TLS2 to TLS2P

Upgrade Guide

VEEDER-ROOT

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Contact TLS Systems Technical Support for additional troubleshooting information at 800-323-1799.

DAMAGE CLAIMS / LOST EQUIPMENT

Thoroughly examine all components and units as soon as they are received. If any cartons are damaged or missing, write a complete and detailed description of the damage or shortage on the face of the freight bill. The carrier's agent must verify the inspection and sign the description. Refuse only the damaged product, not the entire shipment.

Veeder-Root must be notified of any damages and/or shortages within 30 days of receipt of the shipment, as stated in our Terms and Conditions.

VEEDER-ROOT'S PREFERRED CARRIER

1. Contact Veeder-Root Customer Service at 800-873-3313 with the specific part numbers and quantities that were missing or received damaged.

2. Fax signed Bill of Lading (BOL) to Veeder-Root Customer Service at 800-234-5350.

3. Veeder-Root will file the claim with the carrier and replace the damaged/missing product at no charge to the customer. Customer Service will work with production facility to have the replacement product shipped as soon as possible.

CUSTOMER'S PREFERRED CARRIER

1. It is the customer's responsibility to file a claim with their carrier.

2. Customer may submit a replacement purchase order. Customer is responsible for all charges and freight associated with replacement order. Customer Service will work with production facility to have the replacement product shipped as soon as possible.

3. If "lost" equipment is delivered at a later date and is not needed, Veeder-Root will allow a Return to Stock without a restocking fee.

4. Veeder-Root will NOT be responsible for any compensation when a customer chooses their own carrier.

RETURN SHIPPING

For the parts return procedure, please follow the appropriate instructions in the "General Returned Goods Policy" pages in the "Policies and Literature" section of the Veeder-Root **North American Environmental Products** price list. Veeder-Root will not accept any return product without a Return Goods Authorization (RGA) number clearly printed on the outside of the package.

Introduction

Installation of Upgrade Kit

Figures

Introduction

This manual contains installation procedures for the TLS2 to TLS2P upgrade.

Contractor Certification Requirements

Veeder-Root requires the following minimum training certifications for contractors who will install and setup the equipment discussed in this manual:

Installer (Level 1) Certification: Contractors holding valid Installer Certification are approved to perform wiring and conduit routing; equipment mounting; probe, sensor and carbon canister vapor polisher installation; wireless equipment installation; tank and line preparation; and line leak detector installation.

TLS-350 Technician (Level 2/3 or 4) Certification: Contractors holding valid TLS-350 Technician Certifications are approved to perform installation checkout, startup, programming and operations training, system tests, troubleshooting and servicing for all Veeder-Root TLS-300 or TLS-350 Series Tank Monitoring Systems, including Line Leak Detection and associated accessories.

Warranty Registrations may only be submitted by selected distributors.

Related Manuals

577013-959   TLS2P Site Prep and Installation Manual

577013-960   TLS2P Setup & Operators Manual

Safety Precautions

The following safety symbols are used in this manual to alert you to important safety hazards and precautions.

	EXPLOSIVE Fuels and their vapors are extremely explosive if ignited.		**FLAMMABLE** Fuels and their vapors are extremely flammable.
	ELECTRICITY High voltage exists in, and is supplied to, the device. A potential shock hazard exists.		**TURN ELECTICAL POWER OFF** Live power to a device creates a potential shock hazard. Turn Off electrical power to the device and associated accessories when servicing the unit.
	WARNING Heed the adjacent instructions to avoid damage to equipment, property, environment or personal injury.		**STATIC SENSITIVE COMPONENTS** Wear grounded anti-static wrist strap before handling the printed circuit board.
	READ ALL RELATED MANUALS Knowledge of all related procedures before you begin work is important. Read and understand all manuals thoroughly. If you do not understand a procedure, ask someone who does.		

⚠ WARNING

FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS AND SAFETY PRECAUTIONS COULD CAUSE DAMAGE TO PROPERTY, ENVIRONMENT, RESULTING IN SERIOUS INJURY OR DEATH.

You are working with a device in which potentially lethal voltages may be present.

Death or injury may result if safety precautions are not followed.

1. **Turn off, tag, and lockout power to the console before installing this kit.**
2. **Read all instructions and symbol warnings.**

Installation of Upgrade Kit

This section describes the field upgrade of a TLS2 into a TLS2P Console.

KIT REQUIRED

• TLS2 ᴛᴏ TLS2P Upgrade kit - P/N 330020-662

SPECIAL TOOLS REQUIRED (NOT IN KIT)

• Torx drive screwdrivers to fit #T-10 and #T-15 screws
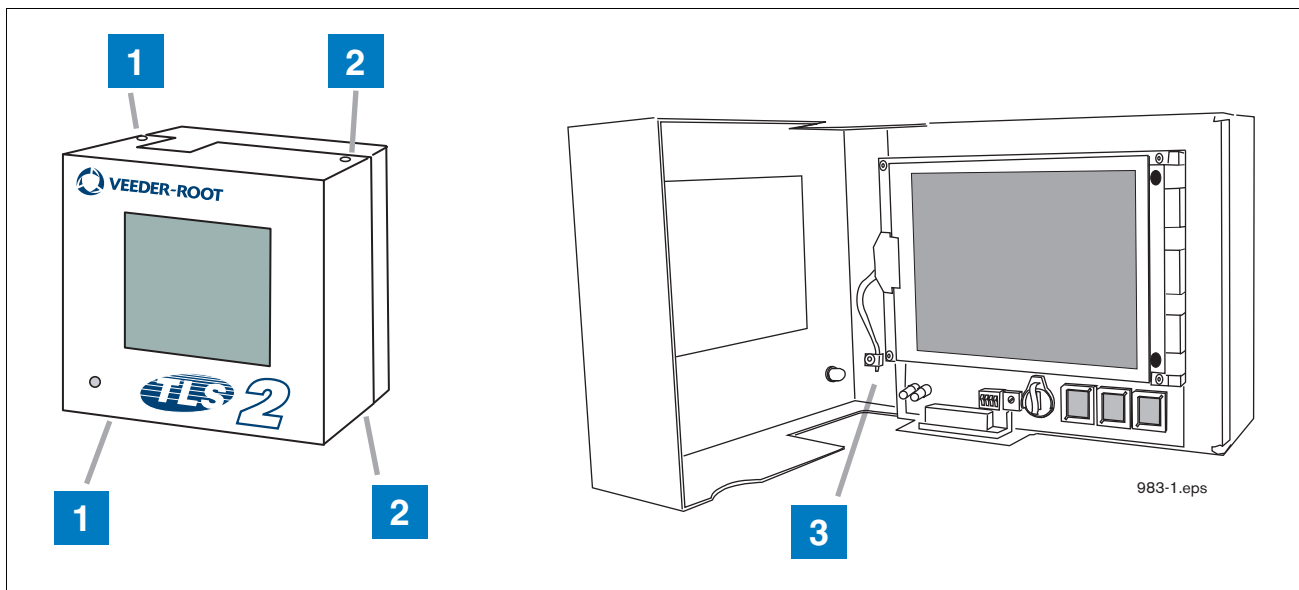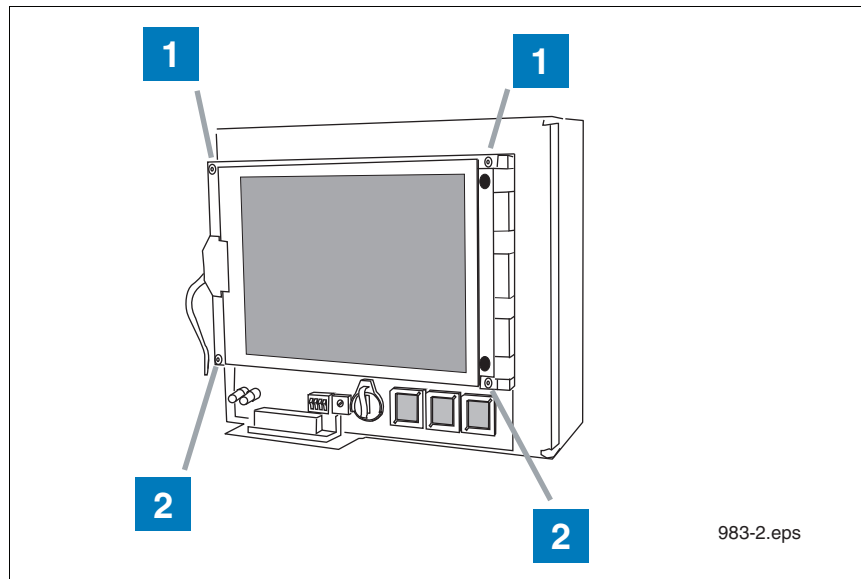
PROCEDURE

Figure 1.   Removing TLS2 Console Door

Shut off, tag, and lockout power to the TLS2 Console.

1   Remove and retain the top and bottom T-15 shoulder screws and washers from the right side of the console door (item 2 in Figure 1). Swing the door to the left.

2   Loosen the T-15 screw in the door grounding saddle clamp and remove the ground wire (item 3 in Figure 1).

Figure 2.   Disconnecting the display assembly from the CPU board

1   Remove and retain the four T-10 screws, spacers and washers (items1 and 2 in Figure 2) attaching the display to the CPU board. Retain the two shorter screws (0.5" long - item 2 in Figure 2) and all of the washers. Carefully remove the last screw while holding the display assembly. Lower the display until it is supported by its two cables.
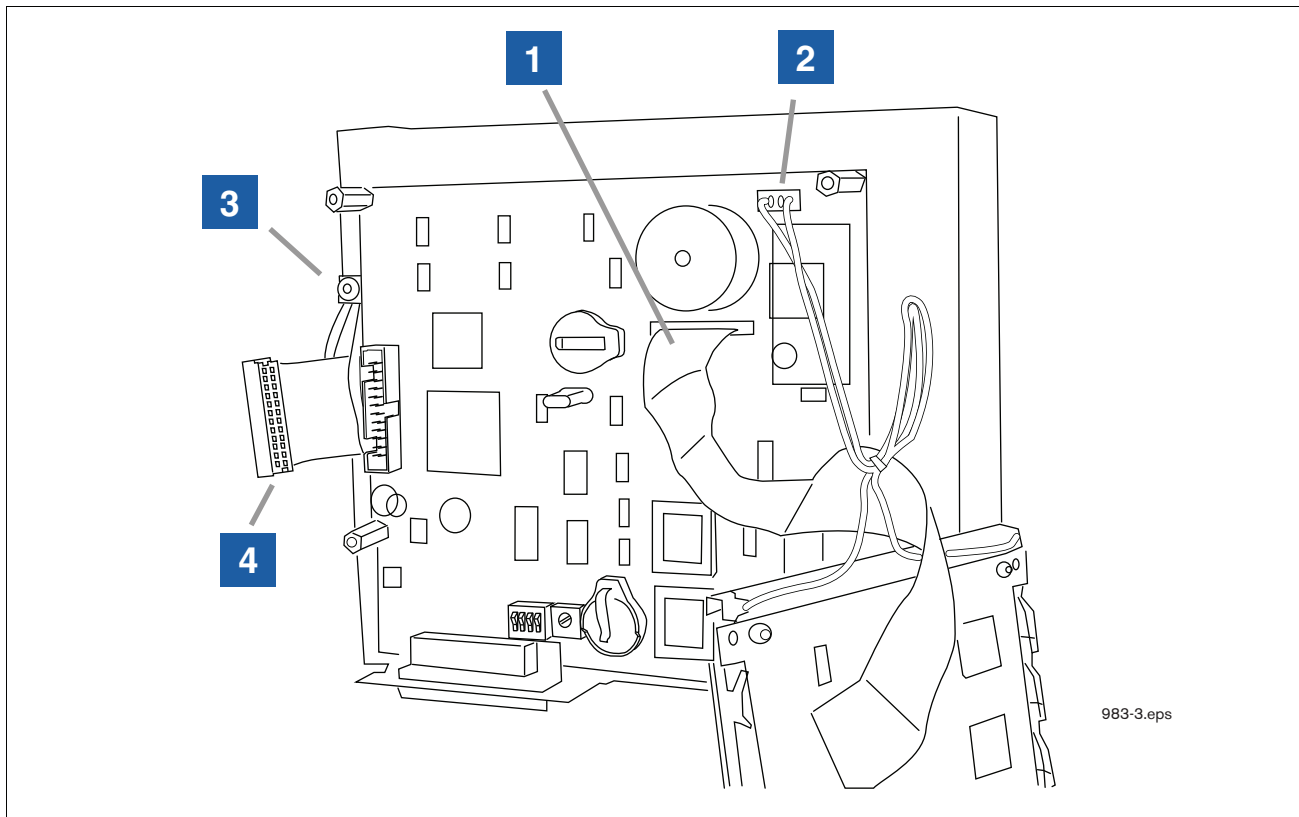
Figure 3.   Removing the display

1   Hold the display and pull up the ribbon cable from its connector on the CPU board (item 1 in Figure 3) and remove the 2-wire plug (item 2 in Figure 3) at the top of the CPU board. Carefully set the display aside.

2   Using the T-15 torx wrench, remove the ground wire saddle clamp on the inner door (item 3 in Figure 3).

3   Remove the ribbon cable from its connector on the edge of the CPU board (item 4 in Figure 3). Notice the orientation of the ribbon cable in the connector as it will connect to the new CPU board in the same way.

4   Remove and retain the top and bottom T-15 screws and washers (item 1 in Figure 1) from the left side of the console door. Remove and discard the door.

5   While pushing the ground wire and ribbon cable through the slot in the inner door, remove the CPU board/inner door assembly and discard.
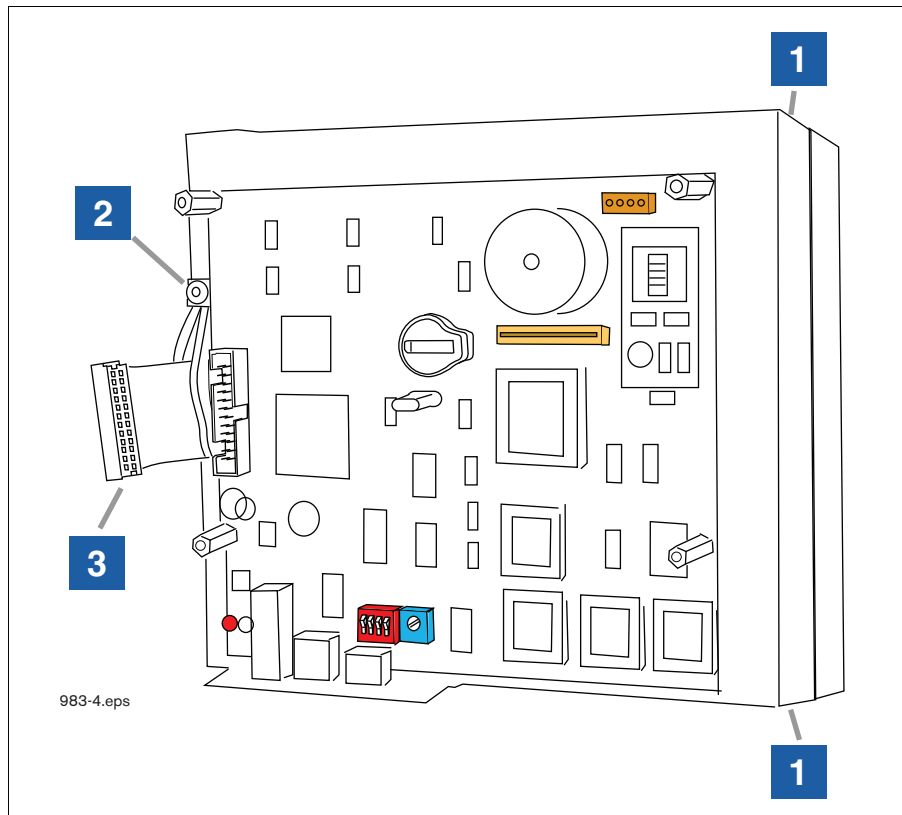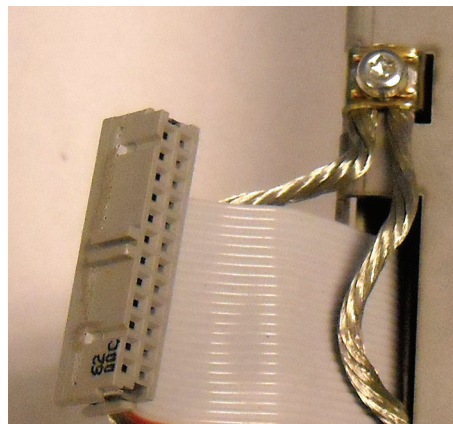
Figure 4.   Attaching the new CPU board/inner door assembly to the console

1   Get the new TLS2P CPU board/inner door assembly from the kit. Get the two T-15 torx shoulder screws you removed from the right side of the door earlier.

2   Get the static protecting wrist strap from the kit and slip the looped end around one wrist and connect the other end to side of the console.

3   Remove the CPU board/inner door assembly from its packing and push the ground cable and ribbon cable through the right side opening in the inner door assembly and place the inner door assembly on the console and screw in the two right-side T-15 torx shoulder screws (item 1 in Figure 4), snug but not tight. Reattach the grounding strap to the bare metal on the top of the inner door.

4   Loosen the ground wire saddle clamp on the inner door (item 2 in Figure 4) and loop the ground wire through it and tighten securely (see photo at right). The other end of the ground wire will attach to the new door's grounding saddle clamp.

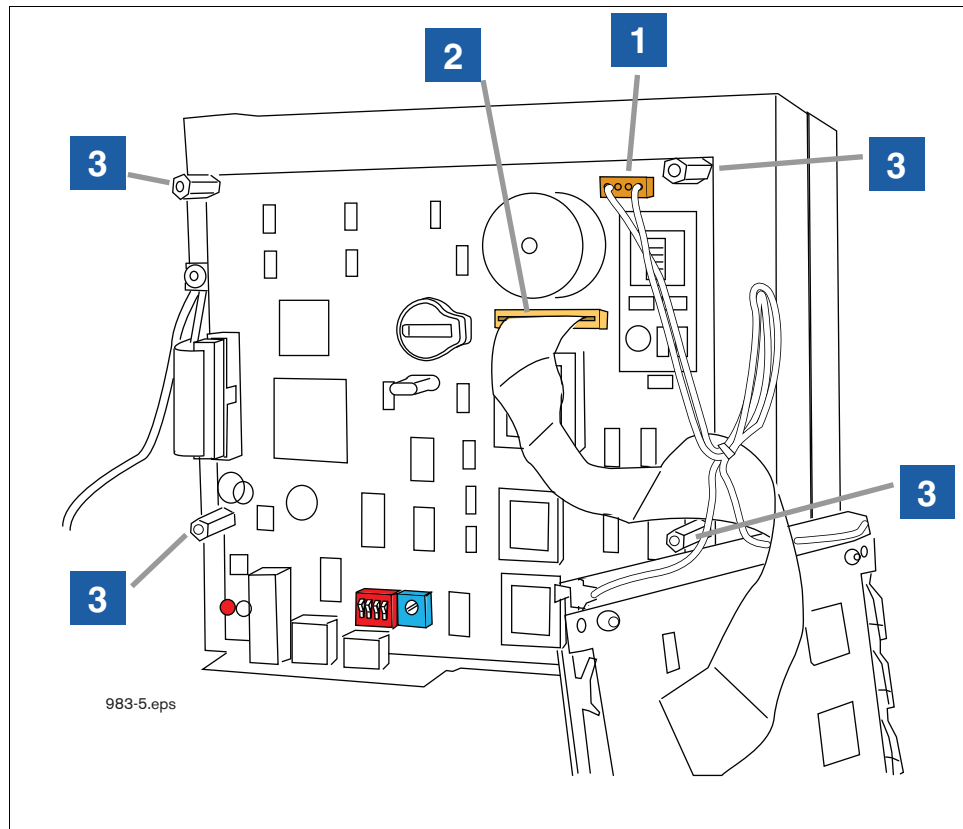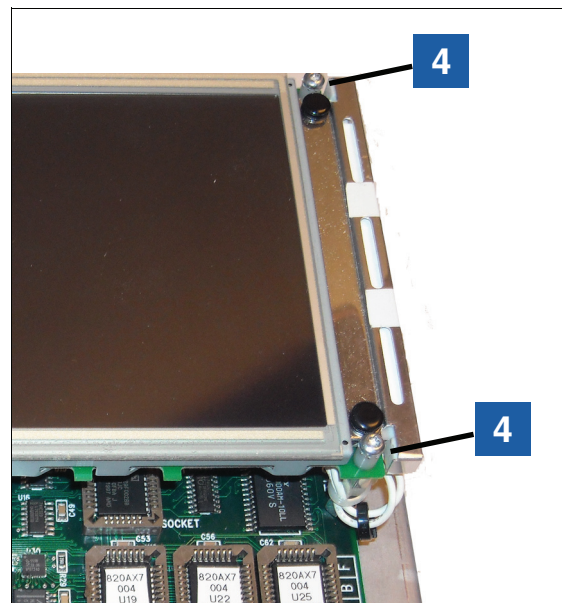5   Connect the ribbon cable (item 3 in Figure 4) to the connector on the left side of the new CPU board.

Figure 5. Attaching the display to the CPU board

1   Get the four T-10 screws, spacers and washers you saved when removing the display from the old CPU board (items 1 and 2 in Figure 2).

2   Get the display and attach its 2-wire cable plug to the connector on the CPU board (item 1 in Figure 5).

3   Push the display's ribbon cable into its connector on the CPU board (item 2 in Figure 5).

4   Position the display over the standoffs (item 3 in Figure 5) and replace the 4 screws and 2 spacers (used under right side display attaching screws only - see plastic spacers (item 4 in photo at right).
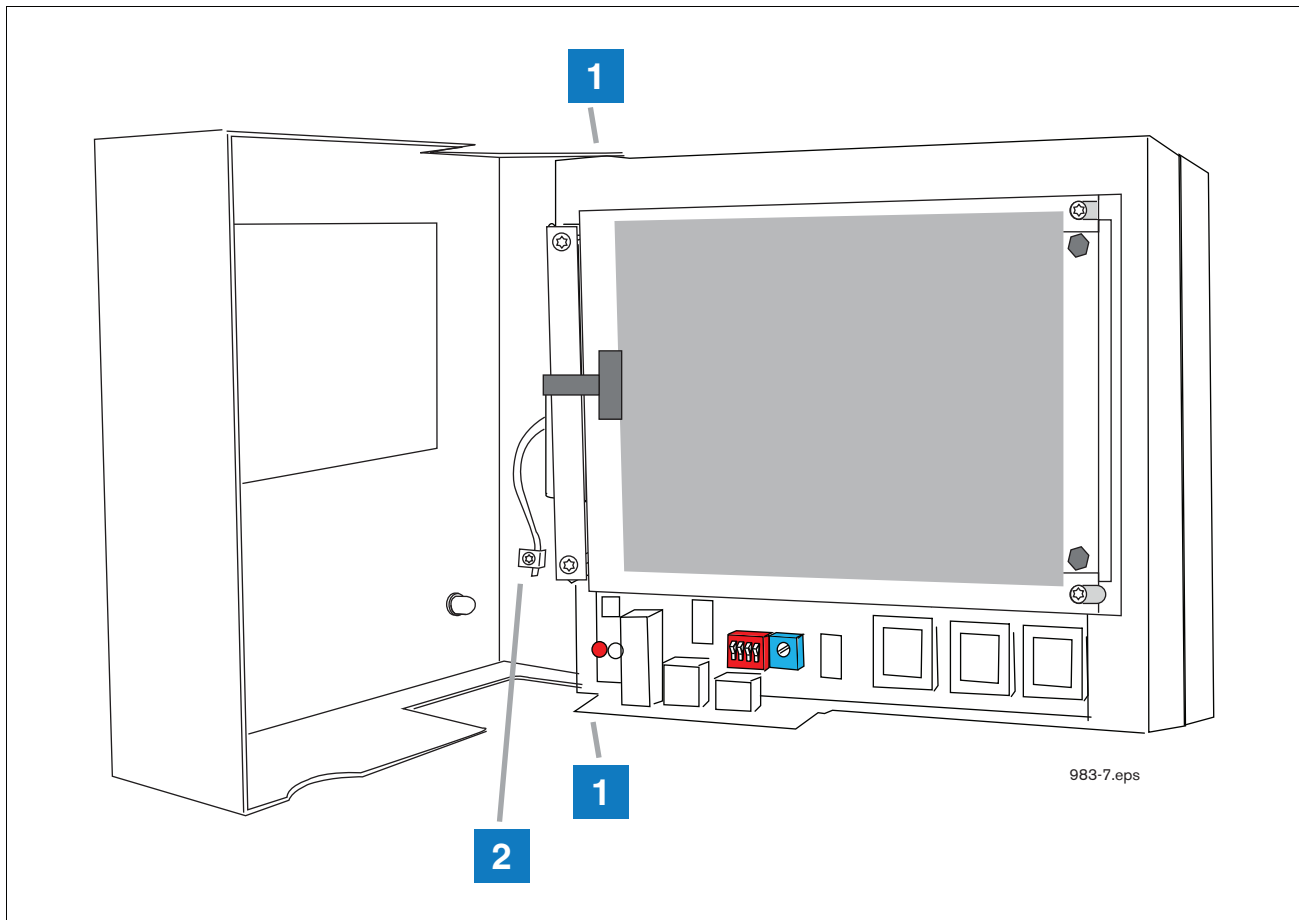
Figure 6.   Attaching the new door to the TLS2P console

1   Get the two T-15 torx shoulder screws and the new
    TLS2P door.

2   Position the door over the left holes in the top and
    bottom of the console and screw in the two shoulder
    screws (item 1 in Figure 6).

3   Loosen the grounding clamp (item 2 in Figure 6) in the
    door and push the grounding strap from the console
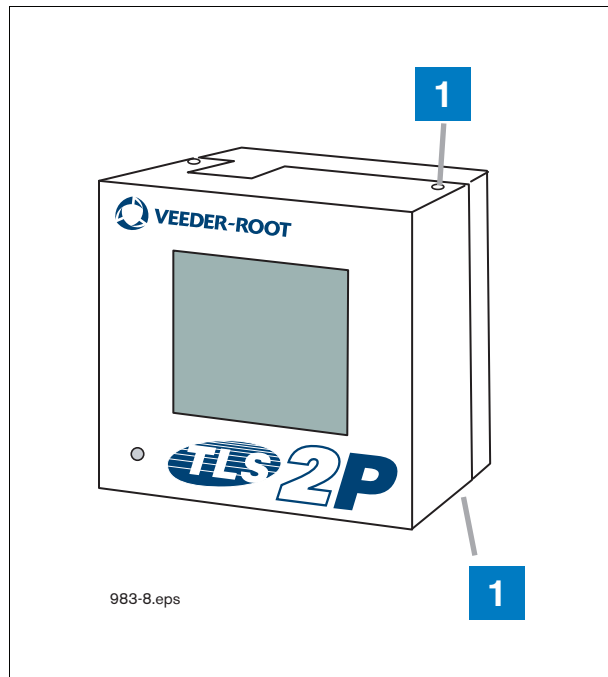   under the saddle clamp and tighten the screw.

Figure 7.   Securing outer door of TLS2P console

1   Remove the static preventing grounding strap from the inner door. Remove the two right T-15 torx screws holding on the inner door (item 1 Figure 6), close the new outer door, reinsert the two shoulder screws in the two holes in the door and tighten securely.

2   Restore power to the TLS2P console and refer to manual 577013-960 for setup procedures.

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