Yamaha piston instruments are equipped with plastic valve guides. The part number for the newest plastic guide with metal insert is G0141093. There is a metal valve guide #G0141093N which has limited availability.

The following diagram shows the assembly procedure for the piston assembly.

**Assembly tips for tuba pistons**

1. Make sure the guide pin on the bottom of the plastic guide fits into the smallest hole on the top of the piston. The other larger hole is an air vent.

2. Put a very small drop of low strength Lock Tight on the threads (in the top of the piston) before installing the valve stem. This will help keep the stem from coming unscrewed, which causes the guide to come loose and spin around on the piston.

3. Just before tightening the stem, push the plastic guide with your thumb so that the guide tip sticks out over the piston far enough to work but not so far that it rubs the guide slot wall.

4. After oiling, place the piston very carefully back into the casing aligning the guide tip with the guide channel inside the casing. Make sure the piston is all the way in before screwing down the top valve cap.

We encourage you to pass this information on to band directors and their students in order to properly maintain their Yamaha instruments.