

SPACEMAN^{USA}

COMMERCIAL ICE CREAM & FROZEN BEVERAGE EQUIPMENT

PARTS LIST



MODEL SM-6220

SOFT SERVE - COUNTER TOP - SINGLE FLAVOR

Customer Service

Sunday – Saturday
8 AM – 5 PM Mountain

Toll-Free: +1 (888) 610-5520

Local: +1 (720) 328-1020

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Spaceman USA, LLC

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Sales and Product Information

Monday – Friday
8 AM – 5 PM Mountain

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TROUBLESHOOTING

PROBLEM: STOP 1 - LOW TEMP PROTECT

Probable Cause

1. Inadequate mix in hopper
2. Improper mixing of product
3. Air Tube is not installed correctly
4. Viscosity adjustment is set incorrectly
5. Product being drawn too quickly

Remedy

1. Ensure hopper is at least half full
2. Follow manufacturer instructions for mixing product; ensure correct mix ratios
3. Clean Air Tube, ensure proper orientation
4. Lower viscosity setting as required (Page 17)
5. Ensure Air Tube not clogged, allow machine 2-3 seconds in between servings.

PROBLEM: STOP 2 - MOTOR OVERLOAD

Probable Cause

1. Viscosity adjustment is set incorrectly
2. Inadequate mix in hopper
3. Improper mixing of product
4. Air Tube is not installed correctly
5. Product being drawn too quickly

Remedy

1. Lower viscosity setting as required (Page 17)
2. Ensure hopper is at least half full
3. Follow manufacturer instructions for mixing product; ensure correct mix ratios
4. Clean Air Tube, ensure proper orientation
5. Ensure Air Tube not clogged, allow machine 2-3 seconds in between servings to recover.

PROBLEM: PRODUCT TOO SOFT

Probable Cause

1. Machine not cleaned/lubricated adequately
2. Inadequate mix in hopper
3. Improper mixing of product
4. Machine does not have adequate ventilation
5. Viscosity adjustment is set incorrectly

Remedy

1. Clean and properly lubricate machine daily
2. Ensure hopper is at least half full
3. Follow manufacturer instructions for mixing product; ensure correct mix ratios
4. Ensure at least 6" of clearance on all sides
5. Raise viscosity setting as required (Page 17)

PROBLEM: HOPPER NOT COLD ENOUGH

Probable Cause

1. Warm Product Recently Added
2. Hopper Temperature Setting too High
3. Temperature Offsets need adjustment

Remedy

1. Allow at least 1 hour after adding new mix for hopper temperatures to stabilize
2. Adjust Hopper Temperature down.
3. Call Spaceman Technical Support

PROBLEM: HOPPER FREEZING

Probable Cause

1. Inadequate Mix in Hopper
2. Hopper Temperature Setting too Low

Remedy

1. Ensure hopper is at least half full
2. Adjust Hopper Temperature Up

PROBLEM: MACHINE MAKING NOISE

Probable Cause

1. Improper Assembly
2. Wearable Parts Need Replacement
3. Internal Cleaning / Maintenance Required
4. Damaged Internal Parts

Remedy

1. Stop machine use, drain product with machine powered OFF. Clean and Inspect Parts.
2. Replace wearable parts with new Tune-Up Kit and Scraper Blades at least once every 3 months
3. Contact Spaceman USA Technical Support
4. Inspect parts carefully for damage, ensure proper assembly. Replace as required.

PROBLEM: STOP 4 - TEMPERATURE

Probable Cause

1. Malfunctioning Temperature Probe

Remedy

1. Replace Temperature Probe

PROBLEM: STOP 6 - MOTOR AMP

Probable Cause

1. Malfunctioning Power Board

Remedy

1. Replace Power Board

PROBLEM: PRODUCT LEAKS EXCESSIVELY INTO INTERNAL DRIP TRAY

Probable Cause

1. Improper or inadequate lubrication of drive shaft gasket
2. Damaged, missing, or improperly installed drive shaft gasket

Remedy

1. Use sufficient food-grade lubricant, and add sufficient lubricant inside drive shaft gasket during assembly (Page 11)
2. Replace drive shaft gasket every 1 to 3 months; replace torque assembly guide every 1 to 3 months

PROBLEM: PRODUCT LEAKS EXCESSIVELY FROM DISPENSING DOOR SPOUT

Probable Cause

1. Improper or inadequate lubrication of draw valve and draw valve O-rings.
2. Cracked, broken, or worn draw valve O-rings

Remedy

1. Use sufficient food-grade lubricant when assembling draw valve (Page 12)
2. Replace O-rings every 1 to 3 months

PROBLEM: MACHINE SHUTS DOWN AUTOMATICALLY

Probable Cause

1. Cylinders are experiencing freeze-up (usually due to viscosity being set too high for selected product)

Remedy

1. Reset machine (Page 16), and lower viscosity as required (Page 17)

MACHINE SPECIFICATIONS

SM-6220

SOFT SERVE FREEZER

PRODUCT INFORMATION

Type	Counter Top
Flavors	1
Cooling	Air Cooled
Freezing Cylinders	1x 1.7 L / 1.8 qt
Product Mix Hoppers	1x 8.0 L / 8.5 qt
Output (4oz Servings)	18.0 qt / hr
	144 Servings / hr
Motor	1x 0.6 HP, 450W
Compressor (Main)	1x 3650 BTU, R404A
Compressor (Auxilliary)	Solenoid

FEATURES

Machine Controls	Single, Digital
Refrigerated Hopper	Yes, Digital Control
Hopper Agitator	No
Temperature Display	Yes
Standby Mode	Yes
Low Mix Indicator Light	Yes
Low Mix Indicator Alarm	No
Low Temperature Protection	Yes
Motor Amperage Protection	Yes, Mechanical
High Pressure Protection	Yes
Thermal Overload Protection	Yes



DESCRIPTION

A single flavor, gravity feed, countertop soft serve freezer. Capable of producing a variety of products including: Soft Serve, Frozen Yogurt, Ice Cream, Custards, and Sorbets. Digital control system automatically regulates and maintains consistent product quality. Refrigerated hopper and Standby Mode keeps product fresh, even overnight, and is approved for dairy and non-dairy products.

CUSTOM OPTIONS

Air Chute, Spinner (1)

ELECTRICAL SPECIFICATIONS

	Maximum Fuse Size	Min. Circuit Ampacity	Poles (P) Wires (W)
110-115/60/1	1 x 20A	1 x 18A	2P / 3W

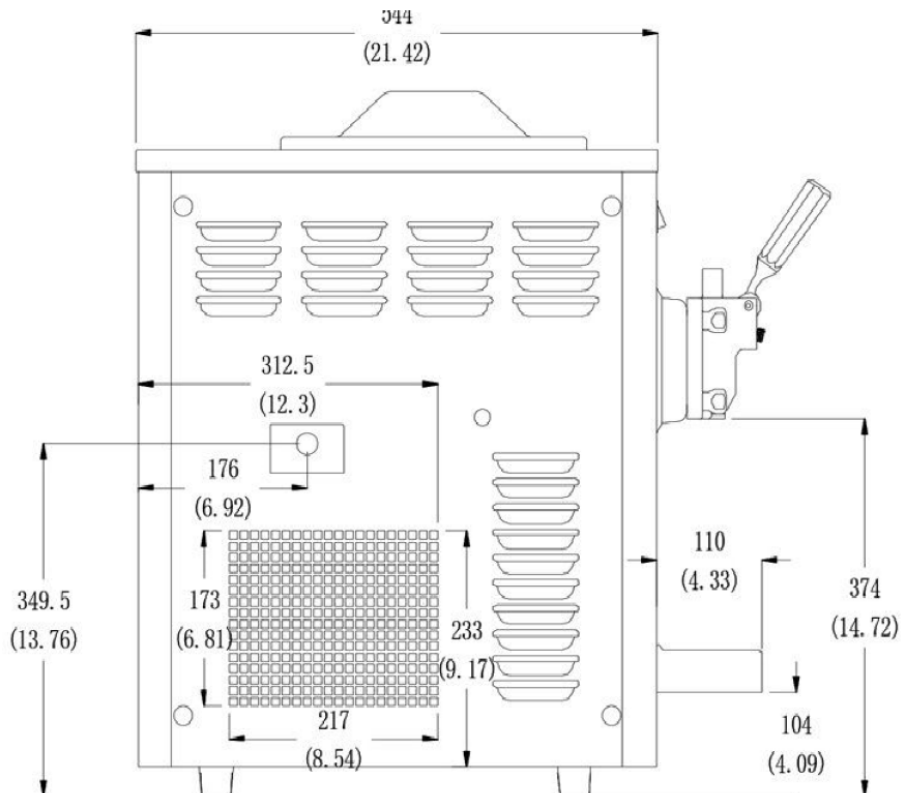
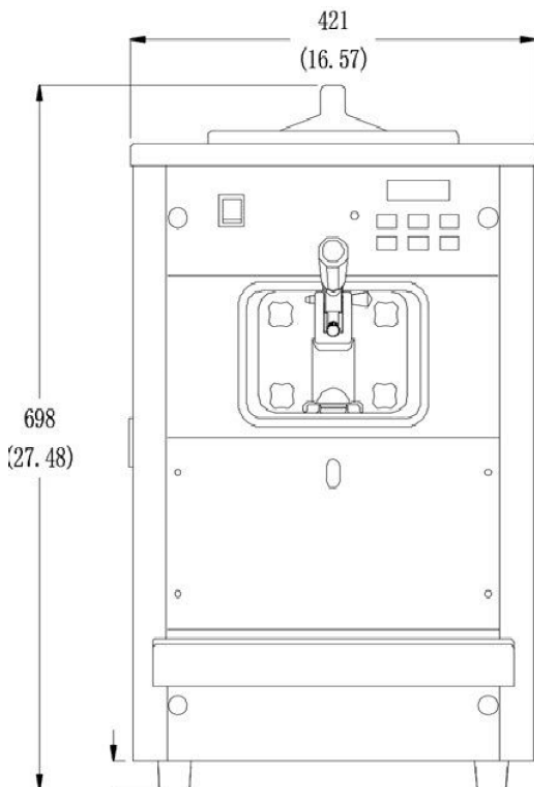
Electrical Plug: 1x NEMA 5-20

SIZE SPECIFICATIONS

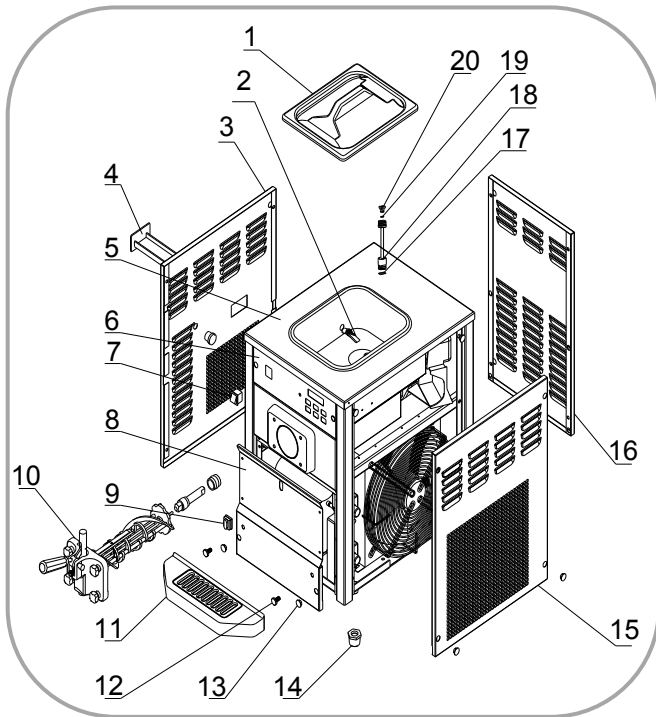
	Machine		Shipping	
Weight	90 kg	200 lbs	100 kg	222 lbs
Depth (mm / in)	544*	21.5*	700	27.6
Width (mm / in)	421*	16.6*	465	18.3
Height (mm / in)	698	27.5	840	33.1

Shipping Volume: 0.27 CBM / 9.54 CBF

* Machine Requires Minimum 6" Clearance on all sides

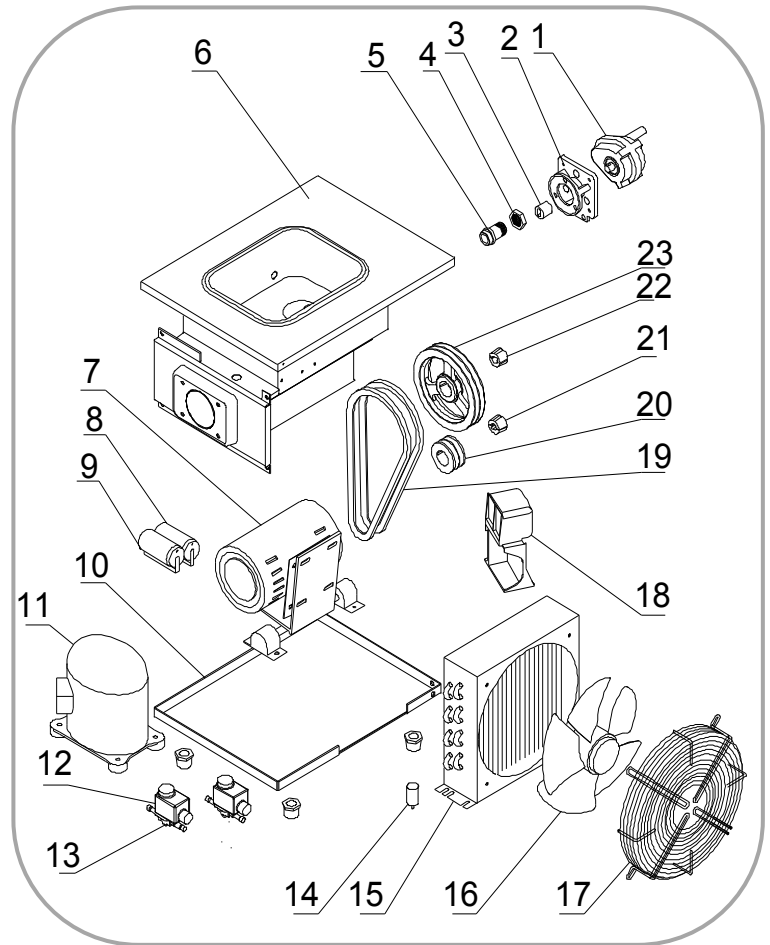


Exterior Parts



Item	Part #	Description
1	3.4.03.01.001	Hopper Lid
2	3.1.03.04.009	Low Mix Sensor
3	2.3.4.18.001	Panel - Left
4	3.4.04.02.003	Internal Drip Tray
5	2.1.1.01.0023	Hopper & Cylinder
6	2.3.4.07.001	Panel - Front - U
7	3.1.03.03.003	Power Switch
8	2.3.4.17.002	Panel - Front - L
9	3.1.03.04.004	Draw Sensor
10	2.1.1.15.0003	Dispensing Door
11	3.4.04.01.002	Drip Tray
12	3.6.39.004	Drip Tray Mount
13	3.4.07.01.001	Bolt Cover
14	3.3.05.03.001	Leg
15	2.3.4.20.001	Panel - Right
16	2.3.4.13.001	Panel - Rear
17	3.4.08.01.002	O-Ring - Air Tube
18	2.1.1.22.0002	Air Tube
19	3.4.08.01.028	O-Ring - Cap
20	2.1.3.23.0001	Air Tube Cap

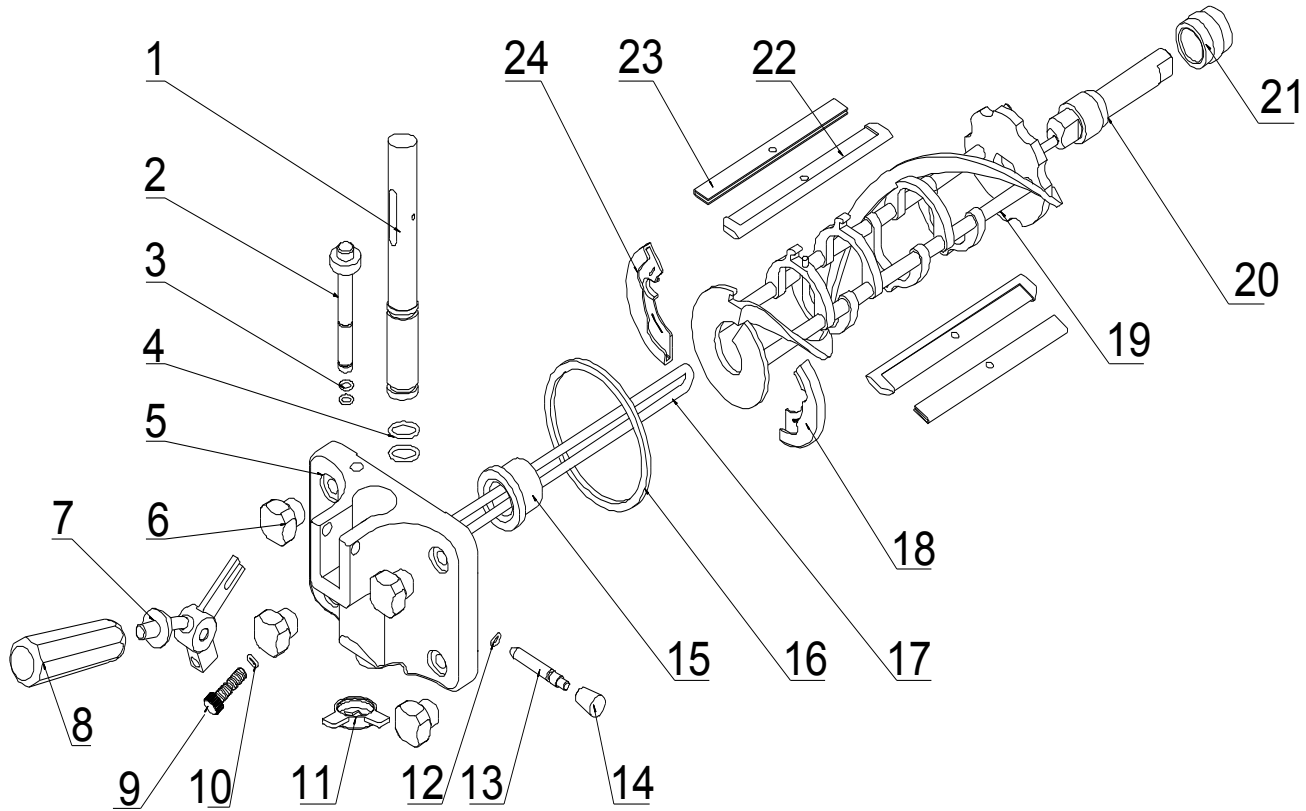
Interior Parts



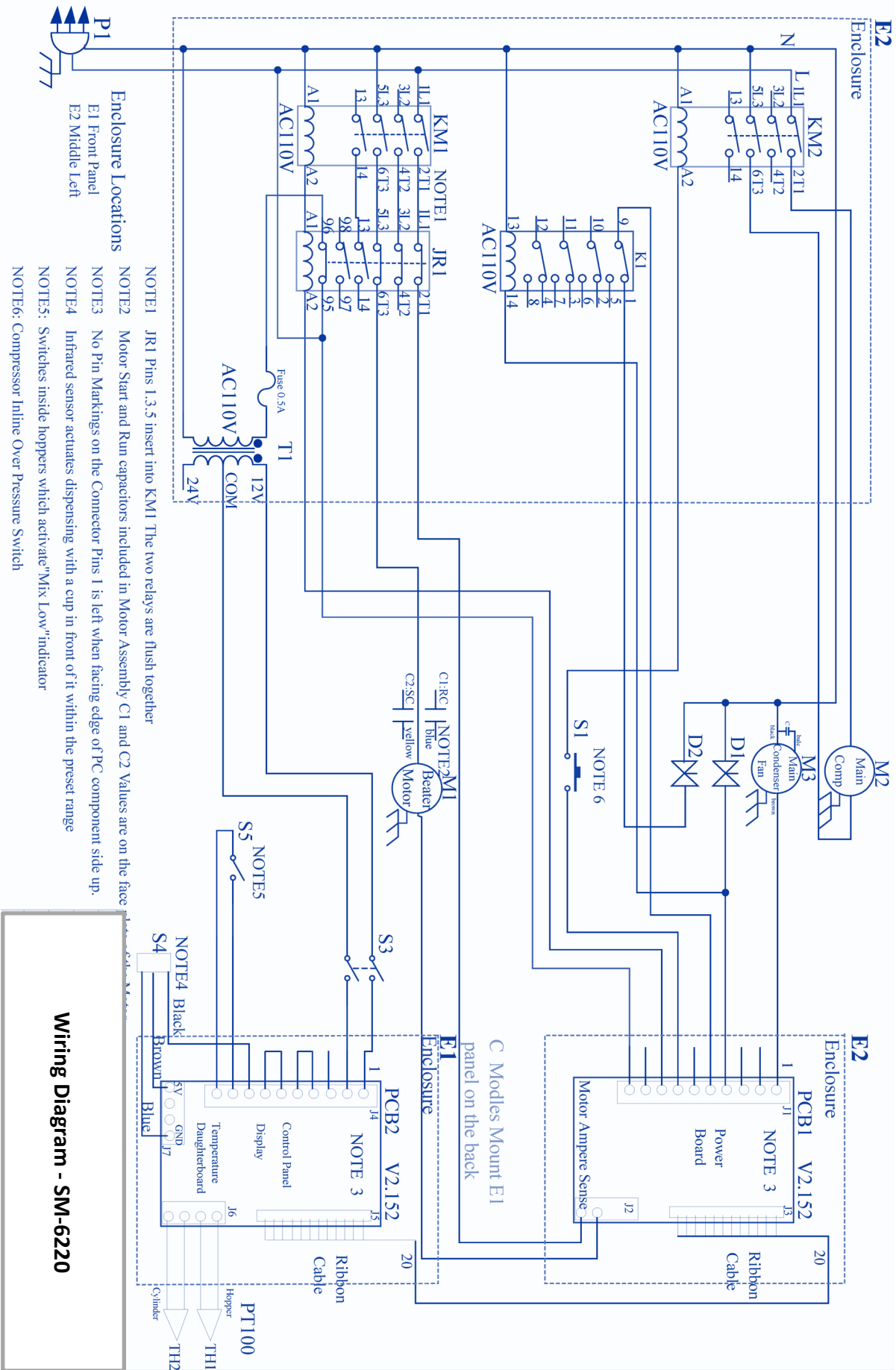
Item	Part #	Description
1	3.3.02.01.002	Gear Box
2	2.1.3.15.0002	Gear Box Mount
3	3.3.02.04.001	Drive Coupling
4	3.3.02.02.010	Nut - RS Bearing
5	3.3.02.02.001	Rear Shell Bearing
6	2.1.1.01.0023	Hopper & Cylinder
7	3.3.01.07.010	Motor - 450W
8	3.1.02.22.010	Capacitor - Running
9	3.1.02.22.063	Capacitor - Start
10	2.2.4.01.0002	Chassis
11	3.2.01.02.028	Compressor - Main
12	3.2.04.04.016	Solenoid - Coil
13	3.2.04.04.001	Solenoid - Body

Item	Part #	Description
14	3.2.03.04.003-2	Capacitor - Fan
15	3.2.02.01.003	Condenser
16	3.2.03.04.003	Fan Motor
17	3.2.03.04.003-1	Fan Cover
18	3.2.01.04.014	Compressor - Aux
19	3.3.03.01.019	Belt - XPA900
20	3.3.04.02.003	Pulley - 71x2-1108
21	3.3.04.01.006	Bushing - 1108
22	3.3.04.01.005	Bushing - 1008
23	3.3.04.02.007	Pulley - 182x2-1008

Dispensing Door and Beater



Item	Part #	Description	Item	Part #	Description
1	2.1.3.01.0002	Draw Valve	13	2.1.3.27.0001	Retention Pin
2	2.1.3.02.0015	Prime Plug	14	2.1.3.27.0025	Nut - Retention Pin
3	3.4.08.01.013	O-Ring - Plug	15	3.4.01.03.001	Beater Guide
4	3.4.08.01.006	O-Ring - Valve	16	3.4.08.01.029	Door Gasket
5	2.1.3.14.0002	Dispensing Door	17	2.1.1.11.0003	Beater Rod
6	2.1.3.32.0001	Hand Screws	18	3.4.01.02.002	Beater Shoe - R
7	2.1.3.26.0004	Handle Seat	19	2.1.1.10.0002	Beater
8	3.4.05.01.001	Dispensing Handle	20	2.1.3.25.0001	Drive Shaft
9	3.6.39.009	Adjustment Screw	21	3.4.07.05.002	Drive Shaft Gasket
10	3.4.08.01.012	O-Ring - Screw	22	3.4.02.01.002	Scraper Blade
11	3.4.05.03.004	Star Cap	23	2.3.4.04.001	Scraper Blade Clip
12	3.4.08.01.013	O-Ring - Pin	24	3.4.01.01.002	Beater Shoe - L



Item	Part #	Description	Item	Part #	Description	Item	Part #	Description
M1	3.3.01.07.010	Motor - 45-W	S4	3.1.03.04.004	Draw Sensor	JR	3.1.01.02.012	Thermal Relay
M2	3.2.01.02.028	Compressor	S5	3.1.03.04.009	Low Mix Sensor	PC1	2.2.1.01.0007	Power Board
M3	3.2.03.04.003	Fan Motor	KM	3.1.01.01.011	Contactor	PC2	2.2.1.01.0009	Control Board
S1	3.2.04.06.004	Pressure Switch	D	3.2.04.04.016	Solenoid Coil	TH	3.1.02.13.020	Temp Probe
S3	3.1.03.03.003	Power Switch	T	3.1.01.04.006	Transformer	F	3.1.02.08.002	Fuse - 0.5A

