This guide provides a system description of the SaniServ Model 601 Shake Machine. It has been prepared to assist in the training of personnel on the proper operation and maintenance of the machine.

Please read and fully understand the instructions in this guide before attempting to install, operate, or perform routine maintenance on the machine.

**MODEL 601 SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Number of barrels</td>
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<tr>
<td>Barrel Capacity (quarts)</td>
<td>5</td>
</tr>
<tr>
<td>Mix Pan Capacity (quarts)</td>
<td>15</td>
</tr>
<tr>
<td>Height - leg mounted (in)</td>
<td>32-1/2</td>
</tr>
<tr>
<td>Width (in)</td>
<td>17</td>
</tr>
<tr>
<td>Depth (in)</td>
<td>24-3/4</td>
</tr>
<tr>
<td>Power</td>
<td>208-230/60/1</td>
</tr>
<tr>
<td></td>
<td>208-230/60/3</td>
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</tbody>
</table>

**IMPORTANT**

**SERVICE:** Always contact your SaniServ dealer or distributor for service questions or service agency referral. Do not call the manufacturing facility. If your SaniServ dealer or distributor cannot satisfy your service requirements, they are authorized to contact the factory for resolution.

**PARTS:** Always order parts from your SaniServ dealer or distributor. When ordering replacement parts, specify the part numbers, give the description of the part, the model number and the serial number of the machine.
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ITEM        DESCRIPTION      PART NUMBER
1 Carburetor Tube ................................108350
2 Carburetor Tube O-ring .......................58947
3 Mixpan Lid ........................................107794
4 Rear Bearing & Seal Assembly ..............108541
5 Dasher Assembly .................................See Fig. 3
6 Front Plate Assembly ..........................See Fig. 2
7 Drink Spinner .......................................188397
8 Syrup Rail Assembly Complete ..............188409
8a Syrup Rail ..........................................108978
8b Syrup Well Lid .................................108911
8c Syrup Ladle .........................................6926
8d Syrup Pump (optional) .........................108912
8e Syrup Well ..........................................6924
9 Drip Tray Bracket ...............................108968
10 Drip Tray Insert ................................108866
11 Drip Tray ............................................108865
12 Mix Pan Agitator ...............................108919

Fig. 1 (a)
Exploded View
O-ring Legend:
A - Front Plate (qty 1)
B - Spigot Plunger (qty 2)
C - Carburetor Tube (qty 1)

Note: See page 23 for a full size o-ring comparison chart

Fig. 1(c)
Parts Placement in Parts Tray p/n 108918

Lubricant 4 Oz. Tube p/n 1150
Sanitizer p/n 65634
Carburetor Tube Brush p/n 2264
Spigot Plunger O-Rings p/n 58923
Carb Tube O-Rings p/n 58947
Evaporator (Freezing Cylinder) Brush p/n 2244

Note: Items are not drawn actual size

Front Plate O-Ring p/n 58911

Fig. 1(d)
Maintenance Items in Spare Parts Kit
### Drink Spinner Replacement Parts

#### Fig. 1(e)
Service Parts Exploded View

<table>
<thead>
<tr>
<th>ITEM</th>
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<tbody>
<tr>
<td>1</td>
<td>Brush Retainer Cap</td>
<td>65635</td>
</tr>
<tr>
<td>2</td>
<td>Brush and Spring (set of 2)</td>
<td>65629</td>
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<tr>
<td>3</td>
<td>Agitator Blade</td>
<td>108841</td>
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<tr>
<td>4</td>
<td>Drink Spinner, 230 Volt</td>
<td>70049</td>
</tr>
<tr>
<td>5</td>
<td>Retaining Screw</td>
<td>60115</td>
</tr>
<tr>
<td>6</td>
<td>Complete Assembly</td>
<td>188426</td>
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### Face Plate and Dasher Assemblies

#### Fig. 2
Front Plate Assembly

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>Spigot Plunger</td>
<td>105503</td>
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<td>2</td>
<td>Spigot Plunger O-rings (2)</td>
<td>58923</td>
</tr>
<tr>
<td>3</td>
<td>Front Plate O-ring</td>
<td>58911</td>
</tr>
<tr>
<td>4</td>
<td>Front Plate Knob (2)</td>
<td>64065</td>
</tr>
<tr>
<td>5</td>
<td>Spigot Handle</td>
<td>65632-01</td>
</tr>
<tr>
<td>6</td>
<td>Front Plate</td>
<td>65631</td>
</tr>
<tr>
<td>7</td>
<td>Faspin</td>
<td>64255</td>
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</table>

#### Fig. 3
Dasher Assembly

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scraper Blade (2)</td>
<td>104984</td>
</tr>
<tr>
<td>2+3</td>
<td>Rear Seal Assembly</td>
<td>108541</td>
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<tr>
<td>4</td>
<td>Dasher</td>
<td>3113-01</td>
</tr>
<tr>
<td>5</td>
<td>Stator Rod</td>
<td>65633</td>
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**NOTE:** BE CERTAIN TO ASSEMBLE ITEMS 2 AND 3 BEFORE INSTALLING
Full Size O-ring Comparison Guide

- Front Plate O-ring
- Spigot Plunger O-rings
- Carburetor Tube O-ring

Fig. 2A
O-ring Guide
The rear seal assembly components have been designed to eliminate the possibility of putting the parts together incorrectly or installing the rear seal assembly onto the dasher backwards.

The bearing (hard polymer portion) has a diameter larger than the inside diameter of the mating rear seal (rubber portion) to make it all but impossible to join the two pieces incorrectly.

Also, the long hollow barrel on the rear bearing makes it impossible to install the rear seal assembly backwards onto the dasher and still be able to install the face plate onto the machine.

**Note:** To comply with sanitation regulations, the rear seal assembly must be taken apart, and the individual parts must be cleaned separately every time the machine is cleaned.
1. Assemble and lubricate the dasher assembly in the following manner:

a. Apply a generous amount of lubricant to the shoulder of the dasher and the area of the shaft where the white plastic portion of the rear seal assembly contacts the shaft (Fig. 4). This is easily performed by running a 1/4 inch bead of lubricant around the shoulder of the dasher.

b. Lubricate the two areas of the stator rod (Fig. 4) and slide the stator rod into the dasher (Fig. 5). Make certain that the end of the stator rod is inserted into the hole at the rear of the dasher.

c. Install the rear seal assembly so that the rubber portion of the rear seal assembly is facing the rear wall of the barrel and the plastic rear bearing is resting against the dasher. (Fig. 5).

d. Install the scraper blades on the dasher assembly by holding the blades perpendicular to the tabs - Fig. 6 (a) - and then snapping them over the flat area of the support rod. Then rotate the blades downward in a counterclockwise direction as viewed from the front of the dasher - Fig. 6 (b). Note: Reverse the blades each cleaning to maintain sharpness. In addition, the blades are equipped with a wear mark - Fig. 6 (c). When the blades are worn to this mark, they must be replaced with SaniServ part number 104984.

Note: Use only food approved lubricants. Haynes Lubri-Film (SaniServ part number 1150) is recommended and is available from your parts supplier. Lubrication must be performed daily.
e. With the "Auto/Cleanout" switch set to the "OFF" position, insert the dasher assembly into the freezing cylinder as far as possible - Fig. 7 (a) - being careful not to damage the scraper blades. Damage will occur to the scraper blades and the machine will not operate properly if the scraper blades are installed facing in a clockwise direction - Fig. 7 (b).

Note: The stator rod has not been displayed in Fig. 7 (a) and Fig. 7 (b) for clarity only. Stator rods MUST be installed for proper machine operation.

f. While maintaining force against the dasher, rotate it slowly until the tongue of the dasher engages the groove in the drive system at the rear of the freezing cylinder. The outer most portion of the dasher should be recessed approximately 1/4" to 3/8" inside the freezing cylinder. No part of the dasher should extend outside the freezing cylinder. Scraper blades should be visible, extending approximately 1/8" beyond the dasher's diameter when viewed from the front of the dasher.

2. Lubricate and assemble the front plate assembly in the following manner:

a. Install the two o-rings on the spigot plunger by rolling them onto the plunger. Seat the o-rings in the grooves making certain that they are not twisted. Smooth the lubricant into the grooves and over the sides of the plunger assembly (Fig. 8).
Assembly & Lubrication

b. Slide the lubricated spigot plunger into the front plate (Fig. 9) making certain that the spigot handle slot is aligned to the front.

c. Insert the spigot handle and secure it with the faspin.

d. Install the front plate o-ring on the back of the front plate. **DO NOT LUBRICATE FRONT PLATE O-RING**

e. Secure the front plate assembly to the front plate mounting studs with the two plastic knobs. Simultaneously, turn both knobs in a clockwise direction.

**CAUTION**

Tighten the knobs evenly. **DO NOT** tighten one knob all the way down and then the other. Doing so may result in front plate breakage. Only moderate force is required. Do not overtighten.

3. Set the spigot plunger to the closed position.

4. Place a small amount of **Sanitary Lubricant** such as SaniGel (p/n 1150) on the bottom of the mix pan agitator and place the lubricated mix pan agitator in the right front corner of the mix pan as you face the machine. Position the agitator until you feel the magnets of the agitator engage the magnets of the drive system beneath the mix pan - see Fig. 10.

**CAUTION**

Keep lubricant away from the “MIX OUT” sensor located in the bottom of the mix pan.
5. Install the drip tray and drip tray insert (Fig. 11) into the drip tray support mounted to the machine.

6. Install the o-ring onto the Carburetor Tube (Fig. 12). Apply lubricant sparingly over the o-ring and place the assembly in the bottom of the mix pan for sanitizing.

**IMPORTANT**

KEEP LUBRICANT OUT OF MIX INLET HOLE

7. Proceed directly to the "Sanitizing" section of this manual.
Prior to operation, the machine must be sanitized. The unit must have already been cleaned and lubricated. **Note:** Sanitize immediately before usage, not several hours before or the previous evening. SaniServ recommends that this equipment be sanitized daily.

**CONSULT YOUR LOCAL HEALTH AUTHORITY FOR REQUIRED SANITIZING FREQUENCY AND PROCEDURES**

1. First and always, wash your hands with a suitable antibacterial soap.

2. Prepare approximately 2 - 3 gallons of sanitizing solution equivalent to 200 parts per million chlorine residual or what is required by your local health agency.

3. Wearing eye protection, carefully pour the sanitizing solution into the mix pan.

4. While the solution is draining into the freezing cylinder, use a sanitary brush to wipe the solution onto the sides of the mix pan, over the mix out sensor in the bottom of the mix pan, and the under side of the mix pan lid.

5. Set the control switch **ONLY** to the "CLEANOUT" position and let the machine agitate for approximately three to five minutes.

**WARNING**

6. Set the control switch to the "OFF" position and drain the solution from the machine. Proceed directly to the "Operation" section of this manual.

**WARNING**

**CAUTION**

DO NOT set the control switch to the "AUTO" position. Doing so would freeze the sanitizing solution and may result in significant damage to the machine.

**WARNING**

DO NOT INSERT ANY TOOLS OR OBJECTS INTO THE MIX INLET HOLE OR INTO THE DISPENSING HOLE IN THE FRONT PLATE. DAMAGE TO THE MACHINE OR PERSONAL INJURY MAY RESULT.

**WARNING**

DO NOT RINSE OUT THE MACHINE

DO NOT ALLOW SANITIZING SOLUTION TO REMAIN IN THE MACHINE FOR SEVERAL HOURS. DOING SO COULD DAMAGE MACHINE PARTS.

---

Fig. 13  Dispensing Product
1. Remove the carburetor tube from the bottom of the mix pan and place it into a sanitary location.

2. Place a 16 oz. Cup under the spigot and open the spigot handle. Pour approximately one quart of fresh product mix into the mix pan. (This will chase the sanitizing solution from the mix pan and freezing cylinder.) Close the spigot handle when the sanitizer is purged from the system. (Fig. 14)

3. Fill the mix pan with prechilled, properly mixed product.

4. Install the carburetor tube into the mix inlet hole in the mix pan with a gentle twisting motion.

5. To start the refrigeration cycle on single phase machines, set the control switch (Fig. 15.) to the “CLEANOUT” position for approximately 1-1/2 seconds until a click is heard, then rapidly move the switch to the “AUTO” position.

An alternate way to start the refrigeration cycle is to move the control switch (Fig. 15) to the “AUTO” position, using your fingers lift the rod resting on top of the spigot plunger until you hear the spigot switch click, and hold for three seconds - or simply open the spigot just far enough to activate the spigot switch for three seconds dispensing as little product as possible.

On three phase machines it is necessary to follow the latter procedure activating the spigot switch for three seconds by dispensing a small quantity of product or raising the spigot switch rod with your fingers.

6. Replace the mix pan lid.

**IMPORTANT**

DO NOT POUR SHAKE MIX DIRECTLY ONTO THE MIX PAN AGITATOR AS YOU FILL THE MACHINE

Keep the mix pan at least half full to avoid starving the freezing cylinder and to maximize the cooling effect of the mix pan refrigeration. A "MIXOUT" light is activated by the mix out sensor to indicate a low mix level in the mix pan.

**IMPORTANT**

ALWAYS OPERATE THE MACHINE WITH THE LID ON THE MIX PAN RESERVOIR

**NOTE** - The Mix Pan Agitator only turns when the Auto/Cleanout Control Switch is in the “AUTO” position. If the Mix pan agitator stops turning during machine operation:

1. turn off machine
2. reposition the mix pan agitator (see page 13 item 4) using a sanitized utensil - see sanitizing instructions for proper sanitizing procedure
3. follow instructions for starting the machine.
Disassembly & Cleaning

CONSULT YOUR LOCAL HEALTH AGENCY FOR CLEANING AND SANITIZING REQUIREMENTS

This unit does not come pre-sanitized from the factory. Before serving any product, the dispenser must be disassembled, cleaned, lubricated, reassembled, and sanitized. These instructions are general guidelines ONLY. Cleaning and sanitizing procedures must conform to your local health agency requirements. SaniServ recommends that this equipment be cleaned and sanitized DAILY.

Emptying Machine

Prior to the disassembly and cleaning of parts, the machine must be emptied of product. Use the following procedures (Steps 1 and 2). If this is the first time operation, disregard steps 1 and 2.

1. Remove the carburetor tube (Fig. 16) from the mix inlet hole and lay it in the bottom of the mix pan.

2. Set the control switch to the "CLEANOUT" position and dispense all product from the freezing cylinder by pulling downward on the spigot handle (Fig. 17).

3. Set the control switch (Fig. 15) to the "OFF" (center) position. Close the spigot handle before proceeding to disassembly and cleaning.

DO NOT INSERT ANY OBJECTS OR TOOLS INTO THE MIX INLET HOLE OR FRONT PLATE DISPENSING HOLE WHILE THE MACHINE IS RUNNING. SIGNIFICANT DAMAGE TO THE MACHINE OR PERSONAL INJURY MAY RESULT.

1. Fill the machine with cold water and set the control switch to the "CLEANOUT" position. DO NOT use hot water. Doing so could damage the machine. Let the machine agitate briefly and then drain the water by pulling downward on the spigot handle. After the machine is empty, set the control switch to the "OFF" position. Repeat the above procedure as necessary to make certain that all mix product is removed from the machine.

2. Prepare a suitable detergent and warm water solution at approximately 130°F. DO NOT use an abrasive detergent on any part of the machine.

3. Fill the mix pan with the cleaning solution. Make certain that the machine is "OFF". Wearing eye protection, clean the mix pan thoroughly with a brush as the solution drains into the freezing cylinder. Clean the mix inlet hole with the brush provided.

Set the control switch to the "CLEANOUT" position and agitate for approximately 1 - 2 minutes and then drain the solution by opening the spigot handle. When the machine is empty, set the control switch to the "OFF" position.

5. Remove the mix pan lid, mix pan agitator (Fig. 17), drip tray and drip tray insert.

Place all parts in a three partition sink filled with the following solutions:
   a. In one partition, mild detergent solution.
   b. In a second partition, clear rinse.
   c. In a third partition, sanitizing rinse consisting of 200 parts per million (PPM) chlorine residual.

CONSULT YOUR LOCAL HEALTH AGENCY FOR CLEANING AND SANITIZING REQUIREMENTS

This unit does not come pre-sanitized from the factory. Before serving any product, the dispenser must be disassembled, cleaned, lubricated, reassembled, and sanitized. These instructions are general guidelines ONLY. Cleaning and sanitizing procedures must conform to your local health agency requirements. SaniServ recommends that this equipment be cleaned and sanitized DAILY.

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2. Set the control switch to the "CLEANOUT" position and dispense all product from the freezing cylinder by pulling downward on the spigot handle (Fig. 17).

3. Set the control switch (Fig. 15) to the "OFF" (center) position. Close the spigot handle before proceeding to disassembly and cleaning.

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1. Fill the machine with cold water and set the control switch to the "CLEANOUT" position. DO NOT use hot water. Doing so could damage the machine. Let the machine agitate briefly and then drain the water by pulling downward on the spigot handle. After the machine is empty, set the control switch to the "OFF" position. Repeat the above procedure as necessary to make certain that all mix product is removed from the machine.

2. Prepare a suitable detergent and warm water solution at approximately 130°F. DO NOT use an abrasive detergent on any part of the machine.

3. Fill the mix pan with the cleaning solution. Make certain that the machine is "OFF". Wearing eye protection, clean the mix pan thoroughly with a brush as the solution drains into the freezing cylinder. Clean the mix inlet hole with the brush provided.

Set the control switch to the "CLEANOUT" position and agitate for approximately 1 - 2 minutes and then drain the solution by opening the spigot handle. When the machine is empty, set the control switch to the "OFF" position.

5. Remove the mix pan lid, mix pan agitator (Fig. 17), drip tray and drip tray insert.

Place all parts in a three partition sink filled with the following solutions:
   a. In one partition, mild detergent solution.
   b. In a second partition, clear rinse.
   c. In a third partition, sanitizing rinse consisting of 200 parts per million (PPM) chlorine residual.

Fig. 16
Carburetor Tube

Fig. 17
Mix Pan Agitator
5. Remove the front plate by turning the black plastic knobs in a counterclockwise direction (Fig. 18). Disassemble the front plate in the following manner:

a. Remove the faspin and then the spigot handle.
b. Remove the front plate o-ring.
c. With the spigot handle removed, push the spigot plunger up and out the top of the front plate.
d. Remove the o-rings from the spigot plunger by grasping the plunger with one hand and with a dry cloth in the other hand, squeeze the o-ring upward (Fig. 19). When a loop is formed, grasp the o-ring with your other hand and roll it out of its groove and off of the spigot plunger.

6. Remove the dasher assembly (Fig. 20) being careful not to damage the scraper blades, then disassemble in the following manner:

a. Remove and disassemble the rear seal - see pg 22.
b. Remove the stator rod from the dasher.
c. Remove the scraper blades from the dasher - Fig. 21(a) - by first rotating the blades upward - Fig. 21(b) - and then unsnapping one end from the support rod.

SCRAPER BLADES MUST BE REMOVED FOR CLEANING

7. Remove the carb tube and the carb tube o-ring. Clean inside the tube with the brush supplied.
8. Remove the mix pan lid - See Exploded View Fig. 1(a), drip tray and drip tray insert (Fig. 22).

**CAUTION**

**DO NOT CLEAN ANY PARTS IN A DISHWASHER**

9. Place all removed parts including the mix pan agitator in a three partition sink containing the following:

   a. In one partition, mild detergent solution which is at approximately 130°F.
   b. In a second partition, clear rinse water.
   c. In a third partition, sanitizing rinse consisting of 200 parts per million (ppm) chlorine residual unless another chlorine residual is specified by your local health authority.

10. Wearing eye protection, use the small diameter brush to clean all holes and ports in all of the parts. **DO NOT** use an abrasive detergent.

11. After thoroughly washing the parts in the detergent solution, rinse them in the rinse water. Place the parts in the sanitizing solution for five (5) minutes or whatever contact time is mandated by your local health authority. Air dry to prepare for assembly and lubrication.

**CAUTION**

**DO NOT WIPE SANITIZED PARTS DRY**

12. The remainder of the machine - including the mix pan, the mixout sensor mounted in the bottom of the mix pan (see Fig. 23), and the freezing cylinder - must be cleaned in place using a mild detergent solution.

Clean the exterior of the machine with a damp cloth. **DO NOT USE AN ABRASIVE CLEANER ON ANY EXTERIOR PANELS OF YOUR MACHINE**

**WARNING**

WHEN CLEANING THE MACHINE, DO NOT ALLOW EXCESSIVE AMOUNTS OF WATER AROUND ANY ELECTRICALLY OPERATED COMPONENTS.

SEVERE ELECTRICAL SHOCK TO PERSONNEL OR DAMAGE TO THE MACHINE MAY RESULT.
Use the Carburetor Tube Brush (p/n 2264) to clean the face plate, carburetor tube and the inlet tubes inside the nix pan. (Fig. 24)

**CAUTION**

Do NOT insert the brush into the mix-pan inlet tubes while the machine is running!

Use the Evaporator (Freezing Cylinder) Brush (p/n 2244) to clean the evaporator (Freezing Cylinder). (Fig. 25)

To prevent machine damage, DO NOT insert the brush into the freezing cylinder beyond the rear bearing.
**Routine Maintenance**

**WARNING**

**DISCONNECT THE MACHINE FROM ITS POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE. PERSONAL INJURY OR DAMAGE TO THE MACHINE COULD RESULT.**

**TO PREVENT INJURY TO OPERATORS, SOME MAINTENANCE ITEMS LISTED SHOULD ONLY BE PERFORMED BY TRAINED SERVICE TECHNICIANS. CONSULT YOUR SANISERV DISTRIBUTOR OR DEALER FOR GUIDANCE.**

**Daily:**
Inspect the machine for signs of product leaks past seals and o-rings. If proper assembly does not stop leaks around o-rings or seals, check for improper lubrication, worn or damaged parts. Replace parts as needed.

**Periodically:**
Inspect the scraper blades to see that they are straight and sharp. If worn, damaged or warped, the blades will not scrape the cylinder wall correctly and freezing capacity will be reduced. Replace parts as needed. See Fig. 6 (c) for wear marks on the blades.

**Periodically:**
Clean the drip chute assembly with warm water and detergent solution. The drip chute assembly is located directly beneath the freezing cylinder. See Exploded View Fig. 1 (a).

**Monthly:**
Thoroughly clean the condenser fins on all air-cooled machines. Remove all lint and dust with a vacuum or compressed air. A dirty condenser greatly reduces refrigeration capacity and efficiency. When using compressed air, place a damp cloth on the opposite side of the condenser to catch the flying dirt or lint.

**WARNING**

**CONDENSER FINS ARE VERY SHARP USE EXTREME CAUTION WHEN CLEANING**

**Semiannually:** It is advisable to clean and lubricate the idler arms to ensure their smooth operation. Use the following procedures:

1. Be certain that power to the machine is off.

**WARNING**

**HAZARDOUS MOVING PARTS**

2. Remove the rear panel of the machine.

3. Disconnect the springs from the belt idler arm and torque idler arm - see Exploded View Fig. 1 (b) - by placing needle nose pliers on one end of each spring and pulling the end out of the retainer. It is not necessary to unscrew the belt idler screw. Note: The torque idler spring is blue and the belt idler spring is blue.

4. Remove the nut from the pivot point of each idler arm assembly. Mark the individual idler arms for correct reinstallation after performing the maintenance.

5. Remove the idler arms and inspect the pivot sleeves. These areas should be free of rust, debris, or dried lubricant. If any of these substances are found, they are to be removed.

6. Clean and polish each sleeve surface with a fine grade of emery cloth.

7. Sand the surface of each pivot stud, making sure it is highly polished. After this has been completed, apply anti-sieze compound to the stud and sleeve surface.

8. Reinstall the idler arms making certain the torque idler arm is installed properly against the torque switch.

9. Install the belt making certain that there is no grease on the belt or pulley. Step to the side of the unit and view the belt to make certain it is aligned (straight from top to bottom).

10. Reattach the torque idler arm spring (blue) and the belt idler arm spring (blue) to their respective positions.

11. Place the unit into operation. Check the product for proper consistency. Replace the rear panel.

**Annually:** Remove panels and clean the inside of the machine including the base, side panels, condenser, etc. Check the belts for signs of cracking or wear.
**Drip Tray:** This should be removed daily and cleaned to remove residue. See Fig. 22.

**Front Plate:** This component is the plastic device from which the product is dispensed. It is designed and made for strength and durability. However, through improper use, it can be damaged. Use the following information for proper care. See Fig. 18.

1. Do not lubricate the large o-ring on the rear of the front plate. If lubricated, it will not seal properly and product will leak from the freezing cylinder.
2. Do not over tighten the knobs.
3. Always tighten front plate knobs evenly. Do not attempt to turn one knob all the way down and then the other. Doing so will bind the front plate and result in breakage.
4. Improper installation of the stator rod can cause breakage. The stator rod must be properly seated in the dasher before installing the front plate. If improperly installed, subsequent tightening of the knobs will break the front plate.
5. Do not attempt to wash the front plate or any other machine components in a dishwasher.

**Filling:** Always fill the machine at the start of each day. Fresh prechilled mix will produce the best results.

Do not pour shake mix directly onto the mix pan agitator. If you do, it is possible to break the magnetic coupling between the agitator and the drive system beneath the pan. If that happens, it is necessary to reposition the mix pan agitator in a sanitary manner - see page 13.

**Mix Out Light:** When the mix out light comes on, fill the mix pan. The mix pan must be filled immediately to avoid air entering the freezing cylinder which will starve the machine, causing freeze-up and vibration. If this condition occurs, set the control switch to the "OFF" position and add mix to the mix pan. Allow the freezing cylinder to refill and return the control switch to the "AUTO" position.

**Mix Pan Lid:** Be sure to leave the lid in place on top of the machine to prevent any foreign materials from contaminating the mix.

**Mixing:** Be certain that the shake mix is prepared and handled per label instructions.

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**Helpful Hints**
<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shake will not dispense</td>
<td>Mix pan or mix inlet tube is frozen</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Dasher motor thermal overload tripped</td>
<td>Allow motor to cool</td>
</tr>
<tr>
<td></td>
<td>Mix out</td>
<td>Fill mix pan</td>
</tr>
<tr>
<td></td>
<td>Circuit breaker tripped or fuse blown</td>
<td>Reset breaker or replace fuse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Call Service if new fuse blows or circuit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>breaker trips immediately</td>
</tr>
<tr>
<td></td>
<td>Dasher motor rotating clockwise as viewed from front of machine</td>
<td>Call Service</td>
</tr>
<tr>
<td>Shake too thin</td>
<td>Dull scraper blades</td>
<td>Replace scraper blades</td>
</tr>
<tr>
<td></td>
<td>Dirty condenser fins</td>
<td>Clean condenser fins - Warning! Sharp</td>
</tr>
<tr>
<td></td>
<td>Bad mix - used/refrozen</td>
<td>Clean monthly</td>
</tr>
<tr>
<td></td>
<td>Inadequate air space around machine</td>
<td>Replace with new mix</td>
</tr>
<tr>
<td></td>
<td>Refrigeration setting - compressor running</td>
<td>Clear obstructions - provide 6 inch</td>
</tr>
<tr>
<td></td>
<td>Compressor or fan will not run</td>
<td>minimum clearance all around</td>
</tr>
<tr>
<td></td>
<td>Timer circuit defective</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Worn or misaligned belt</td>
<td>Call Service</td>
</tr>
<tr>
<td>Shake too thick</td>
<td>Mix pan empty</td>
<td>Fill mix pan</td>
</tr>
<tr>
<td></td>
<td>Torque switch setting</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Refrigeration setting</td>
<td>Call Service</td>
</tr>
<tr>
<td>Mix in mix pan freezing up</td>
<td>Refrigeration setting</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Mix pan agitator missing</td>
<td>Install mix pan agitator</td>
</tr>
<tr>
<td></td>
<td>Mix pan agitator not turning</td>
<td>Call Service</td>
</tr>
<tr>
<td>Mix in pan too warm</td>
<td>Warm mix added to mix pan</td>
<td>Keep mix refrigerated before adding to</td>
</tr>
<tr>
<td></td>
<td>Refrigeration setting</td>
<td>mix pan</td>
</tr>
<tr>
<td></td>
<td>Mix pan agitator missing</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Mix pan agitator not turning</td>
<td>Install mix pan agitator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Call Service</td>
</tr>
<tr>
<td>Front plate leaks</td>
<td>Missing front plate o-ring</td>
<td>Install o-ring</td>
</tr>
<tr>
<td></td>
<td>Lubricated front plate o-ring</td>
<td>Remove lubricant and reinstall</td>
</tr>
<tr>
<td></td>
<td>Missing spigot plunger o-rings</td>
<td>Install o-rings</td>
</tr>
<tr>
<td></td>
<td>Unlubricated spigot plunger o-rings</td>
<td>Lubricate</td>
</tr>
<tr>
<td></td>
<td>Worn o-rings</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Improper lubricant</td>
<td>Remove defective lubricant and apply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SaniGel p/n 1150</td>
</tr>
</tbody>
</table>
## Trouble Shooting Guide

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shake coming out of drip chute into drip tray</td>
<td>No rear seal</td>
<td>Install rear seal assembly</td>
</tr>
<tr>
<td></td>
<td>Lubricant on rubber portion of rear seal</td>
<td>Disassemble rear seal assembly, remove all lubricant from rubber seal, sanitize, reassemble, and reinstall</td>
</tr>
<tr>
<td></td>
<td>Worn rear seal assembly</td>
<td>Replace</td>
</tr>
<tr>
<td>Mix Out Light will not light</td>
<td>Burned out lamp</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Defective liquid level board</td>
<td>Call Service</td>
</tr>
<tr>
<td>Squeaking or chirping noises</td>
<td>Mix level low</td>
<td>Fill mix pan with mix</td>
</tr>
<tr>
<td></td>
<td>Lubricant on rubber portion of rear seal</td>
<td>Disassemble rear seal assembly, remove all lubricant from rubber seal, sanitize, reassemble, and reinstall</td>
</tr>
<tr>
<td></td>
<td>Belt alignment</td>
<td>Call Service</td>
</tr>
<tr>
<td>Compressor does not come on with machine control switch in “AUTO” when spigot is opened</td>
<td>Machine unplugged</td>
<td>Plug machine into receptacle</td>
</tr>
<tr>
<td></td>
<td>Circuit breaker tripped or fuse blown</td>
<td>Reset breaker or replace blown fuse</td>
</tr>
<tr>
<td></td>
<td>Dasher motor thermal overload tripped</td>
<td>Call Service if new fuse blows or circuit breaker trips immediately</td>
</tr>
<tr>
<td></td>
<td>Spigot switch defective</td>
<td>Allow motor to cool</td>
</tr>
<tr>
<td></td>
<td>Faulty timer</td>
<td>Call Service</td>
</tr>
<tr>
<td>No shake mix in barrel</td>
<td>No mix in mix pan</td>
<td>Fill mix pan</td>
</tr>
<tr>
<td></td>
<td>Restricted carburetor tube</td>
<td>Remove restriction - frozen mix or excessive o-ring lubricant</td>
</tr>
<tr>
<td></td>
<td>Mix pan or mix inlet tube is frozen</td>
<td>Call Service</td>
</tr>
<tr>
<td>Machine freezes up</td>
<td>Restricted carburetor tube</td>
<td>Remove restriction - frozen mix or excessive o-ring lubricant</td>
</tr>
<tr>
<td></td>
<td>Low mix level in mix pan</td>
<td>Fill mix pan</td>
</tr>
<tr>
<td></td>
<td>Damage from prior freeze up</td>
<td>Check dasher, scraper blades, and stator rod</td>
</tr>
<tr>
<td></td>
<td>Missing dasher, scraper blades, or stator rod</td>
<td>Replace missing parts</td>
</tr>
<tr>
<td></td>
<td>Freezing cylinder surface too cold</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Mix pan too cold</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Sticking spigot switch</td>
<td>Call Service</td>
</tr>
<tr>
<td></td>
<td>Sticking torque switch</td>
<td>Call Service</td>
</tr>
</tbody>
</table>