Jøtul GF 400 BF CE2 Balanced Flue Gas Stove



Installation and Operation Instructions

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- 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.
 - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instruction.
 - 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.



EU Gas Appliance Regulation (GAR)

We

Company name:	Jøtul North America, Inc.		
Postal address:	55 Hutcherson Drive		
Postcode and City	Gorham, Maine		
Country	United States of America		
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Declare that the GAC is issued under our sole responsibility and belongs to the following product:			
Apparatus model/Product:	Jøtul GF 400 BF CE2		
Туре:	Balanced Flue Gas Heater		
Article Number:	30051208		
Batch:			
Serial Number:	Series :		

Object of the declaration (identification of apparatus allowing traceability; it may include a colour image of sufficient clarity where necessary for identification of apparatus):



The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Gas Appliance Regulation (GAR) 2016/142/EC (ex-90/396/EEC)

Title, Date of Standard/Specification	า		
BS EN 613: 2001 + A1: 2003 + C1: 20	008		
Notified body (where applicable)		4 digit notified body number	
Kiwa Ltd T/A Kiwa Gastec	0558		
CE/0558/016/163			
Additional information:			
N/A			
Signed for and on behalf of: Jøtul No	orth America, Inc.		
Gorham, Maine U.S.A.	18/07/2018	Roger Purinton	
		Product Development Manager	

Place of issue

Date of issue

Name, function

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THIS OWNER'S MANUAL PROVIDES INFORMATION TO ENSURE SAFE INSTALLATION AND EFFICIENT, DEPENDABLE OPERATION OF YOUR STOVE.

PLEASE READ THESE INSTRUCTIONS IN THEIR ENTIRETY AND MAKE THEM AVAILABLE TO ANYONE USING OR SERVICING THIS GAS STOVE.

1. Technical Information

Technical Data - Jøtul GF 400 BF CE2 PIN 0558CN1873					
Countries of Destination	AT, BG, CH, CZ DK, EE, ES, FI GB, GR, HR, IE IT, LT, LV, NO, PT RO, SE, SI, TR	DE, LU, PL, RO	BE, FR	NL	
			NATURAL G	AS	
Gas Type	G20		G20≒G25	G20≒G25.3	G25
Gas Category	I _{2H}	I_{2E}	I _{2E+}	I _{2EK}	I_{2L}
Supply Pressure (mbar)	20		20≒25	20≒25	25
Nominal Heat Input (Net, kW)	7.0		7.0≒6.4	7.0≒7.6	6.4
Burner Pressure at Full Rate - Hot (mbar) ±1 (0mbar)	5.9		5.9≒7.4	5.9≒7.4	7.4
Maximum Gas Consumption (m³/h) 15°C, 1`013 .25 mbar	0.740		0.740≒0.787	0.740≒0.793	0.787
Main Burner Injector Marking (x1)	33				
Efficiency Horizontal termination (%, nett) Verti- cal termination (%, nett)	81.1 83.6		81.1 ≒ 79.9 83.6 ≒ 82.6	81.1 ≒ 80.4 83.6 ≒ 82.6	79.9 82.6
Maximum Heat Output Horizontal termination (kW) Vertical termination (kW)	5.7 5.9		5.7≒5.1 5.9≒5.3	5.7≒5.3 5.9≒5.5	5.1 5.3
Efficiency Class	2				
NOx Class	5				
Flue Type	C ₁₁ or C ₃₁				
Concentric Flue Diameter (inner/outer)	100/150mm				



THIS APPLIANCE IS FACTORY-EQUIPPED TO USE ONLY NG (G20/25).

THIS APPLIANCE IS NOT FUEL CONVERTIBLE.

SEE THE ATTACHED DATA PLATE AND SHIPPING LABELS FOR FUEL IDENTIFICATION AND SPECIFICATIONS.

DO NOT SUBSTITUTE ANY TYPE OF GAS OTHER THAN THAT SPECIFIED FOR THE MODEL DESIGNATED ON THE DATA PLATE.

2. General Information

- This product has been approved to the European Standard EN 613:2000 and is in accordance with EC Gas Appliances Directive 2009/142/EC (ex-90/396/EEC).
- Before installation, ensure that the local distribution conditions (identification of the type of gas and pressure) and the adjustment of the appliance are compatible.
- This product may only be used with Natural Gas G20 indicated on the Data Plate and Shipping Labels. It is not fuel convertible.
- Assembly, installation and maintenance must be performed by a qualified person in accordance with the instructions for Assembly, Installation, and Use enclosed with the product. The installation may only be operated after it has been inspected by a qualified person and a certificate of completion has been issued.
- The Installation should be carried out in accordance with the Building Regulations which include the following standards for installation and maintenance of flues, ventilation and installation of Gas Fires.
 For UK BS 5440:1, BS 5440:2, BS 5871 Part 1
 For Republic of Ireland IS813, ICP3, IS327.
 For France Decree of 2 August 1977 and the NF DTU 61.1 P4.
- The appliance is designed as a freestanding unit and no additional fixing methods need apply.
- This appliance is intended for use on a gas installation with a governed meter.

3. Safety Precautions

- This appliance must be installed in accordance with the rules in force. Consult instructions before installation and use of this appliance.
- The appliance is designed as a heating device and all components will become hot (excluding control valve and control access panel). Care should be taken not to touch unit when it is in operation.
- WARNING! If you detect an odour of gas:
 - Do not light the stove or any other appliance.
 - Do not use electrical switches or the telephone.
 - Contact your gas supplier's emergency number.
- The appliance must only be installed and repaired by qualified personnel. Always turn off the gas supply before service.
- The appliance must be inspected following installation and at least once a year by qualified personnel.
- The appliance must only use gas of the correct type and pressure. See Technical Data for more details.
- It is permitted to install the appliance adjacent to a wall made of combustible material maintaining the clearances specified in figs. 3-4.
- The minimum clearance to combustible material in front of the appliance is 600mm.
- The minimum clearance to combustible mantel or shelf above the appliance is 600mm.
- WARNING: Curtains may not be placed within 600mm above the appliance.
- Never store combustible gas or liquid in the same room with the appliance.
- WARNING: Never use the appliance if the front glass panel has been removed, is cracked, or is open.
- Replacement of the glass should be done by a licensed or qualified service person. Only remove glass for routine service. Always handle glass carefully.
- Do not burn solid fuel in the appliance.
- WARNING: Do not modify or substitute materials comprising the artificial solid fuel bed components. Do not modify the fuel bed layout or quantity of material therein.
- Do not place combustible material on or near the appliance, as the appliance becomes hot.
- This appliance becomes hot in use so it advisable to keep young children, the aged, or infirm, and animals at a safe distance using a fireguard conforming to BS6539 or BS6778 to provide extra protection.

4. Installer Information

Installation Guide for Qualified Personnel

NOTE: This appliance is factory pre-set for Natural Gas (G25) fuel only as specified on the appliance Data Plate and shipping label.

Fixing

The GF 400 BF CE2 is designed as a freestanding appliance and as such does not require additional fixing.

Requirements for Floor Plate

The appliance may stand on a wooden floor. A floor plate of non-combustible material is required if the appliance is to be placed on carpet, vinyl, linoleum or other combustible material. Minimum dimensions of the floor plate: 686 x 356mm as in fig. 2. Jøtul can supply floor plates in a variety of colors.

Firewall Requirements

The appliance may be placed directly against a wall made of combustible material with the clearances specified in fig. 3. Make sure there is adequate space for the vent system behind the appliance and for the full height/ length of the pipe.

Position of Appliance

Minimum clearances are as follows: See Figs. 3 - 6.

	0 5
Clearance from wall to rear of appliance -	100mm
Clearance from wall to side of appliance -	100mm
Minimum clearance from top of appliance	2
to register plate -	380mm

Minimum clearance from top of appliance to combustible shelf, - 600mm

Flue System Installation

Note! During the installation of the vent, it is important to adhere to national and local regulations that apply. The system must only be installed with a vent system approved by Jøtul. Only one single stove may be connected to the vent system.

The vent system must terminate outdoors.

The vent system is a balanced system: 100% of the combustion air is supplied from outside the house and all exhaust gas is returned to outside the house. The vent pipe is a coaxial pipe in which the combustion air is supplied through the outer pipe and the exhaust gas returned through the inner pipe.

Minimum Vent System Clearances to Combustible Materials

<i>Horizontal Vent Pipe:</i> From the top of the vent pipe From the side and bottom of the vent pipe	50 mm 25 mm
<i>Vertical Vent Pipe:</i> From all sides of the vent pipe	25 mm
<i>Position of Vent Pipe</i> : Under porch, covered entrance, story or balcony, have at least two open sides under the floor	that 300 mm
To window or door that can be opened	300 mm
To permanently closed window, recommended to av condensation on the surface	oid 300 mm
From vent to roof soffit	300 mm

Alcove Installation

Maximum Alcove Depth:	63.5 cm*	
Minimum Alcove Width:	85.7 cm*	
Minimum Ceiling Height from floor: With Short Legs (6"):	155 cm 150 cm	
* Alcove dimensions result from specific test		

configurations, not stove clearance specifications.

Flueing Options

The GF 400 BF CE2 is capable of a variety of flueing configurations using an assortment of balanced flue components and accessories illustrated on pages 20, page 17.

1. Flue arrangement for horizontal termination, (Fig. 7a).

When horizontal length is 600mm or less, the flue spigot must be attached to the stove in a vertical position and a minimum rise of 500mm achieved, a 90 degree elbow should be fitted and then the horizontal terminal which is supplied attached with 600mm of flue pipe. The 600mm terminal section may be cut to up to 300mm if required.

2. Flue arrangement for horizontal termination,

(Fig. 7b).

When the horizontal length is greater than 600mm, the flue spigot must be attached to the stove in a vertical position and a minimum rise of 1 metre achieved. A 90° elbow should be fitted and balanced flue sections may then be attached until a maximum of 5 metres is achieved. This 5 metres when measured must include the attached horizontal flue section of 600mm as the final item connected.

3. Flue arrangement for vertical termination, (Fig. 7c).

The flue spigot must be attached to the stove in a vertical position.

The stove only works if the correct quantity of air is supplied. The draught in the pipe is limited by the horizontal length of the pipe, and decreases as the horizontal length of the pipe increases. If the vent system changes direction and more than three 90° pipe bends are inserted, the draught will be reduced. Each additional pipe bend must therefore be allocated the same draught restriction as a 300mm horizontal length of pipe.

A maximum of 5 bends (both vertical and horizontal) may be used in one flue system. This means that with a total of 5 bends used, the total horizontal length of the flue system must be not more than 5.0m.

Vent Restriction

Exhaust Restrictor

The Exhaust Restrictor is an adjustable shutter located at the top of the firebox. It is adjusted by moving a pivot pin into one of four positions. It is set in the FULLY OPEN position at the factory. Refer to Fig. 8 to find the setting appropriate for your vent configuration.

Adjusting Exhaust Restrictor Plate:

- 1. Remove the Top Plate.
- 2. Locate the pivot pin at the top left side of the firebox. See fig. 8. Loosen the wing nut on the pivot pin and push the pin to the left to disengage it from the current setting position. Move the pin toward the rear and then right to engage it in the appropriate slot position on the firebox.
- 3. Tighten the wing nut and replace the Top Plate.

Assembly Prior To Installation

The product is delivered with 2 packages. The contents include:

- Log Set
- Remote Control Transmitter
- 1. Remove the Top Plate of the stove by simply lifting it straight off of the stove body.
- 2. To open the firebox, disengage the two Glass Frame Latches located on top of the firebox. Pull each lever up to release the latch from the notch in the frame. See Fig. 9.
- 3. Use gloves to handle the ceramic logs, as they can cause skin irritation.
- 4. Familiarize yourself with the installation requirements specified in this manual, before beginning the installation.

Log Set Installation

The GF 400 BF CE2 log set must be installed before operating the burner. The log set includes five log pieces, packaged inside the firebox, with a quantity of ceramic ember stones. The stones simulate glowing coals when the burner is operating.

To install the log set, remove the packaging and place the parts inside the firebox as illustrated in Figures 10 - 15.

USE WORK GLOVES TO HANDLE THE LOGS AND EMBERS TO PROTECT YOUR HANDS FROM IRRITATION.

- 1. Engage the holes in the underside of the right log with the pins on the burner skirt. Fig. 10.
- 2. Engage the holes in the underside of the rear log with the two pegs in the burner skirt as in Fig. 11.
- 3. Engage the left log on the burner skirt pegs as in Fig. 12.
- 4. Install center log on the appropriate pegs shown in Fig. 13.
- 5. Engage the upper log as shown in Fig. 14.
- 6. Sparingly spread ember stones in a single layer over the burner plate and around the logs. Do not use the entire quantity of embers. DO NOT OBSTRUCT THE PILOT ASSEMBLY OR BURNER SKIRT PORTS. Maintain 6 mm clearance from the burner skirt edges. See Fig. 15.

NOTE: Avoid covering burner ports. Excessive ember application will promote sooting. If sooting occurs, remove some of the embers.

Ember stones will whiten over time. Retain the remaining ember stones for future use.

7. Lower the glass frame with the glass back into place and re-engage the latches.



THIS APPLIANCE IS NOT FUEL CONVERTIBLE. SEE RATING DATA PLATE FOR APPROPRIATE FUEL SPECIFICATIONS. DO NOT USE ANY OTHER FUELS.

Gas Installation

Gas installation, pressure testing, and burner adjustments must only be performed by qualified personnel. It is

important to adhere to national and local regulations as appropriate to the following countries:

- UK BS5440 Parts 1 and 2, and BS 5871 Part 1.
- Republic of Ireland IS813, ICP3 and IS327.
- France Decree of 2 August 1977 and the NF DTU 61.1 P4.
- The appliance must not be exposed to pressure above 55 mbar (5,5 kPa) during pressure testing.
- Gas tubing must conform to specifications required by the country / district of installation.
 - Copper tube shall conform to BS EN 1057; or BS EN 13349.

• Steel tubing shall conform to • BS EN 10216-1 and BS EN 10217-1 and/or BS EN 10216-2; • BS EN 10217-2; or • BS EN 10255.

• Pliable corrugated (stainless-steel) tubing shall conform to: • BS 7838; or • BS EN 15266.

- For practical reasons, the vent system should be installed before the appliance is connected to the gas supply.
- The stove is supplied with a 3/8" to 8mm compression union. The gas valve has a 3/8" NPT threaded connection. See figs. 16 and 16a, pages 14-15.
- NOTE: The gas supply connection is made at the DN8 mm pipe work at the right side of the brass tee. See Fig.16. Use G1/2 BSP male-to- male adaptor supplied in the hardware kit.
- All tube connections must be approved and the gas pipeline must have an approved shutoff valve. Only use approved sealing agent (tape) at all the pipe connections. When the pipe sections have been assembled and connected to the appliance, open the gas supply and light the appliance (see Lighting Instructions, page 10). Perform a leak test on all the pipe connections.

Commissioning

Battery Installation

The TESC valve requires three, AA alkaline batteries be installed within the central battery compartment. The batteries supplied in the stove hardware kit were used to test the valve and burner functions at the factory, however, these have been removed before shipping. Note the proper battery orientation as molded into the battery compartment.

Testing Gas Pressure

Correct gas pressure is important for the safe use of gas in the appliance. It is important that the correct gas pressure is set during the installation of the appliance.

The gas plumbing assembly is equipped with outlets (taps) for the testing of gas pressure. See Fig. 16a and the identification list below.

- **Supply Inlet:** See Technical Data, page 4 for supply pressure to the valve (volume of gas to the valve). Access to the supply tap is from the rear.
- Manifold Outlet: Access is from the left side as you face the stove. Test the gas pressure with the valve flame regulator set to the highest level.

Loosen the screw in the tap and attach the tube from the manometer to the outlet. Remember to tighten the screw when the testing is completed and test for leaks at each location with test fluid or a digital detector.

Required gas pressure from the valve outlet is displayed in the table below. (Note that the installer is required to operate the appliance for at least 20 minutes before measuring the burner pressure.

Gas Type	Supply Pressure mbar	Burner Pressure (Hot) mbar (±1.0mbar)		
Natural Gas				
G20	20	5.9		
G20≒G25	20≒25	5.9≒7.4		
G25	25	7.4		

Inspection of the Pilot Flame

The pilot assembly flame should have two flames as shown in fig. 17. The rear flame should fully engulf the thermo-element that controls gas flow through the valve. The forward flame ignites the burner. Each flame should project out approximately 30 mm and be unobstructed.

The flames should be stable and the colour mainly blue. Call for service if any of these characteristics are evident:

- weak, lifting, or wandering flame
- yellow or dirty flame

5. User Information

Operating Instructions

Commissioning, Lighting

NOTE! Odours may be present when using the stove for the first time:

When used for the first time and hot, the appliance will emit a harmless, non-toxic odour. It is recommended that the room should be thoroughly ventilated (by opening doors or windows) during initial use. The gas is not toxic, but the room should be thoroughly aired out. During first use, it may take a short time before the gas tube is cleared of air, but subsequently the appliance should function as described in the lighting instruction.

Prior to lighting:

- Use a soap and water solution to check all fuel connections for possible gas leaks. Use a digital gas detector to check the area around the appliance and at the ceiling as natural gas is lighter than air and will rise. Any leak must be eliminated before the appliance is put into service. If you detect an odor of gas, see Warnings under Safety Precautions on page 5.
- Do not use the appliance if any part of it has been submerged in water. Call for service to replace the parts that have been in water.

TESC Valve Controls Identification

The burner operates in conjunction with a pilot flame that is automatically lit when there is a call for heat by actuating either the valve controls or a remote control handset. The valve and burner controls are located under the firebox behind the access panel. See Fig. 18, page 16.

1. Master Switch:

Left position (O) - The valve is disconnected from all power. The burner cannot function. Set the switch to this position if the appliance will not be used for long periods.

Right position (I) - The valve is powered and operable.

2. Indicator Lamp:

• Fast flashing - the valve is busy and will not accept commands.

• Medium Fast flashing - the valve is preparing to start or restart the burner.

- Slow flashing the valve has detected an error.
- One short flash every 8 seconds Low Battery condition. See Battery Replacement, page 11.
- 3. Burner Power Button: Powers the burner On and Off.
- **4. Power Increaser Button:** Raises burner flame intensity through 7 levels .
- 5. Power Decreaser Button: Lowers flame intensity.

Lighting Instructions



WARNING: THIS APPLIANCE FEATURES ELECTRONIC PILOT IGNITION. DO NOT ATTEMPT TO LIGHT THE PILOT MANUALLY.

Lighting the Burner - Manually

- 1. Slide the white Master Switch to the right (I) to power the TESC valve.
- 2. Press the Burner Power button for 1 second and release. The red LED will flash accompanied by an audible chirp as the pilot flame ignites. Within approximately 1 to 10 seconds, the burner will light at the medium level 3.

Operate the burner at this power level for several minutes to allow the stove and vent system to thoroughly warm up before adjusting the power level further.

3. Adjust the burner intensity level by pressing the Increaser (+) and Decreaser (-) buttons to achieve the desired heat output.

Turning Off the Appliance - Manually

 Press and release the Burner Power button. The burner will extinguish and go into Standby mode.

Remote Control (Handset) Operation

Refer to the instructions beginning on page 16.

CAUTON: If any flame supervision device or actuating flame (pilot light) is extinguished either intentionally or unintentionally, no attempt should be made to re-ignite the gas until at least 3 minutes have elapsed. **NOTE:** If the appliance will not be used for an extended period, such as during summer or storage, disconnect power by setting the valve Master switch to the Left (O). It is also advisable to shut off the main gas supply line valve and remove the batteries from the control valve to prevent corrosion.

Battery Replacement

The TESC valve is powered by 3, AA 1.5v alkaline batteries.

- 1. Slide the white Master switch to the left (O) position to disconnect power, Fig. 18.
- 2. Press and push the battery cover release lever to the left to open the compartment.
- 3. Orient the batteries as displayed on the back of the compartment.

Maintenance

The complete installation, which includes the gas supply, the actual appliance and the vent system, must be inspected annually. The inspection must be carried out by qualified service engineer.

Annual Service

Annual service of the appliance includes the following check points.

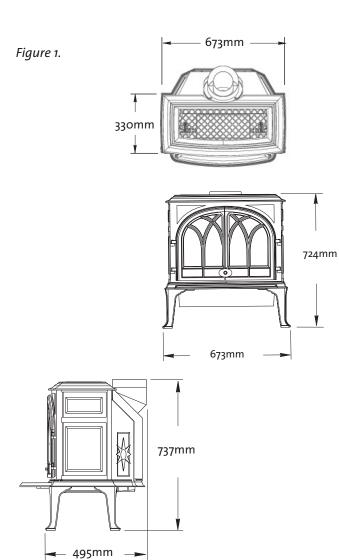
- Lighting and inspection of the pilot flame (see the section - Inspection of the Pilot Flame above);
- 2. Cleaning the glass: Use only ammonia-free, nonabrasive glass cleaning compounds. Polish using newspaper.
- 3. The gasket around the glass must be inspected annually for wear and replaced if necessary;
- 4. Check if the textured ember stones need to be replaced; they will whiten over time.
- Look for soot. It could be a result of the ceramic logs not being properly aligned or completely engaged with the associated mounting pins. Also confirm that the exhaust restrictor has been adjusted correctly. See Vent Restriction, page 7.
- 6. Check the gas pressure if other gas equipment is connected to the gas supply.
- 7. Look for signs deterioration or corrosion within the appliance, pilot assembly, and vent system.
- 8. Look for obstructions in the vent system (such as bird's nests, or branches from bushes and trees). Keep vent terminations clear. Inspect to confirm the integrity of all pipe seams and fasteners

External Maintenance

Painted products may change color after some years of usage. The surface should be cleaned and brushed free of any loose particles before new stove paint is applied.

Enameled products must only be cleaned with a soft, damp cloth and only when the surface is cold. Do not use water or soap. Enamel surfaces stain easily when hot. A solution of vinegar and baking soda may be used to remove stains.

6. Illustrations



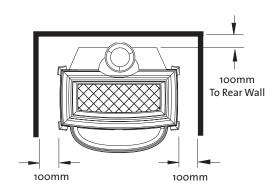


Figure 3.

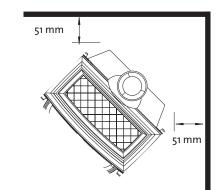


Figure 4.

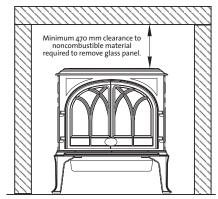
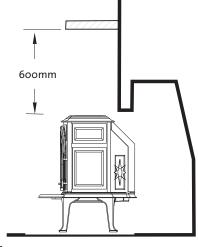
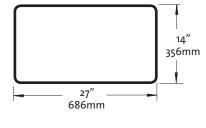


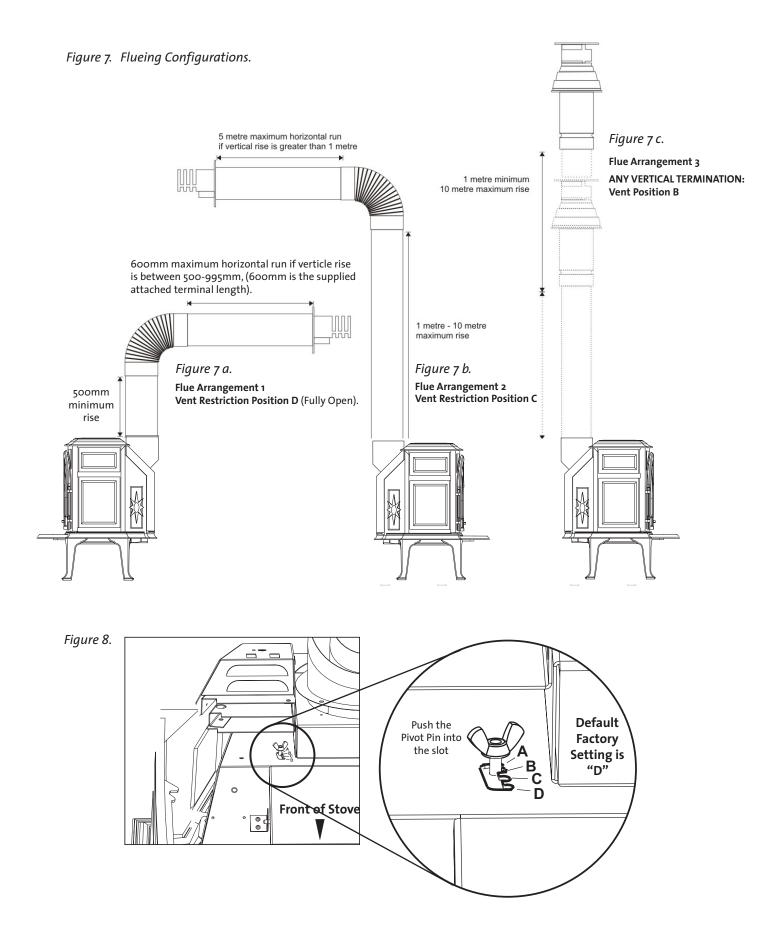
Figure 5.











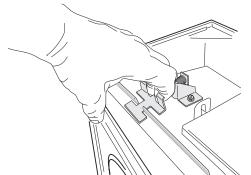


Figure 9.



Figure 11. Rear Log, PN 220645.



Figure 13. Middle Log, PN 220648.

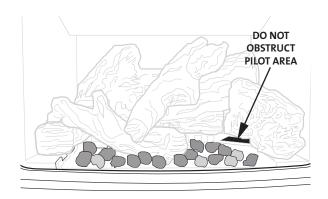


Figure 15. Ember Stones, PN 220702.

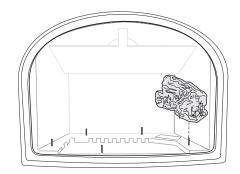


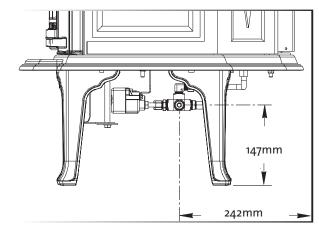
Figure 10. Right Log, PN 220647.

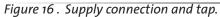


Figure 12. Left Log, PN 220646.



Figure 14. Cross Log, PN 220701.





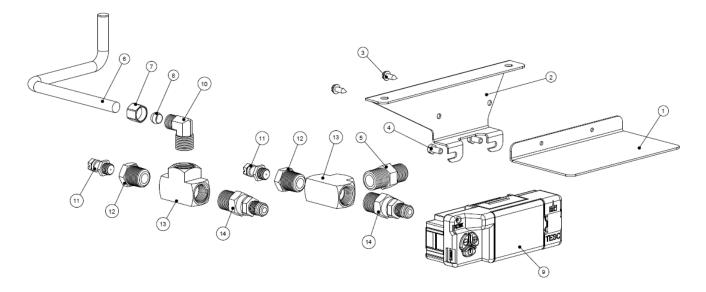
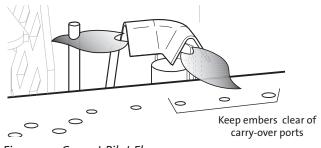


Figure 16a. Valve assembly and fittings

No°	No° de pièce	Description
1.	226041	Valve Heat Shield
2.	225944	Valve Bracket
3.	17917	Screw, HWH SMA #8 x 1/2 SL Blk Oxide
4.	117970	Bolt, Hex Cap M5 x 10 DIN 933 8.8 Plain
5.	226036	Adaptor, 3/8" NPT to 1/2" BSPP (G1/2)
	220168	Adaptor, Brass, 3/8" NPT to 5/16" Compression
6.	221769	Flex Tube, Main Gas - 5/16" OD x 10"
7.	129464	Compression Nut - 5/16"
8.	129463	Compression Sleeve - 5/16"
9.	158018	Valve Assembly, G20 (Natural Gas)
10.	129129	Elbow, 90° Brass 3/8 NTP - 5/16" dia. comp.
11.	225973	Test Point Nipple, 1/8" NTP B.E.S. 6901
12.	226077	Adaptor, 3/8" Male NPT x Female 1/8" BSPT
13.	225980	Tee, Brass, Female 3/8 NTP
14.	226076	Swivel Fitting, 3/8" Male NPT x M12
15.	220946	Orifice, #33, G20 (not illustrated)





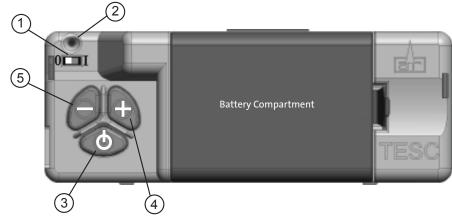


Figure 18. Valve Controls

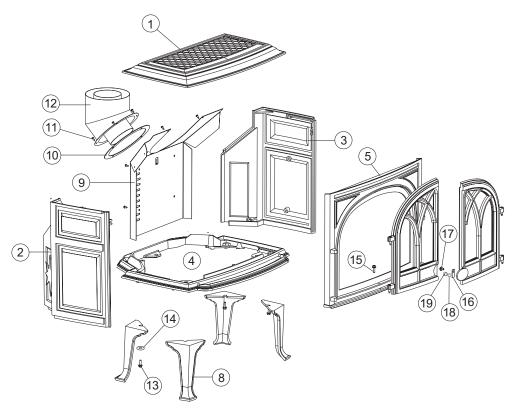


Figure 19. Exterior components.

	Cast Iron Parts	Matte Black Paint
1.	Top Plate	10396292
2.	Left Side Plate	10391892
3.	Right Side Plate	10391992
4.	Bottom Plate	10396392
5.	Front, Complete	15565492
8.	Legs, (4)	10192592

9.	Rear Shroud	22498992
10.	Gasket, Collar	129118
11.	Screw, #8 x 13mm, 4	117917
12.	Vent Collar, 100mm/150mm	129126
13.	Bolt, M6 x 20, 4	117117
14.	Fender Washer, 4	120004
15.	Bolt, M6 x 20	117117
16.	Magnet Plate	22498492
17.	Bolt, M6 x10	9962
18.	Magnet	225355
19.	Magnet Cover, Neoprene	225338

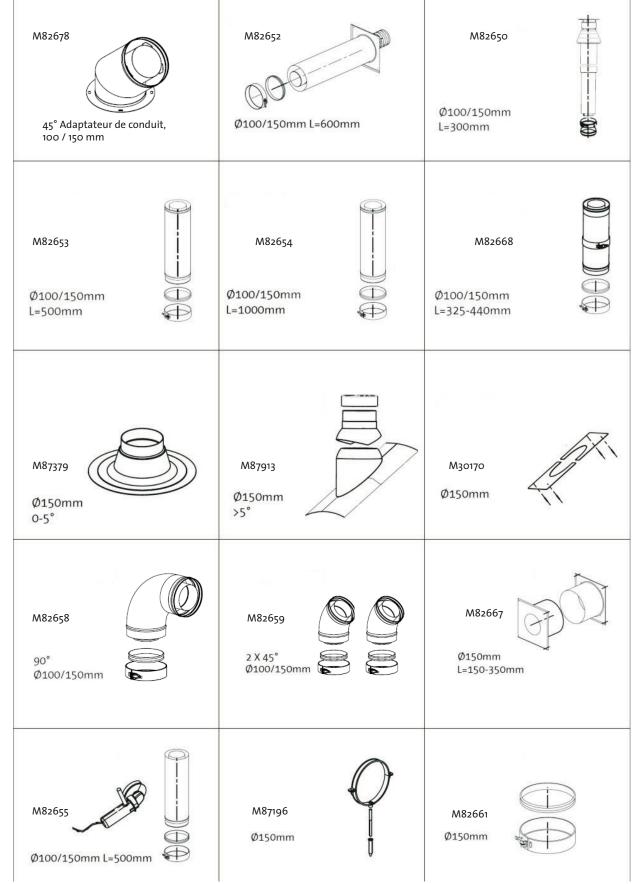


Figure 20. Muelink and Grol flue components. All balanced flue accessories include locking bands.

7. Remote Control Operation

Before using the remote handset...

Familiarize yourself with all the handset functions and complete the **Remote Control Setup** procedure described in this section.

Handset Functions

Insert two, AA batteries into the rear compartment or the handset. The handset has been paired with the stove at the factory.

1. Place the TESC valve Master power switch in the ON position. Fig. 18, #1.

NOTE: For safety reasons, any button must be *pressed and released* for the command to be recognized. Do not press and hold the button down, unless otherwise instructed.

2. Grasp your hand around the back of the handset to unlock its functions. An audible signal and green unlock light will indicate that the handset is unlocked and ready to accept commands. The handset will remain unlocked and available to accept commands as long as you continue to hold it.

Display Read-outs - Fig. 21.

- Mode Status: MAN (Manual) Zzz (Sleep), Thermostat or Timed
- 2. Time: (12 hour or 24 hour display)
- 3. Day of Week
- 4. WIFI: (Valve and Handset are within command range)
- 5. Burner Status: (OFF / ON)
- 6. Room Temperature: (°C / °F)
- 7. Battery Condition: (RC = Handset, FC = Fire Control)
- 8. Handset Unlocked Green when illuminated
- 9. Light Sensor (for Display backlight)
- 10.Handset Settings: (Press to change settings)
- 11. Mode Settings: (Press to change modes)
- 12. Increase Flame
- 13. Decrease Flame
- 14. Power Press to turn burner ON and OFF.



Fig. 21.

Operation

- **To Turn Burner ON:** Grasp handset around the back and sides to unlock it (signal and light). Using the other hand, **press and hold** a finger on the power button for about 3 seconds, (signal and light). Immediately release the power button when "**PILOT**" is displayed. A second green flash and a longer beep will also signal to immediately release the power button. The pilot should ignite within a few seconds followed by the burner.
- NOTE: If the power button is held for more than a few seconds after the second flash/beep, the command is ignored for safety reasons. Similarly, if it is released too soon before the word PILOT appears, the command is also ignored. The system control is designed to ensure that unintended ignition cannot occur.
- **To Turn Burner OFF** Grasp handset to unlock it, then press and release power button once.

Remote Control Setup

After successful batteries installation, the Handset will display as shown in fig. 21. As supplied, the handset is already paired to the stove control system. Follow the steps below to configure basic settings for remote control functionality.

1. Set the Time

• Holding the handset as described previously to unlock the keypad, press and hold "SET" for a few seconds. The display will be seen as shown in Fig. 22.

2. Set for 12 or 24 Hour

 As always when pressing the remote control buttons keep the control held to keep the green light on and therefore handset safety feature, unlocked. The H indicates you can set the timer to either 24 hour or 12 Hour (AM or PM) display. Press the + or – button on the handset to toggle between the two settings. Fig. 23. When you are ready to confirm the setting, press and release the "SET" button to progress to the Day of Week setting.

3. Setting the Day of the Week

 Press and release the + and buttons until the correct day of the week is shown on the display. Fig. 24.

(Mo = Monday, Tu= Tuesday, We=Wednesday, Th=Thursday, Fr=Friday, Sa= Saturday and Su=Sunday).

- Press "SET" to accept the day of the week and to progress to setting the Hour of the day.
- NOTE: Pressing "SET" advances to the next display and pressing "MODE" will return you to the previous display setting.



Fig. 22.



Fig. 23.



Fig. 24.

4. Setting the Hour

 Press and release the + or – button to change the hour to the correct hour and press set to store and to move to setting the minute. Fig. 25.
 Peneat this for setting the

Repeat this for setting the minutes.

5. Setting the Temperature display to Celsius or Fahrenheit.

 Press and release the + or button to toggle between C and F. Fig. 25.

When the display shows the desired symbol, press and release the "SET" button to store.

6. Exit Setup Mode

Press and hold (not releasing straight away) the "SET" button for a few seconds and this will exit the setup menu. (alternatively you can press and release the set button several more times until the time of day is displayed on the handset. The control is now ready for use. Fig. 26



Fig. 26.

7. Battery Usage

Note: the legend at the bottom shows the battery condition of both the batteries in the hand set and in the valve alternately.

- RC = Remote Control handset
- FC = Fire control.

The display battery icon will show an empty area when power begins to weaken. Monitor battery condition and change them before they go completely flat to avoid losing the remote control settings. Although stove Pairing is not lost if the batteries are removed or dead, replacing them before they have gone flat will avoid having to reset the time of day, day of the week, and other settings again.



Fig. 25.

8. Paging the handset

If you have misplaced the handset (and it is in range of the stove), you can page it by pressing the "+" button only on the fire control for 5 seconds. The handset will flash and signal to help you to locate it. The flashing and sound will last for 60 seconds or until it is picked up. If the handset is not found in 60 seconds, repeat the page process.

 NOTE: PRESS "+" Button ONLY. Do not press "+" and "-" simultaneously as that will accidentally break the handset/stove synchronization. The pairing will then need to be reset. Should this occur, see "Pairing the Remote Control" on the next page to rest synchronization.

9. Handset Display Settings

In the event that you may want to change the other preset settings of the control features. Do not do a long press and hold above but a normal short press and release will take you into the advanced settings area.

Advanced settings options:

• Backlight (LA-O / LA-I)

L-A = Automatic (default setting). Illuminates in the dark, but not in the light.

L-o = Backlight never On.

L-1 = Backlight ON only when handset is unlocked.

- Display Contrast (C 1) 8 levels from 0 to 7 (default level 4).
- P Not Available

10. Alternate Automatic Modes

Depending upon the features of your stove, the handset may be enabled to control the following automatic functions:

- Thermostat mode
- Timed Thermostat mode
- Sleep mode. Sleep mode can be selected to work in conjunction with either manual or thermostatic modes.
- You can switch between modes at any time with the handset unlocked by pressing and releasing the MODE button to toggle between modes.
- Note: If at any time the POWER button is pressed during operation, this will stop the fire and exit any automatic mode and return the handset to manual (MAN) operation mode.

11. Sleep mode (Zzz) in Manual Operation

Sleep mode is used to set a period of time after which the burner will turn off.

The Sleep time period can be set before or during manual operation of the fire. Hold the handset to unlock it as described previously and press the MODE button as many times as necessary until the word MAN and the Zzz symbols are flashing at the top of the display. Press and release the SET button and this will put the control into Manual Sleep mode.

The default time period for the Sleep time period is 1:00 hour. Pressing the SET button again will show the remaining Sleep time. Set the desired time by pressing the "+" or "-" buttons. The available timer period can be set from 1 minute to 4:00 hours.

Press SET to change the time setting required, or, if left for a few seconds, that time wil be stored and used.

The burner control will shut Off at the end of the time period and, as in Manual mode, it will remain Off.

12. Sleep mode in Thermostatic mode

Sleep mode may be set before or during a thermostatic mode operation (see below).

13. Thermostatic mode for closed fires

Grasp the handset and press and release the MODE button several times as necessary until the display shows the thermometer symbol flashing at the top of the display. Press the SET button to enter this mode.

Press the SET button again to see the temperature setting that is set and the mode (the default is 24°C).

Press the (+) and (-) buttons to alter the setting as desired. When finished, press SET or leave and after a few seconds the new setting will be accepted.

NOTE: When the set temperature is reached while the fire is in operation, the burner power level will reduce each minute until the burner is off. The burner will then remain off until it is manually reignited. The thermostat function may then be reset as described above.

14. Pairing the Remote Control

Although the remote control is paired with the stove at the factory, it may become necessary to cancel the pairing and re-synchronize the two, follow the steps below.

NOTE: A new pairing can be made accidentally necessary by pressing the (+) and (-) buttons on the remote control or on the TESC valve control simultaneously for 5 seconds.

Resetting the remote control display to factory settings

- Hold the remote control to unlock.
- Hold down the SET button until the remote beeps, then release. PROG appears in the top left corner.
- Press and release the Mode button until the word SETUP flashes in the upper right corner.
- Press and release SET to enter SETUP menu.
- Press and release the Set button about 9 times, until the display indicates "CA" (Cancel All)
- Press and release the (+) or (-) for the display to appear "CA1", then press and release the SET button once. "TESC" will appear in the display to indicate the remote control is now cleared and ready to be paired to the valve control. Fig. 27.

Pairing the handset to the TESC valve

- Confirm all batteries are fresh and correctly installed.
- Set the valve master Power switch (I) to ON.
- Place the handset within 1 meter (3 ft.) of the stove.
- Simultaneously press and hold both (+) and (-) buttons on the Control Valve (not on the handset) until the RED LED lights. Immediately press and hold the ON button until the handset chirps and displays (1--Γ). Fig. 28.
- Grasp the remote control to illuminate the GREEN light and enable keypad commands to the burner control valve.
- Press "SET" with your other hand to complete the pairing.
- Adust time and temperature settings as previously described.

As indicated earlier in the manual...

N.B. If the display returns to the word "TESC", as shown above, too much time as passed before pressing "SET" and the pairing has failed. Repeat the pairing procedure from the beginning.

N.B. Never press the (+) and (-) simultaneously, except when pairing. Unless initializing pairing, this action will cancel synchronization and require resetting the remote control to factory settings,



Fig. 27.





8. Jøtul Group Gas Product Limited Warranty

This warranty policy applies to gas products identified by the Jøtul trade name GF 400 BF CE2 as set forth below.

A. LIMITED TWENTY-FIVE YEAR WARRANTY - Cast Iron: Jøtul North America Inc. (JØTUL) warrants, to the original retail purchaser, that those components of the Jøtul Gas Stove or Fireplace Insert specified above will be free of defects in material and workmanship for a period of twenty-five (25) years from the date of purchase. This warranty is subject to the terms, exclusions and limitations set forth in the following text.

B. LIMITED TWO YEAR WARRANTY - Burner, Burner Treatments, Firebox Components: JØTUL warrants, to the original retail purchaser, that those components of the Jøtul Gas Stove specified above will be free of defects in material and workmanship for a period of two (2) years from the date of purchase. This warranty is subject to the terms, exclusions, and limitations set forth in the following text.

C. LIMITED TWO YEAR WARRANTY - Enamel Finish: JØTUL warrants, to the original retail purchaser, the enamel finish on cast iron components of the Jøtul Stove or Fireplace Insert specified above against peeling or fading for a period of two (2) years from the date of purchase. This warranty is subject to the terms, exclusions and limitations set forth below.

D. LIMITED TWO YEAR WARRANTY - Gas Components (controls,

plumbing, valve): JØTUL warrants, to the original retail purchaser, that those components of the Jøtul Gas Stove specified above will be free of defects in material and workmanship for a period of two (2) years from the date of purchase. This warranty is subject to the terms, exclusions, and limitations set forth in the following text.

JØTUL will repair or replace (including parts & labor), at its option, any of the above components determined by JØTUL to be covered by this warranty. You must, at your own expense, arrange to deliver or ship the component to an authorized Jøtuldealer and arrange for pickup or delivery of the component after repairs have been made. If, upon inspection, JØTUL determines that the component is covered by this warranty, the repair or replacement will be made as set forth above. This warranty is not transferable and is extended only to, and is solely for the benefit of, the original retail purchaser of the Jøtul Gas Stove. This paragraph sets forth the sole remedy available under this warranty in the event of any defect in the Jøtul Gas Stove.

The warranty period for any replaced component will be the remaining unexpired portion of the warranty period for the original component.

Please retain your dated sales receipt in your records as proof of purchase.

EXCLUSIONS AND LIMITATIONS

NOTICE: This warranty is void if installation or service is performed by someone other than an authorized installer, service agency or gas supplier, or if installation is not in conformance with the installation and operating instructions contained in this owner's manual or local and/or national fire and building regulations. A listing of local authorized installers, service agencies and gas suppliers can be obtained from the National Fireplace Institute at http://www.nficertified.org/.

This warranty does not cover the following:

1) Repair or replacement of parts that are subject to normal wear and tear during the warranty period or to parts that may require replacement in connection with normal maintenance. These parts include gaskets and glass (except to the extent such parts suffer damage from thermal stress).

2) Damage due to incorrect installations not in conformance with the installation instructions contained in this owner's manual or local and/or national fire and building regulations.

3) Damage due to service performed by an installer, service agency or gas supplier, unless otherwise agreed to in writing by JØTUL.

4) Labor or other costs associated with the repair of gas controls, plumbing, burners, log set, or sheet metal firebox beyond the warranty period.

5) Damage caused by unauthorized modification, use or repair.

6) Damage to enameled surfaces caused by improper operation or misuse, including use that is not in conformance with the operating instructions contained in this owner's manual. Such damage can typically be identified by bubbling, cracking, or discoloration of the enamel finish.

7) Costs incurred by travel time and/or loss of service.

8) Damage incurred while the Jøtul Gas Stove is in transit.

IN NO EVENT SHALL JØTUL, ITS PARENT COMPANY, SHAREHOLDERS, AFFILIATES, OFFICERS, EMPLOYEES, AGENTS OR REPRESENTATIVES BE LI-ABLE OR RESPONSIBLE TO YOU FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR OTHER SIMILAR DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR DAMAGES TO A STRUCTURE OR ITS CONTENTS, ARISING UNDER ANY THEORY OF LAW WHATSOEVER. ALL IMPLIED WARRAN-TIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WRITTEN WARRANTY. EXCEPT AS EXPRESSLY SET FORTH HEREIN, JØTUL MAKES NO ORAL, WRITTEN OR OTHER WARRANTY WITH RESPECT TO JØTUL, SCAN OR ATRA GAS STOVES OR FIREPLACES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on the length of implied warranties. Therefore, the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

JØTUL reserves the right to discontinue, modify or change the materials used to produce the Jøtul Gas Stove. JØTUL shall have the right to replace any defective component with substitute components determined by JØTUL to be of substantially equal quality and price.

The dollar value of JØTUL's liability for breach of this warranty shall be limited exclusively to the cost of furnishing a replacement component. JØTUL shall not in any event be liable for the cost of labor expended by others in connection with any defective component. Any costs or expenses beyond those expressly assumed by JØTUL under the terms of this warranty shall be the sole responsibility of the owner(s) of the Jøtul Gas Stove.

No dealer, distributor, or other person is authorized to modify, augment, or extend this limited warranty on behalf of JØTUL. NO MODIFICATION OR CHANGE TO THIS WARRANTY WILL BE EFFECTIVE UNLESS IT IS MADE IN A WRITTEN DOCUMENT MANUALLY SIGNED BY AN AUTHORIZED OF-FICER OF JØTUL.

An authorized installer may have been provided with certain information related particularly to the Jøtul Gas Stove; however, no authorized installer or other person who may service the appliance is an agent of JØTUL. No inference should be made that JØTUL has tested, certified, or otherwise pronounced any person as qualified to install or service the appliance. JØTUL shall not be liable or otherwise responsible for any error or omission by a person installing or servicing a Jøtul Gas Stove.

If you believe your Jøtul Gas Stove is defective, you should contact your nearest authorized Jøtul, Scan, or Atra dealer, who will process a warranty claim. IN ORDER TO QUALIFY FOR WARRANTY COVERAGE, JØTUL MUST RECEIVE NOTICE OF A POSSIBLE DEFECT WITHIN SIXTY (60) DAYS OF THE DATE THE DEFECT IS FIRST DISCOVERED, OR REASONABLY COULD HAVE BEEN DISCOVERED.

This warranty is given by Jøtul North America, Inc., 55 Hutcherson Drive, Gorham, Maine 04038 USA

Sign.:

Sign.:

Date:

9. Service Record

INSTALLATION SIGNATURE FORM

With proper usage and maintenance, this appliance will serve its owner many years of satisfactory performance. Please contact your Jøtul dealer for assistance if any problems should arise with your Jøtul appliance. Save this user manual and make sure it is available for service personnel.

Date: Company: Model Name: Jøtul GF 400 BF CE2 Service details: Serial No.: Purchase Date: Annual service - year 10 Sign.: Company: Date: Name of Installer: Service details: Fuel Type: Was the appliance converted? Annual service - year 11 Sign.: Notes: Company: Date: Service details: Annual service - year 1 Sign.: Annual service - year 12 Sign.: Company: Date: Date: Company: Service details: Service details: Annual service - year 2 Sign.: Annual service - year 13 Sign.: Company: Date: Date: Company: Service details: Service details: Annual service - year 3 Sign.: Annual service - year 14 Sign.: Date: Company: Company: Date: Service details: Service details: Annual service - year 4 Sign.: Annual service - year 15 Sign.: Date: Company: Company: Date: Service details: Service details: Annual service - year 5 Sign.: Annual service - year 16 Sign.: Company: Date: Company: Date: Service details: Service details: Annual service - year 6 Sign.: Annual service - year 17 Sign.: Company: Date: Company: Date: Service details: Service details: Annual service - year 7 Sign.: Annual service - year 18 Sign.: Company: Date: Company: Date: Service details: Service details:

Annual service - year 8

Annual service - year 9

Company:

Service details:

This appliance must be installed in conformance with local and national building regulations. Before beginning the installation, it is important that these instructions be carefully read and understood. Jøtul maintains a policy of continual product development. Consequently, products may differ in specification, color, or type of accessories from those illustrated or described in various publications.

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