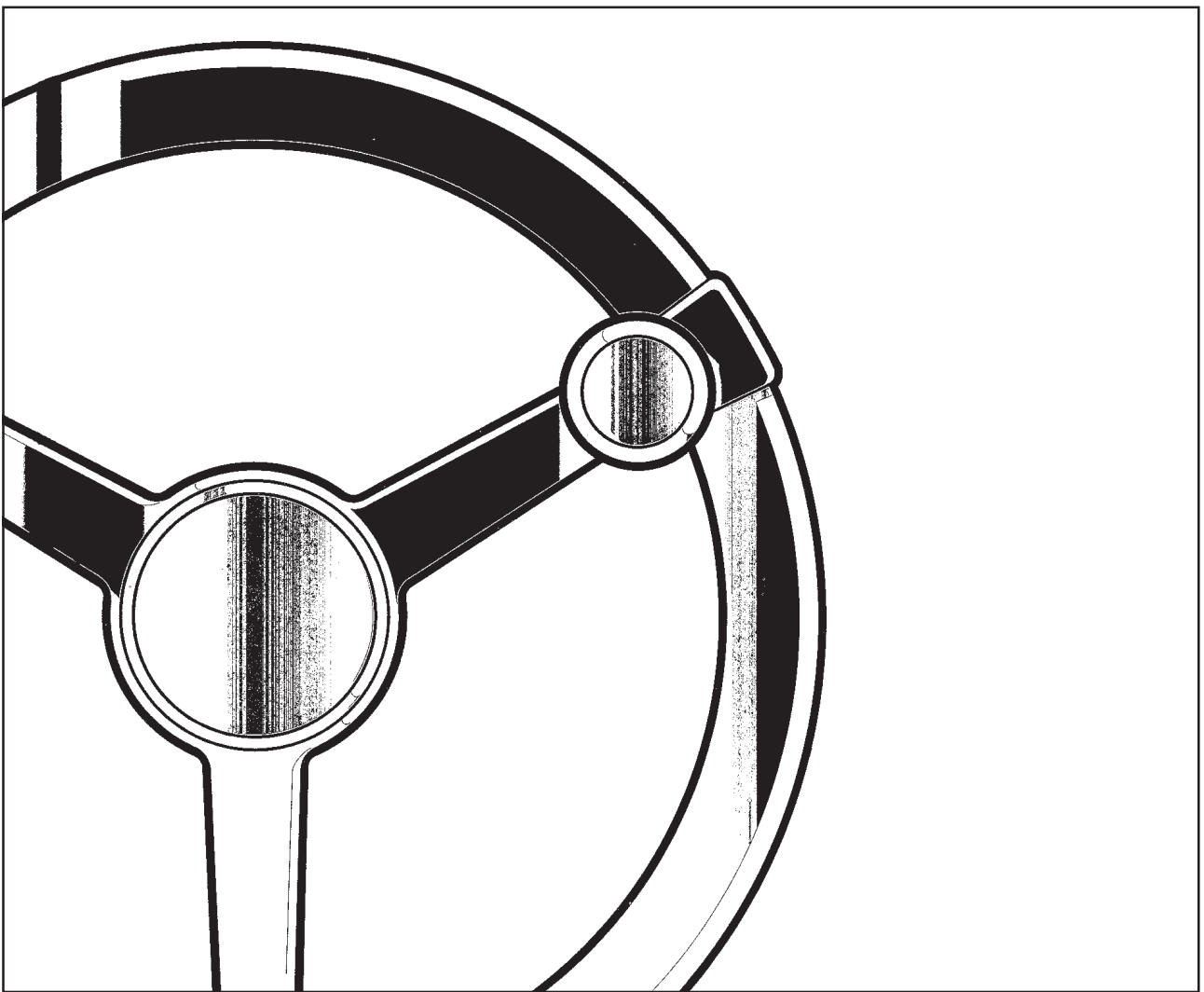


DYNAPAC CC 722/722C OPERATION

0722EN2



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DYNAPAC

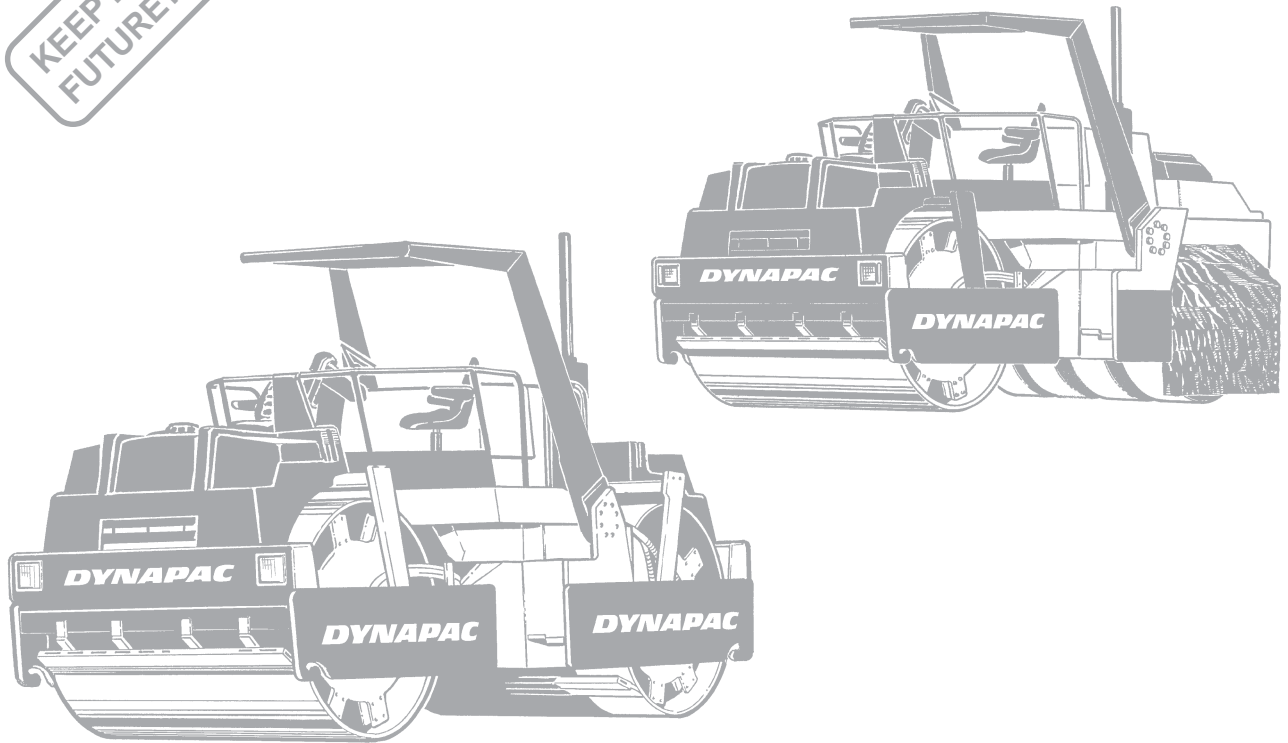
Vibratory roller CC722/722C

Operation O722EN2, May 2002

**Diesel engine:
Cummins QSB 5.9-C**

**These instructions apply from:
CC 722: PIN (S/N) *63920722*
CC 722C: PIN (S/N) *64020722***

**KEEP THIS MANUAL FOR
FUTURE REFERENCE**



The CC 722 is a roller of the heavier category in the CC family.

The CC 722 has articulated steering and drive on both drums.

The CC 722 features high power, high capacity and high quality in extremely demanding applications, such as building highways and airfields, with strict requirements for results and sealed surfaces in compacting various asphalt compounds.

Separate information about accessories is available on request.

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WARNING SYMBOLS

WARNING



Safety instructions - Personal safety

CAUTION



Special caution - Machine or component damage

SAFETY MANUAL

WARNING



The safety manual, which accompanies each machine, must be studied by each operator of the roller. Always follow the safety rules and do not remove the manual from the roller.

GENERAL

This manual contains instructions concerning operation and use of the roller. For information regarding care and maintenance, see the manual, "MAINTENANCE, CC 722/C".

WARNING



When starting up and driving a cold machine, which implies cold hydraulic fluid, the braking distance will be longer than normal until the machine reaches normal working temperature.

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

SAFETY INSTRUCTIONS (Also read the safety manual)

WARNING



1. The operator must be familiar with the contents of the OPERATION MANUAL before starting the roller.
2. Make sure that all instructions in the MAINTENANCE MANUAL are followed.
3. Only trained and/or experienced operators may drive the roller. Passengers are not allowed on the roller. Remain seated during all operation.
4. Never use the roller if it is in need of adjustment or repairs.
5. Board and leave the roller only when it is stationary. Use the grips and railings that are provided. Always use a "three-point grip" - both feet and one hand or one foot and both hands - when boarding or exiting the machine.
6. The ROPS (Roll Over Protective Structure) should always be used when the machine is operated on risky ground.
7. Drive slowly in sharp bends.
8. Avoid driving at an angle on slopes; drive straight up or down.
9. When driving close to unsafe edges or holes, make sure that at least two thirds of the drum width is firmly on material that has already been compacted.
10. Make sure that there are no obstacles in the direction of travel, on the ground or overhead.
11. Drive extra carefully on uneven ground.
12. Use the safety equipment provided. The seat belt must be worn on machines fitted with ROPS.
13. Keep the roller clean. Clean dirt and grease from the operator's platform without delay. Keep all signs and decals clean and clearly legible.
14. Safety measures before refueling:
 - Stop the engine.
 - Do not smoke.
 - No naked flame in the vicinity.
 - Ground the nozzle of the filling device against the tank to prevent sparks.
15. Before repairs or service:
 - Place chocks against the drums/wheels and against the strike-off blade.
 - Lock the articulation if required.
16. Hearing protectors are recommended if the noise level exceeds 85 dB(A). The noise level may vary depending on what material the machine is operating on.
17. Make no changes or modifications on the roller that could affect safety. Changes may only be made following written consent by Dynapac.
18. Do not use the roller until the hydraulic fluid has reached its normal working temperature. Braking distance can be longer than usual if the fluid is cold. See starting instructions in the OPERATION MANUAL.

SAFETY WHEN DRIVING

Driving near an edge

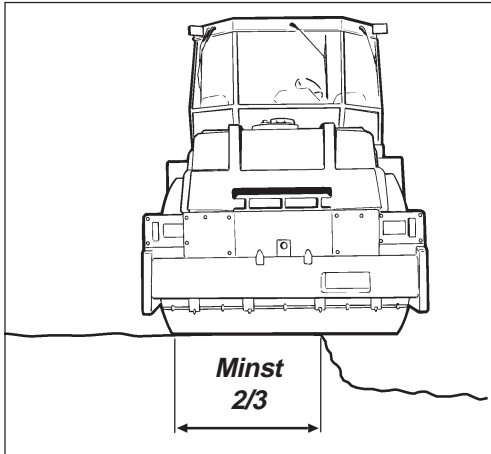


Fig. 1 Position of drum when driving near an edge

When you drive near an edge, at least two thirds of the drum width must be on solid ground.

WARNING



Remember that the machine's center of gravity is displaced outward when you steer to one side. For example, it shifts to the right when you steer to the left.

Slopes

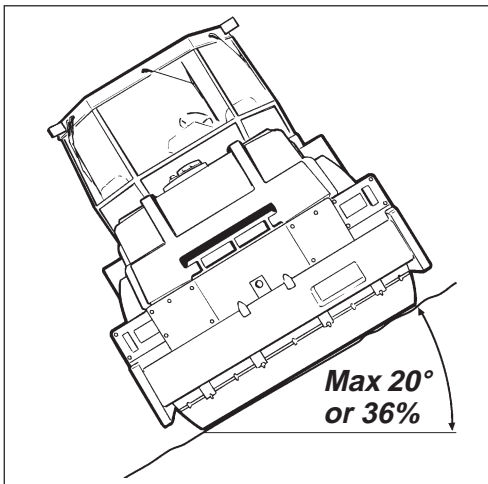


Fig. 2 Tipping angle on side slopes

WARNING



The ROPS (Roll Over Protective Structure) is always recommended when driving on slopes or insecure ground.

WARNING



Where possible, avoid all driving *across* a slope. Instead, drive up and down on sloping ground.

The tilting angle is measured on a hard, level surface with the machine stationary, steering angle zero, vibration switched OFF and all tanks full. Remember that loose ground, steering of the machine, vibration switched ON, driving speed and raising the center of gravity (for example, with accessories) may cause the machine to topple even on a smaller slope than that stated here.

WARNING



If you have to leave the cab in an emergency, use one of the doors or the front window, which can be opened.

SAFETY (OPTIONAL)

Air conditioning

WARNING



The system contains pressurized refrigerant. Releasing refrigerants into the air is prohibited. The refrigerant circuit may only be repaired by an authorized company.

WARNING



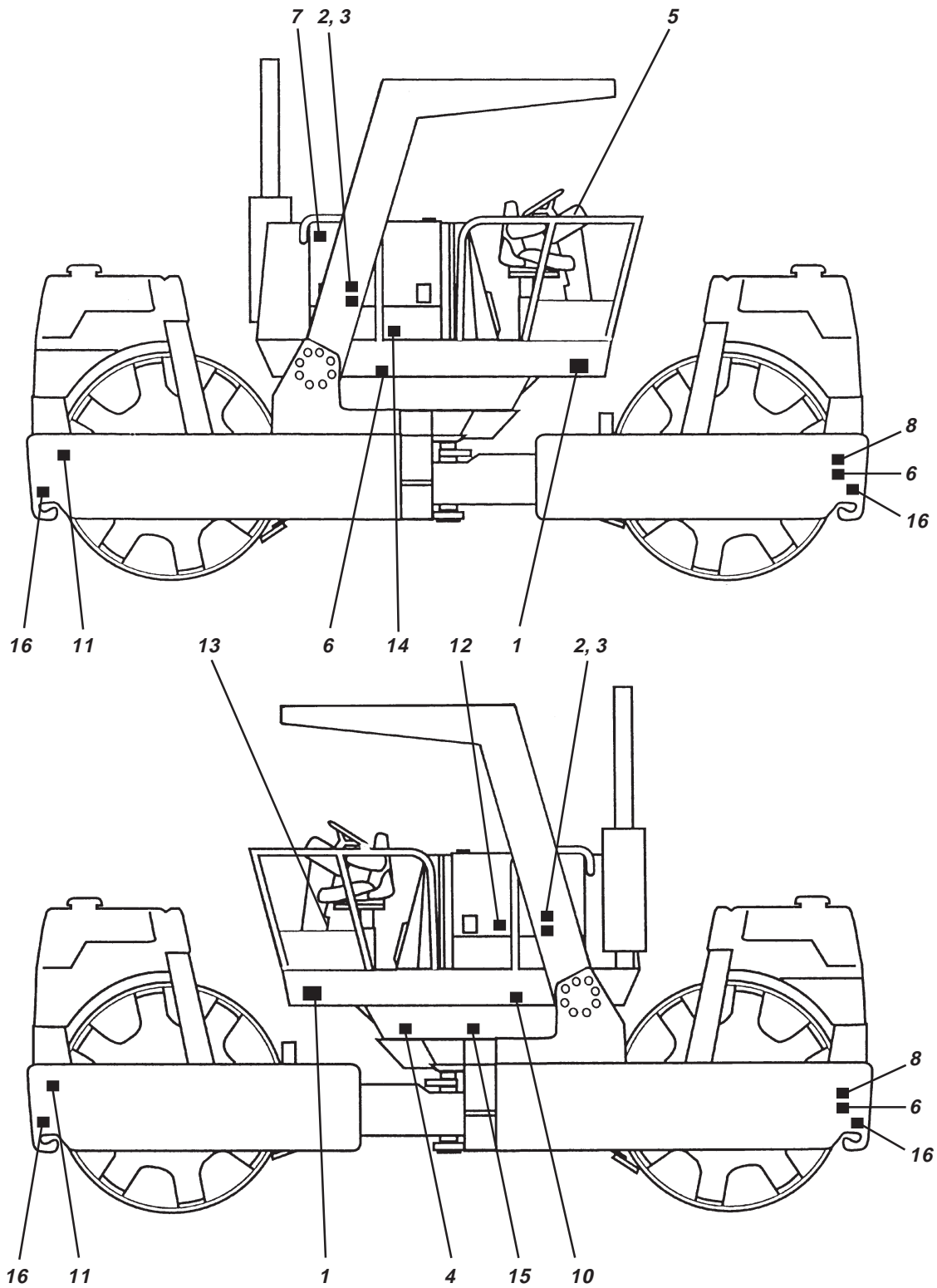
The cooling system is pressurized. Incorrect handling can result in serious personal injury. Do not disconnect the hose coupling.

CAUTION



Recharge the system with approved refrigerant when required.

SAFETY DECALS, LOCATION/DESCRIPTION



SAFETY DECALS, LOCATION/DESCRIPTION

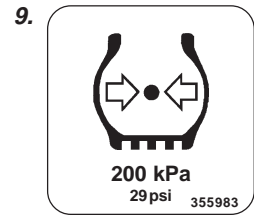


Crush zone, articulation/ Drum. Maintain a safe distance from the crush zone.

(Two crush zones on machines fitted with pivotal steering.)



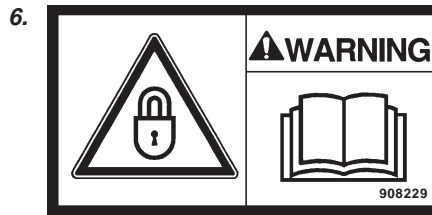
The operator is urgently requested to read the safety manual, and the operation and maintenance instructions before using the machine.



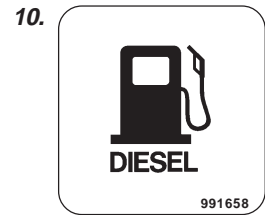
**Tire pressure
(Combi machine only)**



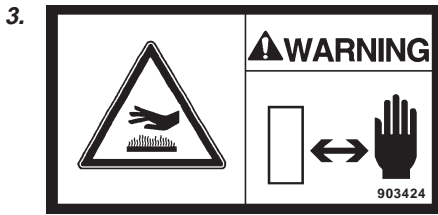
Warning - rotating engine components. Keep your hands at a safe distance from the danger zone.



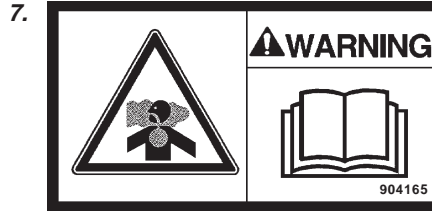
Warning - rotating parts. Maintain a safe distance from the crush zone.



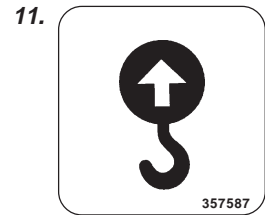
Diesel fuel



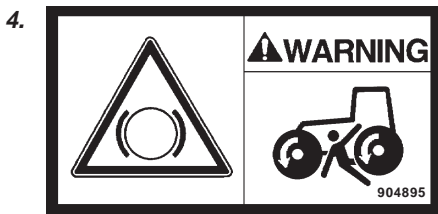
Warning - hot surfaces in the engine compartment. Do not touch.



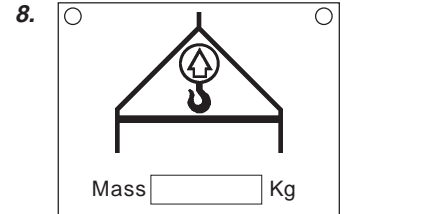
Toxic gas. Read the instruction manual.



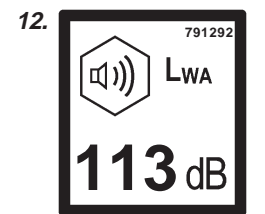
Lifting point



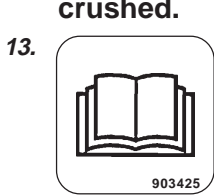
Study the towing chapter before disengaging the brakes. Danger of being crushed.



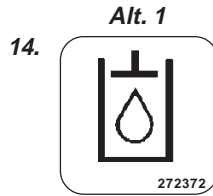
Lifting plate



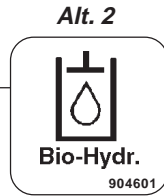
Guaranteed Sound Power level



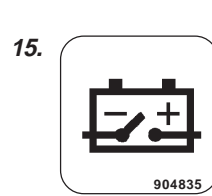
Handbook compartment



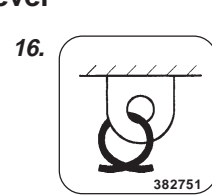
Hydraulic fluid



Biological hydraulic fluid



Battery disconnecter



Securing point



Emergency exit

MACHINE AND ENGINE PLATES

Machine plate

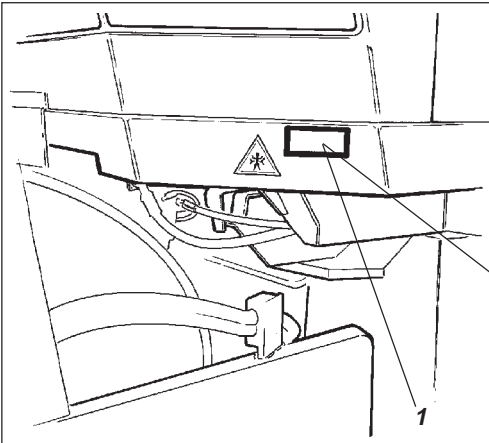
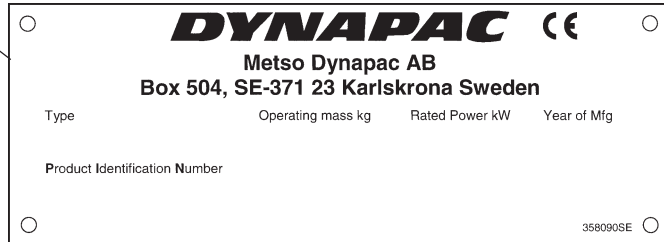


Fig. 1 Operator's platform
1. Type plate

The machine type plate (1) is affixed on the front left edge of the operator's platform. The plate shows the manufacturer's name and address, type of machine, PIN (Part Identification Number = serial number), weight in working order, engine power and year of manufacture. Please state the PIN (serial number) of the roller when ordering spares.



Serial number on frame

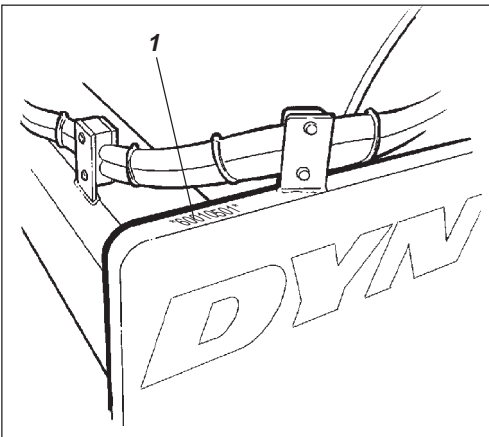


Fig. 2 Front frame
1. Serial number

The serial number of the frame (1) is punched on the right edge of the forward frame.

Engine plate

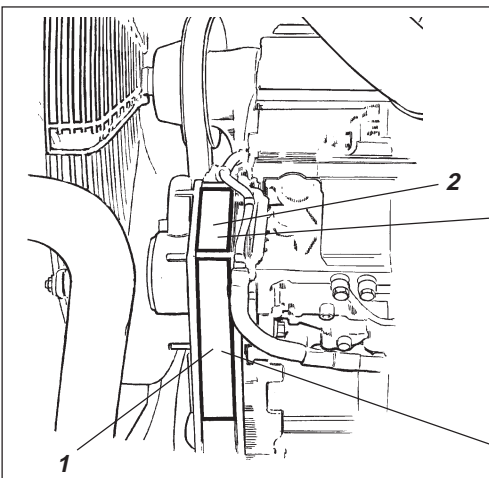
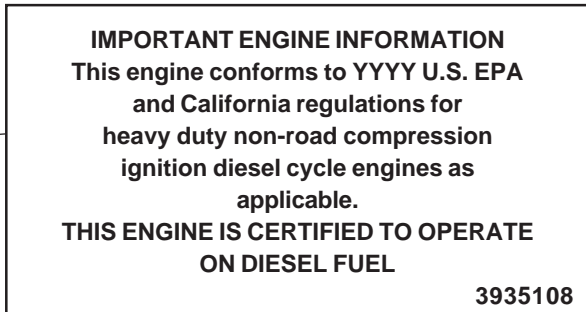


Fig. 3 Engine
1. Type plate
2. EPA sign (USA)

The engine data plate (1) is on the crankcase below the air cleaner on the right side of the engine. The plate indicates the type of engine, serial number and engine data. Please state the engine serial number when ordering spares. See also the engine manual.



Cummins Engine Company, Inc Columbus, Indiana 47202-3005	CIDL		CPL		Engine Serial No.
	Family				Cust. Spec.
● Warning: Injury may result and warranty is voided if fuel rate, rpm or altitude exceed published maximum values for this model and application.	Valve lash	Inch	Int.	Exh.	Timing-TDC
	cold	MM	Int.	Exh.	Fuel rate at rated HP
Date of MFG.	Firing Order				FR
Made in Great Britain.	3284907	Rated HP/kW	at		RPM

INSTRUMENTS AND CONTROLS

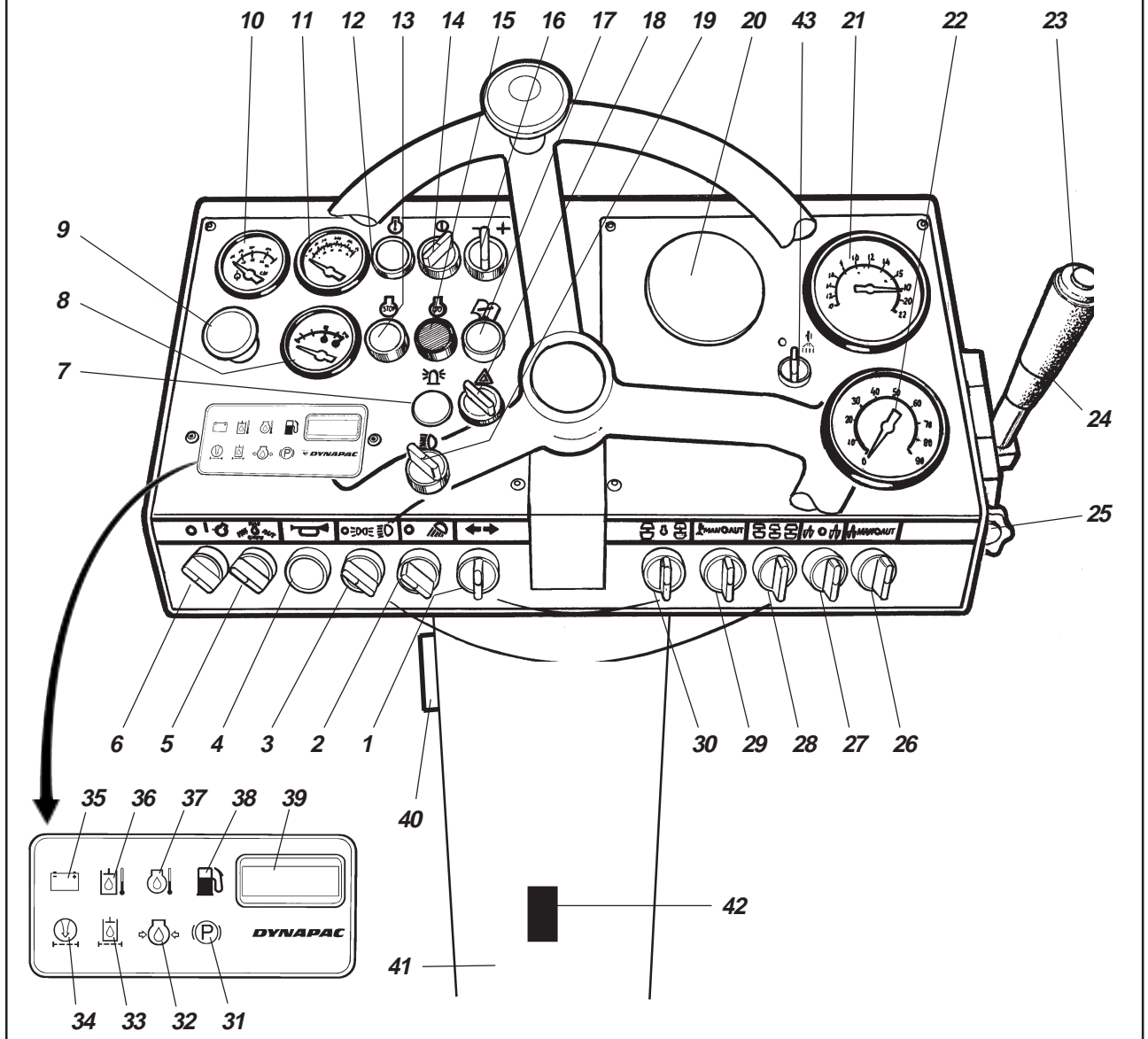
















Fig. 4 Instruments and controls










- | | | |
|--|--|---|
| 1. Direction indicator □ | 17. Service indicator lamp | 31. Brake warning lamp |
| 2. Rear working lights □ | 18. Hazard flashers □ | 32. Engine oil pressure warning lamp |
| 3. Driving lights □ | 19. Main/dipped beam—contact/control lamp □ | 33. Hydraulic filter warning lamp |
| 4. Horn | 20. Compaction meter □ | 34. Air filter warning lamp |
| 5. Rev selector | 21. Speedometer □ | 35. Charging warning lamp |
| 6. Start switch | 22. Vibration/Frequency meter □ | 36. Hydraulic temperature warning lamp |
| 7. Hazard beacon □ | 23. Vibration ON/OFF | 37. Engine oil temperature warning lamp |
| 8. Fuel gauge | 24. Forward/Reverse lever | 38. Fuel level warning lamp |
| 9. Reserve/Parking brake knob | 25. Speed control □ | 39. Hourmeter |
| 10. Temperature gauge, hydraulic fluid | 26. Vibration setting Man/Auto | 40. Fuse box |
| 11. Temperature gauge, engine | 27. Amplitude selector, High/Low | 41. Handbook compartment |
| 12. Fault alarm lamp | 28. Vibration, front/rear drum (CC 722 only) | 42. Locking pedal |
| 13. Fault alarm lamp | 29. Watering Man/Auto | 43. Sprinkler system (tires) (for CC 501C only) |
| 14. Diagnostics "ON" | 30. Freq./Vibr. meter ON/OFF | |
| 15. Preheating, diesel engine | | |
| 16. Scroll through error codes | | |

□ = Optional equipment

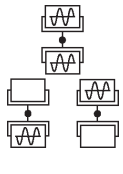










INSTRUMENTS AND CONTROLS, FUNCTIONAL DESCRIPTION

Item in fig. 6	Designation	Symbol	Function
1	Direction indicator switch (Optional)		Turn left to switch on the left direction indicator, etc. The flashing indicator is OFF in the middle position.
2	Rear working light switch (Optional)		Turn right to switch on the working lights.
3	Driving light switch (Optional)		Switches ON the headlight and taillight.
4	Horn, switch		Press to sound the horn.
5	Rev selector, diesel engine		900 = Idling revs 1500 = Revs for loading/unloading 2200 = working and transport revs
6	Starter switch		In position  , the electric circuit is broken. In position  , all instruments and electric controls are powered. In position  , the start motor is activated. The rev selector must be at 900 rpm.
7	Hazard beacon, switch (Optional)		Turn right to switch on the hazard beacon.
8	Fuel gauge		Indicates level in the fuel tank.
9	Reserve brake/Parking brake		Press to activate the reserve brake. Press when the machine is stationary to activate the parking brake. Pull out to release both brakes.
10	Hydraulic fluid temperature gauge (Optional)		Indicates the temperature of the hydraulic fluid. Normal temperature range 65°C–80°C (150–175°F). Stop the engine if the gauge indicates more than 120°C (248°F). Locate the fault.
11	Engine temperature gauge		Indicates engine working temperature. Normal temperature range 82°C–95°C (180–200°F).
12	Fault alarm lamp, not serious fault	Yellow	Indicates fault and displays error code together with 13.
13	Fault alarm lamp, serious fault	Red	Stop the engine.
14	Diagnostic "ON"		Checks error code together with lamp 12 and 13.
15	Preheating of diesel engine	Green	Lights when preheating temperature is not right.





INSTRUMENTS AND CONTROLS, FUNCTIONAL DESCRIPTION

Item in fig. 6	Designation	Symbol	Function
16	Scroll through error codes.		Turn right to scroll forward. Turn left to scroll backward.
17	Service indicator lamp	White	If the lamp lights for a few seconds, it is time for the 250-hour service.
18	Hazard flasher switch (Optional)		Turn right to switch on the hazard flashers.
19	Main/Dipped beam, switch with control lamp (Optional)		In the right position, the switch and the main beam light. In the left position, the dipped beam lights.
20	Compaction meter (Optional)		-
21	Speedometer (Optional for CC 722)		The outer scale indicates roller speed in km/h. The inner scale indicates roller speed in mph.
22	Vibration/Frequency meter (Optional CC 722)		Indicates the current frequency of the drum. Contact (31) in correct position.
23	Vibration ON/OFF, switch		Press once and release to switch vibration ON, press again to switch vibration OFF. The above applies only when switch (26) is in the left position.
24	Forward/Reverse lever		The lever must be in neutral to enable the engine to start; the engine will not start if the forward/reverse lever is in any other position. The forward/reverse lever controls the driving direction and speed of the roller. Move the lever forward to drive the roller forward, etc. The roller speed is proportional to the movement of the lever from the neutral position. The further from neutral, the higher the speed.
25	Speed limiting device (Optional)		Limits movement of the F/R lever and therefore the speed. The speed control can be bypassed.
26	Vibration setting, switch	MAN  AUTO 	In the left position, switch (23) turns the vibration ON/OFF. Vibration works only at rev setting 2200 rpm. In the middle position, the vibration system is switched OFF. In the right position, the vibration is automatically switched ON/OFF with the forward/reverse lever.
27	Amplitude selector front, switch		The left mode gives low amplitude/high frequency. The right mode gives high amplitude/low frequency.

INSTRUMENTS AND CONTROLS, FUNCTIONAL DESCRIPTION

Item in fig. 6	Designation	Symbol	Function
28	Vibration, front/rear drum, switch (CC 722 only) <small>CAUTION</small> Do NOT switch ON when switch (23) is ON.		In the left position, vibration is applied to the rear drum. In the middle position, vibration is applied to both drums. In the right position, vibration is applied to the front drum.
29	Watering switch	MAN O AUTO 	In the left position, continual watering is applied to the drums. In the middle position, watering is switched OFF. In the right position, watering is automatically switched ON/OFF when the direction of travel is changed with the forward/reverse lever.
30	Vibration/Frequency meter switch (optional equipment for CC 722)	FREQ METER 	Switches on the vibration/frequency meter.
31	Brake warning lamp		The lamp lights when the parking or reserve brake knob is pushed in and the brakes are applied.
32	Engine oil pressure warning lamp		The lamp lights if engine oil pressure is too low. Stop the engine immediately and locate the fault.
33	Hydraulic filter warning lamp		If the lamp lights while the engine is running at full revs, the hydraulic filter must be changed.
34	Air cleaner warning lamp		If the lamp lights while the engine is running at full revs, the air cleaner must be cleaned or replaced.
35	Charging warning lamp		If the lamp lights while the engine is running, the alternator is not charging. Stop the engine and locate the fault.
36	Hydraulic temperature warning lamp		If the lamp lights, the hydraulic fluid is too hot. Do not drive the roller; cool the fluid by allowing the engine to idle and locate the fault.
37	Warning lamp, engine oil temperature		If the lamp lights, the engine is too hot. Stop the engine immediately and locate the fault. See also the engine manual.
38	Fuel level warning lamp		When the lamp lights, there is only enough fuel left for a short distance. Refuel as soon as possible.
39	Hourmeter		Engine running time is indicated in hours.

INSTRUMENTS AND CONTROLS, FUNCTIONAL DESCRIPTION

Item in fig. 6	Designation	Symbol	Function
40	Fuse box (on the side of the steering column)		Contains fuses for the electrical system. See under the heading "Electrical system" for a description of the fuses.
41	Handbook compartment		Pull up and open the top of the compartment to access handbooks.
42	Locking pedal		Disengages the control table to turn to the left or right operator's position.
43	Sprinkler system (tires) Continuous/intermittent (CC 501 only)		Controls the flow of water to the tires. Continuous or intermittent watering.

CONTROLS IN THE CAB

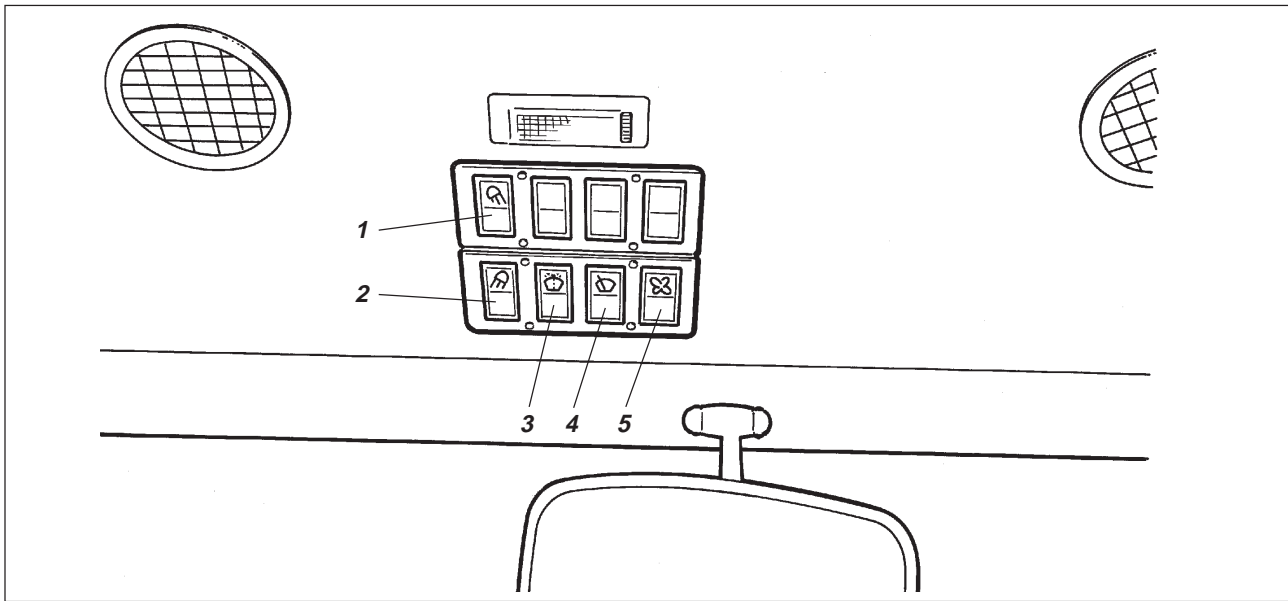


Fig. 7a Cab roof

1. Working lights, rear
2. Working lights, front
3. Windshield wash
4. Windshield wiper
5. Ventilation fan

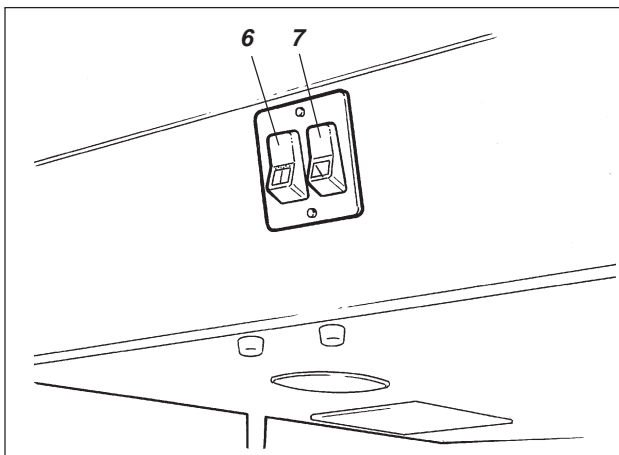


Fig. 7b Cab roof, left side

6. Wash, left side window
7. Wiper, left side window

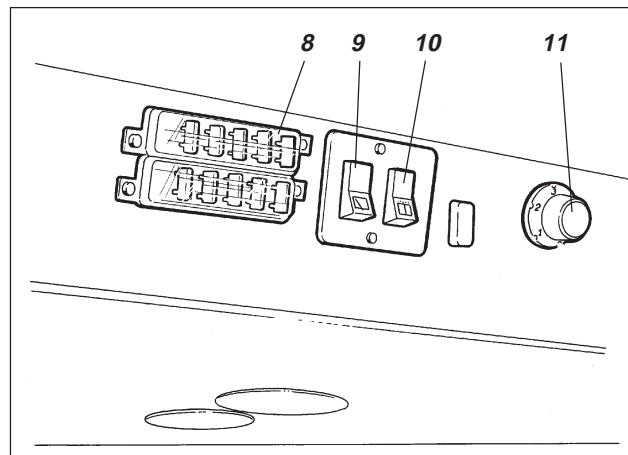













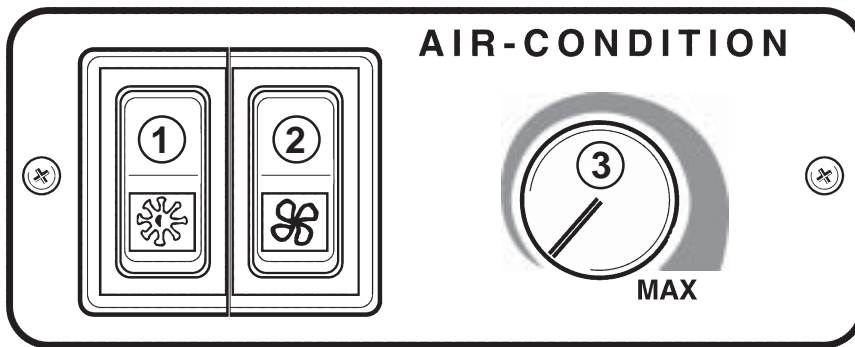
Fig. 7c Cab roof, right side

8. Fuse boxes
9. Wiper, right side window
10. Wash, right side window
11. Heater control

CONTROLS IN THE CAB, FUNCTIONAL DESCRIPTION

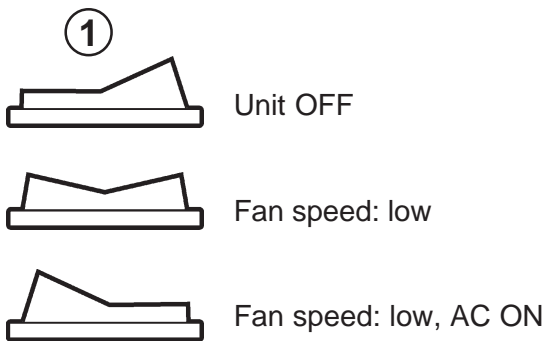
Items in fig. 7	Designation	Symbol	Function
1	Working lights, rear, switch		Press to switch on the rear working lights.
2	Working lights, front, switch		Press to switch on the front working lights.
3	Windshield wash, switch		Press to wash the windshield.
4	Windshield wiper, switch		Press to operate the windshield wiper.
5	Ventilation fan, switch		Press to start the cab ventilation fan.
6	Wash, left side window, switch		Press to wash the left side window.
7	Wiper, left side window, switch		Press to operate the left side-window wiper.
8	Fuse boxes (cab)		Contains fuses for the electrical system. See under the heading "Electrical system" in the Maintenance Manual for a description of the functions of the different fuses.
9	Wiper, right side window, switch		Press to operate the right side-window wiper.
10	Wash, right side window, switch		Press to wash the right side window.
11	Heater control, knob		Turn clockwise to increase cab temperature.

AIR CONDITIONING, OPERATION INSTRUCTIONS (OPTIONAL)

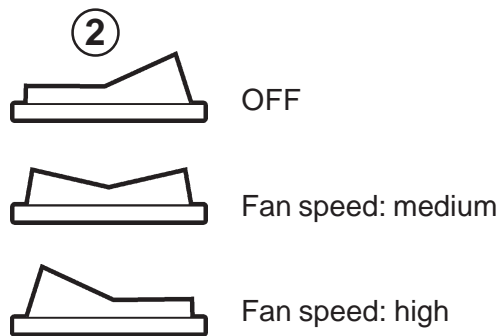


AC panel in cab roof, right side.

Fan and AC switch 0 - 1 - AC



Fan switch 0 - 2 - 3



The fan and AC switch (1) must be in the AC ON position to enable the fan switch (2) to work.

Ventilation: Set the switch (1) in the low position to run the fan at low speed.

Cooling: Set the switch (1) in the AC ON position to run the fan at low speed.

The fan speed can be increased in two steps with the changeover switch (2).
Adjust the temperature with the cooler thermostat (3).

BEFORE START

Battery disconnect – Switching on

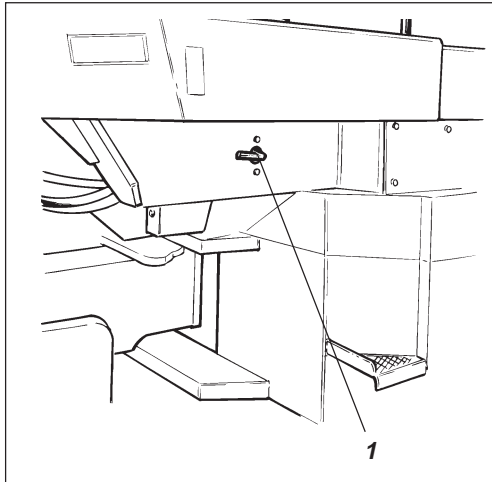


Fig. 8 Battery disconnect
1. Knob

Remember to perform daily service. See the operation manual.

The battery disconnecter is located on the left side of the machine. Turn the knob (1) to the ON position. The entire roller is now powered.

Water tanks – Level

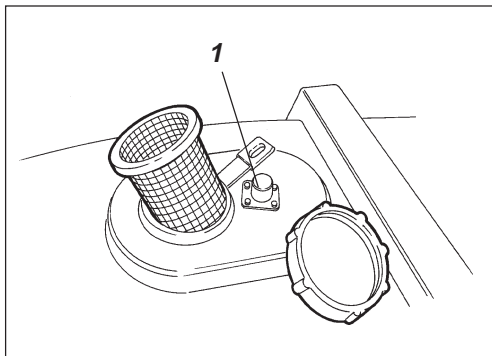


Fig. 9 Water tank
1. Level gauge

Ensure that the water tanks are full before beginning operation on asphalt. See the respective level meter (1).

Operator's table – Setting

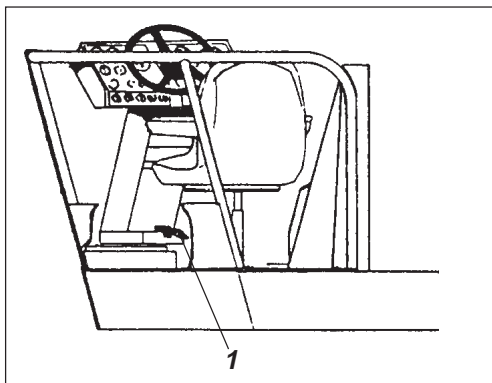


Fig. 10 Operator's platform
1. Locking pedal

Press down the locking pedal (1) for the control table and set to the desired position. Release the pedal and ensure that the control table is latched before driving.

BEFORE START

Operator's seat – Setting

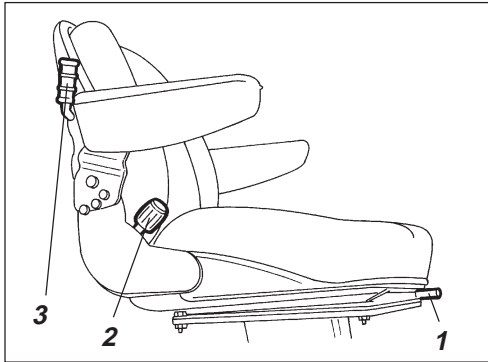


Fig. 11 Operator's seat

1. Length adjustment
2. Seat-back setting
3. Cushioning adjustment

Position the operator's seat so that the controls are easily accessible.

The seat can be adjusted as follows:

- Lengthwise (1)
- Seat-back slope (2)
- Cushioning in relation to the operator's weight (3)

Instrument och reglage – Kontroll

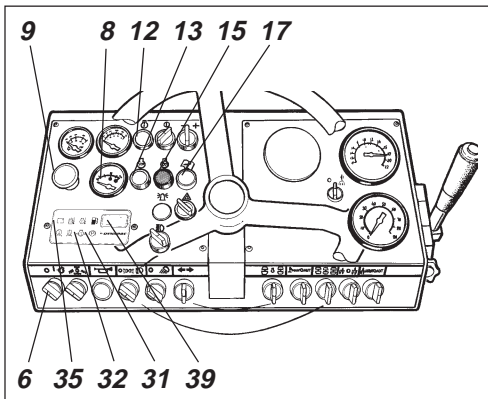


Fig. 12 Instrument panel

6. Starter switch
8. Fuel gauge
9. Parking brake knob
- 12, 13,
15, 17. Diagnostic lamps
31. Brake warning lamp
32. Engine oil pressure warning lamp
35. Charging warning lamp
39. Hourmeter

Turn the starter switch (6) to position I. All warning lamps should light for about 5 seconds and the beeper should sound. Check that the warning lamps light.

Check that the warning lamps for charging (35), oil pressure (32) and parking brake (31) light. Diagnostic lamps 12, 13, 15, 17 should light for a few seconds. Lamp 17 lights when it is time for service.

The hourmeter (39) records the number of hours as long as the engine is running.

Parking brake – Check

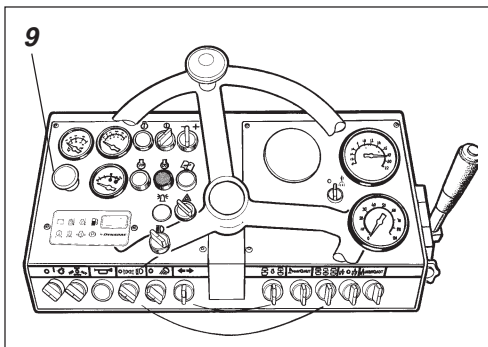


Fig. 13 Control panel

9. Parking brake knob

WARNING



Make sure that the reserve/parking brake knob (38) is pushed in. If the parking brake is not applied, the roller may start to roll when starting the engine on sloping ground.

Interlock (optional)

The engine switches off 7 seconds after the operator rises from the seat. This will occur regardless of whether the forward/reverse lever is in neutral or the drive mode. The engine will not stop if the parking brake is activated.

BEFORE START

Speed control

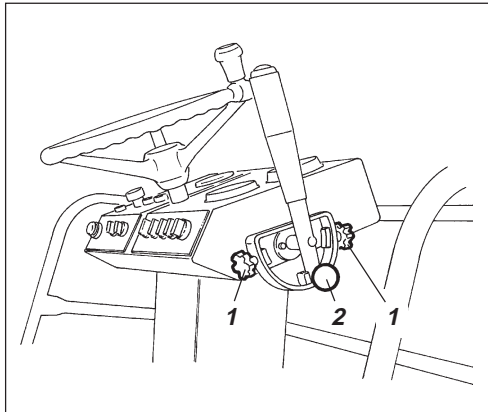


Fig. 14 Speed limiting device
1. Setting knob
2. Disengagement device

The machine is provided with a speed control device that can be disengaged for transportation driving.

Loosen the knob (1) on the speed control device. Set the forward/reverse lever to the desired speed and tighten the knob.

You can use the forward/reverse lever to bypass the speed control by pulling out the speed control knob (2).

Field of view

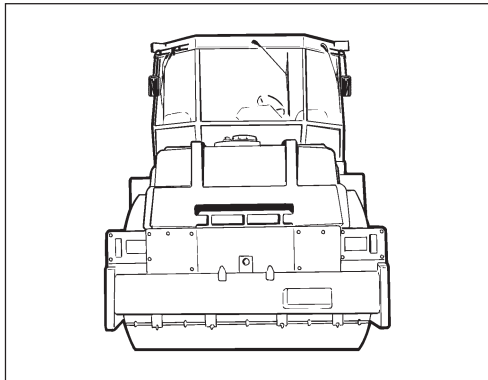


Fig. 15 Field of view

Before starting, make sure that the field of view is unobstructed, both in front and behind. All cab windows must be clean and rearview mirrors properly adjusted.

Operator's station

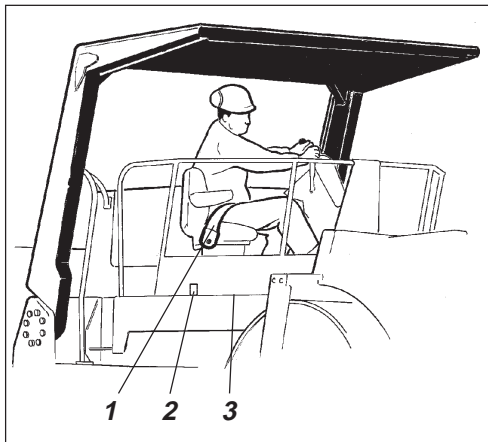


Fig. 16 Operator's station
1. Seat belt
2. Rubber element
3. Anti-slip

Fasten the seat belt (1) provided if ROPS or a cab is fitted on the roller and wear a protective helmet.

WARNING



Always replace the seat belt with a new one if it is worn or has been subjected to a heavy load.

CAUTION



Check that the rubber elements on the platform are intact. Worn elements will impair comfort.

WARNING



Ensure that the anti-slip on the platform is in good condition; replace with new anti-slip if friction is poor.

WARNING



If the machine is fitted with a cab, make sure that the door is closed when in motion.

START

Starting the engine

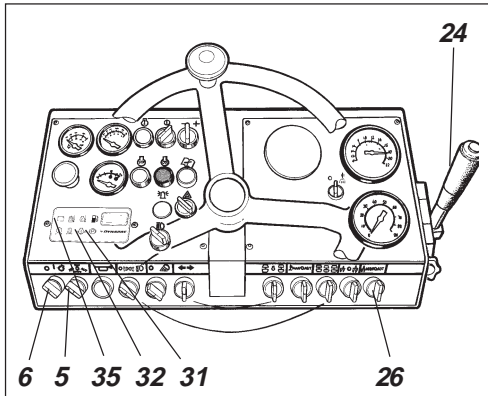


Fig. 17 Instrumentpanel

- 5. Rev selector
- 6. Start switch
- 24. Forward/Reverse lever
- 26. Vibration setting Man/Auto
- 31. Brake warning lamp
- 32. Engin oil temperature warning lamp
- 35. Charging warning lamp

Set the forward/reverse lever (24) in neutral. The engine cannot be started if the lever is in any other position.

Set the vibration switch (26) for manual/automatic vibration to 0 mode.

Set the rev control (5) to idling mode (900 rpm).

Turn the starter switch (6) to the right to starting mode and release the knob as soon as the engine starts.

The preheating lamp, Green, must go out before you run the starter motor. A Yellow or Red lamp lights. Stop the engine if Red lights. If the Yellow lamp lights, check the error code and take necessary measures.

CAUTION



Do not run the starter motor too long; preferably wait a minute or so if the engine does not start.

CAUTION



The electrical system in the machine is 12V. Only 12V may be used to assist starting.

WARNING



Never use start gas.

Warm up the engine at idling speed for a few minutes, longer if ambient temperature is below +10°C.

Check during warmup that the warning lamps for oil pressure (32) and charging (35) are out. The parking brake warning lamp (31) should still light.

WARNING



When you start up and drive a cold machine, the hydraulic fluid is cold and the braking distance will be longer than normal until the machine reaches normal working temperature.

WARNING



Make sure that ventilation (extraction) is adequate if the engine is run indoors. Risk of carbon monoxide poisoning.

WARNING



During all transportation, make sure that side-displaced drums are in neutral.

OPERATION

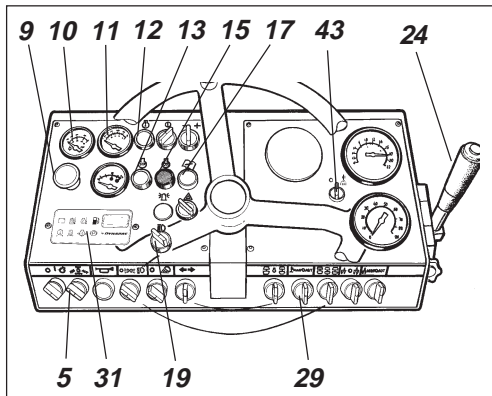


Fig. 18 Instrument panel

- 5. Rev selector
- 9. Reserve/Parking brake knob
- 10. Temperature gauge for hydraulics
- 11. Temperature gauge for engine
- 12, 13, 15, 17. Diagnostic lamps
- 19. Main/dipped beam switch
- 24. Forward/Reverse lever
- 29. Watering Man/Auto
- 31. Brake warning lamp
- 43. Watering, tires

Set the rev selector (5) at 2200 rpm.

Check that the steering is working by turning the steering wheel once to the left and once to the right, while the roller is stationary. The steering should work smoothly and without jerks or interruption.

WARNING



Make sure that the area in front of and behind the roller is clear.

Turn the watering unit ON when driving on asphalt (29) for the drum (36) for the tires (Combi). Use AUTO mode to save water.

The reserve/parking brake knob (9) must be pulled out and the lamp (31) must be out.

Carefully move the forward/reverse lever (24) in the desired direction of travel. Speed increases as the lever is moved farther from the neutral position.

CAUTION



Always regulate speed with the forward/reverse lever, not by changing engine revs.

Check the emergency stop by pressing the reserve/parking brake knob (9) while the roller is moving **slowly** forward or in reverse.

The roller should slow down and come to a standstill as the control lamp (31) lights.

The forward/reverse lever (24) must be restored to neutral before operation can continue.

Check while driving that the gauges show normal readings and that the warning lamps do not light.

Max. temperature of hydraulic fluid (10): 85°C (185°F).

Max. coolant temperature (11), diesel engine: 100°C (212°F).

Check now and then while driving that the gauges/lamps indicate normal values. If values are abnormal or the beeper sounds, stop the roller and the engine immediately. Check and remedy any fault; see also the maintenance manual and the engine manual.

Combo machines only:

CAUTION



Inspect the tire tread now and then to detect asphalt compound that has fastened; this is likely until the tires are sufficiently warm. Mixing 2–4% cutting oil in the sprinkler water for the tires can prevent fastening.

DRIVING/VIBRATION

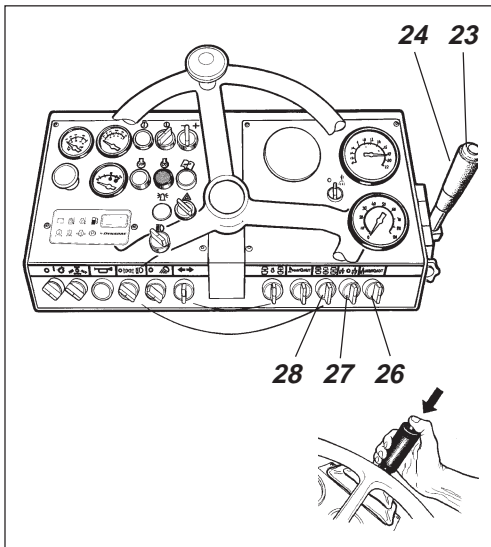


Fig. 19 Instrument panel

- 23. Vibration ON/OFF
- 24. Forward/Reverse lever
- 26. Vibration switch (MAN/AUT)
- 27. Amplitude selector (High/Low)
- 28. Vibration, front/rear drum (CC 722 only)

CAUTION



Vibration may not be applied while the roller is stationary.

Set normal operating speed of the engine (2200 rpm) so that maximum rate of vibration 2700 VPM (45 Hz) is obtained.

Set the desired amplitude (high or low) on the front and rear drum with (27) and (28). Set the vibration selector (26) to MAN or AUT.

In AUT mode: Vibration is automatically switched ON and OFF by the forward/reverse lever during operation.

In MAN mode: Vibration is switched ON and OFF with the button (23) on the forward/reverse lever.

Vibration can only be used at 2200 rpm.

Manual vibration

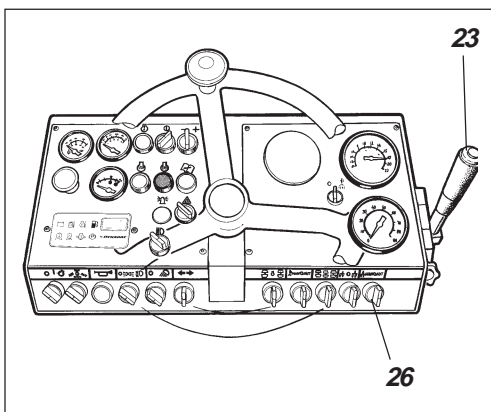


Fig. 20 Instrument panel

- 23. Vibration ON/OFF
- 26. Vibration switch (MAN/AUT)

CAUTION



The amplitude setting may not be altered while the vibration motor is running. Wait until vibration stops before resetting.

Set the vibration switch (26) to MAN.

Move the forward/reverse lever forward or back.

Switch the vibration ON with the button (23) on the forward/reverse lever. Both drums are activated.

The roller can be run with vibration in one drum only by setting the respective amplitude selector to the O position.

CAUTION



Wait until the roller is moving before switching on the vibration.

DRIVING/VIBRATION

Automatic vibration

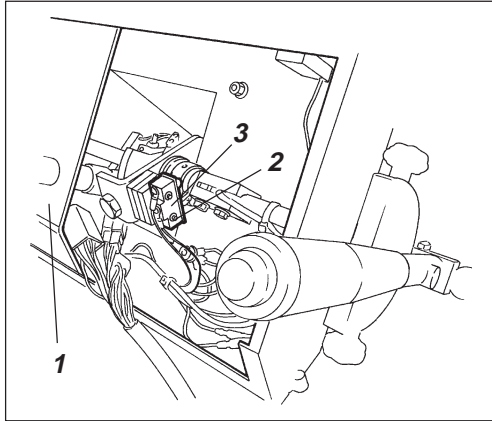


Fig. 21 Engaging the vibration

1. Instrument plate
2. Adjustment
3. Microswitch

With the vibration switch (26) in the AUT mode, the vibration is automatically switched ON and OFF by the forward/reverse lever at the pre-set speed.

Vibration is connected via two microswitches that are each activated by a cam on the axle of the forward/reverse lever.

The connecting position and thus the speed is adjustable.

- *Cams close together:* Connection of vibration at low speed.
- *Cams apart:* Connection of vibration at higher speed. Ensure that vibration is engaged at the same speed front and rear.

BRAKING

Reserve brake

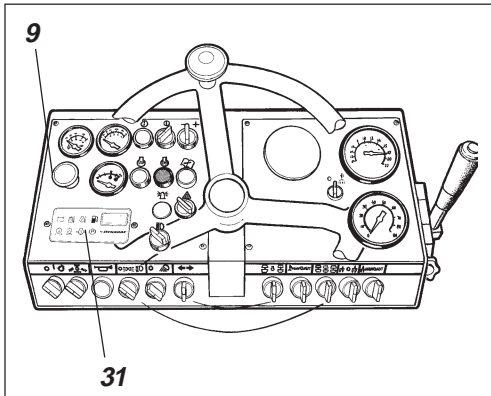


Fig. 22 Left instrument panel

- 9. Reserve/parking brake knob
- 31. Brake warning lamp

Braking is normally done with the forward/reverse lever. The hydrostatic transmission brakes the roller when the lever is moved toward neutral. In addition, a disc brake in each gearbox is applied when the reserve brake knob (9) is pressed in. Lamp (31) lights.

WARNING



To brake, press the reserve/parking brake knob (9), hold the steering wheel firmly and be prepared for a sudden stop.

After braking, restore the forward/reverse lever to neutral and pull up the reserve/parking brake knob.

CAUTION



The disc brake is automatically applied to stop the roller if the engine stops or if hydraulic pressure is insufficient for any other reason.

STOPPING

Stopping the engine

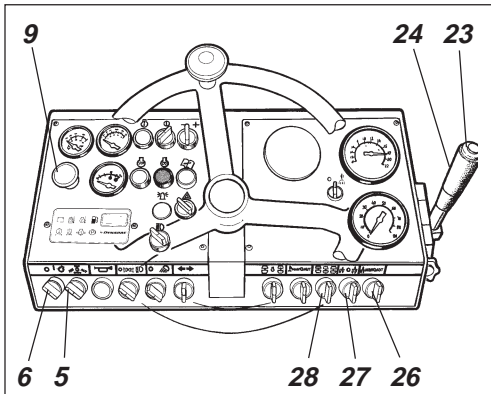


Fig. 23 Instrument panel

- 5. Rev selector
- 6. Switches
- 9. Parking brake knob
- 23. Vibration ON/OFF
- 24. Forward/Reverse lever
- 26. Vibration setting Man/Auto
- 27. Amplitude selector, High/Low (CC 722C only)
- 28. Vibration, front/rear drum (CC 722 only)

Press (26) to switch vibration off if the vibration selector (23) is in the MAN mode. Set (27) and the amplitude selector (28) to the O mode.

Move the forward/reverse lever to neutral to stop the roller.

Set the engine speed to about 900 rpm (5) and allow it to run for a few minutes to even out the temperature.

Press the parking brake knob (9).

Turn the switch (6) to the O position to stop the engine.

Place the protective cover over the control table. Lock as required.

Switch the battery disconnecter OFF and remove the handle from the switch.

WARNING



When you start up and drive a cold machine, the hydraulic fluid is cold, and the braking distance will be longer than normal until the machine reaches normal working temperature.

PARKING

Chocking the drum

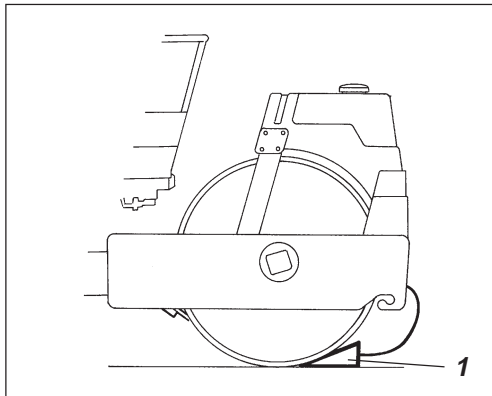


Fig. 24 Chocking the drum
1. Chock

WARNING



Never leave the roller with the engine running unless the parking brake knob is pressed in.

WARNING



Ensure that the roller is parked in a safe place out of the way of traffic. Chock the drums if the roller is parked on sloping ground.

CAUTION



Remember the risk of freezing during the winter. Check antifreeze in the engine coolant and empty the water tanks and its pumps and leads.

Battery disconnecter

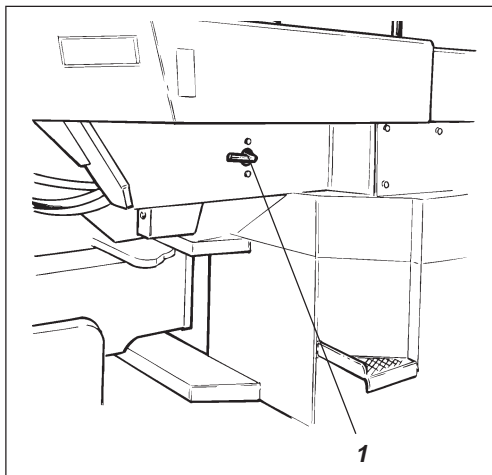


Fig. 25 Engine compartment
1. Battery disconnecter

Switch the battery disconnecter (1) into disconnected mode and remove the key before leaving the roller.

This will prevent battery discharge and will also make it difficult for any unauthorized person to start and drive the machine. Also lock the doors to the engine compartment.

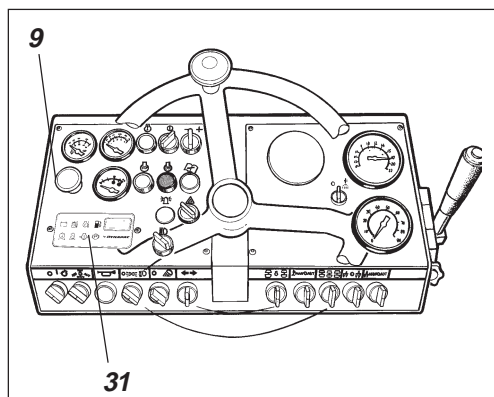


Fig. 26 Left instrument panel
9. Reserve/parking brake knob
31. Brake warning lamp

The parking brake knob (9) must always be pressed if the operator has to leave his seat for any reason while the engine is running. The brake warning lamp (31) should then light.

PARKING

Long-term parking

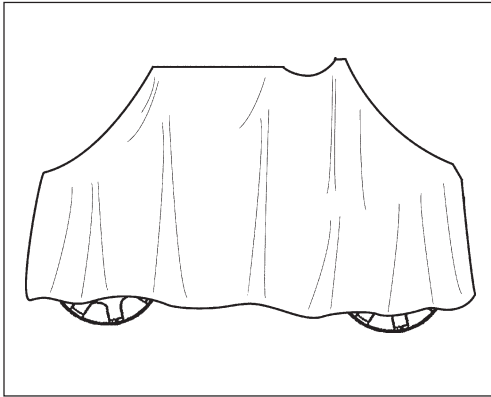


Fig. 27 Long-term parking

CAUTION



In the case of parking for longer than one month, please refer to the “Engine inhibition” chapter in engine manual and the “Long-term storage” chapter in the roller maintenance manual.

A suitable alternative to inhibition is to start the engine once a month and run the roller for about half an hour while operating all of the hydraulic functions, then lubricate all of the nipples and fill the fuel tank. Remember to empty the water tank and the sprinkler system.

HOISTING

Locking the articulation joint

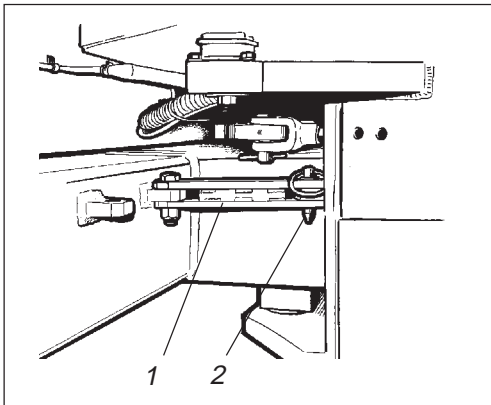


Fig. 28 Left side of articulation
1. Articulation in interlocked mode
2. Locking pin

WARNING



The articulation must be locked before you lift the roller. Fold out the arm (1) and secure it to the rear machine frame with the cotter (2). Attach the lifting chains and ensure that no parts will be crushed when hoisting.

WARNING



Check the weight of the machine by reading the data punched on the hoisting plate.

CAUTION



Steel wires, chains, etc. must be dimensioned in conformance with current regulations.

Releasing the articulation joint

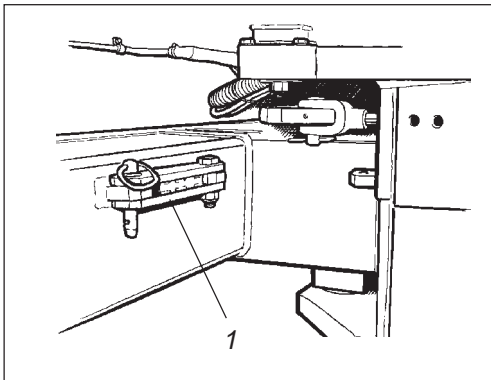


Fig. 29 Left side of articulation
1. Articulation lock in open mode

Weight: See data plate on the roller

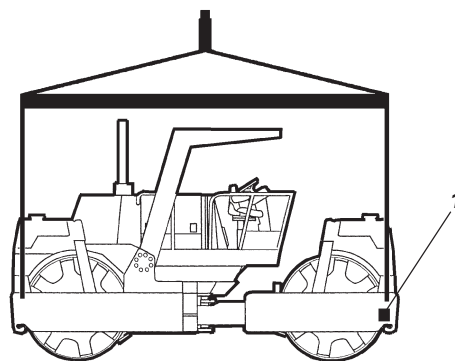


Fig. 30 Lifting the roller
1. Hoisting plate

WARNING



Keep well clear of the hoisted machine. Ensure that hoisting hooks are securely anchored.

CAUTION



Remember to restore the articulation interlock to open mode before driving again.

TOWING

Alternative 1 Towing short distances with engine working

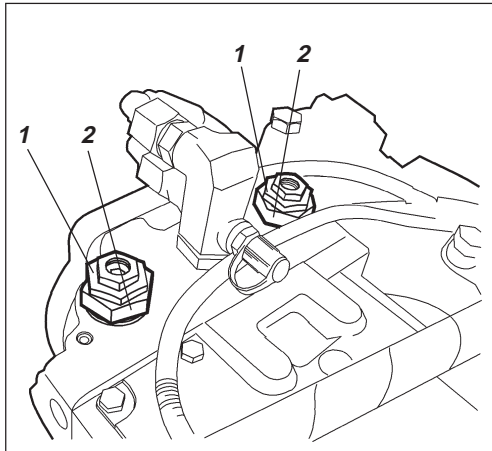


Fig. 31 Propulsion pump

1. Towing valve
2. Multifunction valve

The roller can be moved up to 300 meters (330 yards) according to either of the options below.

WARNING



Press the reserve/parking brake knob, and stop the engine temporarily. Chock the drums to prevent the machine from rolling.

Open the right door to the engine compartment to gain access to the propulsion pump.

Turn both towing valves (1) (middle hexagonal nut) three turns counter-clockwise, holding the multifunction valve (2) (lowermost hexagonal nut) in place. The valves are located on top of the propulsion pump.

Start the engine and allow it to idle.

The roller can now be towed and can also be steered if the steering system is in action.

Alternative 2 Towing short distances with engine not working (with hand pump, standard)

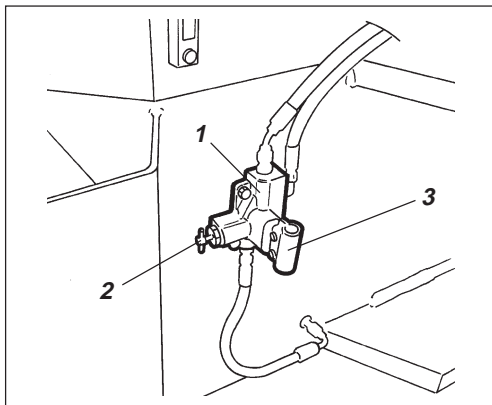


Fig. 32 Hand pump

1. Valve
2. Locking screw
3. Holder for pump arm

WARNING



Chock the drums to prevent the roller from moving when the brakes are mechanically disengaged.

Turn the arm on the bypass valve (1) 90° to disengage the hydrostatic brake.

Operate the hand pump (3) to apply hydraulic pressure until the disc brakes release.

The roller can now be towed.

After towing, pull out the valve to apply the brakes again.

CAUTION



Remember to restore the arm on the valve block to its initial position after towing.

TOWING

Towing a roller

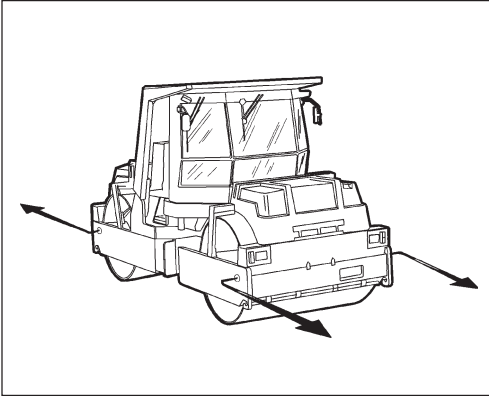


Fig. 33 Towing

WARNING



The roller must be counter-braked when towing. Use a towbar because the roller will have no ability to brake.

CAUTION



The roller must be towed slowly, max. 3 km/h (2 mph) and for a short distance only, max. 300 m (330 yards).

When a machine is towed/retrieved, the towing device must be connected to both lifting holes. Pulling forces shall act longitudinally on the machine as illustrated. Maximum gross pulling force 102 kN (22.931 lbf).

CAUTION



Restore the items for towing.

TRANSPORTATION

Locking the articulation joint

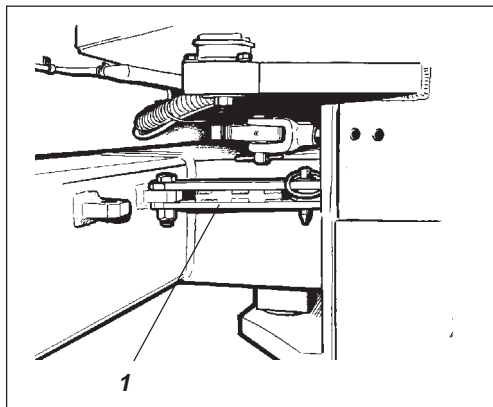


Fig. 34 Articulation joint/locking device
1. Mode for transportation and hoisting

WARNING



Lock the articulation joint before transportation.

Lock the articulation joint with the interlocking device.

Roller prepared for transportation

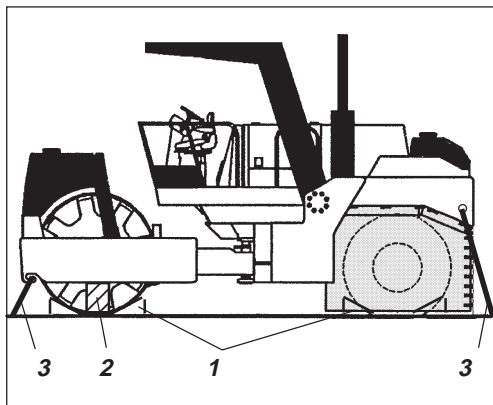


Fig. 35 Chocking the drum/frame
1. Chock
2. Blocking-up timber
3. Lashing wire/chain

Secure the drum and wheels with chocks (1) at the front, rear and sides.

Block up under the drum frame (2) to avoid overload on the rubber suspension of the drum.

Clamp down the frame with lashing wire/chain (3) at all four corners.

Releasing the articulation joint

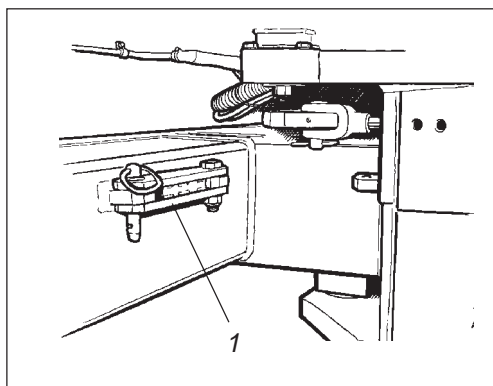


Fig. 36 Left side of articulation
1. Articulation lock in open mode

CAUTION



Remember to restore the articulation interlock to open mode before driving again.

OPERATING INSTRUCTIONS - SUMMARY



1. Follow the **SAFETY INSTRUCTIONS** in the **Safety Manual**.
2. Make sure that all instructions in the **MAINTENANCE MANUAL** are followed.
3. Turn the battery disconnecter switch to the **ON** position.
4. Put the forward/reverse lever in **NEUTRAL**.
5. Set the amplitude selector in **NEUTRAL**.
6. Set the stop knob in the **OFF** mode (pushed in).
7. Start the engine and allow it to warm up.
8. Ensure that the reserve brake knob is in the **OFF** mode (pulled out).



9. **Test the brakes.**
Remember that the braking distance will be longer if the roller is cold.



10. **Drive the roller. Operate the forward/reverse lever with care.**

11. Use the vibration only when the roller is in motion.
12. Ensure that the drums are watered sufficiently when needed.



13. **IN AN EMERGENCY:** - **Press the RESERVE BRAKE KNOB.**
- **Hold the steering wheel firmly.**
- **Brace yourself for a sudden stop.**

14. Parking: - Stop the engine and chock the drums.
15. Towing: - See the **OPERATION MANUAL**.
16. Lifting: - See the **OPERATION MANUAL**.