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# GASOLINE CHAINSAW 37.2CC 14"

## POWEG2010

### 1 APPLIANCE

These models are intended for infrequent use by homeowners, cottagers, and campers, and for such general applications as clearing, pruning, cutting firewood, etc. They are not intended for prolonged use. If the intended use involves prolonged periods of operation, this may cause circulatory problems in the user's hands due to vibration.

It is not designed for commercial use.



**WARNING!** Read this manual and general safety instructions carefully before using the appliance, for your own safety. Your power tool should only be passed on together with these instructions.

### 2 DESCRIPTION (FIG A)

1. Saw chain	11. Guide bar cover
2. Guide bar	12. Bucking spike
3. Chain brake lever / hand guard	13. Bar retaining nuts
4. Front handle	14. Air cleaner cover
5. Starter handle	15. Choke lever
6. Stop switch	16. Saw chain adjustment screw
7. Safety trigger	17. Chain catcher
8. Rear handle / boot loop	18. Throttle/ trigger
9. Oil tank cap	19. Adjustment screw for oil supply
10. Fuel tank cap	20. Primer bulb

- LOW KICKBACK SAW CHAIN helps significantly reduce kickback or the intensity of kickback, due to specially designed depth gauges and guard links.
- 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.
- STOP SWITCH immediately stops the engine when tripped. Stop switch must be pushed to ON position to start or restart engine.
- SAFETY TRIGGER prevents accidental acceleration of the engine. Throttle trigger cannot be squeezed unless the safety latch is depressed.
- CHAIN BRAKE LEVER / HAND GUARD protects the operator's left hand in the event it slips off the front handle while saw is running.
- 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.



**WARNING!** Beware of kickback. Hold chain saw firmly with both hands when using. For your own safety, please read and follow the safety precautions in this manual before attempting to operate your chain saw. Improper use can cause serious injury.



**WARNING!** When using gas 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.

### 3 PACKAGE CONTENT LIST

- Remove all packing materials
- Remove remaining packaging and transit supports (if existing)
- Check the completeness of the packing content
- Check the appliance, the power cord, the power plug and all accessories for transportation damages.
- Keep the packaging materials as far as possible till the end of the warranty period. Dispose it into your local waste disposal system afterwards.



**WARNING** Packing materials are no toys! Children must not play with plastic bags! Danger of suffocation!

1 x Gasoline chainsaw 37.2CC - 14"	1 x bottle for 2-cycle lubricant (empty)
1 x Manual	1 x sparkplug key
1 x chain	1 x round file
1 x bar	1 x small screwdriver
1 x bar sheath	2 x hex key for fastening chain bar



When parts are missing or damaged, please contact your dealer.

### 4 SYMBOLS

In this manual and/or on the machine the following symbols are used:

	Wearing of protection against noise advised		Wearing eye protection is advised
	Always wear gloves		Wear a mask In dusty conditions
	Denotes risk of personal injury or damage to the tool.		In accordance with essential applicable safety standards of European directives
	Read manual before usage		Wearing of protective shoes advised

### 5 SAFETY

- DO NOT operate a chain saw with one hand! Serious injury to the operator, helpers, bystanders, or any combination of these persons may result from one-handed operation. A chain saw is intended for two-handed use.
- DO NOT operate a chain saw when you are fatigued, under the influence of drugs, alcohol or medication.
- Use safety footwear, snug-fitting clothing, protective gloves, and eye, hearing and head protection devices.
- Use caution when handling fuel. To avoid fire, move the chain saw at least 10 feet (3m) from the fueling point before starting the engine.
- DO NOT allow other persons to be near when starting or cutting with the chain saw. Keep bystanders and animals out of the work area.

- DO NOT start cutting until you have a clear work area, secure footing, and a planned retreat path from the falling tree.
- Keep all parts of your body away from the saw chain when the engine is running.
- Before you start the engine, make sure that the saw chain is not contacting anything.
- Carry the chain saw with the engine stopped the guide bar and saw chain to the rear, and the muffler away from your body.
- DO NOT operate a chain saw that is damaged, improperly adjusted, or not completely and securely assembled. Be sure that the saw chain stops moving when the throttle control trigger is released.
- Shut off the engine before setting the chain saw down.
- Use extreme caution when cutting small size brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance.
- 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 fibers is released.
- Keep the handles dry, clean, and free of oil or fuel mixture.
- Operate the chain saw only in well-ventilated areas.
- DO NOT operate a chain saw in a tree unless you have been specifically trained to do so.
- All chain saw service, other than the items listed in the user manual safety and maintenance instructions should be performed by competent chain saw service personnel.
- When transporting your chain saw, use the appropriate guide bar scabbard.
- DO NOT operate your chain saw near or around flammable liquids or gases whether in or out of doors. An explosion and/or fire may result.
- Do not fill fuel tank, oil tank or lubricate when the engine is running.
- **USE THE RIGHT TOOL:** Cut wood only. Do not use the chain saw for purposes for which it was not intended. For example, do not use the chain saw for cutting plastic, masonry, or non-building materials.
- The first time user should have practical instruction in the use of chainsaw and the protective equipment from an experienced operator.
- Do not attempt to hold the saw with one hand only. You cannot control reactive forces and you may lose control of the saw, which can result in the skating or bouncing of the bar and chain along the limb or log.
- Never run the chainsaw indoors. Your chainsaw produces poisonous exhaust as soon as the combustible engine is started, which may be colorless and odorless. To use this product can generate dust, mists and fumes containing chemicals known to cause reproductive harm. Be aware of harmful dust, mist (such as saw dust or oil mist from chain lubrication) and protect your self properly.
- Wear gloves and keep your hand warm. Prolonged use of chainsaws exposing the operator to vibrations may produce white finger disease. In order to reduce the risk of white finger disease, please wear gloves and keep your hand warm. If any of the white finger symptoms appear, seek medical advice immediately.
- Drive in the spiked bumper of the chainsaw directly behind the intended hinge and pivot the saw around this point. The spiked bumper rolls against the trunk.
- Only chain, guide bar and spark plug can be replaced by the user himself. Always make sure you replace with correct material as stated in the specifications of the manual.

## 6 KICKBACK SAFETY PRECAUTIONS



KICKBACK may occur when the NOSE or TIP of the guide 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 guide bar up and back toward the operator.

PINCHING the saw chain along the BOTTOM of the guide bar may PULL the saw forward away from the operator.

PINCHING the saw chain along the TOP of the guide bar may PUSH the guide bar rapidly back toward the operator.

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

- With a basic understanding of kickback, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
- 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 chain saw handles. A firm grip will help you reduce kickback and maintain control of the saw. Don't let go.
- Make sure 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.
- Do not overreach or cut above shoulder height.
- Follow manufacturer's sharpening and maintenance instructions for the saw chain.
- Only use replacement bars and chains specified by the manufacturer or the equivalent.



**NOTE: Low-kickback saw chain is a chain that has met the kickback performance.**



**WARNING: Kickback can lead to dangerous loss of control of the chain saw 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 chain saw operational dangers and the leading cause of most accidents.**

Beware of:

Rotational kickback (Fig 1)

A = kickback path

B = kickback reaction zone

The push (pinch kickback) and pull reactions (Fig 2)

A = pull

B = solid objects

C = push

## 7 ASSEMBLY



**Note: described actions below may vary slightly depending on model you purchased.**

### 7.1 Tools for assembly

You will need these tools to assemble your chain saw:

- Combination wrench-screwdriver (contained in your user's kit).
- Heavy duty work gloves (user supplied).

### 7.2 Assembly requirements



**Warning: do not start saw engine until unit is properly prepared.**

Your new chain saw will require adjustment of chain, filling the fuel tank with correct fuel mixture and filling the oil tank with chain lubricating oil before the unit is ready for operation. Read the entire user manual before attempting to operate your unit. Pay particular attention to all safety precautions.

Your user manual is both a reference guide and handbook provided to furnish you with general information to assemble, operate and maintain your saw.

### 7.3 **Guide bar / saw chain / clutch cover installation**



**Warning: always wear protective gloves when handling chain.**

#### 7.3.1 To install the guide bar

To ensure the bar and chain receive oil, only use the original style bar with the oil passage hole (A) as illustrated above. (fig. 3a)

- Make sure the chain brake lever is pulled back into the disengaged position (fig. 3b)
- Remove the bar retaining nut(s) (B). Remove the chain brake cover (C) by pulling straight out, some force may be required. (fig. 3c).
- Place the slotted end of the guide bar over the bar bolt (F). Slide guide bar behind clutch drum (G) until the guide bar stops (fig. 3d).

#### 7.3.2 To install saw chain:

Always wear heavy duty gloves when handling saw chain or making saw chain adjustments.

- Spread chain out in a loop with cutting edges (1) pointing clockwise (fig. 4a).
- Slip the chain around the sprocket (B) behind the clutch (C). Make sure the links fit between the sprocket teeth (fig. 4b).
- Guide the drive links into the groove (D) and around the end of the bar (fig. 4b).



**Note: the saw chain may droop slightly on the lower part of bar. This is normal.**

- Pull guide bar forward until chain is snug. Ensure all drive links are in the bar groove.
- Install the clutch cover making sure the tang is positioned in the lower hole in the guide bar. Make sure the chain does not slip off of the bar. Install the bar retaining nut hand tight and follow tension adjustment instructions in section saw chain tension adjustment.



**Note: the guide bar retaining nuts are installed only hand tight at this point because saw chain adjustment is required. Follow instructions in section saw chain tension adjustment.**

#### 7.3.3 Saw chain tension adjustment

Proper tension of saw chain is extremely important and must be checked before starting, as well as during any cutting operation.

Taking the time to make needed adjustments to the saw chain will result in improved cutting performance and prolonged chain life.



**Warning: always wear heavy duty gloves when handling saw chain or making saw chain adjustments.**

**7.3.4 To adjust saw chain:**

- Hold nose of guide bar up and turn adjustment screw (16) clockwise to increase chain tension. Turning screw counterclockwise will decrease amount of tension on chain. Ensure the chain fits snugly all the way around the guide bar. (fig 5)
- After making adjustment, and while still holding nose of bar in the uppermost position, tighten the bar retaining nuts securely. Chain has proper tension when it has a snug fit all around and can be pulled around by gloved hand.



**Note: if chain is difficult to rotate on guide bar or if it binds, too much tension has been applied. This requires minor adjustment as follows:**

- Loosen the bar retaining nuts so they are finger tight. Decrease tension by turning the bar adjustment screw counterclockwise slowly. Move chain back and forth on bar. Continue to adjust until chain rotates freely, but fits snugly. Increase tension by turning bar adjustment screw clockwise.
- When saw chain has proper tension, hold nose of bar in the uppermost position and tighten the 2 bar retaining nuts securely.



**Caution: a new saw chain stretches, requiring adjustment after as few as 5 cuts. This is normal with a new chain, and the interval between future adjustments will lengthen quickly.**



**Caution: if saw chain is too loose or too tight, the sprocket, bar, chain, and crankshaft bearings will wear more rapidly. Study fig.6 for information concerning correct cold tension (A), correct warm tension (B), and as a guide for when saw chain needs adjustment (C).**

**7.3.5 Chain brake mechanical test**

Your chain saw is equipped with a chain brake that reduces possibility of injury due to kickback. The brake is activated if pressure is applied against brake lever when, as in the event of kickback, 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.**

**7.3.6 To test chain brake:**

- The chain brake is disengaged (chain can move) when brake lever is pulled back and locked. Be sure the chain brake latch is in the off position. (fig. 7a)
- The chain brake is engaged (chain is stopped) when brake lever is in forward position and the chain brake latch is in the on position. You should not be able to move chain. (fig. 7b)



**Note: the brake lever should snap into both positions. If strong resistance is felt, or lever does not move into either position, do not use your saw. Take it immediately to a professional service center for repair.**



**Don't let your motor run in high speed when your chainbrake is activated.**

## 8 FUEL AND LUBRICATION

### 8.1 Fuel

Use regular grade unleaded gasoline mixed with 40:1 custom 2-cycle engine oil for best results. Use mixing ratios in section fuel mixing table below.



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



**Warning: 2-cycle lubricant must be a premium grade oil for 2-cycle air cooled engines mixed at a 40:1 ratio. Do not use any 2-cycle 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.**

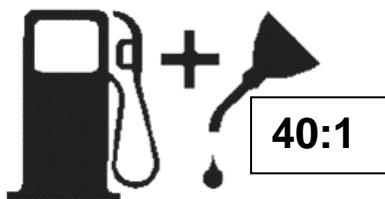
### 8.2 Mixing fuel

Add oil to an approved fuel container followed by the gasoline to allow incoming gasoline to mix with oil. Shake container to ensure thorough mix.



**Warning: Lack of lubrication voids engine warranty. Gasoline and oil must be mixed at 40:1**

#### 8.2.1 Fuel and lubrication symbols



#### 8.2.2 Mixing ratio: 40 parts gasoline to 1 part lubricant

Gasoline liters	1	2	3	4	5
2-cycle oil ml	25	50	75	100	125

#### 8.2.3 Recommended fuels

Some standard petrols are enriched with oxygen-containing compounds such as alcohol or ether to comply with regulations on clean air. The motor is designed to work well on any car petrol, including these enriched petrols, on the condition that the above mixing ratios are observed!

#### 8.2.4 Chain and bar lubrication

Always refill the chain oil tank each time the fuel tank is refilled. We recommend using our replacement chain & bar. Always use good quality chain oil, which contains additives to reduce friction and wear and to assist in the prevention of pitch formation on the bar and chain

## 9 OPERATION

### 9.1 Engine pre start checks (Fig 8)



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

- Fill the fuel tank (A) with correct fuel mixture.
- Fill the oil tank (B) with correct chain and bar oil...

#### **9.2 Starting a cold engine**

- Activate the chain brake (move the hand guard forward and engage it) (Fig 9a)
- To start the saw, push the switch (ON/OFF switch) to the ON (I) position. (Fig. 9b)
- Pull out the choke (A) to the point where it latches in place. (Fig. 9c)
- Press primer bulb 3 to 5 times.
- Place the saw on a firm and level surface. Hold the saw securely with your foot as illustrated. Tug sharply on the starter several times until first firing sound is heard. (Fig. 9d)
- Choke will be turned off automatically when you pull the throttle. (Fig. 9e)
- Forcefully pull the starter until the motor engages. (Fig 9f)
- Slightly press in the throttle (Fig 9g)
- Pull back the brake lever to release the chain brake (Fig 9h)

#### **9.3 Warm start**

- Activate the chain brake (Fig 9i)
- Set the switch (on/off) to ON(I) position (Fig 9j)
- Forcefully pull the starter until the motor engages (Fig 9k)
- Slightly press down on the throttle (Fig 9l)
- Release the chain brake (Fig 9m)

#### **9.4 When engine is saturated with fuel**

- Remove the air filter
- Remove the spark plug
- Position the machine in an angle of 45° with the sword upwards
- Pull the starters rope a few times
- Clean the spark plug and place back
- Place back the air filter and start without choke

#### **9.5 To stop engine (Fig 9n)**

- Release trigger and allow engine to return to idle speed.
- Push the I/O (on/off) switch to O (off) to stop engine.



**Note: for emergency stopping, simply activate chain brake and switch the I/O (on/off) switch to o (off).**

#### **9.6 Chain brake operational test**

Test the chain brake periodically to ensure proper function.

Perform a chain brake test prior to initial cutting, following extensive cutting, and definitely following any chain brake service.

Test chain brake as follows:

- Place saw on a clear, firm, flat surface.
- Start engine.
- Grasp the rear handle (A) with your right hand (fig. 10).
- With your left hand, hold the front handle (B) [not chain brake lever (C)] firmly (fig. 10).
- Squeeze the throttle trigger to 1/3 throttle, then immediately activate the chain brake lever (C) (fig. 10).



**Warning: activate the chain brake slowly and deliberately. Keep the chain from touching anything; don't let the saw tip forward.**

- Chain should stop abruptly. When it does, immediately release the throttle trigger.



**Warning: if chain does not stop, turn engine off and take your unit to the nearest authorized service center for service.**

- If chain brake functions properly, turn the engine off and return the chain brake to the disengaged position.

### **9.7 Saw chain / bar lubrication**

Adequate lubrication of the saw chain is essential at all times to minimize friction with the guide bar. Never starve the bar and chain of oil. Running the saw with too little oil will decrease cutting efficiency, shorten saw chain life, cause rapid dulling of chain, and cause excessive wear of bar from overheating. Too little oil is evidenced by smoke, bar discoloration or pitch build-up.



**Note: saw chain stretches during use, particularly when it is new, and it will occasionally be necessary to adjust and tighten it. New chain will require adjustment after about 5 minutes of operation.**

### **9.8 Automatic oiler**

Your chain saw is equipped with an automatic clutch driven oiler system. The oiler automatically delivers the proper amount of oil to the bar and chain. As the engine speed increases, so does the oil flow to the bar pad.



**Do not adjust the chain lubrication system unless the motor has been turned off.**

The chain lubrication system has been preset to medium oil flow at the factory. The flow can be adjusted if necessary.

- To adjust the oil flow, turn the adjusting screw at the bottom side of the housing (Fig 11) (19)
- Turning it clockwise reduces the oil flow, while turning it counterclockwise increases the oil.

### **9.9 General cutting instructions**

#### **9.9.1 Felling**

Felling is the term for cutting down a tree. Small trees up to 6-7 inches (15-18cm) in diameter are usually cut in a single cut. Larger trees require notch cuts. Notch cuts determine the direction the tree will fall.

**Felling a tree:**



**Warning: a retreat path (A) should be planned and cleared as necessary before cuts are started. The retreat path should extend back and diagonally to the rear of the expected line of fall, as illustrated in fig. 12a**



**Caution: if felling a tree on sloping ground, the chain saw operator should keep on the uphill side of the terrain, as the tree is likely to roll or slide downhill after it is felled.**



**Note: direction of fall (B) is controlled by the notching cut. Before any cuts are made, consider the location of larger branches and natural lean of the tree to determine the way the tree will fall.**



**Warning: do not cut down a tree during high- or changing winds or if there is a danger to property. Consult a tree professional. Do not cut down a tree if there is a danger of striking utility wires; notify the utility company before making any cuts.**

General guidelines for felling trees:

Normally felling consists of 2 main cutting operations, notching (C) and making the felling cut (D). Start making the upper notch cut (C) on the side of the tree facing the felling direction (E). Be sure you don't make the lower cut too deep into the trunk.

The notch (C) should be deep enough to create a hinge (F) of sufficient width and strength. The notch should be wide enough to direct the fall of the tree for as long as possible.



**WARNING: Never walk in front of a tree that has been notched. Make the felling cut (D) from the other side of the tree and 1.5 - 2.0 inches (3-5 cm) above the edge of the notch (C) (Fig. 12b)**

Never saw completely through the trunk. Always leave a hinge. The hinge guides the tree. If the trunk is completely cut through, control over the felling direction is lost.

Insert a wedge or felling lever in the cut well before the tree becomes unstable and starts to move. This will prevent the guide bar from binding in the felling cut if you have misjudged the falling direction. Make sure no bystanders have entered the range of the falling tree before you push it over.



**Warning: before making the final cut, always recheck the area for bystanders, animals or obstacles.**

Felling cut:

- Use wooden or plastic wedges (A) to prevent binding the bar or chain (B) in the cut. Wedges also control felling (fig. 12c)
- When diameter of wood being cut is greater than the bar length, make 2 cuts as shown (fig. 12d).



**WARNING: As the felling cut gets close to the hinge, the tree should begin to fall. When tree begins to fall, remove saw from cut, stop engine, put chain saw down, and leave area along retreat path (Fig. 12a).**

#### 9.9.2 Llimbing

Limbing a tree is the process of removing the branches from a fallen tree. Do not remove supporting limbs until after the log is bucked (cut) into lengths (Fig. 13).

Branches under tension should be cut from the bottom up to avoid binding the chain saw.



**WARNING: Never cut tree limbs while standing on tree trunk.**

#### 9.9.3 Bucking

Bucking is cutting a fallen log into lengths. Make sure you have a good footing and stand uphill of the log when cutting on sloping ground. If possible, the log should be supported so that the end to be cut off is not resting on the ground. If the log is supported at both ends and you must cut in the middle, make a downward cut halfway through the log and then make the undercut. This will prevent the log from pinching the bar and chain. Be careful that the chain does not cut into the ground when bucking as this causes rapid dulling of the chain. When bucking on a slope, always stand on the uphill side.

- Log supported along entire length: Cut from top (overbuck), being careful to avoid cutting into the ground (Fig. 14a).
- Log supported on 1 end: First, cut from bottom (underbuck) 1/3 diameter of log to avoid splintering. Second, cut from above (overbuck) to meet first cut and avoid pinching (Fig. 14b).
- Log supported on both ends: First, overbuck 1/3 diameter of log to avoid splintering. Second, underbuck to meet first cut and avoid pinching (Fig. 14c)



**NOTE: The best way to hold a log while bucking is to use a sawhorse. When this is not possible, the log should be raised and supported by the limb stumps or by using supporting logs. Be sure the log being cut is securely supported.**

#### 9.9.4 Bucking using a sawhorse

For personal safety and ease of cutting, the correct position for vertical bucking is essential (fig. 15).

Vertical cutting:

- Hold the saw firmly with both hands and keep the saw to the right of your body while cutting.
- Keep the left arm as straight as possible.
- Keep weight on both feet.



**Caution: while the saw is cutting, be sure the chain and bar are being properly lubricated.**

## 10 MAINTENANCE INSTRUCTIONS

All chain saw service, other than items listed here in your user manual maintenance instructions, should be performed by a professional.

### 10.1 *Preventive maintenance*

A good preventive maintenance program of regular inspection and care will increase life and improve performance of your chain saw. This maintenance checklist is a guide for such a program. Cleaning, adjustment, and parts replacement may be required, under certain conditions, at more frequent intervals than those indicated.

Maintenance checklist	Action	Each use	Hours of Operation
Item	Action	10	20
Screws/nuts/bolts	Inspect/tighten	V	
Air filter	Clean or replace		V
Fuel filter/oil filter	Replace	V	
Spark plug	Clean/adjust/replace		V
Fuel hoses	Inspect	V	
	Replace as required		
Chain brake components	Inspect	V	
	Replace as required		

### 10.2 *Winter maintenance*

Your chain saw requires winter maintenance. Please contact your local dealer for this.

It includes the following:

- Replacing spark plug
- Sharpening the chain
- Cleaning of air filter (Replacement if necessary)

- Cleaning of guide bar
- Oil pump check up
- Thorough cleanup
- Fine tuning and testing

#### 10.3 Air filter



**Caution: never operate saw without the air filter. Dust and dirt will be drawn into engine and damage it. Keep the air filter clean!**

To clean air filter:

- Remove knob (A) holding air filter cover in place; remove the top cover (B) by loosening the cover retaining screw. Cover will lift off. (fig. 16a)
- Lift the air filter out of air-box (fig. 16b).
- Clean air filter with compressed air. When heavily polluted, wash filter in clean, warm, soapy water. Rinse in clear, cool water. Air dry completely.



**Note: it is advisable to have a supply of spare filters.**

- Install air filter. Install engine / air filter cover. Make sure latch (E) latch (F) and cover fit properly. Tighten the cover retaining knob securely.



**Warning: never perform maintenance when the engine is hot, to avoid any chance of burning hands or fingers.**

#### 10.4 Fuel filter (Fig. 17)

- Remove the fuel tank cap.
- Bend a piece of soft wire to from a hook at the end.
- Reach into fuel tank opening and hook fuel line. Carefully pull the fuel line toward the opening until you can reach it with your fingers.



**Note: do not pull hose completely out of tank.**

- Lift filter (A) out of tank.
- Pull filter off with a twisting motion. Discard filter.
- Install new filter. Insert end of filter into tank opening. Make sure filter sits in bottom corner of tank. Use a long screwdriver to aid in filter placement if necessary.
- Fill tank with fresh fuel / oil mixture. See section fuel and lubrication. Install fuel cap.

#### 10.5 Spark plug



**Note: for efficient operation of saw engine, spark plug must be kept clean and properly gapped.**

- Push stop switch down.
- Remove knob (A) holding air filter cover in place; remove the top cover (B) by loosening the cover retaining screw. Cover will lift off. (fig. 18a)
- Disconnect the wire connector (C) from the spark plug (D) by pulling and twisting at the same time (fig. 18b).
- Remove spark plug with spark plug socket wrench.



**DO NOT USE ANY OTHER TOOL**

- Check electrode gaps with wire feeler gauge and set gaps to .025" (.635mm) if necessary.
- Reinstall a new spark plug.



**Note: a resistor spark plug must be used for replacement.**

**Note: this spark ignition system meets all requirements of the interference-causing equipment regulations.**

## 11 CLEANING AND MAINTENANCE

### 11.1 *Sprocket tip lubrication:*



**Caution: the sprocket tip on your new saw has been pre-lubricated at the factory. Failure to lubricate the guide bar sprocket tip as explained below will result in poor performance and seizure, voiding the manufacturer's warranty.**

Lubrication of the sprocket tip is recommended after 25 hours of use or once a week, whichever occurs first. Always thoroughly clean guide bar sprocket tip before lubrication.

Tools for lubrication:

The lube gun (optional) is recommended for applying grease to the guide bar sprocket tip. The lube gun is equipped with a needle nose tip which is necessary for the efficient application of grease to the sprocket tip.

To lubricate sprocket tip:



**Warning: wear heavy duty work gloves when handling the bar and chain.**

- Press the stop switch down.



**Note: it is not necessary to remove the saw chain to lubricate the guide bar sprocket tip. Lubrication can be done on the job.**

- Clean the guide bar sprocket tip.
- Using the lube gun (optional), insert needle nose into the lubrication hole and inject grease until it appears at outside edge of sprocket tip (fig. 19).
- Rotate saw chain by hand. Repeat lubrication procedure until the entire sprocket tip has been greased.

### 11.2 *Guide bar maintenance:*

Most guide bar problems can be prevented merely by keeping the chain saw well maintained. Insufficient guide bar lubrication and operating the saw with chain that is too tight will contribute to rapid bar wear. To help minimize bar wear, the following guide bar maintenance procedures are recommended.



**Warning: always wear protective gloves during maintenance operations. Do not carry out maintenance when the engine is hot.**

**11.3 Chain sharpening:**

For the inexperienced chain saw user, we recommend that the saw chain be professionally sharpened by the nearest professional service center. If you feel comfortable sharpening your own saw chain, special tools are available from the professional service center.

Chain sharpening requires special tools to ensure that cutters are sharpened at the correct angle and depth. For the inexperienced chain saw user, we recommend that the saw chain be professionally sharpened by the nearest professional service center. For non-experienced users of the chain saw, we recommend to have the chain sharpened by a specialist in any authorized service.



**Warning: when having wrong sharpened chain, there may occur a higher danger of kickback.**

- To sharpen the saw chain, use the suitable sharpening tools:
  - round chain file
  - file leading
  - chain measuring caliber.

These tools can be bought in any specialized stores.

- To gain well shaped sawdust particles, use sharp chain. If there appears wooden powder, you must sharpen the saw chain.



**Warning: all cutting teeth must be similarly long. Different length of the teeth can cause rough run of the chain or its rupture, as well.**

- Minimum length of the teeth must be 4mm. If they are shorter, remove the saw chain.
- Angles, which the teeth are under, must be followed.
- To sharpen the chain basically, make 2 to 3 pulls of the file from the inside out.



**Warning: after 3 to 4 of your sharpening of the cutting teeth, have the saw chain sharpened in any authorized service. They will sharpen the depth limiter as well, which provides the distance.**

**Chain sharpening**

The pitch of the chain (fig. 20) depends on the model.

POWEG2010

Pitch 9.525 mm (3/8")

Gauge 1.27 mm (0.05")

Sharpen the chain using protective gloves and a round file of Ø5/32" (4mm).

Always sharpen the cutters only with outward strokes (fig.21) observing the values given in fig. 20. After sharpening, the cutting links must all have the same width and length.



**Warning: a sharp chain produces well-defined chips. When your chain starts to produce sawdust, it is time to sharpen.**

After every 3-4 times the cutters have been sharpened you need to check the height of the depth gauges and, if necessary, lower them using the flat file and template supplied optional, then round off the front corner. (Fig. 22)



**WARNING: Proper adjustment of the depth gauge is as important as proper sharpening of the chain.**

**11.4 Guide bar**

The bar should be reversed every 8 working hours to ensure uniform wear. Keep the bar groove and lubrication hole clean using a bar groove cleaner (optional). (fig. 23) check the bar rails frequently for wear.



**Warning: never mount a new chain on a worn sprocket or self-aligning ring.**

Oil passages - oil passages on the bar should be cleaned to ensure proper lubrication of the bar and chain during operation.



**Note: the condition of the oil passages can be easily checked. If the passages are clear, the chain will automatically give off a spray of oil within seconds of starting the saw. Your saw is equipped with an automatic oiler system.**

**11.5 Chain maintenance**

Chain tension:

Check the chain tension frequently and adjust as often as necessary to keep the chain snug on the bar, but loose enough to be pulled around by hand.

Breaking in a new saw chain:

A new chain and bar will need chain readjustment after as few as 5 cuts. This is normal during the break-in period, and the interval between future adjustments will begin to lengthen quickly.



**Warning: never have more than 3 links removed from a loop of chain. This could cause damage to the sprocket.**

Chain lubrication:

Always make sure the automatic oiler system is working properly. Keep the oil tank filled with good quality chain, bar and chain oil.

Adequate lubrication of the bar and chain during cutting operations is essential to minimize friction with the guide bar.

Never starve the bar and chain of lubricating oil. Running the saw dry or with too little oil will decrease cutting efficiency, shorten saw chain life, cause rapid dulling of chain, and lead to excessive wear of bar from overheating. Too little oil is evidenced by smoke or bar discoloration.

**12 TECHNICAL DATA**

<b>Model:</b>	<b>POWEG2010</b>
Engine displacement	37.2 CC
Max .Shaft brake power	1.2 kW
Blade length	355 mm
Bar cutting length	14"
Chain pitch	9.525mm (3/8")
Chain gauge	1.27mm (0.05")
Idle speed (max)	3000 rpm
Recommended max. Speed, With cutting attachment	10500 rpm
Fuel capacity	310 ml
Anti vibration	Yes
Drive sprocket	6 teeth
Oil capacity	210 ml

Chain brake

Yes

**13 NOISE**

Noise values measured according to relevant standard. (K=3)

Acoustic pressure level LpA 97 dB(A)

Acoustic power level LwA 110 dB(A)

**ATTENTION! Wear hearing protection when sound pressure is over 85 dB(A)**

aw (Vibration)

5.0 m/s<sup>2</sup>K = 1.5 m/s<sup>2</sup>**14 STORING A CHAIN SAW**

Caution: never store a chain saw for longer than 30 days without performing the following procedures. Storing a chain saw 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.

- Remove the fuel tank cap slowly to release any pressure in tank. Carefully drain the fuel tank.
- Start the engine and let it run until the unit stops to remove fuel from carburetor.
- Allow the engine to cool (approx. 5 minutes).
- Using a spark plug wrench, remove the spark plug.
- Pour 1 teaspoon of clean 2-cycle oil into the combustion chamber. Pull starter rope slowly several times to coat internal components. Replace spark plug. (Fig.24)



**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.**

Removing a unit from storage

- Remove spark plug.
- Pull starter rope briskly to clear excess oil from combustion chamber.
- Clean and gap spark plug or install a new spark plug with proper gap.
- Prepare unit for operation.
- Fill fuel tank with proper fuel / oil mixture. See fuel and lubrication section

**15 TROUBLE SHOOTING**

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Unit won't start or starts but will not run.	Incorrect starting procedures. Incorrect carburetor mixture adjustment setting. Fouled spark plug. Empty fuel tank. Primer bulb was not pressed enough.	Follow instructions in the user manual. Have carburetor adjusted by an authorized service center. Clean/gap or replace plug. Fill fuel tank with properly mixed fuel.
Unit starts, but engine has low power.	Fuel filter is plugged. Incorrect lever position. Dirty spark arrestor screen. Dirty air filter. Incorrect carburetor mixture adjustment setting service dealer.	Replace the fuel filter. Move to run position. Replace spark arrestor screen. Remove, clean and reinstall filter. Have carburetor adjusted by an authorized service center.
Engine hesitates.	Incorrect carburetor mixture adjustment setting. Air filter is plugged.	Have carburetor adjusted by an authorized service center. Replace or clean the air filter.

	Old or improperly mixed fuel.	Drain gas tank/add fresh fuel mixture.
No power under load.	Incorrect carburetor mixture adjustment setting. Old or improperly mixed fuel. Air filter is plugged. Fouled spark plug.	Have carburetor adjusted by an authorized service center. Drain gas tank (see storage)/add fresh fuel mixture. Replace or clean the air filter. Replace or clean the spark plug.
Runs erratically.	Incorrectly gapped spark plug. Plugged spark arrestor. Dirty air filter.	Clean/gap or replace plug. Clean or replace spark arrestor. Clean or replace air filter.
Smokes excessively.	Incorrect carburetor mixture adjustment setting. Incorrect fuel mixture.	Have carburetor adjusted by an authorized service center. Use properly mixed fuel (40:1 mixture).

## 16 WARRANTY

- This warranty covers all material or production flaws excluding : batteries, chargers, defective parts subject to normal wear & tear such as bearings, brushes, cables, and plugs, or accessories such as drills, drill bits, saw blades, etc. ; damage or defects resulting from maltreatment, accidents or alterations; nor the cost of transportation.
- Damage and/or defects resulting from inappropriate use also do not fall under the warranty provisions.
- We also disclaim all liability for any bodily injury resulting from inappropriate use of the tool.
- Repairs may only be carried out by an authorised customer service centre for Powerplus tools.
- You can always obtain more information at the number 00 32 3 292 92 90.
- Any transportation costs shall always be borne by the customer, unless agreed otherwise in writing.
- At the same time, no claim can be made on the warranty if the damage of the device is the result of negligent maintenance or overload.
- Definitely excluded from the warranty is damage resulting from fluid permeation, excessive dust penetration, intentional damage (on purpose or by gross carelessness), inappropriate usage (use for purposes for which the device is not suitable), incompetent usage (e.g. not following the instructions given in the manual), inexpert assembly, lightning strike, erroneous net voltage. This list is not exhaustive.
- Acceptance of claims under warranty can never lead to the prolongation of the warranty period nor commencement of a new warranty period in case of a device replacement.
- Devices or parts which are replaced under the warranty therefore remain the property of Varo NV.
- We reserve the right to reject a claim whenever the purchase cannot be verified or when it is clear that the product has not been properly maintained. (Clean ventilation slots, carbon brushes serviced regularly, etc.).
- Your purchase receipt must be kept as proof of date of purchase.
- Your appliance must be returned undismantled to your dealer in an acceptably clean state, (in its original blow-moulded case if applicable to the unit), accompanied by proof of purchase.

## 17 ENVIRONMENT

Should your machine need replacement after extended use, do not put it in the domestic waste but dispose of it in an environmentally safe way.

## 18 DECLARATION OF CONFORMITY



**VARO – Vic. Van Rompu N.V.** - Joseph Van Instraat 9 - BE2500 Lier - BELGIUM, declares that,

product: Gasoline chainsaw 37.2CC 14"  
trade mark: PowerPlus  
model: POWEG2010

is in conformity with the essential requirements and other relevant provisions of the applicable European Directives, based on the application of European harmonized standards. Any unauthorized modification of the apparatus voids this declaration.

European Directives (including, if applicable, their amendments up to the date of signature);

2006/42/EC

2014/30/EU

2000/14/EC

Annex V

LwA

Measured

Guaranteed

106dB(A)

110dB(A)

European harmonized standards (including, if applicable, their amendments up to the date of signature);

EN ISO 11681-1: 2011

EN ISO 14982: 2009

Keeper of the Technical Documentation : Philippe Vankerkhove, VARO – Vic. Van Rompu N.V.

The undersigned acts on behalf of the company CEO,

Philippe Vankerkhove  
Certification manager  
14/12/2020, Lier - Belgium