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Replacing the Sliding Motor



RN-SPLZ066



WARNING: Before removing the covers, you **MUST** switch **OFF** the unit **AND** disconnect the unit from the main power supply by switching **OFF** the circuit breaker in the electrical cabinet.

ONLY an approved Carestream technician is qualified to inspect or maintain the unit while it is switched on and while the covers are removed. In this case, **NO** unqualified person must approach the unit.

Description

The sliding motor navigates the sliding assembly.

Tool Requirements

You must supply the following tools:

- Metric allen keys.
- Metric spanners.
- Flathead screwdriver.



Note: The tool references mentioned in this guide are ISO tool references.

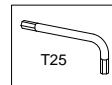
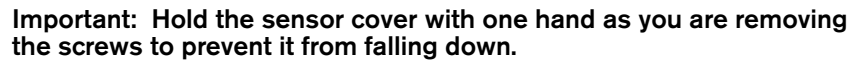
Before Removing or Replacing the Sliding Assembly

Before removing or replacing the sliding assembly, make sure that:

- The unit is **disconnected from the main power supply** by switching **off** the circuit breaker in the electrical cabinet.
- The unit is switched **off**.
- You have the required tools.
- You have the appropriate new sliding motor.

To remove the sliding motor, follow these steps:

1. Remove the two screws A_1 and remove the sensor cover A_2 .



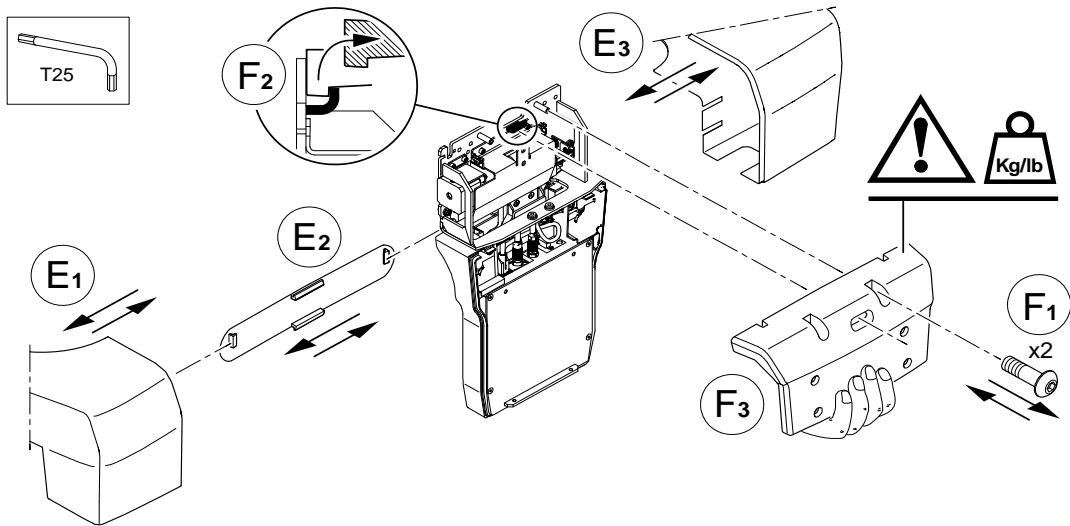
- Important:** Hold the sensor counterweight with one hand (B₂) as you are removing the screws to prevent it from falling down.



3. Carefully pull one side of the plastic strip (C₁) and remove the screw (C₂). Then pull the other side of the plastic strip to remove the second screw.
4. Undo and remove the two screws (D₁) and (D₂).

For detailed information on all the screws that you must remove from the rotative arm covers, see “CS 8100SC 3D Covers”.

5. Remove the rotative arm cover (E₁).



6. Carefully slide and remove the plastic strip (E₂).

7. Remove the rotative arm cover (E₃).

For detailed information on all the screws that you must remove from the rotative arm covers, see “CS 8100SC 3D Covers”.

8. Remove the two screws (F₁).

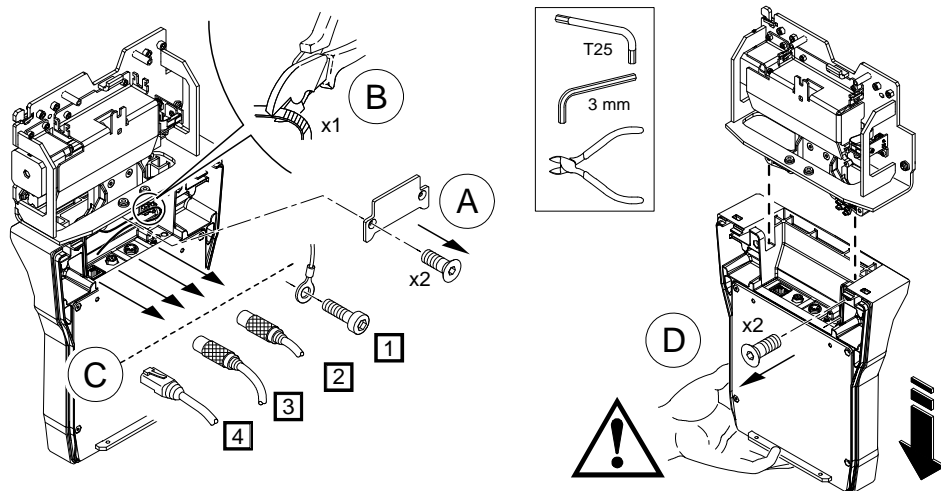
9. Lift the counterweight up to disengage it from the locating peg (F₂) and remove the counterweight block (F₃).



WARNING: The counterweight is very HEAVY.

Removing the Sensor

10. Remove the two screws and the metal plate (A).



11. Cut the cable tie for the CPB42 ethernet cable (B).

12. Disconnect the four cables in the illustrated order (1, 2, 3 and 4) (C).



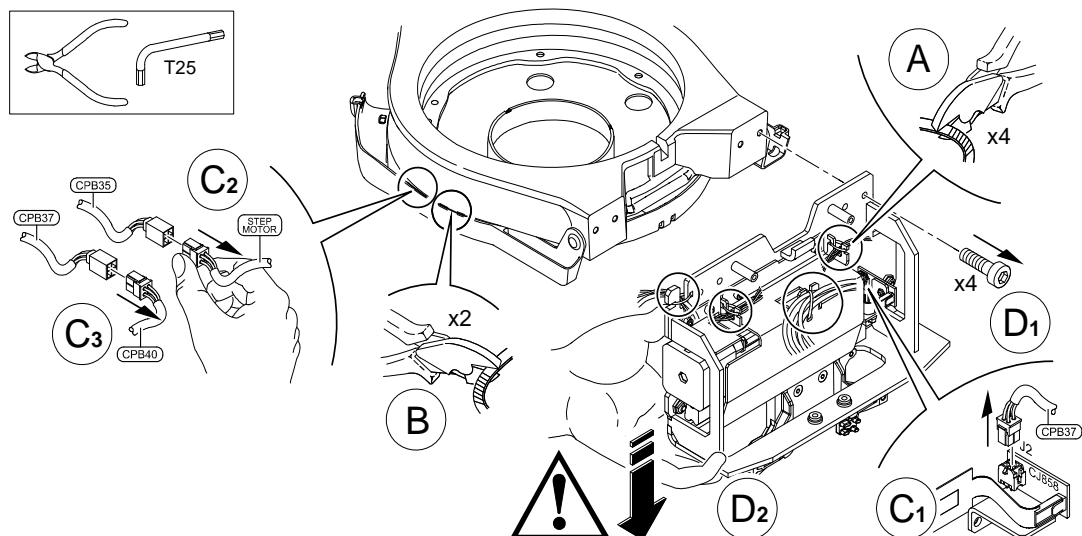
Important: Make a note on how the cable at order 4 (CPB42 ethernet cable) is looped behind the other three cables. It has a ferrite around it at the top of the sliding assembly.

13. Support the sensor with one hand and remove the two screws (D).

14. Remove the sensor.

Removing the Sliding Assembly

15. Cut the four cable ties (A).



16. Cut the two cable ties (B).
17. Disconnect the CPB37 cable from the CJ858 sliding detector board (C₁) on the sliding assembly.
18. Disconnect the sliding motor cable from the CPB35 cable (connected to the CJ902 sliding board) (C₂).
19. Disconnect the CPB40 sliding optical sensor cable from the CPB37 cable (connected to the CJ902 sliding board) (C₃).
20. Remove the four screws (D₁).

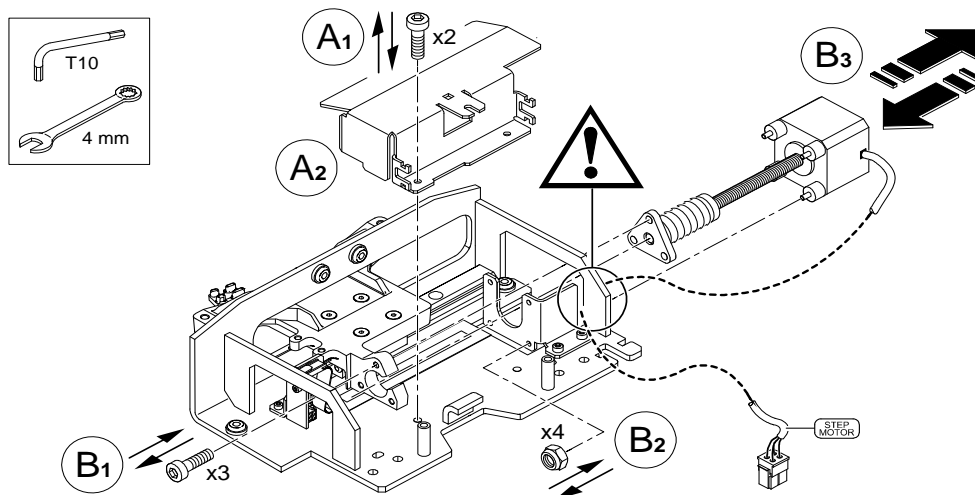


Important: Hold the sliding assembly with one hand (D₂) as you are removing the screws to prevent it from falling down.

21. Remove the sliding assembly.

Removing the Sliding Motor

22. Remove the two screws (A₁) and lift off the metal cage (A₂).



23. Remove the three screws (B₁).
24. Undo and remove the four nuts (B₂).
25. Carefully remove the sliding motor (B₃).

Replacing the Sliding Motor

To replace the sliding motor, follow these steps:

1. Carefully place the sliding motor (B₃).

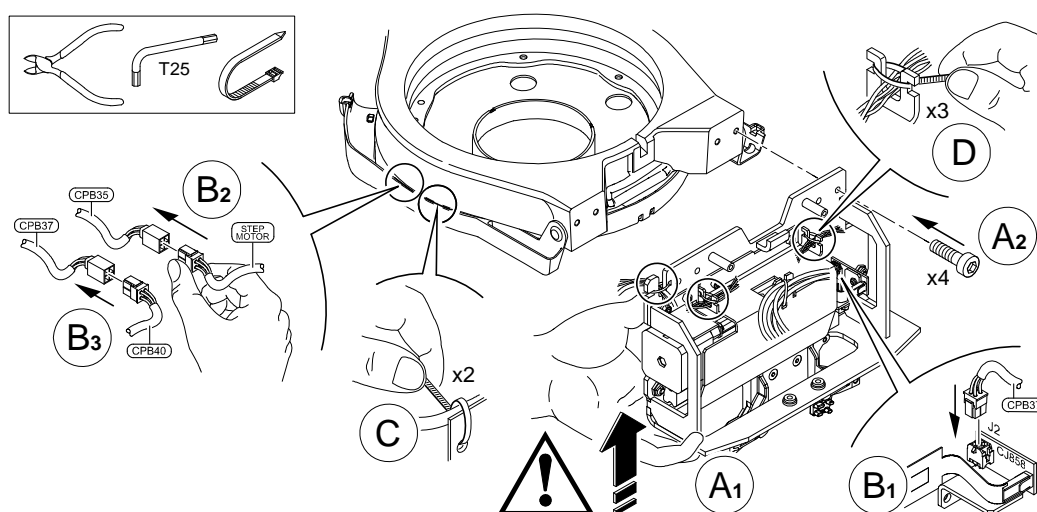


Important: Make sure that you put the sliding motor (step motor) cable in through the frame of the sliding assembly as illustrated.

2. Replace the four nuts (B₂).
3. Replace the three screws (B₁).
4. Place the metal cage (A₂) and replace the two screws (A₁).

Replacing the Sliding Assembly

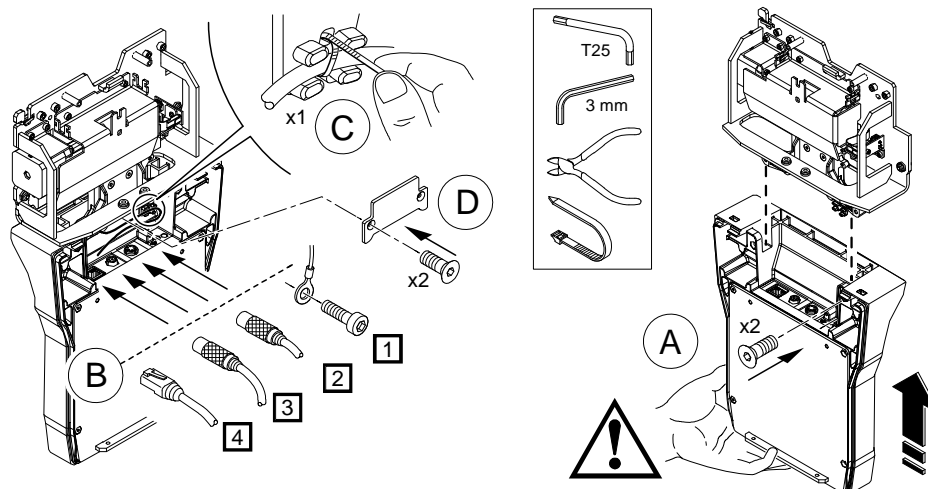
5. Place the sliding assembly (A₁).



6. Replace the four screws (A₂).
7. Connect the CPB37 cable to the CJ858 sliding detector board (B₁) on the sliding assembly.
8. Connect the sliding motor cable to the CPB35 cable (connected to the CJ902 sliding board) (B₂).
9. Connect the CPB40 sliding optical sensor cable to the CPB37 cable (connected to the CJ902 sliding board) (B₃).
10. Replace the two cable ties (C).
11. Replace the three cable ties (D). **DO NOT** replace the fourth cable tie around the CPB38, CPB41, and CPB39 cables.

Replacing the Sensor

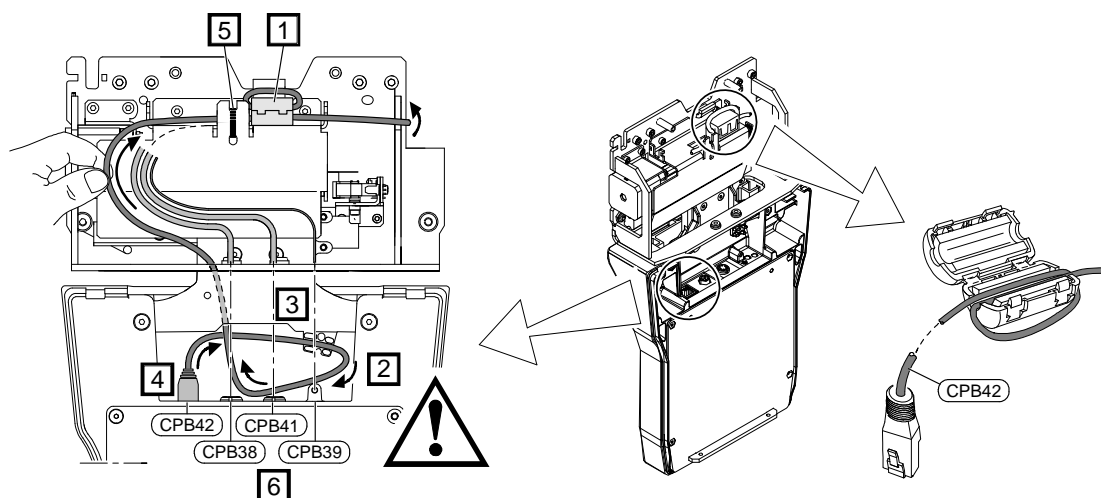
12. Place the sensor and replace the two screws (A).



Connecting the four cables

13. To connect the four cables (B), do the following:

CPB42 ethernet cable



- Make sure that the ferrite around the CPB42 ethernet cable is in front of the mounting peg (1).
- Pull the CPB42 ethernet cable through the hole and loop it as illustrated behind the connectors for cables CPB38, CPB41, and CPB39 (2).



Important: The loop is a safety measure to prevent any tension, through trap or tangle, to the CPB42 ethernet cable.

- Put a cable tie on the CPB42 ethernet cable (3).
- Connect the CPB42 ethernet cable to the sensor (4).

CPB38, CPB41, and CPB39

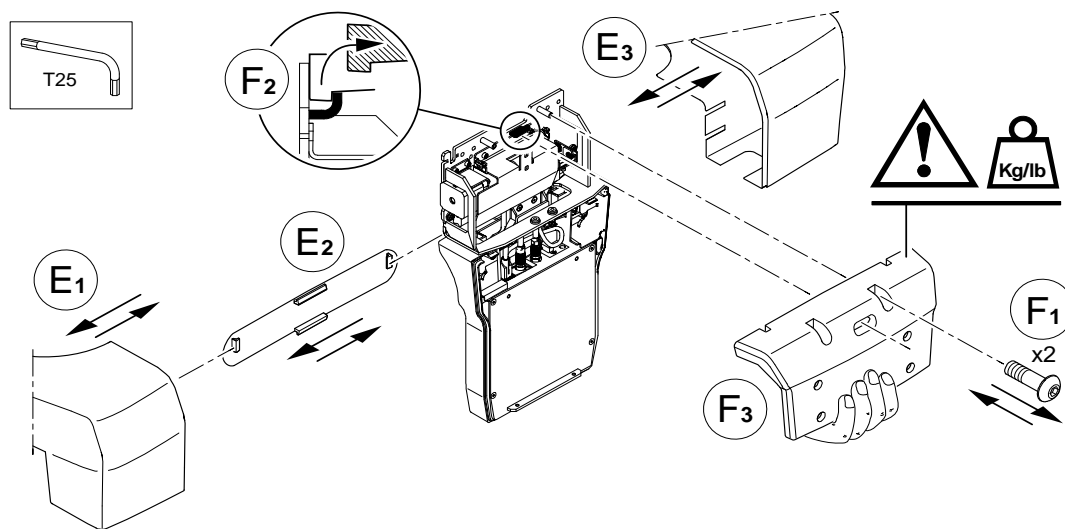
- Put a cable tie on all three cables (5).
- Pull the cables through the hole and connect CPB38, followed by CPB41 and CPB39 (6).

14. Make sure that the cable tie for the CPB42 ethernet cable is properly fixed (C).

15. Replace the metal plate and the two screws (D).

Replacing the covers and the counterweights

16. Mount the counterweight block (F₃) by placing the hole on the counterweight block into the mounting peg (F₂).



17. Insert and tighten the two screws (F₁).

18. Replace the rotative arm cover (E₃).

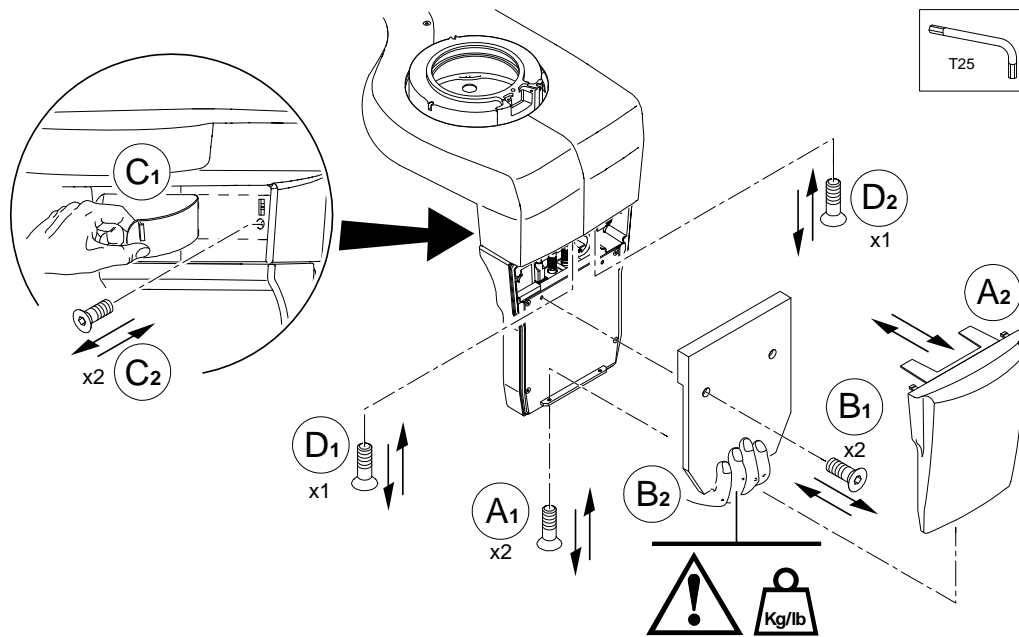
For detailed information on all the screws that you must replace for the rotative arm covers, see “CS 8100SC 3D Covers”.

19. Replace the plastic strip (E₂).

20. Replace the rotative arm cover (E₁).

For detailed information on all the screws that you must replace for the rotative arm covers, see “CS 8100SC 3D Covers”.

21. Insert and tighten the two screws on both sides of the plastic strip $\textcircled{C_1}$ $\textcircled{C_2}$.



22. Insert and tighten the two screws ($\textcircled{\text{D}_1}$ $\textcircled{\text{D}_2}$).

23. Place the sensor counterweight $\textcircled{B_2}$.

24. Insert and tighten the two screws $\textcircled{\text{B}_1}$.

25. Place the sensor cover $\textcircled{A_2}$.

26. Insert and tighten the two screws $\textcircled{A_1}$.

27. Switch on the circuit breaker in the electrical cabinet.

28. Switch on the unit.

29. Using the **Service Tools**, run the **3D sensor sliding part replacement** under the **Part replacement** menu.

Testing the Sliding Motor

To test the sliding motor, follow these steps using the **Service Tools**:

1. Run the post installation procedure.
2. Register the intervention.
See [“Registering the Intervention” on page 46](#)

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Replacing the Y Motor Assembly



WARNING: Before removing the covers, you **MUST** switch **OFF** the unit **AND** disconnect the unit from the main power supply by switching **OFF** the circuit breaker in the electrical cabinet.

ONLY an approved Carestream technician is qualified to inspect or maintain the unit while it is switched on and while the covers are removed. In this case, **NO** unqualified person must approach the unit.

Description

The Y motor assembly enables the rotative arm movement in the Y direction.

Removing the Y Motor Assembly

Tool Requirements

You must supply the following tools:

- Metric allen keys.
- Metric spanners.
- Flathead screwdriver.

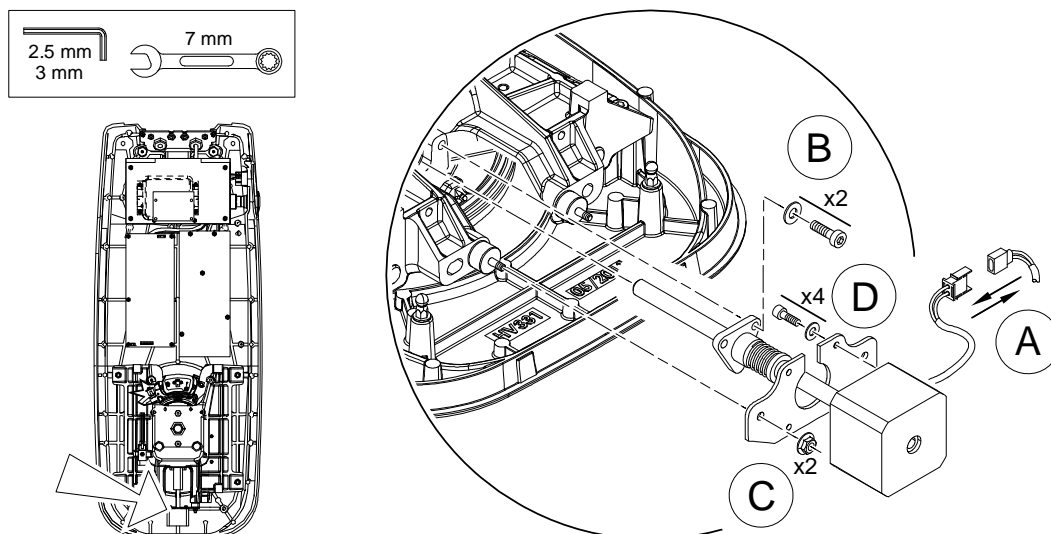


Note: The tool references mentioned in this guide are ISO tool references.

Before Removing or Replacing the Y Motor Assembly

Before removing or replacing the Y motor assembly, make sure that:

- The unit is **disconnected from the main power supply** by switching **off** the circuit breaker in the electrical cabinet.
- The unit is switched **off**.
- The head cover is removed.
- You have the required tools.
- You have the appropriate new Y motor assembly.



To remove the Y motor assembly, follow these steps:

1. Disconnect the motor cable (A).
2. Remove the two screws and washers holding the triangular plate in place (B).
3. Undo the two nuts on the motor assembly backplate (C).
4. Remove the Y motor assembly.
5. Remove the four screws and washers that hold the backplate to the Y motor (D).

Replacing the Y Motor Assembly

To replace the Y motor assembly, follow these steps:

1. Attach the backplate to the Y motor by putting a washer on each screw and tightening the four screws (D).
2. Insert the Y motor assembly into position.
3. Put a washer on each of the two screws that hold the triangular plate in place (B) and tighten the two screws.
4. Tighten the two nuts on the motor assembly backplate (C).
5. Connect the motor cable (A).
6. Switch on the circuit breaker in the electrical cabinet.
7. Switch on the unit.
8. Using the **Service Tools**:
 - Run the head translation calibration.
 - Save the system and calibration parameters (see [“Saving the System and Calibration Parameters” on page 42](#)).

- Run the rotative arm diagnostics.

Testing the Y Motor Assembly

To test the Y motor assembly, follow these steps using the **Service Tools**:

1. Run the post installation procedure.
2. Register the intervention.
See [“Registering the Intervention”](#) on page 46.