

Introduction

Purpose

This manual provides information about the Power Supply Assembly (M15579A001) and identifies differences in appearance and location from the power supplies that it replaces.

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Related Documents

| Document Number | Title | GOLD SM Library |
|-----------------|---|--|
| MDE-4652 | Atlas® 9800 Electronics Field Installation Instructions | Gasboy® Atlas Pumps/Dispensers |
| FE-357 | Atlas Pump Retail/Commercial Field Wiring Instructions | <ul style="list-style-type: none"> • Gasboy Parts List • Wiring Diagrams |

Abbreviations and Acronyms

| Term | Description |
|-------|---|
| CPU | Central Processing Unit |
| DEF | Diesel Exhaust Fluid |
| ESD | Electrostatic Discharge |
| FCC | Federal Communications Commission |
| GOLD | Gilbarco® Online Documentation |
| NEC® | National Electrical Code |
| NFPA® | National Fire Protection Association |
| OSHA | Occupational Safety and Health Administration |
| STP | Submersible Turbine Pump |
| VAC | Voltage Alternate Current |
| VDC | Voltage Direct Current |

Important Safety Information

Notes: 1) *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 Gilbarco 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 the Gasboy Technical Support 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 Cod (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 Gilbarco replacement parts and retrofit kits or your pump/dispenser. Using parts other than genuine Gilbarco replacement parts could create a safety hazard and violate local regulations.

Federal Communications Commission (FCC) Warning

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

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 lines.

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.

Before You Begin

Read and follow all safety information provided in “[Important Safety Information](#)” on [page 2](#).

To prepare the site and dispenser for the installation, proceed as follows:

- 1 Inform the manager that the power will be disconnected.
- 2 Barricade the unit to be worked on.
- 3 Remove all power supplied to the unit at the breaker located in the building. Follow OSHA lockout/tagout procedures.

WARNING

Failure to turn off the unit during the installation of the kit may cause injury or bodily harm from electrical shock. Ensure that all power to the unit is switched off before opening the door to the unit and during kit installation.

CAUTION



A properly grounded Electrostatic Discharge (ESD) wrist strap must be worn while servicing any electronic devices or components. Failure to use electrostatic precautions may damage electronic components and void warranty.

Atlas 9800 Power Supply Assembly (M15579A001)

Gasboy released a new 24VDC power supply for Gasboy commercial pumps and dispensers. The 24VDC power supply is more robust converting the required 5VDC and 7.5VDC from 24VDC to support the commercial Central Processing Unit (CPU) boards, and to power the additional components found in the Atlas PRIME.

Features of the Atlas 9800 power supply assembly are as follows:

- Required for M06333 CPU Boards.
- Compatible with the following 9800 CPU Boards: C06391, C06392, C06393, C06394, C06500, C06501, C06502, C06503, M05346A001, M05346A002, M05346A003, M05346A004, and M06333KXXXX.
- Required for Atlas PRIME.
- Replaces current power supplies (9800) as shown in the following table:

| Description | Old Power Supply Part Number | Replacement Power Supply Part Number |
|--|------------------------------|--------------------------------------|
| Kit to replace 115 VAC PS with Battery | C06397, M07588A001 | M12421K00X* |
| 115 VAC PS without Battery | C06396, M07588A002 | M15579A001 |
| Kit to replace 230 VAC PS with Battery | C06489, M07588A003 | M12422K00X* |
| 230 VAC PS without Battery | C06488, M07588A004 | M15579A001 |

*X refers to the required number of displays, where X=1 for 1 display, X=2 for 2 displays, X=3 for 4 displays.

Figure 1: Atlas 9800 Power Supply Assembly



Accessing Electronic Components

WARNING

Always remove the AC power from the pump/dispenser before servicing the unit. Failure to turn off the unit before servicing may result in serious injury or death.

To access the electronic components, proceed as follows:

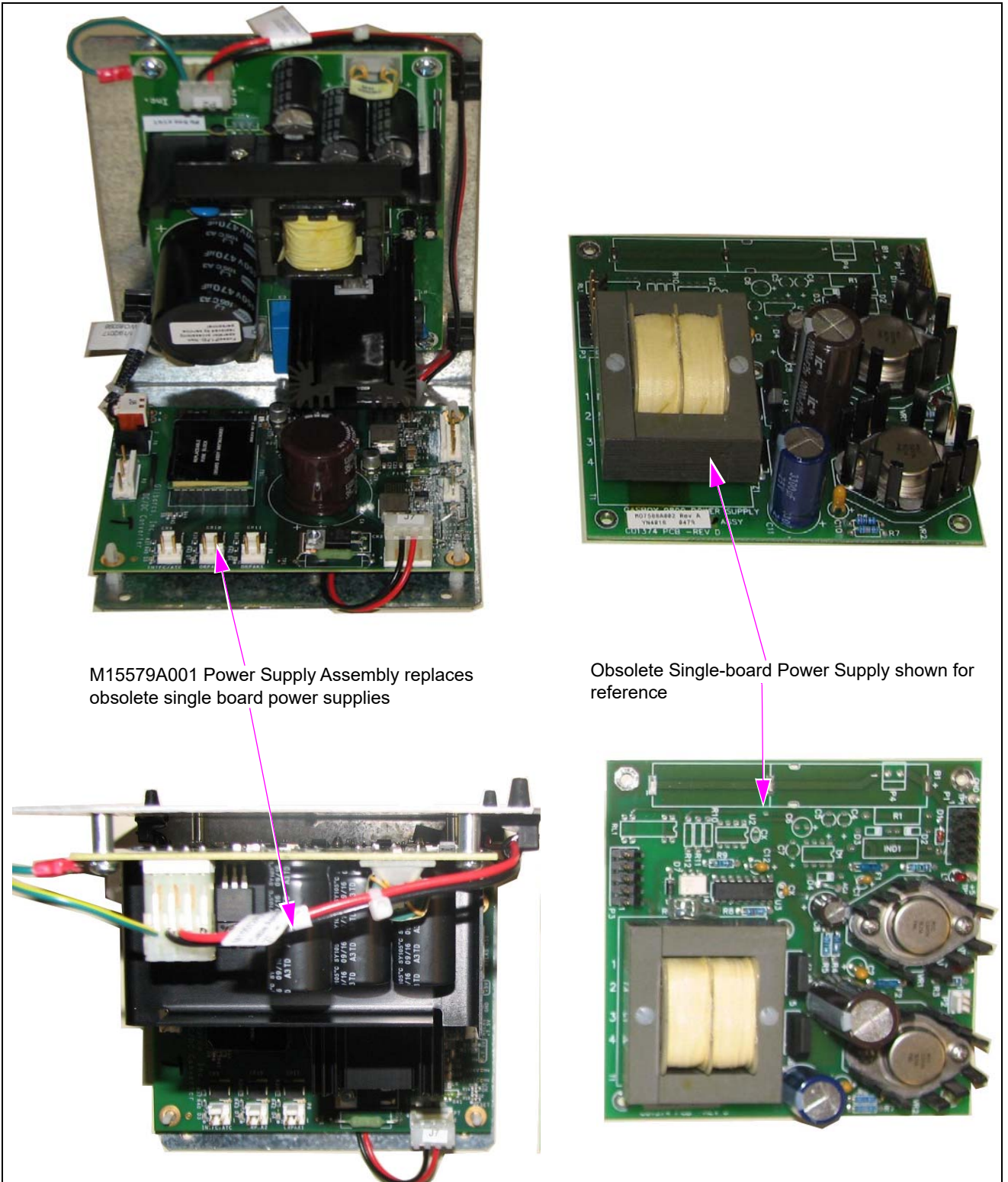
- 1 Unlock and remove the front panel on the pump/dispenser.
- 2 Remove the two bolts/screws located over the tabs of the bezel assembly. Lift the bezel assembly upwards and out to remove.
Note: For A and Q models with front load nozzle, remove the nozzle boot plastic shroud (two screws), before removing the bezel assembly.
- 3 Loosen the two screws that secure the display panel, remove them if required, and pivot the display panel down.

Removing the Power Supply

To remove the power supply, proceed as follows:

- 1 Ensure that you disconnect AC power to the pump/dispenser.
- 2 Disconnect the AC power cable from the P3 connector. Disconnect the DC cables from the P2 and P1 connectors.
- 3 Unscrew and remove all the screws that hold the power supply. Retain the screws for installing the new power supply.
- 4 Remove the power supply. For models with plastic standoffs, remove the screws and unsnap the power supply from the standoffs. Remove any standoffs that may have remained on the power supply and place them back into the plate where the power supply was mounted (see [Figure 2](#) on [page 7](#)).

Figure 2: Atlas 9800 Power Supply Assembly



M15579A001 Power Supply Assembly replaces obsolete single board power supplies

Obsolete Single-board Power Supply shown for reference

Installing the Atlas 9800 Power Supply Assembly (M15579A001)

To install the power supply assembly, proceed as follows:

- 1 Install the new power supply on the standoffs. Ensure that the P1 connector is closest to the CPU board and P3 connector is away from the CPU. If the pump model is 9822 or 9823, the P1 connector is closest to the pump-handle assembly.
- 2 Reinstall the screws removed in step 3 on [page 6](#). For models with plastic standoffs, carefully push the power supply onto the plastic standoffs before installing the screws.
- 3 Reconnect the following:
 - Cables and AC power to the P3 connector.
 - Display backlight to the P2 connector.
 - CPU DC to the P1 connector.
- 4 Check all connections and cabling.
- 5 Reassemble the pump/dispenser.
- 6 Return power to the dispenser.
- 7 Test the unit to ensure proper operation.

The following images show the mounting of the new power supply assembly in various Gasboy 9800 and Atlas dispensers.

Figure 3: Mounting Assembly in 9800 Pre-A, A, or Q Models

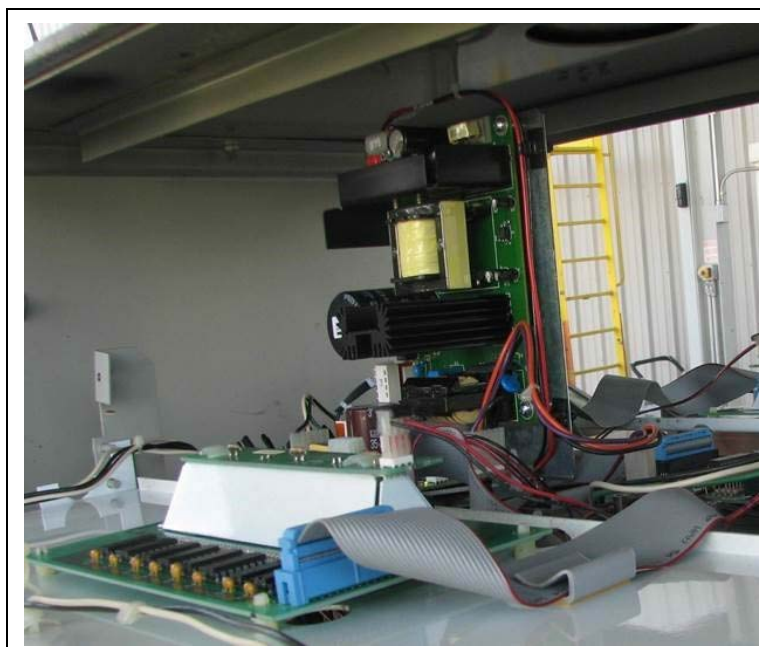


Figure 4: ASTRA (9820) Model (Chassis Shown Without Cabinet)

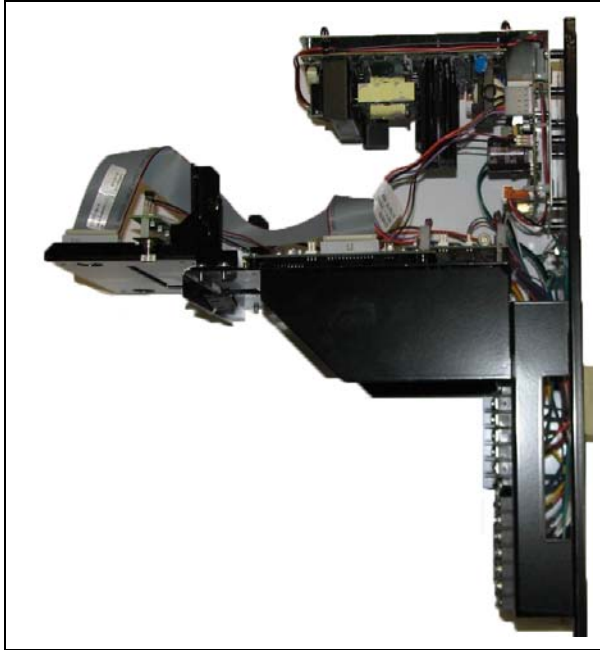


Figure 5: Standard Atlas 9800K Models

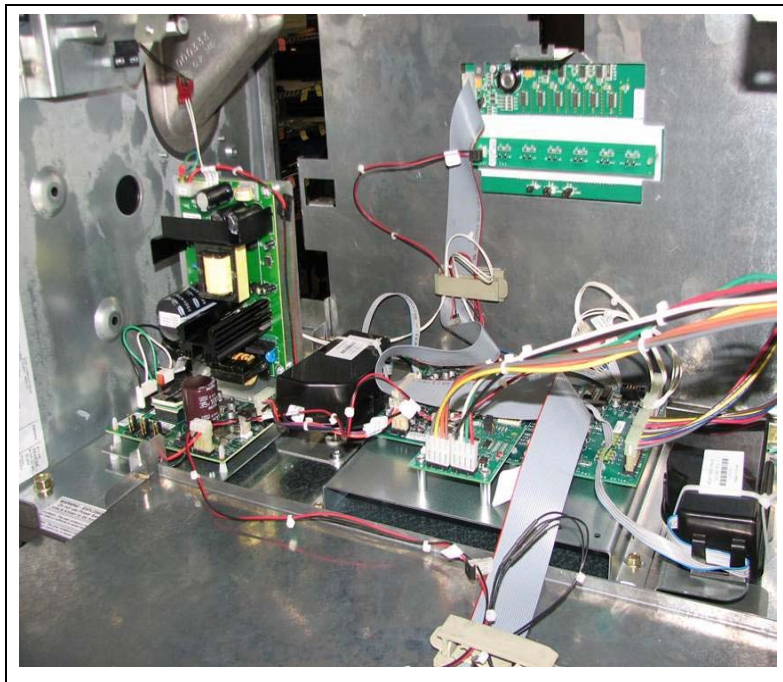


Figure 6: Atlas Ultra-Hi™ 9850K Models

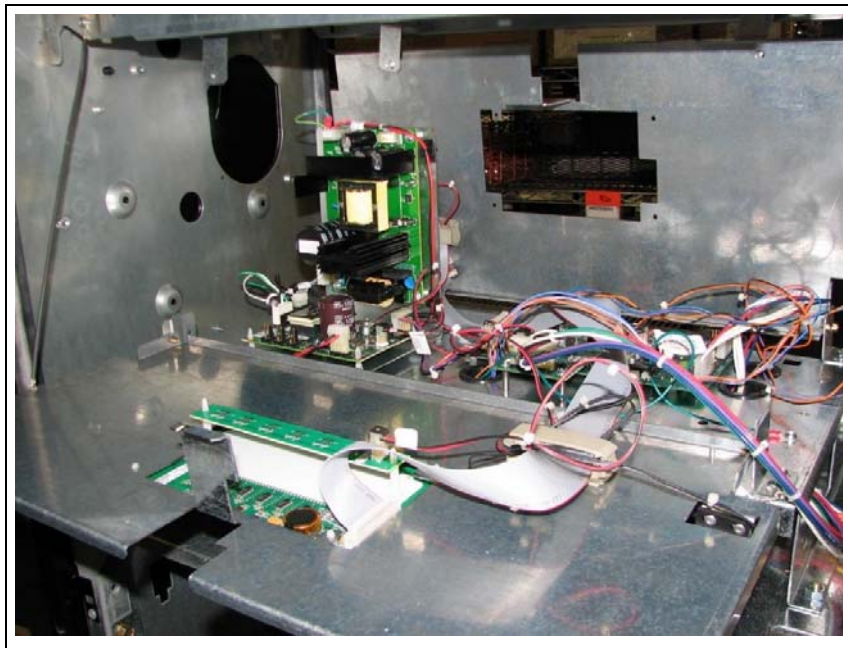


Figure 7: Atlas Diesel Exhaust Fluid (DEF) 9862KX Models

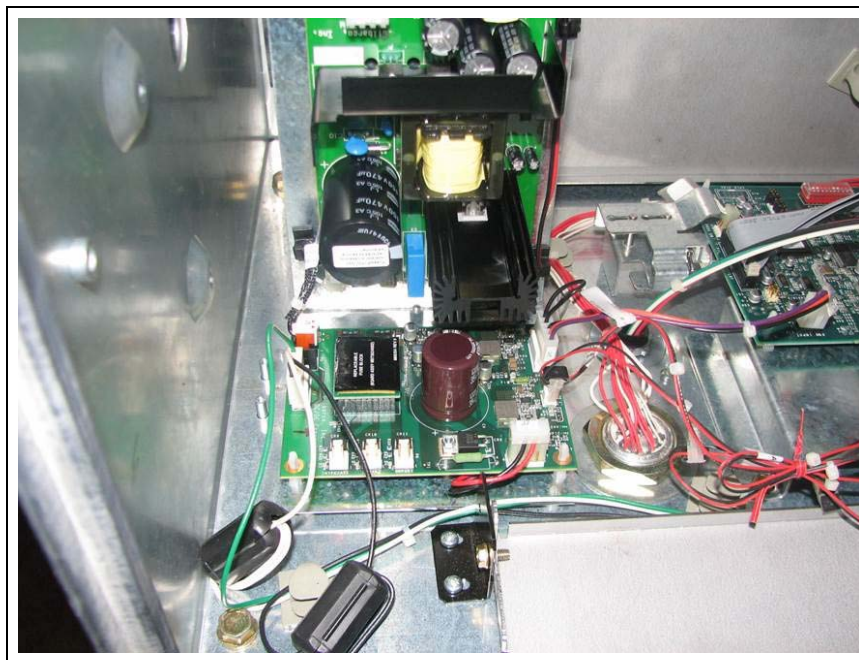
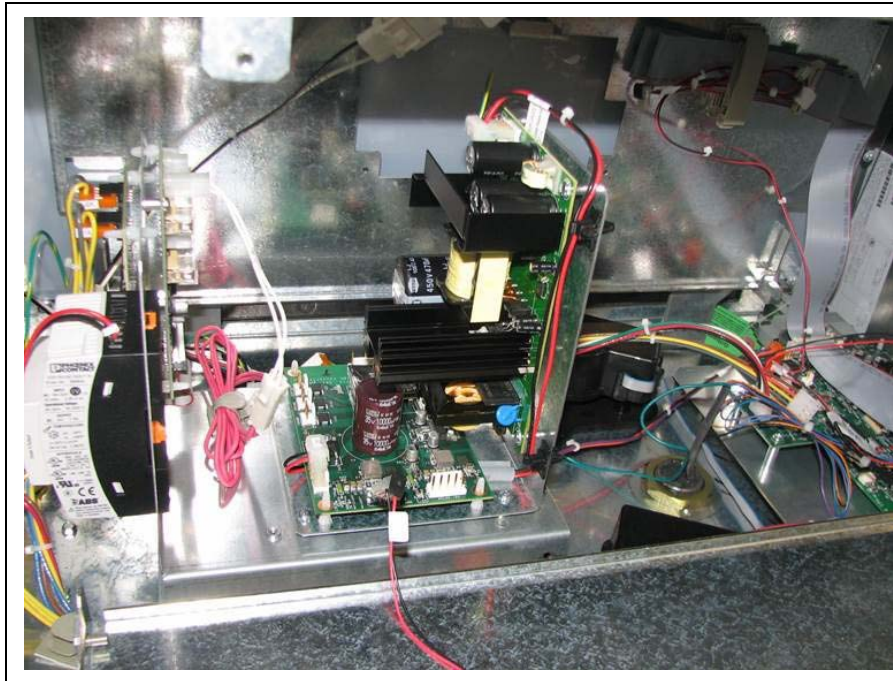


Figure 8: Atlas E85 9872KX Models



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