

AS-30946 (Pinza ResQ de contenedores)

Cambio del motor de la pinza

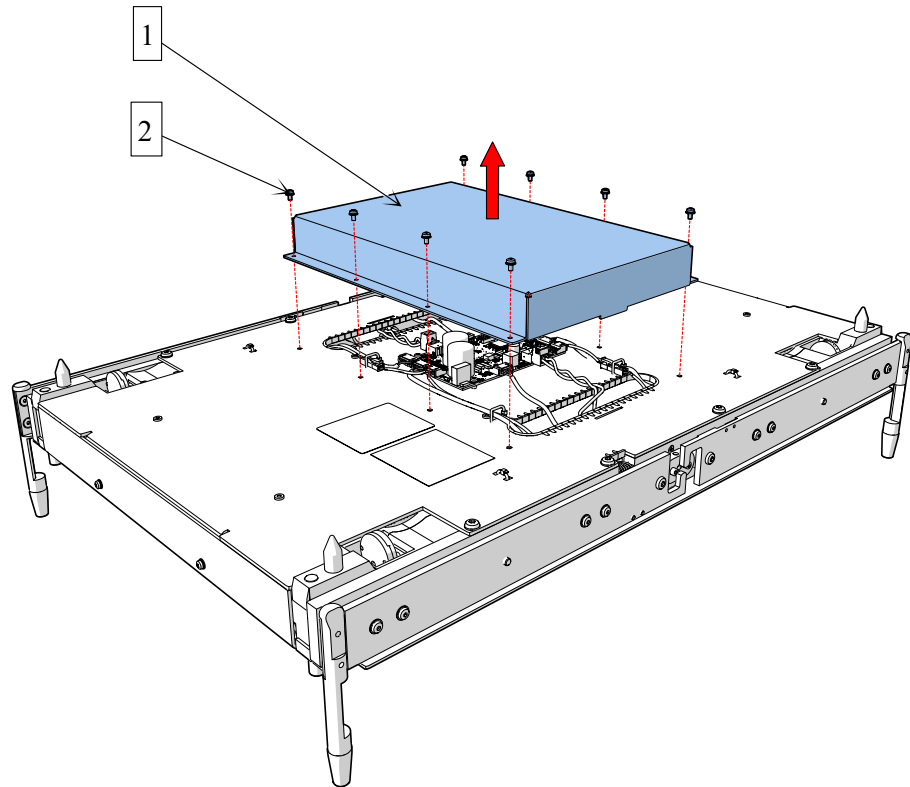
Preparativos:

Consulte el manual de servicio R5+ (AS-55242-STD-es) para obtener instrucciones sobre cómo quitar la placa de agarre.

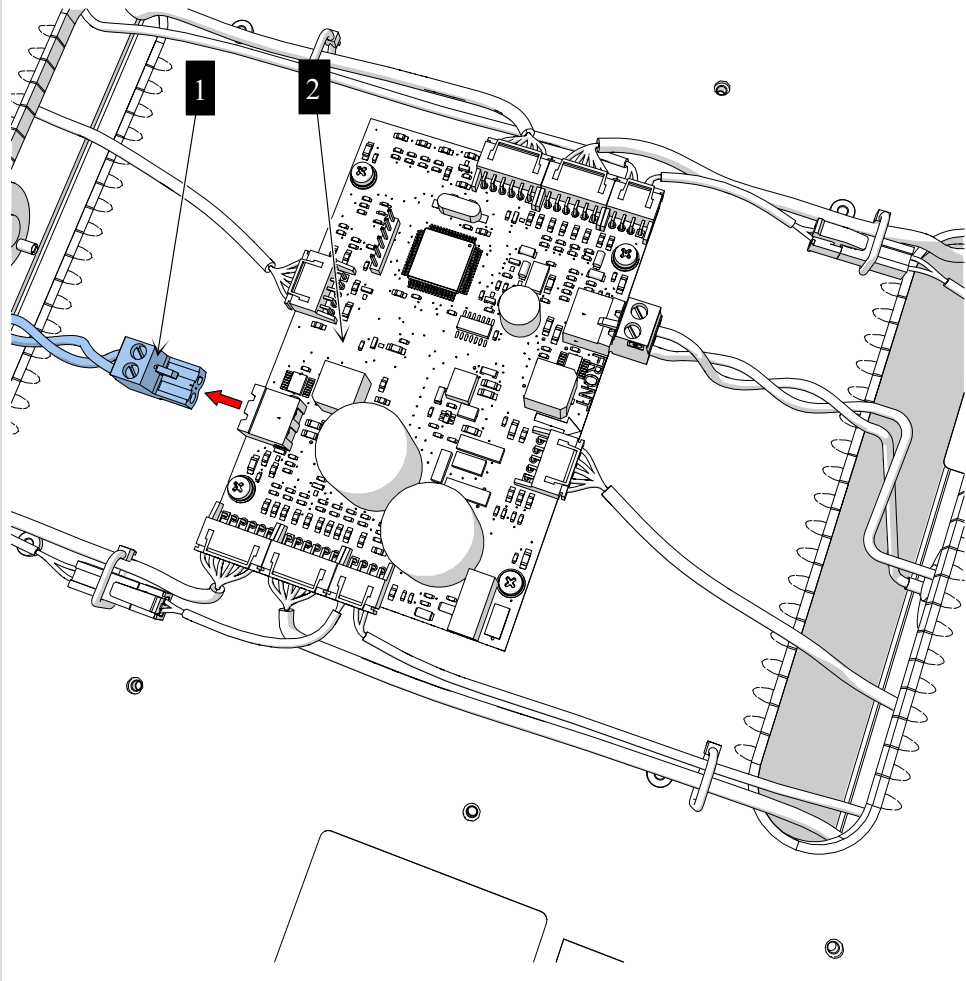
Tabla 7. Procedimiento

Retire la cubierta de la placa de circuito impreso y desconecte el motor de la CPU de la pinza

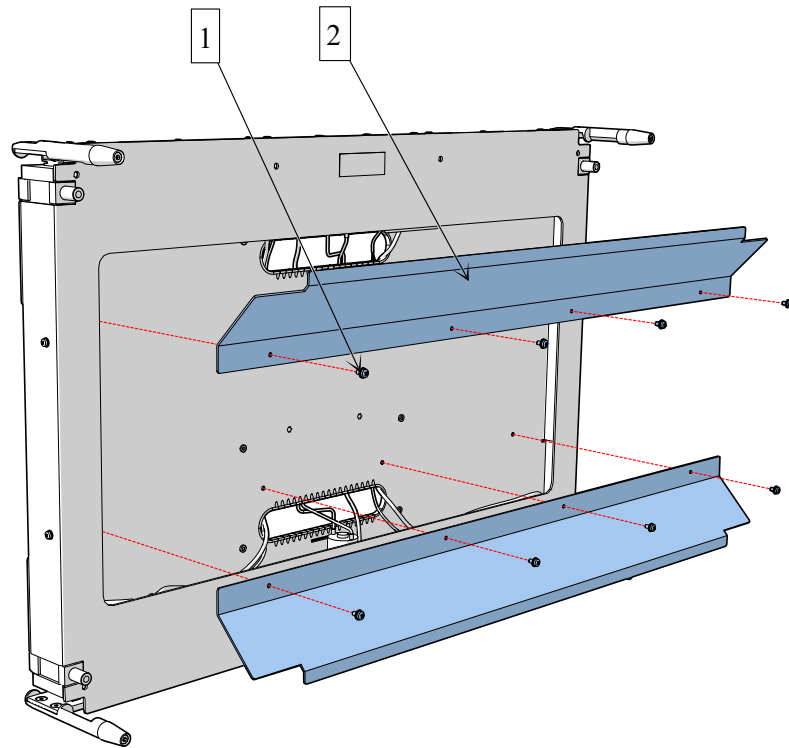
1. Extracción: Desatornille los tornillos de cabeza plana AS-13492 (2) [x8] y retire la cubierta de PCB AS-18180 (1).



2. Desconecte el cable AS-12150 (1) de la CPU de agarre AS-90183 (2).

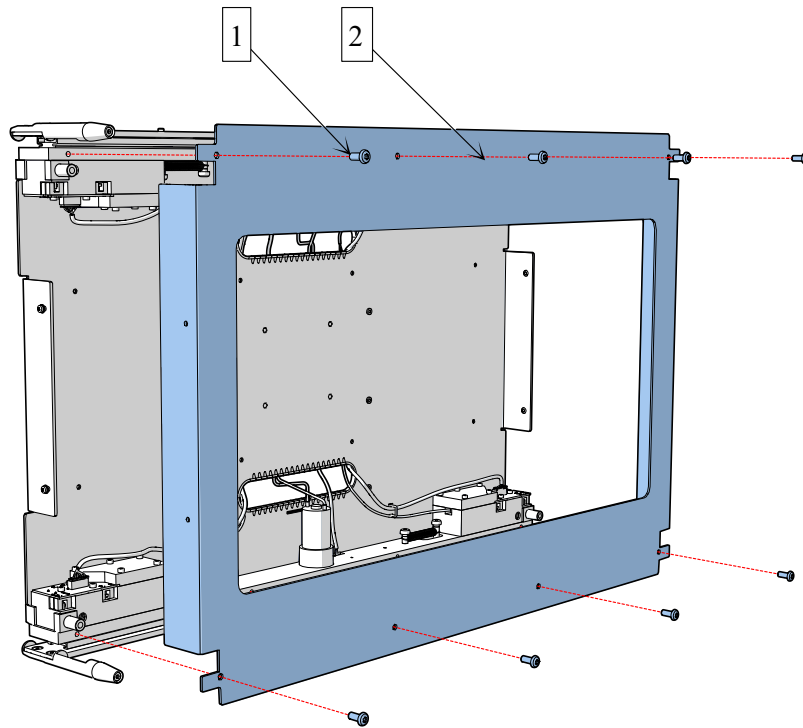


3. Retire las cubiertas de los cables del motor AS-18179 (2) [x2] quitando los tornillos AS-13492 (1) [x8].

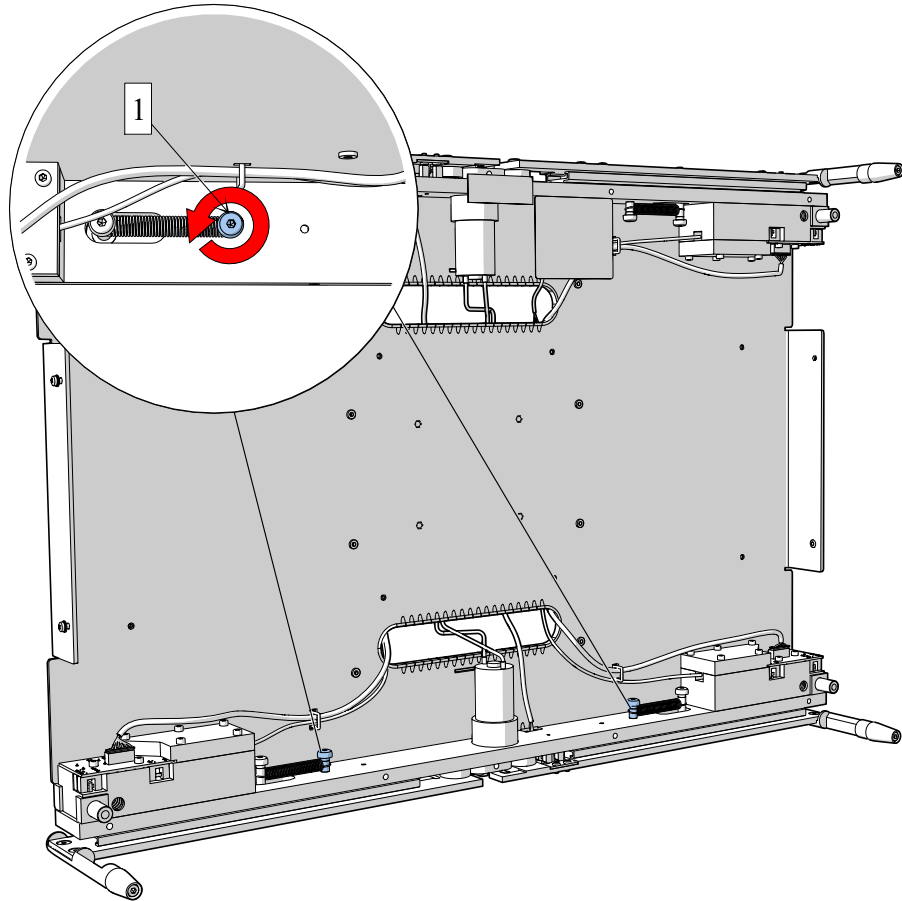


Retire la cubierta del cable del motor en la parte inferior de la placa de agarre:

4. Retire la placa inferior AS-18168 (2) desenroscando los tornillos AS-13384 (1) [x8].

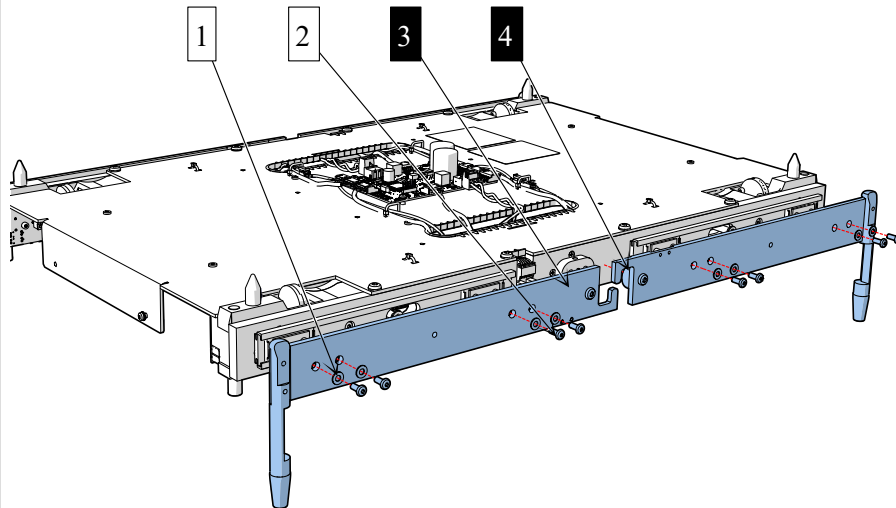


5. Afloje los pernos AS-10970 (1) [x2] que sujetan los resortes en las barras de agarre.

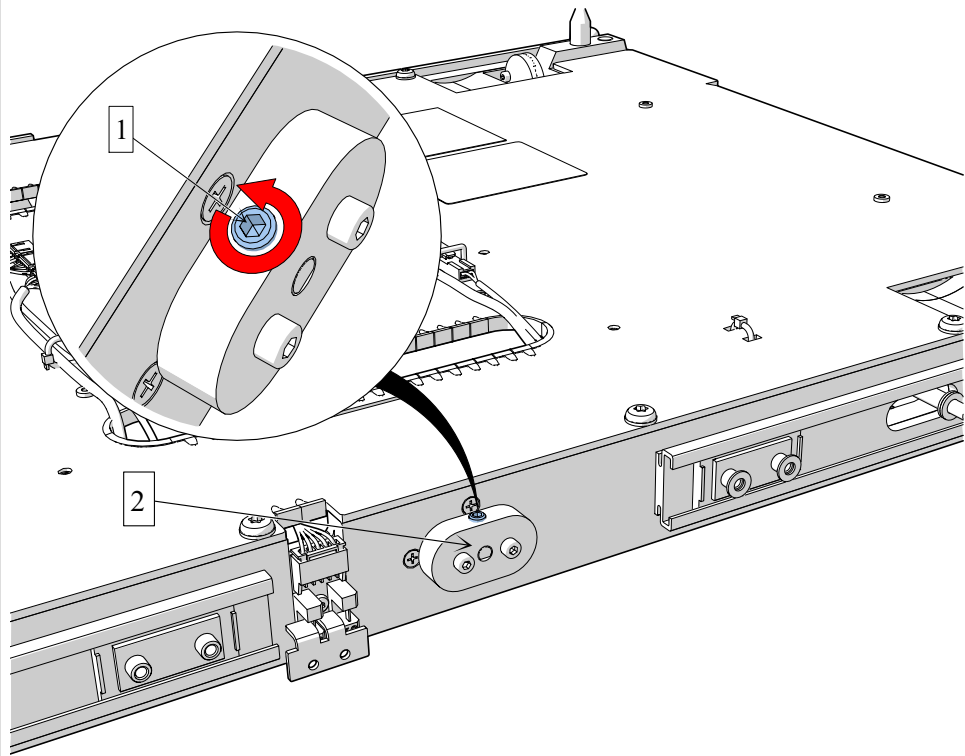


Afloje y retire ambas barras de agarre:

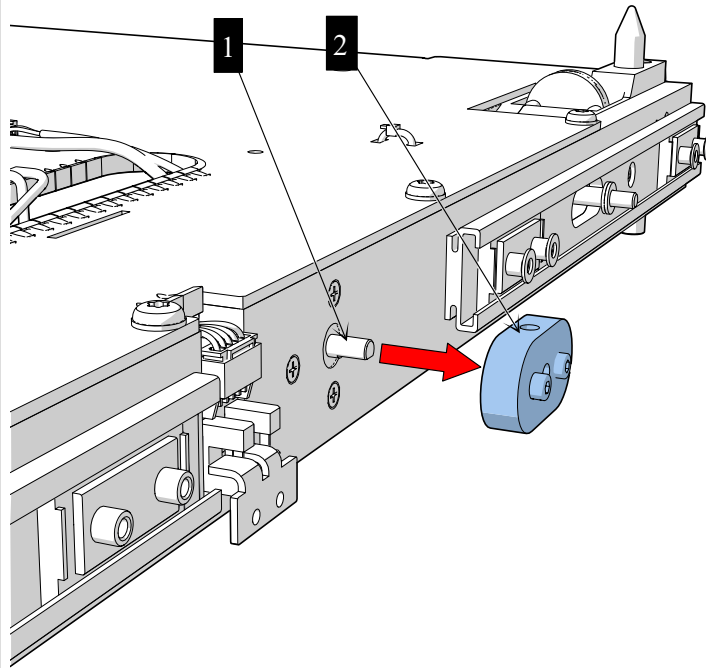
6. Desatornille y retire los tornillos AS-11364 (2) [x8] y las arandelas AS-13498 (1) [x8].
7. Retire las barras de agarre AS-18171 (3) [x2], incluidos los cojinetes (4) [x2].



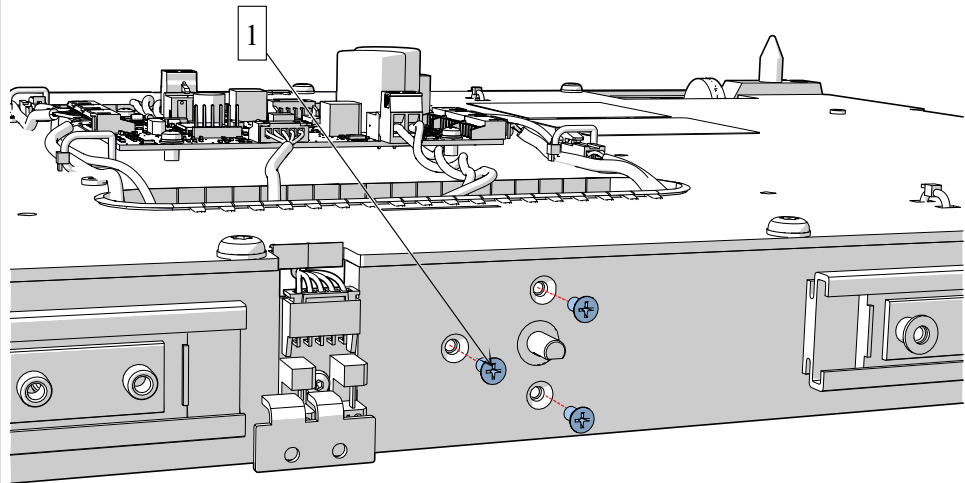
8. Loosen the AS-13150 Hex-head screw (1) and remove the Trigger Cam (2) from the motor shaft.



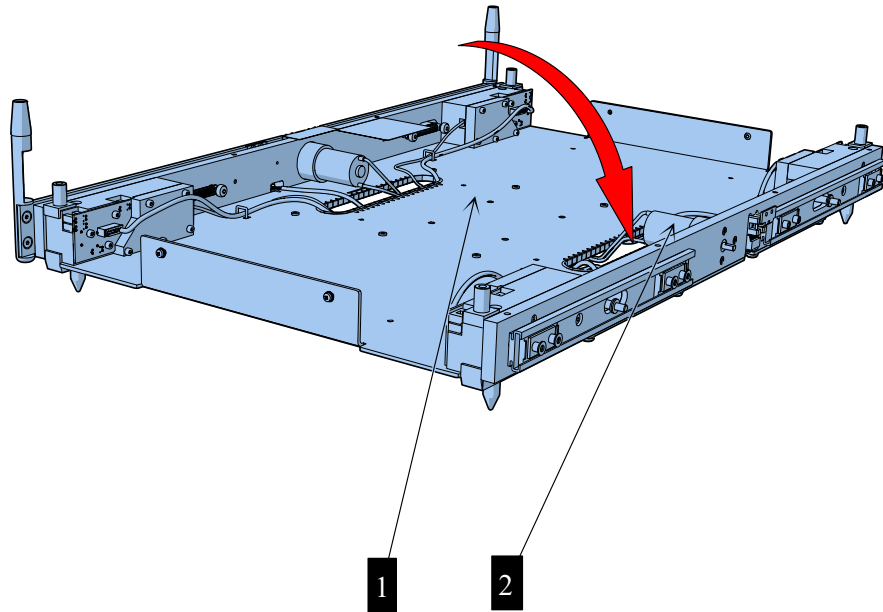
9. Remove the AS-18175 Trigger Cam (2), from the motor shaft (1).



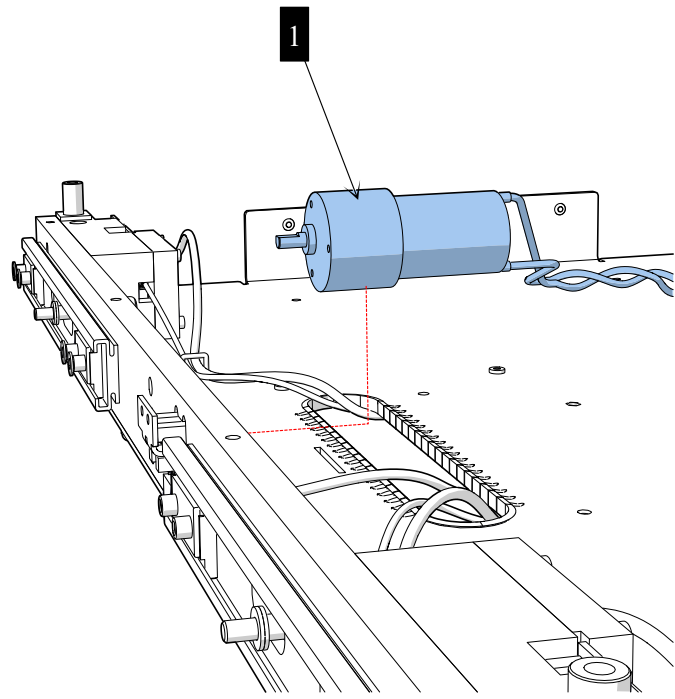
10. Unscrew the AS-10166 screws (1) [x3] from AS-18169 Frame Beam.



11. Flip the AS-30946 Bin ResQ Gripper (1) upside-down while supporting the AS-10449 Gripper Motor (2).

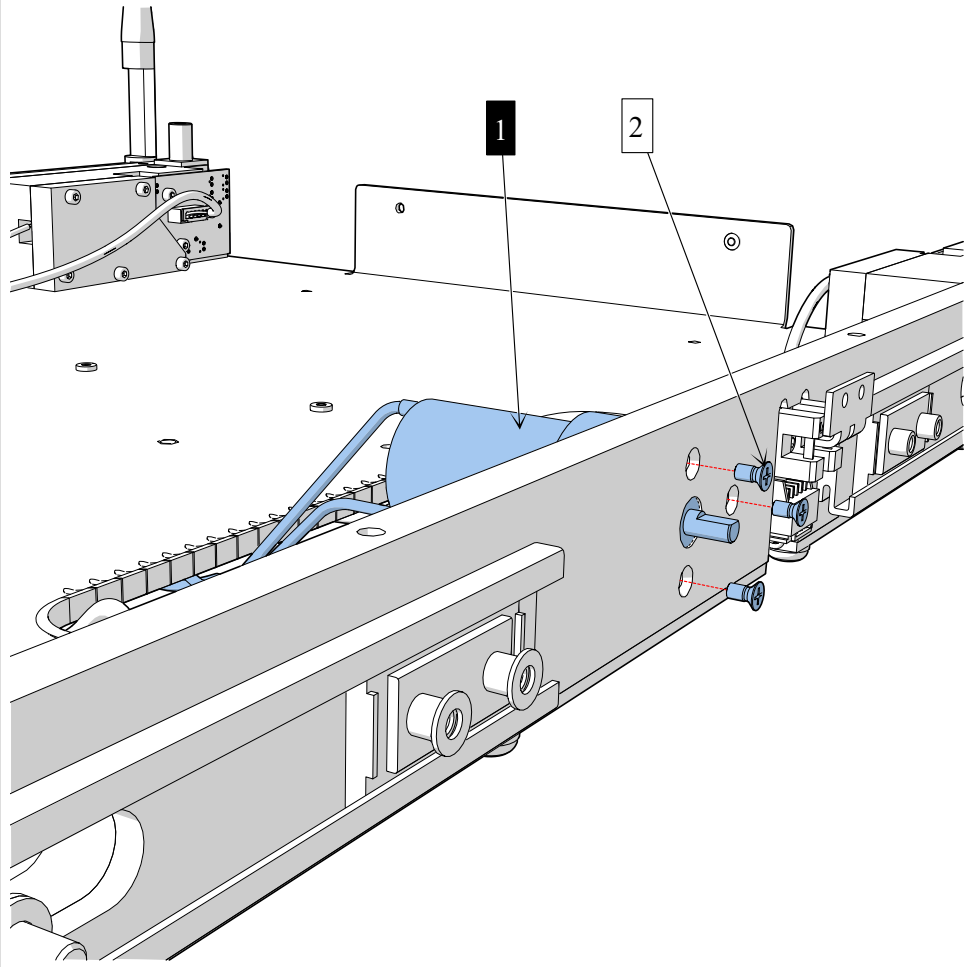


12. Remove the AS-10449
Gripper Motor (1).

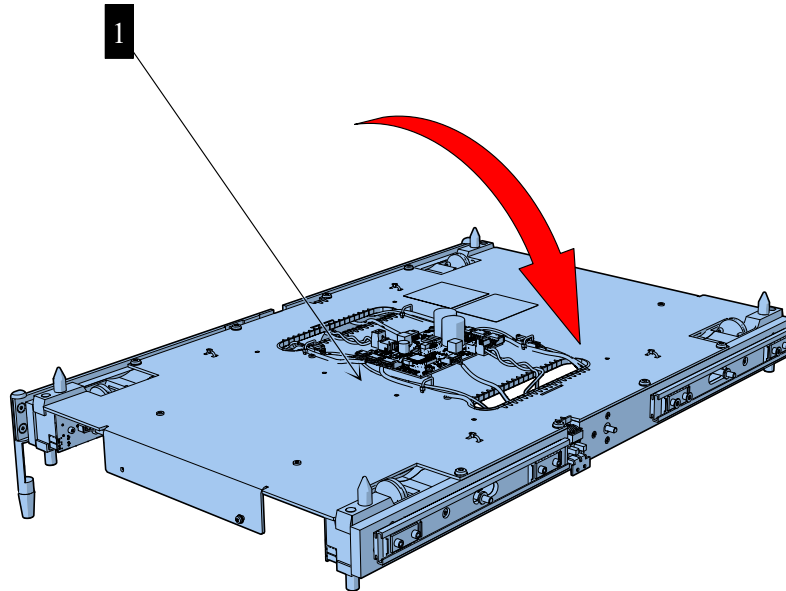


Installing the replacement motor

1. Insert the new AS-10449 Gripper Motor (1) and fasten the AS-10166 screws (2) [x3] to a torque 1 Nm.



2. Flip the AS-30946 Bin ResQ Gripper (1) back from the up-turned position to right side-up.



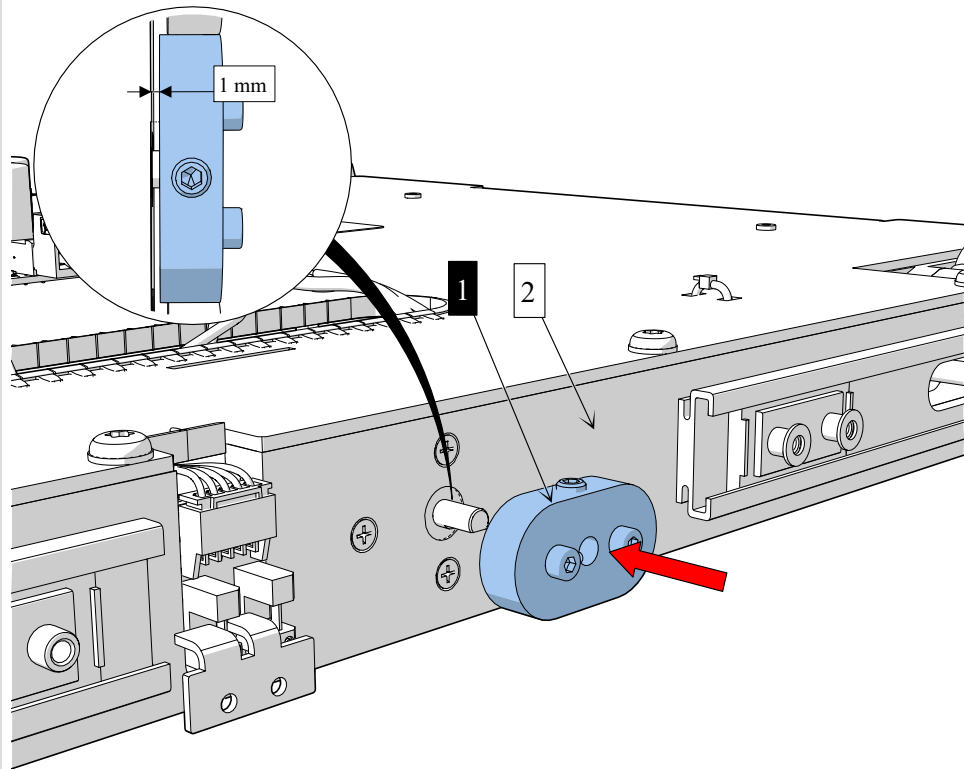
3. Mount the AS-18175 Trigger Cam (1) on AS-10449 Gripper Motor Shaft while maintaining a 1-mm gap between the AS-18175 Trigger Cam (1) and the AS-18169 Frame Beam (2).

❗ Important

Ensure that a 1-mm gap is maintained between the AS-18175 Trigger Cam (1) and the AS-18169 Frame Beam (2).

❗ Important

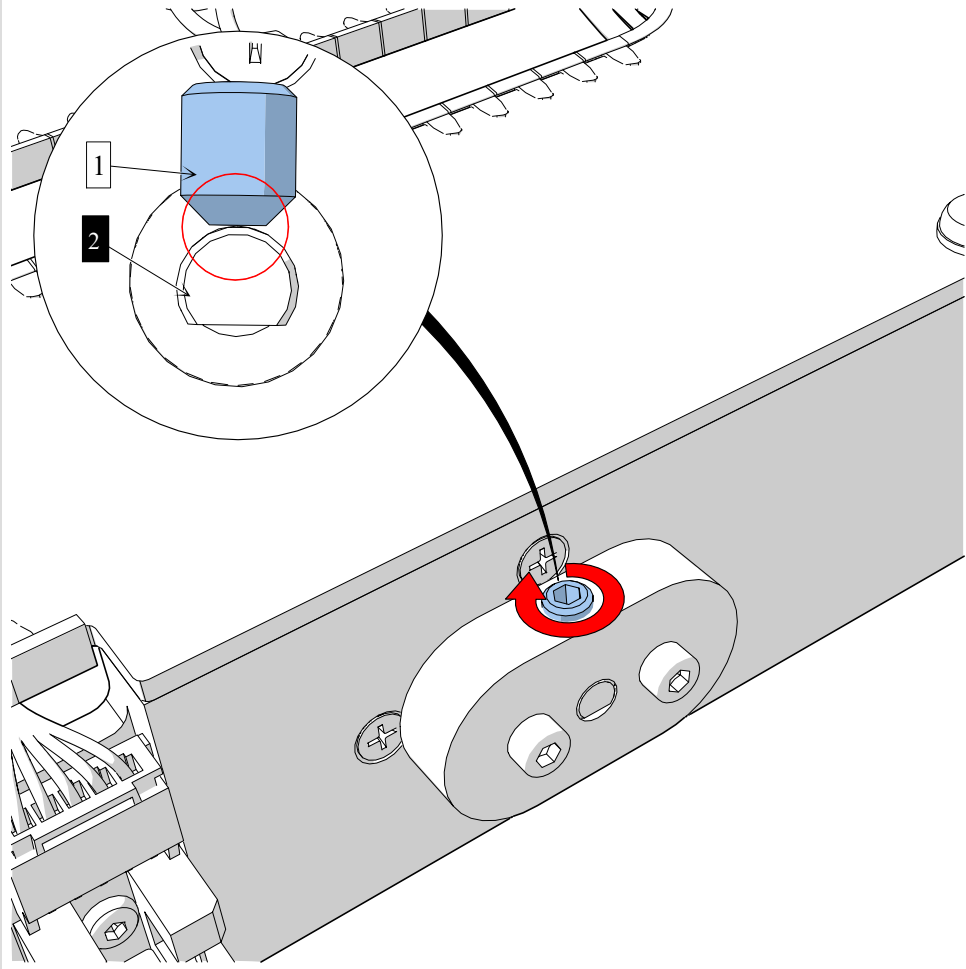
The AS-13150 Hex-head screw must touch the round surface of the motor shaft.



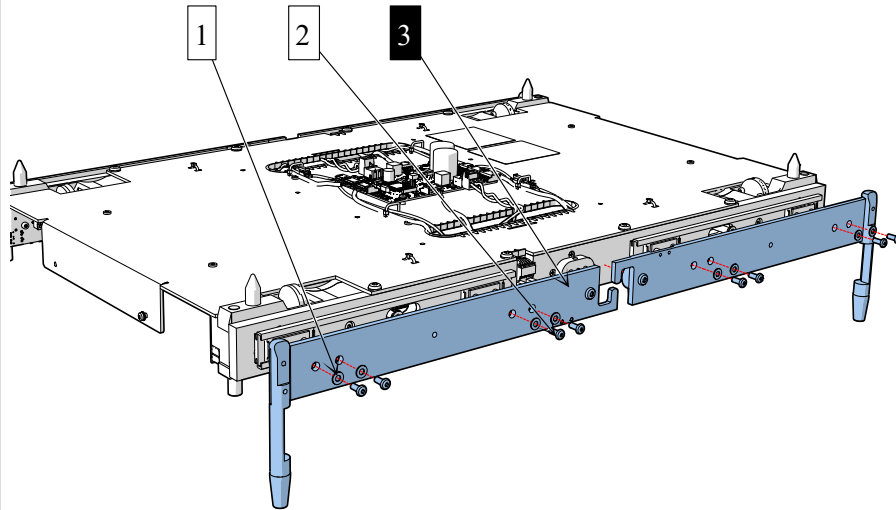
4. Tighten the AS-13180 Hex screw (1) on AS-18175 Trigger Cam (2) to a torque of 2.4 Nm.

! Important

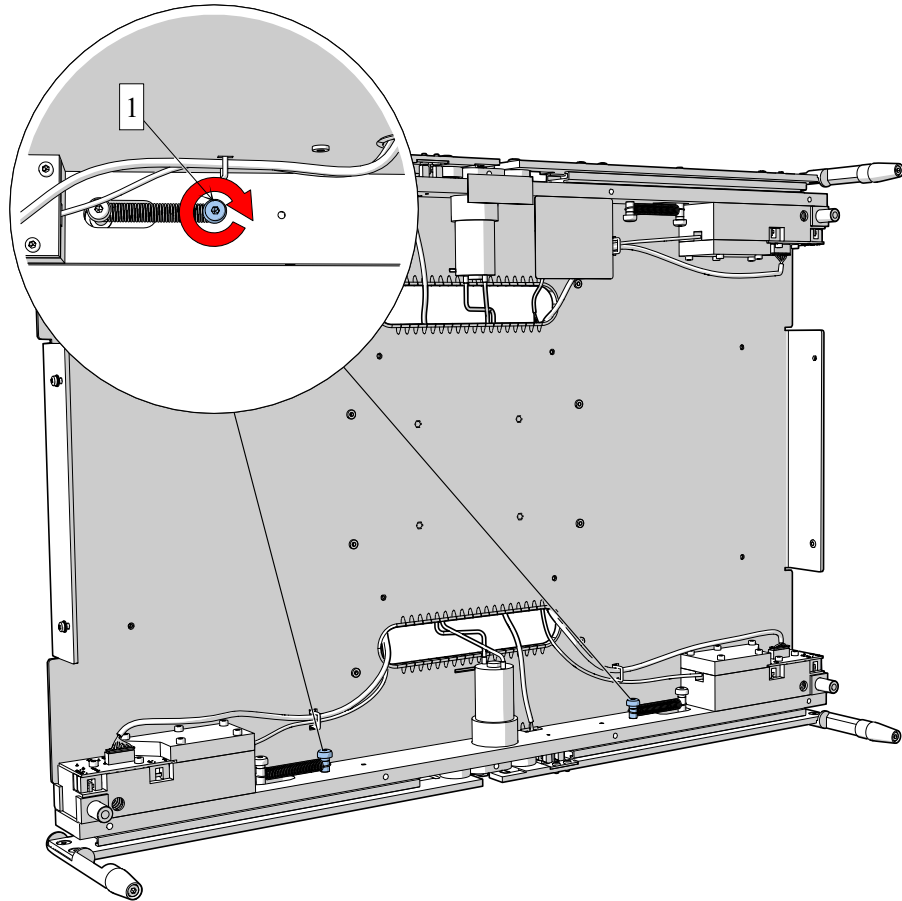
The AS-13180 Hex screw (1) must touch the round surface of the motor shaft, see detail view.



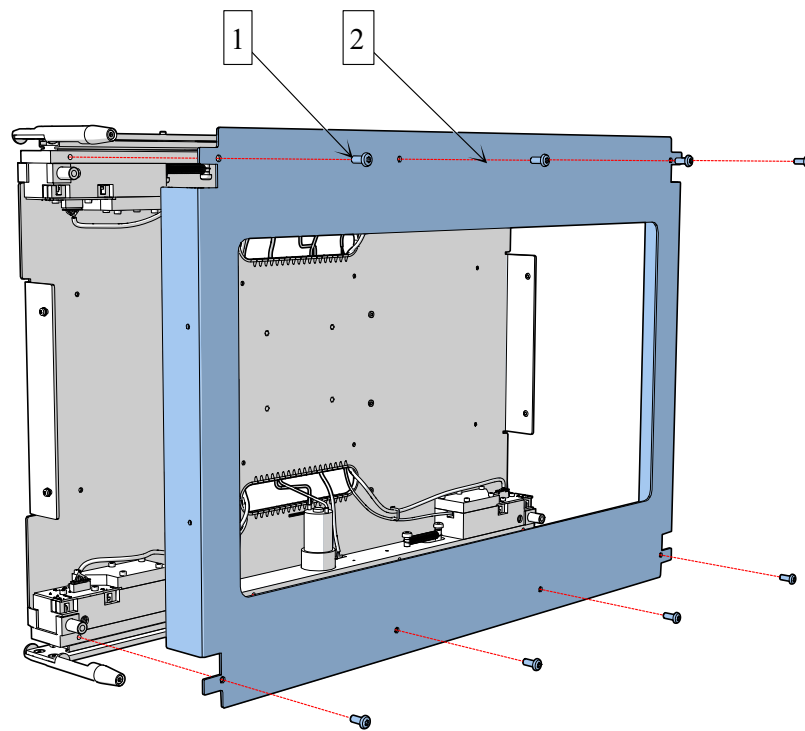
5. Mount the AS-18171 Gripper Bars (3) [x2] with the AS-11364 screws (2) [x8] including the AS-13498 Washers (1) [x8]. Tighten to a torque of 1.2 Nm.



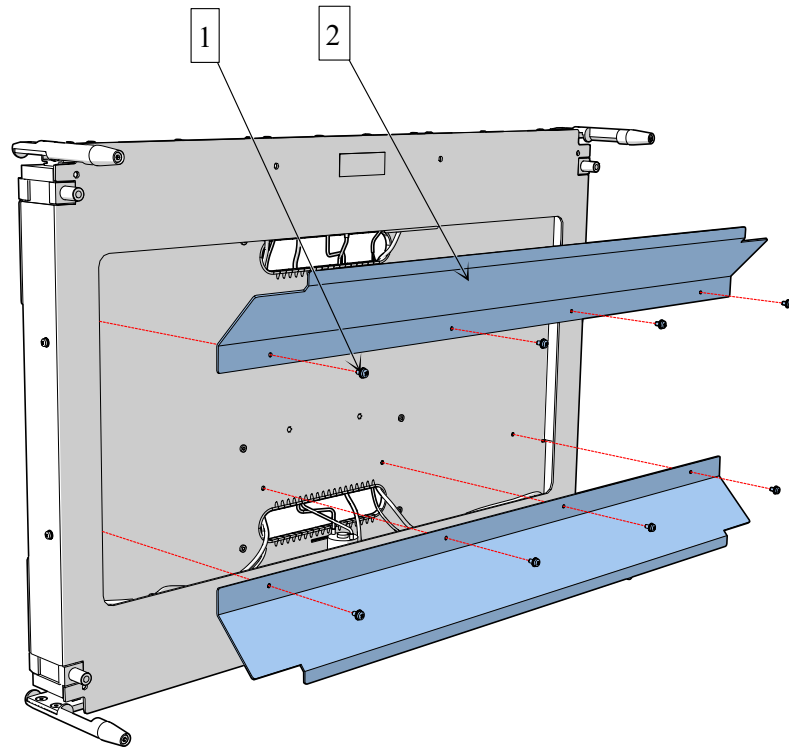
6. Mount the springs onto the AS-10970 Bolts (1) [x2] that hold the springs on the gripper bars. Torque to 3 Nm.



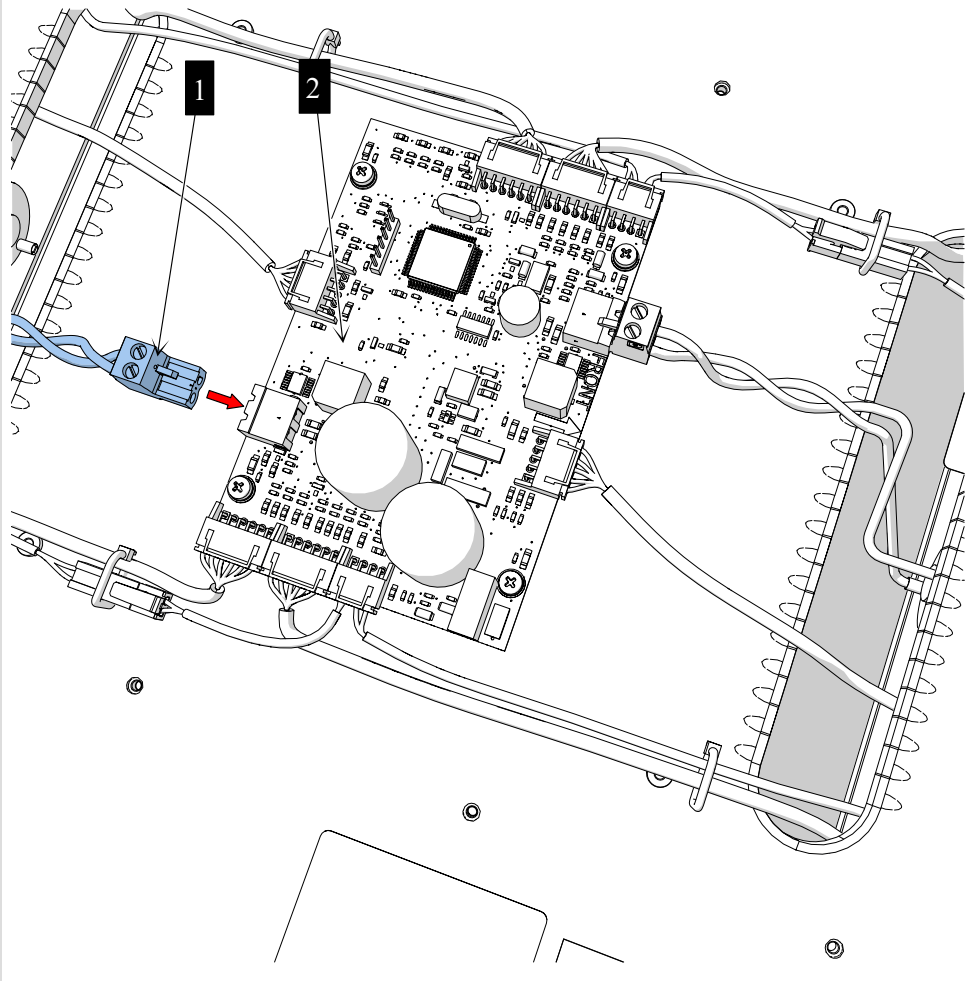
7. Fasten the AS-18168 Bottom Plate (2) with the AS-13384 screws (1) [x8]. Torque to 3 Nm.



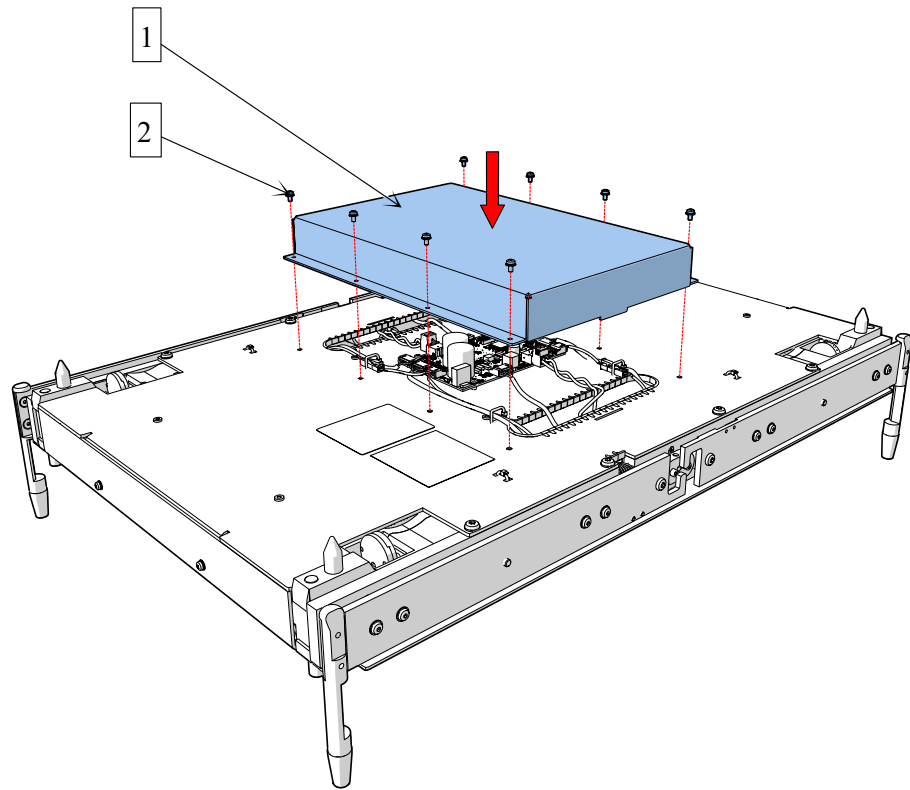
8. Fasten the AS-18179 Motor Cable Covers (2) [x2] using the AS-13492 screws (1) [x8]. Torque to 0.6 Nm.



9. Connect the AS-12150 Cable (1) to the AS-90183 Gripper CPU (2).



10. Fasten the AS-18180 PCB Cover (1) using the AS-13492 Pan-head screws (2) [x8]. Torque 0.6 Nm.

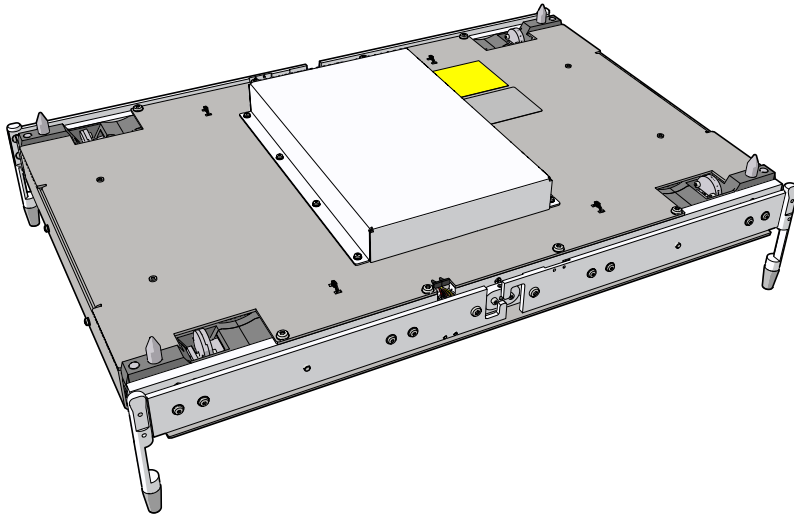


11. Follow instructions in the R5+ Service Manual (AS-55242-STD-en) in order to attach the gripper to the robot and level it.

Replacing the Gripper Guides

Preparations:

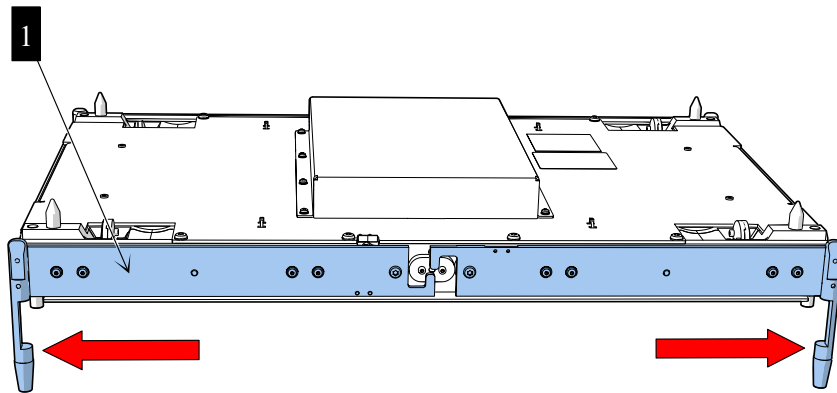
Position the robot on the Service Grid and disconnect the battery.



Procedure

Accessing the bolts on the Gripper Guides:

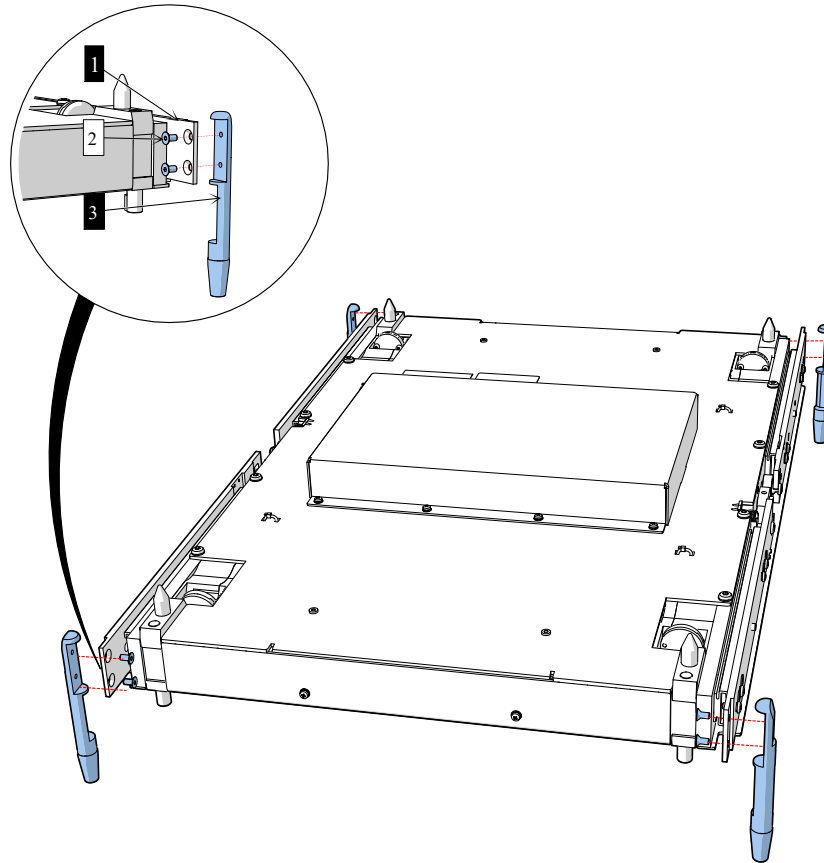
1. To access the bolts on the gripper guides the grippers must be fully extended.
2. To remove, extend the gripper fully by pulling the AS-31151 ResQ Gripper Bars (1) outwards to access the bolts on the gripper guides.



Procedure

Loosening the bolts to remove a damaged Gripper Guide:

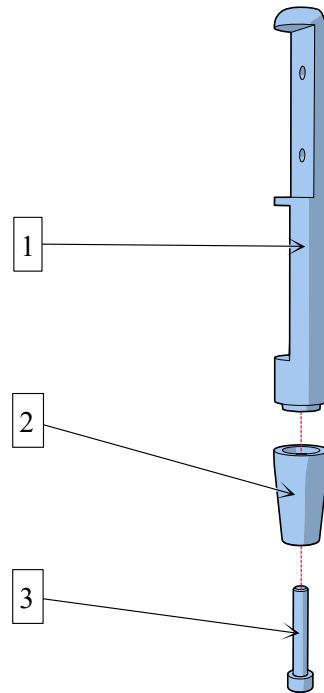
3. Unscrew AS-11428 Hex screws (2) [x2] from the AS-31151 ResQ Gripper Bar (1) and remove the damaged AS-18172 Gripper Guide (3).
4. Repeat this task for other Gripper Guides (3) [x4] that shall be removed.



Procedure

Installation:

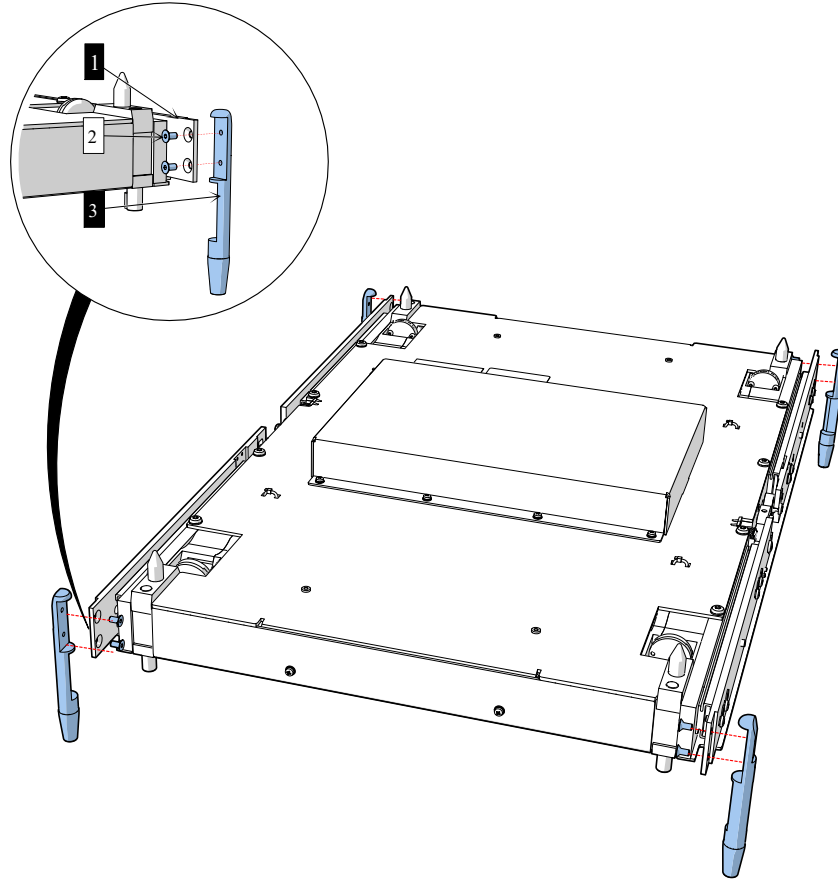
5. Mount AS-18173 Gripper Guide Tip (2) using an AS-11090 screw (3) to attach it to the AS-18172 Gripper Guide (1). Torque to 1.2 Nm.



Procedure

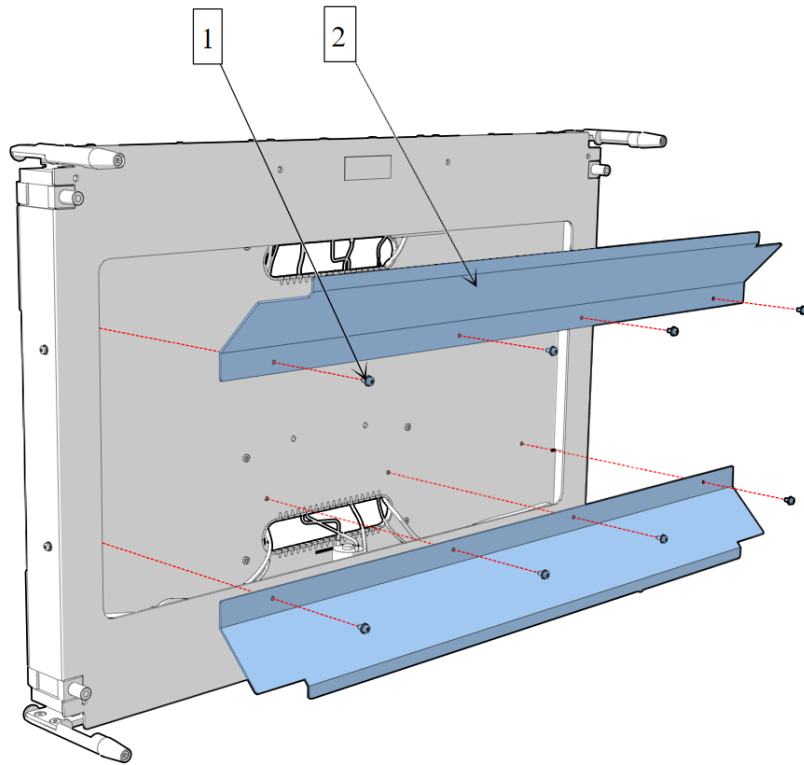
Mounting the Gripper Guides on the Gripper Bars:

6. Mount AS-18172 Gripper Guide (3) using the AS-11428 Hex screws (2) [x2] to attach it to the AS-31151 ResQ Gripper Bar (1). Torque to 1.2 Nm.
7. Repeat this task for other Gripper Guides (3) [x4] that shall be mounted.
8. Connect the battery and perform a function test.



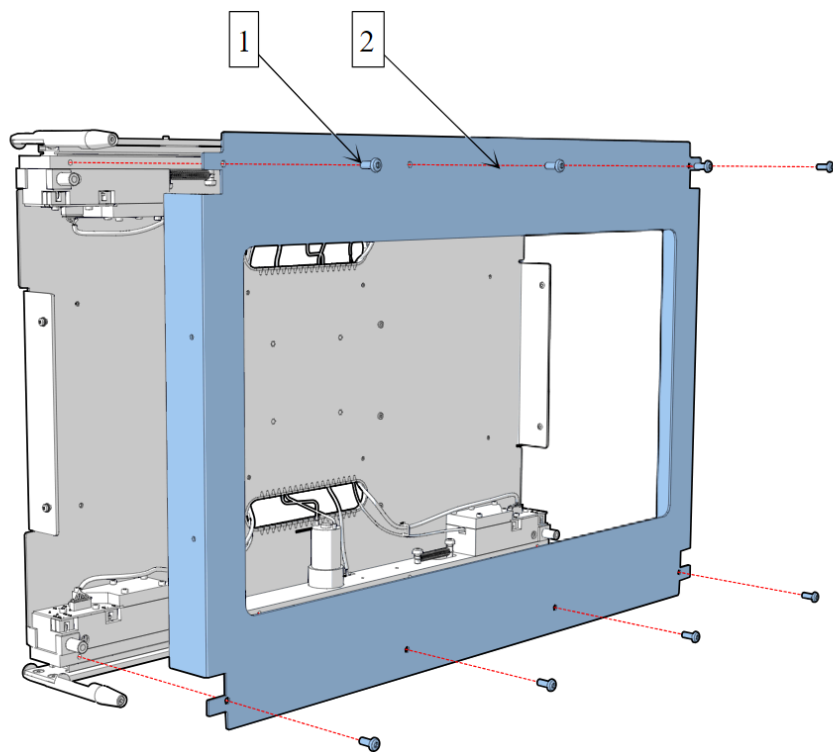
AS-36135 (IGUS Slider) replacement procedure

1. Remove the AS-18179 Motor Cable Covers (2) [x2] by removing the AS-13492 screws (1) [x8].

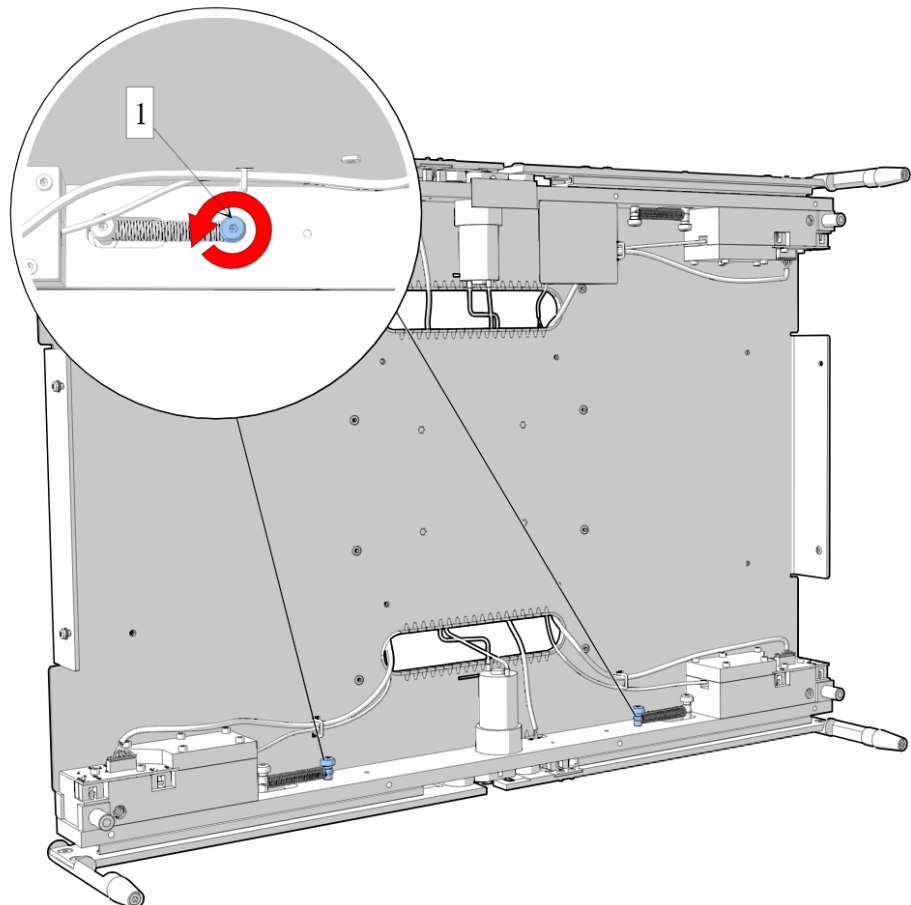


Retire la cubierta del cable del motor en la parte inferior de la placa de agarre:

2. Retire la placa inferior AS-18168 (2) desenroscando los tornillos AS-13384 (1) [x8].

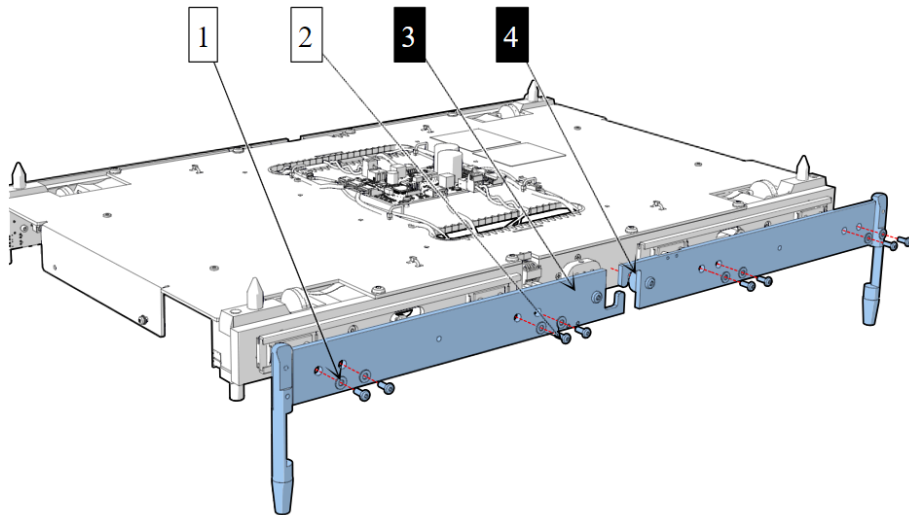


3. Afloje los pernos AS-10970 (1) [x2] que sujetan los resortes en las barras de agarre.



Afloje y retire ambas barras de agarre:

4. Desatornille y retire los tornillos AS-11364 (2) [x8] y las arandelas AS-13498 (1) [x8].
5. Retire las barras de agarre AS-18171 (3) [x2], incluidos los cojinetes (4) [x2].



6. Deslice hacia afuera el deslizador AS-36135 IGUS (1) e inserte el reemplazo.

Realice los pasos del 1 al 5 en orden inverso para volver a ensamblar.

