Items Needed:

- **2-7 gallon brew bottle** (also called Carboy)
- **Bubble lock** (also call Airlock)
- **specific gravity meter** (optional) It's also good to have a floating volume for the meter. This is also know as a specific gravity hydrometer.
- **Good long brew** thermometer (accurate in the 50 to 200 deg F range)
- Bottle cleaning supplies (**long neck bottle scrubber**) also called a carboy brush.
- **bottle(s) for storing your cider** in when it has completed its fermentation. (optionally you may need flip tops or bottle caps and a capper device). Just run them thru the dishwasher to make them clean. Pull them right out of the dishwasher and bottle them directly.
- 1 gallon 100% Tree Top crisp cider (or similar. Make sure it does not have any preservative and is actually made from apples. Don’t worry about Vitamin C fortification it will not harm the yeasts).
- 1 lb of dark brown sugar
- 1.5 lbs of honey (orange blossom)
- 0.5 tbsp pumpkin pie spice
- 2 sticks of cinnamon sticks
- 5-10 tbsp of Powder (icing) sugar.

Preparation:

- Pop open and start drinking cider (I’m having a cold Angry Orchard)
- Clean large pot for use on the stove
- Add crisp apple cider, honey and dark brown sugar to the brew
- Bring brew just to a boil (to re-pasteurize the cider) and the honey and sugar are incorporated.
- Add pumpkin pie spice: (or mix 3 parts cinnamon, 2 parts ground ginger, 2 parts ground nutmeg, 1.5 parts allspice, 1.5 parts clove to make 1 tbs total)
- Add sticks of cinnamon
- Cook brew on low heat for about 5 minutes
- Remove heat and cover brew to let it cool to less than 80 degF (to be safe). (Note that yeast can survive up to 120 deg F and will die at > 140 deg F)
- Use this cooling time to clean your brew bottle, funnel, and bubble lock.
- Drink some more cider or other nice beverage. (Try 1:10 Apple Crown Royal and Martinelli’s Cider)
- Put into glass or appropriate bottle
- Pour a little into your specific gravity meter and note the gravity on your brew-bottle with some tape and a sharpie. You’ll need this later to calculate the percent by volume of alcohol if you want to calculate it. Us this opportunity to check its taste. It should be fruity and very sweet.
- Mix in lukewarm water to liquify and activate your Champagne/Sparkling Wine Yeast (For instance **Lalvin EC-1118**) and mix lightly into the batch (or shake bottle).
- Store brew bottle in a cool place (>50 degF and <70 degF) and wait until bubbles (CO2) stop forming (approximately 2 wks)
- Put some of the “fermented cider” into your specific gravity meter and note the value. Use a percent by volume alcohol calculator to figure out how much your brew has attenuated. Don’t be
surprised if it comes up with 11% by volume. If it’s less don’t worry add more sugar next time and wait longer for the brew to ferment.

- Put bubble lock on it

Path 1: (flat hard cider)
- Pour contents of your brew bottle into your pot on the stove. (leave the last bit at the bottom in the jar. This is a large load of yeast cake which can be reused by a washing technique you can find online if you are a cheap bastard and don’t want to use yeast from the brew shop. (Alternatively use a racking cane and tube to draft the cider off without collecting too much of the yeast cake)
- Kill the yeast by bringing the pot to >140 degF for 5 minutes. No significant alcohol will evaporate so don’t worry about the angles taking your share of the brew.
- Sip brew and add honey and sugar or brown sugar to taste.
- Let the brew settle to 70 deg and transfer to clean bottles or glass containers.
- label, share and brag.

Path 2: (bubbly hard cider)
- Pour in 1 tbsp of powder (icing) sugar into each bottle.
- Pour cider directly from the brew bottle into air tight bottles (with caps or pop-tops). Leave about 0.5” below the cap if possible. (remember to sterilize your bottles and caps). Don’t use the yeast cake bit at the bottom (use that to make bread later).
- Store in a cool place (>50 degF and <70 degF) if possible.
- In 2 weeks pop one bottle open, enjoy and check how bubbly it is. Add 1 week and check again if it is still kind of flat.
- Refrigerate and enjoy.
- label, share and brag.