



TS-1091	Check Z-axis Pulley Set Screws (VX2/VXL)	Document Owner: Service Department	Effective Date: AUG-22-2022	Page 1 of 6
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Purpose

This document provides guidance on ensuring the Z-axis pulley set screws are set correctly to hold the pulleys tightly to the arm.

Intended Use

If either of the two pulleys on the back side of the arm are loose, issues are likely to arise. The larger is the *drive pulley*, and the smaller is the *motor pulley*. Both have set screws that hold the pulley tight to the arm, which in turn makes the arm move; see Figure 4.

Required Material and Equipment

3mm allen wrench

Intended Audience

End users of the VX

Prerequisites

N/A

Procedure

1. Power off the instrument.
2. If present, remove the grounding strap from inside the hood.

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Figure 1.

3. Remove the hood by unscrewing the four hood screws with a 3mm allen wrench, then pulling the hood straight up and free from the gantry.

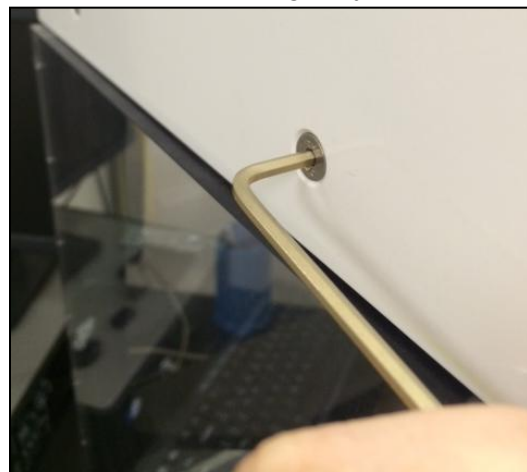


Figure 2.

4. At the top of the Z-axis are two stainless steel screws with springs around them, circled in Figure 3 below.

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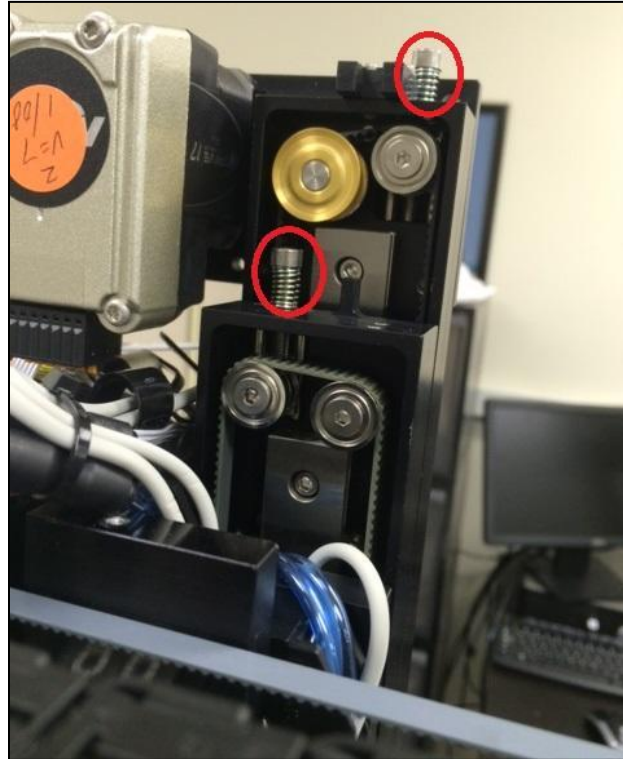


Figure 3.

Note: These screws should be tight but spring back slightly when pressing them down. Tighten them using a 3mm allen wrench until they are tight but still have a slight spring back to them.

5. Take notice of the two pulleys on the back side of the arm; the larger is called the drive pulley, and the smaller is the motor pulley. Both pulleys have set screws that keep the pulley tight to the arm, which in turn makes the arm move. One of these pulleys is most likely loose and causing the issues.

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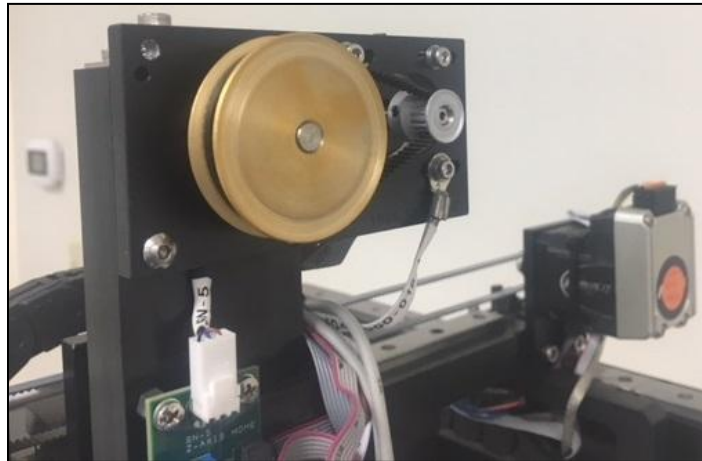


Figure 4.

6. Make sure the Drive pulley set screw (shown in Figure 5 below) is lined up on the flat part of the shaft.



Figure 5.

7. To check this, pull the pulley away from the arm slightly to check the orientation of the shaft. A flat part is clearly visible.
8. When the set screw is aligned with the flat edge, push the pulley back on, and tighten the set screw.

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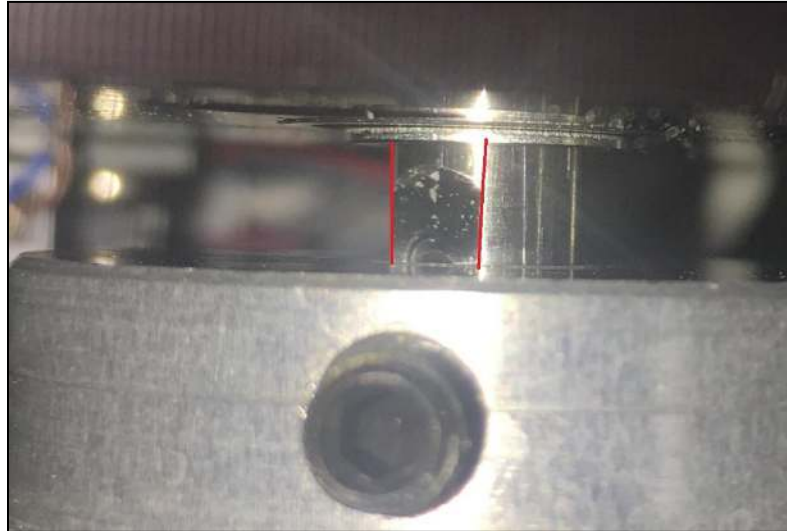


Figure 6.

9. Repeat for the motor pulley set screw, and flat part of the shaft.

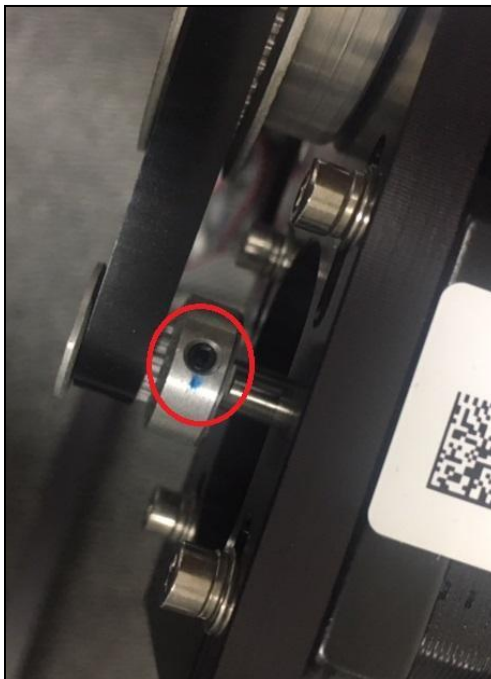


Figure 7.

10. Replace the lid, restart, and test the instrument.

If you need additional assistance, please call our service department at 314-298-9800



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or email service@scinomix.com.

Definitions

N/A

Revision History

Version:	Change:	Effective Date:	Approved by:
A	New	AUG-22-2022	Service