



Installation

Introduction

This manual provides installation instructions for Kits M05023K001 & M05023K002 for Gasboy® Q Models. These kits contain hardware required for replacing the copper tubing in Gasboy Q series commercial pumps and dispensers.

This upgrade will help protect against a possible safety hazard that could be present with contaminated aviation fuel.

Required Reading

Before installing these kits, 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.

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

Required Tools

The following tools are needed to install the Gasboy Q Model Kit M05023K001:

- Socket set or combination box & open end wrenches

Parts List

The Gasboy Aviation Tubing Retrofit Kit M05023K001

The following table lists the parts for the above kit.

Description	Part Number	Quantity
Tubing Assy	M04844A001	1
O-Ring	049002	1
O-Ring	Q10068 14	1

The Gasboy Aviation Tubing Retrofit Kit M05023K002

The following table lists the parts for the above kit.

Description	Part Number	Quantity
Tubing Assy	M04845A001	1
O-Ring	049002	1
O-Ring	Q10068 14	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	
<p>The EMERGENCY STOP, ALL STOP, and PUMP STOP buttons at the cashier's station WILL NOT shut off electrical power to the pump/dispenser.</p>	
	<p>This means that even if you activate these stops, fuel may continue to flow uncontrolled.</p>
<p>You must use the TOTAL ELECTRICAL SHUT-OFF in the case of an emergency and not only these cashier station "stops."</p>	

Evacuation and Barricading

Any procedures performed on or near the pump/dispenser (but not requiring accessing the pump/dispenser or STPs) requires the following actions:



- An evacuation of all unauthorized persons and vehicles
- Using safety tape or cones as barricades to the effected units

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 Gilbarco Veeder-Root Support Center at 1-800-800-7498. 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.

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 thoroughly 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 thoroughly 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.

Informing Emergency Personnel

Compile the following information for emergency personnel:

- Location of accident (e.g. address, front/back of building, etc.)
- Nature of accident (e.g. possible heart attack, run over by car, burns, etc.)
- Age of victim (e.g. baby, teenager, middle-age, elderly)
- Whether or not victim has received first aid (e.g. stopped bleeding by pressure, etc.)
- Whether or not victim has vomited (e.g. if swallowed or inhaled something, etc.)

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

Installing the M05023K001 Kit for Suction Pumps

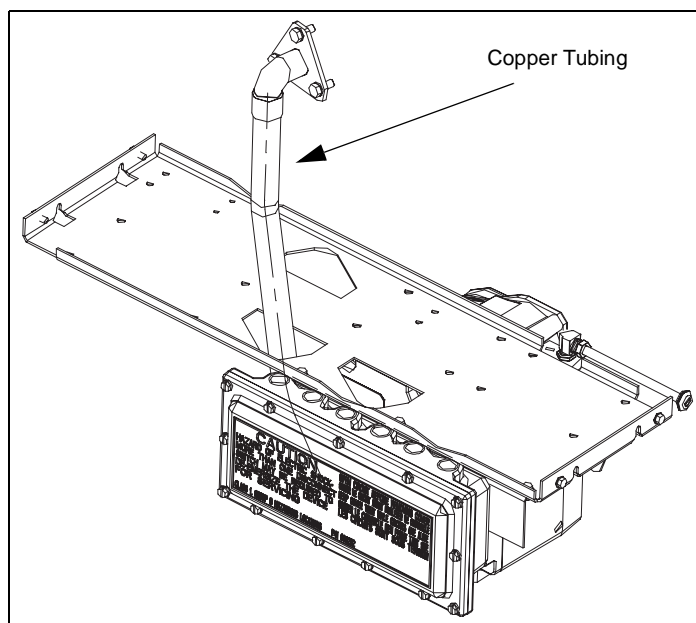
The following process explains the removal of copper tubing and installation of approved piping for aviation fuel.

- 1 Read all instructions before beginning installation.
- 2 Observe and execute all safety precautions and procedures before, during and after installation.
- 3 Obtain permission from station Operator/Manager to remove pump/dispenser from service and obtain key to the suction pump door.
- 4 Turn off all power to the pump and use Tag-Out and Lock-Out procedures.
- 5 Using the key, open the doors on both sides of the pump.
- 6 Trip the shear valve and test to ensure that the line is completely closed. (Test by turning power back on and verify that no fuel can be dispensed. If unit can still function, again retrip shear valve, making sure that it is completely closed.)

Note: In the next step, before loosening any bolts, reduce the pressure in the lines.

- 7 Station catch basins and absorbent materials in such a way as to catch any fuel still left in any open lines (after reducing pressure in the lines).
- 8 With eye protection in place, remove the copper tubing between the suction pump and meter. Save all bolts for later use. See Figure 1.

Figure 1: Copper Tubing in Suction Pump Unit



- 9** Install new steel tubing and new O-Rings, (Q10068 14 at meter flange and 049002 at the pumping unit flange) and attach steel tubing using existing bolts. (The use of silicone grease helps to hold O-rings in place during assembly.)
- 10** Return power to pump and run fuel through the pump and inspect for leaks.
- 11** Purge all air from unit (usually 10 gallons is recommended).
- 12** Remove catch basin, tools and absorbent materials. (Dispose of absorbent materials and fuels in a safe manner. Do not dispose of them in station trash receptacles or in the pump pit box.)
- 13** Re-install the front and back doors to the pump.

Installing the M05023K002 Kit for Remote Dispensers

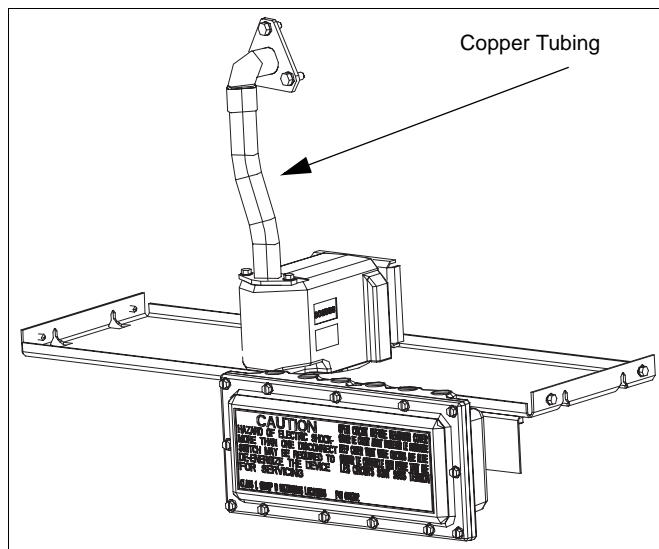
The following process explains the removal of copper tubing and reassembly with approved piping for aviation fuel.

- 1 Read all instructions before beginning installation.
- 2 Observe and execute all safety precautions and procedures before, during and after installation.
- 3 Obtain permission from station Operator/Manager to remove pump/dispenser from service and obtain key to the suction pump door.
- 4 Turn off all power to the dispenser and use Tag-Out and Lock-Out procedures.
- 5 Using the key, open the doors on both sides of the dispenser.

Note: In the next step, before loosening any bolts, reduce the pressure in the lines.

- 6 Trip the shear valve and test to ensure that the line is completely closed. (Test by turning power back on and verify that no fuel can be dispensed. If unit can still function, again retrip shear valve, making sure that it is completely closed.
- 7 Station catch basins and absorbent materials in such a way as to catch any fuel still left in any open lines. In the next step, before loosening any bolts, reduce the pressure in the lines.
- 8 With eye protection in place, remove the copper tubing between strainer housing and meter, loosening bolts slowly so as to relieve any fuel pressure gradually. Save all bolts for later use. See Figure 2.

Figure 2: The existing printer mounted on CIM door.



- 9 Install new steel tubing and new O-Rings, (Q10068 14 at meter flange and 049002 at the strainer flange) and attach steel tubing using existing bolts. (The use of silicone grease helps to

hold O-rings in place during assembly.)

- 10** Open shear valve.
- 11** Return power to pump and run fuel through the pump and inspect for leaks.
- 12** Purge all air from the unit (usually 10 gallons is recommended).
- 13** Remove catch basin, tools and absorbent materials. (Dispose of absorbent materials and fuels in a safe manner. Do not dispose of them in station trash receptacles or in the pump pit box.)
- 14** Re-install the front and back doors to the pump.

Gasboy® is a registered Trademark of Gasboy International Inc.



© 2004 Gilbarco Inc.
7300 West Friendly Avenue • Post Office Box 22087
Greensboro, North Carolina 27420
Phone (336) 547-5000 • <http://www.gilbarco.com> • Printed in the U.S.A.
MDE-4369 Aviation Tubing Retrofit Kit for Gasboy® Q Models Kits M05023K001 & K05023K002 • October 2004