



# EVO<sup>TM</sup> 200 AND EVO<sup>TM</sup> 400 FUSE REPLACEMENT GUIDE

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### Introduction

This manual contains instructions for replacing the fuses in the Franklin Fueling Systems (FFS) EVO™ 200 and EVO™ 400 Automatic Tank Gauges (ATGs). You must follow all safety information, warnings, instructions, and other information in this manual. Please read this entire manual carefully. If you do not follow the instructions in this manual, the result could be faulty operation, equipment damage, injury, or death.

#### **Questions and concerns**

In case of emergency, follow the procedures established by your facility. If you have questions or concerns about safety or need assistance, use the information below to contact FFS:

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#### Conventions used in this manual

This manual includes safety precautions and other important information presented in the following format:

**NOTE**: This provides helpful supplementary information.

**IMPORTANT**: This provides instructions to avoid damaging hardware or a potential hazard to the environment, for example: fuel leakage from equipment that could harm the environment.

**A** CAUTION: This indicates a potentially hazardous situation that could result in minor or moderate injury if not avoided. This may also be used to alert against unsafe practices.

**A WARNING**: This indicates a potentially hazardous situation that could result in severe injury or death if not avoided.

**A** DANGER: This indicates an imminently hazardous situation that will result in death if not avoided.

#### **Operating precautions**

FFS equipment is designed to be installed in areas where volatile liquids such as gasoline and diesel fuel are present. Working in such a hazardous environment presents a risk of severe injury or death if you do not follow standard industry practices and the instructions in this manual. Before you work with or install the equipment covered in this manual, or any related equipment, read this entire manual, particularly the following precautions:

**A** CAUTION: Use only original FFS parts. Substituting non-FFS parts could cause the device to fail, which could create a hazardous condition and/or harm the environment.

▲ WARNING: Follow all codes that govern how you install and service this product and the entire system. Always lock out and tag electrical circuit breakers while installing or servicing this equipment and related equipment. A potentially lethal electrical shock hazard and the possibility of an explosion or fire from a spark can result if the electrical circuit breakers are accidentally turned on while you are installing or servicing this product. Refer to this manual (and documentation for related equipment) for complete installation and safety information.

▲ WARNING: Follow all federal, state, and local laws governing the installation of this product and its associated systems. When no other regulations apply, follow NFPA codes 30, 30A, and 70 from the National Fire Protection Association. Failure to follow these codes could result in severe injury, death, serious property damage, and/or environmental contamination.

▲ WARNING: All wiring must enter the console's enclosure through the designated knockouts. An explosion hazard may result if other openings are used. All wiring from probes to the console must be run in conduit separate from all other wiring. Failure to do so will create an explosion hazard.

**A DANGER**: Make sure you check the installation location for potential ignition sources such as flames, sparks, radio waves, ionizing radiation, and ultrasound sonic waves. If you identify any potential ignition sources, you must make sure safety measure are implemented.

#### Other documentation

The EVO™ 200 and EVO™ 400 Automatic Tank Gauges Installation Guide, the EVO™ 200 and EVO™ 400 Automatic Tank Gauges Operation Guide, and the EVO™ 200 and EVO™ 400 Automatic Tank Gauges Programming Guide are useful manuals you may need. To download these manuals, go to: www.franklinfueling.com>Products>Fuel Management Systems>Automatic Tank Gauges>EVO™ 200 & EVO™ 400>Downloads>Manuals. Alternatively, you can click the following link, and go to the "Manuals" heading:

http://www.franklinfueling.com/americas/fms/featured/27308/en/evo-200-evo-400#Downloads

#### Certified installer or service person

The equipment described in this manual should be serviced only by an FFS-certified technician, installer, or service person. Only an FFS-certified technician, installer, or service person is allowed to access both the user interface keypad and internal areas of an EVO™ 200 or EVO™ 400 ATG. If your EVO™ 200 or EVO™ 400 ATG is serviced by someone who is not an FFS-certified technician, installer, or service person, your warranty will be void.

#### Required equipment

- Needle nose pliers
- Grounding strap



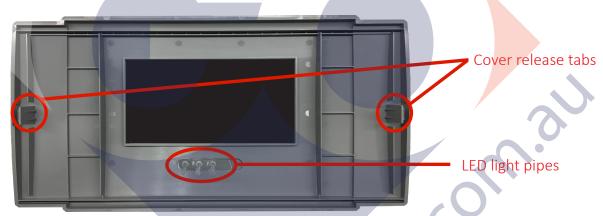
## Replacing Fuses

**IMPORTANT**: Make sure you wear a grounding strap during this entire procedure. If you do not, your ATG could be permanently, severely damaged, and your warranty could be voided.

**IMPORTANT:** Lift the cover away carefully to help avoid damaging the LED light pipes.

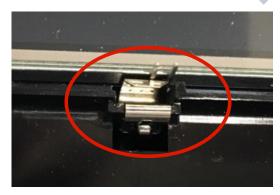
▲ WARNING: Your ATG has more than one power connection point. To avoid equipment damage and a shock hazard, make sure all power connection points to the ATG are disconnected <u>before</u> you begin servicing your ATG. Also, always perform a proper lockout/tagout (LOTO) procedure to prevent accidental energization of your ATG while you are servicing it.

1. Press the cover release tabs inward, and then lift the cover straight away from the ATG with both hands.



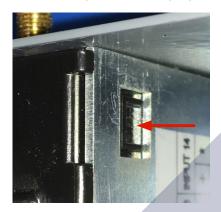
**IMPORTANT:** Put the grounding clip you remove in the following step in a safe place. You will use it at the end of this procedure.

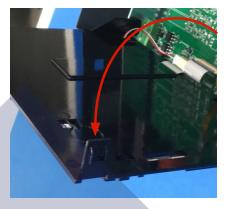
2. Grasp the clip side of the grounding clip with needle nose pliers, and gently pull up until the clip is free. The 2-pin stacker display ground remains in place behind the grounding clip.



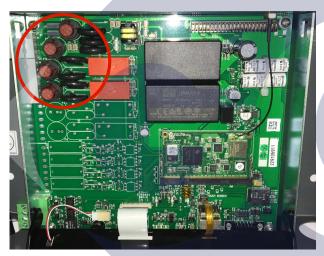


3. Press in one of the side tabs on the display until it is disengaged, and then press in the other side tab. Flip the LCD display down when both side tabs are disengaged.



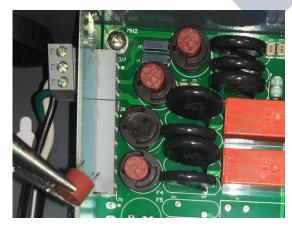


4. Locate the fuses in the upper left corner of the main board.



**IMPORTANT:** The following step shows a fuse being removed with needle nose pliers, but you may be able to remove the fuse with your fingers. In either case, remove the fuse <u>very gently</u>, especially if you need to rock it back and forth. If the wire prongs in the base of the fuse break off in the fuse receptacle, you will have to replace the main board.

5. Grasp the fuse you wish to replace, and very gently pull to remove it.



**IMPORTANT:** The following step, you may be able to install the fuse with your fingers, but you can use needle nose pliers if you prefer. In either case, install the fuse <u>very gently</u>. Make sure the wire prongs in the base of the fuse align with their holes in the fuse receptacle. If the wire prongs in the base of the fuse break off in the fuse receptacle, you will have to replace the main board.

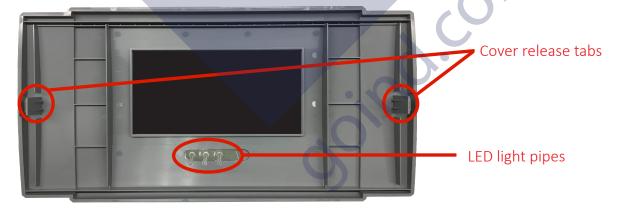
- 6. Install the new fuse. Make sure the wire prongs in the base of the fuse align with their holes in the fuse receptacle.
- 7. Flip the display up, and press in the latches on the display holder so that they click into their holes in the barriers.

The 2-pin stacker protrudes through the hole in the display holder. Insert the grounding clip you removed earlier. This clip has a spring side and a clip side. Grasp the clip side of the grounding clip (you can use needle nose pliers), and seat it in the hole in the display holder where the 2-pin stacker protrudes. The spring side of the clip holds the stacker against the display. You may need to push the grounding clip into the hole to seat it properly.



**IMPORTANT:** In the following step, be careful when you lower the cover onto the ATG in order to avoid damaging the LED light pipes.

8. Lower the cover straight onto the ATG so that the LED light pipes are not bent or broken. Lower the cover until the release tabs click into their holes in the sides of the ATG.



9. Turn on the circuit breaker for the ATG.



