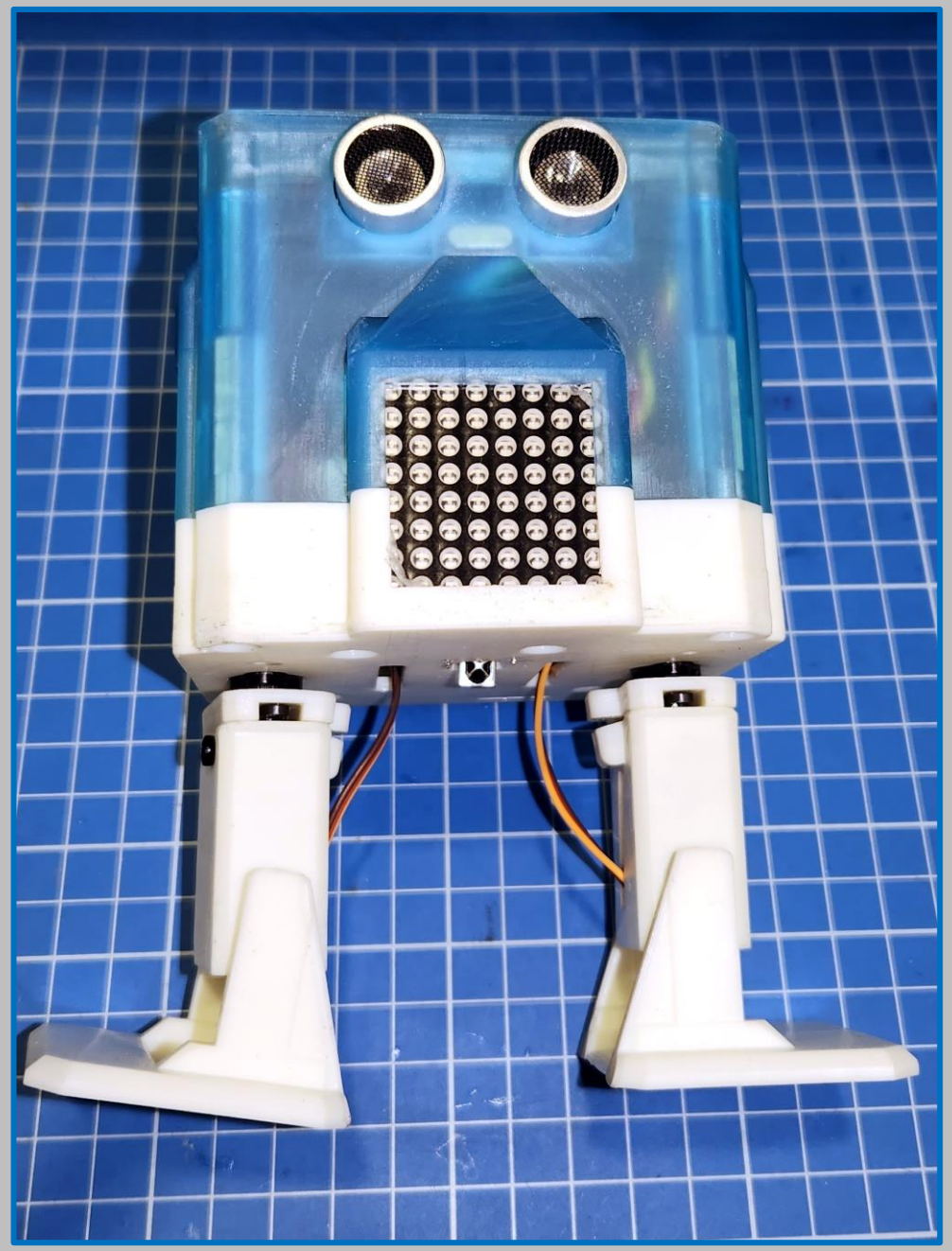
Roboter VIKY Anleitung

Stand: 21.06.2023



VICTORS BASTLERLAND®

VIKY Stückliste

- Fuß 2x
- Bein 2x
- Beinhalterung 2x
- Grundkörper 1x
- Gesicht 1x
- Rücken 1x
- Deckel 1x
- Seitenblende 2x
- Metallservos 4x
- Akkuplatte 1x

- Arduino kompatibles Board 1x
- Servo Expansion Board 1x
- Infrarotfernbedienung mit Batterie u. Empfänger 1x
- Ultraschallabstandssensor 1x
- Buzzer 1x
- Touchsensor 1x
- Led-Matrix 1x
- Bluetoothmodul 1x
- Ladegerät 1x

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VIKY Box

Box mit 8 Fächern:

Fach 1: M2.5 Quadratische Mutter 6x, Schrauben Befestigung Servo an Grundkörper M2.5 x 8mm 4x

Fach 2: Servohorn – kurz 2x, Schrauben Servohorn Befestigung M2.5 x 4mm 4x

Fach 3: M2.9 x 16mm 2x, Schrauben Befestigung Servo Bein, Schrauben 2.2 x 4.5 4x Befestigung Beinhalterung an den Servohorn;

Fach 4: Abstand M3 x 40mm IG-IG 4x; Schrauben M3 x 8mm Senkkopf Befestigung Abstand ans Körper Basis 8x

VIKY Stückliste

Fach 5: Schrauben M3 x 30mm 4x Befestigung Gesicht und Rücken; Abstandhalter M3 x 20mm IG-IG 2x; Abstandhalter M3 x 20mm IG-AG 2x

Fach 6: Schrauben schwarz M2.5 x 20mm 2x Befestigung Bein an die Beinhalterung; Schrauben 2.2 x 6mm 2x Befestigung Infrarotsensor

Fach 7: Servohorn – lang

Fach 8: Abstandhalter M3 x 12mm 4x

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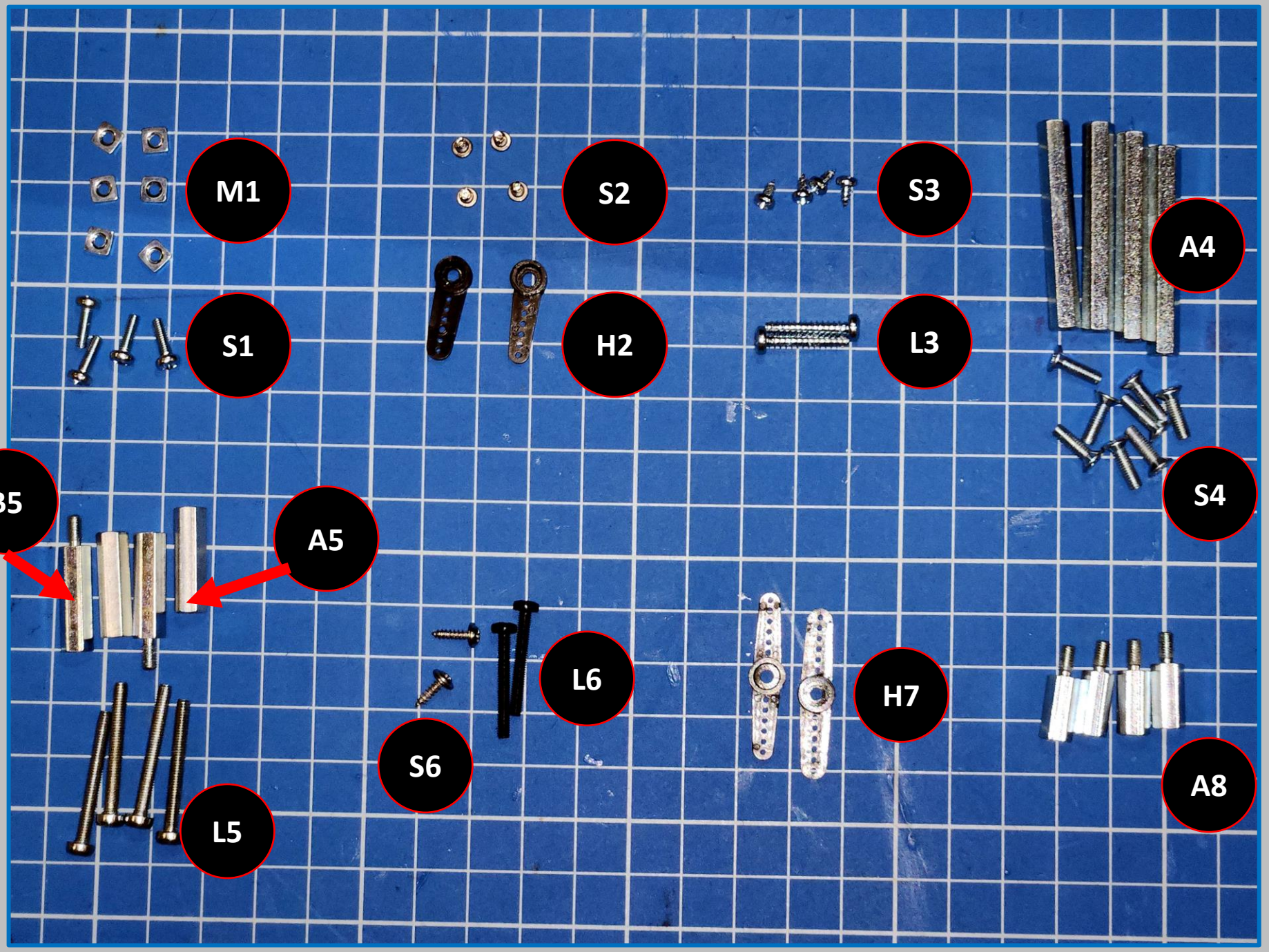

Bauteile Schrauben

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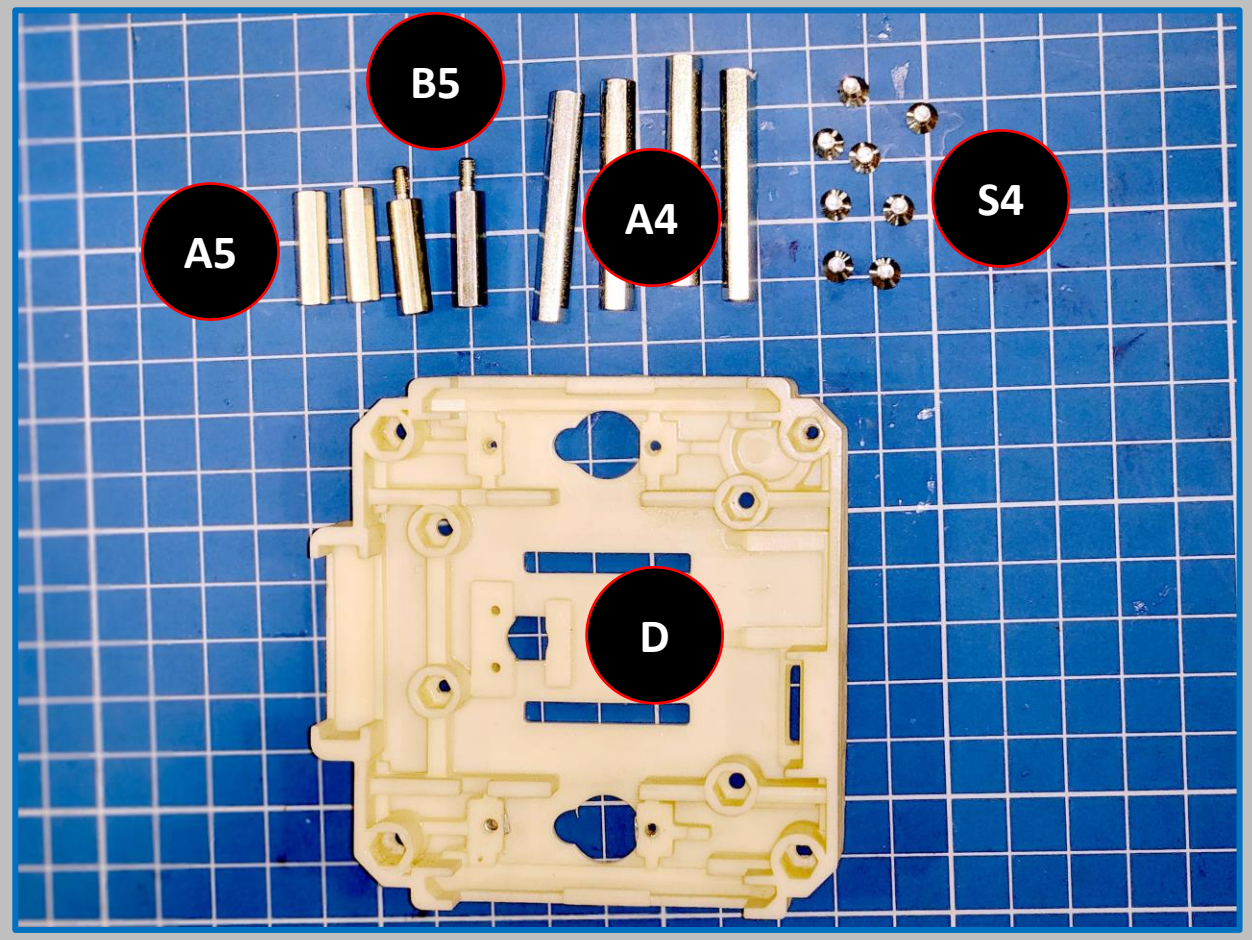
Schritt 1



Abstandshalter montieren.

Teile:

2x Abstandshalter A5
2x Abstandshalter B5
4x Abstandshalter A4
8x Schrauben S4
D Grundkörper

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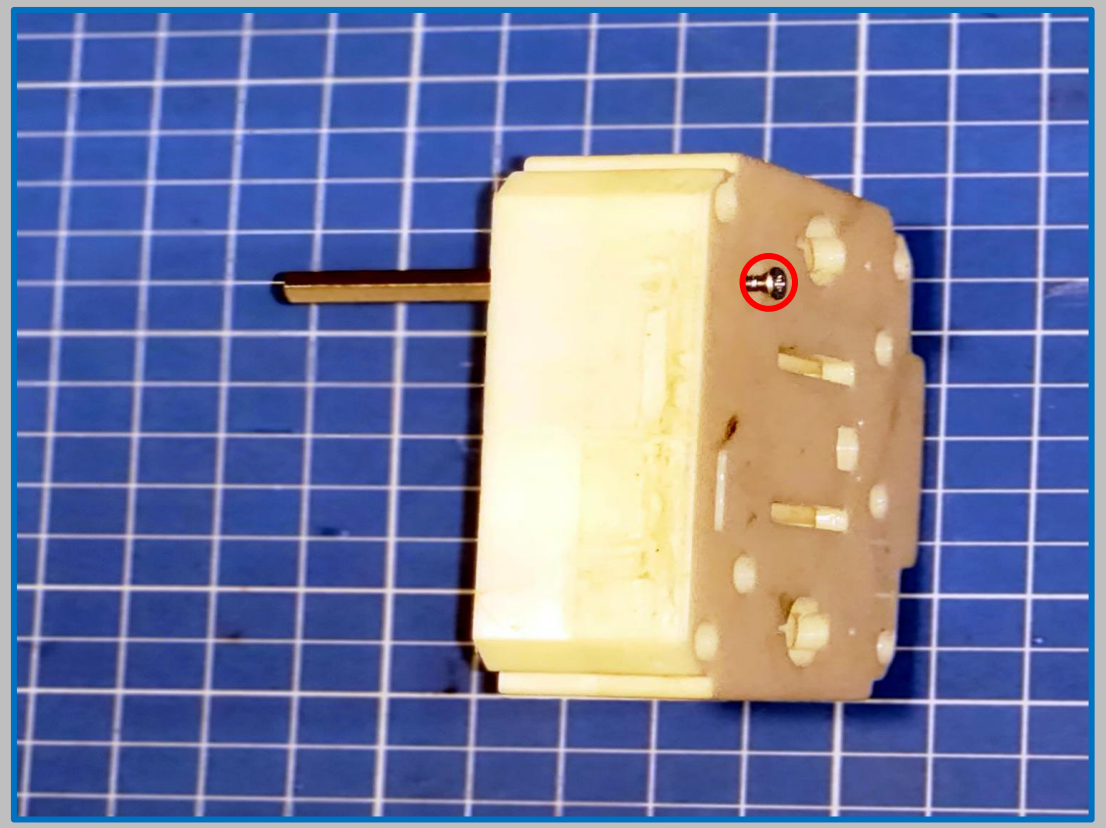
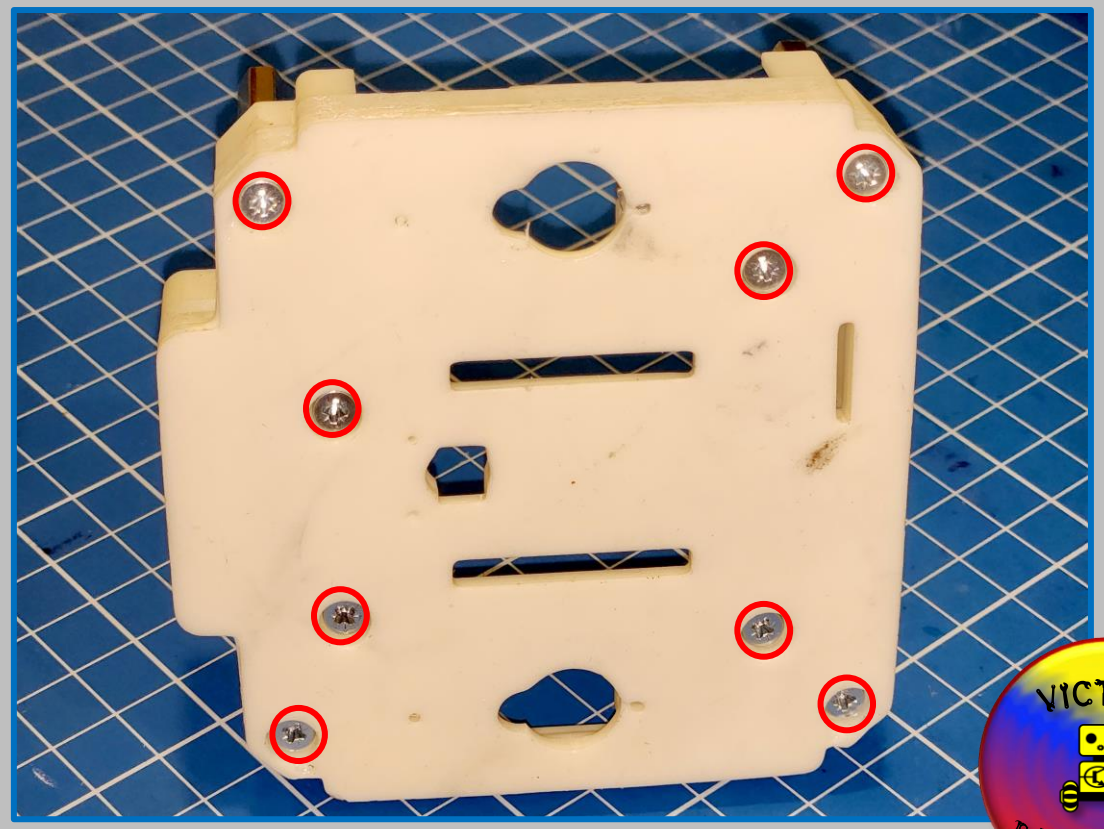
Schritt 1

Die Abstandshalter von unten verschrauben.





! Positionen siehe nächste Folie!

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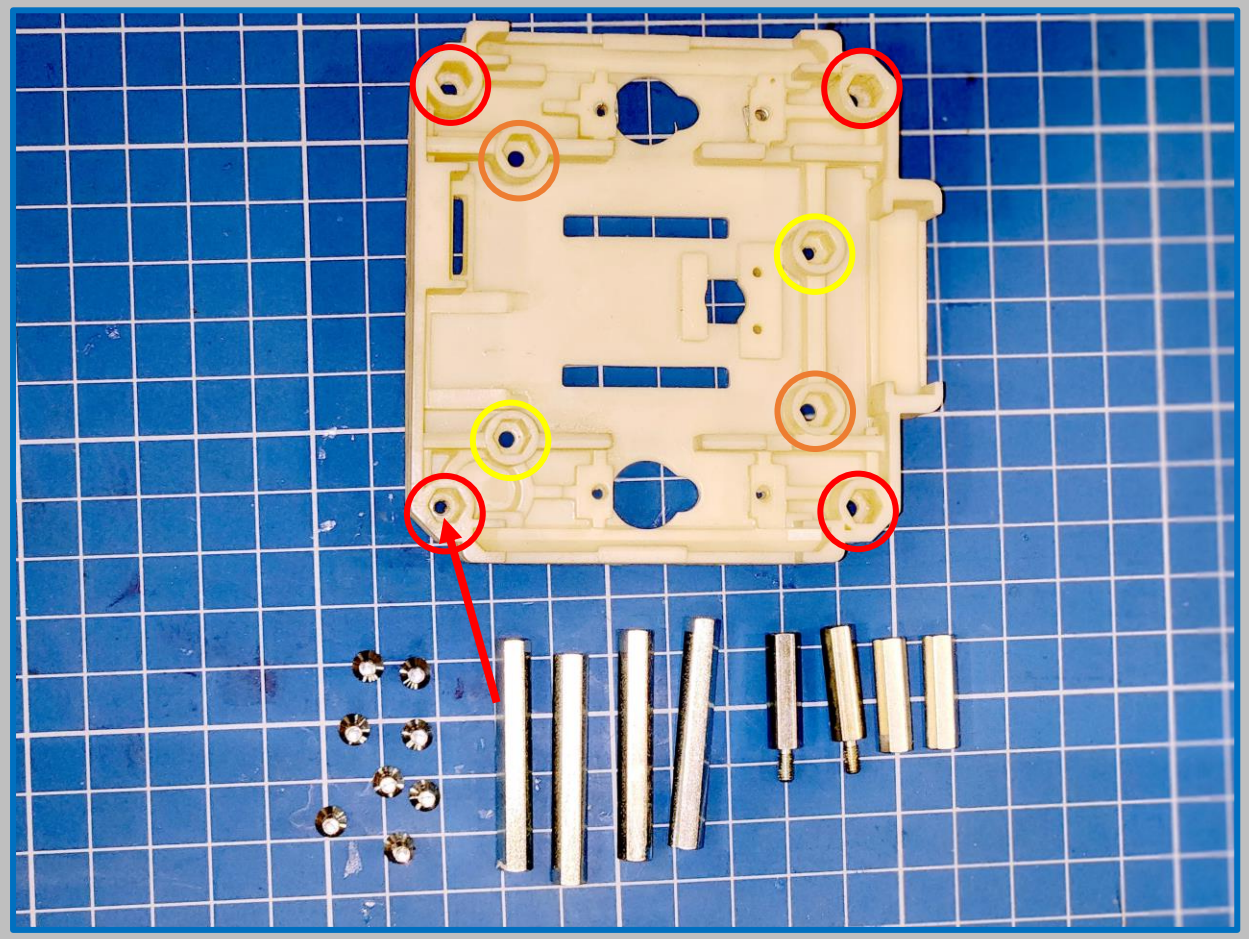
Schritt 1



- Die großen Abstandshalter A4 in die vier äußeren Bohrungen.
- Die zwei Abstandshalter B5 in die gelben Markierungen.
- Die zwei Abstandshalter A5 in die orangenen Markierungen.

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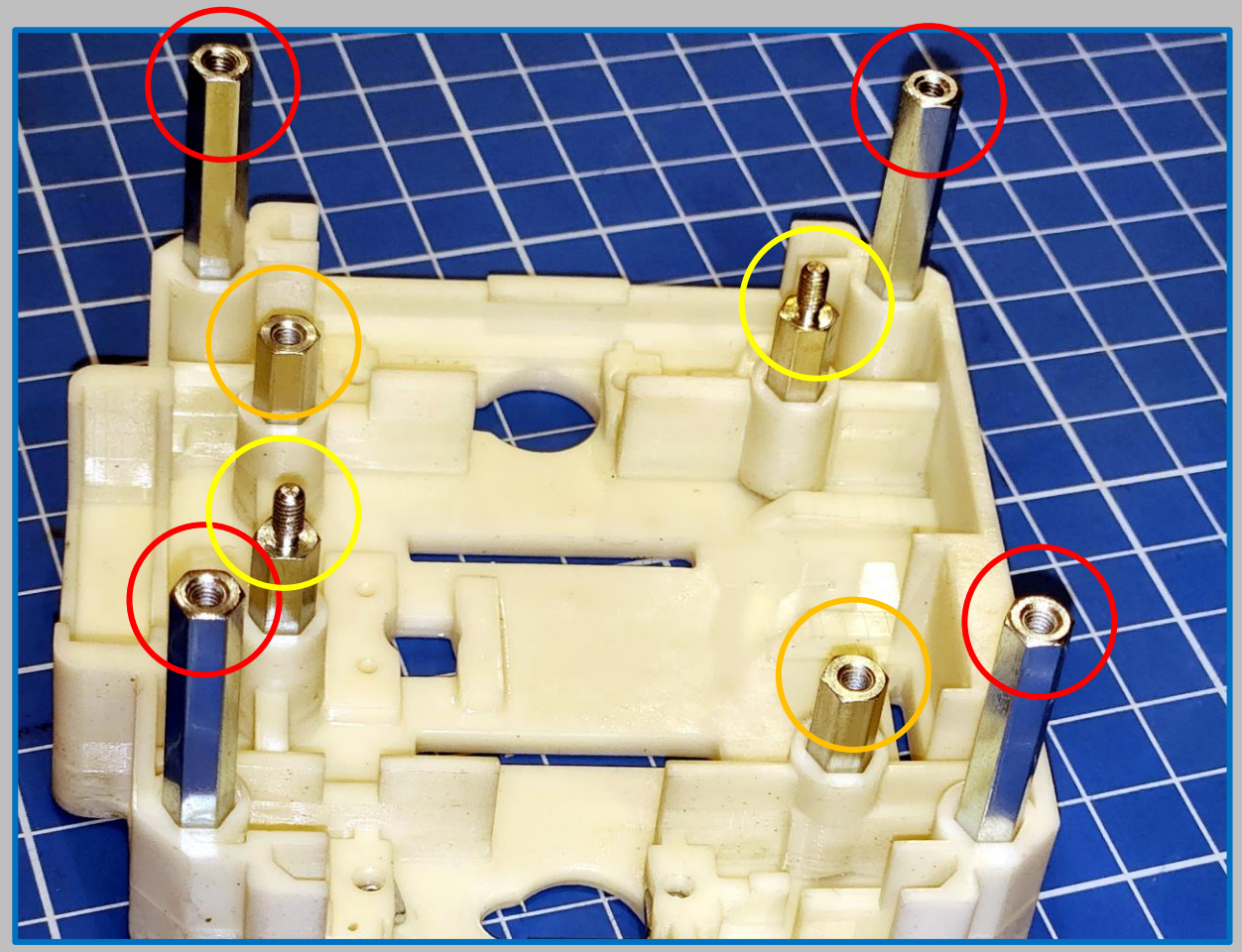
Schritt 1



Positionen der verschraubten Abstandshalter.

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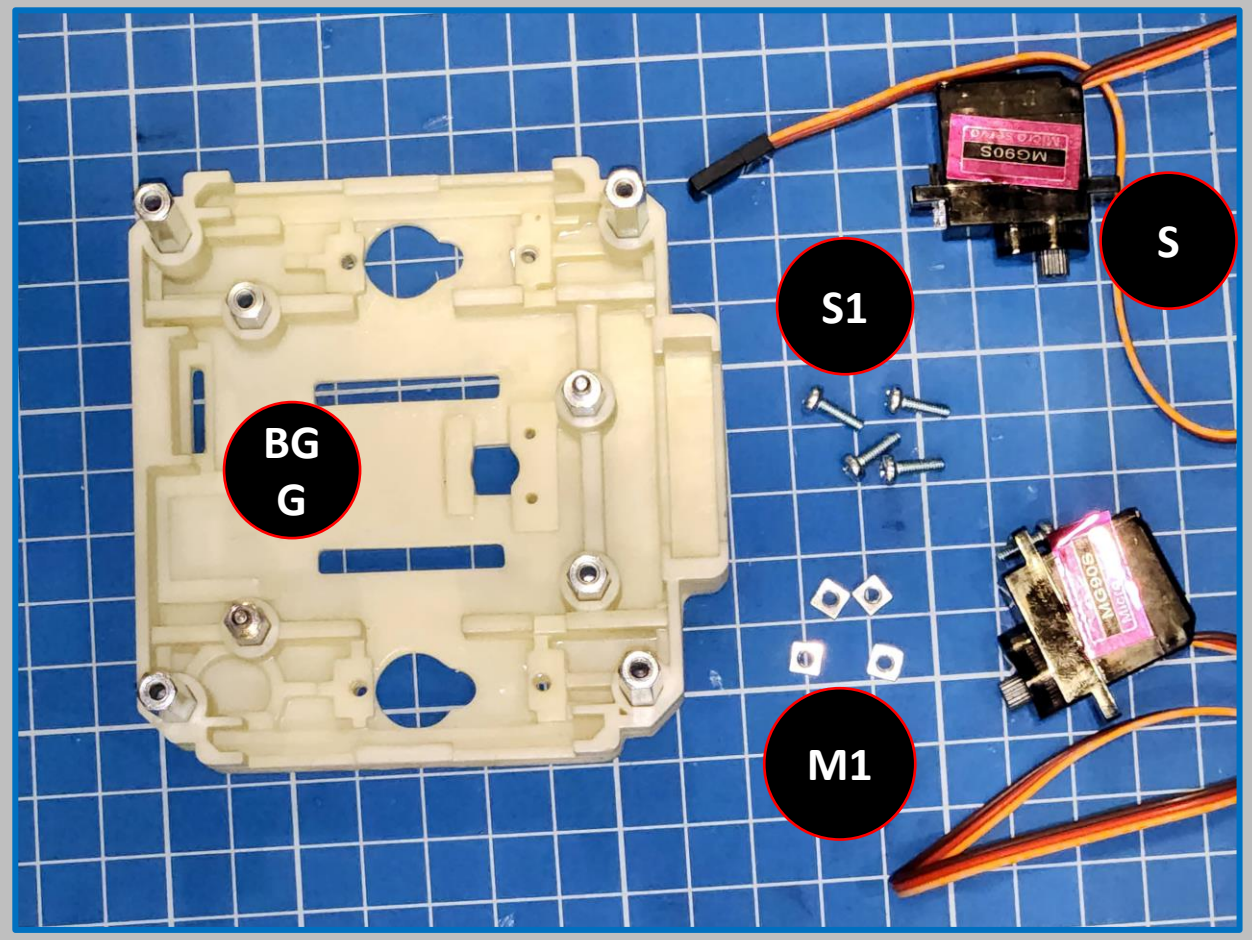
Schritt 2



Zwei Servomotoren montieren.

Teile:
BG Grundkörper
4x Schrauben S1
2x Servomotor
4x Mutter M1

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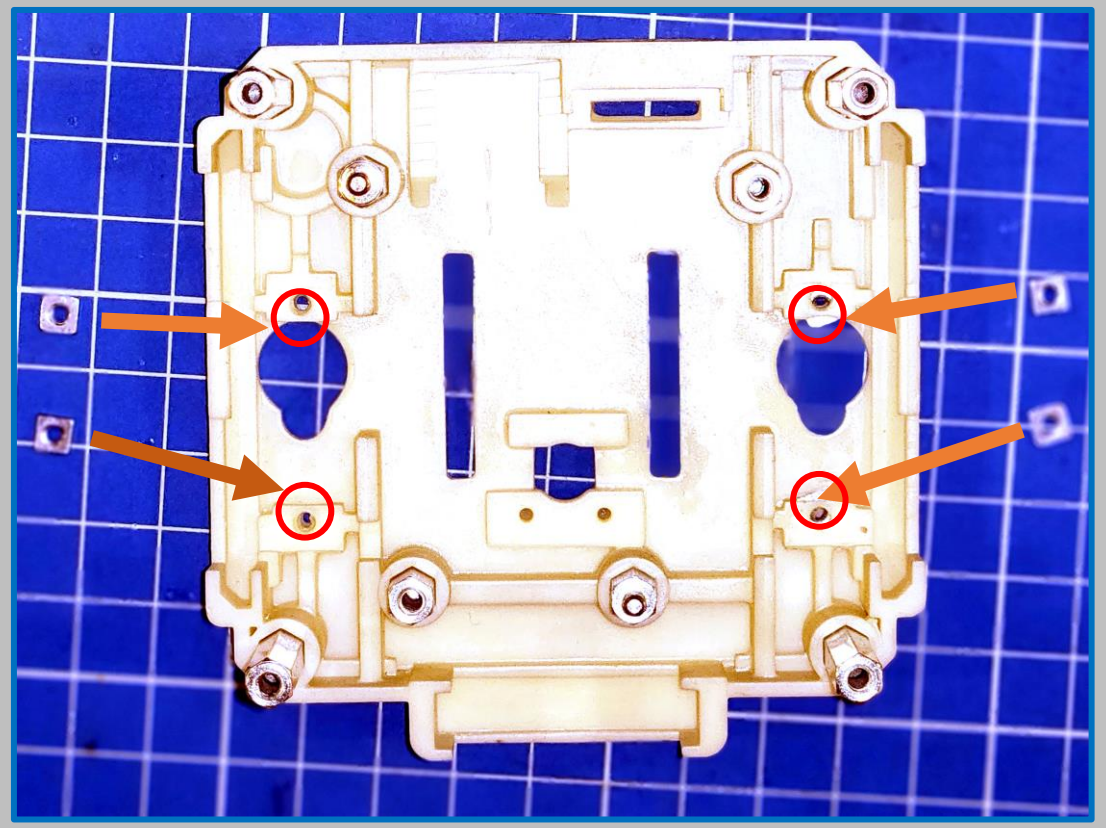
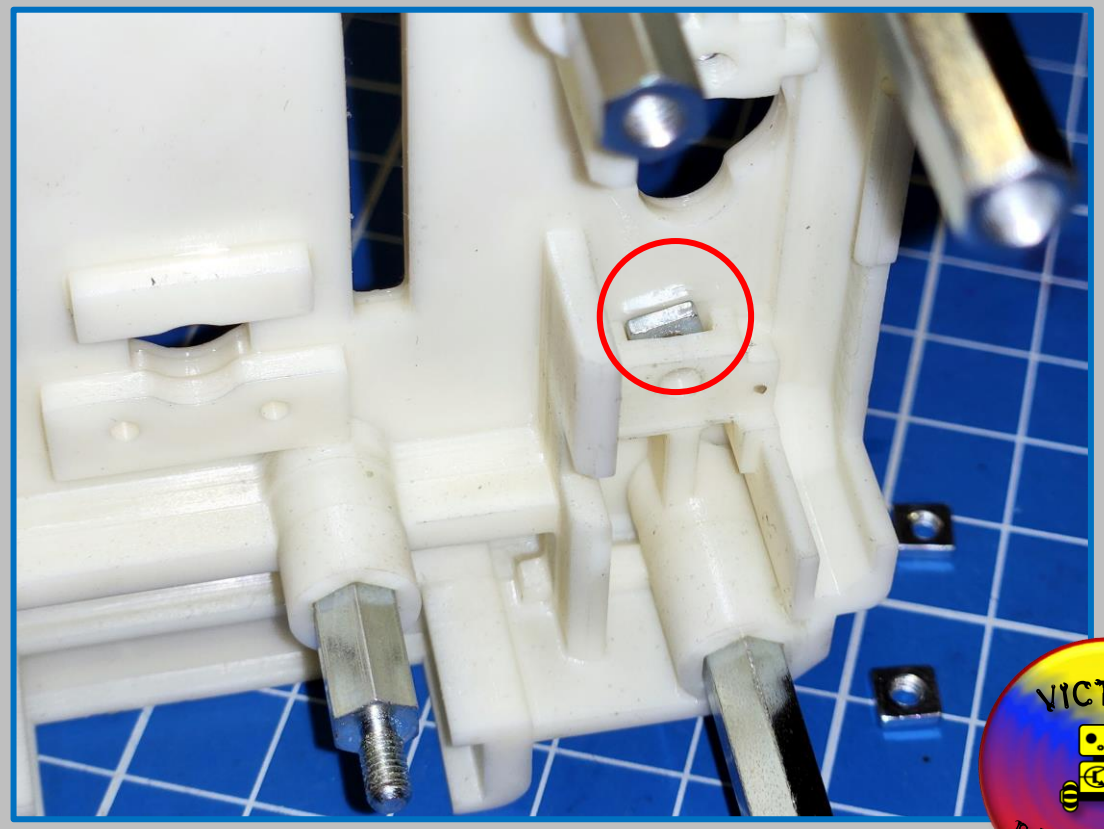
Schritt 2

Die vier eckigen Muttern M1 in die Taschen stecken.





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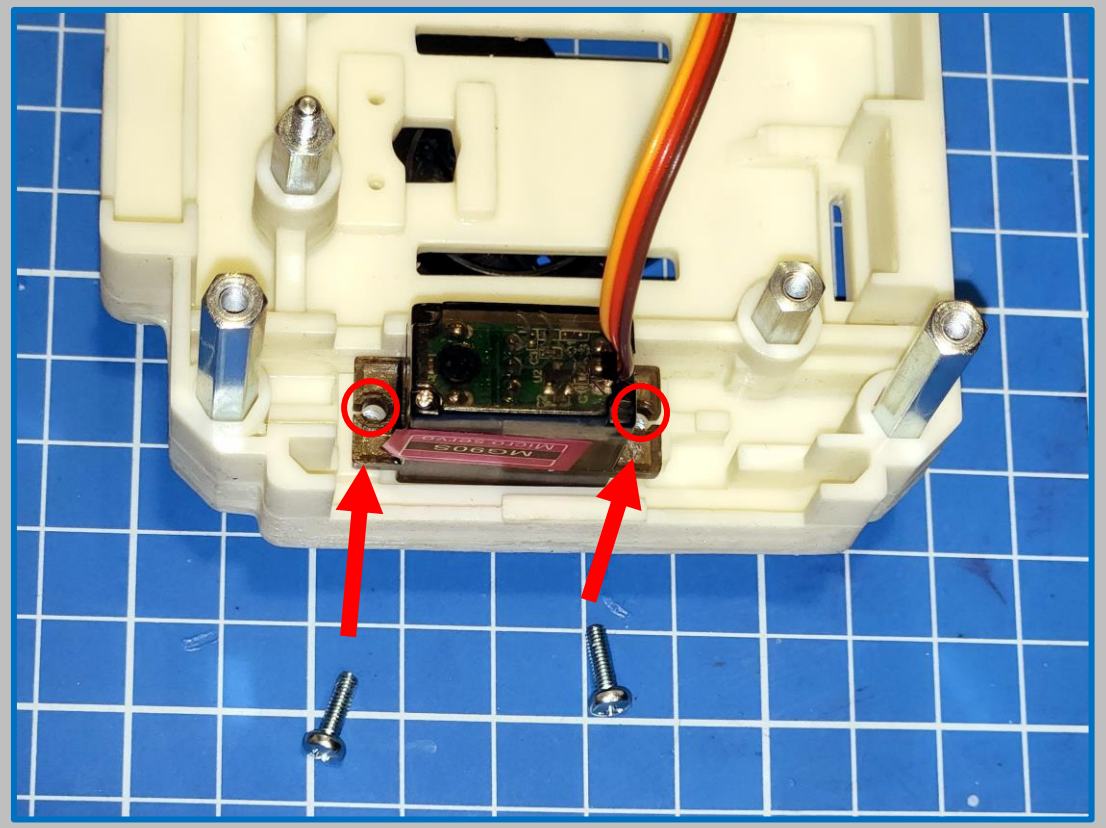
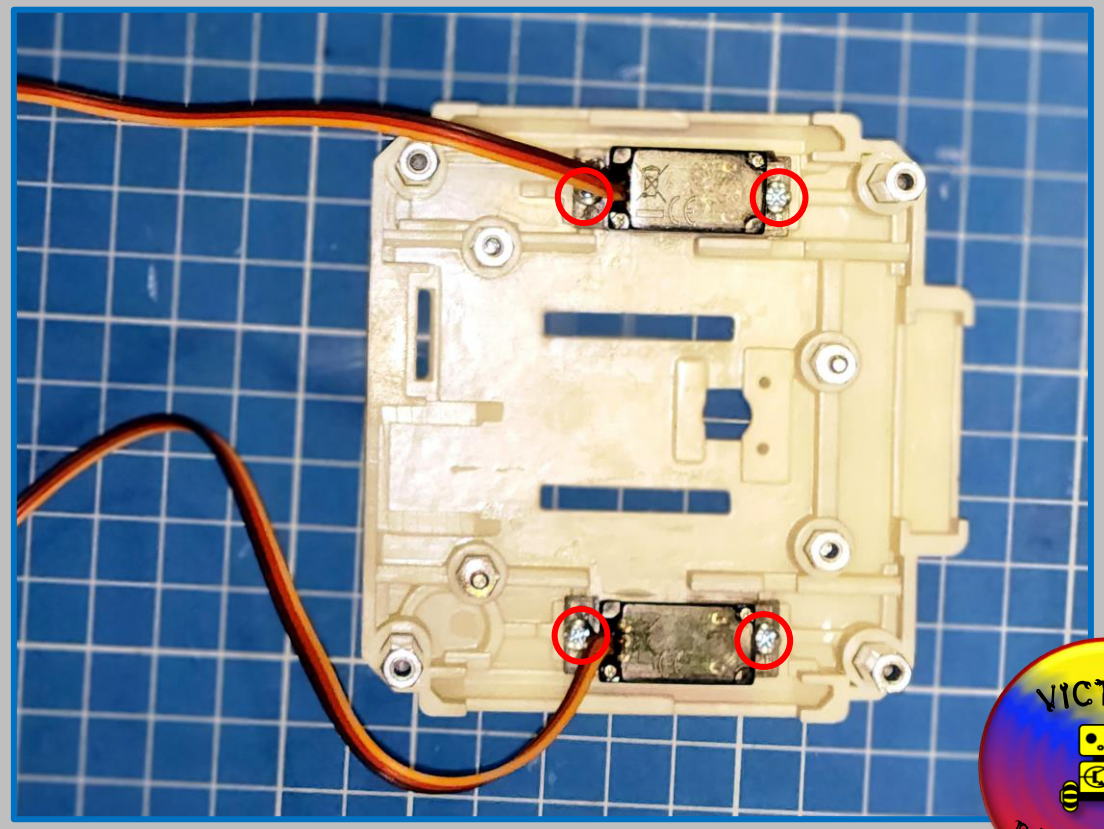
Schritt 2

Zwei Servos mit jeweils zwei Schrauben S1 befestigen.





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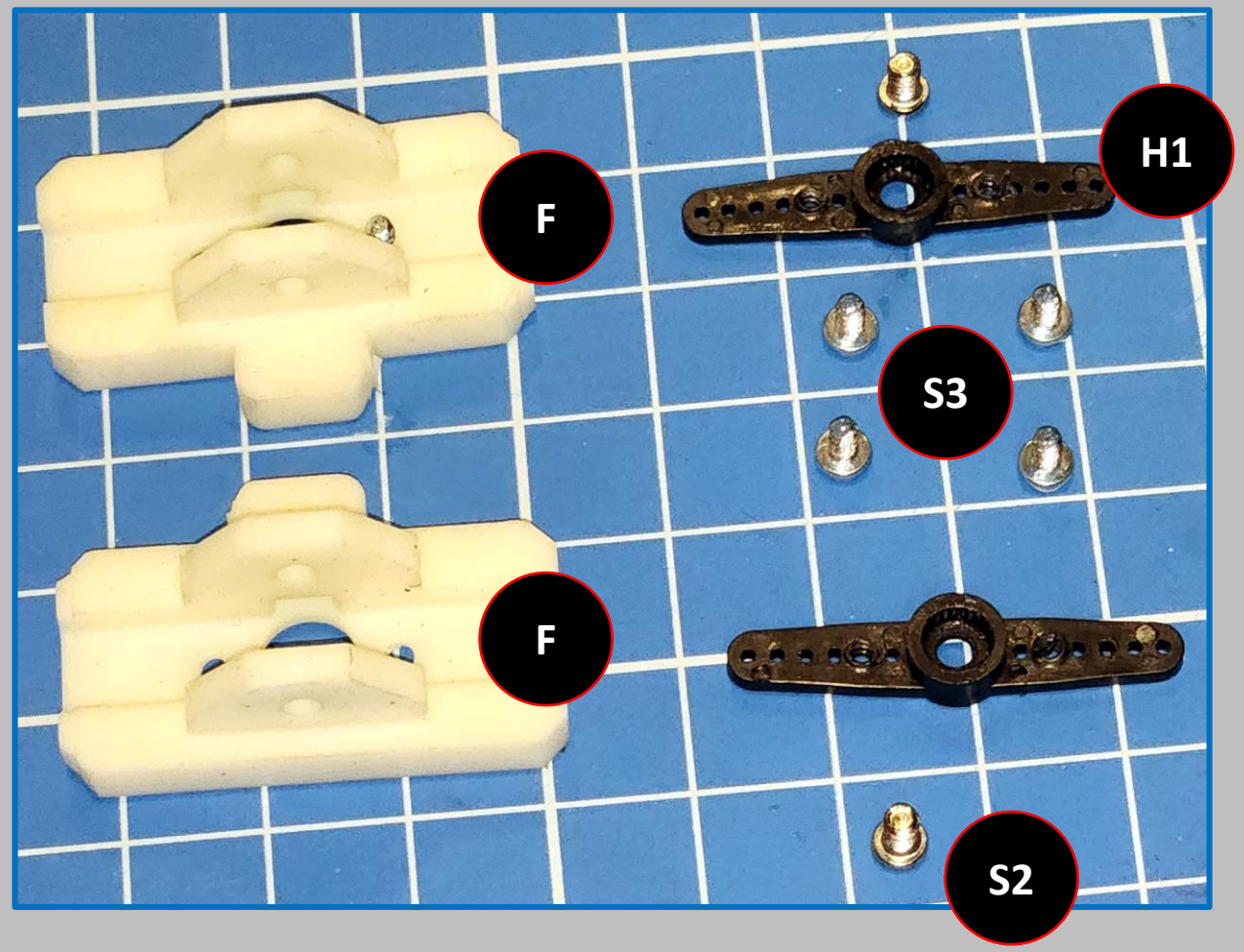
Schritt 3



Servohörner mit Fußhalter verschrauben.

Teile:
2x Fußhalter
2x Servohörner H7
4x Schraube S3
2x Schraube S2

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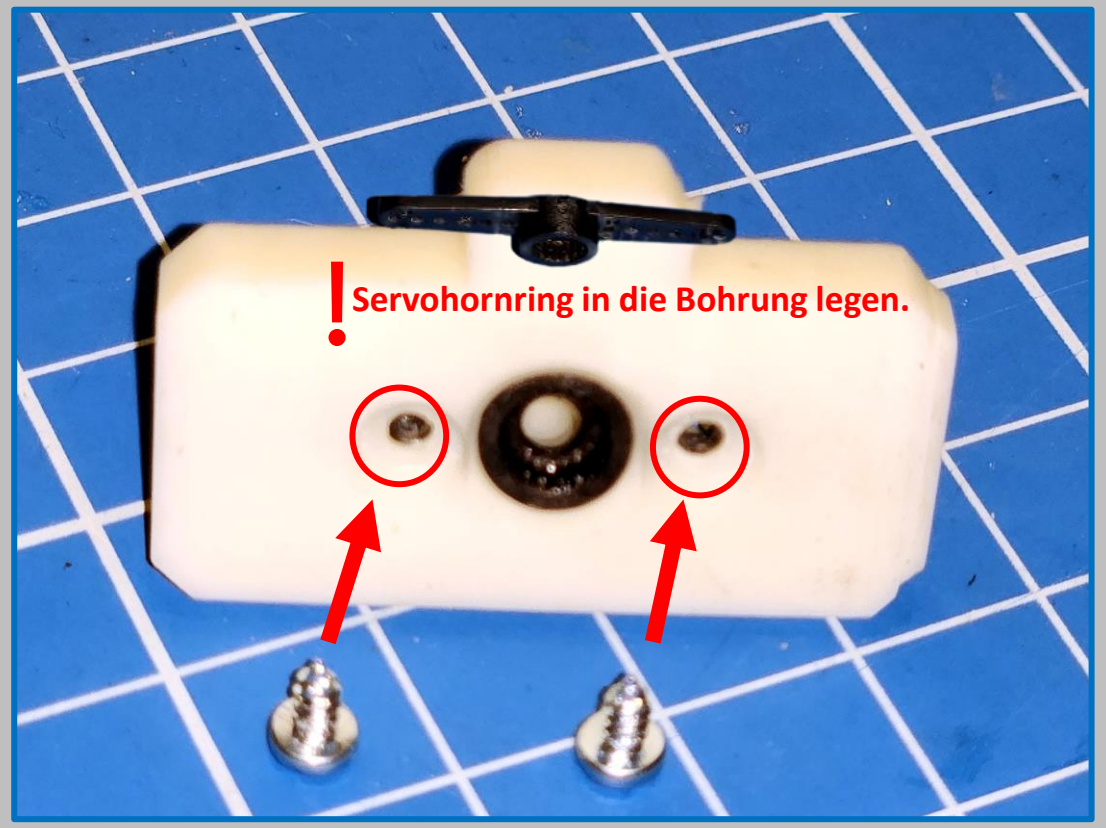
Schritt 3

Zwei Servohörner H7 mit jeweils zwei Schrauben S3 befestigen



Servohorn H7 in den Fußhalter legen.

Von Gegenseite verschrauben S3.

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Schritt 4

Servomotorenfußhalter mit BG Grundkörper montieren.

Teile:
Baugruppe Grundkörper
2X Schrauben S2

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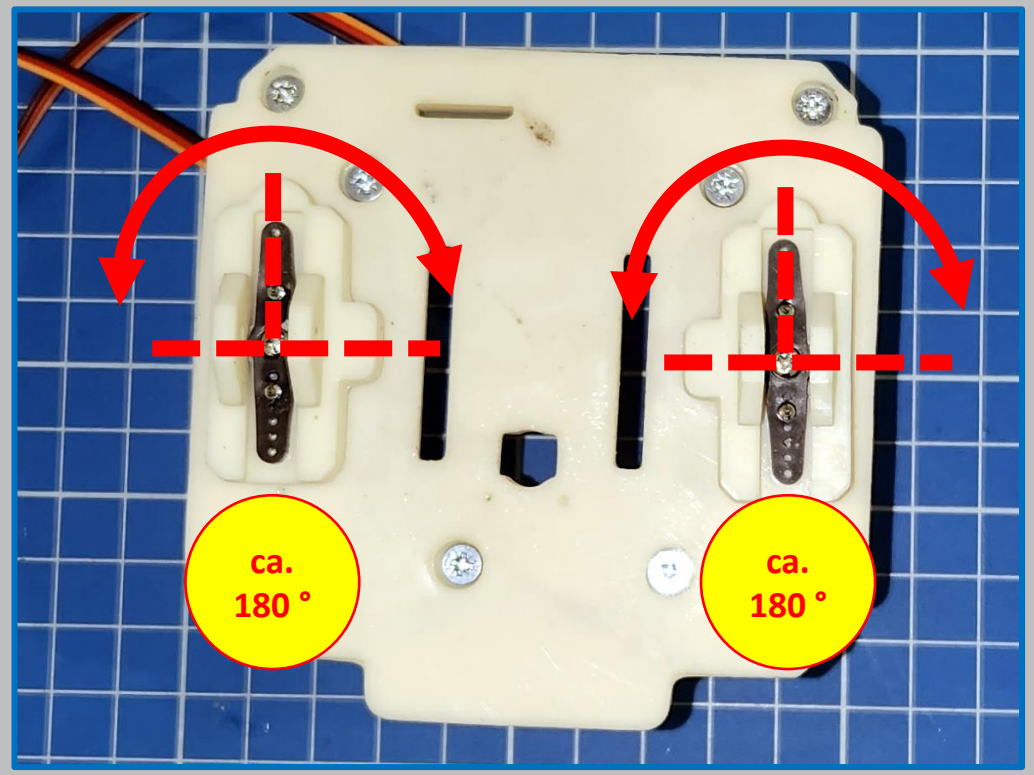
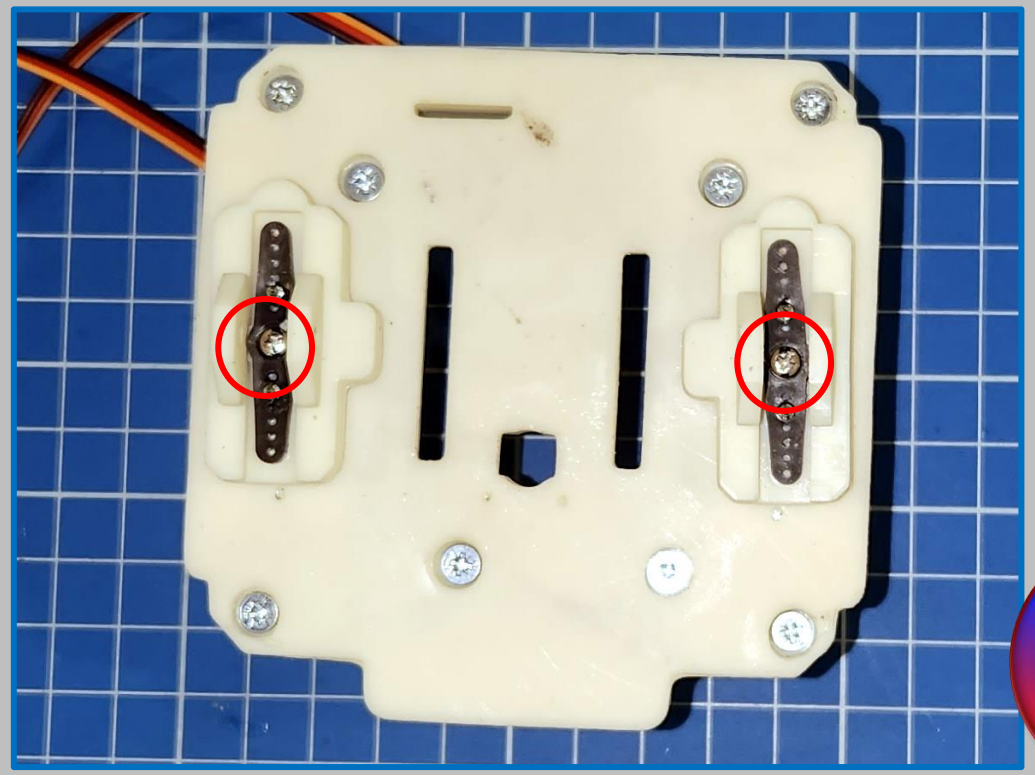
Schritt 4

Die Servomotoren müssen sich ca.180° bewegen können.



Servomotorenfußhalter mit Grundplatte verschrauben S2.



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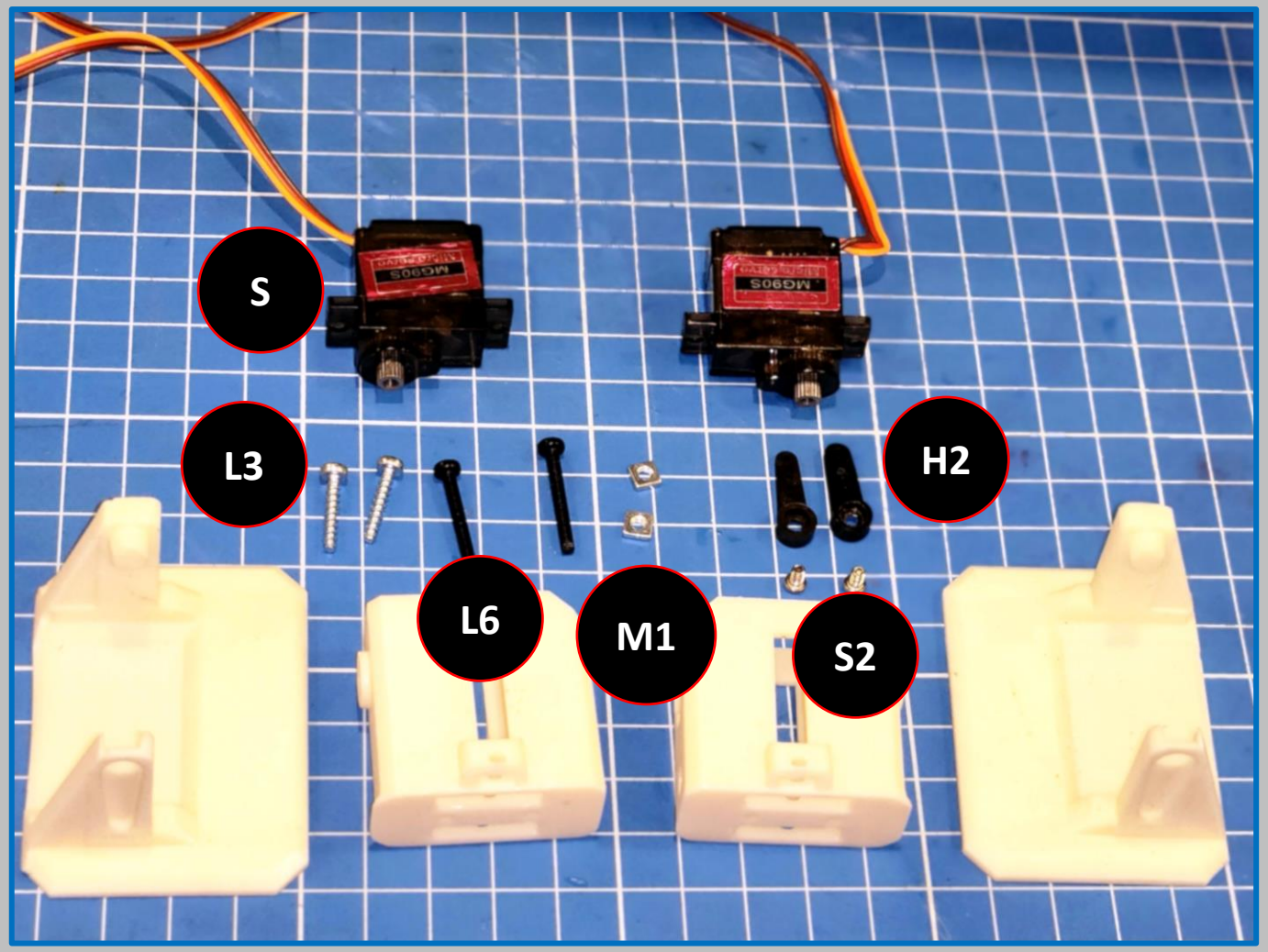
Schritt 5



Füße an Baugruppe Grundkörper montieren.

Teile:
2x Schrauben L3
2x Schrauben L6
2x Schrauben S2
2x Mutter M1
2x Servohörner H2
2x Fuß
2x Bein
2x Servomotoren

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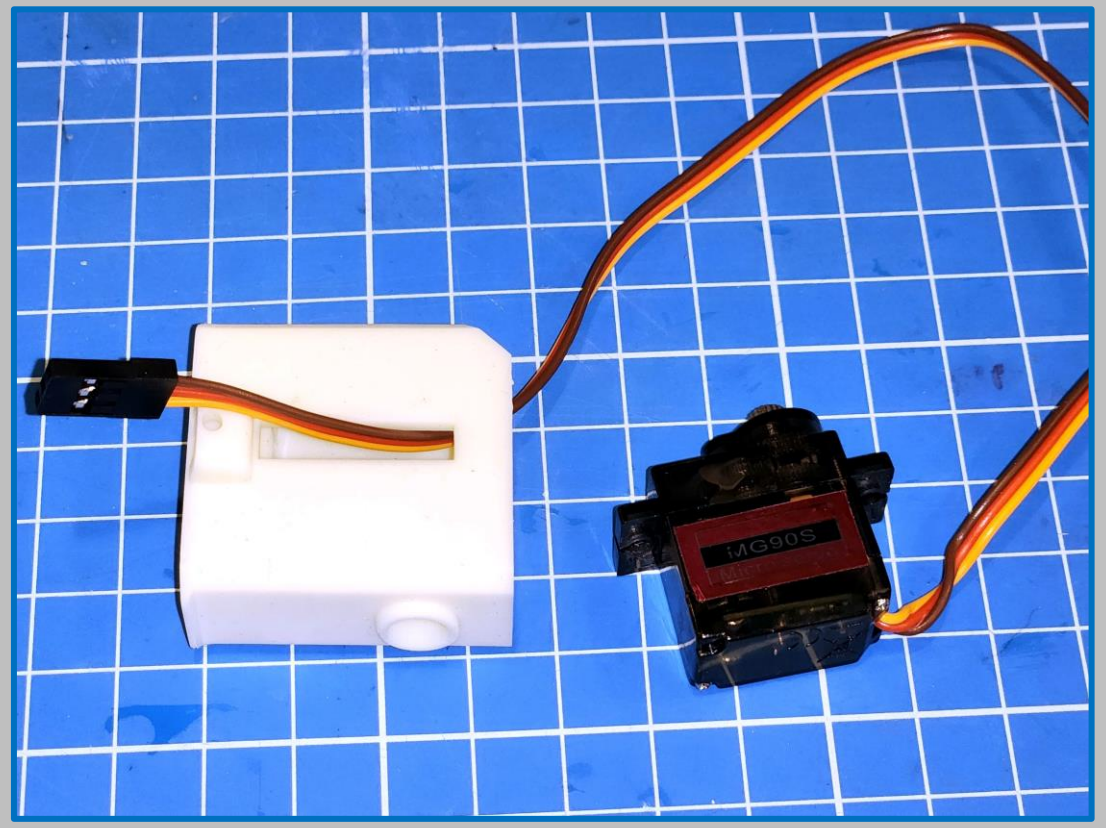
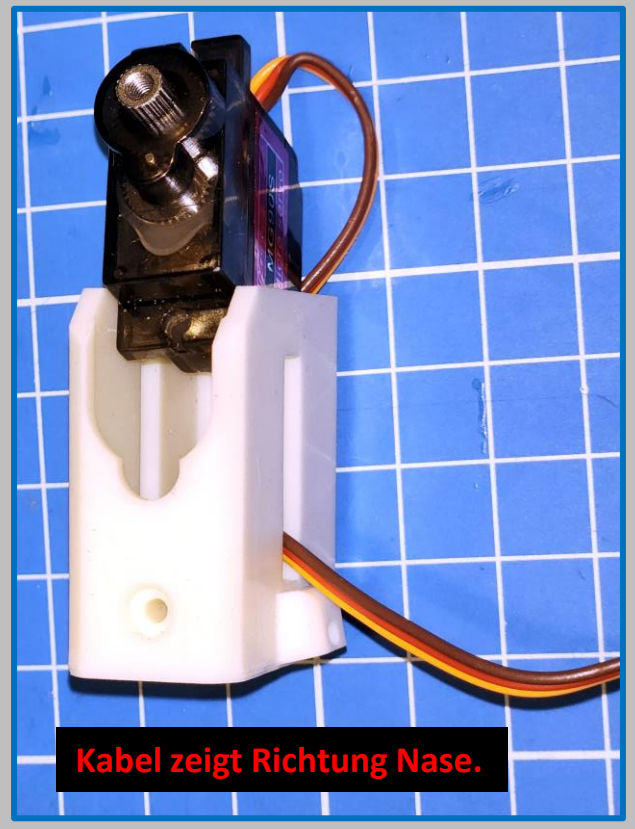
Schritt 5

Den Motor in den Beindruck legen.





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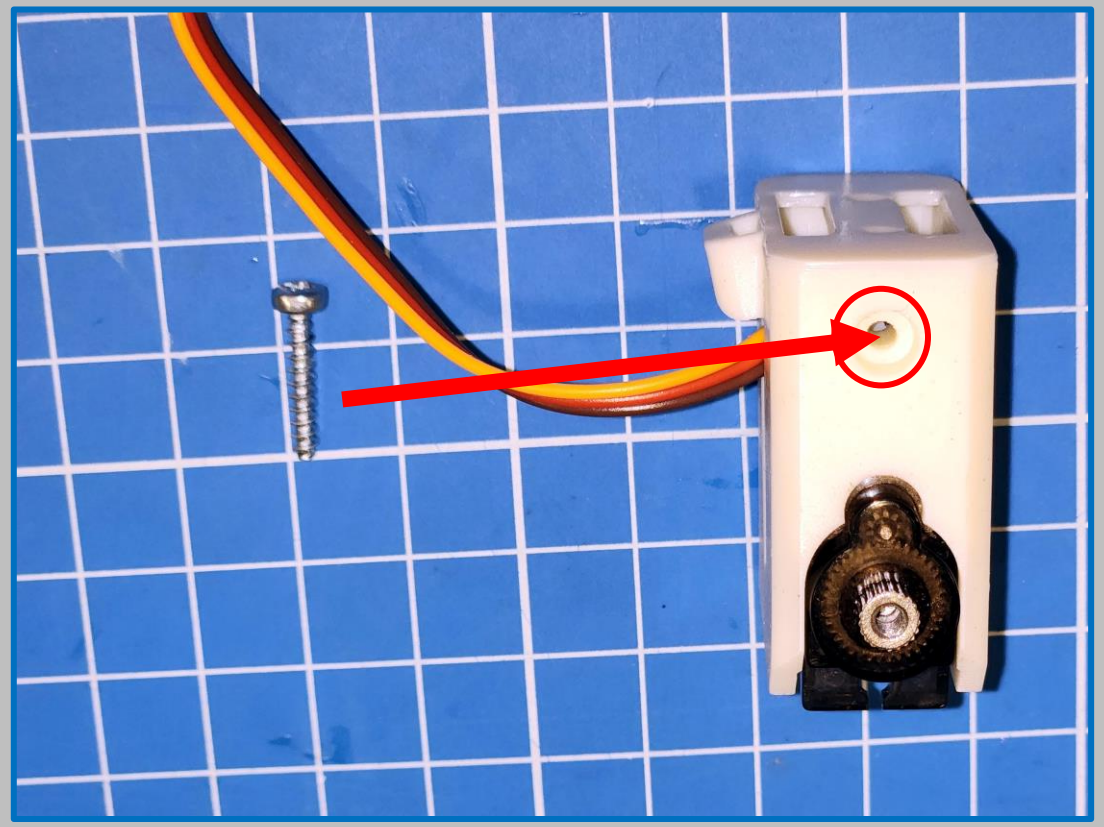
Schritt 5

Servo mit Schraube L3 befestigen



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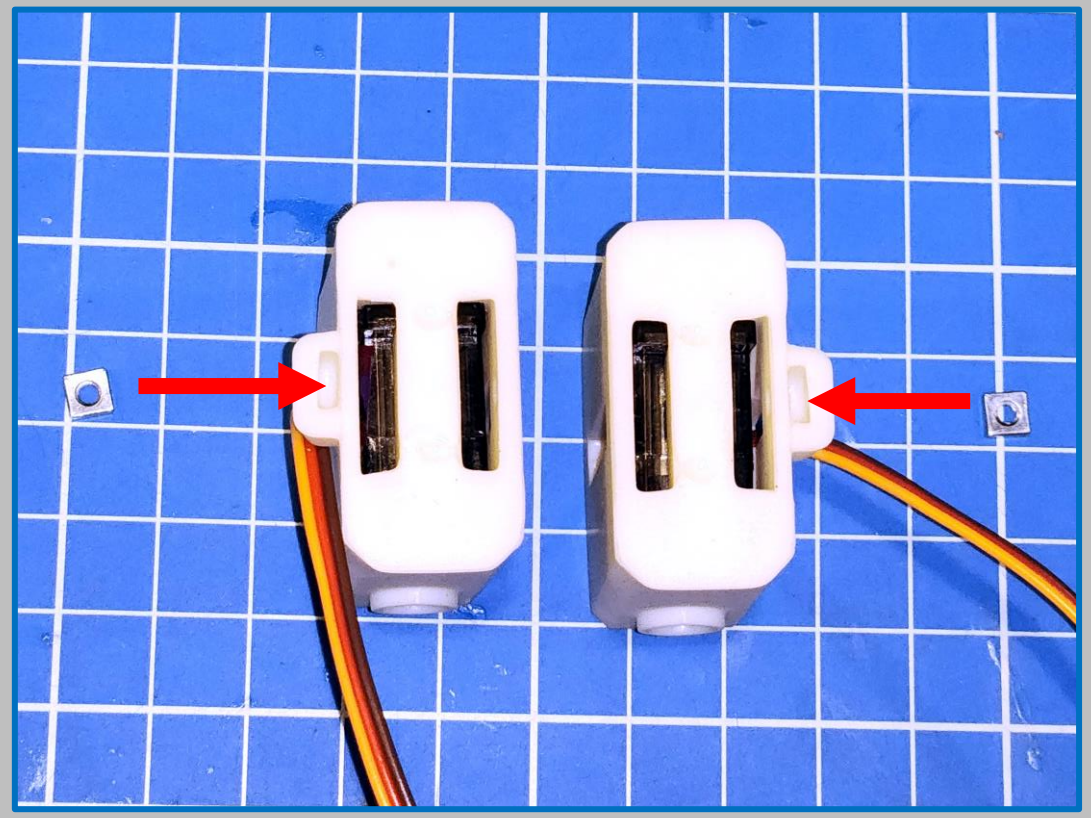
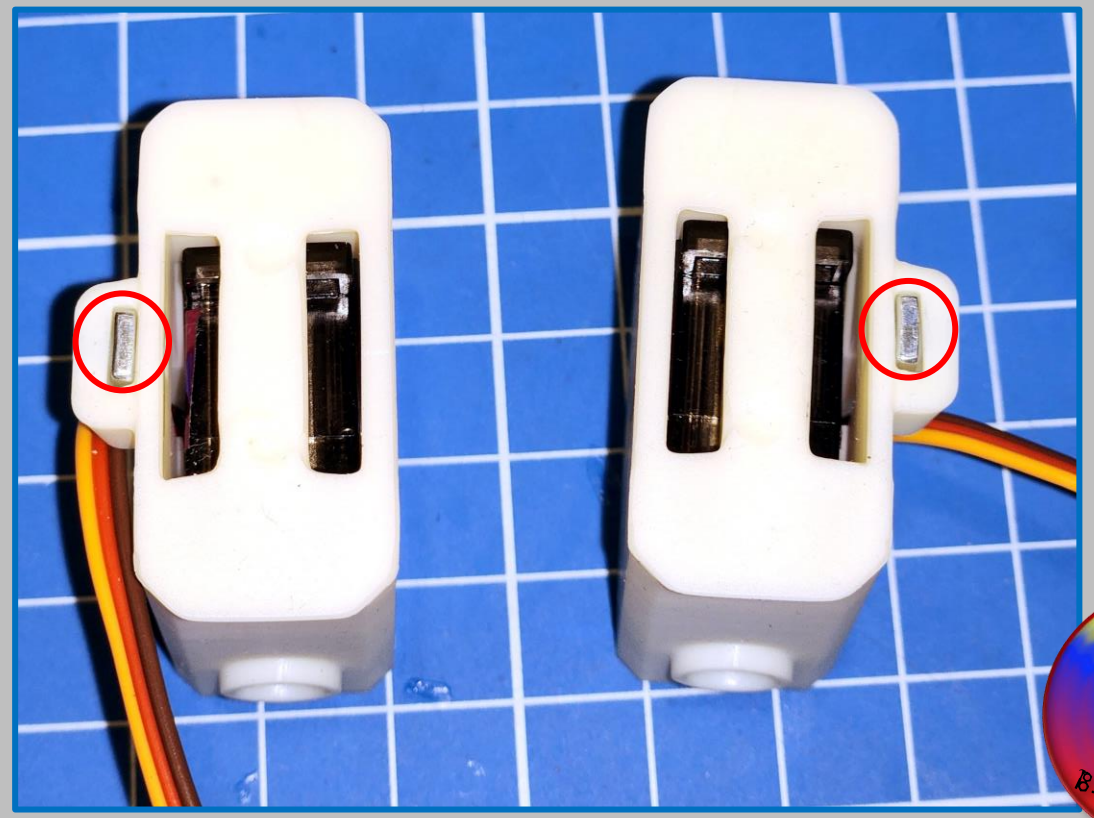
Schritt 5

Die eckigen Muttern M1 in die Taschen stecken.





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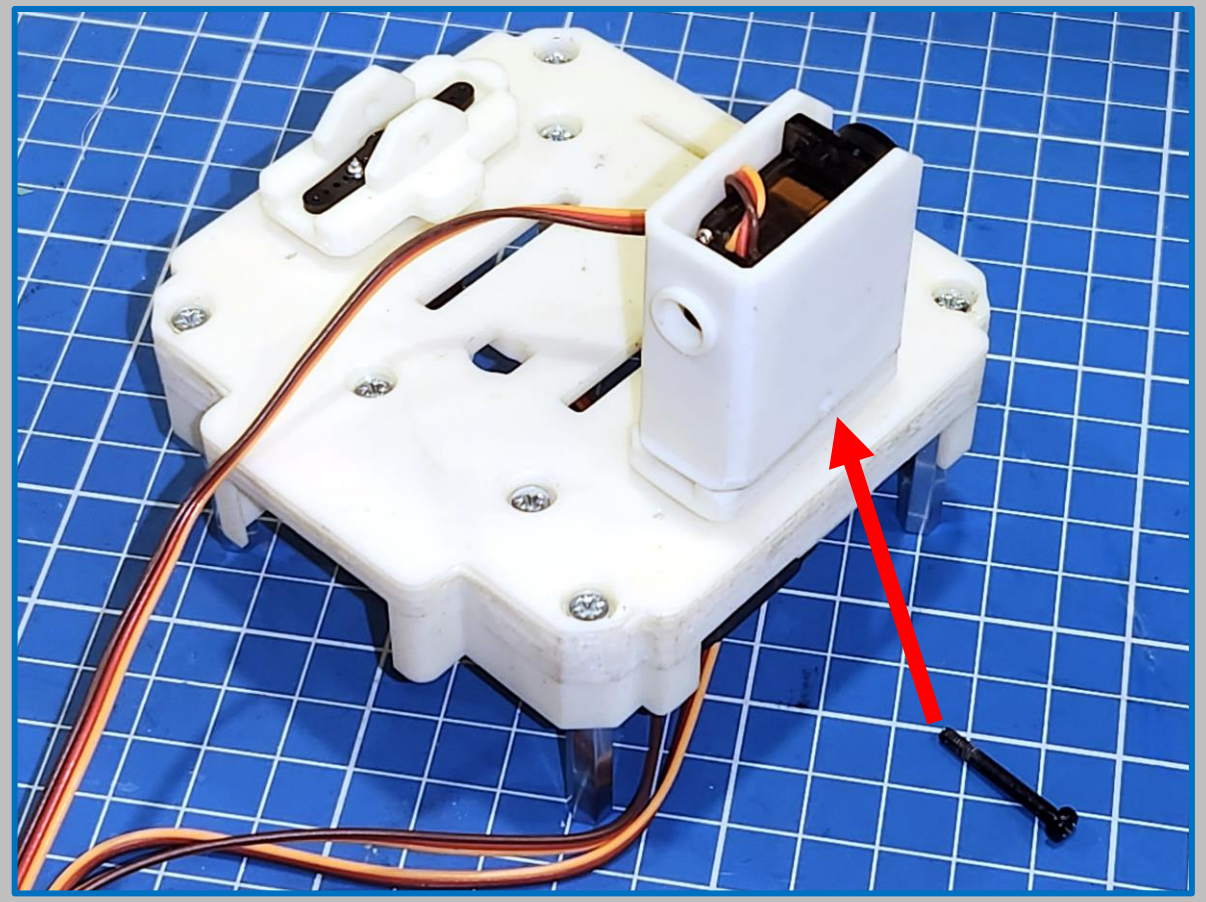
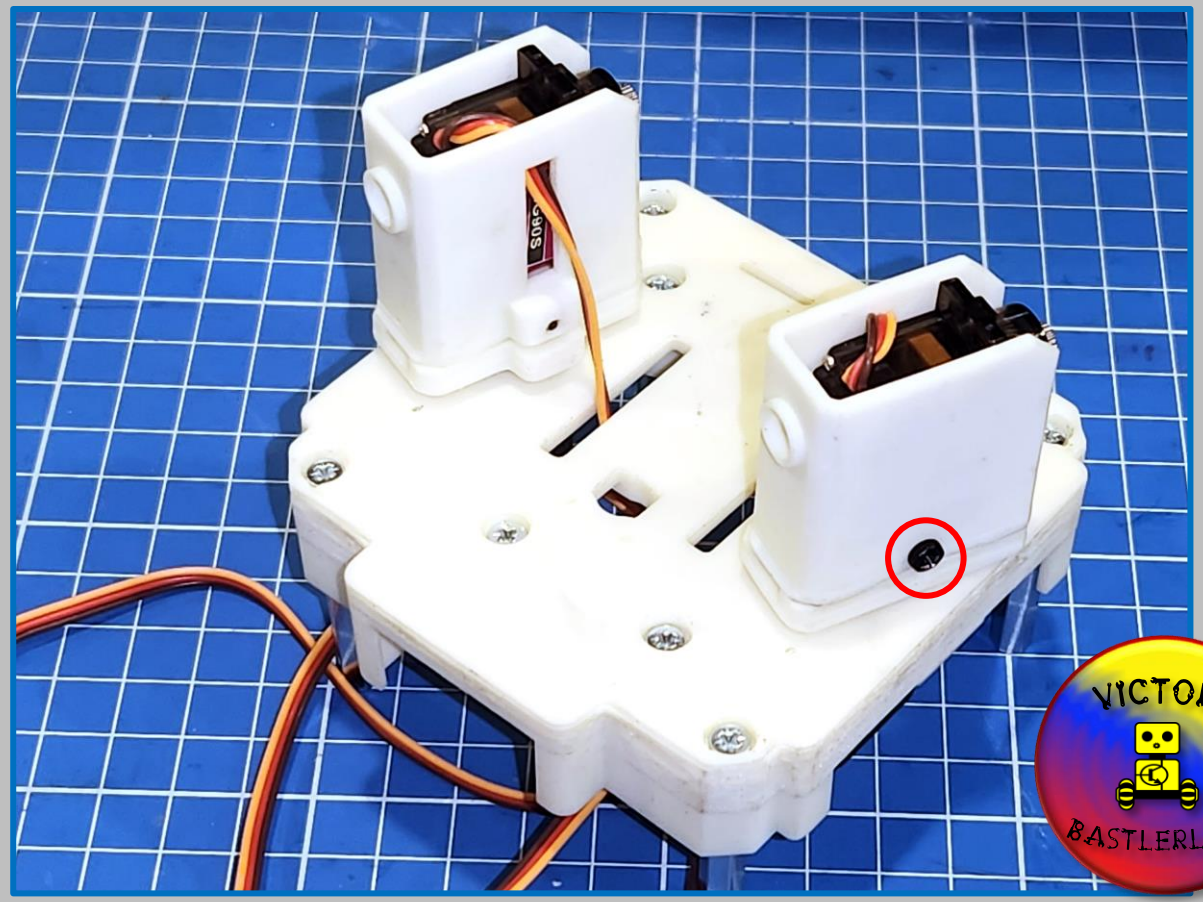
Schritt 5

Bein mit BG Grundkörper verschrauben L6.





VICTORS BASTLERLAND®

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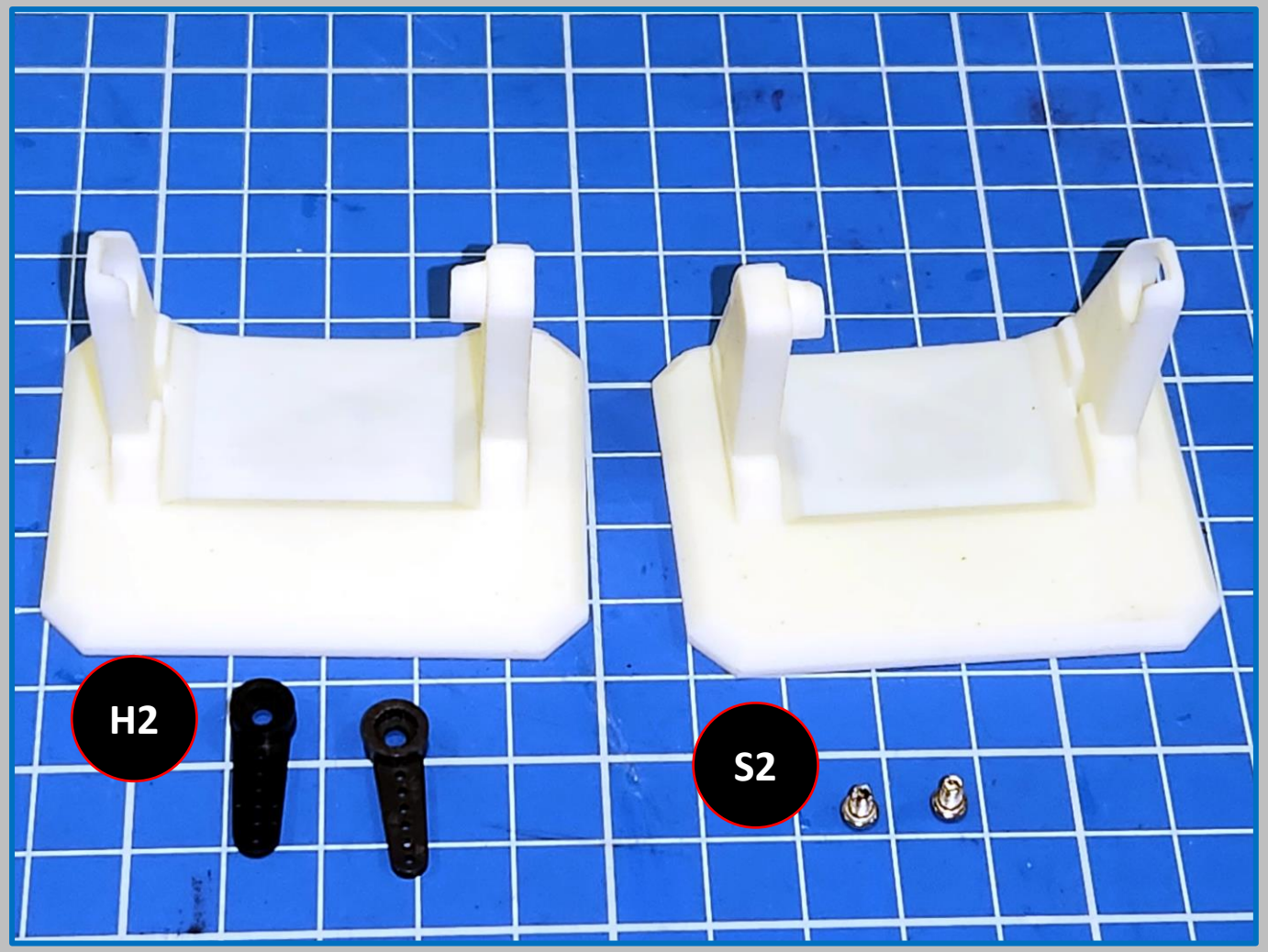
Schritt 5



Füße an Bein montieren.

Teile:
Servohorn H2
Schrauben S2

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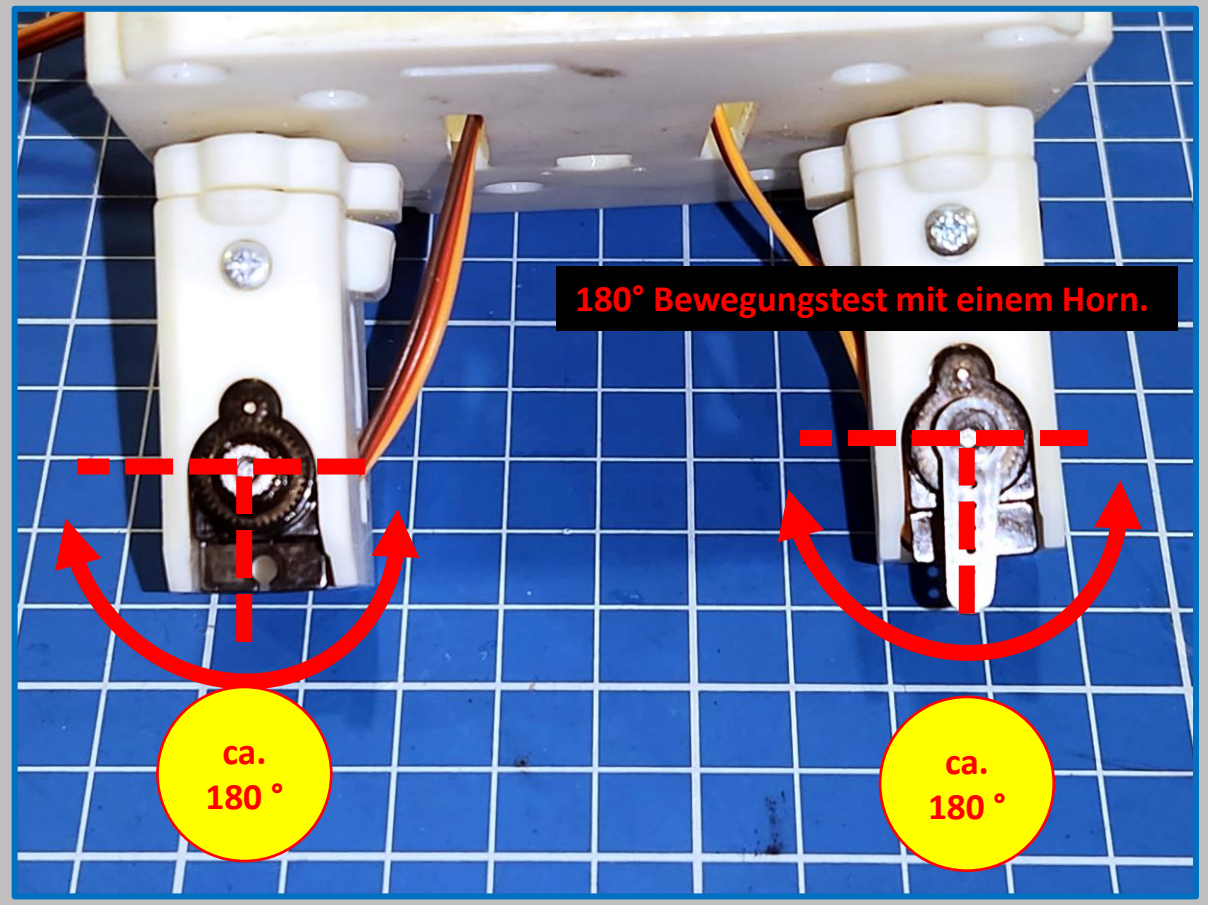
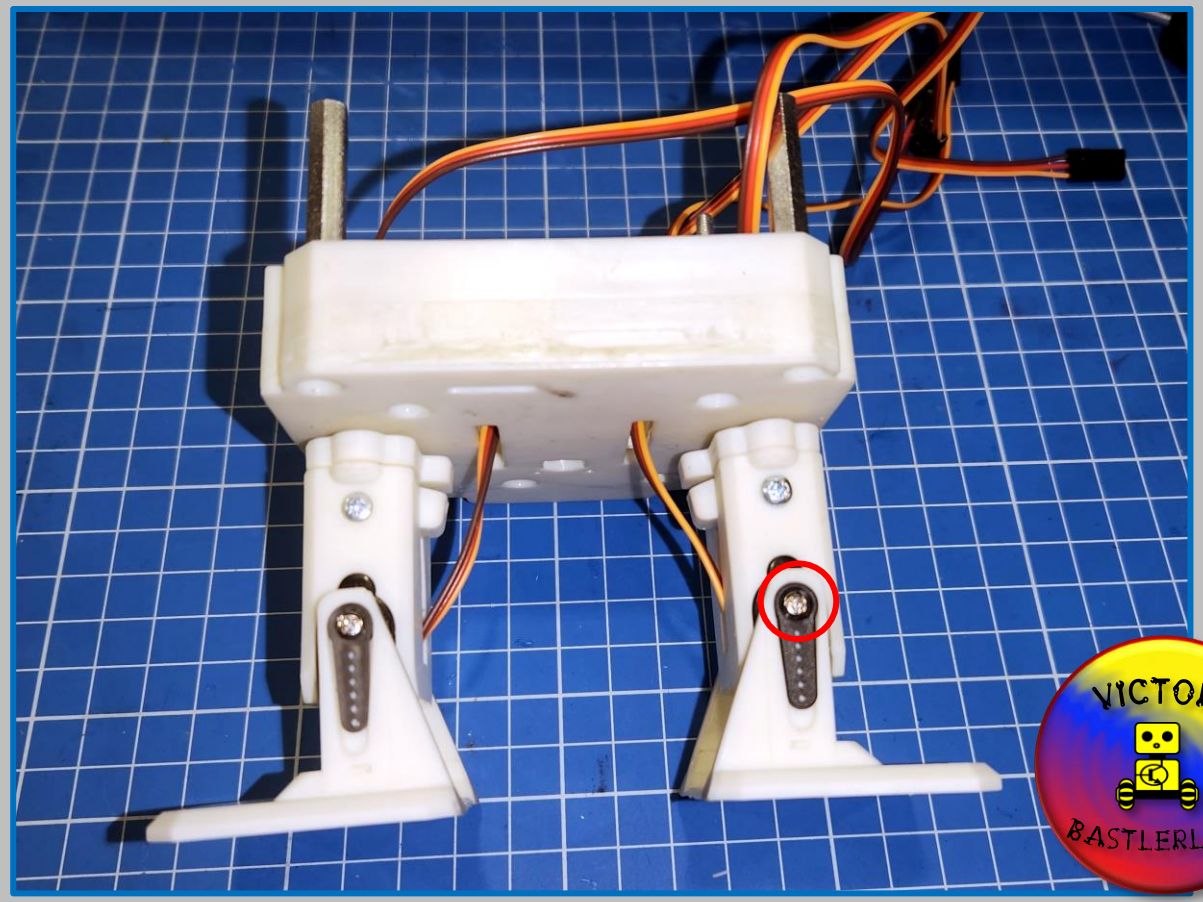
Schritt 5

Die Servomotoren müssen sich ca. 180° bewegen können.

Fuß mit Bein verschrauben S2.





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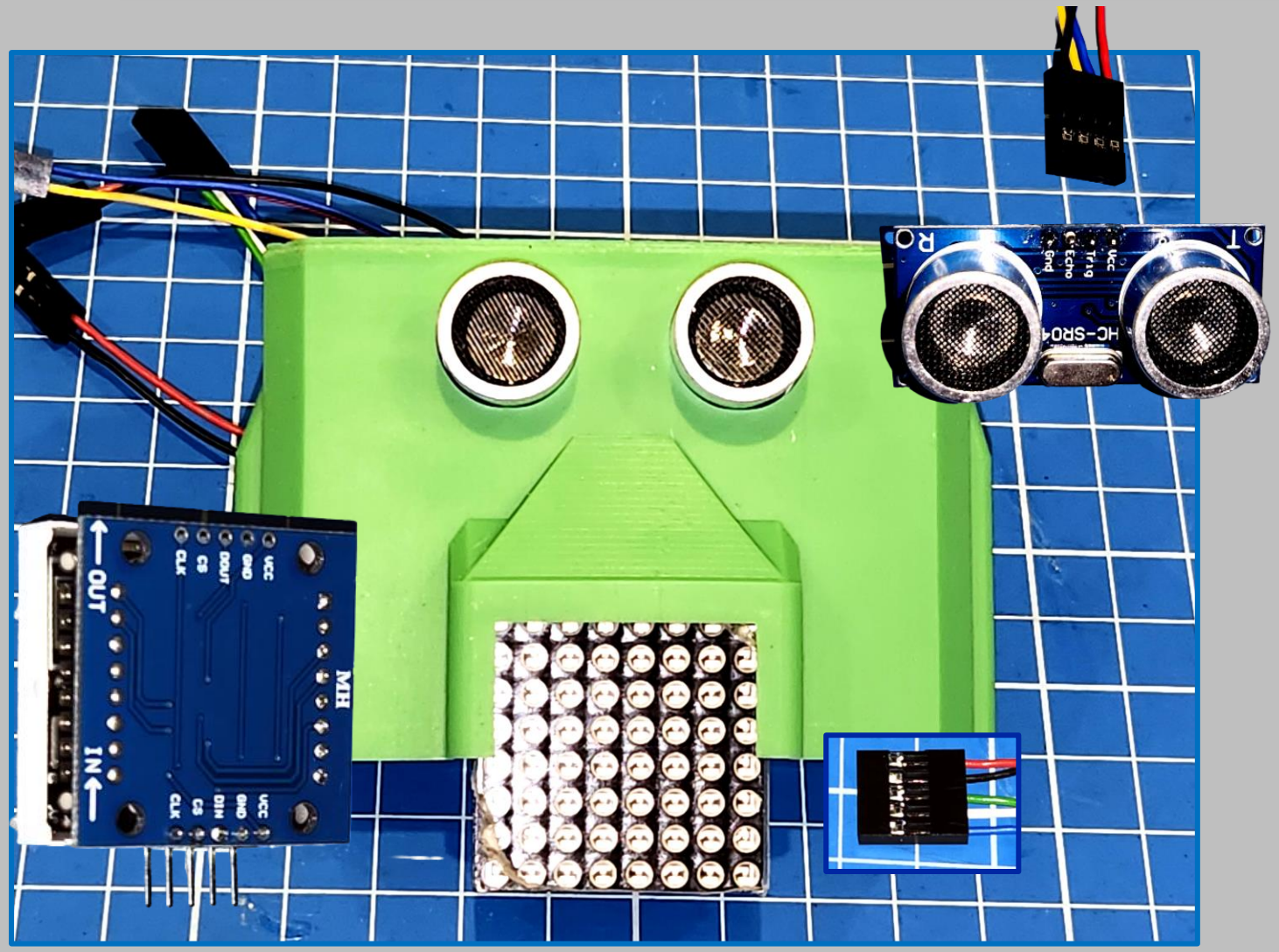
Schritt 6



LED-Matrix und Ultraschallsensor.

Teile:
Verbindungskabel
Verbindungskabel
Ultraschallsensor
LED-Matrix
Gesicht

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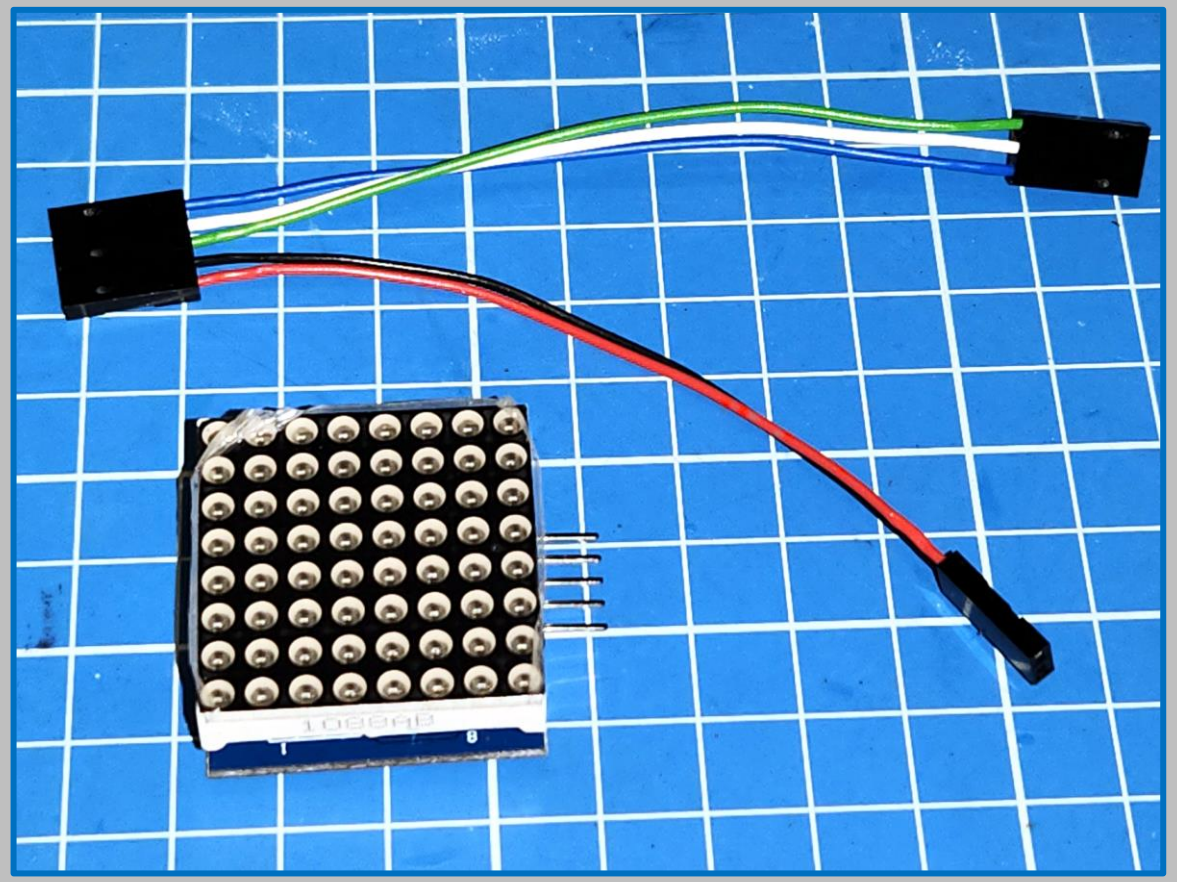
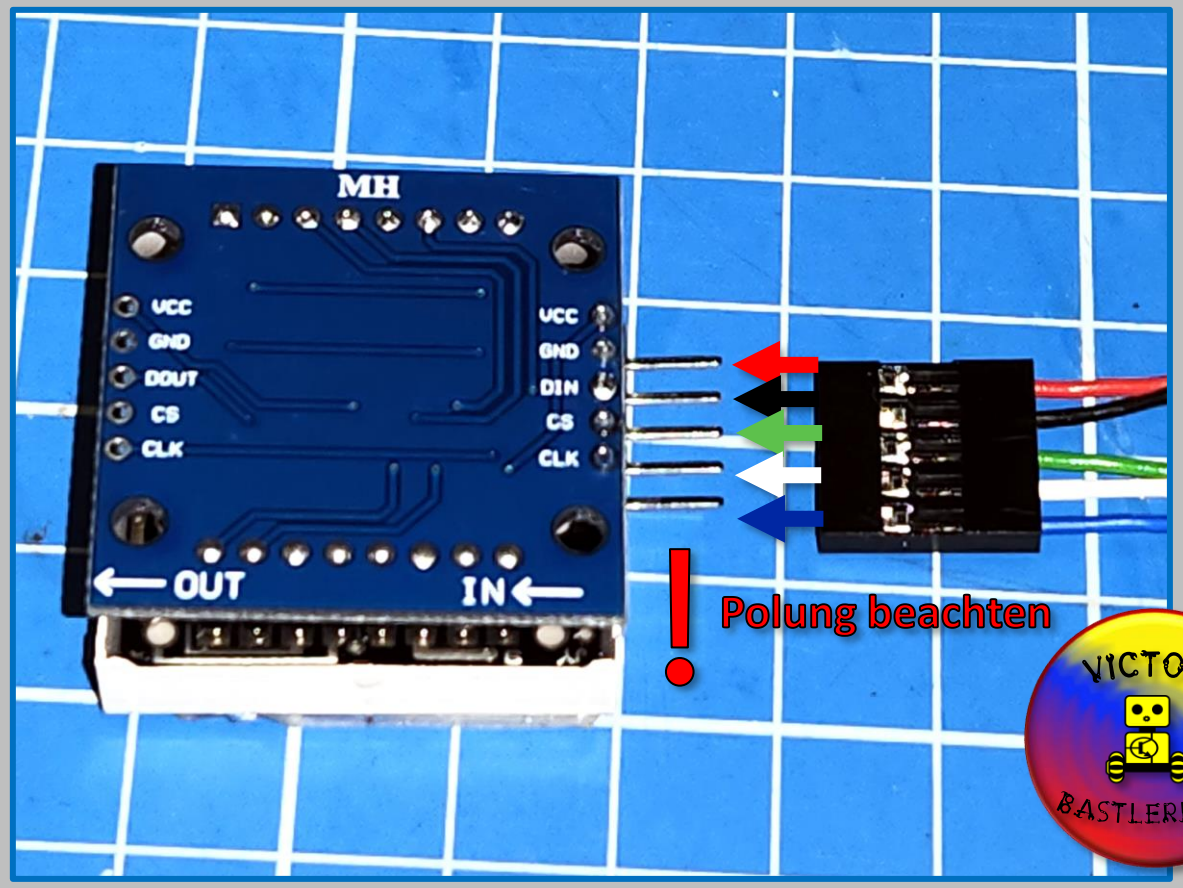
Schritt 6

Verbindungskabel mit LED-Matrix verbinden.





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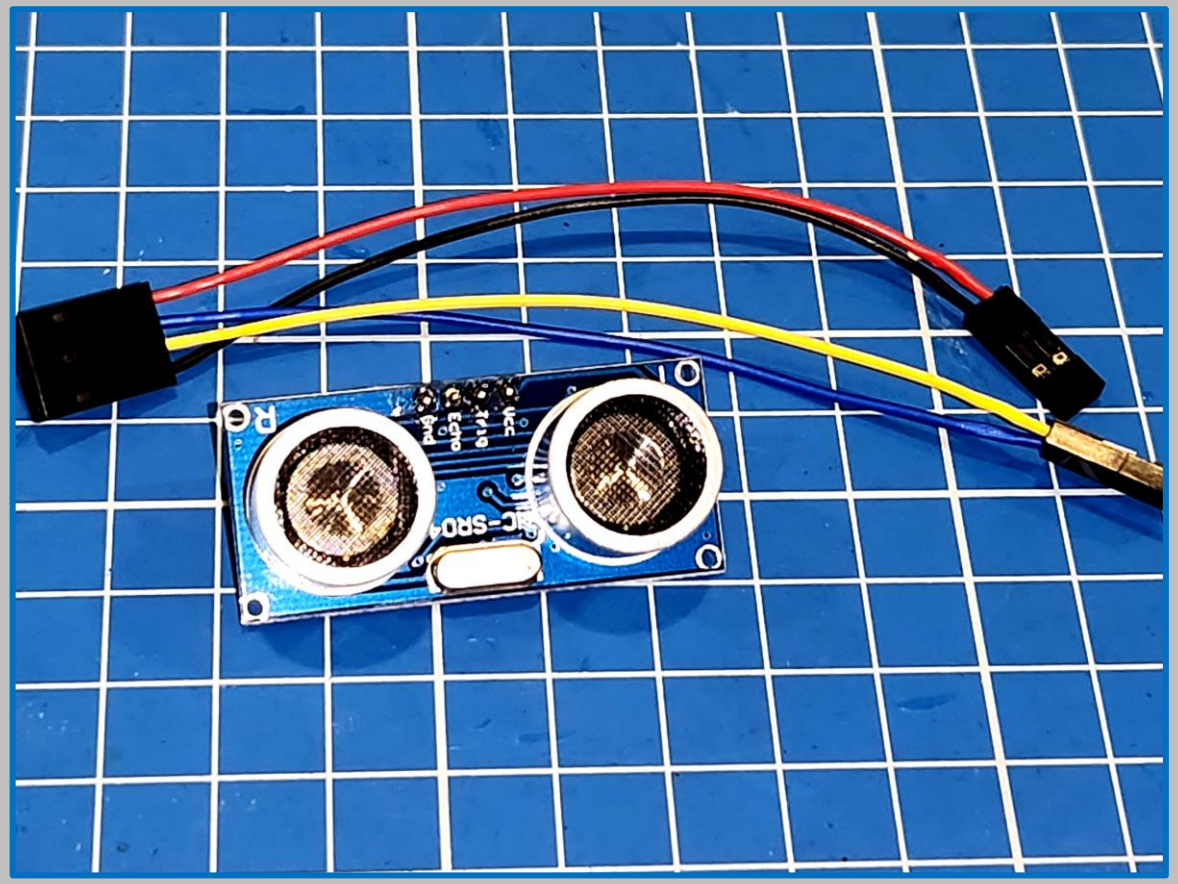
Schritt 6

Verbindungskabel mit Ultraschallsensor verbinden.



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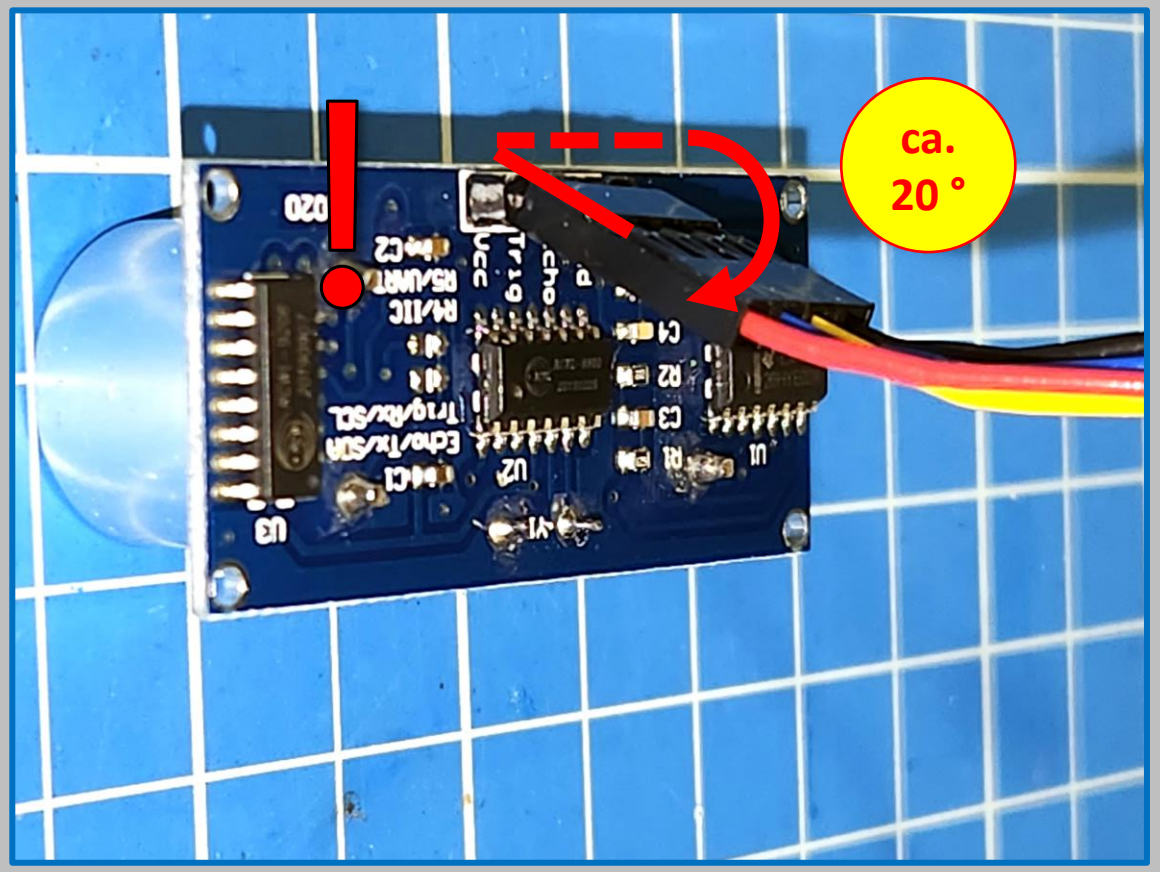
Schritt 6

Verbindungskabel mit Ultraschallsensor leicht biegen.



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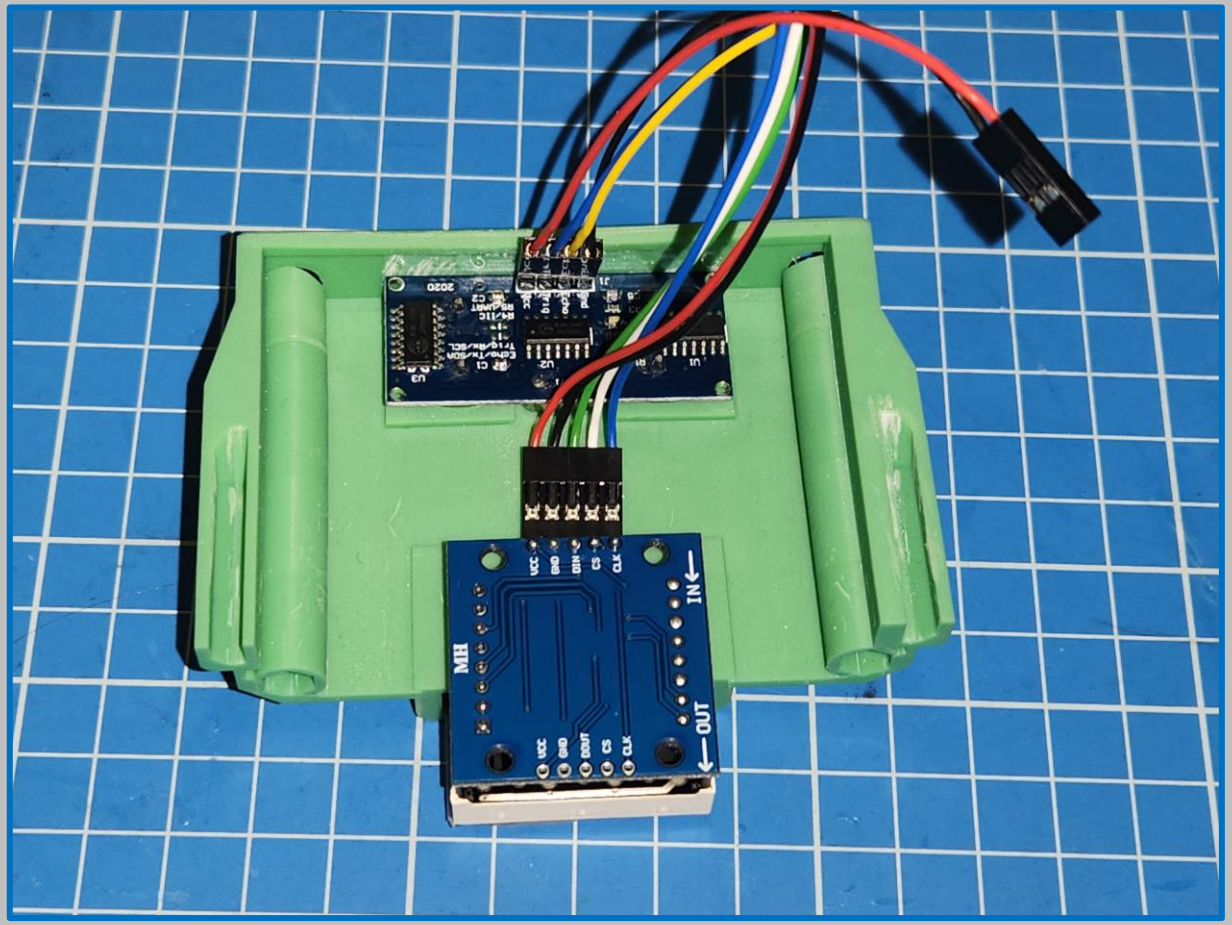
Schritt 6

Ultraschallsensor und LED-Matrix in das Gesicht stecken



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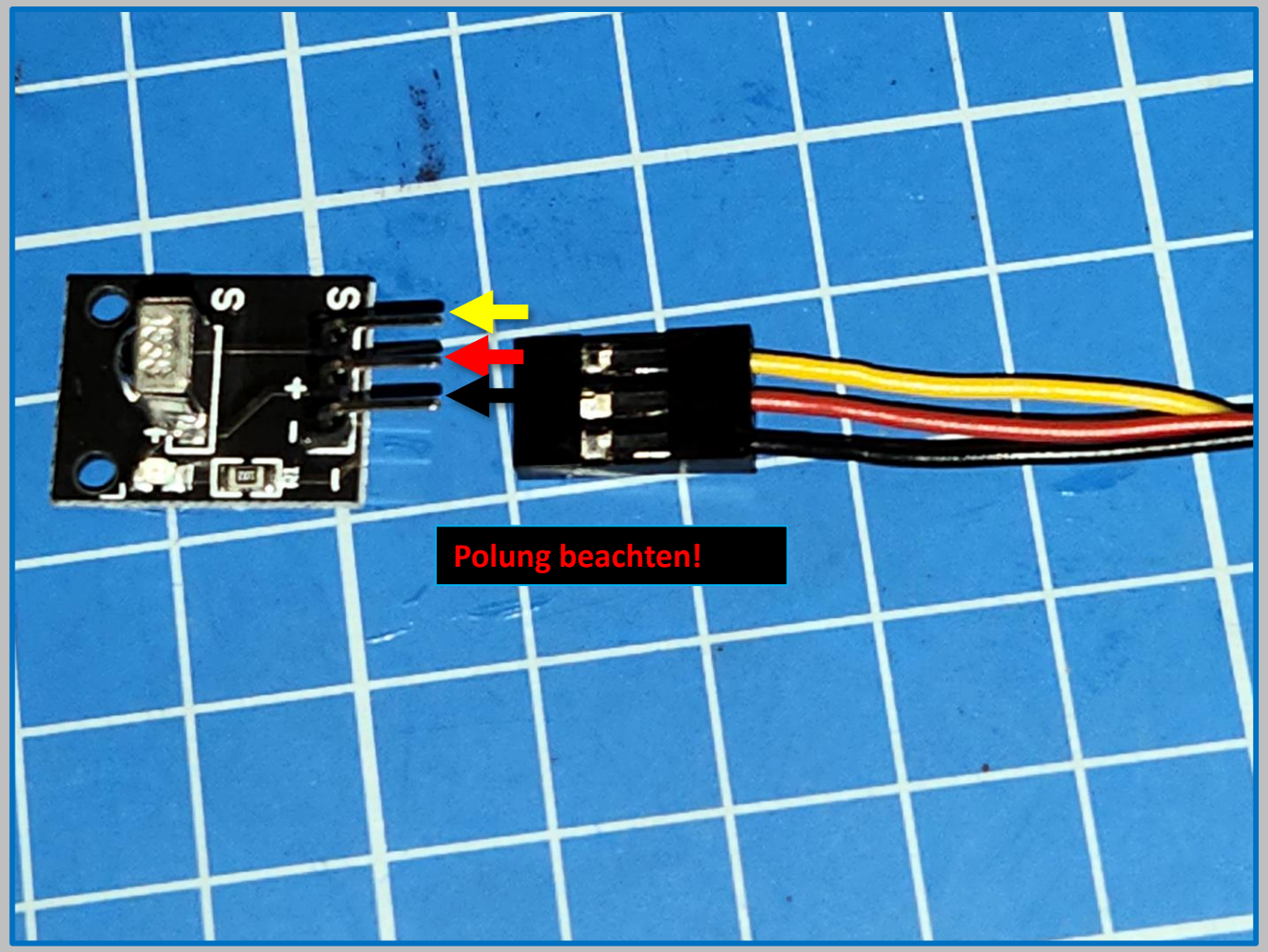
Schritt 7



IR-Empfänger und Buzzer

Teile:
IR-Empfänger
Verbindungskabel
Buzzer
Verbindungskabel
Schrauben S6
Abstandshalter A8

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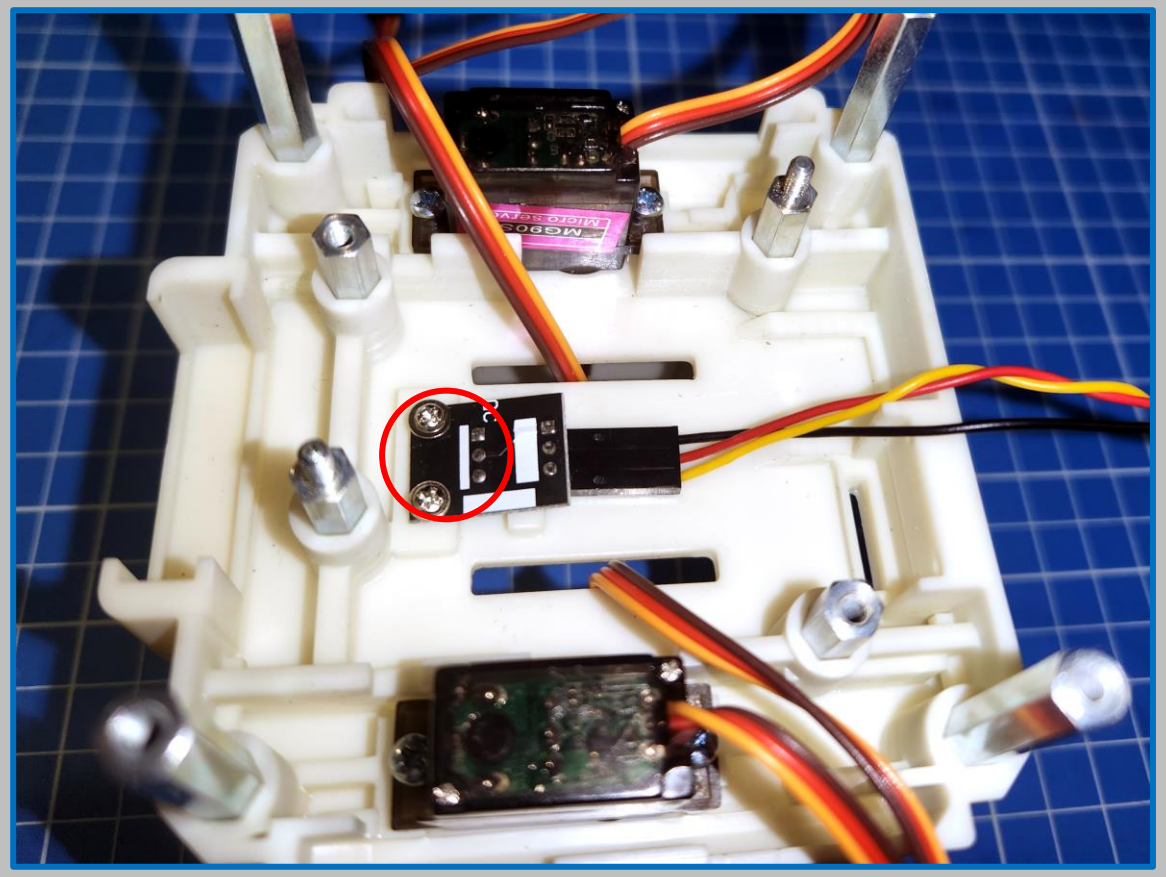
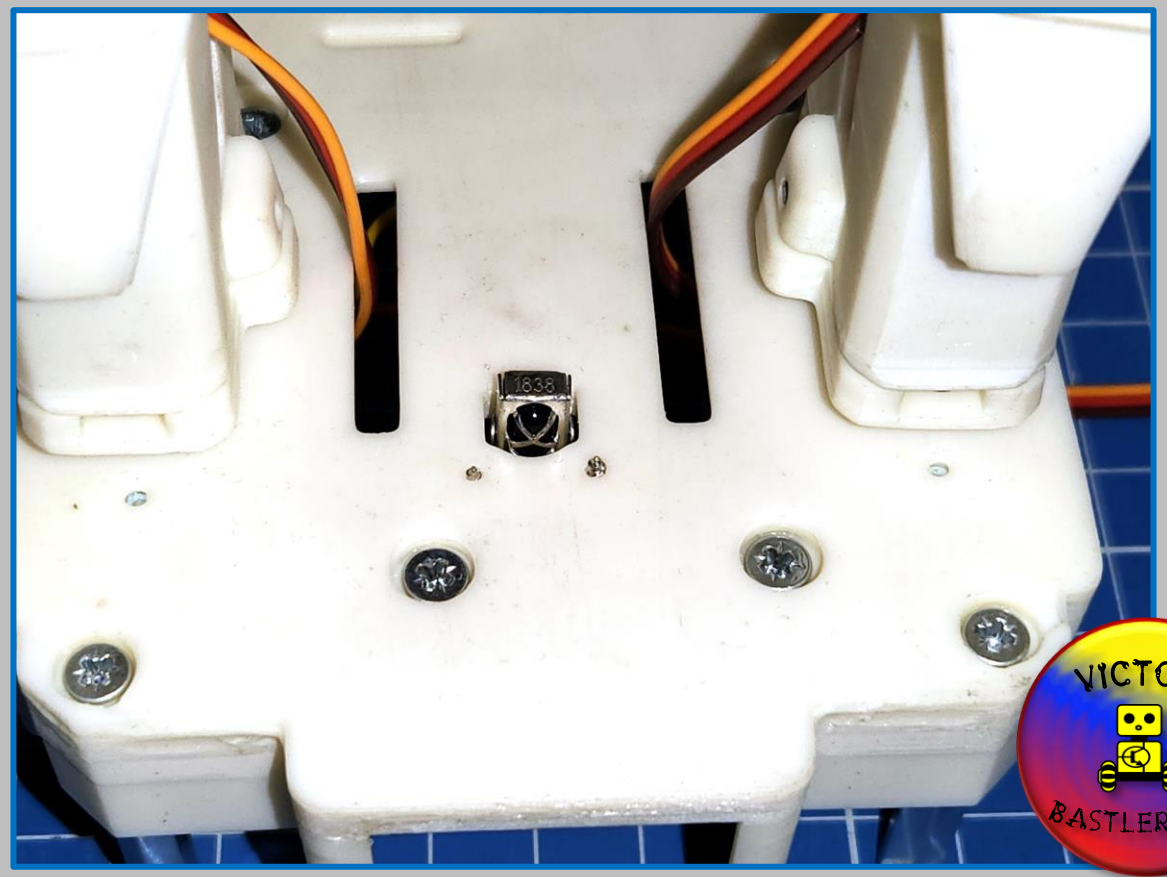
Schritt 7

IR mit Schrauben S6 befestigen



Ansicht von unten



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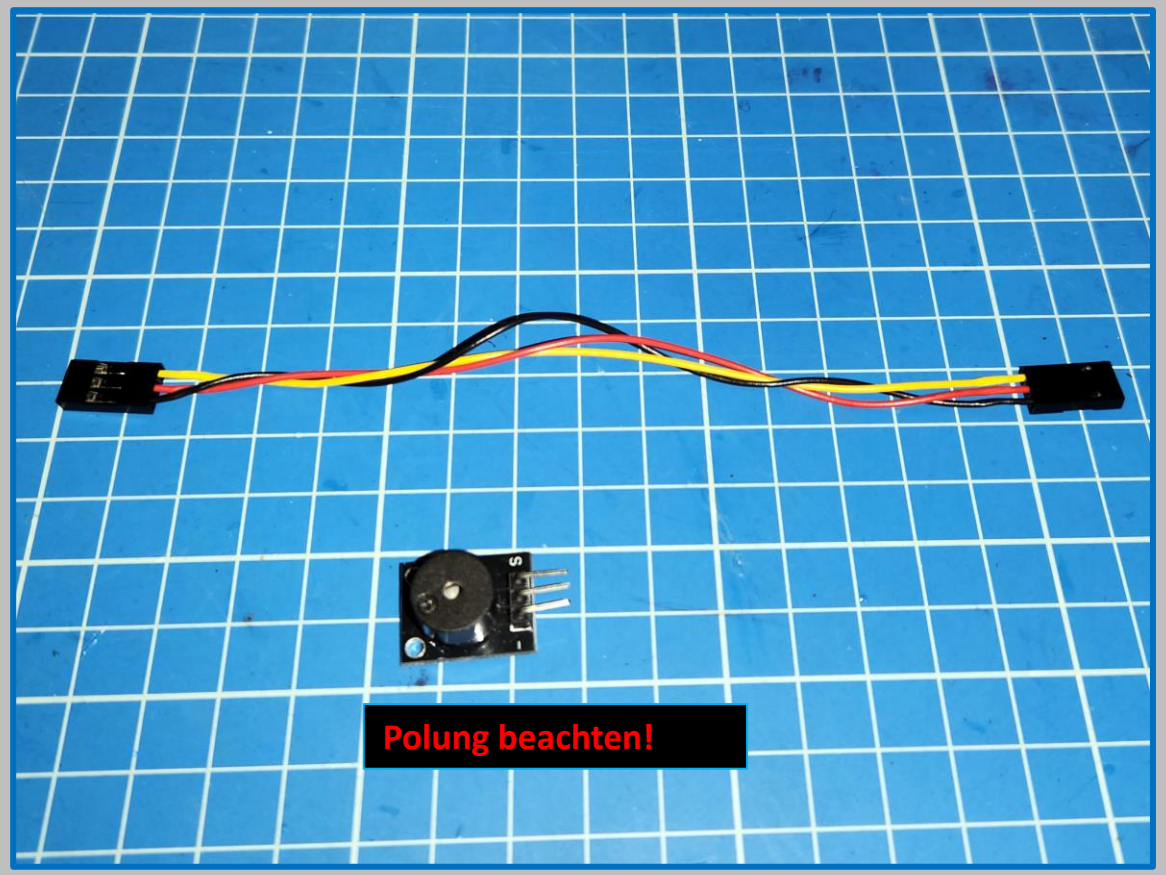
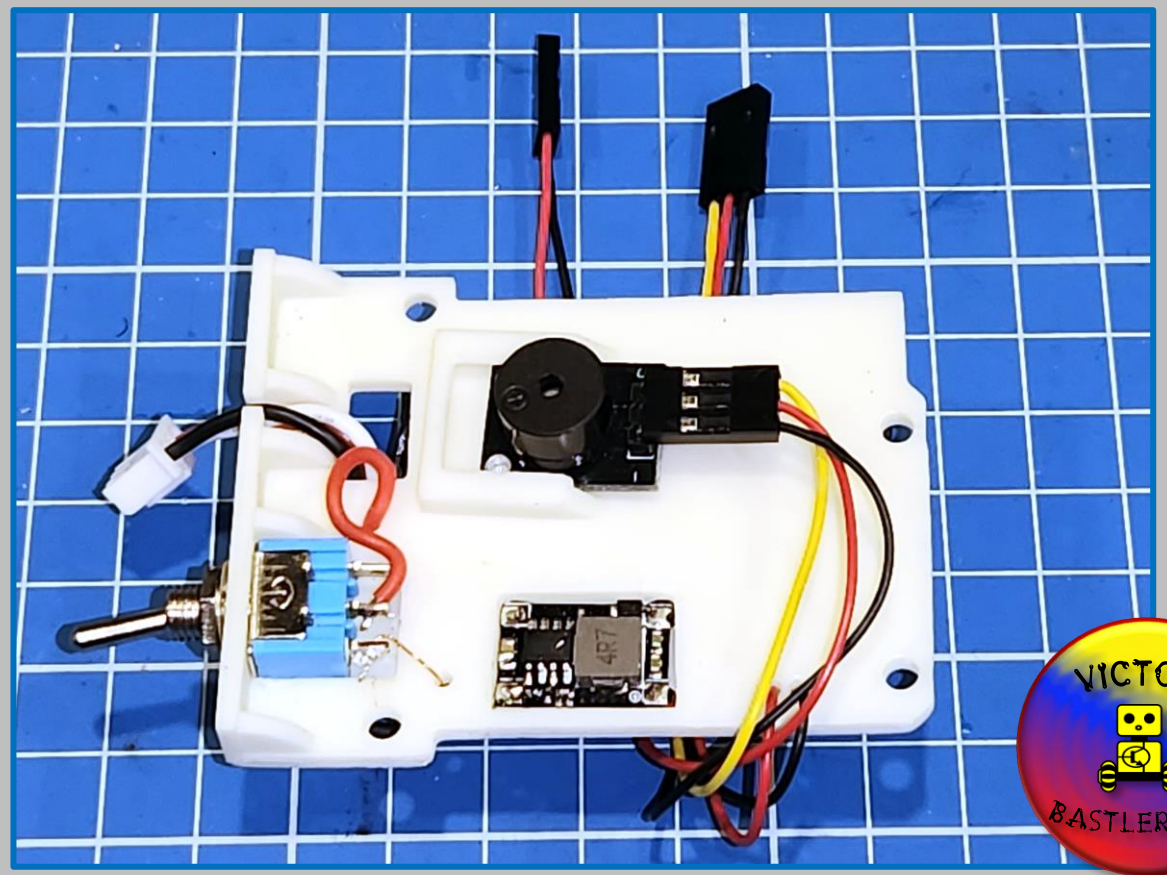
Schritt 7

Buzzer mit Verbindungskabel verbinden



Buzzer in Akkuplatine stecken



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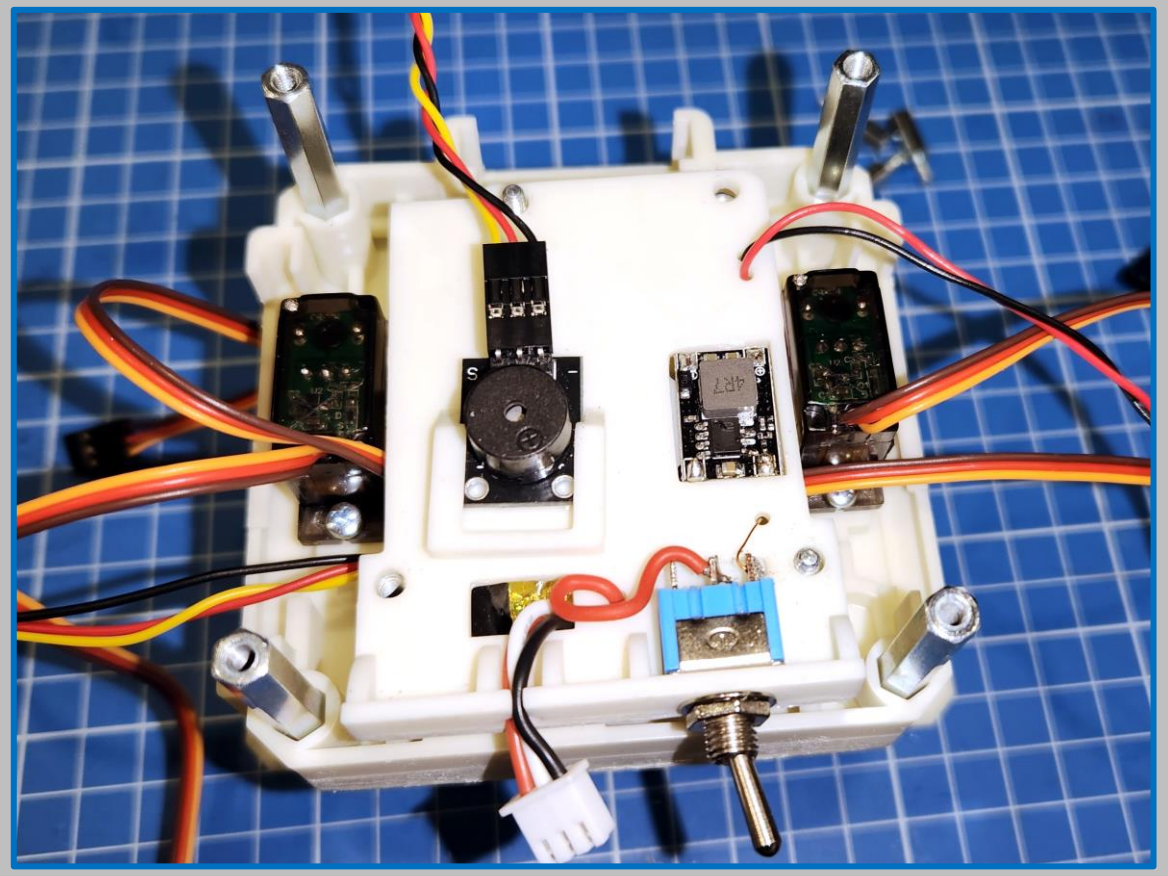
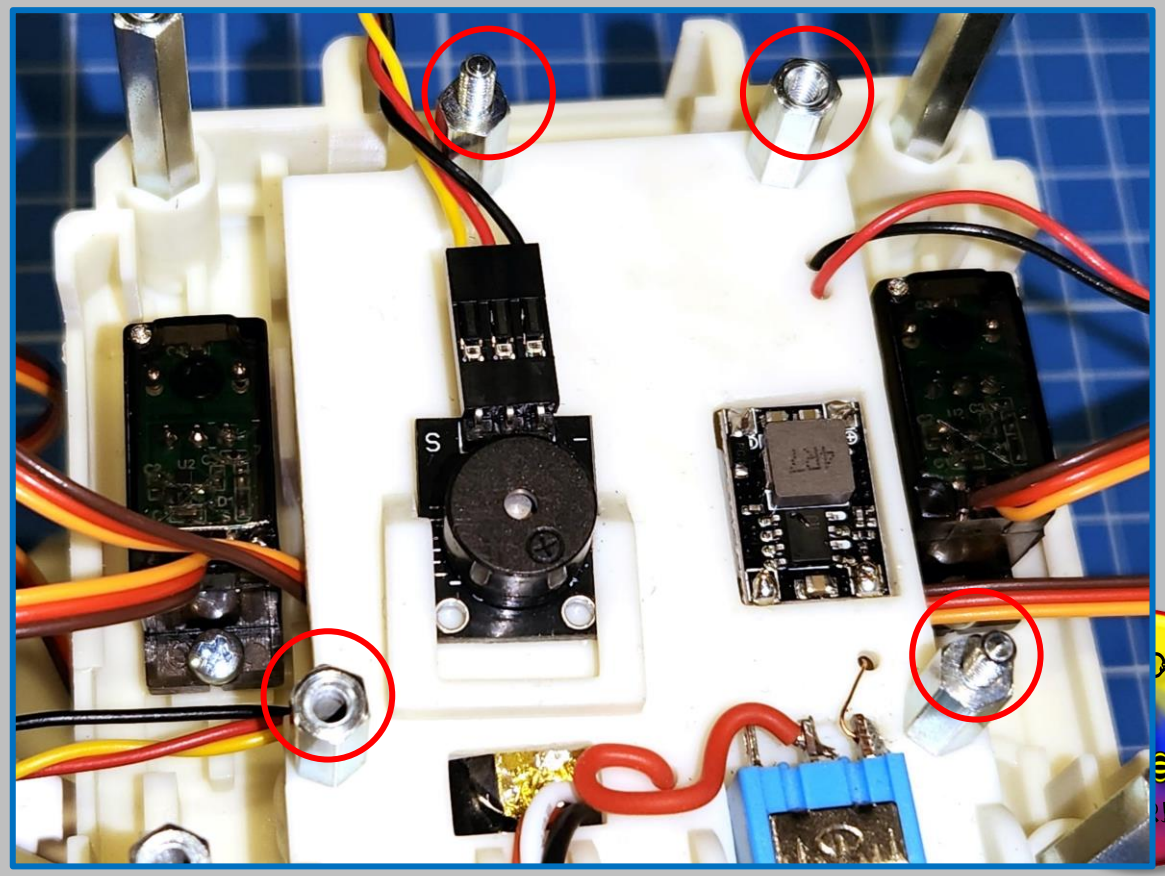
Schritt 7

Akkuplatine auf Grundkörper stecken

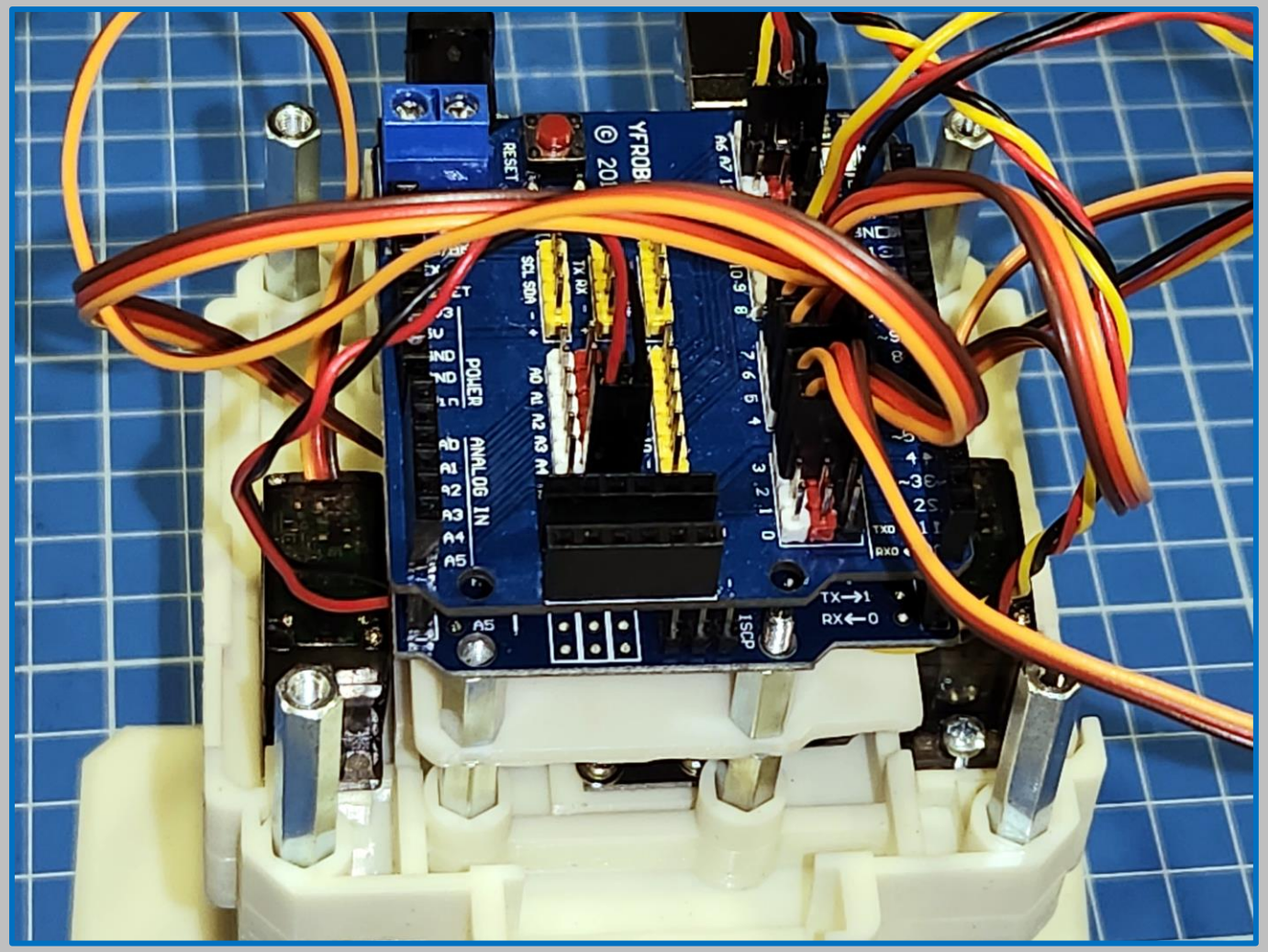


Abstandshalter A8 aufschrauben



VIKY

Schritt 8



Montage und Verkabelung Shield und Arduino

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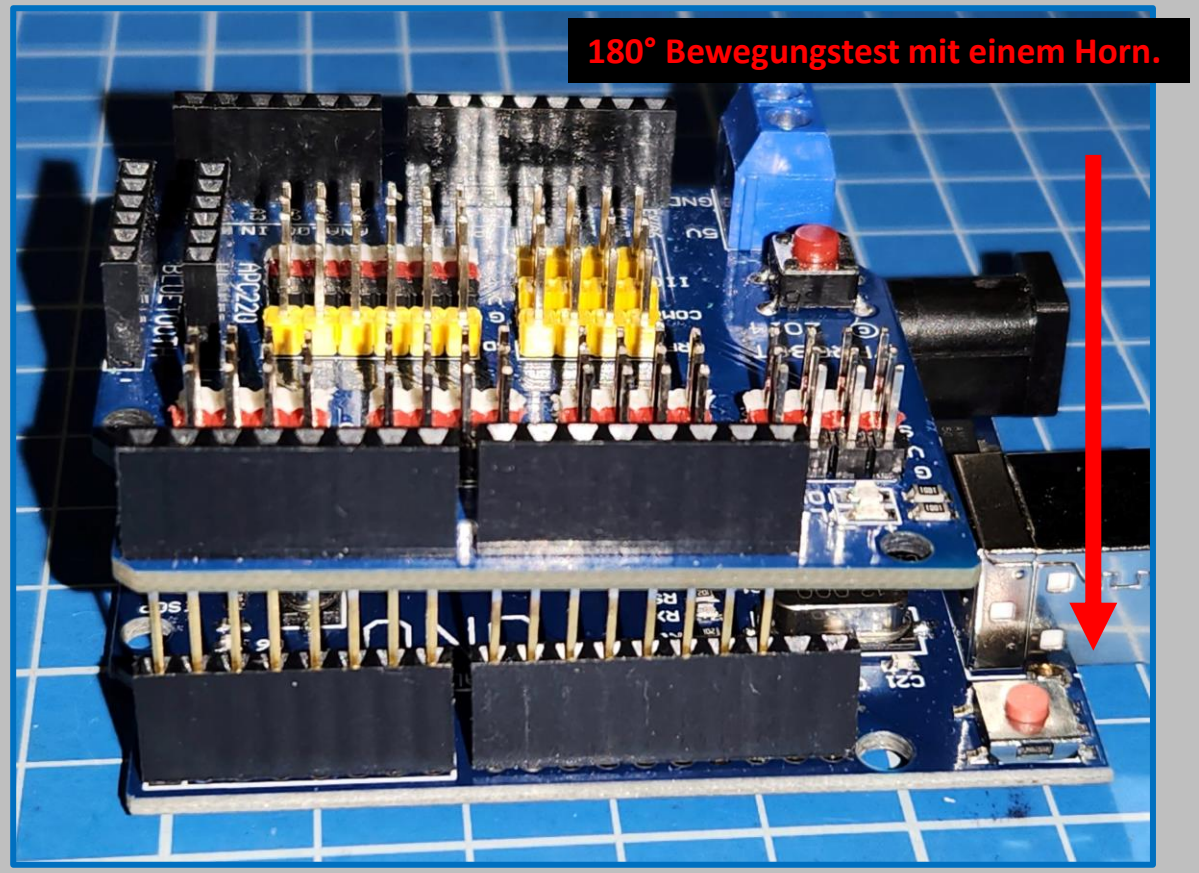
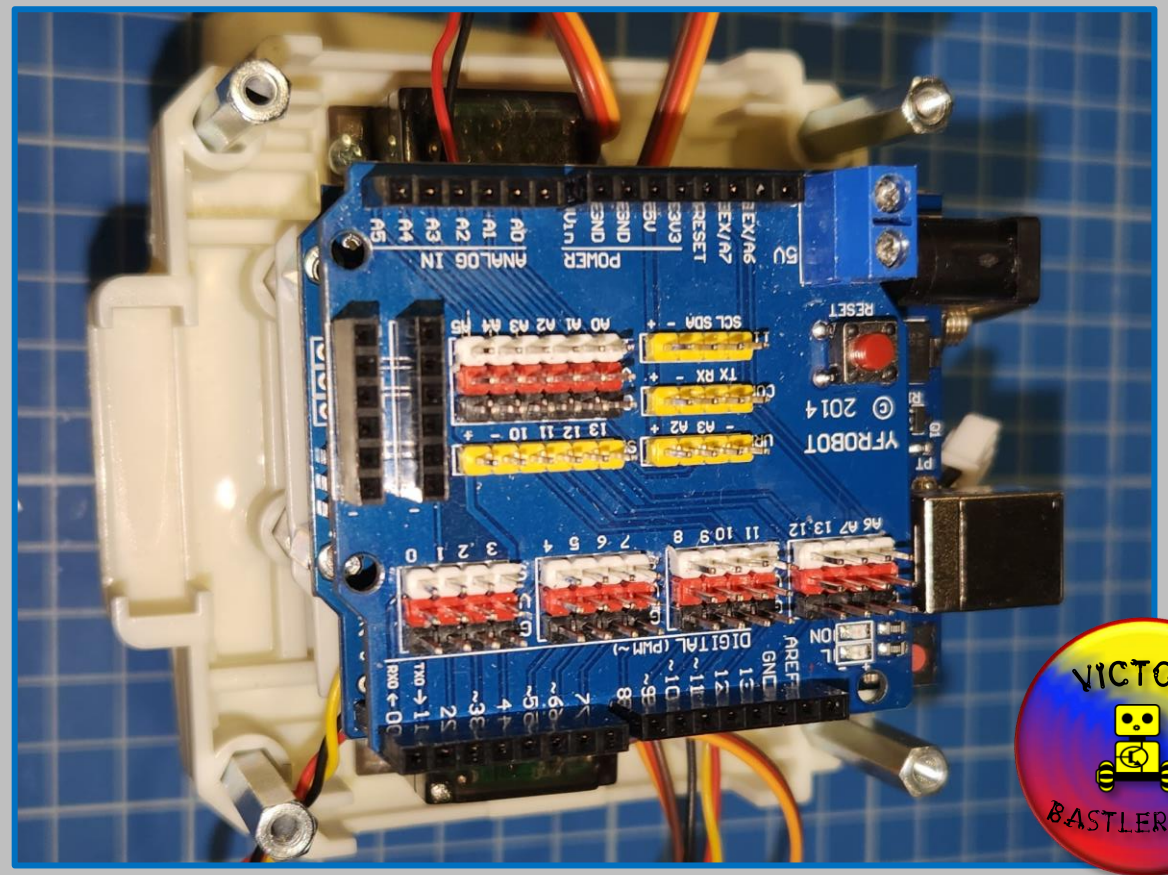
Schritt 8

Shield auf Arduino Uno stecken



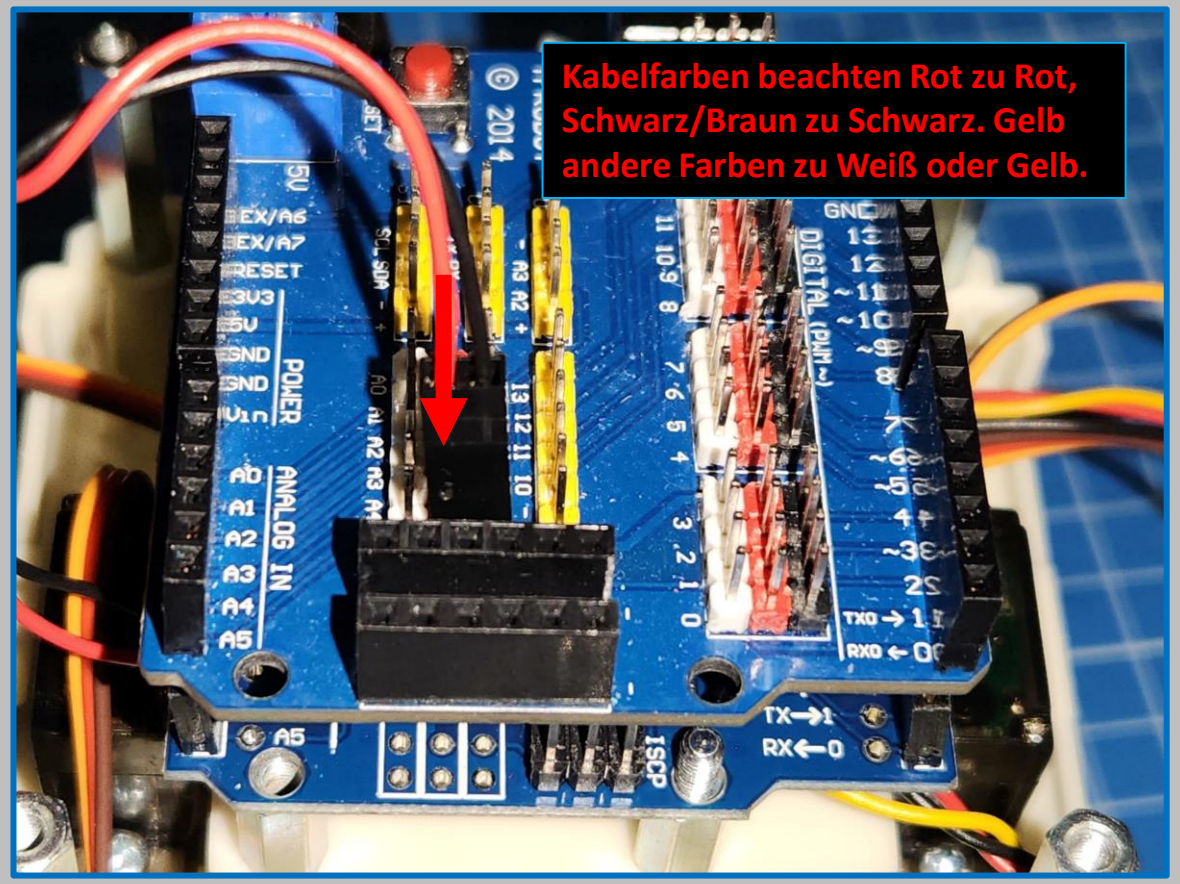
Shield + Arduino auf Baugruppe Grundkörper stecken

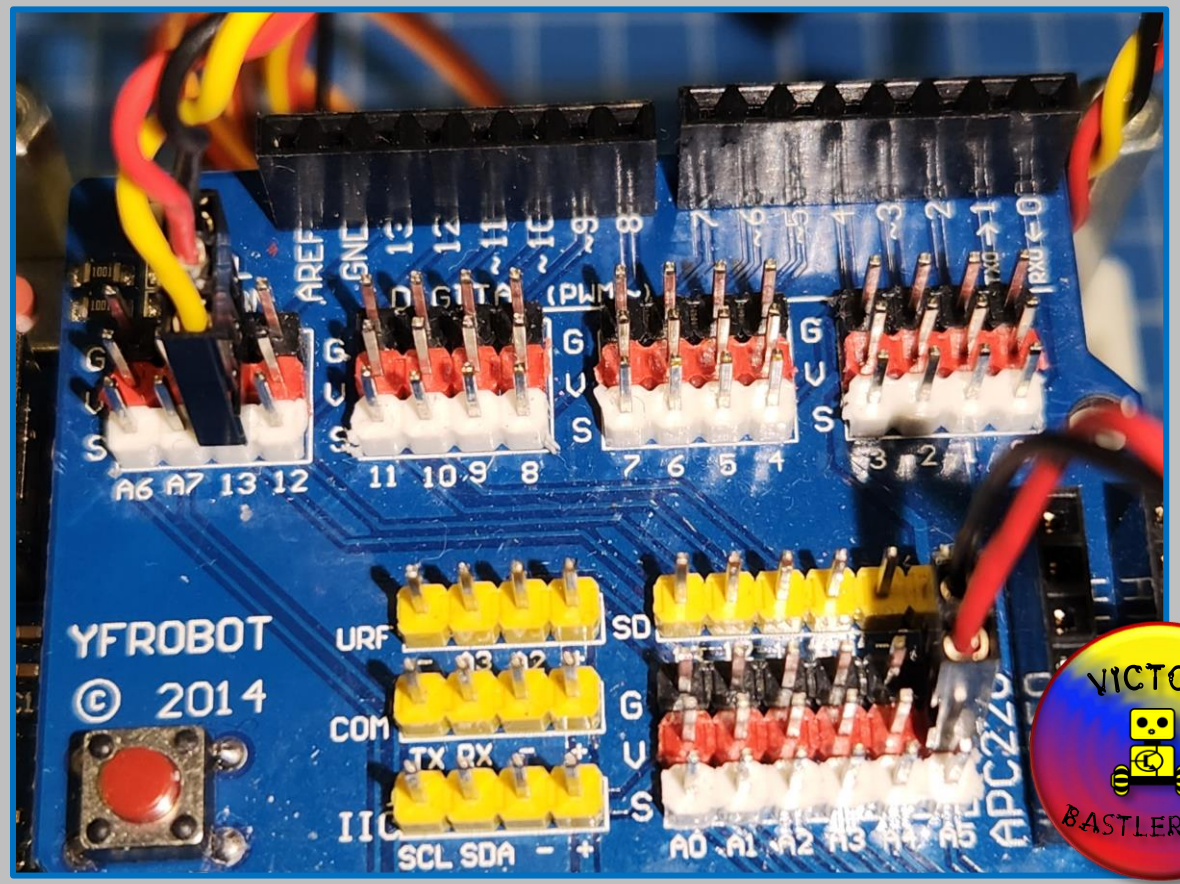


VIKY

Schritt 8

Verkabelung, Polung beachten!





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Schritt 8

Pinbelegung, Polung beachten!

LED Matrix

CLK -> A1 (weiß) // Clock Pin

CS -> A2 (weiß) // Chip Select (CS) Pin

DIN -> A3 (weiß) // Data In Pin

Beine und Füße

linkes Bein -> 2

rechtes Bein -> 3

linker Fuß -> 4

rechter Fuß -> 5

Buzzer

Buzzer -> 13

Ultraschallsensor

Trigger -> 8

Echo -> 9

Bluetooth

TX -> 11

RX -> 12

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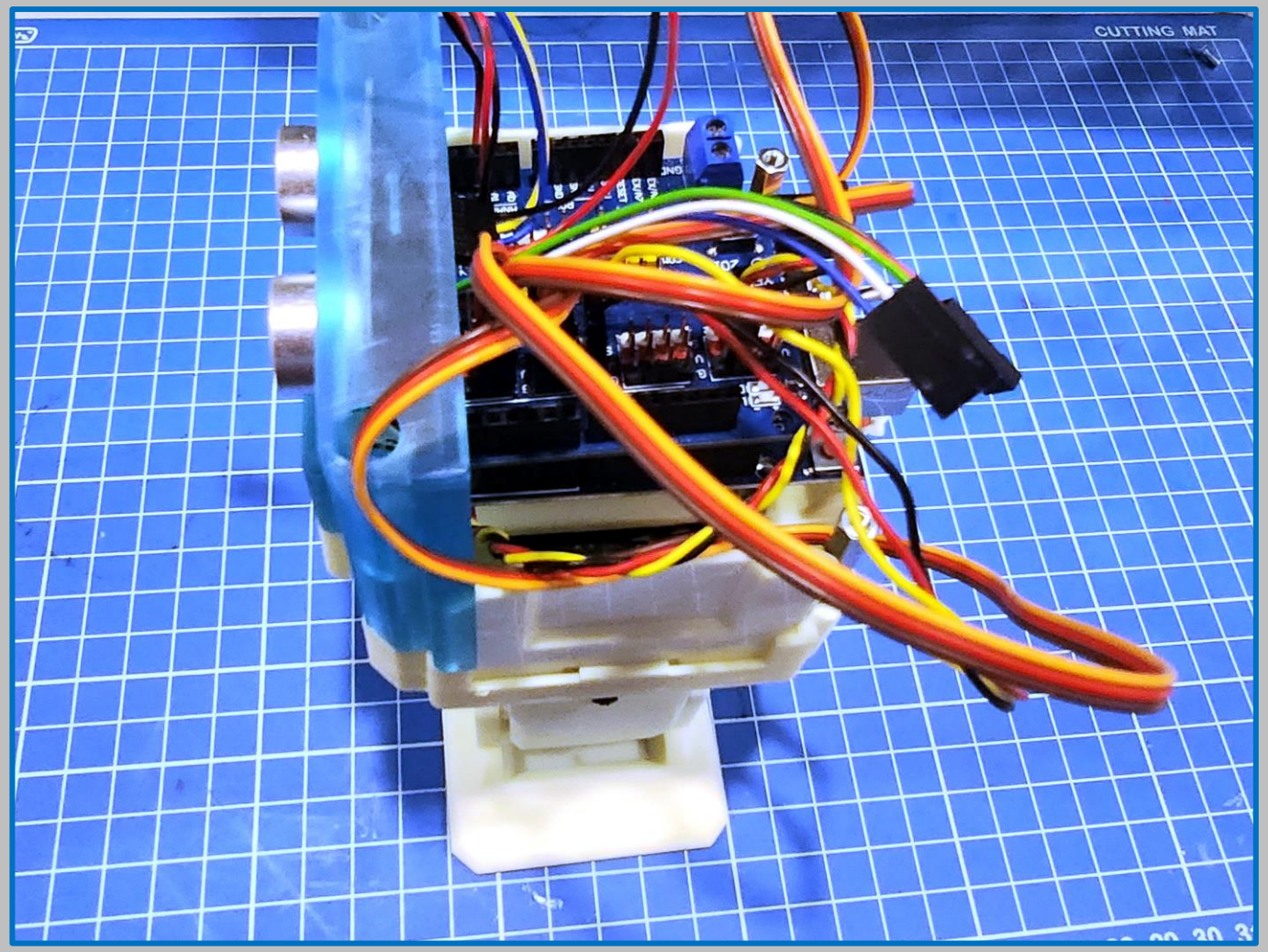
Schritt 9



Endmontage

Teile

Schrauben L5

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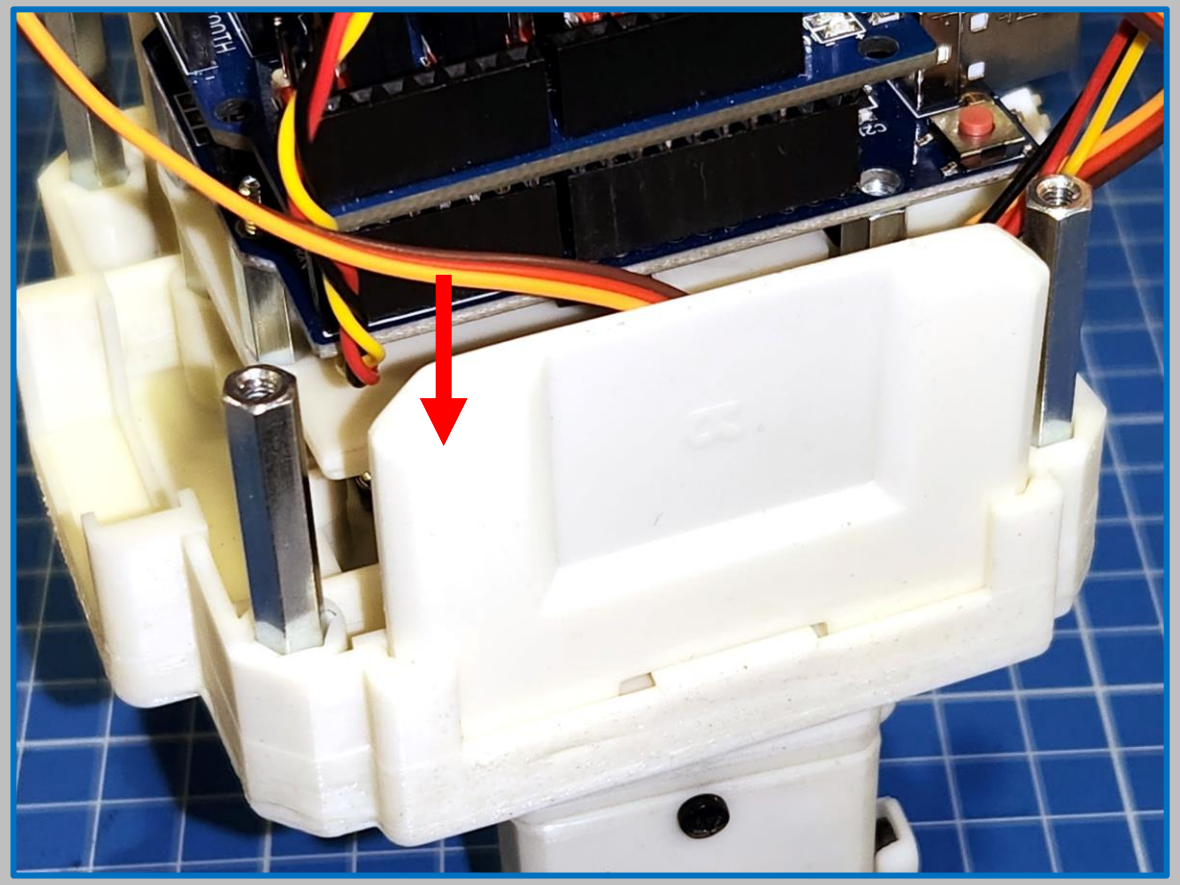
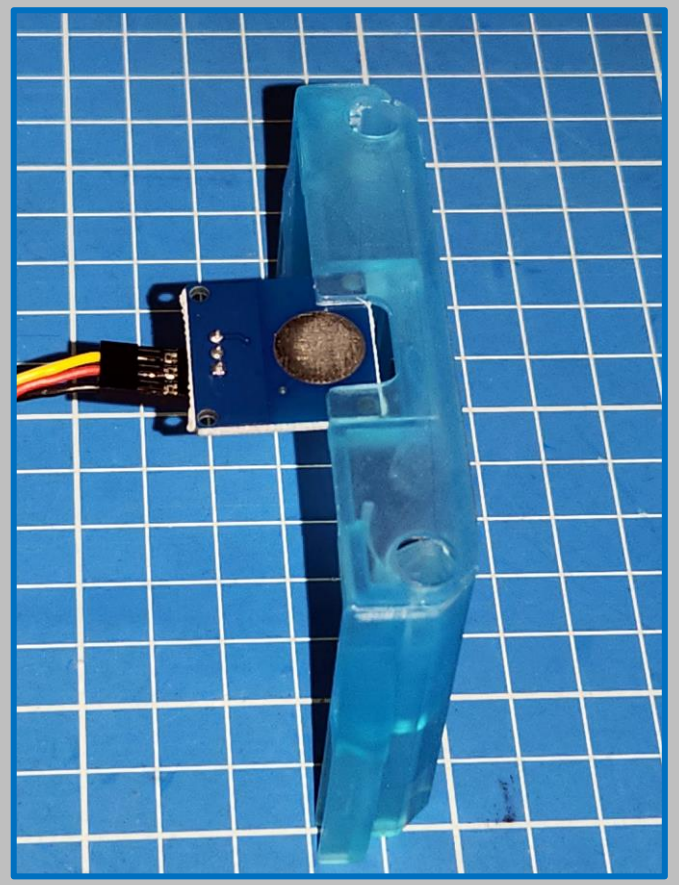
Schritt 9

Installation von Seitenteilen



Touchsensor mit Verbindungskabel verbinden
In Hinterteil stecken



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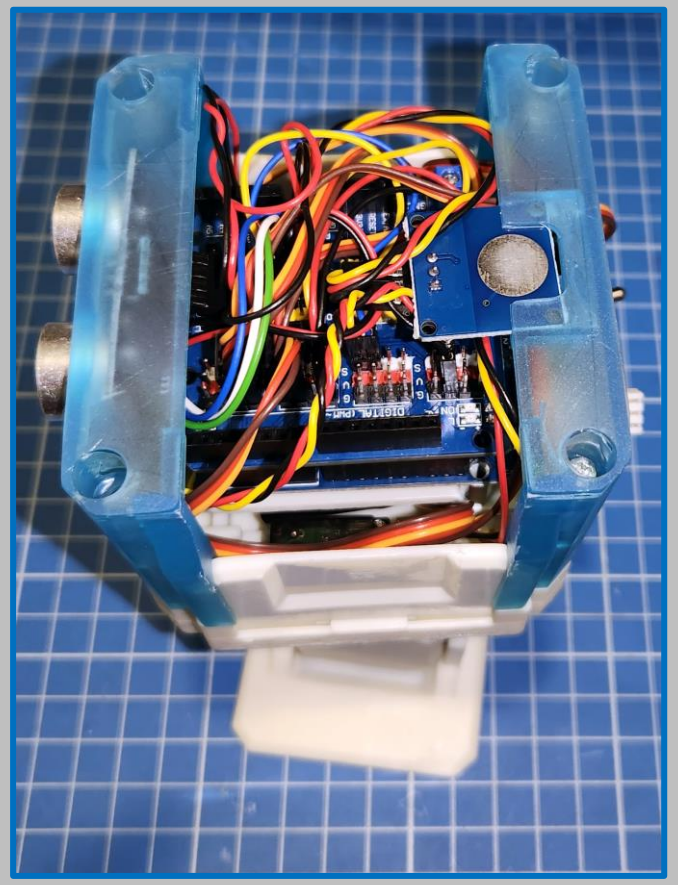
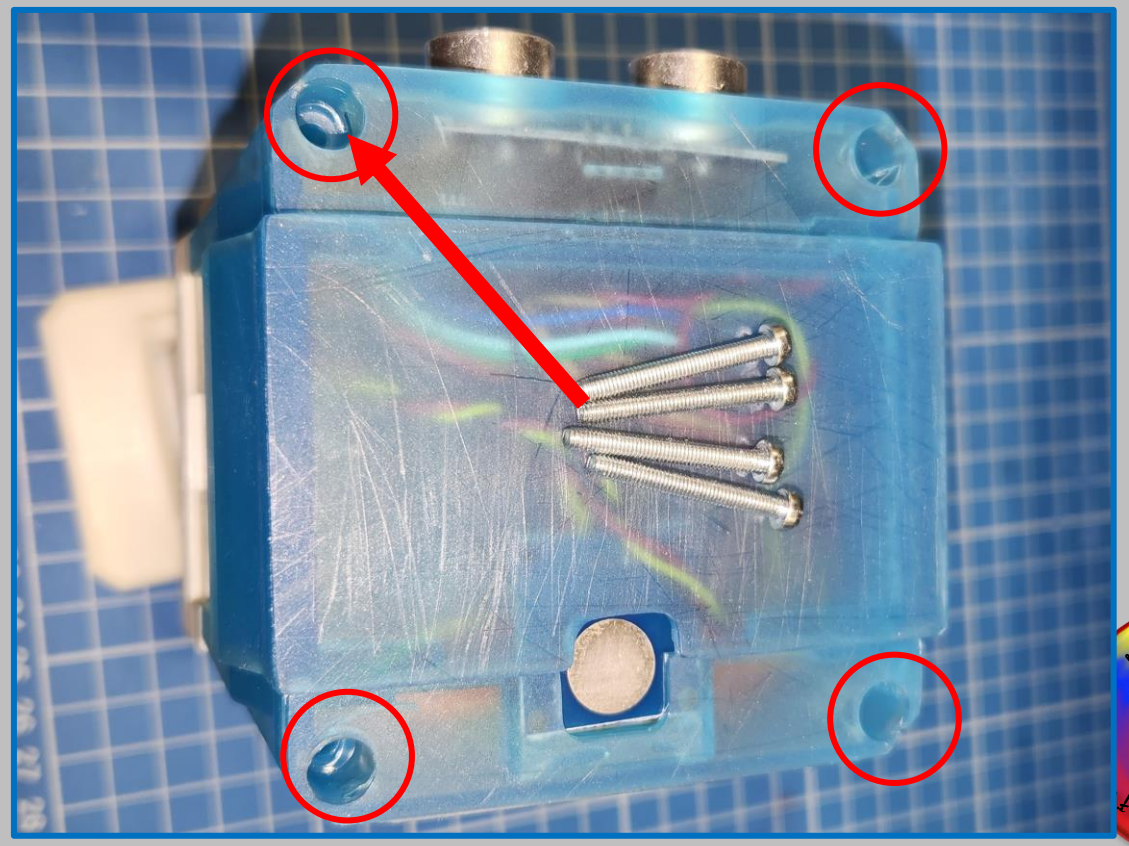
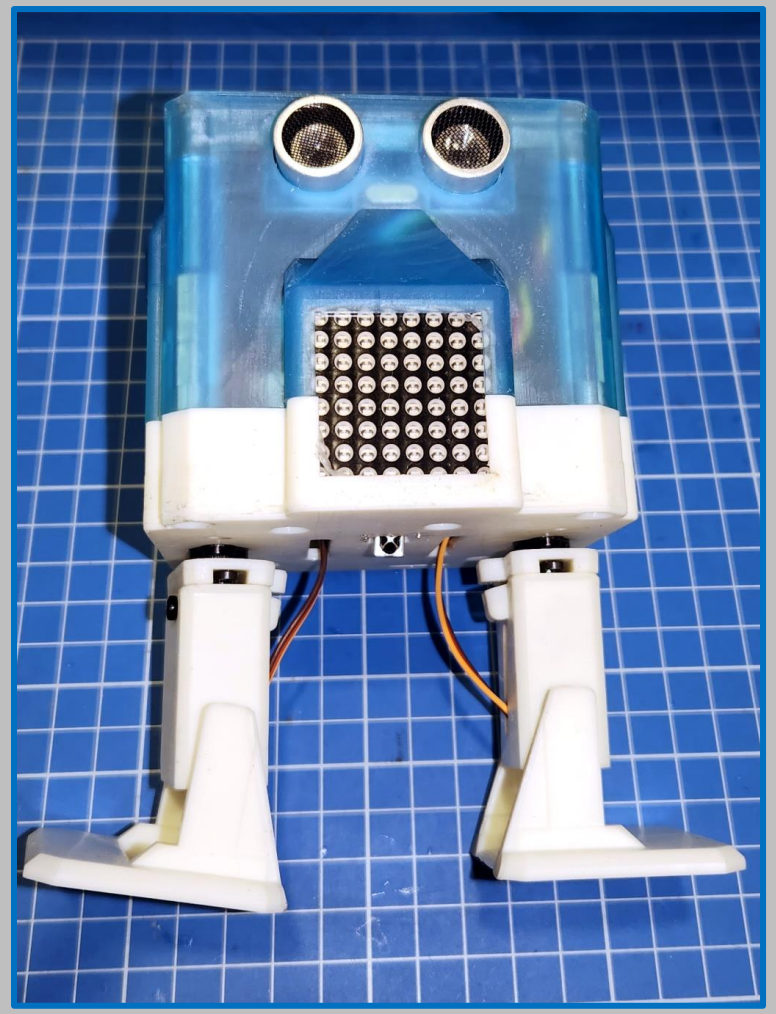
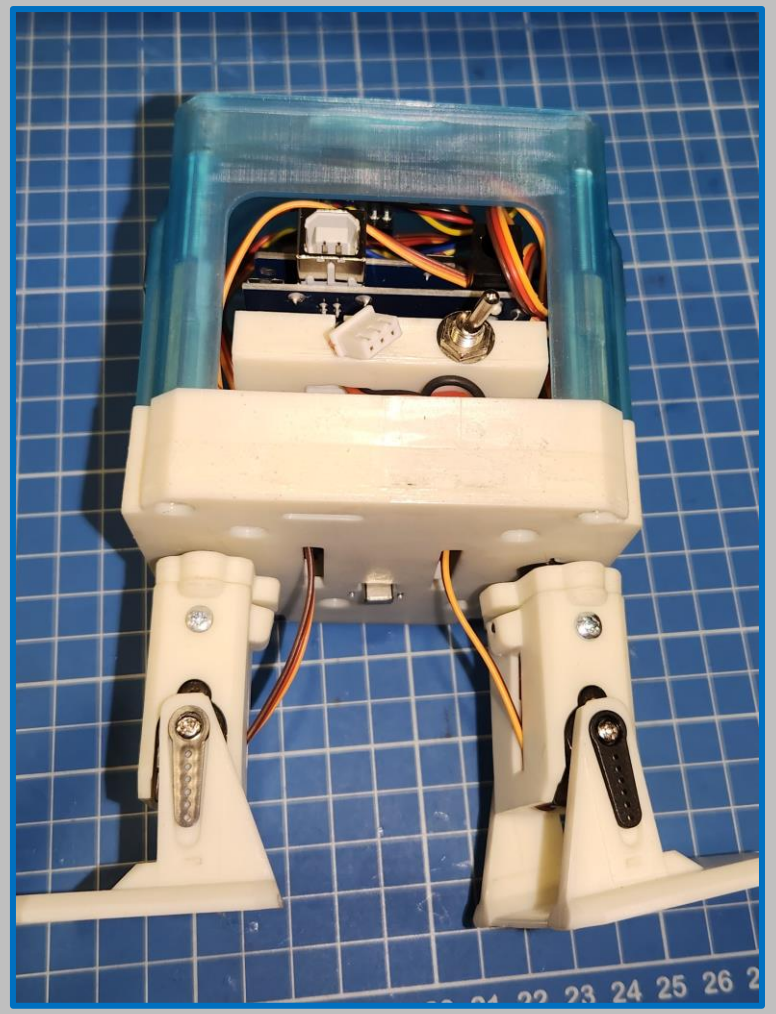
Schritt 9

Installation von Hinterteil



Mitteilteil einsetzen
Verschrauben mit Schraube L5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