INSTRUMENT REPAIR

QUICK AND SIMPLE FIXES WHEN YOU CAN'T GET A PROFESSIONAL

**Warning: not all solutions are permanent**
YOUR WORST NIGHTMARE:

The concert is tonight and a student broke their instrument.
There’s no time to get it fixed by a professional.

NOW WHAT?!
WHAT YOU NEED IN YOUR TOOLBOX
EVERYDAY OBJECTS

1. Screwdrivers of all sizes
2. Needle-nose pliers
3. Electrical and Scotch tape
4. Scissors
5. Sandpaper
6. Strong, small-gauge cording
7. Lighter
8. Hard wax (orthodontic or similar)
9. Cigarette paper
10. Office paper
**ADDITIONAL TOOLS**

- Mouthpiece Puller
- Sound Post Setter- can be homemade (see later slide for instructions)
- Replacement corks and pads
- Pad and cork glue
- Extra instrument screws
- And many more
USES FOR YOUR 10 TOOLS #1

Screwdrivers of all sizes:

1. Woodwind, many percussion, and some brass instruments have screws that are in danger of becoming loose.
2. Used to scrape off residue of corks needing replacement
3. Used to reach pins on woodwind keys to bend back into place.
USES FOR YOUR 10 TOOLS #2

Needle Nose Pliers

1. Bend keys back to their original position
2. Get a firmer grip on small and/or hard to reach objects (pins, loose cork, etc.)
3. Turn exposed screws with worn head (screw driver is not able to turn)

**To ensure that the pliers do not damage keys, cover the prongs with electrical tape.
USES FOR YOUR 10 TOOLS #3

Electrical Tape

1. Temporarily replace corks and add at key mechanism intersections (such as the clarinet bridge).

2. Also functions as a cushion on teeth for clarinet and saxophone players.

**Scotch tape can be used in places where black tape would be too conspicuous, but does not offer the same amount of grip.**
USES FOR YOUR 10 TOOLS #4

Scissors
1. Cutting things.
2. Shaving down cork.
USES FOR YOUR 10 TOOLS #5

Sandpaper (fine)
1. Quickly turns hard reeds into softer, playable reeds.
2. Sand down corks.
3. Can sometimes be used to smooth out jagged key rings.
USES FOR YOUR 10 TOOLS #6

Strong, Small-gauge Cording
1. Restraining rotary valves.
2. Binding corks, increasing stability of joints (floss works also).
USES FOR YOUR 10 TOOLS #7

Lighter
1. Reactivate pad glue (only use on worn instruments- may leave mark).
2. Prevent ends of cording from fraying (nylon, not cotton).
Uses for Your 10 Tools #8

Hard Wax (orthodontic or similar)

1. Temporarily fills deep cracks in wood to prevent air from leaking from the bore.
2. Reduces friction between moving metal mechanisms.
3. Also gives comfort to those students with orthodontia.
USES FOR YOUR 10 TOOLS #9

Cigarette Paper

1. Collects moisture from pads better than regular paper. Some recommend dollar bills, but they can leave residue.

2. Many music stores sell pad paper, but it is not as absorbent as cigarette paper.
USES FOR YOUR 10 TOOLS #10

Office Paper
1. Can function as a slight cushion to cork joints.
2. Used as tracing paper when cutting cork into shapes
3. Folding origami provides tranquility after all of these stressful repairs the day of a concert.
WHEN IS IT BEYOND DIY?

Dented brass instruments
Chipped mouthpieces
Fallen bridges that cannot be realigned
Re-hairing of a bow
Punctured drumheads
Part of the instrument is missing
When you cannot recognize what it is supposed to look like

For these, seek professional assistance.
Homemade Sound Post Setter (Violin)

Needed: 1 wire coat hanger (unwound) and pliers.

1. Mold the wire into an almost-S shape no longer than 16 inches.
2. The wire should have one sharp edge and a dull edge. Using the pliers, bend the dull end into a tight curve about the diameter of the sound post.
3. Stick the sound post with the sharp end of the wire and ease it into the treble-side F hole.
4. Maneuver it into place directly under the bridge until it stands vertically on its own.
5. When it is able to stand, release it from the tool and use the other end of the wire to adjust its position toward the treble side of the bridge, about a quarter of an inch towards the tailpiece. It will need a lot of adjusting.