

David's Bridal – Controller Offline (XL10 Controller Failure)



Standard Operating Procedure (SOP)

Title: David's Bridal – Controller Offline (XL10 Controller Failure)

Purpose

This SOP outlines the steps and guidelines to ensure suspected XL10 controller failures at David's Bridal locations are identified, verified, and temporary control (via drop stat / temporary construction stat) is installed so the HVAC unit remains operational.

Scope

This procedure applies to EMS technicians, service technicians, and monitoring personnel supporting David's Bridal locations with XL10 controllers.

Procedure

1. Step-by-Step Process

Step 1: Identify Possible XL10 Failure

- Check EMS/Webs monitoring for abnormal readings.
- If **Setpoint and Space Temperature both read 256**, this indicates the **controller has likely failed**.
- Note that the XL10 may appear to function in programming tools while still failing to control the HVAC unit.

Step 2: Confirm HVAC Call from the XL10

- Monitor the site through **WEBS** while initiating a **call for two stages of cooling or heating**.
- Adjust setpoints if necessary to ensure the system is testing the correct operating mode (cooling or heating).

Step 3: Verify Call for Cooling or Heating

- a. Remove **R, Y1, and Y2** (or **W1 and W2 for heating**) from the **EMS panel terminal strip**.
- b. Ensure wires are removed from the **field wiring side**, not the panel supply side (directly from the **XL10 board terminals**).
- c. Use an **ohmmeter** to check for contact closure between:
 - **R and Y1 (or W1)**
 - **R and Y2 (or W2)**
- d. If the contacts show **open**, the **XL10 controller is likely faulty**.

Step 4: Check for Wiring Shorts

- a. Disconnect **Y1 and Y2 (or W1 and W2)** wires from **both ends**.
- b. Check for **direct shorts between these wires**.

- c. If Y1 and Y2 (or W1 and W2) remain open, inspect the **EMS terminal strip**.
- d. Use an **ohmmeter** to test continuity between the **Y1 and Y2 (W1 and W2) terminals** on the terminal strip.
 - If the **terminals show closed contacts**, the **XL10 is likely faulty**.
 - If the **terminals are open**, the **XL10 controller is likely functioning correctly**.

Step 5: Perform Final System Checks

- If voltage confirms a **call for cooling/heating at the HVAC unit** and the **EMS terminal strip contacts are closed**, the **XL10 controller is likely not the issue**.
- If wiring tests show **no damage or open circuits**, perform **additional troubleshooting on the HVAC unit**, as the issue is likely **mechanical rather than EMS-related**.

Step 6: Install Temporary Control if XL10 Failure is Confirmed

- If the **XL10 controller failure is confirmed**, do **not leave the unit down**.
- Install a **Drop Stat (Temporary Construction Stat)** to maintain HVAC operation until permanent repairs can be completed.

2. Quality Assurance

- Verify the **Setpoint and Space Temperature readings** in EMS monitoring.
- Confirm proper **voltage calls for heating or cooling** at the HVAC unit.
- Ensure the **Drop Stat (Temporary Construction Stat)** is installed if the XL10 controller has failed.
- Document **all troubleshooting steps and results**.

Troubleshooting

Issue 1: Controller Shows Call but Unit Does Not Run

Solution:

- Verify XL10 outputs by checking **contact closure between R and Y1/Y2 or W1/W2** using an ohmmeter.
- Confirm that the HVAC unit receives the call signal.

Issue 2: Suspected Wiring or Terminal Strip Fault

Solution:

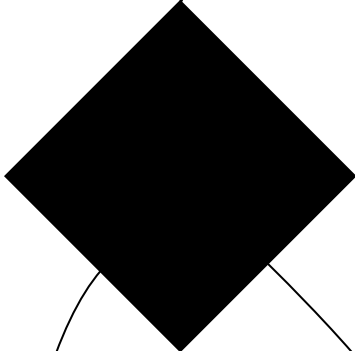
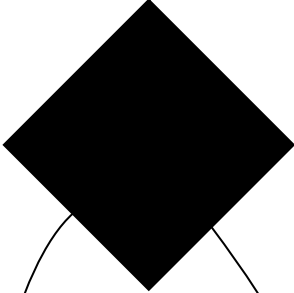
- Disconnect wires and check for **shorts or continuity issues** between Y1/Y2 or W1/W2.
- Inspect the EMS terminal strip and confirm whether contacts are **open or closed**.

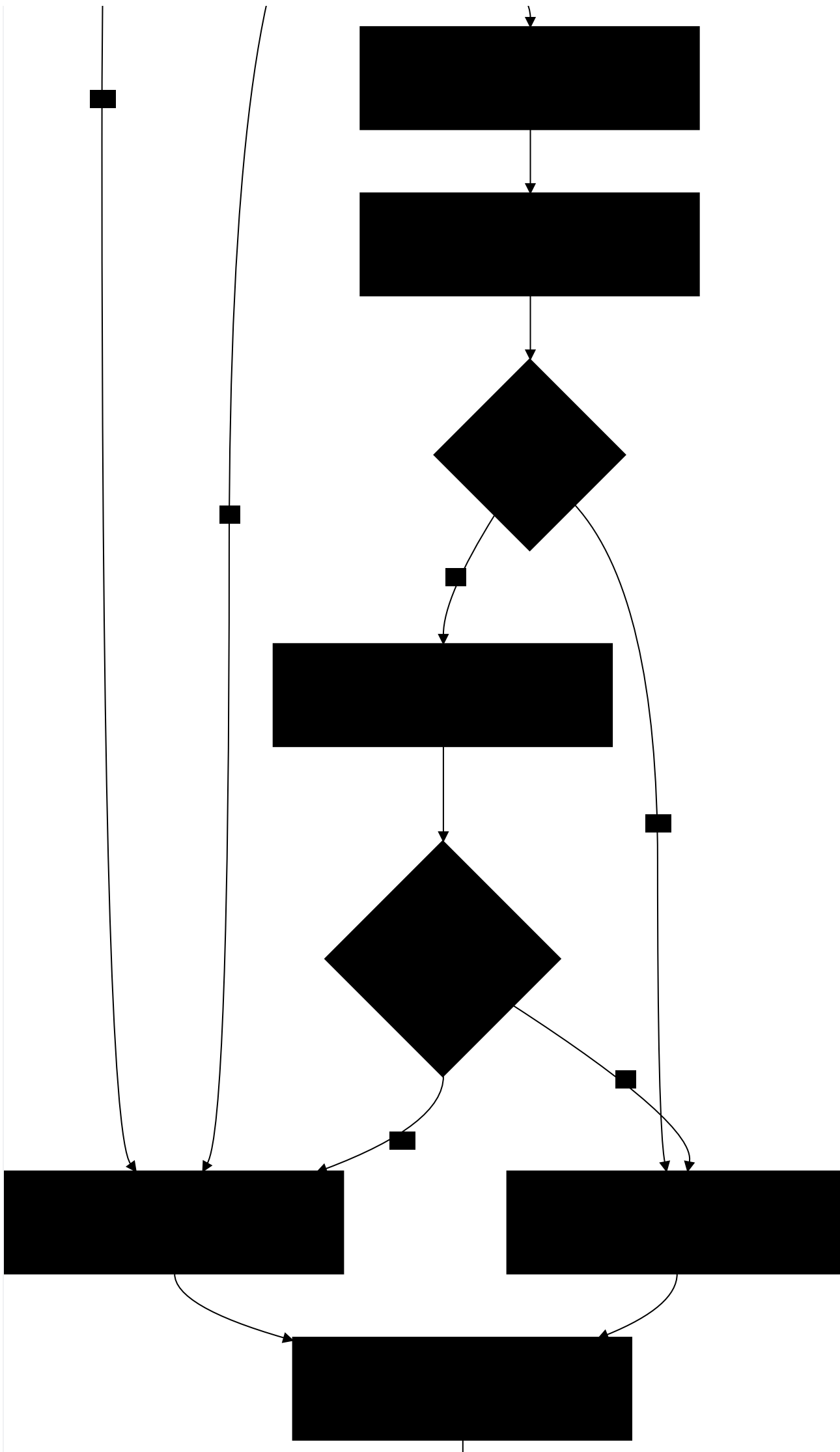
Documentation and Reporting

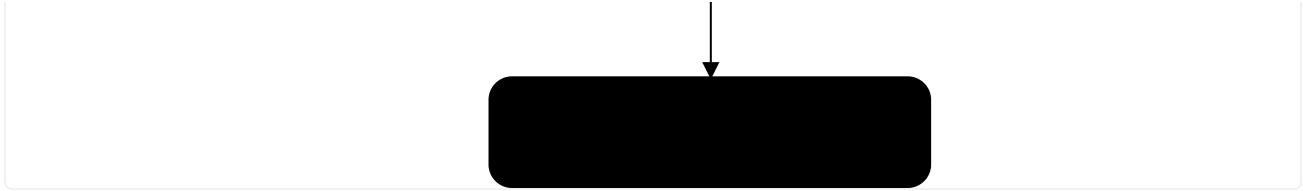
- Record all **troubleshooting steps, voltage readings, and continuity tests** in the **work order (WO)**.
- Document confirmation of **XL10 controller failure**, if applicable.
- Record installation of the **Drop Stat (Temporary Construction Stat)** and confirm that the unit was **left operational**.
- Reference the **XL Troubleshooting Tab** for additional guidance if needed.

Process Map

undefined







Editable Mermaid Diagram

David’s Bridal – Controller Offline (XL10 Controller Failure).drawio

Revision History

Version	Date	Author	Changes Made
1.0	03/11/2026	Dylan Turman	Initial draft
1.1	[MM/DD/YY]	[Author Name]	[Description of changes]

Approval

Approved by: [Name and Title]

Date: [MM/DD/YY]