

DRAPER

EN

Original Instructions
Version 2 – April 2025

PETROL **CHAINSAW**

80103, 80106



**UK
CA** **CE**

1. Preface

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate, or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

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

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

1.1 Product Reference

User Manual for: Petrol Chainsaw

Stock No: 80103, 80106

Part No: CSP4546, CSP5250

1.2 Revisions

Version 1: March 2019
First release

Version 2: April 2025

As our manuals are continually updated, always ensure that the latest version is used.

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1.3 Understanding the Safety Content of This Manual



WARNING! – Situations or actions that may result in personal injury or death.



CAUTION! – Situations or actions that may result in damage to the product or surroundings.

ATTENTION – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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3. Product Introduction

3.1 Intended Use

This petrol chainsaw is designed for general lopping, cutting branches/limbs and felling of trees.


Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.

3.2 Specification

Stock No.:	80103	80106
Part No.:	CSP4546	CSP5250
Engine		
Type:	2 Cycle single cylinder	2 Cycle single cylinder
Power:	1.7KW	2.0KW
Capacity:	45CC	52CC
Idle speed:	3000rpm	3000rpm
Max. speed:	11000rpm	11000rpm
Fuel tank capacity:	0.55L	0.55L
Chain lubricating oil tank capacity:	0.26L	0.26L
Useable cutting length:	430mm	460mm
Chain		
Specified pitch:	8.255mm	8.255mm
Specified drive link gauge:	1.47mm	1.47mm
Drive Sprocket		
Number of teeth:	7T	7T
Specified pitch:	8.255mm	8.255mm
Noise emissions		
Sound pressure level:	102dB (A)	102dB (A)
Sound power level:	114dB (A)	114dB (A)
Vibrations level:	9.5m/S ²	9.5m/S ²
Net weight (Machine only):	7kg	7kg

Important: The declared vibration total values and noise emissions values have been measured in accordance with a standard test method and may be used for comparing one tool with another. These values may also be used in a preliminary assessment of exposure.

 **WARNING!** The vibration and noise emissions during actual use of the product can differ from the declared values depending on the type of work and the area upon which it is used. Before each use, estimate the likely exposure resulting from the actual conditions of use. Take into account all parts of the operation cycle in order to identify any safety measures required to protect the operator.

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Failure to follow these instructions may result in injury or damage to the user and the product.

4.1 General Health and Safety Precautions



WARNING! DANGER OF DEATH!

Chainsaws pose a significant health and safety risk, even to careful and informed operators. The dangers of using and applying a chainsaw should not be taken lightly. Seek guidance, training or employ a professional to carry out the task if uncertain or nervous of the potential risk and dangers involved.

- **NEVER** modify the chainsaw in anyway.
- Before use, inspect the chainsaw for wear and any damage. Inspect and check the following:
 - Guide bar grooves for distortion.
 - Guide bar rail for cracks.
 - Condition and operation of the sprocket teeth, drive sprocket, chain tension.
 - Operation of the chain brake.
- **NEVER** operate the chainsaw alone in case of an emergency. Have an assistant in visual/communication range.
- Ensure the work area is assessed for potential risks and bystanders are kept at a safe working distance. Keep bystanders at a minimum of 10M away from the work area.
- In case of accident, ensure that emergency services can be contacted, and adequate information is available to facilitate an urgent recovery.
- **ALWAYS** carry a basic first aid kit containing large wound dressings.
- Check and identify any gas, water, electric, phone services etc. particularly overhead before using the chainsaw.
- Ensure a distance of a least twice the tree height is observed from all obstacles and dangers.
- Tree felling must only be carried out by a single individual and only after the danger zones and escape routes have been identified and cleared.
- **DO NOT** fell trees when wind conditions may influence/control the direction.
- Close observation and inspection of dead or diseased wood and insecure limbs and branches must be carried out prior to any cutting.
 - Dead wood can cause unexpected reactions during felling.
- Remove any scrub or other obstructions from the area to enable a quick escape and ensure visibility of the chain is not impeded during cutting.
- If working is being carried out due to wind damage, ensure no unstable trees or limbs pose any further damage.
- **NEVER** stand on anything other than the ground.
- When preparing to work on the ground, e.g. cross cutting or limbing, ensure no obstacles are hidden or obscured from view.
 - Contact with such an object can result in loss of footing or kickback from the chainsaw.
- Always maintain the chainsaw in good working order and regularly serviced by an authorised service agent. Only use replacement parts recommended by Draper Tools.

4.2 Specific Health and Safety for Saw Operation

- **DO NOT** operate the chainsaw without being completely familiar with all the safety aspects, functions and how to stop the chainsaw in an emergency.
- **DO NOT** operate the chainsaw above shoulder height.
- Regularly clear the cut material as it builds up to prevent a hazard under foot.
- **NEVER** use the chainsaw if the stop switch is faulty or not functional.
- Ensure the chain does not rotate when the saw is it idle.
- **NEVER** operate the chainsaw with a maladjusted or blunt chain as this is highly dangerous.
- Prior to each use inspect the chainsaw for damage. Ensure all safety features and mechanisms especially the chain brake are functioning correctly and that the cutting means is of the type and design as specified by the manufacturer.
- Adopt a secure and balance stance and hold the saw close into your body for balance.

4. Health and Safety Information

- Maintain a good grip with both hands on the saw. The chainsaw is designed for operation only of the rear handle by the right hand and the front handle by the left hand. Grip the front handle with the left thumb underneath to allow resistance in case of kickback.
- **ALWAYS** stop the chainsaw before setting it aside.
- **DO NOT** set a hot chainsaw down on or near easily combustible materials e.g. dry leaves or grass.
- Only begin cutting with throttle at maximum speed.
- Operate the chain brake before moving with the saw. If moving more than a short distance stop the saw and refit the bar guard.
- **DO NOT** attempt to use the chainsaw if tired, ill or under the influence of alcohol or other drugs.



WARNING! DO NOT touch the hot engine parts, in particularly the exhaust muffler during and after use.

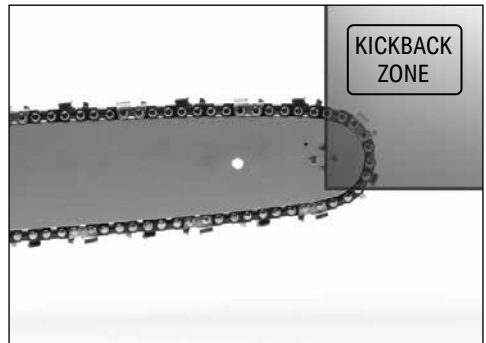
4.3 Personal Protective Equipment (PPE)

- **ALWAYS** wear appropriate Personal Protective Equipment (PPE) specifically designed for use with a chainsaw as follows:
 - Safety helmet (**BS EN397 or BS EN 14052**) with mesh visor (**BS EN1731**) to protect against falling or thrown debris.
 - Hearing protection (**BS EN 352**) – ear defenders to protect against the high level of noise generated.
 - Gloves (**BS EN381-7**) with protective guard on back of left hand to defend against chain whip in the event of a breakage.
 - Leg protection (**BS EN381-5**) with a chain clogging material designed to stop the chain before it penetrates fully through and into the flesh.
 - Non-slip foot protection (**BS EN345-2 or BS EN ISO 17249**) – safety boots with a good non slip tread incorporating protection to toes and shins.
 - High visibility close fitting jacket.
 - Gloves, boots and leg protection should be marked with the symbol (shown) and indicate the chain speed to which they have been tested.
- Due to the nature and ferocity of a petrol driven chainsaw, no PPE can provide 100% protection against chainsaw cuts.



4.4 Kickbacks & Pull Away Risks

- Kickback occurs when the chainsaw is stopped suddenly, resulting in the tip or the guide bar being violently thrown up towards the operator's head/face. Correct stance and knowledge of the operating procedure can greatly reduce the risk.
- Kickback is the most common hazard associated with chainsaws and can result in serious injuries, and even fatalities.
- This chainsaw model is fitted with an inertia activated chain brake and a manually triggered chain brake.
 - In the event of a strong kickback, inertia generated will release the brake lever and trigger the chain brake.
 - In the event of a less severe kickback, the chain brake lever will activate on the operator's left hand side, hence the necessity to operate two handed.
- To avoid kickbacks occurring, **DO NOT** use the tip of the guide bar and take note of foreign objects and other branches/limbs close to the cutting areas.
 - Always make the initial cut on the tension surface of the timber and use non metal spread wedges to avoid the timber pinching the chain.
 - Start cutting at full speed and ensure the body of the saw and spiked bumper are against the timber.
 - Cut only one piece of timber at a time and assess the tension is correct.
 - Use of a low kickback saw chain is advised to reduce the chance of kickback occurring.



- **DO NOT** cut above shoulder height.
- **Type of Kickback Risks/Dangers:**
 - If the chain becomes pinched or snags in the kickback zone of the guide bar this can result in chain movement in the opposing direction on the guide bar.
 - If the chain along the top of the guide bar becomes pinched this can result in the chainsaw being force backwards through the guide bar and forced horizontally back towards the user.
- As well as kickback there is also a risk of the chainsaw pulling away due to the chain pinching along the bottom of the guide bar as it returns to the power head. This can result in the chainsaw being pulled from the operator's hands.
- Additional to kickback, there is a risk of skating or bouncing which can lead to a loss of control if the initial incision moves sideways along the timber.

4.5 Health and Safety Information for Machines with a Petrol Engine



WARNING! During use, parts of this product become hot enough to ignite some materials.

- **DO NOT** touch the engine or exhaust during or immediately after use and allow it to cool before refuelling.
- **ALWAYS** allow the engine to cool before refuelling. Avoid spillages when refuelling
- **NEVER** place objects on the engine while it is in use and keep all air vents clear of dust, dirt and other obstructions.
- Faulty mufflers must be replaced.
- **NEVER** store the machine with fuel in the tank inside any structure where petrol fumes could reach an open flame or spark.
- Only use fresh, clean and good quality fuel/oil in the chainsaw.
- **NEVER** operate the chainsaw without chain oil.
- Ensure the correct ratio of fuel and oil are used.



WARNING!

Petrol is highly flammable:

- Store fuel in containers specifically designed for this purpose and keep away from heat and direct sunlight.
- **NEVER** refuel in close proximity to naked flames, sparks or other sources of ignition.

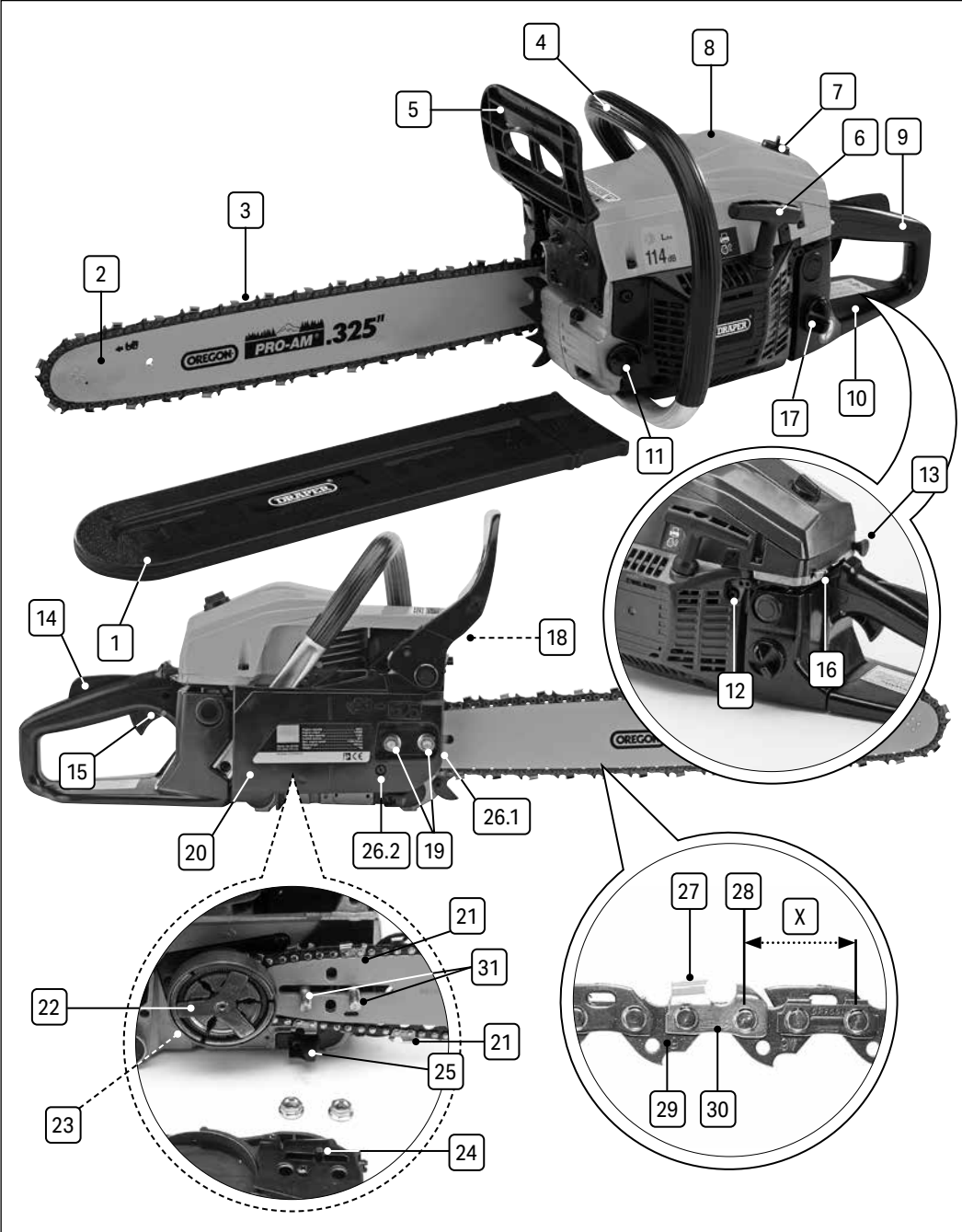
- **NEVER** smoke in the vicinity of the machine.
- Refuel outdoors only and do not smoke while refuelling.
- Wipe up and correctly dispose of any fuel spillage immediately.
- Move away from the refuelling area before restarting the chainsaw.
- Store fuel for short periods only and avoid mixing more than required.

4.6 Residual Risk

The safety instructions in this manual cannot account for all possible conditions and situations that may occur. Exercise common sense and caution when using this product and protect against any additional conceivable risks.

5. Identification and Unpacking

5.1 Product Overview



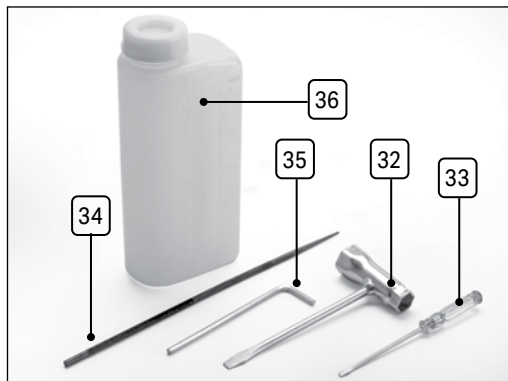
5. Identification and Unpacking

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- | | | |
|--------------------------------------|--|---------------------------------|
| 1 Bar guide guard | 12 Idle speed adjuster (carburettor set screw) | 23 Drive sprocket |
| 2 Guide bar | 13 Choke lever | 24 Chain tension adjuster pin |
| 3 Chain | 14 Throttle trigger lock out | 25 Chain catcher |
| 4 Wrap round handle | 15 Throttle trigger | 26 Chain tension adjuster screw |
| 5 Chain brake lever/front hand guard | 16 Stop switch | 26.1 Stock No 80103 |
| 6 Recoil starter cord | 17 Fuel tank cap | 26.2 Stock No 80106 |
| 7 Top cover screw | 18 Muffler/Silencer | 27 Cutting edge |
| 8 Top cover | 19 Bar locking nuts | 28 Depth gauge |
| 9 Rear handle | 20 Clutch cover | 29 Drive link |
| 10 Rear hand guard/foot plate | 21 Spiked bumper | 30 Direction of rotation arrow |
| 11 Chain oil tank cap | 22 Clutch | 31 Bar locking threads |

5.2 What's in the Box?

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment. If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



- | | |
|----|-------------------------|
| 32 | Combination box spanner |
| 33 | Screwdriver |
| 34 | Chainsaw file |
| 35 | Hex key |
| 36 | Oil mixing bottle |

5.3 Packaging

Keep the product packaging for the duration of the warranty period in case the product needs to be returned for repair.



WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

6. Assembly Instructions

Important: Before preparing or adjusting this product, read and understand all the safety instructions listed in this manual.

WARNING! DO NOT start the chainsaw before mounting and correctly adjusting the guide bar **(2)** and chain **(3)**.

Attention: Saw chain is extremely sharp – always wear gloves when handling.

6.1 Attaching/Adjusting Guide Bar and Chain (Fig.1 – Fig.8)

1. Position the power head as shown in Fig.1 – ensure the chain brake is disengaged. To disengage, pull the chain brake lever **(5)** forward.

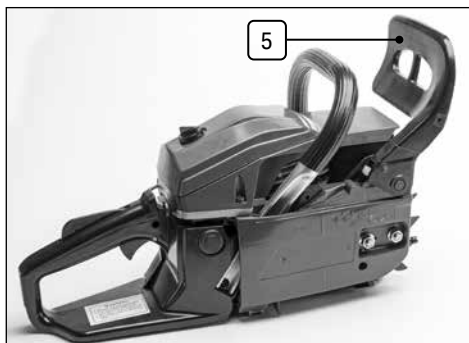


Fig. 1

2. Use the combination box spanner **(32)** to remove the two guide bar locking nuts **(19)**.

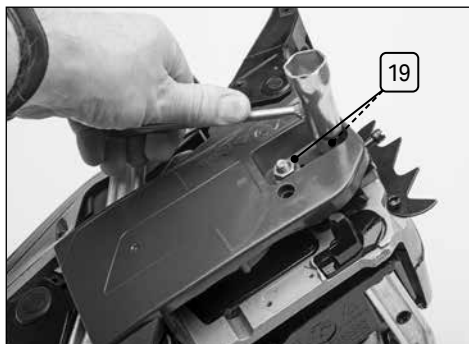


Fig. 2

3. Loosen the chain tension adjuster screw **(26.1)** or **(26.2)** using a cross-slot screwdriver. Turn anticlockwise to retract the chain tension adjuster pin **(24)**.

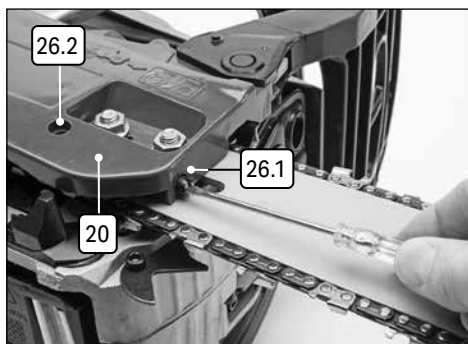


Fig. 3

Note: Tension adjuster screw for **80103** marked as **(26.1)** and **80106** marked as **(26.2)** on Fig.3.

4. Pull the clutch cover **(20)** away and off the machine.
5. Fit the chain **(3)** behind the clutch **(22)** and around the drive sprocket **(23)**, paying particular attention to the cutter orientation.

Note: The chain is driven on the top of the guide bar away from the power head. The direction of rotation arrow **(30)** is marked on both the saw chain cutters and links. Ensure the drive sprocket teeth are correctly meshed with the drive links.

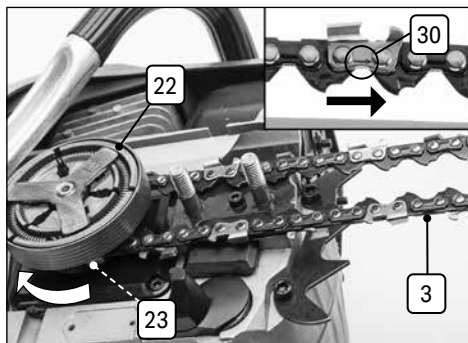


Fig. 4

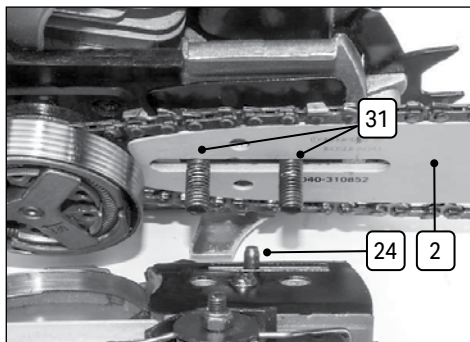


Fig. 5

6. Position the guide bar (2) onto the bar locking threads (31). Then locate the chain tension adjuster pin (24) into the guide bar aperture.

Note: The tension pin location may need to be pre-adjust to assist with fitting.

7. Slot all the drive links into the guide bar groove. Mesh the drive links at the tip of the bar correctly round into the nose sprocket teeth.
8. To put some tension on the saw chain, slide the guide bar away from the bar head.



Fig. 6

9. Using a screwdriver tighten the chain tension adjuster screw (26) clockwise before refitting the clutch cover (20). Ensure the chain and guide bar do not come apart and the drive links have not separated from the sprockets while fitting the clutch cover.

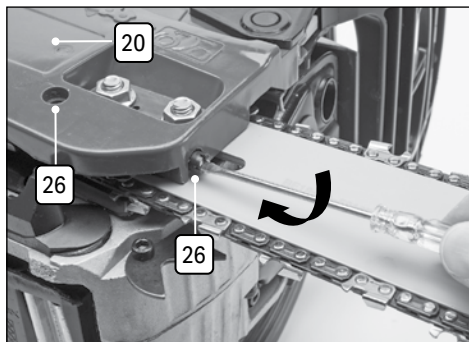


Fig. 7

10. Tighten the clutch cover (20) nuts by hand **ONLY** at this time to allow for further chain tensioning and adjustment.
11. Check the chain tension halfway along the guide bar by pulling the drive links out of the groove. Continue to tighten the chain tension until only a complete drive link (29) is visible.

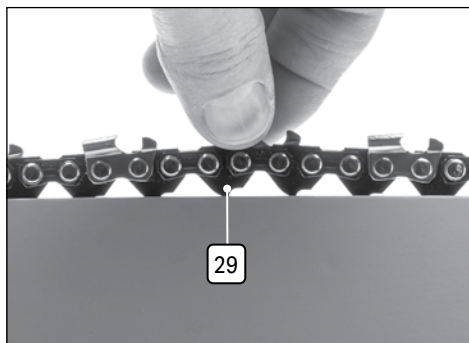


Fig. 8

12. Lift up the tip of the guide bar (2), keeping light pressure on the front of the power head while tightening the clutch cover nuts fully.
13. Once secure, ensure the chain brake is disengaged and check that the chain runs freely.

6. Assembly Instructions

6.2 Fuelling and Lubrication (Fig.9 – Fig. 10)

This chainsaw is equipped with a 2 stroke air cooled petrol engine and requires a mixture of fuel and oil to perform and function correctly.

Important: Failure to use the correct oil, fuel and mix ratio will cause permanent damage to the engine. Only use fresh, clean, good quality unleaded fuel with a high quality 2 stroke oil.

- **A mix ratio of 25:1 must be used. To mix a ratio of 25:1 add 200ml of 2 stroke oil into 5litres of unleaded fuel.**
- 1. Pour the petrol/oil mix into the mixing bottle (36) supplied, replace the cap and shake gently.

Note: the mixing bottle supplied is not suitable for storing or transporting the petrol/oil mix.

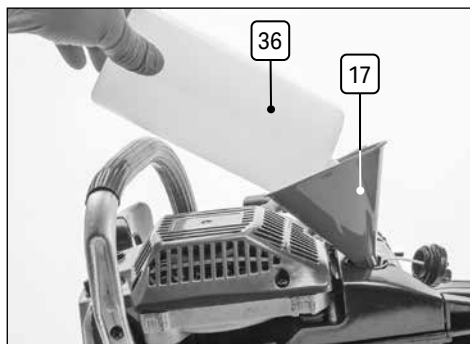


Fig. 9

2. Remove the fuel tank cap (17) by turning clockwise. With the aid of a funnel pour the mix into the fuel tank. Replace the cap firmly. **DO NOT** overfill and avoid spilling the mix.
3. Using oil specifically designed for lubricating chainsaw guide bars and saw, remove the chain oil tank cap (11) by turning anticlockwise.
4. With the aid of a funnel pour the lubricant into the tank and replace cap firmly.
- Wipe off any spilt fuel or oil immediately.

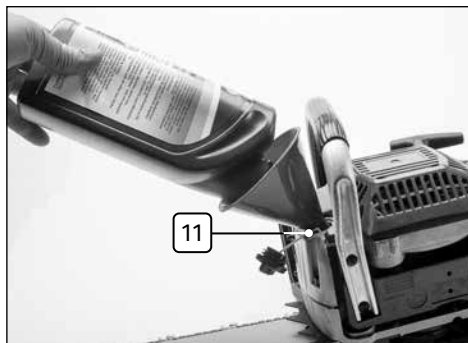


Fig. 10

Important: Before operating this product, read and understand all the safety instructions listed in this manual. Ensure that the product is fully assembled, correctly prepared for use and you are wearing the correct PPE.

Important: When first operating a chainsaw stop and check the tension after a few minutes work (Engine stopped and blade brake applied). This is necessary to allow an initial stretch to be taken up in the chain links.

WARNING! A loose saw chain is dangerous and could result in a serious accident.

7.1 Cold Starting the Chain Saw (Fig.11 – Fig.13)

1. Before starting, disengage the chain brake and rest the chainsaw on a stable surface.
2. Move the 'STOP' switch [16] to the 'ON' position and pull out the choke lever [13] fully.

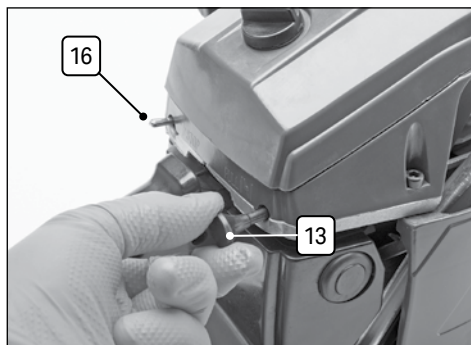


Fig. 11

3. Pass your foot through the rear handle [9] and stand on the hand guard [10].
4. Apply firm downward pressure on the wrap round handle [4]. With the other hand grip the recoil starter cord [6] – ensuring the chain and bar are free and not touching any objects.
5. Pull the starter cord using short sharp movements.
 - **DO NOT** use the full length of the cord as this can cause breakages or premature failure.
 - **DO NOT** release the starter cord and allow to recoil on its own.
6. Once the engine tries to fire, push the choke lever to the midway (throttle advance) position. Continue operating the starter cord until the engine starts.

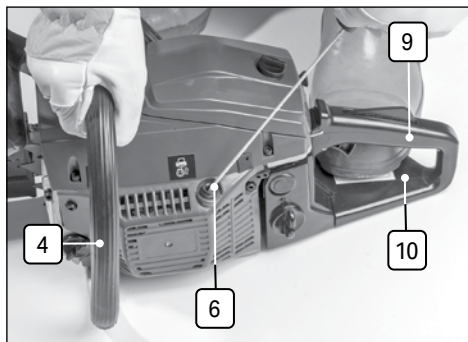


Fig. 12

CAUTION! chain will start rotating as the throttle is operated.

Note: If there is a strong smell of fuel this indicates that the engine maybe flooded. Stop the engine and wait a few minutes before attempting to restart.

7. When the chainsaw is running, hold it firmly and allow it to warm for 20 seconds before operating.
8. Grip the rear handle [9] and cover the throttle trigger lockout [14] with the palm of your hand.
9. Pull the throttle [15] a few times to increase the engine speed. Once the engine is at operating temperature it will tick over at normal speed.
 - If pausing the operating or moving more than three paces always engage the chain brake and stop the engine.
 - Always transport the chainsaw with the bar guard [1] in place.

WARNING! The chain will continue to move for a period after the throttle has been released.

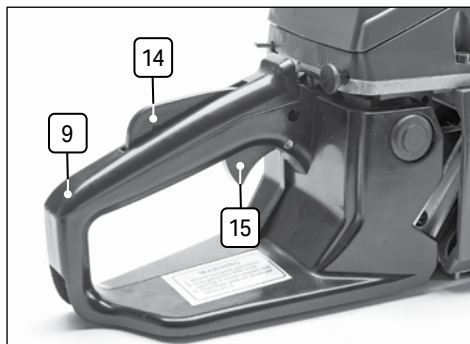


Fig. 13

7. Operating Instructions

7.2 Warm Starting the Engine

- Move the 'STOP' switch (16) to the 'ON' position and pull out the choke lever (13) to the midway position to engage.
- Pull the recoil starter cord (6) to start the engine.

7.3 Stopping the Engine (Fig.14)

Move the 'STOP' switch (16) to the 'OFF' position.

Note: If the chainsaw has been running at full speed for a prolonged period allow the saw to idle for a few minutes before stopping the engine.

- **ALWAYS** stop the engine when refuelling, topping up the chain oil, moving, cleaning or carrying out any checks or adjustments.

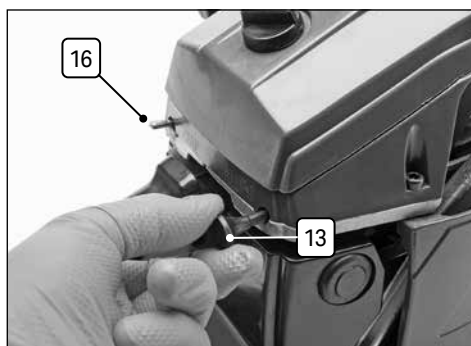


Fig. 14

7.4 Holding the Chainsaw (Fig.15 – Fig.16)

1. Hold the chainsaw power head close into the body. In this position the weight of the saw will be easier to manage and in the event of a kickback will be more controllable.
2. Firmly grip the rear handle pulling the power head tight into the hip/thigh area.
3. With the left hand grip the front handle with thumb on the underside. In this position with the body turned slightly towards the saw, if a kickback occurs the left arm will be stronger to brace against the force of the kickback.
4. Work at hip height or bend the knees instead of the back. This will be more comfortable and a safer stance to adopt.



Fig. 15



Fig. 16

7.5 Chain Brake

- Before starting any cutting, manually check the chain brake lever (5) moves backwards and forward correctly. Check with the saw pre-heated and ticking over.
 - If the chain brake is not functioning correctly switch off the engine immediately.
 - **DO NOT** attempt to operate the chainsaw until the issue has been resolved and the safety device is operational.
 - **A worn brake mechanism is dangerous, so have it checked by an authorised service agent regularly.**

7.6 Basic Cutting

Refer to the Health and Safety section before carrying out any cutting operations.

Ensure that the recommended checks have been carried out and the correct PPE is available.

- Immediately after any cutting operation release the throttle and return the chainsaw to idle.
- **DO NOT** force the chain to cut, allow it to cut at its own pace.
- The chainsaw is for cutting timber only.
- **DO NOT** allow the chain to come in contact with the ground as soil and dirt will dull the chain quickly. Hard wood will also rapidly dull the chain.
- When the chain is sharpened correctly, the cutting yield will be high and there should be no abnormal wear on the mechanical parts of the bar.
- Stop the chainsaw and clear the cut debris at regularly intervals to maintain a firm footing.

7.7 Felling (Fig.17 – Fig. 19)

- **ALWAYS** seek advice from the local authority prior to cutting down any trees as regulations, laws and protection orders may affect or prohibit the work involved.
- **NEVER** leave a partially felled or hung tree. In the event of the tree becoming hung in another tree or obstacle seek assistance from a professional.
- Ensure there is sufficient fuel to safely complete the felling cut.
- To fell a tree safely many factors need considering:
 - Establish a safe perimeter at least 2½ times the height of the tree.

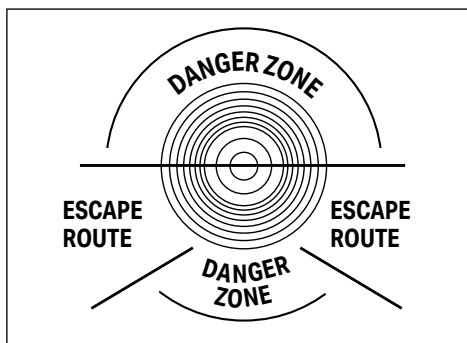


Fig. 17

- Place warnings of the activity taking place and prevent bystanders from entering the area.
 - The direction of the falling tree can be influenced but not guaranteed.
 - Roads, footpaths and services such as overhead power cables all present problems which need to be addressed before commencing the work. If unable to resolve these issues, have the work carried out by a trained professional.
 - The direction of fall can be changed by factors such as the wind, sloping terrain, tree growth (leaning, limb structure and decay) etc. Failure to observe or account for these factors can result in severe injury or fatality.
 - Plan an escape route and ensure all scrub and debris are cleared so that you can move quickly to safety if the felling direction unexpectedly changes.
- Remove the lower tree branches/limbs up to shoulder height. To protect against kickbacks use the tree trunk/stem for protection and keep the guide bar offset from the body.

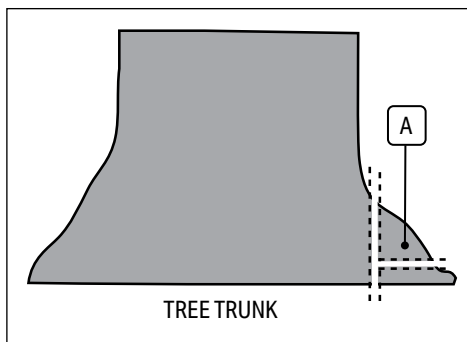


Fig. 18

7. Operating Instructions

- If the tree has large buttress roots (A) remove these to enable the direction notch (B) to be cut as close to the ground as possible.
- The direction notch (B) should be started 45° down into approximately 1/3 of the tree's diameter. Cut the bottom of the notch at 90° and remove the wedge.

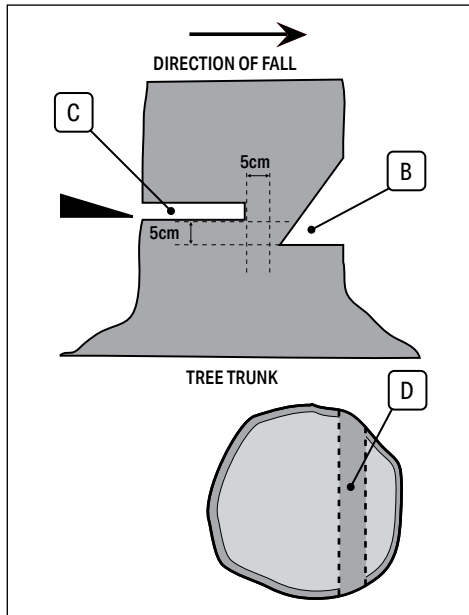


Fig. 19

- On the opposite side and 5cm higher than the bottom of the notch, make the felling cut (C) at 90°. Make the cut in one go and stop 5cm from the back of the notch. This creates the hinge (D) to help control the felling. The hinge must be parallel.
 - Use the spike bumper (21) to obtain a firm grip and leverage while cutting.
 - Wedges should be used to prevent the saw being pinched and to complete the fell safely.
- For safety when the tree starts to fall move back and away at 45° as quickly as possible. Branches on the underside of the tree can cause the trunk/stem to move sideways or backwards.

7.8 Delimbing (Fig.20)

- Ensure the tree is stable before work commences.
- Ideal work height is between waist and knee height.
- If the felled tree is on a slope always stay above the tree in case the removal of the limb causes dangerous movement.
- When removing smaller branches with a single cut keep the tree between you and the chain.
- For larger limbs make three cuts.
 - Use the top of the guide bar for the initial cut (E) 1/3 through the tensioned underside of the limb.
 - Make the second cut (F) all the way through using the underside of the guide bar.
 - The third cut (G) is to leave a neat collar and only necessary if the tree is not being felled.

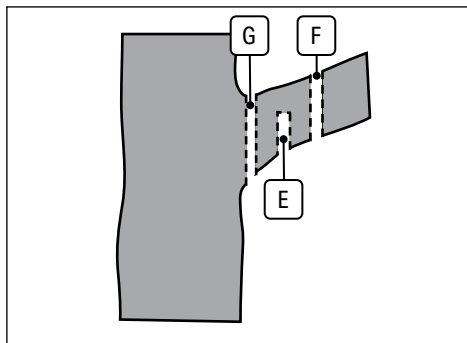


Fig. 20

- On a felled tree always work from butt/roots to tip with the tree on your right side. Always keep the trunk between you and the guide bar.

7.9 Cross Cutting/Bucking (Fig.21 – Fig.23)

- When cross cutting the compression face must always be cut first followed by a second cut from the other side to meet and complete the cut. The initial cut should be 1/3 the diameter and the second cut 2/3.
- Incorrectly assessing the tension can result in the chain pinching or the timber splintering.

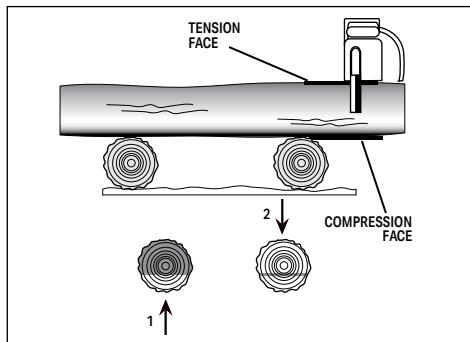


Fig. 21

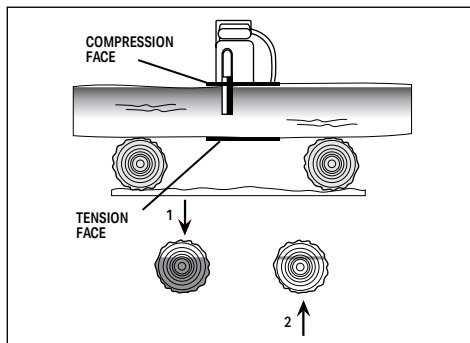


Fig. 22

- Always use a log saw stand/horse for smaller logs. Secure smaller logs before cutting as the chain speed can cause the log to move and kick up.

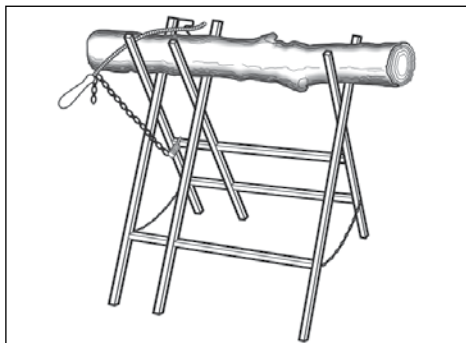


Fig. 23

- Use the spiked bumper to achieve a firm grip and leverage while cutting.

8. Maintenance and Troubleshooting

Important: Always stop the engine, engage the chain brake and allow to cool down before carrying out any maintenance, cleaning or adjustments to the chainsaw.

- **DO NOT** carry out any repairs to this chainsaw unless you are qualified to do apart from the items listed in this section. Have damaged parts replaced by an authorised service agent before using this product.



DANGER! DO NOT make any changes or modifications to this chainsaw. In case of repairs use genuine spare parts recommended by Draper Tools.

8.1 General Maintenance

- **ALWAYS** stop the engine and allow to cool down before cleaning, transporting or storing the chain saw.
- Maintain the chainsaw in good working order and regularly serviced by an authorised service agent. Ensure the handle remain clean and free from oil, fuel and moisture.
- Regularly check external nuts and fixings to ensure vibrations during normal operation has not loosen them.
- Clean the plastic surfaces after each use with a mild detergent and sponge. **DO NOT** use aggressive cleaning agents.
- Periodically remove any shavings or sawdust from the visible parts of the chain mechanism.
- To avoid engine problems, empty the fuel tank if storing for longer than 30days. **NEVER** use engine or carburettor cleaning products in the fuel tank as this could cause permanent damage.
- **DO NOT** store the chainsaw or fuel in an enclosed area where fuel vapours can reach sparks or flames from switches, heaters or electric motors etc.
- Store the chainsaw in a safe, dry area out of the reach of children.

8.2 Chain Lubrication (Fig.24)

- Prior to use check the chain oil distribution on a piece of paper or cut timber.
- If the chain is not sufficiently lubricated check the oil tank level (See section 6.2). If the oil level is sufficient increase the oil flow by rotating the setting screw [24.1].

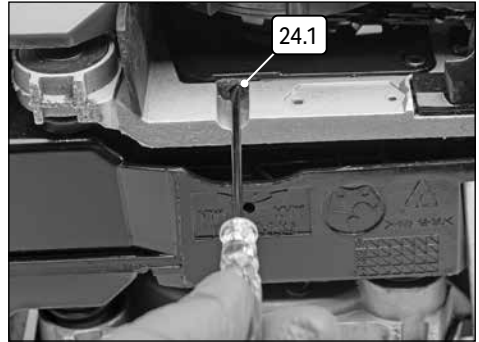


Fig. 24

- If the problem persists, stop the engine and allow to cool. Remove sawdust from behind the clutch cover and clean the bar groove.

8.3 Chain Sharpening (Fig.25)

Note: Sawdust instead of chips indicates that the saw chain needs sharpening or replacing.

- Before sharpening, use the chain tension screw [26] to make the chain taut.

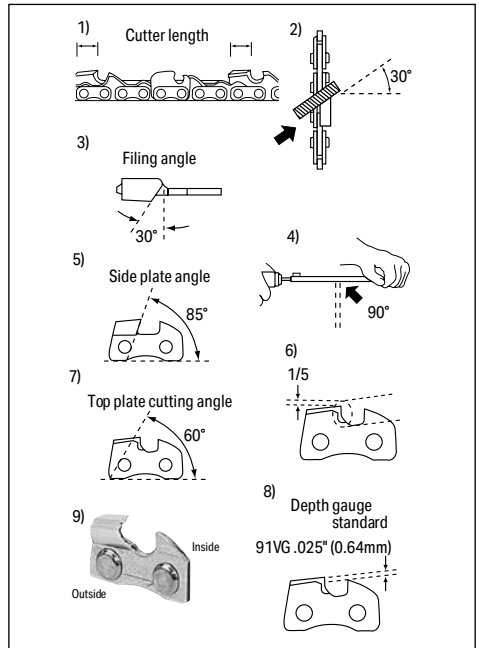


Fig. 25

- During sharpening, lock the chain using the brake **[5]**.
- Ensure that every cutter is filed to the same length and angle and all depth gauge **[28]** links are the same height (**Fig.25 -1**). Inconsistent angles can result in a poor cut or endanger the operator.
- Use a round file specific for the chain fitted – observe the sharpening angles as shown on **Fig.25 (2, 3, 5, 7, 8)**.
- Position the file to project 20% of its diameter above the cutter (**Fig.25 – 6**).

8.4 Carburettor Adjustment (Fig.26)

- During this process the chain will be moving. Ensure suitable protective equipment (PPE) is worn.
 - **Note:** the chain **MUST NOT** move while the engine is at idle speed.
 - The carburettor has been set at standard values during manufacturer and adjustments to these values may be required occasionally.
1. To adjust, start the engine and allow to idle.
 - If the engine stalls the idle speed is too low.
 - If the chain moves the idle speed is too fast.
 2. Use a cross-slot screwdriver to turn the adjustment screw **[12]**.
 - Clockwise to increase the engine speed.
 - Anticlockwise to decrease the engine speed.



Fig. 26

8.5 Bar Maintenance

- Periodically clean the chain run grooves and oil passages.
- Lubricate the sprocket wheel with bearing grease.
- Reverse the guide bar regularly to ensure uniform wear.

- Burring on the guide bar rail is normal – remove these burrs as appropriate with a flat file.
- Replace the guide bar when the chain run groove is worn, the bar is damaged or if excessive burring or heating occurs.

8.6 Air Filter (Figs.27 – Fig. 28)

- A clogged air filter can reduce the engine efficiency, reducing the cutting performance and increasing the fuel consumption.
 - Clean the air filter more frequently when the wood being cut is dry or the work environment is dusty.
1. Remove the top cover **[8]** by loosening the screw **[7]**.

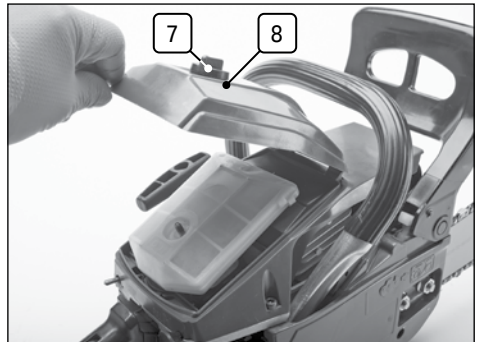


Fig. 27

2. Remove the filter **[8.1]** from the chainsaw and brush out any loose dirt. If the dirt is hard to remove wash the filter using hot soapy water. Ensure the filter is fully dry before refitting.

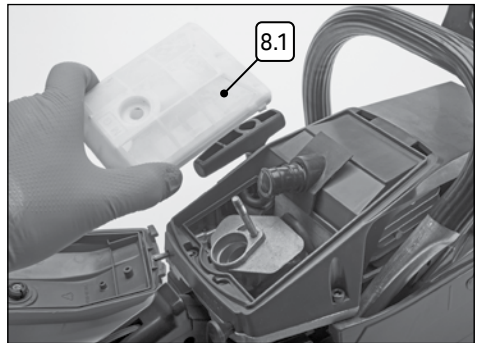


Fig. 28

3. Replace the filter if damaged, deformed or cracked.

8. Maintenance and Troubleshooting

8.7 Fuel Filter (Fig.29)

- Replace the fuel filter (17.1) annually.
1. To change the fuel filter, unscrew and remove the fuel tank cap (17).
 2. Gently pull out the fuel filter from the tank using a pair of long nose pliers.
 3. Replace the filter and refit the fuel cap securely.



Fig. 29

8.8 Spark Plug (Fig.30 – Fig.31)

- The spark plug should be replaced annually or if the chainsaw is experiencing starting problems.
1. Remove the top cover (8) to reveal the spark plug.
 2. Carefully pull off the spark plug HT lead. Then unscrew the spark plug using the box spanner (32) supplied.



Fig. 30

3. If the electrodes are excessively soiled or very worn, replace the spark plug. Excessive soiling can be due to the incorrect ratio of oil to fuel being used.
- **Note:**
 - Ensure the spark plug has the correct heat range for this chainsaw.
 - The spark plug gap should be 0.6mm. Use feeler gauges to check the gap is correct.

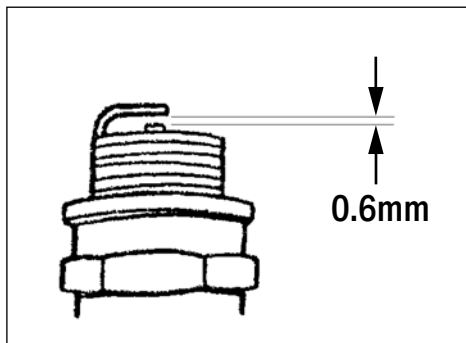


Fig. 31

8.9 Troubleshooting

Problem	Possible cause	Remedy
Engine will not start or only runs for a few seconds.	Fuel tank empty.	Fill with correct fuel/oil mixture – See Section 6.2.
	No fuel reaching carburettor.	Check fuel filter – clean or replace if required. See section 8.7. Check for damage to fuel line.
	Engine flooded.	Wait a few minutes then restart.
	'Stop' switch in 'OFF' position.	Move switch to 'ON' position
	Spark plug soiled or worn.	Clean or replace spark plug – See Section 8.8.
Engine does not idle correctly.	Carburettor requires adjusting.	Adjust carburettor – See Section 8.4.
	Other issues.	Contact Draper Tools for advice.
Engine stutters or stalls under load.	Spark plug soiled.	Clean or replace spark plug – See Section 8.8.
	Air filter dirty.	Clean or replace filter– See Section 8.6.
	Carburettor requires adjusting.	Adjust carburettor – See Section 8.4.
Chain not moving or too tight.	Chain brake engaged.	Disengage chain brake.
	Insufficient chain lubrication.	Fill chain oil tank.
Excessive smoke from engine.	Too much oil mixed with unleaded fuel.	Empty fuel tank and refill with correct oil/fuel mixture.
Chain moves while engine at idle.	Carburettor requires adjusting.	Adjust carburettor – See Section 8.4.
	Clutch fault.	Contact Draper Tools for advice.

9. Spares, Returns and Disposal

For spare parts, servicing, and repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent.

Draper Tools will endeavour to hold any spare parts, if applicable, for seven years from the date that it sells the final matching stock item.

Any servicing or repairs carried out by unauthorised personnel or installation of spare parts not supplied by Draper Tools will invalidate your warranty.

Important: For safety, **ALWAYS** drain and clean the product of any oil, fuel, chemicals or other substances before returning it to Draper Tools or its authorised agent. Store these materials in suitable containers and dispose of them in accordance with local regulations. Draper Tools and its agents cannot be responsible for the disposal of these substances.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- Dispose of oil separately and in accordance with local regulations; **DO NOT** abandon it in the environment.



10. Warranty

Draper Tools products are carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. Contact information can be found at the back of this manual.

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 covers parts and labour for 12 months from the date of purchase. Where tools have been hired out, the warranty period covers 90 days from the date of purchase.

This warranty does not apply to any consumable parts, batteries 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 Tools repair agent.

In all cases, to make a claim for faulty workmanship or materials within the standard warranty period, please contact or return the product to the place of purchase. Proof of purchase may be required.

If the place of purchase is no longer trading or if you experience any difficulties with your warranty, please contact Customer Services with the product details and your proof of purchase. Contact details can be found at the back of this manual.

If the tool is not covered by the terms of this warranty, repairs and carriage charges will be quoted and charged accordingly.

This warranty supersedes any other guarantees expressed or implied and variations of its terms are not authorised.

Your Draper Tools guarantee is not effective until you can produce, upon request, a dated receipt or invoice to verify your purchase within the guarantee period.

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

Draper Tools Limited



Read the instruction manual .



Always wear safety footwear



Wear protective gloves



Wear protective face wear



Wear ear defenders



No naked flames



Warning!



Warning! Petrol is extremely flammable, allow the engine to cool 2 minutes before refueling



Warning! Do not start or run engine in enclosed area, even if doors or windows are open



Warning! Danger of kickbacks. Kickbacks can cause lethal wounds



Single value noise marking.
(Maximum declared A-Weighted sound power level in decibels).



European conformity.



UK Conformity Assessed.

Contact Details

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Please contact the Draper Tools Product Helpline for repair and servicing enquiries.