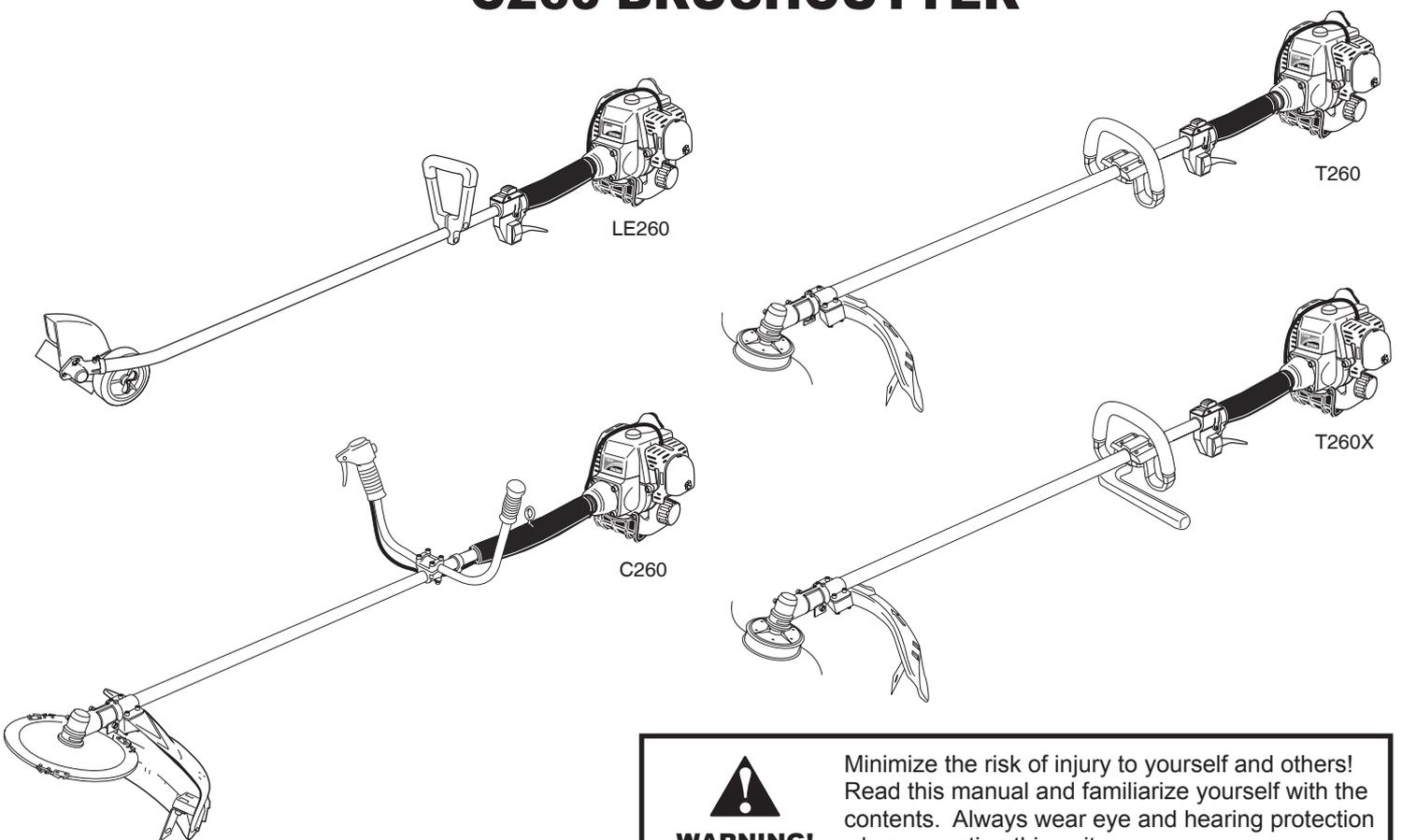


SHINDAIWA OWNER'S/OPERATOR'S MANUAL

T260 GRASS TRIMMER
T260X GRASS TRIMMER
LE260 LAWN EDGER
C260 BRUSHCUTTER



 **WARNING!** Minimize the risk of injury to yourself and others! Read this manual and familiarize yourself with the contents. Always wear eye and hearing protection when operating this unit.

shindaiwa

Part Number 62710-94310 Rev. 8/05

Introduction

The Shindaiwa 260-series hand held power equipment has been designed and built to deliver superior performance and reliability without compromise to quality, comfort, safety, or durability.

Shindaiwa's high-performance engines represent the leading edge of 2-cycle engine technology, delivering exceptionally high power with remarkably low displacement and weight. As an owner/operator, you'll soon discover for yourself why Shindaiwa is simply in a class by itself!

IMPORTANT!

The information contained in this manual describes units available at the time of publication.

Shindaiwa Inc. reserves the right to make changes to products without prior notice, and without obligation, to make alterations to units previously manufactured.

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Attention Statements

Throughout this manual are special "Attention Statements".



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 avoid damaging the unit.

IMPORTANT!

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

NOTE:

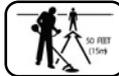
A statement preceded by the word "NOTE" contains information that is handy to know and may make your job easier.



Read and follow this operators manual. Failure to do so could result in serious injury.



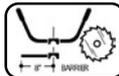
Wear eye and hearing protection at all times during the operation of this unit.



Keep bystanders at least 50 feet (15 m) away during operation.



Beware of thrown or ricocheted objects.



Do not operate this unit with a blade unless the unit is equipped with a handlebar.



Always wear a harness when operating this unit with a blade. A harness is also recommended when using trimmer line.



If unit is used as a brushcutter, beware of blade thrust. A jammed blade can cause the unit to jerk suddenly and may cause the operator to lose control of the unit.

IMPORTANT!

The operational procedures described in this manual are intended to help you get the most from your unit, and to protect you and others from harm. These procedures are guidelines for safe operation under most conditions, and are not intended to replace any safety rules and/or laws that may be in force in your area.

If you have questions regarding your 260-series unit, or if you do not understand something in this manual, your Shindaiwa dealer will be glad to assist you. You may also contact Shindaiwa, Inc. at the address printed on the back of this Manual.

General Safety Instructions

Work Safely

Trimmers and brushcutter operate 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 this unit!*



WARNING!

Never make unauthorized attachment installations.



WARNING!

Use Good Judgment

NEVER operate the engine when transporting the unit.

NEVER operate the engine indoors! Make sure there is always good ventilation. Fumes from engine exhaust can cause serious injury or death.

ALWAYS use the proper cutting tool for the job.

ALWAYS stop the unit 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 unit 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.



WARNING!

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

General Safety Instructions The Properly Equipped Operator

Stay Alert

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



WARNING!



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



WARNING!

Minimize the Risk of Fire

NEVER smoke or light fires near the unit.

ALWAYS stop the engine and allow it to cool before refueling. Avoid overfilling and wipe off any fuel that may have spilled.

ALWAYS inspect the unit for fuel leaks before each use. During each refill, check that no fuel leaks from around the fuel cap and/or fuel tank. If fuel leaks are evident, stop using the unit immediately. Fuel leaks must be repaired before using the unit.

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.

NEVER run the engine without the spark arrester screen in place.

Wear hearing protection devices and a broad-brimmed hat or helmet.

Wear close-fitting clothing to protect legs and arms. Gloves offer added protection and are strongly recommended. Do not wear clothing or jewelry that could get caught in machinery or underbrush. NEVER wear shorts!

Always wear eye protection such as goggles or safety glasses.

Always wear a harness when operating a unit equipped with a blade.

Always operate with both hands firmly gripping the unit.

When operating with a blade, make sure the handle is positioned to provide you with maximum protection from contacting the blade.

Keep a proper footing and do not overreach—maintain your balance at all times during operation.

Keep away from the rotating trimming line or blade at all times, and never lift a moving attachment above waist-high.

Wear appropriate footwear (non-skid boots or shoes): do not wear open-toed shoes or sandals. Never work barefooted!

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

Figure 1

Safety Labels

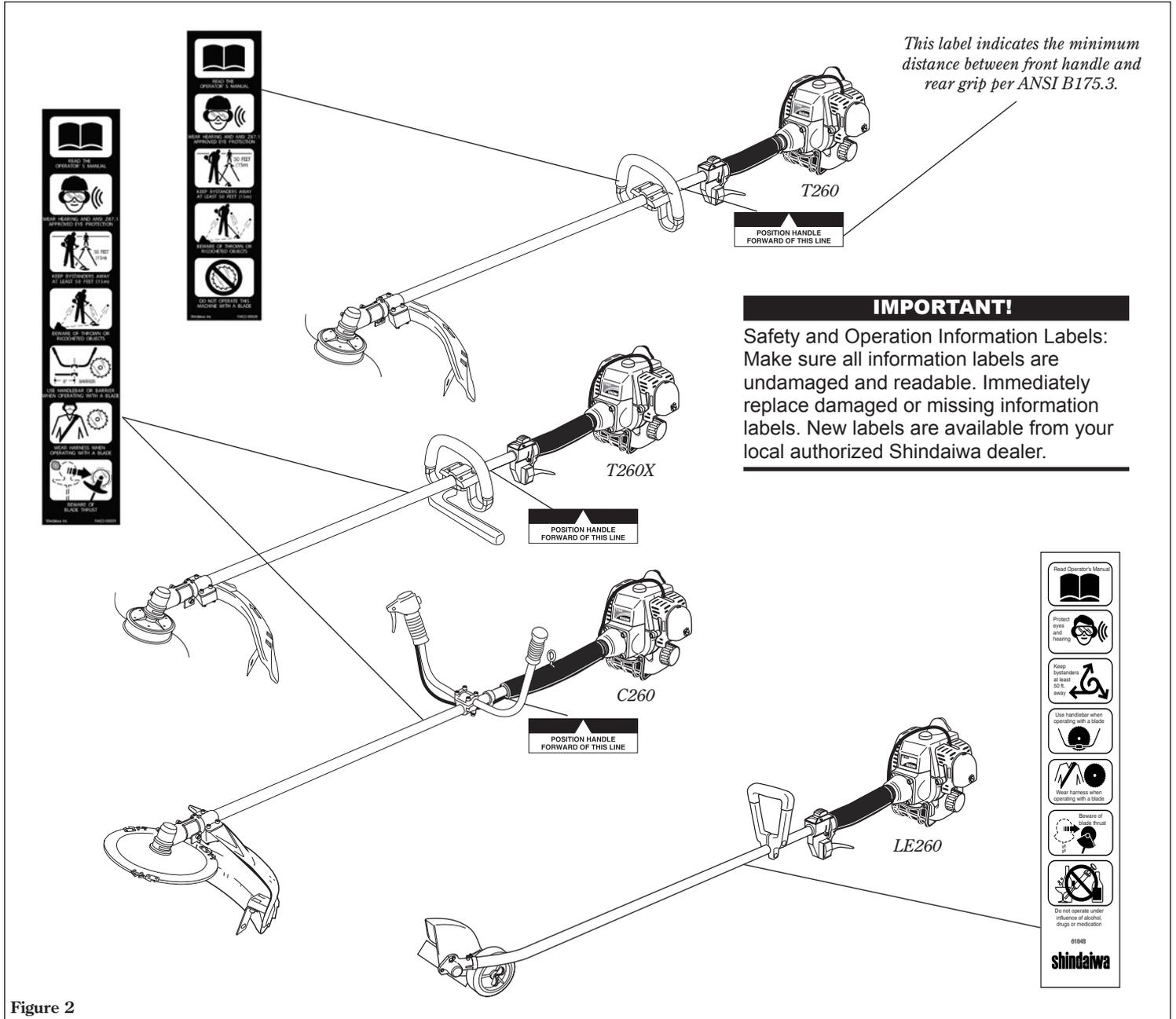


Figure 2

Be Aware of the Working Environment (all units)

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

Make sure bystanders or observers outside the 50-foot "danger zone" wear eye protection.



Reduce the risk of bystanders being struck by flying debris. Make sure no one is within 50 feet (15 meters)—that's about 16 paces—of an operating attachment.

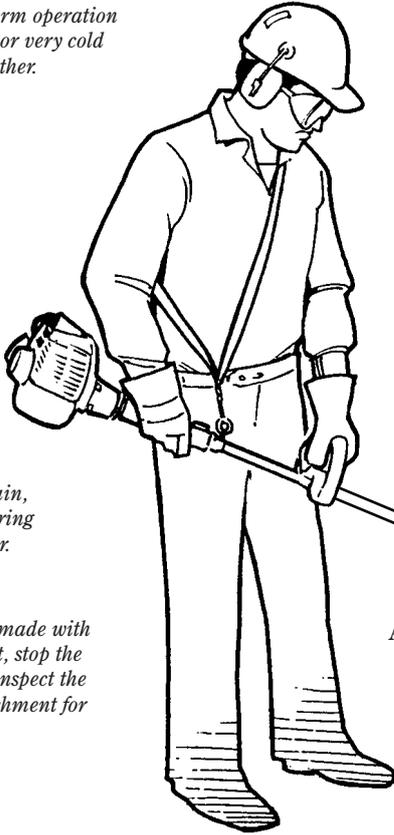
Beware of a coasting blade. A coasting blade can injure while it continues to spin after the throttle trigger is released or after the engine is stopped.

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

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

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

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.

Figure 3

Product Description

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



WARNING!

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

Prior to Assembly

Before assembling, make sure you have all the components required for a complete unit:

- Engine assembly
- Outer tube assembly
- Cutting attachment shield
- Cutting attachment (trimmer head or brushcutter blade)
- Correct operator's handle (see pages 7-9)
- Kit containing debris shield mounting bracket and hardware, operator's handle mounting bracket and hardware, this manual and tool kit for routine maintenance. Tool kits vary by model and may include a hex wrench, spark-plug/screwdriver combination wrench, and spanner.

Carefully inspect all components for damage.

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.

Specifications

T260/T260X Dry Weight (less attachments).....	5.0 kg/11.0 lb.
LE260 Dry Weight (less attachments)	5.6 kg/12.3 lb.
C260 Dry Weight (less attachments).....	5.2 kg/11.5 lb.
Engine Model.....	Shindaiwa S260
Engine Type	2-cycle, vertical-cylinder, air-cooled
Bore x Stroke.....	32 x 30 mm/1.26 x 1.18 in.
Displacement.....	24.1 cc/1.5 cu. in.
Maximum Power Output.....	1.2 hp/0.9 kW @ 7500 RPM (min ⁻¹)
Fuel/Oil Ratio.....	50:1 with Shindaiwa 2-cycle Mixing Oil
Fuel Tank Capacity	600 cc/20.3 oz.
Carburetor Type.....	TK-DPN, diaphragm-type
Ignition	Fully electronic, transistor-controlled

Specifications are subject to change without notice.

Spark Plug.....	Champion CJ8Y (for EMC compliance use NGK BMR6A)
Air Filter.....	Non-reversible flocked filter element
Starting Method	Recoil
Stopping Method.....	Slide switch
Transmission Type	Automatic, centrifugal-clutch w/bevel gear
EPA Emission Compliance Period*	Category A

* The EPA emission compliance referred to on the emission compliance label located on the engine, indicates the number of operating hours for which the engine has been shown to meet Federal emission requirements. Category C = 50 hours (Moderate), B = 125 hours (Intermediate) and A = 300 hours (Extended).

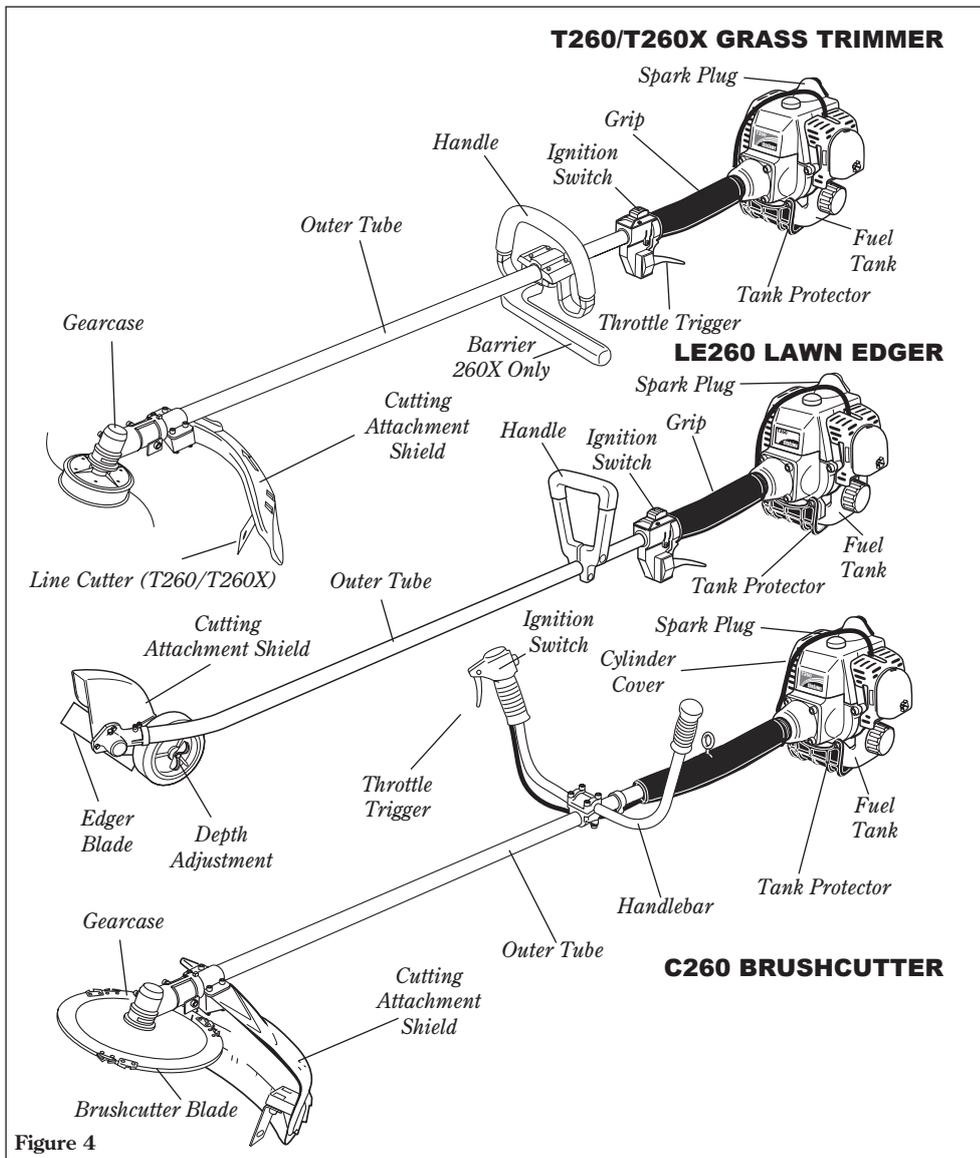
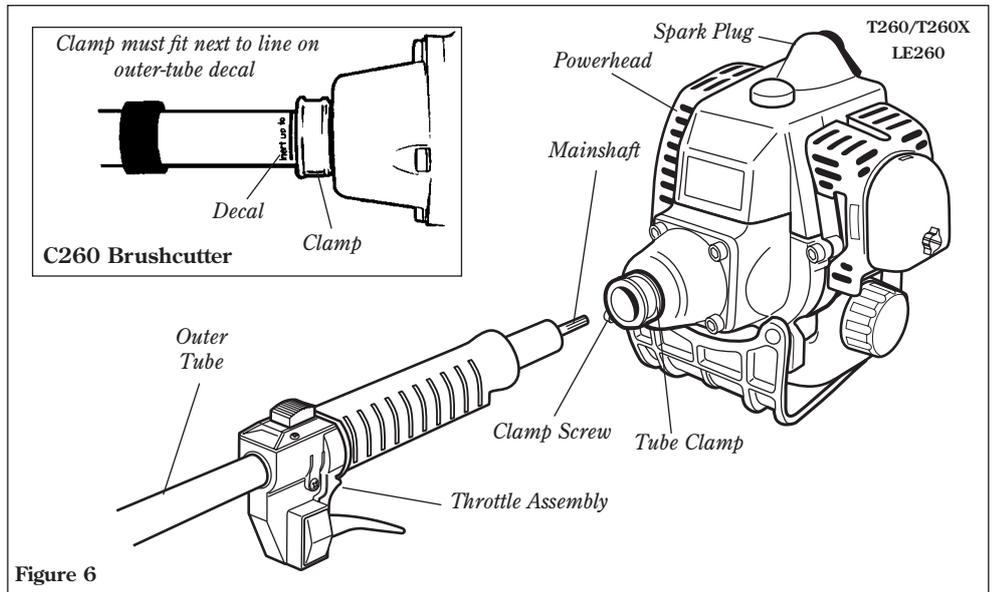
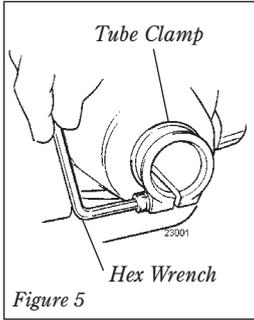


Figure 4

Assembly: Driveshaft/Powerhead All Models

Connect the Outer Tube to the Powerhead.

1. Place the powerhead on a clean, flat surface, spark plug facing up.
2. Use the 4 mm hex wrench to loosen the tube clamp screw.
3. Slide the outer tube into the tube clamp until the tube bottoms. If installation is difficult, rotate the outer tube or gearcase output shaft slightly until you feel the mainshaft splines engage with the powerhead.
4. Position the outer tube so that the gearcase output shaft is facing down (opposite the spark plug).



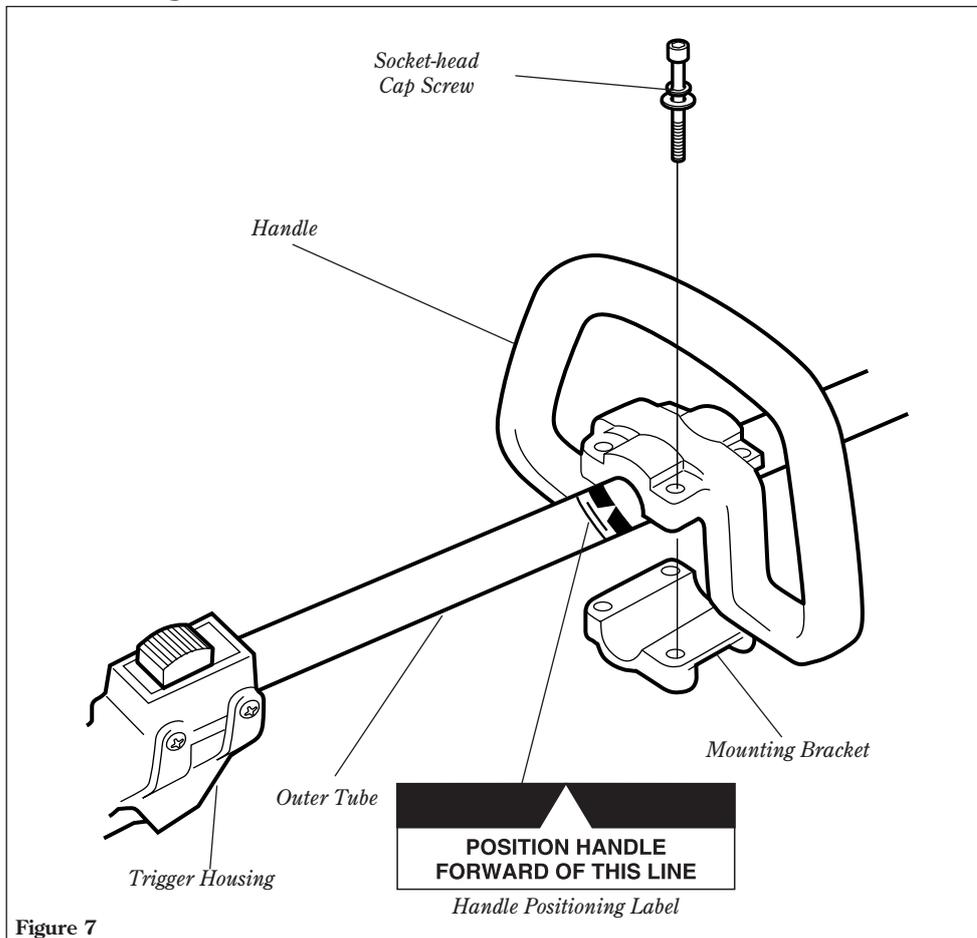
C260 — Slide the outer tube into the powerhead until the installation decal aligns with the tube clamp.

5. Tighten the clamp screw firmly.

CAUTION!

Do not force the outer tube into the powerhead! Excessive force can damage the outer tube and mainshaft.

Assembly: Handle T260



Connect the Handle to the Outer Tube.

1. Position the handle on the outer tube forward of Handle Positioning Label as shown in Figure 7.
2. Install the mounting bracket with the socket head cap screws. Tighten the screws finger-tight ONLY at this time.
3. Locate the handle in the best position for operator comfort (usually about 10 inches ahead of the throttle housing).
4. Secure the handle by alternately tightening the four socket-head screws in a diagonal or "crisscross" fashion.

Barrier Bar and Hanger Assembly

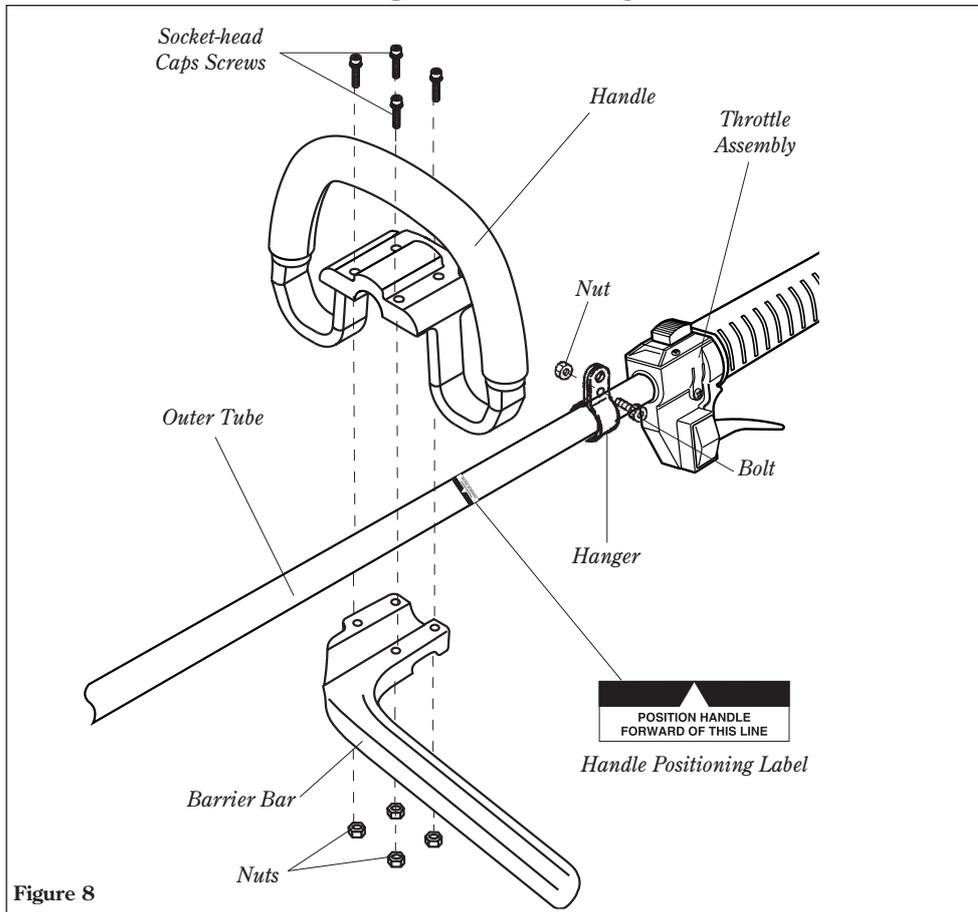


Figure 8

Connect the Handle to the Outer Tube.

1. Remove the four socket-head cap screws on the handle and remove the handle and mounting bracket.
2. Position the handle on the outer tube forward of Handle Positioning Label as shown in Figure 8.
3. Install the barrier bar with the socket-head cap screws and nuts. Tighten the screws finger-tight ONLY at this time.
4. Locate the handle in the best position for operator comfort (usually about 10 inches ahead of the throttle housing).
5. Secure the handle by alternately tightening the four socket-head screws in a diagonal or “criss-cross” fashion.
6. Position the hanger on the outer tube between the handle and throttle assembly. See Figure 8.
7. Secure the hanger with the nut and bolt as shown in Figure 8.

Assembly: Handle LE260

Connect the Handle to the Outer Tube.

1. Remove both screws from the handle.
2. While spreading the handle at the mounting hole, position the handle on the outer tube as shown.
3. Reinstall the two mounting screws in the handle, but do not tighten them at this time.

NOTE:

The handle is recessed to receive the hex nuts.

4. Locate the handle at the best position for operator comfort (usually about 10 inches ahead of the throttle lever).
5. Secure the handle by tightening the knob at the handle base.

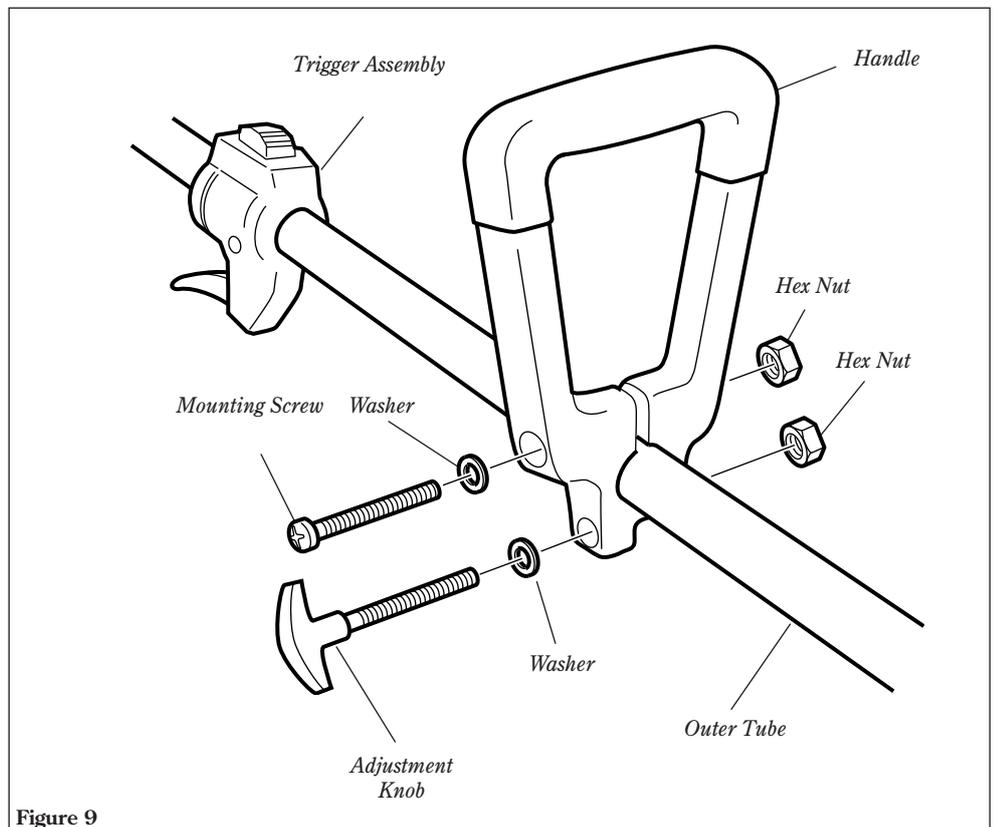


Figure 9

Assembly: Throttle Linkage and Ignition Leads T260/T260X/LE260

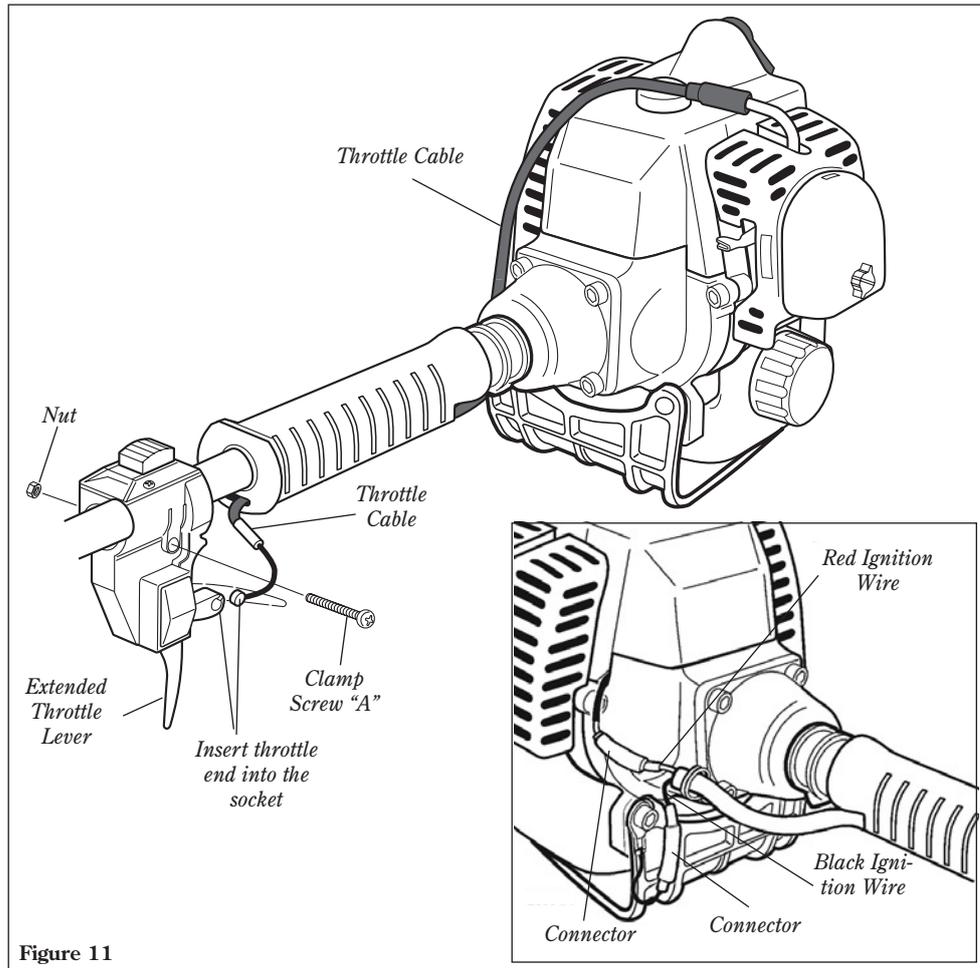


Figure 11

Install the Throttle Cable (T260/ T260X/LE260)

1. Loosen and remove the throttle lever clamp screw "A".
2. Extend the throttle lever.
3. Starting from the powerhead, push the throttle cable through the handgrip until it appears at the throttle assembly.
4. Insert the throttle cable end into the socket on the throttle lever.
5. Retract the throttle lever to its original position.
6. Replace and tighten the throttle lever clamp screw "A".
7. Using finger pressure only, connect the red and black ignition wires onto the connectors on the powerhead (see the inset).

Assembly: Handle C260

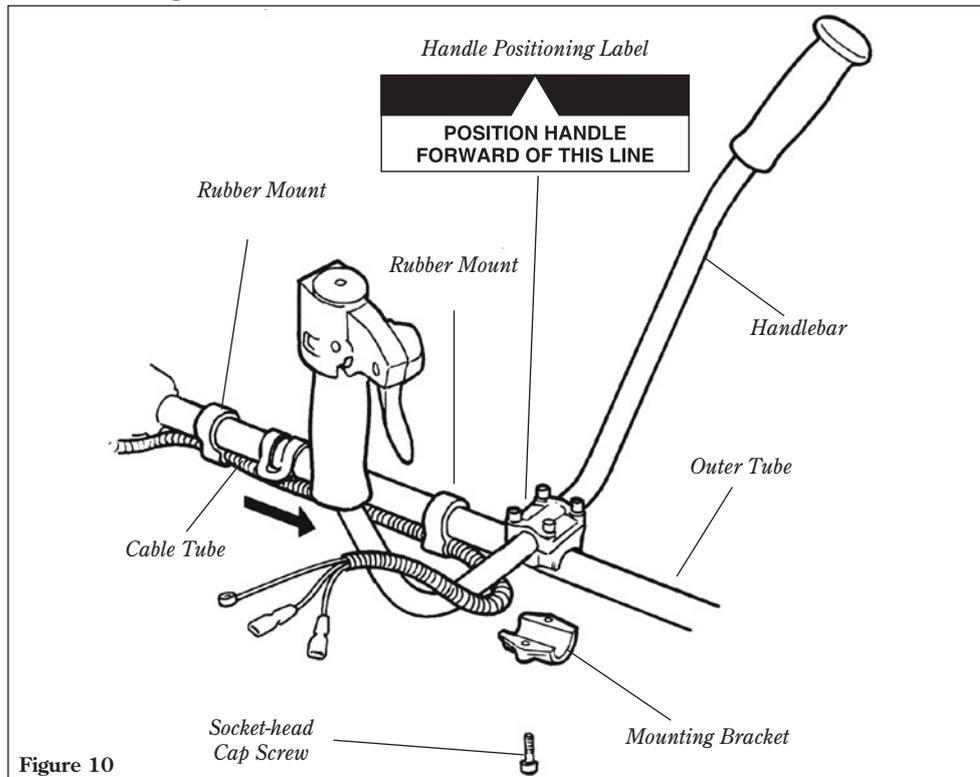


Figure 10

Assemble the Handlebar

1. Position the handle over the outer tube forward of Handle Positioning Label as shown in Figure 10. The handlegrips must face "up," with the throttle lever to the right-hand side as shown in Figure 10.
2. Attach the handle mounting bracket from below using the two socket-head cap screws, washers, and lock washers. Tighten both screws **FINGER TIGHT ONLY** at this time.
3. Locate the handle in the best position for operator comfort (usually about 5 inches ahead of the harness loop.) If necessary, reposition the aluminum collar between the handlebar bracket and outer tube.

IMPORTANT!

The aluminum collar must be installed between the handlebar bracket and outer tube! If the aluminum collar is omitted or is improperly installed, the handlebar bracket cannot be properly secured.

4. Use the hex wrench to securely tighten both handlebar cap screws.
5. Working from the handlebar toward the powerhead, route the ribbed throttle cable tube through the two rubber mounts on the outer tube.

Assembly: Throttle Linkage and Ignition Leads C260

Install the Throttle Cable (C260)

1. Loosen and remove the throttle lever clamp screw "A", and slide the throttle assembly about 1-inch away from the handgrip.
2. Extend the throttle lever (inset).
3. Push the throttle cable and switch wires through the handgrip until it appears at the throttle assembly.
4. Insert the throttle cable end into the socket on the throttle lever.
5. Retract the throttle lever to its original position.
6. Using finger pressure only, gently push the red and black ignition wires onto the connectors underneath the throttle assembly
7. Slide the throttle assembly back to its original position, and then replace and tighten the throttle lever clamp screw "A".

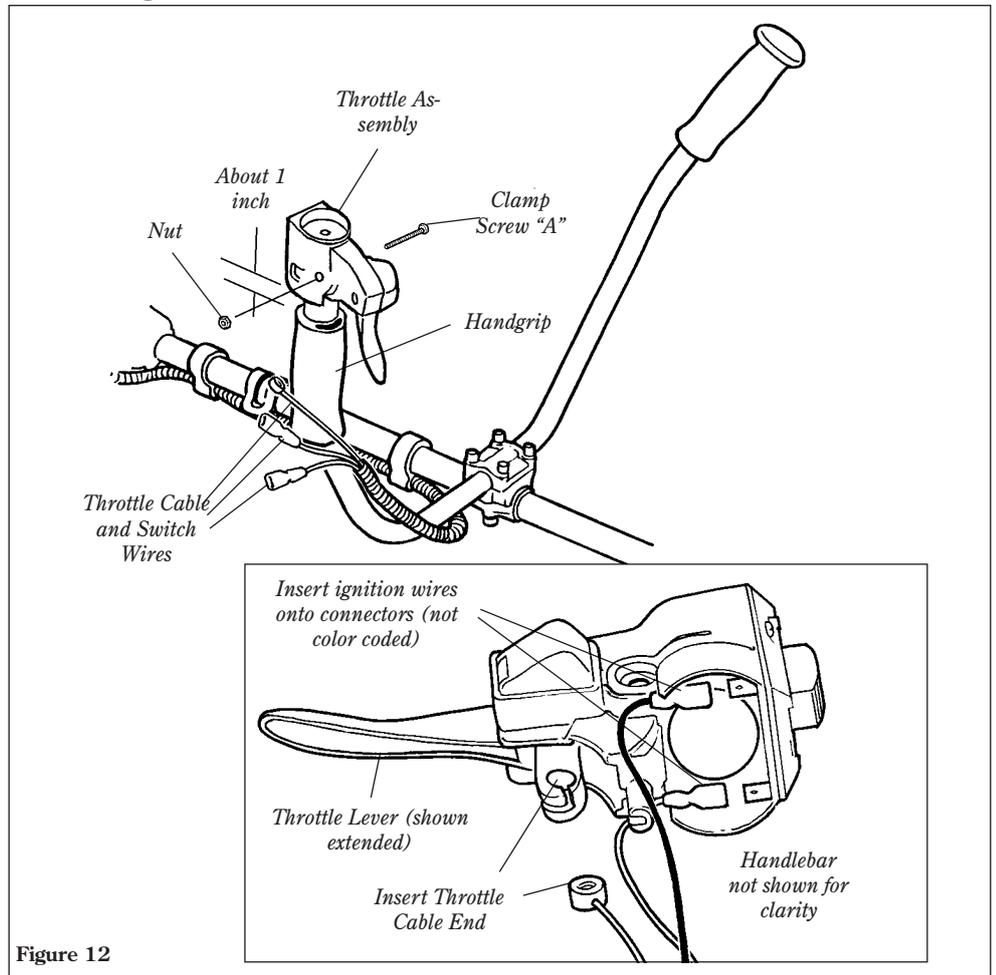


Figure 12

Assembly: Cutting Attachment Shield T260/T260X/C260

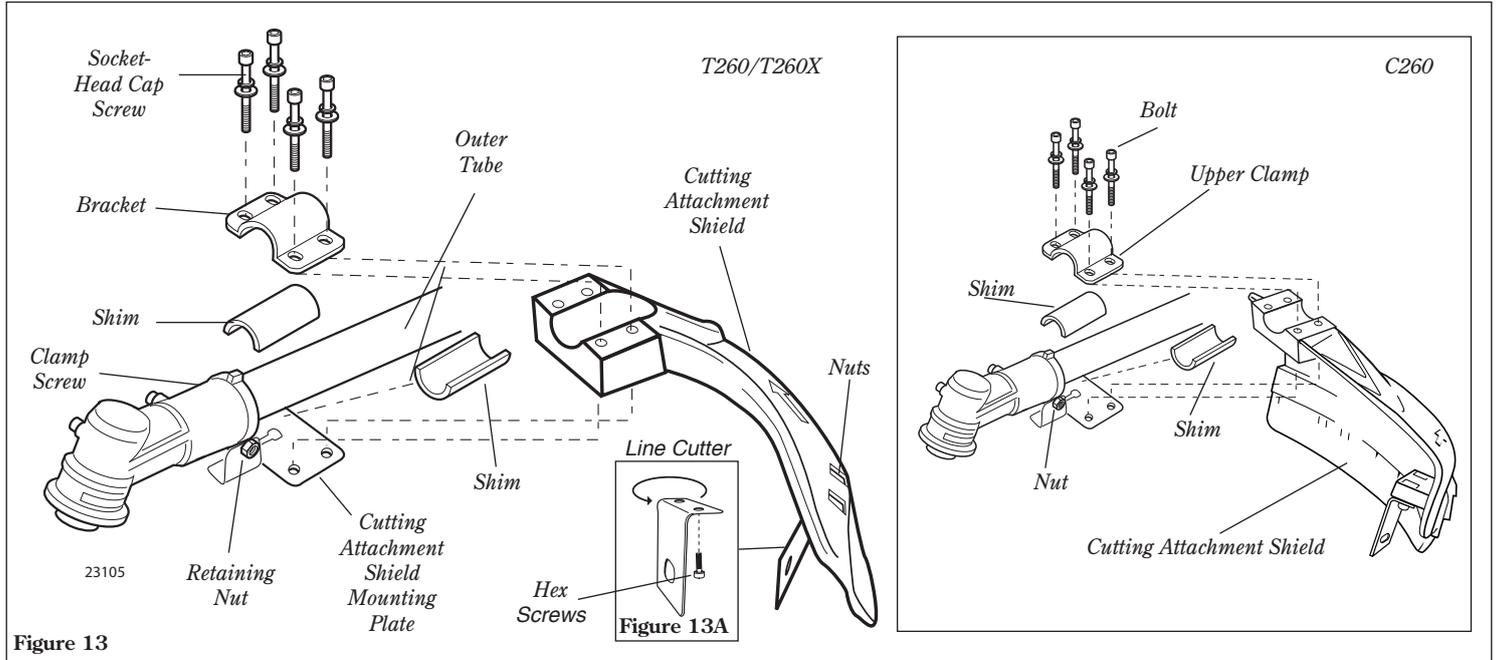


Figure 13

Install the Cutting Attachment Shield T260/T260X/C260.

1. Insert the cutting attachment shield between the outer tube and the cutting attachment shield mounting plate. See Figure 13.

NOTE:

It may be necessary to loosen the retaining nut and clamp screw to adjust cutting attachment shield mounting plate.

2. Fit the two shims and the bracket over the outer tube and loosely install the four socket-head cap screws. See Figure 13.
3. Tighten the four socket-head cap screws to secure the cutting attachment shield.

CAUTION!

Make sure the clamp screw and retaining nut are securely tightened before tightening the four socket-head cap screws.



WARNING!

NEVER operate the unit without the cutting attachment shield installed and tightly secured!

Sub-Shield C260.

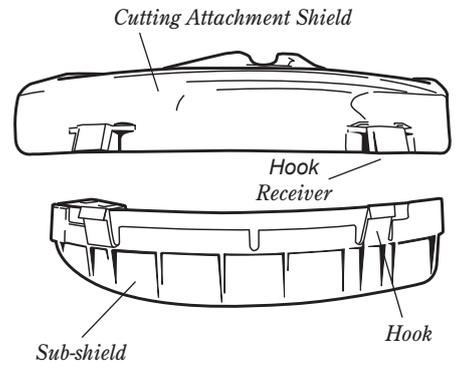
(when trimmer head is in use)

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



WARNING!

NEVER use this machine without sub-shield when using a trimmer head.



CAUTION!

Make sure the sub-shield is completely hooked at the hook receiver.

To Change Position of Line Cutter.

The line cutter can be positioned in 2 positions to obtain different line length for cutting.

1. Remove the 2 hex screws with a 4 mm hex wrench. See Figure 13A.
2. Rotate line cutter. See Figure 13A.
3. Reinstall the two hex screws and tighten them securely.



WARNING!

The line cutter is very sharp. Wear gloves to protect your hands when handling.

NOTE:

Be careful to not lose the 2 nuts in the cutting attachment shield, they are not captured.

Assembly: Cutting Attachment Shield LE260

Mount the Cutting Attachment Shield on the Gearcase.

1. Remove the shaft bolt, bolt guard, holder A and holder B from the gearcase.
2. Align the cutting attachment shield assembly with the gearcase as shown, and then fit the shield onto the matching flange on the gearcase.

CAUTION!

The LE260 is intended for right-handed operation only! When correctly assembled, the cutting attachment shield and shaft **must** be oriented as shown.

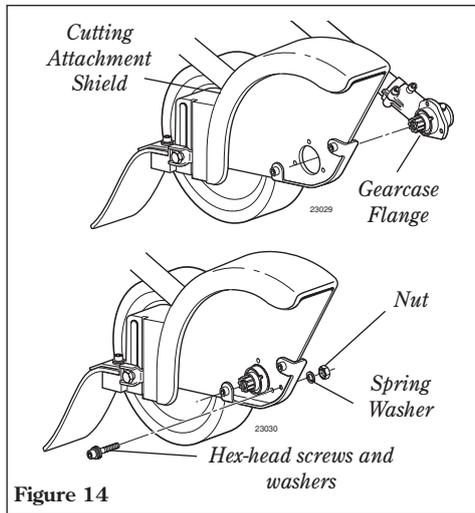
3. Install the hex-head screws and washers, then use the hex wrench to firmly tighten all three screws.
4. Install a washer and nut on each of the three screws assembled in Step 3, then firmly tighten each nut.

IMPORTANT!

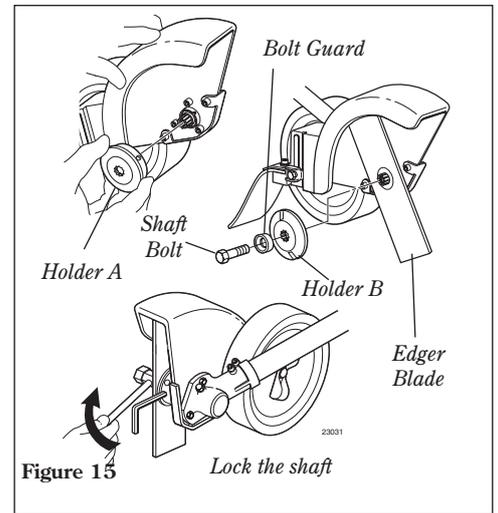
The three hex-head screws must be firmly tightened before installing and tightening the nuts.

Mount the Edger Blade

1. Remove the plastic protector sleeve from the gearcase output shaft, and fit the holder A onto the shaft.



2. Mount the edger blade and holder B onto the shaft, and then install the bolt guard and shaft bolt (turn bolt counter-clockwise to install).
3. Align the hole in blade holder A with the matching hole in the gearcase, and then use the hex wrench to temporarily lock the gearshaft as shown.
4. Use the combination wrench to firmly tighten the shaft bolt. Remove the hex wrench.



WARNING!

- The LE260 is designed for use with a single blade only!
- Never operate the LE260 without the cutting attachment shield installed and tightly secured!

The LE260 Edger should now be completely assembled.

Assembly: Trimmer Head T260

Install the Trimmer Head.

1. Turn the trimmer over so that the gearcase output shaft faces UP.
2. Remove and discard the vinyl shaft protector.
3. Position the tool holder as shown, and slide the holder onto the output shaft.
4. Rotate the tool holder and shaft until the notch in the holder aligns with the notch on the gearcase flange, and use the long end of the hex wrench to lock the output shaft in position. See Figure 16.
5. While holding the hex wrench, thread the trimmer head onto the output shaft in a counter clockwise rotation. Using hand pressure only, tighten the trimmer head firmly on the gearshaft.

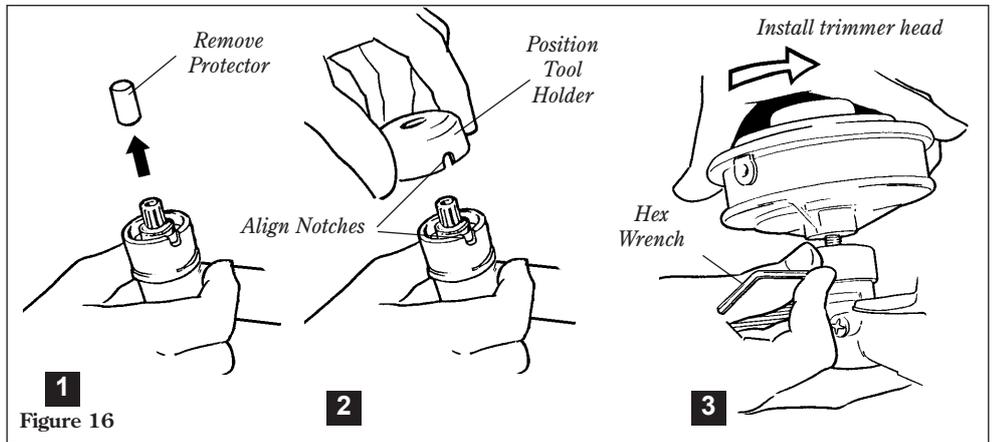


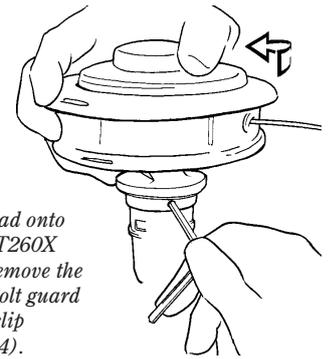
Figure 16



WARNING!

A standard T-series unit should NEVER be operated with blade-type attachments. For blade use the trimmer must first be fitted with a bicycle-type handlebar or barrier bar that is located in front of the operator to reduce risk for the operator to come in contact with cutting attachment (per ANSI B175.3). When using a blade, the unit must be equipped with a harness or a strap.

C260 T260X



The trimmer head has a left-hand thread. Turn the trimmer head counter-clockwise to install.

6. Remove the hex wrench.

The T260 grass trimmer should now be completely assembled and ready for use as a grass trimmer. For instructions on installing a blade on a C260 or T260X, see page 14.

Assembly: Brushcutter Blade C260/T260X

Mount the Saw Blade.

1. Turn the unit over so the gearcase output shaft is facing UP. Remove the shaft bolt, bolt guard and Holder "B".

NOTE:

The bolt has a left-hand thread, so turn clockwise to loosen.

2. Rotate the output shaft until the hole in Holder "A" aligns with the hole in the gearcase. Lock the output shaft by inserting the long end of the hex wrench through the hole in the gearcase into the matching hole in Holder "A".
3. Install the safety clip off-center as shown.
4. Fit the blade onto the flange on Holder "A" and lock the blade in place with the safety clip.

NOTE:

Blades can later be removed or reinstalled by temporarily sliding the safety clip to an off-center position.

CAUTION!

Install the blade so the printed surface is visible to the operator when the brushcutter is in the normal operating position.



WARNING!

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

NOTE:

It may be necessary to temporarily remove the safety clip when installing certain blades.



WARNING!

Never operate the brushcutter without the safety clip in place!

5. Install Holder "B" so it is flat against the brush blade. The recess in Holder "B" must face the saw and completely cover the safety clip.

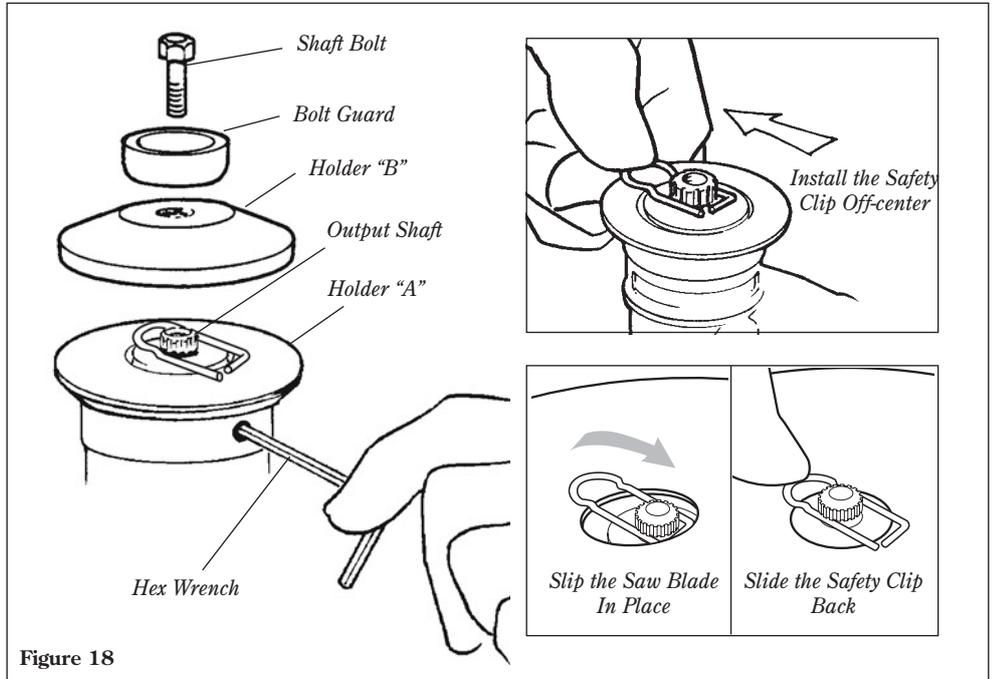


Figure 18

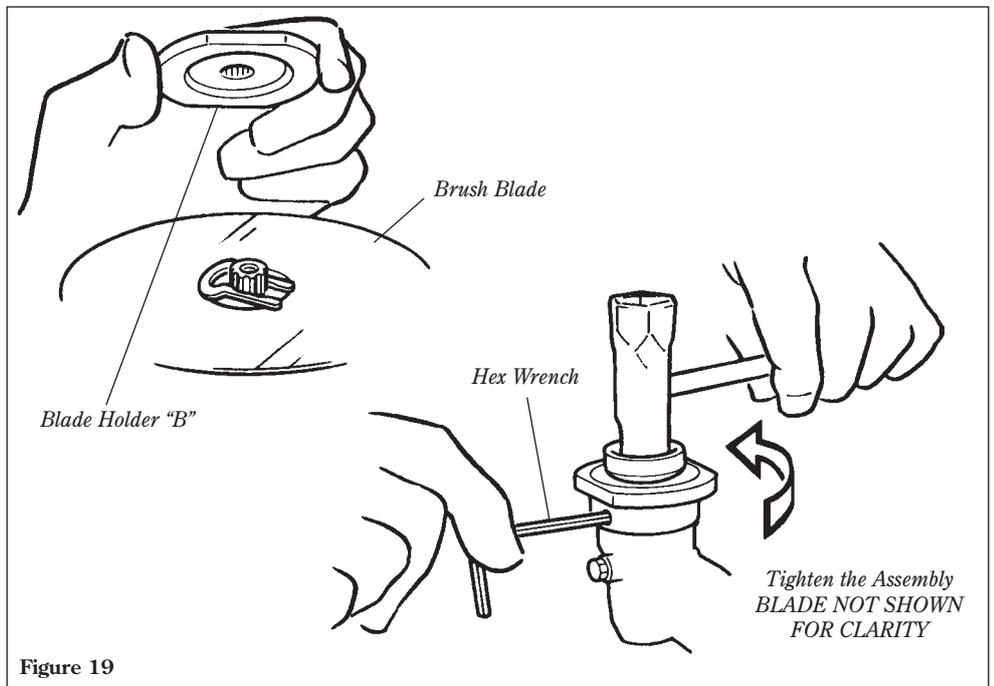


Figure 19

6. Secure the blade holder with the bolt and bolt guard. The cup side of the bolt guard must face outward.
7. Tighten the shaft bolt securely using the small end of the spark plug wrench. The bolt has a left-hand thread, so tighten it counter-clockwise.

8. Remove the hex wrench.

The C260/T260X Brushcutter should now be completely assembled.

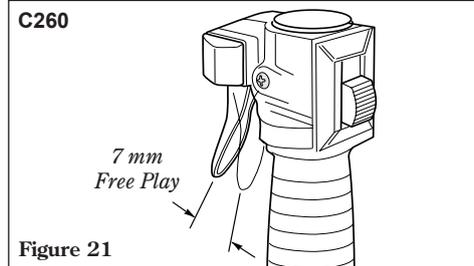
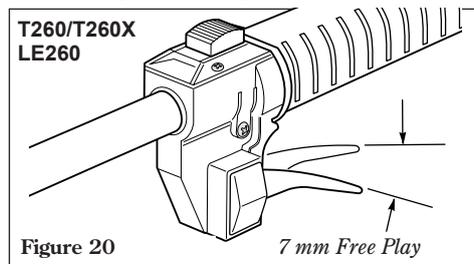
Throttle Cable Free Play

All Models

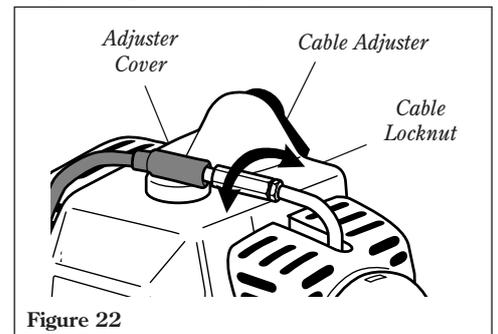
1. Test the throttle lever for smooth operation. Any stiffness or binding must be corrected before placing the unit in service.
2. Test the throttle lever for free play of approximately 7 mm in the idle position. Make adjustments at the carburetor as follows:

- Temporarily move the adjuster cover to expose the cable adjuster.
- Loosen the cable locknut and then screw the cable adjuster in or out until proper free play is achieved.

Checking Free Play



Adjusting Free Play



Mixing Fuel

CAUTION!

- Some types of gasoline contain alcohol as an oxygenate. Oxygenated gasoline may cause increased operating temperatures. Under certain conditions, alcohol-based gasoline may also reduce the lubricating qualities of some 2-cycle mixing oils.
- Never use any type of gasoline containing more than 10% alcohol by volume! Generic oils and some outboard oils may not be intended for use in high-performance 2-cycle type engines, and should never be used in your Shindaiwa engine.

CAUTION!

This engine is designed to operate on a 50:1 mixture consisting of unleaded gasoline and 2-cycle mixing oil only. Use of non-approved mixing oils can lead to excessive carbon deposits.

- Use only fresh, clean unleaded gasoline with a pump octane of 87 or higher.
- Mix with 50:1 Shindaiwa Premium 2-cycle mixing oil or with an equivalent high quality 2-cycle mixing oil.

Examples of 50:1 mixing quantities

- 1 gallon of gasoline to 2.6 oz. mixing oil.
- 5 liters of gasoline to 100 ml. mixing oil.

IMPORTANT!

Mix only enough fuel for your immediate needs! If fuel must be stored longer than 30 days and  oil with fuel stabilizer is not used, it should first be treated with a fuel stabilizer such as STA-BIL™.

Filling the Fuel Tank



WARNING!

Minimize the Risk of Fire!

- **STOP** engine before refueling.
- **ALWAYS** allow the engine to cool before refueling!
- Wipe all spilled fuel and move the engine at least 10 feet (3 meters) from the fueling point and source before restarting!
- **NEVER** start or operate this unit if there is a fuel leak.
- **NEVER** start or operate this unit if the carburetor, fuel lines, fuel tank and/or fuel tank cap are damaged.
- **NEVER** smoke or light any fires near the engine or fuel source!
- **NEVER** place any flammable material near the engine muffler!
- **NEVER** operate the engine without the muffler and spark arrester in good working condition.

1. Place the unit on a flat, level surface.
2. Clear any dirt or other debris from around the fuel filler cap.
3. Remove the fuel cap, and fill the tank with clean, fresh fuel.
4. Reinstall the fuel filler cap and tighten firmly.

Starting the Engine

IMPORTANT!

Engine ignition is controlled by a two position switch mounted on the throttle housing labeled, "I" for ON or START and "O" for OFF or STOP.

IGNITION SWITCH ON

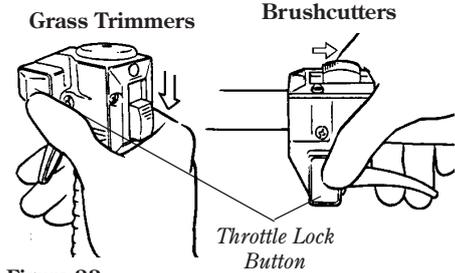


Figure 23

1. Slide the ignition switch to the "ON" position. See Figure 23.
2. Set the throttle lever to the "fast idle" position as follows:
 - a. Squeeze the throttle lever toward the handgrip on the shaft tube.
 - b. Depress and hold the throttle lock button.
 - c. While depressing the throttle lock button, release the throttle lever. See Figure 23.

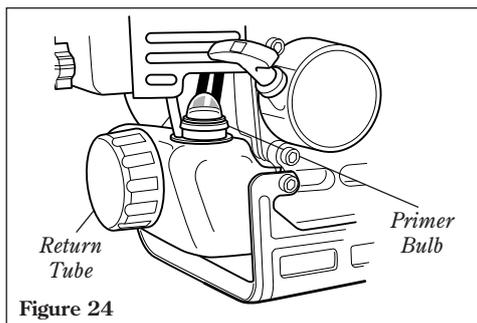


Figure 24

3. Press the primer bulb until fuel can be seen flowing in the transparent return tube.

IMPORTANT!

The primer system only pushes fuel through the carburetor. Repeatedly pressing the primer bulb will not flood the engine with fuel.

Stopping the Engine

IGNITION SWITCH OFF

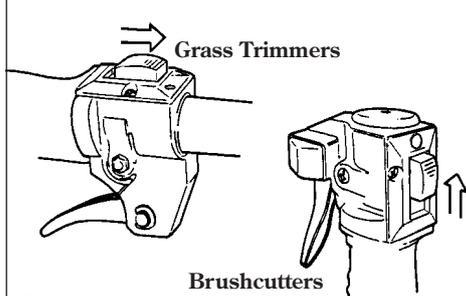


Figure 28

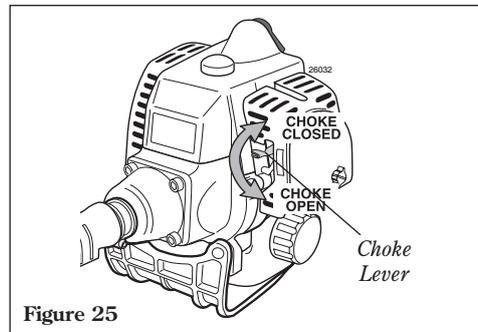


Figure 25

4. Set the choke lever to the CLOSED position if the engine is cold.

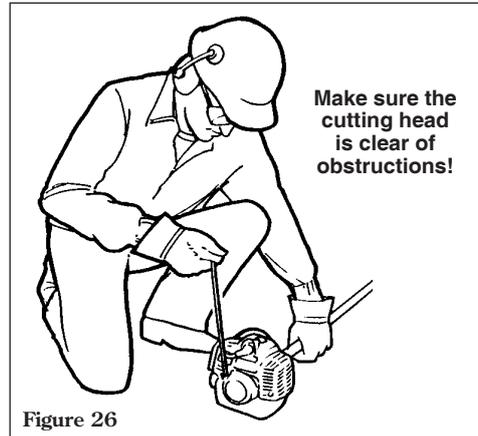


Figure 26

5. While holding the outer tube firmly with one hand, slowly pull the recoil starter handle until resistance is felt, then pull quickly to start the engine.

CAUTION!

Do not pull the recoil starter to the end of the rope travel. Pulling the recoil starter to the end of the rope travel can damage the starter.



WARNING!

The cutting attachment may rotate when the engine is started!

6. When the engine starts, slowly move the choke lever to the "OPEN" position. See Figure 27. (If the engine stops after the initial start, close the choke and restart.)

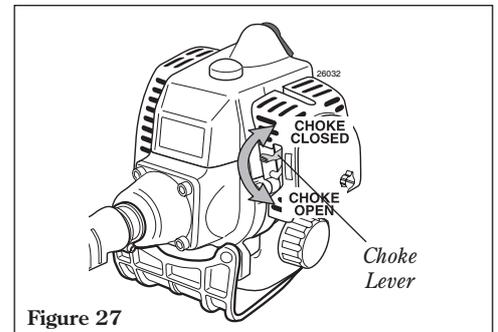


Figure 27



WARNING!

Never start the engine from the operating position.

7. Operating the throttle will automatically disengage the fast-idle setting.

IMPORTANT!

If the engine fails to start after several attempts with the choke in the closed position, the engine may be flooded with fuel. If flooding is suspected, move the choke lever to the open position and repeatedly pull the recoil starter to remove excess fuel and start the engine. If the engine still fails to start, refer to the troubleshooting section of this manual.

When the Engine Starts...

- After the engine starts, allow the engine to warm up at idle 2 or 3 minutes before operating the unit.
- After the engine is warm, pick up the unit and clip on the harness if so equipped. See page 17.
- Advancing the throttle makes the cutting attachment turn faster; releasing the throttle permits the attachment to stop turning. If the cutting attachment continues to rotate when the engine returns to idle, carburetor idle speed should be adjusted (see page 17).

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.

Adjustment Procedure



WARNING!

The cutting attachment must NEVER rotate at engine idle! If the engine idle speed cannot be adjusted by the procedure described here, return the trimmer to your Shindaiwa dealer for inspection.

1. Place the trimmer on the ground, then start the engine, and then allow it to idle 2-3 minutes until warm.
2. If the cutting attachment rotates at engine idle, reduce idle speed by turning the idle adjustment screw counter-clockwise.

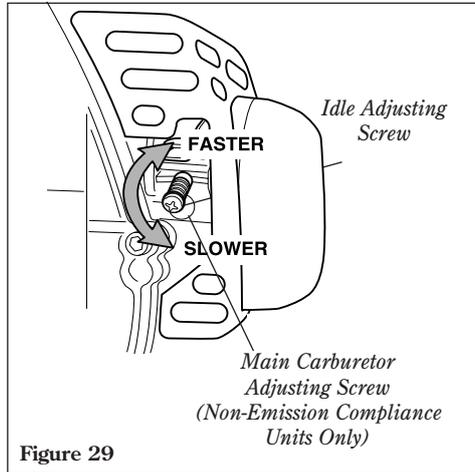


Figure 29

3. If a tachometer is available, the engine idle speed should be final-adjusted to 3,000 RPM (min⁻¹) ±250 RPM (min⁻¹).



WARNING!

The cutting attachment must NEVER rotate at engine idle speeds!

NOTE:

Carburetor mixture adjustments are preset at the factory and cannot be serviced in the field.

Non-Emission Compliance Engines

Initial carburetor mixture adjustments on non-emission compliance engines are:

Main adjusting screw 2 turns ± 1/4.

Adjustments may vary because of altitudes and other factors. See your authorized Shindaiwa dealer for correct adjustments.

Checking Unit Condition

NEVER operate the unit with the cutting attachment shield or other protective devices (harness, stop switch, 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 your Shindaiwa trimmer, brushcutter or lawn edger. Do not make modifications to the unit without the written approval of Shindaiwa, Inc.

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 attachment holder. If a properly installed attachment vibrates, replace the attachment with a new one and re-check.

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

NEVER allow the engine to run at high RPM without a load. Doing so could damage the engine.

NEVER operate a unit 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.

Shoulder Strap

Adjust the shoulder strap so the shoulder pad rests comfortably on the off-side shoulder and the cutting path of the cutting attachment is parallel to the ground. Make sure all hooks and adjustment devices are secure.



Figure 30

T260/LE260

NOTE:

Although a shoulder strap accessory is not required for use with a grass trimmer or a edger, a shoulder strap can increase operator comfort during extended periods of operation. See Figure 30.

Operating With A Blade C260/T260X



WARNING!

Always wear a shoulder strap when operating this unit with a blade. A shoulder strap is also recommended when using trimmer line.

NOTE:

Using a shoulder strap with a brushcutter allows you to maintain proper control of the unit and reduces fatigue during extended operation.

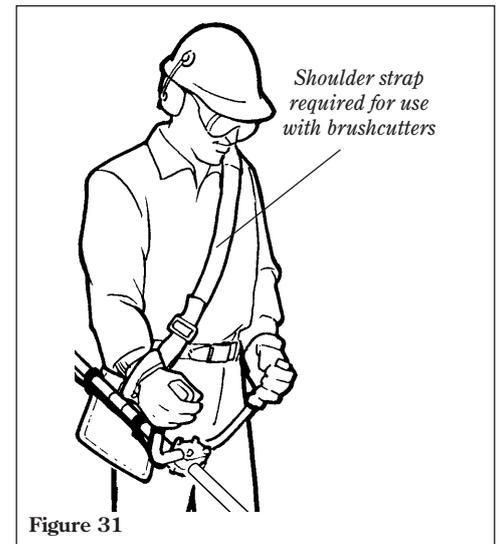


Figure 31

Cutting Grass (Units Equipped with a Trimmer Head)

Your Shindaiwa T260 Grass Trimmer may be equipped with one of several Shindaiwa trimmer head models, each with features for specific applications and/or operational requirements.

NOTE:

A grass trimmer head can also be fitted to the Shindaiwa C260.

For proper operation, always refer to the instructions accompanying the trimmer head being used. Available trimmer head styles include:

- **Semi-automatic.** Trimmer line is indexed when the operator taps the trimmer head on the ground during operation.
- **Manual.** The operator indexes line manually with the grass trimmer stopped.

- **Fixed.** The operator must stop the unit and add new lengths of trimmer line manually.
- **Flail.** This device, designed for clearing weeds and light brush, features three nylon blades attached to the head by pivots.

Engine Operating Speeds

CAUTION!

Do not push the rotating line into trees, wire fences or any material that could tangle or break line ends.

Operate the unit at full throttle while cutting grass.

CAUTION!

Operation at low RPM can lead to premature clutch failure.

Trimming and Mowing Grass

Hold the grass trimmer so the trimmer head is angled slightly into the area to be cut. To ensure maximum trimmer-line service life, cut only with the tip of the trimmer line. Cut grass by swinging the unit's trimmer head from left to right. Keep the trimmer head horizontal.

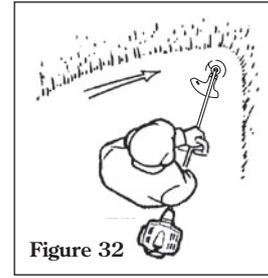


Figure 32

Edging

Tilt the handle about 100° to the left (from horizontal) and move forward, holding the trimmer vertically, as shown.

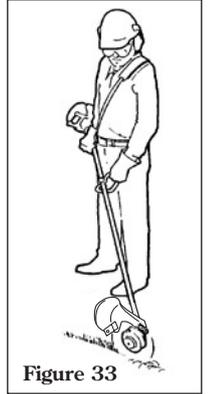


Figure 33

Using a Brushcutter Blade C260/T260X

WARNING!

- Before working with a blade-equipped unit, always inspect and clean the area of objects that could interfere with or damage the blade.
- Never use a blade near sidewalks, fence posts, buildings or other objects that could cause injury or damage.
- Never use a blade for purposes other than those for which it was designed.
- Whenever you strike a hard object with a blade, always stop the brushcutter and carefully inspect the blade for damage. **NEVER OPERATE THE BRUSHCUTTER WITH A DAMAGED BLADE!**
- A blade-equipped unit must be equipped with a bicycle-type handlebar or barrier bar as well as a harness or strap.
- Always make sure the cutting attachment shield is properly installed before operating your unit.

Blade Thrust

'Blade thrust' is a sudden sideways or backward motion of the brushcutter. 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!**

Brushcutter Handlebar

A brushcutter handlebar helps prevent the operator from moving forward, or the unit moving rearward, thus preventing inadvertent bodily contact with the blade. **ALWAYS KEEP THE HANDLEBAR SECURELY IN PLACE ON THE UNIT!**

Brushcutter Shoulder Strap

A shoulder strap provides additional protection against blade thrust. In addition, a shoulder strap gives significant support and comfort to help ensure safe and efficient operation.

When operating a T260X or C260 with a blade, make sure both the handle and harness are adjusted to the size of the operator using the unit.

Engine Operating Speeds

Operate the unit at full throttle while cutting. Best fuel efficiency is obtained by releasing the throttle when swinging back after a cut.

- To prevent possible engine damage, do not allow the brushcutter 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 head.

The blade rotates counter-clockwise. For best performance and to minimize being stuck by debris, move the blade from right to left while advancing on your work.

Position the blade so cuts are made between the blade's 8 o'clock and 10 o'clock positions (as viewed from above). **DO NOT** cut between the 10 o'clock and 5 o'clock positions.

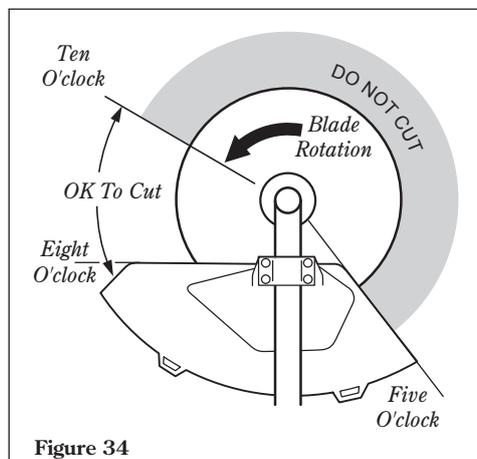


Figure 34

WARNING!

When cutting wood with a saw, feed the blade slowly—*never strike or "slam" a spinning blade against the wood.*

WARNING!

DO NOT use 2-tooth or non-Shindaiwa approved 4-tooth cutting blades with Shindaiwa trimmers and brushcutters.

Vertical Cuts

Hold the brushcutter with the blade at a 90° angle to the ground so the blade's bottom edge rotates toward the operator. Move the blade from top to bottom through the cut, and cut *only* with the bottom edge of the blade.

WARNING!!

When making vertical cuts, never allow the blade to exceed waist height.

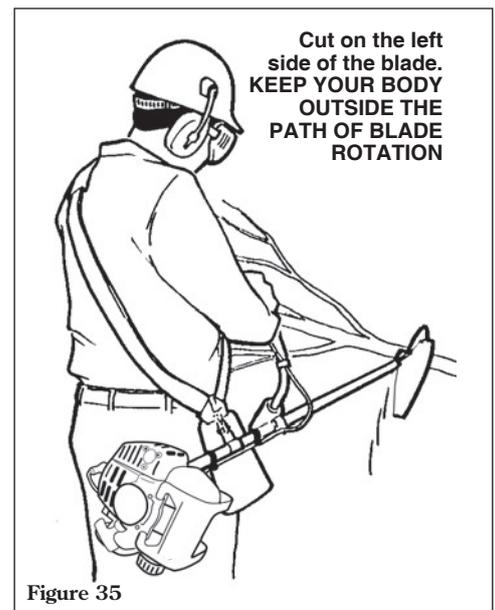


Figure 35

Using a Hand-held Edger LE260

Guidelines for Operating the Edger.

- Before edging, make sure the area is soft enough so the blade does not bog down. If necessary, water the area before edging.
- Remove debris and other obstacles that could be thrown by the rotating blade.
- Plan your work so the edger blade is always on your right-hand side.

Begin each pass by positioning the unit over the work, and with the engine running at about half-throttle. Slowly lower the blade to the ground while applying full throttle.

CAUTION!

Low-speed edging can lead to premature clutch failure.

- Do not move the edger into the work so fast that the engine or blade bogs down.

Regular and frequent use of the edger will make a neater lawn, and a frequently trimmed edge will be easier to maintain.



Figure 36

WARNING!!

- Wear eye protection, long pants, and boots when operating this unit!
- Whenever you strike a hard object with the blade, always stop the edger and carefully inspect the blade for damage. NEVER OPERATE THE EDGER WITH A DAMAGED BLADE!

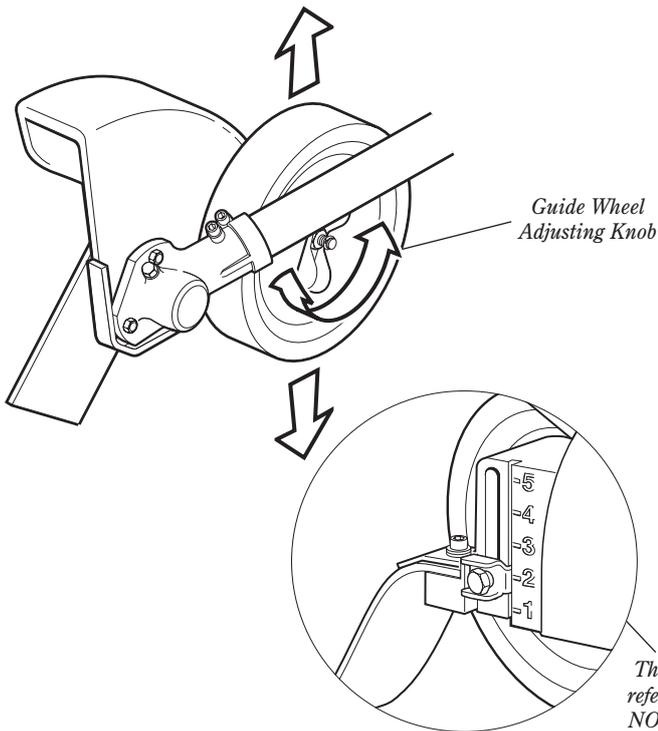


Figure 37

Adjusting the Blade Cutting Depth.

The edger's depth of cut is controlled by a combination of operator height, blade wear, and the positioning of the edger's guide wheel.

To adjust blade height:

1. Loosen the guide wheel adjusting knob.
2. Raise or lower the guide wheel to the desired setting (see figure 37).
3. Tighten the guide wheel adjusting knob firmly.

WARNING!!

Never adjust the guide wheel while the engine is running.

NOTE:

Guide wheel adjustment is also required to compensate for blade wear.

WARNING!!

Use only Shindaiwa replacement blades.

Maintenance

IMPORTANT!

MAINTENANCE, REPLACEMENT OR REPAIR OF EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY REPAIR ESTABLISHMENT OR INDIVIDUAL; HOWEVER, WARRANTY REPAIRS MUST BE PERFORMED BY A DEALER OR SERVICE CENTER AUTHORIZED BY SHINDAIWA KOGYO CO., LTD. THE USE OF PARTS THAT ARE NOT EQUIVALENT IN PERFORMANCE AND DURABILITY TO AUTHORIZED PARTS MAY IMPAIR THE EFFECTIVENESS OF THE EMISSION CONTROL SYSTEM AND MAY HAVE A BEARING ON THE OUTCOME OF A WARRANTY CLAIM.

WARNING!!

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

WARNING!!

Non-standard parts may not operate properly with your unit and may cause damage and lead to personal injury.

NOTE:

Using non-standard replacement parts could invalidate your Shindaiwa warranty.

Muffler

This unit must never be operated with a faulty or missing spark arrester or muffler. Make sure the muffler is well secured and in good condition. A worn or damaged muffler is a fire hazard and may also cause hearing loss.

Spark Plug

Keep the spark plug and wire connections tight and clean.

Fasteners

Make sure nuts, bolts, and screws (except carburetor adjusting screws) are tight.

Blades

Keep blades sharp and check blade condition frequently. If a blade's performance changes suddenly, stop the engine and check the blade for cracks or other damage. Replace a damaged blade IMMEDIATELY!

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.
- DO NOT use 2-tooth or non-Shindaiwa approved 4-tooth cutting blades on Shindaiwa trimmers or brushcutters.
- The LE260 Edger is designed for use with a single, bar-type blade only.
- Blades are not interchangeable between Shindaiwa edgers and trimmer/brushcutter models. Operating any unit with a blade or attachment not approved for that unit can be hazardous and may cause serious injury.

Daily Maintenance

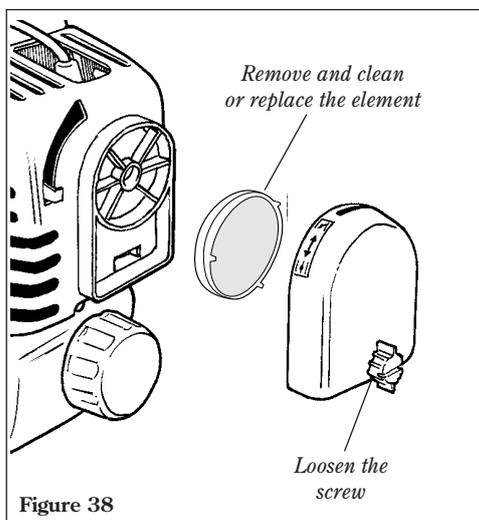
Prior to each work day, perform the following:

- Check for loose or missing screws or components. Make sure the tool and cutting attachment are securely fastened.

- Check the entire unit for leaking fuel or grease.
- Remove dirt or debris from the engine, check the cooling fins and air cleaner for clogging and clean them as necessary.

- Carefully remove any accumulation of dirt or debris from the muffler or the fuel tank. Dirt build-up in these areas could cause the engine overheating, induce premature wear, or create a fire hazard.

10-Hour Maintenance



Every 10 hours of operation (more frequently in dusty or dirty conditions):

- Remove the air cleaner element. See figure 38. Clean or replace as necessary. To clean element: Wash it thoroughly in soap and water. Let it dry before reinstalling the element.

10/15-Hour Maintenance

CAUTION!

Do not operate the unit if the air cleaner or element is damaged, or if the element is wet.

Every 10 to 15 hours of operation:

- Remove and clean the spark plug. Adjust the spark plug electrode gap to 0.024-inch (0.6 mm). If the spark plug must be replaced, use only a Champion CJ8Y or equivalent spark plug of the correct heat range. (For electro magnetic compliance (EMC) use a NGK BMR6A resistor plug.) See Figure 39.

Clean the spark plug and check the gap at the electrode.

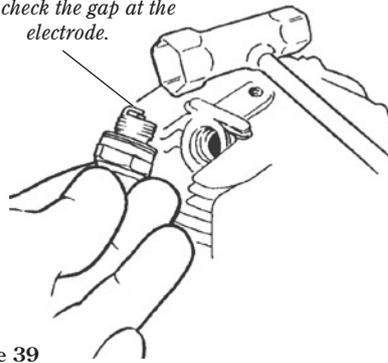
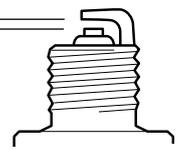


Figure 39

CAUTION!

Before removing the spark plug, clean the area around the plug to prevent dirt and debris from falling into internal engine parts.

0.024 inch
(0.6 mm)



50-Hour Maintenance

Every 50 hours of operation (more frequently in dusty or dirty conditions):

- Remove the cylinder cover and clean grass and dirt from the cover and cylinder fins.
- Remove the cutting attachment, cutting attachment holder and gear shaft collar. Remove the filler plug from the side of the gearcase and press new grease into the gearcase until grease is pushed out. Use only lithium-base grease such as Shindaiwa Gear Case Lubricant or equivalent. See figure 40.

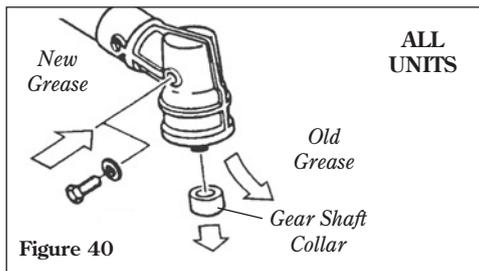


Figure 40

- Use a hooked wire to extract the fuel filter from inside the fuel tank. See figure 41.

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.

Remove and replace the filter element. Before reinstalling the new filter element, inspect the condition of all the fuel system components (fuel pick-up line, fuel return line, tank vent line, tank vent, fuel cap and fuel tank). If damage, splitting or deterioration is noted, the unit should be removed from service until it can be inspected or repaired by a Shindaiwa-trained service technician.

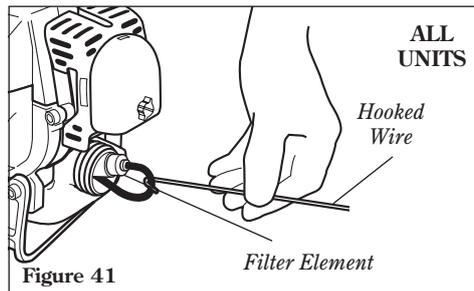


Figure 41

LE260 ONLY

Lubricate the Flexible Shaft.

Lack of lubrication will cause rapid wear to the flexible shaft and also to the shaft tube liner, resulting in increased vibration and greatly decreased service life. Remove and lubricate the flexible shaft as follows:

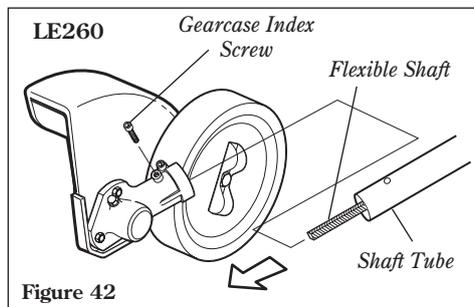


Figure 42

- Loosen the gearcase clamp screw.
- Remove the gearcase index screw.
- Slide the gearcase and shield assembly from the shaft tube.
- Pull the flexible shaft from the shaft tube assembly, and clean the shaft thoroughly in solvent.
- Inspect the shaft carefully, and discard if worn or damaged.
- Coat the entire length of the shaft with Shindaiwa Premium Gearcase Lube (or equivalent), and reinstall the shaft in the shaft tube assembly.

NOTE:

For extended shaft life, the flexible cable should be reversed end-for-end during the reinstallation process.

- Insert the flexible shaft into the female end of the gearcase pinion.
- Install the gearcase on the shaft tube in the reverse order of removal.

CAUTION!

The D-shaped shim washer must be positioned with its flat edge toward the shaft tube.

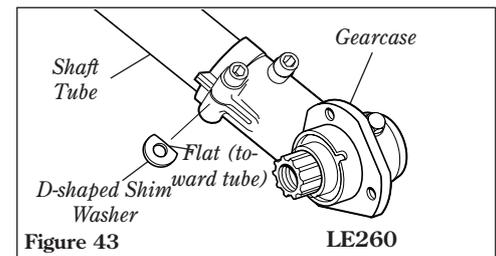


Figure 43

LE260 ONLY

Inspect the Gearcase Protector

The metal gearcase protector (p/n 72958-16210) is installed to protect the gearcase flange from damage when working close to sidewalks or other abrasive surfaces, and should be routinely inspected for damage or excessive wear.

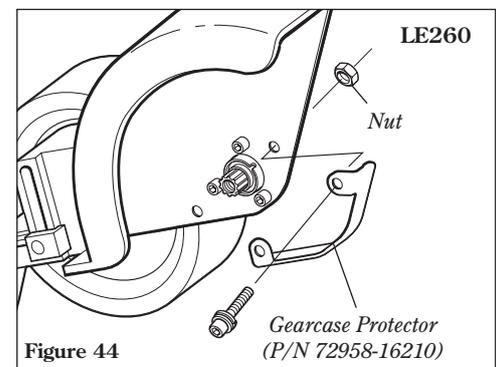


Figure 44

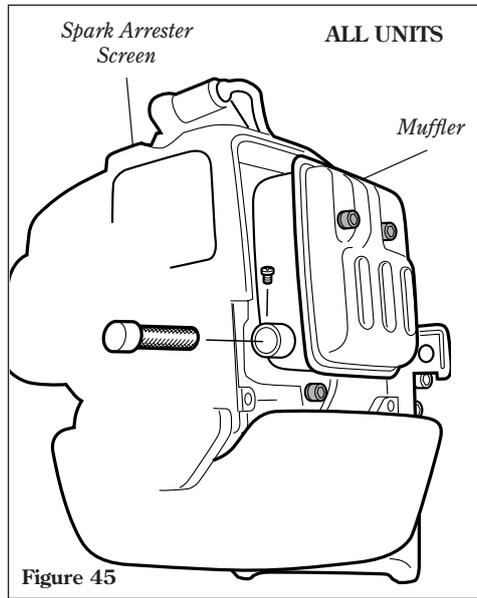
When replacing the protector, inspect to be sure that both of the protector mounting screws are firmly tightened and each screw is locked in place with a nut as shown.

Muffler

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 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 260 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 could also damage your hearing.

Long Term Storage

Whenever the unit 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 fuel tank.

IMPORTANT!

All stored fuels should be stabilized with a fuel stabilizer such as STA-BIL™, if  oil with fuel stabilizer is not used.

To remove the remaining fuel from the fuel lines and carburetor and with the fuel drained from the fuel tank.

1. Prime the primer bulb until no more fuel is passing through.
2. Start and run the engine until stops running.
3. Repeat steps 1 and 2 until the engine will no longer start.

CAUTION!

Gasoline stored in the carburetor for extended periods can cause hard starting, and could also lead to increased service and maintenance costs.

- Remove the spark plug and pour about 1/4 ounce of 2-cycle mixing 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 unit, repair or replace any worn or damaged parts.
- Remove the air cleaner element from the carburetor and clean it thoroughly with soap and water. Let dry and reassemble the element.
- Store the unit in a clean, dust-free area.

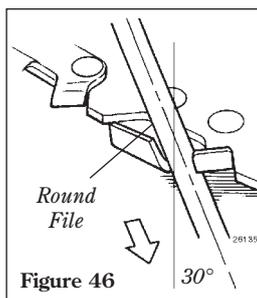
Blade Sharpening

When the cutting edges of the blade become dull, they can be resharpened with a few strokes of a file.

In order to keep the blade in balance, all cutting edges must be sharpened equally.

Shindaiwa Tornado™ Blade

To sharpen the cutters on a Shindaiwa Tornado Blade, use a 7/32-inch round file. File the leading edge of each tooth to a razor edge. The top plate of each tooth should angle back 30°.

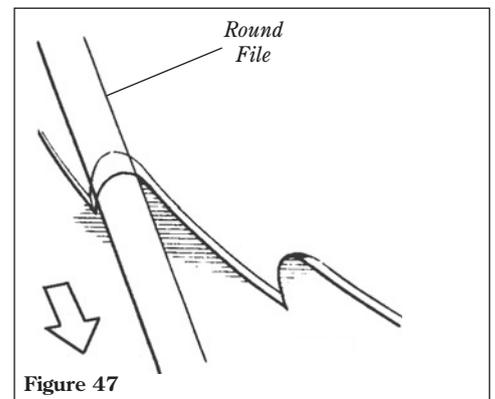


WARNING!

Sharpen only the cutting teeth of a blade. DO NOT alter the contour of the blade in any way.

Multiple-tooth Circular Blade

Use a round file to maintain a radius of 0.04 to 0.06" (1 to 1.5 mm) at the base of each tooth. Cutting edges must be offset equally on each side.



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 incorrect, stale, or contaminated; mixture incorrect.	Refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher, mixed with Shindaiwa Premium 2-cycle mixing oil at a 50:1 gasoline/oil ratio.
YES ↓		
Is fuel visible and moving in the return line when priming?	NO Check for clogged fuel filter and/or vent.	Clean as required. Restart.
YES ↓		
Is there spark at the spark plug wire terminal?	NO The ignition switch is in "O" (OFF) position. Shorted ignition ground. Faulty ignition unit.	Move switch to "I" (ON) position 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 is fouled or improperly gapped. The plug is damaged internally or of the wrong size.	Crank the engine with the plug removed, reinstall the plug, and restart. Clean and regap the plug to 0.024" (0.6 mm). Restart. Replace the plug with a Champion CJ8Y or equivalent type spark plug of the correct heat range. For EMC compliance, use NGK BMR6A. Restart.

LOW POWER OUTPUT

What To Check	Possible Cause	Remedy
Is the engine overheating?	Operator is overworking the unit. Carburetor mixture is too lean. Improper fuel ratio. Fan, fan cover, cylinder fins dirty or damaged. Carbon deposits on the piston or in the muffler.	Shorten trimmer line. Cut at a slower rate. Consult with an authorized servicing dealer. Refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher, mixed with Shindaiwa Premium 2-cycle mixing oil at a 50:1 gasoline/oil ratio Clean, repair or replace as necessary. 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. Loose or damaged spark plug. Air leakage or clogged fuel line. Water in the fuel. Piston seizure. Faulty carburetor and/or diaphragm.	Clean or replace the air filter. Tighten or replace the plug with a Champion CJ8Y or equivalent type spark plug of the correct heat range. For EMC compliance, use NGK BMR6A. Restart. Repair or replace fuel filter and/or fuel line. Refill with fresh fuel/oil mixture. See page 15. Consult with an authorized servicing dealer.
Engine is knocking.	Overheating condition. Improper fuel. Carbon deposits in the combustion chamber.	See above. Check fuel octane rating; check for presence of alcohol in the fuel (page 15). Refuel as necessary. Consult with an authorized servicing dealer.

Troubleshooting Guide (continued)

ADDITIONAL PROBLEMS

Symptom	Possible Cause	Remedy
Poor acceleration.	<ul style="list-style-type: none"> Clogged air cleaner element. Clogged fuel filter. Lean fuel/air mixture. Idle speed set too low. 	<ul style="list-style-type: none"> Clean the air cleaner element. Replace the fuel filter. Consult with an authorized servicing dealer. Adjust: 2,750 (\pm250) RPM (min^{-1}).
Engine stops abruptly.	<ul style="list-style-type: none"> Switch turned off. Fuel tank empty. Clogged fuel filter. Water in the fuel. Shorted spark plug or loose terminal. Ignition failure. Piston seizure. 	<ul style="list-style-type: none"> Reset the switch and restart. Refuel. See page 15. Replace filter. Drain; replace with clean fuel. See page 15. Clean or replace spark plug with a Champion CJ8Y or equivalent type spark plug of the correct heat range. For EMC compliance, use NGK BMR6A. Tighten the terminal. Consult with an authorized servicing dealer.
Engine difficult to shut off.	<ul style="list-style-type: none"> Ground (stop) wire is disconnected, or switch is defective. Overheating due to incorrect spark plug. Overheated engine. 	<ul style="list-style-type: none"> Test and replace as required. Replace spark plug with a Champion CJ8Y or equivalent type spark plug of the correct heat range. For EMC compliance, use NGK BMR6A. Idle engine until cool.
Cutting attachment rotates at engine idle.	<ul style="list-style-type: none"> Engine idle too high. Broken clutch spring or worn clutch spring boss. Loose attachment holder. 	<ul style="list-style-type: none"> Set idle: 2,750 (\pm250) RPM (min^{-1}). Replace spring/shoes as required, check idle speed. Inspect and re-tighten holders securely.
Excessive vibration.	<ul style="list-style-type: none"> Warped or damaged cutting attachment. Loose gearcase. Bent main shaft/worn or damaged bushings. 	<ul style="list-style-type: none"> Inspect and replace attachment as required. Tighten gearcase securely. Inspect and replace as necessary.
Cutting attachment will not rotate.	<ul style="list-style-type: none"> Shaft not installed in powerhead or gearcase. Broken shaft. Damaged gearcase. 	<ul style="list-style-type: none"> Inspect and reinstall as required. Consult with an authorized servicing dealer.

Shindaiwa Kogyo Co., Ltd.

Federal Emission Design And Defect Limited Warranty

Utility And Lawn And Garden Engines

Shindaiwa Kogyo Co., Ltd. warrants to the initial purchaser and each subsequent owner, that this utility equipment engine (herein engine) is designed, built and equipped to conform at the time of initial sale, to all applicable regulations of the U.S. Environmental Protection Agency (EPA), and that the engine is free of defects in materials and workmanship that would cause this engine to fail to conform with EPA regulations during its warranty period. This emission warranty is applicable in all States, except the State of California.

For parts listed under PARTS COVERED, the dealer authorized by Shindaiwa Kogyo Co., Ltd. will, at no cost to you, make the necessary diagnosis, repair, or replacement of any defective emission-related component to ensure that the engine complies with applicable U.S. EPA regulations.

MANUFACTURERS WARRANTY COVERAGE

When sold within the U.S., this engine's emission control system is warranted for a period of two (2) years from the date this product is first delivered to the original retail purchaser.

OWNER'S WARRANTY RESPONSIBILITIES

As the engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Shindaiwa Kogyo Co., Ltd. recommends that you retain all receipts covering maintenance on your engine, but Shindaiwa Kogyo Co., Ltd. cannot deny a warranty claim solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the engine owner, you should however be aware that Shindaiwa Kogyo Co., Ltd. may deny your warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your engine to the nearest dealer authorized by Shindaiwa Kogyo Co., Ltd. when a problem exists.

If your Shindaiwa Dealer is unable to answer questions regarding your warranty rights and responsibilities, you should then contact your Shindaiwa Distributor.

For the name and telephone number of the Shindaiwa Distributor in your area, please call Shindaiwa Inc. at (503) 692-3070 between the hours of 8:00 AM and 5:00 PM Pacific Standard Time.

PARTS COVERED

Listed below are the parts covered by the Federal Emission Design and Defect Warranty. Some parts listed below may require scheduled maintenance and are warranted up to the first scheduled replacement of that part. The warranted parts include:

1. Carburetor Internal Components
 - Jet, Diaphragm Assembly-Metering
2. Ignition System Components
 - Ignition Coil
 - Flywheel Rotor

The emission control system for your particular Shindaiwa engine may also include certain related hoses and connectors.

LIMITATIONS

The Federal Emission Design and Defect Warranty shall not cover any of the following:

- (a) conditions resulting from tampering, misuse, improper adjustment (unless they were made by the dealer or service center authorized by Shindaiwa Kogyo Co., Ltd. during a warranty repair), alteration, accident, failure to use the recommended fuel and oil, or not performing required maintenance services,

- (b) the replacement parts used for required maintenance services,
- (c) consequential parts used for required maintenance services,
- (d) diagnosis and inspection fees that do not result in eligible warranty service being performed, and
- (e) any non-authorized replacement part, or malfunction of authorized parts due to use of non-authorized parts.

MAINTENANCE AND REPAIR REQUIREMENTS

You are responsible for the proper use and maintenance of the engine. You should keep all receipts and maintenance records covering the performance of regular maintenance in the event questions arise. These receipts and maintenance records should be transferred to each subsequent owner of the engine. Shindaiwa Kogyo Co., Ltd. reserves the right to deny warranty coverage if the owner has not properly maintained the engine. Shindaiwa Kogyo Co., Ltd. will not deny warranty repairs, however, solely because of the lack of repair, maintenance or failure to keep maintenance records.

MAINTENANCE, REPLACEMENT OR REPAIR OF EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY REPAIR ESTABLISHMENT OR INDIVIDUAL; HOWEVER, WARRANTY REPAIRS MUST BE PERFORMED BY A DEALER OR SERVICE CENTER AUTHORIZED BY SHINDAIWA KOGYO CO., LTD. THE USE OF PARTS THAT ARE NOT EQUIVALENT IN PERFORMANCE AND DURABILITY TO AUTHORIZED PARTS MAY IMPAIR THE EFFECTIVENESS OF THE EMISSION CONTROL SYSTEM AND MAY HAVE A BEARING ON THE OUTCOME OF A WARRANTY CLAIM.

If other than the parts authorized by Shindaiwa Kogyo Co., Ltd. are used for maintenance replacements or for the repair of components affecting emission control, you should assure yourself that such parts are warranted by their manufacturer to be equivalent to the parts authorized by Shindaiwa Kogyo Co., Ltd. in their performance and durability.

OBTAINING WARRANTY SERVICE

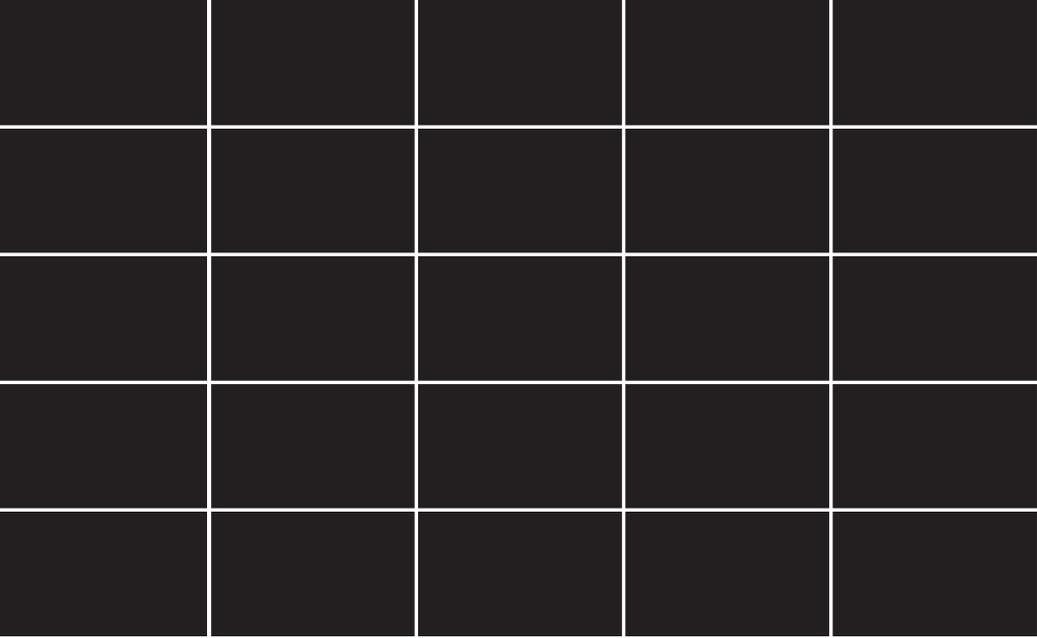
All repairs qualifying under this limited warranty must be performed by a dealer authorized by Shindaiwa Kogyo Co., Ltd.

If any emission-related part is found defective during the warranty period, it is your responsibility to present the product to an authorized Shindaiwa dealer. Bring your sales receipts showing the date of purchase for this engine. The dealer authorized by Shindaiwa Kogyo Co., Ltd. will perform the necessary repairs or adjustments within a reasonable amount of time and furnish you with a copy of the repair order. All parts and accessories replaced under this warranty become the property of Shindaiwa Kogyo Co., Ltd.

To locate an authorized Shindaiwa dealer nearest you, contact your Shindaiwa Distributor. For the name and telephone number of the Shindaiwa Distributor in your area, please call Shindaiwa Inc. at (503) 692-3070 between the hours of 8:00 AM and 5:00 PM Pacific Standard Time.

THIS WARRANTY IS ADMINISTERED BY

Shindaiwa Inc.
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Tualatin OR. 97062
(503) 692-3070



shindaiwa

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