

# **QUANTUM SERIES JUICE DISPENSER**

## **IPL Manual**









Release Date: April 25, 2001

Publication Number: 720901120IPL Revision Date: April 28, 2014

**Revision: C** 

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## GENERAL ASSEMBLY

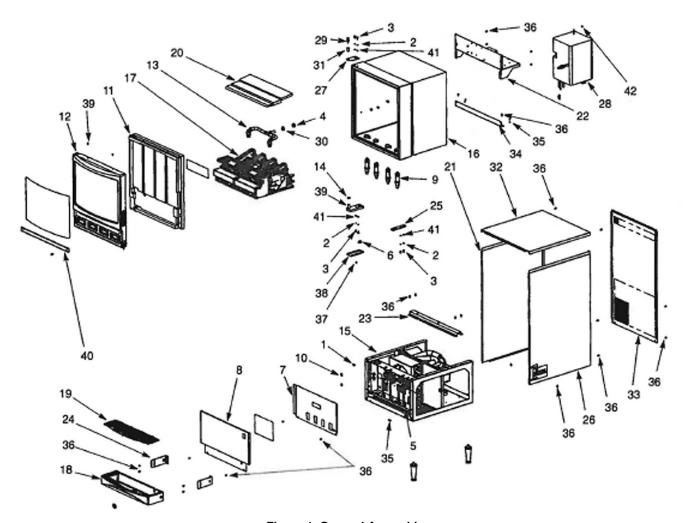


Figure 1. General Assembly



**Table 1. General Assembly** 

	lable 1. General Assembly		
Item No.	Part No.	Name	
1	0720405	Nut 1/4-20	
2	0730202	Washer No. 10 Split Lock	
3	0706903	Screw No. 10-32 X1/2" TH SS 115V 60 HZ	
	07061002	Screw No. 10 X 5/8" HHWF230 50HZ	
4	07344	Bushing Snap 3000 & 4000 Series	
5	45366	Brkt and Tube Drain 3000 & 4000 Series	
6	0733904	Bushing Snap	
7	45107	Cover Electrical Box 1000 & 2000 Series	
/	7245669	Cover Electrical Box 3000 Series	
	45408	Cover Electrical Box 4000 Series	
_	45159001	Panel Splash 1000 and 2000 Series	
8	45667100	Panel Splash 3000 Series	
	45459100	Panel Splash 4000 Series	
	45003	Nozzle Mixer O-Ring Assembly	
9	31525037 45123	O-Ring 0.739 ID Mixer Static	
	48808001	Nozzle Mixing	
10	470725	Plug Button	
10	45354	Door Assem 1000 Series(see Fig. 8)	
	45241	Door Assem 2000 Series (see Fig. 8)	
11	45390	Door Assem 3000 Series (see Fig. 8)	
	45470	Door Assem 4000 Series (see Fig. 8)	
	7245550	Cover Assem 1000 Series (see Fig. 10)	
12	45296006	Cover Assem 2000 Series (see Fig. 10)	
12	45394005	Cover Assem 3000 Series (see Fig. 10)	
	45481006	Cover Assem 4000 Series (see Fig. 10)	
	309852000	Client 1000, 2000 & 3000 Series	
13	77060900	Fitting T-Barb 3/8 1000, 2000 & 3000 Series	
	49034	Tube 1000, 2000 & 3000 Series	
14	45439	Nylon Washer	
15		Refrigeration Assembly (see Fig. 2)	
16		Cabinet Assembly (see Fig. 3)	
	45115	Platform Assembly 1000 Series (see Fig. 4)	
17	45215	Platform Assembly 115 V 60 HZ, 2000 & 4000 Series (see Fig. 4)	
	45215001	Platform Assembly 230V 50 HZ, 2000 & 4000 Series (see Fig. 4)	
	45315	Platform Assembly 115V 60HZ, 3000 Series (see Fig. 4)	
	45129001	Drip Tray, 1000 Series	
18	45129100	Drip Tray, 2000 Series	
	45678100	Drip Tray, 4000 Series	
	45430100	Drip Tray, 4000 Series	

Table 1. General Assembly

Table 1. General Assembly		
Item No.	Part No.	Name
	45155001	Cup Rest, 1000 Series
19	45255003	Cup Rest, 2000 Series
19	45677003	Cup Rest, 3000 Series
	45455003	Cup Rest, 4000 Series
	45158	Shelf, 1000 Series
20	45117	Shelf, 2000 Series
20	45317	Shelf, 3000 Series
	45417	Shelf, 4000 Series
21	45444	Strap
22		Electrical Box Assembly (see Fig. 12)
	45151	Bracket, Water Coil 1000 & 2000 Series
23	45666	Bracket, Water Coil 3000 Series
	45451	Bracket, Water Coil 4000 Series
	46546	Arm Assembly
24	45152	Bracket Assembly Drip Tray 1000 Series (not shown)
	96561	Plate Door Support 1000 Series
25	45436	Plate Door Support 2000, 3000 & 4000 Series
26	7245443	Panel RH Side
27	49154	Plate Hinge Upper
28	45165100	Coil, Water Assembly
29	49155	Hinge Bolt Shoulder
30	309852000	Client
31	49157	Bushing Upper Hinge
	45199	Panel Top 1000 & 2000 Series
32	45659	Panel Top 3000 Series
	45445	Panel Top 4000 Series
	45125	Panel, Back 1000 & 2000 Series
33	7245665	Panel, Back 3000 Series
	45425	Panel, Back 4000 Series
	7245765	Bracket, Cabinet 1000 & 2000 Series
34	7245763	Bracket, Cabinet 3000 Series
	7245764	Brackets, Cabinet 4000 Series
35	07115001	Screw, TF 8-32 TRPH 12
36	0704106	Screw, 8-32 1/4" THM S
37	45088	Cover, Bottom Hinge
38	45087	Cover, Top Hinge
39	0702901	Screw, 8-32 X 3/8" FHM
	45164	Bracket, Flavor Strip 2000 Series
40	45032	Holder, Flavor Label 3000 Series
	45464	Holder, Flavor Label 4000 Series
41	0730104	Washer, Plane Flat 10
42	0720406	Nut, No. 10-32
43		Item Not Used
<b>L</b>		



## REFRIGERATION AND FRAME ASSEMBLY

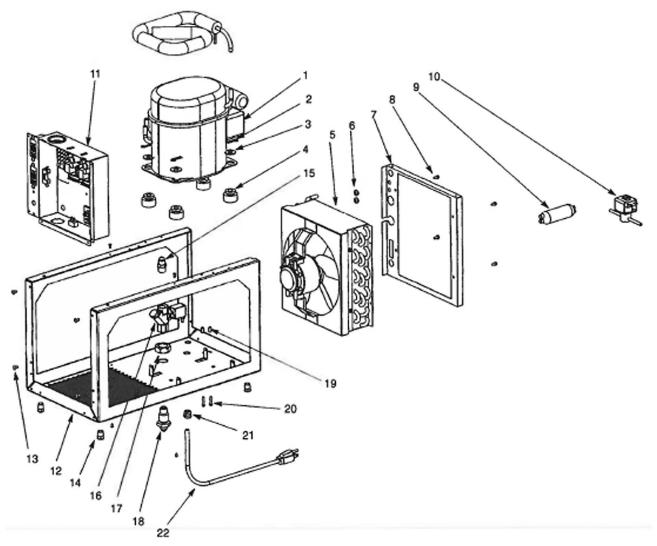


Figure 2. Refrigeration and Frame Assembly



Table 2. Refrigeration and Frame Assembly

Table 2. Refligeration and Frame Assembly		
Item No.	Part No.	Name
1	729011105	Kit Compressor, 120V 60 HZ
	729011106	Kit Compressor, 230V 50 HZ
2	08474	Clip, Spring
3	07301046	Washer, Flat 0.468 ID
4	08467	Grommet, Compressor
-	45163001	Motor Assembly & Condenser 115V 60 HZ (seeFig. 9)
5	45163002	Motor Assembly & Condenser 230V 50/60 HZ (see Fig. 9)
6	7240691	Grommet
	45148	Baffle Condenser (1000 & 2000 Series)
7	45670	Panel, Baffle Condenser (3000 Series)
	45448	Panel, Baffle Condenser (4000 Series)
8	289521	Screw, No. 8-32 3/8" HHS
9	45073	Dryer
10	45373010	Solenoid Valve 120V 60 HZ
10	45373020	Solenoid Valve 230V 50/60HZ

Table 2. Refrigeration and Frame Assembly

Item No.	Part No.	Name
11		Box, Electrical Assembly (see Fig. 11)
	45105100	Frame (1000 & 2000 Series)
12	45671100	Frame (3000 Series)
	45405100	frame scratch that Frame (4000 Series)
13	07115001	Screw, TF8-32 TRPH 12
14	60342002	Insert, Threaded 3/8-16
15	2124713	Fitting, Straight 3/8MF X 3/8MPT
16	45091001	Valve, Water Solenoid 24V
17	03824001	Not, Jam 7/8-14
18	30041001	Fitting,, Bulkhead
19	04442	Spacer
20	0702609	Screw, Machine 8-32 BDPH 24
21	7221320	Strain Relief
22	46384	Cord, Service 115V 60HZ
	46384001	Cord, Service 220V 50HZ



# UPPER CABINET ASSEMBLY

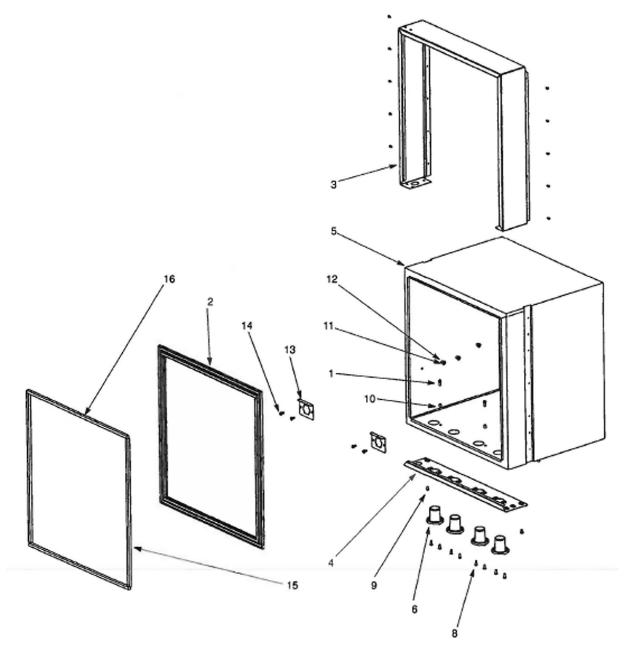


Figure 3. Upper Cabinet Assembly



**Table 3. Upper Cabinet Assembly** 

Table 3. Upper Cabinet Assembly		
Item No.	Part No.	Name
1	45051	Stud, Latch No. 10-32
	45119	Gasket Liner (1000 & 2000 Series)
2	45662	Gasket Liner (3000 Series)
	45419	Gasket Liner (4000 Series)
	45141	Wrap, Front (1000 & 2000 Series)
3	45657	Wrap, Front (3000 Series)
	45441	Wrap, Front (4000 Series)
	45142	Panel, Bottom Front (1000 Series)
4	45207	Panel, Bottom Front (2000 Series)
4	45664	Panel, Bottom Front (3000 Series)
	45407	Panel, Bottomed Front (4000 Series)
	45167	Liner, Inner Assembly (1000 Series)
5	45220	Liner, Inner Assembly (2000 Series)
5	45654100	Liner, Inner Assembly (3000 Series)
	45420100	Liner, Dinner Assembly (4000 Series)
6	45027001	Bushing
7	11761	Ham Door (1000 Series: not shown)
	11762	Ham Door (2000 Series: not shown)
/	11763	Ham Door (3000 Series: not shown)
	11823	Ham Door (4000 Series: not shown)

**Table 3. Upper Cabinet Assembly** 

Item No.	Part No.	Name
8	0704105	Screw, 8-32 X 1/2" THMS
9	0704101	Screw, MA 8-32 TRPH 12
10	04441	Spacer, Lower
11	0702609	Screw Machine 8-32 BDPH 24
12	4636X	Bushing, Hinge
	45132	Bracket, Connector Platform (1000 Series)
13	45232	Bracket, Connector Platform (2000 & 4000 Series)
	45632	Bracket, Connector Platform (3000 Series)
14	0704001	Screw, 8X3/8"
15	47121004	Magnet Door Seal
16	47121005	Magnet Door Seal (1000 & 2000 Series)
	47121006	Magnet Door Seal (3000 Series)



## PLATFORM ASSEMBLY

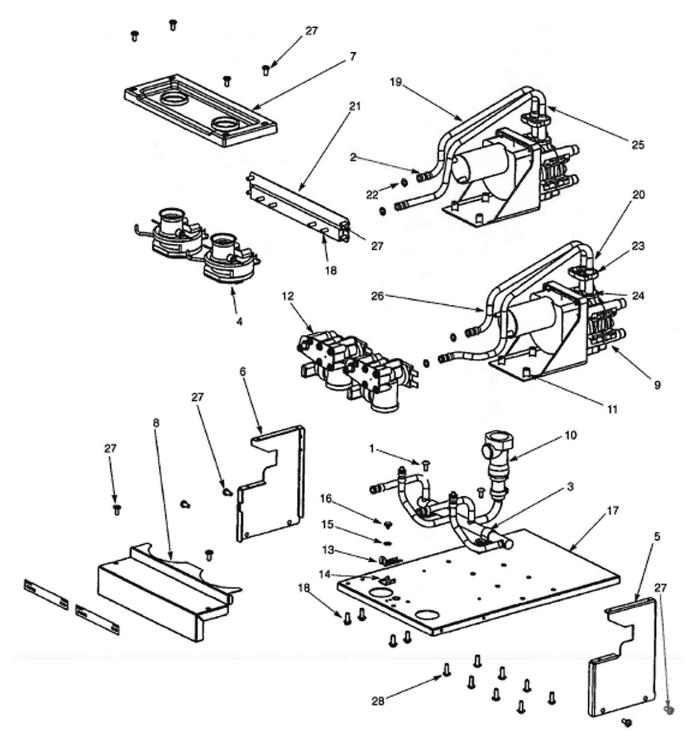


Figure 4. Platform Assembly



**Table 4. Platform Assembly** 

	Table 4. Flationii Assembly		
Item No.	Part No.	Name	
	45115	Platform Assem. (1000 Series)	
	45215	Platform Assem. (2000 & 4000 Series)	
	45315	Platform Assem. (3000 Series)	
1	0704101	Screw, Mach. 8-32 TRPH 12	
2	71822081	Washer, Holddown	
3	309852000	Client	
4	45026	Adapter Bottle Assem. (see Fig. 5)	
5	45033	Support Bottle, Right	
6	45034	Support Bottle, Left	
	45391001	Adapter, Caddy Support (1000 Series)	
7	45391002	Adapter, Caddy Support (2000 & 4000 Series)	
	45391003	Adapter, Caddy Support (3000 Series)	
	45137	Panel, Splash Platform (1000 Series)	
	45236	Panel, Splash Valve (2000 & 4000 Series)	
8	45345004	Cover, Platform (2000 & 4000 Series)	
	7245036	Panel, Splash Valve (3000 Series)	
	45345003	Cover, Platform (3000 Series)	
9	45185	Pump & Motor Assembly (see Fig. 7)	
	245174	Manifold Assembly, Water (1000 Series)	
10	45274	Manifold Assembly, Water (2000 & 4000 Series)	
	45041	Manifold Assembly, Water (3000 Series)	
11	45238	Bushing	
12	45045	Block Valve Assembly	
13	45046	Latch	

**Table 4. Platform Assembly** 

Table 4.1 lationii Assembly		
Item No.	Part No.	Name
14	45047	Guide, Latch
15	45048	Washer, Latch
16	7720800077	Rivet, Latch
	45114	Platform (1000 Series)
17	45214	Platform (2000 & 4000 Series)
	45314	Platform (3000 Series)
18	07032001	Screw, 8-18 X 7/16"
	45173	Tube Assembly, Suction (1000 Series)
19	45276 that	Tube Assembly, Suction (2000 & 4000 & Series)
	45068003	Tube Assembly, Suction (3000 Series)
00	45069	Line Discharge Assembly (1000 & 3000 Series)
20	45273	Tube Assembly Discharge (2000 & 4000 Series)
	45160	Bracket, Bottle Adapter (1000 Series)
21	7245262	Bracket, Support Bottle Adapter (2000 & 4000 Series)
	45339	Bracket, Caddy Support (3000 Series)
22	398033000	O-Ring 0.239 ID
23	48195006	Clamp Hose
24	481950062	Clamp
25	45275	Tube, Assembly Discharge (2000 & 4000 Series)
	45068001	Line, Suction Assembly (3000 Series)
26	45277	Tube Assembly, Suction (2000 & 4000 Series)
	45068002	Tube Assembly, Center Suction (3000 Series)
27	0704001	Screw 8 X 3/8"
28	0704105	Screw 8-32 X 1/2" THMS



## VALVE BLOCK ASSEMBLY

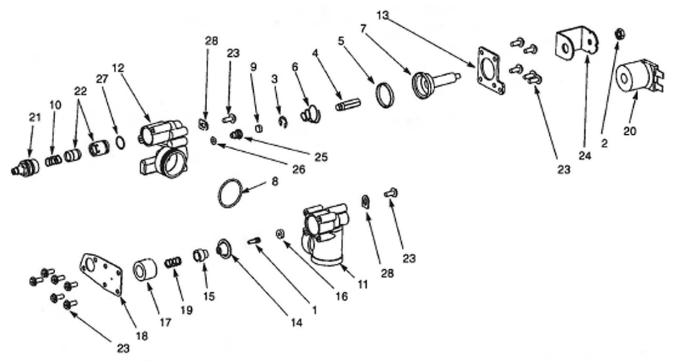


Figure 5. Valve Block Assembly

Table 5. Valve Block Assemby

Table 3. Valve block Assembly		
Item No.	Part No.	Name
	45045	Block Valve Assembly
1	45177	Holder Poppet Seal
2	0720406	Nut 10-32
3	71815321	Ring, Retaining
4	7215323	Armature tab
5	18070002	Gasket, Rubber Valve Block
6	18367	Spring Armature
7	19695001	Guide
8	31525021	O-Ring 1.114 ID
9	18071	Seat, Armature
10	48258005	Spring, Syrup
11	45192	Valve Body, Mixing
12	445193	Valve Body, Water
13	45029	Plate, Coil Retainer
14	47011	Diaphragm Valve

Table 5. Valve Block Assemby

Item No.	Part No.	Name
15	45180	Spring, Actuator
16	45189	Poppet
17	45179	Support, Diaphragm
18	45195	Plate, Front Valve Block
19	45186	Spring
20	48520001	Coil Assembly 24V DC
21	48978	Flow Control Bonnet Assembly
22	48979103	Sleeve & Piston Assembly ,Water
22	60281001	Sleeve Ceramic, Syrup
23	07032001	Screw 8-18 X 7/16
24	16779003	Frame, Solenoid
25	49612	Port Valve, Water
26	31525020	O-Ring 0.176 ID
27	31525060	O-Ring 0.459 ID
28	48378	Bracket, Support Valve



#### **BOTTLE ADAPTER ASSEMBLY**

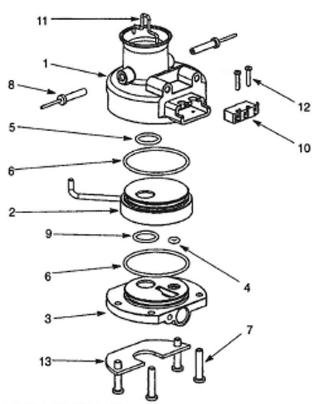


Figure 6. Bottle Adapter Assembly

#### **Table 6. Bottle Adapter Assembly**

ranie of Dottie Maupier Meconiary		
Item No.	Part No.	Name
1	45026	Adapter Bottle Assembly
2	45060001	Adapter, Caddy Top
3	45060002	Adapter Caddy Run & Flush
4	31525062	O-Ring 0.118 ID
5	31525014	O-Ring 0.489 ID
6	31525061	O-Ring 1.489 ID
7	07015001	Screw 8-18 X 3/4"
8	45043	Pin, Sensor Sold out
9	31525064	O-Ring 0.488 ID
10	60068021	Switch, Snap Portion Control
11	45076	Pin Actuator
12	60067086	Screw 2-56 X 7/16"
13	45084001	Plate, Support Bottle

## PUMP AND MOTOR ASSEMBLY

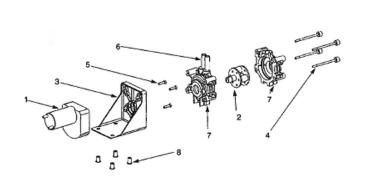


Figure 7. Pump and Motor Assembly

Table 7. Pump and Motor Assembly

Tubio 7.1 ump and motor 7.000mbry		
Item No.	Part No.	Name
	45185	Pump & Motor Assembly
1	45016001	Motor Pump
2	45728001	Rotor Assembly
3	45050	Block Assembly Mounting, Pump & Motor
4	45017001	Thumb Screw, Pump
5	0702905	Screw 8-32 X 3/4" FHMS
6	45037001	Tubing, Neoprene 0.250 ID (sold by the foot)
7	45727	Body, Pump Assembly
8	45283	Bushing
9	45098	Kit, Pump Tube Replacement
10		
11		
12		



## REAR DOOR ASSEMBLY

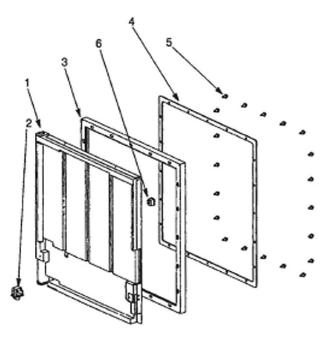
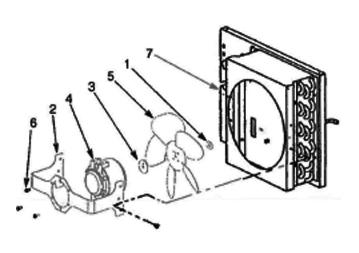


Figure 8. Rear Door Assembly

#### Table 8. Rear Door Assembly

Table 6. Real Door Assembly			
Item No.	Part No.	Name	
	45241	Door Assembly, Back (1000 & 2000 Series)	
	45390	Door Assembly, Back (3000 Series)	
	45470	Door Assembly, Back (4000 Series)	
	45281	Panel, Rear Door (1000 & 2000 Series)	
1	45386	Panel, Rear Door(3000 Series)	
	45477	Panel, Rear Door (4000 Series)	
2	7233023	Switch, Safety	
_	7245120	Gasket, Door Magnetic (1000 & 2000 Series)	
3	45320	Gasket, Door Magnetic (3000 Series)	
	45431	Gasket, Door Magnetic (4000 Series)	
	7245780	Frame, Door Gasket (1000 & 2000	
4	7245781	Series)	
-	7245782	Frame, Door Gasket (3000 Series)	
		Frame, Door Gasket (4000 Series)	
5	7245779	Rivet 0.236 Dia.	
6	45432	Switch, Rocker	

## CONDENSER MOTOR ASSEMBLY



**Table 9. Condenser Motor Assembly** 

Item No.	Part No.	Name	
	45175001	Motor Assembly Fan 9W 120V60HZ	
	45175002	Motor Assembly Fan 9W 230V 50/60 HZ	
1	0726802	Nut, Tinnerman	
2	45159	Panel, Splash	
3	41757	Washer	
4	48004	Motor, Fan 9W 120V 60HZ	
4	448013	Motor,Fan 9W 230V 50/60 HZ	
5	45168	Blade, Fan	
6	96285001	Screw 8-36 X 3/8"	
7	45161	Condenser Coil	

Figure 9. Condenser Motor Assembly



## Door Cover Assembly

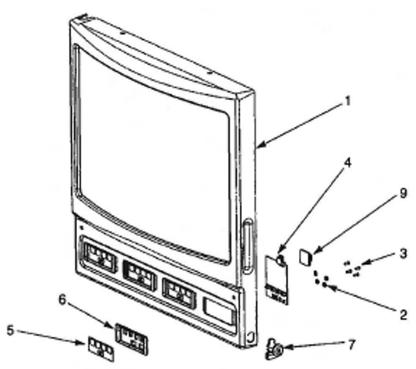


Figure 10. Door Cover Assembly

**Table 10. Door Cover Assembly** 

	Table 10. Door Cover Assembly			
Item No.	Part No.	Name		
	45296006	Cover Assembly Merchandiser Pushbutton (2000 Series)		
	45296007	Cover Assembly Merchandiser Portion Control (2000 Series)		
	45296009	Cover Assembly Merchandiser Portion Control, Illuminated (2000 Series)		
	45394005	Cover Assembly Merchandiser Pushbutton (3000 Series)		
	45394007	Cover Assembly Merchandiser Pushbutton, Illuminated (3000 Series)		
	45394008	Cover Assembly Merchandiser Portion Control, Illuminated (3000 Series)		
	45481006	Cover Assembly Merchandiser Pushbutton (3000 Series)		
	45481007	Cover Assembly Merchandiser Portion Control (4000 Series)		
	45481008	Cover Assembly Merchandiser Pushbutton, Illuminated (4000 Series)		
	45481009	Cover Assembly Merchandiser Portion Control, Illuminated (4000 Series)		

**Table 10. Door Cover Assembly** 

Item No.	Part No.	Name	
	45224004	Cover, Merchandiser (2000 Series)	
	45224005	Cover, Merchandiser Illuminated (2000 Series)	
	45377004	Cover, Merchandiser (3000 Series)	
1	45377005	Cover, Merchandiser Illuminated (3000 Series)	
	45472004	Cover, Merchandiser (4000 Series)	
	45472005	Cover, Merchandiser Illuminated (4000 Series)	
2	07301029	Washer, Flat 0.125 ID	
3	0712901	Screw No. 4 X 5/16"	
4	45018001	Board, Pushbutton	
4	49280001	Portion Control Board	
5 49230 Overlay Assem		Overlay Assembly Pushbutton	
5	49231	Overlay Assembly Portion Control	
6	7245399	Bezel Pushbutton	
0	45398	Bezel Portion Control	
7	45435	Lock & Keys	
8	11771	Jumper Assembly, Strain Relief (not shown)	
9	04037	Clip	



# ELECTRICAL Box(DC)ASSEMBLY

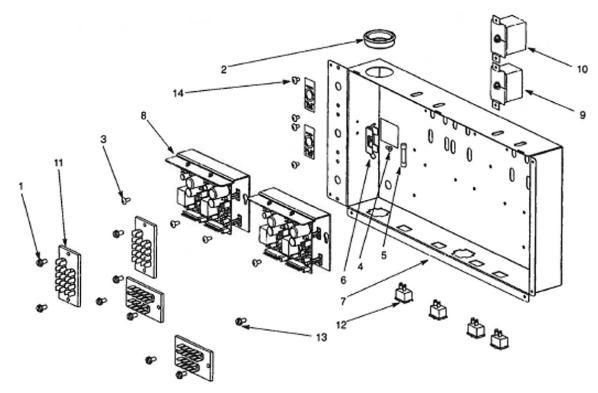


Figure 11.Electrical Box (DC) Assembly

Table 11. Electrical Box (DC) Assembly

	Table 11: Electrical Box (Bo) Assembly				
Item No.	Part No.	Name			
1	07061001	Screw No. 10 X 3/8"			
2	0733903	Bushing, Snap			
3	07115001	Screw TF 8-32 TRPH 12			
4	0734801	Rivet, Pop			
5	59328001	Fuse, 6.25 Amp			
6	7245059	Fuse holder			
	45106	Box Electric (1000 & 2000 Series)			
7	45673	Box Electric (3000 Series)			
	45414	Box Electric (4000 Series)			

Table 11. Electrical Box (DC) Assembly

Item No.	Part No.	Name	
	45138	Regulator Voltage Assembly (1000 Series)	
8	45238	Regulator Voltage Assembly (2000 & 4000 Series)	
	45674	Regulator Voltage Assembly (3000 Series)	
9	46306	Thermostat Concentrate	
10	46307	Thermostat Water Evaporator	
11	49273	Block, Terminal	
12	45432	Switch	
13	07061003	Screw No. 10 X 3/8" HHWF	
14	348871	Screw No. 8-32 X1/4"	



# ELECTRICAL BOX (AC) ASSEMBLY

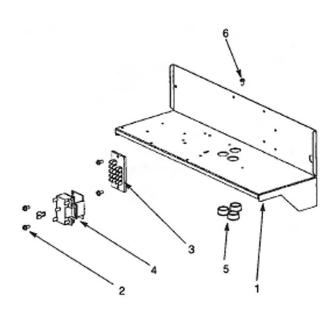


Table 12. Electrical Box (AC) Assembly

Item No.	Part No.	Name	
	45110	Box Electric (1000 & 2000 Series)	
1	45668	Box Electric (3000 Series)	
	45410	Box Electric (4000 Series)	
2	07061001	Screw No. 10 X 3/8"	
3	49273	Block Terminal	
4	46308	Relay, Start 115V 60 HZ	
	463081	Relay, Start 220V 50 HZ	
5	0735201	Bushing	
6	07061003	Screw No. 10 X 3/8"	
7	45028	Transformer 115V 60 HZ (not shown)	
	45028001	Transformer 240V 50 HZ (not shown)	
8	60600002	Ballast (not shown)	

Figure 12. Electrical Box (AC) Assembly



## VOLTAGE REGULATOR ASSEMBLY

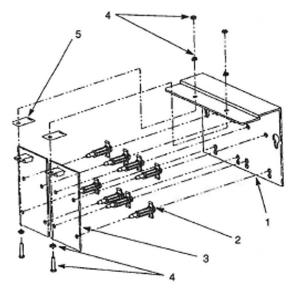


Figure 13. Voltage Regulator Assembly

#### Table 13. Voltage Regulator Assembly

Item No.	Part No.	Name	
	45138	Regulator Voltage Assembly (1000 Series)	
45238 Regulator Voltage 4000 Series)		Regulator Voltage Assembly (2000 & 4000 Series)	
	45338	Regulator Voltage Assembly (3000 Series)	
	45162	Bracket, Voltage Regulator	
1	45675	Bracket Voltage Regulator (3000 Series)	
2	45056	Support, P C Board	
3	45012002	Board, Voltage Regulator	
4	45004	Kit, Mounting	
5	45004001	Insulator, Voltage Regulator	

## TANK ASSEMBLY

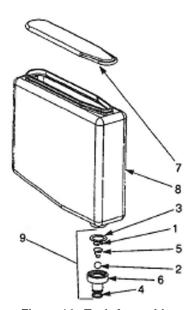


Figure 14.. Tank Assembly

**Table 14. Tank Assembly** 

Item No.	Part No.	Name	
	45190	Tank Assembly	
1	46433	Retainer	
2	463571	Tank, Ball Check	
3	7229192	Gasket Adapter	
4	31525010	O-Ring 0.737 ID	
5	1836701	Spring, Adapter	
6	7245246	Fitting, Adapter Tank	
7	45260001	Lid, Tank	
8	45260	Tank	
9	45248	Adapter, Assembly Tank	
10			
11			
12			



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