# ITEM # GPSHT32

## 2-Cycle Gas Powered Pole Saw w/Hedge Trimmer

# Instructions

### READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

### IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE, DO NOT USE THIS PRODUCT!

### QUESTIONS? CONTACT CUSTOMER SERVICE.

Call Customer Service at **1-866-460-9436, Monday-Friday, 8 AM - 4 PM Central Time**. A copy of the sales receipt is required.

### KEEP MANUAL, SALES RECEIPT & WARRANTY FOR FUTURE REFERENCE

To register your product warranty, please visit buffalotools.com or scan the QR code.

## Layout and items supplied

1. Cutter bar
2. Saw chain
3a. Oil tank / cap
3b. Gear unit
4. Drive rod mechanism
5. Connecting piece
6. Additional handle
7. Eyelet
8. Handle
9. On/Off Switch
10. Throttle lock
11. Throttle lever
12. Spark plug boot
13. Starter cable
14. Fuel tank / cap
15. Air filter/housing cover
16. Choke lever
17. Clip
18. Screw (4x)
19. Open-ended wrench size 8/10
20. Hex key
21. Cutter guard
22. Carrying strap
23. Oil/Gas mixing bottle
24. Multifunction tool
25. Lubrication nipple
26. Fuel pump "primer"
27. Hedge trimmer attachment
28. Extension attachment

**Items supplied**

• Open the packaging and take out the equipment with care.
• Remove the packaging material and any packaging and/or transportation braces (if available).

• Check to see if all items are present.
• Inspect the equipment and accessories for transport damage.
• If possible, keep the packaging until the end of the guarantee period.

**Important!**
**The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of swallowing or suffocating.**

• Original operating instructions

## Intended use

The pole-mounted 2-cycle-powered trimmer is suitable for felling trees or sawing any materials other than wood. The equipment may be used only for its intended purpose.

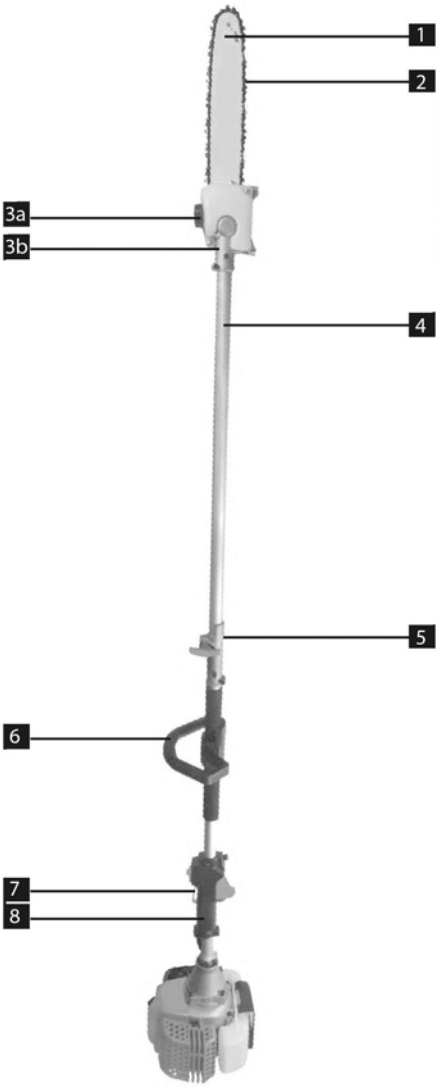
Hedge trimmer (when fitted with reciprocating blade): The trimmer is intended to be used for trimming hedges and bushes with diameter not more than APPROX 1 INCH.

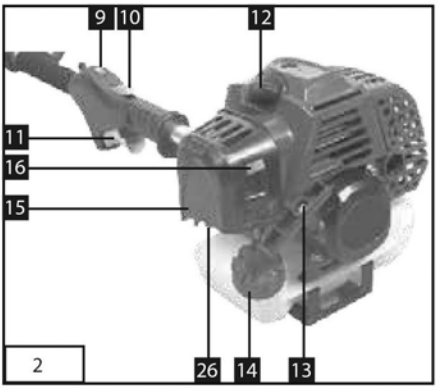
## Technical data

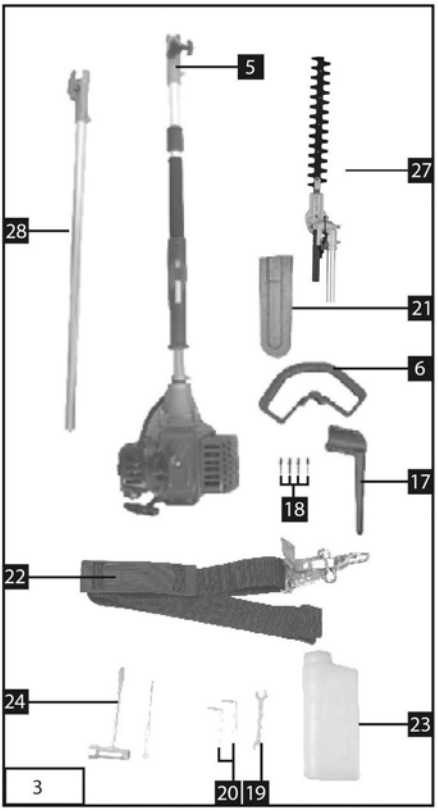
**FUEL REQUIREMENTS:**
Mix 0.7 oz 2-Cycle Oil with 28 oz Gasoline

| | |
|---|---|
| Engine type: | 2-stroke engine, air-cooled, chrome cylinder |
| Engine power (max.): | 0.85 kW/ 1.14 HP |
| Displacement: | 32.6cc |
| Engine idle speed: | 2700-3400 RPM |
| Max. engine speed: | 9,500 RPM |
| Tank capacity: | 825 $cm^3$ |
| Spark plug: | L7T |
| **Pole saw** | |
| Max. cutting length: | 9.75" |
| Chain: | 10", 3/8", 0.050" |
| Cutter bar: | 10", 3/8", 0.050" |
| **Hedge trimmer** | |
| Cutting length: | 14 inches |
| Cutting width: | approx. 1 inch |
| **Sound** | |
| $L_{pA}$ sound pressure level: | 114 dB(A) |

BEFORE USE, FAMILIARIZE YOURSELF WITH AND IDENTIFY THE FOLLOWING :



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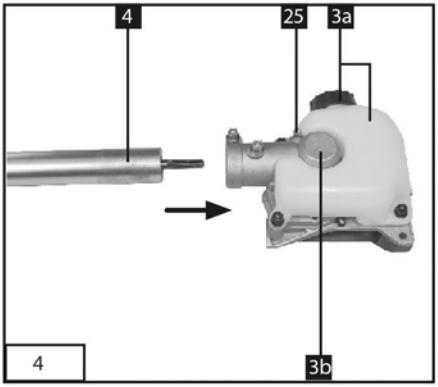


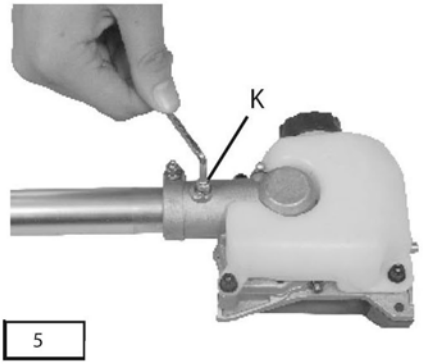


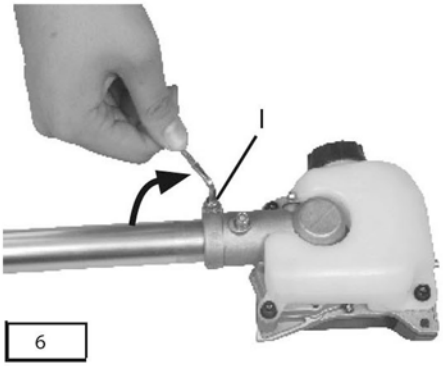


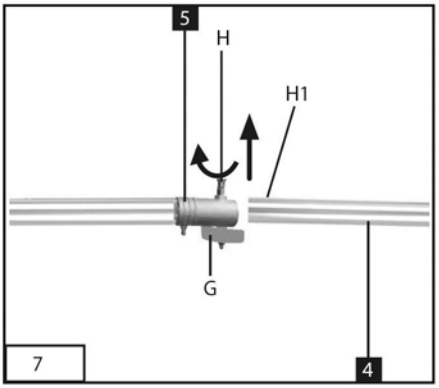


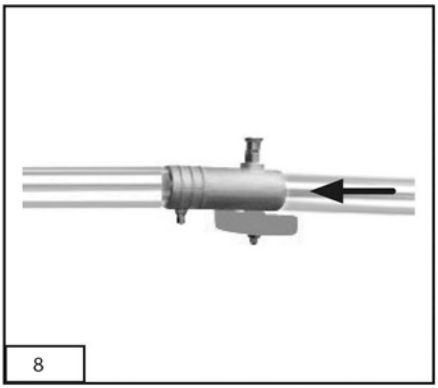


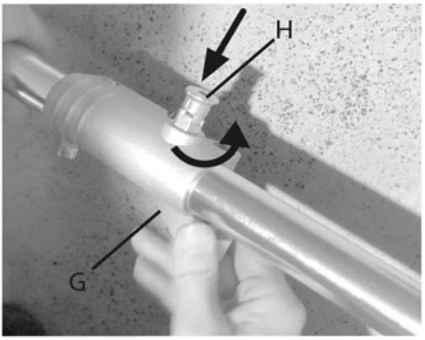

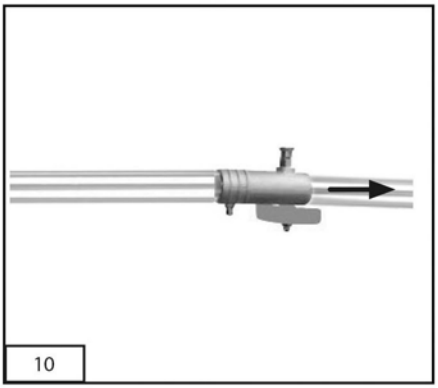
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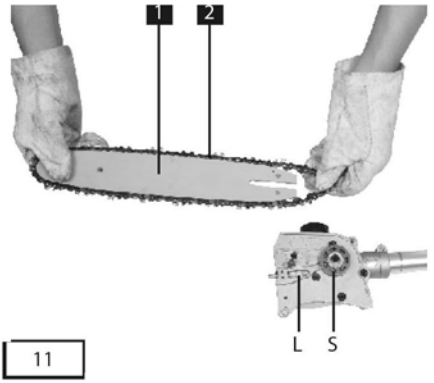
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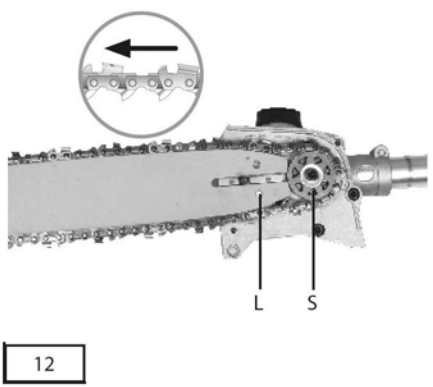
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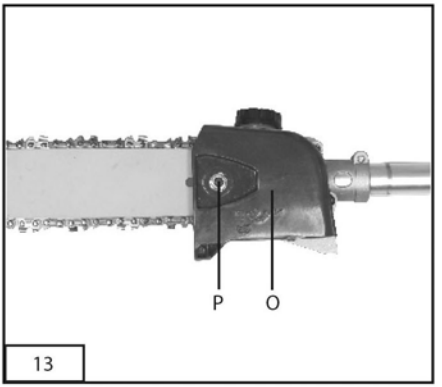
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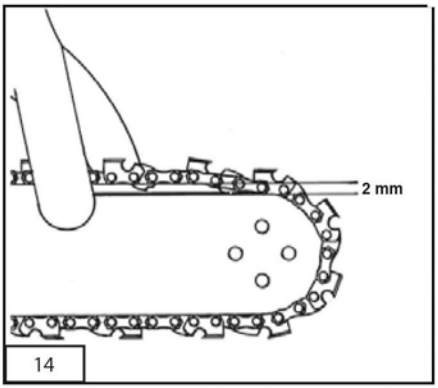
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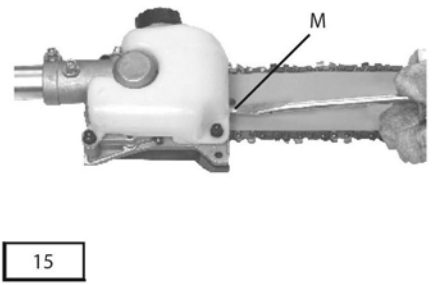
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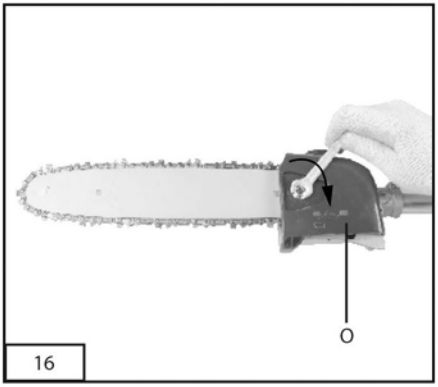
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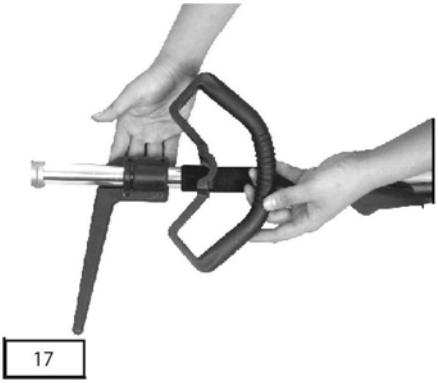
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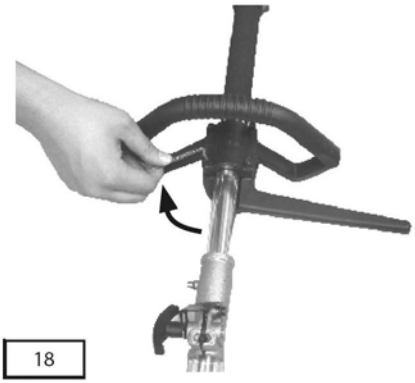
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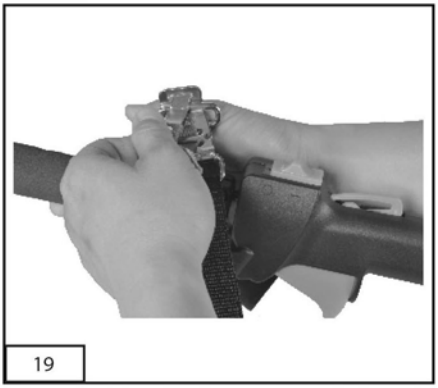
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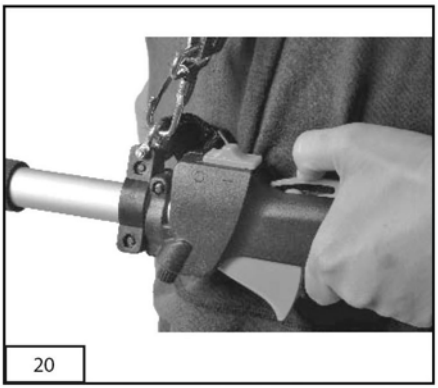
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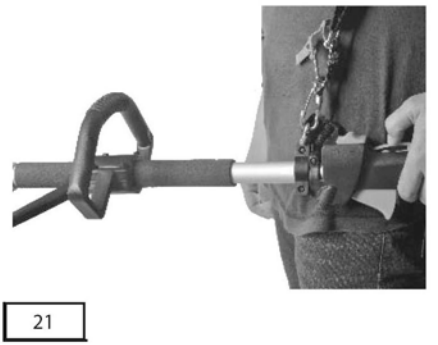
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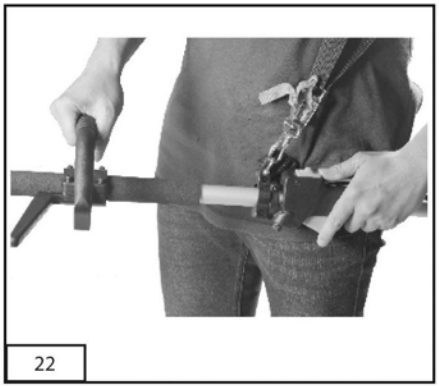
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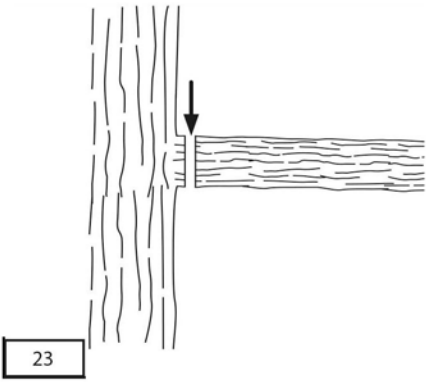
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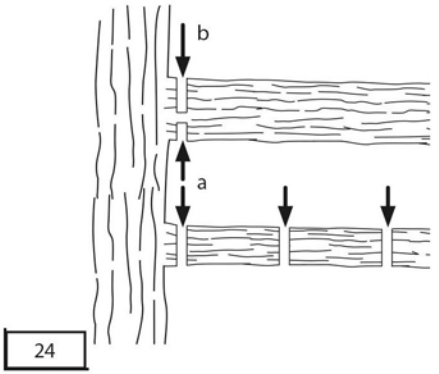
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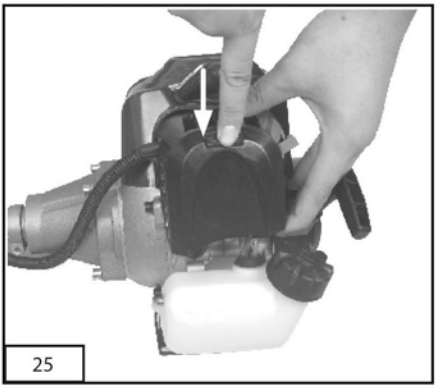
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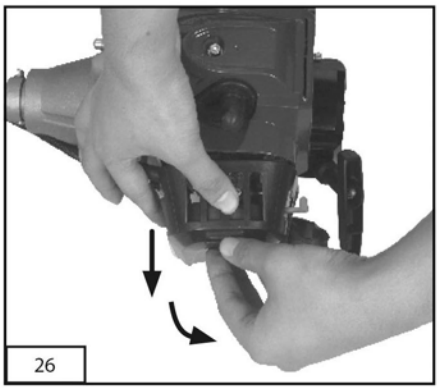
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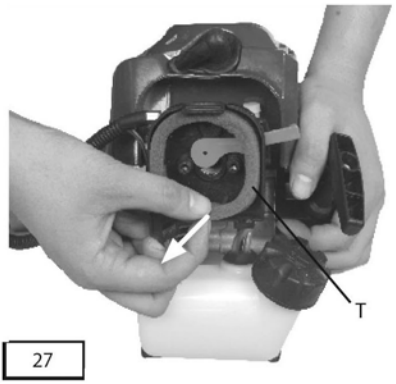
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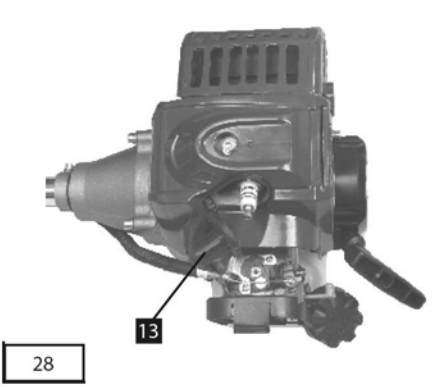


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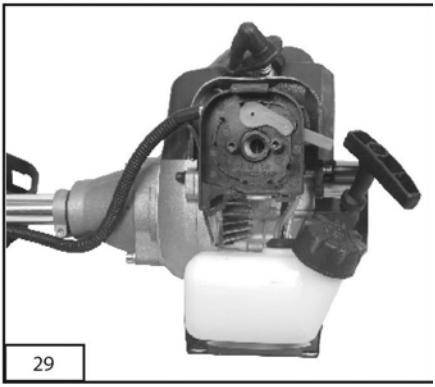

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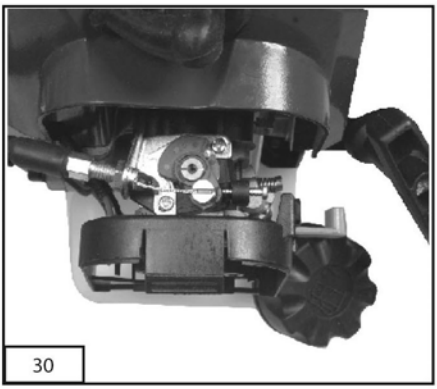

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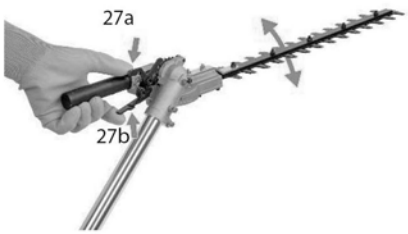


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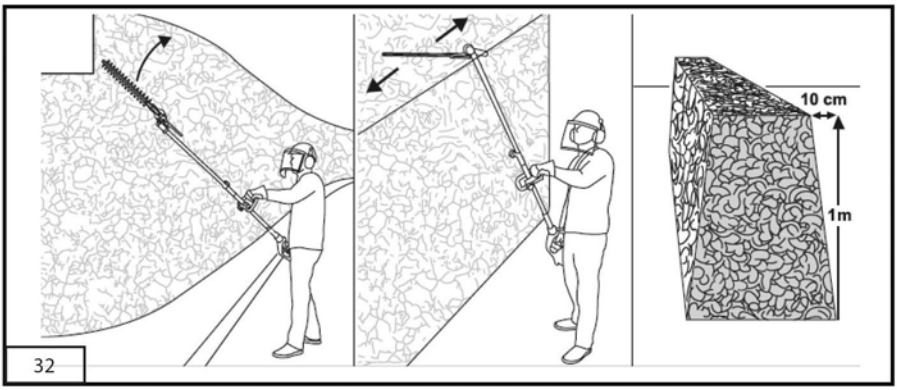


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**Important!**

When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety regulations with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and safety regulations as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety instructions.

## Safety information

For the relevant safety information please refer to the booklet included in delivery.

**Warning!**

**Read all the safety information and instructions.**

Any errors made in following the safety information and the instructions set out below May result in electric shock or injury. Keep all safety information and instructions in a safe place for future use.

**Explanation of the symbols on the equipment**

Warning!

Wear protective headgear, goggles And ear muffs.

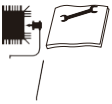
Wear safety gloves.

Watch out for falling and catapulting parts.

Read the directions for use before operating the equipment.

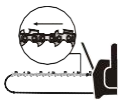
Wear sturdy, non-slip footwear.

Protect the equipment from rain and damp.



Switch off the equipment and pull out. The spark boot plug before carrying out any maintenance work.

Electric shock can cause fatal injury. Keep a distance of at least 32 feet from power cables.



Direction of the chain movement and teeth.

Caution: Hot equipment parts. Keep your distance.


Sound power level guaranteed

**WEAR EAR MUFFS**
The noise of impact can cause damage to hearing.

**In operation**
Reduce noise generation and vibration to a minimum!
• Use only equipment that is in perfect condition.
• Maintain and clean the equipment regularly.
• Adopt your way of working to the equipment
• Do not overload the equipment.
Have the equipment checked if necessary.
Switch off the equipment when not in use.
• Wear gloves.

## Assembly

**Important!**
Do not start the pole saw until it has been fully assembled and the chain tension has been adjusted.
Always wear protective gloves when working on the pole saw to protect your self against injury.

**Pole Saw**

**Joining the gear unit to the drive rod mechanism (Fig. 4-6)**
Tools required: Allen keys size 4mm/5mm (supplied). Push the gear unit (Item 3b) and the drive rod mechanism (Item 4) into each other. Center both by turning the screw (Item K). Important! Make sure that the screw (Item K) is turned exactly into the guide hole (Item F). Otherwise there is a risk of the upper part of the rod mechanism being damaged. To join the two subassemblies securely together, tighten the screw (Item I). To take apart, proceed in reverse order.

**Joining the drive rod mechanism to the connecting piece (Fig. 7-10)**
Open the handle screw (Item G) and pull out the locking pin (H) and hold it clockwise and push the drive rod mechanism (Item 4) into the connecting piece (Item 5). Make sure that the locking pin latches in the guide hole (Item H1) and tighten the handle screw. To take apart, undo the handle screw and pull out the locking pin (H) and hold it clockwise. Pull the drive rod mechanism out of the connecting piece.

**Fitting cutter bar and chain (Fig. 11-16)**
Tools required: Hex key size 5mm
Remove the chain wheel cover (Fig.13/ Item O) by undoing the fastening screw (Item P). Lay the chain (Item 2) as shown into the groove which runs around the cutter bar (Item 1). Note the alignment of the chain teeth (Fig. 12). Insert the cutter bar as shown in Fig. 12 into the mount at the gear unit. Place the chain round the chain wheel (Item S). Make sure that the teeth of the chain engage securely in the chain wheel. The cutter bar must be hooked into the chain tensioning bolt (Item L).
Fit the chain wheel cover.
Important! Do not fully tighten the fastening screw until after you have adjusted the chain tension (see section 5.4).

**Tensioning the chain (Fig. 14-16) Important!**
Always pull out the spark boot plug before performing any checks or adjustments. Undo the fastening screw (Item P) of the chain wheel cover by a few turns (Fig. 13). Adjust the chain tension with the chain tensioning screw (Fig. 15/Item M). Turning the screw clockwise increases the chain tension, turning it counterclockwise decreases the chain tension. The chain is correctly tensioned if it can be raised by around 2 mm in the middle of the cutter bar (Fig. 14).
Tighten the fixing screw of the chain cover. (Fig. 16).
Important! Chain links must lie properly in the guide groove of the cutter bar.
**Notes on tensioning the chain:**
The chain must be properly tensioned to ensure

safe operation. When the saw chain can be raised by around 2 mm in the middle of the cutter bar, you know that the chain tension is ideal. During cutting, the temperature of the chain rises and its length changes. It is important therefore to check the chain tension at least every 10 minutes and to adjust it again as required. This applies in particular to new saw chains. When you have finished working, slacken the chain and it will shorten when it cools down. This will help to prevent damage to the chain.

**Fitting the additional handle**
Fit the additional handle as shown in Fig. 17-18.

**Hedge trimmer**
Remove the pole saw working head attachment and attach the hedge trimmer working head. Please refer the installation procedure (Fig. 7-10).

**Swiveling the hedge trimmer (Fig. 31).** Press both lock /release lever (27a) and control lever (27b) and swivel the hedge trimmer into the desired position/ angle. Allow the control lever (27b) to click into the recess in the base plate (hedge trimmer).

## Before starting

Each time before use, check the following:
• That there are no leaks in the fuel system.
• That the equipment is in perfect condition and that the safety devices and cutting devices are complete.
• That all screws are securely fastened.
• That all moving parts move smoothly.

**Fuel and oil**
Recommended fuels
Use only a mixture of unleaded petrol and special 2-stroke engine oil. Mix the fuel mixture as indicated in the fuel mixing table.
Important: Do not use a fuel mixture which has been stored for longer than 90 days.
Important: Never use 2-stroke oil with a recommended mixing ratio of 100:1. The manufacturer's warranty will be voided in case of engine damage due to inadequate lubrication.
Important: Only use containers designed and approved for the purpose to transport and store fuel.
Pour the correct quantities of petrol and 2-stroke oil into the mixing bottle (see scale printed on the bottle). Then shake the bottle well.

**Fuel mixing**

Mix 0.7 oz 2-Cycle Oil
with 28 oz Gasoline (ratio of 40:1)

**Chain lubrication**
Important! Never operate the chain if it is not lubricated with saw chain oil. Use of the pole saw without saw chain oil or if the oil level is below the „min" mark will damage the pole saw.

**Important!**
Be aware of the temperature conditions:
Different lubricants with completely different viscosity are required at different ambient temperatures.
At lower temperatures you will need
Low viscosity oils in order to achieve a sufficient lubricating film. However, if the same low viscosity oil is used during the summer it will become even thinner due to the ambient temperatures alone, and as a result the lubricating file could break down causing the chain to overheat and become damaged. In addition, the chain oil would burn and produce unnecessary pollutants.

**Filling the oil tank (Fig. 1):**
Place the pole saw on a flat surface. Clean the area around the oil tank cap (Fig. 3a) and then clean the oil tank cap.
Fill the tank (Item 3a) with saw chain oil. In the process, make sure that no dirt enters the tank, as this could cause the oil nozzle to become blocked. Close the oil tank cap.

## Operation

**Starting with a cold engine**

Fill the tank with the required amount of oil/ gas mix.
Set the equipment down on a hard surface.
1. Press the fuel pump (primer) (Fig. 2/Item 26) 10 times.
3. Move the on/off switch to ON "I"
4. Set the choke lever (Fig. 2/Item 16) to "START".
5. Hold the equipment firmly and pull out the
starter cable (Fig. 2/Item 13) until you feel it begin to resist. Then tug sharply on the starter cable 4 times.
The equipment should start.
Once the engine has started, move the choke lever immediately to "RUN" and allow the equipment to warm up for approx. 10 seconds. Important: Since the throttle lever is secured, the cutting tool starts to operate when the engine is started.
Then release the throttle lever by actuating it once.
6. If the engine does not start up, repeat steps 4-6 above.
Please note: If the engine does not start up even after several attempts, read the section "Engine troubleshooting".

**Starting with a warm engine**

(The equipment has been idle for less than 15-20min.)
1. Set the equipment down on a hard, level surface.

Switch the On/ Off switch to "I".

Secure the throttle lever (in the same way as described in "Starting with a cold engine").

Hold the equipment and pull out firmly the starter cable until you feel it start to resist. Then tug sharply on the starter cable. The equipment should start after 1-2 tugs. If the equipment does not start after 6 pulls, repeat steps 1 - 7 for starting the engine from cold.

**Troubleshooting engine restart**

Please follow these Instructions to restart the machine.
Check either the fuel pipe aging or cracking, if any, easy to buy new one for replacement at local store.
Check either the fuel pipe joint of carburetor loosening or aging, if any, cut the pipe joint a little bit to rejoin as well.
Please pull the starting rope 5-8 times
Before fuel refilling to the carburetor is in an operating state.

Refill the fuel and restart the machine according to the cold start mode.

**Emergency Stop procedure:**

If it becomes necessary to stop the equipment immediately, set the On/ O switch to"Stop" or" O".

**Normal procedure:**

Let go of the throttle lever and wait until the engine has changed to idling speed. Then set the On/Off switch to "Stop" or "O".

**Fitting the shoulder strap**

Important! Always use the shoulder strap when Working with the equipment. Switch o the equipment before you take off the shoulder strap (risk of injury).
1. Slip the shoulder strap over your shoulder.
2. Adjust the length of the shoulder strap so that the strap attachment is at waist level.

**Practice**

Practice all the work steps with the engine switched

off before you start to use the equipment.

## USE INSTRUCTIONS

**Working with the pole saw Preparations**

To ensure that you can work safely, check the following points before every use:

**Condition of the pole saw**

Before you start your work, inspect the pole saw for damage to the housing, the chain and the cutter bar. Never use a pole saw which is obviously damaged.

**Oil container**

Level of oil in the oil container: Both before and during your work make sure that there is always Sufficient oil in the system. To avoid damaging the pole saw, never run the saw if there is no oil in the system or if the oil drops below the "min" mark.

On average, a single filling will last 10 minutes depending on the number of pauses in cutting and the loads involved.

**Chain**

Tension of the chain, condition of the cutting elements: The sharper the chain, the easier and more controllable it is to operate the pole saw. The same also applies to the chain tension. For greater safety you must check the chain tension before your work and at least every 10 minutes during your work. New chains in particular tend to expand more.

**Safety clothing**

Always wear appropriate tight-fitting safety clothing such as special trousers which protect against cuts, protective gloves and safety shoes.

**Hearing protection and protective goggles**

Wear a protective helmet with integral face and

hearing protection. This will offer protection

against falling branches and recoiling branches.

**Safe working**

Never stand under the branch you want to saw. Use special caution when working with branches under tension and splintering wood.

Possible risk of injury caused by falling branches and catapulting pieces of wood.

When the equipment is in operation, keep other persons and animals away from the danger zone. The equipment is not protected from electric shock through contact with high-voltage cables. Keep a minimum distance of 10 m from live cables. Electric shock can cause fatal injury.

When working on slopes always stand to the upper or left or right side of the branch you want to cut.

Hold the equipment as close as possible to your body. This will help you to keep your balance.

**Cutting techniques**

Start with the bottom branches on the tree. This will make it easier for the cut branches to drop.

After completing a cut, the weight of the saw will abruptly increase for the operator as the saw is no longer supported by the branch. This can result in you losing control over the saw.

Remove the saw from the cut only with the saw chain still running. This will prevent the saw from getting jammed.

Never cut with the tip of the saw.

Never cut into the bulging branch collar. This will prevent the tree from healing.

**Sawing off smaller branches (Fig.23):**

Place the contact surface of the saw onto the branch. This will prevent the saw from making jerky movements when you begin a cut. Exerting slight pressure, guide the saw from the top to the bottom through the branch.

**Sawing off large and long branches (Fig.24)**:

Carry out a relief cut when working on large branches.

Start by sawing through 1/3 of the branch diameter (a) from the top to the bottom with the top side of the cutter bar. Then saw towards the first cut (b) from the top to the bottom with the bottom side of the cutter bar. Saw off long branches in several steps to keep control over the impact location.

**Kickback**
The term "kickback" describes what happens when the running pole saw suddenly kicks upward and backward. Usually this is caused by contact between the tip of the cutter bar and the work piece or by the saw chain becoming trapped.
In the event of kickback, large forces occur suddenly and violently. As a result, the pole saw usually reacts uncontrollably. This can often result in very serious injuries to the worker or persons in the vicinity. The risk of kickback is at its greatest when the saw is positioned for a cut in the region of the tip of the cutter bar, as the leverage effect is greatest there. It is therefore safest to position the saw as flat as possible.

**Important!**
• Make sure that the chain tension is always correctly adjusted.
• Only use a pole saw if it is in perfect working order.
• Only work with a saw chain that has been properly sharpened in accordance with the instructions.
• Never cut with the upper edge or the tip of the cutter bar.
Always hold the chainsaw firmly with both hands.
Cutting wood which is under tension
Special care is required when cutting wood which is under tension. Cutting wood which is under tension can release the tension, causing the wood to react out of control. In the worst case this can result in severe and even fatal injuries. This type of work must be performed only by specially trained persons.

**Working with the hedge trimmer**
**Cutting techniques (Fig32)**
The double-sided cutter bar allows cutting in both directions or by using swinging movements from one side to the other.
For a vertical cut, move the hedge trimmer evenly forwards or up and down in an arc.
For a horizontal cut, move the hedge trimmer in a scything motion along the edge of the hedge so that cut branches fall to the ground.

**NOTE**
**Remove thicker branches with a branch cutter.**

## Maintenance

**Replacing the chain and cutter bar**
The cutter bar needs to be replaced if the guide groove of the cutter bar is worn.
Proceed as described in the section „Fitting the cutter bar and the chain".

**Checking the automatic chain lubrication**
You should check the operation of the automatic chain lubrication system on a regular basis in order to guard against overheating and the damage this can cause to the cutter bar and the chain.
Point the tip of the cutter bar at a smooth surface (a board or a cut tree face) and allow the pole saw to run. If you see a growing oil stain on the smooth surface, the automatic chain lubrication system is working properly. If there is no clear oil stain, please refer to the corresponding instructions in the section "Troubleshooting". If the information contained there still fails to remedy the situation, please contact customer service
Important! Do not actually touch the surface with the tip of the cutter bar when performing this test. Keep a safe distance (approx. 8").

**Sharpening the chain**

The chain can be re-sharpened by any dealer. Do not attempt to sharpen the chain yourself unless you have the necessary special tools and experience.

**Air Filter Maintenance (Fig 25-27)**

Maintenance of the air filter (Fig 25-27) Soiled air filters reduce the engine power by supplying too little air to the carburetor. Regular checks are therefore essential. The air filter should be checked after every 25 hours of use and cleaned if necessary. If the air contains a lot of dust, the air filter should be checked frequently.

1. Remove the air filter cover (Fig 25-26)
2. Remove the air filter (Fig 27)
3. Clean the air filter by tapping it or blowing it out.
4. Assemble in reverse order.

**Maintenance of the spark plug (Fig. 27)** Spark plug sparking gap = 0.6mm. Tighten the spark plug with a torque of 12 to 15 Nm. Check the spark plug for dirt and grime after 10 hours of operation and if necessary clean it with a copper wire brush. Thereafter service the spark plug after every 50 hours of operation.

1. Pull out the spark boot plug (Fig. 28).
2. Remove the spark plug (Fig. 28) with the supplied multifunction tool (Item 24).
3. Assemble in reverse order.

**Applying grease to the gear unit**

After every 20 hours of use add a little gear grease (approx. 10 g.) at the lubrication nipple (Fig. 4/Item 25).

## Cleaning, storage, transpor

**Cleaning**

• Regularly clean the tensioning mechanism by blowing it out with compressed air or cleaning it with a brush. Do not use any tools for cleaning.
• Keep the handles free of oil so that you can maintain a firm grip.
• Clean the equipment as required with a damp cloth and, if necessary, mild washing up liquid.
• If you are not going to use the pole saw for an extended period of time, remove the chain oil from the tank. Briefly immerse the saw chain and the cutter bar into an oil bath and then wrap them in oil paper.

**Important!**

Always pull out the spark boot plug each time before carrying out any cleaning. Never immerse the equipment in water or other liquids in order to clean it.
Store the pole saw in a safe and dry place out of the reach of children.

**Storage**

Important: Never put the equipment into storage for longer than 30 days without carrying out the following steps.

**Storing the equipment**

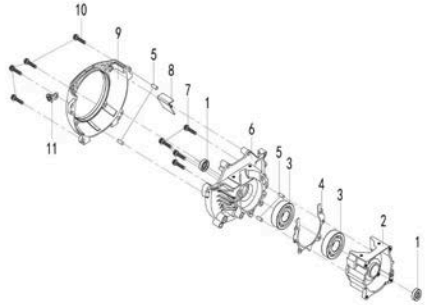
If you intend to store the equipment for longer than 30 days, the equipment must be prepared accordingly. Otherwise the fuel still remaining in the carburetor will evaporate and leave a rubbery sediment. This can cause problems when starting up the equipment and may require expensive repairs.

1. Slowly remove the fuel tank cap to release any pressure that may have formed in the tank. Carefully empty the tank.
2. To remove the fuel from the carburetor, start the engine and let it run until the equipment stops.
3. Leave the engine to cool (approx. 5 minutes).
4. Remove the spark plug (see section 9.5).
5. Add one teaspoon of 2-stroke engine oil into the combustion chamber. Slowly pull the starter cord several times to apply a layer of oil to all internal components. Fit the spark plug again.

# TROUBLESHOOTING

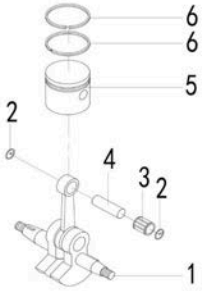
| Fault | Possible cause | Remedy |
|---|---|---|
| The equipment does not start. | - Correct starting procedure not followed<br>- Dirty or damp spark plug<br>- Incorrect carburetor setting | - Follow the instructions for starting<br>- Clean the spark plug or replace it with a new one<br>- Contact customer service. |
| The equipment starts but does not develop its full power. | - Incorrect choke lever setting<br>- Soiled air filter<br>- Incorrect carburetor setting | - Set the choke lever to "ON".<br>Clean the air filter<br>- Contact customer service. |
| The engine does not run smoothly. | - Incorrect electrode gap on the spark plug<br>- Incorrect carburetor setting | - Clean the spark plug and adjust the Electrode gap, or fit a new spark plug<br>- Contact an authorized customer service. |
| Engine smokes excessively. | - Incorrect fuel mix<br>- Incorrect carburetor setting | - Use the correct fuel mix (see fuel mixing table)<br>- Contact an authorized customer service. |
| Saw chain is dry. | - No oil in the tank<br>- Vent in the oil tank cap is blocked<br>- Oil outlet blocked | - Top up with oil<br>- Clean the oil tank cap<br>- Clear the oil outlet |
| Chain/guide bar is hot. | - No oil in the tank<br>- Vent in the oil tank cap is blocked<br>- Oil outlet is blocked<br>- Chain is blunt<br>- Chain is over-tensioned | - Top up with oil<br>- Clean the oil tank cap<br>- Clear the oil outlet<br>- Re-sharpen or replace the chain<br>- Check the chain tension |
| Pole saw judders, vibrates or does not saw properly. | - Chain is under-tensioned<br>- Chain is blunt<br>- Chain is worn<br>- Saw teeth point in the wrong direction | - Adjust the chain tension<br>- Re-sharpen or replace the chain<br>- Replace the chain<br>Refit the chain with the teeth facing in the correct direction |

## A. Crankcase assy



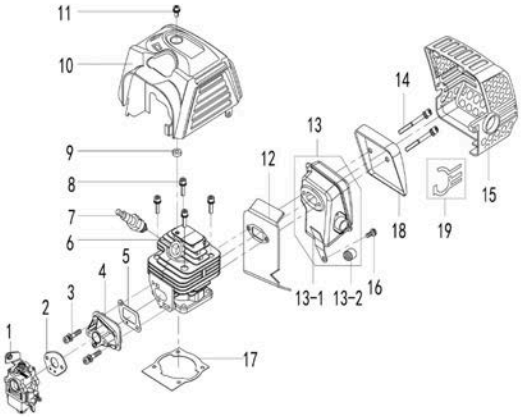

| No. | Description | Qty |
|---|---|---|
| A1 | Oil seal 12*22*7 | 2 |
| A2 | Lower Crankcase | 1 |
| A3 | Deep groove ball bearing 6201P6 | 2 |
| A4 | Crankcase sealing gasket | 1 |
| A5 | Round pin Φ5×10 | 4 |
| A6 | Upper crankcase | 1 |
| A7 | Screw M5*30 | 4 |
| A8 | Air deflector | 1 |
| A9 | Fly Wheel cover | 1 |
| A10 | Screw M5*20 | 4 |
| A11 | Hang line buckle | 1 |

## B. Crankshaft and connecting rod assy



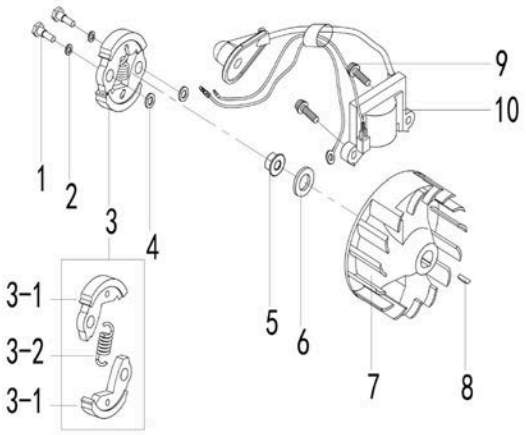

| No. | Description | Qty |
|---|---|---|
| B1 | Crankshaft and connecting rod assy | 1 |
| B2 | Piston pin circlip | 2 |
| B3 | Needle bearing NA9*12*12 | 1 |
| B4 | Piston pin | 1 |
| B5 | Piston | 1 |
| B6 | Piston ring | 2 |

## C. Carburetor/Cylinder/Muffler assy



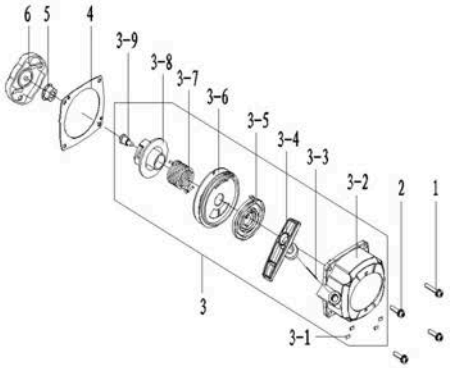

| No. | Description | Qty |
|---|---|---|
| C1 | Carburetor | 1 |
| C2 | Carburetor sealing gasket | 1 |
| C3 | Screw M5*20 | 2 |
| C4 | Intake pipe | 1 |
| C5 | Intake sealing gasket | 1 |
| C6 | Cylinder | 1 |
| C7 | Spark plug | 1 |
| C8 | Screw M5*20 | 4 |
| C9 | Heat insulating mat for cylinder cover | 1 |
| C10 | Cylinder cover | 1 |
| C11 | Screw M5*20 | 1 |
| C12 | Muffler sealing gasket | 1 |
| C13 | Muffler | 1 |
| C14 | Screw M6*60 | 2 |
| C15 | Muffler cover | 1 |
| C16 | Screw M5*14 | 1 |
| C17 | Cylinder sealing gasket | 1 |
| C18 | Muffler cover | 1 |
| C19 | Aluminium-foil paper | 1 |

## D. Flywheel/ ignition assy



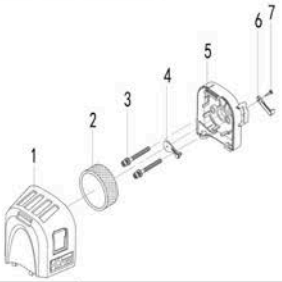

| No. | Description | Qty |
|---|---|---|
| D1 | Clutch bolt | 2 |
| D2 | Clutch wave-form gasket¢10 | 2 |
| D3 | Clutch assembly | 1 |
| D4 | Flat washer 8*18*1.2 | 2 |
| D5 | Nut M8*1.25 | 1 |
| D6 | Flat washer 8*16*1.5 | 1 |
| D7 | Flywheel | 1 |
| D8 | Woodruff key M3×13 | 1 |
| D9 | Screw M5*20 | 2 |
| D10 | Ignition Assy | 1 |

## E. Starter assy



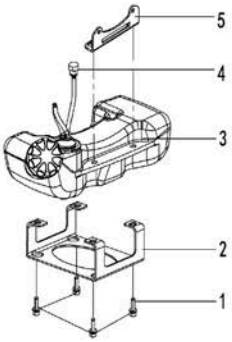

| No. | Description | Qty |
|---|---|---|
| E1 | Screw M5*25 | 1 |
| E2 | Screw M5*20 | 3 |
| E3 | Starter assembly | 1 |
| E3-1 | Copper card | 4 |
| E3-2 | Starter cover | 1 |
| E3-3 | Starter rope | 1 |
| E3-4 | Starter handle | 1 |
| E3-5 | Starter coil spring | 1 |
| E3-6 | Rotation wheel | 1 |
| E3-7 | Starter spring | 1 |
| E3-8 | Starter wheel | 1 |
| E3-9 | Non-standard screw M5*9 | 1 |
| E4 | Starter gasket | 1 |
| E5 | Nut M8*1.25 | 1 |
| E6 | Starter driving plate | 1 |

## F. Air filter assy



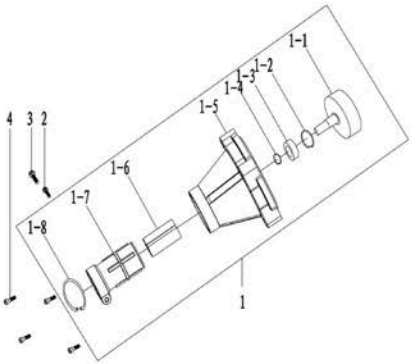

| No. | Description | Qty |
|---|---|---|
| F1 | Air filter cover | 1 |
| F2 | Air filter sponge | 1 |
| F3 | Screw M5*55 | 2 |
| F4 | Throttle plate | 1 |
| F5 | Air filter base | 1 |
| F6 | Throttle trigger | 1 |
| F7 | Screw ST2.9*8 | 1 |

## G. Fuel tank assy



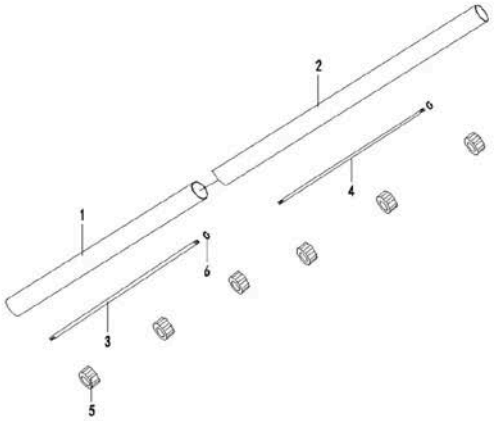

| No. | Description | Qty |
|---|---|---|
| G1 | Screw M5*20 | 4 |
| G2 | Oil t ank protection bracket | 1 |
| G3 | Fuel tank assembly | 1 |
| G4 | Stabilizer | 1 |
| G5 | Tank fixing bracket | 1 |

## H. Output assembly



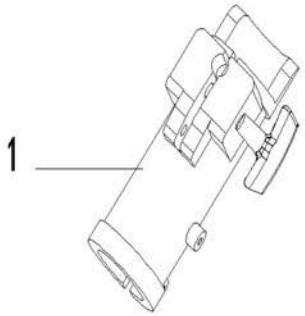

| No. | Description | Qty |
|---|---|---|
| H1 | Output assembly | 1 |
| H1-1 | Clutch cover | 1 |
| H1-2 | Circlip for hole 35 | 1 |
| H1-3 | Deep groove ball bearings 6202RS | 1 |
| H1-4 | Circlip for shaft 15 | 1 |
| H1-5 | Aluminium tube permanent seat | 1 |
| H1-6 | Rubber damping cover | 1 |
| H1-7 | Aluminium tube permanent seat | 1 |
| H1-8 | Circlip for hole 45 | 1 |
| H2 | Screw M6*25 | 1 |
| H3 | Screw M5*12 | 1 |
| H4 | Screw M6*30 | 4 |

## I. Aluminium tube assy



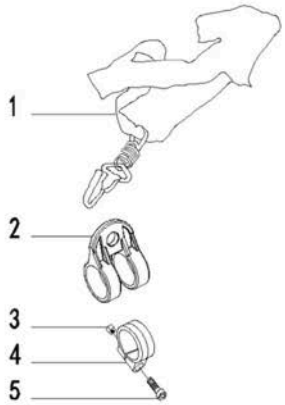

| No. | Description | Qty |
|---|---|---|
| I1 | Rear aluminium tube | 1 |
| I2 | Front aluminium tube | 2 |
| I3 | Rear drive shaft | 1 |
| I4 | Front drive shaft | 2 |
| I5 | Oiliness shaft sleeve | 9 |
| I6 | circlip for shaft | 3 |

## J. Pipe connection sleeve assembly



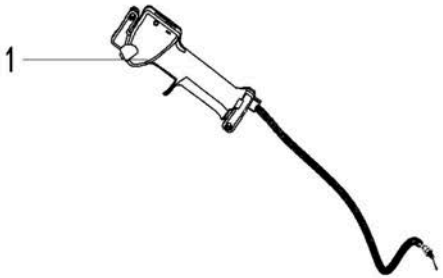

| No. | Description | Qty |
|---|---|---|
| J1 | Pipe connection sleeve assembly | 2 |

## K. Belt assy



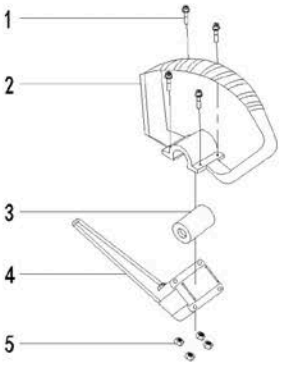

| No. | Description | Qty |
|---|---|---|
| K1 | Belt | 1 |
| K2 | Belt Base | 1 |
| K3 | Nut M5 | 1 |
| K4 | Belt Hanging buckle | 2 |
| K5 | Screw M5*16 | 1 |

## L. Handle assembly



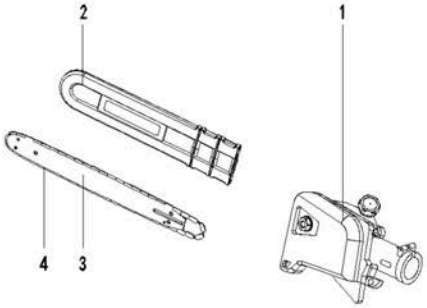

| No. | Description | Qty |
|---|---|---|
| L1 | Handle assembly | 1 |

## M. Handle assy




| No. | Description | Qty |
|---|---|---|
| M1 | Screw M5*30 | 4 |
| M2 | P handle top cover | 1 |
| M3 | Shock absorber sleeve | 1 |
| M4 | P handle bottom cover | 1 |
| M5 | Nut M5 | 4 |

## N. Pole assy




| No. | Description | Qty |
|---|---|---|
| N1 | Pole assembly | 1 |
| N2 | Bar cover | 1 |
| N3 | Bar | 1 |
| N4 | Chain | 1 |

# EMISSION CONTROL SYSTEM WARRANTY
# Buffalo Corp.

## YOUR WARRANTY RIGHTS AND OBLIGATIONS

The U.S. Environmental Protection Agency (EPA), California Air Resources Board and Buffalo Corp are pleased to explain the emissions control system warranty on your (current model year) 2022 small off-road engine. In California, new equipment that use small off-road engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. Buffalo Corp must warrant the emissions control system on your small off-road engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine or equipment leading to the failure of the emission control systems.

Your emission control systems may include parts such as the carburetors or the fuel injection system, the ignition system, catalytic converters, fuel tanks, fuel lines (for liquid fuel and fuel vapors), fuel caps, valves, canisters, filters, clamps, and other associated components. Also included may be hoses, belts, connectors, and other emission-related assemblies.

Where a warrantable condition exists, Buffalo Corp will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

The emissions control system on your small off-road engine is warranted for two years. If any emissions-related part on your small off-road engine is defective, the part will be repaired or replaced by Buffalo Corp.

OWNER'S WARRANTY RESPONSIBILITIES:

- As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Buffalo Corp recommends that you retain all receipts covering maintenance on your small off-road engine, but Buffalo Corp cannot deny warranty

coverage solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

- As the small off-road engine owner, you should however be aware that Buffalo Corp may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
- You are responsible for presenting your small off-road engine to a Buffalo Corp distribution center or service center as soon as the problem exists. The warranty repairs shall be completed in a reasonable amount of time, not to exceed 30 days.

If you have a question regarding your warranty rights and responsibilities, you should contact at 1-866-460-9436 or email info@buffalotools.com.

- DEFECTS WARRANTY REQUIREMNTS:

(a) The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser and extends for a period of Two Years.

(b) General Emissions Warranty Coverage.

The small off-road engine or equipment must be warranted to the ultimate purchaser and any subsequent owner the emission control system when installed was:

(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the US EPA & California Air Resources Board,; and

(2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

(c) The warranty on emissions-related parts will be interpreted as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by subsection (e) must be warranted for the warranty period defined in Subsection (b)(2). If any such part fails during the period of warranty coverage, it must be repaired or replaced by Buffalo Corp according to Subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for a time not less than the remaining warranty period.

(2) Any warranted part that is scheduled only for regular inspection in the written instructions required by subsection (e) must be warranted for the warranty period defined in Subsection (b)(2). A statement in such written instructions to the effect of “repair or replace as necessary” shall advise owners of the warranty coverage for evaporative emissions related parts. Replacement within the

warranty period is covered by the warranty and will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for a time not less than the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions required by subsection (e) must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by the engine manufacturer according to Subsection (4) below. Any such part repaired or replaced under warranty must be warranted for a time not less than the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions of this article must be performed at no charge to the owner at a warranty station.

(5) Notwithstanding the provisions of Subsection (4) above, warranty services or repairs must be provided at all manufacturer distribution centers that are franchised to service the subject engines.

(6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7) Throughout the emissions control system's warranty period defined in Subsection (b)(2), Buffalo Corp must maintain a supply of warranted parts sufficient to meet the expected demand for such parts and must obtain additional parts if that supply is exhausted.

(8) Manufacturer-approved replacement parts that do not increase the exhaust or evaporative emissions of the engine or evaporative emission control system must be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of Buffalo Corp.

(9) The use of add-on or modified parts may be grounds for disallowing a warranty claim made in accordance with this Article. Buffalo Corp. will not be liable under this Article to warrant failures of warranted parts caused by the use of an add-on or modified part.

(10 ) Buffalo Corp shall provide any documents that describe that Buffalo Corp.'s warranty procedures or policies within five working days of request by the Executive Officer.

(d) A list of all emission warranty parts list must be included with each new engine or equipment subject to this Article, The emission warranty parts list shall include all parts whose failure would increase exhaust and evaporative emissions, and contains the following parts

Exhaust Emission Warranty Parts List.

(1) Fuel Metering System

(i) Carburetor and internal parts (and/or pressure regulator or fuel injection system).

(ii) Air/fuel ratio feedback and control system.

(iii)Cold start enrichment system.

(iv) Fuel Tank.

(2) Air Induction System

(i) Controlled hot air intake system.

(ii) Intake manifold.

(iii) Air filter.

(3) Ignition System

(i) Spark Plugs.

(ii) Magneto or electronic ignition system.

(iii) Spark advance/retard system.

(4) Air Injection System

(i) Air pump or pulse valve.

(ii) Valves affecting distribution of flow.

(iii) Distribution manifold.

(5) Catalyst or Thermal Reactor System

(i) Catalytic converter.

(ii) Thermal reactor.

(iii)Exhaust manifold.

(6) Particulate Controls

(i) Traps, filters, precipitators, and any other device used to capture particulate emissions.

(7) Miscellaneous Items Used in Above Systems

(i) Electronic controls.

(ii) Vacuum, temperature, and time sensitive valves and switches.

(iii) Hoses, belts, connectors, and assemblies.

Evaporative Emission Warranty Part List
(1) Fuel Tank
(2) Fuel Cap
(3) Fuel lines (for liquid fuel and fuel vapors)
(4) Fuel Line Fittings
(5) Clamps*
(6) Pressure Relief Valves*
(7) Control Valves*
(8) Control Solenoids*
(9) Electronic Controls*
(10) Vacuum Control Diaphragms*
(11) Control Cables*
(12) Control Linkages*
(13) Purge Valves*
(14) Gaskets*
(15) Liquid/Vapor Separator
(16) Carbon Canister
(17) Canister Mounting Brackets
(18) Carburetor Purge Port Connector

*Note: As they relate to the evaporative emission control system.

(e) Written instructions for the maintenance and use of the evaporative emissions control system by the owner shall be furnished with each new engine or equipment subject to this Article. The instructions must be consistent with this Article and applicable regulations contained herein.

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