

5 – Maintaining Units

This chapter provides information on the following aspects of pump/dispenser maintenance:

- Periodic Inspections
- Periodic Maintenance Requirements
- Special Maintenance Instructions

CAUTION

DEF is mildly corrosive. To avoid damage to components in the vicinity of the dispenser, avoid use of materials that could be corroded, or use protective coatings.

CAUTION

Do not open the electronics cabinet to change paper, to remove cash acceptor cassettes, or to perform any other tasks when it is raining. The moisture from the rain can damage the pump/dispenser.

General Safety Considerations

Safe operation of the equipment is very important to your customer and you. The following recommendations are in addition to those found in the sections that follow and [“Important Safety Information”](#) on [page 2-1](#).

- 1 Do not allow the customer to use damaged units or broken components with sharp edges.
- 2 Do not allow the customer to use units with missing doors or panels or with doors open.
- 3 Ensure that the adequate and readable instructions are clearly given on the units or nearby areas for potential safety hazards such as static electricity fueling hazards, use of unapproved containers, and so on. Place signs where fueling customers will notice and can read them.
- 4 Do not use long hoses beyond recommendations that may present a trip hazard. Use hose retrievers in good operating condition, when long hoses are used.
- 5 Do not allow the customer to use units which do not have hose breakaways installed on them.
- 6 Do not allow the customer to use units with hoses and/or nozzles removed from either side.

- 7 Do not allow the customer to use units that are leaking fuel.

WARNING

DEF, flexible fuels such as biodiesel, high alcohol percentage fuels such as E85, and so on may be incompatible with certain plumbing materials and hydraulic components.

Use of incompatible materials or components with alternative fuels such as E85 or DEF can result in leaks or unexpected failures of components resulting in fire or explosion or environmental damage. When installing components in E85 units, refer to [“Important Requirements for E85 Units”](#) on page 4-4.

When dispensing alternative fuels such as E85 or DEF, verify with the manufacturer if the material of all plumbing components are compatible with the fuels or DEF being dispensed.

Periodic Inspections

The Gilbarco Encore FlexPay™ IV is a Payment Card Industry PIN Entry Device (PCI-PED) payment device. As a result, the equipment owner is responsible for regular inspection of the device for signs of tampering or replacement and tracking of all events in the life cycle of the device, including: installation, maintenance events, audit events, inspection events, removal from site, and decommission. As a convenience, Gilbarco offers Insite360™ Encore, which can assist with asset-level tracking.

Performing General and Component Maintenance Inspections

This section provides instructions for scheduling two types of maintenance inspections:

- General inspections
- Component inspections

Note: This section does not include special inspections such as those required when changing fuel types. For those requirements, refer to [“Important Considerations When Changing Fuel Types”](#) on page 4-3.

Safety Warnings

You are performing inspections and maintenance in a potentially dangerous environment of flammable fuels/vapors and high voltage. To prevent injury when inspecting a unit at the islands, follow all safety precautions in [“Important Safety Information”](#) on page 2-1.

WARNING

You are performing inspections and maintenance in a potentially dangerous environment of flammable fuels/vapors and high voltage. Failure to adhere to the safety precautions in this manual may cause fire or explosion, resulting in severe injury or death. Read and adhere to all safety precautions before performing any maintenance activity.

General Inspections

Perform a general inspection of each unit as follows:

- Every week to ensure that all units are operating properly
- Whenever you receive a complaint about potential unit problems

As part of your general inspection, inspect the entire pump or dispenser for the following indications:

- External damage
- Leaks
- Exposed sharp or similar edges that may cause cuts
- Missing parts, doors, and so on.
- Safety hazards when fueling, such as slippery surfaces, trip hazards, missing warning signs, and so on.

Replace any missing or damaged warning labels. Gilbarco also strongly recommends that ASCs/CSCs periodically inspect the equipment as outlined in the next subsection.

WARNING

If you find any leaks or damage, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion, or electrical shock could result, if you continue to use leaking or damaged pumps/dispensers.

WARNING

To prevent injury to customers or yourself, block customer access to the pump/dispenser with cones or similar equipment, when inspecting.

Component Inspections

To schedule component inspections, refer to the following table. Generally, the station owner must only *inspect* for damage or problems with the units. For safety reasons, several tasks in the following table, including *all* repairs, must be performed only by an ASC/CSC. To determine if an ASC/CSC must perform a task, refer to the column titled “Who Performs the Inspection/Repair” on [page 5-4](#).

WARNING

Do not attempt to perform any task that is noted “ASC/CSC only” in the “Who Performs the Inspection/Repair” column on [page 5-4](#). Performing those tasks incorrectly could result in severe injury or death.

WARNING

If you find a leak during an inspection, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion, or electrical shock could result, if you continue to use a leaking or damaged pump/dispenser.

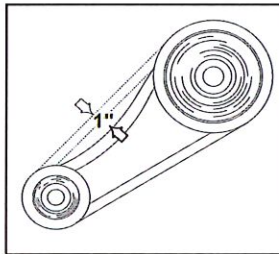
Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
Once a month	Belts	Recommended Belt Tensions: Tighter belt tensions can cause wear and premature failures for both pump and motor bearing. Loose belts result in low flow or pulley/belt failures. Use the following ratings: <ul style="list-style-type: none"> • 65-75 lbs (30-34 Kgf) for new belts • 50-65 lbs (28-30 Kgf) for old belts 	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test

CAUTION



Belts and pulleys can pinch fingers and hands. Injuries may result. Avoid placing fingers or hands between belts and pulley. Never turn power on to fit belt on pulley.

1. On the link belts, check all tabs for correct positions (inward).
2. Check the belt tension. If there is more than 1 inch of play on one side of belt, then tighten the belts by tightening the idler pulley against the belt. If there is excessive play, then replace the belt with the next shorter length belt



Upon receiving a customer complaint	Replacing printer paper	Refer to the instructions in "Changing Receipt Paper in M00317A00X Printer" on page 5-15 or "Changing Receipt Paper in USB Printer (M04119A001)" on page 5-18 or "Changing Receipt Paper in USB Sliding Printer (M06972A001)" on page 5-21 or "Changing Receipt Paper in USB Sliding Printer for Encore S Series E-CIM Bezel (M07885A001)" on page 5-24.	Owner
Upon receiving a customer complaint	Correcting printer jams	Refer to the instructions in "Clearing Paper Jams in USB Printer (M04119A001)" on page 5-28 or "Clearing Paper Jams in USB Sliding Printer (M06972A001)" on page 5-30.	Owner
Once a week	Displays	1. Inspect displays for proper reading of all digits. 2. Verify if the displays are properly backlit.	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
At least once a week or if a customer complaint arises	Hoses	1. Inspect each hose for leaks and damage.	• Owner - Inspect • ASC/CSC only - Repair and test

**WARNING**

If you find a leak, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion or electrical shock could result, if you continue to use a damaged pump/dispenser.

2. Inspect each hose for the following wear or damage:
 - Bulges
 - Cracks
 - Cuts
 - Flattened spots
 - Reinforcement showing
 - Soft spots
 - Splits
 - Weaknesses
 - Tears
3. Consult the hose manufacturer for any additional inspections required.
Note: If repair is required, call an ASC/CSC.

**WARNING**

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
Once a week or if a customer complaint arises	Hose retrievers	<ol style="list-style-type: none"> 1. Inspect hose retrievers for frayed or broken cables. 2. Inspect hose retrievers for cables wrapped around hoses. 	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test

Notes:

1. If repair is required, call an ASC/CSC.
2. When hose retrievers are used, the breakaway whip hose must be attached to the nozzle, and the breakaway coupling attached to the whip hose, with the retriever clamp positioned between the breakaway coupling and the dispenser outlet casting. When retrievers are not used, the breakaway whip hose is attached to the dispenser outlet casting and the breakaway coupling is attached to the other end of the breakaway whip hose.

**WARNING**

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Once a week or as notified about a potential problem	Nozzles and boot area	<ol style="list-style-type: none"> 1. Inspect nozzles for the following: <ul style="list-style-type: none"> • Damage • Leaks • Loose nozzle spouts • Missing parts, such as retainer springs and splash guards 	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test
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**WARNING**

If you find a leak, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion, or electrical shock could result, if you continue to use a damaged pump/dispenser.

2. Inspect vapor recovery boots (bellows) for proper seal and signs of damage.
3. Consult the nozzle manufacturer for any additional required inspections.

Note: If repair is required, call an ASC/CSC.

**WARNING**

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
Once a week, or as notified about a potential leak	Leaks, outside the unit	<ol style="list-style-type: none"> Inspect the following for leaks or signs of leakage: <ul style="list-style-type: none"> • Breakaways • Couplings • Hose outlet castings • Hoses • Nozzles • Swivels Look for any signs of fuel or fuel staining around the base of the dispenser, especially at the side columns and at the upper housing. Review all documentation provided by each component's manufacturer for additional inspection information. If a leak is found, stop using the unit, and make arrangements to repair the leak. 	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test

WARNING

If you find a leak, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion, or electrical shock could result, if you continue to use a damaged pump/dispenser.

WARNING

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Once a week or after drive-offs	Breakaways	<ol style="list-style-type: none"> Inspect breakaways for secure connection to hose and for any leaks. 	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only- Repair and test
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WARNING

If you find a leak, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion, or electrical shock could result, if you continue to use a damaged pump/dispenser.

- Consult the breakaway manufacturer for any additional required inspections.

Notes:

- If repair is required, call an ASC/CSC.
- Some breakaways are not repairable. Check with the ASC/CSC whether the breakaway is repairable before the ASC/CSC attempts to reassemble the breakaway.
- A leak inspection within the hydraulics cabinet is also required. See the relevant section, later in this chapter.

WARNING

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Once a week or as required	Wash unit	Clean with Simple Green® all purpose cleaner (or equivalent). Do not wash with a high-pressure hose. Refer to "Cleaning and Detailing Unit" on page 5-31.	Owner
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Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
Once a week or upon complaint of improper reading of cards	Card Reader	Clean the card reader with a Card Reader Cleaning Card (Q11482) weekly or if the card reader is not reading credit cards properly. Cleaning of card readers periodically may prevent future service calls. Card readers that do not work because of lack of periodic cleaning are not covered by warranty.	Owner

CAUTION

Do not use a pressure washer to clean the pump/dispenser.

Once a month	Bulbs (Eclipse only)	Where bulbs are used, verify if all light box bulbs are illuminated.	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test
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**WARNING**

To avoid injury when inspecting the bulbs, use a safe and sturdy non-conductive fiberglass step ladder. Follow ladder manufacturer safety instructions.

Do not rest the ladder against the dispenser.

Block off area where you will be working.

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
Once a month, after drive-offs, or as notified about a potential leak	Leaks, within the lower hydraulics cabinet	<ol style="list-style-type: none"> 1. Whenever possible, Gilbarco recommends removing power to the unit before performing these inspections. 2. Block the unit area to prevent customers from operating the unit during inspection. 3. Remove the lower panels slowly and carefully to avoid any fuel being sprayed in the cabinet (especially if a drive-off has occurred). Wear eye protection. 4. Inspect all hydraulic connections and seals, including the following: <ul style="list-style-type: none"> • Meters • Valves 5. If wetness or dripping fuel is found, stop using the unit, and make arrangements to repair the leak. <i>Note: Some staining of parts around seals is normal and does not indicate a problem. Look for dripping or wet surfaces.</i> 6. Monitor repaired places closely. 	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test

**WARNING**

To prevent injury when inspecting self-contained units (equipped with pumps and electric motors), do not place your hands near the belts, pulleys, or motors. Do not allow anyone to use either side of the pump when inspecting. Block the pump/dispenser off or lock the nozzle to the nozzle hook.

**WARNING**

If you find a leak, stop using the pump/dispenser, and contact your local ASC/CSC. Fire, explosion, or electrical shock could result, if you continue to use a damaged pump/dispenser.

**WARNING**

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

**CAUTION**

To prevent potential injury, wear eye protection when performing these inspections.


New Installations -
After 50,000
gallons (200,000
liters), or after one
month

Filter change
and strainer
cleaning

Replace filters, and clean strainers regularly.

Note: Water alert filters may fail prematurely if water passes through them.

Only an ASC/CSC must
perform these tasks.

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
After first filter change - Every 300,000 gallons (1.1 million liters), every six months, or when fuel delivery rate significantly slows.		<div style="background-color: black; color: white; padding: 5px; text-align: center;">  WARNING </div> <div style="border: 1px solid black; padding: 5px;"> <p>Do not attempt to perform any of these tasks yourself. Performing these tasks incorrectly could result in severe injury or death.</p> </div> <p><i>Note: Most complaints regarding continual slow flow rate from the dispenser are caused by clogged filters</i></p>	
Every three months	Clean CRIND device printer	<ul style="list-style-type: none"> Clean the CRIND device M00317A00X Printer using the Printer Cleaning Card Q13400. Follow instructions in "Cleaning CRIND Device in M00317A00X Printer" on page 5-28 (use Moore Wallace M05194B001). Clean the CRIND device M04119A001 [Universal Serial Bus (USB)] Printer using the M05194B001 Cleaning Kit. Follow instructions included in the kit. 	Owner
Every three months	Clean CRIND device display	Clean the CRIND device display regularly with a mild detergent and soft cloth using Moore Wallace M05194B001 Cleaning Kit. Be careful not to scratch the display. Do not use an abrasive cleaner, or glass cleaner or detergent that contains ammonia. Ammonia will damage plastic display windows and door materials.	Owner
Every six months	Inspect and lubricate shear valves	<p>To check valve operation, perform the following tasks:</p> <ol style="list-style-type: none"> 1. Trip the valve. 2. Authorize the hose at the console, if required. 3. Lift the operating handle. 4. Place the discharge nozzle in an approved container. 5. Squeeze the nozzle operating lever. If flow continues after several seconds, the valve is defective and must be serviced or replaced. 6. Place a few drops of SAE10 oil on shear valve body shaft. 7. Open and close valve with a wrench several times. 8. Place valve back in service. <p><i>Note: If repair is required, call an ASC/CSC.</i></p>	<ul style="list-style-type: none"> • Owner - Inspect and lubricate • ASC/CSC only - Repair

CAUTION

If you are not sure which device is the shear valve or have not been trained regarding its use or service, have the ASC/CSC inspect and lubricate this device for you.

WARNING

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
Every six months	Pump pulleys, belts, and belt tension	1. Remove power to the unit.	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test

**WARNING**

To prevent an injury, remove power to the pump/dispenser before you start the maintenance activity.

CAUTION

To avoid injury, avoid getting your fingers in a pinch point between the pulley and belt during an inspection.

2. Inspect belts for fraying/cracks.
3. Inspect pulleys for excessive wear in grooves and excessive bearing play.
4. Ensure that there is no more than 1 inch of play on either side of the belt, by pressing the belt midway between the two pulleys.

Note: If repair is required, call an ASC/CSC.

**WARNING**

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Every six months	Nozzle hooks and shafts	<ol style="list-style-type: none"> 1. Lubricate with silicone grease, if required. 2. Check for damage. 3. Ensure that the locking tab locator is not broken. <p>The locking tab locator helps hold the nozzle in the nozzle boot and enables the station owner to lock the nozzle boot with a clasp padlock.</p> <p><i>Note: If repair is required, call an ASC/CSC.</i></p>	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair and test
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**WARNING**

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Every six months	Door locks	Lubricate with a graphite lubricant or lock oil. Follow manufacturer's instructions. Do not over-lubricate.	Owner
Every 12 months or as required in harsh climate	Polish unit	Polish metal parts with Nu Finish® car polish. Refer to "Cleaning and Detailing Unit" on page 5-31.	Owner

Recommended Frequency	Components	Recommended Maintenance	Who Performs the Inspection/Repair
When other components are serviced	Eclipse unit fiberglass	Look for loose fiberglass skins, missing brackets, and missing mounting hardware.	<ul style="list-style-type: none"> • Owner - Inspect • ASC/CSC only - Repair

Note: If repair is required, call an ASC/CSC.



WARNING

Do not attempt to make these repairs yourself. Doing so could result in severe injury or death.

Every six months (annually for Encore 550) or if fuel inventory discrepancies exist.	Meter calibration	Have the unit meters checked for proper calibration and corrected as required. High volume stations may require more frequent calibration checks when compared to the low volume stations.	<ul style="list-style-type: none"> • Owner - arranges for service • ASC/CSC - tests and re-calibrates, if required
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For Units with Ecometer

Yearly	Ecometer calibration	Have the unit meters checked for proper calibration and corrected as required. Ecometers with proper air purging during installation will not generally vary from initial calibration settings.	<ul style="list-style-type: none"> • Owner - arranges for service • ASC/CSC - tests and re-calibrates, if required
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For Units Equipped with DEF

Once a week, especially during cold weather	DEF hose retriever and nozzle door mechanism	Verify if the hose retrieves properly. Verify if the nozzle door opens and closes properly. From a half-way lifted position, the door must close completely unassisted, after the nozzle has been placed back into the nozzle holder.	<ul style="list-style-type: none"> • Owner - Inspect • ASC - Repair
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CAUTION

During cold weather, a hose retriever that does not retract properly or a nozzle door that does not self close properly may cause freezing of the nozzle, hose, or other components. This prevents DEF from being dispensed or may cause damage to components that results in leaks.

After a DEF spill occurs	Dispenser and surrounding metallic components	Flush the DEF spill with water and dry the area with clean rags, especially areas that contain metallic parts.	Owner
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Note: Spilled DEF can be slippery and will corrode metallic parts.

CAUTION

DEF is mildly corrosive. Handle with care. Wear eye protection and rubber gloves during any cleanup activity.

Periodic Maintenance Requirements

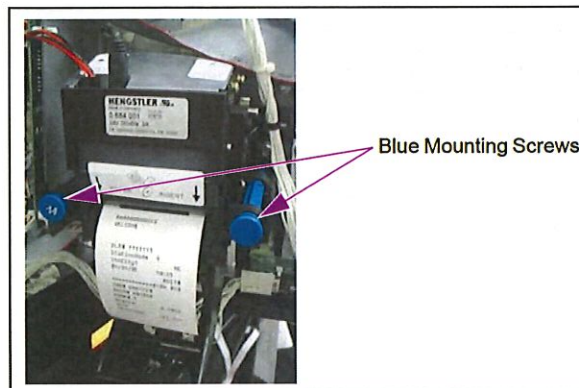
Changing CRIND Device Printer Paper

This section provides instructions for cleaning and changing paper for the following CRIND device printers:

- M00317A00X
- M04119A001: USB printer that is affixed to the door and can accommodate paper rolls of up to 4 inches in size.
- M06972A001: USB sliding printer that can accommodate paper rolls of up to 6 inches in size.

These printers can be distinguished by identifying the large blue colored mounting screws (pins) that are found only on the M04119A001 and M06972A001 Printers.

Figure 5-1: USB Printer with Blue Mounting Pins



Ensure that you follow the correct set of instructions based on the type of printer.

CAUTION



Avoid contacting the gears on the side of the printer with fingers or hair as it could result in an injury.

CAUTION

When the units are wet or when it rains, avoid changing paper for units without overhead canopies. If this cannot be prevented, use a dry rag to wipe off the moisture from the door area especially around the door edges. Avoid dripping water on the printer or other electronic components when opening the door. This will cause them to fail prematurely as a result of corrosion.

Cleaning Printer

Cleaning the printer regularly may help print quality and increase the life-span of the printer. When cleaning the printer, use Moore Wallace M05194B001 Cleaning Kit. For details, refer to [“Special Maintenance Instructions”](#) on page 5-31.

Printer Paper Ordering Information

The printer paper is sold as a blank roll or with low paper marks. Paper rolls with low paper marks alert the station about the paper level being low. The following table lists the information for ordering printer paper:

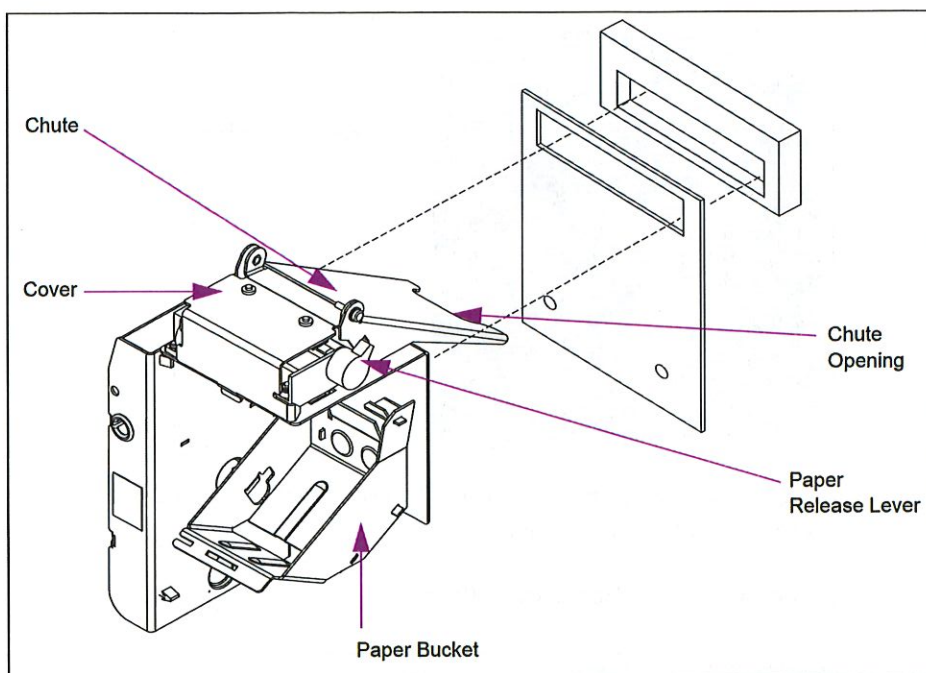
Vender	Type	Part No.	Printer Type
Moore Wallace Customer Service 1-800-416-8151	Blank Roll (4")	M04809B012	• M04119A001 (USB) • M00317A00X Printer
	Low Paper Marks (4")	M04809B014	• M04119A001 (USB) • M00317A00X Printer
Nakagawa Mfg (USA) 1-800-609-0608	Blank Roll (4")	N60125BN	M04119A001 (USB)
	Low Paper Marks (4")	N60125DN	M04119A001 (USB)
Moore Wallace Customer Service 1-800-416-8151	Blank Roll (6")	M04809B017	M06972A001 (Sliding)
	Low Paper Marks (6")	M04809B018	M06972A001 (Sliding)

Notes: 1) Use of improper paper can result in poor quality print, shortened printer life or frequent printer jams, which may not be covered by warranty.

2) It is important that all operators be trained in proper paper changing technique for problem-free operation.

Changing Receipt Paper in M00317A00X Printer

Figure 5-2: M00317A00X Printer



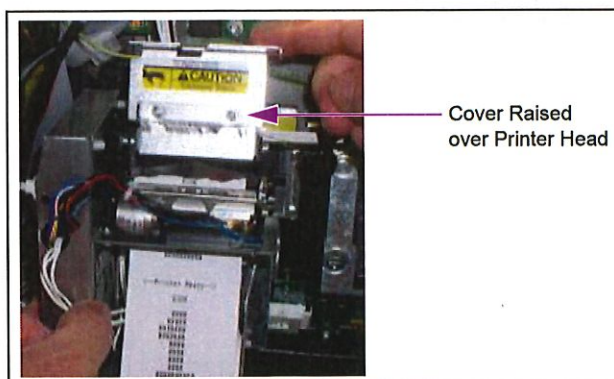
CAUTION

Avoid touching any wires or circuit boards during paper replacement, as static electricity from your fingers may damage the unit.

To replace the receipt paper in the M00317A00X Printer, proceed as follows:

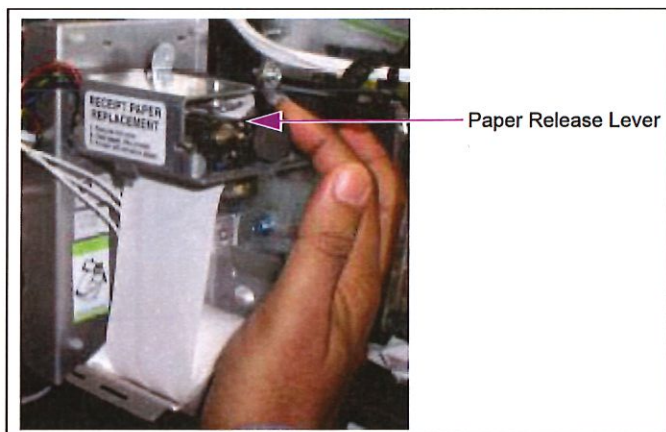
- 1 Remove the paper roll core.
- 2 Raise cover over printer head.

Figure 5-3: Printer Cover - Opening



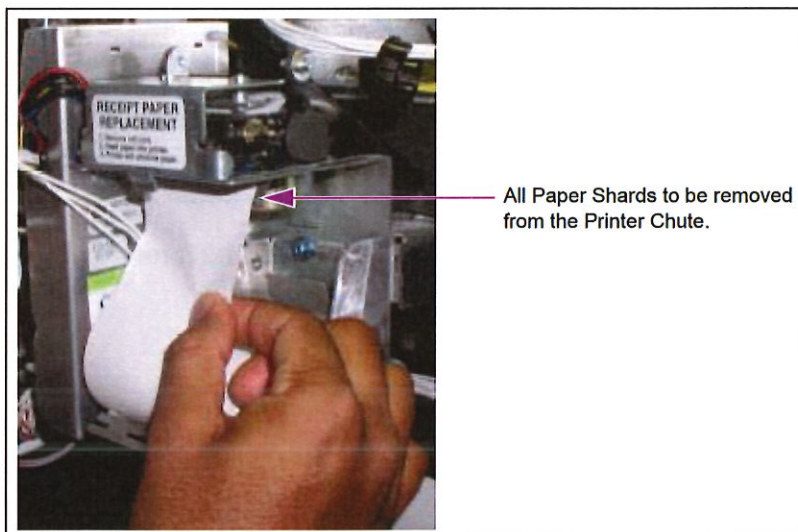
- 3 Pull the paper release lever towards you.

Figure 5-4: Paper Release Lever - Releasing



- 4 Inspect and remove any paper from the printer chute (paper shards in the printer chute can cause a subsequent printer jam).

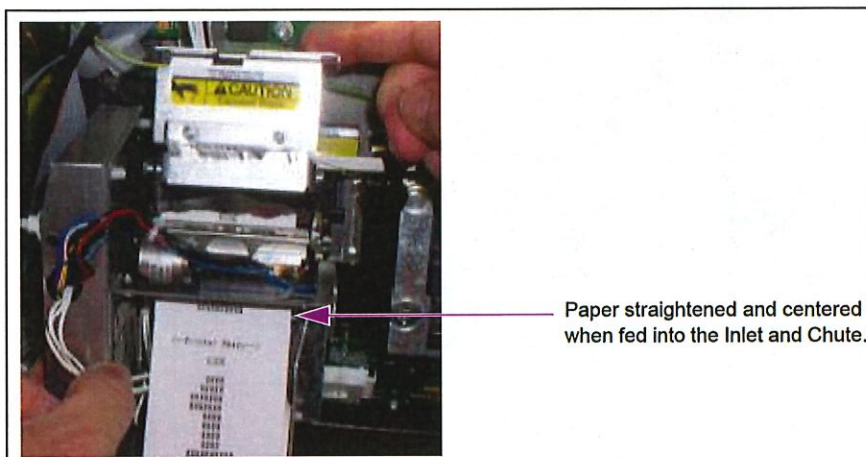
Figure 5-5: Paper Between Rollers



- 5 Feed the new paper into the inlet until the paper passes over the stainless steel V-shaped cutter and out of the chute exit at the front of the dispenser.

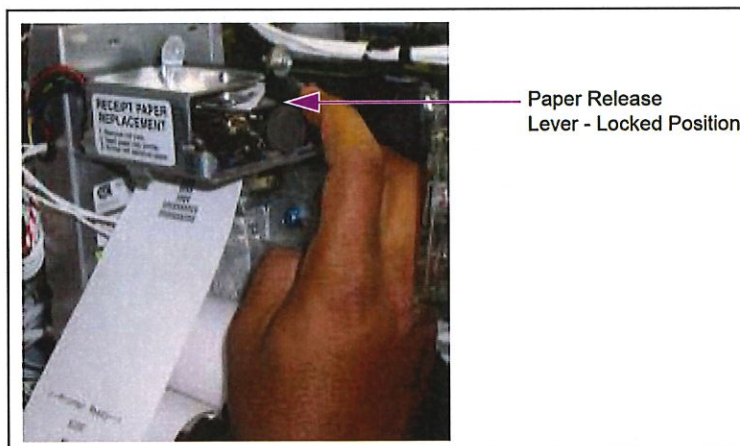
Note: The paper must run straight into the chute. Straighten and center the paper as required when feeding.

Figure 5-6: Paper Feed



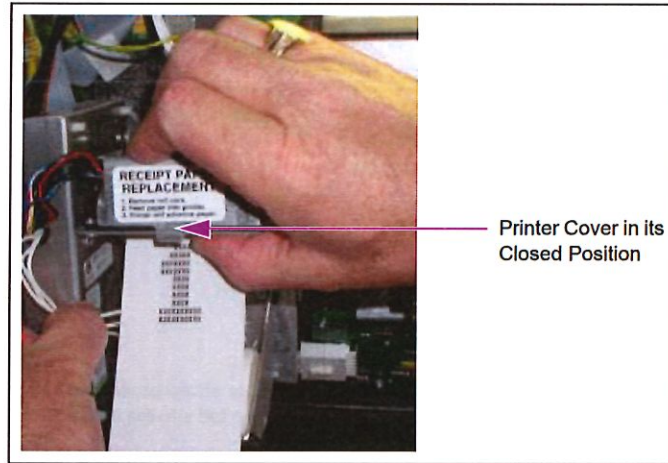
- 6 Push the paper release lever completely in the forward direction (away from you).

Figure 5-7: Paper Release Lever - Locking



- 7 Close the cover over the printer mechanism completely. Any gaps may lead to paper jams later.

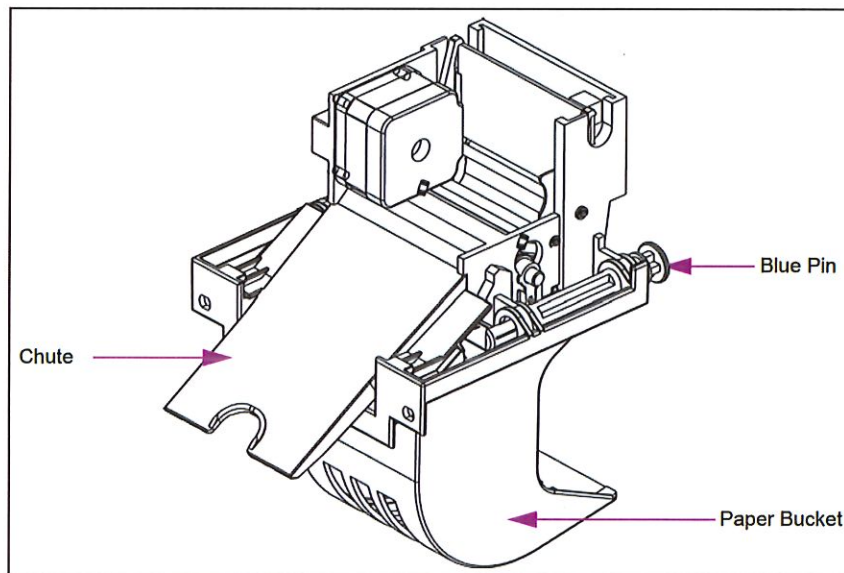
Figure 5-8: Printer Cover - Closing



- 8 Tear the excess paper at the chute opening.

Changing Receipt Paper in USB Printer (M04119A001)

Figure 5-9: USB Printer



CAUTION

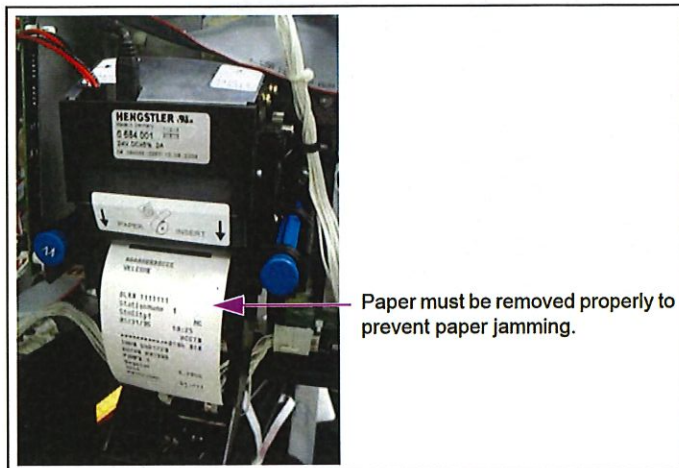
Avoid touching any wires or circuit boards during paper replacement, as static electricity from your fingers may damage the unit.

To replace the receipt paper in the USB printer, proceed as follows:

1 Remove the paper roll core.

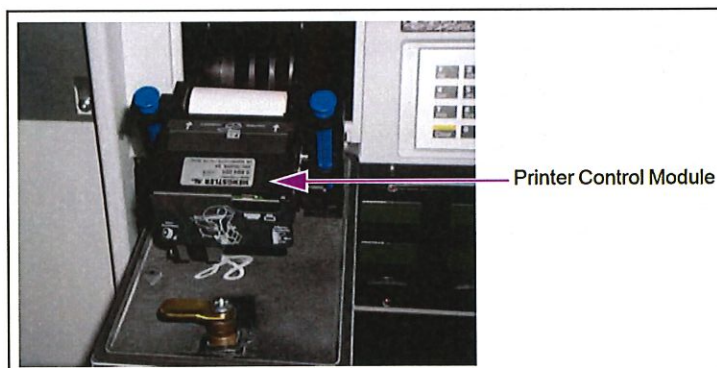
Note: To prevent paper from being trapped inside the printer, the printer automatically reverses the last short receipt left from the paper roll. Remove such receipts along with the paper roll core, if present.

Figure 5-10: Paper Removal



Note: In Encore S series, the printer is installed in an inverted manner, as you open the printer door as shown in [Figure 5-11](#). Apart from the way in which the printer is installed, the procedure for changing the receipt printer paper remains as explained in this section.

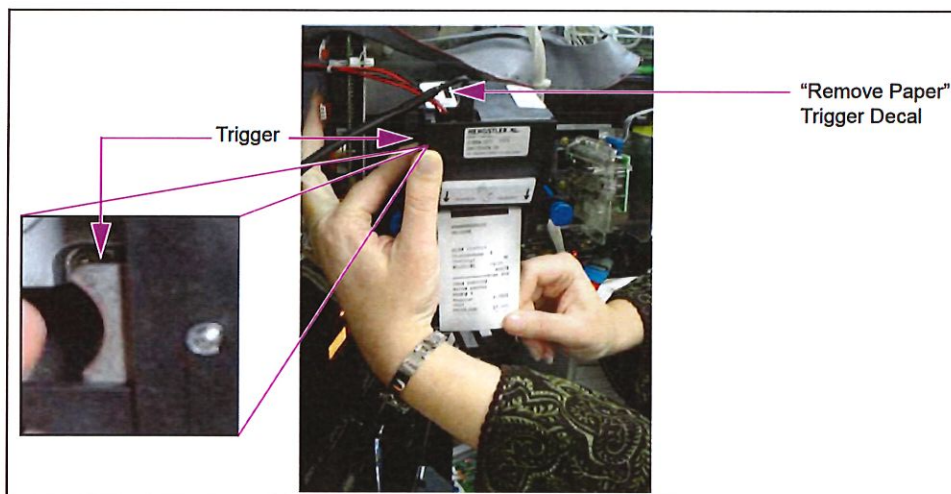
Figure 5-11: Printer in Encore S Series Unit



- 2** Locate the paper removal trigger on the left-hand side of the printer. This is located directly under the “Remove Paper” trigger decal. For the exact location of the trigger, see [Figure 5-12](#) on [page 5-20](#).

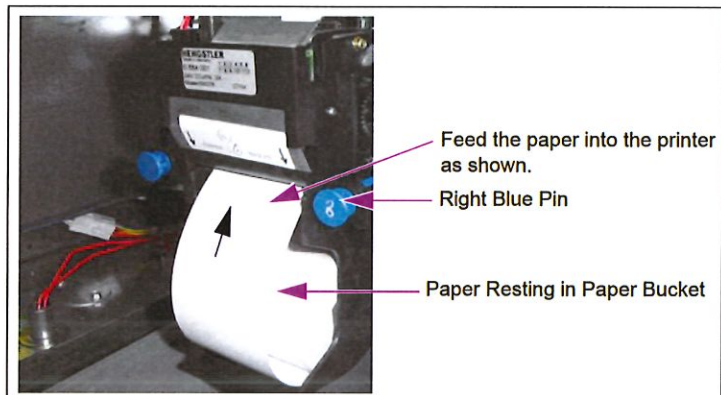
- 3 Press the trigger when gently pulling the paper to cleanly remove the paper from the paper feed path.

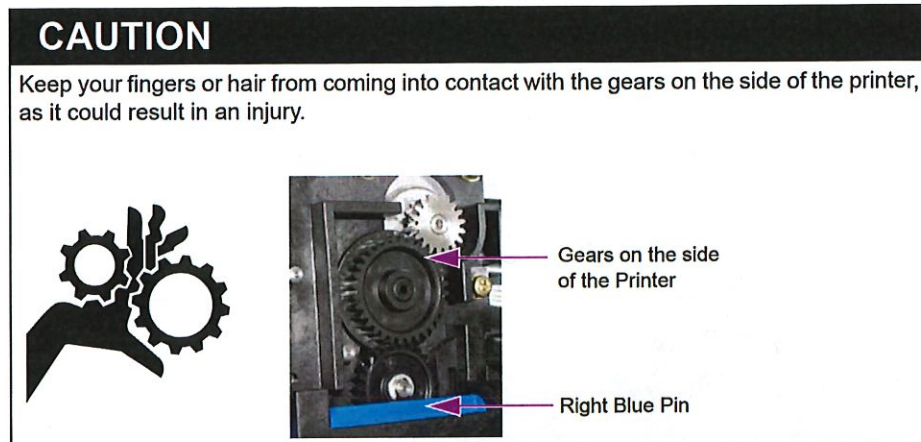
Figure 5-12: Paper Removal - Trigger Decal



- 4 Place the new roll of paper in the paper bucket. For orientation, see [Figure 5-13](#).

Figure 5-13: Paper Feeding into Printer



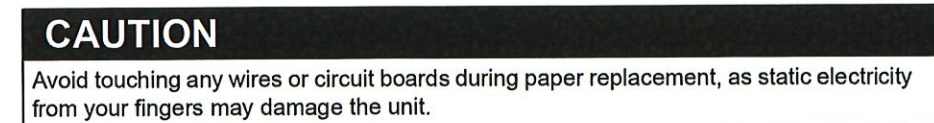
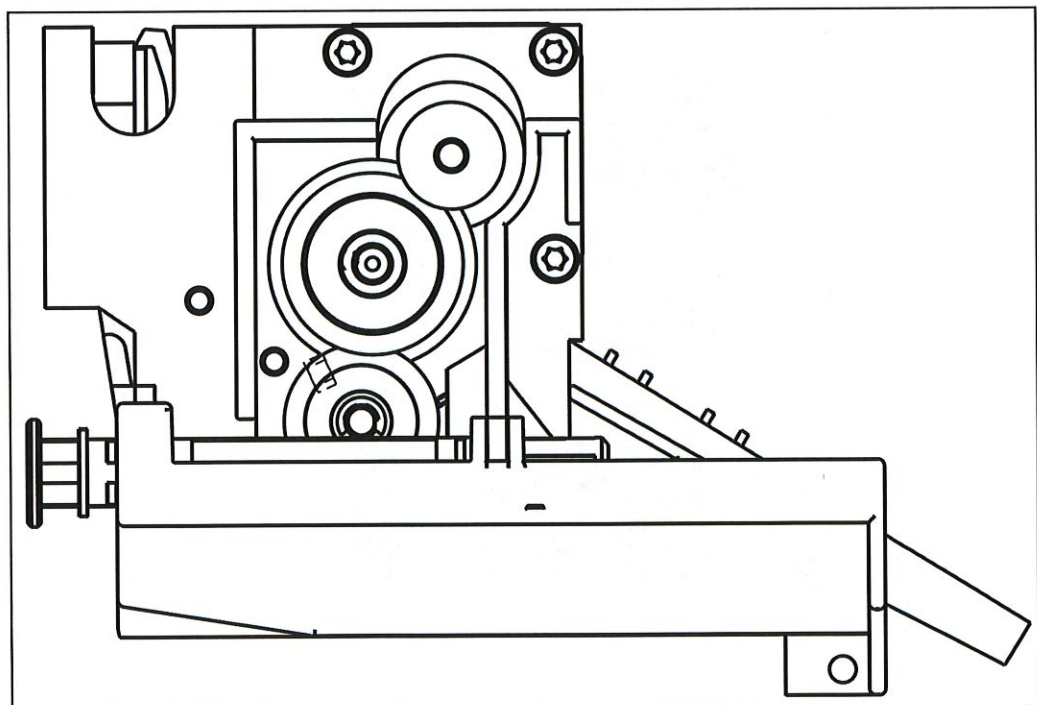


- 5 Feed the paper into the printer inlet following the direction of arrows on the printer.
Note: If the gears rattle when loading the paper, press trigger and feed the paper simultaneously.

The paper will automatically feed through the printer after the initial feed is done manually.

Changing Receipt Paper in USB Sliding Printer (M06972A001)

Figure 5-14: USB Sliding Printer



To replace the receipt paper in the sliding printer, proceed as follows:

- 1 Remove the paper roll core.

Note: To prevent paper from being trapped inside the printer, the printer automatically reverses the last short receipt left from the paper roll. Remove such receipts along with the paper roll core, if present.

Figure 5-15: Paper Removal

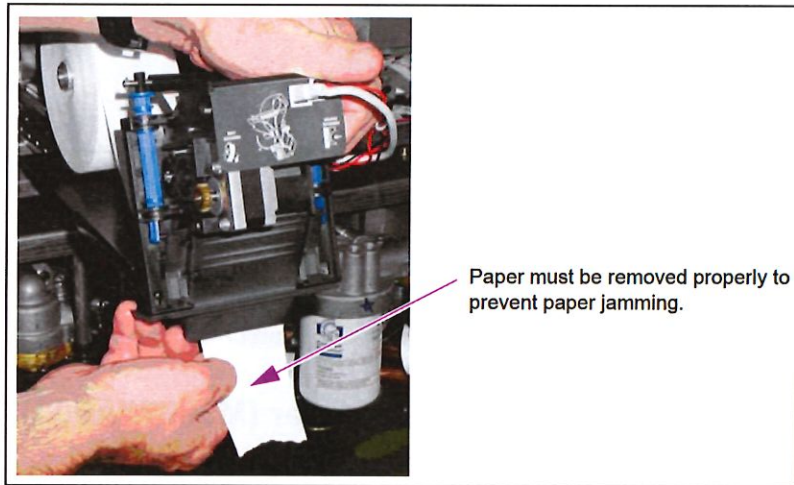
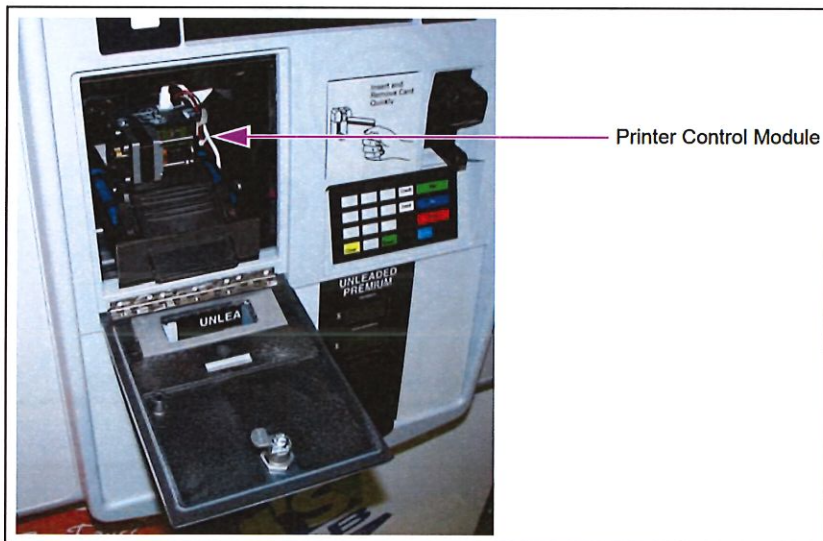
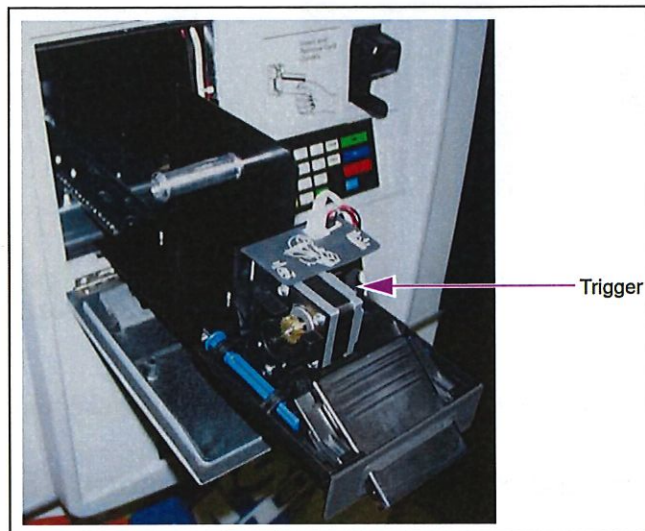


Figure 5-16: Printer in Encore S Series Unit



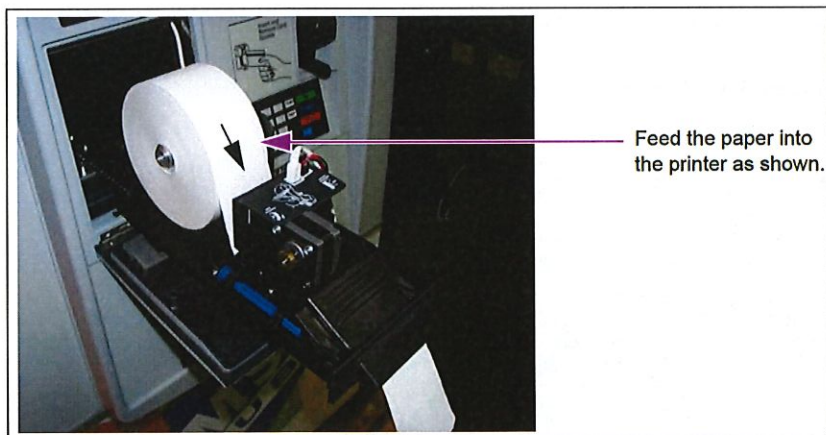
- 2 Locate the paper removal trigger on the right side of the printer. This is located directly under the “Remove Paper” trigger decal. For the exact location of the trigger, see [Figure 5-17](#).
- 3 Press the trigger when gently pulling the paper to completely remove the paper from the paper feed path.

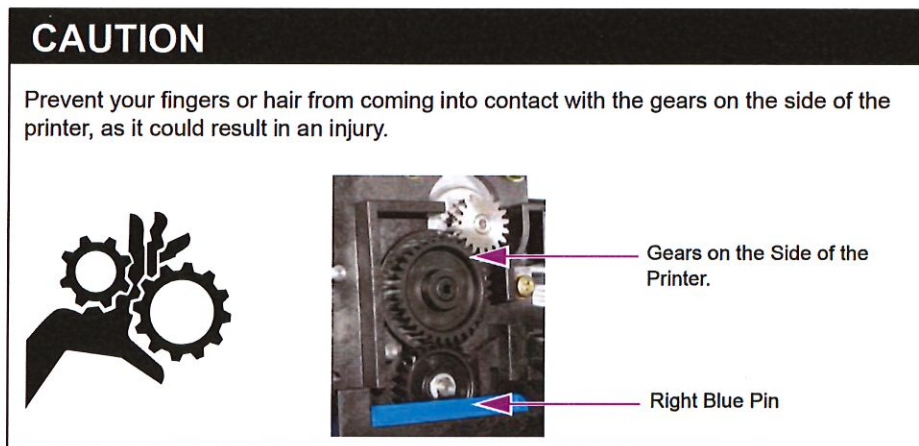
Figure 5-17: Paper Removal - Trigger Decal



- 4 Place the new roll of paper in the paper bucket. For orientation, see [Figure 5-18](#).

Figure 5-18: Feeding Paper into Printer





- 5 Feed the paper into the printer inlet following the direction of arrows on the printer.
Note: If the gears rattle when loading the paper, press trigger and feed the paper simultaneously.

The paper will automatically feed through the printer after the initial feed is done manually.

Changing Receipt Paper in USB Sliding Printer for Encore S Series E-CIM Bezel (M07885A001)

To change the receipt paper in the printer, proceed as follows:

Note: The USB Sliding Printer for Encore S Series E-CIM (M07885A001) is capable of holding a receipt paper roll of 6 inches.

- 1 Insert the printer key and turn it to the left to open the printer door.

Figure 5-19: Inserting Printer Key



- 2 Open the printer door and pull out the slide completely.

Figure 5-20: Opening Door and Pulling out Slide



- 3 Pull the empty paper spindle from the cable clamp.
Note: The unit is shipped with the spindle held by the cable clamp.

Figure 5-21: Pulling Paper Spindle

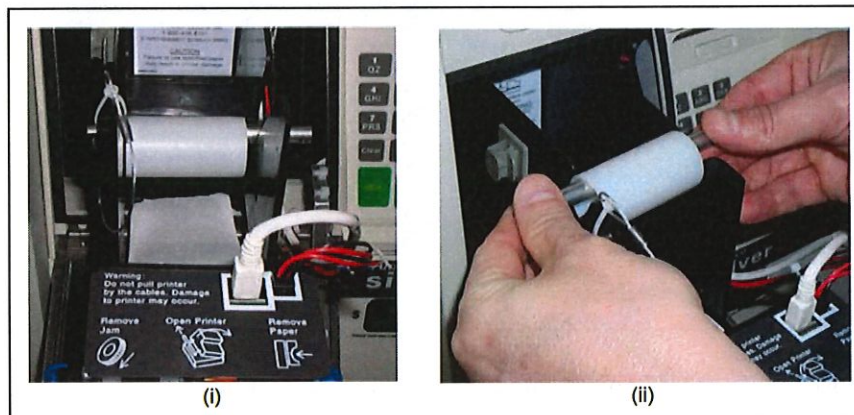
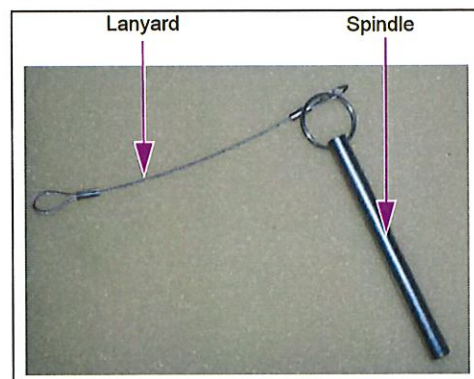
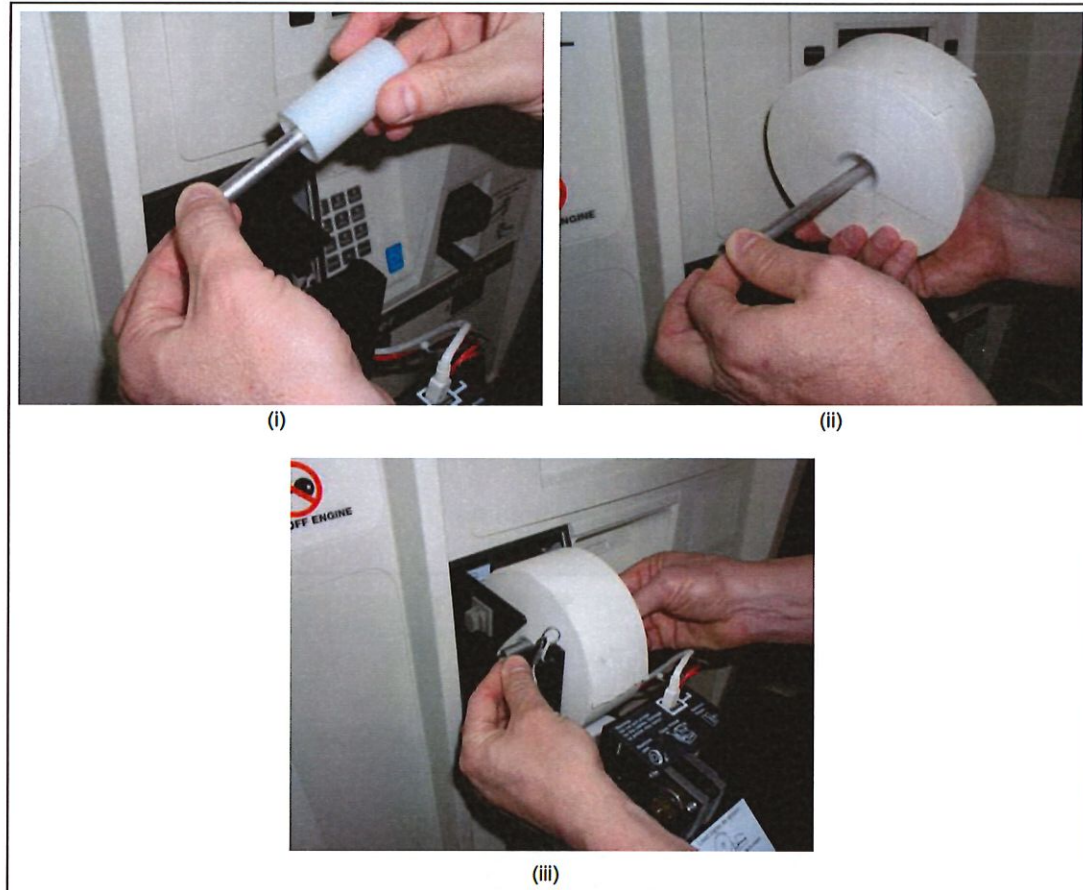


Figure 5-22: Spindle



- 4 Insert the spindle in a new paper roll and slide it into the spindle slot with the paper feeding from over the top.

Figure 5-23: Inserting New Paper Roll



- 5 Remove any small pieces of paper behind the printer head.

- 6 Feed the paper into the printer using the built-in ramp as a guide.

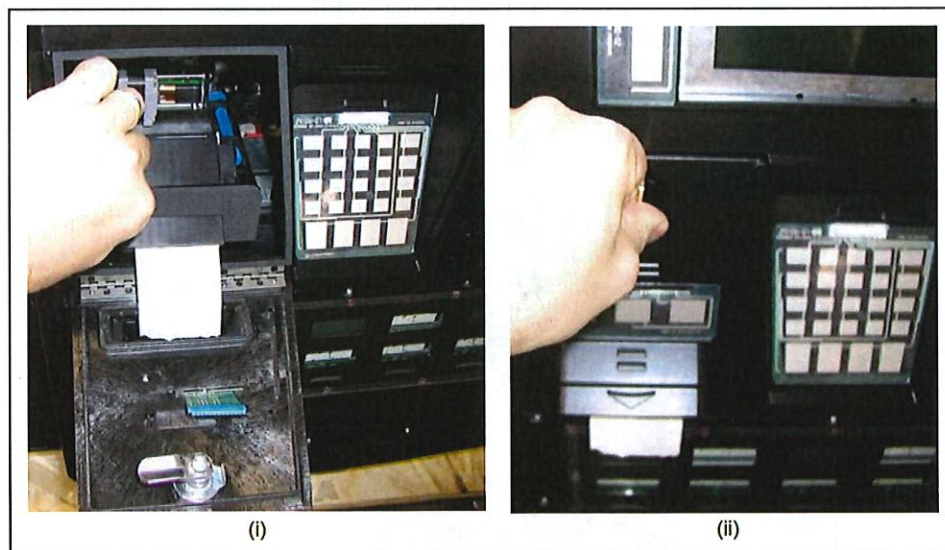
Note: Ensure that the paper is fully fed before you proceed. If the paper is not fed, check if the paper is jammed.

Figure 5-24: Feeding Paper into Printer



- 7 Push the printer slide back in and feed the paper through the slot. Close the printer door and turn the key to the right to lock it.

Figure 5-25: Pushing Printer Slide



- 8 Pull to tear paper.

Cleaning CRIND Device in M00317A00X Printer

Clean the CRIND device in the M00317A00X Printer using Printer Cleaning Cards (Q13400) every three months. Cleaning the printer will eliminate most print quality problems.

To clean the CRIND device's printer, proceed as follows:

- 1 Remove the paper and paper roll from the printer. Refer to [“Changing Receipt Paper in M00317A00X Printer”](#) on page 5-15 (steps 1 to 4).
- 2 Insert a printer cleaning card into the inlet.
- 3 Manually advance the cleaning card through the roller bars using the round feed knob near the paper release lever.
- 4 Replace the paper roll and re-install the receipt paper. Refer to [“Changing Receipt Paper in M00317A00X Printer”](#) on page 5-15.

Clearing Paper Jams in USB Printer (M04119A001)

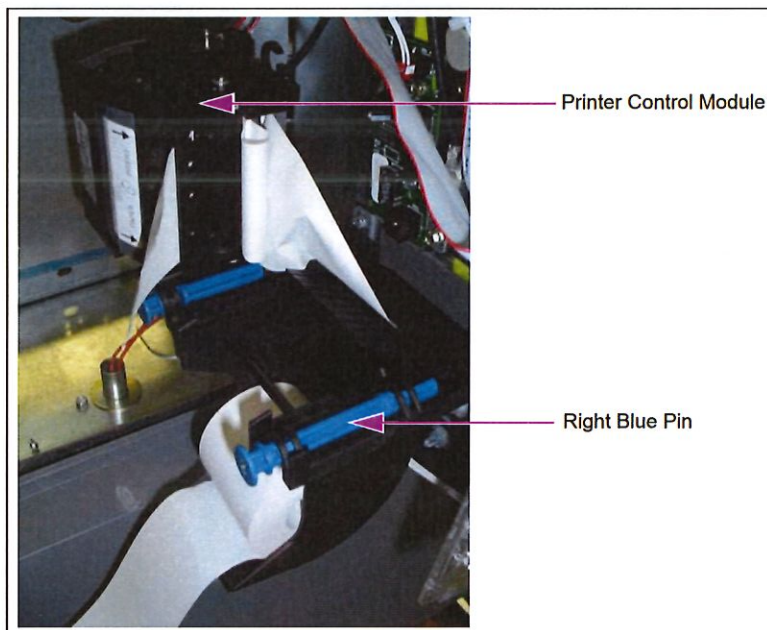
CAUTION

Avoid using tools for prying printer parts or using excessive force to clear jams. This could result in permanent damage to the printer.

To clear a paper jam, proceed as follows:

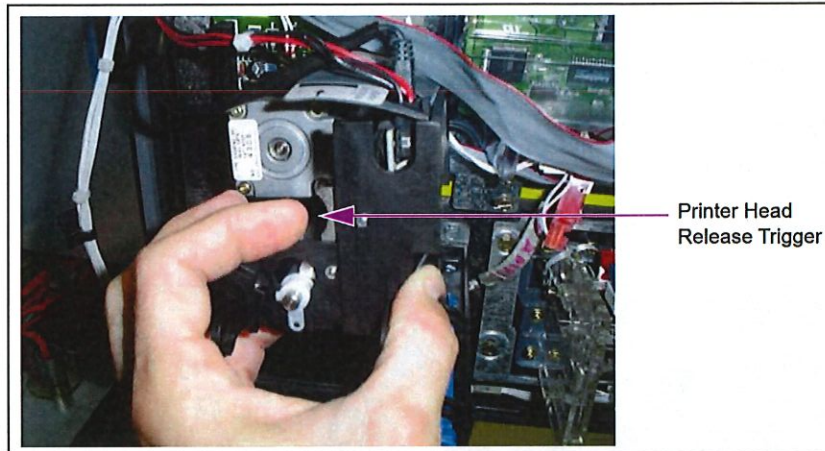
- 1 Pull the right blue pin and lift the printer control module to expose the jam.
Note: In Encore S series units, the printer is installed in an inverted manner. Hence, pull the left blue pin to lift the printer control module and expose the jam.

Figure 5-26: Printer Control Module



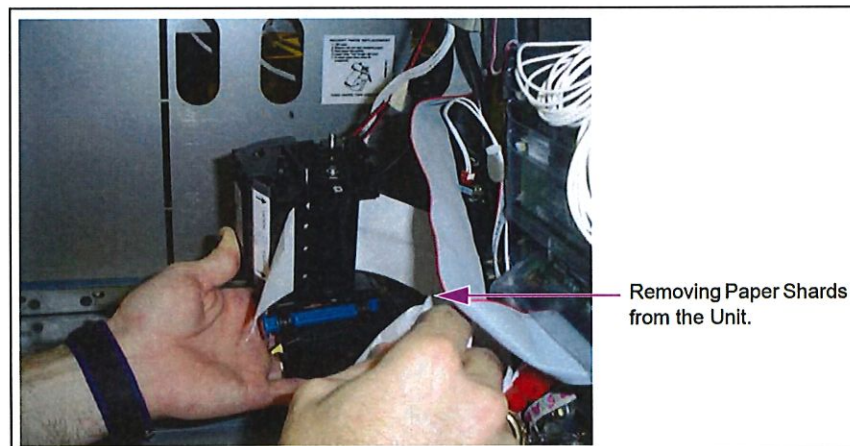
- 2 Press the printer head release trigger on the left side of the printer and remove the paper.
Note: In Encore S series units, the printer is installed in an inverted manner. Hence, the printer head release trigger is on the right side of the printer.

Figure 5-27: Printer Head Release Trigger



- 3 Tear paper at the paper feed and at the paper chute.
- 4 Gently pull the paper through the module, until it is completely removed. Leave no shards in the unit, especially in the printer chute.
Note: Rotate the gears to release the shards, if required.
- 5 Lower the module back on the paper bucket and push the right blue pin in place.

Figure 5-28: Printer Module - Removal of Shards



Clearing Paper Jams in USB Sliding Printer (M06972A001)

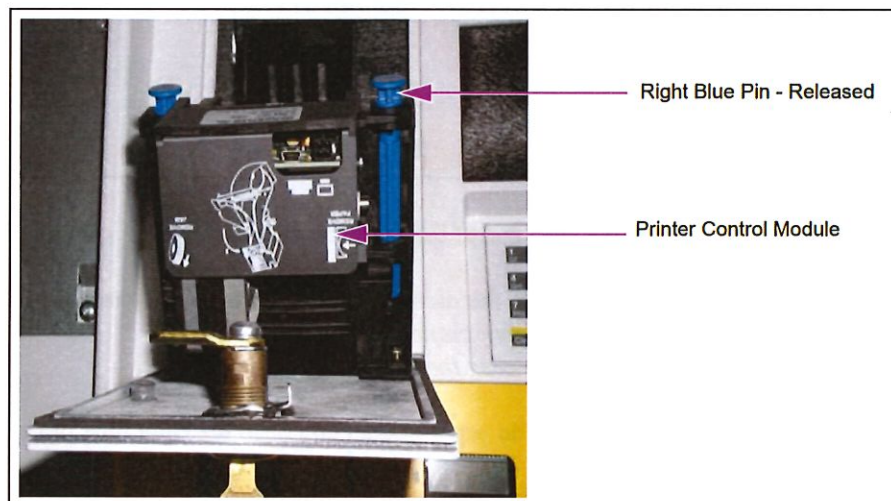
CAUTION

Avoid using tools for prying printer parts or using excessive force to clear jams. This could result in permanent damage to the printer.

To clear a paper jam, proceed as follows:

- 1 Release the right blue pin by pulling it upward, and tip the printer control module forward to expose the jam.

Figure 5-29: Printer Control Module

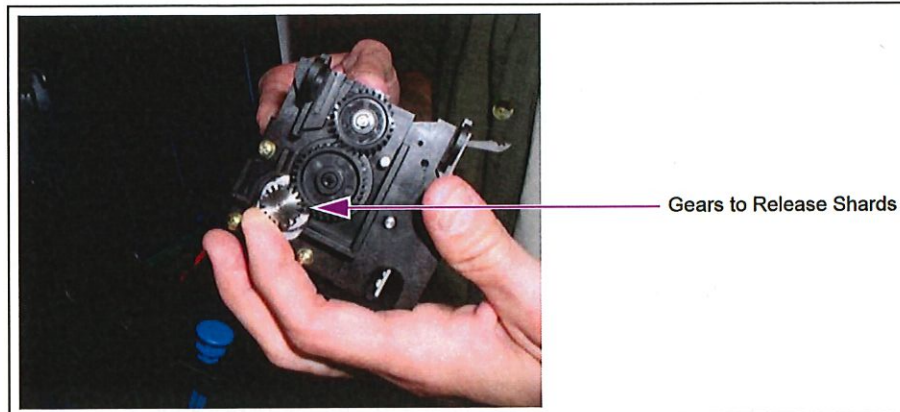


- 2 Press the printer head release trigger on the right side of the printer during the paper removal process.

- 3 Gently pull the paper through the module until it is completely removed. Leave no shards of paper in the unit. Check the paper chute and ensure that it is clear. Lower the module back on the paper bucket and push the right blue pin in place.

Note: You can rotate the gears to release shards.

Figure 5-30: Use Gears to Remove Shards



- 4 Place the printer control module back and push the right blue pin back in place.

Special Maintenance Instructions

The following are the special maintenance instructions to be followed:

Cleaning and Detailing Unit

The following is a list of recommendations for cleaning dispensers:

- Special considerations
- Painted plastics and metals
- Graphics
- Display lenses
- Stainless steel sheathing
- Waxing the dispenser

Materials Required

- Safety glasses
- Flexible rubber gloves
- Concentrated Simple Green all purpose cleaner
- Soft bristle nylon brush
- Spray bottle filled with water
- Empty spray bottle (to use with prepared cleaning mixture)
- White cotton cloths
- Nu Finish car polish
- Safety cones or barricades
- Cotton or paint-safe microfiber cloth or washing mitt
- Two large buckets (for the cleaning solution and rinsing debris)

Special Considerations

- Do not use fuels or acetone.
- Avoid citrus-based cleaners, household detergents, cleaners that contain sodium hydroxide, strong solvents, or acids.
- Do not use waxes, harsh abrasives, or cleaners that contain ammonia on the textured door surfaces as ammonia can damage plastics.
- Simple Green cleaner is the recommended cleaner for all surfaces. Avoid deicers as they may damage graphics.
- Do not spray the cleaner or rinse water onto or into the card reader, receipt printer, cash acceptor, or electronic display areas of the unit.
- Nu Finish is the recommended polish. Do not use any wax-based polishes. Do not apply the Nu Finish polish to electronic displays or nozzle boots.
- Avoid high pressure washers and constant direct spray from a water hose or high pressure water hoses on the dispenser doors/cabinet. Rinse water must be applied as a gentle spray.
- DEF is mildly corrosive with metals. Do not allow dried or wet DEF to remain on metallic parts on or near the dispenser for more than a day.

Routine Cleaning

Perform the following routine cleaning weekly or as required:

- 1 Place safety cones or other devices to barricade the units being cleaned.
- 2 Wear safety glasses and flexible rubber gloves.
- 3 In the empty spray bottle, prepare a mixture of one (1) part Concentrated Simple Green cleaner to 10 parts water.

CAUTION

Do not spray the cleaning mixture and water in or onto the card reader, receipt printer, cash acceptor, or electronic display area, as it may damage the equipment and will not be covered by warranty.

- 4 Spray the prepared cleaning mixture on the unit from bottom to the top. Streaking may occur if sprayed from the top down.
- 5 Scrub the unit with a soft bristle nylon brush in a circular motion from bottom to top. Scrub long enough to cause the cleaning solution to foam. For best results, two scrubbing cycles are recommended.
- 6 Rinse the unit thoroughly from the top to the bottom, ensuring that all the cleaner is removed. For best results, brush the unit when rinsing. Cleaner that dries on the unit will attract dirt.
- 7 Dry the unit with a clean white cloth.
- 8 Remove barricade(s) and cleaning supplies from the unit area.

Deep Cleaning and Detailing

Perform the following deep cleaning and detailing as required - at least once a year. This helps restore the original color to the painted surfaces.

- 1 Perform steps 1 to 8 on [page 5-32](#) of the routine cleaning procedure except, in step 3 on [page 5-32](#), prepare a mixture of one (1) part Concentrated Simple Green cleaner to one (1) part water.
- 2 Using a new clean white cloth, apply the Nu Finish polish to the cloth and apply the polish to the painted or metal surfaces of the unit.
Note: For difficult-to-remove ground-in dirt, apply Nu Finish polish to the soft bristle nylon brush and rub the surface.

IMPORTANT INFORMATION
<ul style="list-style-type: none">• Do not apply the Nu Finish polish to textured surfaces.• Do not apply the Nu Finish polish to electronic displays or nozzle boots.

- 3 Wipe surface of the unit with a clean white cloth.
- 4 Remove barricade(s) and cleaning supplies from the unit area.

Painted Plastics and Metals

Gilbarco has tested and recommends the following products for cleaning painted plastics and metals:

- Simple Green All Purpose Cleaner
- CAF OTIS Super Concentrate Multi-surface Cleaner
- Windex® Ammonia-free
- Dawn® Ultra Platinum Dishwashing Liquid
- Simoniz® Tru Blue Liquid Cleaner

The following cleaning products specifically designed for automotive (car washes) use are also recommended:

- Armor All®
- Duragloss®
- Mothers®
- Meguiars®
- Turtle Wax®

Graphics

For regular cleaning of graphics, use the cleaners for [“Painted Plastics and Metals”](#).

Display Lenses

To clean display lenses, proceed as follows:

- 1 Wash display lenses with a mild cleaner (such as Simple Green, Windex ammonia-free, or Simoniz TruBlue) and lukewarm water using a clean sponge or a soft cloth.
- 2 Rinse well with clean water (avoid high pressure washers or high pressure water hoses).
- 3 Dry thoroughly with a chamois or moist cellulose sponge to prevent water spots.

Note: Do not scrub or use brushes on these products; their coating is UV-resistant, not mar-resistant.

Stainless Steel Sheathing

- For regular cleaning of stainless steel sheathing, use the cleaners referred in “[Painted Plastics and Metals](#)” on [page 5-33](#).
- For hard to remove stains and slight rust, use Bar Keepers Friend®.

Waxing Dispenser

Gilbarco recommends the following for waxing dispensers:

- Wash with Simple Green and then wax with Nu Finish Car Polish.
- Apply a good quality car wax for protection. The latest synthetic polymer-based waxes (such as Meguiar’s Ultimate Wax, Mothers California Gold® Synthetic Wax, and Turtle Wax ICE® Liquid Polish) provide long lasting protection.

Note: Avoid waxes on the lens, grade selection buttons, and nozzle boots as irregular application may cause poor appearance.