

# GETTING THE BEST OUT OF YOUR INSTRUMENT

A clinic by:  
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Summit





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- ▶ Owner of North Country Winds

MILES DECASTRO



- ▶ Your instrument needs to be checked by a technician
- ▶ Even if it's brand new
- ▶ The bigger the store you bought it from, the more likely something was overlooked



TL;DR



HOW DO YOU KNOW?



- ▶ If it sounds good immediately?
- ▶ Suction?
- ▶ Have someone else play it?
- ▶ Check the make/model?

THE USUAL STARTING POINTS







HAND-SELECTED

- ▶ Who selected it?
- ▶ Are you a clone?
- ▶ What was the sample size?
- ▶ Were these samples rejects from the last selector?
- ▶ Or last 10 selectors?
- ▶ Or the last 100?
- ▶ Why don't they all play well?
- ▶ Don't limit yourself to one brand



# HAND SELECTED



- ▶ What are you looking for?
- ▶ Does it play the best or leak the least?
- ▶ Resistance can be caused by leaks
- ▶ Intonation problems can be caused by leaks
- ▶ Instruments need to be professionally set up

HAND SELECTED





## Clarinet

- ▶ Go to a trusted shop
- ▶ Select from their inventory
- ▶ Work with the in-house technician
- ▶ Get the instrument playing to your specifications



BACKUN

EVETTE

SELMER PARIS

BUFFET

SELMER

YAMAHA

# SUGGESTED SELECTING



YOU'VE GOT THE INSTRUMENT  
NOW WHAT?



IT CAN'T LEAK







# CHECKING FOR LEAKS: MAG MACHINE

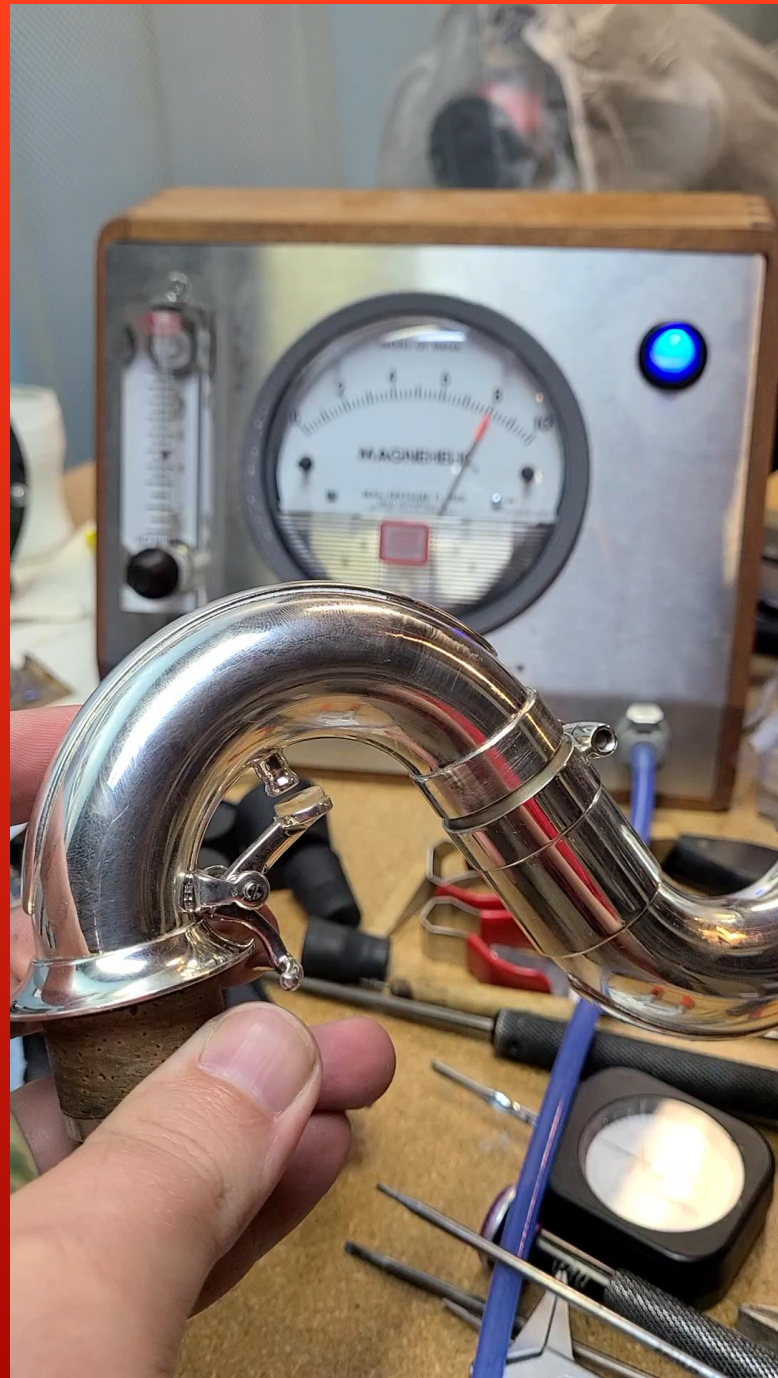


CHECKING FOR LEAKS: LEAK LIGHT



CHECKING FOR LEAKS: LEAK LIGHT



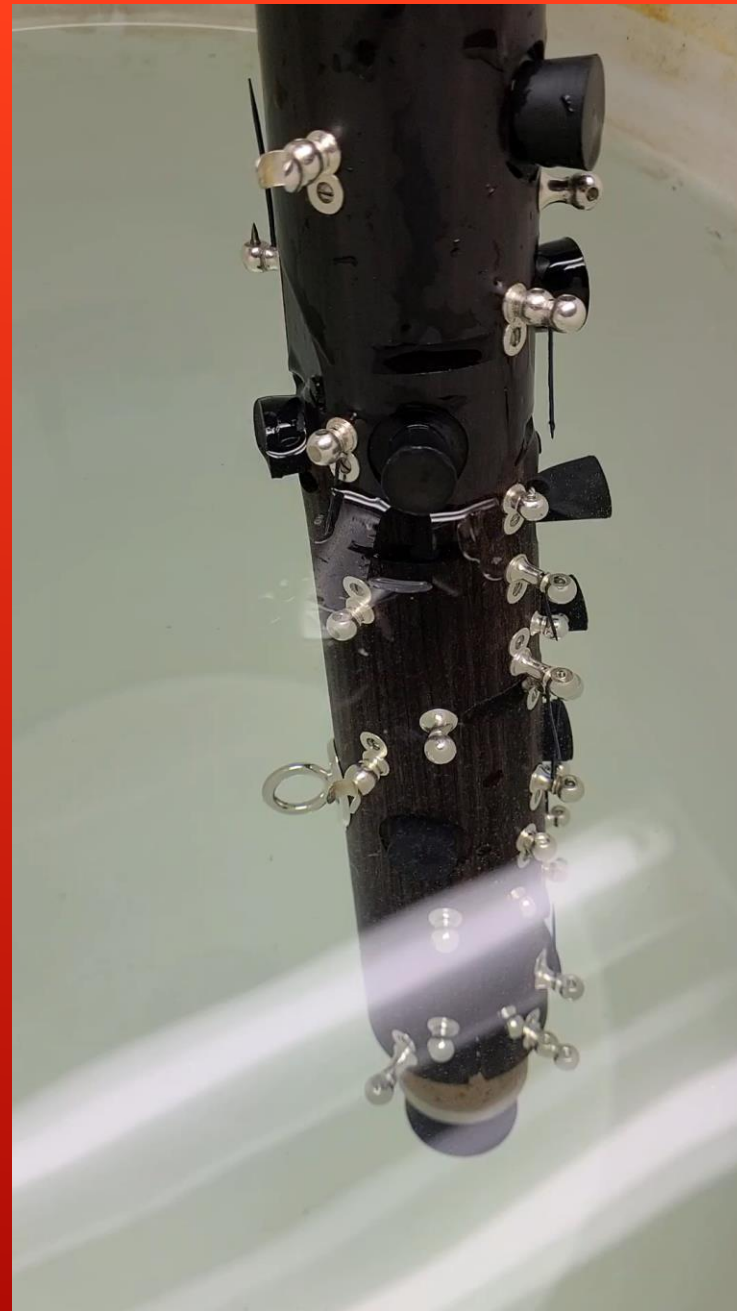


SNEAKY NECK LEAKS



SNEAKY NECK LEAKS





SNEAKY BODY LEAKS



- ▶ Check for leaks at corks
- ▶ Cork leaks can be temporarily fixed
- ▶ Tenon fit can be a large repair job



## FINDING YOUR INNER LEAK

- ▶ Your technician should be using modern tools to inspect your clarinet

# INSPECTION



- ▶ Spring tensions should be measured
- ▶ All springs should be lubricated

# SPRINGS





- ▶ Traditional pads
  - ▶ AKA Skin
  - ▶ AKA Felt
  - ▶ Don't seal as well as synthetic
  - ▶ Skin can tear
  - ▶ Skin can buzz
- ▶ Valentino Greenbacks (white)
  - ▶ Seal great!
  - ▶ Show dirt and oil

## PADS (THAT I DON'T USE MUCH)



- ▶ Valentino Greenbacks (black)

- ▶ Seal great!
- ▶ Don't show dirt/oil

- ▶ Valentino Masters

- ▶ Seal great!
- ▶ Positive, firm feel

PADS (THAT I USE A LOT)



- ▶ Cork

- ▶ Great seal
- ▶ Last a long time
- ▶ Can be more stable than the instrument
- ▶ Extremely loud



PADS (THAT I USE SOMETIMES)



- ▶ High-quality leather pads
  - ▶ I use MusicMedic (but there are other good choices)
  - ▶ I prefer resonators whenever possible



## SAX & BASS CLARINET PADS

- ▶ RooPads

- ▶ Made from Kangaroo leather (instead of goat leather)
- ▶ Unlikely to get sticky



SAX & BASS CLARINET PADS (GETTING FANCY)

- ▶ Synthetic is superior
  - ▶ Synthetic key corks
  - ▶ Synthetic key felts
  - ▶ Teflon
- ▶ Natural cork
  - ▶ For tenon corks only

# MATERIALS







PROFESSIONAL CLEANING

- ▶ Clean tone hole build-up between cleanings
  - ▶ Cotton swab
  - ▶ Mascara brush
  - ▶ Pipe cleaner
- ▶ Sax & Bass Clarinet
  - ▶ At least wipe down the instrument occasionally
  - ▶ Use cotton swab to clean around mechanisms

**BETWEEN CLEANINGS**



- ▶ Obtain high-quality swab
  - ▶ Apply a few drops of oil to the swab
  - ▶ Run the swab through several times
  - ▶ Repeat 4x per year

- ▶ Recommended oils

- ▶ Backun Almond Oil
- ▶ Pure Almond Oil
- ▶ Valentino #18
- ▶ Naylor's

# BORE OIL





- ▶ Tone holes need to be perfect
- ▶ Don't assume it came perfect from the factory

## TONE HOLES



- ▶ Tone holes can be perfected
  - ▶ Seal with cyanoacrylate
  - ▶ Dress with special tools
  - ▶ Dress inside and outside edges

## TONE HOLES







TONE HOLES (INSIDE EDGE)





STONE HOLES (OUTSIDE EDGE)



► [https://www.youtube.com/watch?v=1\\_fa\\_h80v-w&t=171s](https://www.youtube.com/watch?v=1_fa_h80v-w&t=171s)

# SAXOPHONE TONE HOLES

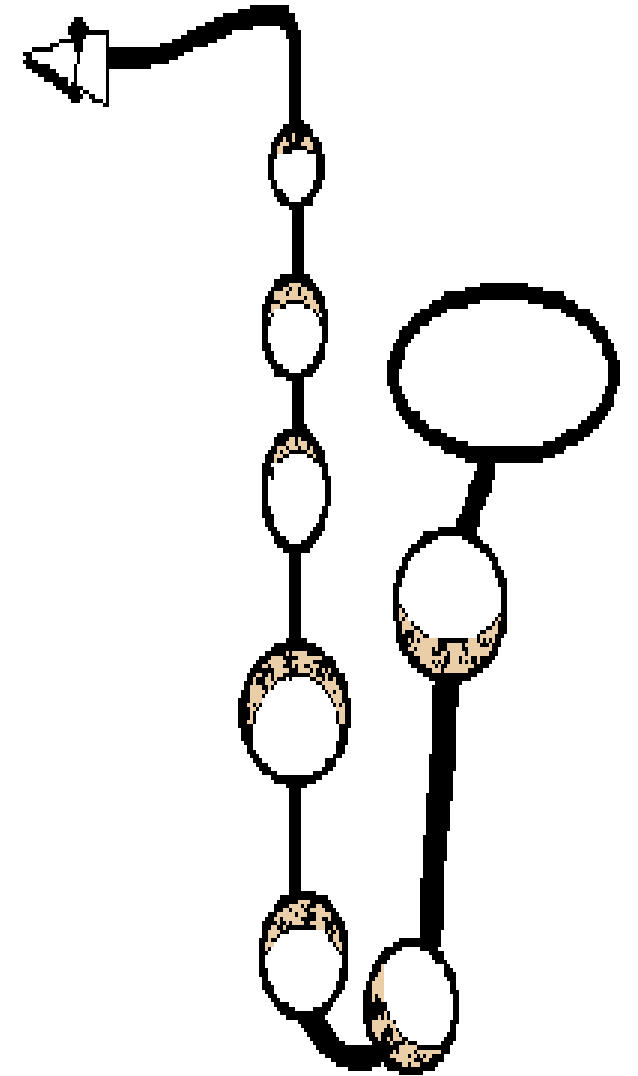


TRUING TONE HOLES

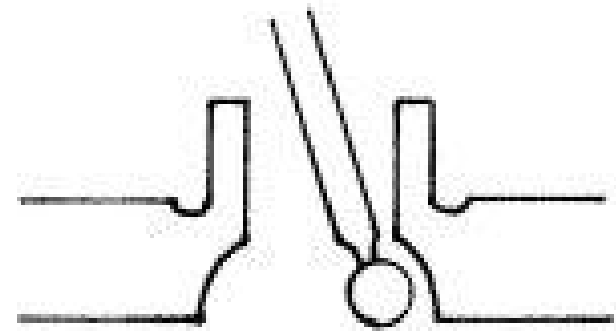
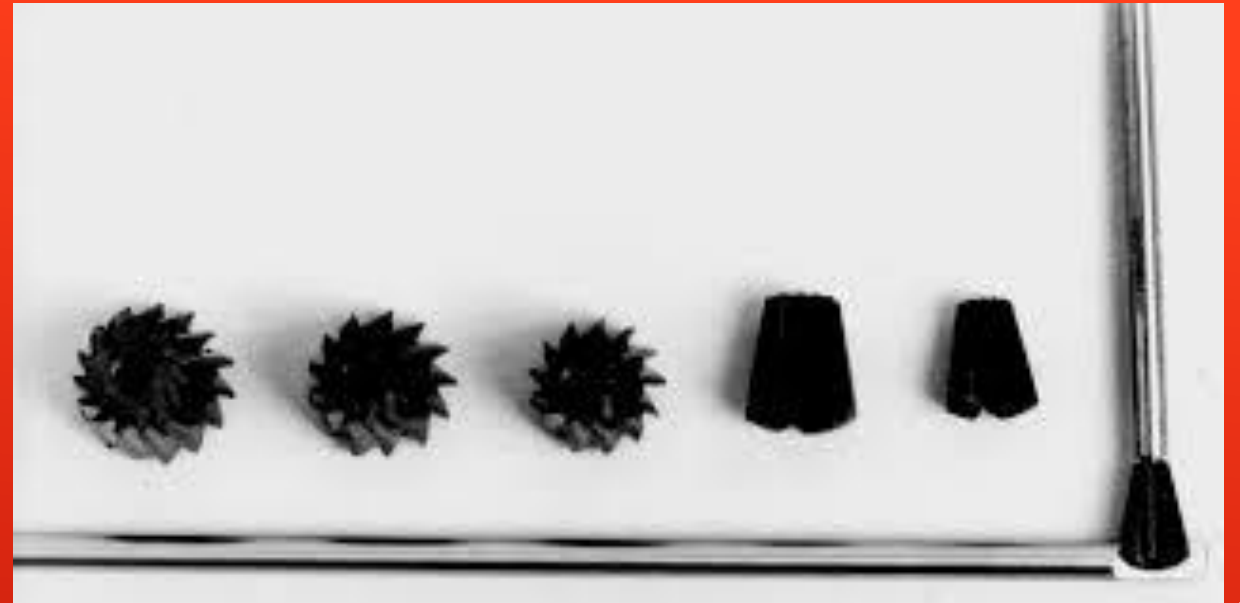


- ▶ Lowers pitch
- ▶ Will lower pitch at fundamental and the 12<sup>th</sup> on clarinets
- ▶ Will lower pitch for both octaves on saxophones

## STONE HOLE CRESCENTS



- ▶ Can be used to affect mainly the tone
- ▶ Can be used to affect mainly the fundamental
- ▶ Can be used to affect mainly the 12th



# UNDERCUTTING

▶ Not like this → → → → → → → → →



CRACK REPAIR



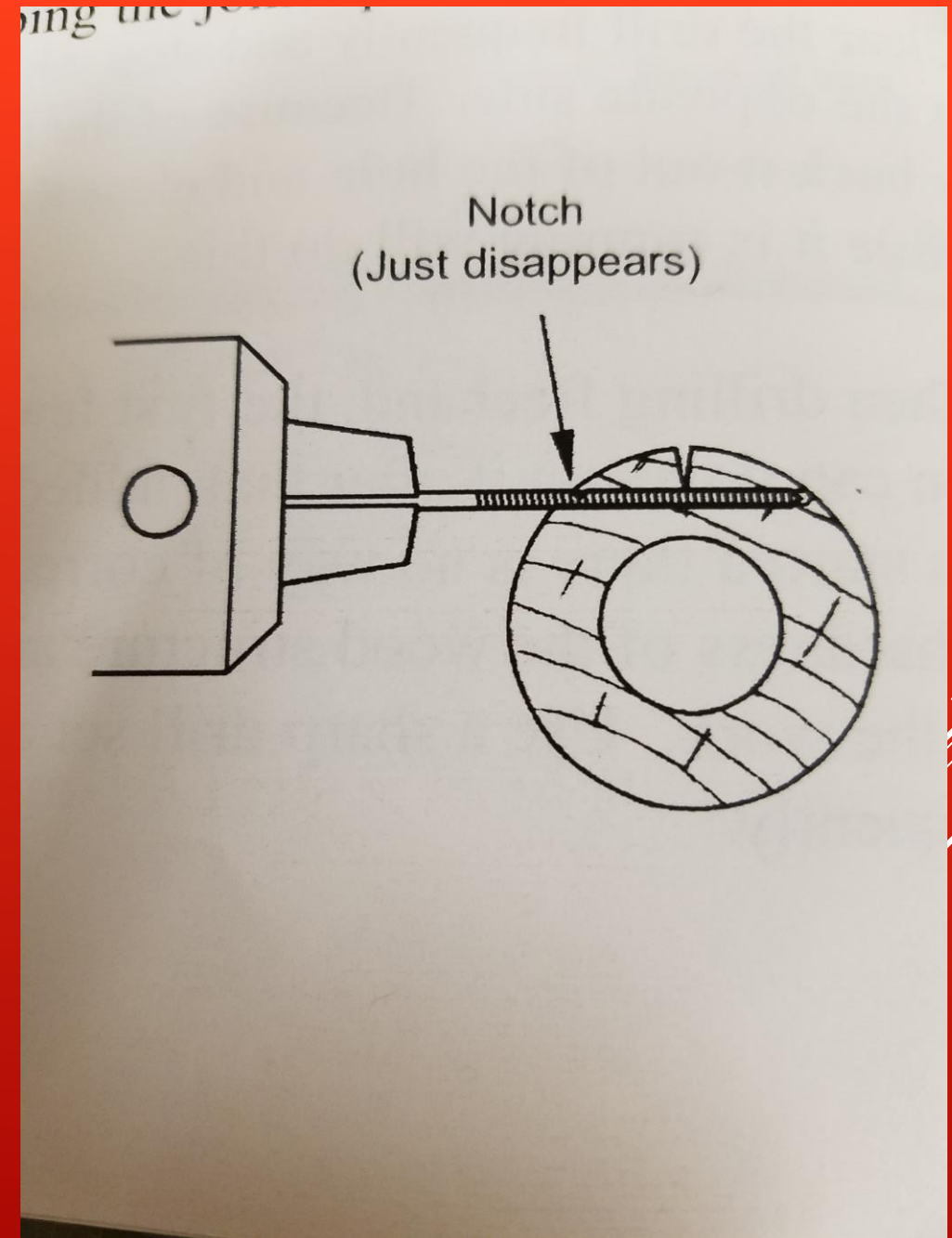
- ▶ Flush banding (the old standard)
- ▶ We've come a long way

## CRACK REPAIR



- ▶ Threaded wire (current standard)
- ▶ Does a good job, but can we do better?

## CRACK REPAIR



- ▶ Carbon fiber pinning (my standard)
  - ▶ Less invasive
  - ▶ Less stress to the instrument

## CRACK REPAIR







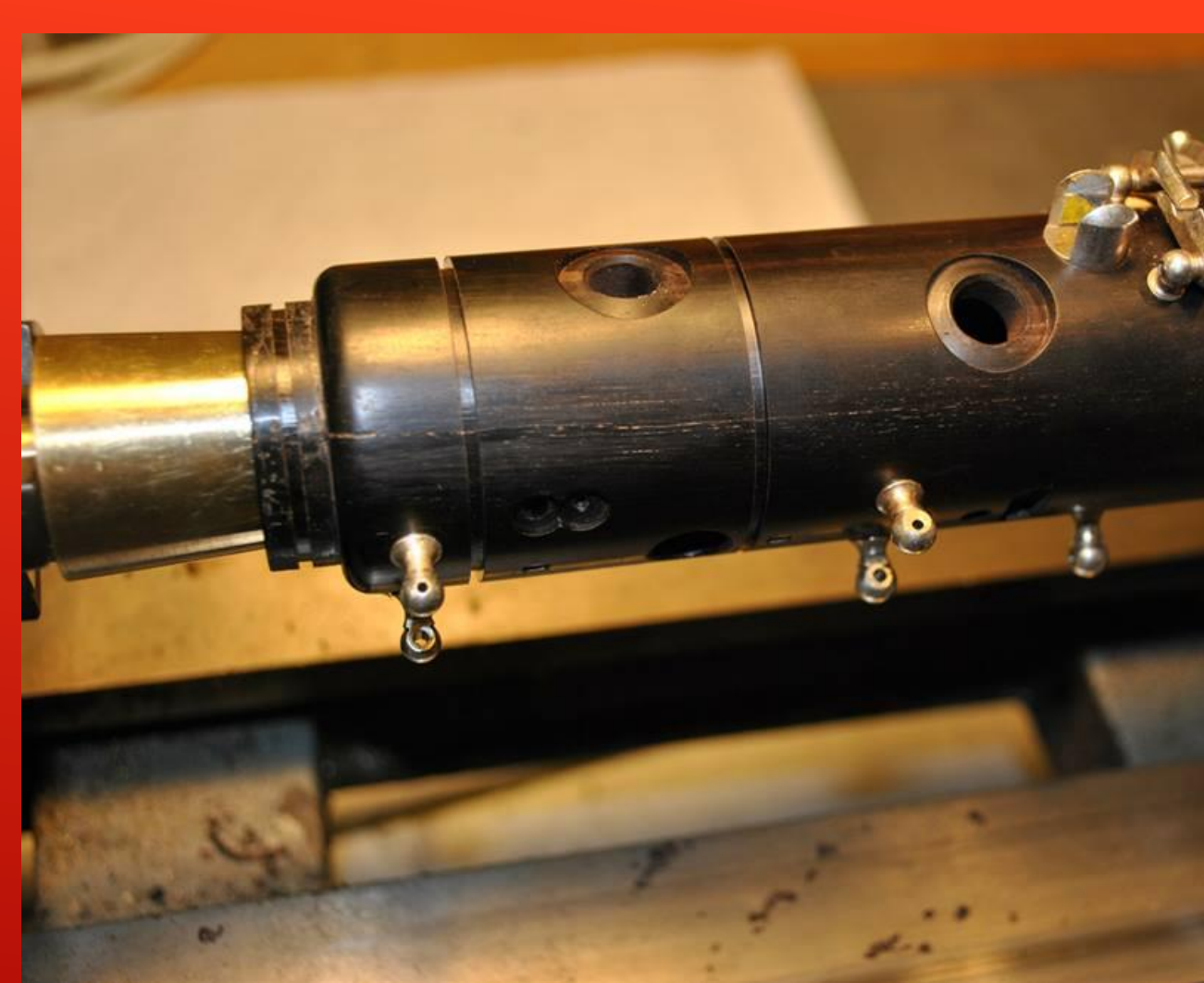


- ▶ Carbon fiber banding
  - ▶ Also a good method
  - ▶ Strong
  - ▶ Requires removing more material

## CRACK REPAIR







- ▶ Doesn't look as nice on cocobolo and rosewood

## CRACK REPAIR



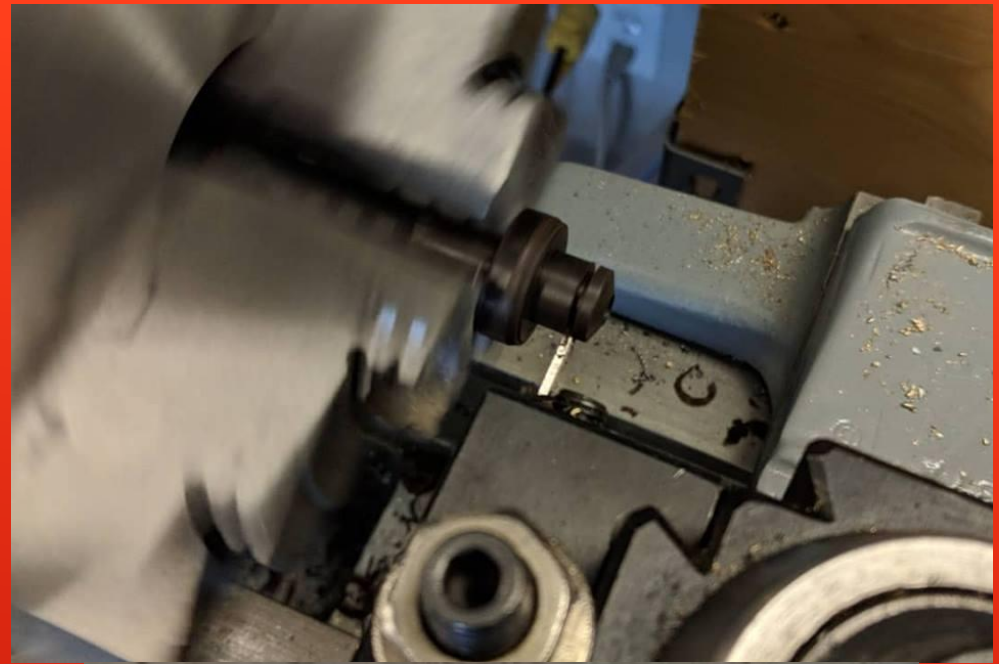
- ▶ Tone hole replacement
  - ▶ Required when cracks go through tone holes
  - ▶ A portion of the tone hole is drilled out
  - ▶ An insert is installed



## CRACK REPAIR



- ▶ A new tone hole top (bushing) is fabricated on a lathe
- ▶ Typically made from ABS plastic, or a similar material



CRACK REPAIR

- ▶ Undetectable if you didn't know to look for it



## CRACK REPAIR

- ▶ Not so bad on cocobolo or rosewood

## CRACK REPAIR





- ✓ Clean tone holes
- ✓ Bore oil
- Oil keys
- Recommend Ultimax or Hetman
  - Light/Low if disassembling
  - Heavy/High for key noise



## MAINTENANCE YOU CAN DO

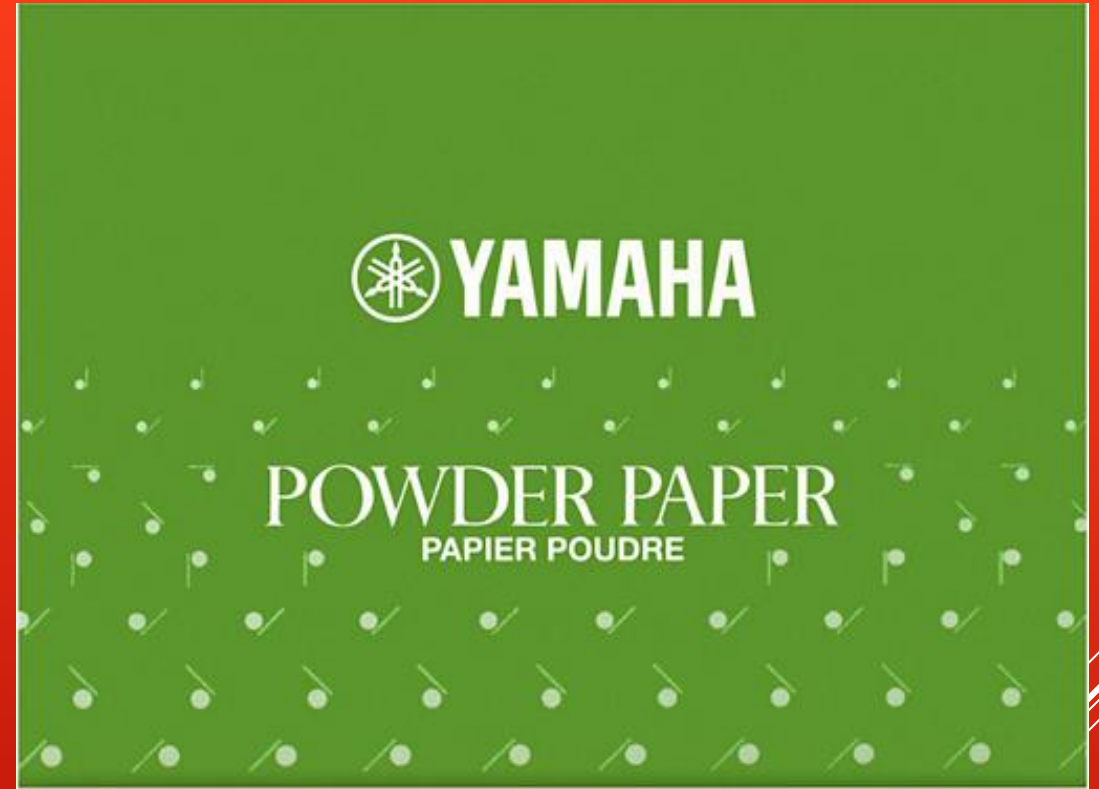


- ▶ Super glue gel
  - ▶ NOT REGULAR SUPLER GLUE
  - ▶ SERIOUSLY, not regular super glue
  - ▶ Use to re-apply key corks, felts, and pearls

MAINTENANCE YOU CAN DO



- ▶ Yamaha Powder Paper
  - ▶ Use on sticky keys



MAINTENANCE YOU CAN DO



- ▶ Emergency repair kits
  - ▶ Musicmedic.com
  - ▶ Jsmithco.com



MAINTENANCE YOU CAN DO

- ▶ Amber Melt Pellets
  - ▶ Glue pellets for pads



MAINTENANCE YOU CAN DO

- ▶ Teflon Tape

- ▶ AKA- Plumber's tape, Thread seal tape, PTFE tape
- ▶ Wrap around loose tenon corks



MAINTENANCE YOU CAN DO



- ▶ Alligator forceps for stuck swabs



MAINTENANCE YOU CAN DO

► Finding your technician



TECHNICIANS

## ▶ Technician checklist:

- ▶ Be an expert in what they are repairing
  - ▶ (They can also be an expert in other things)
- ▶ Stick to their estimates
  - ▶ Both time and cost
- ▶ Be someone you trust
- ▶ Treats you like a client (not a customer)

## ▶ Client checklist:

- ▶ Be punctual
- ▶ Follow through/follow directions
- ▶ Communicate clearly
- ▶ Be up-front
- ▶ Show respect (the same respect they show you and your clarinet)
- ▶ No trust issues
- ▶ Discuss from a player's perspective (don't try to identify the problem)

# TECHNICIANS



- ▶ Music is hard!
- ▶ Make it easier on yourself
- ▶ By getting the BEST out of your instrument

**That's one small step  
for music**



**One giant leap for  
clarinetkind**

CONCLUSION



