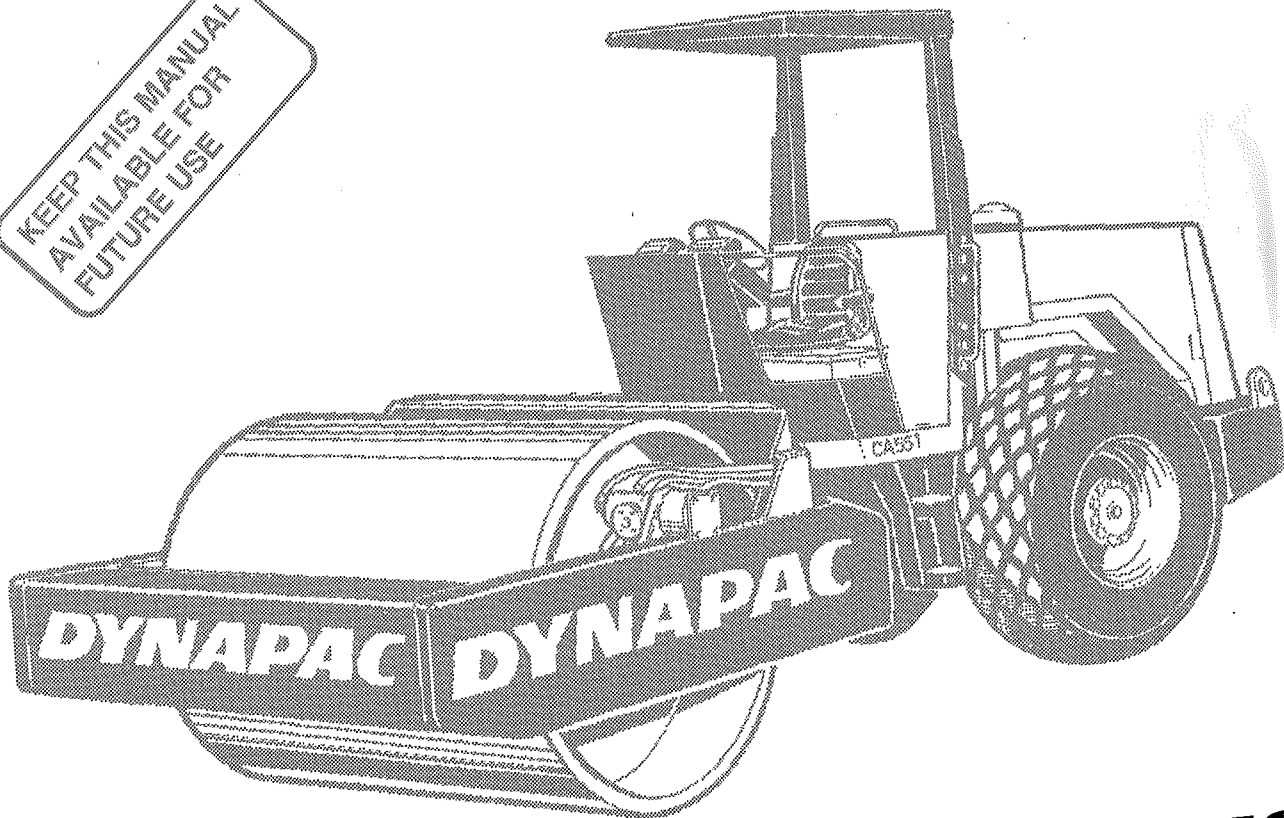


The CA51 family of vibration rollers consists of models CA 511D, CA 511PD and CA 551D, where CA 511D/551D is especially highly productive for the compaction of coarse blasted rock but is equally effective on other material, granular or cohesive.

The typical machine for cohesive material is the CA 511PD. This roller is also particularly suitable for the compaction of disintegrated stone material. Interchangeable drums, ie, smooth drum or padfoot, facilitate a wide range of application.

CA 511/551 is the basic version dealt with in these operating instructions. Separate information is available on request concerning additional equipment.

KEEP THIS MANUAL  
AVAILABLE FOR  
FUTURE USE



## OPERATION

# CA 511/551

## VIBRATORY ROLLER

O511EN2, 961230

Diesel Engine:  
Deutz BF6L 913

Operating Instructions apply for  
CA 511: PIN (S/N) \*61410001\*  
CA 551: PIN (S/N) \*61410026\*

We reserve the right to change specifications without notice  
Printed in Sweden

SVEDALA

**DYNAPAC**  
Svedala Compaction Equipment AB

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## WARNING SYMBOLS

WARNING



**Warning — Personal safety may be involved.**

CAUTION



**Caution — Damage to component or machine.**

## SAFETY MANUAL

WARNING



**The safety manual that accompanies the machine should be studied by every operator of the roller. Always follow the safety instructions and do not take the manual away from the roller.**

## GENERAL

This manual contains instructions concerning operation of the machine. For information regarding care and maintenance, see the "MAINTENANCE" manual.

WARNING



**When starting up and driving a cold machine, which implies cold hydraulic fluid, the braking distances will be longer than normal until the machine attains 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.

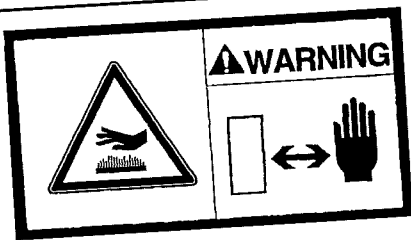
## SAFETY INSTRUCTIONS (Read the Safety Manual too)

WARNING



1. Read and clearly understand OPERATING MANUAL before starting and operating the machine.
2. Ensure that all instructions in the MAINTENANCE MANUAL are adhered to.
3. Do not operate machine unless qualified by training or experience. Do not allow passengers on the rollers.
4. Do not operate machine if it is in need of repair or adjustment.
5. Do not get on or off moving machine. Always use the steps and handrails that are provided.
6. Roll Over Protective Structures (ROPS) is recommended when stability conditions are questionable. Always use seat belt with ROPS.
7. Drive slowly when turning corners. Do not exceed recommended speed.
8. Avoid sidehill travel. Operate up and down the slope.
9. When operating close to an edge, overlap new passes so that at least half of the drum width is on previously compacted material.
10. Be alert to overhead obstacles. Look up as well as down.
11. Use special caution when operating on rough or uneven ground. Always maintain a speed consistent with working conditions.
12. Obey all safety rules and use safety equipment provided for the job.
13. Keep the machine clean. Avoid dirt and grease on operator platform. Keep all instruction signs and decals clean and fully legible.
14. Exercise caution when refueling machine:
  - Shut down engine
  - No smoking allowed
  - Use no open flames
  - Ground filler nozzle against tank neck to avoid a spark.
15. Chock drums and/or tyres, support the levelling blade and apply steering lock before servicing or repairing machine.
16. If noise levels on machine without cabs are over 85 db(A):
  - Ear protection is recommended.
17. Do not modify the machine in any way which will affect safety. Any modification on this machine requires prior written approval from Dynapac.
18. Do not operate machine until hydraulic fluid has reached operating temperature. Braking distance can be greater when fluid is cold. See starting instruction in OPERATING MANUAL.

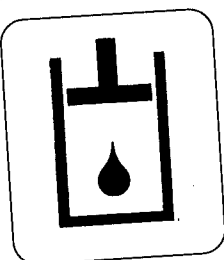
# SAFETY DECALS, LOCATION AND DESCRIPTION



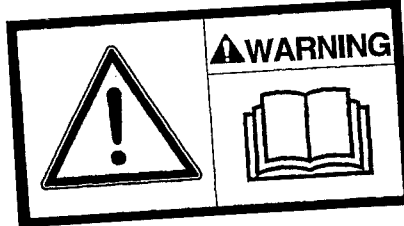
Warning for hot surface. The surface must not be touched.



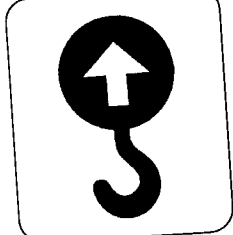
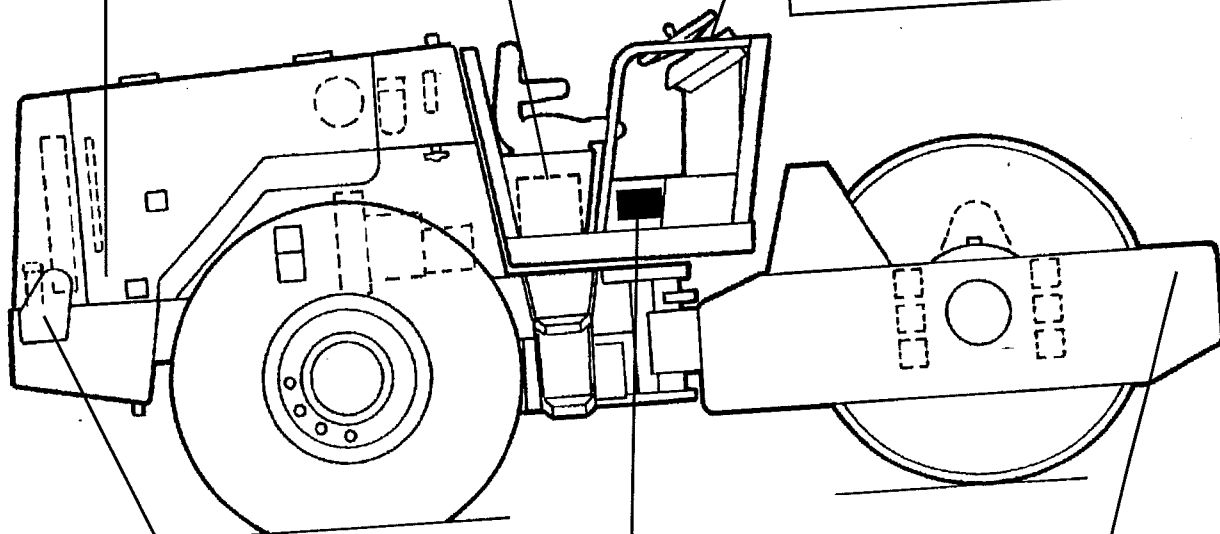
Warning for rotating engine components. Keep your hands at a safe distance from the danger zone.



Hydraulic fluid



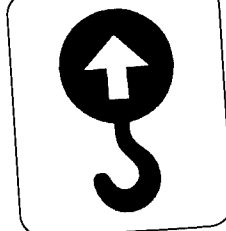
The operator is urgently requested to read the safety manual, and the operation and maintenance instructions before using the machine.



Lifting point

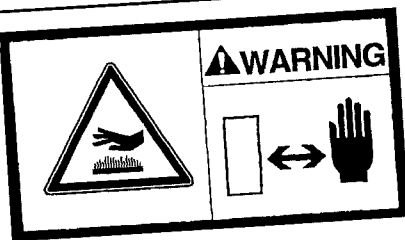


Crush zone, articulated steering. Maintain a safe distance from the crush zone.



Lifting point

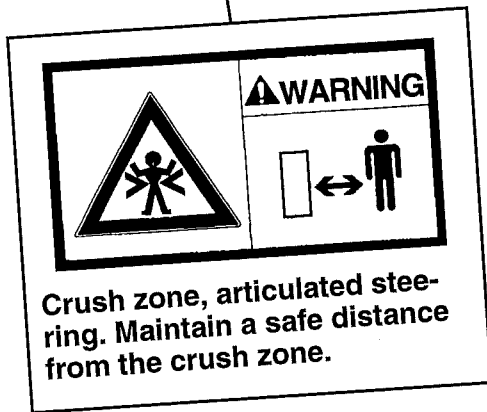
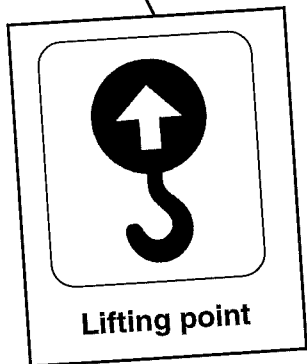
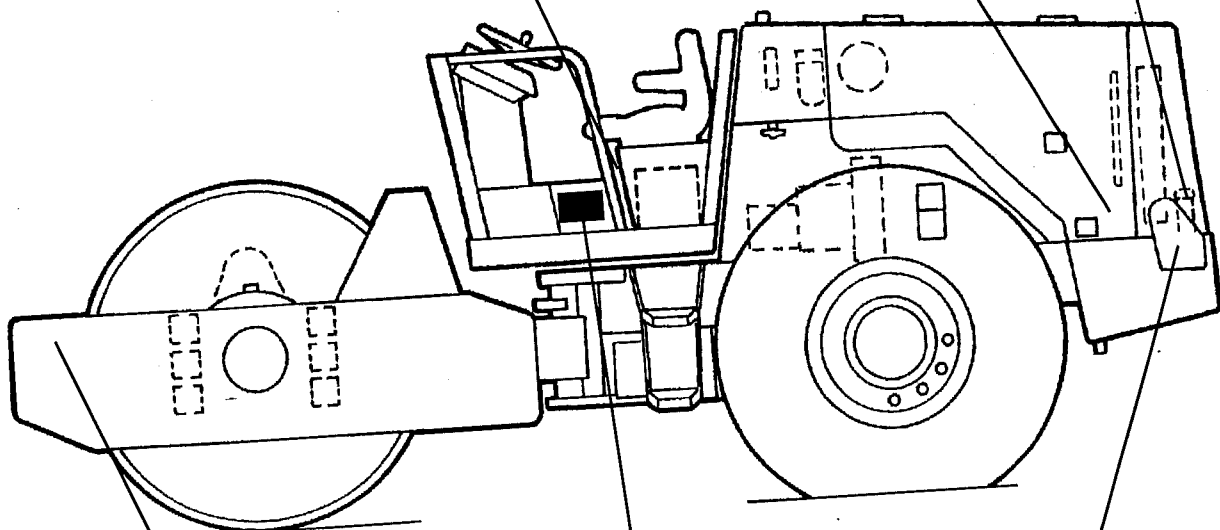
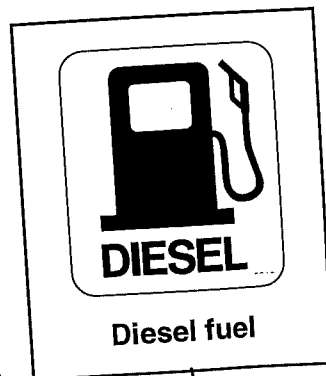
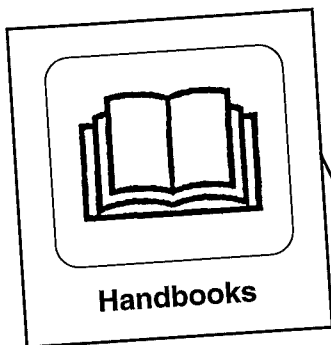
**SAFETY DECALS, LOCATION AND DESCRIPTION**



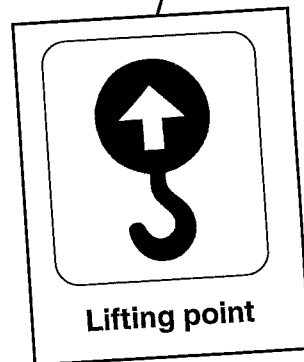
**Warning for hot surface.**  
The surface must not be touched.



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

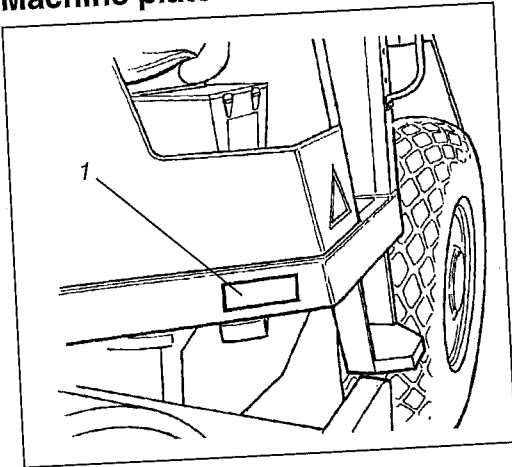


**Crush zone, articulated steering.** Maintain a safe distance from the crush zone.



## MACHINE AND ENGINE PLATES

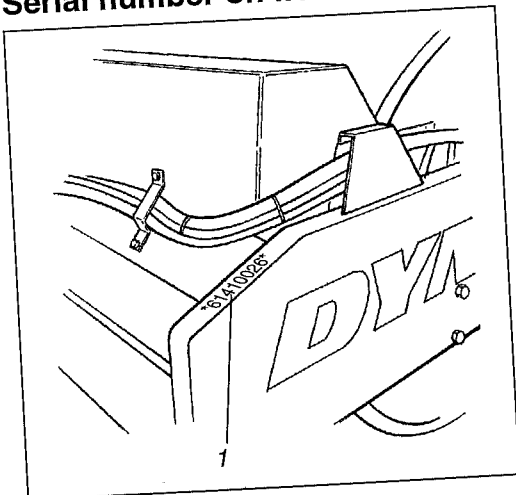
### Machine plate



**Fig. 1 Left foot step**  
1. Machine 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, ie, Part Identification Number, (serial number), operating weight, engine power and year of manufacture. Please state the PIN (serial number) of the roller when ordering spares.

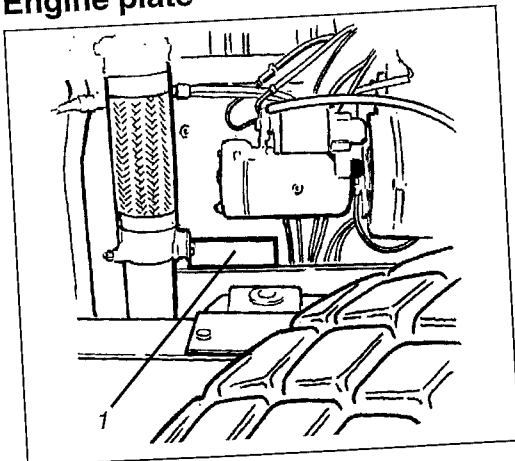
### Serial number on frame



**Fig. 2 Front frame**  
1. Serial number

The serial number of the machine is punched on the right edge of the front frame. This number is the same as the PIN (serial number) on the machine plate.

### Engine plate



**Fig. 3 Engine**  
1. Type plate

The engine type plate (1) is affixed to the crankcase below the starter motor. The plate shows the type of engine, serial number and engine data. Please state the serial number of the engine when ordering spares. See also the engine manual.

# INSTRUMENTS AND CONTROLS

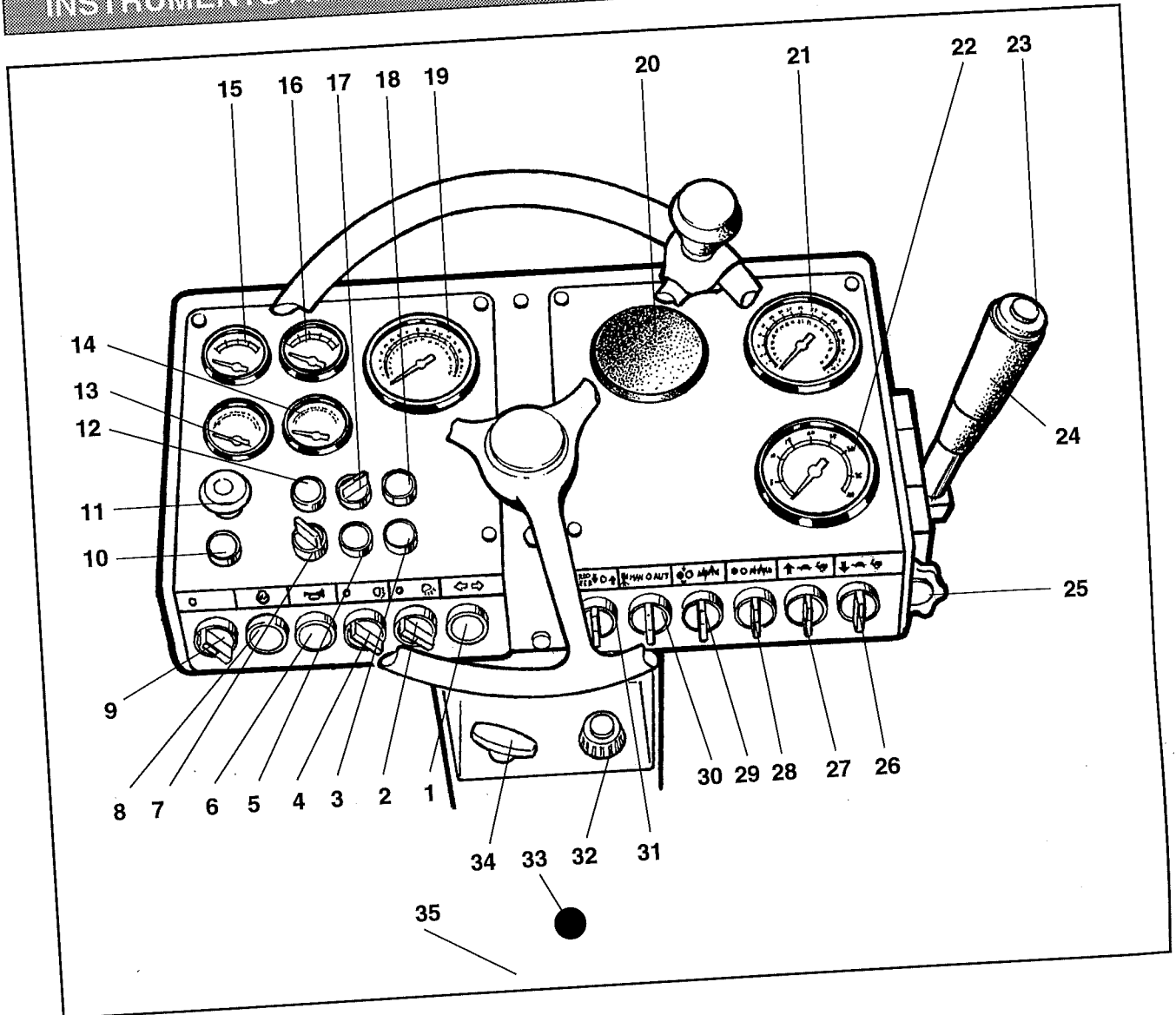
















Fig. 4

- |    |                      |    |                                     |    |                               |
|----|----------------------|----|-------------------------------------|----|-------------------------------|
| 1  | Direction indicator* | 14 | Fuel gauge                          | 25 | -*                            |
| 2  | Working lights*      | 15 | Temperature gauge — hydraulic fluid | 26 | Speed selector, reverse       |
| 3  | Hazard beacon*       | 16 | Temperature gauge — engine          | 27 | Speed selector, forward       |
| 4  | Driving lights*      | 17 | High/Low beam switch*               | 28 | Amplitude selector            |
| 5  | Hazard flashers*     | 18 | Warning lamp — air filter           | 29 | -*                            |
| 6  | Horn                 | 19 | Tachometer/Hour-meter               | 30 | -*                            |
| 7  | -*                   | 20 | Compaction meter*                   | 31 | Frequency meter switch*       |
| 8  | Starter button       | 21 | Speedometer*                        | 32 | Revs control                  |
| 9  | Starter power switch | 22 | Frequency meter*                    | 33 | Locking lever — Seat rotation |
| 10 | Brake warning light  | 23 | Vibration ON/OFF                    | 34 | Stop knob                     |
| 11 | Emergency stop       | 24 | Forward/Reverse lever               | 35 | Pocket for handbooks          |
| 12 | Oil pressure lamp    |    |                                     |    |                               |
| 13 | Voltmeter            |    |                                     |    |                               |










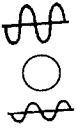
\* Optional equipment

# FUNCTIONAL DESCRIPTION, INSTRUMENTS AND CONTROLS

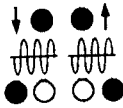





Item in fig. 4	Designation	Symbol	Function
1	Direction indicator (Optional)		
2	Working lights (Optional)		
3	Hazard beacon (Optional)		
4	Driving lights, front (Optional)		
5	Hazard flashers (Optional)		
6	Horn		Press to sound the horn
7	- (Optional equipment)		
8	Starter button		Press to energize starter motor
9	Starter power switch		Electric circuit is broken in mode O. All electrical instruments and controls are powered in mode I. DEUTZ: The circuit must <b>not</b> be switched off while the engine is running.
10	Brake warning lamp		The lamp LIGHTS when the brakes are engaged.
11	EMERGENCY STOP (Red button)		OFF (pulled out) is the normal mode while driving. ON (pushed in) applies the brakes and stops the roller.
12	Warning lamp, oil pressure		Warning lamp LIGHTS to indicate insufficient pressure of lubricating oil. Stop engine immediately and remedy the cause.
13	Voltmeter		Indicates voltage of the system, normally 12 to 15 Volt.
14	Fuel gauge		Indicates content of fuel tank.
15	Temperature gauge, hydraulic fluid.		Indicates temperature of hydraulic fluid. Normally 65°C to 80°C (150°F to 175°F). Stop the engine if gauge shows temperature above 85°C (185°F) and locate the cause.



# INSTRUMENTS AND CONTROLS, contd.

Item in fig. 4	Designation	Symbol	Function
16	Temperature gauge Cummins: Coolant  Deutz: Engine oil		Indicates working temperature of engine, normally 82°C to 93°C (180°F to 200°F). See Engine Manual. Indicates temperature of engine oil.
17	High and Low beam, and control lamp (Optional)		
18	Warning lamp - air filter		Air filter needs cleaning or changing if lamp lights while engine is running at full revs.
19	Tachometer/Hour-meter		Indicates speed of engine. Multiply gauge reading by 100. Driving time shown in digits.
20	Compaction meter (Optional)	-	-
21	Speedometer (Optional)	-	-
22	Vibration/Frequency meter (Optional)		-
23	Vibration ON/OFF		Press to switch on vibrator. Press again to switch off. Applies when (27) is in MAN mode.
24	Forward/reverse control		Move the lever in desired direction of travel. Driving speed is proportional to movement of the lever. The machine brakes on moving the lever towards neutral. Observe also that the engine can only be started with the lever in neutral.
25	Speed regulator (Optional)	-	-
26	Speed selector, reverse		Transportation speed (High) Working speed (Low)
27	Speed selector, forward		Transportation speed (High) Working speed (Low)
28	Amplitude selector		HIGH or LOW mode. For specifications see Maintenance Manual.

## INSTRUMENTS AND CONTROLS, contd.

Item in fig. 4	Designation	Symbol	Function
29	Sequence selector (Optional)		Switches over (on changing direction Forward, Reverse) to give vibration on front or rear drum with regard to direction of travel.
30	Watering (Optional)	<p style="text-align: center;">MAN O AUTO</p> 	Controls flow of water to the front and rear drum. MAN mode provides continuous watering. Watering switched off in O mode. AUT mode provides automatic switching ON/OFF via the forward/reverse control.
31	Engages vibration/frequency meter (Optional).	<p style="text-align: center;">FREQ METER</p> 	-
32	Revs control (Diesel)		Release/lock with center button. Pull out to increase engine revs. Push in to decrease. Turn/screw the knob for fine adjustment. Counterclockwise = increase. Clockwise = decrease.
33	Locking lever — Seat rotation		Releases the control unit for rotation.
34	Stop knob (Deutz engine)		Pull out to stop engine.
35	Pocket for handbooks		Safety, operation and maintenance manuals, which must not be removed from the machine.

# INSTRUMENTS AND CONTROLS IN THE CAB

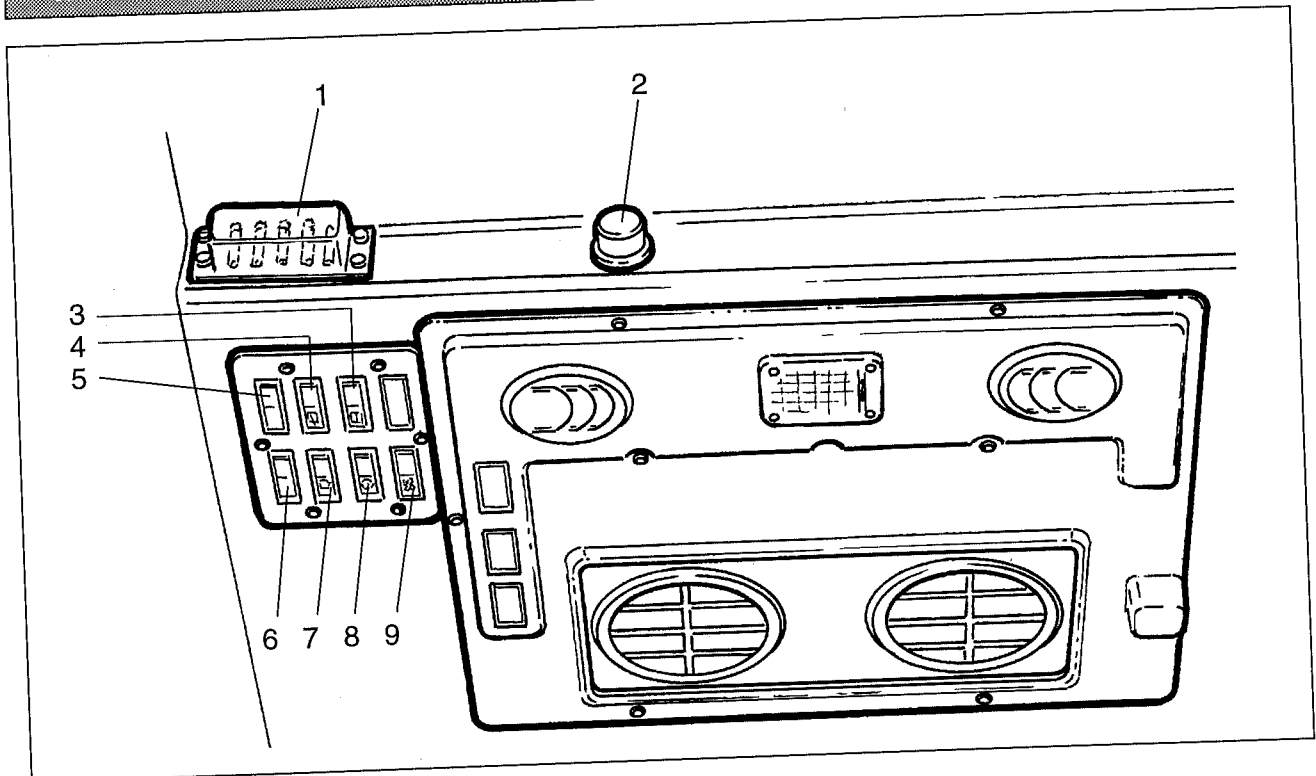
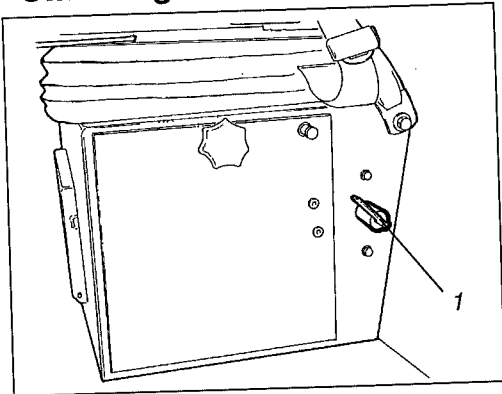


Fig. 5 Cab roof

Item in fig. 5	Designation	Symbol	Function
1	Fuse box (cab)		Contains fuses for the electrical system. See under heading "Electrical system" for description of functions of the different fuses.
2	Heater control, knob		Turn clockwise to increase temperature in the cab.
3	Wind shield spray, rear, switch		Push to activate the rear spray.
4	Wiper, rear, switch		Push to turn on the rear wiper.
5	Working lights, rear, switch		Push to turn on the rear working lights.
6	Working lights, front, switch		Push to turn on the front working lights.
7	Wiper, front, switch		Push to turn on the front wiper.
8	Wind shield spray, front, switch		Push to activate the front spray.
9	Fan, switch		Push to switch on the fan in the cab.

## BEFORE STARTING

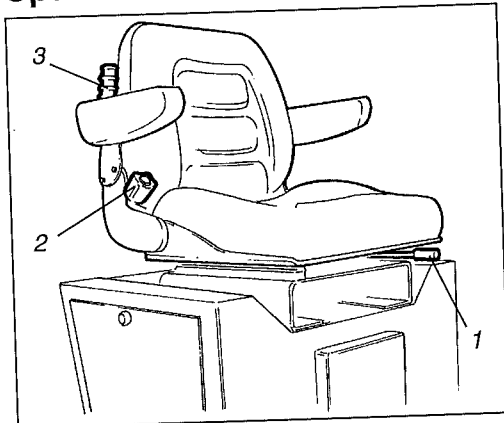
### Battery disconnecter - Switching on



**Fig. 6 Battery Box**  
1. Battery disconnecter

1. Ensure that the daily service has been carried out, see MAINTENANCE Instructions.
2. Set the battery master switch (1) to the ON mode.

### Operator's seat - Setting



**Fig. 7 Operator's seat**  
1. Lever - length adjustment  
2. Knob - back slope  
3. Lever - cushioning  
4. Lever - transverse travel

Adjust the operator's seat so that all controls can be easily reached.

The seat can be adjusted as follows:

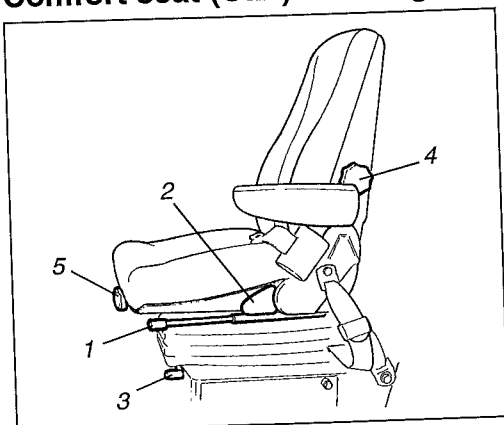
1. Lengthwise setting
2. Backrest slope.
3. Cushioning in relation to operator's weight.

WARNING



**Ensure that the battery box is closed when driving.**

### Comfort seat (Cab) - Setting



**Fig. 8 Operator's seat**  
1. Lever - lengthwise  
2. Lever - backrest slope  
3. Lever - weight adjustment  
4. Knob - lumbar support  
5. Knob - cushion slope

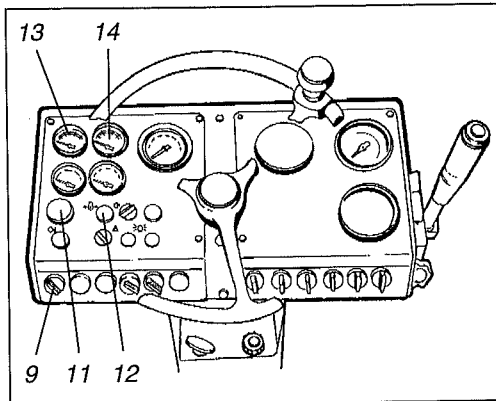
Set the operator's seat to ensure a comfortable posture, with controls easily accessible.

The seat features the following adjustments.

1. Lengthwise setting
2. Backrest slope
3. Weight setting
4. Lumbar support
5. Cushion slope

## BEFORE STARTING (Contd.)

### Instruments and lamps - Control

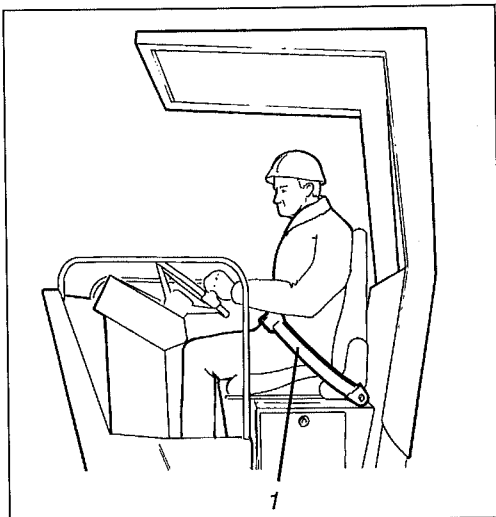


**Fig. 9 Instrument panel**

- 9. Starter switch
- 11. EMERGENCY stop
- 12. Oil pressure warning lamp
- 13. Voltmeter
- 14. Fuel gauge

1. Make sure the EMERGENCY STOP knob (11) is pulled out.
2. Turn the starter switch (9) to position I.
3. Check that the voltmeter (13) shows at least 12 volts.
4. Check that the fuel gauge (14) shows a reading.
5. Check that the oil pressure lamp (12) lights.

### Seat belt



**Fig. 10 Operator's seat**  
1. Seat belt

If ROPS or a cab is fitted on the roller, use your seat belt (1).

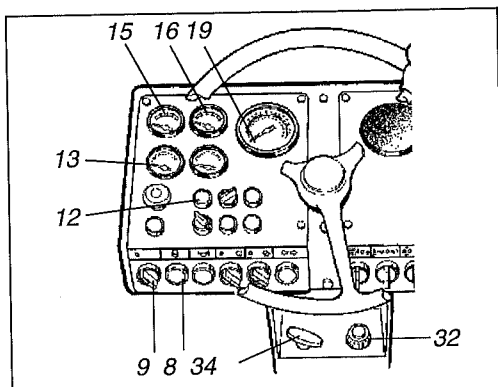
WARNING



**Always replace the seat belt with a new one if it is worn or has been subjected to excessive force.**

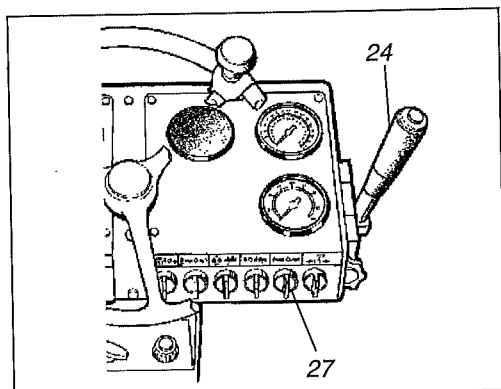
# STARTING

## Starting the engine



**Fig. 11a Instrument panel**

- 8. Starter button
- 9. Starter power switch
- 12. Warning lamp, oil pressure
- 13. Voltmeter
- 15. Temperature gauge, hydraulics
- 16. Temperature gauge, engine
- 19. Tachometer/Hour-meter
- 32. Revs control
- 34. Stop control (Deutz)



**Fig. 11b Instrument panel**

- 24. Forward/reverse lever
- 27. Vibration setting

1. Set the forward/reverse lever (24) in neutral. The engine can only be started with the lever in neutral.
2. Set the vibration setting (27) to O. Make sure the stop control (34) is pushed in (applies to Deutz engines only).

3. Press the revs control button (32) and pull up the lever to 1/4 throttle. Make sure the starter power switch (9) is in position I.

4. Press the starter button (8) and release it immediately the engine starts.

**CAUTION**



If the engine does not start immediately, wait a few seconds before making another attempt.

5. Run the engine warm at about 1000 r/min for 5 to 10 minutes depending on ambient temperature. Check that the tachometer/hour-meter (19) shows a reading.

6. Check while warming up that the voltmeter (13) shows 13 to 14 V, and that the oil pressure warning lamp (12) is out. Check that the engine temperature gauge (16) indicates a reading toward the end of the warming up period.

**CAUTION**



The starter power switch (9) must not be turned to O while the engine is running. (Applies to rollers fitted with Deutz engine).

**WARNING**

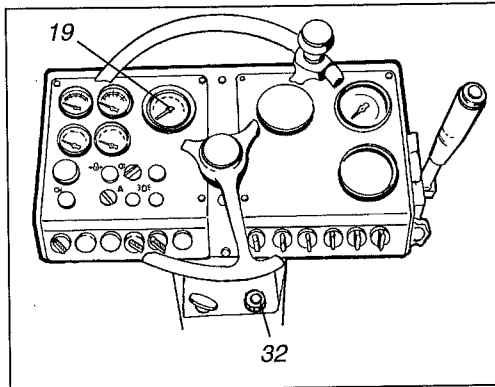


**When starting up and driving a cold machine, which implies cold hydraulic fluid, the braking distances will be longer than normal until the machine attains working temperature.**

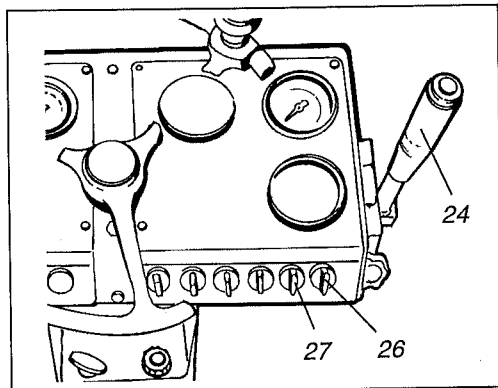
**WARNING**



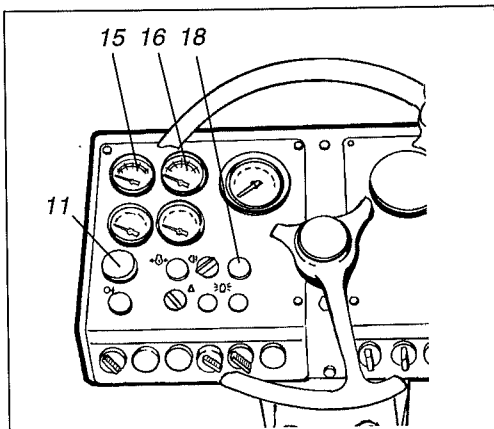
**Ensure that ventilation (evacuation) is adequate if the engine is run indoors. (Risk of carbon monoxide poisoning).**



**Fig. 12 Instrument panel**  
 19 Tachometer/hour-meter  
 32 Revs control



**Fig. 13 Right instrument panel**  
 24 Forward/Reverse control  
 26 Speed selector  
 27 Speed selector



**Fig. 14 Left instrument panel**  
 11. EMERGENCY STOP  
 15. Hydraulic fluid temperature  
 16. Engine temperature  
 18. Warning lamp/air cleaner

1. Set the revs control (32) to give a reading of 2400 r/min on the tachometer (19). Adjust finely by turning the knob (32). Counterclockwise = increase, Clockwise = decrease.
2. Ensure that the steering is working properly by turning the steering wheel once to the right and once to the left while the machine is standing still.

WARNING



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

3. Turn the High/Low speed selectors (26) and (27) to the desired settings, see decal on the instrument panel.

**Speeds:**

- Low forward/Low reverse 4,8 km/h (3 mph)
- Low forward/High reverse 6,6 km/h (4 mph)
- High forward/Low reverse 6,9 km/h (4.3 mph)
- High forward/High reverse 11,6 km/h (7 mph).

WARNING



**The setting high/high may only be used during transportation on a smooth surface.**

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

CAUTION



Speed must always be regulated with the forward/reverse lever and not by changing speed of the engine.

5. Check operation of the emergency brakes by pressing the emergency stop knob (11) while the roller is running slowly forward. The roller should then slow down.
6. Check while driving that gauges show normal readings and that warning lamps do not light. Maximum hydraulic fluid temperature (15) 85°C (185°F). Maximum engine oil temperature (16) when the pointer reaches the red zone.

CAUTION



If the horn sounds, this may be an indication that the fan belt has broken. Stop the engine immediately, check and correct the fault.

CAUTION



The main filter must be cleaned or changed if the air filter warning lamp (18) lights while driving and at full engine revs, see Maintenance Instructions.

## VIBRATION/DRIVING

### High/low amplitude

#### — Setting

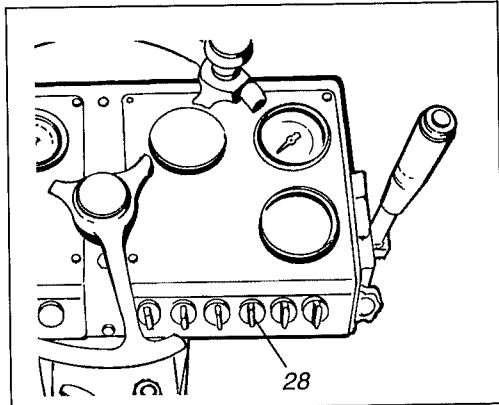


Fig. 15 Right instrument panel  
28 Amplitude selector

1. Vibration is not permitted while the machine is standing still.
2. Set high or low amplitude with the amplitude selector (28).

CAUTION



Amplitude high/low must not be reset while the vibration is switched on. Wait until vibration stops before changing the setting.

### Vibration

#### — Switching on

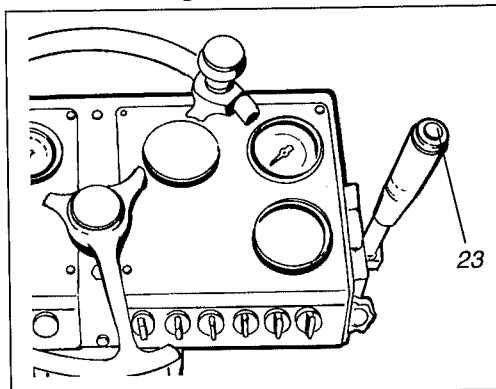


Fig. 16 Right instrument panel  
23 Vibration ON/OFF

Start vibration with the push button (23) while the roller is in motion.

CAUTION



Do not switch off vibration when changing the direction of travel.

## SAFETY WHEN DRIVING

### Slope

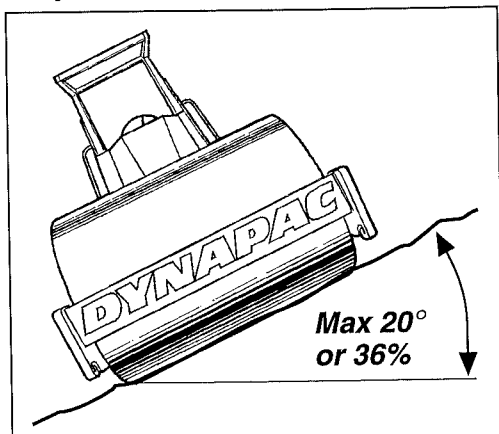


Fig. 17 Tipping angle on side slopes

The tipping angle stated here is measured on a flat and hard supporting surface with the machine stationary. Steering angle is zero, (machine driving straight forward) and vibration is switched off. Remember that a loose surface, applied steering of the machine, vibration switched on, driving speed and a higher level of the center of gravity (eg, options fitted) can result in tipping on a smaller slope than that shown here.

WARNING

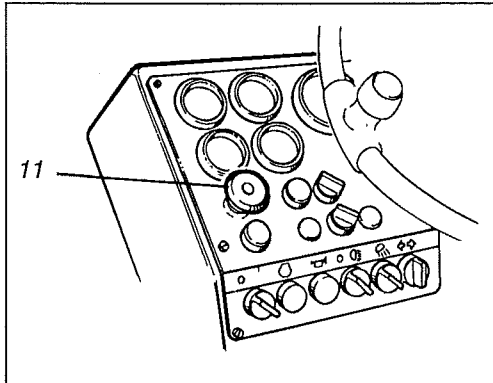


Where possible, avoid all driving transversely across a slope. Instead, drive up and down sloping ground. The roller will topple over on side slopes greater than 20° or 36% to the right or left.



## BRAKING

### Normal braking and EMERGENCY STOP



**Fig. 18 Left instrument panel**  
11 Emergency stop

Braking is normally made with the forward/reverse lever. The roller is braked to a standstill by the hydrostatic transmission when the lever is moved towards the neutral mode.

In addition the multi-disc brakes on the drum motor and rear axle, which operate as a parking brake, are applied when the EMERGENCY STOP (11) is pressed in.

WARNING

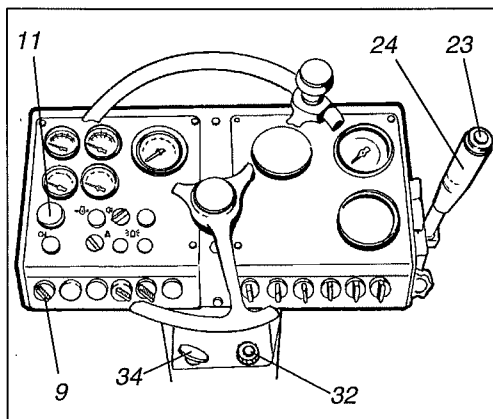


**In an emergency, press the EMERGENCY STOP BUTTON (11). Hold the steering wheel firmly as the machine brakes.**

After emergency braking: Reset the forward/reverse lever to neutral. Pull out the emergency stop knob (11) and start the engine again if required.

## STOPPING

### Switching off the engine



**Fig. 19 Instrument panel**  
9 Starter power switch  
11 Emergency stop  
23 Vibration ON/OFF  
24 Forward/Reverse lever  
32 Revs control  
34 Stop knob

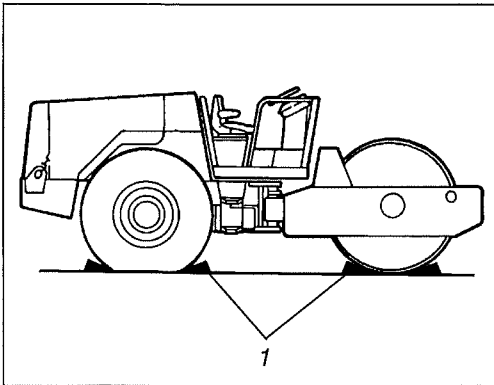
1. Switch vibration off by pressing (23).
2. Stop the roller by moving the forward/reverse lever (24) to neutral.
3. Push in the revs control (32) until the engine runs at idling speed, 800 to 1000 r/min. Allow the engine to run for a few minutes.
4. Push in the emergency stop knob (11).
5. Pull out the stop control (34).
6. Turn the starter power switch (9) to position 0.

WARNING



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

## PARKING



**Fig. 20 Front drum**  
1 Brake chock

WARNING



**Never leave the roller with the engine running unless the emergency stop control is pushed in.**

The roller is equipped with a parking brake which is applied automatically when the engine stops or when hydraulic pressure disappears from the drive system.

Fit chocks against the drum and wheels when parking on a slope with the engine switched off.

WARNING

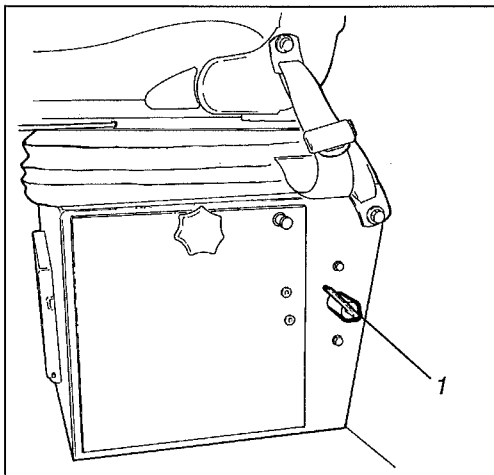


**Make sure the roller is parked safely and is not a traffic hazard.**

CAUTION

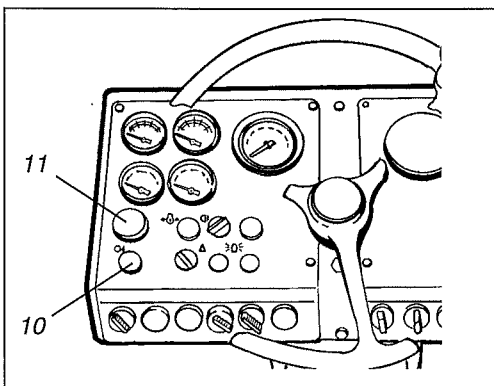


Remember the danger of freezing during the winter period. Fill the engine cooling system and the water tanks of the roller with a mixture of anti-freeze. See also the Maintenance Instructions.



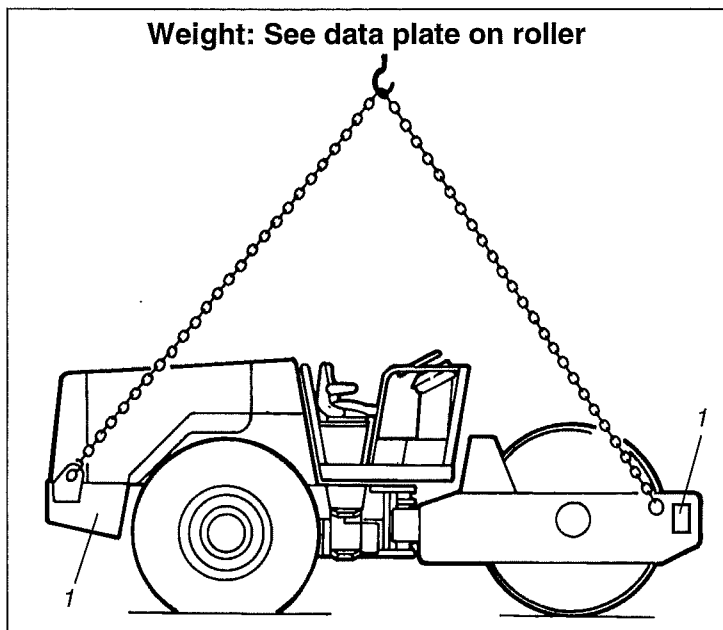
**Fig. 21 Battery**  
1 Battery disconnect

Switch OFF the battery master switch (1) before leaving the roller.



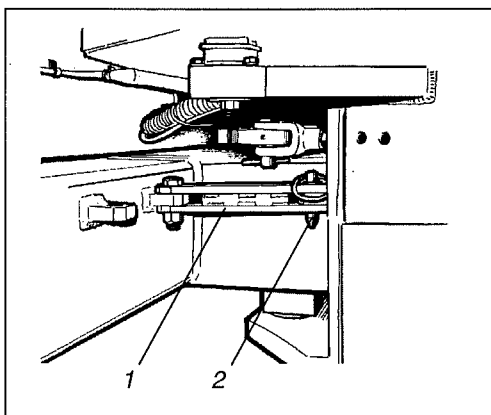
**Fig. 22 Left instrument panel**  
10 Brake warning lamp  
11 Emergency stop knob

The emergency stop knob (11) must first be pressed in if the operator, for any reason, finds it necessary to leave his seat while the engine is running. The brake warning lamp (10) should then light.



**Fig. 23 Hoisting roller**  
(rear plate on left side)

## Locking the articulated joint



**Fig. 24 Left side of articulated joint**  
1 Articulated joint in locked mode  
2 Locking pin

WARNING



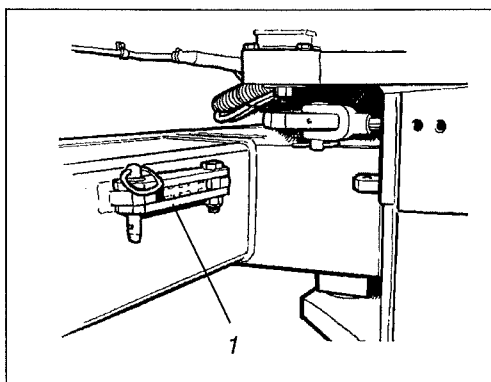
**Lock the steering mechanism to prevent turning before hoisting the roller. Extend the arm (1) and lock it securely with the pin (2) to the rear frame. Connect the lifting chains, making sure that no parts can be damaged while hoisting.**

CAUTION



**Steel wires, chains, etc. Must comply with current regulations.**

## Releasing the articulating joint



**Fig. 25 Left side of articulated joint**  
1 Articulated joint in released mode

WARNING



**Check the weight of the machine punched on the data plate (1) (fig 23). Make sure that hoisting hooks are securely anchored. Keep well clear of the hoisted machine.**

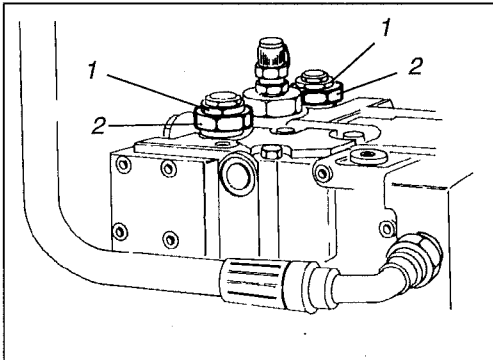
CAUTION



**Remember to release the articulated joint interlock before starting to drive.**

## Method 1

### Towing short distances with the engine running



**Fig. 26 Drive pump**  
1 Towing valve  
2 Lock nut

The roller can be moved up to 50 metres (55 yards) using either of two methods as follows:

WARNING



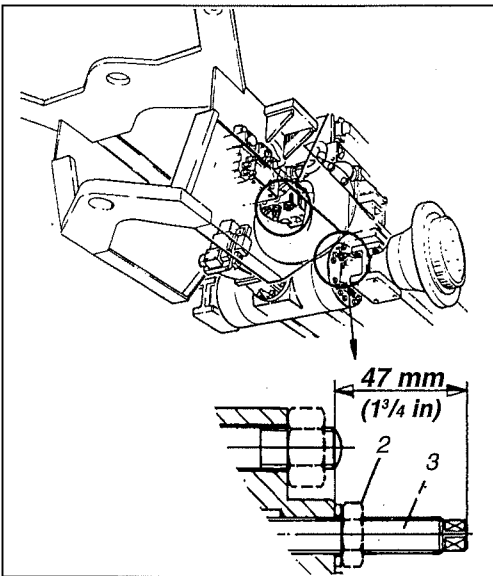
**Press the EMERGENCY STOP and stop the engine temporarily.**

Chock the drum. The machine may otherwise start to roll when the towing valves are loosened. Turn both towing valves (1) three turns anticlockwise. Hold against the lower hexagon (2) if necessary.

Remove the chocks, pull out the emergency stop knob and start the engine. The roller can now be towed.

## Method 2

### Towing short distances when the engine is not working



**Fig. 27 Rear axle**  
2 Lock nut  
3 Adjusting screw

Same as Method 1 but since the engine is not working the brakes must first be disengaged as follows:

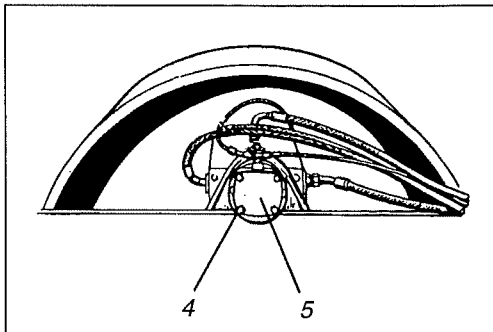
1. Loosen the lock nut (2) and screw in the adjusting screws (3) about 30 mm (1 1/4 in). These are located on the rear axle, one screw on each side of the differential housing.
2. Wipe clean around the drum brake (5, fig. 28) and loosen the four fastening screws (4). These are located on the outer face of the drum gearing.
3. Lift out the brake assembly and place it on the beam that is bolted to the side frame. Do not disconnect the hoses.
4. Protect the brake assembly to prevent damage.

The brakes are now disengaged and the roller can be towed away.

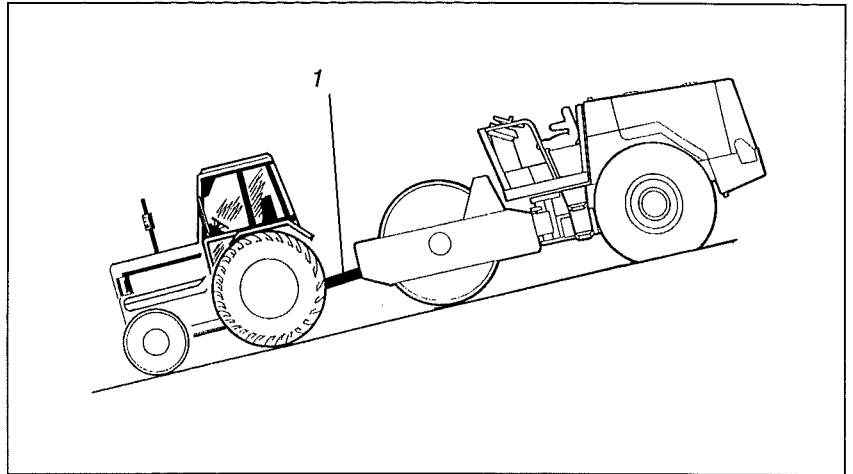
CAUTION



After towing remember to reset the towing valves (1). Screw out the adjusting screw (3) to its initial position, 47 mm (1 3/4 in) from the point of contact and tighten the lock nuts (2). Refit the brake assembly (5) and tighten the screws (4).



**Fig. 28 Drum brake**  
4 Screw  
5 Brake



**Fig. 29 Towing**  
1. Towing bar

WARNING



**Towing downhill with the brakes out of order, always use a towing bar.**

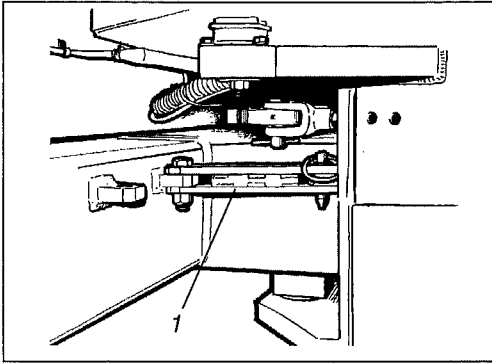
**After towing**

CAUTION



Remember to reset to the initial settings on completion of towing, see Method 1 or 2 on page 20.

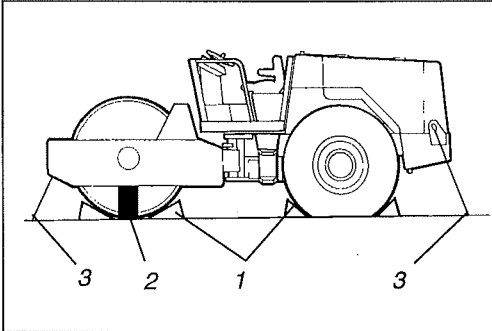
## Locking the articulated joint



**Fig. 30 Articulated joint/locking device**  
1 Hoisting and transportation mode

1. Lock the articulation (1).

## Roller prepared for transportation



**Fig. 31 Transportation**  
1 Supports  
2 Frame support  
3 Lashing chains

2. Chock the drum and wheels (1).
3. Support weight of the frame to prevent excessive strain on the rubber suspension (2).
4. Clamp down the roller at all four corners (3).

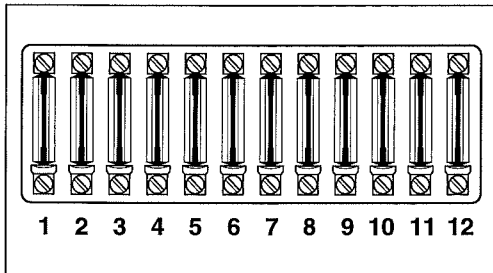
CAUTION



Remember to restore the articulation lock to the open mode before driving the roller again.

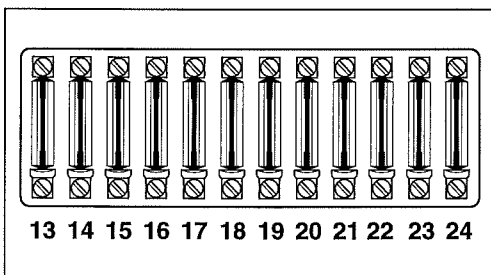
# ELECTRICAL SYSTEM

## Fuses



**Fig. 32 Fuse boxes**

1. Vibration relay
2. Instruments
3. Horn/V-belt monitor
4. -
5. Hazard beacon
6. Pneumatically cushioned operator seat
7. Brake valve
8. Gear selector
9. -
10. Vibration/Brake/Start relay
11. Working lights, front
12. Working lights, rear



**Fig. 33 Lower fuse box (optional)**

13. Working lights, rear
14. Parking lights, left
15. Parking lights, right
16. Direction indicator/left
17. Direction indicator/right
18. Low beam, left
19. Low beam, right
20. High beam, left
21. High beam, right
22. Brake lights, right
23. Brake lights, left
24. -

The machine is equipped with a 12 volt electrical system and an alternator.

CAUTION



Connect the battery to the correct polarity. Negative to ground. The cable between the alternator and battery must not be disconnected when the engine is running.

CAUTION

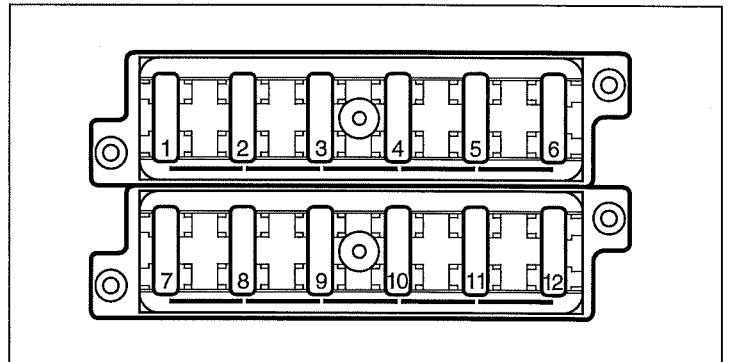


Before carrying out any electric welding on the machine, disconnect the battery grounding cable and then all terminals to the alternator.

The electrical regulating and control system is protected against overload by 8 A fuses, which are located in fuse boxes on the steering column, see maintenance diagram.

The lower fuse box is only fitted on rollers that are equipped with driving lights, direction indicators and rear working lights.

Fig. 34 illustrates the fuse boxes that are fitted in the cab, ie, in cases where this is relevant.




**Fig. 34 Fuse box in cab (optional)**

- |      |                             |
|------|-----------------------------|
| 10A  | 1. Front working lights     |
| 10A  | 2. Rear working lights      |
| 3A   | 3. Front spraying           |
| 15A  | 4. Fan                      |
| 15A  | 5. Front wiper              |
| 15A  | 6. Rear wiper               |
| 3A   | 7. Interior lighting, Radio |
| 7.5A | 8. Air conditioner          |
|      | 9. -                        |
|      | 10. -                       |
| 3A   | 11. Hazard beacon           |
| 25A  | 12. Cab heater              |

## OPERATING INSTRUCTIONS - SUMMARY

WARNING



1. **Follow all SAFETY INSTRUCTIONS that apply for the machine, see the Safety Manual.**
2. Make sure that all instructions in the MAINTENANCE MANUAL are followed.
3. Turn the battery disconnect switch to ON.
4. Set the Forward/Reverse control to NEUTRAL.
5. Set the amplitude selector to NEUTRAL where applicable.
6. Set the stop control to OFF (pushed in).  
(Applies to engines with mechanical stop control.)
7. Start the engine and run till warm.
8. Set the gear selector to WORKING SPEED () where applicable.
9. Check that the EMERGENCY STOP is OFF (pulled out).

WARNING



10. **Test the brakes.**

WARNING



11. **Run the roller. Use the Forward/Reverse control with care.**

12. Vibrate only while the roller is in motion.
13. Check for proper watering on the drum(s) where applicable.

WARNING



14. **In the event of danger:**
  - Press the EMERGENCY STOP knob.
  - Hold onto the steering wheel.
15. When parking: Stop the engine and chock the drum and wheels.
16. When towing: See the towing instructions in this OPERATION MANUAL.
17. When hoisting: See the hoisting instructions in this OPERATION MANUAL.