

# Spitfire 180 Operating and Installation Instruction Manual



#### \*KEEP THIS MANUAL FOR FUTURE REFERENCE\*

# Spitfire180

\*\* Please read from beginning to end before operating.

Spitfire180 Serial #: \_\_\_\_\_

Quality Controlled by- Doug & Don Form#7.2-257 Issue#2 Oct 21, 2011

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#### **Warnings & Disclosures**

- The Spitfire 180 barbeque is designed to use only LPG fuel.
- Read this owner's manual carefully and completely before trying to assemble, operate, or service this barbeque.
- Improper use of this gas appliance can cause serious injury or death from burns, fire, explosion, carbon monoxide poisoning and oxygen depletion.
- Do not install this appliance in spaces containing internal combustion engines, fuel tanks, or joints and fittings.
- Test all propane lines and connections for leaks with a soapy water solution. Do not use a flame to test for leaks.
- If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Close the LPG cylinder valve when Spitfire is not in use.
- Close the Spitfire regulator valve before opening the LPG cylinder valve.
- Close the LPG cylinder valve in the event of an emergency.
- Close the LPG cylinder valve when the boat is unattended.
- Always open the hood before lighting.
- Do not allow LPG cylinder to lie on its side.
- If the burner does not light immediately turn control regulator to lock-off position and do not attempt to light the burner for at least 60 seconds.
- Trim excess fat from meats to minimize flare-ups.
- Let the barbeque cool before cleaning or removing any parts for cleaning or servicing.
- This barbeque is for OUTDOOR USE ONLY. Do not operate inside a boat, garage, shed or other enclosed areas.

#### **Spitfire Packing List**

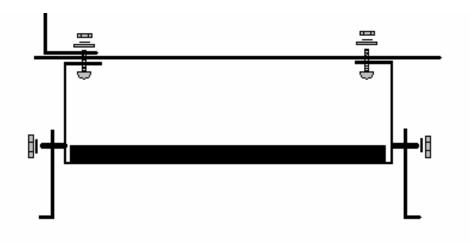
\*PLEASE KEEP YOUR PROOF OF PURCHASE FOR WARRANTY.

#### Spitfire180 Part# 00-SPT-180

- 1. Top Lid and Main Body Assembly
- 2. Thermometer part# 15-120
- 3. Stainless Grill Section part# 15-195 (2 required)
- 4. Stainless Burner & Bracket part# 15-060
- 5. Orifice Assembly part# 15-072
- 6. Regulator Control part# 15-110
- 7. Spark Igniter part# 15-101
- 8. Drip Tray part# 15-082
- 9. Deck Legs
- 10. Vinyl cover part# 15-171

#### **Assembly**

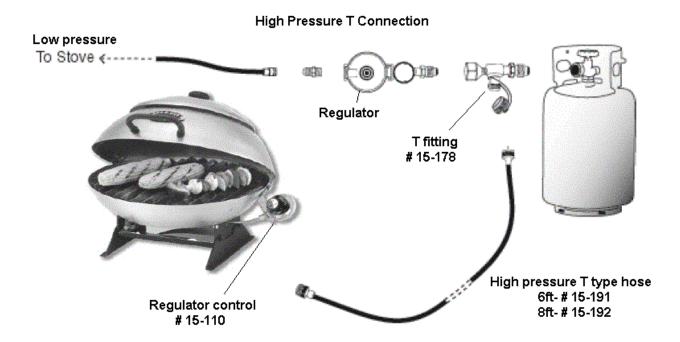
You will need to attach the feet of the BBQ to the rest of the unit. The two feet of the Spitfire slide on to the inserted studs on the base. The flanges are to point outwards. Use the four 10 x 32 nuts and #10 lock-washers to secure the legs to the base. The drip tray is placed in the area between both legs. The 4 porcelain grill sections will sit on the ledges provided above the burner. Remember to remove all protective plastic from the body.



#### **Propane Fuel Connection**

The most common LPG connection is the 1 lb. disposable bottle that connects directly to the barbeque or a hose straight from the barbeque to a 10lb. or 20 lb. tank. We have 6ft part# 15-188 and 8ft part# 15-189 high pressure propane hoses available. **High** pressure propane is required with the regulator control included with the Spitfire. The Spitfire gas control is also the pressure regulator part# 15-110.

If your boat has a regulated propane source, the fuel line to the Spitfire must be tee'd off before any regulators on the main fuel supply. A high pressure T type connector is available from Dickinson for this. \*See the high pressure T connection diagram below.

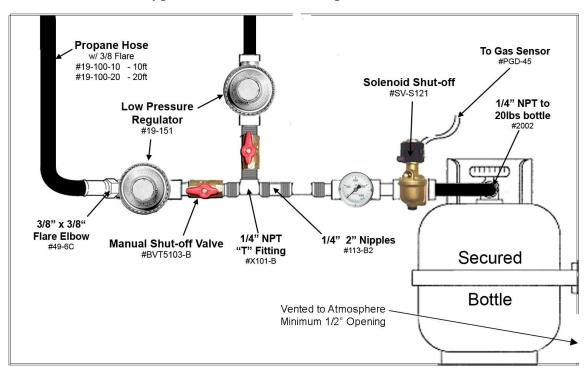


#### **Low Pressure System Connection:**

If you already have a low pressure line available for your Spitfire, you would then need to replace the regulator control part# 15-110 with low pressure gas valve part # 15-193. If doing so, there MUST be a separate 11" WC low pressure regulator part# 19-151 at the bottle regulating the propane. \*See the low pressure connection diagram below.



Typical Low Pressure Propane Locker



#### **Leak Test:**

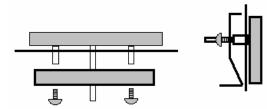
- 1. Do not use or permit sources of ignition in the area while doing the leak test. This includes smoking.
- 2. Leak testing solution should be half liquid soap and half water.
- 3. Apply the solution to the LP gas delivery system at all connections.
- 4. Bubbles in the soap solution indicate that a leak is present.
- 5. The leak(s) must be stopped by tightening the loose joints, or replacing the faulty parts.

\*\*\*DO NOT USE BARBEQUE UNTIL LEAK IS CORRECTED\*\*\*

# **Getting to Know your Spitfire**

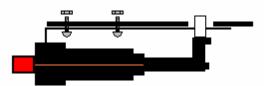
#### Thermometer:

The Spitfire 180 is fitted with a thermometer. If you remove the thermometer for cleaning or replacement, see below for re-assembly diagram. Inspect the thermometer to ensure no small white bits of plastic are around the edge, left over from the protective plastic used in the manufacturing process. Be aware that bending or damaging the thermometer probe or dropping the Spitfire, may cause the thermometer to stop working. (use  $\#6 \times \%4$  screws)



#### **Spark Igniter:**

The igniter probe should be as close to the holes in the burner as possible. See diagram below. For a perfect fit, adjust the probe so that it is 3/16ths"(4.75mm) away from the holes. Igniters seldom fail but if yours stops working try cleaning the probe. Built up grease may have coated the probe, preventing the spark. Remove the igniter, clean the bracket and around the base, the copper line on the side of the igniter and the screws. Built up grease may have interrupted the ground. (use #8 x 3/8 screws & #8 nuts)

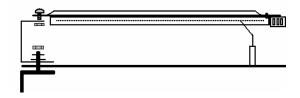


# **Orifice Assembly:**

The orifice assembly is the series of brass fittings that attach to the gas regulator control and go inside the end of the burner. The orifice has a tiny hole that controls the maximum amount of fuel allowed to enter the burner. From time to time salt or other debri may plug the hole changing the flame. The Spitfire will not get hot, and a blocked orifice may be the reason. Remove and clean with a very small wire (twist tie). Do not expand the hole or the Spitfire will burn too hot.

#### The Burner:

Your burner bar is made of stainless steel and is the most rugged, longest lasting marine burner bar around. Salt air, heat and acids in foods however still take their toll on the burner bar. Try to keep the burner clean and free of obstructions. The venturi may need adjusting to your liking. When the slots line up, the flame will be vibrant blue (more like a broiler flame), when the slots are closed, the flame will be lazy yellow (more like a burning briquette bbq), or they can just be left in the middle. (use #8 x 3/8 screw & nut)



# Lighting

- 1) Spitfire control regulator in LOCK-OFF position
- 2) Open Lid and turn on LPG gas supply at source
- 3) Turn Control Regulator ON to the medium level. Press Igniter button several times, or use a long bbq lighter through the match hole. Check to make sure the propane is burning.

\*\*If the burner does not light immediately turn control regulator to lock-off position and do not attempt to light the burner for at least 60 seconds.

# **Operation**

When the burner is lit the Control Regulator setting may be selected. With the lid closed the Spitfire will quickly reach cooking temperatures (approx. 5 minutes).

Do not leave the control regulator on high with the lid closed for long periods of time or damage may be caused to the body of Spitfire due to overheating. High gas settings are only recommended for a short pre-heat period, barbequing with the lid open, or with the lid closed, but at a moderate setting. After cooking, turn the Spitfire off at the LPG source. Once the burner has extinguished, turn the Control Regulator to the LOCK-OFF position. This will de-pressurize the fuel line.



# BBQ TEMPERATURE ADJUSTMENT PROCEDURE

#### Venturi Adjustment...

The venturi is what lets air mix with the propane fuel, in your barbeque. It may need to be adjusted to obtain your optimal temperature. If it is closed (fig 1), then simply open it, by loosening the phillips head screw, and move it until the vent holes are open. (fig 2)

Opening it will help introduce more air into the burner, which will in turn, bring down your flame temperature. If you want to increase your flame temperature, then just close the venturi

Accessing the venturi screw is easily done without removing the burner from the barbeque, as it's located in the box connecting the regulator to the barbeque.

#### Regulator Adjustment...

After adjusting your venturi, you may still need to adjust the regulator, to obtain the optimal running temperature.

First you need to make sure your bottle of propane is at least 1/2 full. Then light the burner and turn it to the high setting.

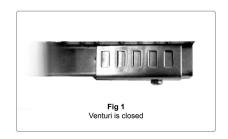
Now remove the sticker on the regulator (fig 3) and adjust the screw to increase or decrease the flame. Your regulator will have either an allen screw, flathead screw, or phillips screw. For this reason, some regulators will turn clockwise to decrease the flame, and some will turn counter-clockwise.

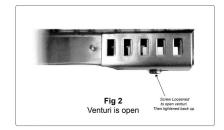
So youll need to adjust the screw first about 1/2 a turn to see which direction you'll need to be turning it, for further adjustment.

\*\*\*WHEN ADJUSTING, MAKE SURE TO ONLY DO 1/2 A TURN AT A TIME\*\*\*

You should have the regulator on the high setting when adjusting your flame to optimal condition. But after youve adjusted it, you should also test it at the low setting, to ensure you didn't adjust it too much. Decreasing the regulator too much, can cause the flame to blow out on windy days, especially on the low setting.

After adjustments are made, you can enjoy your barbeque at its most optimal running condition









#### **Cleaning and Maintenance**

- 1) Clean grease from the drip tray and the base of the Spitfire regularly.
- 2) Clean burner and burner orifice seasonally. The burner orifice can be removed for thorough cleaning with hot water and a bronze wire brush.
- 3) The Spitfire stainless top lid and main body **will** eventully discolor with heat.
- 4) A defective spark igniter is uncommon. If the igniter does not work, it will be caused by grease build-up on the wire electrode or by the igniter mount not being grounded to the body of the barbecue during assembly. The igniter can be cleaned with hot water and a cloth.

#### **Cooking**

The removable drip tray must be installed prior to cooking. Do not allow grease to build-up in the grease tray or in the base of the Spitfire. The porcelain enamel cooking surface plates should be pre-heated and sprayed or covered with cooking oil to prevent food from sticking. Accumulated grease will burn off if the cooking plates are turned over. Barbecues will get hot and splash grease, and for safety reasons it is therefore advisable to mount the unit outboard.

# Spitfire180 Accessories & Parts Available

#15-150A	Universal Rail Mount Kit
#15-150F	Fishing Rod Holder Mount Kit
#15-187	Taff Rail Mount Kit
#15-150P	Scotty Mount Kit
#15-171	Black Vinyl Cover
#15-203	Aussie griddle pan (8" x 11")
#15-188	6 ft. Propane Hose – High Pressure
#15-189	8 ft. Propane Hose – High Pressure
#15-191	6ft. Propane T Type Hose – High Pressure
#15-192	8ft. Propane T Type Hose – High Pressure
#15-178	"T" type Connector
#15-193	Low pressure Control Valve

#19-151	Low pressure Regulator
#19-100-10	10 ft. Low Pressure Hose
#19-100-20	20 ft. Low Pressure Hose
#15-555	BBQ Cleaning Kit
#15-195	Stainless rod grills *2 needed
#15-082	Drip Tray
#15-060	Large Burner & Bracket
#15-072	Large Orifice Assembly
#15-101	Large Model Spark Igniter
#15-110	Regulator Control
#15-120	Thermometer
#15-194	Adapter for European Gas Canisters

<sup>\*\*</sup>To place an order visit www.dickinsonmarine.com

#### **Warranty Policy**

We at Dickinson wish to maintain a reasonable and easy system for warranties, returns and exchanges. To accomplish this, we would like to inform you of some helpful guidelines and procedures to use and follow when sending back product to Dickinson Marine. All correspondence regarding returns, warranties and exchanges will go through the factory of Dickinson Marine in Coquitlam, BC, Canada and the product MUST be returned to this location.

# Warranty

Dickinson Marine warranties all of its products for a period of one year dated from the purchase of the product by the end user with proof of purchase or a registered warranty. We warrant our barbeque burners for a period of 3 years dated from the purchase of the product by the end user with a registered warranty. The warranty card should be copied for your records and returned to Dickinson to activate your warranty within 90 days of your purchase. You can also activate it online at <a href="www.dickinsonmarine.com">www.dickinsonmarine.com</a> A copy of the warranty card must have been received or a proof of purchase must be presented to receive the warranty.

- 1. The customer can contact us directly to settle any warranty issues. We are pleased to help. Call us toll free 1-800-659-9768 or email: info@dickinsonmarine.com
- 2. If the customer is returning a complete product they see as defective, be sure the product has been assembled correctly and is being used correctly. If you are not sure please call our Technical Help Department @ 1-800-659-9768. Dickinson Marine will not provide credit for used products that are not defective. In these cases, it is best to call the factory to determine if the product is being used correctly or has been assembled correctly or is in fact defective.
- 3. All products being sent back to Dickinson Marine must have a Return Authorization Number. Contact us at Dickinson Marine toll free 1-800-659-9768 or e-mail <a href="mailto:info@dickinsonmarine.com">info@dickinsonmarine.com</a> to obtain a Return Authorization Number. This allows us to track and process your return. Once you have received an RA# from us, include your proof of purchase and ship to the address below. We recommend you ship using the mail service insured and retain a tracking number. Customers are responsible for the shipping costs for all returns and exchanges.

Dickinson Marine Returns Unit# 101-17728 66 Ave Surrey, BC V3S 7X1 Canada

4. Products that are demonstrably older than the warranty period or those that have obviously been misused will not be returned, exchanged, or repaired.

#### Non-defective Returns & Exchanges

Dickinson reserves the right to apply a 20% restocking fee for returned product sent back. An RA # will be needed from the factory to facilitate any return. Credits will be made at the last purchased price for that part number.

#### **Limited Warranty**

WARRANTY PROVISIONS: Dickinson warrants this product to be free of defects in workmanship and materials for a period of one year. This warranty is limited to claims submitted in writing within a one-year period following the date of purchase. If any part of your new product fails because of a manufacturing defect within the warranty period Dickinson offers to replace said parts free of charge, provided, however, that such parts have not been improperly repaired, altered or tampered with or subjected to misuse, abuse or exposed to corrosive conditions. This warranty, however, is limited by certain exclusions, time limits and exceptions as listed below. Read these limitations and exclusions carefully.

TIME LIMIT: This warranty is given too and covers only the original purchaser. Coverage terminates one year from the date of purchase for parts replacement. EXCLUSIONS: This warranty does not cover or include: (a) Any normal deterioration of the product and appearance of items, due to wear and/or exposure; (b) any guarantees, promises, representations, warranties or service agreements given or made by an authorized distributor or other person selling this product, other than those specifically stated herein; (c) any damage or defect due to accident, improper repair, alteration, unreasonable use including failure to provide reasonable and necessary maintenance, misuse or abuse of the equipment, or exposure to corrosive conditions. This warranty is conditioned upon normal use, reasonable and necessary maintenance and service of your product, and written notice being given promptly upon Buyer's discovery of a warranty claim, pursuant to paragraph 6 below. Reasonable and necessary maintenance is maintenance which you are expected to do yourself or have done for you. maintenance, which is necessary to keep your product performing its intended function and operating at a reasonable level of performance.

DAMAGE LIMITATION WARNING: IN NO EVENT SHALL Dickinson BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING (BUT NOT LIMITED TO) LOSS OF USE OF THE PRODUCT, LOSS OF TIME, INCONVENIENCE, EXPENSES FOR TRAVEL, LODGING TRANSPORTATION CHARGES, LOSS BY DAMAGE TO PERSONAL PROPERTY OR LOSS OF INCOME, PROFITS OR REVENUE.

ORAL OR IMPLIED WARRANTY LIMITATIONS: The foregoing warranty is exclusive and in lieu of all other warranties, written or oral, expressed or implied, including but not limited to any warranty or merchantability or fitness for a particular purpose.

TRANSFER LIMITATIONS: This warranty is not assignable or transferable. It covers only the original purchaser.

CLAIM PROCEDURE: In the event of a defect, problem or that a breach of this warranty is discovered, in order to protect any warranty rights you must promptly notify Dickinson. Give name, address, and model name, location of unit, description of problem and where you can be reached during business hours.

RESERVED RIGHT TO CHANGE: Dickinson reserves the right to make changes or improvements to products it produces in the future without imposing on itself any obligations to install the same improvements in the products it has previously manufactured.

SECOND OR SUBSEQUENT OWNER: Dickinson does not give any warranty to secondary or subsequent purchasers, and it disclaims all implied warranties to such owners.

INSPECTION: To assist you in avoiding problems with your product and to validate this warranty you are required to do the following: (a) read the warranty; (b) inspect the product. Do not accept delivery until you have examined the product with your supplier; (c) ask questions about anything you do not understand concerning the product.

OWNER REGISTRATION: Fill out the WARRANTY CARD within 30 days from the date of delivery. WARRANTY: RETURN OF THE CARD IS CONDITION PRECEDENT TO WARRANTY COVERAGE AND PERFORMANCE. IF YOU DO NOT FILL OUT AND MAIL THE CARD AS DIRECTED, YOU WILL NOT HAVE A WARRANTY.

# Register your Warranty.....

Please register your warranty with Dickinson Marine. Fill out and send back the warranty registration below. Make sure to include the serial # for our records.

No warranty will be extended for improper installations. Use of any unapproved materials, equipment, or installation procedures will result in a voided warranty. Do not use any substitutes of the heaters valve, burner or fan other then the ones supplied by Dickinson. Dickinson Marine accepts no liability for any damage or loss of service resulting from unapproved modifications.

#### Warranty Form

I have read and understand the Limited Warranty and the entire Instruction Manual and agree to the terms and conditions. (PLEASE PRINT)

Name:
Address:
Phone:
Spitfire 180 Barbeque
Spitfire Serial #:
Date of Purchase:
Seller's Name:
Seller's Location:
Signature:

This warranty form can also be filled out online. www.dickinsonmarine.com

#### **Dickinson Marine**

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E-mail: <u>info@dickinsonmarine.com</u>
Website: <u>www.dickinsonmarine.com</u>

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