

Repairing a sticky needle valve

If the needle valve on your Huky IR burner is sticky, you can take it apart and lubricate it so that it operates smoothly. There is a small O-ring on the stem of the needle valve that won't operate smoothly if it dries out. It's the smaller O-ring closer to the tip of the needle in the photo below. The larger one helps to seal the packing assembly in the body of the valve.



1. To remove the valve first remove blue knob and locking nut from the needle valve stem. You will need a hex key to loosen the set screw in the knob.



2. Remove the two 1/8" compression fittings from the valve inlet and outlet. It's best to remove the longer copper tubing first. The longer tubing gives the pipe more flexibility which facilitates removing the nut. Once the nut has been backed off far enough to remove the tube from the valve, there will be nothing to impede the removal of the shorter 1/8" tubing.



3. Remove the nut that fastens the body of the valve to the burner housing. This will allow you to remove the valve.



4. Remove the packing nut from the valve. If you have a vice that should make things easier. I was able to put a box end wrench on the packing nut and an adjustable wrench on the square section of the valve body. The packing nut had joint compound on the threads. I didn't have any but used Teflon tape when I screwed it back in. If you use Teflon tape you must be very careful not to allow any excess tape to drape around the end of the threads which could block the opening.



5. Thoroughly clean the moving parts of the assembly by screwing the stem in as far as it will go. This exposes the stem and needle with the O-ring (see the first photo). After cleaning apply a small amount of Dow 111 to the O-ring.

6. When you re-assemble the valve it's probably best to use pipe joint compound. Maybe someone here can answer that for sure.

7. After reassembling the packing, reattach the valve to the burner housing with the retaining nut.

8. First re-attach the shorter 1/8" copper compression fitting, then the longer one.

9. Re-attach locking nut and blue adjusting knob to the stem. Use hex key to tighten the set screw in the knob.