
Part Replacement Instruction

Product: EM 1, EMC 6, EMC 6M, and CH 1

Part Replaced: X Drive Motor

Required Tools:

#1 Phillips Screw Driver
3/32" Allen Wrench
9/64" Allen Wrench
1/16" Allen Wrench
11/32" Allen Wrench
Loctite 222 (Red)

Procedure:

1. Turn the peripheral off and unplug the Power Cord from the wall socket.
2. Loosen the two Retaining Screws (Figure 1-A) holding the X Motor Cover (Figure 1-B) in place, and remove the X Motor Cover.

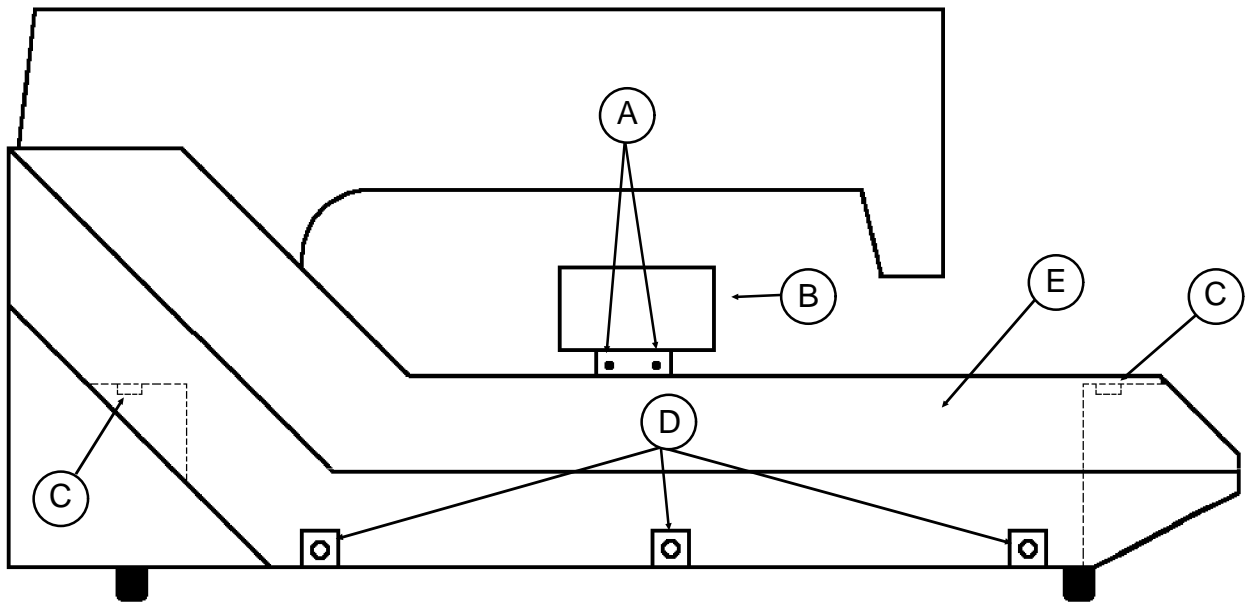


Figure 1

3. Loosen the front and rear End Cap Locking Screws (Figure 1-C).

4. Remove the three End Cap Retaining Screws (Figure 1-D) and remove the End Cap (Figure 1-E).
5. Remove the two Retaining Screws (Figure 2-F) holding the Y Drive Belt Bracket (Figure 2-G) to the Y Drive Bracket (Figure 2-H).

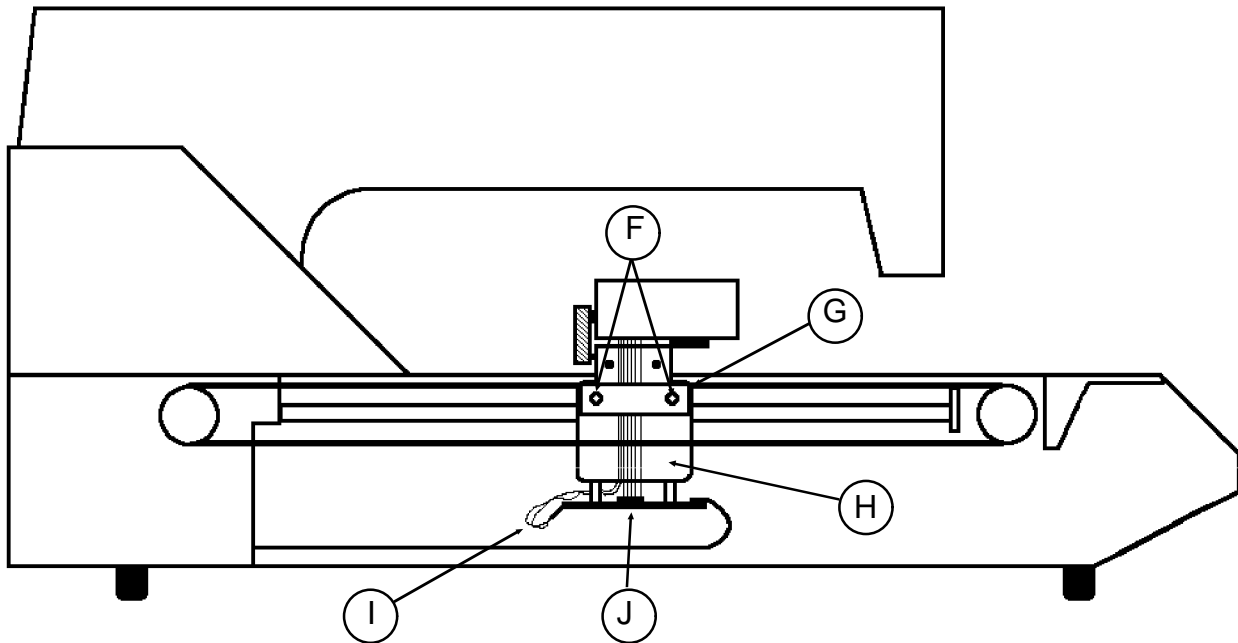


Figure 2

NOTE: Take note of the position of the red and black wires to be removed in the next step, so that you can replace them properly when reassembling the peripheral.

6. Unplug the red and black X Motor Drive Wires (Figure 2-I) from the X Motor Interface Board (Figure 2-J).

NOTE: Take note of the position of the Cable to be removed in the next step so that you can replace it properly when reassembling the peripheral.

- Unplug the X Motor Encoder Cable (Figure 3-K) from the X Motor.

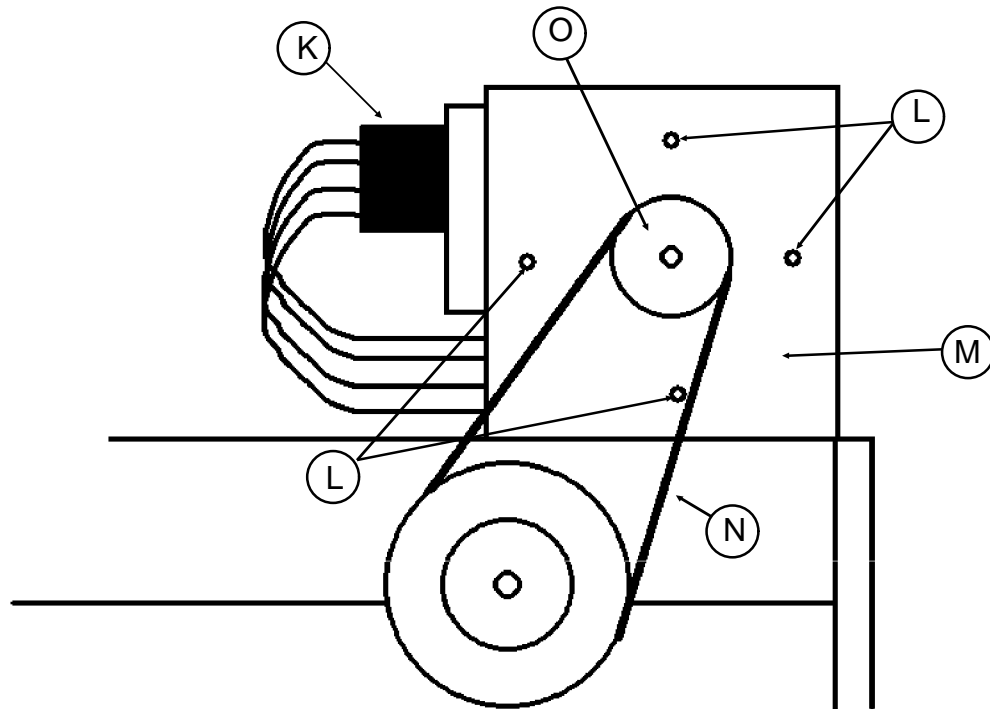


Figure 3

- Mark the position of the four X Motor Retaining Screws (Figure 3-L) so that you can position the new X Motor correctly in a later step.
- Remove the four X Motor Retaining Screws holding the X Motor in the X Motor Bracket (Figure 3-M).
- Tilt the X Motor enough to slide the X Motor Belt (Figure 3-N) off of the X Motor Pulley (Figure 3-O), then pull the X Motor out of the X Motor Bracket.
- Loosen the Set Screw Holding the X Motor Pulley to the X Motor Shaft, and remove the X Motor Pulley.
- Slide the X Motor Pulley onto the new X Motor Shaft so that the Pulley is flush with the end of the X Motor Shaft.
- Place a small drop of Loctite on the X Motor Pulley Set Screw and secure the X Motor Pulley to the X Motor Shaft. Make sure that the Set Screw is tightened down to the flat on the X Motor Shaft.
- Position the X Motor in the X Motor Bracket and X Motor Belt.

15. Loosely install the X Motor Retaining Screws removed in step 9.
16. Lift up on the X Motor until the X Motor Retaining Screws are in the positions marked in step 8, then tighten the Retaining Screws.
17. Plug the X Motor Encoder Cable into the X Motor.
18. Route the red and black X Motor Drive Wires down to the X Motor Interface Board, and plug them in to the positions noted earlier.

NOTE: Do not allow the wires to cross each other between the Y Drive Belt Bracket and the Y Drive Bracket in the next two steps. If the wires are crossed, they can break and cause erratic X Motor Operation.

19. Loosely install the two Retaining Screws removed in step 5 through the Y Drive Belt Bracket and into the Y Drive Bracket.
20. Center the Y Drive Belt Bracket on the Y Drive Bracket and tighten the two Retaining Screws.
21. Position the End Cap in place, and tighten the front and rear End Cap Locking Screws.
22. Install the three End Cap Retaining Screws removed in step 4.
23. Install the X Motor Cover and tighten the Retaining Screws loosened in step 2.
24. Plug the Power Cord into the wall socket and turn the peripheral on.
25. Perform a test sew out.

END OF PROCEDURE