Path to EMV on the Forecourt

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Detailed EMV Timeline

August 2011: Visa announces EMV migration timeline to the US

January 2012: MasterCard announces US EMV migration
March 2012: Discover announces US EMV migration
June 2012: American Express announces US EMV migration

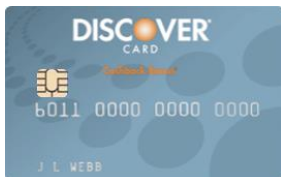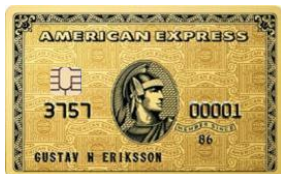| 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |

Oct 2012: PCI audit relief

Apr 2013: Payment processor mandate to support EMV transactions

Oct 2015: Liability shift for transactions on non-EMV capable POS terminals (in-store)

Oct 2017: Liability shift for transactions on non-EMV capable forecourt terminals
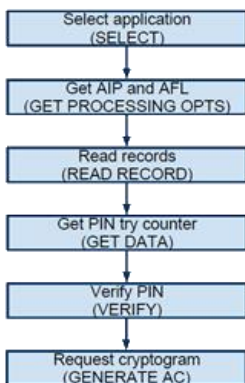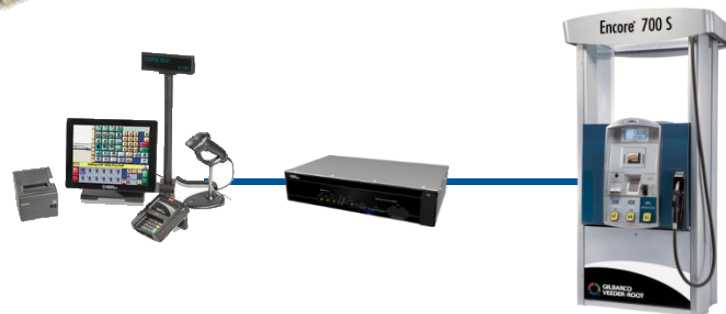
Forecourt EMV Building Blocks

CRIND Upgrade

Chip Card Reader

CRIND EMV Software Upgrade

Select application
(SELECT)

Get AIP and AFL
(GET PROCESSING OPTS)

Read records
(READ RECORD)

Get PIN try counter
(GET DATA)

Verify PIN
(VERIFY)

Request cryptogram
(GENERATE AC)

Enhanced Site Connectivity

New Dispenser – Encore 700 S

Standard Features

> EMV-certified FlexPay™ II CRIND

> Encrypting PIN Pad (EPP)

> Secure Encrypting Card Reader (SCR)

> 5.7" color screen

Optional Upgrades

> Hybrid (Chip & Mag Stripe) Card Reader (HCR)

> 10.4" color screen

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CRIND Upgrade – FlexPay II Retrofit Kit

> Available to upgrade the following dispensers for EMV:

  > The Advantage$^®$

  > Encore$^®$ 300

  > Encore 500

  > Encore S

> Includes the same CRIND technology and options available on the Encore 700 S

Confidential

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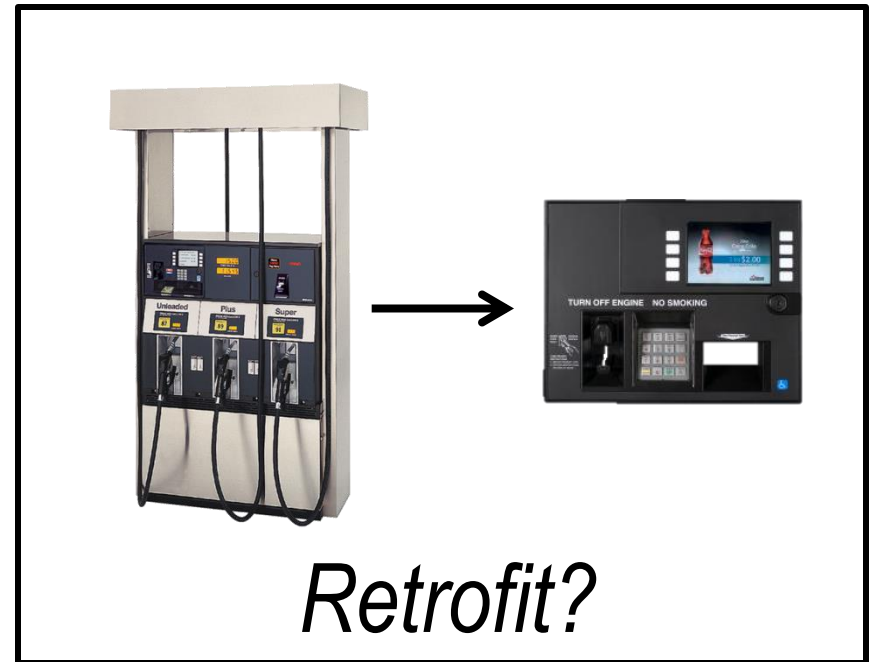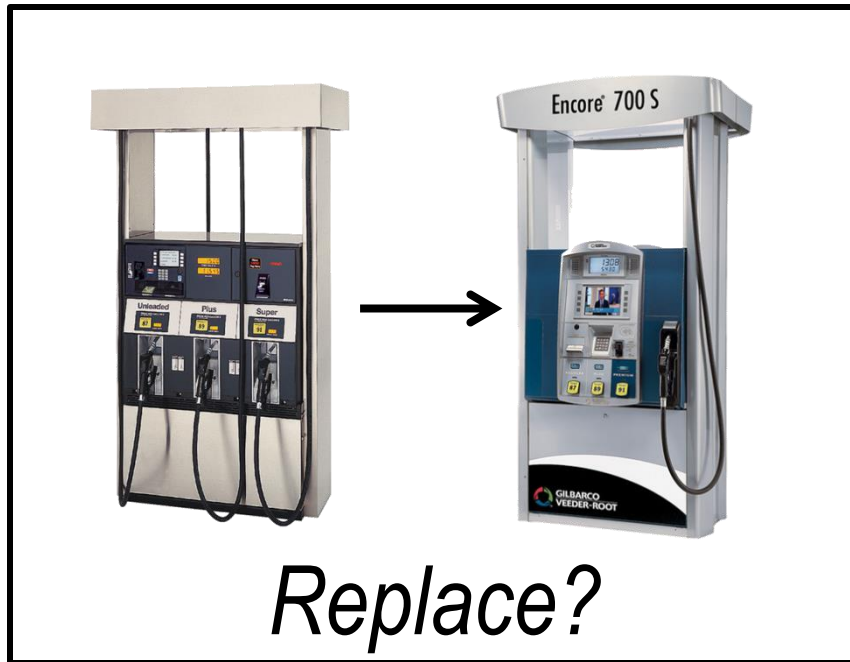# CRIND Upgrade – Secure PumpPAY™

> Available to upgrade the following dispensers for EMV:
>> Wayne Vista
>> Wayne Ovation
>> Tokheim Premier B
>> Tokheim Premier C

> All-in-one version retrofits Vista and Tokheim

> Distributed version retrofits Ovation

> Discounts available with Applause TV

Replace vs. Retrofit?

> As dispensers age, the average cost of maintaining older pump equipment / hydraulics can increase over time

> Dispensers older than 8-10 years can see higher maintenance costs

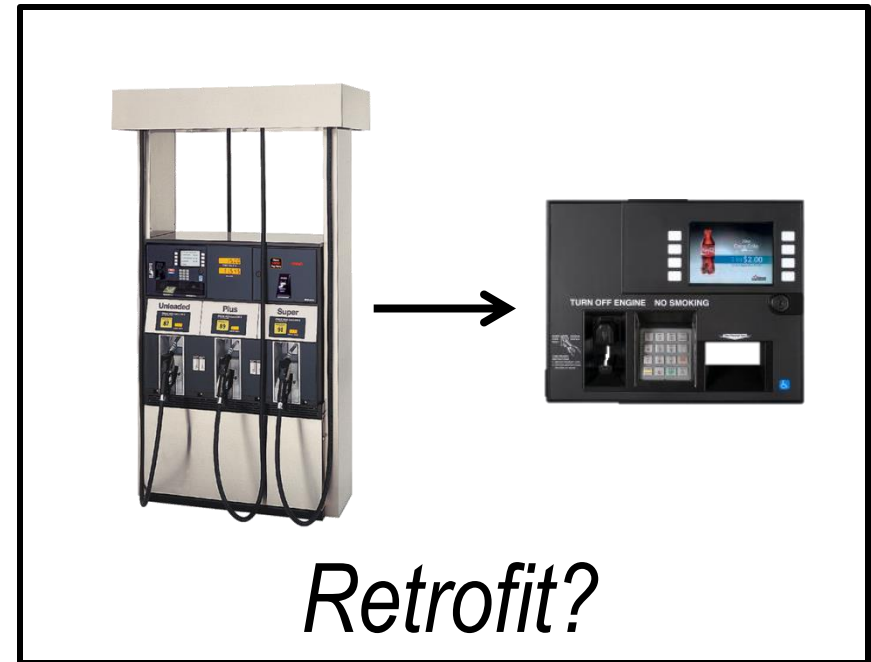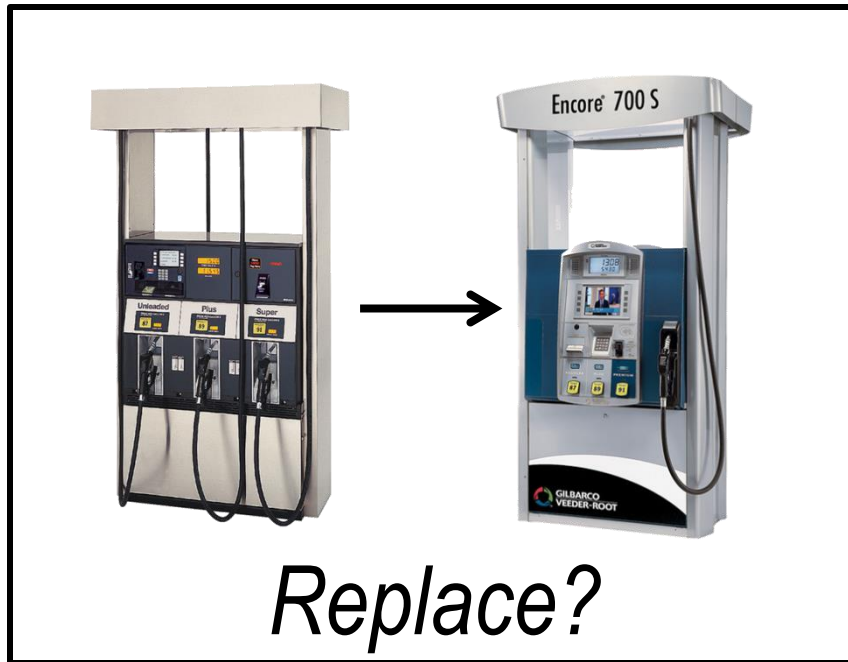> Purchasing new dispensers can also improve site image and drive increased traffic

Replace?

Retrofit?

Replace vs. Retrofit? – Gilbarco Recommends

Replace

> Tokheim Premier B & C
>
> Wayne Vista
>
> Gilbarco Advantage
>
> Gilbarco Encore 500
>
> Gilbarco Encore 300 (if prior to 2005)

Retrofit

- Wayne Ovation
- Gilbarco Encore S ECIM
- Gilbarco Encore S
- Gilbarco Encore 300 (if after 2005)

Replace?

Retrofit?

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EMV Hybrid Card Reader (HCR)

> Accepts both Magnetic Stripe and EMV Chip Cards

> Includes logical and physical security to combat tampering and skimming

> SRED-certified (Secure Reading and Exchange of Data) for End-to-End Encryption

> Available as a factory-installed option on Encore 700 S or FlexPay II Retrofit Kits, as well as a field retrofit kit for units already installed

Enhanced Site Connectivity

EMV Transactions

Forecourt Merchandising

Applause TV™

Remote Management

> Three new technologies driving the need for high-speed connectivity to the forecourt

Enhanced Site Connectivity

Options for enabling high-speed connectivity

1. Install Ethernet *CAT5e/CAT6* cabling

    > Length limitation of 300 ft. (larger sites)

    > Must be run in low voltage conduit separate from power wiring

2. Use *FlexPay Connect* over existing wiring

    > Eliminate the cost of breaking concrete

    > Works with legacy twisted pair wiring

    > Provided at no charge on orders with Applause TV

Enhanced Site Connectivity

FlexPay Connect Components

1. **Backroom Communications Module (BRCM)**
   > Long-range Ethernet switch
   > Converts Ethernet signal into twisted pair
   > 1 BRCM supports up to 8 dispensers

2. **Dispenser Communications Module (DCM)**
   > Converts twisted pair signal back to Ethernet
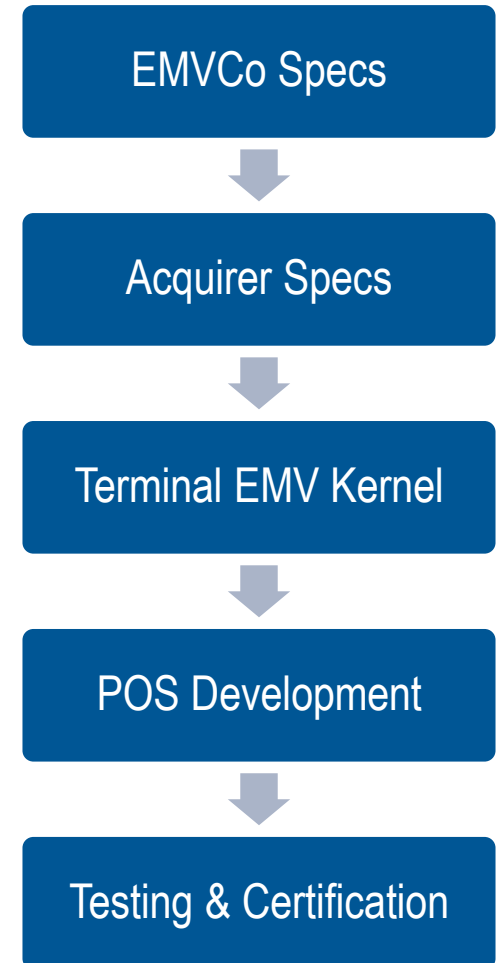   > 1 DCM per dispenser

3. **Two-Wire Buffer Module (TBM2)**
   > Enables sharing of single twisted pair for CRIND and Applause communications
   > 1 board system supports up to 8 dispensers

CRIND EMV Software Upgrade

> EMV Level 2 Kernel – the software in the terminal that supports EMV processing

> Gilbarco is developing its EMV kernel based on Acquirer specs

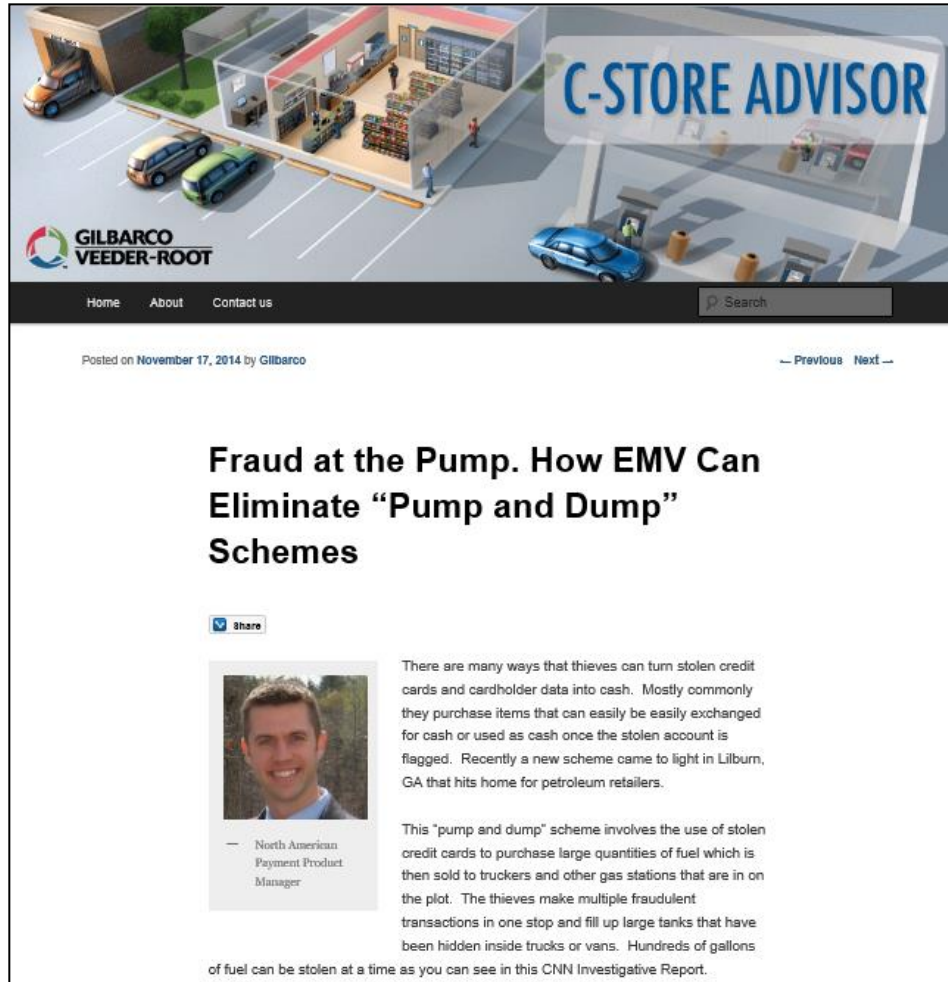> Ethernet protocol spec will be provided to major POS providers for integration, testing, and certification

EMVCo Specs

Acquirer Specs

Terminal EMV Kernel

POS Development

Testing & Certification

EMV Education Resources

> **Gilbarco's EMV Informational Webpage**

> > http://www.gilbarco.com/emv

> **EMV Online Training Courses: *EMV in 16 Minutes***

> > http://www.paragonedge.com/emv-online-training-classes.html

> **EMV Migration Forum – Knowledge Center**

> > http://www.emv-connection.com/emv-migration-forum/knowledge-center/

> **EMV Basics Infographic**

> > http://www.emv-connection.com/infographicemv-chip-cards-the-future-of-payments/

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Gilbarco C-Store Advisor Blog

> **Valuable information on industry changes and their impacts on retailers**

> http://c-storeadvisor.gilbarco.com/

Gilbarco Product Questions & Contacts

To place orders or for service related questions

contact your local distributor or ASC

http://www.gilbarco.com/us/contactaRep

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