

# Soft Serve/Shake Combination Freezer

## Taylor Model C602

Place this chapter in the Shakes/Desserts section of the Equipment Manual.

Manufactured exclusively for  
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### Warranty

A warranty checkout card is shipped with every new freezer that leaves the factory. The warranty checkout card is packed in an envelope which also contains this operator's manual. Refer to the warranty checkout card and the warranty classifications listed in the Parts Identification/Function section when service is performed on your freezer.

It is recommended that the operator take the necessary time to carefully read through the complete warranty information contained in the warranty checkout card. Any questions or unclear statements found within the card should be made clear to you upon delivery of the freezer. Thoroughly understand your warranty protection before you begin operation.

For any questions pertaining to the Taylor Company Warranty, please contact your authorized Taylor Distributor or Taylor Company, Rockton, Illinois 61072.

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## INTRODUCTION

The Model C602 is a combination shake and soft serve freezer. The soft serve side uses a 3.4 quart (3.2 liter) freezing cylinder with a single spout door.

The shake side has a 7 quart (6.6 liter) freezing cylinder with a four flavor dispensing door. The touch panel has four flavor symbols for selecting and drawing the desired shake flavor. When dispensing a shake, the cup is placed on the shake cup holder located below the door spout. A shake flavor symbol  is selected to automatically raise the draw valve, allowing frozen mix and syrup to enter the door where they are blended and dispensed as a finished shake.

A portion control device will sense the filling of the shake cup and automatically close the draw valve upon filling the shake cup to the correct level. The operator also has the ability to override the portion control and stop dispensing the shake by touching any of the four shake flavor symbols. The shake draw valve can also be raised and lowered in the WASH and OFF modes by selecting any of the four flavor symbols to enable cleaning, sanitizing, and priming.

Shake syrup is stored in the lower front compartment. Each syrup flavor is delivered to the dispensing door by a peristaltic pump. Syrup can be pumped directly from disposable plastic jugs, stainless steel tanks, or adapted to syrup-in-bag dispensing. The proper syrup delivery rate is achieved by calibrating each syrup flavor.

The mix is located in the mix hopper and is pumped to the freezing cylinder by an air/mix pump.

When your machine is delivered or if it has been in the OFF position for more than 24 hours, disassemble the freezer following the Manual Brush Cleaning procedures found on page 54. Follow the Equipment Set-Up procedures on page 60 to re-assemble your machine.

The machine must be disassembled, cleaned, sanitized and lubricated at least once every two weeks. Syrup lines must be cleaned and sanitized weekly.

It is recommended that these operating procedures be followed closely to insure correct assembly and disassembly of the freezer.

The C602 is designed for indoor use only.

## SAFETY

Always follow these safety precautions when operating the freezer:



**DO NOT** operate the freezer without reading this operator's manual. Failure to follow this instruction may result in equipment damage, poor freezer performance, health hazards, or personal injury.



**DO NOT** operate the freezer unless it is properly grounded. Failure to follow this instruction may result in electrocution.



All repairs must be performed by an authorized Taylor service agent. The main power supplies to the freezer must be disconnected prior to performing any repairs. Failure to follow this instruction may result in personal injury, equipment damage, poor freezer performance, or health hazards.



Stationary appliances which are not equipped with a power cord and a plug or other device to disconnect the appliance from the power source must have an all-pole disconnecting device with a contact gap of at least 3 mm installed in the external installation. Failure to follow this instruction may result in electrocution.



**DO NOT** operate the freezer with larger fuses than specified on the freezer data label. Failure to follow this instruction may result in electrocution or damage to the machine. Consult your electrician.



**DO NOT** operate the freezer unless all service panels and access doors are restrained with screws. Failure to follow this instruction may result in severe personal injury from hazardous moving parts.



**DO NOT** attempt to draw product or disassemble the unit during the HEAT cycle. The product is hot and under extreme pressure.



**DO NOT** put objects or fingers in the door spout. Failure to follow this instruction may result in contaminated product or personal injury from blade contact.



**DO NOT** remove the door, beater, scraper blades, drive shaft or air/mix pump unless all control switches are in the OFF position. Failure to follow this instruction may result in severe personal injury from hazardous moving parts.



**USE EXTREME CAUTION** when removing the beater assembly. The scraper blades are very sharp and may cause injury.



This freezer must be placed on a level surface. Failure to comply may result in personal injury or equipment damage.



**DO NOT** install the unit in an area where a water jet could be used, and do not use a water jet to clean or rinse the freezer. Failure to follow these instructions may result in serious electrical shock.

This freezer is designed to operate indoors, under normal ambient temperatures of 70° - 75°F (21° - 24°C). The freezer has successfully performed in high ambient temperatures of 104°F (40°C) at reduced capacities.

**DO NOT** obstruct air intake and discharge openings: 3" (76 mm) minimum air space all sides. Install the deflector provided to prevent recirculation of warm air. Failure to follow this instruction may cause poor freezer performance and damage to the machine.

**NOTICE** all warning labels that have been attached to the freezer to further point out safety precautions to the operator.

**HAZARD COMMUNICATION STANDARD (HCS)** - The procedure(s) in this manual include the use of chemical products. These chemical products will be highlighted with bold faced letters followed by the abbreviation (HCS) in the text portion of the procedure. See the Hazard Communication Standard (HCS) manual for the appropriate Material Safety Data Sheet(s) (MSDS).

This piece of equipment is made in America and has American sizes of hardware. All metric conversions are approximate and vary in size.

**NOISE LEVEL:** Airborne noise emission does not exceed 78 dB(A) when measured at a distance of 1.0 meter from the surface of the machine and at a height of 1.6 meters from the floor.

## Notes:

## PARTS IDENTIFICATION/FUNCTIONS

### Exploded View (See Figure 1)

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	053809-1	Cover-Hopper*Black*	2	Protects mix in mix hopper from any debris. Helps keep temperature in mix hopper uniform.	103
2	X44797	Agitator Assembly	2	Stirs product in mix hopper to assure even temperature.	103
3	043934	Pin-Retaining Hopper Cover	2	Holds hopper cover while filling hopper with mix.	103
4	X56003	Pan-Drip-Rear 8-3/4" Long (22.2 cm)	2	Used to catch any mix leakage from the mix pump.	103
5	055958	Panel-Rear-Upper	1	Provides access to internal components.	103
6	X48228	Guide A.-Drip Pan Mix Pump	2	Holds the mix pump drip pan in place.	103
7	055959	Panel-Rear-Lower	1	Provides access to internal components.	103
8	X56005	Pan-Drip-Side 12-3/4" Long (32.4 cm)	2	Used to catch any mix leakage from the rear shell bearing.	103
9	056692	Trim-Corner-Rear Right Side	1	Cosmetic trim. Seals the panels together.	103
	056693	Trim-Corner-Rear Left Side	1	Cosmetic trim. Seals the panels together.	103
10	044106	Caster-4"	4	Wheels which support the unit and allow easier movement.	103
11	011694	Screw-1/4 - 20 x 3/8	4	Attaches the panels to the frame.	000
12	055950	Panel-Side Right	1	Panel which provides access to internal components.	103
13	033812	Tray-Drip	1	Catches mix leakage from spout of freezer door.	103
14	033813	Shield-Splash	1	Helps to prevent any mix leakage from splashing.	103
15	042706	Lid-Syrup Jar	2	Lid for non-heated topping containers.	103
16	036573	Jar-Syrup - Plastic Shallow	2	Holds non-heated sundae toppings.	103
17	036574	Jar-Syrup - Stainless Shallow	2	Holds heated sundae toppings.	103
18	033637-1	Ladle-1 oz. (30 ml.)	2	Used to dispense non-heated toppings.	103
19	035034	Pan-Drip 19-3/4" Long (50.2 cm)	1	Used to catch any mix leakage from the rear shell bearing.	103

### Exploded View (Continued)

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
20	056131	Plate-Dec.	1	Touch sensor display panel on front of machine.	103
21	055957	Panel-Side Left	1	Panel which provides access to internal components.	103
22	052779-3	Filter-Air 18.0 L x 13.5 H x .70 W	2	Filters dust and dirt from the main condenser.	000

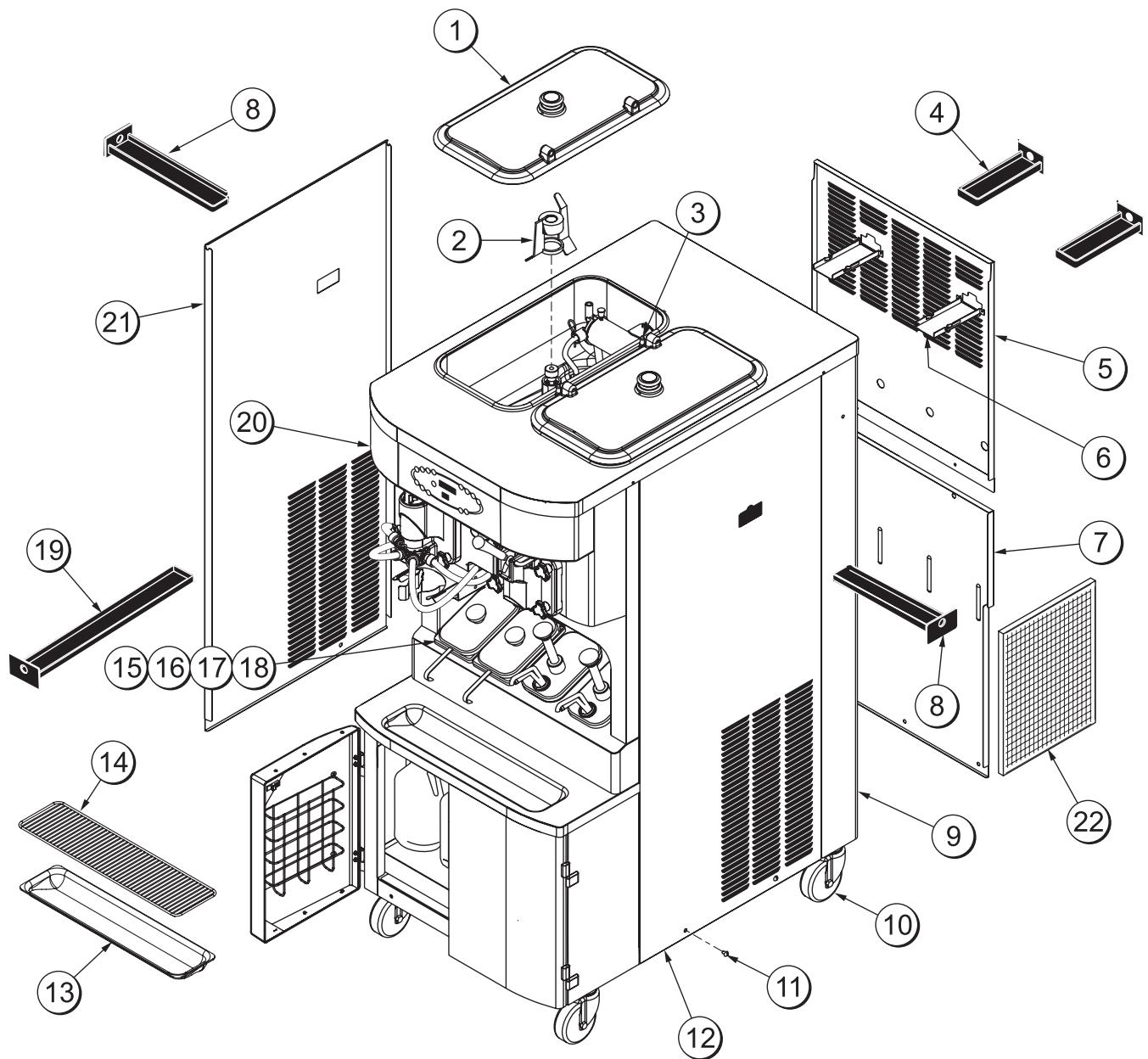


Figure 1

**Front View (See Figure 2)**

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	X35584SER2	Motor A.-Spinner	1	Turns spinner shaft assembly.	103
2	059462	Solenoid -Draw Valve	1	Energized to raise the shake draw valve.	103
3	020108	Coupling-Flexible W/Screws	1	Connects spinner motor to coupling assembly and provides adjustment for spinner shaft.	103
4	057910	Bumper-Recessed	1	Rubber cushion attached to the solenoid plunger.	103
4a	057911	Screw-1/4-20 x 3/4	1	Secures the bumper and actuator to the solenoid plunger.	000
5	056620	Bracket-Coupling Actuator	1	Raises and lowers the shake draw valve.	103
6	X20329	Coupling A.-Drive Spinner	1	Locks spinner shaft in place.	103
7	055987	Stud-Nose Cone	8	Freezer door sits on these studs and handscrews hold freezer door in place.	103
8	056674	Fitting-Panel Mount QD	4	Quick disconnect fitting for door syrup line.	103
9	055192	Clip-Spring Cup Holder	2	Holds the cup in place during dispensing.	103
10	X59304	Line A.-Syrup Door	4	Delivers syrup to the freezer door. Has a small slot for thin syrup.	103
	X56652	Line A.-Syrup Door	4	Delivers syrup to the freezer door. Has a large slot for thick syrup and particulates.	103
11	X59268	Sensor A.-Pyroelectric 6" L	1	Senses a change in temperature and closes the draw valve, stopping the flow of product.	103
12	X53353-BLU X53353-BRN X53353-RED X53353-WHT	Fitting A.-Syrup Jug	1 per tank	Transfers syrup from the syrup jug or tank to the peristaltic pump.	103
**12	X58450	Line A.-Syrup	4	Transfers syrup from the syrup bag to the peristaltic pump.	103
12a	053040-BLU 053040-BRN 053040-RED 053040-WHT	Cap-Ultimate Syrup	1 ea.	Attachment covers for containers.	000
12b	053052-36	Hose-Beverage	4	Delivers syrup to peristaltic pump.	000
12c	X53175	Tube A.-Syrup Pick Up	4	Transfers syrup from container to pump.	000
*12d	053036	Ferrule-.625 ID	4	Clamps syrup hose on fitting.	000
13	X58607	Door A.-Cabinet	2	Insulates syrup cabinet to keep an even temperature.	103
14	054809	Switch-Toggle-Power	1	Controls power to the machine.	103

\* Not Shown

\*\* Bag Syrup System

**Front View (Continued)**

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
15	X53800-BRN	Pump A.-Syrup-Heated (Chocolate)	1	Dispenses heated sundae topping.	103
16	X53800-TAN	Pump A.-Syrup-Heated (Caramel)	1	Dispenses heated sundae topping.	103
17	056008	Holder-Cup Shake	1	Holds cup in place during dispensing.	103
18	051574	Screw-Adjustment	1	Adjusts the sensing eye to determine correct level of shake.	103
19	059144	Rack-Syrup Cabinet Door	2	Rack for storage.	103
†20	062178	Latch-Cabinet	2	Holds the cabinet door closed.	103
21	028889	Switch-Lever-SPST 10A	1	Activates freezer operation when dispensing soft serve product.	103
22	045606	Holder-Fuse-In Line Type HLR	1	Contains the fuse.	103
23	062431	Fuse-12A In Line-Non Delay	1	Protects the draw solenoid circuit from damage by tripping in an overload condition.	000
*	015971	Pin-Roll-.094 x .562	1	Secures spinner shaft in coupling assembly.	000

\*Not Shown

†Prior to serial number K4091994, use 058630 Latch-Door-Magnetic.

## Front View

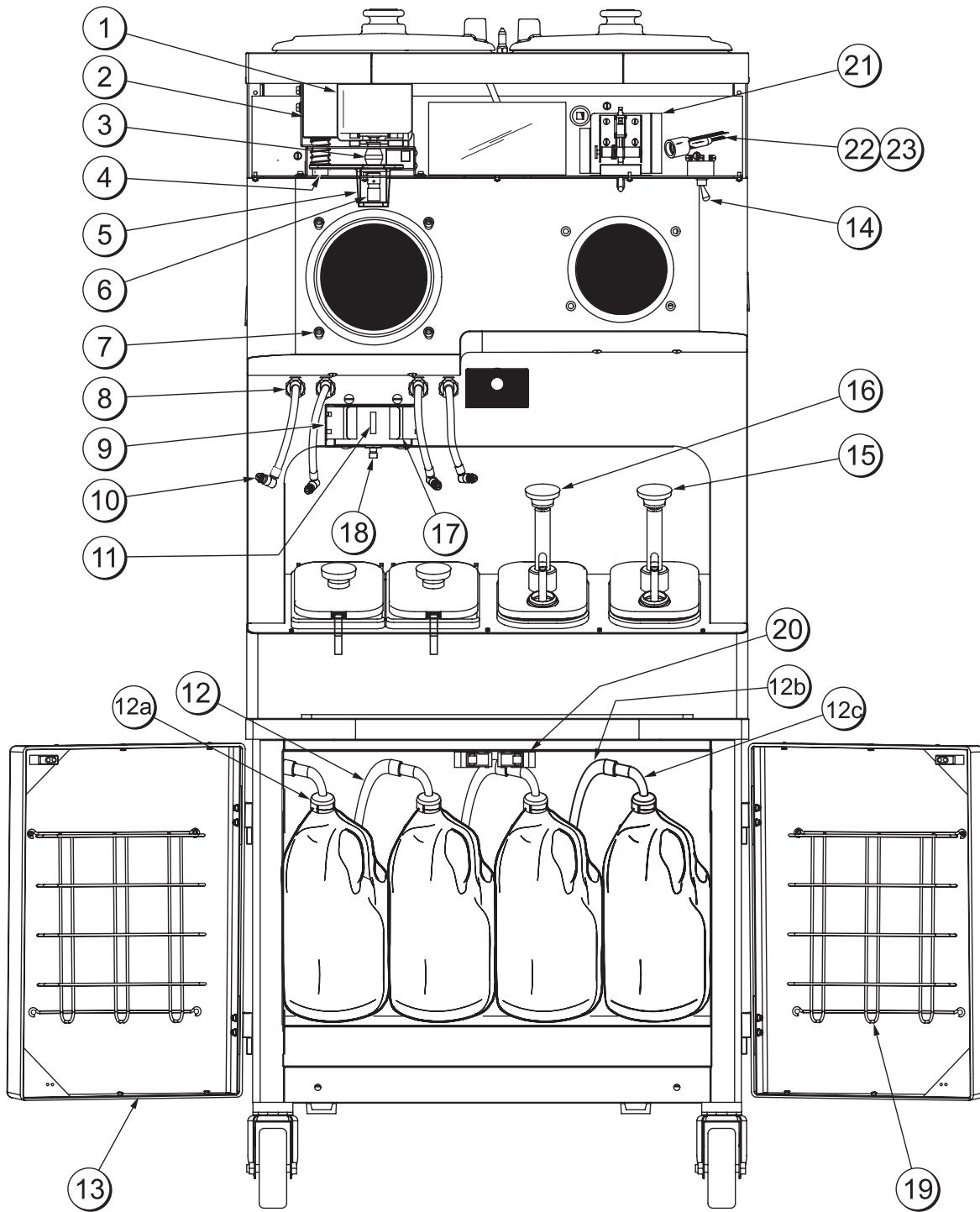


Figure 2

### Syrup Cabinet View (See Figure 3)

ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION	WARR. CLASS
1	056016	Shelf-Syrup	1	Provides access to syrup pumps.	103
2	052916	Pump-Peristaltic	4	Pumps syrup to freezer door.	103
3	058725	Motor-Gear 161 RPM	4	Drives peristaltic pump rollers.	103
4	059144	Rack-Syrup Cabinet Door	2	Rack for storage.	103
5	058613	Block-Hinge	4	Attaches the door to the syrup cabinet.	103
6	058614	Block-Hinge	4	Attaches the door to the syrup cabinet.	103
†7	062178	Latch-Cabinet	2	Holds the cabinet door closed.	103
*	058615	Pin-Hinge	4	Attaches the door to the syrup cabinet.	103

\*Not Shown

†Prior to serial number K4091994, use 058630 Latch-Door-Magnetic.

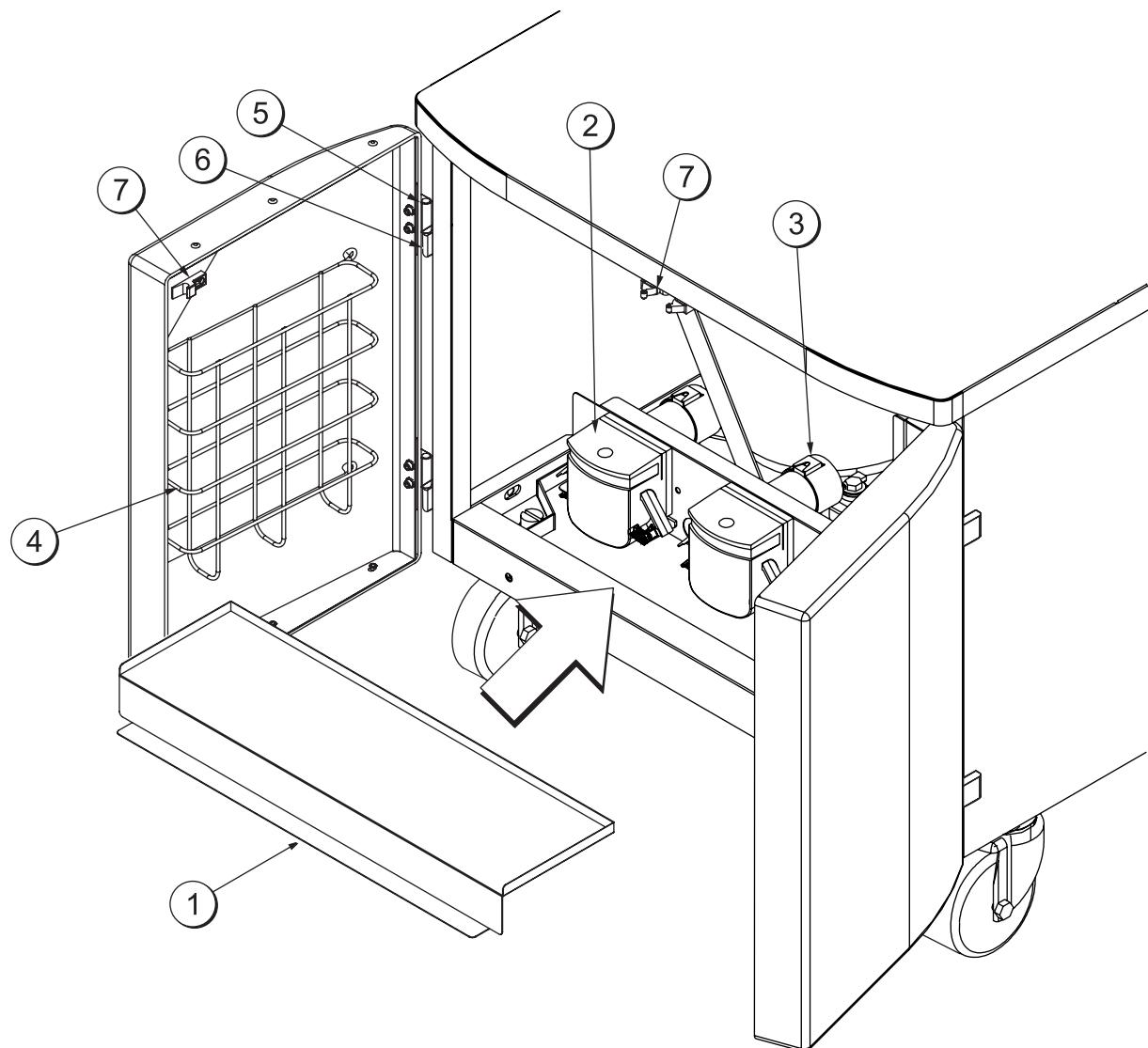


Figure 3