PISTON VALVE INSTRUMENT CARE AND MAINTENANCE

KEEP IT CLEAN: Don't chew gum, eat, or drink softdrinks just before or while you play. Food particles, sugar and other foreign materials, when blown into an instrument, are difficult to dislodge, and eventually affect playing qualities. If you do eat just before playing, rinse your mouth thoroughly with water.

Playing your instrument will inevitably leave deposits on the inside. These will build up over a period of time and make the bore smaller, changing the tone of the instrument. Clean the inside of the tubing at least once every two months.

PLAYERS Care Kits contain all the Oils, Greases, Brushes, Polishing Cloths, etc. needed to perform necessary maintenance on your instrument.

CLEANING YOUR INSTRUMENT - To help loosen dirt particles, pour a cup of *luke-warm* water into the bell. Operate valves while shaking your instrument, then drain. Blow out excess water through keys. A *few drops* of liquid detergent, be sure to rinse thoroughly with clearwater to prevent gumming of valves or slides. Never use any ammonia-type cleaner or hot water. It could damage the lacquer finish. Trombone bell and slide sections must be cleaned separately. Valve-instrument slides and crooks should be cleaned every three to six months. Use either a bore brush, or a bore cleaning kit.

For trombone slides, follow the method described above using a trombone bore brush. Trombone slides are easily damaged, so handle them very carefully when cleaning.

PISTON VALVES (*IMPORTANT*) - To clean piston valves, remove pistons. Wash the pistons and the inside of casings with liquid dish soap. Pistons are easily dented, so handle them carefully. Rinse, then dry with clean cloth. Lubricate and reassemble. Be sure to get each piston in the proper casing. Number One casing is the nearest to the mouthpiece; Number Three, the bell. Each piston is numbered.

An experienced repairman can quickly check your instrument's condition, and an inexpensive, early repair can often eliminate costly major repair or overhauls. Due to the complex and delicate instruction of instruments, it is best not to attempt any adjustments or repairs. The instrument should be checked and adjusted only by a competent repairman at least twice a year.





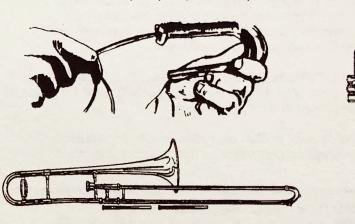


ROTOR VALVES - Don't take apart. Use rotor valve lubricant. Remove the tuning slide and turn the valve upside down. Pour a small amount of the oil into the valve through the tuning slide tubes and work the valve so that the oil will reach the bearing. Rotor valves should be lubricated frequently for longer service. For cleaning, bring your instrument to your nearest local repair shop.

TUNING AND VALVE SLIDES (IMPORTANT) - Lubricate these slides at least once a month with tuning slide grease. A small amount applied to sliding surfaces of the slides will keep them in fine condition and will prevent sticking. Notes: If slides are stuck, don't try loosen them. Bring them to your nearest local instrument repair shop.

TROMBONE SLIDES - Wash slides regularly. Apply a small amount of slide oil, work the slides to distribute lubrication, then wipe off the excess at the joint. Don't work slides when they are dry.

Only an expert should examine and repair a dented slide or a vaive that sticks. They are precision components, fitted to close tolerances, and should be serviced by only a qualified repairman.



NOW REASSEMBLE THE INSTRUMENT - Apply three to four drops of valve oil to each piston and insert into the valve casing. Be sure that the piston numbers correspond to the casing into which they are inserted. A light film of slide grease can be used on slides and threaded parts to prevent binding.

IMPORTANT II

Usually valve guides have one side larger than the other, and fit in only one way. Be sure to line guides up properly when inserting valves.