

## AS-35194 (Pinza robotizada)



### Retire AS-35194 (Pinza del robot)

Tiempo estimado de retirada: 10 minutos

#### Herramientas necesarias:

- Barra de ajuste x2
- Llave hexagonal - 2,5 mm

#### Preparación:

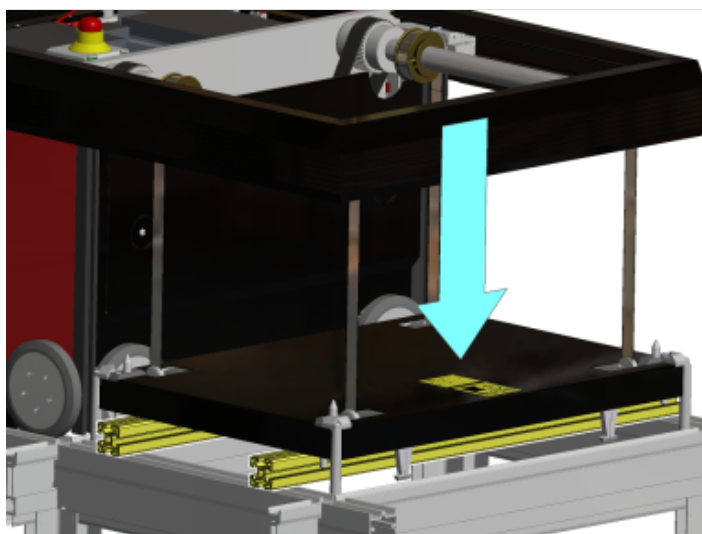
- Retire AS-35205 (SDG de la parte superior de la hoja) / AS-35646 (DDG de la parte superior de la hoja)[as-35205-sheet-top-sdg---as-35646-sheet-top-ddg-.html#UUID-2653ba5f-4e21-b730-9d1e-f6dd04791b3a\_UUID-9a96252c-e093-b3f9-9d3b-4de2dade2faf]

1. Coloque dos barras debajo de la pinza (puede usar las mismas barras que para el ajuste de la pinza).
2. Baje la pinza hasta que descance sobre las barras.
3. Hágalo manualmente → AS-35194 (Robot Gripper) Bajada manual.



#### Nota

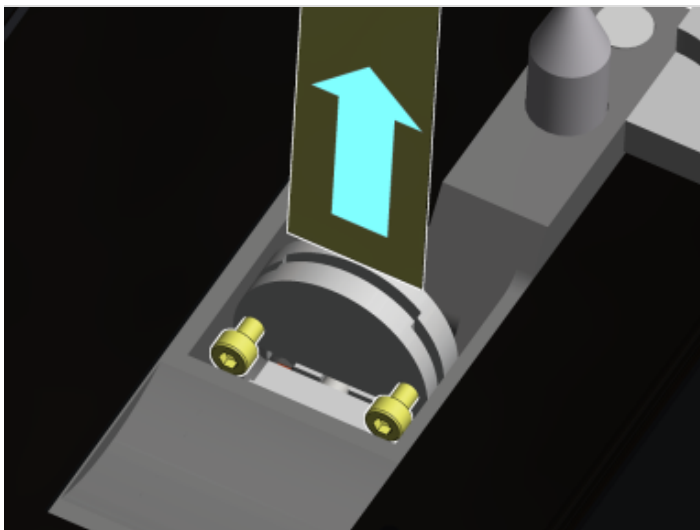
No utilice el panel de control para bajar la pinza en este procedimiento.



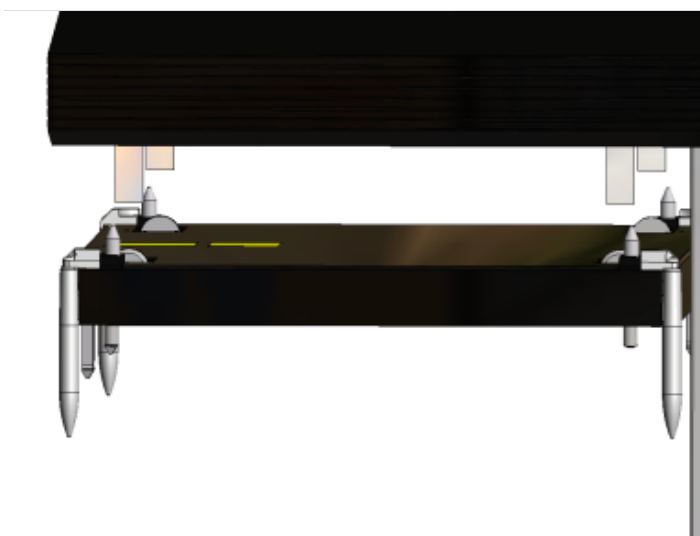
4. Hay cuatro conexiones (un sujetador en cada esquina de la pinza).
5. Afloje los dos tornillos hexagonales M3x8mm (llave hexagonal de 2,5 mm) en cada sujetador, pero no los retire.
6. Retire las tiras de acero de todos los sujetadores.

**Nota**

Asegúrese de que las barras estén colocadas correctamente en la pista (que no puedan caerse) antes de desconectar la pinza.



7. Cuando las cuatro tiras de acero estén desconectadas, retire la pinza.



## Instalar AS-35194 (Pinza de robot)

Tiempo estimado de instalación: 30 minutos

**Herramientas necesarias:**

- Barra de ajuste x2
- Llave hexagonal - 2,5 mm - forma de L
- Llave hexagonal - 2,5 mm - Forma de T
- Mandril

**Procedimiento:**

1. Coloque dos barras en la parte delantera del robot (puede usar las mismas barras que para el ajuste de la pinza).
2. Coloque la pinza en las barras.

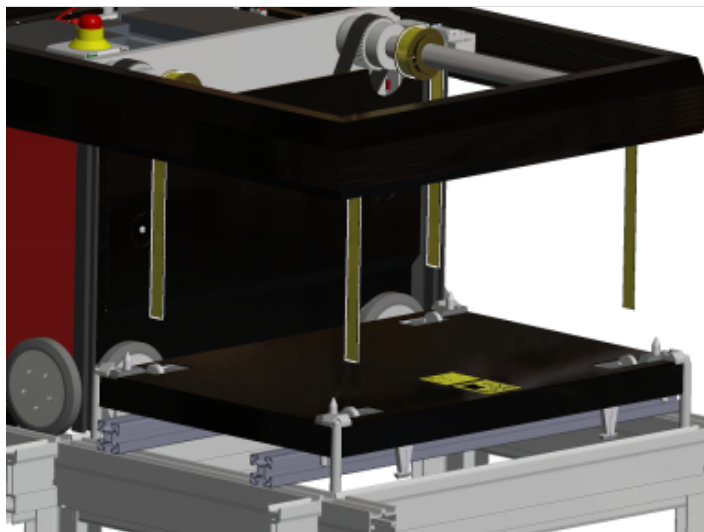
**Nota**

Asegúrese de que las barras estén colocadas correctamente en la pista (que no puedan caerse).

**Caution**

Gripper has to be aligned according to the sticker on it (arrow is showing where is the FRONT).

3. Lower the steel strips until they reach all four fasteners on the Gripper, plus few centimeters more (strips should be a little loose).
4. Lower the steel strips until they reach all four fasteners on the Gripper, plus few centimeters more (strips should be a little loose).

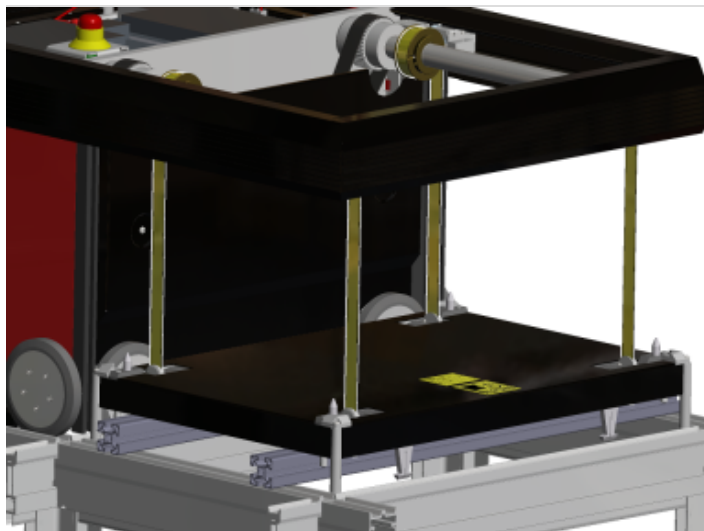
**Note**

Do not use the control panel for lowering the Gripper in this procedure.

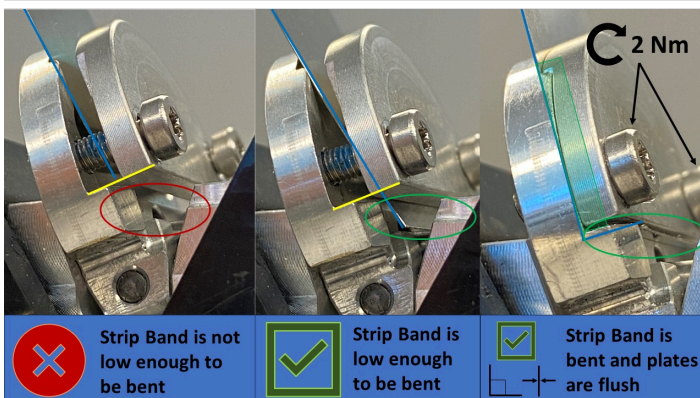
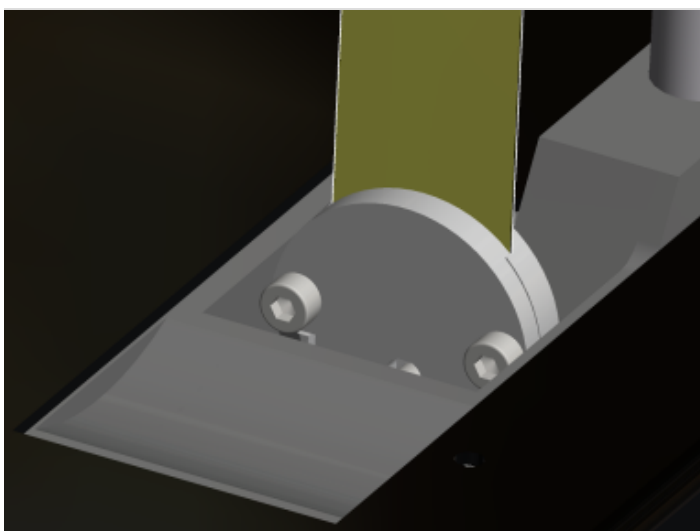
5. There are four connections with two screws per Gripper strip sensor house.

**Note**

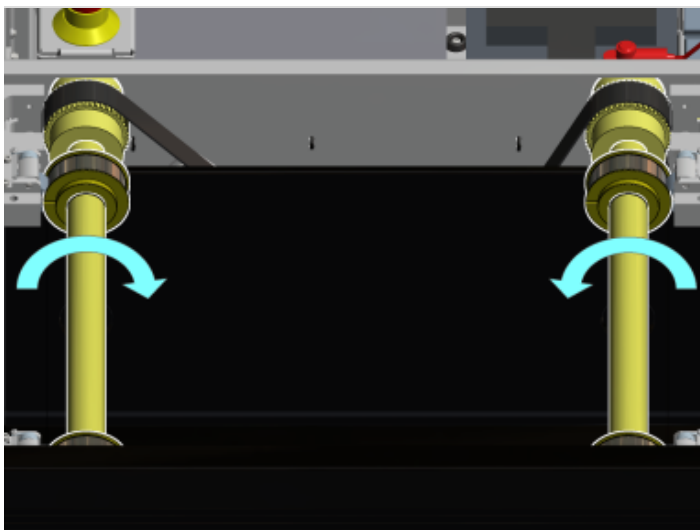
Screws should be tightened in few steps. Few rotation first screw, few rotation second screw and this way until you notice screws are tightened. Thank to this, you will avoid misalignment between two tightener parts and in consequence not correctly attached steel strip to the Gripper.



6. Put the steel strip firmly into the fastener and tighten both M3x8mm hex socket screws (2,5mm hex key).



7. When all four connections are done, lift up the Gripper.  
8. Do this manually → AS-35194 (Robot Gripper)  
Manual lifting



#### Completion:

- Adjust AS-35194 (Gripper)[as-35194--robot-gripper-.html#UUID-615f1cd0-c94d-2caf-556f-d588cec2487d\_UUID-d2715e29-d943-ad24-47b3-fa071739f17f]
- Install AS-35205 (Sheet top SDG) / AS-35646 (Sheet Top DDG)[as-35205--sheet-top-sdg---as-35646--sheet-top-ddg-.html#UUID-2653ba5f-4e21-b730-9d1e-f6dd04791b3a\_UUID-67d6d688-0828-2123-11d3-b92cb6ca4d01]

## Adjust AS-35194 (Robot gripper)

Estimated installation time: 15 minutes

#### Tools needed:

- Adjustment bar x2
- Hex key - 2.5 mm - L shape
- Hex key - 2.5 mm - T shape
- Torx T10 (or hex key above, depending on set screw generation)
- Mandrel

**Preparation:**

- Remove AS-35205 (Sheet top SDG) / AS-35646 (Sheet Top DDG)[as-35205-sheet-top-sdg---as-35646-sheet-top-ddg-.html#UUID-2653ba5f-4e21-b730-9d1e-f6dd04791b3a\_UUID-9a96252c-e093-b3f9-9d3b-4de2dade2faf]

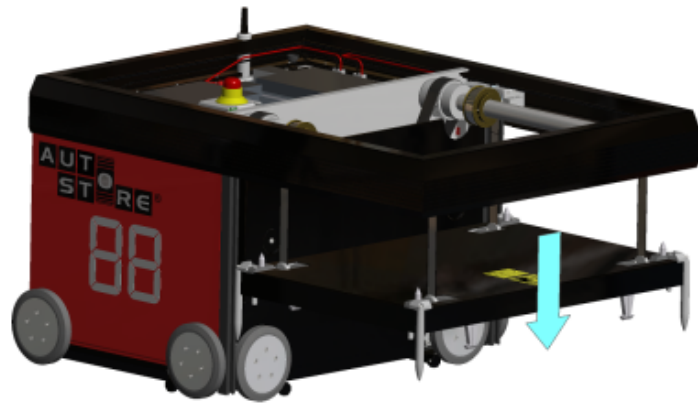
**Procedure:****Note**

Make sure Robot is switched OFF (ESTOP button must be pushed).

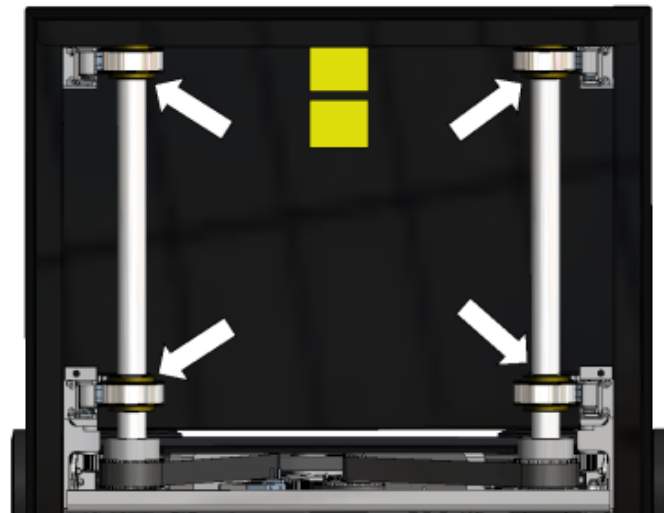
1. Lower the Gripper to approx the half height of Robot.
2. Do this manually → AS-35194 (Robot Gripper) Manual lowering.

**Note**

Do not use the control panel for lowering the gripper.



3. Press the Gripper down by hand to make sure that the strip reels are tight.



4. To adjust the gripper you will need two identical, straight bars that must be longer than the width of the Robot frame.
5. Place the bars on top of the gripper, one on each side.



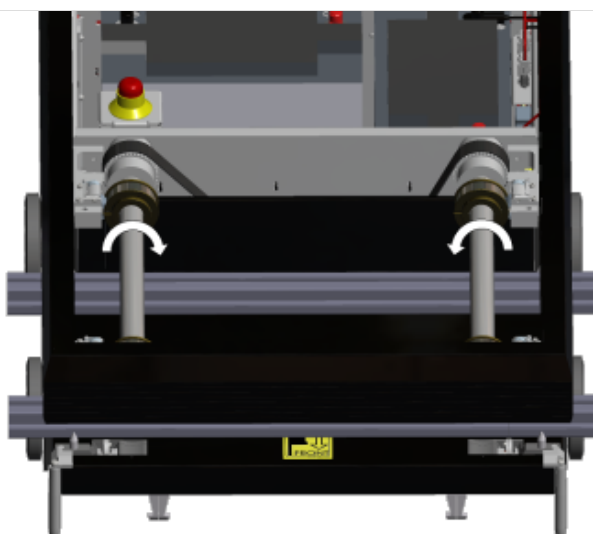
6. Lift up the Gripper until bars touch the Robot frame.
7. Do this manually → AS-35194 (Robot Gripper) Manual lifting

**Note**

Do not use the control panel for raising the gripper

**Caution**

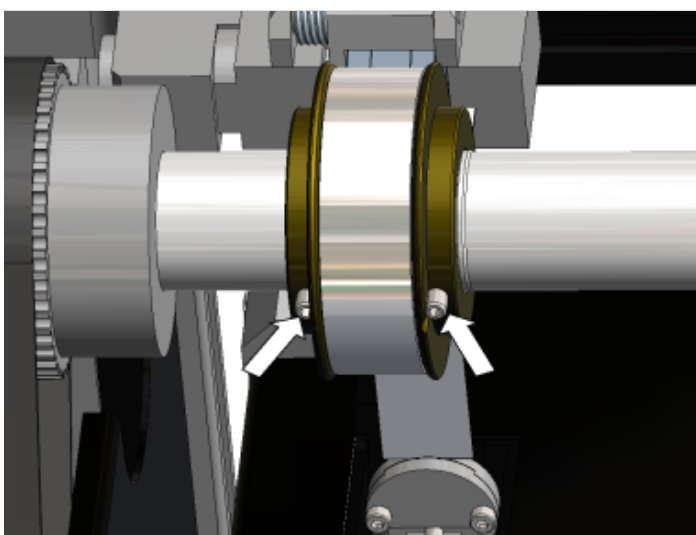
Using the control panel can cause serious damage to the Lift Motor.



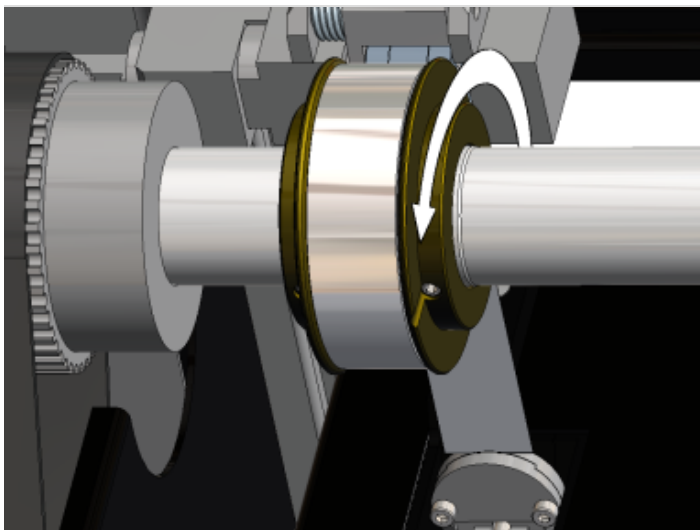
8. Loosen both M5x10mm hex socket setscrew (2,5mm hex key) on the strip reel but do not remove them.

**Caution**

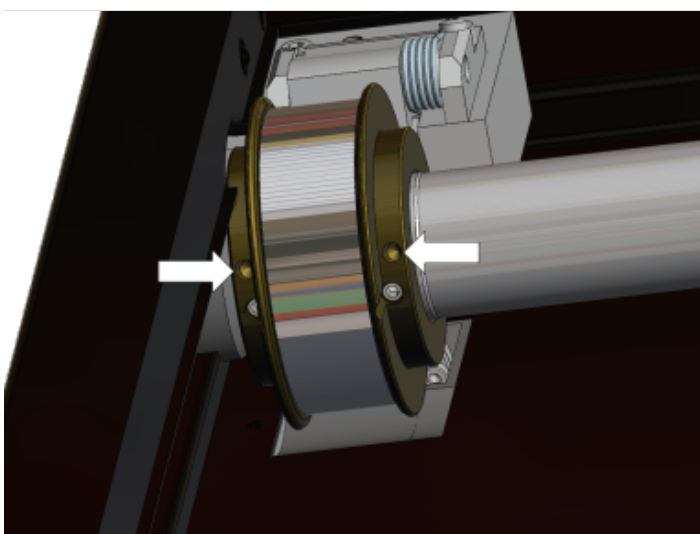
Never loosen more than one strip reel at a time!



9. Turn the strip reel and have a little pressure on it while you fasten the M5x10mm hex socket setscrew (2,5mm hex key) again.



10. On newer versions there have been made a cut out/hole in the reels. You can put a pin tool (4mm diameter) inside this hole to tighten the strip steel



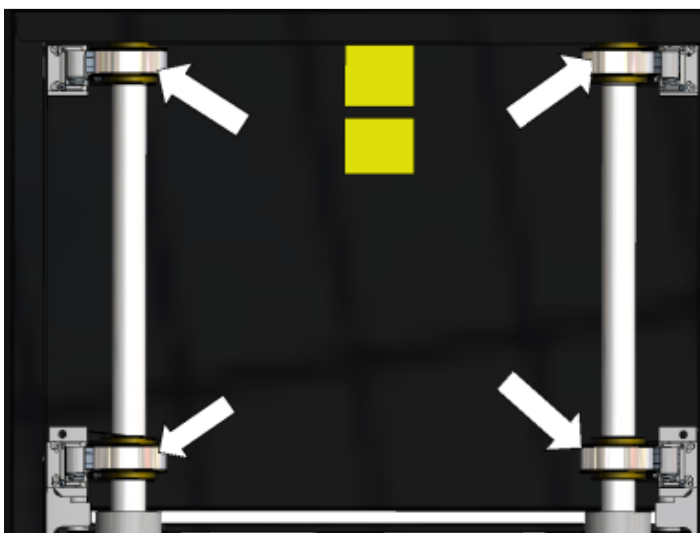
11. Tighten the set screws to a torque of 1 Nm when the strip reel is held in a position that eliminates the gap between the straight bars and the frame.  
12. Repeat this on all four strip reels. Once you have confirmed the Gripper is level, tighten all the set screws to a torque of

3 Nm.

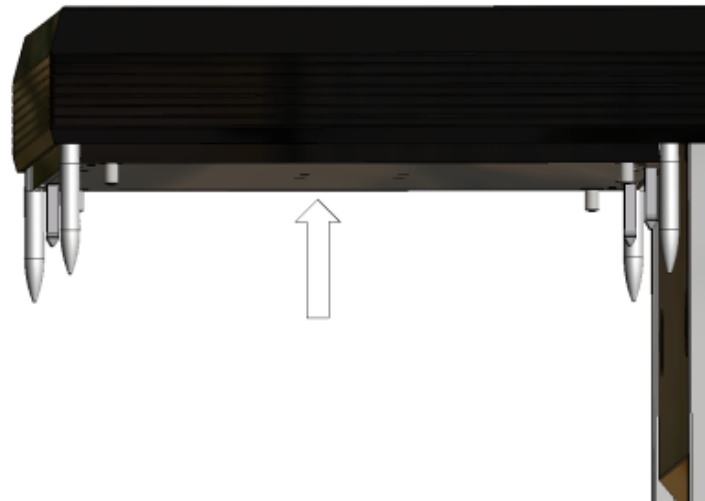


#### Note

Depending on the generation, the set screws can be either hex or Torx T10



13. Lower the Gripper and remove both bars.
14. Lift up the Gripper to the top position.



#### Completion:

- Install AS-35205 (Sheet top SDG) / AS-35646 (Sheet Top DDG)[as-35205--sheet-top-sdg---as-35646--sheet-top-ddg-.html#UUID-2653ba5f-4e21-b730-9d1e-f6dd04791b3a\_UUID-67d6d688-0828-2123-11d3-b92cb6ca4d01]

## Test Mode - Instruction

#### Preparation:

- Remove AS-35205 (Sheet top SDG) / AS-35646 (Sheet Top DDG)[as-35205--sheet-top-sdg---as-35646--sheet-top-ddg-.html#UUID-2653ba5f-4e21-b730-9d1e-f6dd04791b3a\_UUID-9a96252c-e093-b3f9-9d3b-4de2dade2faf]
- Remove AS-35005 (Gripper guides)[as-35005--gripper-guides-.html#UUID-cdeed872-305f-7ddf-5b3e-d2bc6e13c8e3\_UUID-b0bfc215-c7ec-9f6e-408a-3921ee9376f6]
- Remove AS-35000 (Gripper sheet)[as-35000--gripper-sheet-.html#UUID-2c1717b0-32fe-394c-4c67-05f604a82c60\_UUID-a9500aaa-a26b-918e-91d8-459e34f60c6f]

#### Procedure:

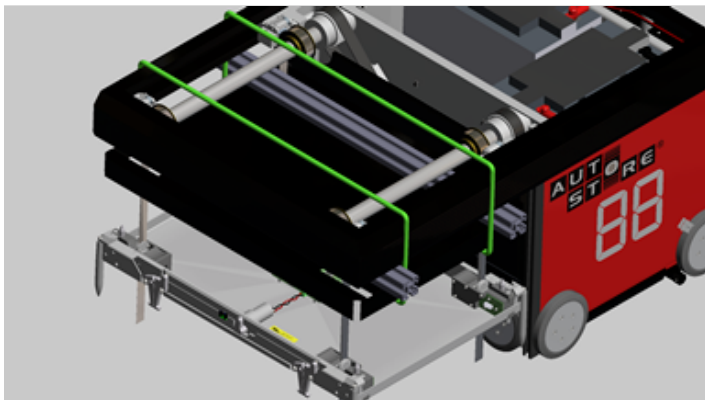
1. Fix the Gripper top cover under the Robot frame.



#### Note

Use two straight bars (that are longer than the width of the Robot frame) and two flexible ropes with hooks (about 80 cm each).

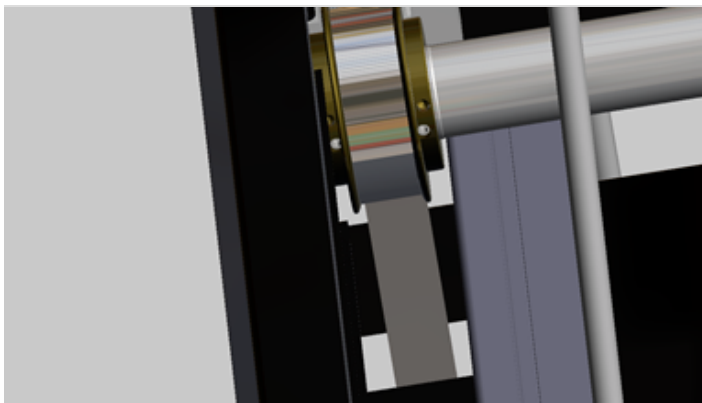
2. Place both bars on the top of the Gripper. One bar on each side.
3. Use flexible ropes with hooks to hook the Gripper top cover under the Robot frame.



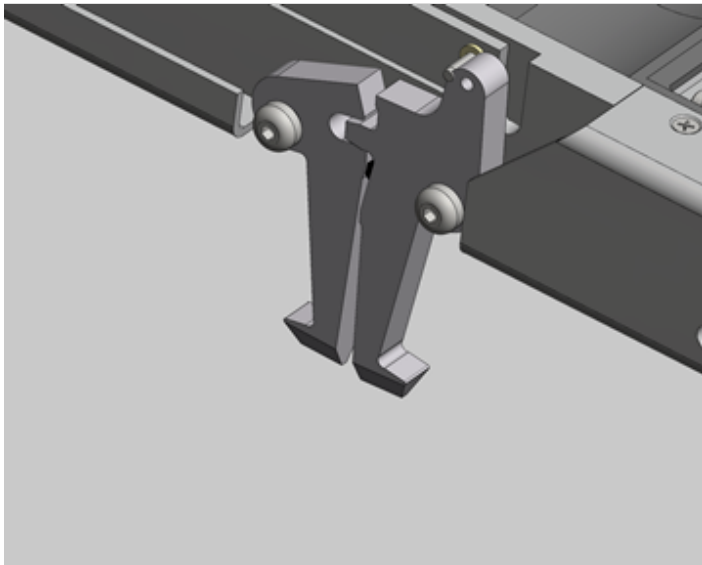


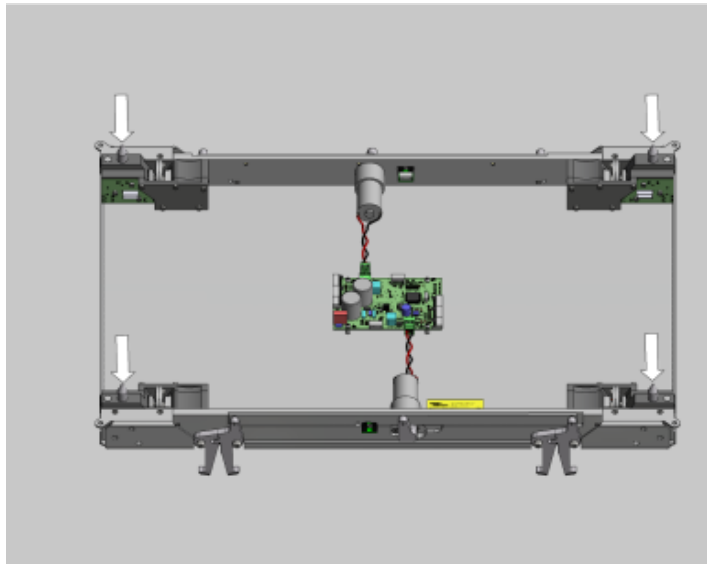
**Caution**

Make sure that Gripper cover does not touch the steel strips or strips reel.

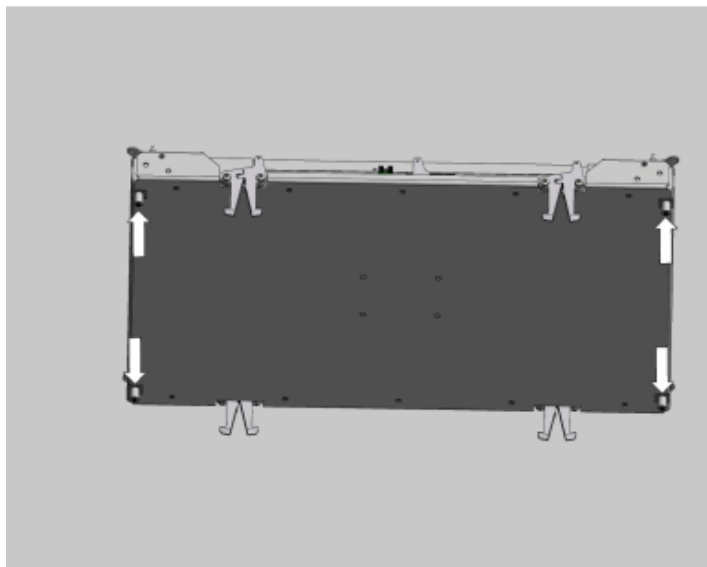


4. All Gripper hooks should be in closed position. If they aren't - set them manually.





5. Make sure all Top Buttons and all Bin Buttons are working in full movement range and without any friction.



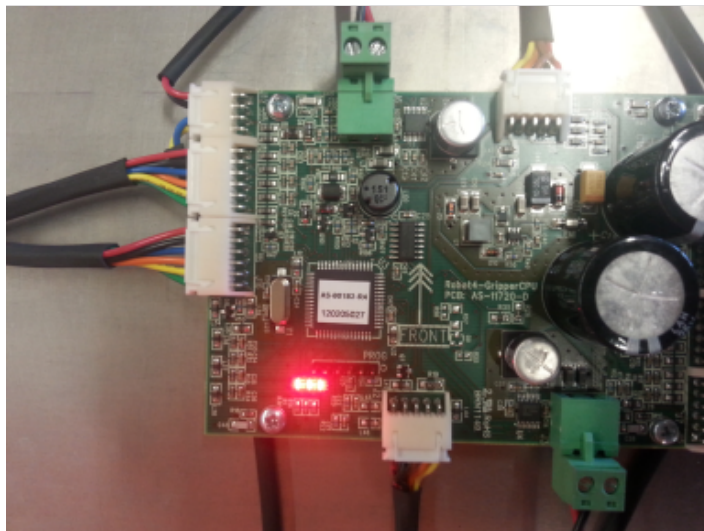
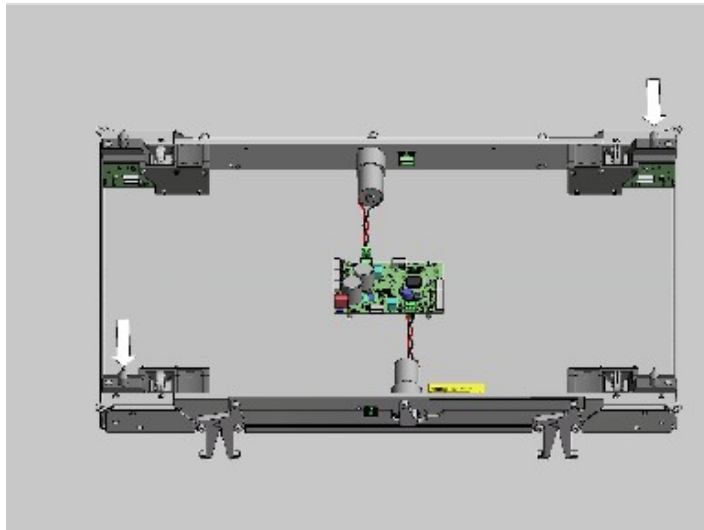
6. Turn ON the Robot - Release the EM button on the top of Robot.
7. Three LEDs should start lit now (LED color is not always red).
8. Within 5 seconds push two Top Buttons, placed in diagonally (as is shown on picture).



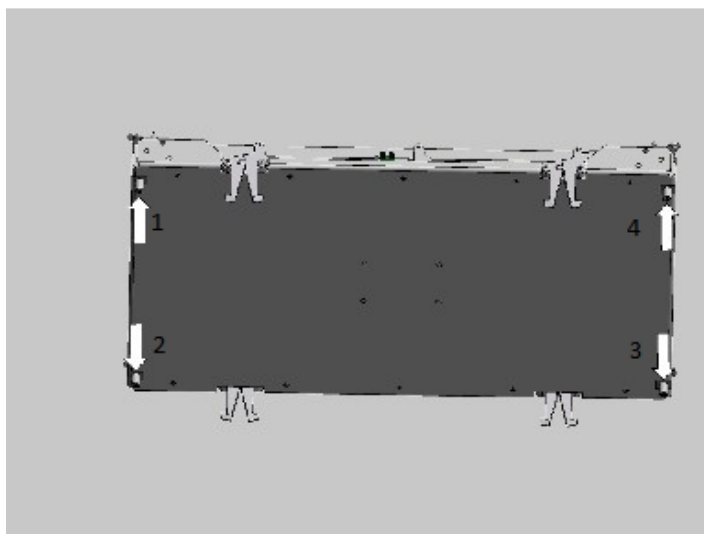
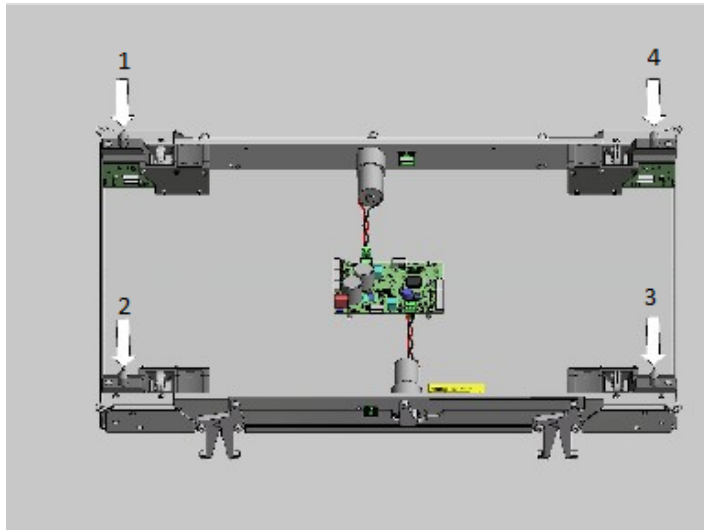
#### Note

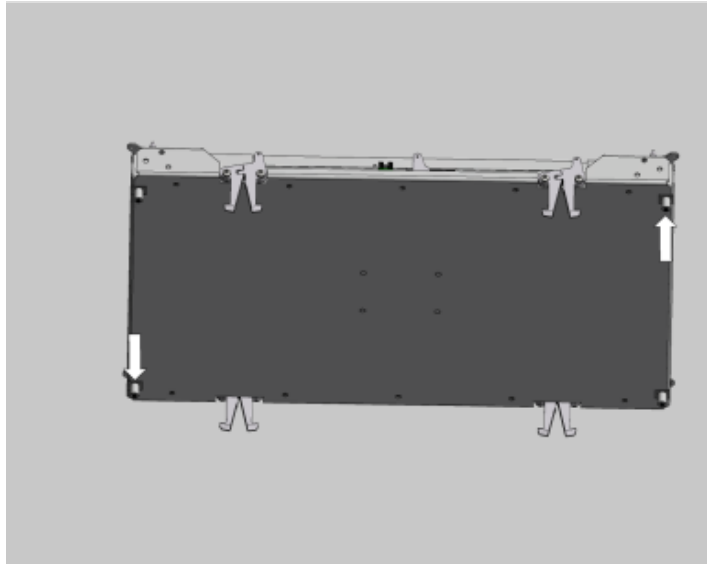
If LEDs are not lit, turn OFF the Robot by pushing the ESTOP button).

Wait at least 30 seconds before retrying this step again.

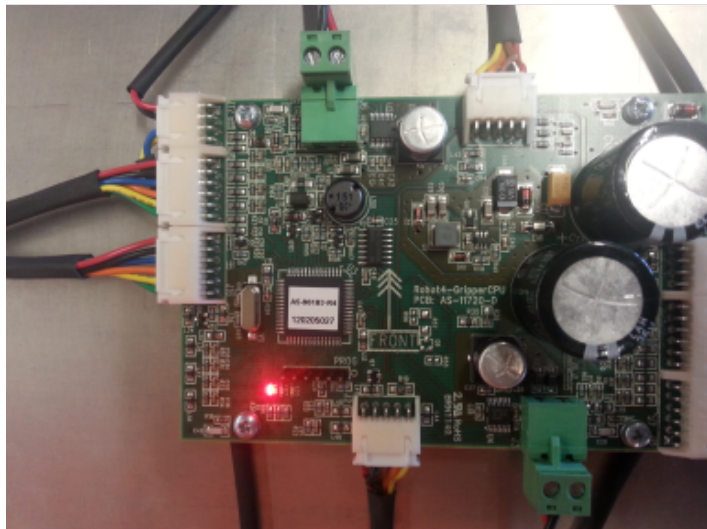
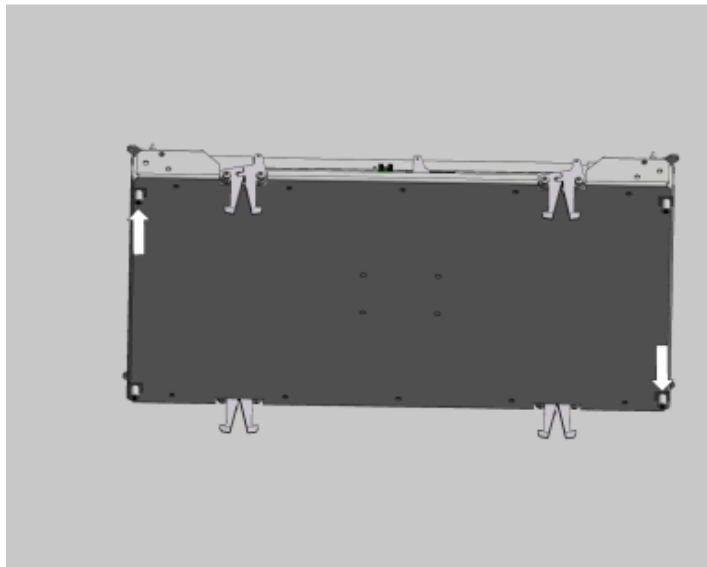


9. Test all Top Buttons and all Bin Buttons by pressing them.
10. LEDs should lit when button is pressed.
11. Top button has only two positions -> ON and OFF. One LED should lit when ON position.
12. Bin button has three positions -> ON (1 step), ON (2 step), OFF. Accordingly 1 step - one LED lit, 2 step - two LEDs lit.





13. Test the Gripper hooks by pressing two Bin Buttons (placed in diagonally), at the same time.
14. One diagonal is for opening the hooks, second is for closing.



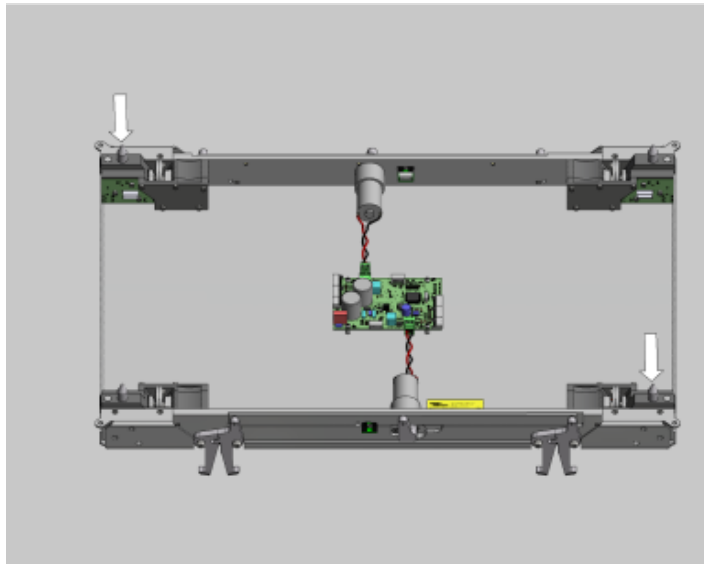
15. Press and hold for a few seconds two Top buttons (placed in diagonally) at the same time - to turn OFF the Test mode.
16. Notice that this time the diagonal for buttons is opposite than for turning ON the Test mode.

**Caution**

Make sure all Gripper hooks are in closed position.

**Note**

Not following practice will cause errors when adding the Robot to the Grid.

**Completion:**

- Install AS-35000 (Gripper sheet)[as-35000--grripper-sheet-.html#UUID-2c1717b0-32fe-394c-4c67-05f604a82c60\_UUID-e5abe875-056a-50fb-14a3-7f0d60789e64]
- Install AS-35005 (Gripper guides)[as-35005--grripper-guides-.html#UUID-cdeed872-305f-7ddf-5b3e-d2bc6e13c8e3\_UUID-c1abd2e5-9137-4097-5f42-7cd2dbd0107b]
- Install AS-35205 (Sheet top SDG) / AS-35646 (Sheet Top DDG)[as-35205--sheet-top-sdg--as-35646--sheet-top-ddg-.html#UUID-2653ba5f-4e21-b730-9d1e-f6dd04791b3a\_UUID-67d6d688-0828-2123-11d3-b92cb6ca4d01]

## Setting the Gripper in Safe Position

Put two bars under the Gripper (you can use the same bars as for Gripper adjustment).

Lower the Gripper until it will rest on bars and steel strips will be a little loose.

Manually lower the gripper

**Note**

It's not recommended to use the Control panel for lowering the Gripper in this procedure.

