

OWNER'S MANUAL

A-PLUS² STEAM COOKER



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OPERATING INSTRUCTIONS

The **A-PLUS-2 STEAM COOKER** may be used for either:

- a.) A Steam Pressure Cooker in both compartments (*As a Pressure Cooker, it will cook fresh and defrosted foods*).
- b.) A Convection Steam Cooker in the TOP compartment ONLY (*As a Convection Cooker, it will defrost and cook frozen vegetables or 3/4" thick meat and seafood in a minimal amount of time*)

PREHEATING COMPARTMENT:

Before each initial operation of the cooker and at other times when the cooking compartment is cold, a 5-minute preheating cycle is required.

1. Check steam supply to insure pressure. a.) Direct Steam - Turn on valve of external steam supply.
b.) All other Units - Follow steam generator operating instructions inside cabinet base.
2. Close cooking compartment door to engage both door latches. If door doesn't latch, turn door wheel counterclockwise until both latches are engaged (*see Fig. 1*).
3. Seal cooking compartment by turning door wheel clockwise until wheel is hand tight.

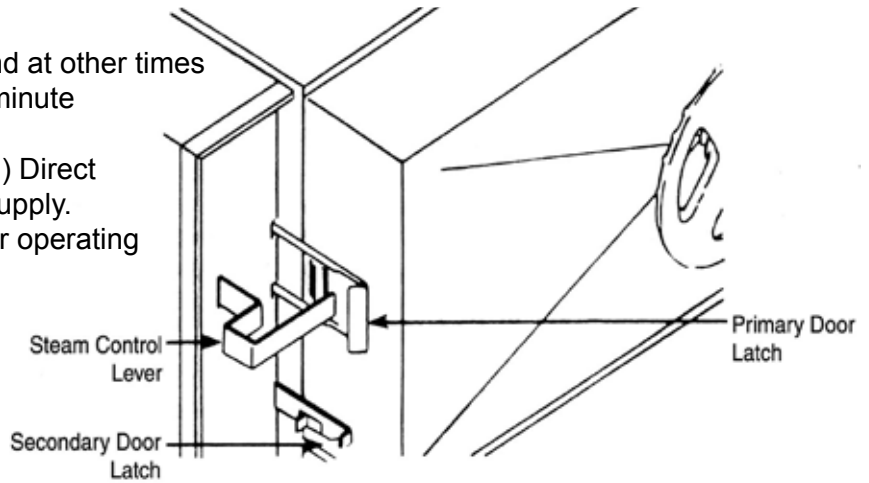


Fig. 1. Door Latches

CAUTION: DON'T WRENCH DOOR WHEEL TIGHT! Damage to door wheel and door gasket may result.

4. Ensure that automatic override switch is in AUTO (Down) position.
5. Set controls for cooking compartment to be preheated:
 - a.) Top Compartment:
 1. Place mode selector switch in the PRESSURE Cooking (Up) position.
 2. Set 60-Minute Timer (Top) to 5-Minute position. (Go beyond 15-Minutes and back to 5-Minutes for accurate timing.)
 3. Pull steam control lever out and down. (*see Fig. 1*) Indicator light will come on to show that the unit is operating. If pressure drops below 3 PSI (0.2 kg/cm^2), adjust timer settings.
 - b.) Bottom Compartment:
 1. Set 60-Minute timer to 5-Minute position.
 2. Pull steam control lever out and down. (*see Fig. 1*) Indicator light will come on to show that the unit is operating. If pressure drops below 3 PSI (0.2 kg/cm^2), adjust timer settings.
6. At end of cooking cycle, steam control lever is released automatically, exhausting steam and condensation from the compartment, and causing the buzzer to sound. Turn off buzzer by setting timer to OFF position.
7. Allow pressure to return to 0 PSI. Loosen door by turning wheel counterclockwise. Push primary door latch from door lip. Allow remaining steam to dissipate from the partially open door. Then, after determining that no water is flowing out under the bottom of the door, lift the secondary door latch and open door fully.

NOTE: If automatic controls fail, place automatic override switch to MANUAL (Up) position and time manually.

CONVECTION STEAM COOKING (Top Compartment Only):

Before loading the cooker, be sure compartment is hot. If not hot, follow preheating instructions.

1. Slide pans of frozen food onto pan supports in top cooking compartment.

OPERATING INSTRUCTIONS

2. Close cooking compartment door to engage both door latches. If door does not latch, turn door wheel counterclockwise until both latches are engaged. (see Fig. 1)
3. Place cooking mode selector switch in PRESSURELESS COOKING (Down) position.
4. Set 15-minute timer (Center) to required cooking time.
5. Turn off buzzer which sounds to indicate cycle complete by setting timer dial to the OFF position.
6. Loosen door by turning wheel counterclockwise. Push primary door latch from door lip. Allow remaining steam to dissipate from partially open door. Then, after determining that no water is flowing under bottom of the door, lift the secondary door latch up and open the door fully.
7. Unload by sliding pans of food from pan supports.

PRESSURE COOKING (Both Compartments):

Before loading the cooker be sure compartment is hot. If not hot, follow preheating instructions.

1. Slide pans of food into either cooking compartment
2. Close cooking compartment door to engage both door latches. If door does not latch, turn door wheel counterclockwise until both latches are engaged. (see Fig. 1)
3. Ensure that automatic switch is in AUTO (Down) position.
4. Set controls for cooking compartment to be used
 - a.) Top Compartment:
 1. Place mode selector switch in the PRESSURE COOKING (Up) position.
 2. Set 60-minute timer (Top) to required cooking time.
 3. Pull steam control lever out and down.
 - b.) Bottom Compartment:
 1. Set 60-minute timer to required cooking time.
 2. Pull steam control lever out and down.
5. At end of cooking cycle, steam control lever is released automatically exhausting steam and condensate from the compartment by causing the buzzer to sound. Turn off buzzer by setting timer to the OFF position.
6. Allow pressure to return to 0 PSI. Loosen door by turning door wheel counterclockwise. Push primary door latch from door lip. Allow remaining steam to dissipate from the partially open door. Then, after determining that no water is flowing out under the bottom of the door, lift the secondary door latch and open the door fully.
7. Unload by sliding pans of food from pan supports or shelves.

NOTE: If automatic controls fail, place automatic override switch in MANUAL (Up) position and time manually.

CLEANING:

Consult steam generator instructions inside base for shut-down procedure. After each daily operating period, the A-PLUS-2 should be thoroughly cleaned with mild detergent, making sure compartment is left dry and door is open.

OPERATING INSTRUCTIONS

A-PLUS-2 COOKER FACTS ON PARADE

1. Frozen vegetables should be cooked 6 pans 12" x 20" x 2 1/2" in the PRESSURELESS COOKING MODE (perforated pans recommended).
2. Frozen entrees 6 pans 12" x 20" x 2 1/2" should be defrosted and heated in the PRESSURE COOKING MODE (perforated pans recommended).
3. Fresh foods 6 pans 12" x 20" x 2 1/2" should be cooked in the PRESSURE COOKING MODE.
4. Pressureless Cooking should only be used for frozen vegetables or short term defrosting.
5. All foods, except cakes and pastry, can be cooked in a steam cooking unit.
6. Steam cooked meals have greater nutritional value since they retain most of their vitamins and minerals.
7. Because foods are cooked faster by the higher temperature of steam cooking, they can be prepared closer to serving time, insuring maximum freshness.
8. Steam cooked food has a higher percent yield -more portions per dollar spent.
9. Food may be served from the same pan in which it is steam cooked, thus reducing food breakage since there is no extra handling or transferring of food from cooking pans to serving pans. It also reduces pot washing tasks.
10. Some important advantages of steam cooking are: labor saving, reduced operating costs, space saving, and the lifting of heavy stock pots is eliminated.
11. Rice and spaghetti products, if thoroughly wet at the start of the cooking process, are very easily prepared.
12. Foods such as potatoes, poultry, seafood and some meats may be blanched in the steam cooker, thus reducing the total cooking time and grease absorption.
13. Fuel is used only when the steam cooking is in operation.
14. The steam cooker will loosen foods burned on pans making washing easier.
15. Solid pans are recommended when liquid is to be retained and perforated pans when liquid is not to be retained.
16. Eggs may be cooked out of the shell if they are to be chopped, which eliminates peeling after steaming.
17. The steam cooker can be opened during the cooking period (by first releasing the steam pressure) to add or remove items. If any time is lost, an adjustment may be made on the timer.
18. Steam cooking information, including recommended pan size and type, weight per pan, cooking times, and pan yields are given on the following pages of this manual.

OPERATING INSTRUCTIONS

VEGETABLES					
ITEM	APPROX. FROZEN WT. PER PAN	RECOMMENDED 12" x 20" PERFORATED PAN	NUMBER OF PANS	PRESSURELESS TIMER SETTINGS MINUTES	APPROX. NO. COOKED SERVINGS PER PAN
Snap or Waxed Green Beans	6 # (2.7kg)	2 1/2' (65mm)	1-3 4-6	15-20 20-25	25-30 3oz. (85g)
Beets 2"	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-3 4-6	40-45 45-60	30-35 3oz. (85g)
Broccoli Stalks 1/2 - 3/4"	6 # (2.72kg)	2 1/2' (65mm)	1-3 4-4	10-15 15-20	25-30 3oz. (85g)
Sliced Carrots	9 # (4kg)	2 1/2' (65mm)	1-3 4-6	18-21 21-25	35-40 3oz. (85g)
Cauliflower Trimmed 1 1/2-2"	6 # (2.72kg)	2 1/2' (65mm)	1-3 4-6	10-15 15-20	30-35 3oz. (85g)
Corn on the Cob, Husked	1 doz.	2 1/2' (65mm)	1-3 4-6	10-12 12-15	12
Cabbage, Head Cored	5 # (2.25kg)	2 1/2' (65mm)	1-3 4-6	14-16 16-20	15-20 4oz.(115g)
Onions, 2"	6 # (2.72kg)	2 1/2' (65mm)	1-3 4-6	10-18 15-30	25-30 4oz.(115g)
Peas, Shelled	5 # (2.3kg)	2 1/2' (65mm)	1-3 4-6	5-6 7-8	25-30 34oz.(85g)
Potatoes, French Fry Cut	10 # (4.5kg)	2 1/2' (65mm)	1-3 4-6	15-18 18-20	50-3oz. (85g)
Potatoes, Regular Cut	10 # (4.5kg)	2 1/2' (65mm)	1-3 4-6	20-25 25-30	50-3oz. (85g)
Squash, Clean Cut	3 # (1.4kg)	2 1/2' (65mm)	1-2 3-4	3-5 4-6	3 3/4oz. (105g)
Squash, Winter Peeled	9 # (4kg)	2 1/2' (65mm)	1-3 4-6	15-20 20-25	25-30 3oz. (85g)
Squash - Summer, Sliced 1"	7 # (3.2kg)	2 1/2' (65mm)	1-3 4-6	8-12 12-15	30-35 3oz. (85g)
Turnip, Diced	5 # (2.3kg)	2 1/2' (65mm)	1-3 4-6	25-30 30-35	20-25 4oz.(115g)
Canned Vegetables	7 # (3.4kg)	2 1/2' (65mm)	1-3 4-6	4-5 5-8	25-30 34oz. (85g)
MISCELLANEOUS					
Eggs, in Shell	3 doz.	2 1/2" (65mm)	1-3 4-6	8-9 9-10	36 1 egg each
Eggs, Out of Shell	4 doz.	2 1/2" (65mm)	1-3 4-6	6-7 7-8	48 1 egg each
Rice, Bulletin 16	4 # (1.8kg)	4" (100mm)	1-2 3-4	22-24 25-27	60-65 3oz. (85g)
Spaghetti, Bulletin 13	3 # (1.4kg)	4" (100mm)	1-2 3-4	20-22 23-26	40-45 4oz. (115g)

OPERATING INSTRUCTIONS

FROZEN VEGETABLES					
ITEM	APPROX. FROZEN WT. PER PAN	RECOMMENDED 12" x 20" PERFORATED PAN	NUMBER OF PANS	PRESSURELESS TIMER SETTINGS MINUTES	APPROX. NO. COOKED SERVINGS PER PAN
Asparagus Spears	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	8-13	30-3oz. (85g)
Green Beans Regular	6 # (2.7kg)	2 1/2' (65mm)	1-6	8-13	25-3oz. (85g)
French Cut Green Beans	6 # (2.7kg)	2 1/2' (65mm)	1-6	4-10	25-3oz. (85g)
Lima Beans	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	12-15	30-3oz. (85g)
Broccoli	6 # (2.7kg)	2 1/2' (65mm)	1-6	7-10	25-3oz. (85g)
Brussels Sprouts	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	9-14	30-3oz. (85g)
Carrots	6 # (2.7kg)	2 1/2' (65mm)	1-6	7-12	25-3oz. (85g)
Cauliflower	6 # (2.7kg)	2 1/2' (65mm)	1-6	7-12	25-3oz. (85g)
Cut Corn	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	5-10	30-3oz. (85g)
Mixed Vegetables	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	5-10	30-3oz. (85g)
Peas	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	5-10	30-3oz. (85g)
Spinach	9 # (4kg)	2 1/2' (65mm)	1-6	Must be Defrosted	30-4oz. (85g)
Squash	7 1/2 # (3.4kg)	2 1/2' (65mm)	1-6	Must be Defrosted	50-3oz. (85g)
FROZEN PREPARED ENTREES					
Lobster Tails					
Lobster Tails 6-8 Oz. (170-225g)	7-8# (3.2-3.6kg)	2 1/2" (65mm)	1-6	15-20	15-6oz. (170g)
Shrimp C.D.P.	16-20 # (7 1/2-9kg)	2 1/2" (65mm)	1-6	8-11	75-3oz. (85g)
Green Shrimp	16-20 # (7 1/2-9kg)	2 1/2" (65mm)	1-6	11-15	50-3oz. (85g)
Bulk Pack, Frozen	3 1/2-4 # (1.6-1.8kg)	2 1/2" (65mm)*	1-6	30-45**	10-6oz. (170g)
Bulk Pack, Defrosted	3 1/2-4 # (1.6-1.8kg)	2 1/2" (65mm)*	1-6	25-35**	10-6oz. (170g)
* Perforated Pan					
** Pressure Timer Setting					

OPERATING INSTRUCTIONS

MEAT					
Chicken, Cut-Up	6 # (2.7kg)	2 1/2" (65mm)	1-3 4-6	18-25 25-30	Protein 15-20 2oz. (55g)
4# Whole	3 Each	4" (100mm)	1-2 3-4	45-55 55-65	Protein 25-30 2oz. (55g)
Fowl, 5# or More Whole	2 Each	4" (100mm)	1-2 3-4	50-60 65-75	Protein 20-25 2oz. (55g)
Fish Fillets	3 # (1.4kg)	2 1/2" (65mm)	1-3 4-6	8-12 10-15	12-15 2oz. (55g)
Frankforts	5 # (2.3kg)	2 1/2" (65mm)	1-3 4-6	3-4 4-5	35-40 2oz. (55g)
Hamburgers 3 oz. (85g)	5 # (2.3kg)	2 1/2" (65mm)	1-3 4-6	12-14 15-18	20-25 2oz. (55g)
Meatballs * 1 oz. (30g)	6 # (2.7kg)	2 1/2" (65mm)	1-3 4-6	18-22 22-25	Protein 20-25 2oz. (55g)
Meatloaf*	15 # (6.8kg)	2 1/2" (65mm)	1-3 4-6	35-40 40-45	Protein 50-60 2oz. (55g)
Pork Chops Loin Bone 4 oz. (115g)	6 # (2.7kg)	2 1/2" (65mm)	1-3 4-6	25-30 30-35	Protein 24 2oz. (55g)
Sausage 1 1/2 oz. (45g)	6 # (2.7kg)	2 1/2" (65mm)	1-3 4-6	18-21 22-25	18-20 2oz. (55g)
Turkey Carcass	20-22 # (9-10kg)	2 1/2" (65mm)	1-2	100-120	Protein 50-60 2oz. (55g)
Turkey off Carcass	10-12 # (4.5-5kg)	2 1/2" (65mm)	1-3 4-6	50-60 60-75	Protein 55-65 2oz. (55g)
* Raw weight for Meatballs and Meatloaf including Hamburgers and extenders and yields 2 oz. (56g) protein plus extenders or 3 oz. (85g) total portion.					

TROUBLE-SHOOTING

This service and parts section contains descriptive information. Trouble-shooting procedures, maintenance information, and parts identification for the A-PLUS-2 Cooker. Only information for those electrical and plumbing systems which are not included in the A Cooker, but are required for the A-PLUS-2 are included.

DESCRIPTION:

The model A-PLUS-2 is a factory modified model A Cooker equipped for operator selection of either pressure or free-vented pressureless steam cooking in the upper compartment. Double stacked, independently controlled compartments are fitted with single automatic controls. A separate steam source required for operation is factory mounted under the cooker with all steam, drain and electric interconnections completed (Models A-PLUS-2 E, A-PLUS-2 G and A-PLUS-2 SC). The cooker can also be supplied on a cabinet containing plumbing controls for direct connection to an existing steam source (Model A-PLUS-2 D).

BASIC FUNCTIONING:

The upper compartment of the A-PLUS-2 may be converted from a pressure steam cooker to a pressureless, free-vented steam cooker simply by placing a mode selector switch in the required position followed by setting a timer:

1. For pressure cooking, the compartment is automatically sealed by the closing of an exhaust valve and evacuation of air through a steam trap as steam is injected. The compartment remains at approximately 5 lbs. steam pressure until the operator-selected cooking duration ends (top timer).
2. For pressureless cooking, the compartment remains vented to the drain system while steam is injected. In this manner a continuous flow of steam circulates throughout the compartment and out the exhaust for the cooking duration (center timer).

The lower compartment functions at all times as described in 1 above and utilizes an independent timer (bottom timer).

SERVICE:

Should repairs be required, a network of authorized service agencies is available to assist with prompt service. A current Directory of Authorized Service Agencies and service assistance may be obtained by contacting:

Product Service Department
Market Forge, 35 Garvey Street, Everett, Massachusetts 02149-4403, Telephone: (617) 387-4100

The model and serial numbers must be referenced when corresponding with Market Forge.

GENERAL:

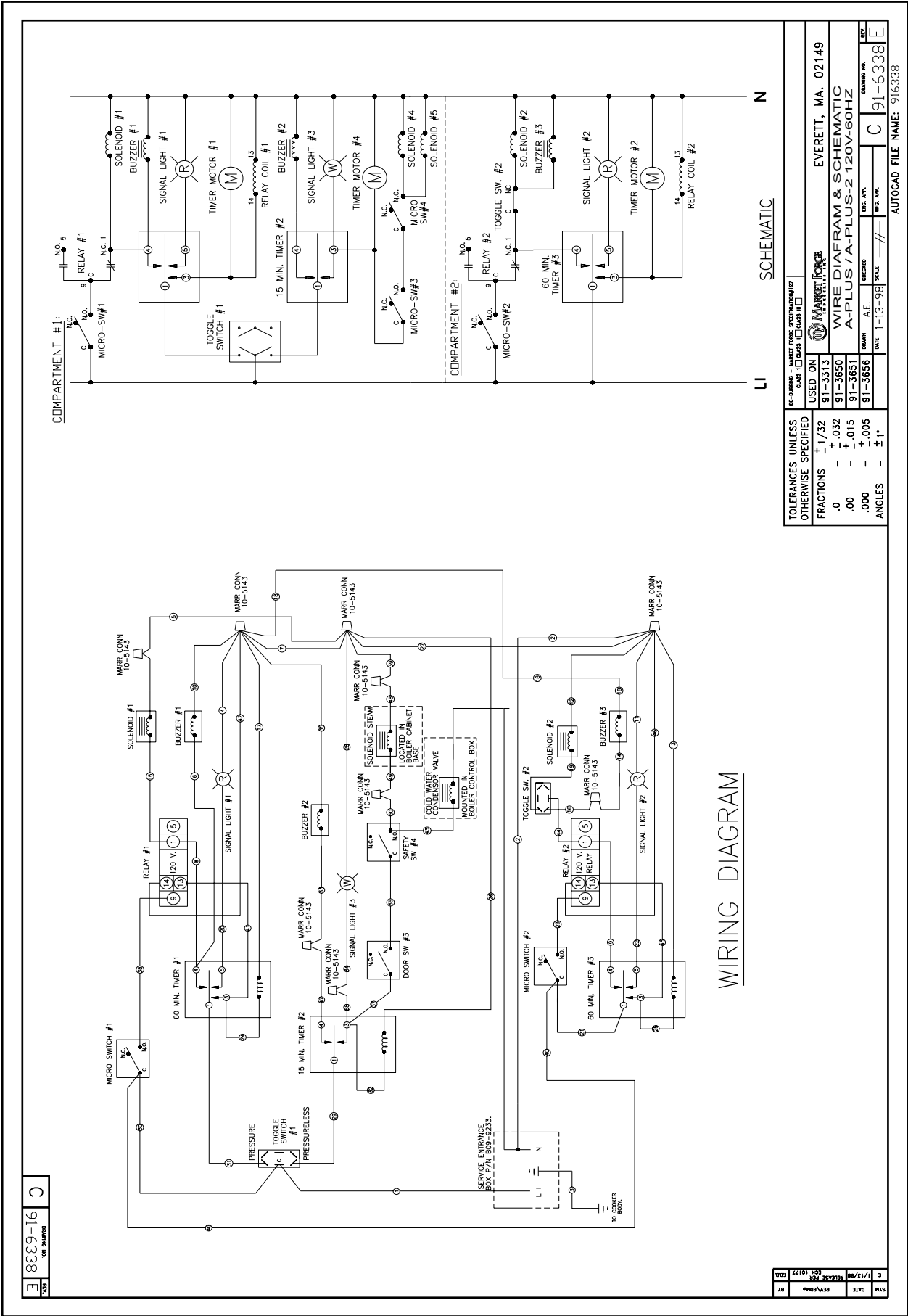
This Section contains trouble-shooting guide information to assist service personnel in locating the general source of problems which may occur with the A-PLUS-2 COOKER. It is recommended that local authorized service be obtained for assistance in completing the trouble-shooting procedures.

The table on page 9 serves as a general guide to trouble-shooting. Before attempting to utilize this information, service personnel should be thoroughly familiar with the operating instructions and the function of all controls in the operating instructions.

ELECTRICAL FAULT ISOLATION:

Correction of an electrical failure first requires isolation of the fault to a single circuit or components. In most cases the nature of the figure and its effect upon the operation of the cooker will be sufficient to isolate it to one or more circuit elements. The electrical fault isolated guide is provided on page 10 for isolating electrical faults which may occur in operation of the upper compartment. Wiring Diagram, and schematic diagram (*see Fig. 2*) are also provided for locating the source of electrical failures.

TROUBLE-SHOOTING



TROUBLE-SHOOTING

GENERAL TROUBLE-SHOOTING GUIDE

PROBLEM PROBABLE CAUSE	REMEDY
1. INDICATOR LIGHT FAILS TO LIGHT IN PRESSURE COOKING MODE.*	
a. Power to A-Plus Cooker off.	a. Locate external circuit breaker for incoming power and place in ON position.
b. Selector Switch in Pressureless Cooking position.	b. Place in Pressure Cooking Position.
c. 60-Minute Timer not set.	c. Set 60-Minute Timer.
2. INDICATOR LIGHT FAILS TO LIGHT IN PRESSURELESS COOKING MODE.*	
a. Power to A-Plus Cooker off.	a. Locate external circuit breaker for incoming power and place in ON position.
b. Selector Switch in Pressure Cooking Position.	b. Place in Pressureless Cooking Position.
c. 15-Minute Timer not set.	c. Set 15-Minute Timer.
3. INDICATOR LIGHT FAILS TO LIGHT WITH SELECTOR SWITCH IN PRESSURE COOKING POSITION AND 60-MINUTE TIMER SET.*	
a. Power to A-Plus Cooker off.	a. Locate external circuit breaker for incoming power and place in ON position.
b. Indicator Light burned out.	b. Replace light.
c. Faulty wiring.	c. Inspect condition of wire, and tightness of all connections. Correct as needed.
d. Faulty Selector Switch.	d. Replace Switch.
e. 60-Minute Timer Contact Faulty.	e. Replace Timer.
f. Faulty Microswitch.	f. Replace Switch.
4. INDICATOR LIGHT FAILS TO LIGHT WITH SELECTOR SWITCH IN PRESSURELESS COOKING POSITION AND 15-MINUTE TIMER SET.*	
a. Power to A-Plus Cooker off.	a. Locate external circuit breaker for incoming power and place in ON position.
b. Indicator Light burned out.	b. Replace light.
c. Faulty wiring.	c. Inspect condition of wire, and tightness of all connections. Correct as needed.
d. Faulty Selector Switch.	d. Replace Switch.
e. 15-Minute Timer Contact Faulty.	e. Replace Timer.
5. PRESSURE COOKING MODE FAILS TO STOP.	
a. Defective 60-Minute Timer Motor or Contact.	a. Replace Timer.
b. Defective Steam Exhaust Valve.	b. Replace Valve.
6. PRESSURELESS COOKING MODE FAILS TO STOP.*	
a. Defective 15-Minute Timer Motor or Contact.	a. Replace Timer.
b. Defective Steam Inlet Solenoid Valve.	b. Replace Valve.
7. STEAM FAILS TO ENTER COMPARTMENT IN PRESSURELESS COOKING MODE (WITH INDICATOR LIGHT ON).*	
a. Compartment door not closed.	a. Securely latch door closed.
b. No steam entering steam line.	b. Check steam generator and pressure producing valve for proper operation.
c. Faulty or jammed door interlock switch.	c. Adjust or replace switch.
d. Faulty steam inlet solenoid valve.	d. Replace valve.
NOTE: * Pertains to upper compartment only.	
8. BANGING SOUND OR STEAM ENTERING BOTTOM COMPARTMENT WITH TOP COMPARTMENT IN PRESSURELESS COOKING MODE.	
a. Improperly adjusted cold water flow control valve.	a. Adjust valve. Increase flow of steam, decrease for banging.

NOTE: * Pertains to upper compartment only.

TROUBLE-SHOOTING

GENERAL TROUBLE-SHOOTING GUIDE

PROBLEM PROBABLE CAUSE	REMEDY
9. STEAM ENTERS COMPARTMENT AT ALL TIMES.	
a. Faulty inlet solenoid steam valve	a. Replace valve.
b. Defective or jammed door interlock switch.	b. Clean or replace switch.
c. Defective manual steam valve.	c. Check valve and mechanism.
10. NO STEAM PRESSURE GAUGE READING COOKING MODE.	
a. Insufficient steam input from steam generator.	a. Check generator for 15PSI output. Adjust
b. Faulty pressure gauge.	b. Replace gauge
c. Faulty steam exhaust valve.	c. Check vavle and mechanism.
d. Faulty relief valve.	d. Replace valve.
11. BUZZER FAILS TO SOUND AT END OF PRESSURE COOKING DURATION.	
a. Faulty microswitch.	a. Replace microswitch.
b. Faulty buzzer.	b. Replace buzzer.
12. BUZZER FAILS TO SOUND AT END OF PRESSURELESS COOKING DURATION (WITH INDICATOR LIGHT OFF).*	
a. Faulty 15-Minute timer.	a. Replace 15-Minute timer.
b. Faulty buzzer.	b. Replace buzzer.
13. COOKING COMPARTMENT FAILS TO REACH COOKING TEMPERATURE IN PRESSURE COOKING MODE.	
a. Air in cooking compartment.	a. Replace steam trap.
b. Low steam pressure.	b. See item 7.
14. IN PRESSURE COOKING MODE PULLING UP ON SAFETY VALVE KNOB FAILS TO CAUSE PRESSURE DROP.	
a. Defective relief valve.	a. Replace relief valve.
15. IN PRESSURE COOKING MODE TOP COMPARTMENT ACCUMULATES WATER.	
a. Plugged drain screen.	a. Clean.

NOTE: * Pertains to upper compartment only.

ELECTRICAL FAULT ISOLATION GUIDE - UPPER COMPARTMENT

FAILURE	LOCATION
1. WILL NOT OPERATE IN EITHER PRESSURE OR PRESSURELESS COOKING MODE.	A. INCOMING POWER. B. SELECTOR SWITCH. C. WIRING.
2. OPERATES IN PRESSURE MODE BUT NOT IN PRESSURELESS MODE.	A. SELECTOR SWITCH. B. WIRING. C. 12-MINUTE TIMER. D. STEAM SOLENOID VALVE.
3. OPERATES IN PRESSURELESS MODE BUT NOT IN PRESSURE MODE.	A. SELECTOR SWITCH. B. WIRING. C. 60-MINUTE TIMER.
4. INDICATOR LIGHT OFF IN EITHER MODE.	A. INDICATOR LIGHT. B. WIRING.
5. INLET SOLENOID VALVE FAILS TO OPEN BUT INDICATOR LIGHT IS ON IN PRESSURELESS MODE.	A. DOOR INTERLOCK SWITCH. B. INLET SOLENOID VALVE COIL. C. WIRING.
6. BUZZER FAILS TO SOUND AT END OF EITHER PRESSURE OR PRESSURELESS COOKING MODE.	A. 15-MINUTE TIMER. B. BUZZER. C. WIRING.
7. WILL NOT STOP OPERATING IN PRESSURE MODE.	A. 60-MINUTE TIMER MOTOR.
8. WILL NOT STOP OPERATING IN PRESSURELESS MODE.	A. 15-MINUTE TIMER MOTOR.

MAINTENANCE

GENERAL:

This section contains both preventive and corrective maintenance information required for the A-PLUS-2 Cooker.

Preventive maintenance may be performed by maintenance personnel at the establishment in which the cooker is installed. It is recommended that user personnel never attempt to make repairs or replacements to the equipment without the assistance of authorized service. Assistance in service methods or a current

Directory of Authorized Service Agencies may be obtained from Market Forge.

PREVENTIVE MAINTENANCE:

A good preventive maintenance program begins with the daily cleaning procedure described in the table below. Additional preventive maintenance operations are presented in this section .

IMPORTANT:
WHEN CLEANING THIS APPLIANCE, DO NOT
HOSE DOWN ELECTRICAL PARTS INSIDE.

FREQUENCY	PROCEDURE
DAILY	1. CLEANING: Remove pan supports, shelves and shelf supports, and thoroughly wash and rinse interior of both cooking compartments. Be sure the drain screen, located inside top compartment, is clear of all food particles.
WEEKLY	1. SAFETY VALVE CHECK: With upper compartment in operation in the pressure cooking mode, lift up on level of forward mounted safety valve. Repeat for rear mounted safety valve. Steam should flow freely from outlet port, verifying proper functioning and clearing of accumulated deposits in valves. 2. INNER DOOR CLEANING: Remove inner door from both compartments. Wash inner door and inside of outer door with mild detergent, rinse and reassemble.
MONTHLY	1. DOOR WHEEL LUBRICATION: Check door hand wheel rotation for ease of motion. If wheel resists rotation when door is unlatched, lubrication is required. Remove inner door and apply graphite lubrication to screw threads.

DRAIN SCREEN CLEANING & REMOVAL:

The drain screen inside the top compartment is provided to prevent blockage of the drain line. It must be kept clean at all times by scrubbing daily with a stiff bristle brush.

WARNING: A plugged drain may cause compartment flooding, resulting in overflow of scalding water when door is opened.

Should the drain screen require removal due to excessive blockage or damage, the truss head screw is loosened and the screen slipped out. The screen must be in position, completely covering the lower drain opening, prior to reuse of the A-PLUS-2.

SAFETY VALVE CHECK:

The safety valves are protective devices which automatically relieve excessive pressure (above 8 PSI) in the unlikely event of equipment malfunction. Manual opening of the valves is also possible and should be done once a week to assure valves are clear and mechanically sound.

1. Place upper cooker compartment into operation in the pressure mode and allow pressure to build to about 4 PSI.
2. Pull up on safety valve lever for forward-mounted valve (closest to manifold box on left side of cooker). Flow of steam from the valve outlet verifies correct manual valve function and clears exhaust passage.
NOTE: Steam is not present at relief valve until steam trap has evacuated all air from the cooker compartment. Presence of adequate steam should be checked (4-5 psi on gauge) before checking valve.
3. Repeat step 2 for rear-mounted valve.

INNER DOOR REMOVAL & CLEANING:

The door assembly includes an outer door with mounted hand wheel and an inner door with sealing gasket. The inner door parts should be cleaned weekly to ensure proper sealing against compartment opening.

MAINTENANCE

1. With door opened and hand wheel turned to full clockwise position, grasp tabs and lift inner door up and away from door.
2. Wash inner doors, gaskets and inside of outer door with mild detergent, rinse and reassemble.

DOOR WHEEL LUBRICATION:

The door wheel includes the externally mounted wheel and built-in screw mechanism. Rotation of the door wheel should be checked monthly for ease of motion. If the wheel grinds or is difficult to turn, the screw should be lubricated with graphite followed by rotation of the wheel to transfer lubricant into threads in door.

STEAM CONDENSER ADJUSTMENT:

The drain and exhaust plumbing assembly for the A-PLUS-2 Cooker is located inside the cabinet base under the cooking compartments. In addition to the cold water steam condensing system included with the boiler (or direct steam connection plumbing), an additional steam condensing circuit is supplied in boilers used with the A-PLUS-2 Cooker. This circuit functions automatically at all times when the cooker is operating in the Pressureless mode.

ASSEMBLY

DOOR ASSEMBLY INSTRUCTIONS

STEP 1:

Make sure the handle on the door is turned as far clockwise as possible.
(See Figure 1.)



Figure 1.

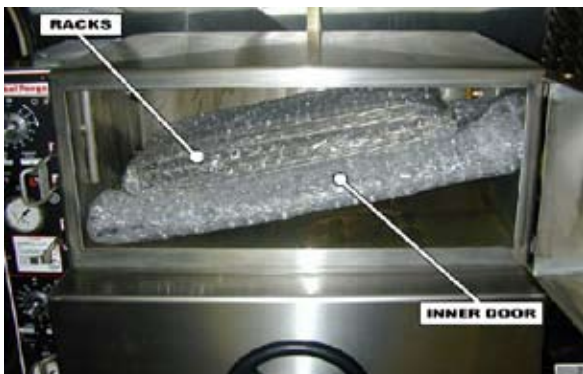


Figure 2.

STEP 2:

Take the inner door (Shipped as shown in Figure 2.) out of cavity. Remove packaging and discard.

STEP 3:

Line up the outer door pins (marked "A") with the inner door holes (marked "B"). Set the door in place and turn handle counter-clockwise until you bring the inner door to the outer door. (See Figure 3.)

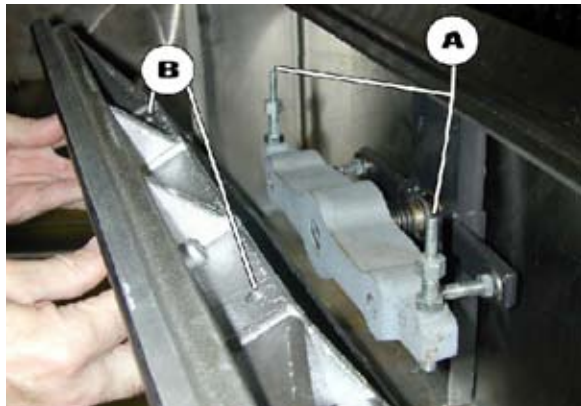


Figure 3.

ILLUSTRATED PARTS LIST

GENERAL:

This section contains a listing of all replaceable parts of the A-PLUS-2 Cooker, specifically required for the A-PLUS-2. The parts are identified in illustrations and keyed to an accompanying parts list. Modification parts required for use with the steam generator or steam direct connection plumbing are also listed. Parts list contain the figure index number, the Market Forge part number and an abbreviated description.

ORDERING INFORMATION:

Orders for repair parts should be directed to the nearest authorized parts distributor. Contact the factory for a current Market Forge Authorized Parts Distributor List.

All orders should contain the Market Forge part number(s), the part description(s), the model and serial numbers.

ILLUSTRATED PARTS LIST

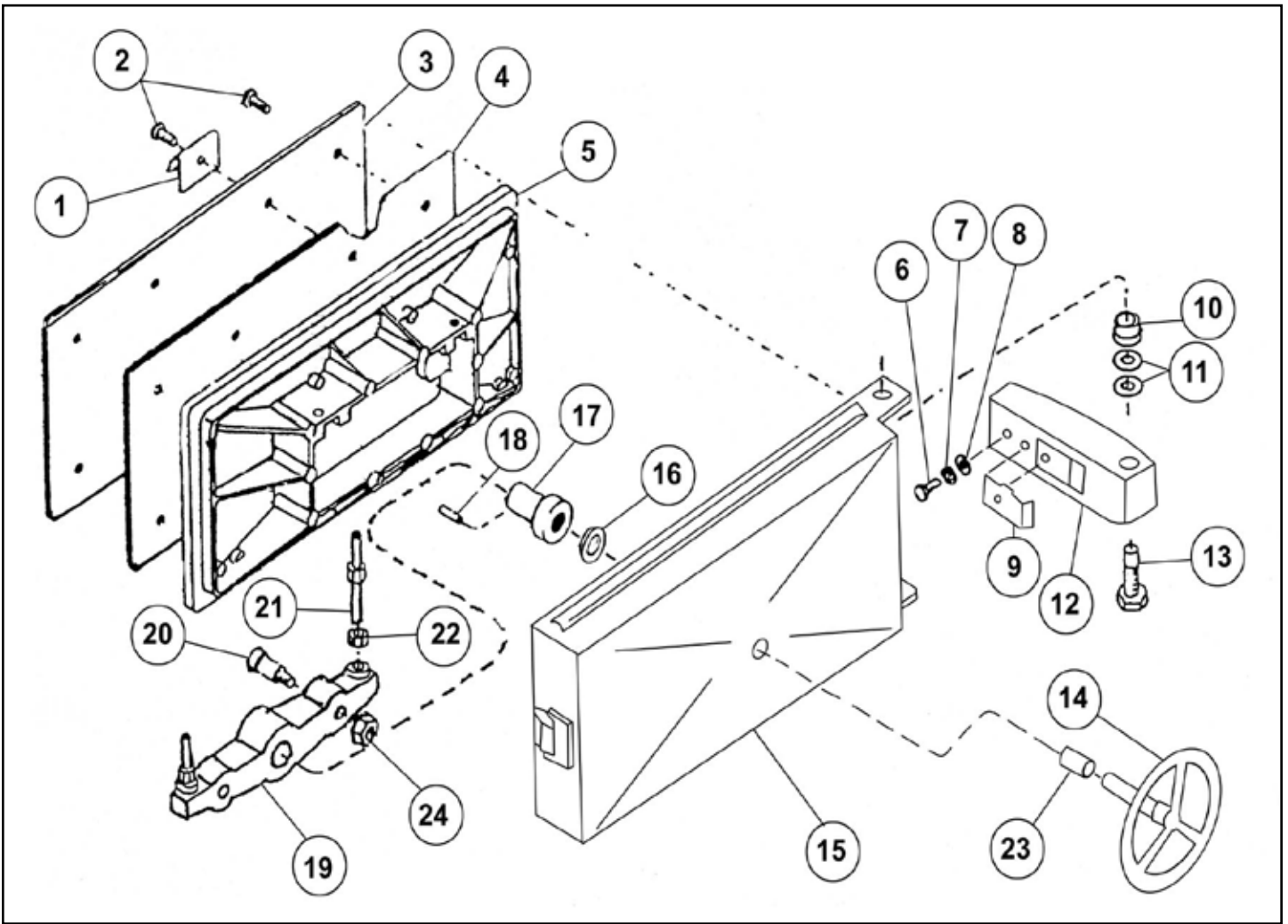


Fig. 3. Door Assembly

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	90-8310	HAND GRIP	13	10-1981	PIVOT HINGE
2	10-6764	GASKET SCREWS	14	90-8328	HANDWHEEL, SPOKED
3	90-8311	GASKET PLATE	15	91-5148	OUTER DOOR, POLISHED
4	10-0433	DOOR GASKET	16	10-2423	THRUST WASHER
5	91-3152	INNER DOOR	17	10-3080	DOOR BUSHING
	90-8147	INNER DOOR ASSEMBLY (ITEM'S 1-5)	18	10-1696	ROLL PIN
6	10-2135	5/16 - 10 x 3/4 HX. HD. BOLT	19	90-8119	STRONG BACK
7	10-2426	11/32 ID x 3/4 OD FT. WASHER ST/ST	20	10-2012	CAP SCREW
8	10-1909	5/16 THREADSEAL	21	10-1973	SUPPORT STUD ASSEMBLY
9	90-8114	DOOR SPRING RELEASE	22	10-2302	HX. NUT 3/8 - 16
10	10-3079	DOOR PIVOT BEARING	23	90-8317	HANDWHEEL BUSHING
11	10-2427	1/16 THK. x 1" OD FLAT WASHER	24	10-2013	HX. JAM NUT 3/8 - 16
12	90-8111	HINGE - POLISHED		10-9998	DOOR ADJUSTING TOOL
	90-8316	HINGE - PAINTED			

ILLUSTRATED PARTS LIST

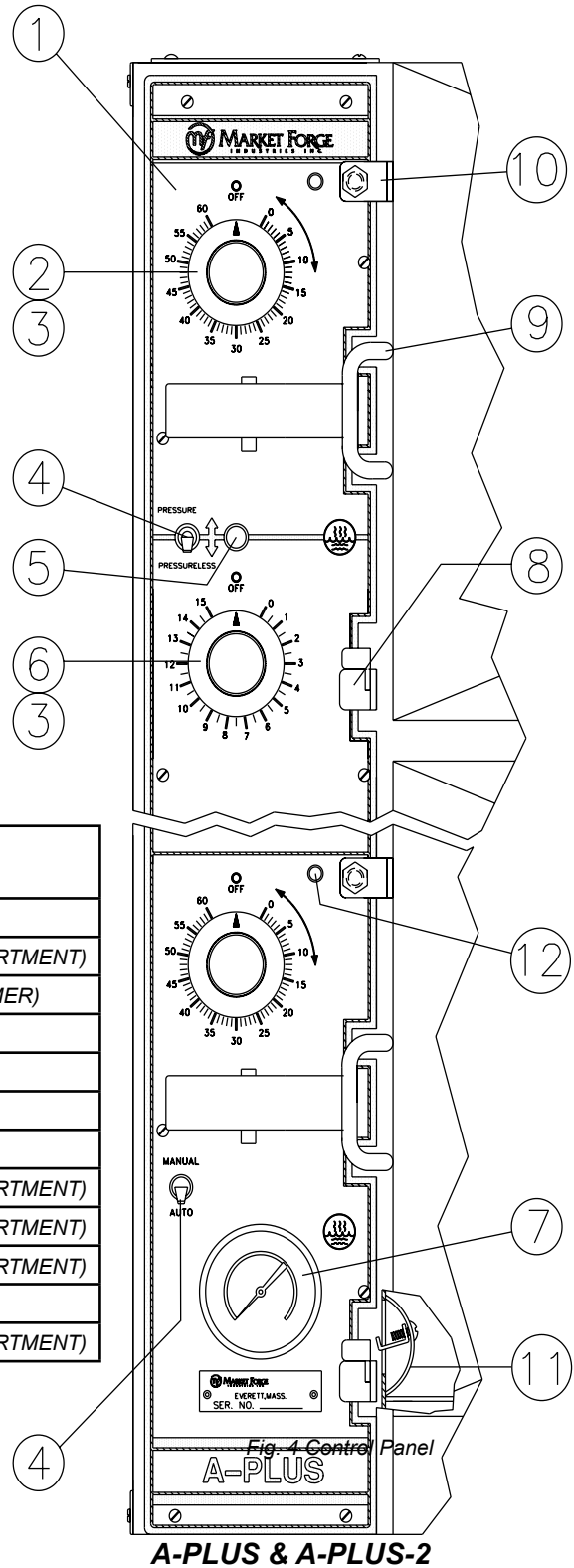


Fig. 3. Control Panel

ITEM	PART NO.	DESCRIPTION	QTY.
1	91-6327	PANEL, CONTROL, A-PLUS	1
2	10-6291	TIMER, 60 MINUTE, 120V	1(PER COMPARTMENT)
3	09-5259	KNOB, TIMER	1(PER TIMER)
4	10-7903	SWITCH, TOGGLE	2
5	10-5940	LIGHT, PILOT, WHITE LENS, 120V	1
6	10-7927	TIMER, 15 MINUTE, 120V	1
7	10-4748	GAUGE, PRESSURE	1
8	91-5163	ASS'Y, LATCH, SECONDARY	1(PER COMPARTMENT)
9	90-8338	ASS'Y, HANDLE, LATCH	1(PER COMPARTMENT)
10	10-6859	SWITCH, MICRO	1(PER COMPARTMENT)
11	91-3308	ASS'Y, STRAINER	1
12	10-5499	LIGHT, PILOT, RED LENS, 120V	1(PER COMPARTMENT)

ILLUSTRATED PARTS LIST

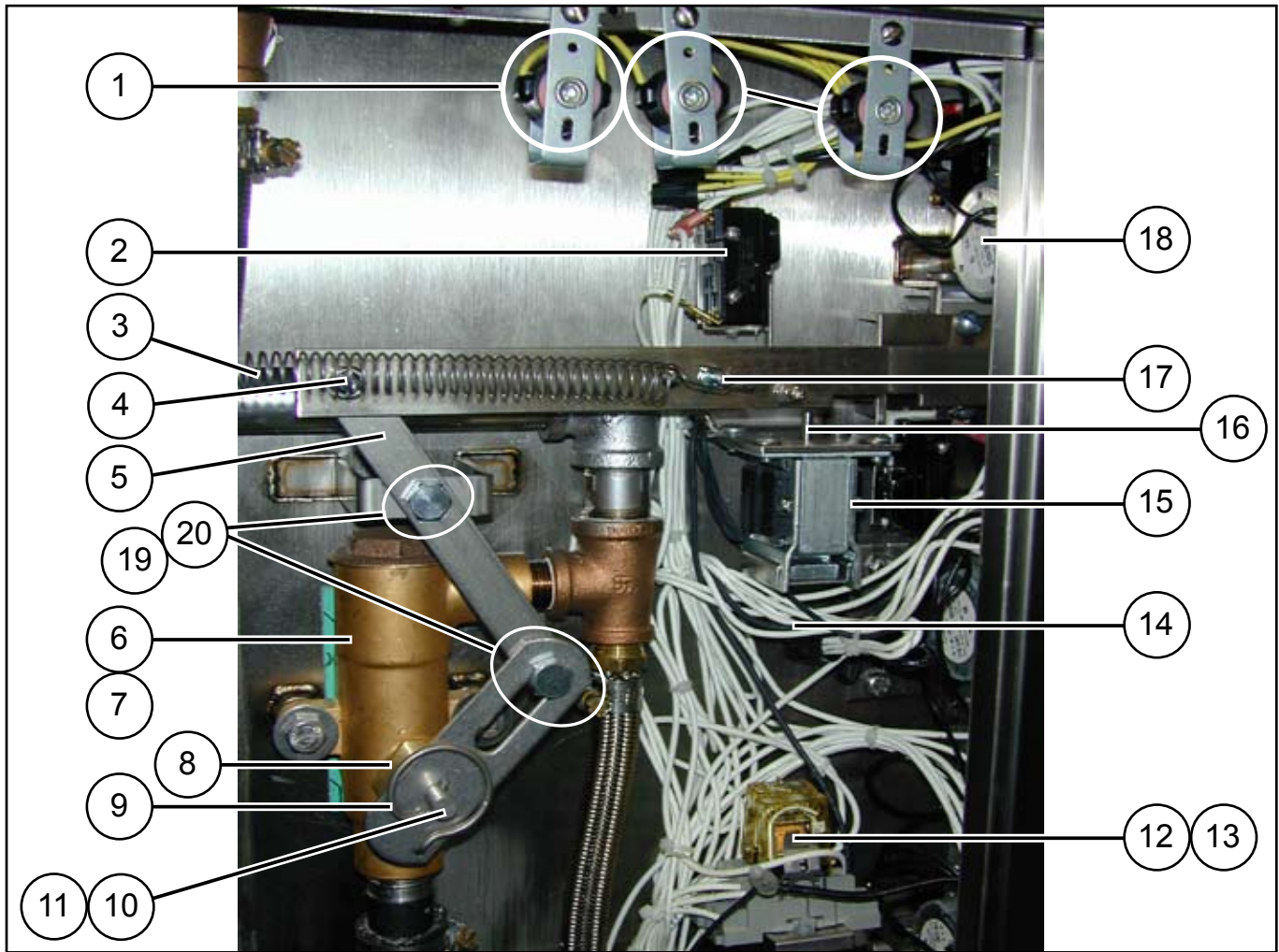


Fig 4. Right Side Control Area

ITEM	PART NO.	DESCRIPTION	QTY.
1	10-7395	BUZZER	1 (PER TIMER)
2	10-5613	MICRO, SWITCH	1 (PER COMPARTMENT)
3	10-2755	SPRING, VALVE OPERATING ARM	1 (PER COMPARTMENT)
4	90-9215	HANDLE, CONTROL	1 (PER COMPARTMENT)
5	90-8534	ARM, PIVOT	1 (PER COMPARTMENT)
6	90-2434	COMBO. STEAM AND EXHAUST VALVE	1 (PER COMPARTMENT)
7	91-6204	GASKET, VALVE BODY	1 (PER COMPARTMENT)
8	10-2756	SPRING, SYNCHRONIZER	1 (PER COMPARTMENT)
9	90-8537	ARM, ACTUATING VALVE	1 (PER COMPARTMENT)
10	90-4153	SYNCHRONIZER	1 (PER COMPARTMENT)
11	10-1133	O-RING	1 (PER COMPARTMENT)
12	10-9174	RELAY, POWER, MIDGET	1 (PER COMPARTMENT)
13	10-9175	SOCKET, RELAY	1 (PER COMPARTMENT)
14	10-7927	TIMER, 15 MINUTE	1 (PER UNIT)
15	10-5997	SOLENOID	1 (PER COMPARTMENT)
16	90-8905	PUSH ROD	1 (PER COMPARTMENT)
17	08-3415	EYE BOLT WITH NUT	1 (PER COMPARTMENT)
18	10-6291	TIMER, 60 MINUTE	1 (PER COMPARTMENT)
19	10-1967	BOLT, SHOULDER - LINKAGE	1 (PER COMPARTMENT)
20	10-2328	NUT, STOP, 1/4-20, STAINLESS STEEL	1 (PER COMPARTMENT)

ILLUSTRATED PARTS LIST

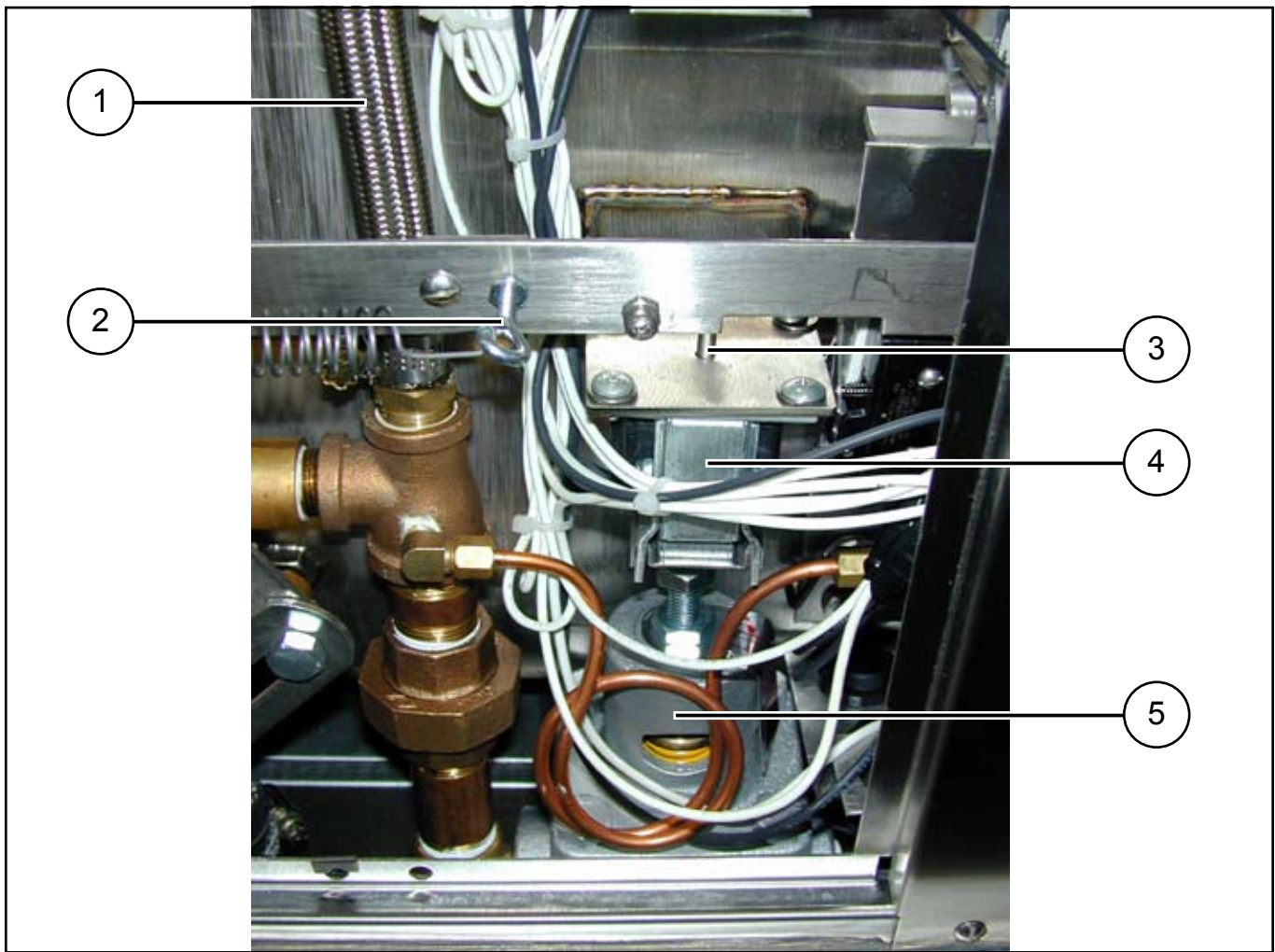


Fig 5. Right Side Control Area

ITEM	PART NO.	DESCRIPTION	QTY.
1	08-4913	HOSE, ST/ST, BRAIDED	1-2 (PER COMP.) 2-3 (PER COMP.)
2	08-3415	EYE BOLT WITH NUT	1 (PER COMPARTMENT)
3	90-8905	PUSH ROD	1 (PER COMPARTMENT)
4	10-5997	SOLENOID	1 (PER COMPARTMENT)
5	10-1033	PRESSURE REDUCING VALVE	1 (PER COMPARTMENT)

ILLUSTRATED PARTS LIST

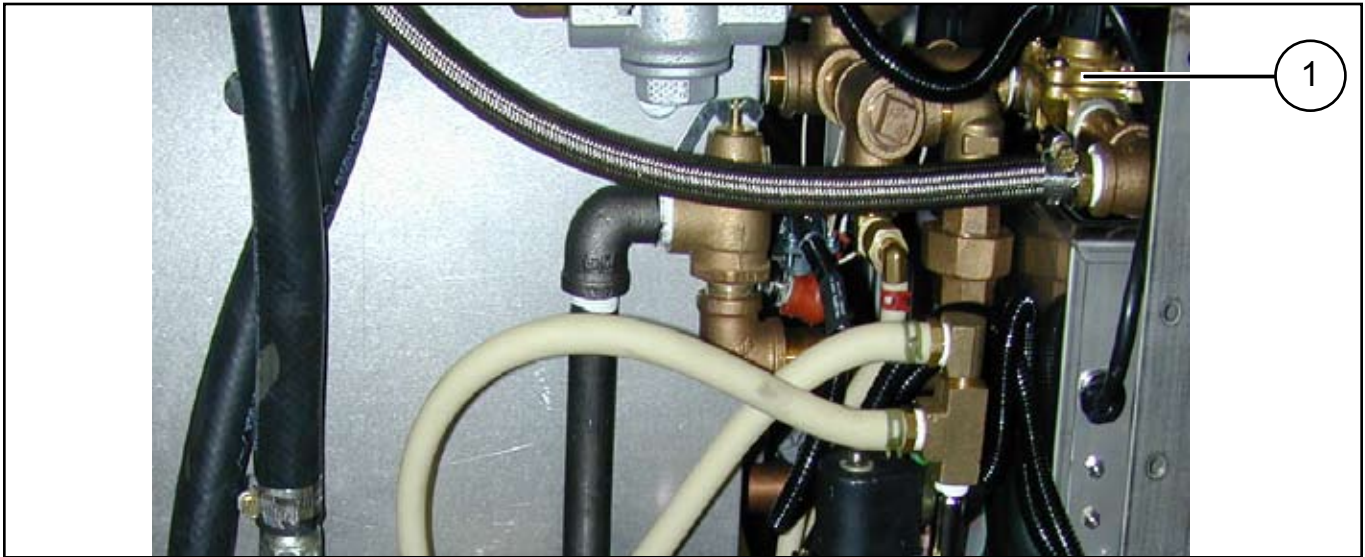


Fig 6. Boiler Base - Side View

ITEM	PART NO.	DESCRIPTION	QTY.
1	10-7363	STEAM VALVE, INLET TO PRESSURELESS COMPARTMENT	1

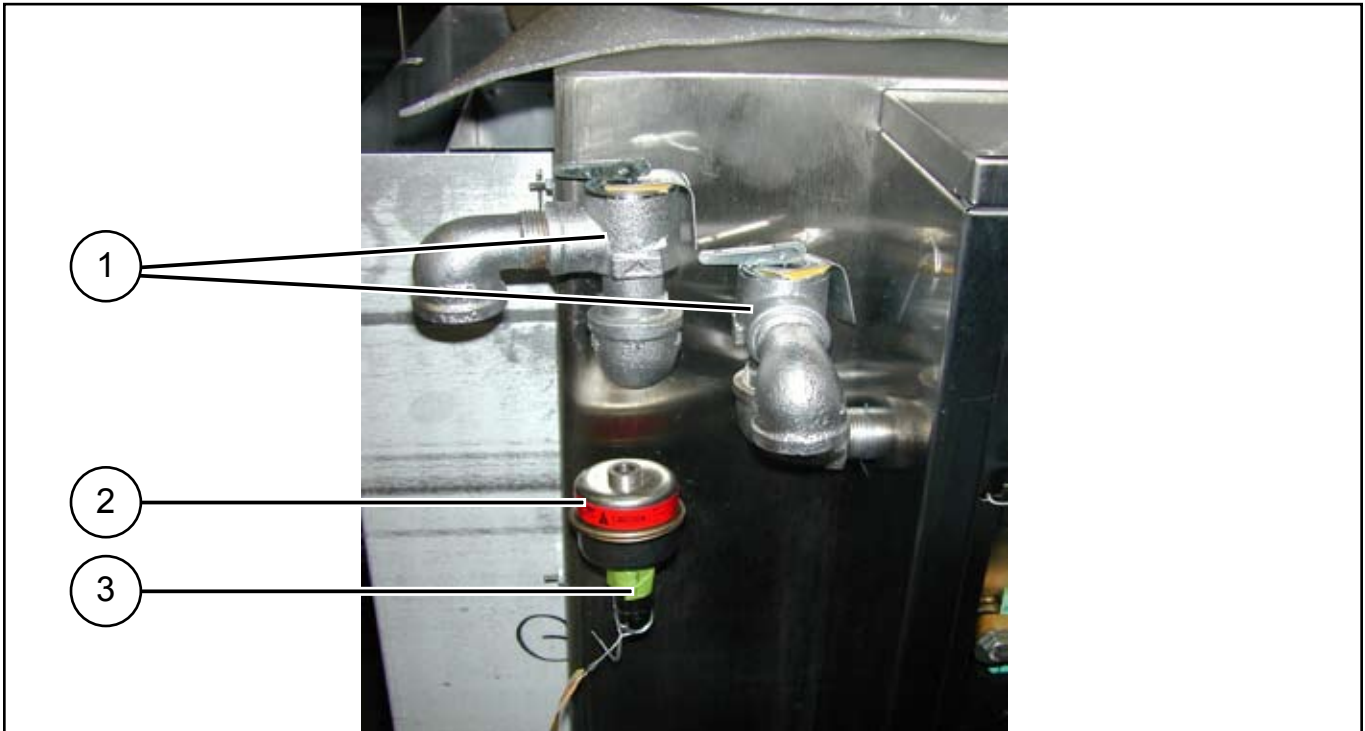


Fig 7. Right Rear View

ITEM	PART NO.	DESCRIPTION	QTY.
1	10-4742	VALVE, SAFETY, 3/4", 8 LBS.	2
2	10-6156	TRAP, STEAM	1 (PER COMPARTMENT)
3	08-4813	ADAPTER, 90°, STEAM TRAP	1 (PER COMPARTMENT)

ILLUSTRATED PARTS LIST

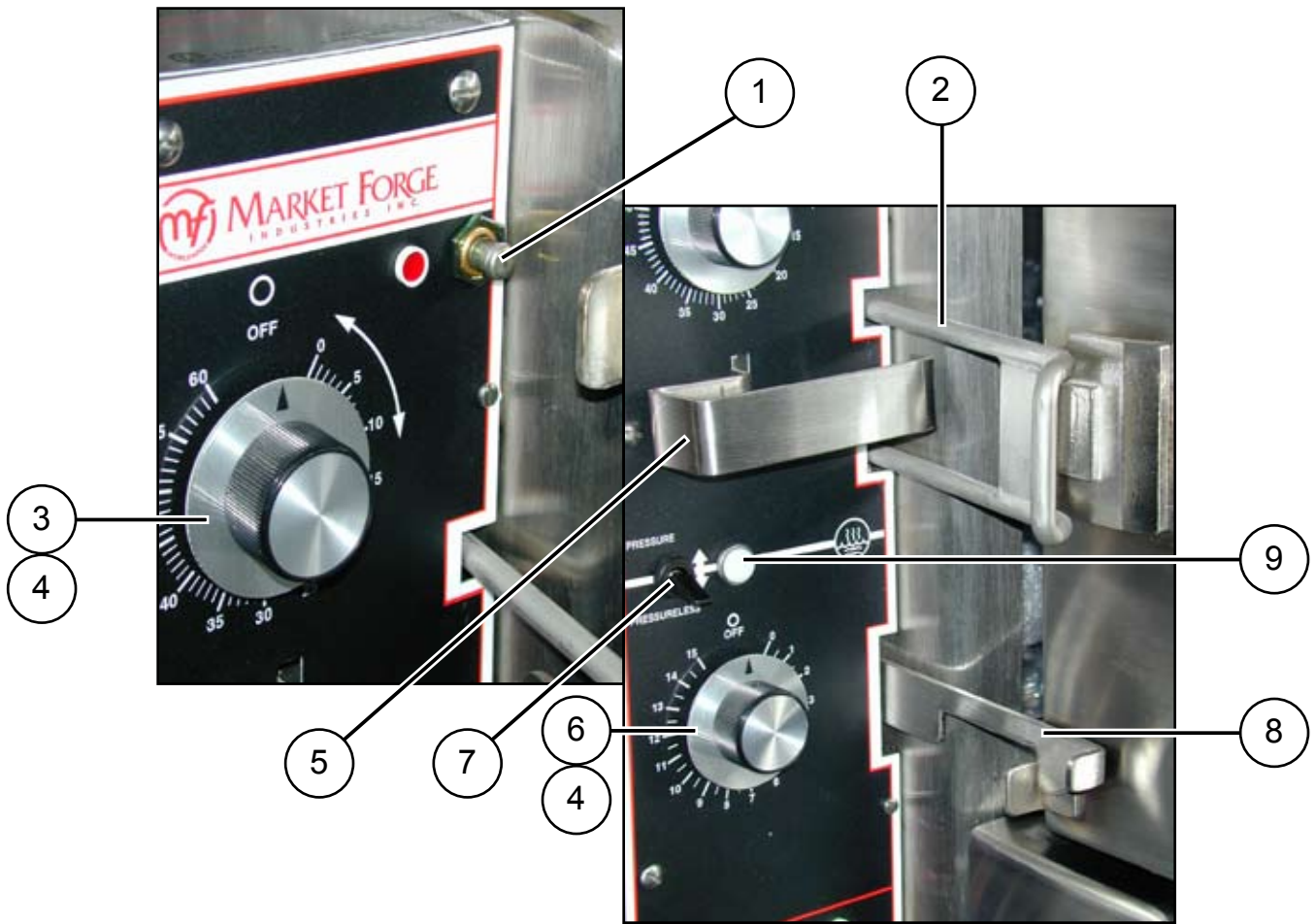


Fig 8. Front Control Panel

ITEM	PART NO.	DESCRIPTION	QTY.
1	10-6859	MICRO SWITCH	1 (PER COMPARTMENT)
2	90-8338	ASSEMBLY, HANDLE LATCH AND BRACKET	1 (PER COMPARTMENT)
3	10-6291	TIMER, 60 MINUTE	1 (PER COMPARTMENT)
4	09-5259	TIMER, KNOB	1 (PER COMPARTMENT)
5	90-9215	HANDLE, CONTROL	1 (PER COMPARTMENT)
6	10-7927	TIMER, 15 MINUTE	1
7	10-7903	SWITCH, TOGGLE	2
8	91-5163	ASSEMBLY, LATCH, SECONDARY	1 (PER COMPARTMENT)
9	10-5940	LIGHT, PILOT, WHITE LENS	2