



# **TOTALFLOW**

## ***Technical Bulletin 81***

### **Fairchild Actuator new design fix**

## **Totalflow Technical Bulletin**

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## 1. Purpose

This document describes a compatibility problem between the Totalflow valve control package and the latest design of the Fairchild M/P actuator.

## 2. Description

Fairchild redesigned the logic board on their actuators. This style of logic board is round where the previous version was square (See drawing below). This board also has two latching relays on it (white rectangles that are larger than any other component on the board). This design utilizes two latching relays to give end of travel indications (i.e. Full Open and Full Closed). Under certain conditions it is possible for the new actuator to indicate a full open and a full closed contact at the same time. These conditions can occur when the valve is either manually or automatically moves to one of the stops (full open or closed). This condition can occur during setup or during normal operation.

## 3. Conclusion

The condition of Full Open and Full Closed at the same time locks up the valve control Application. A new EPROM has been released for the 6713 (on-board valve control) that corrects this problem. The part number is 2015489-016 or newer. Other firmware to support the Plug-In RTU (Expanded I/O) can be provided upon request. The new Fairchild parameter can be accessed through terminal mode. This feature is enabled by typing `vact =100`. **NOTE: this is only to be used on Fairchild M/P actuators.** This feature extends the power on time when an end of travel condition is sensed. This allows the actuator to put the relay into the correct condition.



Below is a picture of the new logic board.

