### CARE AND MAINTENANCE



**A** WARNING: Turn off heater and let cool before servicing or cleaning.



CAUTION: You must keep control areas, burner, and circulating air passageways of heater clean. Inspect these areas of heater before each use. Have heater inspected yearly by a qualified service technician. Heater may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

### ODS/PILOT AND BURNER

· Use a vacuum cleaner, pressurized air, or a small, soft bristled brush to clean.

# CLEANING BURNER PILOT AIR INLET HOLE

We recommend that you clean the unit every 2,500 hours of operation or every three months. We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

- 1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
- 2. Inspect burner and pilot for dust and dirt.
- 3. Blow air through the ports/slots and holes in the burner. Also clean the pilot assembly. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 24). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

## **CABINET**

## Air Passageways

• Use a vacuum cleaner or pressurized air to clean.

# **Exterior**

- · Use a soft cloth dampened with a mild soap and water mixture.
- · Wipe the cabinet to remove dust.

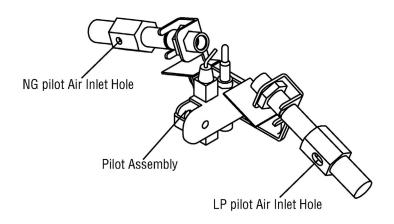


Figure 24 - Pilot Inlet Air Hole

# **TROUBLESHOOTING**



WARNING: If you smell gas:

- · Shut off gas supply.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.



IMPORTANT: Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.



**WARNING:** Only a qualified service technician should service and repair heater.

**CAUTION**: Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/ pilot unit.

Note: All troubleshooting items are listed in order of operation.

Problem	Possible Cause	Corrective Action
When ignitor button is pressed in, there is no spark at ODS/pilot	Ignitor electrode is positioned wrong. Ignitor electrode is broken.	Replace electrode.
at 020/pilot	Ignitor electrode is not connected to ignitor cable.	2. Replace ignitor cable
	Ignitor cable is pinched or wet.	Free ignitor cable if pinched by any metal or tubing.     Keep ignitor cable dry.
	<ul><li>4. Broken ignitor cable.</li><li>5. Bad piezo ignitor.</li></ul>	Replace ignitor cable.     Replace piezo ignitor.
When ignitor button is pressed in there is a spark at ODS/pilot but no	Gas supply is turned off or equipment shutoff valve is closed.	Turn on gas supply or open equipment shutoff valve.
ignition.	Control knob not fully     pressed in while pressing     ignitor button.	Fully press in control knob while pressing ignitor button.
	3. Air in gas lines when installed.	Continue holding down control knob. Repeat igniting operation until air is removed.
	4. ODS / pilot is clogged.	4. Clean ODS/pilot (see Care and Maintenance, page 19) or replace ODS/pilot assembly.
	5. Gas regulator setting is not correct.	5. Replace gas regulator.
	6. Control knob not in PILOT position.	6. Turn control knob to PILOT position.
	7. Depleted gas supply (propane).	7. Contact local propane/LP gas company.

Problem	Possible Cause	Corrective Action
ODS/pilot lights but flame goes out	1. Control knob is not fully	1. Press in control knob
when control knob is released.	pressed in.	fully.
	2. Control knob is not pressed	2. After ODS/pilot lights,
	in long enough.	keep control knob pressed
		in 30 seconds.
	3. Equipment shutoff valve is	3. Fully open equipment
	not fully open.	shutoff valve.
	4. Thermocouple connection is	4. Hand tighten until snug,
	loose.	and then tighten ¼ turn
	F. Thermoseuple demaged	more.
	<ul><li>5. Thermocouple damaged.</li><li>6. Control valve damaged.</li></ul>	<ul><li>5. Replace thermocouple.</li><li>6. Contact customer service.</li></ul>
Burner(s) does not light after ODS/	Burner orifice is clogged.	Clean burner orifice (see
pilot is lit.	1. Barrier ermee ie eleggea.	Care and Maintenance,
		page 19).
	Burner orifice diameter is too small.	2. Contact customer service.
	3. Inlet gas pressure is too low.	3. Contact your gas supplier.
	or muct gas prossure is tes iom.	o. Comact your gas supplied.
Delayed ignition of burner(s).	Manifold pressure is too low.	Contact your gas supplier.
	2. Burner orifice is clogged.	2. Clean burner (see
		Care and Maintenance,
		page 19).
Burner backfiring during combus-	Burner orifice is clogged or	Clean burner orifice (see
tion.	damaged.	Care and Maintenance,
		page 19).
	2. Burner is damaged.	Contact dealer or customer service.
	3. Gas regulator is damaged.	3. Replace gas regulator.
High yellow flame during burner	1. Not enough air.	Check burner for dirt and
combustion.		debris. If found, clean
		burner (see Care and
	2. Con manufataria dafa di	Maintenance, page 19).
	2. Gas regulator is defective.	Replace gas regulator.     Contact your gas supplier.
	3. Inlet gas pressure is too low.	3. Contact your gas supplier.
Gas odor during	1. Foreign matter between	Take apart gas tubing
combustion.	control valve and burner.	and remove foreign matter.
	2. Gas leak. (See Warning Statement at top of	Locate and correct all leaks (see "Checking
	page 20).	Gas Connections,"
	F-90 20).	page 13).
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Problem	Possible Cause	Corrective Action
Slight smoke or odor during initial operation	Residues from manufacturing process.	Problem will stop after a few hours of operation.
Heater produces a whistling noise when burner is lit.	<ol> <li>Turning control knob to high (5) position when burner is cold.</li> <li>Air in gas line.</li> <li>Air passageways on heater are blocked.</li> <li>Dirty or partially clogged burner orifice.</li> </ol>	<ol> <li>Turn control knob to low (1)     position and let warm up for a     minute.</li> <li>Operate burner until air is removed     from line. Have gas line checked by     local gas company.</li> <li>Observe minimum installation     clearances (Fig. 4, page 10)</li> <li>Clean burner (see Care and         Maintenance, page 19).</li> </ol>
Heater produces a clicking/ticking noise just after burner is lit or shut off.	Metal is expanding while heating or contracting while cooling.	This is common with most heaters.  If noise is excessive, contact qualified service technician.
White powder residue forming within burner box or on adjacent walls or furniture.	When heated, the     vapors from furniture     polish, wax, carpet     cleaners, etc., turn into     white powder residue.	Turn heater off when using furniture polish, wax, carpet cleaner or similar products.
Heater produces unwanted odors.	1. Heater is burning vapors from paint, hair spray, glues, etc. See IMPORTANT statement, page 20.  2. Gas leak. See Warning Statement at the top of page 20.  3. Low fuel supply.	<ol> <li>Ventilate room. Stop using odor causing products while heater is running.</li> <li>Locate and correct all leaks (see "Checking Gas Connections," page 13).</li> <li>Refill supply tank (Propane /LP models).</li> </ol>
Heater shuts off in use (ODS operates).	Not enough fresh air is available.     Low line pressure.     ODS/pilot is partially clogged.	Open window and/or door for ventilation.     Contact local gas supplier.     Clean ODS/pilot (see <i>Care and Maintenance</i> , page 19).
Gas odor exists even when control knob is in OFF position.	Gas leak. See Warning     Statement at top of     page 20.     Control valve is     defective.	Locate and correct all leaks     (see "Checking Gas Connections",     page 13).     Contact customer service.
Moisture/condensation noticed on windows.	Not enough combustion/ ventilation air.	Refer to "Air for Combustion and Ventilation" requirements, page 7.

## REPLACEMENT PARTS

**NOTE:** Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

#### PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement parts, call Customer Service at 909-825-0993 for referral information.

When calling Customer Service or your dealer, have ready:

- Your name
- Your address
- Model and serial number of your heater
- How heater was malfunctioning
- Type of gas used (Propane/LP or Natural gas/NG)
- Purchase date
- Usually, we will ask you to return the defective part to the factory

#### PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s) call Customer Service at 909-825-0993 for referral information.

When calling Customer Service have ready:

- Model number of your heater
- The replacement part number

# **ACCESSORIES**

Purchase these heater accessories from your local dealer. If they can not supply these accessories, contact Williams Furnace for information.

## **EQUIPMENT SHUTOFF VALVE**

For all models. Equipment shutoff valve with 1/8 in. NPT tap. (see figure 1)

#### Optional FAN Kit - 2295

The optional fan kit has 3 settings ON/OFF/Auto. (see figure 2).

### FLOOR MOUNTING STAND

For locating heater on the floor, away from a wall. Complete installation instructions provided with floor mounting stand. (see figure 3)

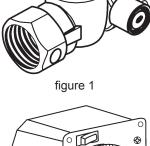


figure 2

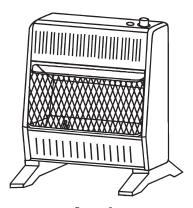


figure 3