

# RapidTool Series A Rebar Tying Machine Troubleshooting Guide

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## Warning

- Ensure power is off and battery removed before performing service.
- Do not use oil based lubricants to clean product as this may void warranty.

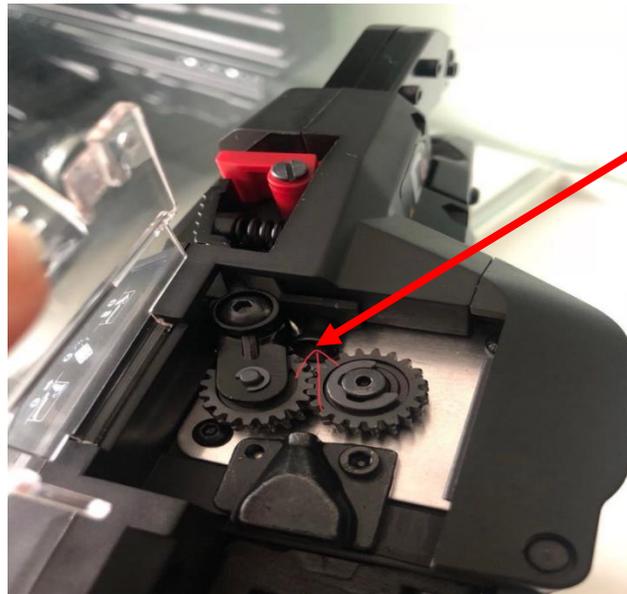
## Phone Diagnosis

### General Issue

- Ensure all bolts on machine are tightened – particularly around Machine Mouth – needs to be in correct alignment.

### Issue with wire feed or wire cutting mechanism

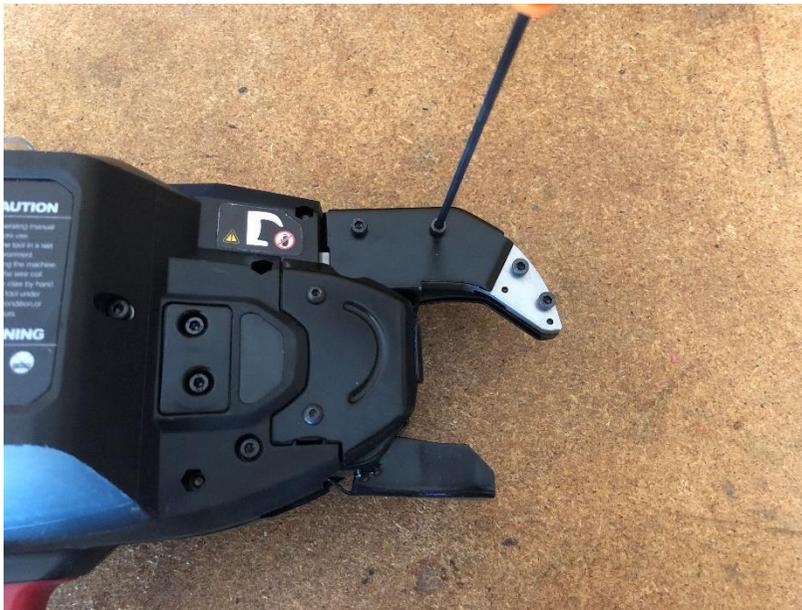
1. Remove wire and use air blow gun to clean wire feeding channel by firing air through wire feed Pipe.



*Note: Customer should be removing wire coil and cleaning the feeding gear, brake gear and machine mouth areas after use with an air blow gun. This includes using air blow gun to also clean wire feeding channel by firing air through wire feed Pipe as detailed above.*

### If issue is still not resolved:

1. Open machine mouth.

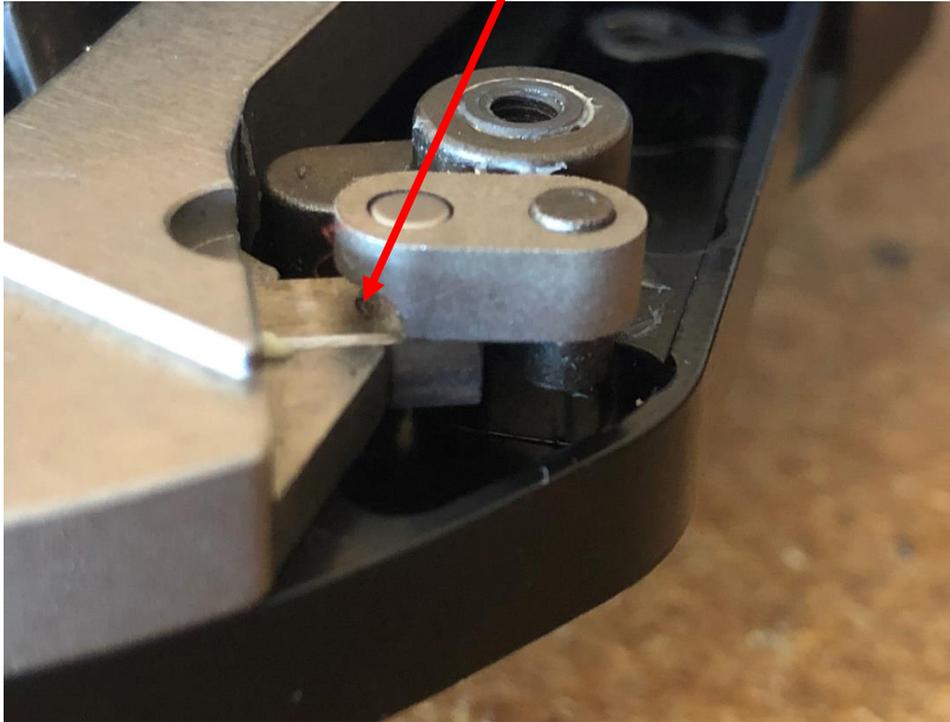


2. Remove and clean cutter and cutter section with a dry cloth or air blow gun.



3. Check cutter and cutting mechanism parts and replace if damaged.

4. Reassemble cutter section (ensure recess is in correct position below) and securely replace machine mouth covers.



## Troubleshooting Guide

Refer to troubleshooting spreadsheet below. Solutions in **yellow** may be performed by customer without need to return machine.

| No. | Normal Operation   | Problem                                      | Warning Sound              | Cause  | What to Check   | Solution  |
|-----|--|--|----------------------------|--|---|---|
| 1   | Power on → The Tip Axis is initialized and the wire-cutter operates automatically. | No operation takes place.                    | No sound emitted.          | Battery completely empty.  | Confirm the battery is charged.   | Perform normal charge.  |
|     |  |  |                            | Electrode plate has been oxidized.   | Take out the battery and see if the electrode is brown.   | Polish terminal part of battery pack with clean cloth, etc.   |
|     |  |  | Continuous short beeps     | Battery is empty.  | Confirm the battery is charged.   | Perform normal charge.  |
|     |  |  | One short beep             | Bad connection of twisting motor connecting wire or twisting motor is broken.  | Check twisting motor connecting wire or twisting motor.   | Reconnect the connecting wire or replace with new twisting motor.   |
|     |  | Twister cannot go back to the initial state. | Seven short beeps repeated | There is foreign substance between Magnetic plate (#326) and Route PWB unit (#325) or bad connection of connecting wire K. | Check if there is foreign substance between Magnetic plate (#326) and Route PWB unit (#325) or check the wire K connection. | Remove the foreign substance between Magnetic plate (#326) and Route PWB unit (#325) or replace with new connecting wire K. |
| 2   | Trigger ON → Wire is sent out.   | No wire is sent out.                         | Two short beeps            | Curl guide is open.  | Open/close curl guide.  | Fully close curl guide.   |

| No. | Normal Operation             | Problem  | Warning Sound              | Cause   | What to Check   | Solution   |
|-----|------------------------------|--|----------------------------|---|---|--|
|     |                              |  | Three short beeps repeated | Tie wire has run out.   | Check if the tie wire has run out.                      | Set the new tie wire as per loading tie wire section below.  |
|     |                              |  |                            | Wire caught inside reel.  | Check if wire inside reel has been loosened and caught. | Remove fray on reel.   |
|     |                              |  |                            | Feeding channel is blocked with foreign substance.                          | Check the feeding channel                               | Remove wire and use air blow gun to clean wire feeding channel by firing air through wire feed pipe as shown in diagram above.   |
|     |                              |  |                            | A small bump on tie wire  | Check tie wire  | Cut off the part of tie wire with a small bump   |
|     |                              |  |                            | Bad connection of feeding motor connecting wire or feeding motor is broken. | Check feeding motor connecting wire or feeding motor.   | Reconnect the connecting wire or replace with new feeding motor.   |
| 3   | Binding wire draws a circle. | Curl is distorted and steps out of curl guide. | No sound emitted.          | Wire, by hitting reinforcing bars, was repelled.                            | Check if wire hits reinforcing bars at binding.         | Pay attention so that wire does not hit reinforcing bars at binding.   |
| 4   | Wire is cut.                 | No wire cutting takes place.                   | No sound emitted.          | Cutter section is blocked with foreign substance.                           | Confirm function of cutter section.                     | Remove wire and use air blow gun to clean wire feeding channel by firing air through wire feed pipe as shown in diagram above.<br>Open machine mouth and wipe cutter section with dry cloth or blow it with air as shown in diagram above. |

| No. | Normal Operation           | Problem                | Warning Sound              | Cause  | What to Check   | Solution  |
|-----|----------------------------|------------------------|----------------------------|--|---|---|
|     |                            |                        |                            | Cutter or the cutting mechanism is broken or worn out.   | Check the cutter, and each part in cutting mechanism  | Open machine mouth and replace with a new part as shown in diagram above.   |
| 5   | Wire twisting takes place. | Wire gets tangled.     | No sound emitted.          | Wire, by hitting reinforcing bars, was repelled.   | Check if wire hits reinforcing bars at binding.   | Pay attention so that wire does not hit reinforcing bars at binding.  |
|     |                            |                        | Seven short beeps repeated | There is foreign substance between Magnetic plate (#326) and Route PWB unit (#325) or bad connection of connecting wire K. | Check if there is foreign substance between Magnetic plate (#326) and Route PWB unit (#325) or check the wire K connection. | Remove the foreign substance between Magnetic plate (#326) and Route PWB unit (#325) or replace with new connecting wire K. |
|     |                            |                        |                            | Tie wire is tangled on the twister.  | Check the twister for tangled wire.   | Remove tangled wire from the twister.   |
|     |                            |                        | Four short beeps repeated  | Bad connection of twisting motor connecting wire or twisting motor is broken.  | Check twisting motor connecting wire or twisting motor.   | Reconnect the connecting wire or replace with new twisting motor.   |
|     |                            | Binding power is weak. | No sound emitted.          | Reinforcing bar is not of designated size.   | Confirm size of reinforcing bars to be bound.   | Use appropriate diameter scope.   |
|     |                            |                        |                            | Tension setting is not at the right level.   | Check the tension setting level.  | Adjust the tension setting to a higher level.   |
|     |                            |                        |                            | Erroneous handling such as improper application of machine.  | Confirm how to apply machine to reinforcing bars.   | Adjust the tension setting to a higher level and ensure machine is  |

| No. | Normal Operation | Problem                      | Warning Sound            | Cause   | What to Check                                     | Solution   |
|-----|------------------|------------------------------|--------------------------|---|---|--|
|     |                  |                              |                          |   |   | held as per correct usage section below.   |
|     |                  | Twisting-off tie head occurs | No sound emitted.        | Reinforcing bar is not of designated size.                  | Confirm size of reinforcing bars to be bound.     | Use appropriate diameter scope.  |
|     |                  |                              |                          | Tension setting is not at the right level.                  | Check the tension setting level.                  | Adjust the tension setting to a lower level.   |
|     |                  |                              |                          | Erroneous handling such as improper application of machine. | Confirm how to apply machine to reinforcing bars. | Adjust the tension setting to a lower level and ensure machine is held as per correct usage section below. |
|     |                  | Works properly.              | Continuous short beeps   | Low power remains in the battery pack.                      | Confirm the battery is fully charged.             | Perform normal charge.   |
|     |                  |                              | Six short beeps repeated | The tool is used at high temperature.                       | Check the temperature at the job site.            | Leave the tool and the battery pack at a cooler temperature for some time, then continue operation.        |

## 4. Machine Operation

*Always read, understand and comply with safety instructions (Section 2) before use.*

### Battery Saving Function

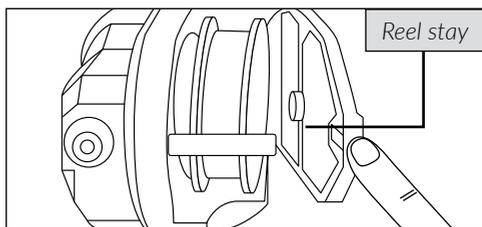
The machine is equipped with a battery saving function and will automatically shut down after 10 minutes of no use.

### Tie Tension Settings

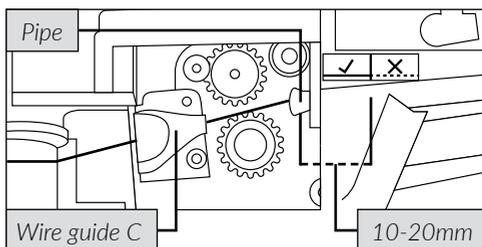
Use the adjusting knob to set tie tension at desire level (1=min tension / 10=max tension).

### Loading Wire Coil

**Warning - Ensure trigger lock is on, power is switched off and battery removed.**

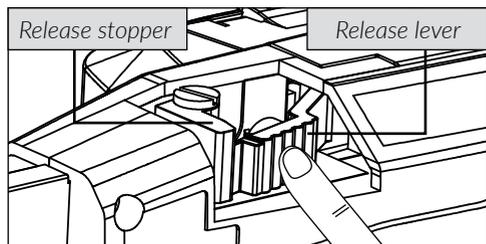


3. Insert the wire coil with the wire-end upwards and forward. Carefully close the reel stay and secure the reel stopper.

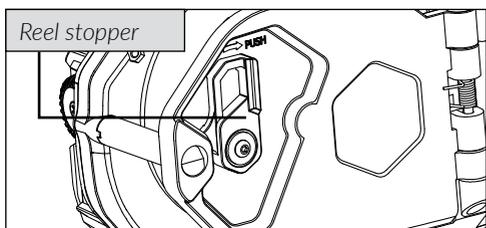


4. Insert the tip of the wire into wire guide C, through the gap of the feeding gears and all the way into the pipe (10-20 mm).

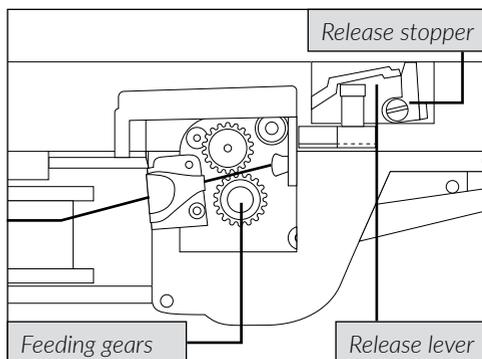
If the window is dirty and it is difficult to determine the position of the Wire Guide C, clean the inside of the window with a soft cloth. Close the window again to prevent the ingress of foreign bodies in the machine.



1. Push the release lever until it is caught by the release stopper.

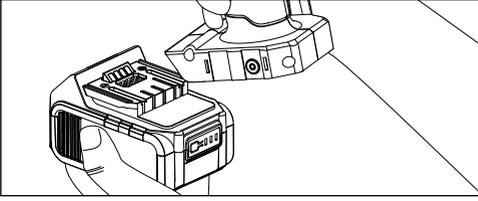


2. Push the reel stopper to open the reel stay.



5. Push the release stopper and make sure that the release lever is back in original position, and that the feeding gears are clamping the wire.

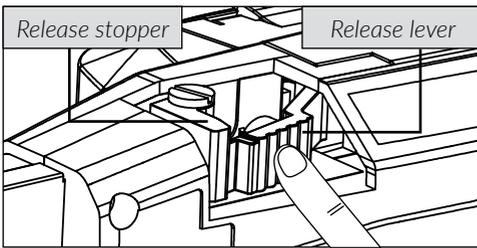
6. Make sure that the wire is tight and firm. Prevent the wire from curling up behind the wire coil. This may cause a jam.



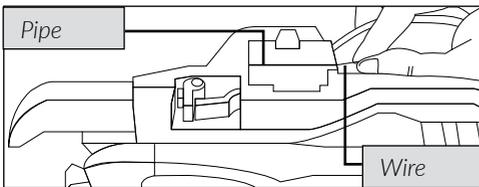
7. Insert battery into machine battery slot and set the main switch to ON. Release the trigger lock before starting to tie.

### Replacing Wire Coil

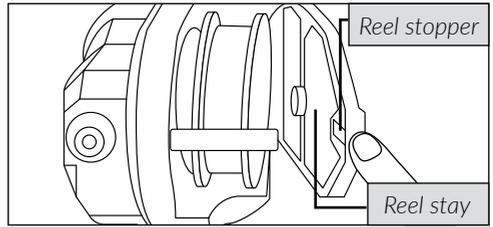
**Warning - Ensure trigger lock is on, power is switched off and battery removed.**



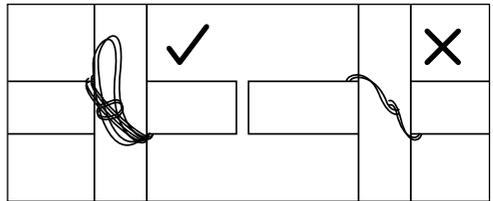
1. Push the release lever until it is caught by the release stopper.



2. Remove the wire coil.

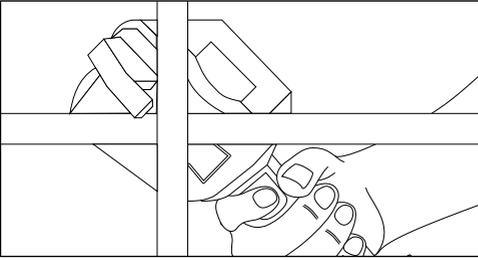


3. Push the reel stopper to release the reel stay and open it at the same time, remove the wire coil.
4. Load new wire coil (refer to previous instructions for loading wire coil).

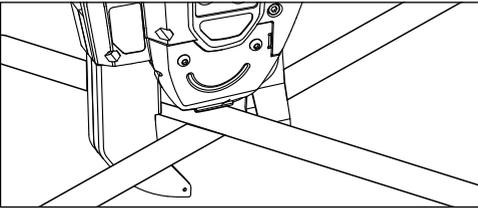


5. Perform a test tie, to check if the tie tension of set correctly.

## Correct Usage

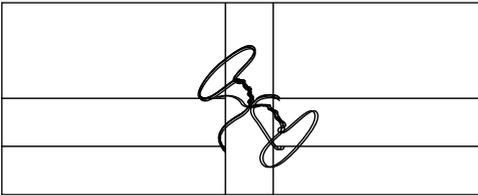


1. Place the arm A unit in a 45° angle over the rebar cross surface and push the mouth towards the rebar.



2. Place arm A perpendicularly on top of the rebar cross surface and with the mouth centred over the cross.

**Warning - Do not move the machine while it is tying.**



3. Cross-tying. Bend down the knot of the first tie, before you make the second tie.