

# Introduction

# **Purpose**

This document provides instructions to install the following Balanced System Vapor Recovery (VR) kits in Atlas™ Models 8700KX, 8800KX, 9100KX, and 9800KX units:

- M06184K001 (Atlas Electronic Dispenser Balanced Vapor Recovery Kit)
- M06184K002 (Atlas Mechanical Dispenser Balanced Vapor Recovery Kit)

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# **Required Tools**

The following tools are required for the installation of the kits:

- · Standard Wrench Set
- Drill (capable of accepting a 5/8 inch masonry drill bit)
- 5/8 inch Masonry Drill Bit
- Flat tip Screwdriver
- Cross tip Screwdriver
- Level (capable of checking vertical plumb)
- Pipe Compound (UL®-approved gas and oil-resistant)
- · White lithium-based grease

# **Required Reading**

Before installing a kit, the installer must read, understand, and follow:

- · This manual
- NFPA 30A, The Automotive and Marine Service Station Code
- NFPA 70, The National Electric Code
- Applicable federal, state and local codes and regulations

Failure to do so may adversely affect the safe use and operation of the equipment.

Note: This kit must be installed by a Gasboy® Authorized Service Contractor (ASC) to ensure warranty.

## **Parts List**

The following table lists the parts included in this kit.

## M06184K00X Atlas Dispenser Vapor Recovery Kits

See Figure 3 on page 8 for location of items on the unit.

			Quantity	
ltem	Description	Part Number	M06184K001	M06184K002
1	Clamp and Reel Assembly	032671	1	1
2	Support Post	063838	1	1
3	Cap plug 1-1/2"	017930	1	1
4	Screw 5/16" - 18 x 2", SS	051956	3	3
5	Washer, Flat, SSTL	Q13454-04	4	4
6	Washer, Lock 5/16, SS	068874	4	4
7	Spacer, 3-1/4"	063200	1	1
8	Bolt 5/16" (Anchor)	013250	1	1
9	Hole Plug, Plastic Vented, 7/8 In. Hole	Q10554-12	1	1
10	Screw 5/16" - 18 x 4-1/4"	Q10624-23	1	1
11	3/4" Swivel	064560	1	1
12	Nozzle-Emco VR	038502	1	1
13	Hose GY 7.5'	030301	1	1
14	Splitter, Dispenser Mount, Emco A4041-002 (Figure 1 on page 2)	066817	1	1
15	Hose 3/4" HW 1'-4"	HHS6X014BKX1	1	1
16	3/4" to 1" Bushing	K02297	1	1
17	Breakaway	044007	1	1
18	Hose GY 4.5'	030303	1	1
19	Boot-Nozzle (electronic)	003336	1	0
	Boot-Nozzle (mechanical)	M05632B001	0	1
20	Hook-Nozzle Kit	003719	1	1
21	Gasket, Nozzle Boot	026850	1	1

## **Parts To Obtain**

The following parts are required to install the Emco Splitter (item 14 above) and are to be obtained separately:

- 3/4 inch NPT Nipple
- 3/4 inch Elbow

Figure 1: Emco A4041-002 Splitter (Part Number 066817)



# **Related Documents**

Document Number	Title	GOLD Library
MDE-4331	Atlas Fuel Systems Installation Manual	Atlas Pumps/Dispensers
MDE-4334	Atlas Start-up/Service Manual	Atlas Pumps/Dispensers
PT-1949	Commercial and Retail Series Atlas Pump and Dispenser Illustrated Parts Manual	Atlas Pumps/Dispensers

# **Abbreviations and Acronyms**

Term	Description
ASC	Authorized Service Contractor
VR	Vapor Recovery

# Warranty

For information on warranty, refer to MDE-4255 Gasboy's Warranty Policy Statement. If you have any warranty-related questions, contact Gasboy's Warranty Department at its Greensboro location.

# **Important Safety Information**

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 Gasboy 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 Gasboy Authorized Service Contractor or call the Gasboy Service Center at 1-800-444-5529. 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 Hazard Association (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 Gasboy replacement parts and retrofit kits on your pump/dispenser. Using parts other than genuine Gasboy 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.

### 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.



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 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



Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs.

Keep airway open.

Seek medical advice immediately.

### **★** WARNING



Gasoline spilled in eyes may cause burns to eye tissue.

Irrigate eyes with water for approximately 15 minutes.

Seek medical advice immediately.

### **▲** WARNING



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

**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 M06184K00X Vapor Recovery Kit

# **Preparing for the Installation**

- 1 Request permission from the Manager/Owner to remove power from the unit and then remove power using normal procedures. Perform the lockout/tagout safety procedures.
- **2** Activate the emergency shutoff valve.
- **3** Ensure that you have the proper kit for the model dispenser to be retrofitted.
- **4** Be prepared to follow all applicable safety rules and procedures.

# Mounting the Emco Splitter to Dispenser

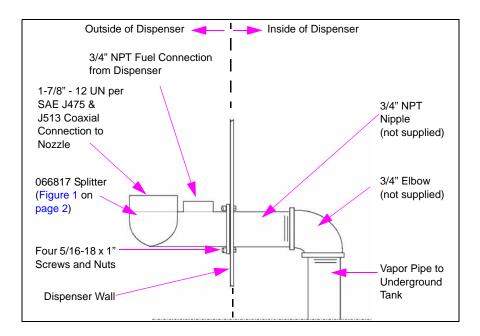
The mounting holes on the dispenser for the Emco Splitter (item 14) are already on the unit. Mount the splitter per the following instructions.

# **CAUTION**

Use a UL-approved joint compound on all pipe threads. DO NOT use Teflon® tape.

- 1 Knock out the plastic plugs for the mounting holes near the bottom of the hose side of the Atlas unit.
- 2 Using a length of 3/4 inch pipe (nipple) long enough to position the splitter (item 14) so that the flange is flush with the dispenser wall, screw the pipe into the splitter. See Figure 2.

Figure 2: Mounting 066817 Splitter to Dispenser



- **3** Screw the elbow onto the vapor pipe which goes to the underground tank. Tighten the elbow and turn in position to receive the nipple coming from the Splitter.
- 4 Screw the splitter and pipe into the elbow. Tighten and leave the splitter in the position with threaded ports facing up, as shown in Figure 2 on page 6, and align screw holes.
- **5** Bolt the splitter to the dispenser wall using four 5/16"- 18 x 1" screws and nuts.

# **Assembling and Installing Product Jumper Hose**

The following parts are required to assemble and install the Product Jumper Hose:

- 064560 3/4 inch swivel (item 11)
- HHS6X014BKX1 3/4 inch HW hose (item 15)
- K02297 3/4 inch to 1 inch bushing (item 16)

## IMPORTANT INFORMATION

Use Pipe compound (UL-approved gas and oil-resistant) on all pipe threads.

- 1 Mount the 3/4 inch to 1 inch bushing (item 16) in the dispenser outlet (see Figure 3 on page 8).
- 2 Mount the 3/4 inch swivel (item 11) on the 3/4 inch HW hose (item 15).
- 3 Connect the fixed end of the 3/4 inch HW hose to the bushing in the dispenser outlet and the end (with swivel mounted) to the splitter port (item 14) labeled FUEL.

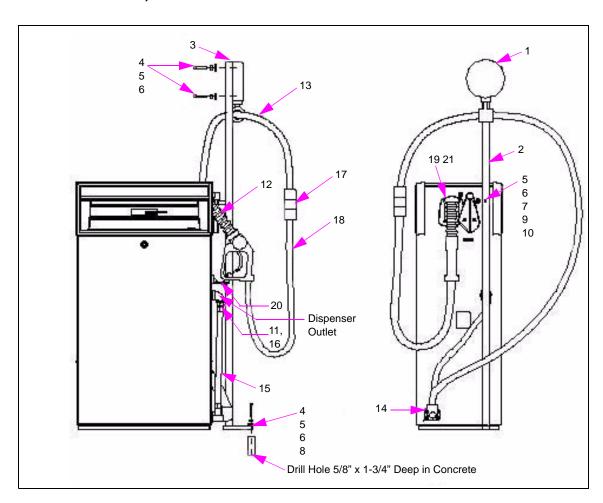


Figure 3: Hose and Retriever Assembly and Parts Identification (Electronic Model Shown)

# **Mounting the Hose Retriever**

The following parts are required to mount the Hose Retriever:

- 032671 Clamp and Reel Assembly (item 1)
- 063838 Support Post (item 2)
- 017930 1-1/2 inch Cap Plug (item 3)
- 051956 5/16 18 x 2 SS Screw (item 4)
- Q13454-04 Flat, SSTL Washer (item 5)
- 068874 5/16 inch SS Lock Washer (item 6)
- 063200 Spacer, 3-1/4 inch (item 7)
- 013250 5/16 inch Bolt Anchor (item 8)
- Q10554-12 Bottom Plug (item 9)
- Q10624-23 5/16 18 x 4-1/4 inch Screw (item 10)
- 1 Assemble Clamp and Reel Assembly (item 1) to Support Post (item 2) with hardware (items 4, 5, and 6). See Figure 3.
- 2 Install Cap Plug (item 3) at the top of the Support Post.

- 3 Install Reel and Support Post Assembly to the side of the dispensing unit and loosely secure with hardware (items 5, 6, 7, 9, and 10).
  - Note: The spacer (item 7) mounts between the post and side panel. On electronic models, the spacer mounts to the side panel through a pre-existing plugged hole to the right of the off-side lever stop. On mechanical models, the spacer mounts to the side panel replacing the off-side lever stop.
- **4** Ensuring that the support post is plumb, mark and drill a hole of diameter 5/8 inch and depth of 1-3/4 inch in the island.
- 5 Install Bolt Anchor (item 8) in the hole. Secure the bottom of the support post with hardware (items 4, 5, and 6).
- 6 Tighten all hardware installed in step 3.
- 7 Plug the hole in the bottom of the support post by installing the bottom plug (item 9).

# **Modifying Nozzle Boot**

The following parts are required to modify the nozzle boot:

- 003336 Nozzle Boot (electronic model) (item 19)
  - $\sim$  OR  $\sim$
  - M05632B001 Nozzle Boot (mechanical model) (item 19)
- 003719 Nozzle Hook Kit (item 20)
- 026850 Nozzle Boot Gasket (item 21)
- 1 Remove the four screws securing the existing nozzle boot and remove the nozzle boot and existing gasket. Save screws for reassembly.
- 2 Mount new Nozzle Boot Gasket (item 21) and Nozzle Boot (item 19) and secure with the screws saved in step 1 (Figure 3 on page 8).
- **3** Remove the hardware from the existing nozzle hook. Save all mounting hardware for reassembly.
- **4** Remove the two plugs from the lower mounting holes of side panel and place them in the two upper holes.
- 5 Install the new Nozzle Hook Kit (item 20) in the two lower holes in the side panel and secure using mounting hardware saved in step 3 (Figure 3 on page 8).

# **Mounting Hose to Retriever and Splitter**

The following parts are required to mount the Hose to the Retriever and Splitter:

- 038502 Emco VR Nozzle (item 12)
- 030301 GY Hose, 7.5 feet (item 13)
- 044007 Breakaway (item 17)
- 030303 GY Hose, 4.5 feet (item 18)
- 1 Using white lithium-based grease, lubricate both ends of the 7.5-feet GY hose threads (item 13) and O-Rings.
- 2 Thread one end of the hose into the Emco Splitter (Figure 2 on page 6 and item 14, Figure 3 on page 8) on the dispenser unit.
- **3** Thread the breakaway (item 17) on the other end of the hose.
- **4** Using white lithium-based grease, lubricate both ends of the 4.5-feet GY hose threads (item 18) and O-Rings.
- **5** Thread one end of the hose into the breakaway. Thread the Emco VR Nozzle (item 12) onto the other end of the hose.
- **6** Tighten all connections securely (four connections).
- 7 Install the clamp on the Clamp and Reel Assembly (item 1) to the hose. Position the clamp on the hose such that the hose does not touch the ground when the nozzle is positioned in the boot.
- **8** Pull out the hose and check the operation of the Clamp and Reel Assembly retriever and also check the lay of the hose.

# Completing the Installation

- 1 Inform the Manager/Owner that power will be restored to the unit and then restore power using normal procedures. Remove the lockout/tagout and return to normal operation.
- **2** Release the emergency shutoff valve.
- **3** Test the system for leaks. For detailed information regarding leak tests, refer to MDE-4334 Atlas Start-up/Service Manual.

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