



Fill tank only at a gasoline station. Gasoline must be fresh (not over 4 months old) and not contaminated with oil or diesel fuel. Low-octane fuel works fine.



Install oxygen backflash arrestor between torch and oxygen hose. No need for a fuel line backflash arrestor.



Attach hoses. Green hose to oxygen (right hand thread). Red hose to gasoline (left hand thread).



Pump tank to 20 psi. Pressure drops as torch cuts. When it drops to 10 psi, pump back to 20 psi.

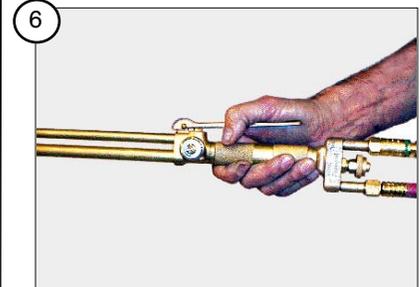
Fast flow safety valve needs 10 psi of tank pressure to function.



Open tank gasoline valve slowly, about 2 turns. After 30 seconds, open valve fully. If gasoline is shut off by fast flow valve, close valve, tap tank on the ground and repeat.

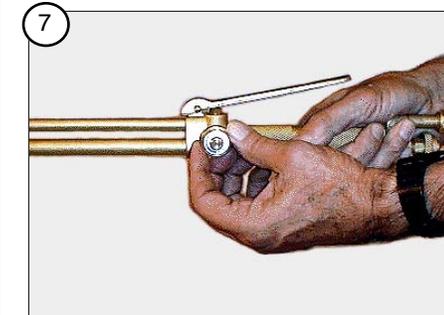


Select cutting tip and oxygen pressure from cutting chart on gasoline tank. Open oxygen bottle valve slowly and fully. Set desired pressure on oxygen regulator.



IMPORTANT: PURGE OXYGEN LINE BY DEPRESSING CUTTING LEVER FOR 5 SECONDS. AS WITH ALL OXY-FUEL TORCHES,

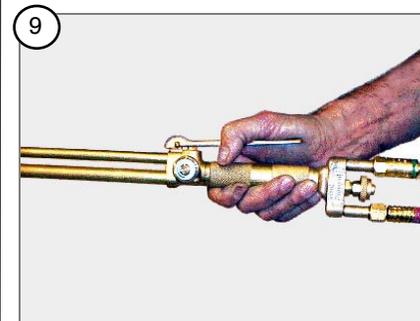
FAILURE TO PURGE MAY CREATE CONDITIONS FOR OXYGEN LINE BACKFLASH.



First open torch oxygen valve about 1/2 turn. Final opening depends on tip size and oxygen pressure.



Then open torch gasoline valve until light mist appears. If liquid drips from torch, increase oxygen or reduce gasoline.



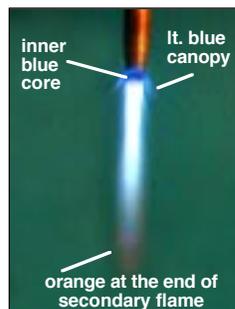
Purge oxygen line again by depressing cutting lever for 5 seconds.



Ignite torch by striking spark close to the tip and to one side. A new hose contains air which extinguishes the flame. Just light again - about 2 or 3 times until line is purged of air.



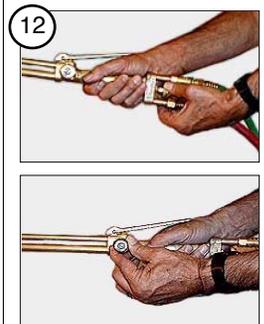
Warm the tip by pressing it to steel at an angle. Adjust gas valve until the steel turns a bright red orange.



Final adjusted flame should have a bright blue core about 3/16-inch long (4-5 mm). (If it looks like an acetylene flame, it's too lean.)

Important Note:

New gasoline hose contains an oily residue from manufacture that causes the flame to run yellow for about 10 minutes. Longer hoses take longer for this residue to clear.



When finished cutting, **shut down torch by closing gasoline first, then oxygen.**

PETROGEN[®]
OXY-GASOLINE CUTTING SYSTEM

CALL US IF YOU NEED ASSISTANCE.

If you need help, we want to hear from you!

Toll Free: 877-888-6724 Fax: 719-596-4721

E-mail: torch@petrogen.com

Getting Started

IMPORTANT INFORMATION

*** Fill the PETROGEN tank with fresh gasoline from a gasoline station.**

Fuel from other storage tanks is often old and/or contaminated and can make the PETROGEN flame run yellow.

If the preheat flame burns yellow:

1. Tip may be too cool. Warm the tip by pressing it to the steel.
2. Flame may be too rich in gasoline. Increase oxygen or decrease gasoline.
3. Flame may be too large. Reduce deep blue core of flame to 1/8 inch (3-4 mm).
4. A new gasoline hose contains an oily residue from the manufacturing process which causes the flame to burn yellow. It will disappear in about 10 minutes for each 20 feet of hose.
5. Gasoline may be contaminated with oil. Get new fresh gas.
6. Oxygen supply may be insufficient.

If the flame goes out while cutting:

It might still be burning inside the tip. Stop the burning by quickly shutting off the preheat oxygen, and then just as quickly opening it up again. Re-light the torch. There is no danger, but you might ruin the tip if you don't act quickly: brass will burn at the exit of the 6-holes in the inner brass core of the tip.

If the tip nut gets loose:

Do not tighten the tip nut while the torch head is hot. If the torch head gets hot, the tip nut sometimes becomes loose. Tightening while the brass is hot might distort the head. Expansion of gasoline inside the cutting tip makes the tip run cool, but exposing the torch head to a very hot environment can overcome the cooling effect and the head can get hot. This heat can expand the brass in the torch head so that the threads pull away from the threads on the tip nut. The tip nut may loosen and the torch will pop and leak.

Cool the head before tightening. The head can be cooled rapidly by closing both valves, then opening only the gasoline valve. The hot tip will vaporize the gasoline instantly and cool the tip. When the vapor turns to a mist the head is cool and the tip nut can be tightened. **(To keep the torch cool, take advantage of PETROGEN's long coupling distance, described below.)**

You can lift the tip high above the steel and still keep cutting:

You can back away from emerging slag and heat concentrations because of the gasoline flame's long coupling distance. The PETROGEN torch does not need to be precisely 1/4" away from the steel to continue cutting, as other torches do. Keep the tip out of the hot spots and you will increase tip life and prevent overheating of the torch head.

You can bury the tip in mud, sand, water, etc.:

The flame might go out but will never backflash. The flame is very forceful because the gasoline in the tip expands 160 times when it changes from liquid to vapor.

You are safe:

1. The PETROGEN torch cannot backflash up the gasoline line. Liquid gasoline does not burn.
2. Any leak would leave a wet spot, would be visible and could be fixed quickly.
3. If the gasoline hose is cut, the fast flow check valve in the tank shuts off the fuel.