STANDARD OPERATING PROCEDURE

Mixer, Heavy-duty, Commercial, Stand

Model: K5-SS
Manufacturer: Kitchen-Aid
Location: Technology Transfer Pilot Plant, 1598 Food Sciences Building
Publication Date: 05/16/2014
Description and Uses

Kitchen-Aid heavy-duty, commercial stand mixers are used to mix small-scale, dry and semi-wet materials.

Power Specifications

Motor: Kitchen-Aid Model K5-SS
Power/Wattage: 325 W
Voltage/Frequency: 115 Volts/60 Hz.
Mixing Speed: Mixing speed varies; 10 speed settings

Potential Hazards and Safety Precautions

Electric Shock/Standard Voltage (115V)
• Make certain to use the correct outlet that is specifically designed to fit the electrical cord plug.
• Make sure the area around the outlet, floor and your hands are completely dry when plugging or unplugging the electrical cord to/from the outlet.
• Make sure to turn off the machine and unplug the power when changing the agitator attachments, and/or cleaning or servicing the mixer.

Moving Parts and Mechanical Pinch Points/Possible Entanglement of Extremities, Hair, Jewelry or Clothing
• Do not operate the mixer if the mixing bowl is not properly in place.
• Avoid contact with any moving parts. Do not insert hands, fingers or other body parts into the bowl while the mixer is running.
• Make sure to secure long hair and any loose clothing or jewelry before operating the mixer.
• Do not use any tool to assist in the mixing while the mixer is running, as serious injury may result.
• Nothing, except the material for which the mixer is intended to blend, should ever be placed into the bowl while the mixer is running.

Flying Debris/Potential Eye Damage
• Do not operate the mixer without wearing all required personal protective equipment, including safety glasses or goggles.

Hot Substances/Possible Burns
• Be sure to wear heat-resistant gloves when mixing hot foods or substances.
• Never mix flammable or volatile chemicals, materials, or substances using this machine.
### Required Personal Protective Equipment

- Long Pants
- Lab Coat with Tight-fitting Sleeves
- No Loose Fitting Clothing
- Hair Net (Tie Back Long Hair)
- Safety Glasses or Goggles
- Rubber or Heat-resistant Gloves
- Water-resistant Boots
- No Open-toed or Open-heeled Shoes

### Training

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Operation

1. Be sure to acquire all required training before operating this mixer. Operation requires site-specific training from the pilot plant manager or other trained personnel on this machine.

2. Thoroughly read “Instructions and Recipes” manual for this mixer model before operating the mixer (can be accessed online at Sears PartsDirect.com). Please refer to this manual prior to operation.

3. Be sure to wear all required personal protective equipment previously listed.

4. During operation, report any problems to the pilot plant manager. Listen for any abnormal sounds or vibration.

5. Before starting and attaching the bowl, be sure that the mixer power cord is unplugged and that the speed control is set to OFF.

6. To attach the bowl, place the bowl lift handle in the down position. Fit the bowl support over the locating pins. Press down on the back of the bowl until the bowl pin snaps into the spring latch. Raise the bowl before mixing (see Figure 1).

7. Plug the mixer into a grounded, 3-prong, 120-V outlet. Note: Make sure the area around the outlet, floor and your hands are completely dry when plugging or unplugging the electrical cord to/from the outlet.

8. Attach your choice of the wire whip, flat beater or dough hook to the agitator depending upon the application. To do this, pull the motor head up, then slip your choice of the whip, beater, or hook onto the agitator shaft and press upward as far as possible. Then, turn it to the right, securing the whip, beater, or hook over the pin on the shaft. Once secured, place the motor head back into the down position.

9. To raise the bowl, rotate the handle to a straight-up position. The bowl must always be in a raised, locked position when mixing. To do this, make sure the motor head is completely down and the lever is placed in a LOCK position (see Figure 2).

10. Add the samples to be mixed into the bowl.
11. Turn on the mixer by moving the Solid State Speed Control lever from the OFF position to STIR position until the desired speed is achieved (see Figure 3). The speed control lever should only be set gradually from slow to high.

12. When your sample is completely mixed, turn off the mixer by moving the Solid State Speed Control lever to OFF position (see Figure 3).

13. Safely unplug the mixer. **Note:** Make sure the area around the outlet, floor and your hands are completely dry when plugging or unplugging the electrical cord to/from the outlet.

14. Unlock the motor head by moving the lever back to the UNLOCK position (see Figure 2). Once unlocked, lift the motor head upwards.

15. Remove the wire whip, flat beater or dough hook from the agitator by pressing it upward as far as possible, turning left, and pulling it from the shaft.

16. To remove the bowl, rotate the handle to a straight-down position. Grasp the bowl handle and lift straight up and off of the locating pins.

17. Scrape all mixed contents from the agitator attachment and bowl into a collection vessel for further processing or storage.

18. Prepare for clean-up procedures.

**Clean-up Procedures**

1. Be sure to safely unplug the mixer from the electrical outlet prior to cleaning.

2. The bowl, white flat beater and white dough hook may be washed in an automatic dishwasher or cleaned thoroughly with warm water and detergent, followed by a hot-water rinse. Allow the bowl and these attachments to dry on paper towels or in a drying cart. For proper drainage of rinse water and more efficient drying, the bowl should be dried upside down.

3. If the wire whip was used, it should be hand washed with warm water and detergent, followed by a hot-water rinse. Dry the wire whip immediately in a forced-air oven set at 50°C. **Note:** Never keep the wire whip, flat beater or dough hook attached to the agitator shaft while mixer is not in use.

4. Completely wipe the stand mixer with a soft, damp cloth to remove any debris from the external surfaces of the mixer. **Note:** Never use household or commercial cleaners. Do not immerse the mixer in water. Wipe off the agitator shaft frequently, removing any residue that may accumulate over time.

5. Undergo a check-out inspection with the pilot plant manager.
Machine Care and Maintenance

• Kitchen-Aid Stand Mixers must be properly cleaned and inspected after each use. Inspect the machine for any leakage or broken parts. Report any leak or broken parts to the pilot plant manager.
• All final inspections are performed by the pilot plant manager.
• The bowl lift should be lubricated once per month using a food-grade vegetable grease.
• Motor bearings and transmission gears require little attention and are packed with special grease from the factory that should last for years. Should the grease need replacement, refer to the online “Instructions and Recipes” manual. Only the pilot plant manager or a trained service technician should service these parts.

Accessories

Mixing bowl. Agitator accessories include a wire whip, white flat beater and white dough hook.