

SPACEMAN^{USA}

COMMERCIAL ICE CREAM & FROZEN BEVERAGE EQUIPMENT

PARTS LIST



MODEL SM-6235H

SOFT SERVE - COUNTER TOP - DUAL FLAVOR + TWIST

Customer Service

Sunday – Saturday
8 AM – 5 PM Mountain

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

Local: +1 (720) 328-1020

service@spacemanusa.com

Spaceman USA, LLC

226 Commerce Street
Suite B
Broomfield, CO 80020

Sales and Product Information

Monday – Friday
8 AM – 5 PM Mountain

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

Local: +1 (720) 328-1020

sales@spacemanusa.com

info@spacemanusa.com

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-6235H

SOFT SERVE FREEZER

PRODUCT INFORMATION

Type	Counter Top
Flavors	2 + Twist
Cooling	Air Cooled
Freezing Cylinders	2x 1.7 L / 1.8 qt
Product Mix Hoppers	2x 12.0 L / 12.7 qt
Output (4oz Servings)	48 qt / hr
	385 servings / hr
Motor	2x 1.2 HP, 900W
Compressor (Main)	1x 6500 BTU, R404A
Compressor (Auxilliary)	1x 480 BTU, R134A

FEATURES

Machine Controls	Dual, Digital
Refrigerated Hopper	Yes, Digital Control
Hopper Agitator	Yes
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 twin-twist, gravity feed, countertop soft serve freezer. Capable of producing a variety of products including: Soft Serve, Frozen Yogurt, Ice Cream, Custards, and Sorbets. Independent digital control system automatically regulates and maintains consistent product quality on each side. Refrigerated hoppers and Standby Mode keeps product fresh, even overnight.

CUSTOM OPTIONS

Air Pump, Water Cooled, Air Chute, Spinner (1)

ELECTRICAL SPECIFICATIONS

	Maximum Fuse Size	Min. Circuit Ampacity	Poles (P) Wires (W)
208-230/60/1	1 x 20A	1 x 17A	2P / 3W

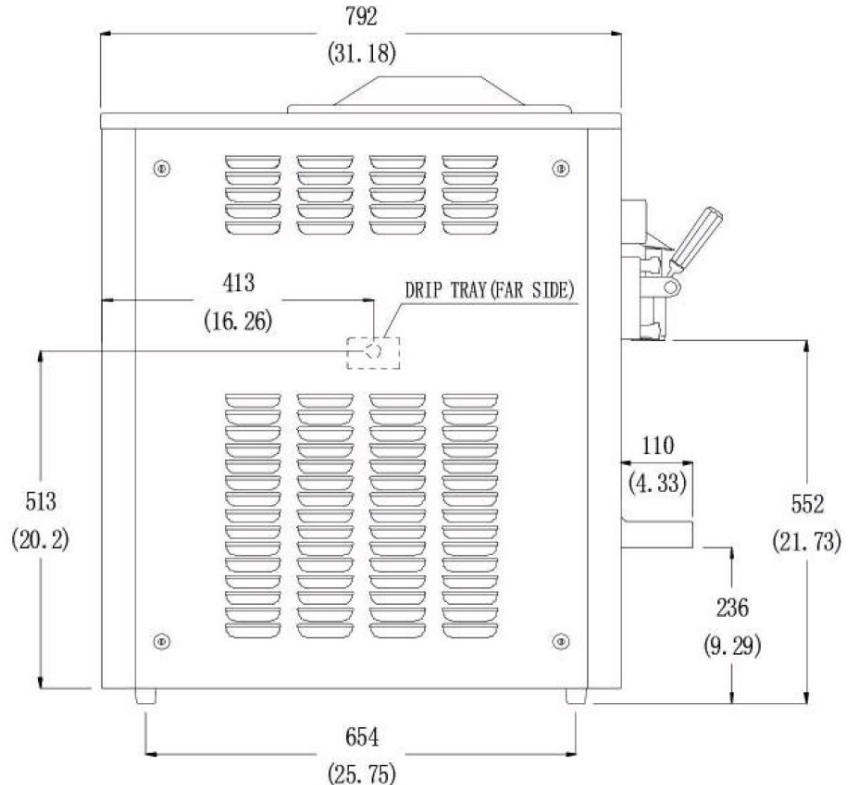
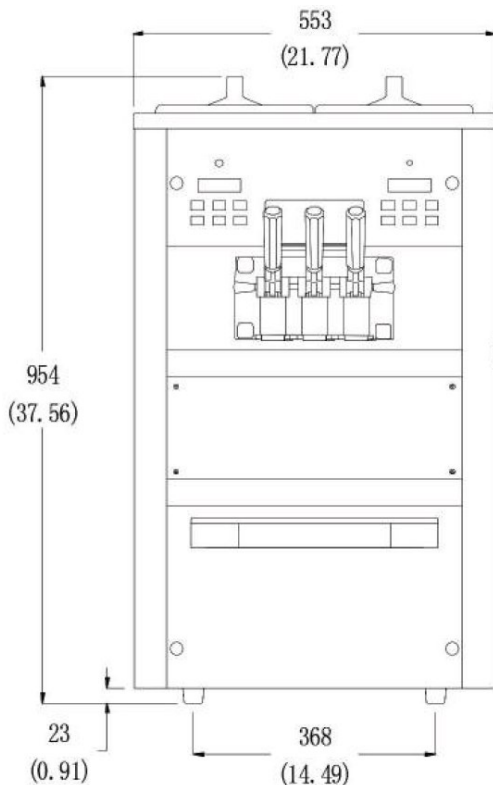
Electrical Plug: 1x NEMA L6-20

SIZE SPECIFICATIONS

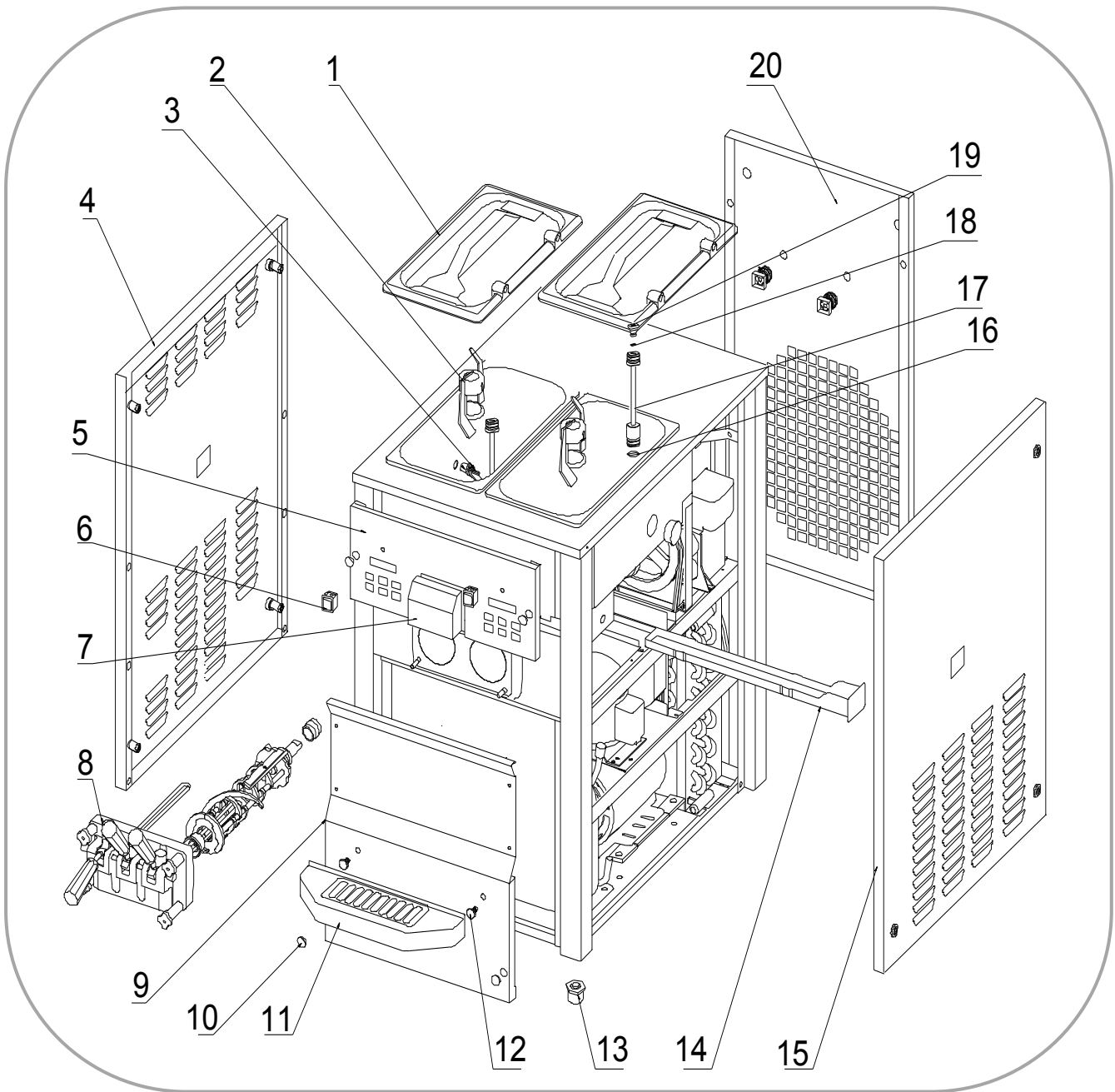
	Machine		Shipping	
Weight	174 kg	384 lbs	191 kg	421 lbs
Depth (mm / in)	792*	31.2*	910	35.9
Width (mm / in)	553*	21.8*	600	23.7
Height (mm / in)	954	37.6	1080	42.6

Shipping Volume: 0.59 CBM / 20.82 CBF

** Machine Requires Minimum 6" Clearance on all sides*



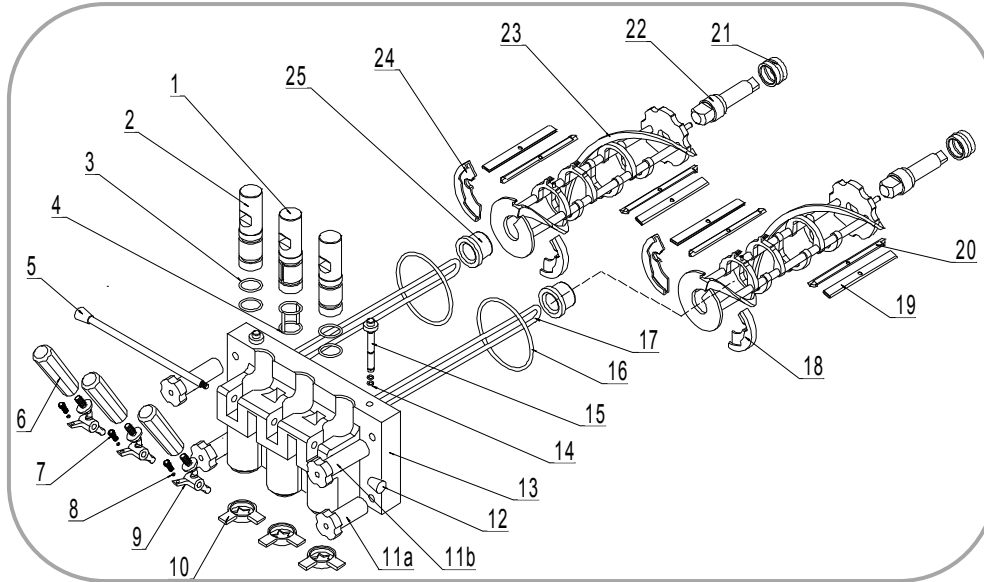
SPECS—EXTERNAL PARTS



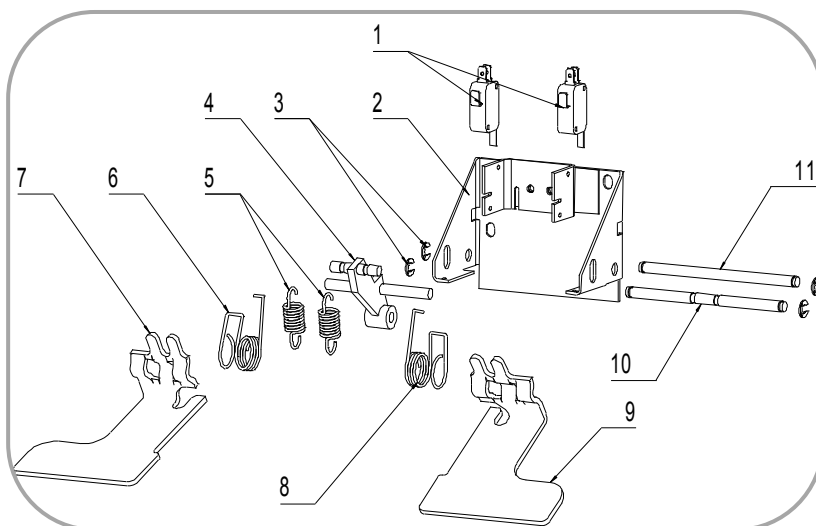
Item	Part #	Description	Item	Part #	Description	Item	Part #	Description
1	3.4.03.01.004	Hopper Lid	9	2.3.4.27.005	Panel - Front - L	17	2.1.1.22.0001	Air Tube
2	2.1.1.23.0001	Agitator Blade	10	3.4.07.01.001	Bolt Cover	18	3.4.08.01.028	O-Ring - Cap
3	3.1.03.04.009	Low Mix Sensor	11	3.4.04.01.002	Drip Tray	19	2.1.3.23.0001	Air Tube Cap
4	2.3.4.28.003	Panel - Left	12	3.6.39.004	Drip Tray Mount	20	2.3.4.23.003	Panel - Rear
5	2.3.4.08.002	Panel - Front - U	13	3.3.05.03.001	Leg			
6	3.1.03.03.003	Power Switch	14	3.4.04.02.001	Internal Drip Tray			
7	3.4.07.07.004	Switch Cover	15	2.3.4.30.003	Panel - Right			
8	2.1.1.15.0007	Dispensing Door	16	3.4.08.01.002	O-Ring - Air Tube			

SPECS—OPERATING PARTS

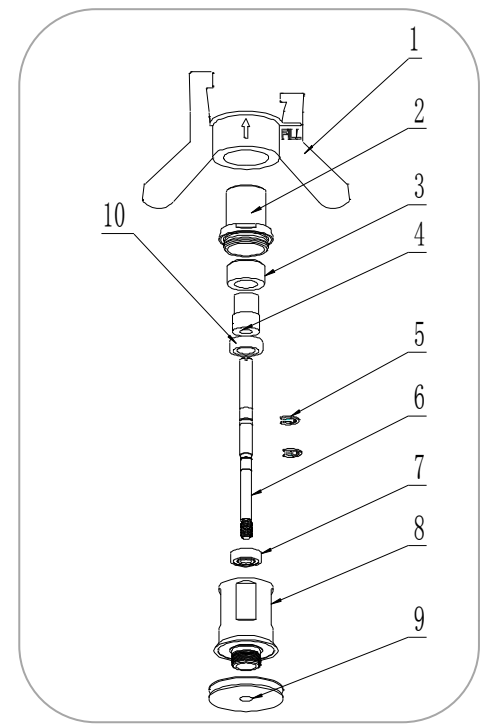
Dispensing Door and Beater



Item	Part #	Description	Item	Part #	Description
1	2.1.3.02.0003	Draw Valve - Mid	13	2.1.3.14.0003	Dispensing Door
2	2.1.3.01.0009	Draw Valve - Side	14	3.4.08.01.013	O-Ring - Prime
3	3.4.08.01.011	O-Ring - Valve	15	2.1.3.02.0015	Prime Plug
4	3.4.08.01.019	H-Ring - Valve	16	3.4.08.02.007	Door Gasket
5	2.1.3.27.0002	Retention Pin	17	2.1.1.11.0001	Beater Rod
6	3.4.05.01.001	Dispensing Handle	18	3.4.01.02.002	Beater Shoe - R
7	3.6.39.009	Adjustment Screw	19	3.4.02.01.002	Scraper Blade
8	3.4.08.01.012	O-Ring - Screw	20	2.3.4.04.001	Scraper Blade Clip
9	2.1.3.26.0001	Handle Seat	21	3.4.07.05.002	Drive Shaft Gasket
10	3.4.05.03.005	Star Cap	22	2.1.3.25.0001	Drive Shaft
11a	3.4.05.02.001	Hand Screw - Short	23	2.1.1.10.0002	Beater
11b	3.4.05.02.002	Hand Screw - Long	24	3.4.01.01.002	Beater Shoe - L
12	2.1.3.27.0025	Nut - Retention Pin	25	3.4.01.03.001	Beater Guide



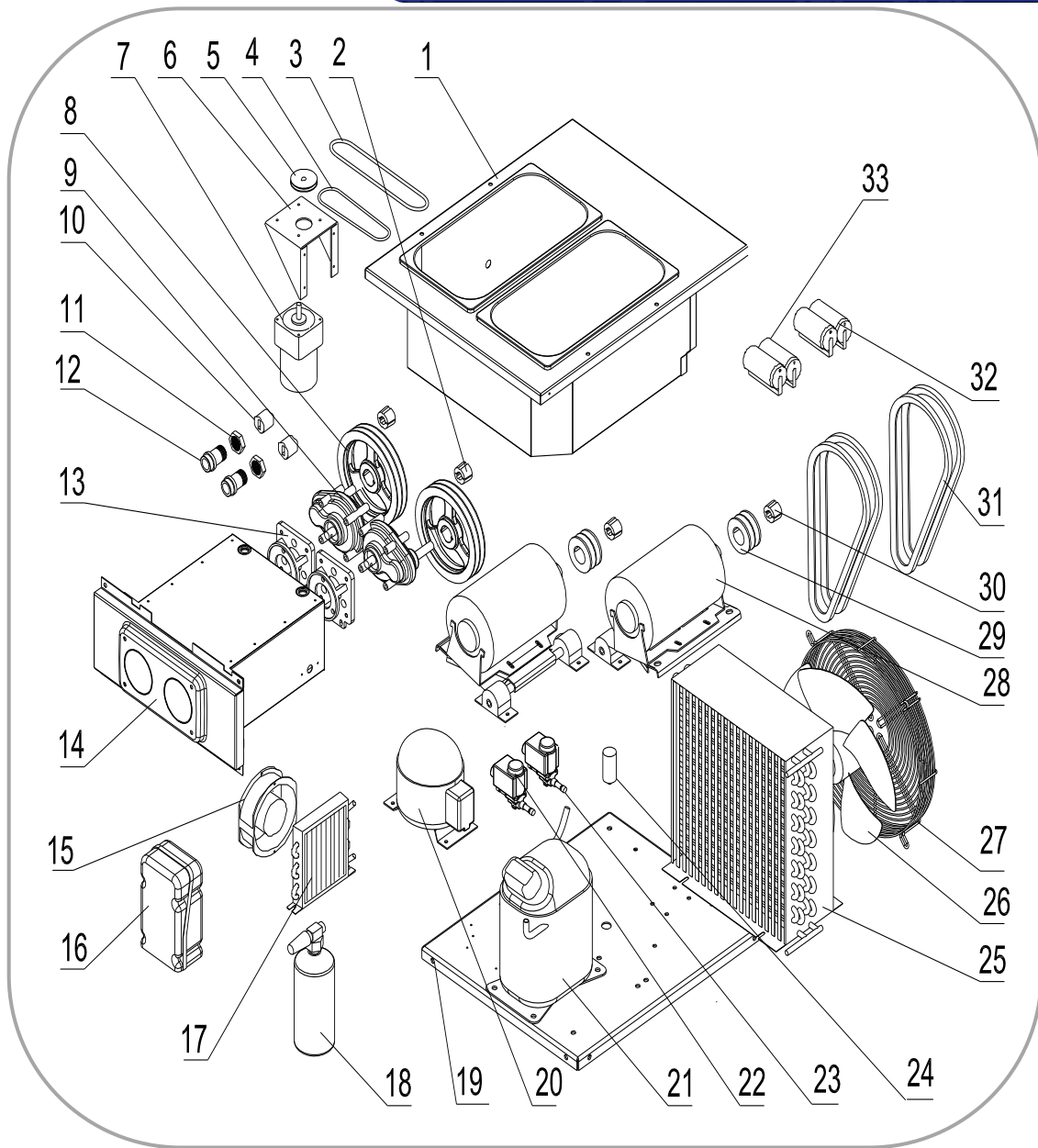
Hopper Agitator



Item	Part #	Description
1	2.1.1.23.0001	Agitator Blade
2	2.1.4.02.005	HA Housing Cap
3	2.1.4.02.002	HA Main Magnet
4	2.1.4.02.003	HA Shaft Magnet
5	3.6.34.003	C-Clip
6	2.1.3.42.0001	Drive Shaft
7	3.3.02.07.004	HA Bearing - Lower
8	2.1.4.02.001	HA Housing
9	2.1.4.02.015	Pulley - HA
10	3.3.02.07.003	HA Bearing - Upper

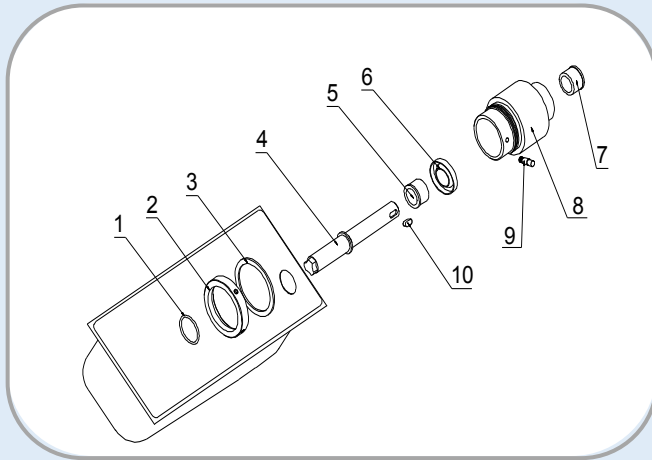
Item	Part #	Description
1	3.1.03.01.004	Switch - Draw
2	2.1.1.19.0010	Switch Mount
3	3.6.34.002	C-Clip - #6
4	2.1.1.19.0006	Draw Switch Lever
5	3.6.02.002	Spring - Draw
6	3.6.01.001	Spring - Return - L
7	2.1.4.05.011	Draw Arm - L
8	3.6.01.011	Spring - Return - R
9	2.1.4.05.012	Draw Arm - R
10	2.1.4.05.001	Retention Pin - F
11	2.1.4.05.002	Retention Pin - R

SPECS—INTERNAL PARTS

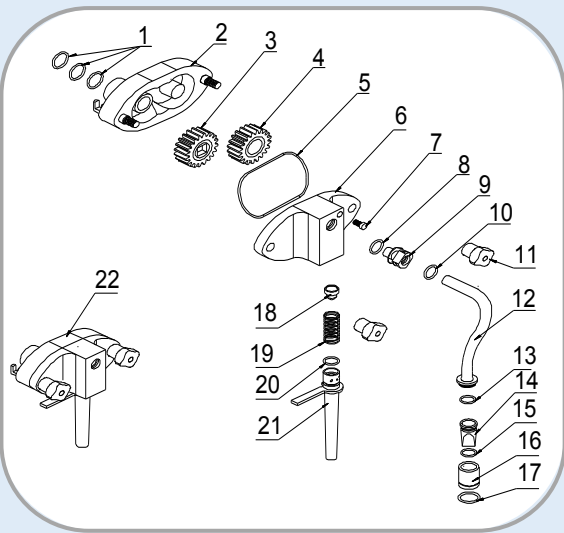


Item	Part #	Description	Item	Part #	Description	Item	Part #	Description
1	2.1.1.03.0011	Hopper Assembly	12	3.3.02.02.001	Rear Shell Bearing	23	3.2.04.04.015	Solenoid Coil
2	3.3.04.01.005	Bushing - 1008	13	2.1.3.15.0002	Mount - Gear Box	24	3.2.03.04.001-2	Capacitor - Fan
3	2.1.4.08.003	Belt - HA - 600mm	14	2.1.1.06.0012	Cylinder Assembly	25	3.2.02.01.007	Condenser - Main
4	2.1.4.08.023	Belt - HA - 265mm	15	3.2.03.01.001	Fan Motor - Aux	26	3.2.03.04.001	Fan Motor - Main
5	3.3.04.04.008	Pulley - 34mm	16	3.2.01.04.004	Start Component	27	3.2.03.04.001-1	Fan Cover - Main
6	2.3.4.45.007	Bracket - HA	17	3.2.02.01.001	Condenser - Aux	28	3.3.01.05.003	Motor - 900W
7	3.3.01.01.001	Agitator Motor	18	3.2.04.08.001	Receiver 76x280	29	3.3.04.02.003	Pulley - 71x2-1108
8	3.3.04.02.007	Pulley - 182x2-1008	19	2.2.4.01.0007	Chassis	30	3.3.04.01.006	Bushing - 1108
9	3.3.02.01.002	Gear Box	20	3.2.01.01.002	Compressor - Aux	31	3.3.03.01.017	Belt - XPA1232
10	3.3.02.04.001	Drive Coupling	21	3.2.01.02.005	Compressor - Main	32	3.1.02.22.009	Capacitor - Running
11	3.3.02.02.010	Nut - RS Bearing	22	3.2.04.04.002	Solenoid Body	33	3.1.02.22.061	Capacitor - Start

SPECS—AIR PUMP PARTS

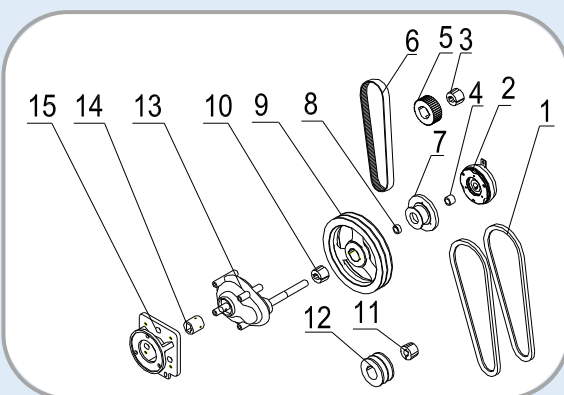


Item	Part #	Description
1	3.4.08.03.010	Nylon Ring - Shaft
2	2.1.4.01.016	Nut - Pump Seat
3	3.4.08.03.012	Nylon - Pump Seat
4	2.1.4.01.018	Drive Shaft - Pump
5	3.3.02.06.001	Bearing - Front
6	3.3.02.09.002	Bearing Gasket
7	3.3.02.06.001	Bearing - Rear
8	2.1.4.01.017	Air Pump Seat
9	3.6.39.010	Lock Pin
10	3.6.33.002	Drive Shaft Key



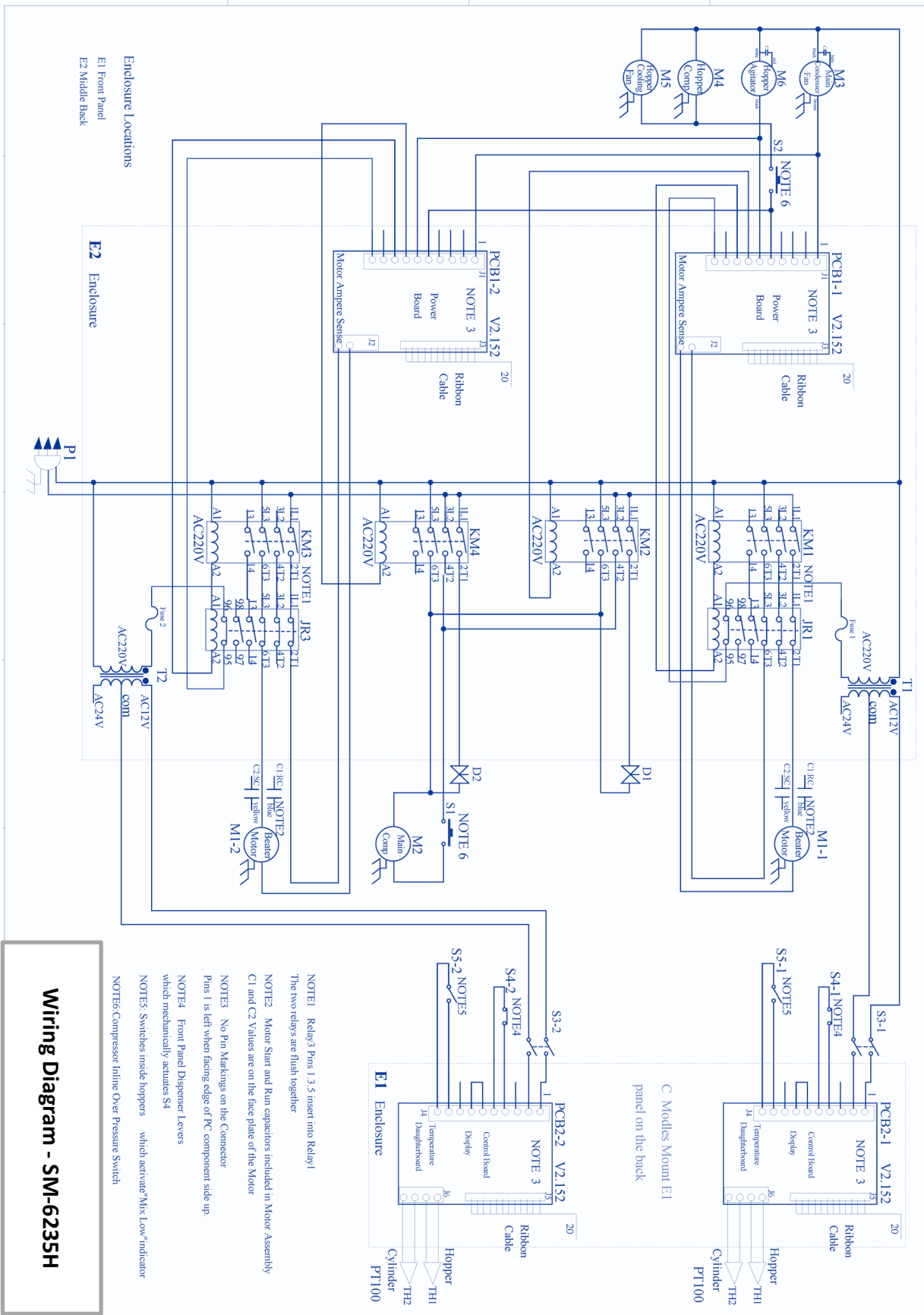
Item	Part #	Description
1	3.4.08.01.025	O-Ring
2	2.1.4.01.004	Air Pump Shell
3	2.1.4.01.013	Driving Gear
4	2.1.4.01.012	Driven Gear
5	3.4.08.01.004	Air Pump Gasket
6	2.1.4.01.003	Air Pump Cover
7	2.1.4.01.029	Lock Nut
8	3.4.08.01.003	O-Ring - Connector
9	2.1.4.01.023	Connector—Pump
10	3.4.08.01.008	O-Ring - Connector
11	2.1.4.01.002	Hand Screws

Item	Part #	Description
12	2.1.4.01.043	Air Tube - Left
13	3.4.08.01.003	O-Ring - Tube
14	2.1.4.01.035	Check Valve
15	3.4.08.01.023	O-Ring - Valve
16	2.1.4.01.039	Connector - Hopper
17	3.4.08.01.037	O-Ring - Connector
18	3.4.07.06.003	Plug
19	3.6.03.003	Spring
20	3.4.08.01.003	O-Ring - Suction
21	2.1.4.01.049	Suction Tube - 200
22	2.1.1.13.0001	AP Assembly



Item	Part #	Description
1	3.3.03.01.006	Belt - XPA1207
2	3.1.01.06.001	Micro Clutch
3	3.3.04.01.005	Bushing - 1008
4	3.3.04.06.001	Bushing - Clutch
5	3.3.04.03.001	Pulley - 63-5-1008
6	3.3.03.02.001	Belt - 5M665
7	3.3.04.03.002	Pulley - 50-5M
8	3.3.04.06.002	Bushing - Clutch

Item	Part #	Description
9	3.3.04.02.007	Pulley - 182x2-1008
10	3.3.04.01.005	Bushing - 1008
11	3.3.04.01.005	Bushing-1008
12	3.3.04.02.001	Pulley - 63x2-1008
13	3.3.02.01.007	Gear Box - Long
14	3.3.02.04.001	Drive Coupling
15	2.1.3.15.0002	Gear Box Mount



Wiring Diagram - SM-6235H

Item	Part #	Description	Item	Part #	Description	Item	Part #	Description	Item	Part #	Description
M1	3.3.01.05.003	Motor - 900W	M6	3.3.01.01.001	Agitator Motor	PC1	2.2.1.01.0007	Power Board	S4	3.1.03.01.004	Draw Switch
M2	3.2.01.02.005	Compressor - Main	JR	3.1.01.02.011	Thermal Relay	PC2	2.2.1.01.0004	Control Board	S5	3.1.03.04.009	Low Mix Sensor
M3	3.2.03.04.001	Fan Motor - Main	KM	3.1.01.01.010	Contactar	D	3.2.04.04.015	Solenoid Coil	F	3.1.02.08.002	Fuse - 0.5A
M4	3.2.01.01.002	Compressor - Aux	T	3.1.01.04.007	Transformer	S1/2	3.2.04.06.004	Pressure Switch			
M5	3.2.03.01.001	Fan Motor - Aux	TH	3.1.02.13.020	Thermostat	S3	3.1.03.03.003	Power Switch			

NOTE1: Relays Pins 1, 3, 5 insert into Relay 1
The two relays are flush together

NOTE2: Motor Start and Run capacitors included in Motor Assembly
C1 and C2 Values are on the face plate of the Motor

NOTE3: No Pin Markings on the Connector
Pins 1 is left when facing edge of PC component side up

NOTE4: Front Panel Dispenser Levers
which mechanically actuates S4

NOTE5: Switches inside hoppers which activate "Mix Low" indicator

NOTE6: Compressor Inline Over Pressure Switch

