

M A N U A L



**NAX 1000S**










over **100** years  
of **EXPERIENCE**




A

**NAX 1000S** 2020

 <b>1,82 kW</b> 2900/min	 <b>125 cc</b>	 <b>42 cm</b>
 <b>5,9 Nm</b> 2200/min	 <b>450E</b> SERIES	 <b>24 kg</b>



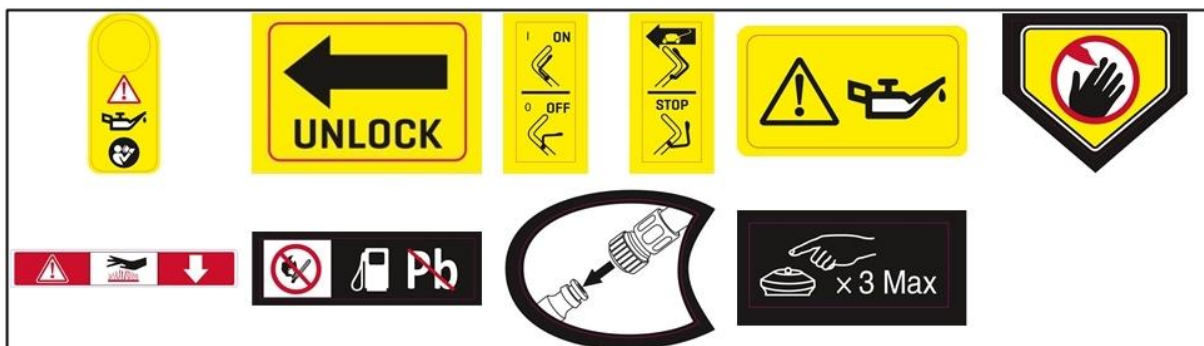
NAX POWER Sp. z o.o.  
 Al. Krakowska 39  
 05-090 Raszyn, Poland



B



C



D



***PETROL LAWN MOWER WITH A DRIVE***  
***Model: NAX 1000S***

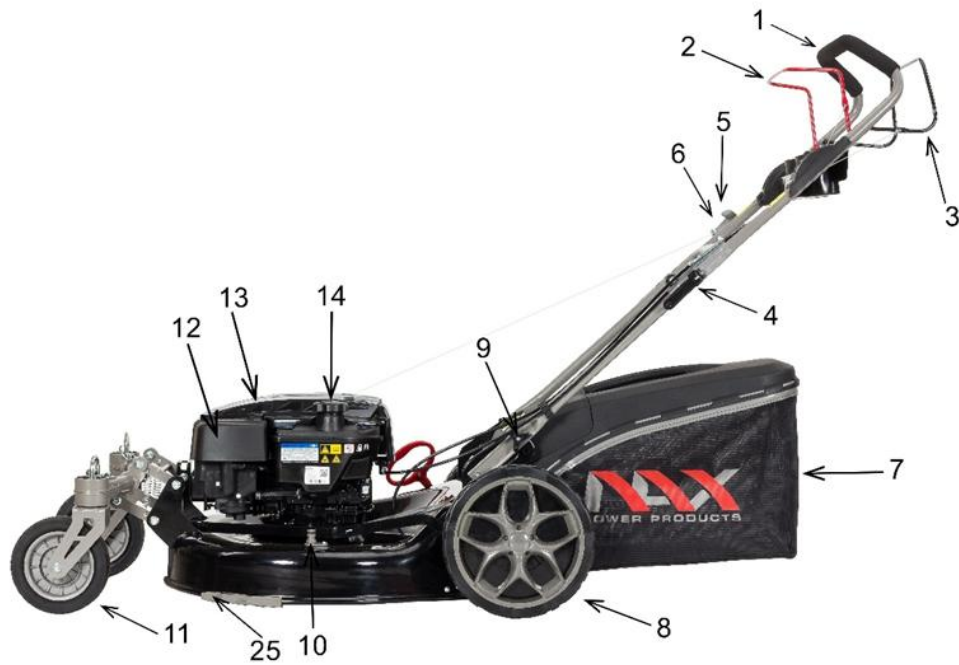
**CONSTRUCTION OF MOVER AND ILLUSTRATIVE DRAWINGS**

Fig. 1

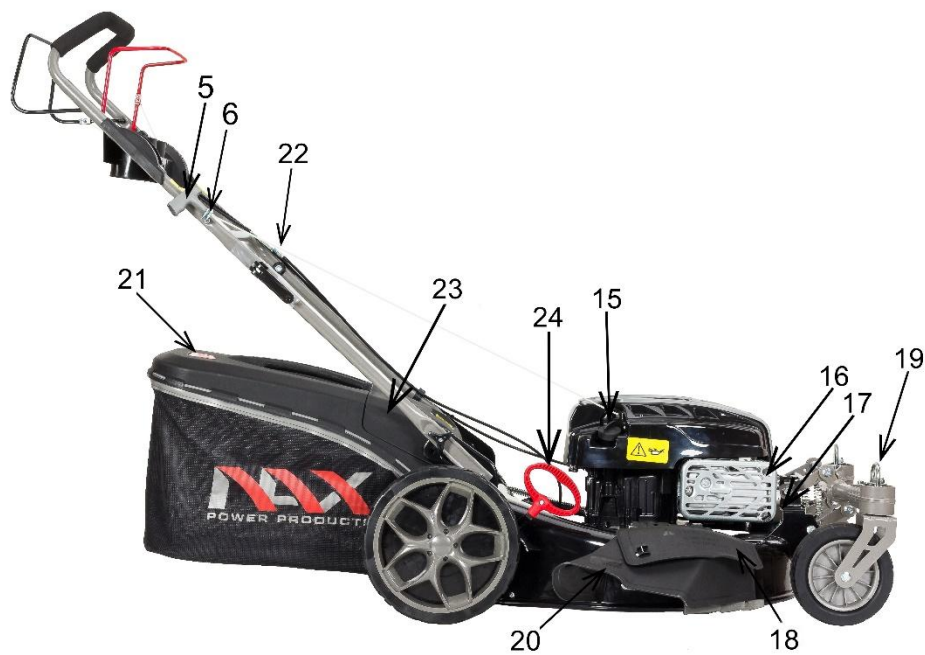


Fig. 2

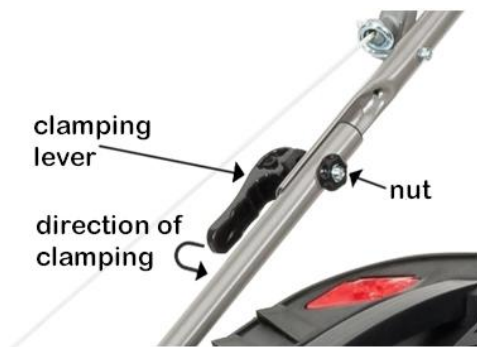


Fig. 3

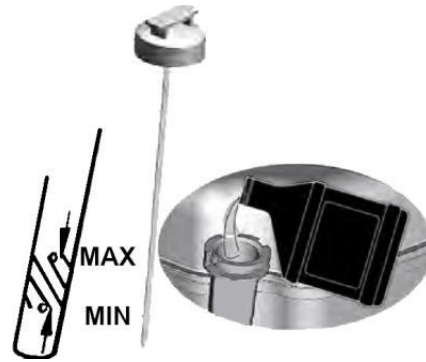


Fig. 4

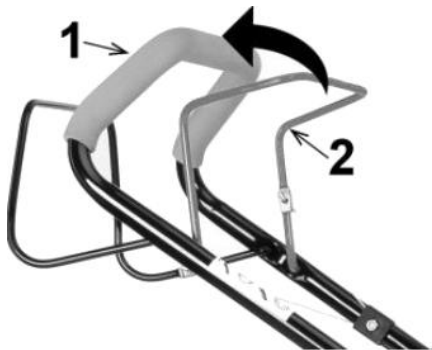


Fig. 5



Fig. 6



Fig. 7

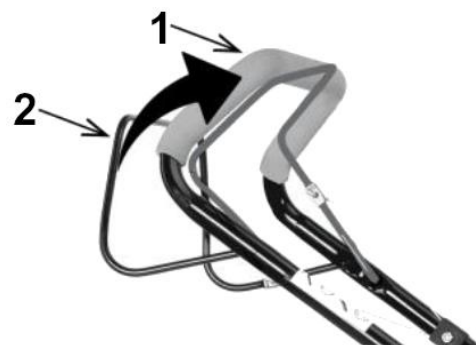


Fig. 8





Fig. 9

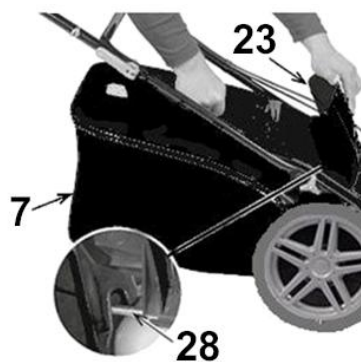


Fig. 10



Fig. 11

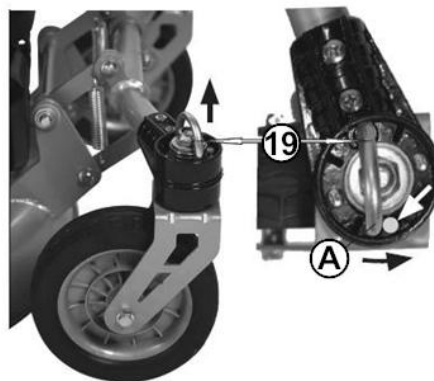


Fig. 12



Fig. 13

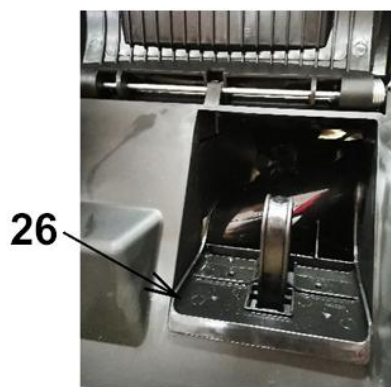


Fig. 14

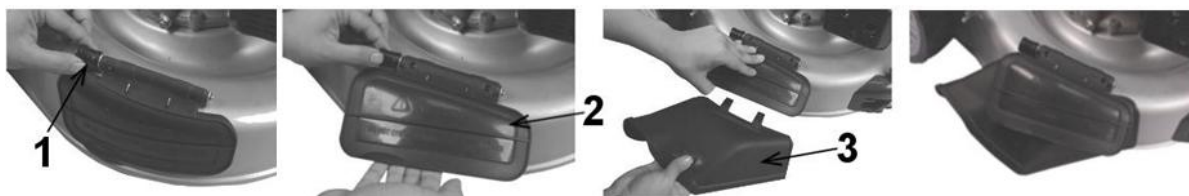


Fig. 15

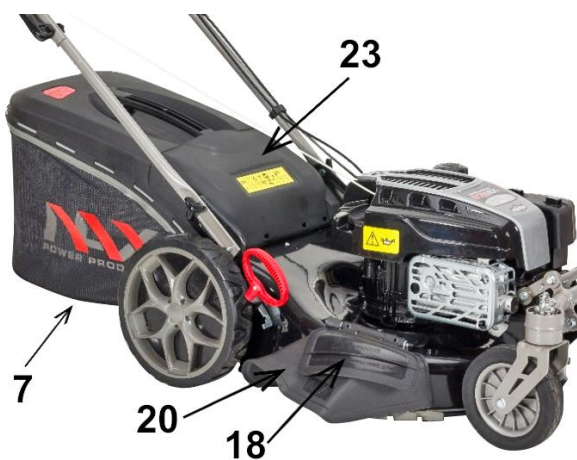


Fig. 16

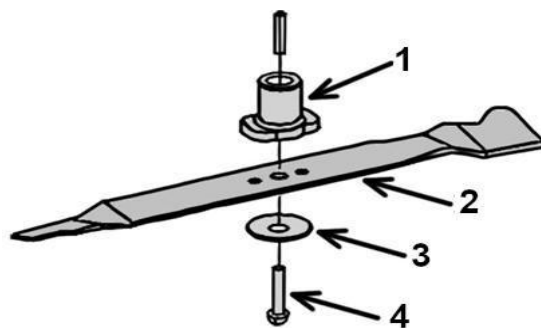


Fig. 17

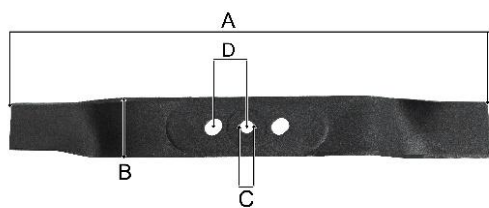


Fig. 18



Fig. 19

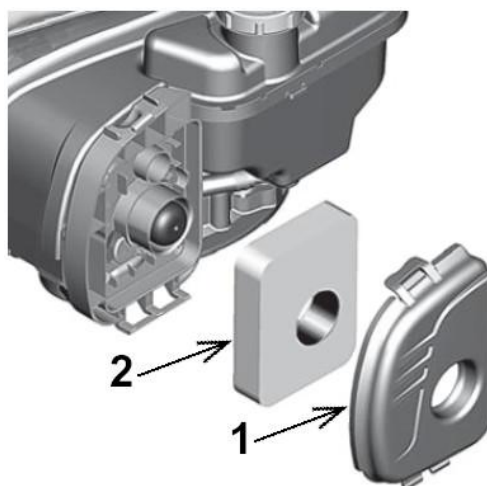


Fig. 20

Fig. 21

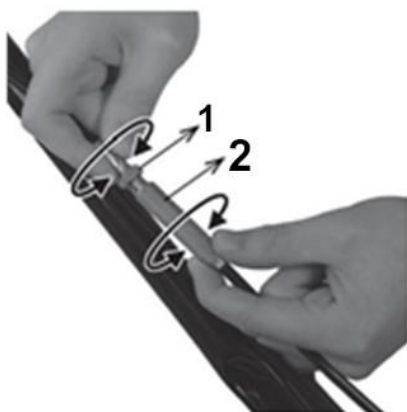


Fig. 22



Fig. 23



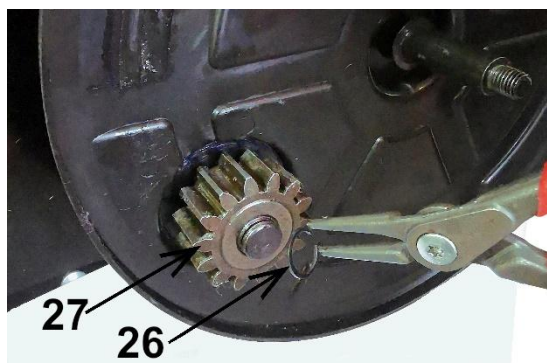


Fig. 24

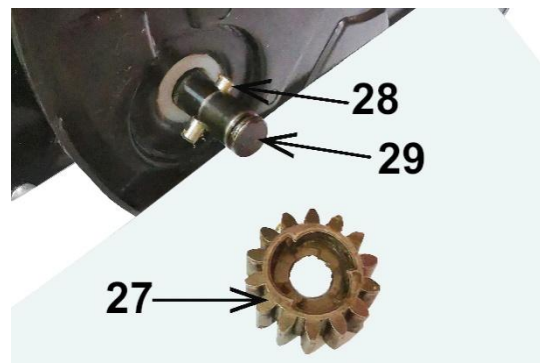


Fig. 25

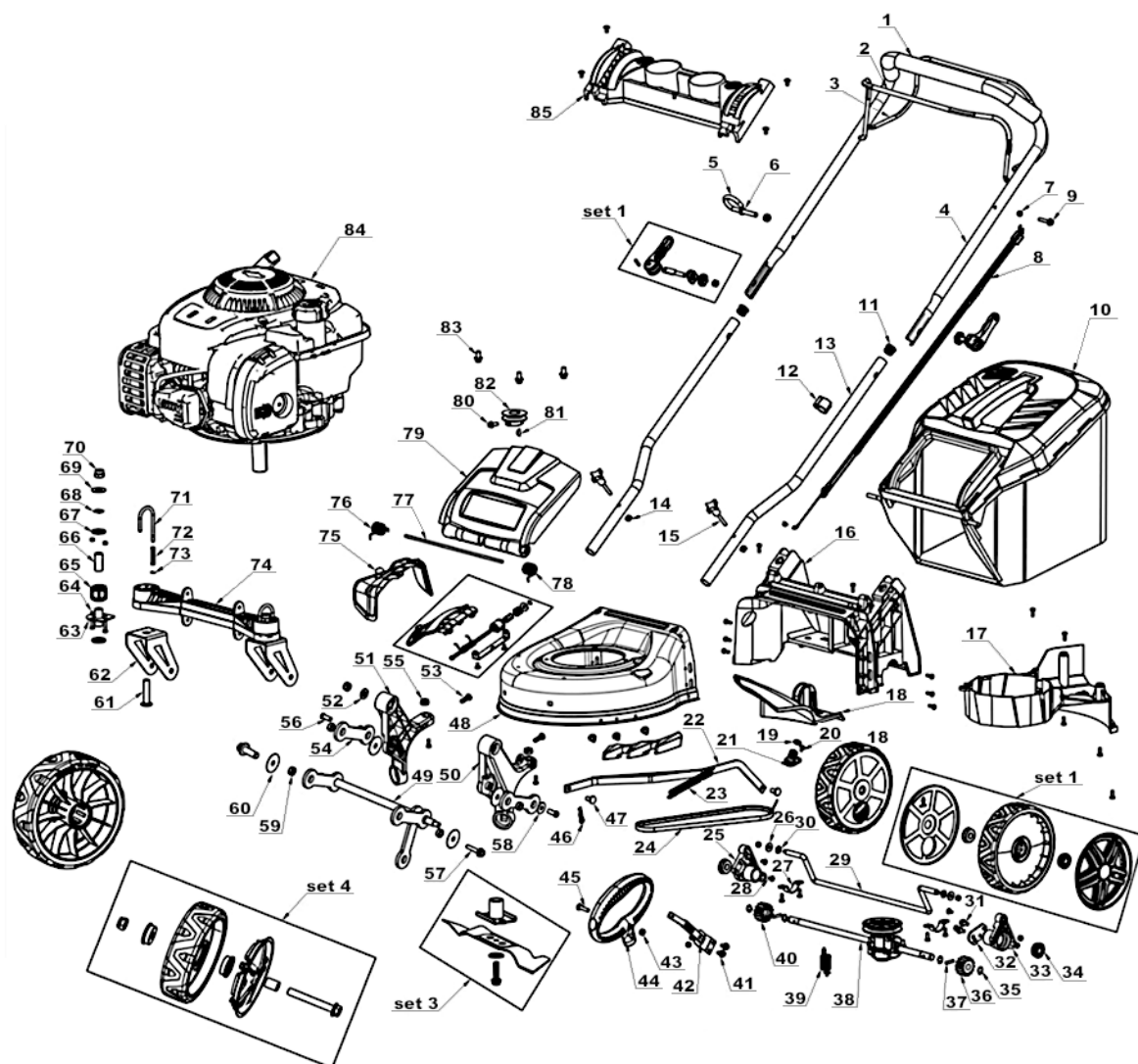


Fig. 26

**WARNING!**

**Before assembly or operating, read the Operator's Manual.**

**The device is intended for household areas.**

**Using the device for professional, semi-professional or commercial purposes voids the warranty.**

Original operation manual, edition 1/2020

Translation of the original operation manual from polish language

*This manual should be treated as an integral part of the device. It should be stored in the place provided for it so that it is easily accessible. Remember to pass on the operation manual to a new owner or user if the device is resold or transferred to another person.*

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**TECHNICAL DATA**

Type, model	NAX 1000S
Engine	B&S 450E
Engine type	upper-valve (OHV), four-stroke, air-cooled
Fuel	unleaded petrol 95 Pb
Engine capacity	125 cc
Machine rated power	1.82 kW / 2900 rpm
Maximum torque	5.9 Nm / 2200 rpm
maximum rotation speed	2900 rpm
Fuel tank capacity	0.8 L
Oil pan capacity	0.47 L
Housing	steel
Basket capacity	45 L
Cutting width	42 cm
Cutting height	25-75 mm, 6 steps
Guaranteed sound power level LWA	96 dB(A)
Sound pressure (acoustic pressure) LpA	LpA=80.7 dB (A), K=2.10 dB (A)
The value of vibrations transmitted by the machine and acting on the operator's upper limbs	$a_{hv}=3.902 \text{ m/s}^2$ , $K=1.5 \text{ m/s}^2$
Equipment mass	24 kg
Year of manufacture	2020

**The device includes:**

- lawn mower,
- basket,
- bolts, nuts
- operation manual,
- warranty card,
- guarantee conditions,
- EC declaration of conformity.

**DESCRIPTION OF GRAPHIC PAGES AND PICTOGRAMS**

Pictograms page 2.A

1. Attention! Danger. Caution.
2. Important! Read the operation manual and follow the warnings.
3. Danger of injury from objects thrown out by the working machine. Keep away from unauthorized persons.
4. Keep a safe distance from buildings.
5. Do not cut grass on slopes towards slopes.
6. Note: Disconnect the high-voltage pipe from the spark plug before maintenance and / or repair.
7. Keep out of the reach of children.
8. It is prohibited to work in the rain.



9. Note: Keep hands and feet away from the knife blades.
10. Never work with the ejection flap raised. Objects picked up by the mower blade can be dangerous.
11. Check and clean the area before starting work.
12. Keep unauthorized persons away from the working mower.
13. Note: Keep hands and feet away from rotating parts.
14. Before cleaning, repairing / checking the machine, make sure that the blade and all moving parts have stopped.
15. Risk of fire or explosion. Gasoline is highly flammable.
16. Note: A hot surface can cause burns.
17. Wear safety goggles.
18. Wear ear protection.
19. Use protective gloves.
20. Wear protective footwear
21. Attention! Four-stroke engine, do not mix gasoline and oil. The machine has two separate tanks and oil and petrol fillers.
22. The blade rotates for a few seconds after switching off the mower. Do not move the mower whose blades are not completely stopped.
23. Note: Exhaust gases are harmful to health. There is a danger of poisoning or suffocation. Do not use the device indoors.
24. Do not dispose of used equipment. It is the user's responsibility to hand over used equipment to a designated collection point for waste recycling.

## OTHER MARKINGS ON THE MACHINE

1. Name plate (page 2.B)  
The type plate is located on the rear of the mower housing. The information on the plate is necessary to determine the appropriate spare parts and service activities
2. Guaranteed sound power level (page 2.C)
3. Warnings and other labels (page 2. D)

## SAFETY RULES FOR MACHINES AND DEVICES WITH COMBUSTION ENGINE



### WARNING!

- Read this manual thoroughly. Familiarize yourself with the safety regulations and with the control systems and the principles of proper use of the device.
- Failure to observe the following warnings and safety instructions may result in electric shock, fire and / or serious injury.
- Retain this operation manual for reference.
- This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capacity or without experience or knowledge of the equipment, unless supervised or in accordance with instructions for use given by persons responsible for their safety.
- Do not allow the device to be used by children, adolescents up to 16 years of age and people not acquainted with the device's operation manual.

## GENERAL SAFETY REGULATIONS

### WORKING AREA SAFETY

- Ensure good lighting and order in the workplace. Cluttered and dark areas contribute to accidents.
- Keep children and observers away from places where devices with an internal combustion engine are used. Distractions can cause loss of control of the device. Garden equipment should be left away from unauthorized persons.
- The operator or user is responsible for accidents or hazards occurring to other people or the environment.

## SAFETY DURING WORKING WITH FUEL

- The internal combustion engine is designed to run on gasoline or a fuel mixture (see type of fuel in the device's technical data).
- Gasoline should be stored only in specially prepared containers (canisters).
- Store gasoline away from factors that could cause a fire, e.g. bonfires, open flames, where there is electric sparking, elevated temperature, welding sparks or other heat sources that can cause fuel to ignite.
- The fuel tank should only be filled outdoors.
- It is extremely dangerous to smoke cigarettes or use open flames when the machine is running or when filling the fuel tank.
- Always turn the engine off and cool before filling the tank with fuel.
- Do not fill the tank above the lower edge of the filler neck, gasoline has a high thermal expansion.
- If you spill fuel, immediately wipe up spilled gasoline with a dry cloth.
- When filling the fuel tank, be careful not to spill fuel on clothing. Gasoline-soaked clothing can catch fire and should be changed immediately.
- After filling the tank with fuel, tighten the cap tightly and before starting the engine, move the fuel canister to a place at least 3 m away from the place where the filling was carried out.
- Before starting the engine, check the tightness of the entire fuel system, especially the fuel tank, fuel lines, connectors, filler cap and carburetor area. Do not start the engine if you detect a leaking fuel system as it may cause a fire.
- The device should not be operated in explosive atmospheres, which form flammable liquids, gases or dust. The internal combustion engine may create sparks which may ignite the dust or fumes.
- Do not use the device if you have trouble turning it off. Any device that cannot be turned off is dangerous and must be repaired.
- Do not store the device with filled fuel tank indoors. Gasoline vapors are flammable and dangerous to health.



### CAUTION!

Avoid breathing gasoline vapors and exhaust fumes. Gasoline, gasoline vapors and exhaust fumes can cause poisoning.

Do not operate the saw in closed or poorly ventilated rooms. In case of headache, nausea, hearing or vision impairment, stop work immediately.

## PERSONAL SAFETY

- Be foresightful, watch what you do, and use common sense when working with the equipment. Do not use the equipment when you are tired or under the influence of drugs, alcohol or medication. A moment of inattention during work can cause serious personal injury.
- Protective equipment should be used. Always wear safety glasses. Wearing protective equipment such as a dust mask, non-slip shoes, helmet or hearing protectors under the right conditions will reduce personal injury.
- Before starting the equipment, remove all objects and keys. Leaving the key in the rotating working part of the machine can cause personal injury.
- Do not lean too far. You should always stand firm and balance. This will allow better control in unpredictable situations.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- When working, hold the tool by the additional handles if the tool is equipped with them. Losing control of the tool carries the risk of injury.
- Do not use the device if you have trouble turning it off. Any device that cannot be turned off is dangerous and must be repaired.





**CAUTION!** Despite the use of a safe structure by design, the use of protective measures and additional protective measures, there is always a residual risk of injury during work.

## USE AND CARE FOR EQUIPMENT

- Do not overload the tool. Use a tool with the power appropriate for the work. Properly selected equipment will enable better and safer work under the load for which it was designed.
- Store the unused equipment out of the reach of children. Do not allow people not familiar with the tool or this manual to use the equipment. Internal combustion tools and equipment are dangerous in the hands of untrained users.
- Internal combustion tools must be maintained. Check alignment or jamming of moving parts, cracked parts and all other factors that may affect the operation of the device. If damage is found, the equipment must be repaired before use. Many accidents are caused by improper repair and / or maintenance of the equipment.
- Before using the device, replace all defective, worn and damaged parts. Replace with new warning signs on the device if they become illegible or damaged.
- Warning decals and spare parts can be ordered from NAX service and authorized dealers.
- An internal combustion tool, equipment, working tools etc. should be used in accordance with these instructions, taking into account the conditions and the type of work to be performed. Using the device in a manner not intended for it may be dangerous.

## OPERATION AND EXPLOITATION OF TOOLS EQUIPPED WITH A BATTERY

- Before inserting batteries into the tool, make sure that its on / off switch is in the "off" position. Inserting the batteries into the device when the on / off switch is in the "on" position can cause serious injury.
- Use only the charger recommended by the manufacturer. Using a charger to charge other types of batteries may cause a fire.
- Never use batteries other than those recommended by the manufacturer. Use of other batteries may result in serious injury or fire.
- When the device is not in use, remove the battery. The battery should be kept away from metal objects such as paper clips, coins, nails, screws, etc., which may short-circuit the battery terminals. Shorting the battery terminals together may cause burns or a fire.
- Under extreme conditions, liquid may escape from the battery. You must avoid contact with it. If it accidentally it comes into contact with liquid - rinse immediately with water. If liquid gets in your eyes, contact your doctor immediately. Liquids leaking from the battery may cause irritation or burns.
- It is forbidden to use chargers and power supplies outside the rooms and in rooms with high humidity such as bathrooms or basements.



**CAUTION!** Chargers and power supplies for battery devices are intended for indoor use in a dry environment. Danger of electric shock and / or damage to the device.

## REPAIR

- Before carrying out any adjustment, part replacement or storage, the spark plug wire must be removed. Such preventive safety measures reduce the risk of accidental starting.
- Repair should be performed by a qualified person using only original spare parts. This will ensure further safe operation of the device. It is recommended to have any service performed by an authorized NAX service center.



**CAUTION!** Danger of suffocation when children play with the packaging. The packaging, especially the foil bag, should be stored out of the reach of children.

## DETAILED SAFETY PROVISIONS FOR MOWERS



### WARNING

- Beware of sharp knife edges. The blades rotate even after the engine has been turned off.
- You can only use the chain saw in good technical condition, perform the necessary actions if necessary or contact the service center. It is recommended to use the services of an authorized NAX service.
- Before starting, check if:

- ✓ the device is assembled according to the operation manual;
- ✓ the cutting tool and the whole cutting unit (three-armed knife or head with a cutting line, fastening elements, construction of the cutting unit) are in good technical condition; regularly check their attachment, damage and wear (depressions, cracks);
- ✓ safety devices (e.g. ejector cover, housing, steering handle, engine brake lever) are in good technical condition and work properly;
- ✓ the grass catcher is undamaged and correctly mounted, you cannot use a damaged grass basket.
- The mower must not be switched on unless the blade is correctly mounted. Danger of dangerous vibrations!
- Cutting tools should be sharp and clean. Properly keeping sharp edges of cutting tools reduces the likelihood of jamming and simplifies handling.
- Before adjustment, cleaning, maintenance, switch off the device and remove the high voltage cable from the spark plug.
- Do not mow when other people, especially children or pets, are nearby.
- Do not start a damaged mower.
- Do not touch the knives until the equipment is turned off and the knives do not stop completely.
- Do not lift or carry the device with the engine running.
- Turn off the mower and remove the high voltage cable from the spark plug when:
  - ✓ you leave the equipment unattended,
  - ✓ before adjusting the lock,
  - ✓ before checking, cleaning or repairing the device,
  - ✓ after hitting with a foreign object,
  - ✓ before cleaning the outlet,
  - ✓ if excessive vibration occurs.

## PREPARATION

- When mowing, always wear solid footwear and long pants, do not operate the device without shoes or wearing sandals.
- Check carefully the area where the device will work and remove all stones, branches, wires, bones and other foreign objects.
- In high grass, you may not notice obstacles (e.g. stumps, roots), so before starting work with the device, mark all obstacles hidden in the grass that cannot be removed.
- Always check the blades, bolts and knife assembly for wear and damage before use. Replace worn or damaged knives and bolts in pairs to maintain balance.
- In the case of multi-knife devices, be careful, because the rotation of one knife may cause the rotation of other knives.

## KNIFE SHARPENING

- To ensure optimal working conditions for the mower, the machine's knife should be sharpened. This seemingly simple operation must be carried out with special care. It requires a lot of technical knowledge and necessary service equipment. The manufacturer is not responsible for any damage to the mower related to improper knife sharpening. The recommended angle is 30 °.
- It is safe to have the knife sharpened by an authorized NAX service center.
- Before sharpening, the mower should be turned off, allow the engine to cool down, remove the high voltage cable from the spark plug, if necessary remove the battery and unscrew the knife.
- The knife can be sharpened manually, using a whetstone or a suitable metal file, it is preferable to sharpen with a professional sharpener, all the time bearing in mind that the blade may overheat, thus it will not be suitable for work. It is recommended to use liquid coolant for metalworking, it is permissible to use water all the time, bearing in mind that not all sharpening machines can work in the coolant stream. The blue surface of the blade indicates damage to the knife, which should no longer be used.
- **After each sharpening, the knife must be balanced.** If the user does not have a balancing machine and the appropriate knowledge, it is necessary to return the knife to a specialized service for balancing. Working with an unbalanced knife causes excessive vibration and, as a consequence, may cause loosening of the screw connections of the entire device, including the knife attachment screw, which may be dangerous to the health

and life of the user.

## USAGE

- Mow only in daylight or in good artificial light.
- Do not mow during rain, especially during a storm. Avoid mowing wet grass.
- Always make sure that your legs stand firmly on the slope.
- Come on, never run. Remember to keep a secure position.
- Mow across slopes, never up or down.
- Be very careful when changing the direction of travel on a slope.
- Do not mow on excessively sloping slopes.
- Pay special attention when reversing or pulling the device towards you.
- Turn off the machine if it is to be tilted or when moving it over non-grass surfaces and when transporting it to the mowing site and back again.
- Before transporting the mower, cool the engine, drain fuel and oil.
- Do not use the device with damaged covers or housings or without safety devices, e.g. attached covers and / or grass containers.
- Start the engine according to the instructions, making sure that the feet are away from the cutting tools.
- Do not start the mower when it is tilted, unless it is necessary to start in high grass. In this case, press the handle to lift the front of the machine, but only as much as is necessary, and then slowly lower the mower to the ground. Make sure that both hands hold the handle securely throughout the operation.



**Attention! The B&S engines cannot operate on a slope above 15°.**

- Do not keep your hands and feet near rotating parts. For rotary mowers, make sure that the discharge opening is not blocked at all times.
- When starting the powered mower, do not pull on the drive start lever.

## MAINTENANCE AND STORAGE



### Warning

- Before carrying out any repair or maintenance operations, make sure that the mower has the spark plug high voltage cable removed and there are no children or third parties nearby.
- Remember that there may be fuel in the machine's tank. Safety rules for handling fuel are described in this manual in the section "Safety in handling fuel".
- Keep all nuts, bolts and screws in good condition to make sure that the device will work safely. Check the grass container often for wear or damage.



For mowers, make sure you use the right type of knives.

After finishing work, the mower should be cleaned. The fuel tank must be empty. Place the mower on the handle (spark plug up). Use a brush to clean the inside of the mower housing from grass and dust, and possibly protect metal parts with anti-corrosive agents. You can clean the entire mower with a damp cloth and, if necessary, protect it with varnish paste.

The mower must be stored in a well-ventilated room in a dry, dust-free place. Check that the grass basket is empty and properly cleaned. Rotting grass can damage the basket.

Only a functional mower should be stored, if necessary, the faults must be rectified before storage.

If the mower is equipped with a battery, remember that the optimal storage conditions for the battery are 10 to 21° C, low humidity, 50% charged battery.

## IN CASE OF AN ACCIDENT OR FAILURE

In the event of an accident, stop / turn off the machine immediately and call for help (if required).

In the event of a fault, stop / turn off the machine and contact an authorized service center to avoid the fault.

## **SAFETY AND PRODUCER'S LIABILITY**

Any use of the mowers, other than described in this manual is considered improper and the manufacturer is not liable for any damage or damages resulting from such a procedure.

Proper use also includes respecting the operating, maintenance, storage and repair conditions established by the manufacturer.

To prevent accidents, all safety precautions and hazard avoidance must be followed.

Any changes in the construction of the device made by the user may affect the safety of use of the machine and release the manufacturer from liability for damage or injuries.

## **RESIDUAL RISKS**

Despite the fact that the machine manufacturer bears responsibility for its construction eliminating danger, certain elements of risk during operation are unavoidable. The residual risk arises from the erroneous behavior of the machine's operator.

The greatest danger occurs when performing the following prohibited activities:

- use of the device by children,
- use of the machine for other purposes than described in the Operation Manual,
- when other people, especially children or animals are nearby,
- use of the device by people not acquainted with the operation's manual,
- using the device without proper, protecting operating clothing and footwear protecting foot,
- using the device with damaged covers or casing and without properly installed safety devices.

When observing the instructions in the operating manual, the residual hazards of using the machine may be eliminated.

There is a risk in case of failure to comply with the above recommendations.

## **USAGE**

The device is intended only for mowing lawns in accordance with the description and safety rules contained in these instructions for use. Other applications may be dangerous to users and may cause damage to the equipment.

The machine should not be used to:

- collecting leaves or cleaning the area of dry plants,
- leveling molehills,
- cutting bushes,
- chopping branches.

## **ADDITIONAL INFORMATION FOR THE USER**

Performing maintenance and adjustment work before or after the season can be a problem even for advanced users.

To meet these needs, the NAX brand would like to offer you a paid service consisting of preparing the machine for storage and / or work. The scope of this service may include: spark plug replacement, cleaning, maintenance, oil change, filter replacement and lubrication of moving parts, knife sharpening and balancing, as well as other work related to the adjustment and maintenance of equipment. This will ensure long-term and reliable operation and safety of the device.

## **PREPARING FOR OPERATION**

The mower is supplied by the manufacturer in a cardboard packaging in a partially disassembled state. After reading the operating manual and assembly drawings, it should not be too difficult to assemble the mower. All necessary



components for assembly are included in the packaging. This operation manual applies to various models of mowers. The mower described may differ from your purchase. Read the passages that refer to the device model you have.

## CONSTRUCTION OF PETROL MOWER

Illustrative drawings can be found on page 4, Fig. 1-2

- |    |                                    |
|----|------------------------------------|
| 1  | Handle                             |
| 2  | Engine brake lever                 |
| 3  | Drive lever with line              |
| 4  | Clamp lever                        |
| 5  | Starter handle with cable          |
| 6  | Starter cable attachment point     |
| 7  | Basket                             |
| 8  | Rear wheel                         |
| 9  | Handle connection nut with housing |
| 10 | Water cleaning system connection   |
| 11 | Front wheel                        |
| 12 | Air filter cover                   |
| 13 | Engine                             |
| 14 | Fuel-filler cap                    |
| 15 | Oil filler cap                     |
| 16 | Muffler                            |
| 17 | Spark plug pipe                    |
| 18 | Side discharge cover               |
| 19 | Wheel lock lever                   |
| 20 | Side discharge chute               |
| 21 | Basket full indicator              |
| 22 | Cable adjustment                   |
| 23 | Grass ejection cover               |
| 24 | Cutting height adjustment lever    |
| 25 | Side comb for laying grass         |

## ASSEMBLY

The mower handle is factory set in the storage position.

- Set the lower handle to the use position, making sure that the handle is between the stops and tighten it with the wing nut.
- Set the upper handle to the use position and lock it with the clamping lever. Turning the nut changes the length of the clamping lever bolt, thus increasing or reducing the clamping force. Fastening occurs when the clamp is pressed against the handle in the direction of the arrow on Fig. 3.



**Attention! Too short the bolt with a nut may cause the clamping lever not to be tightened, and consequently damage the lever.**

**Attention! When unfolding and folding the handle, make sure that the engine brake cable does not break or bend. A bent or otherwise damaged cord may prevent the mower from working properly.**

- Fasten the starter rope handle 5 (Fig. 2) at the attachment point 6 (Fig. 2).



**Attention! The starter rope extends with resistance. Pull the engine brake lever towards you and slowly pull the cable out to the necessary length. Remember that pulling the starter cord vigorously can start the mower.**

## FILLING THE ENGINE WITH OIL

The engine is not filled with oil at the factory. There may be traces of oil remnants in the engine after factory inspection. Before first start-up, pour approximately 0.47L of recommended B&S SAE30 engine oil, checking its level on the dipstick integrated with the oil filler cap Fig.4.



The oil level must be between the lines: min. / max.  
Original engine oil for B&S SAE30 for lawn mowers is recommended

The first oil change should be carried out after 5 hours of mower operation, after burning about two fuel tanks. The next oil changes should be carried out every 25 hours of work, but at least once a year.

Drain the used oil while the engine is still hot.

Regularly check the oil level before each use.

If necessary, top up oil.



**Attention! Used oil should not be disposed of by accident, dispose of it in the sewage system or directly into the environment. Take it to an oil disposal point.**

## REFUELING

- Before using, familiarize yourself with the safety, use, handling and storage principles contained in this Operation Manual.
- Fuel should be poured outside, in a place where there is no risk of sparks or flames.
- Gasoline should only be stored in suitable containers (canisters) that are approved. Check the condition of fuel storage containers regularly.
- Fuel tanks must be securely closed. For safety reasons, replace damaged fuel filler caps.
- Do not use beverage bottles or similar to store consumables, e.g. fuel or oil, as other people, especially children, could drink from them.
- The fuel tank should only be filled outdoors; do not smoke while refueling.
- Gasoline should be topped up before starting the internal combustion engine.
- Do not unscrew the fuel tank cap or add fuel while the internal combustion engine is running or when the engine is hot.
- **Do not overfill the fuel tank! Due to the thermal expansion of the fuel, do not fill the tank above the lower edge of the filler neck.**
- The device must not be stored with the fuel tank filled indoors. The resulting gasoline vapors may come into contact with open flames and ignite. If the fuel tank needs to be emptied, it should be done outdoors. Before starting the machine, make sure that there is no spilled fuel on or near the machine. If necessary, wipe off the fuel.



**Attention! Gasoline vapors are flammable. Before starting the mower, make sure that the working machine is not less than 3m from fuel tanks.**

## OPERATION

### BRAKE LEVER

Pull the brake lever before starting the engine **2** to the handle **1** (Fig. 5).

By releasing the brake lever, the engine and cutting knife stop.

### ENGINE STARTING



**Warning!** When the engine is running, the cutting blades rotate.

1. Check the oil level (Fig. 4).
2. Fill the fuel tank with clean, unleaded gasoline. Make sure the spark plug wire is connected to the spark plug.
3. Press the suction pump 3-4 times **12** (Fig. 6) (if present).
4. Stand behind the mower as shown in figure no 7.
5. Hold the brake lever with one hand **2** (Fig. 5) in the working position as shown in the figure.
6. With your other hand, grasp the starter cord handle **5** (Fig. 7).
7. Lightly pulling the cord towards you, remove the starter slack, and when you feel resistance, pull the cord hard and vigorously **5** (Fig. 7) and let it slowly go back to its place.
8. Do not release the line handle until the line is pulled through the starter return system.
9. If the engine does not start after 5-6 strokes, follow the directions in the "Inspection and Troubleshooting" chapter.



## WORKING WITH A DRIVE

To start the drive, pull it to the handle **1 (Fig. 8)** drive lever **2 (Fig. 8)**.

You can turn off the drive at any time by releasing the drive lever and operate the device like a mower without a drive.

## MOWING HEIGHT SETTING



**Attention!** Before changing the cutting height, stop the engine and disconnect the spark plug cable.

To set the desired cutting height, change the position of the adjustment lever **24 (Fig. 9)** located on the housing of the mower. You can choose from 6 different cutting heights in the range of 25 - 75 mm.

## INSTALLING THE GRASS BASKET

1. Raise the mower basket cover **23 (Fig. 10)**.
2. Insert the basket **7 (Fig. 10)** attaching the hooks at the inlet to the basket on a rod designed for this purpose **28 (Fig. 10)** at the mower outlet cover, then lower the cover.
3. Make sure the hooks are attached correctly.



**Warning!** Often check the technical condition of the grass basket. If any parts are worn or damaged, they must be replaced with new parts that are available at authorized service centers.

## EMPTYING THE GRASS BASKET



**Warning!** Stop the engine before emptying and removing the basket.

Basket full indicator **21 (Fig. 11)** allows you to quickly assess the level of basket filling. If the indicator plate is raised while the mower is running, it means that the basket is not full yet. If the indicator plate is in a horizontal position during the mower's operation, it means that the basket is full and should be emptied.

## SETTING THE FRONT WHEELS

Due to the special design of the front wheels, the mower is extremely manoeuvrable. Wheel alignment is set when the clamping device snaps into place **19 (Fig. 12)**. If we want to change the wheel position:

1. lift the bracket to release it,
2. put the wheel in a new position,
3. snap the mounting brackets back into place.

In order for the front wheels to move freely, the clamping brackets must be raised **19 (Fig. 12)** and do not put them in the hole, but place them on the plate next to it (**Fig. 12 point A**).

## CLEANING THE CUTTING UNIT CABINET



**Warning!** When the engine is running, the cutting blades rotate.

1. After finishing work, thoroughly clean the entire device.
2. Stop the engine and disconnect the spark plug wire before cleaning the housing.
3. Empty the fuel tank before cleaning.
4. Without tilting the mower to the side, lay it on the ground so that the front wheels are in the air.
5. Clean the underside of the mower with a brush and water.

Do not use high-pressure cleaning devices, as high-pressure water can break the paint protection of the housing. Do not use intensive cleaning and washing agents, e.g. aggressive detergents, they can damage plastics and metals, which may result in deterioration of the device's safety.

The second way to clean the housing is to use the housing cleaning system.

After connecting the hose to a special quick coupler that is already mounted in the mower housing and unscrew the water, start the mower. The device is cleaned during the rotation of the knife, on which a strong stream rinses out flushing residues of grass. (**Fig. 13**)

## MOUNTING THE SIDE DISCHARGE CHUTE

To mount the side discharge chute:

1. open the side ejector cover **2 (Fig. 15)** (To unlock the cover, first turn the axle cover **1 (Fig. 15)**),
2. push in the side discharge chute **3 (Fig. 15)**.

## GRINDING FUNCTION

Mulching (mulching) is a care procedure involving the fragmentation of cut grass. The mulching system allows it to be left completely or partially on the soil, where it decomposes and provides nutrients.

The lawn meets the mulching conditions when the grass is no more than 4 cm. The lawn on which mulching will be carried out must be mowed regularly and quite often - even every few days. During mulching, only young and delicate blades can be left on the surface, without damaging the lawn, as they break down and do not rot.

To start the grinding function, remove the grass catcher and remove the side ejection cover (if fitted), mount the grass grinding attachment /plug **26 (Fig. 14)** to the rear outlet and close the tailflap.



**For mulching to be fully effective, you must buy a milling knife.**

## SIDE EJECTION FUNCTION

To work with the side ejection:

1. remove the grass basket **7 (Fig. 16)** (if fitted), insert the mulching plug into the rear outlet opening and close the flap **23 (Fig. 16)**.
2. lift the side discharge cover **18 (Fig. 16)** and install the side discharge chute with the catches **20 (Fig. 16)**. **Note: to raise the side discharge cover, it may be necessary to use a lot of force or to open a special lock preventing its automatic opening (if present on your model).**
3. Rest the side discharge cover on the side discharge cover (side discharge duct).

## MAINTENANCE

### HANDLING THE CUTTING KNIFE



#### Warning:

Disconnect the spark plug wire before checking the cutting knife or blade attachment shaft. If the knife hits an object, stop the engine, disconnect the spark plug cable and check the mower for damage. Check whether the crankshaft on the power take-off side or the adapter to which the knife is attached has not been damaged (bent or cracked).

The knife adapter does not provide protection against engine damage when the knife hits objects other than grass, e.g. stones, branches, molehills.

Check often that the knives are not bent, that they are not excessively worn, and that there are no other damages such as cracks or deformations.

Damaged parts must be replaced with new ones, recommended by the manufacturer. For safety, replace the knives every two years. Knives should be well sharpened (details in chapter "Sharpening a knife"). Blunt knives tug at the grass, causing the tips to yellow.



**Attention! It is imperative to balance the knife after each sharpening. An unbalanced blade can cause dangerous vibrations that can damage the mower and / or cause an accident.**

**Check the knife clamping screw often. The screw must be firmly tightened to a torque of 45 to 55 Nm.**

### REMOVING THE KNIFE (FIG. 17)

- 1 Adapter
- 2 Knife
- 3 Saddle half pad
- 4 Screw



**Attention! Cutting knife 2 (Fig. 17) it can be very sharp, use gloves to protect your against injury. Screw 4 (Fig. 17) unscrew to the left (right-hand thread).**

1. Empty the fuel tank.
2. Use a wooden block to prevent the knife from turning.
3. Loosen the screw that holds the knife.

4. Check the condition of the knife (see chapter "Operation of the cutting knife").
5. Replace a worn or damaged knife with a new one recommended by the manufacturer.
6. Tighten the screw to 45 to 55 Nm. If the clamping screw is too loose, the knife may become loose, which may cause an accident.



**Attention! When installing the knife, remember about the direction of the knife. If the knife is incorrectly fastened, it will not cut properly and may cause an accident.**

### THE MOST IMPORTANT KNIFE PARAMETERS (FIG. 18)

**A** - length (420 mm), shorter knives are allowed, but then you have to take into account that the effective cutting width will be smaller,

**B** - width (50 mm),

**C** - clamping hole diameter (11 mm),

**D** - hole center distance (27 mm),

hole diameter 11x11 mm circle for safety wedges is standard and amounts to 15.5 mm.

It is recommended to use NAX cutting knives dedicated to the given mower model.



**Attention! The shape of the knife indicates its characteristics, depending on the shape of the knife is more suitable for: mowing with a basket, mowing with side ejection or mulching. The universal knife used in the factory may turn out to be less efficient than we would have expected, so it is recommended to buy accessory knives for each function, i.e. one for grinding, the other for throwing grass into the basket.**

### SPARK PLUG OPERATION

Spark plug **17 (Fig. 19)** must be replaced at the beginning of each season or after 100 hours of operation.

Use original B&S 992306 BS-OHV-HT spark plugs. Recommended gap between electrodes is: 0.6 mm (**Fig. 19**). Check the gap with a blade feeler gauge.

### OIL REPLACEMENT

The first oil change should be carried out after 4 to 5 hours of engine operation. Perform next oil changes every 25 hours of operation or more often. The oil drain plug may be mounted on the engine block, but this depends on the engine model. If the engine does not have a drain plug in the engine block, pour oil with the filler plug after emptying the fuel tank:

- Unscrew the oil filler cap with the dipstick.
- Remove the air filter to prevent it from absorbing gasoline when the mower is tilted.
- Tilt the mower to the oil filler plug side **15 (Fig. 20)**.
- Leave the mower in this position until the oil stops flowing (this may take several minutes).

After pouring the oil out of the engine, set the mower in a flat position and pour about 0.47L of engine oil recommended by B&S SAE30 specification by checking the level on the dipstick integrated with the oil filler cap. Screw in the oil plug with the dipstick and install the air filter.

### AIR FILTER REPLACEMENT

Every 25 hours of operation, check the condition of the air filter. The filter must be replaced every 100 hours or earlier if it is contaminated.

Press the catches securing the filter housing or unscrew the bolts securing the filter cover **1 (Fig. 21)**.

1 - lid

2 - filter refill

1. Open the cover.
2. Remove the air filter (the air filter is a piece of oil-soaked sponge).
3. If the filter is not damaged:
  - wash the filter sponge element with water and detergent,
  - squeeze the foam element into a clean cloth,
  - soak the filter sponge element with clean engine oil.
4. If the filter is damaged or damaged, replace the filter with a new one.
5. Replace the cover by sliding the catches into the slots on the filter housing or tighten the screw.

## LINE ADJUSTMENT

The cables may stretch and contract during use. They should then be checked and properly adjusted (if adjustment is available on your model). To do this:

1. loosen the small locking nut **1 (Fig. 22)** and then depending on your needs:
2. turn the adjusting nut **2 (Fig. 22)** counterclockwise: the cable is shortened,
3. turn the adjusting nut **2 (Fig. 22)** clockwise: the cord will be extended.

## GREASING

The swivel wheel bearings should be lubricated by introducing a small amount of aerosol lubricant directly onto the bearing **25 (Fig. 23)**.

To lubricate the rear drive wheel rack **8 (Fig. 1)** you should:

1. Remove the rear wheel hub cap by turning the hub cap counterclockwise.
2. Unscrew the drive wheel nut with a 13 mm wrench.
3. Remove the drive wheel from the axle.
4. Remove the Seger ring **26 (Fig. 24)** and then slide the drive rack off **27 (Fig. 24)**, from the gear shaft **29 (Fig. 25)**.
5. Sprocket, drive carrier **28 (Fig. 24)** and the gear shaft must be cleaned of grease residues and lightly grease the above elements. The recommended grease for this operation is NAX bevel gear grease.



**CAUTION! Lubricate the gear wheel from the inside 27 (Fig. 25). Do not lubricate the outer rim on the sprocket and the drive wheel.**

6. Refit the entire mower drive mechanism in reverse order.

## TRANSPORTATION

### PREPARATION FOR TRANSPORT

- Before transporting the mower, remove oil, then: cool the engine, remove fuel from the tank, carburettor and fuel lines.
- The device can only be transported in the working position, i.e. at an angle of up to 15 degrees above the level.
- The handle may be folded.



**Attention! Be careful when folding or unfolding the handle, as the cables may be damaged. Damaged cables can cause the mower to malfunction and in some cases reduce the safety of use of the device.**

## DEVICE ASSEMBLY DIAGRAMS

The assembly diagram of the device is available on the website **9 Fig. 26**.



## PROBLEMS REVIEW AND DIAGNOSIS

### INSPECTIONS

Inspections		Prior to each use	After 5 hours of operation	Every 25 hours of work or once a season	Before storage	After every 100 hours of work	After each use
Engine oil	check it out	x					
	replace		x (only the first replacement)	x			
Air filter	check it out	x					
	clean		x				
	replace			x			
Spark plug	check it out			x			
	replace					x	
Cutting Blade	check it out	x					
	sharpen			x			
Lines adjustment	check it out		x				
Adapter	check it out	x					
Protection of the drive	check it out		x				
Threaded connections	check it out	x			x		
Fuel	check it out	x					
	empty				x		
The bottom of the mower	clean		x		x		x
	protect				x		
Lubrication	execute			x	x		
Valves	check / adjust			x			

Annual, post- or pre-season paid checks carried out on the website will help avoid problems during the season.

## TROUBLESHOOTING

Problem	Possible cause	Solution
The device does not start	Low fuel.	Check the fuel level and add fuel if necessary.
	Spark plug flooded or damaged.	Check, clean or replace the spark plug.
	Interruption in ignition system or contaminated fuel insert.	Have the gardening equipment service repaired, it is best to entrust the mower to an authorized service center.
Engine fires unevenly	Contaminated air filter.	Replace or wash the filter in soapy water and gently soak in engine oil.
	Low quality fuel.	Remove fuel and refuel the mower with high-quality fuel.
	Clogged fuel line, no fuel or old fuel.	Clean the fuel line, check fuel delivery, add fresh fuel.
	Water, oil or dirt in the fuel system.	Drain the carburettor with the fuel sink screw and top up with fresh mixture.
	Oil flooded carburettor after tilting the mower to the side.	Clean the carburettor from oil.
The engine goes out	Badly adjusted brake cable.	Make the appropriate adjustment.
	Dirty air filter.	Replace the filter.
The engine is smoking	Muffler flooded with oil after tilting the mower to the side.	Top up oil and start the mower for 15 minutes, the oil will burn itself.
Excessive vibration.	Knife adapter damaged.	Replace it.
	Crooked motor shaft (after impact).	Stop the engine immediately and remove the spark plug cap. Tighten all screws and make other appropriate repairs. If the vibration does not disappear, entrust the repair to an authorized service center.
	Loose assembly of components.	
The mower does not throw grass in the bin	The grass is too high.	Mow twice.
	Wet grass.	Do not mow.
	Inverted or worn cutting knife.	Insert the cutting knife correctly or replace it.
	Dirty lawn mower chassis.	Clean the mower chassis.
	A dirty or overfilled basket.	Empty and clean the basket.
	Engine speed too low.	Adjust the turnover at the authorized service center.
Wheel drive not working (drive version)	Worn or damaged drive belt.	Replace the wheel drive belt.
	Cut grass lying down.	Clean the transmission mechanism.
	Incorrectly adjusted drive cable.	Adjust the drive cable.
	Worn drive protection mechanism.	Replace the gear.

## WARRANTY AND SERVICE

The product purchased by you is intended for amateur (hobby) use only. If the equipment is used for other purposes (commercial, professional), it will lose the guarantor's liability for the purchased equipment. You can find information on the warranty and the NAX service network in the attached warranty card.

Remember that the machine should be cleaned after each use. Keeping the equipment clean will ensure long-term and reliable operation. Cleaning, maintenance and periodic inspections are not repairs. Authorized NAC services may perform these activities as part of a paid service.

**DECLARATION OF CONFORMITY**

Manufacturer:

name: **NAX POWER Sp. z o.o.**  
address: Al. Krakowska 39, 05-090 Raszyn, Poland

with full responsibility declares that the machine:

name: **Petrol lawn mower**  
model: **NAX 1000S**  
serial number: 033 **20** 2490749955 5000 **000001** - 033 **23** 2490749955 5000 **999999**

meets the essential requirements:

- ❖ of Machinery Directive **MD 2006/42/EC**,
- ❖ Compatibility Directive **EMC 2014/30/EU**,
- ❖ Noise Directive **NEE 2000/14/EC Annex VI** and **2005/88/EC**.

meets the requirements of the following harmonized standards:

- ✓ **EN ISO 5395-1:2013+A1**,
- ✓ **EN ISO 5395-2:2013+A1+A2**,
- ✓ **AfPS GS 2014:01**
- ✓ **EN ISO 14982:2009**,
- ✓ **EN ISO 3744: 1995**,
- ✓ **ISO 11094: 1991**

and meets the requirements:

- ✓ 2004/26/EC, 2006/96/EC, 2010/26/EU, 2016/1628/EU.

2000/14 / EC: the conformity assessment procedure followed according to Annex VI:

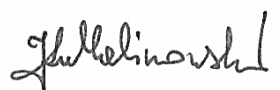
- ❖ measured maximum sound power level:  $L_{WA}$  is 96 dB (A),
- ❖ guaranteed sound power level:  $L_{WA}$  is 96 dB (A).

The conformity assessment procedures according to NEE 2000/14 / EC were carried out with the participation of a notified body:

name: TÜV Rheinland LGA Product GmbH  
address: Tillystrasse 2, 90431 Nurnberg,  
identification number: 0197

Place of submission and storage of Technical Documentation:

NAX POWER Sp. z o. o  
Al. Krakowska 39,  
05-090 Raszyn



**Jarosław Malinowski**

**Technical and Certification Director**

**Raszyn, November 21, 2019**



**NOTES:**

M A N U A L





## WARRANTY

*Dear Sir or Madam,*

*Thank you for purchasing our product and congratulations on your right choice. The device that you bought was designed and manufactured according to the latest technologies and represents global standards of quality and reliability, while being environmentally friendly. We remind you to carefully read the commissioning and operation procedures before using the device; these procedures are contained in the Operating Instructions supplied with the device.*

*Our specialized service network serves you with all assistance in the field of technical and operational advice.*

*A list of authorized service points and service tips can be found at: [naxpower.com](http://naxpower.com)*

## WARRANTY CONDITIONS

1. NAX guarantees smooth operation of the device in accordance with the technical and operational conditions described in the User Manual.
2. The device is granted a 36-month warranty to the consumer (i.e. a natural person making a legal transaction with the entrepreneur not directly related to its business or professional activity) and a 12-month warranty when purchased by the entrepreneur (i.e. a natural person, a legal person and an organizational unit operating in own business or professional activity). " After this period, the user is entitled to paid repairs. The condition for granting a 36-month warranty is a warranty review at an authorized NAX service between 12 and 24 months of use. The review is free, but the costs of providing equipment for the service and consumables such as oil, candle, air filters, fuel filters, are covered by the user / owner of the equipment.
3. All damages disclosed during the warranty period resulting from material, assembly or manufacturing defects will be removed free of charge.
4. The basis for obtaining warranty protection is proof of purchase of the device from an Authorized Distributor of NAX equipment together with the print of this warranty card signed on the day of sale issued by the official **NAX Authorized Distributor**. Warranty coverage will not be granted if the warranty print is certified / stamped by a company that is not an NAX Authorized Distributor. This warranty applies within the territory of the Republic of Poland.
5. Defects of the device subject to warranty will be removed within 14 business days from the date of acceptance at the NAX Authorized Service. This period may be extended to 30 business days in exceptional cases.
6. For reasons beyond the control of the Guarantor, the aforementioned deadline may be extended, in particular if the product requires additional verification / expertise or there are circumstances in the form of force majeure preventing its behavior, e.g. flood, fire, strikes, natural disasters, import restrictions, etc.
7. The warranty does not include activities such as: assembly, maintenance, service, periodic adjustment and cleaning, as well as inspections, oil and filter changes together with materials and parts used for the above activities. These activities can be carried out for a fee.
8. In order to remove defects or damage, the device together with the proof of purchase and a valid warranty card should be delivered to: the nearest Authorized Service Center or use a convenient "door to door" system or to the place of purchase. The device should be cleaned beforehand. The service / shop may refuse to repair an uncleaned device. If the device is to be sent, the operating fluids (fuel and oil) must be emptied before handing it over to the courier or seller. The packaging must ensure safe transport, original packaging is recommended.
9. The method of repair is determined by the guarantor. The guarantor is not obliged to provide a replacement device during the warranty repair.
10. This warranty applies provided that the device is properly used, maintained and serviced in accordance with the attached operating instructions.
11. The user is obliged to immediately cease using the damaged device. Continued use of a damaged device may result in further faults and endanger the health or life of the user or third parties.
12. The warranty does not cover damage resulting from: mechanical damage, misuse, modification or repair carried out by unauthorized persons. This also applies to the installation and use of incorrect parts and filters, greases, oils, fuels.
13. Damage to the warranty seals, if any, or the serial number plate can be the basis for rejecting the warranty.
14. The warranty does not cover defects caused by lightning, fire, floods and other natural disasters.
15. The warranty does not cover consumables and components subject to natural wear during operation and subject to user control such as V-belts, bulbs, filters, spark plugs, road wheels, knives and cutting blades, knife holders, string heads, cutting chains, chain guides, steering cables, keys and overload pins.
16. NAX is not responsible for direct or indirect damages, losses or costs resulting from the use or inability to use the device for any purpose.
17. If it is necessary to carry out activities related to the maintenance of the device before starting the repair, the Service / Store may carry out such activities against payment with the consent of the user / advertiser.
18. If during the repair it was necessary to replace elements related to safety of use or third parties (e.g. cutting blades, chains, guides, cutting element covers and other safety-related elements), the service is obliged to replace these elements even if it involves this with the need to charge fees with the consent of the user / advertiser. In case of refusal, the service will return the product without any repairs.
19. The warranty does not cover any damage caused to objects or persons.
20. The warranty for the goods sold does not exclude, limit or suspend the rights of the buyer who is a natural person under the warranty for defects of the thing sold.



## Warranty card

.....  
 Equipment name \* ..... Model \*

.....  
 Date of sale \* ..... Device serial number \* ..... Engine serial number .....

I declare that I have read the User Manual and the Warranty Card. I received the purchased equipment in working order, complete, along with the proof of purchase.

Legible signature of the buyer .....

.....  
 Stamp and legible signature of the seller \*<sup>1</sup>

\* To be completed by the seller

**\*<sup>1</sup> I declare that I am official NAX Authorized Distributor.**

Submission of a statement inconsistent with the facts by an entity that is not an authorized NAX Distributor may result in criminal liability of the seller pursuant to art. 271 and Article 267 of the Penal Code.

No.	Dates	Repair report number	Official Stamp
	Equipment notification date		
	Date of completion of repair / Date of device release		
	Equipment notification date		
	Date of completion of repair / Date of device release		
	Equipment notification date		
	Date of completion of repair / Date of device release		
	Equipment notification date		
	Date of completion of repair / Date of device release		
	Equipment notification date		
	Date of completion of repair / Date of device release		

The original repair report is equivalent to the entry on the warranty card.

