

TLS-3XX Series Consoles

Display Replacement Guide

Notice

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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

Contractor Certification Requirements	1
Safety Precautions	1
Before You Begin	2

Display Replacement Procedure.....	3
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Figures

Figure 1.	Removing the Display and Keyboard Cable Connectors	3
Figure 2.	Top Display/Keyboard Cover Securing Tabs	4
Figure 3.	Display/Keyboard Cover Wiring Input Label Positions (330636-000 Labels Shown)	4
Figure 4.	Removing Keyboard	5
Figure 5.	Installing Keyboard In Replacement Cover	5

Tables

Table 1.-	Display Replacement Kit P/N 330020-816	2
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Introduction

This manual contains instructions for replacing the right front door LCD display in the following consoles:

- TLS-300 (all versions)
- TLS-350 (all versions)
- EMC (all versions)
- ProPlus and ProMax

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 Certification (Level 1): 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.

Technician Certification (Level 2/3): Contractors holding valid Technician Certifications are approved to perform installation checkout, startup, programming and operations training, system tests, troubleshooting and servicing for all Veeder-Root Series Tank Monitoring Systems, including Line Leak Detection. In addition, Contractors with the following sub-certification designations are approved to perform installation checkout, startup, programming, system tests, troubleshooting, service techniques and operations training on the designated system.

- Wireless 2
- Tall Tank

VR Vapor Products Certification: Contractors holding a certification with the following designations are approved to perform installation checkout, startup, programming, system tests, troubleshooting, service techniques and operations training on the designated system.

- ISD – In Station Diagnostics
- PMC – Pressure Management Control
- CCVP - Veeder-Root Vapor Polisher
- Wireless – ISD/PMC Wireless
- A current Veeder-Root Technician Certification is a prerequisite for the VR Vapor Products course.

Warranty Registrations may only be submitted by selected Distributors.

Safety Precautions

The following safety symbols may be used throughout this manual to alert you to important safety hazards and precautions.




ELECTRICITY

High voltage exists in, and is supplied to, the device. A potential shock hazard exists.




TURN POWER OFF


Live power to a device creates a potential shock hazard. Turn Off 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.



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**



This system operates on 115 or 230 Vac power. Serious injury or death from electrical shock could occur if the power ON/OFF warnings in this manual are not heeded.

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

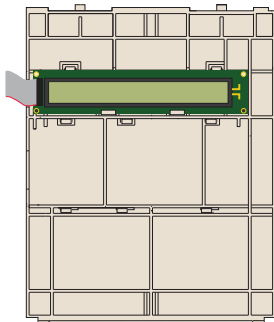
- 1. Read and follow all instructions in this manual, including all safety warnings.**
- 2. Remove rings from hands, metal watch bands and bracelets, and loose hanging neck jewelry before performing these procedures.**
- 3. Do not modify or use service parts other than those provided by Veeder-Root.**

Before You Begin

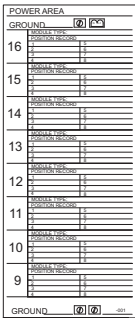
Table 1 lists the replacement parts needed for the display replacement instructions described in this manual.

Table 1. Display Replacement Kit P/N 330020-816

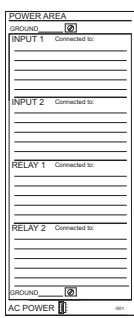
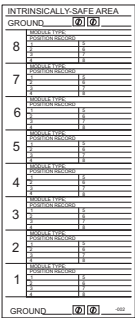
Item	P/N	Description (Illustrations Below)	Qty.
1	329326-001	LCD Display	1
2	329371-002	Plastic Cover	1
3	330617-000	TLS-350 Series, EMC, ProMax And Proplus Consoles - Wiring Input Labels	1 set
4	330636-000	TLS-300 Series And EMC Basic Consoles - Wiring Input Labels	1 set
5	577014-101	Manual	1



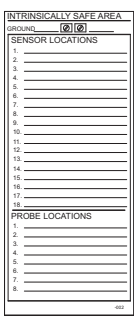
329326-001 LCD Display
329371-002 Plastic Cover



330617-000 Label Set



330636-000 Label Set

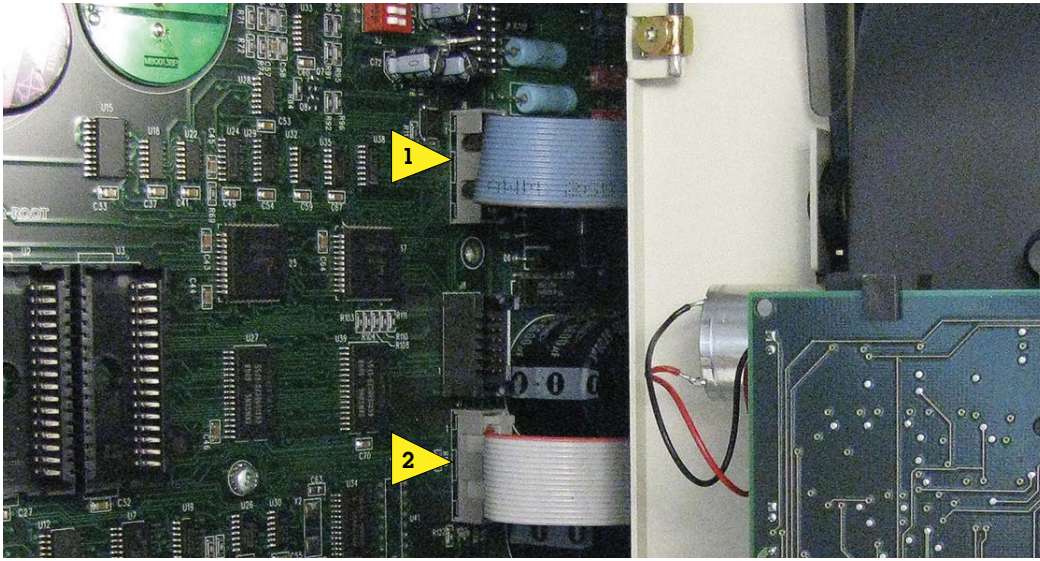


577014-101 Manual

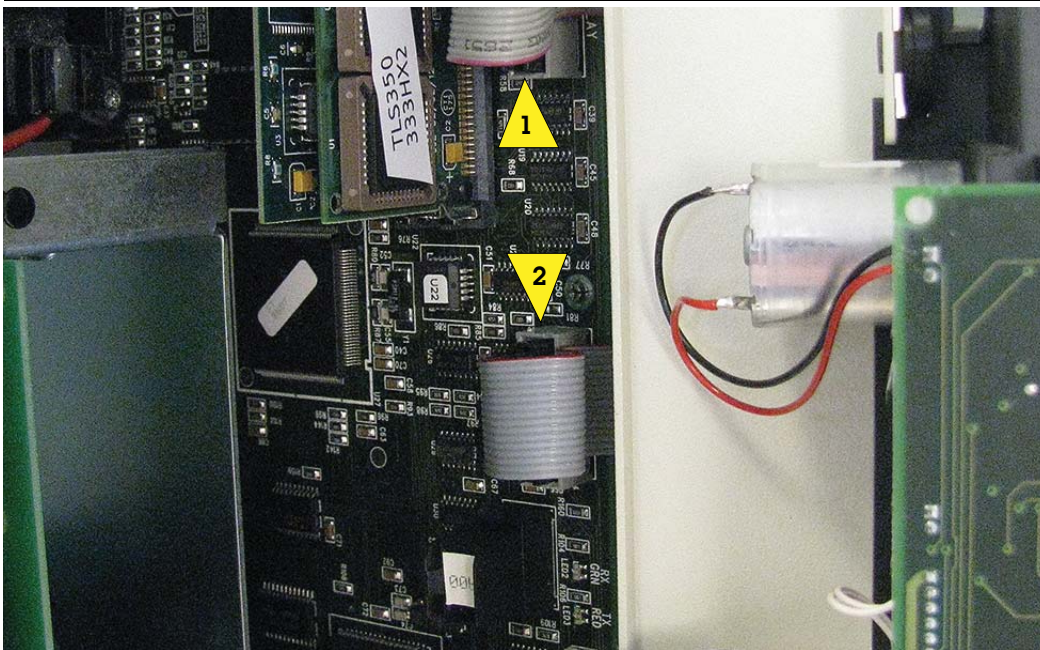
Display Replacement Procedure



1. Switch off, tag and lockout power to the console. Open the two front doors of the console. Disconnect the Display (1 upper) and Keyboard (2 lower) cable connectors from the consoles CPU board as shown in Figure 1.



TLS-300 and EMC Basic Console Cable Connectors



TLS-350, EMC, ProMax and ProPlus Console Cable Connectors

Figure 1. Removing the Display and Keyboard Cable Connectors

2. Notice the two small slots in the top of the display/keyboard door.
3. Facing the inside of the display door, insert a flat blade screwdriver between the top of the plastic display/keyboard cover and next to one of the two tabs of the cover that seat in the door's slots (see Figure 2). Gently pry down with the screwdriver blade near the tab to free it from the slot in the door, then repeat this procedure to free the second tab. Firmly rotate the cover away from the door to free its bottom tabs from the bottom door slots. Feed the two cables between the door(s) and remove the cover from the console and set it aside.

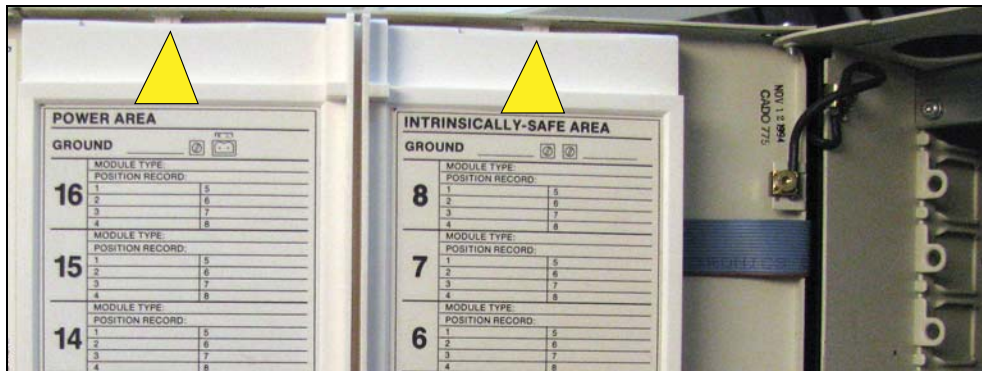


Figure 2. Top Display/Keyboard Cover Securing Tabs

4. Get the new display/cover assembly from kit. Get the two blank wiring input labels from the kit, P/N 330636-000 for a TLS-300 or EMC console, or P/N 330617-000 for a TLS-350 Series, EMC, ProMax or ProPlus console.
5. Remove the backing from the Power Area input label and press it into the left partition (1) on the back of the cover. Remove the backing from the Intrinsically-Safe Area input label and press it into the right partition (2) on the back of the cover (see Figure 3).

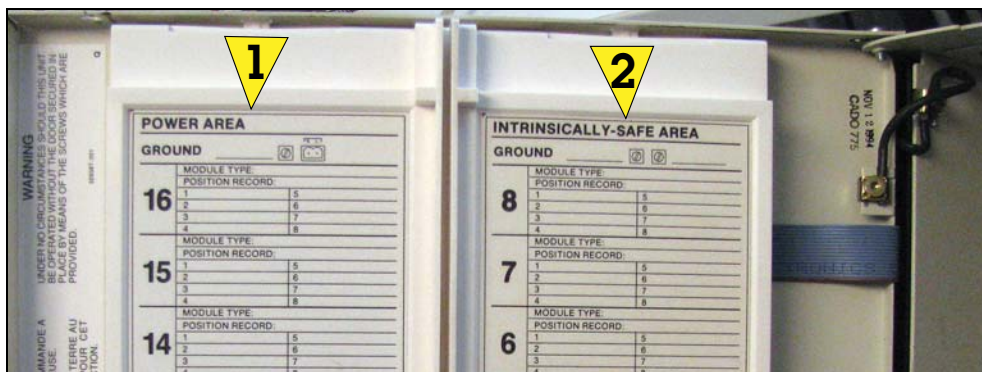


Figure 3. Display/Keyboard Cover Wiring Input Label Positions (330636-000 Labels Shown)



6. With the old and new display/keyboard covers side by side, copy the wiring input notations from the old display/keyboard cover labels onto the new cover's wiring input labels. **Be especially careful to accurately copy the wiring input notations from the old display/keyboard cover to the replacement cover!**

7. Flip the old display/keyboard assembly over (see Figure 4). The keyboard is held in place by three notched sections (item 1) along its top edge and three flex snaps (item 2) along its lower edge. Remove the keyboard assembly from the old display's plastic cover by pressing down on the three snaps below the keyboard assembly one at a time, while rotating the bottom edge of the keyboard away from the cover (see Figure 4).

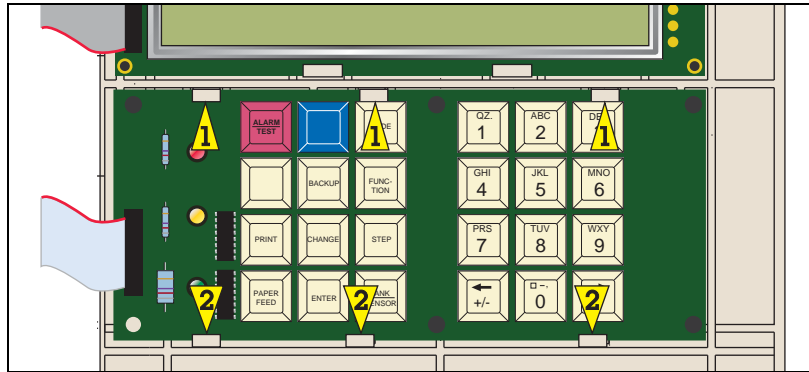


Figure 4. Removing Keyboard

8. Get the new replacement display and cover assembly from the kit and notice the keyboard mounting position is the same as in the cover being replaced. Slide the keyboard's top edge up and into the three notched sections (1) in the new cover then rotate the bottom edge down until the three snaps (item 2) click over the board as shown in Figure 5.

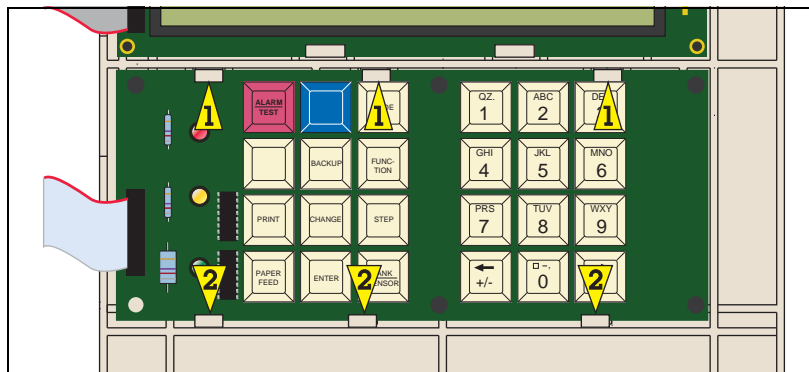


Figure 5. Installing Keyboard In Replacement Cover

9. Notice the display/keyboard plastic cover has two tabs on along its bottom edge in addition to the two along its top edge, and that there are also two slots in the bottom as well as the top flange of the console's right door.
10. With the keypad and display facing the inside of the console right door, lower the bottom edge of the display/keyboard plastic cover onto the bottom flange of the console door until the two bottom tabs of the cover seat in the two bottom door slots, then rotate the top of the cover against the door until the two top tabs snap into the two slots in the top flange of the door. A screwdriver blade may be needed to depress the top of the cover so the tab(s) can slide under the door's flange and into the slots.
11. Thread the two cables between the doors and into the left side of the console. Reconnect the display and keyboard cable plugs to their respective connectors on the CPU board (ref. Step 1).
12. Close and secure both doors. Reapply power to the console.



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