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Originalfassung

DE BETRIEBSANLEITUNG

RAD DUMPER

Übersetzung / Translation

EN USER MANUAL

WHEELED DUMPER

ES MANUAL DE INSTRUCCIONES

MINI DUMPER CON RUEDAS

HR UPUTA ZA UPORABU

DAMPER S KOTAČIMA

FR MODE D'EMPLOI

MINI DUMPER AVEC ROUES



ZI-RD300

EAN : 9120039232485



ACHTUNG: Motoröl kontrollieren!
ATENCIÓN: Comprobar el aceite del motor!



ATTENTION: Check engine oil!
PAŽNJA: Provjerite motorno ulje!
ATTENTION : Contrôler l'huile
moteur !



25 PREFACE (EN)

Dear Customer!

This manual contains important information and advice for the correct and safe use and maintenance of the wheeled dumper ZI-RD300.

Following the usual commercial name of the device (see cover) is substituted in this manual with the name "machine".

The manual is part of the machine and may not be stored separately. Read it profoundly before first use of the machine and keep it for later reference. When the machine is handed to other persons always put the manual to the machine.

Please follow the security instructions!

Please read the entire manual, to prevent misunderstandings, machine damage or even injuries!



Due to continuous development of our products illustrations, pictures might differ slightly.

If you however find errors in this manual, please inform us.

Technical changes excepted!

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26 SAFETY

26.1 Intended Use

The machine must only be used for its intended purpose! Any other use is deemed to be a case of misuse.

To use the machine properly you must also observe and follow all safety regulations, the assembly instructions, operating and maintenance instructions lay down in this manual.

All people who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.

It is also imperative to observe the accident prevention regulations in force in your area.



The same applies for the general rules of occupational health and safety.

The machine is used for:

Small loading and transportation tasks in landscaping and agriculture.

Any manipulation of the machine or its parts is a misuse, in this case ZIPPER-MASCHINEN and its sales partners cannot be made liable for ANY direct or indirect damage.

Even when the machine is used as prescribed it is still impossible to eliminate certain residual risk factors.

WARNING	
 	<ul style="list-style-type: none">▪ Max. load 300kg▪ Allowed tilt position in the direction of travel: 15°▪ Allowed tilt position transverse to direction of travel: 10°▪ It is forbidden to remove the protection devices and safety devices!▪ Read also the separately packed operation manual of the engine manufacturer <p style="text-align: center;">HÖCHSTE VERLETZUNGSGEFAHR!</p>

Ambient conditions

The machine may be operated:

humidity	max. 70%
temperature	+5°C to +40°C (+41°F to +104°F)

Prohibited use

- The operation of the machine outside the stated technical limits described in this manual is forbidden.
- Operation of the machine function without any protection devices is forbidden.
- Any manipulation of the machine and parts is forbidden.
- The machine is not approved for transporting passengers
- The machine is not approved for public traffic!
- Etwaige Änderungen in der Konstruktion der Maschine sind unzulässig.
- The use of the machine for any purposes other than described in this user-manual is forbidden.
- It is not allowed to leave the immediate work area during the work is being performed.!



26.2 Security instructions

Missing or non-readable security stickers have to be replaced immediately!

To avoid malfunction, machine defects and injuries, read the following security instructions!

The locally applicable laws and regulations may specify the minimum age of the operator and limit the use of this machine!



- Use the machine only in good enough light to allow a safe operation can be guaranteed.
- In tiredness, decreased concentration or under the influence of alcohol or drugs, the work on the machine is prohibited!
- Caution in slippery conditions - slip hazard - risk of injury. When working, robust and non-slip footwear. Slides / stumble / traps are a major cause of serious injury.
- Unauthorized persons, especially children and not trained personnel must be kept away from the running machine!
- The machine must be operated only by trained persons (knowledge and understanding of this manual), which have no limitations of motor skills compared with conventional workers.
- No other person, children or pets shall remain within 15m!
- If you pass the machine to third, these instructions must be attached to the machine.
- Before each use, the reliability of the machine is to be checked
- Do not climb into the dump box
- Never carry passengers!



- Danger of burns! During the operation flow of hot exhaust gases and engine parts such as the muffler and engine become hot.
- Let the machine cool down before storage.
- After the operation, the machine must cool down. Otherwise there is an imminent risk of burns



- **WARNING: Gasoline is highly flammable!**
- Stop the engine before refuelling
- Smoking and open flames are prohibited during refuelling.
- Do not refuel when the engine and carburettor are still very hot
- Refuel only outdoors or in a well ventilated area.
- Avoid contact with skin and clothes (fire hazard).
- Check after refuelling tank cap and check for leaks.
- Spilled fuel is to wipe immediately.
- Keep the fuel in suitable containers only
- Make sure the fuel does not overflow. If the fuel overflows, the engine must not be started. Remove any dirt from the appliance and prevent any attempt at ignition until fuel fumes have evaporated.
- Damaged fuel tank or other tank cap must be replaced immediately
- After the operation the fuel cock must be closed (if available)



- **Work attentively, safety conscious and always be fully aware safe stand when working! Caution on uneven work surfaces and work surfaces with a slope!**
- **Never operate the machine on slopes where the angle is over 15°!**
- **Avoid use in wet grass. Risk of slipping!**
- **Regular breaks reduce the security risk to loss of control due to fatigue.**
- **Walk! Never run with the machine**
- **Be especially careful when you turn the machine or move backwards!**
- **Never use the machine on soft ground. Risk of tipping!**



- **Take especially care, if the ground contains many stones or roots. An unattended stalling of the drill might easily cause an accident**



- **Use personal safety equipment: ear protectors, safety gloves in EN 388, class 3111, safety shoes S1, safety goggles or face protection when working with the machine!**
- **Never operate the machine without or with soft shoes!**



- **Do not operate in an enclosed or confined areas.**
- **Exhaust contains poisonous carbon monoxide. The exposure can cause unconsciousness and death.**
- **If the fuel tank has to be emptied it must be done outdoors. Keep the drained fuel in a specially designated container or dispose of carefully**



- **Never leave the machine running unattended! Before leaving the working area switch the machine off and wait until the machine stops.**
 - **Switch off the machine before maintenance or adjustment.**
 - **Never remove the fuel tank cap when the engine is running or hot**
- Switch of the engine and remove the ignition key (if is available):**
- **Before check, clean or work on the machine**
 - **Before refueling**
 - **Always if you leave the machine**



26.3 Remaining risk factors



WARNING

It is important to ensure that each machine has remaining risks. In the execution of all work (even the simplest) greatest attention is required. A safe working depends on you!

Even if the machine is used as required it is still impossible to eliminate certain residual risk factors totally. The following hazards may arise in connection with the machine's construction and design:

- **Risk of noise:**

Working for a long time can damage your hearing if you do not use a very good hearing protection.

- **Risks of working area:**

Keep attention for stones and other things that can be thrown around by the machine.

- **Risk to the hands or fingers:**

Risk of crushing: Operate the machine firmly with both hands. When tilting the dump box keep extreme caution.

Risk of burns: Access while it is working in the mowing apparatus. After the operation, the machine must cool down. Otherwise, there is an acute risk of scalding!

- **Risk of fire and explosion:**

Gasoline is highly flammable and explosive under certain conditions.

NEVER refuel fuel or engine oil while the machine is in operation or is hot.

When refueling and at places where fuel is stored not smoke or allow open flames or sparks.

Do not overfill the fuel tank and avoid the spillage of gasoline during refueling. If fuel is spilled make sure the area is completely dry and cleaned before starting the engine.

Make sure that the filler cap is tightly closed again after refueling safely.

- **Chemical risks:**

Never use or refuel a gasoline or diesel engine in a closed area without adequate ventilation.

Carbon monoxide emissions from the internal drive units of the engine can cause in confined spaces through inhalation health effects and death. Therefore use the machine only in well-ventilated rooms or outdoors in operation.

Liquid fuels can cause serious damage on the skin and the environment.

- **Vibration:**

The declared vibration emission value has been for a standardized test is measured and can be used to compare one tool with another electric are.

The declared vibration emission value may also be used for a preliminary assessment of exposure.

Warning:

Emission level of vibration can be different from the specified value during the actual use of the electric tool, depending on the manner in which the power tool is used. When you feel uncomfortable or notice discoloration of skin on your hands during the use of the machine, stop working immediately. Observe sufficient break times to rest. Failure to have sufficient break times may result in a hand-arm vibration syndrome.

The extent of exposure depending on the type of work or machine use should be estimated and appropriate breaks taken. In this way, the extent of exposure can be considerably reduced over the entire work time. Minimize the risk caused by vibrations. Maintain this machine according to the instructions in the manual.

These risk factors can be minimized through obeying all security and operation instructions, proper machine maintenance, proficient and appropriate operation by persons with technical knowledge and experience.

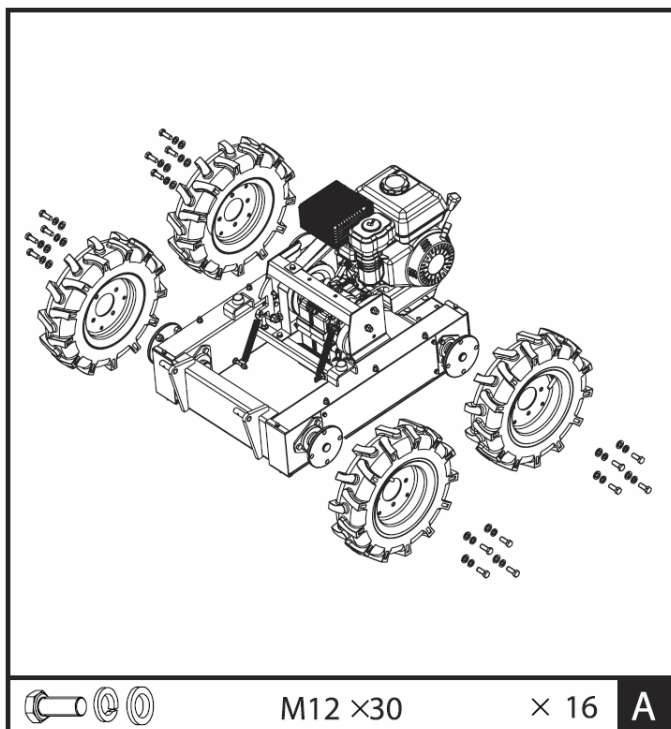
In spite of all safety is and remains her healthy common sense and their corresponding technical qualification / training for use of the machines most important safety factor!!



27 ASSEMBLY

Please check the product contents immediately after receipt for any eventual transport damage or missing parts. Claims from transport damage or missing parts must be placed immediately after initial machine receipt and unpacking before putting the machine into operation. Please understand that later claims cannot be accepted anymore.

27.1 Assembly



A Wheels:

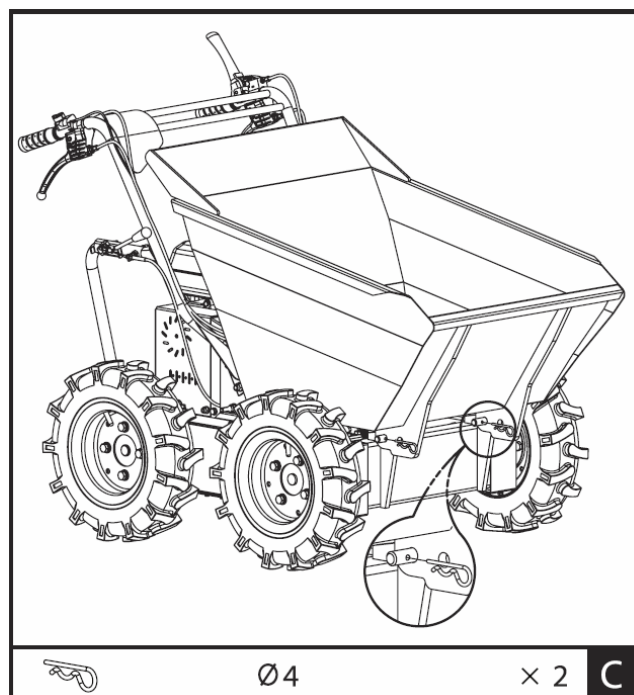
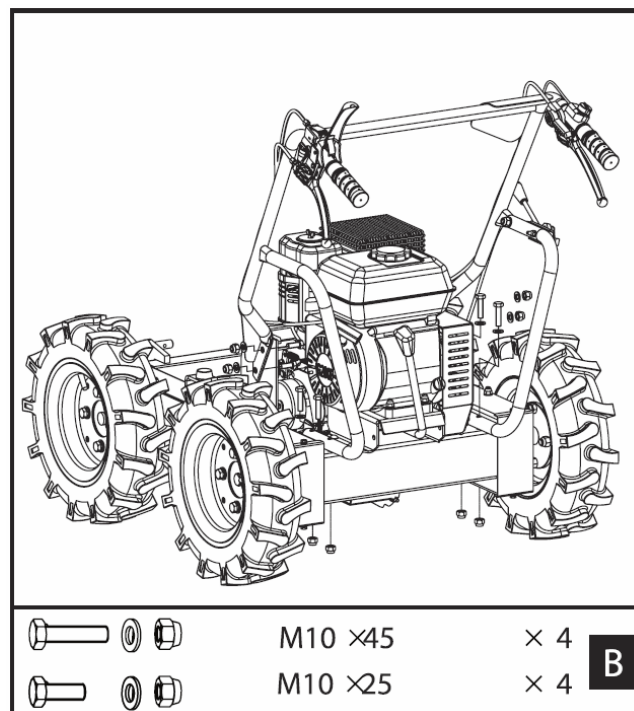
Mount the wheels and fasten them with M12X30 bolts, washers and nuts.

B Handle frame:

Mount the handle frame assembly to the chassis and secure it with M10X25 bolts, washers and nuts at the front and M10X45 bolts, washers and nuts at the rear.

C Dump box:

Install the dump box and fasten the front with two Ø4 R-clips.





28 OPERATION

Device to be operated in a perfect state only. Inspect the device visually every time it is to be used. Check in particular the safety equipment, controls and screwed connection for damage and if tightened properly. Replace any damaged parts before operating the device.

28.1 Operation instructions



NOTICE

- **Disengage clutch lever before starting the engine**
- **Always hold the unit with both hands when operating.**
- **Do not rapidly accelerate, turn sharply or stop.**
- **Do not overload the machine capacity**
- **Always make certain that the weight is evenly balanced**
- **Always move in directions parallel with the slope (up or down).**
- **Change the gears only when the machine stands still!**
- **To avoid danger, do not shift gears on slopes**
- **Attention: While tipping the centre of gravity will change suddenly!**
- **Do not tipping on soft ground**

28.2 Functions of components

1 Engine switch: The engine switch must be in the ON position for the engine to run.

Turning the engine switch to the OFF position stops the engine.

2 Throttle control: Controls engine speed. Put the throttle control on low speed(L) or high speed(H)

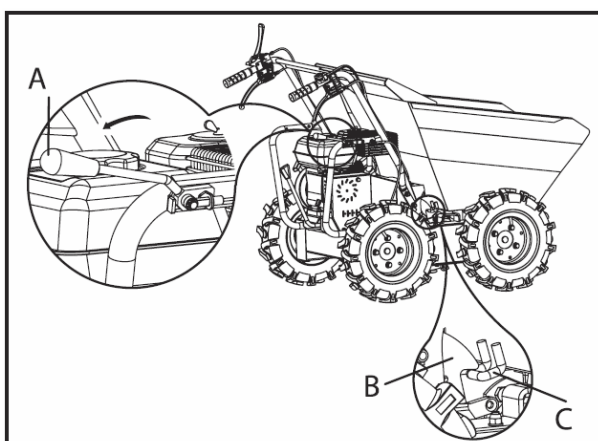
3 Right steering lever: Operate the lever to turn right

4 Clutch control lever: Squeeze the lever, clutch engaged. Release the lever, clutch disengaged

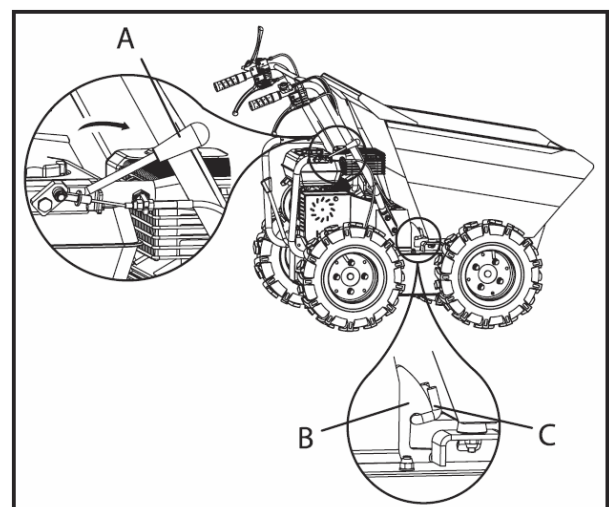
5 Left steering lever: Operate the lever to turn left

7 Gear selection lever: Controls forward (3x) or reverse (1x) movements of the machine.

8 Tipping handle: Controls the tipping of the dump box (manual!)



1. Swing tipping handle A in the direction of the arrow to release limiter B out of hook C. The dump box will be released.
2. Tipping by hand



1. After tipping the load, swing handle A back to reset limiter B into hook C, which will lock the dump box.



Before start operating, check the dump box to make sure it is locked (B, C)!



28.3 Start up

28.3.1 Checking the engine oil level



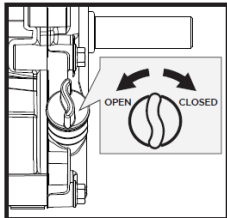
WARNING

ATTENTION! For transport motor oil has been drained. Fill up with 4-stroke quality motor oil before first operation! Failure to do so will result in permanent motor damage and void guarantee!

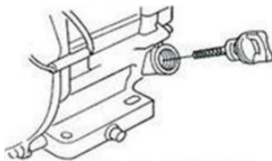


NOTICE

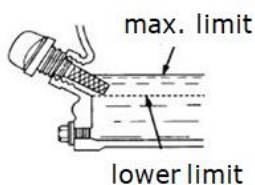
A too low oil level will cause damage to the engine and shorten the service life of the machine. Therefore, check the motor oil level before every start and if necessary fill up with oil.



1. To check the engine oil level, place the machine on a flat, level surface. Switch off the motor and wait for ten minutes to allow the circulating oil to 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 dipstick back into the opening as far as possible, but do not screw it in. (Make sure that the dipstick is really pushed in completely - occasionally it gets jammed).

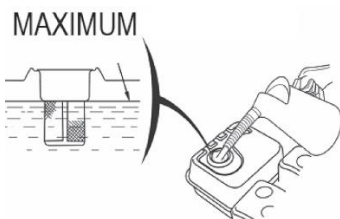


4. Pull out the oil dipstick again and check the oil level. There are two markings for this - see illustration on the left.
5. If the oil level is low, fill up the recommended oil to the upper rim at the maximum (maximum filling volume: see technical data: **do not overfill!**)
6. Insert the oil dipstick again and retighten it.
7. Wipe away oil residues.

28.3.2 Refuel

WARNING

Use only unleaded fuel with min. 95 octane or higher
Never use 2-stroke mixture of diesel! DAMAGE OF ENGINE



1. Refuelling only outdoors!
2. Before removing the filler cap, turn the engine off and let it cool machine
3. Clean the fuel filler cap area
4. Remove the filler cap carefully
5. Fill in fuel
6. Fuel tank capacity: 3,6 l. Fill tank only up to 1,5 cm below the rim of the filler neck, so that the fuel has place for expansion.
7. Replace and tighten the filler cap
8. Wipe any fuel residues and wait until it evaporates



28.4 Operation

28.4.1 Start Engine

Start the engine, if you have your wheeled dumper mounted correctly:

- Set the gear selection lever (7) to the neutral position.
- Move the choke lever on the machine to the full choke position.
- Turn engine switch to "ON".
- Pull the starter rope several times so that the carburettor is filled with gasoline.
- Pull the starter handle, pull-out until resistance is felt. Let the rope rewind slowly across and then move expeditiously.
- Run the pull-starter handle slowly to the rope guide back as soon as the engine starts.
- Set the choke lever after a few seconds of engine run position "OPEN"

To start the engine is warm the choke lever is not to be operated.

- When the engine is warmed up, place the gear lever (7) (forward / reverse) in the desired position. If the desired gear can not load, press the clutch lever short and repeat the process. After inserting the gear lever Push the clutch lever and the mini transporter begins to drive. Drag to adjust the throttle lever to the speed accordingly.
- With the steering arm on the handles and can be easily controlled. To drive in the desired direction each use the right or left steering lever.

28.4.2 Idle speed

Throttle lever to the "SLOW" (SLOWLY) take to protect the motor if no work is done.

Downshifting the engine to idle prolongs the life of engine reduces fuel consumption and the noise level of the machine.

28.4.3 Stop the engine

To stop the engine, release the clutch lever and turn the switch on the motor to the "OFF" position. Under normal conditions, proceed as follows.

- a. Move the throttle lever to the SLOW position.
- b. Allow engine to idle for 1-2 minutes.
- c. Turn engine switch to OFF "OFF".
- d. Turn the fuel valve lever to OFF.

ATTENTION: Not move the choke lever to stop the engine to CHOKE. Risk of reignition or damage to the engine!



NOTES

- The steering characteristics change proportional to the speed driven and the laden weight. The lightly loaded machine can be steered with lighter lever operation. With greater loading of the steering lever to control with higher pressure.
- The highest loadings of mini handling is according to the floor on which the machine is used to adjust.
- It is therefore recommended to drive on difficult tracks in a low gear and with caution. In such situations, the machine to be driven over the entire range in a low gear.
- Avoid sharp turns and frequent changes of direction when driving on the road, especially on rough, tough terrain, which has many sharp, uneven areas, causing high friction.
- Although the unit has 4-wheel traction, please remember, to be careful when working under adverse weather conditions (ice, rain and snow) or on soils where the mini-dumper could be unstable.
- When the clutch lever is released, the machine is automatically braked and stops.
- If the machine is stopped on steep slopes, one of the wheels must be secured with a wedge.



29 MAINTENANCE



ATTENTION

No cleaning, upkeep, checks or maintenance when machine is running
Shut off the machine and let it cool down before start servicing!

The machine does not require intense maintenance. However, to ensure a long lifespan, we strongly recommend following the upkeep and maintenance plan.

Repairs must be carried out by specialists! Use original ZIPPER parts only!

NOTICE

Only a properly maintained equipment may be a satisfactory tool. Care and maintenance deficiencies can cause unpredictable accidents and injuries.

Repairs should be performed only by authorized service centers.

Improper operation may damage the equipment or endanger your safety.

29.1 Maintenance plan

Controls for the maintenance of the machine	
Loose or lost screws, nuts, bolts	Regularly prior to each operation
Damage of any part of the machine	Regularly prior to each operation
Fuel tank of tightness	Regularly prior to each operation
Tires checking	Regularly prior to each operation
Machine cleaning	Regularly after operation
Cleaning spark plug	Every 25 working hours
Cleaning air filter	Every 20-30 working hours
Oil level checking	Every 50 working hours

29.2 Cleaning

Clean the machine and the working attachment from soil, dust, grass, chips, and small twigs, etc.

NOTICE

The use of solvents, harsh chemicals or abrasive cleaners leads to damage to the machine!

Therefore: When cleaning, use only mild detergent

The use of high pressure cleaners is not recommended. It shortens the service life and reduces the operational integrity. (Water can get into the gear!)

Impregnate bare surfaces of the machine against corrosion (e.g., anti-rust WD40)



29.3 Engine

Information about engine maintenance you can find in operation manual of the engine manufacturer!

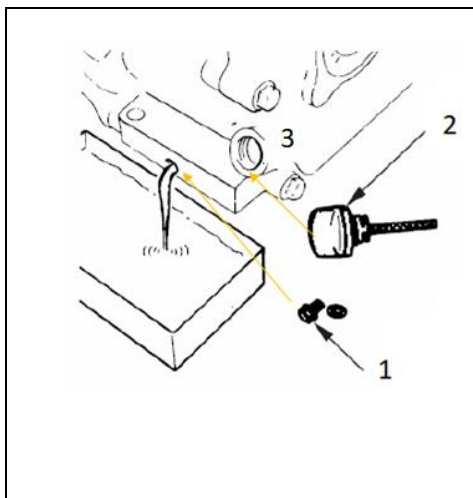
29.3.1 Engine oil exchange

The engine oil change would be explicitly mentioned here in order to be included in the machine operating manual. Oil change interval after the first 20h or 1 month after commissioning and then every 100h or 1x per year.

NOTICE



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



1. Remove the oil drain plug (1) from the engine.
2. Open the oil tank cap (2). Collect the draining oil in a collection container and dispose of it properly.
3. Retighten the oil drain plug after draining.
4. Fill in fresh oil through the filling opening (3) (see section Checking the engine oil level).
5. Use only high quality engine oil, e.g: SAE30, 15W40 or similar!

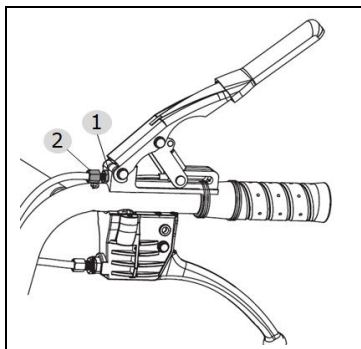
NOTICE



Drain the used oil when the engine is warm.
Warm oil drains quickly and completely.

29.4 Clutch

As clutch wears out, the same lever could have a wider opening, being so uneasy to use. To enable proper operation, the clutch cable must be adjusted:

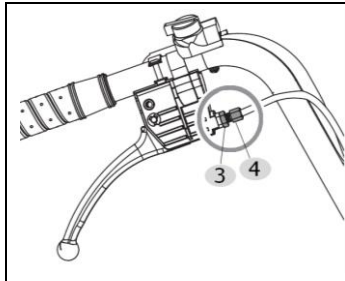


1. Loosen the jam nut (1) by turning it counter clockwise with 10 mm wrench.
2. The clutch lever is set to the original position with the adjusting nut (2).
3. Then retighten the lock nut (1).



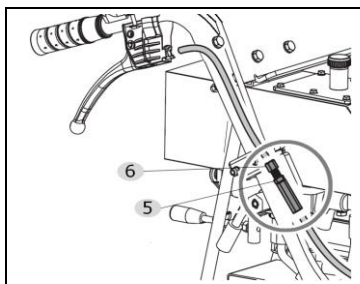
29.5 Steering

If you have difficulty steering the unit, you will need to adjust the steering levers with the special adjusters.



1. Loosen the jam nut (3) by turning it counter clockwise with 10 mm wrench.
2. Unscrew the adjust nut (4) to eliminate the play in the cable, which can occur after initial use or normal wear. Be very careful not to unscrew the adjust nut too much because this can create another problem: the loss of traction.
3. Then retighten the lock nut (3).

If the above adjustment does not create enough cable tension, follow the steps below:



1. Loosen the jam nut (5) by turning it counter clockwise with 10 mm wrench.
2. Unscrew the adjustment nut (6) to eliminate the play in the cable. (do not to unscrew the adjust nut too much because this can create another problem: the loss of traction).
3. Retighten the lock nut (5).

29.6 Tires

Check the pressure of tires periodically to make sure they are properly inflated.
Recommended pressure is: **2,1 bar** (0,21Mpa)

29.7 Gearbox

29.7.1 Check gearbox oil

The gearbox is pre-lubricated and sealed at the factory. Unless there is evidence of leakage or service has been performed on the gearbox, no additional lubricate should be required until 50 hours of use. For future use, check the oil level after every 50 hours of use.

NOTICE



Waste oils are toxic and must not be released into the environment!

Contact your local authorities for information on proper disposal.

If you remove the oil level plug and no oil flows out, please add oil and then screw the oil level plug.

NOTICE: recommended motor oil: GL-5, GL-6, SAE80W-90. Do not use synthetic oil!

If you want to replace oil, place the machine on a level ground. The machine must be stopped and still warm. Unscrew the filter cap and the drain plug. When the oil is drained, replace the drain plug, fill up with fresh oil and then replace the filter cap.

29.8 Storage

If the machine is stored for longer than 30 days:

- Let the machine cool down
- Clean the machine and dry
- Empty Tank and carburetor completely, avoid fuel spillage
- Store in a dry, out of reach of children place, well packaged



29.9 Disposal



Do not dispose the machine, machine components fuel and oil in residual waste. Contact your local authorities for information regarding the available disposal options. When you buy at your local dealer for a replacement unit, the latter is obliged to exchange your old.

30 TROUBLE SHOOTING

Trouble	Possible cause	Trouble
Engine will not start	• Incorrect starting sequence	• Observe the correct starting sequence
	• Dirty air filter	• Clean/replace air filter
	• No fuel supply	• Refuel
	• Fault in the fuel line	• Check the fuel line for kinks or damages
	• Engine flooded.	• Screw off, clean and dry the spark plug. Then pull the cranking rope several times and reinstall the spark plug
	• Spark plug connector not placed on.	• Place on the spark plug connector
	• No ignition spark	• Clean/replace spark plug • Check ignition cable
Engine starts and is stalled immediately	• Incorrect idle adjustment	• Contact customer service
Machine works with interruptions	• Carburetor incorrectly adjusted	• Contact customer service
	• Spark plug fouled	• Clean/replace spark plug • Check spark plug connector
Machine does not work with full performance	• Machine overloaded	• Too much pressure • soil too tough
	• Dirty air filter	• Clean/replace air filter
	• Carburetor incorrectly adjusted	• Contact customer service
Machine does not run while the engine is running	• Gear is not engaged properly	• Shift lever in right position switch



NOTICE

Should you in necessary repairs not able to properly to perform or you have not the prescribed training for it always attract a workshop to fix the problem.