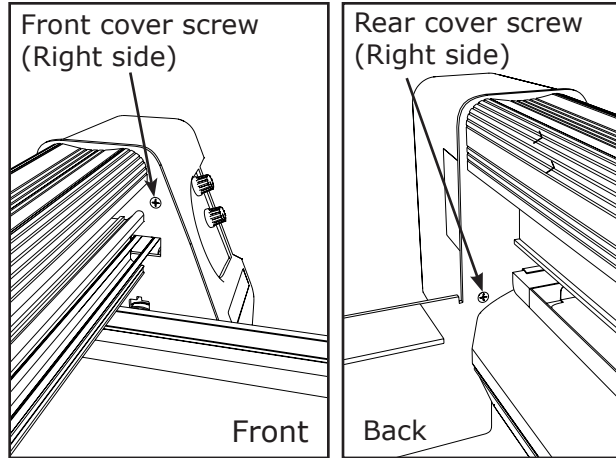


Right Side Cover Removal

Unplug the power and data cable from the back of the machine.

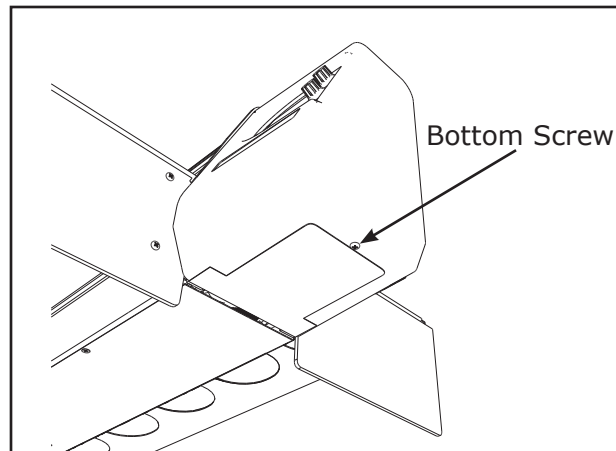
- 1 Removing the right cover**
Remove the 2 black Phillips screws shown.



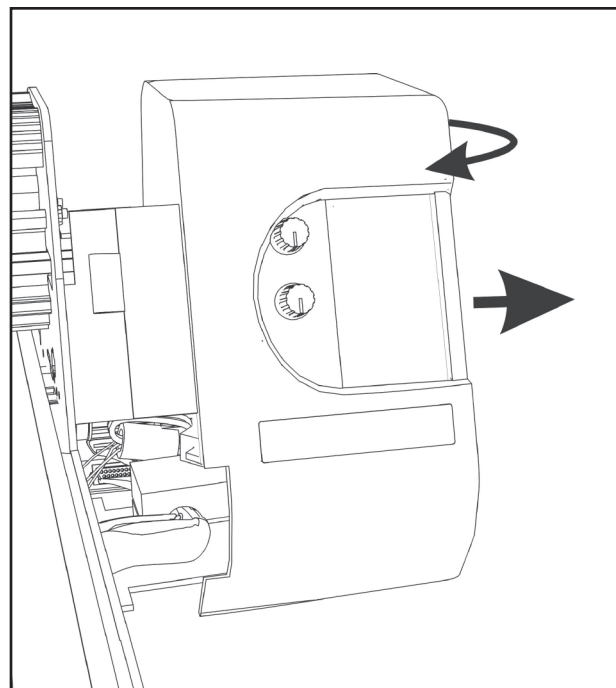
Tools Required:
Phillips Screwdriver

Applies to:
300 System
350HF

Remove the silver phillips screw on the bottom of the cover.



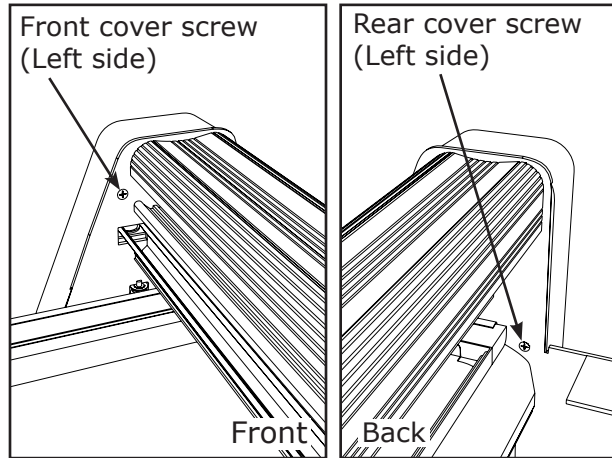
Remove the right side cover of the machine by pulling it to the right. Once the cover hits the knobs on the keypad, rotate the cover toward the front of the machine to remove.



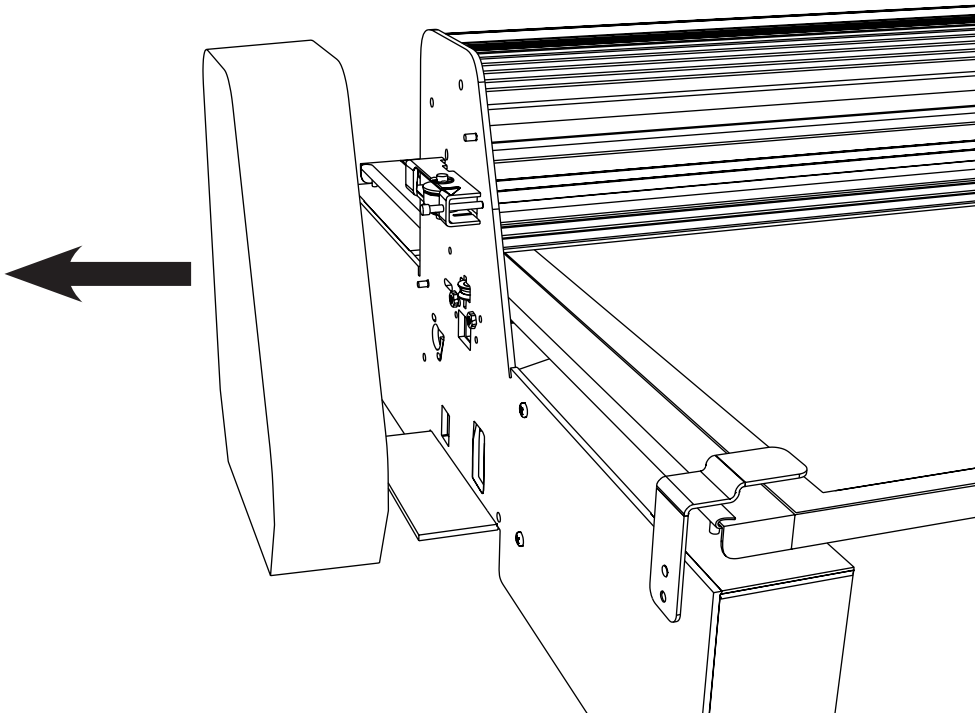
Left Side Cover Removal

IOLINE™
14140 NE 200th St.
Woodinville, WA. 98072
(425) 398-8282

- 1 Remove the 2 black Phillips screws shown.



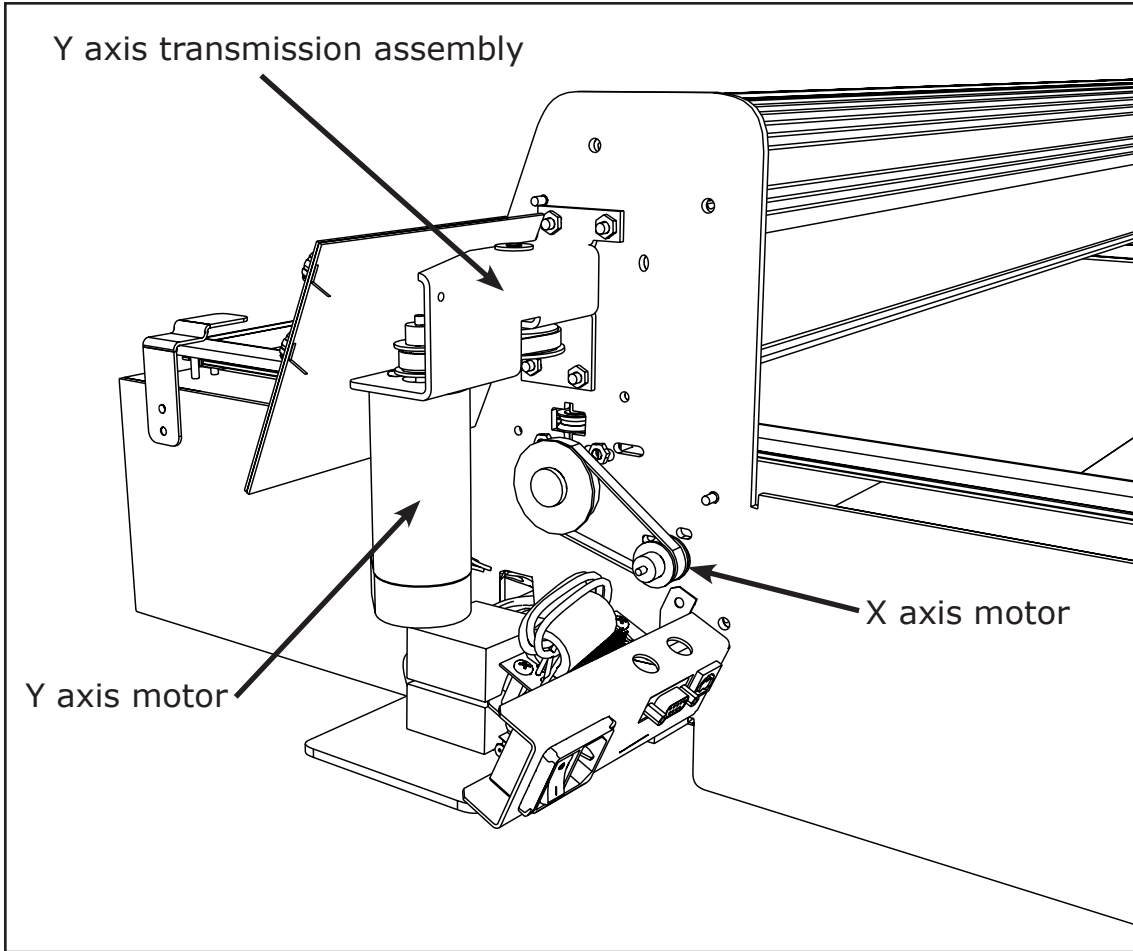
- 2 Remove the left side cover of the machine by pulling it to the left.



Tools Required:
Phillips Screwdriver

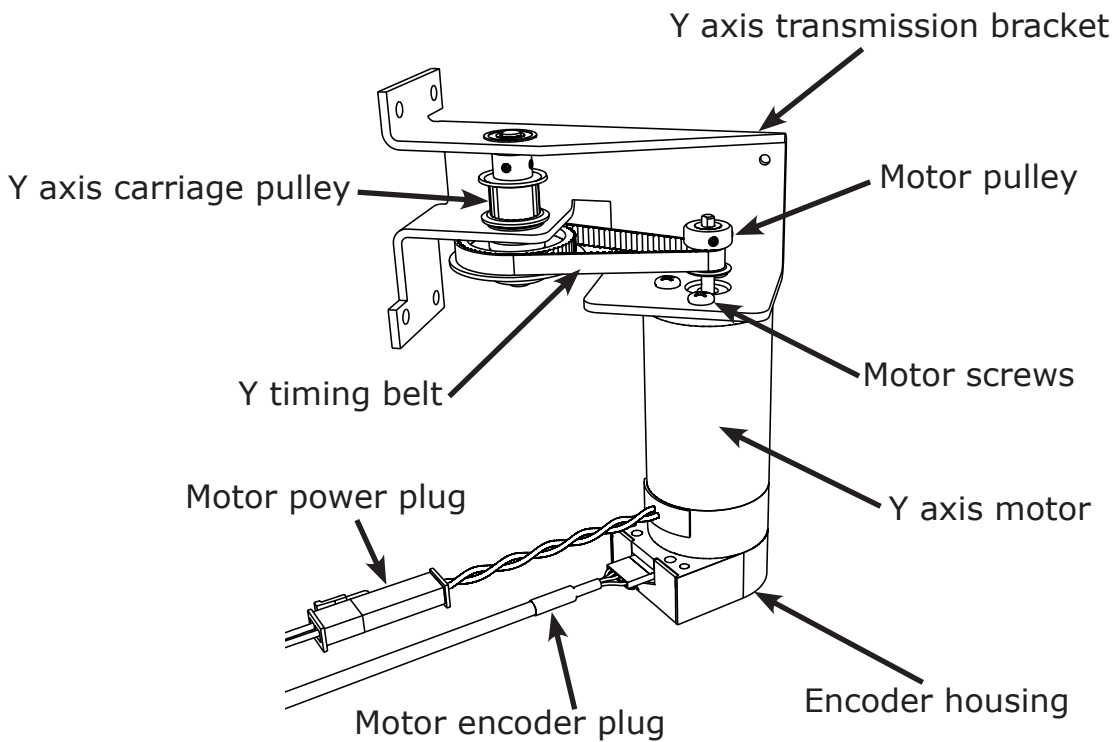
Applies to:
300 System

X and Y axis Motor Locations



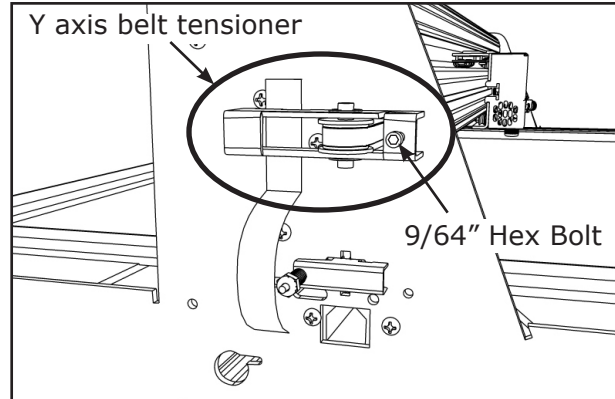
Y axis transmission assembly parts

(Current assembly shown)

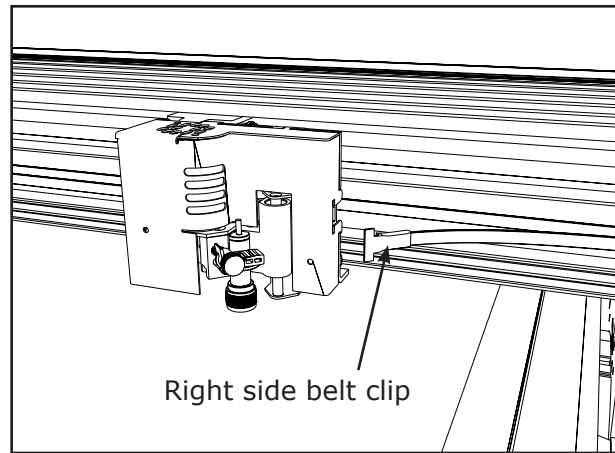


Y Axis Transmission Removal

- ① Loosen the 9/64" hex bolt on the Y belt tensioner located on the left side of the machine.

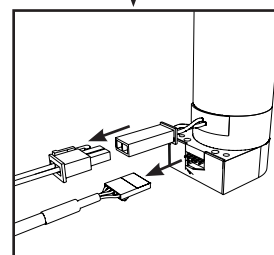
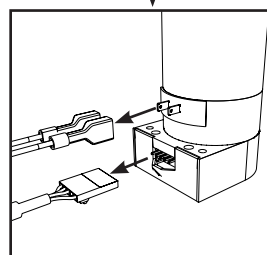
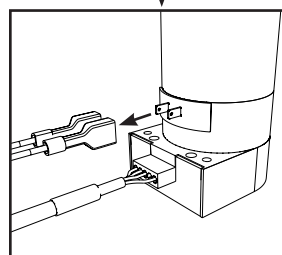
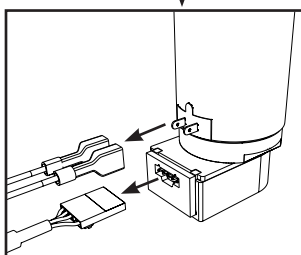
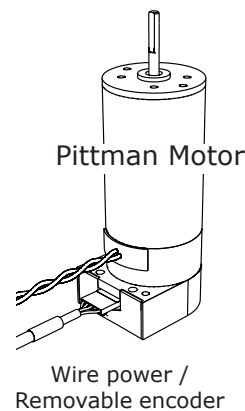
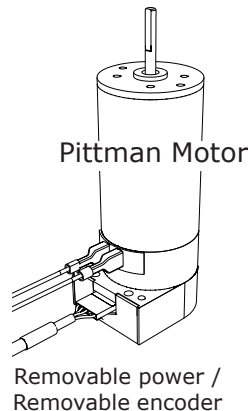
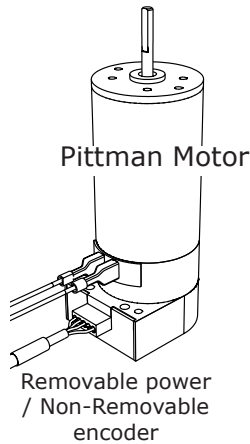
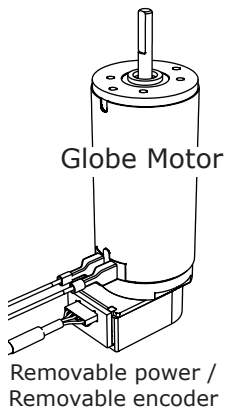


- ② Remove the right side belt clip from the carriage assembly.



- ③ Disconnect the wires from the motor on the Y axis transmission.

Note: There are 4 types of motor connections. See the pictures to determine which motor your machine has. You can read the label on the motor to determine the manufacturer of the motor.

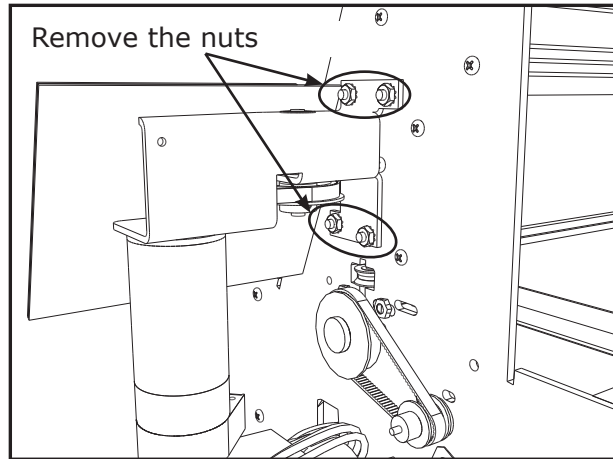


For this type of connector cut the tyrap holding the encoder wire.

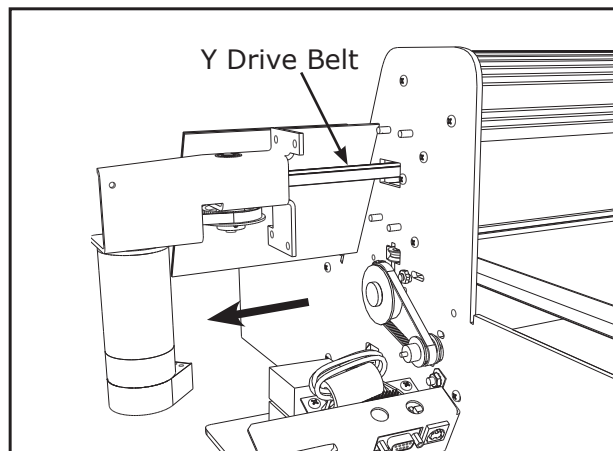
Tip:
Mark the bolt with a piece of tape so you know how much to tighten later.

Note:
Do not remove this bolt.

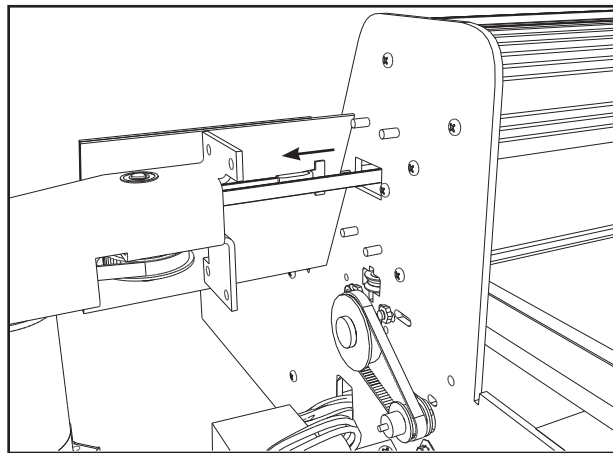
- ④ Remove the (4) 11/32" nuts holding the Y axis transmission to the machine.



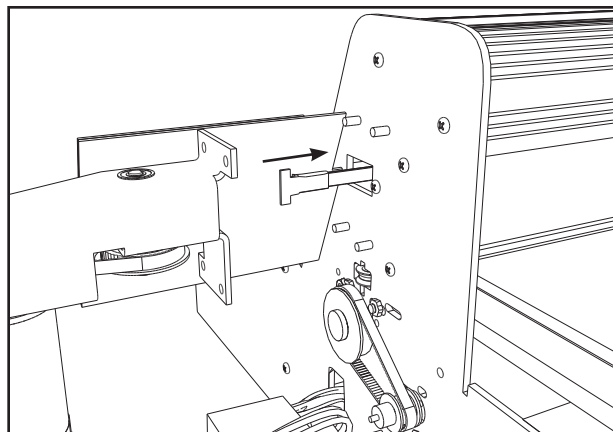
- ⑤ Slowly pull the transmission away from the machine.



- ⑥ Guide the Y axis belt end through the opening in the end plate.

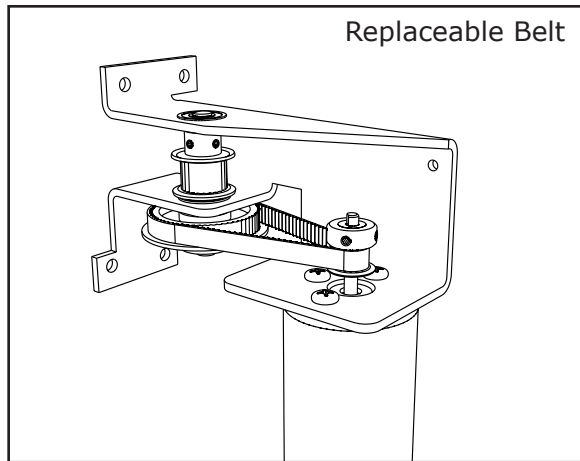
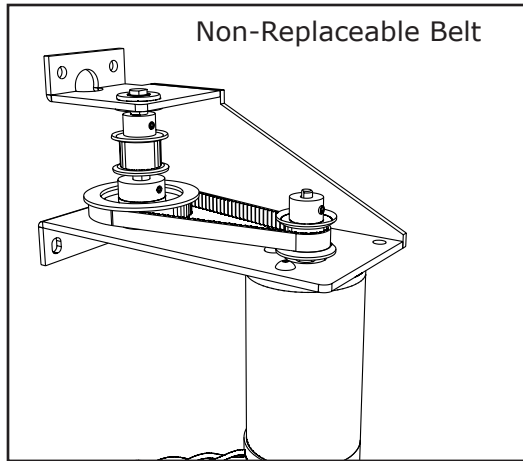


- ⑦ Remove the belt completely from the transmission.

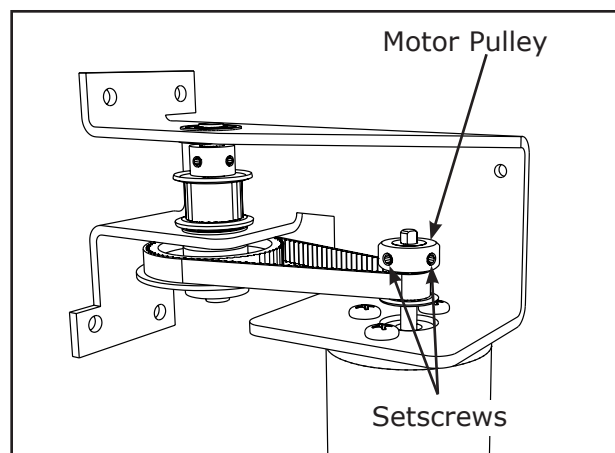


Y Transmission Motor Replacement

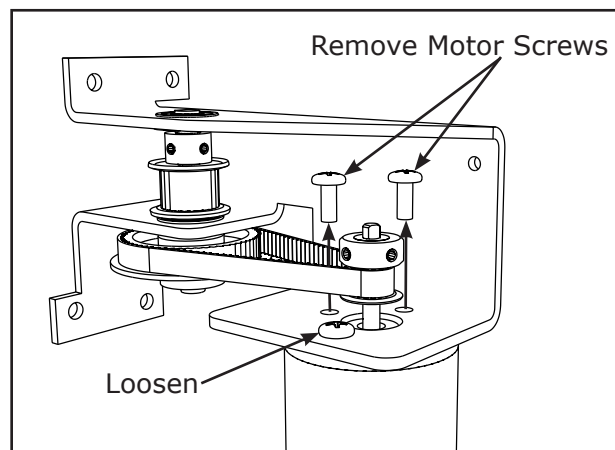
Determine which transmission assembly you have by looking at the pictures below.



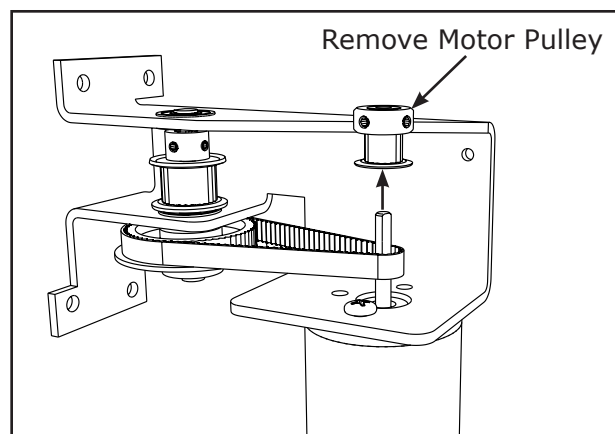
- 1 Loosen the (2) 1/16" allen screws holding the small pulley to the motor shaft.



- 2 Remove 2 of the Phillips screws holding the motor to the transmission bracket. Loosen the third screw.



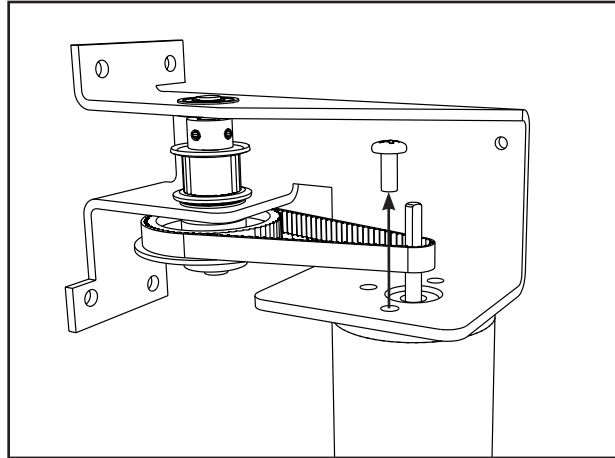
- 3 Remove the motor pulley from the motor shaft. The belt should be loose enough to do this now.



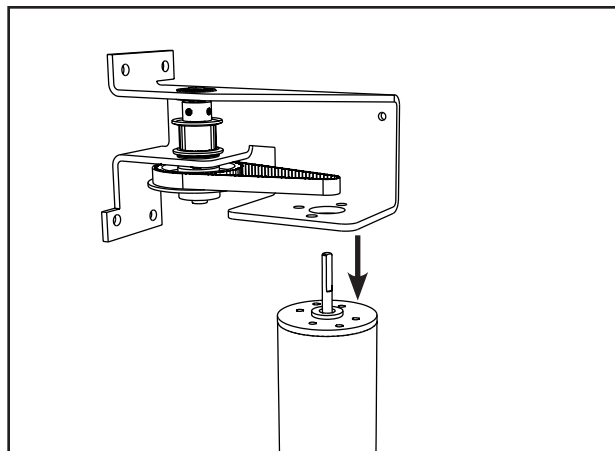
Note:
Setscrew sizes may vary.

Note:
If you have the 'Non-replaceable belt' style transmission, these screws will be a 5/64" allen screw.

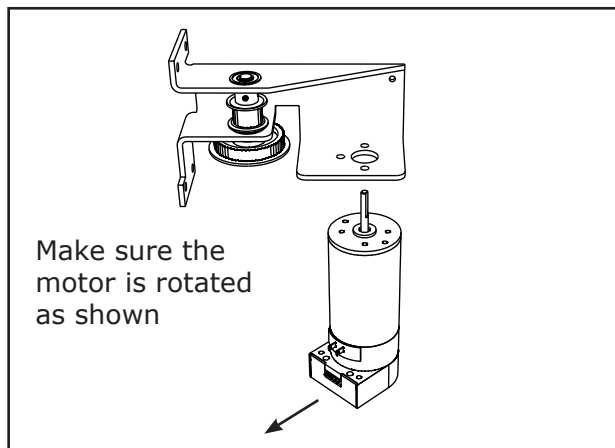
- ④ Remove the last screw holding the motor to the transmission bracket.



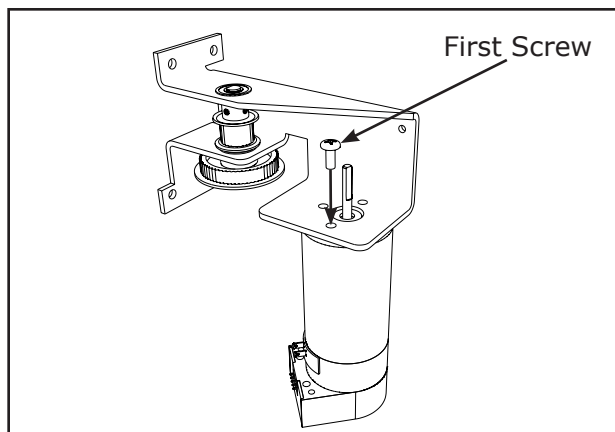
- ⑤ Remove the motor from the transmission bracket.



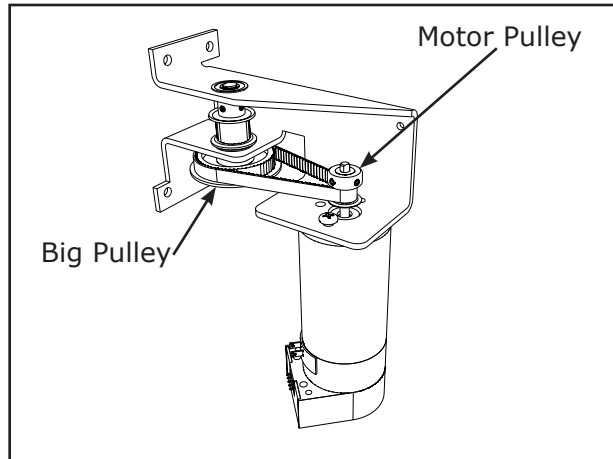
- ⑥ Line up the motor with the 3 holes in the transmission bracket as shown



- ⑦ Install the first screw in the motor but leave it partially loose for now.

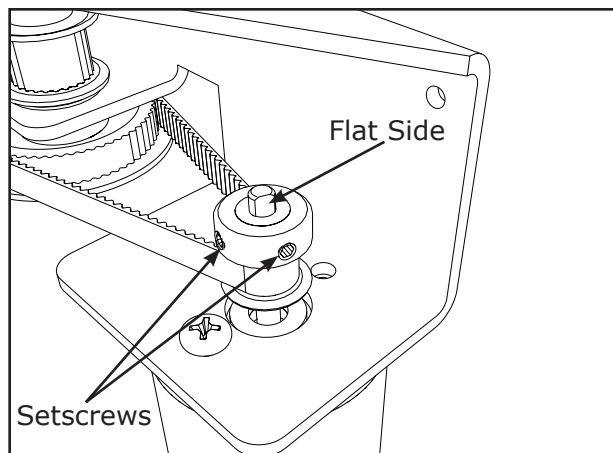


- 8 Install the pulley and belt in the transmission. Leave the pulley and belt loose for now.



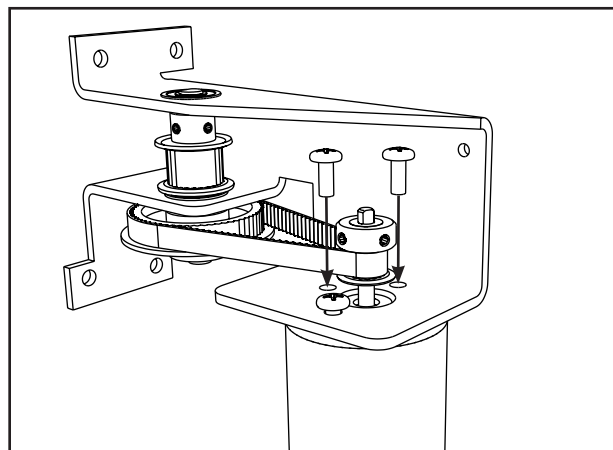
Note:
Make sure the height of the motor pulley is the same as the big pulley. The belt should run straight and not rub.

- 9 Once the belt is straight tighten the setscrews on the motor pulley.

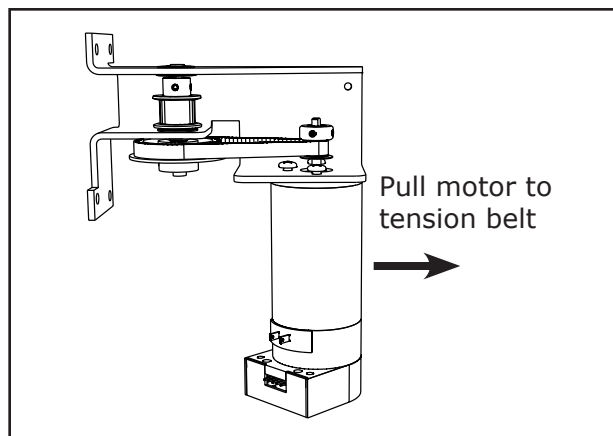


Note:
Make sure you tighten one of the setscrews onto the flat side of the motor shaft.

- 10 Install the last 2 motor screws but leave them loose for now.

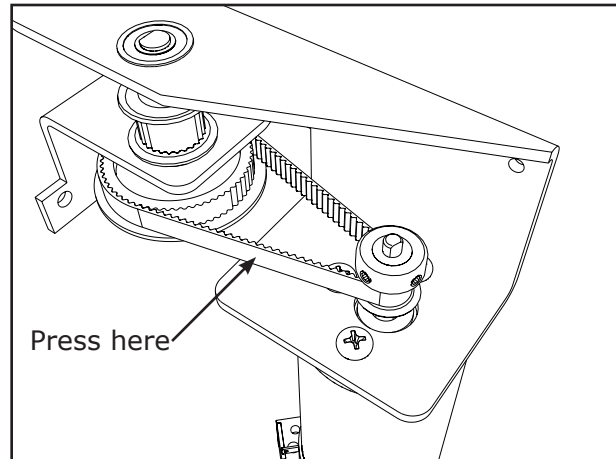


- 11 Tension the timing belt by pulling on the motor in the direction shown. Hold the motor as you tighten up the motor screws.



Note:
Make sure you don't overtighten the belt. Too much tension will cause a jam error.

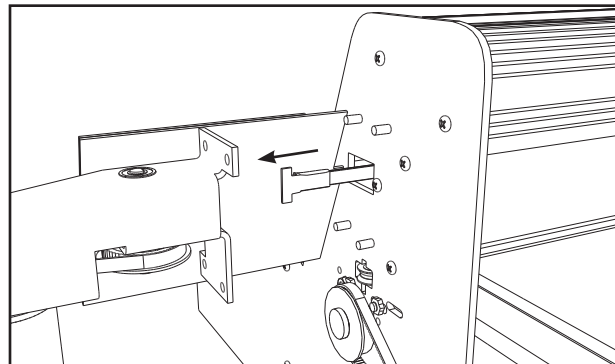
- 12 Check the tension on the timing belt by pressing on it in the place shown. With proper tension the belt should push in about 1/8" before stopping.



Note:
If the belt has too much tension it could cause a jam during machine initialization. If the belt is too loose you will see poor cut quality issues.

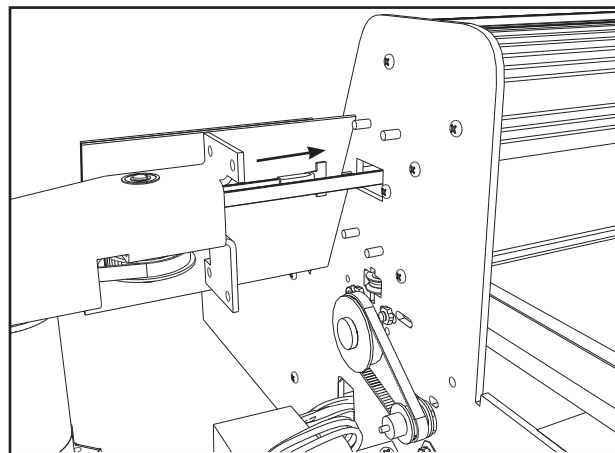
Y Axis Transmission Installation

- 1 Guide the Y axis drive belt around the top pulley on the transmission.



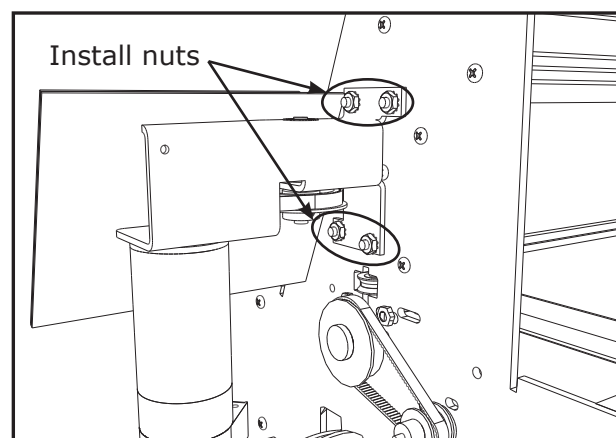
After looping it around the pulley insert the belt end through the hole in the endplate.

Guide the transmission body onto the (4) studs protruding from the machine body.

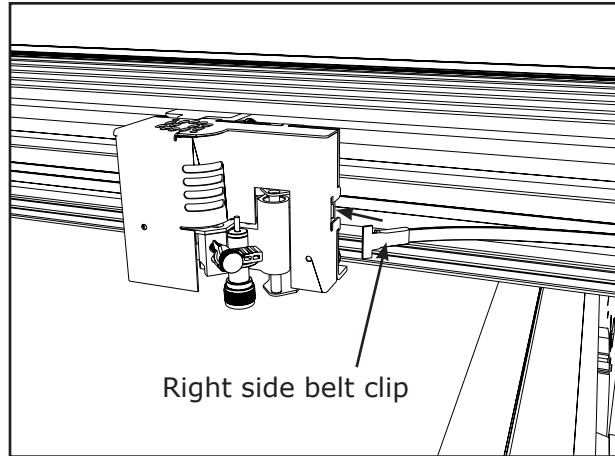


Note:
Make sure not to pinch the belt between the transmission and the machine body.

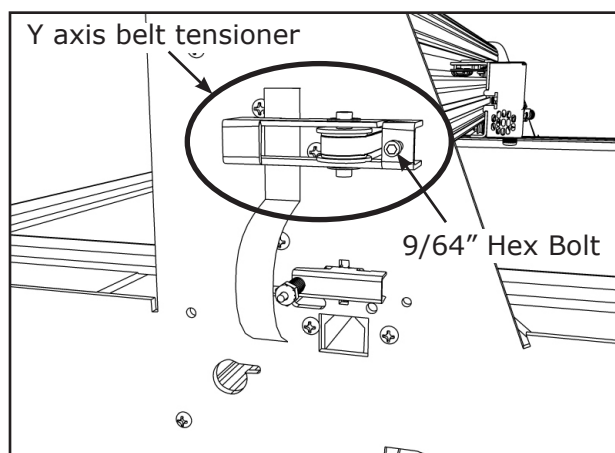
- 2 Install and tighten the (4) 11/32" nuts that hold the transmission to the machine.



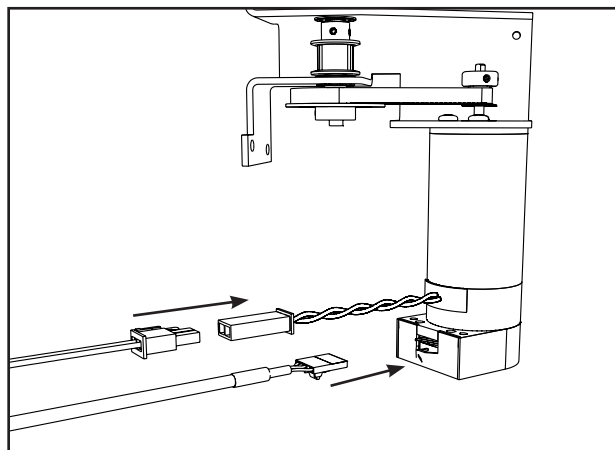
- ③ Connect the Y axis drive belt to the carriage assembly.



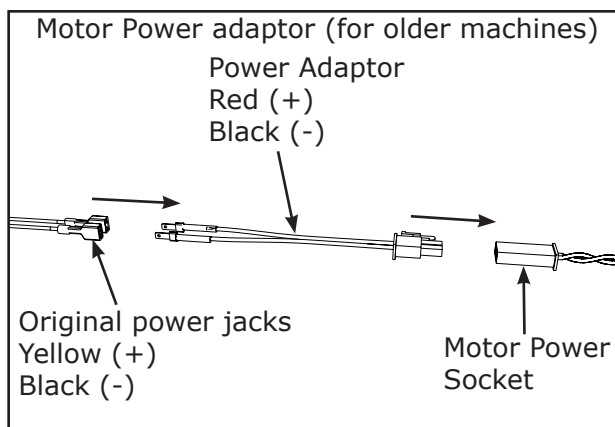
- ④ Make sure the belt is running straight across the machine and tighten the 9/64" hex bolt on the belt tensioner until the belt is taught. If you marked the bolt with tape earlier then tighten to that piece of tape. This will assure the correct tension on the Y drive Belt.



- ⑤ Connect the Power and Encoder wires to the motor as shown.



If your machine is older you may need to use the supplied motor power adaptor. Make sure you connect the positive and negative correctly.



If problems arise contact Ioline Tech Support for assistance.

Note:
 Check that the tensioner legs are in the indentations on the end plate before tightening.