IMI Cornelius
Automated Beverage System (ABS)
Model ABS

Daily maintenance task
BE 31 D1  Clean ABS

Monthly maintenance task
BE 31 M1  Clean and sanitize ice hopper and ice chute

Quarterly maintenance task
BE 31 Q1  Clean pre-cool condenser filter

⚠️ Hazards
These icons alert you to a possible risk of personal injury.

繁體中文 Equipment alerts
Look for this icon to find information about how to avoid damaging the equipment while doing a procedure.

🌟 Tips
Look for this icon to find helpful tips about how to do a procedure.
Clean ABS

Why
To ensure cleanliness and prolong the life of the ABS

Time required
5 minutes to prepare
15 minutes to complete

Time of day
At close or non-peak periods
For 24-hour restaurants: during low-volume periods

Hazard icons
- Chemicals
- Compressed Gas/Air/Liquid
- Electricity
- Hot Surfaces
- Manual Handling
- Moving Parts
- Sharp Objects/Surfaces
- Slippery Floors
- Syringes & Body Fluids

Tools and supplies
- Brush, nylon-bristled
- Bucket, clean and sanitized towels
- Bucket, soiled towels
- McD All Purpose Super Cleaner (APSC) solution
- Non-scratch pad
- Paper towels

Procedure

1. **Set ABS to manual mode.**
   Press the ‘Manual Auto’ button in the lower left hand corner of the touchpad to place unit in Manual mode.

2. **Remove cup conveyor cover and conveyor assembly.**
   1. Loosen the 3 thumbscrews by hand that hold the cup conveyor cover in place by turning them counter-clockwise.
   2. Remove the cup conveyor cover by lifting up.
   3. Remove conveyor assembly by lifting up.

3. **Remove drip tray grille.**
   Remove the grille from the drip tray and set it aside. Remove any foreign objects from the drip tray and throw them away.

4. **Clean drip tray.**
   Use a clean, sanitized towel and McD APSC solution to clean the drip tray.

5. **Check drainage tray.**
   Pour carbonated water from dispenser into the drip tray. Check that the drip tray drains properly. If drain pan is slow draining service may be required.
**Clean ABS** (continued)

6 **Clean and sanitize Conveyor, Grille & Cover.**
   Clean and sanitize the conveyor, grille and cover at the three-compartment-sink. Allow them to air dry. Note: Conveyor is not dishwasher safe.

7 **Check conveyor drive seal.**
   Make sure the conveyor drive seal or water deflector is in place. If it is missing, it needs to be ordered and replaced immediately. Failure to replace in a timely manner will result in degradation of the drip tray insulation.

8 **Clean conveyor thru beam sensors.**
   Roll the end of a paper towel to a point and dip it in carbonated water. Wipe both sensors which are located on the left side of drain pan near position A.

9 **Reinstall conveyor assembly and grille.**
   Reinstall grille. Reinstall conveyor with drive assembly on left. Further instructions can be found on the front upper panel of the ABS.

10 **Reinstall conveyor cover and tighten three thumbscrews by hand until snug.**

11 **Remove and clean nozzle and diffuser from dispenser (before sanitizing steps 12 & 13).**
   1. Remove the nozzle from the dispenser by turning clockwise and pulling down.
   2. Remove the diffuser (clear) and diffuser ring (white) by pulling down.

12 **Clean diffuser area.**
   Wipe down the diffuser area with a clean, sanitized towel. Brush the diffuser area thoroughly with a nylon-bristled brush.

13 **Clean and sanitize the nozzle and diffuser.**
   1. Clean the diffuser and nozzle thoroughly with the nylon-bristled brush and warm water.
   2. Prepare a solution of McD sanitizer. Soak the nozzle and diffuser in sanitizer solution for 1 minute, shake and allow to air dry.

   **Equipment Alert**
   Do not clean the holes in the bottom of the diffuser.

   Do not allow the components to soak in sanitizer any longer than one minute. If the nozzle and diffuser are left in the sanitizer for extended periods, the plastic and o-rings can deteriorate.

14 **Reinstall nozzle and diffuser.**
   Push the diffuser back into position. Reinstall the nozzle by pushing the nozzle up and turn counter-clockwise until it is firmly in place. Pull downwards to make sure it is correctly in place.
15 **Clean outside of ABS.** Wipe the outside of the ABS with a clean, sanitized towel and McD APSC solution. Use a non-scratch pad to remove heavy soils.
Clean and sanitize ice hopper and ice chute

Why
To ensure cleanliness and prolong the life of the ABS

Time required
5 minutes to prepare 40 minutes to complete

Time of day
At close or non-peak periods For 24-hour restaurants: during low-volume periods

Hazard icons
- Chemicals
- Electricity
- Manual Handling
- Moving Parts
- Sharp Objects/Surfaces
- Slippery Floors

Tools and supplies
- Brush, nylon-bristled
- Bucket, clean and sanitized towels
- Bucket, soiled towels
- Ice scoop
- McD All Purpose Super Cleaner (APSC) solution

Procedure

1. **Turn off ABS.**
   Turn the ABS power switch to the OFF position. The switch is located on the lower left side of the unit’s front panel.

2. **Remove top cover.**
   Remove the top cover and set it aside.

3. **Remove ice from hopper.**
   Remove and discard all the ice from the hopper using an ice scoop. If necessary, pour clean water slowly into the hopper to melt the ice.

4. **Remove agitator retainer and ice agitator assembly.**
   1. These items are located inside of the hopper.
   2. Unscrew the retainer by turning it counter-clock wise.
   3. Lift off the agitator disc.
   4. Remove the agitator by pulling upwards.

5. **Clean inside of hopper.**
   1. Clean the inside of the hopper and then sanitize using McD APSC solution and a sanitized towel.
   2. Clean and sanitize the remaining components including the hopper cover, agitator, agitator disc and agitator retainer at the three compartment sink.
Reinstall agitator, agitator disc and agitator retainer.
1. Return the agitator to its original position. 2. Replace the agitator disc. 3. Secure in place with the agitator retainer by turning it clockwise.

Turn on ABS.
Turn the ABS power switch to the ON position.

Set ABS to manual mode.
Press the red “AUTO/MANUAL” button, located in the lower left hand corner of the touchpad, to place the machine in manual mode.

Remove front panel.
Remove front panel/lid holder, and set it aside. No tools are needed. Simply push up to unhook the panel and slide it forward.

Turn off ice gate.
Ice gate disable switch is located to the left of the ice chute. Turn the ice gate switch to the OFF position.

Open ice gate.
Push the ice gate to the left to allow for chute removal. Do not remove the ice gate, simply open it.

Remove ice chute.
Pull and hold the locking pin with one hand while rotating ice chute clockwise one inch, then pull the ice chute down to remove.

Clean ice chute.
Using McD APSC solution and a nylon-bristled brush, clean and sanitize the ice chute.

Reinstall ice chute.
To reinstall ice chute, pull and hold locking pin forward with one hand. With the other hand slide the chute back into place and turn counter-clock wise 1 inch. Release locking pin and check that chute is secure by pulling downwards.

Turn on ice gate.
Turn the ice gate switch to the ON position.
Clean and sanitize ice hopper and ice chute (continued)

16 Refill ice chute.
Press the button labeled ‘Extra Ice’ to refill the ice chute while in manual mode. It is located on the bottom row, second button from the right.

17 Reinstall lid holder and front panel.
Clean pre-cool condenser filter

Why
To ensure cleanliness and prolong the life of the ABS

Time required
2 minutes to prepare 5 minutes to complete

Time of day
At close or non-peak periods For 24-hour restaurants: during low-volume periods

Hazard icons
Chemicals Compressed Gas/Air/Liquid Electricity Hot Surfaces Manual Handling Moving Parts Sharp Objects/Surfaces Slippery Floors

Tools and supplies
- Bucket, clean and sanitized towels
- Bucket, soiled towels
- McD All Purpose Super Cleaner (APSC) solution
- Screwdriver, Philips (only needed on older units with 56... prefix serial numbers)

Procedure

1. Remove lower front panel.
   Remove the front lower grille panel. Only older units will require a Phillips head screwdriver to remove 2 screws.

2. Turn off power.
   Turn the pre-cool power switch to the off position. This switch is located on the chassis electrical box on the left hand side of the unit.

3. Remove pre-cool condenser filter.
   Slide the pre-cool condenser filter up to remove it from the ABS. The filter is located on the front of the chassis.

4. Clean filter.
   Using a warm solution of McD APSC solution and a clean towel, clean the filter. Rinse the filter in luke warm water and shake off any excess water.

5. Replace pre-cool condenser filter.
   Return the pre-cool condenser filter into its original position by sliding it down.

6. Turn on power.
   Turn the pre-cooler power switch to the on position. This switch is located on the chassis electrical box.

7. Replace lower front panel.
   Replace the front lower grille panel. Only older units will require a Phillips head screwdriver to refasten 2 screws.