

Operator's Manual

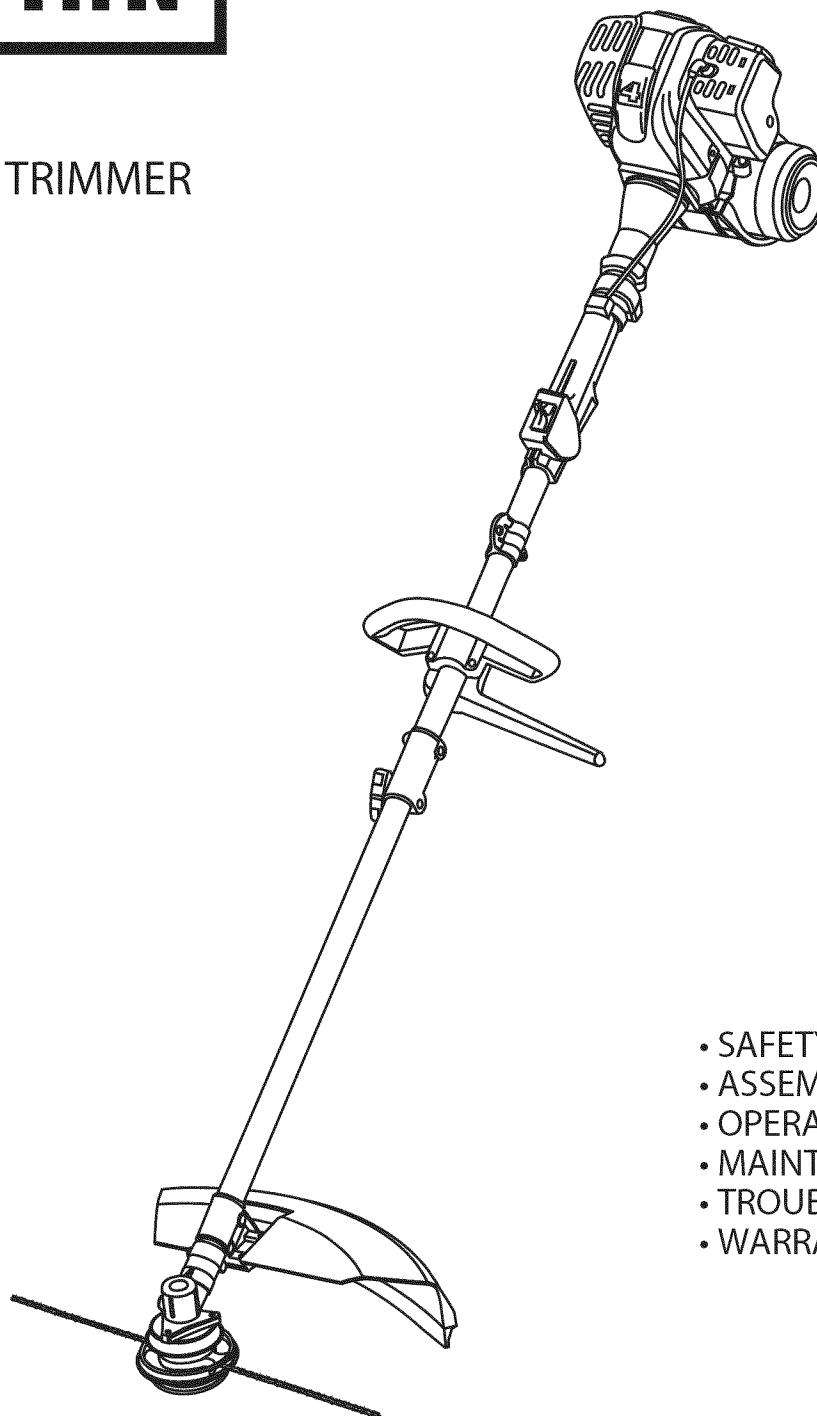


4-Cycle

PROPANE POWERED TRIMMER

Models: 104.79212

104.79211



16.4 oz. / 465 g propane bottle
not included

For assistance with assembly
or operation call:
1-800-235-5878

- SAFETY
- ASSEMBLY
- OPERATION
- MAINTENANCE
- TROUBLESHOOTING
- WARRANTY

CAUTION: Before using
this product, read this
manual and follow all
safety rules and operating
instructions.

Sears, Roebuck and Co., Hoffman Estates, IL 60179, U.S.A.

Visit our web site: www.sears.com/craftsman

769-03546

CRAFTSMAN
4-CYCLE PROPANE TRIMMER

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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 regulations pertaining to these requirements. Failure to follow these requirements could subject you to liability or a fine. This unit is factory equipped with a spark arrestor.

All information, illustrations, and specifications in this manual are based on the latest production information available at the time of printing. We reserve the right to make changes at any time without notice.




WARNING:
When using this unit, you must follow these safety rules. Please read these to ensure the safety of the operator and any bystanders. Please keep these instructions for later use.

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE OPERATING

- 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 Craftsman red medium thickness (85908) or black wide thickness (85909) replacement lines. 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.
- Do not operate this unit when tired, ill, under the influence of alcohol, drugs or medications.
- This unit is intended for adult use only. Do not allow children or untrained individuals to use the unit.
- Familiarize yourself with the controls and proper use of your trimmer prior to using.



WARNING:
When servicing, use only identical replacement parts. Use of any other parts may create a hazard or product damage.

- Never start or run the unit inside a closed room or building. Breathing exhaust fumes can be fatal. Operate this unit only in a well ventilated outdoor area.
- Wear safety glasses or goggles that meet ANSI Z87.1 standards and are marked as such. Wear ear/hearing protection when operating this unit. Wear a face or dust mask if the operation is dusty.
- Wear heavy long pants, boots, gloves and a long sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair above shoulder level.
- The cutting attachment shield must always be in place while operating the unit as a trimmer. Do not operate unit without proper line installed.
- This unit has a clutch. The cutting attachment remains stationary when the engine is idling. If it does not, have the unit adjusted by a Sears or other qualified service dealer.
- Adjust the handle to your size in order to provide the best grip.
- Be sure the cutting attachment 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. Refer to Starting/Stopping Instructions (p.10).
- Only use this tool for its intended purpose.
- Do not overreach. Always keep proper footing and balance.
- Always hold the unit with both hands when operating. Keep a firm grip on both handles or grips.
- Keep hands, face, and feet at a distance from all moving parts. Do not touch or try to stop the cutting attachment when it rotates.
- Do not touch the engine, gear housing or muffler. These parts get extremely hot from operation, even after the unit is turned off.
- Do not operate the engine faster than the speed needed to cut, trim or edge. Do not run the engine at high speed when 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 the unit, switch the engine to off, and disconnect the spark plug for maintenance or repair.
- Use only identical replacement parts and accessories designed for this line trimmer. Use of any other 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 attachment and shield.
- To reduce fire hazard, replace a faulty muffler and spark arrestor. Keep the engine and muffler free from grass, leaves, excessive grease or carbon buildup.

OTHER SAFETY WARNINGS

- Never store a unit with propane canister attached inside a building where vapor 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 Cleaning and Storage instructions. (p.19)
- 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.



WARNING:

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

SAVE THESE INSTRUCTIONS

SAFETY & INTERNATIONAL SYMBOLS

This operator's manual describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance and repair information.



WARNING: Indicates danger, warning or caution. May be used in conjunction with other symbols or pictographs.



WARNING: READ OPERATOR'S MANUAL: 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 bystanders.



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 standards and ear protection when operating this unit. Use a full face shield when needed.



OIL : Refer to operator's manual for the proper type of oil.



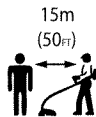
THROWN OBJECTS AND ROTATING CUTTER CAN CAUSE SEVERE INJURY WARNING: Do not operate without the cutting attachment shield in place. Keep away from the rotating cutting attachment.



ON / OFF STOP CONTROL ON / START / RUN



ON / OFF STOP CONTROL OFF or STOP



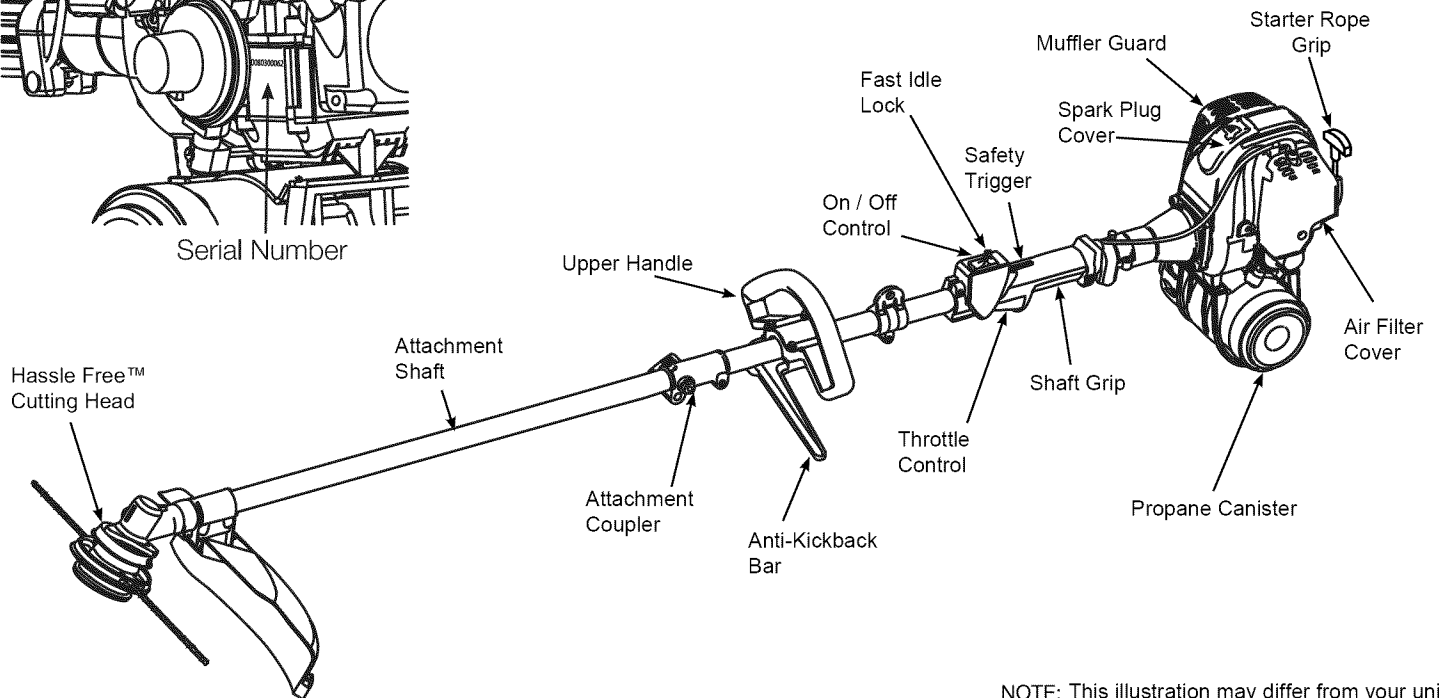
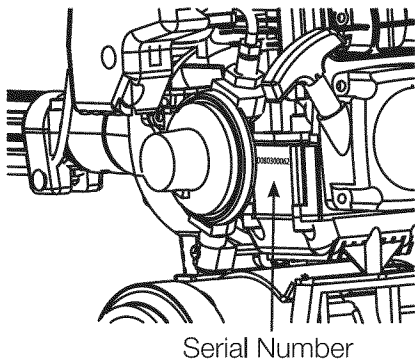
KEEP BYSTANDERS AWAY WARNING: Keep all bystanders, especially children and pets, at least 50 feet (15 m) from the operating area.



HOT SURFACE WARNING: Do not touch a hot muffler, gear housing or cylinder. You may get burned. These parts get extremely hot from operation. They remain hot for a short time after the unit turned off.



SHARP BLADE WARNING: Sharp blade on cutting attachment shield. To prevent serious injury, do not touch the line cutting blade.



NOTE: This illustration may differ from your unit. For example, the picture shows a straight shaft; your unit may have a curved shaft.

TOOL KIT

Your unit is provided with a tool kit (Fig.1). This tool kit consists of the following:

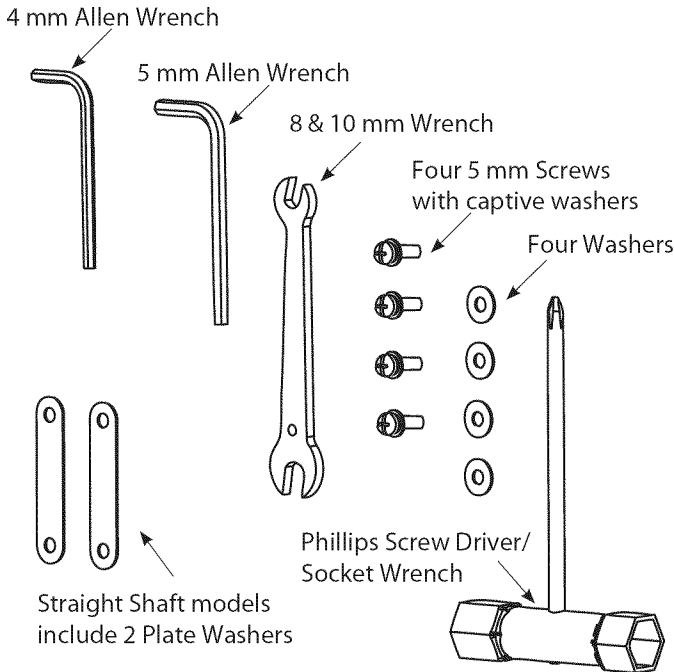


Fig. 1

INSTALLING CUTTING ATTACHMENT SHIELD

Use 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.

FOR CURVED SHAFT TRIMMERS

Place the cutting attachment shield and spacer against tube as shown in (Fig.2). Use the 2 screws provided to clamp the cap and shield onto the tube. Tighten the screws evenly. Make sure the shield does not touch any rotating parts.

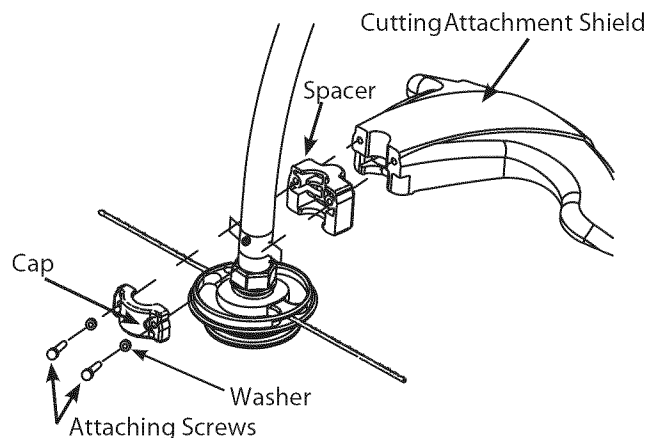


Fig. 2

FOR STRAIGHT SHAFT TRIMMERS

Place the cutting attachment shield onto the shaft mount. Install using provided hardware in the sequence as shown (Fig.3).

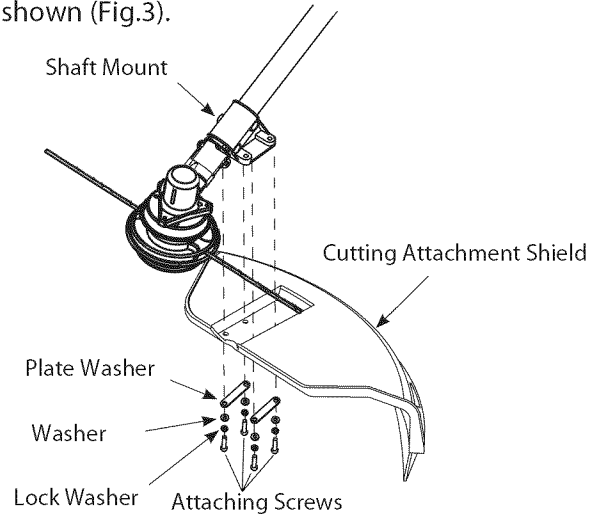


Fig. 3

INSTALLING THE UPPER HANDLE AND SAFETY BAR

1. Locate the 4 screws included in the tool kit.
2. Assemble the upper handle, safety bar and 4 attaching screws as shown in (Fig.4). Position the handle parts evenly over the rubber sleeve on shaft. Do not completely tighten.
3. While holding the unit in the operating position (Fig. 14), position the upper handle to the location that provides you the best grip.
4. Tighten the clamp screws evenly, until the upper handle is secure.

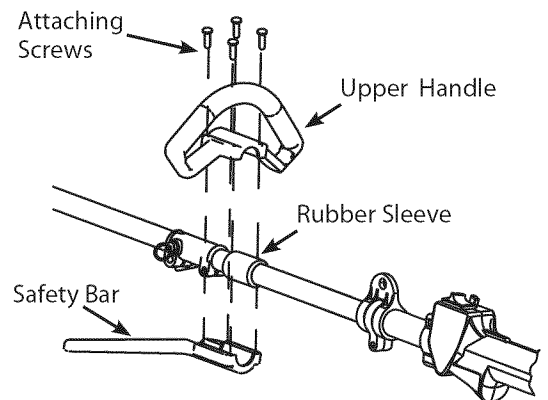



Fig. 4



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

WARNING
 ADVERTENCIA

RECOMENDED OIL TYPE

Using the proper type and weight of oil in the crankcase is extremely important. Check the oil before each use and change the oil regularly. Failure to use the correct oil, or using dirty oil, can cause premature engine wear and failure. Use a high-quality SAE 10W-30 weight oil of API (American Petroleum Institute) service class SF, SG, SH.

ADDING OIL TO THE CRANKCASE INITIAL USE

NOTE: This unit is shipped without oil in the crankcase.

In order to avoid damage to the unit, put oil in the crankcase before you attempt to start the unit.

Your unit is supplied with one 2.5 fluid oz. (75 mL) bottle of SAE 10W-30 SF, SG or SH oil (Fig. 5).

1. Unscrew the top of the bottle of oil and remove the paper seal covering the opening. Replace the top. (Fig. 5).

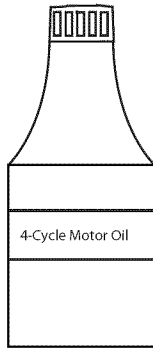


Fig. 5

NOTE: Save the bottle of oil. It can be used to measure the correct amount during future oil changes. See Changing The Oil (p.13).

2. Place the unit on a level surface (Fig. 6).

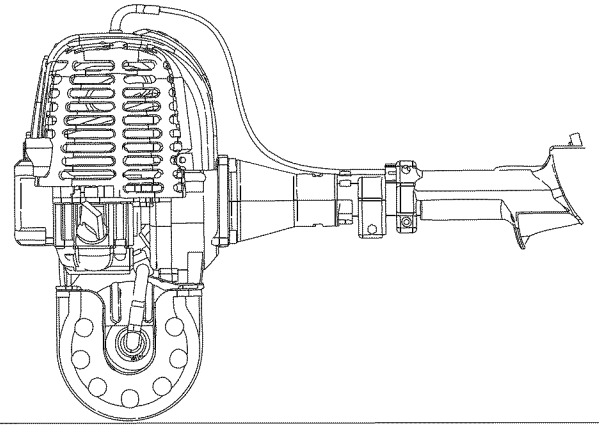


Fig. 6

3. Remove the oil plug / dipstick from the crankcase (Fig.7).
4. Pour the entire bottle of oil into the oil fill hole (Fig.7).

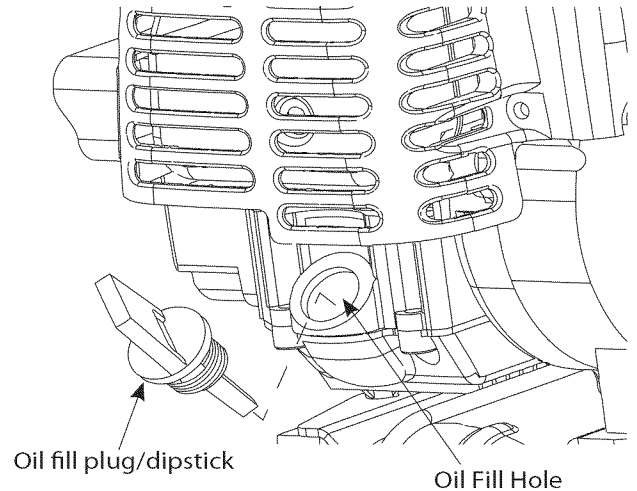


Fig. 7

Check oil before each use and change as needed. Refer to Changing the Oil (p.13).

5. Wipe up any oil that may have spilled and reinstall the oil plug/dipstick.

**WARNING:**

Overfilling crankcase may cause hot oil to drip from air filter, and smoke to come out from the exhaust. Check and maintain the proper oil level in the crank case; it is important and cannot be over emphasized. Check the oil before each use and change as needed. See Changing the Oil (p.13).

SAFETY WARNINGS FOR PROPANE UNITS

NOTE: Use propane only in containers specifically designed and approved for this unit. Propane is a combustible gas; it is colorless and thus invisible to the naked eye. Propane has a harmless odorant added so that it is possible to smell it. The propane odorant makes the propane smell like sulfur or rotten eggs. If at any time the smell of propane is identified, turn off the engine. If the leak persists, remove the propane canister. Never attempt to operate a unit that has a suspected leak. Always remove the propane canister from any unit that has a suspected leak.

CARBON MONOXIDE HAZARD

Burning propane makes Carbon Monoxide (CO). CO is invisible, has no smell and can kill you. Operating your trimmer in an enclosed area can be dangerous.

1. Use only in well ventilated areas. If you experience headache, drowsiness, or nausea, turn unit off and get fresh air quickly.
2. Never use where people are sleeping.
3. Follow unit instructions for proper use.

HANDLING & STORAGE

1. Keep out of reach of children.
2. Never expose cylinder to heat, sparks, or flame. Never leave in direct sunlight. Never store at temperatures above 120 degrees (49 degrees C).
3. Never store in living spaces.
4. Always use cylinder until it is completely empty.
5. Never refill a disposable cylinder. Refilling may cause an explosion. Federal law forbids transportation if re-filled, imposes a penalty up to \$500,000, and 5 years imprisonment (49 U.S.C. 5124).
6. Never put in luggage or take on trains or aircraft.
7. To discard, contact local refuse hauler or recycle center. Never put in fire or incinerator. Do not puncture. If your cylinder was purchased with a "Green Key" * or similar device, install it when empty and cylinder may be recycled with other steel items.

NOTE: FIRE/EXPLOSION HAZARD

Contains enough gas to cause serious fire, explosion, and burns. To reduce chance of leak, fire, or explosion:

BEFORE USE

1. Check propane cylinder and trimmer seals. Never use with damaged or missing seals. Discard cylinder if dirt or rust particles are in valve area.
2. Turn trimmer off.
3. Attach cylinder outdoors away from pilot lights, flames, sparks or other ignition sources. These sources can ignite leaking gas.
4. Hand tighten only. Never use tools to tighten. Over-tightening can damage seals.
5. Check for leaks. Put soapy water on connections. Look for bubbles. Listen for hiss of escaping gas. Feel for extreme cold. Smell for rotten egg odor. Do not use if leaking.
6. Read and follow trimmer instructions.

DURING USE

Never use near pilot lights, flames, sparks, or other ignition sources. They can ignite leaking gas.

AFTER USE

1. Turn trimmer off and let cool.
2. Detach cylinder when not in use.
3. Detach outdoors away from pilot lights, flames, sparks, or other ignition sources; they can ignite leaking gas.
4. Replace cylinder cap to keep valve clean.

IN CASE OF FIRE

1. Leave area quickly and call 911 or your local fire department for help.
2. Let fire burn out.

* Green Key- is a trademark of The Coleman Company, Inc.



WARNING:

Propane is highly flammable, and its vapors can explode if ignited. Take the following precautions.

USE THE CORRECT PROPANE CANISTER

Always use Propane canisters or “Bottles” that are the correct size. The 17 ounce or 16.4 ounce canisters that are approximately 3-7/8 inch in diameter are the correct canisters (Fig.8). Do not use the smaller diameter canisters as they will not latch securely to the unit and vibration may cause damage to the trimmer and potentially result in a dangerous leak.

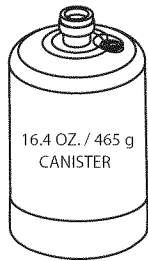


Fig. 8

ATTACHING THE PROPANE CANISTER

1. Make sure the engine is off.
2. If the propane canister to be installed has a protective plastic cap over the threaded end, remove it. Make sure the canister clamp is in the un-latched position.
3. Insert the threaded end of the propane canister into the clamp as far as it will go (Fig. 9A). Insert the propane connector onto the threaded end of the canister and screw it onto threads clockwise (Fig. 9B). Screw it until snug. Do not over tighten. It may be normal to hear or smell a slight momentary leak of propane as the connector is being screwed in. Make sure that the connector is installed tight enough that any leakage stops. Hand tight is sufficient. Slide canister back so all of fuel line components are behind the guard and latch the canister clamp.

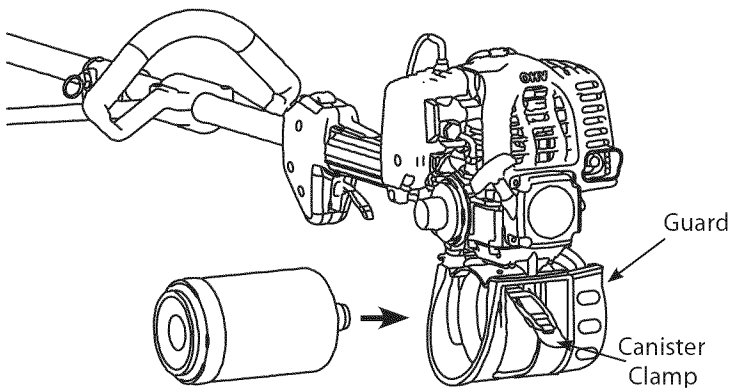


Fig. 9A

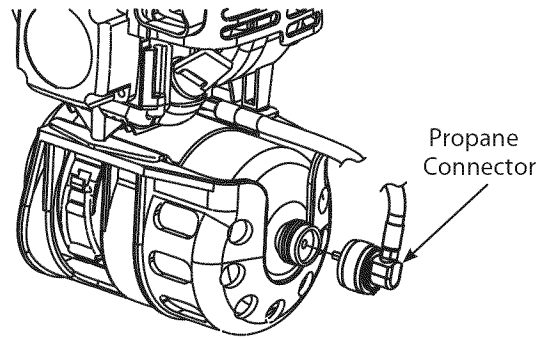


Fig. 9B

REMOVING THE PROPANE CANISTER

1. Make sure the engine is off.
2. Un-latch the bottle clamp and push canister against the guard exposing the propnae connector. Remove the propane connector by turning it counterclockwise.
3. Remove the empty canister.
4. Dispose of empty propane canisters in accordance to Federal, State and local Regulations.



WARNING:

Never attempt to force a connector onto a propane canister that has improper or damaged threads.



WARNING:

This container and by-products of the combustion of its contents contain chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.



WARNING:

Extremely flammable fire/explosion. Hazard contents under pressure. Carbon monoxide hazard.



WARNING:

Propane is extremely flammable. Vapor may explode. Always stop the engine and allow it to cool before replacing the propane canister. Do not smoke. Keep sparks and open flames at a distance from the area.

AVAILABLE CUTTING ATTACHMENTS

Brushcutter attachment.....	358.79244
Edger attachment.....	358.79240
Cultivator attachment.....	358.79241
Blower attachment.....	358.79242
Pruner attachment.....	358.79245

INSTALLING CUTTING ATTACHMENTS

Your unit is provided with the Hassle-Free™ Cutting Head attachment shaft.

NOTE: Place the unit on the ground or on a work bench to make accessory installation or removal easier.

1. Turn knob counterclockwise to loosen (Fig.10).
2. While firmly holding the attachment shaft, push it straight into the attachment coupler (Fig.10).

NOTE: Aligning the release button with receiving hole will help installation (Fig.10).

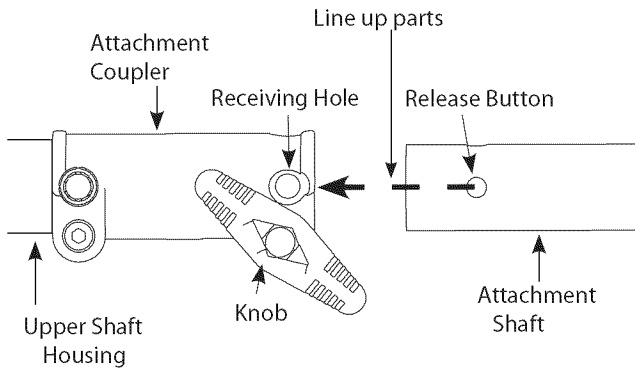


Fig. 10

3. Turn the knob clockwise to tighten (Fig. 11). The unit is ready to use.

NOTE:

- Lock the release button in the receiving hole and securely tighten the knob before operating this unit.
- Except for edging, attachments are to be used in the receiving hole only. Using the wrong hole could lead to personal injury or damage to the unit.
- Always install the attachment so that the engine is upright (propane tank on bottom) when unit is operated. A secondary receiving hole is provided for use of a trimmer being used for edging only. No other accessory should be used in this secondary hole (90° edging hole) (Fig.11).

EDGING POSITION

For edging, lock the release button of the cutting attachment into the 90° edging hole (Fig.11), so that the engine remains in the upright position while operating.

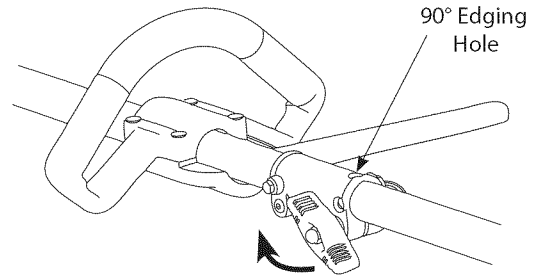


Fig. 11

REMOVING CUTTING ATTACHMENTS

1. Turn the knob counterclockwise to loosen (Fig.12).
2. Press and hold the release button (Fig.12).
3. While firmly holding the upper shaft housing, pull the cutting attachment or add-on straight out of the coupler (Fig.12).

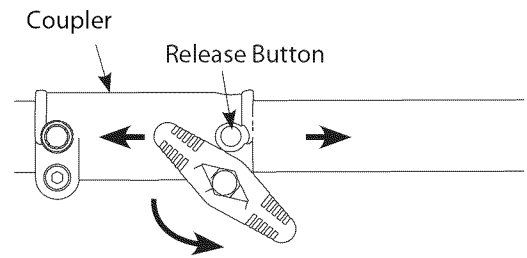



Fig. 12



WARNING:
To avoid serious injury and damage to the unit, shut off the unit before removing or installing attachments.

STARTING INSTRUCTIONS

1. Check the oil level in the crankcase. Refer to Checking the Oil Level (p.12).
2. Turn switch to ON position (Fig.14).

NOTE: If your unit is equipped with a spring loaded type ON/OFF switch, it will always remain in the ON position.

3. Place trimmer firmly on the ground or a very sturdy work surface. Make sure cutting head is clear of all objects. Make sure all bystanders are a minimum of 50 feet (15m) away. Do not attempt to start near pilot lights or any open flame. Do not smoke. Grasp the starter rope handle with one hand and the handle pole with the other hand (Fig.13).

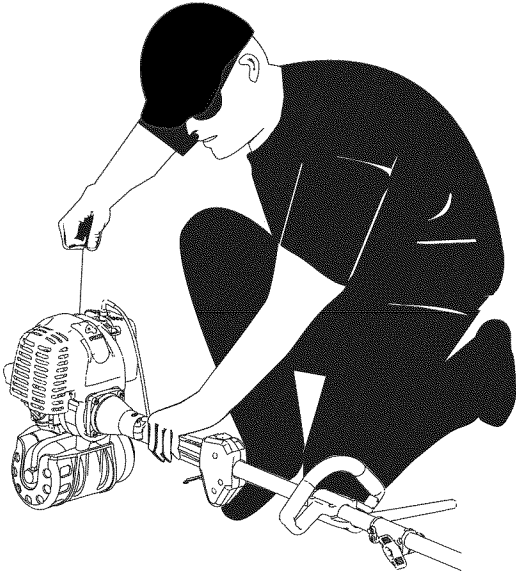


Fig. 13

4. With the unit in the starting position, do not squeeze the throttle control (Fig.14). Then pull the rope smoothly and briskly. The engine should start. A cold engine should start with 3-5 pulls. A warm engine should start on the first pull.

NOTE: On the very first use, it may take extra pulls to fill the fuel system with propane.

5. Squeeze the throttle control slightly to warm up the engine for 15 to 30 seconds. In cold weather, move the throttle slowly until the engine warms up for 30 to 60 seconds.

NOTE: This unit is provided with a Fast Idle Lock (Fig. 14). If experiencing starting difficulties under regular conditions, squeeze the throttle control, then push and hold the Fast Idle lock forward while releasing the throttle trigger. Then start the unit.

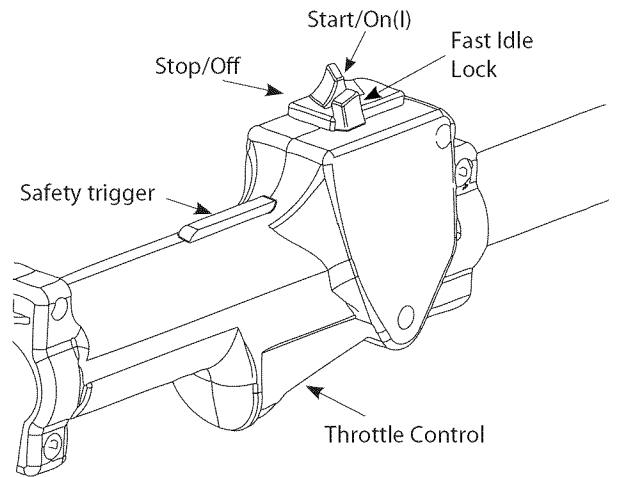


Fig. 14

NOTE: When starting the engine in very hot or cold conditions it may be necessary to squeeze the throttle control while pulling the starter rope.

STOPPING INSTRUCTIONS

1. Release your hand from the throttle control. Allow the engine to cool down by idling.
2. If your unit is equipped with a spring loaded ON/OFF switch, press and hold the button on OFF until the unit stops. Otherwise, push the switch to the off position.
3. When done using the trimmer for the day, disconnect the propane canister from the unit.

**WARNING:**

Avoid accidental starting. Make sure you are in the starting position when pulling the starter rope (Fig. 13). To avoid serious injury, the operator and unit must be in a stable position while starting. Make sure that any add-on item is installed correctly and secure before starting the unit.

**WARNING:**

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

OPERATING YOUR TRIMMER

Before operating the unit, stand in the operating position (Fig. 15). Check for the following:

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

HOLDING THE TRIMMER



Fig. 15

TIPS FOR BEST TRIMMING RESULTS

- For best trimming results, operate unit at full throttle.
- Keep the cutting attachment parallel to the ground.
- Do not force the cutting attachment. 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 overload the engine.
- Cut grass over 8 inches (200 mm) by cutting from top to bottom in small increments to avoid premature line wear or engine drag.
- Slowly move the trimmer into and out of the cutting area at the desired height. Move either in a forward-backward or side-to-side motion. Cutting shorter lengths produces the best results.

- Trim only when grass and weeds are dry.
- The life of your cutting line is dependent upon:
 1. Proper adherence to explained trimming techniques
 2. What vegetation is cut
 3. Where vegetation is cut

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

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

NOTE: This unit is equipped with an Anti-Kickback bar. This bar helps protect you from "kick-back" which may occur during operation. The Anti-Kickback bar hits the side of your leg when the trimmer jumps back, preventing the cutting head to contact the operator.

FREQUENCY	MAINTENANCE REQUIRED	REFER TO
BEFORE STARTING ENGINE	CHECK OIL	PAGE 6
EVERY 10 HOURS	CLEAN AND RE-OIL AIR FILTER	PAGE 13
FIRST CHANGE AT 10 HOURS	CHECK OIL	PAGE 13
EVERY 25 HOURS THEREAFTER	CHECK OIL	PAGE 13
EVERY 25 HOURS	CHECK SPARK PLUG POSITION GAP	PAGE 14
EVERY 25 HOURS	ROCKER ARM CLEARANCE ADJUSTMENT	PAGE 16

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

NOTE: Failure to maintain your trimmer at the recommended schedule may result in poor performance and/or cause permanent damage to your trimmer

NOTE: Some maintenance procedures may require special tools or skills. If you are unsure about these procedures call 1-800-235-5878 for assistance.

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.

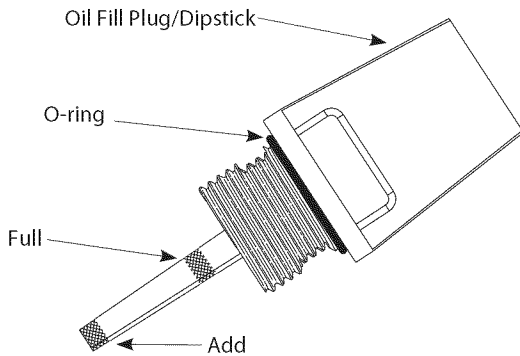


Fig. 16

CHECKING THE OIL LEVEL

The importance of checking and maintaining the proper oil level in the crankcase cannot be overemphasized. Check oil before each use:

1. Stop the engine and allow to cool.
2. Place the unit on a flat, level surface to get a proper oil level reading.
3. Keep dirt, grass clippings and other debris out of the engine. Clean the area around the oil fill plug/dipstick before removing it.
4. Remove the oil fill plug/dipstick and wipe off oil. Reinsert it all the way back in.
5. Remove the oil fill plug/dipstick and check the oil level. Oil should be between the add and fill marks (Fig. 16).
6. If the level is low, add a small amount of oil to the oil fill hole (Fig. 17) and recheck. Repeat this procedure until the oil level reaches the full mark of the dipstick.

NOTE: Do not overfill the unit.

NOTE: Make sure the O-Ring is in place on the oil fill plug/dipstick when checking and changing the oil (Fig. 16).

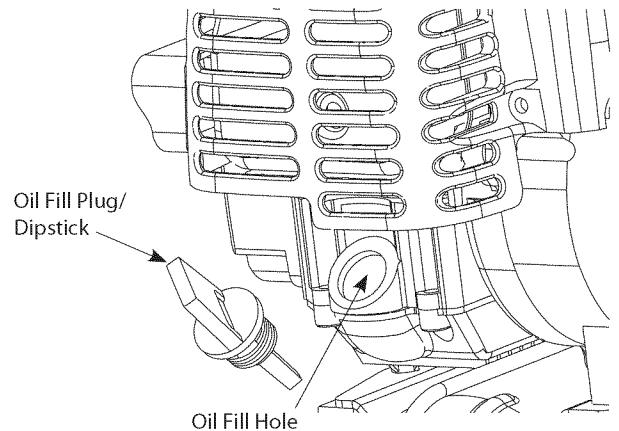



Fig. 17



WARNING:
When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

WARNING
ADVERTENCIA



WARNING:
To prevent extensive engine wear and damage to the unit, always maintain the proper oil level in the crankcase. Never operate the unit with the level below the bottom of the dipstick.

WARNING
ADVERTENCIA

CHANGING THE OIL

For a new engine, change the oil after the first 10 hours of operation. Change the oil while the engine is still warm but not hot. The oil will flow freely and carry away more impurities.

1. Unplug spark plug wire to prevent accidental starting.
2. Remove the oil fill plug/dipstick.
3. Pour the oil out of the oil fill hole and into a container by tipping the unit to its side (Fig. 18). Allow ample time for complete drainage.

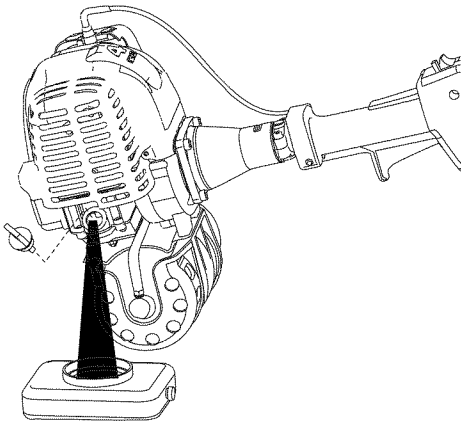


Fig. 18

NOTE: Wear gloves to prevent injury when handling the unit.

4. Wipe up any oil residue on the unit and clean up any oil that may have spilled. Dispose of the oil according to Federal, State and local regulations.
5. Refill the crankcase with 2.5 fluid oz. (75 mL) of SAE 10W-30 SF, SG, or SH oil.

NOTE: Use the bottle saved from initial use to measure the correct amount of oil. The bottle measures approximately 2.5 fluid oz. (75 mL) (Fig. 16).

Check the level with the dipstick. If the level is low, add a small amount of oil and recheck. Do not overfill (Fig. 17).

6. Replace the oil fill plug/dipstick.
7. Reconnect the spark plug boot.

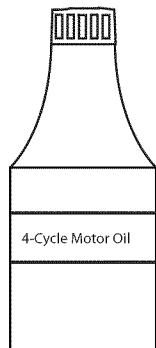


Fig. 19

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.

1. Remove the phillips head screw in the air filter cover. Then pull the air filter cover out and upwards (Fig.20).
2. Remove the air filter (Fig. 20).

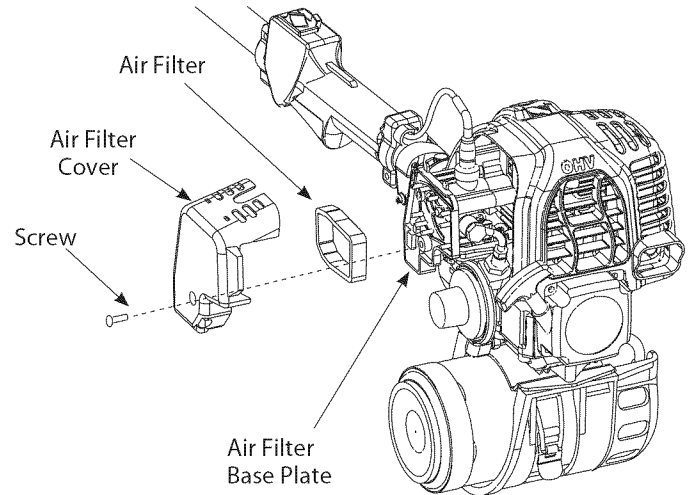


Fig. 20

3. Wash the filter in detergent and water. Rinse the filter thoroughly and allow it to dry.
4. Apply enough clean SAE 10W-30 motor oil to lightly coat the filter.
5. Squeeze the filter and remove excess oil.
6. Replace the filter.

NOTE: If the unit is operated without the air filter, you will VOID the warranty.

7. Reinstall the air filter cover. Position the hooks on the top of the air filter base plate into the slots at the top of the filter cover.
8. Swing the cover until the air filter cover snaps into place and replace the screw.



WARNING:

To avoid serious personal injury, be sure to turn the unit off before servicing it.

CARBURETOR ADJUSTMENT

The idle speed of the engine is adjustable. An idle adjustment screw is on the rear side of the carburetor (Fig. 21).

NOTE: Careless adjustments can seriously damage your unit. Only a Sears or other qualified dealer should make carburetor adjustments.

CLEAN AIR FILTER

The condition of the air filter is important to the operation of the unit. A dirty or oil saturated air filter will restrict air flow. 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 Cleaning Air Filter (p.13).

ADJUST IDLE SPEED SCREW

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

1. Start the engine and let it run at a high idle for a minute to warm up. Refer to Starting/Stopping (p.10) instructions.
2. Release the throttle trigger and let the engine idle. If the engine stops, use a small phillips or flat blade to turn the idle speed screw in, clockwise, 1/8 of a turn at a time (as needed) until the engine idles smoothly.

NOTE: The cutting attachment should not rotate when the engine idles.

3. If the cutting attachment rotates when the engine idles, turn the idle speed screw counterclockwise 1/8 of a turn at a time (as needed), to reduce idle speed. Checking the fuel, cleaning the air filter, and adjusting the idle speed should solve most engine problems. If not and all of the following are true, check the spark plug for proper gap and condition.

- the engine will not idle
- the engine hesitates or stalls on acceleration
- there is a loss of engine power

If problem still occurs, have the carburetor adjusted by a Sears or other qualified service dealer.

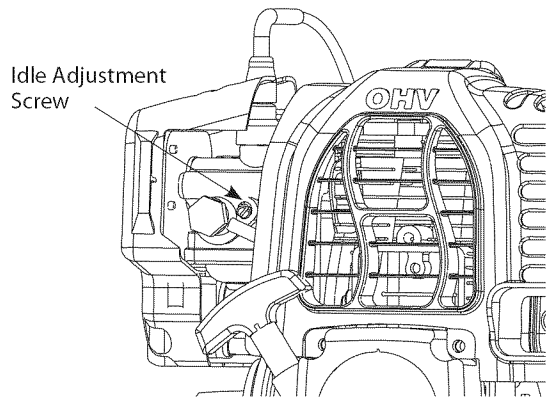


Fig.21

REPLACING THE SPARK PLUG

Use NGK CMR6A or Champion RCJ6Y replacement spark plugs.

The correct air gap is 0.02 in. (0.5 mm). Remove the plug after every 25 hours of operation and check its condition.

1. Stop the engine and allow it to cool. Remove the spark plug cover. Grasp the plug wire firmly and pull the cap from the spark plug.
2. Clean dirt from around the spark plug. Remove the spark plug from the cylinder head by using a 5/8 in. socket, turning it counterclockwise.
3. Replace cracked, fouled or dirty spark plug. Set the air gap at 0.02 in. (0.5 mm.) using a feeler gauge (Fig 22).
4. Install a correctly-gapped spark plug in the cylinder head. Turn the 5/8 in. socket clockwise until snug.

If using a torque wrench torque to: 110-120 in. lb. (12.3-13.5 N-m)

NOTE: Do not over tighten.

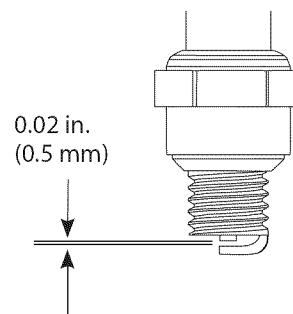


Fig.22



WARNING:

Do not sand blast, scrape, or clean spark plug electrodes. Grit in the engine could damage the cylinder.

LINE REPLACEMENT

For Hassle-Free™ Cutting Head

Always use Craftsman Hassle Free XTRA QUIET Spiral Line. Choose the line size best suited for the job at hand. Red colored line is designed for cutting grass and small weeds. Black colored line is designed for cutting larger weeds and light brush.

NOTE: Before inserting new line into the holes in the cutting head, identify the proper holes by following the directions on the glide plate (Fig. 23). Do not attempt to remove the cutting head from the unit when replacing line.

1. Insert both ends of your line into the insertion holes in the side of the cutting head (Fig. 23).

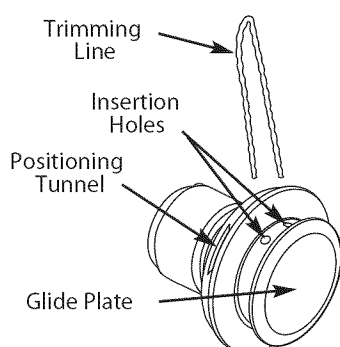


Fig. 23

2. Push the bend in the line until the ends of the line push through the positioning tunnels (Fig. 24).

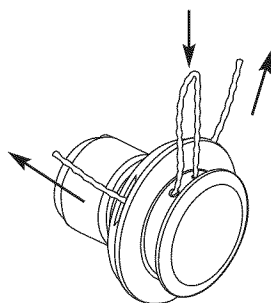


Fig. 24

3. Pull the ends of the line until the line bend is centered between the two insertion holes and firmly against the side of the cutting head (Fig. 25).

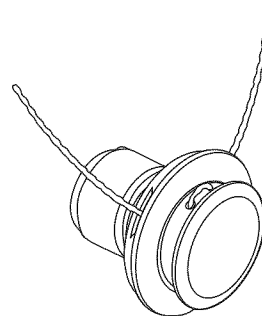


Fig. 25

4. Correctly installed line will be the same length on both sides.

NOTE: 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 post

ROCKER ARM CLEARANCE ADJUSTMENT

1. Remove the four screws on the engine cover with a phillips head screw driver (Fig. 26).
2. Remove the engine cover.
3. Disconnect the spark plug wire.
4. Clean dirt from around the spark plug. Remove the spark plug by using tool provided, turn counterclockwise. This requires partial disassembly of the engine. If you feel unsure or unqualified to perform this, take the unit to a Sears or other qualified service dealer.

NOTE: Inspect the valve to rocker arm clearance with a feeler gage after the first 25 hours of operation. The engine must be cold when checking or adjusting the valve clearances. This task should be performed in a clean dust free environment.

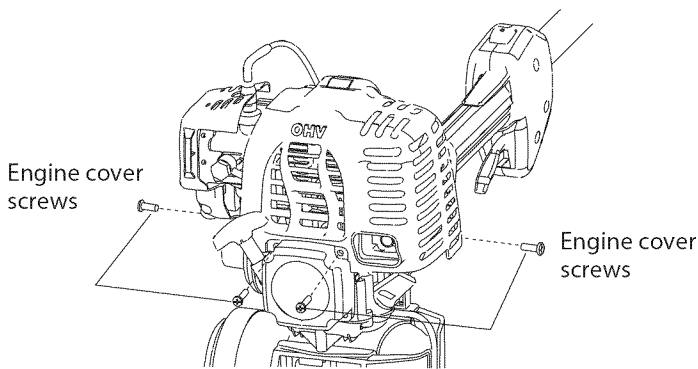


Fig. 26

5. Clean dirt from around the rocker arm cover.
6. Remove the three screws holding the rocker arm cover with a phillips head screwdriver.
7. Remove the rocker arm cover and gasket (Fig. 27).

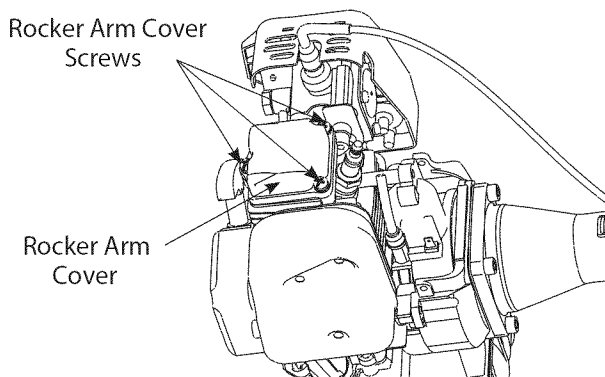


Fig. 27

8. Pull the starter rope slowly to bring the piston to the top of its travel, (this position is known as top dead center). Check that the piston is at the top of its travel by looking down into the spark plug hole. Both valves should be closed and the rocker arms should move freely. If this statement is not true, repeat this step until top dead center is achieved before proceeding to the next step.
9. Slide a feeler gage between the rocker arm and the valve return spring. Measure the distance between the rocker arm and valve stem (Fig. 28) Take care to only measure the free play. It is very easy to insert too thick a feeler gauge and accidentally depress the valve and valve return spring. Measure both the intake and exhaust valve distances.

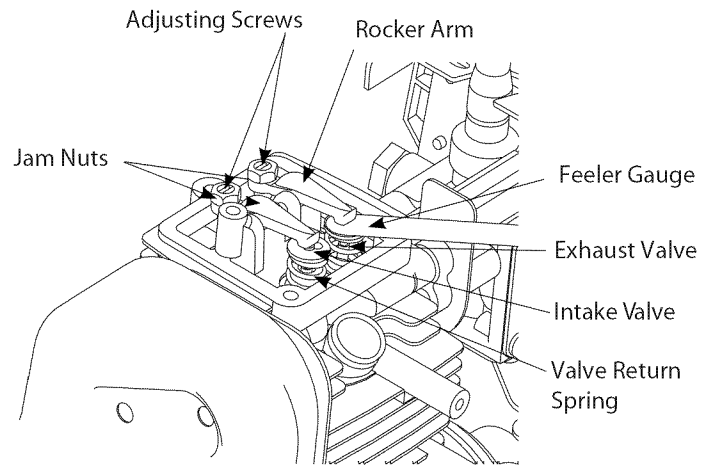


Fig. 28

10. Check the spark plug and reinstall, see Replacing the Spark Plug (p.14).
11. Reinstall the spark plug wire.

IF THE CLEARANCE IS NOT WITHIN SPECIFICATION

1. Loosen the jam nut and turn the adjusting screw as necessary. To increase the clearance, turn the adjusting screw counterclockwise. To decrease the clearance, turn the adjusting screw clockwise.
 2. Tighten the jam nut when the clearance is set.
 3. Recheck the both clearances. Readjust if necessary.
 4. Reinstall the rocker arm cover using a new gasket.
 5. Tighten cover screws evenly until snug.
 6. Reinstall the engine cover checking the alignment of the cover. Tighten the four engine cover screws until snug.
- The recommended clearance for both intake and exhaust is 0.076-0.152mm (0.003-0.006in).
 - Use a standard automotive 0.127mm (0.005in) feeler gage.



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.

CLEANING

Use a small brush to clean the outside of the unit. Do not use strong detergents. Household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene, can damage plastic housing or handle. Wipe off any moisture with soft cloth.

STORAGE

- Remove propane canister.
- Never store the unit with attached propane canister where fumes may reach an open flame or spark.
- Allow the engine to cool before storing.
- Lock up the unit to prevent unauthorized use or damage.
- Store the unit in a dry, well-ventilated area.
- Store unit out of reach of children.



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

LONG TERM STORAGE

1. Remove propane canister.
2. Allow the engine to cool. Remove the spark plug and put 5 drops of high quality motor oil into the cylinder. Pull the starter rope slowly to distribute the oil. Reinstall the spark plug.

NOTE: Remove the spark plug and drain all of the oil from the cylinder before attempting to start the trimmer after storage.

3. Change the oil, referring to Changing the Oil (p.13). Dispose of the old oil in accordance to Federal, State and Local regulations.
4. Thoroughly clean the unit and inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts. The unit is ready for storage.

TRANSPORTATION

- Allow the engine to cool before transporting.
- Secure the unit while transporting.
- Remove propane canister.

TROUBLESHOOTING

ENGINE WILL NOT START

CAUSE

- Empty propane canister
- Bad spark plug

ACTION

- Install full canister
- Replace the spark plug

ENGINE WILL NOT IDLE

CAUSE

- Air filter is plugged
- Improper carburetor adjustment

ACTION

- Replace or clean the air filter
- Adjust according to the carburetor adjustment section or take to a Sears or other qualified service dealer for an adjustment

ENGINE WILL NOT ACCELERATE

CAUSE

- Cutting attachment bound with grass
- Dirty air filter

ACTION

- Stop the engine & clean the cutting attachment
- Clean or replace the air filter

ENGINE LACKS POWER OR STALLS WHEN CUTTING

CAUSE

- Bad spark plug

ACTION

- Replace the spark plug

IF FURTHER ASSISTANCE IS REQUIRED, CONTACT A SEARS OR OTHER QUALIFIED SERVICE DEALER.

SPECIFICATIONS

ENGINE*

ENGINE TYPE	AIR-COOLED 4-CYCLE
DISPLACEMENT	25.4 CC
CLUTCH TYPE	CENTRIFUGAL
OPERATING R.P.M.	6,800-9,300 R.P.M.
IDLE SPEED	3,000-3,400 R.P.M.
IGNITION TYPE	ELECTRONIC
IGNITION SWITCH	PUSH ON/ OFF SWITCH
VALVE CLEARANCE	0.003-0.006 INCHES (0.076-0.152 mm)
SPARK PLUG GAP	0.02 INCHES (0.5 mm)
LUBRICATION	SAE 10W-30 OIL
CRANKCASE OIL CAPACITY	2.5 FLUID OZ. (75 mL)
FUEL	PROPANE 16 OZ. / 465 G CANISTER
CARBURETOR	CHOKE-LESS, ALL POSITION
STARTER	PULL START WITH AUTO REWIND
MUFFLER	BAFFLED WITH GUARD
THROTTLE	SAFETY LOCK WITH MANUAL SPRING RETURN
DRIVE SHAFT AND HOUSING	
DRIVE SHAFT HOUSING	ALUMINUM TUBE
THROTTLE CONTROL	FINGER-TIP TRIGGER
APPROXIMATE UNIT WEIGHT	13.1-14.9 LBS
CUTTING MECHANISM	HASSLE FREE™ CUTTING HEAD
CUTTING HEAD DIAMETER	4-1/4 INCHES (108 mm)
TRIMMING LINE	RED MEDIUM (71-85908) OR BLACK LARGE (71-85909)
CUTTING PATH DIAMETER	14 INCHES (356 mm)

*ALL SPECIFICATIONS ARE BASED ON THE LATEST PRODUCT INFORMATION AT THE TIME OF PRINTING.
WE RESERVE THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE.

CRAFTSMAN FULL WARRANTY

If this Craftsman product fails due to a defect in material or workmanship within two years from the date of purchase, return it to any Sears store, Parts and Repair Service Center, or other Craftsman outlet in the United States for free repair (or replacement if repair proves impossible).

This warranty applies for only 90 days if this product is ever used for commercial or rental purposes.

This warranty covers ONLY defects in material and workmanship. Sears will NOT pay for:

- Expendable items that can wear out from normal use within the warranty period, such as cutting line, filters or spark plugs.
- Repairs necessary because of accident or failure to operate or maintain the product according to all supplied instructions.
- Preventive maintenance, or repairs necessary due to improper fuel mixture, contaminated or stale fuel.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Hoffman Estates, IL 60179

Repair Protection Agreements

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- Unlimited service and no charge for parts and labor on all covered repairs
- Product replacement up to \$1500 if your covered product can't be fixed
- Discount of 10% from regular price of service and related installed parts not covered by the agreement; also, 10% off regular price of preventive maintenance check
- Fast help by phone – we call it Rapid Resolution – phone support from a Sears representative. Think of us as a “talking owner's manual.”

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*Coverage in Canada varies on some items. For full details call Sears Canada at 1-800-361-6665.

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