

# MORRISON®

## Petrol Line Trimmers

BC 230E/B



## Owner's Manual

Important

**Please read this Owner's Manual and the Express Warranty before using this product. The Warranty does not cover damage due to misuse or failure to follow the operating and installation instructions.**

Keep the instructions in a safe place for future use.

[www.morrisonoutdoor.com](http://www.morrisonoutdoor.com)

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Do not operate this machine before it has been assembled correctly and you have read and understood these instructions.

**Keep the instructions in a safe place for future use.**

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Thank you for buying the Morrison BC 230E/B line trimmer. Your new trimmer has been engineered and manufactured to Morrison's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.



### **WARNING**

To reduce the risk of injury, the user must read and understand the operator's manual.



### **WARNING**

Do not attempt to operate this trimmer until you have read thoroughly and understood completely all instructions, safety rules etc contained in this manual. Failure to comply may result in accidents involving fire, electric shock or serious personal injury. Save operator's manual and review frequently for continuing safe operation, and instructing others who may use this tool.

## **READ ALL INSTRUCTIONS.**

## General Safety Rules

- For safe operation, read and understand all instructions before using the trimmer. Follow all safety Instructions. Failure to follow all safety Instructions listed below, can result in serious personal injury.
- Do not allow children or untrained individuals to use this unit
- Never start or run the engine in a closed or poorly ventilated area; breathing exhaust fumes can kill.
- Clear the work area before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the bump head.
- Wear full eye and hearing protection while operating this unit.
- Wear heavy long pants, boots, and gloves. Do not wear loose fitting clothing, short pants, jewellery of any kind, or use with bare feet.
- Secure long hair so it is above shoulder level to prevent entanglement in any moving parts.
- Keep all bystanders, children, and pets at least 15m away.
- Do not operate this unit when you are tired, ill, or under the Influence of alcohol, drugs, or medication.

- Do not operate in poor lighting.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance or exposure to hot surfaces.
- Keep all parts of your body away from any moving part.
- Do not touch area around the muffler or cylinder of the trimmer, these parts get hot from operation.
- Always stop the engine and remove the spark plug wire before making any adjustments or repairs except for carburetor adjustments.
- Inspect the unit before each use for loose fasteners, fuel leaks, etc. Replace any damaged parts before use.
- It has been reported that vibrations from hand-held tools may contribute to a condition called Raynaud's Syndrome in certain individuals. Symptoms may include tingling, numbness and blanching of the fingers, usually apparent upon exposure to cold. Hereditary factors, exposure to cold and dampness, diet, smoking and work practices are all thought to contribute to the development of these symptoms.

It is presently unknown what, if any, vibrations or extent of exposure may contribute to the condition. There are measures that can be taken by the operator to possibly reduce the effects of vibration:

- a. Keep your body warm in cold weather. When operating the unit wear gloves to keep the hands and wrists warm. It is reported that cold weather is a major factor contributing to Raynaud's Syndrome.
  - b. After each period of operation, exercise to increase blood circulation.
  - c. Take frequent work breaks. Limit the amount of exposure per day.
- If you experience any of the symptoms of this condition, immediately discontinue use and see your physician about these symptoms.
- Keep the tool well maintained, fasteners tightened and worn parts replaced.
  - Mix and store fuel in a container approved for fuel.
  - Mix fuel outdoors where there are no sparks or flames.
  - Wipe up any fuel spillage. Move 9m away from refueling site before starting engine.
  - Stop the engine and allow to cool before refueling or storing the unit.
  - Allow the engine to cool; empty the fuel tank and secure the unit from moving before transporting in a vehicle.

## Specific Safety Rules For Trimmer Use

- Replace bump head if cracked, chipped, or damaged in anyway. Be sure the bump head is properly installed and securely fastened. Failure to do so can cause serious injury.
- Make sure all guards, straps, deflectors and handles are properly and securely attached.
- Use only the manufactures replacement line in the cutting head. Do not use any other cutting attachment.
- Never operate unit without the safety guard in place and in good condition.
- Maintain a firm grip on both handles while trimming.
- Keep bump head below waist level. Never cut with the bump head located over 76 cm or more above the ground.
- Start the engine carefully with hands and feet well away from the cutting means.
- Never fit metal cutting elements.
- Do not use for lawn edge trimming.
- Never store the machine with petrol in the tank inside a building where fumes may reach an open flame or spark.
- To reduce fire hazard, keep the engine and silencer free of grass, leaves or excessive grease.
- Do not change the engine governor or over speed the engine.

- Replace faulty silencers and spark arrestors, if fitted.

## Symbols

**Important:** Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

	<b>Safety Alert Symbol</b> Indicates danger, warning or caution. It means attention!!! Your safety is involved.
	<b>Read Your Operator's Manual</b> Your manual contains special messages to bring attention to potential safety concerns as well as operating and servicing information. Please read all the information carefully to ensure satisfaction and safe use.
	<b>Wear eye and hearing protection</b> Wear eye and hearing protection when operating this equipment.
	<b>Keep bystanders away</b> Keep all bystanders at least 15m away.
	<b>Ricochet</b> Danger of Ricochet.
	<b>RPM Decal</b> Rotational direction and maximum speed of the shaft for the cutting attachment.
	<b>Boots</b> Wear non-slip safety footwear when using this equipment.
	<b>Gloves</b> Wear non-slip, heavy-duty gloves.
	<b>No Smoking</b> Do not smoke when mixing fuel or filling fuel tank.
	<b>Petrol</b> Use unleaded petrol intended for motor vehicle use with all octane rating of 90 ((R+M)/2) or higher.
	<b>Oil</b> Use synthetic 2-stroke oil for air cooled engines.
	<b>Mix Petrol and Oil</b> Mix the fuel mix thoroughly and also each time before refuelling.
	<b>Switch</b> RUN / STOP Switch

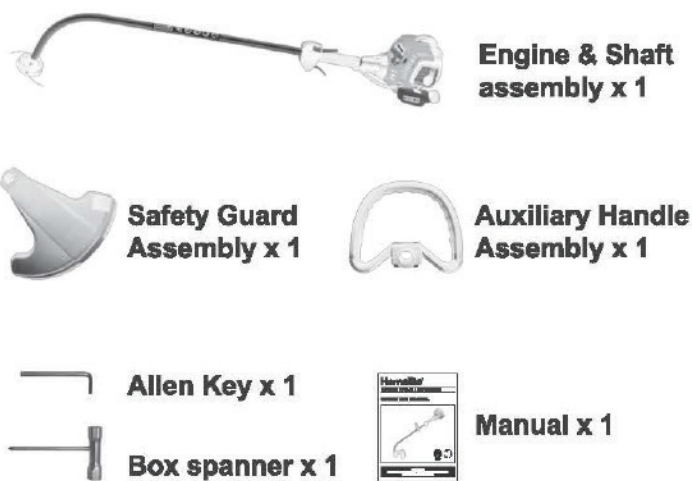
## Service

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest authorised service centre for repair. When servicing, use only identical replacement parts.

## Specifications

**Model:** Morrison BC 230E/B  
**Engine type:** Air cooled 2-stroke EUV  
**Total displacement:** 22.5cc  
**Fuel mix ratio:** 50:1  
**Max engine power:** 0.70 kw/8000rpm  
**Idle speed:** 3200 ± 150rpm  
**Max rated speed:** 10000 ± 300rpm  
**Cutting path:** 410mm  
**Trimming line:** 2.0mm  
**Fuel tank volume:** 500ml  
**Weight:** 5.1kg  
**Spark Plug:** CMR6A  
*Specifications are subject to change without notice.*

## Packing List



## Assembly

- WARNING**  
If any parts are damaged or missing, do not operate this tool until the parts are replaced. Failure to heed this warning could result in serious personal injury.
- WARNING**  
Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.
- WARNING**  
To prevent accidental starting that could cause serious personal injury, always disconnect the engine spark plug wire from the spark plug when assembling parts.
- WARNING**  
Never attach or adjust any attachment while power head is running. Failure to stop the engine may cause serious personal injury.
- WARNING**  
Be certain the knob is fully tightened before operating equipment; check it periodically for tightness during use to



avoid serious injury.

## Operation



Read the operation manual and follow all warnings and safety instructions.



Wear eye protection and ear protection.



Keep all bystanders, especially children and pets, at least 15m from the operating area.

### FUEL AND REFUELING

#### HANDLING THE FUEL SAFELY

- Always handle fuel with care, it is highly flammable.
- Always refuel outdoors where there are no sparks and flames. Do not inhale fuel vapors.
- Do not let petrol or oil come in contact with your skin.
- Keep petrol and oil away from the eyes. If petrol or oil comes in contact with the eyes, wash them immediately with clean water. If irritation is still present, see a doctor immediately.
- Clean up spilled petrol immediately.

#### MIXING THE FUEL

- This product is powered by a 2-stroke engine and requires pre-mixing petrol and 2-stroke oil. Pre-mix unleaded petrol and 2-stroke engine oil in a clean container approved for petrol.
- This engine is certified to operate on unleaded petrol intended for automotive use with an octane rating of 90 {[R + M] / 2} or higher.
- Do not use any type of pre-mixed petrol from fuel service stations, this includes the pre-mixed petrol oil intended for use in mopeds, motorcycles, etc.
- Use synthetic 2-stroke oil only. Do not use automotive oil or 2-stroke outboard oil.
- Mix 2% synthetic 2-stroke oil into the petrol. This is a 50:1 ratio.
- Mix the fuel thoroughly and also each time before fueling.
- Mix in small quantities. Do not mix quantities larger than usable in a 30 day period. Synthetic 2-stroke oil containing a fuel stabilizer is recommended.



#### FILLING THE TANK

- Clean surface around fuel cap to prevent contamination.
- Loosen fuel cap slowly to release pressure and to keep fuel from escaping around the cap.
- Carefully pour fuel mixture into the tank. Avoid spillage.
- Prior to replacing the fuel cap, clean and inspect the gasket.
- Immediately replace fuel cap and hand tighten.
- Wipe up any fuel spillage. Move 9m away from refuelling site before starting engine.



**NOTE:** It is normal for smoke to be emitted from a new engine during and after first use.

#### WARNING

Always shut off engine before fuelling. Never add fuel to a machine with a running or hot engine. Move at least 9m from refuelling site before starting engine. Do not smoke!



	+		=	
1 Litre	+	20 ml	=	} 50:1 (2%)
2 Litres	+	40 ml	=	
3 Litres	+	60 ml	=	
4 Litres	+	80 ml	=	
5 Litres	+	100 ml	=	

### STARTING AND STOPPING

#### WARNING

Never start or run the engine inside a closed or poorly ventilated area; breathing exhaust fumes can kill.

#### To start a cold engine:

- Lay the trimmer on a level surface.
- Check the engine switch to be on "RUN" position.
- **PRIME** - press the primer bulb 10 times slowly.
- **SET** the choke lever to the "START" position.
- Left hand **SQUEEZING** the throttle trigger.
- Right hand **PULL** the starter rope with a quick firm and consistent upward motion **until the engine fires or starts and runs.**

**Note:** If difficulties with starting are experienced (this may occur in colder conditions) refer to troubleshooting section in this manual.

- Move the choke lever to "RUN" position.
- Allow engine to warm up for 5-20 seconds.

#### To start a warm engine:

With the engine switch on "RUN" position, **PULL** the starter rope with a quick firm and consistent upward motion until the engine starts.

#### To stop the engine:

Press and hold the switch on "STOP" position for 2 seconds until the engine stops

### OPERATING THE TRIMMER

Hold the trimmer with the right hand on the rear handle and the left hand on the front handle. Keep a firm grip with both hands while in operation. Trimmer should be held at a comfortable position with the rear handle about hip height.

**Always operate trimmer at full throttle.** Cut tall grass from the top down. This will prevent grass from wrapping around the shaft housing and bump head which may cause damage from overheating. If grass becomes wrapped around the bump head, stop the engine, disconnect the spark plug wire, and remove the grass. Prolonged cutting at partial throttle will result in oil dripping from the silencer.



## Maintenance

#### WARNING

Use only original manufacturer's replacement parts, accessories and attachments. Failure to do so can cause possible injury, poor performance and may void your warranty.

- You may make adjustments and repairs described here. For other repairs, have the trimmer serviced by an authorised service agent.
- Consequences of improper maintenance may include excess carbon deposits resulting in loss of performance and discharge of black oily residue dripping from the muffler.
- Make sure all guards, straps, deflectors and handles are properly and securely attached to avoid the risk of personal injury.



### CLEANING THE EXHAUST PORT AND MUFFLER

Depending on the type of fuel used, the type and amount of oil used, and/or your operating conditions, the exhaust port and muffler may become blocked with carbon deposits. If you notice a power loss with your petrol powered tool, a qualified service technician will need to remove these deposits to restore performance.

### SPARK ARRESTOR

This machine is fitted with a spark arrestor to help prevent fires. The spark arrestor is fitted at the muffler discharging port. To ensure proper performance of your product, the spark arrestor must be cleaned or replaced every 25 hours or each year. Please contact your nearest service dealer for a new spark arrestor. To find your nearest service dealer please visit our website.

### CLEANING AIR FILTER

A dirty air filter will cause starting difficulty, loss of performance, and shorten the life span of the engine. Check the air filter monthly. For best performance, replace the air filter at least once a year.

- Loosen the air filter cover by turning the fixing knob counter clockwise.
- Remove the airbox cover and the air filter
- Clean the foam filter element with warm soapy water. Rinse and let dry.

**NOTE:** If the foam filter element is damaged, it should be replaced.

- Apply a light coat of engine oil to the foam filter element, then squeeze it out.
- Reinstall the air filter.

**NOTE:** Make sure the filter is seated properly inside the cover. Installing the filter incorrectly will allow dirt to enter the engine, causing rapid engine wear.



- Reinstall the airbox cover and tighten the fixing knob to secure.

### FUEL TANK

#### WARNING

A leaking fuel cap is a fire hazard and must be replaced immediately.

The fuel cap contains a sealing gasket and a check valve to ventilate built up fuel gasses. A clogged check valve will cause poor engine performance. If performance improves when the fuel cap is loosened, the check valve may be faulty. Replace fuel cap if required.

The fuel supplied to the engine is passed through a filter to remove any contaminants from entering the engine.

Contaminants in the fuel can cause poor performance and damage to the engine.

The fuel filter is a non-serviceable item and if needed should be replaced by an AUTHORISED SERVICE CENTRE.

### SPARK PLUG REPLACEMENT

This engine uses an CMR6A spark plug. Use an exact replacement and replace annually.

### IDLE SPEED ADJUSTMENT

If idle speed is too high and needs adjustment, turn the idle speed

screw counterclockwise to reduce the engine speed.

If the idle speed is too low and needs adjustment, turn the idle speed screw clockwise to increase engine speed.

**NOTE:** The engine should be at normal operating temperature before making adjustments to the idle speed.

### STORING THE PRODUCT

- Clean all foreign material from the product. Store idle unit indoors in a dry, well-ventilated area that is inaccessible to children. Keep away from corrosive agents such as garden chemicals.
- Abide by all ISO and local regulations for the safe storage and handling of petrol.

### WHEN STORING FOR 1 MONTH OR LONGER

Drain all fuel from tank into a container approved for petrol. Run engine until it stops.

## Troubleshooting

IF THESE SOLUTIONS DO NOT SOLVE THE PROBLEM, CONTACT YOUR AUTHORISED SERVICE DEALER.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine will not start.	<ol style="list-style-type: none"> <li>1. No spark.</li> <li>2. No fuel.</li> <li>3. Engine is flooded.</li> <li>4. Starter rope pulls harder now than when new.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check spark. Remove spark plug. Re-attach the spark plug cap and lay spark plug on metal cylinder. Pull the starter rope and watch for spark at spark plug lip. If there is no spark, repeat test with the new spark plug.</li> <li>2. Push primer bulb until bulb is full of fuel. If bulb does not fill, primary fuel delivery system is blocked. Contact a servicing dealer. If primer bulb fills, engine may be flooded, proceed to next solution.</li> <li>3. Set the choke lever to the RUN position. Squeeze the throttle trigger and pull the starter rope repeatedly until the engine starts and runs. NOTE: Depending on the severity of the flooding, this may require numerous pulls of the rope.</li> <li>4. Contact a servicing dealer.</li> </ol>
Engine has difficulties starting in colder (winter) conditions.	Fuel is having trouble atomizing in cold conditions.	<ol style="list-style-type: none"> <li>1. Lay the trimmer on a level surface.</li> <li>2. <b>Check the engine switch to be on "RUN" position.</b></li> <li>3. <b>PRIME- press the primer bulb 10 times slowly.</b></li> <li>4. <b>SET</b> the choke lever to the "START" position.</li> <li>5. <b>Squeezing</b> the throttle trigger.</li> <li>6. <b>PULL</b> the starter rope with a quick firm and consistent upward motion <b>until the engine starts/fires.</b></li> <li>7. <b>Re-adjust choke lever</b> to half way and allow engine to warm up for 5-20 seconds. If the engine has attempted to start but fails to run on, Re-start the engine in the half choke position (half way between start and run) and allow engine to warm up.</li> </ol>
Engine starts but will not accelerate.	Engine requires approximately three minutes to warm up.	Allow engine to completely warm up. If engine does not accelerate after three minutes, contact a servicing dealer.
Engine starts but will only run at high speed at half choke	Carburetor requires adjustment.	Contact a servicing dealer.
Engine does not reach full speed and emits excessive smoke.	<ol style="list-style-type: none"> <li>1. Check oil fuel mixture.</li> <li>2. Air filter is dirty.</li> <li>3. Spark arrestor screen is dirty.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use fresh fuel and the correct 2-stroke oil mix.</li> <li>2. Clean air filter. Refer to Cleaning the Air Filter Foam earlier in this manual.</li> <li>3. Contact a servicing dealer.</li> </ol>
Engine starts, runs, and accelerates but will not idle.	Idle speed screw on carburetor requires adjustment.	Turn idle speed screw clockwise to increase idle speed.



## Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
Line will not advance.	<ol style="list-style-type: none"><li>1. Line welded to itself.</li><li>2. Not enough line on spool.</li><li>3. Line worn too short.</li><li>4. Line tangled on spool.</li><li>5. Engine speed too.</li></ol>	<ol style="list-style-type: none"><li>1. Lubricate with silicone spray.</li><li>2. Install more line. Refer to "Line Replacement" earlier in this manual.</li><li>3. Pull lines while alternately pressing down on and releasing bump head.</li><li>4. Remove line from spool and rewind. Refer to "Line Replacement" earlier in this manual.</li><li>5. Advance line at full throttle.</li></ol>
Grass wraps round shaft housing and bump head.	<ol style="list-style-type: none"><li>1. Cutting tall grass at ground level.</li><li>2. Operating trimmer at part throttle.</li></ol>	<ol style="list-style-type: none"><li>1. Cut tall grass from the top down.</li><li>2. Operate trimmer at full throttle.</li></ol>
Bump knob hard to turn.	Screw threads dirty or damaged.	Clean threads and lubricate with grease - if no improvement, replace bump knob.
Oil drips from muffler.	<ol style="list-style-type: none"><li>1. Operating trimmer at part throttle.</li><li>2. Check oil/fuel mixture.</li><li>3. Air filter dirty</li></ol>	<ol style="list-style-type: none"><li>1. Operate trimmer at full throttle.</li><li>2. Use fresh fuel and the correct synthetic 2-stroke oil mix.</li><li>3. Clean per instruction in Maintenance Section.</li></ol>





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