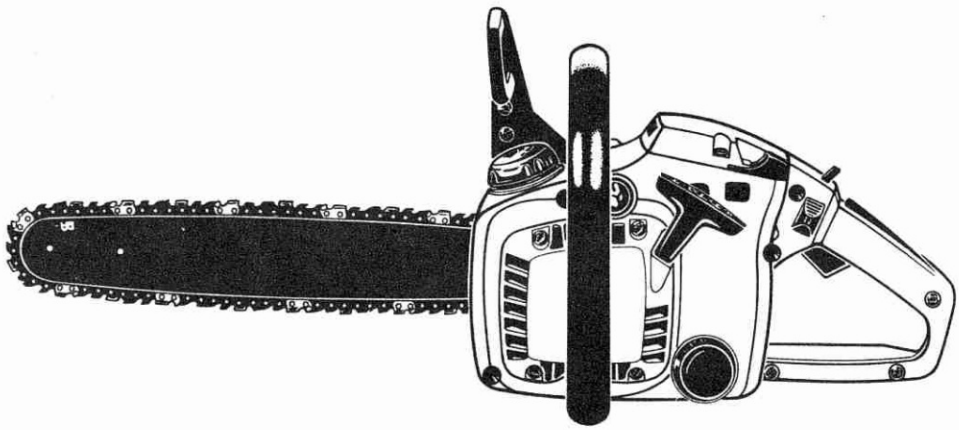
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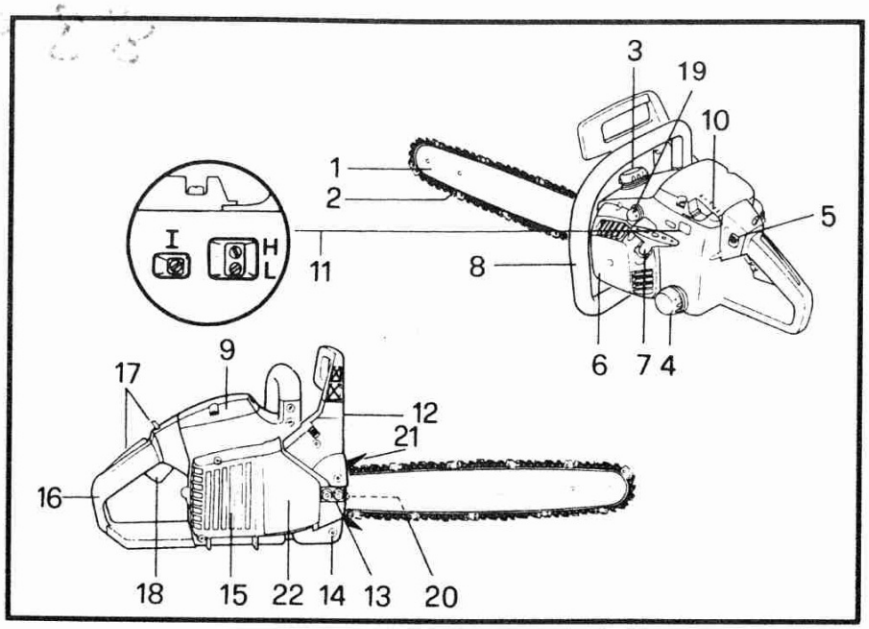
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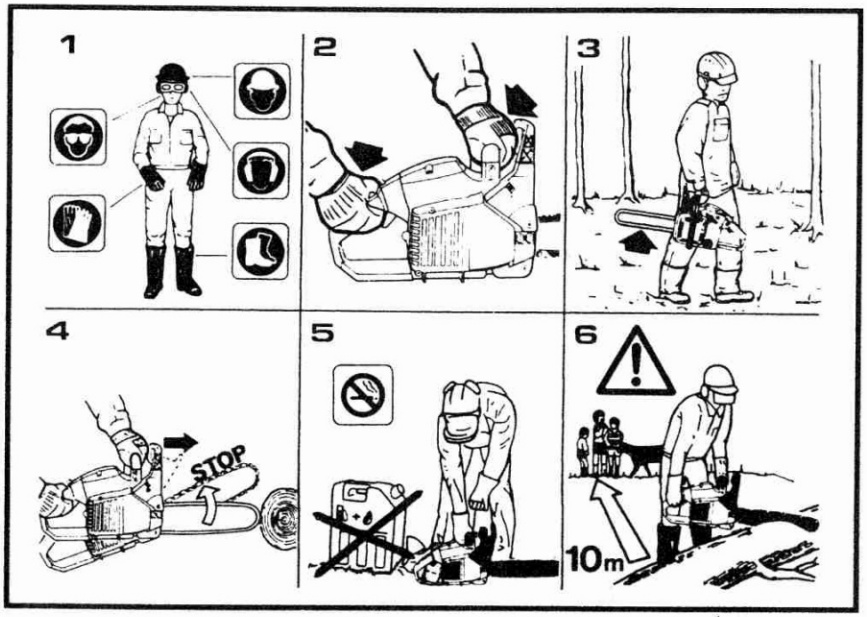
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Mini Mac 833AV 32cm³
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MAC 836AV 35cm³
MAC 837AV 38cm³
MAC 838AV 38cm³
MAC CAT 839 38cm³

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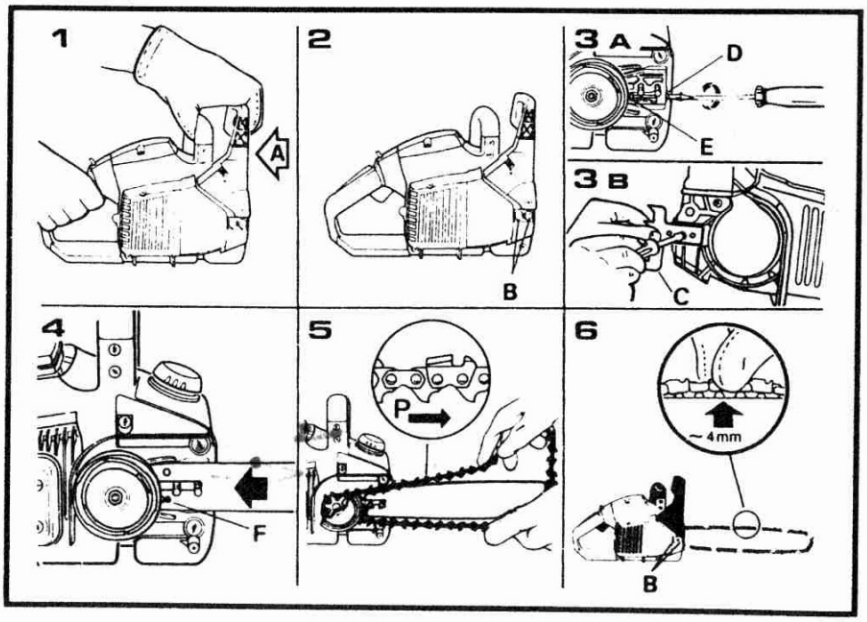
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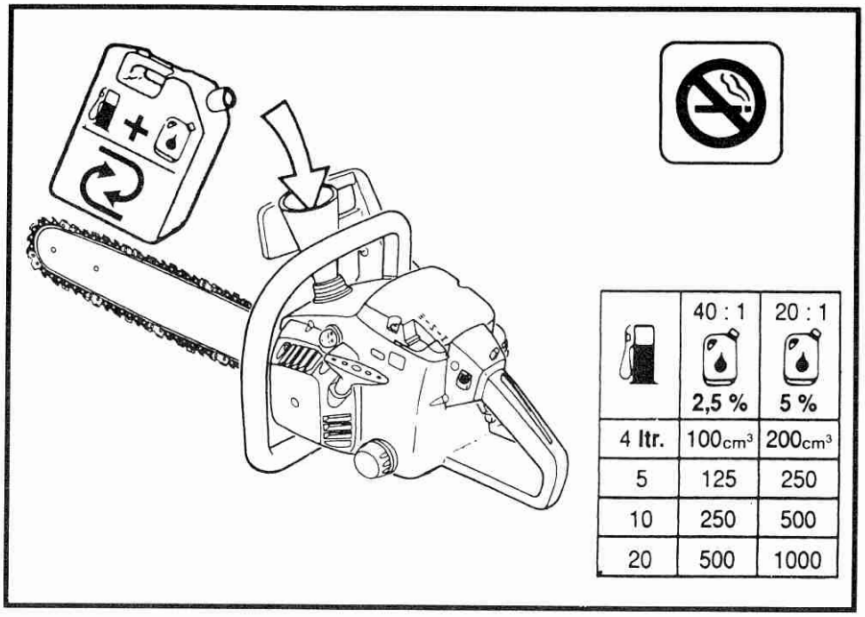
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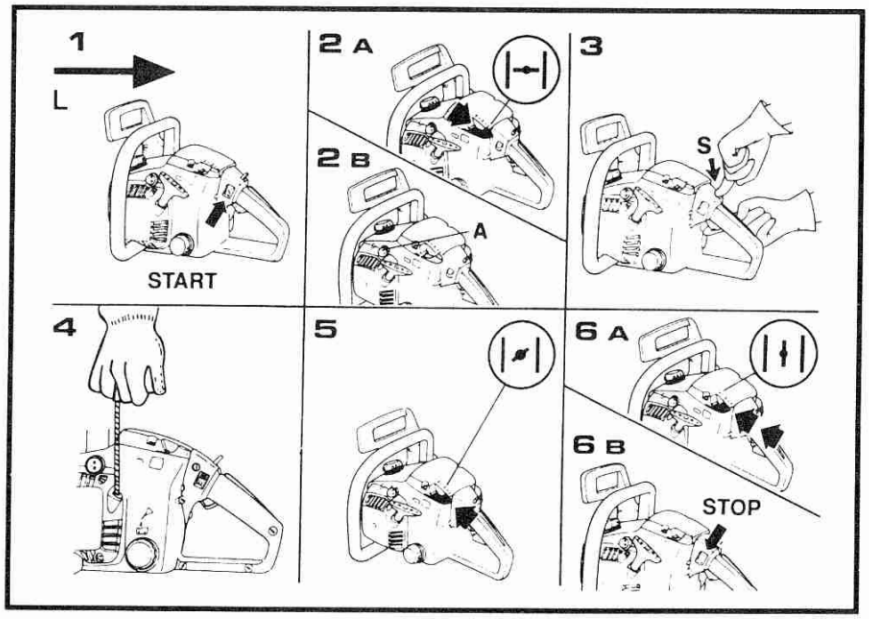

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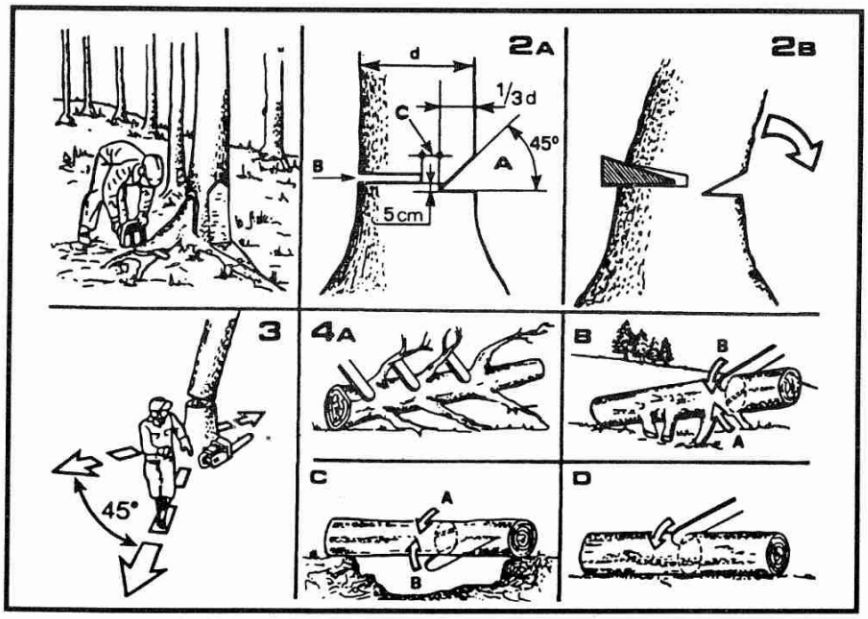


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20	500	1000

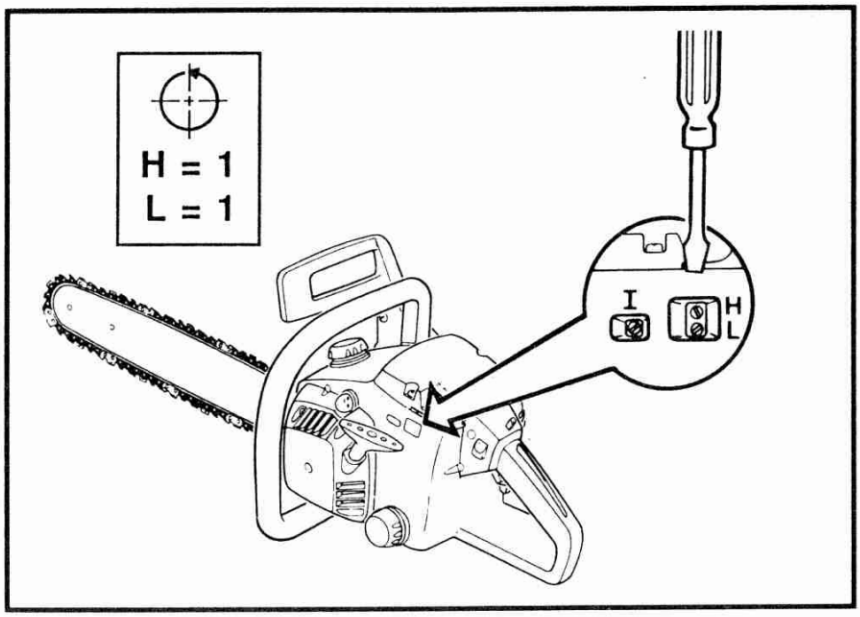
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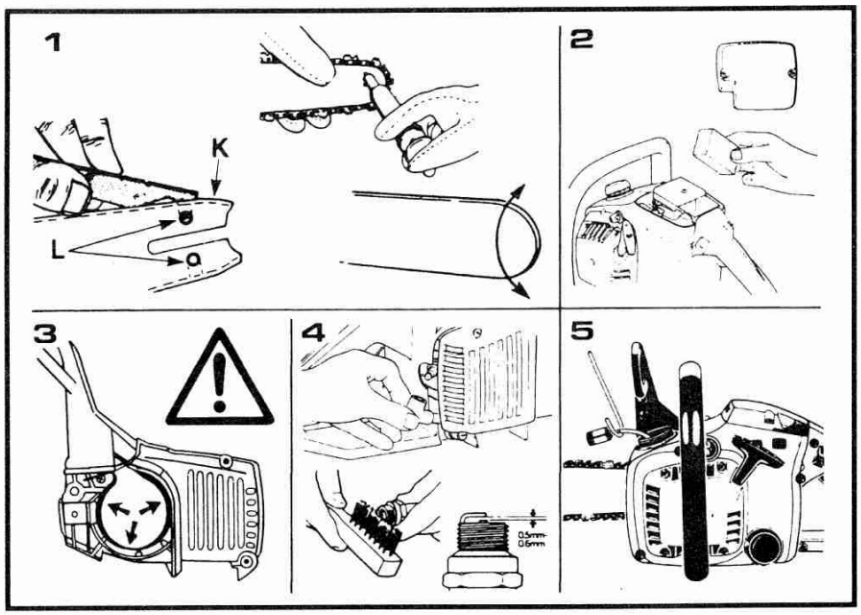
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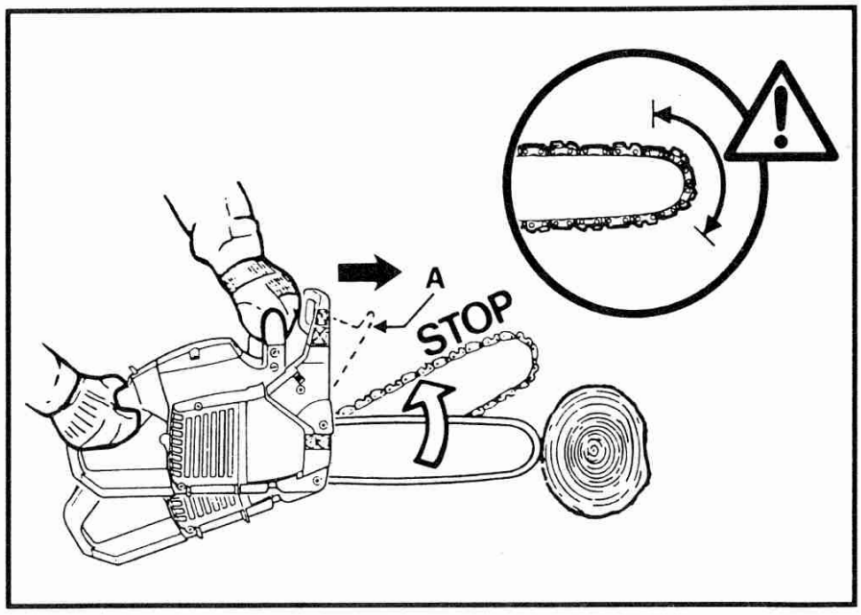
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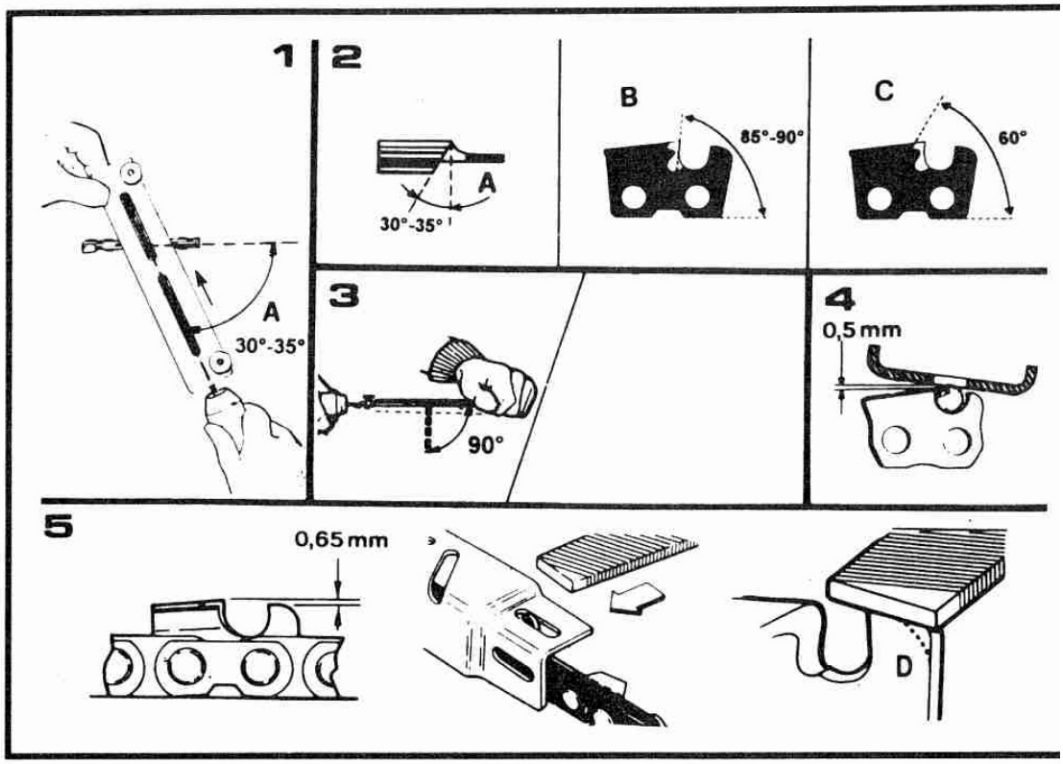
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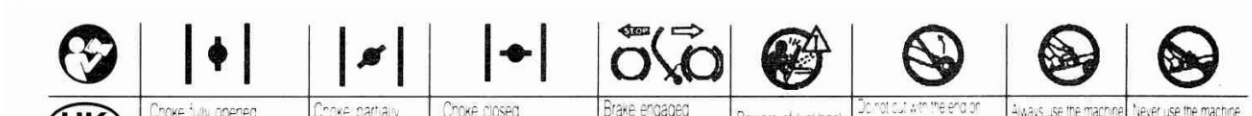


TECHNICAL DATA

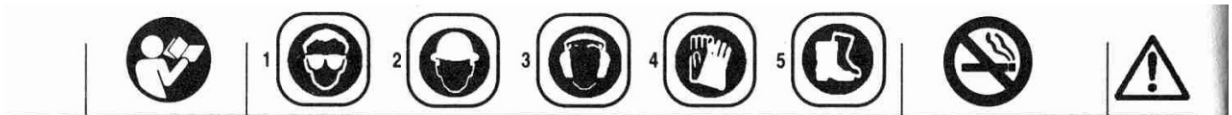
THIS PRODUCT MEETS THE SAFETY STANDARD REQUIREMENTS OF THE EUROPEAN MACHINERY DIRECTIVE

UK

DISPLACEMENT (cm^3)	32	35	38
BORE AND STROKE (mm)	36.3x30.4	38x30.4	39.6x30.4
ENGINE OUTPUT (kW)	0.9	1.1	1.25
ENGINE SPEED AT MAX POWER (min^{-1})	8.000	8.000	8.000
MINIMUM SPEED (min^{-1})	3.000	3.000	3.000
DRY WEIGHT (Kg) (NO BAR AND CHAIN)	4.5	4.8	4.8
CHAIN PITCH (9.525 mm)	0.375"	0.375"	0.375"
CHAIN GAUGE (1.3 mm)	0.050"	0.050"	0.050"
BAR LENGTHS (cm)	30/35	35/40	35/40/45
No . OF SPROCKET TEETH	6	6	6
OIL TANK CAPACITY (cm^3)	180	180	180
FUEL TANK CAPACITY (cm^3)	290	290	290
SOUND PRESSURE LEVEL (AT THE OPERATOR'S EAR). LpAav (dBA) (ISO 7182)	99.9	97.9	99.6
SOUND POWER LEVEL LwAav (dBA) (ISO 3744)	110	108	110
VIBRATION LEVEL (ISO 7505) (m/s^2)	9.7	10.1	6.2

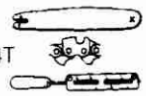
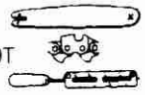
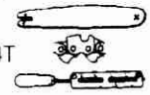
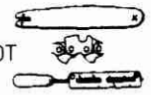


UK	Choke fully opened (hot start, run)	Choke partially opened	Choke closed (cold start)	Brake engaged / Brake disengaged	Beware of kickback	Do not cut with the end of the bar: this may cause «Kickback»	Always use the machine with both hands	Never use the machine with both one hand



UK	Read operators manual carefully	Wear safety clothing. **1** Approved safety glasses or face shield / **2** Approved safety helmet / **3** Approved ear defender / **4** Approved gloves / **5** Approved safety footwear	Do not smoke while re fuelling or while operating the trimmer	Warning Caution

SUMMARY CHART TO IDENTIFY THE CORRECT COMBINATION OF BAR/CHAIN - FILE/FILE HOLDER

	MINI MAC 832	MINI MAC 833 AV	MAC 835 AV	MAC 836 AV	MAC 837 AV	MAC 838 AV	MAC CAT 839
12" 300 mm  44T	214234 B 214921 B 214215 B	214234 B 214921 B 214215 B					
14" 350 mm  49T	214235 B 214919 B 214215 B	214235 B 214919 B 214215 B	214235 B 214919 B 214215 B	214235 B 214919 B 214215 B	214235 B 214919 B 214215 B	214235 B 214919 B 214215 B	214235 B 214919 B 214215 B
16" 400 mm  54T			214236 B 214925 B 214215 B	214236 B 214925 B 214215 B	214236 B 214925 B 214215 B	214236 B 214925 B 214215 B	214236 B 214925 B 214215 B
18" 450 mm  60T					229157 B 228546 B 214215 B	229157 B 228546 B 214215 B	229157 B 228546 B 214215 B

UK ENGLISH

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A GENERAL DESCRIPTION

1. BAR
2. CHAIN
3. FUEL TANK CAP
4. OIL TANK CAP
5. STOP SWITCH
6. STARTER HOUSING
7. STARTER HANDLE
8. FRONT HANDLE
9. AIR FILTER COVER
10. CHOKE KNOB
11. CARBURETTOR ADJUSTMENT SCREWS
12. SAFETY CHAIN BRAKE
13. BAR RETAINING NUTS
14. CHAIN CATCHER
15. MUFFLER SHIELD
16. REAR HANDLE
17. THROTTLE TRIGGER LOCKOUT/THROTTLE ADVANCE
18. THROTTLE TRIGGER
19. PRIMER BULB
20. CHAIN ADJUSTER SCREW
21. SPIKE
22. CHAIN BRAKE COVER

B SAFETY PRECAUTIONS

1 **All operators should read this manual carefully before using this chainsaw.**

Wear suitable clothing. This should include snugly-fitting (safety) clothing, sturdy boots, heavy duty gloves, goggles or a face screen and ear plugs or ear mufflers. Wear a helmet if there is risk of falling objects or projections from trees.

2 Always hold the chainsaw firmly with both hands when the engine is running. Always maintain a firm foothold. Ensure you are able to stop the engine quickly if necessary. Do not work up a tree unless you have received suitable training and have the appropriate equipment (belts, ropes, safety hooks etc) for this type of work. We strongly recommend that all first-time chainsaw users obtain practical instruction on safe chainsaw usage before operating the chainsaw. Do not operate this machine when tired or under the influence of any substances, drugs or alcohol which can impair vision, dexterity or judgement.

Prolonged use of chainsaws or other machines exposing the operator to vibration may produce Whitefinger's Disease (Raynaud's Phenomenon). This may reduce the hands' ability to feel and regulate temperature and may produce general numbness. Continual or regular users should therefore monitor closely the condition of their hands or fingers. If any of the symptoms appear, seek immediate medical advice.

3 Never carry the chainsaw with the engine running. Whenever carrying a chainsaw, even for short distances, the chain should be covered by the chain guard (scabbard) and the bar should point backwards. When transporting the chainsaw in a vehicle, secure the saw to prevent fuel spillage.

4 To avoid kick-back, do not attempt to cut with the nose of the bar. Ensure the engine is running at full throttle before commencing to cut. To avoid kick-back, do not let the nose of the bar come into contact with logs, branches, the ground or any other obstruction. Do not allow any part of the chain to come into contact with rock, nails or wire fence. Ensure the chain is kept sharp and correctly tensioned. Keep the spike or the saw body against the wood

when cutting. Use only genuine accessories and spare parts. We recommend you have your unit periodically checked and serviced by an authorised dealer. Do not use chainsaw above shoulder height.

5 Do not operate the chainsaw near a naked flame or spilled fuel. Only operate the chainsaw outside and in well ventilated areas.

After re-fueling, always wipe off any spilled fuel. Move the chainsaw away from the fueling point before starting the engine.

6 Keep by-standers and animals out of the work area; at a minimum distance of 10 m or twice the timber length necessary, use warning signs to keep on-lookers at a distance.

Carefully survey the working site to note any hazards, eg. roads, paths, electricity cables, dangerous trees etc. Do not use the chainsaw if the device stopping the chain (safety chainbrake) does not work correctly.

Never place hands on the chain whilst the engine is running.

Ensure someone is within hearing distance in case of an accident. If this is not possible, it is recommended that users operating chainsaws in remote areas carry an adequate first-aid kit with them and ensure someone knows their location.

Never leave the engine running whilst the tool is unattended.

ONLY USE ORIGINAL SPARE PARTS AND ACCESSORIES.

C BAR AND CHAIN INSTALLATION

Ensure the stop switch is in the "off" (O) position before attempting any kind of maintenance or adjustment. Always wear a pair of sturdy gloves when fitting or adjusting the chain.

1 Ensure chain brake lever is in disengaged position **(A)**.

2 Remove retaining nuts **(B)** and cover.

3A Turn the adjusting screw **(D)** counterclockwise taking it fully back.

3B Screw the filling spike into the clutch cover having taken off and descarded the metal plate.

4 Position the bar as illustrated ensuring the adjusting tang fits into the adjusting hole **(F)** on the bar.

5 Feed chain on to the sprocket and into the bar groove ensuring correct direction of chain **(P)**. Check chain is correctly engaged on drive sprocket and runs freely in bar groove.

6 Reposition side cover locking nuts **(B)** finger tight.

Adjust tension screw **(D)** so that when lifting the chain an entire drive link is just visible.

The chain is correctly tensioned when there is no slack on the underside of the bar, and it runs freely in bar groove. Tighten the bar retaining nuts with the wrench, pushing bar tip upwards.

D FUEL MIX

Use only fuel recommended by this manual. This product is fitted with a 2-stroke engine and therefore requires a 2-stroke petrol and oil mix. Use leaded (4 Star) or unleaded petrol with a minimum octane rating of 90. When using leaded petrol, use 2.5% (40:1) of McCulloch oil, otherwise use 5% (20:1) of a high quality 2-stroke engine oil (from a recognised brand). When using unleaded petrol, use 2.5% (40:1) of McCulloch oil or use 2.5% (40:1) of a high quality synthetic 2-stroke engine oil.

Only use oil from sealed containers. In order to obtain a good fuel mix, put the oil into the container before the petrol.

IMPORTANT

Always shake this fuel mix vigorously each time you use it. We recommend to carry out this operation each time you use the fuel.

Fuel mix properties deteriorate with time, we therefore recommend that you only make the quantity of fuel mix you will need for each usage. Do not use fuel mix more than a week old as this could damage the engine.

WARNING

Do not smoke when re-fuelling. Always open the fuel cap slowly. Re-fuel in open spaces only, keeping away from naked flames or sparks.

Always store fuel in an approved container.

SAFE STORAGE OF FUEL

Petrol is highly inflammable. Put out all cigarettes, pipes and cigars before working with petrol. Avoid spilling petrol. Store fuel in a cool, well ventilated place, in an approved container specifically designed for the purpose. Never store engine with fuel in the tank in enclosed, poorly ventilated areas, where fuel fumes may reach an open flame, spark or pilot light such as in a furnace, water heater, clothes dryer etc. Petrol fumes can cause an explosion or a fire. Do not store large amounts of fuel. To prevent possible restarting problems avoid running the fuel tank dry. This also helps to extend engine life.

CHAIN LUBRICATION

IMPORTANT The service life of the bar and chain depends on good lubrication.

Always use chain lubricating oil of medium viscosity. We recommend special McCulloch chain lubricating oil. Never use waste oil for this purpose. This results in damage to the bar, the chain and the oil pump. Refill the chain oil tank each time the saw is refuelled.

Important. The chain oil feed is reduced to a minimum ëwhen the regulating bolt is completely closed (turning clockwise).

E STARTING AND STOPPING

IMPORTANT. Never start or operate the saw unless bar and chain are properly installed. Before starting always move the saw away from the fuelling area and place it on firm, flat surface, the guide bar to the front.

1 Check that the chain brake is in the disengaged position moving the trigger **(L)** backwards (towards the front handle). Move the stop switch upwards.

2A Slide the choke lever to the "closed" position |←|.

2B Push the primer bulb **(A)** at least 10 times.

3 Depress throttle advance button **(S)** and squeeze the throttle trigger at the same time. Release trigger, and then the safety button. The throttle advance is now engaged leaving both hands free to start the saw safety.

4 Place the saw on a firm,flat surface,hold it firmly and pull the starter rope 4 times at least. Beware of moving chain!

5 Move choke lever to the "half closed" position |◪|. Hold the machine firmly and pull the starter rope 4 times at least. Engine should start. Allow to run for 10 seconds, this will allow engine warm up for better cutting performance.

6A Release the throttle advance by depressing and releasing the throttle trigger. Move the choke lever to the "open" position. If engine fails to start, repeat these instructions.

6B The engine is stopped by depressing the STOP switch (STOP position).
After lengthy use of the chain saw at full speed, we recommend to run the engine for a few seconds at idle speed before stopping it.

F USAGE

IMPORTANT. Before using a chain saw read carefully the Manual and all safety precautions carefully.

FELLING TREES

- Make sure that there are no bystanders or animals in the work area.
- Study the direction of the fall of the tree and then plan your exit path away from the planned direction of fall.
- Don't fell trees when there is a strong wind.

1 Clear the tree base of interfering limbs and brush. Clean the work area from stones or other objects which could damage the chain. If the tree has large protruding roots, remove them before felling (see illustrations).

2 **A)** Cut a felling notch **(A)** of 45°on the side you want the tree to fall to a depth of about one third of the trunk diameter **(D)**. Then make a felling cut **(B)** about 5 cm higher than the felling notch on the opposite side of the tree. Make sure that the felling cut does not go right through the trunk. A hinge **(C)** must always be left to provide control over the direction of the fall.

B) Use wedges to control the moment and direction of the fall.

3 When the tree starts to fall, walk away along your preplanned escape path.

CUTTING FALLEN TRUNKS

4 **A) Limbing thick branches**. For limbing and bucking leave the lower limbs to support the log off the ground.

B) Supported at one end only. Begin with a bottom cut made by the upper side of the bar **(A)**; the depth of the cut should be about one third of the log diameter **(A)**.
Finish with a top cut **(B)** meeting the first one. With this technique splitting, cracking can be avoided.

C) Supported at both ends. Begin with a top cut about one third of the log diameter.
Then finish with a bottom cut **(B)** meeting the first one. This technique avoids the risk of pinching the bar in the log.

D) If the log is supported along its whole length it may be cut normally from above. Take care not to touch the ground with the chain.

- When working on a slope always stand on the uphill.
- When cutting prepared timber, use clamps or chocks to secure work.
- Use extreme caution when cutting small size brush and saplings which may catch the chain and pull you off balance.

G CARBURETTOR ADJUSTMENT

N.B. We suggest carburettor adjustments are made by an authorized service dealer.

The carburetor has three adjustment screws:

- **L**: The needle **screw (L)** governs the fuel flow at low speed and also the acceleration from low to full speed.
  To set **screw (L)**: close screw **(L)** turning it clockwise without forcing ↻.
  Then open screw 1 full turn (counterclockwise) ↺.
  If acceleration is not smooth, open another 1/8 turn to increase fuel flow ↺.
- **H**: The needle **screw (H)** governs fuel flow at high speed (throttle valve fully open).
  To set hi speed screw **H**: close screw **(H)** turning it clockwise without forcing ↻.
  Then open screw 1 full turn (counterclockwise) ↺.
  If the engine speed is too high (the maximum speed with bar and chain on should not exceed 10.200 min^{-1}), open the screw about 1/8 turn (counterclockwise) ↺. Optimal adjustment is found between 1 and 1 1/4 turns.
- **I**: The (**I** IDLE) screw controls the throttle opening to govern idle speed (3.000 min^{-1}) adjust as necessary.
  CAUTION: increased idle speed may cause chain movement.
  For precise adjusting contact an authorised service station equipped with accurate measuring tools.

H ROUTINE MAINTENANCE

Ensure the stop switch is in the "off" (O) position before attempting any kind of maintenance or adjustment.
Always wear a pair of sturdy gloves when fitting or adjusting the chain.
CHAIN: Check tension regularly and adjust if necessary.

1 **BAR**
- Clean the bar groove **(K)** and check the lubrication holes **(L)** in the bar to ensure that they are not clogged.
- Grease sprocket periodically. Rotate sprocket and repeat.
- Rotate bar periodically to maximise bar life.

2 **AIR FILTER**
- A dust clogged air filter may cause carburetor problems. This may prevent the engine from reaching its maximum speed and cause high fuel consumption. Routine cleaning is essential.
- Remove cover.
- Wash filter in petrol (do not use fuel which is mixed with oil).
- The filter can also be cleaned with compressed air.
- Replace filter if damaged or if it does not seal tightly in the air box.

3 **CHAIN BRAKE**
- **WARNING: Contact your service dealer if anything appears wrong with your chain brake. Do not disassemble**

or manipulate the mechanism of the chain brake.

– Clean the brake mechanism periodically (without disassembling it) and control the wear of the band visually.

4 **SPARK PLUG**

Remove and clean the spark plug every 30 hours. Check the electrode gap (0,5/0,6 mm).

– Replace spark plug about every 100 working hours or whenever it is extremely encrusted.

– Heavily encrusted electrodes can result from an incorrect carburetor setting or by wrong fuel mixture (too much oil) or a poor quality of oil in the fuel mix. Check and correct.

OIL FILTER

The oil filter is on the end of the oil suction hose inside the oil tank .

To clean and replace the filter pull it out through the oil tank filter opening.

To remove deposits from the oil tank half-fill it with kerosene or petrol and shake thoroughly. Drain off and fill the tank with fresh saw chain oil.

Never use waste oil.

5 **FUEL FILTER**

To change fuel filter remove the tank cap and pull out the filter with a piece of bent wire or long forceps. Replace the filter as shown in the illustration and reposition it.

It is recommended to replace the fuel filter at least once a year.

- **PERIODICALLY:** It is important to clean the saw thoroughly particularly around cylinder fins to avoid overheating of the engine.
- **LONG STORAGE:** Empty fuel and run engine until dry.

I CHAIN BRAKE TESTING

The chain brake does not provide total protection if the machine is used without taking the necessary precautions or carrying out proper maintenance.

The chain brake **(A)** is intended to engage automatically in case of kickback. The chain brake can also be engaged manually by pushing the chain brake lever forwards.The manual use of the chain brake is recommended only at low speed and for a short period.

Always test the chain brake before using your saw.

Always release the brake before starting.

Kickback may occour if the end of the bar (see illustrated angle) touches any solid object.

Kickback is a violent upward and rearward movement of the bar and may cause you to lose control of the machine.

Never attempt to start a cut with this part of the bar. Always keep a firm grip on the saw with both hands because,in case of kickback, the contact of the hand of the front handle with the lever **(A)** will automatically stop the chain.

CHAIN-CATCHER

All units are also fitted with a safety chain-catcher. This helps to stop the chain in case of breakage.

TESTING THE CHAIN BRAKE :

1 The chain brake is disengaged when brake lever is pulled back and locked (chain can move).

2 The chain brake is engaged when brake lever is in forward position (chain is stopped).

The chain brake should snap into both positions. If strong resistance is felt or lever does not move into either position, **DO NOT USE YOUR SAW**.

Take it immediately to an authorized servicing dealer.

L CHAIN SHARPENING (MP 370 GLX)

1 The cutter teeth should be sharpened with a round 5/32" file.

The job can be made easier by also using a file holder.

The chain can remain fitted on the bar during sharpening.

Before commencing, the chain should be tensioned correctly and the chain brake should be activated to prevent the chain from moving.

2 To obtain a correct sharpening the file must be carefully held to maintain 3 basic angles:
- **A** Top angle 30 ° - 35 °
- **B** External, side angle 85 ° - 90 °
- **C** Internal, side angle 60 °.

File in one direction only, from the "inside" of the cutter tooth towards the "outside".

Do not allow the file to touch the chain as you bring it back to re-position it. Each cutter tooth should be filed with the same number of strokes.

3 The file should be held horizontally to the cutter tooth being sharpened.

4 Best results to obtain a precise sideways angle can be obtained by holding the file so that it rises 0,5 mm above the top face of the cutter tooth.

5 DEPTH GAUGE

Correct depth gauge height is vital to ensure maximum chain life and cutting efficiency.

The height of the depth gauge should be lowered as the cutter tooth is filed back; this height should be checked every 4 or 5 sharpenings.

The best way to do this is to use a flat file and a depth gauge tool.

The correct setting is 0.65 mm below the top edge of the cutter tooth.

The cutter tooth depth gauge should then be rounded **(D)**.

FAULT FINDING TABLE

	Engine will not start	Engine runs badly or looses power when cutting	The machine runs but does not cut well
Check STOP switch is in the position **I**.	●		
Control fuel level min. 25% tank capacity.	●	●	
Check air filter is clean.	●	●	
Remove spark plug, dry it, clean it and adjust it, and replace it, if necessary.	●	●	
Control and adjust the carburetor screws if necessary.		●	
Change fuel filter. Contact your dealer.		●	
Carefully follow the cutting accessory assembly instructions.			●
Check metal cutting accessory is sharp. Otherwise, contact your dealer.			●

Engine still gives trouble: contact your dealer.

McCULLOCH

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