GARDENLINE®

45cc Petrol Chainsaw

User Guide

After Sales Support
Now you have purchased a Gardenline® product you can rest assured in the knowledge that, as well as your 3 year parts and labour guarantee, you have the added peace of mind of dedicated helplines and web support.

AFTER SALES SUPPORT-7 DAYS A WEEK

GB 0845 872 2740
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(Charged at local rates)

www.coreservice.co.uk

MODEL: GPCS46Z, 06/14, 52579

Please read this manual thoroughly before use and retain for future reference.

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Welcome 1

You have made an excellent choice with the purchase of this quality Gardenline® product.
By doing so you now have the assurance and peace of mind which comes from purchasing a product that has been manufactured to the highest standards of performance and safety, supported by the high quality standards of Aldi.
We want you to be completely satisfied with your purchase so this Gardenline® product is backed by a comprehensive manufacturer's 3 year warranty and an outstanding after sales service through our dedicated Helpline.
We hope you will enjoy using your purchase for many years to come. If you require technical support or in the unlikely event that your purchase is faulty please telephone our helpline for immediate assistance. Please contact the technical helpline before returning your product to store. Faulty product claims made within the 3 year warranty period will be repaired or replaced free of charge provided that you have satisfactory proof of purchase (keep your till receipt safe!).
This does not affect your statutory rights. However, be aware that the warranty will become null and void if the product is found to have been deliberately damaged, misused or disassembled.

General Information 2

Read and follow the operating instructions and safety information before using this product for the first time.

Read all safety regulations and instructions.
Any errors made in following the safety regulations and instructions may result in serious injury, fire or electric shock. Keep all safety regulations and instructions in a safe place for future use. When using equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating manual 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, give them these operating instructions as well. We accept no liability for damage or accidents which arise due to non-observance of these instructions and the safety information.

Warning! For safety reasons, the Chainsaw is not to be used by children, young people under 16 years of age, or any other persons who are not acquainted with these operating instructions.

Items supplied

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if applicable).
- Check to see that all items are included.
- Inspect the equipment and accessories for transport damage.
- Keep the packaging until the end of the warranty period.

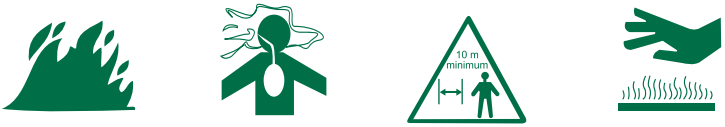
Explanation of the symbols and warning signs on the machine

1 2 3 4 5 6 7

1 Read the user manual before using the machine.
2 You must always wear safety goggles to guard your eyes from flying debris, ear plugs or similar ear defenders to protect your hearing and a safety helmet to protect against the risk of falling objects.
3 Important! Wear gloves to protect your hands.
4 Wear safety boots to protect your feet.
5 Warning! Danger!
6 Make sure that the chain brake is released. Pull back the handle/chain brake before operating.
7 Sound level data (115dB) in accordance with Directive 2000/14/EC

Machine handling pictograms

1 2 3 4



5 6 7 8

1 Beware of kickback (recoil).
2 Avoid contact with the tip of the guide bar (chain return point). This will result in kickback of the chainsaw.
3 Do not hold the saw with one hand.
4 Hold the saw firmly with both hands. Place your right hand on the rear handle and your left hand on the front handle.
5 Petrol and petrol vapour are extremely inflammable.
6 The exhaust gas is poisonous and asphyxiating. If inhaled it may even be lethal. Do not operate the engine in enclosed or

poorly ventilated places.

7 Do not start and do not use the equipment close to people (especially children) or animals. During operation, it is recommended that a minimum distance of 10 metres from other people be maintained.

8 To avoid the risk of burns do not touch the engine or exhaust. Remember they will remain hot for some time after use.

Kickback safety precautions

Warning: Kickback can lead to dangerous loss of control of the chainsaw and result in serious or fatal injury to the saw operator or to anyone standing close by. Always be alert.
Rotational kickback and pinch-kickback are major chainsaw operational dangers and the leading cause of most accidents.

KICKBACK may occur when the NOSE or TIP of the chain bar touches an object, or when wood closes in and pinches the saw chain in the cut. Tip contact in some cases may cause a lightning-fast reverse reaction, kicking the chain bar up and back towards the operator.

PINCHING the saw chain along the BOTTOM of the cutting (chain) bar may PULL the saw forward away from the operator.
PINCHING the saw chain along the TOP of the cutting (chain) bar may PUSH the chain bar rapidly back towards the operator.

Any of these reactions may cause you to lose control of the saw, which could result in serious personal injury.

Beware of the following: Rotary recoil (FIG 1)

A = Recoil direction
B = Recoil reaction zone

Impact/Jamming recoil and pulling reactions (FIG 2)

When cutting from under an object (See Pic A) using the top of the chain the object may pinch the chain and cause either a forward force on the chainsaw or a rearward force on the object (as seen in Pic B)
When cutting from the top surface of an object (Pic C) using the bottom of the chain the object may pinch the chain and cause either a rearward force on the chainsaw or a forward force on the object (as seen in Pic B)

To prevent pulling reactions on the chainsaw, place the wood you wish to cut flush against the claw stop (15). Use the claw stop as a pivot point during cutting.

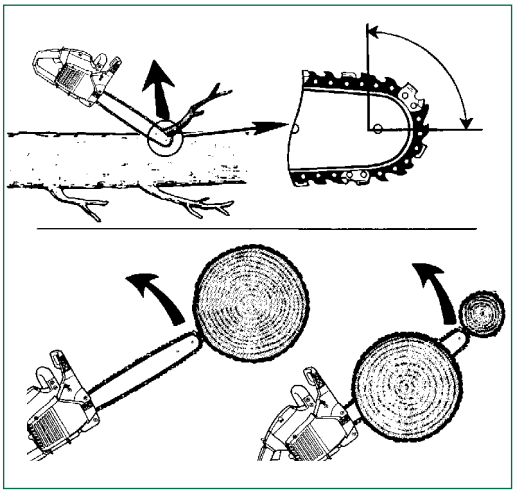


FIG 1

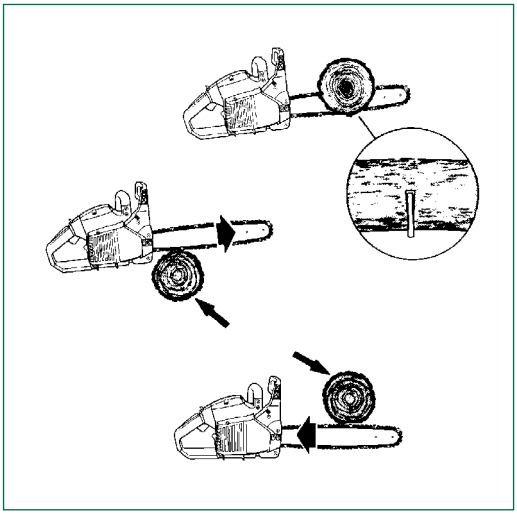


FIG 2

Safety Instructions 3

Warning: When using petrol tools, basic safety precautions, including the following, should always be followed to reduce the risk of serious personal injury and/or damage to the unit.

Read all these instructions before operating this product and keep them stored in a safe place for future reference.

1. **DO NOT operate a chainsaw with one hand! Serious injury to the operator, helpers, bystanders, or any combination of these persons may result from one-handed operation. A chainsaw is intended for two-handed use only.**
2. **Do NOT use the saw if you are tired, ill or under the influence of alcohol and/or drugs.**
3. **Use safety footwear, snug-fitting clothing, protective gloves, as well as eye, hearing and head protection devices.**
4. **Use caution when handling fuel. Move the chainsaw at least 10 feet (3m) away from the fueling point before starting the engine.**
5. **DO NOT allow other persons to be near when starting, cutting with the chainsaw. Keep bystanders and animals out of the work area.**
6. **DO NOT start cutting until you have a clear work area, secure footing, and a planned retreat path from falling trees or branches.**
7. **Keep all parts of your body away from the saws' chain when the engine is running.**
8. **Before you start the engine, make sure that the chain is not in contact with anything.**
9. **Carry the chainsaw with the engine stopped, the chain bar and saw chain facing rearwards, and with the exhaust away from your body.**
10. **NEVER use a chainsaw which is damaged, incorrectly set or incomplete or loosely assembled. Make sure that the chain rotation stops when the chain brake is applied.**
11. **Shut off the engine before setting the chainsaw down.**
12. **Use extreme caution when cutting a small size bush and saplings because slender material may catch in the saw chain and be whipped towards you or pull you off balance.**
13. **When cutting a limb that is under tension, be alert for spring back so that you will not be struck when the tension in the**

wood fibres is released.

14. Keep the handles dry, clean, and free of oil or fuel mixture.
15. Operate the chainsaw only in well-ventilated areas.
16. DO NOT operate a chainsaw from in a tree unless you have been specifically trained to do so.
17. All chainsaw servicing, other than the items listed in the user manual safety and maintenance instructions should be performed by competent chainsaw service personnel.
18. When transporting your chainsaw, use the appropriate chain bar scabbard.
19. DO NOT operate your chainsaw near or around flammable liquids or gases whether in or out of doors. An explosion and/or fire may result.
20. Do not fill the fuel tank, oil reservoir or lubricate whilst the engine of the chainsaw is running.
21. USE THE CORRECT TOOL: Cut wood only. Do not use the chainsaw for purposes for which it was not intended. For example, do not use the chainsaw for cutting plastic, masonry, or building materials.
22. The engine will create toxic exhaust fumes as soon as the engine is started. Never work in enclosed areas or in areas with poor ventilation.

Note: The chainsaw is designed for occasional use by home owners, garden owners and campers and is for general work such as stump grubbing, cutting firewood, etc. It is not designed for lengthy use. If it is used for a lengthy period, the vibrations it causes in the hands of the user may result in circulation problems (white finger syndrome).

Kickback

Kickback may occur when the nose or tip of the chain bar touches an object, or when the wood closes in and pinches the saw chain in the cut. If the bar tip contacts, it may cause a lightning-fast reverse reaction, kicking the chain bar up and back towards the operator. Pinching the saw chain along the top of the chain bar may push the chain bar rapidly back towards the operator. Either of these reactions may cause you to loose control of the saw, which could result in serious personal injury. Do not rely exclusively upon the safety devices built into your saw. As a chainsaw user, you should take several steps to keep your cutting jobs free from accident or injury.

1. With a basic understanding of kickback, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
2. Keep a good firm grip on the saw with both hands, the right hand on the rear handle, and the left hand on the front handle, when the engine is running. Use a firm grip with thumbs and fingers encircling the chainsaw handles. A firm grip will help you reduce kickback and maintain control of the saw. Don't let go.
3. Make sure that the area in which you are cutting is free from obstructions. Do not let the nose of the chain bar contact a log, branch, or any other obstruction which could be hit while you are operating the saw.
4. Cut at high engine speeds.
5. Do not overreach or cut above shoulder height.
6. Follow the manufacturer's sharpening and maintenance instructions for the saw chain.
7. Only use replacement bars and chains specified by the manufacturer or the exact equivalent.

Safety features (FIG 3)

a. LOW KICKBACK SAW CHAIN: helps significantly reduce kickback, or the intensity of kickback, due to specially designed depth gauges and guard links.

b i. CHAIN BRAKE LEVER / HAND GUARD: protects the operator's left hand in the event it slips off the front handle while saw is running.

b ii. CHAIN BRAKE: is a safety feature designed to reduce the possibility of injury due to kickback by stopping a moving saw chain in milliseconds. It is activated by the CHAIN BRAKE lever.

c. STOP SWITCH: immediately stops the engine when tripped. Stop switch must be pushed to the "START" position to start or restart engine.

d. SAFETY TRIGGER LOCK: prevents accidental acceleration of the engine. Throttle trigger cannot be squeezed unless the safety latch is depressed.

e. CHAIN CATCHER: reduces the danger of injury in the event saw chain breaks or derails during operation. The chain catcher is designed to intercept a whipping chain.

Note: Study your saw and be familiar with its parts.

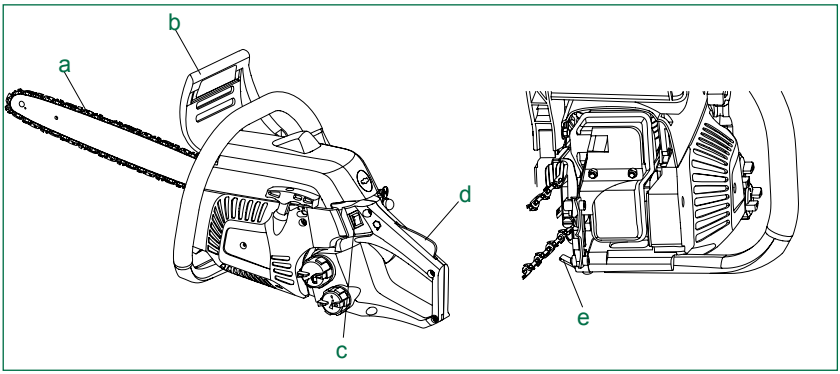


FIG 3

Proper use

The chain is designed exclusively for sawing wood. You may only fell trees if you have received the appropriate training.
The manufacturer cannot be held liable for damage caused by improper or incorrect usage.
Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the machine is used in commercial, trade or industrial businesses or for the equivalent purposes.

Environmental protection

Dispose of soiled maintenance material and operating materials at the appropriate collection point. Recycle packaging material, metal and plastics.

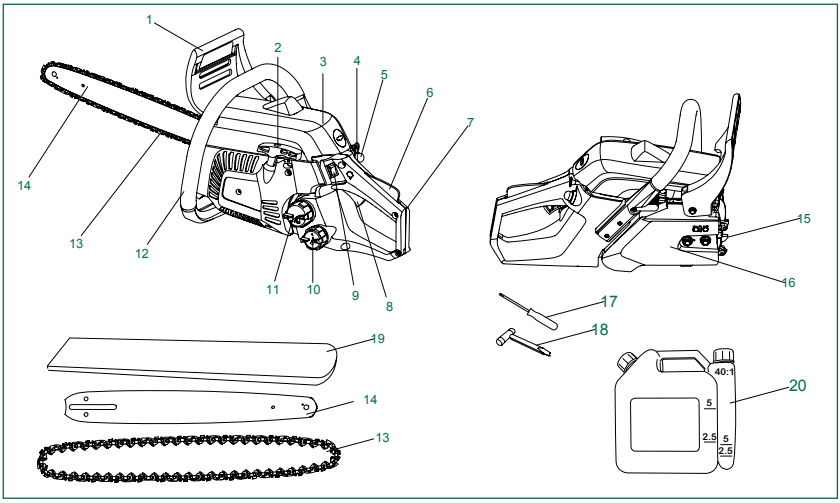


FIG 4

Layout (FIG 4)

1. Chain-brake
2. Start handle
3. Engine cover
4. Choke control
5. Primer bulb
6. Throttle interlock
7. Rear handle
8. Throttle trigger
9. Start/stop switch
10. Oil reservoir
11. Fuel tank
12. Front handle
13. Saw chain
14. Chain bar
15. Claw stop
16. Bar cover
17. Screwdriver
18. Plug wrench
19. Bar protector
20. Mixing bottle

Installation

Important: Do not start the engine until the saw is fully assembled.

Important: Wear protective gloves at all times when handling the chain.

Fit the chain bar (FIG 6)

WARNING: The saw chain has very sharp edges. Use thick protective gloves for your personal safety.

Note: To ensure that the bar and the chain are supplied with oil when in use, USE ONLY THE ORIGINAL BAR. The oiling hole (FIG 5/ Item A) must be kept clear of dirt and any build-up of residue.

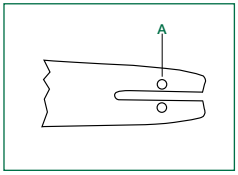


FIG 5

a. Tensioner nuts
b. Chain cover
c. Clutch
d. Tensioner pin (located in assembly hole)
e. Cutting link
f. Packing piece

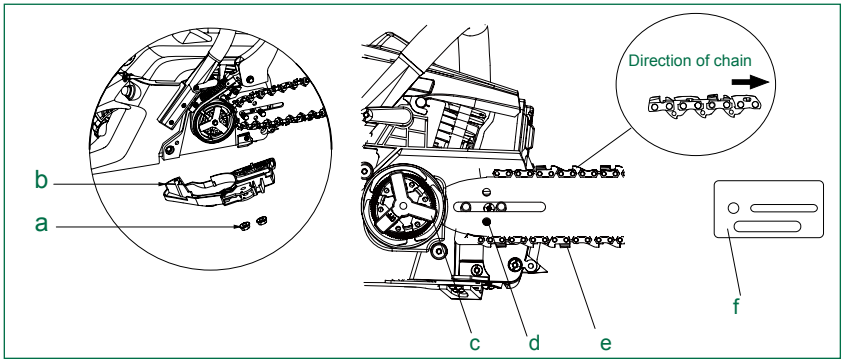


FIG 6

1. Pull the chain-brake back and ensure that it has been released. (the chain cover can only be removed with the chain-brake disengaged)
2. Then remove the securing nuts on the chain cover
3. Take out the packing piece (f) and dispose of it responsibly
4. Fit the chain around the bar ensuring that the direction of the chain is as depicted in the picture on the bar. Fit the chain on the sprocket. Adjust the position of chain tensioner so the tensioner pin locates in the hole on the bar.
5. Adjust the tension to ensure that there is not too much slack in the chain. (FIG 7)

Note: Make sure the tensioner pin is located in the assembly hole on the bar.

Note: Pay attention to the correct direction of the saw chain. Compare with the picture near the chain sprocket and the picture on the bar.

6. Fit the chain cover to the power unit and fasten the nuts to chainsaw and fasten the nuts until finger tight.
7. While holding up the tip of the bar, adjust the chain tension by turning the tensioner screw until the chain engages in the bar channel.
   Note: when tensioned correctly it should be possible to pull one full chain link free of the bar channel with ease.
8. Tighten the nuts securely with the bar tip supported (12-15 Nm). Then check the chain for smooth rotation and proper tension while moving it by hand. If necessary, loosen the chain cover.

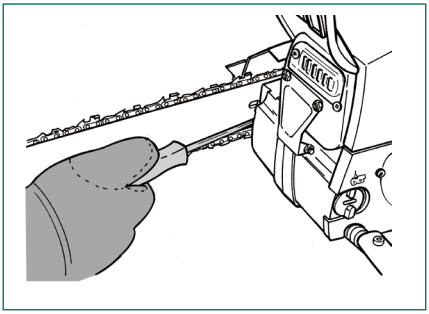


FIG 7

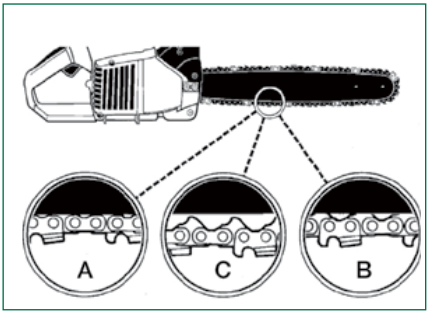


FIG 8

9. Tighten the tensioner nuts.

Note: A new chain will expand its length during the first period of use. Check and re-adjust the tension frequently as a loose chain can easily derail or cause rapid wear of itself and the chain bar.

Caution: If the saw chain is TOO LOOSE or TOO TAUT, the Vdrive wheel, chain bar, chain and crank shaft bearing will suffer premature wear. FIG 8 shows the correct tension A (when cold) and tension B (when warm). FIG C shows a chain that is too loose.

Before starting the machine

Chain brake mechanical test

Your chainsaw is equipped with a Chain brake that reduces possibility of injury due to kickback. The brake is activated if pressure is applied against the brake lever when, as in the event of kickback, the operator's hand strikes the lever. When the brake is actuated, chain movement stops abruptly.

Warning: The purpose of the chain brake is to reduce the possibility of injury due to kickback; however, it cannot provide the intended measure of protection if the saw is operated carelessly. Always test the chain brake before using your saw and periodically while on the job.

To test the chain brake (FIG 9)

a. The Chain brake is DISENGAGED (chain can move) when the BRAKE LEVER IS PULLED BACK AND LOCKED.

b. The chain brake is ENGAGED (the chain is locked) when the brake lever is pushed forward. It should not be possible to move the chain.

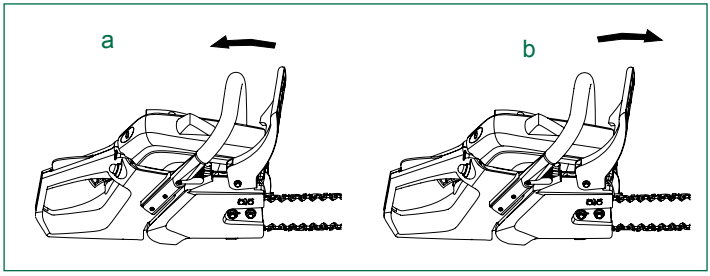


FIG 9

Note: The brake lever should snap into both positions. If this is not the case do not use your saw. contact the helpline immediately using the details provided.

Fuel and lubrication

Fuel

Use regular grade unleaded fuel mixed in a ratio of 40:1 with 2-stroke engine oil (JASO FC GRADE OIL or ISO EGC GRADE) for best results.

Mixing fuel (FIG 10)

Mix fuel with 2 stroke oil in the supplied container. Firstly fill the large chamber of the mixing bottle up to a mark of your choice (2.5 / 5) then add 2 stroke oil into the smaller chamber to the corresponding mark. Shake gently to ensure a thorough mix.

Warning: Never use neat fuel in your unit. This will cause permanent engine damage and void the manufacturer's warranty for the product. Never use a fuel mixture that has been stored for over 90 days.

Warning: If 2-stroke lubricant is to be used, it must be premium grade oil for 2-stroke air cooled engines mixed at a 40:1 ratio. Do not use any 2-stroke oil product with a recommended mixing ratio of 100:1. If insufficient lubrication is the cause of engine damage, it voids the manufacturer's engine warranty

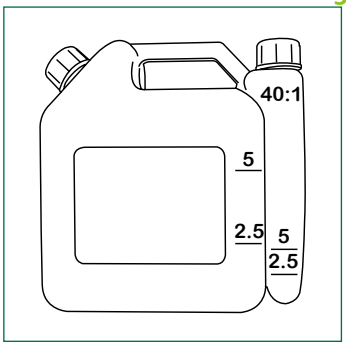


FIG 10

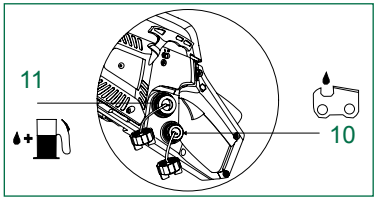


FIG 11

Recommended fuels

Some conventional fuels are being blended with oxygenates such as alcohol or an ether compound to meet clean air standards. Your engine is designed to operate satisfactorily on any fuel intended for automotive use including oxygenated fuel. It is recommended to use unleaded petrol as fuel.

Lubrication of chain and chain bar

Whenever you refill the fuel tank with petrol you must also top up the level of chain oil in the chain oil tank.
Use special chainsaw oil to lubricate the saw chain.
Note: most stores will sell acceptable oil under the name "Chainsaw chain oil"
Note: Do not use wasted or regenerated oil that can cause damage to the oil pump.

Important: The fuel mix is added into fuel tank(11), chain lubrication oil is filled into oil tank(10).Seal one cap prior to removing the second cap. If you put the fluid into the wrong tank seek assistance from an expert immediately.

Fueling the unit

1. **Untwist and remove the fuel cap.**
2. **Put fuel into the fuel tank to 80% of the full capacity.**
3. **Fasten the fuel cap securely and wipe up any fuel spillage around the unit.**

Important: Select bare ground for fuelling.
Important: Move at least 10 feet (3 meters) away from the fuelling point before starting the engine.
Important: Stop the engine before refuelling the unit. At the same time, be sure to sufficiently agitate the mixed fuel in the container.

Engine pre-start checks

Warning: Never start or operate the saw unless the bar and chain are properly installed.

1. **Ensure the correct fuel mixture is put into the fuel tank (11)**
2. **Ensure the oil tank reservoir (10) is topped up with chainsaw chain oil**
3. **Be certain the chain brake is engaged before starting the unit**

Once you have filled the fuel and oil reservior, tighten each filler cap securely by hand. Do not use any tools to do so.

Features 6

- 37cm cutting length(40cm bar length)
- Automatic choke
- Primer assisted start up
- Anti-vibration handle
- Safety start/stop switch
- 16.7m/s chain speed
- 270ml fuel tank capacity
- Easy grip pull cord handle
- Mixing bottle included
- Easy pull start system

This Gardenline chainsaw is fitted with an "easy pull start system". This cannot be started in the same manner as most other pull start petrol machinery, the operator should pull the start handle with a smooth and continuous action, all rapid and jerky actions must be avoided.

Operating Instructions 7

Operation

Starting the engine

1. Fill the fuel and chain oil tanks respectively, and tighten the caps securely. (FIG 12)
2. Engage the chain-brake (push it forward until an audible click is heard).
3. Set the switch to the “START” position. (FIG 13)
4. Press and release the primer bulb(5) 10 times and ensure that the primer bulb is approximately 3/4 filled with fuel before attempting to start. (FIG 14)
5. Pull the choke control out to engage. (FIG 14)
6. While holding the saw unit securely on the ground, pull the start handle two times. at this point, the engine will usually not start. (FIG 15)
   WARNING: Do not start the engine whilst holding the chainsaw in one hand. The saw chain may touch your body. This is very dangerous.
7. Push the choke control in to disengage. (failure to do this may cause the engine to flood)
8. Pull the start handle with **smooth, continuous pulls no more than five times**. if the engine does not start, remove the spark plug for 30 minutes, replace, and repeat the start procedure.
9. Allow the saw to run and warm up in this position for 30 seconds.
10. Disengage the chain-brake, by pulling it back.

Note: If you fail to start your machine, or require further assistance, please contact our after sales support team, details can be found at the bottom of the page.

Note: When restarting immediately after stopping the engine or when the engine is warm, it will not be necessary to use the choke function.
Make sure the cutting blade is pointing away from your body at all times, the chain may rotate upon ignition.

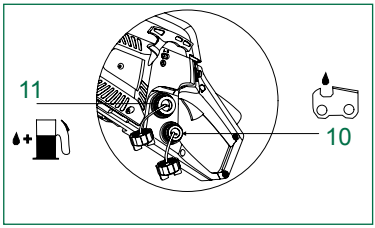


FIG 12

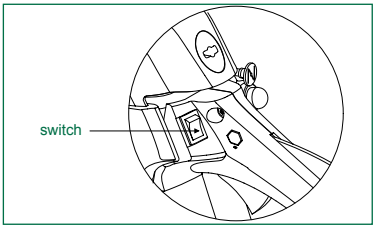


FIG 13

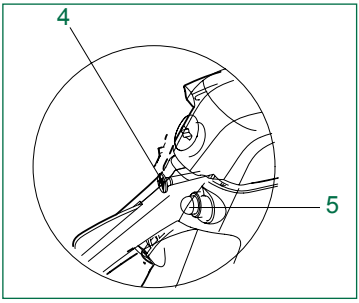


FIG 14

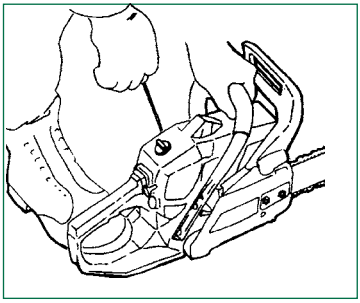


FIG 15

Checking the oil supply

NOTE: With the chainsaw fully assembled and adjusted it is important to check the chain oil supply is dispensing adequate lubrication. Proceed as below:

After starting the engine, run the chain at medium speed and see if chain oil is being dispensed as shown in FIG 16.

Note: The oil reservoir should become nearly empty by the time fuel is used up. Be sure to refill the oil tank every time when refuelling the saw.

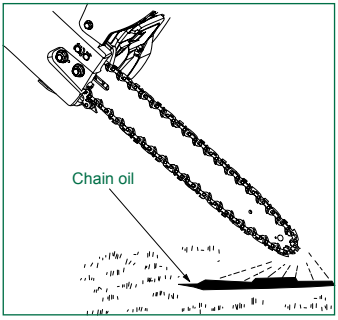


FIG 16

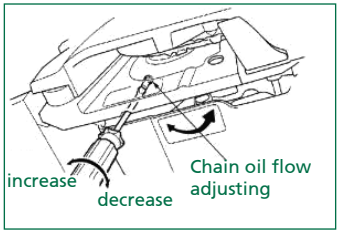


FIG 17

With the chainsaw switched off the chain oil flow can be changed by inserting a screwdriver in the hole on the bottom of the side of the clutch. Increase or decrease the oil flow (See Fig 17) according to your work conditions. Restart the chainsaw and check the rate of flow meets your requirements.

Chain brake (FIG 18)

This machine is equipped with a chain-brake that will immediately disable the chain upon the occurrence of kickback during cutting. The brake is automatically operated by inertia forces, which act on the weight fitted inside the front guard. This brake can also be operated manually with the front guard pushed forward to the guide bar(Pic. b). To disengage the chain-brake, pull it back until it touches the front handle.

Important: Be sure to confirm brake operation every time you use the machine and periodically during the period of use.

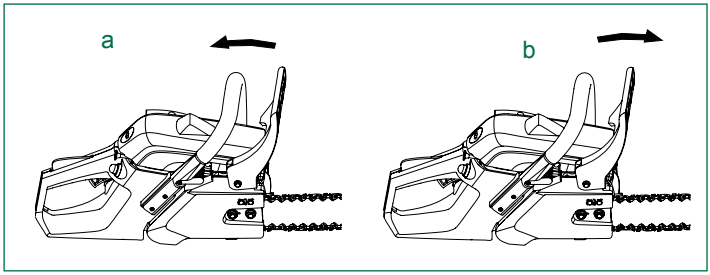


FIG 18

How to confirm if the chain brake is functioning correctly

1. Turn off the engine and leave until cold.
2. With the chainsaw on a flat surface and the chain tensioned correctly, engage the chain-brake by pushing it forward until an audible click is heard. Then, wearing protective gloves, attempt to move the chain by hand in the direction of normal rotation if this is not possible the chain brake has been engaged. If the brake is engaged when the chain is rotating at high speed for extended periods of time this can cause damage to the clutch or for it to fail completely. When the brake is activated whilst cutting, immediately release it having first released the throttle lever and set the chainsaw to "STOP"."

Stopping the engine

1. Release the throttle lever to allow the engine to idle for a few seconds.
2. Set the switch to the “STOP” position. (FIG 19)

Important: Do not put the chainsaw on the ground when it is still running. For additional safety, Switch the chainsaw off when not in use or between cuts. In the event that the ignition switch will not stop the saw, pull the choke control out and engage the chain brake to stop the engine. If the ignition switch does not stop the saw when set to the "STOP" position, have the ignition switch repaired before using the chainsaw again to prevent unsafe conditions or serious injury.

Note: When you have finished using the saw, always relieve the tank pressure by loosening, then retightening, the chain oil and fuel mix caps. Allow the engine to cool before storing.

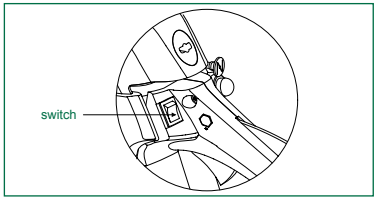


FIG 19

Cutting Guidance 8

Sawing

Before proceeding to your job, read the "Safety instructions" section. It is recommended to first practice sawing easy logs. This also helps you get accustomed to your unit.

1. **Always follow the safety regulations. The chainsaw must only be used for cutting wood. It is forbidden to cut other types of material. Vibrations and kickback will vary with materials other than wood and the requirements of the safety regulations would not be met. Do not use the chainsaw as a lever for lifting, moving or splitting objects. Do not lock it over fixed stands. It is strictly forbidden to attach any accessories to this product other than those supplied by the manufacturer.**
2. **It is not necessary to force the saw into the cut. Apply only light pressure while running the engine at full throttle.**
3. **If the saw chain gets caught in the cut, do not attempt to force it out, but use a wedge or a lever to enlarge the cut, freeing the saw.**

Guarding against kickback

1. **This saw is equipped with a chain brake that will stop the chain in the event of kickback if operating properly. You must check the chain brake operation before each use by running the saw at full the throttle for 1-2 seconds and pushing the front hand guard forward. The chain should stop immediately with the engine at full speed. If the chain is slow to stop or does not stop, you should contact the helpline immediately to arrange for the checking and or repair of the machine.**
2. **It is extremely important that the chain brake be checked for proper operation before each use and that the chain is sharp in order to maintain the kickback safety level of this saw. Removal of safety devices, inadequate maintenance, or incorrect replacement of the bar or chain may increase the risk of serious personal injury due to kickback.**

Felling a tree (FIG 20)

WARNING: You should have received training from a suitable person before attempting to fell a tree."

1. **Decide the felling direction considering the wind, lean of the**

tree, location of heavy branches, ease of job after felling and other factors.

2. While cleaning the area around the tree, arrange a good foothold and retreat path.
3. Make a notch cut one-third of the way into the tree on the felling side.
4. Make a felling cut from the opposite side of the notch and at a level slightly higher than the bottom of the notch.

Warning: When you fell a tree, be sure to warn anyone in close proximity of the danger.

5. Escape path (FIG 21)
   First clear the tree base and work area of interfering limbs and brush and clean its lower portion with an axe. Then, establish two paths of escape (B) and remove all obstacles. These paths should be generally opposite to the planned direction of the fall of the tree (A) and about at a 45° angle. Place all tools and equipment a safe distance away from the tree, but not on the escape paths.

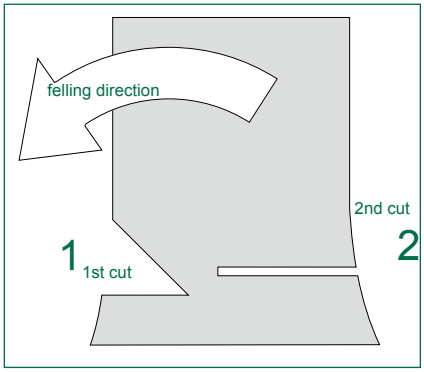


FIG 20

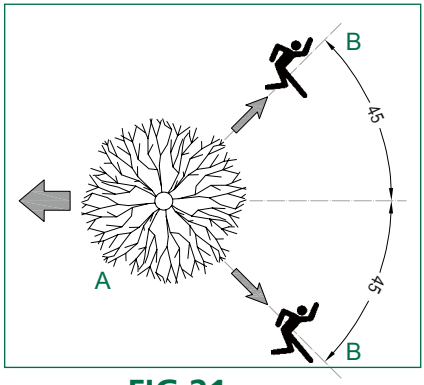


FIG 21

Bucking and limbing

WARNING:

1. Always ensure a stable foothold. Do not stand on the log.
2. Be alert to the rolling over of a cut log. Especially when working on a slope, stand on the uphill side of the log.
3. Follow the instructions in “Safety Instructions” to avoid kickback of the saw.

Before starting work, check the direction of the bending force

inside the log to be cut. Always finish cutting from the opposite side of the bending direction to prevent the chain bar from being trapped in the cut.

A log lying on the ground (FIG 22)

Saw down halfway, then roll the log over and cut from the opposite side.

A log supported off the ground (FIG 23)

In area A, saw up from the bottom one-third and finish by sawing down from the top. In area B, saw down from the top one-third and finish by sawing up from the bottom.

Cutting limb of a fallen tree (FIG 24)

First check to which side the limb is bent. Then make an initial cut from the bend side and finish by sawing from the opposite side.

WARNING: Be alert to the spring back of a cut limb.

Pruning of a standing tree (FIG 25)

Cut up from the bottom, finish down from the top.

WARNING:
Do not use an unstable foothold or ladder.
Do not overreach.
Do not cut above shoulder height.
Always use both hands to grip the saw.

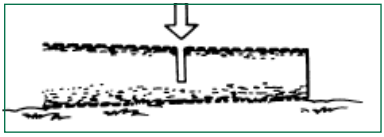


FIG 22

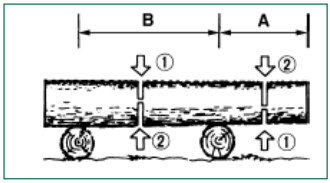


FIG 23

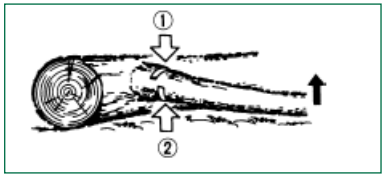


FIG 24

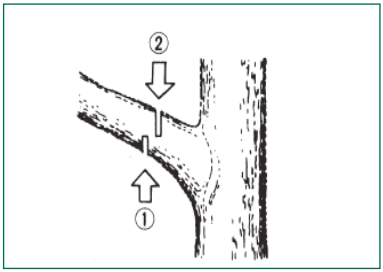


FIG 25

Maintenance 9

Before cleaning, inspecting or repairing your unit, make sure that the engine has stopped and is cool. Disconnect the spark plug to prevent accidental starting.

Maintenance after each use

1. Air filter (FIG 26)

Dust on the air filter surface can be removed by detaching the engine cover, removing the filter and tapping a corner of the filter cover against a hard surface. To clean dirt in the meshes remove the cover and brush in petrol. When using compressed air, blow from the inside.
To reassemble push the cover back into place, press the rim until it clicks.

2. Oiling port (FIG 27)

Detatch the chain bar and check the oiling port for clogging.

3. Chain bar (FIG 28)

When the chain bar is dismounted, remove sawdust from the bar groove and the oiling port.
Grease the nose sprocket through the grease port on the tip of the bar.

4. Others

Check for fuel leakage and loose fastenings and damage to major parts, especially handle joints and chain bar mounting and Silencer. If any defects are found, make sure to have them repaired before operating the unit again.

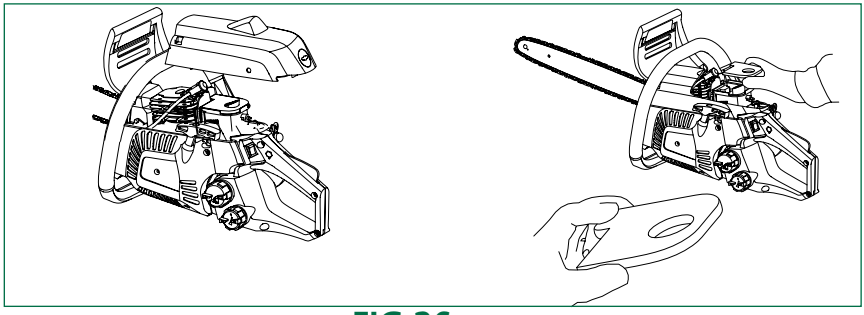


FIG 26

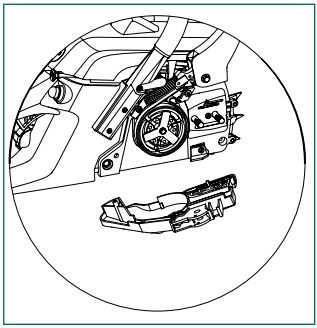


FIG 27

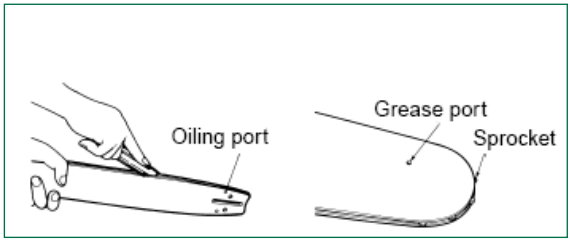


FIG 28

Periodical service points

1. Air cooling system (FIG 29)

Dust clogging around the cooling system and the cylinder fins will cause overheating of the engine. Periodically check and clean the cooling system and the cylinder fins with a brush after removing the cylinder cover, the air cleaner and the recoil case. When installing the cylinder cover and the cooling system, make sure that switch wires and grommets are positioned correctly in place.

Note: Be sure to unblock the air intake hole.

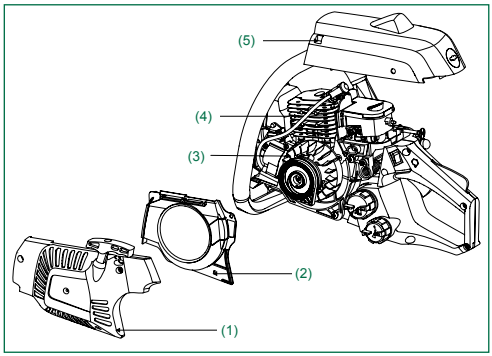


FIG 29

1. Start assembly
2. Fan cover
3. Fan
4. Cylinder fins
5. Engine cover

2. Spark plug (FIG 30)

Clean the electrodes with a wire brush and reset the gap to 0.65 mm as necessary.

3. Sprocket (FIG 31)

Check for cracks and for excessive wear interfering with the chain drive. If there is obvious wear replace it with a new one. Never fit a new chain on a worn sprocket, or a worn chain on a new sprocket.

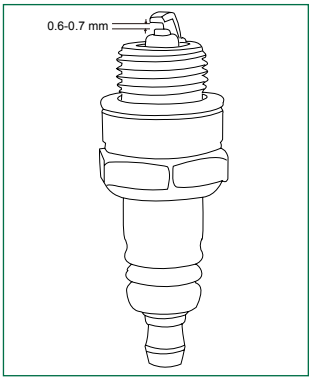


FIG 30

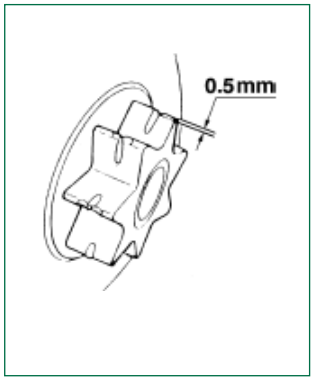


FIG 31

Maintenance of the saw chain and chain bar

Note: It is very important for smooth and safe operation to always keep the cutters always sharp.

The cutters need to be sharpened when:

1. **Sawdust becomes powder-like.**
2. **Cutting requires extra force.**
3. **The chainsaw does not cut straight and clean.**
4. **Vibration increases.**
5. **Fuel consumption increases.**

Cutter setting guidance

Warning: Be sure to wear safety gloves.

Before filing:

1. **Make sure the saw chain is held securely.**
2. **Make sure the engine is stopped.**
3. **Use a round file with the proper size for your chain**

Note: Chain type: 91PJ File size: 5/32 in (4.0 mm)

Place your file on the cutter and push straight forward. Position the file position as illustrated. (FIG 32)

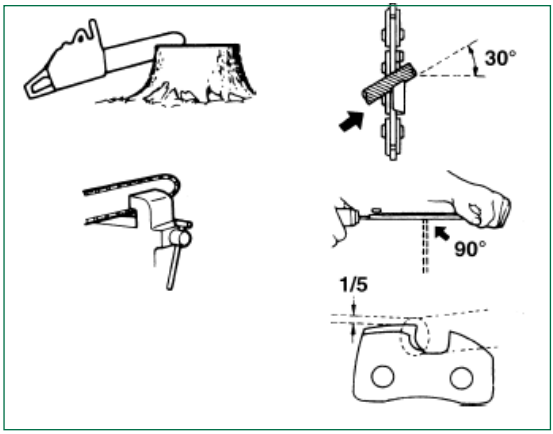


FIG 32

After every cutter has been set, check the depth gauge and file it to the proper level as illustrated. (FIG 33)

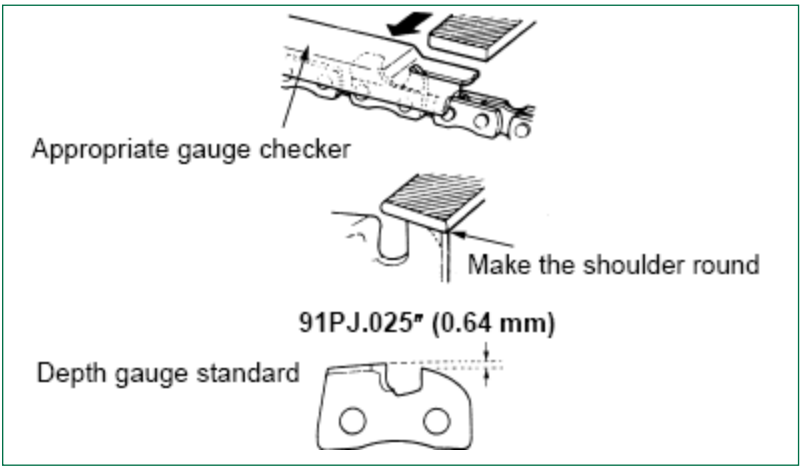


FIG 33

Warning: Be sure to round off the front edge to reduce the chance of kickback or tie-strap breakage.

Make sure every cutter has the same length and angle as illustrated. (FIG 34)

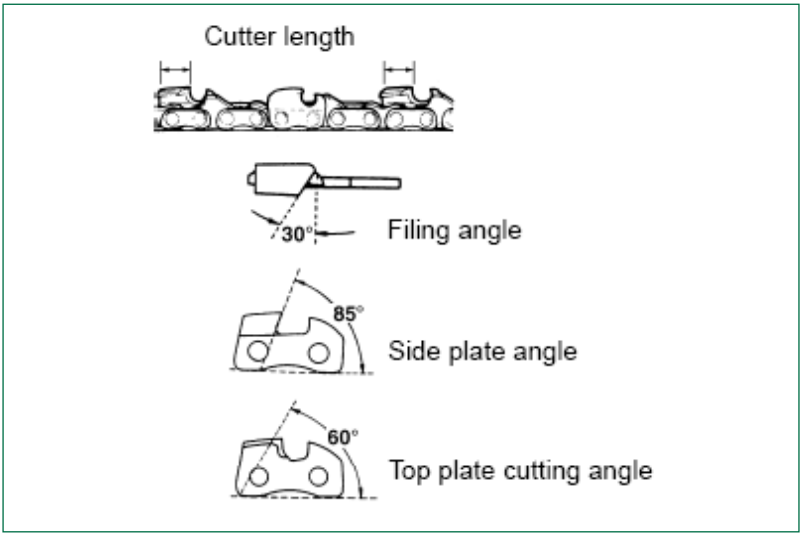


FIG 34

Chain Bar (FIG 35)

1. Reverse the bar occasionally to prevent partial wear.
2. The bar rail should always have parallel internal faces (see diagram). Check for wear of the bar rail. Apply a ruler to the bar and the outside of a cutter. If a gap is observed between them, the rail is normal. Otherwise, the bar rail is worn. Such a bar needs to be corrected or replaced.

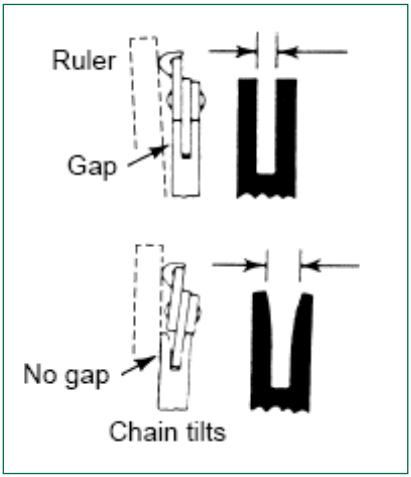
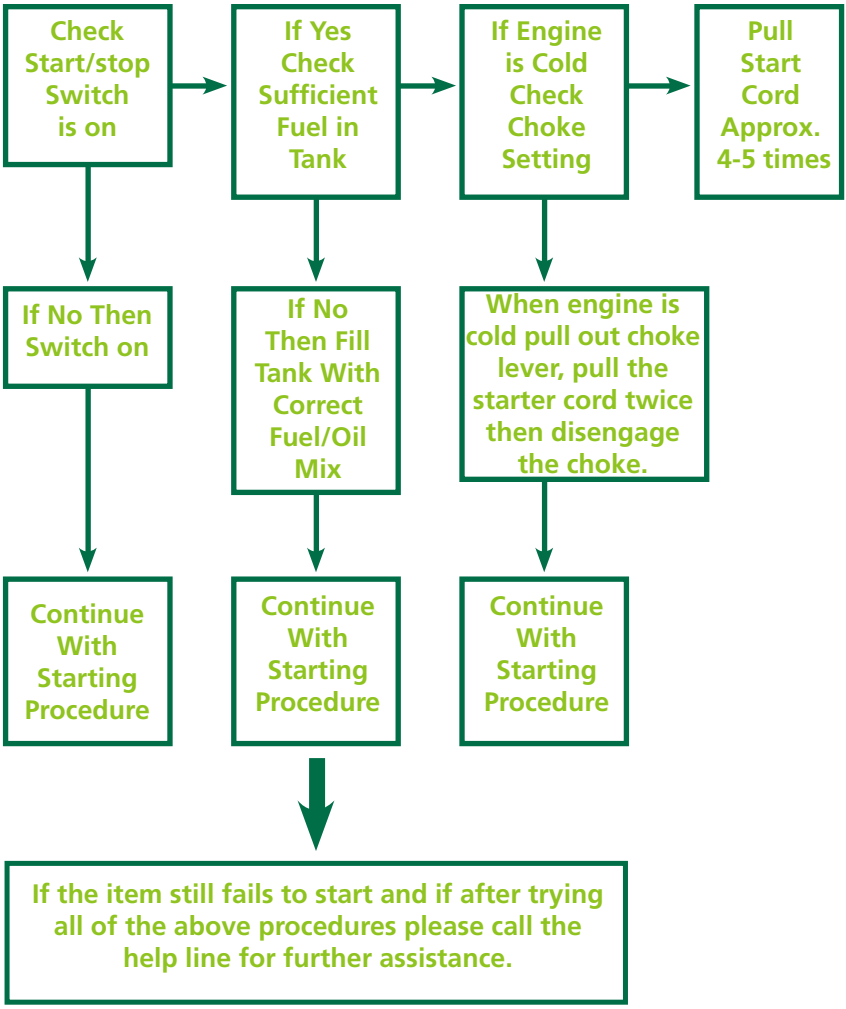


FIG 35

Petrol Engine Starting Procedure/ Check List



Frequently Asked Questions 10

FAULT	POSSIBLE CAUSES	TROUBLESHOOTING
Unit won't start or starts but will not run	Incorrect starting procedures	Follow instructions in the User Guide or refer to the starting procedure check list on page 31
	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an Authorised Service Centre
	Fouled spark plug	Clean/gap or replace plug
	Fuel filter blocked	Replace fuel filter
	Chain brake is on	Put Chain brake in off position
Unit starts, but engine has low power	Incorrect lever position on choke	Move to RUN position
	Dirty air filter	Remove, clean and reinstall filter
	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an Authorised Service Centre
Engine hesitates	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an Authorised Service Centre
No power under load	Incorrectly gapped spark plug	Clean/gap or replace plug
Runs erratically	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an Authorised Service Centre
Smokes excessively	Incorrect fuel mixture	Use properly mixed fuel (40:1 mix)
Poor performance when operated	Blunt chain	Sharpen or replace the chain
	Loose chain	Tension the chain
Engine dies	Empty petrol tank	Fill up the petrol tank
	Fuel filter in the wrong position in the tank	Completely fill the petrol tank or re-position the fuel filter in the petrol tank
Insufficient chain lubrication (the cutter rail and chain get hot)	Empty oil tank for the chain	Top up the oil tank for the chain
	Oil lubrication opening blocked	Clean the oil lubrication hole in the cutter bar (FIG5/Item A) Clean the groove in the cutter bar

Useful Information 11

Technical data

Engine displacement	45.4 cm^3
Maximum engine capacity	1.6 kW
Bar length	40 cm
Number of chainsaw chain drive links	57
Cutter rail length	37 cm
Chain gauge	(0.050˝), 1.27 mm
Idling speed	3300 rpm
Maximum speed with cutting equipment	11500 min^{-1}
Fuel tank capacity	270 ml
Oil tank capacity	190 ml
Anti-vibration function	Yes
Chain wheel teeth	6 Teeth x 9.255 mm
Chain brake	Yes
Clutch	Yes
Automatic chain lubrication	Yes
Low-kickback chain	Yes
Net weight without chain and chain bar	4.8 kg
Net weight (dry)	5.6 kg
Fuel consumption (specific)	450g / kWh
L_{pA} sound pressure level	101 dB(A) K=1.5 dB(A)
L_{WA} sound power level	115 dB(A)
Vibration ahv (front handle) max.	3.04 m/s^2 K=1.5 m/s^2
Vibration ahv (rear handle) max.	5.10 m/s^2 K=1.5 m/s^2
Chain type	Oregon PJ057X
Bar type	Oregon 160SDEA041
Spark plug	L8RTF

STORAGE

Caution: Never put a chainsaw into storage for longer than 30 days without carrying out the following steps.

Storing a chainsaw

Storing a chainsaw for longer than 30 days requires storage maintenance. Unless the storage instructions are followed, fuel remaining in the carburetor will evaporate, leaving gum-like deposits. This could lead to difficult starting and result in costly repairs.

1. **Remove the fuel tank cap slowly to release any pressure in the tank. Carefully drain the fuel tank.**
2. **Start the engine and let it run until the unit stops to remove fuel from carburetor.**
3. **Allow the engine to cool (approx. 5 minutes).**
4. **Remove the spark plug.**

Note: Store the unit in a dry place and away from possible sources of ignition such as a furnace, gas hot water heater, gas dryer, etc.

Putting the saw back into operation

1. **Remove spark plug.**
2. **Pull starter rope briskly to clear excess oil from combustion chamber.**
3. **Clean the spark plug and check that the electrode gap (approx 0.65mm) is correct.**
4. **Prepare the unit for operation.**
5. **Fill the fuel tank with proper fuel/oil mixture. Refer to the Fuel and Lubrication Section.**

Waste disposal

The equipment and its accessories are made of various types of material, such as metal and plastic. Defective components must be disposed of as special waste. Ask your dealer or your local council.

SUMEC

Declaration of Conformity

We

SUMEC Hardware &Tools Co.,Ltd.
198 ChangJiang RD .,Nanjing, CHINA
And our branch office
SUMEC UK Co. Ltd
Unit A&B, Escrick Business Park, Escrick,
York YO19 6FD
Declare that the product

45.4cc Petrol Chainsaw
Model No: PCS46Z

EC type approval no:
09SHW1347-05 issued by intertek Deutschland GmbH(NB905)
Measured sound capacity level 101 dB(A)
Guaranted sound capacity level 115 dB(A)
Complies with the essential health and safety requirements of the following directives:
2004/108/EC ----EMC Directive
2006/42/EC----Machinery Directive
2000/14/EC Annex,2005/88/EC ----Noise Directive
2004/26/EC ----Emission Directive
Standards and technical specification referred to :
EN ISO 11681-1:2001
EN ISO 14982:2009

Authorized Signatory
Date: 2012-05-16

Signature:

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