

Ioline 200/300/350HF

Table & table belt replacement

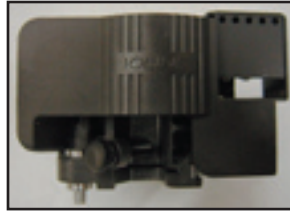
IOLINE™

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(425) 398-8282

Start by removing the bottom, right and left side covers. For instructions on this procedure see the 300/350HF service manual downloadable at; http://www.ioline.com/tech/manual_tech.html#DCS

① Removing the carriage assembly

Figure out what carriage you have by looking at the pictures to the right.



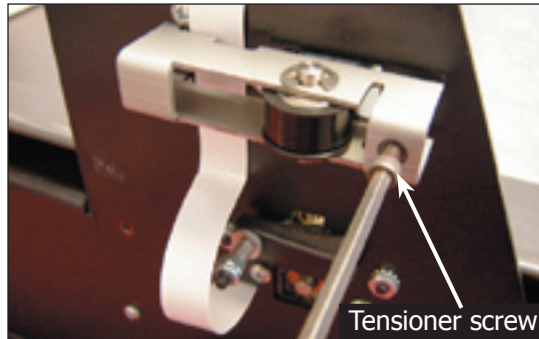
Carriage A
Older 300 system



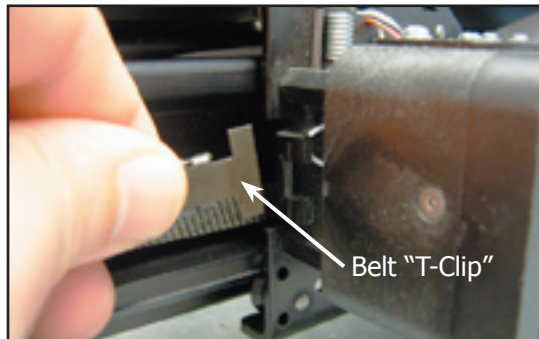
Carriage B
New 300 system
or
350HF

Removing 'Carriage A'

A) Loosen the screw on the Y axis belt tensioner on the left side of the machine.



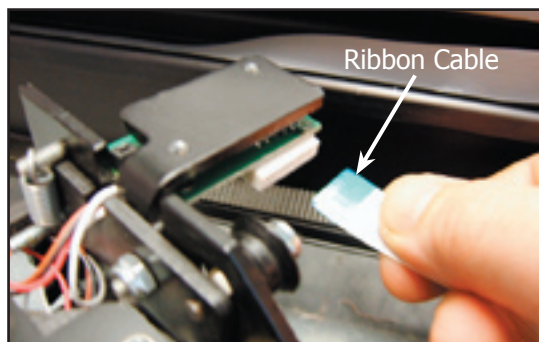
B) Unclip the Y axis belt "T-Clip" from the right and left side of the carriage.



C) Push down on the top of the carriage assembly and pull the bottom towards you. The carriage will pop off the rail completely.



D) Unplug the ribbon cable attached to the carriage assembly.

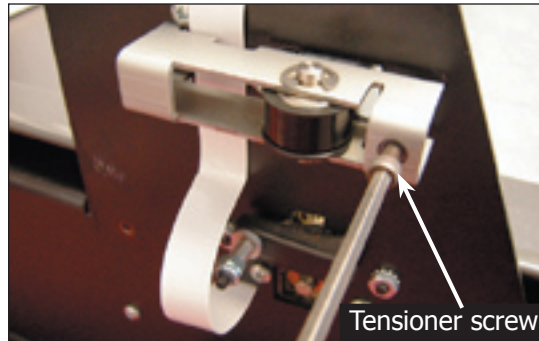


⚠ CAUTION

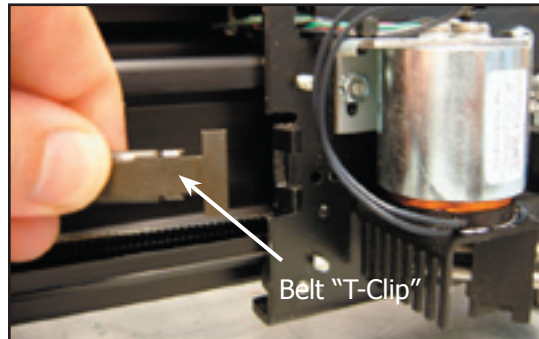
DO NOT remove this screw.

Removing 'Carriage B'

- A) Loosen the screw on the Y axis belt tensioner on the left side of the machine.



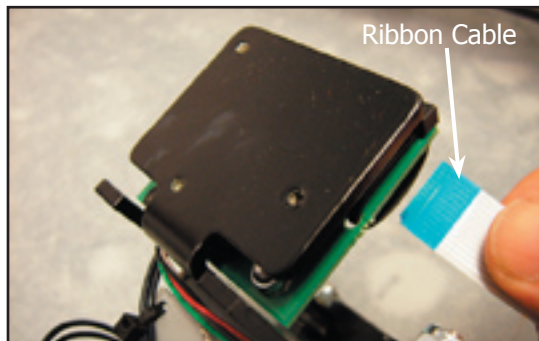
- B) Unclip the Y axis belt "T-Clip" from the right and left side of the carriage.



- C) Push down on the top of the carriage assembly and pull the bottom towards you. The carriage will pop off the rail completely.



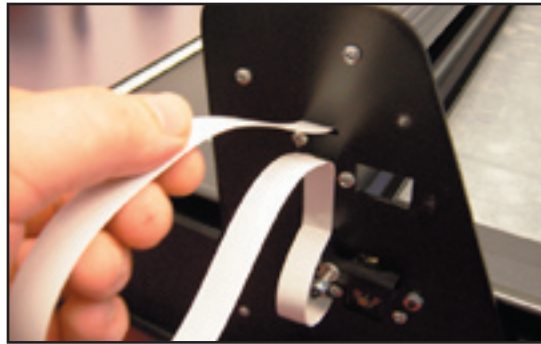
- D) Unplug the ribbon cable attached to the carriage assembly.

**⚠ CAUTION**

DO NOT remove this screw.

② Remove the ribbon cable

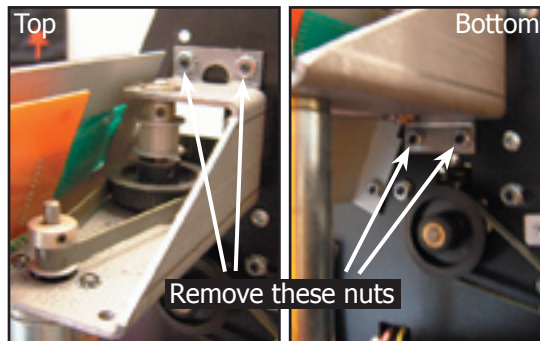
Un-Stick the ribbon cable from the double-stick tape and pull it out the left side of the machine. Remove the cable from the double-stick tape on the left end plate.

**⚠ CAUTION**

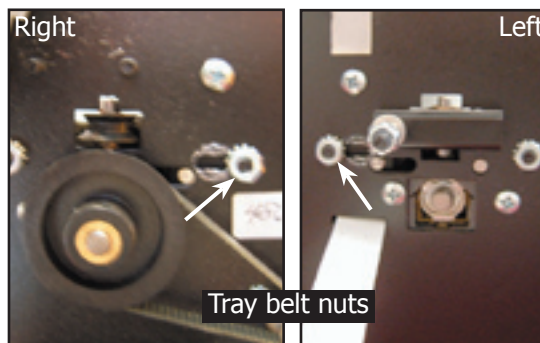
Don't bend the ribbon cable back and forth, or it could break.

③ Remove the Y axis transmission

To remove the Y axis transmission, first remove the 4 nuts (top and bottom) that hold the transmission to the right end plate. Remove the Y axis belt from the transmission and un-plug the wires to the motor. Set the transmission aside for now.

**④ Loosen the tray belt nuts**

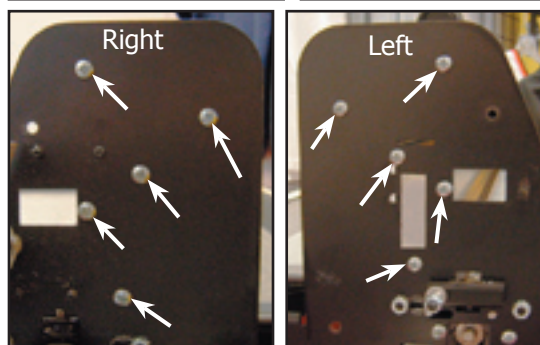
Loosen the tray belt nuts on the right and left side of the machine.

**i NOTE**

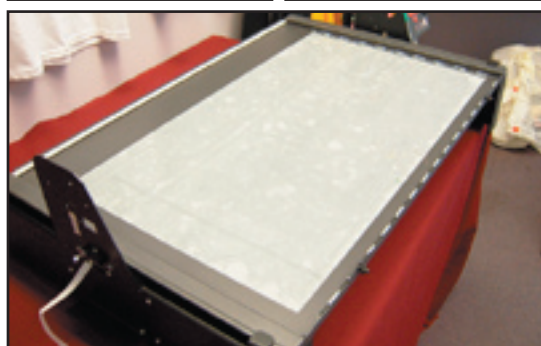
DO NOT remove the nuts

⑤ Removing the traverse screws

The traverse is the long rail that the carriage runs back and forth on, remove the screws on the right and left side that hold the traverse on the machine. See the pictures to the right for the locations.

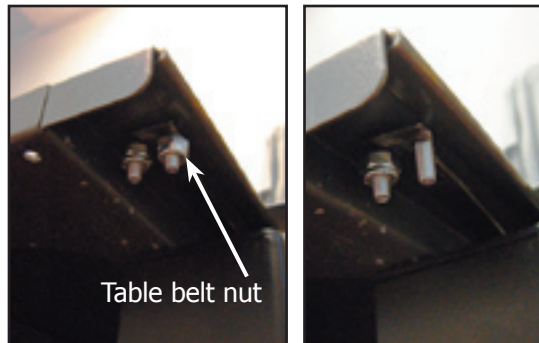


Remove the traverse from the machine so it looks like this. Be very careful when taking the traverse off, it is heavy and can scratch the inside of the end plates.

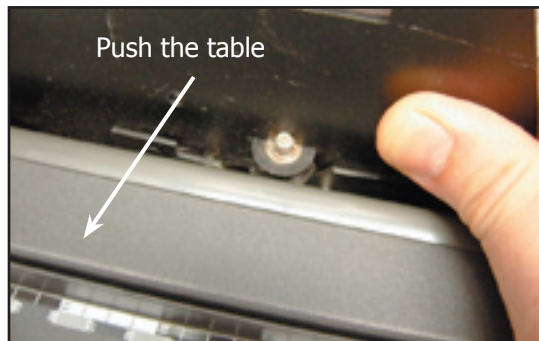


⑥ Removing the belt clip nuts

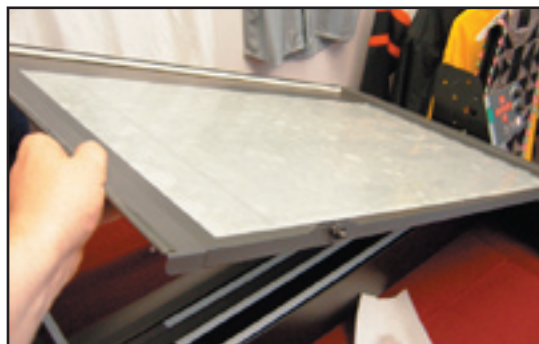
The tray clip nuts are located on the bottom of the table in the 4 corners. Remove one nut from each corner and unclip the belt from all four corners.

**⑦ Disengage the table wheels**

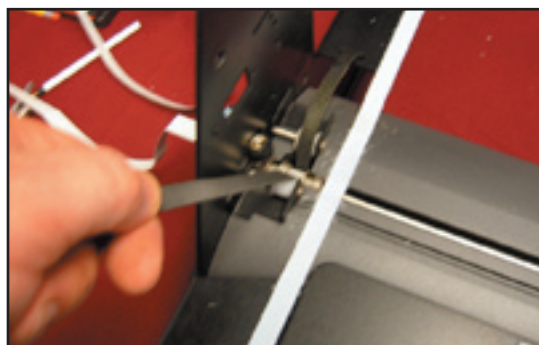
On the right side of the machine, push the table to the left side and pop it off the wheels. The wheel on the left side of the table is spring loaded.

**⑧ Removing the table assembly**

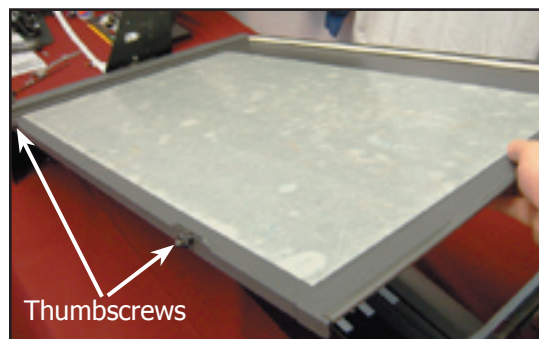
Lift the table assembly off the machine body.

**⑨ Removing and installing the table belts**

Pull the table belts out of the gear assembly on the right and left side of the machine. Thread the new belts through the gears and wheels in the same way.

**⑩ Installing the table**

Place the table on the machine making sure the thumbscrews are at the front.

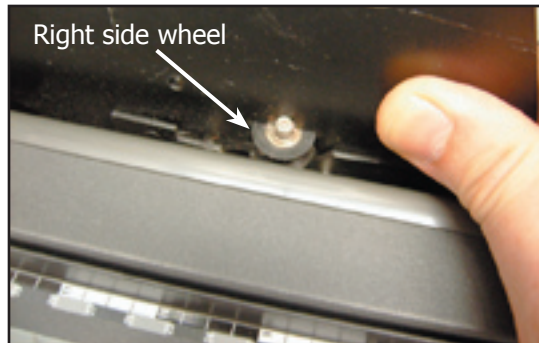


i NOTE

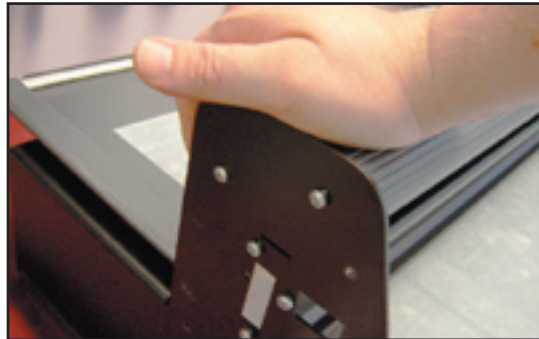
The left side wheel is spring loaded

11 Line up the table

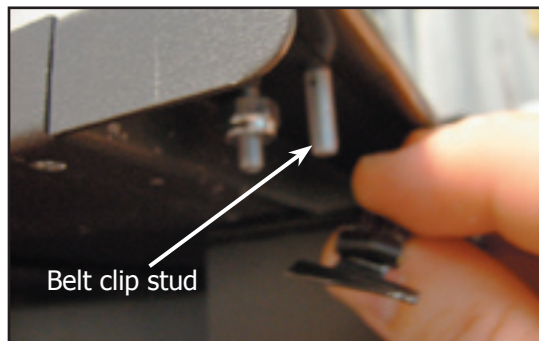
On the right and left side of the machine there are small wheels. The wheels should press against the edge of the table. Line up the left edge of the table with the wheel on the left. Press the table to the left and let the table drop into the wheel on the right.

**12 Installing the traverse**

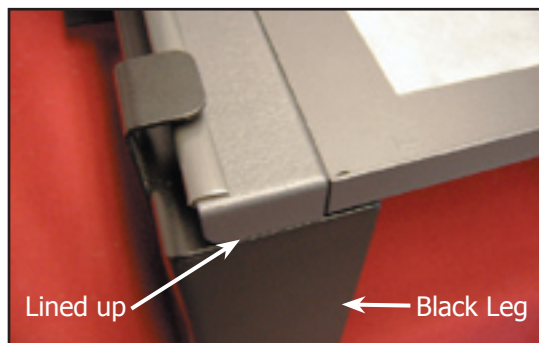
Install the traverse onto the machine making sure you line up the 5 screw holes on each side. Before tightening the screws all the way make sure you push down on the top of the traverse. This will make sure the traverse is at its lowest point on the machine.

**13 Attaching the table belts**

Hook the ends of the table belts up to the studs on the bottom of the table. When tightening the nut that holds them don't make them tight. They are designed to be left a little loose.

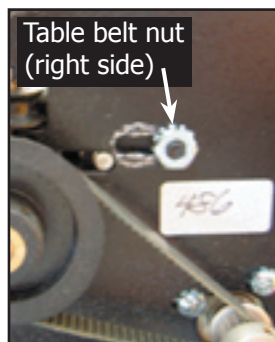
**14 Aligning the table**

To work properly the table must be straight on the machine. Move the table forward until both sides line up with the legs of the machine.

**15 Tightening the table belts**

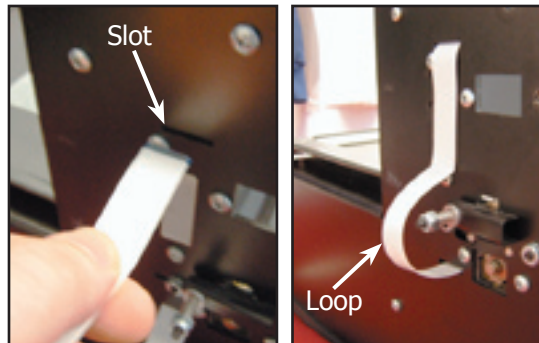
In order to tighten the table belts pull the table belt nut toward the front of the machine and tighten the nut as you hold it. Make sure the table stays aligned with the legs.

Do this to both the right and left side of the machine.

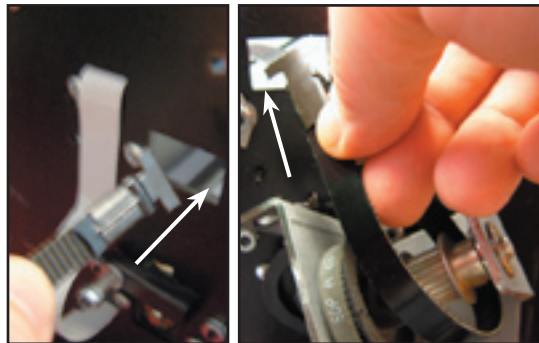


16 Installing the ribbon cable

Insert the ribbon cable into the slot on the left side of the machine. Make sure there is a loop in the cable just below where it goes into the machine (see picture). Press the ribbon cable down to the double-stick tape on the inside of the traverse.

**17 Installing the Y axis belt**

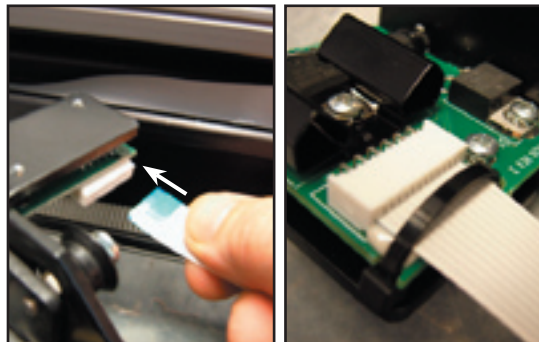
Insert the long Y axis belt into the hole on the left side of the machine. Bring it through the hole on the right side of the machine and wrap the belt around the gear on the Y axis transmission. Push the belt through the hole on the right again.

**i NOTE**

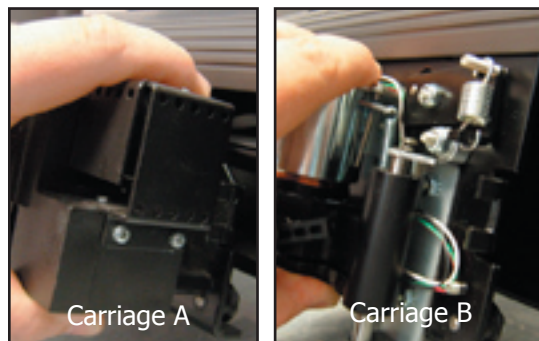
Make sure the belt is not twisted.

18 Installing the ribbon cable on the carriage

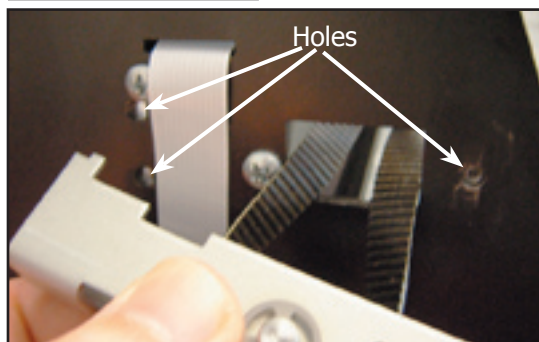
Insert the ribbon cable into the connector on the top of the carriage. Make sure the blue end is facing "UP".

**19 Installing the carriage**

Place the top wheel on the back of the carriage on the top rail of the traverse. Push down on the top of the carriage and push the bottom toward the machine.

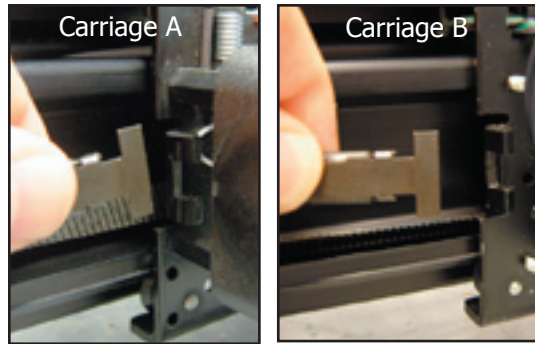
**20 Tightening the belt tensioner**

Line up the tensioner body to the holes in the machine.

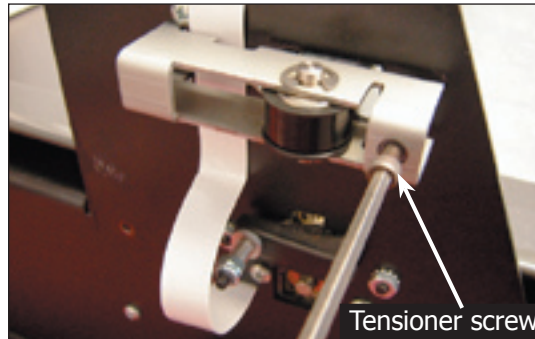


20 Connect the belt to the carriage

Hook the belt "T-Clips" to the right and left side clips of the carriage. Make sure the tensioner is in the holes on the left side of the machine.

**21 Tighten the belt tensioner**

Tighten the belt tensioner screw until there is tension on the long Y axis belt.

**22 Test the machine before turning on**

Before turning the machine on move the tray in and out and the carriage side to side to make sure everything is tight. If you notice the table getting off alignment the belts aren't tight enough, or the belts are not evenly tensioned. If the carriage is slipping while going back and forth the long Y axis belt is loose.

If problems arise contact Ioline Tech Support for further help.

⚠ CAUTION

DO NOT over tighten the belt. Too much tension will cause premature wear on the belt.