

RAPHAEL 606

SERVICE MANUAL



O1M YOUNG IL M
Spine Care System

YOUNG IL M Co., Ltd.

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This manual covers installation and operation procedures for the following product.



Raphael 606-PR
Auto Flexion, Auto Drop,
Manual Drop, Elevation



Raphael 606-LU
Auto Flexion, Auto Drop,
Manual Drop



Raphael 606-DE
Auto Flexion, Manual Drop



Raphael 606-ST
Auto Flexion

Raphael 606 Service Manual

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RAPHAEL 606 WARRANTY

1. One Year Warranty

All Raphael 606 tables and its accessories(except upholstery) are warranted by YOUNG IL M Co., Ltd. against defects in materials and workmanship for a period of one year from the date of shipment. YOUNG IL M will repair or send replacement parts to the customer. Labor is excluded.

This warranty is not covered if the product is defective due to misuse, abuse, acts of God, accidents, modification or any other matter unrelated to YOUNG IL M.

2. Warranty Expiration

After expiration, YOUNG IL M will repair or send replacement parts at suggested price list. The cost of shipping or transportation to and from the service location will be the responsibility of the customer.

RAPHAEL 606 WARRANTY

Service Procedure

If you think you have a problem with the table, please contact YOUNG IL M or authorized dealer.

After taking the information, we will advise on the action we will take. Sometimes it may take time to get back to you to consult with engineers. After analyzing the problem, we will decide if the unit can be repaired on site, or replacement parts will be sent.

**YOUNG IL M promises to provide the best service
for our customers.**



1. CUSHION REPLACEMENT

Tools Required:

1) Cervical

1. The cervical cushion has Velcro tape. Detach each cushion carefully.



Figure 1.1



Figure 1.2

1. CUSHION REPLACEMENT

Tools Required:

5 mm Allen key
13 mm wrench

2) Thoracic

1. Raise the cushion with lever.
2. Tighten the drop knob to hold the cushion(turn the knob towards foot).
3. Remove the four 5 mm bolts (see Figure 1.3).

Note: Be sure to loosen the drop knob to prevent steel ball bearings from popping up before raising the cushion.

4. Remove the four 13 mm bolts and replace it with a new one (see Figure 1.4).

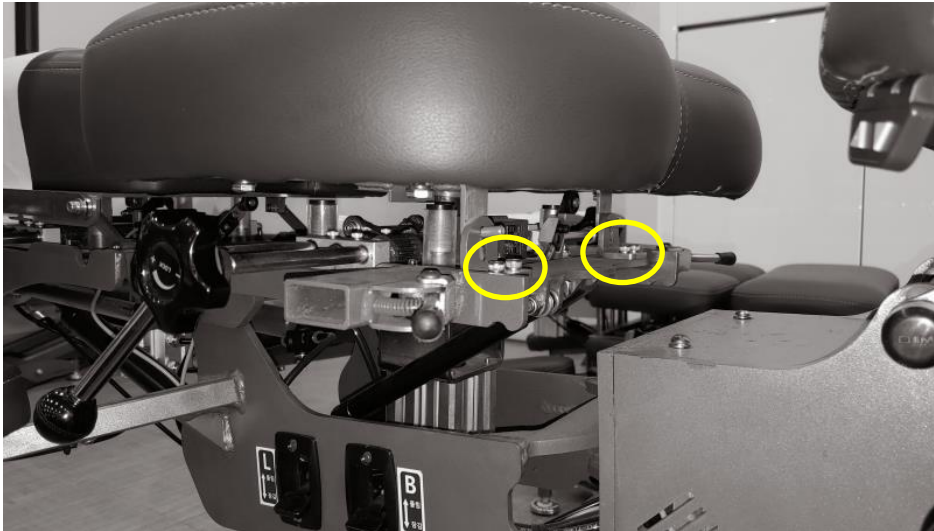


Figure 1.3

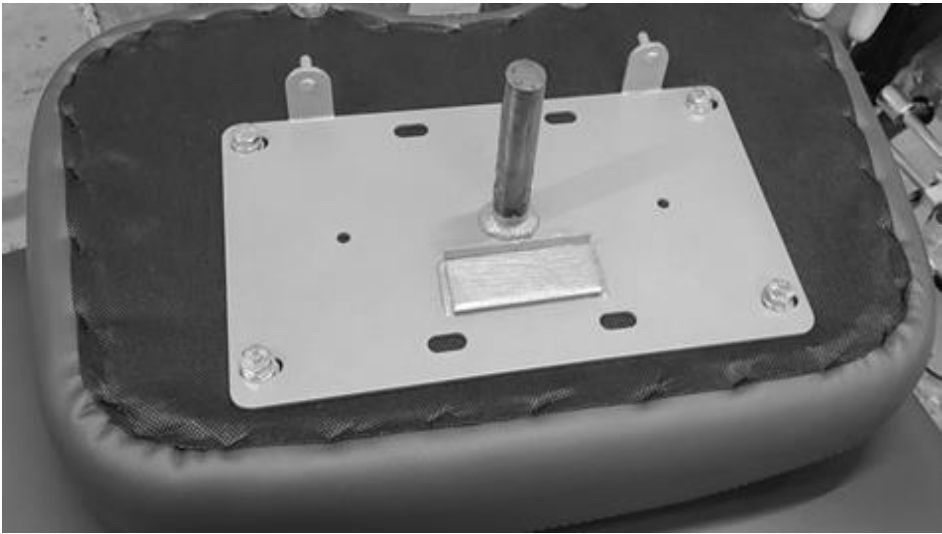


Figure 1.4



Figure 1.5

1. CUSHION REPLACEMENT

Tools Required:

Phillips screwdriver

6 mm Allen key

13 mm wrench

3) Pelvic

1. Remove the two Phillips screws on the DP switch (see Figure 1.6).
2. Remove the two 6 mm bolts on each side (see Figure 1.7).

Note: Be sure to loosen the drop knob to prevent steel ball bearings from popping up once before raising the cushion

3. Raise the cushion and replace it with a new one.



Figure 1.6

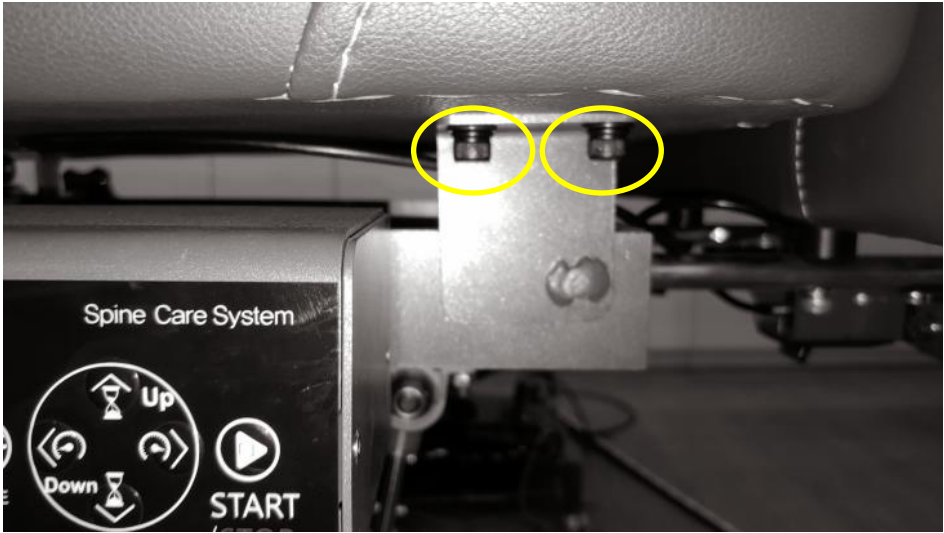


Figure 1.7



Figure 1.8

1. CUSHION REPLACEMENT

Tools Required:

6 mm Allen key

4) Ankle Support

1. Remove the two 6 mm bolts on each side (see Figure 1.9).
2. Replace it with a new one.

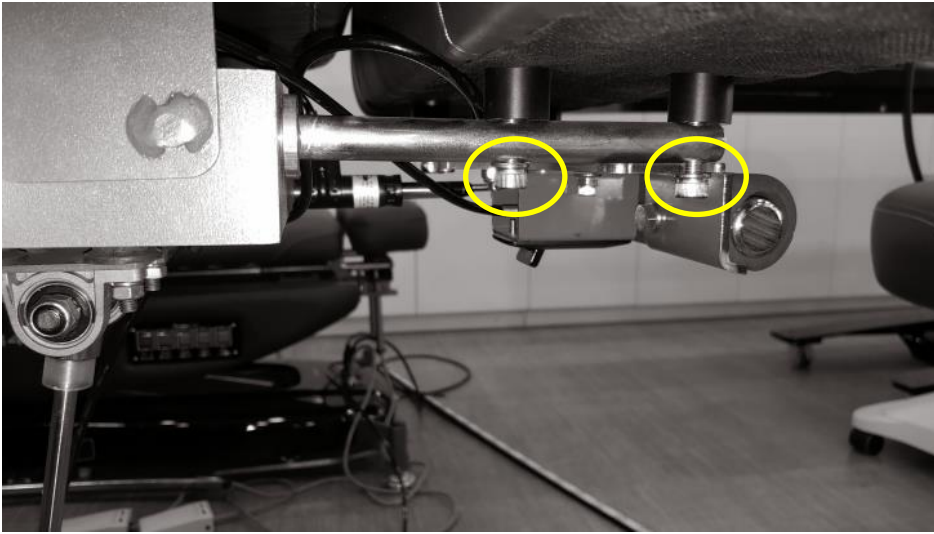


Figure 1.9



Figure 1.10

1. CUSHION REPLACEMENT

Tools Required:

13 mm wrench

5) Arm Rest

1. Remove the two 13 mm bolts (see Figure 1.11).
2. Replace it with a new one.

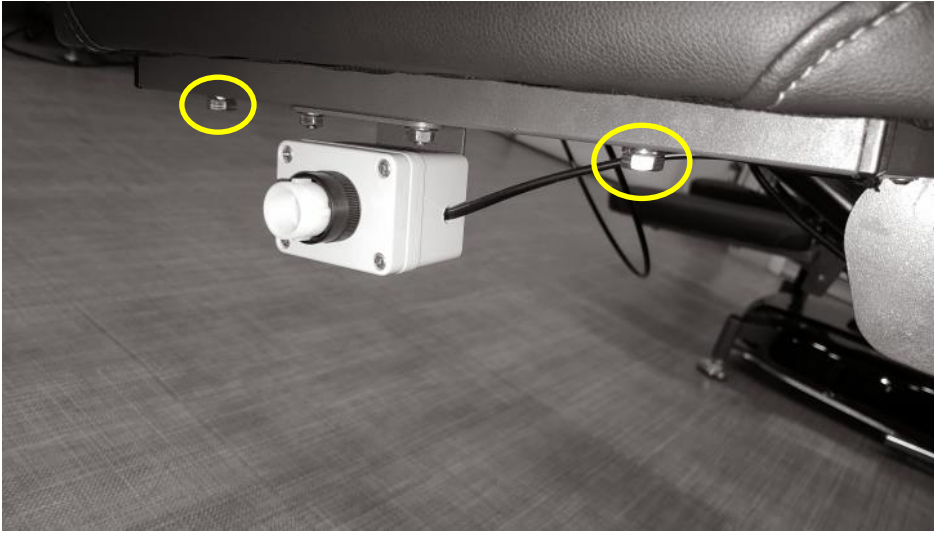


Figure 1.11



Figure 1.12

2. WIRE REPLACEMENT

Tools Required:

2.5 mm Allen key

10 mm Allen key

1) Cervical Flexion

1. Remove the two 2.5 mm bolts (see Figure 2.1).
2. Remove the 10 mm bolts and remove the broken wire (see Figure 2.2)
3. Replace it with a new one and adjust the wire tension.

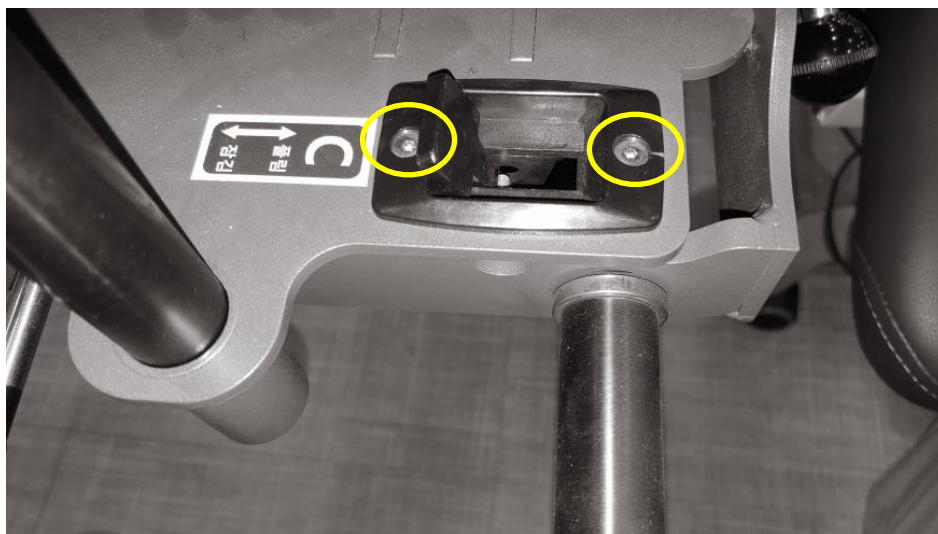


Figure 2.1

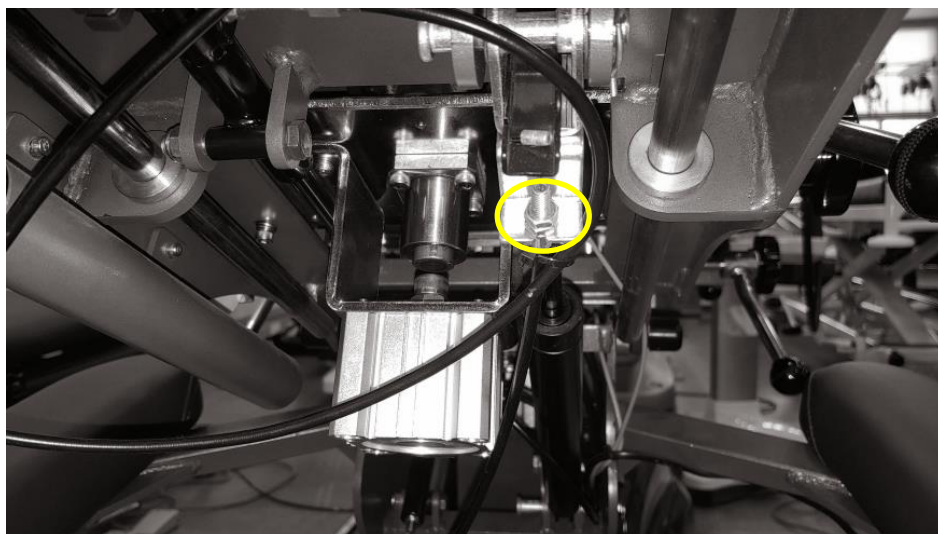


Figure 2.2

2. WIRE REPLACEMENT

Tools Required:

2.5 mm Allen key

10 mm Allen key

Snap ring pliers or Long nose pliers

2) Cervical Handle Lever

1. Remove the 4 mm bolt (see Figure 2.3).
2. Remove the snap ring (see Figure 2.4).
3. Remove the 10 mm bolt and remove the broken wire (see Figure 2.5).
4. Replace it with a new one and adjust the wire tension.



Figure 2.3

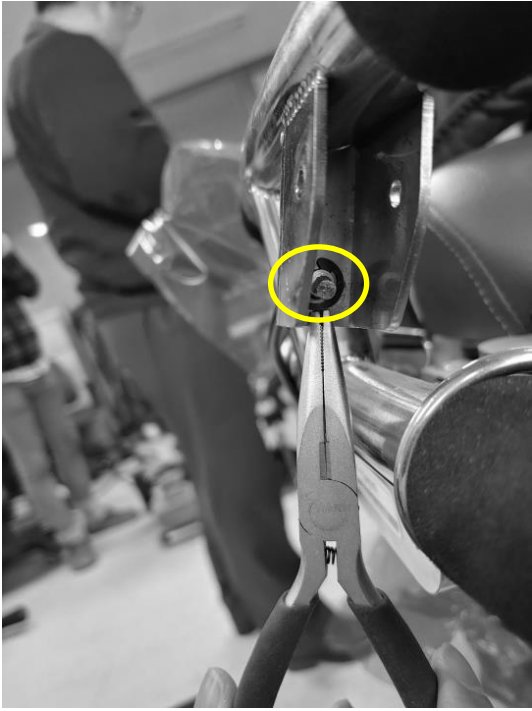


Figure 2.4

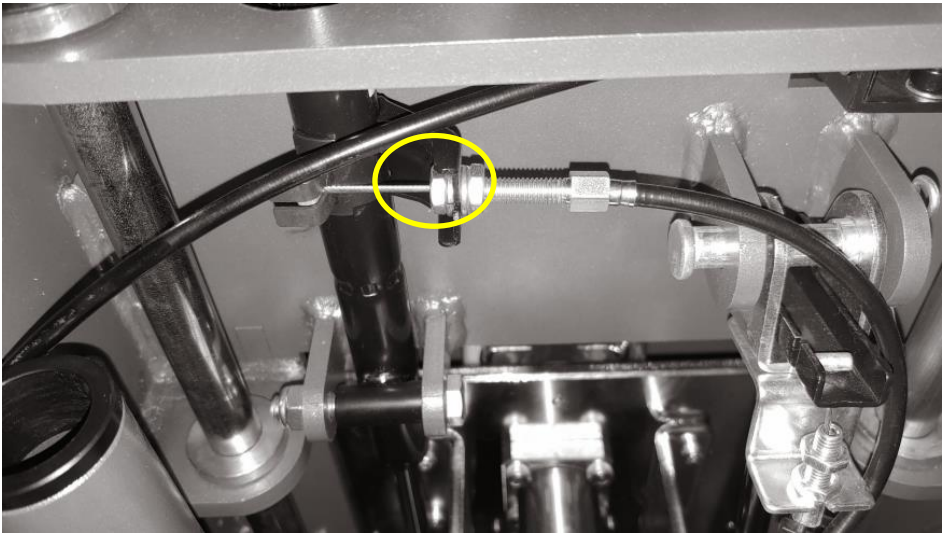


Figure 2.5

2. WIRE REPLACEMENT

Tools Required:

2.5 mm Allen key

10 mm Allen key

3) Lateral Flexion

1. Remove the 10 mm bolt (see Figure 2.6).
2. Remove the 2.5 mm bolts and remove the broken wire (see Figure 2.7).
3. Replace it with a new one and adjust the wire tension.

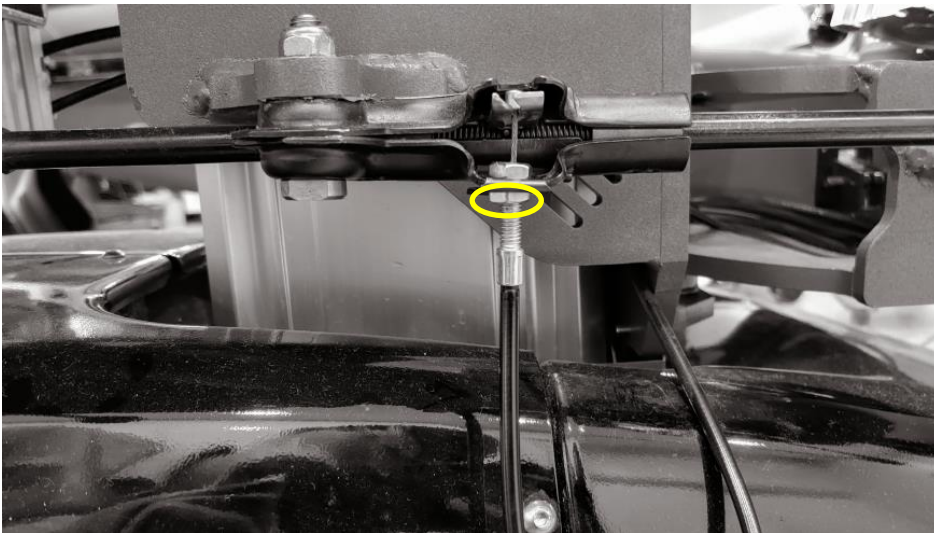


Figure 2.6

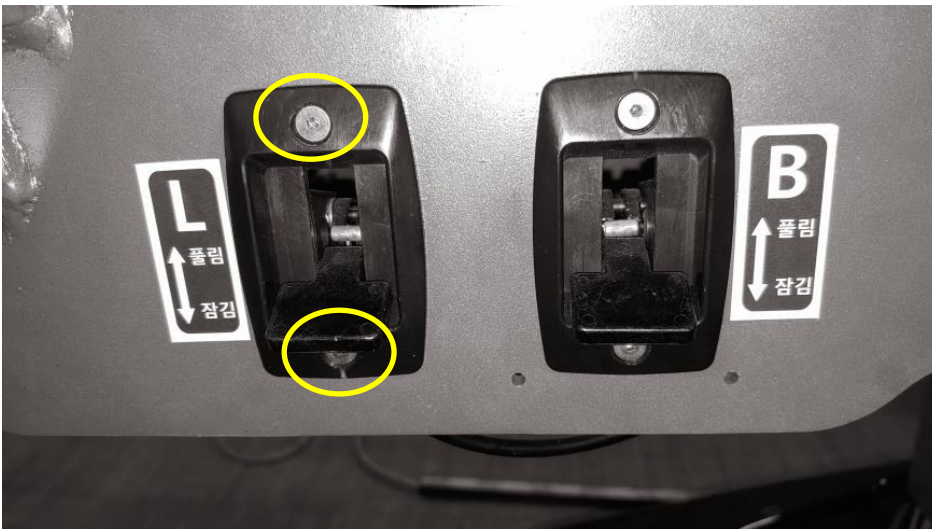


Figure 2.7

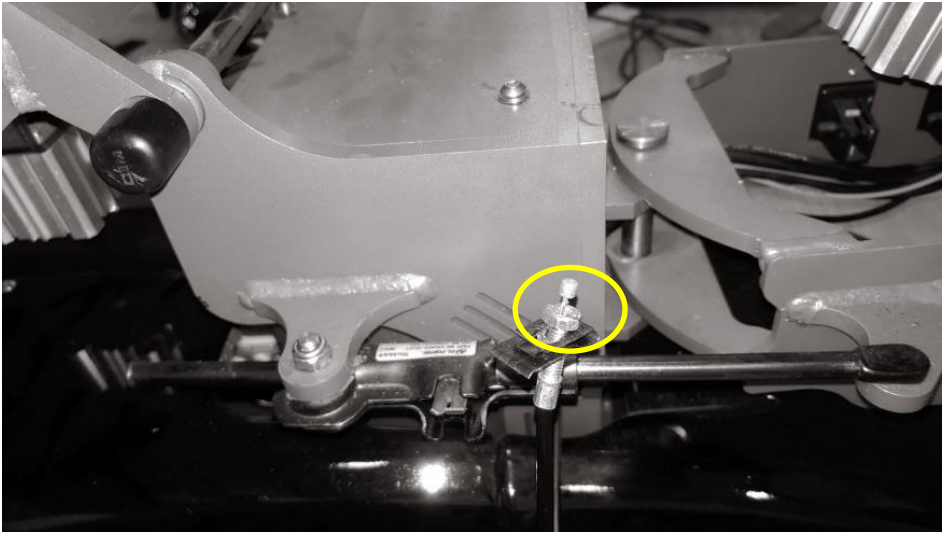


Figure 2.8

2. WIRE REPLACEMENT

Tools Required:

2.5 mm Allen key

10 mm Allen key

4) Abdominal Break away

1. Remove the 10 mm bolt (see Figure 2.9).
2. Remove the 2.5 mm bolts and remove the broken wire (see Figure 2.10).
3. Replace it with a new one and adjust the wire tension.



Figure 2.9

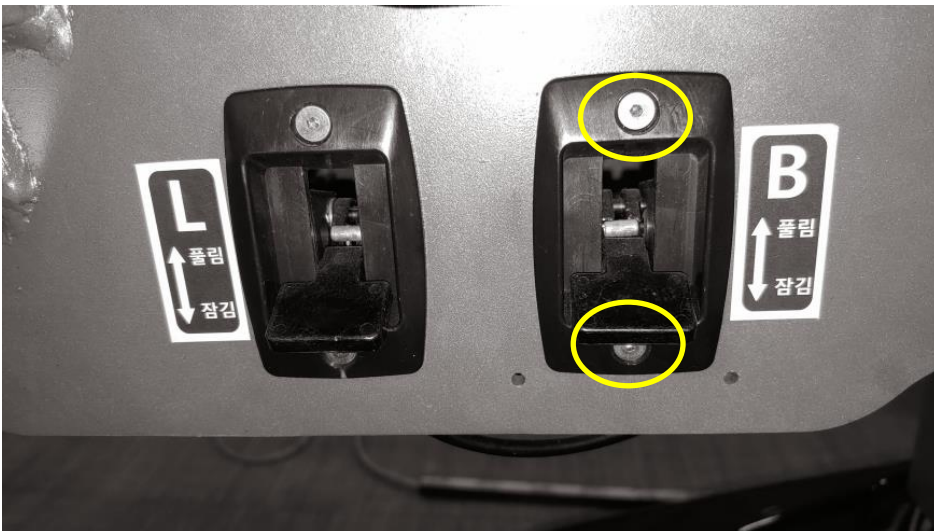


Figure 2.10

2. WIRE REPLACEMENT

Tools Required:

2.5 mm Allen key

10 mm Allen key

5) Telescoping

1. Remove the pelvic cushion (refer to the page #7).
2. Remove the 2.5 mm bolts and 10 mm bolts
3. Replace it with a new one and adjust the wire tension.

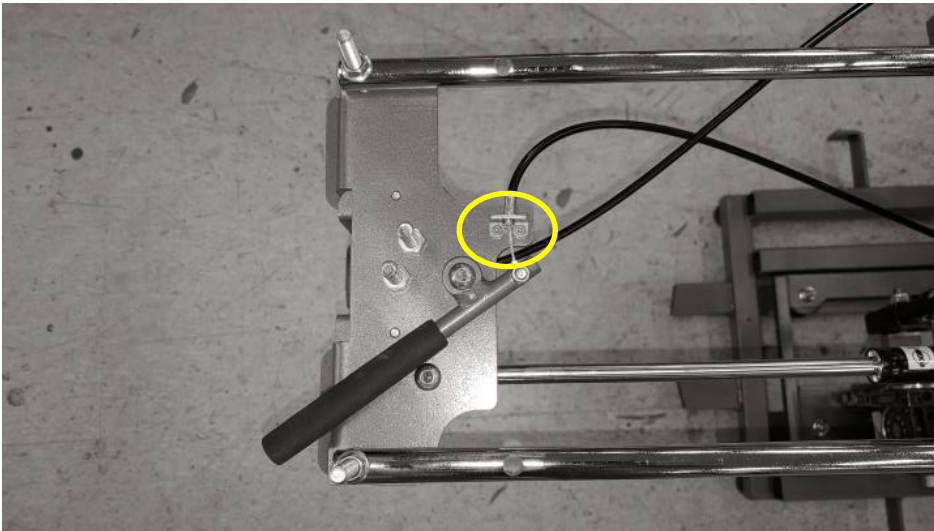


Figure 2.11

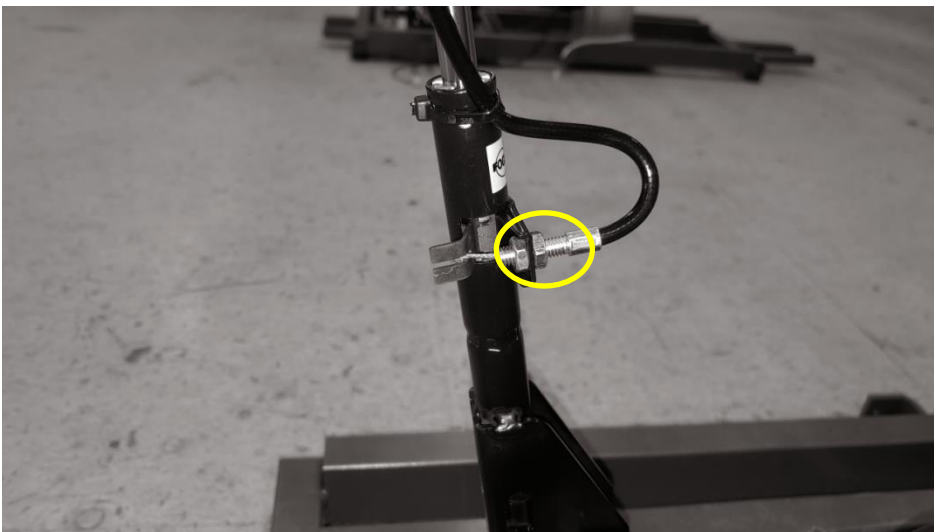


Figure 2.12

2. WIRE REPLACEMENT

Tools Required:

2.5 mm Allen key

10 mm Allen key

6) Ankle Support

1. Remove the pelvic cushion (refer to the page #7).
2. Remove the 2.5 mm bolts and 10 mm bolts.
3. Replace it with a new one and adjust the wire tension.

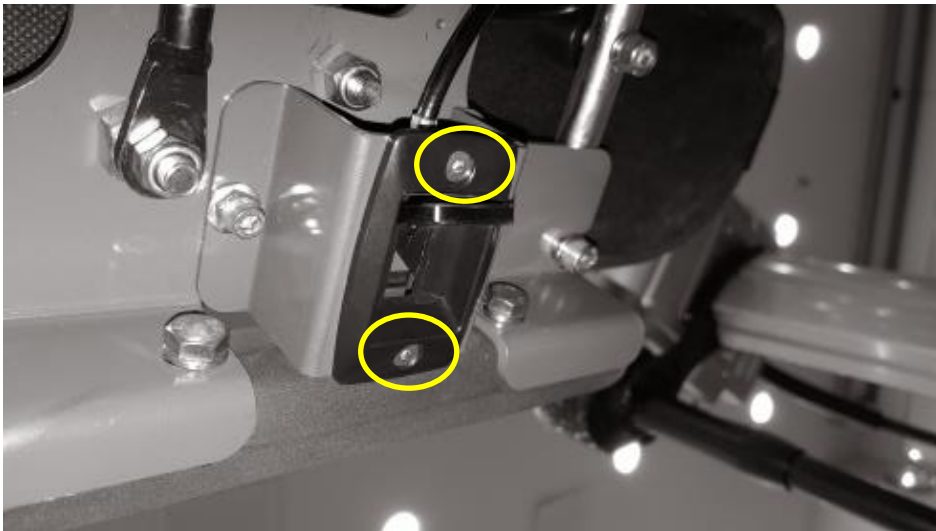


Figure 2.13

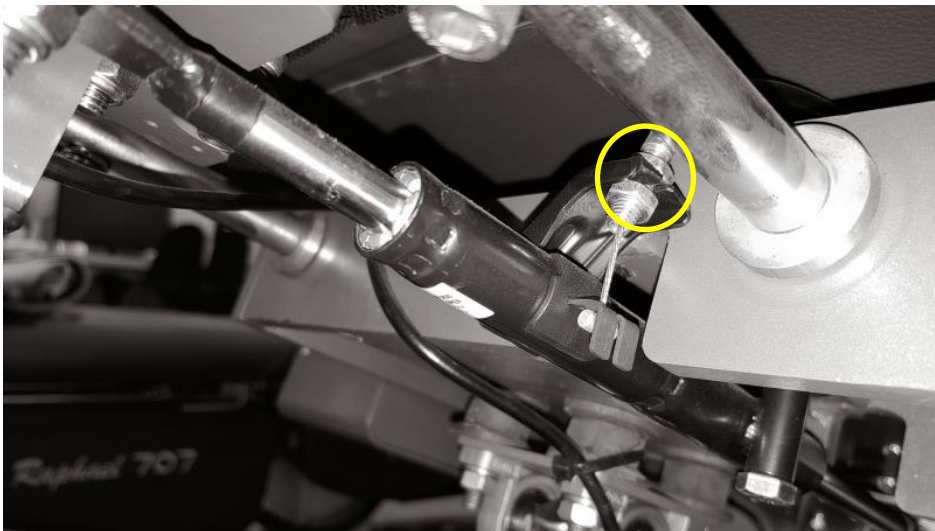


Figure 2.14

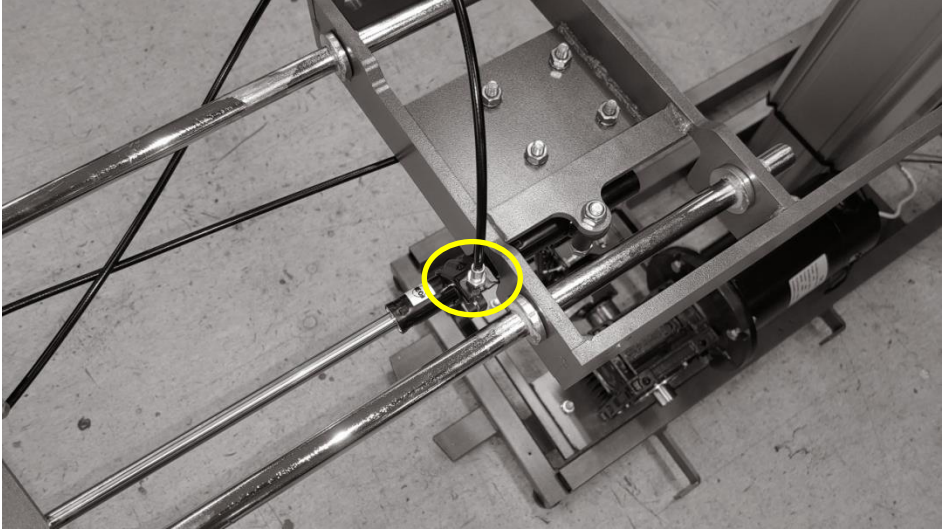


Figure 2.15

3. ELEVATION MOTOR REPLACEMENT

Tools Required:

3 mm Allen key
4 mm Allen key
14 mm Wrench

Procedure

1. If the elevation motor is operational, the table should be brought down to its lowest position. If the motor is not operational, the upper part must be supported to prevent it from falling once the motor is removed.
2. Remove the 4 mm and 3 mm bolts on the base cover.
3. Lower the table to its lowest position and remove the four 14 mm bolts at the bottom of the table (see Figure 3.1).
4. Remove the 14 mm bolt on each side (see Figure 3.2).
5. Remove the shaft half and remove the four 4 mm bolts (see Figure 3.3).
6. Once the four bolts are removed, place the shaft back.
7. Remove the 3 mm bolt on each side (see Figure 3.4).
8. Remove the all bolts on the base cover and remove the cover.
9. Unplug the motor cable at the motherboard (see Figure 3.5).
10. Raise the upper part of the table and replace the elevation motor.



Figure 3.1

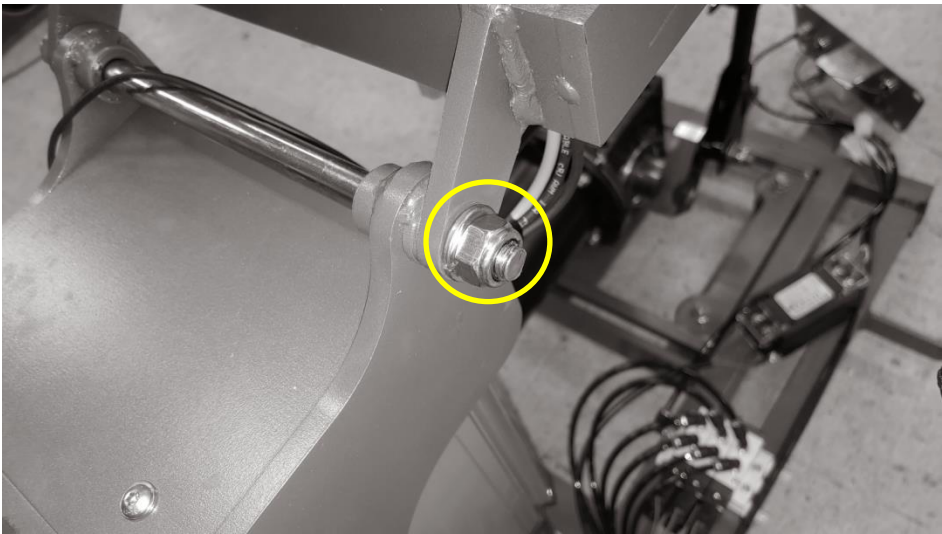


Figure 3.2

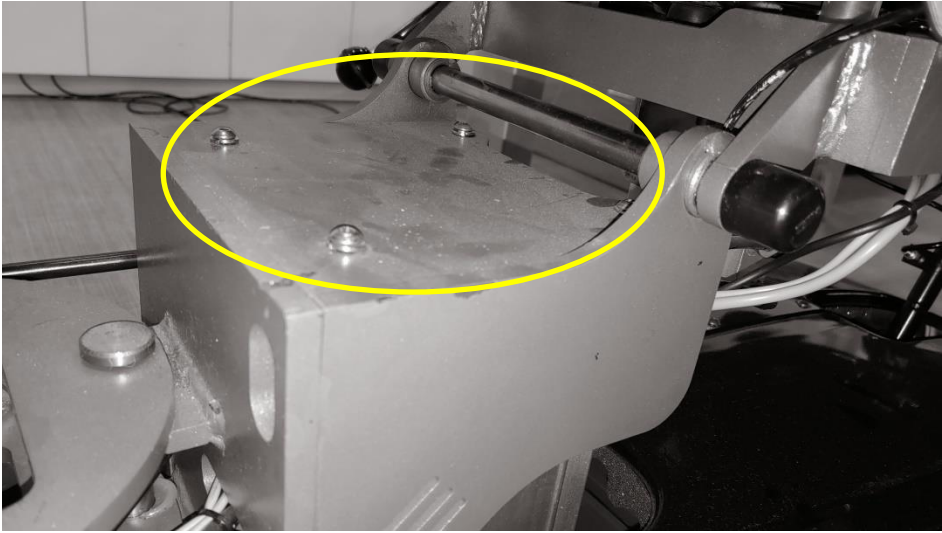


Figure 3.3

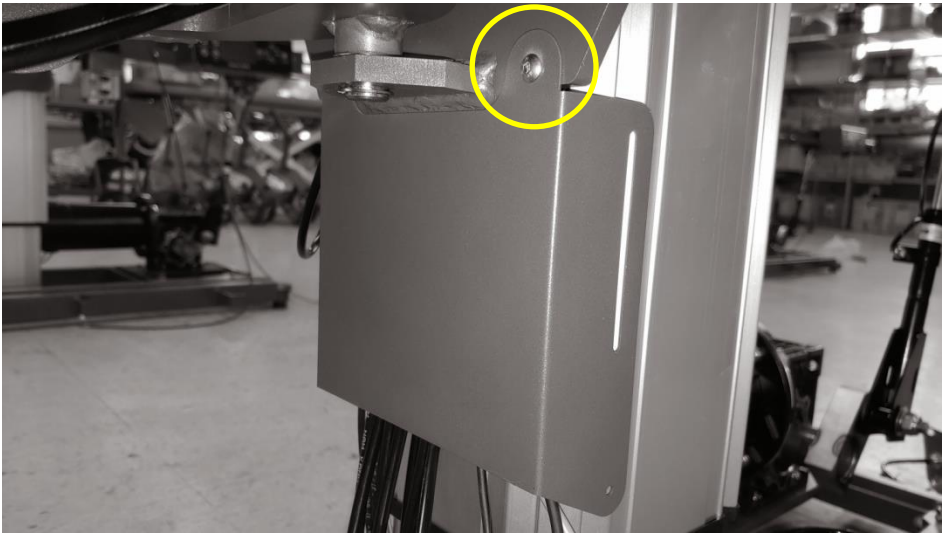


Figure 3.4

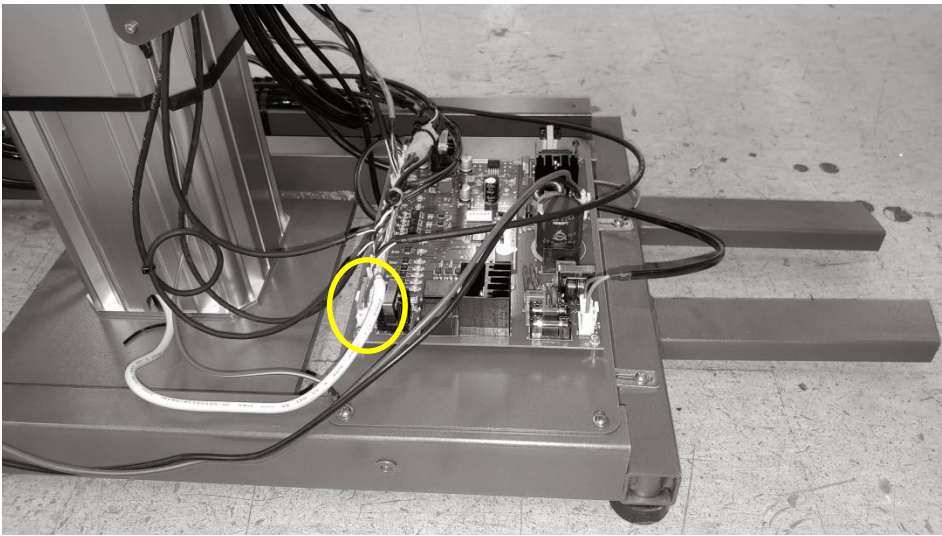


Figure 3.5

4. FLEXION MOTOR REPLACEMENT

Tools Required:

3 mm Allen key
4 mm Allen key
13 mm Wrench
19 mm Wrench

Procedure

1. Remove the 4 mm and 3 mm bolts on the base cover.
2. Disconnect the flexion motor cables (see Figure 4.1, 4.2).
3. Remove the 19 mm bolt at the flexion (see Figure 4.3).
4. Remove the four 13 mm bolts on the flexion motor (see Figure 4.4).
5. Remove the four 13 mm bolts under the worm gear (see Figure 4.5).

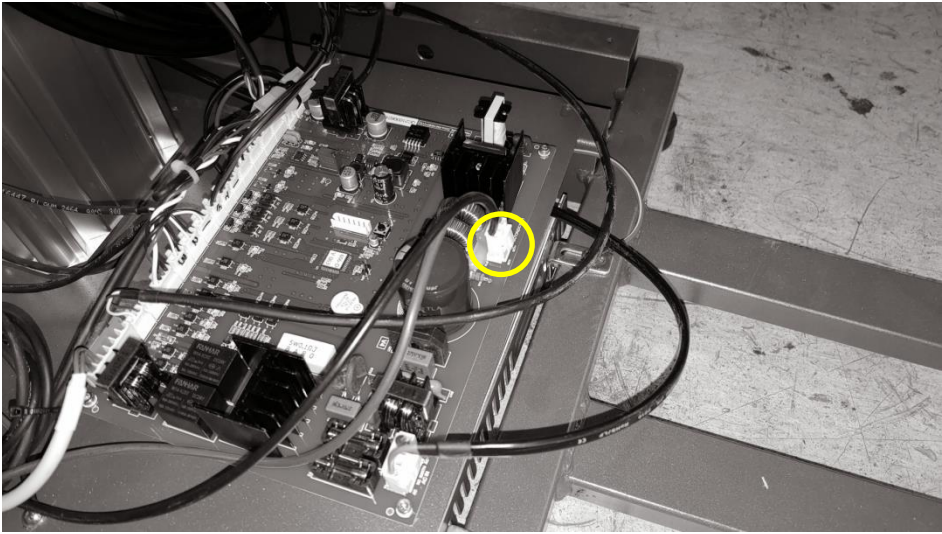


Figure 4.1

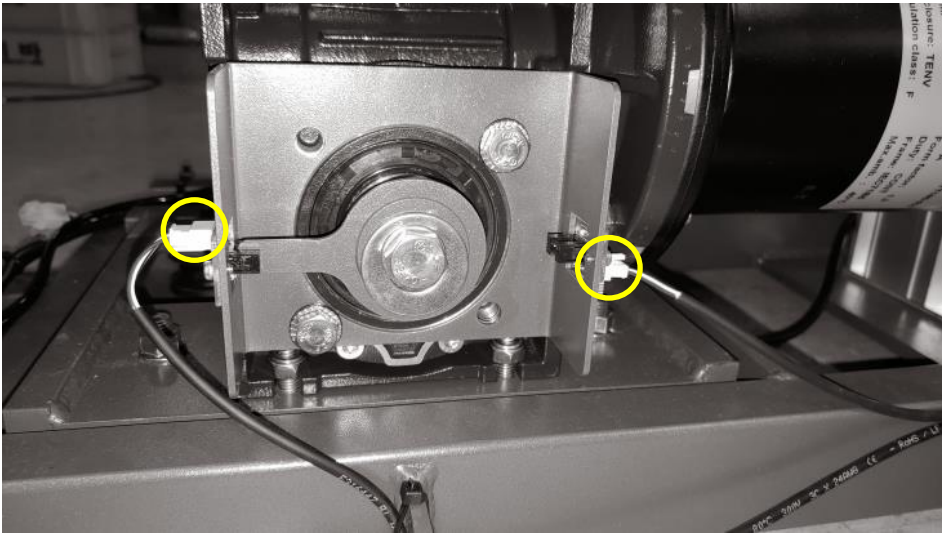


Figure 4.2

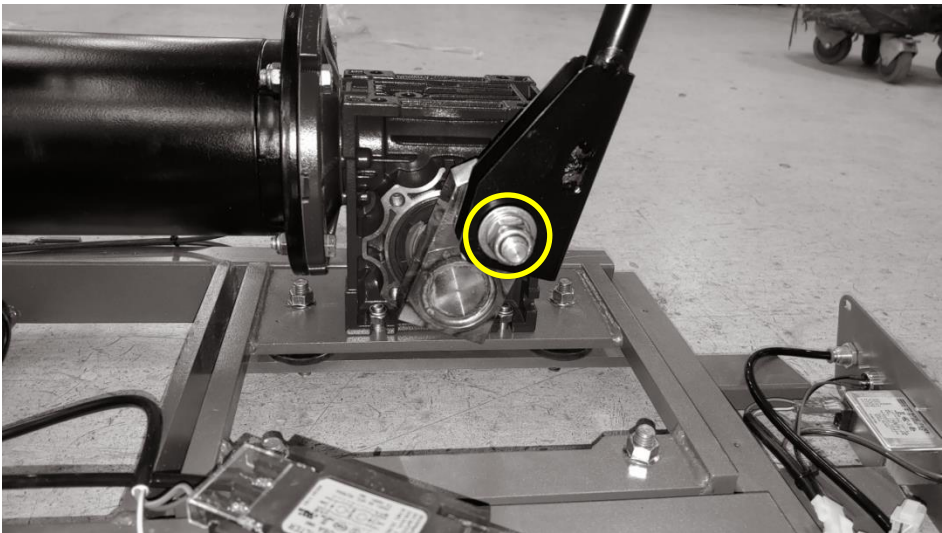


Figure 4.3



Figure 4.4

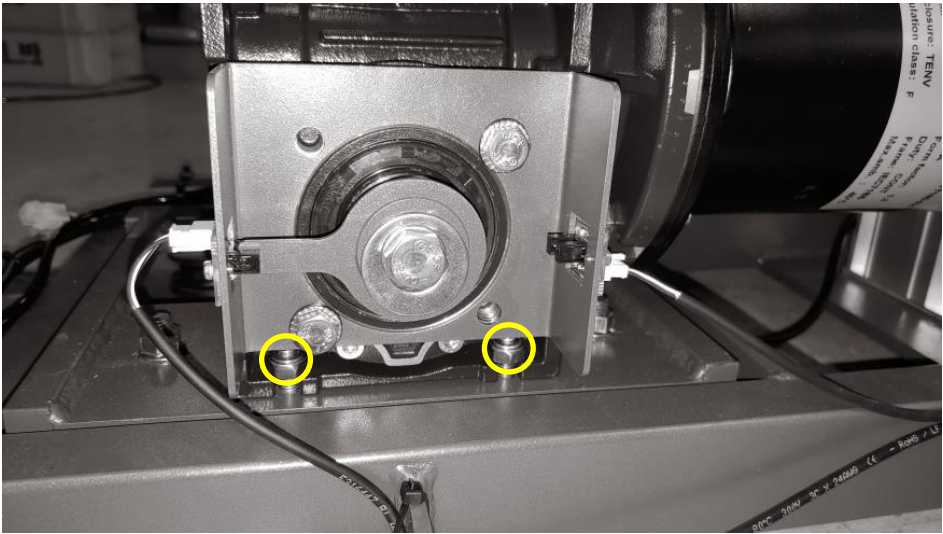


Figure 4.5

5. CONTROL PANEL REPLACEMENT

Tools Required:

Phillips Screwdriver

4 mm Allen key

Procedure

1. Remove the two bolts on each side (see Figure 5.1).
2. Cut the zip tie if necessary and disassemble the panel cover (see Figure 5.2).
3. Replace the board with a new one (see Figure 5.3).



Figure 5.1

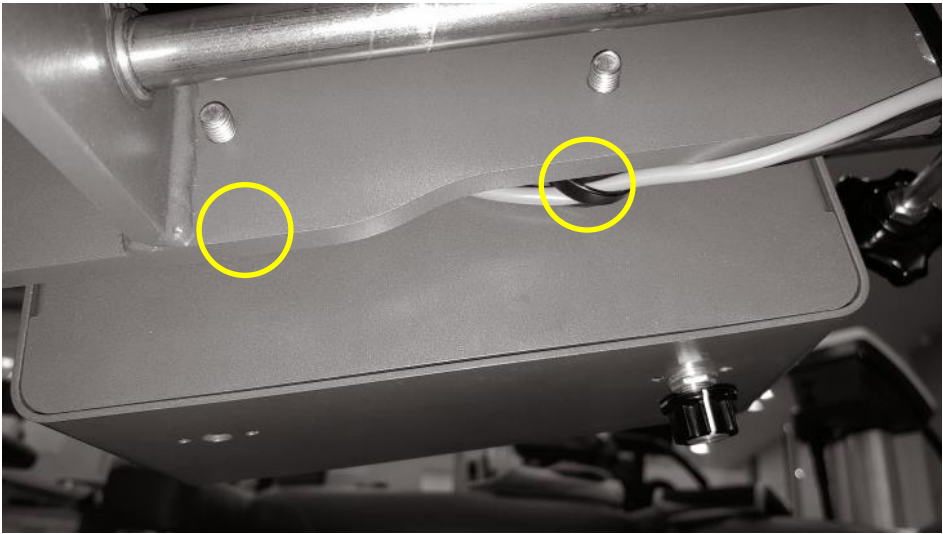


Figure 5.2

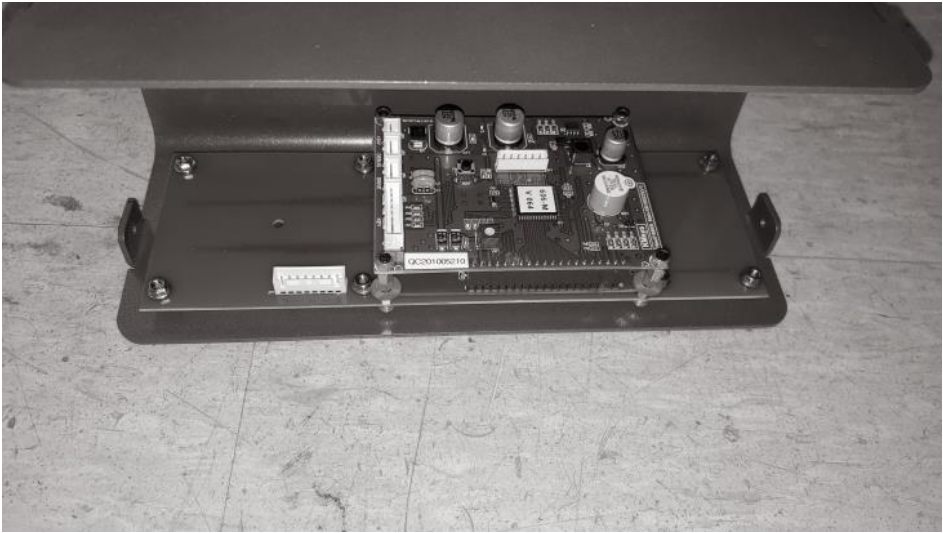


Figure 5.3

6. MAIN BOARD REPLACEMENT

Tools Required:

Phillips Screwdriver

3 mm Allen key

4 mm Allen key

Procedure

1. Remove the base cover
2. Unplug the all cables from the main board

Note: Be sure to remember the plug location on the main board before removing.

3. Remove the four 4 mm bolts (see Figure 6.1).

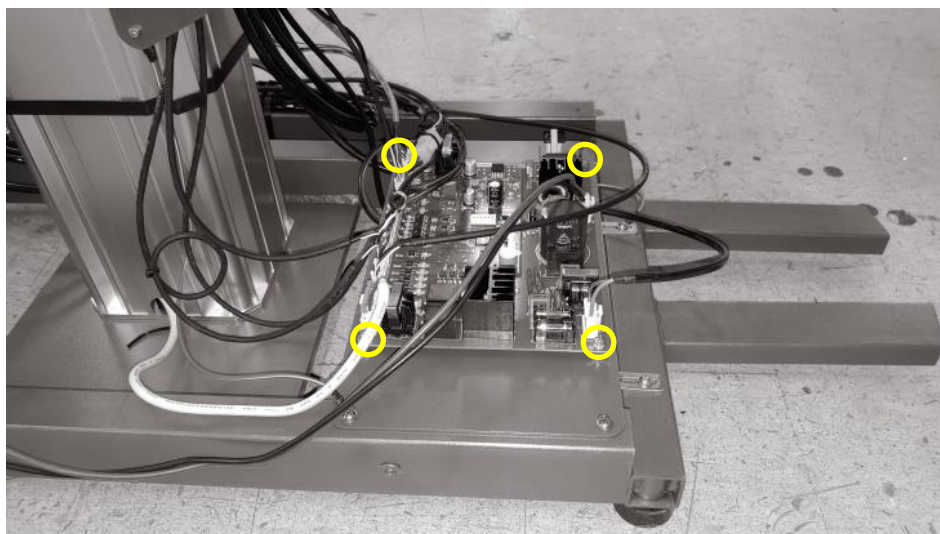


Figure 6.1

7. DROP PIECE PARTS REPLACEMENT

Tools Required:

10 mm wrench
5 mm Allen key

Procedure

1. Remove the cushion (refer to the cushion replacement)
2. Remove the four 5 mm bolts to replace the entire drop piece if necessary . *Note: Be sure to loosen the drop knob to prevent steel ball bearings from popping up before raising the cushion.*

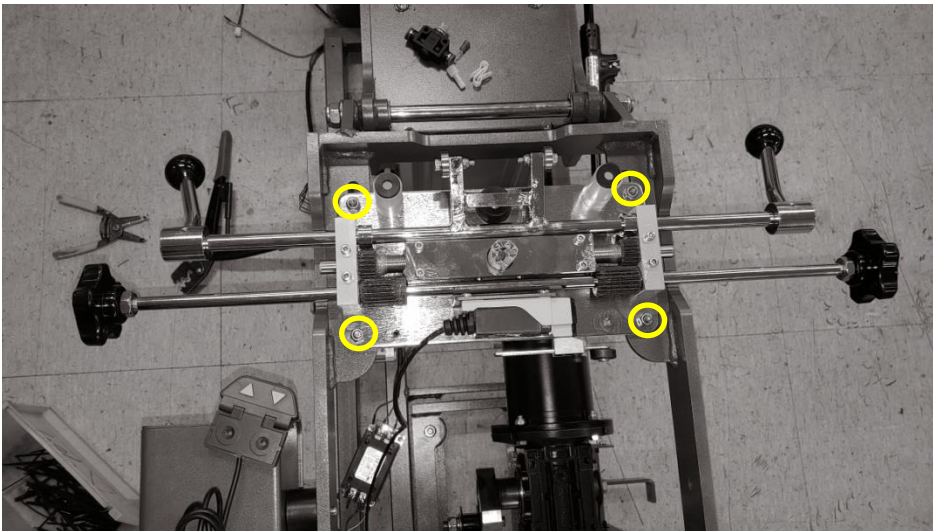


Figure 7.1

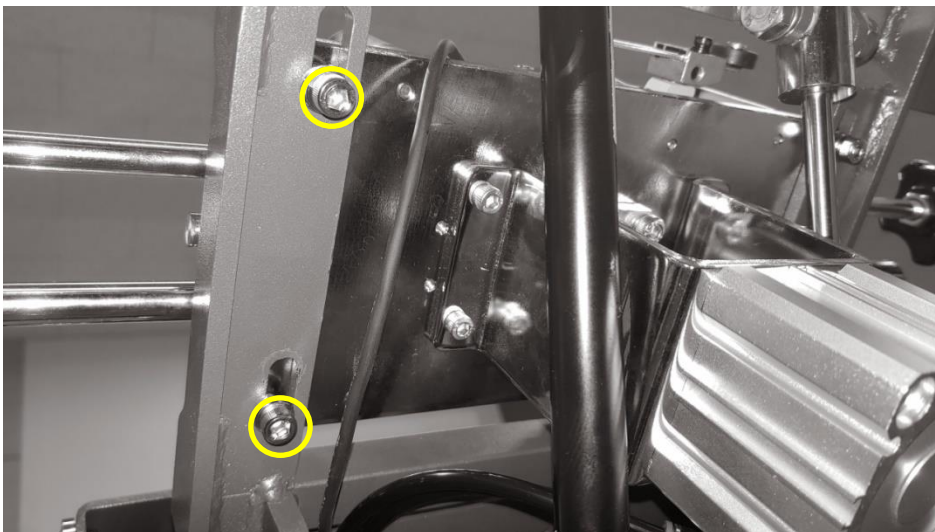


Figure 7.2

8. NOISE FILTER REPLACEMENT

Tools Required:

Phillips Screwdriver

3 mm Allen key

4 mm Allen key

Procedure

1. Remove the base cover
2. Remove the bolts (see figure 8.1).
3. Replace the broken filter with new one
4. Replace the cables if necessary

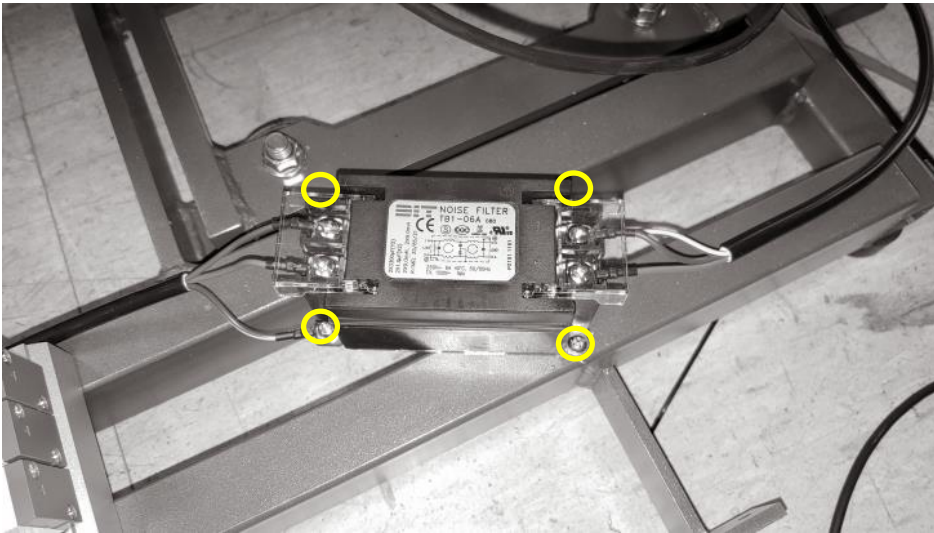


Figure 8.1

9. AIR DISTRIBUTOR REPLACEMENT

Tools Required:

Phillips Screwdriver

3 mm Allen key

4 mm Allen key

Procedure

1. Remove the base cover
2. Inspect the air distributor and hoses.
3. Remove the 4 mm bolts on both sides (see figure 9.1).
4. Replace the broken parts with new ones.

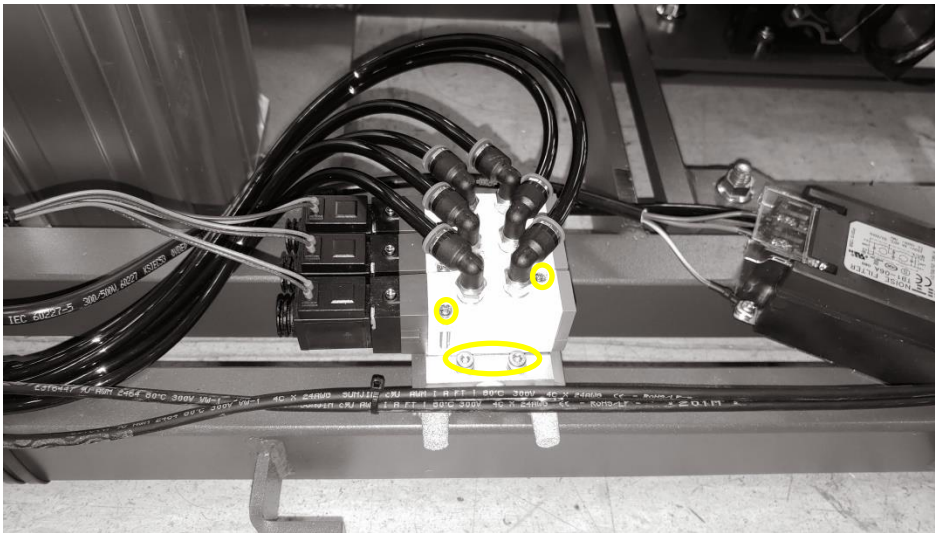


Figure 9.1

10. AIR CYLINDER REPLACEMENT

Tools Required:

14 mm wrench
4 mm Allen key

Procedure

1. Remove the two 14 mm bolts at the air cylinder (see figure 10.1).
2. Remove the four 4 mm bolts under the air cylinder (see figure 10.2).



Figure 10.1

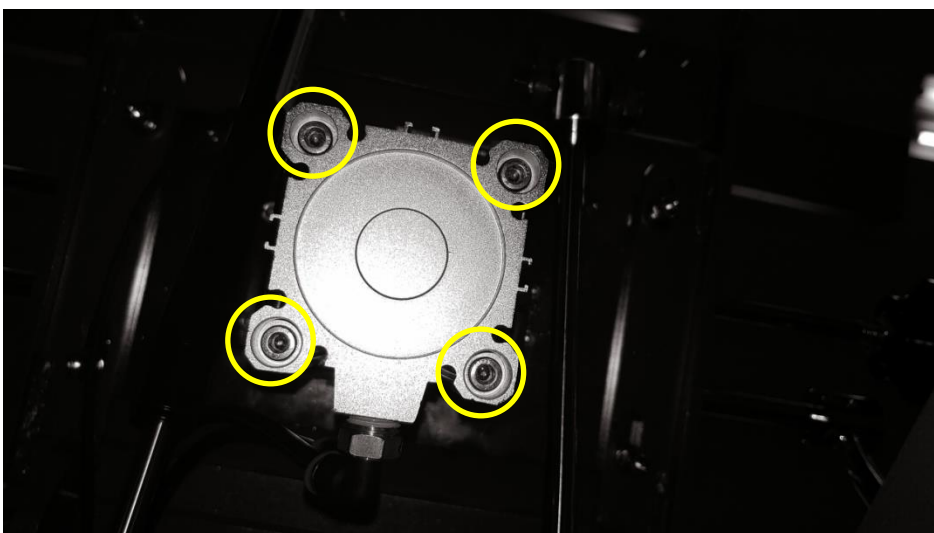


Figure 10.2

11. POWER CONNECTOR REPLACEMENT

Tools Required:

3 mm Allen key

Phillips Screwdriver

Procedure

1. Remove the four 3 mm bolts on the power cover(see figure 11.1).
2. Inspect the cables and replace with new ones if necessary (see figure 11.2).

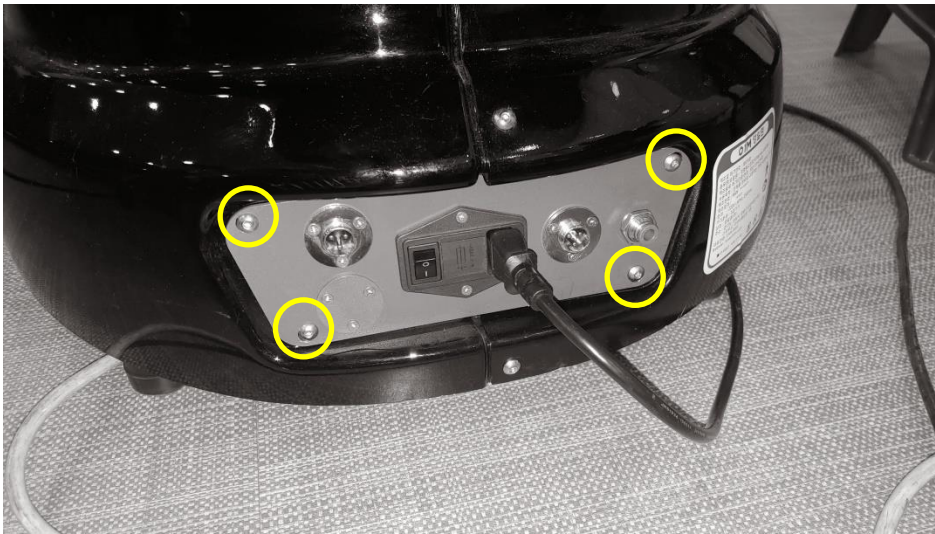


Figure 11.1



Figure 11.2

12. BASE COVER REPLACEMENT

Tools Required:

3 mm Allen key

4 mm Allen key

Procedure

1. Remove the all 4 and 3 mm bolts on the cover.
2. Remove the power cover case if necessary.