SECTION 6-1

SANITATION SCHEDULE

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DANGER:</td>
<td>Running or coasting mixing arm can cause serious injury or death. Never reach inside mixing bowl without disconnecting and locking out power.</td>
</tr>
<tr>
<td>CAUTION:</td>
<td>Make sure all covers, guards and other parts that are removed for cleaning are re-attached and secured before running mixer.</td>
</tr>
<tr>
<td>CAUTION:</td>
<td>Soaps with high pH values can cause damage to inside bowl surface over a period of time. Use mild soap to clean mixer.</td>
</tr>
</tbody>
</table>

Your Peerless mixer has been designed and built for easy cleaning. We recommend the following cleaning schedule and instructions to avoid unsanitary conditions and to add to the life of your mixer.

Sometimes personal experience dictates a sanitation schedule different from our recommendation. However, it is important that you develop and enforce a thorough, periodic cleaning program that covers your mixer’s sanitation needs.

Follow all safety and sanitation guidelines when working on the mixer. Before starting to clean your mixer, always disconnect and lock out electrical power. See Section 1-3, Zero Energy State Procedures.

We strongly recommend thorough cleaning of your new mixer before you mix the first batch.
**SANITATION SCHEDULE TABLE 6-1-1**

<table>
<thead>
<tr>
<th>SUGGESTED AREA</th>
<th>PROCEDURE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agitator Shaft Seals</td>
<td>Disassemble, Clean with warm, soapy water. Pack with food-grade lubricant</td>
<td>Daily (Each down day)</td>
</tr>
<tr>
<td>Canopy Scrapers (Optional)</td>
<td>Remove dough build-up with warm, soapy water or scrape with a plastic scraper.</td>
<td>Weekly</td>
</tr>
<tr>
<td>Drive Motor</td>
<td>Clean fan cover. Dry clean housing with brush</td>
<td>Monthly</td>
</tr>
<tr>
<td>Flour Gate (Optional)</td>
<td>Remove flour and dough with warm, soapy water</td>
<td>Weekly</td>
</tr>
<tr>
<td>Front/Rear Bowl Seals</td>
<td>Remove dough build-up</td>
<td>Weekly</td>
</tr>
<tr>
<td>Inside Bowl</td>
<td>Clean with hose and plastic scraper</td>
<td>Daily (Each down day)</td>
</tr>
<tr>
<td>Inside Mixer End columns</td>
<td>Wipe out flour dust or oil</td>
<td>Monthly</td>
</tr>
<tr>
<td>Mixer Outside</td>
<td>Clean with warm, soapy water</td>
<td>Daily (Each down day)</td>
</tr>
<tr>
<td>Safety Ingredient Door</td>
<td>Clean frame, underside of door</td>
<td>Daily (Each down day)</td>
</tr>
</tbody>
</table>

**DANGER:** Avoid personal injury or death. Disconnect and lockout power before cleaning. See Section 1-3, Zero Energy State Procedures.
We recommend daily cleaning of the following areas of your Peerless mixer. If your mixer operates on a 24-hour schedule, and daily cleaning is not possible, we recommend cleaning during every scheduled non-production, or down time. Clean by washing down with water or by scraping and wiping the surfaces.

We also recommend daily cleaning of any other surfaces that come into direct contact with dough.

**DANGER:** Avoid personal injury or death. Disconnect and lockout power before cleaning. See Section 1-3, Zero Energy State Procedures.

**WARNING:** When spraying mixer or mixer components with water or compressed air, always wear eye protection to prevent objects entering eyes.

**CAUTION:** Avoid personal injury and damage to mixer bowl. Be sure refrigeration system is turned off before cleaning inside bowl.

**CAUTION:** Failure to clean agitator shaft seals can cause damage to agitator shaft.

**NOTE:** Do not spray the operator control panel, or any electrical covers or conduits, directly with water or other liquids.
# DAILY CLEANING

<table>
<thead>
<tr>
<th>Component</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agitator Shaft Seals</td>
<td>Disassemble and clean with warm, soapy water. See Section 6-2</td>
</tr>
<tr>
<td></td>
<td>Pack Seals with food grade lubricant</td>
</tr>
<tr>
<td>Inside Bowl</td>
<td>We recommend washing with a hose and plastic scraper for inside-bowl cleaning.</td>
</tr>
<tr>
<td></td>
<td>See Section 6-4, Inside Bowl</td>
</tr>
<tr>
<td></td>
<td>If machine-wash method is used, fill bowl to agitator shaft with soap and</td>
</tr>
<tr>
<td></td>
<td>water (optional sanitizing agent) Run 30 minutes in low speed. See Section</td>
</tr>
<tr>
<td></td>
<td>6-4, Inside Bowl</td>
</tr>
<tr>
<td></td>
<td>If washing inside bowl with a high-pressure hose, use only water. We do not</td>
</tr>
<tr>
<td></td>
<td>recommend washing inside bowl with a high-pressure hose if very hot water and</td>
</tr>
<tr>
<td></td>
<td>or powerful sanitizing chemicals are used. See Section 6-4, Inside Bowl</td>
</tr>
<tr>
<td></td>
<td>We do not recommend steam cleaning inside bowl</td>
</tr>
</tbody>
</table>
SECTION 6-1

WEEKLY CLEANING DETAIL 6-1-2

We recommend the following areas of your Peerless mixer be cleaned thoroughly once a week.

**DANGER:** Avoid personal injury or death. Disconnect and lockout power before cleaning. See Section 1-3, Zero Energy State Procedures.

**WEEKLY CLEANING:**

<table>
<thead>
<tr>
<th>Area</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy Scrapers (Optional)</td>
<td>Check for dough buildup. Clean with warm, soapy water or scrape off dough with plastic scraper</td>
</tr>
<tr>
<td>Flour Gate (Optional)</td>
<td>Disassemble and clean with warm, soapy water to remove flour dust and dough</td>
</tr>
<tr>
<td>Front/Rear Bowl Seals</td>
<td>Check for dough buildup. Remove; scrape clean</td>
</tr>
<tr>
<td>Safety Ingredient Door (Optional)</td>
<td>Check for dough/gluten buildup on underside of door&lt;br&gt;Wipe out any materials present</td>
</tr>
</tbody>
</table>

**CAUTION:** Avoid personal injury. Be sure pneumatic system is turned off and locked out before cleaning flour gates or safety ingredient doors. See Section 1-3, Zero Energy State Procedures.
MONTHLY CLEANING DETAIL 6-1-3

We recommend the following areas of your Peerless mixer be cleaned once a month.

**DANGER:** Avoid personal injury or death. Disconnect and lockout power before cleaning. See Section 1-3, Zero Energy State Procedures.

MONTHLY CLEANING:

<table>
<thead>
<tr>
<th>Drive Motor</th>
<th>Remove and clean <em>drive motor</em> fan cover.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dry clean <em>drive motor</em> housing with a brush. Be sure ribs (veins) are free of flour, dough or other debris.</td>
</tr>
<tr>
<td>Mixer End Columns</td>
<td>Clean by wiping out any flour dust or oil that may be present.</td>
</tr>
<tr>
<td></td>
<td><em>Do not wash inside end doors with water.</em></td>
</tr>
</tbody>
</table>
HALLMARK MIXER AGITATOR SHAFT SEAL CLEANING

The agitator shaft seals on your Peerless Hallmark Line mixer are designed for quick and easy cleaning. Peerless recommends the agitator shaft seals be cleaned daily or during every scheduled non-production, or downtime. We realize personal experience may dictate a cleaning schedule different from our recommendation; however, shaft seals should be cleaned at least once or twice a week to prevent damage to the seals and/or agitator shaft. Follow all safety guidelines and OSHA rules when cleaning the mixer.

We recommend the following procedure for cleaning agitator shaft seals.

TO CLEAN AGITATOR SHAFT SEALS:
1. Disconnect and lockout electrical power to mixer. See SECTION 1-3, Zero Energy State Procedures.
2. Remove wing nuts that hold shaft seal assembly to bowl ends. See FIGURE 6-2-1.
SECTION 6-2

3. Slide shaft seal assembly away from bowl end. Remove o-ring from shaft seal assembly. See FIGURE 6-2-2.

FIGURE 6-2-2

Unsnap and remove stainless band clamp. See FIGURE 6-2-3.
4. Pull apart plastic split inserts to expose split seals. See FIGURE 6-2-4.

5. Remove spring insert from split seals. *It is best to NOT unhook the spring.* Use a finger to slide the spring out of the lip of the seal. Let the spring stay on the shaft. See FIGURE 6-2-5.

6. Inspect seals. Replace if hard and brittle, or show excessive wear.

7. Clean seals and seal housing by washing with warm water.
8. Lubricate split seals and seal inserts with petrol gel, white petroleum jelly, or shortening to help seal and prolong the life of the seals. See FIGURE 6-2-6.

![FIGURE 6-2-6]

9. Reinstall split seals on shaft making sure groove openings face mixer bowl. Guide seal spring into grooves. Grease seals and fill grooves with petrol gel, white petroleum jelly, or shortening. See FIGURE 6-2-7.

![FIGURE 6-2-7]

10. Reinstall split inserts over split seals on shaft. Make sure split seals are at the top of the shaft. See FIGURE 6-2-8.
11. Place band clamp over split insert and snap shut. See FIGURE 6-2-9.

12. Install a bead of petrol gel in o-ring groove on lip of split insert. See FIGURE 6-2-10.
13. Install rubber o-ring in groove on lip of split insert. See FIGURE 6-2-11.

14. Slide split seal assembly over stud mounting holes. Be sure seal splits between housing halves are horizontal when bowl is in full-up position. See FIGURE 6-2-12.

**NOTE:** In some applications, studs and wing nuts are welded together. Insert studs through shaft seal assembly and into bowl ends. Secure by tightening wing nuts.
FIGURE 6-2-12

Bowl in Full-Up Position

Stud

Seal Split

Stud

Split Seal Assembly

Agitator Shaft
FLOUR GATE CLEANING

**DANGER:** Severe personal injury or death may result from improper contact with flour gate slide. Turn off air supply, bleed off air pressure and lockout before cleaning. See Section 1-3, Zero Energy State Procedures.

**DANGER:** Do not walk on top of mixer. Surfaces of mixer may be slippery and could cause fall resulting in injury.

**CAUTION:** Do not reach hand or arm into flour gate opening. Severe personal injury may result.

The flour gate on your Peerless mixer is designed for easy cleaning. Flour dust, dough and gluten can get into flour gate openings and fittings, causing unsanitary conditions and less efficient operation of your mixer. Therefore, it is important to take the flour gate apart for periodic cleaning and inspection.

Check your Certified Data Sheet, to see which type flour gate has been installed on your mixer:

- Manual Slide Gate
- Pneumatic Butterfly-Style Valve.
- Pneumatic Slide Gate
Cleansing an Optional Manual Slide Gate

We recommend the following steps for cleaning a manual slide gate.

1. Disconnect and lockout electrical power to the mixer. See Section 1-3, Zero Energy State Procedures.
2. Remove the flour sock from between mixer and hopper.
3. Remove the retainer knobs from the top of the gate assembly.
4. Lift off the flour flange retainer plate exposing the gate assembly.
5. Wipe off the gate slide and retainer plate. Wash any plastic parts in cool water.
6. Reassemble gate assembly making sure to tighten the knobs securely.
CLEANING AN OPTIONAL PNEUMATIC BUTTERFLY-STYLE VALVE AND PNEUMATIC SLIDE GATE

We recommend the following steps for cleaning an optional pneumatic butterfly-style valve.

1. Disconnect and lockout electrical power to the mixer. See Section 1-3, Zero Energy State Procedures.

2. Shut off the mixer's air supply by turning the mixer's shut-off valve located behind the end doors, in front of the air supply filter-regulator-coalescer assembly. When the shut-off valve is turned, the air pressure will bleed off.

3. Lock out the air supply to the mixer. See Section 1-3, Zero Energy State Procedures.

4. Remove flour sock from between mixer and hopper.

5. Lower bowl and wash in place with warm soapy water the bottom of the gate to clean.

6. Reinstall flour dust vent sock.

**CAUTION:** Do not reach hand or arm inside butterfly valve opening when reconnecting air lines. Valve may move unexpectedly causing personal injury.

**NOTE:** When reinstalling, be sure to replace proximity cables on correct proximity pickups.
SECTION 6-4

INSIDE BOWL

DANGER: Accidental operation of mixer while cleaning can cause severe personal injury or death. Disconnect and lockout power before cleaning. See Section 1-3, Zero Energy State Procedures.

CAUTION: If cleaning mixer by high-pressure hose-wash method, always use protective eye wear and rain gear.

We recommend daily cleaning inside the mixer's bowl. Clean inside the bowl by filling it with warm, soapy water and running the agitator in low speed for no more than 30 minutes. Remove water from the bowl by pouring into a trough.

CAUTION: During machine-wash, do not exceed 30 minutes running time, especially in low speed. Motor overheating can occur.

Caustic sanitizers are known to etch stainless steel interiors and seals over time, especially if used in excess of manufacturer’s parts-per-million recommendations. It is important to monitor usages of your specific sanitizing chemical to minimize damage without compromising mixer sanitation requirements.

CAUTION: During sanitization, always remove agitator shaft seals, clean and re-lubricate with food grade lubricant. See Section 6-2, Agitator Shaft Seal Cleaning.

We do not recommend steam cleaning inside bowl.
SECTION 6-5

MIXER END COLUMNS

**DANGER:** Accidental operation of mixer while cleaning can cause severe personal injury or death. Disconnect and lockout power before cleaning. See **Section 1-3, Zero Energy State Procedures.**

**CAUTION:** *Do not wash inside the end doors with water.* Components inside end enclosure are not corrosion proof.

*Peerless* recommends cleaning the **mixer end columns** once a month by wiping out excess grease and oil with a dry cloth. Flour dust can be wiped out with a dry cloth or vacuumed out.