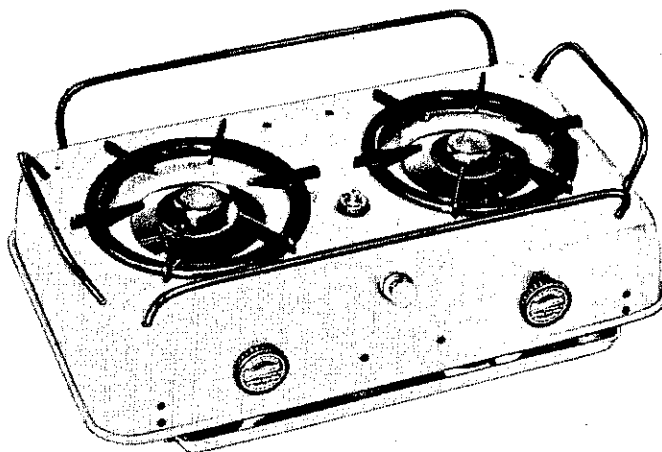


## HOMESTRAND ALCOHOL STOVE, Model 205 A

### Instructions and Parts List

**H 2157 A 6-75**



### OPERATION INSTRUCTIONS

**To Fill:** Unscrew filler cap. Fill tank with denatured ethyl alcohol using a funnel. Replace cap. Filler cap is equipped with a safety valve and must not be replaced by any other type cap.

**To Start:** Pump 20 or more times to pressurize fuel tank. Pump is located at front of stove.

**To Operate:** Burners must be preheated to produce vaporized alcohol. Slowly open (counter clockwise) one burner at a time to allow alcohol to flow into priming cup below the burner body. Fill priming cup 3/4 full (about 1/4 oz). Shut off burner (clockwise) and ignite priming alcohol. When this alcohol is fully consumed, turn control wheel toward open position and light burner.

**DO NOT PUT COOKING UTENSILS ON STOVE UNTIL BURNERS ARE FUNCTIONING PROPERLY.**

**CAUTION: FLARE-UP** may occur during preheating and particularly if burner valve is opened before preheating is completed. Follow starting instructions very carefully. If flare-up occurs, shut off burner and re-start as per instructions "To Operate."

**To Shut off Burner:** Turn control wheel to extreme right. Release pressure in tank by loosening filler cap.

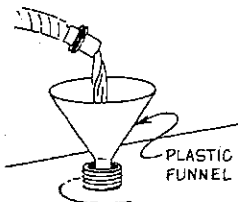
**To Clean Burner Nozzle:** Turn control wheel to extreme left position. This will automatically clean deposits from nozzle. Then return to extreme right.

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

#### HOW TO LIGHT YOUR HOMESTRAND ALCOHOL STOVE

##### 1 FILL TANK

FILL  $\frac{3}{4}$  FULL WITH ALCOHOL



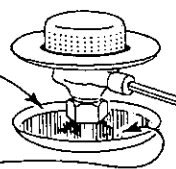
##### 2 PUMP

PUMP 15-20 TIMES TO PRESSURIZE TANK



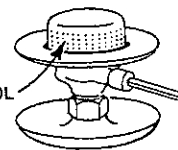
##### 3 PREHEAT BURNER

OPEN VALVE MOMENTARILY TO FILL PRIMING CUP  $\frac{3}{4}$  FULL THEN... CLOSE VALVE AND LIGHT ALCOHOL



##### 4 LIGHT BURNER

WHEN PRIMING ALCOHOL IS COMPLETELY CONSUMED OPEN VALVE AND LIGHT VAPORIZED ALCOHOL



# PARTS LIST FOR HOMESTRAND ALCOHOL STOVE, Model 205

**PARTS LIST FOR BURNER**  
Assemble burner in numerical sequence by item number.

ITEM	PART NO.	PART NAME
1	1415	Burner Body Assembly
2	1123	Valve w/Washer, Packing & Nut
3	1323	Cleaning Needle
4	1117	Nozzle
5	1128	Inner Cap
6	1127	Outer Cap
7	1469	Filter
8	2307	Copper Washer
9	1656	Control Knob & Shaft
10	2302	Pin, Control Shaft

**H2300 BURNER RENEWAL KIT**  
CONSISTS OF ITEMS 2 - 8

## HOW THE BURNER WORKS

The burner is warmed to a temperature high enough to vaporize the liquid alcohol by the priming process (see Page 1). After the burner is lit, the liquid alcohol is forced by air pressure in the fuel tank (K) into the burner body (1) thru the filter element (7). On contact with the hot burner, the alcohol boils. The vapor continues thru the metering valve (2) and the nozzle (4), where it inducts air thru the four holes in the burner flange. The resulting fuel/air mixture passes out thru the holes in the outer cap (6) where it burns. Heat from the flame is conducted down to the body to keep it hot.

## CALIBRATION OF FUEL/AIR MIXTURE

1. Light the burner (see Page 1).
2. If the mixture is too lean (too much air), the flame will blow out, will not burn completely around the cap, or will separate from the cap. If the mixture is too rich (too little air), the flame will be yellow or orange and will appear billowed out. A correct mixture appears as a blue flame with almost no orange.
3. To adjust the burner, grip the burner flange with a pair of pliers and carefully rotate it until a proper flame is attained.

ITEM	PART NO.	PART NAME
A	2176	Clip, Grate
B	2162	Grate
C	1012-1	Long Guard Rail with Screws
D	1012-2	Short Guard Rail with Screws
E	2304	Drip Tray
F	1656	Control Knob & Shaft
G	1324	Alcohol Burner
H	1673	Priming Cup
I	1282	Burner Fitting
J	1018-1	Feed Pipe
K	1335	Tank Body Assembly
L	1333	Filler Cap w/Relief Valve & Packing
M	1221	Packing, Filler Cap
N	1332	Pump Check Valve, Complete
O	1233	Pump "U" Cup
P	1231	Pump, Complete w/"U" Cup
R	525	Wrench, Nozzle & Check Valve
S	1979	Tank Burner Unit, Complete

## HELPFUL HINTS FOR ALCOHOL STOVES

- 1) To obtain maximum performance from your new stove, it is extremely important that you use a quality grade denatured alcohol, free from impurities.
- 2) If you find a small flame where the control stem enters the burner, tighten the nut slightly until flame no longer appears. Fig. 1.
- 3) Should you notice alcohol in or around the pump, the check valve located in the bottom of the pump barrel leaks and must be replaced.
- 4) If the pump bounces back when you try to pump, the check valve is stuck and should be replaced.
- 5) If you pump and get little or no pressure in the tank, the pump leather or U-cup (depending on age of your stove) needs replacing or oiling.
- 6) If your stove lights but goes out after a while your filler cap leaks or you did not pump enough.
- 7) If no alcohol comes through the burner when you attempt to prime, you have no pressure in the tank or a filter clogged by dirty alcohol. The filter seldom clogs but when it does your stove must be serviced by trained personnel.
- 8) If you order spare parts please give stove Model and Serial number to make sure the correct parts are shipped.

**CAUTION:** Never operate a liquid fuel stove unattended. If a burner should go out, it will cool off, and liquid fuel will escape.

**WARNING:** INSTALLATION SHOULD COMPLY WITH APPLICABLE STANDARDS OF THE ABYC AND/OR THE "FIRE PROTECTION STANDARDS FOR MOTOR CRAFT, NFPA # 302." BE SURE TO PROVIDE ADEQUATE VENTILATION, PERMANENT AND SECURE FASTENING OF THE STOVE AND PROTECTION FOR ALL SURROUNDING WOODWORK.

### EXCERPTS FROM NFPA NO. 302 - 1972

#### CHAPTER 4. COOKING, HEATING AND AUXILIARY APPLIANCES

40. Open flame devices are more liable to promiscuous, unskilled or ignorant operation than any other boat equipment involving fire risk. It is therefore imperative that such items be selected and installed with the aim of minimizing personal and physical hazards.

#### 4.1. Cooking Equipment.

4.1.1. Galley stoves shall be manufactured, approved and labeled for marine use. Printed instructions for proper installation, operation and maintenance shall be furnished by the manufacturer. A durable and permanently legible instruction sign covering safe operation and maintenance shall be provided by the manufacturer and installed on or adjacent to the consuming appliance, where it may be readily read.

(a) Stoves shall be installed in adequately ventilated areas to comply with Paragraph 113.

(b) Stoves shall be securely fastened when in use and when stored.

(c) Any burner system that may affect safety by reason of motion of the boat shall not be used.

(d) All woodwork or other combustible materials above stove tops and all woodwork or combustibles immediately surrounding stoves shall be effectively insulated with non-combustible materials or sheathing.

#### 4.1.3. Alcohol, Fuel Oil and Kerosene Stoves.

(a) Either pressure or gravity fed burners are permissible.

(b) Fuel supply tanks shall be constructed of corrosion resistant metal with welded or brazed joints and fittings.

(1) Pressure tanks integrally installed with stoves shall withstand a test pressure of at least 200 pounds per square inch gage.

(2) Pressure tanks integrally installed with stoves shall be effectively protected from the heat of the burners.

(3) Pressure tanks for remote installation shall be approved and be able to withstand a test pressure of at least 100 pounds per square inch gage.

(4) Pressure tanks remotely installed shall be rigidly secured in an accessible location permitting convenient filling and pump operation.

(5) Gravity tanks shall be substantially secured and should be remote from stoves. In any event, they shall be so located or shielded that under continuous operation at maximum output, the temperature of contained fuel will not be substantially raised by heat from burners.

(6) No gravity tank shall have a capacity exceeding 2 gallons. Tanks of larger capacity shall be in accordance with Section 31.

(7) Gravity tanks should have provision for filling and venting outside galley space.

(c) When fuel tanks are remotely located, as is preferred for gravity feed systems, approved stop valves shall be installed close to tanks and fuel lines shall be installed with as few fittings as practicable between valves and stove connections.

(d) If solidified fuel is used, the containers shall be properly secured on a fixed base to prevent sliding or overturning in a sudden roll of the vessel.

