

1360 Redwood Way, Suite A Petaluma, CA. 94954 TEL: (707) 763-7799 Toll free in the USA (800) 767-9543 FAX (707) 763-2631 <u>www.xandexsemi.com</u> EMAIL: <u>insidesales@xandex.com</u> Instructions for Xandex Pneumatic Controller Digital Counter Replacement 370-0111

# IMPORTANT! READ BEFORE INSTALLING!

This instruction applies to replacement of the digital counter on all Xandex Pneumatic Controllers. There are two (2) versions of digital counters depending on the manufacturing date of the controller. Controllers manufactured before 2018, use the included Chassis Adapter to properly fit the new counter. Controller manufactured in 2018 or later, the Chassis Adapter is not required.

## 370-0111 DIGITAL COUNTER REPLACEMENT SET PARTS LIST

The following is a list of parts included in the 370-0111 Digital Counter replacement set.

DESCRIPTION	QTY
DIGITAL COUNTER	1
WIRE SPLICE GRN	1
WIRE SPLICE ORG	1
CHASSIS ADAPTER	1
DIGITAL COUNTER REPLACEMENT INSTRUCTION	1
	DIGITAL COUNTER WIRE SPLICE GRN WIRE SPLICE ORG CHASSIS ADAPTER

### **REQUIRED TOOLS**

The following is a list of tools needed to install the Digital Counter.

- Hex bit or L-key 5/64"
- Wire Cutters
- Wire Stripper (22AWG)
- Small flat screwdriver, pick or prybar.

### **BEFORE YOU BEGIN**



Shock hazard! Disconnect AC power from unit before servicing. Use appropriate ESD precautions when working inside the controller! Do not place undue strain on internal electrical connections.

Disconnect all inputs/outputs from the rear panel of the controller, including AC power, input air and all inker electronic and pneumatic connections. Remove the controller to an appropriate maintenance area for servicing. Observe ESD precautions when working with the controller cover removed.

## WIRE ROUTE MODIFICATION

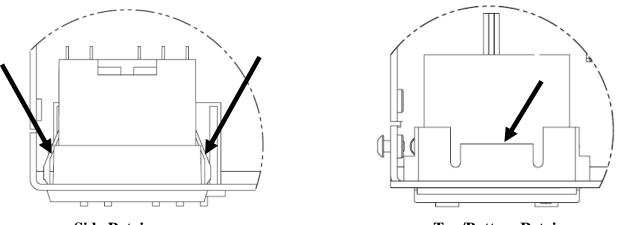
To install the replacement digital counter, the original wiring harness is to be modified. Removing a few zip ties located near the counter will gain additional wire length and ease installation. Upon installation of the new counter, route the splices and wires away from critical components such as the PCBA and Thumbwheel switch.

## DIGITAL COUNTER REPLACEMENT SET INSTRUNCTIONS

Digital Counter replacement is similar for all Xandex Pneumatic Controllers. There are several versions of Counters and Controllers, some with limited space for routing splices and wires. The old six-digit version of the Digital Counter is slightly larger and can be identified by the round push button and integrated side lock retainer. The newest eight-digit version is identified by the oval button and separate top/bottom lock retainer. Two colors of splices are included in the Set for wiring identification only, either color splice can be used for the primary white wire.

## With Power and Main Air removed:

- 1. Remove the four (4) cover screws from each side of the controller and remove the cover.
- 2. Using a tool, push in the locking features on the retainer to loosen Counter.



**Side Retainers** 

**Top/Bottom Retainers** 

- 3. Pull the Counter partially out of the Controller to gain access to the wiring harness.
- 4. Identify the Black and White wires exiting the Counter and carefully remove several zip ties from the harness to gain working length and ease installation.
- 5. Remove the Counter from the front of the Controller. Locate the heat shrink on the black and white wires. From the Counter side, cut the wires.
- 6. Remove the Counter and Retainer (if applicable) from the Controller and dispose according to regulation.
- 7. Unwrap the wires from the Counter. Replacement can be performed using the factory length wire. If your controller has limited space, the Counter wires can be shortened to no less than 2.5 inches (65 mm) for installation while providing an adequate service loop.

- 8. Using a 22 AWG striping tool, remove approximately .40 inches (11mm) of insulation from the Black and White wires on the new Counter. Repeat the strip process for the Black and White wires on the harness.
- 9. Orient and install the new Counter retainer inside the controller. Next, feed the harness wires through the retainer and chassis, exiting at the front.
- 10. Install the splice (any color) onto the white wires by first lifting the lever and then inserting the wire completely. Secure the wire by closing the lever. Install the remaining splice onto the black wires.

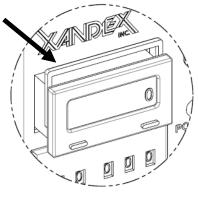


Lever Open



Lever Closed

- 11. Install the new Counter by feeding the splices and wires into the chassis. Carefully route for proper clearance between the PCBA and Thumbwheel. Push the counter into the front panel.
- 12. If required, install the chassis adapter over the top of the counter as shown.



- 13. Push in the Counter so the flange is flush to the controller. Now, push the retainer completely over the counter against the inside face of the Controller to secure.
- 14. Install the cover onto the controller then install four (4) cover screws to each side.

## DIGITAL COUNTER TEST

To test the function of the new Counter, use SETUP MODE and follow the steps below.

### With Cover installed:

- 1. Install Power cable, turn Power switch to On.
- 2. Set the Controller thumbwheels to 12345.
- 3. Press and hold the RESET button while simultaneously moving the TOP MODE SWITCH to SETUP position.
- 4. Release the RESET button and press again, the counter should increment by 15.
- 5. If the counter does not increment, try again from step 3.