

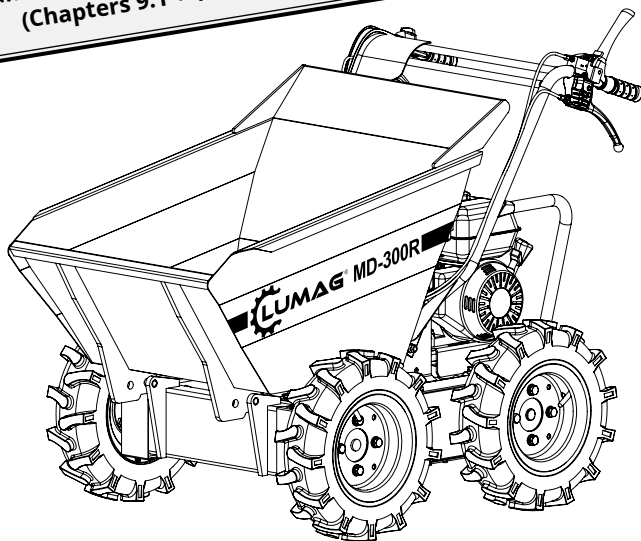


MD-300R

DANGER!

The engine and transmission oil was prepared for shipping drained.

Before first use, the engine and transmission oil must be refilled!
(Chapters 9.1 + 11.4)



Art.No. MD300R

D

original operating instructions
mini-transporter MD-300R

Model: MD-300R

Serial number: _____

Both the model number and the serial number can be found on the machine's rating plate. You should keep both numbers in a safe place for future reference. This manual explains the machine's functions and uses.

Before commissioning, read the operating instructions and observe the safety and warning instructions!

08/2020 MD300R
www.lumag-maschinen.de

OVERVIEW

1. PREFACE

2. INFORMATION ON THE OPERATING INSTRUCTIONS

3. INTENDED USE

4. SAFETY

- 4.1 Warnings
- 4.2 General safety instructions
- 4.3 Work area
- 4.4 Personal safety
- 4.5 Safe handling of fuel
- 4.6 Use and maintenance of the machine
- 4.7 Maintenance
- 4.8 Special safety instructions
- 4.9 Residual hazards and protective measures
- 4.10 Electrical system
- 4.11 Behavior in an emergency

5. WARNING AND NOTE SYMBOLS USED

6. DELIVERY

7. ASSEMBLY

- 7.1 Installing wheels
- 7.2 Installing the guide bar
- 7.3 Install the tipping container & gear lever
- 7.4 Engine oil

8. FUNCTIONS AND CONTROLS

9. COMMISSIONING

- 9.1 Filling engine oil
- 9.2 Filling fuel
- 9.3 Checks before each commissioning

10. OPERATION

- 10.1 Starting the engine
- 10.2 Idle
- 10.3 Stopping the engine
- 10.4 Raising and lowering the tipping container
- 10.5 Operating instructions

11. MAINTENANCE

- 11.1 Preventive measures
- 11.2 Adjusting the clutch
- 11.3 Setting up the control
- 11.4 Lubrication / Changing / checking transmission oil
- 11.5 Tires
- 11.6 Engine maintenance

12. STORAGE

13. TRANSPORT

14. TROUBLESHOOTING

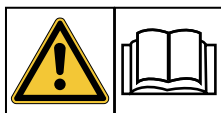
15. TECHNICAL DATA

16. WARRANTY / GUARANTEE / CUSTOMER SERVICE

17. EC DECLARATION OF CONFORMITY

18. COMPONENTS OF THE MACHINE

1. PREFACE



DANGER!

Read and follow the safety instructions and warnings before use.

Use this manual to familiarize yourself with the machine, its correct use and the safety instructions. Keep this manual in a safe place so that you can refer to this information at any time.

If you hand the machine over to other people, please also hand over the complete manual.

limitation of liability

We have endeavoured to provide you with as much information as possible about accident prevention when operating the machine, but we accept no liability for incomplete information on the danger points and sources listed.

The manufacturer assumes no liability for damages resulting from:

- Failure to follow the operating instructions
- Improper use of the machine
- Improper assembly, commissioning, operation and maintenance of the machine
- Operating the machine with defective safety devices or with improperly installed or non-functional safety and protective devices
- Failure to observe the instructions in the operating manual regarding transport, storage, function, operation, maintenance and care of the machine
- Unauthorized structural changes to the machine
- Inadequate monitoring of machine parts subject to wear
- Improperly performed repairs
- Disasters caused by foreign bodies and force majeure

name machine

The term "machine" replaces the commercial name of the object to which this operating manual - see cover page - refers.

copyright protection

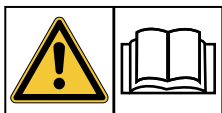
All documents are protected by copyright. Distribution and reproduction of documents, even in part, as well as communication of the content is not permitted unless expressly agreed.

reservations

Information on technical data, dimensions and illustrations of the machine as well as changes to safety standards are subject to further development and are therefore not binding for delivery in every case.

Subject to printing and wording errors.

2. INFORMATION ON THE OPERATING INSTRUCTIONS



This operating manual provides important information on how to use the MD-300R mini transporter. The prerequisite for safe work is correct compliance with all of the safety instructions and handling instructions provided. In addition, the local accident prevention regulations and general safety regulations applicable to the area in which the machine is used must be observed.

3. INTENDED USE

The MD-300R mini transporter is a motorized wheelbarrow, hand-held and has four-wheel drive. The machine is suitable for small loading and transport tasks in gardening, landscaping and agriculture, taking into account the specifications and safety instructions listed in this manual.

Only loads up to 300 kg may be moved. The permitted inclination in the direction of travel of 15° and transverse to the direction of travel of 10° must not be exceeded.

The mini transporter is equipped with a tipping trough as standard. Unlocking and tipping is done manually.

The machine is not approved for passenger transport.

Any other use or use beyond this is not considered to be in accordance with the intended use. The manufacturer is not liable for any damage resulting from this. The user alone bears the risk.

When using the machine on public roads, the provisions of the applicable national road traffic regulations must be observed (reflectors, lighting, etc.).

SECURITY

Observing the operating and maintenance instructions and carrying out maintenance work as well as adhering to the maintenance intervals are part of the intended use.



Persons who are not familiar with the operating instructions, children, young people and persons under the influence of alcohol, drugs or medication are not permitted to operate the machine.

4. SAFETY

This section provides a comprehensive overview of all important safety aspects for adequate protection of the operator and for safe and trouble-free operation. Failure to follow the instructions and safety information contained in this manual may result in significant hazards.

4.1 Warnings

Warning notices are marked with symbols in this operating manual. The safety notices highlighted with a warning triangle refer to your personal safety, while notices without a warning triangle refer solely to material damage.

The instructions must be strictly followed to avoid accidents, personal injury and property damage.

DANGER

Failure to follow these instructions may result in serious danger to life or death.

WARNING

Failure to follow these instructions may result in death or serious injury.

CAUTION

Failure to follow these instructions may result in minor to moderate injury.

A NOTICE

Failure to follow these instructions may result in damage to the engine or other property.

In addition, the operating instructions contain other important text passages marked with the word **DANGER** are marked.

4.2 General safety instructions

WARNING

Instructions on hazards, warnings and precautions must be strictly observed to minimize the risk of personal injury, property damage and improper servicing.

1. Read and observe the operating instructions and the symbols and signs on the machine. Learn their use and limitations as well as their potential sources of danger.
2. Familiarize yourself with the operation and proper use. You should know how to stop the machine and quickly switch off the control.
3. Read and follow all instructions and safety warnings in the engine manufacturer's manual, which is included separately with your machine. Do not operate the machine until you fully understand how to properly operate and maintain the engine and how to avoid accidental injury and property damage.

4.3 Work area

DANGER

Internal combustion engines pose a particular danger during operation and when refueling. Always read and observe the warnings and the additional safety instructions listed further down in this manual. Failure to observe these instructions could result in serious or even fatal injuries.

1. Do not start the engine in a closed room or garage. The engine's exhaust fumes contain poisonous carbon monoxide. Being in an atmosphere containing carbon monoxide can lead to unconsciousness and death. Do not run the engine without adequate ventilation and under no circumstances run it indoors.
2. Only operate the machine in good visibility and lighting conditions.
3. Adjust the working speed to the current conditions.
4. When reversing, use extreme caution to avoid slipping or falling.

4.4 Personal safety

WARNING

Familiarize yourself with the machine. Proper training is a prerequisite for working safely with this device. Incorrect operation or operation by untrained personnel can be dangerous. Read the operating instructions for this device carefully and familiarize yourself with the controls and their functions. Above all, learn how to stop the engine quickly and safely in an emergency.

SECURITY

DANGER!

Persons who are not familiar with the operating instructions, children, young people under the age of 18 and persons under the influence of alcohol, drugs or medication are not permitted to operate the machine.

1. Dress properly. Wear long pants, non-slip shoes or boots and gloves. Do not wear loose clothing, shorts or any type of jewelry. Protect long hair by tying it back at shoulder height. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can get caught in moving parts.
2. Always wear personal protective equipment (PPE).
 - Hearing protection to reduce the risk of hearing loss.
 - Eye protection to reduce the risk of eye damage.
 - Sturdy work gloves, leather gloves offer good protection.
 - Sturdy shoes or boots with non-slip soles.
 - Wear a protective helmet to protect against flying debris, depending on the work environment.
3. Inspect your machine before starting it. Make sure that all safety devices are correctly fitted and working. Make sure that all nuts, bolts, etc. are tightened properly.
4. Never use the machine if it is in need of repair or is in poor condition. Replace damaged, missing or repairable parts before you operate the machine. Check for fuel leaks and keep the machine in a safe condition.
5. Never remove or modify the protective devices. Therefore, check regularly that they are working properly.
6. Do not operate the machine if the engine switch does not turn it on or off. All gasoline-powered machines that cannot be controlled by the engine switch are dangerous and must be replaced. Defective switches must be replaced at a service center.
7. Make it a habit to remove all adjusting tools and wrenches from the machine area before operating the machine. Tools or wrenches left near a moving part of the machine can cause injury.
8. Be alert. Pay attention to what you are doing and use common sense when operating the machine.
9. Do not overestimate yourself. Do not operate the machine barefoot, in sandals or similar light footwear. Wear safety shoes that protect your feet and give you grip on slippery surfaces. Make sure you have a firm footing and keep Always keep your balance. This allows for better control of the machine in unexpected situations.
10. Avoid accidental starting. Make sure the engine is switched off before transporting the machine or carrying out maintenance or servicing. Transporting or servicing a running machine can lead to accidents.

4.5 Safe handling of fuel

DANGER

Internal combustion engines pose a particular danger during operation and when refueling. Always read and observe the warnings and the additional safety instructions listed further down in this manual. Failure to observe these instructions could result in serious or even fatal injuries.

1. When filling or emptying the fuel tank, use an approved fuel container. Do this in a clean outdoor area. Do not smoke and keep the area free from sparks, open flames or other sources of ignition while operating the machine. **Never fill fuel tanks in enclosed spaces!**
2. Keep grounded, conductive objects, such as tools, away from open live parts and connections to avoid sparks or arcing. These events could ignite smoke or fumes.
3. Always stop the engine and allow it to cool before filling the fuel tank. Never remove the fuel cap or add fuel when the engine is hot or running. Never operate the machine with known leaks in the fuel system.
4. Slowly loosen the fuel cap to release any pressure in the tank.
5. Never overfill the fuel tank. Do not fill the tank more than 1 1/2 cm below the bottom of the filler neck to allow enough room for expansion as the heat of the engine can cause the fuel to expand.
6. Replace all fuel tank and container caps securely and wipe up any spilled fuel. Never operate the machine without the fuel tank cap securely in place.
7. Avoid creating sources of ignition in the event of fuel spillage. If fuel is spilled, do not attempt to start the engine. Remove the machine from the area and avoid any sources of ignition until the fuel vapors have dissipated.
8. Store fuel in containers specially designed and approved for this purpose. Store fuel in a cool, well-ventilated area, away from sparks, open flames or other sources of ignition.
9. Never store fuel or a machine filled with fuel in an enclosed space where fuel vapors can come into contact with sparks, open flames or other sources of ignition (such as kettles, ovens, clothes dryers, etc.). Allow the engine to cool before storing it in an enclosed space.

4.6 Use and maintenance of the machine

1. Position the machine so that it cannot move during maintenance, cleaning, adjustment, installation of accessories or spare parts, or during storage.
2. Do not overload the machine. Only use a device suitable for the work you are doing. With a suitable machine you will work better and more safely within the specified performance range.

SECURITY

3. The engine must not be operated at excessive speed. Do not change the basic setting of the engine. The speed controller regulates the maximum permissible operating speed of the engine.
4. Do not run the engine at high speed when not working.
5. Keep hands or feet away from rotating parts.
6. Avoid contact with hot fuel, oil, exhaust fumes and hot surfaces. Do not touch the engine or muffler! These parts become extremely hot during operation. They remain hot for a short time even after the engine has been turned off. Allow the engine to cool before attempting any maintenance or adjustment.
7. If the machine starts to make an unusual noise or vibration, stop the engine immediately, pull the spark plug connector and look for
Find the cause. Unusual noises or vibrations are usually warning signs of problems.
8. Only use parts approved by the manufacturer. This machine complies with the relevant safety regulations. Repairs must only be carried out by an approved service center or our service team using original spare parts; otherwise accidents may occur to the user.
9. Maintain the machine. Make sure that all moving and fixed parts are in the correct position, that there are no broken parts or other defects that may affect the smooth operation of the machine. If any malfunction occurs, have the machine repaired before operating it. Many accidents are caused by poor maintenance.
10. Keep the engine and exhaust free of grass, leaves, excessive grease or carbon deposits to reduce the risk of fire hazard.
11. Never pour water or other liquids onto the machine. Keep the handles dry, clean and free from dirt. Clean the machine after each use.
12. Follow proper disposal laws and regulations for gas, oil, etc. to protect the environment.
13. Store the machine properly when not in use. Choose a safe location so that the machine cannot be started by unauthorized persons. Do not store the device outdoors or in a damp environment. Secure the machine against rolling away.

4.7 Maintenance

⚠ WARNING

Improper maintenance or failure to observe or resolve a problem can become a source of danger during operation. Only operate machines that have been regularly and correctly maintained. This is the only way you can be sure that you will operate your device safely, economically and without problems. And for a long time to come.

1. Before cleaning, repairing or inspecting the machine, make sure that the engine is stopped and all moving parts are stopped.
2. Before carrying out any work on the machine, disconnect the spark plug connector to prevent the engine from being started accidentally.
3. Have your machine serviced only by qualified personnel and only with original spare parts

repair. This will ensure the safety of the machine.

4.8 Special safety instructions

⚠ WARNING

Instructions on hazards, warnings and precautions must be strictly observed to minimize the risk of personal injury, property damage and improper servicing.

1. Check the work area carefully and keep it clean and free of dirt to avoid tripping hazards. Work on level ground.
2. Never stay in areas where your body would be at risk if you moved during assembly, installation and commissioning, maintenance, repair or relocation.
3. Keep spectators, children and animals at least 23 metres away. If they approach, switch off the machine immediately.
4. Do not climb onto the tipping trough or transport any persons.
5. Never park the machine, especially when loaded, on unstable ground that could give way.
6. Always release the clutch before starting the engine.
7. Start the engine carefully according to the instructions and keep a sufficient safety distance from moving machine parts.
8. Never leave the operating position while the engine is running.
9. Always operate the machine with both hands. Hold the handlebar firmly. Be aware that the machine may unexpectedly move upwards or forwards if it encounters buried obstacles such as large stones.
10. Operate the machine at walking pace! Never run with the machine.
11. Do not overload the machine. Drive at a safe speed and adjust it to the terrain gradient, road conditions and load to be transported.
12. Use extreme caution when reversing or pulling the machine toward you.
13. Always use extreme caution when crossing or driving on dirt roads, gravel paths or country lanes. Stay alert for hidden dangers or traffic.
14. On soft ground, drive in first forward/reverse gear. Do not accelerate quickly, make sharp turns or stop.
15. Be extremely careful when working on frozen ground as the machine may slip.
16. If possible, avoid driving on gravelly riverbeds, gravel terrain, reinforced concrete, stony fields, tree trunks, etc., as these operations may cause serious damage or shorten the life of the crawler tracks.
17. Do not operate the machine in a confined space where there is a risk that the operator could be crushed between the machine and other objects.
18. Do not use the machine on slopes with an angle greater than 15°.
19. When driving down a slope, whether forward or backward, always make sure

that the weight is evenly distributed. Always move in the direction parallel to the slope (up or down). To avoid danger, do not change gears on a slope.

20. When tipping the load from the tipping trough, the centre of gravity of the load is constantly changing and the ground conditions will be crucial for the stability of the machine. There are particular risks for tracked dumpers working on soft ground and whose load, such as clay, sticks to the vehicle body.

4.9 Residual hazards and protective measures

Mechanical residual hazards

Squeeze

Careless operation of the machine can result in serious injuries.

→ Be particularly careful on uneven terrain or slopes. Make sure you have a secure footing.

neglect of ergonomic principles

Negligent use of personal protective equipment (PPE)

Careless use or omission of personal protective equipment can result in serious injury.

→ Wear prescribed protective equipment.

Human behavior, misconduct

→ Always be fully concentrated on all work.

residual risk - Can never be ruled out.

Electrical Residual Hazards

Electrical contact

Touching the spark plug connector while the engine is running may result in an electric shock.

→ Never touch the spark plug connector or spark plug while the engine is running.

Thermal residual hazards

burns, chilblains

Touching the exhaust/housing may cause burns.

→ Allow the motor device to cool down.

danger from noise

hearing loss

Prolonged, unprotected work with the mini dumper can lead to hearing damage.

→ Always wear hearing protection. *Hazards from materials and other substances*

contact, inhalation

The exhaust fumes from the machine can cause health damage.

→ Only use the power tool outdoors and take regular breaks.

fire, explosion

Fuel is flammable.

→ Smoking and open fires are prohibited during work and refueling.

*Danger from vibration***whole-body vibration**

Prolonged work with the machine can lead to physical impairments due to vibrations.

→ Take regular breaks.

*Other hazards***Slipping, tripping or falling of persons**

On unstable and uneven surfaces, you may cause injury by tripping.

→ Be aware of obstacles in the work area. Always ensure you have a secure footing and wear safety shoes.

4.10 electrical system

People wearing a pacemaker must not touch the live parts of the ignition system when the engine is running.

4.11 Behavior in an emergency

If an accident occurs, initiate the necessary first aid measures and request qualified medical assistance as quickly as possible.

When requesting assistance, please provide the following information:

- *where it happened*
- *what happened*
- *how many injured*
- *what type of injury*
- *waiting for questions*

USED WARNING AND INFORMATION SYMBOLS

5. WARNING AND NOTE SYMBOLS USED

Symbols are provided on the machine to provide important information about the product and instructions for use.



Danger of carbon monoxide poisoning!

Do not start or run the engine in enclosed spaces, even if the doors and windows are open.



Gasoline and oil are extremely flammable and explosive!

Before refueling, turn off the engine and let it cool down. Keep the engine away from heat, sparks and flames. Do not smoke near the machine!



CAUTION! Use only clean fuel.



DANGER! This is about your safety.

The symbol indicates a danger, warning or caution.



Read and follow the operating instructions and safety instructions before commissioning. Otherwise, the risk of injury to the operator and other persons increases.



Wear eye and hearing protection. Helmets are mandatory to protect against flying debris.



Wear protective gloves.



Wear safety shoes with a non-slip sole and steel toe cap.



It is forbidden to remove or modify protective and safety devices.



DANGER!

Before cleaning, maintenance or repair work, switch off the engine and disconnect the spark plug connector.

USED WARNING AND INFORMATION SYMBOLS



RISK OF TOLLING!

If the maximum permitted incline is exceeded, there is a risk of tipping over. Do not exceed the maximum slope of 15% under any circumstances. Never tip the container on soft ground or when it is inclined.



WARNING! Danger of flying objects.

Bystanders, pets and livestock must never stand in front of or next to the moving mini-transporter. When the engine is running, keep a sufficient safety distance of at least 23 meters.



Keep bystanders away.



Warning of hot surface!

Contact can cause burns. Only carry out maintenance, servicing and cleaning work when the engine has cooled down.



WARNING! Keep hands and feet away from rotating parts. Only touch machine parts when they have come to a complete standstill. Never open or remove protective devices when the engine is running. Danger from rotating parts such as chains or toothed belts.



WARNING! Danger of crushing.

Maintain a sufficient safety distance from moving parts of the machine. Danger when unloading the tipping container.



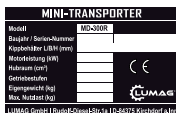
gear transmission (3V + 1R)



The gearshift lever may only be operated when the drive is switched off and the engine speed is low.



Guaranteed sound power level LWA



NAMEPLATE

Equipped with model name, year of manufacture and serial number. Please always state this information when ordering spare parts or for service information.

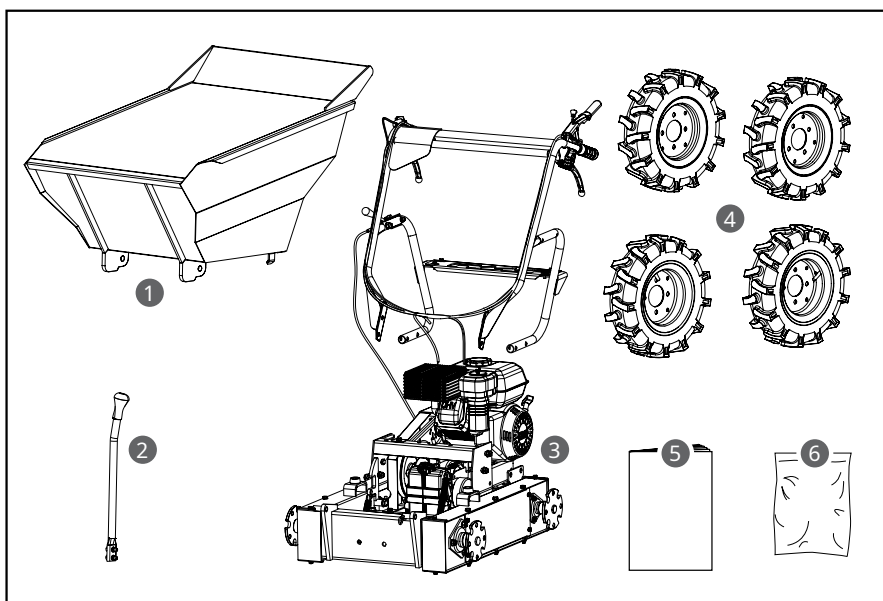


Old electrical/motor devices are recyclable materials and therefore do not belong in household waste! Please dispose of the components in an environmentally friendly manner.

6. SCOPE OF DELIVERY

The all-terrain mini transporter with tipping trough is delivered partially pre-assembled. The parts are carefully packaged for shipping.

After unpacking the machine, check that all of the parts listed below are present. If any of the parts listed are missing, notify your dealer.



1 tipping container

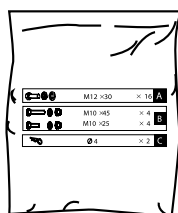
2 gear levers

3 Pre-assembled machine unit with petrol engine and guide bar

Wheel set (4 pieces)

5 Operating instructions

6 mounting kit

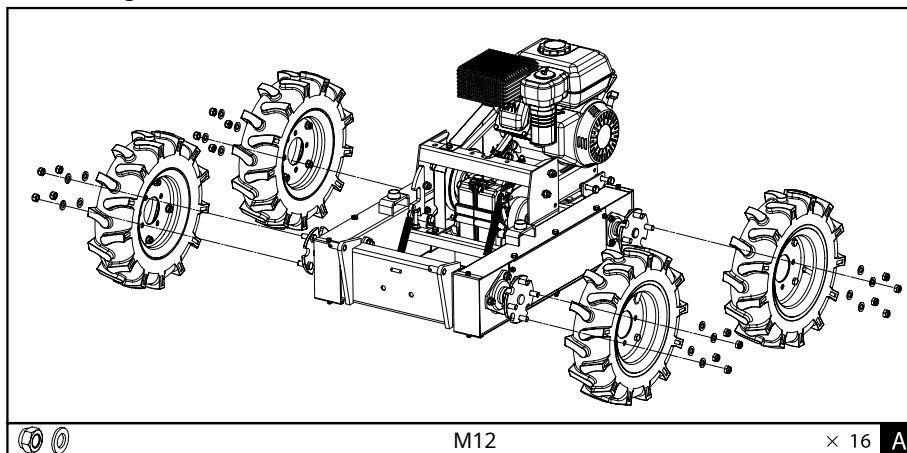


mounting kit

7. ASSEMBLY

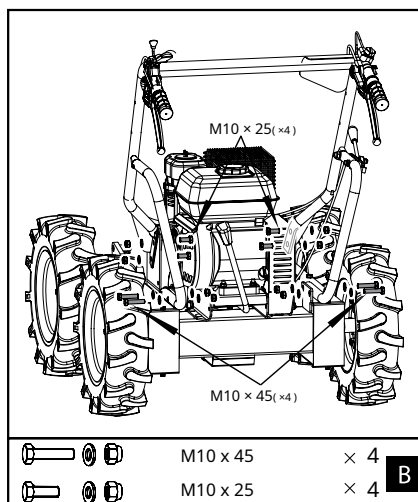
If you follow the assembly instructions below, the machine will be assembled in just a few minutes.

7.1 Installing wheels



Fasten each wheel with 4 M12 lock nuts and 4 washers.

7.2 Installing the guide bar



Align the holes on the guide bar with the chassis.

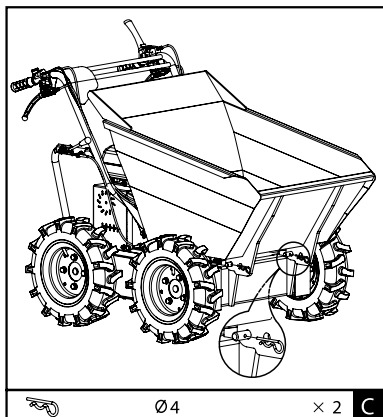
Attach the guide bar on both sides:

front of the chassis with
2 hexagon screws M10 x 25,
2 washers and 2 lock nuts.

rear of the chassis with
2 hexagon screws M10 x 45,
2 washers and 2 lock nuts.

ASSEMBLY

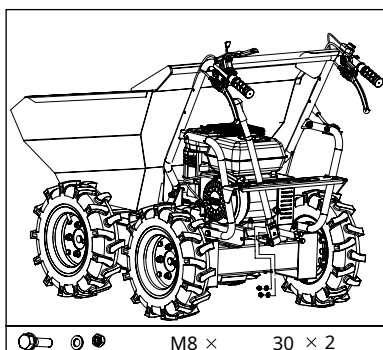
7.3 Installing the tipping container & gearshift lever



Position the tipping container over the chassis and bracket.

Align the holes with the bracket.

Insert the two retaining bolts through the hole and secure the container on both sides with a safety pin $\varnothing 4$.



Mount the gear shift lever to the spring plate.

Remove the bolts, washers and nuts from the gear shift lever.

Align the upper hole of the lever with the center of the long hole in the spring plate and also the lower holes and secure it with M8x30 bolts, washers and nuts.

7.4 Engine oil

The machine is delivered without engine oil.

**DANGER!**

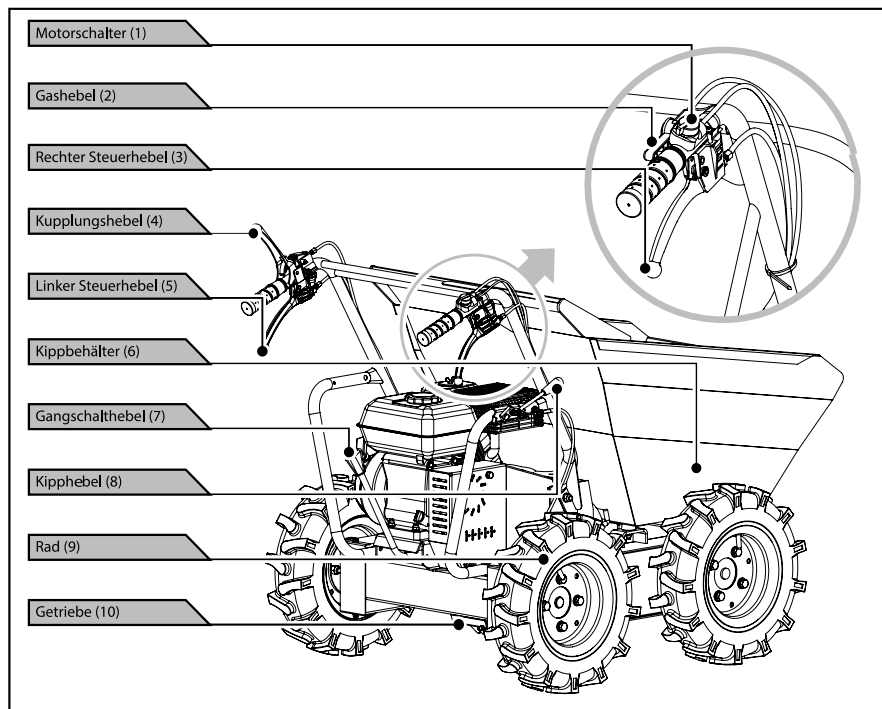
The engine oil has been drained for shipping. Failure to refill the oil pan with oil before starting the engine will result in permanent damage and void the engine warranty.

Before first use, MOTOR OIL be filled up!

**PLEASE READ CAREFULLY:**

Please also note the operating instructions in the enclosed engine manual.

8. FUNCTIONS AND CONTROLS



engine switch (1)

The engine switch turns the ignition system on and off.

The engine switch must be in the ON position for the engine to run. Turning the engine switch to the OFF position will turn the engine off.

throttle (2)

The throttle lever controls the engine speed. By operating the throttle lever accordingly, the engine runs faster or slower.

Right control lever (3)

This lever is operated to move to the right.

clutch lever (4)

The clutch is engaged by pressing the clutch lever. To disengage the clutch, release the lever.

FUNCTIONS AND CONTROLS

Left control lever (5)

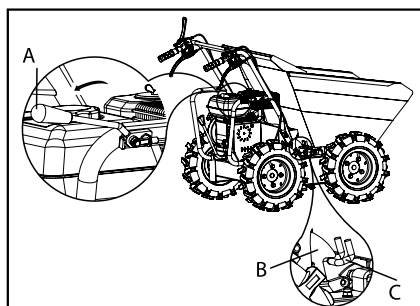
This lever is operated to move to the left.

gearshift lever (7)

This lever controls the forward and backward movement of the machine.

rocker arm (8)

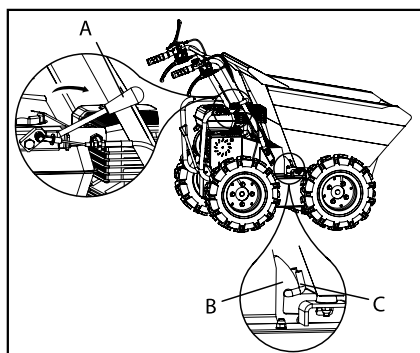
This lever makes emptying the container easy.



Tipping is done by hand or you operate the mechanism and then tilt the trough.

1. Push the lever forward in direction A and unlock the rocker arm, see B + C.

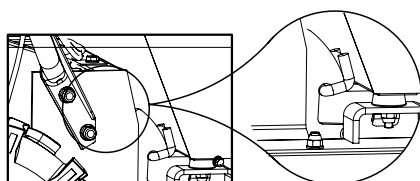
2. Tilt the container forward to discharge the contents.



The container is tilted back to its original position by hand.

1. Push the lever backwards in direction A and lock the rocker arm, see B + C.

2. By lifting the container slightly you can check whether the container is securely hooked and locked.



DANGER!

Before you start working with the machine, check that the tipping container is really secured as shown in the illustration.

9. COMMISSIONING

⚠ DANGER

Danger to life due to improper commissioning!

You may only carry out the work described in this chapter after you have read and understood Chapter 4, "SAFETY". It concerns your personal safety!

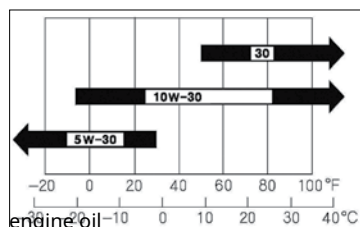
9.1 Filling engine oil

For transport reasons, the engine is shipped from the factory without engine oil!



A NOTICE

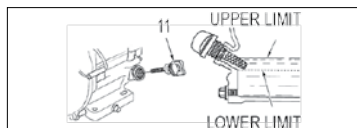
The engine oil must be topped up before the first use! Incorrect oil filling can lead to irreparable damage to the engine. In this case, the seller and manufacturer will not provide any warranty.



1. Position the machine so that the engine is horizontal.
2. Use commercially available engine oil with specification 10W-30 or 10W-40.

Engine oil: filling quantity approx. 0.6 liters.

Do not overfill!



1. Unscrew the engine oil filler plug.
2. Wipe the dipstick with a clean cloth and reinsert it, do not screw it in.
3. Remove the dipstick again and read the oil level, if necessary top up the engine oil to the level mark "MAX, UPPER LIMIT or H". When the engine is running, the engine oil filler screw must always be firmly seated in the filler neck!
4. If the oil level is too low (MIN, LOWER LIMIT or L), top up with equivalent engine oil

COMMISSIONING

9.2 Filling fuel

⚠ DANGER

Health and explosion hazards from combustion engines. Be careful when handling fuel!



- The engine's exhaust gases contain poisonous carbon monoxide. Being in an environment containing carbon monoxide can lead to unconsciousness and death. Do not run the engine in an enclosed space.



- Before starting, read the machine's operating instructions and the engine manual



- Keep the engine away from heat, sparks and flames. Do not smoke near the sweeper!



- Petrol is extremely flammable and explosive. Before refueling, turn off the engine and let it cool down.

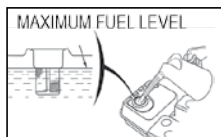
⚠ CAUTION

Engine damage! Risk of engine damage due to incorrect gasoline.



- **Danger of engine damage due to incorrect petrol. Only fill up with petrol RON 95 or higher. Under no circumstances should you fill up the machine with 2-stroke mixture, diesel or non-approved fuels.**

This engine requires only regular unleaded gasoline with a research octane rating of 95 or higher. Use only fresh, clean fuel. Water or impurities in the gasoline will damage the fuel system.



Tank volume: 3.6 liters

Refuel in a well-ventilated area with the engine stopped. If the engine has been running immediately before, allow it to cool down first. Never refuel the engine in a building where gasoline vapors can be reached by flames or sparks.

⚠ WARNING

Gasoline is extremely flammable and explosive. You can suffer burns or other serious injuries when handling fuel.

When refilling fuel, please note:

- Turn off the engine and allow it to cool for at least 10 minutes before removing the fuel tank cap.
- Keep the engine away from heat, sparks and flames.
- Fill the fuel outdoors or in a well-ventilated area.
- To allow room for the gasoline to expand, do not fill beyond the bottom edge of the fuel filler neck.
- Keep gasoline away from sparks, open flames, pilot lights, heat sources and other sources of ignition.
- If fuel is spilled, wait until the vapors have dissipated before starting the engine.

refueling

1. Clean the area around the fuel tank cap of dirt and foreign objects.
2. Remove the fuel tank cap.
3. Fill the fuel tank with petrol (RON95 or higher). To allow room for the petrol to expand, do not fill beyond the bottom edge of the fuel filler neck.
4. Screw the tank cap tightly onto the tank neck.
5. Wipe up any spilled gasoline immediately.

A NOTICE

Only fill the tank up to 1 1/2 cm below the lower edge of the filler neck so that the contents have room to expand.

9.3 Checks before each commissioning

Before starting up the machine, carry out the following checks. The machine must be on a firm, level surface. This is the only way to ensure safe operation of the machine.

- Are all covers and mudguards correctly fitted?
- Is the machine complete or are there any missing parts?
- Check all electrical wiring and connections for damage or corrosion.
- Check all load-bearing metal parts for mechanical damage.
- Check the tire pressure.
- Check the engine:
 - the engine oil level,
 - the filling of the fuel tank (the tank should be at least half full),
 - the condition of the air filter,
 - the fuel lines and connections for leaks and mechanical damage,
 - the fuel tank, cap and connections for cracks and leaks.

10. OPERATION



DANGER!

Check that every nut and screw is absolutely tight before using the machine. The machine vibrates heavily during operation. Screws that are not tightened tightly can come loose and get lost, leading to dangerous situations!

⚠ DANGER

Do not start the engine in a closed room. The exhaust fumes contain carbon monoxide, which is very toxic if inhaled!

⚠ WARNING

Warning of hot surfaces!

The exhaust and other engine parts become very hot during operation. Never touch the hot engine. Keep a safe distance from hot surfaces and keep children away from the running engine.

10.1 Starting the engine

A detailed description of engine operation and all related precautions and procedures can be found in the Engine Manual, which is supplied separately with the machine.

Check that there is sufficient fuel in the fuel tank.

Start the engine once you have assembled your machine correctly.

starting a cold engine

When you start the machine, place it on a level surface.

1. Place the gearshift lever (7) on the gearbox into the neutral position. 
2. Slide the fuel tap to the right to open it. 
3. Activate the choke. When the engine is cold, push the choke lever all the way to the left.
4. Move the throttle lever (2) on the handlebar to the middle position.
5. Turn the engine switch (1) to ON.
6. Pull the starter handle gently until you feel resistance. Then pull the rope out gently and quickly and let it run back slowly. Repeat until the engine starts.
7. Gradually move the choke lever back to ON/OPEN while the engine is warming up.

8. Select the desired gear and slowly pull the clutch lever (4). If the gear does not engage immediately, slowly release the clutch lever and repeat the process. This will start the machine moving.
9. Pull the throttle lever (2) to increase the speed accordingly.
10. The machine has control levers (3 + 5) on the handlebar and can be easily steered in this way. To drive to the right or left, simply operate the right (3) or left (5) control lever.

starting a warm engine

If the engine is still warm from previous operation, use of the choke lever is usually not required. Follow the instructions above, but omit points 3 and 7, which refer to the choke.

CAUTION

Be careful with hot engine parts!

When the engine is running and immediately after switching off the machine, there is a risk of burns from the exhaust and other engine components. Children must be kept away from the running engine and hot components.



10.2 Idle

To protect the engine when not working, move the throttle to the SLOW "L" position. Shifting the engine down to idle extends engine life, saves fuel, and reduces machine noise.

10.3 Stopping the engine

To stop the engine in an emergency, release the clutch lever (4) and turn the engine switch (1) to the OFF position.

Under normal conditions, proceed as follows.

1. Move the throttle lever to the SLOW position.
2. Let the engine idle for 1-2 minutes.
3. Turn the engine switch to OFF.
4. Turn the fuel tap to OFF (CLOSE).

A NOTICE

Do not set the choke lever to CHOKE to stop the engine. Danger of backfiring or damage to the engine!

10.4 Raising and lowering the tipping container

You can raise and lower the tipping container using the tilting lever (8). To lift, first unlock the trough using the handle. After tipping is complete and before driving on, the container must be secured again.

9.5 Operating instructions

- Steering sensitivity increases in proportion to the speed and load of the machine: if the machine is unloaded, a light pressure on the lever is sufficient to produce a steering movement. If the machine is loaded, a slightly higher pressure is required.
- The mini transporter has a maximum capacity of 300 kg. However, it is recommended to measure and adjust the load according to the ground on which the machine is to be used.
- It is therefore recommended to drive in a low gear and with particular caution on difficult routes. In such situations, the machine should be driven in a low gear for the entire route.
- Avoid sharp turns and frequent changes of direction when driving, especially on rough, hard terrain that has many sharp, uneven spots and causes high friction.
- Although the machine has four-wheel drive, please remember to be careful when operating in adverse weather conditions (ice, heavy rain and snow) or on surfaces where the mini transporter may become unstable.
- When the clutch lever is released, the machine stops and brakes automatically.
- If the machine is stopped on a slope, one of the wheels must be secured with a wedge.

A NOTICE

The mini-transporter is not approved for use on public roads.

11. MAINTENANCE

Regular maintenance extends the service life of the machine and ensures trouble-free operation.

All persons who carry out cleaning, maintenance and repair work on the sweeper must be technically qualified and appropriately trained. They must be aware of all dangers and risks associated with the device. Further work not described in this operating manual may only be carried out by your LUMAG specialist workshop or authorized specialist workshops.



⚠ WARNING

Before carrying out any cleaning, maintenance or repair work, switch off the engine, wait until the machine has come to a standstill and remove the spark plug connector.



Do not carry out maintenance work near open flames. Fire hazard!

DANGER!

Also observe the maintenance instructions in the engine manual. Have the machine checked and serviced by a specialist workshop at the end of the season.

11.1 Preventive measures

- **Switch off the engine and return all function levers to their original position.** Allow the engine and exhaust system to cool before touching any parts.
- **Check the general condition of the machine.** Check the machine for loose screws, misalignment, binding of moving parts, cracked or broken parts, and any other features that may affect the safe operation of the machine.
- **Remove all dirt and other deposits that have accumulated on the wheels and on the machine.** Clean the machine after each use. Then lubricate all moving parts with a high-quality, light engine oil.

A NOTICE

Never use a high-pressure cleaner to clean the machine. Water can penetrate into sealed areas of the machine and gearbox and damage shafts, gears, bearings or the motor. The use of high-pressure cleaners shortens the service life and reduces the operational suitability of the machine.

11.2 Adjusting the clutch cable

As the V-belts become worn, the response may change and proper operation may no longer be possible. In this case, the cable must be adjusted and the lever returned to its original position by operating the adjuster and adjusting the lock nut accordingly.

11.3 Setting up the control

If the device is difficult to steer, the steering levers must be adjusted using the adjusting screw.

1. Loosen the lock nut and unscrew the adjusting screw to eliminate any play in the cable that occurs during initial operation or due to normal wear. **DANGER!** Do not screw the adjustment screw too far, otherwise another problem could arise: the device will stop.
2. At the end of the adjustment process, do not forget to tighten the lock nut again.

11.4 Lubrication / Changing / checking transmission oil

DANGER!

Check the transmission oil before first use and top up if necessary!

Check oil level every 50 hours of operation. To do this, carefully loosen the oil control screw on the left side of the gear block (in the middle) using a 10mm hexagon socket wrench, see illustration. The machine must be in the horizontal position. If no oil comes out when you loosen the oil control screw, fill the gear block with 80W-90 gear oil and tighten the control screw again.

Changing the transmission oil

Oil change once a year.

Required parts: approx. 1.5 liters of gear oil (80W-90) Required tools: 10 and 16 hexagon socket wrenches

First you have to lift the machine. Without a lifting platform, such a change is hardly possible. Then you have to look where the oil filler and oil drain plugs are located.

Draining the transmission oil

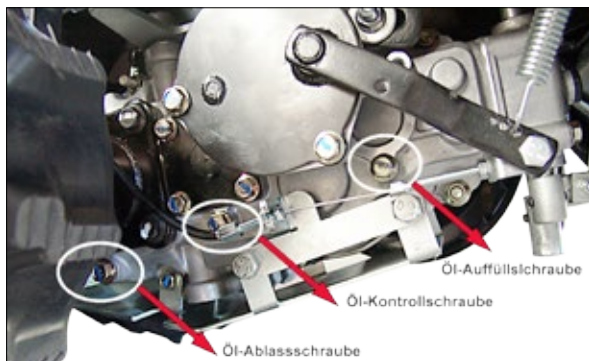
On the left side of the gearbox, directly under the axle funnel, is the oil drain plug, see illustration. You have to unscrew this with a 16mm hexagon socket wrench and let the oil drain out. Then screw it back in (the thread must be clean!) and tighten it with 25-30 Nm!

refill transmission oil

The oil filler plug is located on the left side of the gearbox, directly below the brake rod.

It is unscrewed using the same hexagon socket as the oil control screw. You then have to fill in transmission oil using a hose or a special pump. There is enough oil in there if oil runs out of the opening again.

(Guideline value: the amount of oil to be filled is approx. 1.5 liters; transmission oil specification: 80W-90) Now screw the screw back in (make sure the thread is clean!) and tighten it with 25-30 Nm.



Gearbox block with oil check plug, drain plug and filler plug

11.5 Tires

Pay attention to the wear and tear on the tires. Long periods of inactivity and exposure to sunlight increase the risk of rapid aging of the tires.

The tires should be checked weekly:

- Checking the air pressure
- Checking the tires
- Aging state

air pressure

The air pressure in each tire must be checked regularly. Operating with under- or over-inflated tires can result in serious injury.

Recommended tire pressure in all wheels: 2.1 bar (30 psi)

11.6 Engine maintenance

For information on engine maintenance, refer to the Engine Manual supplied with the machine. This Engine Manual provides you with detailed information and a maintenance schedule to help you perform the appropriate tasks.



PLEASE READ CAREFULLY:

Please note the operating instructions in the enclosed engine manual.



Used engine oil must be disposed of in an environmentally friendly manner. Take used oil to a public collection point or comply with the relevant national regulations in which the machine is used. Do not dispose of the oil in drains, on the ground or in any type of water.

12. STORAGE

DANGER

Do not store the machine with fuel in an unventilated area where fuel vapors can come into contact with flames, sparks, pilot lights, or other sources of ignition.

If the mini transporter is not used for more than 30 days, the following steps must be followed to store the machine:

1. Completely drain the fuel tank. Fuel containing ethanol or MTBE can go stale during a 30-day storage period. Old fuel has a high gum content and can clog the carburetor and restrict fuel flow.
2. Start the engine and let it run until it stops. This will ensure that no fuel remains in the carburetor. This will prevent gum buildup in the carburetor and possible engine damage.
3. While the engine is still warm, drain the oil from the engine. Add fresh engine oil to the **engine manual** refill with the recommended grade.
4. Clean the outside of the machine with a clean cloth. Make sure that the ventilation slots are not blocked.

A NOTICE

Do not use aggressive or petroleum-based cleaning agents to clean plastic parts. Such chemicals can damage plastic parts.

5. Check the machine for loose or damaged parts. Repair or replace any damaged parts and tighten any loose bolts or lock nuts.
6. Store the machine on level ground in a clean, dry, well-ventilated building.

WARNING

Risk of fire and explosion!

Do not store equipment with gasoline in an unventilated building where gasoline vapors can be reached by flames, sparks, pilot lights, or other ignition sources.

13. TRANSPORT

⚠ WARNING

Before transporting the machine or storing it in an enclosed space, switch off the engine and allow it to cool down to avoid burns and to eliminate the risk of fire. It must also be ensured that people are not endangered by the machine tipping over or slipping or by machine parts flying up or down.

The mini transporter is heavy and must not be lifted alone. Get help or use the appropriate equipment to lift the machine.

- Always switch off the engine during transport!
- Make sure that the tipping container is secured.
- Transport the machine in a horizontal position to avoid fuel or oil leakage.

- When transporting over long distances, the fuel tank must be completely emptied.
- Use the lifting points when lifting.
- Attach suitable hooks to the anchor point and pull up carefully to avoid injury.

- Secure the machine on the transport vehicle against rolling, slipping or tipping over and also lash it in suitable places.

A NOTICE

Before lifting, ensure that the lifting device is capable of safely supporting the weight of the machine (see "Technical data"). Loading ramps must be load-bearing and stable.

TROUBLESHOOTING

14. TROUBLESHOOTING

Disturbance	Caused	remedy
The engine doesn't start	spark plug connector removed	Securely attach the spark plug connector to the spark plug
	Lack of fuel or old fuel	Fill the fuel tank with clean, fresh gasoline
	Choke is not activated	Choke lever during cold start in choke position 
	fuel line blocked	Clean the fuel line
	Spark plug dirty	Clean, adjust gap or replace spark plug
	engine flooded	Wait a few minutes, start again, but without fuel intake (primer)
Engine runs irregularly	spark plug connector loose	Attach the spark plug connector and tighten it.
	Engine running on CHOKE	choke lever to ON reset (OPEN)
	Fuel line blocked or old fuel.	Clean the fuel line. Fill the tank with clean, fresh gasoline
	exhaust clogged	Clean the exhaust opening
	Water or dirt in the fuel system	Empty the fuel tank and fill it with fresh fuel
	air filter dirty	Clean or replace air filter
	carburetor not adjusted correctly	See engine manual
engine overheats	Engine oil level too low	Fill the crankcase with the correct oil
	air filter dirty	Clean the air filter
	Insufficient airflow	Remove and clean the housing
	carburetor not adjusted correctly	See engine manual
Machine does not move even though the engine is running	Gear was not engaged correctly	Make sure that the gear lever is not between two gears
	Check the timing belt for smooth running and play	tensioning the timing belt

If these measures do not resolve the problem or if errors occur that are not listed here, have your machine checked by a specialist.

15. TECHNICAL DATA

Model	MD-300R
drive motor	1 cylinder 4-stroke OHV engine
engine power	4.1 kW (at 3,600 rpm)
displacement	196 cm ³
gear stages	3 V + 1 R
driving speed	0 - 3.6 km/h / forward 0 - 1.2 km/h / backward
starting device	recoil starter
drive system	all-wheel drive
ground clearance	100 mm
tilting device	Mechanically
universal tires	4.00 - 8
dead weight	147 kg
tipping container (L/W/D)	940 mm / 635 mm / 330 mm
Machine dimensions (L/W/H)	1327 mm / 730 mm / 1038 mm
load capacity max.	300 kg
<i>emissions values idling</i>	
sound pressure level LpA	84.7 dB(A)
sound power level LwA	98 dB(A)
hand and arm vibration	not more than 2.5 m/s ²
whole-body vibration	not more than 0.8 m/s ²
<i>operating resources</i>	
engine oil	SAE 10W-30 or 10W-40 / 0.6L
transmission oil	80W-90
fuel	unleaded petrol RON95 / 3.6 l

The values given are emission values and do not necessarily represent safe workplace values. Although there is a correlation between emission and immission levels, this cannot be used to reliably determine whether or not additional precautionary measures are necessary. Factors that influence the current immission level at the workplace include the nature of the work area, other noise sources, e.g. the number of machines and other adjacent work processes. The permissible workplace values can also vary from country to country. However, this information is intended to enable the user to make a better assessment of hazard and risk.

WARRANTY / GUARANTEE

16. WARRANTY / GUARANTEE / CUSTOMER SERVICE**WARRANTY**

The statutory warranty period applies to the device. Any defects that can be proven to be due to material or assembly errors must be reported to the seller immediately. Proof of purchase of the device must be provided by presenting the invoice and receipt when making a warranty claim.

The warranty is excluded with regard to parts if defects have arisen due to natural wear and tear, temperature or weather influences or due to defects resulting from negligent assembly, faulty connection, incorrect fuel/fuel mixture, installation, operation, maintenance, lubrication or force.

Furthermore, no warranty is provided for damage caused by inappropriate or improper use of the machine, such as improper modifications or repair work carried out by the owner or third parties, or intentional overloading of the machine. Wear parts with a limited service life (e.g. V-belts, clutch, throttle cable, spark plug, air filter, battery, blades, hoses, wheels, tools and other aids) as well as all setting and adjustment work are excluded from the warranty.

GUARANTEE

LUMAG guarantees impeccable quality and, without prejudice to the statutory warranty, provides a guarantee in the event of material or manufacturing defects. The guarantee for LUMAG products is 24 months for exclusively private use, and 12 months for commercial or professional use or rental, from the date of delivery.

The buyer must always prove warranty claims by providing the original purchase receipt. A copy of this must be enclosed with the warranty application. The buyer's address and machine type must be clearly identifiable for professional or commercial use. Without the original purchase receipt, we can only carry out the repair for a fee.

Please do not send any devices back to us without a SERVICE NUMBER that you have received from our service department. If we receive devices unsolicited, we cannot accept and process them. To request a SERVICE NUMBER, please contact our service team at: info@lumag-maschinen.de

Please clearly label the shipping box with the SERVICE NUMBER to ensure quick identification.

Warranty work is carried out exclusively by our LUMAG service workshop. Defects that occur within the warranty period due to material or manufacturing defects must be remedied by repair if they have occurred despite proper use and care of the device. We reserve the right to make two repairs if the same defect occurs. If repair fails or is impossible, the device can be exchanged for an equivalent device. If the exchange is also unsuccessful or impossible, there is the option of a replacement.

Normal wear and tear, natural aging, improper use, and cleaning, maintenance and adjustment work are generally not covered by the guarantee (e.g. cutting device, air and fuel filters, spark plugs and recoil starters, drive belts, etc.). Due to operation and use, some components are subject to normal wear and tear, even when used as intended, and may need to be replaced in good time.

CUSTOMER SERVICE

If you have any technical questions, information about our products or would like to order spare parts, our service team is available as follows:

Service time: Monday to Thursday from 7.30 a.m. to 12 p.m. and 1 p.m. to 5 p.m.,
Friday from 7.30 a.m. to 12:30 p.m.
Phone: 0049 / (0)8571 / 92 556-0
Fax: 0049 / (0)8571 / 92 556-19
E-mail: info@lumag-maschinen.de

if they have occurred despite proper operation and care of the machine, by

17. EC DECLARATION OF CONFORMITY

In accordance with the provisions of the EC directives

- Machinery Directive 2006/42/EC
- Electromagnetic Compatibility 2014/30/EU
- Outdoor Directive 2000/14/EC

the company explains:

LUMAG GmbH
Rudolf-Diesel-Str. 1a
D-84375 Kirchdorf/Inn
Phone: + 49 / 8571 / 92 556-0
Fax: + 49 / 8571 / 92 556-19

that the product

Device type: mini-transporter
Device type: MD-300R

meets the essential protection requirements of the above-mentioned EC directives. Conformity is based on the following standards:

EN 474-1:2006+A4:2013

Earth-moving machinery - Safety - Part 1: General requirements

EN ISO 12100:2010

Safety of machinery — General principles for design — Risk assessment and risk reduction

EN 55012:2007+A1

Vehicles, boats and equipment powered by internal combustion engines - Radio interference characteristics - Limits and methods of measurement for the protection of external receivers

EN 61000-6-1:2007

Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments

EN ISO 3744:1995

Acoustics - Determination of sound power and sound energy levels of noise sources from sound pressure measurements - Envelope method of accuracy class 2 for an essentially free sound field above a reflecting plane

ISO 6395:1988

Acoustics - Measurement of noise emission from earthmoving machines - Conditions for dynamic testing

Person authorized to compile the technical documentation: Gabriele Denk

The declaration of conformity refers only to the machinery in the condition in which it was placed on the market; it does not take into account any parts and/or interventions subsequently fitted by the end user.

Kirchdorf, March 20, 2019

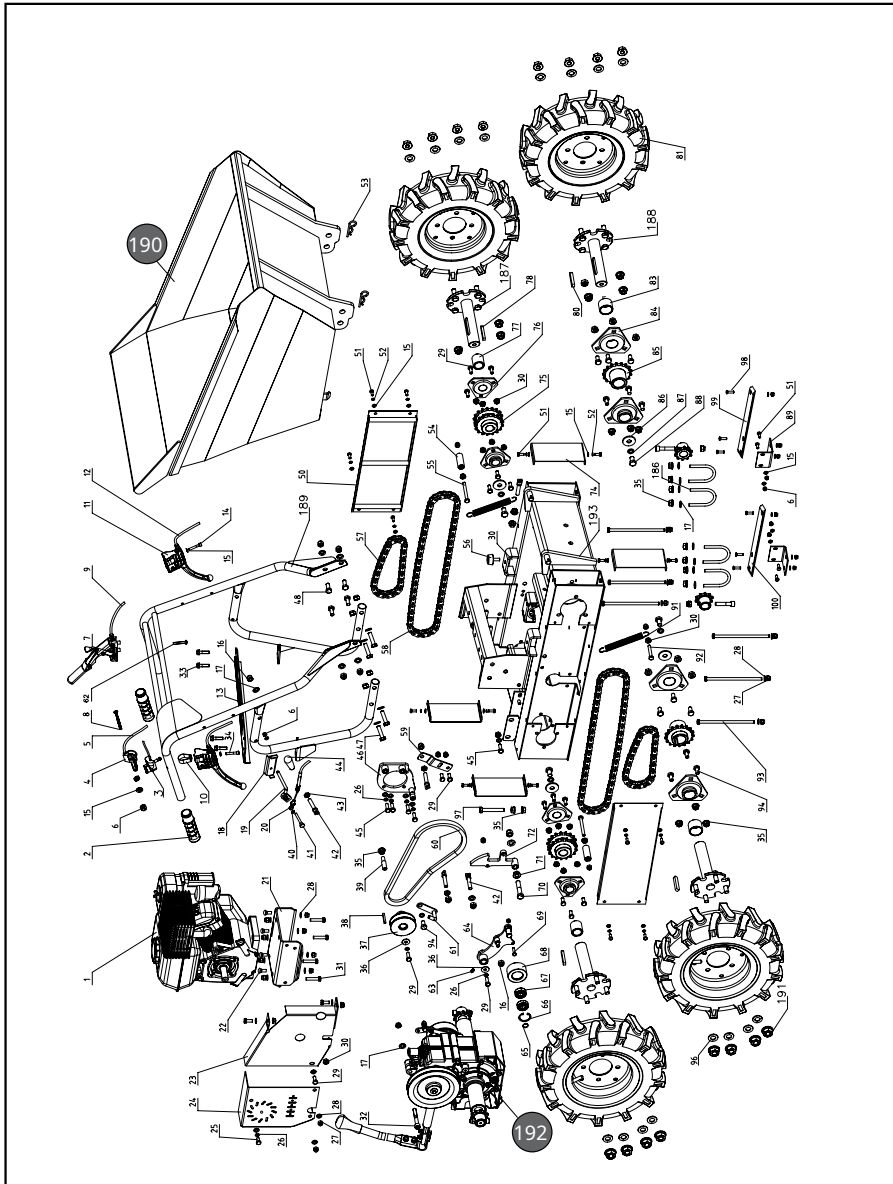
Christopher Weißenhorner, Managing Director

distributor, authorized representative



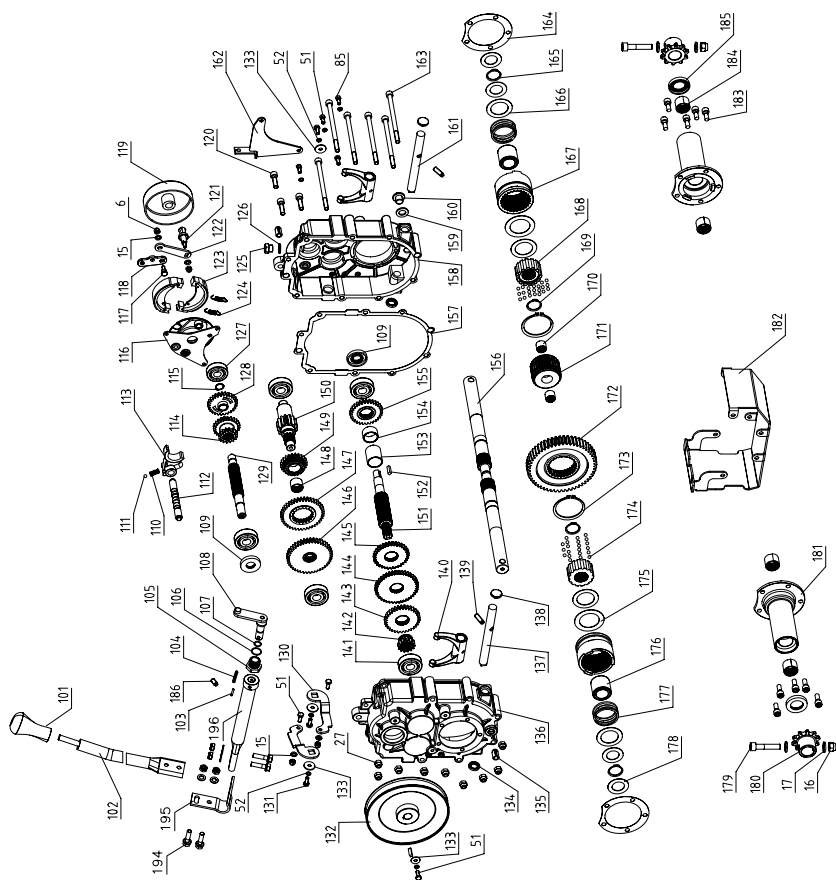
Signature

18. COMPONENTS OF THE MACHINE



COMPONENTS OF THE MACHINE

Gear Box



NOTES

This image shows a full page of white paper with horizontal dashed lines, typical of primary school writing paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



This image shows a full page of white paper with horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Subject to change!

Version 1101MD300R (08.20 D)_V1

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