Vector Grid Cleaning

Once the Vector grid has been removed from the Fusion, you can remove the front panel to clean any debris build up that you may find.

The Front panel is removed by loosening the 2 Green captured screws at either side of the front of the grid, shown in figure 115.
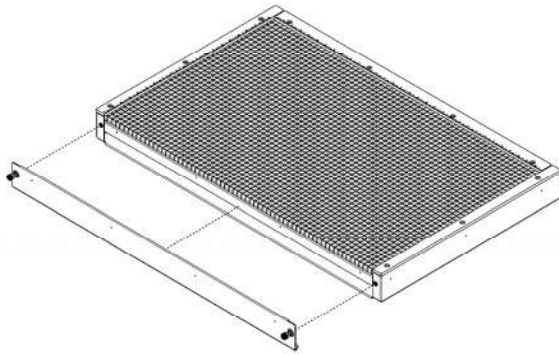

Figure 115

Replacing the Z-motor

Z-Motor Removal

To remove the Z-Motor from the Fusion engraver, begin by removing the Right hand lower panel from the Fusion engraver, shown in figure 116, to expose the Z-motor.
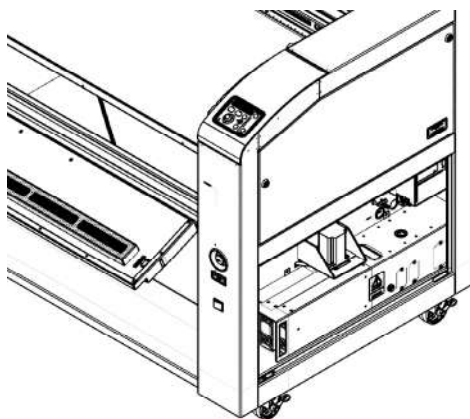

Figure 116

Located around the perimeter of the Z-motor mounting bracket are 4 screws. With a pencil or other marking tool, make a small mark at the leading edge of the motor. This mark will be used when we apply tension to the Z-belt after installing a new belt or motor, figure 117.
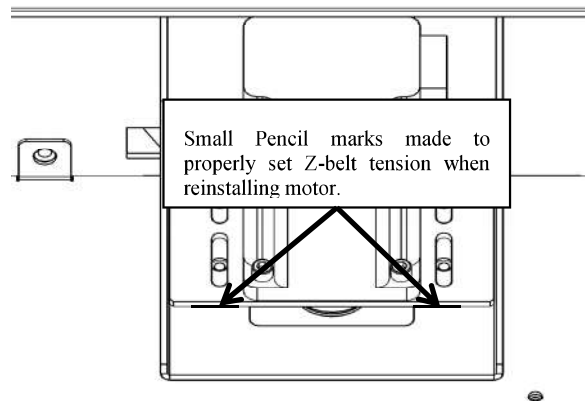

Small Pencil marks made to properly set Z-belt tension when reinstalling motor.

Figure 117

Located around the perimeter of the Z-motor mounting bracket are 4 screws, figure 118. Loosen these four screws, but do not remove them.
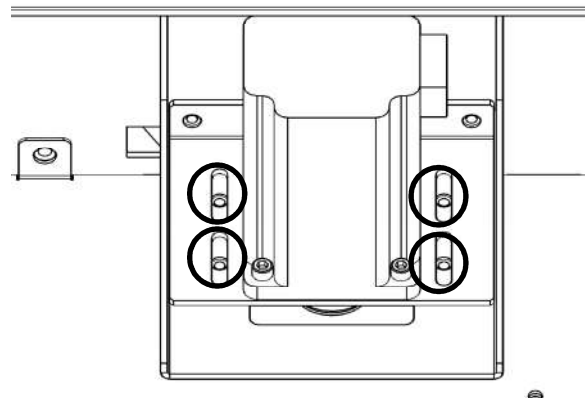

Figure 118

Remove the tension from the Z-Belt

On either side of the Z-Motor are 2 tensioning screws, figure 119. Remove the tension from the Z-motor belt by loosening these two screws.
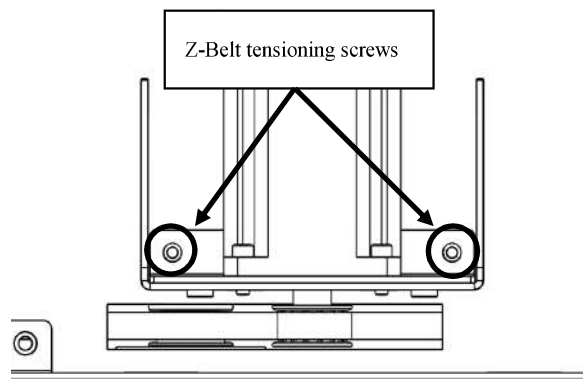
Z-Belt tensioning screws

Figure 119

Follow the Z-Motor harness back to its closest connector and disconnect the Z-motor there.

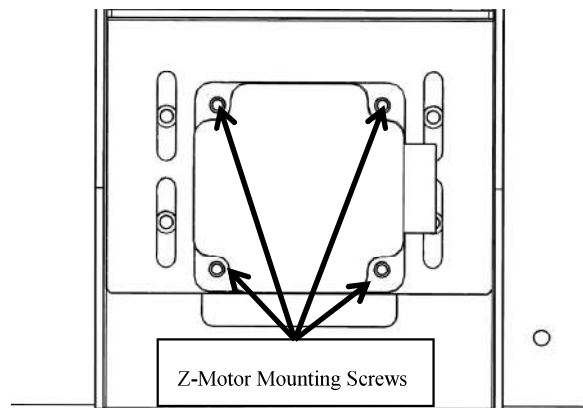Remove the 4 screws which secure the motor to the adjustment bracket, figure 120.

Z-Motor Mounting Screws

Figure 120

Remove the Z-Motor.

Installing the Z-Motor

Place the Z-motor in to the Z-Motor mounting bracket and ensuring that the Z-Motor belt is properly fitted in to the Z-Motor pulley.

Install the four Z-motor mounting screws and tighten.

Tighten the two Z-Belt tensioning screws until the slack in the Z-Motor belt has been removed and the front of the Z-Motor mounting bracket is lined up with the small

pencil marks made before the motor was removed. Keep in mind that this is a starting point for the belt tension; it is possible that additional tension may need to be applied.

Tighten the four screws which secure the Z-Motor mounting bracket to the chassis.

Replace the lower side panel.

Test for functionality.

Replacing the Z-Belt

Removing the Z-belt

Raise the table to the top of the machine.

Turn off the power

Disconnect the machine from its power source and secure the cord end.

Remove both lower access panels from the machine.

With a pencil or other marking device, scribe a small line at the front of the motor mount, shown in figure 121. This will be used to set the proper belt tension when the belt is reinstalled.
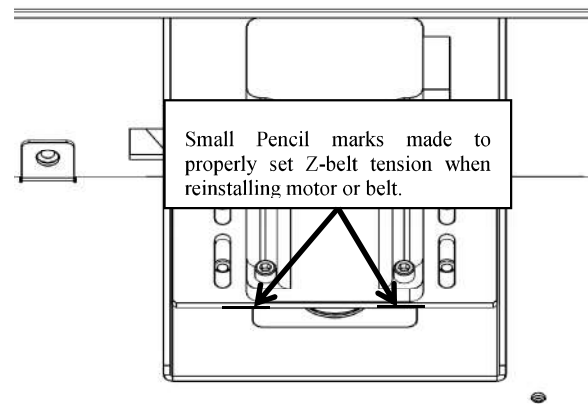

Small Pencil marks made to properly set Z-belt tension when reinstalling motor or belt.

Figure 121

Loosen the 4 Z-Motor mounting bracket screws

Loosen the two tensioning screws to remove the tension from the Z-Belt.