

AS-35645 (Conjunto de eje de tira DDG)



Nota

En esta sección se describe la instalación y extracción del conjunto de eje de tira para el *modelo DDG*.

Haga clic aquí para obtener instrucciones relacionadas con el conjunto del eje de tira para el modelo SDG.[as-35025-strip-shaft-assembly-sdg.html]

Retire AS-35645 (Conjunto de eje de tira DDG)

Tiempo estimado de retirada: 20 minutos

Herramientas necesarias:

- Llave hexagonal - 2 mm
- Llave hexagonal - 2,5mm
- Llave hexagonal - 3 mm
- Llave hexagonal - 4 mm
- Destornillador - Ranura 5mm
- Cinta

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]
- Retire AS-35021 / AS-35945 (Anverso de la hoja)[as-35021-r5---as-35945-r5---sheet-front-.html#UUID-31b10256-172a-aa77-27f3-70611fd2f729_UUID-e830e1e1-7335-76b1-3edd-915246c7f0c6]
- Retire AS-35011 / AS-35942 (Hoja trasera)[as-35011-r5---as-35942-r5---sheet-rear-.html#UUID-3cfad36f-2d13-f6a1-bd8c-29067174afcf_UUID-56eb0901-be2b-17b1-005e-ab3076196808]
- Retire AS-35194 (Pinza del robot)[as-35194-robot-gripper-.html#UUID-615f1cd0-c94d-2caf-556f-d588cec2487d_UUID-d1cefc1d-d8cc-4e4f-887ea075f10e1282]

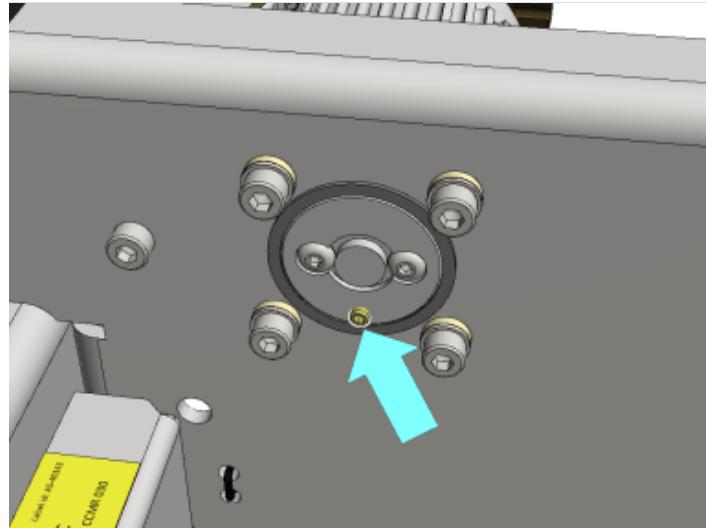
- Kit de tiras de robot seguro AS-35149 / AS-35948[as-35149-r5---as-35948-r5---robot-strip-kit-.html#UUID-99d54947-5192-c85f-aa9b-61979e4e6f58_UUID-dd4cac46-2e97-e8d5-f825-138d2a0bbd29]
- Retire el AS-35210 (Conjunto de baterías)[as-35210--battery-assembly-.html#UUID-d12b6509-2362-50e1-afbd-5d8ba4735988_UUID-852734a8-2963-b764-6ec9-926946f929e2]
- Retire el AS-35200 (piso de la batería)[as-35200--battery-floor-.html#UUID-bf9cabd6-ee31-0bef-ac7b-ab738d9b8c25_UUID-d5ae8863-70b4-5227-0eb8-ed569c4e031d]
- Aflojar AS-35197 (Correa gemela 670)[as-35197--belt-twin-670-.html#UUID-1ddb98a2-3186-bc5c-3f47-c2a275ed2263_UUID-40ebbe84-2a67-6903-4dbd-8f9f0d7fd758]
- Afloje AS-35195 / AS-35934 (Correa de distribución)[as-35195-r5---as-35934-r5---timing-belt-.html#UUID-f740b189-e796-a67e-51e2-1467cd6ede5e_UUID-fbc4941c-fe2b-64b8-5852-fdc445c1477c] - Izquierda o derecha, dependiendo de qué AS-35645 (Conjunto de eje de tira) vaya a quitar
- Retire AS-35195 / AS-35934 (Correa de distribución)[as-35195-r5---as-35934-r5---timing-belt-.html] - Izquierda o derecha, dependiendo de qué AS-35645 (Conjunto de eje de tira) vaya a quitar
- Retire AS-35049 (conjunto de parada de emergencia)[as-35049--e-stop-assembly-.html#UUID-b7fdca25-72dc-93a1-25d9-ec7963d75acf_UUID-609629f4-b564-8fcc-5d37-233fb063abd] se aplica solo si se quita el eje de la tira en el lado derecho

Procedimiento:

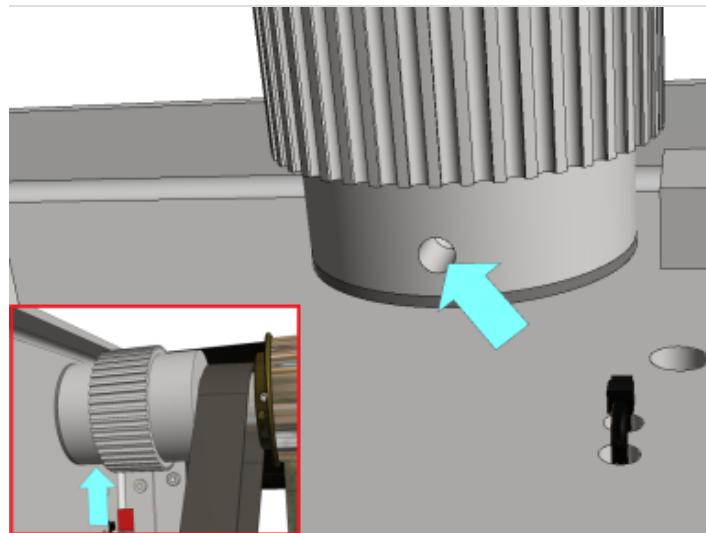
 Nota

Este procedimiento es el mismo para ambos ejes de banda. En el ejemplo siguiente se describe solo el de la izquierda.

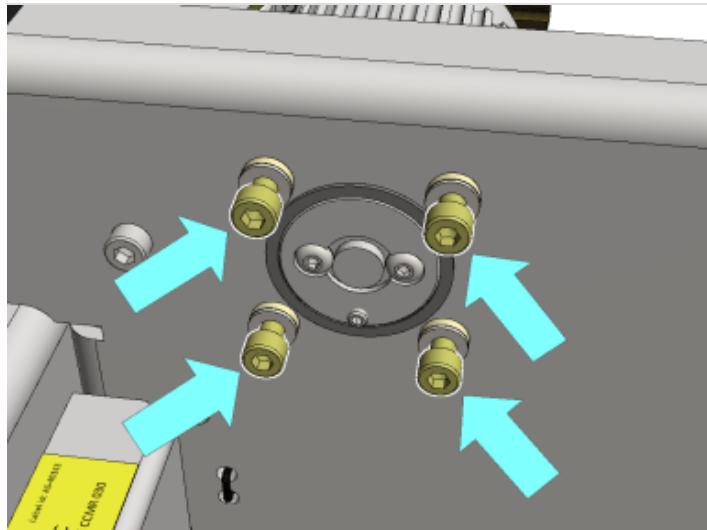
1. Afloje el tornillo de fijación del tubo hexagonal M4x10 mm (llave hexagonal de 2 mm) en el eje de la tira, pero no lo quite.



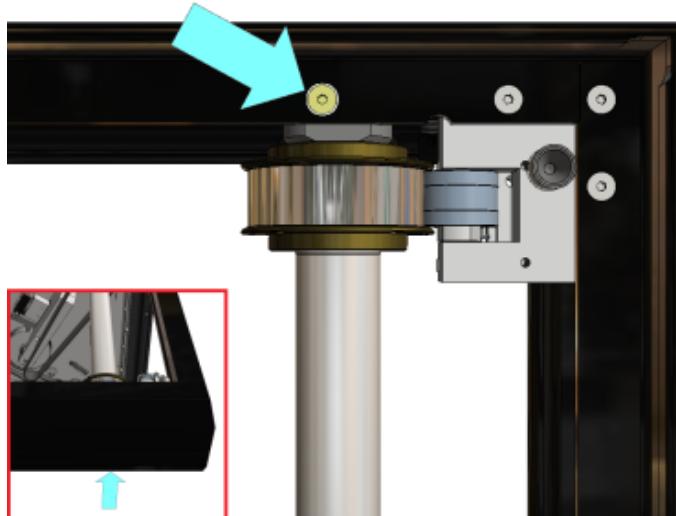
2. Retire el cable que está fijado al eje de la tira. AS-35054 (Kit de cable de tira)



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3. Afloje los cuatro tornillos hexagonales M5x20 mm (llave hexagonal de 4 mm) en el eje de la tira, pero no los quite.



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4. Desatornille el tornillo hexadecimal M5x16mm (llave hexagonal de 3 mm) debajo del marco del robot.



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5. Tire un poco del eje de la tira, hacia el centro del robot.

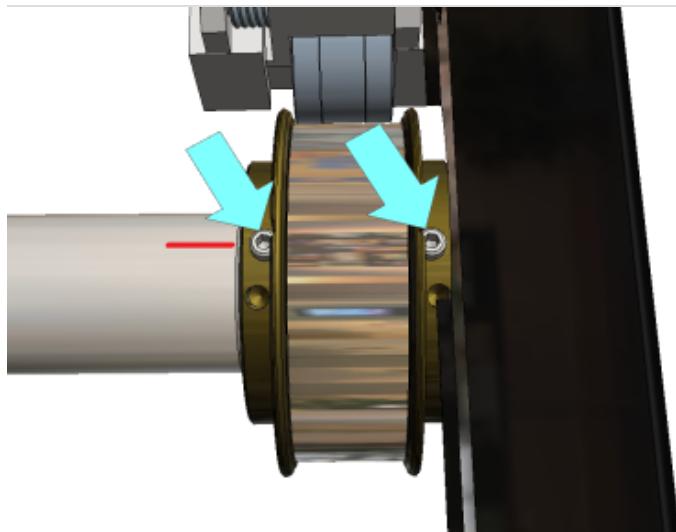




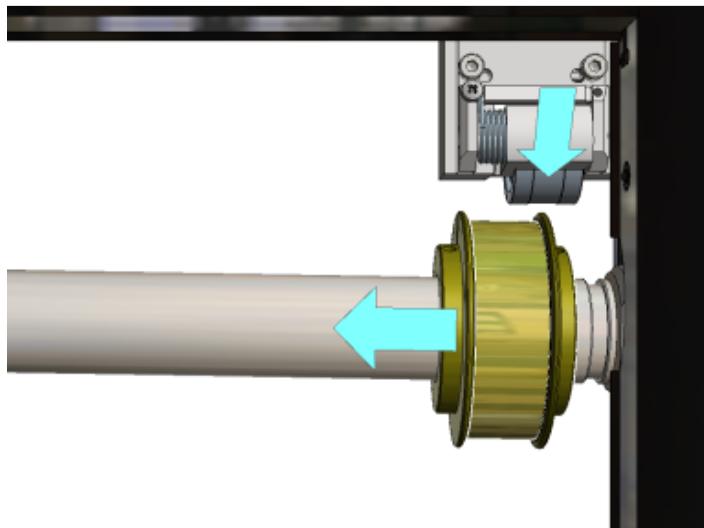
Note

It's worth to mark the position of screws (mentioned below) - useful in the Install procedure.

6. Loosen both M5x10mm hex socket setscrews (2,5mm hex key) on the Strip reel.



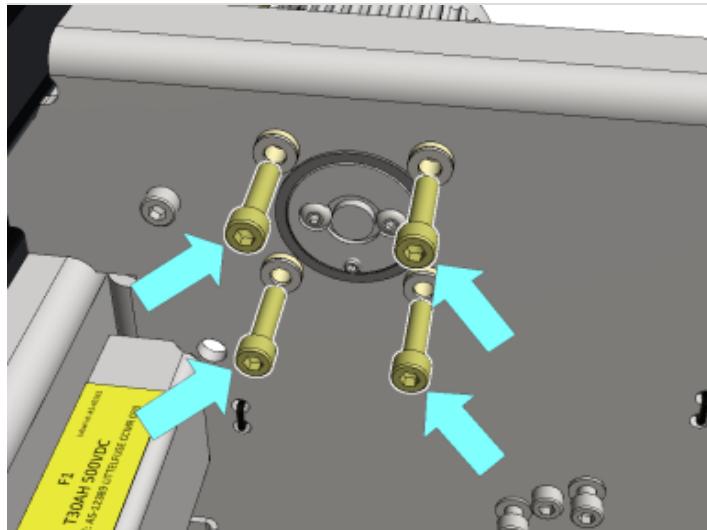
7. Push down the wheel on the Strip roller, then slide the Strip reel to the center of the Strip shaft.
8. Do it the same with the second Strip reel on this Strip shaft.



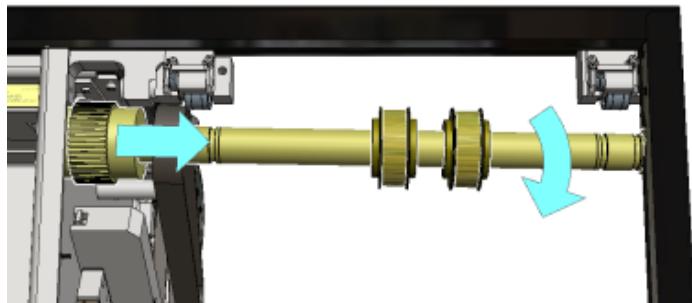
9. Set both Strip reels as shown in the picture (you can tighten screws on Strip reels - mentioned in 6th step)



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10. Unscrew the four M5x20mm hex socket screws (4mm hex key) on the Strip shaft.



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11. Pull the Strip shaft towards the Robot top frame and slightly to the center of the Robot.
12. Remove the Strip shaft.



Install AS-35645 (Strip shaft assembly DDG)

Estimated installation time: 25 Minutes

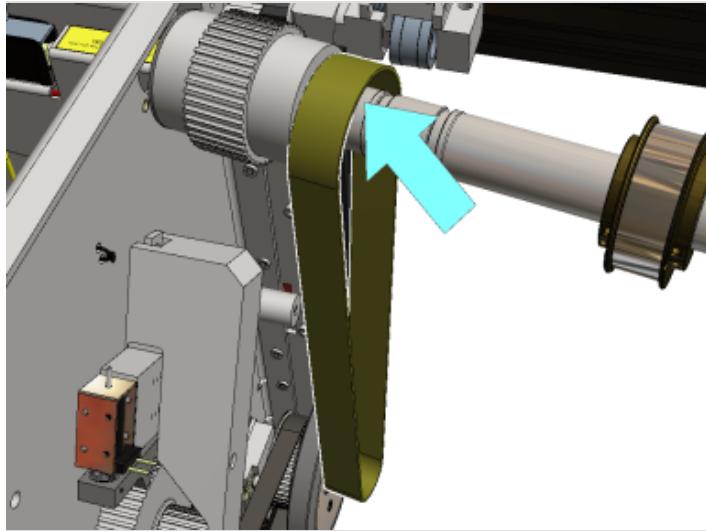
Tools needed:

- Hex key - 2mm
- Hex key - 2,5mm
- Hex key - 3mm
- Hex key - 4mm

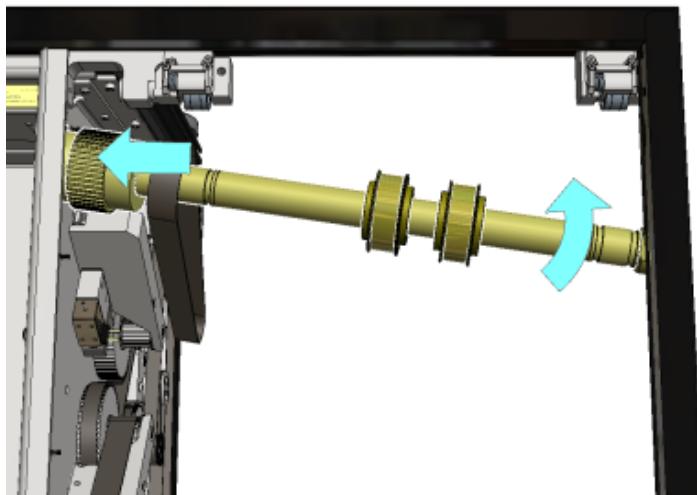
Procedure:

 Note

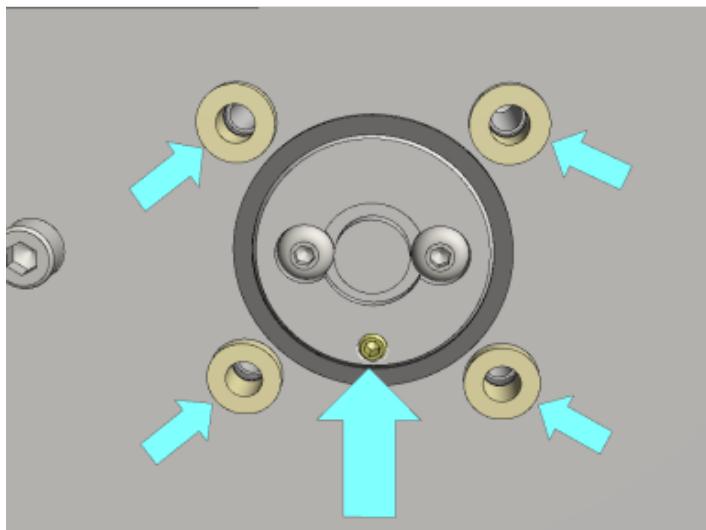
This procedure is the same for both Strip shafts. The example below, describes only the left one.



1. Put the AS-10740 (Timing Belt) on the Strip shaft.



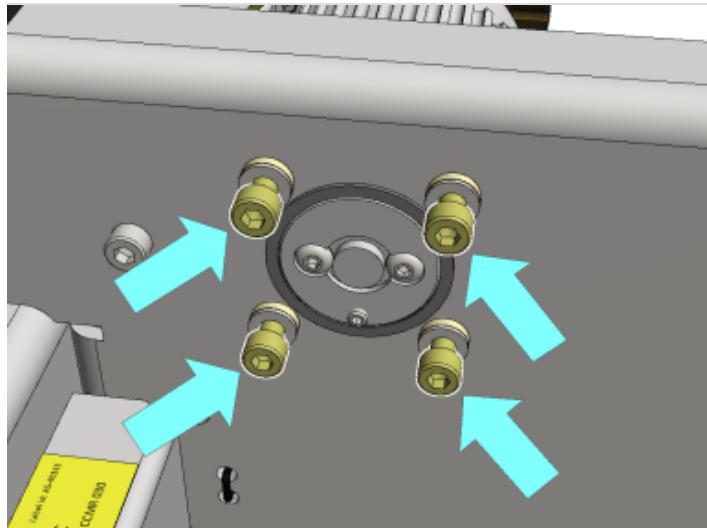
1. Put the Strip shaft into the place.
2. First fit the shaft inside the Robot front frame.
3. Then slide the second end of the Strip shaft inside the Robot top frame to set it in position.



1. Align four holes on the Strip shaft with holes on the Robot front frame.
2. The M4x10mm hex socket set screw (2mm hex key) must be pointed downwards.

 Note

Make sure the Nylon insulating washers are inside all four holes (on the Robot front frame).

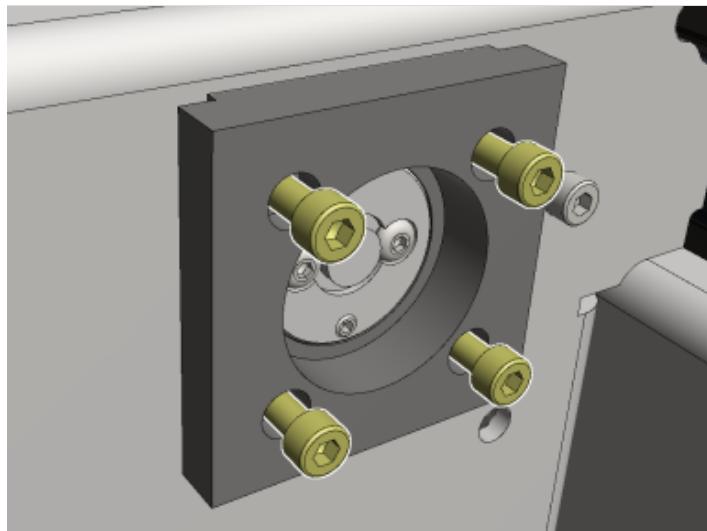


1. Screw in the four M5x20mm hex socket screws (4mm hex key) on the Strip shaft.
2. Do not tighten them, leave loose.

Note

Notice that here on the left Strip shaft, there is a steel M5 washer under each M5x20mm hex socket screw.

Illustration on the right shows how it should be for the right strip shaft.

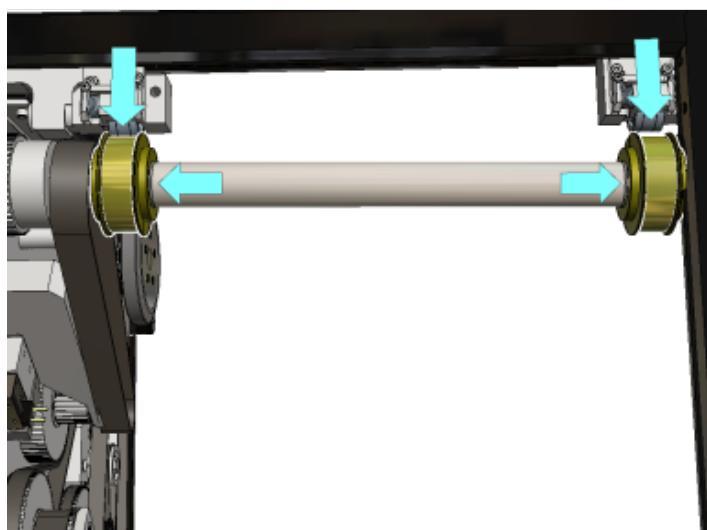


Right Strip shaft

The EM button adapter must be fixed as in picture.

Notice that there are no steel M5 washers here.

Nylon insulating washers are on place like on the left shaft.

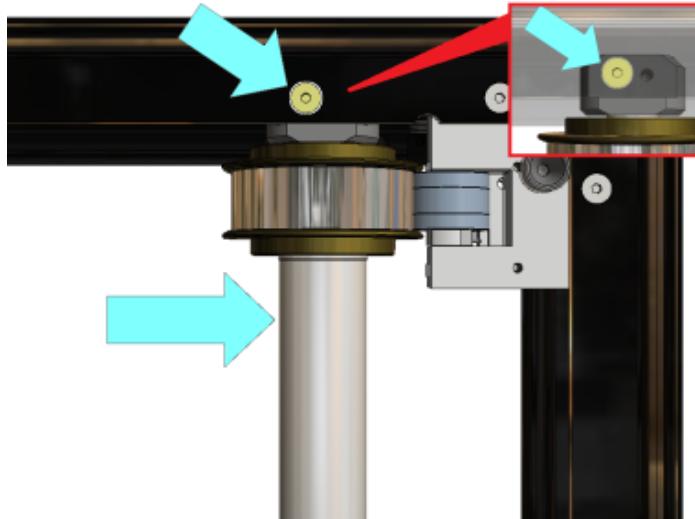


1. Set both Strip reels on their positions.
2. Do not forget to push down wheels on the Strip rollers, when adjusting Strip reels in position (you can tighten screws on Strip reels in position, relying on marked spot - mentioned in 6th step the Remove procedure).

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1. Tighten the M5x16mm hex socket screw (3mm hex key) under the Robot frame.

 Note

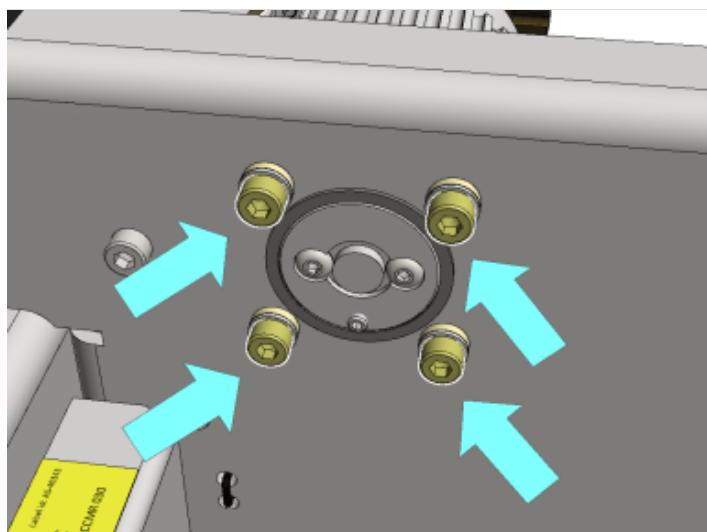
Note that there are two holes on the bearing house. Use the one that is closer to the center of the Robot.



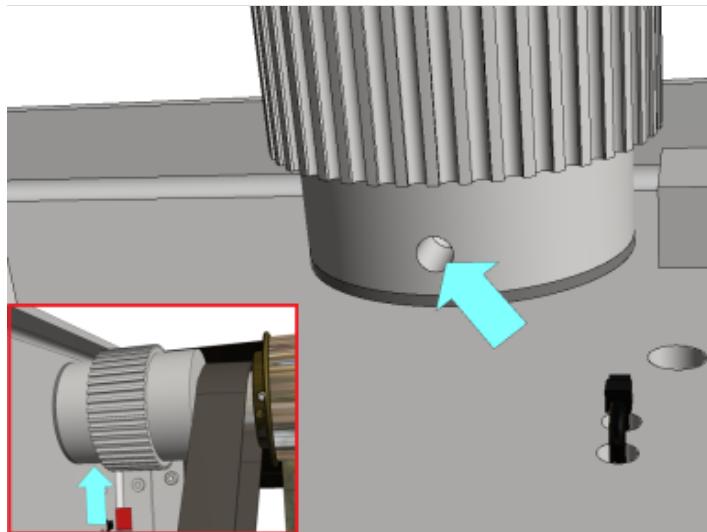
1. Tighten the four M5x20mm hex socket screws (4mm hex key) on the Strip shaft.

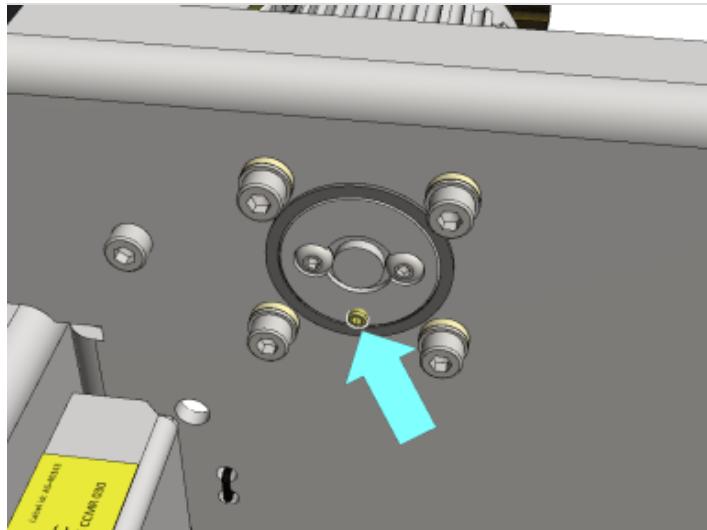
 Note

Do not tighten screws too much, to no crush the Nylon insulating washers (mentioned in 3rd step).



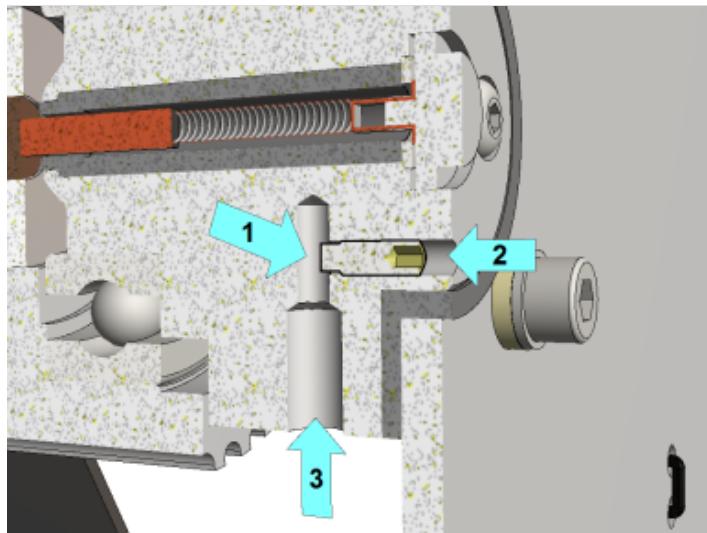
1. Insert the wire into the hole. AS-35054 (Cablekit stripshaft)





1. Tighten the M4x10mm hex socket set screw (2mm hex key).

Details in cross-section illustration to the right.



Cross-section of the Strip shaft

1. The spot where the metal part of the Ferrule tube should enter
2. M4x10mm hex socket set screw (2mm hex key)
3. The hole where the wire should enter (mentioned in step 8)

AS-35054 (Cablekit stripshaft)

Warning

The wire with the Ferrule tube must enter and reach the end of hole. Only then will the screw be able to hold the wire in position.

Completion:

- Make sure AS-10741 (Belt twin 670) is loose. If not, Loosen AS-35197 (Belt twin 670)[as-35197-belt-twin-670-.html#UUID-1ddb98a2-3186-bc5c-3f47-c2a275ed2263_UUID-40ebbe84-2a67-6903-4dbd-8f9f0d7fd758]
- Make sure AS-10740 (Timing Belt) tensioner is in upper position. If not, Loosen AS-35195 (Timing Belt) - Left or Right[as-35195-r5---as-35934-r5---timing-belt-.html#UUID-f740b189-e796-a67e-51e2-1467cd6ede5e_UUID-fbc4941c-fe2b-64b8-5852-fdc445c1477c], depending on which AS-35025 (Strip shaft assembly) has been installed
- Install AS-35049 (E-Stop assembly)[as-35049-e-stop-assembly-.html#UUID-b7fdca25-72dc-93a1-25d9-ec7963d75acf_UUID-64edfdf-2a01-51c8-716e-2eb6f6b4fe1f] - only applies to right side strip shaft
- Install AS-35195 / AS-35934 (Timing Belt) Left[as-35195-r5---as-35934-r5---timing-belt-.html#UUID-f740b189-e796-a67e-51e2-1467cd6ede5e_UUID-561498fa-152c-ce84-8cba-bc1447a5a085] or Install AS-35195 / AS-35934 (Timing Belt) Right[as-35195-r5---as-35934-r5---timing-belt-.html#UUID-f740b189-e796-a67e-51e2-1467cd6ede5e_UUID-c8a627f5-98f7-d865-fe1e-18c2d656aa75]

- Tighten AS-35195 / AS-35934 (Timing Belt)[as-35195-r5---as-35934-r5---timing-belt-.html#UUID-f740b189-e796-a67e-51e2-1467cd6ede5e_UUID-fd9cf96c-c35f-59da-3c41-859743ebb51e]
- Tighten AS-35197 (Belt twin 670)[as-35197-belt-twin-670-.html#UUID-1ddb98a2-3186-bc5c-3f47-c2a275ed2263_UUID-2e1dc04f-24a3-32d2-6ea4-2d9de7816264]

A Caution

Keep this order. This belt must be tensioned after AS-35195 (Timing Belt), NOT before

- Install AS-35200 (Battery floor)[as-35200--battery-floor-.html]
- Install AS-35210 (Battery assembly)[as-35210--battery-assembly-.html#UUID-d12b6509-2362-50e1-afbd-5d8ba4735988_UUID-a8e83a06-e4f7-0dd6-a877-ad9518033fc8]
- Install AS-35194 (Robot gripper)[as-35194--robot-gripper-.html#UUID-615f1cd0-c94d-2caf-556f-d588cec2487d_UUID-e6775622-8bb2-1625-05b3-a0f150e05715]
- Adjust AS-35194 (Robot gripper)[as-35194--robot-gripper-.html#UUID-615f1cd0-c94d-2caf-556f-d588cec2487d_UUID-d2715e29-d943-ad24-47b3-fa071739f17f]
- Install AS-35021 / AS-35945 (Sheet front)[as-35021-r5---as-35945-r5---sheet-front-.html#UUID-31b10256-172a-aa77-27f3-70611fd2f729_UUID-9b92d4e7-aba2-2c22-3c5d-0a94f0ac7d0a]
- Install AS-35011 / AS-35942 (Sheet rear)[as-35011-r5---as-35942-r5---sheet-rear-.html#UUID-3cfa3d6f-2d13-f6a1-bd8c-29067174acf_UUID-770524a6-795b-3ce1-c444-ef2d7880a405]
- 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]

Securing the strip shaft assembly against unnecessary rotation

Secure the Strip-Shafts from unnecessary rotation.

Use clamps or just a duct tape to combine shafts with the Robot top frame.



Note

Unnecessary shaft rotation can cause the steel strips to unroll.

