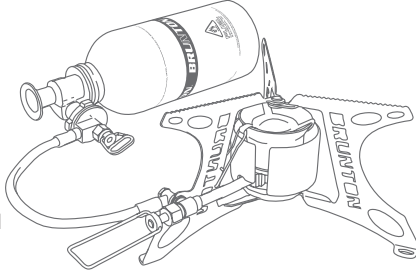


BRUNTON®

GENERAL SAFETY INFORMATION

This manual contains important information about the assembly, use and maintenance of this stove. Keep this manual for future reference. Be sure to read this manual completely before using the Vapor-AF. Keep this manual and review it regularly to maintain awareness of procedures and warnings. This manual should be read in conjunction with the warnings on the unit.



Failure to follow the warnings printed here and on the stove may result in fire, property damage, injury or death.

Particular attention should be paid to information accompanied by the safety alert words: WARNING, and CAUTION.

1) Important Safety Warnings (Prior to using the Vapor-AF)

To avoid injury, it is extremely important that you read, understand and follow all instructions and warnings in this manual before using the Vapor-AF. Gain acquaintance with all parts and functions of the stove before using it, and practice using and maintaining prior to taking it on a trip. Failure to follow all warnings and instructions could result in fire, property damage, serious injury or death!

Contact the place of purchase or Brunton if you have any questions.

- A. WARNING:** DO NOT light or use the Vapor-AF indoors or in an unventilated area. This stove consumes oxygen and produces carbon monoxide, which can be deadly.
- B. WARNING:** DO NOT light or use the stove near, or on top of flammable materials. Minimum distance to flammable materials is 3 feet (1 meter) from the side of stove and 5 feet (1.5 meters) above stove. Always light and use the stove with caution.
- C. NEVER** cover the stove and fuel bottle with wind shields, rocks or similar. This could cause overheating and damage the stove and fuel bottle.
- D. NEVER** use the stove near other lit stoves, open fire or other heat sources.
- E. NEVER** leave a lighted stove unattended.
- F. NEVER** let children use the stove, and ALWAYS supervise children in the vicinity of the stove.
- G. NEVER** relight a hot stove. Let the stove cool prior to priming and lighting again. A hot stove may vaporize liquid fuel and cause a dangerous fireball when relighting.
- H. NEVER** release air pressure by unscrewing the pump from the fuel bottle. Instead, release air pressure by using the bottle's Flip-stop feature, when connected to the burner.
- I. ALWAYS** release air pressure using Flip-stop feature prior to disconnecting, packing or disassembling the stove.
- J. NEVER** move or shake a lighted stove.
- K. ALWAYS** place stove on a flat, firm surface before lighting.
- L. ALWAYS** let the stove cool completely, before moving, disassembling or packing it.
- M. NEVER** use the stove any other way than as described in this manual. The Vapor-AF is intended for outdoor cooking only, and is not designed for use with large capacity cookware. Maximum pot diameter is 9 inches (22 cm). Maximum pot weight including food/water/drink is 8 pounds (4 kg).

2) Recommended Fuel Types

NEVER use fuels other than those specified below. **NEVER** mix fuels. When changing fuels, empty the fuel bottle first. **NEVER** fill bottles near a lit stove, an open flame, a lit cigarette or any other source of ignition. **NEVER** store fuel bottles or flammable materials near a stove in use. Use ONLY Brunton fuel bottles. Other manufacturer's fuel bottles may not seal the pump properly causing fuel leaks.

Because of the Vapor-AF's unique, patented burner design, it is capable of burning a wide variety of fuels, using the same jet. Avoid frequent clogging by using clean, fresh, high quality fuel.

- Butane
- White gasoline (and similar)
- Kerosene
- Diesel fuels
- Jet (aviation) fuel
- Auto fuel

3) Fuel Usage

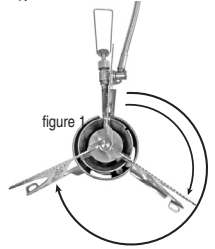
Plan 4 oz. of fuel per person per day for cooking and 8 oz. for melting snow and cooking in winter.

4) User Instructions

ALWAYS check for spilled fuel and fuel leaks before lighting the stove. DO NOT light or use the stove if leaks are found. Leaks must be repaired prior to lighting or using the stove.

I. VAPOR-AF SET UP

1. Unfold and lock the Vapor-AF's legs into position (figure 1).
2. Clean the jet by inserting cleaning needle into the jet
3. Turn burner control handle fully clockwise to close.
4. Check that the flame spreader is fitted snugly into position.
5. Connect the burner to the pump by connecting the fuel hose to the pump.
6. Make sure the bottle is laying flat with ON visible on the pump



II. PREPARING THE STOVE TO BURN BUTANE OR LIQUID FUELS

The Vapor-AF is able to burn butane or liquid fuels with only one jet and an easy turn of the burner cup.

1. To burn butane, turn burner cup clockwise until it stops. (figure 2) Proceed to step 3 to use butane.
2. To burn liquid fuels, turn burner cup counter clockwise until it stops. (figure 3) Proceed to step 4 to use liquid fuels.



III. LIGHTING THE VAPOR-AF WITH BUTANE

1. Turn canister valve handle on by turning counter clockwise
2. Turn control handle 1/2 turn counter clockwise or until you hear butane gas coming from the jet.
3. Use a flame to ignite the burner. Turn control handle counter clockwise for desired output.
4. To turn burner off, simply close the canister valve and control handle by turning clockwise until fully closed.

IV. FILLING BRUNTON FUEL BOTTLES

1. Fill the Brunton fuel bottle to the "fill level" line (figure 4).
 - Do not fill the fuel bottle completely because you must leave room for the pump and air pressurization.
2. Keeping bottle upright, fit pump through bottle opening and tighten.
 - Clean the bottle if you should spill.



When stove is not in use, carry fuel in the bottle with the pump fitted (air pressure released) and the burner disconnected, or with the original lid of the fuel bottle tightly fitted.

V. PRIMING (PREHEATING) THE BURNER WITH LIQUID FUELS

In order to vaporize the fuel, the burner must be primed (preheated). The conductor ribs of the burner will quickly conduct heat from a priming flame to the valve house of the burner where fuel is vaporized. Insufficient priming will result in high, surging and yellowish flames. Please note that in cold and windy weather conditions, priming takes longer than in hot and calm conditions. Similarly, the priming time varies with fuel type. White gasoline needs shorter priming time (due to earlier vaporization) than kerosene or diesel. Do not hold any part of your body above the stove while priming or lighting.

1. Make sure the control handle is fully closed by turning clockwise.
2. Pump approximately 20-25 full strokes with the pump to build up air pressure in the fuel bottle. If bottle is less than half full, it may require an additional 20-25 strokes.
3. Turn control handle 1/2 turn, counter clockwise. Turn off, fully after about two seconds.
 - There will now be a small amount of fuel in the burner jet and on the priming wick.
 - In cold and windy climate, and when using kerosene or diesel, it is necessary to keep the control handle on for approximately four seconds to release more priming fuel.
4. Light the priming wick. The fuel will prime the burner.

VI. Lighting the Vapor-AF

1. When priming flame is down to a small flame (approximately 15-30 seconds) slowly turn the control handle 1/4 of a turn counter clockwise.
 - The burner should now release fuel and produce a controlled, blue flame.
 - If burner produces a high, surging and yellowish flame, the burner is not sufficiently primed. Immediately turn control handle fully off and let priming continue. When priming flame is down to a small flame again, turn the control handle 1/4 of a turn counter clockwise.
- Note: Priming may take longer in cold and windy conditions, or when using kerosene or diesel fuel.
2. When priming is sufficient, slowly turn control handle until desired output is reached.
 - The stove should produce a blue, steady flame.
 - If the burner starts to surge, turn down the control handle until flame is blue and steady. Let it burn at this level for about 20 seconds prior to increasing output again.
 3. If necessary, pump a few times to increase output. Stop pumping once firm resistance on the pump is reached.
 - Fuel bottle pressure is crucial for the output of the stove, and too low of pressure causes low output and long boil times.
 - Do not over-pressurize since this can lead to surging, yellowish flare-ups.

Note: The stove is designed for cooking not air heating, and runs better with a pan or pot.

VII. Turning the Vapor-AF OFF (Flip-stop)

The Flip-stop pump is designed to prevent fuel spillage and release air pressure from the fuel bottle prior to disconnecting from the stove.

- Leaving control handle fully on, flip the fuel bottle until OFF is read on the pump.
 - The fuel feed hose of the pump will start to feed air instead of fuel. All fuel remaining in the pump, hose and burner will be burnt and used.
- After a short time (full output) the flame will automatically burnout.
 - When the flame has gone out, air pressure is automatically released through the burner jet, helping to clean the jet. Let stove depressurize for a couple of minutes.
 - Wait until all pressure has been released, and let the stove cool off prior to disconnecting the canister valve.

Note: If the stove is not to be moved or disconnected, you can turn the stove off by closing the control handle fully, without depressurizing the bottle. Since air pressure is still in the bottle, the moment the control handle is turned on fuel will escape through the burner jet. ALWAYS use the flip-stop to depressurize bottle before transporting.

5) Cleaning & Maintenance

I. Maintenance

- Brunton recommends carrying a Vapor-AF maintenance kit for field repairs and maintenance.
- Use only Vapor-AF parts when replacing/repairing the stove. Never modify!

II. Cleaning Burner Jet & Burner Maintenance

- Turn OFF stove valve and wait until stove has completely cooled. Remove flame spreader. Pierce the jet hole with cleaning needle.

- All types of fuel contain impurities which may clog the jet. This is noted by poor burner performance, despite adequate pressure in the fuel bottle.
- Make a habit of cleaning the burner jet prior to setting it up, and packing out.

- If stove output is still poor, it may be necessary to clean the jet again. Remove the burner plate, and unscrew the jet using the Multi-tool. Carefully prick the jet orifice using the cleaning needle, then reassemble the jet and burner plate.

6) Vapor-AF Parts

1 Flame spreader	21 Flame spreader fastener	41 Bottle opener
2 Jet	22 Fuel pump body	42 Cleaning needle
3 Inner burner cup	23 Fuel bottle o-ring (P-24)	43 Canister valve
4 Priming wick	24 Fuel filter	
5 Burner cup	25 Filter cap	
6 Metallic part	26 Filter holder	
7 Bottom burner cup screw (M3x8)	27 O-ring for plunger (P-11.2)	
8 Valve spindle	28 Plunger	
9 O-rings for valve spindle (P-3)	29 Screw for filter fastener (M3 x 6)	
10 Spindle nut	30 Spring fastener	
11 Control handle base	31 Valve spring	
12 Control handle	32 Check valve O-ring (SM-3)	
13 O-rings for swivel (P-3)	33 Check valve	
14 Swivel holder	34 O-rings (P-8)	
15 Fuel hose assembly	35 Pump adapter	
16 O-ring (P-8)	36 Connector to #43 canister valve	
17 Valve gasket	37 Air pipe	
18 Pot support	38 Fuel pipe	
19 E-ring	39 Flathead screwdriver for nozzle installation	
20 Center pin for pot support	40 Flathead screwdriver	

WARRANTY

Brunton warrants this product to be free of defects in workmanship and materials for the lifetime of the original owner, and is nontransferable. If you have any problems with your Vapor-AF, the stove should be returned to the dealer or sent to Brunton, 2255 Brunton Court, Riverton, WY 82501 U.S.A. Please contact Brunton at the number below to obtain a RA#. Clean food and soot from stove before shipping. Shipping cost to Brunton is the responsibility of the purchaser. Return postage will be paid by Brunton. Please return this warranty card to Brunton as a proof of purchase. This warranty does not cover damage caused by accident, misuse, abuse, or tampering. A nominal charge will be assessed to repair such damage.

BRUNTON

Attn.: Warranty Repair 307.857.4700
 2255 Brunton Court support@brunton.com
 Riverton, WY 82501 www.brunton.com

LIMITS OF LIABILITY

Brunton assume no responsibility for any inconvenience, loss, or injury, direct or consequential damage arising from possession or use of the goods. This warranty gives you specific legal rights which may vary from state to state. Check with your local state about your rights.

Detach and return within 30 days.

Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Email: _____
 Date Purchased: _____

Would you like to receive a Brunton catalog?
 Yes No

Please let us know where you purchased your Vapor-AF?

Store Name: _____
 City: _____ State: _____ Zip Code: _____
 Online site Catalog
 Gift Brunton Other _____

Do you own another Brunton product?

Yes. Product: _____ No

