

M A N U A L



NAX 100C



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



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B



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D



CHAIN SAW
NAX 100C

CONSTRUCTION OF CHAIN SAW AND PREVIEW DRAWINGS

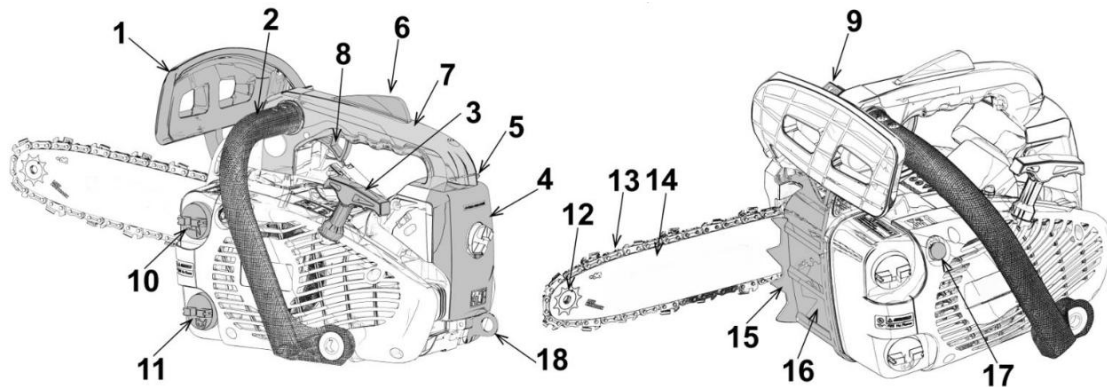


Fig. 1

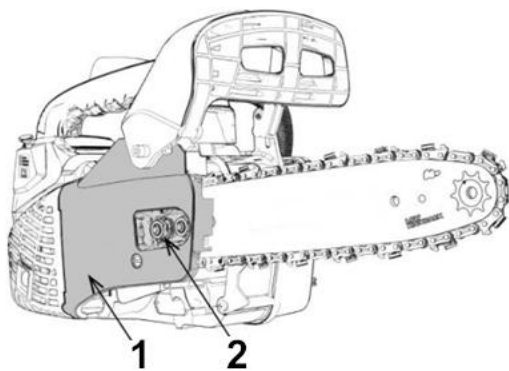


Fig. 2

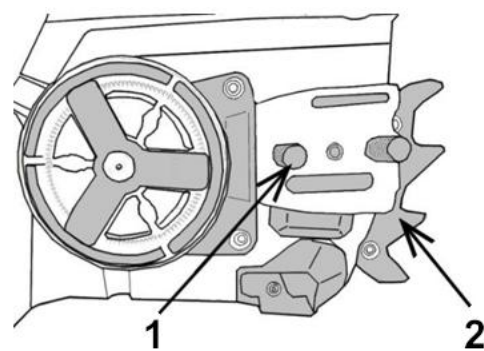


Fig. 3

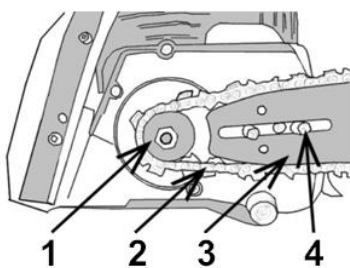


Fig. 4

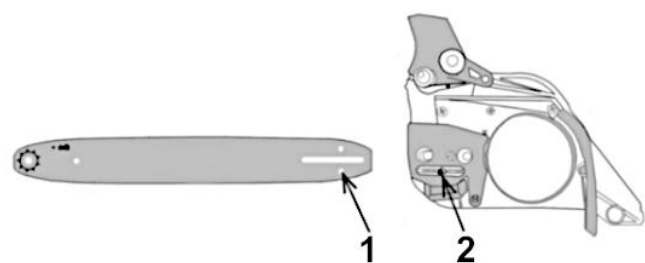


Fig. 5

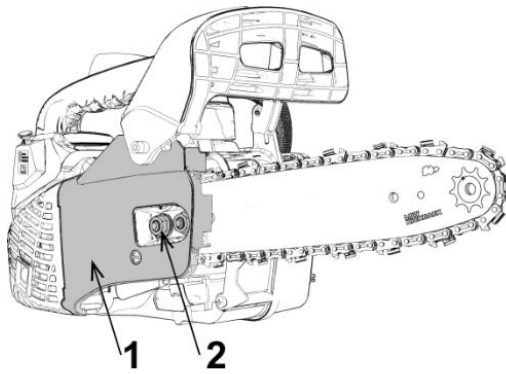


Fig. 6

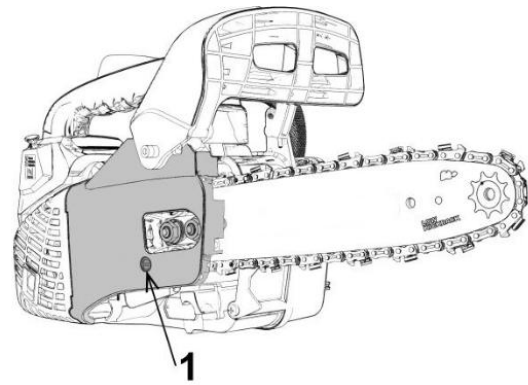


Fig. 7

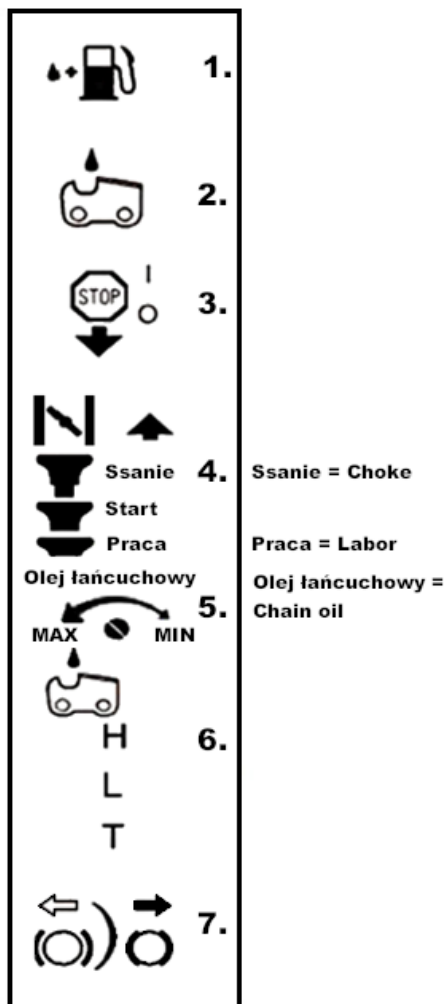


Fig. 8



Fig. 9

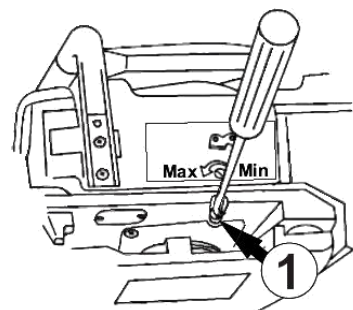


Fig. 10

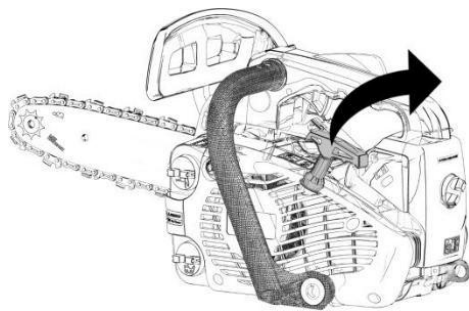


Fig. 11

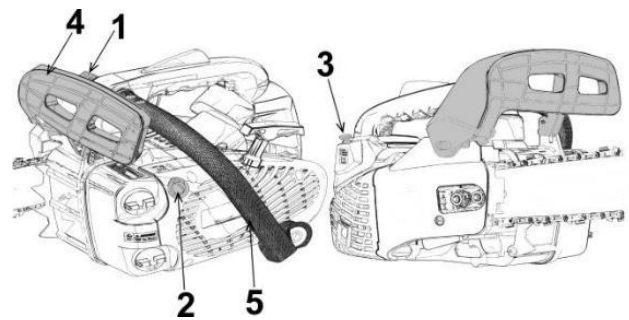


Fig. 12

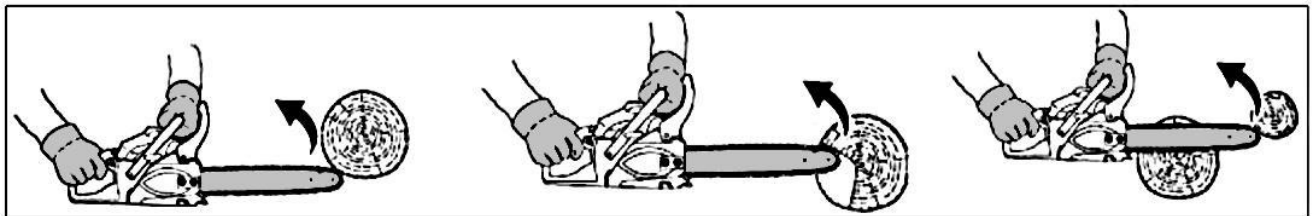


Fig. 13

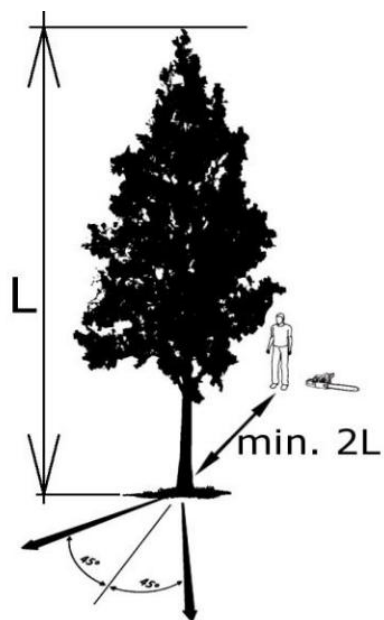


Fig. 14

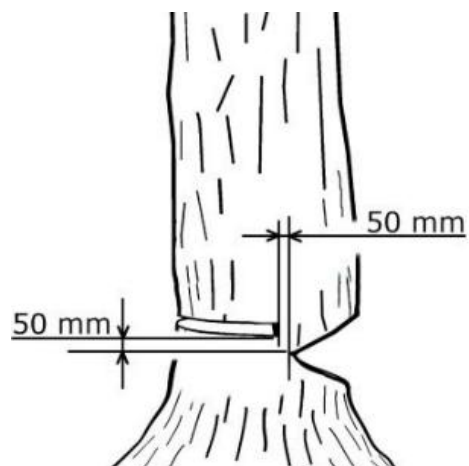


Fig. 15

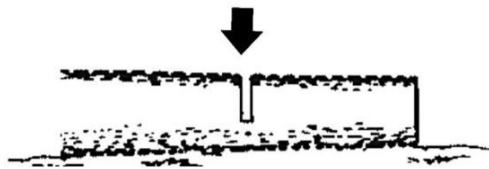


Fig. 16

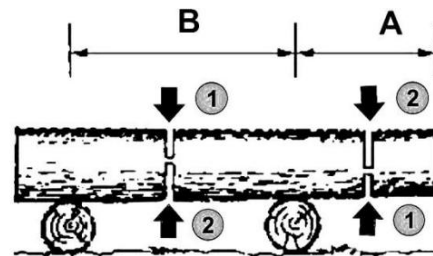


Fig. 17

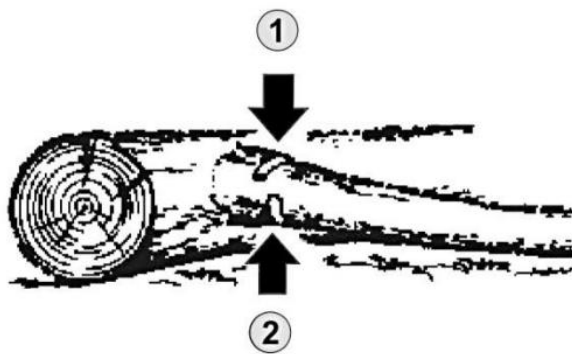


Fig. 18

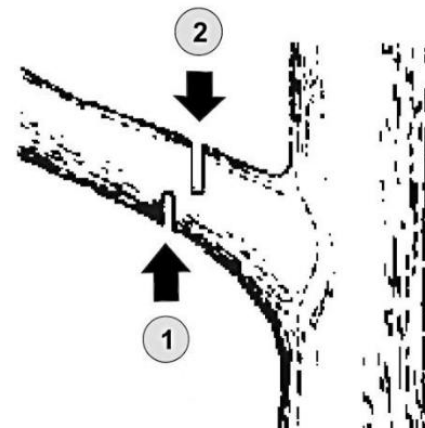


Fig. 19

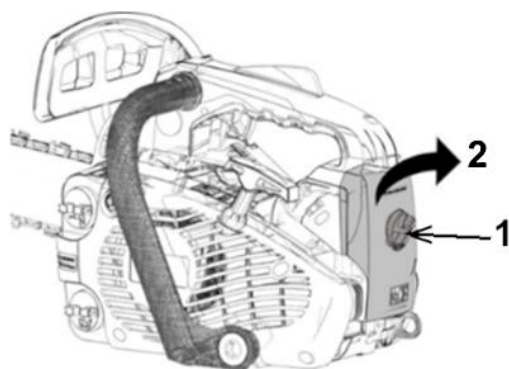


Fig. 20

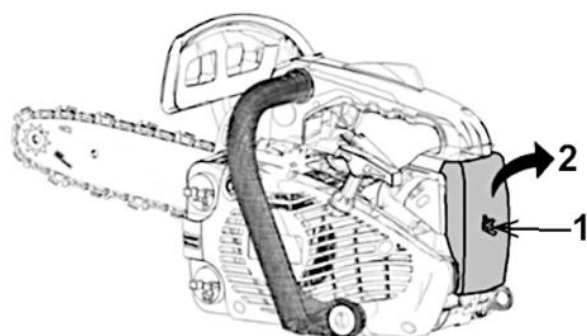


Fig. 21



Fig. 22

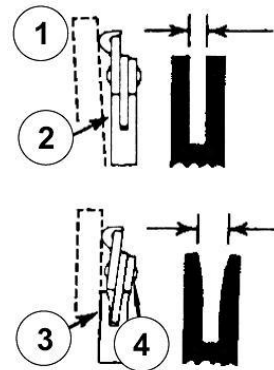


Fig. 23

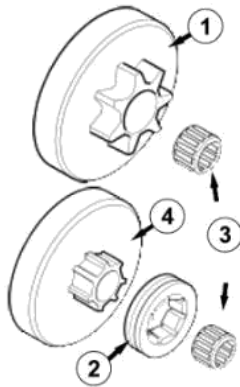


Fig. 24

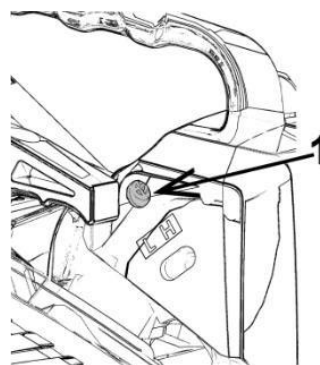


Fig. 25

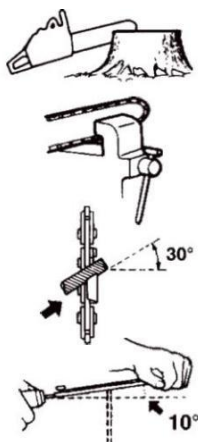


Fig. 26

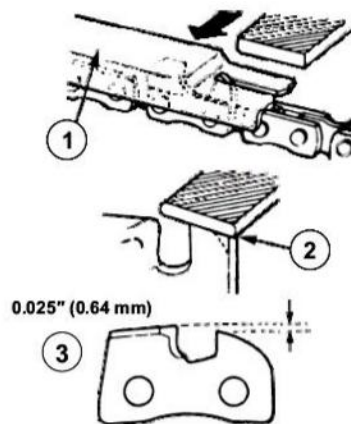


Fig. 27

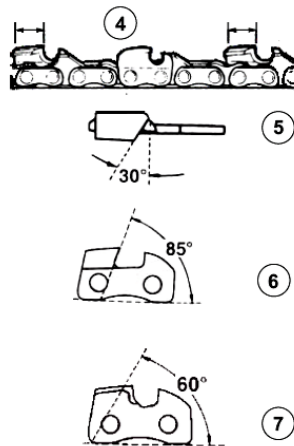


Fig. 28

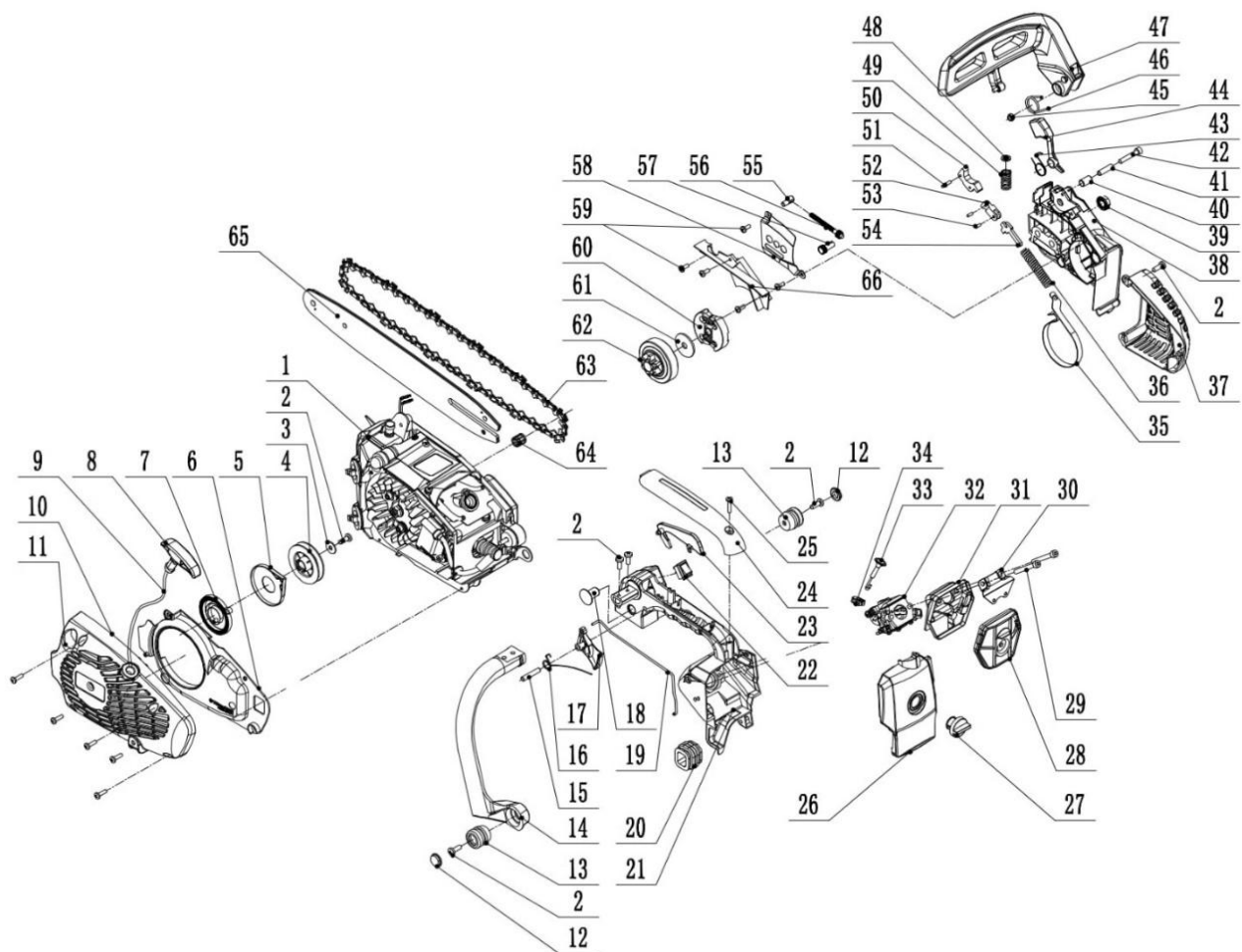


Fig. 29

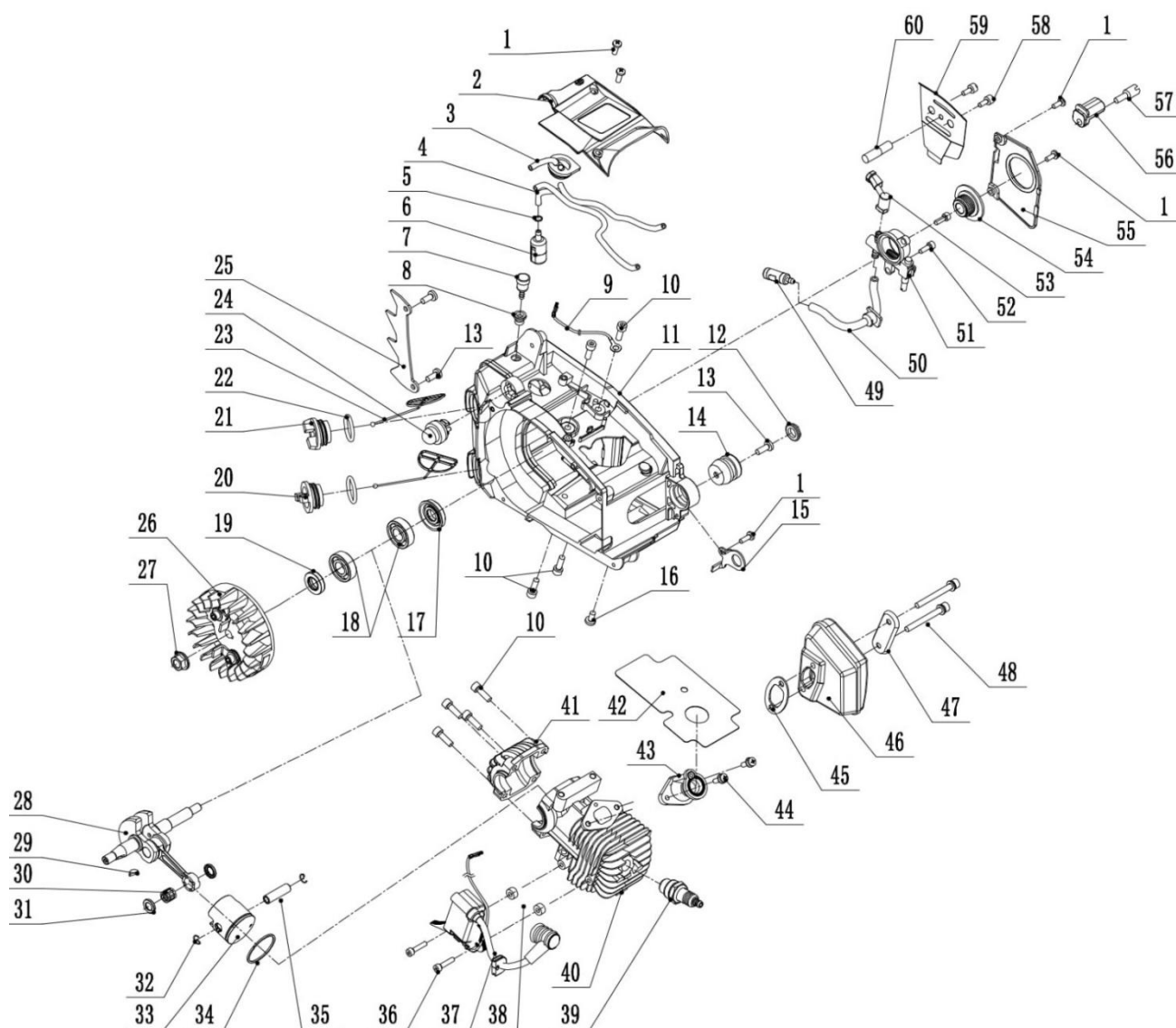


Fig. 30

**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

CIRCULAR COMBUSTION SAW	
Type, model	NAX 100C
Engine	TT-1E34F series BS
Fuel mix	40: 1 (4 l of gasoline for every 100 ml of two-stroke oil)
Fuel tank capacity	230 cm ³
Mix oil (recommended)	Briggs & Stratton for two-stroke engines
Oil for lubricating the chain	NAX
Oil tank capacity for chain lubrication	160 cm ³
Engine capacity	25.4 cc
Machine rated power	0.75 kW – 8500 rpm
Maximum torque	1.0 Nm - 6500 rpm
Spark plug	TORCH L8RTF
Maximum engine speed with cutting attachment	10500 rpm
Maximum engine idle speed	3300 ± 500 rpm
Gearwheel	6T X 3/8"
Chain scale	3/8"
Chain thickness	1.3 mm
Number of chain links	40 pieces,
Guide length	10" (25 cm)
Maximum chain feed speed	~ 19 m/s
Sound pressure level	LpA= 93.4 dB(A) K =3 dB
The value of vibrations transmitted by the machine and acting on the operator's upper limbs	front handle a front_hv, eq 7.128 m/s ² rear handle a rear_hv, eq 6.895 m/s ² K= 1.5 m/s ²
Guaranteed sound power level LWA	117 dB(A)
Equipment mass	3.5 kg
Year of manufacture	2020

THE DEVICE INCLUDES:

- petrol chain saw (power supply unit, guide bar guard, guide bar, chain, butt),
- screws, nuts, necessary wrenches,
- operation manual, EC declaration of conformity, warranty conditions, warranty card.

DESCRIPTION OF GRAPHIC PAGES AND PICTOGRAMS

Pictograms page 2.A

1. Attention! Danger. Exercise special caution.
2. Important! Read the instructions and follow the warnings.
3. Risk of fire or explosion. Gasoline is highly flammable.
4. Keep out of the reach of children.
5. It is prohibited to work in the rain.
6. Note: Exhaust gases are harmful to health. There is a danger of poisoning or suffocation. Do not use the device indoors.
7. Note: A hot surface can cause burns.
8. Wear protective gloves!
9. Keep safe distance.
10. Note: Disconnect the high-voltage pipe from the spark plug before maintenance and / or repair.
11. Never operate the saw only with one hand.
12. Hold the saw with both hands.
13. Danger of kickback. Be careful
14. Use only a gas / oil mixture as fuel.
15. 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.
16. Wear safety glasses and ear protection.

OTHER MARKINGS ON THE MACHINE

1. Name plate (page 2.B)
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 REGULATIONS FOR PETROL CHAINSAW



WARNING!

- Observe all safety instructions, operation manual, descriptions and data supplied with the device. Failure to follow the instructions below may pose a risk of serious injury.
- Use a soft, dry cloth to clean the chain saw. Never use any detergent or alcohol.
- Use personal protective equipment: safety glasses or goggles, protective gloves, protective footwear and protective clothing. Wear ear protectors. Exposure to noise over a long period of time may result in hearing loss.
- Regularly clean the equipment's ventilation slots. The engine blower draws dust into the housing, and large accumulation of metal dust can cause electrical hazards.
- 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 in accordance with the operating instructions;
 - ✓ The cutting tool is in good technical condition; regularly check chain attachment, damage and wear;

- ✓ Safety devices (e.g. cutting unit cover, housing, handle, engine switch) are in good technical condition and work properly;
- Before adjustment, cleaning, maintenance, switch off the engine.
- Do not use the device when other people, especially children or pets, are nearby.
- Do not start a damaged chain saw.
- Do not move the device with the engine running.
- Turn the chain saw off when:
 - you leave the equipment unattended,
 - before adjustment,
 - before checking, cleaning or repairing the device,
 - after hitting with a foreign object,
 - before you clean,
 - in the event of abnormal vibrations.

PREPARATION

- Always wear solid footwear and long pants when working with the equipment, do not operate the device with bare feet or in sandals.
- Check carefully the area where you will be working and remove all stones, branches, wires and other foreign objects protruding from the ground that you might trip over during your work.
- 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.
- Before use and after falling or other impacts, inspect the saw to identify any significant damage that may affect safety.

REMEMBER! Do not leave the chain saw uncontrolled. Never leave the chain saw turned on, as unintentional use may result, which may result in accidents.

USAGE

- Work only in daylight or in good artificial light.
- Do not work during rain, especially during a storm and in high humidity.
- Do not work in strong winds or other weather conditions that will cause the device to use a dangerous situation.
- It is important to have correct posture during work. In order not to bother excessively, frequent change of work position is recommended.
- Stop work every 15 minutes - rest is necessary. Tiredness and distraction can contribute to an accident.
- Keep your feet steady and keep balance during work.
- When working on a slope, make sure your legs are standing firmly.
- Do not work too long because of the possibility of tingling or numbness in the fingers and hands. If such symptoms occur, stop working.
- Attention! The device causes vibrations of the limbs during operation. The value of vibration acceleration is provided in the table with rated data. Prolonged exposure of hands to vibration for several months or years, can cause the white toe disease, i.e. a decrease in limb temperature caused by ischemia. Symptoms such as tingling, numbness, hypersensitivity to cold should not be underestimated, see a doctor.
- Do not use the device with damaged covers or housings or without any protection.
- Start the saw engine as per the instructions.
- Check the chain saw brake for proper operation from time to time, as a malfunctioning brake may not disconnect the cutting chain movement in an emergency.
- Refuel after switching off the engine and after it has cooled down, as there is a risk of spillage and ignition from hot parts of the chain saw.
- Do not touch the chain saw with exposed body parts to avoid any possible burns.
- When working, hold the chain saw with both hands on the handles provided.
- Always adjust before cutting the chain brake lever by pulling it toward you. During operation, the safety brake is also a hand guard.
- Move the chain saw away from the material to be cut only when the saw chain is running.
- When cutting processed sawn timber or thin limbs, use a special support (goat). It is not allowed to cut several boards at the same time (stacked on top of each other) or materials held by a leg or held by another person.

- When cutting through, always use the buttress as a fulcrum. Holding the chainsaw by the main handle, guide it with the auxiliary handle.
- If it is not possible to cut the material at once, pull the saw back slightly, move the buttress and continue cutting by slightly raising the main handle of the saw.
- When cutting horizontally, position yourself so as to keep as vertical a position as possible.
- Use extreme caution if the chain is jammed. Then the so-called recoil directed towards the operator.
- To avoid dangerous situations, try to cut with the bottom of the guide where possible. In this case, any recoil would be directed away from the operator's body.
- Be careful when cutting splitting wood, because cut pieces of wood can be thrown away in any direction with the risk of injury.
- Pay particular attention to branches that are under tension, never cut branches hanging down from below.
- An uncontrolled fall of a felled branch or the whole tree may cause injury, while standing always stand on the side of the line of the predicted fall direction of the tree to be felled.
- Remember that the direction of the cuts should in principle be opposite to the main direction of felling the tree. Before cutting, determine the direction of the fall of the tree, for greater safety, tying a rope to be able to direct the falling trunk in the right direction.
- A working chain saw tends to rotate when the top of the chain guide touches the workpiece. In this case, the chainsaw may move uncontrollably towards the operator with the risk of injury.
- Be particularly careful at the end of cutting wood, because the saw without resistance in the form of cut material falls by the force of inertia, which can cause injury.
- Do not use the chain saw above shoulder height or standing on a tree, ladder, scaffolding, stump, etc.



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.
Maintenance and storage

WARNING!

- Before attempting any repair or maintenance, make sure the chain saw engine has stopped and is cold. Disconnect the high voltage cable from the spark plug to prevent accidental starting of the engine.
- 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.
- After finishing work, clean the device of grass, dust and dirt



CAUTION! Always make sure that the device is turned off before performing any inspection or maintenance.

Use a fine brush, tuft, or cloth to clean the housing of the dust, you can clean the saw with compressed air.

Cleaning with a damp cloth is allowed, however, provided that the device is dried immediately after this operation. Metal parts must be protected with oil.

Regularly clean the ventilation holes with compressed dry air. Do not insert sharp objects into the ventilation openings.

After finishing work, please:

- Wipe the ventilation holes and leave them free of dirt.
- Wipe the chain saw with a dry cloth.



CAUTION! Never use aggressive or corrosive cleaning detergents as they may damage the plastic parts of the device. It is unacceptable to clean the saw with a water jet, water may damage the electric parts of the saw.

Cleaning agents and solvents such as gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia can damage plastic components.



CAUTION! The chain saw must be stored in a well-ventilated room in a dry, dust-free place. Only a functional device should be stored; rectify faults before storage.

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 chain saw, 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 RISK

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 guards or the casing and without properly installed safety devices, e.g. shield guards etc.

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 work in the home garden in accordance with the description and safety rules contained in these operation manual. It can be used for cutting trees, cutting branches, preparing firewood and for other applications that require pruning. Other applications may be dangerous to users and may cause damage to the equipment.

The device should not be used to:

- cutting materials other than wood and wood-based materials,
- as a lever for lifting, moving or dividing objects.

ADDITIONAL INFORMATION FOR THE USER

Performing maintenance and adjustment work before or after the season can be a problem even for advanced users. The NAX company would like to offer you a service consisting in preparing the machine for storage and / or work. The scope of this service may include: candle 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 WORK

The saw is supplied by the manufacturer in a cardboard packaging in a partially disassembled state. After reading the operating instructions and assembly drawings, assembling the chain saw should not be too difficult. All necessary components for assembly are included in the packaging.

WARNING! The chain has very sharp edges. Use thick protective gloves for safety.

- Stay away from the saw chain as it will start to rotate when the engine starts.
- The handles should be dry, clean and free from oil or the fuel mixture.



- Use extreme caution when cutting small branches and trees, as thin material can get stuck in the saw chain and hit the operator or throw him off balance.
- When cutting stressed boughs, be careful not to be hit when the stress in the wood fibers is reduced.
- Check the tree for dry branches that may fall during felling operations.
- Always stop the engine before putting the saw down.

CONSTRUCTION OF PETROL SAW

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

1. Speed brake lever.
2. Auxiliary handle
3. Starter handle with cable
4. Air filter cover
5. Choke control
6. Gas control lever lock
7. Main handle
8. Gas control handle
9. Switch
10. Fuel-filler cap
11. Oil filler cap
12. Guide lubrication points
13. Chain
14. Guide
15. Buttness
16. Muffler
17. Suction pump
18. Ear hanger

INSTALLING THE GUIDE

To mount the guide:

- Remove the drive transmission cover **1 (Fig. 2)** by unscrewing the nuts **2 (Fig. 2)**.
- Mount the buttness **2 (Fig. 3)** using the screws supplied.
- Put the guide on the pins shown in the picture **1 (Fig. 3)**.

FITTING THE CHAIN

To put the chain on the guide bar:

- Bring close the guide bar **3 (Fig. 4)** to the drive wheel **1 (Fig. 4)**.
- Install the chain **2 (Fig. 4)** remembering the chain's operation direction. The direction is indicated by arrows on the guide bar, on the chain and the machine body.

CAUTION! When installing the chain, remember to put it correctly on the drive wheel and then on the guide bar.

INSTALLING THE TRANSMISSION GUARD

To attach the cover:

- Check that the emergency brake is applied, otherwise it will not be put on
- Remember that the chain tensioning point **1 (Fig. 5)** was on the pin in the cover.

TENSIONING THE CHAIN

Before starting work, stretch the chain. To do this, use the chain tensioning screw.

To tighten the chain, loosen the drive case housing nuts **2 (Fig. 6)** check that the chain is in the guide groove of the guide bar and use a screwdriver to turn the adjustment screw **1 (Fig. 7)** until the chain is properly tensioned. A correctly tensioned chain can be lifted in the middle of the guide bar to a height of about 3-4 mm. Correctly tighten the guide fastening nuts.

CAUTION! When working with a chainsaw, the cutting chain lengthens as a result of heating. Check and adjust the tension frequently, as a loose chain can easily fall off the rail or wear quickly and damage the bar.

SYMBOLS ON THE DEVICE

Symbols are placed on the device for safe operation and maintenance.

Use these guidelines to be careful not to make a mistake.

Designations of the symbols. (Fig. 8)

1. Hole for refilling the fuel mixture. Place: fuel tank housing **Fig. 1, point 10.**
2. Hole for topping up oil to the chain. Place: fuel tank housing **Fig. 1, point 11.**
3. Switch tip. When the engine switch is moved towards "O" (STOP), the engine goes out.
Place: the rear part of the device on the left **Fig. 1, point 9.**
4. Choke tip. When the choke lever is pulled out, choke is activated.
5. Note on the amount of oil to lubricate the chain:
 - "MIN" direction - reducing oil quantity
 - "MAX" direction - increasing the amount of oil. Place: the bottom of the saw.
6. Carburetor adjustment indicator:
 - "H" indicator position
 - Position of indicator "L"
 - Idle adjustment screw position "T"
7. Chain brake:
 - Left arrow - brake released
 - Right arrow - brake turned on

FILLING THE FUEL TANK

Fill the fuel tank before the first start-up.

When filling with fuel, observe the following rules:

- the engine cannot operate,
- the engine cannot be hot,
- Do not allow fuel to spill.

Mix the filtered 95 octane unleaded gasoline with good quality engine oil - synthetic or semi-synthetic, designed for air-cooled 2-stroke engines well, and fill the fuel tank. We recommend Briggs & Stratton two stroke oil. To refuel the saw tank:

- unscrew the fuel filler cap **10 (Fig. 1)**,
- pour previously prepared fuel mixture (max 230 ml),
- screw the fuel filler cap **10 (Fig. 1)**.



CAUTION! Most engine problems are caused, directly or indirectly, by the low quality of fuel used in the device. The use of Mixol oil and its derivatives as well as oil for 4-stroke engines is prohibited.

Recommended mix ratio: 40: 1

Table for a 40: 1 mix

The amount of gasoline in liters	1	2	3	4	5
The amount of oil in ml	25	50	75	100	125

CAUTION! It is forbidden to use other suggestions of the mixture under the threat of loss of warranty.

CHAIN LUBRILAC

The new chainsaw has an empty oil tank, so fill the tank with oil before using it for the first time. To do this:

- unscrew the fuel filler cap **11 (Fig. 1)**,
- pour max. 160 ml (be careful not to get any dirt inside the tank when filling it),
- screw the fuel filler cap **11 (Fig. 1)**.

For chain lubrication, it is best to use a guide and chain preparation or a special NAX chain lubricant.

**CAUTION!**

Do not use used or regenerated oil, as this may damage the oil pump.

Check chain lubrication system. After starting the engine, use the gas control lever to set the maximum speed and check that the chain is spraying oil as shown on **Fig. 9**.

The oil flow for chain lubrication can be adjusted by inserting a screwdriver into the bottom slot on the clutch side (**Fig. 10**). The flow should be adjusted according to the operating conditions.

**CAUTION!**

The adjustment range is about ¼ turn. Exceeding the MIN or MAX marking will cause mechanical damage to the chain lubrication pump.

1 - Adjusting Screw

**CAUTION!**

The oil tank (with properly adjusted lubrication) should almost empty until the fuel is used up. Make sure the oil tank is topped up each time you refuel.

STARTING THE SAW

To start the saw:

- Make sure that the saw stands firmly on the ground.
- Slide the safety brake **4 (Fig. 12)** in the attached positions, i.e. push it away from the auxiliary handle until it clicks.
- Switch **1 (Fig. 12)** set to "I" or "Start".
- With one hand, holding the saw so that it is stationary, pull the starter handle once without jerking (**Fig. 11**) checking that the engine is warm and starting.
- If the engine did not start, press the pump several times (4-6 times) **2 (Fig. 12)**, pull out the choke lever **3 (Fig. 12)** and pull the starter rope until the first cycle of work.
- Slide the choke back and pull the starter cord. The motor should start.

CAUTION! Pulling or jerking the starter cord abruptly may cause mechanical damage to the starter.

- After starting the engine, pull the emergency brake **4 (Fig. 12)** to the auxiliary handle **5 (Fig. 12)** and only then by controlling the throttle lever check that the chain rotates.



CAUTION! If the engine does not start, despite several attempts, it may mean that the spark plug is flooded. In this case, unscrew the spark plug, wipe and dry it, and then pull the starter cord several times without jerking (without spark plug and the chain saw turned 180 °), thus draining the cylinder of excess fuel. Then repeat the entire startup procedure.

CHAIN BRAKE

The safety brake is designed to immediately stop the saw chain when it bounces, i.e. the bar suddenly rises. The brake is automatically activated by inertia.

Before each use, check the operation of the safety brake by moving the lever forward. Use the gas control handle to check that the chain does not rotate. If so, it means that the emergency brake is functional. After checking, pull the brake lever toward the auxiliary handle until it clicks.

CUTTING

Read the chapter "Safety instructions" before starting work. It is recommended to first practice cutting on easy logs, which will also help you get used to operating the device.

Do not apply a lot of force to make the cut, use light pressure when the engine reaches maximum speed.

When the saw gets stuck in the material being cut, do not try to force it out, but use a wedge or lever.

PROTECTION AGAINST JET FORCE

Check the function of the chain brake before each use by switching on the saw and at maximum engine speed after 1-2 seconds push the safety brake forward. The chain should stop immediately when the engine is running at full speed. If the chain stops too slowly or does not stop at all, replace the brake band and clutch drum before using the saw.

It is extremely important that the brake is checked for proper operation before each use and that the chain is sharp in order to maintain the correct level of protection against the chainsaw bouncing back. Removing protective devices, improper maintenance, or replacing the guide bar or chain with the wrong equivalent can increase the risk or cause serious injury.

Typical cases illustrate (Fig. 13).

OPERATION

CUTTING TREES

Before cutting the tree, you must:

- Determine the direction of the cut, taking into account the wind, the slope of the tree, the location of heavy branches, ease of work after felling and other factors (Fig. 14).
- By clearing the area around the tree arrange a good escape route.
- Make an incision to one-third the depth of the tree (Fig. 15) on the side of the tree where the tree is to be laid.
- Make a cut on the opposite side of the cut, at a level slightly higher than the cut.



WARNING!

When cutting down a tree, warn people who may be nearby about potential danger.

CUTTING AND HEWING

Before starting work, assess the direction of the distribution of forces (stresses) inside the entire log. Always end the cut on the opposite side of the log bending direction to prevent cutting guide jam.

- A tree lying on the ground (Fig. 16): Cut down halfway, then turn the log and cut from the other side.
- Tree placed on supports (Fig. 17): In area A, cut from the bottom up to one third of the depth and finish cutting from the top down. In area B, cut from top to bottom to one third of the depth and finish cutting from the bottom up.
- Cutting off the branches of a felled tree (Fig. 18): First check which way the branch is bent. Then make the first cut from the bend side and finish cutting from the other side. If the branch is bent like at (Fig. 18) - cut from the bottom up, finish cutting from the top down.
- Cutting off the branches of a standing tree (Fig. 19).



Attention! First cut the branch down to approximately $\frac{1}{2}$ in diameter, then cut the branch from above.



WARNING!

Always ensure good foot support. Do not stand on tree logs. Watch out for the rolling of the cut log.

Be careful of springing the branch being cut off.

Do not use the saw on an unstable surface or ladder. Do not work with arms outstretched. Do not cut above shoulder height. Always hold the chain saw with both hands.

MAINTENANCE

The rules for safe maintenance of the device are described in this manual in the section "Maintenance and storage" in the chapter "Detailed safety rules for petrol saws".



WARNING!

Before cleaning, inspecting or repairing the device, make sure that the engine is switched off and is not hot. Disconnect the spark plug to prevent the petrol saw from being switched on accidentally.

AIR FILTER CLEANING

A dirty air filter increases fuel consumption and reduces the efficiency of an internal combustion engine. The air filter should be cleaned as needed, at least every 5 hours of operation of the saw. Sawdust on the filter surface can be removed with a brush. To clean the filter from the inside, use compressed air.

To reach the air filter, unhook the tabs **1 (Fig. 20)** and remove the air filter cover **2 (Fig. 20)**.

Then unscrew the wing nut holding the air filter **1 (Fig. 21)** and remove the air filter **2 (Fig. 21)**. The air filter should be disassembled, washed with gasoline and dried, and replaced if necessary.

CYLINDER RIBBING

Dust accumulating on the cylinder fins may cause the saw engine to overheat, therefore the cylinder fins should be inspected and cleaned periodically during air filter maintenance.

MAINTENANCE OF THE SPARK PLUG

To ensure proper operation of the engine, check the condition of the spark plug, check its cleanliness and the gap, which should be 0.5-0.7 mm. Use original TORCH L8RTF spark plugs. Always do the following with the engine off:

1. Carefully pull the high voltage cable from the spark plug. Do not pull on the cable, just directly on the plug.
2. Unscrew the spark plug using the spark plug wrench provided.
3. Visually inspect the spark plug for damage and dirt. Use a copper wire brush to remove carbon and soot deposits.
4. Check the gap with a feeler gauge and adjust the electrode distance to 0.5 to 0.7 mm **(Fig. 22)**.
5. Check the spark plug washer, screw the spark plug with a spark plug wrench. Torque 12-15 Nm.
6. Install the power cord on the spark plug.
7. In case of any problems please contact the NAX Service Center.

CLEANING THE GUIDE AND CHAIN

After every 5 hours of operation or more often, depending on the operating conditions, check the condition of the guide bar and chain. To do this, remove the chain from the guide bar and then:

- remove sawdust from the guide groove and oil hole,
- lubricate the chain guide mode through the grease supply hole at the end of the guide **12 (Fig. 1)**.

Occasionally invert the guide bar to avoid partial wear.

The guide rail should always have a rectangular shape.

Check the wear of the guide rail. To do this, place a ruler **1 (Fig. 23)** to the guide outside the blade. If there is a gap between them **(2 Fig. 23)** the rail is good. Otherwise, if there is no space **3 (Fig. 23)** the chain is tilted **(4 Fig. 23)** the rail is worn. Such a guide needs repair or replacement.

RACK CONTROL

Check for cracks and excessive wear affecting chain drive. If wear is found, replace the rack with a new one. Never put a new chain on a worn sprocket or a worn chain on a new sprocket.

- 1 - clutch basket with fixed rack
- 2 - floating rack
- 3 - needle bearing
- 4 - clutch basket with floating rack

CARBURETTOR ADJUSTMENT

The carburettor of the device has been adjusted at the factory, but may need to be adjusted during normal use. Before doing this, make sure that:

- the saw was previously started and warmed up,
- choke is off,
- the air filter and fuel filter are clean,
- the mixture is fresh and without any impurities.



The idle speed can be adjusted by using the marked screw **1 (Fig. 25)**. By turning the screw counterclockwise the rotation decreases, by turning the screw clockwise we increase the rotation. To set the speed, turn the idle adjustment screw slowly clockwise until the chain begins to rotate, and then turn the screw counterclockwise until the chain stops moving.

CAUTION! If, after adjustment, the chain moves while the engine is idling, have it repaired at the NAX Authorized Service.

Mixture composition adjustment: this operation should be carried out by the service, as incorrect adjustment may cause the engine to overheat or seize. Incorrect regulation has a negative impact on environmental protection and carries the risk of losing warranty protection. Do not take this action if you do not have the appropriate knowledge and tools.

CHAIN SHARPENING

The cutting tool should always be clean and sharp to ensure efficient and safe work. Working with a chain saw with a blunt chain causes faster wear of the guide chain and chain drive wheel, and in extreme cases can lead to chain breakage. That is why it is important to sharpen the chain in time. Sharpening the chain yourself requires the use of special tools and skills, so it is recommended to entrust the sharpening of the chain to qualified persons or gardening tools services. An authorized NAX service is recommended.

Blades need sharpening when:

- sawdust is in the form of dust,
- cutting requires additional strength,
- the cut trace is not straight,
- vibrations increase,
- fuel consumption increases.



Warning! Wear protection gloves

Before sharpening:

- make sure that the chain is kept in a safe position,
- make sure the engine is off,
- prepare a round file of the right size for the chain (chain pitch: 0.325 inches; file size: 3/16 inches (4.76 mm)).

Place the file on the blade and push straight forward.



Keep file position as at **Fig. 26**.

After setting each blade, check the depth and saw it to the appropriate level as per **Fig. 27**.

Warning!

Make sure the front edge has been rounded to reduce the risk of the connecting eye jumping back or breaking. **Fig. 27**

- 1 - adequate control
- 2 - rounding the arm
- 3 - standard depth

Make sure that each blade has the same length and angles.

- 4 - length of blade
- 5 - sawing angle
- 6 - side plate angle
- 7 - cutting angle of the upper projection

OTHER TIPS

Check for fuel leaks, loose connections, and damage to the main parts of the chain saw, especially handle connections and guide bar attachment. If any defects are found, make sure they are repaired before restarting.

TRANSPORT

PREPARATION FOR TRANSPORT

- Turn off the chain saw before moving it.



- Before transporting the chain saw, replace the chain guard and engage the chain brake.
- Carry the chain saw by the front handle to avoid possible injury.
- For transport, the saw must be secured with transport belts, and if possible, transport the scythe folded in its original packaging.

STORAGE

Keep the chain saw in a dry, ventilated and safe place out of reach of children.

If the chain saw is not in use, it should be stored clean, on a flat and dry surface. If the break in operation is longer than 3 months it is necessary to:

- empty and clean the fuel tank,
- dispose of fuel in accordance with applicable regulations,
- remove the chain and guide bar and clean them by spraying with preservative oil,
- thoroughly clean the device, especially the cylinder fins and air filter.

REVIEW AND DIAGNOSIS OF PROBLEMS

INSPECTIONS

Inspections		Prior to each use	After work or daily	After each refueling	Once a week	Monthly	In case of damage	If required
Entire Machine	visually check (condition, leaks)	x		x				
	clean		x					
Throttle switch and lock, combination switch	test	x		x				
Chain brake	test	x		x				
	clean		x					x
Fuel filter in the fuel tank	inspect					x		
	clean / replace filter;						x	
Fuel tank	clean					x		
Chain oil tank	clean					x		
Chain lubrication	check it out	x						
Saw chain	check, check of sharpness	x						x
	check proper tension.	x						x
	sharpen							x
Guide	check for wear and damage	x						
	clean and turn over				x			x
	replace						x	x
Chain sprocket	inspect				x			
Air filter	inspect	x						x
	replace						x	
Cylinder ribs	clean					x		
Carburetor	check the idle adjustment - the chain cannot rotate	x						x
	adjust idling speed							x
Spark plug	adjust the gap between the electrodes							x
All available nuts and bolts (except for adjusting bolts)	tighten							x
Chain catcher	check / replace	x		x				x

The above maintenance intervals only apply to normal machine operating conditions. If the daily working time is longer than normal or the cutting conditions are difficult (very dusty surroundings, resin-rich wood, tropical wood, etc.), then the indicated actions should be performed much more often.

TROUBLESHOOTING

Problem	Possible cause	Solution
Difficulties in starting a cold engine.	Low fuel.	Check the fuel level and add fuel if necessary.
	Spark plug flooded or damaged.	Check, clean or replace the spark plug.
	No spark on the spark plug.	Replace the spark plug with a new one.
	No suction attached.	See the chapter: Starting the engine.
	Contaminated air filter	Clean or replace the filter.
The equipment goes out and it is difficult to restart.	The fuel mix has run out.	Fill the fuel tank.
	Carburettor clogged.	Clean the carburettor.
	Ignition switch off.	Turn off the switch.
	Too much carbon deposits have accumulated on the spark plug.	Clean carbon deposit collected on the spark plug.
	Clogged / dirty fuel filter.	Replace it.
	Choke enabled.	Turn off choke.
Low engine acceleration speed and poor cutting power.	Clogged cylinder cooler, too much soot has accumulated in the top of the cylinder.	Clean the cylinder.
	Oil circulation blocked and / or air filter blocked.	Clean
	Weak or tight chain.	Adjust and / or sharpen.
	Dirty air filter.	Clean or replace
Idle speed is not stable.	The fuel pin is too tight and / or the stop screw is incorrectly adjusted.	Have it adjusted at the garden tools service. An authorized NAX service is recommended.
	The fuel pin is too tight and / or the oil is too thick.	Have it adjusted at the garden tools service. An authorized NAX service is recommended.
	Water or dirt in the fuel system.	Change the fuel, and if it does not help - have it repaired by qualified service.

CAUTION! If the device requires further maintenance, please contact the NAX Central Service.

DEVICE ASSEMBLY DIAGRAMS

Assembly diagrams of the device are on pages 9 and 10.

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: **Chain saw**
model: **NAX 100C**
serial number: 047 **20** 2490749900 5000 **000001** - 047 **23** 2490749900 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 11681-2A: 2011**,
- ✓ **EN ISO 14982: 2009**,

and meets the requirements:

- ✓ 2016/1628 / EU, 2018/989 / EU.

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

- ❖ measured maximum sound power level: L_{WA} is 107 dB (A),
- ❖ guaranteed sound power level: L_{WA} is 117 dB (A).

The conformity assessment procedures were carried out with the participation of a notified body:

name: TÜV SÜD Industrie Service GmbH
address: Westendstrasse 199, 80686 München, Germany
Identification number: 0036

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, December 20, 2019

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

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 *¹

* To be completed by the seller

***¹ 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.

