

KRAFT&DELE

Instruction Manual



Please read this instruction carefully and understand before using this tool.

PETROL-POWERED HEDGE TRIMMER

Symbols used

Symbols are sometimes used on the packaging, on the machine or in the accompanying documentation. A key to these symbols is given below.



Instructions

Read the instructions carefully before use, and keep them for future reference.



Power rating

Indicates the machine's maximum power.



Blade length

Specifies length of blade.

Introduction

To get the most out of your new petrol-powered hedge trimmer, please read through these instructions and the enclosed safety instructions before use.

Please also save the instructions in case you need to refer to them at a later date.

Technical data

Engine:	22.5 cc two-stroke
Power rating:	0.65kw
Fuel:	Oil/lead-free petrol mixture, 1:25
Engine speed:	6500 rpm
Starting method:	Recoil starter
Fuel tank capacity:	600 ml
Blade length:	650 mm



Main components

1. Blade
2. Protective guard
3. Front handle
4. Air filter
5. Starter handle
6. Muffler
7. Fuel cap
8. Trigger for rotatable handle
9. On/off button
10. Safety button
11. Throttle lever
12. Fuel tank

Special safety instructions

The engine uses an oil/petrol mixture. Never use pure leaded petrol, diesel, petroleum or other fuels.

Mix and add the fuel in a well-ventilated area.

Fuel should be stored out of the reach of children in a clearly marked and approved container.

Remove any spilt fuel with a dry cloth after refuelling.

Smoking and use of naked flames during refuelling is forbidden.

Never refill with fuel when the engine is running.

Never refill with fuel in an enclosed space.

Do not overfill with fuel, as this can cause a fire hazard.

Check that the fuel cap is tightly closed, as fuel leaks can cause a fire hazard.

Store flammable materials at a safe distance from the engine, as the exhaust gases are very hot and could ignite such materials.

The engine parts become hot when in use. Avoid touching them and do not put the trimmer down on inflammable materials (dry grass, dry leaves, etc.) whilst the engine is hot.

For outdoor use only. The exhaust gases contain carbon monoxide and hydrocarbons that are highly dangerous to humans and animals if inhaled.

Never start the engine without the air filter in place or if the muffler is defective.

Always follow the engine maintenance instructions under "Cleaning and Maintenance".

Never allow children to use the device.

Never use the device standing on a ladder or the like, and do not attempt to climb trees while holding it. Always ensure you are standing firmly and safely on the ground.

Never use the device if the throttle lever, safety button or on/off button are not functioning correctly.

Ensure the blade is not in contact with anything before starting the engine.

Keep both handles free of oil and fuel.

Hold the trimmer with a hand on each handle when in use.

Always use ear-protectors, protective goggles, overalls and safety footwear during use.

Do not allow other people or animals to come within a radius of 3 metres of the trimmer while it is running.

Remember that noise from the trimmer can prevent you from hearing warnings, etc. Be aware of your surroundings when you are using the trimmer.

Keep fingers and hands safely away from the blade during use.

Do not obstruct or in any other way deactivate the safety button.

Stop the engine immediately if engine problems occur.

Stop the engine and remove the cable from the spark plug before removing any trapped items from the blade and before cleaning or maintenance.

Never put the trimmer down before it has completely stopped running. The blade will continue to run a short time after you release the throttle lever.

Never walk around with the trimmer while it is running.

Always fit the protective sleeve on the blade when transporting or storing the trimmer. Check for fuel leaks during transport or storage.

Use

Filling with fuel

The engine uses a blend of two-stroke oil and unleaded petrol mixed in a 1:25 ratio. The petrol must not contain ethanol or methanol. Only two-stroke oil intended for two-stroke engines in garden/park machinery may be used.

Shake the fuel container prior to filling up since the fuel/oil mix can separate after long periods in storage. Do not use fuel mixtures that have been stored for more than 1 month.

Remove the fuel cap (7) from the fuel tank (5) and fill with fuel. Replace the fuel cap and check that it will not come loose during use.

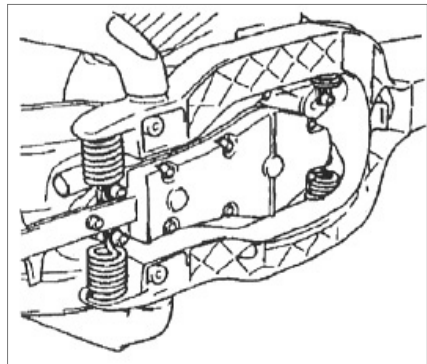
Check before every use:

Check that the on/off button (9), safety button (10) and throttle lever (11) are functioning correctly.

Check for fuel leaks.

Check that the two parts of the blade are not loose, cracked or bent.

Check that the spring mounting in the anti-vibration system is not damaged.

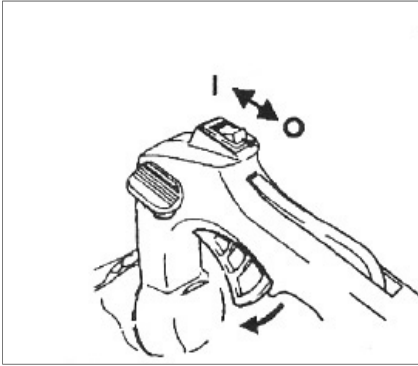


Check that the trimmer ventilation slots are not blocked.

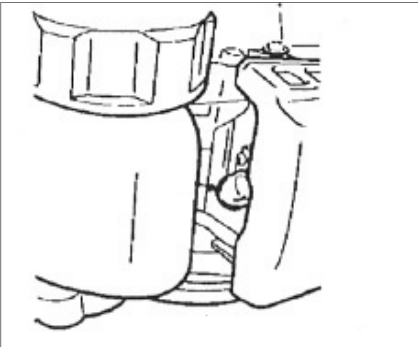
Cold engine start:

Place the trimmer on a firm surface at a safe distance from inflammable materials.

Push the on/off button to "I/RUN".



Press the fuel pump gently 5-6 times until fuel enters the pump.



Move the choke to the closed position.

Pull the starter handle (5) slowly out until you feel resistance. Then pull the starter handle sharply out. Release the starter handle. Repeat a few times.

NB! Do not let the starter handle hit the engine since this can cause damage.

Move the choke to the open position.

Pull the starter handle out sharply until the engine starts.

Press the throttle lever in and allow the engine to cool a little. Once the engine runs idle without stopping, it should be left to idle for around one minute before you use the trimmer.

Warm engine start:

Push the on/off button to "I/RUN".

Push the starter handle in until the engine starts without closing the choke.

If the petrol tank has run completely dry, let the engine cool, fill up with fuel and follow the cold start procedure.

Running-in

For the first 20 hours of operation you must not run the engine at a high speed for long periods at a time.

Use

Cut all thick branches first with shears before using the trimmer.

Grip the handle firmly and press the safety button (10) in. Grip the front handle (3) with your other hand. Press the throttle lever (11) in. The blade starts to move. If you release the safety button and/or throttle lever, the blade will stop and the trimmer will idle.

Move the trimmer from side to side with even movements to cut the hedge. Always start from the bottom and side, and repeat the movement over the same area if there is very thick foliage.

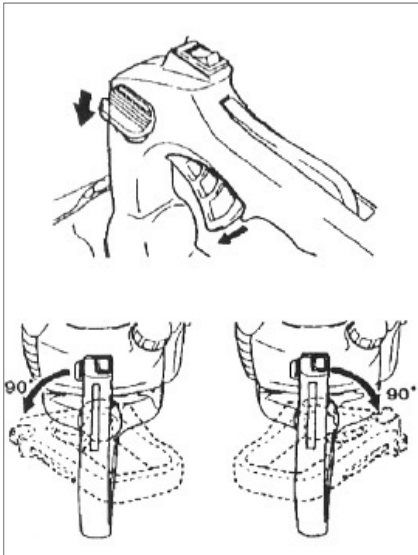
Be very careful when cutting near walls, thick branches, wire fencing or other obstructions. If the blade comes in contact with an obstruction, it can jam or kick back. Stop the trimmer immediately if the blade jams. The blade can be damaged if it comes into contact with metal, stone or other solid objects.

Stopping the engine:

Release the throttle lever.

Move the on/off button to "O/STOP".

Turning the handle



You can turn the handle 90° to the left or the right relative to its initial position to improve your working position. Switch the engine off. Press the trigger (8) in and turn the handle until it clicks in place in the required position.

Cleaning and maintenance

Always remove leaves, dirt, etc. from the trimmer. Wipe all parts of the trimmer with a damp cloth. Lubricate the blade with a lubricating oil.

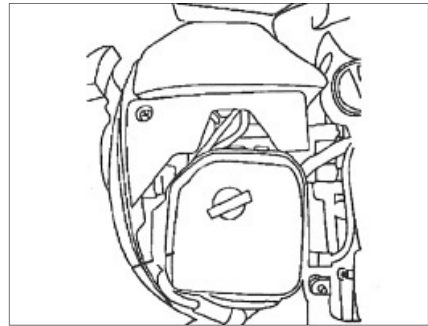
Sharpen the teeth using a chainsaw file or similar. Be very careful when sharpening the teeth!

Keep in a dry place when not in use.

If the trimmer is to remain in storage for a long period, empty the fuel tank.

Unscrew the spark plug, pour 10-20 ml two-stroke oil in the opening and pull the starter handle. Retighten the spark plug.

Cleaning the air filter



The air filter should be cleaned after every 25 hours of operation.

Remove the air filter (4) by turning the button on the side of the cover.

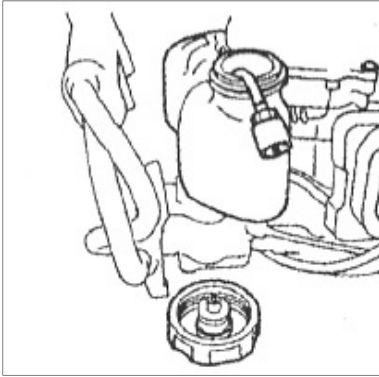
Remove the filter element and wash in warm water with a little detergent.

Clean the inside of the filter.

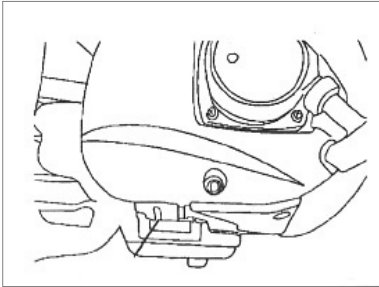
Allow to dry completely before replacing.

Cleaning the fuel filter

The fuel filter should be cleaned after every 25 hours of operation or if the trimmer struggles to stay on.



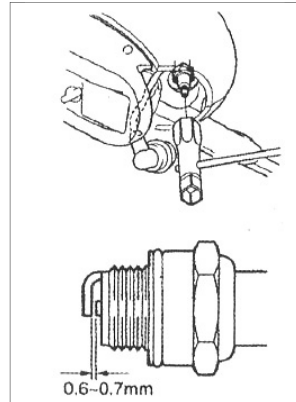
Idling speed adjustment



If the blades move while the engine is idling, you should adjust the idling speed. First clean the air filter, then start the engine and allow it to warm up. Use the adjustment screw to set the idling speed so there is a good safety margin between the idling speed and the blade engaging.

Checking the spark plug

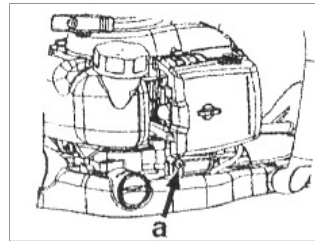
Use a feeler gauge to check the gap between the spark plug electrodes regularly. It should be 0.6 to 0.7 mm. Adjust if necessary.



If the spark plug is very sooty, clean or replace it. Always replace with the same type.

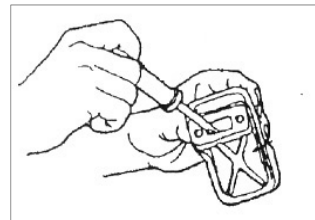
Lubricating the gears

Lubricate the gears with a grease gun after every 25 hours of operation.



Inspecting the muffler

Detach the muffler (6) and remove any soot or carbon deposits using a screwdriver. Replace the muffler.



MAINTENANCE AND CARE

AREA	MAINTENANCE	PAGE	BEFORE USE	MONTHLY
Air Filter	Clean/Replace	14	•	
Fuel Filter	Inspect/Clean/Replace	14		•
Spark Plug	Inspect/Clean/Adjust/Replace	14		•
Carburettor	Adjust/Replace and adjust	16		•
Cooling System	Inspect/Clean	16	•	
Silencer	Inspect/Tighten/Clean	16		•
Gear Housing	Grease	15	• (15 - 20h)	
Starter Rope	Inspect/Replace	-		•
Blades	Inspect/Clean/Lubricate	15	•	
Fuel Leaks	Inspect	14	•	
Screws, Bolts and Nuts	Inspect/Tighten/Replace	-	•	
Fuel Line	Inspect	-	•	

IMPORTANT

Time intervals are maximum. Actual use and your experience will determine the frequency of required maintenance. Record dates of monthly and yearly inspections.

TROUBLE SHOOTING

Trouble		Cause	Remedy
Engine	- hard to start - does not start		
Engine cranks	Fuel at carburettor → No fuel at carburettor	<ul style="list-style-type: none"> • Fuel filter clogged • Fuel line clogged • Carburettor 	<ul style="list-style-type: none"> • Clean or replace • Clean • Ask your ECHO dealer
	Fuel at cylinder → No fuel at cylinder	<ul style="list-style-type: none"> • Carburettor 	<ul style="list-style-type: none"> • Ask your ECHO dealer
	↓ Silencer wet with fuel	<ul style="list-style-type: none"> • Fuel mixture is too rich 	<ul style="list-style-type: none"> • Open choke • Clean/replace air filter • Adjust carburettor • Ask your ECHO dealer
	Spark at end of plug wire → No spark at end of plug wire	<ul style="list-style-type: none"> • Ignition switch off • Electrical problem 	<ul style="list-style-type: none"> • Turn switch on • Ask your ECHO dealer
	Spark at plug → No spark at plug	<ul style="list-style-type: none"> • Spark gap incorrect • Covered with carbon • Fouled with fuel • Spark plug defective 	<ul style="list-style-type: none"> • Adjust 0.6 to 0.7 mm • Clean or replace • Clean or replace • Replace plug
Engine does not crank	↓	<ul style="list-style-type: none"> • Internal engine problem 	<ul style="list-style-type: none"> • Ask your ECHO dealer
Engine runs	Dies or accelerates poorly	<ul style="list-style-type: none"> • Air filter dirty • Fuel filter dirty • Fuel vent plugged • Spark plug • Carburettor • Cooling system plugged • Exhaust port/silencer plugged 	<ul style="list-style-type: none"> • Clean or replace • Clean or replace • Clean • Clean and adjust/replace • Adjust • Clean • Clean

WARNING DANGER

- ALL TRIMMER SERVICE OPERATIONS, OTHER THAN ITEMS LISTED IN THE OPERATOR'S MANUAL, SHOULD BE PERFORMED BY COMPETENT SERVICE PERSONNEL.
- FUEL VAPORS ARE EXTREMELY FLAMMABLE AND MAY CAUSE FIRE AND/OR EXPLOSION. NEVER TEST FOR IGNITION SPARK BY GROUNDING SPARK PLUG NEAR CYLINDER PLUG HOLE, OTHERWISE SERIOUS PERSONAL INJURY MAY RESULT.