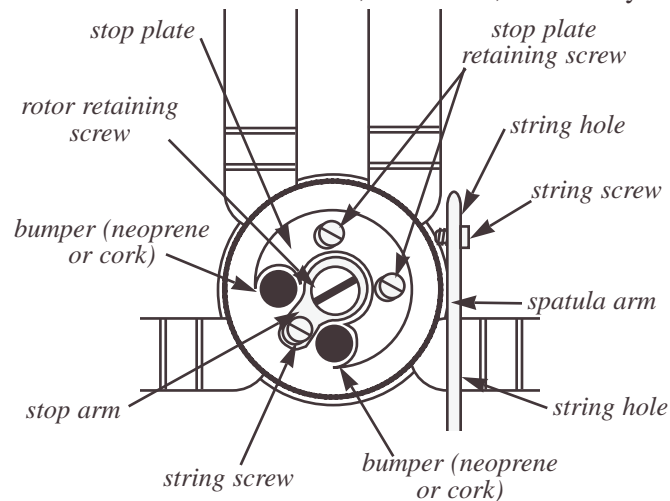




Studio of Andrew B. Spang

# Stringing Rotary Valves

A very necessary skill for the complete brass player is the ability to string your own rotary valves. Whether done backstage as an emergency repair right before a performance or as preventative maintenance after a serious cleaning session, being able to confidently restring your valves can save a lot of stress, headaches, and money.



You will need the following supplies:

- A small screwdriver (check the screws on your valves: slotted or Phillips)
- A pair of sharp scissors
- Some Fly Line Backing (Braided Nylon, 50 lb. wt.)
- A lighter
- *optional*: a french horn stringing jig
- *optional*: two popsicle sticks & tape

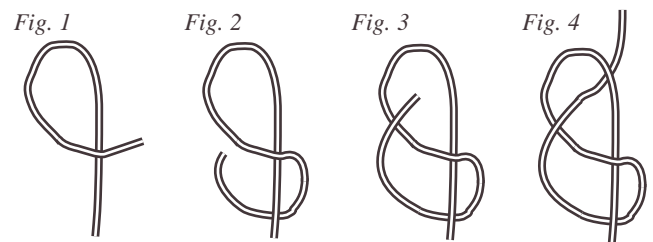
If you would like to keep the spatulas aligned (the same height when up) use a french horn stringing jig, or place one popsicle stick on the spatulas where your fingertips usually rest and another beneath it on the other side of the spatulas. Secure together with tape.

A rotary valve has several small screws. Be very careful loosening these screws: they can be very hard to replace if lost, and often pulling on the string somewhere else can loosen the screw more than you expected. First loosen the two string screws and remove the old string.

Cut a 5- or 6-inch piece of Fly Line Backing (the string). Seal each end of the fishing line by lighting it and then pinching the end to melt the strands together. (Please note: if you are using a blended fiber or actual string, this usually will not work.) This insures that the fishing line will not fray, become thin and break.

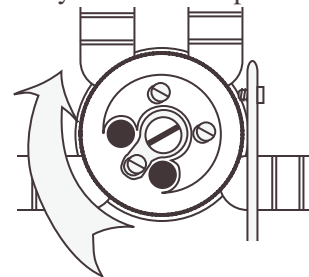
Next, tie a knot in one end. While any knot bigger than the *string hole* will work, I recommend utilizing a

*figure-8 knot*. To tie a *figure-8 knot*, loop the string over then back under (Fig. 1, Fig. 2). Next, pass the string



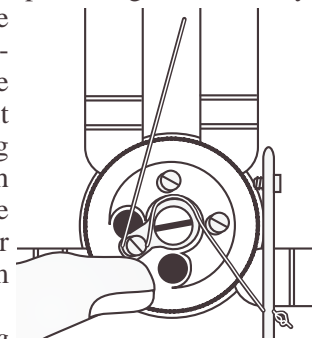
through the first loop (Fig. 3) and pull tight (Fig. 4). A *figure-8 knot* constantly pulls itself tighter and is least likely to become undone.

Spin the *stop arm* up into position and hold it in place with your thumb. Spin it towards the end of the *spatula*.



Insert the untied end of the string into the *string hole* opposite the valve and pull through towards the valve. Send the string up between the *spatula* and the *rotor stop arm*. Loop it around the cylinder, down between the *string screw* and the *rotor*

*retaining screw*, and around the *string screw*. Pass the string around the cylinder and pull it tight. Carefully tighten the *string screw* on the *stop arm* with your screwdriver. You do not need to knot the string as the screw will hold it in place. Next, pass the string under itself and back through the *spatula string hole* near the end. Passing the string under itself helps keep the string from rolling off the cylinder.



Once through the *string hole*, loop the string around the *string screw* and pull snug. Use your screwdriver to tighten the *string screw* and hold the string tight. Again, no knot is necessary as the screw will hold it in place. Trim off the excess (not too short, this will make it hard to re-tie if necessary) and seal the end with the lighter. Finally, check your valve to make sure it moves freely and you're done! ■

