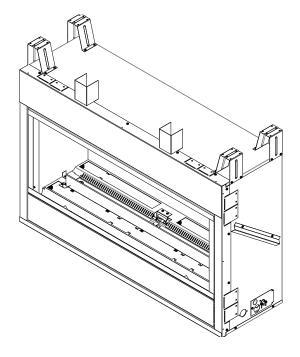


# AVFL Vent Free Fireplace System Installation & Operating Instructions Models: AVFL42NIP & AVFL42PIP

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS – Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - 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.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This is an unvented fireplace. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 8.* 





INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

## Thank you and congratulations on your purchase of a Monessen fireplace.

PLEASE READ THE INSTALLATION AND OPERATION INSTRUCTIONS BEFORE USING THE APPLIANCE! IMPORTANT: Read all instructions and warnings carefully before starting installation.

Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

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Product Features AVFL42 Controls Gas Specifications & Orifice Size Gas Pressures Fireplace and Framing Dimensions	. 6 . 6 . 6
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ATTENTION IN Follow this Standard	-	ist
This standard work checklist is to be used by the installer in conju installation manual. Customer: Lot/Address: Model (circle one): AVFL42NIP, AVFL42PIP	Date Installed: Location of Firepla Installer:	d of, the instructions contained in this
WARNING! Risk of Fire or Explosion! Failure to in lead to a fire or explosion.	nstall appliance acco	ording to these instructions could
Appliance Install (Pg. 7 & 10) Verified that the chase is insulated and sealed. Required non-combustible board is installed. Verified clearances to combustibles. Fireplace is leveled and secured. Adequate provisions for combustion and ventilation air have bee	YES	IF NO, WHY?
Gas (Pg 13-14) Proper appliance for fuel type. Leak check performed and inlet pressure verified. Verified proper air shutter setting for installation type.		
<b>Electrical (Pg 15)</b> Unswitched power (110-120 VAC) provided to the appliance. Switch wires properly installed.		
Media & Accessories (Pg 17-21) All packaging and protective materials removed (inside & outside of appliance). Media installed correctly. Accessories installed properly.		
<b>Finishing (Pg 10 &amp; 12)</b> Verified all clearances meet installation manual requirements. Mantels and wall projections comply with installation manual req	uirements. 🗌	
Manual bag and all of its contents are removed from inside/ under the appliance and given to party responsible for use and of Started appliance and verified no gas leaks exist.	peration.	

#### Hearth & Home Technologies recommends the following:

• Photographing the installation and copying this checklist for your file.

• That this checklist remain visible at all times on the appliance until the installation is complete.

**Comments:** Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed

Comments Communicated to party responsible	Dy		on
$\rightarrow$ = Contains updated information.	(Builder / Gen. Contractor/)	(Installer)	(Date)

## INSTALLER

WARNING

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

- Any change to this heater or its controls can be dangerous.
- Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.
- Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.
- Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.
- 1. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- 2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
- 3. Young children should be carefully supervised when they are in the same room with the appliance.
- 4. Do not place clothing or other flammable material on or near the appliance.
- 5. Any safety screen or guard removed for servicing an appliance, must be replaced prior to operating the heater.
- 6. Installation and repair should be done by a qualified service person. To prevent malfunction and/or sooting, an unvented fireplace should be cleaned before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
- 7. WARNING: Any change to this fireplace or its controls can be dangerous.
- 8. Unvented fireplaces are a supplemental zone heater. They are not intended to be the primary heating appliance.
- 9. CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
- 10. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.I/NFPA54.**
- 11. This unit complies with ANSI Z21.11.2:19 *Unvented Heaters*.

- 12. Do not install the heaters in a bathroom or bedroom.
- 13. Correct installation of the ceramic fiber logs, proper location of the heater, and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. Refer to log placement instructions for proper installation.
- 14. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
- 15. **Caution:** Candles, incense, oil lamps, etc. produce combustion byproducts including soot. Vent-free appliances will not filter or clean soot produced by these types of products. In addition, the smoke and/ or aromatics (scents) may be reburned in the vent-free appliance which can produce odors. It is recommended to minimize the use of candles, incense, etc. while the vent-free appliance is in operation.
- 16. This is an unvented fireplace. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 8.*
- 17. This heater shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.
- 18. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Unvented fireplaces emit moisture into the living area. In most homes of average construction, this does not pose a problem. In houses of extremely tight construction, additional mechanical ventilation is recommended.
- 20. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not

harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

- 21. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
- 22. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psig (3.5 kPa).
- 23. The appliance must be isolated from gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5 kPa).
- 24. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
- 25. Never burn solid fuels in a fireplace where a unvented room heater is installed.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

### **BUILDING CODE INFORMATION**

Adhere to all local codes or, in their absence, the latest edition of THE NATIONAL FUEL GAS CODE ANSI Z223.1 or NFPA54 which can be obtained from:

American National Standards Institute, Inc. 1430 Broadway New York, NY 10018

or

National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269

WARNING: This product and the fuels used to operate this product (liquid propane or natural gas), and the products of combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm. For more information go to: www.P65Warnings. ca.gov.

## **AVFL42 CONTROLS**

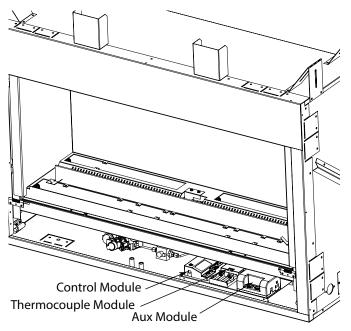


Figure 1 – AVFL42 Controls (Control Access Door Shown Open)

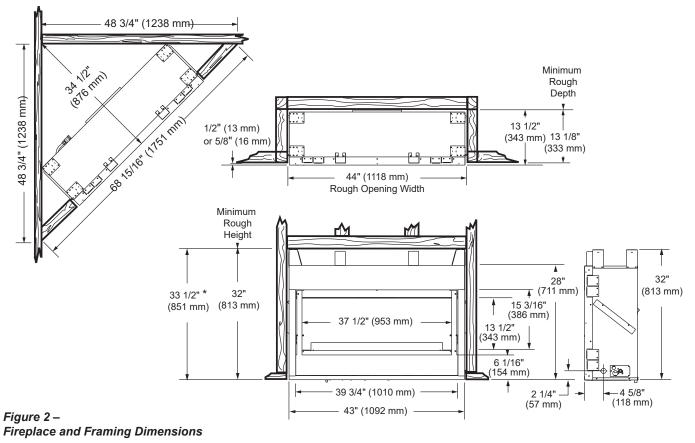
## **GAS SPECIFICATIONS & ORIFICE SIZE**

MODEL	FUEL	MAX. INPUT MIN. INPUT (BTU/h) (BTU/h)		ORIFICE SIZE
AVFL42NIP	L42NIP NAT. 37,000 24,500 2		2.20 mm	
AVFL42PIP	LP. 36,000 28,500		#55	

**NOTE:** For LP models an external regulator is required to reduce supply pressure to a maximum of 13" w.c.

### **GAS PRESSURES**

	NATURAL	PROPANE (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure Setting	3.5" w.c.	10" w.c.
Pilot Regulator	3.5" w.c.	—



\*NOTE: The AVFL42 unit must be raised at least 1.5 inches above the top surface of the finished floor when using the AVFL42WFBT-A or AVFL42WCSS-A wide contemporary face..

## **GETTING STARTED**

Check your packing list to verify that all listed parts have been received. You should have the following:

- Unvented fireplace
- Two (2) anchoring screws
- Installation/operating instructions
- 5" non-combustible board
- 2" x 32" deflector glass
- Two (2) bags fireglass
- Twelve (12) 15 watt bulbs
- One (1) 90 watt bulb
- RC300 remote control

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.** 

## WHAT YOU WILL NEED

You must have the following items available before proceeding with installation:

- · External regulator (for propane/LPG only)
- Manual shutoff valve
- · Piping which complies with local codes
- Sediment trap
- · Phillips head screwdriver
- Tee joint.

**WARNING** 

**WARNING** 

- Pipe sealant approved for use with propane/LPG (Resistant to sulfur compounds)
- Pipe wrench

Do not install the heater:

- Where curtains, furniture, clothing, or other flammable objects are less than 36" from the front of the heater.
- In high traffic areas.
- In windy or drafty areas.

Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile — handle with care.

## PLANNING THE INSTALLATION

In planning the installation for the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the *Fireplace Location (page 9, Figure 3)* and *Clearances* and *Height Requirements (page 10, Figures 4 and 5)* sections and *Fireplace and Framing Dimensions (page 7, Figure 2)* illustration found in this manual.

**NOTE:** Be sure all packing material has been removed from under the unit.

- 2. Install following the instructions found in this manual.
- 3. Field wire main power supply to junction box. Refer to the *Electrical Installation* section (*page 15*). (Electrical connections should only be performed by an experienced, licensed certified service person).
- 4. Plumb gas line. Refer to the *Connect the Gas (page 13, Figure 7)* section found in this manual. (Gas connections should only be performed by an experienced, licensed/ certified service person).
- 5. Complete finish wall material and/or surround.

## ADEQUATE COMBUSTION AND VENTILA-TION AIR

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that pace, and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of a confined space.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6 x 10<sup>11</sup> kg per pa/sec-m<sup>2</sup>) or less with openings gasketed or sealed, and
- b. Weather stripping has been added on openable windows and doors, and

## **PRE-INSTALLATION INFORMATION**

c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and other openings.

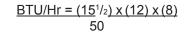
The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

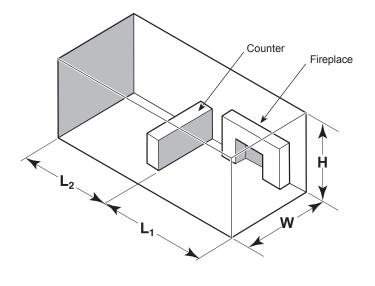
$$\frac{BTU/Hr = (L_1 + L_2) Ft x (W) Ft x (H) Ft}{50}$$

Consider two connecting rooms with an open area between, with the following dimensions:

$$\frac{BTU/Hr = (15^{1}/_{2} + 12) x (12) x (8)}{50}$$

If there were a door between the two rooms the calculation would be based only on the room with the heater.





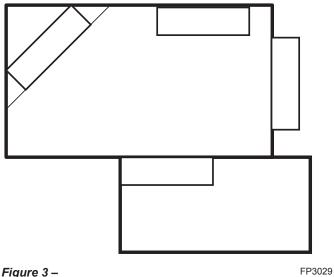
If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.

## FIREPLACE LOCATION

This unvented fireplace requires no outside venting and burns cleanly and efficiency. As a zero-clearance unvented fireplace, it can be installed against (or recessed into) any wall that is accessible to a gas line.

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to *Clearance and Height Requirements* section on *Page 10*. Minimum clearances to combustibles **must be maintained**.
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. Refer to *Figure 3* below for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.



Possible Fireplace Locations

Monessen • AVFL42 Installation Instructions • 4117-900 Rev. B • 05/20

## PRE-INSTALLATION INFORMATION

## **CLEARANCES AND HEIGHT REQUIREMENTS**

Ensure that minimum clearances shown in Figures 4 and 5 are maintained. Left and right clearances are determined when facing the front of the firebox.

Follow these instructions carefully to ensure safe installation. Failure to follow these requirements may create a fire hazard.

Sidewall Clearances — The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 6". Figure 4

Ceiling Clearance — The ceiling must be at least 36" from the firebox opening. Figure 4

**Back Wall Clearance** — The appliance may be placed against a combustible back wall.

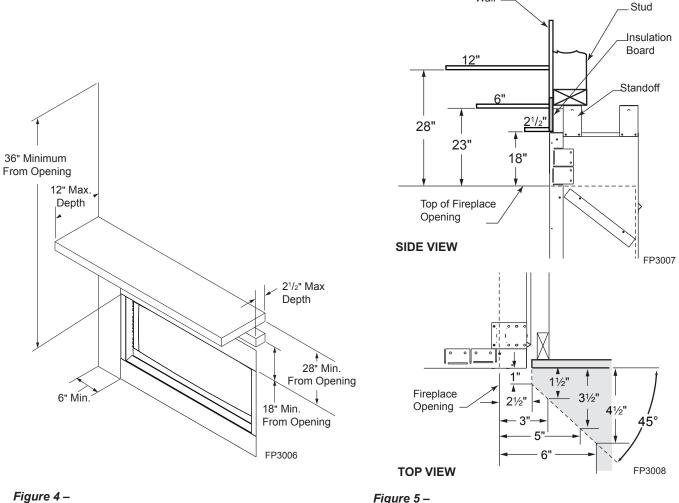
The dimensions shown in Figures 4 and 5 are minimum clearances to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

WARNING Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

Floor Clearance — The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support so that no cold air can enter from under the firebox. See note below regarding floor installation with wide contemporary faces.

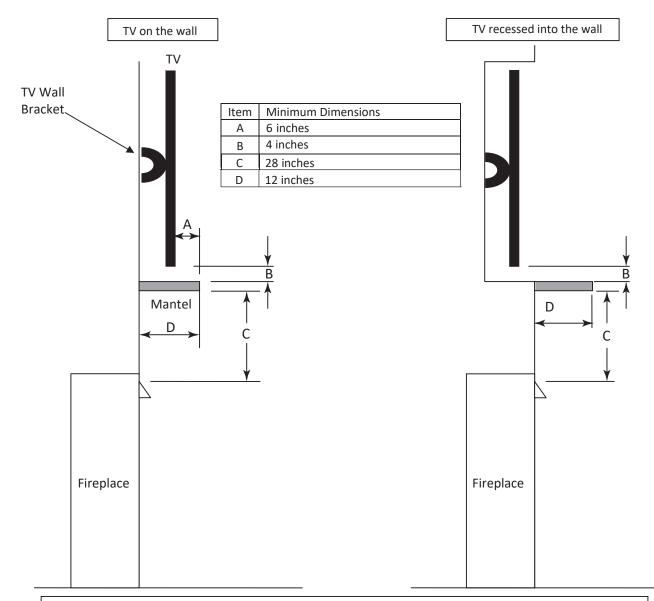
Mantel clearances — Must meet the clearance requirements detailed in Figures 4 and 5.

Wall



Sidewall and Ceiling Clearances

Mantel Clearances Monessen • AVFL42 Installation Instructions • 4117-900 Rev. B • 05/20



## Good Faith Guidelines for TV Installations above a Typical Gas Fireplace

#### Notes:

- 1. These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximum allowable operating temperatures.
- 2. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.
- 3. Mantel height and depth must conform to mantle requirements specified in the fireplace installation manual.
- 4. "C" dimension taken from the top of the hood or fireplace opening.
- 5. Suggestions on how to further reduce TV temperatures:
  - a. Increase "A" dimension.
  - b. Increase "C" dimension, however, increasing "B" dimension beyond maximum recommended typically results in higher temperatures.

## SECURE FIREPLACE TO FRAMING

The fireplace must be secured to the framing studs as shown in *Figure 6*. Use eight (8) screws to attach fireplace to framing. The side nailing flanges are  $\frac{1}{2}$ " or  $\frac{5}{3}$ " to accommodate different wall thickness.

over

	Never install combustible materials front face of fireplace.	,
Ž		

## **FINISHING MATERIAL**

**NOTE:** Any remote wiring (i.e. remote control, wall switch), must be done prior to final finishing to avoid costly reconstruction.

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black painted face of the appliance. It is permissible to bring combustible wall board to the top of the standoffs on the top and to the wall board stand-offs on the sides of the unit. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

**NOTE:** Fireplace may be installed on top of framing or platform constructed of combustible materials which do not protrude beyond the face.

## NONCOMBUSTIBLE FACING INSTALLATION

**CAUTION**: The noncombustible wall board supplied with this unit can be damaged if dropped or struck. Handle with care.

- 1. Using drywall screws secure noncombustible board to the two brackets on top of unit. **IMPORTANT**: To avoid cracking the board, pre-drill holes prior to securing to the unit/framing.
- 2. Wipe any debris or dust from the noncombustible board and drywall.
- 3. It is highly recommended to prime the facing using a quality primer prior to taping and mudding. This will ensure proper adhesion of both the tape and mud. The supplied board is very porous.
- 4. Tape the seams using a mesh type tape.
- 5. Mud seams as normal. We recommend using a product called Durabond high strength compound for the first coat. This product can be purchased at any hardware store. Follow manufacturer's recommendations for curing the mud. NOTE: Depending upon the final finishing method, use a minimum rated 300 degree sealant, drywall compound or thin set to seal the side and top joints.
- 6. Prime wall for a second time for proper adhesion of paint.

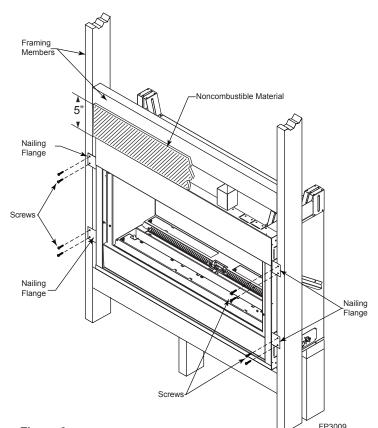


Figure 6 – Secure Fireplace to Framing Studs

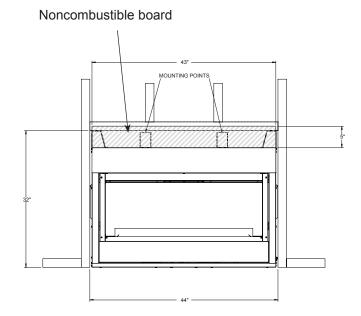


Figure 6A – Noncombustible facing installation

## CONNECT THE GAS

**D**NG

WARN

**NOTICE:** A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

Note: Gas line may be installed on the left or right side of the appliance.

#### WARNING

This appliance is equipped for either natural or propane gas. Field conversion is not permitted.

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged <sup>1</sup>/<sub>8</sub>" NPT pressure tapping point should be installed upstream of the appliance. *Figure 7* 

A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliable. *Figure 7*  CHECK GAS TYPE: The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, DO NOT INSTALL THE HEATER. Contact your dealer for the correct model.

**IMPORTANT:** Loosen the pipe adapter on the flex tube before installing to the system piping.

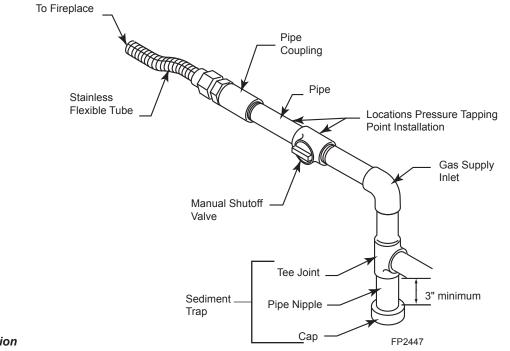
Always use an external regulator for all propane/LPG heaters only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

When tightening the joint to the valve, hold the valve securely to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.** 

Connecting directly to an unregulated propane/LP tank can cause an explosion.

DO NOT USE OPEN FLAME TO CHECK FOR GAS LEAKS.



WARN

Figure 7 – Gas Connection

## CHECK GAS PRESSURE

#### Figure 8

Check the gas pressure with the appliance burning and the control set to **HIGH**.

Open control access door at bottom front of unit to find valve and regulator referred to below.

The valve regulator controls the burner pressure which should be checked at the pressure test point.

Turn captured screw counterclockwise two or three turns and then place tubing to pressure gauge over test point. Use test point "A" closest to gas inlet. After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check for gas leaks.

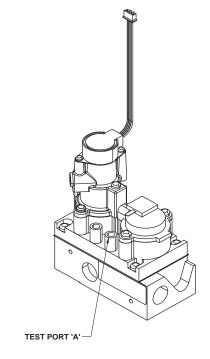


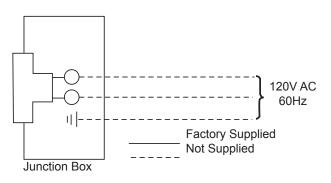
Figure 8 – Pressure Test Point Location

### WIRING JUNCTION BOX

- 1. Before installing, wire the receptacle into an electrical circuit. This should be done before framing the fireplace. Wire with minimum 60° C wire in accordance with prevailing codes.
- 2. Remove the cover plate located on the outer shellright side.
  - Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
  - 4. Make all necessary wire connections and reattach the cover plate to the outer shell.

**NARNING** 

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.



Junction Box Wiring Diagram

Electrical connections should only be performed by a qualified licensed electrician. Main power supply must be turned off before connecting to the main electrical power supply or performing service.

Electrical Grounding Instructions: This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle.

**IMPORTANT:** Always check local building codes. This installation must comply with local regulations as well as the National Electric Code.

## Intellifire™ Plus ODS Ignition System Wiring

• Wire the appliance junction box to 110-120 VAC for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! DO NOT wire IFP ODS controlled appliance junction box to a switched circuit. Incorrect wiring will override IFP ODS safety lockout.

- Refer to Figure 9, IFP ODS Wiring Diagram.
- This appliance is equipped with an Intellifire<sup>™</sup> Plus control valve which operates on a 6 volt/1.5 AMP system.
- Plug the 6 volt transformer plug into the appliance junction box to supply power to the unit OR install 4 AA cell batteries (not included) into the battery pack before use.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Battery polarity must be correct when installing batteries. When using batteries as a power source, the 6-volt transformer must be unplugged from the receptacle.

Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service.

#### Accessories Requirements

• This appliance ships standard with a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

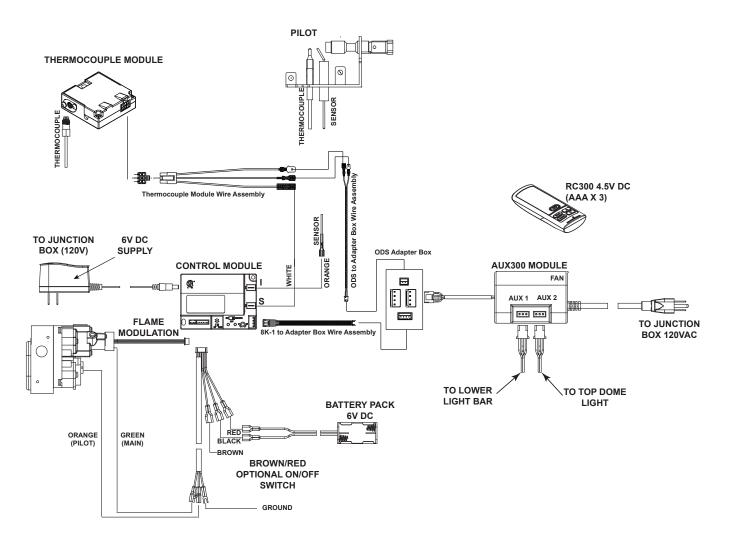


Figure 9 – IntelliFire™ Plus ODS Wiring Diagram

## **BULB INSTALLATION**

Turn OFF the main power supply before performing any service work on the unit, including installing or replacing light bulbs.

**NOTE**: This unit is shipped without bulbs installed to prevent any damage to the bulb filament during transport. This unit is shipped with a total of 13 bulbs (twelve 15W bulbs and one 90W bulb). These instructions apply to new installations only. If replacing bulbs after the installation is complete, see page 32 for instructions.

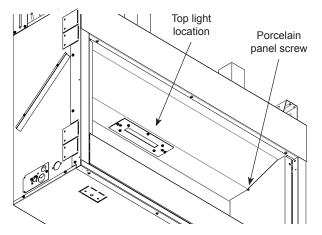
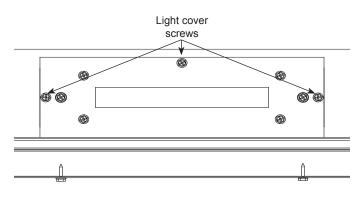


Figure 10– Top Light Position; Porcelain Panel Screw Location

## TOP LIGHT BULB INSTALLATION

- Remove three screws holding light cover in place (as shown in Figure 11)
- 2. Insert (1) 90W bulb provided into socket
- 3. Replace top light cover with three screws



#### Figure 11– Top Light Screws

#### LOWER LIGHT BAR BULB INSTALLATION

- 1. Remove air deflection glass from the unit and place on a flat, clean surface.
- Using a Phillips screwdriver remove the screws (one each) holding the left and right porcelain panels in place.
- Carefully remove the panels from the unit placing them on a clean level surface. NOTE: The rear porcelain panel is held in place by the left and right panel and could fall forward if not supported during removal of the side panels.

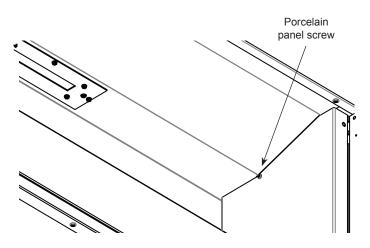


Figure 12– Porcelain Panel Screw Location

- 4. With side panels removed the rear porcelain panel can be removed from the unit and placed on a clean, level surface.
- 5. Remove nine screws that secure the front hearth in place and remove from unit. *Figure 13*

- 6. Remove five screws that secure the rear hearth in place and remove from unit. *Figure 13*
- 7. Figure 14 shows bulb placement for front and rear light bars. Insert bulbs in sockets.
- 8. With (twelve 15W) bulbs installed in front and rear light bar, reinstall the rear hearth first with five screws that were removed earlier. *Figure 13*
- 9. Reinstall the front hearth with nine screws removed earlier. *Figure 13*
- 10. Place the rear porcelain panel back in place and reinstall the left and right side using same screws that were removed earlier.
- 11. Re-install the air deflection glass before proceeding to add decorative media (next page).

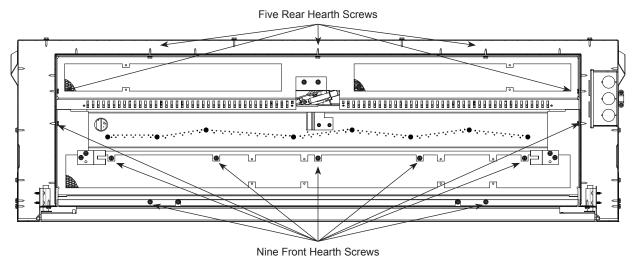
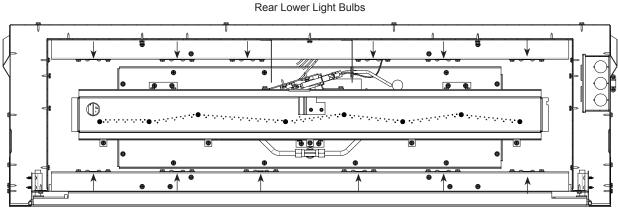


Figure 13– Hearth Screw Locations



Front Lower Light Bulbs

Figure 14– Lower Light Bulb Location

# INSTALLATION OF AIR DEFLECTION GLASS

**NOTE**: The 32" deflector glass must be installed prior to placing any fireglass or stone media on the burner. To install the air deflection glass simply place the tabs located at the bottom of the glass into the slots at either end of the burner floor, in front of the burner ports. The glass should stand upright, neither leaning forward nor backward.

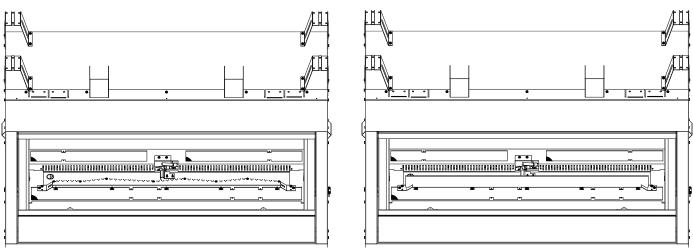
## **GLASS ONLY PLACEMENT**

**NOTE:** Two (2) bags of glass are supplied with the fireplace. Both bags may be used to cover the entire floor and burner. We advise against using additional glass as too much can cut off the proper amount of air the burner needs to burn cleanly. This may cause sooting.

- 1. Spread glass evenly in one layer over the entire floor and burner. It is important to not have the glass too thick on ported area (single layer only).
- 2. Turn burner on and adjust glass over ported areas to achieve an even, clean flame.

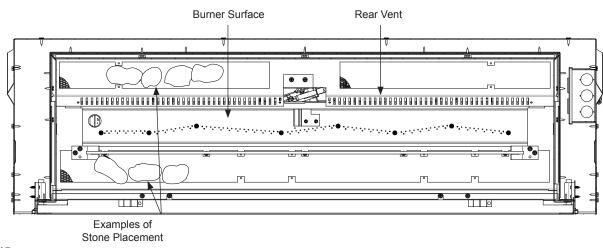
## **GLASS AND OPTIONAL STONE KIT PLACEMENT**

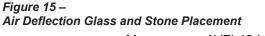
- 1. For best results, spread glass evenly over the entire floor and burner making sure the glass is not too thick over the burner ports (single layer only). *Figure 15.*
- 2. Place the stones randomly in front of and behind the burner. CAUTION: Do not allow stones to sit directly on burner or in flame. *Figure 15 and 16.*
- 3. Turn burner on and adjust glass over the ported area to achieve an even, clean flame. *Page 31, Figure 25*



Air Deflection Glass Placement (before)







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## PLACEMENT OF OPTIONAL LOGS

WARNING: Turn off fireplace and allow to cool completely before beginning installation.

#### **Kit Contents:**

- Two (2) ceramic fiber driftwood logs
- Four (4) log support pin brackets
- Eight (8) #8 bracket mounting screws

**NOTE** — Do not handle logs with your bare hands. Always wear gloves to prevent skin irritation from ceramic fibers. After handling the logs, wash your hands with soap and water to remove any traces of fibers.

**NOTE**: Prior to installing the log set, you must first install the pin brackets on the burner. Fireglass and the air deflection glass should only be installed after the pin brackets are in place. The logs must then be placed in the unit after the fireglass and air deflection glass. If the optional logs are added after the air deflection glass and fireglass are in use, move the fireglass away from the areas in Figure 18 and

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs supplied with the optional log kit (AVFL42DLS-A).

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

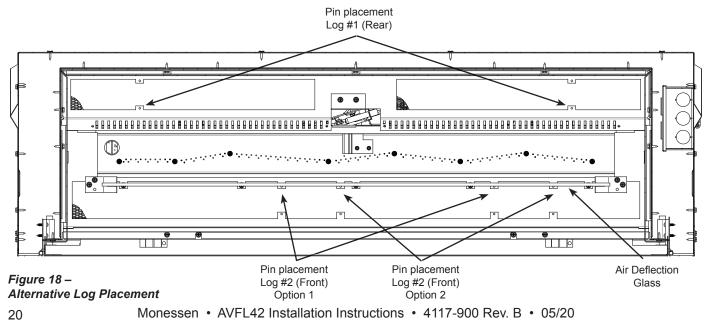
install the support brackets, then arrange fireglass evenly across burner again.

1. Mount the four log support pin brackets using mounting holes and screws provided in locations indicated in Figure 18. Note that the front log can be mounted in two different positions. The pin brackets can be moved to accommodate the preferred log placement.

WARNING



2. Place the large rear log (#1) by aligning the holes in the bottom of the log Figure 17 with the two pins at the Log Pin Assembly back of the burner. Figure 18.



 Place the front log (#2) by aligning the holes in the bottom of the log with the two pins at the front of the burner. The front log may be placed in one of two positions on the burner depending on which two pin set locations are used.



Figure 19– Front Log Placement



Figure 20 – Alternative Front Log Placement



WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. **DO NOT** try to light the burner by hand.
- B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

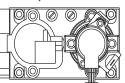
#### WHAT TO DO IF YOU SMELL GAS

- DO NOT try to light any appliance.
- DO NOT touch any electric 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.
- C. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS (IPI)

1. This appliance is equipped with an ignition device which automatically lights the burner. DO NOT try to light the burner by hand.





- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the top of this label. If you do not smell gas, go to next step.
- 3. To light the burner:
  - Equipped with wall switch: Turn ON/OFF switch to ON. Equipped with remote or wall control: Press ON or FLAME button. Equipped with thermostat: Set temperature to desired setting.
- If the appliance does not light after three tries, call your service technician or gas supplier.

#### TO TURN OFF GAS TO APPLIANCE |

- Equipped with wall switch: Turn ON/OFF switch to OFF. Equipped with remote or wall control: Press OFF button. Equipped with thermostat: Set temperature to lowest setting.
- Service technician should turn off electric power to the control when performing service.

4604-200

## WARNING:

DO NOT CONNECT LINE VOLTAGE (110/120 VAC OR 220/240 VAC) TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

## **CAUTION:**

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

Hot while in operation. DO NOT touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

#### NOT FOR USE WITH SOLID FUEL

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANS/Z223.1/ NFPA 54, or the National Gas and Propane Installation code, CSA B149.1.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

4604-201

### **Initial Use**

Initial Break-in Procedure

- The fireplace should run three to four hours continuously on high.
- Turn the fireplace off and allow it to completely cool.

This cures the materials used to manufacture the fireplace.

## NOTICE! Open windows for air circulation during fireplace break-in.

- Some people may be sensitive to smoke and odors.
- Smoke detectors may activate.

## **Burn Rate**

The Artisan model has a variable burn rate which is controlled by the remote control. Therefore the flame height is adjustable.

The flame height may be adjusted as desired by locating the flame option on the remote control and adjusting up or down to desired flame height.

## **Operation During A Power Outage**

The IntelliFire<sup>™</sup> Plus ODS intermittent pilot ignition system comes with a battery backup system that enables the system to operate in a power outage. The system offers seamless transition from household AC power to battery backup. A factory-installed battery pack is located in the control cavity of the appliance. See Figure 21. Battery longevity and performance will be affected by long term exposure to the service temperatures of this appliance.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source.

#### To Operate Fireplace Using Battery Power (DC):

- 1. Access the control cavity of the appliance. See Figure 21 for location. Lift the barrier screen off of the appliance.
- Locate the battery tray and insert four AA cell batteries. See Figure 21. Battery polarity must be correct or module damage will occur. A complete wiring diagram is included in the electrical section of the appliance installation manual.
- 3. Turn the appliance on according to the instructions below for the appropriate type of control:

Standard Wall Switch or Factory-Installed ON/OFF Switch:

• Toggle the switch as you would under normal circumstances.

#### Wireless Remote:

- Remote receiver is integrated into the ignition module
- Use the remote to turn the appliance on.
- To preserve battery life, do not use the HI/LO flame or THERMOSTAT options.

#### **Ignition Module:**

· Locate the ignition module in the control cavity.

• Slide the ON/REMOTE/OFF switch to the ON position. **NOTICE:** Some functionality will be lost when using battery backup including remote control, lights, or any other auxiliary functions that require household 110-120 VAC power.

#### To Return to Operation Using Electrical (AC) Power Standard Wall Switch or Factory-Installed ON/OFF Switch:

- Toggle the switch to OFF.
- Remove the batteries from the battery tray.

#### Wireless Remote:

- Slide the ON/REMOTE/OFF switch to the REMOTE position.
- Remove the batteries from the battery tray.

#### **Ignition Module:**

- Slide the ON/REMOTE/OFF switch to the REMOTE position.
- Remove the batteries from the battery tray.

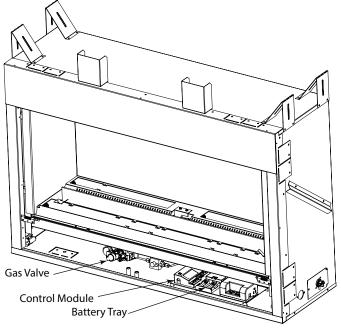


Figure 21 - Control Cavity Location

## **Installation & Operating Instructions**

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged system component.
- Modification of the system component.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

• Read, understand and follow these instructions for safe installation and operation.

## Introduction

The RC300 multifunctional remote control is designed to control light, flame height and interior dome lighting. The RC300 is equipped with thermostat functions which can automatically control the temperature in the room in which it is installed. The control is only for use with the Hearth & Home Technologies IntelliFire Plus™ system (IPI). The AUX300 module is rated for 120 VAC, 60 Hz, and is required for operation of this remote control device.

## **Installation Precautions**

This remote control is tested and safe when installed in accordance with this installation manual. Do not install any components that may be damaged.

Do not modify, disassemble, or substitute any of the components included with this kit. Installation of this unit must be done by a qualified service technician.

Placement of this remote control may affect performance. An assessment of the space should be done prior to installation for optimum performance.

## **Determine Location**

Determine the location for the remote control. The selected location should be in the same space as the gas fireplace. Never place this unit in a separate room. The remote control must be placed within 30 feet (9.14 m) of the fireplace but should not be exposed to extreme heat.

The RC300 is approved for interior installation and should not be used in exterior applications.

• Keep remote control out of reach of children.

#### **FCC Requirements**

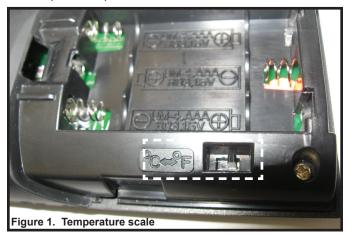
**Warning! Risk of Fire!** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Contact the dealer or an experienced radio TV technician for help.

## **Changing Temperature Scale**

To change the temperature display between Celsius and Fahrenheit, remove the battery cover from the back of the remote control and slide the switch to your desired temperature scale (see Figure 1). The screen will automatically change the indicators on the room temperature and set temperature portion.



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#### Installation of Remote Control Housing

**CAUTION! Risk of Fire! DO NOT** install damaged or modified components. Warranty will be voided if damaged or modified components are installed.

**Kit components**: One remote control, two #6 screws, two wall anchors, 3 AAA batteries and one AUX300 module. If batteries are properly installed the remote will turn on

- 1. Remove remote control components from packaging.
- 2. Remove battery cover from the back of the remote by sliding it down and install 3 AAA batteries.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation, trips, etc):

- Remove batteries from remote control.
- · Unplug switching adapter and remove back-up batteries.
- Secure the remote control housing on a flat wall surface using the two screws and wall anchors provided. See Figure 2.

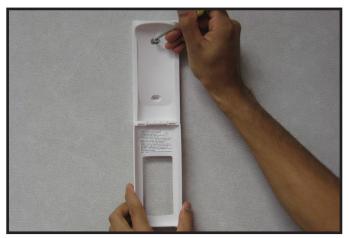


Figure 2. Mounting Remote Control Housing

4. Place remote control inside housing. See Figure 3.



Figure 3. Remote in Housing

5. Close the housing door. See Figure 4.



Figure 4. Mounting Remote Control Housing

## Programming the RC300 to the Control Module

**CAUTION! RISK OF BURNS!** DO NOT PROGRAM THE REMOTE CONTROL TO THE CONTROL MODULE WHEN FIREPLACE IS HOT.

- Verify the ON/OFF/REMOTE switch is in the REMOTE position. Green LED light will blink three times and control module will beep once 5 seconds later when ready. See Figure 5.
- Using a small item (such as a paper clip) press and release the LEARN button located near the ON/OFF/ REMOTE switch. See Figure 5.
- Control module will beep once and LED will blink green for 10 seconds.
- While the LED is blinking, press the POWER button on the remote control. A double beep will come out of the control module to indicate that it has been programmed successfully.

**NOTICE:** Up to three remote controls can be programmed into the control module. Simply press a button on the other remote controls during the 10 second programming process to add another remote into the system. It is recommended to program only one RC300 remote control.

To clear memory in the control module, use a small item (such as a paper clip) to press and release the LEARN button. Control module will beep once and LED will blink green for 10 seconds **DO NOT** press any buttons on the remote during the ten seconds that the green LED blinks. The memory will be cleared. Note that the RC300 will not be programmed if it's in STANDBY mode. Press the ON/ OFF button twice to switch to IDLE mode.

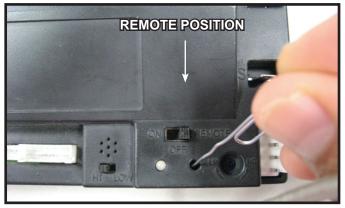
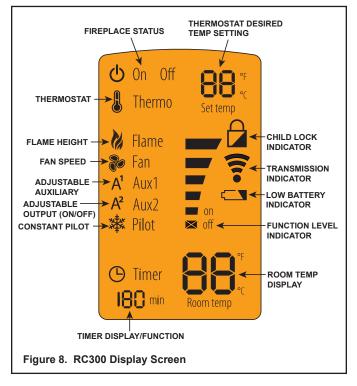


Figure 5. Programming RC300 - (Control Module is located under unit.)

## **Display Screen**



## **Function Buttons**



Use POWER button to turn the unit on and off.

Menu Use MENU button to display the menu functions. Only functions that can be activated will be displayed. For example: Flame Height will not be displayed when the remote status is OFF.



Use the SELECT button to select the current feature.



Use the UP and DOWN arrows to toggle through the menu functions and value selections in the submenus.

## Idle When Remote is in ON Mode

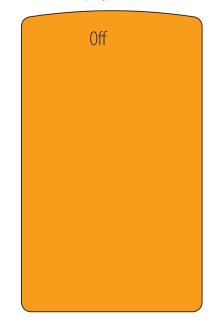
The remote control will go into an idle mode if no buttons are pressed within 5 seconds. Press any button to resume full functionality. In idle mode, only active functions will show on the screen.



Figure 9. RC300 Idle Mode

## Standby mode

The remote control will go into a standby mode if no buttons are pressed within 5 minutes. Press the POWER button to reactivate the remote control to ON mode. Active functions will be displayed



## About ON Mode

- All functions can be accessed when the remote control is in the ON mode.
- Only active functions will be displayed when the remote control is in the ON mode.

## About OFF Mode

Only the following functions can be accessed in the OFF mode:

- AUX1-Lower Light Bar
- AUX2-Top Dome Light

Only active functions will be displayed when the remote control is in the OFF mode.

## **Turning On the Fireplace**

• Press the POWER button to turn the fireplace ON. The fireplace will first ignite the pilot. Once the pilot flame is established the main burner will be lit.

**NOTICE:** Whenever the fireplace is cycled from OFF to ON, the main burner will light on high for 10 seconds before returning to the previous user setting.

## **Adjusting Flame Height**

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **FLAME** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **FLAME HEIGHT**, then press **SELECT**. The **FLAME HEIGHT** can be adjusted to 5 different settings.

**NOTICE:** FLAME HEIGHT will not be adjustable for first ten seconds when fireplace is turned on.

**NOTICE:** The system will remember the previous FLAME HEIGHT setting and will automatically adjust after 10 seconds.

**NOTICE:** Some models use fixed valves, which cannot be adjusted.

## AUX1 Function (Lower Light Bar)

## AUX2 Function (Top Dome Light)

- Press the **MENU** button to activate the menu.
- Using the UP and DOWN arrows highlight the AUX1 icon and press SELECT.
- Use the **UP** and **DOWN** arrows to adjust the **AUX1** output, then press **SELECT**. The **AUX1** function can be adjusted to 4 different settings: HI, MED, LOW and OFF.

### Adjusting Thermostat

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **THERMO** icon and press **SELECT**.
- Use the UP and DOWN arrows to turn the THERMO ON or OFF, then press SELECT (the SET TEMP will start blinking). Using the UP and DOWN arrows select the desired temperature and press SELECT.

**NOTICE:** If the THERMO function is on, the SET TEMP can be adjusted at any time by pressing the UP and DOWN arrows.

**NOTICE:** As the ROOM TEMP (RT) approaches SET TEMP (ST), the remote system will automatically adjust the flame height. If the RT rises above ST, the fireplace will shut down the main burner. After this, the fireplace will turn back on after the RT drops below the ST.

**NOTICE:** The system requires a two degree Fahrenheit or higher temperature difference between RT and ST for the fireplace to turn on.

**NOTICE:** The system will remember the previous TEM-PERATURE setting when THERMOSTAT mode is cycled ON or OFF.

**NOTICE:** If your installation includes an optional wired ON/ OFF wall switch, it should be in the OFF position when using the RC300 in thermostat mode.

## Adjusting Timer

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **TIMER** icon and press **SELECT**.
- Use the UP and DOWN arrows to turn the TIMER ON or OFF, then press SELECT. Using the UP and DOWN arrows select the desired set time and press SELECT. Timer operates in increments of 15, 30, 45, 60, 90, 120 and 180 minutes.

## Setting the Child Lock

• Press and hold the **MENU** and **UP** arrow buttons simultaneously for 4 seconds to enable or disable the child lock feature.

**NOTICE:** No functions will be usable until child lock feature is disabled.

## **Power Outage**

- If fireplace battery backup system IS installed at time of power outage, fireplace operation will not be interrupted.
- If fireplace battery backup system IS NOT installed at time of power outage, fireplace will shut off. To resume fireplace operation, install battery backup.

**NOTICE:** Battery polarity must be correct or module damage will occur.

## **Manual Fireplace Shutoff**

In the unlikely event that the remote wall switch malfunctions and will not turn off the fireplace, call your dealer for service assistance. In the meantime, you may choose one of the following actions to turn off the fireplace:

**CAUTION! Risk of burns!** Fireplace surfaces are hot when operating and during cool down. Use care and wear gloves when opening the front and accessing components inside the fireplace.

Check remote screen for battery level indicator, replace the batteries if low battery is indicated (See Figure 8, page 27).

The fireplace may be manually shut down by one of the following methods:

#### Turn off the control module:

- Open or remove the decorative front to access the control module.
- Move switch to OFF (See Figure 22, page 30).

#### Disconnect power to the control module:

- Open or remove the decorative front to access power cord to the junction box and/or back-up batteries.
- Unplug the control module and/or remove back-up batteries.

#### Shut off gas to the control:

- Open or remove the decorative front and locate the gas shut-off valve to the left of the gas control.
- · Rotate the valve 90 degrees to turn off gas supply.

## Turn off power to the fireplace (if back-up batteries are not installed):

- Unplug unit from electrical source, if you cannot unplug then:
- Locate house circuit breaker for fireplace.
- Turn off the circuit breaker.

## Detailed Component Operating Instructions— Intellifire™ Plus ODS

## **Control Module Operation**

 The control module has an ON/OFF/REMOTE selector switch that must be set. See Figure 22.

OFF Position: Appliance will ignore all power inputs and will not respond to any commands from a wall switch or remote. The unit should be in the OFF position during installation, service, battery installation, fuel conversion, and in the event that the control goes into LOCK-OUT mode as a result of an error code.

ON Position: Appliance will ignite and run continuously in the HI flame setting, with no adjustment in flame output. This mode of operation is primarily used for initial installation or power outage operation with battery backup.

REMOTE Position: Appliance will initiate commands from an optional wired wall switch and/or the wireless remote (RC300).

- 2. If using a wired wall switch with the module in REMOTE mode, the flame output can be adjusted with the HI/LO selector switch on the module. See Figure 22. Note that the flame HI/LO selector switch will become inactive once a remote control (RC300) is programmed to the control module. Note that the control module will always ignite the fireplace on HI and remain so for the initial 10 seconds of operation. If the HI/LO is switched to the LO position, the flame output will automatically drop to the lowest setting after the flame has been established for 10 sec. After this 10 second period, the flame can be adjusted from HI to LO with the switch.
- 3. The control module has safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the RC300 remote.
- If you intend to use both an optional wired wall switch and the RC300 remote control to operate your fireplace, the wall switch will override any commands given by the remote.

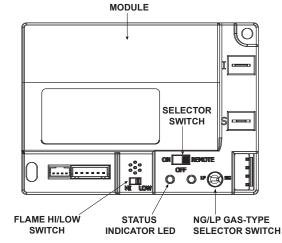


Figure 22 Control Module

#### 5. Module Reset

This module may lock-out under certain conditions. When this occurs, the appliance will not ignite or respond to commands. The module will go into lock-out mode by emitting three audible beeps, then continuously displaying a RED/GREEN error code at its status indicator LED.

- Check battery tray. Remove batteries if installed. Batteries should only be installed for use during power outages.
- Locate the module selector switch. (See Figure 22).
- Set the module selector switch to the OFF position.
- Wait five (5) minutes to allow possible accumulated gas to clear.
- Set the module selector switch to ON or REMOTE position.
- · Start the appliance.

**WARNING! Risk of Explosion! DO NOT** press the module reset switch more than one time within a five minute time period. Gas could accumulate in firebox. Call a qualified service technician.

**Nine Hour Safety Shutdown Feature** The appliance has a safety feature that automatically shuts down the fireplace after nine hours of continuous operation without receiving a command from the wall switch or optional remote.

## **Appliance ON/OFF**

Use the IntelliFire<sup>™</sup> Plus Remote Control to control the ON/ OFF function of the appliance. Follow instructions included with the remote control. If desired, a wall switch may be installed to control the ON/OFF function of the appliance.

## FLAME APPEARANCE

Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

## CHECK THE PILOT FLAME

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural gas. Refer to Figure 23 for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. Refer to Figure 24 for incorrect shape of pilot flame.

## CHECK BURNER FLAME APPEARANCE

In normal operation, at full rate after 15 minutes, the flames should appear as shown in Figure 25.

If logs are installed, the flames should be yellow and should not impinge on the logs.

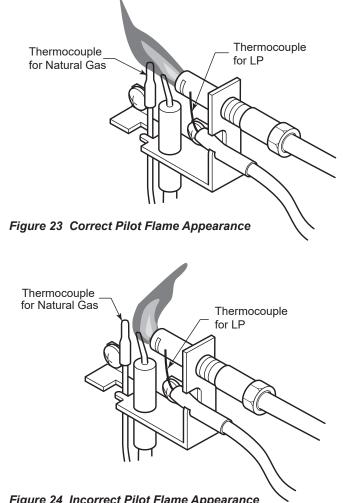


Figure 24 Incorrect Pilot Flame Appearance



Figure 25 Burner Flame Appearance (Shown with fireglass only)

## **CLEANING AND SERVICING**

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

WARNING

Turn off heater and allow to cool before cleaning. Disconnect electrical power before cleaning or servicing.

Remove logs, if installed, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Also remove glass, stones and/or glass chunks, as applicable. Refer to manual for correct log placement.

## **PERIODIC CLEANING – Refer to parts diagram for** location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Brush logs and/or stones with soft bristle brush or vacuum with brush attachment.
- Clean fireglass with a soft wet cloth.
- Vacuum loose particles and dust from the burner, controls.
- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush, or pipe cleaners.
   Failure to keep air intake holes clean will result in sooting and poor combustion.
- The fireplace face should be dusted and wiped with a wet soapy cloth.

## ANNUAL CLEANING/INSPECTION – Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush or pipe cleaners.
   Failure to keep air intake holes clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner and rear burner.
- Replace battery in remote control device.

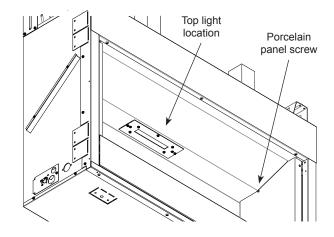


Figure 26 Top Light Position; Porcelain Panel Screw Location

## **REPLACING LIGHT BULBS**

#### TOP LIGHT BULB INSTALLATION

- Remove three screws holding light cover in place (as shown in Figure 27)
- 2. Insert (1) 90W bulb provided into socket
- 3. Replace top light cover with three screws

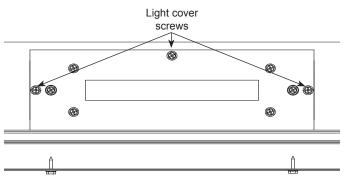


Figure 27 Top Light Screws

#### LOWER LIGHT BAR BULB INSTALLATION

- 1. Remove air deflection glass from the unit and place on a flat, clean surface.
- 2. Remove any optional media already installed in the unit (e.g. stones, fireglass, log set, etc.).
- Using a Phillips screwdriver remove the screws (one each) holding the left and right porcelain panels in place. *Figure 28*
- 4. Carefully remove the panels from the unit placing them on a clean level surface.

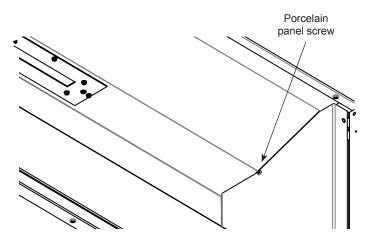


Figure 28 Porcelain Panel Screw Location

- **NOTE:** The rear porcelain panel is held in place by the left and right panel and could fall forward if not supported during removal of the side panels.
- 5. With side panels removed the rear porcelain panel can be removed from the unit and placed on a clean, level surface.
- 6. Remove nine screws that secure the front hearth in place and remove from unit. *Figure 29*
- 7. Figure 30 shows bulb placement for front and rear light bars. Insert bulbs in sockets.
- 8. With (twelve 15W) bulbs installed in front and rear light bar, reinstall the rear hearth first with five screws that were removed earlier. *Figure 29*
- 9. Reinstall the front hearth with nine screws removed earlier. *Figure 29*
- 10. Place the rear porcelain panel back in place and reinstall the left and right side using same screws that were removed earlier.
- 11. Re-install the air deflection glass and decorative media (see page 19).

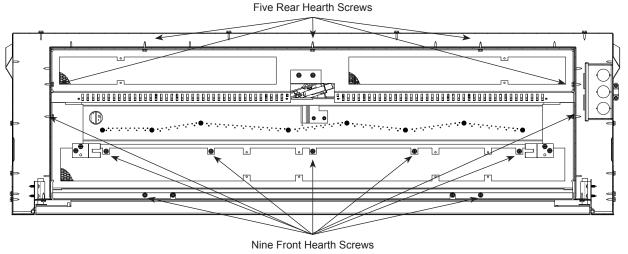
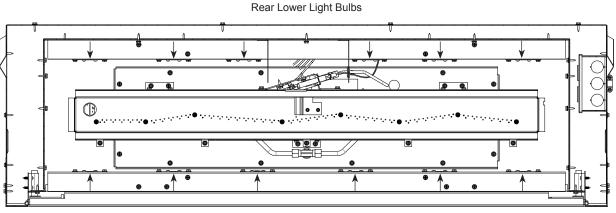


Figure 29 Hearth Screw Locations



Front Lower Light Bulbs

Figure 30 Lower Light Bulb Location

## **OPERATING INFORMATION**

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into the fireplace. Do not place a blower inside the burn area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films, or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance possibly causing headaches or eye or lung irritation. *This is a normal and temporary occurrence.* 

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

This appliance must not be used with glass doors.

## **OPTIONAL ACCESSORIES**

There are a wide range of optional accessories available for the AVFL Vent Free Fireplace. A variety of face and trim kits can change the appearance of the fireplace. Choose the stylish driftwood log set, rustic stone kit, or go minimalist with just a coating of fireglass and transform the fireplace to suit your space.

#### **Faces and Trim Kits**

Wide Contemporary Textured Black Fa	се
	AVFL42WFBT-A
Wide Contemporary Stainless Steel Fa	се
	AVFL42WCSS-A
Black Textured Inside Fit Trim Kit	AVFL42TKI
Coastal Driftwood Log Set	AVFL42DLS-A
Stone Kit	SKAVFL42
Glass Kits	
Glass Kit Bronze	GKB
Glass Kit Diamond	GKD
Glass Kit Onyx	GKO
Glass Kit Sapphire	GKS

- WARNING Turn appliance OFF and allow to cool • before servicing.
  - Only a qualified service person should • service and repair the heater.

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

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a gualified service technician. Contact your dealer to arrange a service call by a qualified service technician.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Appliance produces unwanted odors.	Appliance burning vapors from paint, hair spray, glues, etc.	Ventilate room. Stop using odor causing products while heater is running.
	Gas leak.	Locate and correct all leaks.
	Initial burn off.	Ventilate room and turn unit on high until odor is gone. Odor should be gone after six hours of continuous use.
Appliance shuts off during use.	Not enough fresh air is available for ODS/pilot to operate.	Open window and/or door for ventilation.
	Low line pressure.	Contact local gas company.
	ODS/pilot is partially clogged.	Clean ODS/pilot.
	Defective thermopile.	Check wire connections. Check output should be 500 millivolts across thermopile leads with ON/OFF switches off.
Burner does not light after ODS/pilot is lit.	Burner orifice is clogged.	Burner orifice is clogged.
	Burner orifice diameter is too small.	Burner orifice diameter is too small.
	Inlet gas pressure is too low.	Inlet gas pressure is too low.
Burner backfires during combustion.	Manifold gas pressure is too low.	Contact local gas company.
	Burner orifice is clogged.	Clean burner or replace burner orifice.
Slight smoke or odor combustion.	Burner orifice is clogged or damaged.	Clean burner or replace burner orifice.
	Burner is damaged.	Replace burner.
	Gas regulator defective.	Replace gas regulator.
Logs appear to smoke after initial operation.	Vapor from paint or curing process of logs.	Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours.
		Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	Air in gas line.	Operate burner until air is removed from line. Have gas line checked by local gas company.
	Dirty of partially clogged burner orifices.	Clean burner or replace burner orifice.
No gas to pilot.	LP regulator shut down due to inlet pressure too high.	Verify LP tank regulator is installed and set at 11" to 13" w.c. Replace regulator on heater.

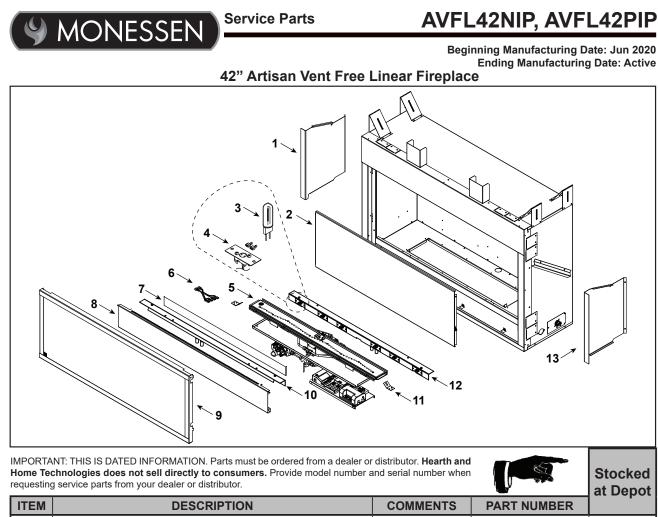
## Troubleshooting

## IntelliFire<sup>™</sup> Plus ODS Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. The ignitor/module	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
makes noise, but no spark.	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from mod- ule to pilot assembly. Verify connections underneath pilot assembly are tight; also verify igniter and flame sense wires are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).
2. Pilot won't light, there is no noise or spark.	Verify that transformer is installed and plugged into module. Check voltage of transformer at connection to module. Acceptable readings of a good transformer are between 6.4 and 6.6 volts DC. Battery power supply voltage must be at least 4 volts. If less than 4 volts, replace batteries.	
	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Re- move and verify continuity of each wire in wiring harness. Replace any damaged components.	
	C. Improper wall switch wiring.	Verify that 110-120 VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
3. Pilot sparks, but pilot will not light. A. Gas supply is off or lacking pressure.		Verify that incoming gas line ball valve is "open." Verify that inlet pressure reading is within acceptable limits.
	B. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	<ul> <li>D. Pilot valve solenoid voltage is out of spec.</li> </ul>	Verify that 1.5 to 1.8 VDC is supplied to pilot solenoid from module. If below 1.5 volts, replace module. If 1.5 volts or greater, replace valve.

## Intellifire<sup>™</sup> Plus Ignition System - (continued)

Symptom	Possible Cause	Corrective Action
<ol> <li>Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)</li> </ol>	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contami- nated flame sensing rod.	With fixed glass assembly in place, verify that flame is en- gulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure spec- ifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of ap- pliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or con- taminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sens- ing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.
5. Appliance lights and runs for a few minutes and then shuts down and/or appliance cycles on and off.	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contami- nated flame sensing rod.	Verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series be- tween module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accu- mulated on flame sensing rod.
	C. Logs are set up incorrectly.	Remove and reinstall logs per the log placement instructions.
	D. Damaged pilot assembly or con- taminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sens- ing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.



DESCRIPTION	COMMENTS	PART NUMBER	
Porcelain Panel, Left		20305462	
Porcelain Panel, Rear		20305461	
Rub	15w (qty 12 req)	SRV4601-155	Y
dub	Top Light (90w)	SRV4602-302	Y
Bulb Socket	Qty 13 req	SRV73D4521	
Engine Accombly	NG	SRV4117-015	
Engine Assembly	Propane	SRV4117-016	
Wire Harness		SRV78D1077	Y
Deflection Glass		SRV20305432	Y
Panel, Access Door		20305434K	
Screen Frame Assembly		20305693K	Y
Light Assembly		20305969K	
Support, Glass (Painted)	Qty 2 req	20306020K	Y
Rear Light Assembly		20306046K	
Porcelain Panel Right		20305464	
Reflector Light Assembly		SRV4117-030	
Junction Box Assembly		26D2128K	
Non Combustible/Cement Board		20305772	
Remote, RC 300		SRV4605-307	Y
	Porcelain Panel, Left         Porcelain Panel, Rear         Bulb         Bulb Socket         Engine Assembly         Wire Harness         Deflection Glass         Panel, Access Door         Screen Frame Assembly         Light Assembly         Support, Glass (Painted)         Rear Light Assembly         Porcelain Panel Right         Reflector Light Assembly         Junction Box Assembly         Non Combustible/Cement Board	Porcelain Panel, Left	Porcelain Panel, Left20305462Porcelain Panel, Rear20305461Porcelain Panel, Rear20305461Bulb15w (qty 12 req)SRV4601-155Bulb SocketQty 13 reqSRV4602-302Bulb SocketQty 13 reqSRV73D4521Engine AssemblyNGSRV4117-015PropaneSRV4117-016Wire HarnessSRV78D1077Deflection GlassSRV20305432Panel, Access Door20305434KScreen Frame Assembly20305693KLight Assembly20305693KSupport, Glass (Painted)Qty 2 req20306020KRear Light Assembly20305464Porcelain Panel RightSRV4117-030Junction Box AssemblySRV4117-030Junction Box Assembly26D2128KNon Combustible/Cement Board20305772

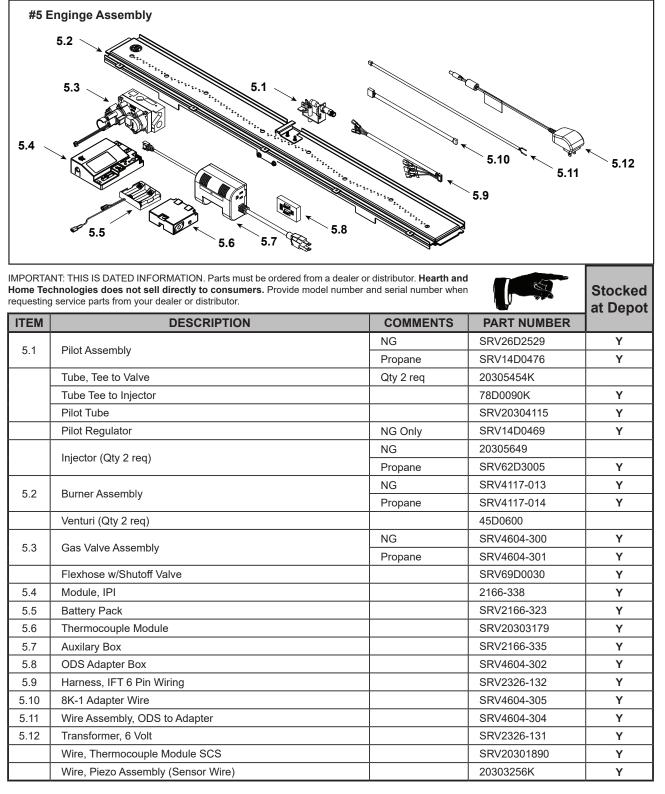
Additional service part numbers appear on following page.

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## AVFL42NIP, AVFL42PIP

Beginning Manufacturing Date: Jun 2020 Ending Manufacturing Date: Active





**Service Parts** 

## AVFL42NIP, AVFL42PIP

Beginning Manufacturing Date: Jun 2020 Ending Manufacturing Date: Active

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MPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. <b>Hearth and</b> Home Technologies does not sell directly to consumers. Provide model number and serial number when requesting service parts from your dealer or distributor.								
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	at Depot				
	14.2	14.1						
14.1 14.2	Log #1 Log #2		20305703K 20305704K					

#### Hearth & Home Technologies LIMITED LIFETIME WARRANTY

Hearth & Home Technologies, on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet and electric hearth appliances that are purchased from an HHT authorized dealer.

#### WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

#### WARRANTY PERIOD:

Warranty coverage for consumers begins at the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. However, the warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood and pellet appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting						
Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Components Covered	
1 Year		x	x	x	x	x	All parts including handles, external enamaled components and other material except as covered by Conditions, Exclusions, and Limitations listed	
2 years			х	х			Igniters, Auger Motors, Electronic Components, and Glass	
		x					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)	
		х		х			Molded Refractory Panels, Glass Liners	
3 years			х				Firepots, burnpots, mechanical feeders/auger assemblies	
5 years	1 year	х					Vent Free Burners, Vent Free Logs	
			Х	Х			Castings, Medallions and Baffles	
6 years	3 years			x			Catalyst - Limitations Listed	
7 years	3 years		х	x			Manifold tubes, HHT Chimney and Terminations	
10 years	1 year	х					Burners, logs and refractory	
Limited Lifetime	3 years	x	x	x			Firebox and heat exchanger, FlexBurn® System (engine, inner cover,access cover and fireback)	
1 Year	None	x	х	х	x	х	All replacement parts beyond warranty period	

See conditions, exclusions and limitations on the next page

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#### WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- This warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the appliance resides.
- Contact your installing dealer for warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.
- Limited Catalyst Warranty
  - For wood burning products containing a catalyst, the catalyst will be warranted for a six-year period to the original purchaser at the site of original installation. The purchaser must provide the name, address, and telephone number of the location where the product is installed, proof of original purchase date, date of failure, and any relevant information regarding the failure of the catalyst.

#### WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to the appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

#### This warranty is void if:

- The appliance has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

#### LIMITATIONS OF LIABILITY

 The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFICED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

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Monessen, a brand of Hearth & Home Technologies 7571 215th Street West, Lakeville, MN 50044 www.monessenhearth.com