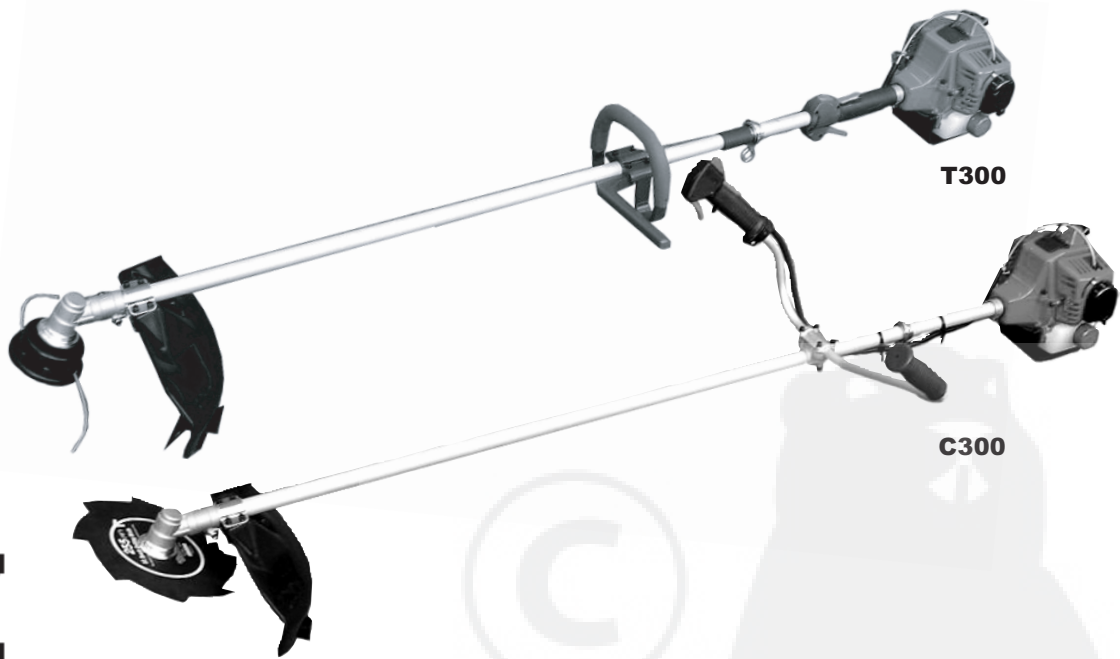


**SHINDAIWA OWNER'S/
OPERATOR'S MANUAL**

**T300 GRASS TRIMMER
C300 BRUSHCUTTER**



WARNING! Read this manual and familiarize yourself with its contents.



This machine is designed for cutting grass, weed, and bushes. Do not use this machine for other purposes.

Minimize the risk of injury to yourself and others.

Do not operate or service this machine unless you clearly understand this manual.


Keep this manual at a particular place so that you can reread it whenever you have a question about its use.

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1 Attention Statements

Throughout this manual are special “attention statements” surrounded by boxes and preceded by the triangular Attention Symbol.



WARNING!

A statement preceded by the triangular attention symbol and the word “WARNING” contains information that should be acted upon to prevent serious bodily injury.

CAUTION!

A statement preceded by the word “CAUTION” contains information that should be acted upon to prevent mechanical damage.

IMPORTANT!

A statement preceded by the word “IMPORTANT” is one that possesses special significance.

NOTE:

A statement preceded by the word “NOTE” contains information that is handy to know and may make your job easier.

2 Warning Labels

Warning labels affixed to the machine are as follows:

READ AND FOLLOW THE OPERATOR'S MANUAL. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY.

WEAR HEAD, EYE AND HEARING PROTECTION DURING THE OPERATION OF THIS MACHINE.

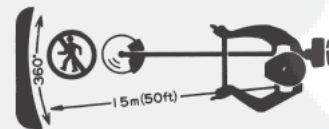
WEAR NONSLIP GLOVES, LONG TROUSERS AND NONSKID BOOTS DURING THE OPERATION OF THIS MACHINE.

MAKE SURE NO ONE IS WITHIN 15 METERS (50 FEET) OF AN OPERATING ATTACHMENT.

BEWARE OF THROWN OBJECTS.

THE MAXIMUM SPEED OF THE CUTTING ATTACHMENT SHAFT IN min^{-1} .

SOUND POWER LEVEL (MEASURED IN ACCORDANCE WITH 2000/14/EC)



MAX
8500 min^{-1}



2-1 The Properly Equipped Operator



WARNING!

Use Good Judgment

ALWAYS wear eye protection to shield against thrown objects.

NEVER run the engine when transporting the machine.

NEVER run the engine indoors - make sure there is always good ventilation.

Fumes from engine exhaust can cause serious injury or death.

ALWAYS clear your work area of trash or hidden debris that could be thrown back at you or toward a bystander.

ALWAYS use the proper cutting tool for the job.

ALWAYS stop the machine immediately if it suddenly begins to vibrate or shake. Inspect for broken, missing or improperly installed parts or attachments.

NEVER extend trimming line beyond the length specified for your unit.

ALWAYS keep the unit as clean as practical. Keep it free of loose vegetation, mud, etc.

ALWAYS hold the machine firmly with both hands when cutting or trimming, and maintain control at all times.

ALWAYS keep the handles clean. **ALWAYS** disconnect the spark plug wire before performing any maintenance work.

ALWAYS, if a blade should bind fast in a cut, shut off the engine immediately. Push the branch or tree to ease the bind and free the blade.

2-2 General Safety Instructions

Work Safely

Trimmers and brushcutters run at very high speeds and can do serious damage or injury if they are misused or abused. Never allow a person without training or instruction to operate your machine.



WARNING!

Never make unauthorized attachment installations.

Stay Alert

You must be physically and mentally fit to operate this machine safely.



WARNING!

Never operate power equipment of any kind if you are tired or if you are under the influence of alcohol, drugs, or any other substance that could affect your ability or judgement.



WARNING!

Minimize the Risk of Fire
NEVER smoke or light fires near the trimmer or brushcutter. **ALWAYS** stop the engine and let it cool before refueling. Avoid overfilling and wipe off any fuel that may have spilled. **ALWAYS** move the unit to a place well away from a fuel storage area or other readily flammable materials before starting the engine. **NEVER** place flammable material close to the engine muffler.

2-3 Be Aware of the working Environment

Avoid long-term operation in very hot or very cold weather.

Make sure bystanders or observers outside the 15 meters "danger zone" wear eye protection.



Reduce the risk of bystanders being struck by flying debris. Make sure no one is within 15 meters—that's about 16 paces—of an operating attachment.

Be extremely careful of slippery terrain, especially during rainy weather.

Always make sure the appropriate cutting attachment shield is correctly installed.

Beware of a coasting blade when brushcutting. A coasting blade can injure while it continues to spin after the throttle trigger is released or after the engine is stopped.

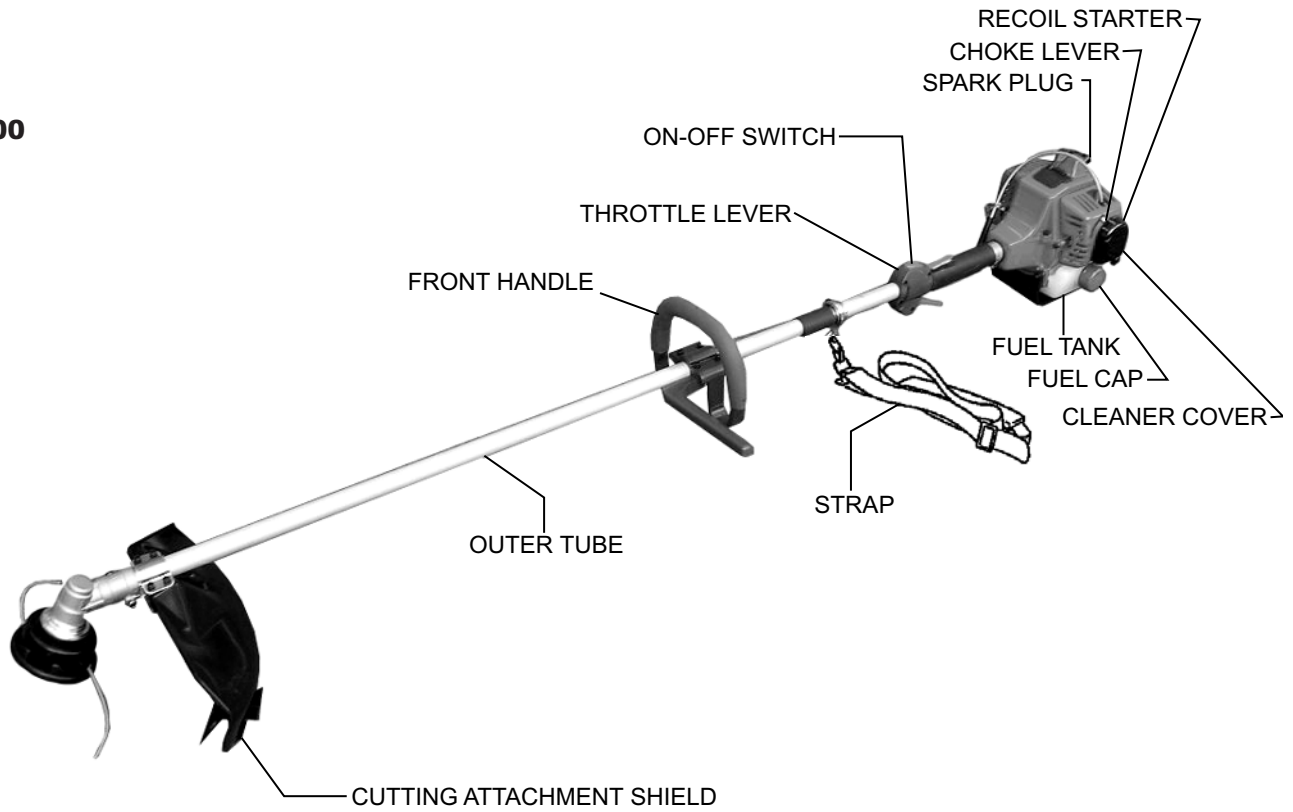
If contact is made with a hard object, stop the engine and inspect the cutting attachment for damage.

When operating in rocky terrain or near electric wires or fences, use extreme caution to avoid contacting such items with the cutting attachment.

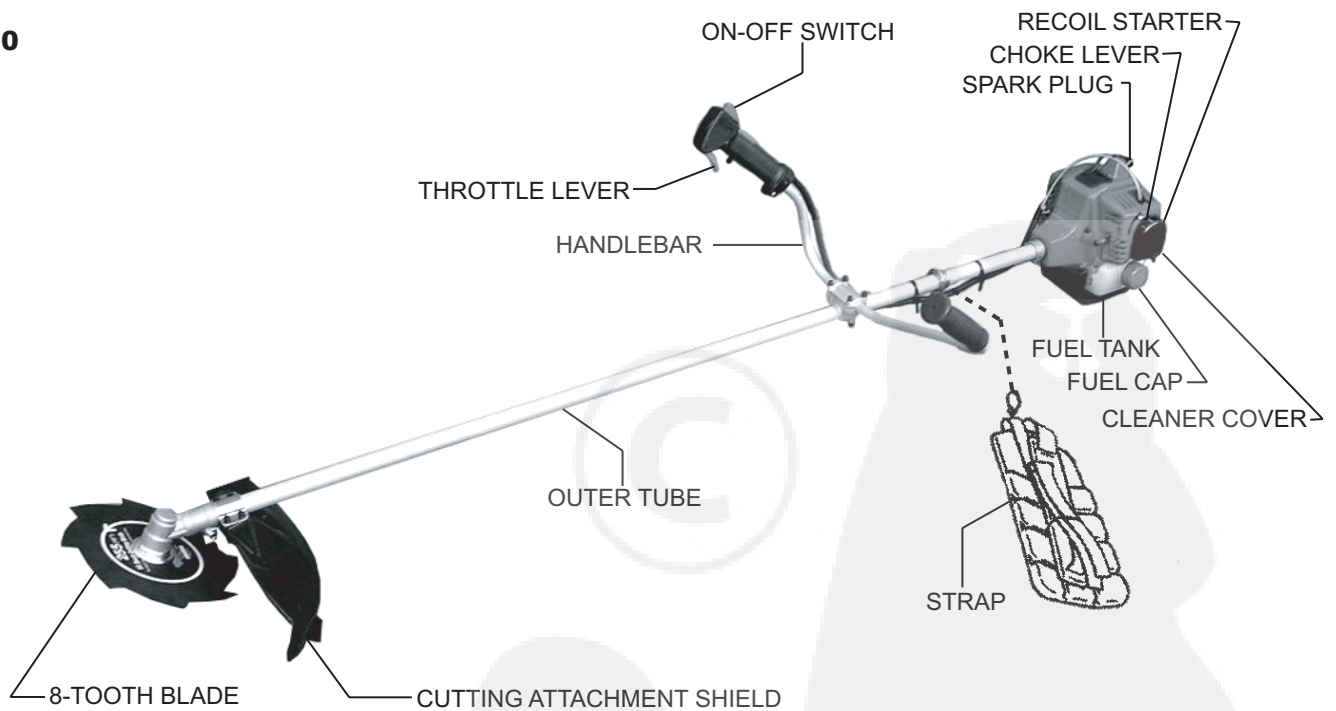
Be constantly alert for objects and debris that could be thrown either from the rotating cutting attachment or bounced from a hard surface.

3 Product Descriptions

T300



C300



Using the accompanying illustrations as a guide, familiarize yourself with your machine and its various components. Understanding your machine helps ensure top performance, long service life, and safer operation.



WARNING!

The engine exhaust from this product contains chemicals which may cause cancer, birth defects, or other reproductive harm.



WARNING!

Do not make unauthorized modifications or alterations to any of these units or their components.

4 Technical Specifications

Model Name	T300/EC1	C300/EC1
Engine Model	S270EC	
Engine Type	2-cycle, vertical cylinder, air cooled	
Dry Weight (Less Attachment)	6.0 kg	6.2 kg
Bore x Stroke	34mm x 30mm	
Displacement	27.2 cm ³	
Engine Speed at Maximum Power Output	8,000 min ⁻¹ (rpm)	
Maximum Power Output	0.95 kW	
Engine Speed at Idling	3,000 min ⁻¹ (rpm)	
Maximum Engine Speed	11,500 min ⁻¹ (rpm)	
Fuel/Oil Ratio	50:1	
Fuel Tank Capacity	650 cm ³	
Carburetor	TK, DPV10W Diaphragm	
Ignition System	Fully Electronic, transistor controlled	
Spark Plug	NGK BPMR6A	
Air Cleaner	Semi-wet Type	
Starting Method	Recoil Starter	
Stopping Method	Slide Switch	
Handle	Loop Type	Bicycle Type
Dimensions	1780 x 365 x 290mm	1790 x 575 x 470mm
Sound Pressure Level * (average data between at Idling and at Racing) note.1	92 dB (A)	91 dB (A)
Sound Power Level * (average data between at Idling and at Racing) note.1	106 dB (A)	
Vibration Level *, note.1	Idling left/right	3.4/2.3m/s ²
Vibration Level *, note.1	Racing left/right	4.5/6.9m/s ²
Sound Pressure Level * (average data between at Idling and at WOT) note.2	98 dB (A)	
Sound Power Level * (average data between at Idling and at WOT) note.2	109 dB (A)	
Vibration Level *, note.2	Idling left/right	3.2/2.2m/s ²
Vibration Level *, note.2	WOT left/right	7.2/7.5m/s ²

* Sound Pressure Level: in accordance with EN ISO 11806 and ISO 7917

* Sound Power Level: in accordance with EN ISO 11806 and ISO 10884

* Vibration Level: in accordance with EN ISO 11806 and ISO 7916

Note 1: 8-tooth blade equipped

Note 2: Trimmer head equipped

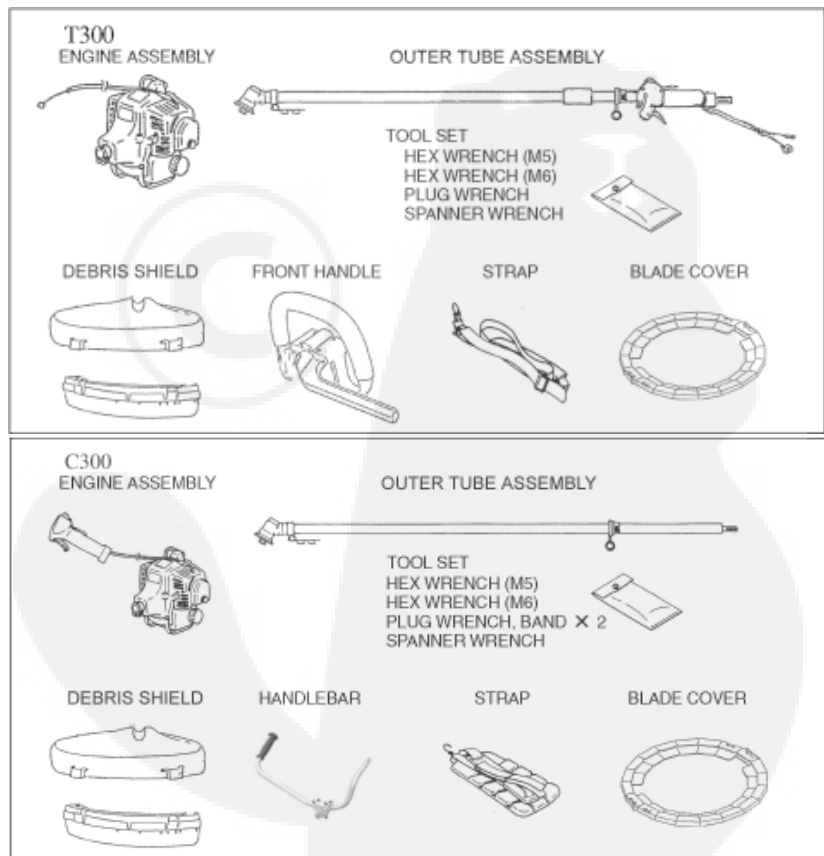
5 Assembly Procedure

5-1 Prior to Assembly

Before assembling, make sure you have all the components required for a complete unit. This machine consists of the following components and accessories. Carefully inspect all components for damage. If you find any damaged or missing items, ask your Shindaiwa dealer for support.

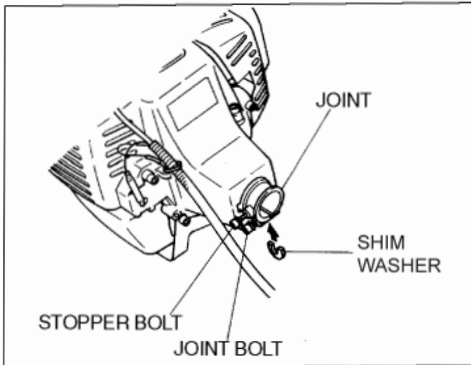
IMPORTANT!

The terms "left," "left-hand," and "LH", "right," "right-hand," and "RH"; "front" and "rear" refer to directions as viewed by the operator during normal operation of this product.



5-2 Before Assembling the Outer Tube

- (1) Using the hex wrench, loosen the stopper bolt to the end.
- (2) Loosen the joint bolt. Do not lose the shim washer.



5-3 Assembly of the Outer Tube (A) T300

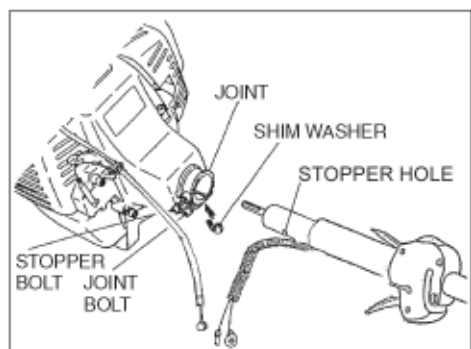
- (1) Slip the outer tube into the joint until the tube bottoms. The outer tube or gear case shaft may have to be rotated slightly for the splines on the main shaft to fully engage to the engine.

- (2) Place the D-shaped shim washer with its flat side up in the gap of the joint. Then, tighten the joint bolt securely using the hex wrench.

- (3) Loosen the screw which tightens the throttle lever to the outer tube. Shift the throttle lever toward the blade.

- (4) Put the throttle cable into the tube. Push throttle cable through hole in rear grip.

- (5) Set the throttle cable onto the throttle lever. Use the wrench so that the wire edge goes into the slot of the throttle lever securely.



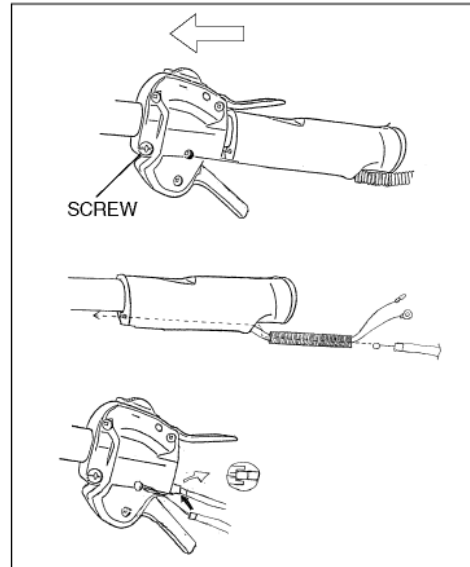
NOTE:

Make sure that the throttle cable is built into the cable guide of the throttle lever.

- (6) Shift the throttle lever back to original position, pulling the earth cord and throttle cable and tighten the screw securely.

- (7) Remove the bolt tightening the cylinder cover.

- (8) Put the bolt through the hole of the earth cord terminal and tighten the bolt.

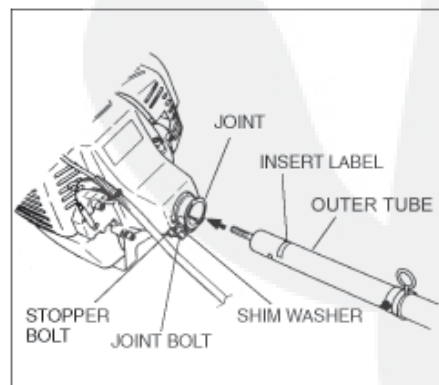


(B) C300

- (1) Slip the outer tube into the joint until the tube bottoms (up to the insert label). The outer tube or gear case shaft may have to be rotated slightly for the splines on the main shaft to fully engage to the engine.

- (2) Locate the outer tube so that the stopper bolt can go into the stopper hole. Using the hex wrench, tighten the stopper bolt securely.

- (3) Place the D-shaped shim washer with its flat side up in the gap of the joint. Then, tighten the joint bolt securely using the hex wrench.



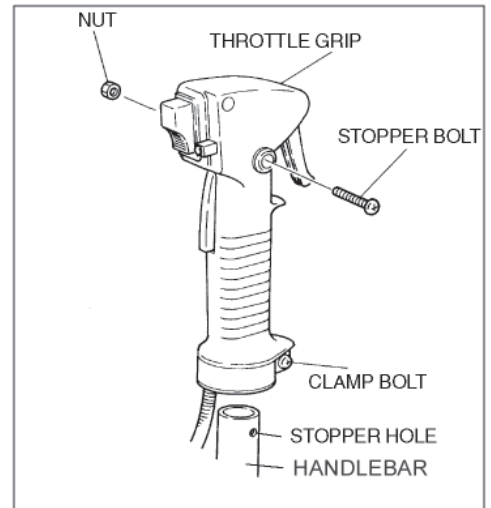
- (4) Loosen the stopper bolt of the throttle grip. Remove the stopper bolt and nut.

- (5) Fully loosen the clamp bolt of the throttle grip.

CAUTION!

DO NOT REMOVE THE SHIM WASHER!

The shim washer prevents overtightening of the outer tube joint. Overtightening the outer tube joint could damage the outer tube assembly.



- (6) Slip the right-side handlebar into the throttle grip. Locate the throttle grip so that the stopper bolt can pass through the stopper hole.

Securely tighten the stopper bolt and nut.

- (7) Securely tighten the clamp bolt.

5-4 Assembly of the Handle (A) T300



WARNING!

NEVER operate this machine without the front handle. Operating without the front handle may result in serious injury.

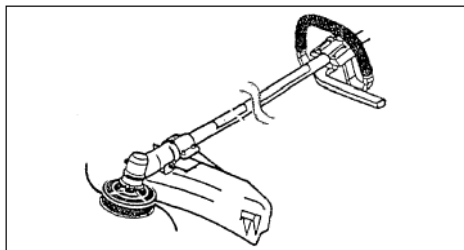
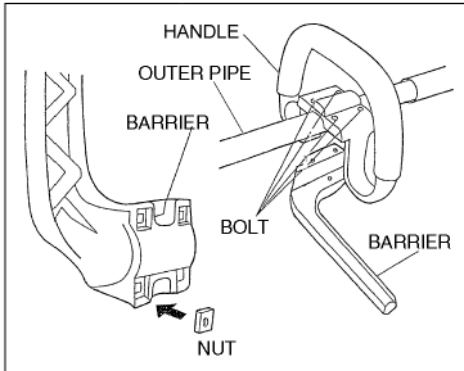
NOTE:

Tighten four bolts diagonally to properly secure the handle.

NOTE:

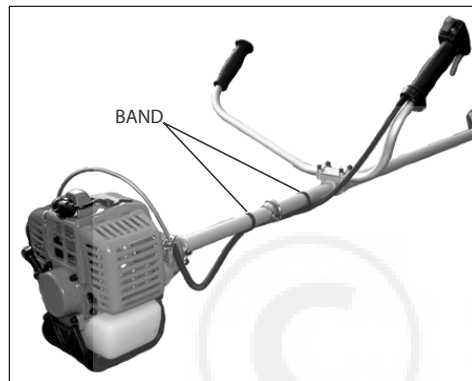
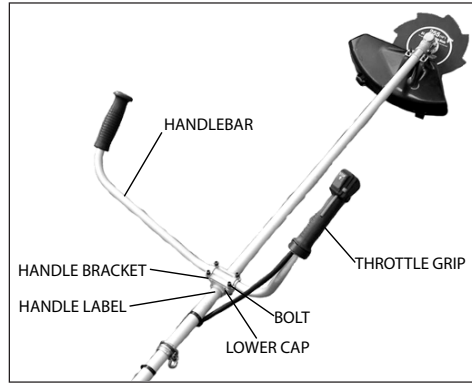
Adjust the handle at the best position for operator comfort.

- (1) Put four square nuts in the recesses on the underside of the barrier.
- (2) Fit the handle and barrier over the outer pipe and tighten four bolts.



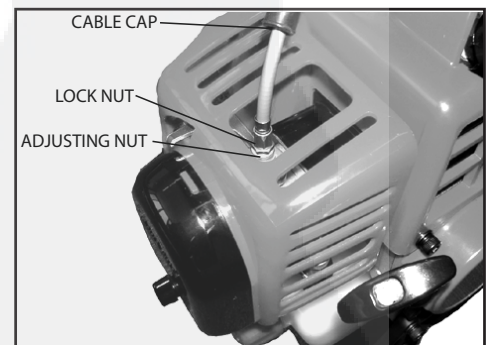
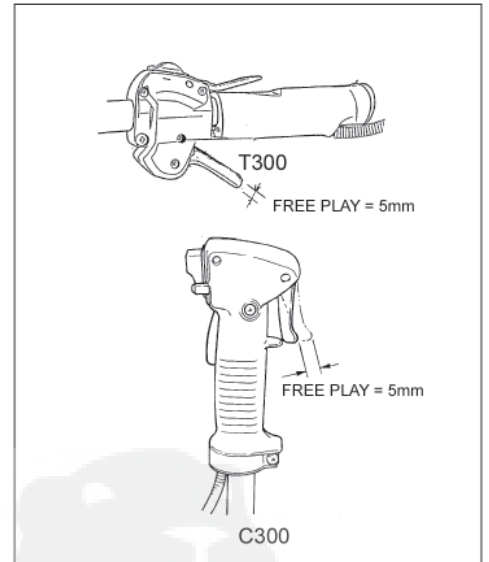
(B) C300

- (1) Loosen the two bolts of the lower cap and remove the lower cap.
- (2) Position the handle bracket against the handle label located on the outer tube.
- (3) Attach the lower cap with the two bolts and tighten the bolts. Make sure the front handle is in position per the illustration.
- (4) Secure the cable to the outer pipe with the two bands as the illustration shows. The two bands are in the tool bag.



5-5 Throttle Cable Adjustment

- (1) Pull the throttle trigger gently, and check for free-play of approximately 5mm.
- (2) If free-play is out of specifications:
 - (a) Slide the cable cap toward the muffler side until the adjusting nut and the lock nut appear.
 - (b) Loosen the lock nut slightly.
 - (c) Turn the adjusting nut so that free-play is about 5mm.
 - (d) Then, tighten the lock nut.
 - (e) Slide the cable cap back.



5-6 Debris Shield Assembly



WARNING!

NEVER operate this machine without the cutting attachment shield. Operating without the cutting attachment shield may result in serious injury.

(A) Cutting Attachment Shield

(1) Insert the cutting attachment shield between the outer tube and the lower clamp. Loosen the nut and bolt which are tightening the lower clamp if the cutting attachment shield does not fit with the lower clamp.

NOTE:

It may be necessary to loosen the lower clamp bolt so that the shield will fit between the tube and clamp.

(2) Fit the two spacers and the upper clamp over the outer pipe and tighten with four bolts.

NOTE:

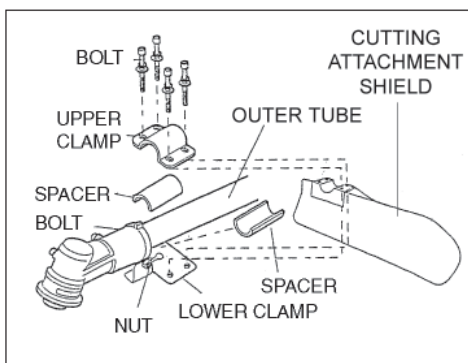
Tighten four bolts a crisscross fashion.

(3) Tighten the lower clamp bolt and nut securely.



WARNING!

Carefully inspect the debris shield assembly to make sure it is tightened securely and does not wobble.

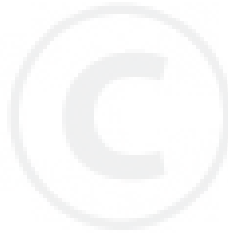
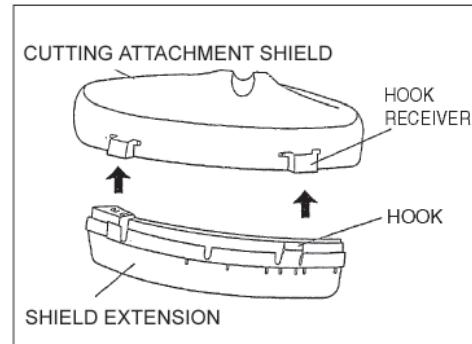


(B) Shield Extension (when trimmer head is in use)

(1) Attach the shield extension to the cutting attachment shield.

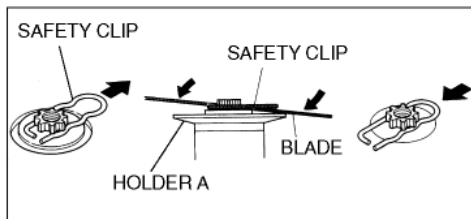
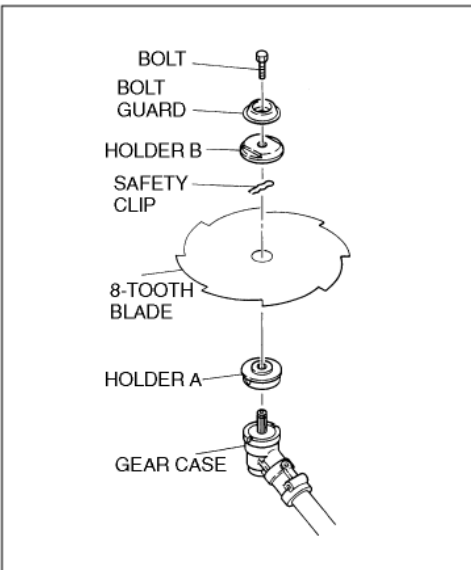
NOTE:

Make sure the shield extension is completely hooked at the hook receiver.



5-7 Installing a Blade

- (1) Make sure the switch is off and the engine is stopped.
- (2) Wear gloves to protect your hands.
- (3) Turn the unit over so the saw holder flange extending from the gear case is facing up.
- (4) Using the small end of the plug wrench, loosen the bolt (turn clockwise) and remove the bolt, bolt guard, and holder B.
- (5) Slide the safety clip as shown in the illustration.



WARNING! Never operate this machine without the safety clip in place.

- (6) Fit the blade over the safety clip onto holder A. Then, slide the safety clip back to its original position.

WARNING! The blade must fit flat against holder A. The blade's mounting hole must be centered over the raised boss of holder A.

- (7) Put holder B and bolt guard back and at this time only finger tighten the bolt.
Make sure holder B is flat against the blade and the recess in holder B must face the blade and completely cover the safety clip.

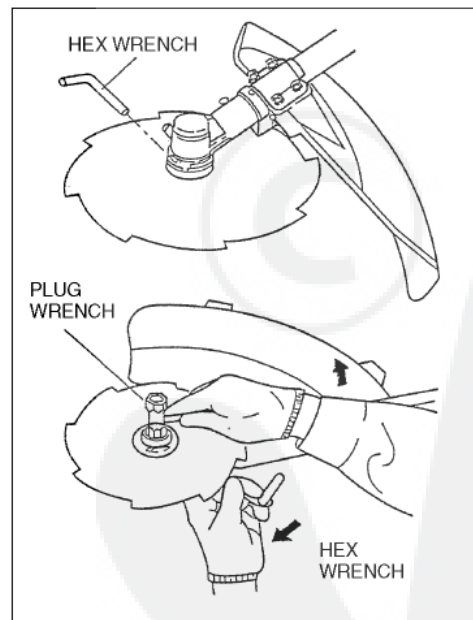
- (8) Rotate holder A until the hole in its skirt aligns with the hole in the gear case. Insert the hex wrench through both holes (to prevent the shaft from turning).

- (9) Holding the hex wrench and blade with one hand, tighten the bolt (turn counterclockwise) securely using the small end of the plug wrench.

- (10) Remove the hex wrench.

WARNING! Before operating, make sure the blade is securely mounted. Turn the blade with your hand slightly and make sure the blade turns smoothly without wobbling.

WARNING! The blade must fit flat. Make sure the direction of the arrow indicated on the blade corresponds with the arrow indicated on the cutting attachment shield.



6 Starting/Stopping Adjusting the Engine

6-1 Filling the Fuel Tank

WARNING! When adding fuel, make sure the engine is stopped and cooled-down. Filling or mixing fuel and oil must be done away from any fires or other ignition sources.

CAUTION! This engine is designed to operate only on a 50:1 mixture consisting of unleaded gasoline and a premium 2-cycle mixing oil. Use of non-approved mixing oils can lead to excessive maintenance costs and/or engine damage.

- (1) Turn the fuel cap counterclockwise and take it off.
- (2) With the fuel cap hanging down from the filler opening, fill the fuel tank with fresh, clean fuel (mixture of fuel and oil) and tighten the fuel cap securely.
- (3) If there is any fuel spilled on the machine, make sure it is wiped off completely.

6-2 Starting the Engine



WARNING!

MAKE SURE THE BLADE IS WELL CLEAR OF ANY INTERFERENCE. Before starting the engine, place unit on clear, level surface. Make sure you have good secure footing and always keep a firm grip on the machine. **THE CUTTING ATTACHMENT MAY ROTATE WHEN THE ENGINE STARTS.**



WARNING!

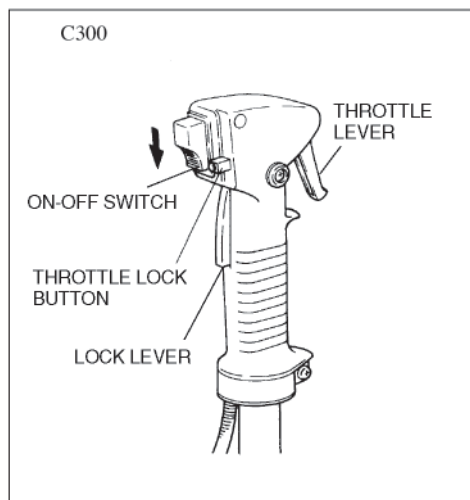
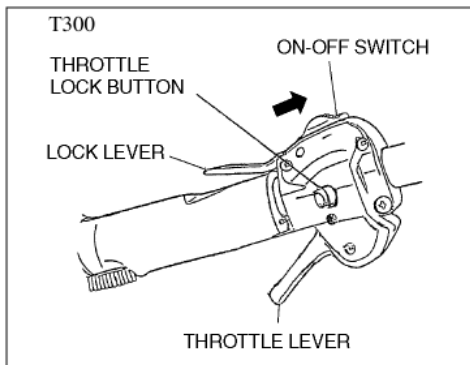
Move at least three meters away from the fuel site before starting the engine.



WARNING!

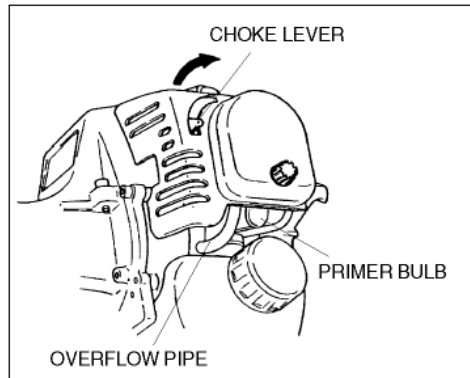
Never operate the engine without the cutting attachment installed.

(1) Starting a Cold Engine and/or Restarting After Refueling.

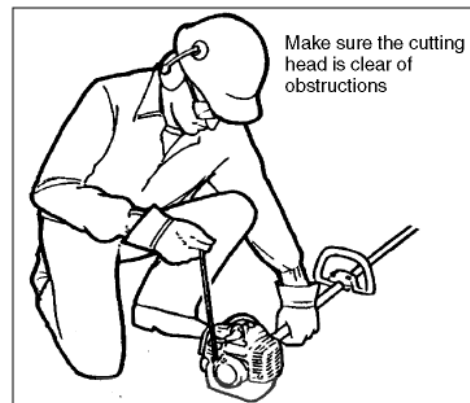


(a) Slide the ON-OFF switch to the "I" position.

(b) Prime the engine by repeatedly depressing the carburetor primer bulb until fuel can be seen flowing through the transparent overflow return tube:



(c) Push the choke lever upward ("I+I" position).



(d) Depressing the lock lever, pull the throttle lever fully and depress the throttle lock button. While depressing the throttle lock button, release the throttle lever and the lock lever. Now the throttle stays at high idle (starting speed).

(e) While firmly holding the outer pipe with one hand, pull the recoil starter handle upward with your other hand. Pull slowly at first until you feel the starter engage, then pull quickly to start the engine. Do not pull the starter rope to the end of its travel.

CAUTION!

Pulling the starter rope to the end of its travel may damage the starter mechanism.

IMPORTANT!

Repeated cranking of the engine with the choke CLOSED ("I+I") will lead to engine flooding. If the engine fails to start after several attempts, move the choke lever to the OPEN position and continue cranking.

(f) When the engine first fires, gradually return the choke to OPEN ("I+I") position if you have not already done so.

- If the engine stops before the choke is fully open, restart with the choke closed.
- If the engine stops after the initial firing, restart with choke closed.

(g) When the engine starts and is running, set the engine to idle by tapping the throttle lever to release the throttle lock.



WARNING!

Never start the engine from the operating position.

(2) Starting a Warm Engine

Starting a warm engine involves all of the steps of starting a cold engine. EXCEPT:

- Do not press the primer bulb, and
- The choke should be in the OPEN position.

If the engine does not start, follow the cold engine starting procedure.

(3) When the engine starts:

- After the engine starts, disengage the throttle lock and allow the engine to warm-up at idle for 2 or 3 minutes before operating the machine.
- After the engine is warm, pick up the machine and clip-on the strap.
- Advancing the throttle makes the cutting attachment rotate faster; releasing the throttle makes the attachment stop running. If the cutting attachment continues to rotate, carburetor idle speed should be adjusted.

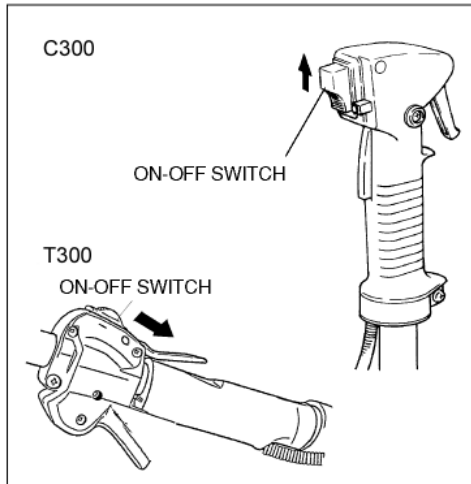
6-3 Stopping the Engine

Idle the engine briefly before stopping, then slide the ON-OFF switch to the "O" (for STOP) position.



WARNING!

The cutting attachment continues rotating for a while after the switch is turned off.



6-4 Engine Idle Adjustment

The engine must return to idle speed whenever the throttle lever is released. Idle speed is adjustable, and must be set low enough to permit the engine clutch to disengage the cutting attachment when the throttle is released.



WARNING!

The cutting attachment must NEVER rotate at engine idle! If the idle speed can not be adjusted by the procedure described here, have the unit inspected at an authorized Shindaiwa dealer.



(1) Place the unit on the ground, then start the engine and allow it to idle for 2-3 minutes until warm.

(2) If the attachment rotates when the engine is at idle, reduce the idle speed by turning the idle adjustment screw counterclockwise.

(3) If a tachometer is available, the engine idle speed should be adjusted to 3,000 min⁻¹ (rpm)

NOTE:

Carburetor fuel mixture adjustments are preset at the factory on units with emission control systems and cannot be serviced in the field.

7 Unit Condition Check

NEVER operate the unit with the cutting attachment shield or other protection devices (strap, blade retention clip, etc.) removed.



WARNING!

A cutting attachment shield or other protective device is no guarantee of protection against ricochet. YOU MUST ALWAYS GUARD AGAINST FLYING DEBRIS!

Use only authorized Shindaiwa parts and accessories with this machine. Do not make modifications to the machine without the written approval of Shindaiwa.

ALWAYS make sure the cutting attachment is properly installed and firmly tightened before operation.

NEVER use a cracked or warped cutting attachment: replace it with a serviceable one.

ALWAYS make sure the cutting attachment fits properly into the appropriate cutter holder. If a properly installed attachment vibrates, replace the attachment with new one and recheck.

ALWAYS stop the engine immediately and check for damage if you strike a foreign object or if the machine becomes tangled. Do not operate with broken or damaged equipment.

NEVER operate a machine with worn or damaged fasteners or attachment holders.

NEVER cut with dull blades. Doing so will increase the risk of blade thrust and may also damage your equipment.

8 Prior To Operation

8-1 To Wear the Strap

(1) Attach the strap hook to the hanger on the outer pipe.

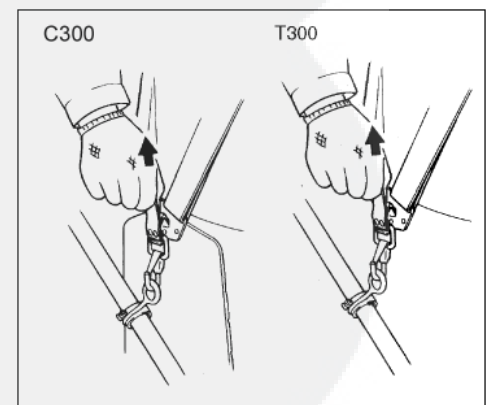
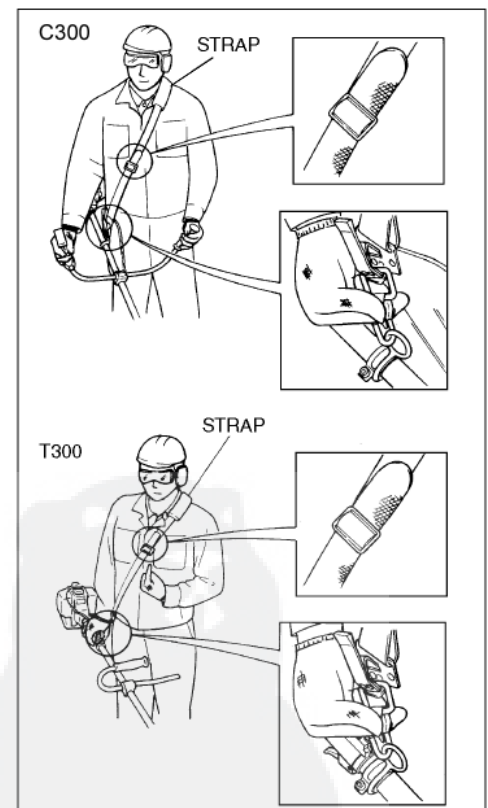
(2) Wear the strap so that the hook stays at your right side.

(3) Adjust the length of the strap so that you can hold and operate the machine comfortably.

(4) Make sure the hip pad stays between your hip and outer pipe. (C300 ONLY)

8-2 Emergency Release

In case of emergency, firmly pull the white tab at the hook. The machine will release from the strap.



9 Operation

- (1) After starting the engine, pull the throttle lever gradually. The engine speed increases and the blade will start rotating.
- (2) When the throttle lever is released, the engine goes back to idle speed automatically.
- (3) Operate the machine at full throttle while cutting. Best fuel efficiency is obtained by releasing the throttle when swinging back after cut.
- (4) The blade rotates counterclockwise. For best performance and to minimize being stuck by debris, move the blade from right to left while advancing on your work.



WARNING!

Position the blade so cuts are made between blade's 8 o'clock and 11 o'clock positions (as viewed from above). DO NOT cut between the 11 o'clock and 5 o'clock positions.



WARNING!

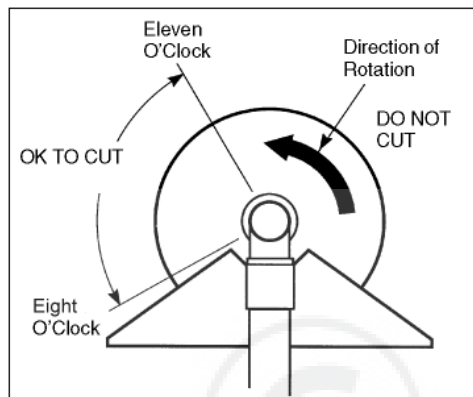
"BLADE THRUST" is a sudden sideway or backward motion of the machine. Such motion may occur when the blade jams or catches on an object such as a sapling tree or tree stump. BE CONSTANTLY ALERT FOR BLADE THRUST AND GUARD AGAINST ITS EFFECTS.

CAUTION!

DO NOT use 2-tooth blades with this machine.

CAUTION!

To prevent possible engine damage, do not allow the machine to run at high speeds without a load. Avoid operating the engine at low speeds. Doing so can lead to rapid clutch wear. In addition, slow-speed operation tends to cause grass and debris to wrap around the cutting attachment.



WARNING!

NEVER strike or slam the spinning blade against the wood.



WARNING!

When transporting, make sure the engine is not running and blade is covered with blade cover.

10 Recommended Cutting Attachment

Make sure to use the following recommended Shindaiwa cutting attachment with this machine.

PART NUMBER 60903-98310
8-TOOTH BLADE
INNER BORE: 25.4mm
DIAMETER: 255.0mm
THICKNESS: 2.0mm



PART NUMBER 72430-92142
3-TOOTH BLADE
INNER BORE: 25.4mm
DIAMETER: 255.0mm
THICKNESS: 2.2mm



PART NUMBER 60903-98320
4-TOOTH BLADE
INNER BORE: 25.4mm
DIAMETER: 255.0mm
THICKNESS: 2.0mm



PART NUMBER 78820-04000
TAP & FEED TRIMMER HEAD
BOLT DIAMETER: 8mm
THREAD: LEFT, 1.25mm PITCH



11 Blade Sharpening

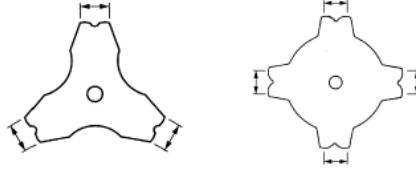
With the file or a grinder, file a blade as follows.



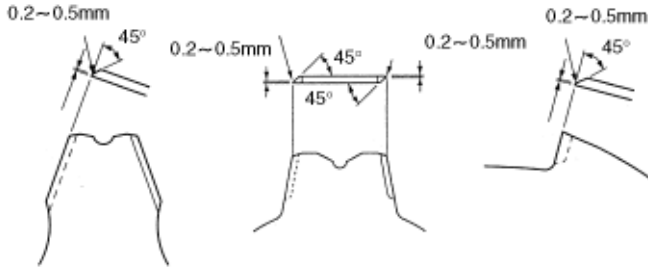
WARNING!

Sharpen only the cutting teeth of a blade. DO NOT alter the contour of the blade in any way. In order to keep the blade in balance, all cutting edges must be sharpened equally. DO NOT file the tips of the teeth too sharp.

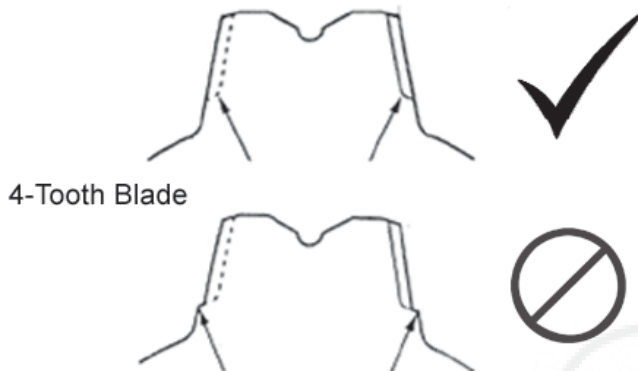
Make sure the width of the 3 sides/4 sides is all the same.



The sharpening angle should be 45° approx.
Do not file the tips of the blade too sharp. Leave 0.2–0.5mm unsharpened.

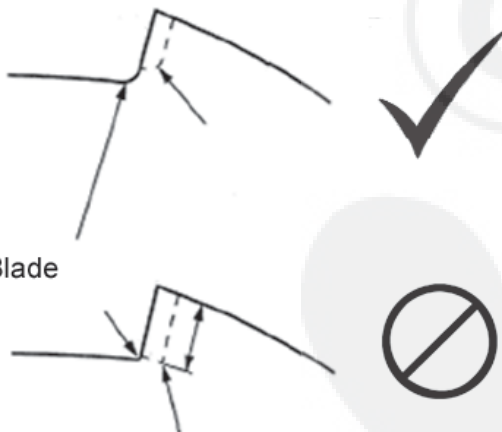


The bottom of each tooth must remain unsharpened. (Blade as viewed from bottom.)



4-Tooth Blade

8-Tooth Blade



12 Maintenance



WARNING!

Before performing any maintenance, repair, or cleaning work on the machine, make sure the engine and cutting attachment are completely stopped. Disconnect the spark plug wire before performing service or maintenance work.



WARNING!

Never repair a damaged blade by welding, straightening, or by modifying its shape. An altered blade may break during operation, resulting in serious personal injury.

12-1 Daily Maintenance

Prior to each work day, perform the following:

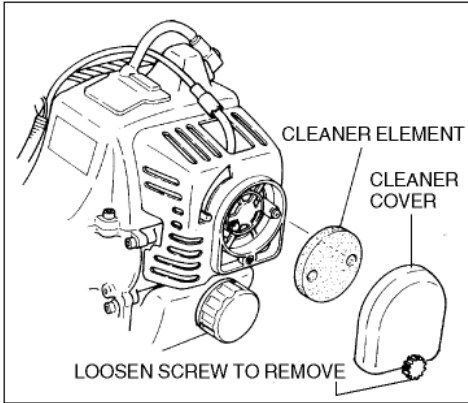
- Remove the dirt and debris from the engine, check the cooling fins and air cleaner for clogging, and clean them as necessary.
- Carefully remove any accumulations of dirt or debris from the muffler and fuel tank. Dirt buildup in these areas can lead to engine overheating, fire, or premature wear.
- Check for loose or missing screws or components. Make sure the cutting attachment is securely fastened.
- Check the machine for leaking fuel or grease.

12-2 10 Hour Maintenance

Remove the air cleaner element from the carburetor and clean it thoroughly with soap and water. Squeeze out excess, let dry and reassemble the element.

CAUTION!

Do not operate the machine if the air cleaner or element is damaged, or if the element is water-soaked.

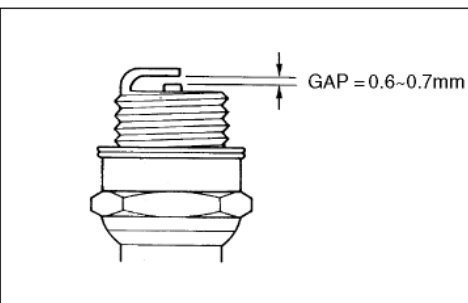


12-3 10/15 Hour Maintenance

Remove and clean the spark plug. Adjust the spark plug electrode gap to 0.6 - 0.7mm. If the plug must be replaced, use only NGK, BPMR6A.

CAUTION!

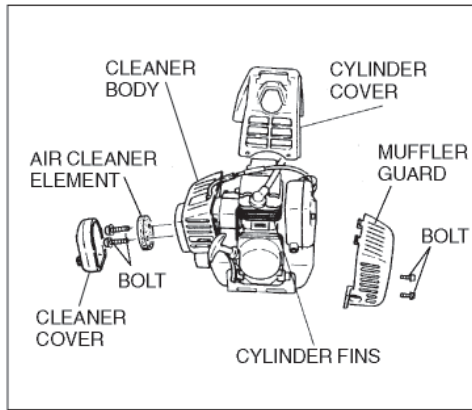
Before removing the spark plug, clean the area around the plug to prevent dirt and dust from getting into the engine's internal parts.



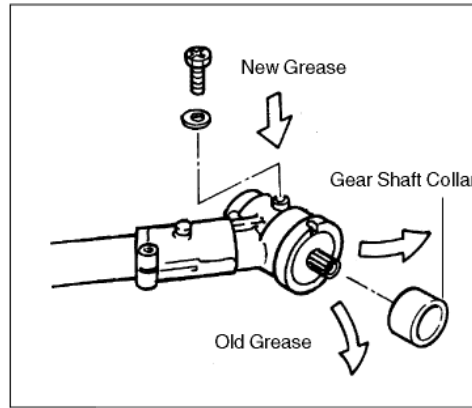
12-4 50 Hour Maintenance

Cleaning

Remove and clean the cylinder cover and clean grass and dirt from the cylinder fins.



Remove the cutting attachment and the gear shaft collar, and press new grease into the gear case until the old grease has been pushed out. Use only lithium base grease (such as Shindaiwa Gear Case Lubricant).

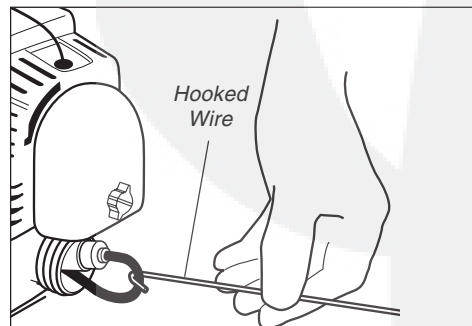


Fuel Filter Maintenance

Use a hooked wire to extract the fuel filter from inside the fuel tank. Remove and replace the filter element. Before reinstalling the filter, inspect the condition of the fuel line. If damage or deterioration are noted, the unit should be removed from service until you can consult with an authorized servicing dealer.

CAUTION!

Make sure you do not pierce the fuel line with the end of the hooked wire. The line is delicate and can be damaged easily.

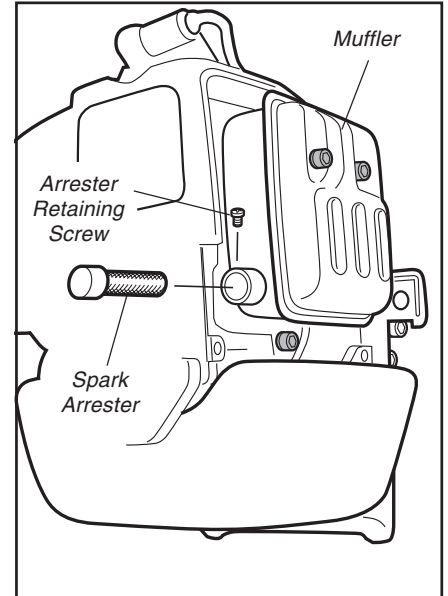


12-5 Muffler Maintenance

Hard starting or a gradual loss of performance can be caused by carbon deposits lodged in the muffler's spark arrester screen.

In such cases, performance can usually be restored by removing the spark arrester screen and giving it a thorough cleaning with a stiff bristle brush.

If carbon deposits are severe or if no performance improvement is noted, your unit should be returned to your Shindaiwa dealer for inspection.



WARNING!

Never operate this unit with a damaged or missing muffler or spark arrester! Operating with missing or damaged exhaust components is a fire hazard and may also damage your hearing.

12-6 Long Term Storage

Whenever the machine will not be used for 30 days or longer, use the following procedures to prepare it for storage.

- Clean external parts thoroughly and apply a light coating of oil to all metal surfaces.
- Drain all the fuel from the carburetor and the fuel tank.

IMPORTANT!

All stored fuels should be stabilized with a fuel stabilizer such as STABIL®.

CAUTION!

Gasoline stored in the carburetor for a long time will likely cause hard starting and could lead to increased service and maintenance costs.

- Remove the spark plug and pour about 7 grams of oil into the cylinder through the spark plug hole. Slowly pull the recoil starter 2 or 3 times so oil will evenly coat the interior of the engine. Reinstall the spark plug.
- Before storing the machine, repair or replace any worn or damaged parts.
- Remove the air cleaner element from the carburetor and clean it thoroughly with soap and water. Squeeze out the excess, let dry and reassemble the element.
- Store the machine in a clean, dust free area.

13 Troubleshooting Guide

Engine Does Not Start

What To Check	Possible Cause	Remedy
Does the engine crank?	NO → Faulty recoil starter. Fluid in the crankcase. Internal damage.	Consult with an authorized servicing dealer.
YES ↓ Good compression?	NO → Loose spark plug. Excess wear on cylinder, piston, rings.	Tighten and re-test. Consult with an authorized servicing dealer.
YES ↓ Does the tank contain fresh fuel of the proper grade?	NO → Fuel/mixture incorrect, stale or contaminated.	Re-fill with fresh fuel of the correct mixture (gasoline and Shindaiwa Premium 2-cycle Engine Oil (50 : 1 ratio; page 10).
YES ↓ Is fuel visible and moving in the return line when priming?	NO → Check for clogged fuel filter and/or vent.	Clean as required; re-start.
YES ↓ Is there spark at the spark plug wire terminal?	NO → The ignition switch is in the STOP position (OFF). Shorted ignition wires. Faulty ignition module.	Move switch to START (ON) and re-start. Consult with an authorized servicing dealer.
YES ↓ Check the spark plug	→ If the plug is wet, excess fuel may be in the cylinder. The plug may be fouled or improperly gapped. The plug may be damaged internally or of the wrong size.	Crank the engine with the plug removed, replace the plug, and re-start. Clean and re-gap the plug to (0.6 ~ 0.7mm). Re-start. Replace the plug with a NGK BPMR6A.

What To Check	Possible Cause	Remedy
Is the engine overheating?	Operator is overworking the machine.	Shorten trimmer line. Cut at a slower rate.
	Carburetor mixture is too lean.	Consult with an authorized servicing dealer.
	Improper fuel ratio.	Re-fill with fresh fuel of the correct mixture (gasoline and Shindaiwa Premium 2-cycle Engine Oil (50 : 1 ratio; pg 10).
	Fan, fan cover, or cylinder fins dirty or damaged.	Clean, repair or replace as necessary.
	Carbon deposits on piston or in the muffler.	Consult with an authorized servicing dealer.

Engine is rough at all speeds. May also have black smoke and/or unburned fuel at the exhaust.	Clogged air filter.	Service the filter.
	Loose or damaged spark plug.	Tighten or replace.
	Air leakage or clogged fuel line.	Repair or replace filter and/or fuel line.
	Water in the fuel.	Replace the fuel.
	Piston seizure.	Consult with an authorized servicing dealer.
	Faulty carburetor and/or diaphragm.	Consult with an authorized servicing dealer.

Engine is knocking.	Overheating condition.	See above.
	Improper fuel.	Check fuel octane rating; check for presence of alcohol in the fuel. Refuel as necessary.
	Carbon deposits in the combustion chamber.	Consult with an authorized servicing dealer.

Additional Problems

Symptom	Possible Cause	Remedy
<div style="border: 1px solid black; padding: 5px; width: fit-content;">Poor acceleration.</div>	Clogged air filter.	Clean the air filter.
	Clogged fuel filter.	Replace the fuel filter.
	Carburetor mixture too lean.	Consult with an authorized servicing dealer.
	Idle speed set too low.	Adjust: 3,000 min ⁻¹ (rpm)
<div style="border: 1px solid black; padding: 5px; width: fit-content;">Engine stops abruptly.</div>	Switch turned off.	Reset the switch and re-start.
	Fuel tank empty.	Refuel.
	Clogged fuel strainer.	Replace strainer.
	Water in the fuel.	Drain; replace with clean fuel.
	Shorted spark plug or loose terminal.	Clean and replace spark plug, tighten the terminal.
	Ignition failure.	Consult with an authorized servicing dealer.
	Piston seizure.	Consult with an authorized servicing dealer.
<div style="border: 1px solid black; padding: 5px; width: fit-content;">Engine difficult to shut off.</div>	Earth (stop) wire is disconnected, or switch is defective.	Test and replace as required.
	Overheating due to incorrect spark plug.	Clean and regap to 0.6mm (0.024"). Correct plug: (NGK BPMR6A)
	Overheated engine.	Idle engine until cool.
<div style="border: 1px solid black; padding: 5px; width: fit-content;">Cutting attachment rotates at engine idle.</div>	Engine idle too high.	Set idle: 3,000 min ⁻¹ (rpm)
	Broken clutch spring or worn clutch spring boss.	Replace spring/shoes as required, check idle speed.
	Loose attachment holder.	Inspect and re-tighten holders securely.
<div style="border: 1px solid black; padding: 5px; width: fit-content;">Excessive vibration.</div>	Warped or damaged attachment.	Inspect and replace attachment as required.
	Loose gearcase.	Tighten gearcase securely.
	Bent main shaft/worn or damaged bushings.	Inspect and replace as necessary.

DECLARATION OF CONFORMITY

We hereby declare the Shindaiwa Engine Brushcutter,
Model R26 (C300/EC1, T300/EC1)

meets the following respective requirements.

Council Directives:

89/336/EEC as amended
98/37/EC as amended
2000/14/EC as amended
2002/88/EC as amended

Standard taken:

EN 292 parts 1&2
ISO 11806
CISPR 12

Measured sound power level: 112dB(A)

Guaranteed sound power level: 113dB(A)

Technical documentation is kept by:

K. Maeda DIV. Manager
Engineering Research and Development DIV.

Shindaiwa Kogyo Co.,Ltd.

Head office : 6-2-11, Ozuka-Nishi, Asaminami-Ku,
Hiroshima, 731-3167, Japan

TEL:81-82-849-2003 , FAX:81-82-849-2482

19th August, 2004

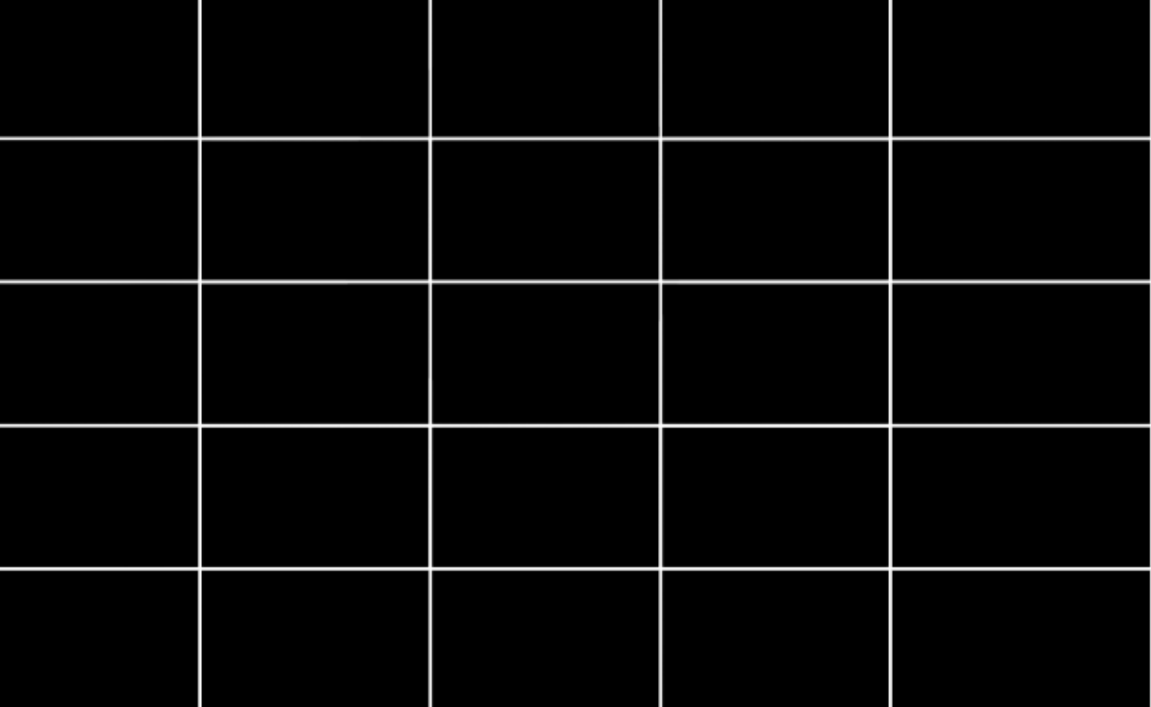


T. Yoshitomi
DIV. Manager
Quality Assurance DIV.

Shindaiwa Kogyo Co.,Ltd.

Head office : 6-2-11, Ozuka-Nishi, Asaminami-Ku,
Hiroshima, 731-3167, Japan

TEL:81-82-849-2206 , FAX:81-82-849-2481



shindaiwa

Shindaiwa Inc.
11975 S.W. Herman Road
Tualatin, Oregon 97062
Telephone: 503 692-3070
Fax: 503 692-6696
www.shindaiwa.com

Shin-Daiwa Kogyo Co., Ltd.
Head Office: 6-2-11 Ozuka
Nishi, Asaminami-ku
Hiroshima, 731-3167, Japan
Telephone: 81-82-849-2220
Fax: 81-82-849-2481

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