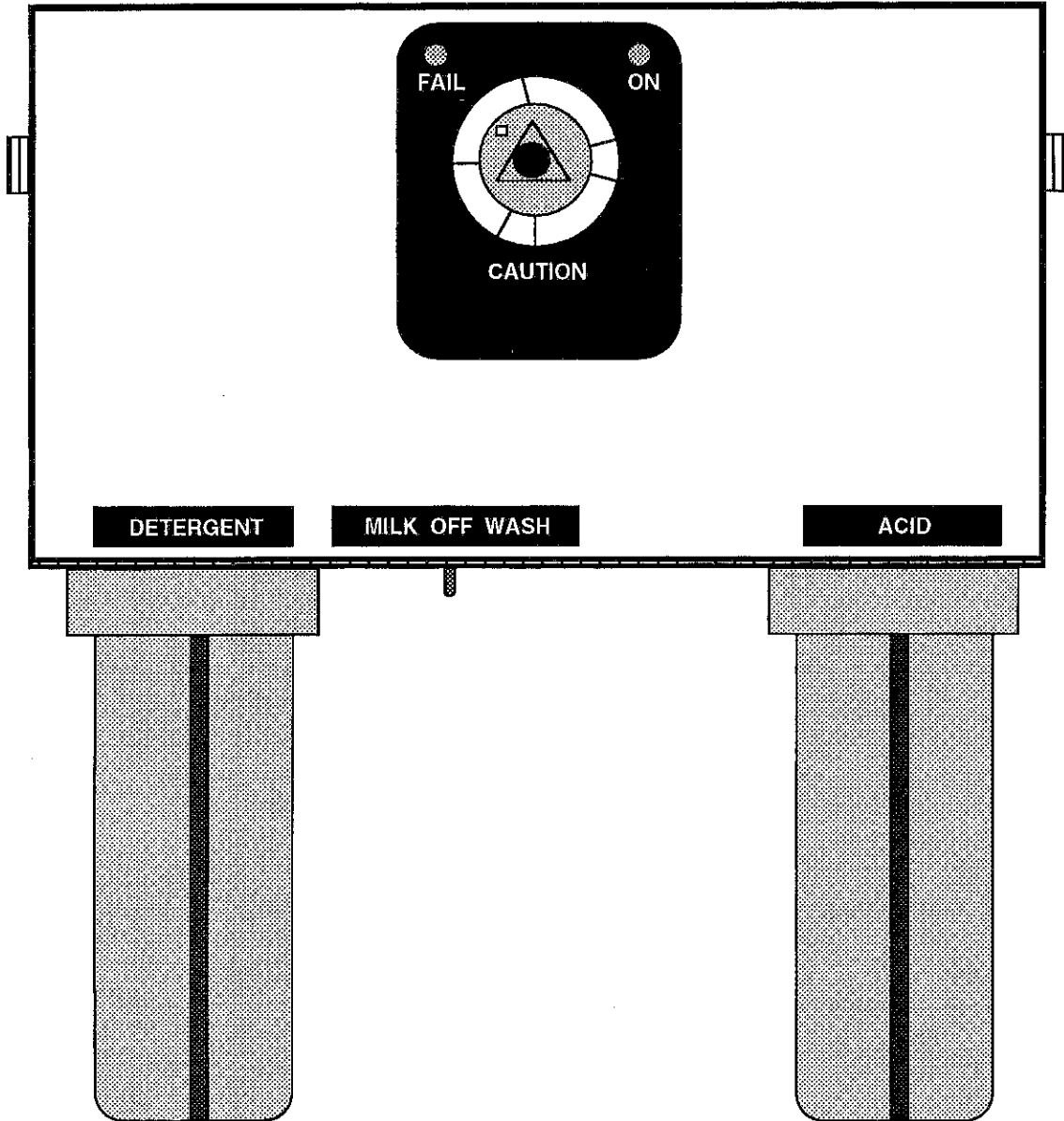


Bender 8500 PIPELINE WASHER



THE ABILITY TO CLEAN MILKING SYSTEMS BOTH RELIABLY AND ECONOMICALLY HAS MADE THE 8500 PIPELINE WASHER THE BENCHMARK OF THE INDUSTRY.



8500 PIPELINE WASHER INSTALLATION

1. Install plumbing for hot and cold water lines, with garden hose shut-off valves on each line within 3' of where the control unit will be installed. (Two 4' inlet hoses are provided.)

WARNING: All input water supply lines require ANTI-BACKFLOW VALVES to prevent chemicals from entering the water supply.

2. Install the control unit on the wall
 - A. If possible do not install above the wash vat.
 - B. If the unit is installed over 7' from the input plate, longer water input hoses must be provided - 25' provided for 3 input hoses.
3. Install input plate on the wash vat. See page 26.
 - A. 10' of 1/4" O.D. rigid tubing has been provided for the pressure switch line.
4. Route the 1/4" O.D. rigid tubing between the flexible tubing on the pressure switch and the rubber bushing, on the input plate. Tubing should be sloped for self-draining so condensation does not accumulate.
5. Attach the 1/2" I.D. pressure switch tubing to the input plate. Tubing should be cut off 6" below the required level of water in the wash vat.
6. Water input to wash vat.
 - A. From hot solenoid to a 9/16" nipple in the plate on the wash vat.
 - B. From detergent jar (rear) to a 9/16" nipple in the plate on the wash vat.
 - C. From acid jar (rear) to a 9/16" nipple in the plate on the wash vat.
 - D. Use plastic ties to route hoses neatly and insure self-draining.
7. Attach the 4' long pressure hoses.
 - A. Hot on left side.
 - B. Cold on right side.

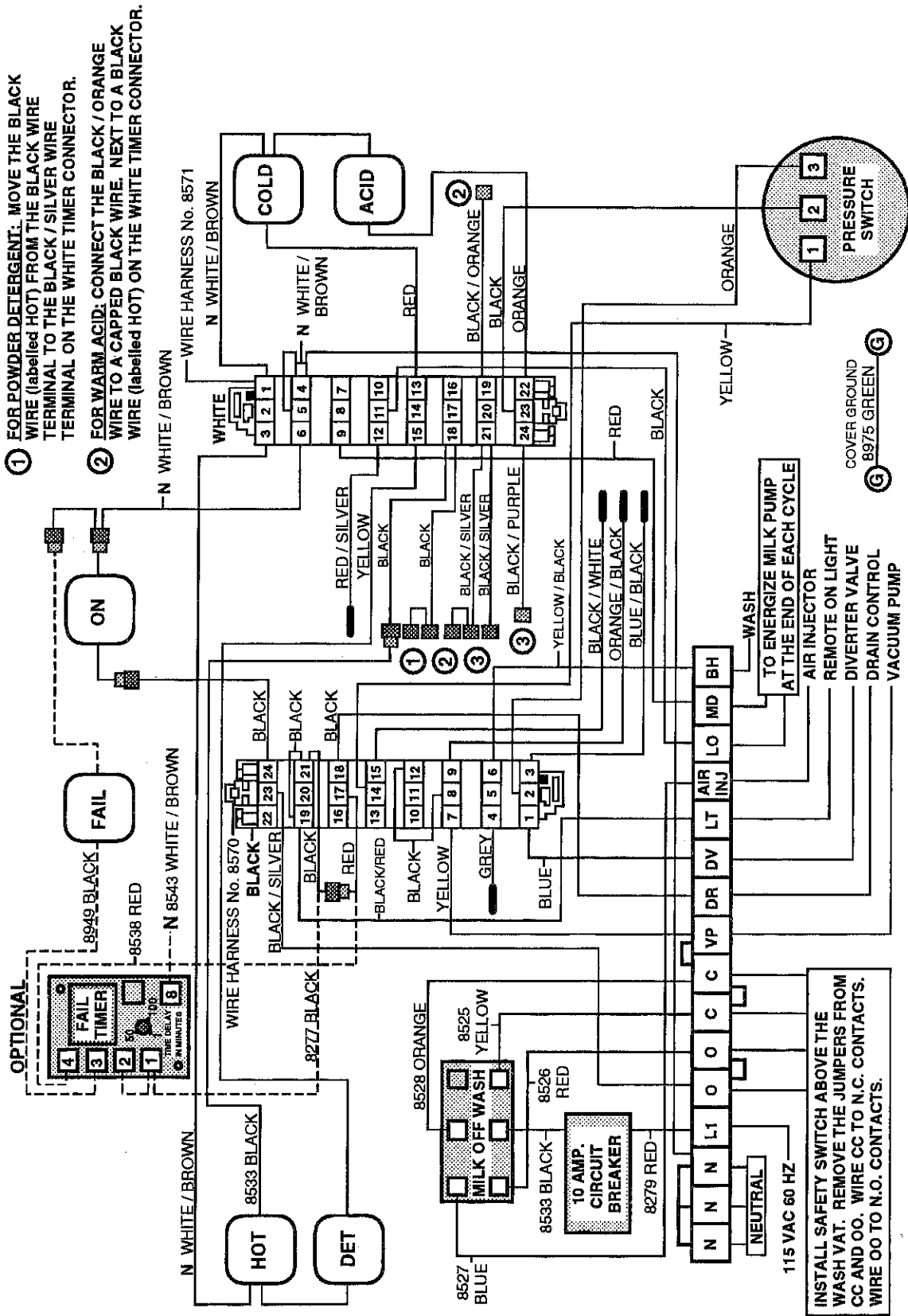
TURN FAUCETS ON.
8. Wiring the control box: All wiring on installation should be done according to National Electrical Code and Local Regulations. Be absolutely certain this unit is grounded to an approved ground.
 POWER INPUT: 115 VAC 60 HZ. SINGLE PHASE. Input terminal L1, N for Neutral and Ground. See page 20 for external wiring diagram.

ADJUSTMENTS

FIRST RINSE AND WASH--See 9750 sequence control rinse and wash notes for ADJUSTMENT procedure. Page 49.



8500 WIRING



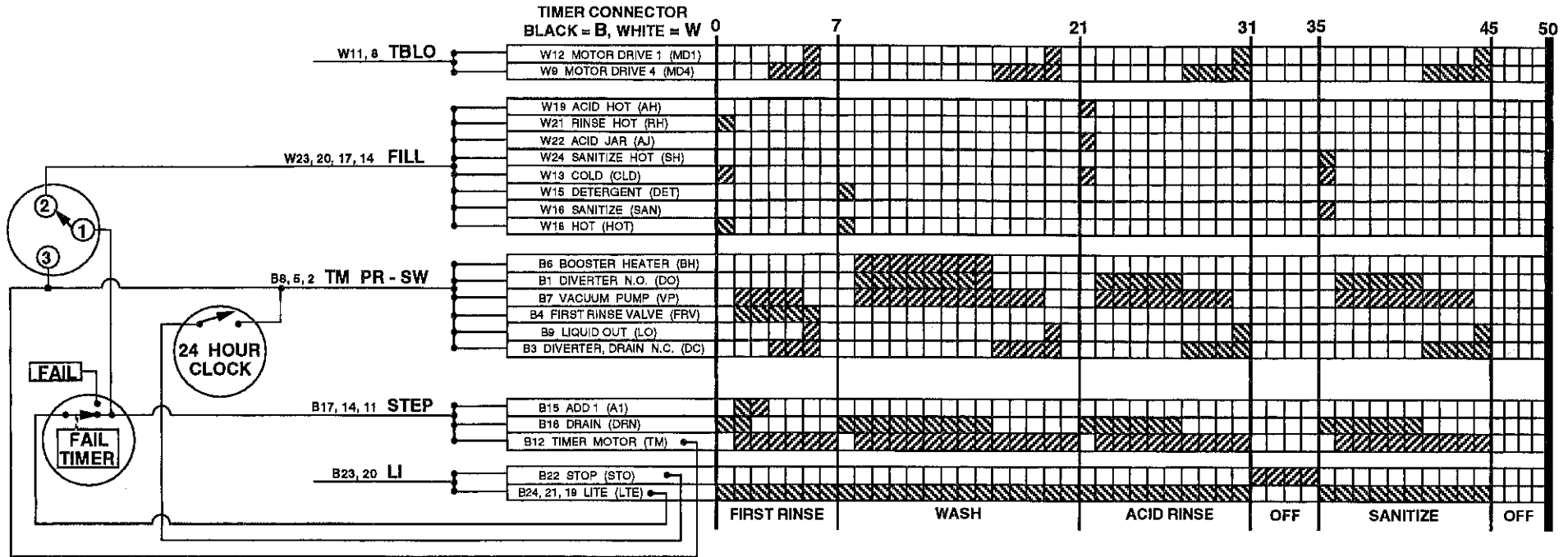
- FOR POWDER DETERGENT: MOVE THE BLACK WIRE (labelled HOT) FROM THE BLACK WIRE TERMINAL TO THE BLACK / SILVER WIRE TERMINAL ON THE WHITE TIMER CONNECTOR.
- FOR WARM ACID: CONNECT THE BLACK / ORANGE WIRE TO A CAPPED BLACK WIRE. NEXT TO A BLACK WIRE (labelled HOT) ON THE WHITE TIMER CONNECTOR.

INSTALL SAFETY SWITCH ABOVE THE WASH VAT. REMOVE THE JUMPERS FROM CC AND OO. WIRE CC TO N.C. CONTACTS. WIRE OO TO N.O. CONTACTS.

- ALL OUTPUT LOADS GREATER THAN 1 AMP. REQUIRE A 115 VAC GROUND TO AN APPROVED GROUND. CONTACTOR INTERFACE.
- ALL WIRING ON INSTALLATION SHOULD BE DONE ACCORDING TO NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
- FOR WARM SANITIZE: CONNECT THE BLACK / PURPLE WIRE TO A CAPPED BLACK WIRE. NEXT TO A BLACK WIRE (labelled HOT) ON THE WHITE TIMER CONNECTOR.



9750 SEQUENCE CONTROL



FIRST RINSE AND WASH NOTES:

Washer is wired for a 1 min. RINSE, 3 min. normally open DRAIN, and a 8 min. WASH.

- For a 2 min. rinse, 2 min. normally open drain:
Connect the black / white wire in the black timer connector, to the DR terminal on the 16 position terminal block.
- For first rinse valve:
Connect to the grey wire in the black timer connector.
- To run milk pump 1 min. at the end of each cycle:
Replace the red wire in the MD terminal on the 16 position terminal block, with the red / silver wire in the white timer connector.
- Jar models are wired for liquid detergent. When using Powder detergent, move the black wire (labelled HOT) from the black wire terminal to the black / silver wire terminal on the white timer connector.

ACID RINSE, SANITIZE, DRAIN, AND DIVERTER NOTES:

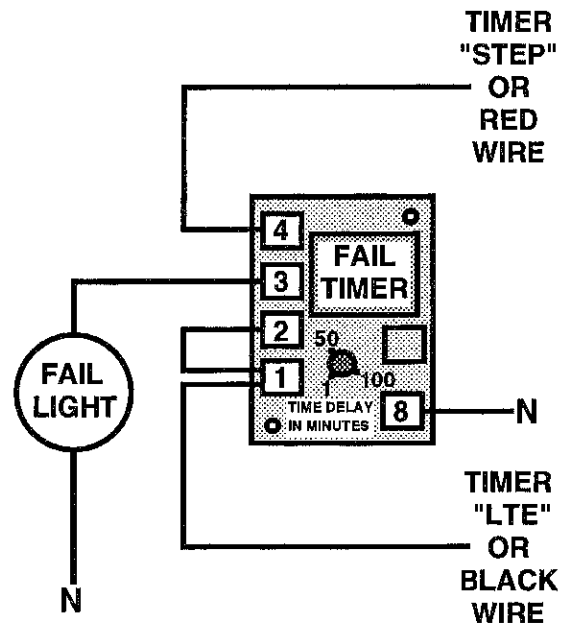
- For warm acid:
Connect the black / orange wire to a capped black wire. Next to a black wire (labelled HOT) on the white timer connector.
- For warm sanitize:
Connect the black / purple wire to a capped black wire. Next to a black wire (labelled HOT) on the white timer connector.
- For a normally closed drain control, or diverter valve:
Replace the wire in the DR, or DV terminal on the 16 position terminal block, with the blue / black wire in the black timer connector.
- For 1 min. of power at the end of each cycle:
Connect to the orange / black wire in the black timer connector.



8540 INSTALLATION

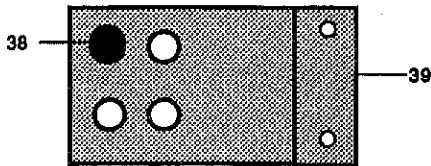
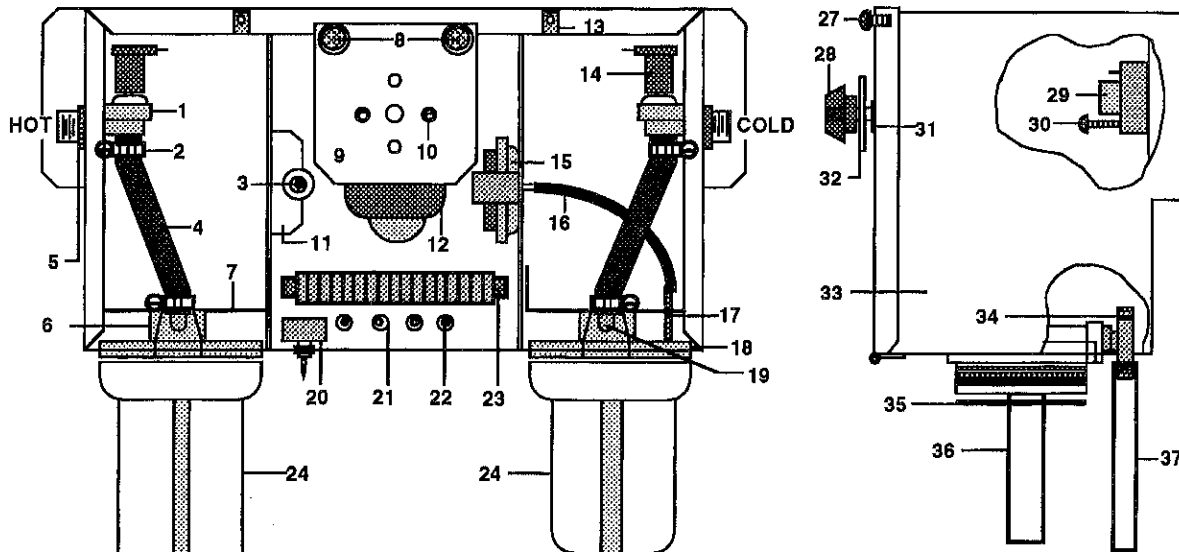
8540 FAILSAFE KIT INSTALLATION

1. A. On 9450 timer, remove yellow wire from timer "LITE" to timer "STEP" terminals.
 B. On 9750 timer, disconnect the connected red and black wires on the black timer connector.
2. Mount fail timer to the 8 - 32 nuts behind the main timer bracket, or use hook and loop adhesive tape. Adjust timer to 100 minutes. (This will be correct for most installations.)
3. Place fail light in the mounting hole in the timer bracket.
4. Wire according to electrical diagram.





8500 PARTS LIST



ITEM	DESCRIPTION	PART NO.
1	WATER VALVE	8515
2	S.S. HOSE CLAMP - 1/2"	2392
3	CIRCUIT BREAKER - 10 AMP.	2685
4	REINFORCED RUBBER TUBING - 1/2" I.D. X 6 1/2" LONG.	8519
5	PLASTIC NUT - GREEN	1401
6	DETERGENT JAR TOP ASSEMBLY	8513
7	MOUNTING BRACKET	8816
8	LAMP	8249
9	TIMER BRACKET	8232
10	S.S. SCREW - PHILLIPS HEAD 10 - 32 X 3/8" LONG	6135
11	BRACKET	2682
12	TIMER	9750
	TIMER MOTOR - .8 RPM 120VAC / 50-60HZ	9755
13	SHEET METAL CLIP NUT	6136
14	COIL - 110 VAC	32551
15	PRESSURE SWITCH	5513
16	PLASTIC TUBING - 3/16" I.D. X 1/16" WALL X 8 1/2" LONG.	8289
17	FLEX PLASTIC TUBING - 1/4" O.D. X .060 WALL 10' LONG	2849
18	ACID JAR TOP ASSEMBLY	8896
19	ELBOW - 3/8" NPT X 1/2" HOSE	8506
20	DPDT TOGGLE SWITCH	6265
21	RETENSION WASHER	2677
22	S.S. SCREW - PHILLIPS HEAD 10-32 X 3/8" LONG	6135
23	TERMINAL BOARD	8886
24	DETERGENT AND ACID JAR	8514
25	HOSE GASKET	1403
26	3/8" I.S. PRESSURE HOSE - 4' LONG	2541
27	S.S. SEAL SCREW - PHILLIPS PAN HEAD 10-24 X 1/2" LONG	6140
28	TIMER KNOB	8254
29	FAIL TIMER - 100 MINUTE	8926
30	S.S. SCREW - PHILLIPS PAN HEAD 8 - 32 X 1.0" LONG	6159
31	GROMMET	5518
32	DIAL INDICATOR	8234
33	CASE ASSEMBLY	8520
34	RUN TEE CHECK VALVE ASSY. - 1/2" HOSE X 3/8" NPT X 1/2" HOSE	8507
35	DETERGENT AND ACID JAR GASKET	8512
36	PLASTIC TUBING - 3/4" I.D. X 1" O.D. X 7-1/2" LONG.	8835
37	PLASTIC TUBING - 1/2" I.D. X 1/8" WALL / FT.	1099
38	PRESSURE SWITCH BUSHING	2576
39	INPUT PLATE	8505
	WATER VALVE REPAIR KIT (not shown)	7900

