

## Removing Burners

I always find it easier to disassemble torches for restoration. It enables you to detail each individual piece. I always start with removing the burner assembly from the tank. The typical way to do this seems to be to use a pliers or Vise-Grips to unscrew the feed tube from the tank. I have seen a lot of torches but I have seen very few without tool marks on the feed tube.

The best way to remove the burner without creating tool marks is to use a vise (see picture). Put a piece of leather in the jaws of the vise to protect the burner. If you don't have a piece of leather, use an old leather work glove or something similar. Insert the burner into the vise with the torch handle on the left. Tighten down the vise jaws only enough to make it snug. Do not over tighten. Place your right hand on the bottom of the tank to keep it straight. Pull the handle of the torch toward you and it should unscrew relatively easily. A steady even pressure usually does the trick. Try not to use too much force. I find a good rule of thumb is: if you start dragging the workbench around the room, you should try some other method. If it doesn't come apart, try heating the connection between the burner and the feed tube. This should enable you to remove the burner from the feed tube and still give you ample room to clean and polish the tank. Heating the connection between the feed tube and the tank would melt the solder on the tank fitting.

This same method can be used to remove frozen filler plugs in the bottom of torch tanks. The jaws of my vise are 4" wide and easily fit down into the concave bottom of torches.



Some early torches such as the White torch pictured to the right have burners that unscrew from the feed assembly. Removing the barrels from these burners can be difficult but it significantly simplifies the restoration process. I first attempt to use the hose clamp method mentioned earlier but there are times that I am not successful with that method.

For the more difficult situations I use the method below. All the burners have holes in the side. The holes on the sides usually directly oppose each other. It is easy to insert a rod, of some sort, directly through the center of the circumference of the burner. The rod should be very close to the diameter of the holes in the burner. This will prevent or minimize damage to the holes themselves. In the example below I use a Phillips head screwdriver. I have also used Allen wrenches and awls. Whatever you choose should be tensile so it doesn't bend easily.

Note that in the example below that there is only a small amount of the screwdriver protruding from the burner barrel where it comes into contact with the vise. This keeps the screwdriver from bending. The burner is not locked into the vise. It is loose and I am holding it in place. To unscrew the burner, pull the feed tube toward you and it should come loose. You may hear a pleasant "Pop". The pressure is exerted on the vise jaw facing you. I place a piece of leather between the burner and the vise jaw to prevent damage to the burner barrel. In this case, I also had to hold the screwdriver in place. If you used a short rod that was only slightly larger than the diameter of the burner, that wouldn't be necessary.



Once again, don't try to muscle it. If it doesn't unscrew with an appropriate amount of pressure, use a propane torch to heat the connection and try again. I have also found that heating connections and then quickly immersing the part in cold water works well to loosen whatever is holding the two pieces together. I sometimes heat and cool it several times.



