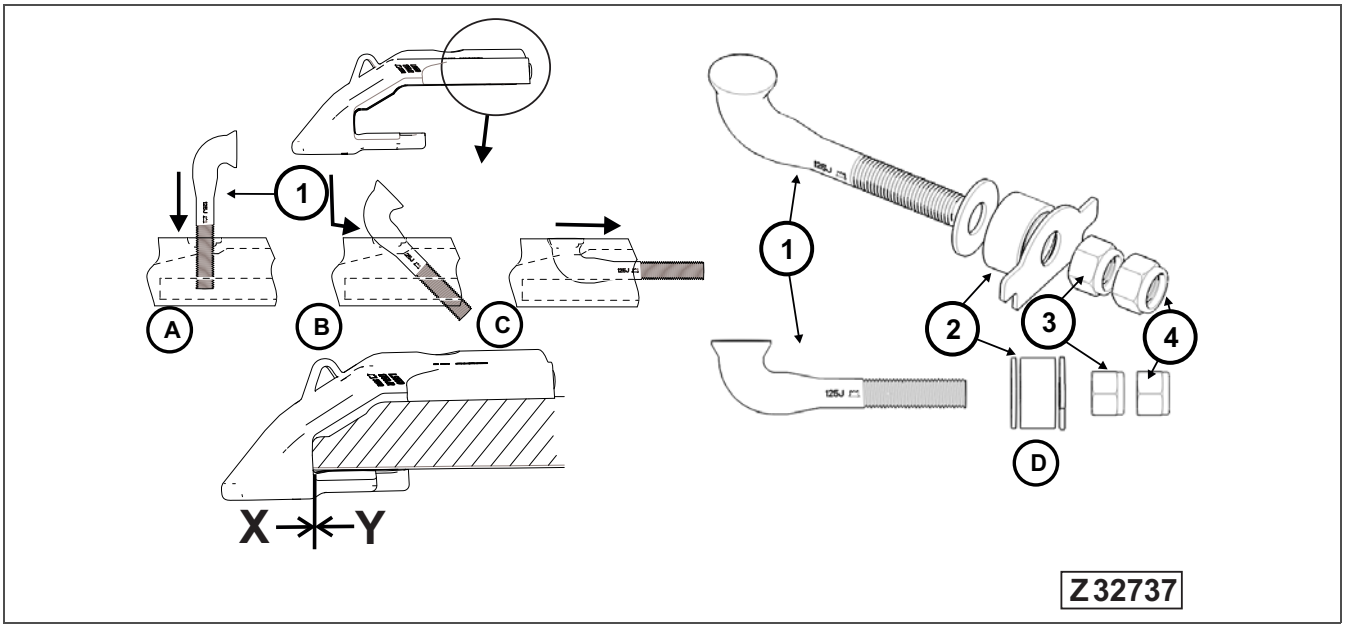


Fig. 4-180

Legend for Fig. 4-180

(1) J-bolt

(2) Spring assembly

(3) First nut

(4) Second nut

The left side of the illustration shows the position of the J-bolt (1) in the lip shroud. Mount the bolt as shown ensuring that when it is tightened.

To reposition the shroud on the lip, insert the J-bolt onto the shroud through the top hole (A). Rotate the bolt 90° so that the threaded end is facing the rear of the shroud. (B and C)
Reposition the shroud on the lip by sliding it onto the weld base as far as it will go, making sure that the X surface contacts the X surface.
Attach the spring assembly (2) ensuring it is the correct way around. The end plate (D) is towards the rear of the shroud. Tighten the nuts (3 and 4) to 305 Nm (225 ft lbs).

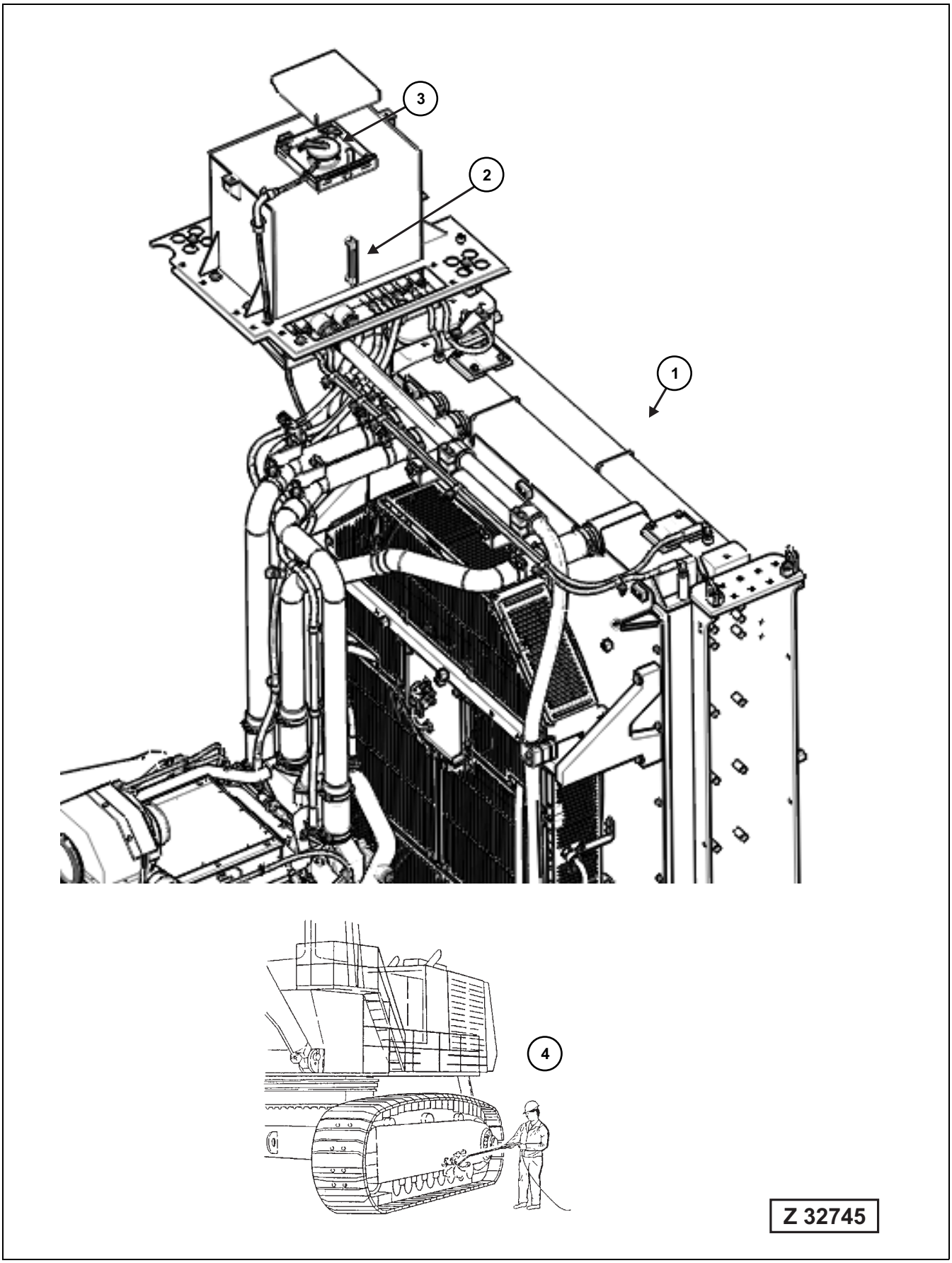


Fig. 4-187

4.12 EVERY 50 OPERATING HOURS OR WEEKLY

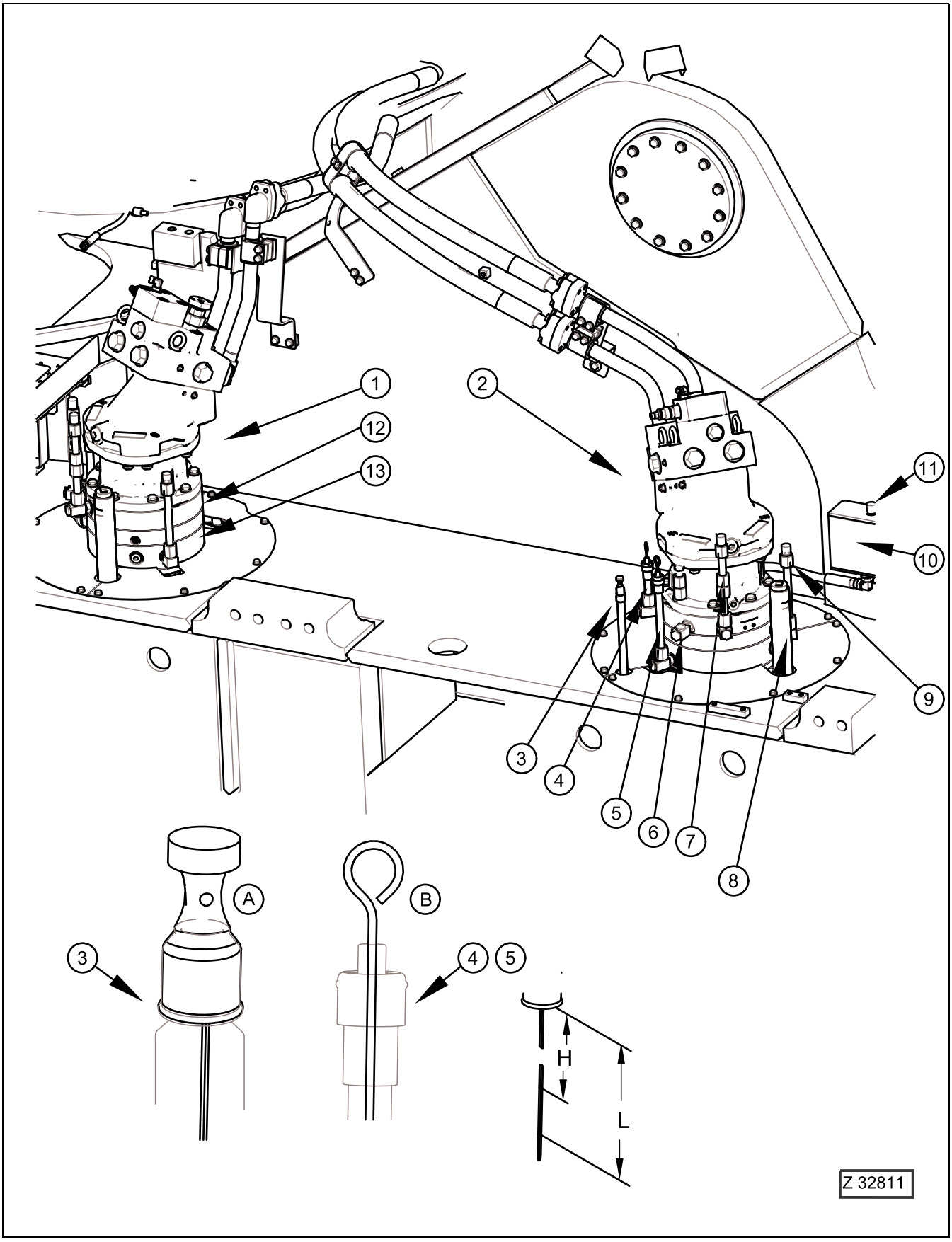


Fig. 4-193

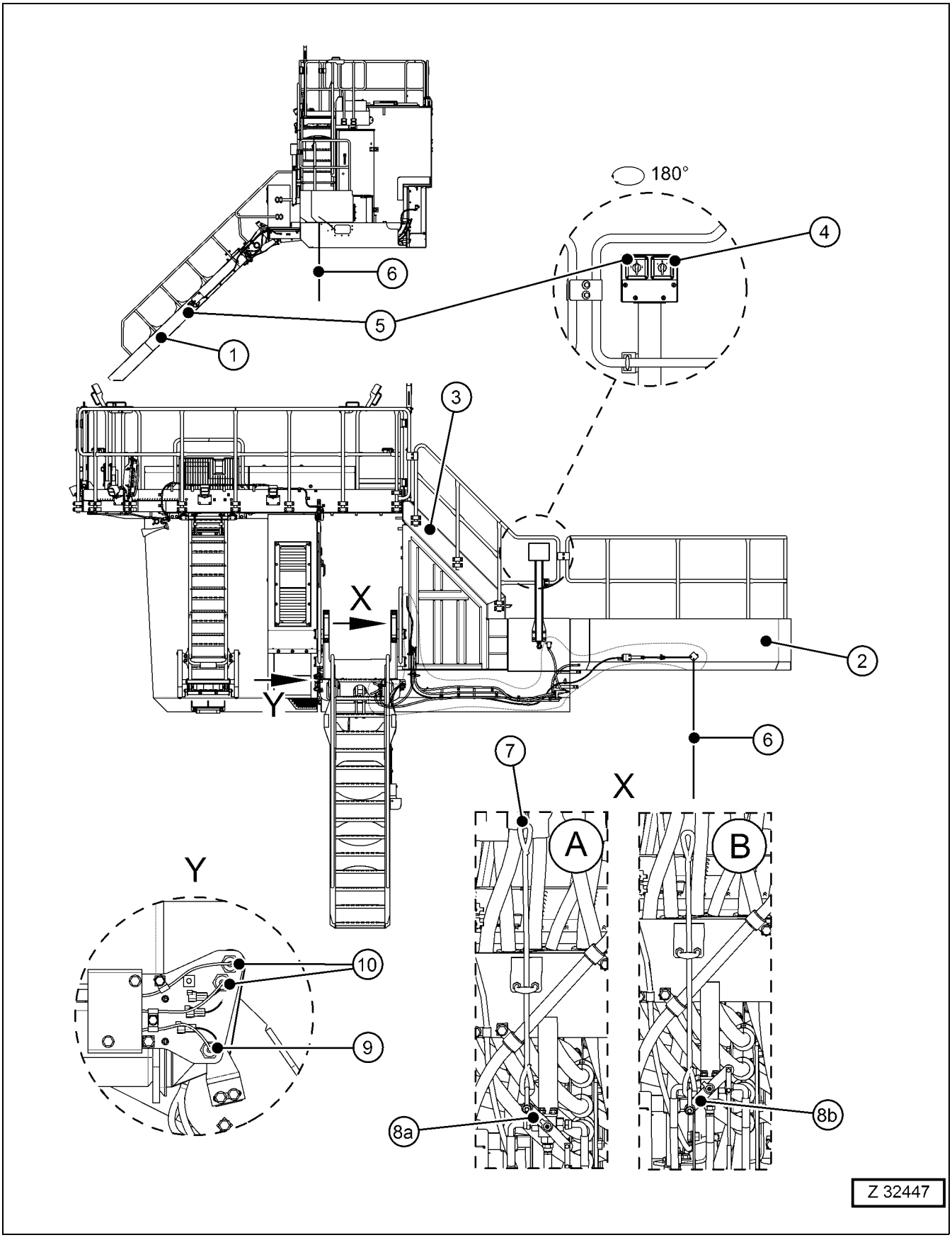


Fig. 4-198

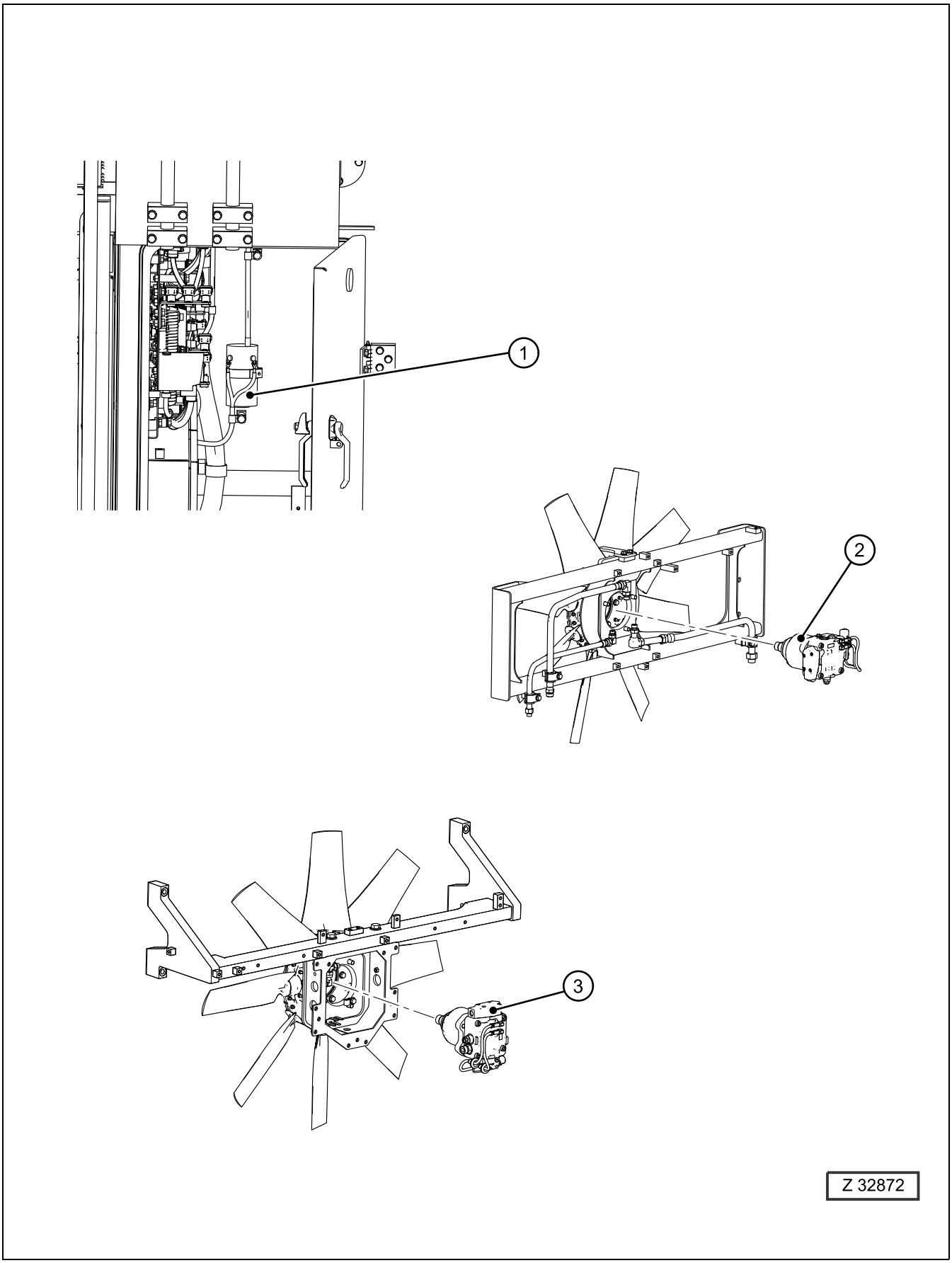


Fig. 4-205

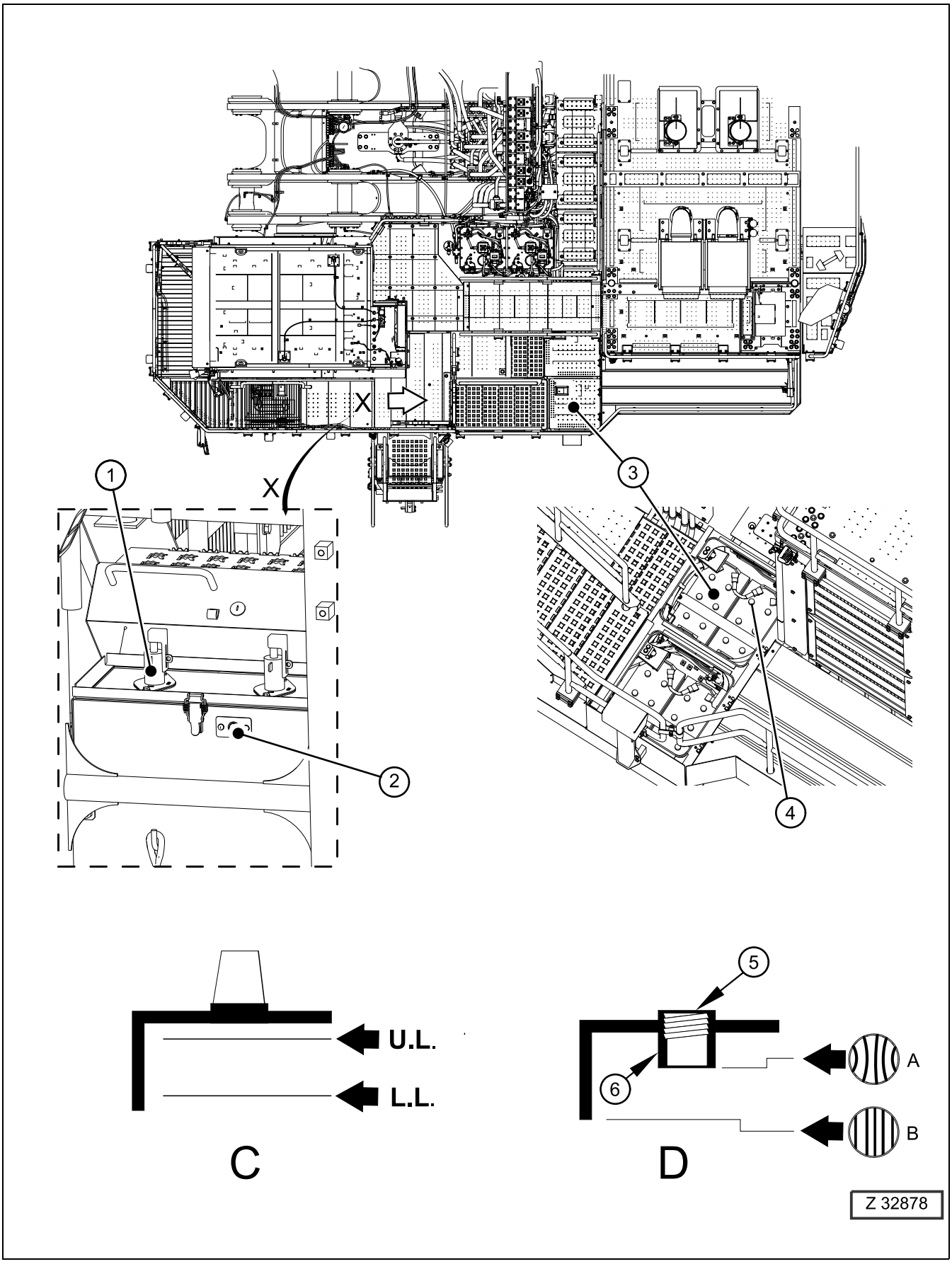


Fig. 4-210

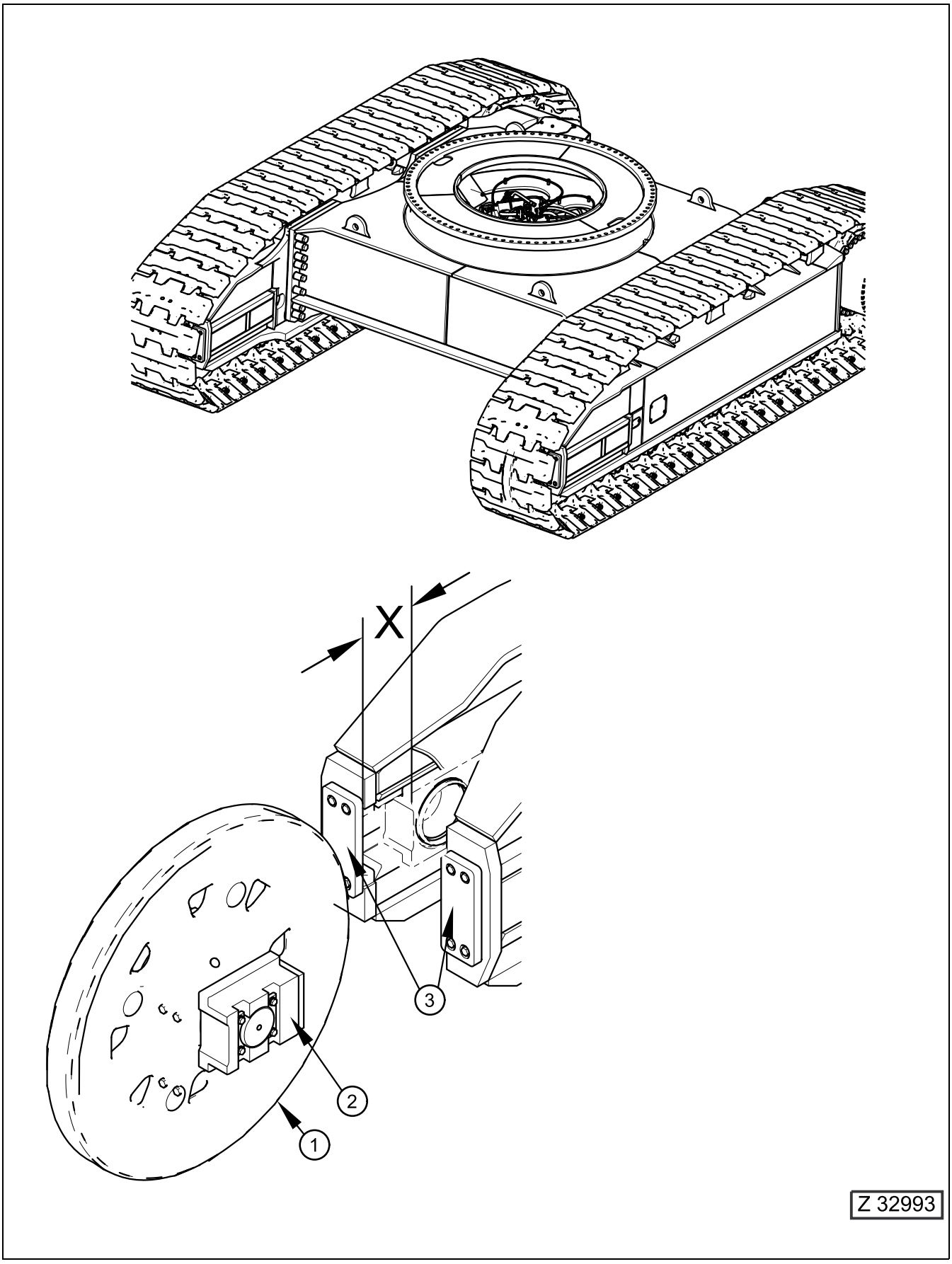


Fig. 4-215

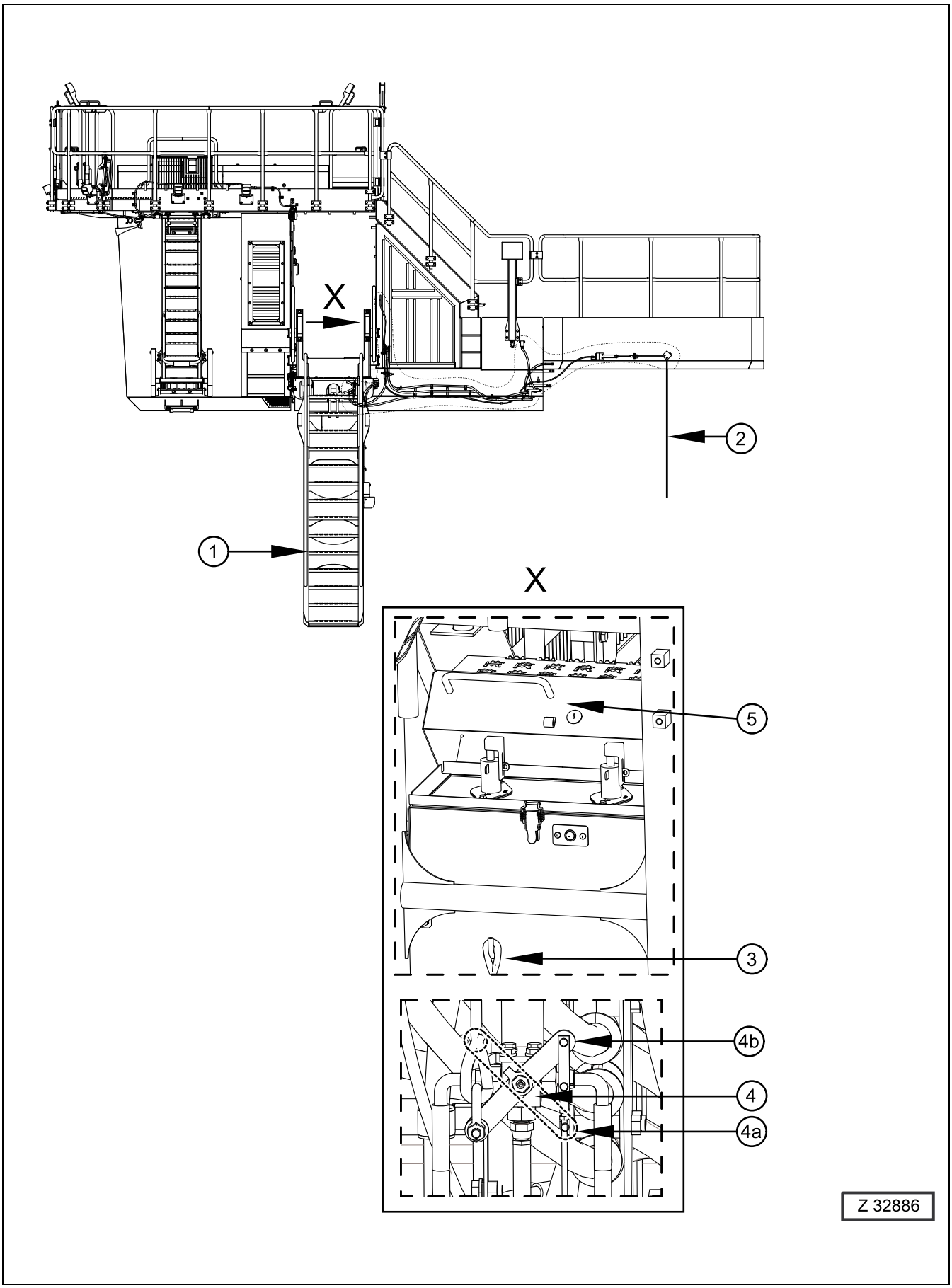


Fig. 4-220

NOTICE

If the transparent cover (6) is not tight enough, it may cause engine starting failure. If the transparent cover (6) loosens while operating, air can enter the fuel circuit meaning the fuel pressure is not high enough to start the engine.

Stage 2 filters

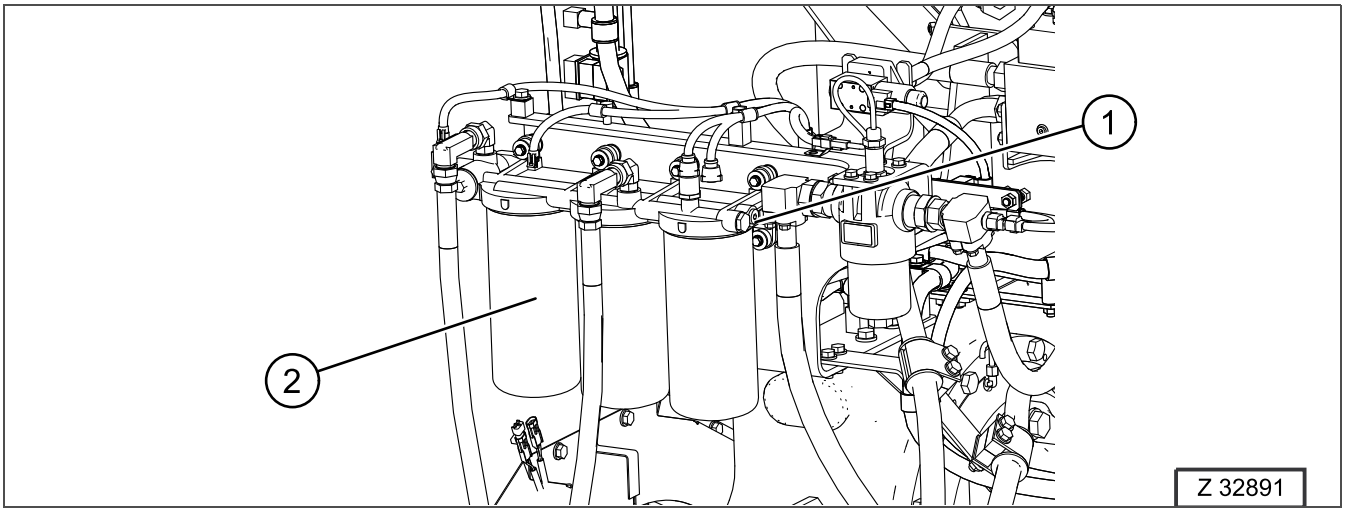


Fig. 4-231

Legend for Fig. 4-231

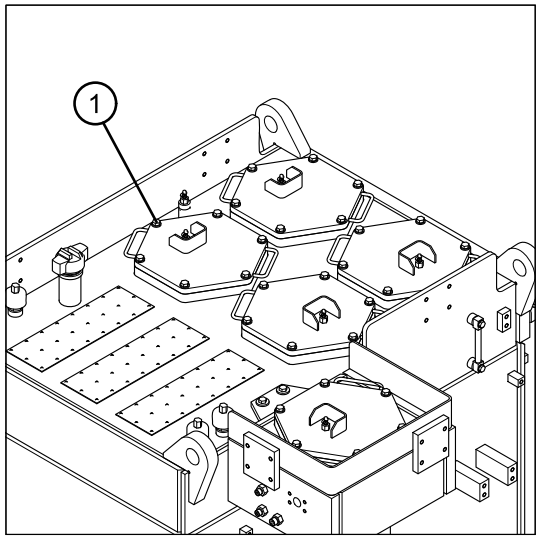
(1) Drain plugs

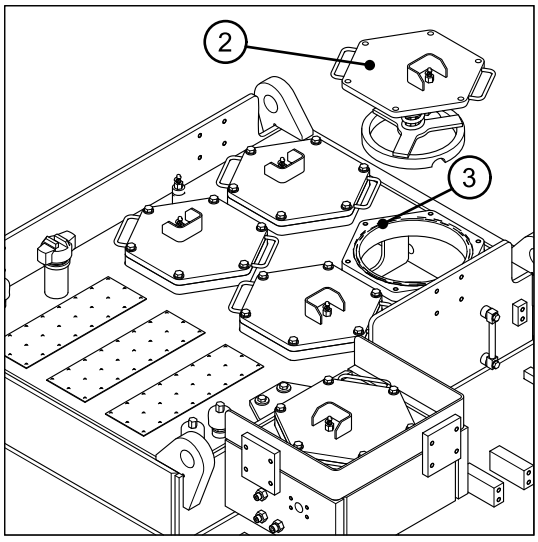
(2) Stage 2 fuel filter (3 micron)

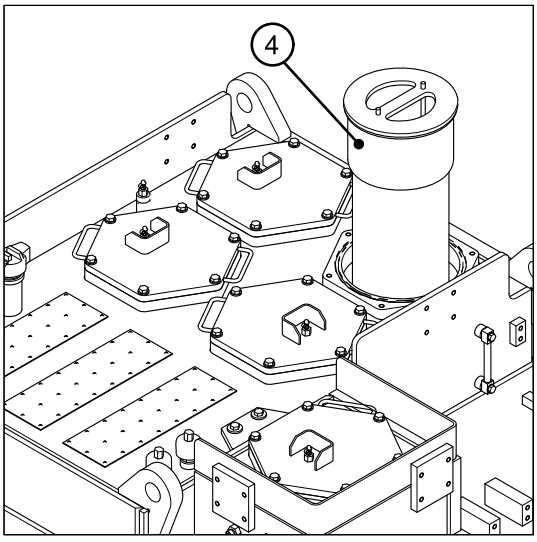
1. Loosen the drain plug (1) to drain the fuel. Perform this action slowly to avoid splashing fuel.
2. Remove the stage 2 fuel filter cartridges (2)
3. Clean the seal surface of the filter head.
4. Thinly apply oil to the ring surface and install new cartridge to the filter head.
5. Tighten the drain plug (1)
6. When installing the filter cartridge, tighten until the packing surface contacts the sealing surface of the filter head, then tighten further another 1/2 to 3/4 turns (hand tighten to 20Nm).

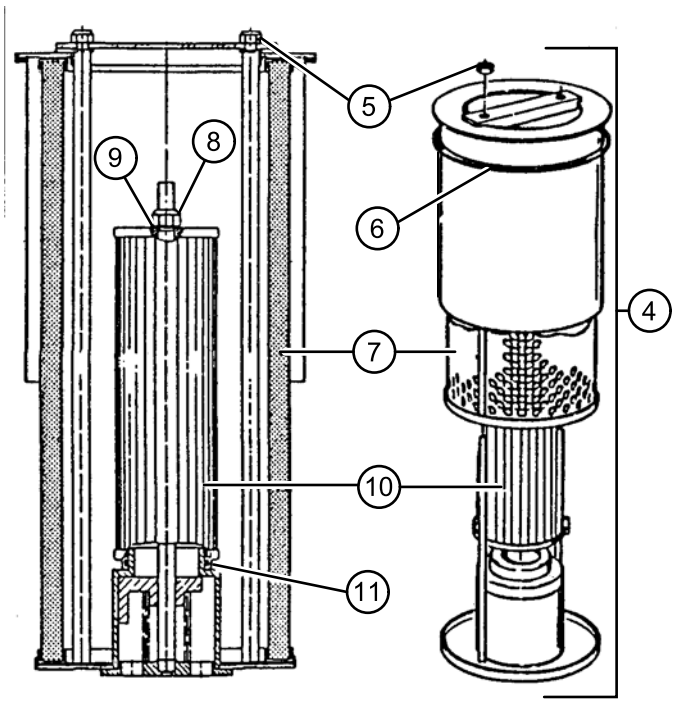
REMARKS: If the filter surface is tightened too much, the packing will be damaged and this will lead to fuel leakage. If the cartridge is too loosely tightened, fuel will also leak from the packing. Always tighten to specifications.

7. After replacing the filter cartridge, turn the starting switch to ON position.
   The fuel feed pump which is provided with the stage 1 filter operates.
   the fuel feed pump bleeds the fuel circuit (over stage 1 and stage 2 filters) automatically and drains back to the fuel pump.
8. Turn the starting switch to OFF position









Z 32897

Fig. 4-237

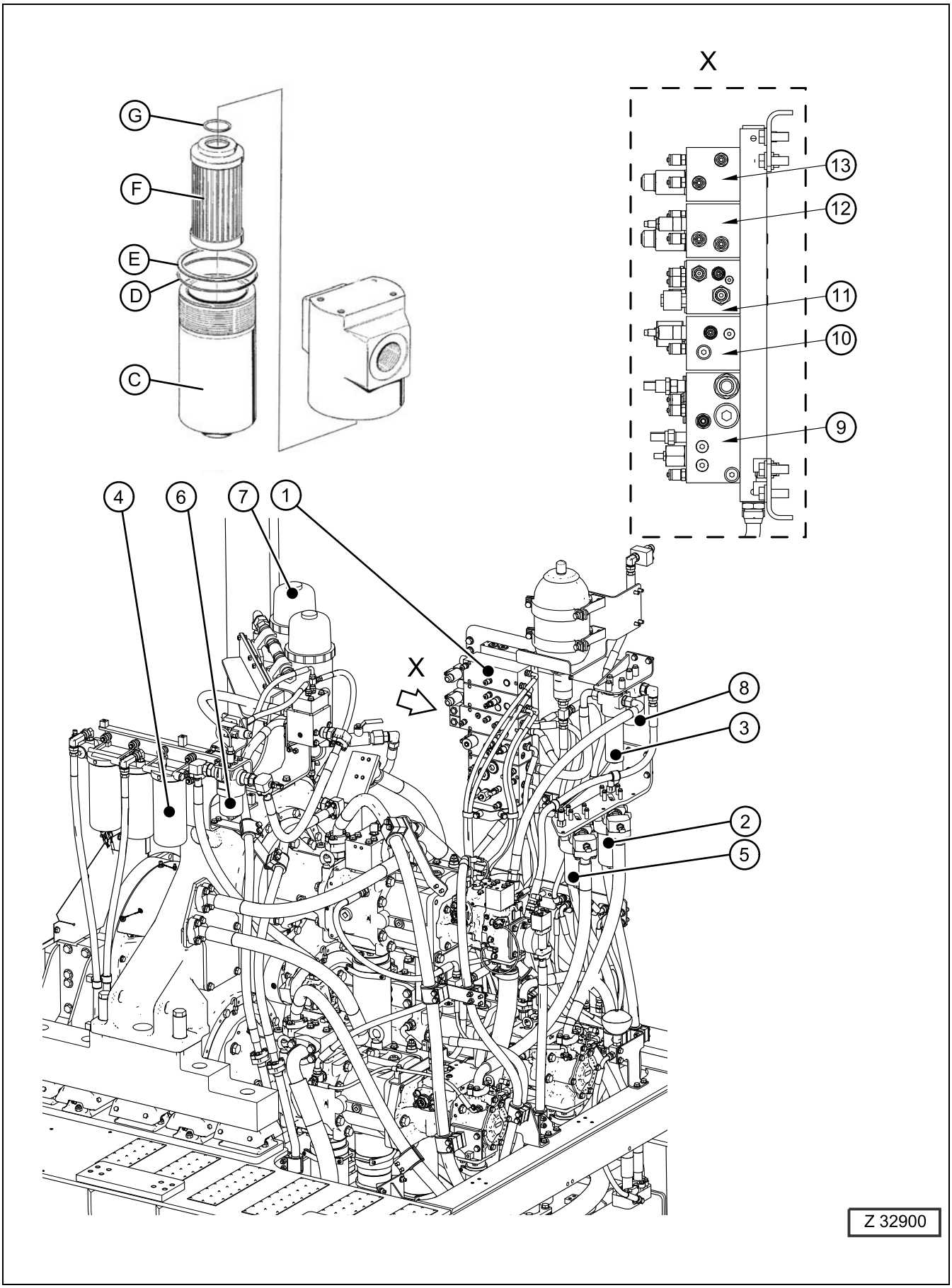


Fig. 4-242

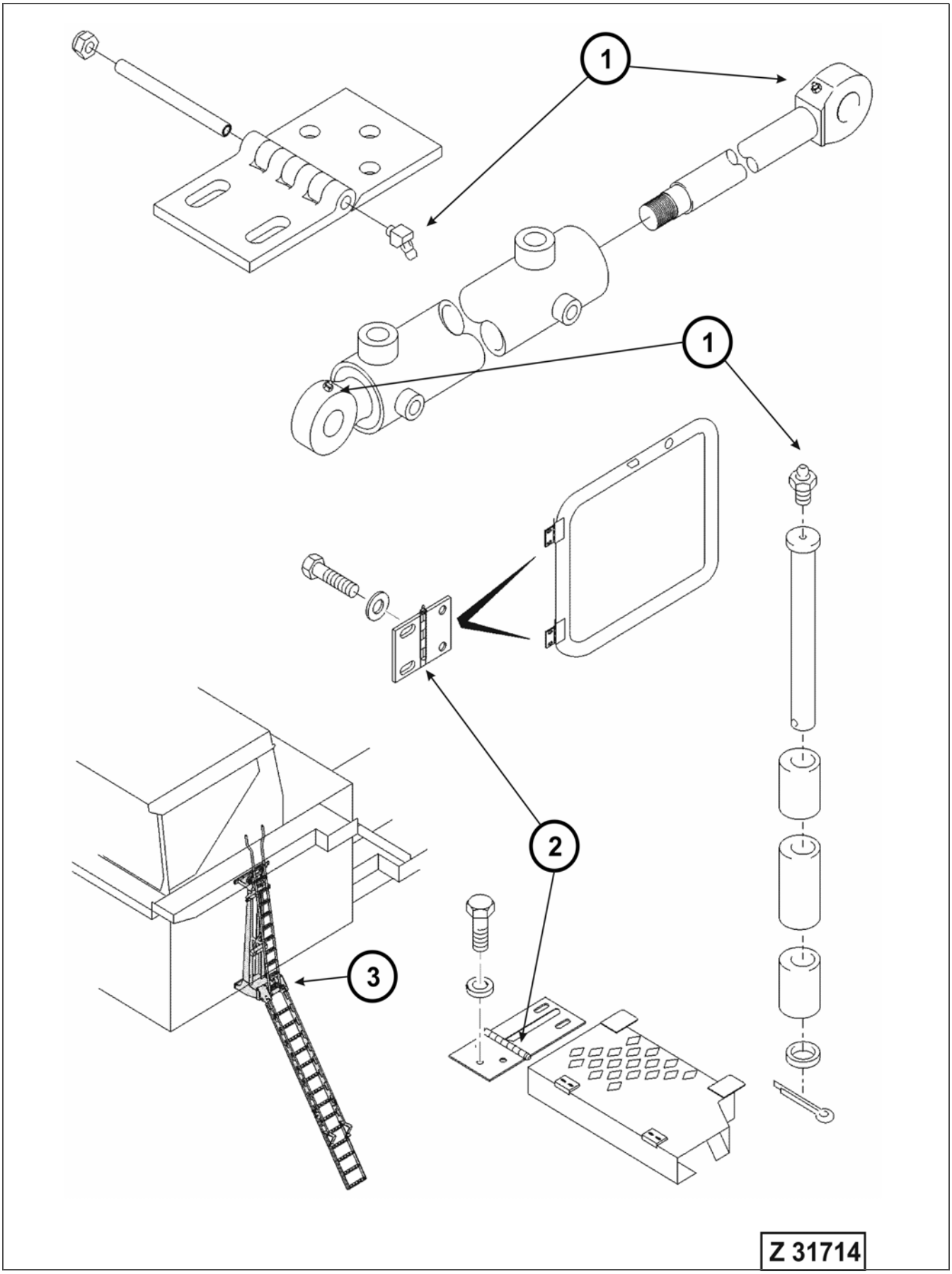


Fig. 4-247

4.15.12 CHECKING AND RELEASING GAS IN THE ACCUMULATOR FOR CONTROL CIRCUIT

⚠ WARNING

ACCUMULATOR HANDLING IS HAZARDOUS!

The accumulator is charged with high pressure nitrogen gas which may cause an explosion leading to serious injury or death.
Stand away from the hydraulic equipment when performing this operation to avoid spurting oil.
Do not disassemble the accumulator.
No naked flames in the vicinity of the accumulator.
No drilling, welding or flame-cutting.
No hitting, rolling or impacting.
The gas must be released when disposing of the accumulator. Ask your Komatsu distributor to perform this.

NOTICE

If the nitrogen gas charge in the accumulator is low and operations are continued, it is impossible to release the remaining pressure inside the hydraulic circuit if a failure occurs on the excavator.

Accumulator Function

The accumulator has the function of storing the pressure of the control circuit. <Even after the engine is stopped, the control circuit can be operated as long as the accumulator functions normally. The following actions are possible:-

– When the control lever is operated in the direction to lower the working equipment, the working equipment descends under its own weight
– Release the pressure from the hydraulic circuit.
– The accumulator for the hydraulic circuit is located as shown by (1) on Fig. 4-255

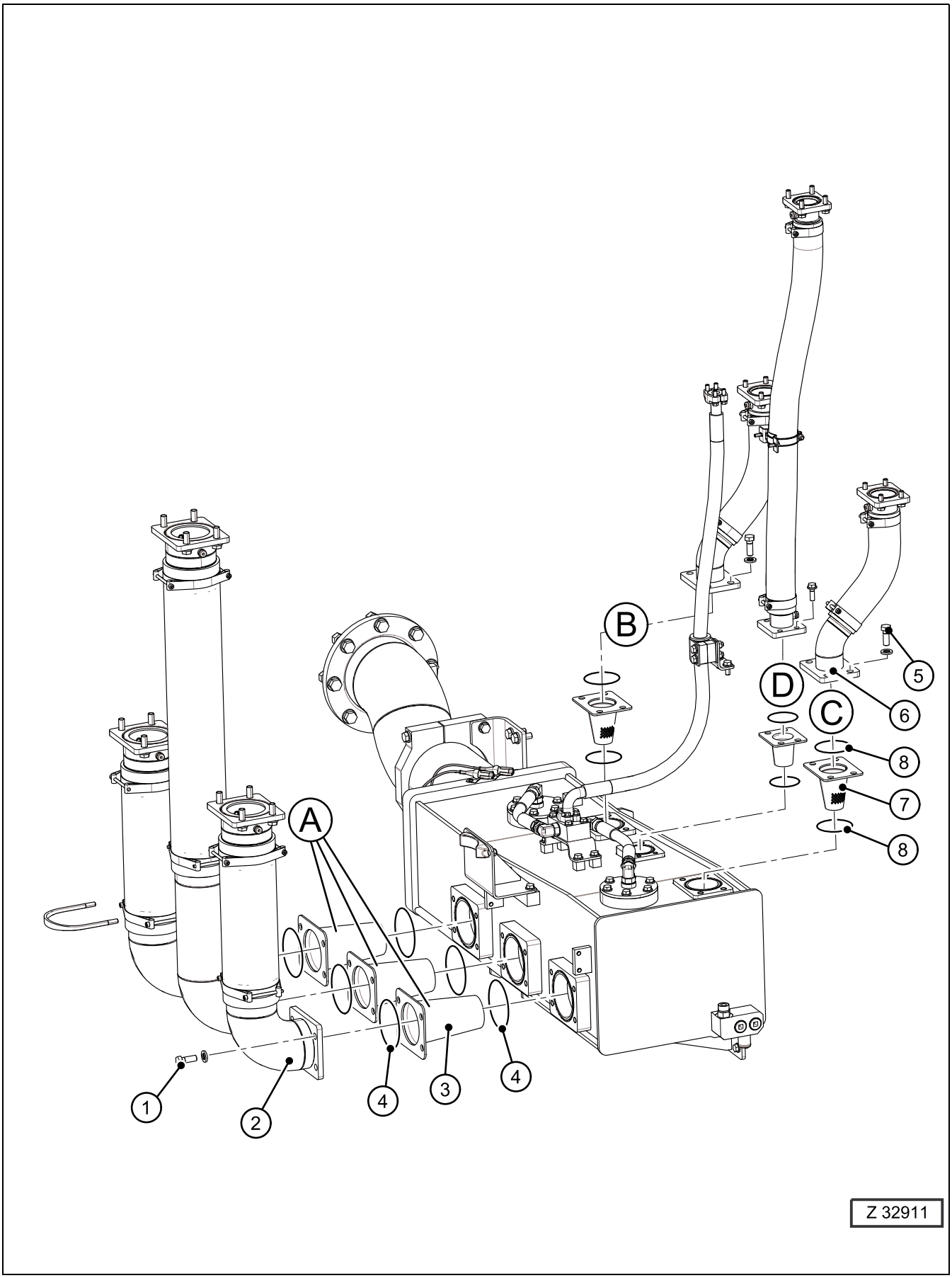


Fig. 4-264

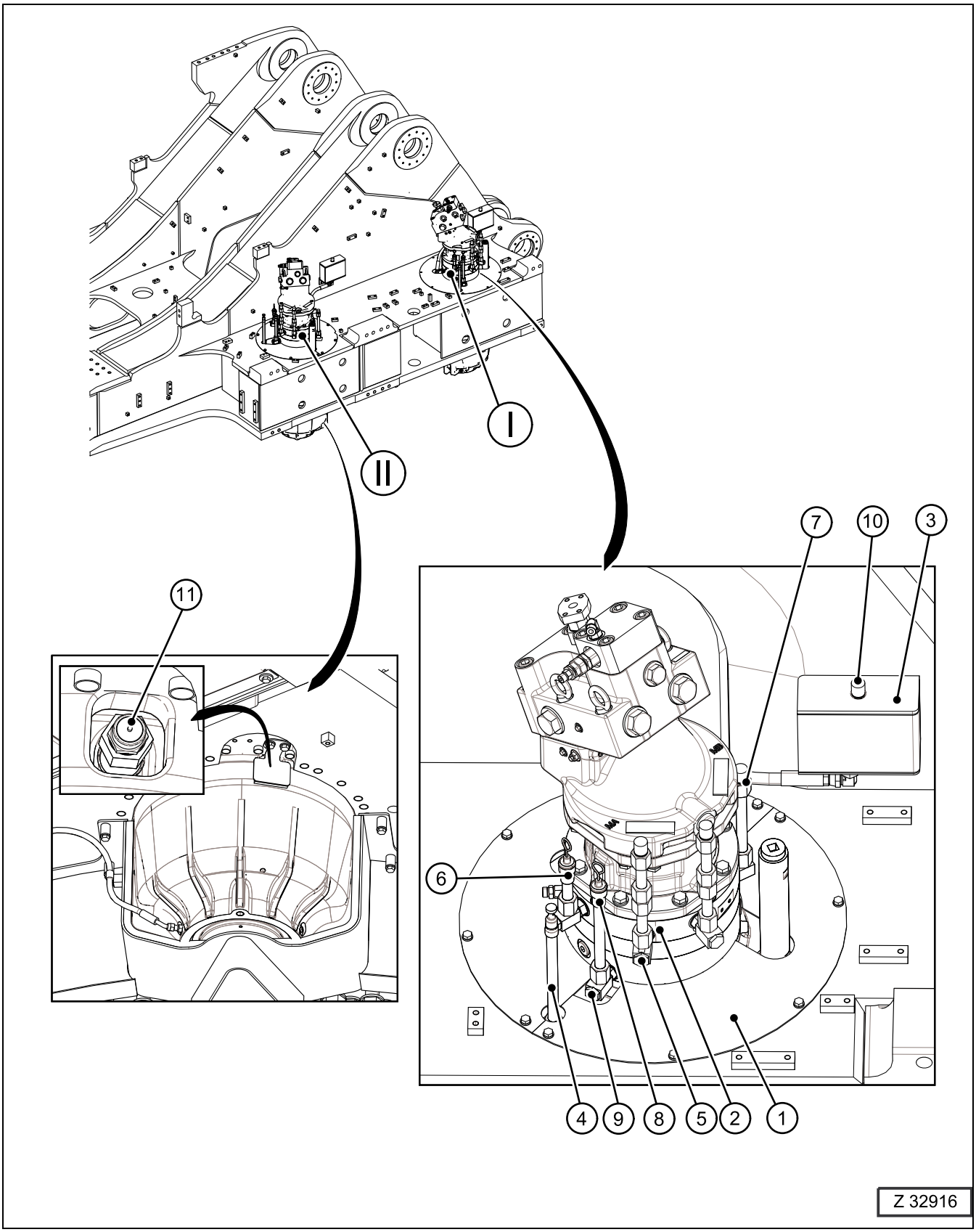


Fig. 4-269

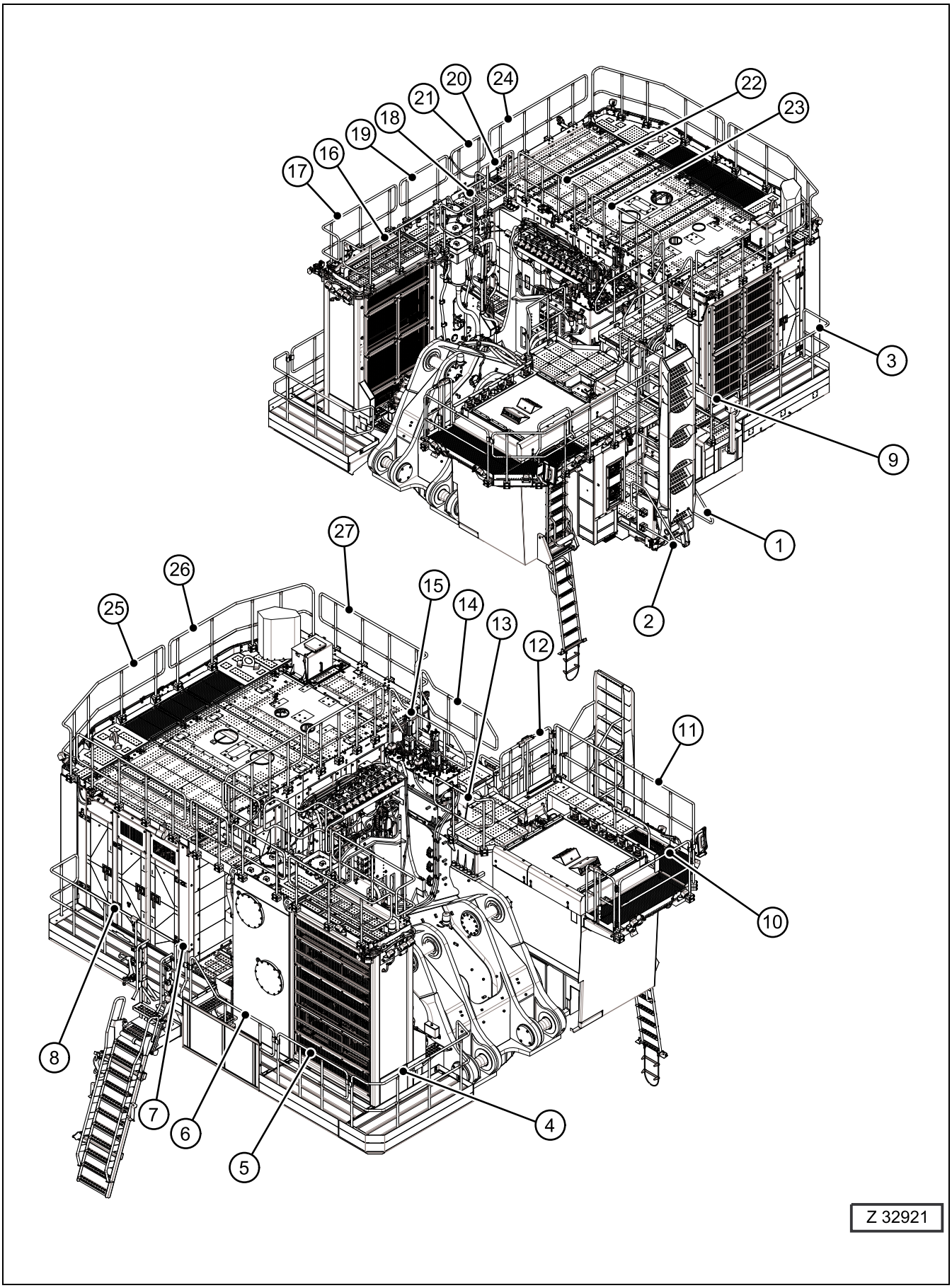

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
Z 32921

Fig. 4-274

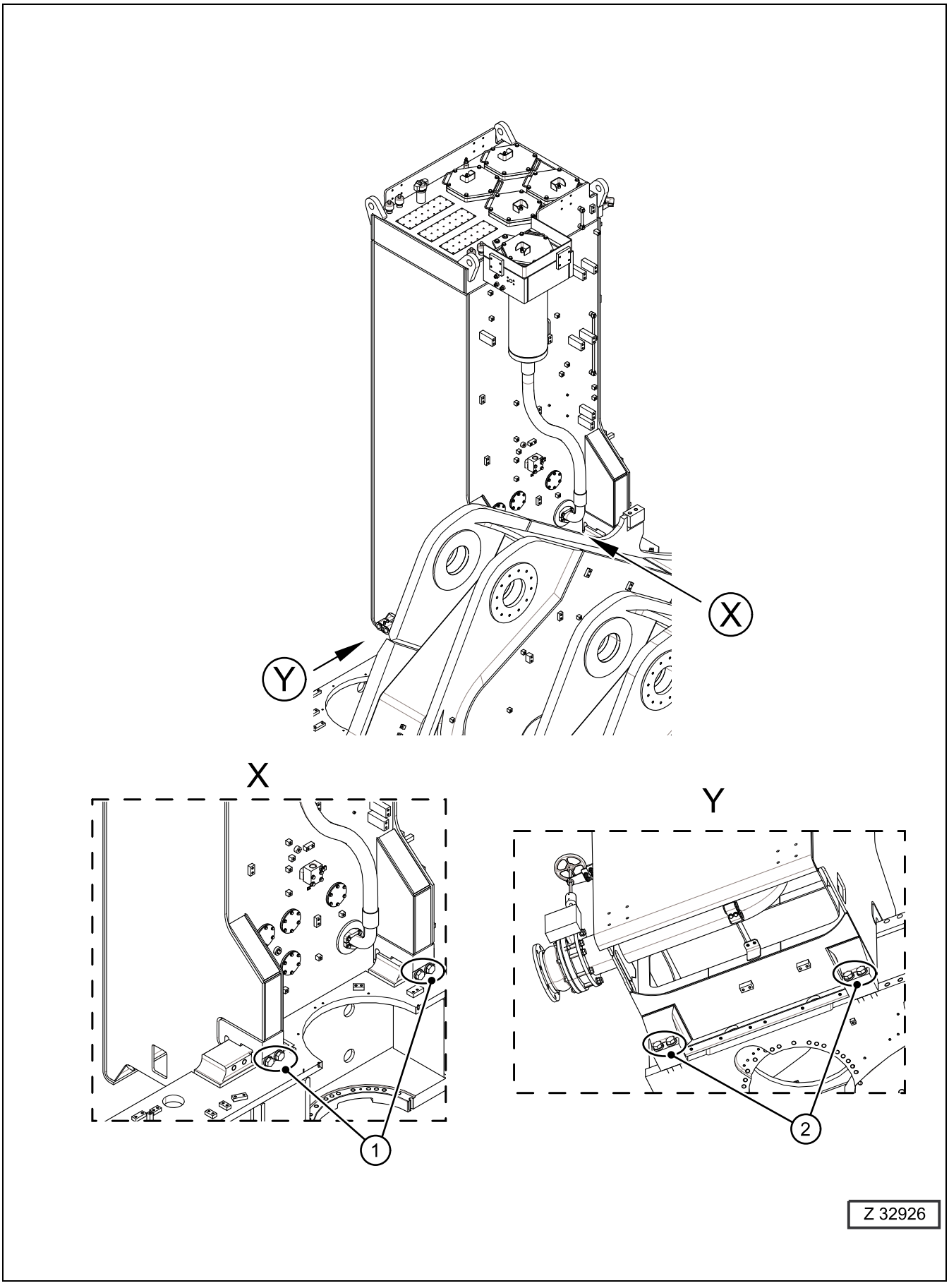


Fig. 4-279

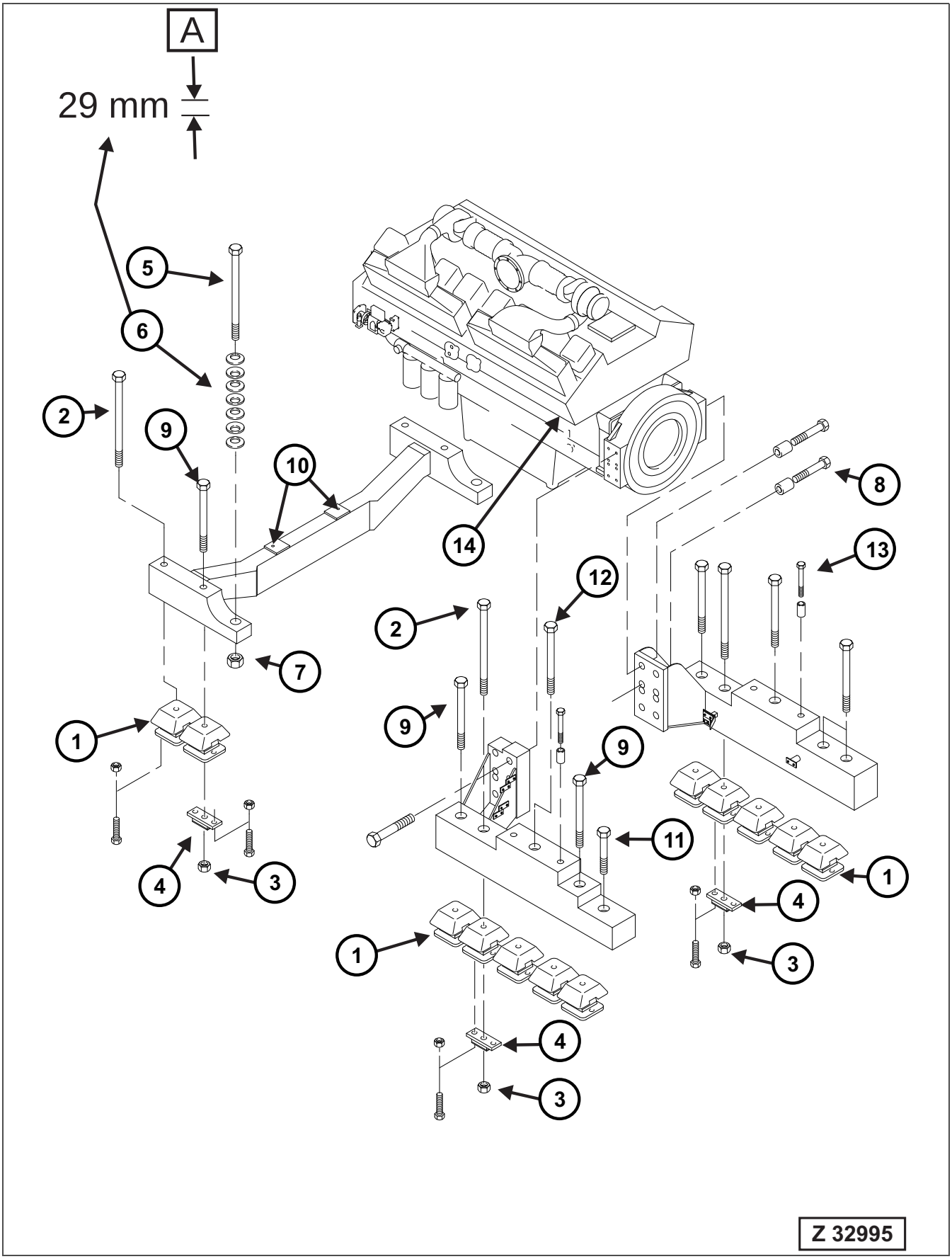


Fig. 4-284

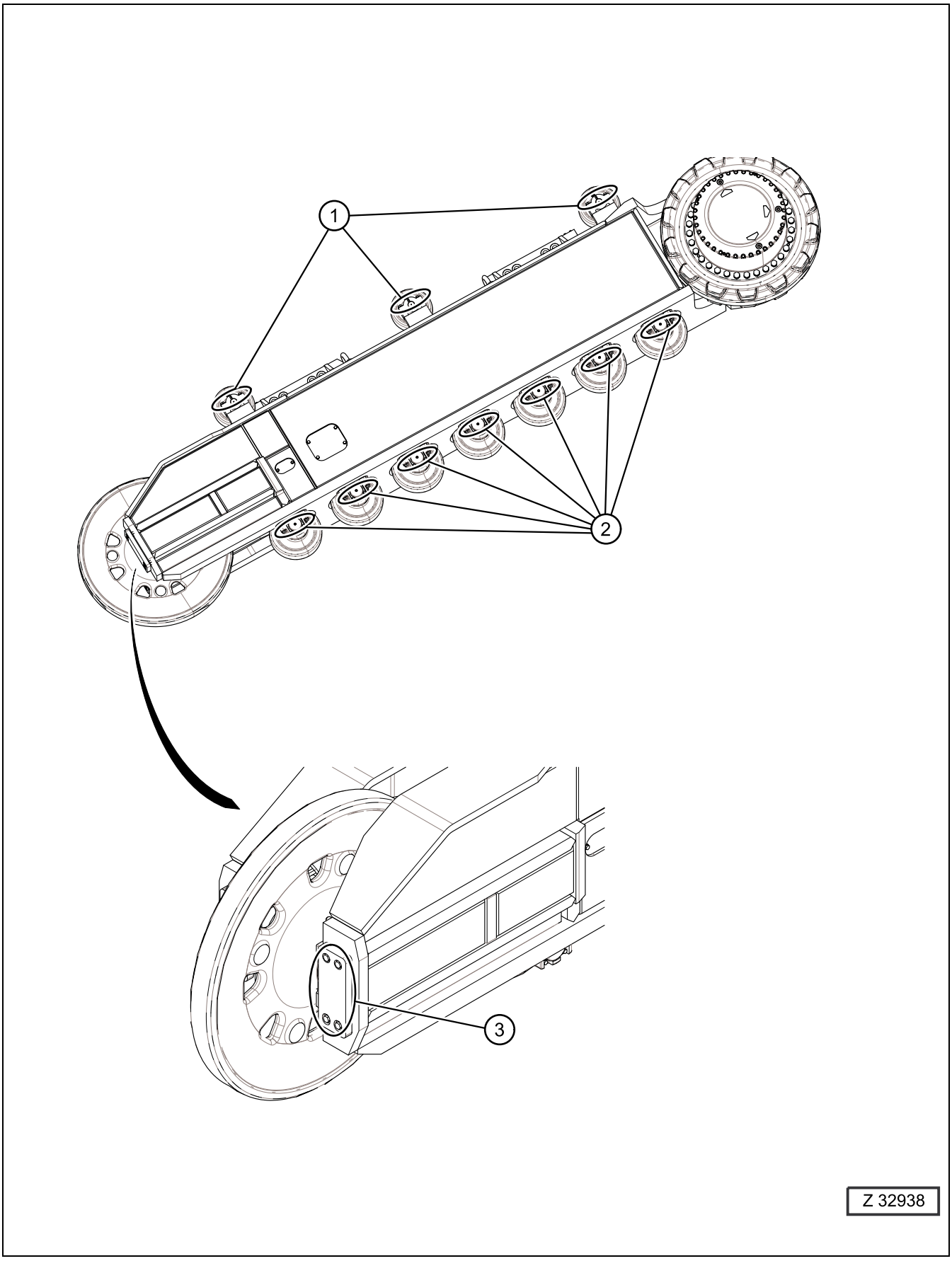


Fig. 4-289