



# Motor Belt, Pulley & Set Screws

Cut Quality & Error Code Troubleshooting  
Last Updated: 11/17/14

This document explains how to properly adjust the belt tension of your motor belts. Along with ensuring the pulleys are aligned and set screws are tight.

*NOTE: The photos shown may not be the same orientation as yours, but the idea is the same across multiple models.*

## X AXIS (media movement)

- 1) Verify the X axis motor belt is properly tensioned with about 1/16" to 1/8" play.

*Loosen 2 phillips screws*

*Push motor away from black pulley to tighten*

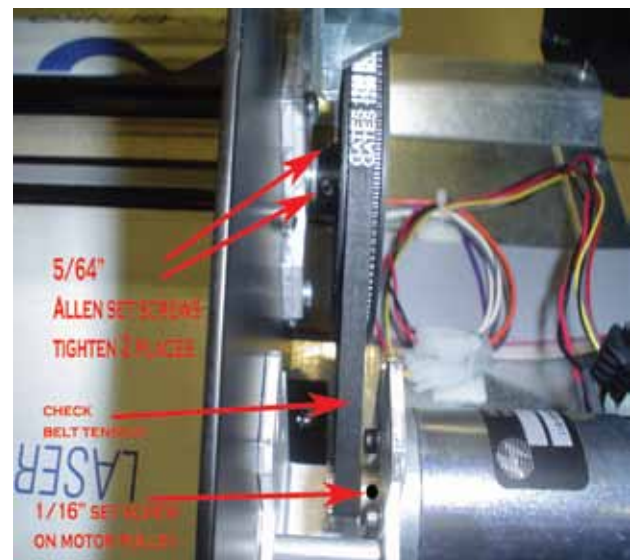
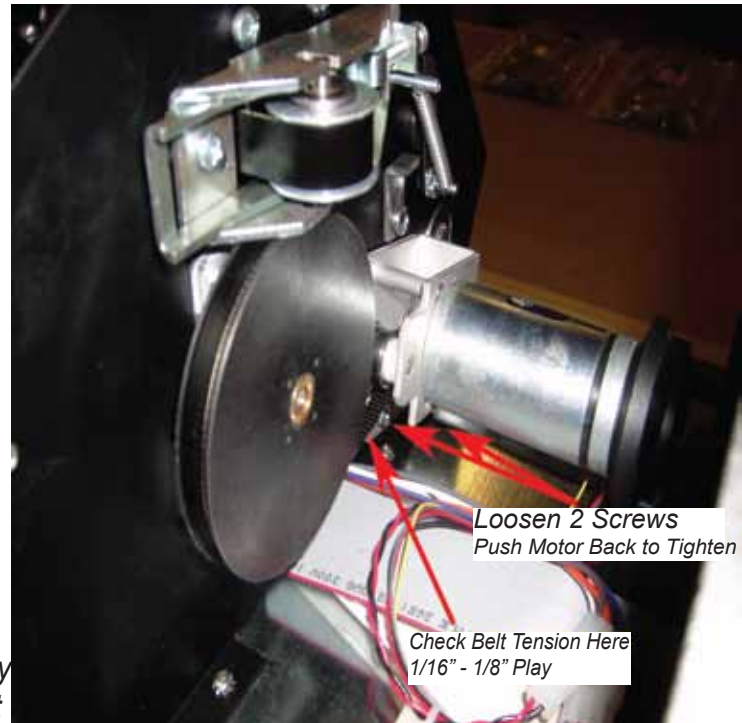
- 2) Inspect the teeth of the belt to ensure they are not excessively worn or missing.

*Note: The teeth should have a square profile to them. If they appear "sharp" or worn, it is recommended to replace it*

- 3) Using a 5/64" Allen Wrench, verify the black pulley's set screws are tightened. Also, confirm the set screws are on the flats of the grit roller shaft.

- 4) Using a 1/16" Allen Wrench, verify the set screw of the motor's (gold) pinion gear is tightened.

- 5) Confirm the motor belt is aligned along all pulleys.



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All specifications are subject to change.

## Y Axis (carriage movement)

1) Verify the Y axis motor belt is properly tensioned with about 1/16" to 1/8" play.

2) Inspect the teeth of the belt to ensure they are not excessively worn or missing.

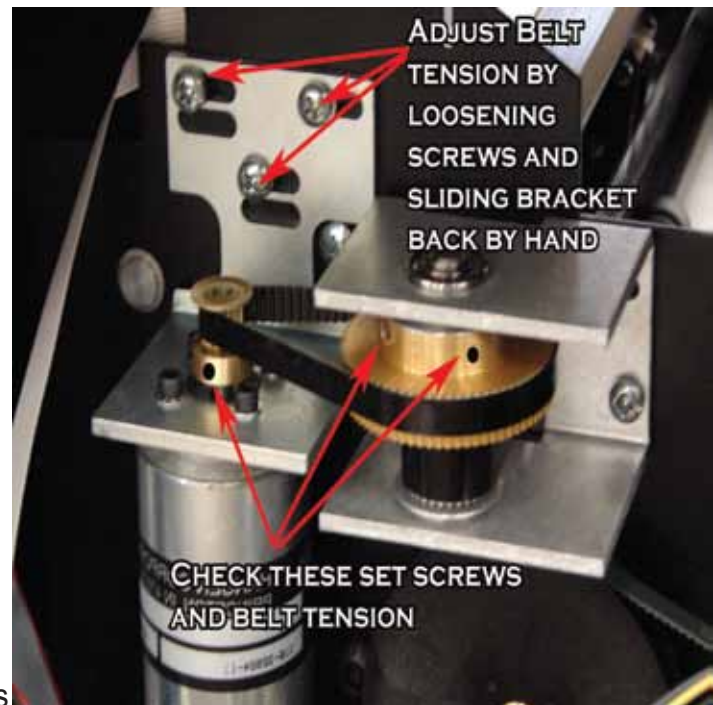
*Note: The teeth should have a square profile to them. If they appear "sharp", it is recommended to replace it*

3) Using a 5/64" Allen Wrench, verify the large gold gears set screws are tightened. Also, confirm the set screws are on the flats of the Y Axis idler shaft.

4) Using a 1/16" Allen Wrench, verify the set screw of the motor's (gold) pinion gear is tightened.

5) Confirm the motor belt is aligned along all pulleys.

6) Confirm the set screw of the gear shown to the right is tight with a 3/32" Allen Wrench



# LONG Y Axis Motor Belt

1) Verify the long Y axis belt that carries the carriage is properly tensioned.

- When the machine is powered on and the carriage goes to the 'home' position, if the long Y belt sags, it needs to be tightened.

Long Y Axis Belt p/n - H19-001  
(Length required is dependant on model #)

## Model 536 Motor Belt Part #'s:

The photo on the right shows how to determine which belts are needed depending on the diameter of the large black pulley of the X axis. Once the black pulley is measured, this will indicate which set of motor belts are required for your machine.

## Model 830 TM Motor Belt Part #'s:

X Axis - H19-010  
Y Axis - H19-011

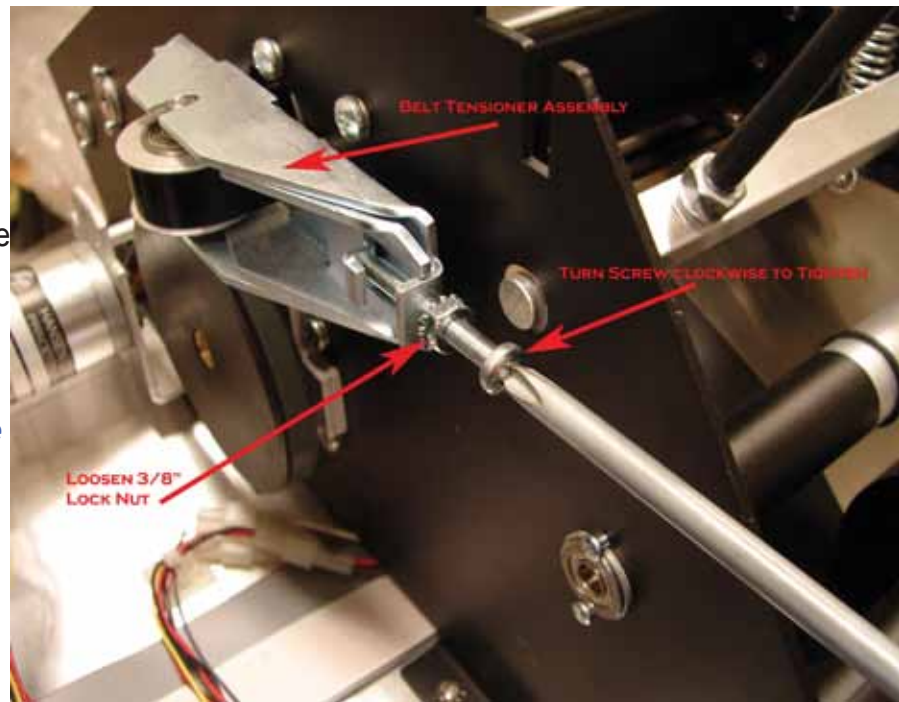
## Model 315 Motor Belt Part #'s:

X Axis - H19-017  
Y Axis - H19-012

If your model # is not listed above, please contact technical support at

<http://allendatagraph.com/tech-support/>

To place an order, contact our front office at (603) 216-6344 to process the order.



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