

TROY-BILT® TB10CS

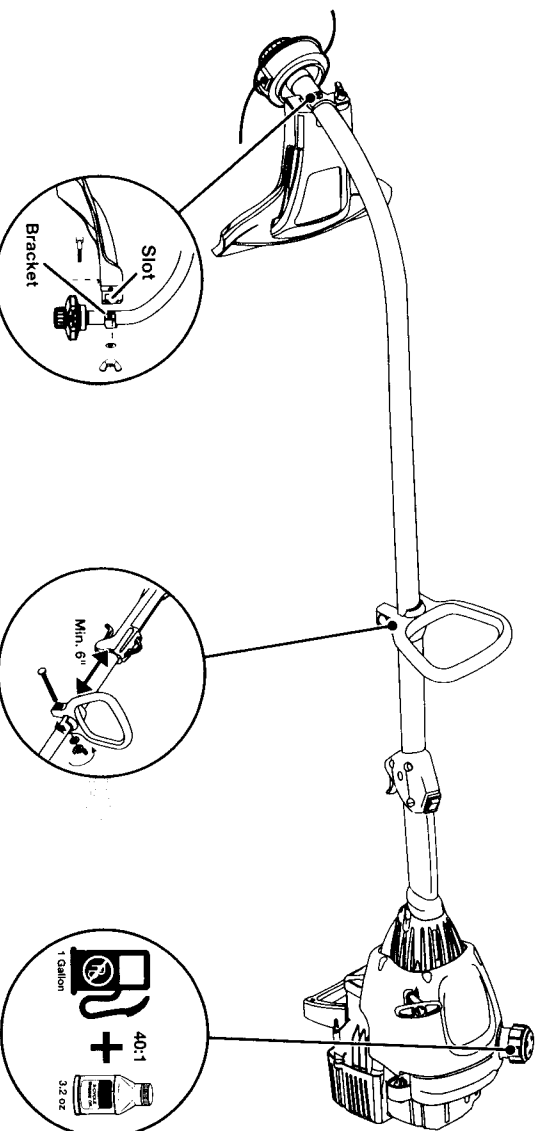
2-Cycle Trimmer

Operator's Manual

FAST ASSEMBLY GUIDE

Quick Instructions to Assemble

for complete instructions, refer to the Assembly Instructions section of this manual.

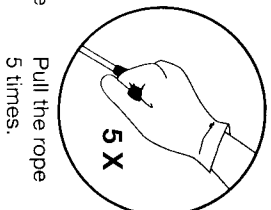
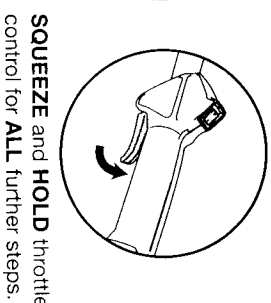
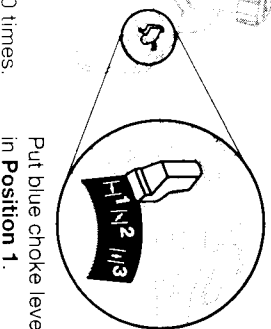
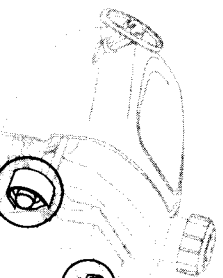


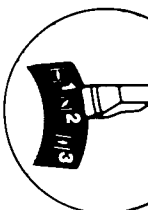
Slide the shield's slot onto the mounting bracket. Rotate the shield onto the shaft. Push square bolt through shield and bracket. Tighten washer and wing nut onto bolt.

Push D-handle on shaft. Move handle a minimum 6 inches away from shaft grip. Insert clamp bolt and tighten the wing nut.

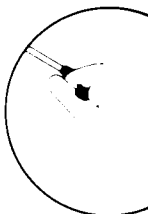
Mix thoroughly in a separate fuel can:
– 3.2 fl. oz. of 2-cycle engine oil
– 1 gallon of unleaded gasoline
Place the unit on a level surface. Fill fuel tank.
NOTE: Do not mix directly in the engine fuel tank.

FAST START GUIDE





Move blue choke lever to **Position 2**.



Pull the rope 3 to 5 times to start. Run engine for 30-60 seconds to warm up.



While continuing to squeeze the throttle control, move the blue choke lever to **Position 3**.



Continue warming for an additional 60 seconds. During this time the unit may be used.

DIDN'T START?
Repeat these instructions.

If engine still fails to start, refer to the Starting/Stopping instructions section of this manual for additional starting and troubleshooting information.

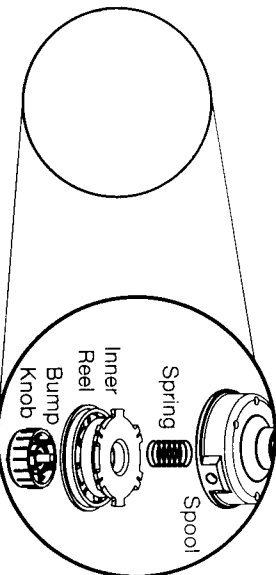
FASTLINE GUIDE

Quick Instructions to Replace SpiltLine® Trimmer Line

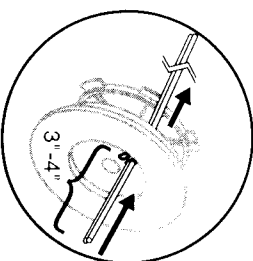
Replacement SpiltLine® Part #49U2341K953

For single line installation, refer to Line Installation section of this manual.

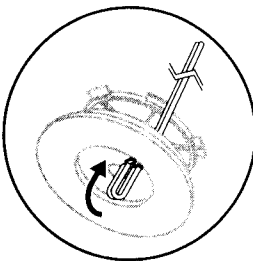
For replacement spool installation, refer to Installing a Prewound Reel section of this manual.



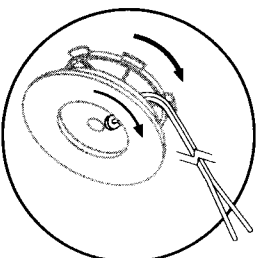
Unscrew Bump Knob™ counterclockwise. Remove inner reel and spring.



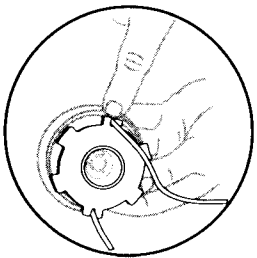
Insert 10' of 0.095" SpiltLine® through hole in top of reel. Pull most of line through hole until 3"-4" remains.



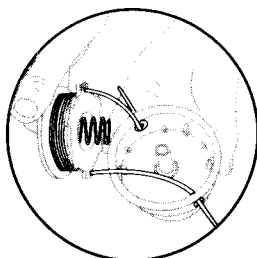
Bend short end and push it into the other hole. Pull tight.



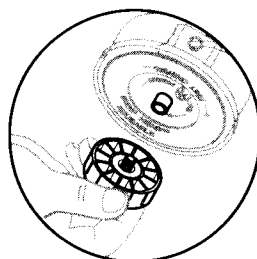
Wind line tightly in direction of arrow. Spilt other end of SpiltLine® back 6"-7".



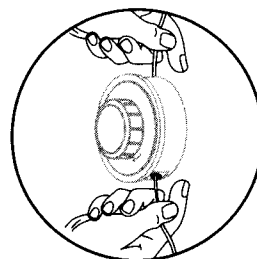
Push 6"-7" ends into 0.095" holding slots.



Insert lines through eyelets in spool. Insert spring and reel into spool.



Hold the inner reel in place. Tighten Bump Knob clockwise.



Pull lines firmly to release from holding slots.



IMPORTANT: READ OPERATOR'S MANUAL THOROUGHLY AND FOLLOW THE SAFE OPERATION PRACTICES BEFORE OPERATING THE UNIT.

NEED HELP? CALL 1-800-828-5500 IN U.S. OR 1-800-668-1238 IN CANADA



DO NOT RETURN THIS PRODUCT

For Assistance please call 1-800-828-5500 (U.S.) or 1-800-668-1238 (Canada) or visit www.troybilt.com or www.troybilt.ca



SERVICE INFORMATION

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For service call **1-800-828-5500** in the United States or **1-800-668-1238** in Canada to obtain a list of authorized service dealers near you. For more details about your unit, visit our website at www.troybilt.com or www.troybilt.ca.

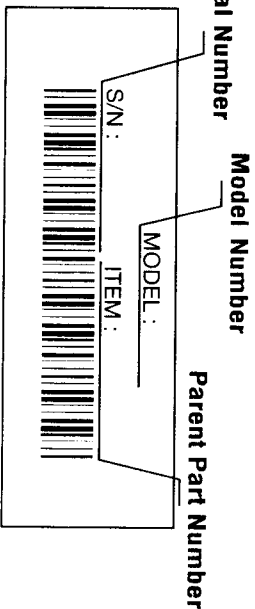
If you have difficulty assembling this product or have any questions regarding the controls, operation or maintenance of this unit, please call the Customer Support Department.

DO NOT RETURN THE UNIT TO THE RETAILER. PROOF OF PURCHASE WILL BE REQUIRED FOR WARRANTY SERVICE.

THIS PRODUCT IS COVERED BY ONE OR MORE U.S. PATENTS. OTHER PATENTS PENDING.

Service on this unit both within and after the warranty period should be performed only by an authorized and approved service dealer.

Before beginning, locate the unit's model plate. It lists the model and serial numbers of your unit. Refer to the sample plate below and copy the information for future reference.



Copy the model and parent part number here: _____

Copy the serial number here: _____

RULES FOR SAFE OPERATION

CALIFORNIA PROPOSITION 65 WARNING

WARNING

THE ENGINE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

SPARK ARRESTOR NOTE

NOTE: For users on U.S. Forest Land and in the states of California, Maine, Oregon and Washington. All U.S. Forest Land and the state of California (Public Resources Codes 4442 and 4443). Oregon and Washington require, by law that certain internal combustion engines operated on forest brush and/or grass-covered areas, be equipped with a spark arrestor, maintained in effective working order, or the engine be constructed, equipped, and maintained for the prevention of fire. Check with your state or local authorities for

RULES FOR SAFE OPERATION

- Mix and add fuel in a clean, well-ventilated outdoor area where there are no sparks or flames. Do not smoke while fueling or mixing fuel. Wipe up any spilled fuel from the unit immediately. Always wipe unit dry before using.
- Move the unit at least 30 feet (9.1 m) from the fueling source and site before starting the engine. Do not smoke or allow sparks and open flames near the area while adding fuel or operating the unit.

WHILE OPERATING





- Never start or run the unit inside a closed room or building. Breathing exhaust fumes can kill. Operate this unit only in a well ventilated outdoor area.
- Wear safety glasses or goggles that are marked as meeting ANSI Z87.1-1989 standards. Also wear ear/hearing protection when operating this unit. Wear a face or dust mask if the operation is dusty. Long sleeve shirts are recommended.
- Wear heavy, long pants, boots and gloves. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair above shoulder level.
- The cutting head shield must always be in place while operating the unit. Do not operate unit without both trimming lines extended, and the proper line installed. Do not extend the trimming line beyond the length of the shield.
- This unit has a clutch. The cutting head remains stationary when the engine is idling. If it does not, have the unit adjusted by an authorized service technician.
- Adjust the D-handle to your size to provide the best grip.
- Be sure the cutting head is not in contact with anything before starting the unit.
- Use the unit only in daylight or good artificial light.
- Avoid accidental starting. Be in the starting position whenever pulling the starter rope. The operator and unit must be in a stable position while starting. See Starting/Stopping Instructions.
- Use the right tool. Only use this tool for the purpose intended.
- Do not overreach. Always keep proper footing and balance.
- Always hold the unit with both hands when operating. Keep a firm grip on both the front and rear handle or grips.
- Keep hands, face, and feet at a distance from all moving parts. Do not touch or try to stop the cutting head when it is rotating.
- Do not touch the engine or muffler. These parts get extremely hot from operation. They remain hot for a short time after you turn off the unit.
- Do not operate the engine faster than the speed needed to cut, trim or edge. Do not run the engine at high speed when you are not cutting.
- Always stop the engine when cutting is delayed or when walking from one cutting location to another.
- If you strike or become entangled with a foreign object, stop the engine immediately and check for damage. Do not operate before repairing damage. Do not operate the unit with loose or damaged parts.
- Stop and switch the engine to off for maintenance, repair, or for changing the cutting head or other Add-Ons.
- Use only original equipment manufacturer replacement parts and accessories for this unit. These are available from your authorized service dealer. Use of any unauthorized parts or accessories could lead to serious injury to the user, or damage to the unit, and void your warranty.
- Keep unit clean of vegetation and other materials. They may become lodged between the cutting head and shield.
- To reduce fire hazard, keep the engine and muffler free from grass, leaves, excessive grease or carbon build up.

OTHER SAFETY WARNINGS

- Never store the unit, with fuel in the tank, inside a building where fumes may reach an open flame or spark.
- Allow the engine to cool before storing or transporting. Be sure to secure the unit while transporting.
- Store the unit in a dry area, locked up or up high to prevent unauthorized use or damage, out of the reach of children.
- Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use. See the Cleaning and Storage instructions.
- Keep these instructions. Refer to them often and use them to instruct other users. If you loan someone this unit, also loan them these instructions.

SAVE THESE INSTRUCTIONS


The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL	MEANING
	WARNING: Failure to obey a safety warning can result in injury to yourself and others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.
	CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.
	SAFETY ALERT: Indicates danger, warning or caution. Attention is required in order to avoid serious personal injury. May be used in conjunction with other symbols or pictographs.
	DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment. Read the Operator's Manual and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.


FOR QUESTIONS, CALL 1-800-828-5500 IN U.S. OR 1-800-668-1238 in CANADA

• **IMPORTANT SAFETY INSTRUCTIONS •**


	WARNING: When using the unit, you must follow the safety rules. Please read these instructions before operating the unit in order to ensure the safety of the operator and any bystanders. Please keep these instructions for later use.
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- Read the instructions carefully. Be familiar with the controls and proper use of the unit.
- Do not operate this unit when tired, ill, or under the influence of alcohol, drugs, or medication.
- Children and teens under the age of 15 must not use the unit, except for teens guided by an adult.
- All guards and safety attachments must be installed properly before operating the unit.
- Inspect the unit before use. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and secure. Replace parts that are cracked, chipped, or damaged in any way. Do not operate the unit with loose or damaged parts.
- Carefully inspect the area before starting the unit. Remove all debris and hard or sharp objects such as glass, wire, etc.
- Be aware of the risk of injury to the head, hands and feet.
- Clear the area of children, bystanders, and pets. At a minimum, keep all children, bystanders, and pets outside a 50 feet (15 m.) radius; there still may be a risk to bystanders from thrown objects. Bystanders should be encouraged to wear eye protection. If you are approached, stop the unit immediately.
- Use only 0.095 inch (2.41 mm) diameter original equipment manufacturer replacement line. Never use metal-reinforced line, wire or rope. These can break off and become dangerous projectiles.
- Squeeze the throttle control and check that it returns automatically to the idle position. Make all adjustments or repairs before using unit.


SAFETY WARNINGS FOR GAS UNITS


	WARNING: Gasoline is highly flammable, and its vapors can explode if ignited. Take the following precautions:
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- Store fuel only in containers specifically designed and approved for the storage of such materials.
- Avoid creating a source of ignition for spilled fuel. Do not start the engine until fuel vapors dissipate.
- Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank, or add fuel, when the engine is hot. Never operate the unit without the fuel cap securely in place. Always loosen the fuel tank cap slowly to relieve any pressure in the tank.


SYMBOL	MEANING
	• SAFETY ALERT SYMBOL Indicates danger, warning or caution. May be used in conjunction with other symbols or pictographs.


	• READ OPERATOR'S MANUAL WARNING: Read the operator's manual(s) and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystander.
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	• WEAR EYE AND HEARING PROTECTION WARNING: Thrown objects and loud noise can cause severe eye injury and hearing loss. Wear eye protection meeting ANSI Z87.1-1989 standards and ear protection when operating this unit. Use a full face shield when needed.
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	• UNLEADED FUEL Always use clean, fresh unleaded fuel
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	• ON/OFF STOP CONTROL ON / START / RUN
---	--

	• ON/OFF STOP CONTROL OFF or STOP
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	• DO NOT USE E85 FUEL IN THIS UNIT WARNING: It has been proven that fuel containing greater than 15% ethanol will likely damage this engine and void the warranty.
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	• THROWN OBJECTS AND ROTATING CUTTER CAN CAUSE SEVERE INJURY WARNING: Small objects can be propelled at high speed, causing injury. Keep away from the rotating rotor.
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	• KEEP BYSTANDERS AWAY WARNING: Keep all bystanders, especially children and pets, at least 50 feet (15 m) from the operating area.
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	• HOT SURFACE WARNING Do not touch a hot muffler or cylinder. You may get burned. These parts get extremely hot from operation. When turned off they remain hot for a short time.
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	• OIL Refer to operator's manual for the proper type of oil.
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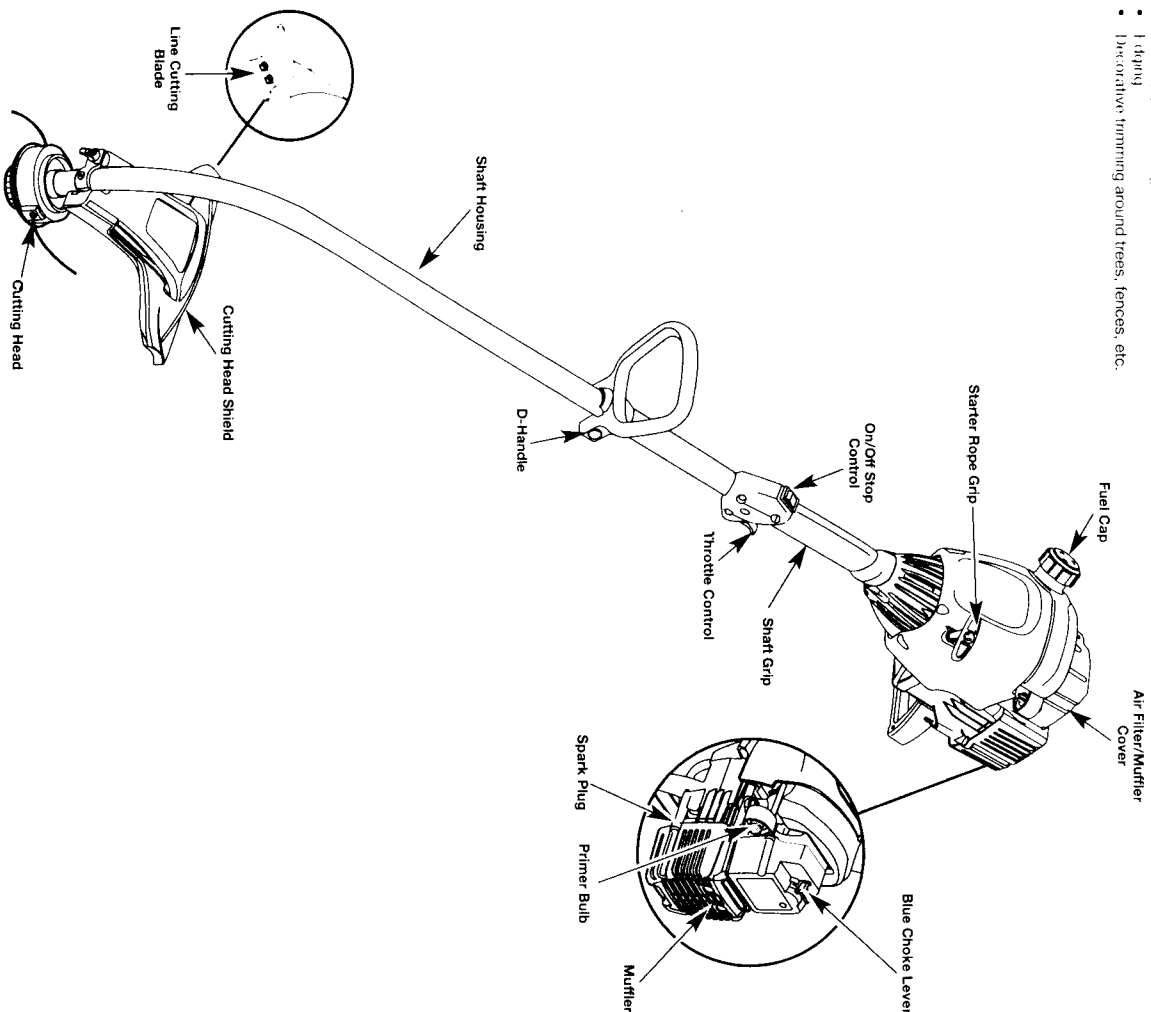
	• CHOKE CONTROL 1. • FULL choke position 2. • PARTIAL choke position 3. • RUN choke position
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	• SHARP BLADE WARNING: Sharp blade on cutting attachment shield. To prevent serious injury, do not touch the line cutting blade.
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KNOW YOUR UNIT

APPLICATIONS

- As a trimmer
- Cutting grass and light weeds
- Edging
- Decorative trimming around trees, fences, etc.



ASSEMBLY INSTRUCTIONS

INSTALL THE CUTTING HEAD SHIELD



WARNING: To prevent serious personal injury, never operate the trimmer without the cutting attachment shield in place.

From the following instructions if the cutting attachment shield on your unit is not installed. Use only the instructions that apply to the type of shaft and shield that your unit is equipped with.

Place the cutting attachment shield onto the shaft housing. Be sure the guard mounting bracket slides into the slot on the edge of the cutting shield. Rotate the shield into place.

STARTING/STOPPING INSTRUCTIONS



WARNING: Avoid accidental starting. Make sure to be in the starting position when pulling the starter rope (Fig. 10). To avoid serious injury, the operator and unit must be in a stable position while starting.

STARTING INSTRUCTIONS

1. Mix gas with oil. Fill fuel tank with fuel/oil mixture. See Oil and Fuel Mixing Instructions.

NOTE: There is no need to turn the unit on. The On/Off Control is in the ON (I) position at all times (Fig. 6).

2. Fully press and release the primer bulb 10 times slowly. Some amount of fuel should be visible in the primer bulb and fuel lines (Fig. 4). If you can't see fuel in the bulb, press and release the bulb as many times as it takes before you can see fuel in it.

3. Place the blue choke lever in **Position 1** (Fig. 4).

4. Crouch in the starting position (Fig. 5), squeeze the throttle control, and pull the starter rope out with a controlled motion 5 times.

5. Place the blue choke lever in **Position 2** (Fig. 4).

6. While squeezing the throttle control, pull the starter rope in a controlled motion 3 to 5 times to start engine.

7. Keep the throttle squeezed and allow the engine to warm up for 30 to 60 seconds.

8. Continue to squeeze the throttle control, move the blue choke lever in **Position 3** (Fig. 4) and continue warming the engine for an additional 60 seconds. During this time the unit may be used.

NOTE: Unit is properly warmed up when engine accelerates without hesitation.

If... the engine hesitates, return the blue choke lever to **Position 2** (Fig. 4) and continue warm-up.

If... the engine does not start, go back to step 2.

If... the engine fails to start after a few attempts, place the blue choke lever in **Position 3** and squeeze the throttle control. Pull the starter rope out with a controlled and steady motion 3 to 8 times. The engine should start. If not, repeat.

IF WARM... If the engine is already warm, start the unit with the blue choke lever in **Position 2**.

After the unit starts, move the blue choke lever to **Position 3**.

STOPPING INSTRUCTIONS

1. Release your finger from the throttle control. Allow the engine to cool down by idling.

2. Press and hold On/Off Control in the OFF (O) position until engine comes to a complete stop (Fig. 6).

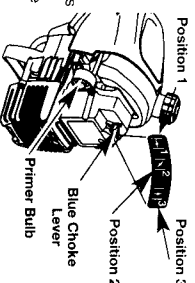


Fig. 4

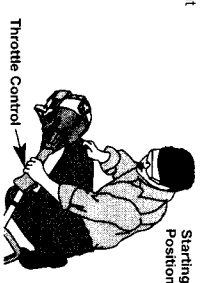


Fig. 5

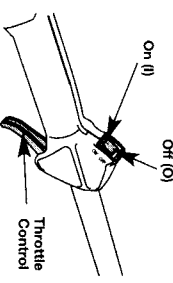


Fig. 6

OPERATING INSTRUCTIONS

HOLDING THE TRIMMER



WARNING: Always wear eye, hearing, foot and body protection to reduce the risk of injury when operating this unit.

Before operating the unit, stand in the operating position (Fig. 7). Check for the following:

- The operator is wearing eye protection and proper clothing
- With a slightly-bent right arm, the operator's hand is holding the shaft grip
- The operator's left arm is straight, the left hand holding the D-handle
- The unit is at waist level
- The cutting head is parallel to the ground and easily contacts the grass without the need to bend over

ADJUSTING TRIMMING LINE LENGTH



CAUTION: Do not remove or alter the line cutting blade assembly. Excessive line length will make the unit overheat. This may lead to serious personal injury or damage to the unit.

The Bump Head™ cutting head allows you to release trimming line without stopping the engine. To release more line, lightly tap the cutting head on the ground (Fig. 8) while operating the trimmer at high speed.

NOTE: Always keep the trimming line fully extended. Line release becomes more difficult when the cutting line gets shorter.

Each time the head is bumped, about 1 inch (25.4 mm) of trimming line releases. A blade in the cutting head shield will cut the line to the proper length if any excess line is released.

For best results, tap the bump knob on bare ground or hard soil. If you attempt a line release in tall grass, the engine may stall. Always keep the trimming line fully extended. Line release becomes more difficult when the cutting line gets shorter.

NOTE: Do not rest the Bump Head™ on the ground while the unit is running.

Some line breakage will occur from:

- Entanglement with foreign matter
- Normal line fatigue
- Attempting to cut thick, stalky weeds
- Forcing the line into objects such as walls or fence posts

TIPS FOR BEST TRIMMING RESULTS

- Keep the cutting head parallel to the ground.
- Do not force the cutting head. Allow the tip of the line to do the cutting, especially along walls. Cutting with more than the tip will reduce cutting efficiency and may overheat the engine.
- Cut grass over 8 inches (203 mm) by working from top to bottom in small increments to avoid premature line wear or engine strain.
- Cut from right to left whenever possible. Cutting to the left improves the unit's cutting efficiency (Fig. 9), and throws debris away from the operator.

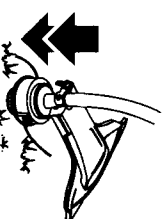


Fig. 8

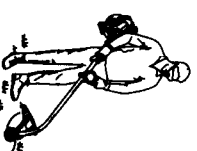


Fig. 7

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- A technical diagram showing a wing nut being tightened onto a square bolt. An arrow points to the wing nut with the label "Wing Nut". Another arrow points to the square bolt with the label "Square Bolt".

Fig. 2

-
- Fig. 3**
- The diagram illustrates the assembly of the D-Handle. Key components and instructions are labeled:
- Shaft Grip**: The upper handle component.
 - Shaft**: The central shaft connecting the two handles.
 - Housing**: The lower handle component.
 - D-Handle**: The overall assembly.
 - Minimum 6 inches (15.24 cm)**: The required distance between the shaft grip and the housing.
 - Bolt**: The fastener used to secure the housing to the shaft.
 - Washer**: A flat circular disc placed between the housing and the shaft.
 - Nut**: The threaded component that secures the bolt.
 - Wing**: The adjustable part of the nut.
 - Tighten**: An arrow indicating the direction to turn the wing to secure the assembly.

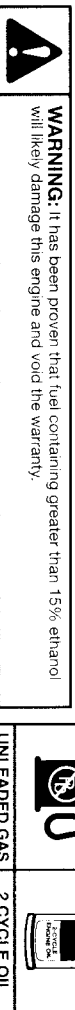
Fig. 3

OIL AND FUEL INFORMATION

OIL AND FUEL MIXING INSTRUCTIONS

Old and/or improperly mixed fuel are the main reasons for the unit not running properly. Be sure to use fresh, clean unleaded fuel. Follow the instructions carefully for the proper fuel/oil mixture.

DEFINITION OF BLENDED FUELS



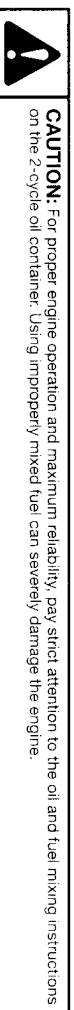
1. LITERA	2. COM
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Today's fuels are often a blend of gasoline and oxygenates such as ethanol, methanol, or MTBE (ether). Alcohol-blended fuel absorbs water. As little as 1% water in the fuel can make fuel and oil separate. It forms acids when stored. When using alcohol-blended fuel, use fresh fuel (less than 30 days old).	1 GALLON US (3.8 LITERS)	3.2 FL. OZ. (95 ml)
	1 LITER	25 ml

MIXING RATIO - 40:1

- Always use the fresh fuel mix explained in your operator's manual
- Always agitate the fuel mix before fueling the unit
- Drain the tank and run the engine dry before storing the unit

USING FUEL ADDITIVES



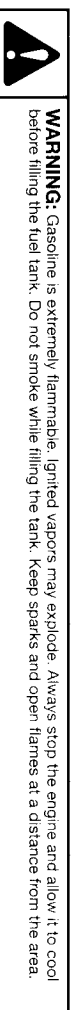
The bottle of 2-cycle oil that came with your unit contains a fuel additive which will help inhibit corrosion and minimize the formation of gum deposits. It is recommended that you use our 2-cycle oil with this unit.

If unavailable, use a good 2-cycle oil designed for air-cooled engines along with a fuel additive, such as STA-BIL® Gas Stabilizer or an equivalent. Add 0.8 oz. (23 m.) of fuel additive per gallon of fuel according to the instructions on the container. NEVER add fuel additives directly to the unit's fuel tank.

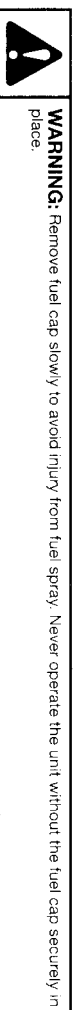
Thoroughly mix the proper ratio of 2-cycle engine oil with unleaded gasoline in a separate fuel can. Use a 40:1 fuel/oil ratio. Do not mix them directly in the engine fuel tank. See the table below for specific gas and oil mixing ratios.

NOTE: One gallon (3.8 liters) of unleaded gasoline mixed with one 3.2 oz. (95 ml.) bottle of 2-cycle oil makes a 40:1 fuel/oil ratio.

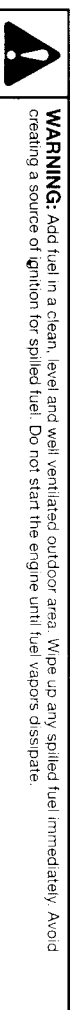
NOTE: Dispose of the old fuel/oil mix in accordance to Federal, State and Local regulations.



FUELING THE UNIT



WARNING: Add fuel in a clean, level and well ventilated outdoor area. Wipe up any spilled fuel immediately. Avoid creating a source of ignition for spilled fuel. Do not start the engine until fuel vapors dissipate.



1. With the unit on a flat, level surface, remove the fuel cap.
 2. Place the gas container's spout into the fill hole on the fuel tank and fill the tank.
 3. Do not overfill the tank.
- NOTE:** Do not overfill the tank.
3. Wipe up any gasoline that may have spilled.
 4. Reinstall the fuel cap.
 5. Move the unit at least 30 ft. (9.1 m) from the fueling source and site before starting the engine.

- For example, the line will wear faster when trimming against a foundation wall as opposed to trimming around a tree.

DECORATIVE TRIMMING

Decorative trimming is accomplished by removing all vegetation around trees, posts, fences and Rotate the whole unit so that the cutting head is at a 30° angle to the ground (Fig. 9).



Fig. 9

MAINTENANCE AND REPAIR INSTRUCTIONS

MAINTENANCE SCHEDULE

WARNING: To prevent serious injury, never perform maintenance or repairs with unit running. Always service and repair a cool unit. Disconnect the spark plug wire to ensure that the unit cannot start.

Perform the required maintenance procedures at the frequency stated in the table. These procedures should also be a part of any seasonal tune-up.

NOTE: Some maintenance procedures may require special tools or skills. If you are unsure about these procedures take your unit to any non-road engine repair establishment, individual or authorized service dealer.

NOTE: Maintenance, replacement or repair of the emission control devices and system may be performed by any non-road engine repair establishment, individual or authorized service dealer.

FREQUENCY	MAINTENANCE REQUIRED	SEE
Before starting engine	Fill fuel tank with fresh fuel	p. 3
Every 10 hours	Clean and re-oil air filter	p. 4
Every 25 hours	Check and clean spark arrestor	p. 4
Every 50 hours	Check spark plug condition and gap	p. 4
	Inspect exhaust port and spark arrestor screen for clogging or obstruction to assure maximum performance levels.	p. 4

LINE INSTALLATION

WARNING: Never use metal-reinforced line, wire, chain or rope. These can break off and become dangerous projectiles.

This section covers both SplitLine™ and standard single line installation.

Always use original equipment manufacturer 0.095 in. (2.41 mm) replacement line. Line other than the specified may make the engine overheat or fail.

There are two methods to replace the trimming line:

- Wind the inner reel with new line
- Install a prewound inner reel

Removing the Existing Inner Reel

1. Hold the outer spool with one hand and unscrew the bump knob counterclockwise (Fig. 10). Inspect the bolt inside the Bump Knob to make sure it moves freely. Replace the Bump Knob if damaged.
2. Remove the inner reel from the outer spool (Fig. 11).

3. Remove spring from the inner reel (Fig. 11).

4. Use a clean cloth to clean the inner reel, spring, shaft, and inner surface of the outer spool.

5. Check the indexing teeth on the inner reel and outer spool for wear (Fig. 12). If necessary, remove burrs or replace the reel and spool.

NOTE: Always use the correct line length when installing trimming line on the unit. The line may not release properly if the line is too long.

Single Line Installation

Go to Step 8 for SplitLine™ Installation.

6. Take approximately 20 feet (6 m) of new trimming line, loop it into two equal lengths. Insert each end of the line through one of the two holes in the inner reel (Fig. 13). Pull the line through the inner reel so that the loop is as small as possible.

7. Wind the lines in tight even layers, onto the reel (Fig. 14). Wind the line in the direction indicated on the inner reel. Place your index finger between the two lines to stop the lines from overlapping. Do not overlap the ends of the line. Proceed to step 12.

SplitLine™ Installation

8. Take approximately 10 feet (3 m) of new trimming line. Insert one end of the line through one of the two holes in the inner reel (Fig. 15). Pull the line through the inner reel until only about 4 inches is left out.

9. Insert the end of the line into the open hole in the inner reel and pull the line tight to make the loop as small as possible (Fig. 15).

10. Before winding, split the line back about 6 - 7 inches. Wind the line in tight even layers in the direction indicated on the inner reel.

11. Wind the line in tight even layers in the direction indicated on the inner reel.

12. Insert the ends of the line into the two holding slots (Fig. 16). Insert the ends of the line into the two holding slots (Fig. 16).

13. Insert the ends of the line through the eyeslets in the outer spool and place inner reel with spring inside the outer spool (Fig. 17). Push the inner reel and outer spool together.

14. Before reassembling the cutting head, hold the inner reel in place and install the bump knob by turning clockwise. Tighten securely.

15. Grasp the ends and pull firmly to release the line from the holding slots in the reel.

- NOTE: The spring must be assembled on the inner reel before reassembling the cutting head.

14. Hold the inner reel in place and install the bump knob by turning clockwise. Tighten securely.

15. Grasp the ends and pull firmly to release the line from the holding slots in the reel.

INSTALLING A PREWOUND REEL

1. Hold the outer spool with one hand and unscrew the bump knob counterclockwise (Fig. 10). Inspect the bolt inside the bump knob to make sure it moves freely.

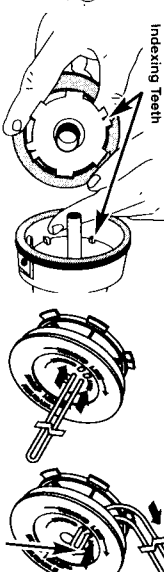


Fig. 12

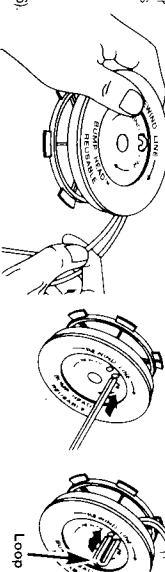


Fig. 13

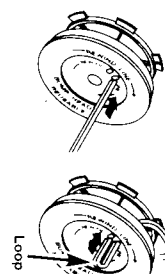


Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20



Fig. 21



Fig. 22



Fig. 23



Fig. 24



Fig. 25



Fig. 26



Fig. 27



Fig. 28



Fig. 29



Fig. 30



Fig. 31



Fig. 32



Fig. 33



Fig. 34



Fig. 35



Fig. 36

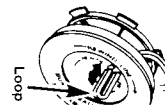


Fig. 37



Fig. 38



Fig. 39



Fig. 40



Fig. 41



Fig. 42



Fig. 43



Fig. 44



Fig. 45



Fig. 46



Fig. 47



Fig. 48



Fig. 49



Fig. 50



Fig. 51



Fig. 52



Fig. 53



Fig. 54



Fig. 55



Fig. 56



Fig. 57



Fig. 58



Fig. 59



Fig. 60



Fig. 61



Fig. 62



Fig. 63



Fig. 64



Fig. 65



Fig. 66



Fig. 67



Fig. 68



Fig. 69



Fig. 70



Fig. 71



Fig. 72



Fig. 73



Fig. 74



Fig. 75



Fig. 76



Fig. 77



Fig. 78



Fig. 79



Fig. 80



Fig. 81



Fig. 82



Fig. 83



Fig. 84



Fig. 85



Fig. 86



Fig. 87



Fig. 88



Fig. 89



Fig. 90



Fig. 91



Fig. 92



Fig. 93

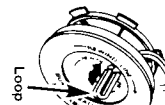


Fig. 94



Fig. 95



Fig. 96



Fig. 97



Fig. 98



- NOTE:** The spring must be assembled on the inner reel before reassembling the cutting head.
- Insert the ends of the line through the eyelets in the outer spool (Fig. 17).
 - Place the new inner reel inside the outer spool. Push the inner reel and outer spool together. While holding the inner reel and outer spool, grasp the ends and pull firmly to release the line from the holding slots in the spool.
 - Hold the inner reel in place and install the bump knob by turning clockwise. Tighten securely.

AIR FILTER MAINTENANCE

WARNING: To avoid serious personal injury, always turn your trimmer off and allow it to cool before you clean or service it.



Removing the Air Filter/Muffler Cover

- Place the blue choke lever in Position 2 (Fig. 18).
- NOTE:** The blue choke lever must be in Position 2 to remove the air filter/muffler cover. Remove the four (4) screws securing the air filter/muffler cover (Fig. 18). Use a T-20 Torx bit screwdriver.
- Pull the cover from the engine. Do not force.

Cleaning the Air Filter

Clean and re-oil the air filter every 10 hours of operation. It is an important item to maintain. Failure to maintain your air filter properly can result in poor performance or can cause permanent damage to your engine.

- Remove air filter/muffler cover. Refer to Removing the Air Filter/Muffler Cover.
- Turn cover over and look inside to locate the air filter. Remove the air filter from inside the air filter/muffler cover (Fig. 19).
- Wash the filter in detergent and water (Fig. 20). Rinse the filter thoroughly. Squeeze out excess water. Allow it to dry completely.
- Apply enough clean SAE 30 oil to tightly coat the filter (Fig. 21).
- Squeeze the filter to spread and remove excess oil (Fig. 22).
- Replace the air filter inside the air filter/muffler cover (Fig. 19).

NOTE: Operating the unit without the air filter and air filter/muffler cover assembly will VOID the warranty.

Reinstalling the Air Filter/Muffler Cover

- Place the air filter/muffler cover over the back of the carburetor and muffler. Align the screw holes.
- Insert the four (4) screws into the holes in the air filter/muffler cover (Fig. 18) and tighten. Do not over tighten.

SPARK ARRESTOR MAINTENANCE

- Remove air filter/muffler cover. Refer to Removing the Air Filter/Muffler Cover.
- Locate the muffler, but do not remove it. Find the screw on the bottom of the muffler (Fig. 23). Remove the screw using either a torx #20 or flat blade screwdriver.
- Carefully pry up the left side spark arrestor hood. Two tabs act as hinges on the right side of the hood. Flip open the spark arrestor hood like a door and then pull its tabs out of the muffler slots.
- Using a small flat blade screwdriver, carefully pry the spark arrestor screen out from the inside of the spark arrestor hood.
- Clean the spark arrestor screen with a wire brush. Replace it if it is damaged, or if you are unable to clean it thoroughly.
- Reinstall the spark arrestor screen snugly back into the spark arrestor hood.
- Reinstall the two hood tabs into the two muffler slots and tip the spark arrestor hood closed.
- Replace the screw you removed in Step 2 and tighten it securely.
- Reinstall the air filter/muffler cover.

WARNING: If the spark arrestor hood and spark arrestor screen are not tightened securely, they could fall off causing damage to the unit and possible serious personal injury.



CARBURETOR ADJUSTMENT

The idle speed of the engine is adjustable through the air filter/muffler cover (Fig. 24).

NOTE: Careless adjustments can seriously damage your unit. An authorized service dealer should make carburetor adjustments.

Check Fuel Mixture

Old and/or improperly mixed fuel is usually the reason for improper unit performance. Drain and refill the tank with fresh, properly-mixed fuel prior to making any adjustments. Refer to Oil and Fuel Information.

Clean Air Filter

The condition of the air filter is important to the operation of the unit. A dirty air filter will restrict air flow and change the air/fuel mixture. This is often mistaken for an out of adjustment carburetor. Check the condition of the air filter before adjusting the idle speed screw. Refer to Air Filter Maintenance.

Adjust Idle Speed Screw

WARNING: The cutting head will spin during idle speed adjustments. Wear protective clothing and observe all safety instructions to prevent serious personal injury.



If, after checking the fuel mixture and cleaning the air filter, the engine still will not idle, adjust the idle speed screw as follows:

- Start the engine and let it run at a high idle for a minute to warm up. Refer to Starting/Stopping Instructions.
- Release the throttle trigger and let the engine idle. If the engine stops, insert a small Phillips screwdriver into the hole in the air filter/muffler cover (Fig. 24). Turn the idle speed screw in, **clockwise**, 1/8 of a turn at a time (as needed) until the engine idles smoothly.
- If the engine appears to be idling too fast, turn the idle speed screw **counterclockwise** 1/8 of a turn at a time (as needed), to reduce idle speed.

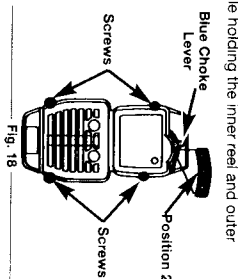


Fig. 18

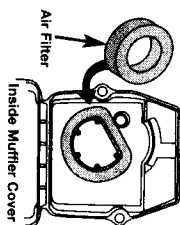


Fig. 19

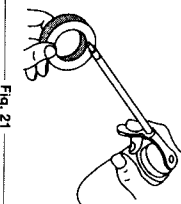
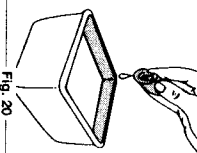


Fig. 22

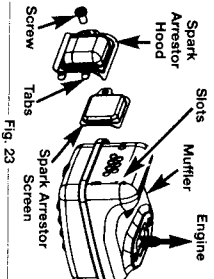


Fig. 23

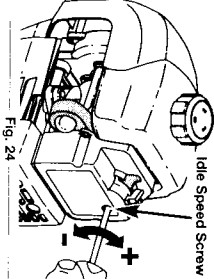


Fig. 24

Cutting head out of line	Refill with new line
Inner reel bunched up	Realign the inner reel
Cutting head dirty	Clean inner reel and outer spool
Line twisted	Disassemble, remove the twisted section and rewind
Line twisted when refiled	Disassemble and rewind the line
Not enough line is exposed	Feed the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting head

CUTTING LINE ADVANCES UNCONTROLABLY

CAUSE

Oil, cleaner or lubricant in cutting head

ACTION

Clean and thoroughly dry the cutting head

If further assistance is required, contact your authorized service dealer.

SPECIFICATIONS

ENGINE*	
Engine Type.....	Air-Cooled 2-Cycle
Stroke.....	1.25 in. (31.75 mm)
Displacement.....	1.9 cu in. (31 cc)
Operating RPM.....	6,800+ rpm
Idle Speed RPM.....	2,600 - 3,600 rpm
Ignition Type.....	Electronic
Ignition Switch.....	Rocker Switch
Spark Plug Gap.....	0.025 in. (0.635 mm)
Lubrication.....	Fuel/Oil Mixture
Fuel/Oil Ratio.....	40:1
Carburetor.....	Diaphragm, Air-Position
Starter.....	Auto Rewind
Muffler.....	Barfed with Guard
Throttle.....	Manual Spring Return
Fuel Tank Capacity.....	13 fl.oz. (384 ml)

DRIVE SHAFT & CUTTING HEAD*

Drive Shaft Housing.....	Steel Tube
Throttle Control.....	Finger-Tip Trigger
Approximate Unit Weight (No fuel, with cutting head, shield and D-handle).....	13 lbs. (5.9 kg)
Cutting Mechanisms.....	Bump Head™
Line Spool Diameter.....	3 in. (76.2 mm)
Trimming Line Diameter.....	0.095 in. (2.41 mm)
Cutting Path Diameter.....	17 in. (43.18 cm)

*All specifications are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

