



# SMC CORP

## BRUSH CUTTER USER'S MANUAL

**SBC-2800 SERIES**

**SBC-2600 SERIES**

**SBC-2400 SERIES**



**SHOULDER TYPE  
SWIVEL FUNCTION**



**KNAPSACK  
BRUSH  
CUTTER**

**KBC-2600 SERIES**

**SMC CORP**

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## Thank you very much for purchasing our brush cutter !

Our top priority is customer safety. Before use, please be sure to read this manual which explains safety procedures, assembly of the machine and instructions for use, etc. Please use the machine safely and efficiently at all times. If you have any questions, please contact the store where you purchased our product.



**\* BE SURE TO OBSERVE THE FOLLOWING  
FOR SAFE USE THE BRUSH CUTTER !**



**\* BRUSH CUTTER / TRIMMER  
IMPORTANT SAFETY INFORMATION**

**1.**

## GENERAL MATTERS

- (1) The brush cutter is designed to cut weeds.  
Never use it for any other purpose, such as cutting tree branches, etc.
- (2) Wear clothes with tight fitting long sleeves and trousers  
(No loose sleeves or trouser bottoms) , a protective cap (safety helmet), gloves,  
dust- proof glasses and safety shoes.
- (3) Prepare a whistle, an axe, and a hatchet.
- (4) Be sure to put the blade guard in the specified position.
- (5) Do not use the machine when tired!  
Under the influence of alcohol or after taking medication.
- (6) Children, pregnant women or untrained personnel must not use the machine.
- (7) Do not lend the brush cutter to people who are not properly trained  
Or well - experienced with its operation.
- (8) Do not use the machine during the night or in bad weather conditions.

**2.**

## BRFORE OPERATION

### (1) MACHINE INSPECTIONS:

- 1-1. Use the machine only after making sure that there are no abnormalities.  
Check items:
  - Missing or loose screws.
  - Lubricant Oil, grease and fuel are in their proper locations.
  - There are no fuel leaks.
- 1-2. Check the engine type, 2-cycle engine is used the mix ratio of fuel is  
50 (gasoline) to 1 (oil). Mix fuel carefully, because an improper mixing ratio will result  
in burning or excessive wear of the engine.
- 1-3. Check the engine type, 4-cycle engine is no need to mix gasoline & oil.
- 1-4. Make sure that the engine is cooled down before refueling.  
Refuel the machine in a safe area.
- 1-5. Fuel is flammable. Never smoke when refueling. Never refuel near fire.  
Be sure to keep the machine away from fire. If fuel spills whilst refueling,  
thoroughly wipe it up before continuing.
- 1-6. Use the machine after making sure that there are no abnormalities  
of the cutter mechanism: e. g ., The blade is mounted securely,  
the teeth of the blade are properly set and the cutter is not damaged in any way.
- 1-7. Be sure to put the blade guard and the shoulder band on the machine.

### (2) WORKING SITE INSPECTIONS:

- 1-1. Use the machine after making sure there are no cans,  
wires or pebbles in the work area.
- 1-2. Specify an area within a 15m radius from the operator as a dangerous area.  
Warn people by surrounding the area with a rope and putting up a notice.  
Prevent people and pets from entering the area. If a person or a pet approaches  
within a 15m distance, immediately stop the engine. If two people or more work  
together with the machines, work 15m apart from each other.

- (3) WORKING TIME:**
- 1-1. Work 2 hours or less a day.
  - 1-2. Fatigue is the biggest factor in accidents.  
Take a 10-20 minute rest for every 30-40 minutes of work.

**(4) STARTING THE ENGINE:**

- 1-1. Check the area within a 15m radius before starting the engine.  
Do not let the blade touch the ground, stones or branches !
- 1-2. Do not start the engine inside a building. When starting the engine, be sure to move the engine 3m or more away from the refueling place.
- 1-3. Be careful not to breathe exhaust fumes.

**3.**

**DERIVING OPERATION**

**(1) OPERATING:**

- 1-1. Leave plenty of time for mowing. Do not use the machine when raining or after rain.  
It is dangerous because the ground is slippery.  
Be careful in slippery places i.e. snow or ice. Always secure a safe foothold.
- 1-2. Do not move the brush cutter with excessive force.  
Work in a proper and balanced posture.
- 1-3. Follow the manufacturer's recommended engine revolution speed.  
Only change speed when a change is needed.
- 1-4. When there is any sign of danger, immediately stop the engine or move the brush cutter away from the operator, i.e. remove the shoulder band.
- 1-5. When the cutter touches a hard object, such as a stone, immediately stop the engine and make sure that there are no abnormalities on the blade surface.  
If there is an abnormality, stop working and replace the blade.
- 1-6. When grass coils around the blade and the engine slows down,  
be sure to turn off the engine before removing the grass.
- 1-7. Operate the blade by sweeping it from right to left.
- 1-8. Do not use the brush cutter for purposes other than mowing. Do not cut water or soil.
- 1-9. Be sure to use the brush cutter parts specified by the manufacturer.
- 1-10. Be sure to put the blade guard on the machine before working.  
Never remove the blade guard, because it is dangerous to work without the guard.
- 1-11. When the engine revolves, the machine may move in a opposite direction due to torque.  
Firmly grip the handle to counteract this.
- 1-12. When two or more people work together, decide on a signal, such as a whistle,  
in advance. Always observe the signal. Keep 15m apart from each other.
- 1-13. Never talk with another person while working. If you need to take, stop the engine first.
- 1-14. Do not touch the spark plug cap or the high – voltage cable.  
There is a possibility of receiving an electric shock.
- 1-15. To prevent burns, do not touch the engine or muffler during operation.  
After stopping the engine wait until the engine has cooled down.
- 1-16. Be sure to stop the engine before moving to another work site,  
Putting the brush cutter on the ground or stopping work.  
Do not place the machine near flammable material, such as dead grass,  
because the muffler is still hot after the engine stops and may ignite it.
  - 1-16-1. To remove the machine in an emergency, press the joint on the shoulder band.
  - 1-16-2. In an emergency, such as an injury, let others know by shouting in a loud voice.
  - 1-16-3. Be sure to stop the engine and put the blade cover on the machine  
after stopping mowing or before moving it to another site.
- 1-17. If the brush cutter experiences any trouble, refer to the troubleshooting instructions  
in the manual. If the manual instructions do not work, consult the store where you  
bought the machine.



**CAUTION:**

**An uncontrolled brush cutter can cause serious injury or death of not only the operator but also a third party. Use the machine very carefully.**

**(2) ATTIRE:**

- 1-1. Wear comfortable clothing.
- 1-2. Wear gloves during operation.
- 1-3. Wear a cap or helmet.
- 1-4. Wear dust – proof glasses to protect the eyes.
- 1-5. Use proper protective accessories (i.e. earplugs) to protect the ears.
- 1-6. Wear safety shoes.

**4.****AFTER OPERATING****(1) AFTER USE CARE:**

- 1-1. Carefully remove loose dirt and dust after stopping the engine.  
In particular, remove debris from the air cleaner and cooling fins.  
If debris remains, it might cause engine trouble later on.
- 1-2. Check that the clamp screws of each part are not loose and that the blade is not damaged. If necessary, tighten the screws or replace the blade with the genuine spare as specified by the manufacturer.
- 1-3. Check that the gear case fuel or grease does not leak. If necessary, repair the part.
- 1-4. Before repairing or adjusting the machine,  
stop the engine and unplug the secondary cord.
- 1-5. When exchanging parts, be sure to use genuine spare parts as specified by the manufacturer.

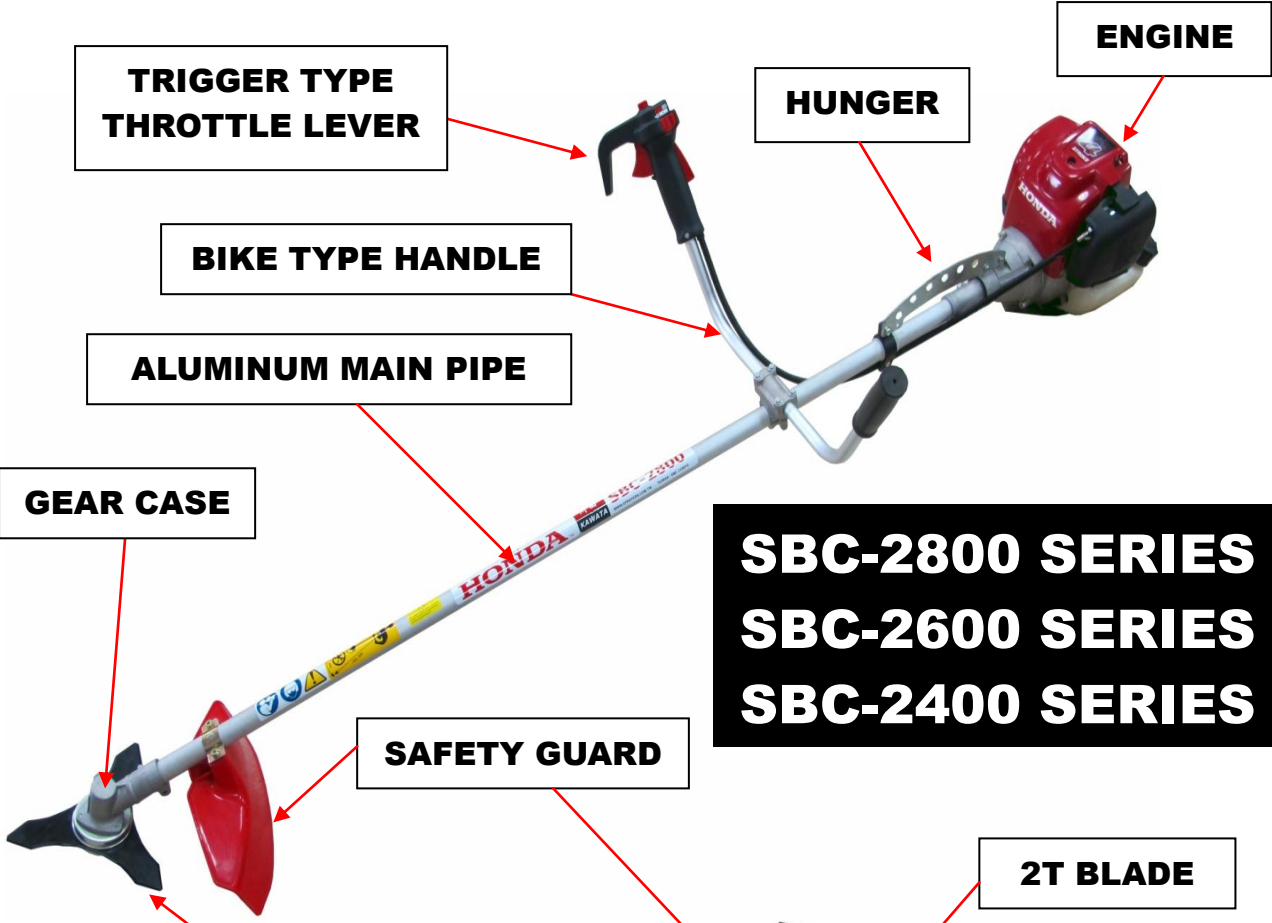
**(2) STORAGE:**

- 2-1. Clean each part thoroughly.  
Apply a thin layer of oil to the metal parts in order to prevent rust.
- 2-2. Empty the fuel tank and carburetor.
- 2-3. Remove the spark plug.  
Put a little engine oil (about 3-5cc) in the cylinder through the plug hole.  
Slowly pull the recoil starter several times so that the oil is applied thoroughly to the inner surface. Replace the plug.
- 2-4. Pull the recoil starter until it feels to be on the compression stroke (heavy).
- 2-5. If the machine is damaged, be sure to repair the part before storing it.
- 2-6. Be sure to put the blade cover on the machine for safety, when either storing  
Or moving the machine to another site.
- 2-7. Store it in a dry and dust/dirt –free place.

**SPECIFICATIONS**

MODEL	SBC-2800	SBC-2600	SBC-2400	KBC-2600
N.W.	8.0 – 9.0 kg	7.0 - 7.5 kg	6.0 - 6.5 kg	11.5 - 12 kg
HOUSING DIA.	28 mm	26 mm	24 mm	26 mm
SHAFT	8 mm	7 mm	7 mm	7 mm
HANDLE TYPE	BIKE TYPE	BIKE TYPE	BIKE / LOOP	LOOP TYPE
HONDA	GX35	GX35	GX25	GX35
MITSUBISHI	TB43	TB43	TU26	TB43
KAWASAKI	TJ45E	TJ45E	TJ27E	TJ45E

# BRUSH CUTTER CONSTRUCTIONS



**SBC-2800 SERIES**  
**SBC-2600 SERIES**  
**SBC-2400 SERIES**



**KBC-2600 SERIES**



# ASSEMBLY SHOULDER BRUSH CUTTER

## STEP-1

Install the engine to the brush cutter attachment.  
Fitting bolts X 4 PCS



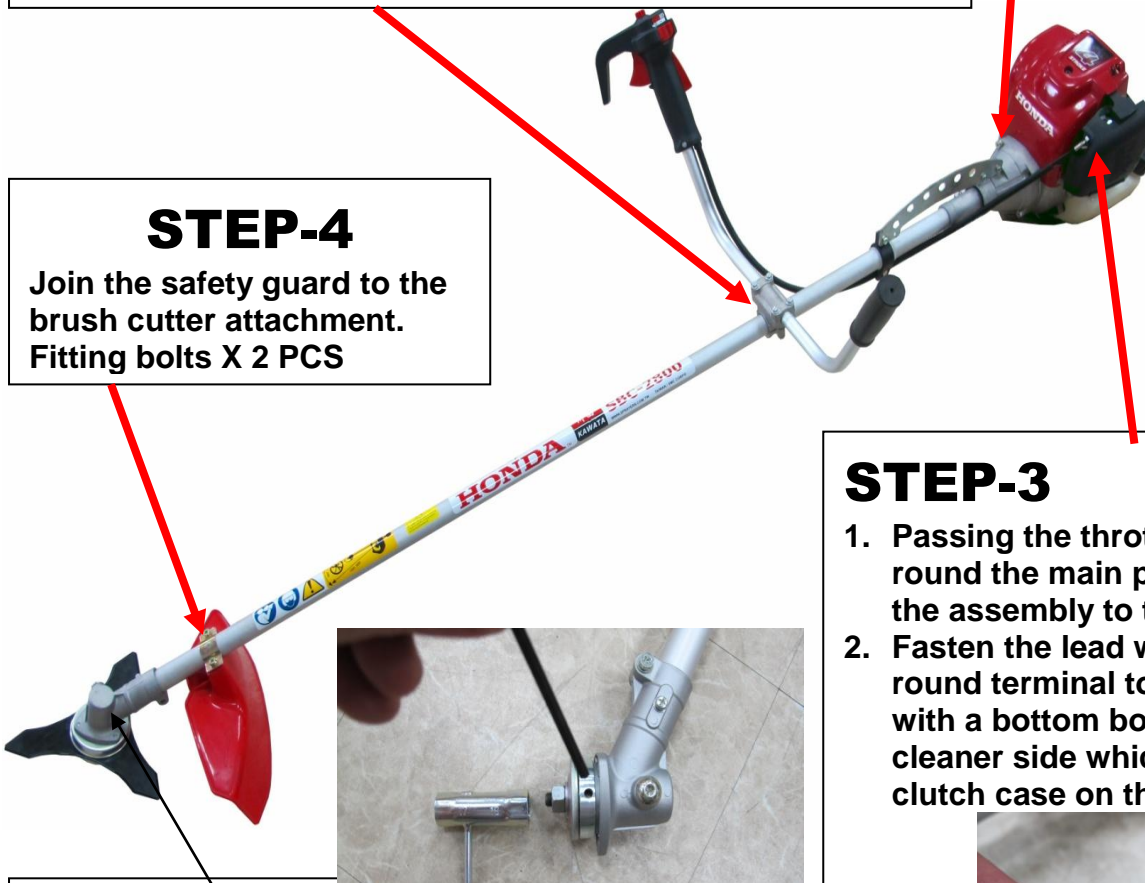
## STEP-2

Join the handle to the brush cutter attachment.  
Fitting bolts X 4 PCS



## STEP-4

Join the safety guard to the brush cutter attachment.  
Fitting bolts X 2 PCS



## STEP-3

1. Passing the throttle wire with the round the main pipe grip, attach the assembly to the engine.
2. Fasten the lead wire with the round terminal to the clutch case with a bottom bolt at the air cleaner side which fixes the clutch case on the engine.



3. Turn the throttle wire round from the muffler side.
4. Secure the lead wire/throttle wire to the machine, using the wire band.



## STEP-5

### Blade Mounting

1. Attach the Prevention Plate to the bottom of the Gear Case using the Cross Screw.
2. Install the Blade Clamping plate onto the gear shaft.
3. Tightly fasten the Blade Clamping Plate, Stabilizing Plate & Washer with Blade using the Hexagon Nut
  - Use the spanner.
  - Be careful of injury from the BLADE.
  - When mounting the blade, bear in mind that the direction of rotation is counter clockwise.



# ASSEMBLY KNAPSACK BRUSH CUTTER

## STEP-1

1. Install the soft pipe to the engine.
2. Join the wire of throttle lever & engine.
3. Turn the throttle wire round from the muffler side.
4. Secure the lead wire/throttle wire to the machine, using the wire band.



## STEP-2

Fixed the throttle lever line on the throttle lever.



## STEP-4

Blade Mounting

1. Attach the Prevention Plate to the bottom of the Gear Case using the Cross Screw.
2. Install the Blade Clamping plate onto the gear shaft.
3. Tightly fasten the Blade Clamping Plate, Stabilizing Plate & Washer with Blade using the Hexagon Nut
  - Use the spanner.
  - Be careful of injury from the Blade.
  - When mounting the blade, bear in mind that the direction of rotation is counter clockwise.



## STEP-3

1. Join the soft pipe with main pipe.  
Fitting bolts X 4 PCS
2. Join the Loop handle with main pipe.  
Fitting bolts X 4 PCS
3. Join the safety guard to the brush cutter attachment.  
Fitting bolts X 2 PCS



# INSPECTIONS BEFORE STARTING ENGINE



## WARNING

### ■ Fuel for **2** - cycle engine ---KAWASAKI MITSUBISHI.

Use regular car gasoline mixed with special 2-cycle engine oil as fuel.

Gasoline: special 2-cycle engine oil (JASO FE Class)

Mixing ratio (volume ratio)

**50:1 (Kawasaki TJ27E / TJ45E ) / MITSUBISHI TB43**

**25:1 MITSUBUISHI TU26**

- Do not use old or contaminated fuel (smells acidic) or fuel with a different mixing ratio. This will cause engine trouble when starting or low output power.
- If the fuel spilt, be sure to wipe it up. If not, it might stain clothing or cause injury.
- Do not use 4-cycle engine oil.  
It may result in a damaged plug, piston ring adhesion or clogged muffler.
- Use gasoline paying special attention to damage from explosion or fire.

### ■ Fuel for **4** - cycle engine --- HONDA

1. Use regular car gasoline 86 to 98.
2. Add the 4 -cycle oil into HONDA engine.

## START ENGINE

### START ENIGNE

1. Move the choke lever to the CLOSE position.  
To start engine a warm engine, leave the choke lever in the OPEN position
2. Push the priming bulb 3~5 times.
3. Pull the STARTER GRIP, let engine star.



OPEN

CLOSE

STARTER GRIP





# STOP ENGINE

■ Push **STOP** button.



# INSPECTION & MAINTENANCE

1. Cleaning the air cleaner.  
Clean the element with white kerosene.  
Then soak it in engine oil and squeeze it firmly with one hand.
2. Cleaning and inspections of each part
  - Clean the section around the muffler.
  - Clean the cooling fin and suction hole for cooling.
  - Inspect each nut and bolt and tighten them.
  - Check that there are no fuel leaks.
3. Inspections / maintenance every 50 hours.  
Cleaning and adjustment of the spark plug.  
After cleaning the end of the plug,  
adjust the electrode clearance to 0.6-0.7mm.
4. Lubrication of the gear case
5. Remove the lubrication bolt on the side of the Gear case and lubricate the inner surface with grease.



## CAUTION

ABOUT ENGINE MAINTAIN SECTION

PLEASE READ ORIGINAL HONDA / MITSUBISHI / KAWASAKI ENGINE MANUAL!

# TROUBLE SHOOTING

	MALFUCTIONS	CAUSE	REMEDIES
E N G I N E	The engine does no start or is difficult to start.	<ol style="list-style-type: none"> <li>1. The machine is not switch on.</li> <li>2. The fuel is empty.</li> <li>3. No enough priming.</li> <li>4. The engine sucks excessive fuel.</li> <li>5. Old fuel is being used.</li> </ol>	<ol style="list-style-type: none"> <li>1. Switch the machine on.</li> <li>2. Refuel the tank.</li> <li>3. Press the priming pump 5-7 times.</li> <li>4. Start the engine with the throttle lever and choke lever fully opened.</li> <li>5. Exchange it for a new one.</li> </ol>
	Do not work at low engine revolution speed, Engine stop.	<ol style="list-style-type: none"> <li>1. The carburetor was not adjusted properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the carburetor.</li> </ol>
	It does not accelerate well.	<ol style="list-style-type: none"> <li>1. Grass coils around the engine.</li> <li>2. The carburetor was not adjusted properly.</li> <li>3. The idle speed is too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove the grass.</li> <li>2. Adjust the carburetor.</li> <li>3. Increase the speed until just before The cutter starts revolving. (Adjust there carburetor.)</li> </ol>
	Output power is not sufficient during operation or the engine stops.	<ol style="list-style-type: none"> <li>1. The element (air filter) is dirty.</li> <li>2. Improper fuel is being used.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean the element or replace it.</li> <li>2. Use proper fuel mix ratio.</li> </ol>
B R U S H C U T T E R	The cutter does not stop at low speed.	<ol style="list-style-type: none"> <li>1. The carburetor was not adjusted properly.                             <ul style="list-style-type: none"> <li>• The clutch spring has trouble.</li> <li>• The idle speed is too height.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the carburetor.</li> <li>2. Replace the clutch spring.</li> <li>3. Decrease the speed until the cutter stops.</li> </ol>
	The cutter does not revolve even though revolution speed is increased	<ol style="list-style-type: none"> <li>1. Grass coils around the cutter.</li> <li>2. The holder or setting plate is loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove the grass.</li> <li>2. Tighten the nuts on the holder or setting plate.</li> </ol>
	Abnormal vibration	<ol style="list-style-type: none"> <li>1. The cutter is not concentric or a Tooth on the edge is chipped.</li> <li>2. The drive shaft is bent.</li> <li>3. The bolts on the gear case are loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the hole of the cutter with the machine and tighten the screws. Or replace the cutter.</li> <li>2. Replace the drive shaft.</li> <li>3. Tighten the bolts on the gear case.</li> </ol>



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