

Zone Terminal

Tools Needed

- flat-head screwdriver
- needle-nose pliers
- drill

Physical Dimensions

The ZT unit measures 6.88 x 7.31 x 1.52 inch (175 x 186 x 39 mm), and weighs 1.25 lb (0.57 kg). A coiled, 6-pin telephone-type cord is included. The cord is 17 inches long and stretches to 5 feet. The ZT contains a 5-year lithium battery, factory installed.

The Wall Mount Base with ZT measures 6.94 x 7.44 x 2.00 (176 x 189 x 51 mm).

The Utility Mount Base with ZT measures 6.94 x 7.44 x 6.00 (176 x 189 x 152 mm) when mounted on the ENC100.

Environmental Information

Installation of the Zone Terminal must meet the following standards:

- Ambient operating conditions: 32 to 122°F (0 to 50°C)
- 10 to 90% non-condensing relative humidity
- 86°F (30°C) maximum dew point

Notes: Do not mount the Zone Terminal on a vibrating surface.

The atmosphere must be free of corrosive chemical vapors that may damage electronic equipment.

Cleaning of ZT Surfaces

- Use mild soap and water with a soft cloth to wipe surfaces of the ZT clean.
- **Do not** immerse the ZT unit in water.
- Wipe clean with pure isopropyl alcohol, if surface becomes excessively dirty.

Installing the Inserts

Before you mount the ZT or connect it to a controller, the clear plastic insert that describes the displayed values must be in place.

1. To open the ZT, lay the ZT flat and press the white tab on the top of the ZT while pulling the front cover towards you.
2. Align the insert to the lower left front of the ZT.
3. Press the pieces back together.

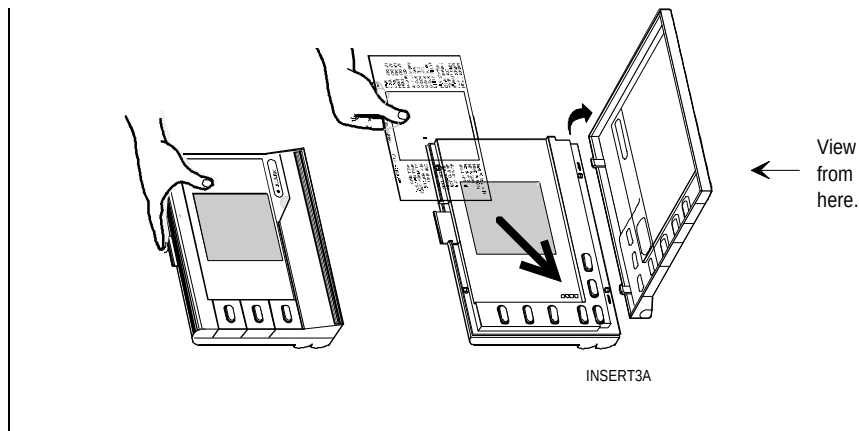


Figure 1: Template Installation

Connecting the Zone Terminal

Prior to final connection, the ZT must be downloaded using the *ZT PRO* software tool which is part of the *HVAC PRO Rev. 3.0 or later*. Refer to the *HVAC PRO for Windows User's Manual, Zone Terminal* section.

Wiring Considerations

If the ZT is connected 50 feet or less from the controller, install 24 AWG (6-conductor) telephone cable between the controller and the ZT.

If the ZT is connected up to 500 feet from the controller, install 18 AWG wire. The ZT requires 24 VAC, Common, and Zone Bus. The Zone Bus and Common should be twisted pair.

The ZT can be connected directly to the:

- Air Handling Unit (AHU)
- Function Module Kit (FMK)
- Relay Kit (RLY) through a CBLCON-0
- Actuator (M100C)
- Zone Sensor (TE-6400)
- Humidity Sensor (HE-6400)

Figure 2 shows you where to locate the telephone-style plugs in these components.

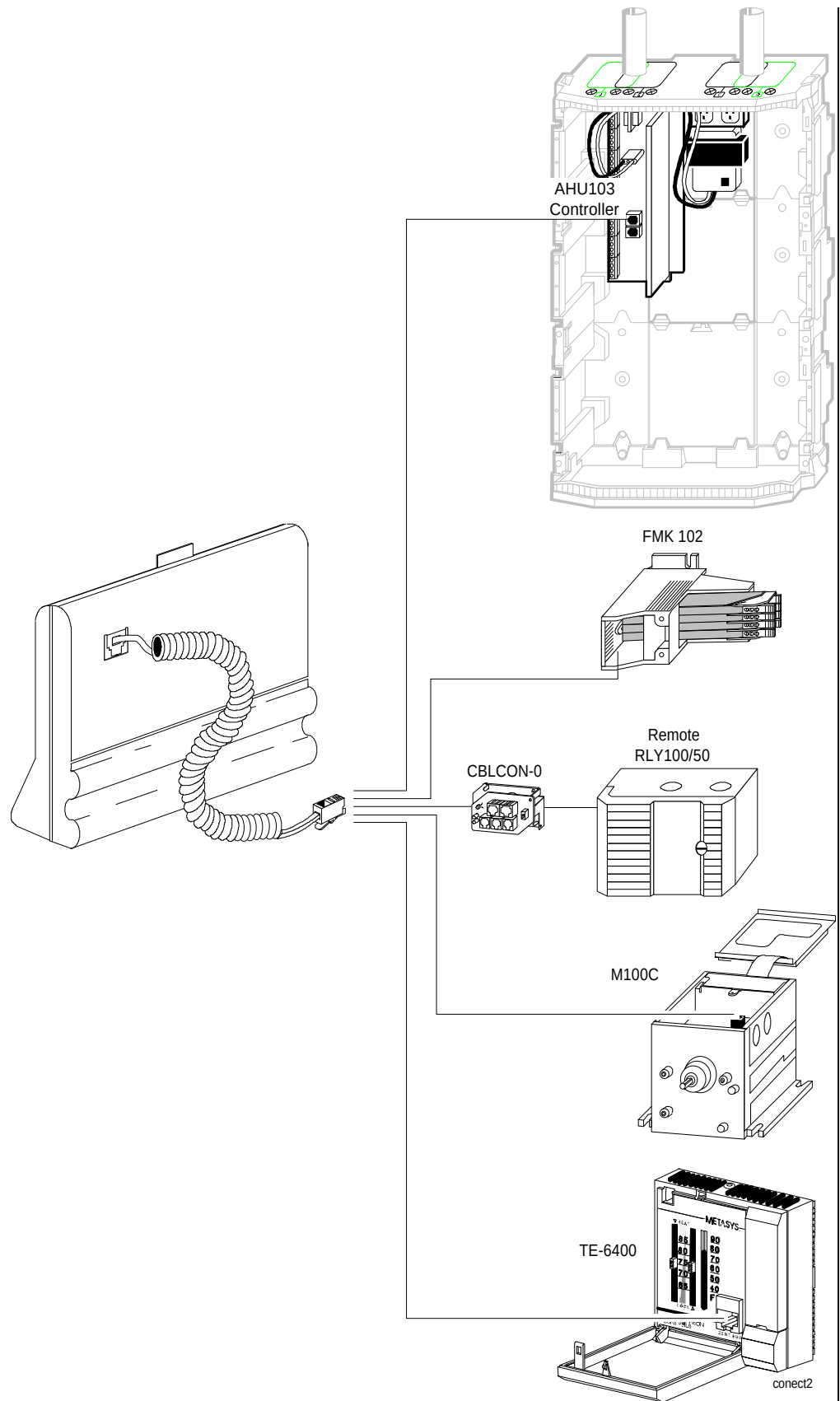


Figure 2: Connecting the Zone Terminal

Other remote connections include permanently connecting to a UNT or VAV using the CBLCON-0 and TE-6400 Zone Sensor (Figure 3).

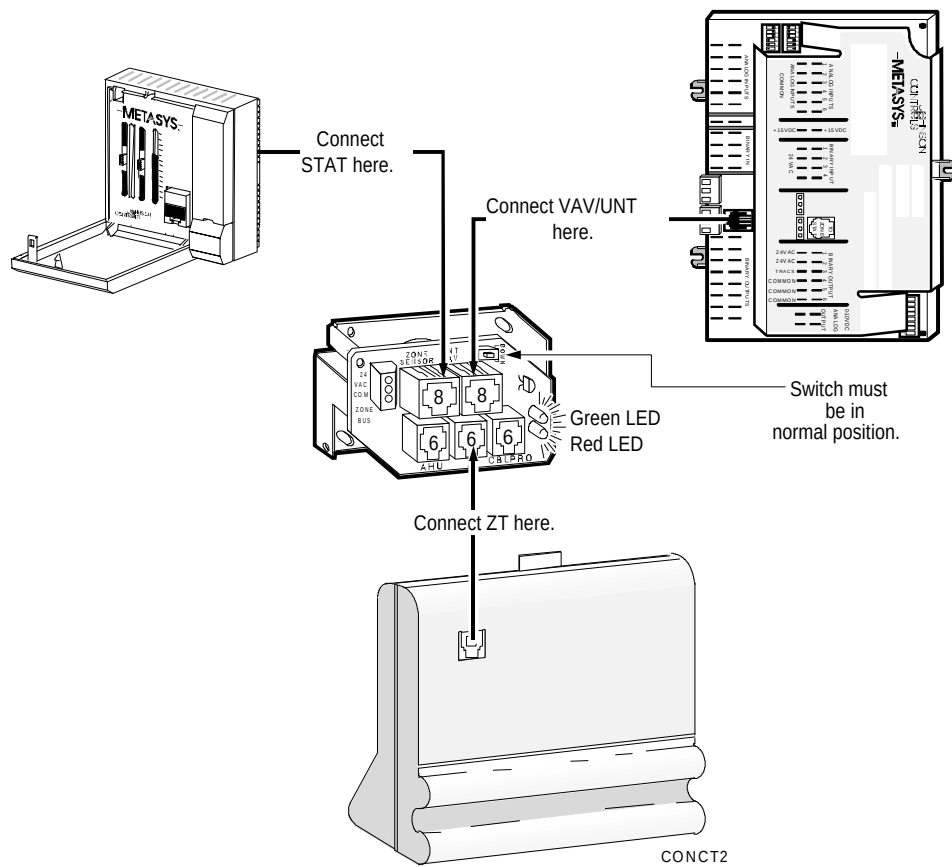


Figure 3: Connecting Remote ZT to UNT/VAV with CBLCON-0 and Zone Sensor

The Zone Terminal can be connected directly to a VAV/UNT through a Zone Sensor without the use of the CBLCON-0 (Figure 4). This is a portable application.

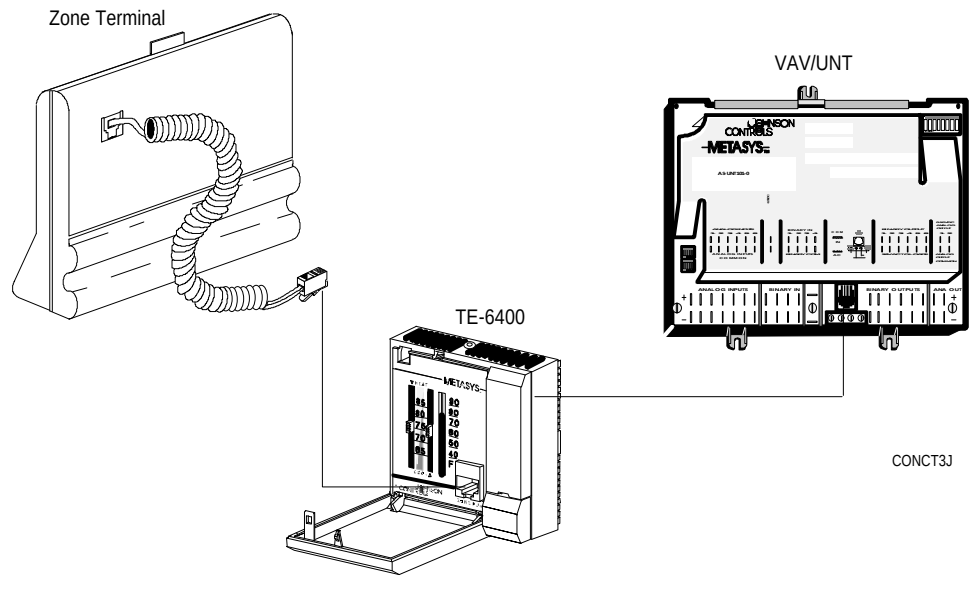


Figure 4: Remote Connect ZT to VAV/UNT through the Zone Sensor

! CAUTION: The ZT must be plugged into a **6-pin** telephone-type jack. Plugging the ZT into an 8-pin jack destroys the 8-pin receptacle and prevents the ZT from powering up.

**Physical
Installation of
Wall Mountings
and Bases**

**Enclosure Kit
and Base
Installation**

For optimum viewing, mount the top of the ZT 65 inches from the floor.

Before attaching the Enclosure Kit (ENC100-0) to the wall, remove the top or bottom rectangular knockouts with a needle-nose pliers, depending on the end through which the wires will run.

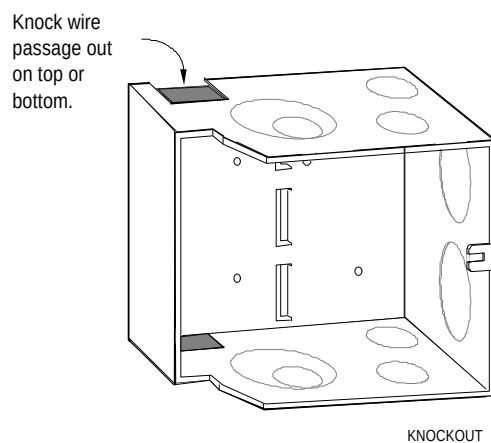


Figure 5: Remove Knockouts

Attach the Enclosure Kit (ENC100-0) to a flat surface or wall for direct connection of the ZT to an application specific controller. Pull wire through before attaching standoffs and screws for the plastic base.

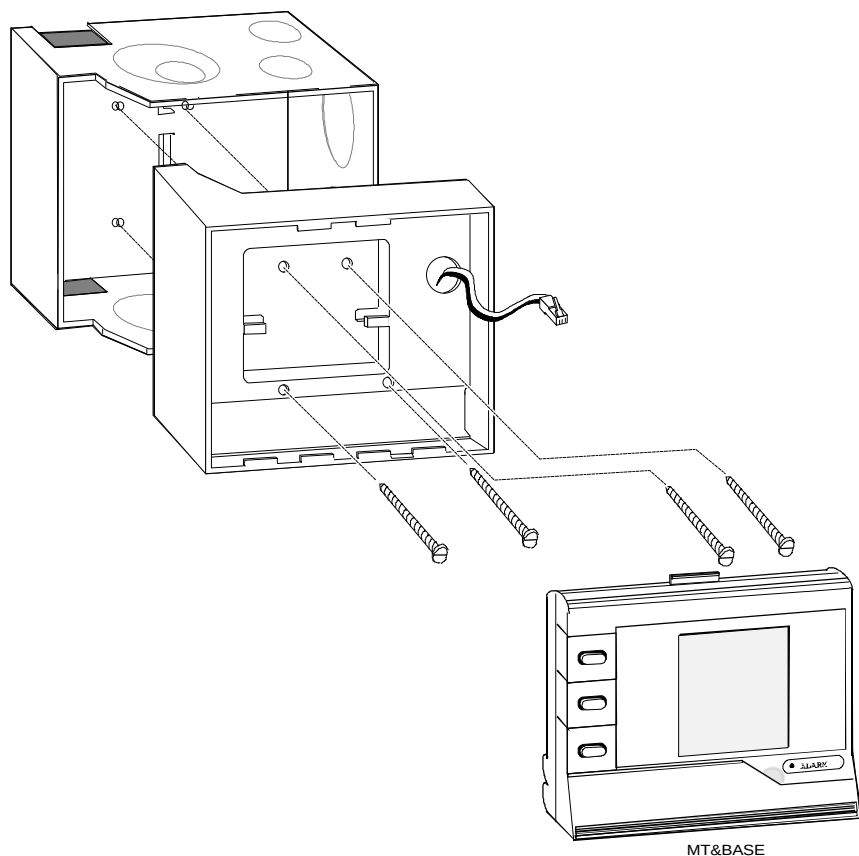


Figure 6: Attaching the Enclosure Kit and Utility Mounting Base

Attach the base, pulling the telephone jack type cord through the opening as shown below. Plug the cord into the back of the ZT, and snap the ZT into position.

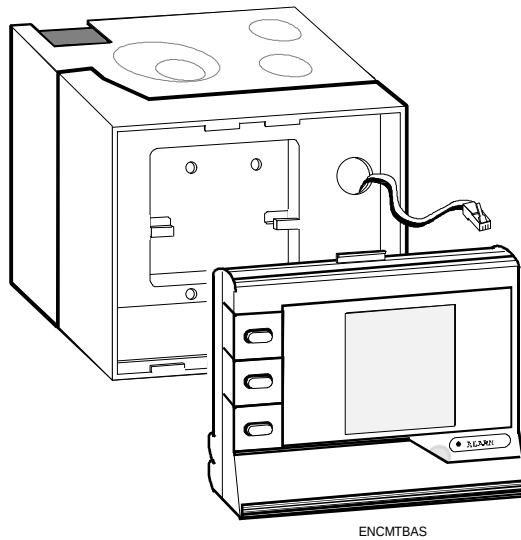


Figure 7: Connecting and Mounting the ZT

Wall Mount Installation

For office or other types of remote connections, attach the Wall Mount to a flat surface or wall. Use three screws and plastic anchors (not provided). For easy reading, mount the ZT at least 65 inches from the floor to the top of the ZT.

1. Position the Zone Terminal Wall Mounting Base on the wall.
2. Mark the three mounting hole locations and remove the base.
3. Drill three holes for No. 6 anchors (not included) and install the anchors for mounting the base.
4. Thread the ZTU cable through the access hole in the back of the base.
5. Secure the Wall Mounting Base to the wall with three No. 6 screws.
6. Plug the ZTU cable in the back of the ZTU, and snap the ZTU into the base.

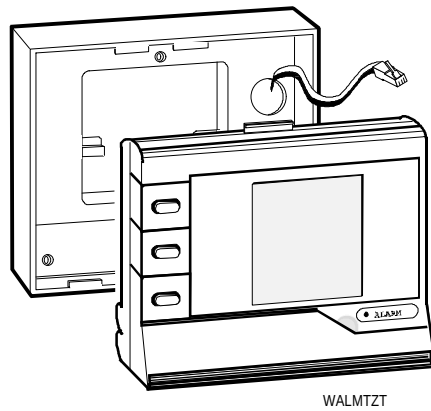


Figure 8: Attaching ZT and Wall Mount

Mounting the ZTU Externally on the UPM

Using the wall mounting base, follow the instructions below to mount the Zone Terminal on a UPM.

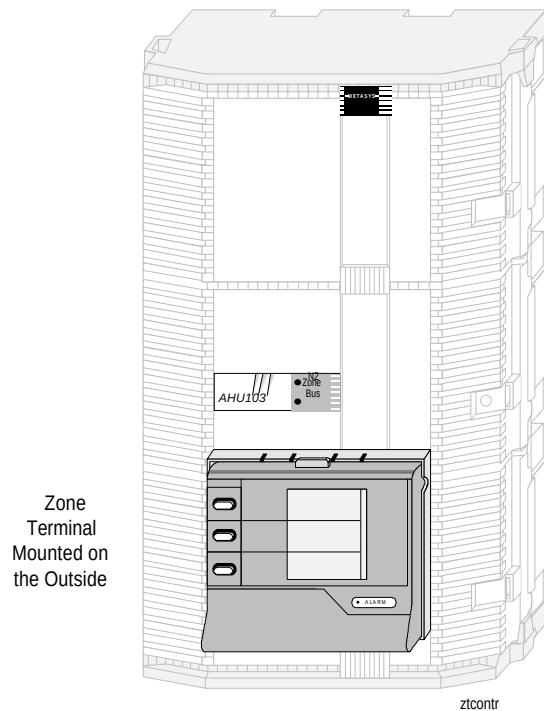


Figure 9: Mounting the Zone Terminal on a UPM

1. Position the Zone Terminal Wall Mounting Base flush on the cover at eye level (approximately 65 inches from the floor to top of ZT).
2. Mark mounting holes.
3. Mark cable hole.
4. Drill three size 3/32 inch pilot holes for mounting the base.
5. Drill 5/8 to 1 inch hole for cable.
6. Mount the base to the UPM cover using three No. 6 thread forming or sheet metal screws. Use a No. 6 x 3/4 inch screw for the top hole and two No. 6 x 1/2 inch screws for the bottom screws.

Mounting the ZT Behind a Window Enclosure in the UPM

The Panel Unit in Poteau, Oklahoma has a bracket available for mounting the ZT behind a window that allows control equipment to be mounted behind the ZT, thereby maximizing the use of the UPM. Contact the Panel Unit for more information.

Johnson Controls Panel Unit wires and configures units, complete with accessories, to your specifications. The ZTU internal mounting bracket is also available. Contact:

Panel Unit -- Poteau
3100 North Broadway

P.O. Box 1088

Poteau, OK 74953

(918) 647-2195

FAX: (918) 647-4895 (Customer Service)

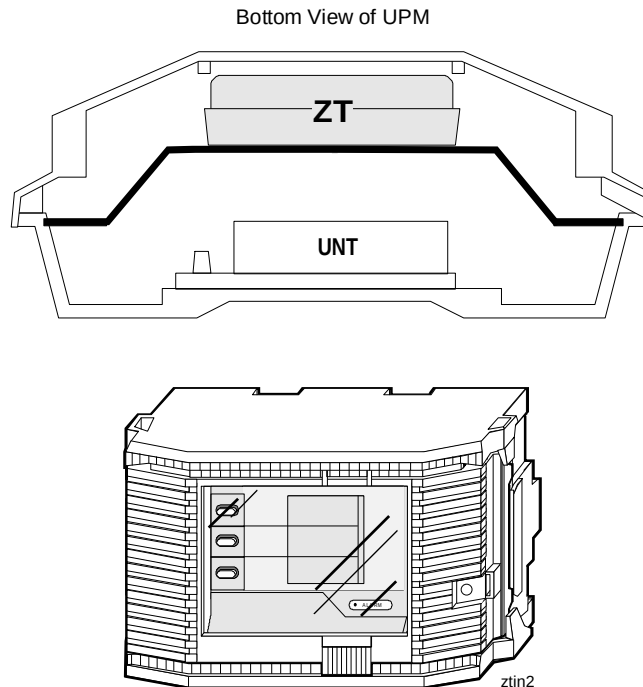


Figure 10: Bracket for Mounting the ZTU Internally in the UPM

Removing a Mounted ZT

Use a large flat-head screwdriver and insert it in the bottom where the ZT and mounting base come together. Gently pry the ZT out of the mounting base. As you push the screwdriver in, the ZT slides up and then out.

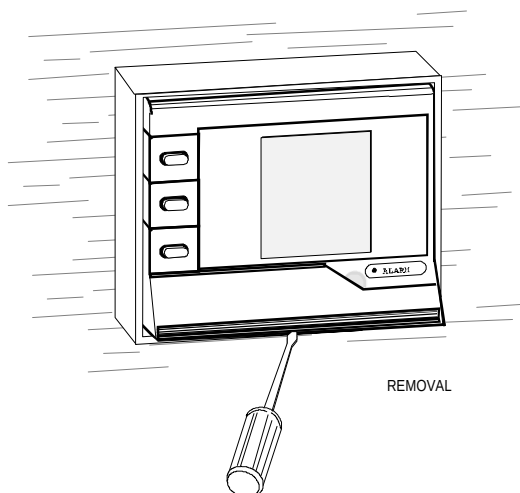


Figure 11: Removing Mounted ZT

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Issue Date 0495
Printed in U.S.A