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Originalfassung

DE BETRIEBSANLEITUNG

Übersetzung / Translation

EN USER MANUAL

ES MANUAL DE INSTRUCCIONES

FR MODE D'EMPLOI

RÜTTELPLATTE

PLATE COMPACTOR

PLACA COMPACTADORA

COMPACTEUR À PLAQUE



ZI-RPE120GYN

EAN: 9120039234090

CE

ACHTUNG: Öl kontrollieren!

Motor startet nicht bei Ölmindermenge!



ATTENTION: Check Oil!

Engine doesn't start at low oil level

Edition: 12.02.2020 - Revision - 00 - RaR - DE/EN/ES/FR



13 PREFACE (EN)

Dear Customer!

These operating instructions contain information and important notes for safe commissioning and handling of the ZIPPER plate compactor ZI-RPE120GYN, hereinafter referred to as "machine".



The manual is an integral part of the machine and must not be removed. Keep it for later use in a suitable place, easily accessible to users (operators), protected from dust and moisture, and enclose it with the machine if it is passed on to third parties!

Please pay special attention to the chapter Safety!

Due to the constant further development of our products, illustrations and contents may differ slightly. If you notice any errors, please inform us.

Subject to technical changes!

Inspect the goods immediately after receipt and note any complaints on the consignment note when accepted by the deliverer!

Transport damage must be reported separately to us within 24 hours.

Holzmann cannot accept any liability for unnoticed transport damage.

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The place of jurisdiction shall be the court responsible for ZIPPER Maschinen.

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14 SAFETY

This section contains information and important notes on safe commissioning and handling of the machine.



For your own safety, read these operating instructions carefully before putting the machine into operation. This will enable you to handle the machine safely and prevent misunderstandings as well as personal injury and damage to property. In addition, observe the symbols and pictograms used on the machine as well as the safety and hatard information!

14.1 Intended Use of the Machine

The machine is intended exclusively for the following activities:

For compacting soils (e.g. granular soils consisting of gravel and sand or mixtures of both) and for vibrating paving stones, bricks, etc. on small to medium-sized areas.

The rubber mat should only be used to vibrate paving stones, bricks and the like! Other materials such as gravel, chippings etc. can be processed without a rubber mat.

ZIPPER-MASCHINEN accepts no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.

14.1.1 Probibited Applications / Hazardous Misapplications

- Operation of the machine without adequate physical and mental aptitude
- Operating the machine without corresponding knowledge of the operating instructions of the vibratory plate or the engine manual.
- Changes in the design of the machine
- Operating the machine in a potentially explosive environment
- Operating the machine indoors or in closed areas
- Operation of the machine without functioning or missing mudguards
- Operation of the machine in hard soil, frozen soil and mixed soil containing fragments of Bricks.
- Remove the safety markings attached to the machine. Modify, circumvent or disable the safety devices of the machine.
- Use of the machine for the transport of persons

The improper use or disregard of the versions and instructions described in this manual will result in the voiding of all warranty and damage claims against **ZIPPER-MASCHINEN**.

14.2 User Requirements

The machine is designed to be operated by one person. Always operate the machine from behind. Never stand next to or in front of the machine when the engine is running.

The prerequisites for operating the machine are physical and mental aptitude as well as knowledge and understanding of the operating manual.

Please note that local laws and regulations may determine the minimum age of the operator and restrict the use of this machine!

Put on personal protective equipment before starting work with/on the machine.

Work on electrical components or equipment may only be carried out by a qualified electrician or under the instruction and supervision of a qualified electrician.

14.3 General Safety Instructions

To avoid malfunctions, damage and health hazards when working with the machine, the following points in particular must be observed in addition to the general rules for safe working:

- Before each use, check that the machine is in perfect condition. Ensure that all guards are in the correct place and in working order and that all nuts, bolts, etc. are firmly tightened.
- Ensure adequate lighting conditions in the working and surrounding areas of the machine.



- Keep hands and feet away from moving machine parts and always ensure a safe stand when working.
- Make sure that the area to be tamped does not contain any "live" electric cables, gas or water lines which could be damaged by vibration.
- Remove adjustment tools from the machine before switching it on.
- Never leave the running machine unattended.
- Ensure that unauthorised persons maintain an appropriate safety distance from the machine and keep children away from the machine in particular.
- The machine may only be operated, serviced or repaired by persons who are familiar with it and who have been informed of the dangers arising during this work.
- Always wear suitable personal protective equipment (ear protection, dust mask, safety shoes, close-fitting protective clothing, etc.)!
- Do not work on the machine if it is tired, not concentrated or under the influence of medication, alcohol or drugs!
- Never operate the machine in the presence of flammable liquids or gases (danger of explosion!).
- Carry out conversion, adjustment, measuring and cleaning work only when the engine is switched off.
- Only use spare parts and accessories recommended by ZIPPER machines.

14.4 Special Safety Instructions for operating the ZI-RPE120GYN

- Longer continuous use of the plate compactor can lead to circulatory disturbances, especially of the hands, caused by vibration. Therefore, take regular breaks!
- Wear suitable protective gloves to reduce the vibration intensity. The hardness of the surface to be treated, personal predisposition to circulatory disorders and low outside temperatures considerably reduce the permitted period of use.
- When working in or near excavations or building pits, make sure that the walls are stable and do not run the risk of collapsing due to vibration.
- Keep away from edges and trenches and avoid situations where the vibratory plate could tip over.
- Excessive noise can cause hearing damage and temporary or permanent hearing loss. Wear hearing protection certified to health and safety regulations to limit noise exposure.
- Do not increase the regulated idle speed of the engine above 3,500 rpm. This could result in damage to the machine or personal injury.

14.5 Safety instructions for machines with internal combustion engine

- Do not touch the engine and/or muffler during operation or immediately after switching off! These areas become hot during operation and can cause burns.
- Do not touch the spark plug connector when the engine is running (electric shock!).
- Do not operate the unit in closed areas or in poorly ventilated rooms unless there is adequate ventilation through exhaust fans or hoses. (Danger from carbon monoxide!)
- Do not smoke while the machine is in operation.
- Do not smoke when refuelling the machine.
- Refuel the machine only in a well ventilated area.
- Do not refuel the machine when the engine is running or the machine is still hot.
- Do not refuel the machine near an open flame.
- Do not spill any fuel when refuelling.
- Do not crank a flooded petrol engine as long as the spark plug is removed fuel accumulated in the cylinder sprays out of the spark plug opening.
- Do not carry out an ignition spark test on petrol engines if the engine is flooded or petrol can be smelled. A stray spark could ignite the vapors.
- Do not use petrol or other types of fuel or flammable solutions to clean machine parts, especially in enclosed spaces. Vapors from fuels and solutions may explode.
- Always keep the area around the muffler free from foreign substances such as leaves, paper, cardboard, etc. A hot muffler could ignite these substances and cause a fire.
- Close the fuel filler cap again after refuelling.
- Check the fuel line and tank regularly for leaks and cracks. Do not operate the machine if leaks in the fuel system are known.



Store fuel only in designated and approved containers.

14.6 Hazard Warnings

Despite the intended use of the machine, certain residual risks remain. Due to the structure and construction of the machine, hazardous situations may occur when handling the machines:

DANGER



A safety instruction designed in this way indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING



Such a safety instruction indicates a potentially hazardous situation which, if not avoided, may result in serious injury or even death.

CAUTION



A safety instruction designed in this way indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE



A safety note designed in this way indicates a potentially dangerous situation which, if not avoided, may result in property damage.

Irrespective of all safety regulations, your common sense and your corresponding technical suitability/training are and will remain the most important safety factor for error-free operation of the machine. **Safe working depends first and foremost on you!**

15 STARTING-UP

NOTICE



The use of paint thinners, petrol, aggressive chemicals or abrasives will damage the surfaces! Only use mild detergents for cleaning.

15.1 Assembly

15.1.1 Checking delivery content

The machine is delivered pre-assembled. Unpack the machine and check that supplied parts are complete and in order.

15.1.2 Assembling

HINWEIS



The use of paint thinners, petrol, aggressive chemicals or abrasives leads to material damage to the surfaces! Therefore use only mild detergents for cleaning!



The machine is supplied pre-assembled. The parts that have been dismantled to facilitate transport must be assembled before start-up/use.

Procedure:



1. Fasten holding bracket to the base frame using screws, washers and snap rings (see illustration on the left).



2. Mount throttle lever to the holding bracket (see picture on the left).



3. If desired, fix the rubber mat to the underside of the machine using the metal strips and screws also supplied, and fit the transport device (see illustration on the left).

15.2 Measures before each use

NOTICE



The use of paint thinners, petrol, aggressive chemicals or abrasives leads to material damage to the surfaces! Therefore use only mild detergents for cleaning!

- Observe the safety instructions (at the beginning of this manual).
- Clean the machine and remove dirt and dust if necessary.
- If the air filter is dirty, blow the filter cartridge from the inside by moving a jet of dry compressed air up and down. Continue until all dust has been removed. Replace the air filter with a new one if necessary.
- Check the carburettor for external dirt and dust and clean it with dry compressed air if necessary.
- Check the nuts and bolts for tightness. (Screws or bolts loosened by vibrations can lead to accidents!)

15.2.1 Checking the Engine Oil Level

NOTICE

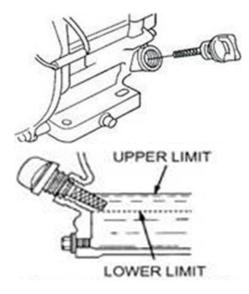


Too low an oil level will damage the engine and shorten the service life of your machine. Therefore, check the engine oil level before each start and top up if necessary.





- 1. To check the engine oil level, place the machine on a safe, level surface. Switch off the engine and allow the machine to stand for ten minutes so that the circulating oil can collect in the oil pan.
- 2. Unscrew the oil dipstick and wipe with a clean, lint-free cloth or a non-fibrous paper towel.



- 3. Push the measuring rod back into the opening as far as it will go, but do not screw it in. (Make sure that the rod has really been pushed in completely sometimes it cants itself).
- 4. Pull out the oil dipstick again and read off the oil level. There are two markings for this see illustration on the left.
- 5. If the oil level is low, refill recommended oil up to the upper edge (maximum filling volume: approx. 0.5 litres).
- 6. Insert the oil dipstick again and tighten.

15.2.2 Checking the fuel tank level

NOTICE



Observe the safety regulations for fuel control. Filter the fuel during refuelling to prevent foreign particles from entering the combustion chamber. Wipe up leaked fuel.

Procedure:

- 1. Unscrew the tank cap (sits on the fuel tank).
- 2. Level check in the form of a visual inspection. If necessary, top up with petrol with the appropriate octane number (RON 95).
- 3. Close the fuel filler cap tightly after refuelling.

16 OPERATION

- Save the working environment before you start compressing.
- Only put the machine into operation after you have read and understood the safety instructions and carried out the necessary measures before initial commissioning.
- The correct moisture content of the soil is very important for correct compaction. Compaction of dry materials is facilitated by moistening the material. Too much moisture leaves behind water-filled cavities which weaken the load-bearing capacity of the soil.
- Wetness or excessive irrigation can lead to overloading and death of the engine.



16.1 Information on Initial Start-up



NOTICE

Note that the machine is delivered without engine oil and fuel. Make sure that the fluif containers are filled before the machine is put into operation for the first time.

ATTENTION: The machine does not start until the engine oil has been refilled to the upper limit.

Also check the excitation oil level before initial operation!

16.1.1 Test Run Initial Start-up

- Let the machine run idle for about 3 minutes.
- Watch out for abnormal noises.
- Do you pay attention to the exhaust fumes (too black, too white)?

16.1.2 Notes on the first 20 operating hours

In order to optimize the life expectancy of your machine, the following points should be observed:

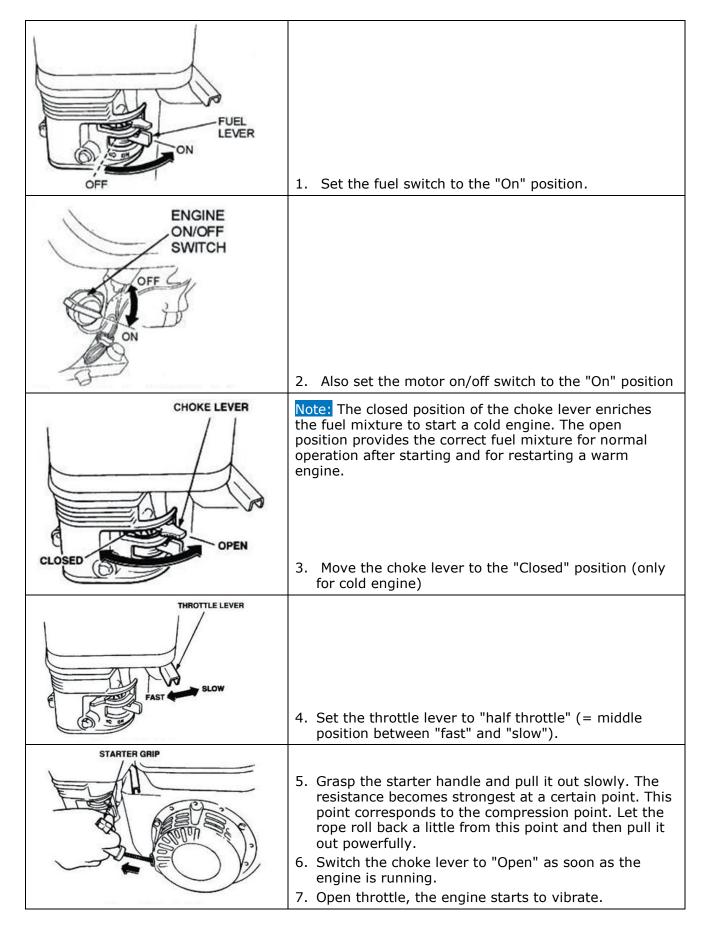
- Spare the engine for the first 20 operating hours (this also applies to used engines after extensive maintenance). This means lower speed and lower maximum working load than during normal operation.
- Change the engine oil after the first 20 hours of operation.

16.2 Operating Instructions

- Always ensure an optimum oil level.
- Never tighten the cable while the engine is running. This will damage the engine.
- The pull mechanism for changing the engine speed is limited by an adjusting screw. This is factory set. Never change this setting on your own, you could overload the motor.
- Under no circumstances should you operate the machine on slopes of more than 20°, as even with an optimum oil level the engine may not be supplied with sufficient lubrication.
- In the direction of the vibratory plate advance and within a range of one meter around the vibrator, nobody but the operator must stand.
- During the compaction and raising of an earthwork, the soil should first be compacted about 10 to 15 cm inside the edge two to three times, then the edge is compacted.
- If you shake the soil inside a building, the vibrating plate should not touch the base structure, the reinforced concrete piles, the base of the machine, the underground pipes, etc. The vibrating plate should not be in contact with the base structure.
- When working inside the building, the vibratory plate or eccentric block must not strike against the walls.
- If several vibrator plates are used simultaneously on one surface, the parallel distance between the machines should not be less than five metres and the distance between the front and rear machines should not be less than ten metres.
- If the machine is working in an environment that is just about perfect, e.g. on soft or uneven ground, make sure to reduce the horsepower to the lowest level to prevent the machine from sinking. On slopes (max. 20° allowed!!!), make sure that the machine does not tip over.
- Pay increased attention to the following particularly dangerous areas:
 - When working in tunnels, good ventilation must be provided to prevent accidents. In addition, there must be a functioning control system for the functioning of the fresh air supply.
 - The stability of the machine should be taken into account when working and parking the machine in order to avoid dangers.



16.3 Starting the engine





16.4 Stopping the Machine

16.4.1 Emergency Stop

In case of danger and/or in an emergency situation, you can quickly switch off the vibratory plate with the speed governor by pushing it completely into the STOP position.

16.4.2 Switching off the machine

- 1. Set the upper throttle lever to "minimum" and let the engine run idle for approx. 3 minutes at low engine speed.
- 2. Then set the engine ON/OFF switch (ignition switch) to the OFF position.
- 3. Close the fuel switch.
- 4. Wait until the engine has cooled down before storing the machine.

17 MAINTENANCE

WARNING



Hot surfaces and rotating machine parts while the engine is running can cause serious injury or even death. Always switch off the machine for conversion, adjustment, cleaning and maintenance work and secure it against unintentional startup.

17.1 Maintenance and servicing plan

17.1.1 Table of Activities

What to do?	When to do / how often?
Check fuel level	before each start-up
Check engine oil level	before each start-up
Control of the operating elements	before each start-up
Check for damaged parts	before each start-up
Checking for loose or lost screws	before each start-up
Change engine oil	first after 20 h, then every 100 h
Check V-belt	every 50 h; replacement after 300 h or 1 year
Change exciter oil	every 200 h
air filter cleaning	every 50 h, replacement after 300 h or 1 year
spark plug test	every 100 h; replacement after 300 h or 1 year

The specified intervals refer to working under "normal" operating conditions. Depending on the load, a change/exchange may also be necessary at an earlier point in time.



17.2 Changing oil of the Vibrating Unit

NOTICE





Waste oils are toxic and must not be released into the environment! If necessary contact local authorities for information on proper disposal.

17.2.1 Exciter oil exchange



- Disassemble the V-Belt cover Remove the screws of the V-Belt cover and afterwards the cover.
- Disassemble the V-Belt Detension the V-Belt and remove it.
- 3. Remove the machine upper part from the base plate
 - Loosen the 4 screws(1,2,3,4)
 - Lift the upper part off the base plate
 - Open the draining screw on the exciter (5)
 - Empty used exciter oil
 - Fill in new exciter oil (20W20 or 15W30 is recommended).
 - Quantity approx.. 200ml
 - Assemble the drain screw again and tighten it.
- 4. Assemble the upper part of the machine again
- Assemble the V-Belt (check belt tension and adjust if necessary).
- 6. Assemble the belt cover again.

17.3 Engine Oil Change

NOTICE





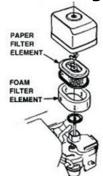
Waste oils are toxic and must not be released into the **environment!** If necessary contact local authorities for information on proper disposal.



- 1. Remove the lifting frame
- 2. Loosen the oil drain plug (W) on the rear of the engine.
- 3. Open the oil tank cap (K). Collect the draining oil in a collecting container and dispose of it properly!
- 4. Tighten the oil drain plug again after emptying.
- 5. Top up with fresh oil via the filling opening (K). Only use high-quality engine oil!



17.4 Cleaning the air filter



A contaminated air filter can contribute to problems starting the machine, loss of performance during operation and shorten engine life. Zipper Machines does not accept any liability for engine damage caused by failure to clean the air filter regularly.

- 1. To clean the air filter, first loosen the wing nut on the air filter housing, remove the cover (foam filter element) and remove the air filter cartridge (paper filter element). Clean both elements mechanically with a soft brush.
- 2. If only the air filter cartridge is to be cleaned, blow it from the inside by moving a dry jet of compressed air up and down until all the dust has been removed.

An air filter change is pending when:

- the engine power drops and fuel consumption increases at the same time
- the oil consumption increases
- the starting of the engine becomes more difficult

17.5 Checking and replacing V-belt and coupling

WARNING



Warning of danger of detection/trapping in! Never attempt to check the V-belt while the engine is running. Your hands could get caught between the V-belt and the clutch. Serious hand injuries may result.

NOTICE

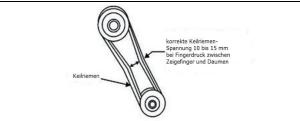


If the vibratory power of the machine - regardless of the number of operating hours - suddenly decreases or stops completely during normal operation, first of all check the V-belt and coupling.

Loose or worn V-belts reduce power transmission efficiency, result in poor compaction performance and shorten the service life of the belt itself. Therefore, check the V-belt tension at the specified intervals.

17.5.1 Checking the V-belt tension





- 1. Loosen the screws (S) of the V-belt cover and remove them.
- 2. Check tension
- 3. The V-belt tension is OK if the belt yields approx. 10 to 15 mm under pressure with thumb and index finger (see illustration on the left). If the V-belt is too loose or too tight, adjust the tension!
- 4. Reinstall the V-belt cover after a positive check.



17.5.2 Re-tensioning the V-belt



The V-belt is tensioned by moving the engine block on the vibratory plate.

- 1. Remove the V-belt cover.
- 2. Loosen the nuts (M2) that fix the engine block to the vibratory plate.
- 3. Loosen the lock nut (M1) to move the engine block with the screw (S).

 Screw in screw S (turn to the right) = tighten the belt. Unscrew screw S (turn to the left) = loosen belt.
- 4. Once the belt has the correct tension, retighten the nuts fixing the motor block to

the vibratory plate (M2) and the lock nuts (M1).

5. Finally reinstall the V-belt cover

17.5.3 Changing the V-belt

- 1. Loosen the V-belt and move it to the maximum foremost position (unscrew S).
- 2. Engage a cranked wrench in the locking screw of the belt.
- 3. Turn the wrench counterclockwise to loosen the V-belt.
- 4. Clean the drive wheels including the V-groove and the inside of the protective cover.
- 5. Tighten the new V-belt.
- 6. Bring the engine block into the rear position so that the V-belt yields inwards by 10 to 15 mm at finger pressure and tighten the fastening screws again.
- 7. Finally, reattach the V-belt protective cover.

17.6 Checking the coupling

Check the coupling at the same time as the V-belt. With the belt removed, check the outside for seizure and the "V" groove for wear and damage with your eyes. Clean the V-groove as required. The wear of the lining or the shoe should be checked with a running check. If the shoe is worn, the power transmission will be insufficient and the shoe will slip.

17.7 Cleaning the Spark Plug

- 1. Pull out the spark plug cap and remove impurities from the outside of the spark plug.
- 2. Then unscrew the spark plug using the spark plug wrench.
- 3. Check the ceramic insulation, clean the electrodes (metal tips) and check the distance between the contacts. It should be 0.7 to 0.8 mm.
- 4. Reassemble the cleaned (or replaced) spark plug and replace the spark plug cap.

18 TRANSPORT

WARNING



Never lift or transport the machine with the engine running!

18.1 Short Distance Transport

For transport over short distances, use the hand holder and the mounted transport device:

- 1. Release the transport device from the rubber holder and support the wheel axle on the around.
- 2. Pull the machine backwards until the base plate rests on the rubber supports of the wheel suspension.
- 3. Press the handle vertically until the centre of gravity of the machine is behind the wheel axle.

Only move the machine on level and firm ground!



18.2 Lifting and placing on other means of transport

NOTICE



Two people are required to lift and place the machine on another means of transport - one person to operate the hoist and one person to keep the machine in balance.

- 1. When transporting over long distances, fold the handle forward as far as possible.
- 2. Make sure that the lifting device including accessories is designed for the weight of the machine.
- 3. Check the fixing of the lifting frame before lifting
- 4. Lift the machine only a few centimetres to check the load capacity.
- 5. Than lift the machine as gently as possible afterwards to the desired position.
- 6. Secure the load properly for transport.

19 STORAGE

- 1. If the machine is not used for a longer period of time (>30 days):
- 2. Empty the oil tanks and fuel tanks.
- 3. Remove the spark plug and pour a few drops of engine oil into the cylinder. Using a rope starter, turn the engine a few times so that the oil is well distributed inside the cylinder. Clean the spark plug and replace it.
- 4. Cover the cooled machine and store it out of the reach of children and unauthorised persons in a well-ventilated, dry and frost-free environment.

20 DISPOSAL



Do not dispose of your machine in residual waste. Contact your local authorities for information on available disposal options. If you buy a new vibratory plate or equivalent from your dealer, he is obliged in certain countries to dispose of your old machine properly.

21 TROUBLESHOOTING

WARNING



Hot surfaces and rotating machine parts while the engine is running can cause serious injury or even death. Always stop the machine before carrying out troubleshooting work and secure it against unintentional restarting.

Fault	Possible cause / remedy
Motor does not start	 Check ON/OFF switch and make sure it is positioned to "ON". Check fuel supply. Check engine oil level (a sensor prevents starting if oil level is too low). Make sure that the spark plug ignition cable is connected. Check spark plug Check carburettor and air filter and make sure they are clean.
Motor stops	 Check fuel supply. Check that the fuel tap is open. Check oil levels. Check the condition of the air filter.
Engine does not deliver enough power:	 Check fuel supply. Check that the fuel tap is open. Check the condition of the air filter. Check throttle position
Insufficient vibration	Check whether the V-belt slips or is lost.Check throttle position
Machine does not move freely	Check the underside of the disc for buildup.