Pleasant Hearth

VENT-FREE GAS LOG SET

WARNING: This appliance is equipped for (Natural and Propane) gas. Field conversion is not permitted other than between natural or propane gases.

MODEL # VFL2-SO18DT VFL2-EO18DT VFL2-SO24DT VFL2-EO24DT VFL2-WW18DT VFL2-WW24DT

> Patent Pending Dual **Fuel System**





Dual Fue

ANS Z21.11.2 2013

CAUTION - FOR YOUR SAFETY

A 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 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.
- 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.

AWARNING: Do not attempt to access or change the setting of the fuel selection means. Access to and adjustment of the fuel selection means must only be a performed by a qualified service person when connecting this appliance to a specified fuel supply at the time of installation.

Change of the selector setting to other than the fuel type specified at the time of installation could damage this appliance and render it inoperable.

The installer shall replace the access cover before completing the installation and operating this appliance.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to Air For Combustion and Ventilation section on page 9 of this manual.

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

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 propane or natural gas. This appliance is equipped with a simple means to switch between propane and natural gas. Field conversion by any other means including the use of a kit is not permitted.

The Installation instructions for an appliance for installation on combustible flooring shall specify that when the appliance is installed directly on carpeting, tile or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.



Questions, problems, missing parts? Before returning to your retailer, call our customer service department at 1-877-447-4768, 8:30 a.m. – 4:30 p.m., CST, Monday – Friday or email us at customerservice@ghpgroupinc.com.

TABLE OF CONTENTS

Specifications	2
Important Safety Information	3
Product Identification	5
Product Features	6
Preparing for Installation	7
Installation	10
Unpacking	15
Log Assembly	21
Operation	22
Care and Maintenance	25
Troubleshooting	27
Replacement Parts	30
Warranty	31

WARNING: Read the Installation & Operating Instructions before using this appliance.

IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in possible injury to persons or a fire hazard and will void the warranty.

ITEM	VFL2-SO18DT VFL2-EO18DT VFL2-WW18DT		VFL2-SO24DT VFL2-EO24DT VFL2-WW24DT		
Input Rating	30,000 BTU/Hr		30,000 BTU/Hr		
Minimum Input Rating	15,000 BTU/Hr	24,000 BTU/Hr	15,000 BTU/Hr	24,000 BTU/Hr	
Gas Type	Natural	LP/Propane	Natural	LP/Propane	
Ignition	Electronic Push Button	Electronic Push Button	Electronic Push Button	Electronic Push But- ton	
Manifold Pressure	5 in. W.C.	10 in. W.C.	5 in. W.C.	10 in. W.C.	
Inlet Gas Pressure *For purposes of input adjustment					
Maximum	14 in. W.C.	14 in. W.C.	14 in. W.C.	14 in. W.C.	
Minimum*	6 in. W.C.	11 in. W.C.	6 in. W.C.	11 in. W.C.	

SERVICE HINTS

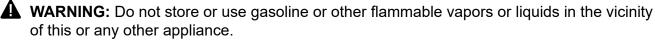
When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- heater will not produce specified heat
- for propane/LP units, propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local natural or propane/LP gas supplier.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this heater. Improper use of this heater can cause serious injury or death from burns, fire, explosion, electrical shock, and carbon monoxide poisoning.

Only a qualified installer, service agent, or local gas supplier may install and service this product.



WARNING: This appliance can be used with propane or natural gas. It is shipped from the factory adjusted for use with propane.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning resemble the flu with headaches, dizziness, or nausea. If you have these signs, the heater may not be working properly. Get fresh air immediately! Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease, people who are anemic, those under the influence of alcohol, and those living in high altitudes.

NATURAL AND PROPANE/LP GAS: Natural and Propane/LP gases are odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists. Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to operating this heater safely.

WARNING:

- Due to high temperatures, locate this appliance out of traffic and away from furniture and draperies.

- Heater becomes very hot when operating. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Heater will remain hot for a time after shutoff. Allow surfaces to cool before touching.

- Carefully supervise young children when they are in the room with the heater.

- Do not place clothing or other flammable material on or near the appliance. Never place any objects in the heater.

- Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

- Any change to this heater or its controls can be dangerous.

- Do not use any accessories not approved for use with this heater.

- Keep the appliance are clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

- This appliance is intended for supplemental heating.

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

SAFETY INFORMATION

1. 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.

2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors.

- 3. 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
- 4. This heater shall not be installed in a bedroom or bathroom.
- 5. Do not use this heater as a wood-burning heater. Use only the logs provided with the heater.

6. Do not add extra logs or ornaments such as pine cones, vermiculite or rock wool. Using these added items can cause sooting. Do not add lava rock inside the heater; only around the outside of the heater.

7. This heater is designed to be smokeless. If logs ever appear to smoke, turn off heater and call a qualified service person. Note: During initial operation, slight smoking could occur due to log curing and heater burning manufacturing residues.

8. To prevent the creation of soot, follow the instructions in Cleaning and Maintenance, page 25 & 26.

9. Before using furniture polish, wax, carpet cleaner or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.

10. This heater needs fresh air ventilation to run properly. This heater has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the heater if not enough fresh air is available. See Air for Combustion and Ventilation, page 9. If heater keeps shutting off, see Troubleshooting, page 27.

11. Do not run heater

- where flammable liquids or vapors are used or stored.
- under dusty conditions.
- 12. Do not use this heater to cook food or burn paper or other objects.
- 13. Never place any objects in the heater or on logs.

14. Do not use heater if any part has been under water. Immediately call a gualified 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.

15. Turn off and unplug heater and let cool before servicing. Only a gualified service person should service and repair heater.

16. Operating heater above elevations of 4,500 feet could cause pilot outage.

17. Do not operate heater if log is broken. Do not operate heater if log is chipped (dime-sized or larger).

18. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lb. capacity.

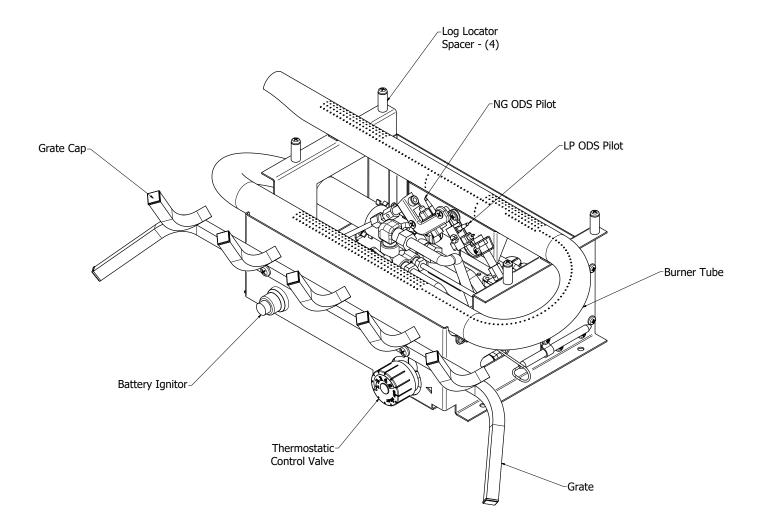
19. Provide adequate clearances around air openings.

QUALIFIED INSTALLING AGENCY

Only a qualified agency should install and replace gas piping, gas utilization equipment or accessories, and repair and equipment servicing. The term "qualified agency" means any individual, firm, corporation, or company that either in person or through a representative is engaged in and is responsible for:

a) Installing, testing, or replacing gas piping or

b)Connecting, installing, testing, repairing, or servicing equipment; that is experienced in such work; that is familiar with all precautions required; and that has complied with all the requirements of the authority having jurisdiction.



PRODUCT FEATURES

This log set has been tested and approved to ANS Z21.11.2 2013 standard for Unvented Heaters and can be operated with the flue damper closed. State and local codes in some areas prohibit the use of vent-free heaters.

DUAL FUEL CAPABILITY

Your heater is equipped to operate on either propane or natural gas. The heater is shipped from the factory ready for connecting to propane. The heater can easily be changed to natural gas by having your qualified installer follow the instructions on page 16 and the markings on the heater.

SAFETY PILOT

This heater has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/pilot shuts off the heater if there is not enough fresh air and cuts off main burner gas in the event of flame out.

ELECTRIC PUSH BUTTON IGNITION SYSTEM

This heater is equipped with an Electronic Push Button control system. This system requires one AAA battery (provided).

THERMOSTAT HEAT CONTROL

The control automatically cycles the burner on and off to maintain a desired room temperature (See page 23).

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts. Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

In the State of Massachusetts, unvented propane or natural gas-fired space heaters shall be prohibited in bedrooms and bathrooms.

In the State of Massachusetts the gas cock must be a T-handle type. The State of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

LOCAL CODES

Install and use heater with care. Follow all codes. In the absence of local codes, use the latest edition of The National Fuel Gas Code, ANSI Z223.1, also known as NFPA 54*.

*Available from: American National Standard Institute, Inc. 1430 Broadway New York, NY 10018

National Fire Protection Association, Inc. 1 Batterymarch Park Quincy, MA 02269-9101

This heater is designed for vent-free operation. State and local codes in some areas prohibit the use of vent-free heaters.

The installation of appliances designed for manufactured home (U.S. only) or mobile home installation must conform with the Standard CAN/CSA Z240 MH, Mobile Housing, in Canada, or with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or when such a standard is not applicable, ANSI/ NCSBCS A225.1/NFPA 501A, Manufactured Home Installations Standard.

CARE AND MAINTENANCE

BURNER FLAME PATTERN

Figure 29 shows a correct burner flame pattern. Figure 30 shows an incorrect burner flame pattern. The incorrect burner flame pattern shows sporadic, irregular flame tipping. The flame should not be dark or have an orange/reddish tinge.

Note: When using the heater the first time, the flame will be orange for approximately one hour until the log cures.

If burner flame pattern is incorrect, as shown in Figure 30

- turn heater off (see To Turn Off Gas to Appliance, page 23).
- see Troubleshooting, page 27.

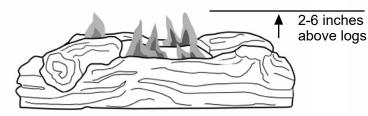


Fig. 29 - Correct/Normal Flame Pattern with short flames



Fig. 30 -Incorrect/Abnormal Flame Pattern with tall flames

WARNING: Turn off heater and let cool before servicing.

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 person. Heater may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

BURNER ORIFICE HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have heater inspected yearly by a qualified service person.

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. 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.

CARE AND MAINTENANCE

- 1. Shut off unit including pilot. Allow unit to cool for at least 30 minutes.
- 2. Inspect burner, pilot and primary air inlet holes on orifice holder for dust and dirt (See Fig. 31).
- 3. Blow air through the ports/slots and holes in the burner.

4. Check the orifice holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint or pet hair with a soft cloth or vacuum cleaner nozzle.

5. Blow air into the primary air holes on the orifice holder.

6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4. Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about 2" from where the pilot flame comes out of the pilot assembly (see Figure 32). 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.

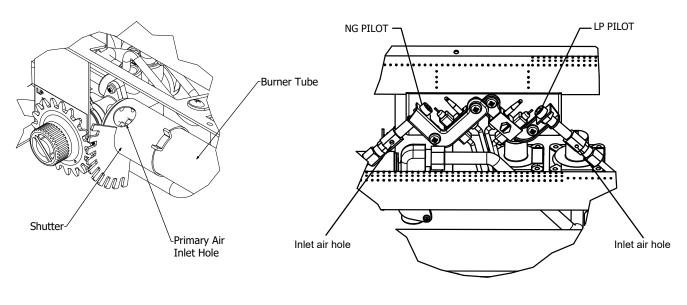


Fig. 31 - Primary Air Inlet Slot on Burner Tube

Fig. 32 - Pilot Inlet Air Hole (Propane/LP Gas)

LOG SET

- If you remove the log set for cleaning, refer to page 21, for placement instructions.
- Replace log set if broken or chipped (dime sized or larger).

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.

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: Make sure that power is turned off before proceeding.

WARNING: Turn off and let cool before servicing. Only a qualified service person should service and repair heater.

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

SERVICE HINTS

When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- heater will not produce specified heat
- for propane/LP units, propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local natural or propane/LP gas supplier.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
There is a sputtering sound coming from the Liquid Propane pilot that is a nuisance. When operating on Natural Gas (NG) and the NG pilot is lit.	1. Use of Natural Gas.	1. Call Customer Service.
When ignitor button is pressed in, there is no spark at ODS/ pilot.	 Ignitor electrode is positioned wrong. Ignitor electrode is broken. Ignitor electrode is not connected to ignitor cable. Ignitor cable is pinched or wet. Damaged ignitor cable. Bad Electronic Push Button ignitor. Bad Battery. 	 Replace electrode. Replace electrode. Replace ignitor cable Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry. Replace ignitor cable. Replace Electronic Push Button ignitor. Check Battery and replace if needed.
When ignitor button is pressed in, there is a spark at ODS/ pilot but no ignition.	 Gas supply is turned off or equipment shutoff valve is closed. Control knob not fully pressed in while pressing ignitor button. Air in gas lines when installed. ODS / pilot is clogged. Gas regulator setting is not correct. Control knob not in PILOT position. Depleted gas supply (propane). 	 Turn on gas supply or open equipment shutoff valve. Fully press in control knob while pressing ignitor button. Continue holding down control knob. Repeat igniting operation until air is removed. Clean ODS/pilot (see Care and Maintenance, page 25 & 26) or replace ODS/pilot assembly. Replace gas regulator. Turn control knob to PILOT position. Contact local propane/LP gas company.

TROUBLESHOOTING

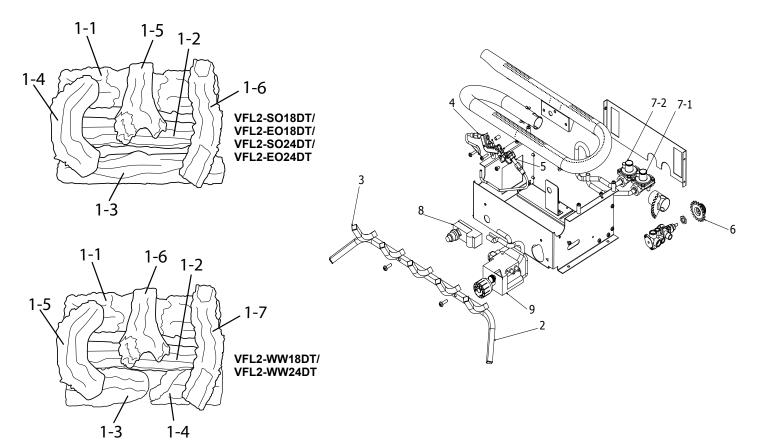
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
ODS/pilot lights but flame goes out when control knob is released.	 Control knob is not fully pressed in. Control knob is not pressed in long enough. Equipment shutoff valve is not fully open. Thermocouple connection is loose. Thermocouple damaged. Control valve damaged. Wrong gas setting. 	 Press in control knob fully. After ODS/pilot lights, keep control knob pressed in 30 seconds. Fully open equipment shutoff valve. Hand tighten until snug, and then tighten ¼ turn more. Replace thermocouple. Contact customer service. Correct gas selection.
Burner(s) does not light afterODS/pilot is lit.	 Burner orifice is clogged. Burner orifice diameter is too small. Inlet gas pressure is too low. 	 Clean burner orifice (see Care and Maintenance, page 25 & 26) or contact customer service. Contact customer service. Contact your gas supplier.
Burner(s) does not light afterODS/pilot is lit. (Heater is set up for NG.)	1. Inlet gas pressure is too high.	1. Contact your gas supplier.
Delayed ignition of burner(s).	 Manifold pressure is too low. Burner orifice is clogged. 	 Contact your gas supplier. Clean burner (see Care and Maintenance, page 25 & 26) or contact customer service.
Burner backfiring during combustion.	 Burner orifice is clogged or damaged. Burner is damaged. Gas regulator is damaged. 	 Clean burner orifice (see Care and Maintenance, page 25 & 26 or contact customer service. Contact dealer or customer service. Replace gas regulator.
High yellow flame during burner combustion	 Not enough air. Gas regulator is defective. Inlet gas pressure is too low. 	 Check burner for dirt and debris. If found, clean burner (see Care and Maintenance, page 25 & 26). Replace gas regulator. Contact your gas supplier.
Gas odor during combustion.	 Foreign matter between control valve and burner. Gas leak. (See Warning Statement at top of page 27). 	 Take apart gas tubing and remove foreign matter. Locate and correct all leaks (see "Check- ing Gas Connections," page 19).
Heater produces a clicking/ticking noise just after burner is lit or shut off.	1. Metal is expanding while heating or contracting while cooling.	 This is common with most heaters. If noise is excessive, contact qualified service technician.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
White powder resi- due forming within burner box or on adjacent walls or furniture.	1. When heated, the vapors from furniture polish, wax, carpet cleaners, etc., turn into white powder residue.	1. Turn heater off when using furniture polish, wax, carpet cleaner or similar products.
Heater produces unwanted odors.	 Heater is burning vapors from paint, hair spray, glues, etc. See IMPORTANT state- ment, page 27. Gas leak. See Warning Statement, page 27. Low fuel supply. 	 Ventilate room. Stop using odor causing products while heater is running. Locate and correct all leaks (see "Checking Gas Connections," page 19). Refill supply tank (Propane /LP models).
Heater shuts off in use (ODS oper- ates).	 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 Care and Maintenance, page 25 & 26).
Gas odor exists even when control knob is in OFF posi- tion.	 Gas leak. See Warning Statement at top of page 27. Control valve is defective. 	 Locate and correct all leaks (see "Checking Gas Connections", page 19). Contact customer service.
Moisture/conden- sation noticed on windows.	1. Not enough combustion/ ventilation air.	1. Refer to "Air for Combustion and Ventilation" requirements, page 9.
Slight smoke or odor during initial operation	1. Residues from manufacturing process.	1. Problem will stop after a few hours of operation.
Heater produces a whistling noise when burner is lit.	 Turning control knob to high (5) position when burner is cold. Air in gas line. Air passageways on heater are blocked. Dirty or partially clogged burner orifice. 	 Turn control knob to low (1) position and let warm up for a minute. Operate burner until air is removed from line. Have gas line checked by local propane/LP gas company. Observe minimum installation clearances (Fig. 5,6,7,8 page 13-14). Clean burner (see Care and Maintenance, page 25 & 26) or contact customer service.

REPLACEMENT PARTS LIST

For replacement parts, call our Technical Service Department at 1-877-447-4768, 8:30 a.m. – 4:30 p.m., CST, Monday – Friday.



			PART NO.			
ITEM NO.	DESCRIPTION	QTY	VFL2-SO18DT VFL2-EO18DT	VFL2-SO24DT VFL2-EO24DT	VFL2-WW18DT	VFL2-WW24DT
1	Log Set (complete)	1	DYDA18	DYDA24	DYWW18	DYWW24
1-1	Log 1	1	A-014A	A-014A	H-0714A	A-0014A
1-2	Log 2	1	H-1080A	H-1086A	H-1080A	H-1086A
1-3	Log 3	1	A-0639A	A-0640	A-0014A	H-0714
1-4	Log 4	1	H-0331	H-331A	H-0713B	H-0713A
1-5	Log 5	1	H-0812	H-0812	H-0542	H-0542
1-6	Log 6	1	A-0668	A-0668	H-0374	H-0374
1-7	Log 7	1			A-0007	A-0007
2	Grate	1	GP287-01	GP288-01	GP287-01	GP288-01
3	Grate End Cap	1	GP287-02	GP287-02	GP287-02	GP287-02
4	ODS Pilot - NG	1	GZ20-30B	GZ20-30B	GZ20-30B	GZ20-30B
5	ODS Pilot - LP	1	GZ20-29B	GZ20-29B	GZ20-29B	GZ20-29B
6	Selector Knob	1	GZ20-17	GZ20-17	GZ20-17	GZ20-17
7-1	Regulator, NG 5" WC	1	GR-130B-GHP	GR-130B-GHP	GR-130B-GHP	GR-130B-GHP
7-2	Regulator, LP 10" WC	1	GR-130A-GHP	GR-130A-GHP	GR-130A-GHP	GR-130A-GHP
8	Ignitor Module	1	GZ20-32a	GZ20-32a	GZ20-32a	GZ20-32a
9	Control Valve, Euro SIT 630	1	0630560	0630560	0630560	0630560