



Introduction

Purpose

This manual provides instructions to install the Above Ground Tank Kit (M14695K001) for Atlas™ 9850K Series Units.

If the Atlas 9850K model pump is used with an above ground tank, an anti-siphon valve is recommended on the inlet of the pump. This kit supplies a valve and parts to allow installation of the valve

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Required Tools

- Pipe Wrenches
- Ratchet Handle with 3/8" drive
- Channel lock pliers
- UL®-Listed pipe sealant

Parts List

The following table lists the parts included in this kit.

Item	Description	Part Number	Quantity
1	Check Valve & Piping Assy .150 A/G Tank	G066831	1
2	Tube Assy., Return 9850K AGT kit	M14791A001	1
3	Elbow, 1/2" NPT Conduit, M/F	K42448	1
4	Nipple, Conduit 1/2 X 3-5/8 Alum	R11976-55	1
5	Conduit fitting, 90-degree elbow, F/F	M16595B001	1
6	Conduit, J-box to solenoid 9850K AGT kit	M14806B001	1
7	Union, Exp Std 1/2" M&F Stl	N16289-20	1
8	Bushing, Red Hex HD 2 X 1-1/2	K02300	1
9	Nipple, 1-1/2X1/3/8 EH Fe Pipe.	R11493-58	2
10	Valve, Sol 1.5" Skin 230V 2Stg	G067062	1
11	Valve Shear, 1-1/2 Union	G066867	1

Note: 1) To protect the solenoid valve, a suitable strainer or filter should be installed upstream and as close to the valve as possible.

2) If the pump is installed with a satellite, Gasboy recommends a shear valve be installed on the master satellite outlet. Refer to MDE-4331 Atlas Fuel System Installation Manual.

Related Documents

Document Number	Title	GOLD SM Library
MDE-4255	Gasboy's Warranty Policy Statement.	Gasboy Atlas Pumps/Dispensers
MDE-4430	Important Warnings and Safeguards	Gasboy Safety and Warranty Docs
MDE-4331	Atlas Fuel System Installation Manual	Gasboy Atlas Pumps/Dispensers
MDE-4334	Atlas Start-up/Service Manual	Gasboy Atlas Pumps/Dispensers
FE-357	Atlas Pump Retail/Commercial Field Wiring	Installers Public Documents

Abbreviations and Acronyms

Term	Description
DEF	Diesel Exhaust Fluid
NEC	National Electrical Code
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
STP	Submersible Turbine Pump

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

Notes: 1) Save this Important Safety Information section in a readily accessible location.

2) Although DEF is non-flammable, diesel is flammable. Therefore, for DEF cabinets that are attached to diesel dispensers, follow all the notes in this section that pertain to flammable fuels.

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 Support 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 Health Administration (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.

DEF is non-flammable. Therefore, explosion and fire safety warnings do not apply to DEF fluid lines.

Important Safety Information

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.

WARNING

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.



Gilbarco Veeder-Root encourages the recycling of our products. Some products contain electronics, batteries, or other materials that may require special management practices depending on your location. Please refer to your local, state, or country regulations for these requirements.

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/DEF 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

DEF generates ammonia gas at higher temperatures. When opening enclosed panels, allow the unit to air out to avoid breathing vapors. If respiratory difficulties develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

WARNING



Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs. Keep airway open. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled in eyes may cause burns to eye tissue. Irrigate eyes with water for approximately 15 minutes. Seek medical advice immediately.

WARNING



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

WARNING

DEF is mildly corrosive. Avoid contact with eyes, skin, and clothing. Ensure that eyewash stations and safety showers are close to the work location. Seek medical advice/recommended treatment if DEF spills into eyes.

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

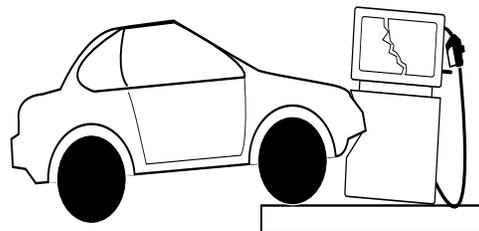
Lockout/Tagout

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.

Hazards and Actions

 WARNING	
	Spilled fuels, accidents involving pumps/dispensers, or uncontrolled fuel flow create a serious hazard.
	Fire or explosion may result, causing serious injury or death. Follow established emergency procedures. DEF is non-flammable. However it can create a slip hazard. Clean up spills promptly.

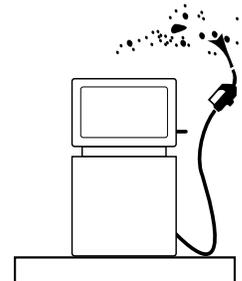
The following actions are recommended regarding these hazards:



Collision of a Vehicle with Unit



Fire at Island



Fuel Spill

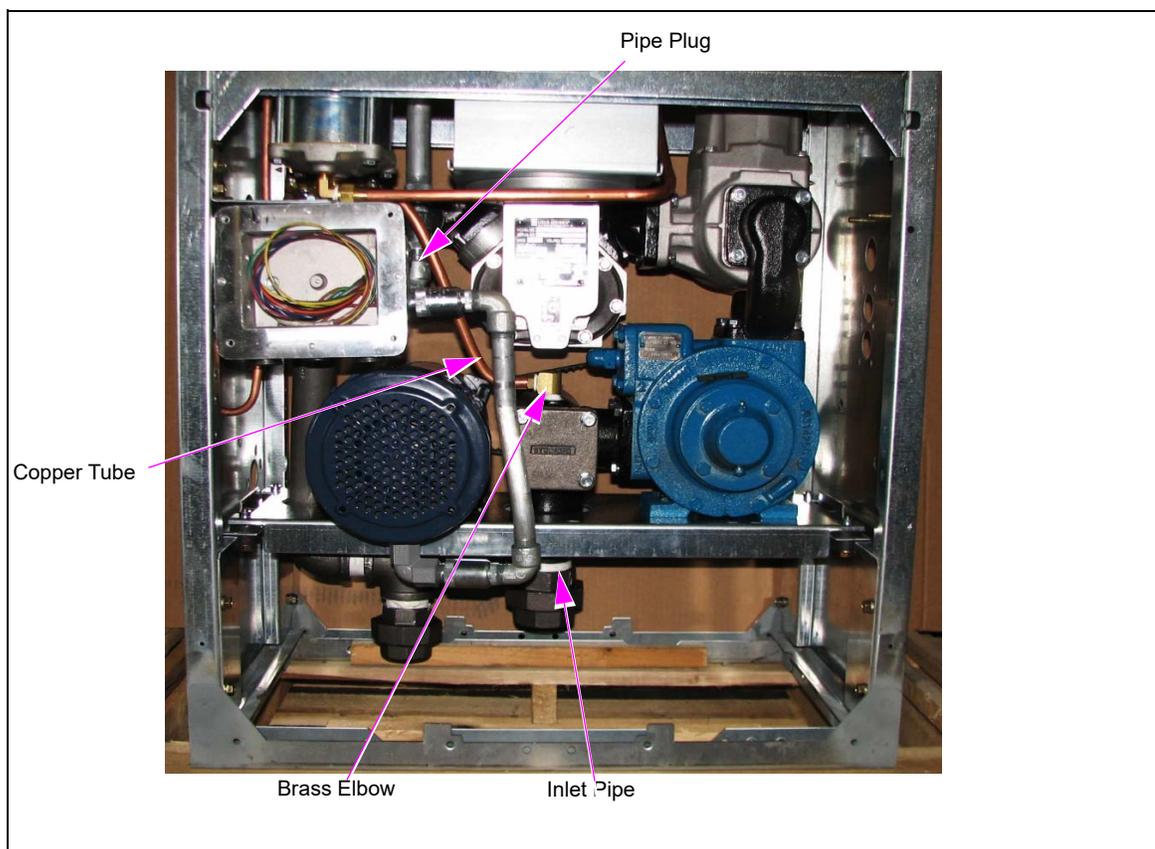
- Do not go near a fuel spill or allow anyone else in the area.
- Use station EMERGENCY CUTOFF immediately. Turn off all system circuit breakers to the island(s).
- Do not use console E-STOP, ALL STOP, and PUMP STOP to shut off power. These keys do not remove AC power and do not always stop product flow.
- Take precautions to avoid igniting fuel. Do not allow starting of vehicles in the area. Do not allow open flames, smoking or power tools in the area.
- Do not expose yourself to hazardous conditions such as fire, spilled fuel or exposed wiring.
- Call emergency numbers.

Installing the Above Ground Tank Kit (M14695K001)

To install the Above Ground Tank Kit (M14695K001) for Atlas 9850K Series Units, proceed as follows:

- 1 Refer *MDE-4430 Important Warning and Safeguards*, to review the important warning and safeguards instruction.
- 2 Remove the Pipe Plug from the side of the junction box.
- 3 Remove the return Copper Tube from the bottom of the sump to the top of the strainer casting.
- 4 Remove the Brass Elbow at the top of the strainer casting.
- 5 Remove the Inlet Pipe from the strainer casting.

Figure 1: 9850K Pumping Unit



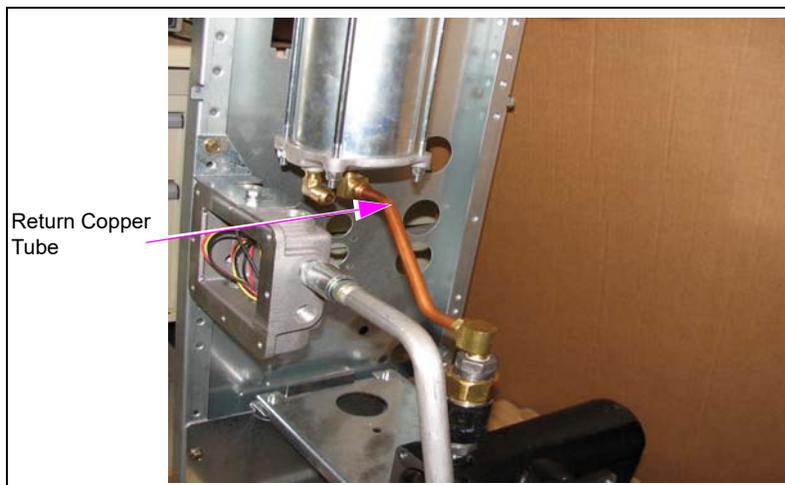
- 6 Ensure that the Check Valve assembly is fully assembled and then install it in the top of the strainer casting.

Figure 2: Check Valve



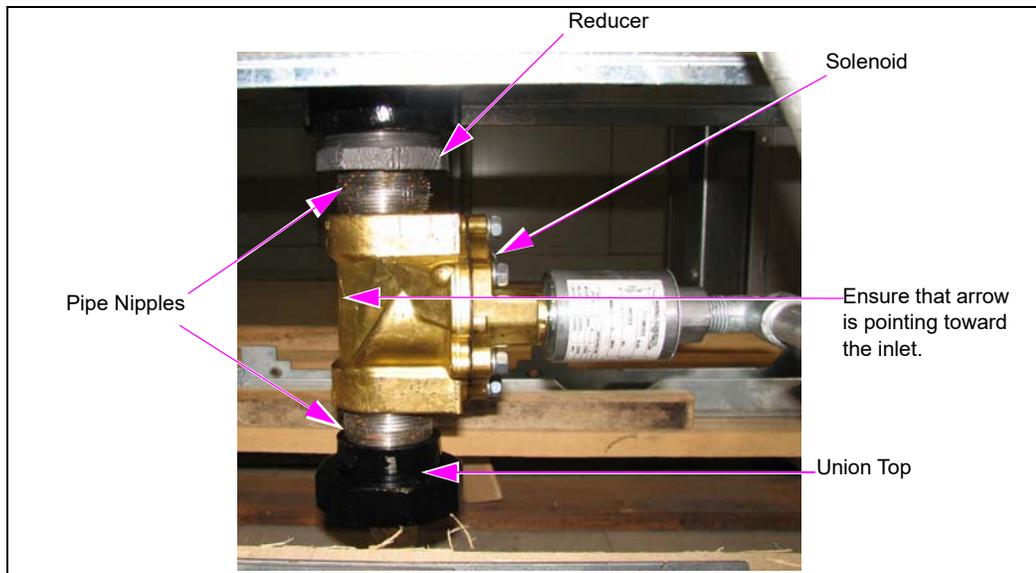
- 7 Install new return copper tube from the bottom of the sump to the top of the check valve.

Figure 3: Return Copper Tube



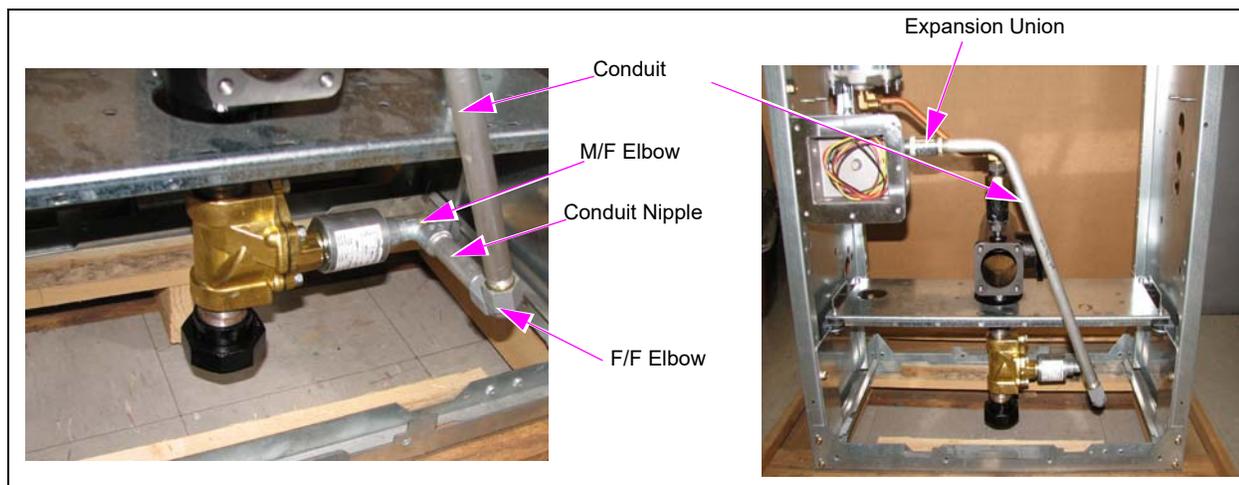
- 8 Install reducer, pipe nipples, solenoid, and union top on the shear valve.

Figure 4: Solenoid Valve



- 9 Install the conduit elbows, conduits, and expansion union as shown in the figure.

Figure 5: Installation of Conduit Elbow, Conduits, and Expansion Union



- 10 The solenoid must be connected in parallel with the pump motor. Refer to field wiring diagram *FE-357 Atlas Pump Retail/Commercial Field Wiring* and “External Valve” section in *MDE-4331 Atlas Fuel System Installation Manual*.
- 11 Install shear valve according to manufacturer’s instructions. Refer to *MDE-4331 Atlas Fuel System Installation Manual*.
- 12 After the pump is installed, test for leaks and proper operation before putting the unit into service.

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