



Introduction

This manual provides installation instructions for Atlas™ Models 8700K, 8800K, 9100K, 9800K balanced system Vapor Recovery (VR) kit M06430K00X.

Self Contained Vapor Recovery Kits

Kit No.	Description
M06430K001	VR Kit, 1 Grade 1 Hose Pump, Electronic
M06430K002	VR Kit, 2 Grade 2 Hose Pump, Electronic
M06430K003	VR Kit, 1 Grade 2 Hose Pump, Electronic
M06430K004	VR Kit, 1 Grade 1 Hose Pump, Mechanical
M06430K005	VR Kit, 2 Grade 2 Hose Pump, Mechanical
M06430K006	VR Kit, 1 Grade 2 Hose Pump, Mechanical

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.

Required Tools and Materials

The following tools are needed to install the VR kit:

- 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®-classified gas- and oil-resistant)
- White lithium-based grease

Parts Lists

Note: Parts in these kits include the Vapor Recovery Parts in the appropriate tables below, plus the parts included in the Hose and Hose Retriever Parts List. The difference between kits K001/K004, K002/K005, and K003/K006 is in the Nozzle Boot (item 19) listed in “Hose and Hose Retriever Parts List” on page 3.

Vapor Recovery Parts List for 1 Grade 1 Hose M06430K001 and M06430K004

See [Figure 2](#) and [Figure 3](#) for item identification.

Item	Part Number	Description	Quantity per Kit
2	066817	Splitter, Dispenser Mount, Emco A4041-002 (Figure 1)	1
4	M00415B011	Screw Metric M8X25	6
5	M00415B003	Nut, Metric, Hex Serrd. Flg. (M8)	8
7	M06495B001	Bracket, Atlas Balanced Support	1
8	R11496-40	Pipe Nipple 3/4" NPT X 2.75"	1
9	K74225	Pipe Union, Female	1
10	M06494A001	Tube Assy., Atlas Balanced Vapor	1
11	M00703B001	U-bolt Metric	1

Vapor Recovery Parts List for 2 Grade Self-Contained M06430K002 and M06430K005

See [Figure 2](#) and [Figure 4](#) for item identification.

Item	Part Number	Description	Quantity per Kit
2	066817	Splitter, Dispenser Mount, Emco A4041-002 (Figure 1)	2
4	M00415B011	Screw Metric M8X25	10
5	M00415B003	Nut, Metric, Hex Serrd. Flg. (M8)	14
7	M06495B001	Bracket, Atlas Balanced Support	1
8	R11496-40	Pipe Nipple 3/4" NPT X 2.75"	2
9	K74225	Pipe Union, Female	2
10	M06494A001	Tube Assy., Atlas Balanced Vapor	2
11	M00703B001	U-bolt Metric	2

Vapor Recovery Parts List for 1 Grade 2 Hose M06430K003 and M06430K006

See [Figure 2](#) and [Figure 5](#) for item identification.

Item	Part Number	Description	Quantity per Kit
2	066817	Splitter, Dispenser Mount, Emco A4041-002 (Figure 1)	2
4	M00415B011	Screw Metric M8X25	10
5	M00415B003	Nut, Metric, Hex Serrd. Flg. (M8)	12
7	M06495B001	Bracket, Atlas Balanced Support	1
8	R11496-40	Pipe Nipple 3/4" NPT X 2.75"	2
9	K74225	Pipe Union, Female	2
10	M06496A001	Tube Assy., Atlas Balanced Vapor	1
11	M00703B004	U-bolt Metric	1

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



Hose and Hose Retriever Parts List

See [Figure 6](#) for item identification.

Item	Part Number	Description	Quantity per Hose
1	032671	Clamp and Reel Assembly	1
2	063838	Support Post	1
3	017930	Cap plug 1-1/2"	1
4	051956	Screw 5/16"-18 x 2", SS	3
5	068079	Washer 5/16", SS	4
6	068874	Washer, Lock 5/16", SS	4
7	063200	Spacer, 3-1/4"	1
8	013250	Bolt 5/16" (Anchor)	1
9	Q10554-12	Plug, Button	1
10	Q10624-23	Screw 5/16"-18 x 4-1/4"	1
11	064560	3/4" Swivel	1
12	038502	Nozzle-Emco VR	1
13	030301	Hose GY 7.5'	1
15	HHS5X009BKX1	Hose 5/8" HW 9" LG	1
16	K02297	3/4" to 1" Bushing	1
17	044007	Breakaway	1
18	030303	Hose GY 4.5'	1
19	003336	Boot-Nozzle, Electronic	1
	M05632B001	Boot-Nozzle, Mechanical	
20	033719	Hook-Nozzle Kit	1
21	026850	Gasket, Nozzle Boot	1

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 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 only these cashier station "stops."

Total Electrical Shut-Off Before Access

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

Evacuation, Barricading and Shut-Off

Any procedures requiring accessing the pump/dispenser or STPs requires the following three actions:



- An evacuation of all unauthorized persons and vehicles using safety tape, cones or barricades to the effected units
- A total electrical shut-off of that unit

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

There is applicable information in NFPA 30A; *Automotive and Marine Service Code*, NFPA 70; *National Electrical Code (NEC)*, OSHA regulations and federal, state, and local codes which 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 that follow must be followed to prevent death, injury or damage to the equipment

DANGER - This signal word is used to alert you to a hazard to unsafe practice which will result in death or serious injury

WARNING - This alerts you to a hazard or unsafe practice that could result in death or serious injury.

CAUTION with Alert symbol - This signal word designates a hazard or unsafe practice which may result in minor injury.

CAUTION without Alert symbol - When used by itself, CAUTION 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 become explosive if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause explosive vapors in the vicinity of dispenser or island.

No Open Flames



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 fuels and their vapors. After getting 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. Be familiar with Cardiopulmonary Resuscitation (CPR) methods if you are working 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 tag out and lock out procedures. If you are not familiar with this requirement, refer to information in the service manual and OSHA documentation.

Working With Electricity Safely

Be sure to use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Be sure grounding connections are properly made. Make sure that sealing devices and compounds are in place. Be sure not to pinch wires when replacing covers. Follow OSHA Lock-Out and Tag-Out 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. Be sure to clean hands after handling equipment. Do not place any equipment in mouth.

WARNING

This area contains a chemical known to the State of California to cause cancer.

WARNING

This area contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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

Emergency First Aid

Informing Emergency Personnel

Compile the following information for 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. Reference Subpart S of 29 CFR Part 1910 - Electrical Hazards, 29 CFR Part 1910.333 contains specific Lockout/Tagout provision for electrical hazards.

Installing the Vapor Recovery Kit

Preparation

- 1 Request permission from the manager/owner to remove power from the unit; then remove power using normal procedures. Perform the lockout/tagout safety procedures.
- 2 Ensure you have the proper kit for the dispenser model to be retrofitted.
- 3 Be prepared to follow all applicable safety rules and procedures.

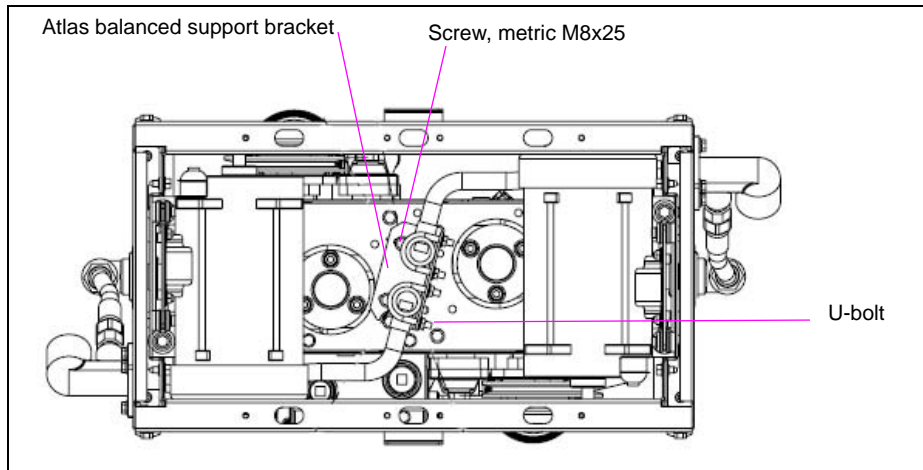
Mounting the Vapor Recovery Piping

CAUTION

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

- 1 See “Parts Lists” on page 2 for the appropriate kit and refer to Figure 2 through Figure 5.
- 2 Screw the 3/4-inch x 2-1/2 inch pipe nipple into the splitter on the flange side and tighten.

Figure 2: Pump Mounting



- 3 Insert the nipple through the splitter hole in the frame, place four M8x25 screws and M8 nuts, and tighten them.
- 4 Place the 3/4-inch pipe union onto the nipple.
- 5 Place the other half of the 3/4-inch pipe union to the adapter end of the copper tube assembly.
- 6 Attach the support bracket to the bottom of the pump mounting plate as shown in Figure 2 and insert two M8x25 screws and M8 nuts, and tighten them.
- 7 Install the copper tube assembly to the unit by coupling the union.
- 8 Install and tighten the U-bolt(s) and nuts, and tighten the union.
- 9 Install the connection to the underground tank using an appropriately-sized union.

Figure 3: Vapor Recovery Kit M06430K001 and M06430K004

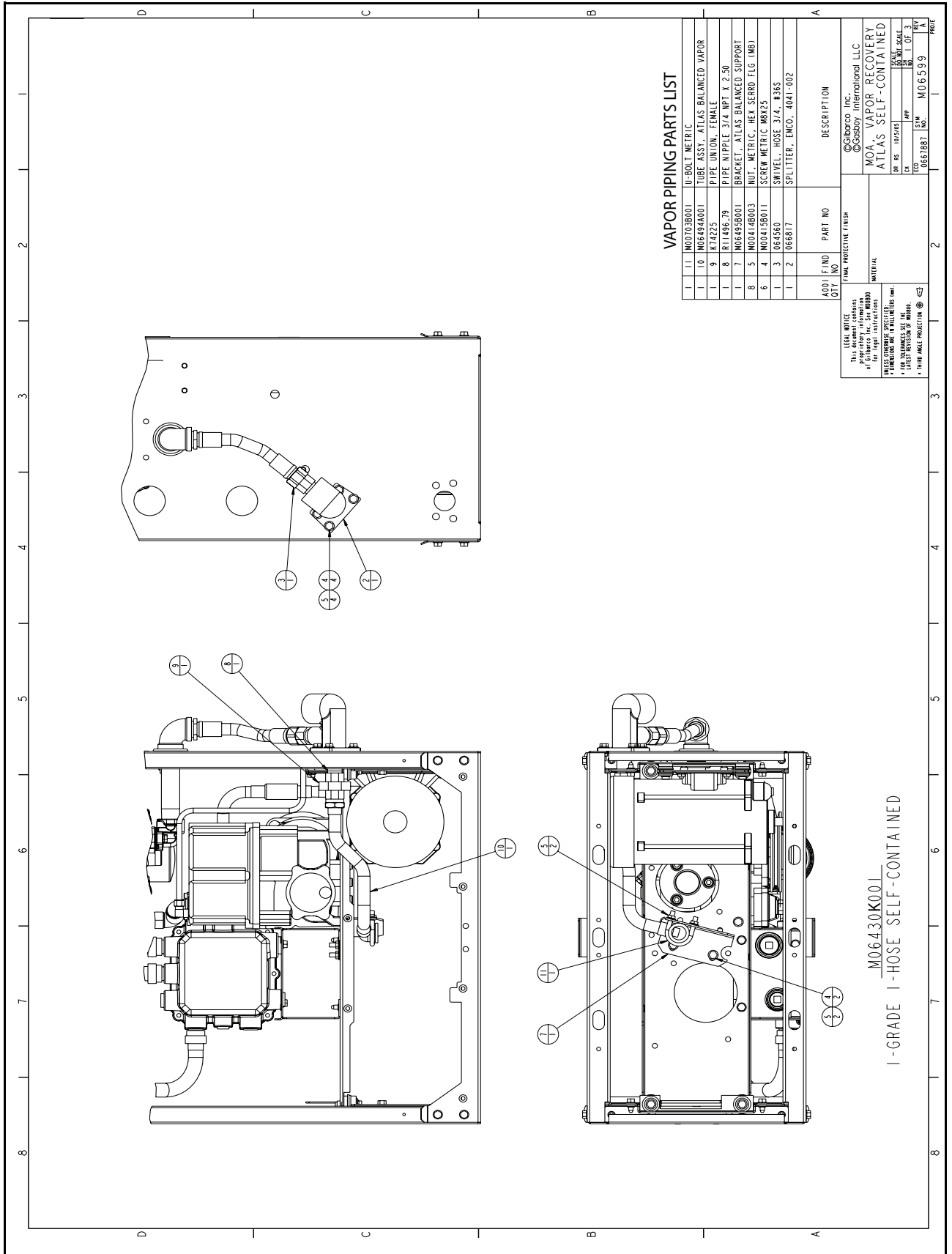
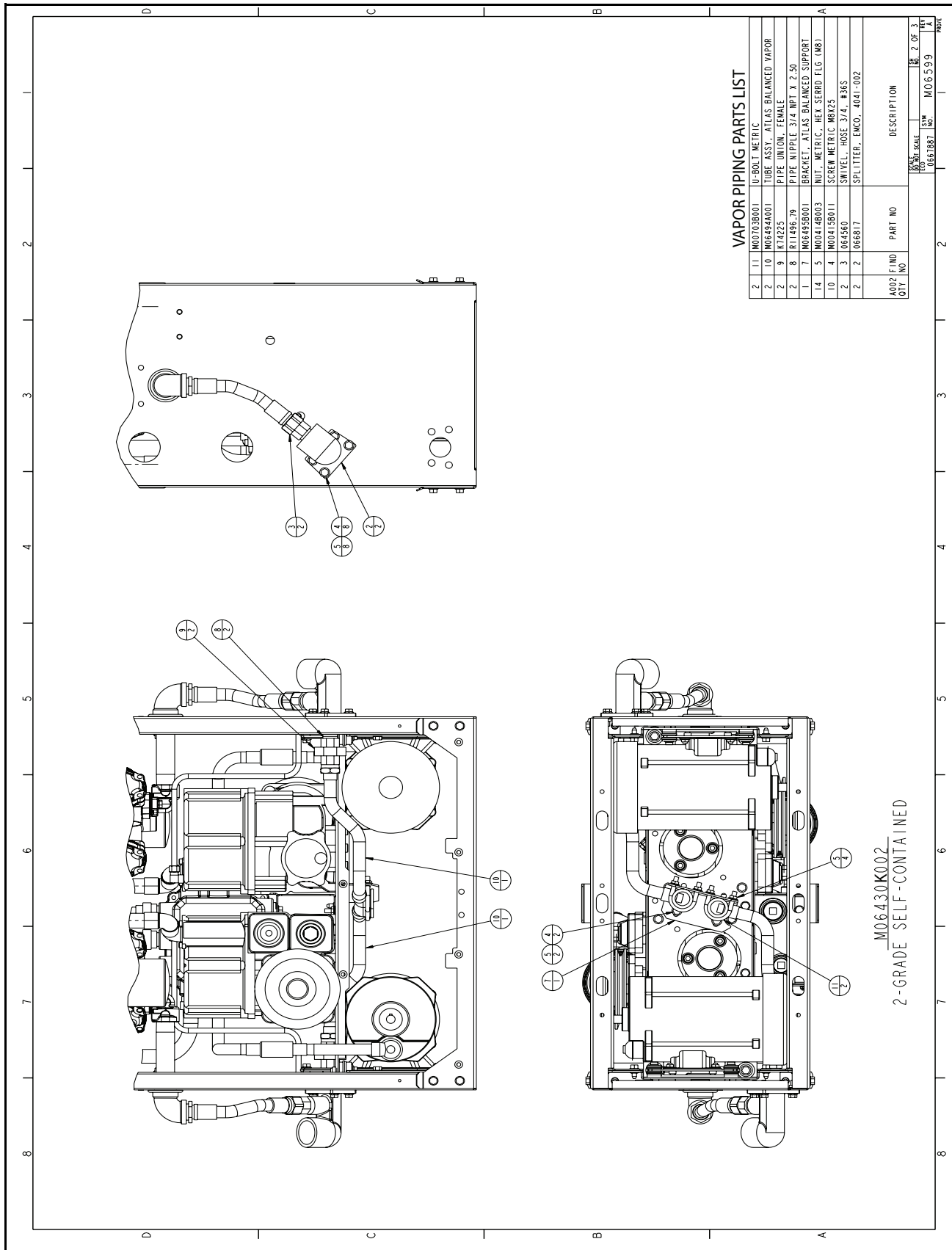


Figure 4: Vapor Recovery Kit M06430K002 and M06430K005



Hose and Retriever Installation

Note: See “*Hose and Hose Retriever Parts List*” on page 3.

Assembling and Installing Product Jumper Hose

Items needed for this procedure are the following:

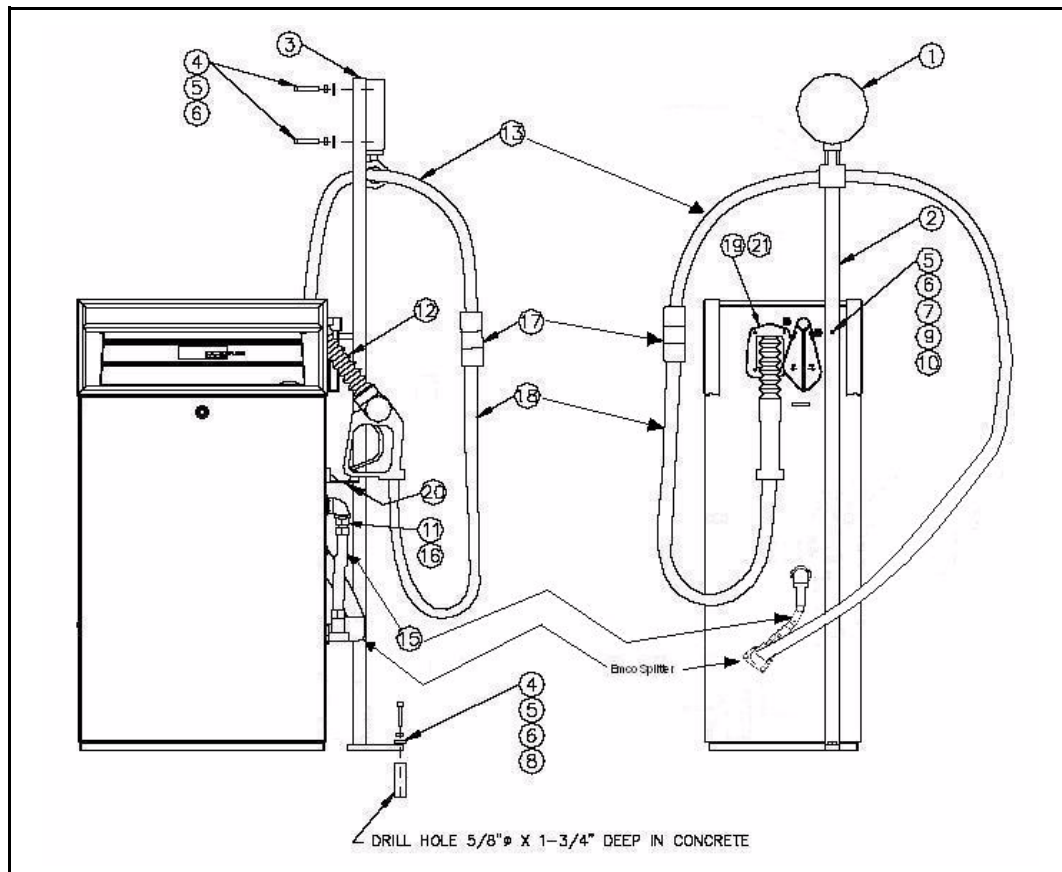
- Item 11 – 064560 3/4-inch Swivel
- Item 15 – HHS5X009BXX1 3/4-inch HW Hose, 1-foot 4-inches
- Item 16 – K02297 3/4-inch-to-1-inch Bushing

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 6](#)).
- 2 Mount the 3/4-inch swivel (item 11) on the 5/8-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 other end (with swivel mounted) to the splitter inlet port labeled **FUEL**.

Figure 6: Hose and Retriever Assembly with Parts Identification



Mounting the Hose Retriever

Items needed for this procedure are the following:

- Item 1 - 032671 Clamp and Reel Assembly
- Item 2 - 063838 Support Post
- Item 3 - 017930 1-1/2-inch Cap Plug
- Item 4 - 051956 5/16-18 x 2 SS Screw
- Item 5 - 068079 5/16-inch SS Washer
- Item 6 - 068874 5/16-inch SS Lock Washer
- Item 7 - 063200 Spacer, 3-1/4-inch
- Item 8 - 013250 5/16-inch Bolt Anchor
- Item 9 - Q10554-12 Bottom Plug
- Item 10 Q10624-23 5/16-18 x 4-1/4-inch Screw

- 1 Assemble Clamp and Reel Assembly (item 1) to support post (item 2) with hardware (items 4, 5, and 6) (Figure 6)
- 2 Install Cap Plug (item 3) in the top of the support post (Figure 6).
- 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) (Figure 6).
*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 Making sure that the support post is plumb, mark and drill a 5/8-inch diameter x 1-3/4-inch deep hole in the island (Figure 6).
- 5 Install Bolt Anchor (item 8) in hole. Secure bottom of support post with hardware (items 4, 5, and 6) (Figure 6).
- 6 Tighten all hardware installed in step 3.
- 7 Plug hole in bottom of support post by installing bottom plug (item 9) (Figure 6).

Modifying Nozzle Boot

Items needed for this procedure are the following:

- Item 19 - 003336 Boot, Nozzle (electronic model)
~ OR ~
Item 19 - M05632B001 Boot, Nozzle (mechanical model)
- Item 20 - 033719 Hook, Nozzle Kit
- Item 21 - 026850 Boot Gasket

- 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 6).

- 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 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 6).

Mounting Hose to Retriever

Items needed for this procedure are the following:

- Item 12 – 038502 Emco VR Nozzle
 - Item 13 – 030301 GY Hose, 7.5 feet
 - Item 17 – 044007 Breakaway
 - Item 18 – 030303 GY Hose, 4.5 feet
- 1 Using white lithium-based grease, lubricate both ends of the 7.5-foot GY hose threads (item 13) and O-rings.
 - 2 Thread one end of the hose into the Emco splitter (item 14, Figure 6) on the dispenser unit.
 - 3 Thread the breakaway (item 17) onto the other end of the hose.
 - 4 Using white lithium-based grease, lubricate both ends of the 4.5-foot GY hose threads (item 18) and O-rings.
 - 5 Thread one end of the hose into the breakaway. Thread the Emco 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 Installation

- 1 Inform the manager/owner that power will be restored to the unit; 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.

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