

## **VINTAGE YAMAHA FG NECK REMOVAL NOTES v2020.8**

1. **CUT THRU THE LACQUER RADIUS** at the sides of the heel **BEFORE** doing anything else. Separating the fretboard could cause the corner lacquer to crack, especially the late 70's and later models. Check the fretboard extension to the top also, although a lacquer radius there isn't as thick if there is one.
  - a. **Put 3 layers of masking tape on both sides of the heel corners.** This protects the guitar from the occasional scalpel slip and the side of the scalpel during cutting, and provides a visual guide.
  - b. **Cut thru the lacquer radius with a NEW scalpel blade on a very shallow angle.** Be sure to cut slightly into the wood too to be sure you are thru the lacquer, and if the heel is glued to the side of the guitar it reduces the chance of tear out being visible.
2. The **HEEL CAP NEEDS TO BE SEPARATED FROM THE BINDING BEFORE** removing the neck. I use a .010" saw to cut thru the heel cap close to the binding. Steam doesn't separate the heel cap from the binding (the plastic ones are glued to the binding), forcing the neck off will wreck the binding. **THE WOOD HEEL SHOULD ALSO BE SEPARATED FROM THE BINDING**, the steam doesn't always do it.
3. **LOOSENING THE FRETBOARD EXTENSION FROM THE TOP.**
  - a. **Put tape on the top all around the sound hole, and over the bridge.**
  - b. **Use the heat shield on the top, and 75W halogen bulb** (about 1" from the fretboard). **Take extra time to heat the fretboard extension** to soften the glue before forcing the spatula under, but not enough to loosen neck block!! The amount of time will vary depending on the amount of glue used. Move the guitar around to heat most of the fretboard extension, about 15-20 minutes to start. In some cases you will smell the glue when it's heated. Experiments have shown heat alone doesn't "liquefy" hide glue, but it must soften it slightly, enough to get the spatula in, in some cases.
  - c. **Work the spatula from the sound hole end**, and slightly from the top side (opposite the pickguard).
  - d. **NEVER push the spatula all the way thru from the side!!** It can dig into the top and cause damage.
4. **REMOVE THE 15TH FRET.**
  - a. **Start with a small chisel to get under the sides of the fret 1/16" from the treble end.** Yamaha must have pressed the frets in, most of the frets are below the surface of the wood and the fret pullers can't get under them without chewing up the fret. Be very careful with the chisel, it can cause lots of damage to you and the guitar if it slips. Put a piece of tape on fretboard to the left of the 15<sup>th</sup> fret to help protect the fretboard in case of a chisel slip.
  - b. **Once the fret is lifted slightly, use the Stew Mac fret pullers to get under the fret. Then you want to slowly advance towards the other end, only 1/8" max at a time.** You don't want to go too fast and distort the shape of the fret. Watch for fretboard chips being lifted under the fret.
  - c. You could use the Stew Mac Chip Stopper, but I haven't had much chipping with this method. If the fretboard starts to chip, spray water all over it, being sure it gets under the frets. That will soften the wood and reduce chipping, but it can cause the fretboard to swell and close the fret slots slightly.
5. **DRILL THE STEAM HOLES.**
  - a. **Measure 3/4" from both sides of the fretboard centerline.**
  - b. **Use 3/32" (118° point) drill.**
  - c. **Start the 3/32" hole straight in**, then angle it towards the heel about 10 degrees.
  - d. **Drill until you feel it break into the neck pocket.** Don't go any further.
  - e. **VERIFY your steam tip fits into the hole** before turning on the steam!
6. **PUT STEAM IN THE NECK.**
  - a. **Pour 3/4 cup of water into the steam reservoir. DO NOT fill!!** That causes lots of water to be pushed out.
  - b. **Open the needle valve on the steam trap 1/2 turn.**
  - c. **Heat up your steam generator until it mostly stops spitting water into the steam trap.**
  - d. **Close the needle valve completely, then close and reopen 1/8 turn.** You want to inject heat and moisture into the joint, not lots of water.

- e. **After inserting the tip into the hole, be sure there is steam coming out of the other hole.**  
Alternate holes every minute.

## **7. REMOVE THE NECK.**

- a. **After 2 minutes start wiggling the neck**, looking for movement. Don't force it. Try again every 30 seconds. Keep alternating the steam every minute.
- b. **Tighten the neck jig every minute.** *You ARE using a neck jig???*
- c. **If the neck doesn't come off after 6 minutes turn off the steam and re-evaluate.**

- 8. BROKEN HEEL REMOVAL.** Broken heel Yamaha FG's necks are extremely hard to remove. The neck needs to be wiggled to help release it. If the heel is broken it won't wiggle. Additional steam and neck jig pressure will be required to HOPEFULLY get it out. The heel will CERTAINLY be distorted from the steam softening it. If the neck completely separates from the neck you can drill additional steam holes into the top of the heel to get the steam into the areas you can't normally reach. This will probably get real ugly. **You NEED to use a neck jig!**

File the heel cap (wood OR plastic) down to the tape line before pull sanding. Pull sanding the wood will pull chunks out of it.