Tools

- Smooth Jaw Parallel Pliers Ferree's Tools F61A https://www.ferreestoolsinc.com/collections/pliers/products/f61-parallel-actionpliers Smooth Jaw Flat Nose Pliers JL Smith small pliers https://www.jlsmithco.com/product/jls-small-flat-nose-pliers/ Rawhide Mallet(s) <mark>o 1", 1 ½"</mark> Comfortable Screwdrivers that fit instrument screws o https://www.musicmedic.com/woodwind-screwdriver.html Size B, C, D, E, F Or Wera Precision slotted screwdrivers with equivalent sizing o https://www.homedepot.com/p/Stanley-Precision-Screwdriver-Set-6-Piece-66-052/203713248 Compact, not as useful. Affordable • Pad Prick o https://www.ferreestoolsinc.com/collections/small-items-1/products/b1p-pad-pin-pick Useful to remove old waterkeys, etc Bobcat Mouthpiece Puller https://votawtool.com/products/bobcat-mouthpiece-puller?variant=34493980016775 LED rope light/leak light o https://www.musicmedic.com/flexi-nova-leak-light-system.html Waterkey Spring installing tool https://www.jlsmithco.com/product/jls-waterkey-spring-tool/ LIFESAVER when waterkeys pop off Spring Hook o https://www.jlsmithco.com/product/jls-spring-hook/ Headjoint cork measuring stick • Cleaning rod... Use the inscribed line at the other end to check HJ cork distance Mouthpiece Shank Dent Tool https://www.ferreestoolsinc.com/products/n15-mouthpiece-shank-arbor .
- Screw Holding Screwdriver
 - <u>https://www.ferreestoolsinc.com/collections/woodwind-supplies/products/f70-screw-holding-screwdriver</u>
- Tweezers to install or remove adjustment materials
 - <u>https://www.amazon.com/Precision-Anti-Static-Electronics-Laboratory-Jewelry-Making/dp/B07RNVXXV1</u>
- Blazer ES1000/Spitfire Butane Torch
 - o <u>http://blazerproducts.com/the-new-spitfire-micro-torch.html</u>
- Clarinet Pad Slick
 - o https://www.ferreestoolsinc.com/products/e33-clarinet-pad-leveling-tool

Highlighted = Highly recommend

Supplies

- JLS Directors Waterkey Cork assortment
 - o https://www.jlsmithco.com/product/jls-directors-waterkey-cork-assortment/
- Painter's Tape
 - <mark>o Blue, ½"</mark>
- Small Zip Ties
- Super Glue
 - https://www.homedepot.com/p/Loctite-Super-Glue-0-14-oz-Gel-Control-Clear-Applicator-each-234790/100371839
 - For keycorks. Not for tenon corks!
- Paper Clips
 - For missing screws/rods Temp fix!
- Mouthpiece Spray
 - Mint Isopropyl Alcohol for Brass
 - Sterisol for plastic and hard rubber mouthpieces
- Soft Bristle Pipe Cleaners
- Hetmans or similar Synthetic Valve, Rotor, Key, Slide Oil + Greases
- Bach Tuning Slide Grease
 - o The Pink Stuff
- Cork Grease
 - o D'addario all natural or similar
- Sugru
 - o https://sugru.com/buy/sugru-mouldable-glue-by-tesa-3-pack-black
 - Use to make removable key risers for smaller hands shape and mold to fit, let cure
- Rotor Cord
 - o https://www.ferreestoolsinc.com/products/d40-french-horn-cord
 - Cut @ 45 degree angle for ease of installing, ~8" length.
- French Horn/Trombone/Tuba Stick Cork
 - <u>https://www.ferreestoolsinc.com/collections/cork-and-felt/products/a18-french-horn-straight-</u> corks?variant=39249289805872
- Bumper Felts
 - $\circ~$ Get from your local tech no need to stock dozens of each size
- Hot melt glue for WW pads, Bumper Felts/waterkey corks
 - o https://www.jlsmithco.com/product/amber-melt-glue-stick/
- Q Tips
- High quality sandpaper 220, 320 grit
 - 3M product w/ smooth backing
- Valve guides for your most common make+model of brass instruments
 - o 3d modeling/computer class, have them model your existing valve guides and print in ABS
- Razor Blades
 https
 - https://www.razorbladeco.com/62-0161-gem-carbon-steel-extra-sharp
 - Cutting cork, rotor cord, bumper felts, bumper corks, etc. Fresh blade each time
- Small cutting mat

Most of the above tools and supplies are included in the Directors Combination Fix Kit, plus peel + stick woodwind pads and some additional tools. Highlighted = Highly recommend

References/Books

- Complete Woodwind Repair Manual by Reg Thorpe
 - o https://napbirt.org/store/viewproduct.aspx?id=15265455
- Percussion Repair Manual by Aaron Moss
 - o https://napbirt.org/store/viewproduct.aspx?id=16514577
- Guide to Brass Musical Instrument Repair by Christopher Bluemel
 - o https://www.jwpepper.com/Guide-to-Brass-Musical-Instrument-Repair/10316755.item
- DIY leak light
 - o <u>http://www.shwoodwind.co.uk/HandyHints/leaklight.htm</u>
 - <u>https://youtube.com/watch?v=h_COXE-iOjI</u> USB Sax Leak Light
- Ferree's Tools
 - o <u>www.ferreestoolsinc.com</u>
- JL Smith Co
 - o <u>www.jlsmithco.com</u>
- Votaw Tool
 - o <u>www.votawtoolco.com</u>
- NAPBIRT
 - o <u>www.napbirt.org</u>