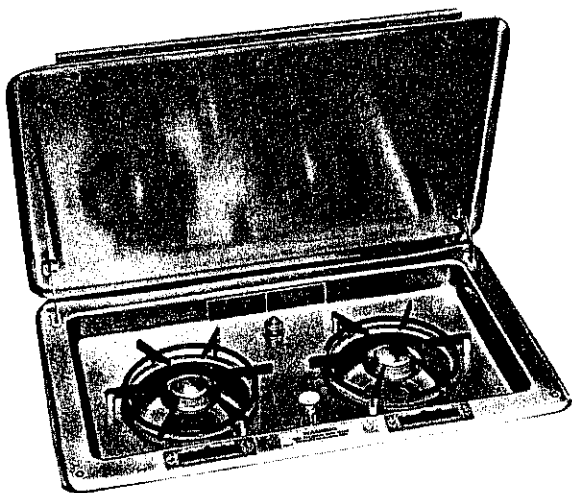


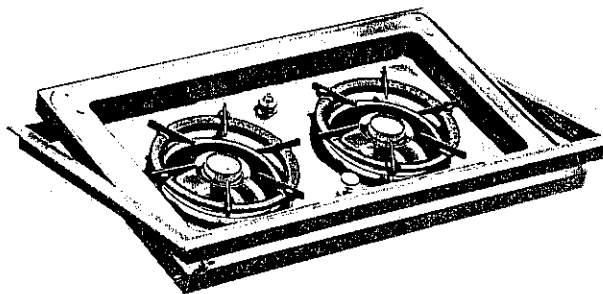
ALCOHOL STOVE, MODELS 206, 209, 209B and 209G
OPERATING INSTRUCTIONS and PARTS LIST
Including installation instructions and parts list for Model 211 Gimbal.

TWO-BURNER RECESSED
ALCOHOL STOVE



MODEL 206

GIMBAL MOUNTED
TWO-BURNER
ALCOHOL STOVE



MODEL 209G

PLEASE KEEP THIS MANUAL ABOARD YOUR BOAT

OPERATING INSTRUCTIONS

Before attempting to operate stove, please read these instructions carefully and become thoroughly

familiar with the various parts of the stove and how they operate.

THEORY OF OPERATION

The burners use alcohol vapor for fuel. This gaseous fuel is produced by boiling liquid alcohol in the base of the burner by diverting some of the heat from the flame through the burner body.

In order to start a cold burner, it must first be heated above 180°F in order to produce the required vapor. This is usually done by burning a small amount (about ¼ oz.) of liquid alcohol in a special priming cup under the base of the burner. As the burner heats up, the liquid alcohol trapped in the burner boils, causing a flame to appear at the burner cap. If the priming cup is too full, the rising temperature also causes the priming alcohol to boil which produces a relatively high flame around the burner before it boils away. These conditions, usually termed "flare-up" are a natural consequence of the priming process and are usually not serious. A little practice will show the correct amount of alcohol

necessary to produce the required temperature. Too much alcohol will produce "flare-up" and too little will not bring the burner to a high enough temperature. A hot burner will produce a hissing sound when turned on. A cold burner will be silent or produce a squirting sound, and liquid alcohol will flow down into the priming cup. After priming, the burner must be lit before it cools off, or re-priming will be necessary.

Fuel: The burners are designed to use 95% **denatured ethyl alcohol**, which is commercially available as alcohol stove fuel. Satisfactory operation is also obtained with 91% isopropyl alcohol containing less than .003% by weight non-volatile material. **Caution:** Do not use wood alcohol (methanol), rubbing alcohol, or ethyl alcohol with non-volatile denaturing additives, as they will not burn satisfactorily and burners will become clogged.

OPERATING COMPONENTS

The **fuel fill nipple** is located at the rear center of the stove. Note that it has a special cap which includes a pressure relief valve which effectively prevents excessive pressure buildup in the tank. This cap must never be replaced by any other type.

The **pump** is located at the front center of the stove, and is used to pressurize the fuel tank. Satisfactory operation of the alcohol burners is obtained with the fuel supplied at a pressure 8 to 15 psig. An average of 15 to 20 strokes of the pump are required to obtain sufficient pressure, but this varies depending on the amount of fuel in the tank and more strokes may provide better burner operation.

The **burner control wheels** are located in the front flange of the stove. The control moved to the ex-

treme right is the "off" position. The extreme left position, which is about six pushes of the control wheel, is the "clean" position. In this position, the internal mechanism of the burner causes a small wire to be pushed thru the burner nozzle, thereby removing any dirt which may have lodged there. The full "on" position of the control is about half way between the off and clean positions, or about 3 pushes of the control wheel. The burner may be operated at lower heats by moving the control to the right toward close. Cleaning the nozzle is normally performed while the burner is operating. Move the control to the extreme left then back to the center operating position. Be prepared to relight the burner as the cleaning will often extinguish the flame.

BURNER OPERATION

Fill tank approximately ¾ full with denatured ethyl alcohol, using a funnel. Replace cap and tighten snugly.

Pump 15 to 20 times to pressurize tank.

To operate, burners must be preheated. Open the burner by moving the control three pushes to the left. This will allow liquid alcohol to flow from the burner. Close the burner after about three seconds by pushing the control back to the extreme left. About two Tbsp. of alcohol will have flowed from the burner and run down into the indentation in the cup at the base of the burner.

With the burner still off, ignite the alcohol in the priming cup.

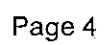
When the priming alcohol is completely consumed, open the burner control and light the vaporized alcohol at the burner cap.

CAUTION: -FLARE UP may occur during preheating and particularly if burner valve is opened before preheating is completed, and burner is not hot enough. Follow starting instructions carefully. If flare up occurs, shut off burner, allow flame to go out, then preheat again following instructions above.

Do not put cooking utensils on stove until burners are functioning properly.

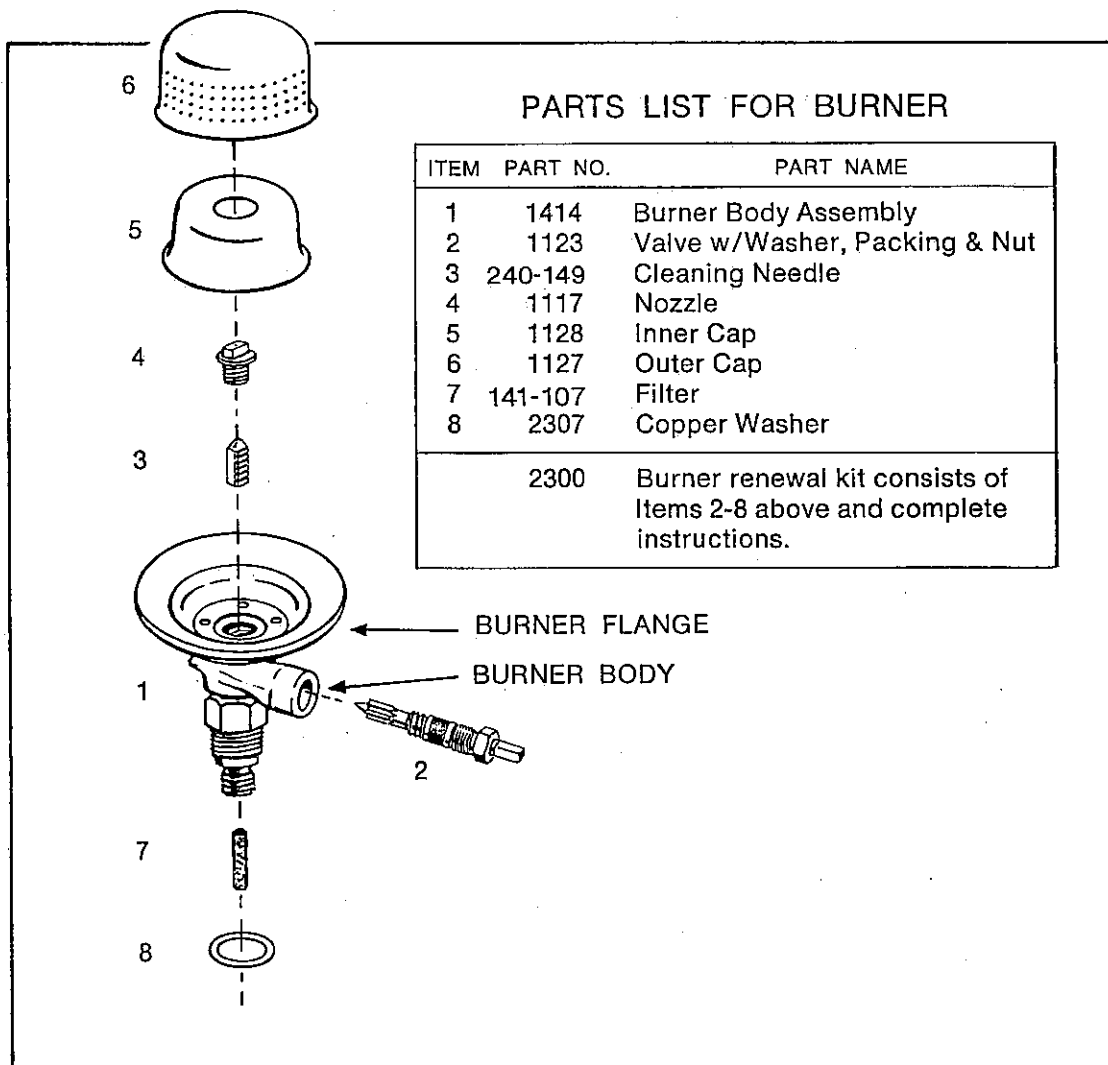
When finished cooking, turn off burners and release pressure in tank by loosening filler cap.

**IN CASE OF FIRE — USE WATER TO PUT OUT ALCOHOL FIRES.
SMOTHER GREASE FIRES OR USE A CLASS B FIRE EXTINGUISHER.**



PARTS LIST

Item	Model 206	Model 209	Part Number	Part Name
A	x	x	H-1150	Control Wheel
B	x	x	H-1273	Stem
C	x	x	H-1152	Feed pipe
D	x	x	H-1322	Burner Assembly
E	x	x	H-1336	Tank Assembly
F	x	x	H-1332	Check Valve
G	x	x	H-1233	U-cup
H	x	x	H-1231	Pump Complete
I	x	x	H-1333	Cap
J	x	x	H-2162	Grate
K	x	—	H-1057	Lid Stay
L	x	—	H-1276	Lid Complete
M	x	—	H-1064	Bushing
N	—	x	H-1743	Hole Cover
O	x		H-1193	Spring Lock



INSTALLATION INSTRUCTIONS

MODEL 209G

Important: Installation to comply with the ABYC and/or "Fire Protection Standards for Motor Craft," NFPA No. 302.

Location: Choose a countertop location allowing clearance for the following stove dimensions (see figure 1): Length, side to side, $24\frac{5}{8}$ inches; depth, front to back, $16\frac{3}{8}$ inches; minimum bottom clearance (height) below the top of the counter of $7\frac{1}{4}$ inches.

Cutout: Draw an outline of the countertop cutout, $23\frac{3}{8}$ x $15\frac{1}{2}$ inches, centering it in the dimensions of the location selected.

Frame Installation: Position the countertop-gimbal frame assembly in the cutout. The gimbal lock should be at the front of the stove. Secure the counter frame to the counter with the 4 No. 7 oval head wood screws.

Counterweight: Install counterweight support yoke with screws supplied. Note profile is asymmetrical. See fig. 2 for correct installation. Bolt counterweight to support yoke . . . position approximately in middle of adjustment range. Final adjustment should be made after stove is installed.

Stove Installation: Handle stove carefully to avoid damage to control wheels. Tilt stove lowering one end into gimbal frame. Slide stove until other end is free to drop into final position. Secure with 4 machine screws provided.

Counterweight Adjustment: Slide metal counterweight as required to level stove, then tighten bolts.



FIG. 1

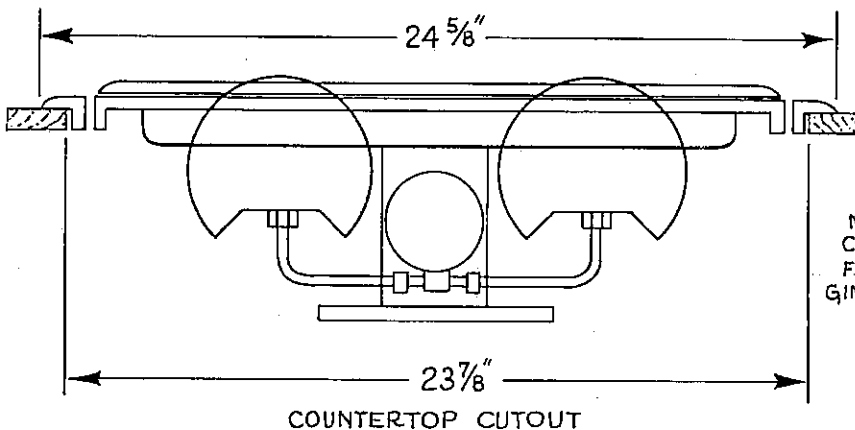
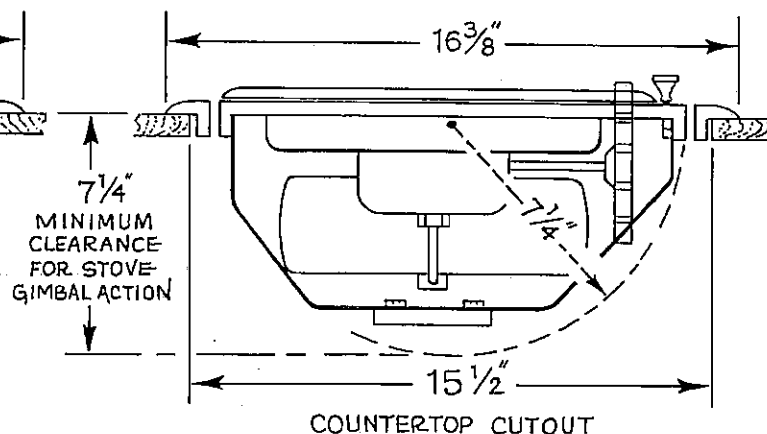
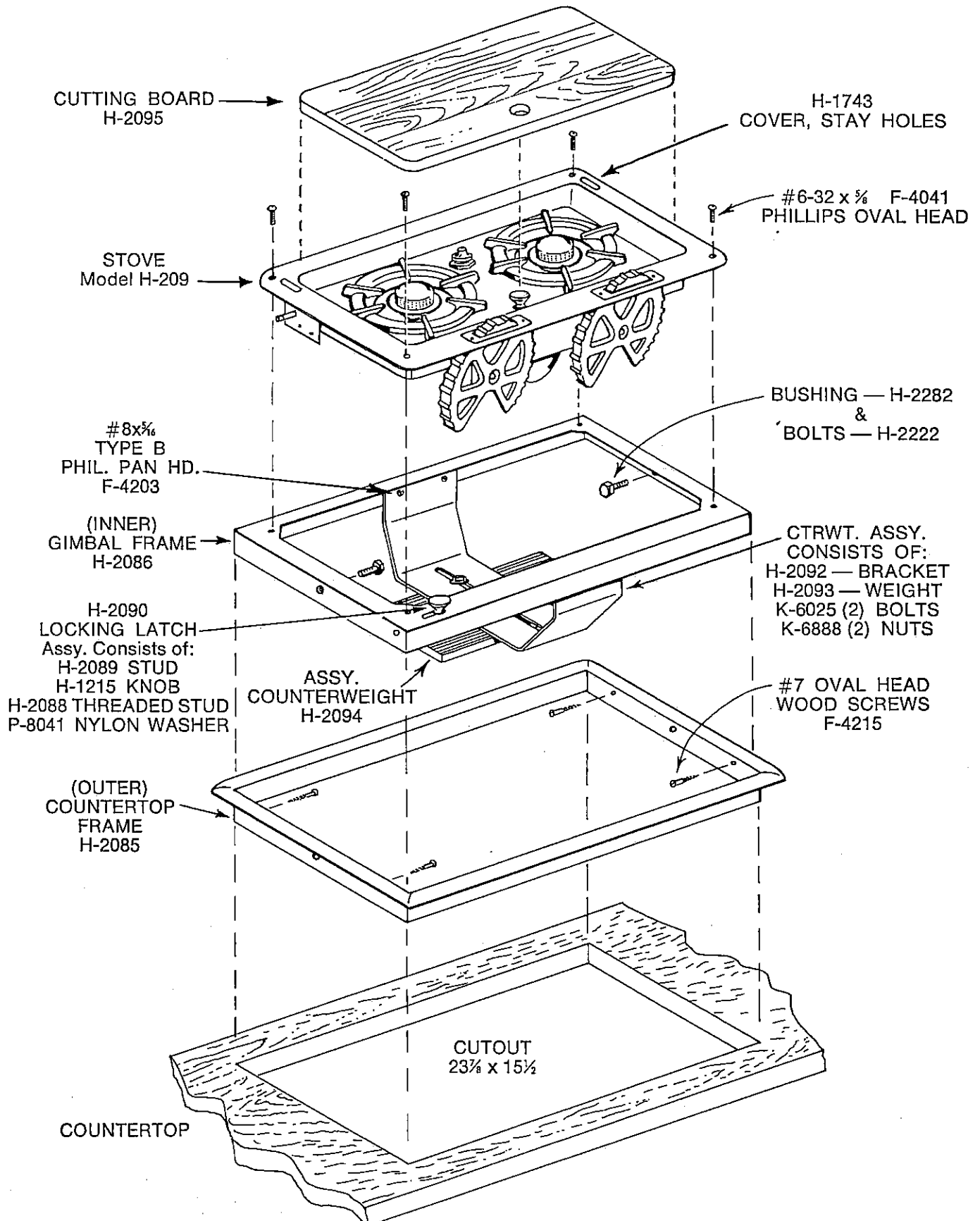


FIG. 2



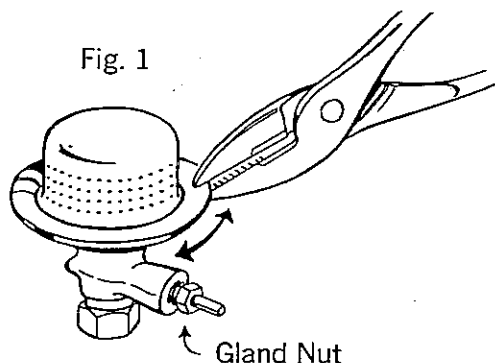


H-209 IS RECESSED STOVE
H-211 IS GIMBAL KIT FOR STOVE



HELPFUL HINTS FOR OPERATION AND MAINTENANCE OF YOUR MODEL 206 OR 209 ALCOHOL STOVE

1. To obtain maximum performance from your new stove, it is extremely important that you use a quality grade denatured (ethyl) alcohol free from impurities or 91% isopropyl alcohol stove fuel (not rubbing alcohol) containing less than .003% by weight non-volatile matter. The majority of stoves returned to us for burner service are clogged from impure alcohol.
2. A properly operating burner will have a blue flame, with several rows of little flame tips. There should not be a yellow tip on the flame. The air-fuel ratio of the burner may be adjusted for most efficient operation. With burners lit, hold burner flange with a pair of pliers and rotate flange until the yellow flame tip is eliminated, see Figure 1.
3. A burner operating properly will boil two cups of water in a 2½ qt. (6½ inch), uncovered saucepan in seven to nine minutes.
4. If you notice a small flame where the control stem enters the burner, tighten the gland nut slightly until the flame no longer appears. This adjustment may have to be made after a few hours of burner operation, but then should require very little attention, see Figure 1.
5. If the pump bounces back when you try to pump, or if the pump handle is pushed all the way back out after a pump stroke, the check valve (F) at the base of the pump is defective and should be replaced. (A special H-525 wrench is required to replace check valve).



6. If you pump, and get little or no pressure in the tank, the pump U-cup (G) needs to be replaced.
7. If the burner lights properly, but goes out after a short time, you did not pump enough, or your filler cap leaks. Replace rubber gasket or relief valve assembly (I).
8. If no alcohol comes thru the burner when you attempt to prime, you have no pressure in the tank, or a filter clogged by dirty alcohol.

DO NOT ATTEMPT TO FILL BURNER FLANGE — PRIMING CUP IS BELOW BURNER BODY

HOW TO LIGHT YOUR KENYON ALCOHOL STOVE			
1 FILL TANK FILL ¾ FULL WITH ALCOHOL PLASTIC FUNNEL	2 PUMP PUMP 15-20 TIMES TO PRESSURIZE TANK 	3 PREHEAT BURNER OPEN VALVE MOMENTARILY TO FILL PRIMING CUP ¾ FULL THEN... CLOSE VALVE AND LIGHT ALCOHOL 	4 LIGHT BURNER WHEN PRIMING ALCOHOL IS COMPLETELY CONSUMED OPEN VALVE AND LIGHT VAPORIZED ALCOHOL

KENYON

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