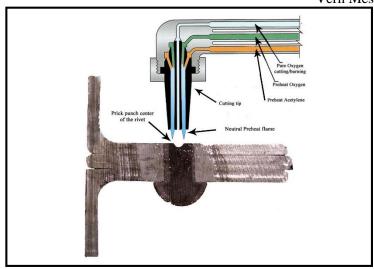
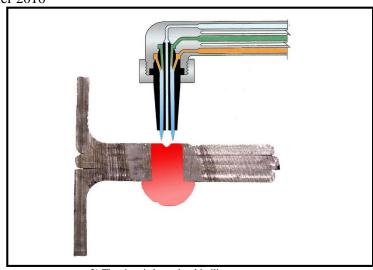
Removing Rivets with Oxygen-Fuel Hand Torch Vern Mesler 2016

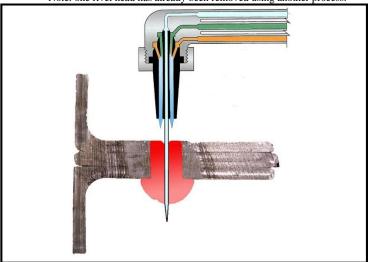


 Oxygen-fuel hand torch (using acetylene) is positioned to start the rivetremoval process. Neutral flame is used for pre-heating.
 Note: one rivet head has already been removed using another process.

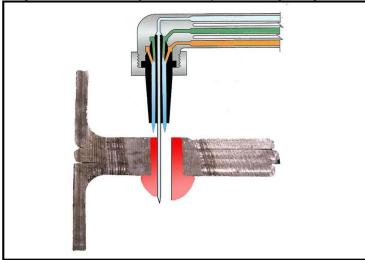


2) The rivet is heated to kindling temperature.

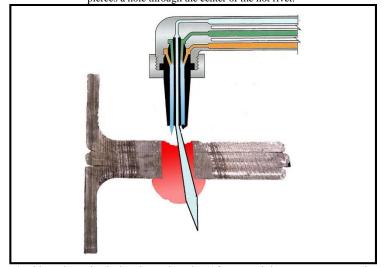
Note: an indentation had been hammered at the center of the rivet to allow the operator to center the cutting flame accurately in the next step of the process.



3) The torch is lifted up and the oxygen lever depressed. The pure oxygen stream pierces a hole through the center of the hot rivet.



4) The operator continues cutting until most of the rivet is removed from the hole. At this stage, the remaining rivet can be punched out. This completes the process.



Avoid erratic cutting by keeping a clean tip. (After several rivets are cut out, metal slag from the piercing will blow back at the tip, plugging some of the tip orifices.)



If the tip is not cleaned, which often happens, the torch tip will cut erratically and damage the parent metal and the holes.

Illustration of torch adapted from *Welding, Principles and Applications* by Larry Jeffus, 6th edition, 2008 (p. 157); illustration of rivet and angle assembly adapted from photo by Nathan Holth.