

Introduction

Purpose

This manual provides information for cleaning of Encore® units.

Intended Users

This manual is written for the owners and operators of Encore units.

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Related Documents

Document		
Number	Title	GOLD ^{sм} Library
MDE-5055	Encore CNG Start up and Service Manual	Encore

Abbreviations and Acronyms

Term	Description
renn	Description
CNG	Compressed Natural Gas
DEF	Diesel Exhaust Fluid
NEC®	National Electrical Code
NFPA®	National Fire Protection Association
OSHA	Occupational Safety and Hazard Administration
STP	Submersible Turbine Pump
TAC	Technical Assistance Center

Important Safety Information

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

2) Although Diesel Exhaust Fluid (DEF) is nonflammable, 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 the Gilbarco Technical Assistance Center (TAC) at 1-800-743-7501. 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.

Federal Communications Commission (FCC) Warning

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

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 lines.

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.



Gilbarco Veeder-Root encourages the recycling of our products. Some products contain electronics, batteries, or other materials that may require special management practices depending on your location. Please refer to your local, state, or country regulations for these requirements.

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.

MARNING

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.

Hazards and Actions

WARNING



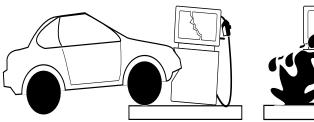
Spilled fuels, accidents involving pumps/dispensers, or uncontrolled fuel flow create a serious hazard.



Fire or explosion may result, causing serious injury or death.

Follow established emergency procedures.

The following actions are recommended regarding these hazards:







Collision of a Vehicle with Unit

Fire at Island or Site

• Do not go near a fuel spill or allow anyone else in the area.

- Use station EMERGENCY CUTOFF immediately. Turn off all system circuit breakers to the island(s).
- · Do not use console E-STOP, ALL STOP, and PUMP STOP to shut off power. These keys do not remove AC power and do not always stop product flow.
- · Take precautions to avoid igniting fuel. Do not allow starting of vehicles in the area. Do not allow open flames, smoking or power tools in the area.
- · Do not expose yourself to hazardous conditions such as fire, spilled fuel or exposed wiring.
- Call emergency numbers.

Encore CNG Automatic Safety Systems

Unique automatic disconnect functions are included in the Encore CNG dispenser which contains a hydrocarbon sensor and impact detector/tilt switch. These devices switch power off inside the dispenser automatically in a hazardous fault condition and send a signal that can be utilized to switch off the site automatically. However, the above recommended actions (regarding collision of vehicle on island or site or gas leak) are still applicable and these automatic devices should not be relied upon to ensure the site is made safe and the manual intervention described above must be enacted.

WARNING

CNG dispenser in collision with vehicles damaged with fire or explosions must be removed from service and replaced.

WARNING

Breakaways must be installed to provide safety protection in the event of a drive-off while the nozzle is connected. CNG dispenser MUST NOT be used in service without approved breakaways being installed.

Adapters are not to be used at the vehicle fuel connection.

Maintaining Units

This section provides maintenance instructions and recommendations for the materials to use for cleaning the exterior of Encore units.

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)

IMPORTANT INFORMATION

- Do not use Ammonia-based cleaners such as Windex.
- Do not use Citrus-based cleaners.
- Do not use isopropyl alcohol.

Painted Plastics and Metals

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

- Simple Green® All Purpose Cleaner (preferred 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®
- Meguiar's®
- 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.
- 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.

Special Considerations and Routine Cleaning

- Do not use fuels or acetone.
- Do not use isopropyl alcohol for cleaning the bezel.
- 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 de-icers 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 of the routine cleaning procedure.

Note: In step 3, 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

- 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.

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