



Professional Series Galley Range

OWNER'S MANUAL

Read all instructions and warnings before operating.

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INTRODUCTION

Thank you for selecting the Force 10 Professional Series Galley Range. Your unit was carefully inspected and tested at our factory. Please take the time to read this manual carefully; many of its instructions are essential to the safe operation of your new Force 10 Range.

Because of the continuing refinement of our product designs, your Range may possess features not discussed in the manual. We have tried to supply all the information you might need, so please take time to read this manual before installing and using your Range.

Force 10 advises strongly against unauthorized modification of this product, but we do encourage you to correct problems which may arise by under-taking the simple repairs and maintenance described in this manual.

Any recommendation or advice given by Force 10 Marine Company or any of its employees is solely an accommodation to the customer, and should not be relied upon by the customer without an independent verification of its applicability to the customer's particular situation.

SAFETY & PRECAUTIONS

Read all Instructions before operating.

- **If the Information in this manual is not followed exactly, a fire or explosion may result, causing property damage, personal injury or death.**
- **Open flame cooking appliances consume oxygen and produce carbon monoxide. To avoid asphyxiation, or death from exposure to carbon monoxide, maintain open ventilation when using this appliance.**
- Do not use this appliance as a source of heat.
- Test all fuel lines and connection points for leaks with a soapy water. **Do not attempt to locate leaks by using an open flame.**
- Close the main gas valve when the appliance is not in use.
- Never leave this appliance unattended during use.
- Save this manual for future reference.

GAS PRESSURE

Your Force 10 Galley Ranges (unless otherwise specified) is designed to operate from low pressure Propane gas.

Gas	Pressure		Orifice Size (mm) / By Pass (mm)			
	mbar	psi	Auxiliary Burner	Rapid Burners	Broiler	Thermostatic Oven Burner
Propane	30	0.44	0.45/ 0.30	0.78/ 0.47	0.68/ NA	0.74/ 0.37

INSTALLATION

Unpacking

1. Remove all plastic coating before use.
2. Please copy the model and serial number of your unit into your manual. This is located both on the shipping box and the right stove side of the Range.

MODEL # _____ **SERIAL #** _____

Packing List

Owners Manual	Gimbal Wall Brackets (2)
Pot Holders (2 sets)	Built-in Trim kit
Gimbal Wall Brackets (2)	LPG warning plates (3)

Gas connection

Note: This appliance is designed to operate from low pressure (30mbar) Propane. Exposure to high pressure can damage the unit

Connect your Galley Range to a properly installed low pressure Propane System. Force 10 Manufacturing recommends that your Propane system meet the regulations specified in the American Boat and Yacht Council Standard A-1. (Marine Liquefied Petroleum Gas (LPG) Systems)

The gas fitting on this range is a 3/8" SAE 45 Male flare fitting, located in the back on the lower left as you are facing the front of the unit.

For gimbaled installation there must be a minimum of 24" (600mm) of flexible hose to allow the unit to gimbal freely.

Test all fuel lines and connection points for leaks with a soapy water before use. **Do not attempt to locate leaks by using an open flame.**

An optional 8mm Nozzle adaptor fitting is also available (Part # 87155)

Minimum Clearances to Overhead Cabinets

30" (762mm) minimum clearance between the top of the cooking surface and the bottom of an unprotected wood or metal cabinet;

or

24" (610mm) minimum when bottom of wood or metal cabinet is protected by a flame retardant heat shield.

To eliminate the risk of burns or fire by reaching over the heated surface, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5" beyond the bottom of the cabinets

This Range can be installed as a Gimbaled or Built-in (stationary).

Gimbal Installation

Cutout Dimensions:

Width: 25.4" (645 mm)

Depth: 21.65" (550 mm)

Height: 24.61" (625 mm)

The opening between the cabinets should be 25.40" (645mm) wide, a minimum of 21.65" (550mm) deep and 24.61" (625mm) high for proper gimbal. The range requires a minimum 1" (25mm) open space behind the range, and at least 2" (51mm) of space below to allow the range to gimbal correctly.

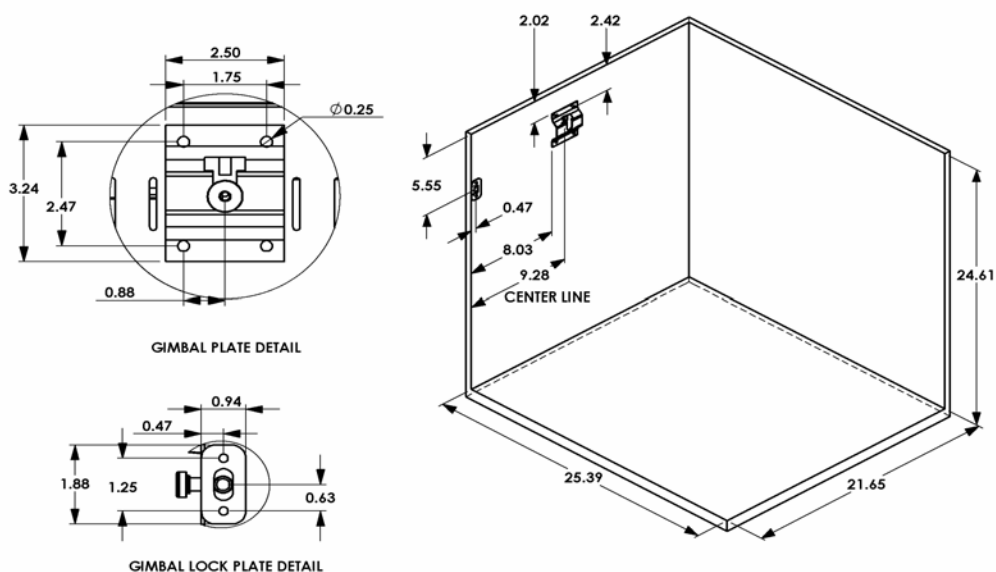
Mount a gimbal bracket on each side of the opening, positioning the top edge of the bracket 2.02" (51.3mm) below the countertop, and the front side of the bracket 8.03" (204mm) back from the front edge of the cabinets. This will position the stove so that the top of the cooking grill frame is flush with the countertop and the front of the unit will be flush with the front surface of the adjacent cabinets.

Level each bracket and fasten with four #12 wood screws at least 1/2" in length. (Screws not included)

Drill a 3/8" (10mm) hole on each side of the opening for the gimbal pin. Locate the hole 0.47" (12mm) in from the face of the cabinet and 5.55" (141mm) below the countertop. Fasten the gimbal lock plate over the hole using two # 8 wood screws at least 3/8" in length. (Screws not included)

Carefully lift the stove into position so that the gimbal pins slide into the brackets. Gently pry the safety tabs of the bracket inward, toward the stove so that they protrude over the gimbal pins.

Make sure the stove swings freely at least 15 degrees. Check to ensure the gimbal lock pins slide into the hole you drilled.



Built-in Installation

Cutout Dimensions:

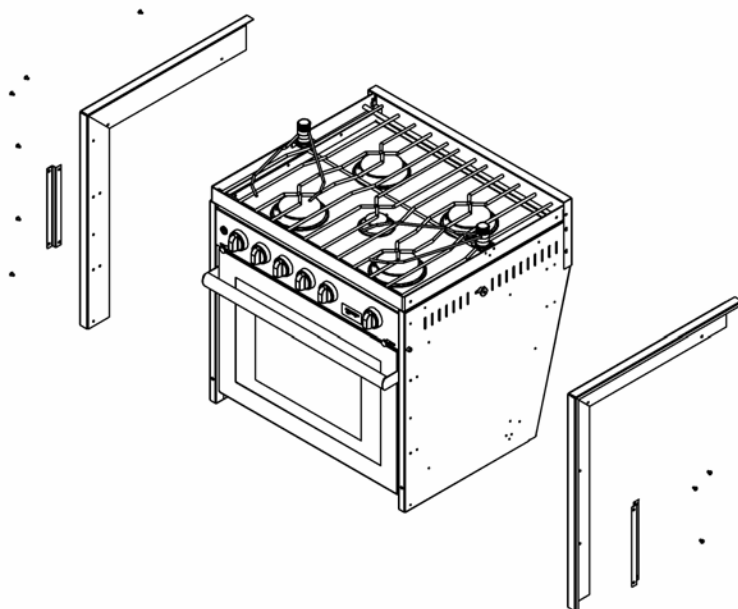
Width: 25.1" (635 mm)

Depth: 21.75" (553 mm)

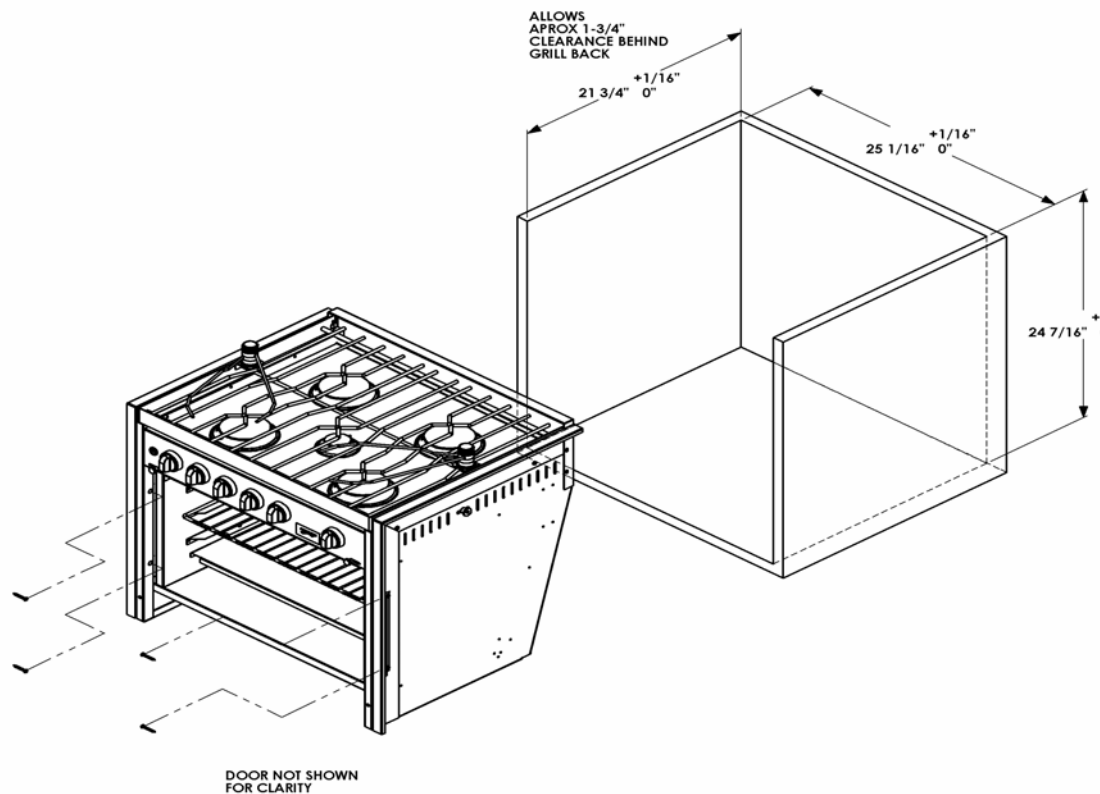
Height: 24.5" (623 mm)

The opening between the cabinets should be 25" (635mm) wide, 21.75" (553mm) deep and 24.5" (623mm) high. This height leaves clearance for changing the battery.

Attach the trim kit and front spacer to the right and left stove sides as shown in the diagram below using the enclosed screws. (6) Screws per side.



Secure the stove into position by screwing the stove sides to the walls of the cut out. The mounting holes are located as shown. Use #6, 1" stainless steel wood screws (Screws not included)



OPERATION

Features

Your Force 10 Professional Series range has a number of features to make your unit easier to use.

Pot Holders - There are (2) sets of Pot holders included with your unit. These Pot holders are designed to hold pots in place during movement. To install the pot holder, screw the unit (clockwise) into the black base on either side of the top grill. Adjust the width of the arms by loosening the black knob (counter-clockwise) and separating the arms to the desired width.

Removable Top Grill - This range is equipped with a removable top grill for ease of cleaning and maintenance.

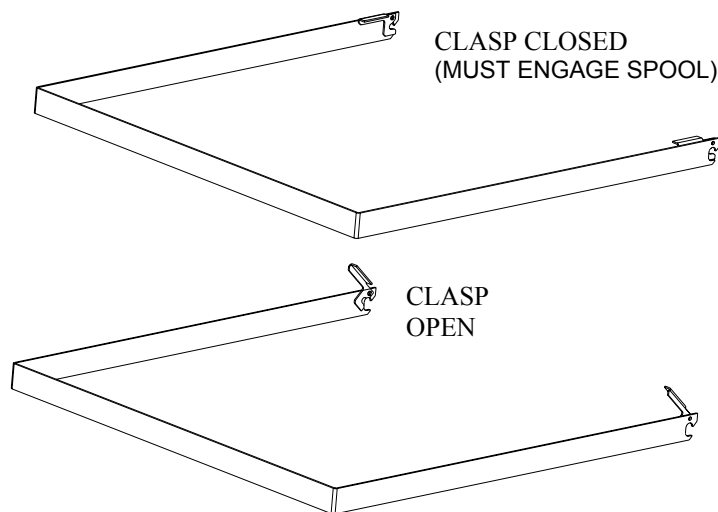
To remove:

Rotate the two clasps located on each end of the grill frame up ward approximately 45 degrees until the clasp disengages the spool. (The clasp when properly engaged will ride

in the center slot of the round spool that is attach to the stove) Once the clasps are disengaged lift the rear of the grill and at the same time pull it towards the front of the stove. This motion will allow the small hook sections of the grill frame to ride over the top of the spool. The grill frame will now be free of the stove.

To install:

To replace the grill simply reverse the procedure. Make sure that the clasps are open, then while holding the rear of the grill up slide the frame hooks over the top of the spools. Push down the clasps so that they engage the spool center groove. Check the alignment of the grill with the stove body, it should be square and feel secure and be able to rotate freely upward.



Oven door - Your Force 10 Range is equipped with a slide away space saving door. To open the door, lift up on the handle and pull towards you. The door will fold underneath the oven.

The door has two positions; fully closed and broiler position. The broiler position uses the set of notches on the end of the handle arms. There is also a door lock that should be used when the oven is not in operation.

To lock the handle, lift up the brass knob located on the right side of the handle and slide it towards the door. To unlock the handle lift up the knob and slide it towards the handle.

Top Burners Operation

*Before lighting, ensure the **Burner Caps** are on the burners.*

All the burners are equipped with a flame failure device (thermocouple). If the flame goes out for any reason, the solenoid inside the control valve cuts off the supply of gas to the burner.

To light the top burners:

- Push in the control knob that corresponds to the burner you are lighting, and turn counter-clockwise 90°.
- Continue pushing the control knob in, while pushing the ignition button located on the left side of the control panel. (There will be a spark at all the burners)
- Once the burner is lit, continue to hold the control knob in for (20) seconds to allow the thermocouple to heat up and energize the solenoid inside the valve.
- Turn the control knob counter-clockwise to adjust the output down.
- To turn the burner off, turn the control knob clockwise to the off position.

Oven/Broiler Operation

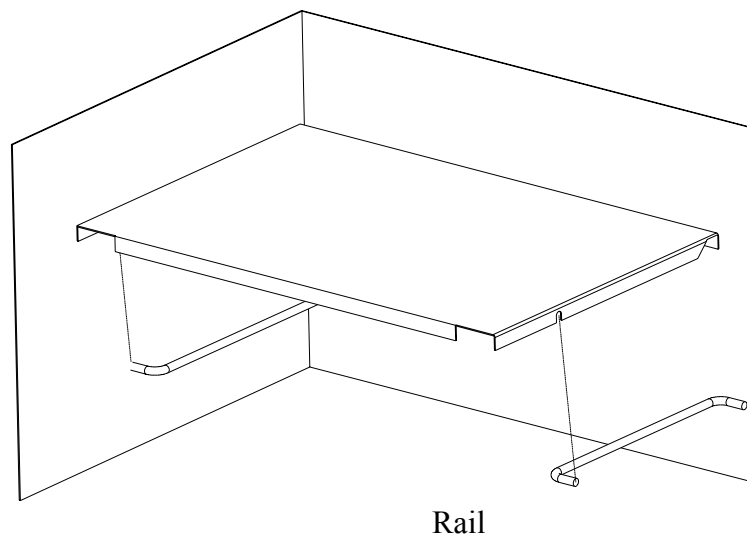
The oven and broiler are controlled by the same valve. The oven and broiler can not be operated at the same time. The oven temperature is controlled by a mechanical thermostat. The oven burner will provide full output until it reaches the set point at which timer it will go into a maintenance mode.

For best results it is important to pre-heat the oven. The oven should be pre-heated for 8-10 minutes to achieve a stable temperature.

It is essential for proper operation of your oven that the heat disbursement plate be installed.

Heat Disbursement Plate installation:

Install the Heat Plate on the side rails located towards the bottom of each oven side, with the circular notches towards the front.



Oven:

- To light the oven push in the oven control knob and turn counter-clockwise to the desired temperature setting. Pushing in the control knob will engage the integrated spark ignition system.
- Once the burner is lit, continue to hold the control knob in for (20) seconds to allow the thermocouple to heat up and energize the solenoid inside the valve. The ignition will continue to spark when you hold in the control knob.
- Allow the oven to preheat for 8-10 minutes to achieve a stable temperature.
- To turn off the oven, push in and turn the control knob clockwise to the off (vertical) position.

Broiler:

- To light the broiler push in the oven control knob and turn clockwise Pushing in the control knob will engage the integrated spark ignition system.
- Once the burner is lit, continue to hold the control knob in for (20) seconds to allow the thermocouple to heat up and energize the solenoid inside the valve. The ignition will continue to spark when you hold in the control knob.

Warning: Broiling is a rapid heating process. Broil with the oven door open. Do not operate the broiler for more than 20 minutes at a time.

- Before lighting the burner, pull the heat shield (located on the top of the oven) out and position the door in the broiler position.
- To turn off the oven, push in and turn the control knob clockwise to the off (vertical) position.

The Range (including the oven door) becomes hot when the oven is being operated. The top portion of the back of the range becomes very hot during oven operation. Do not contact it with unprotected skin.

CLEANING & MAINTENANCE

Cleaning Stainless Steel

Do not use abrasive pads; they will scratch the surface

The basic rule of thumb is to use the mildest cleaning procedure that will do an effective job. Always rinse thoroughly with clear water and dry completely. Frequent cleaning will prolong the service life of stainless steel equipment and help maintain the finish.

Ordinary deposits of waste and fluids can usually be removed with soap and water. More stubborn deposits or stuck on debris may require harder rubbing or the use of commercial cleaning products acceptable for use on metal surfaces. When using any cleansing agent, the rubbing should be in the direction of the polish lines or "grain" of the metal.

Prolonged Lay-Up

If you leave your boat unattended for a long period of time, particularly in high heat and humid conditions, the high temperature lubricant in the gas control valves may settle, resulting in difficulty in turning the control valves and possibly seizure of the valve.

In the event this should occur do not use force to free-up the valve stem. Remove the control panel from the range by first removing the control knobs and the screws that hold it in place from the top tray. Remove the two small Phillips head screws on the front of each control valve. Once this is accomplished, you can remove the cap that holds the valve stem in the valve body.

Inside the body is a shaft that may also be dirty. Using a pair of tweezers, remove the shaft. **Remember its orientation inside the valve.** Carefully clean the valve stem and shaft using warm water or alcohol. Replace the shaft back in the valve, ensuring it is in the proper position. Lubricate the valve stem with a high-temperature lubricating grease (a small amount will do) and replace the valve and its associated cap. Secure the screw and replace the control panel.

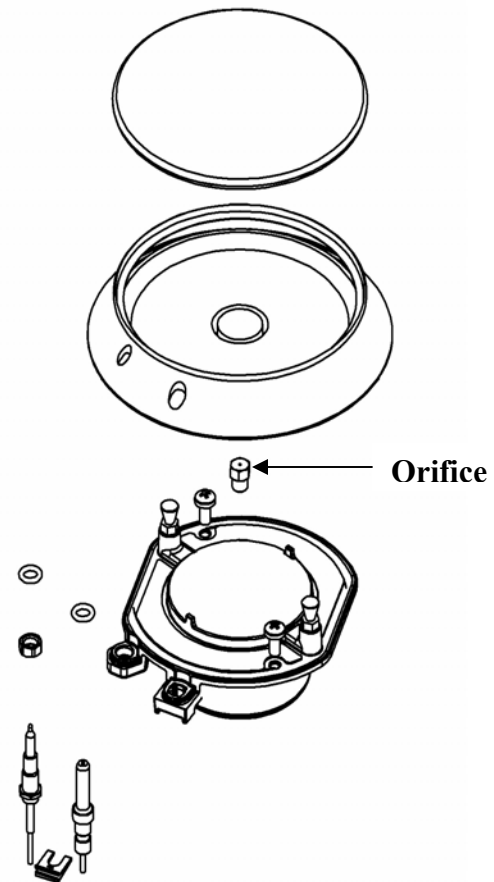
Cleaning the Burner Orifice

The orifices on the burner should be cleaned at least once a year to remove grease and carbon build up. The orifice should be removed for cleaning. To clean out the orifice use compressed air or soak it in alcohol and use a soft bristle brush. **Never use metal to clean the orifice**

Turn off the gas before performing any maintenance.

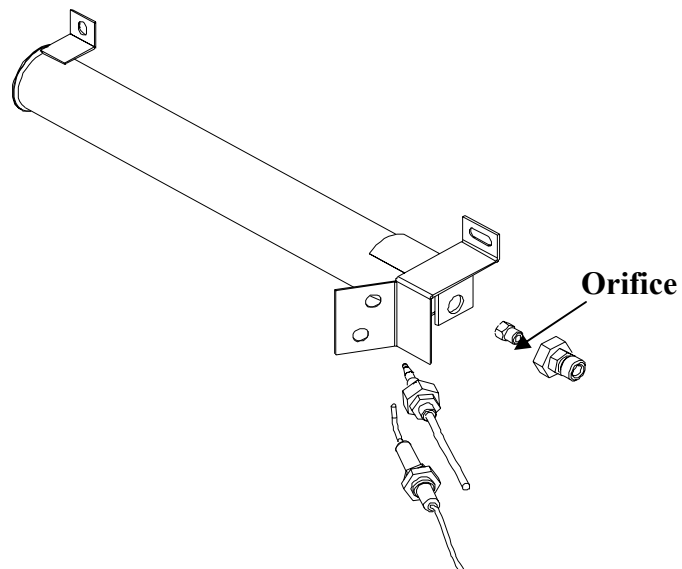
Removal of the top burner orifices:

- Twist the burner cap counter-clockwise and lift up.
- Remove the flame spreader.
- Using an 7mm socket unscrew and remove the brass orifice.
- Re-assemble the burner before use insuring the burner cap is attached.



Removal of the oven orifice:

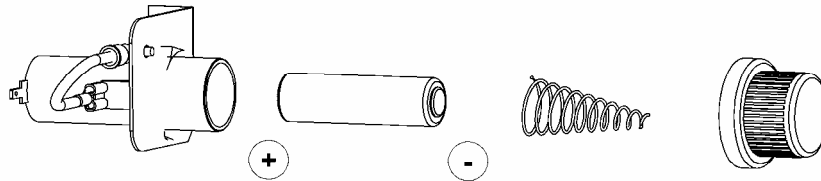
- Unscrew the oven burner bracket from the back of the stove.
- Rotate the burner 180 degrees to gain access to the orifice.
- Remove the orifice from the orifice holder with a 7mm wrench.
- Re-assemble the burner before use.



Changing the battery

The electronic ignition system is powered from a AA 1.5 Volt Battery. The Battery holder is located at the back of the stove, under the door.

To change the battery, unscrew the black cap. Remember to respect the polarity.



Replacing a Thermocouple

Tools Required: Phillips Head screwdriver
 8mm open wrench

Top Burners

1. Remove the top Grill
2. Remove the top tray
 - Remove all the burner caps
 - Remove the flame spreaders
 - Un-screw the burner cup from the top tray by removing the (2) screws on each burner cup.
 - Remove the front control panel by removing the (3) screws on the front of the top tray.
 - Detach the top tray from the body by un-screwing the (3) screws on both the right and left side.
3. Disconnect the thermocouple from the valve by sliding the spade connector off the back of the valve. (This connection is under a black plastic cap)
4. Using an 8mm wrench, remove the brass thermocouple nut. The thermocouple head will come out from the bottom.

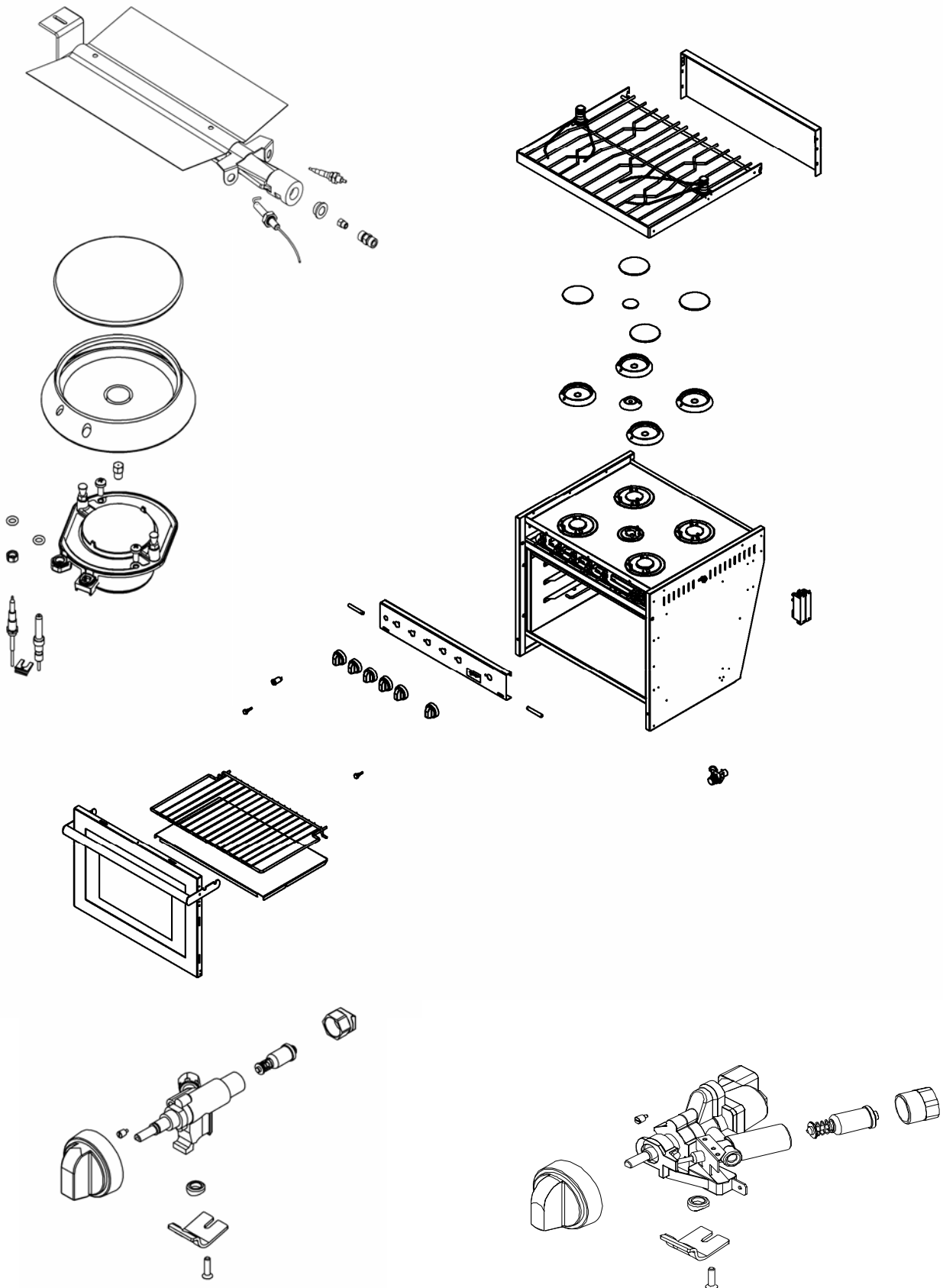
Oven and Broiler

1. Remove the top tray and control panel as described above.
2. Using an 8mm wrench unscrew the thermocouple nut from the back of the thermostatic valve.
3. Unscrew the thermocouple head from the bracket on the oven burner or broiler.

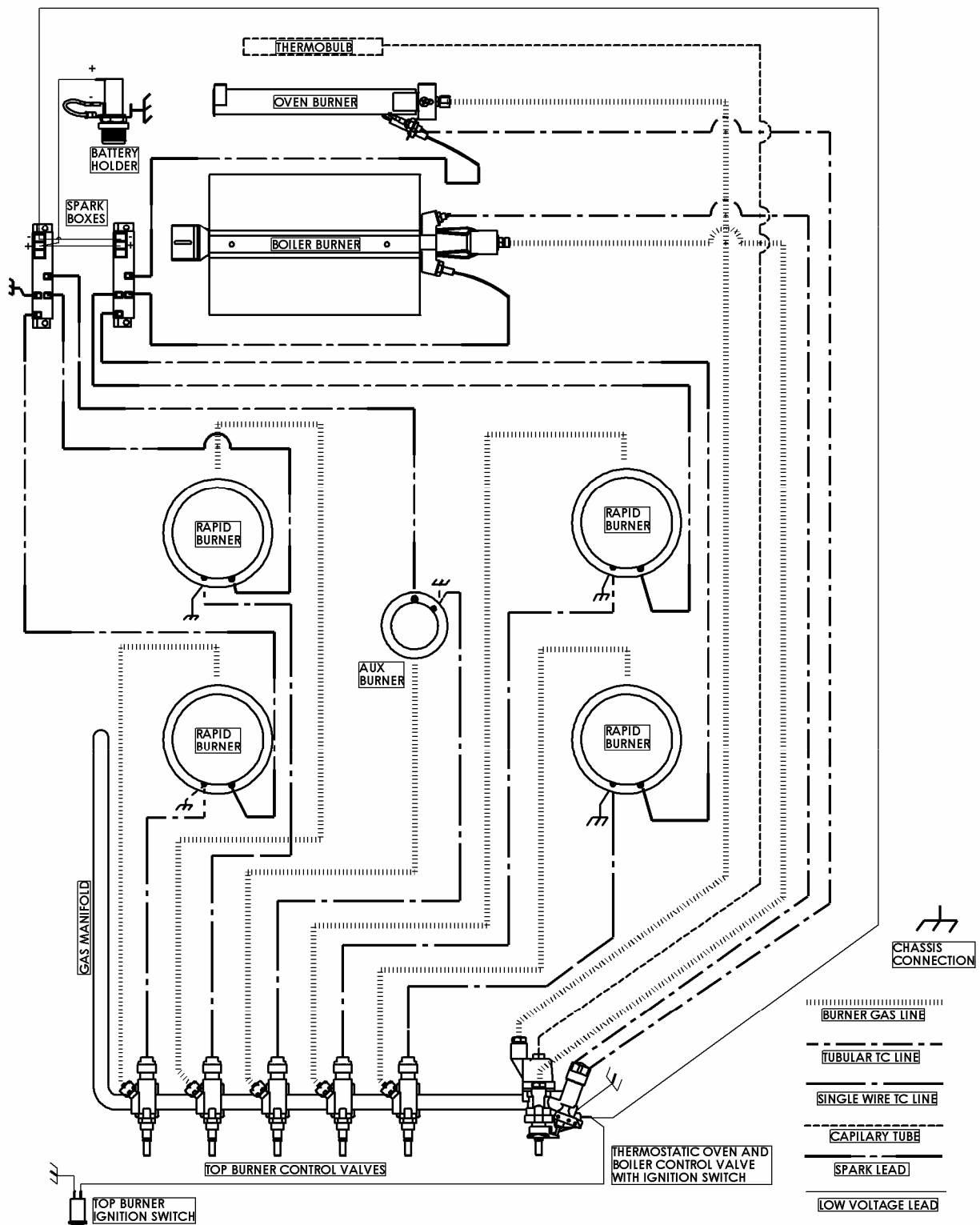
TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	Solution
Burner will not stay lit	Thermocouple is not in the flame	See Low Flame
	Thermocouple has failed	Replace thermocouple
	Solenoid in the valve has failed	Replace solenoid
Burner will not light (No gas)	Supply tank is empty	Re-fill tank
	Shut-off valve is closed	Open valve
	System Solenoid is shut	Reset or replace
	Air lock in fuel line	Bleed the fuel line
	Blocked orifice	Remove and clean orifice
Low Flame	Low gas pressure	Check regulator at the tank
	Dirty orifice	Remove and clean orifice
Igniter does not spark	Battery is dead	Change battery
	Spark plug is dirty	Clean tip of spark plug
	Spark Box has failed	Replace the spark box
Oven does not get hot	The heat plate is not installed	Install the heat plate
	Dirty orifice	Remove and clean orifice
	Low gas pressure	Check regulator at the tank

Assembly Diagrams

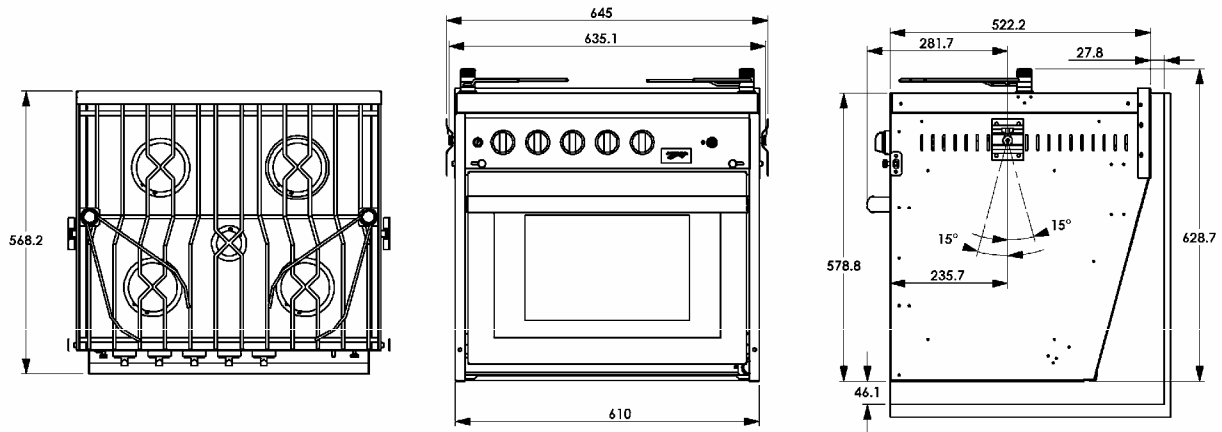


Gas and Electrical Circuits



SPECIFICATIONS

Model: 62551



Fuel Type:	Propane / Butane
Input Gas Pressure:	30 mbar
Rapid Burner Output:	(4) @ 8500 BTU / 2.5 Kw (each)
Auxiliary Burner Output:	(1) @ 3400 BTU / 1 Kw
Oven Burner Output:	6370 BTU / 1.87 Kw
Broiler Output:	6800 BTU / 2 Kw
Oven Volume:	1.3 cu. ft / 36 L
Electrical Requirement	1.5 Volt DC AA Battery
Weight:	112 lbs (51 Kg)
Warranty:	(2) Years

Limited Warranty

Force 10 Manufacturing warrants this appliance to the original consumer to be free from defective material(s) and workmanship while under normal use and service for a period of (2) year.

During the warranty period, Force 10 Manufacturing will, at its option and without charge, repair and/or replace but not remove or re-install the faulty product.

The purchaser will return defective products to the address stated below. No product will be accepted by Force 10 Manufacturing without a Return Authorization Number. Return of defective products must be accompanied by written details of the problems and proof of purchase.

The buyer shall be responsible for shipping and insurance charges, if any, on the products returned for repair under the terms of this warranty. Force 10 Manufacturing will pay shipping of products returned to the buyer.

This limited warranty applies only to products that have been installed and used in accordance to printed instructions of Force 10 Manufacturing and does not cover improper use, vandalism, negligence or accidents.

You do not need to register for your warranty. The serial number and a copy of the original bill of sale will be required to determine warranty eligibility.