

01 McDonald's® ABS Basic Daily Operation



- Press the red "AUTO/MANUAL" button to place the ABS unit into "MANUAL" mode.
- "MANUAL" mode prevents ABS moving parts from operating.



- Pressing the appropriate size cup button will rotate the cup tube to the front for proper filling.



- Load cup tubes properly:
 1. fan cups to separate
 2. support bottom of tube with your hand while cup tubes are being filled. This will prevent damage to the cup tube fingers.



- Do not over fill cup tubes.
- Overfilling cup tubes past label will damage cup tube fingers and cause multiple cups to be pulled by ABS.



- Do not hand pull cups from turret.
- Continuous improper loading, overfilling and manual pulling of cups will cause damage to the cup tube fingers and multiple cups to be extracted.



- Do not operate ABS with cracked cup tubes or missing hardware. This may cause damage to other major components.



- Place the lids onto the cup tubes. Covered cup tubes prevent foreign objects or material from falling into a customer's cup.



- Remove ice bin lid and fill with ice cubes.
- Bin cover must rest securely on top of bin. A covered ice bin will prevent foreign objects or material from falling inside.
- Do not overfill.



- Visually inspect grabber pads for tears, cracks, excessive wear or loose fit. Replace as needed.
- Do not use any cleaning products on pads, as it will cause pads to slip off cups.



- Clear drink orders by pressing the "UP ARROW" to highlight orders and pressing enter to clear orders.
- Press the red "AUTO/MANUAL" button to place the ABS unit into "AUTOMATIC" mode.



- Do not pour coffee or hot liquids into drain pan, as the plastic drain pan will develop cracks and leaks.
- Drain pan replacement is very expensive.

11 Complete Daily Top 10 Checklist:

- 01** Is the conveyor clean?
- 02** Is the nozzle and diffuser clean?
- 03** Is syrup deflector in place?
- 04** Are the cup tubes properly filled?
- 05** Are the cup tubes cracked?
- 06** Are the cup tubes fingers damaged or missing?
- 07** Is the drip tray clean?
- 08** Is the cup locator spring damaged or missing?
- 09** Is the water deflector in place?
- 10** Are grabber pads cracked, loose, worn or torn?

For ABS Service Call:
Coca-Cola SMILE Service
1-800-241-COKE
2 6 5 3

02

McDonald's® ABS Basic Daily Cleaning



A

Daily Maintenance

Tools:

McD APC, Paper Towel, Clean Cloth, Carbonated Water, Clean Paper Napkin, McD Sanitizer, Sanitizing Bucket, Nylon Nozzle Brush and a Clean Sanitized Cloth.

CAUTION: Do not wipe the keypad or LCD displays with solvents or cleaning agents. Do not use cleansers containing bleaching agents as they usually contain materials that will discolor the stainless steel. Heavy discoloration should be removed with McD "No Scratch" Pad. Never use plain steel wool as it will scratch the panel. Do not use a cleaning cloth, brush or abrasive cleansers on sensors. The cleaning cloth may leave oily residue on the lens causing a malfunction.



01 Press the red "AUTO/MANUAL" button to place the ABS unit into "MANUAL" mode.



02 Loosen the screws (3) that retain the cup conveyor cover.



03 Remove the conveyor cover and conveyor assembly. *Do not carry conveyor by cup holder.*



04 Remove the grille from the drip tray and clean with warm soapy water.

- Inspect the cup locator spring.



05 Pour warm (NOT HOT) water down drip tray drain. Flush the drip tray using carbonated water. Hot water or coffee will crack drip tray.



06 Wipe down the drip tray area, splash panel and clean any spills from the machine exterior using McD APC with a clean cloth.



07 Make sure water deflector is properly installed; this will help prevent motor failures. (Order replacement if the deflector is missing.)



08 Roll the end of the paper napkin into a point and dip into the carbonated water and wipe both sensors. **CAUTION:** Never use a cleaning cloth, brush or abrasive cleansers on sensors.



09 Clean the sensor with the carbonated water-soaked paper napkin.



10 Clean the conveyor assembly using luke warm soapy water.

- Do not use hot water or place in dishwasher. Rinse with plain water.
- Reinstall the grille and conveyor assembly.



11 Prepare sanitize solution by adding one packet of McD Sanitizer to 2 1/2 gallons of lukewarm water in a clean sanitized bucket.

- Remove the nozzle from the dispenser by turning and pulling down.
- 12 Remove the diffuser from the valve by pulling down. Place the nozzle and diffuser in the Sanitizer solution.



13 Remove collar from diffuser.

- Check to see if syrup deflector is properly installed.



14 Clean the diffuser and nozzle using the nylon brush. Rinse with lukewarm water.

- Reinstall the diffuser and nozzle. Ensure they are located correctly in the machine.
- Dirty components can cause excess foaming.



15 Clean the diffuser and nozzle using the nylon brush. Rinse with lukewarm water.



16 Do not clean the holes in the bottom of diffuser.



17 Wipe dirt and dust from the outside of the machine with McD APC solution and wipe dry with a soft, sanitized cloth.

- Apply McD Stainless Steel Cleaner dressing to all exterior stainless steel surfaces and wipe dry with a paper towel.
- Drink orders should be cleared before going back to "AUTOMATIC" mode.
- 18 Press the red "AUTO/MANUAL" button to place the ABS into "AUTO" mode.



03 McDonald's® ABS Planned Maintenance



A Monthly Maintenance

Tools: McD Sanitizer, McD APC, Long Handle Nylon Bristle Brush and a Clean Sanitized Cloth.

CAUTION: Do not use sharp objects, metal devices or abrasives on the ice hopper, top cover or agitator disc. Irreparable damage may result to the units. Do not use any solvents or other cleaning agents because they may attack the plastic material.



01 Turn ABS unit power switch "OFF".
CAUTION: Unit will agitate if the ABS is left "ON".



02 Remove the top cover and set it aside.

- Remove and discard all the ice from the hopper. If necessary, pour clean, potable water slowly into the hopper to assist in melting the ice.



03 Remove the agitator retainer, disk, and the ice agitator assembly.

- Using McD APC and a long handled nylon bristle brush, clean the interior of the hopper, top cover, agitator and agitator cover.
- Rinse all with clean water.
- Prepare sanitize solution by adding one packet of McD Sanitizer to 2 1/2 gallons of lukewarm water in a clean sanitized bucket.

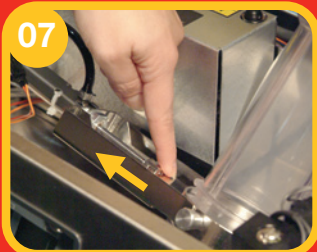


05 Using McD Sanitizer and a soft, sanitized cloth, wipe the interior of the hopper, top cover, agitator, and agitator cover.

- Reinstall the agitator retainer, disk, and the ice agitator assembly.



06 Turn manual ice gate switch "OFF" to relieve pressure on ice gate cylinder.



07 Push the cylinder open to the left.



08 Pull the locking pin out and rotate the ice chute clockwise approximately 1 inch and pull down the ice chute.



09 Using McD Sanitizer and long handled nylon bristle brush clean the interior of the ice chute.

- Reinstall ice chute.



10 Turn manual ice gate switch "ON".



11 Turn ABS unit power switch "ON".



12 Clear drink orders by pressing the "UP ARROW" to highlight orders and pressing enter to clear orders.

- Refill ice chute.
- Return ABS unit to the "AUTO" mode by pressing the "AUTO/MANUAL" button.

B Quarterly Maintenance

Tools: Phillips Head Screw Driver.

Clean the condenser filter (for units with integral water pre-cooler option only).

- Remove the front lower grille panel.
- Turn power supply off via the Pre-Cooler power switch.
- Slide the condenser air filter vertically and remove the unit.
- Clean the filter using hot water and shake it dry.
- Reinstall the condenser air filter.
- Turn power supply "ON".
- Reinstall the lower front panel.



NOTE: A dirty condenser restricts airflow that results in excessively high operating temperatures. High operating temperatures reduce machine capacity and shorten component life. Any bent condenser fins must be straightened with a fin comb. Contact your Service Agent to perform this service.

For ABS Service Call:
Coca-Cola SMILE Service

1-800-241-COKE
2 6 5 3



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To order job aid cards contact Coca-Cola Parts: 1-800-638-2653 Part #111099 -or- www.3Wire.com 3Wire Part #1039561

04

McDonald's® ABS Alarms and Troubleshooting

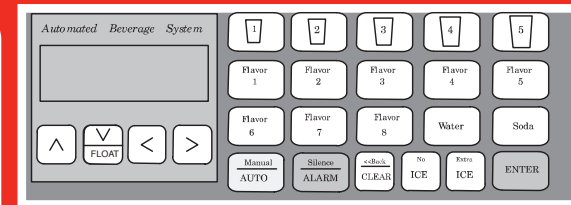


A

Alarm & Warning Messages

When an alarm occurs, press the SILENCE/ALARM button to silence the alarm. Read the display to determine the problem so that the appropriate corrective action can be taken. LEFT and RIGHT arrows are used to scroll the alarm list and the number of unresolved warnings and alarms are displayed with direction cues to scroll. Listed below are the Alarm and Warning messages that may appear on the display screen.

MESSAGES OR CONDITIONS	EXPLANATION	SOLUTION
(X) CUP OUT AT STATION (Y)	The cup tube for size (X) is empty at station (Y).	Refill the empty cup tube with the correct cup size and then press ENTER to continue dispensing.
CLEAR SYRUP SOLD OUT	The clear syrup (SPRITE) is sold out (EMPTY B.I.B.).	Connect a new syrup supply and the ABS unit will continue. If the ENTER button is pressed before the syrup supply is replenished, automatic operation will resume but only the cup and ice will be dispensed for this flavor.
LOW ICE - REFILL SOON	Ice level in the ice bin is too low.	Refill the ice bin with ice. Press ENTER. Alarms may continue for up to 15 minutes.
CLEAR CUP JAM	Cup(s) jammed in the conveyor at the cup extraction position and the conveyor and turret are unable to operate.	Remove all cups from the conveyor cup holders at the EXTRACT POSITION before pressing the ENTER button. Another cup will be extracted and dispensing will continue.
	Cup Tubes.	Over stacking of cups in cup tubes. Do not fill above the top of the cup tube. Cup tube fingers are damaged (bent), replace all four fingers. Cup tubes not properly mounted. Remove and remount cup tubes.
	Loose or Missing Hardware.	Check each cup tube to insure all hardware is present on the cup tube. Replace any missing hardware.
	Cups.	Cups are packed together and will not separate.
	NO CUP EXTRACTED	The gripper did not or could not extract a cup from the cup tube.
TURRET STALLED	Grabber Pads.	Wet, dry off. If damaged, replace.
	C02	Check bulk C02 tank, if empty go to back up C02 and turn on.
	Cup Tubes.	Cup tube fingers are damaged (bent), replace all four fingers.
	Cups	Cups are packed together and will not separate.
CONVEYOR STALLED	Turret unable to rotate clockwise or counter-clockwise.	Clear obstruction (lid holder, cup tube or cups). Press ENTER
CONVEYOR NOISE	Cup(s) jammed in the conveyor at the cup extraction position and the conveyor and turret are unable to operate. Does the conveyor rotate?	Remove all cups from the conveyor cup holders at the EXTRACT POSITION before pressing the ENTER button. Another cup will be extracted and dispensing will continue. Make sure conveyor is installed correctly. Repair or Replace.
CONVEYOR NOISE	Audible noise as conveyor turns.	Remove conveyor and clean.
CUP HOLDERS	Loose on conveyor belt.	Three screws hold the cup holder firm to the conveyor belt. Tighten screws till firm (DO NOT OVERTIGHTEN). Use kit 14461.
AIR OR C02 LOW OR OUT	Change C02 cylinder or have bulk tank refilled. Check cause not operating and repair.	C02 supply is low or empty or air compressor not operating.



COKE SMALL PARTS 1-800-241-2653
Ask for Small Parts Department. Part orders less than \$15/order are FREE. Prices subject to change.

Listed below are the most common parts needed.

14461	Conveyor Backing Plate Kit	\$1.16
16586	Nozzle Brush	\$0.50
19136	Valve Nozzle	\$2.63
20297	Deflector, Syrup (Diffuser)	\$6.10
20482	Small Nut, Cup Tube	\$3.42
20483	Acorn Nut 6x32	\$0.43
20484	Large Nut, Cup Tube	\$3.27
20582	Plastic Spacer for Cup Tube	\$0.79
20652	Cup Locator Spring	\$7.71
20669	Water Deflector	\$0.97
20763	Screw for Front Panel	\$0.41
20881	Clinch Stud, Cup Tube	\$0.29
20882	Lock Nut for Cup Tube	\$0.03
28074	Cup Fingers 16, 21, 42 oz.	\$4.75
28075	Cup Fingers 12, 32 oz.	\$4.93
28076	Ice Chute Brush	\$8.79



04

McDonald's® ABS Alarms and Troubleshooting



B

Troubleshooting

PROBLEM	CAUSE	CORRECTIVE ACTION
GATE DOES NOT OPEN OR IS SLUGGISH AGITATOR TURNS	A. Ice Chute not installed correctly.	Reinstall Ice Chute.
ABS UNIT WILL NOT ENTER AUTO MODE	A. Out of C02. B. No POS host cable. C. Unit appears locked up.	Reinstall C02 Press Clear, AUTO. Power off and Restart.
BEVERAGES TOO SWEET	A. Carbonator not working. B. No C02 pressure in carbonator. C. Valve ratio requires adjusting. D. Plugged filter.	Call for service. Call for service. Call for service. Replace.
BEVERAGES NOT SWEET ENOUGH	A. Empty B.I.B. container. B. Valve ratio requires adjusting.	Replace. Call for service.
BEVERAGES NOT COLD	A. No ice in hopper. B. Drains plugged and water standing on coldplate. C. Master cooling system not cooling.	Fill ice bin. Clean ice bin and flush drain with warm water. Call for service.
DRINKS FOAMY	A. Nozzle & Syrup diffuser not clean. B. Bulk Coke tank needs to be sanitize. C. Lower or out of C02.	Clean and Sanitize. Clean and Sanitize. Replace or Switch to Back up.

C

POS Troubleshooting

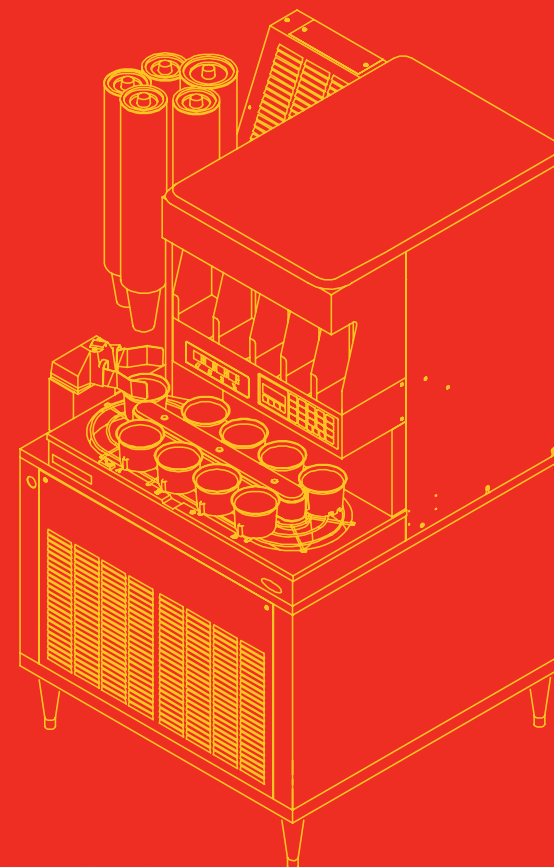
ABS SYSTEM NOT COMMUNICATING	<ul style="list-style-type: none"> Verify that the ABS unit is in AUTOMATIC MODE. If ABS is in MANUAL MODE, switch ABS to AUTOMATIC MODE. Verify that the ABS unit is enabled in the POS Drink Dispenser setup. Verify that POS cable is connected to COM2 on the CCU. Verify that the POS cable is connected to the ABS unit. Verify all programming is correct. Verify that no error messages are displayed on the ABS unit. Reboot power to the CCU. Reboot power to the ABS unit.
ABS UNIT WILL NOT DISPENSE A DRINK WITHOUT ICE OR WITH EXTRA ICE	<ul style="list-style-type: none"> For no ice, you must have the modifier enabled as "NO", "W/O", or "W/OUT". For extra ice, you must have the modifier enabled as "EXTRA" or "XTRA".
ABS UNIT IS DISPENSING THE WRONG SIZE OR FLAVOR	<ul style="list-style-type: none"> Make sure that the order in which the flavors and sizes are the same in Flavor Setup and Size Setup in the Drink dispenser as it is on the ABS System. Coca-Cola will provide the Flavor Position Guide for POS programming. Call your POS vendor for service.
ABS IS NOT DISPENSING ONE OR MORE OF A SIZE OR FLAVOR	<ul style="list-style-type: none"> Verify the Flavor and Size spelling is the same in both the Flavor and Size setup as it is in the Menu Item Setup. Call your POS vendor for service.
ABS NOT PROGRAMMED FOR BREWED TEA	<ul style="list-style-type: none"> Brewed tea needs to be programmed in position 14 in the POS flavor table.

D

COCA-COLA PHONE FIX®

Coca-Cola SMILE Service 1-800-241-COKE

- Ask for Phone Fix to assist in troubleshooting
- Ask for the Small Parts Department to order small parts
- Ask for a Service Technician to be dispatched



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To order job aid cards contact Coca-Cola Parts: 1-800-638-2653 Part #111099 -or- www.3Wire.com 3Wire Part #1039561