

IMPORTANT: This manual provides complete instructions for safely operating and maintaining your Edger. Read and save these instructions. Refer to this manual each time before using your Edger. Keep this manual for future reference.

#### WARNING:

This product contains one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

# YARD FORCE

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# **SAFETY DEFINITIONS**

### **Safety Alert Symbols**

The following symbols are used on the product and in this manual to alert the operator of potential safety hazards. Read them carefully, and understand their meaning.



**DANGER!** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING!** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION!** Indicates a potentially hazardous situation which, if not avoided, may result in minor/moderate injury or equipment/property damage.

The following symbols can be found on your edger. Carefully read and understand their meaning.

### **Safety Warning Symbols**

$\triangle$	Indicates WARNING, DANGER, or CAUTION.	0	Wear eye protection complying with ANSI Z87.1 and hearing protection.
	Read operator's manual before operating this machine. Failure to follow directions could result in serious injury.		Disconnect spark plug wire when not in use or before servicing, cleaning, or performing maintenance on the unit.
	Thrown objects. Remove all rocks, stones, and foreign objects which could be thrown by machine	2	Engine exhaust contains carbon monoxide, an odorless and deadly gas. NEVER run unit indoors or in a poorly ventilated area.

Ť 🌣 🕺	Do not use if children or bystanders are present.		Do NOT touch hot muffler or cylinder. These parts are extremely hot from opera-tion and may remain hot for a short time after operation.
	Rotating parts can cause serious injury. Keep hands and feet away.	Jan 4	To reduce risk of fire, clean spilled gas and oil and keep unit free from debris. Gasoline is extremely flammable. Allow machine to cool before refueling.

# **Control and Operating Symbols**

	Oil Fill Location Do Not Overfill		Gasoline Fill Location
START  MINCREASE CUTTING DEPTH	Depth Control Lever START Position is the furthest FORWARD position Move lever REARWARD to increase cutting depth	ENGINE STOP	Start Lever Release lever to stop engine Engage lever to start/ run engine
N	Choke/Cold Start	<b>=</b>	Run/Warm Start
△ DANGER CONNICTED E	Always check that the ground wires are connected before running the unit		

# **IMPORTANT SAFETY INFORMATION**

### RESPONSIBILITY OF OPERATOR

- Carefully read and follow these safety instructions. Failure to do so can result in serious injury.
- Know your product. Read and understand this manual before use. Compare
  the illustrations to unit. Learn location and function of all controls. Thoroughly
  understanding the unit before use will result in the best performance and
  safety.
- Follow all instructions when assembling the unit. If the unit was purchased in assembled condition, the operator must check the unit carefully to make sure it was assembled according the instructions in the manual before use.
- Regularly inspect the edger. Make sure parts are not bent, damaged, or loose.
- 5. Use this equipment for its intended purpose only.
- Operate the unit only with guards, shields, and other safety items in place and working correctly.
- 7. Service the unit only with authorized or approved replacement parts.
- 8. Complete all unit maintenance and adjustments according to the instruction in this manual



#### WARNING!

Look for this symbol to point out important safety precautions. It means: "Attention! Become Alert! Your Safety Is Involved."



#### **WARNING!**

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



#### WARNING!

To prevent accidental starting when setting up, transporting, adjusting or making repairs, always disconnect spark plug wire and put wire where it cannot contact the spark plug.

### PREPARATION SAFETY



#### **WARNING!**

 Read, understand, and follow all instructions on the machine and in this manual. Be thoroughly familiar with the controls and the proper use of the edger before starting. Know how to stop the engine quickly. Familiarize yourself with all the safety and operating decals on this
equipment.



#### WARNING!

- Thoroughly inspect the area where the edger is to be used and remove all foreign objects. Your equipment can propel small objects at high speed causing personal injury or property damage. Stay away from breakable objects, such as house windows, auto glass, greenhouses, etc.
- Check that all nuts and bolts are tight and equipment is in good condition.



#### WARNING!

 Always check that the flameout wire is connected before starting engine.

### **OPERATION SAFETY**



#### WARNING!

· Never allow children or young teenagers to operate the edger.



#### WARNING!

- Keep area of operation clear of all bystanders, particularly small children and pets.
- Only allow responsible individuals, who are familiar with the instructions, to operate the edger.



#### WARNING!

- Do not operate the edger while under the influence of alcohol, drugs, or other medication which can cause drowsiness or affect your ability to operate this machine safely.
- Do not use this machine if you are mentally or physically unable to operate the machine safely.
- Always wear ANSI compliant safety goggles or safety glasses with side shields when operating edger to protect your eyes from foreign objects, which can be thrown from the unit.
- Wear appropriate clothing such as a long sleeved shirt or jacket. Also wear long trousers or slacks. Do NOT wear shorts. Do NOT wear loose clothing, which could get caught in this equipment.
- Always wear work gloves and sturdy footwear such as leather work shoes or short boots. These will protect ankles and shins from small sticks, splinters, and other flying debris, and improve traction.
- It is advisable to wear protective headgear to protect against being struck by small flying particles, or being struck by low hanging branches, twigs, or other objects, which may be unnoticed by the

operator.



#### WARNING!

- · Do not put hands or feet near or under rotating parts.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.



#### WARNING!

- Exercise caution to avoid slipping or falling. Always be sure of your footing; keep a firm hold on the handle and walk; never run. Never operate the edger at high transport speeds on slippery surfaces.
- · Look behind and use care when backing.
- · Never operate the edger without good visibility or light.



#### DANGER!

- Do not run the engine indoors or inside a closed area. The exhaust fumes are dangerous, containing CARBON MONOXIDE, an ODORLESS AND DEADLY GAS.
- Never leave the edger unattended when the engine is running. Stop
  the engine and make sure all moving parts have stopped. Remove the
  wire from the spark plug.
- Do not overload the edger capacity by attempting to till too deep at too fast a rate.
- If the edger should start to vibrate abnormally, stop the engine, disconnect the spark plug wire and prevent it from touching the spark plug. Check immediately for the cause. Vibration is generally a warning of trouble.
- Watch for holes, ruts, bumps, or other rough ground. Tall grass can hide obstacles.

### **FUEL SAFETY**



#### WARNING!

- Gasoline is extremely flammable, and gasoline vapors can explode if ignited. Handle with care.
- · Use an approved container.
- Check fuel supply before each use, allowing space for expansion as the heat of the engine and/or sun can cause fuel to expand.
- · Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.



#### WARNING!

- Do not smoke while refueling.
- · After refueling, replace fuel tank cap securely and wipe up spilled fuel.
- · Never store fuel or edger with fuel in the tank inside a building where

### STORAGE SAFETY



#### WARNING!

- Always refer to the operator's manual instructions for important details if the edger is to be stored for an extended period.
- Never store the edger with fuel in the fuel tank inside a building where ignition sources are present such as water heaters, space heaters, clothes dryers, etc.
- To reduce fire hazard, keep edger free of grass, leaves, or other debris build-up.
- Allow the engine to cool before storing in any enclosure.

### REPAIR, MAINTENANCE, AND ADJUSTMENT SAFETY



#### WARNING!

- After striking a foreign object, stop the engine. Remove the wire
  from the spark plug and keep the wire away from the plug to prevent
  accidental starting. Thoroughly inspect the edger for any damage. If
  damaged, have the equipment repaired by a trained technician before
  restarting and operating.
- Stop the engine before cleaning, repairing, or inspecting the unit. Make sure all moving parts have stopped. Let the engine cool, disconnect the spark plug wire and move it away from the spark plug.
- Never attempt to make any adjustments while the engine is running except when specifically recommended by the manufacturer.
- Keep the edger in safe working condition. Check all fasteners at frequent intervals for proper tightness.
- When servicing or repairing the edger, do not tip the machine over or up unless specifically instructed to do so in this Manual. Service and repair procedures can be done with the edger in an upright position. Some procedures will be easier if the machine is lifted on a raised platform or working surface.
- Use only original equipment or authorized replacement parts.



#### WARNING

- Never tamper with safety devices. Check their proper operation regularly.
- Do not change the engine governor setting or over-speed engine.
- · Clean and replace safety and instruction decals as necessary.
- To guard against engine over-heating, always have engine debris filter mounted and clean.

### **CHILDREN SAFETY**



#### WARNING!

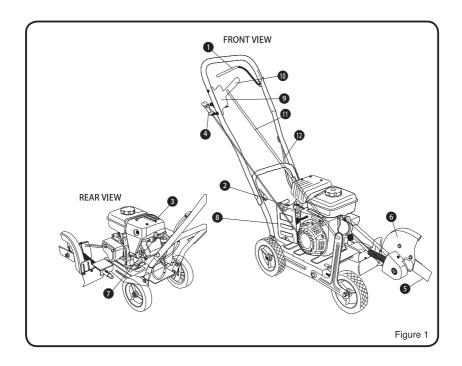
- Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the edger and the edging activity.
- Keep children out of the edging area and under the watchful care of a responsible adult.
- · Never assume that children will remain where you last saw them.
- Be alert and turn edger off if children enter the area.
- Before and while moving backwards, look behind and down for small children.
- · Never allow children to operate the edger.
- Use extra care when operating near blind corners, shrubs, trees, or other objects that may obstruct vision.

# **SPECIFICATIONS**

Unit Weight	50.3 lb. (22.8kg)
Cutting Depths	2 1/2 - 3/4 in. (-63 - 20 mm)
Blade Diameter	9 in. (228 mm), 2 point
Gasoline Capacity	1.7 qt. (1.6L)
Oil Type (API SG-SL) 10W-30 is recommended	ed for all service temperatures. See
page 7 for additional information.	
Oil Capacity	12 oz (355 ml)
Spark Plug Model	Torch E7RTC
Spark Plug Gap	0.024-0.028 in. (0.6-0.7 mm)
Engine Type	4 Stroke OHV
Displacement	79cc
RPM	3600 RPM
Torque Rating	3.5 ft-lbs torque per SAE J1940

# **PARTS & FEATURES**

- Start Lever Lever on handle which allows the engine to run. When lever is released, engine will stop.
- Choke Control Restricts the air intake. This allows for an enriched fuel-air mixture which helps to start the engine.
- 3. Muffler Location of engine exhaust.
- Recoil Starter Handle The engine is equipped with an easy pull recoil starter
- 5. Blade Rotating cutting element.
- **6. Blade Guard** Prevents stones and debris from being thrown at the operator.
- Spark Plug/Spark Plug Wire Provides spark to ignite air/ fuel mixture. The Spark Plug Wire must be disconnected and moved away from the Spark Plug when servicing the unit.
- Air Filter Removes debris and contaminates from intake air, allowing engine to run smoothly with low exhaust.
- 9. Depth Selector Plate
- 10. Depth Control Lever
- 11. Control Rod Used to control the edging depth of cut.
- 12. Flameout Wire Terminals Must be connected for the Start Lever to function.



### **ASSEMBLY**

Read and follow the assembly instructions. Do not discard any parts or materials until the unit is assembled. References to the right or left side of the edger are from the viewpoint of the operator's position behind the edger.



#### **WARNING!**

Do not operate edger if it is damaged or not completely and correctly assembled.



#### WARNING!

Before doing any assembly or maintenance to the unit, remove the wire from the spark plug.



#### WARNING!

Always wear ANSI compliant safety glasses with side shields while assembling the edger.

### Intended use

- When used for its intended purpose, this device corresponds to the state
  of the art, as well as to the current safety requirements at the time of its
  introduction
- The unit is designed to cut lawn areas in private house and hobby gardens.
- The device is not suitable for commercial or industrial use.
- Any other type of use is inappropriate.
- Improper use or modifications to the device or the use of components that are not tested and approved by the manufacturer may result in unforeseen damage!
- Any use that deviates from its intended use and is not included in these
  instructions is considered unauthorised use and relieves the manufacturer
  from his or her legal liability.

The following components will be found in the carton. Quantities shown in ( ).

- 1. (1) Edger
- 2. (1) Edger Operator's Manual
- 3. (1) Upper Handle
- 4. (1) Control Rod
- 5. (1) Container of SAE 30 Engine Oil
- 6. (1) Parts bag containing the following:
  - (2) Hair Pins
  - (2) Plastic Wing Nuts (M8)
  - (2) M8x35mm Pipe Bolts
  - (1) Wire Tie
  - (1) Spark plug socket wrench w/ rod



#### WARNING!

Flameout wires MUST be connected for correct engine operation. Failure to connect can result in serious injury.

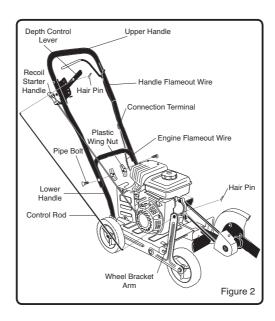
### **How to Remove Edger from Carton**

- 1. Remove all parts and packaging components.
- 2. Use a utility knife to cut all 4 vertical edges and lay the side panels flat around the edger.
- 3. Remove any remaining packaging.
- 4. Roll the unit out from the carton, and place on a hard level surface.

#### How to Assemble the Handle

NOTE: Refer to Figure 2 when following steps below:

- 1. Assemble the upper handle to the lower handle with the (2) pipe bolts and the (2) plastic wing nuts. Firmly handlighten the wing nuts.
- 2. Slide one end of the control rod into the hole of the Depth Control Lever. Secure with hairpin.
- 3. Slide the other end of the control rod through the hole of the wheel bracket arm. Secure with second hairpin.
- 4. Attach the recoil starter handle through the rope guide, by twisting it into position.
- 5. Remove the temporary insert from the engine flameout wire terminal.
- Connect the flameout wires from the engine and handle. Use cable tie to secure loose wire to handle.



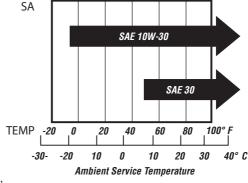
# **ENGINE PREPARATION**

### **Engine Oil**



#### CAUTION!

Engine shipped without oil. Failure to add oil will result in serious engine damage. A bottle of SAE 30 engine oil is included with your edger. Refer to the chart on the right for alternative oil types to use at different TEMP -20 temperatures. Always use a high quality detergent oil classified "For Service, SG.



SH, SJ" or higher. Do not use special additives.



#### CAUTION!

Always use recommended oil type. Using dirty oil or incorrect oil type such as 2-stroke engine oil will shorten engine life.

NOTE: Engine Oil Capacity is 355 ml. For the first time fill, simply add the entire contents of the provided oil bottle to the crankcase.

### **HOW TO CHECK OIL LEVEL AND** FILL TO PROPER LEVEL



#### WARNING!

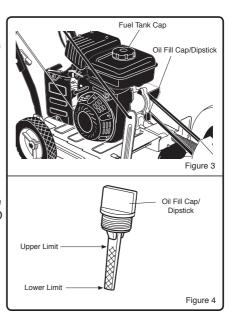
Before checking oil, make sure engine is off, and spark plug wire has been disconnected from spark plug.



#### CAUTION!

Frequently check oil level while filling. DO NOT OVERFILL. DO NOT UNDERFILL. Running engine at improper oil level will seriously damage engine.

1. Place the edger on a level surface. Put the depth control lever in the first



- cutting depth (See Figure 7), and check that the frame of the edger is level.
- 2. Remove the oil fill cap/dipstick and wipe clean with cloth. (See Figure 3)
- Insert dipstick into fill spout but do NOT screw in. Remove dipstick and check oil level.
- 4. When oil level is full, the oil will be at upper limit on dip stick. If oil level is near or below the lower limit, oil must be added. (See Figure 4)
- 5. Add oil slowly until the oil level reaches the upper limit of the dipstick. Use a funnel or nozzle to reduce spillage.
- 6. Replace and tighten dipstick.
- 7. Clean up any spilled oil.

### **Fuel**



#### **WARNING!**

• Gasoline is extremely flammable and vapors can explode if ignited. Handle with care. Use fresh, clean, regular-unleaded gasoline with a minimum of 88 Octane. Do NOT use leaded gasoline, gasohol, methanol, or diesel fuel. Do NOT mix oil with gasoline. Do NOT allow gasoline to become contaminated with dust, water, or debris.



#### **CAUTION!**

Using incorrect fuel type or contaminated fuel will cause serious engine damage.

**NOTE:** Fuel tank capacity is approximately 1.7 qt (1.6L)

#### **HOW TO FILL ENGINE WITH FUEL**



#### WARNING!

- Turn engine off and let engine cool for several minutes before removing the fuel cap or adding fuel.
- Never fill fuel tank indoors.
- · Do not smoke while adding fuel.
- 1. Clean surface around fuel tank cap to prevent contamination. (See Figure 3)
- 2. Loosen fuel cap slowly. After removing cap, place on a clean surface.
- 3. Pour fuel into the tank. Use care to avoid spillage.



#### WARNING!

Do NOT OVERFILL fuel. Allow space for the fuel to expand due to heat from engine and/or sun.

- 4. Before replacing the fuel cap, inspect and clean the fuel cap seal.
- 5. Replace the fuel cap and securely hand-tighten.
- 6. Clean up any spilled fuel.

### **OPERATION**

### **Before Starting the Engine**



#### WARNING!

Before starting engine, read operator's manual. Become familiar with location and function of all controls. Know how to stop the engine quickly.



#### WARNING!

Before starting the engine, check that the flameout wire terminals have been connected.

Before attempting to start the engine, review the following steps:

- 1. Unit has been assembled according to all assembly instructions.
- 2. Flameout wire terminals are connected.
- 3. Unit has been inspected for any damaged or missing components.
- 4. No parts are remaining in the carton.
- 5. Engine oil is at proper level.
- 6. Fresh, clean, regular-unleaded gasoline has been added to fuel tank.
- 7. Spark plug wire is connected to spark plug.
- 8. Edger has been moved to desired location.
- 9. Edger is on level surface.



#### WARNING!

Keep all bystanders, especially CHILDREN, away during operation.

**IMPORTANT:** This unit's engine exhaust system is equipped with a spark-arresting muffler. Tampering with or removing the spark-arrestor violates section 4442 of the California Public Resources Code as well as other applicable state and federal law.

### **How to Start Engine**



#### DANGER!

Never Run engine indoors or in a poorly ventilated area. Engine exhaust contains Carbon Monoxide, an ODORLESS and DEADLY gas.



#### WARNING!

Debris thrown from edger can cause severe eye damage. Always wear ANSI compliant safety glasses or eye shields when operating edger. If you wear eyeglasses, put an OSHA certified Wide Vision Safety Mask over your eyeglasses.

- 1. Review ALL steps in the "BEFORE STARTING THE ENGINE" section.
- Always move the Depth Control Level to the Start Position when start the engine every time. Keep the blade leave the ground before you start the

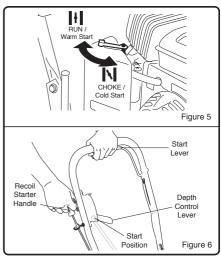
- machine.(See Figure 6)
- 3. Always rotate Choke to the Chock Position, when the engine is cold. (See Figure 5)

**NOTE:** Not required when re-starting a warm engine.

 Firmly grip the edger handle with your left hand, pulling the Start Lever against the handle. (See Figure 6)

**NOTE:** Engine will not start if the Start Lever is not pulled against the handle

- 5. Firmly grip the Recoil Starter Handle with your right hand. (See Figure 6)
- 6. Pull the recoil slowly, until you feel tension in the starter rope. Then quickly pull the recoil starter handle to completely unwind the starter rope. DO NOT allow the starter rope to snap back. Let the starter rope slowly rewind.



- 7. After the engine starts, wait 2-5 seconds and rotate the choke back to the RUN position. (See Figure 5)
- 8. If engine fails to start after 5 or 6 more attempts, see instructions in the "Troubleshooting Chart".



#### WARNING!

Keep hands, feet, hair, and loose clothing away from any moving parts. Avoid touching muffler and surrounding areas – temperatures can exceed 150 degrees. Keep all safety devices and shields in place.

### How to Stop the Edger

Release the start lever (See Figure 6). This will ground out the engine through the flameout wire, causing the engine to stop.



#### **WARNING!**

The flameout wire terminals must be securely connected for the Start Lever to function. Refer to the "How to assemble the handle" section.

### **How to Adjust Cutting Depth**

Move the Depth Control Lever rearward to increase the depth. (See Figure 7)

NOTE: There are 4 cutting depth settings from approximately ground level to 2.5" (63 mm) deep.



#### **CAUTION!**

Do not overload the edger capacity by attempting to edge too deep at too fast a rate. To edge at deeper settings, make multiple passes, first cutting at shallow depths.

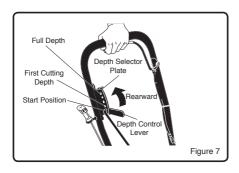
#### **EDGING TIPS**



#### WARNING!

Read the Operator's manual. Know location and functions of all controls. Keep all safety devices and shields in place. Never allow children or uninstructed adults to operate the edger. Keep bystanders away from machine. Keep away from the blade and all rotating parts, which cause injury.

- Edging is best performed when conditions are dry. If the soil is too wet, dirt becomes packed around the blade causing premature belt wear and decreased performance.
- If dirt does become packed around the blade, stop the engine and remove the wire from the spark plug. Remove the packed dirt and debris from the blade.
- For deep edging, first cut at shallow depths. Then, cut at greater depths until the desired depth is obtained.
- Edging can be customized by varying the number of passes and the distance between the blade and the edge of sidewalk, driveway, or curb.



# **MAINTENANCE**

#### Maintenance Schedule



#### WARNING!

▲ Before performing any maintenance, turn engine off and remove the wire from the spark plug to prevent accidental starting and serious injury.

**IMPORTANT:** The warranty on this edger does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain the edger as instructed in this manual, and only use genuine replacement parts. The following table lists required periodic maintenance.

#### PERIODIC MAINTENANCE SCHEDULE TABLE

Service Records- Fill in dates as you complete regular service	Before Each Use	After Every 10 Hours of Use	After Every 25 Hours of Use	After Every 50 Hours of Use	After Every 100 Hour of Use	Before Each Season	Before Storage	See Note Below
Check Engine Oil Level,Fill to Proper Level	√					√		
Check Connection of BOTH Flameout Wire Connectors	√					√		
Clean Debris From Unit	√					√	√	
Lubricate All Pivot Points		√				√	√	
Check Fasteners for Tightness		√				√		1
Check Drive Belt Replace if Necessary		√				√		
Check Blade for Wear or Damage Replace if Necessary		√				√		
Check Fuel Line Replace if Necessary			√			√		
Lubricate Wheel Axles			√			√	√	
Check Spark Plug Replace if Necessary			√			√		
Change Engine Oil				√		√	√	2,3
Clean Air Filter Replace if Necessary			√			√		4
Replace Spark Plug					√			
Clean Combustion Deposits from Cylinder, Piston, and Valves					√			



#### **CAUTION!**

### **IMPORTANT NOTES about Maintenance schedule**

- 1. Re-check tightness of all fasteners after first 2 hours of initial use
- 2. Change engine oil after first 2-8 hours of initial use
- Change oil every 25 hours if operating under heavy load or in high temperatures
- 4. Clean air filter every 10 hours if operating under dusty conditions.



#### WARNING!

Use only GENUINE replacement parts. Other parts may damage the unit or result in injury.

### Lubrication

Add a small amount of engine oil to lubricate parts and pivot points. Refer to "Periodic Maintenance Schedule Table" for time intervals to lubricate parts.

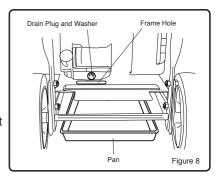
### How to Change the Engine Oil

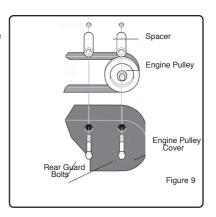
**NOTE:** Refer to Figure 8 when following the steps below:

- 1. Stop the engine and let it cool.
- Disconnect spark plug wire from the spark plug.
- Put the depth control lever in the starting position (See Figure 7). This will slightly tilt the frame and engine toward the rear.
- Insert a flat pan under the edger, underneath the oil drain plug and frame hole.
- 5. Remove oil dipstick. (See Figure 3)
- 6. Remove the oil drain bolt and washer.
- 7. Allow all oil to drain through the frame hole into the pan.

**IMPORTANT:** Used oil is a hazardous waste. Place oil in a sealed container and take to your local recycling center. Do NOT discard with household waste.

- 8. Replace and tighten the oil drain plug and washer.
- To re-fill engine with oil, see engine preparation section "How to Check Oil and Fill to Proper Level."

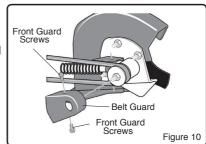




### How to Replace the Belt

**IMPORTANT:** Only use a replacement belt from the manufacturer.

- 1. Disconnect the spark plug wire from the spark plug.
- Remove the two rear guard bolts to remove the engine pulley cover. (See Figure 9)
- Remove the two Front Guard Screws and the Belt Guard. (See Figure 10)
- 4. Push the blade arm toward the unit to compress the blade arm spring and slacken the belt. TIP: This can be accomplished by using a ratcheting tie-down strap. Always follow the strap manufacturer's instructions.



- 5. Remove the old belt from the engine and guill assembly pulleys.
- 6. To install a replacement belt from the manufacturer, reverse the steps above.
- The rear guard bolts should be tightened to 13-16 foot-pounds [18-22N-m].
- The front guard screws should be tightened to 4-6 foot-pounds [6-8N-m].

# How to Change the Blade



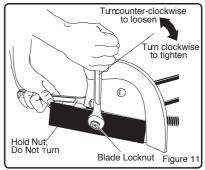
#### WARNING!

Do not sharpen the blade. Sharpening can damage the blade and cause it to break, which can cause injury to you or to others. The blade is subject to nicks, scratches, and dents, which will generally not affect function. The blade is also subject to wear – reducing the cutting depth. Replace a worn blade by following the steps below:

**IMPORTANT:** Only use a replacement blade from the manufacturer.

**Note:** Replacing the blade requires two (2) 12" adjustable wrenches, or two (2) 3/4 in. [19mm] wrenches.

- 1. Shut off engine.
- 2. Disconnect the spark plug wire from the spark plug.
- 3. Remove the blade locknut that holds the blade to the drive shaft. (See Figure 11)





#### WARNING!

To remove or tighten the blade locknut, always use the method shown in Figure 11. Always position the holding wrench on the nut behind the blade.

- 4. Remove the blade.
- 5. Replace with new blade from the manufacturer by reversing the above steps.

Note: Tighten the blade locknut to 35-45 foot-pounds (47-61 N-m)

### How to Clean the Air Filter

A dirty air filter will restrict air intake. Regular maintenance of air cleaner will help improve engine performance and reduce emissions.

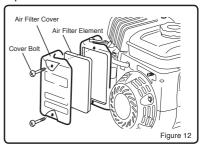


#### WARNING!

Never clean air filter with gasoline or an easy ignited solvent because it may cause explosion.

NOTE: Refer to Figure 12 when following the steps below:

- 1. Remove the air filter cover bolts.
- 2. Remove the air filter cover.
- 3. Carefully remove air filter element to prevent dirt from falling into carburetor.
- 4. Clean all parts. Wash the air filter element in a nonflammable or high burning point solvent, and allow to dry thoroughly; dip the filter element in clean oil, and squeeze out all excess oil.
- 5. Reinstall the air filter element.
- Replace air filter cover and tighten cover bolts



### How to Check the Spark Plug

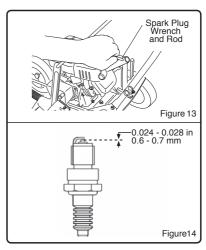
Spark Plug Model: Torch E7RTC



#### WARNING!

Only use the recommended spark plug or a spark plug with the same temperature range. Using an improper spark plug, an incorrect spark plug gap, or a dirty/fouled spark plug can reduce engine performance and cause damage.

- 1. Stop engine and allow it to cool.
- 2. Remove spark plug wire from spark plug.
- Use the spark plug wrench and rod (included with edger) to remove the spark plug. (See Figure 13)



- 4. Visually inspect the spark plug for cracks or damage. If cracked, replace spark plug.
- 5. Clean carbon deposits. If excessive carbon build up, replace spark plug.
- Check that the gap of the spark plug is 0.024-0.028 in. (0.6-0.7 mm). (See Figure 14)
- 7. Re-insert the spark plug and tighten using the spark plug wrench and rod. (See Figure 13)

**NOTE:** Torque of spark plug is 18-22 foot-pounds (25-30 Nm)

8. Reattach spark plug wire to spark plug.

### **How to Prepare for Storage**



#### WARNING!

Never store the edger indoors with fuel in the fuel tank. Never store in an enclosed, poorly ventilated area where fumes could reach an open flame, a spark or a pilot light as on a furnace, water heater or clothes dryer. Allow engine to cool before storing unit.



#### WARNING!

Do not remove gasoline while inside a building, near a fire, or while you smoke. Gasoline fumes can cause an explosion or a fire.

**NOTE:** A yearly checkup or tune-up at an authorized service center will make sure that the edger will provide maximum performance for the next season.

When the edger is put in storage for thirty days or more, the following steps should be followed to make sure the edger is in good condition the next season.

- 1. Let the engine run until it is out of gasoline.
- 2. Change the oil by following instructions under "How to Change the Oil."
- 3. Remove the spark plug from the cylinder. Pour one ounce of oil into the cylinder. Slowly pull the recoil-start grip so that the oil will protect the cylinder. Install a new spark plug in the cylinder. Pull starter handle slowly a few times to distribute oil. Pull recoil slowly until resistance is felt. This will close the cylinder valves.



#### **WARNING!**

DO NOT attach spark plug wire to spark plug when storing unit.

- Clean edger. Remove all dirt, leaves, debris, grease, etc. from the edger including cylinder cooling fans, recoil starter cover holes, under fuel tank, and
  under muffler.
- Check the edger for worn or damaged parts. Have damaged parts replaced if necessary.
- 6. Tighten any loose hardware.
- 7. Apply lubrication as directed in Maintenance section.
- 8. Put the unit in a building that has good ventilation.
- 9. Cover the edger with a breathing material.

# Troubleshooting

PROBLEM	POSSIBLE CAUSE(S)	SOLUTION(S)
Engine difficult to start	1. Out of fuel 2. Start lever is not compressed 3. Choke in "Run / Warm Start" position 4. Spark plug wire disconnected 5. Fouled spark plug 6. Dirty Carburetor 7. Clogged air filter 8. Clogged fuel filter 9. Contaminated Fuel	1. Add fresh fuel 2. Pull start lever against handle 3. Rotate Choke lever to "Choke / Cold Start" position 4. Attach spark plug wire to spark plug 5. Remove spark plug. Inspect. Replace if necessary 6. Take unit to an authorized service center for Carburetor cleaning 7. Remove and clean air filter 8. Remove fuel filter. Inspect. Replace if necessary 9. Drain fuel
Engine Problems Engine smokes excessively Engine runs very "rough" Engine runs erratically Engine cannot maintain full speed	1. No Engine Oil 2. Engine oil not at proper level 3. Fouled spark plug 4. Clogged air filter 5. Clogged fuel filter 6. Contaminated Fuel 7. Carburetor out of adjustment 8. Choke in "Choke / Cold Start" position	1. Add engine oil 2. Check engine oil. Add or drain engine oil if necessary 3. Remove spark plug. Inspect. Replace if necessary 4. Remove and clean air filter 5. Remove fuel filter. Inspect. Replace if necessary 6. Drain fuel tank. Clean fuel tank. Fill with fresh fuel 7. Take unit to an authorized service center for Carburetor adjustment 8. Rotate Choke to "Run / Warm Start" position
Excessive vibration / noise	Loose parts     Engine problems     (above)	Tighten all fasteners     Refer to engine solutions     (above)
Blade will not rotate	Debris interfering with blade     Blade loose     Belt Loose	Remove debris from around blade     Tighten blade nuts     Replace Belt
Engine will not stop	Flameout wire terminals disconnected	Connect handle and engine flameout wire terminals
Blade will not cut properly	Damaged or worn blade	Replace blade
Frequent engine stalling	Excessive edging speed / depth     Engine problems (above)	Edge at a moderate pace.     Make multiple passes.     Refer to engine solutions (above)

# Warranty

Please keep your original purchase receipt in a safe place as proof of purchase. Warranty coverage for this product must be verified by the original purchase receipt.

The warranty period begins on the day that the product was purchased from an authorized retailer of Yard Force products. Warranty coverage only applies to the original purchaser and is not transferrable. Warranty coverage is only provided on products purchased from authorized Yard Force retailers. Warranty coverage is NOT provided on products purchased from resellers or other retailers. Warranty coverage is only provided on products purchased and used in the USA from authorized Yard Force retailers. Products purchased or used outside of the USA are not covered by this warranty.

#### (2) Two-Year Warranty - Engine and Frame

The YF7302 Edger has a 2-Year Limited Warranty on the gas engine (see chart below) and frame from the date of purchase against manufacturer defects for residential use only. Commercial use voids the warranty. This warranty does not cover accidental damage, unreasonable use, normal wear and tear, neglect or non-compliance with the Operating, Safety and Maintenance Instructions. All service, outside of normal maintenance as described in this manual, must be done by an authorized service technician. Any unauthorized service or changes to the original configuration of this product will void the warranty. All parts and accessories used on and with this product must be manufactured and/or authorized by SUMEC North America.

#### (90) Ninety-Day Warranty – Attachments

The attachments included with the YF7302 including wheels, control levers and cables, pulleys and other similar parts are warranted against manufacturer defects for residential use only for a period of 90 days from date of purchase. The edger blade is a wear part and is not covered after first use.

Warranty does not cover loss of use or other consequential damages arising from any of the above, nor does it cover repairs made or attempted by unauthorized persons. This warranty is void if the product is used for commercial, rental or industrial purposes. Certain parts, attachments and accessories are subject to normal wear and tear and are excluded from the warranty.

#### Service and Warranty Claims process

Contact the Yard Force Support Center toll-free at (866) 902-9690 Monday- Friday between 8:30 AM and 5:00 PM Eastern Time for service and warranty support.

Yard Force Service Support agents can help you troubleshoot problems over the phone to get you back up and running as quickly as possible. In the situation where service or warranty inspection is needed, please follow these steps:

- Call Yard Force Support Center at (866) 902-9690 Monday-Friday between 8:30 AM and 5:00 PM Eastern Time.
- 2. Send in proof-of-purchase and serial number (if applicable) to confirm warranty coverage.
- If service or a warranty evaluation is requested, Yard Force will direct you to the nearest authorized service center – or you can ship the product directly to Yard Force for service. All shipping costs are the responsibility of the consumer.
- 4. Yard Force will provide an RGA number that should be used in all communications with Yard Force and/or the Yard Force Authorized Service Center and is required to be indicated on the product itself and on the outside of the box.
- 5. All shipments to Yard Force must have an RGA number. Any shipment received that does not have an RGA number clearly marked on the outside of the box will be refused.
- 6. All shipments must be sent pre-paid, Yard Force does not pay for any shipping costs for service or warranty evaluation. Yard Force is not responsible for any packages that are lost by carrier. We recommend that shipments are made by a carrier that provides tracking and delivery confirmation.

For more information or to ask questions, please call toll-free (866) 902-9690 Monday-Friday between 8:30 AM and 5:00 PM Eastern Time.

#### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

### Limitation of Liability (cont.):

SYSTEMS COVERED BY THIS WARRANTY:	PARTS DESCRIPTION:		
Fuel Metering System	Carburetor assembly (if so equipped) and its internal components; fuel filter (if so equipped), carburetor gaskets, fuel pump (if so equipped)		
Air Induction System	Intake pipe/ manifold, air cleaner		
Ignition System	Spark plug , ignition module / coil		
Exhaust System	Catalytic muffler assembly (if so equipped), muffler gasket, exhaust manifold		
Crankcase Breather Assembly	Breather connection tube		
Miscellaneous Parts Used in Above Systems	Hoses, belts, connectors and assemblies		
Evaporative Emissions Components <sup>2</sup>	Fuel line, fuel line fittings, clamps, fuel tank, carbon canister, canister mounting brackets, carburetor purge port connector, fuel cap		
<sup>1</sup> Covered up to the first required replacement only. See the Maintenance Schedule			
<sup>2</sup> As applicable to your product engine emissions certifications			

# **EMISSION CONTROL SYSTEM WARRANTY**

### **Your Warranty Rights and Obligations:**

The California Air Resources Board, U.S. EPA and Sumec Hardware & Tools Co., Ltd.(Sumec) are pleased to explain the Emission Control System Warranty on your new outdoor power equipment engine.

#### California

In California, new spark-ignited small off-road equipment engines must be designed, built and equipped to meet the State's stringent anti-smog standards.

#### Other States, U.S. Territories

In other areas of the United States, your engine must be designed, built and equipped to meet the U.S. EPA emission standards for spark-ignited engines at or below 19 kilowatts

#### All of the United States

Sumec Hardware & Tools Co., Ltd.(Sumec) must warrant the emission control system on your power equipment engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your power equipment engine. Where a warrantable condition exists, Sumec will repair your power equipment engine at no cost to you including diagnosis, parts and labor.

#### **Manufacturer's Warranty Coverage:**

The emission control system is warranted for two years. If any emissions-related part on your engine is defective, the part will be repaired or replaced by Sumec.

#### **Owner's Warranty Responsibility**

As the power equipment engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Sumec recommends that you retain all receipts covering maintenance on your power equipment engine, but Sumec can not deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance. As the power equipment engine owner, you should however be aware that Sumec may deny your warranty coverage if your power equipment engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your power equipment engine to distribution center or service center authorized by Sumec as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact Sumec Hardware & Tools Co., Ltd.(Sumec) customer service representative at 866-902-9690 Monday-Friday between 8:30 AM and 5:00 PM Eastern Time or write to daniel.castles@sumec-na.com

### **Warranty Coverage:**

Sumec warrants that the product engine is free from defects in materials and workmanship which cause such engine to fail to conform with the U.S. EPA or State of California emissions standards for small spark-ignited nonroad (off-road) engines – as applicable to your Sumec product. Small spark-ignited off-road engines manufactured after January 1, 1995 and sold in the State of California and U.S. EPA certified small spark-ignited nonroad engines manufactured in model year 1997 or later and sold in all of the United States are covered by this Emission Control System Warranty for a period of two years from the date of delivery to the original purchaser. This Emission Control System Warranty is transferable to each subsequent purchaser for the duration of the warranty period. Emission Control System Warranty repairs or replacements will be made without charge for diagnosis, part or labor. A list of warranted parts are warranted only up to the first scheduled required replacement interval for such item, as set forth in the Owner's manual. If any emission control system part is repaired or replaced under the Emission Control System Warranty, it shall be warranted for the remainder of the applicable warranty period. Sumec will also repair or replace other engine components damaged by a failure of any part covered by the Emission Control system Warranty during the Emission Control System Warranty Period. Only parts authorized and approved by Sumec may be used in the performance of any Emission Control System Warranty repairs or replacements and will be provided without charge to the owner. Unapproved, add-on, modified, counterfeit and/or "gray market" parts may not be used to modify or repair the Sumec engine. If such a part has been used in the repair or maintenance of your engine, and an Sumec Authorized Service Center determines it is defective or causes a failure of a part covered under the Emission Control System Warranty. your claim for repair of your engine or product may be disallowed. Sumec shall not be held liable hereunder for failures of any warranted parts caused by the use of such an unapproved, add-on, modified, counterfeit and/or "gray market" part.

### How to obtain warranty service:

You must take your power equipment engine or the product on which it is installed , along with evidence of the date of the sale to the original purchaser, at your expense, to any Sumec Authorized Service Center during its normal business hours. To locate your nearest Sumec Authorized Service Center, call 866-902-9690 Monday-Friday between 8:30 AM and 5:00 PM Eastern Time or write to daniel.castles@sumec-na.com. The product owner shall be responsible for any expenses or charges incurred for service calls or transportation of the product or equipment engine to and from the Sumec Authorized Service Center, including any and all damages or losses incurred during such transportation or shipment.

#### **Exclusions:**

Failures other than those resulting from defects in material or workmanship are not covered by this Emission Control System Warranty. This Emission Control System Warranty does not extend to emission control systems or parts which are affected or damaged by owner abuse, neglect, improper maintenance, misuse, mis-fueling, improper storage, accident and/or collision, the incorporation of, or any use of, any unapproved, add-on, modified, "gray market" or counterfeit parts, unsuitable attachments, or the unauthorized alteration of any part. This Emission Control System Warranty does not cover the regular replacement of normal maintenance items made in connection with required maintenance services after the item's first scheduled replacement, as set forth in the Operator's Manual (e.g. spark plugs, air filters, fuel filters, etc...).

### **Limitations of Liability:**

Sumec disclaims any responsibility for loss of time or use of the engine, or the equipment in which the engine is installed, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written limited warranty. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions and limitations may no apply to you.

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

### **EMISSION WARRANTY PARTS LIST**

- (1) Fuel Metering System:
  - (a) Gasoline carburetor assembly and its internal components
  - (b) Carburetor gaskets
  - (c) Fuel line
  - (d)Clamps
  - (e) Fuel tank
  - (f) Fuel line fittings
  - (g) pressure regulator(if equipped)
  - (h) Mixer assembly and its internal components (if equipped)
- (2) Air induction system including:
  - (a) Intake pipe/manifold
  - (b) Air cleaner
- (3) Ignition system including:
  - (a) Spark plug
  - (b) Ignition coil
- (4) Catalytic muffler assembly including:
  - (a) Muffler gasket

- (b) Exhaust manifold
- (c) Catalytic converter (if available)
- (5) Crankcase breather assembly including
  - (a) Breather connection tube
- (6) Fuel tank evaporative emissions control system including:
  - (a) purge valves
  - (b) Carbon canister
  - (c) canister Mounting Brackets
  - (d) Fuel Cap
  - (e) Fuel Tank
- (7) Miscellaneous items used in above systems including:
  - (a) Switches
  - (b) Hoses, belts connectors, and assemblies
- (8) Air injection system
  - (a) Pulse valve