UPGRADING TS-550EVO / TS-5000EVO TO EVO™ 600 / 6000

You can now upgrade a Model TS-550evo or TS-5000evo to a Model EVO600 or EVO6000. It is assumed that the UL/C-UL Listed and/or ATEX/IECEx Certified Liquid Level Gauge, Model TS-550evo or TS-5000evo, is already properly installed.

THESE INSTRUCTIONS COVER TWO POSSIBLE SCENARIOS:

- Modifying Model TS-550evo by using Field Installed Upgrade Kit Part No. EVO-600UPG(-W) to become equivalent to UL/C-UL Listed and/or ATEX/IECEx Certified Model EVO600, or...
- Modifying Model TS-5000evo by using Field Installed Upgrade Kit Part No. EVO-6000UPG(-W) to become equivalent to UL/C-UL Listed and/or ATEX/IECEx Certified Model EVO6000.

WARNINGS/IMPORTANT NOTES

NOTE: Installation/inspection/maintenance/repair/overhaul/reclamation of Model TS-550evo or TS-5000evo in the European Union must be performed by qualified personnel in accordance with the applicable requirements of EN 60079-14, EN 60079-17, and EN 60079-19 in addition to all local codes/regulations.

NOTE: Installation/inspection/maintenance/repair/overhaul/reclamation of Model TS-550evo or TS-5000evo relying upon the IECEx certification must be performed by qualified personnel in accordance with the applicable requirements of IEC 60079-14, IEC 60079-17, and IEC 60079-19 as required by local codes/regulations.

IMPORTANT: It is imperative that this upgrade procedure be performed by a competent individual who is familiar with associated risks involved with the installation, operation, and maintenance of electrical equipment in hazardous (classified) locations. This individual must possess knowledge of local and national electrical codes, and/or ordinances, concerned with hazardous location safety requirements. Electrical installations in hazardous areas have features specifically designed to make them suitable for use in such location, and it is the operator's responsibility to maintain the integrity of those special features.

The operator must ensure that electrical equipment is: installed and operated correctly; monitored on a regular basis; and maintained with due regard to safety.

NOTE: Guidance for equipment inspection and maintenance is provided by EN/ IEC 60079-17: "Electrical Apparatus for explosive gas atmospheres, "Inspection and maintenance of electrical installations in hazardous areas" and should be utilized for the inspection/ maintenance process.

NOTE: Guidance for Ex protected equipment is provided by EN/IEC 60079-14: "Electrical installations design, selection and erection."

⚠ **WARNING**: Ensure all power to Model TS-550evo or TS-5000evo and any associated wiring are disconnected/de-energized. All circuits must be de-energized and locked out prior to starting this procedure for both personal and hazardous locations safety.

IMPORTANT: It is imperative the final installation is fully compliant with the requirements of the final upgraded Model EVO600 or EVO6000, as found in Control Drawing No. 000-228180035 and Installation Guide 228180033, provided with the upgrade kit.

PRE-CHECK

IMPORTANT: If the Field Installed Upgrade Kit Part No. EVO-600UPG(-W) or EVO-6000UPG(-W) is dropped, impacted, or damaged, or if the installed Model TS-550evo or TS-5000evo is damaged or malfunctioning, halt the replacement process and contact Franklin Fueling Systems and/or applicable authorities as appropriate.

REQUIRED TOOLS

- Micrometer or pin gauge or calipers (for measuring gaps)
- Screwdriver, flat 7/32 (5.5 mm)
- Screwdriver, Philips (#2)

MARKINGS/CERTIFICATIONS VERIFICATION

Locate and verify the Model TS-550evo or TS-5000evo and Field Installed Upgrade Kit Part No. EVO-600UPG(-W) or EVO-6000UPG(-W) are marked as follows. (If not marked as follows, halt the procedure and contact Franklin Electric.) Verify:

cULus LISTED 6L79

DEMKO 05 ATEX 0430464X
IECEx UL 05.0013X

- On the Model TS-550evo or TS-5000evo, find the label that contains the UL mark, and verify the UL mark matches that in Fig. 2 (cULus mark with "6L79").
- Verify the following required text: "DEMKO 05 ATEX 0430464X," "IECEx UL 05.0013X."
- Verify the following required text is on a serial number label: "Automatic Tank Gauge" and "TS-550evo" or "TS-5000evo".
- On the packaging of the Field Installed Upgrade Kit Part No. EVO-600UPG(-W) or EVO-6000UPG(-W), find the label that contains the UL mark, and verify that it matches the UL mark in Fig. 2 (cULus mark with "6L79").
- Verify the required text "DEMKO 05 ATEX 0430464X," "IECEx UL 05.0013X."
- Verify the required text "Upgrade Kit" and "EVO-600UPG(-W)" or "EVO-6000UPG(-W)," respectively.

PROCEDURE

1. Download the Model TS-550evo or TS-5000evo configuration setup.
2. Remove power to the Model TS-550evo or TS-5000evo console. Perform all necessary safety steps as required by federal, state and local regulations in relation to working with electrical equipment (lockout / tag out).
3. Remove any cables (e.g. Ethernet, USB, or COM1) connected to the communication ports of the original Model TS-550evo or TS-5000evo Controller Module.
4. Open the console (a), and locate the Model TS-550evo or TS-5000evo Controller Module (b) on the far left side, when facing the unit.
5. Remove the LCD display and printer cables one at a time by gently pulling each cable.
6. Remove the silver, protective ribbon cable bracket by loosening the bracket screw.
7. Loosen the top thumb screw (a), and remove the screw (b) located below the bottom thumb screw. Do not loosen the bottom thumb screw. Gently remove the original Model TS-550evo or TS-5000evo Controller Module (c).
8. Install the new EVO600 or EVO6000 Controller Module by sliding the top of the module into the appropriate guide channel (a). *Make sure the bottom of the faceplate connector engages the slot in the back of the console housing.* Tighten the faceplate cover screw (b), and tighten the thumbscrew (c).
9. Install the ribbon cables in the new EVO600 or EVO6000 Controller Module (a), and reattach the silver ribbon cable bracket (b). *Make sure the ribbon cables going in and out of the bracket do not get pinched when the door is opened and closed.*
10. Use a calibrated measuring device (see "Required Tools" above) to check gaps around the protective ribbon cable bracket and the communication brackets at the bottom of the unit.
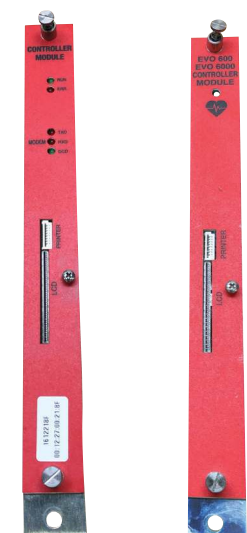   **IMPORTANT**: Gaps must not exceed 1.5 mm.
11. Reinstall cables to the bottom of the module.
    NOTE: If the **EVO-600UPG-W / EVO-6000UPG-W** is being installed, screw the antenna into the antenna connector on the Wi-Fi antenna port.
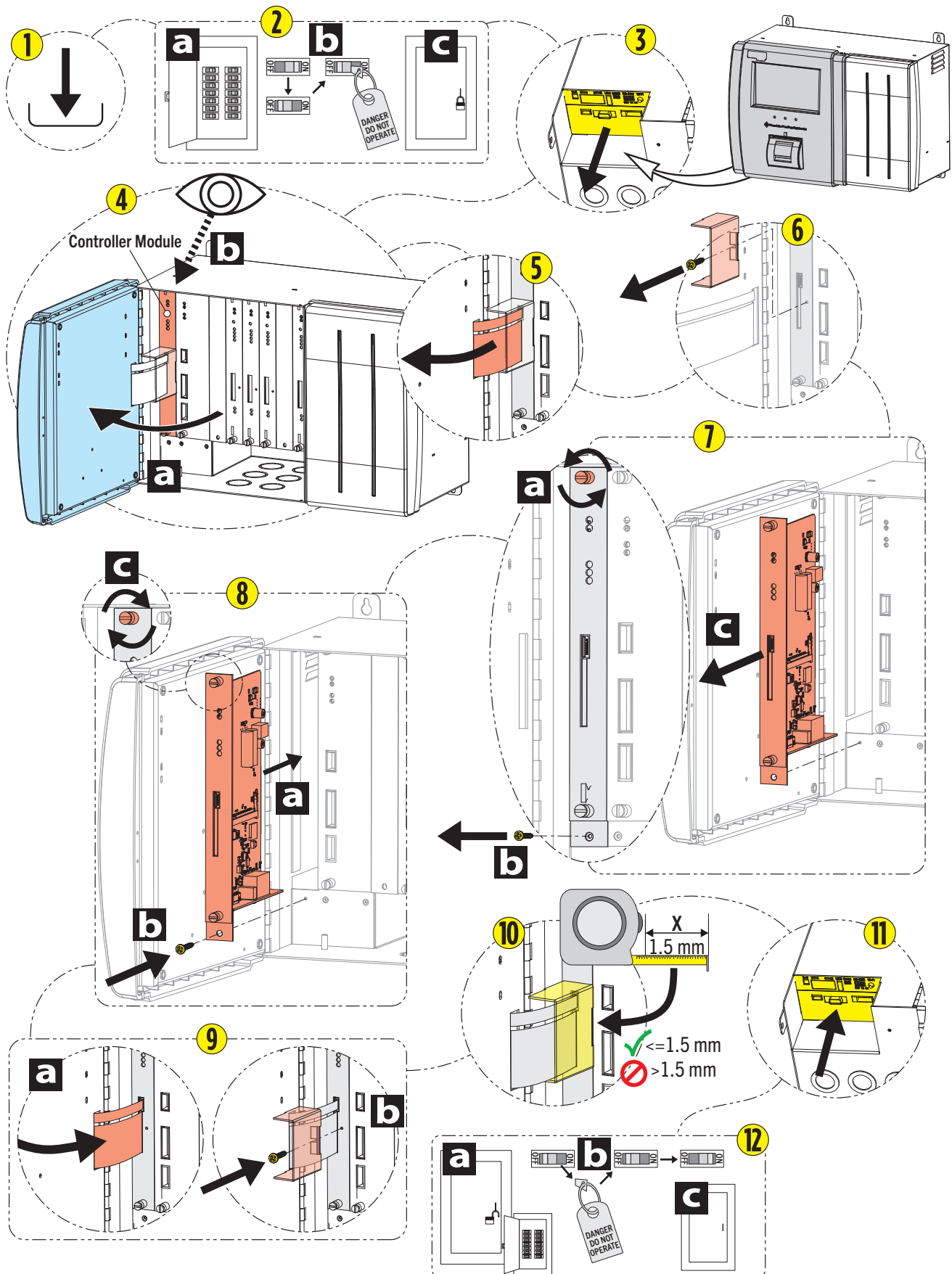12. Reverse the Lock Out/Tag Out procedure, and turn on power to the console.

CONTROLLER MODULES

TS-550evo / TS-5000evo | EVO™ 600 / EVO™ 6000

Controller Module

DANGER DO NOT OPERATE

X
1.5 mm

✓ <=1.5 mm
⊘ >1.5 mm

DANGER DO NOT OPERATE

13. Replace the jewel sticker on the upper left corner of the console's front cover.

14. Install the new serial number label on the side of the console next to the original serial number label (📍). *Do not cover the previous labels.*

15. Upload the configuration downloaded in step 1 and make programming adjustments as needed.

16. If Electronic Line Leak Detection is registered and lines were learned on the Model TS-550evo or TS-5000evo, the learn parameters may be transferred to the EVO™ 600/6000. To import learn parameters for a line, access the Web Browser Interface and navigate to Monitoring > Lines or access the LCD Display and navigate to Quick Jump Menu > Lines > Line # > Control and press the **Import Legacy Learn Parameters** button (📍).