1045 W. National Avenue Addison, Illinois 60101

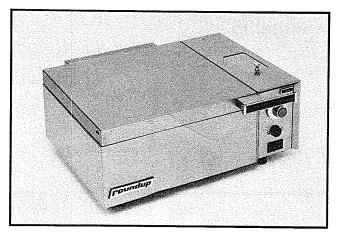
INSTALLATION AND OPERATING INSTRUCTIONS FOR **DELUXE FOOD WARMER MODELS**

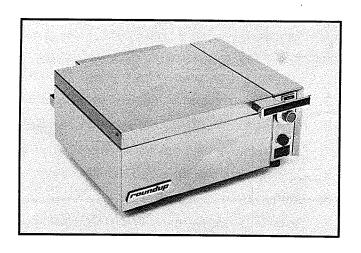




CONTENTS

	Page
Warranty Information	. 2
General Information	. 3
Specifications	. 4
Installation and Operating Instructions	. 6
Wiring Diagrams	. 6
Steaming Tips	. 9
Exploded Views	,12
Parts Lists	.13
Troubleshooting Guide	14
Parts Replacement Instructions	15





P/N1010265 September, 1991

IMPORTANT - READ FIRST - IMPORTANT

Limitation of Liability

It is understood and agreed that seller's liability whether in contract, in tort, under any warranty, in negligence or otherwise shall not exceed the return of the amount of the purchase price paid by purchaser and under no circumstances shall seller be liable for special, indirect or consequential damages. The price stated for the equipment is a consideration in limiting seller's liability. No action, regardless of form, arising out of the transactions may be brought by purchaser more than one year after the cause of action has accrued.

WARRANTY

These units have been constructed of the finest materials available and manufactured to high quality standards. These unts are warranted to be free from mechanical and electrical defects for a period of one year from date of purchase under normal use and service, and when installed in accordance with manufacturer's recommendations. To insure continued proper operation of the units, follow the maintenance procedure outlined in this manual.

- I. This warranty does not include overtime charges or charges for work done by unauthorized service agencies or personnel and is limited to the fifty (50) United States. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating instructions or manuals (see operating manual of specific product); or labor involved in moving adjacent objects to gain access to the Equipment. This warranty does not cover cost of installation, defects caused by improper storage or handling prior to placing the Equipment, malfunction due to improper installation; or the results of abuse, careless operation, or improper maintenance of the Equipment.
- II. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITTNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL ROUNDUP FOOD EQUIPMENT OR A.J. ANTUNES & CO. BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.

THE WARRANTY ON THE UNIT DOES NOT PAY FOR:

1. Damages caused in shipment or damage as a result of improper use.

NOTE: IF UNIT ARRIVES DAMAGED, contact the carrier immediately and file damage claim with them. Save all packing material when filing a claim.

- 2. Installation of electrical/water connections, or installation of water pressure regulators.
- 3. Malfunction resulting from improper maintenance.
- 4. Normal maintenance as outlined in this manual.
- 5. Damage from moisture into electrical components.
- 6. Damage from tampering with, removal of, or changing any pre-set control or safety device.
- 7. Damage caused by abuse or careless handling.
- 8. TRAVEL TIME AND/OR MILEAGE COSTS BY THE SERVICE AGENCY TO REACH STORE LOCATION.

IMPORTANT INFORMATION

The Deluxe Food Warmer you have purchased has been constructed from the finest materials available and manufactured under our high standards. Our Factory has pretested this unit to insure dependability.

TO BECOME FAMILIAR WITH THIS UNIT, PLEASE READ THIS MANUAL CAREFULLY. The manual is complete and contains all the information needed to properly install, operate and maintain your steamer. Following the intructions in this manual will give you years of reliable service from your steamer.

To take full advantage of our warranty, we recommend you fill in the following information.

Model No.	Purchased from	
*Serial #		
*Voltage		
Date Purchased		
Purchase Order #		
Invoice #	Phone	

CAUTION: Use of any replacement part other than those supplied by Roundup Food Equipment Division or their authorized distributors VOIDS ALL WARRANTIES. Service performed by personnel NOT authorized by Roundup Food Equipment Division WILL VOID ALL WARRANTIES.

If you have any questions about warranty coverage, operating or maintenace procedures, contact your local Roundup Agency or Roundup Food Equipment Division at (708) 543-8650.

GENERAL DESCRIPTION

The Deluxe Food Warmer produces a superheated dry steam, using plain tap water, for quick heating and reconstitution of food items. Simple push-button action delivers a fully adjustable impulse of steam. Because the amount of steam is consistent, it removes the guesswork and produces a uniform finished product from one operator to the next.

Model numbers ending in 15 or 60 use an automatic time cycle to cook or reconstitute complete meals with a minimum of attention.

^{*(}Found on Specification plate attached to rear of steamer).

^{**(}Locate the nearest Authorized Service Agency from the enclosed directory.)

SPECIFICATIONS

ELECTRICAL

DFW series: 1500 watts, 12.5 amps, 60 hz, with a six foot (1.8m) grounded power cord.

(Int'l - 1375-1635 watts, 6.3-6.8 amps, 50 hz, with a 1.8m power cord)

DFWT series: 1750 watts, 14.6 amps, 60 hz, with a six foot (1.8m) grounded power cord.

(Int'l — 1600-1905 watts, 7.3-7.9 amps, 50 hz, with a 1.8m power cord)

DFWT series: 3000 watts, 13.1 amps, 60 hz, with a six foot (1.8m) grounded power cord.

(Int'l - 2750-3270 watts, 12.5-13.6 amps, 50 hz, with a 1.8m power cord)

DIMENSIONS - SHIPPING WEIGHT

Model DFW-100 series — 16-1/2 w (41.9 cm) × 8-1/8 h (20.7 cm) × 17-1/4 d (43.8 cm) — 40 lb. (18.2 kilos)

Model DFW-200 series — 15-1/4 w (38.7 cm) × 8-1/8 h (20.7 cm) × 17-1/4 d (43.8 cm) — 40 lb. (18.2 kilos)

Model DFWT-100 series — 20 w (20.8 cm) \times 8-1/8 h (20.7 cm) \times 17-1/4 d (43.8 cm) — 54 lb. (24.5 kilos)

Model DFWT-200 series — 18-3/4 w (47.6 cm) × 8-1/8 h (20.7 cm) × 17-1/4 d (43.8 cm) — 54 lb. (24.5 kilos)

Model DFWF-260C — 27 w \times (68.6 cm) \times 9-3/8 h (23.8 cm) \times 17-1/4 d (43.8 cm) — 75 lb. (33.6

kilos)

CAPACITIES

DFW-Series — Half-size steam table pan, 2-7/8" (7.3 cm) deep

DFWT-Series — Two-thirds size steam table pan, 2-7/8" (7.3 cm) deep

DFWF-260C — Full-size steam table pan, 4" (10.2 cm) deep

WATER SUPPLY

NOTE: Deluxe Food Warmers are designed to use cold tap water. Distilled water may be used to reduce mineral deposit build-up and reduce maintenance costs.

DFW/DFWT-100 Series

These models have a self-contained water supply, and are portable. The water tank capacity is approximately three (3) quarts (2 Liters). An electric pump moves the water into the steam generator.

DFW/DFWT-200, DFWF-260C

These models require a direct water connection. A flexible water line with a quick-disconnect fitting is supplied, ready to connect to a water supply. The incoming water is controlled by an electric solenoid.

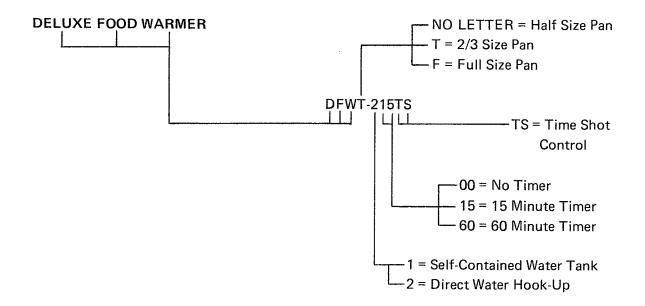
NOTE

Water supply pressure must not exceed 30 psi (2.1 kg/cm² or 207 kPa). Higher water pressures may cause poor performance or flooding. To reduce water pressure, install a water pressure regulator, and set water pressure between 20-30 psi (1.4-2.1 kg/cm² or 138-207 kPa).

4

To order a water pressure regulator from your dealer, specify Roundup Part Number 217K105.

MODEL DESIGNATION



THEORY OF OPERATION

DFW-100/200

When the Operate Switch is pressed, power is applied to the water pump (or solenoid). The pump operates (or the solenoid opens), and water sprays onto the heated Steam Generator. The water flashes into live steam immediately, and surrounds the product with heat.

DFW-100TS/200TS

When the Operate Switch is pressed, power is applied to the cube timer. The cube timer operates the water pump (or solenoid) for a preset time, which sprays a consistent amount of water each time the switch is pressed. This feature eliminates under or oversteaming the product.

DFW (Timer Models)

One of two modes can be used — Manual or Automatic. In Manual, the steamer works like a DFW-100/200 (above). In Automatic, the 15 or 60 minute timer is set to the desired cook time, then the Main Timer Button is pressed. The Main Timer applies power to the cube timer, and the cube timer operates the water pump (or solenoid) every 20 seconds for the entire timed cycle. When the cycle is complete, the main timer turns off power to the cube timer, the 'ready' lamp lights, and the unit is ready for the next cycle.

NOTE

The timer dial will not move down to the zero mark. This design feature allows the operator to repeat the time cycle without resetting the dial.

5

INSTALLATION

Remove all packing materials, inserts, and covering materials from the inside and outside of your new steamer. Wash the perforated pan and trivet in mild soap and water, then rinse in clear water.

DFW-100/DFWT-100 SERIES use plain tap water to produce steam. To fill the self-contained water tank, open the sliding tank cover on the top of the Deluxe Food Warmer. Pour in cold tap water — the water tank will hold about three (3) quarts. Be sure the water tank filter is installed properly (see Page 10, Item 12), then close the water tank cover. Connect the power cord plug to a proper receptacle.

DFW-200/DFWT-200 SERIES require a direct water hookup. An installation kit is packed inside the unit. Connect the 1/4" (6.5 mm) compression fitting to your water supply, and push the quick-disconnect insert (Item 40, Page 12) into the fitting (Item 24, Page 12) on the back of the Food Warmer.

THIS EQUIPMENT IS TO BE INSTALLED TO COMPLY WITH THE BASIC PLUMBING CODE OF THE BUILDING OFFICIALS AND CODE ADMINISTERS, INC. (BOCA) AND THE FOOD SERVICE SANITATION MANUAL OF THE FOOD AND DRUG ADMINISTRATION (FDA).

NOTE: Incoming water pressure must not exceed 30 psi. If necessary, install a water pressure regulator to reduce incoming water pressure. See Page 17 for more information.

Connect the power cord plug to a grounded 20 amp receptacle.

OPERATION

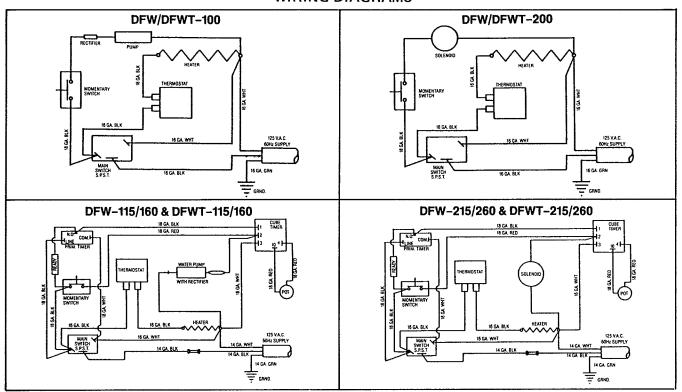
- 1. Move the Power switch to "ON" (pilot light on)
- 2. Allow the unit to preheat for 15 minutes

NOTE: DO NOT PUSH THE OPERATE SWITCH DURING PRE-HEAT

- 3. Open the Top Cover
- 4. Place the product to be steamed in the pan
- 5. Close the Top Cover
- Manual models Press Operate Switch for 1-2 seconds and wait 15-20 seconds for the steam to penetrate the product. See Steaming Tips on Page 9

Timer models — Press Operate Switch for a short burst of steam, or press the Main Timer Button for a timed cycle. See Steaming Tips on Page 9.

WIRING DIAGRAMS



SPECIAL INSTRUCTIONS DELUXE FOOD WARMERS DFW-100/200 SERIES

REMOVING THE ACCESS COVER

CAUTION: Turn the Power Switch OFF and unplug the Power Cord before starting this procedure.

DFW-100 Series

- 1.1 Remove water from water tank.
- 1.2 Remove 5 (five) screws as shown in Figure 1.

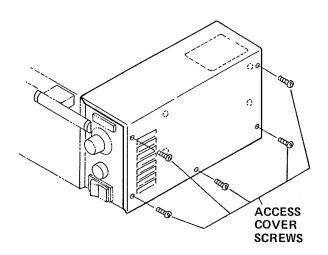


Figure 1

1.3 Remove clamp (Item L) holding the silicone tube to the water tank. Remove the Water Line Filter.

CAUTION: Water may come out of the silicone tube or the water tank.

- 1.4 See Special Instructions Index for part replacement instructions.
- 1.5 Reverse steps 1-3 to install access cover.

DFW-200 Series

- 1.1 Remove the water quick-disconnect fitting from the rear of the unit.
- 1.2 Remove the five (5) screws as shown in Figure 1.
- 1.3 See Special Instructions Index for part replacement instructions.
- 1.4 Reverse steps 1 and 2 to install Access Cover.

CHECKING AND CLEANING THE STEAM GENERATOR

The Deluxe Food Warmer uses an open Steam Generator. Water sprayed onto the Generator surface "flashes" into steam immediately, but the minerals in the water do not steam - they stay on the surface. A small amount of deposits is needed for proper operation, but a build-up of deposits causes poor steaming efficiency, excessive moisture ("wet steam"), and eventually stops the steaming action completely.

To check the amount of buildup, scrape the Steam Generator surface next to the spray tube with a screwdriver. The buildup is excessive when the deposits come off in layers, or "flakes". Sometimes the buildup is thin, but the water won't steam - it just rolls around and sizzles off slowly. Both problems mean that the Steam Generator surface needs to be cleaned. When in doubt, clean the Generator!

To Clean the Steam Generator:

- 2.1 Turn the Power switch OFF.
- 2.2 Unplug the Power Cord.
- 2.3 Allow the unit to cool completely.
- 2.4 Remove the Perforated Pan, Trivet, and Diffuser.
- 2.5 Mix one package of DeLimer in one pint of water and pour onto the Steam Generator surface.
- 2.6 Allow the DeLimer to soak in for at least one hour.
- 2.7 Carefully use a brass or stainless brush/scrubber on heavy buildup.
- 2.8 Remove Spray Tube from Steam Generator by lifting the loose end and pulling it out of the Steam Generator.
- 2.9 Slide the metal cover off, then flex the tube under running water to wash deposits out of the open end.

NOTE: DO NOT BEND THE SPRAY TUBE!! THE TUBE IS TEFLON, AND BENDING CAUSES PERMANENT DAMAGE.

2.10 Slide the metal cover on, and insert the spray tube into the Steam Generator opening.

NOTE: DO NOT FORCE THE SPRAY TUBE INTO THE OPENING! IF YOU HAVE DIFFICULTY INSERTING THE SPRAY TUBE, REMOVE THE MINERAL DEPOSITS FROM THE OPENING WITH A ROUND BRUSH.

- 2.11 Remove DeLimer from the Steam Generator and rinse with clear water to remove all traces of DeLimer.
- 2.12 Fill Steam Generator 1/2" inch (1.5 cm) deep with tap water.

NOTE: The Steam Generator must have a light coating of deposits on it to seal the surface and promote steaming. In most cases, the 1/2" (1.5 cm) of tap water will seal the Generator as the water steams away during warmup. See Troubleshooting Instructions for more help.

- 2.13 Reinstall the Diffuser, Perforated Pan, and Trivet.
- 2.14 Plug in the Power Cord, and turn on the Power switch.
- 2.15 Allow the unit to warmup for 20 minutes.

NOTE: THE UNIT WILL STEAM DURING THIS WARMUP.

NOTE: DO NOT PUSH THE OPERATE SWITCH DURING WARMUP.

WATER FILTERS

DFW-100

If solids or food products enter the Water Pump of your DFW, clogging or damage may occur. To prevent this, two (2) filters are used - 1) A Water Tank Filter (Item 12) that stands up in the water tank, and 2) A cone-shaped Water Line Filter (Item 13) at the bottom of the water tank tube.

CLEAN WATER TANK FILTER

Open access cover (Item 11) and remove Water Tank Filter by pulling it up and out of the bottom of the water tank. Examine the filter to be sure it has the extension (clear tube) attached to the open end. Clean the screen area under running water, if needed.

If the extension is missing or the screen area is torn or damaged, replace the Water Tank Filter.

CLEAN WATER LINE FILTER

Remove the Access Cover (Special Instruction) and remove the Water Tank Filter from the bottom of the water tank tube (The filter may be stuck in the silicone tube). Clean the screen area under running water, if needed.

If the screen area is torn or damaged, replace the Water Line Filter.

ADJUST THE TIME SHOT CONTROL

The amount of steam produced by your Deluxe Food Warmer depends on the amount of water sprayed onto the Steam Generator. The Time Shot Control is used to control the amount of water that is sprayed onto the Steam Generator during each pump/solenoid operation, or "shot".

NOTE: The Time Shot Control is not used on Model DFW-100 or Model DFW-200.

Problems of too much or too little water may be solved by adjusting the Time Shot Control, but high water pressure (more than 30 psi/2.1 kg/cm²/207 kPa) must be reduced to 20-30 psi (1.4-2.1 kg/cm²/137.9 — 207 kPa) for proper operation and consistent performance. See Page 17 for more information.

To adjust the time shot control:

- 4.1 Remove Access Cover (See Section 2).
- 4.2 Locate Time Shot Control (See Figure 2).

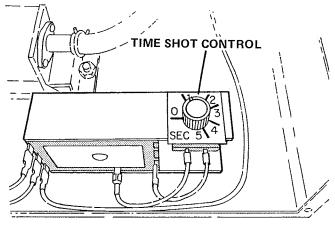


Figure 2

4.3 Move Time Shot Control Knob -

CLOCKWISE (to a HIGHER number) to IN-CREASE the amount of water per shot.

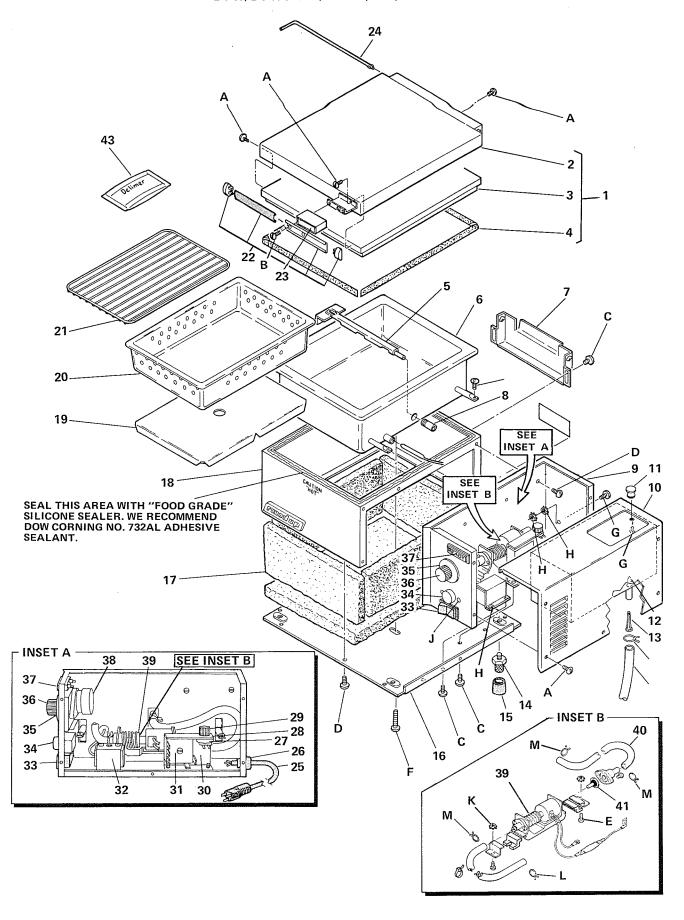
COUNTERCLOCKWISE (to a LOWER number) to DECREASE the amount of water per shot.

- 4.4 Install Access Cover
- 4.5 Test Operation of Steamer
- 4.6 If opertion is satisfactory, return steamer to service. If further adjustment is needed, repeat steaps 4.1 thru 4.5.

STEAMING TIPS

- * Precooked pasta is easily reconstituted, and gives you a hot product without the wetness of the normal "dip" method.
- * Experiment with your products and different steaming times a little more or less steam could change the appearance/flavor.
- * If you serve melted cheese on sandwiches, steam is the perfect way to melt the cheese.
- * Since we eat with all of our senses, a steamed bun (which takes about 10-15 seconds) says "Hot Sandwich" to your customer.
- * Vegetables, rice, and bread products can be reconstituted by steaming before serving cuts down waste.
- * Dinner rolls, muffins, even tortillas can be heated completely and held without drying out the product.
- * Use a low plate or pan when steaming to allow full steam penetration and shorter cooking times.
- * You can lift the lid at any time but be sure to let the steam evaporate before putting your hands or face over the steamer.
- * To get the best from your steamer, use the "1 in 20" rule push the Operate Switch for one second every twenty seconds. By using "1 in 20", your product gets fully heated without using excess water or energy.
- * Condensation inside the steamer is normal, but excess moisture indicates too much water is being used. Use the "1 in 20" rule to correct this problem, and examine the Steam Generator it may need cleaning.
- * Heat meat and bread products apart from each other, then combine in a sandwich. This will keep the meat juices from soaking the bread.
- * Clean the Top Cover gasket as often as possible, or at least once a day.
- * Finish off a special meal with a steamed hand towel hot without excess moisture.

DFW/DFWT-100/100TS/115/160



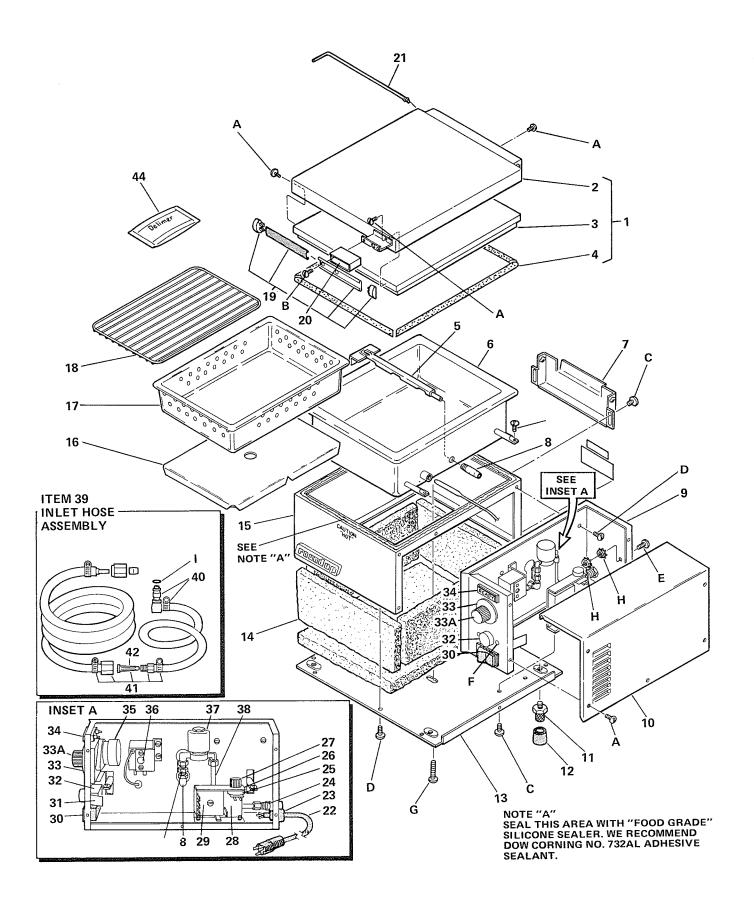
DFW/DFWT-100/100TS/115/160

		DF	W/DFW
ITEM	PART NO.	DESCRIPTION	QTY
1	0010399	Top Cover Assembly-DFW Series	1
	0040000	(Includes Items 2, 3 & 4)	
	0010398	Top Cover Assembly-DFWT Series (Includes Items 2, 3 & 4)	1
2	0020578	Top Cover Shell-DFW Series	1
"	0020577	Top Cover Shell-DFWT Series	i
3	0020471	Top Cover Liner-DFW Series	1
	0020576	Top Cover Liner-DFWT Series	1
4	0200146	Gasket, Top Cover-DFW Series	1
5	0200147 0010145	Gasket, Top Cover-DFWT Series Spray Tube Assembly-DFW	1
1 "	0010145	Spray Tube Assembly-DFWT	1
6	0100172	Steam Generator, DFW, 120 vac	1
1	0100175	Steam Generator, DFW, 220-240	l i
		vac, 50 hz	
	0100173	Steam Generator, DFWT, 120 vac	1
	0100176	Steam Generator, DFWT, 220-240	1
7	0501569	vac, 50 hz Top Cover Hinge	
8	2109101	Steam Generator Tube (DFW/	1 1
"	2190101	DFWT-100 Series)	'
9	0501544	Electrical Housing (Timer Models)	1
	0501542	Electrical Housing (Non-Timer	1
1.0	0040400	Models)	_
10 11	0010400 2100170	Access Cover Assembly Water Tank Knob (Includes	1
''	2100170	attaching screw)	1
12	0010159	Water Tank Filter	1
13	2090101	Water Line Filter	i
14	210K104	Leg Kit (Set of four, includes Item	1
1	2101/100	15)	
15 16	210K108 0020569	Rubber Foot Tip Kit (set of 4) Base Plate (DFW-100, DFW-100TS,	1
''	0020303	DFW-115, DFW-160)	'
	0020571	Base Plate (DFWT-100, DFWT-	1
l		100TS, DFWT-115, DFWT-160)	
17	0400116	Insulation Kit (DFW)	1
18	0400117 0020573	Insulation Kit (DFWT) Main Housing (DFW Series)	1
1 ''	0020574	Main Housing (DFWT Series)	1
19	0500299	Diffuser Pan (DFW Series)	i
1	0500323	Diffuser Pan (DFWT Series)	1
20	2130102	Perforated Pan (DFW Series)	1
21	2130103 0800106	Perforated Pan (DFWT Series) Trivet (DFW Series)	1
"	0800108	Trivet (DFWT Series)	1 1
22	210K191	Handle Kit	
23	0020729	Handle Bracket Cover	1
24	0800219	Top Cover Hinge Pin	1
25	0700119 0700373	Power Cord-120 vac	1
26	040P112	Power Cord-220-240 vac Strain Relief-120 vac (Pkg. of 10)	1
-"	040F129	Strain Relief-220-240 vac (Pkg. lf 10)	1
27	0020526	Time Shot Control (Includes	1
00	4000555	Items 28 & 29)	
28	1000585	Label (0-5 seconds)	1
30	2100115 0500348	Knob Time Shot Control Bracket	1
31	4020154	Solid State Timer (Cube Timer)	1
		DFW-100TS, DFWT-100TS (120	
		vac, Timer Models)	
	4020168	Solid State Timer (Cube Timer)	1
1		DFW-115, DFW-215, DFWT-115, DFWT-215 (120 vac, Timer Models)	
1	4020175	Solid State Timer (Cube Timer)	1
1		DFW/DFWT, All Models (220-240	'
		vac, 50 hz, Timer Models)	

ITEM	PART NO.	DESCRIPTION	QTY
32	4030157	Thermostat	1
33	4010104	Power Switch - 120 vac	1
	4010105	Power Switch - 220-240 vac, 50 hz	1
34	4010106	Operate Switch	1
35	2100120	Timer Dial-15 minute (Includes Item 36)	1
35	2100121	Timer Dial-60 minute (Includes Item 36)	1
36	2180109	Timer Dial Center Button	1
37	4060102	"READY" LIGHT - 120 vac	1
	4060123	"READY" LIGHT - 220-240 vac, 50 hz	1
38	4020102	Main Timer-15 minute (120 vac)	1
	4020103	Main Timer-60 minute (120 vac)	1
	4020104	Main Timer-15 minute (220-240 vac, 50 hz	1
	4020105	Main Timer-60 minute (220-240 vac, 50 hz	1
39	404K101	Water Pump kit, Includes Item 40, Silicone Tube Kit (120 vac, DFW/DFWT Models)	1
	404K102	Water Pump Kit, Includes Item 40, Silicone Tube Kit (220-240 vac, 50 hz DFW/DFWT Models)	1
40	202K101	Silicone Tube Kit (Includes two Tubes)	1
41	4040108	Check Valve	1
42	0700118	Wire Set-DFW/DFWT-100	1
	0700206	Wire Set-DFW/DFWT-100 TS	1
	0700349	Wire Set-DFW/DFWT-115/160	1
43	2140122	DeLimer (DeLiming Cleaner)	1

Hardware items are available only in packages of ten each.

ITEM	PART NO.	DESCRIPTION	ΩТΥ
Α	308P103	Screw, #8-32 x 1/4" - SS	
В	308P151	Screw, #8-32 x 5/16" w/Lockwasher	1
		– SS	İ
C	308P104	Screw, #8-32 x 3/8" — SS	1
D	308P116	Screw, #8-32 x 1/4" - Zinc	
E	308P108	Screw, #8-32 x 3/4" — SS	
F	325P106	Screw, 1/4"-20 x 2" - Zinc	
G	308P105	Screw, #8-32 x 1/2" - SS	
H	300P102	"U" Type Tinnerman	
	308P101	Hex Nut, #8-32 - SS	
J	306P104	Screw, #6-32 x 1/4" — SS	
К	306P143	Hex Nut, #8-32 "KEPS"	
L	211P101	Hose Clamp, 3/8" Diameter	
M	211P103	Hose Clamp, 1/2" Diameter	



DFW/DFWT-200/200TS/215/260

1		ITEM	PART NO	DESCRIPTION	αту
Continue		+			
0010398		'	0010000		'
2			0010398		1
1			0000570		
3		2	1	• · · · · · · · · · · · · · · · · · · ·	1 '
1		3	1		1
4		"			1 '
0200147 Gasket, Top Cover-DFWT Series 1		4			1 '
0010146 Spray Tube Assembly-DFWT 1 1 1 1 1 1 1 1 1				Gasket, Top Cover-DFWT Series	1
6		5	ł		
0100175 Steam Generator, DFW, 220-240 vac, 50 hz			1		
Vac, 50 hz Steam Generator, DFWT, 120 vac 1		ь	3		1 '
0100173			0100175		'
			0100173		1
7			3		I
Steam Generator Tube (DFW/DFWT-200 Series) (Includes Generator Tube, 90° elbow, and connector fittings) Steam Generator Tube, 90° elbow, and connector fittings) Steam Generator Tube, 90° elbow, and connector fittings Steam Generator Tube, 90° elbow, and connector Tube, 90° elbow, and connector Tube, 90° elbow, and connector fittings Steam Generator Tub				vac, 50 hz	
DFWT-200 Series) (Includes Generator Tube, 90° elbow, and connector fittings) Electrical Housing (Timer Models) 1 Electrical Housing (Non-Timer Models) 1 Access Cover Assembly 1 Leg Kit (Set of four, includes Item 15) 12 210K104 Rubber Foot Tip Kit (set of 4) 1 Base Plate (DFW-200, DFW-200TS, DFW-215, DFW-200, DFW-200TS, DFW-215, DFWT-215, DFWT-260) Insulation Kit (DFW) 1 Insulation Kit (DFW Series) 1 Diffuser Pan (DFW Series) 1 Diffuser Pan (DFW Series) 1 Diffuser Pan (DFW Series) 1 Derforated Pan (DFW Series) 1 Perforated Pan (DFW Series) 1 Perforated Pan (DFW Series) 1 Trivet (D					1 '
9		8	200K132		1
9					
9				· .	
10		9	0501544		1
10			0501543		
11				,	l
12					
12		11	210K104		1
13		12	2101/108		,
DFW-215, DFW-260) Base Plate (DFWT-200, DFWT-200TS, DFWT-215, DFWT-260) Insulation Kit (DFW) 1 Insulation Kit (DFW) 1 Insulation Kit (DFWT) 1 1 1 1 1 1 1 1 1					1 .
14			0020070		l '
14	1		0020572	Base Plate (DFWT-200, DFWT-	1
15					
15	i	14	ž i		ł -
16	ı	15	4		
16	l			•	-
17		16	0500299		1
18					
18	ı	17			
19	1	10			1 :
19		10	i :		
20	I	19		,	
22		20		Handle Bracket Cover	1
23					
23		22			
040P129 Strain Relief-220-240 vac, 50 hz (Pkg. of 10)	-	23			
24 2080106 Quick Disconnect Body 1	ı	20	1		!
24	١				•
Comparison of Control of Contro	I	24	2080106		1
0020526	ı	25	0020194		1 .
Control of the cont	I		0020520	·	
26	ı		UUZU5Z6		1
1000585	١	26	1000293	•	1
27	1		1		
29	1		2100115	Knob	
for DFW-200TS (120 vac, TS Model) 4020168 Solid State Timer (Cube Timer) for DFW-115, DFW-215, DFWT-115, DFWT-215 (120 vac models) Solid State Timer (Cube Timer) for all DFW/DFWT Models (220-240				· · · · · · · · · · · · · · · · · · ·	
4020168 Solid State Timer (Cube Timer) 1 for DFW-115, DFW-215, DFWT-115, DFWT-215 (120 vac models) Solid State Timer (Cube Timer) for all DFW/DFWT Models (220-240	I	29	4020124		1
for DFW-115, DFW-215, DFWT-115, DFWT-215 (120 vac models) 4020175 Solid State Timer (Cube Timer) for all DFW/DFWT Models (220-240	١		/N20100		4
DFWT-215 (120 vac models) 4020175 Solid State Timer (Cube Timer) for all DFW/DFWT Models (220-240	١		4020100		i
4020175 Solid State Timer (Cube Timer) for 1 all DFW/DFWT Models (220-240	١				
	١		4020175		1
vac, 50 hz models)	١				
	L			vac, 50 hz models)	

ITEM	PART NO.	DESCRIPTION	ΩТΥ
30	4010104	Power Switch - 120 vac	1
	4010105	Power Switch - 220-240 vac, 50 hz	1
31	0400236	Insulator (DFW/DFWT-215/260)	1
32	4010106	Operate Switch	1
33	2100120	Timer Dial-15 minute (Includes	1
		Item 33A)	
	2100121	Timer Dial-60 minute (Includes	1
		Item 33A)	
33A	2180109	Timer Dial Center Button	1
34	4060102	"READY" Light - 120 vac	1
	4060123	"READY" Light - 220-204 vac	1
		50 hz	
35	4020102	Main Timer-15 minute (120 vac)	1
	4020103	Main Timer-60 minute (120 vac)	1
	4020104	Main Timer-15 minute (220-240 vac)	1
		50 hz)	
	4020108	Main Timer-60 minute (220-250 vac,	1
		50 hz)	
36	4030157	Thermostat	1
37	0020699	Solenoid Kit-120 vac (Includes	1
		90° elbows)	
	0020742	Solenoid Kit-220-240 vac (Includes	1
	0004400	90° elbows)	
38	200K133	Inlet Tube Kit	1
39	0010492	Inlet Hose Assembly	1
40	2080105	Quick Disconnect Insert	1
41	209K101	Filter Kit	1
42	2090101	Water Line Filter	1
MOT	0700118	Wire Set - DFW-200, DFWT-200	1
(NOT	0700206	Wire Set - DFWT-200TS,	1
SHOWN	0700040	DFW-200TS	
	0700349	Wire Set - DFWT-115, DFWT-215	1
44	0700118	Wire Set - DFW-200, DFWT-200	1
44	2140122	DeLimer (DeLiming Cleaner)	1

Hardware items are available only in packages of ten each.

ITEM	PART NO.	DESCRIPTION	ΩТΥ
Α	308P103	Screw. #8-32 x 1/4" - SS	
В	308P151	Screw, #8-32 x 5/16" - SS	
C	308P104	Screw, #8-32 x 3/8" - SS	ı
D	308P116	Screw, #8-32 x 1/4" - Zinc	ļ
E	308P105	Screw, #8-32 x 1/2" - SS	
F	306P104	Screw, #6-32 x 1/4" - SS	
G	325P106	Screw, 1/4' -20 x 2" - Zinc	
Н	308P143	Hex Nut, #8-32 "KEPS"	
ı	020P117	O-Ring	

TROUBLESHOOTING GUIDE

IMPORTANT: Servicing is to be performed by a qualified service person. **NOTE:** Refer to electrical schematic for troubeshooting assistance.

PROBLEM	PROBABLE CAUSE	SOLUTION
Unit will not heat up. Rocker switch is on.	Unit is not plugged into outlet.	Plug power cord into outlet.
HOCKER SWITCH IS OIL.	Loose Connections	Check continuity of wiring. Tighten as needed.
	Circuit breaker is off or has been tripped in main supply.	Turn on or reset circuit breaker.
	Defective wiring.	Replace defective wiring. Review schematic drawing to insure proper wiring.
	Defective power cord.	Check continuity of wires. Replace if defective.
	Defective power (on/off) switch	If there is power to the switch but no power coming out, replace the switch.
	Defective thermostat	If there is power to the thermostat but no power coming out, replace the thermostat. Check the thermostat when unit is cold.
	Defective generator	Test element for continuity, and check for heat when power is applied to element. If no continuity, and/or no heat, replace generator.
Unit heats up but will not steam.	Water tank out of water. (DFW-100 Series.)	Add water to reservoir.
	Water supply is not connected or is shut off. (DFW-200 Series.)	Connect and/or open main water supply. Remove quick disconnect from back of unit. Depress insert quick disconnect plunger. If water does not come out, check water line for blockage.
	Water supply line is pinched.	DFW-100 Series — Remove access cover and straighten flexible lines. DFW-200 Series - Straighten water line.
	Water spray tube is clogged.	Remove spray tube and clean out. See monthly maintenance.
	Water filters clogged.	Remove filter and clean. See special instructions.
	Loose electrical connection at water pump/solenoid valve.	Check continuity of wiring.
	Defective water pump/solenoid valve	If power is going to the pump/solenoid and it does not work, then replace the pump/solenoid.
	Defective operate switch.	If there is power to the operate switch but no power coming out when the button is pushed in, then replace operate switch.
Water from spray tube is reduced compared to	Spray tube is ''clogged.''	Clean spray tube.
former operation.	Water pump is defective.	Replace water pump.
Unit steams continually or becomes flooded.	Insufficient pre-heat.	Remove excess water from generator casting. Allow 20 minutes before operating steamer. Do not operate steamer during pre-heat period.
	Clogged or punctured check valve in water pump. (Self-contained models)	Clean or replace check valve.
	Thermostat setting too low	Surface temperature of casting should be between 350°-375°F (177°C and 191°C). If too low, replace the thermostat.
	Defective solenoid valve/water pump.	If power is going to pump/solenoid and it does not work, then replace the pump/solenoid.
	Defective water pump. (DFW-100 Series.)	Inspect check valve. If check valve is good and water flows continuously with or without timer cycle set, replace pump.
	Defective solenoid. (DFW-200 Series.)	If water flows continuously with or without timer cycle set, replace solenoid.
	DFWF Series only: Continuous steam switch on.	If timer cycle is not set but unit steams approximately every 20 seconds the continuous steam switch is on.

TROUBLESHOOTING GUIDE - Continued

DFW-100 SERIES ONLY

PROBLEM	PROBABLE CAUSE	SOLUTION	
Water leaking in Water pump impeller is cracked or damaged.		Replace water pump.	
Timer Models only			
Unit heats up, pump or solenoid valve works with momentary but will not	If READY light does not work but unit steams approximately every 20 seconds READY light is defective.	Replace READY light.	
steam during timer cycles.	If READY light does not work and unit does not steam approximately every 20 seconds main timer is defective.	Replace main timer.	

REPLACEMENT INSTRUCTIONS FOR ELECTRICAL COMPONENTS

- 1) Solenoid
- 2) Thermostat
- 3) Main Timer (If Used)
- 4) Operate Switch
- 5) Power Switch
- 6) Time Shot Control (If Used)

- 7) Solid State Timer (If Used)
- 8) Water Pump
- 9) Ready Light
- 10) Power Cord
- 11) Steam Generator

TURN OFF THE POWER SWITCH AND UNPLUG THE POWER CORD, THEN REMOVE THE ACCESS COVER BEFORE BEGINNING THESE PROCEDURES

- SOLENOID. Tools required: 1/2 inch Open End Wrench, Adjustable Wrench or Long-Nose Pliers.
- 1.1 Loosen connections on solenoid using 1/2 inch open end wrench.
- 1.2 Disconnect one wire from solid state timer and second wire from heater terminal.

CAUTION: Hold heater terminal with long-nose pliers when loosening or tightening connections.

- 1.3 Reverse above steps to install replacement solenoid.
- 2. THERMOSTAT. Tools required: Straight Blade Screwdriver.
- 2.1 Remove screws holding thermostat to sidewall using straight blade screwdriver.

- 2.2 Move wires, one at a time, to replacement thermostat.
- 2.3 Pull capillary bulb out of casting.
- 2.4 Insert replacement capillary bulb into casting.
- 2.5 Attach replacement thermostat to sidewall.
- 3. MAIN TIMER. Tools required: Straight Blade Screwdriver and 1/16 inch Hex Wrench.
- 3.1 Remove Timer Dial by loosening setscrew with 1/16 inch hex wrench.

NOTE: Timer Dial Button is pressed on, and comes off with the Timer Dial.

3.2 Remove two screws that hold Main Timer with straight blade screwdriver.

NOTE: If needed, remove two screws holding thermostat to sidewall and move thermostat away from Main Timer to make room for Main Timer removal.

- 3.3 Move wires, one at a time, to replace Main Timer.
- 3.4 Reverse above procedures to install replacement Main Timer.

NOTE: Tighten Timer Dial setscrew on flat part of Main Timer shaft — Timer Dial Button should be even with front of Timer Dial after installation.

- 4. **OPERATE SWITCH.** Tools required: Straight Blade Screwdriver.
- 4.1 Remove two screws holding Operate Switch using straight blade screwdriver.

NOTE: If an Insulator (Stiff paper) is in place around the Operate Switch, make a sketch of the Switch and Insulator assembly for correct reinstallation.

- 4.2 Move wires to replacement Operate Switch one at a time.
- 4.3 Reverse above procedures to install replacement Operate Switch.

NOTE: If an Insulator was in place around the Operate Switch, it **MUST** be re-installed.

- POWER SWITCH. Tools required: Straight Blade Screwdriver.
- 5.1 Remove Operate Switch.
- 5.2 Squeeze tabs on both sides of Power Switch while pushing it out of its hole.
- 5.3 Move wires to replacement Power Switch, one at a time, using straight blade screwdriver.

NOTE: Tighten terminals carefully to avoid damage.

- 5.4 Reverse above procedures to install replacement Power Switch.
- 6. TIME SHOT CONTROL. Tools required: 1/2 inch Open End Wrench and 1/16 inch Hex Wrench.
- 6.1 Remove Time Shot Control Knob using 1/16 inch hex wrench.

- 6.2 Loosen nut using 1/2 inch open end wrench and remove Time Shot Control.
- 6.3 Disconnect red wires from Solid State Timer (one at a time) and connect replacement Time Shot Control wires.
- 6.4 Reverse above procedures to install replacement Time Shot Control.

NOTE: Turn Time Shot Control Knob fully counterclockwise, then install and tighten Time Shot Control Knob. White line on Knob must point to "0" before tightening.

- 7. **SOLID STATE TIMER.** Tools required: Straight Blade Screwdriver, Adjustable Wrench, and 3/8 inch Open End Wrench.
- 7.1 Remove Solid State Timer screw and nut using straight blade screwdriver and an adjustable wrench or a 3/8 inch open end wrench.
- 7.2 Move wires (one at a time) to replacement Solid State Timer.
- 7.3 Install and tighten screw and nut on replacement Solid State Timer.
- 8. **WATER PUMP**. Tools required: Straight Blade Screwdriver, Adjustable Wrench and Long-Nose Pliers.
- 8.1 Remove two screws and nuts holding Pump Mount Brackets using a straight blade screw-driver and an adjustable wrench or a long-nose pliers.
- 8.2 Remove Spring Clamp and Silicone Tube from Generator Tube.
- 8.3 Remove White wire from Right Side Heater Terminal.
- 8.4 Hold heater terminal with a long-nose pliers when loosening or tightening connections to prevent damage.
- 8.5 Remove black wire from Operate Switch (or Solid State Timer) and remove Water Pump from unit.
- 8.6 Reverse above procedures to install replacement Water Pump.
- 9. READY LIGHT. Tools required. None

16

- 9.1 Squeeze tabs on each side of Ready Light while pushing it out of its hole.
- 9.2 Push replacement Ready Light wires through the hole from the front.

- 9.3 Disconnect existing Ready Light wires and attach replacement Ready Light wires.
- 9.4 Discard old Ready Light and snap replacement into hole.
- POWER CORD. Tools required: Strain Relief Pliers or Long-nose Pliers and 3/8 inch Open End Wrench.
- 10.1 Remove Power Switch (See instruction 5) and disconnect Black Power Cord wire.
- 10.2 Remove White Power Cord wire from Heater Terminal.

NOTE: Hold heater terminal with a long-nose pliers when loosening or tightening connections to prevent damage.

- 10.3 Remove nut holding (Green) wire to Ground screw using an adjustable wrench.
- 10.4 Squeeze Strain Relief with Strain Relief Pliers or a long nose pliers, and pull Power Cord out of unit.
- 10.5 Reverse above procedures to install replacement Power Cord.

- 11. STEAM GENERATOR. Tools required: Straight Blade Screwdriver, 1/2 inch Open End Wrench, 9/16 inch Open End Wrench or an Adjustable Wrench.
- 11.1 Remove Solenoid (or Water Pump), Thermostat and Capillary Bulb, Generator Tube and wires from Heater Terminals.
- 11.2 Turn unit on one side and remove screws holding Base Plate to Main Housing, including large screw near center of Base Plate.
- 11.3 Remove Insulation, then press Steam Generator out of the Main Housing. It may be necessary to cut the sealant around the top of the Steam Generator to help remove it.

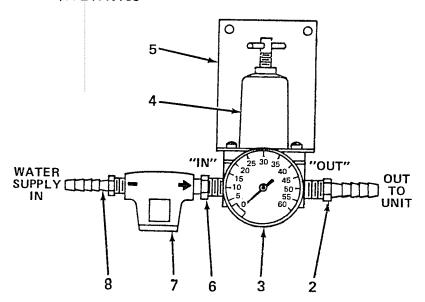
WATER PRESSURE REGULATOR

For consistent steaming and proper performance, incoming water pressure to the steamer must not exceed 30 psi (2.1 kg/cm² or 207 kPa).

A water pressure regulator lowers incoming water to the desired pressure, and allows consistent steaming regardless of incoming pressure changes.

Roundup part number 217K105, shown below, connects easily to a flexible 1/4" (6.5 mm) hose, and can be ordered from your Roundup Dealer.

WATER PRESSURE REGULATOR KIT – SINGLE UNIT P/N 217K105



ITEM	DESCRIPTION	
1	Hose Clamp	
	(Not Shown)	
2	Hose Fitting	
3	Pressure Gauge	
	(0-60 PSI)	
4	Pressure Regulator	
	(Factory Set @ 25 PSI)	
5	Bottom Bracket	
6	Reducing Nipple	
	(1/4 x 1/8)	
7	Filter Strainer	
8	Hose Fitting	

NOTES:

·		
~		

