



4-IN-1 PETROL POWERED GARDEN TOOL



TSBC6



www.thetoolshed.co.nz



OPERATION MANUAL

PRODUCT DETAILS

PRODUCT

4-in-1 Petrol Powered Garden Tool

MODEL NO.

TSBC6

DISTRIBUTED BY



NOTE:

This manual is only for your reference. Due to the continuous improvement of the ToolShed products, changes may be made at any time without obligation or notice.

WARRANTY

This product may be covered under the ToolShed warranty. For more information see our Terms & Conditions at www.thetoolshed.co.nz



CONTENTS:

Specifications..... 4

Identification 4

Safety Instructions..... 5

Assembly..... 8

Operation..... 13

Maintenance..... 19

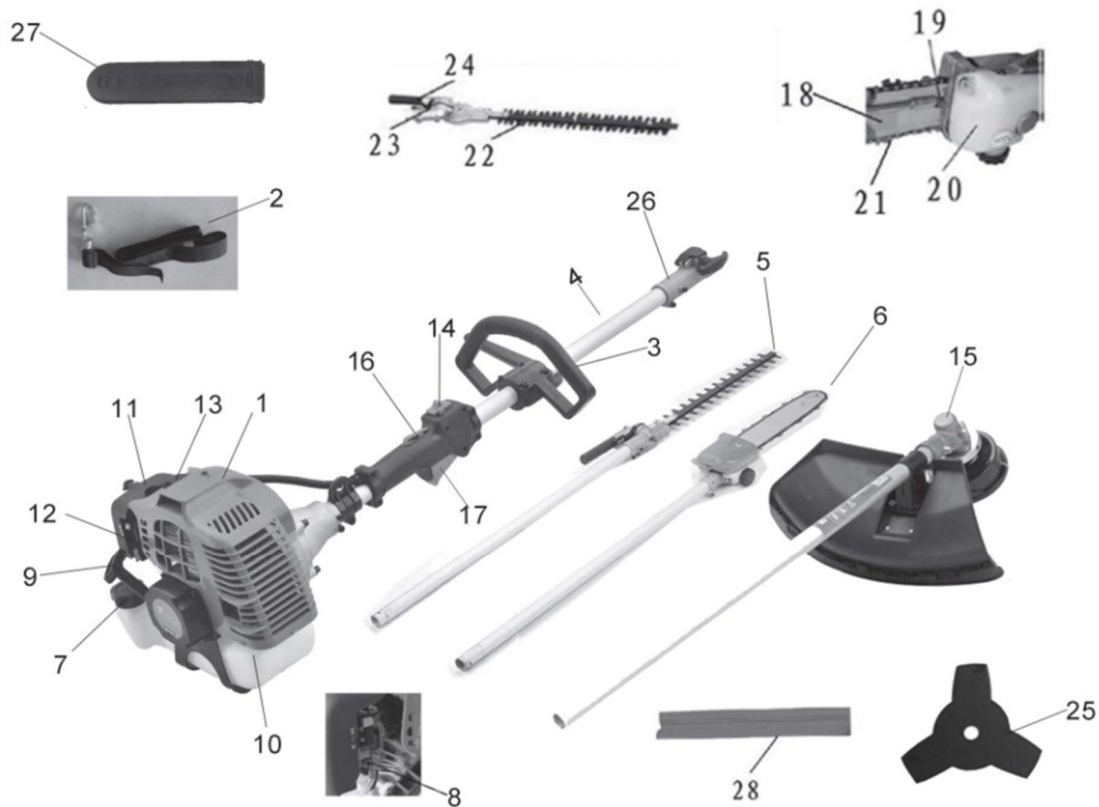
Troubleshooting..... 25

**THIS 4-IN-1 PETROL POWERED GARDEN
TOOL HAS A 2 STROKE PETROL ENGINE
AND THE FUEL FOR THIS ENGINE NEEDS
TO BE MIXED AT A RATIO OF 25-1.**

SPECIFICATIONS

CC Rating	42.7
Power	1.1KW
Fuel Mixture	25-1
Weight	6.6KG
Fuel Capacity	1.2L

IDENTIFICATION



1	Engine unit	11	Air filter	21	Saw chain
2	Shoulder harness	12	Choke	22	Cutting unit
3	Handle	13	Spark plug cap	23	Adjusting handle
4	Extension tube	14	Switch	24	Adjusting handle lock lever
5	Hedge trimmer head	15	Brush cutter head	25	Brush cutter head
6	Chainsaw head	16	Throttle lock	26	Jointer
7	Fuel tank cap	17	Throttle	27	Bar cover
8	Primer bulb	18	Guide bar	28	Blade cover
9	Starting handle	19	Adjusting screw		
10	Fuel tank	20	Oil tank		

IMPORTANT INFORMATION



WARNING READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS. Failure to follow instructions and warnings could lead to serious injury, electric shock, or fire. Save ALL warnings and instructions for future reference.

GENERAL SAFETY GUIDELINES

- This machine can cause serious injury. Read the instructions carefully for the correct handling, preparations, maintenance, and starting and stopping of the machine.
- Never allow children to use the machine.

PERSONAL SAFETY EQUIPMENT

- When cutting, make sure to wear the following safety equipment:
 1. Helmet
 2. Hearing protection
 3. Eye or face protection
 4. Work gloves
 5. Non-slip-sole work boots
- Do not wear loose clothing, jewellery, short trousers, open toed shoes, or bare feet. Do not wear anything which might be caught by a moving part of the unit. Secure hair so it is above shoulder length.

WORK PLACE

- Never start the engine inside a closed room or building. Exhaust gases contain dangerous carbon monoxide.
- Never use this product:
 1. When the ground is slippery or when you can't maintain a steady posture.
 2. At night, at times of heavy fog, or at any other times when your field of vision might be limited, and it is difficult to gain a clear view of the working area.
 3. During rainstorms, during lightning storms, at times of strong or gale-force winds, or at any other times when weather conditions may make it unsafe to use this machine.
- The machine may not be used unless it is undamaged and functions properly.
- Do not operate this machine unless you did not find any faults on checking. If a part has become defective, make sure to replace it before you use your machine again.
- The environment must be free of easily flammable and explosive materials.
- Do not overload the machine and use it only for its intended purpose.
- Always work with care and stay alert. Do not operate the machine when tired, ill, under the influence of alcohol, drugs, or medication.

BEFORE STARTING THE MACHINE

- Make sure no persons or animals are within your work area when you start working.
- Make sure there are no obstacles in your work area.
- Ensure that your machine has been properly and fully assembled.



OPERATION MANUAL

- Check that the machine works properly and make sure that the chain rail or hedge trimmer sits tightly and properly. Ensure that the ON/OFF switch works properly. Do not operate the machine with a damaged or extensively worn cutting blade.
- The machine will vibrate during operation which may cause screws and parts to loosen. Check all screws and parts for tightness.

USING THE PRODUCT

- Keep bystanders and animals at least 15m away from the operating point. If you are approached, immediately stop the engine.
- Grip the handles firmly with both hands using your whole hand.
- Assume a standing position during operation.
- After starting the engine, check to make sure that the cutting attachment stops rotating when the throttle is moved fully back to its original position. If it continues to rotate even after the throttle has been moved fully back, turn off the engine and take the unit for repair.
- If the unit starts to shake or vibrate, turn off the engine and check the whole unit. Do not use it until the trouble has been properly corrected.
- Keep all parts of your body away from cutting attachment and hot surfaces.
- Never touch the muffler, spark plug, or other metallic parts of the engine while the engine is in operation or immediately after shutting down the engine. Doing so could result in serious burns or electric shock.
- While the motor is still hot, keep the machine away from anything flammable.
- Before laying the machine down, ensure the motor is turned off.
- Never work alone.
- Always be aware of your surroundings and stay alert for possible hazards that you may not hear due to the noise of the machine.

MAINTENANCE SAFETY

- In order to maintain your appliance in proper working order, perform the maintenance and checking operations described in the manual at regular intervals.
- Always be sure to turn off the engine before performing any maintenance or checking procedures.
- Use only original replacement parts from the ToolShed. Only these spare parts are guaranteed and designed to be suitable for use with this machine. Using other spare parts will void your warranty and may cause danger to yourself and your surroundings.

HANLDING FUEL

- The engine is designed to run on a mixed fuel which contains highly flammable gasoline. Never store cans of fuel or refill the tank in any place where there is a boiler, stove, wood fire, electrical sparks, welding sparks, or any other source of heat or fire which might ignite the fuel.
- Never smoke while operating the unit or refilling its tank.
- When refueling the tank, always turn off the engine and allow it to cool down. Take a careful look around to make sure that there are no sparks or open flames anywhere nearby before refueling.
- Wipe spilled fuel completely using a dry rag if any fuel spillage occurs during refueling.



TRANSPORT AND STORAGE

- When you finish cutting in one location and wish to continue work in another spot, turn off the engine, lift the unit, and carry it, paying attention to the blade.
- When transporting or storing the machine, always fit the cutting device guard or guide bar cover.
- When hand carrying the machine, put a cover over the cutting part if necessary.
- Never transport the product over rough roads over long distances without removing all fuel from the fuel tank. If doing so, fuel may leak from the tank during transport.

KICKBACK SAFETY PRECAUTIONS FOR CHAINSAW USERS

- **Kickback may occur when the nose or tip of the guide bar touches an object, or when the 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 guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of the reactions may cause you to lose control of the saw, which could result in serious personal injury.**
- **Do not rely exclusively on the safety devices built into your saw. As a chainsaw user, you should take several steps to keep cutting jobs free from accident or injury.**
- With a basic understanding of kickback, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
- Keep a good grip on the saw with both hands 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.
- Make certain that the area in which you are cutting is free from obstructions. Do not let the nose of the guide bar contact a log, branch, or any other obstruction which could be hit while you are operating the saw.
- Cut at high engine speeds.

WARNING: Make sure the chain and guide bar are correctly adjusted before operating the equipment. Never attempt a chain adjustment with the engine running.

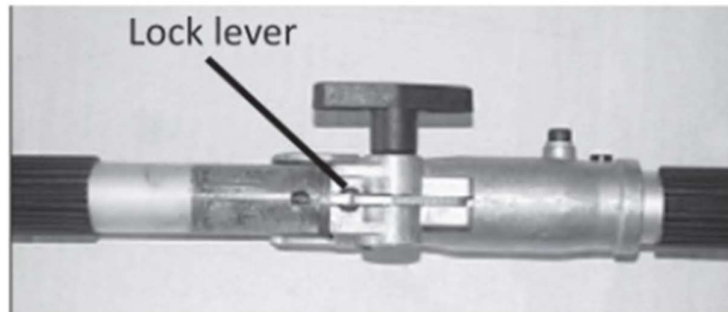
- Always make sure the cutting attachment is properly installed and firmly tightened before operation.
- Never use a cracked or warped guide bar. Replace it with a serviceable one and make sure it fits properly.
- If a saw blade should bind in a fast cut, shut off the engine immediately. Push the branch or tree to ease the bind and free the blade.
- Do not operate the pole pruner with the muffler removed.
- When cutting a limb that is under tension, be alert for spring back so that you will not be struck by the moving limb.
- Always stop the engine immediately and check for damage if you strike a foreign object or if the machine becomes tangled. Do not operate with broken or damaged equipment.

WARNING: Do not make unauthorized modifications or substitutions to the guide bar or chain. Never allow the engine to run at a high RPM without a load as doing so could damage the engine. Keep the pruner as clean as possible. Keep it free of loose vegetation, mud, etc.

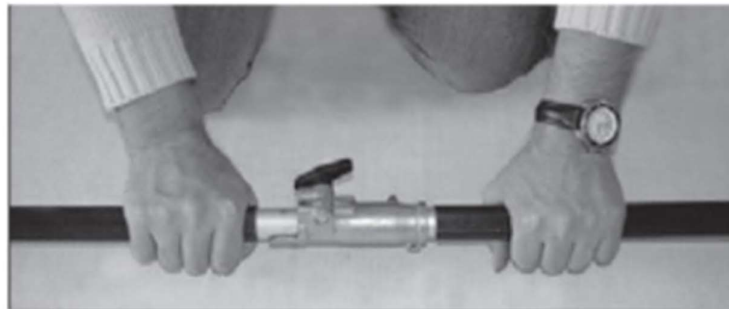
ASSEMBLY

JOINT ATTACHMENT

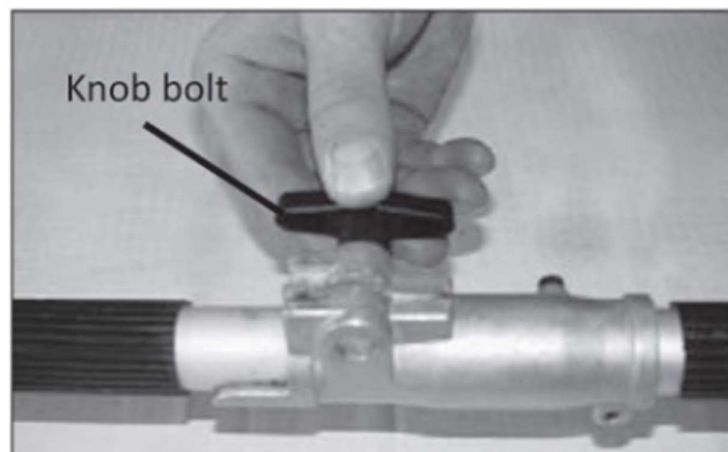
1. Press the lock lever down.



2. Insert the attachment to the main shaft. Fix the lock lever into the hole.



3. Tighten the knob bolt securely.



INSTALLING THE HANDLE

1. Insert the barrier handle to the top handle.
2. Fasten the four internal hexagon screws with a spanner.

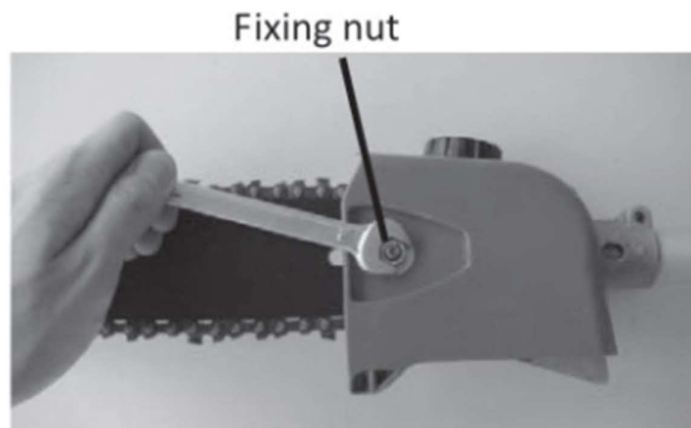


CHAIN TENSION SET UP

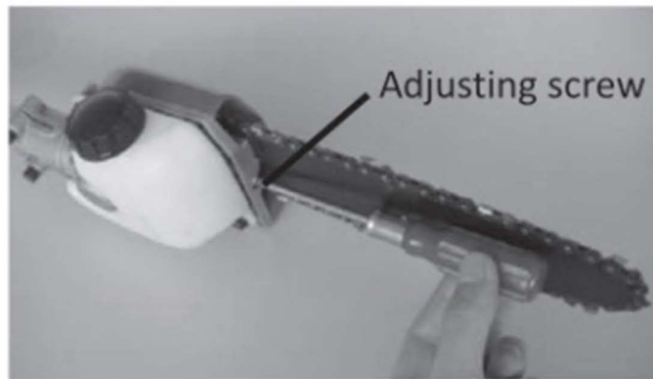
WARNING:

- The saw chain has very sharp edges. Use protective gloves for safety.
- Always pay attention to the chain tension. A slackened chain will increase the risk of backlash. If slackened, the chain could spring out of the guide, could cause injury to the operator, and could be damaged. A slackened chain wears out very quickly and the sprocket wheel and guide bar wear out.

1. Unscrew the fixing nut

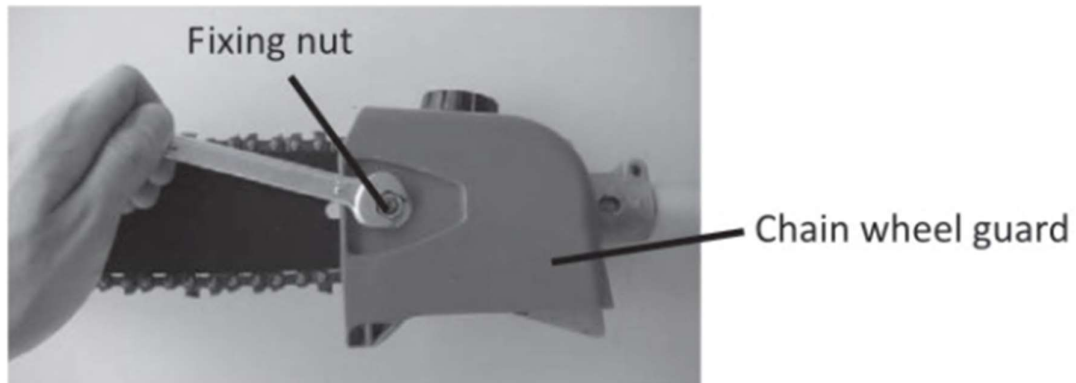


2. Turn the adjusting screw until the chain fits but may be moved with ease.

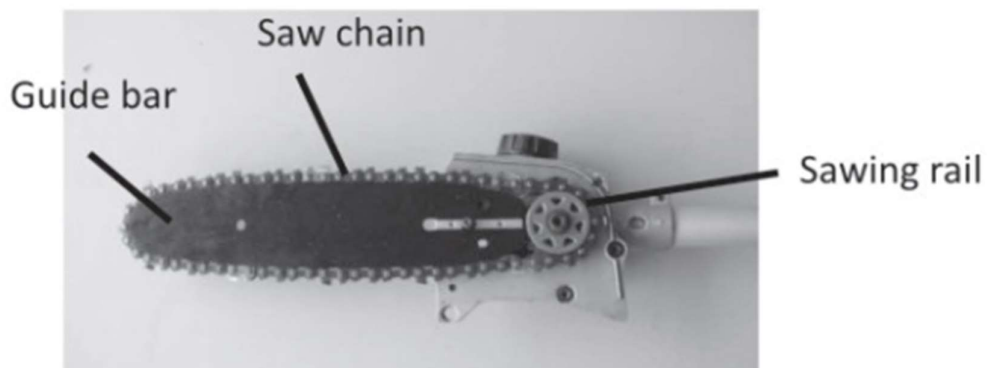


EXCHANGE THE BAR OR SAW CHAIN

1. Unscrew the fixing nut and remove the chain wheel guard.



2. Remove the saw chain and guide bar.

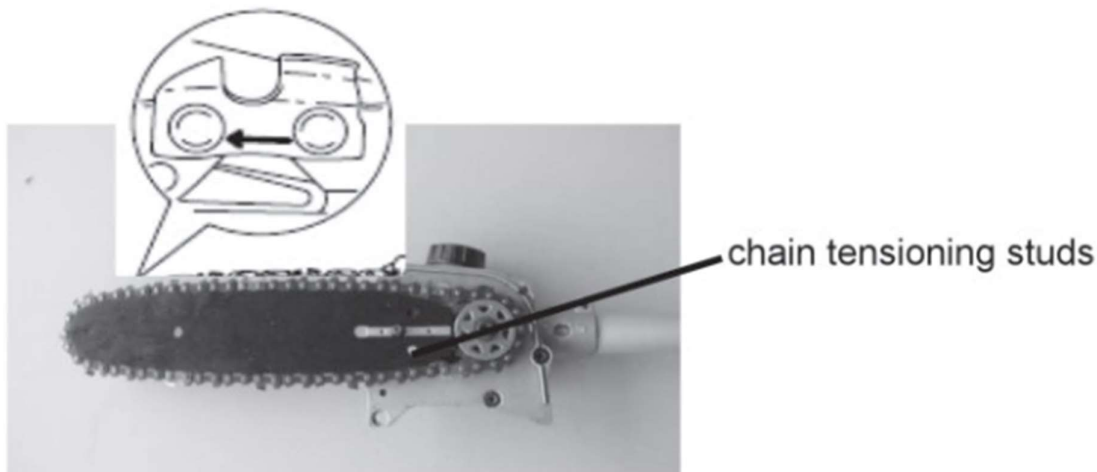


INSTALLING THE GUIDE BAR AND SAW CHAIN

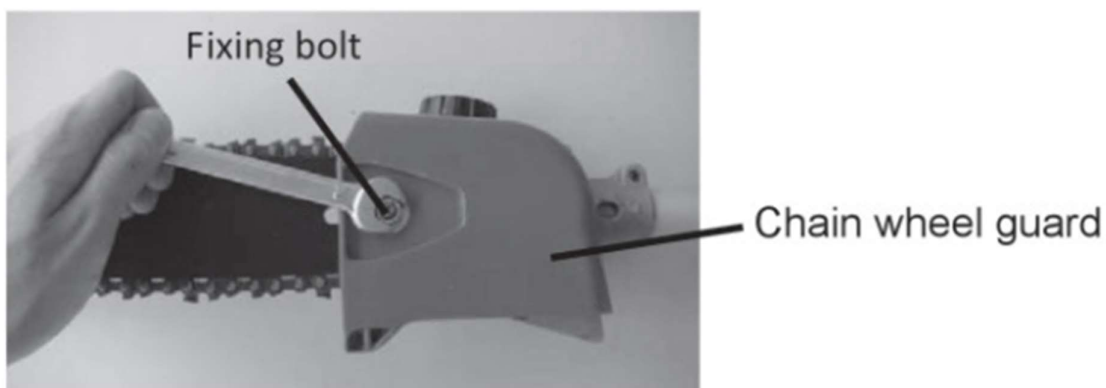
1. Place the sawing chain onto the sawing rail.



2. Position the guide bar so that the chain tensioning studs projects into the guide bar. **Ensure the saw chain runs in the correct direction.**



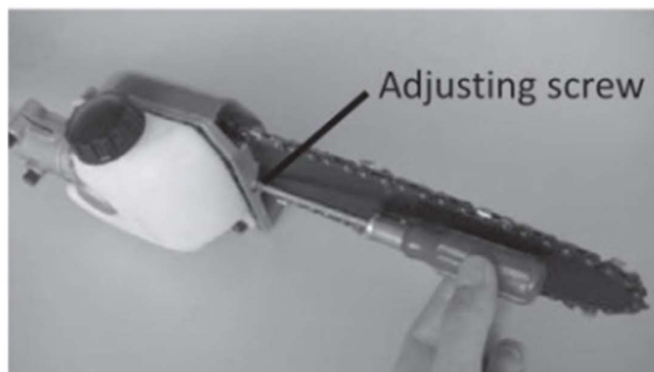
3. Attach the chain wheel protection and then tighten the fixing bolt lightly.



4. Tighten the tensioning screw.
5. Tighten the fixing nut.

NOTE:

The chain should not sag, but it should be possible to pull it a few millimeters away from the saw rail.



BRUSH CUTTER SET UP

1. Press the lock lever down.



2. Insert the attachment to the main shaft. Fix the lock lever into the hole.



3. Tighten the knob bolt securely.

BRUSH CUTTER SET UP

The process is the same as above.

OPERATION

BEFORE OPERATION CHECKS

For your safety, and to maximize the service life of your equipment, it is very important to take a few moments before you operate the engine to check its condition. Be sure to correct any problem you find before use.

Before beginning your pre-operation checks, be sure the switch is in the **OFF** position.

Always check the following items before you start the engine:

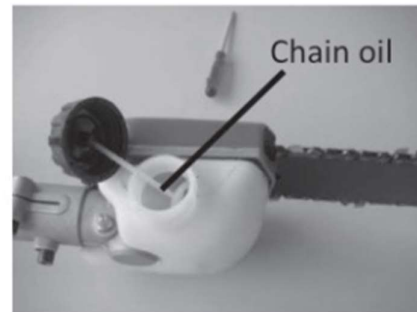
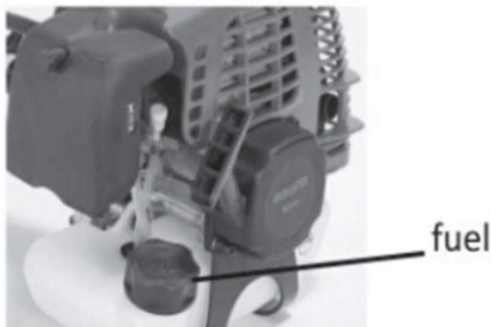
- Cutting head is mounted correctly.
- Switches work easily.
- The ignition plug is safely mounted.
- Make sure that handgrips are clean so that scythe may be lead safely.
- The cutting head must move freely.

FUEL AND CHAIN OIL

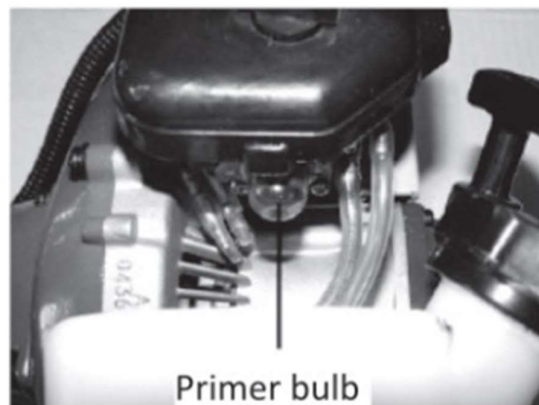
Gasoline is very flammable. Avoid smoking or bringing any flame or sparks near the fuel. Make sure to stop the engine and allow it to cool before refueling the unit. Select outdoor bare ground for fueling.

STARTING THE ENGINE

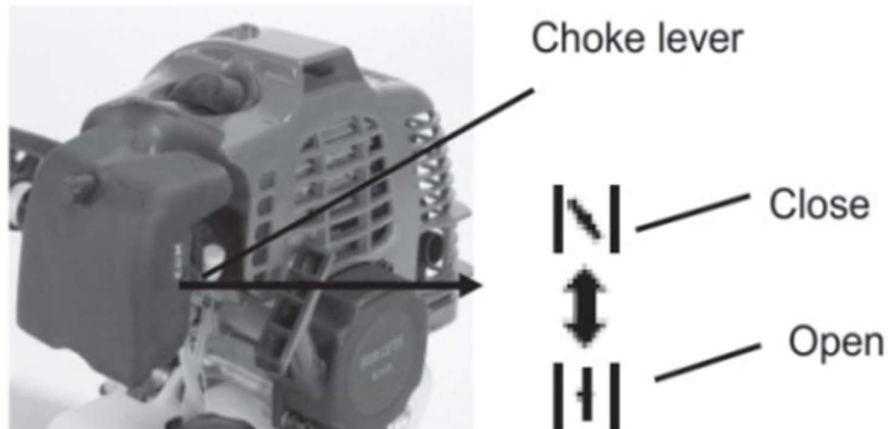
1. Feed fuel into the fuel tank and tighten the cap securely. (Pole chain saw only) Feed the chain oil into the oil tank and tighten the cap securely.



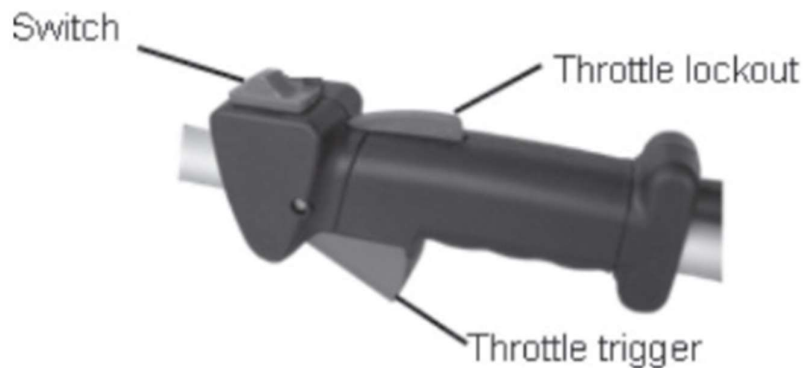
2. Rest the unit on a flat, firm place. Keep the cutting head off the ground and clear of surrounding objects, as it will start rotating upon starting the engine.
3. Press the primer several times until overflow fuel flows out in the clear tube.



4. Move the choke lever to the closed position.



5. Set the stop switch to the 'START' position. Press down the throttle lock.



6. While holding the unit firmly, pull out the starter rope quickly until the engine fires.
7. Move the choke lever downward to open the choke.
8. Allow the engine to warm up for several minutes before starting operation.

WARNING: This product is equipped with a centrifugal clutch mechanism, so the cutting attachment begins to rotate as soon as the engine is started by putting the throttle into the start position. When starting the engine, place the product onto the ground in a flat clear area and hold it firmly in place so as to ensure that neither the cutting part nor the throttle come into contact with any obstacle when the engine starts.

Do not pull too far and watch the cutting head while pulling the starting cable.

Note:

- When restarting the engine immediately after stopping it, leave the choke open.
- Over-choking can make the engine hard to start due to excess fuel. When the engine fails to start after several attempts, open the choke and repeat pulling the rope or remove the spark plug and dry it.

STOPPING THE ENGINE

1. Release the throttle and run the engine for half a minute.
2. Shift the stop switch to the **STOP** position.

WARNING: Except for an emergency avoid stopping the engine while pulling the throttle lever. When it doesn't stop at the switch, move the choke lever to the closed position.

POLE SAW OPERATION

WARNING: Always wear work gloves made of leather or some other sturdy material when using the pole saw. Falling branches may fall onto the face or into the eyes, resulting in injuries, scratches, and cuts. For this reason, you should always be sure to wear a helmet and face protector when using your pole saw.

CHECKING OIL SUPPLY

After starting the engine, run the chain at medium speed and see if chain oil has scattered off. (As shown in the figure).



NOTE:

The oil reservoir has a capacity sufficient to provide about 40 minutes of cutting time (when set to deliver the minimum flow rate, or about as long as you will get from a tank of fuel). Be sure to refill the oil tank every time when refueling the saw.

ADJUSTING OIL FLOW RATE

- Never fill the oil reservoir nor adjust the oiler with the engine running.
- An increase in bar oil flow rate will speed oil consumption, requiring more frequent checks on the oil reservoir.
- To ensure sufficient lubrication, it may be necessary to check the oil level more frequently than at fuel tank refills.
- The pump is set at the factory to deliver a minimum flow rate, but it can be adjusted in the field.
- A temporary increase in oil flow is often desirable when cutting things like hardwood or wood with a lot of pitch.

Adjust the pump as follows:

1. Stop the engine and make sure the stop switch is in the OFF position.
2. Place the unit on its side with the oil reservoir up.
3. With a screwdriver, push in on the oil flow rate adjusting screw and turn in the desired direction.



CAUTION: The oil flow adjusting screw must be pressed in slightly in order to turn. Failure to do so could damage the pump and screw.

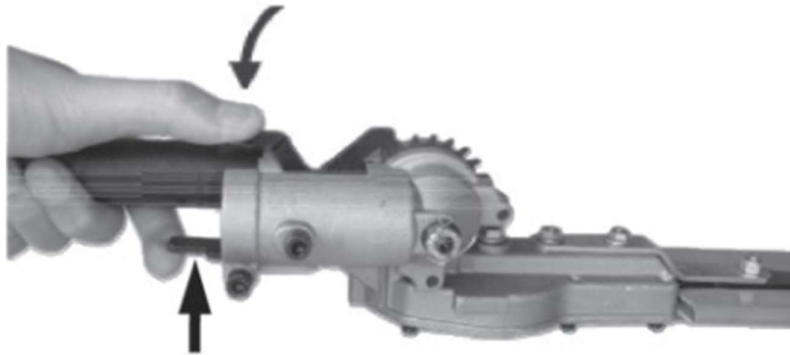
POLE HEDGE TRIMMER OPERATION

DANGER: This product is equipped with extremely sharp blades, and when used improperly these blades can be extremely dangerous. Improper handling can cause accidents, which may in turn lead to a serious injury or death. For this reason, you should always be careful to follow the following instructions when using your trimmer.

- Never hold the trimmer in a way in which the blades are pointed towards someone else.
- Never allow the blades to come into proximity with your body while the engine of the trimmer is in operation.
- Always be sure to turn off the engine before changing the angle of the blades, removing branches which have become stuck in the blades, or at any other time when coming in proximity with the blades.
- Always wear work gloves made of leather or some other sturdy material when using the trimmer.
- Always place the blade cover provided with the trimmer over the blades when not in use.
- Falling branches may fall onto the face or into the eyes, resulting in injuries, scratches, and cuts. For this reason, you should always be sure to wear a helmet and face protector when using your trimmer.

CAUTION: The thickness of branches which may be cut using this trimmer is limited to up to approximately 5mm. Never try to cut branches thicker than this, as doing so may result in damage to the trimmer.

ADJUSTING THE ANGLE OF THE CUTTING BLADES



1. Stop the engine.
2. Lift the lock lever and press down the adjusting lever.
3. Adjust the angle of the blades to the desired angle and release the levers.

OPERATION FOR BRUSH CUTTER

- Working on grass areas, hold the scythe at an angle of 30 degrees and make semicircle turns to the left and right.
- The best results are achieved with grass 15cm high. If it is higher, it is recommended to repeat mowing several times.

CAUTION: When the machine is running, never put the mowing head on the ground.

If the mowing output decreases:

1. Hold the running machine over the grass and knock the ground several times with the mowing head.
2. The cutter enclosed in the protection shield will cut the fibre to the required length.

The fibre remnant may be thrown off and cause an injury.

If the machine is vibrating:

Clean it or, where necessary, remove the grass stuck on the mowing head and protection shield.

1. Hold the clipper safely with both hands.
2. Mow grass and weed only, low shrubbery may be cut with a thick blade.

MAINTENANCE

- Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.
- Always follow the inspection and maintenance recommendations in this owner's manual.

WARNING:

- Make sure the engine has stopped and is cool before performing any service or maintenance on the machine. Contact with moving cutting head or hot muffler may result in a personal injury.
- Read the instructions before you begin and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks and flames away from all fuel related parts.

	System/Components	Procedure	Before Use	Every 25 hours	Every 50 hours	Every 100 hours	Note
Engine	Fuel leaks, fuel spillage	Wipe out	✓				
	Air cleaner	Inspect	✓				Replace if necessary
		Clean		✓			
	Fuel tank, fuel filter	Inspect	✓				Replace if necessary
		Clean		✓			
	Idle adjusting screw	Adjusting idling speed		✓			Replace carburetor if necessary
	Spark plug	Clean and readjust			✓		
	Cylinder fins, intake air cooling vent	Clean		✓			
Others	Muffler, cylinder exhaust port	Clean			✓		
	Combustion chamber	Clean				✓	
	Throttle lever, stop switch	Check operation	✓				
	Cutting parts	Replace if somethings wrong	✓				Pole hedge trimmer only
	Transmission	Grease		✓			
	Screws/nuts/bolts	Tighten/replace	✓			✓	
	Guide bar	Clean	✓				
	Sprocket	Inspect/replace			✓		
	Saw Chain	Inspect/sharpen	✓				

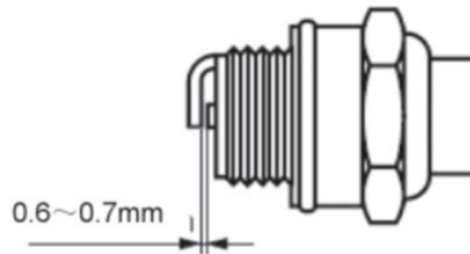
ENGINE MAINTENANCE

AIR CLEANER

If the air cleaner is clogged, it will reduce the performance of the engine. Check and clean the filter element in warm soapy water as required. Dry completely before installing. If it is broken or shrunk, then replace it with a new one.

SPARK PLUG

Starting failure and misfiring is often caused by a fouled spark plug. Clean the spark plug and check that the plug gap is in the correct range.



NOTE: Using any spark plug other than those designed for this engine type may result in the engine failing to operate properly or in the engine becoming overheated and damaged.

To install the spark plug, first turn the plug until it is finger tight, then tighten it a quarter turn more with a socket wrench. Tightening torque – 9.8-11.8N.m (1-1.2kg.m)

MUFFLER

- Inspect the muffler periodically for loose fasteners and any damage or corrosion. If any sign of exhaust leakage is found, stop using the machine and have it repaired immediately. Failing to do so may result in the engine catching on fire.

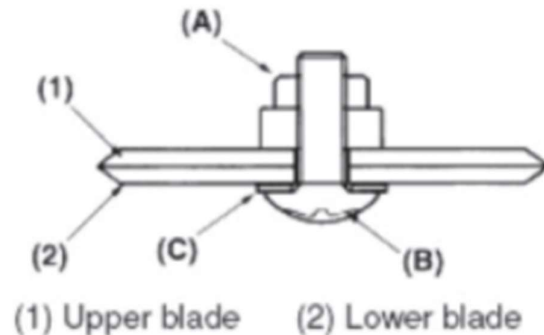
Remove the muffler, insert a screwdriver into the vent, and wipe away any carbon build up. Wipe away any carbon build up on the muffler exhaust vent and cylinder exhaust port at the same time.



HEDGE TRIMMER MAINTENANCE

BLADE

- When refilling the tank or resting, it often a good idea to use the time to oil the cutting blades.
- If a gap exists between the upper and lower blades, follow the procedure below to adjust them so they fit closer together.



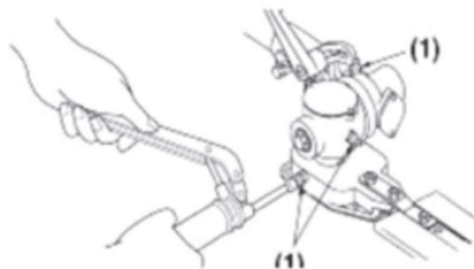
1. Loosen lock nut (A) as shown in the diagram.
2. Tighten screw (B) fully, and then turn one-third to one half of a rotation backwards.
3. While holding onto the screw to keep it in position, tighten the lock nut.
4. Check to make sure the flat washer (C) is loose enough so that it may be turned by pressing on it.

NOTE: Screwing in the screw too tightly may make it impossible for the blades to move. Conversely, not screwing in the screw tightly enough may make the blades of the trimmer feel dull and cause leaves and branches to become caught in the blades of the trimmer.

QUICK TIP: If the blades become so worn down that it is no longer possible to eliminate the gap between them, you should have the blades sharpened or replaced.

TRANSMISSION

The reduction gears are lubricated by multipurpose grease in the transmission. Supply new grease every 25 hours of use or more often if the condition of the job requires it. When adding lubricant, use a grease gun to insert lubricant into the three grease nipples located on the transmission.



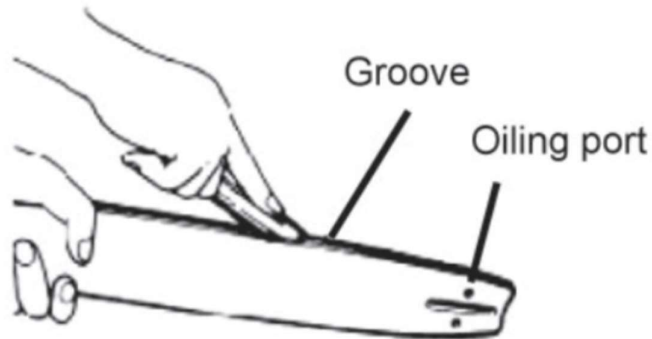
POLE CHAINSAW MAINTENANCE

OILING PORT

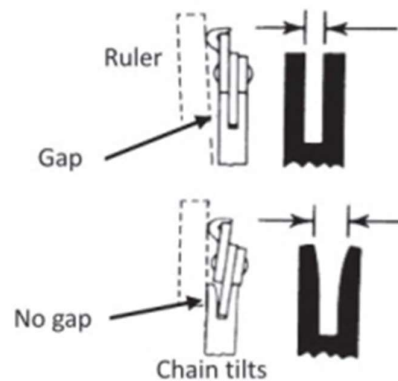
Dismount the guide bar and check the oiling port for clogging.

GUIDE BAR

Remove sawdust in the bar groove and the oiling port.

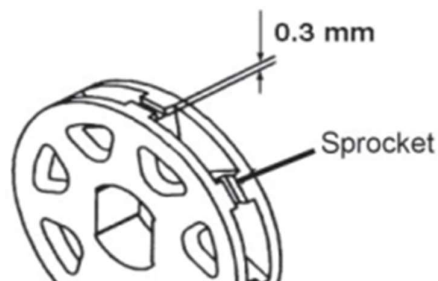


The bar rail should always be a square. Check for wear of the bar rail. Apply a ruler to the bar and the outside of a cutter. If a gap is observed between them, the rail is normal. Otherwise, the bar rail is worn. Such a bar needs to be corrected or replaced.



Sprocket

Check for extensive wear and replace it when teeth are worn over 0.3mm.



SAW CHAIN MAINTENANCE

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

Your cutters need to be sharpened when:

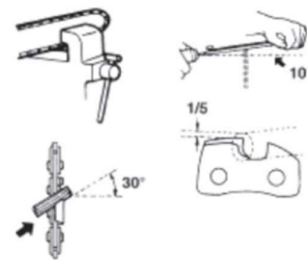
- Sawdust becomes powder-like
- You need extra force to saw
- The cut isn't straight
- Vibration increases
- Fuel consumption increases

BE SURE TO WEAR SAFETY GLOVES

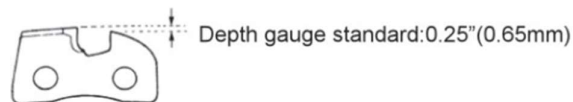
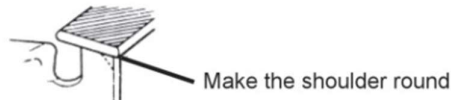
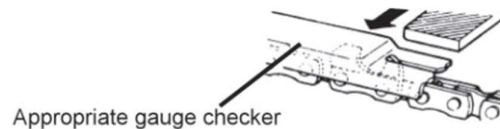
Before filing:

- Make sure the saw chain is held securely
- Make sure the engine is stopped
- Use a round file of proper size for your chain

Place your file on the cutter and push straight forward.
Keep the file positioned as illustrated.



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



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

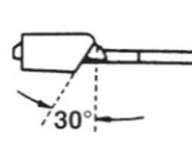
Make sure every cutter has the same length and edge angles as illustrated.



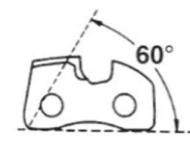
Cutter length



Side plate angle



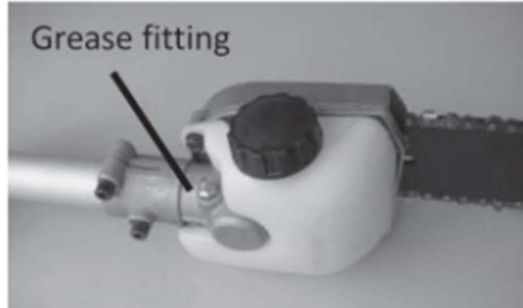
Filing angle



Top plate cutting angle

TRANSMISSION

The reduction gears are lubricated by multipurpose, lithium-based grease in the transmission. Supply new grease every 25 hours or use more or often depending on the job condition. When adding lubricant, use a grease gun to insert lubricant into the three grease nipples located on the transmission.



STORAGE

Aged fuel is one of the major causes of engines failing to start. Before storing the unit, empty the fuel tank and run the engine until it uses all the fuel left in the fuel line and the carburettor. Clean and maintain the machine before storing. Store the unit indoor, taking necessary measures for rust prevention.

TROUBLESHOOTING

STARTING FAILURE		
Check	Probable Causes	Action
Fuel Tank	Incorrect fuel	Drain it and use correct fuel
Fuel Filter	Fuel filter is clogged	Clean
Carburettor adjustment screw	Out of normal range	Adjust to normal range
Sparkling (no spark)	Spark plug is fouled/wet	Clean/Dry
	Plug gap is incorrect	Correct Gap (0.6-0.7mm)
Spark plug	Disconnected	Retighten

THE ENGINE WILL NOT REACH THE MAXIMUM OUTPUT		
Check	Probable Causes	Action
Spark Plug	Fouled plug, carbon residues on electrodes	Clean the plug, check the thermal value and replace it if necessary
Carburettor	Fouled carburettor or carburettor jets	Clean the carburettor, blow it off
Air Filter	Fouled air filter	Clean
Exhaust	Exhaust, exhaust pipe	Remove the exhaust pipe, clean and remove carbon residues
Cylinder/Piston/Piston Ring	The packing ring in the crankcase leaking, worn cylinders, pistons, piston rings	Replace the cylinder, piston, or piston rings
Fuel	Poor fuel mix (too much oil)	Fill according to instructions