5 Operation

5.1 General

If you are not yet acquainted with the controls and indicating elements on this machine you should thoroughly read chapter 3 "Indicators and control elements" before starting work.

All indicators and control elements are described in detail in this chapter.

5.2 Tests before taking into operation

Before the everyday use or before a longer working period the following tests and inspections must be performed.

⚠ Danger

Please observe strictly the safety regulations in chapter 2 of this instruction manual.

- Park the machine on ground as level as possible.

Check:

- fuel tank and fuel lines for leaks
- Screw connections
- function of steering
- function of parking brake
- function of emergency stop
- machine for cleanliness, damage
- presence of the appropriate operating and maintenance instructions
- proper maintenance of the machine

i Note

For a description of the following tasks refer to the chapter "maintenance every 10 operating hours".

- Engine oil level, top up if necessary
- Fuel level, top up if necessary.
- Hydraulic oil level, top up if necessary.
- Hydraulic oil filter element, change if necessary

5.3 Starting the engine

⚠ Danger

Wear your personal noise protection means (ear defenders) before starting operation.

Start the engine only from the operator's seat.

⚠ Caution

In this chapter it is assumed that the operator is fully acquainted with the function of the different control elements on the machine.

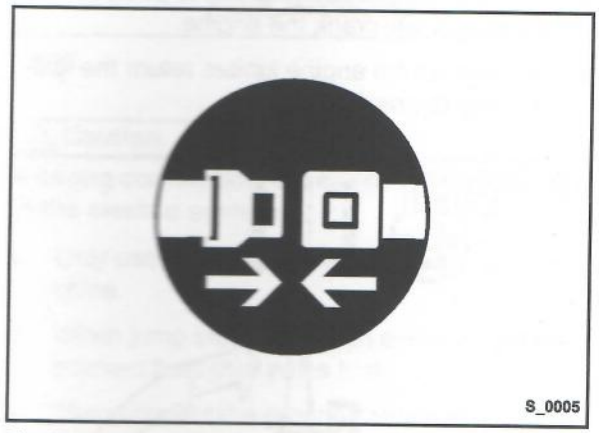

Fig. 24

- Fasten your seat belt (Fig. 24).

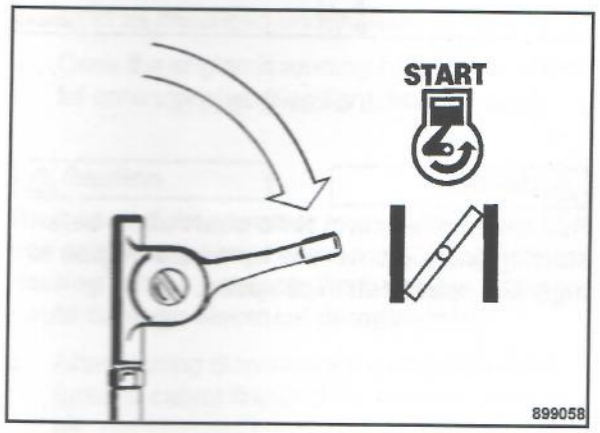

Fig. 25

- Close the choke (Fig. 25).

i Note

Always close the choke if the engine is cold or has cooled down.

Always open the choke if the engine is warm.

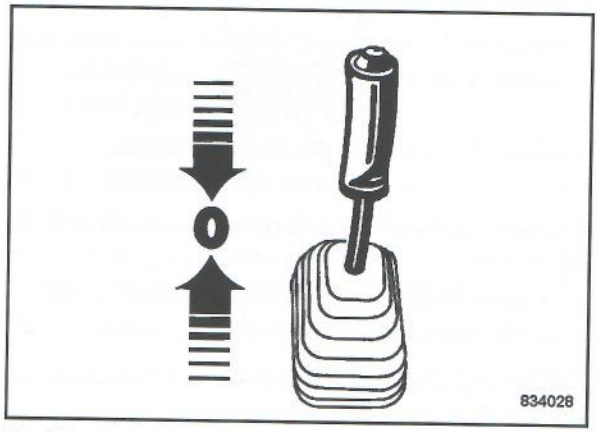

Fig. 26

- Check whether travel lever (Fig. 26) is in neutral position.

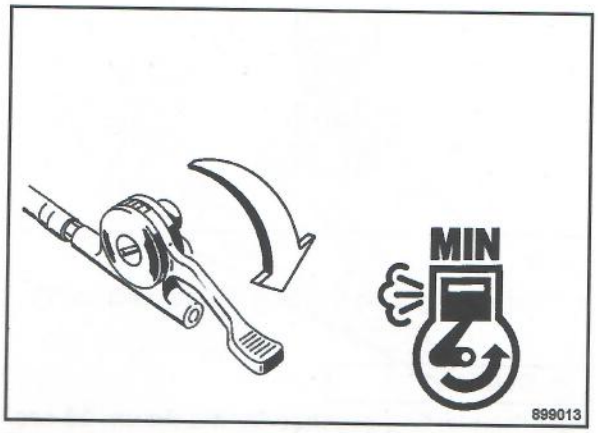

Fig. 27

- Set the throttle lever (Fig. 27) to position "MIN".

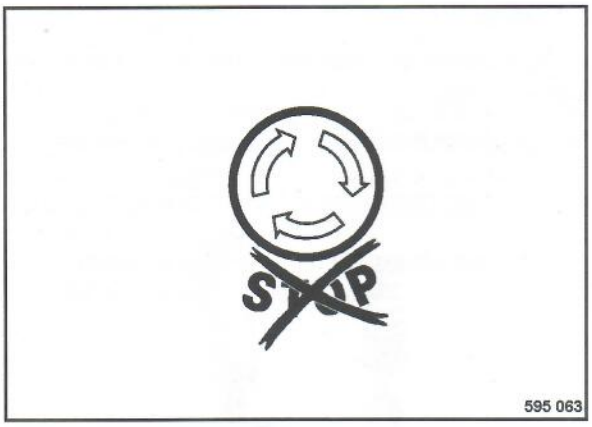

Fig. 28

- Check, whether the emergency stop switch (Fig. 28) is unlocked.

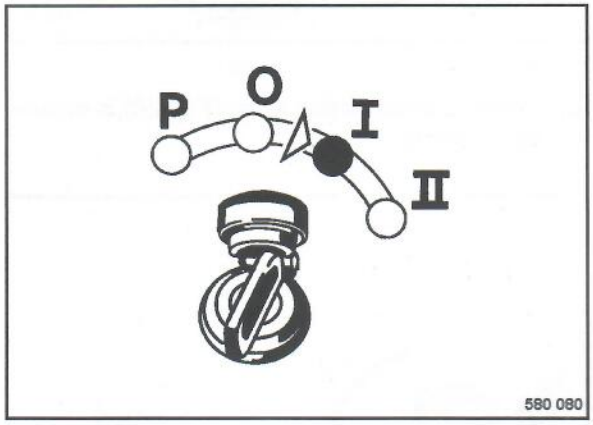

Fig. 29

- Turn the ignition key (Fig. 29) to position "I".

⚠ Caution

Run the starting process for maximum 20 seconds without interruption and pause for a minute between starting attempts.

If the engine has not started after two attempts perform trouble shooting.

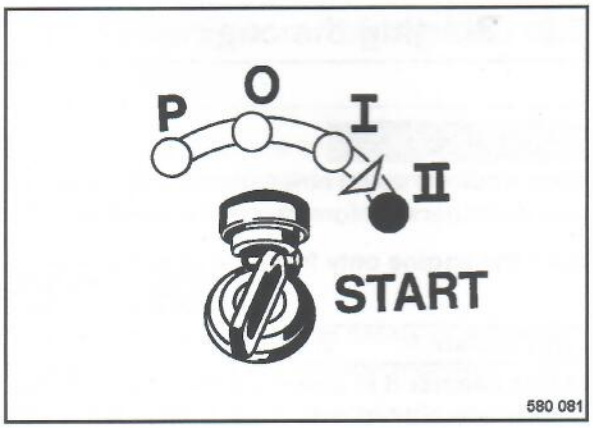

Fig. 30

- Turn the ignition key (Fig. 30) to position "II", the starter will crank the engine.
- As soon as the engine ignites return the ignition key to position "I".

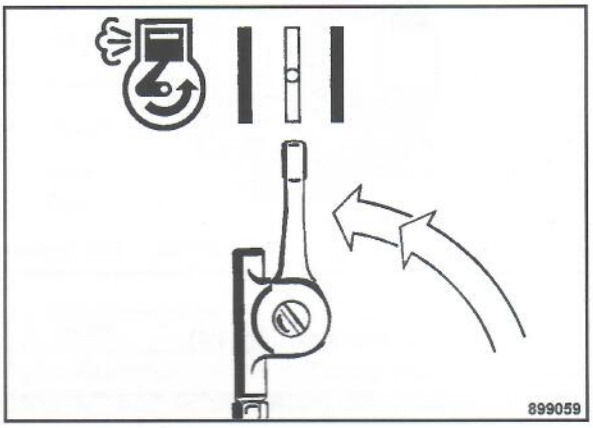

Fig. 31

- Slowly open the choke (Fig. 31).

⚠ Caution

Run the engine warm for a short while before starting work. Do not rev up a cold engine to high idle speed/full load speed.

5.4 Starting with jump wires

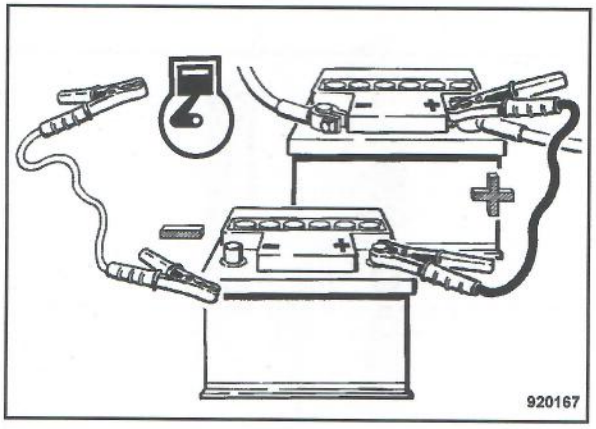

Fig. 32

⚠ Caution

A wrong connection will cause severe damage in the electric system.

- Only use a 12 Volt battery to bridge the machine.
- When jump starting with an external battery connect both plus poles first.
- Then connect the ground cable first to the minus pole of the current supplying battery and then to engine or chassis ground, as far away from the battery as possible (Fig. 32).
- Start as described under 'Starting the engine'.
- Once the engine is running switch on a powerful consumer (working light, etc.).

⚠ Caution

If no powerful consumer is switched on voltage peaks may occur when separating the connecting cables between the batteries, which could damage electrical components.

- After starting disconnect the negative poles (ground cable) first and the positive poles after.
- Switch off the consumer.

5.5 Driving the machine

⚠ Danger

Danger of accident!

Wet and loose soils considerably reduce the ground adhesion of the machine on inclinations and slopes.

Soil conditions and weather influences impair the gradability of the machine.

Do not drive up and down inclinations which exceed the maximum gradability of the machine (see chapter "technical data").

Do not drive without wearing your seat belt.

Always give way to loaded transport vehicles!

Before starting to drive make sure that the drive range is absolutely safe.

Drive and operate the machine only from the driver's seat.

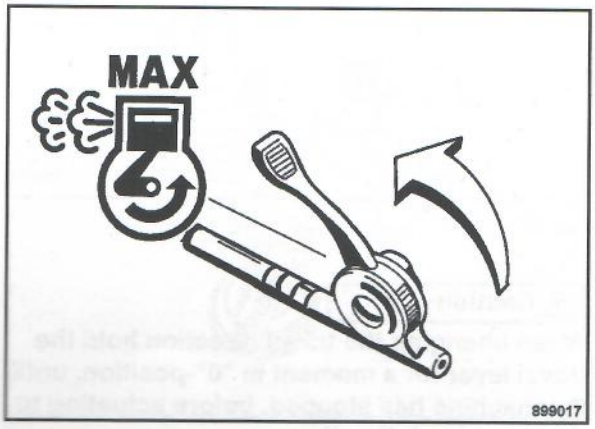

Fig. 33

- Set the throttle lever (Fig. 33) to position "MAX".

⚠ Caution

During operation the throttle lever always remains in "MAX" position. Control the travel speed with the travel lever.

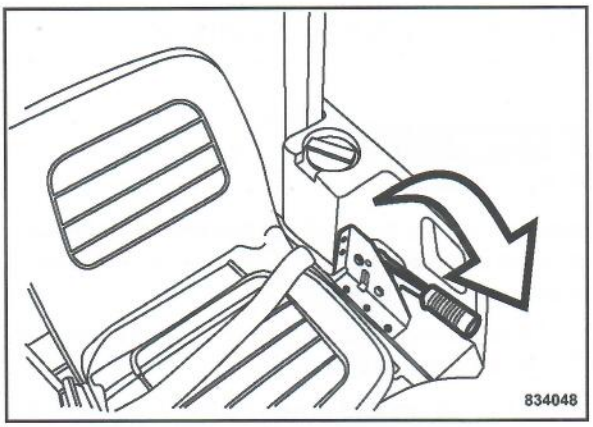

Fig. 34

- Release the parking brake lever (Fig. 34).

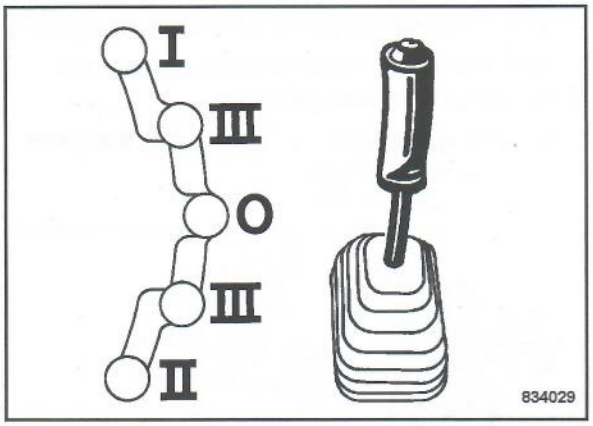

Fig. 35

⚠ Caution

When changing the travel direction hold the travel lever for a moment in "0"-position, until the machine has stopped, before actuating to the new travel direction.

- Shift the travel lever (Fig. 35) slowly to the desired travel direction.

Position "0"	=	Neutral position, service brake, the machine is automatically braked by the hydrostatic drive.
Position "I"	=	Forward travel without vibration
Position "II"	=	Reverse travel without vibration
Position "III"	=	Max. forward/reverse travel with vibration

5.6 Stopping the machine, operating the parking brake

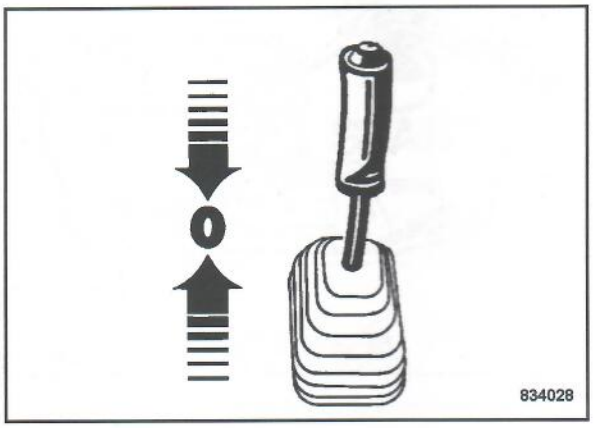

Fig. 36

- Shift the travel lever (Fig. 36) slowly to "0"-position.

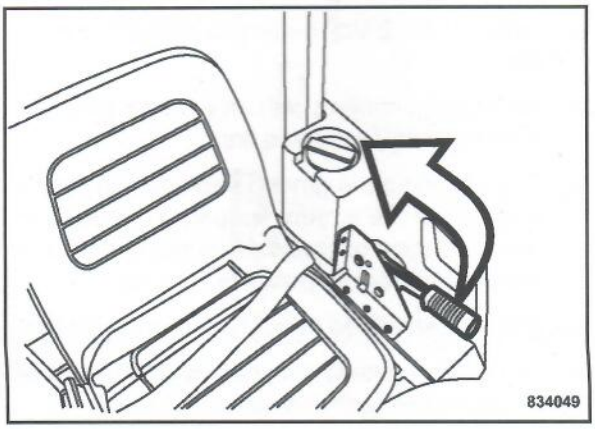

Fig. 37

- Pull up the hand brake lever (Fig. 37).

5.7 Shutting down the engine

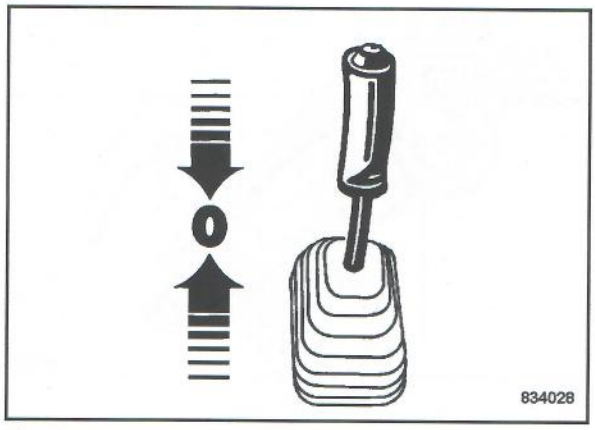

Fig. 38

- Shift the travel lever (Fig. 36) slowly to "0"-position.

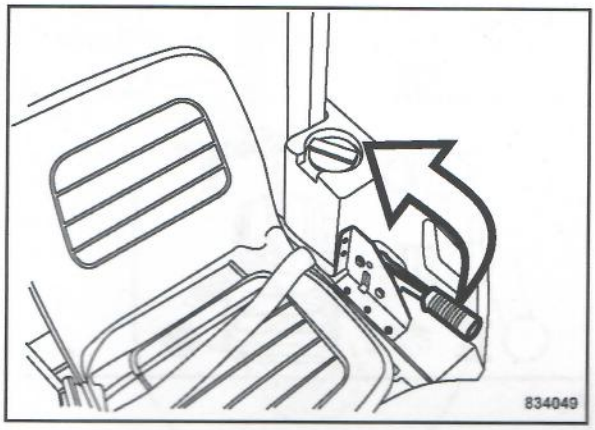

Fig. 39

- Pull up the hand brake lever (Fig. 37).

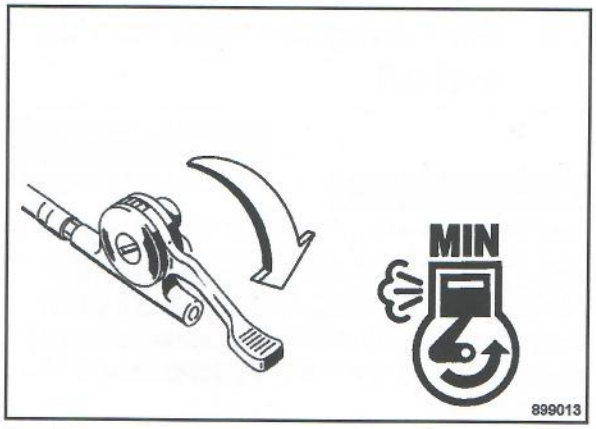

Fig. 40

- Set the throttle lever (Fig. 40) to position "MIN".

⚠ Caution

Do not shut down the engine all of a sudden from full load speed, but let it idle for about 2 minutes.

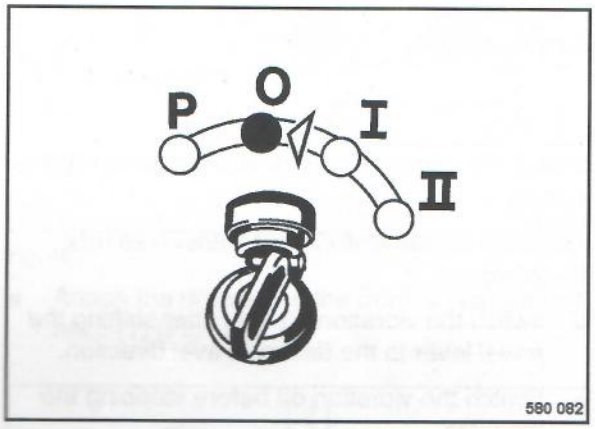

Fig. 41

- Turn the starter switch (Fig. 41) to position "0" or "P" and pull out the ignition key.

⚠ Danger

Danger of accident!

Secure the machine against unauthorized use, pull the ignition key out.

5.8 Switching the vibration on and off

⚠ Danger

Risk of damage!

When compacting with vibration you must check the effect of nearby buildings and underground supply lines (gas, water, sewage, electric power), if necessary stop compaction with vibration.

⚠ Caution

Danger of bearing damage!

Do not activate the vibration on hard (frozen, concrete) ground.

⚠ Caution

During operation the throttle lever always remains in "MAX" position. Control the travel speed with the travel lever.

i Note

Switch the vibration on only at maximum engine speed.

Vibration at standstill causes transverse ruts, therefore:

- switch the vibration on only after shifting the travel lever to the desired travel direction.
- Switch the vibration off before stopping the machine.

Switching the vibration on

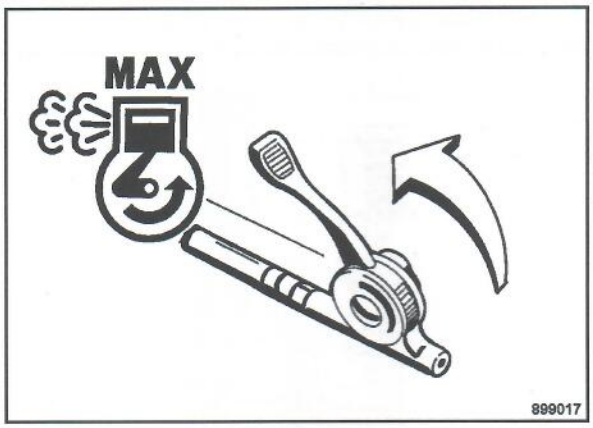

Fig. 42

- Set the throttle lever (Fig. 42) to position "MAX".

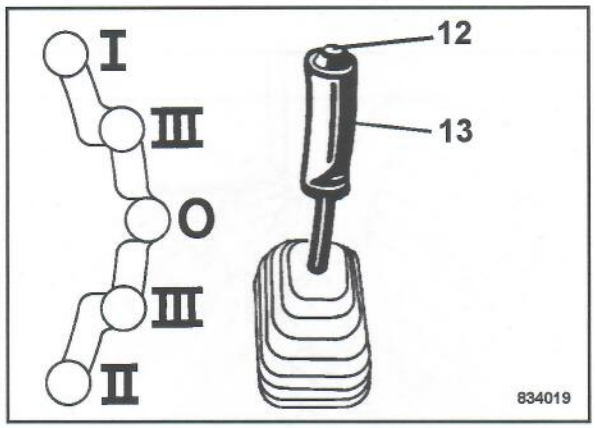

Fig. 43

- Shift the travel lever (13) (Fig. 43) slowly to the desired travel direction to position "III".
- Actuate the vibration push button (12).

Switching off vibration

- Actuate the vibration push button (12) (Fig. 43) again.

5.9 Switching the pressure sprinkling system on and off

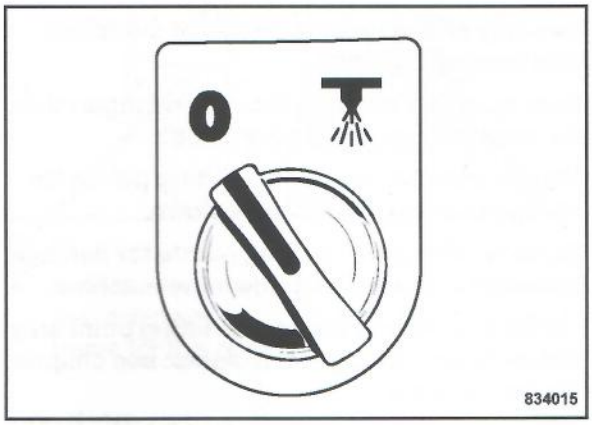

Fig. 44

- Turn the rotary switch for pressurized sprinkling (Fig. 44) "clockwise" to switch on.

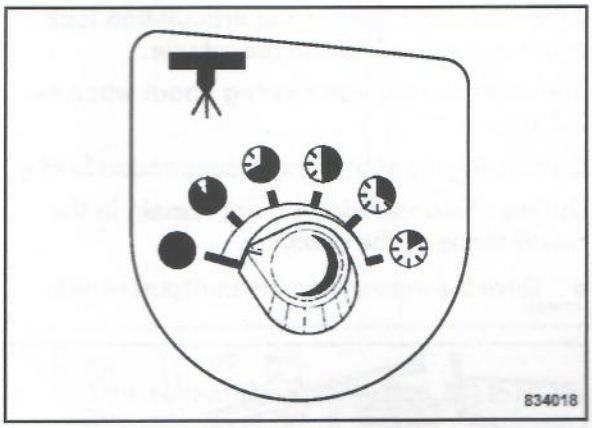

Fig. 45

- Set the interval switch (Fig. 45) to the desired sprinkling interval.

Position "Left", stage 6	=	permanent sprinkling when pressure sprinkling is switched on
Stage 5 - 1	=	Sprinkling intervals of 32, 24, 16, 8 and 4 seconds, Activation time always 4 seconds.

5.10 Towing

⚠ Danger

Danger of accident!

Before releasing the parking brake secure the machine against unintended rolling by using appropriate means (e.g. metal wheel chocks).

Use a towing vehicle with sufficient traction and braking power for the unbraked towed load.

Use a tow bar.

Using the machine as towing vehicle is not permitted.

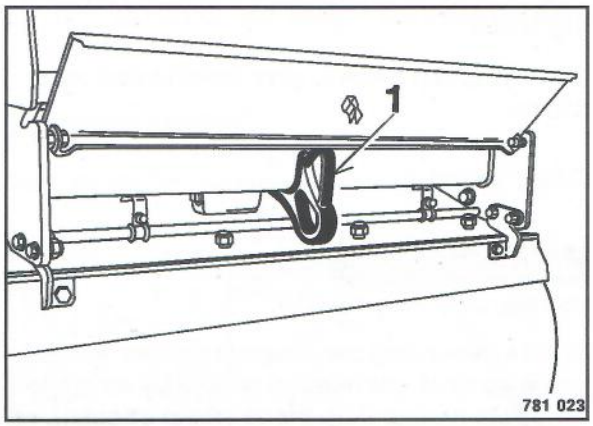

Fig. 46

- Attach the drawbar to the front or rear towing hitch (1) (Fig. 46).

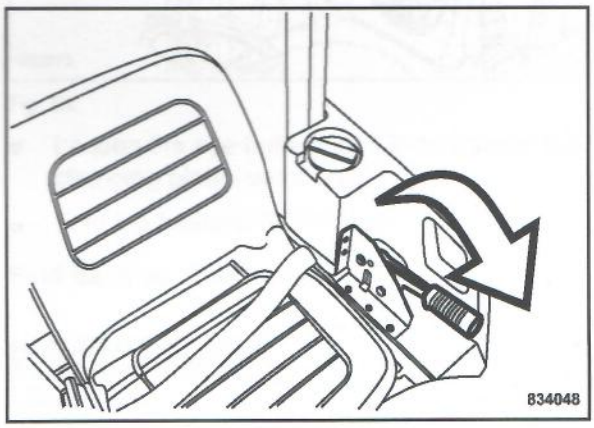

Fig. 47

- Release the parking brake (Fig. 47).

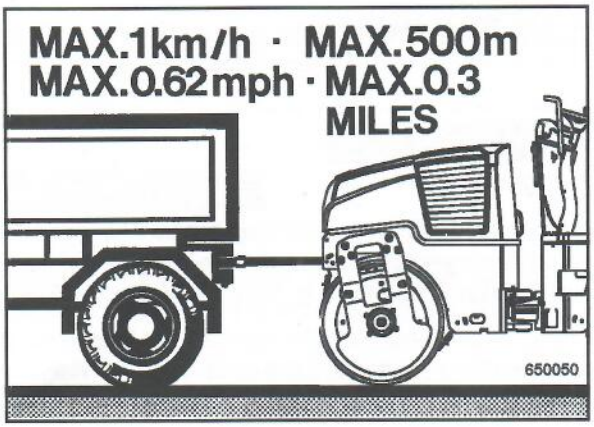

Fig. 48

⚠ Caution

Tow the machine only after releasing the parking brake.

Towing speed 1 km/h, max. towing distance 500 m.

After towing

⚠ Danger

Danger of accident!

Before loosening the drawbar secure the machine against unintended rolling by using appropriate means (e.g. metal wheel chocks), or apply the parking brake.

5.11 Loading and transport

⚠ Danger

Danger of accident! Life hazard!

Use only stable loading ramps of sufficient load bearing capacity.

Make sure that persons are not endangered by the machine tipping or sliding off.

Always use shackles on the lifting points for loading or tying the machine down.

Check all lifting and lashing points for damage before lifting or lashing down the machine.

Lift the machine by the central lifting point only with suitable lifting gear. Weights: see chapter "Technical Data".

Lash the machine down, so that it is secured against rolling, sliding and turning over.

Secure the machine with the articulation lock after driving it on the transport vehicle.

After transport release the articulation lock again and store it in the receptacle.

The machine must not swing about when being lifted.

Do not step or stand under suspended loads.

During demonstration do not remain in the travel range of the machine.

- Drive the machine on the transport vehicle.

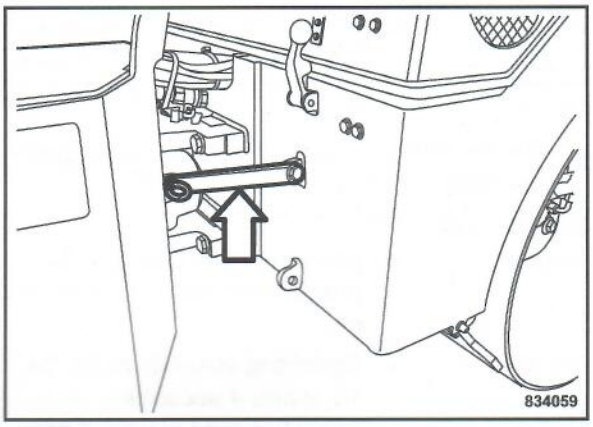

Fig. 49

- After driving the machine onto the transport vehicle swing the articulation lock (Fig. 49) out of its receptacle and lock it in place.

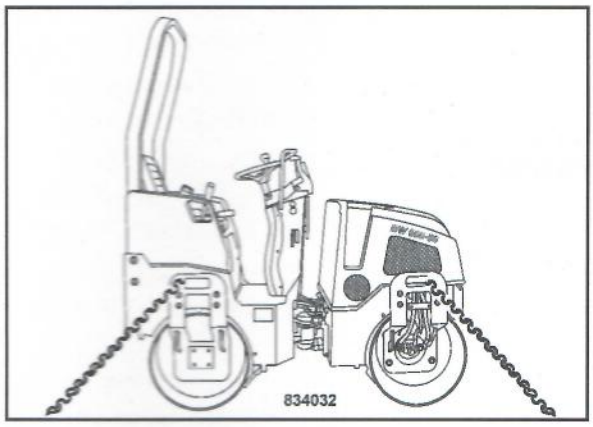

Fig. 50

- Lash the machine to the transport vehicle, use the lashing eyes (Fig. 50) on front and rear frame for this purpose.

Loading

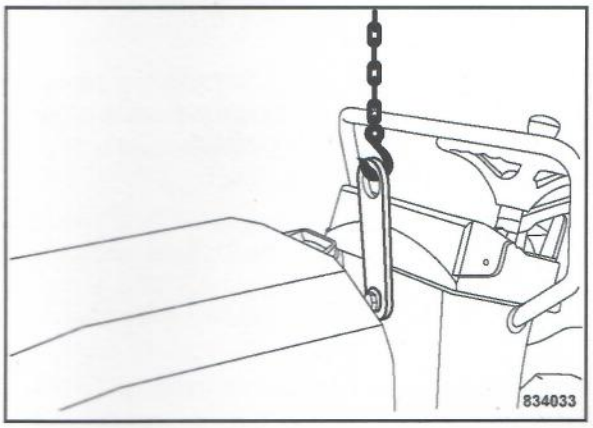

Fig. 51

- Use the central lifting facility (Fig. 51) to lift the machine.

After transport

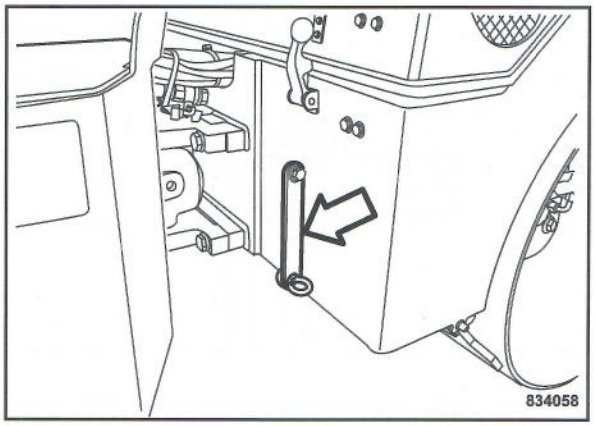

Fig. 52

- After transport release the articulation lock (Fig. 52) again and swing it back into the holding bracket.

Foldable ROPS[1]

Fold down for transport

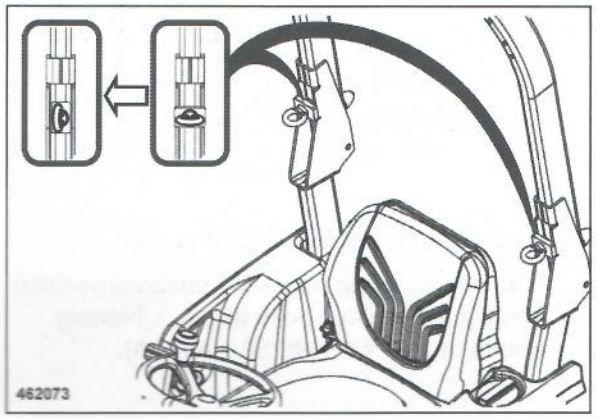

Fig. 53

- Loosen the eye bolts (Fig. 53) and adjust the clamping plates vertically.
- Fold the foldable ROPS back.

Fold back up after transport

⚠ Danger

Life hazard!

Operate the machine only with the ROPS folded up and the fastening screws tightened with the correct tightening torque.

1 Optional equipment

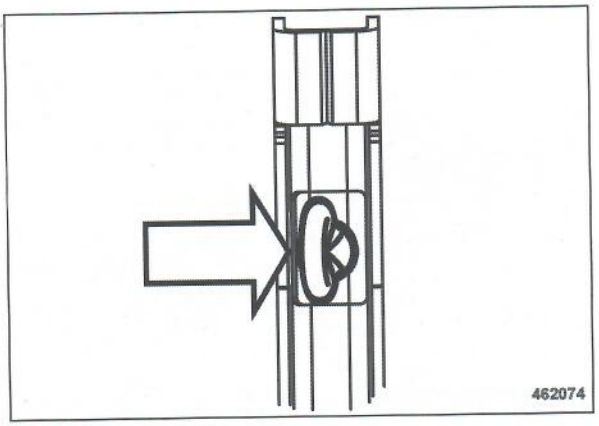

Fig. 54

- Adjust the clamping plates on both sides vertically (Fig. 54).

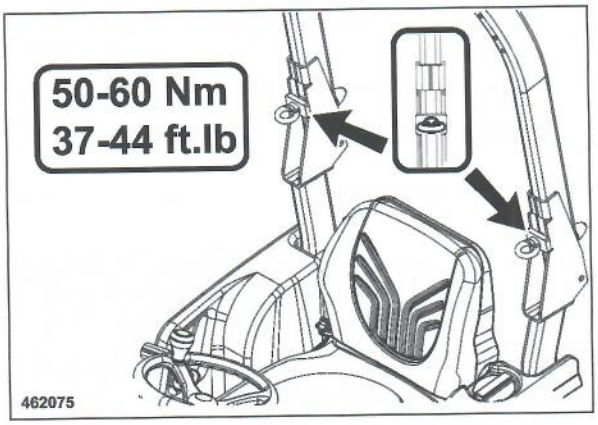

Fig. 55

- Fold up the foldable ROPS (Fig. 55).
- Turn the clamping plates to horizontal position and tighten the eye bolts with a tightening torque of 37 – 44 lbf·ft (50 – 60 Nm).