

Introduction

Purpose

This document provides instructions to install the Nozzle Flap door on the Encore® Diesel Exhaust Fluid (DEF) units.

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Required Tools

Following tools are required for installing the Nozzle Flap door on the Encore DEF units:

- 10 mm Socket and Wrench
- Flat Head Screwdriver
- Phillips® Head Screwdriver
- 4 mm Allen® Wrench

Parts List

Following table lists the parts required for installing the Nozzle Flap door on the Encore DEF units.

Item	Description	Part Number	Quantity
1	Assembly, DEF Flap Door Retrofit	M10008K004	1
2	Screw Metric M6 X 25	M00415B016	6

Related Documents

Document		GOLD Library
Number	Title	
MDE-3804	Encore/Eclipse® Start-Up/Service Manual	<ul style="list-style-type: none">• Encore and Eclipse• Service Manual
MDE-3985	Encore Installation Manual	<ul style="list-style-type: none">• Encore and Eclipse• Encore and Eclipse Installers
MDE-4949	Encore 500 S Ultra-Hi™ DEF +1 Retrofit Kit (ENC DEF RF) Installation Instructions	<ul style="list-style-type: none">• Encore and Eclipse• Encore and Eclipse Installers

Abbreviations and Acronyms

Term	Description
DEF	Diesel Exhaust Fluid
OSHA	Occupational Safety and Health Administration

Important Safety Information

Notes: 1) *Save this Important Safety Information section in a readily accessible location.*

2) *Although DEF is non-flammable, Diesel is flammable. Therefore, for DEF cabinets that are attached to Diesel dispensers, follow all the notes in this section that pertain to flammable fuels.*

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing this product. Before performing any task on this product, read this safety information and the applicable sections in this manual, where additional hazards and safety precautions for your task will be found. Fire, explosion, electrical shock or pressure release could occur and cause death or serious injury, if these safe service procedures are not followed.



Preliminary Precautions

You are working in a potentially dangerous environment of flammable fuels, vapors, and high voltage or pressures. Only trained or authorized individuals knowledgeable in the related procedures should install, inspect, maintain or service this equipment.

Emergency Total Electrical Shut-Off

The first and most important information you must know is how to stop all fuel flow to the pump/dispenser and island. Locate the switch or circuit breakers that shut off all power to all fueling equipment, dispensing devices, and Submerged Turbine Pumps (STPs).

⚠ WARNING

The EMERGENCY STOP, ALL STOP, and PUMP STOP buttons at the cashier's station WILL NOT shut off electrical power to the pump/dispenser. This means that even if you activate these stops, fuel may continue to flow uncontrolled.

You must use the TOTAL ELECTRICAL SHUT-OFF in the case of an emergency and not the console's ALL STOP and PUMP STOP or similar keys.

Total Electrical Shut-Off Before Access

Any procedure that requires access to electrical components or the electronics of the dispenser requires total electrical shut off of that unit. Understand the function and location of this switch or circuit breaker before inspecting, installing, maintaining, or servicing Gilbarco equipment.

Evacuating, Barricading and Shutting Off

Any procedure that requires access to the pump/dispenser or STPs requires the following actions:



- An evacuation of all unauthorized persons and vehicles from the work area
- Use of safety tape, cones or barricades at the affected unit(s)
- A total electrical shut-off of the affected unit(s)

Read the Manual

Read, understand and follow this manual and any other labels or related materials supplied with this equipment. If you do not understand a procedure, call a Gilbarco Authorized Service Contractor or call the Gilbarco Support Center at 1-800-800-7498. It is imperative to your safety and the safety of others to understand the procedures before beginning work.

Follow the Regulations

Applicable information is available in National Fire Protection Association (NFPA) 30A; *Code for Motor Fuel Dispensing Facilities and Repair Garages*, NFPA 70; *National Electrical Code (NEC)*, Occupational Safety and Health Administration (OSHA) regulations and federal, state, and local codes. All these regulations must be followed. Failure to install, inspect, maintain or service this equipment in accordance with these codes, regulations and standards may lead to legal citations with penalties or affect the safe use and operation of the equipment.


Replacement Parts

Use only genuine Gilbarco replacement parts and retrofit kits on your pump/dispenser. Using parts other than genuine Gilbarco replacement parts could create a safety hazard and violate local regulations.

Safety Symbols and Warning Words




This section provides important information about warning symbols and boxes.

Alert Symbol

 This safety alert symbol is used in this manual and on warning labels to alert you to a precaution which must be followed to prevent potential personal safety hazards. Obey safety directives that follow this symbol to avoid possible injury or death.

Signal Words

These signal words used in this manual and on warning labels tell you the seriousness of particular safety hazards. The precautions below must be followed to prevent death, injury or damage to the equipment:

-  **DANGER:** Alerts you to a hazard or unsafe practice which will result in death or serious injury.
-  **WARNING:** Alerts you to a hazard or unsafe practice that could result in death or serious injury.
-  **CAUTION with Alert symbol:** Designates a hazard or unsafe practice which may result in minor injury.
- CAUTION without Alert symbol:** Designates a hazard or unsafe practice which may result in property or equipment damage.

Working With Fuels and Electrical Energy

Prevent Explosions and Fires

Fuels and their vapors will explode or burn, if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially dangerous vapors in the vicinity of the dispenser or island.

DEF is non-flammable. Therefore, explosion and fire safety warnings do not apply to DEF fluid lines.

Important Safety Information

No Open Fire



Open flames from matches, lighters, welding torches or other sources can ignite fuels and their vapors.

No Sparks - No Smoking



Sparks from starting vehicles, starting or using power tools, burning cigarettes, cigars or pipes can also ignite fuels and their vapors. Static electricity, including an electrostatic charge on your body, can cause a spark sufficient to ignite fuel vapors. Every time you get out of a vehicle, touch the metal of your vehicle, to discharge any electrostatic charge before you approach the dispenser island.

Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Familiarize yourself with Cardiopulmonary Resuscitation (CPR) methods, if you work with or around high voltages. This information is available from the American Red Cross. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working on the equipment. Use the OSHA Lockout/Tagout procedures. If you are not familiar with this requirement, refer to this information in the service manual and OSHA documentation.

Working With Electricity Safely

Ensure that you use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Ensure that grounding connections are properly made. Take care that sealing devices and compounds are in place. Ensure that you do not pinch wires when replacing covers. Follow OSHA Lockout/Tagout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while the equipment is down.

Hazardous Materials

Some materials present inside electronic enclosures may present a health hazard if not handled correctly. Ensure that you clean hands after handling equipment. Do not place any equipment in the mouth.

WARNING

The pump/dispenser contains a chemical known to the State of California to cause cancer.

WARNING

The pump/dispenser contains a chemical known to the State of California to cause birth defects or other reproductive harm.

In an Emergency

Inform Emergency Personnel

Compile the following information and inform emergency personnel:

- Location of accident (for example, address, front/back of building, and so on)
- Nature of accident (for example, possible heart attack, run over by car, burns, and so on)
- Age of victim (for example, baby, teenager, middle-age, elderly)
- Whether or not victim has received first aid (for example, stopped bleeding by pressure, and so on)
- Whether or not a victim has vomited (for example, if swallowed or inhaled something, and so on)

WARNING



Gasoline/DEF ingested may cause unconsciousness and burns to internal organs. Do not induce vomiting. Keep airway open. Oxygen may be needed at scene. Seek medical advice immediately.

WARNING

DEF generates ammonia gas at higher temperatures. When opening enclosed panels, allow the unit to air out to avoid breathing vapors. If respiratory difficulties develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

WARNING



Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs. Keep airway open. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled in eyes may cause burns to eye tissue. Irrigate eyes with water for approximately 15 minutes. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled on skin may cause burns. Wash area thoroughly with clear water. Seek medical advice immediately.

WARNING

DEF is mildly corrosive. Avoid contact with eyes, skin, and clothing. Ensure that eyewash stations and safety showers are close to the work location. Seek medical advice/recommended treatment if DEF spills into eyes.

IMPORTANT: Oxygen may be needed at scene if gasoline has been ingested or inhaled. Seek medical advice immediately.

Lockout/Tagout

Lockout/Tagout covers servicing and maintenance of machines and equipment in which the unexpected energization or start-up of the machine(s) or equipment or release of stored energy could cause injury to employees or personnel. Lockout/Tagout applies to all mechanical, hydraulic, chemical, or other energy, but does not cover electrical hazards. Subpart S of 29 CFR Part 1910 - Electrical Hazards, 29 CFR Part 1910.333 contains specific Lockout/Tagout provision for electrical hazards.

Installing the DEF Nozzle Flap Door

Before you begin, read and understand all safety information found in MDE-3804 Encore/Eclipse Start-Up/Service Manual - Safety Instructions.

Inform the Manager that the power must be removed and remove all power supplied to the unit at the breaker located in the building. Block off the unit from customers.

Power must be turned off to the unit to ensure that there are no security errors after the installation.

Removing the Existing DEF Nozzle Door

To remove the existing DEF nozzle door, proceed as follows:

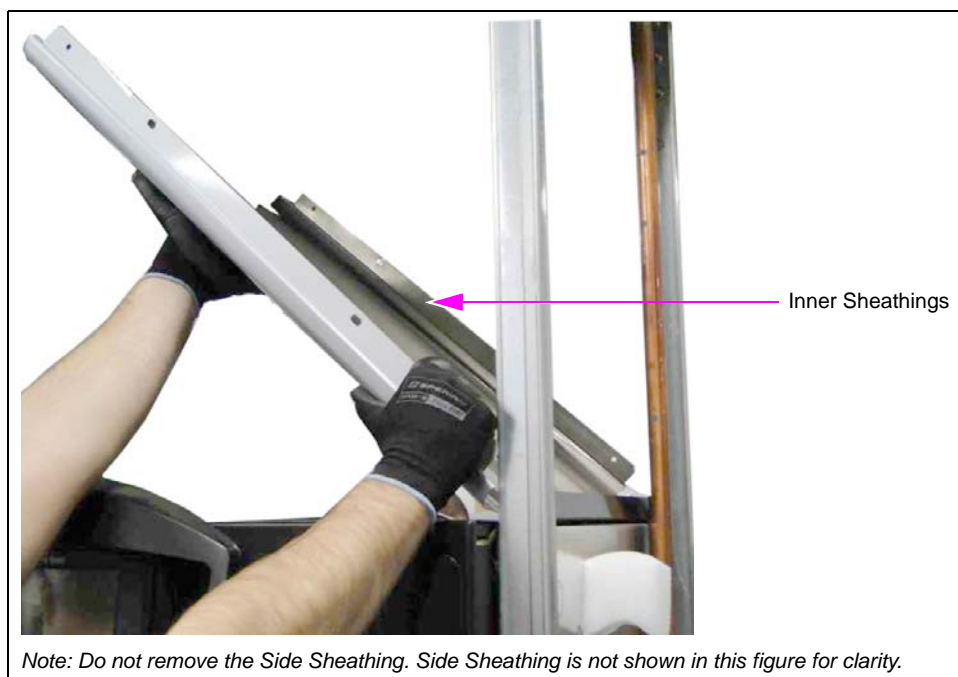
- 1 Disconnect power to the dispenser. Follow OSHA Lock-out/Tag-out procedures.

WARNING

Failure to turn off the unit during the installation of the kit may cause injury or bodily harm from electrical shock. Ensure that all power to the unit is switched off before opening the door to the unit and during kit installation.

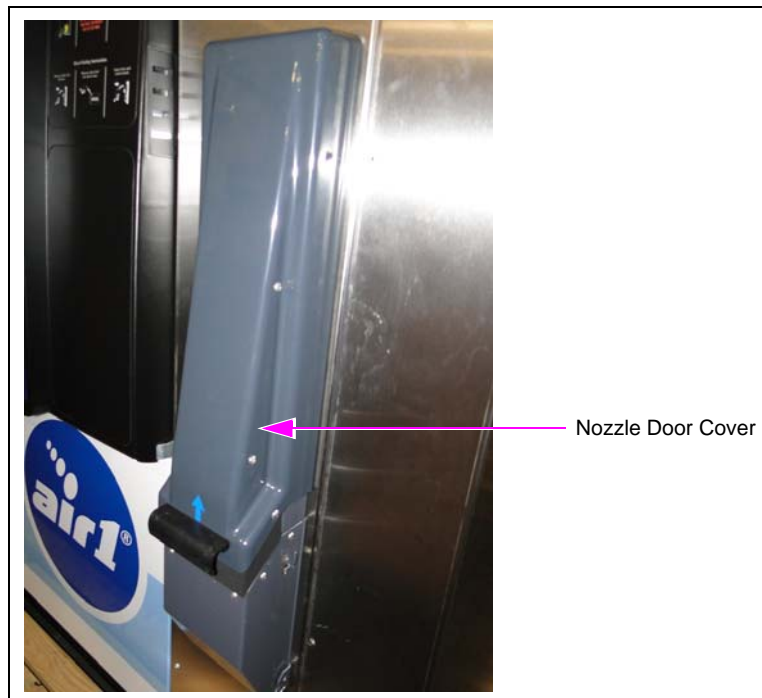
- 2 Shut off DEF inlet valve, if available.
- 3 Remove the inner sheathings as shown in [Figure 1](#). Lift the door counter weight out of the guide tube and set on top of the dispenser.

Figure 1: Removing the Inner Sheathings



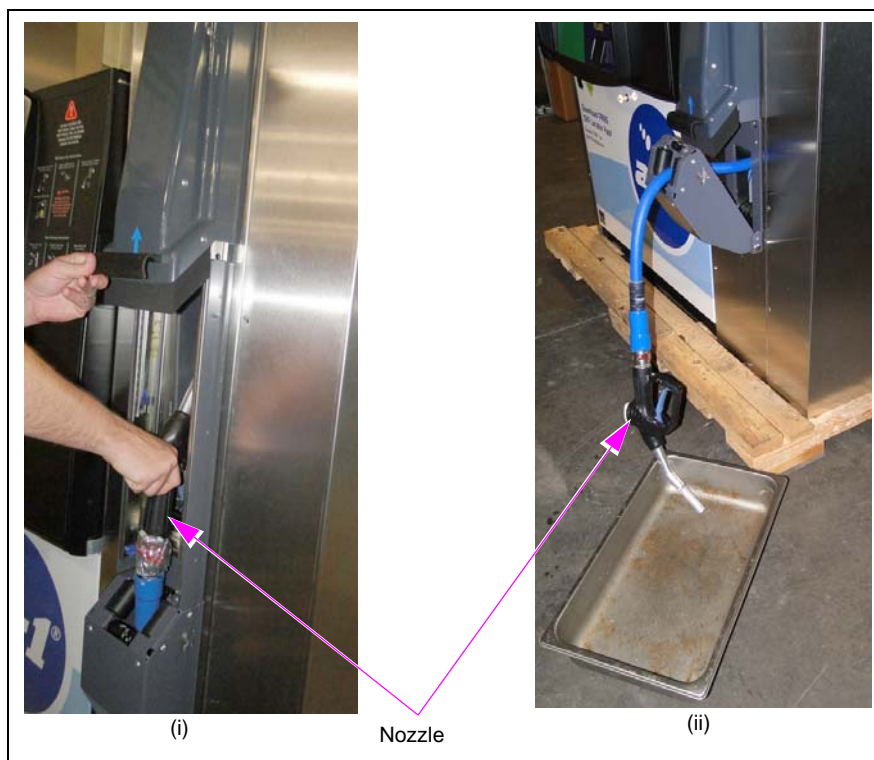
- 4 Open the nozzle door cover (see [Figure 2](#)).

Figure 2: Opening the Nozzle Door Cover



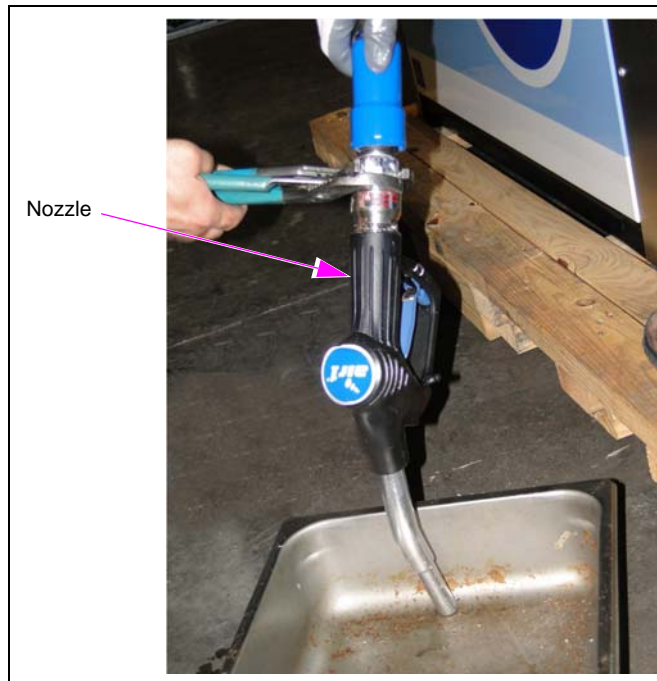
- 5 Pull the nozzle from the nozzle boot (see [Figure 3](#)).

Figure 3: Removing the Nozzle



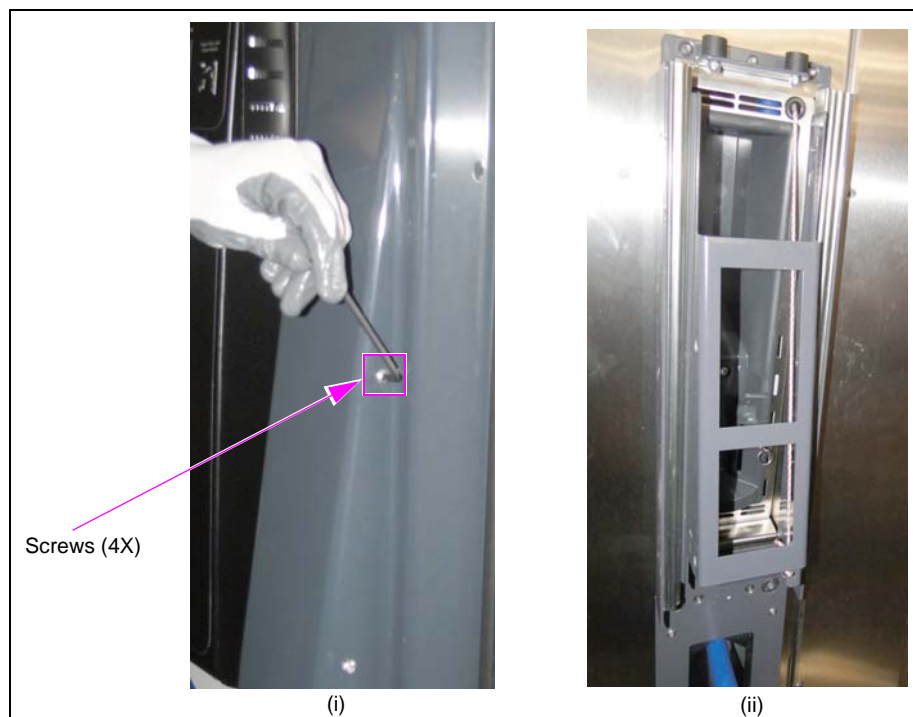
- 6 Disconnect the nozzle (see [Figure 4](#)).

Figure 4: Disconnecting the Nozzle



- 7 Drain the fuel from the nozzle in an approved container.
- 8 Remove the four screws securing the door cover, and discard the cover and screws (see [Figure 5](#)).
- Note: You may require force to remove the screws.*

Figure 5: Removing the Screws



- 9 Remove the lower nozzle cover after removing the push nut as shown in [Figure 6](#).

Figure 6: Removing the Nozzle Cover



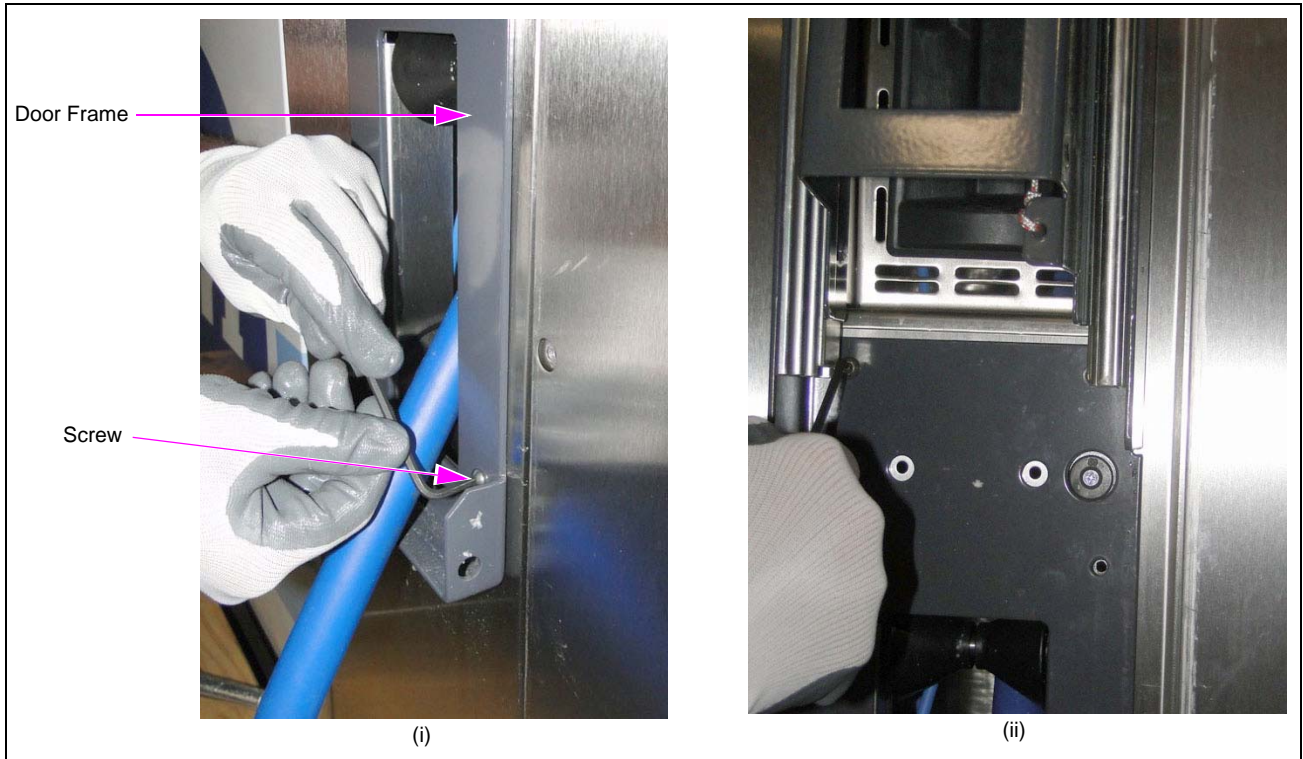
- 10 Untie the door weight pulley rope that is secured to the door sub-frame (see [Figure 7](#)).

Figure 7: Untieing the Door Weight Pulley Rope



- 11 Remove the weight and retain in a safe area.
- 12 Remove the screws that secure the door frame (see [Figure 8](#)).

Figure 8: Removing the Screws



- 13 Remove the door frame (see [Figure 9](#)). Ensure that you grasp the main frame and not the sliding assembly to prevent possibly dropping the frame.

Figure 9: Removing the Door Frame

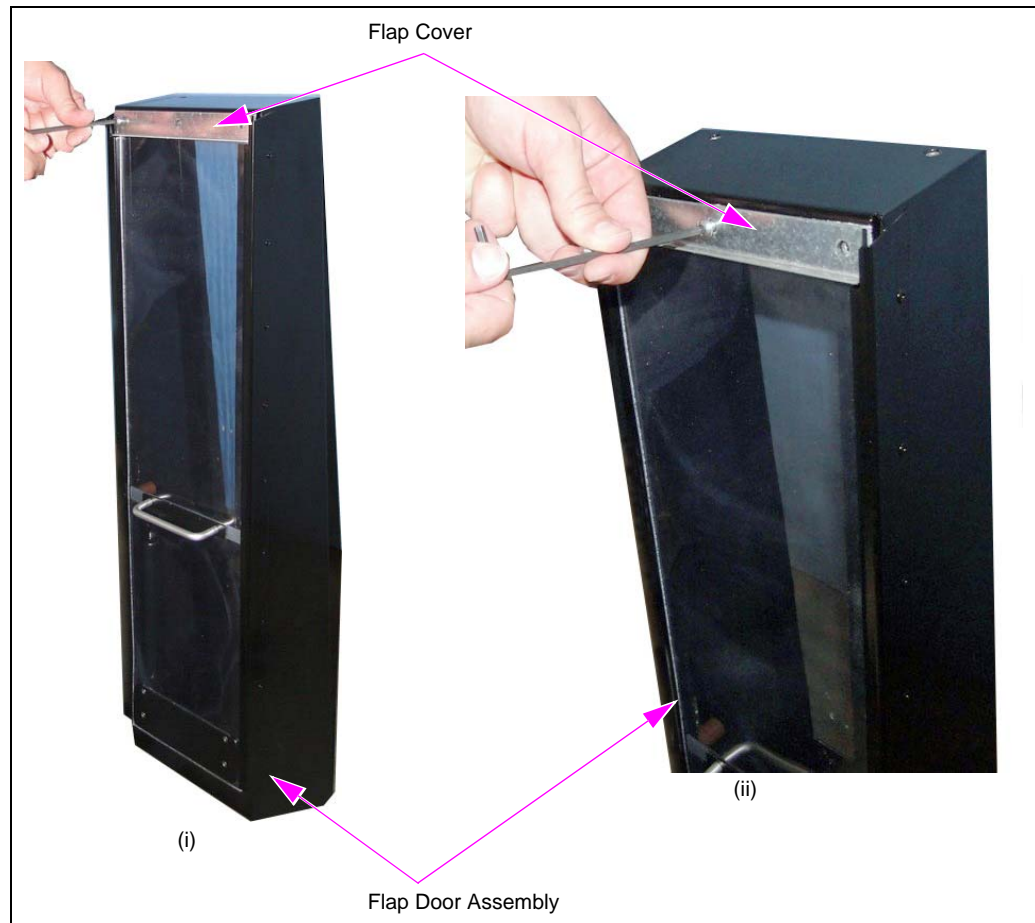


Installing the New Flap Door (M10008K004)

To install the new flap door (M10008K004), proceed as follows:

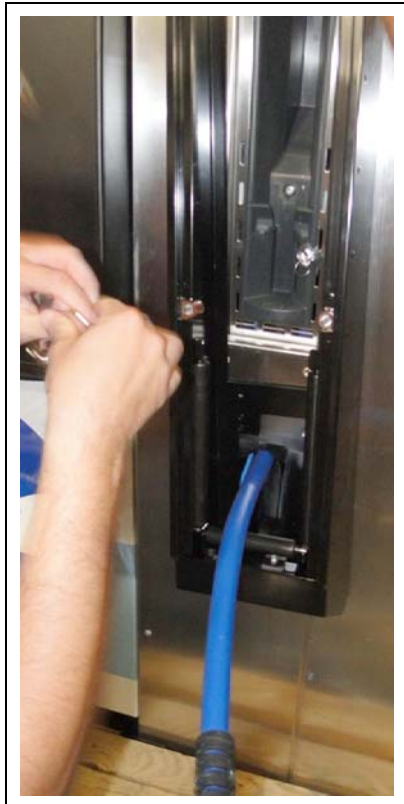
- 1 Remove the flap cover from the new flap door assembly as shown in [Figure 10](#).

Figure 10: Removing the Flap Cover



- 2 Mount the new flap door frame (see [Figure 11](#)).

Figure 11: Mounting the New Flap Door Frame



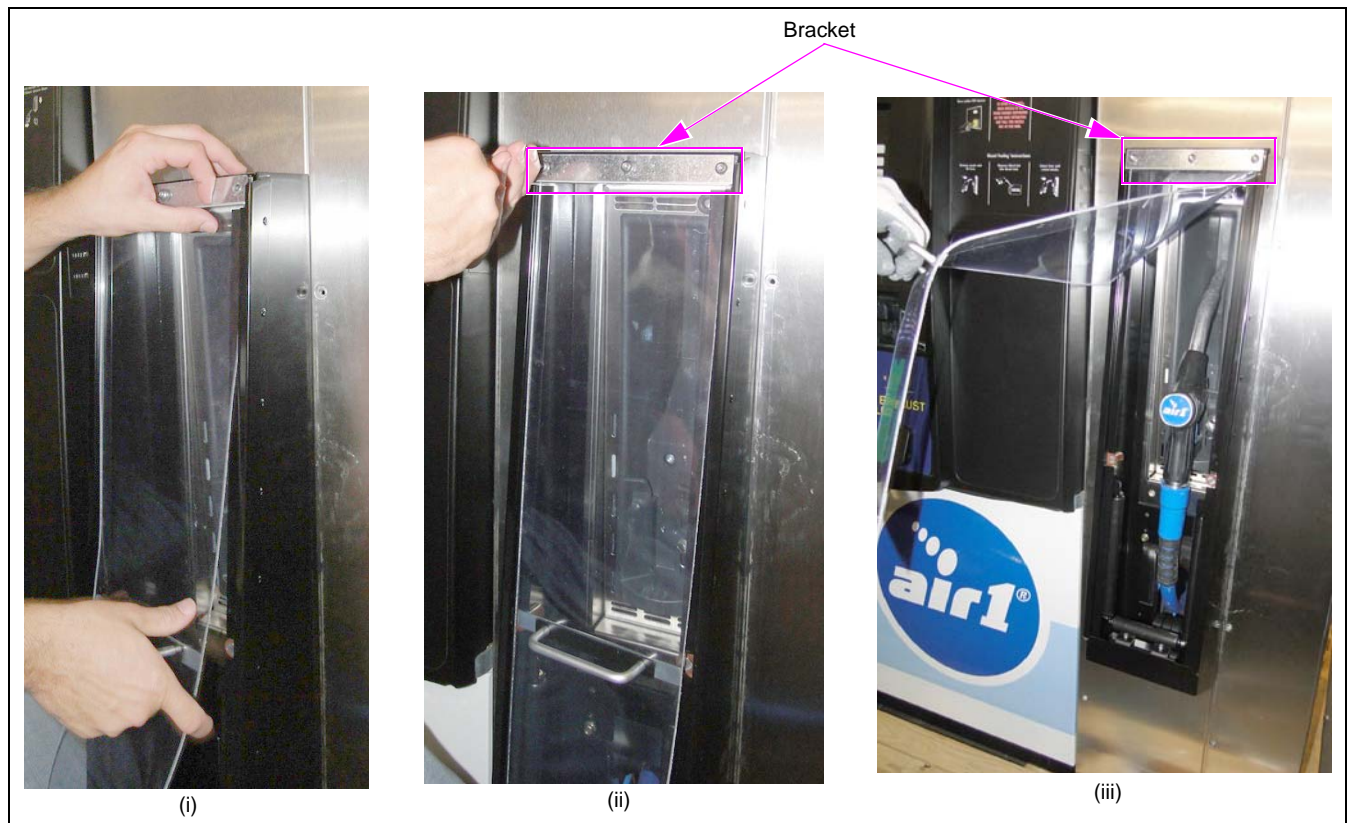
- 3 Secure the six screws using the 10 mm socket wrench (see [Figure 12](#)).
Note: Ensure that you do not push the screws.

Figure 12: Securing the Screws



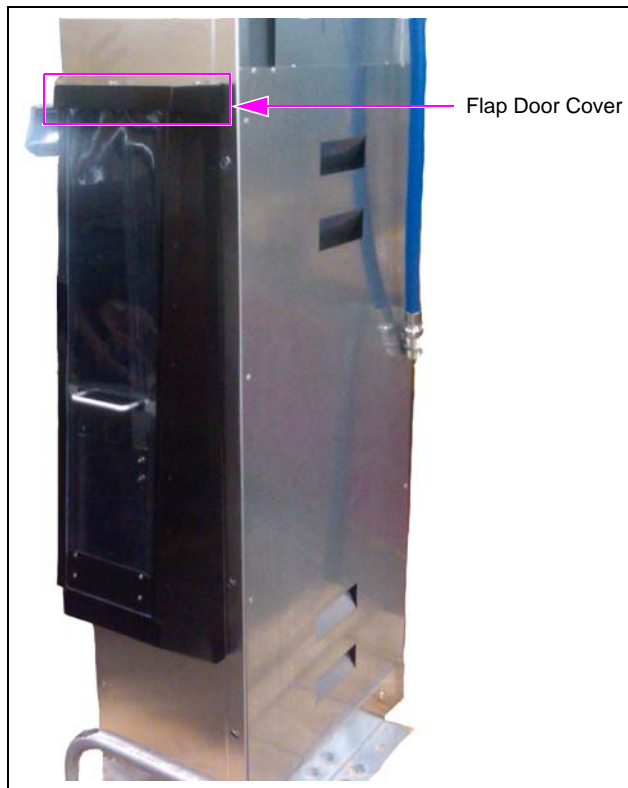
- 4 Re-connect the nozzle.
Note: Ensure that the nozzle is secured tightly and there is no leak.
- 5 Place the nozzle in the nozzle boot.
- 6 Install the flap door cover on the new door frame (see [Figure 13](#)).
Note: Ensure that the protruding side of the bracket is facing you.

Figure 13: Installing the Flap Door Cover



- 7 Mount the flap door cover (see [Figure 14](#)).

Figure 14: Mounting the Flap Door Cover



- 8 Turn on the power and test the unit for proper functioning.

The installation of the DEF Nozzle Flap door on the Encore units is now complete.

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