

Procedure: Y-Axis drive assembly removal and replacement

Tools:

5/32 Allen

Offset Screwdriver, provided

Small Phillips screwdriver

Remove both right hand side panels as you face the machine from the front.

Remove the rear panel to gain access to the Y-Drive shaft located in the rear of the machine.

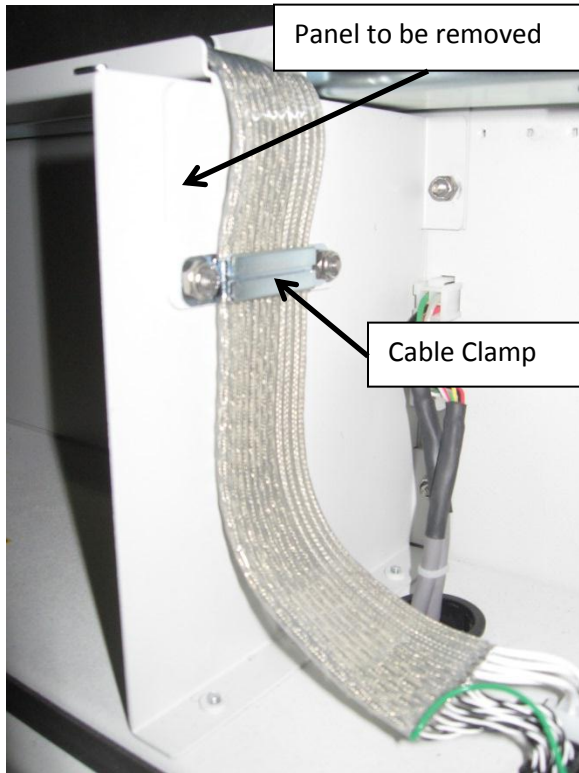
Loosen the 2 Green captured screws from the X-axis assembly with the offset screwdriver

Remove this support panel:

Remove the 2 1/4 inch nuts.

Remove the cable clamp shown in the picture below.

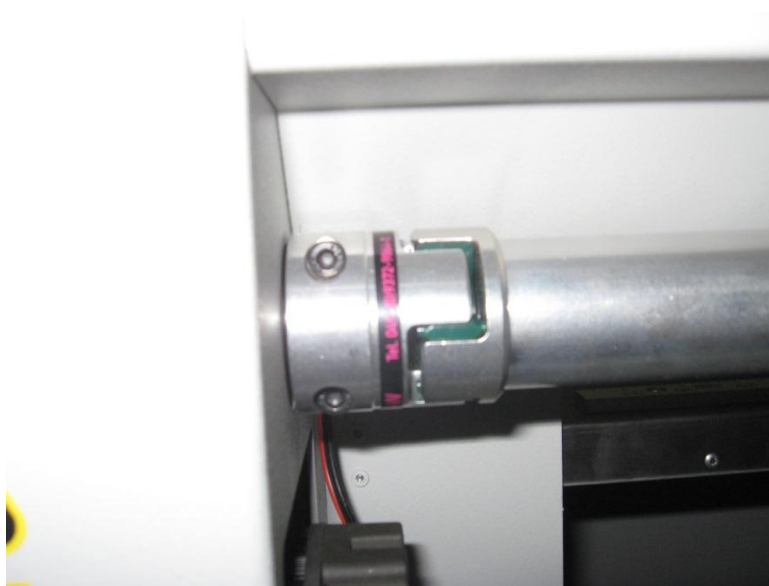
Through the lower access panel, remove the 2 Phillips screws securing the bottom of this panel to the machine and remove this panel.



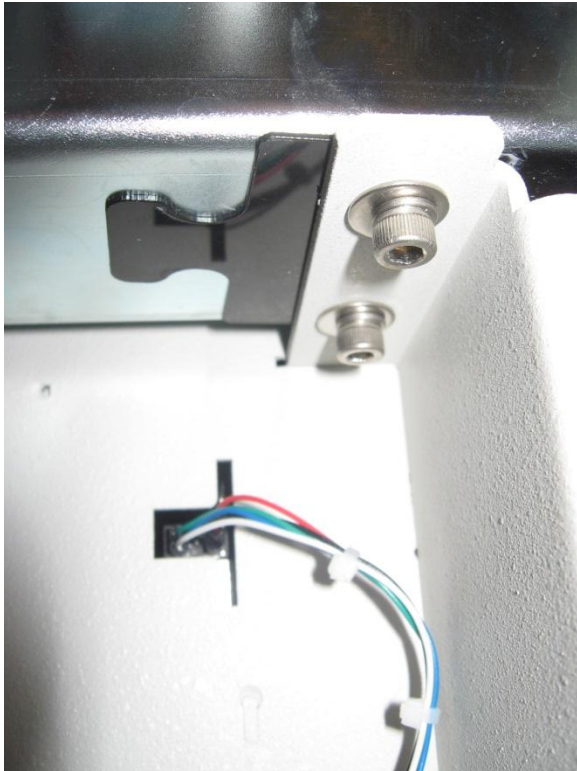
Disconnect the Y-axis sensor from the front of the Y-axis assembly.



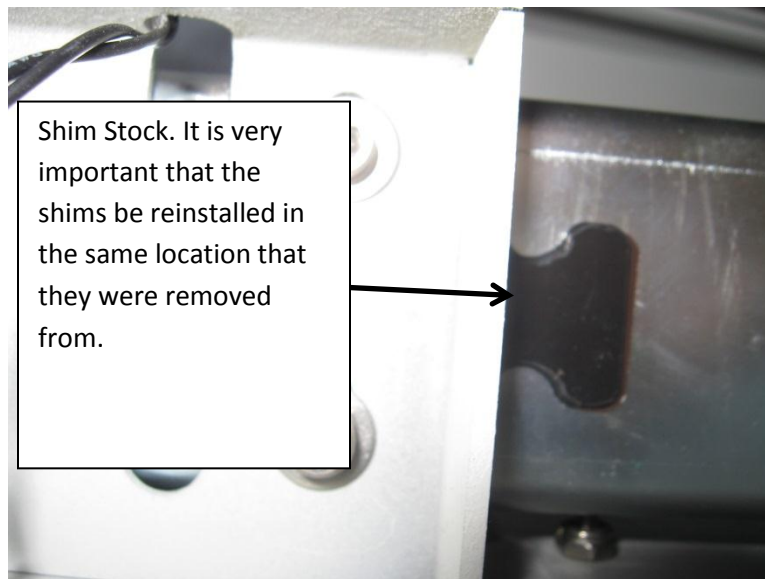
Move to rear of machine and loosen the 2 5/32 Allen screws which secure the drive shaft coupler to the shaft. (There is no need to remove these screws)



Locate, loosen and remove the 2 5/32 Allen Screws which secure the rail to the rear of the machine.



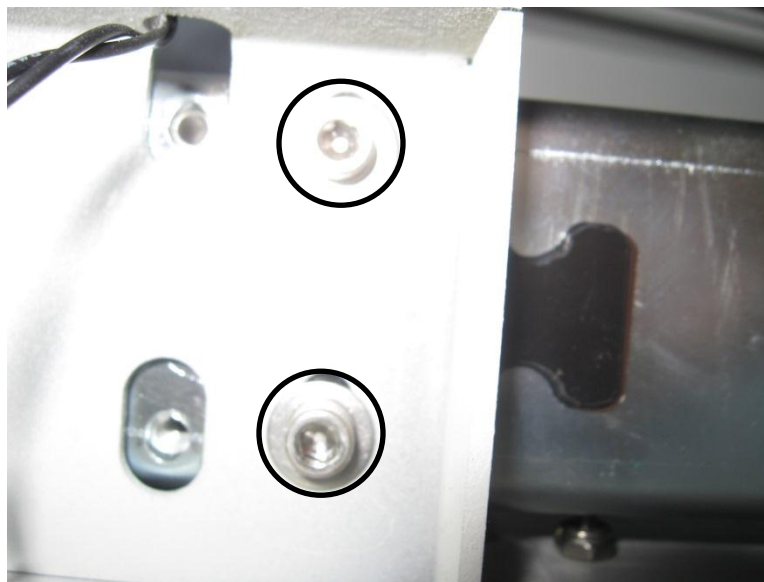
Remove the shim stock that is below the Y-axis assembly and set to the rear of the machine.



Locate, loosen and remove the 2 5/32 Allen screws which secure the rail to the front of the machine.
The screws are located up inside of the Y-axis perch.



Picture shows location



What is up inside of the Y-axis perch

Remove the shim stock from the mount and set to the front of the machine.

Lift up on the front of the rail a little, this will remove the tension from the Y-Drive belt and slip the belt off of the large pulley

Once belt is clear, lower the rail on to the perch and move the x-axis assy to near the front of the machine.

Lift up on the X-axis assy, and pull front of rail toward you and lower it once it is free of the mounting perch and the x-axis assy

Slide the rear of the Y-axis off of its perch and list it up and toward the rear of the machine. This will give you the room you need to remove the rail from the machine.

Installation is the reverse of the removal.

Note: that when installing the replacement Y-Drive assy, the drive shaft will need to be fitted in to the drive coupler on the rear of the machine. You can install the coupler after the Y-drive assy is installed in the machine, but this will require that the clamp on the coupler be removed and refitted. Do not tighten the drive coupler screws until after the Y-axis has been installed and squared up. Once this is complete, tighten the drive coupler.

Prior to tightening the Y-Axis assembly in place, reinstall the right side of the X-axis assembly. Move the rail front to back a few times to square up the Y-axis rail assembly. Then tighten the 4 Y-axis mounting screws.