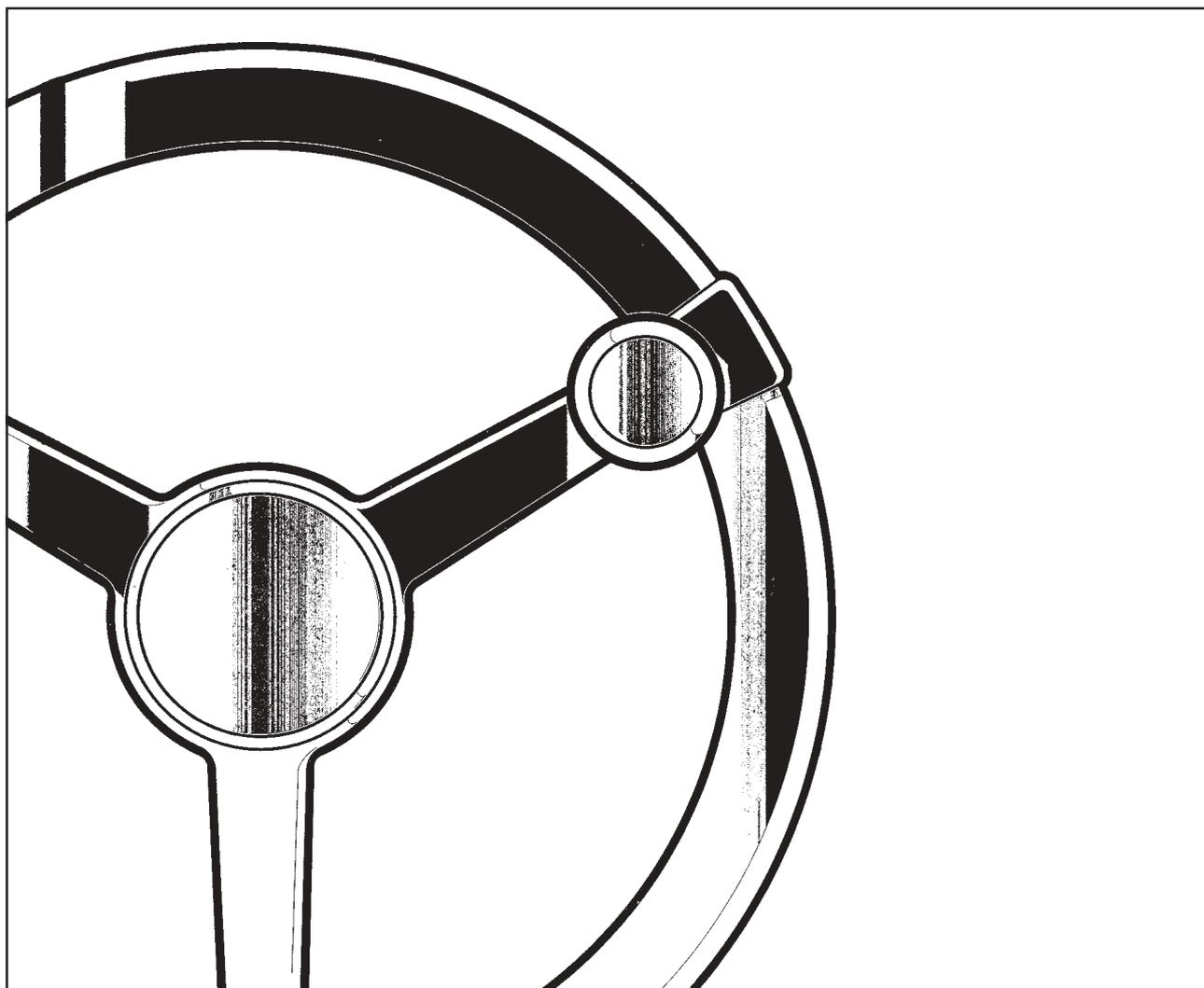


# DYNAPAC CC 82/92 OPERATION

O092EN3



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# **DYNAPAC**

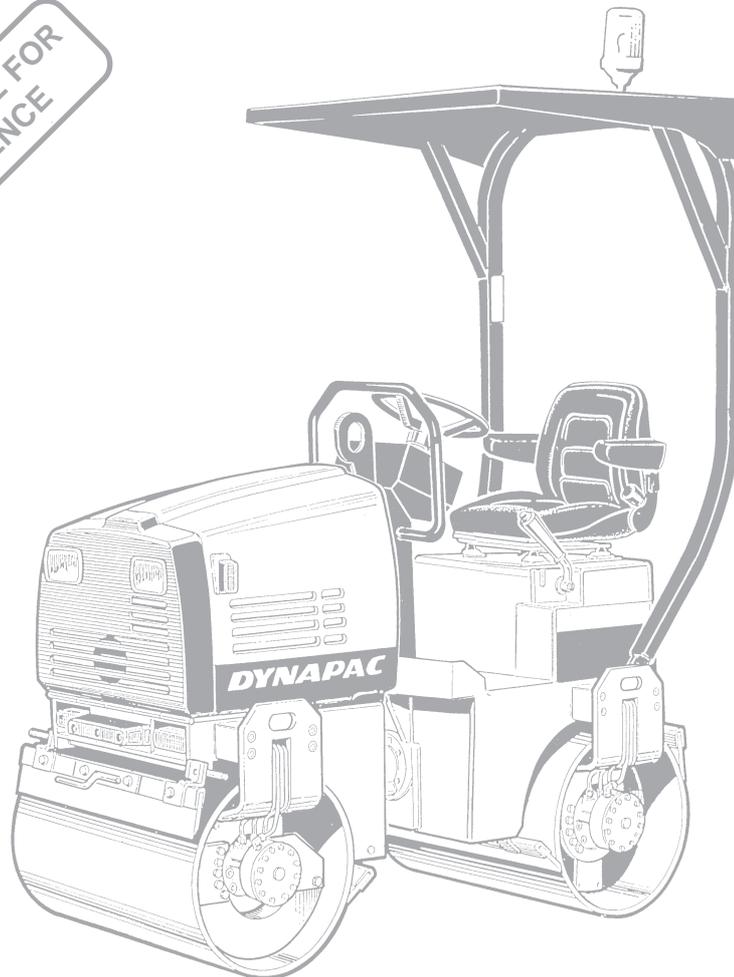
## **Vibratory Roller CC 82/92**

### **Operation O092EN3, January 2002**

**Diesel engine:  
HATZ 2G40**

**These instructions apply from:  
CC 82: PIN (S/N) \*60620504\*  
CC 92: PIN (S/N) \*60610500\***

**KEEP THIS MANUAL FOR  
FUTURE REFERENCE**



*The CC 82/92 is an articulated, vibratory tandem roller in the 1.5 tonne range.*

*These rollers are designed for the compaction of both earth masses and asphalt compounds, and are suitable for repair and maintenance work and for the construction of pedestrian paths and cycle tracks, minor streets and roads, parking lots and yards.*

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## WARNING SYMBOLS

WARNING



**Safety instructions—Personal safety.**

CAUTION



**Special caution—Machine or component damage.**

## SAFETY MANUAL

WARNING



**Each operator of the roller must study the safety manual that accompanies each machine. Always follow the safety rules and do not remove the manual from the roller.**

## GENERAL

This manual contains instructions for operation and use of the roller. For care and maintenance information, see the MAINTENANCE, CC 82/92 manual.

WARNING



**Remember that when you start 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.**

### 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 are allowed to 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. A "three-point grip" is recommended whenever you board or leave the machine—both feet and one hand, or one foot and both hands in contact with the machine.
6. Always use the Roll Over Protective Structure (ROPS) when the machine is used 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.
  - Don't 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 necessary.
16. Hearing protectors are recommended if the noise level is higher than 85 db(A). The noise level will vary depending on the surface being worked on by the machine.
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

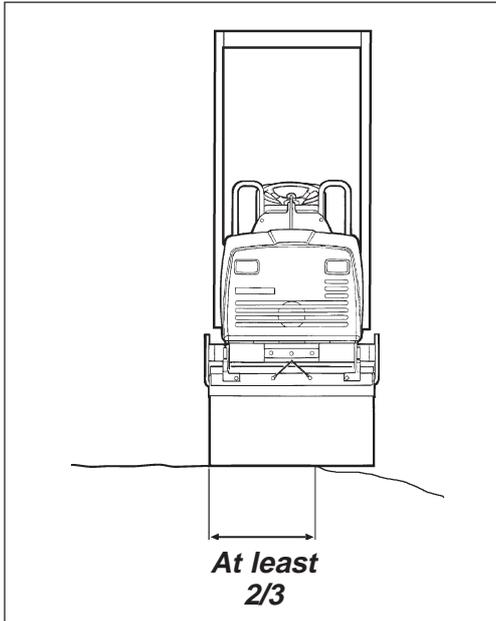


Fig. 1 Position of drum when driving near an edge

When driving 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 outwards when steering to one side. For example, it moves to the right when steering to the left.

### Slopes

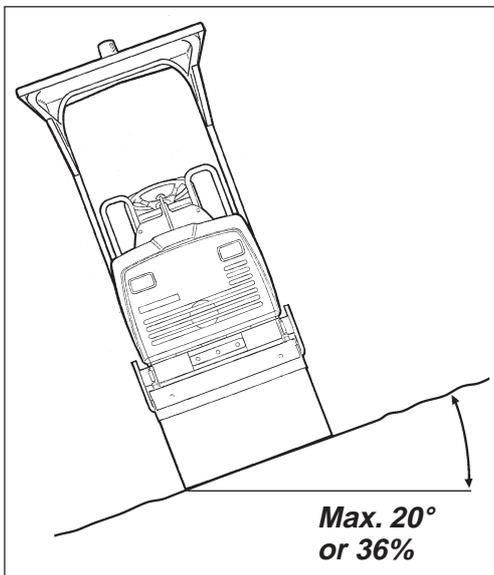


Fig. 2 Tipping angle on side slopes

WARNING



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

WARNING

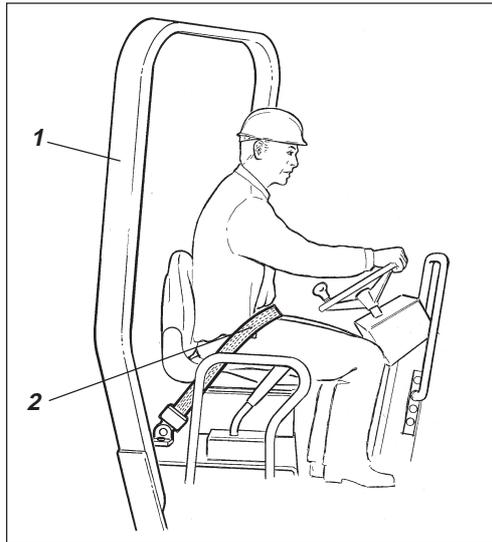


Where possible, avoid all driving *across* a slope. Instead, drive up and down on sloping ground.

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.

## SAFETY WHEN DRIVING

### Sitting position



**Fig. 3 Operator's station**

1. ROPS
2. Seat belt

Always remain seated in the operator's seat for all driving. If the operator rises from his seat the horn will sound, or on some versions the brakes will be applied.

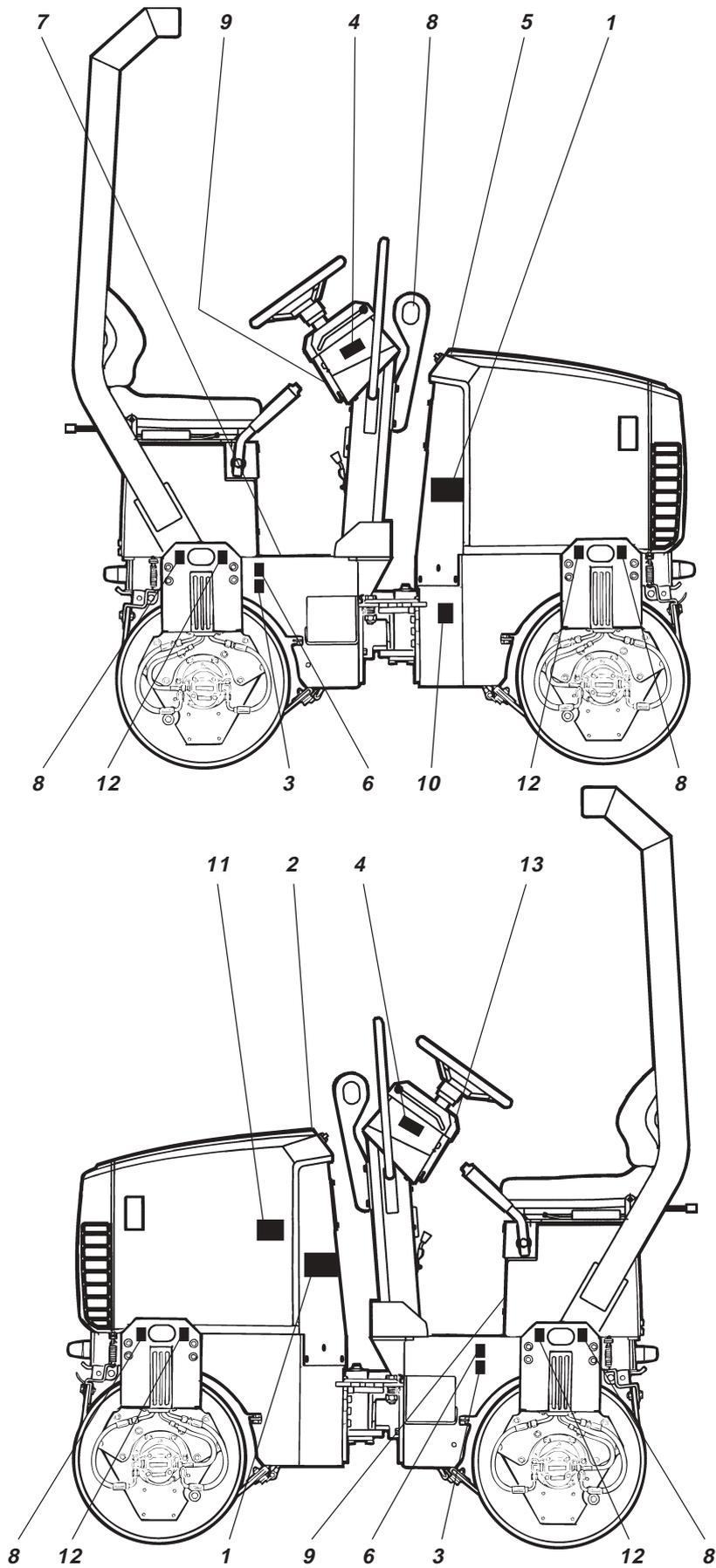
WARNING



**Always fasten the seat belt if the machine is equipped with one. Should the machine turn over there is a serious risk that the operator will fall out with the machine on top of him if he has not fastened the seat belt.**

The seat belt is standard equipment on rollers equipped with a Roll Over Protective Structure (ROPS) (1).

**SAFETY DECALS, LOCATION AND DESCRIPTION**



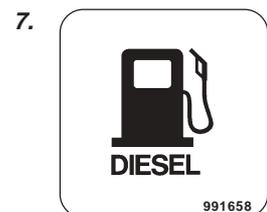
# SAFETY DECALS, LOCATION AND DESCRIPTION



**Crush zone, articulation/drum. Maintain a safe distance from the crush zone.**  
*(Two crush zones on machines fitted with pivotal steering.)*



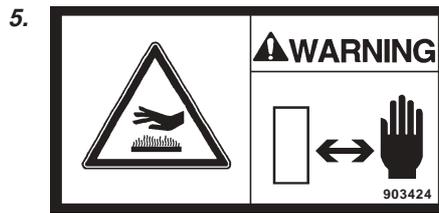
**The operator is urgently requested to read the safety manual, and the operation and maintenance instructions, before using the machine.**



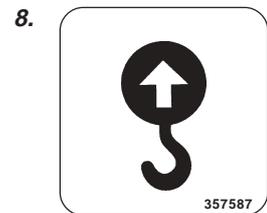
**Diesel fuel**



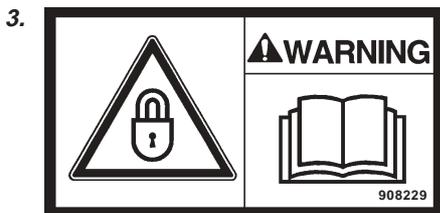
**Warning—rotating engine components. Keep your hands at a safe distance from the danger zone.**



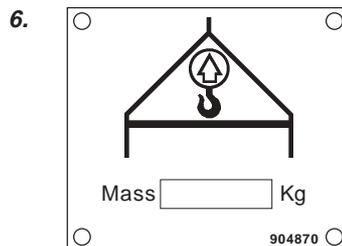
**Warning—very hot surfaces in the engine compartment. Do not touch.**



**Lifting point**



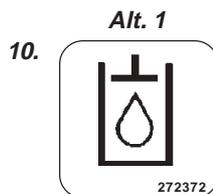
**The articulation joint must be locked while lifting. Read the instruction manual.**



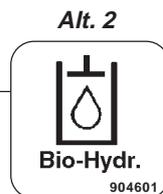
**Hoisting plate**



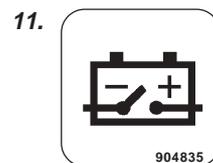
**Handbook compartment**



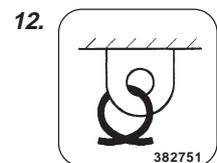
**Hydraulic fluid**



**Biological hydraulic fluid**



**Battery disconnecter**

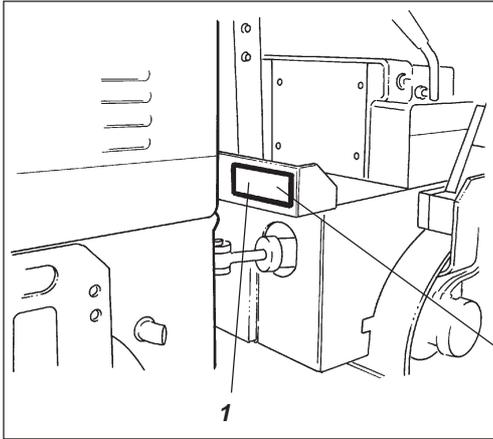


**Securing point**



# MACHINE AND ENGINE PLATES

## Machine plate

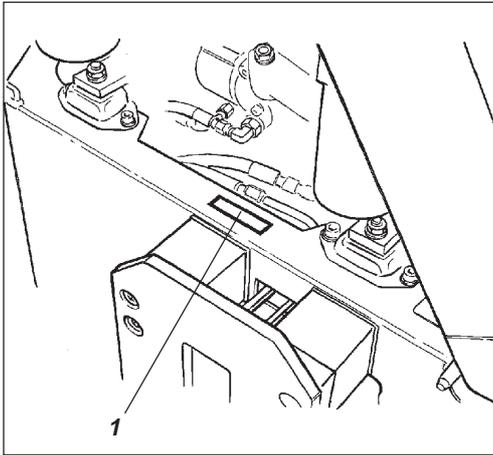


**Fig. 4 Operator's platform**  
1. Machine plate

The machine type plate (1) is affixed on the front left side of the frame, by the steering joint. The plate shows the manufacturer's name and address, type of machine, PIN (product identification number/serial number), weight in working order, engine power and year of manufacture. (Only the manufacturer's name and address, PIN and type of machine will be noted if the machine is delivered outside the EU.) Please specify the roller PIN when ordering spares.



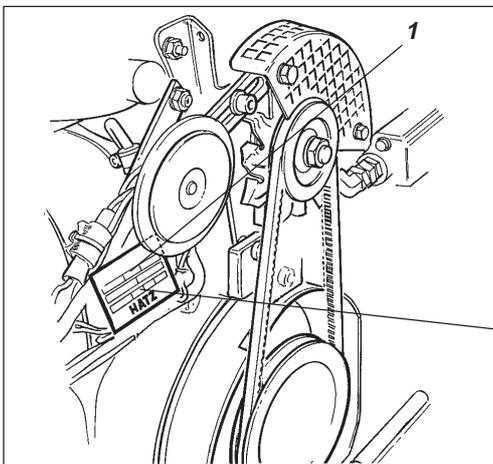
## Serial number on frame



**Fig. 5 Front frame**  
1. PIN

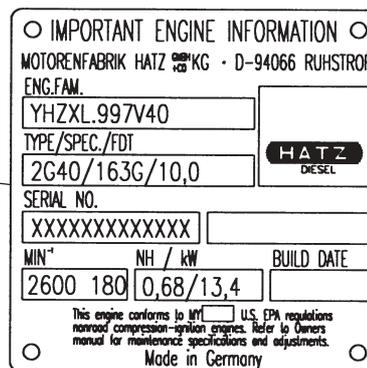
The machine's PIN (1) is punched on the right edge of the forward frame.

## Engine plate

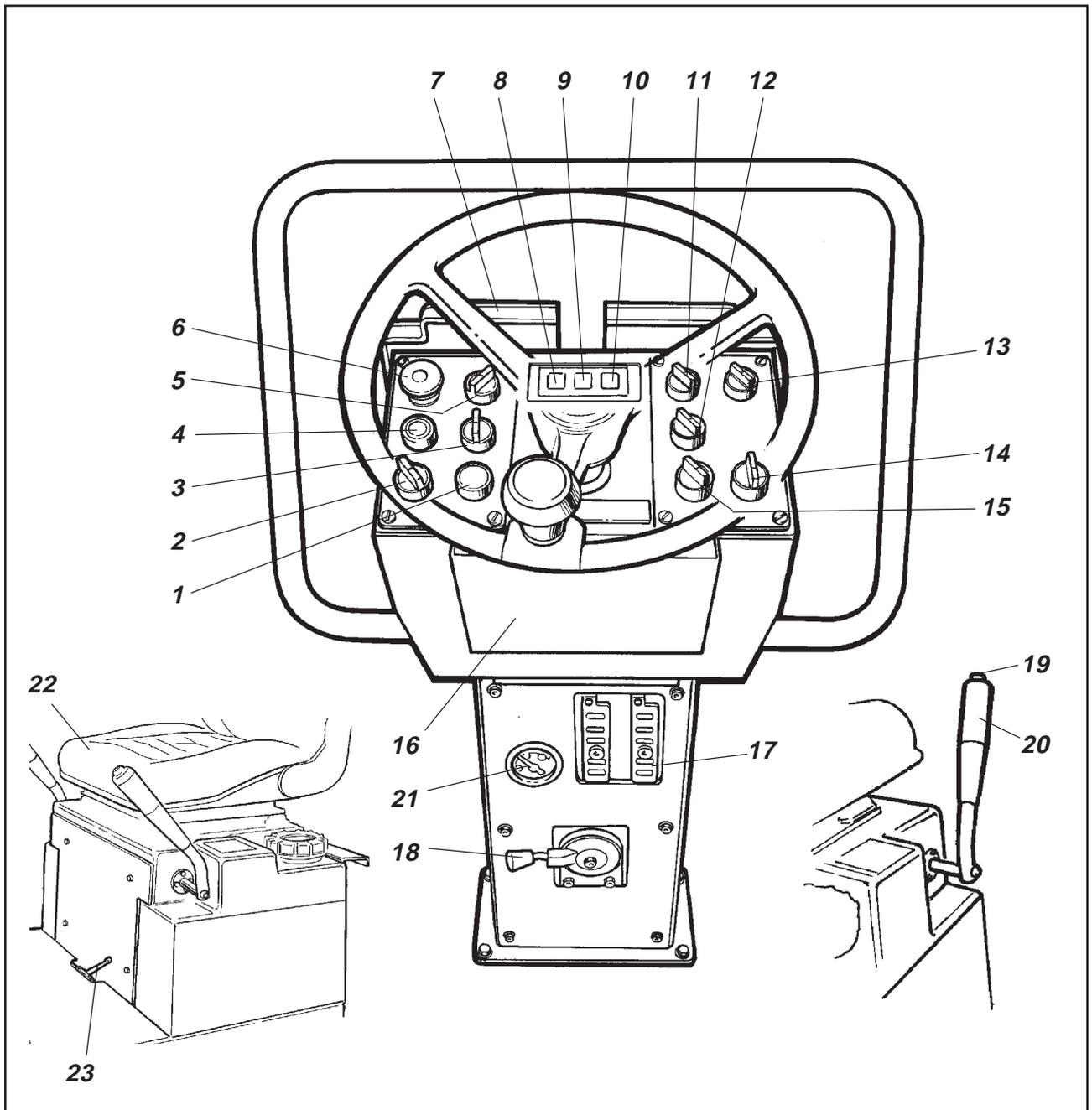


**Fig. 6 Engine**  
1. Type plate

The engine type plate (1) is affixed to the front part of the air guide hood. 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. 7 Operator's station**

- |   |  |
|---|--|
| 1. Horn   | 12. Hazard beacon <input type="checkbox"/>                   |
| 2. Ignition switch                              | 13. Driving lights <input type="checkbox"/>                  |
| 3. Manual/Automatic sprinkler                   | 14. Direction indicator <input type="checkbox"/>             |
| 4. Starter button                               | 15. Hazard flashers <input type="checkbox"/>                 |
| 5. Manual/Automatic vibration                   | 16. Safety and instruction manuals                           |
| 6. Reserve/parking brake                        | 17. Fuse boxes   |
| 7. Instrument shield                            | 18. Rev control  |
| 8. Warning lamp, charging                       | 19. Vibration ON/OFF   |
| 9. Brake warning light                          | 20. Forward/reverse lever                                    |
| 10. Warning lamp, oil pressure/<br>engine temp. | 21. Fuel gauge <input type="checkbox"/>                      |
| 11. Working lights <input type="checkbox"/>     | 22. Seat switch  |
|   | 23. Vibration switch-off/front drum <input type="checkbox"/> |
- =Optional

## INSTRUMENTS AND CONTROLS, FUNCTIONAL DESCRIPTION

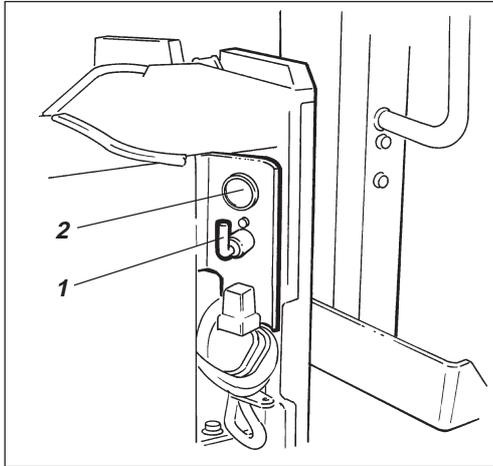
Items in fig. 7	Designation	Symbol	Function
1	Horn, switch		Press to sound the horn.
2	Ignition switch		In position O the electric circuit is broken. In position I all electric switches and lamps except the starter motor circuit are powered.
3	Watering switch		Regulates the flow of water to the drum. MAN mode gives continuous watering. Watering is OFF in 0 mode. The AUT mode gives automatic switching of watering ON/OFF while driving forward and reverse.
4	Starter contact		Press to run the starter motor.
5	Vibration setting switch		In the left position, the vibration is switched ON/OFF by the switch (19). In the middle position, the vibration system is switched off. In the right position, vibration is automatically switched ON/OFF via the forward/reverse lever.
6	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.
7	Instrument protection		Lower over the instrument plate as protection against weather and sabotage.
8	Warning lamp, battery charging		If the lamp lights while the engine is running, the alternator is not charging. Stop the engine and locate the fault.
9	Brake warning lamp		The lamp lights when the parking or reserve brake knob is pushed in and the brakes are applied.
10	Warning lamp, oil pressure, or excessive temperature engine oil.		The warning lamp lights if lubricating oil pressure is too low. Stop the engine and of remedy the cause. See engine manual.
11	Working lights backwards, switch (Optional)		Turn right to switch on the working lights.
12	Hazard beacon, switch (optional)		Turn right to switch on the hazard beacon.
13	Working lights forward, switch (Optional)		Turn right to the first position to switch on the parking lights and to the second position to switch on the forward working lights.

## INSTRUMENTS AND CONTROLS, FUNCTIONAL DESCRIPTION

14	Direction indicator, switch (optional)		Turn left to switch on the left direction indicator. The flashing indicator is OFF in the middle position.
15	Hazard flasher, switch		Turn right to switch on the flashing warning lights.
16	Pocket for manuals		Pull up and open the top of the compartment for access to handbooks.
17	Fuse box (on front of steering column)		Contains fuses for the electrical system. See under the heading "Electrical system" for a description of the functions of the fuses.
18	Rev control, diesel engine	—	The right position gives engine idling revs. The left position gives full revs.
19	Vibration ON/OFF, switch		Press once and release to switch vibration ON, press again to switch vibration OFF. The above applies only when switch 5 is in the left position.
20	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 speed of the roller is proportional to the distance of the lever from the neutral position. The further from neutral the higher the speed.
21	Fuel gauge (optional)		Indicates level in the fuel tank.
22	Seat switch		Remain seated during all operation. If the operator rises from his seat the horn will sound, or the brakes will be applied.
23	Vibration switch-off/Front drum (optional)		Move the lever to the right position (viewed from the operator's position) to disengage vibration on the front drum.

## BEFORE STARTING

### Battery disconnecter – Switching on



**Fig. 8 Left side of engine**  
1. Battery disconnecter  
2. Hourmeter

Remember to perform daily service. See the operation manual.

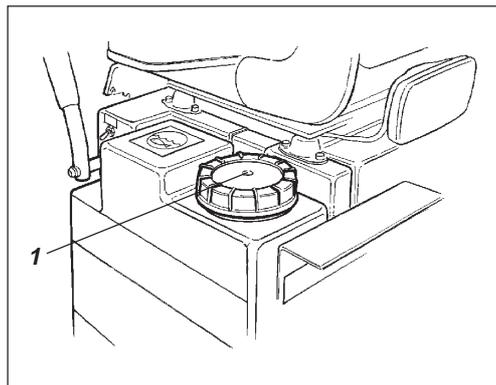
The battery disconnecter is located in the engine compartment. Turn the key (1) to the ON position. The entire roller is now powered.



**WARNING**  
The engine hood must be unlocked during operation, so the battery power can be disconnected quickly if necessary.

Item (2) is the engine hour meter. The number of hours is counted as long as the engine is running.

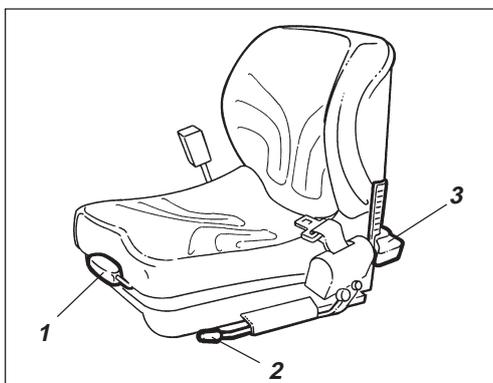
### Water tank – Filling



**Fig. 9 Water tank**  
1. Filler opening

Fill the front water tank and check that the sprinkler pipes are in a satisfactory position for good distribution of water mist over the surface of the drum.

### Operator's seat – Setting



**Fig. 10 Operator's seat**  
1. Seat-back slope  
2. Length setting  
3. Operator's weight

Set the operator's seat in a comfortable position and so that the controls are easily accessible.

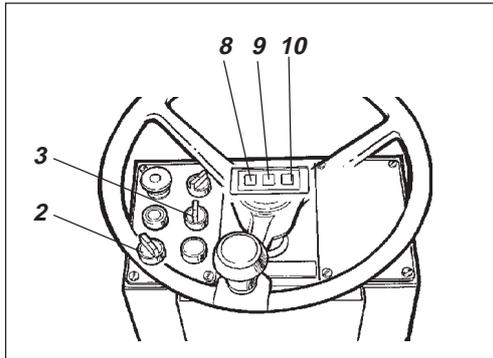
The seat has the following adjustment capabilities:

- Backrest slope (1)
- Length adjustment (2)
- Weight adjustment (3)

To set the operator's weight always press the lever (3) downwards, if the control is at the bottom position it will return automatically to the upper position when the lever is released.

## BEFORE STARTING

### Controls and warning lamps – Checking



**Fig. 11 Instrument panel**

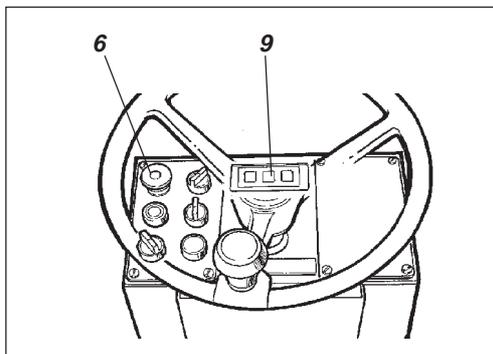
- 2. Main power switch
- 3. Sprinkler switch
- 8,9,10. Warning lamps

Turn the main power switch (2) to the right-hand position.

Ensure that the warning lamps 8, 9 and 10 light.

Turn the sprinkler power switch (3) to the ON mode and ensure that the system is working.

### Parking brake – Control



**Fig. 12 Instrument panel**

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

WARNING

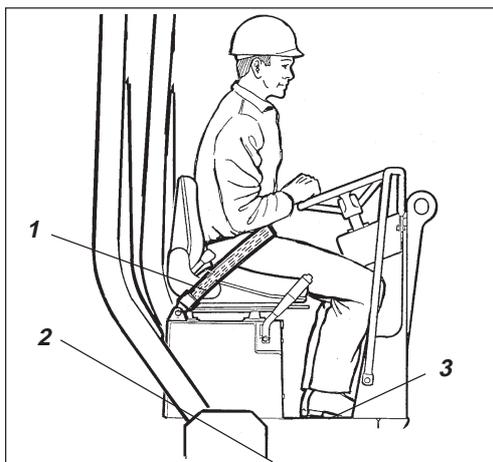


**Make sure that the reserve/parking brake knob (6) is pushed in. If the parking brake is not applied, the roller may start to roll when you start the engine on sloping ground.**

### Interlock (Optional)

The engine switches off 4 seconds after the operator rises from the seat. This will occur regardless of whether the forward/reverse lever is in neutral or drive mode. The engine will not stop if the parking brake is activated.

### Seat belt



**Fig. 13 Operator's station**

- 1. Seat belt
- 2. Rubber element
- 3. Anti-slip

Always fasten the seat belt (1) that is provided if a ROPS (Roll Over Protective Structure) is fitted on the roller, and wear a protective helmet.

WARNING



**Always replace the seat belt (1) with a new one if it is worn or has been subjected to a heavy load.**

WARNING



**Never use the forward/reverse levers as grips when boarding or leaving the roller. The machine can otherwise start if the engine is running and a lever is moved.**

CAUTION



Check that rubber elements (2) on the platform are intact. Worn elements will impair comfort.

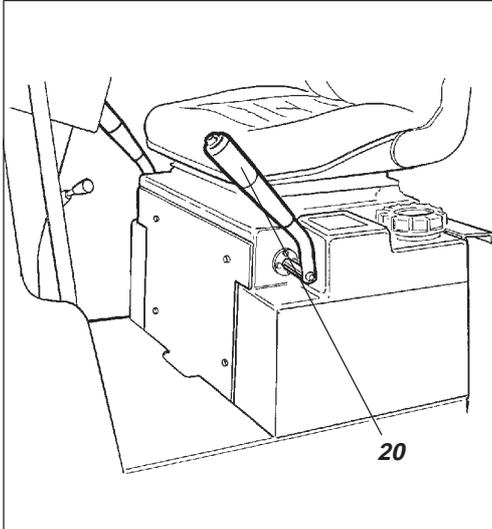
WARNING



**Make sure that anti-slip (3) on the platform is in good condition; replace with new anti-slip if friction is poor.**

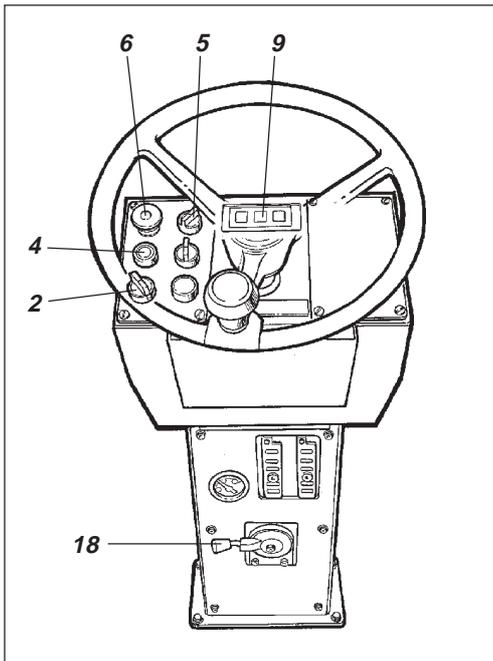
## STARTING

### Starting the engine



**Fig. 14 Operator's seat**  
20. Forward/reverse lever

Set the forward/reverse lever (20) in neutral. The engine can only be started with the lever in neutral.



**Fig. 15 Instrument column**  
2. Ignition switch  
4. Starter button  
5. Vibration switch  
6. Reserve/parking brake knob  
9. Brake warning lamp  
18. Revs control

Set the vibration switch (5) for manual/automatic vibration to the **O** mode.

Put the revs control (18) in the idling mode (far left)

Check that the starter switch (2) is at position I. Press the starter contact (4). Release the starter contact as soon as the engine fires.

**CAUTION**



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

Warm up the engine at idling speed for a few minutes, longer if the ambient temperature is below +10°C (50°F).

Check while warming up that the warning lamps for oil pressure (10) and charging (8) are out. The warning lamp for the parking brake (9) should still light.

**WARNING**



**Remember that when you start 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.**

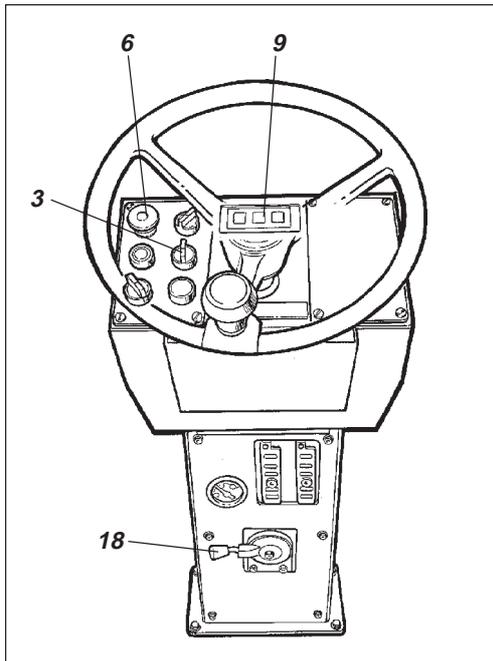
**WARNING**



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

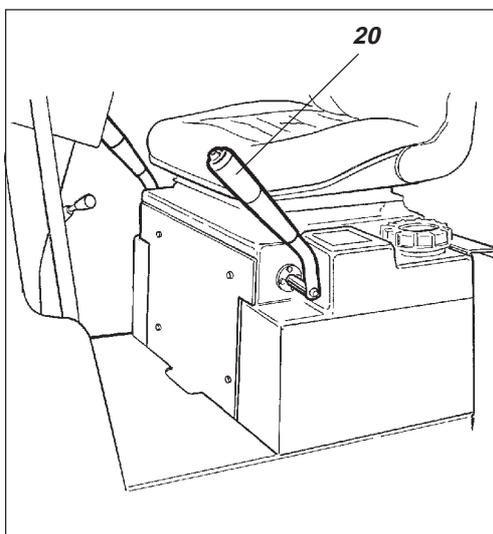
## OPERATION

### Driving the roller



**Fig. 16 Instrument column**

- 3. Sprinkler switch
- 6. Reserve/parking brake knob
- 9. Brake warning lamp
- 18. Rev control



**Fig. 17 Operator's seat**

- 20. Forward/reverse lever

WARNING



**Under no circumstances may the machine be operated from the outside. The operator must remain seated inside the machine during all operation.**

Turn the rev control (18) and latch it in its working mode.

Check that the steering is working by turning the steering wheel once to the right and once to the left, while the roller is stationary.

When compacting asphalt, remember to turn on the watering unit (3).

WARNING



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

WARNING



**Pull up the reserve/parking brake knob (6) and check that the warning lamp for the parking brake is out. When starting the roller on a slope, be prepared that it may begin to roll.**

Carefully move the forward/reverse lever (21) in the desired direction of travel. Speed increases as the lever is moved farther from the neutral position.

CAUTION



**Speed must always be regulated with the forward/reverse lever and never by changing the engine speed.**

WARNING

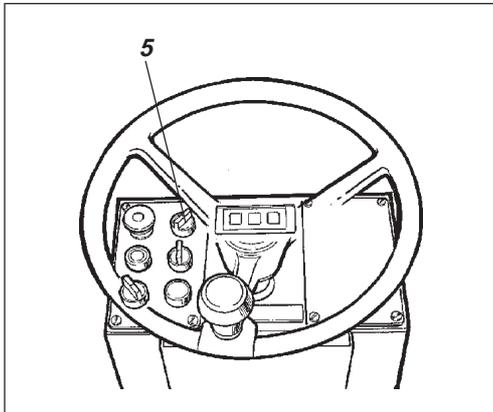


**Test the reserve brake by pressing the reserve/parking brake knob (6) while the roller is running slowly forward.**

Check while driving that warning lamps do not light.

## OPERATION/VIBRATION

### Manual/Automatic vibration



**Fig. 18 Instrument panel**  
5. Switch MAN/AUTO

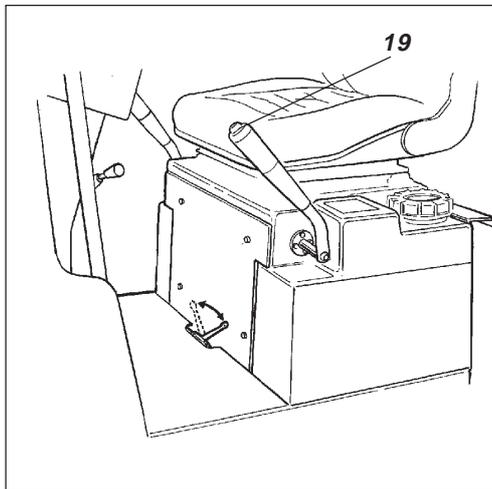
Select manual or automatic switching ON/OFF with switch (5).

In manual mode, the operator must activate vibration via the switch (19) on the forward/reverse lever.

In automatic mode, the vibration is activated when the pre-set speed is reached.

Even switching off is automatic when the lowest speed is reached.

### Manual vibration – Switching on



**Fig. 19 Forward/reverse lever**  
19. Vibration ON/OFF

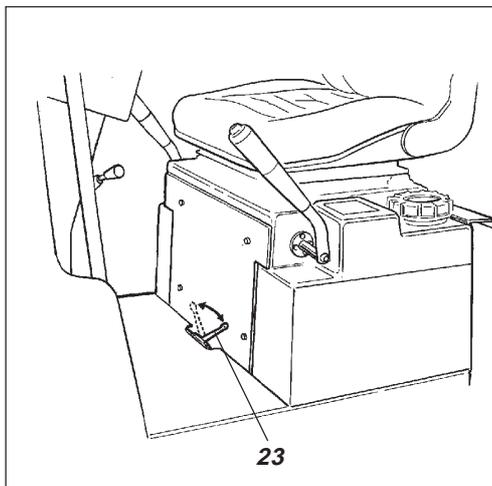
Vibration is engaged and disengaged with the changeover switch (19) on the forward/reverse lever. Always switch off vibration before the roller comes to a complete standstill.

CAUTION



Vibration should not be allowed when the roller is stationary; this may damage the surface and the machine.

### Vibration on one drum (Optional)



**Fig. 20 Operator's station**  
23. Switching lever

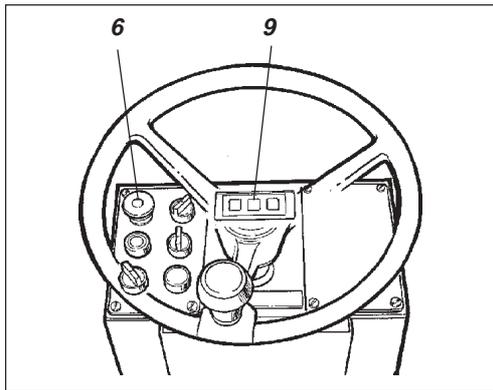
The switching lever (23) is located at the rear on the floor of the operator's station.

Vibration is applied to both drums in the left mode, (viewed in direction of travel).

Vibration is on the rear drum only in the right mode.

## BRAKING

### Reserve brake



**Fig. 21 Instrument panel**  
6. Reserve/parking brake knob  
9. Brake warning lamp

Braking is normally done with the forward/reverse lever. The hydrostatic transmission brakes the roller when the lever is moved towards neutral.

In addition, a disc brake in each drum motor acts as reserve brake when driving, and as a parking brake when stationary.

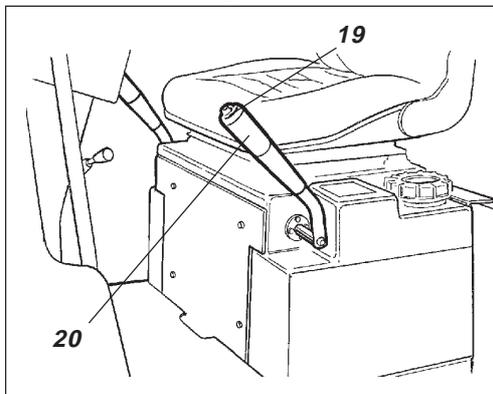
WARNING



**To brake, press the reserve/parking brake knob (6), 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.

### Normal braking



**Fig. 22 Forward/reverse lever**  
19. Vibration ON/OFF  
20. Forward/reverse lever

Press the switch (19) to switch off the vibration.

Move the forward/reverse lever (20) to neutral to stop the roller.

Always press the reserve/parking brake knob (18) even for brief stops when on sloping ground.

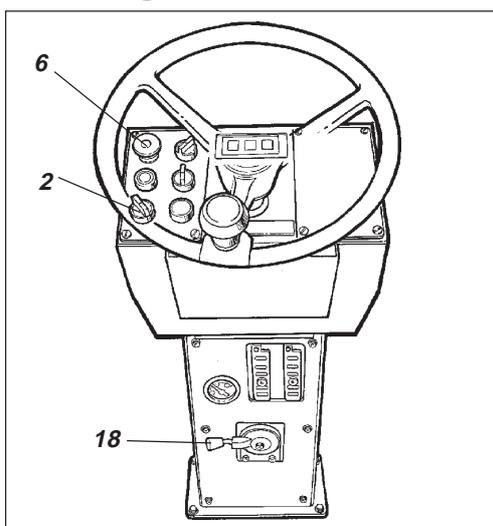
Turn the speed control back to idling, allow the engine to idle a few minutes to cool down.

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.**

### Switching off



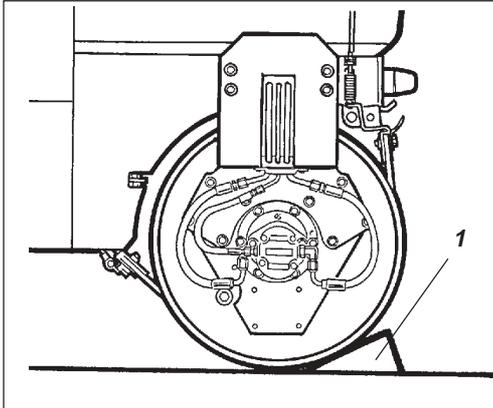
**Fig. 23 Instrument column**  
2. Ignition switch  
6. Reserve/parking brake knob  
18. Rev control

Check instruments and warning lamps to see if any faults are indicated, switch off all lights and other electrical functions.

Turn the starter switch (2) to mode **O**. Lower the instrument cover (on rollers without cab) and lock it.

## PARKING

### Chocking the drum



**Fig. 24 Drum section**  
1. Chock

WARNING



**Never leave the roller with the engine running without first pressing the reserve/parking brake knob.**

WARNING



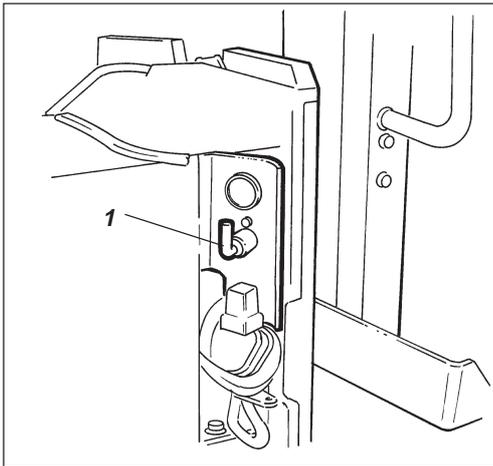
**Make sure that the roller is parked in a safe place for traffic. Chock the drum and wheels if the roller is parked on sloping ground.**

CAUTION



**Remember the risk of freezing during the winter. Drain the water tank, the pump and leads**

### Battery disconnecter



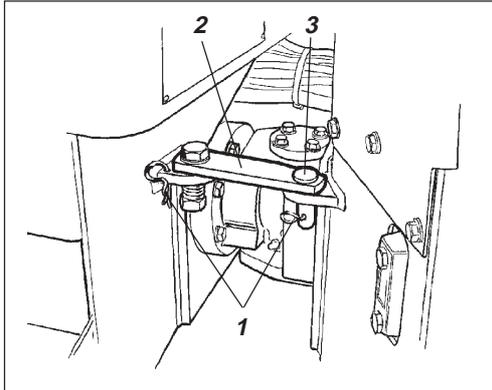
**Fig. 25 Engine compartment**  
1. Battery disconnecter

Switch the battery disconnecter (1) into disconnected mode and remove the handle 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.

# INSTRUCTIONS FOR LIFTING

## Locking the articulation joint



**Fig. 26 Right side of articulated joint**  
1. Locking pins  
2. Locking arm  
3. Locking bolt

WARNING

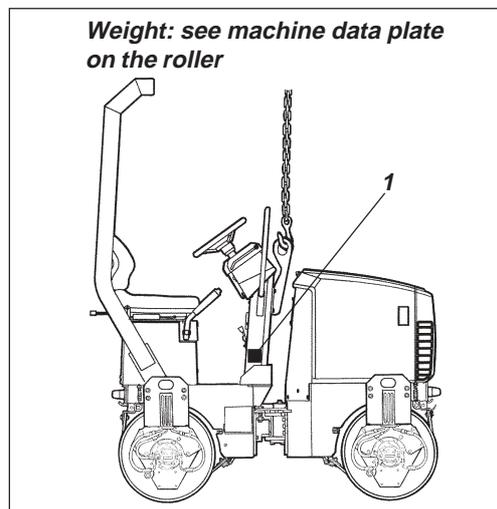


**Before lifting the roller, the articulation must be locked to prevent inadvertent turning.**

Turn the steering wheel so that the machine is set for driving straight forward. Push the reserve/parking brake knob.

Pull out the locking pins (1), move the locking arm (2) forward, secure the locking arm to the front half of the frame by inserting the locking bolt (3) through the bracket in the front frame and locking arm.

Secure the position of the locking arm by refitting the locking pins (1).



**Fig. 27 Hoisting the roller**  
1. Machine plate

WARNING



**The maximum weight of the machine is noted on the hoisting plate (1). See also technical specifications in the maintenance instructions.**

CAUTION



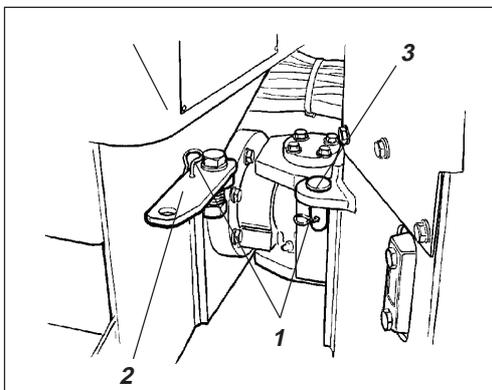
Lifting gear, such as chains, steel wires, straps, and lifting hooks must be dimensioned in conformance with current regulations.

WARNING



**Keep well clear of the hoisted machine! Make sure that hoisting hooks are securely anchored.**

## Releasing the articulated joint



**Fig. 28 Right side of articulated joint**  
1. Locking pins  
2. Locking arm  
3. Locking bolt

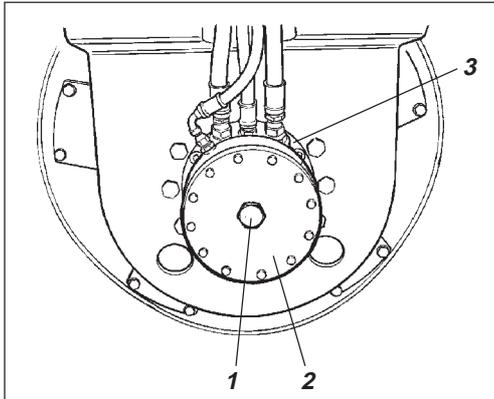
CAUTION



Remember to restore the locking arm (2) to open mode before driving and secure it and the bolt (3) with the locking pins (1).

## INSTRUCTIONS FOR TOWING

### Disengaging the brakes (Optional)



**Fig. 29 Left side of drum**  
1. Disengaging bolt  
2. Brake housing  
3. Drive motor

CAUTION



The following instructions apply to CC 82/92.

WARNING

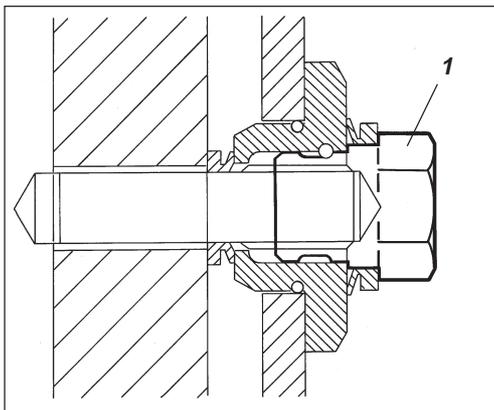


**Push the reserve/parking brake knob, and stop the engine. Chock the drum to prevent the roller from moving when the brakes become disengaged.**

CAUTION



The multi-disc brakes on each drive motor must be disengaged mechanically, as described below, to allow the roller to be towed.



**Fig. 30 Brake housing**  
1. Disengaging bolt

Use an 18 mm socket wrench.

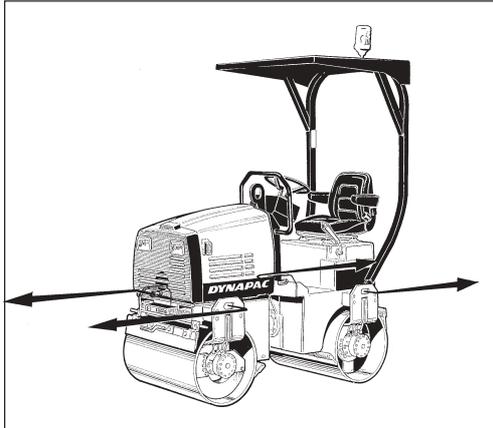
To disengage the brake, turn the disengaging bolt (1) 1 1/2 turns clockwise.

Disengage the brakes on both drums.

After towing, turn the same bolts 1 1/2 turn anticlockwise to re-engage the brakes again.

## TOWING/RETRIEVAL

### Towing a roller



**Fig. 31 Towing**

WARNING



**The roller must be counter-braked when towing; use a towbar because the roller will have no braking ability.**

CAUTION



The roller must be towed slowly (max. 3 km/h / 1.8 mph) and only a short distance (max. 300 m / 275 yds).

When towing/retrieval a machine, the towing device must be connected to both lifting holes. Pulling forces should act longitudinally on the machine as illustrated. Maximum gross pulling force 50.8 kN (11,420 lbs force), or 25.4 (5710 lbs force) per fork.

CAUTION



Restore the items for towing according to towing instructions on the preceding page.

## TRANSPORTATION

### Roller prepared for transportation

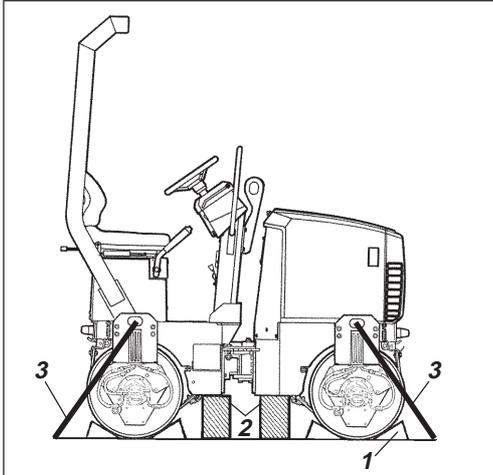


Fig. 32 Transporting a roller

1. Chock
2. Block up
3. Lashing wire

WARNING



**Interlock the articulation before hoisting and transportation; follow the instructions under the respective heading.**

Chock the drums (1) and secure the chocks to the transport vehicle.

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

Clamp down the roller with lashing straps (3) at all four corners; decals indicate the fixing points.

CAUTION



Remember to restore the articulation interlock to open mode before starting the roller again.

### Retractable ROPS (Optional)

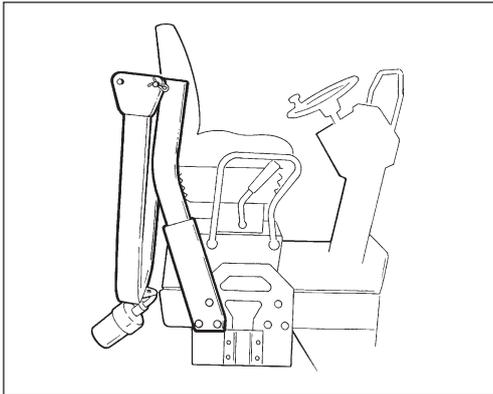


Fig. 33 Retractable ROPS

The machine can be fitted with retractable ROPS.

WARNING



**Risk of being crushed when raising and lowering the exhaust pipe.**

WARNING



**If the roller is equipped with a retractable protective structure, ROPS, then the machine may only be operated with the structure raised and locked in position.**

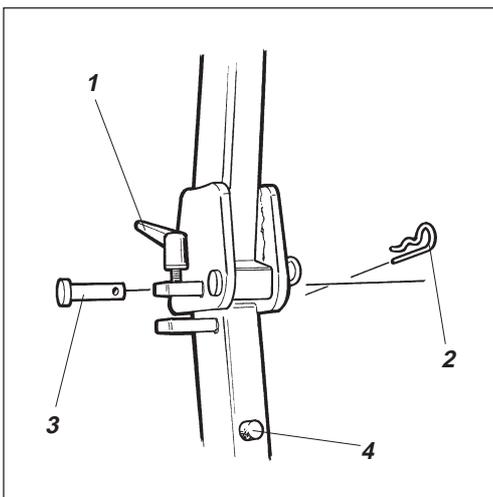


Fig. 34 Locking the protective structure

1. Securing screw
2. Cotter pin
3. Bolt
4. Rubber buffer

To retract the protective structure, unscrew the securing screw (1), pull out the cotter pin (2) and pull out the bolt (3). Do this on both sides of the structure. If there is sufficient space the structure should preferably be retracted to the rear.

WARNING



**Restore the cotter pins and the bolts into position after retracting the structure.**

Proceed in the reverse order to the above when raising the structure.

WARNING



**Always ensure that the structure is locked in its raised position before driving the roller.**

Lubricate the securing screw (1) and the bolt (3) occasionally with waterproof grease.

## OPERATING INSTRUCTIONS – SUMMARY

WARNING



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 to ON.
4. Put the forward/reverse lever in NEUTRAL.
5. Set the vibration selector for Manual/Automatic to position O.
6. Set the RPM control to the idling mode.
7. Start the engine and allow it to warm up.
8. Set the RPM control in the operating mode.
9. Put the reserve/parking brake knob in the pulled-out position.

WARNING



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

WARNING



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

12. Use vibration only when the roller is in motion.
13. Make sure that the drums are watered sufficiently when needed.

WARNING



14. **IN AN EMERGENCY:**
  - **Push in the RESERVE/PARKING BRAKE KNOB.**
  - **Hold the steering wheel firmly.**
  - **Brace yourself for a sudden stop.**

15. Parking: Push in the reserve/parking brake knob.  
Stop the engine and chock the drums.
16. Lifting: - See the OPERATION MANUAL.
17. Towing: - See the OPERATION MANUAL.
18. Transport: - See the OPERATION MANUAL.
19. Retrieval: - See the OPERATION MANUAL.