

Ted,

The inner tubes were not parallel. When laid on a flat surface, one inner tube did lay flat, however, the other inner tube aimed upwards. Neither of the inner tubes was straight. The upper, mouthpiece side, inner tube had curving both upwards and downwards. This tube had damage from the bell, a bell dent. This area was out of round.

The inner tubes have been straightened and rounded. I adjusted the left hand brace bar to ensure that the inner tubes are parallel, and each one is centered in its respective outer tube.

Both of the outer tubes had bowing. The upper, slide lock side, outer tube had bowing upwards. This tube also had damage from the bell. This area was out of round. The lower, water key side, outer tube had bowing mostly to the left, towards the bell section, and downwards. There were several small dents on this tube as well.

I disassembled the outer part of the hand slide to relieve the tension on the outer tubes. While apart I straightened and rounded the outer tubes, and removed any dents. I corrected the geometry during the reassembly process.

Please rest the bell of the horn on your left leg or a trombone stand when not playing.

You are going to notice a scratchy sound with the use of the slide. I have corrected the geometry of the slide. This has changed the wear pattern of the tubes. The slide has been wearing incorrectly for however many years. Even though the geometry has been corrected, the change in the wear pattern has resulted in a scratchy sound. This will gradually disappear as the slide is used and, for lack of a better term, 'breaks in' to the new and corrected action of the slide. The more frequently the slide is used, the quicker the scratchy sound will lessen until it disappears completely. Get some 0000 Grade Steel Wool to occasionally clean the worn areas on the inner tube stockings.

The areas that were heated to disassemble the hand slide burned the lacquer. Those areas were cleaned and spot lacquered to protect the brass.

The *Great Slide Polymer Cleaning Polish and Slickcoat Sealant* has been applied to the inside of the outer tubes. It is a combination of natural and synthetic polymers that greatly enhance slide action. Please read the enclosed 'Discharge Instructions' for further detailed information. Additionally, *Great Slide Polymer Cleaning Polish and Slickcoat Sealant* has been applied to the outside of the outer tubes to remove oxidation, dust, etc. and provide a finishing shine and sealant to protect the lacquer.

I aligned the water key, replaced the water key pad and spring, replaced the rubber bumper on the crook guard, and replaced the felts in each cork barrel.

Thank you,



Ray Splawn,
The Slide Doctor