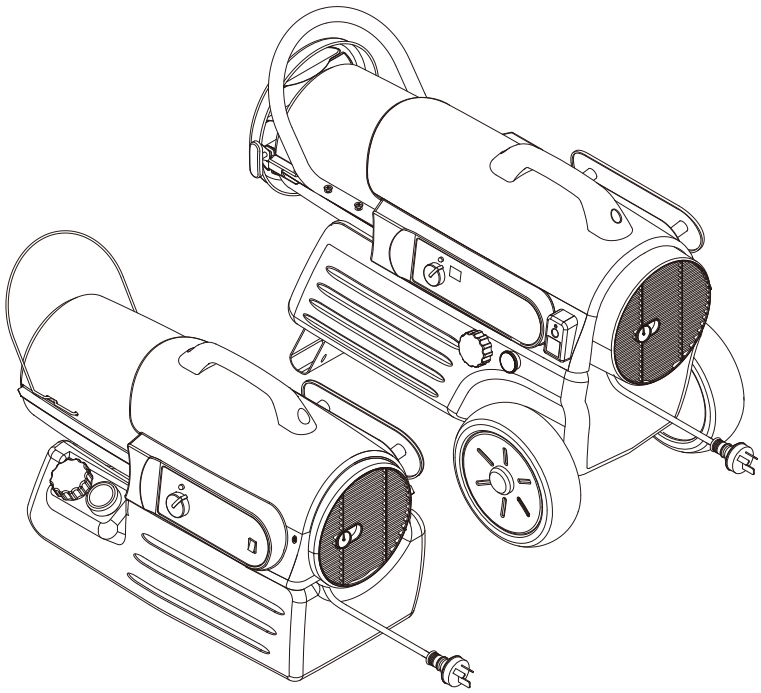
PORTABLE
FORCED AIR DIESEL HEATERS
"USER'S MANUAL"



PASECO

MODEL : **IH75000, IH125000, IH170000**

Before the first use of this heater, please read this USER'S MANUAL very carefully. This USER'S MANUAL has been designed to instruct you as to the proper manner in which to assemble, maintain, store, and most importantly, how to operate the heater in a safe and efficient manner. Please keep this manual for future reference.

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NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

CAUTIONS - SAFETY GUIDE

⚠ **DANGER:** IMPROPER USE OF THIS HEATER CAN RESULT IN SERIOUS INJURY OR DEATH FROM BURNS, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR CARBON MONOXIDE POISONING.

⚠

1. RISK OF INDOOR AIR POLLUTION! (NOT FOR DOMESTIC USE)

- **Use this heater only in well ventilated areas.** Provide at least a 2,800 sq. cm (3 sq. feet) opening of fresh outside air for each 100,000 BTU of heater rating.
- People with breathing problems should consult a physician before using the heater.
- **Carbon monoxide poisoning:** Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness and/or nausea. If you have these signs, the heater may not be working properly.
  Get fresh air at once! Have the heater serviced. Some people are more affected by carbon monoxide than others.
  These include pregnant women, persons with heart or lung disease or anemia, those under the influence of alcohol, or those at high altitudes.
- Never use this heater in living or sleeping areas.

2. RISK OF BURNS/FIRE/EXPLOSION!

- **NEVER** use any fuel other than 1-K kerosene or #1 diesel fuel in this heater.
- **NEVER** use fuel such as petrol, benzene, paint thinners or other oil compounds in this heater. **(RISK OF FIRE OR EXPLOSION)**
- **NEVER** use this heater where flammable vapors may be present.
- **NEVER** refill the heaters fuel tank while heater is operating or is still hot.

3. WARNING: In order to avoid overheating, do not cover the heater

- The front handle of this heater is intended to prevent direct access to heating elements and must be in place when the heater is in use.
- The front handle does not give full protection for young children.

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Children of less than 3 years should be kept away unless continuously supervised.
- Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- If the supply cord is damaged, it must be replaced by the manufacturer's service agent or similarly qualified persons in order to avoid a hazard.

NEVER LEAVE THE HEATER
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CAUTIONS - SAFETY GUIDE

⚠ CAUTION : Hot while in operation. Do not touch. Keep children, clothing and combustibles away from heater.

Minimum Clearances : Outlet: 250cm (8 feet) / Sides, top and rear: 125cm (4 feet)

- **NEVER** block air inlet (rear) or air outlet (front) of heater.
- **NEVER** use duct work in front or behind of heater.
- **NEVER** move, handle, service a hot, operating or plugged in heater.
- **NEVER** transport heater with fuel in it's tank.
- When used with an optional thermostat or if equipped with a thermostat heater may start at any time. **ALWAYS** locate heater on a stable and level surface.
- **ALWAYS** keep children and animals away from heater.
- Bulk fuel storage should be a minimum of 8m (25 feet) from heaters, torches, portable generators or other sources of ignition.
  All fuel storage should be in accordance with federal, state or local authorities having jurisdiction.
- Temperature of the floor is hot while in operation. Use the heater on the wooden floor, will cause deformation or discoloration of the floor. Spread noncombustible mat on the wooden floor to prevent this.

⚠ CAUTION : Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

4. RISK OF ELECTRIC SHOCK!

- Use only the electrical power (voltage and frequency) specified on the model plate of the heater.
- Use only a three-pin, earth grounded outlet and extension cord.

ALWAYS install the heater so that it is not directly exposed to water spray, rain, dripping water or wind.

NEVER LEAVE THE HEATER
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CONTENTS OF USER'S MANUAL

1. INTRODUCTION

Please read this USER'S MANUAL carefully. It will show you how to assemble, maintain, and operate the heater safely and efficiently to obtain full benefits from its many built-in features.

2. FEATURES

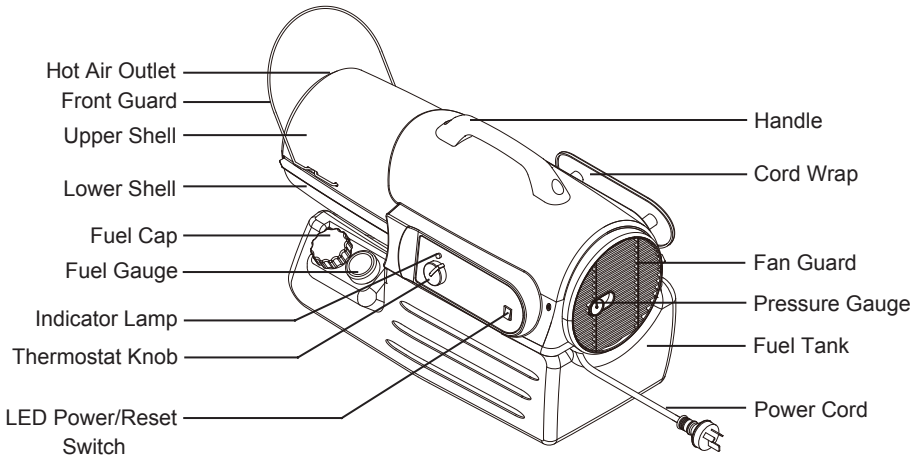

Figure 1. IH75000 MODEL

NEVER LEAVE THE HEATER
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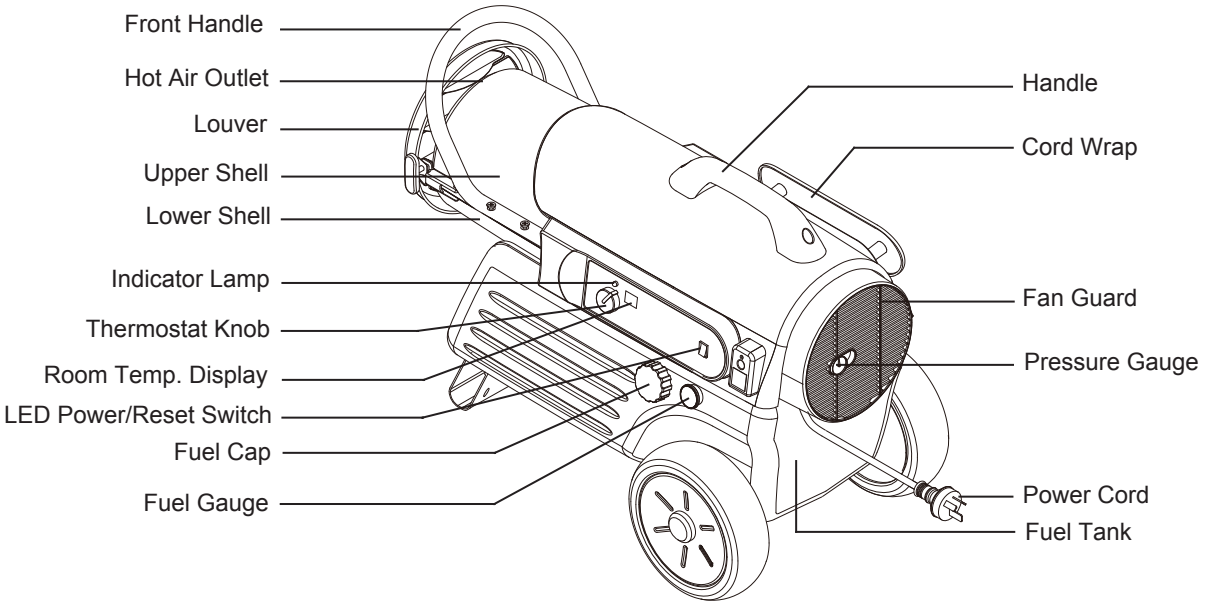

Figure 2. IH125000 MODEL

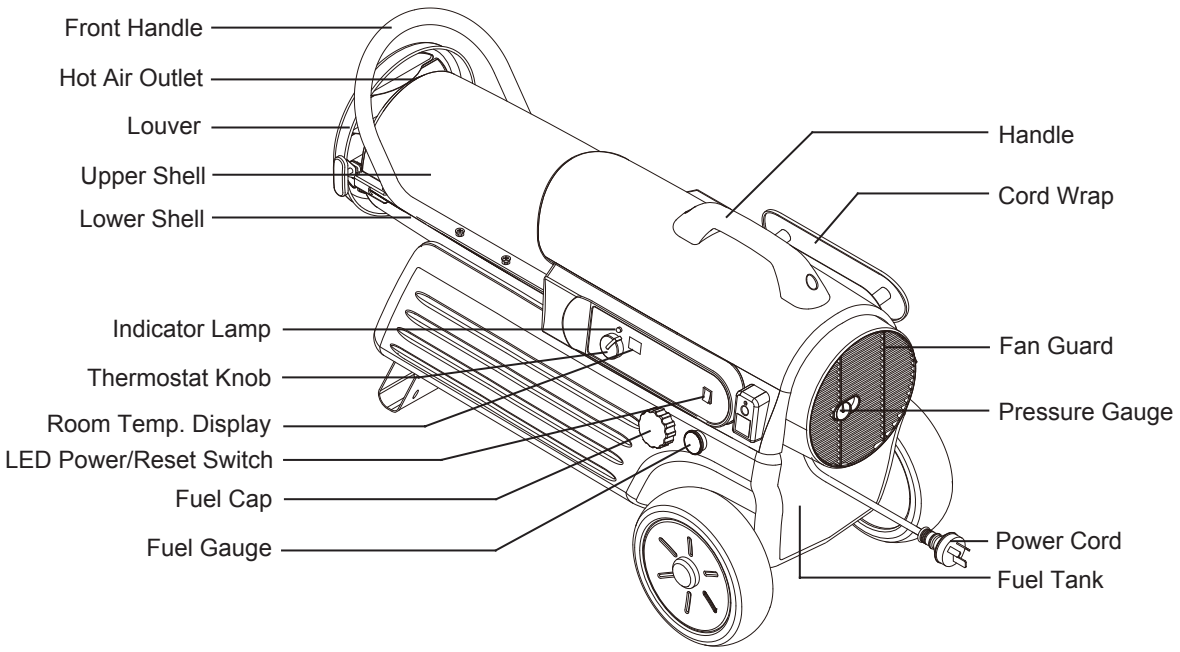

Figure 3. IH170000 MODEL

NEVER LEAVE THE HEATER
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3. UNPACKING AND ASSEMBLY

1. REMOVE THE HEATER AND ALL PACKING MATERIALS FROM THE BOX.
   NOTE : Save the shipping carton and packing materials for future storage.

	IH75000	IH125000	IH170000
Wheel	No	Yes	Yes
Wheel Axle	No	Yes	Yes
Wheel Cap	No	Yes	Yes
Front Handle	No	Yes	Yes
Handle	Yes	Yes	Yes
Cord Wrap	Yes	Yes	Yes
Louvre	No	Yes	Yes
Hardware Kit : HW-KFA1001	Yes	No	No
Hardware Kit : HW-KFA1008	No	Yes	Yes

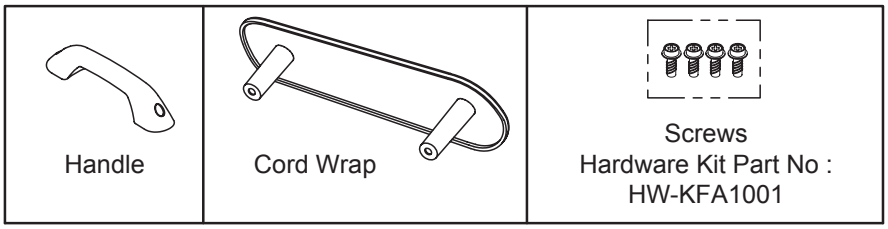

Figure 4. IH75000 MODEL

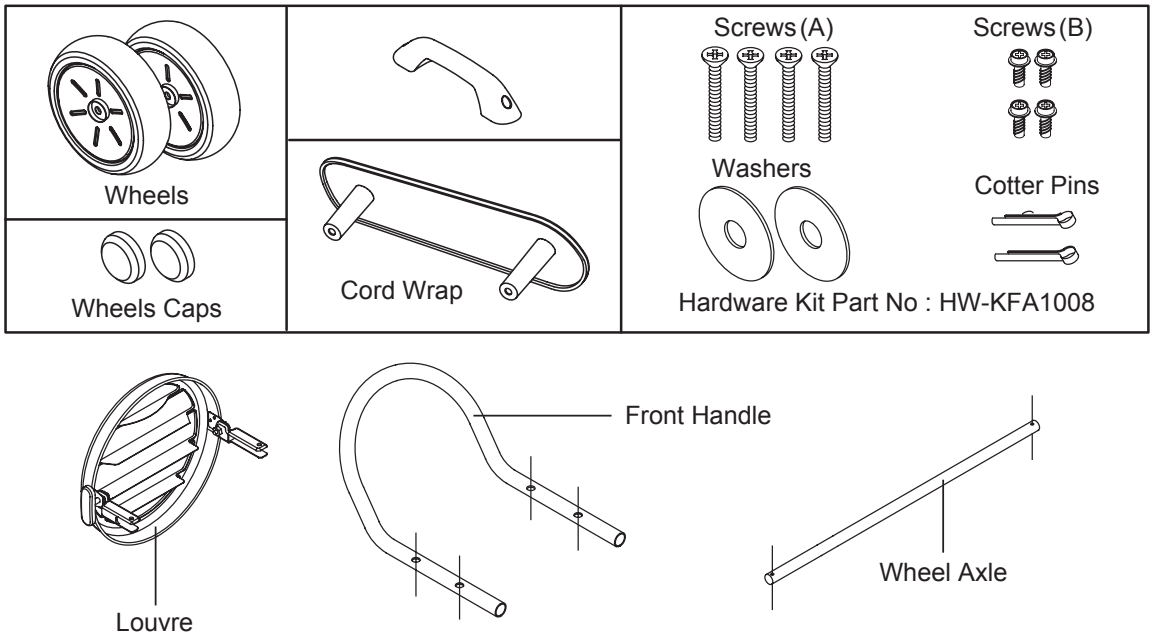

Figure 5. IH125000/IH170000 MODELS

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

2. ASSEMBLY

A. For IH75000 Model only (See Figures 6, 7.)

Tools Required

• Medium Phillips Screwdriver

1. Assembling Handle.
   1) Lift front guard for arrow direction and make sure that guard's wedged portion fits into the slit hole in the upper shell and faces the hot air outlet.
   2) Align boss on bottom of handle with the 2 holes on the shell cover as shown in Figure 6
      NOTE : Be sure to match the tab in the bottom of the handle with the slot in housing cover.
   3) Insert screws into the holes in the handle and tighten each screw.

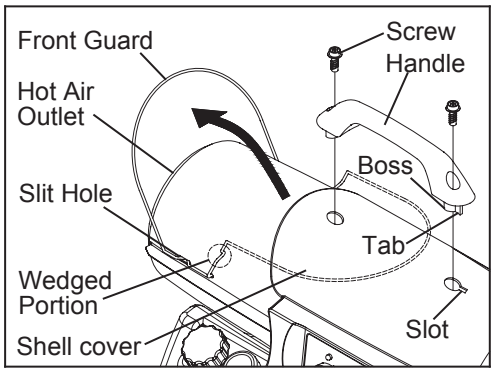

Figure 6. Handle Assembly

2. Assembling Cord Wrap
   1) Align 2 boss on the cordwrap with the 2 holes on the side cover as shown in Figure 7
   2) Insert screws into the holes in the cord wrap and tighten each screw.

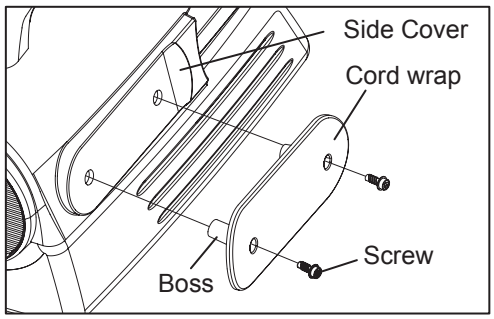

Figure 7. Cord Wrap Assembly

B. For IH125000/IH170000 Models Only

These models are furnished with louver, wheels, front handle, handle and cord wrap. wheels, handles, cordwraps, louver and the mounting hardware are found in the shipping carton.

Tools Required

• Medium Phillips Screwdriver
• 3/8" Open or Adjustable wrench, Use US(Inch) Screws Nuts
• Long Nose Pliers

1. Assembling Wheel & Louver and Front Handle
   1) Slide one Wheel over the Wheel Axle, making sure that the extended hub of the wheel points towards the wheel points towards the Wheel Support (See Figure 8, page 6).
   2) Slide flat washer over wheel axle end, past the hole in the axle.
      Slide cotter pin into the hole in the wheel axle, and using your pliers bend the legs of the Cotter Pin until it can not be removed.
   3) Slide wheel axle through wheel support and assemble the wheel, flat washer and cotter pin as in Steps 1 and 2.
   4) Place wheel caps on flat washers until they snap in place securely.
   5) Remove two screws in each side fore-end of shell upper.
   6) Fit bracket-right & left to each side flange of upper shell and align each hole on the brackets with the hole on the flanges (See Fighre 8, Page 6).
   7) Secure each hole with a screw that removed.
   8) Place front handle on shell flange and insert screws through front handle, shell flange and tighten each screw after each screw is inserted.

2. Assembling handle & cord wrap.
   1) Assembling handle : Assemble by method described above for model IH75000.
   2) Assembling cord wrap : Assemble by method described above for model IH75000.

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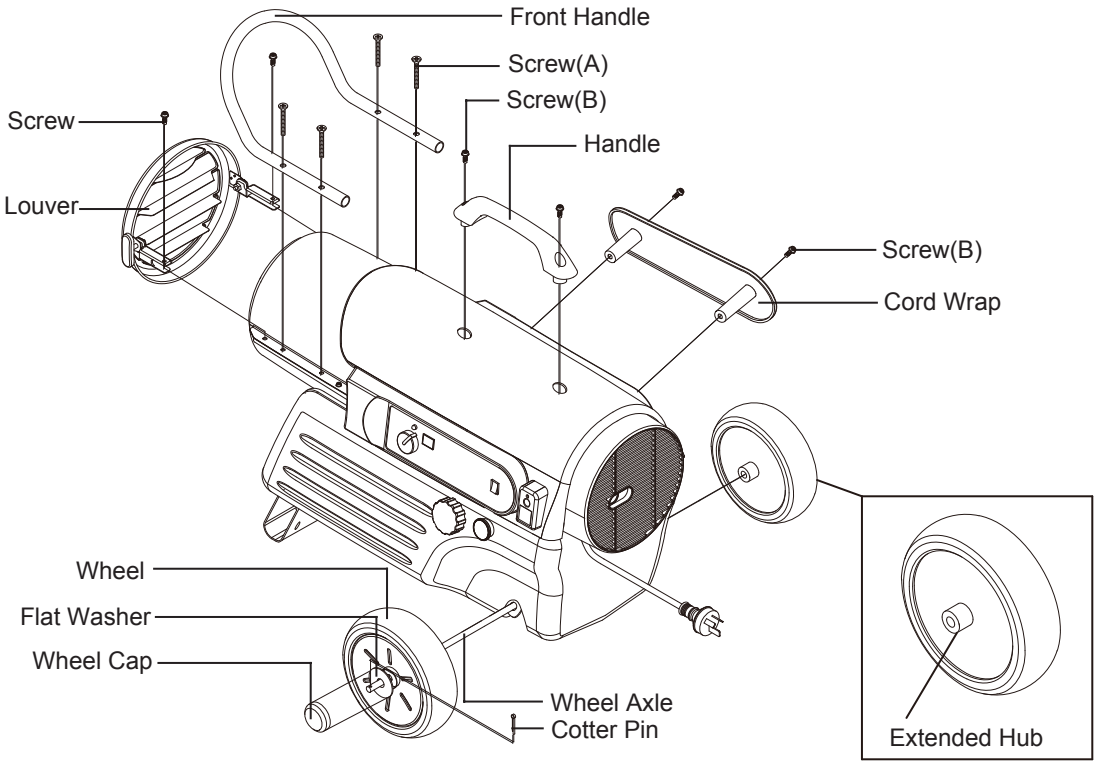

Figure 8. Wheel and Handle Assembly, IH125000/IH170000 Models Only

NOTE : Heater should be inspected before each use, and at least annually by a qualified service person.

4. KEROSENE (1-K)

For optimal performance of this heater, it is strongly suggested that 1-K kerosene be used. 1-K kerosene has been refined to virtually eliminate contaminants, such as sulpher. Which can cause a rotten egg odor during the operation of the heater. However, #1 or #2 diesel fuel may also be used if 1-K kerosene is not available. Be advised that these fuels do not burn as clean as 1-K kerosene, and care should be taken to provide more fresh air ventilation to accomodate any added contaminants that may be added to the heated space.

KEROSENE SHOULD ONLY BE STORED IN A BLUE CONTAINER THAT IS CLEARLY MARKED "KEROSENE". NEVER STORE KEROSENE IN A RED CONTAINER.
Red containers are associated with petrol.

NEVER store kerosene in the living space. Kerosene should be stored in a well ventilated place outside the living area.
NEVER use any fuel other than 1-K kerosene (#1 diesel fuel is an acceptable substitute.)
NEVER use fuel such as petrol, benzene, alcohol, white gas, camp stove fuel, paint thinners, or other oil compounds in this heater. These are volatile fuels that can cause an explosion or uncontrolled flames.
NEVER store kerosene in direct sunlight or near a source of heat.
NEVER use kerosene that has been stored from one season to the next. Kerosene deteriorates over time. **"OLD KEROSENE" WILL NOT BURN PROPERLY IN THIS HEATER.**

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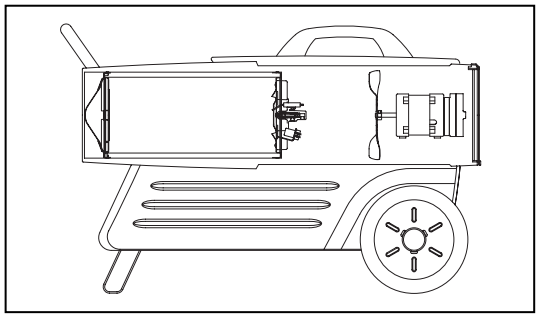
5. OVERVIEW OF HEATERS DESIGN



Fuel System : This heater is equipped with an electric air pump that forces air through the air line connected to the fuel intake and then through a nozzle in the burner head. When the air passes in front of the fuel intake it causes fuel to rise from the tank and into the burner nozzle. This fuel and air mixture is then sprayed into the combustion chamber in a fine mist.

"Sure Fire Ignition" : The electronic ignitor sends voltage to a specially designed spark plug. The spark plug ignites the fuel and air mixture described above.

The Air System : The heavy duty motor turns a fan that forces air into and around the combustion chamber. Here the air is heated and then forced out the front of the heater.

The Safety System :

A. Temperature Limit Control : This heater is equipped with a temperature limit control designed to turn off the heater should the internal temperature rise to an unsafe level. If this device activates and turns your heater off it may require service.

MODELS	Internal Shut-Off Temp. Plus/Minus 10 Degrees	Reset Temperature Plus/Minus 10 Degrees
IH75000	110˚(C)/230˚(F)	90˚(C)/194˚(F)
IH125000	70˚(C)/158˚(F)	40˚(C)/104˚(F)
IH170000	70˚(C)/158˚(F)	40˚(C)/104˚(F)

Once the temperature falls below the reset temperature you will be able to start your heater.

B. Electrical System Protection : The heaters electrical system is protected by a circuit breaker mounted to the power switch that protects the PCB assembly and other electrical components from damage. If your heater fails to operate check this fuse first and replace as needed.

FUSE TYPE:	All Models	250 volt / 5 amps

C. Flame-Out Sensor : Utilizes a photocell to monitor the flame in the burn chamber during normal operation. It will cause the heater to shut-off should the burner flame extinguish.

6. FUELLING YOUR HEATER

NEVER FILL THE HEATER FUEL TANK IN THE LIVING SPACE : FILL THE TANK OUTDOORS.

DO NOT OVERFILL YOUR HEATER AND BE SURE HEATER IS LEVELED. IMPORTANT NOTICE REGARDING FIRST IGNITION OF HEATER :

The first time you light the heater, it should be done outdoors. This allows the oils, etc. used in manufacturing the heater to burn off outside.

WARNING!! : NEVER REFILL HEATER FUEL TANK WHEN HEATER IS OPERATING OR STILL HOT.

NEVER LEAVE THE HEATER
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7. OPERATION

A.) VENTILATION

RISK OF INDOOR AIR POLLUTION/USE HEATER ONLY IN WELL VENTILATED AREAS.
Provide a fresh air opening of at least 2,800 sq. cm (3 sq. feet) for each 100,000 BTU rating.
Provide extra fresh air if more heaters are being used.
Example : A IH75000 heater requires one of the following:

- a two-car garage door raised 15.24 cm (six inches)
- a single-car garage door raised 22.86 cm (nine inches)
- two, 76.20 cm (thirty-inch) windows raised 38.1 cm (fifteen inches)

B.) OPERATION

TO START HEATER

1. Fill fuel tank with kerosene or #1 diesel fuel.
2. Attach fuel cap.
3. Plug power cord of heater into three-pin, earth grounded extension cord. Extension cord must be at least six feet long.

   Extension Cord Wire Size Requirements :
   - 1.8 to 3 meters (6 to 10 feet) long, use 18 AWG conductor.
   - 3.4 to 30.5 meters (11 to 100 feet) long, use 16 AWG conductor.
   - 30.8 to 61 meters (101 to 200 feet) long, use 14 AWG conductor.
4. Turn “THERMOSTAT CONTROL KNOB” to desired setting (setting range : 5℃~45℃) and push power switch to ON” position, power indicator lamp will light and heater will start.

NOTE : Room Temp. display indicates as follows,
* When room temp. is less than 5℃ : "Lo"
* When room temp. is between 0℃ and 45℃ : Indicates room temperature.
* When room temp. is more than 45℃ : "Hi"

If heater does not start, the thermostat setting may be too low,turn "THERMOSTAT CONTROL KNOB" to higher positon to start heater. If heater still does not start, turn power switch to "OFF" and then to "ON" position.(See Figure9). If heater still does not start,see Troubleshooting Guide on page 16.

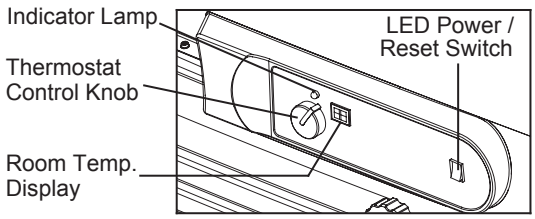

Figure 9.
Power ON/OFF & Temp. Setting.

NOTICE : The major electrical components of this heater are protected by a safety fuse mounted to the PCB board. If your heater fails to start, check this fuse first and replace as necessary. You should also check your power source to insure that proper voltage and frequency are being supplied to the heater.

TO STOP HEATER

1. Turn switch to “OFF” and unplug power cord.

TO RESTART HEATER

1.Wait 10 seconds after stopping heater.
2. Repeat steps under to start heater.

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C.) LOUVRE

⚠ CAUTION : RISK OF BURN

The Louvre is very hot in operation and after shut-off.
Never touch or control angle while still hot.
- Louvre's angle can be controlled by the handle for arrow direction as shown in Figure 10.
(Control range : Upward 28° / downward 20°)

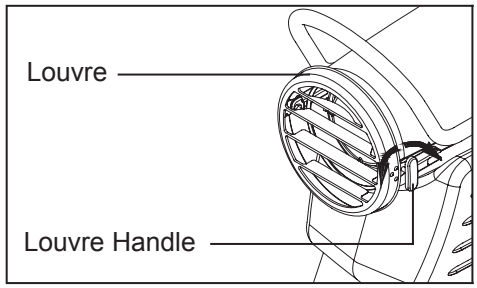

Figure 10. Louvre Angle Control

8. LONG TERM STORAGE OF YOUR HEATER

FUEL TANK DRAIN

1. Remove Fuel Cap (See Figure 11).
2. Drain Fuel Tank through Fuel Cap Opening.
3. Using a small amount of kerosene, swirl,
Never mix water with the kerosene as it will cause poor operation of the heater.
Pour the kerosene out making sure that you remove it all.

IMPORTANT : Do not store kerosene over summer months for use during next next heating season.
Using old fuel could damage heater.

4. Reinstall Fuel Cap (See Figure 12).
5. Store heater in dry well ventilated area. Make sure storage place is free of dust and corrosive fumes.
6. Store the heater in the original box with the original packing material and keep the USER'S MANUAL with the heater.

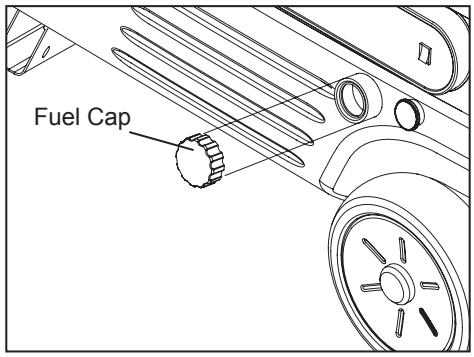

Figure 11. Remove Fuel Cap

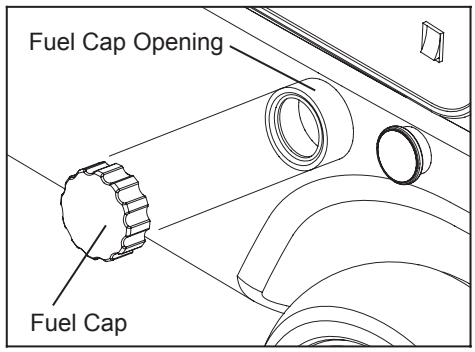

Figure 12. Reinstall Fuel Cap

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9. MAINTENANCE

WARNING!! : NEVER SERVICE HEATER WHILE IT IS PLUGGED IN OR WHILE HOT!

USE ORIGINAL EQUIPMENT REPLACEMENT PARTS. Use of third party or other alternate components will void warranty and may cause unsafe operating conditions.

A.) FUEL TANK

FLUSH EVERY 200 HOURS OF OPERATION OR AS NEEDED (SEE STORAGE, PAGE 10)

B.) UPPER SHELL REMOVAL

-Remove Screw that secure Side Cover as shown in Figure 13.

-Push out for arrow direction and extract Side Cover's Bracket from Rectancle Hole and Separate Side Cover(R).

-Side Cover(L) in opposite of Side Cover(R) Separates by same method. (IH125000/IH170000 Models Only.)

-Remove 4 Screws along each side of heater using medium phillips screwdriver. These Screws attach Upper Rear and Lower shells together. (See Figure 13) (IH75000 Model Only.)

-Remove Screws along each side of heater using medium phillips screwdriver. These Screws attach Upper and Lower shells together.

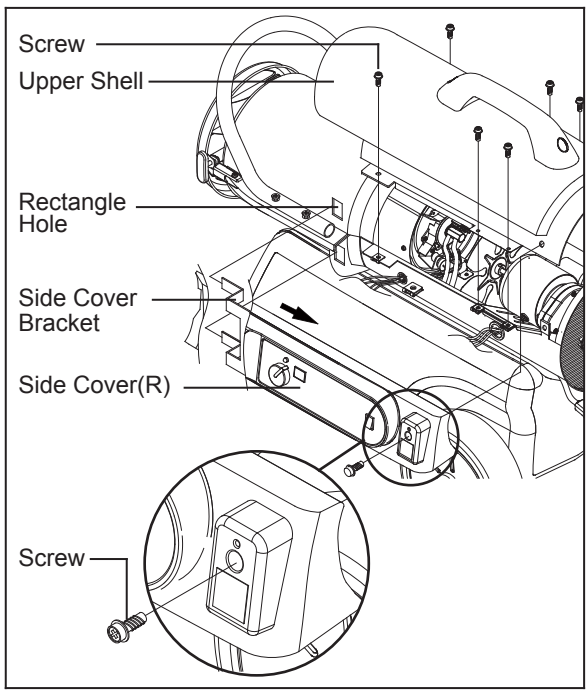

Figure 13. Upper Shell Removal.

C.) AIR OUTPUT, AIR INTAKE AND LINT FILTERS WASH AND DRY WITH SOAP AND WATER OR REPLACE EVERY 500 HOURS OF OPERATION OR ONCE A YEAR.

-Remove Upper Shell.(See Figure 13)

-Remove Fan guard.(See Figure 14)

-Remove End Filter Cover Screws using medium phillips screwdriver.

-Remove End Filter Cover.

-Replace Air Output and Lint Filters.

-Wash or Replace Air Intake Filter.

-Reinstall Fan Guard and Upper Shell.

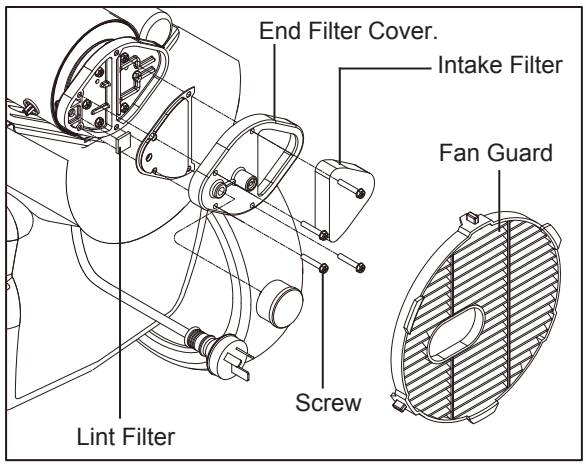

Figure 14. Air Output,Intake,and Lint Filters

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D.) FAN BLADES

CLEAN EVERY SEASON OR AS NEEDED.

-Remove upper shell(See 11 page.)

-Use 1/8" allen wrench to loosen set screw which holds Fan Blade to motor shaft.

- Slip Fan Blade off motor shaft.

-Clean Fan Blade using a soft colth moistened with kerosene or solvent.

-Dry Fan Blade throughly.

-Reinstall Fan Blade on motor shaft. Place Fan Blade hub flush with end of motor shaft.

-Place Set Screw on flat of shaft. Tighten Set Screw firmly 4.5~5.6 N-m (40~50 inch-pounds).

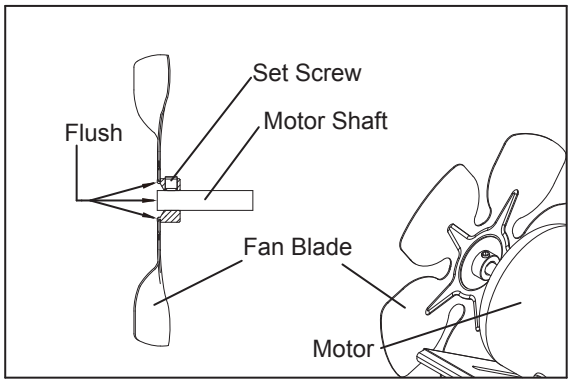

Figure 15. Fan and Setscrew Location.

E.) NOZZLE

REMOVE DIRT IN NOZZLE AS NEEDED (SEE PAGE 16).

- Remove upper shell (See page 11).
- Remove fan blade (See page 11).
- Remove fuel and air line hoses from nozzle adaptor.
- Remove ignitor wire from spark plug.
- Remove spark plug from nozzle adaptor using medium phillips screwdriver.
- Turn nozzle adaptor 40° turn (1/9) to counter clock wise and pull toward motor to remove. (See Figure 14)
- Place plastic hex-body into vise and lightly tighten.
- Carefully remove nozzle from nozzle adaptor using 5/8” socket wrench.
- Blow compressed air through face of nozzle. (this will remove any dirt in nozzle)
- Reinstall nozzle into nozzle adaptor until nozzle seats. Tighten 1/3 turn more using 5/8” socket wrench.(40~45 inch-pounds)
- Reinstall nozzle adaptor to burner head.
- Reinstall spark plug to nozzle adaptor.
- Attach ignitor wire to spark plug.
- Attach fuel and air line hoses to nozzle adaptor.
- Reinstall fan blade and upper shell.

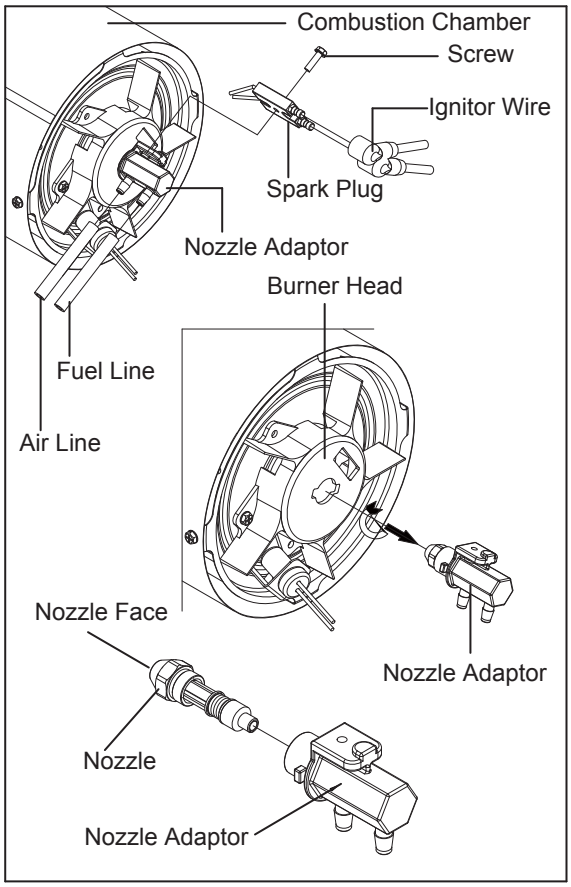

Figure 16. Removing Nozzle

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

F.) SPARK PLUG

CLEAN AND REGAP EVERY 600 HOURS OF OPERATION OR REPLACE AS NEEDED.

- Remove upper shell (See page 11).
- Remove fan (See page 11).
- Remove ignitor wire from spark plug.
- Remove spark plug from nozzle adaptor using mediumphillips screwdriver.
- Clean and regap spark plug electrodes to 3.5mm gap. (0.138")
- Reinstall spark plug to nozzle adaptor.
- Attach ignitor wire to spark plug.
- Reinstall fan and upper shell.

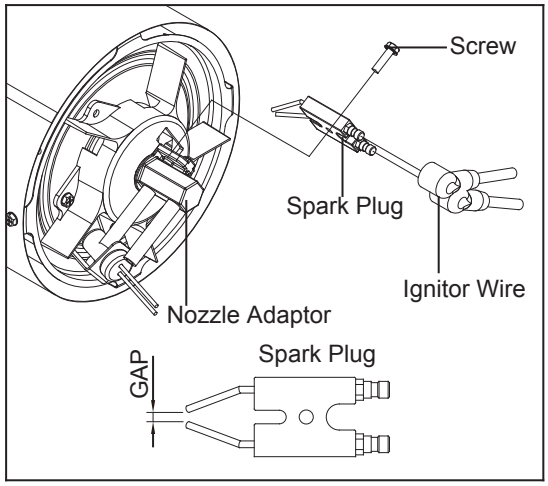

Figure 17. Removing Spark Plug

G.) PHOTOCELL

CLEAN PHOTOCELL ANNUALLY OR AS NEEDED.

-Remove upper shell(See page 11).

-Remove fan (See page 12).

-Remove photocell from photocell bracket.

-Clean photocell lens with cotton swab.

TO REPLACE:

-Disconnect switch wires from power switch.

-Remove two Screws using medium phillips screwdriver.

These Screws attach Main PCB to Side Cover.(See Figure 18)

-Remove Side cover(R).

-Disconnect Photocell Connector from Circuit Board and remove photocell.

-Install new Photocell and connect photocell connector to Circuit Board.

-Replace Circuit Board to Side Cover(R) and Switch wires to Power Switch.

-Replace Fan and Upper Shell.

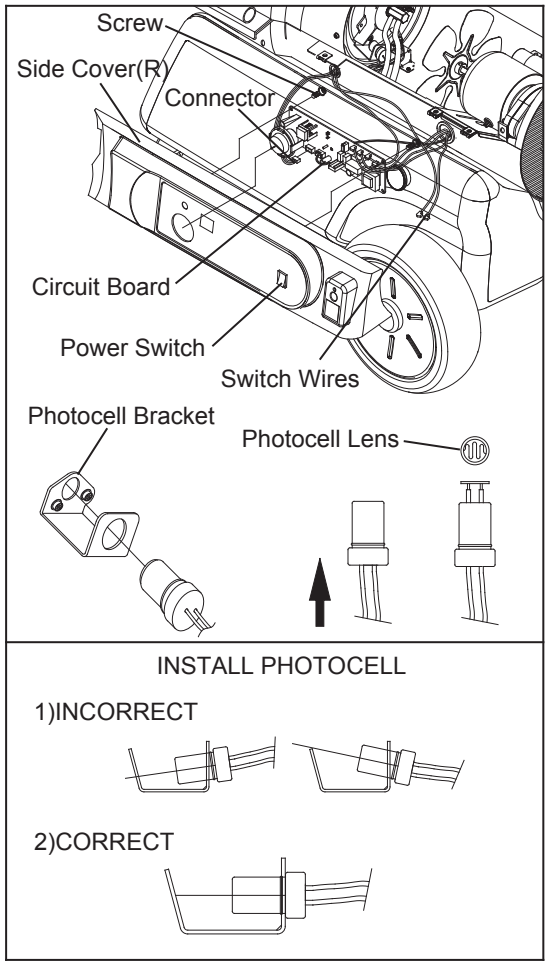

Figure 18. Replace & Cleaning Photocell

NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

H.) FUEL FILTER

CLEAN OR REPLACE TWICE A HEATING SEASON OR AS NEED.

-Remove upper shell(See 11 page).

-Remove Fan Blade(See 12 Page).

-Pull Fuel Line off from Fuel Filter Neck.

-Remove Fuel Filter.

-Wash Fuel Filter with clean kerosene and replace in tank.

-Attach Fuel Line to Fuel Filter Neck.

-Replace Fan Blade and Upper Shell.

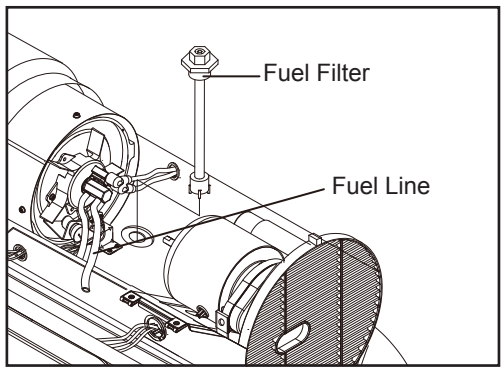

Figure 19. Removing Fuel Filter

I.) PUMP PRESSURE ADJUSTMENT

-Start Heater(See Operation, Page 9) and allow motor to reach full speed.

-Adjust Pump Pressure.(Using a Flat blade screwdriver)

Turn Relief Valve clockwise to increase pressure.
Turn Relief Valve counter-clockwise to decrease pressure.
Set Pump pressure according to the chart below.

-Stop Heater(See Operation, Page 9).

MODE	PUMP PRESSURE
IH75000	3 psi
IH125000	4 psi
IH170000	5 psi

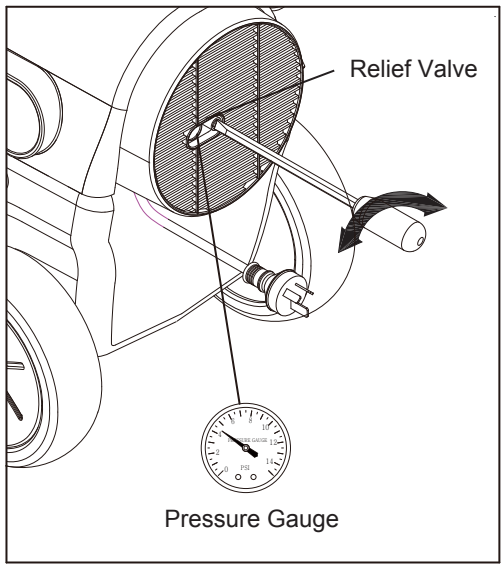

Figure 20. Adjusting Pump Pressure

NOTE: USE ONLY ORIGINAL EQUIPMENT REPLACEMENT PARTS.
USE OF ALTERNATE OR THIRD PARTY COMPONENTS WILL VOID ANY WARRANTY AND MAY CAUSE UNSAFE OPERATING CONDITION.

NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

10. REPLACING FUSE

NOTICE : This heater is fuse protected.
If your heater fails to ignite, DO NOT RETURN YOUR HEATER TO THE STORE.
Please follow the simple instruction below to inspect and change the fuse.

PROCEDURE FOR REPLACING FUSE

⚠ WARNING : SHOCK HAZARD
To prevent personal injury, unplug the power cord before replacing fuse.

1. Unplug heater.
2. Remove the screw that secures the Side Cover, as shown in Figure 21.
3. Push out for arrow direction and extract side cover's bracket from rectangular hole and seperate side cover (See Figure 21).
4. Disconnect switch wires from power switch.
5. Remove two screws using medium phillips screwdriver.
   These screws attach circuit board to side cover (see Figure 22).
6. Remove fuse from fuse holder and replace fuse (see Figure 22).

⚠ WARNING : FIRE HAZARD
To avoid fire, Do not substitute with a higher or lower current rating.

7. Replace switch wires to power switch.
8. Replace circuit board and side cover.

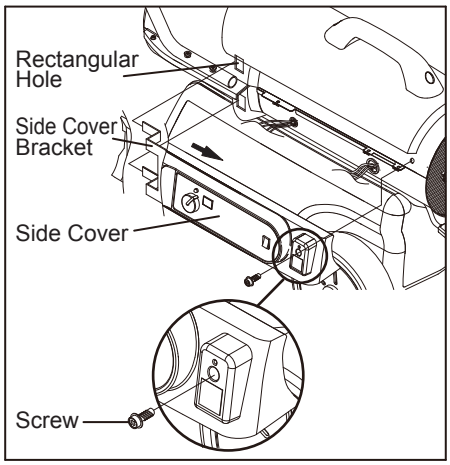

Figure 21. Removing side cover

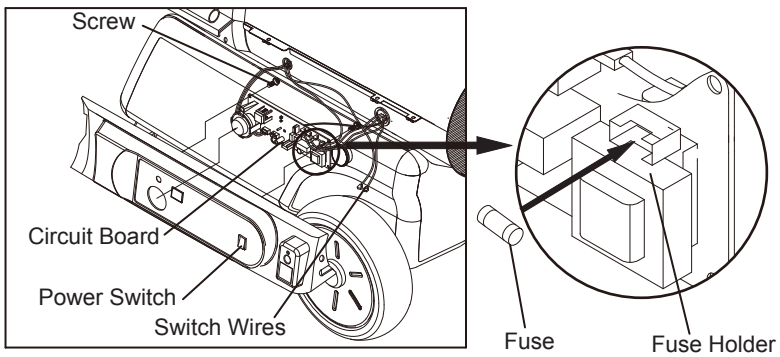

Figure 22. Removing fuse

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11. TROUBLE SHOOTING GUIDE

TROUBLE	POSSIBLE CAUSE	CORRECTIVE ACTION
Heater ignites but MAIN PCB assembly shuts heater off after a short period of time. (Indicator Lamp is flickering and room temp. display indicates " E1 ")	1. Wrong pump pressure 2. Dirty Air Output,Air Intake or Lint Filter. 3. Dirty Fuel Filter. 4. Dirt in Nozzle. 5. Dirty Photocell Lens. 6. Photocell Assembly not Properly installed.(Not seeing the flame) 7. Bad electrical connection between photocell and MAIN PCB assembly. 8. Defective Photocell.	1. See Pump Pressure Adjustment, Page 14. 2. See Air Output,Air intake and Lint Filters, page 11. 3. See Fuel Filter, Page 14. 4. See Nozzle, Page 12. 5. Clean Photocell Lens, Page 13. 6. Make sure photocell boot is properly seated in bracket, Page 13. 7. Check electrical components See wiring diagram, Page 17. 8. Replace Photocell, Page 13.
Heater will not ignite but motor runs for a short period of time.(Indicator Lamp is flickering and room temp.display indicates " E1 ")	1. No fuel in tank. 2. Wrong pump pressure. 3. Carbon deposits on spark plug and/or improper gap. 4. Dirty fuel filter. 5. Dirt in Nozzle. 6. Water in fuel tank. 7. Bad electrical connection between ignitor and MAIN PCB assembly. 8. Ignitor wire is not attached to spark plug.	1. Fill tank with kerosene/diesel 2. See Pump Pressure Adjustment, Page 14. 3. See Spark Plug, Page 13. 4. See Fuel Filter, Page 14. 5. See Nozzle, Page 12. 6. Flush fuel tank with clean kerosene/diesel, Page 10. 7. Check electrical components See wiring diagram, Page 17. 8. Attach ignitor wire to spark plug. See Spark Plug, Page 13.
Fan does not turn when heater is plugged in and power switch was in the " ON " Position. (Indicator Lamp is on or flickering)	1. Thermostat setting is too low. 2. Bad electrical connection between motor and MAIN PCB assembly.	1. Turn thermostat control knob to a higher setting. 2. Check electrical connections, See Wiring Diagram, Page 17.
(Indicator Lamp is flickering and room temp. display indicates "E2")	1. Sensor Failure.	1. Replace sensor. See Wiring diagram, Page 17.
(Indicator Lamp is flickering and room temp. display indicates "E3")	1. Thermostat switch failure.	1. Replace switch. See Wiring diagram, Page 17.
Heater will not turn-on (Indicator Lamp is off)	1. Temperature limit safety device is overheated. 2. No electrical power 3. Blown fuse. 4. Bad electrical connection between temperature limit safety device and PCB board.	1. Turn power switch to "OFF" and allow to cool(about 10 min.) 2. Check to insure heater cord and extension cord are plugged in. Check power supply. 3. Replace safety fuse in PCB board. 4. Check electrical connections See Wiring Diagram, Page 17.

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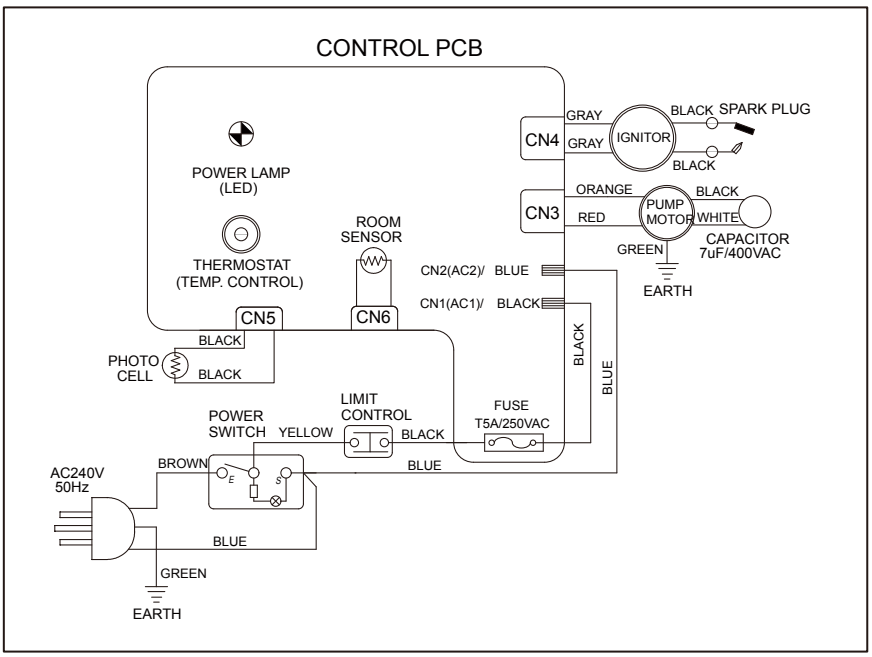
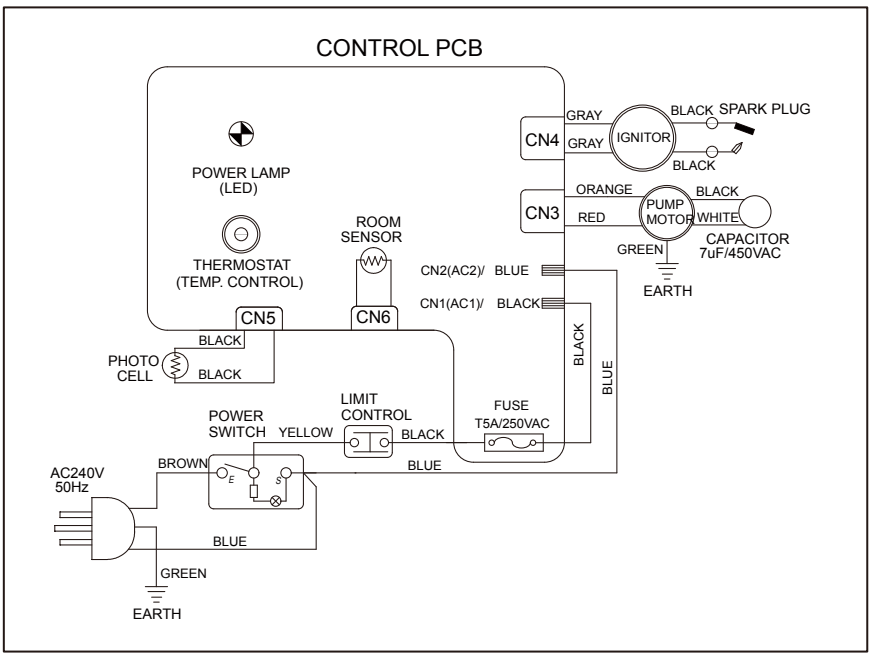
12. WIRING DIAGRAM

A) WIRING DIAGRAM(IH75000)



B) WIRING DIAGRAM(IH125000/IH170000)



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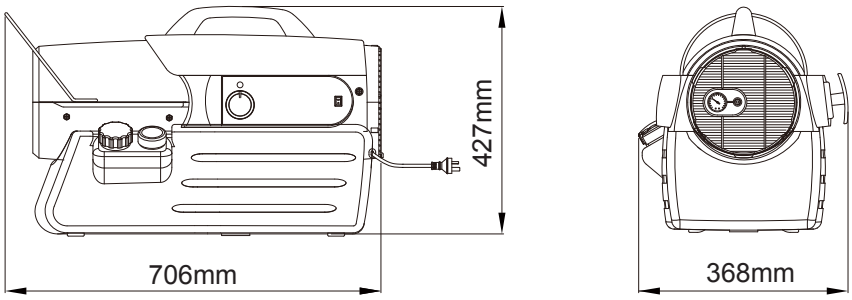
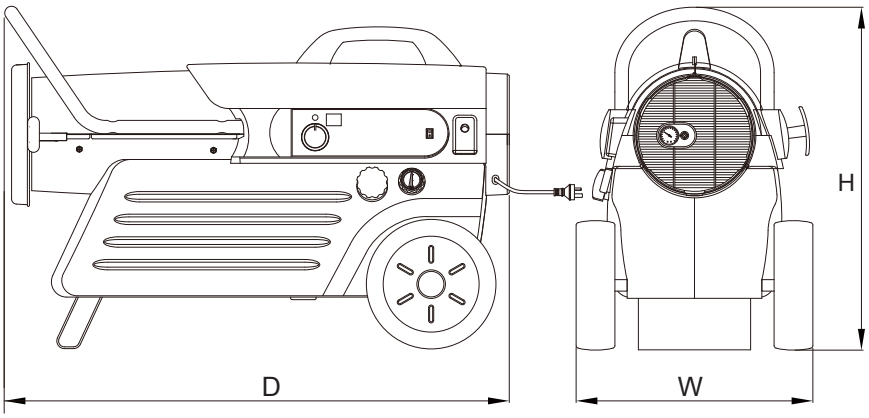
13. SPECIFICATIONS



IH75000



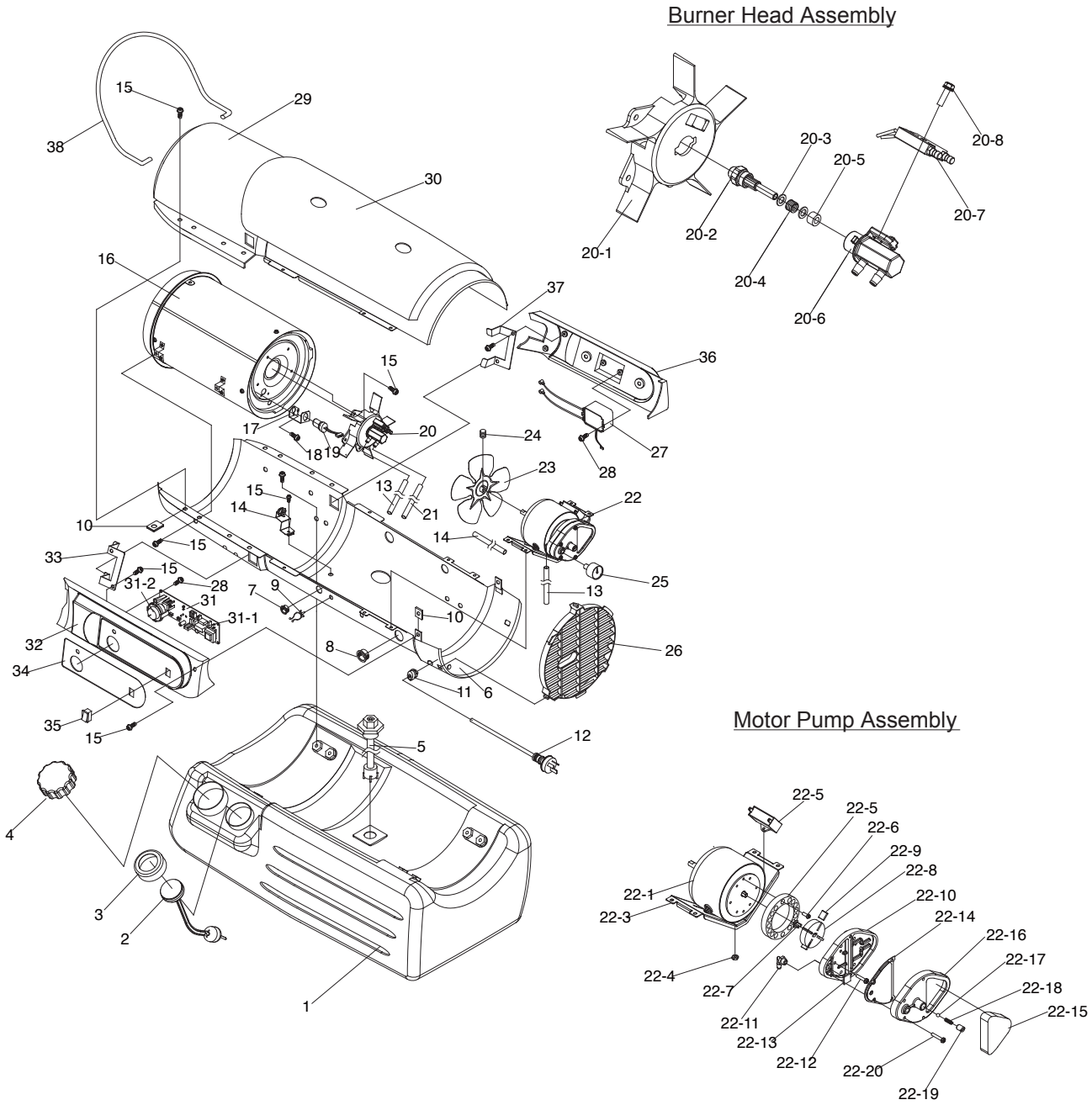
	IH125000	IH170000
H	686mm	686mm
D	815mm	937mm
W	470mm	470mm

IH125000/IH170000

MODEL	**IH75000**	**IH125000**	**IH170000**
Heating Output	60,000BTU (16.5kW)	105,000BTU (29kW)	150,000BTU (41kW)
Fuel Consumption - Litre/Hr.	1.7	3	4.1
Fuel Tank Capacity - Litre	19	38	45
Pump Pressure p.s.i.	3	4	5
Volt/Hz	240V AC / 50Hz	240V AC / 50Hz	240V AC / 50Hz
Amps.	0.6	0.9	0.9
Phase	1	1	1
Size (W × D × H)	368 × 706 × 427(mm)	470 × 815 × 686(mm)	470 × 937 × 686(mm)
Weight (kg)	12	26.5	28

NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

14. EXPLODED PARTS DRAWING(IH75000Model Only)



NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

15. PARTS LIST(IH75000 Model Only)

KEY NO.	DESCRIPTION	PART NO.	KEY NO.	DESCRIPTION	PART NO.
1	Fuel Tank Assembly	2151-0016-00	22-5	Pump Body	3541-0022-00
2	Fuel Gauge	2156-0023-00	22-6	Bolt-BH Special	4321-0198-00
3	Fuel Gauge Cap	3231-0123-00	22-7	Insert	3231-0052-00
4	Fuel Cap	3231-0122-00	22-8	Rotor	3451-0008-00
5	Fuel Filter Assembly	2155-0009-00	22-9	Blade	3451-0009-00
6	Shell Lower Assembly	2151-0042-01	22-10	End Pump Cover	3531-0027-00
7	Bushing Grommet(S)	3231-0120-00	22-11	Elbow	3231-0181-00
8	Bushing Grommet(L)	3231-0121-00	22-12	Flange Bolt	4329-0016-00
9	Twist Lock Stand Off	3713-0022-00	22-13	Lint Filter	3631-0005-00
10	Nut Clip	3131-0182-00	22-14	Output Filter	2155-0004-00
11	Cord Bushing	3712-0013-00	22-15	Intake Filter	3631-0007-00
12	Power Cord	3980-0267-00	22-16	End Filter Cover	3221-0029-00
13	Air Line	3341-0018-00	22-17	Ball	3541-0023-00
14	Temperature Limit Control	2153-0028-00	22-18	Spring	3431-0016-00
15	Flange Screw	4319-0015-00	22-19	Adjusting Screw	3231-0053-00
16	Combustion Chamber	2152-0146-00	22-20	Flange Bolt	4329-0016-00
17	Photocell Bracket	3131-0159-00	23	Fan Assembly	2154-0009-00
18	Screw-BH	4311-0068-00	24	Set Screw	4323-0004-00
19	Photocell Assembly	2153-0002-00	25	Pressure Gauge	3740-0049-00
20	Burner Head Assembly	2152-0121-00	26	Fan Guard	3221-0035-00
20-1	Burner Head	3531-0026-00	27	Ignitor	39E0-0028-00
20-2	Nozzle	2152-0011-00	28	Screw-TH2S	4312-0044-00
20-3	Nozzle Seal Washer	4343-0016-00	29	Shell Upper Assembly	2151-0018-02
20-4	Nozzle Seal Spring	3431-0010-00	30	Shell Cover	3211-0019-00
20-5	Nozzle Sleeve	3311-0002-00	31	Main P.C.B Assembly	215A-0049-00
20-6	Nozzle Adaptor	3231-0179-00	31-1	Fuse	3920-0010-00
20-7	Spark Plug	3651-0012-00	31-2	Thermostat Control Knob	3231-0146-00
20-8	Flange Bolt	4329-0079-00	32	Side Cover(R)	3211-0021-00
21	Fuel Line	3341-0016-00	33	Bracket - Cover(R)	3131-0348-00
22	Motor and Pump Assembly	2154-0083-00	34	Rating Plate	3221-0058-10
22-1	Motor	3970-0216-00	35	Power Switch	39A0-0153-00
22-2	Capacitor	3820-0261-00	36	Side Cover(L)	3211-0023-00
22-3	Motor Supportor	3121-0481-00	37	Bracket - Cover(L)	3211-0023-00
22-4	Nut	4331-0022-00	38	Front Guard	3561-0066-00

NEVER LEAVE THE HEATER
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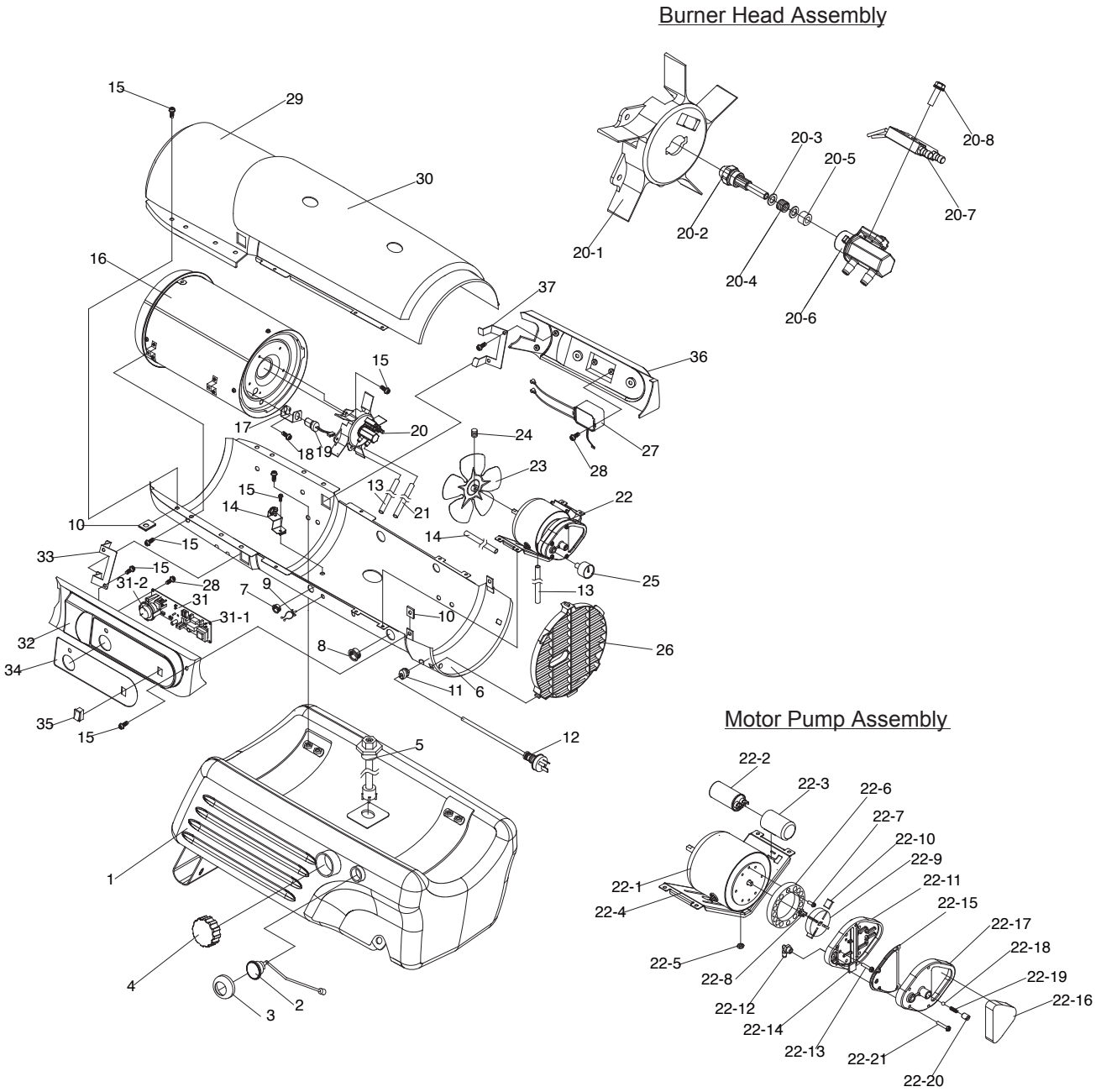
15. EXPLODED PARTS DRAWING(IH125000/IH170000 Models Only)



NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

17. PARTS LIST(IH125000/IH170000 Models Only)

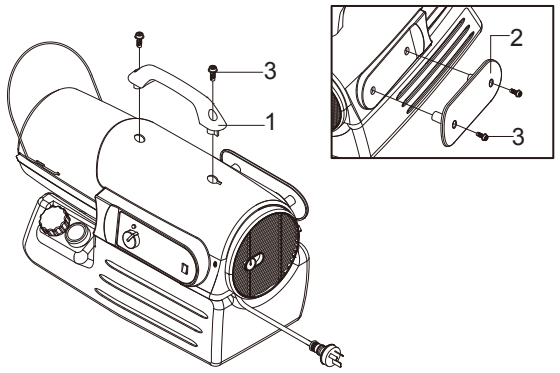
KEY NO.	DESCRIPTION	PART NO.	
		IH125000	**IH170000**
1	Fuel Tank Assembly	2151-0012-00	2151-0011-00
2	Fuel Gauge	2156-0022-00	2156-0022-00
3	Fuel Gauge Cap	3231-0123-00	3231-0123-00
4	Fuel Cap	3231-0122-00	3231-0122-00
5	Fuel Filter Assembly	2155-0010-00	2155-0010-00
6	Shell Lower Assembly	2151-0043-01	2151-0044-01
7	Bushing Grommet(S)	3231-0120-00	3231-0120-00
8	Bushing Grommet(L)	3231-0121-00	3231-0121-00
9	Twist Lock Stand Off	3713-0022-00	3713-0022-00
10	Nut Clip	3131-0182-00	3131-0182-00
11	Cord Bushing	3712-0013-00	3712-0013-00
12	Power Cord	3980-0267-00	3980-0267-00
13	Air Line	3341-0010-00	3341-0002-00
14	Temperature Limit Control	2153-0028-00	2153-0023-00
15	Flange Screw	4319-0015-00	4319-0015-00
16	Combustion Chamber	2152-0148-00	2152-0150-00
17	Photocell Bracket	3131-0159-00	3131-0159-00
18	Screw-BH	4311-0068-00	4311-0068-00
19	Photocell Assembly	2153-0002-00	2153-0002-00
20	Burner Head Assembly	2152-0122-00	2152-0123-00
20-1	Burner Head	3531-0025-00	3531-0024-00
20-2	Nozzle	2152-0005-00	2152-0011-00
20-3	Nozzle Seal Washer	4343-0016-00	4343-0016-00
20-4	Nozzle Seal Spring	3431-0010-00	3431-0010-00
20-5	Nozzle Sleeve	3311-0002-00	3311-0002-00
20-6	Nozzle Adaptor	3231-0179-00	3231-0179-00
20-7	Spark Plug	3651-0012-00	3651-0012-00
20-8	Flange Bolt	4329-0079-00	4329-0079-00
21	Fuel Line	3341-0017-00	3341-0017-00
22	Motor and Pump Assembly	2154-0084-00	2154-0084-00
22-1	Motor	3970-0217-00	3970-0217-00
22-2	Capacitor	3820-0218-00	3820-0218-00
22-3	Holder Capacitor	3231-0182-00	3231-0182-00
22-4	Motor Supportor	3121-0482-00	3121-0482-00
22-5	Nut	4331-0022-00	4331-0022-00
22-6	Pump Body	3541-0022-00	3541-0022-00
22-7	Bolt-BH Special	4321-0198-00	4321-0198-00
22-8	Insert	3231-0052-00	3231-0052-00
22-9	Rotor	3451-0008-00	3451-0008-00
22-10	Blade	3451-0009-00	3451-0009-00
22-11	End Pump Cover	3531-0027-00	3531-0027-00

NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

KEY NO.	DESCRIPTION	PART NO.	
		IH125000	**IH170000**
22-12	Elbow	3231-0181-00	3231-0181-00
22-13	Flange Bolt	4329-0016-00	4329-0016-00
22-14	Lint Filter	3631-0005-00	3631-0005-00
22-15	Output Filter	2155-0004-00	2155-0004-00
22-16	Intake Filter	3631-0005-00	3631-0005-00
22-17	End Filter Cover	3221-0029-00	3221-0029-00
22-18	Ball	3541-0023-00	3541-0023-00
22-19	Spring	3431-0016-00	3431-0016-00
22-20	Adjusting Screw	3231-0053-00	3231-0053-00
22-21	Flange Bolt	4329-0016-00	4329-0016-00
23	Fan Assembly	2154-0004-00	2154-0007-00
24	Set Screw	4323-0004-00	4323-0004-00
25	Pressure Gauge	3740-0049-00	3740-0049-00
26	Fan Guard	3221-0032-00	3221-0032-00
27	Ignitor	39E0-0028-00	39E0-0028-00
28	Screw-TH2S	4312-0044-00	4312-0044-00
29	Shell Upper Front	3111-0220-02	3111-0221-02
30	Shell Upper Rear Assembly	2151-0020-02	2151-0020-02
31	Shell Cover	3211-0020-00	3211-0020-00
32	Main P.C.B Assembly	215A-0050-00	215A-0050-00
32-1	Fuse	3920-0025-00	3920-0025-00
32-2	Thermostat Control Knob	3231-0146-00	3231-0146-00
33	Side Cover(R)	3211-0022-00	3211-0022-00
34	Bracket - Cover(R)	3131-0351-00	3131-0351-00
35	Rating Plate	3221-0059-16	3221-0058-17
36	Power Switch	39A0-0153-00	39A0-0153-00
37	Side Cover(L)	3211-0024-00	3211-0024-00
38	Bracket - Cover(L)	3131-0352-00	3131-0352-00

NEVER LEAVE THE HEATER
UNATTENDED WHILE BURNING!

18. PARTS LIST (WHEELS AND HANDLE)



1) IH75000 MODEL

KEY NO.	DESCRIPTION	PART NO.	QTY
		IH75000	
1	Handle	3231-0125-00	1
2	Cord Wrap	3231-0056-00	1
3	Hardware Kit	HW-KFA1001	1

2) IH125000/IH170000 MODELS

KEY NO.	DESCRIPTION	PART NO.		QTY
		IH125000	**IH170000**	
1	Handle Front	3551-0039-02	3551-0040-02	1
2	Handle	3231-0126-00	3231-0126-00	1
3	Cord Wrap	3221-0057-00	3221-0057-00	1
4	Wheel Axle	3541-0064-00	3541-0064-00	1
5	Wheel	2156-0026-00	2156-0026-00	2
6	Wheel Cap	3231-0100-00	3231-0100-00	2
7	Hardware Kit	HW-KFA1008	HW-KFA1008	1
7-1	Screw(A)	-	-	4
7-2	Screw(B)	-	-	4
7-3	Flat Washer	-	-	2
7-4	Cotter Pin	-	-	2
8	Louvre	2156-0036-00	2156-0036-00	1