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FORCE 10 GOURMET GALLEY RANGE

PROPANE AND NATURAL GAS MODELS

INTRODUCTION

Thank you for selecting the Force 10 Gourmet Galley Range. Your unit was carefully inspected and tested at our factory - we take pride in producing one of the finest and safest gas ranges manufactured for marine use.

Because of the continuing refinement of our product designs, your range may possess features not discussed in the manual. This possibility aside, however, 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 undertaking the simple repairs and maintenance described in this manual.

The most important reason for reading the manual carefully is that many of its instructions are essential to the safe operation of your range.

Should any question arise that is not addressed in this manual, we ask that you contact your dealer, or ourselves, quoting both the model and the serial number printed on the product identification label located on the side of your range.

We welcome any opportunity to be of assistance.

FORCE 10 MARINE LTD. 23080 Hamilton Road Richmond, B.C. Canada V6V 1C9 Telephone (604) 522-0233 Fax: 604-522-9608

> 1-800-283-6070-West Marine 1-800-663-8515-Force 10

SAFETY AND INSTALLATION

Some Force 10 Galley Range models are specifically equipped to burn liquid propane gas (LPG), while other models are equipped to use compressed natural gas (CNG). CNG and LPG are <u>not</u> interchangeable fuels. It is therefore important to ensure that the model you have selected is the correct one for the type of fuel system you intend to use. (If natural gas is used in a propane stove the burner flames will be inadequate for cooking. If propane is used in a stove fitted for CNG, burner flames will be unacceptably and dangerously high.

Recommended installations for both LPG and CNG systems are outlined in this manual. Follow only the instructions which are applicable to your specific model of Galley Range.

If at some future date you want to convert your LPG or CNG range to the other fuel, a conversion kit can be obtained from Force 10. The model and serial numbers of your range are required to obtain the correct kit.

Propane and natural gas are excellent and convenient galley fuels if used in accordance with the installation and safety procedures listed in this manual. If these procedures are ignored, there is a danger of fire and explosion. We have done our best to design and construct your Gourmet Galley Range to be the safest marine galley range available. You can do your part to ensure safety by following these installation and testing procedures.

All valves (both tank and solenoid) must be closed when the boat is unattended. They must also be closed immediately in any emergency. Force 10 recommends in addition that manual cylinder valves be closed while appliances are not in operation.

PROPANE (LPG) FUEL SYSTEM

Follow these instructions for propane model Galley Ranges only.

 Buy your cylinder, gauge, master solenoid valve and hose from a reputable marine dealer, or your local LPG service station. Don't use unreliable or worn-out equipment.

We recommend specifically that only a high quality regulator be used with your Force 10 Galley Range. It must be set at 11" water column. A higher pressure could result in a dangerously high flame setting. If you question the quality or pressure setting of the regulator, please have it inspected by your local LPG service station.

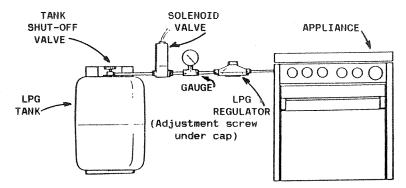
Locate the cylinder and regulator in a housing vented to the open air (preferably on the deck or cabin top) isolated from the hull interior by a vapor-tight enclosure.

Propane is heavier than air. It can therefore accumulate at the bottom of enclosed compartments despite the provision of overhead ventilation. To allow it to drain safely overboard, the housing in which the cylinder is installed must be vented at the bottom with a pipe or hose of at least 1" I.D. running on a downward slope to an outlet on the hull exterior positioned above the water line, and at least two feet distant from any hull opening to the boat interior or engine exhaust.

We recommend the installation of a vapor monitor (sniffer) on your boat with all propane fueled devices.

- 3. Propane is a two-phase (liquid/vapor) fuel, and only vapor withdrawal from the tank is safe. Firmly mount cylinder, right side up, to ensure that liquid withdrawal does not occur.
- 4. We recommend that a solenoid valve, which can be controlled by a switch located in your cabin, be installed next to the manual cylinder valve. The cylinder valve outlet and the 12-volt DC solenoid valve should be clean and dry when they are connected to each other. Unnecessary attempts to seal this connection with substances like pipe dope or teflon tape can result in the introduction of foreign materials into the system that can plug the tiny appliance orifices.
- 5. Tighten the solenoid valve to the cylinder valve outlet properly. Use a 7/8" or adjustable wrench - not a pair of pliers - and apply approximately 50 foot pounds of torque.
- 6. A 0-300 PSI pressure gauge should be installed next to the solenoid valve on its downstream side. Again, the fittings should be clean and dry. It is not necessary to use pipe dope or teflon tape for these connections.
- 7. Install the regulator downstream from the pressure gauge with its vent port pointing downward, protected from spray or deck wash, to prevent water from entering the fuel system through it.

8. Starting from the propane tank itself, the fuel line attachments should therefore occupy the following positions: (a) the manual cylinder valve, (b) the solenoid valve, (c) the pressure gauge, (d) the regulator, and (e) the Range itself.



RECOMMENDED LPG SYSTEM INSTALLATION

- 9. Affix the caution label plate supplied with your Galley Range in the immediate vicinity of the gas cylinder in a place where it will be plainly visible.
- 10. If the range is a gimballed model, the gas supply line should be flexible, fire-resistant hose, UL or CGA approved for use with propane systems, with 3/8" forged female flare nuts machine crimped onto each end.

If your range is a built-in style, you should use either soft copper tubing or a UL/CGA approved gas hose with 3/8" forged female flare nuts machine crimped onto each end.

Because every connection is a potential leak, the fuel line should be one continuous length of hose or tubing. DO NOT MAKE A "T" off any fuel line between an existing appliance and the gas cylinder to feed another appliance.

- 11. Be sure not to kink the hose or piping connecting the regulator with the Range by bending it too sharply during installation-remember that the pressure on the downstream side of the regulator is less than 1/2 PSI.
- 12. Protect the hose against vibration and damage by securing it tightly to bulkheads and hull side with non-corrosive ties or clamps which will not cut, abrade or pinch it.

On gimbal models, the last two feet of the downstream end of the hose should be unattached to bulkheads or the hull side to allow the Range to swing freely on its gimbals.

13. Fuel lines must be protected by close-fitting grommets and sealants where they pass through decks or bulkheads, and the passage must be made vapor-tight.

They should be installed so that they are readily accessible to inspection.

Follow these instructions for natural gas model Galley Ranges only.

- Buy your cylinder, gauge, regulator and fuel line from a reputable marine dealer, or your local CNG service station. Don't use unreliable or worn-out equipment.
- 2. Choose a CNG cylinder location away from any potential fire hazard such as a gasoline fueled engine, hot manifold or exhaust riser. Should the CNG cylinder be adjacent to a fire and a safety valve rupture disc reach 212 F and 3775 psi, the disc would rupture and the gas contained in the cylinder would add to the fire already in progress.
- As CNG is always a vapor, all CNG cylinders are designed without a relief valve.
- 4. The CNG cylinder(s) should be securely mounted, either vertically or horizontally, out of the way in an accessible area for easy operation of CNG cylinder valve, observation of CNG cylinder pressure gauge and for CNG cylinder removal.
- 5. As each standard CNG cylinder contains less thermal energy than two gallons of alcohol or kerosene fuel, but without their potential hazard of liquid leaks or spillage into the bilge, the CNG cylinder may be located in the area of the boat which would be suitable for the location of a pressurized alcohol or kerosene tank. See American Boat and Yacht Council Safety Standards for Small Craft, Section A-22 for recommendations covering CNG. Copies may be ordered direct from A.B.Y.C., 405 Headquarters Drive, Suite 3, Millersville, MD 21108, telephone (301) 923-3932/3935.

NOTE -- By Law, the CNG cylinder valve outlet fitting with its protective cap and chain, and the regulation system nut have left-hand threads. The cap and nut are so marked with a slot.

- The CNG cylinder valve outlet fitting does not require pipe dope or Teflon tape and should be clean and dry when attached to the regulation system nut to keep foreign materials out of the system.
- 7. Use a 10" crescent wrench to tighten the regulation system nut to the CNG cylinder and valve connection. Tighten the nut as you would a welding tank or CO2 cylinder, using approximately 50' pounds torque.
- 8. If the CNG cylinder(s) is to be located on deck or exposed to water spray, point the regulation system so that water cannot run into the second stage (gray) regulator vent or into the body of the pressure gauge.
- 9. If the CNG cylinder(s) is to be located inside a cabin, enclosed in a lazarette hatch, or in an area with little ventilation, you must supply ample overhead ventilation in case of a leak or regulator malfunction.

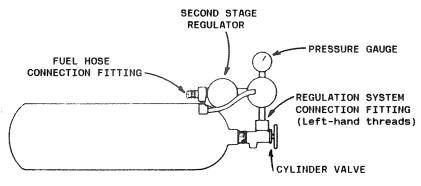
- 10. Affix the caution label supplied with your Galley Range in the immediate vicinity of the cylinder in a place where it will be plainly visible.
- 11. Fuel line must be a type recommended for natural gas. This line may be purchased through any of the natural gas dealers in the U.S. If you have any problems or questions regarding the fuel line or fuel system, contact:

East Coast CORP BROS., INC. 1 Brook Street Providence, RI 02903 Tel: (401) 331-8020 West Coast GAS SYSTEMS, INC. 5361 Production Drive Huntington Beach, CA 92649

Tel: (714) 891-2411

- 12. Push approved CNG hose onto the barbed brass fitting on the CNG outlet connection on the regulation system. Be sure the hose goes on all the way to the plastic guard. CNG hose seals well when it is pushed over the proper size barbed fitting -- hose clamps are unnecessary and should not be used.
- 13. Run the hose from the CNG regulation system to the appliance with 6" minimum radius turns, so the hose does not kink and cut off or reduce the fuel supply causing unsatisfactory operation of the range. Note: Fuel pressure is less than 1/4 psi.
- 14. Use only continuous lengths of hose from the regulation system to the appliance with no tees or splices. Keep the number of fittings to an absolute minimum. Every connection is a potential leak!
- 15. Keep hose away from heat or abrasion. Use plastic ties or clamps to secure the hose to the boat structure or bulkheads. Fuel lines must be protected by close-fitting grommets and sealants where they pass through decks or bulkheads, and the passage must be made vapor-tight.

They should be installed so that they are readily accessible to inspection.



CNG Cylinder can be mounted horizontally or vertically

RECOMMENDED CNG SYSTEM INSTALLATION

Test your fuel system for leaks each time the cylinder supply valve(s) are opened for appliance use.

Use the following procedure for the test.

First, close all range burner valves by turning the controls to the Off position. Next, open both the manual cylinder and solenoid valves and make a note of the reading on the pressure gauge. Now close the manual cylinder valve. The pressure should remain constant for at least 10 minutes. If it doesn't, gas is leaking out of the system somewhere.

The leak(s) should be located by applying a mixture of liquid detergent and water to all connections and other suspect points and checking for bubbles. Do not attempt to locate leaks by using an open flame. Repair and retest the system before putting it into operation.

For more detailed general instructions on the installation of propane and CNG systems on boats, please refer to the American Boat and Yacht Council's pamphlets #A-1 and #A-22 respectively. These pamphlets may be ordered direct from A.B.Y.C., Suite 3, 405 Headquarters Drive, Millersville, MD 21108, (305) 923-3932/3935.

GALLEY RANGE INSTALLATION - GENERAL

- Before installing your Range, fill out the Warranty Registration Form which is enclosed under the front cover of this manual and send it back to Force 10 within 10 days of purchase. Keep your model and serial numbers handy, as they will be required when ordering parts or requesting service assistance.
- Do not locate cabinet storage units or any combustible surfaces at any point directly above the range.
- 3. Force 10 recommends a 30" clearance between the range top and any unprotected combustible cabin top or bulkhead. This clearance may be reduced to a 20" minimum if the overhead combustible surface is shielded with at least 1/4" thick flame-retardant millboard topped with not less than No. 28 MSG sheet steel, 0.015 inch thick stainless steel, 0.024 inch thick aluminum, or 0.020 inch thick copper.
- 4. Gas consumes oxygen in the process of combustion. For this reason it is essential to ventilate any enclosure in which you plan to use your Galley Range. We recommend that at least nine square inches of fresh air ventilation be provided in the vicinity of the range.
- 5. Although your Galley Range is equipped with a thermocouple device which will automatically turn off the gas supply to any burner which might be accidentally extinguished, Force 10 specifically warns that your range should not be used as a cabin or living space heater.

Force 10 manufactures a cabin heater—specifically designed for the purpose—of heating living space which is equipped with (a) an oxygen—depletion sensor—which will—automatically turn off the gas—supply if—the oxygen—level in—the cabin should fall more than 5% below the normal level, and (b) a stack to exhaust combustion-produced water—vapor and carbon dioxide which would otherwise saturate the air—and create—a humid "greenhouse" atmosphere in the cabin—interior (extreme condensation around portholes, hatches, and on the exposed hull side—are the usual signs). For functional reasons, these design features—essential to the safe—and comfortable—operating—of—a cabin space—heater—are not incorporated into the Galley Range.

- 6. The hinged burner grill and frame structure at the top of your range will become very hot during operation of the range top burners do not attempt to swing up or lift it without wearing oven mitts. Keep children and pets well away from the range when it is hot.
- 7. The whole 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.
- 8. Always keep a Class ABC fire extinguisher mounted close by your Galley Range. Grease fires should be extinguished by smothering them with baking soda, or by using the ABC Class fire extinguisher.

This section only applies to models designed for suspension from gimbal bolts.

Be sure to install the gimbal wall brackets so that your range will hang in the desired position in relation to both countertops and adjacent cabinets or bulkheads. For 3 or 4 burner models, there should be at least 1" clearance between the back of the range and the nearest wall or bulkhead to allow free gimbal action. For 2 burner models, 4-1/2" clearance is required for free gimbal action.

Please refer to separate diagram and installation instruction sheet for the mounting dimensions and procedures for your specific model of range.

After installing the wall brackets and placing the rame in position, drill a 3/8" hole for the sliding bolt gimbal lock.

The bolt should be locked into the adjoining cabinet or bulkhead whenever the range is not in use to prevent it from swinging in rough seas. The bolt can be locked into either the "in" or "out" position by turning the knob clockwise.

Install a wooden block or metal plate with a 3/8" hole if the cabinet or fitting is not strong enough to hold the range securely in the locked position.

BUILT-IN MODELS

This section applies only to built-in models.

Please refer to separate diagram and installation instruction sheet for the mounting dimensions and procedures for your specific model of range.

On built-in model stoves, you must ventilate the back of the stove enclosure. This can be done by cutting holes at the side of the rear of the enclosure or across the back.

Some people do a very neat job of installing our built-in stove, however, please realize your stove burners use a lot of oxygen. Therefore make sure you have access holes to supply plenty of fresh air, either below the stove or through the adjacent cabinet side panels. Minimum required area is 10 square inches. Lift the hinged top burner grill and you will see the mounting holes.



OPERATING YOUR GALLEY RANGE

LIGHTING THE RANGE TOP BURNERS

- Read and comply with all safety instructions in the vicinity of the gas cylinder, on the inside of the oven door, and in this manual.
- 2. Turn all burner control knobs to the Off position.
- Open the manual cylinder and solenoid valves. (Turn the manual cylinder valve in the counterclockwise direction, and switch the solenoid valve to the open position.)
- 4. Push in control knob, and turn it counterclockwise to High. At the same time push the spark ignition button (small button beside control knobs) until the burner is lit.
- 5. Continue holding the burner control knob in for about twenty (20) seconds after ignition. This will heat the thermocouple and allow the gas valve to stay open. The thermocouple is designed to cut off the gas supply to the burner if the flame should accidentally be extinguished.

This arrangement also ensures that the range is childproof to the extent that simple twisting of the control knobs will not light any burners or allow gas to enter your boat. Most other stove brands do not have this invaluable safety feature.

 If the electronic ignition fails, turn the burner Off and apply a lit match or lighter to it before turning it back to the High position.

Sometimes the burner will sputter for a while before igniting. Give your range a few seconds to purge the air out of the gas line.

- You should now be able to set the flame to any desired level between High and Low by turning the control knob further in the counterclockwise direction.
- To turn off the burner, turn the control knob clockwise to the Off position.
- 9. You must shut off both the solenoid and the manual gas cylinder valves whenever your vessel is unattended or if there is an emergency. Force 10 recommends in addition that you shut the cylinder valves off whenever your Galley Range is not in use.

LIGHTING THE OVEN AND BROILER BURNERS

1. It is essential to the proper operation of your oven that the cast aluminum heat plate be placed in the middle of the lowest rack in the oven to ensure even heat distribution. Do not put this plate directly on the oven burner, or you may melt it.

NOTE: On occasion the cast aluminum heat plate may sag after prolonged use of the oven. Aluminum is a relatively soft metal that conducts heat well. It also has a relatively low melting temperature. If you notice your heat plate beginning to bend or sag, simply flip it over and it will gradually curve back into shape. This periodic bending back and forth has no detrimental affect on the heat plate. If it has become distorted to the point that it cannot be flipped over and used, call us and we can provide you with a new one.

- Light the oven burner, using the procedure described in instructions 1 to 5 for lighting the range top burners.
- Close the oven door carefully to ensure that the oven burner will not be extinguished.
- 4. Before lighting the broiler burner (not available in all models), make sure that the oven rack has been adjusted to position your food at the desired height.
- 5. Light the broiler burner using the same procedure.
- 6. Remember that broiling is a rapid process BROIL WITH THE DOOR OPEN, check your food often, and do not run the broiler for more than 20 minutes at a time.
- 7. If desired, the broiler and oven burners may be used together for a short time only 10 to 15 minutes or less to hasten the oven preheating time. Be sure to turn the broiler burner off before placing food in the oven to bake or it will burn.

SETTING THE OVEN TEMPERATURE

Leading American manufacturers of oven thermostats and their insurance underwriters agree that the safety of available oven thermostats in the marine environment is seriously open to question.

For this reason, Force 10 has designed the Gourmet Galley Range oven to be used with an accurate thermometer and an infinite heat valve rather than a thermostat.

After lighting the oven burner at the bottom of the oven, close the oven door and keep the burner on High until the temperature begins to reach the desired setting. Then turn the flame down, and adjust the setting until the temperature holds at the desired level. Thereafter, you need only check occasionally to ensure that it remains stable.

To the delight of our customers - and ourselves - this design has produced a superior oven environment with an even heat which is unaffected by the "up-and-down" temperature swings of thermostat controlled ovens. So - don't be surprised if your soufflés and cakes turn out better in the galley than in the kitchen! Incidentally, anyone sending us a copy of their own galley tested recipe will receive a first edition of the Force 10 Cookbook, soon to be published.

CARE AND MAINTENANCE

Your Galley Range is constructed of one of the hardest, corrosion-resistant stainless steels available. However, the surfaces can be damaged if the proper care is not given. Please follow these maintenance suggestions and you will have a good looking appliance for years to come.

- Do not use any abrasive chemical cleaners on the inside or outside of your range. Mr. Muscle II, Spray Clean, or any liquid cleaner is recommended.
- 2. Use a clean cloth or sponge to apply cleaners.
- 3. Remove stains as quickly as possible before they become "set".
- Do not let food spills or burnt foods build up on any surface of your galley range.
- 5. You can use a household oven cleaner for the oven, but remember to follow the product manufacturer's directions!
- 6. Do not use steel wool or S.O.S.-type pads to clean any part of your range. These products will embed fine steel particles in the surface of the stainless steel causing it to "bleed" (rust) in a marine environment. Use bronze wool or some other non-metallic abrasive if you must. Be aware, however, that your range has a fine finish that can be scratched by some abrasive pads or cleansers.

TROUBLESHOOTING

If something should go wrong with the operation of your Galley Range, don't despair! Read this section carefully and follow our suggested remedies - you don't have to be halfway to Hawaii to appreciate the convenience of being able to fix the problem yourself.

If these suggestions do not resolve the difficulty, contact Force 10 directly, or consult your dealer, quoting the model and serial numbers on the side of your Galley Range.

GAS SMELL

- 1. Extinguish all open flames and smoking materials.
- 2. Close both manual and solenoid cylinder valves immediately.
- 3. Make sure that all appliance valves are closed.
- 4. Ventilate all interior compartments thoroughly. Use a fan to push the air from the bottom of all compartments.
- 5. Maintaining as much ventilation as possible, open cylinder valves. Making sure that the appliance valves are still <u>closed</u>, apply a mixture of liquid detergent and water to all connections, checking for bubbles indicating a leak. Do not use a flame to check for leaks.
- When repair of the leak(s) has been completed, test the system with the aid of the pressure gauge, using the procedure previously described for FUEL SYSTEM TESTING.

INADEQUATE HEAT: FLAME BURNING LOW OR GAS OUT

- Your system may be low on fuel check your tank pressure gauge.
- The gas cylinder valve may not be fully open make sure the handle is turned as far as it will go in the counterclockwise direction.
- 3. The burner orifice(s) may be obstructed when cold, take off the burner cap, remove the nipple, clean out the orifice and reinstall the part.
- 4. Sometimes LPG gas will not flow as readily if the outside temperature is very low - i.e. below freezing. There's not much you can do about this condition until the propane cylinder locker warms up.



IGNITION SYSTEM FAILS TO SPARK OR BEGINS TO SPARK SLOWLY

(Does not apply to 2-burner model without broiler, which has piezo ignition.)

- Check the battery to ensure that it is an AA 1.5 volt, that it
 is still giving power, and that it is installed the right way
 around. (Battery holder is located on the underside of the
 stove at the bottom front right hand corner.) Install new
 battery if necessary.
- Check to see whether there is 1/16" (2 mm) gap between the spark plug head and the burner rim, and that all the wires are securely connected to the spark ignition box located midway down the backside of the stove.
- 3. Remove control knobs and faceplate and check the wire connections at the back of the spark igniter switch. Check the operation of the switch with a circuit tester.
- 4. Remove the stove and disassemble so that each spark ignition connecting wire can be checked for shorts. Sometimes a minor nick in the wire will cause a short so the spark plug will not spark at that burner.
- If none of the spark plugs will spark, first replace the battery and check again. If they still won't spark, order a replacement spark ignition box from Force 10.

SPARK FAILS TO IGNITE BURNER

Lift the burner cap off (when cold only) and check for blockage of the hole at the back of the indentation into which the spark plug fits.

BURNER CONTROL VALVE FAILS TO STAY OPEN WHEN VALVE CONTROL KNOB IS RELEASED

There is a problem with the thermocouple. The small upright attachment next to the burner on the range top is one end of the thermocouple.

The outside of the thermocouple is a copper tube. Inside the tube, insulated from it, is a nickel wire. These metals are only in contact with each other at the point which is exposed to the burner flame.

When this point is heated by the burner flame, a small amount of electricity (1.5 millivolt) is generated. This electric current flows to the other end of the thermocouple which is tightened into the gas valve. Here it activates an electromagnet which keeps the valve open.

Should the burner accidentally be extinguished, electricity will no longer be generated, and the valve will be snapped back to the closed position by a stainless steel spring.

As all thermocouples and ranges are tested at the factory, this problem should be very rare. If necessary, however, remove the thermocouple following instructions 1 through 8 for replacing the thermocouple. Lightly sand the end which has been removed from the valve with very fine sandpaper. Replace in the valve and test. If this does not work the thermocouple must have failed and will have to be replaced.

You can also test the thermocouple by removing the end from the valve. Heat up the other end with a torch or another burner on your stove. By using a good quality voltmeter, put one lead on the outside of the thermocouple and the other one on the far cold end. If the thermocouple is okay, it will show 1.5 to 2.5 millivolts on your meter.

REPLACING THE THERMOCOUPLE

TOOLS REQUIRED - Phillips screwdriver
8 mm open wrench or crescent wrench
10 mm open wrench

GENERAL INFORMATION

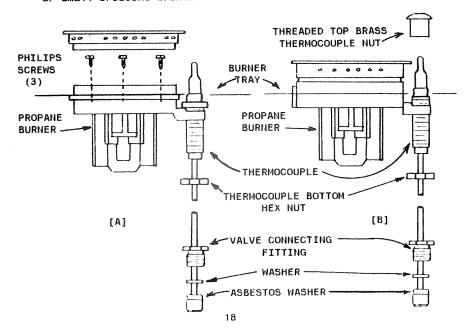
- Thermocouples are made out of 2 dissimilar metals. One end of each metal is fastened together. When this connection is heated up, a small amount of electricity is created (1.5 millivolt) and can be measured between the 2 other ends of these wires.
- 2. The outside of the thermocouple is a copper tube, which acts as a conductor and the inside is an insulated nickel wire, which at the other end, is separated from the copper wire by a very small asbestos washer. This end of the thermocouple screws into the gas valve, which contains an electromagnet.
- 3. When the thermocouple is heated, the electricity generated attracts the electromagnet in the valve and holds the valve open. If the flame is accidentally extinguished, the thermocouple cools, causing the electromagnet to spring back and close the valve.
- 4. If the thermocouple is not holding the valve open, check first that it is screwed into the valve tightly enough, as a loose connection will not transfer the 1.5 millivolt. If it has been tightened too much, the asbestos washer will be crushed, shorting out the thermocouple, and so will not generate the 1.5 millivolt, and must therefore be replaced.

REPLACEMENT INSTRUCTIONS

- Get the stove on deck or on a bunk or table so you can work on it and be comfortable.
- Remove both the back splash panel assembly complete with burner grill and the stove back panel (secured with Phillips screws).
- Remove the screws at top front edge which secure the front face panel.
- 4. Remove the screws on top side edges.
- 5. Remove screws from upper and lower clamps which hold the oven lines and spark wire in position against the rear outer wall of the oven. (You may have to snip the plastic wire tie holding the spark leads together.)
- The oven thermocouple tube is fastened down at the bottom of the oven by seizing wire. Remove carefully and keep for reinstallation.
- 7. Now slide the top burner tray out** about halfway towards the back. Be careful with the tubes and wires. (If you remove any spark leads, mark them carefully for reinstallation.)

**BROILER MODELS - The broiler fuel line must be removed before the top tray can be slid backwards. The brass broiler orifice holder has a small Phillips screw in its right side. Completely remove this screw and pull out the broiler fuel feed line from the broiler. Now you can slide the top tray back -be careful not to bend the broiler fuel line.

 Remove the thermocouple end from the valve using an 8 mm wrench or small crescent wrench.



- 9. <u>Surface mount burners</u> [A]
 Using a 10 mm open wrench or crescent wrench, loosen the hex nut connecting the thermocouple to the burner until the thermocouple is loosened from the burner. Replace thermocouple and proceed to step 10.
 - Non-surface mount burners [8] Loosen up the hexagonal nut at the bottom of the thermocouple, push thermocouple through, and spin off the brass thermocouple nut. Replace thermocouple and proceed to step 10.
- 10. Reverse the above procedure, being extremely careful when putting the end of the thermocouple into the valve. If you turn it too tight, you will crush the asbestos washer and need another new thermocouple. Do not force or cross thread anything easy does it!
- 11. Make sure all gas lines, spark ignition wires, and thermocouples are not touching anything sharp.
- 12. When it is all back together, mix some liquid soap and water and do your standard test for leaks with your fuel system pressurized, and all control knobs turned to **Off**.
- 13. Remember SAFETY FIRST! RESPECT GAS! Who is in a hurry anyway?? Did you order a gas detector yet?? Why not do it now? You will sleep better! Get one today see your local marine dealer.

WARRANTY

Force 10 Marine Ltd. warrants the Gourmet Galley Range against defects in workmanship or materials under normal use for a period of one year from date of purchase. Under this warranty, we will replace any defective part or unit free of charge for the materials and labor, provided that all labor is done by Force 10 Marine Ltd.

No person is authorized to provide any further or wider warranties on behalf of Force 10 Marine Ltd. in connection with the sale or supply of this Galley Range.

Wherever permitted by law, it is a condition of the sale or supply of the Galley Range that

- (a) no implied warranties shall accompany its sale or supply to any person. This exclusion of implied warranties includes, but is not limited to, the implied warranty of merchantability.
- (b) Force 10 Marine Ltd. assumes no liability for consequential damages caused by any defect which might be present in any Range.

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