



## INSTRUCTIONS

55

Using a variable diameter drill bit, cut a chamfer in the convergent section of the nozzle. Drill down until the drill bit hits the thick steel washer.

This is the same bit that was used in chapter 6, step #27.



## OPTIONS

A round file can be used in place of the multi-diameter drill bit.



## WHY?

The purpose of the chamfer is to compress hot combustion gases as they enter the nozzle throat. It will also guide the coring rod into the throat when the fuel is being cast.



## WEB

[www.mcmaster.com](http://www.mcmaster.com) part number 8910A13.

Unfortunately this tool is expensive but it does a fantastic job.



## INSTRUCTIONS

56

The finished nozzle should look like this.



## WHY?

The purpose of the chamfer is to compress hot combustion gases as they enter the nozzle throat. It will also guide the coring rod into the throat when the fuel is being cast.