



Instructions for replacing valves and cleaning



Series:
62000 - 92000
LP Gas



Tools required:

- #2 Phillips screw driver
- 9/16 open wrench
- 7/16 open end wrench
- 10mm open end wrench
- 12mm open end wrench
- Pliers
- Pipe cleaner
- Non abrasive scouring pad
- Bottle brush
- Air hose or can of compressed air
- Rubber gloves
- Leak testing solution 1 part liquid soap and 3 parts water

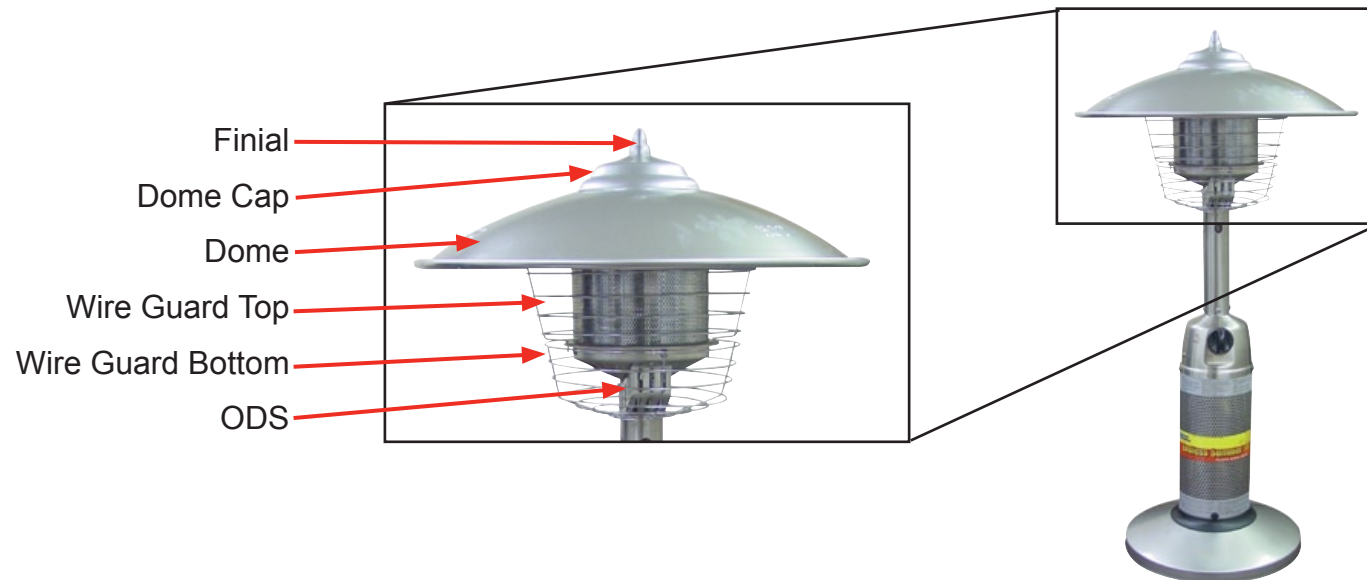
DANGERS and *Cautions*

- 1. Installation and repair should be done by a qualified service person.**
- 2. Use only Blue Rhino Global Sourcing, LLC. factory authorized parts. The use of any part that is not factory authorized can be dangerous. This will also void your warranty. Contact 1.800.762.1142.**
- 3. Do not use flammable solutions or material to clean heater or heater parts. Use only warm soapy water to clean outside of heater.**
- 4. Do not submerge control valve in water.**



Steps 1-3

1. Remove LP cylinder or extension hose from the base of the unit.
2. Remove dome and top wire guard.
3. Remove the dome by unscrewing the decorative finial and the dome cap and unscrewing (you may need the pliers here) the three nuts in the dome.



Step 4



Remove the engine from the shroud (cylinder housing) by removing the 4 Phillips screws.



Step 5



1. Remove the top wire guard by lifting it straight up.
2. Remove the 4 screws holding the emitter screen to the emitter bottom.
3. Remove the emitter by lifting it straight up.



Step 6



1. Remove the 3 screws holding the bottom wire guard.
2. Slide the wire guard down.



Step 7



1. Remove the 2 small screws located in 2 of the four oblong holes.
2. Remove the 2 small screws on the emitter bottom.
3. Slide the burner out.



Step 8



Remove the ODS Cage by removing the screw.



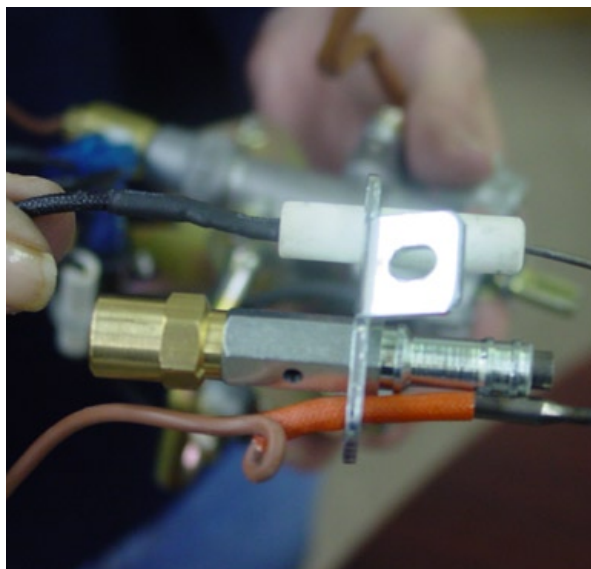
Step 9



Remove the ODS Pilot by unscrewing the screw.



Step 10



1. Remove the 4 Phillips screws holding the post to the valve housing and slide the post up.
2. Remove the pilot supply tube using the # 10 mm and the #12 mm wrenches. Hold the pilot orifice with the #12mm wench. Using the #10 remove the pilot supply tube.
3. Remove the pilot orifice by using the #12 mm and #10 mm wrenches. Hold the hex tube part of the pilot with the #10 mm wrench. Using the #12 mm wrench remove the pilot orifice.
4. With the pilot orifice removed insert the pipe cleaner into the pilot body and through the pilot hood making sure to clean both openings on the pilot hood. You can follow up by blowing some air through the pilot body.



Step 11



1. Remove the control knob
2. Remove the two small screws behind the knob
3. Remove the two screws on either side of the valve housing.



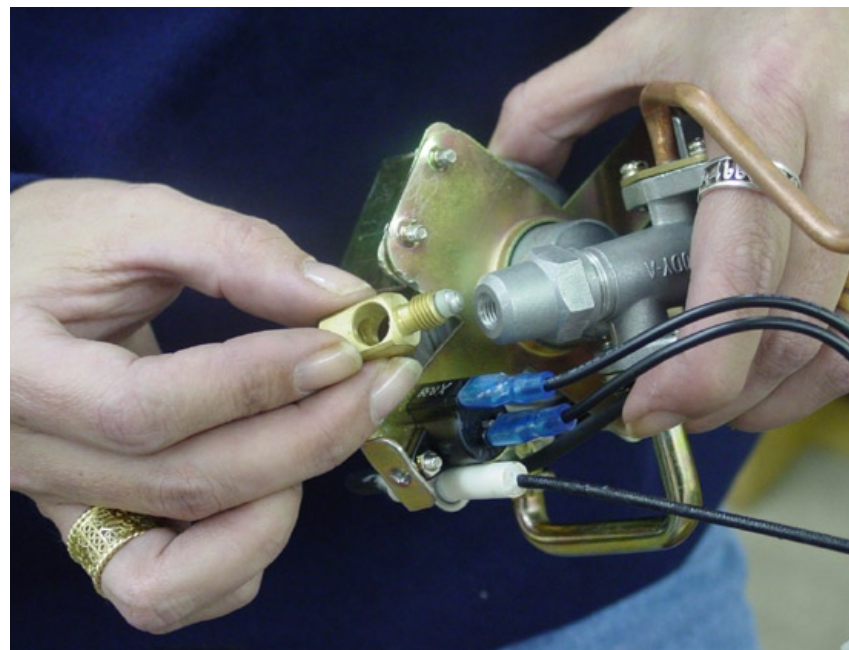
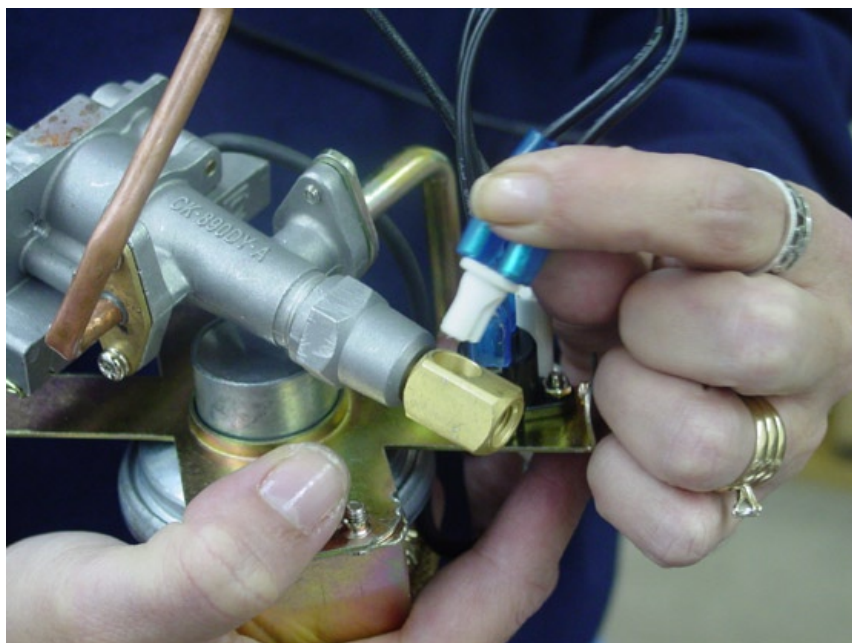
Step 12



Remove the valve from the valve housing. You may need to bend the burner supply tube a little. The back of the control valve will drop down and you should be able to pull it out the rest of the way.



Step 13

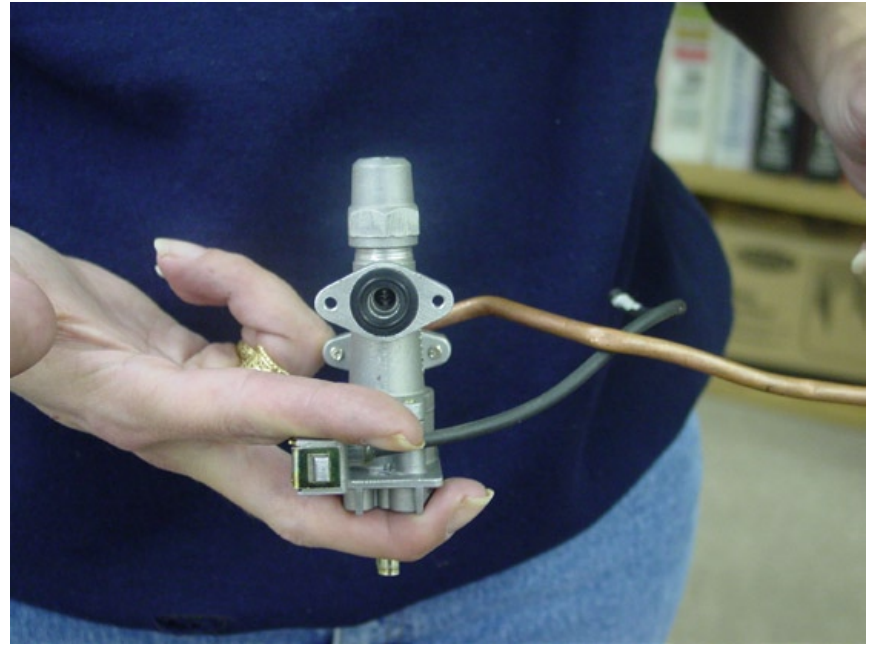
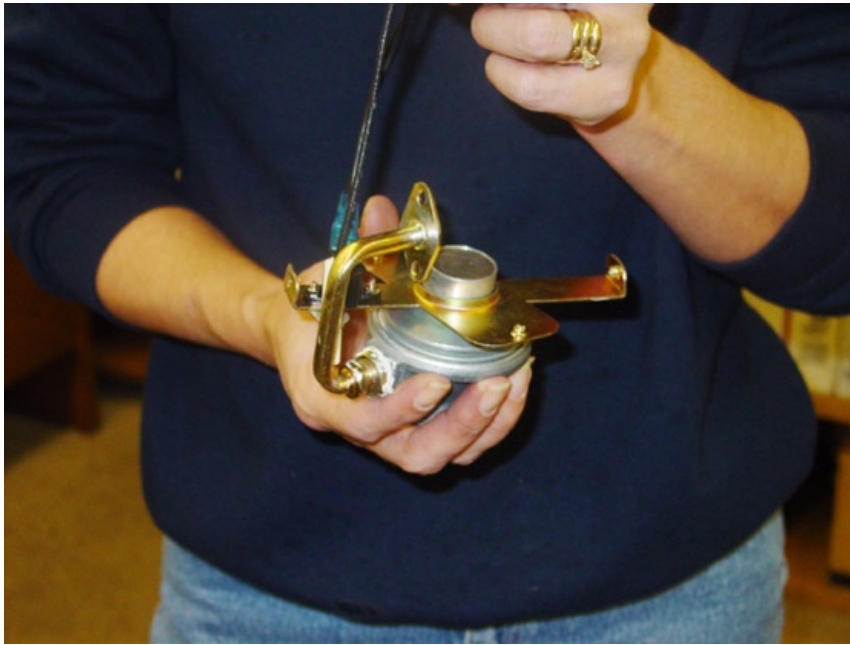


Remove the thermal-couple tip switch block. This is the small brass block located at the back of the control valve.

Note: Remove the thermal-couple wire by unscrewing the nut. You will then be able to remove the tip switch wires and the brass block.



Step 14



Remove the two Phillips screws that hold the regulator supply tube to the valve.

Be careful not to lose the rubber washer and remember to reinstall the washer when you put the new control valve in.



Step 15

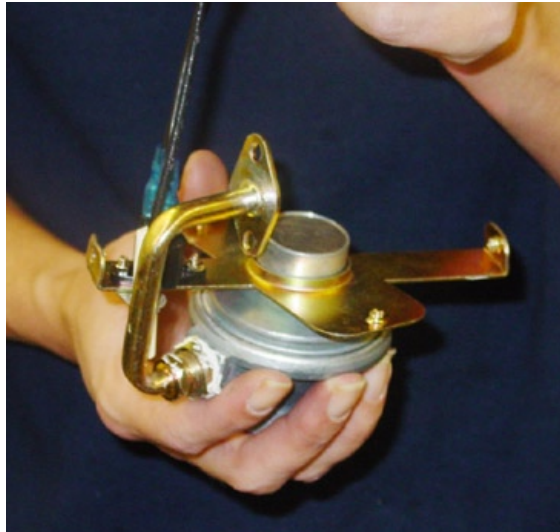


Remove the burner supply tube by removing the two small Phillips screws.

Be careful not to lose the rubber washer and remember to reinstall the washer when you put the new control valve in.



Step 16



If you also need to replace the regulator you will need to remove the 2 screws that hold the regulator in the regulator housing.

Using a 9/16" open end wrench disconnect the regulator from the regulator supply tube. You may need to hold the regulator with the pliers.

Make sure that the threads on the regulator supply tube are clean. Before you replace the new regulator, place some Teflon tape on the threads to assure a good seal.

When reinstalling the regulator housing make sure that the bracket on the housing is in front of the regulator supply tube.



Step 17

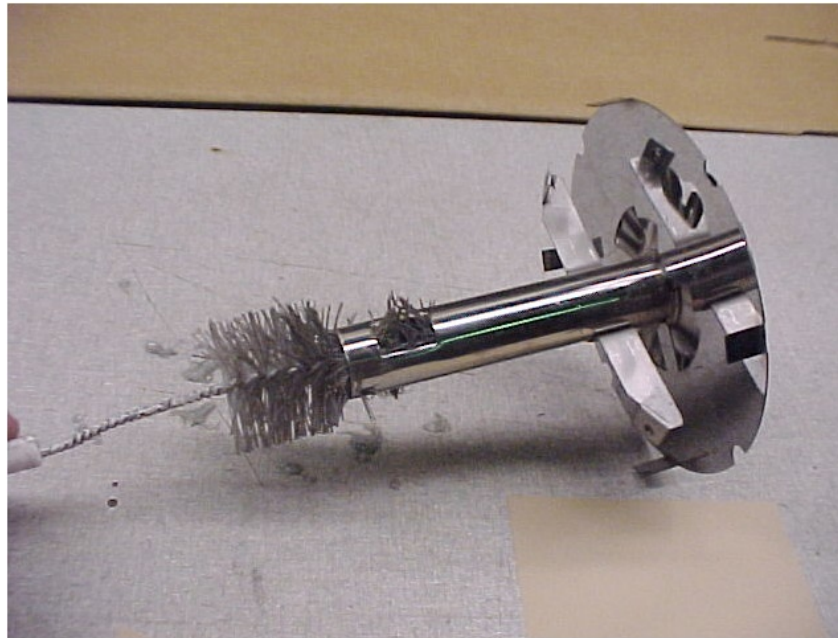


Using a non-abrasive scouring pad, clean the outside and inside of the emitter.

Finish up by blowing any loose soot off the emitter with air or a can of compressed air.



Step 18



Clean the inside of the venturi tub, by insert a bottle brush completely into the venturi tube and twist a couple of times to loosen any debris.



Step 19

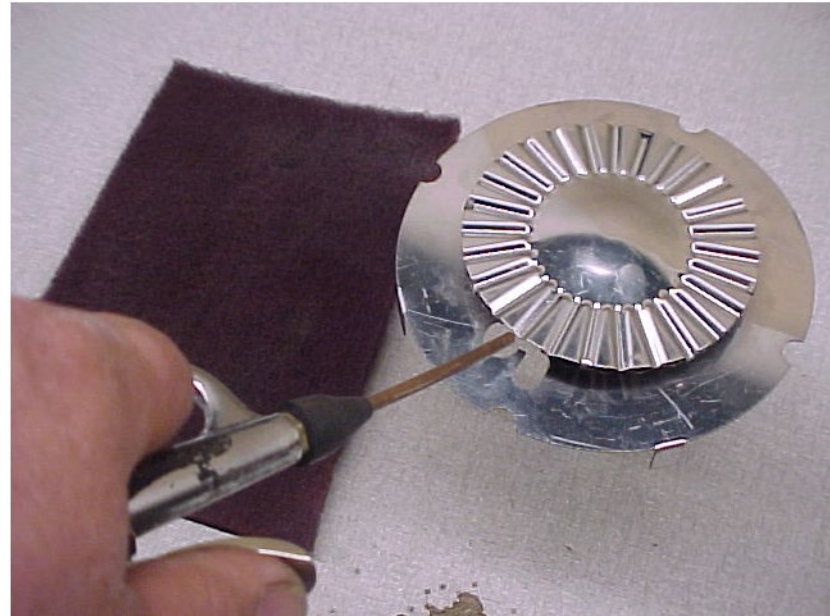


Use a pipe cleaner to clean all burner ports.

Clean the top of the heat shield on the burner with a non-abrasive scouring pad to remove any soot or carbon build-up.



Step 20



With the venturi tube, burner ports and the heat shield cleaned, use the air or a can of compressed air to blow out any soot or carbon build-up.



Step 21

Follow the instruction in reverse and remember to check for leaks at all connections you have made.



Step 22- IMPORTANT

Perform leak check.



WARNING **FOR YOUR SAFETY**

If you smell gas -

1. Shut off gas to appliance.
2. Extinguish any open flame.
3. If odor continues, immediately call your gas supplier or your fire department.

1. Do not operate if gas leak is present. Gas leaks may cause a fire or explosion.
2. You must follow all leak-checking procedures before operating. To prevent fire or explosion hazard when testing for a leak:
 - a. Always perform leak test before lighting the heater and each time the tank is connected for use.
 - b. No smoking. Do not use or permit sources of ignition in the area while conducting a leak test.
 - c. Conduct the leak test outdoors in a well-ventilated area.
 - d. Do not use matches, lighters, or a flame to check for leaks.
 - e. Do not use heater until any and all leaks are corrected.If you are unable to stop a leak, disconnect the LP gas supply. Call a gas appliance serviceman or your local LP gas supplier.

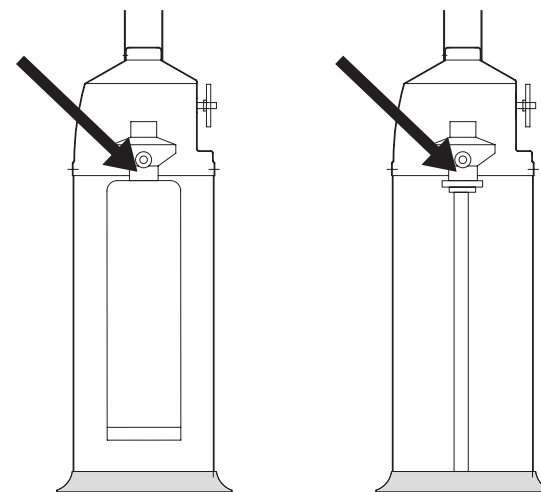


Burner Connections

1. Make sure the regulator valve and hose connections are securely fastened to the burner and the tank.
2. If your unit was assembled for you, visually check the connection between the burner pipe and orifice. Make sure the burner pipe fits over the orifice.

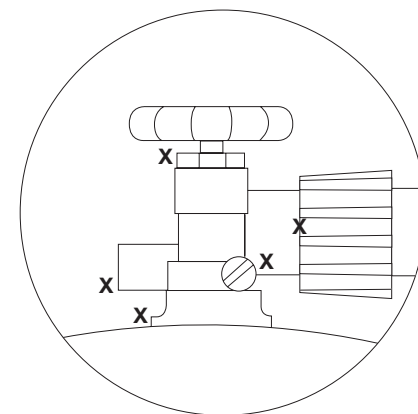
WARNING: Failure to inspect this connection or follow these instructions could cause a fire or an explosion which can cause death, serious bodily injury, or damage to property.

3. Please refer to diagram for proper installation.
4. If the burner pipe does not rest flush to the orifice, please contact 1.800.762.1142 for assistance.



Tank/Gas Line Connection

1. Make 2-3 oz. of leak solution by mixing one part liquid dishwashing soap with three parts water.
2. Make sure control knobs are off.
3. Turn LP gas tank ON at valve.
4. Spoon leak check solution at all "x" and arrow locations.
5. If any bubbles appear turn LP gas tank OFF, reconnect and re-test. If you continue to see bubbles after several attempts, disconnect LP gas source and contact 1.800.762.1142 for assistance.
6. If no bubbles appear after one minute turn tank OFF, wipe away solution and proceed.



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