











**NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!**

**2. ASSEMBLY**

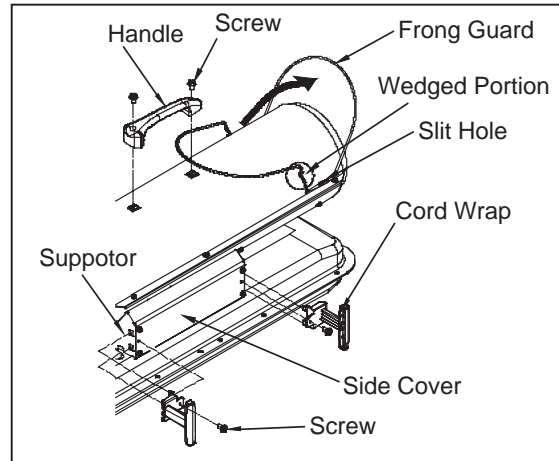
For RMC-KFA45DGP-01/75TDGP-01 Models only

**Tools Required**

- Medium Phillips Screwdriver.

**1. Assembling Handle & Cord Wrap**

- 1) Lift front guard for arrow direction and make sure that guard's wedged portion fits into the slit hole on the upper housing.
- 2) Align the holes in the upper housing with two mounting holes on the handle as shown in Figure 6.
- 3) Secure handle with Screws with provided.
- 4) Insert cord wrap into the rectangle holes on the supportor and align the hole on the cord wrap with the mounting hole on the side cover as shown in Figure 6. (75TDGP-01 Model only)
- 5) Secure cord wrap with Screws with provided.



**Figure 6. Assembling Handle & Cord Wrap**

For RMC-KFA125TDGP-01/210TDGP-02 Models only

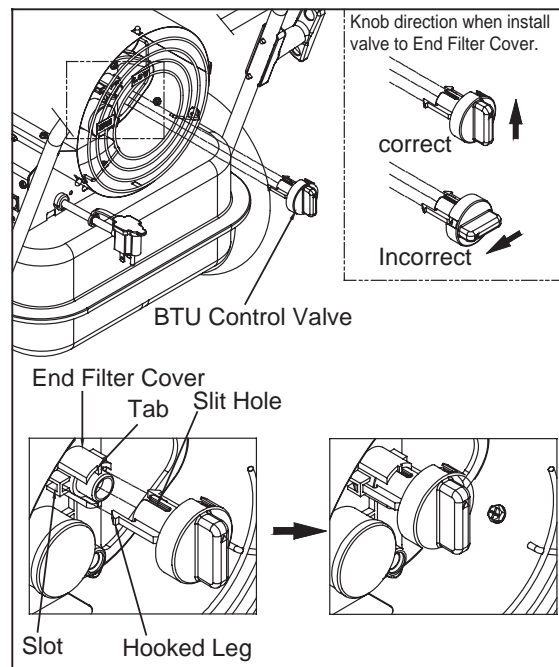
**Tools Required**

- Medium Phillips Screwdriver.
- 19 mm Socket Wrench

**1. Assembling BTU Control Valve**

- (210TDGP-02 Model only)
- 1) Align slit hole on body of Valve with Tab on the End Filter Cover as shown in figure 7.
- 2) Insert hooked leg of valve fully into slot of End Filter Cover so that hooked leg is completely locked to Slot.

**NOTE :** When install valve to End Filter Cover, If valve is assembled for incorrect knob direction, Hooked leg is not completely locked to slot.



**Figure 7. Assembling BTU Control Valve (RMC-KFA210TDGP-02 Model Only)**

**2. Assembling Handle & Wheel and Cord Wrap**

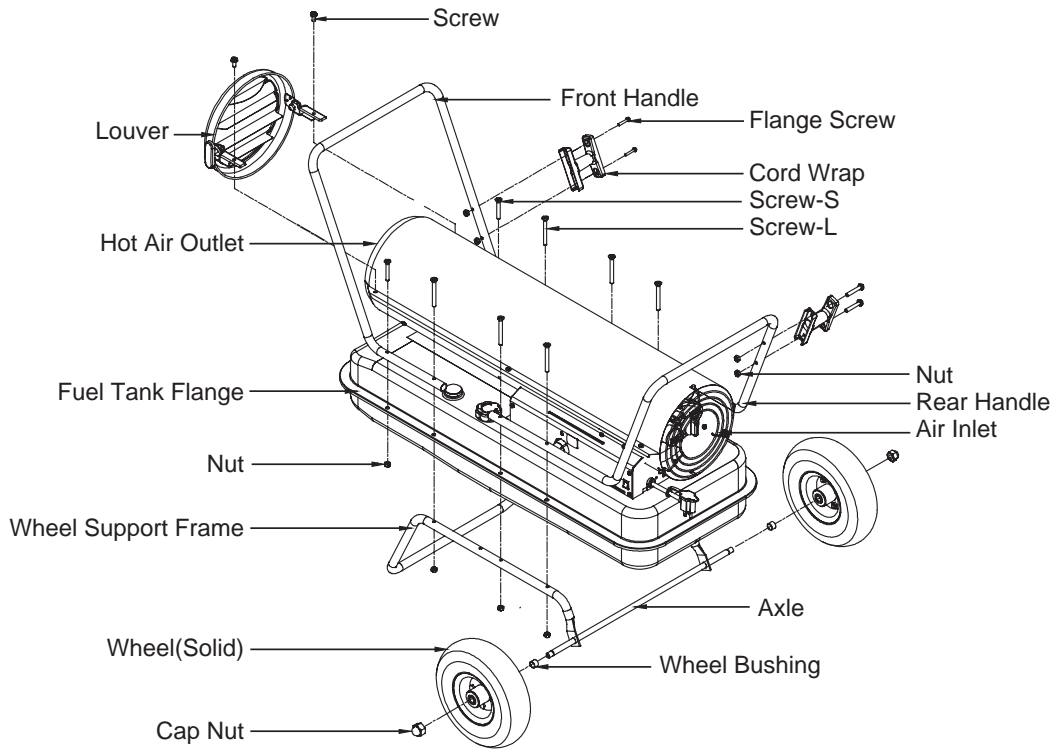
- 1) Slide axle through wheel support frame. Install wheel bushings and wheels on axle
- 2) Attach Cap Nuts on axle ends and tighten with Socket Wrench.
- 3) Place heater on wheel support frame. Align the holes on fuel tank flange with holes on wheel support frame.
- 4) Position the Handles on top of fuel tank flange. Insert screws through handles, fuel tank flange and wheel support frames as shown in Figure 8 and attach nut finger tight after each screw is inserted.

- 5) Align the hole on the handles with the mounging hole on the Cord Wrap. Insert Screws through Cord Wrap, handles and attach nut finger tight after each screw is inserted.
- 6) After all screws are inserted, tighten nuts firmly.

**3. Assembling Louver (RMC-KFA210TDGP-02 Model only).**

- 1) Remove two screw in each side fore-end of upper shell.
- 2) Fit Bracket-Right & Left to each side flange of upper shell and align the each hole on the brackets with the hole on the flanges(See Figure 8, Page 6).
- 3) Secure each hole with a screw that removed.

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**Figure 8. Assembling Handle, Wheel and Cord wrap, Louver**

**CAUTION :** DO NOT OPERATE heater without support frame assembled to tank.

**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 sulphur. Which can cause a rotten egg odor during the operation of the heater. However, #1 diesel/fuel oil 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 gasoline.

**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 fuel oil is an acceptable substitute.)

**NEVER** use fuel such as gasoline, 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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### 6. FUELING 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.**

### 7. OPERATION

#### A.) VENTILATION

**RISK OF INDOOR AIR POLLUTION/USE HEATER ONLY IN WELL VENTILATED AREAS.**

Provide a fresh air opening of at least three square feet (2,800 sq. cm) for each 100,000 BTU/Hr. rating. Provide extra fresh air if more heaters are being used.

Example :

A RMC-KFA210TDGP-02 heater requires one of the following:

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

#### B.) OPERATION

##### **TO START HEATER**

1. Fill fuel tank with kerosene or No. 1 fuel oil.
2. Attach fuel cap.
3. Plug power cord of heater into three-prong, grounded extension cord. Extension cord must be at least six feet long. Extension Cord Wire Size Requirements
  - 6 to 10 feet (1.8 to 3 meters) long, use 18 AWG conductor.
  - 11 to 100 feet (3.4 to 30.5 meters) long, use 16 AWG conductor.
  - 101 to 200 feet (30.8 to 61 meters) long, use 14 AWG conductor.
4. Turn "THERMOSTAT CONTROL Knob" to desired setting (Setting range : 40°F ~ 110°F) (75/125TDGP-01/210TDGP-02 Models Only)
5. Turn "BTU control Knob" to desired level "High or LOW" (KFA210TDGP-02 Model only, See Figure 9.)
6. Push Power Switch to "ON" position, Power Indicator Lamp will light and heater will start.

**NOTE : Room Temp. display indicates as following (RMC-KFA125TDGP-01/210TDGP-02 Models only)**

- when room temp. is less than 0 °F; "L"
- when room temp. is between 0 °F and 99 °F; Indicates in figure.
- when room temp. is more than 99 °F; "Hi"

If heater does not start, the thermostat setting may be too low, turn "thermostat Control Knob" to higher position to start heater. If heater still does not start, turn power switch to "OFF" and then to "ON" position. If heater still does not start, see Troubleshooting Guide on page 15.

**NOTE : User can change BTU LEVEL "High or Low" while in operation by turnig BTU Control Knob.**

**If heater is operated by HIGH BTU LEVEL, Turn BTU Control Knob 90° to clockwise.**

**If heater is operated by LOW BTU LEVEL, Turn BTU Control Knob 90° to counter clockwise.**

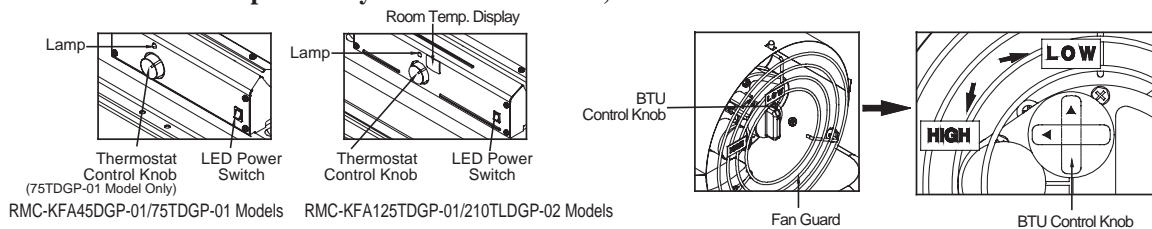


Figure 9. Controls for All Models

**NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!**

**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.

**EXTRA ELECTRIC OUTLET & PIGGYBACK POWER CORD**

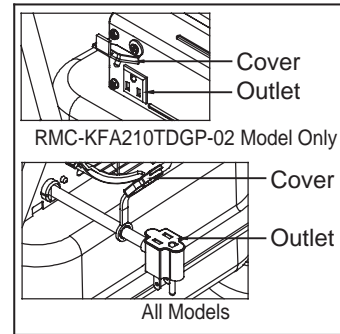
**⚠ WARNING : SHOCK HAZARD!**

- Always cover electric outlet when not in use.
- Don't plug and use a appliance more than 120V/60Hz 5A current in this outlet

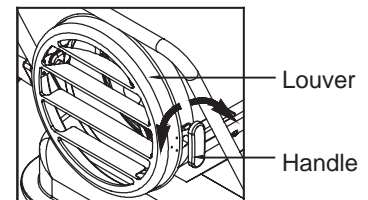
LOUVER(RMC-KFA210TDGP-02 Model Only)

**⚠ CAUTION : RISK OF BURN**

Louver is Extremely Hot in operation and after shut-off. Never touch or control angle while operating or still Hot. -Louver's angle can be controlled by turning handle in direction of arrow as shown in Figure 11. (Control range : Up 28°/Down 20°)



**Figure 10. Electric Outlet**

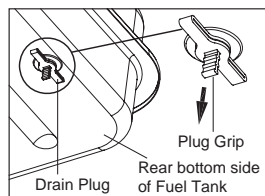


**Figure 11. Louver Angle Control**

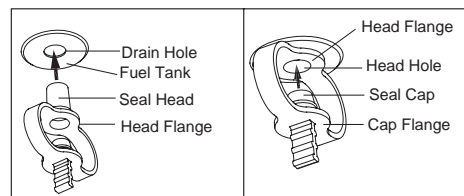
**8. LONG TERM STORAGE OF YOUR HEATER**

**FUEL TANK DRAIN**

- 1. Drain fuel tank through fuel cap opening. (For RMC-KFA45DGP-01/75TDGP-01 Models Only)
- 2. Remove drain plug from rear bottom side of fuel tank by pulling plug grip downward and drain. (For RMC-KFA125TDGP-01/210TDGP-02 Models Only. See Figure 12)
- 3. Using a small amount of kerosene, swirl and rinse the inside of the tank. **NEVER mix water with the kerosene** as it will cause rust inside the tank. Pour the kerosene out making sure that you remove it all. **IMPORTANT :** Do not store kerosene over summer months for use during next heating season. Using old fuel could damage heater.
- 4. Reinstall fuel cap. Properly dispose of old and dirty fuel. (For RMC-KFA45TDGP-01/75TDGP-01 Models Only)
- 5. Reinstall Drain Plug as follows. (For RMC-KFA125TDGP-01/210TDGP-02 Models Only. See Figure 13)
  - Insert plug's seal head fully into drain hole so that flange is flush to tank's bottom.
  - Insert seal cap fully into head hole so that cap flange is flush to head flange.



**Figure 12. Drain Plug Removal**



**Figure 13. Drain Plug Reinstall**

**IMPORTANT :** Reinstall plug fully into hole in tank, Otherwise it will not seal completely.

- 6. Store heater in dry well ventilated area. Make sure storage place is free of dust and corrosive fumes.
- 7. Store the heater in the original box with the original packing material and keep the **USER'S MANUAL** with the heater.

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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.**

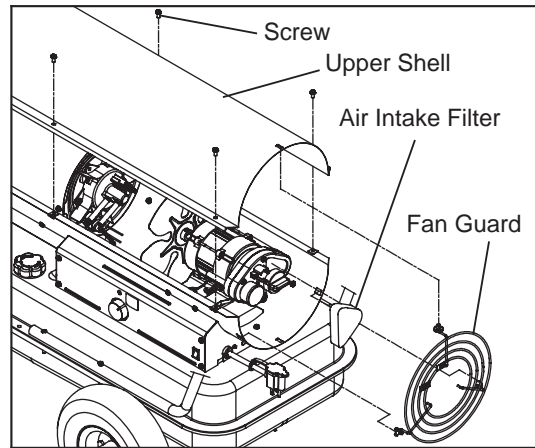
**A.) FUEL TANK**

FLUSH EVERY 200 HOURS OF OPERATION OR AS NEEDED (SEE STORAGE, PAGE 9)

**B.) AIR INTAKE FILTER**

WASH AND DRY WITH SOAP AND WATER EVERY 500 HOURS OF OPERATION OR AS NEEDED.

- Remove screws along each side of heater using medium Phillips screwdriver.
- Lift upper shell off.
- Remove fan guard.
- Wash or replace air intake filter.
- Reinstall fan guard and upper shell.

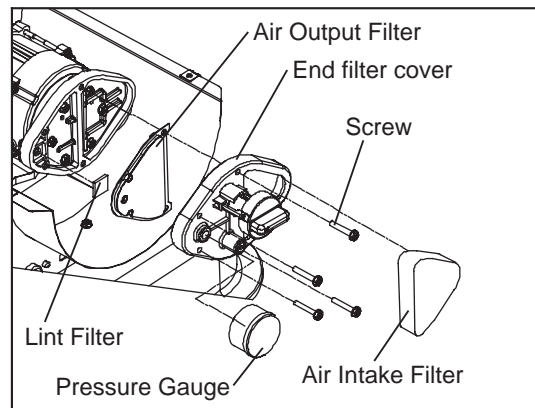


**Figure 14. Air Intake Filter Access**

**C.) AIR OUTPUT FILTER, LINT FILTER**

REPLACE EVERY 500 HOURS OF OPERATION OR ONCE A YEAR.

- Remove upper shell and fan guard (See Air Intake Filter).
- Turn Air pressure gauge counter-clock wise and remove.
- Remove end filter cover screws using medium Phillips screwdriver.
- Remove end filter cover.
- Replace air output and lint filter.
- Reinstall end filter cover and air pressure gauge.
- Reinstall fan guard and upper shell.

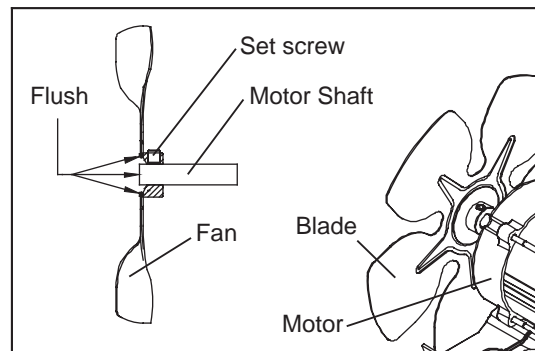


**Figure 15. Air Output Filter Access**

**D.) FAN BLADES**

CLEAN EVERY SEASON OR AS NEEDED.

- Remove upper shell (See Air Intake Filter).
- Use M6 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 cloth moistened with kerosene or solvent.
- Dry fan blade thoroughly.
- 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 (40-50 inch-pounds/4.5-5.6 N-m).
- Reinstall upper shell.



**Figure 16. Fan Assembly**

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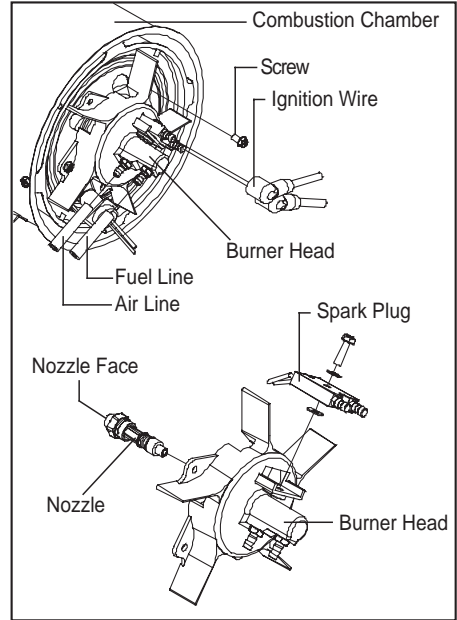
**E.) NOZZLE**

REMOVE DIRT IN NOZZLE AS NEEDED (SEE PAGE 16).  
(For RMC-KFA75TDGP-01/125TDGP-01 Models Only)

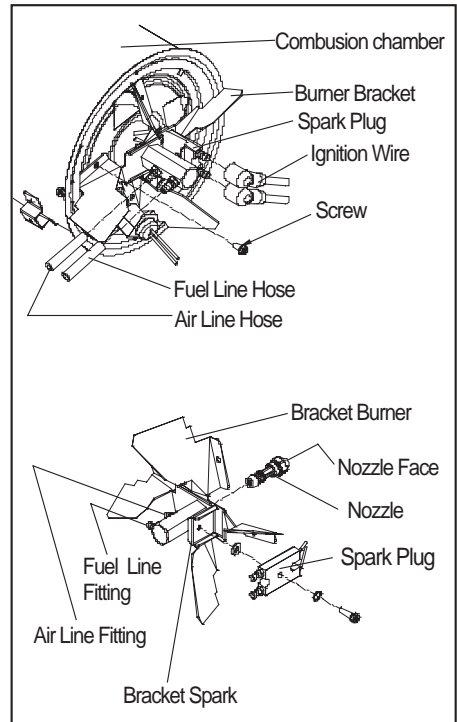
- Remove upper shell (See page 10).
- Remove fan blade (See page 10).
- Remove fuel and air line hoses from burner head.
- Remove ignition wire from spark plug.
- Remove three screws using medium Phillips screwdriver and remove burner head from combustion chamber.
- Remove spark plug from burner head using medium Phillips screwdriver.
- Carefully remove nozzle from burner head using 5/8" socket wrench.
- Blow compressed air through face of nozzle. (this will remove any dirty in nozzle)
- Reinstall nozzle into burner head and tighten firmly. (80~110 inch-pounds)
- Reinstall spark plug in burner head.
- Attach burner head to combustion chamber.
- Attach ignition wire to spark plug.
- Attach fuel and air line hoses to burner head.
- Reinstall fan blade and upper shell.

(For RMC-KFA210TDGP-02 Model Only)

- Remove upper shell (See page 10).
- Remove fan (See page 10).
- Remove fuel and air line hoses from adaptor-nozzle.
- Remove ignition wire from spark plug.
- Remove four screws using medium Phillips screwdriver and remove burner-bracket from combustion chamber.
- Remove spark plug from burner head using medium Phillips screwdriver.
- Carefully remove nozzle from adaptor-nozzle using 5/8" socket wrench.
- Blow compressed air through face of nozzle. (this will remove any dirt in nozzle)
- Reinstall nozzle into adaptor-nozzle and tighten firmly. (80~110 inch-pounds)
- Reinstall spark plug in spark-bracket.
- Attach burner-bracket to combustion chamber.
- Attach ignition wire to spark plug.
- Attach fuel and air line hoses to adaptor-nozzle.
- Reinstall fan blade and upper shell.



**Figure 17. Nozzle Replacement**



**Figure 18. Nozzle Replacement**



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### H.) FUEL FILTER

CLEAN OR REPLACE TWICE A HEATING SEASON OR AS NEED.

- Remove side cover screws using medium phillips screwdriver.
- Disconnect switch wires from power switch and remove side cover.
- Pull fuel line off fuel filter neck.
- Turn fuel filter 90° to counter clockwise and pull to remove. (RMC-KFA45DGP-01/75TDGP-01 Model only)
- Turn fuel filter 90° to clockwise and pull to remove (RMC-KFA125TDGP-01/210TDGP-02 Models only).
- Wash fuel filter with clean fuel and replace in tank.
- Attach fuel line to fuel filter neck.
- Replace switch wires to power switch.
- Reinstall side cover.

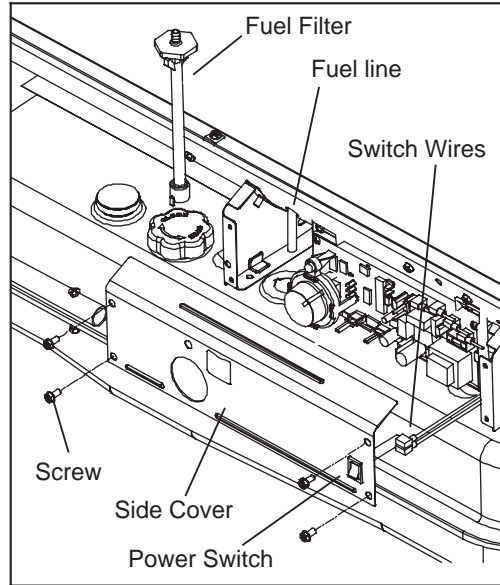


Figure 22. Fuel Filter Replacement

### I.) PUMP PRESSURE ADJUSTMENT

**NOTE: Low BTU level pump pressure is increased or decreased according to High BTU level pump pressure, So, In case need Pump pressure adjusting, Only adjust high BTU level Pump Pressure.**

- Turn BTU CONTROL Knob to HIGH BTU Level. (See Operation, page 8, RMC-KFA210TDGP-02 Model only)
- Start heater (See Operation, page 8)  
Allow motor to reach full speed
- Adjust pressure (Using a flat blade screwdriver) Turn relief valve to clockwise to increase pressure. Turn relief valve to counter clockwise to decrease pressure.
- Set pump pressure to correct High BTU level pressure for each model
- Stop heater (See Operation, page 8)

MODEL	Pump Pressure	
	High BTU level	Low BTU level
RMC-KFA45DGP-01	2.8 psi	N/A
RMC-KFA75TDGP-01	3.8 psi	N/A
RMC-KFA125TDGP-01	5.5 psi	N/A
RMC-KFA210TDGP-02	8.5 psi	6.5 psi

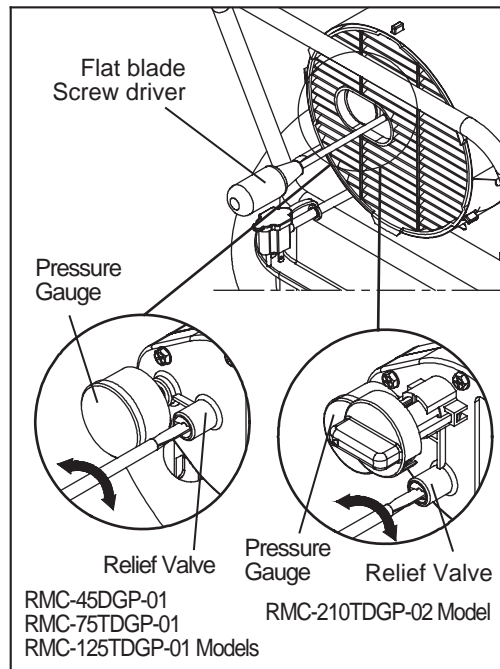


Figure 23. Adjusting Pump Pressure

**NOTE : USE ONLY ORIGINAL EQUIPMENT REPLACEMENT PARTS.**

**Use of alternate or third party components will void any warranty and may cause unsafe operation condition.**

















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**15. PARTS LIST (RMC-KFA45DPG-01/75/125TDGP-01 Models Only)**

KEY NO.	DESCRIPTION	PART NO.			Quantity
		RMC-KFA45DGP-01	RMC-KFA75TDGP-01	RMC-KFA125TDGP-01	
27-4	Nut-Hex	4331-0013-00	4331-0013-00	4331-0013-00	2
27-5	Holder Capacitor	-	-	3231-0152-00	1
27-6	Pump Body	3541-0022-00	3541-0022-00	3541-0022-00	1
27-7	Bolt-BH Special	4321-0198-00	4321-0198-00	4321-0198-00	2
27-8	Rotor	*SP-KFA1000	*SP-KFA1000	*SP-KFA1000	1
27-9	Blade	See SP-KFA1000	See SP-KFA1000	See SP-KFA1000	4
27-10	Insert	See SP-KFA1000	See SP-KFA1000	See SP-KFA1000	1
27-11	End Pump Cover	3531-0008-00	3531-0008-00	3531-0008-00	1
27-12	Nipple	3231-0151-00	3231-0151-00	3231-0151-00	1
27-13	Lint Filter	*SP-KFA1005	*SP-KFA1005	*SP-KFA1005	1
27-14	Bolt Flange	4329-0016-00	4329-0016-00	4329-0016-00	6
27-15	Output Filter	See SP-KFA1005	See SP-KFA1005	See SP-KFA1005	1
27-16	End Filter Cover	3221-0029-00	3221-0029-00	3221-0029-00	1
27-17	Ball	*SP-KFA1006	*SP-KFA1006	*SP-KFA1006	1
27-18	Spring	See SP-KFA1006	See SP-KFA1006	See SP-KFA1006	1
27-19	Adjusting Screw	See SP-KFA1006	See SP-KFA1006	See SP-KFA1006	1
27-20	Bolt Flange	4329-0016-00	4329-0016-00	4329-0016-00	4
27-21	Intake Filter	See SP-KFA1005	See SP-KFA1005	See SP-KFA1005	1
28	Flange Screw	4319-0015-00	4319-0015-00	4319-0015-00	4
29	Fan Assembly	2154-0010-00	2154-0009-00	2154-0004-00	1
30	Bolt Headless Hex Socket	4323-0004-00	4323-0004-00	4323-0004-00	1
31	Pressure Gauge	3740-0049-00	3740-0049-00	3740-0049-00	1
32	Main P.C.B Assembly	215A-0019-00	215A-0026-00	215A-0023-00	1
33	Screw-TH2S	4312-0046-00	4312-0046-00	4312-0046-00	2
34	Ignitor	39E0-0008-00	39E0-0008-00	39E0-0005-00	1
35	Side Cover-Right	3121-0192-10	3121-0324-13	3121-0328-05	1
36	Power Switch	39A0-0044-00	39A0-0153-00	39A0-0153-00	1
37	Window Display	-	-	3231-0113-00	1
38	Flange Screw	4319-0015-00	4319-0015-00	4319-0015-00	4
39	Side Cover-Left	3121-0190-00	3121-0350-00	3121-0352-00	1
40	Flange Screw	4319-0015-00	4319-0015-00	4319-0015-00	4
41	Shell Upper	3111-0213-01	3111-0213-01	3111-0214-01	1
42	Clip Nut	3131-0182-00	3131-0182-00	-	2
43	Fan Guard	3221-0050-00	3221-0050-00	3221-0051-00	1
44	Flange Screw	4319-0015-00	4319-0015-00	4319-0015-00	6
45	Front Guard	3561-0066-00	3561-0066-00	-	1

FOR TECHNICAL ASSISTANCE SEE YOUR LOCAL RETAILER OR  
CONTACT US AT:

Phone : 1-877-447-4768



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**15. PARTS LIST (RMC-KFA210TDGP-02 Model Only)**

KEY NO.	DESCRIPTION	PART NO.	Quantity
		<b>RMC-KFA210TDGP-02</b>	
25-6	Pump Body	3541-0050-00	1
25-7	Bolt-BH Special	4321-0198-00	2
25-8	Rotor	*SP-KFA1022	1
25-9	Blade	See SP-KFA1022	4
25-10	Insert	See SP-KFA1022	1
25-11	End Pump Cover	3531-0008-00	1
25-12	Elbow	3231-0093-00	1
25-13	Lint Filter	*SP-KFA1005	1
25-14	Bolt Flange	4329-0016-00	6
25-15	Output Filter	See SP-KFA1005	1
25-16	End Filter Cover	3221-0073-00	1
25-17	Ball	*SP-KFA1010	2
25-18	Spring	See SP-KFA1010	2
25-19	Adjusting Screw	See SP-KFA1010	2
25-20	Bolt Flange	4329-0016-00	4
25-21	Intake Filter	See SP-KFA1005	1
26	Flange Screw	4319-0015-00	4
27	Fan Assembly	2154-0007-00	1
28	Bolt - Headless Hex Socket	4323-0004-00	1
29	Pressure Gauge	3740-0049-00	1
30	BTU Control Valve	2154-0061-00	1
31	Main P.C.B Assembly	215A-0023-00	1
32	Screw-TH2S	4312-0046-00	2
33	Ignitor	39E0-0014-00	1
34	Side Cover-Right	3121-0330-09	1
35	Power Switch	39A0-0153-00	1
36	Window Display	3231-0113-00	1
37	Flange Screw	4319-0015-00	4
38	Side Cover-Left	3121-0329-00	1
39	Electric Outlet Assembly	39D0-0263-00	1
40	Outlet Cover	3231-0114-00	1
41	Screw-Top Table	4319-0042-00	1
42	Flange Screw	4319-0015-00	4
43	Shell Upper	3111-0215-01	1
44	Fan Guard	3561-0075-00	1
45	Fan Guard Bushing	3351-0010-00	3
46	Flange Screw	4319-0015-00	6

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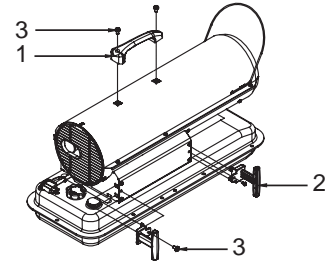


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## 15. PARTS LIST (WHEELS AND HANDLE)

### 1) RMC-KFA45DGP-01/75TDGP-01 MODELS

KEY NO.	DESCRIPTION	PART NO.		Quantity
		RMC-KFA45DGP-01	RMC-KFA75TDGP-01	
1	Handle	3231-0073-00	3231-0073-00	1
2	Cord Wrap	-	3221-0041-00	2
3	Hardware Kit	HW-KFA1000	HW-KFA1001	1



### 2) RMC-KFA125TDGP-01/210TDGP-02 MODELS

KEY NO.	DESCRIPTION	PART NO.		Quantity
		RMC-KFA125TDGP-01	RMC-KFA210TDGP-02	
1	Front Handle	3551-0023-00	3551-0022-00	1
2	Rear Handle	3551-0033-00	3551-0034-00	1
3	Wheel Support Frame	3551-0024-00	3551-0025-00	1
4	Wheel	3720-0016-00	3720-0016-00	2
5	Axle	3551-0066-00	3551-0067-00	1
6	Cord Wrap	3551-0042-00	3551-0042-00	2
7	Hardware Kit	HW-KFA1013	HW-KFA1013	1
7-1	Screw(S)	-	-	2
7-2	Screw(L)	-	-	6
7-3	Flange Screw	-	-	4
7-4	Nut	-	-	12
7-5	Bushing	-	-	2
7-6	Cap Nut	-	-	2
8	Louver	-	2156-0043-00	1

