How we built the SPEEA Stove

Society of Professional Engineering Employees in Aerospace, IFPTE Local 2001 AFL-CIO, CLC



The SPEEA represented Engineers and Technicians of The Boeing Company went on strike February 9, 2000.

In the Northwest winters are wet and cold. We started by burning wood in open 55 gallon steel barrels. The next day we got a better idea.

The SPEEA Stove:

Wood lasts twice as long.

Burns twice as hot.

Keeps the smoke out of your face.

You can cook on it.



We were not the only ones who built these stoves. But this is how we built ours. We have incorporated the best of the improvements that had evolved over the 40 days of the strike.

There are 18,000 people who will never forget the time they spent with their brothers and sisters standing around these stoves.

We know the definition of solidarity, we learned it on the line.

Morris Adams & Tom McCarty

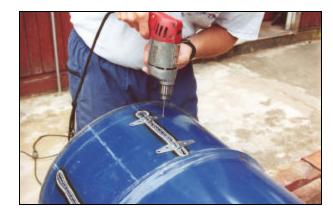


Construction is very simple. The parts are described as they are installed. Start with a clean 55 gallon barrel and lid. Remove the lid and set it aside for now.

Layout the ash door with chalk or soap stone. We made it 8 inches high by 10 inches wide. We also made a layout guide for each of the cuts. This really helped to speed up the job.

Two vent holes about 2 inches in diameter are cut at the same time of each side of the barrel centered on the ash door. Make the left and right side door cuts.

Then install a pair of strap hinges and a gate latch. Nothing is critical except avoid any aluminum parts, they didn't hold up. Everything is fastened with #8 $\frac{1}{2}$ inch long hex head sheet metal screws. Use a $\frac{3}{32}$ drill for all screw holes. No need to fill every hole with a screw, 2 per side is about right.





We drove all the screws using a battery powered drill with an adjustable torque clutch. All the screws fit a $\frac{1}{4}$ magnetic hex driver. Very common and handy.







50 Years from now some will still remember.



When the hinges and gate latch are mounted, cut the door free. Cut a ½ drain hole in the bottom of the barrel. We originally didn't have an ash door but after a few weeks we found out we needed one. We borrowed this improvement from our Everett brothers and sisters.



We also cut our brand "SPEEA" in the side. This looked great at night.

Before cutting the lid remove the gasket by heating the outside of the lid with the torch. Two slow passes around the rim are usually enough. Also unscrew the bung that will remain on the feed door and remove that gasket. They will really stink if you leave them on.



The lid has been cut in half and placed on the barrel for the final assembly. Install another pair of hinges and to allow the feed door to open without binding, remove about one inch of the overhang on each side the of the lid. This is necessary to allow the feed door to open fully Lay out and cut the 6 inch diameter hole for the stove pipe.

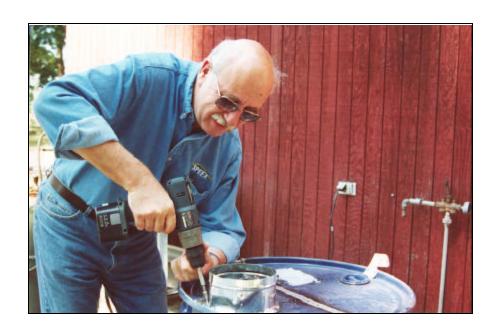




We used a rafter tie to make a handle for the lid. One screw goes through the edge of the lid to keep the door from binding when is closes. A few whacks with a hammer on the edge of the rim will also serve.



Finally a 6 inch duct connector is installed to receive the stove pipe.



If the hole is well cut the stove pipe will slide in without any trouble. If it is a little out of round loosen and remove enough screws and mate the stove pipe to the duct connector and reinstall. The fixed part of the lid is attached to the barrel by 3 screws. One on each side and one in back of the stove pipe. Center punch these holes and drill all the way through.



We used a 3 foot section of 6 inch heat duct for the flue but black stove pipe also is suitable. Use 3 screws spaced about 120 degrees around the collar to secure the flue. Then the stove pipe can be removed and replaced as required for transport or maintenance.

Set the clutch to about minimum torque when driving the screws in the stove pipe as they will easily strip out.

OK, We have room for a parts list.

- 1 55 gallon barrel and lid
- 4 small steel strap hinges
- 1 small self closing gate latch
- 1 6 inch duct connector
- 1 rafter tie
- 1 3 foot section of heater duct
- 29 #8 sheet metal screws

and Notes!

The construction photos were taken of a stove we built after the strike.

All other photo's were taken during the strike.

No it is not recommended to wear shorts when using a cutting torch

Morris and I would like to thank our 18,000 brothers and sisters for their support.

We built several variations of the SPEEA Stove. The double barrel stove worked very well but was harder to transport and maintain. We finally wound up building 30 SPEEA Stoves





Solidarity *Morris and Tom*