



INSTRUCTIONS FOR 33cc Petrol 2-in-1 Garden Tool

Stock No.16056

Part No.GTP32

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



ATTENTION!:
2 stroke engines **MUST** be filled with
unleaded fuel, MIXED with 2-stroke oil.
Failure to add oil or incorrectly mixing the oil
WILL result in running problems or
ENGINE FAILURE!



GENERAL INFORMATION

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:

33cc PETROL 2-IN-1 GARDEN TOOL

Stock no. 16056

Part no. GTP32

1.2 REVISIONS

Date first published April 2016.

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

Downloads are available from: <http://www.drapertools.com/manuals>

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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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3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase.

A proof of purchase must be provided with the tool.

Should the machine develop any fault, please return the complete tool to your nearest authorized warranty repair agent 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.

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 guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, 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 guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

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

Draper Tools Limited

4. INTRODUCTION

4.1 SCOPE

This domestic, portable hand-held 2 stroke 2-in-1 garden tool is designed exclusively for connection to either a grass trimmer or a hedge trimmer.

4.2 SPECIFICATION

Stock no	16056
Part no	GTP32

Motor unit:

Maximum engine performance.....	1,0kW
Engine type.....	2-stroke
Fuel tank capacity	900cm ³
Engine displacement	33cm ³
Fuel/2-stroke oil mix	25:1
Maximum engine performance.....	1.000kW
Engine speed at idle.....	3000rpm
Engine speed (rotational frequency)2	7,500min-1
Engine speed (rotational frequency)3	3,000min-1
Fuel consumption at maximum engine performance.....	503g/kWh
Sound pressure level (A-weighted L _{pAav}) ¹	93.7dB(A)
Sound power level (A-weighted L _{WAav}) ¹	110.5dB(A)
Single value noise level ²	114dB(A)
Vibration level ³	7.29m/s ²
Weight (motor & grass trimmer attachment only - no fuel)	6kg

Grass trimmer attachment:

Cutting diameter (nylon line).....	420mm
Cord diameter	2.5mm
Overall cord length	2.5M
Cord extension	Tap'n go
Noise level.....	94.5dB(A) [K=3,0 dB(A)]
Vibration – full throttle	9.23m/s ² [K=1,5 m/s ²]
Vibration – idling speed.....	3.2m/s ² [K=1,5 m/s ²]

Hedge trimmer attachment

Max. branch size.....	22mm
Blade length	440mm
Cutting length.....	380mm
Noise level.....	94.5dB(A) [K=3,0 dB(A)]
Vibration – full throttle	9.23m/s ² [K=1,5 m/s ²]
Vibration – idling speed.....	3.2m/s ² [K=1,5 m/s ²]

¹ In accordance to BS EN ISO 22868.
² A-weighted sound pressure level in accordance to 2000/14/EC.
³ In accordance to BS EN ISO 22867.

4.3 HANDLING & STORAGE

Care must be taken when handling and lifting. This machine is not a toy and must be respected.

The environment will have a negative result on its operation if you are not careful. If the air is damp, components will rust. If the machine is unprotected from dust and debris; components will become clogged: And if not cleaned and maintained correctly or regularly the machine will not perform at its best.

ALWAYS WEAR SUITABLE AND APPROVED PERSONAL PROTECTIVE EQUIPMENT

5. HEALTH & SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

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.

Read the instruction manual fully. Do not attempt any operation until you have read and understood this manual.

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 spilt on the floor could result in you slipping.

Find a suitable location. The location should provide good natural light or artificial lighting as a replacement. Avoid damp and dust locations as it will have a negative effect on the its performance. If the machine is portable; do not expose to rain. In all cases do not operate power tools near flammable materials.

Beware of electric shock. Avoid contact with earthed surfaces; because they can conduct electricity if there is an electrical fault with the power tool.

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.

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 modify) 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 includes the use of accessories.

Dress appropriately. Clothing should be close fitted, with any long hair tied back and jewellery and neck ties removed as they can cause an entanglement risk, resulting in body parts being pulled into the machine. Footwear must be fully enclosed and have a nonslip sole.

Wear personal protective equipment (PPE). Dust, noise and vibration 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 by wearing approved safety goggles or a face shield. In addition to these common hazards, find out what others may be 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.

5. HEALTH & SAFETY INFORMATION

Move the machine as instructed. 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.

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.

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. HEALTH & SAFETY INFORMATION

5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR 2-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.

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 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. HEALTH & SAFETY INFORMATION

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:

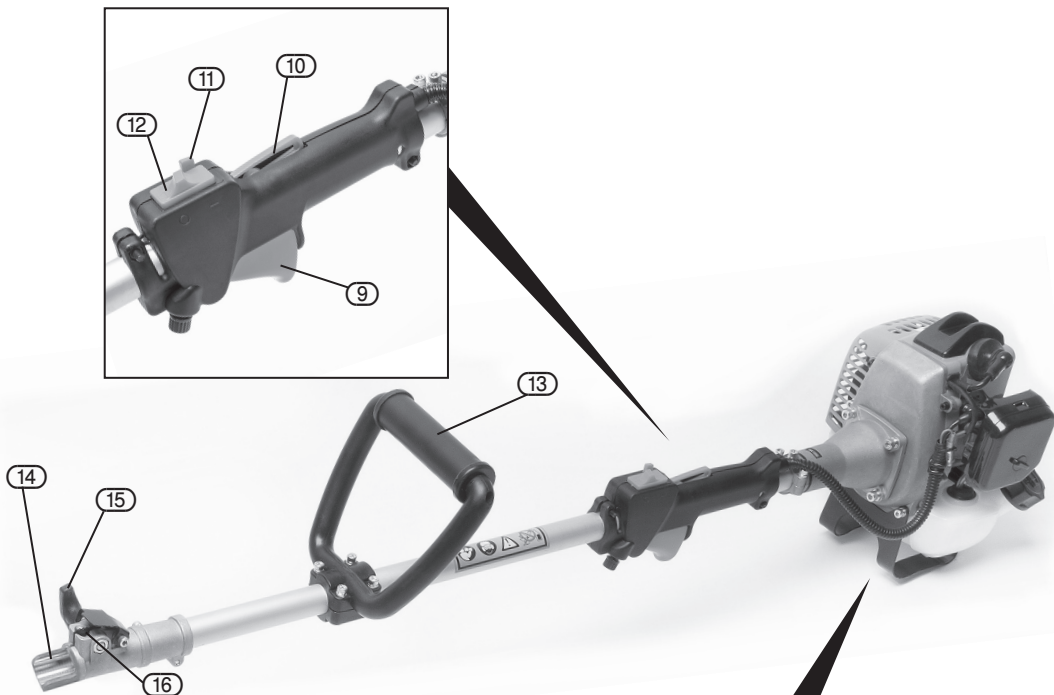
- Tank and siphon fuels only outdoors or in well-ventilated rooms.
- Do not inhale fuel fumes.
- Avoid contact with eyes and skin.
- Wear gloves when transferring fuel.
- When fuel has come into contact with your clothes, change them immediately. Clean your clothes before putting them back on.
- Store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

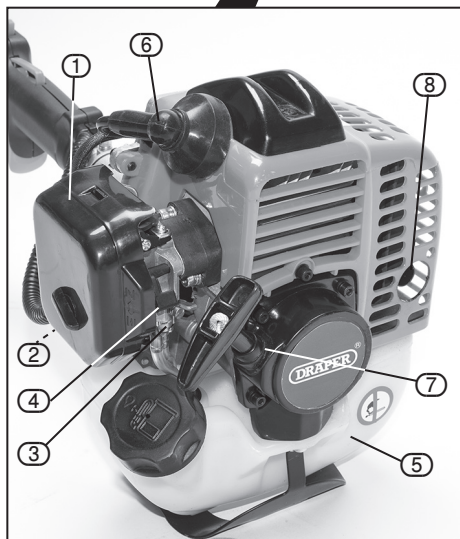
6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION

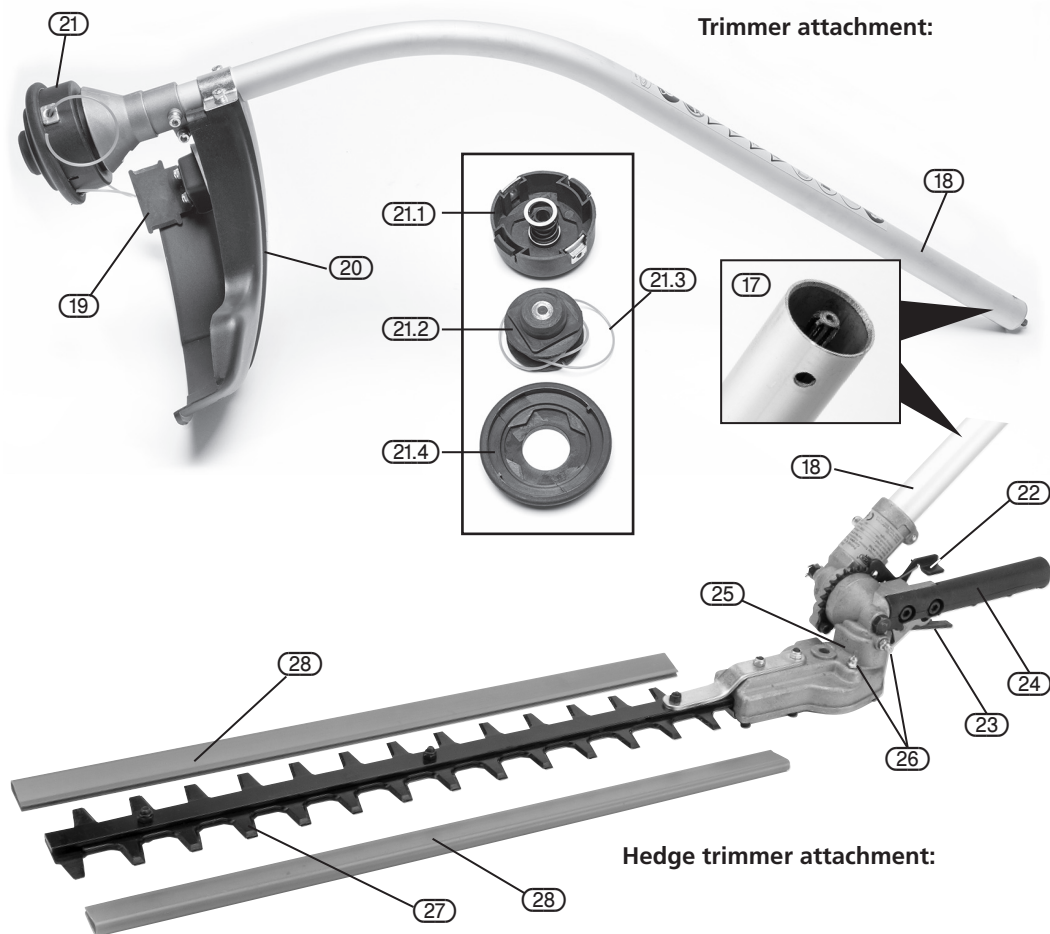


2-Stroke motor unit:

- 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 Front (auxiliary) handle.
- ⑭ Power take off.
- ⑮ Power take off locking handle.
- ⑯ Power take off release latch.



6. TECHNICAL DESCRIPTION



Trimmer attachment:

Hedge trimmer attachment:

- (17) Power take off connection point.
- (18) Shaft.
- (19) Cutting filament trimming blade.
- (20) Cutting attachment guard.
- (21) Spool assembly.
- (21.1) Spool housing.
- (21.2) Spool insert.
- (21.3) Nylon cutting line.
- (21.4) Spool cover.
- (22) Angle adjustment locking lever.

- (23) Angle adjustment lever.
- (24) Adjustment handle.
- (25) Gearbox.
- (26) Grease nipple.
- (27) Blade.
- (28) 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.

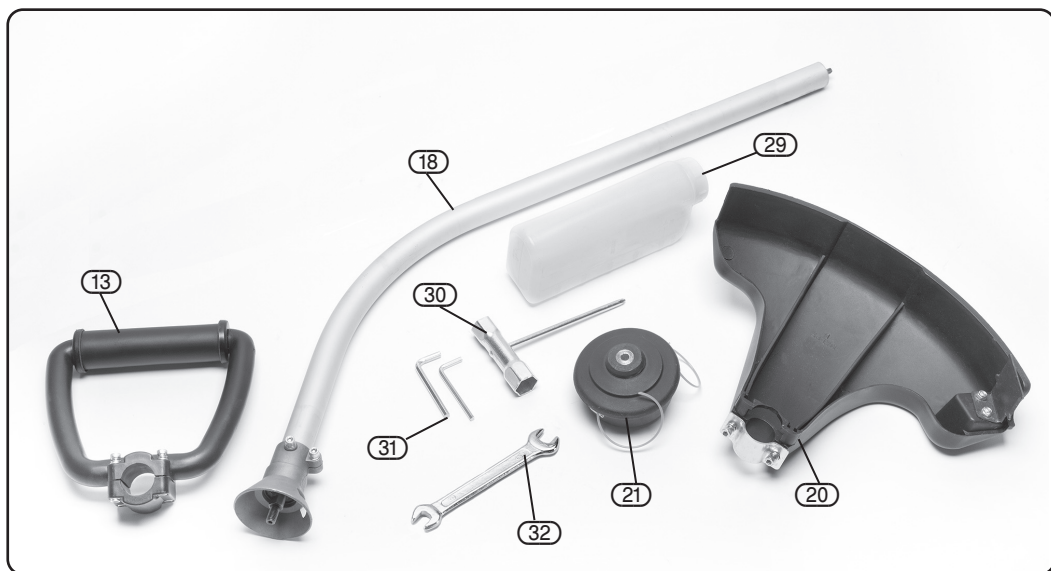
The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

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 2-in-1 garden tool, there are several parts not fitted or attached to it.



(13) Front (auxiliary) handle.

(18) Grass trimmer shaft.

(20) Cutting attachment guard and fittings.

(21) Cutting filament line spool.

(29) 2-stroke mixing bottle.

(30) Spark plug spanner.

(31) 2 × hex keys.

(32) Combination spanner.

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.

Danger! Fuel is highly flammable.

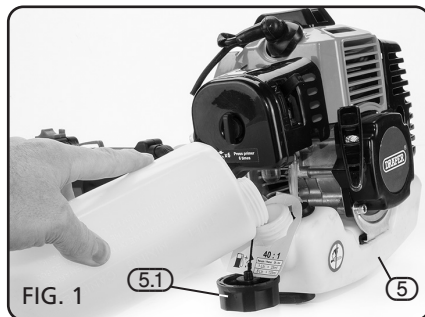
- Open the fuel cap (5.1) by turning it anticlockwise. Hang it to one side so that it does not block the opening.
- Combine fuel and 2-stroke oil to create a 25:1 mixture.

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.

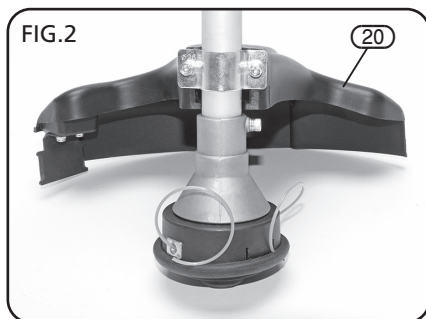


9. PREPARING THE ATTACHMENTS

9.1 FITTING THE GRASS TRIMMER GUARD (FIG.2)

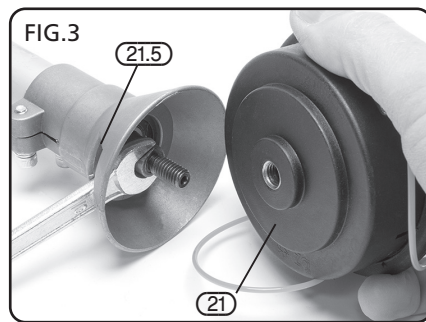
The guard must be fitted and fully operational before using this machine.

- Offer up the guard (20) to the shaft, attached bracket to back with hex bolts finger tight.
- Use hex. keys (31) to tighten bolts when guard is lined up as shown.



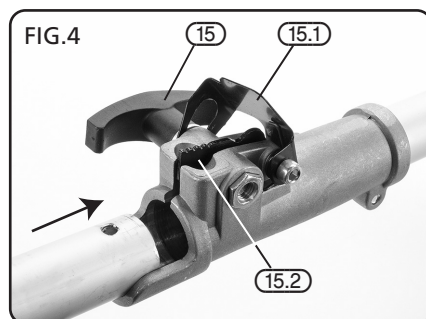
9.2 FITTING THE COMPLETE SPOOL ASSEMBLY (FIG.3)

- With the engine stopped, locate the spindle locking access point (21.5).
- Using a 10mm spanner locate it onto the flat sides of shaft.
- Screw the spool (21) onto the shaft clockwise by hand.



9.3 CONNECTING THE ATTACHMENTS (FIG.4)

- 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 (15) is loose by turning it anticlockwise a few turns.
- The shield (15.1) which is sprung loaded will pop up.
- Slide the attachment shaft inside the power take off collar of the engine unit.
- As the holes line up the sprung loaded lock mechanism (15.2) will click and locate into hole to lock attachment in position.
- Push cover back over and tighten the locking handle (15) clockwise.



Disconnection

- To disconnect loosen locking handle, shield will pop up.
- Then push thumb down on into recess onto sprung loaded locking latch (15.2) and pull the attachment out.

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.5 – 7)

Warning! In an emergency, slide the engine stop switch (12) forward to kill the engine.

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

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.

Warning! Do not pull the starter rope out fully as it may break. Do not release the starter rope and allow it to recoil unaided.

- When the engine starts, squeeze 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.

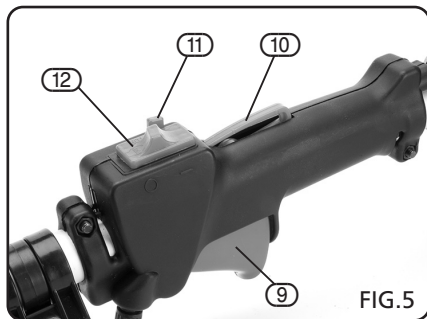


FIG.5

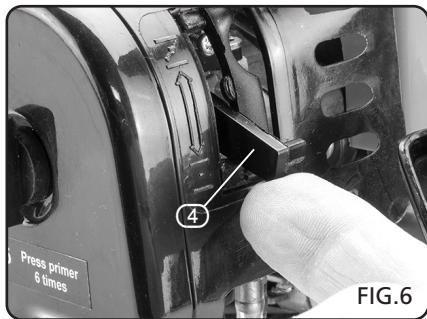


FIG.6

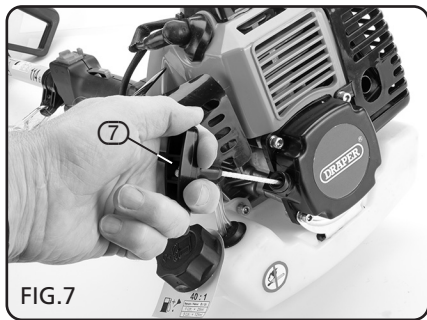


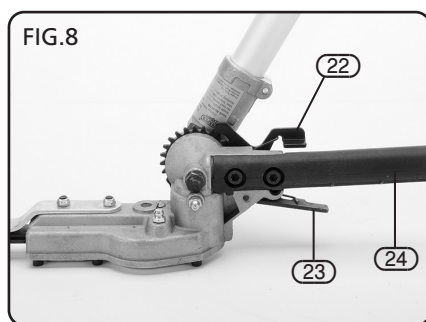
FIG.7

11. OPERATING THE HEDGE TRIMMING ATTACHMENT

11.1 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 (24).
- Lift the angle adjustment locking lever (23) and hold.
- With your thumb, press down the angle adjustment lever (22) and adjust the cutting head to a suitable angle.
- Release lever (23) and make sure the cutting head has locked into position fully.



11.2 WORKING TECHNIQUES (FIGS.9 – 13)

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 22mm 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.



11. OPERATING THE HEDGE TRIMMING ATTACHMENT

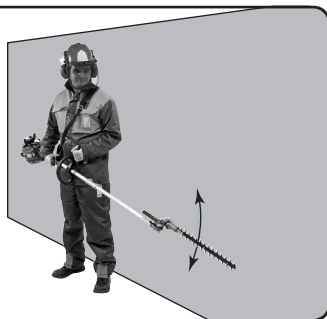
VERTICAL CUTTING [ALONG SIDE] (FIG.10)

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.

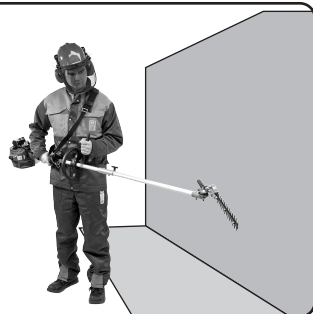
FIG.10



VERTICAL CUTTING [AT A DISTANCE] (FIG.11)

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.

FIG.11

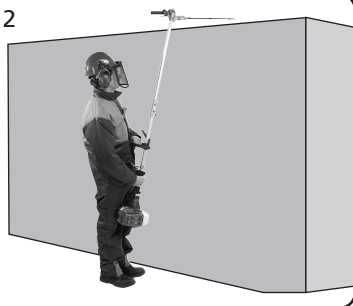


HEDGE TOPPING [ABOVE HEAD HEIGHT] (FIG.12)

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.

FIG.12



HORIZONTAL CUTTING (FIG.13)

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

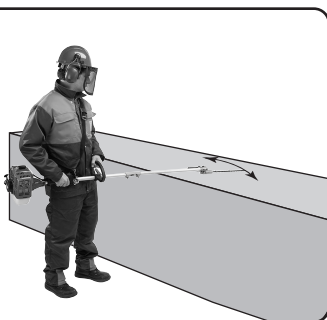
- Set the cutting head straight.
- Make level arcs, so as to encourage the trimmings on to the floor.

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.13



12. OPERATING THE GRASS TRIMMER

12.1 USING THE GRASS TRIMMER (FIG.14)



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.

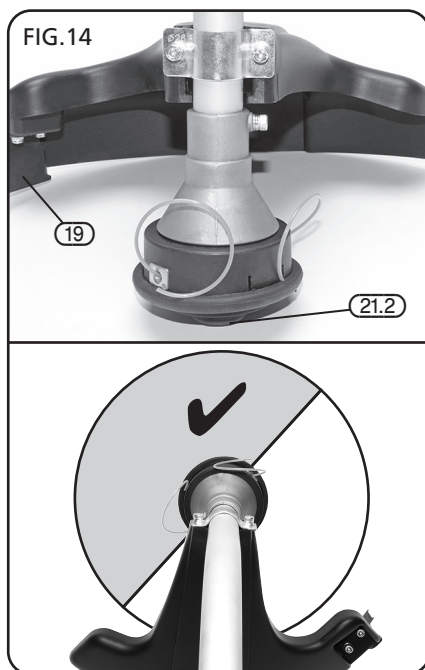
Note: Not all animals will be deterred by the noise of the product alone. The nylon line is intended for clearing grass, weeds and similar soft vegetation. The nylon line is a consumable item, avoiding contact with trees, stones, walls, fences and other hard surfaces will help prolong the life of it.

- 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 kept 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 (21.2) [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 (19). 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.

FIG.14



13. MAINTENANCE – 2-STROKE MOTOR UNIT

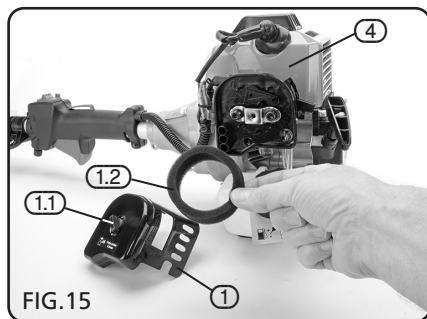
Regular maintenance tasks must be carried out at specific intervals to retain the engine's performance.

13.1 CLEANING THE AIR FILTER (FIG.15)

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.



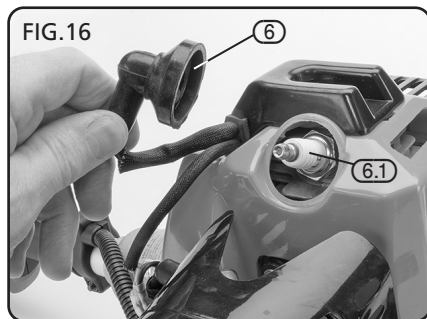
13.2 SPARK PLUG MAINTENANCE (FIGS.16 – 17)

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 (30), 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.

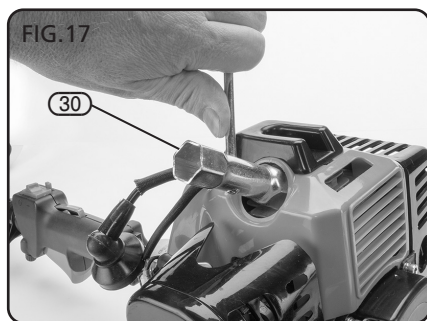
Attention The spark plug should be replaced every 60 hours of machine use or annually during a service. The replacement plug must be an NHSP L8RTF, Oregon O-P17Y or another compatible resistor type plug with the same heat range.

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



13. MAINTENANCE – 2-STROKE MOTOR UNIT

- Tighten the spark plug (6.1) using the spark plug spanner (30), 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.



13.3 ENGINE IDLE SPEED ADJUSTMENT (FIG. 18)

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.

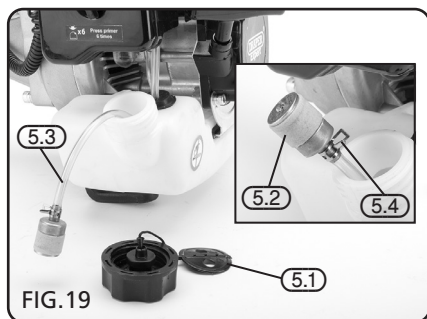
- Run the engine until it is warm.
- Turn screw (3.1) anticlockwise to decrease the engine idle speed.



13.4 REPLACING THE FUEL FILTER (FIG. 19)

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 clogged.

- 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.

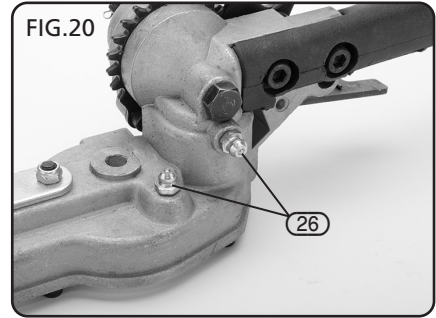


14. MAINTENANCE – ATTACHMENTS

14.1 GEARBOX LUBRICATION (FIG.20)

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 (26).
- Pump in a general purpose gearbox grease.



14.2 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.

14.3 MAINTAINING THE SPOOL (FIGS.21 - 24)

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.

14.4 ATTACHING THE COMPLETE SPOOL ASSEMBLY (FIG.21)

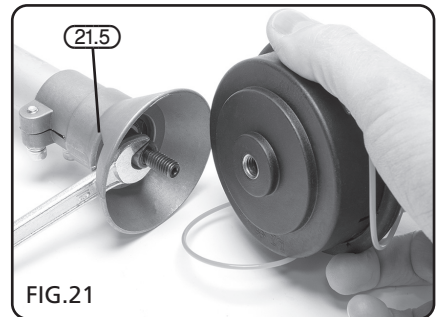
- With the engine stopped, locate the spindle locking access point (21.5).
- Using a 10mm spanner locate it onto the flat sides of shaft.

Remove:

- Screw the spool off the shaft anticlockwise by hand.

Connection:

- Screw the spool on the shaft clockwise by hand.



16. MAINTENANCE – ATTACHMENTS

14.5 REWINDING THE SPOOL INSERT (FIGS 22 – 24)

- With the engine stopped, squeeze [with equal pressure] both sides of the spool housing (21.1) 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 of rotation.

- Find the middle of the replacement nylon line and hook this in to the spool insert at point (21.6).
- 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 (21.7) 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.

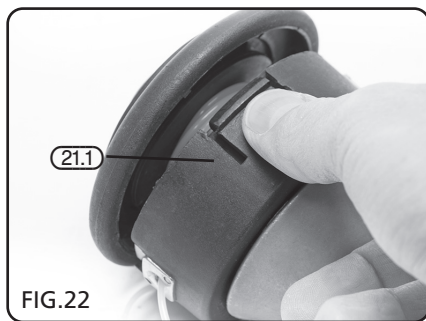


FIG.22

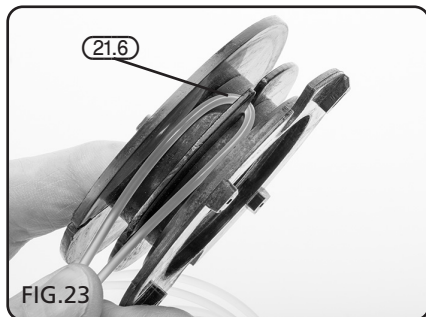


FIG.23

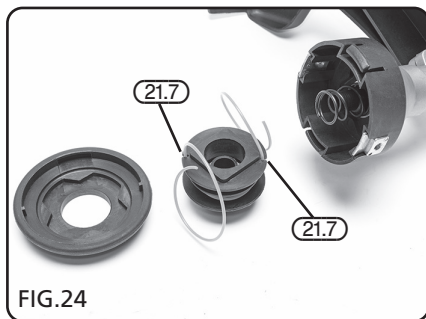


FIG.24

15. TROUBLESHOOTING

15.1 TROUBLESHOOTING GUIDE – 2-STROKE MOTOR UNIT

Problem	Probable cause	Suggested remedy
1. 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].
2. Engine will not restart after refuelling.	No fuel in the lines.	If the engine was run until starved of fuel, repriming 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.
4. 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.

15. TROUBLESHOOTING

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

15. TROUBLESHOOTING

15.2 TROUBLESHOOTING GUIDE – HEDGE TRIMMING ATTACHMENT

Problem	Probable cause	Suggested remedy
1. 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.
2. Unusual noise from the cutting head.	Insufficient grease in the gearbox assembly.	Stop engine. Add grease to the gearbox before continuing.

16. ACCESSORIES

16.1 ACCESSORIES GUIDE

Stock No.	Part No.	Description
85251	Y-GTP33-35	Spark plug.
14447	TSMIX	2-Stroke mixing bottle.
85279	AGTP33-BLD	Nylon cutting filament line spool.
84757	AGTP33-HT	Hedge trimming attachment.
17772	AGTP32-84	Grass trimming attachment

17. DISPOSAL

17.1 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.

18. EXPLANATION OF SYMBOLS

18.1 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.



Always wear gloves.



Danger!
Keep away from sources of ignition.



Warning!
risk of entanglement.



Warning!
Risk of danger to wildlife.



Warning!
Beware of flying debris.



Warning!
Protect feet from risk of injury.



Warning!
Hot surface.



Warning!
Spinning cutting line.

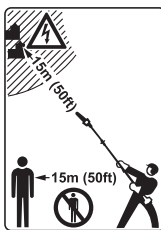


Fuel/2-stroke oil mixture ratio.



8000 min⁻¹

Maximum speed of the applicable cutting unit.



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



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



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

- **DRAPER TOOLS LIMITED,**
Hursley Road, Chandler's Ford,
Eastleigh, Hampshire. SO53 1YF. U.K.
- **Helpline:** (023) 8049 4344
- **Sales Desk:** (023) 8049 4333
- **General Enquiries:** (023) 8026 6355
- **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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