

USER CARE AND MAINTENANCE GUIDE

AZ Patio Heaters

SAFETY TIPS

1. **Keep all connections and fittings clean. Make sure propane cylinder valve outlet is clean.**
2. **Inspect hose before use. Replace if there is evidence of abrasion or wear.**
3. **During set up, check all connections and fittings for leaks using soapy water. See directions for performing a leak test in the Yearly Maintenance section.**
4. **Check entire hose at least once a year.**

YEARLY MAINTENANCE

1. Cleaning out the pilot feed tube.

- Remove the mesh screen around the control panel (igniter switch and control knob).
- Inside the unit you will see a thin copper tube going up into a brass cylinder. The copper tube is called the pilot feed tube, and the brass cylinder is called the venturi tube. Loosen the small set screw on the side of the venturi tube and pull down on the pilot feed tube to remove it.
- On the end of the pilot feed tube is a small brass fitting. This can be unscrewed (you may need to use needle nose pliers to loosen) and placed in a cup of hot water for 5 minutes. This will loosen up any blockages.
- While the fitting is soaking in the hot water, use a pipe cleaner or compressed air to clean out the venturi tube.
- Remove the fitting from the cup of water and make sure it is completely dry. When held up to a light, you should be able to see a tiny point of light through the hole in the center. If it is still blocked, you can use a single wire from a wire bristle brush to clean out the hole. Do not use a safety pin or anything with a diameter larger than a wire bristle as this could damage the fitting.
- Screw the fitting back on to the pilot feed tube, reinsert the feed tube back into the venturi tube, and tighten the set screw.
- Replace the mesh screen around the control panel.

2. Leak test

- Perform all leak tests outdoors.
- Extinguish all open flames.
- NEVER leak test when smoking.
- Do not use the heater until all connections have been leak tested and do not leak.

- Make 2-3 oz. of leak check solution by mixing one part liquid dishwashing detergent and three parts water. Apply several drops of solution where hose attaches to regulator. Apply several drops of solution where regulator connects to LP cylinder. Make sure all patio heater valves are OFF. Turn LP cylinder valve ON.
- If bubbles appear at any connection, there is a leak. Turn LP cylinder valve OFF. If leak is at hose/regulator connection: tighten connection and perform another leak test. If leak is at regulator/LP cylinder valve connection: disconnect, reconnect, and perform another leak check. If you continue to see bubbles after several attempts, cylinder valve is defective and should be returned to cylinder's place of purchase.
- If NO bubbles appear at any connection, the connections are secure. Turn LP cylinder valve OFF.
- NOTE: Whenever gas connections are loosened or removed, you must perform a complete leak test.

SURFACE CARE

1. Powder coated surfaces

- Clean using a soft damp cloth and mild cleanser.
- To prevent oxidation, apply a coat of automotive paste wax to the surface. Allow the wax to dry for a few minutes. Remove residue and polish surface with a clean cloth.
- To remove oxidation, rub the surface with an automotive rubbing or polishing compound.

2. Stainless steel surfaces

- Clean using a soft cloth and stainless steel cleaner/polisher.

TROUBLESHOOTING

1. Initial startup

- Turn the valve on the LP cylinder all the way on.
- Depress the patio heater control knob and turn it counterclockwise until it stops.
- Continue holding the control knob depressed for 1-2 minutes. This will bleed out any air bubbles in the gas line.
- While continuing to hold the control knob depressed, push the red igniter switch repeatedly until the pilot lights.
- Once the pilot is lit, release the control knob and turn it to low. This will light the burner.
- The knob can be turned from low to high to adjust the flame.

2. Why won't my pilot light?

- Blockage in the venturi tube that houses the pilot feed tube. It is very common for spiders to build webs which will block the venturi feed tube. Burnt sentiment from the pilot light can also block the venturi tube. Remove the pilot feed tube from the venturi tube and use a pipe cleaner to remove debris. Compressed air may be used to thoroughly clean the tube.
- Pilot feed tube may be clogged. Clean or replace pilot feed tube.
- Propane tank empty or not turned on.
- Striker switch not working. Replace striker switch.

3. Why is my burner flame low?

- Propane gas may be low. Check propane level.
- Leakage at regulator and possibly with connection fittings. Perform a leak check.
- Outside temperature is below 40 degrees. The propane temperature needs to be above 40 degrees F. Propane will freeze at or below 40 degrees F and will not perform properly. Wrap the propane bottle with a towel or blanket, or temporarily relocate it to an area where the temperature is above 40 degrees F.
- Faulty regulator. Replace regulator.

4. Why does my propane bottle and regulator freeze up on my table top heater when using the 1lb cylinders?

- This is a very common problem with 1lb disposable tanks. When problem occurs reduce volume setting to allow propane to flow evenly to burner.
- You can also purchase a 5' adapter hose that will allow your heater to use a 20lb propane tank which will eliminate this problem.

5. Why does my pilot light, but go out when heater is turned on high or low?

- Faulty anti-tilt switch. Disconnect the anti-tilt switch and connect the two wires together for verification. If heater starts and performs properly, the problem is the anti-tilt switch. Replace the anti-tilt switch immediately. Do not continue to run your heater with a bypassed switch.
- Faulty Thermocouple. If above step does not fix the problem, the thermocouple is faulty. Replace the thermocouple.

6. Why do I get a yellow flame and black smoke?

- Blockage in the venturi tube that houses the pilot feed tube. It is very common for spiders to build webs which will block the venturi feed tube. Burnt sentiment from the pilot light can also block the venturi tube. Remove the pilot feed tube from the venturi tube and use a pipe cleaner to remove debris. Compressed air may be used to thoroughly clean the tube.
- A minor adjustment to your pilot tube setting may also remove this condition. Pilot light should be no larger than 1/4 to 1/2 inches tall for proper operation.
- Unit should be cleaned every year.

7. Why does my unit burn low or won't stay ignited?

- Outside temperature is below 40 degrees. The propane temperature needs to be above 40 degrees F. Propane will freeze at or below 40 degrees F and will not perform properly. Wrap the propane bottle with a towel or blanket or temporarily relocate it to an area where the temperature is above 40 degrees F.
- Faulty propane gas regulator. Replace gas regulator.
- Fittings and hoses from regulator to burner are not tight. Tighten all fittings and check for leakage.