

Common Instrument Problems

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Each week we see a variety of interesting and challenging repairs in our shop. This document will explain some of the less interesting things that we encounter that often can be addressed by the instrument's owner and save lost time, a trip to the music store and a repair fee.

Woodwinds

- If a key is not returning to its resting position, check to ensure that the spring is in its appropriate cradle on the key. If it's not, use an inexpensive spring hook to maneuver the spring back to its proper location.
- If the neck on a saxophone or bass clarinet is loose, check to ensure that the neck screw has been inserted on the correct side of the socket. The screw should enter from the non-threaded side. (i.e. Bundy and Bundy II alto saxophone neck screws enter from the player's left – most others enter from the player's right)
- If an instrument is not playing properly, squeaking, or sounds out of tune, check to be sure that all the joints match. Just because a neck, foot joint, head joint, upper/lower joint, or barrel fits does not mean that it is an acoustical match. Furthermore if a joint or neck is too loose air can leak from the area causing the instrument not to play properly. **Also check the reed, mouthpiece or ligature for cracks, chips and other damage.**
- Saxophone Octave Key Adjustment
 1. When assembled, both the neck and body octave keys should be fully closed. If not, flex the bottom of the neck octave key toward the neck cork
 2. When the octave thumb lever is depressed by itself, the neck octave key should open and the body octave should remain completely closed. If the neck octave key does not open it should be flexed away from the neck cork
 3. When the octave thumb lever and the G key are depressed, the neck octave key should close completely and the body octave should open. If the neck octave key does not completely close it should be flexed toward the neck cork
 4. With the G key depressed, move the octave thumb lever – the neck octave key should stay completely closed and the body octave open. If the neck octave key opens slightly it should be flexed away from the neck cork

Brass

- If a brass instrument is difficult to blow through freely, check to be sure that the valves are in the proper order, turned the right way, and the guides are oriented correctly. Remove all the valves from the instrument and insert the 3rd valve, then the 2nd and the 1st.
 - For Yamaha euphoniums and piston tubas there are three holes on the top of the valve. One for the valve stem, one for a moisture vent and one for the valve guide tab. The valve guide tab will always go in the smaller of the two off-center holes. Also, you should always be able to see the valve number on the top of the valve with the guide installed.
 - If a trumpet valve stem becomes unscrewed from a valve this is the proper re-assembly order:
 - o Insert the valve guide through the side of the spring barrel
 - o Insert the spring ON TOP of the valve guide
 - o Screw on the valve stem
 - o Place the stem felt over the stem
 - o Place the top cap over the stem felt
 - o Screw on the finger button
 - o *Consult one of the other valves to check for the proper orientation of the valve guide
 - Consider purchasing a Bobcat mouthpiece puller for removing stuck mouthpieces. They are very user-friendly and will not damage the mouthpiece or receiver if used properly
 - If a waterkey is leaking, check to see if the waterkey screw has come loose
 - Consider purchasing an assortment of self-adhesive neoprene waterkey corks for do-it-yourself replacement
- Consider purchasing a supply of rotary valve string and a small screwdriver for restringing your own valves