

BLUEROCK[®]

Tools

OPERATIONAL MANUAL V1.0

BLUEROCK[®] WS-212 Wire Stripper

Removing/Replacing Blades

CAUTION!! IMPORTANT!! DANGER!! WARNING!!

DISCONNECT MACHINE FROM POWER BEFORE PROCEEDING!!

Estimated Completion Time: 90 Minutes

Tools Required

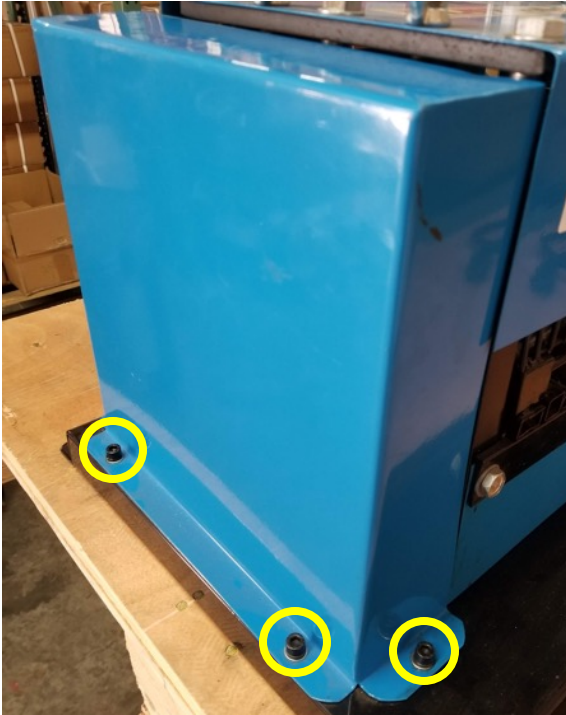
5mm Hex Wrench
14mm Wrench
17mm Wrench
Adjustable Wrench
Pliers
Small Flathead Screwdriver
Flat punch
Rubber Mallet
Hammer
2 types of Bearing Pullers (See Pictures Below)

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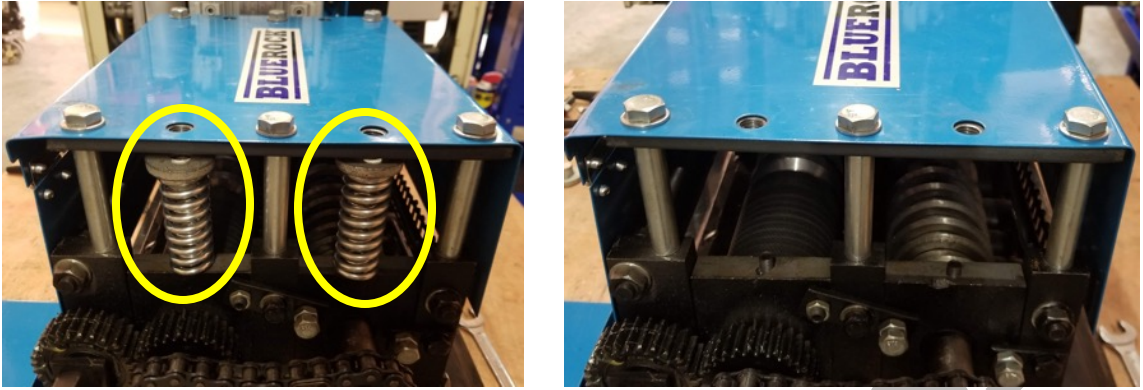
1. Use a 5mm hex wrench to remove 4 bolts fastening the side cover to the base of the machine.



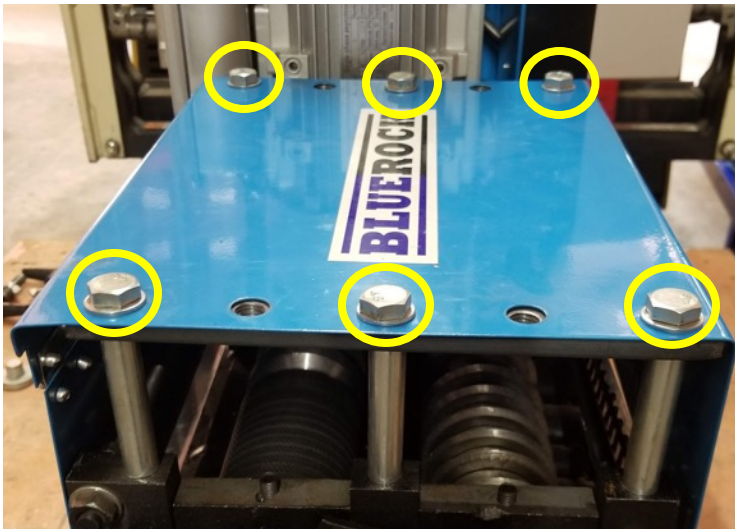
2. Remove the 4 T-handle bolts from the top of the machine.



3. Remove 4 sets of springs and spring caps from the machine.



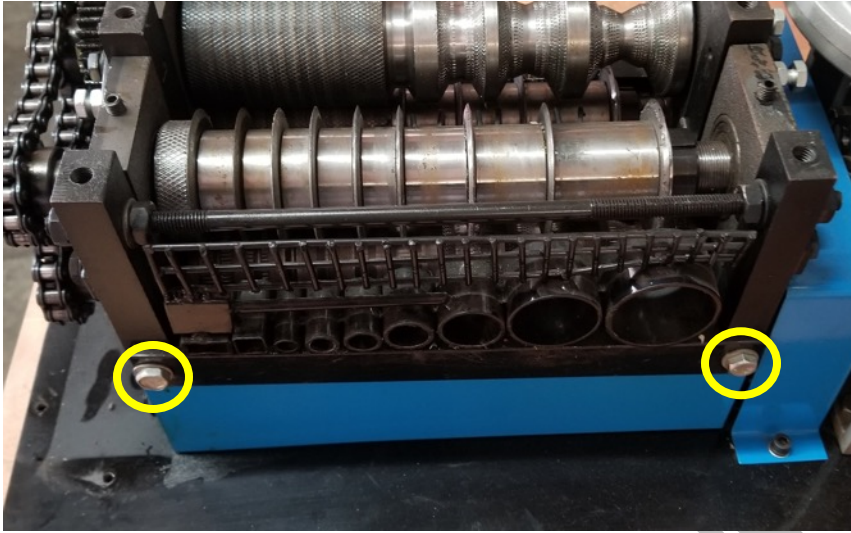
4. Use a 17mm wrench to remove the 6 top bolts from the machine.



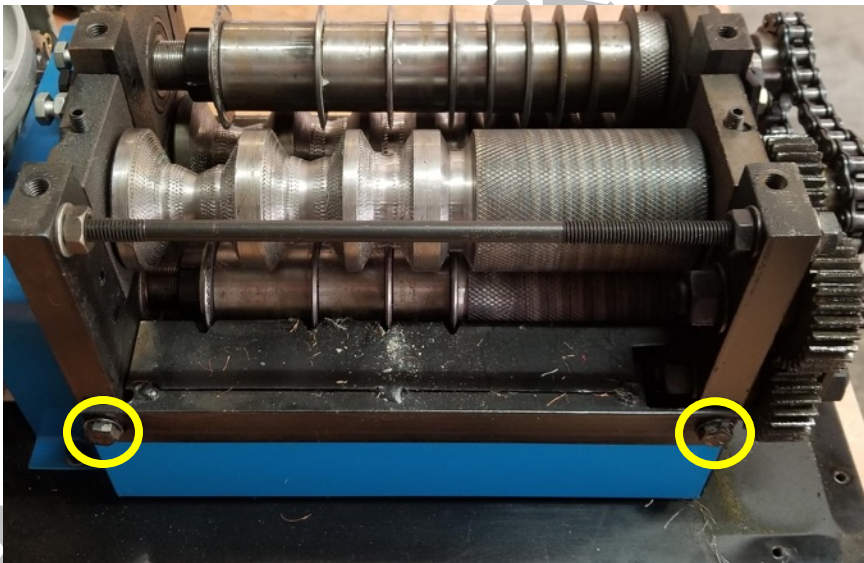
5. Carefully lift the top cover away from the machine. Be sure to remove 6 spacer tubes and 2 flat brackets as shown.



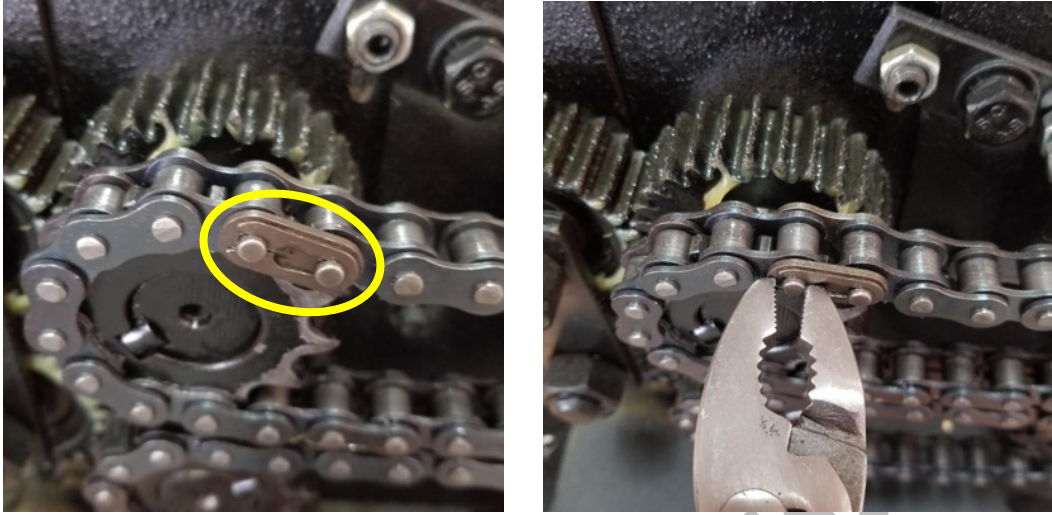
6. Use a 14mm wrench to remove 2 bolts on the front guards as shown and remove the guards from the machine.



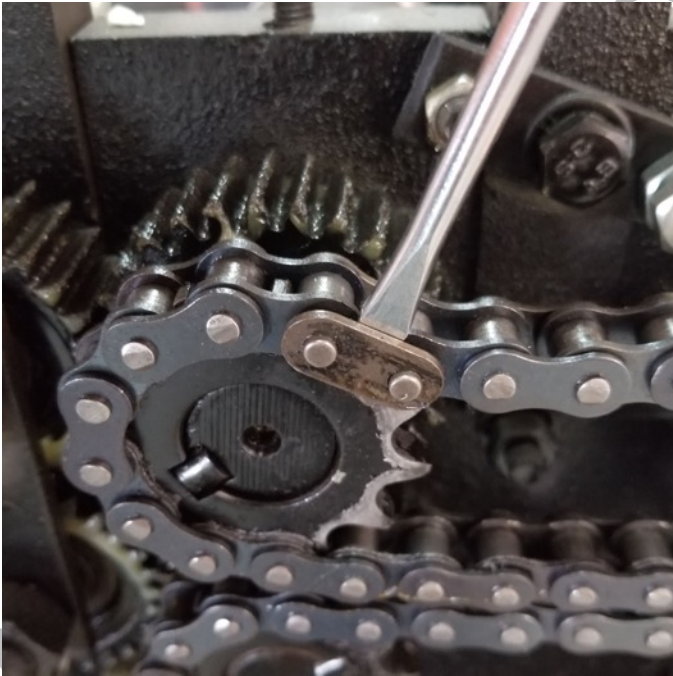
7. Use a 14mm wrench to remove 2 bolts on the rear guard as shown and remove the guards from the machine.



8. Use a pliers to remove the master link clip on the top chain as shown.

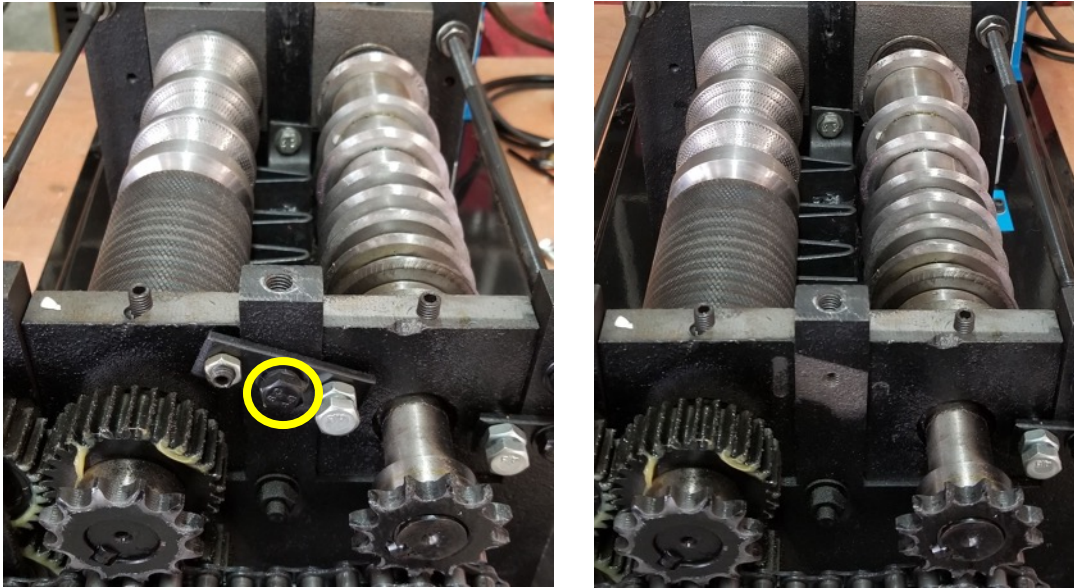


9. Use a flathead screwdriver to pry the master link apart as shown.



10. Set the chain and master link aside on a clean surface.

11. Use a 14mm wrench to remove the upper roller alignment bracket as shown.



12. Very carefully lift the blade roller assembly straight up from the machine and set on a flat piece of wood.

13. Use a bearing puller to remove the bearing housing as shown.



14. Use the bearing puller to remove the bearing from the blade shaft.



15. Use a marker to number the blade spacers for use during reassembly.



16. Place a flat punch against the spanner nut as shown.



17. **Very carefully** hold the blade assembly and tap the punch with a hammer until the nut is loose. **Note:** This nut is standard thread, loosen by spinning counterclockwise.

18. Remove the spanner nut, washer, blades, and blade spacers from the shaft.



19. Alternate placing new blades and blade spacers on the shaft in the order they came off.

20. Replace the spanner nut and tighten with the same method used to remove it.

21. Thoroughly clean the mating surfaces between the bearing housing, bearing, and blade shaft. Lubricate each of these surfaces with a thin coat of grease.

22. Set the bearing housing on a flat piece of wood with the bearing aligned on top of it. Use a rubber mallet to seat the bearing in the housing.



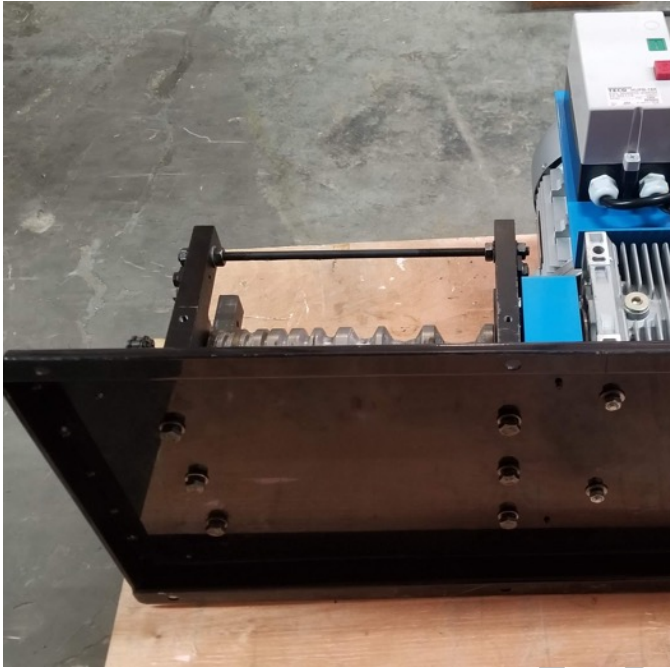
23. Carefully hold the blade shaft vertically on a piece of wood and align the bearing with the end of the shaft. Use a rubber mallet to seat the bearing on the shaft.



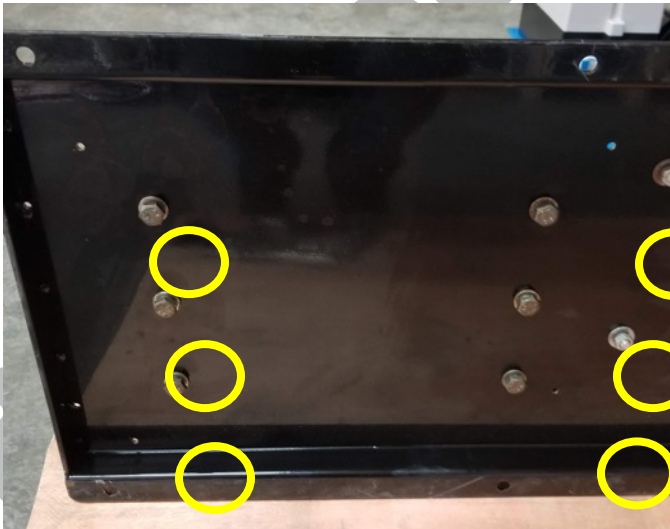
24. Set the blade roller assembly aside until reassembly.

25. Carefully lift the secondary roller straight up from the machine and set aside.

26. **Very carefully** tilt the machine on its side to access bolts under the base plate as shown.
Brace the machine so the motor does not get damaged.



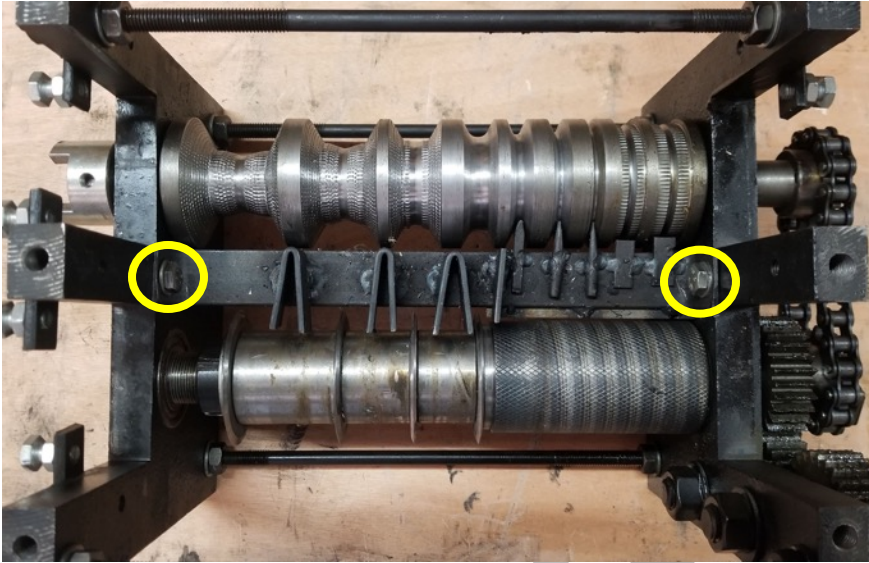
27. Use a 17mm wrench to loosen 6 bolts from the bottom side of the roller assembly as shown. **Note:** Do not fully remove the bolts yet.



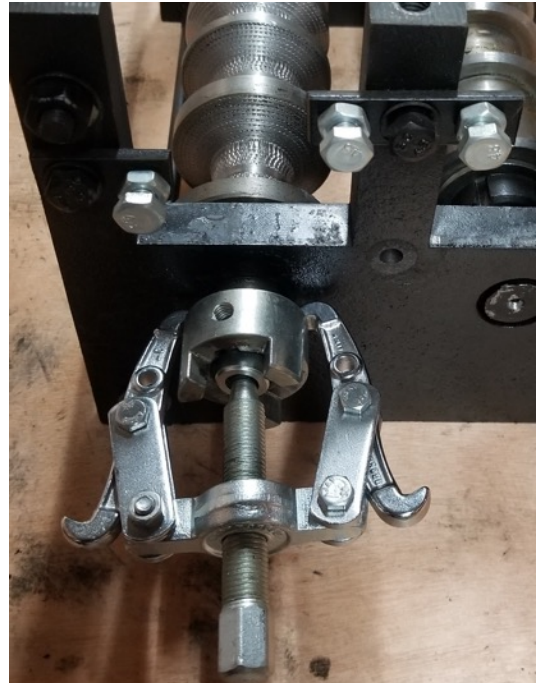
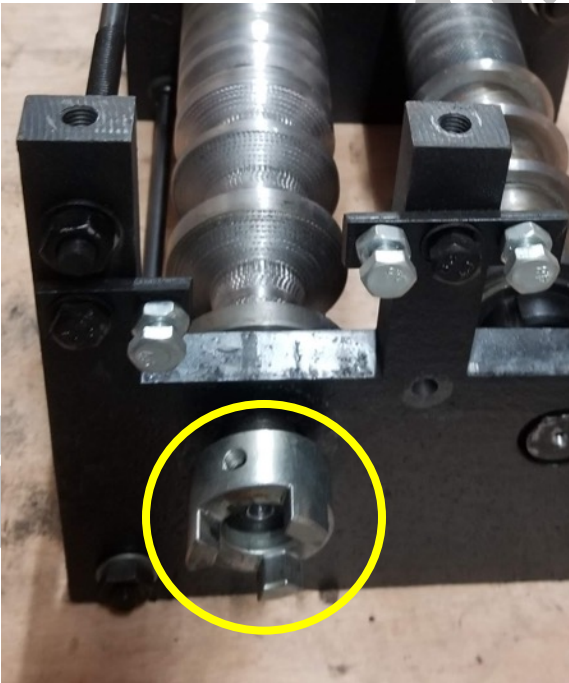
28. Tilt the machine back upright and carefully prop up with wood blocks so the bolts under the machine are accessible by hand.

29. Remove the loosened bolts from the underside of the roller assembly.

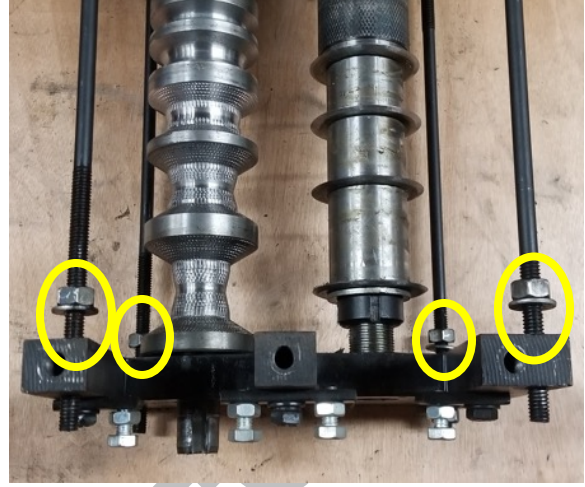
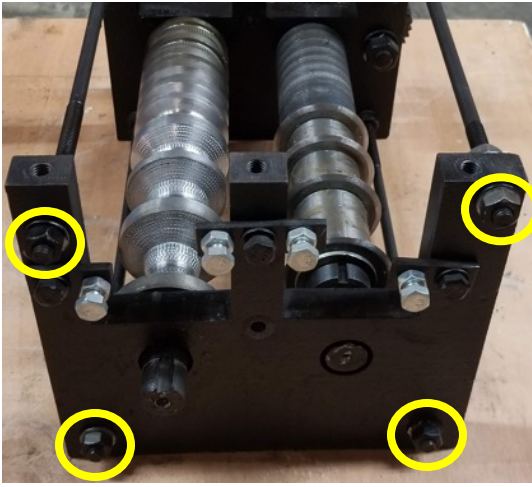
30. Separate the roller assembly from the rest of the machine. Set the motor and base aside until reassembly.
31. Use a 14mm wrench to remove 2 bolts from the middle guard as shown and remove it from the machine.



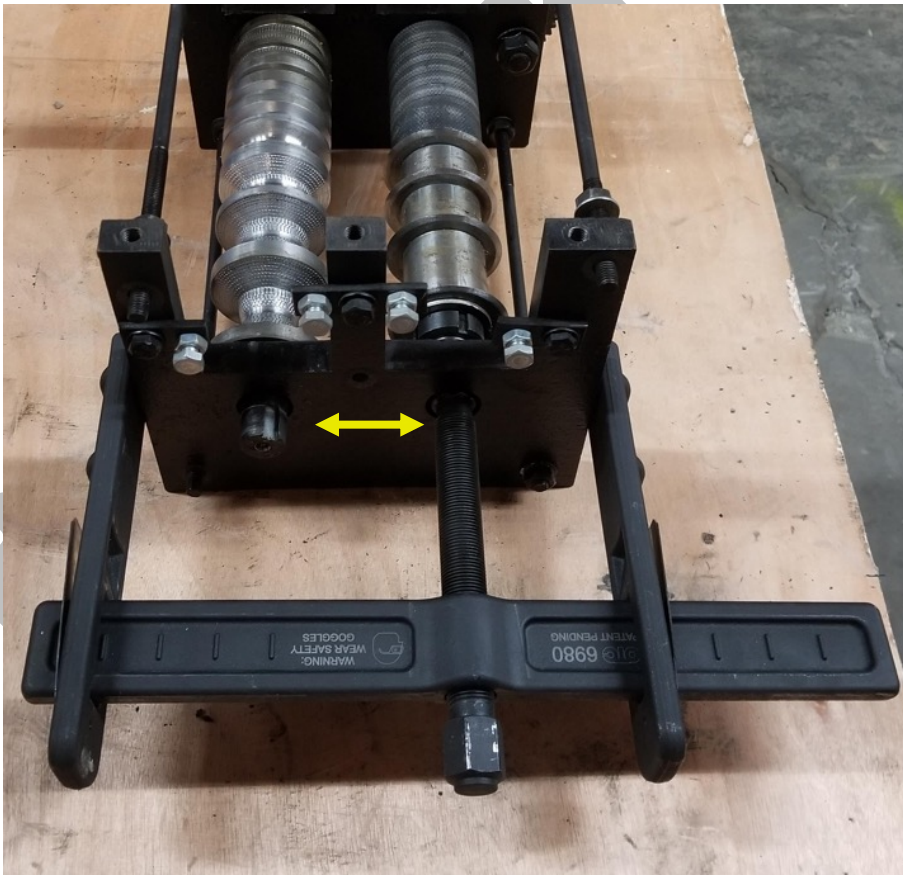
32. Use a bearing puller to remove motor coupling from the roller assembly.



33. Use a 14mm wrench to remove 4 nuts and washers from the side of the machine. Then loosen the 4 nuts on the inside of the plate as shown.



34. Use a large puller (pictured is an OTC Brand 6980 brake drum puller) to remove the side plate from the bottom roller assembly. **Important:** Alternate pulling from each shaft to prevent the plate from binding.



35. Pull the bearing from the shaft using a bearing puller as shown.



36. Use a marker to number the blade spacers for use during reassembly.



37. Place a flat punch against the spanner nut as shown with a wood block supporting the bottom of the roller. Very carefully tap the punch with a hammer until the spanner nut is loose. **Important:** This nut is reverse threaded, loosen by spinning clockwise.



38. Remove spanner nut, washer, blades, and blade spacers from the shaft.



39. Alternate placing new blades and blade spacers on the shaft in the order they came off.
40. Replace the spanner nut and tighten with the same method used to remove it.
41. Thoroughly clean all mating surfaces between the housing, bearings, and shafts.
Lubricate all mating surfaces with a thin layer of grease.

Reassembly

42. Align the bearing with the end of the blade shaft. Use a rubber mallet to seat the bearing on the shaft. **Note:** A spacer such as a large socket will be needed to seat the bearing all the way down.



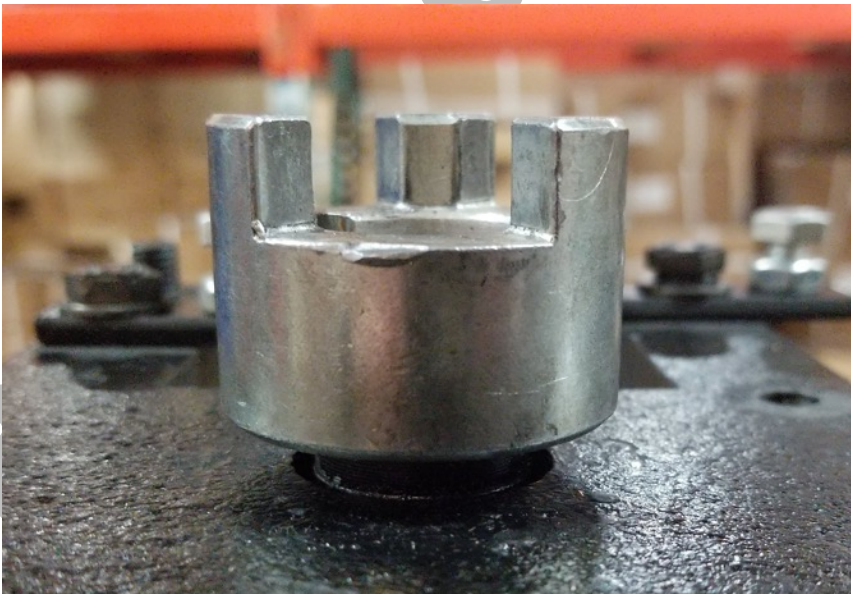
43. Align the side plate of the roller assembly with the lower rollers. Use a rubber mallet to seat the bearings into the housing. Alternate tapping each side as shown to prevent the bearings from binding until the bearings are fully seated in the housing. **Note:** Be sure the nuts on the inside of the plate are loose enough to allow movement.



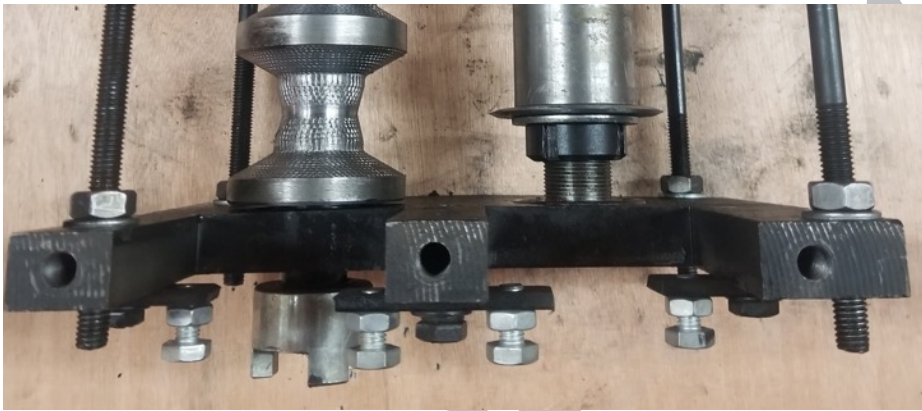
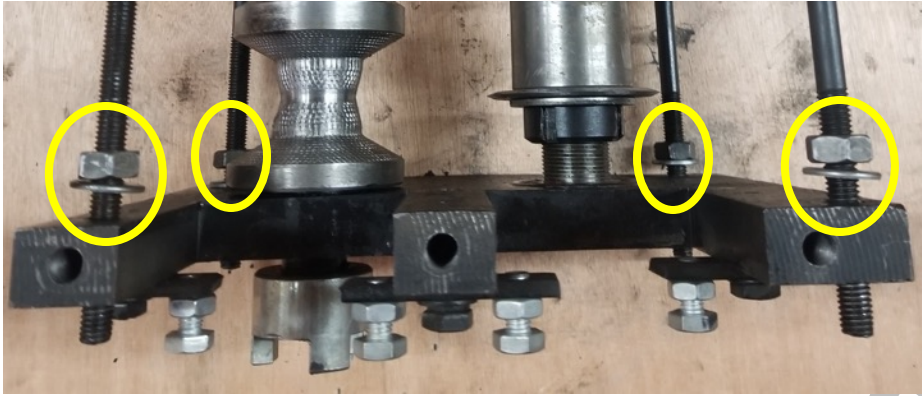
44. Thoroughly clean and lubricate the mating surfaces between the roller shaft and motor coupling. Insert the motor coupling key in the shaft and align the coupling with the shaft as shown.



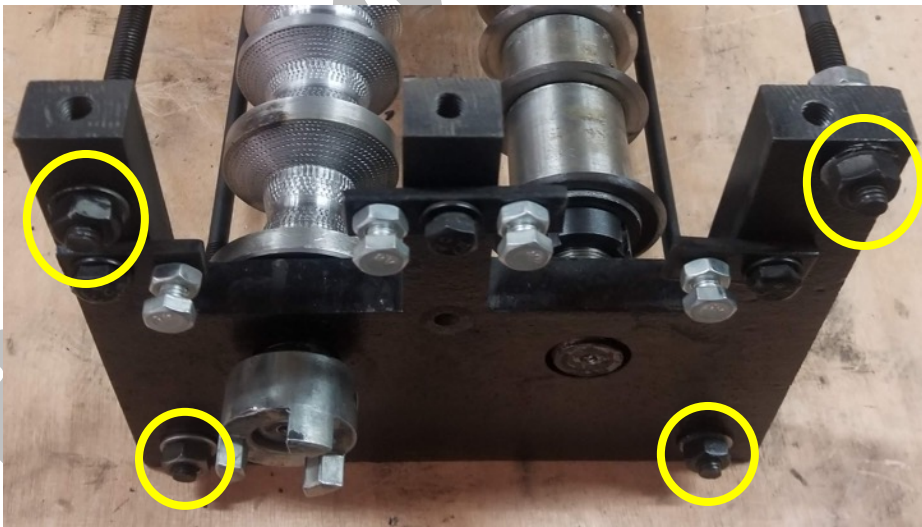
45. Place a block of wood across the top of the coupling so it does not get damaged. Squarely tap the block with a hammer until the coupling is fully seated on the shaft.



46. Finger tighten the nuts on the back of the side plate as shown.

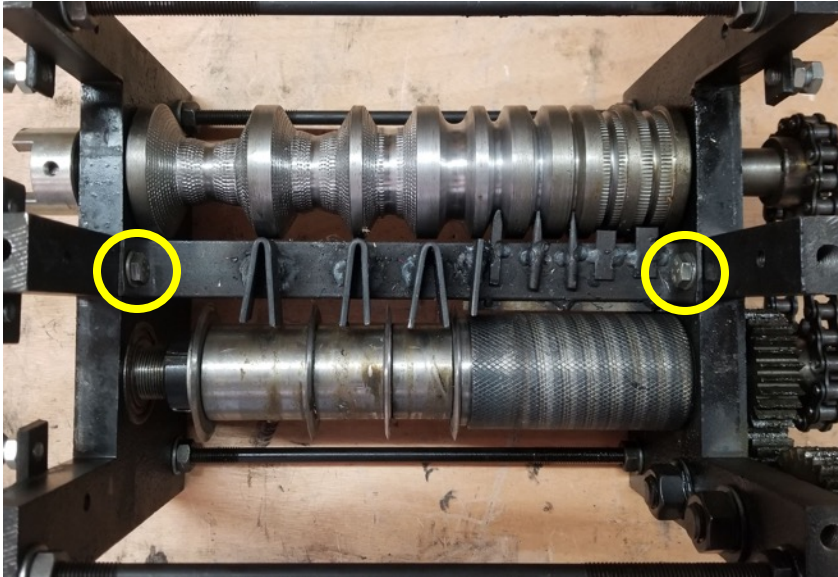


47. Place the washers and nuts on the outside of the plate and use a 14mm wrench to tighten.



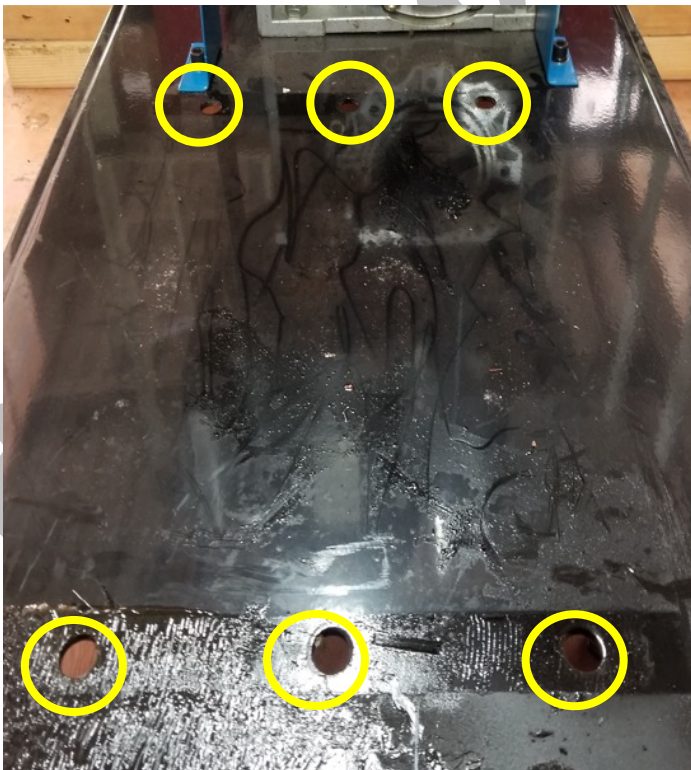
48. Install the middle guard and with 2 bolts as shown. Use a 14mm wrench to tighten.

Note: Turn the roller assembly to be sure the guard does not rub, adjust as needed.



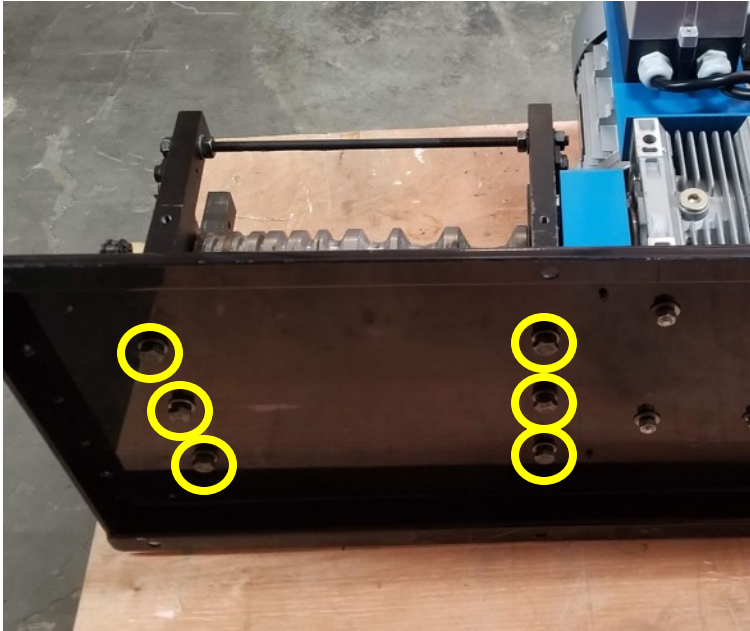
49. Carefully prop up the base of the machine with wood blocks so the underside is accessible. Align the holes under the roller assembly with the holes on the base as shown.

Important: Be sure the motor coupling is aligned and fitted together properly.

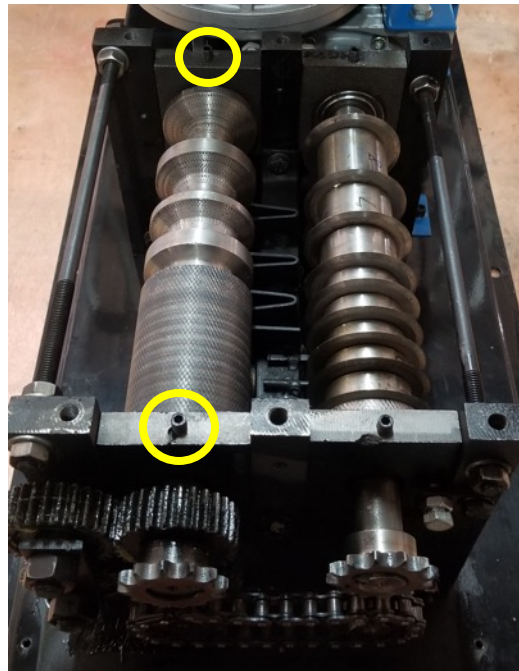
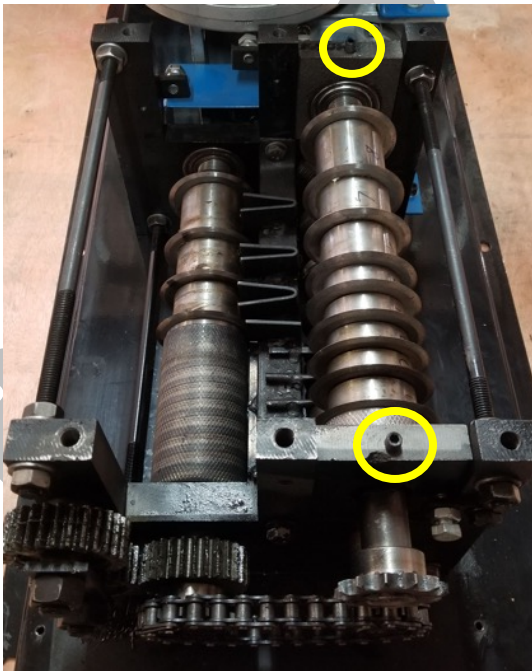


50. Screw each of the 6 bolts into the roller plates through the bottom of the base plate.

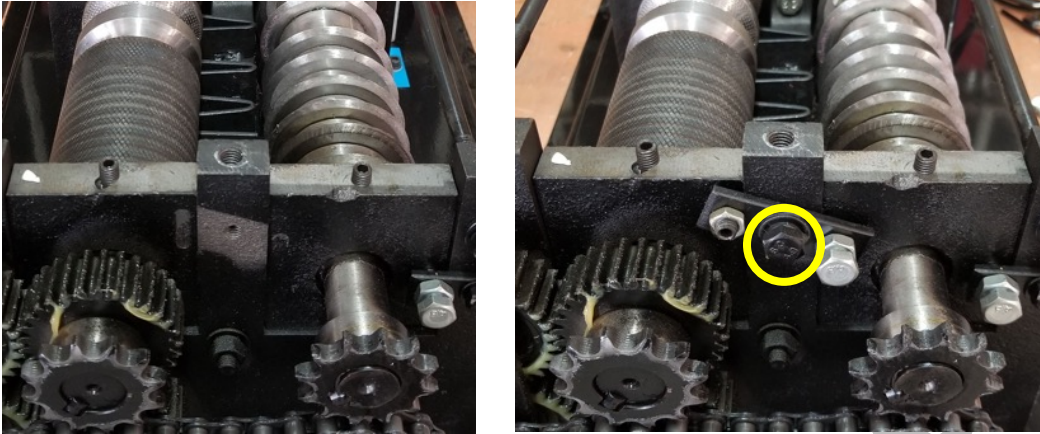
51. Tilt the machine on its side again and use a 17mm wrench to tighten all 6 bolts as shown.



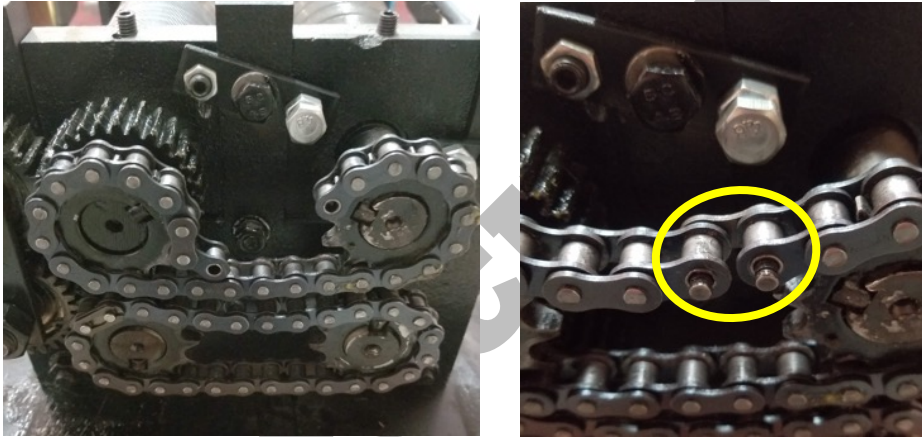
52. Very carefully set the upper blade roller into the machine. Then carefully set the upper secondary roller into the machine. **Important:** Be sure the set screws are facing up as shown.



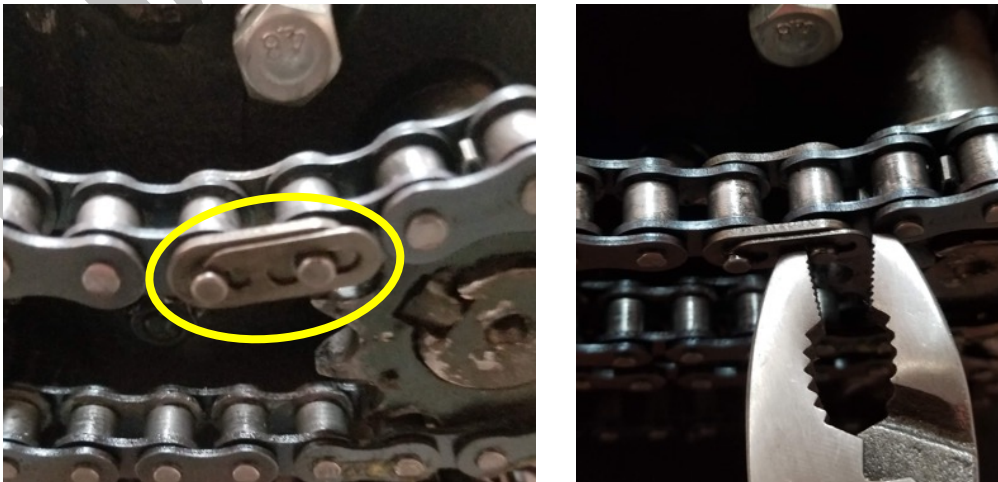
53. Use a 14mm wrench to install the upper roller alignment bracket as shown.



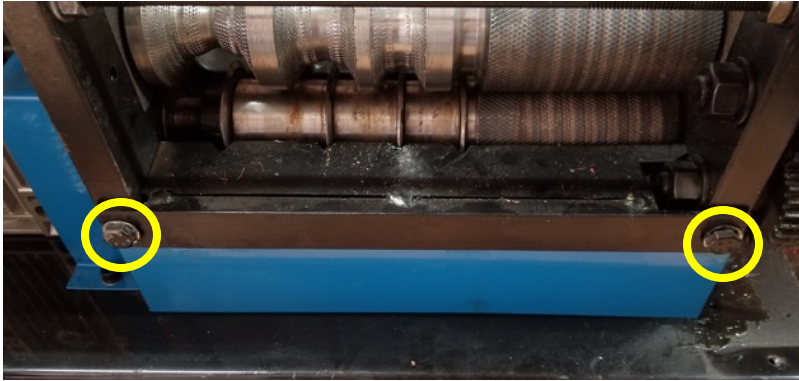
54. Lay the chain across the top sprockets and insert the master link as shown.



55. Install the master link side plate and clip. Use a pliers to fasten the master link clip as shown.



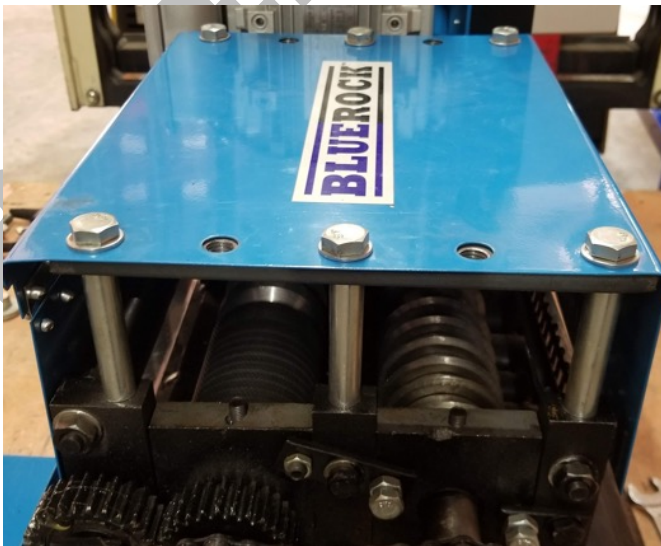
56. Install the rear guard pieces with 2 bolts as shown and tighten using a 14mm wrench.



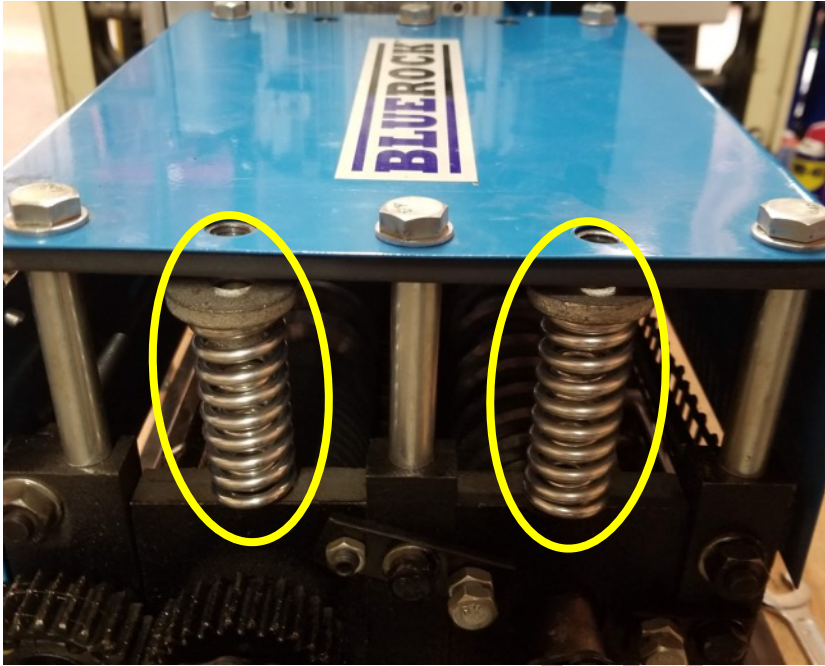
57. Install the front guard pieces with 2 bolts as shown and tighten using a 14mm wrench.



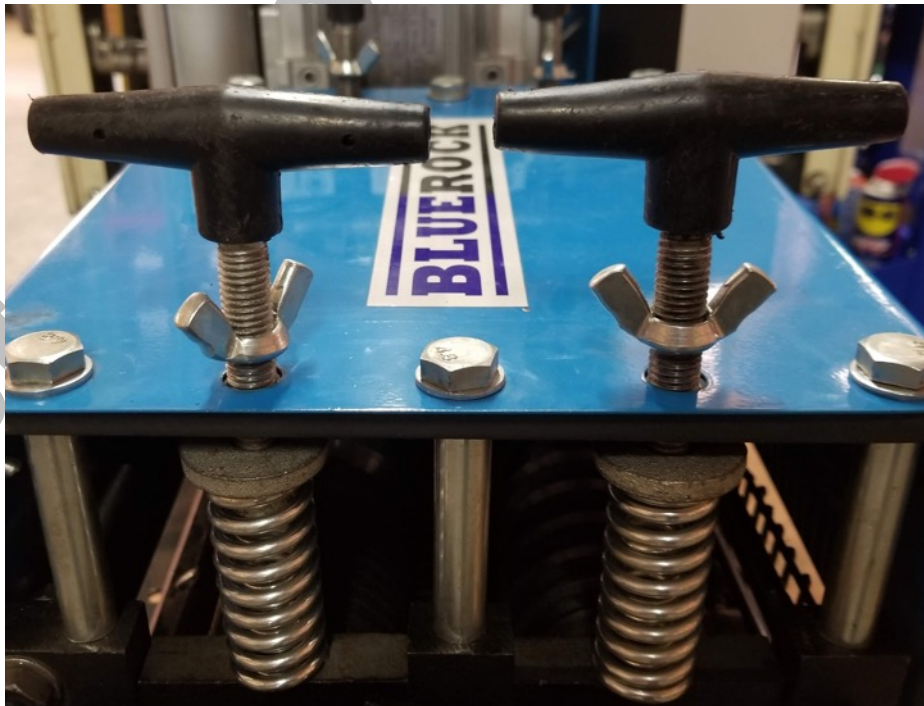
58. Set the top cover in place with 2 flat brackets 6 spacer tubes aligned under it. Insert 6 bolts through the holes in the top cover as shown and use a 17mm wrench to tighten.



59. Set the 4 sets of springs and spring caps in place over the set screws as shown with a small spring inside each large spring.

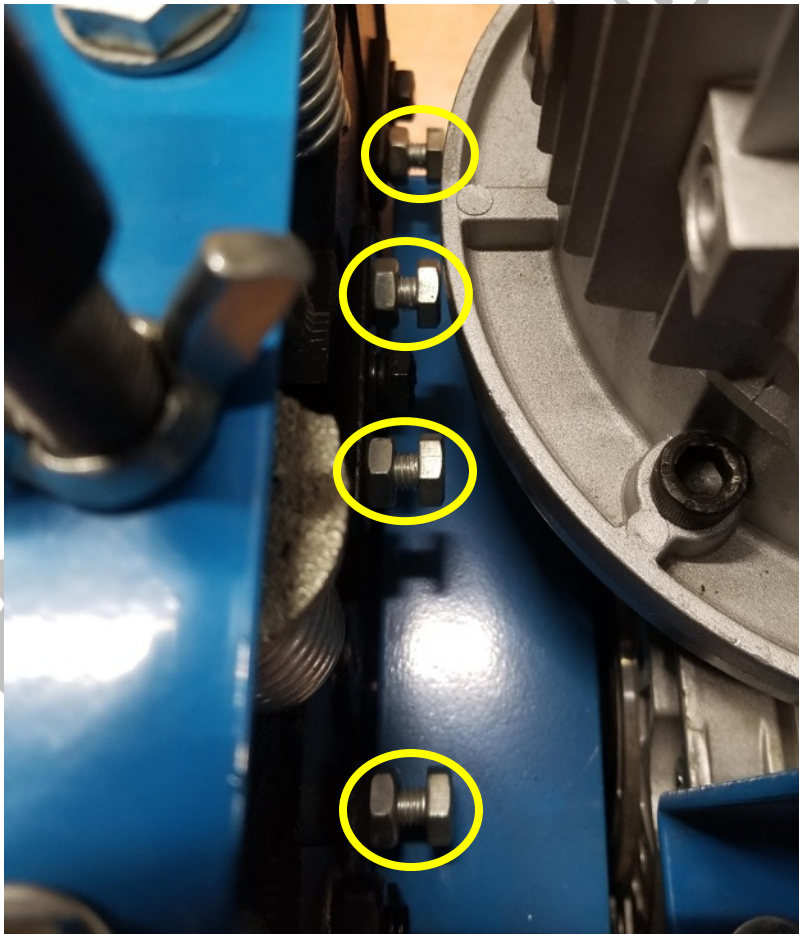
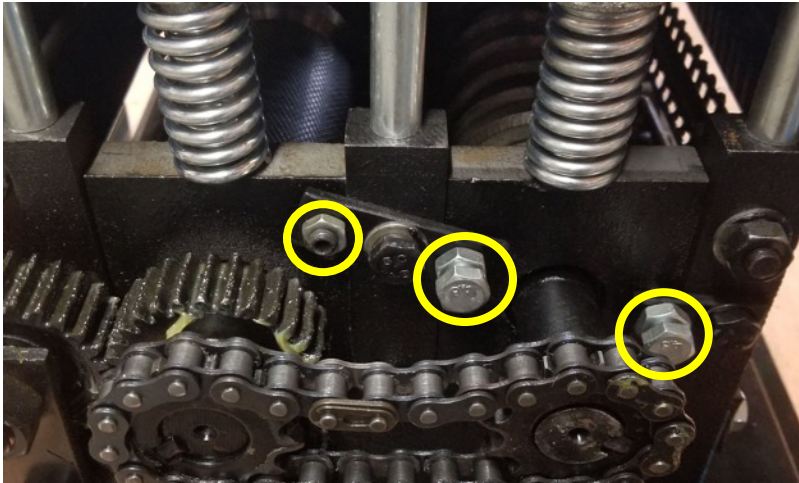


60. Screw 4 T-handle bolts into the flat brackets as shown until they touch the spring caps. Tighten each bolt an additional quarter inch to set default spring tension.



Blade Alignment Adjustment

61. Use a 14mm wrench to loosen the locknuts and blade alignment bolts on each side of the machine as shown. **Note:** This is only necessary if the blades and cutting channels are misaligned. Move to step 65 if blades are already aligned.



62. Move the top rollers so the blades are centered in the cutting channels.
63. Tighten each of the alignment bolts only until they touch the roller housings.
64. Back each bolt out a half turn to allow room for movement and then tighten each locknut.
65. Fasten side cover as shown with 4 bolts and tighten using a 5mm hex wrench.

