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Vibratory plate

DPU 6055

Operator's Manual

Important information

This machine has been provided with an EPA-certified engine.

Additional information can be found in the engine manufacturer's notes.

WARNING

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Caution

This engine is an EPA engine.
Adjusting the engine speed will interfere with EPA certification and the emissions.
Only authorized personnel can make adjustments to this engine.
Please contact your nearest engine dealer or your Wacker Dealer for more information.



2. Foreword

For your own safety and protection from bodily injuries, carefully read, understand and follow the safety instructions in this manual.

Please operate and maintain your Wacker machine in accordance with the instructions in this manual. Your Wacker machine will reward your attention by giving trouble-free operation and a high degree of availability.

Replace faulty or defective components Immediately.

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Safety instruction

2. Safety instruction

for the use of vibratory plates with combustion engines

2.1 General instructions

- 2.1.1 Vibratory plates may only be operated by persons who
- * are at least 18 years of age
 - * are physically and mentally fit for this job
 - * have been instructed in guiding vibratory plates and proved their ability for the job to the employer
 - * may be expected to carry out the job they are charged with carefully.
- The persons must be assigned the job of guiding vibratory plates by the employer.
- 2.1.2 Vibratory plates may only be used for compaction jobs. Both the manufacturer's operating instructions and these safety instructions have to be observed.
- 2.1.3 The persons charged with the operation of vibratory plates have to be made familiar with the necessary safety measures relating to the machine. In case of extraordinary uses the employer shall give the necessary additional instructions.
- 2.1.4 This machine generates noise that exceeds the country-specific permissible noise levels (individual rating level). It may therefore be necessary to wear ear protection


2.2 Operation

- 2.2.1 The engine is started by way of an electric starter.
- 2.2.2 When starting the diesel engine with a starter crank make sure you have assumed a proper position with respect to the engine and that your hands are placed properly on the crank.



Only use the original engine manufacturer's safety starting crank.

To avoid a possible return kick, turn safety starting crank through with full force until the engine starts running.

- 2.2.3 The function of operation levers or elements is not to be influenced or rendered ineffective.
 - 2.2.4 During operation the operator may not leave the control elements.
 - 2.2.5 The operator has to stop the engine of the vibratory plate before going on breaks. The machine has to be placed such that it cannot turn over.
 - 2.2.6 Stop engine before filling fuel tank. When refilling fuel tank, do not allow fuel to come into contact with the hot part of the engine or spill onto the ground.
 - 2.2.7 Do not smoke or handle open fire near this machine.
 - 2.2.8 The tank lid must fit tightly. Shut fuel cock if available when stopping the engine. For long distance transports of machines operated by fuel or fuel - mixtures, the fuel tank has to be drained completely. Leaky fuel tanks may cause explosions and must therefore be replaced immediately.
- 
- 2.2.9 Do not operate this machine in areas where explosions may occur.
 - 2.2.10 Make sure that sufficient fresh air is available when operating vibratory plates equipped with combustion engines in enclosed areas, tunnels, galleries and deep trenches.
 - 2.2.11 During operation keep your hands, feet and clothes away from the moving parts of the vibraton plate. Wear safety shoes, and eye protection glasses in case of trench operation where falling sand stones maybe ejected.
 - 2.2.12 When working near the edges of breaks, pits, slopes, trenches and platforms, vibratory plates are to be operated such that there is no danger of their turning over or dropping in.
 - 2.2.13 Make sure the soil or subsoil to be compacted has a high enough load carrying capacity.
 - 2.2.14 Use appropriate protective clothing while working or while carrying out maintenance work.
 - 2.2.15 When traveling backwards the operator has to guide the vibration plate laterally by its guide handle so that he will not be squeezed between the handle and a possible obstacle. Special care is required when working on uneven ground or when compacting coarse material. Make sure of a firm stand when operating the machine under such conditons.

Safety instruction

- 2.2.16 Vibratory plates are to be guided such that hand injuries caused by solid objects are avoided.
- 2.2.17 Vibratory plates have to be guided such that their stability is guaranteed.
- 2.2.18 Machines with integrated transport trolley may not be parked or stored on the trolley. This device has only been designed to transport the machine.

2.3 Safety checks

- 2.3.1 Vibratory plates may only be operated with all safety devices installed.
- 2.3.2 Before starting operation, the operator has to check that all control and safety devices function properly.
- 2.3.3 If defects in the safety equipment or other defects are detected which impair the safe operation of the internal vibrator, the supervisor is to be notified without delay.
- 2.3.4 The machine must be switched off immediately in case of defects jeopardizing the operational safety of the equipment.
- 2.3.5 Process materials and operating fuels must be stowed away in receptacles or containers marked according to the respective manufacturers specifications.

2.4 Maintenance

- 2.4.1 Only use original spare parts. Modifications to this machine including the adjustment of the maximum speed set by the manufacturer are subject to the express approval of WACKER. In case of nonobservance all liabilities shall be refused.
- 2.4.2 All drive units have to be switched off before carrying out maintenance jobs. Deviations from this are only allowed if the maintenance or jobs require a running engine.
- 2.4.3 When working on vibratory plates equipped with electric starter, disconnect battery before carrying out maintenance or repair jobs on the electric parts of the machine.

- 2.4.4 Remove pressure from hydraulic lines before working on them. Caution: take care when removing hydraulic lines, for the oil may be very hot (up. over 80° C). Precautions are to be taken to prevent oil from splashing into the operator's eyes.
- 2.4.5 All safety devices must be reinstalled properly immediately after maintenance and repair jobs have been completed.
- 2.4.6 Do not hose down the machine with water after each use to avoid possible malfunctions. Do not use high pressure washers nor chemical products.

2.5 Transport

- 2.5.1 During transport, loading and unloading of vibration plates by means of lifting devices, appropriate slinging means or hooks have to be used on the lifting points provided for this purpose on the vibratory plate.
- 2.5.2 The load-carrying capacity of the loading ramps has to be sufficient and the ramps have to be secure such that they cannot turn over. Make sure that no one be endangered by machines turning over by slipping or by moving machine parts.
- 2.5.3 When being transported on vehicles, precautions have to be taken that vibration plates do not slip or turn over.

2.6 Maintenance checks

- 2.6.1 According to the conditions and frequency of use, vibratory plates have to be checked for safe operation at least once a year by skilled technicians, such as those found at WACKER-service depots and have to be repaired if necessary.

Please also observe the corresponding rules and regulations valid in your country.

Technical Data

3. Technical Data

	DPU 6055		
Item no.	0610053	0610049	0610175
Length x width x height mm:	1700 x 710 x 1190	1700 x 860 x 1190	1700 x 710 x 1190
Operating weight without extension plates (550 mm) kg: (610 mm) kg: (710 mm) kg: (860 mm) kg:	454 469 476 499		455 470 477 500
Power transmission	From drive engine directly to exciter unit via automatic centrifugal and V-belts		
Exciter			
Vibrations min ⁻¹ (Hz):	ca. 4150 (69)		
Centrifugal force kN:	60		
Oil	Fuchs Titan Unic 10W40 MC (SAE 10W40)		
Oil quantity l:	0,75		
Drive motor	Air-colled single-cylinder 4 stroke diesel engine with electric starter		
Piston displacement cm ³ :	667		
Rated power (*) kW:	9,3		
at rpm min ⁻¹ :	2650		
Operating rpm's min ⁻¹ :	2880		
No-load rpm's min ⁻¹ :	2950		
Oil	Fuchs Titan Unic 10W40 MC (SAE 10W40)		
Oil quantity l:	1,6		

Technical Data

		DPU 6055
Fuel		Diesel
Fuel consumption	l/h:	1,9
Tank capacity	l:	7,0
Electrical system		
Battery		Special Wacker-battery for vibro plates - 12 V - 55 Ah
Alternator		Rotary current generator with electronic regulator and rectifier
Charging rate max.	A:	26
Charging voltage	V:	14
Starter		Starter motor
D.C.	V:	12
Hydraulic control		
Oil		Fuchs Renolin MR 520
Oil quantity	l:	0,4
Special lubricating grase	L_{PA} :	97 dB(A)
The weighted effec-tive acceleration value, determined according to EN ISO 5349	m/s^2 :	4,9

(*) In accordance with the installed useful outlet power according to Directive 2000/14/EG.

Description

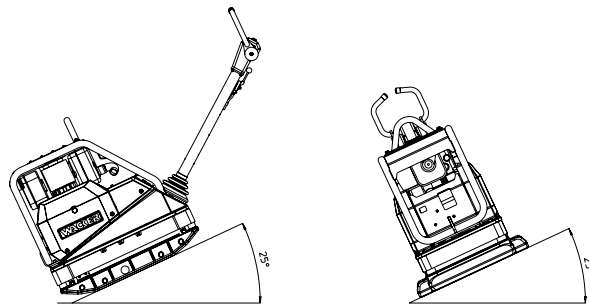
4. Description

4.1 Applications

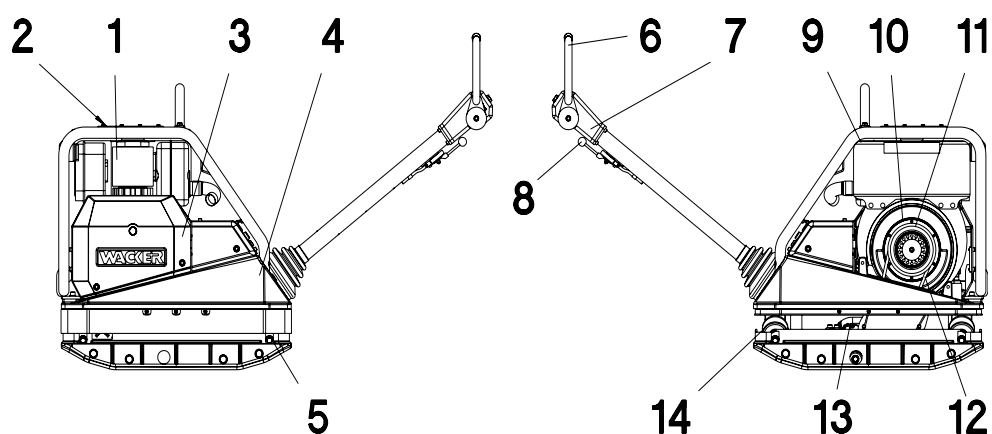
The vibratory plate has been designed for the compaction of almost every type of soil, both in trenches as well as surface compaction. In addition, it is possible to vibrate paving stones and concrete blocks by using extension plates up to 86 cm (accessories).

Extremely cohesive as well as frozen soils are not suitable for compaction. An authorised specialist must give permission for the ground in question to be compacted.

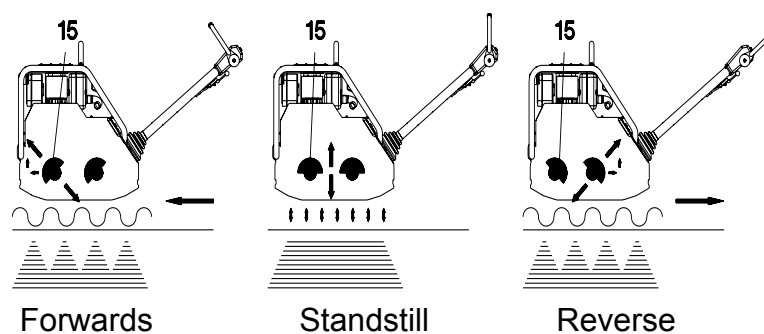
4.2 Max. admissible inclination



4.3 Description of function



- 4.3.1 The vibration required for compaction is produced by the exciter (13) which is firmly joined to the lower mass (5). This exciter (13) is designed as a central vibrator with aligned vibrations. Such a principle permits the direction of vibration to be changed by turning the eccentric weights (15). In this way an infinitely variable transition between vibration in forward motion, at standstill and in reverse motion is possible. This process is hydraulically controlled with the operating control handle (6) on the centre pole head (7).



- 4.3.2 The drive engine (1) anchored to the upper mass (4) drives the exciter (13). The torque is transmitted by means of a friction connection through the centrifugal clutch (11) and the exciter V-belt (12).
- 4.3.3 The centrifugal clutch (11) interrupts flow of power to the exciter (13) at low engine speed and thus permits perfect idling of the drive engine (1).

Description

- 4.3.4 The automatic V-belt pulley (10) combined with the centrifugal clutch (11) ensures optimum tension of the exciter V-belt (12) during operation and relief of the tension of the exciter V-belt (12) when the machine is being relocated or transported.
- 4.3.5 Moreover, the automatic V-belt pulley (10) automatically adapts to the V-belt flanks in line with the wear and thus makes the entire drive from the engine (1) to the exciter (13) maintenance-free (see chapter Exciter V-belt).
- 4.3.6 The speed of the drive engine (1) can be infinitely varied by remote control on the throttle control lever (8). The upper (4) and lower (5) masses are connected to each other by 4 vibration-damping rubber metal shock mounts (14). This damping system prevents the very high frequencies from being transmitted to the upper mass (4). As a result the functionality of the drive engine (1) is retained in spite of the high compaction performance. The drive engine (1) works on the diesel principle; it is started electrically by a pinion starter (3), draws in the combustion air through an air filter, dry (9) and is air-cooled.
- 4.3.7 To facilitate the starting procedure (at very low temperatures, with hand start) the drive engine (1) has an automatic decompression mechanism (2). It ensures that compression is very low during the cranking operation but steadily increases after a few revolutions when it then switches over to full compression.

Transport to work site /Recommendations on compaction

5. Transport to work site /Recommendations on compaction



Warning

Improper use can result in injury or serious material damage.

- * Read and follow all the safety instructions at the beginning of this operator's manual, see chapter *Safety information*.

5.1 Transport to work site



Danger

Danger of fire and explosions by fuel!

Any fuel that escapes can ignite and cause severe burns.

- * Lift and move the machine in the upright position.

Requirements:

- * When transporting the vibrating plate compactor, use only suitable hoisting gear with a minimum load-bearing capacity, see *Technical data*.
- * Always turn off the motor during transportation!

Note

We recommend that the fuel tank be emptied and the carburetor run dry prior to transporting it. Fuel could run out, e.g. if the machine is tilted.

- * Vertically set guide handle head and lock into place.



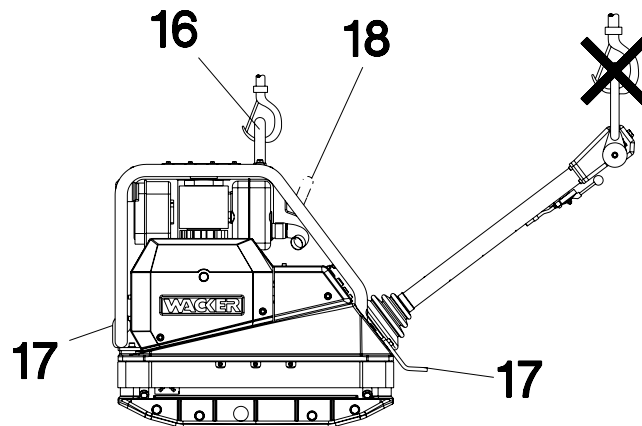
Warning

Danger due to the machine falling!

If the machine falls, it can cause severe injury such as crushing.

- * Only use suitable and tested hoisting gear and lifting tackle (safety load hooks) of sufficient lifting capacity.
- * Attach the machine firmly to the hoisting gear.

Transport to work site /Recommendations on compaction



- * Only attach suitable tackle at the central lifting point (16) provided. The central lifting point is located exactly above the centre of gravity of the machine. The central lifting point can be displaced rearwards (18), given an application in which the height of the machine is of importance (torque wrench setting = 85 Nm).
- * During transport on the loading area of a vehicle, tie down the vibration plate using the lugs (17).

Transport to work site /Recommendations on compaction

5.2 Recommendations on compaction

5.2.1 Ground conditions

The max. compaction depth depends on several factors relating to the ground condition, such as moisture, grain distribution etc, it is therefore not possible to specify exact values.

Recommendation: In each case determine the max. compaction depth with compaction tests and soil samples.

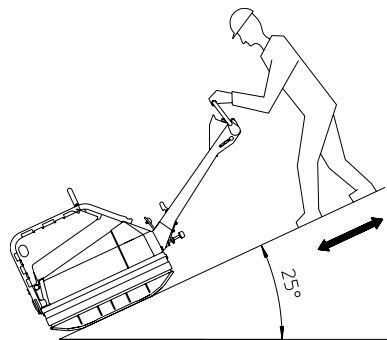
5.2.2 Compaction on slopes

The following points are to be observed when compacting on sloped surfaces (slopes, embankments):

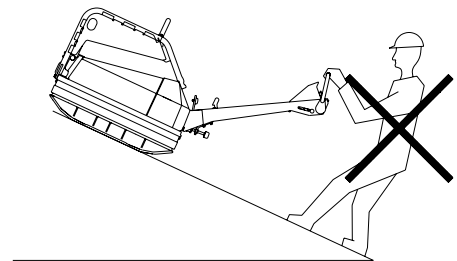
- * Only approach gradients from the bottom (a gradient which can be easily overcome upwards, can also be compacted downwards without any risk).
- * The operator must never stand in the direction of descent.
- * The max. gradient of 25° must not be exceeded.



A tilt in excess of this angle could lead to a stopping of the engine due to the automatic low oil shut-off system. A restarting of the engine can only take place after the valve lever at the oil filter housing has been actuated once.



Right !



Wrong!

Operation

6. Operation



Warning

Improper use can result in injury or serious material damage.

- * Read and follow all the safety instructions at the beginning of this operator's manual, see chapter *Safety information*.

6.1 Starting

6.1.1 Starting requirements:

Engine oil:

Check the oil level with the dipstick (19). Add oil (see *Technical data*) through the filler neck (21) as needed.



The machine must be level and the engine stopped before proceeding with the oil level check.

Fuel:

When pouring diesel fuel into the fuel nozzle (20), maintain absolute cleanliness. Impurities in the fuel can cause breakdowns in the injection system and premature clogging of the fuel filter.

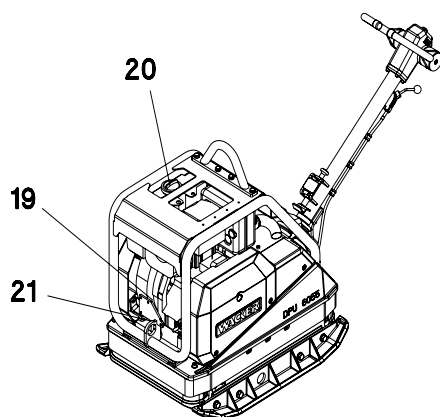


Only refuel the machine when it's engine is stopped.

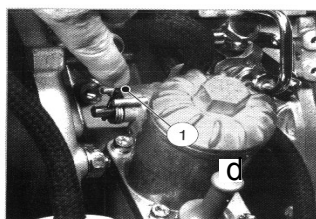
Never refuel the machine close to open flames or ignitable sparks and do not smoke.

Only use pure, clean fuel and clean filling vessels.

Do not spill any fuel.



6.2 Mechanical oil pressure control



It is necessary to reactivate the mechanical oil pressure control in the following cases:

- * after the initial filling - first filling - of the fuel tank or if the tank has run dry.
- * in the case of an automatic engine stop due to an inefficient engine oil supply.
- * after freeing the engine when in presence of extremely low temperatures.

1. Fill up fuel tank.
2. Check engine oil level.
3. To activate depress hand lever „d“ for approx. 5 seconds.
4. Check to see that the engine does not leak.
5. Start engine.

Check oil level every 8 to 15 operating hours in spite of the mechanical oil pressure control.



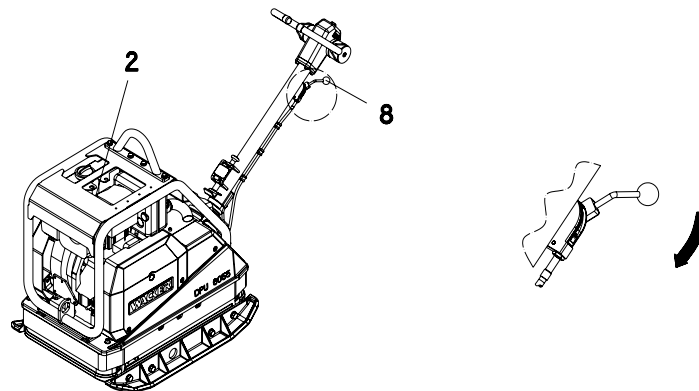
Warning*

Danger of poisoning by exhaust fumes!

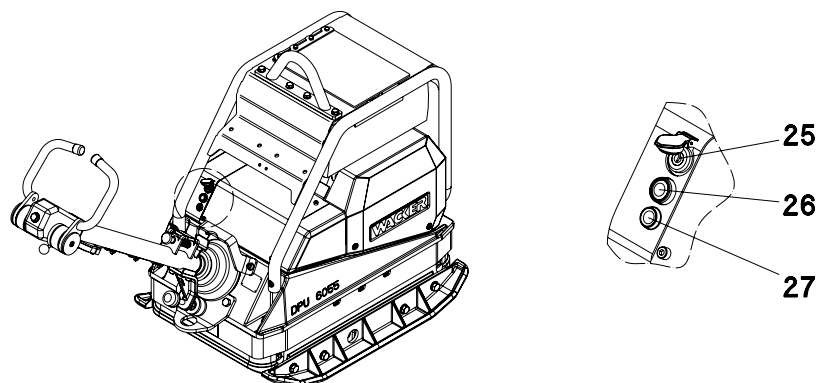
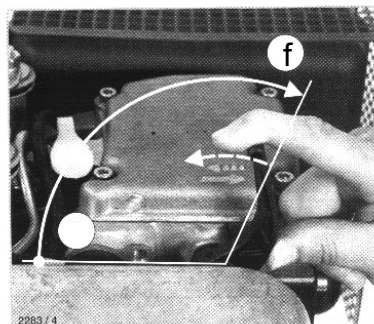
Exhaust fumes contain toxic carbon monoxide that can lead to unconsciousness or death.

- * Always switch off the engine during maintenance work!
- * Before starting the engine always make sure that nobody is in the danger area of the vibratory plate and also check to see if all the safety devices are installed.
- * Never use starter sprays to start the engine.

6.3 Electric start



1. Turn the throttle control lever (8) clockwise into load position 1/2 - 3/4.
2. Leave decompression lever (2) in the position „e“.



3. Put the ignition key into ignition switch (25) and turn it clockwise into operating position (the charge control lamp (27) lights up and the buzzer will be heard). Press in and hold the starter (26) until the engine has started.



Wait until the engine stops before repeating the starting procedure.

4. The charge control lamp (27) must turn off immediately after the engine has started running and the acoustic alarm has stopped.

Stop the engine immediately in case of eventual irregularities, then locate the fault and repair it.

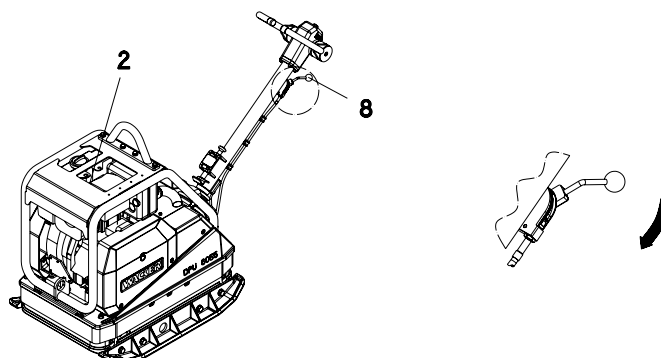


The machine will start vibrating as soon as the engine starts revving up.

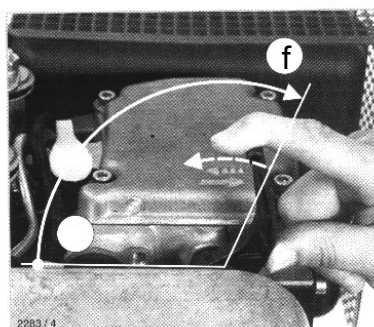
Note: Do not activate automatic decompression lever while the engine is running.

5. Bring the engine up to maximum rpm's and then check the air filter's service indicator (also see chapter on „Maintenance“); clean the dry-type air filter if necessary.

6.4 Starting the engine with the safety starting crank



1. Turn the throttle control lever to the load position 1/2 - 3/4.
2. Turn the decompression lever (2) all the way to „f“. At this point automatic decompression lever engages with an audible click, and the engine is ready to start.

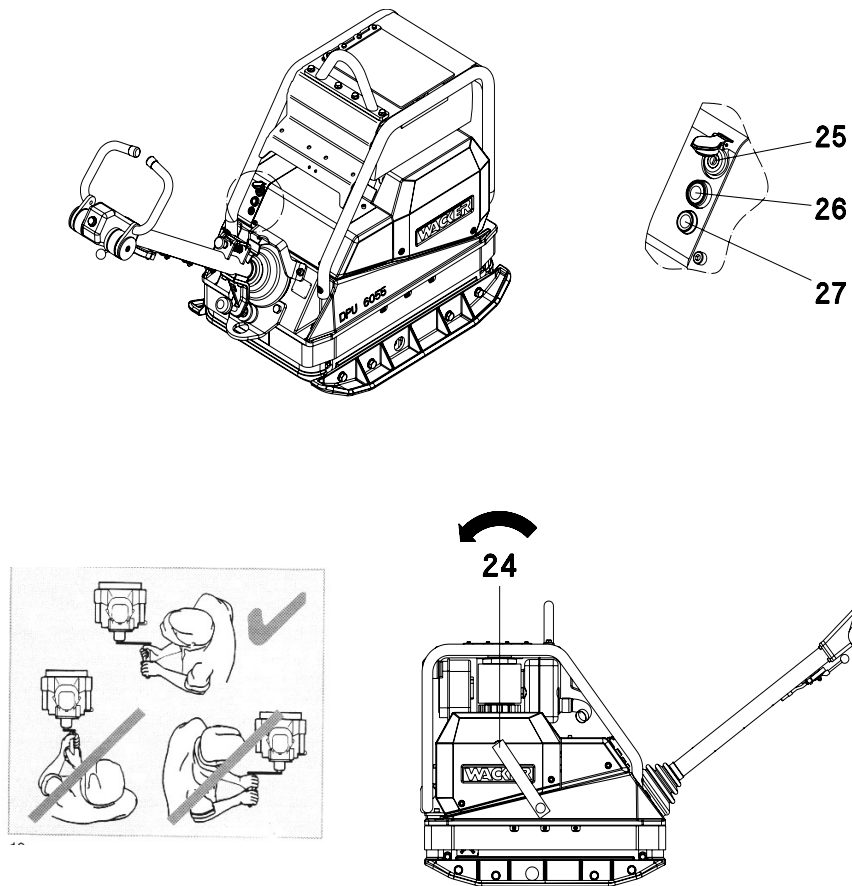


3. Put the ignition key into ignition switch (25) and turn it clockwise into operating position (the charge control lamp (27) lights up and the buzzer will be heard).
4. Check to see that the safety starting crank is in good shape and clean! Broken handle pipes, worn cranking bolts, etc. must be replaced! Lightly grease the gliding area located between the safety starting crank and the guide bush (protective casing).



- * Stand sideways to the engine.
- * Always grasp the handle pipe (h) with both hands.

Operation



- * Slowly turn the safety starting crank counter-clockwise until the ratchet engages. Then start turning the handle with force and with ever increasing speed. The highest possible turning speed must have been reached when the decompression lever reaches position "e" (compression).

Pull the safety start crank out of the protective hood once the engine has started.



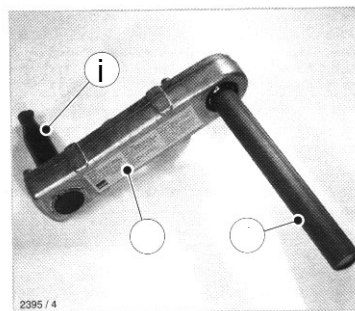
The friction (non-positive) connection between engine and safety starting crank must be guaranteed by a firm grip on the handle pipe and rapid turning of the crank and must not be interrupted under any circumstances during the starting operation.

The connection between the crank web (g) and the crank claw will be released if - due to a hesitant turning of the handle - a return kick should take place during the starting operation.

- * Let loose of the safety starting crank immediately and stop the engine if it should start turning in the wrong direction (smoke coming from the air filter) after a back kick.



Wait until the engine stops before repeating the starting procedure.



5. The charge control lamp (27) must turn off immediately after the engine has started running and the acoustic alarm has stopped.

Stop the engine immediately in case of eventual irregularities, then locate the fault and repair it.



The machine will start vibrating as soon as the engine starts revving up.

Note: Do not activate automatic decompression lever while the engine is running.

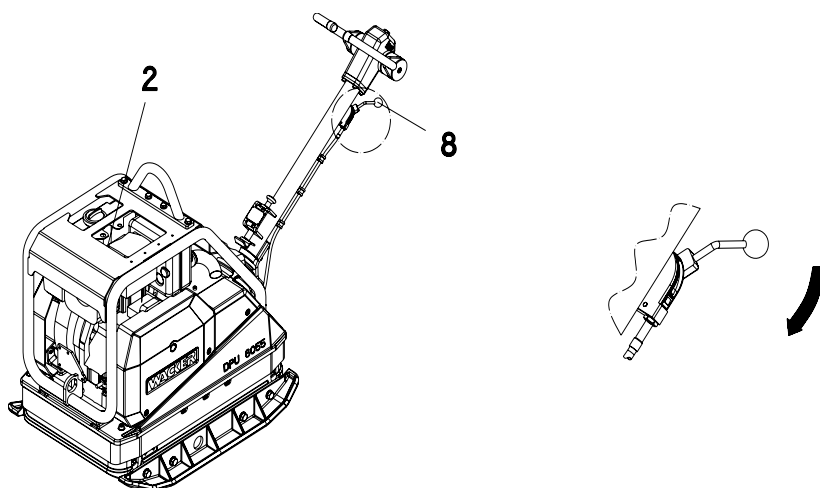
6. Bring the engine up to maximum rpm's and then check the air filter's service indicator (also see chapter on „Maintenance“); clean the dry-type air filter if necessary.

Operation

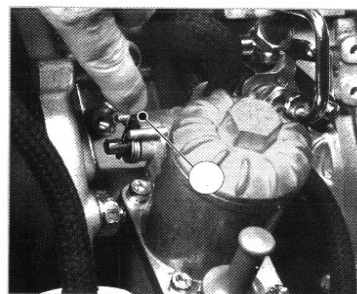
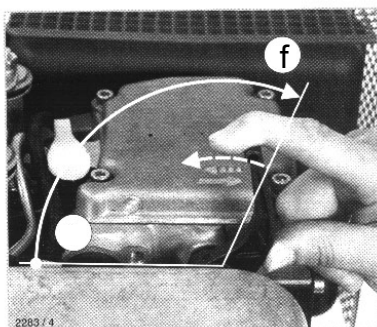
6.5 Starting in cold weather

Always free the engine if the temperature is less than -5 °C (23 °F).

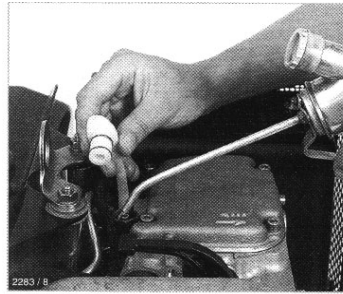
1. Push the throttle lever (8) to the full throttle position.



2. Turn decompression lever to any position in front of starting position „f“.
3. Crank the engine counter-clockwise with the safety start crank (24) as long as necessary until cranking becomes easier (10 to 20 crank turns).
4. Press pin „d“ in for approx. 5 seconds.



5. Clean the area around the dosing device and then pull off the cover.



6. Fill the housing to the upper edge with low viscosity oil. Replace cover and press down with force. Exactly two successive fillings are required.
7. Turn the decompression lever all the way to „f“.
8. Then start the engine immediately with the electric starter or by using the safety start crank.

Operation

6.6 Starting with external battery etc.

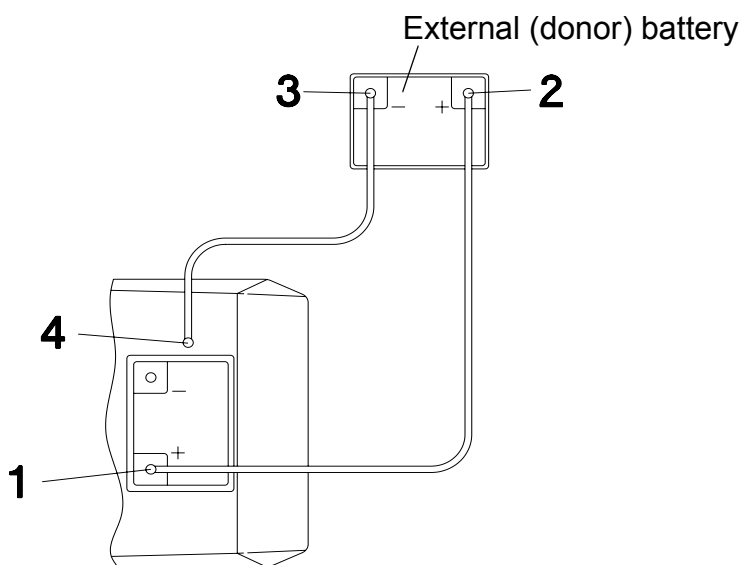
6.6.1 Essential requirements for battery jumper cable:

- * Cable cross-section must be at least 16 mm². (2.5 sq. inches).
- * Clamps must be completely insulated with plastic.



Only connect 12 Volt batteries. The on-board battery will explode if connected to a 24 Volt truck battery!

The use of starter sprays is absolutely forbidden!



6.6.2 Pay close attention to the following connection sequence when jump-starting with an external battery:

1. Connect the red jumper cable with the help of a clamp to the positive pole (1) of the discharged battery.
2. Connect the other clamp of the red jumper cable to the plus pole (2) of the external (donor) battery.
3. Connect the black jumper cable with the help of a clamp to the negative pole (3) of the external battery.
4. Connect the other clamp of the black jumper cable to a grounding point of the machine (4), e.g. to the engine block.

6.6.3 Connect the black jumper cable to the negative pole (3) of the external battery.

6.6.4 Disconnect the clamps in reverse order; first remove the black jumper cable, then the red one.

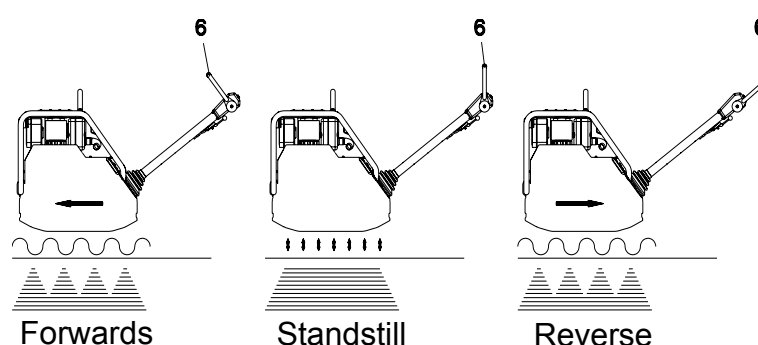
6.7 Forward and reverse motion

The engine speed can be infinitely varied on the throttle control lever.

The direction of travel is determined with the shift lever (6).

Depending on the position of the shift lever (6), the vibration plate compacts in forward direction, at standstill or in reverse direction.

The forward and reverse speeds can be varied by selecting intermediate positions of the shift lever (6) or the machine can be employed for particularly intensive compaction at standstill.



6.8 Compaction without extension plates

If the vibration plate is used without extension plates, screw set of protective screws (8 pcs) into the threaded boreholes situated in the lower mass, in order to avoid threads from being damaged.

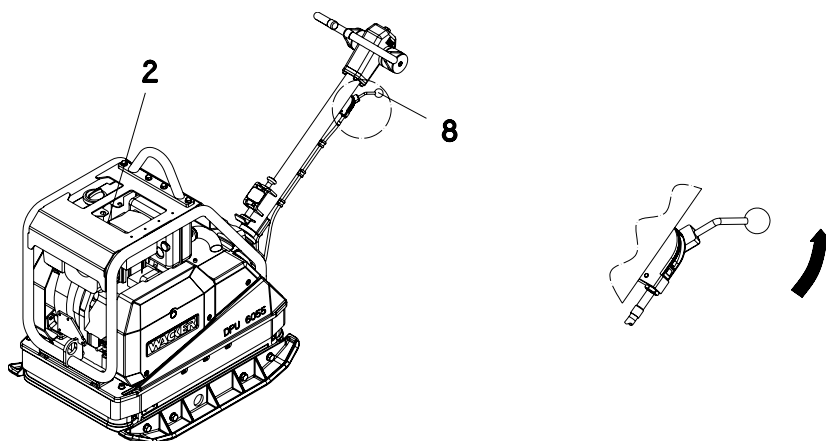
Operation

6.9 Stopping the engine

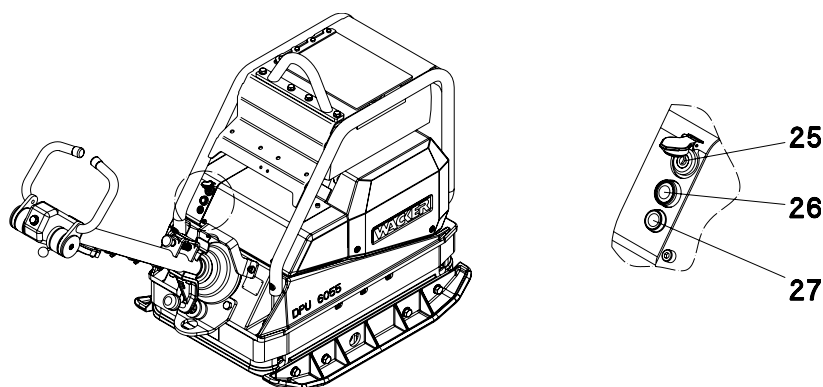


Never switch off the engine with the automatic decompression (2) as this inevitably results in damage to the valve drive and decompression mechanism.

1. Move the throttle control lever (8) to the stop.



2. Turn the ignition key to the stop position and then pull it out once the engine has stopped. The control lamp will extinguish and the acoustic alarm will turn off.



7. Maintenance



Warning*

Danger of poisoning by exhaust fumes!

Exhaust fumes contain toxic carbon monoxide that can lead to unconsciousness or death.

* Always switch off the engine during maintenance work!

7.1 Maintenance schedule

Component	Maintenance work	Maintenance interval
Drive engine	First oil change and filter.	approx. 8 hours after initial start-up
Machine cpl.	Run a visual check to see that everything is complete and undamaged.	daily
Air filter	Check area around combustion air intake and also air filter service indicator.	
Drive engine	Check oil level, if nec. top up oil.	
Centre pole height setting, transport lock	Regrease.	weekly
Fuel tank	Check water separator.	
V-belt	Check V-belt, if. nec. replace.	monthly
Protective frame	Check attachment screws for tight fit.	
Central lifting point		
Tow-bar head	Check oil level, top up if necessary.	
Exciter	Oil change.	every 250 h, or latest every 6 months
Drive engine	Oil change, change oil filter. Keep cooling fins free of dirt, clean dry. Retighten all accessible screw connections.	every 250 h
Battery	Check acid level, if nec. top up with distilled water.	
Fuel filter	Change filter.	every 500 h
Air filter	Replace filter insert.	
Fuel injector	Clean, adjust if necessary, repair or replace.	every 1500 h
Injector valve	Clean, adjust or replace if necessary.	every 3000 h

7.2 Engine oil and oil filter

7.2.1 Check oil level:

- * Remove dirt from the oil dip stick area. Check oil level on oil dipstick (19).



Place the machine in an horizontal (level) position and stop the engine before checking the oil level.

- * If the oil (see *Technical Data*) level is too low, top up with Fuchs oil through the filler nozzle.
- * Pay attention to the max. level mark on the dip stick!



7.2.2 Replacing oil and oil filter:

Note

The work area should be covered with a waterproof sheet to protect the floor (protection of the environment).

1. Let engine warm up.
2. Take off the front cover plate.
3. Remove the oil hose from the support (spanner opening 19) and then hang the hose into an appropriate container.

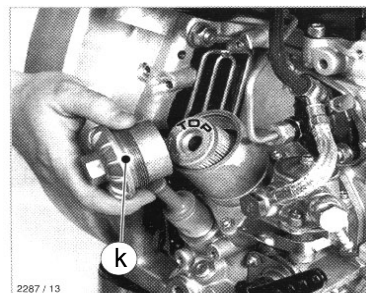


Danger of scalding by hot oil!

Collect the used oil and dispose of it according to local regulations.

4. Let the oil drain completely. Lift the back end of the machine if necessary.

5. Replace oil filter.



6. Clean filter insert carefully to avoid bending the screen netting.

Wipe off screw plug or blow out with compressed air.

Watch out for the "TOP" marking on the oil filter!



7. Check and, if necessary, replace O-ring „k“.

8. Moisten thread and O-ring of the screwed sealing plug with a lubricant.

9. Fasten the oil hose to the support.

10. Fill up with engine oil until the max. marking of the dip stick is reached.

11. Check the oil level again after a short engine test run and top up if necessary.

12. Be sure to check that the screwed sealing plug does not leak.

13. Fasten the front cover plate.

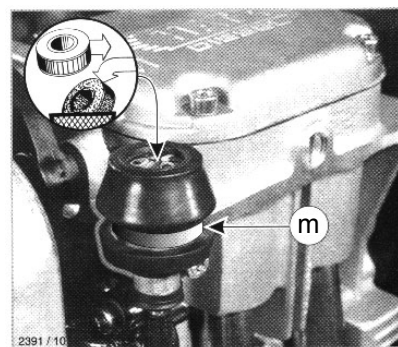
Maintenance

7.3 Air filter

7.3.1 Air filter inspection:

- * Check and, if necessary, remove coarse dirt accumulation such as leaves, dust deposits etc. from air admission holes.
- * Examine and, if necessary, clean dust outlet (l) openings of cyclone prefilter.
- * Air filter service indicator: Start engine and push throttle to full rpm's for a few seconds.

The filter system must be cleaned if the bellows contracts and covers the green ring (m). Check the bellows often per day when working in extremely dusty conditions.

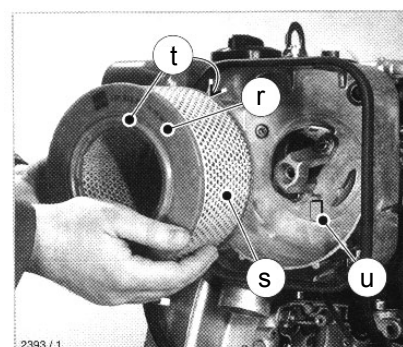
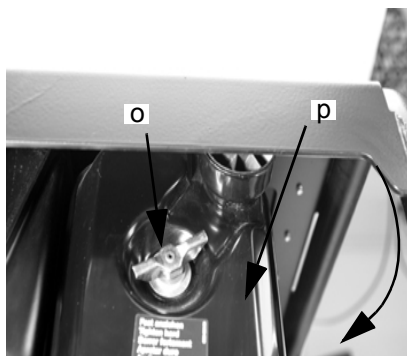


Note

The air cleaner must be cleaned every day if conditions are adverse, dry, and dusty.
Do not clean with compressed air.

7.3.2 Air filter maintenance:

1. Loosen wing (thumb) screw (o) and carefully remove with cover (p).
One turn of the cover (p) by 90° towards the right makes removing easier.
2. Carefully remove filter element (r).
3. Check conditions and cleanliness of valve plate (u).



4. Knock the dry dirt out of the filter element.



Do not clean the filter element with compressed air to avoid causing damages.

Note: Check the filter insert for cracks or other damages while holding it against a light or when illuminating it with a lamp.

Do not reuse the filter element if you have determine any kind of damages in the area of the filtering paper (s) or, as the case may be, in the area of the sealing lip (t).

5. Replace the filter element if the maintenance plan requires it.

6. Follow the disassembly procedure in reverse order to refit the filter.



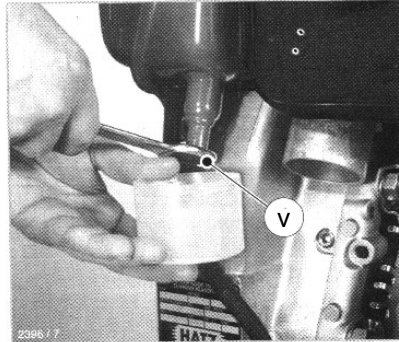
Caution

Operating the engine without air cleaner can cause rapid engine wear.

- * Do not run the engine without an air cleaner.

Maintenance

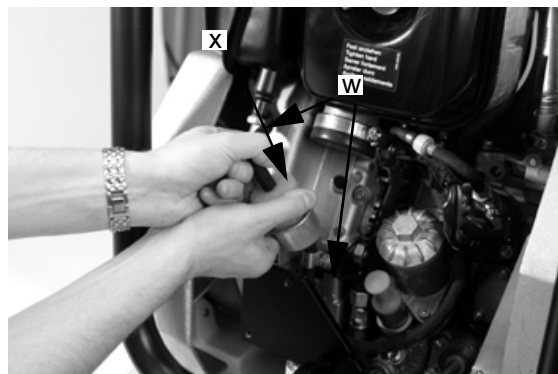
7.4 Fuel system



Do not work close to an open fire and do not smoke when working on the fuel system.

7.4.1 Water separator inspection:

- * Turn hex screw „v“ 2 - 3 turns to detach.
- * Collect the emerging drops in a transparent container. First water and then fuel drops will emerge, as water is specifically heavier than diesel fuel. A clear separating line will make this easily recognizable.
- * Turn the hex screw „v“ back in once only clear fuel emerges.



7.4.2 Fuel filter replacement:

- * Place an appropriate container under the filter to catch any emerging fuel.
- * Close fuel supply line.
- * Pull fuel line „w“ off from both sides of the fuel filter „x“ and then put in a new filter.

Important:

Pay attention to cleanliness and avoid letting any dirt into the fuel line.

- * Always replace fuel filter. Pay attention to the flow direction - look for the arrows.
- * Allow fuel to flow.
- * After a short test run make sure that fuel filter and line do not leak.

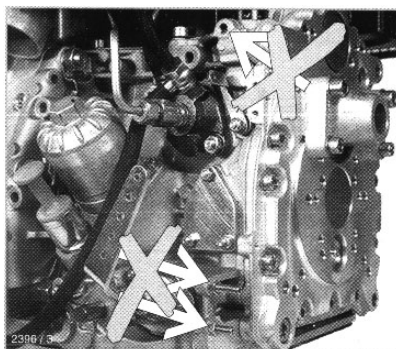
7.4.3 Screwed connections control:

Make sure all accessible screwed connections are correctly tightened and in good shape.



Do not retighten cylinder head screws!

The adjusting screws for the speed governor and at the injection system have been provided with a safety lacquer; do not retighten nor reset them.



Maintenance

7.5 Battery

7.5.1 Check acid level:

1. Remove battery cover.
2. Check acid level, if necessary top up with distilled water.
3. Secure battery cover.



Make sure the positive battery terminal cover is correctly in place before proceeding to install the battery cover. Check to see that the gas venting hose does not have any kinks!



Protect hands and eyes against the acid!

Note: Only replace defective batteries with original Wacker batteries. Standard batteries are not suitable for the high vibration loads.

4. When changing the battery:

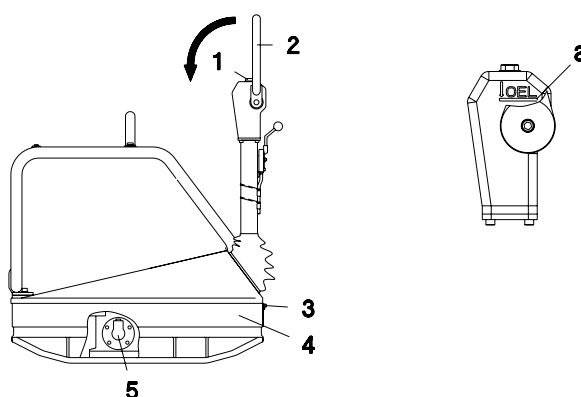
- * Removal: First disconnect negative, then positive terminal of battery.
- * Assembly: First connect positive, then negative terminal of battery.

When using starting sprays etc., see chapter operation.

7.6 Hydraulic control

7.6.1 Check oil level

1. Move centre pole into vertical position.
2. Open filler bore (1).
3. Oil level must coincide with marking (a), top up with hydraulic fluid if necessary (see Technical Data).
4. Close filler bore..

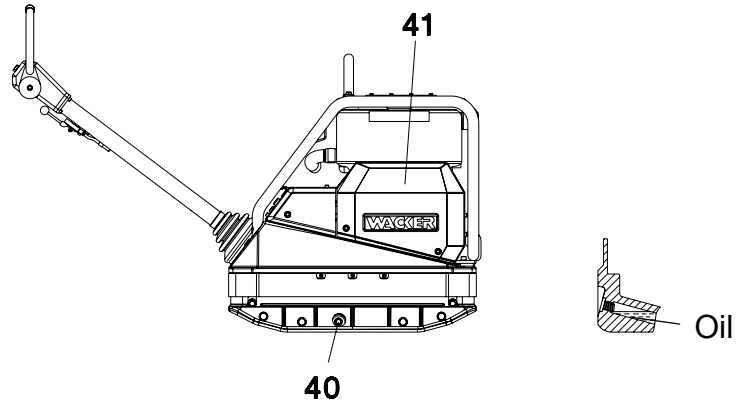


7.6.2 Venting hydraulic control

1. Remove apron (4) by undoing the screws (3).
2. Move centre pole into vertical position, move shift lever (2) right into the reverse position, open filler bore.
3. Loosen connecting screw (5).
4. Slowly push the shift lever into forward motion direction until hydraulic oil emerges bubblefree at the connection screw.
5. Tighten connecting screw, mount apron.
6. If necessary, top up with, seal filler bore.

Maintenance

7.7 Exciter



7.7.1 Check oil level:

1. Position vibration plate horizontally.
2. Open filler bore (40).
3. The oil level must reach the start of the thread of the filler bore (40).
4. If necessary, pour in oil (see *Technical Data*) through filler bore (40) (use funnel 0,75 l).
5. Close filler bore (40). (torque setting = 100 Nm)

7.7.2 Changing the oil:

1. Remove extension plates if necessary.
2. Open filler bore (40).



Warning

Danger through overturning.

If the machine overturns, it can cause severe injury such as crushing. Only use suitable and tested hoisting gear and lifting tackle of sufficient lifting capacity.

Place the machine in a stable position.

3. Tilt vibration plate and keep it tilted until the oil has run out.
4. Place vibration plate in horizontal position.

Note

Avoid spilling oil. Remove any spilled oil immediately.

5. Pour in oil (see *Technical Data*) through the filler bore (40).
6. Close filler bore (40). (torque setting = 100 Nm)
7. Mount extension plates if necessary.



Do not pour in too much oil!

Maintenance

7.8 Exciter V-belt

It is not necessary to retighten the V-belt owing to the use of the automatic centrifugal clutch.

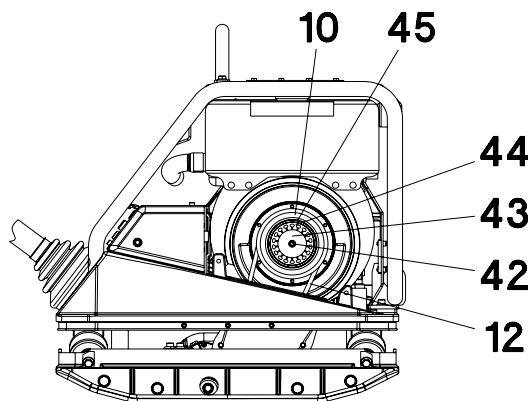
Should the V-belt width fall below 15,5 mm the V-belt must be replaced.

7.8.1 Changing the exciter V-belt:

1. Remove belt guard (41).
2. Undo screw (42).
3. Remove button (43), belleville spring (44), seal (45) and front segment of the V-belt pulley (10).
4. Change exciter V-belt (12).
5. Assemble the components in reverse order; make sure that the coloured marking on the pin coincides with the marking on the V-belt pulley (10).



Do not oil or grease clutch components (will damage the graphite bushes).



8. Faults

8.1 Forward speed too low

Cause	Remedy
To little hydraulic oil in the centre pole head.	Top up hydraulic oil.
Air in hydraulic control.	Bleed system.

8.2 Reverse speed too low

Cause	Remedy
Too much hydraulic oil in centre pole head.	Correct oil level in accordance with mark.

8.3 No reverse motion

Cause	Remedy
Mechanical fault.	Contact Wacker service dept.

8.4 Loss of hydraulic oil

Cause	Remedy
Leaks, hydraulic hose defective.	Contact Wacker service dept.

Faults

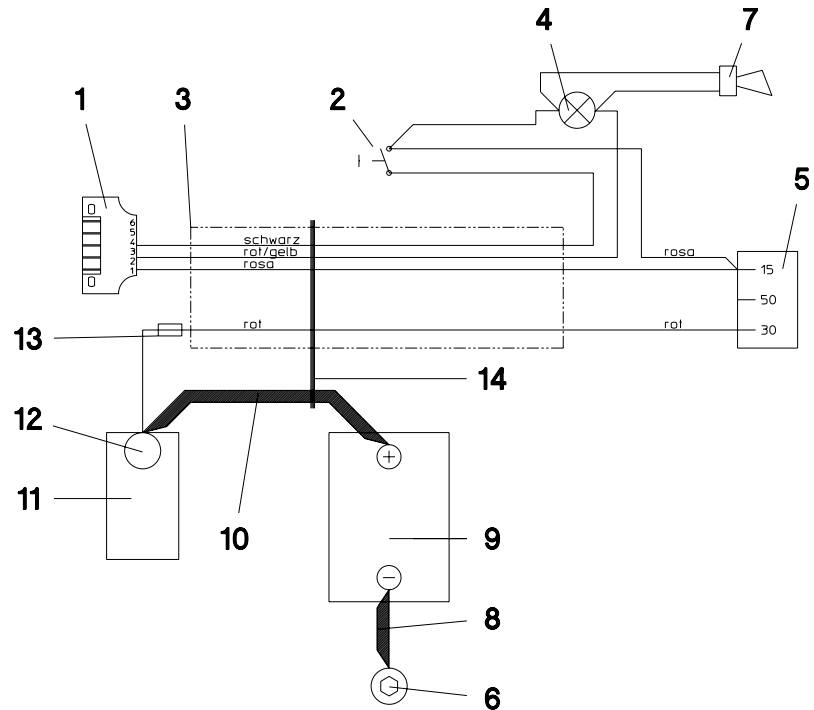
8.5 The charge control lamp will not extinguish and/or the buzzer will not stop buzzing

Cause	Remedy
Dynamo defective.	Contact Wacker service dept.
Control unit defective.	Replace control unit (on rear of the dynamo).

8.6 Engine does not start

Cause	Remedy
Ignition lock defective.	Change defective parts.
Starter defective.	
Start knob defective.	
Battery flat.	Charge battery.
Lack of lubricating oil.	Fill up with oil and actuate valve lever at oil filter housing once.

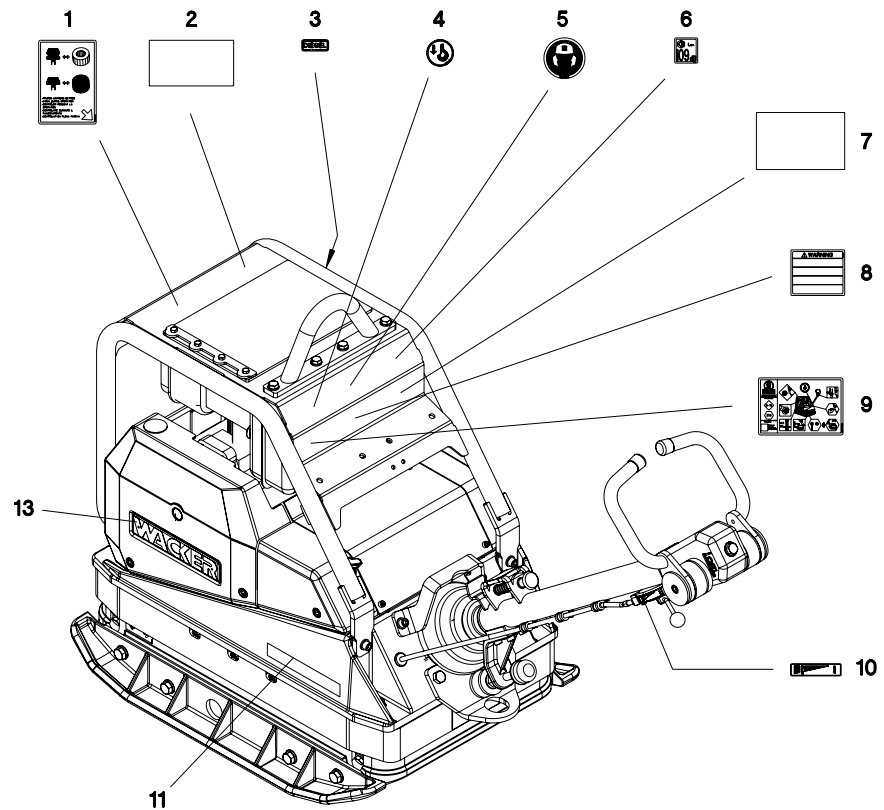
9. Electricwiring-Diagramm



1	Bush plug
2	Button switch
3	Wire harness
4	Control lamp (Battery)
5	Central plug
6	Socket head cap screw DIN912 - M8x16
7	Piezoelectric buzzer
8	Mass line
9	Battery
10	Positive pole stop
11	Starter
12	Nose cap
13	Fixing, fuse
14	Cable yarn

Lables

10. Lables



1	Notice-Air cleaner service indicator Inspect during engine operation
2	Notice-Starting procedure
3	Notice-Diesel
4	Notice-Lifting point
5	Ear protection decal
6	Sound power level
7	Maintenance decal
8	Warning notice - Do not run without protective devices. - Read operator's manual in detail.
9	Notice-Maintenance
10	Start-Stop
11	Type
13	Wacker-Logo

EC - Conformity Certificate**Wacker Construction Equipment AG, Preußenstraße 41, 80809 München**

hereby certify that the construction equipment specified hereunder:

1. Category:

Vibratory plate

2. Type:

DPU 6055

3. Equipment item number:

0610053	0610049	0610175
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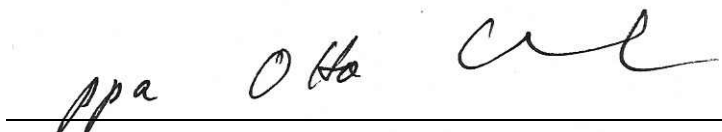
4. Absolute installed power:

9,3 kW

has been evaluated in conformity with Directive 2000/14/EC:

Conformity assessment procedure	At the following notified body	Measured sound power level	Guaranteed sound power level
Annex VIII	VDE Prüf- und Zertifizierungsinstitut Zertifizierungsstelle Merianstraße 28 63069 Offenbach/Main	108 dB(A)	109 dB(A)

and has been manufactured in accordance with the following directives:

2000/14/EG**2004/108/EG****98/37/EG****EN 500-1****EN 500-4**Dr. Stenzel
Research and Development Management

CERTIFICATE

Registration-Number: 6236/QM/06.97

This is to certify that the company

WACKER



**Wacker Construction Equipment AG
Wacker-Werke GmbH & Co. KG**

at the following locations

**Head Office Munich
Preußenstraße 41
80809 Munich**

**Production plant Reichertshofen
Karlsfeld logistics centre
Sales regions with all branches all over Germany**

has implemented and maintains a
Quality Management System for the following scope:

**Machine manufacture
Construction machines**

This Q System complies with the requirements of

DIN EN ISO 9001:2000

and the requirements of the German and international Road Traffic Act.

This Certificate is valid until 2009-06-05.

VDE Testing and Certification Institute
Certification

Date: 2003-05-30

63069 Offenbach, Merianstraße 28
Telefon: +49 (0) 69 83 06-0, Telefax: +49 (0) 69 83 06-555
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The VDE Testing and Certification Institute is accredited by DAR Accreditation
Bodies according to DIN EN ISO 17020 and DIN EN ISO 45012 and notified in the EU
under ID.No. 0366.

TGA-ZM-09-92-00
KBA-ZM-A 00021-97

