

# Flute/Clarinet Repair Clinic



**What you can do &  
What you should not do**

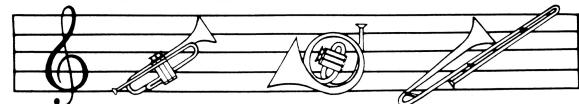
## Handout

**Monday  
April 27, 2009**

**Salisbury University  
Woodwind Methods Class**

**Salisbury Music**

**& INSTRUMENT REPAIR**



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# Bio

Joel R. Smith  
Owner/Repairman  
Salisbury Music & Instrument Repair

Joel graduated from James M. Bennett Sr. HS in 1982. After graduation, he enrolled in The Eastern School of Musical Instrument Repair, located in Irvington, NJ. While at Eastern, Joel worked in the repair shop at City Music Center, a large 2-store music company based in Union, NJ. Studying under Fred Kirschner at Eastern, he learned how to repair brass and woodwind musical instruments, graduating in August of 1983.

In the fall of 1983, Joel, and his parents, Dr. & Mrs. Charles F. Smith Jr., opened Salisbury Music & Instrument Repair in Salisbury, MD. Since that time, Salisbury Music has grown into one of the primary music stores on the lower Eastern Shore, offering the rental, repair, and sales of school band instruments and their related accessories and music.

Joel is a Member of NAPBIRT, the National Association of Band Instrument Repair Technicians, and has attended regional NAPBIRT clinics, as well as attended Yamaha's Musical Instrument Service Training in Grand Rapids Michigan. He has also toured the King Brass Instrument Factory in Eastlake, OH (since closed), and the Yamaha Band Instrument Factory in Grand Rapids, MI (since closed).

# What to Look for First

## Flutes

1. Check to make sure everything looks like it's working OK
  - keys working properly
  - springs all hooked correctly
2. Head cork
3. C Key Rod – either too tight or too loose
4. Missing or torn pads
5. Is the main body bent?

## Clarinets

1. Check the reed
2. Check for chips in the mouthpiece (especially the tip area)
3. Check to make sure everything looks like it's working OK
  - keys working properly
  - springs all hooked correctly
4. Missing or torn pads

## Important Points

1. Knowing what keys are supposed to stay up, what keys are supposed to stay down
2. Have your own mouthpieces & reeds to “play test” an instrument
3. Gravity is very bad for band instruments

### On a related note

Check the interior of a sax body for missing mouthpieces, ligatures, mouthpiece caps, reeds, etc....

# What You Can Do in an Emergency

## Clarinet Tenons

1. White Teflon plumbers tape

## Pads/Keys

1. Seal off tone hole with black electrical tape (good quality)
  - especially good for trill key pads
2. Attempt to re-glue pad
  - be careful not to burn the pad or the instrument
3. For Torn Pad
  - cut a circle of electrical tape and adhere to face of pad
4. Valentino Self-Adhesive Pads
  - Pros/Cons

## Sticking/Sluggish Keys

1. key oil
2. back off pivot screw(s) a touch
3. remove rod/clean/oil/reassemble < **BE CAREFUL**

## Sticking Flute Tenons

1. Use valve oil and a rag to clean both parts of the tenon
  - (*flute tenons & sax necks should not be lubricated*)

## Loose head cork on flutes

1. Wrap in White Teflon plumbers tape
2. Douse in valve oil and light on fire <**BE CAREFUL**

## Broken springs

1. Use a rubber band to hold key down or hold key open

## Clicks/Noisy Key Action

1. Oil the key
2. Look for a missing cork/felt

# What You Should Not Do

*Old Repair Adage*

***-Don't attempt anything that you can't get yourself out of***

1. Don't adjust flute/oboe regulation screws
2. Don't force things
3. Don't make things worse
4. Don't use alcohol to "sterilize" plastic clarinets
5. Know your limitations (*especially with a student's instrument*)

# Good Repairman Communication

1. Try to be specific about the problem(s) you want fixed
2. Understand that "playing condition" can cover a wide variation of work to be done
3. If you have an upper price limit, be sure to state it
4. Don't expect miracles. A 30 year old bass clarinet that hasn't been cared for properly doesn't stand a very good chance of ever playing well, or the cost of repair could vastly exceed your budget.
5. Get parental permission before sending in a student's instrument.
6. Don't abuse the "***I need it now/in an hour/by tomorrow***" line
7. Understand that quality repairs cost money. Repair tools & supplies are expensive, in some cases VERY expensive.

# Student/Instrument Issues that Lead to Repair Problems

1. Sax end plugs
2. Straps left on saxes
3. Mouthpiece covers
4. Removing reeds from mouthpieces
5. Stuff in cases that prevent case from closing properly
6. Putting Bass Clarinets in case backwards
7. Swabbing
8. Regular cleaning of mouthpieces
9. Removing sax mouthpieces from sax necks

# **“Inexpensive” Instruments**

## **(Instrument Shaped Objects)**

1. Intonation Issues (sometimes severe)
2. Keys bend too easily (won't stay in adjustment)
3. Key fit/lost motion
4. Poorly engineered/Under-engineered
5. Parts not available or hard to get
6. Some repair shops **WON'T** work on ISO's, they will have an “approved” list of brands that they will work on. Other repair shops will charge extra for the aggravation factor.

# **Basic Band Director Repair Kit**

1. Assorted Screw Drivers (mostly slotted, but some Phillips)
2. Spring Hook
3. Key oil
4. Valve/tuning slide grease
5. Black Electrical Tape
6. White Teflon Tape
7. Hot glue stick(s)
8. Lighter
9. Mouthpiece puller (for trumpet & trombone)
10. Valve cleaning rod
11. Flute cleaning rod
12. Brass & WW mouthpiece brushes
13. Clear finger nail polish
14. Rubber bands
15. Small cable ties
16. Pipe cleaners