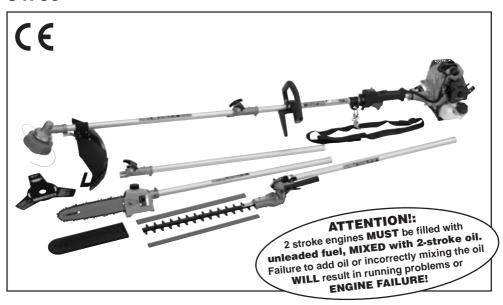




# PETROL 4-IN-1 GARDEN TOOL

84706



These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

# 1. TITLE PAGE

#### 1.1 INTRODUCTION:

**USER MANUAL FOR: Petrol 4-in-1 Garden Tool** 

Stock No: 84706 Part No: GTP33

1.2 REVISIONS:	
Date first published August 2018.	

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: http://drapertools.com/manuals

Draper Tools Limited Hursley Road Chandler's Ford Eastleigh Hampshire SO53 1YF

Website: drapertools.com

**Product Helpline:** +44 (0) 23 8049 4344 **General Fax:** +44 (0) 23 8026 0784

# 1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

**WARNING!** – Information that draws attention to the risk of injury or death. **CAUTION!** – Information that draws attention to the risk of damage to the product or surroundings.

## 1.4 COPYRIGHT © NOTICE:

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# WARRANTY

#### 3.1 WARRANTY

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or:

Product Helpline (023) 8049 4344.

A proof of purchase must be provided.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty period covering labour is 12 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. The warranty is extended to 24 months for parts only. This warranty does not apply to any consumable parts, any type of battery or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

Your Draper warranty is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the warranty period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

**Draper Tools Limited.** 

# 4. INTRODUCTION

#### 4.1 SCOPE

This 2 stroke 4-in-1 garden tool is designed exclusively for connection to a range of Draper Tools' accessories [detailed in this documentation] enabling the operator to perform a range of maintenance tasks in and around the garden.

#### **4.2 SPECIFICATION**

Stock no	84706
Part no	
Motor unit:	
Maximum engine performance	1.0kW
Engine type	2-stroke
Fuel tank capacity	900cm <sup>3</sup>
Engine displacement	
Fuel/2-stroke oil mix	
Maximum engine performance	1 000kW
Engine speed at idle	
Engine speed (rotational frequency) <sup>2</sup>	7 500min-1
Engine speed (rotational frequency) <sup>3</sup>	3 000min-1
Fuel consumption at maximum engine performance	503g/k\/\/h
Sound pressure level (A-weighted L <sub>pAay</sub> ) <sup>1</sup>	93.7dB(A)
Sound power level (A-weighted L.w. ov) <sup>1</sup>	110.5dB(A)
Sound power level (A-weighted LWAav)1	114dB(A)
Vibration level <sup>3</sup>	7 29m/s²
Weight (motor & grass trimmer attachment only - no fuel)	6ka
Tree pruning attachment:	ong
Chain speed	15m/sec
Cutting length	
Chain type	Oregon 91P I039X
Toothing	7T _ 0 375
Oil tank capacity	
Noise level	93.74B(Δ) [K=3.0 4B(Δ)]
Noise level	0 23m/c2 [K=1.5 m/c2]
Vibration – idling speed	6 95/m/s <sup>2</sup> [K=1,5 fil/s <sup>-</sup> ]
Brush cutter/grass trimmer attachment:	0.35411/3 [1(=1,511/3]
Cutting diameter (blade)	255mm
Cutting diameter (blade)	440mm
Cord diameter	
Overall cord length	
Cord extension	
Noise level	04 54B(V) [K=3 0 4B(V)]
Vibration – full throttle	
Vibration – idling speed	2 2m/s2 [K=1,5 m/s2]
Hedge trimmer attachment Max. branch size	00
Blade length	
Cutting length	
Noise level	
Vibration – full throttleVibration – idling speed	9.23[11/S² [K=1,5 M/S²]
• .	
1 In accordance to DC EN ICO 22000	

<sup>&</sup>lt;sup>1</sup> In accordance to BS EN ISO 22868.

<sup>&</sup>lt;sup>2</sup> A-weighted sound pressure level in accordance to 2000/14/EC.

<sup>&</sup>lt;sup>3</sup> In accordance to BS EN ISO 22867.

# 4. INTRODUCTION

#### 4.3 HANDLING & STORAGE

- Care must be taken when handling this product.
  - Dropping this power tool could have an effect on its accuracy and could also result in personal injury. This product is not a toy and must be respected.
- Environmental conditions can have a detrimental effect on this product if neglected.
  - Exposure to damp air can gradually corrode components.
  - If the product is unprotected from dust and debris, components will become clogged.
  - If not cleaned and maintained correctly or regularly, the machine will not perform at its best.
- Continuous A-Weighted Sound Pressure Level at the workstation in accordance to prEN ISO 15744:1999 and declared according to EN ISO 4871.
- \*\* A-Weighted Sound Power Level in accordance to prEN ISO 15744:1999 and declared according to EN ISO 4871.

# 5. HEALTH AND SAFETY INFORMATION

When using any type of power tool there are steps that should be taken to make sure that you, as the user, remain safe.

Common sense and a respect for the tool will help reduce the risk of injury.

## 5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

#### Warning!

- Read all safety warnings and all instructions. Failure to follow the warnings and instructions
  may result in electric shock, fire and/or serious injury.
- The term "power tool" in the warnings refers to your mains operated (corded) power tool or battery-operated (cordless) power tool.

**Most important:** You must know how to safely start and stop this machine, especially in an emergency.

**Keep the work area tidy and clean.** Attempting to clear clutter from around the machine during use will reduce your concentration. Mess on the floor creates a trip hazard. Any liquid spilled on the floor could result in you slipping.

**Find a suitable location.** If the machine is bench mounted, the location should provide good natural light or artificial lighting as a replacement. Avoid damp and dusty locations as it will have a negative effect on the machine's performance. If the machine is portable do not expose the tool to rain. In all cases do not operate power tools near any flammable materials.

**Keep bystanders away.** Children, onlookers and passers by must be restricted from entering the work area for their own protection. The barrier must extend a suitable distance from the tool user.

Unplug and house all power tools that are not in use. A power tool should never be left unattended while connected to the power supply. They must be housed in a suitable location, away locked up and from children.

**Do not overload or misuse the tool.** All tools are designed for a purpose and are limited to what they are capable of doing. Do not attempt to use a power tool (or adapt it in any way) for an application it is not designed for. Select a tool appropriate for the size of the job. Overloading a tool will result in tool failure and user injury. This covers the use of accessories.

**Dress properly.** Loose clothing, long hair and jewellery are all dangerous because they can become entangled in moving machinery. This can also result in parts of body being pulled into the machine. Clothing should be close fitted, with any long hair tired back and jewellery and neck ties removed. Footwear must be fully enclosed and have a non-slip sole.

Wear personal protective equipment (PPE). Dust, noise, vibration and swarf can all be dangerous if not suitably protected against. If the work involving the power tool creates dust or fumes wear a dust mask. Vibration to the hand, caused by operating some tools for longer periods must be protected against. Wear vibration reducing gloves and allow long breaks between uses. Protect against dust and swarf by wearing approved safety goggles or a face shield. These are some of the more common hazards and preventions, however, always find out what hazards are associated with the machine/work process and wear the most suitable protective equipment available.

**Do not breathe contaminated air.** If the work creates dust or fumes connect the machine (if possible) to an extraction system either locally or remotely. Working outdoors can also help if possible.

**Move the machine as instructed.** If the machine is hand held, do not carry it by the power supply cable. If the product is heavy, employ a second or third person to help move it safely or use a mechanical device. Always refer to the instructions for the correct method.

**Do not overreach.** Extending your body too far can result in a loss of balance and you falling. This could be from a height or onto a machine and will result in injury.

**Maintain your tools correctly.** A well maintained tool will do the job safely. Replace any damaged or missing parts immediately with original parts from the manufacturer. As applicable keep blades sharp, moving parts clean, oiled or greased, handles clean and emergency devices working.

# 5. HEALTH AND SAFETY INFORMATION

Wait for the machine to stop. Unless the machine is fitted with a safety brake, some parts may continue to move due to momentum. Wait for all parts to stop, then unplug it from the power supply before making any adjustments, carrying out maintenance operations or just finishing using the tool. Remove and check setting tools. Some machinery requires the use of additional tools or keys to set, load or adjust the power tool. Before starting the power tool always check to make certain they have been removed and are safely away from the machine.

**Prevent unintentional starting.** Before plugging any machine in to the power supply, make sure the switch is in the OFF position. If the machine is portable, do not hold the machine near the switch and take care when putting the machine down, that nothing can operate the switch.

Carefully select an extension lead. Some machines are not suitable for use with extension leads. If the tool is designed for use outdoors, use an extension lead also suitable for that environment. When using an extended lead, select one capable of handling the current (amps) drawn by the machine in use. Fully extend the lead regardless of the distance between the power supply and the tool. Excess current (amps) and a coiled extension lead will both cause the cable to heat up and can result in fire.

**Concentrate and stay alert.** Distractions are likely to cause an accident. Never operate a power tool if you are under the influence of drugs (prescription or otherwise), including alcohol or if you are feeling tired. Being disorientated will result in an accident.

**Have this tool repaired by a qualified person.** This tool is designed to conform to the relevant international and local standards and as such should be maintained and repaired by someone qualified, using only original parts supplied by the manufacturer. This will ensure the tool remains safe to use.

# 5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR 4-IN-1 PETROL GARDEN TOOL USE

**WARNING!** For your safety, please read and understand these instructions before assembling, operating or maintaining this machine.

WARNING! Read the instructions carefully.

Never attempt to modify or operate a modified machine. Fully assemble this machine, including all relevant guards, before operating.

Do not operate this machine without being completely familiar with the safety features and how to operate them.

Never operate this machine if the stop switch is faulty or not functioning.

Never operate this machine while tired, ill or under the influence of drugs.

**DANGER!** Keep out of the reach of children.

Refer to the instructions supplied with the attachment. Fully read and understand before attempting to assemble, operate or maintain the attachment.

Never allow people unfamiliar with these instructions to operate this machine. Local regulations may restrict the age of the operator.

Prior to each use, inspect the machine for signs of damage. Make sure the safety features are present and functioning and that all visible nuts, bolts and screws remain tight. Vibration from normal use can cause them to loosen over time.

Never operate this machine with defective or missing guards.



**WARNING!** Use of this product can pose a danger to wildlife. Before attempting to use this machine, check the area, particularly long grass and under bushes for signs of life: if necessary relocate.

**NOTE:** Not all animals will be deterred by the noise of the product alone.

Do not operate this machine near animals or bystanders.

Check the attachment is correctly fitted to the machine before attempting to start the engine.

# 5. HEALTH AND SAFETY INFORMATION

CAUTION! As the user you are responsible for any injury to people or damage to property.

Never leave this machine running when not in use or leave the it unattended during use.

WARNING! During use the engine gets very hot. Do not touch it, especially the exhaust.

Always be aware of your surroundings, staying alert for possible hazards that you may not hear over the noise of the engine.

Always wear appropriate PPE [Personal Protective Equipment].

- Always wear suitable eye/face protection.
- Ear defenders must be worn to prevent damage to your hearing.
- Gloves to help reduce vibration fatigue.
- Always wear safety footwear.

# 5.3 HEALTH AND SAFETY INFORMATION CONCERNING THE USE OF FUELS

#### Fuels are inflammable and explosive. Reduce the risk of explosion and fire by:

- Turning off and cooling the motor down before filling the tank with fuel.
- Refraining from smoking and starting open fires when handling fuels.
- Storing and mixing fuels in approved and correspondingly labelled canisters.
- Storing fuels in closed containers. Keeping in mind that fuels may evaporate at room temperature and collect on the floor of closed rooms (risk of explosion).
- Start the device at least nine metres away from the machine.

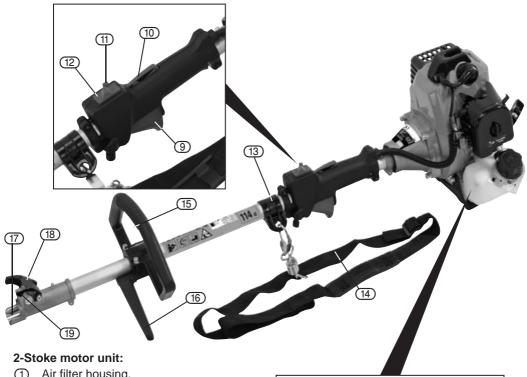
Fuels are toxic, they contain substances that have an immediate toxic effect and may cause permanent damage to your health. Take all precautionary measures to prevent your body from absorbing any of these substances:

- Tank and siphon fuels only outdoors or in well-ventilated rooms.
- Do not inhale fuel fumes.
- Avoid contact with eyes and skin.
- Wear gloves when transferring fuel.
- When fuel has come into contact with your clothes, change them immediately. Clean your clothes before putting them back on.
- Store fuels out of the reach of children.

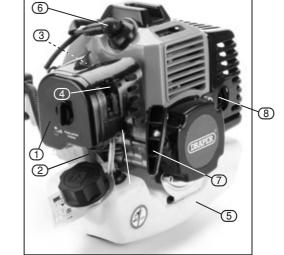
#### When handled inappropriately, fuels may cause damage to the environment:

- Transfer fuel carefully. Fuel must never trickle into the ground or the sewage system.
- Dispose of any remaining fuel in an appropriate manner. Never dispose of fuel with regular household waste.
- Fuels may be stored only for a limited time. Purchase only such quantities that can be used up within a few months.

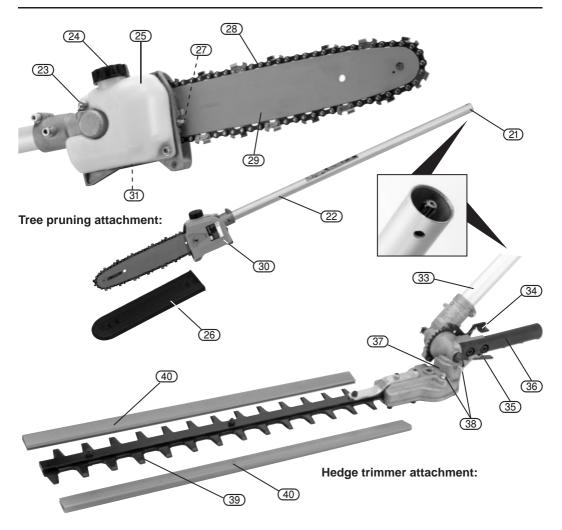
#### **6.1 IDENTIFICATION**



- (1) Air filter housing.
- 2 Fuel primer.
- (3) Carburettor.
- (4) Choke lever.
- 5 Fuel tank.
- 6 Spark plug cover (H.T lead).
- (7) Pull start assembly.
- (8) Exhaust.
- (9) Throttle lever.
- (10) Throttle release lever.
- (11) Throttle lock (start position).
- (12) Engine stop switch.
- (13) Harness attachment point.
- (14) Harness strap.
- (15) Front (auxiliary) handle.
- (16) Reaction bar.
- (17) Power take off.
- (18) Power take off locking handle.
- (19) Power take off release button.

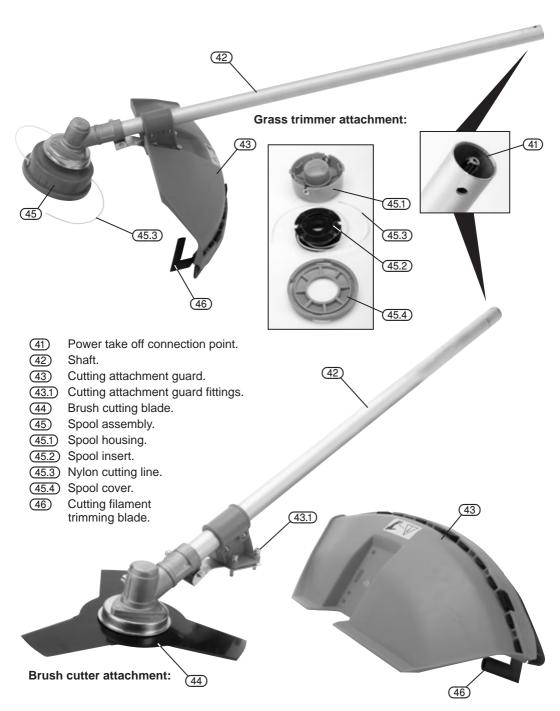


# 6. TECHNICAL DESCRIPTION



- 21) Power take off connection point.
- 22) Shaft.
- 23) Grease nipple.
- Oil reservoir cap.
- 25 Oil reservoir.
- 26) Bar guard.
- (27) Chain tension adjustment screw.
- (28) Chain.
- 29) Guide bar.
- (30) Drive sprocket cover.

- 31) Oil flow adjustment screw.
- 33 Shaft.
- 34) Angle adjustment locking lever.
- 35) Angle adjustment lever.
- (36) Adjustment handle.
- 37 Gearbox.
- 38 Grease nipple.
- 39 Blade.
- 40 Blade guards.



## 7. UNPACKING & CHECKING

#### 7.1 PACKAGING

Carefully remove the products from the packaging and examine them for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the product.

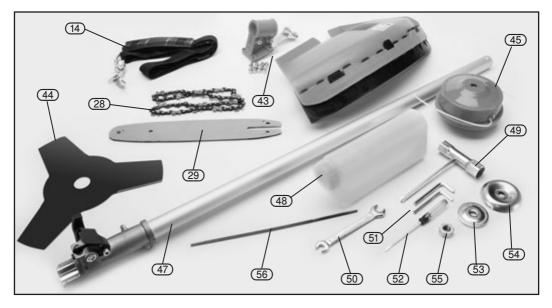
The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

**Warning!** Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

#### 7.2 WHAT'S IN THE BOX?

As well as the 4-in-1 garden tool, there are several parts not fitted or attached to it.



- (14) Harness strap.
- 28 Saw chain.
- (29) Guide bar.
- (43) Cutting attachment guard and fittings.
- 44 Brush cutting blade.
- 45 Cutting filament line spool.
- 47 Extension pole.
- 48) 2-stroke mixing bottle.

- 49 Spark plug spanner.
- 50 Combination spanner.
- 51 2 x hex keys.
- 52 Screwdriver.
- 53 Outer flange.
- 54) Flange cover.
- 55 Blade retaining nut.
- 56) Saw chain sharpening file.

## 8. PREPARING THE 2-STROKE MOTOR UNIT

#### 8.1 FUELLING - FIG.1

This Draper petrol product is powered by a engine which **MUST** be filled with **unleaded fuel MIXED with 2-stroke oil.** Failure to add oil or incorrectly mixing the oil and fuel can result in running problems or engine failure. Any machine returned under warranty which is found to have failed due to a lack of lubrication will be considered a chargeable repair.

Only use fresh, clean, and good quality **unleaded fuel** mixed with synthetic 2-stroke oil in a ratio of 25:1.

**Before** attempting to fuel this machine, make sure you have completely read and understood the safety instructions.

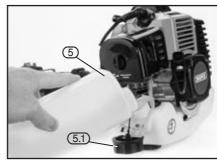


FIG. 1

#### Danger! Fuel is highly flammable.

- Open the fuel cap (5.1) by turning it anticlockwise. Hang it to one side so that it does not block the opening.
- Combine fuel and 2-stroke oil to create a 25:1 mixture.

# Example: Add 40ml of synthetic 2-stroke oil in to 1,000ml (1 litre) unleaded fuel and shake well to produce a 25:1 mix.

Fuel quality degrades rapidly: Avoid storing fuel by mixing only what you require. Using fuel that has degraded will cause starting/running problems.

- Carefully pour the mixture into the fuel tank (5) filling it while taking care not to spill or waste any. Have a rag to hand to clean away any residue or spilt fuel.
- Replace the fuel cap (5.1) making sure it is seated properly before tightening clockwise. If the threads become crossed it will damage the tank. It may also result in fuel leaking out during use and potentially causing a fire risk.

#### 8.2 HARNESS ATTACHMENT - FIGS.2 - 3

The harness (14) is supplied to help reduce user fatigue.

- Pass your head and right arm through the harness 14 and position the attachment point by your right hip.
- Make sure the D ring (14.1) is clipped on to the attachment point (14.2).
- Pass the harness bracket through the D ring (14.1) and push the flat pin (14.4) in place to lock.



FIG. 2



FIG. 3

# 9. PREPARING THE ATTACHMENTS

# 9.1 FITTING AND REMOVING THE CHAIN AND GUIDE BAR - FIGS.4 - 6

**Caution!** Take care when handling the chain as it is sharp.

- With the engine stopped, remove the 10mm nut (30.1) anticlockwise, followed by the drive sprocket cover (30).
- Adjust the chain tension adjustment screw (27)
  until the tensioning pin (27.1) is approximately in the
  midway position.
- Hold the guide bar (29) up and beginning at the nose [tip] lay the saw chain (28) in to the groove.
   Make sure the nose sprocket teeth sit correctly between the chain links (Fig.6).
- Fit the guide bar (29) with the saw chain (28) on to the locating stud (29.1). The chain links on the top of the guide bar must have the arrow pointing away from the housing. If there is no arrow marking visible on the chain, mount it as shown in (Fig.7).
- Replace the drive sprocket cover (30) and the 10mm nut (30.1) and tighten securely.

When the chain begins to wear, the cutting performance will reduce. Have the chain sharpened or replace it with an identical one.

#### To remove the chain and guide bar:

- With the engine stopped, loosen the 10mm nut (30.1) anticlockwise.
- Turn the chain tension adjustment screw (27) anticlockwise to loosen the strain on the bar.
- Remove the 10mm nut (30.1) anticlockwise, followed by the drive sprocket cover (30).
- Lift the guide bar (29) with the saw chain (28) off the locating stud (29.1) and tension pin (29.2) and away from the drive sprocket (30.1).

## 9.2 TENSIONING THE CHAIN - FIGS.7 - 9

When fitting a new chain, check and adjust it regularly until the initial stretch has been taken out [this is normal].

- With the engine stopped and the 10mm nut (30.1)
   (Fig.4) finger tight, hold the tip of the bar up.
- Turn the chain tension adjustment screw (27) (Fig.5) clockwise until the chain pulls tight on the bottom of the bar.

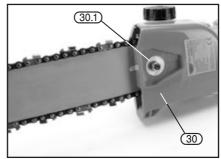


FIG. 4



FIG. 5

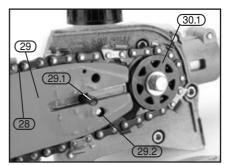


FIG. 6

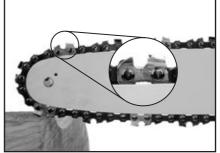


FIG. 7

## 9. PREPARING THE ATTACHMENTS

 When correctly adjusted it should be possible manually run the chain around the bar and pull one complete chain link clear of the groove.



FIG. 8

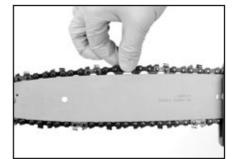


FIG. 9



FIG. 10



FIG. 11

#### 9.3 CHAIN OIL - FIG.10

- A continuous flow of oil on to the guide bar and chain must be provided at all times. This oil lubricates the chain around the bar preventing it from over heating and seizing up.
- Turn the oil reservoir cap (24) anticlockwise to removeit.
- Fill the reservoir (25) with chain oil. Do not use any other type of new or used oil. Chain oil is specifically designed for the job and is not harmful to the environment.
- Replace the oil reservoir cap (24) tightly, turning it clockwise.

# 9.4 FITTING THE BRUSH CUTTER/GRASS TRIMMER GUARD - FIG.11

All guards must be fitted and fully operational before using this machine.

- Snap the guard (43) over the output shaft collar (43.1).
- Drop the spring washer followed by the flat washer over the end of the 5mm hex. socket bolt.
- One side of the guard has a hexagon shaped recess in which the 10mm nut sits.
- Pass the bolt through the guard from the other side [guiding it under the curved end of bracket and turn it clockwise to engage it with the nut.
- When the attachment is fitted the guard should be position directly between the spool and your legs.
   Using a 5mm hex. key tighten the guard so that it does not move freely.

# 9. PREPARING THE ATTACHMENTS

# 9.5 FITTING THE COMPLETE SPOOL ASSEMBLY - FIG.12

- With the engine stopped, locate the spindle locking point (42.1).
- Using the hex. key supplied (51), lock the spindle to stop it from turning. It may be necessary to turn the spool assembly before the hex. key fully engages all the way.
- Screw the spool assembly (45) clockwise on to the spindle making sure the threads are not crossed.
- Tighten the spool before removing the hex. key from the spindle lock.

# 9.6 FITTING THE BRUSH CUTTING BLADE: - FIG.13 - 14

- With the engine stopped, locate the spindle locking point (42.1) (Fig 12).
- Using the hex. key supplied 51, lock the spindle to stop it from turning. It may be necessary to turn the spool assembly before the hex key fully engages all the way (Fig 12).

#### Before fitting, match the direction of rotation arrow on the blade with the one on the guard.

- Sit the blade (44) on the spindle making sure the inner flange (45.5) is the right way round.
- Replace the outer flange (53) and flange cover (54)
   .
- Start the blade nut 55 anticlockwise before tightening it
- Remove the hex. key from the spindle lock.

# 9.7 CONNECTING THE ATTACHMENTS - FIG.15

- Before attempting to start the engine, this attachment must be correctly assembled to the engine output shaft's, power take off.
- Make sure the locking handle (18) is loose by turning it anticlockwise a few turns.
- Pull back on the positioning pin (19) and move it to one side, clear of the hole.
- Slide the attachment shaft inside the power take off collar (17.1) of the engine unit.
- Line up the holes in both shafts before locating pin (19).
- Tighten the locking handle (18) clockwise to secure the two sections together.

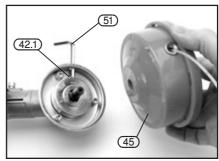


FIG. 12

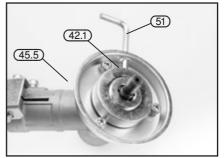


FIG. 13

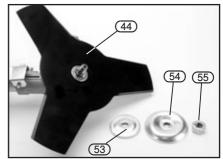


FIG. 14

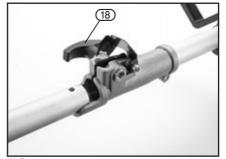


FIG. 15

## 10. STARTING THE 2-STROKE MOTOR UNIT

Do not attempt to start this machine until you have read and understood all the safety instructions.

# 10.1 STARTING THE ENGINE - FIGS.16 - 18

Warning! In an emergency, slide the engine stop switch (10) forward to kill the engine.

- Slide the engine stop switch 10 backward.
- Grip the front handle and squeeze and hold the throttle lock button (12) whilst at the same time depressing the throttle safety lever (11) and throttle (9). When slowly released, the throttle (9) should be held in its start position by throttle lock button (12).

**Cold starts** – close the choke to restrict the amount of air entering the engine. Slide the choke lever 4 to the **OFF** position.

**Warm starts** – open the choke to increase the amount of air entering the engine. Slide the choke lever (4) to the **ON** position.

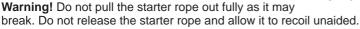
 Prime the engine with fuel. Press the fuel primer (2)
 3 or 4 times. The primer and fuel line from the tank should have fuel present.

Attention! Over priming will cause the engine to flood with too much fuel. This will engulf the spark plug and stop the engine from starting. There will be a stronger smell of fuel when this occurs.

 Grip the neck of the motor unit with your left hand holding the machine firmly on the ground. Crouch over the machine while maintaining firm footing.

Attention! Do not stand or apply any pressure on to the output shaft.

- With your right hand hold the pull start handle ⑦.
- Make 2 or 3 short, sharp pulls of the starter or until the engine starts. If the engine does not start by the fifth crank, move the choke setting.



- When the engine starts, pull throttle lever (9) to release the 'start' position.
- When the engine has been running for a few minutes open the choke fully.

**Attention!** The majority of engines have an initial period in which the internal components bed themselves in. This engine is no different. During this the first 5 or 6 tank fulls [bedding in period], running the engine in the very high rev. range must be avoided as the stresses involved can cause damage to the engine.

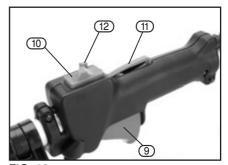


FIG. 16



FIG. 17

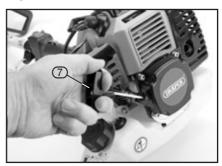


FIG. 18

# 11. OPERATING THE TREE PRUNING ATTACHMENT

#### 11.1 ADJUSTING THE OIL FLOW - FIG.19

Check the flow of chain oil. See how much is thrown from the tip of the bar at full throttle on to a piece of clean white paper. A light spray of oil should be cast on to the paper. If it appears excessive or too light, adjust as necessary.

- With the engine stopped, adjust the oil flow adjustment screw 31 clockwise to increase the flow or anticlockwise to decrease it.
- Start the engine and test the flow again. When sufficient is being thrown from the tip, the adjustment is complete.

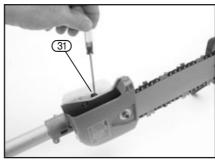


FIG. 19

 A reservoir full of chain oil will run dry long before the engine runs out of fuel. Continually check the oil level during use, refilling the reservoir before it is empty.

#### 11.2 WORKING TECHNIQUES - FIGS.20 - 21

**Beware of hidden objects.** Check there are no cables or other objects hidden within the tree branches that will damage this machine or cause injury if cut by the pruner.

- This machine must not be used in any circumstances that cause it to be within 15M of overhead power lines.
- Before beginning any overhead work, the ground must be cleared first. Remove any debris that
  is likely to trip or obstruct a quick exit to safety. You must plan an 'escape route' should anything
  fall suddenly.
- Inspect the condition of the tree. Check that there are no loose branches that are likely to fall
  unexpectedly as a result of what you intend cutting. Check for signs of decay within the tree that
  may cause part or all of the tree to fall on you.

#### Do not attempt to cut wind fallen trees or timber.

- Work systematically starting from the lowest branches first. This prevents falling branches from becoming hung.
- Do not work in windy conditions as this increases the risk of personal injury.
- Remove the transport guard before starting the engine.

Warning: Before cutting, make sure the chain is correctly fitted and tensioned.

#### **DELIMBING**

The best practice is to cut branches in to manageable sections.

Due to the weight of the branch on it's self, simply cutting through from top to bottom will result in it splitting along the branch damaging the tree. An initial relief cut on the underside, followed by a final cut from above will stop this from happening.

- Position the cutting head near the tree limb making sure it is not touch any other branches.
- With the saw chain running at full speed, begin cutting the underside of the branch using the chain on the top of the guide bar. Cut approximately one third of the way through. Beware of hidden branches as contact with the tip can cause the saw to kickback.

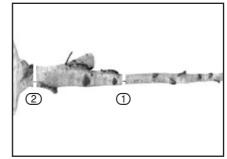


FIG. 20

# 11. OPERATING THE TREE PRUNING ATTACHMENT

- Finish cutting down through the remaining two thirds. Let the chain do the cutting:
   Do not force it!
- Safely and quickly get out of the way from the fallingdebris.
- Small branches can be removed in one cut.
- Do not cut too close to the trunk as it creates a larger diameter 'wound' and takes longer to 'heal'. It can also speed up the spread of decay. A 'wound' will 'heal' fine without the need for any treatment.
- The guide bar and chain are consumable items.

#### 11.3 HAZARDS - FIGS.22 - 24

There are several dangers specific to cutting timber with a saw chain.

**Kickback** is the term used to describe the reaction when the tip of the guide bar is thrown upwards in an arc. On a chainsaw this is very dangerous as it is generally thrown up toward the users face; however, on this type of machine it can still be hazardous and result in a loss of control or injury.

The chain is driven out, away from the head, along the top of the guide bar. If the chain stops suddenly [pinched by the limb being cut] within the kickback zone it will drive the guide bar back and upward in the opposite direction.

**Pull-In** is the result of the chain becoming pinched along the underside of the guide bar, the reaction doing as the name suggests, whipping the machine away from you. To avoid this, make sure the chain is running at full speed before starting the cut.

Generally, the best way to avoid these hazards are:

- Maintain a sharp and correctly tensioned chain.
- Cut one branch at a time.
- Avoid all other branches while performing the cut.
- Butt the housing up to the branch.
- Begin the cut only with the chain at full speed.
- Concentrate at all times and firmly grip the machine with both hands.

If the machine remains trapped in a partial cut stop the engine. Support the weight of the machine while trying to lift [or pull down, depending on the side of the chain trapped] the branch to release the chain.

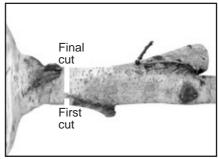


FIG. 21

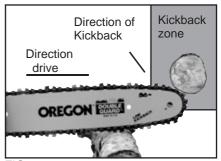


FIG. 22

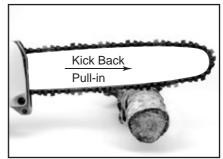


FIG. 23

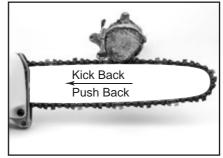


FIG. 24

# 12. USING THE EXTENSION POLE

## 12.1 USING THE 700mm EXTENSION **POLE - FIGS.25 - 26**

**Danger!** This power tool is not insulated against electric shock. To reduce the risk of electrocution, never operate this power tool in the vicinity of any wires or cables (power, etc.) which may be carrying electric current.

Electricity can jump from one point to another by means of arcing. Higher voltage increases the distance electricity can arc. Electrical current can also be carried through branches, especially if they are wet. Maintain a distance of at least 50 feet (15M) between the chain saw (including any branches it is contacting) and any electrical line carrying live current.

This extension pole is only designed to be used with the pruner chainsaw and hedge trimmer attachments to allow a higher working height. Must not be used with a grass/brush cutter attachment.

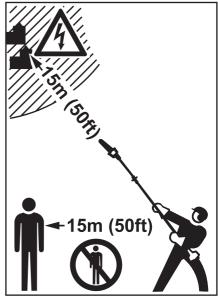


FIG. 25



FIG. 26

# 13. OPERATING THE HEDGE TRIMMING ATTACHMENT

# 13.1 ADJUSTING THE BLADE ANGLE - FIG.26

Depending upon the circumstances, the cutting head can be adjusted to suit access to the hedge.

- With the engine stopped, grip the adjustment handle (36).
- Lift the angle adjustment locking lever (34) and hold.
- With your thumb, press down the angle adjustment lever (35) and adjust the cutting head to a suitable angle.
- Release lever (34) and make sure the cutting head has locked into position fully.

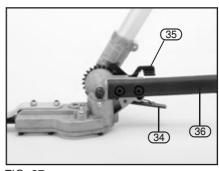


FIG. 27

#### 13.2 WORKING TECHNIQUES - FIGS.28 - 32

Some local authorities impose seasonal bans on hedge cutting. Check with your local authority to make sure this does not affect you.

Beware of hidden objects. Check there are no wire fences, power cables or other objects hidden within the hedge that will damage this machine or cause injury if cut by the blades

Remove the blade guard before starting the engine.

The metal blade is intended for cutting branches up to 24mm and can be used to clear scrub or off shoots around the base of shrubs, brushes and hedges.

The metal blade is a consumable item, avoiding contact with larger branches, roots, stones, walls, fences and other hard surfaces will help prolong the life of it.

Before using the hedge trimmer, remove any large branches with a pair of loppers.

#### **GROUND CLEARANCE**

Before all the hedge trimmings fall and obscure the base of the hedge, clear out any unwanted new shoots or woody weeds.

- Adjust the cutting head.
- Manoeuvre the cutting head in and around the root, avoiding large diameter limbs, roots and stones.

warning! Use of this product can pose a danger to wildlife. Before attempting to use this machine, check the area, particularly long grass and under bushes for signs of life: if necessary relocate. NOTE: Not all animals will be deterred by the noise of the product alone.



FIG. 28

# 13. OPERATING THE HEDGE TRIMMING ATTACHMENT

#### **VERTICAL CUTTING [ALONG SIDE] - FIG.29**

The best practice is to cut the front and side of a hedge first before finishing with the top

- Set the cutting head straight.
- Make large sweeping arcs with the cutting head, using both sides of the blade to trim material from the hedge.

Stand back at regular intervals. What 'looks' to be a straight and level cut from close up will look quite different from a distance.

#### **VERTICAL CUTTING [AT A DISTANCE] - FIG.30**

If an obstacle prevents you from standing directly next to the hedge [for example a flower bed] follow the steps as per vertical cutting but with the cutting head at a more suitable angle.

#### **HEDGE TOPPING [ABOVE HEAD HEIGHT] - FIG.31**

Although it is possible to cut the top of a tall hedge in this method, using a safe platform to raise yourself level with the hedge top is preferred and will result in a more attractive finish.

- Set the cutting head at 90 degrees.
- Twist the shaft to make the cutting head swing in an arc across the top of the hedge.
- Working in this position is particularly difficult. Take regular breaks to avoid strain or injury.

#### **HORIZONTAL CUTTING - FIG.32**

The final stage is to shape the top of the hedge.

- Set the cutting head straight.
- Make level arcs, so as to encourage the trimmings on to the floor.

Do not attempt to cut a hedge higher than chest height without using a safe platform.

**Warning!** If working on a platform, do not attempt to stretch or over reach.

When cutting with the blade set straight, tilt the cutting side of the blades toward the hedge by approximately 0-10 degrees.

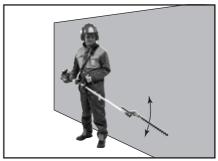


FIG. 29

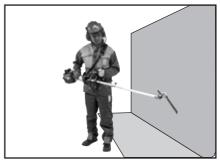


FIG. 30

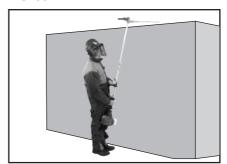


FIG. 31

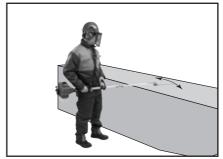


FIG. 32

# 14. OPERATING THE BRUSH CUTTER/GRASS TRIMMER

# 14.1 USING THE GRASS TRIMMER - FIG. 33



Warning! Use of this product can pose a danger to wildlife. Before attempting to use this machine, check the area.

particularly long grass and under bushes for signs of life: if necessary, relocate.

**Note:** Not all animals will be deterred by the noise of the product alone. The nylon line is intended for clearing grass, weeds and similar soft vegetation. The nylon line is a consumable item, avoiding contact with trees, stones, walls, fences and other hard surfaces will help prolong the life of it.

 Begin cutting at full throttle, hovering the spool assembly just off the ground while making arc shaped sweeping actions through the vegetation.
 The nylon line must be keep level with the ground to avoid scalping the ground surface.

When the nylon line is running at speed take care to avoid plastic items such as garden furniture, flower pots and other equally fragile materials to avoid damage.

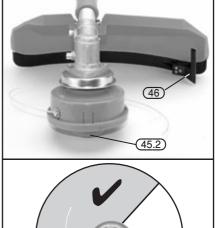
While cutting vegetation it is possible to tell when the line length is deteriorating; the cutting distance from the spool head will decrease. Before the line disappears inside the spool housing strike the cutting head (45.2) [while it is running at speed] on to a piece of suitable ground. This will release a set amount of line from the head which will be drawn out by the rotating [centrifugal] force. Any excess line is automatically trimmed as it strikes the trimming blade on the underneath of the guard (46).

If the line is left or a breakage causes it to disappear inside the spool housing the sound made by the spool head spinning changes.

## 14.2 USING THE BRUSH CUTTER - FIG.34



**Warning!** Use of this product can pose a danger to wildlife. Before attempting to use this machine, check the area.



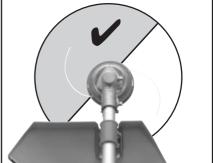


FIG. 33

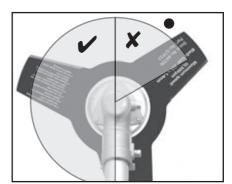


FIG. 34

particularly long grass and under bushes for signs of life: if necessary, relocate.

**Note:** Not all animals will be deterred by the noise of the product alone.

The metal blade is intended for clearing weeds, dense brush and small trees (see scope for more detail). The metal blade is a consumable item; avoiding contact with larger trees, roots, stones, walls, fences and other hard surfaces will help prolong its life.

- Begin cutting at full throttle, hovering the blade assembly just off the ground whilst making arc shaped sweeping actions through the vegetation.
- The blade must be kept level with the ground to avoid scalping the surface.

The most effective area of the cutting head is shown in Fig. 34.

## 15. MAINTENANCE – 2-STROKE MOTOR UNIT

Regular maintenance tasks must be carried out at specific intervals to retain the engine's performance.

#### 15.1 CLEANING THE AIR FILTER - FIG.35

A dirty, clogged air filter will restrict the air flow in to the engine and will cause rough running. It will increase fuel consumption and may result in starting problems.

**Attention** Stop the engine before removing the air filter assembly.

- Set the choke lever (4) to the closed position to prevent any debris entering the carburettor inlet.
- Turn screw (1.1) anticlockwise to remove it.
- Lift cover 1 away at the bottom, then lift it free from the tab at the top.
- Remove and wash the foam air filter element (1.2) in warm soapy water to clean it. Do not use solvents to clean it.
- Allow the filter to dry 100% before refitting it on to the engine.
- Refit cover ①.
- Insert screw (1.1) and turn clockwise to tighten. Replace the filter if it appears worn or damaged.

#### 15.2 SPARK PLUG MAINTENANCE - FIGS.36 - 37

Over time the spark plug can become contaminated.

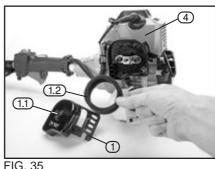
This can be due to adverse running conditions such as, working with part throttle for a prolonged period or a fuel mix containing too much oil. This

contamination can build up causing the engine to run roughly, reduce the fuel consumption or create starting problems.

- Without using any tools [so as to avoid damaging the H.T. lead] remove the lead 6 from the back of the spark plug.
- Using the spark plug spanner supplied (49), turn the spark plug (6.1) anticlockwise to remove it.
- Clean the spark plug and check the electrode gap.
   Maintain a gap of 0.6 to 0.7mm.

**Attention** The spark plug should be replaced every 60 hours of machine use or annually during a service. The replacement plug must be an NHSP L8RTF, Oregon O-P17Y or another compatible resistor type plug with the same heat range.

 Make sure you correctly seat the spark plug thread in to the engine before screwing it clockwise in to the head.



-IG. 35

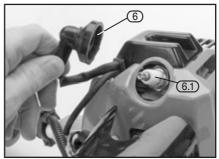


FIG. 36

# 15. MAINTENANCE – 2-STROKE MOTOR UNIT

- Tighten the spark plug 6.1 using the spark plug spanner (49), before replacing the H.T. lead (6). The rubber surround of the H.T. lead cap should be tucked inside the plastic housing of the body to make sure of a good connection with the spark plug.

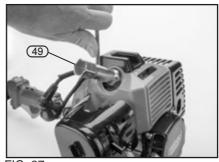


FIG. 37

### 15.3 ENGINE IDLE SPEED ADJUSTMENT - FIG.38

With the engine running at idle the attachment must not operate. For example, the brush cutter blade must not spin while the engine idles. Adjust as necessary.

- Run the engine until it is warm.
- Turn screw (3.1) anticlockwise to decrease the engine idle speed.

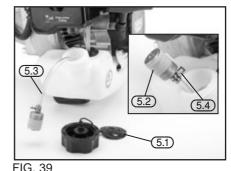


FIG. 38

### 15.4 REPLACING THE FUEL FILTER - FIG.39

To make sure the supply of fuel remains clean there is a small fuel filter attached to the pick-up tube inside the fuel tank. This must be checked regularly and replaced when cloaged.

- Drain fuel tank completely.
- Gently pull the fuel tank cap and chain to release the spring clip (5.1) from inside the tank mouth.
- Tilt the engine so that the fuel tank opening is the lowest point and shake. This will cause the fuel filter (5.2) to fall in to reach.



- Gently pull the filter clear of the tank mouth.
- Without letting go of the pick-up line (5.3), squeeze the hose clip (5.4) and move it away from the filter.
- While still holding the fuel line, pull the clogged filter off and insert the clean filter.
- Reposition the hose clip (5.4) to grip the fuel line on to the filter.
- Push the filter back inside the tank.
- Squeeze the spring clip (5.1) and push it back inside the mouth of the fuel tank.

# 16. MAINTENANCE – ATTACHMENTS

#### **16.1 CHAIN MAINTENANCE**

A saw chain must be regularly maintained to keep it sharp. A blunt chain is more likely to cause kickbacks, reduce fuel economy and above all make the job more difficult. A sharp, well adjusted chain should cut effortlessly thought the timber with little pressure.

After use slacken off the chain tension to prevent the chain from stretching. As the chain cools down it will contract over the guide bar.

#### 16.2 FITTING AND REMOVING THE CHAIN AND GUIDE BAR

- Please refer to section 9.1; page 16

#### 16.3 TENSIONING THE CHAIN

- Please refer to section 9.2; page 16

#### 16.4 CHAIN OIL:

- Please refer to section 9.3; page 17

# 16.5 GEARBOX LUBRICATION

- FIGS.40 - 41

The components within the gearbox have to work very hard and as a result **MUST** remain well lubricated at all times. Before or after each use:

- Connect a compatible grease gun to the gearbox assembly's grease nipples (23), (38).
- Pump in a general purpose gearbox grease.

#### **16.6 BLADE CLEANING**

After use the cutting head must be thoroughly cleaned of debris, sap and moisture.

- Brush clean the blades to remove any debris.
- Use a solvent cleaner to spot clean any sap from the blades.
- Spray the blades with a moisture dispersant lubricating oil, for example Draper stock no.41921.

As with all cutting means, blades will need regular maintenance, whether for resharpening or replacement.

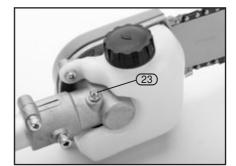


FIG. 40

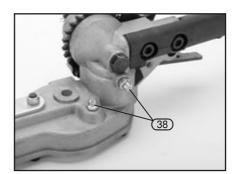


FIG. 41

## 16.7 MAINTAINING THE SPOOL - FIGS.42 - 45

As with all other cutting means, the spool will need regular maintenance, whether it is refilling or replacing the spool or just retrieving the line when it disappears inside the cutting head.

# 16. MAINTENANCE - ATTACHMENTS

# 16.8 REMOVING THE COMPLETE SPOOL ASSEMBLY - FIG.42

- With the engine stopped, locate the spindle locking point (42.1).
- Using the supplied hex. key (51), lock the spindle to stop it from turning. It may be necessary to turn the spool assembly before the hex. key fully engages all the way.
- With the spindle held fast, unscrew the spool assembly (45) anticlockwise.

# 16.9 FITTING THE COMPLETE SPOOL ASSEMBLY

- Please refer to section 9.5, page 18.

# 16.10 REWINDING THE SPOOL INSERT - FIGS.43 - 45

 With the engine stopped, squeeze [with equal pressure] both sides of the spool housing (45.1) at points to release the spool cover.

**Note:** Behind the spool insert is a large spring with two large washers. Take care that these do not spring out or get lost. On the back of the spool insert is marked the direction or rotation.

- Find the middle of the replacement nylon line and hook this in to the spool insert at point (45.2).
- Wind the nylon line neatly in both channels of the insert in the indicated direction.
- When both the lines are wound, hook them through the insert at points (45.5) to hold them in place. Leave a short piece of nylon to feed out through the spool housing.
- Place the large washer, spring and large washer in the spool housing as shown.
- Feed the nylon ends out through the spool housing.
- Carefully lower the spool insert down over the washer and spring while pulling the nylon end tight.
   When everything is lined up push down on the insert at the same time pulling the nylon ends free from the insert. Watch that nothing becomes trapped while you do this.
- While keeping the insert pressed hard down on to the spring, replace the spool cover and clip it back down.

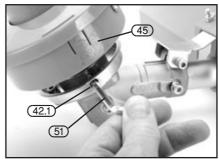


FIG. 42



FIG. 43



FIG. 44

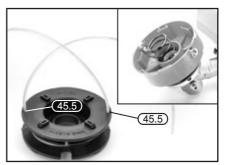


FIG 45

# 17. TROUBLESHOOTING

## 17.1 TROUBLESHOOTING GUIDE - 2-STROKE MOTOR UNIT

Problem	Probable cause	Suggested remedy
Engine will not start.	Engine stop switch activated.	Slide stop switch back to on position.
	Little or no fuel.	Mix up a fresh batch of 25:1 [fuel with 2-stroke oil] and refill.
	Stagnant fuel (fuel has been stored too long).	Drain fuel tank. Mix up a fresh batch of 25:1 [fuel with 2-stroke oil] and refill.
	Spark plug electrode fouled or the gap is incorrectly set.	Remove and service/replace spark plug
	Spark plug H.T. lead not properly connected.	Push H.T. lead on firmly and make sure the engine housing is not preventing a good connection.
	Choke set incorrectly for the starting conditions.	Move the choke to the other setting and try again.
	Air filter clogged.	Clean/replace air filter.
	Engine flooded with fuel (the engine has been over primed]	Remove spark plug and dry the electrode of fuel. Pull the start handle 2 or 3 times without the spark plug fitted. Wait a moment before refitting the spark plug and trying again.
	Fuel filter clogged	Replace fuel filter [in fuel tank].
Engine will not restart after refuelling.	No fuel in the lines.	If the engine was run until starved of fuel, re-priming may be necessary to purge any air from the fuel supply line.
3. Engine runs roughly.	Choke set incorrectly.	Adjust choke.
	Service due.	Clean/replace air filter and spark plug.
	Stagnant fuel (fuel has been stored too long).	Drain fuel tank. Mix up a fresh batch of 25:1 [fuel with 2-stroke oil] and refill.
Heavy blue smoke from exhaust.	The fuel, oil mix is incorrect.	Drain fuel tank. Mix up a fresh batch of 25:1 [fuel with 2-stroke oil] and refill.

# 17. TROUBLESHOOTING

Problem	Probable cause	Suggested remedy
5. Engine will not start.	Power switch off.	Flip switch to ON position.
	Spark plug wire disconnected.	Connect spark plug wire to spark plug.
	Out of fuel	Refuel.
	Spark plug wet, faulty or improperly gapped.	Clean, replace or gap spark plug.
	Throttle control not held wide open.	Hold throttle control wide open when pulling recoil handle.
	Fuel line hose not positioned in bottom of fuel tank.	Push fuel line down into fuel in fuel tank.
Engine runs rough, floods during operation.	Dirty air filter.	Clean or replace air filter.
during operation.	Choke partially engaged.	Turn off choke.
	Carburettor out of adjustment.	Call service agent.
7. Engine is hard to start.	Start fuel.	Drain old fuel and replace with fresh. Use fuel stabilizer at end of season.
	Spark plug wire loose.	Make sure spark wire is securely attached to spark plug.
	Dirty carburettor.	Clean carburettor, use fuel stabilizer, new fuel can.
	Throttle control not held wide open.	Prime unit 3 more times, then hold throttle wide open when pulling recoil handle.
8. Engine misses or lacks	Clogged fuel tank.	Remove and clean.
power.	Clogged air filter.	Clean or replace.
	Carburettor out of adjustment or badly set.	Call service agent.
	Spark plug wet, faulty or improperly gapped.	Clean, replace or gap spark plug.
9. Engine runs, then quits.	Plugged fuel filter.	Clean or replace.
	Carburettor cut off adjustment badly set.	Call service agent.
10. Engine revs too high.	Carburettor out of adjustment.	Call service agent.

# 17. TROUBLESHOOTING

## 17.2 TROUBLESHOOTING GUIDE - TREE PRUNING ATTACHMENT

Problem	Probable cause	Suggested remedy
Chain does not move or is too tight.	Insufficient chain lubrication.	Check oil level in reservoir. Check oil lines are not blocked.
Chain moves while engine is at idle.	Idle is set too high.	Adjust the idle setting until the chain stops.

## 17.3 TROUBLESHOOTING GUIDE - HEDGE TRIMMING ATTACHMENT

Problem	Probable cause	Suggested remedy
Poor cutting performance.	Clogged blades.	Stop engine. Clean and lubricate blade assembly.
	Blades blunt.	Have the blades serviced or replaced by an authorised service centre.
Unusual noise from the cutting head.	Insufficient grease in the gearbox assembly.	Stop engine. Add grease to the gearbox before continuing.

# 18. ACCESSORIES

## **18.1 ACCESSORIES GUIDE**

Stock No.	Part No.	Description
85251	Y-GTP33-35	Spark plug.
14447	TSMIX	2-Stroke mixing bottle.
85288	Y-GTP33-69	Nylon cutting filament line spool.
85279	AGTP33-BLD	Brush cutting blade.
84758	AGTP33-PCS	Tree pruning attachment.
84757	AGTP33-HT	Hedge trimming attachment.
84756	AGTP33-BC	Grass trimming/brush cutter attachment
84759	AGTP33-EP	Extension pole

#### 19.1 EXPLANATION OF SYMBOLS



Always Read the instruction manual



**Always** wear suitable eye/face protection.



**Always** wear ear defenders and safety helmet.



**Always** wear suitable protective clothing.



Always wear safety footwear.



**Danger!**Keep away from sources of ignition.



Warning! risk of entanglement.



Warning! Risk of danger to wildlife.



**Warning!** Beware of flying debris.



Single value noise marking. (maximum declared A-weighted sound power level in decibels).



Warning!
Protect feet from risk of injury.



Warning! Hot surface.



Warning! Spinning cutting line.



Fuel/2-stroke oil mixture ratio.



Maximum speed of the applicable cutting unit.



8500 min<sup>-1</sup>



# Warning!

Never operate this power tool within 50ft (15M) of wires or power cables.



Warning! Maintain a clearance of at least 50ft (15M).

#### 20.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- When decommissioning (preparing the machine to be scrapped) drain any remaining fuel and oil for separate disposal.

# **CONTACTS**

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Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

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