

Operating Instruction

Rider 2000





The TREMIX double ride-on RIDER 2000 is a power-trowel for floating and trowelling fresh and newly cast concrete. The machine is intended for industrial floors, floors in housing, sports halls, parking decks, concrete roads, bridges etc.

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WARNING SYMBOLS


 **WARNING** Indicates danger or hazardous procedure that could result in serious or fatal personal injury if the warning is ignored.

 **CAUTION** Indicates danger or hazardous procedure that could result in damage to machine or property if the warning is ignored.

SAFETY INSTRUCTIONS

 The safety instructions are included in this manual and must be studied by the operator. Always follow the safety rules and keep the manual available for future use.

 Read through the entire manual before starting any maintenance operations.

 Ensure good ventilation (air extraction) if the engine is run indoors.

GENERAL

It is important that the machine is maintained correctly to ensure proper function. It should be kept clean so that any leakage, loose bolts and loose connections can be discovered in time.

Make a habit of inspecting the machine every day before starting up by checking all round it to detect any sign of leakage or other faults.



SPARE A THOUGHT FOR THE ENVIRONMENT! Do not let oil, fuel and other environmentally hazardous substances contaminate the environment. Always dispose of used filters, drained oil and any remaining fuel properly.

This manual contains instructions for periodic attention which should normally be carried out by the operator.



There are additional instructions relating to the engine, for which the manufacturer's instructions are detailed in the engine manual.

SAFETY INSTRUCTIONS

Symbols

The signal words WARNING and CAUTION used in the safety instructions have the following meanings:



WARNING: Indicates danger or hazardous procedure that could lead to serious or mortal injury if the warning is neglected.



CAUTION: Indicates danger or hazardous procedure that could lead to machine or property damage if the warning is neglected.

Important rules for your safety



The machine must not be modified without the prior consent of the manufacturer. Use only original parts. Use only the accessories recommended by Tremix. If modifications not approved by Tremix are carried out, these could result in serious injury to yourself or other personnel.

- These recommendations are based on international safety standards.
- You must also observe any local safety regulations which may be in force. Read all instructions carefully before operating the machine. Keep the instructions in a safe place.
- Signs and stickers giving important information about safety and maintenance are supplied with every machine. Make sure that they are always legible. The ordering numbers for new stickers can be found in the spare parts list.
- Use of the machine and its accessories is restricted to the applications specified in the product literature.
- For reasons of product safety, the machine must not be modified in any way.
- Replace damaged parts immediately.
- Replace all wear parts in good time.

Be alert

Always pay attention to what you are doing, and use your common sense. Do not use the machine if you are tired or under the influence of drugs, alcohol or other substances which can effect your vision, reaction ability or judgement.

Safety equipment



Long exposure to loud noise without ear protectors can cause permanent damage to hearing.



Long exposure to vibrations can damage the hands, fingers and wrists. Do not use the machine if you experience discomfort, cramp or pain. Consult a doctor before resuming work with the machine.

Always use approved safety equipment. The operator, and people in the immediate vicinity of the working area, must wear:

- Safety helmet
- Safety goggles
- Ear protectors
- Dust mask in dusty environments
- High-visibility clothing
- Protective gloves
- Protective shoes

Avoid wearing loosely fitting clothing that might get caught in the machine. If you have long hair, cover it with a hair net. Vibrations from hand-held machines are transmitted into the hands via the handles of the machine. Tremix machines feature a handle design that absorbs a large part of the machine vibrations. The vibrations are not eliminated entirely, but it is possible to use the machines for longer periods of time without the risk of injury. Be alert to acoustic signals from other machines in the working area.

SAFETY INSTRUCTIONS

Working area

Do not use the machine near flammable material or in explosive environments. Sparks can be emitted from the exhaust pipe, and these can ignite flammable material. When you take a pause or have finished working with the machine, do not park it on or near flammable materials. The exhaust pipe can get very hot during operation, and can cause certain material to ignite. Make sure that there are no other personnel inside the working area while the machine is in use. Keep the work-site clean and free of extraneous objects. Store the machine in a safe place, out of unauthorized's reach, preferably in a locked container.

Filling with fuel (Gasoline/diesel)



Petrol has an extremely low flashpoint and can be explosive in certain situations. Do not smoke. Make sure that worksite ventilation is good.

Keep away from all hot or spark-generating objects when handling fuel. Wait until the machine has cooled before filling the tank. Fill the tank at least 3 metres away from where you intend to use the machine. Avoid spilling petrol, diesel or oil on the ground. Protect your hands from contact with petrol, diesel and oil.

Open the tank cap slowly to release any overpressure that might exist in the tank. Do not overfill the tank. Inspect the machine for fuel leakage regularly.

Do not use a machine that is leaking fuel.

Starting the machine



Before starting read instruction book and make your self familiar with the machine and make sure that:

- All handles are free from grease, oil and dirt.
- The machine does not show any obvious faults.
- All protective devices are securely fastened in their places.
- All control levers in "neutral" position.

Start the machine according to the instructionbook.

Operation



Keep your feet well clear of the machine.



Do not operate the machine in poorly ventilated spaces. There is a risk of carbon monoxide poisoning.

Use the machine only for the purpose for which it is intended. Make sure you know how to stop the machine quickly in the event of an emergency situation.

Do not touch the engine or the exhaust pipe of the machine. They gets very hot during operation and can cause burn injuries.

Do not touch V-belts or rotating parts during operation.

SAFETY INSTRUCTIONS

Loading/Unloading



Never remain under or in the immediate vicinity of the machine when it is lifted by a crane. Only use marked lifting points. Always make sure that all lifting devices are dimensioned for the weight of the products.

Maintenance

Maintenance work must only be carried out by skilled personnel. Keep unauthorized persons away from the machine. Do not carry out maintenance work while the machine is moving or the engine is running.

Repair

Never use a machine that is damaged. Qualified repair work requires trained personnel, please contact your nearest authorized workshop.

Extinguishing fires

If there is a fire in or on the machine, it is best to use an ABE-class fire extinguisher. However, a BE-class CO₂ extinguisher is also suitable.





TECHNICAL DATA


Model	Rider 2000
Type	Double ride-on power-trowel
Adjustment of blade angle	Hand wheel
Dimensions of guard ring mm	2020 x 1030
Outer diameter at trowelling (with blades)	2 x 925
DimensionsLxHxW mm	2020x1075x1080
Net weight kg	310
Gross weight kg	425
Engine	Honda GX 620
Power	14.7 kW
Start	Electric starter (ignition key)

Noise Levels

Continuous sound pressure level at operator's place (ISO 11202) L_p= 93 dBA
 Sound power level (ISO 3746) L_{WA} = 108 dBA

Fuel and Lubricants

	ENGINE OIL	Use SAE 15W/40 Volume: 1,5 l Shell Universal Oil TX 15W-40 or equivalent
	FUEL	Use ordinary grade petrol (unleaded)
	GREASE	Use lubricating grease SKF LGHT3/50
	GEARBOXOIL	See page 10.

 **Warning!** Stop the engine before refilling the fuel tank. Never refuel near an open flame or sparks, which could start a fire. Don't smoke. Use pure fuel and clean filling equipment. Take care not to spill fuel.

GENERAL INFORMATION AND RECOMMENDATIONS

In order to avoid injuries or damage on the equipment we recommend that you read and understand the operating instructions before using the machine.

The double power trowel quickly achieves a perfect finish on large concrete surfaces.

Thanks to the sophisticated design and the high-quality material used in the machine, the result will be good even in most unfavorable conditions.

The trowel is easy to run and manoeuvre.

The engine requires only little care and maintenance, we therefore suggest that you read carefully the engine manufacturer's instructions for use, under separate cover.

The safety system of our machines stops the trowel automatically if the operator loses the control of the machine.

The trowelling blades are protected by protection rings avoiding that

the operator gets in contact with the blades.

Change of blades is quick and easy.

The floating discs are fitted to the blades without need to remove the blades.

The exclusive design of the blade system has a great advantage i.e. you can work in two different ways, either with blades or discs.

In order to work in a safe way, never run the machine if you are tired, ill, or under influence of drugs, alcohol or the like.

DO NOT!

- ◆ Do not use the machine for other work than finishing.
- ◆ Do not start the machine if the working area is not unimpeded.
- ◆ Do not use the machine on dry, hardened pavements.
- ◆ Do not move the machine on superficies with protruding obstacles, such as steel bars or the like that might collide with the machine and make it lose its balance.
- ◆ Do not leave the machine without stopping the engine.
- ◆ Never start a damaged machine or a machine that is not correctly or not completely assembled.
- ◆ Do not let children climb on the machine.
- ◆ Do not allow that unauthorized persons run the machine.
Be sure that the person you authorize to use the machine, has a good understanding of the safety norms in this manual.

BEFORE START OF ENGINE

Before starting the engine check the oil level placing the machine on a plane surface and with stopped engine.

If it is necessary to fill use oil recommended in this manual or by the engine manufacturer.

RUNNING THE TROWEL

using the machine, check that the floor is in optimum condition for starting the finishing operation, and check that the blades and the discs are intact and in good condition.

Check that the working area is unimpeded.

1. Seat yourself comfortably with your right foot on the accelerator.
2. Press and approach the two "dead man's" safety grips towards the operating handle-levers, press the knob on both safety grips to engage and the starting position is engaged, and let go. This handling is temporary until the operation is started.
3. Turn the ignition key of the engine for starting and the engine starts. If the engine is cold, pull the choke, wait a couple of minutes till the engine gets a certain temperature.
4. Then press again the safety grips completely and keep them pressed during all the finishing operation.
5. With the right foot on the accelerator, accelerate till the machine moves. Now the operator takes the control and runs the machine with short movements of the handle-levers.
6. We recommend that the operator runs the machine with caution until full understanding as to how the machine reacts.
7. Generally it is necessary to run the engine at maximum r.p.m. and at the same time the hand wheels should be turned parallelly in order to adjust the blade angle that is needed at each stage.



Caution

When you release one or the two safety grips, the engine will stop automatically.

Before restarting the engine, be sure to engage again the two safety grips and do not forget to lift your foot from the accelerator, in this way violent start acceleration is avoided which could cause damage and person injuries.

Important: We recommend to press the accelerator to the bottom in order to ensure that the clutch functions well.

It is not advisable to run the machine at medium speed or below medium speed, which would wear the clutch very quickly.

WORKING TOOLS

Trowelling blades are very important parts in the machine.

They affect the trowelling result and the finish.

Two types of working tools are available:

- ◆ Trowelling blades P/N 22317 (8 pcs)
- ◆ Floating discs P/N 32309 (2 pcs)
Outer diameter Ø 945

The blades are reversibles.

MAINTENANCE

Oil

1. Check the oil level of the gear boxes with the oil level gauge.
2. If it is necessary to fill oil, place the machine on a plane surface, and fill with a recommended oil of good quality for worm gear boxes.

Recommended oils:

- A. FUCHS. RENOLIN – MP 320
- B. CASTROL – ALFHA SP 320
- C. BP- GRXP 320
- D. MOBIL- MOBILGEAR 632
- E. SHELL – OMALA-320
- F. REPSOL- SUPERTAURO 320

Oil quantity:

IMPORTANT! Partial lack or total lack of oil in the gear boxes will cause premature wear.

Fill oil when necessary.

It is advisable to wash the bottom side of the machine (disc, blades, guard rings) with high pressure water in order to avoid incrustation of cement, sand, dust and other material rests used during the finishing operation.

NOTE; Do not use high pressure water when cleaning the engine

Regular lubrication in the greasing points is necessary.

Every week clean the pump of the water tank that makes clean water circulating.

The engine manufacturer's manual should be carefully read.

Transport and moving

In order to ensure the safety of the persons who will move the machine or transport it for short distances, the trowel is provided with four lifting points making it possible to hoist or transport the machine by crane or cart. If the trowel is to be transported for a longer distance, there is a special, optional cart that can be handled by one person.

Transportation carrier P/N 2819

Handling of battery

Before the machine is used for the first time, the following steps have to be taken.

Charging the battery: Check whether the machine has a battery charged with acid or charged dry.

Utilization norms for the battery

A) Batteries with acid charging:

Batteries that are charged with acid are ready when purchased and do not require any acid refilling.

B) Batteries charged dry:

1. Remove the lids
2. Fill every battery element with acid sulphurique, density 1.28 (or 1.23 in tropical countries)
3. Let the battery rest about 30 minutes (minimum) in order to finish the charging.
4. Check the electrolytic level with filled acid against the maximum level indicated on the battery
5. Never fill up to the edge.

C) Maintenance of the battery:

1. Check the connexion terminals.
2. At regular intervals, check the level of the electrolyte, add destillated water.
3. Acid must in no case be added
4. The battery must be recharged if the voltage of the terminals is less than 12.3 V (electrolyte density < 1.25).
5. If the machine will be stored for a length of time, the battery has to be disconnected.

Warnings

The batteries include a risk of explosion due to the gases they generate and a risk of corrosion caused by acid. Before doing any work on the battery the following recommendations should be observed:

1. Read the recommendations in the operating instructions
2. Use protective goggles
3. Do not smoke, do not approach flame or produce sparking during handling
4. Use rubber gloves
5. Do not let children approach the machine

Fuel tank

1. Fill the fuel tank (22 l) but do not overfill. The filling should be carried out in a well aerated space.
2. Try to avoid inhalation of the vapour created during filling
3. Avoid to spill fuel when filling as the vapours and the spilled fuel are very inflammable in certain conditions and can set on fire.
4. Do not smoke during filling and avoid to have fire or sparks, in the space where the fuel is stored.
5. If fuel is spilled the spot has to be cleaned and vapour must be dissipated before starting the engine.
6. Do not place inflammable elements on the engine.
7. Avoid contact of fuel with skin .
8. Do not let any person use the engine without necessary instructions.
9. Do not touch the engine or let anyone touch the warm engine, one could get burns.
10. Do not let children or animals approach the engine.
11. Keep the fuel far from children.

VIKTIGT!

Informationen är endast en generell beskrivning och utgör ingen garanti av något slag.

IMPORTANT!

The information is a general description only, is not guaranteed and contains no warranties of any kind.

WICHTIG!

Die Information ist nur eine allgemeine Beschreibung, aus der keinerlei Garantieansprüche abgeleitet werden können.

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