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Purpose

This document provides the steps required to adjust air pressure for the entire system and the different pneumatic components of the Sci-Print VX2/VXL and SOLO; gripper pressure, roller close pressure, and peel blow pressure. It is important to stay within the guidelines in this document to maintain proper instrument performance.

Intended Audience

Scinomix End user

Prerequisites

N/A

Procedure

Internal System Pressure

1. All pneumatic components of the VX2/VXL and SOLO instruments require compressed air supplied into the **Air Inlet** through a 6mm diameter air line on the right side of the instrument.
2. Recommended pressure is **80 PSI** (*pounds per square inch*) of **compressed air** from a compressor or house air.

CAUTION - DO NOT USE Nitrogen (N2) or Oxygen (O2).

3. The blue **Air Shut Off Switch** must be ON to adjust the internal system pressure. (ON position is horizontal, and OFF Position is vertical).
4. The internal system pressure is displayed on the **Air Pressure Gauge** (Set to 0.5 MPa (*megapascal*) for normal operation).
5. The **Air Pressure Adjust** valve is used to regulate the internal system pressure (pull out to adjust; clockwise to increase, counter-clockwise to decrease; press in to lock).

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Figure 1.

Gripper Pressure (Pneumatic gripper)

1. In order to adjust the gripper pressure on a pneumatic gripper head, the gripper must be closed first.
2. Click Diagnostics > Hardware screen, then click Engage Gripper (or Close Gripper).



Figure 2.

3. The strength of the gripper can be controlled by the adjustment valve inside the VX2/VXL located on the underside of the upper gantry. The pressure gauge to the left of the valve displays how much air pressure is being applied.

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Figure 3.

4. To adjust, loosen the locking nut, then increase air pressure by turning the valve clockwise or decrease the pressure by turning the valve counter-clockwise.
5. Tubes with caps typically can be gripped with between 0.4 to 0.5 MPa of pressure.
6. Tubes without caps (flexible) typically require less pressure, so approximately 0.3 MPa.
7. Make sure to lock the locking nut after adjusting the valve.

Roller Close Pressure

1. In order to adjust the roller close pressure, the clamp roller must be closed first. Click into the Diagnostics > Hardware screen and click **Close Roller**.

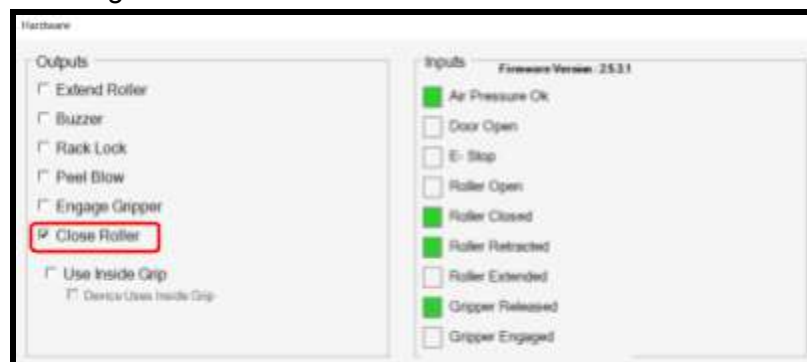


Figure 4.

2. The Roller Close Pressure Adjustment valve and gauge are located just behind the roller assembly (see image below).

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Figure 5.

3. To adjust, loosen the locking nut, then increase air pressure by turning the valve clockwise or decrease the pressure by turning the valve counter-clockwise.
4. Roller Close pressure gauge should be set to ~0.3 MPa for flexible tubes without caps, and 0.4 to 0.5 MPa for tubes with caps.
5. Make sure to lock the locking nut after adjusting the valve.

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Peel Blow Pressure

1. The peel blow pressure adjustment valve is located behind the roller assembly and is next to the roller close pressure adjustment. The peel blow pressure should only be adjusted if optimizing label peeling and application.



Figure 6.

2. In order to adjust the peel blow pressure, click into the Diagnostics > Hardware screen and toggle **Peel Blow** on/off.



Figure 7.

3. To adjust, loosen the locking nut, then increase air pressure by turning the valve clockwise or decrease the pressure by turning the valve counter-clockwise.
4. Adjust until a strong stream of air is directed towards the edge of the peel plate. (Feel with fingers, may also require adjustment of the peel blow bar angle).
5. Make sure to lock the locking nut after adjusting the valve.
6. Test by printing and applying multiple labels.

If you need additional assistance, please call our service department at 314-298-9800 or email service@scinomix.com.



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Definitions

N/A

Revision History

Version:	Change:	Effective Date:	Approved by:
A	NEW	APR-24-2020	B. Petti