

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
3. 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.

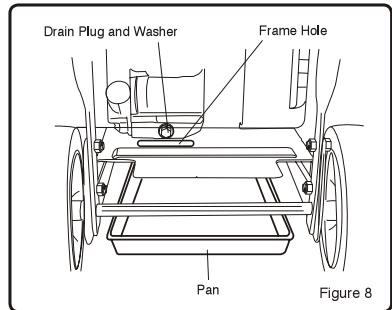
Lubrication

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

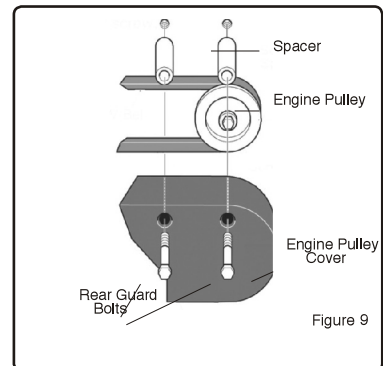
NOTE: Refer to Figure 8 when following the steps below:

1. Stop the engine and let it cool.
2. Disconnect spark plug wire from the spark plug.
3. Put the depth control lever in the starting position (See Figure 7). This will slightly tilt the frame and engine toward the rear.
4. 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.

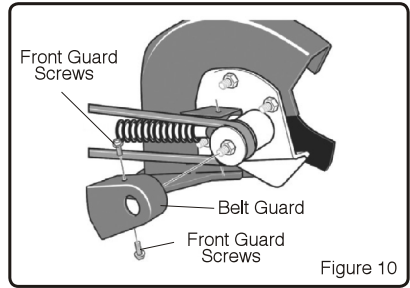
8. Replace and tighten the oil drain plug and washer.
9. To re-fill engine with oil, see engine preparation section “How to Check Oil and Fill to Proper Level.”



How to Replace the Belt

IMPORTANT: Only use a replacement belt from the manufacturer.

1. Disconnect the spark plug wire from the spark plug.
2. Remove the two rear guard bolts to remove the engine pulley cover. (See Figure 9)
3. 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 quill 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



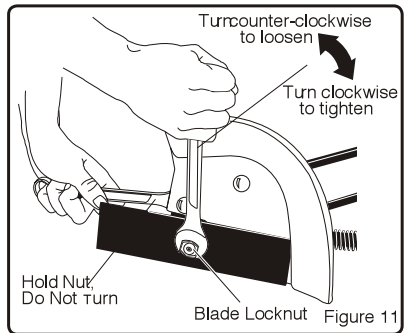
WARNING!

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)

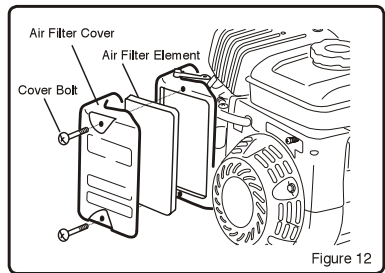
How to Clean the Air Filter

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.
6. 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.
3. Use the spark plug wrench and rod (included with edger) to remove the spark plug. (See Figure 13)

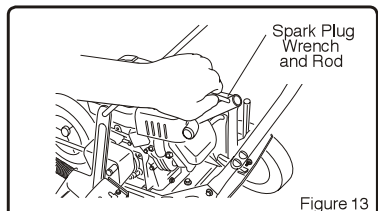


Figure 13

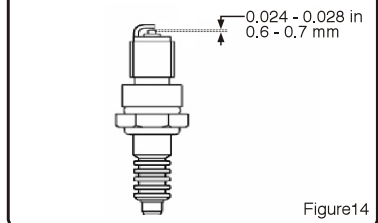


Figure 14

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.
 6. 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.

4. 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.
5. 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	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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
<p>Engine Problems</p> <p>Engine smokes excessively</p> <p>Engine runs very "rough"</p> <p>Engine runs erratically</p> <p>Engine cannot maintain full speed</p>	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Loose parts 2. Engine problems (above) 	<ol style="list-style-type: none"> 1. Tighten all fasteners 2. Refer to engine solutions (above)
Blade will not rotate	<ol style="list-style-type: none"> 1. Debris interfering with blade 2. Blade loose 3. Belt Loose 	<ol style="list-style-type: none"> 1. Remove debris from around blade 2. Tighten blade nuts 3. 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	<ol style="list-style-type: none"> 1. Excessive edging speed / depth 2. Engine problems (above) 	<ol style="list-style-type: none"> 1. Edge at a moderate pace. Make multiple passes. 2. Refer to engine solutions (above)