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Installation Manual

Upgrading the Gilbarco Encore 500S/700S to EMV using Freedom Electronics Easy Pump.

Rev 2 • 11/2021

Kit #	SE57000 Kit
Description	Easy Pump install
Pump Model	Gilbarco Encore 500S/700S

Freedom Electronics
Technical Support 800-761-9369 Option 2

Easy Pump with Gilbarco Encore 500S/700S

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Parts list

Manufacturer Part #	Description
SE57001	E57 FIM-20 Insert ECIM
SE57002	E57 Insert Bracket ECIM
SE57003	E57 Insert Gasket ECIM
SE57004	E57 Card Reader Insert - ECIM with membrane
SE57005	E57 Card Reader Insert - ECIM with EPP
SE57007	E57 EPP Insert
SE57008	E57 CR Insert Gasket - ECIM with membrane
SE57009	E57 CR Insert Gasket - ECIM with EPP
SE57011	E57 EPP Insert Gasket
SE57012	E57 Insert Overlay ECIM
SE57013	E57 CR Insert Overlay - ECIM with membrane
SE57014	E57 CR Insert Overlay - ECIM with EPP
SE57016	E57 EPP Insert Overlay
SE57017	E57 FIM-20 Insert Non-ECIM
SE57018	E57 Insert Bracket Non-ECIM
SE57019	E57 Insert Gasket Non-ECIM
SE57020	E57 Card Reader Insert - Non-ECIM
SE57021	E57 Card Reader Insert Gasket - Non-ECIM
SE57022	E57 Card Reader Overlay - Non-ECIM
SE57023	E57 FIM-20 Insert 2 Overlay Non-ECIM
ENE0602G001	E57 Old Card Instruction Blanking Overlay
ENE0611G001	E57 Old ADA Pinpad Blanking Overlay
SC00004	24V/5V Dual Power Supply
SC00005	Power Supply Bracket
SC00007	FIM-20 Power Cable
SC00022	FIM-20/Printer Data Cable
SC00013	Printer Power Cable
SC00019	Power Supply AC Input Cable
M3x0.5mmx12mm	M3 Phillips No. 1 with 0.5mm Pitch and 12mm Length "PAX Screw"
6-20x3/8xHex	3/8" Hex Head #6-20 (McMaster P/N: 93880A146)
6-32x3/8	3/8" Phillips No. 2 #6-32 Thread (McMaster P/N: 90272A146)
SC00025	Bag of zip ties (25 pack)
0684011 New or Reb	C56 - RS-232 Long Chute Printer (sold Separately)
FIM-20	Sound Payments IM-20 (sold separately)

Tools Required

- Flat Head screwdriver
- Phillips® Screwdriver
- 5/32" Nut Driver
- 5/16" Nut Driver
- 1/4" Nut Driver
- Isopropyl Alcohol
- Putty knife
- Pliers
- Cutters/dykes

Easy Pump with Gilbarco Encore 500S/700S

- We recommend completing the Forecourt install first. Then install a kit into the first dispenser and verify operations before moving onto any others.

- The site will be able to run on dual systems, the new Easy Pump and the existing DCR's. This allows one dispenser at a time to be upgraded without affecting the customers other dispensers.

- Gilbarco dispensers will require printer replacement for proper printer operation, if desired.

- Dispensers with 10.4" displays CANNOT be upgraded at this time.

- eReceipts are available in place of a printer or in combination with a printer.

- Non-CRIND Encore 500S/700S dispensers CANNOT be upgraded.

Important Safety Information

Know Your Environment
Working at a fueling station can present many dangers. It is a potentially dangerous environment of electricity, flammable fuels, vapors, and interaction with the general public. Only trained and knowledgeable individuals should perform service on the equipment. It is important to your safety and the safety of others to follow proper procedures.

Emergency Shut Off (ESO)
Know how to turn OFF power to all the fueling equipment by locating the ESO switch and circuit breakers. You must know how to shut off all fuel flow and electricity in an emergency.

Follow the Regulations
Information is available at Occupational Safety and Hazard Association (OSHA), National Fire Protection Association (NFPA) 30A; Code for Motor Fuel Dispensing Facilities and Repair Garages, NFPA 70; National Electrical Code (NEC), as well as other national, state and local entities. All applicable codes must be followed to maintain safe installation, service, use and operation of the equipment.

LOTO (Lockout/Tagout)
Always make sure ALL power to the dispenser is turned OFF before servicing the dispenser. Follow OSHA Standard 29 CFR 1910.147 The Control of Hazardous Energy (Lockout/Tagout).

No Sparks - No Smoking
Sparks from power tools, burning cigarettes, static electricity, vehicles and other sources can ignite fuels and their vapors. Ensure that you use safe and established practices while working with electrical devices and equipment.   WARNING – EXPLOSION HAZARD. DO NOT DISCONNECT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS.

Wear Proper PPE
Check with your company, customers and the job/site specifics to determine what types of personal protective equipment are appropriate. Always wear the proper PPE to prevent injuries and save lives.

Barricade Your Work Area
One of the dangers of working at an active retail fueling station is the potential impact of customers and the general public. It is important to properly establish your work area by barricading, to reduce the potential of vehicles or customers from entering the work area. The use of barricades is both for the protection of workers and protection of the general public/customers.

Read the Manual(s)
Knowledge of all related manufacturer procedures, manuals and documents is important. Follow the Recommended Practices of The American Petroleum Institute (API). Understand the specific procedures before starting work. If you do not understand a procedure, call Freedom Electronics at 770-792-8888.

Notify Site
On arrival identify yourself to the site manager and inform them of the work you will be performing.

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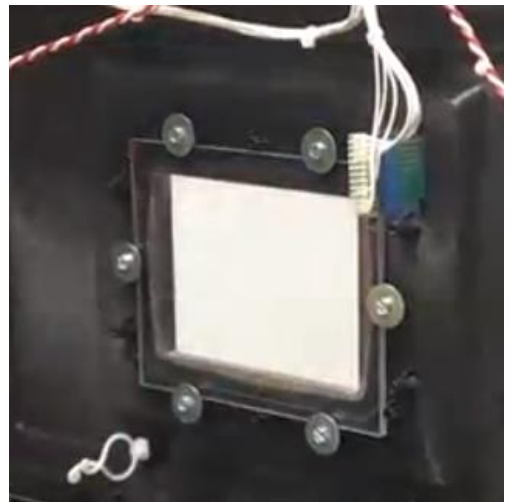1. **Before you begin work, read and understand the Important Safety Information**.

2. Remove power from the Encore dispenser.

3. Remove the card reader, EPP keypad (if applicable) and monochrome display.

4. Secure all cables cleanly inside dispenser using zip ties and existing cable clips.

5. Remove monochrome lens. Save (4) screws for step 9.

6. Disconnect monochrome keypad and install the Monochrome Overlay over the existing overlay. (SE57012) for ECIM dispensers or (SE57023) for NON-ECIM dispensers.

7. Install the E57 Insert Gasket (SE57003) onto the E57 FIM-20 Insert (SE57001) for ECIM dispensers.

   Install the E57 Insert Gasket (SE57019) onto the E57 FIM-20 Insert(SE57017) for NON-ECIM dispensers.

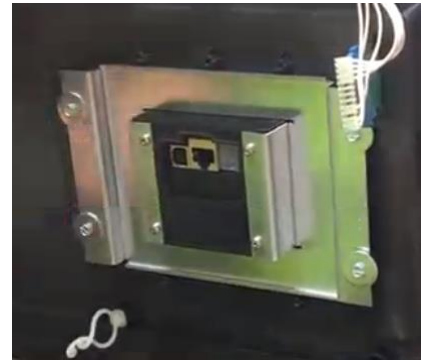8. Install the E57 FIM-20 Insert into the monochrome display opening.

9. Place the FIM-20 into the Insert and secure with the Insert Bracket.

   (SE57002) for ECIM dispensers or (SE57018) for NON-ECIM dispensers.

   Use (4) screws (M3x0.5mmx12mm) to the FIM-20 and (4) screws (from step 5) to the main door.
   - Verify the gasket is present on the FIM-20 before installing.
   - The FIM-20's will be labeled per fueling point. Make sure to install the correct FIM-20 into the correct fueling point.

10. Install the E57 CR Insert Gasket onto the E57 Card Reader Insert.

    There are different styles for the Card Reader Insert, See the next page to determine which one you will be using.

Card Reader Insert, Gasket and Overlay Types

ECIM with membrane keypad
        Gasket - SE57008
        Insert - SE57004
        Overlay - SE57013

ECIM with EPP keypad
        Gasket - SE57009
        Insert - SE57005
        Overlay - SE57014

NON-ECIM with membrane keypad
        Gasket - SE57021
        Insert - SE57020
        Overlay - SE57022

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11. Install the E57 EPP Insert Gasket (SE57011) onto the E57 EPP Insert (SE57007), if applicable.

12. Install the E57 Card Reader Insert into the card reader opening using (4) screws (6-20x3/8xHex).

13. Install the E57 EPP Insert into the EPP opening using with (4) screws (6-20x3/8xHex).

14. Install the E57 EPP Insert Overlay (SE57016) over the EPP Insert.

15. Install the E57 Card Reader Overlay over the Card Reader Insert. See page 6 for correct overlay.

16. Remove the existing printer and install the C56 Hengstler Printer (0684011 New).

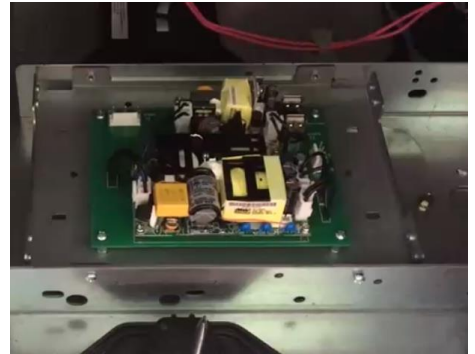17. Remove the existing power and data cables from the printer.

    Repeat steps 3-17 on the other side of the dispenser.
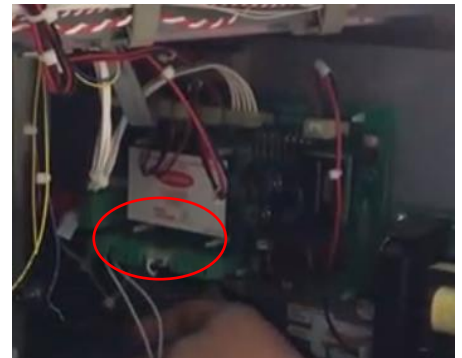
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18. Mount the Power Supply Board (SC00004) onto Power Supply Bracket (SC00005) using (4) screws (6-32x3/8).

19. Install the power supply assembly into the center rails of the dispenser using (4) screws (6-32x3/8).
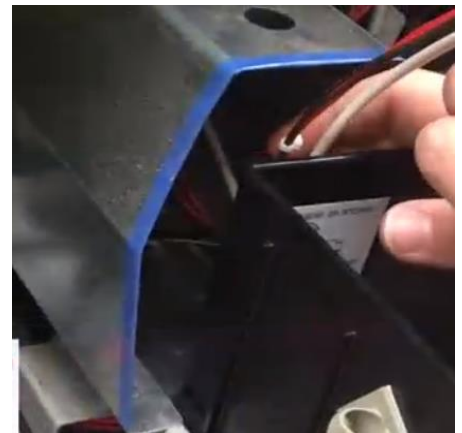
20. Connect the Power Supply Cable (SC00019) to P1 Aux on the Encore power supply and to the Power Supply Board at J1.

21. Connect the Printer Data Cable (SC00022) to the RJ45 port on the FIM-20 and to the USB port on the printer.
Use the existing cable clips to secure the cable through the printer to avoid pinching and stretching.

    Repeat on the other side of the dispenser.

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22. Connect the FIM-20 Power Supply Cable (SC00007) to the FIM-20 and to either J2 USB ports on the power supply board.
Repeat on the other side of the dispenser.

23. Connect the Printer Power Cable (SC00013) to the printer and to the J3 plug on the power supply board. Use the existing cable clips to secure the cable through printer to avoid pinching and stretching.

    Repeat on the other side of the dispenser.

24. Install Card Reader Directional Blanking Overlay (ENE0602G001) over the existing directional overlay.

25. If applicable, Install ADA Keypad Blanking Overlay (ENE0611G001) and disconnect keypad.

26. Route cables through the dispenser cleanly and secure cables using zip ties and dispenser cable clips to avoid pinching and stretching.

27. Close all dispenser doors securely

28. Power dispenser back on