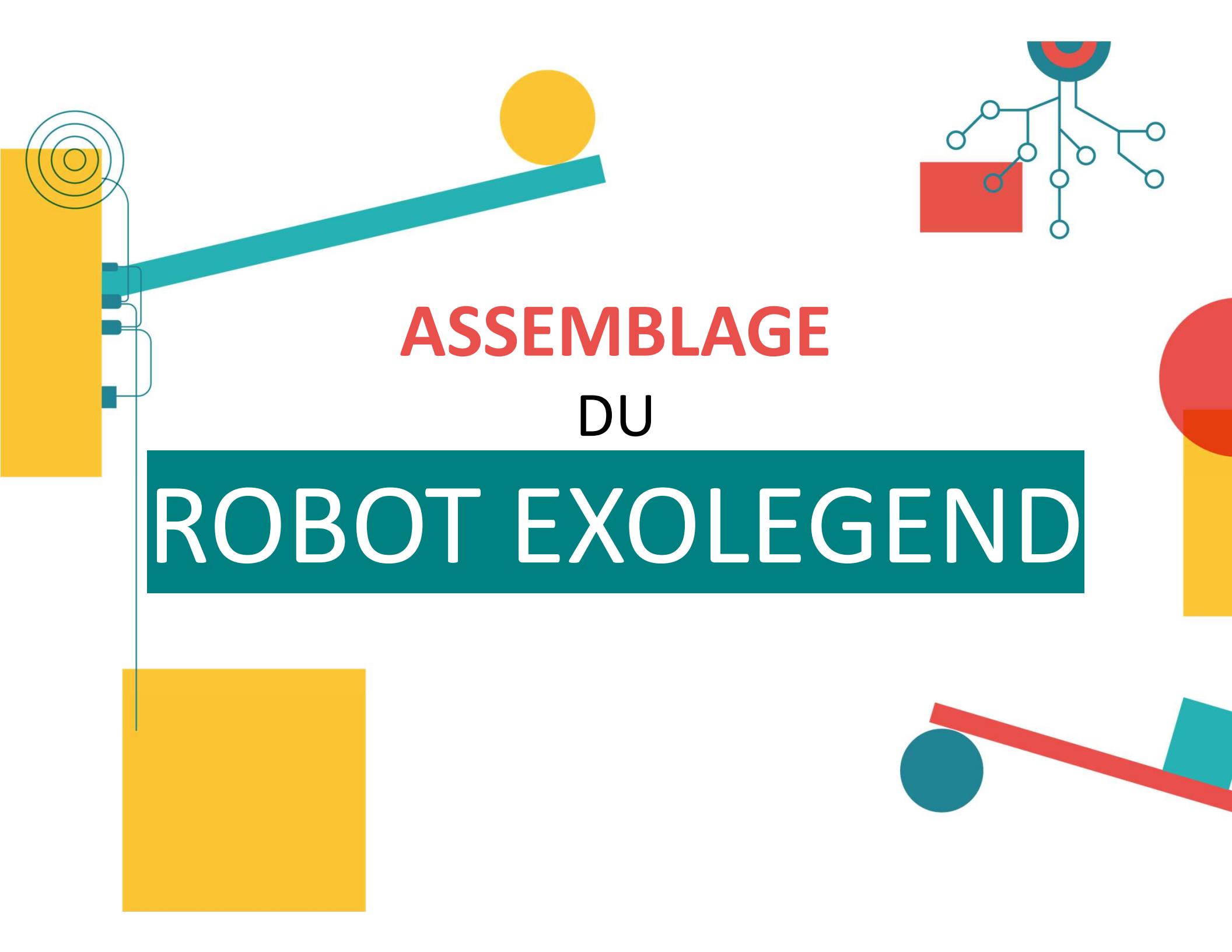


# Exolegend

## H<CK>THON

**Hackathon de programmation robotique** organisé  
par EXOTEC  
31/03 – 02/04 2023

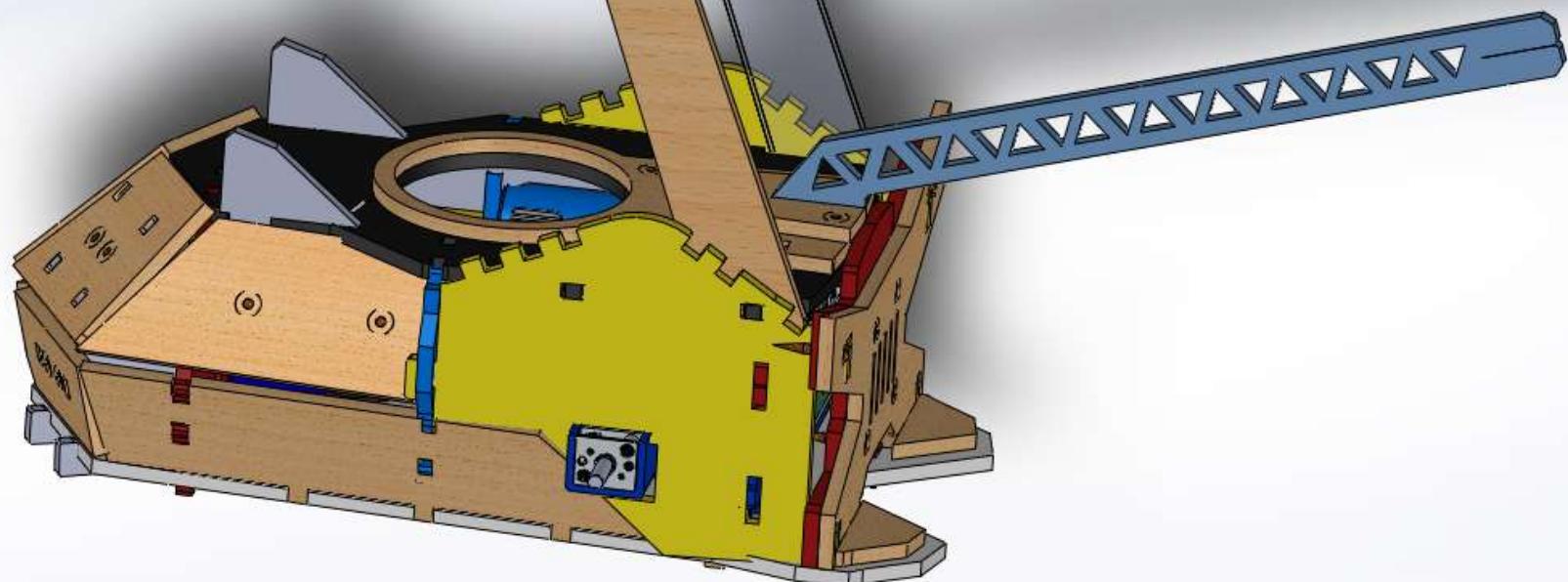


# ASSEMBLAGE DU

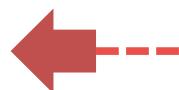
# ROBOT EXOLEGEND

Temps de montage : 1h30

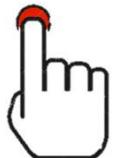
- 1 kit puzzle
  - 2 roues
  - 2 pneu
  - 1 patin clouté
  - 24 cure-dents
  - 1 sticker
  - 1 carte électronique
  - 1 feuille A4
- 
- 1 pince coupante
  - 1 pince
  - 1 tournevis
  - De la colle



# LEGENDE



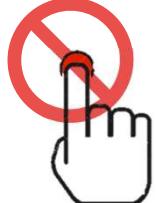
Positionner / insérer dans cette direction



Appuyer légèrement



Appuyer fortement



Ne pas appuyer ici : risque de casse.



point de vigilance

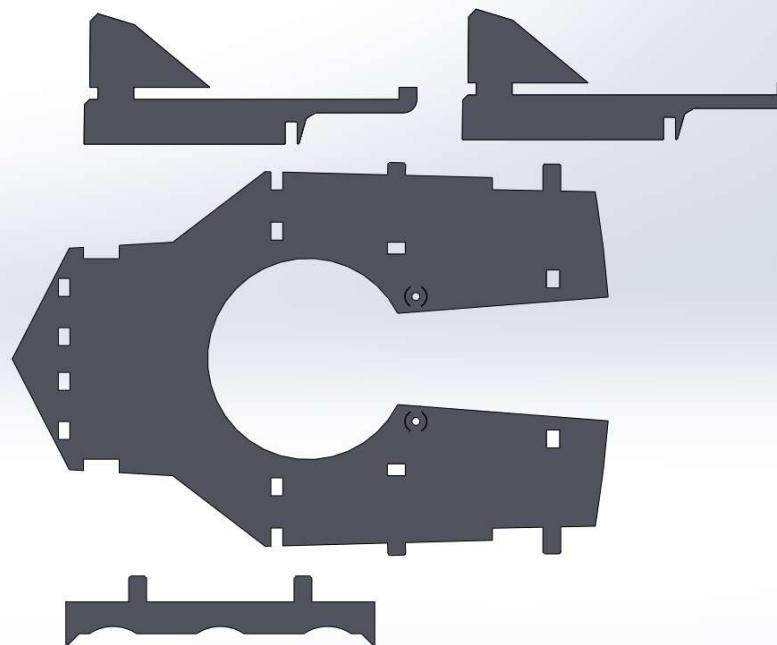


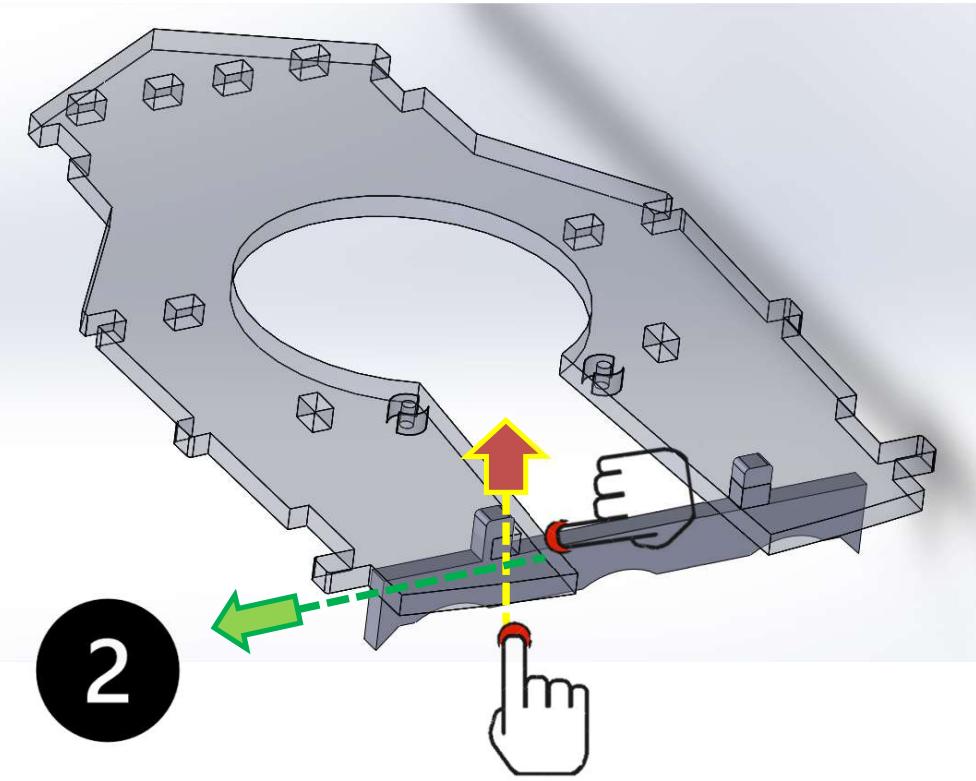
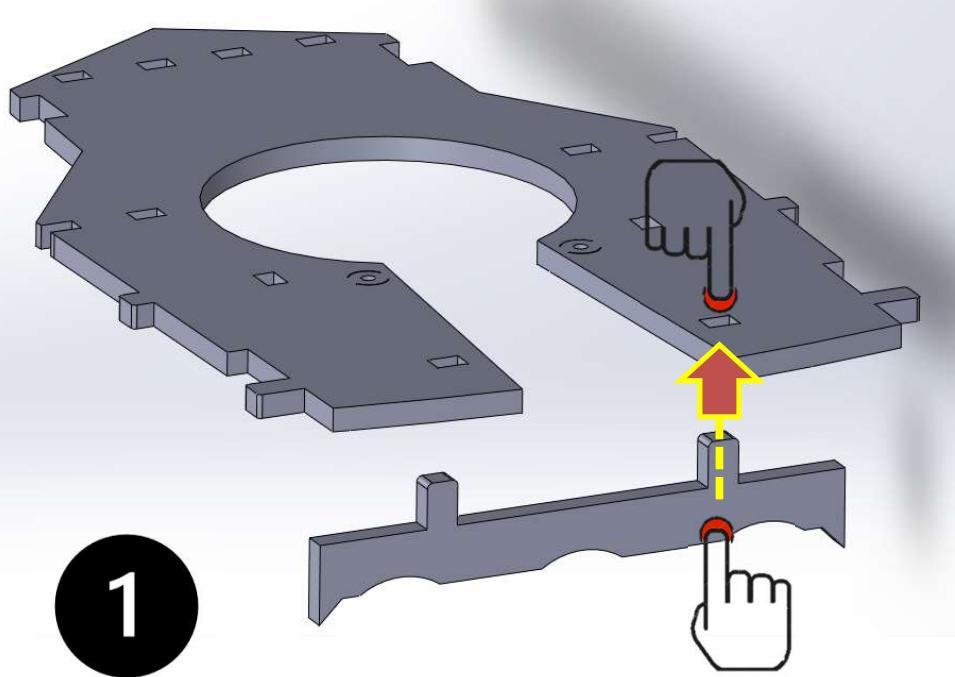
Utiliser une pince



Tips, indication, conseil

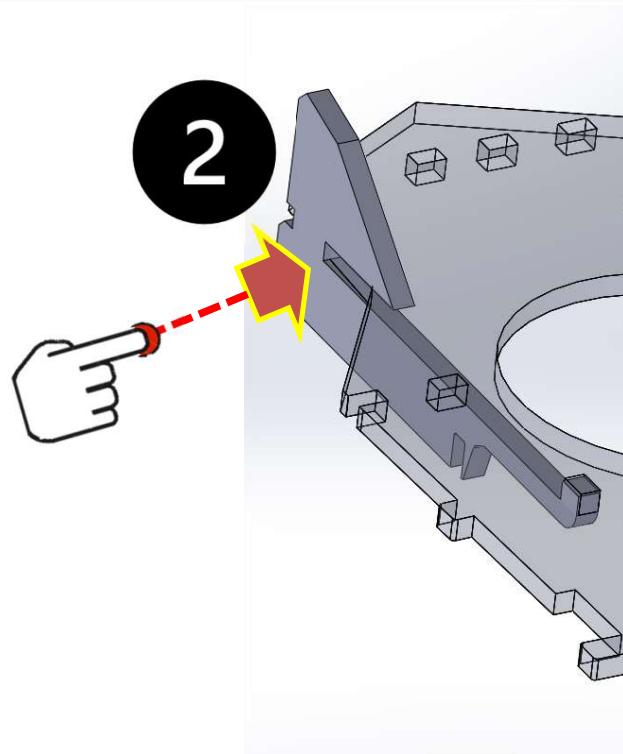
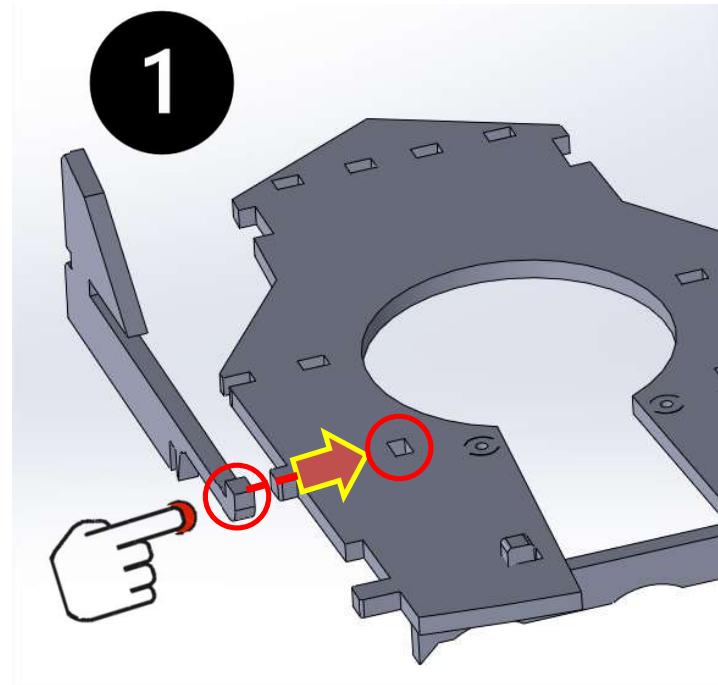
# ASSEMBLAGE DU CAPOT SUPERIEUR



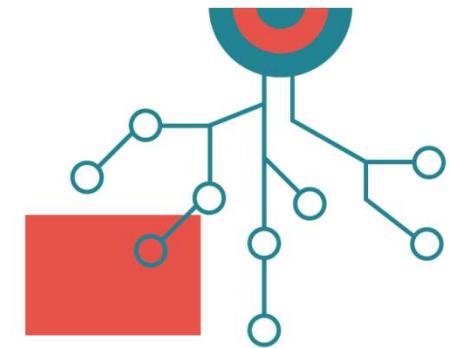
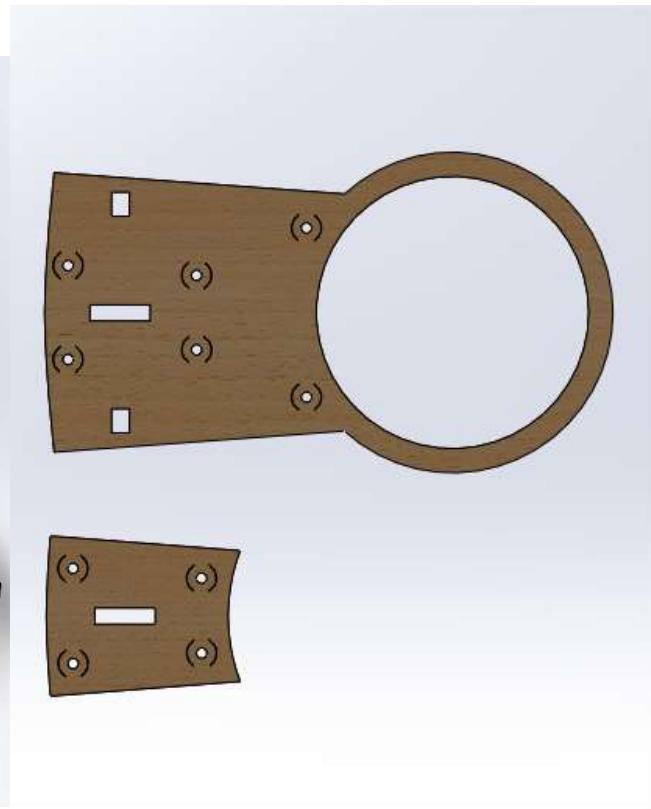
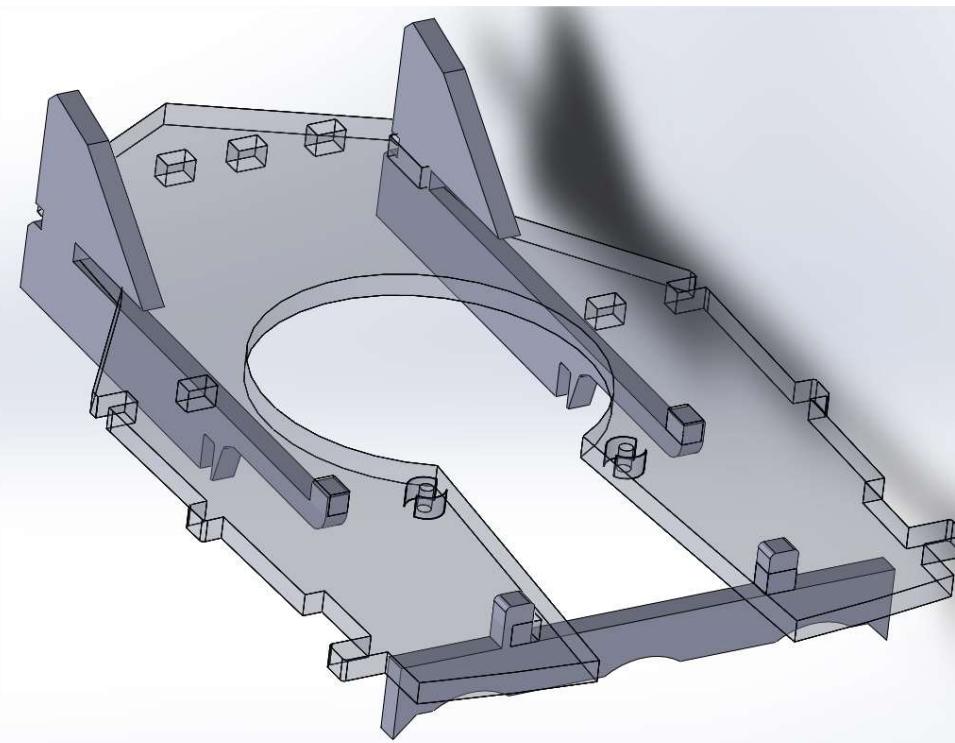


ne pas forcer, juste décaler  
pour que ca rentre (flèche  
verte)

VIDEO a regarder  
avant de suivre les  
prochaines étapes



# ASSEMBLAGE DU SUPPORT BALLOON

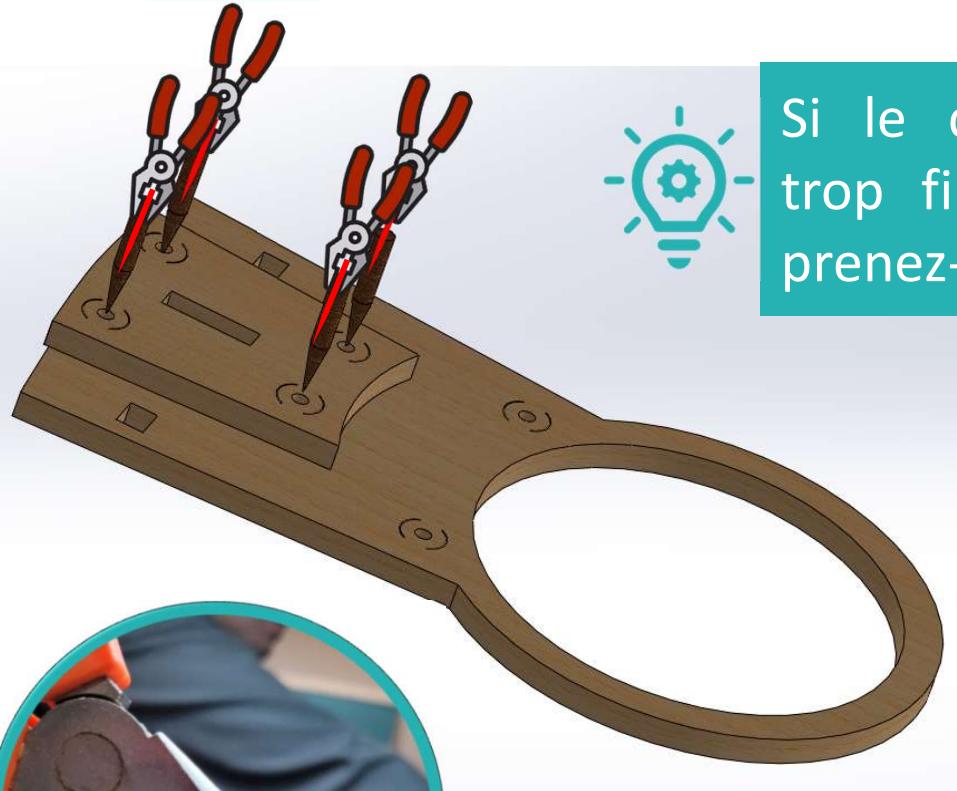




Tenir la partie qui sera coupée pour ne pas se blesser.

1

Enfoncer les 4 cure-dents à la moitié à l'aide de la pince



Si le cure-dent est trop fin, jeter-le et prenez-en un autre !



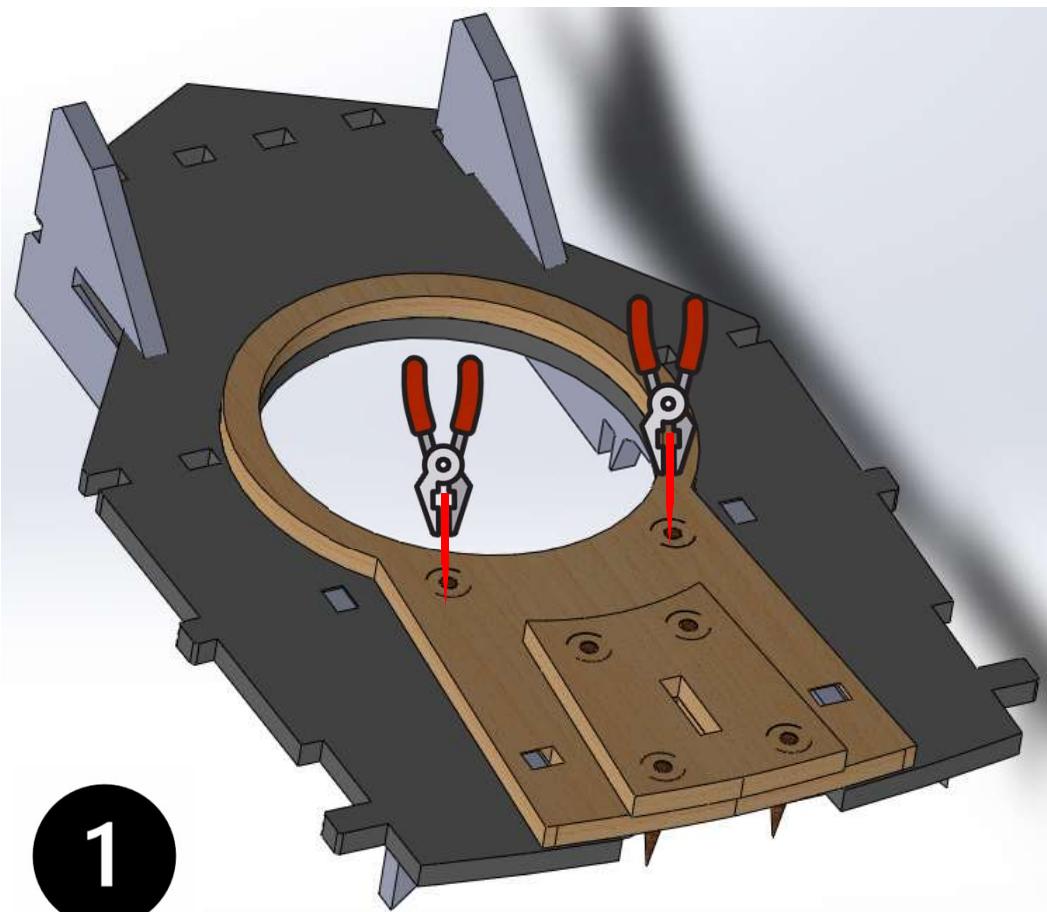
Pincez le cure-dent dans la pince comme ceci ! C'est plus simple.

2

Couper les 4 cure dents de part et d'autre



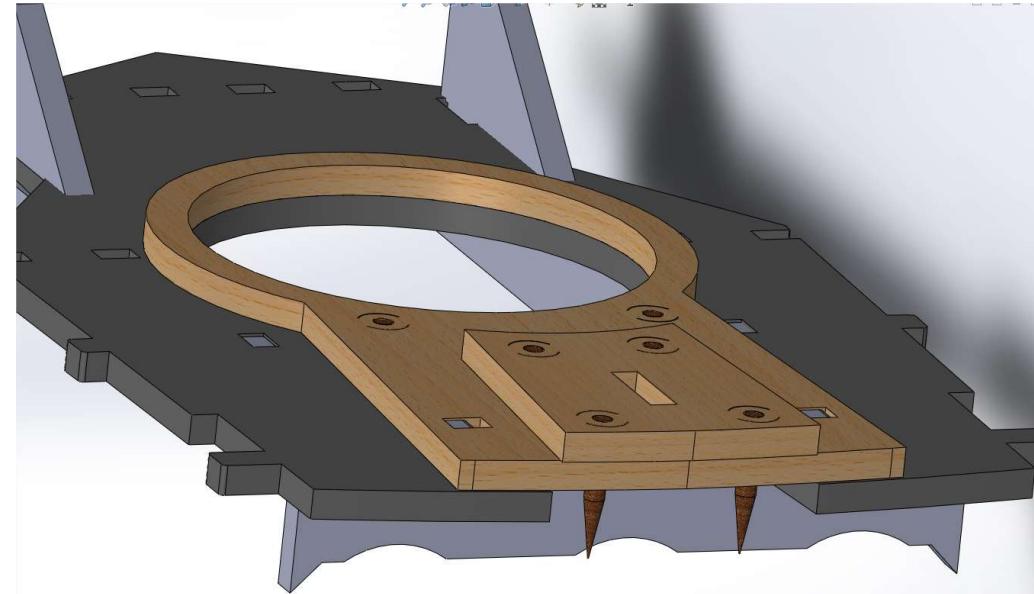
Tenir le cure dent pour ne pas qu'il aille dans vos yeux !



1

Positionner la pièce marron contre la grise puis insérer 2 cure-dent

+ couper les cure dents à raz pour ne pas faire éclater le ballon lors du contact avec le ballon



2

Couper les cure dents à raz pour ne pas faire éclater le ballon lors du contact avec le ballon



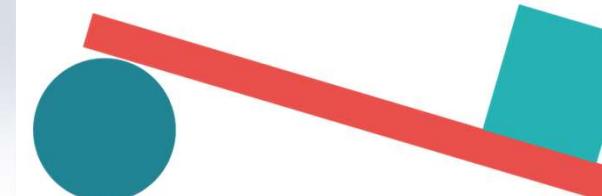
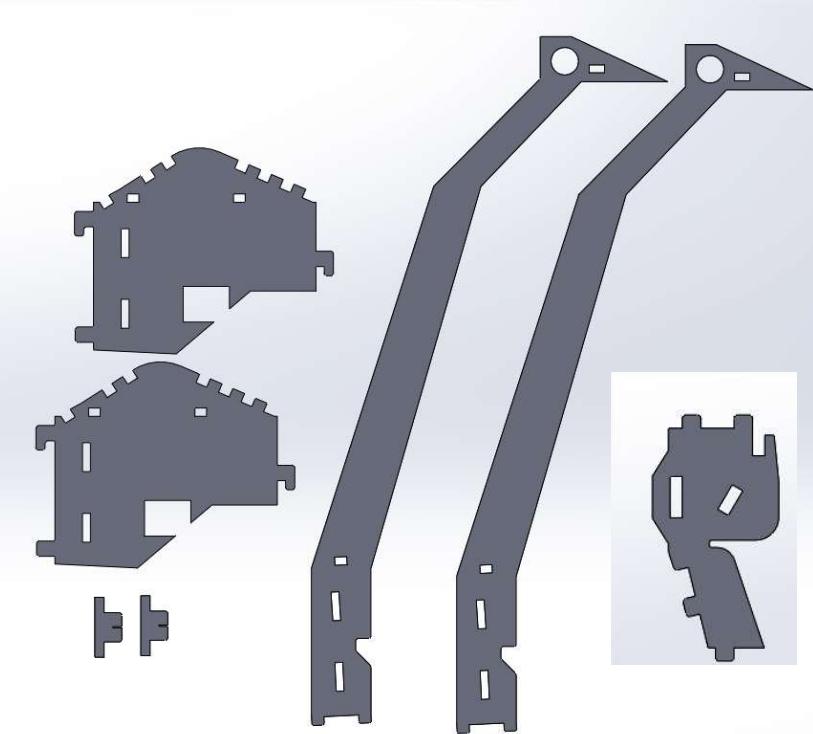
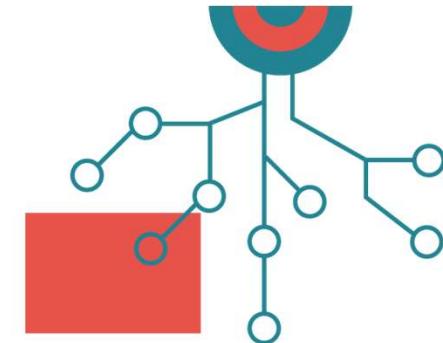
Tenir la partie qui sera coupée pour ne pas se blesser.



# PREPARATION

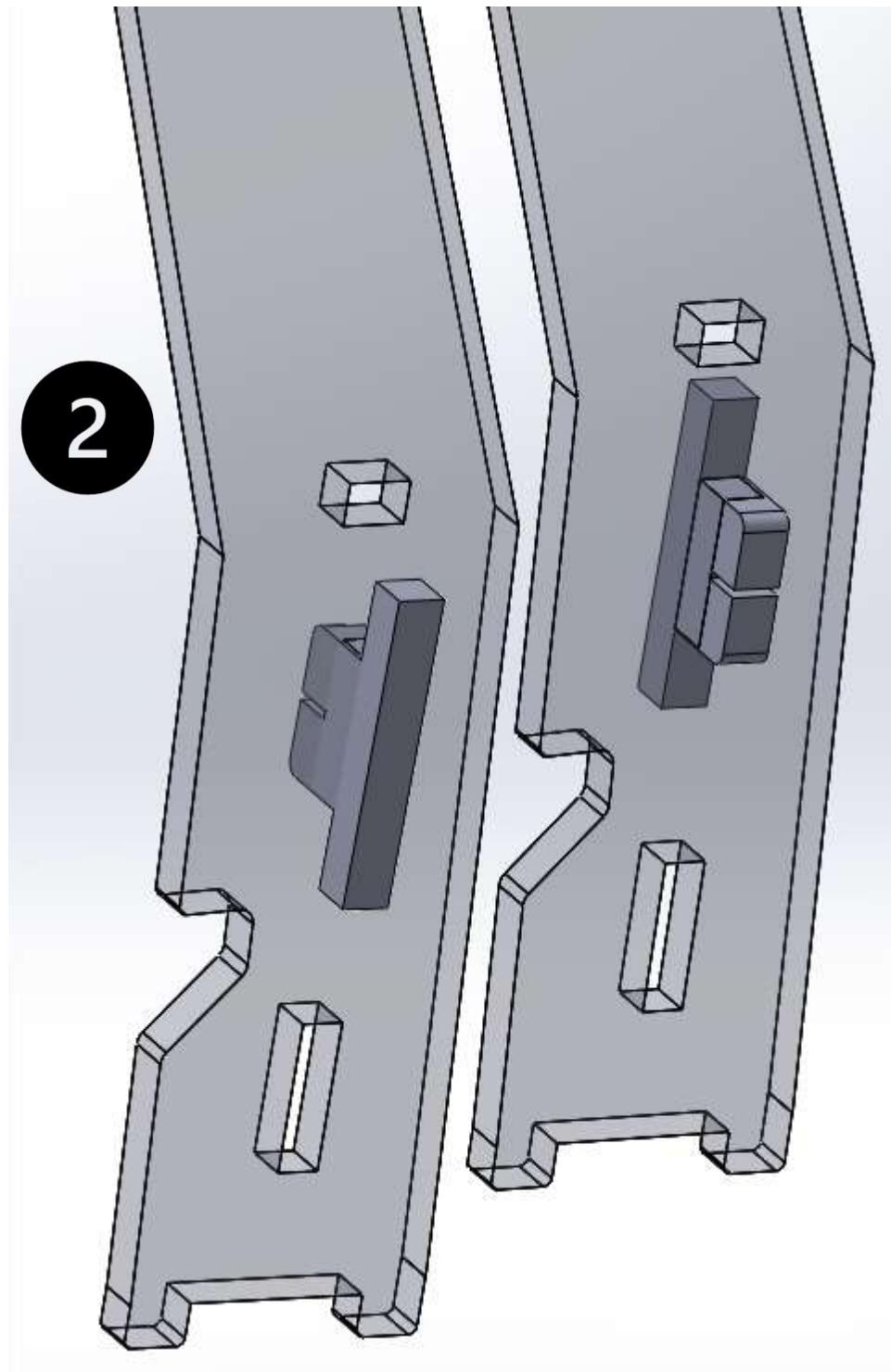
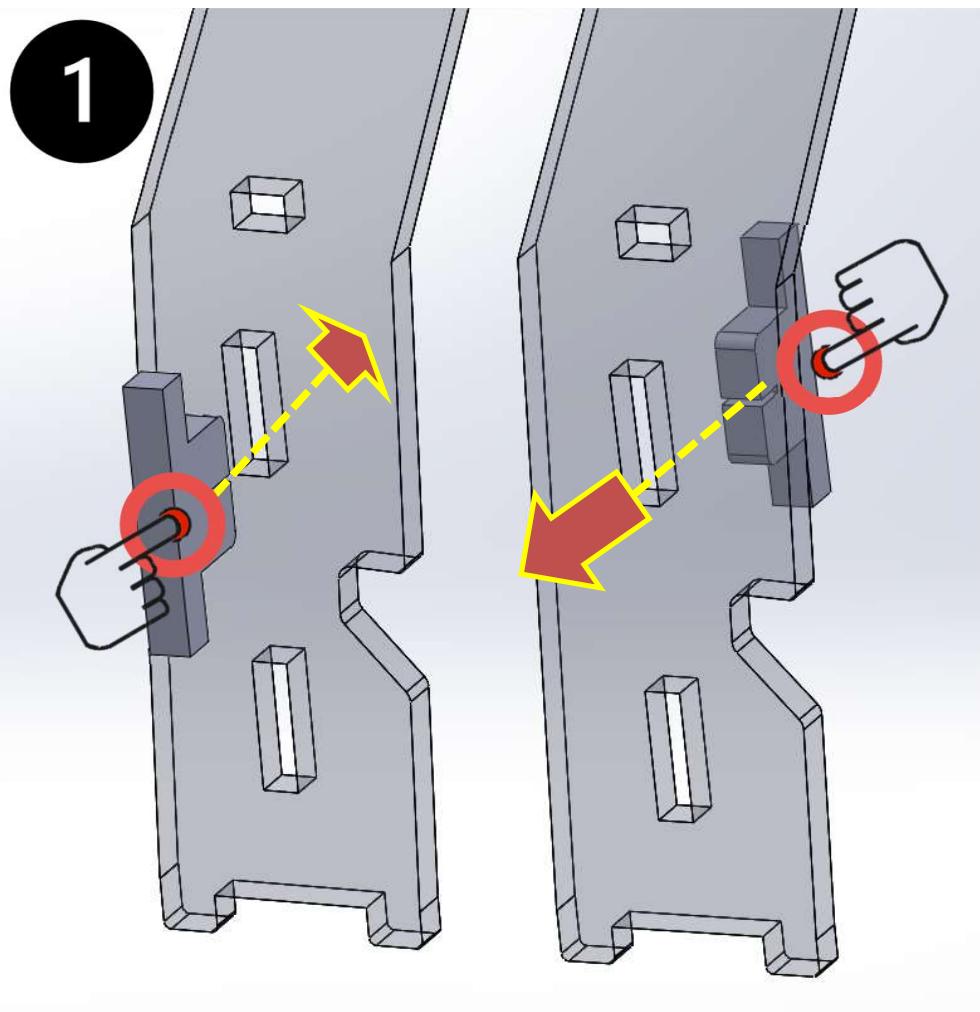
DES

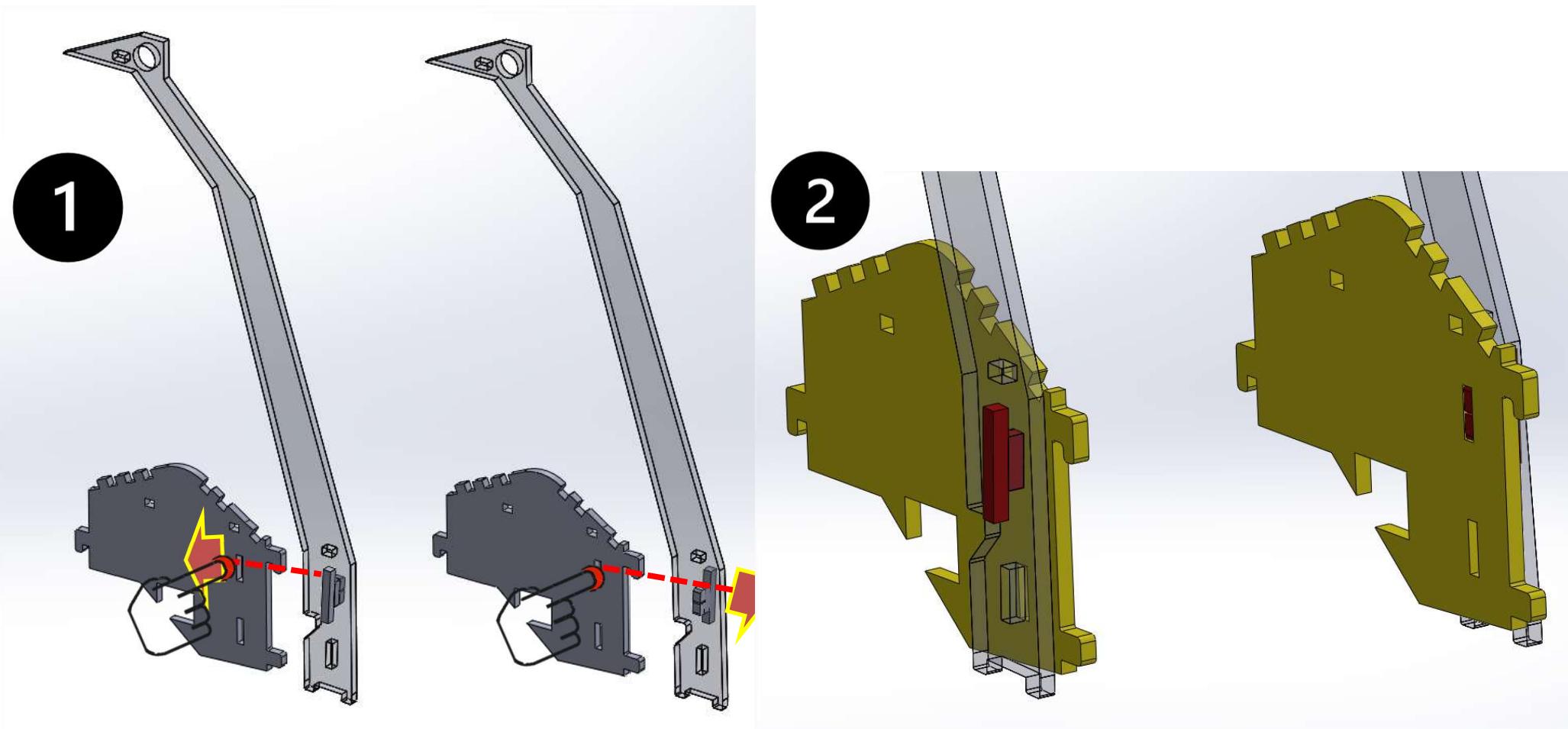
## TAG HOLDER





ATTENTION AU SENS DE MONTAGE :  
les 2 bras se montent en symétrique  
et non à l'identique



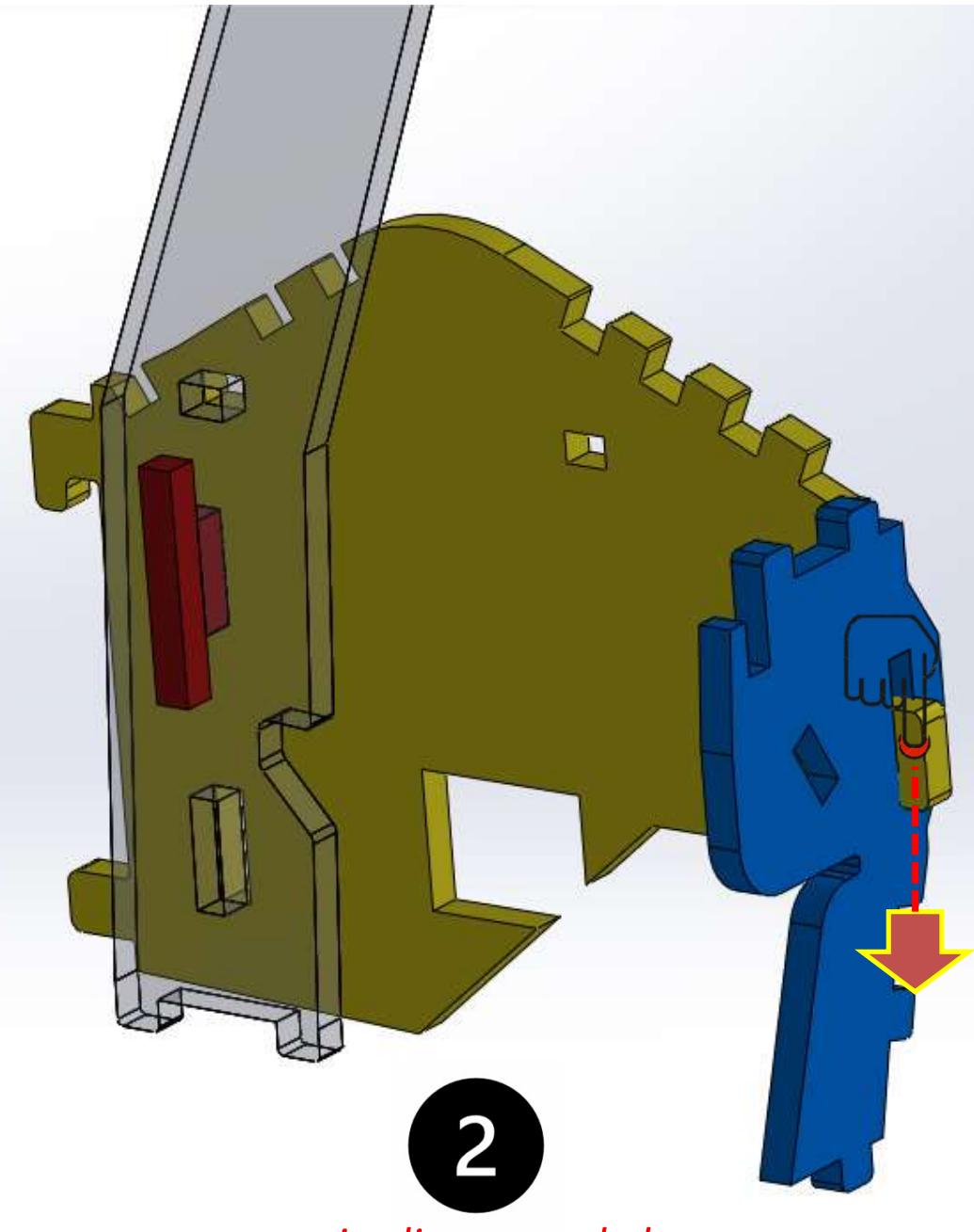
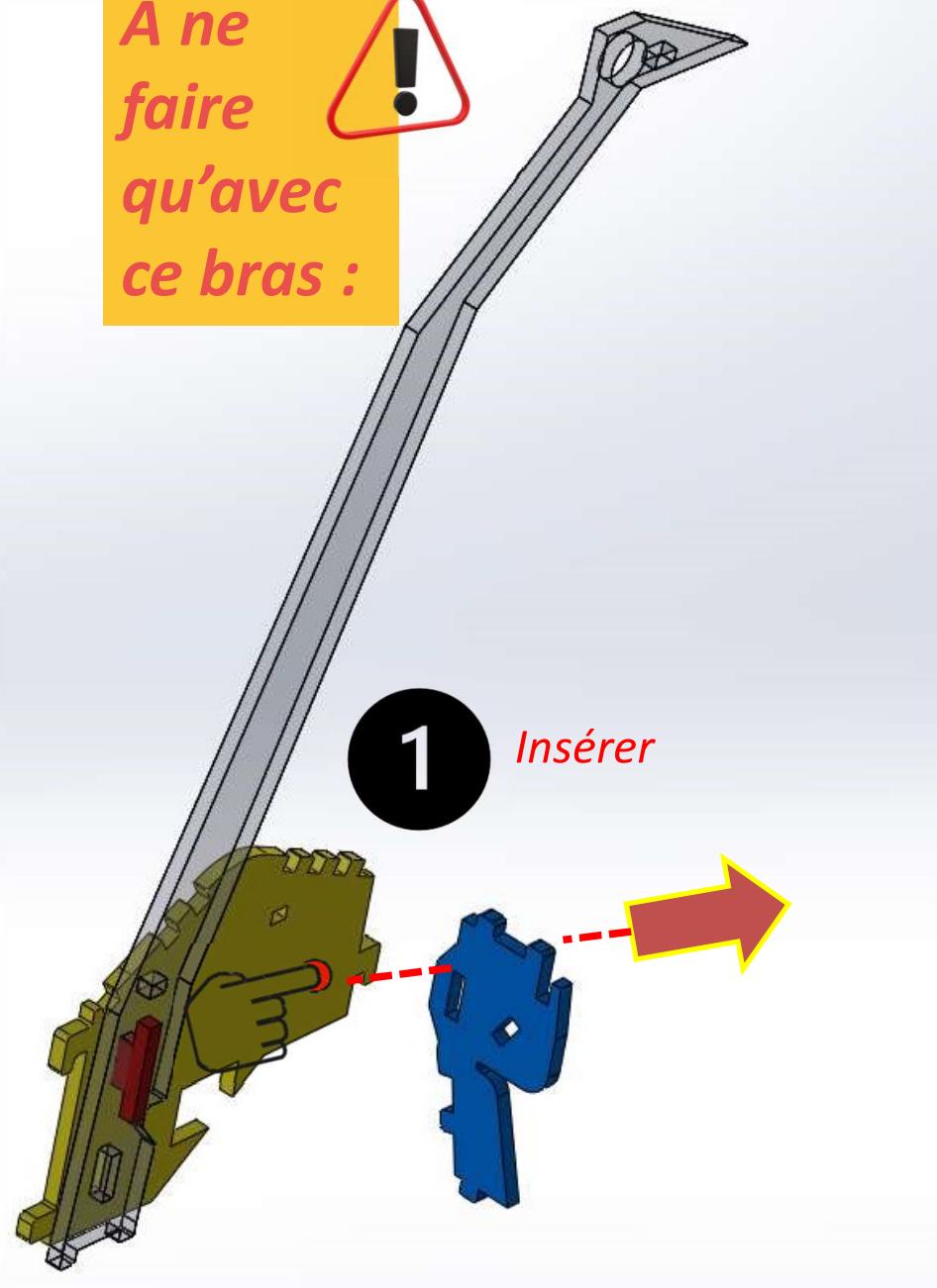


*A ne faire qu'avec ce bras :*



1

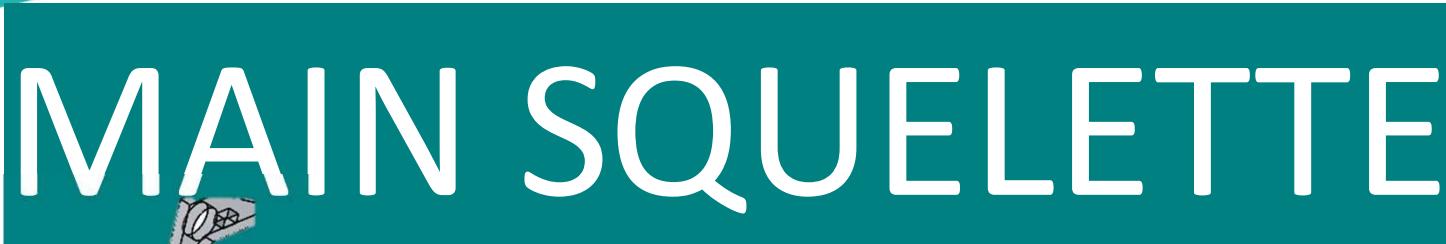
*Insérer*



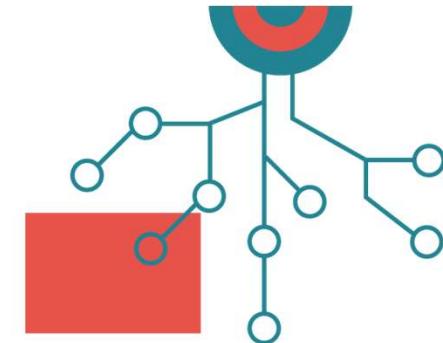
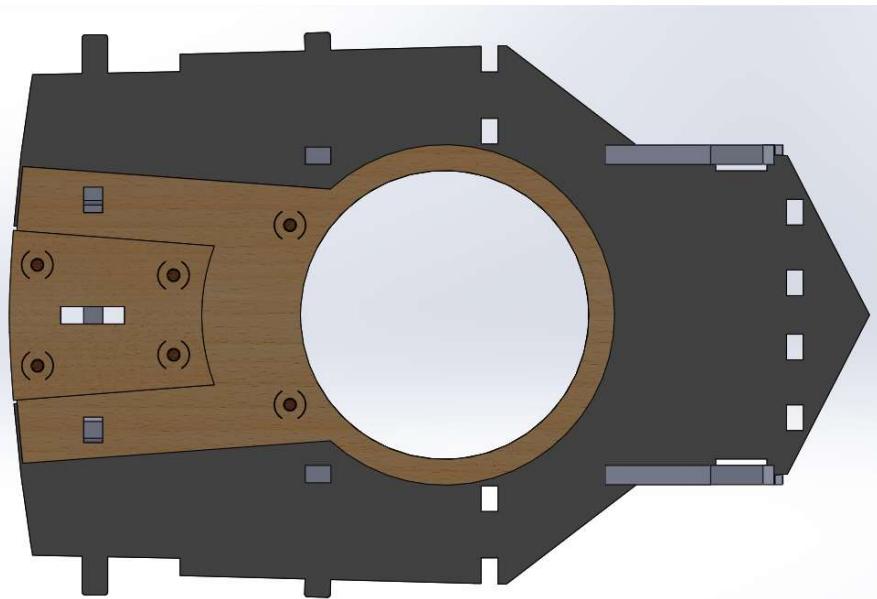
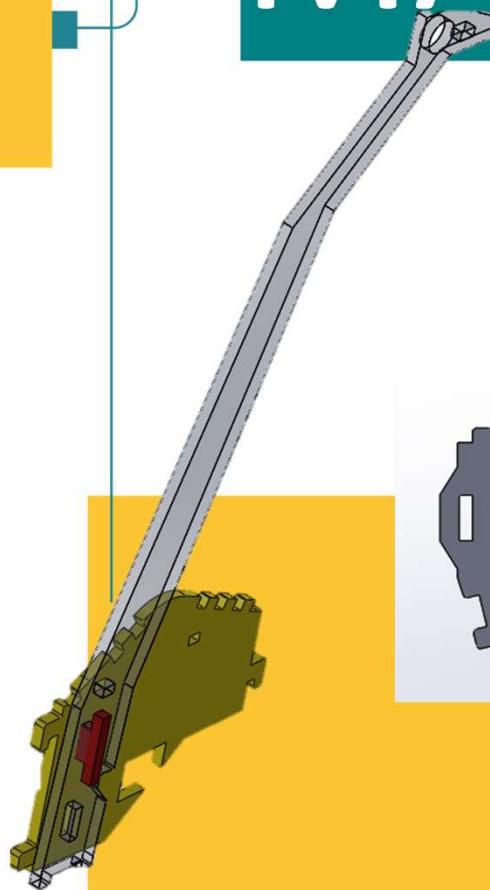


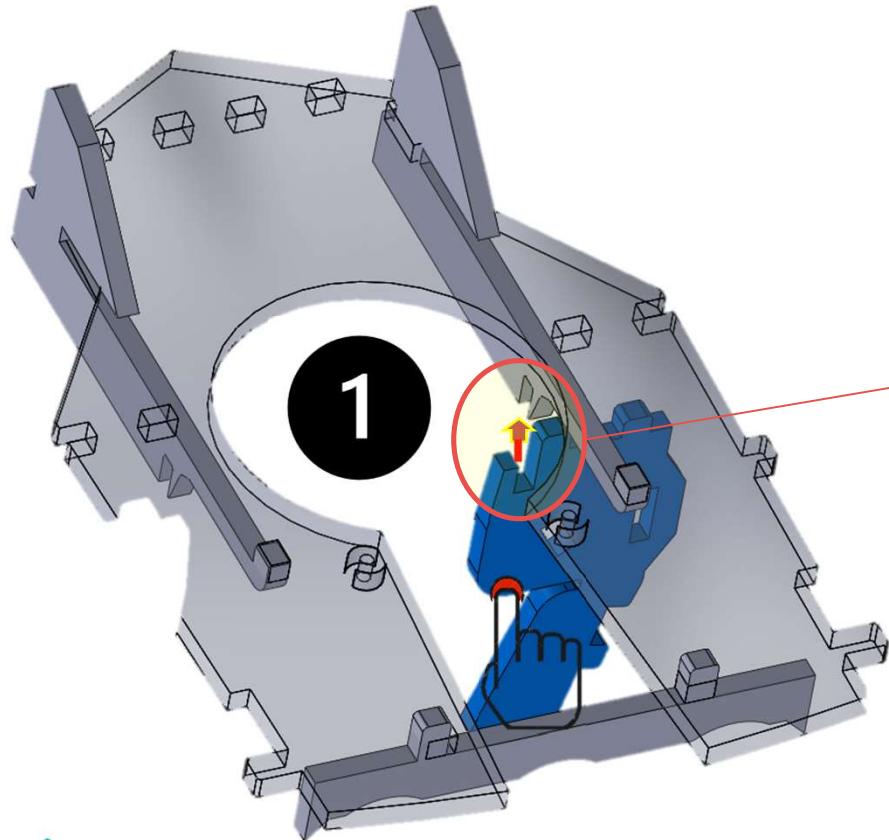
ASSEMBLAGE

DU

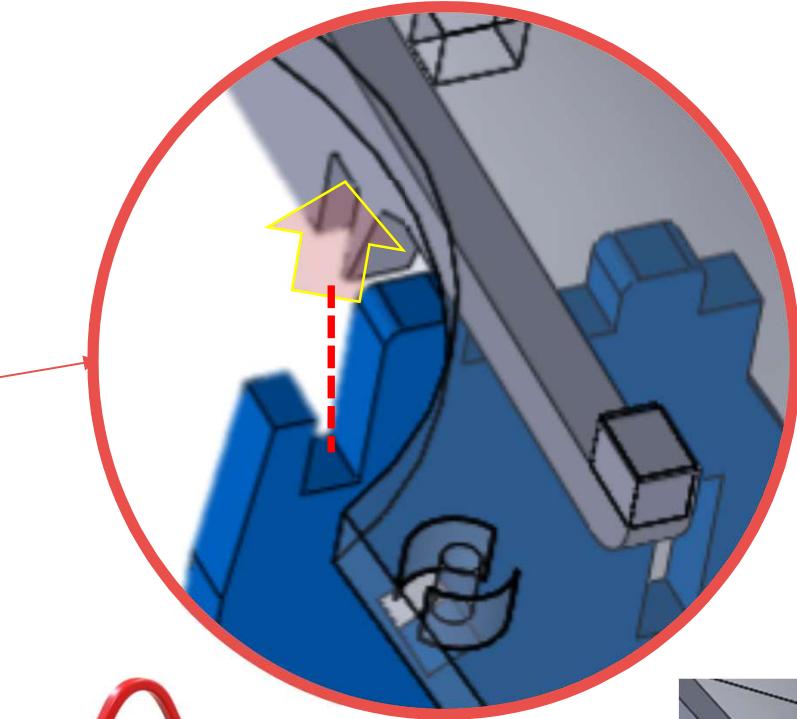
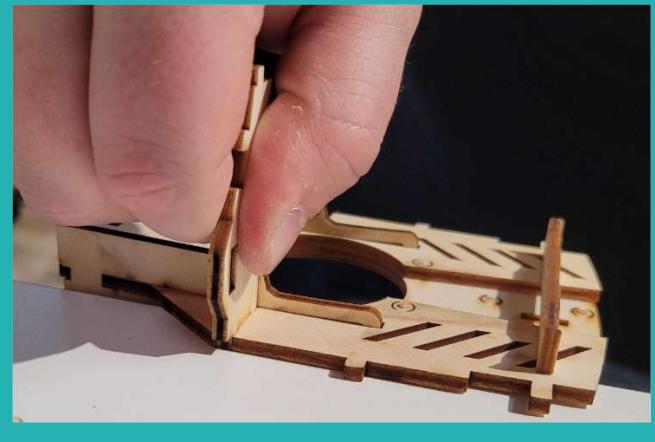


MAIN SQUELETTE

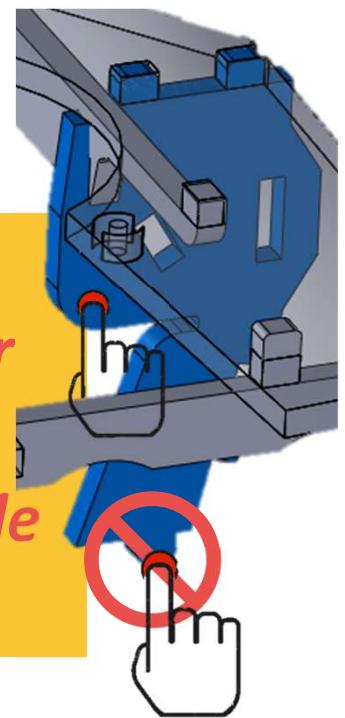




Conseil : presser retourné contre le rebord de la table

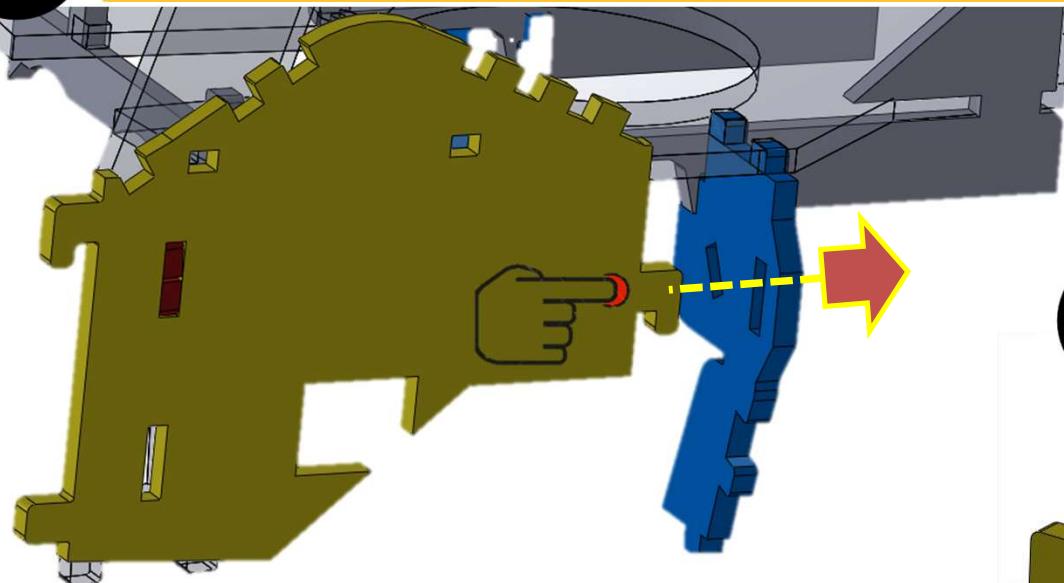


*Monter en force  
SANS appuyer sur  
l'extrémité du  
squelette: risque de  
casse*



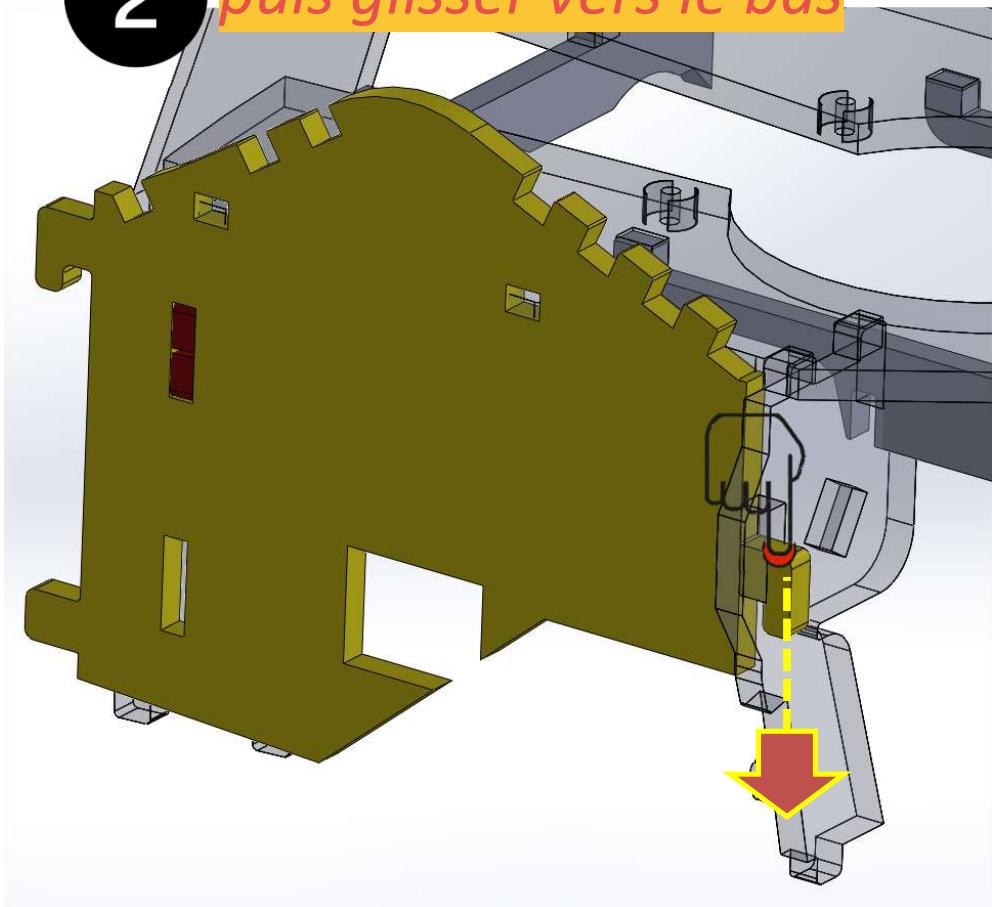
1

*Insérer le 2<sup>ième</sup> bras*



2

*puis glisser vers le bas*

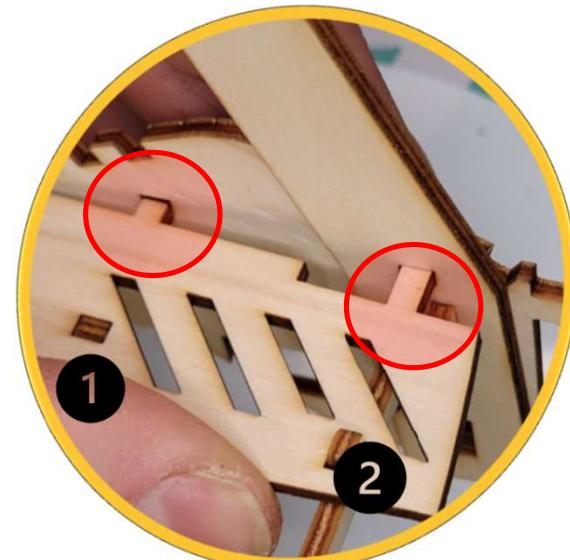
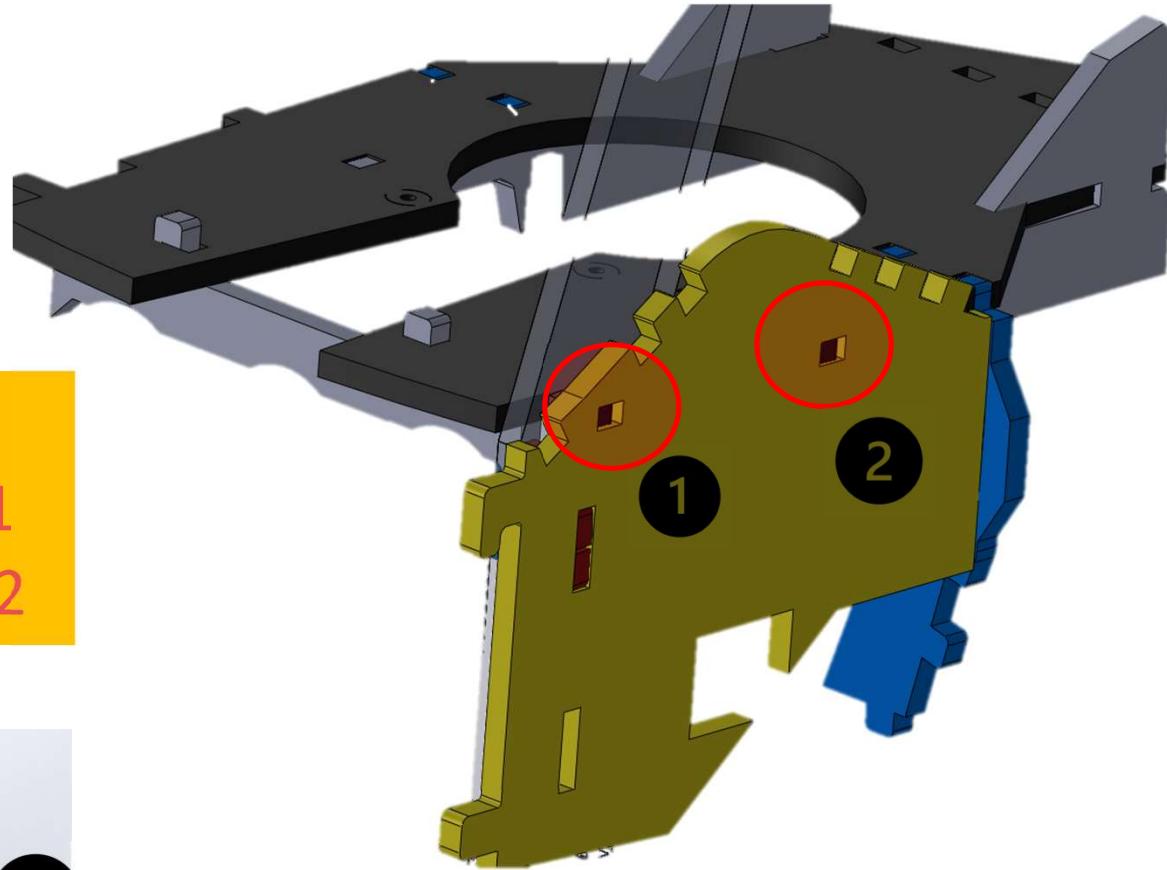
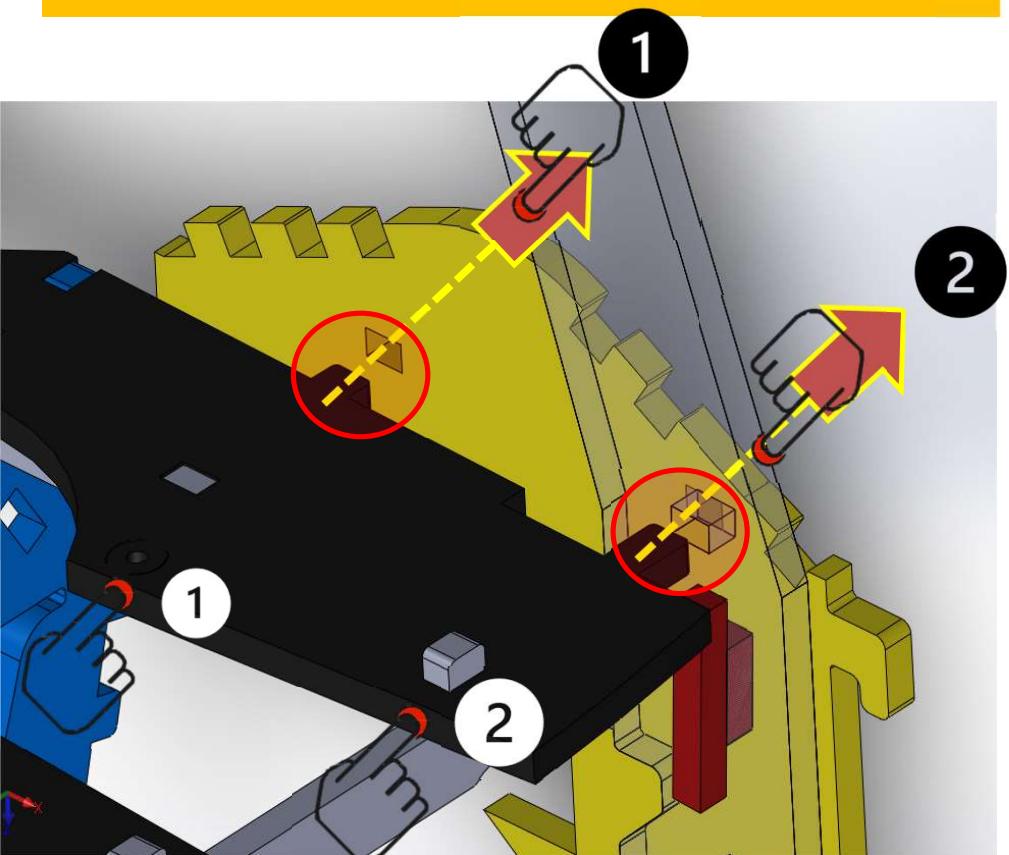


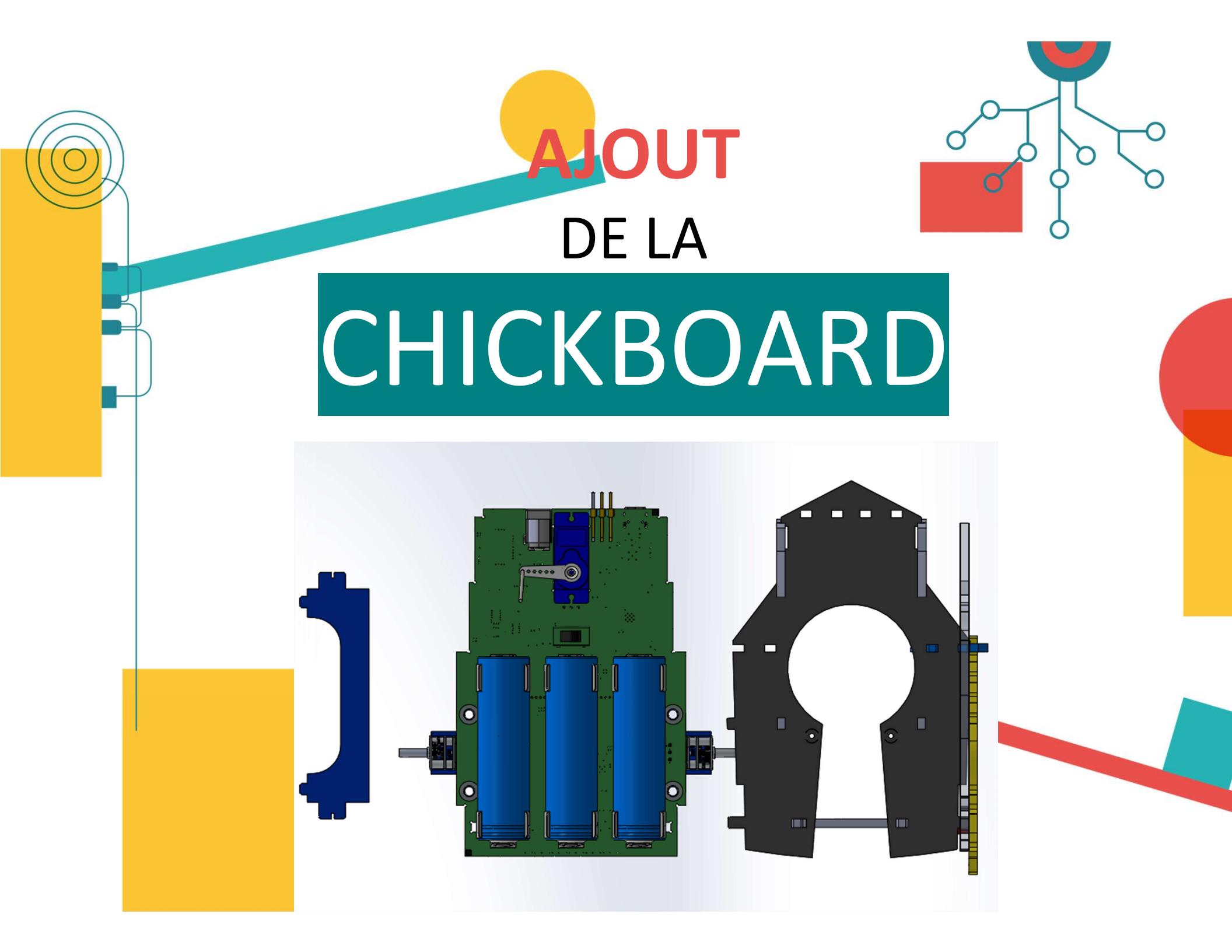


L'autre bras sera à mettre  
qu'après l'insertion de la  
carte électronique

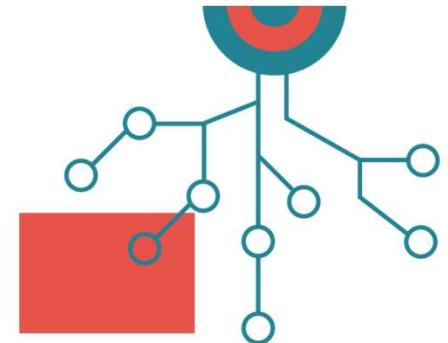
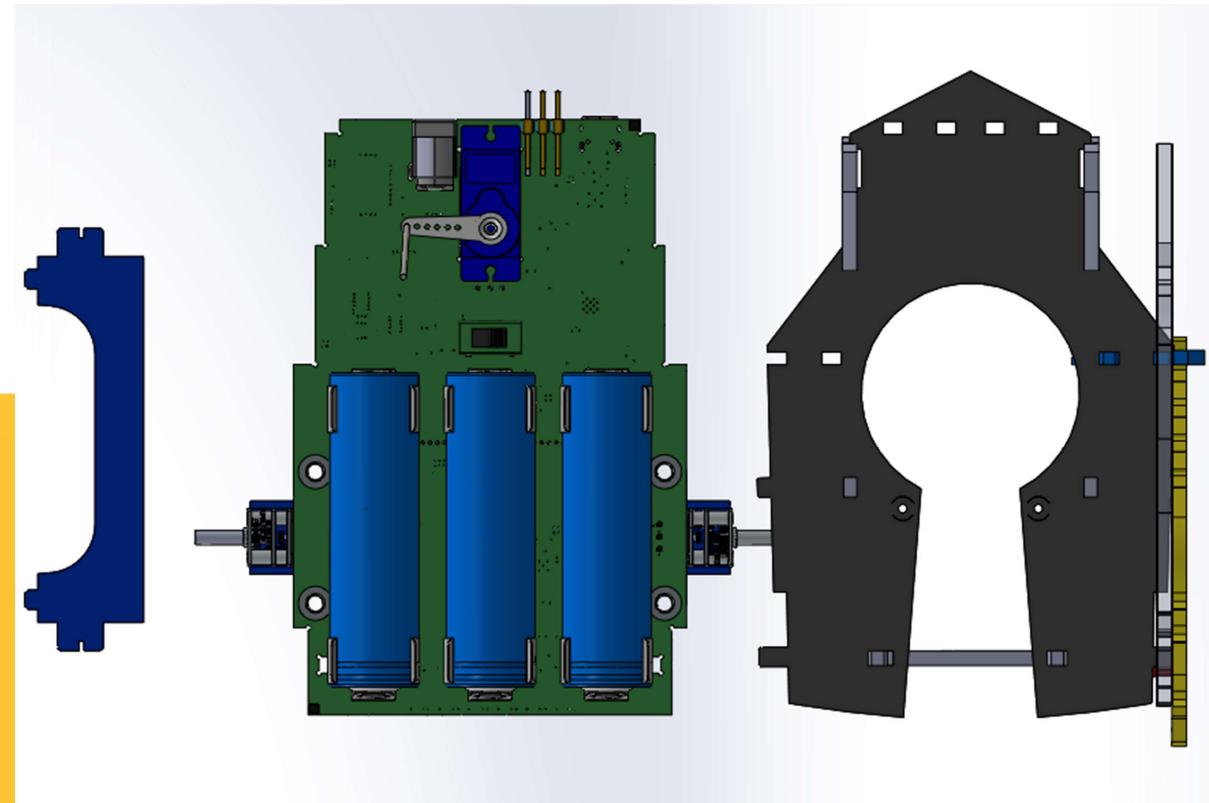
Pincer ensuite le capot avec :

- une 1<sup>er</sup> main entre \*1 et \*1
- une 2<sup>ème</sup> main entre \*2 et \*2





# AJOUT DE LA CHICKBOARD





# Attention

*Manipuler la carte électronique avec grand soin et ne pas la déposer sur des objets métalliques etc.*

*Il y a de la graisse sur les moteurs.*

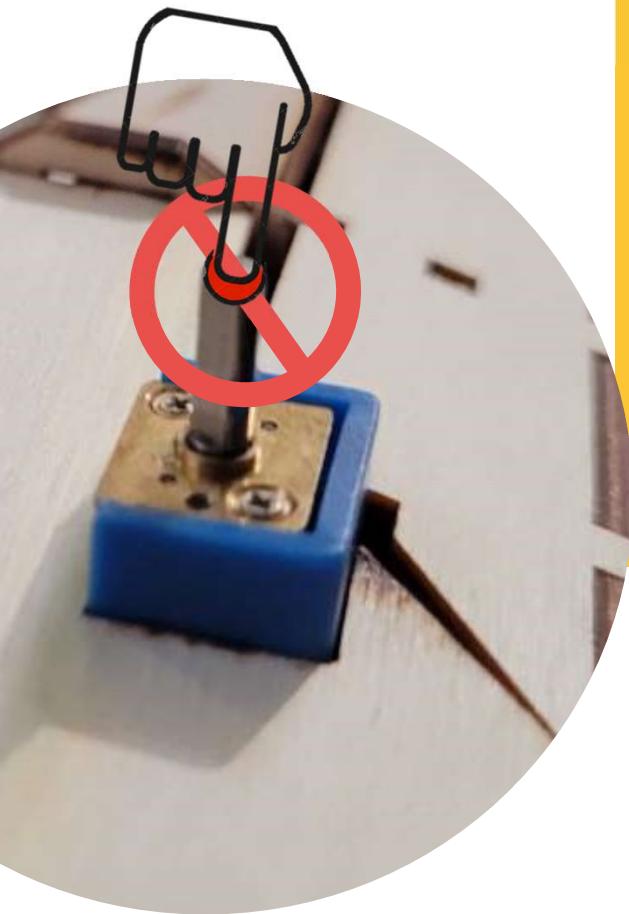
*Ne pas enlever le scotch des batteries .*



# Attention

*Ne pas jeter la boîte en carton de la carte électronique ni la mélanger aux autres :*

*il y a un numéro unitaire associé à chaque carte et elle vous servira de poubelle à la fin.*

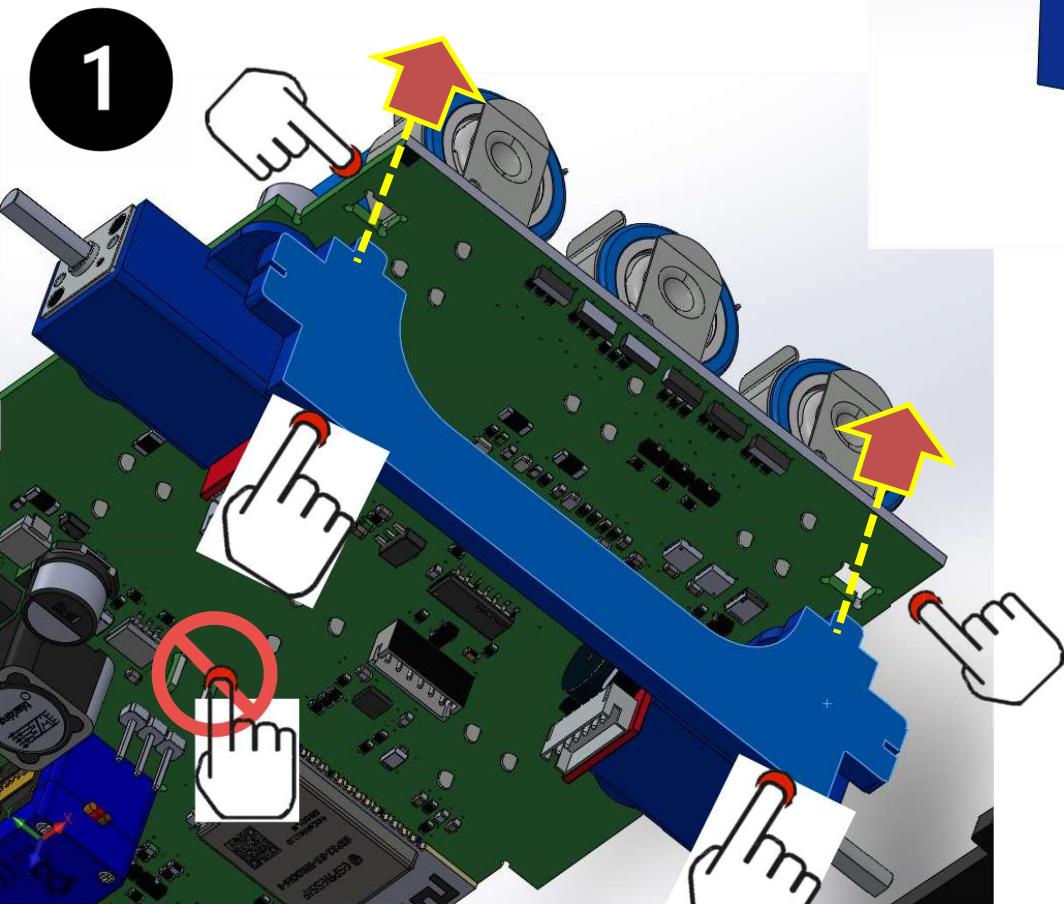


# Attention

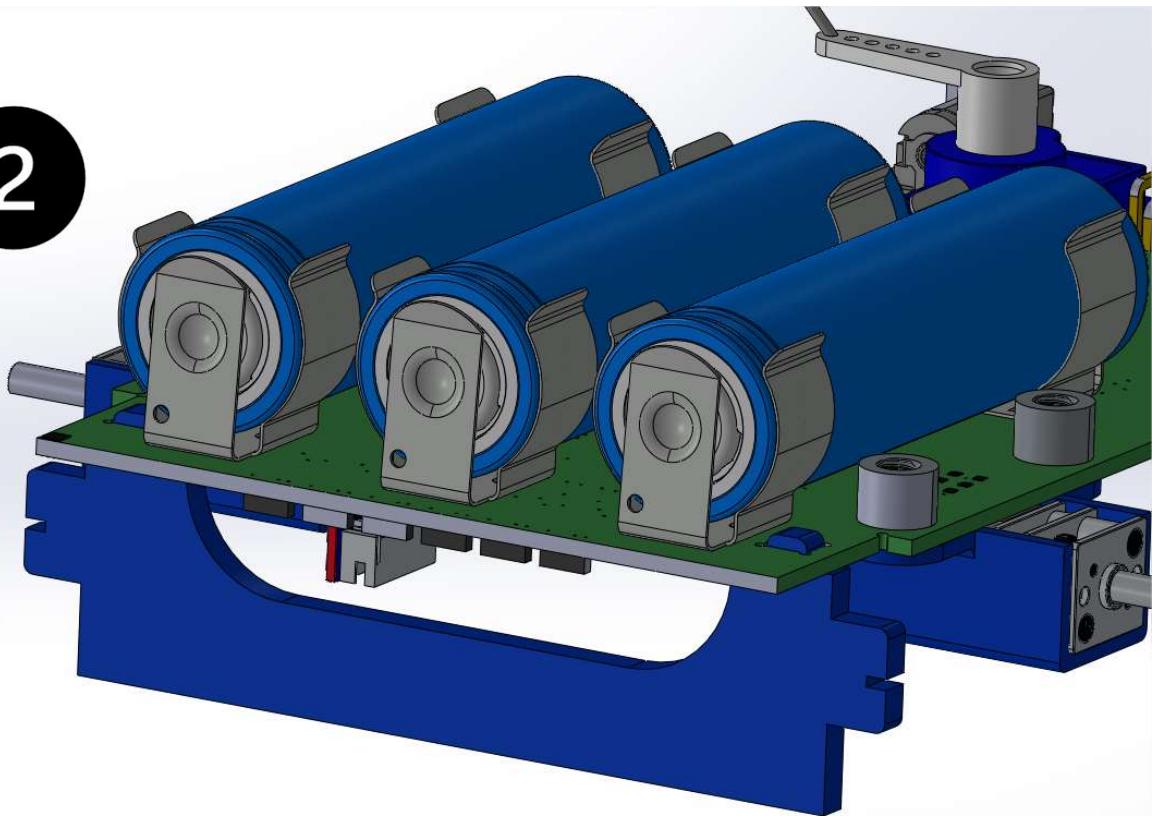
*Ne jamais exercer de  
pression contre les axes  
des moteurs.*



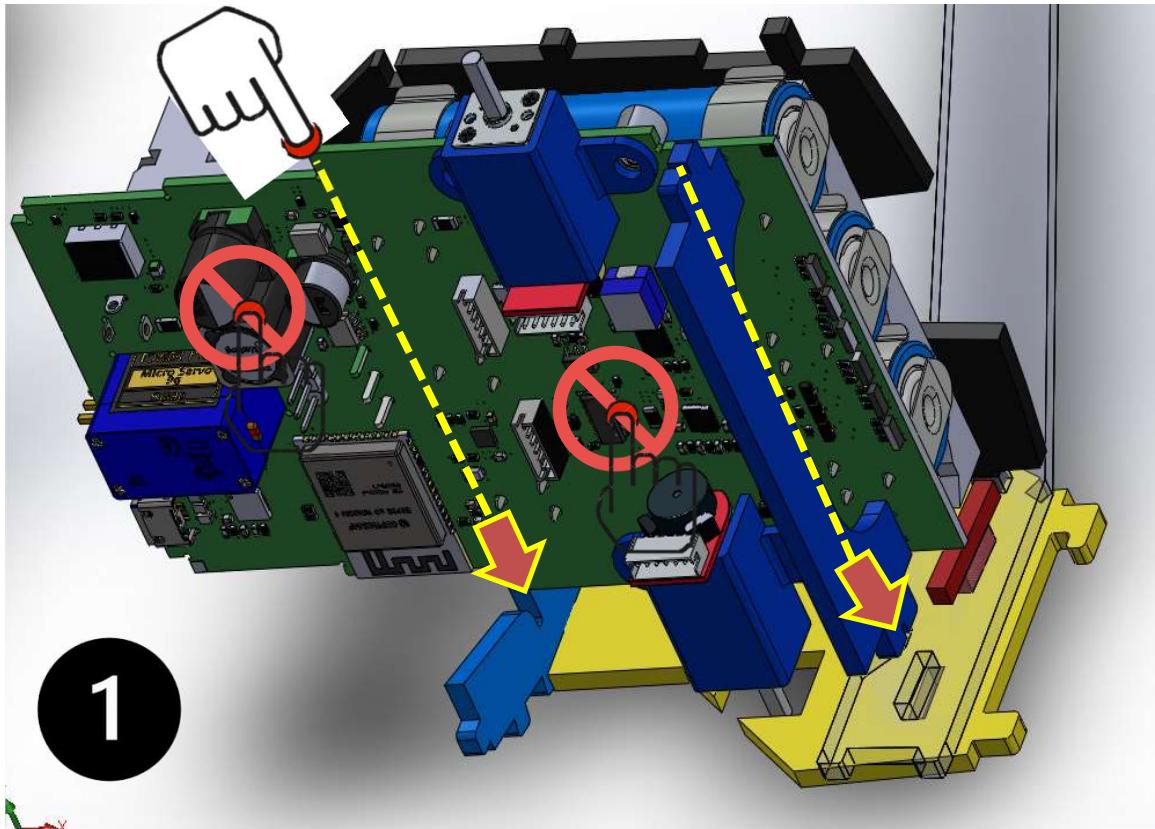
*Ne pas mettre ces doigts  
sur la carte, bien la tenir  
sur les cotés*



2



Bien tenir la pièce en bois :  
cela tombe sinon

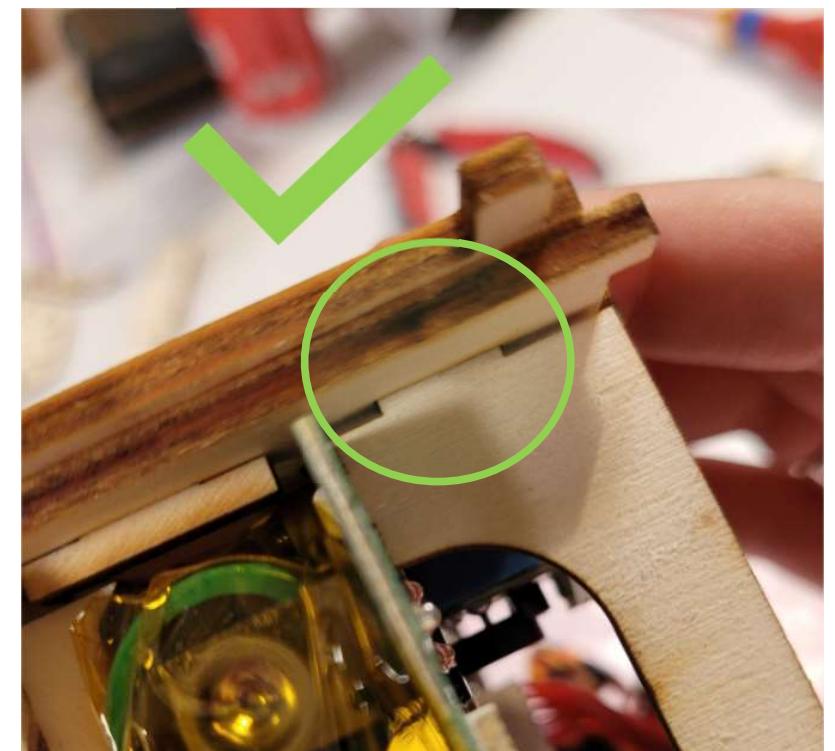
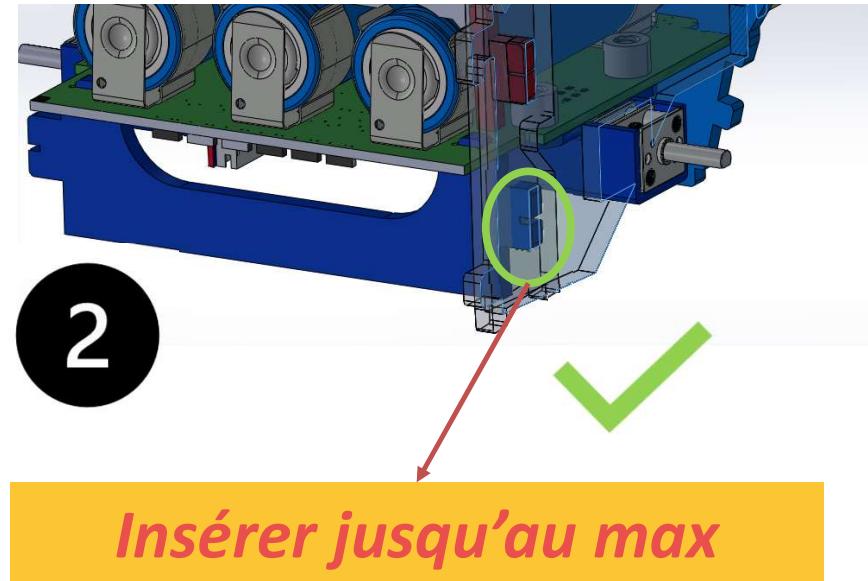


1

***Ne pas mettre ces doigts  
sur la carte, bien la tenir  
sur les cotés***

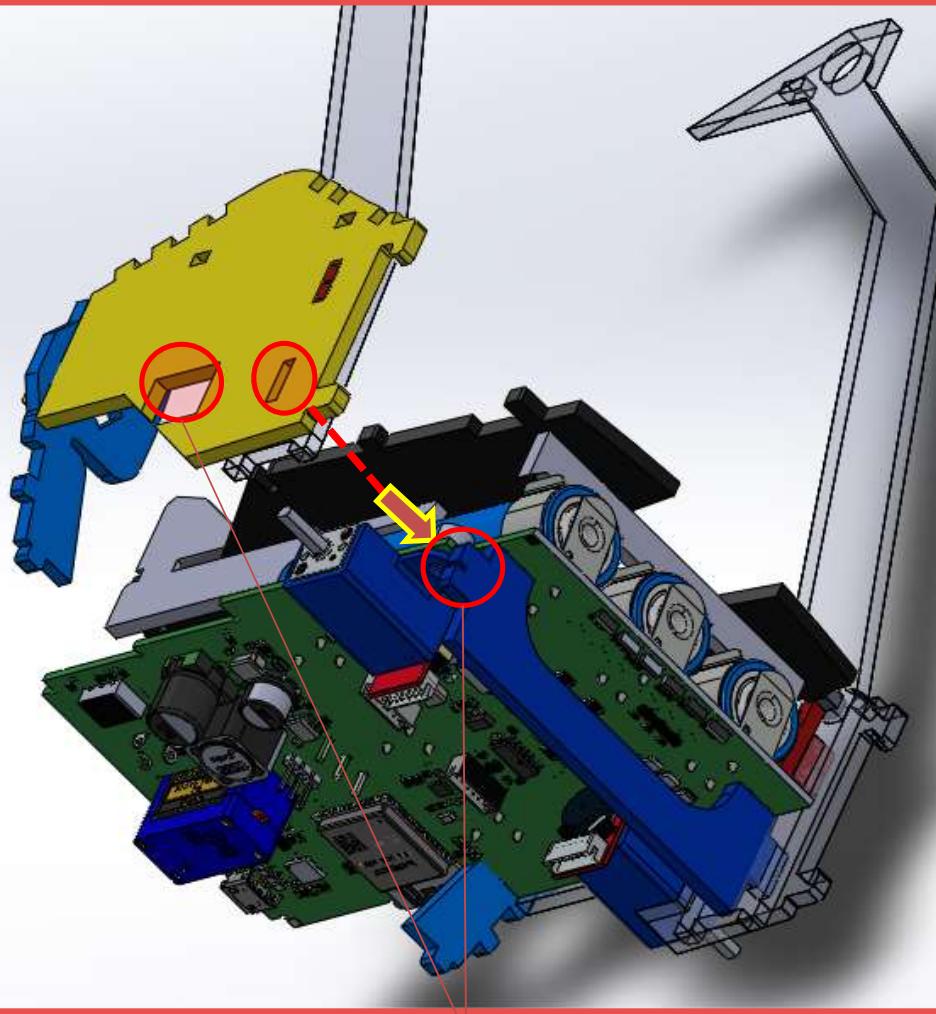


Pencher l'ensemble de coté  
comme sur la 3D



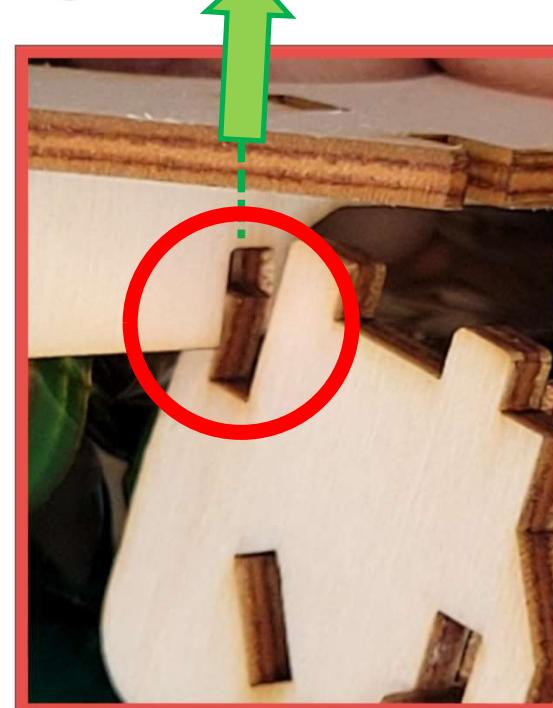
1

Insérer l'autre  
bras ici en 1<sup>er</sup>



Passer le moteur  
Puis insérer la barre bleue

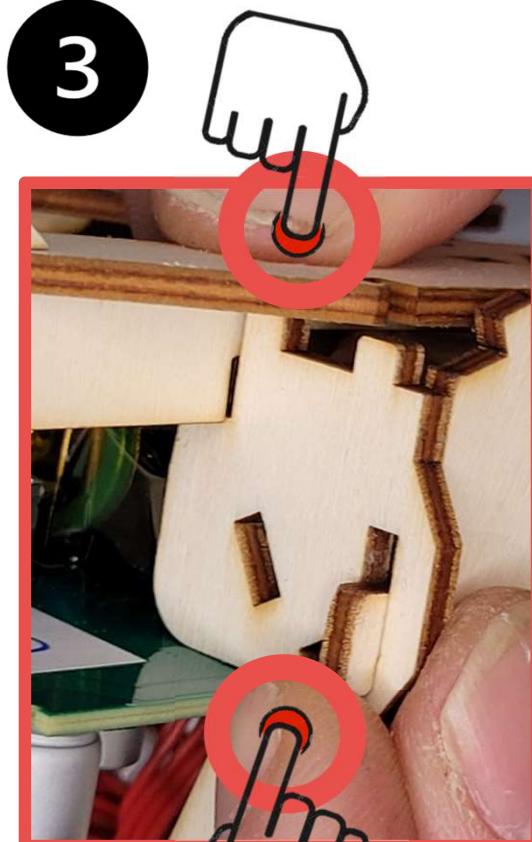
2



Soulever légèrement  
le capot  
(flèche verte)

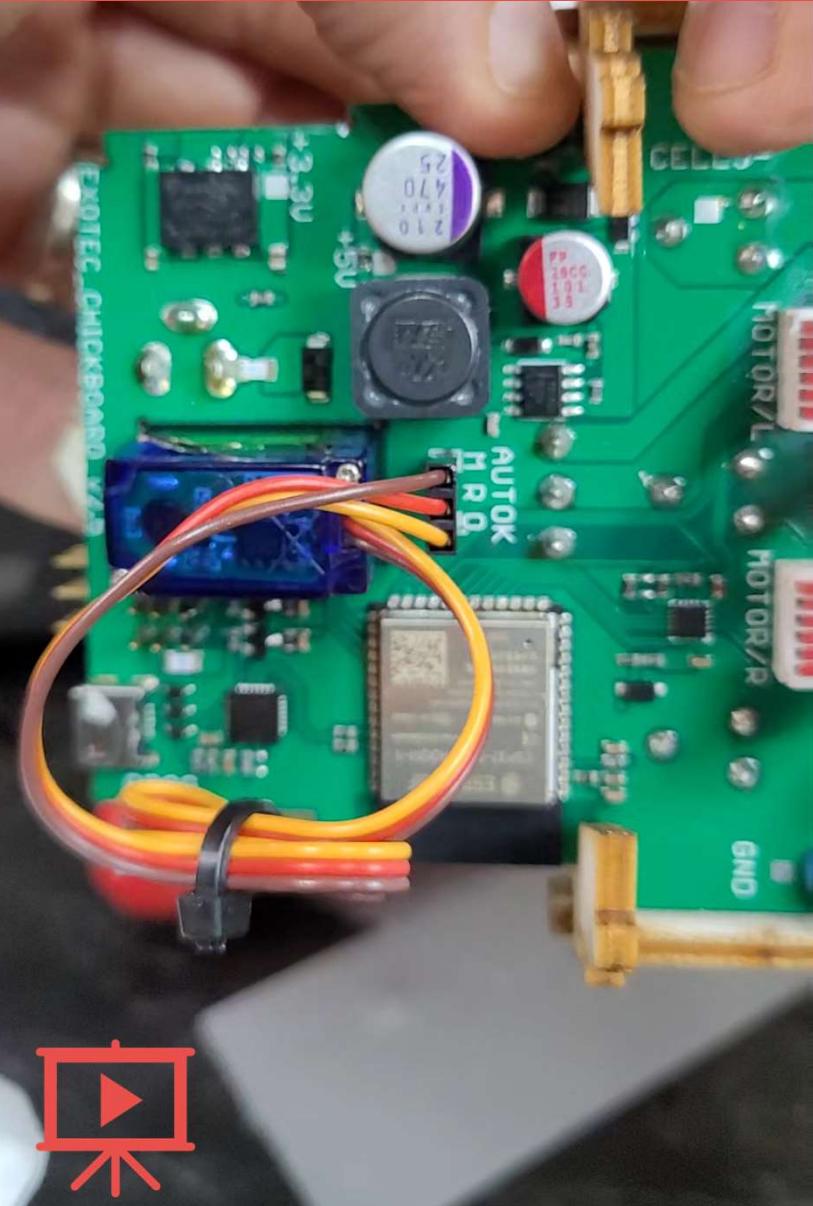
pour pouvoir  
commencer à serrer

3



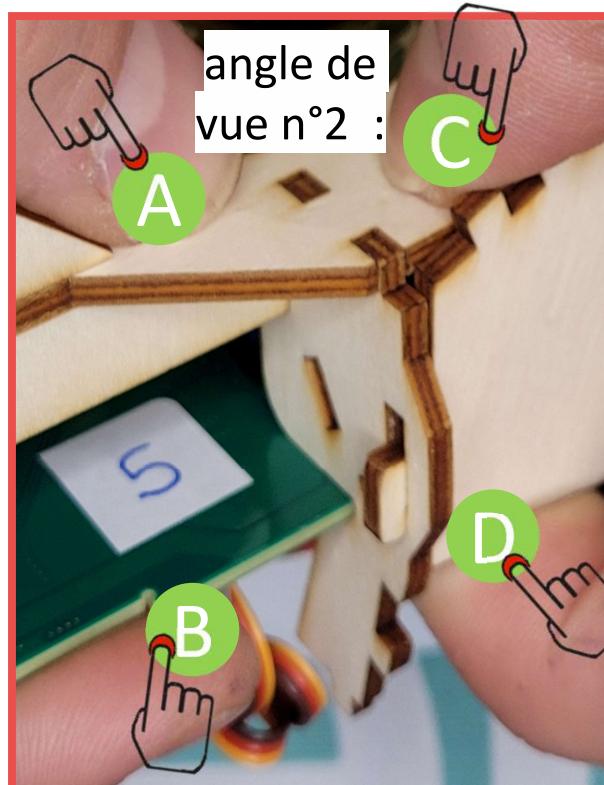
Le serrage  
complet se fait  
à la slide  
suivante

VIDEO a regarder avant de suivre les prochaines étapes



Angle de vue n°1 et n°2 : Pincer fort le capot avec

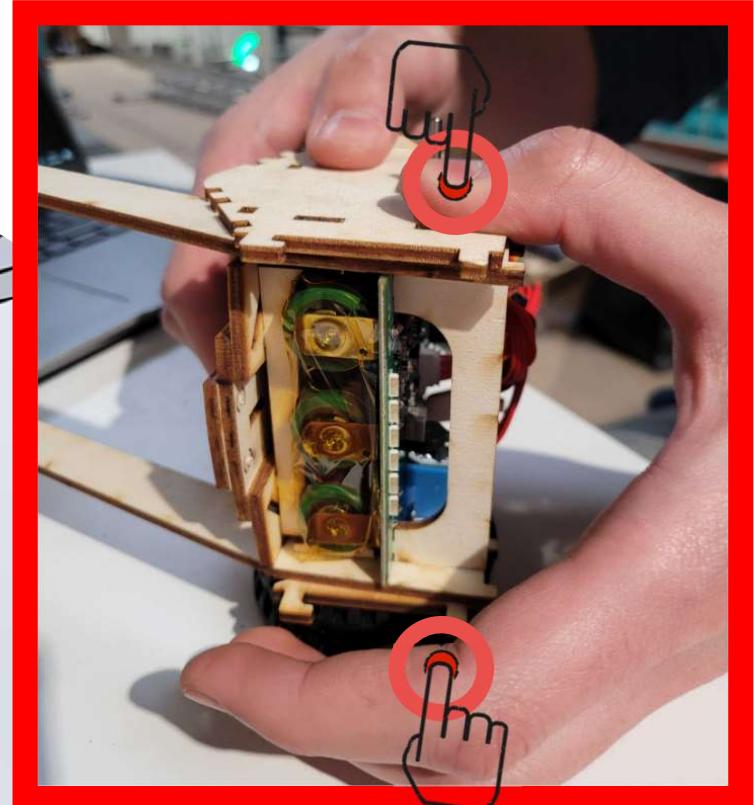
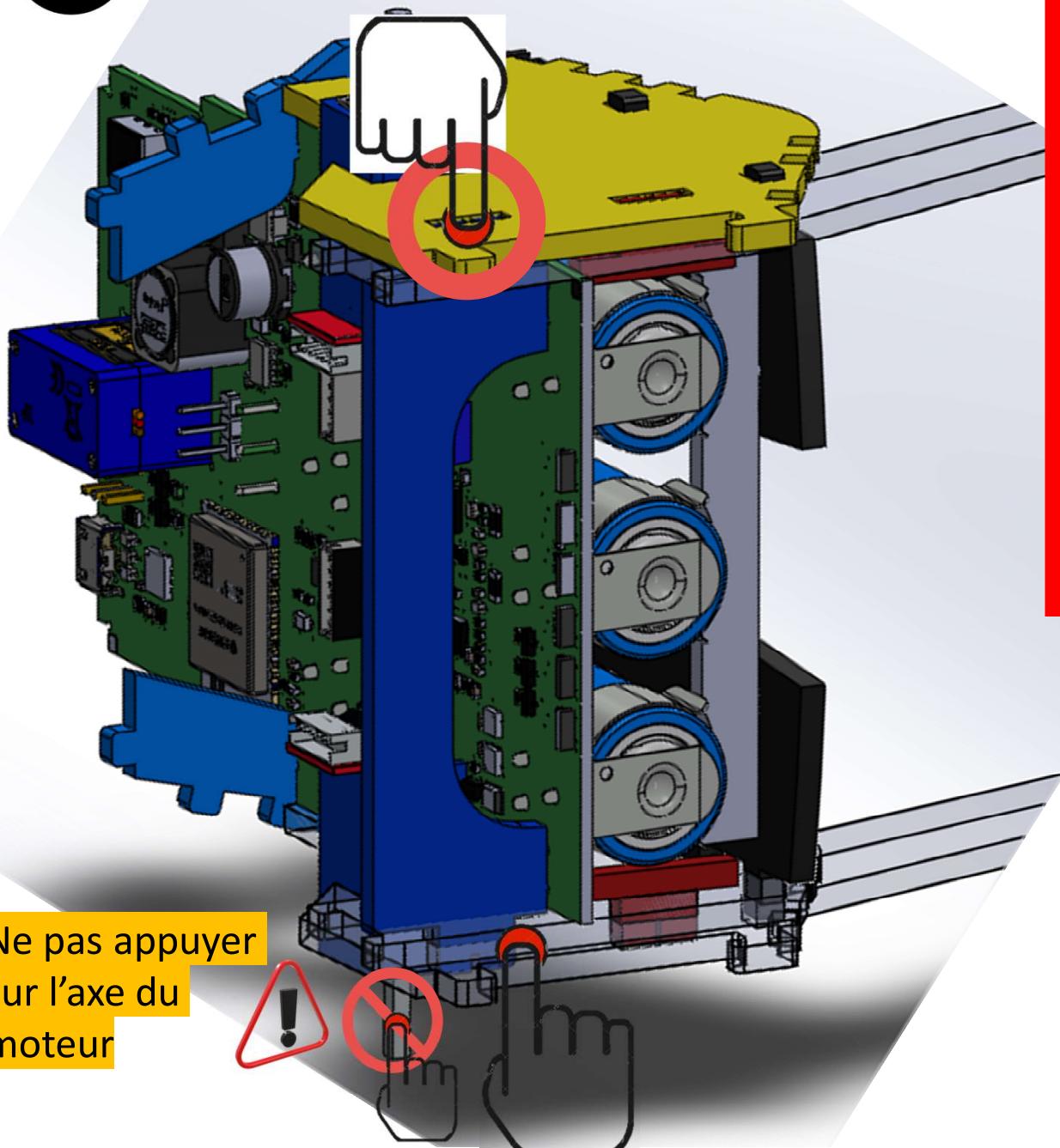
- une 1<sup>er</sup> main entre A et B
- et une 2<sup>ème</sup> main entre C et D

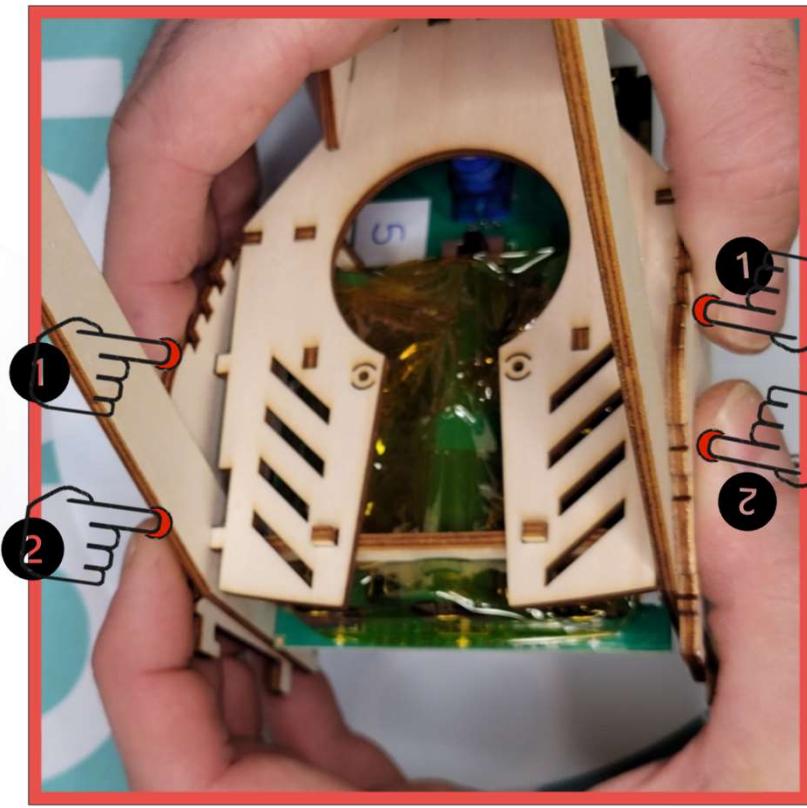
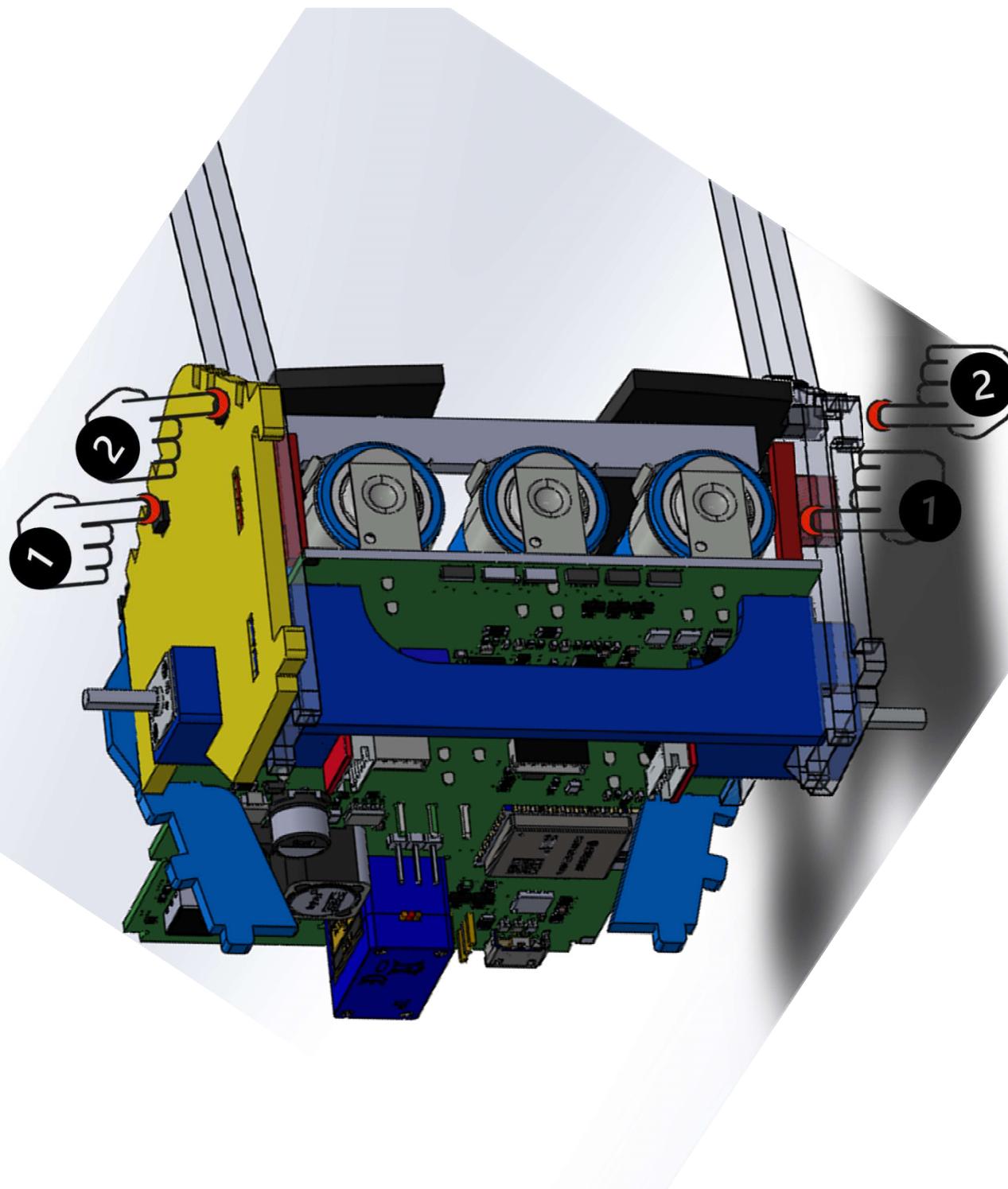


NE SURTOUT PAS  
APPROCHER LA  
PINCE près de la  
carte électronique

1

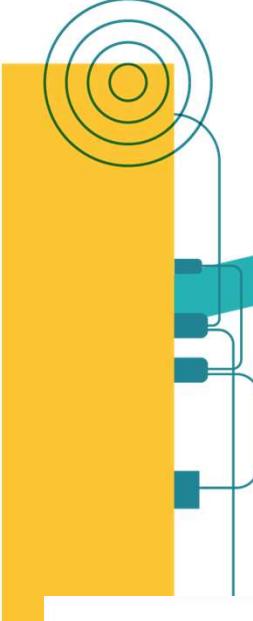
Appuyer fortement ici



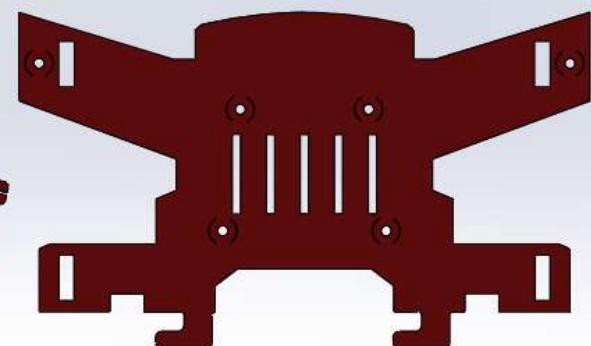
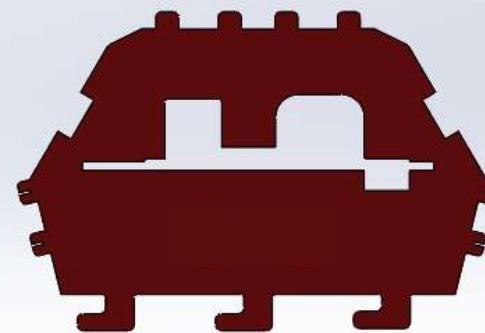
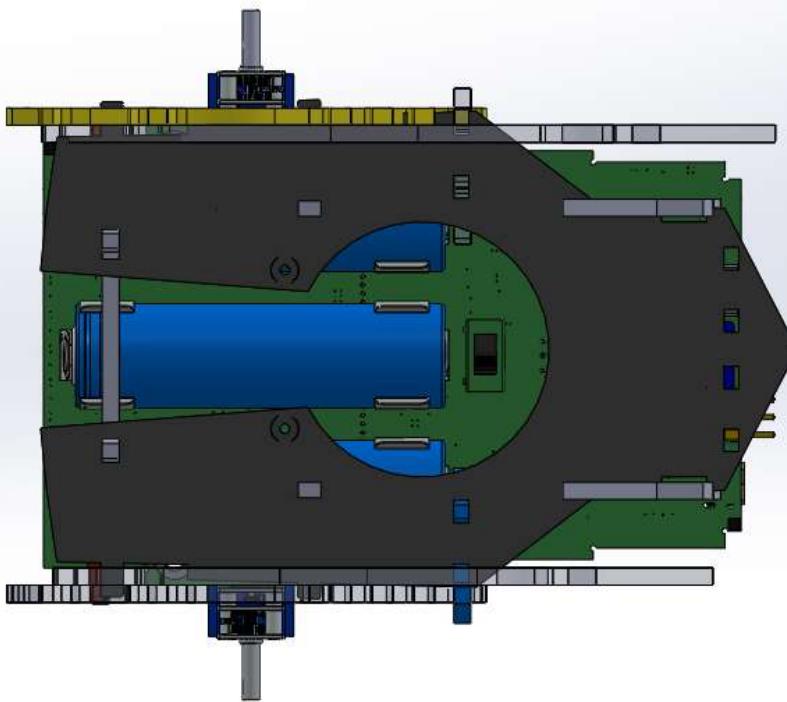
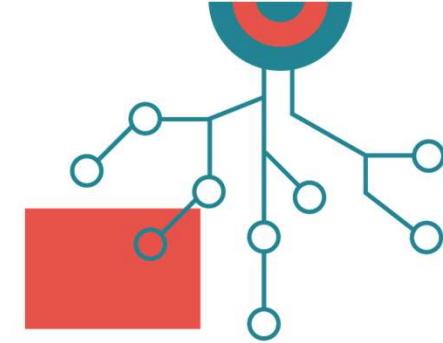


Pincer ensuite  
en 1 et en 2

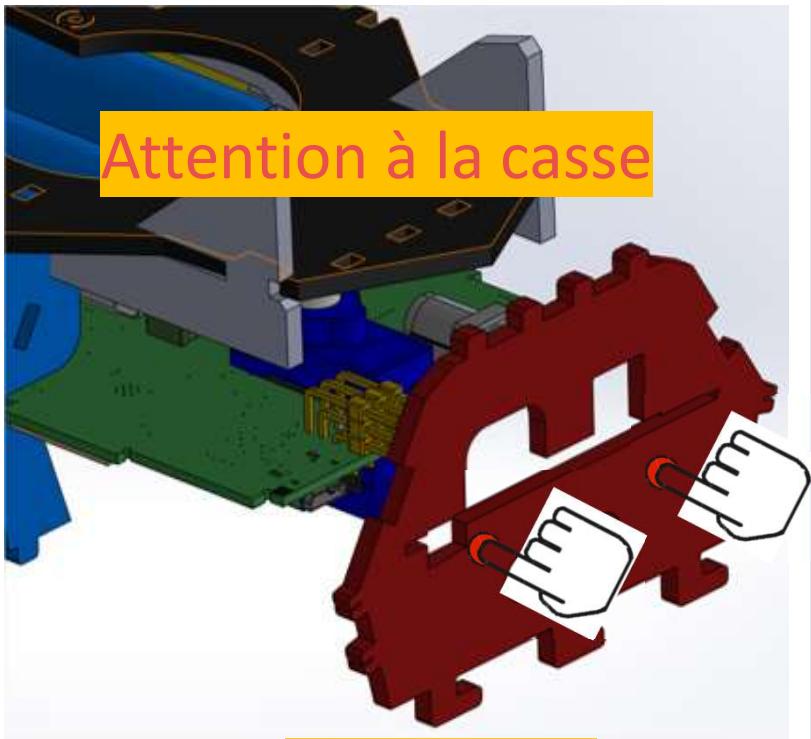
si pas déjà fait



# ASSEMBLAGE DU PIEDS SQUELETTE



Attention à la casse

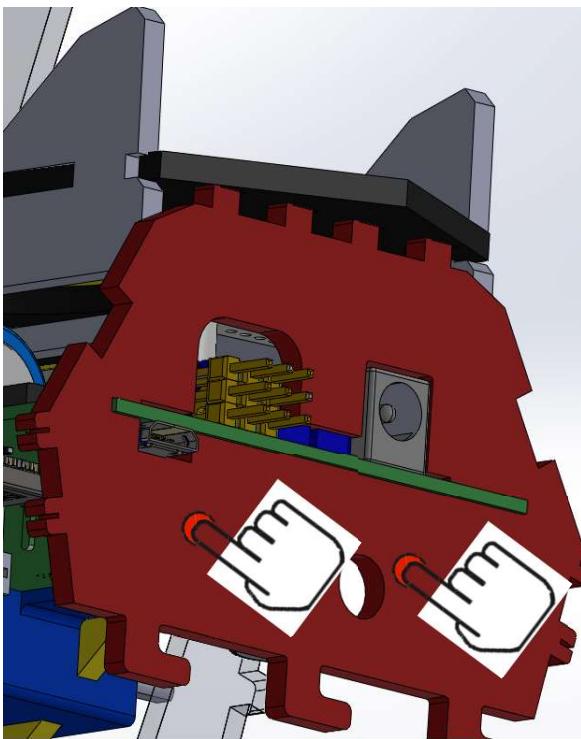
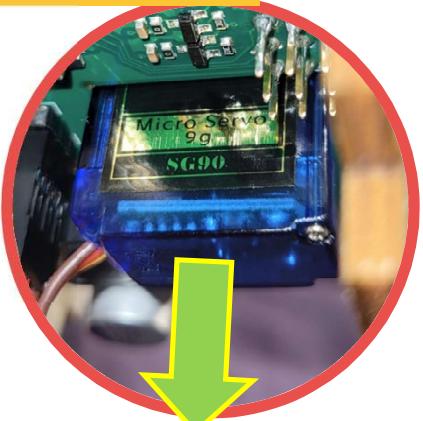


1

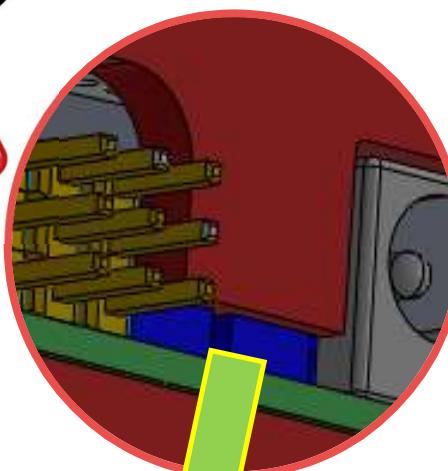
Maintenir le servomoteur BLEU vers le bas et insérer la partie ROUGE



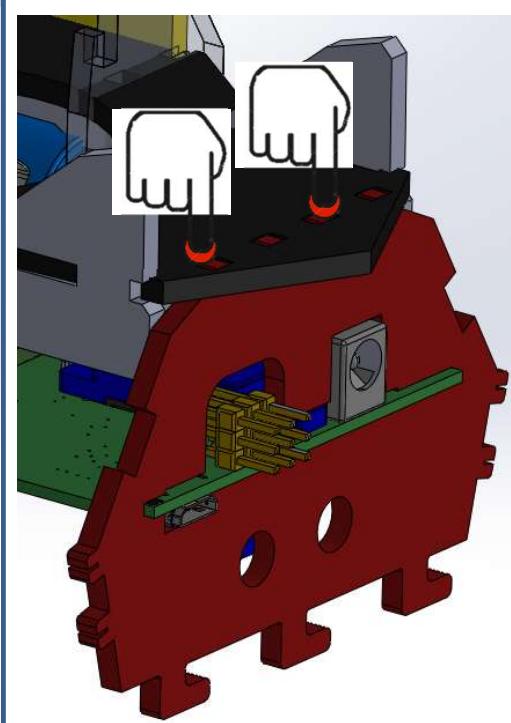
(sert à caler le moteur)



2

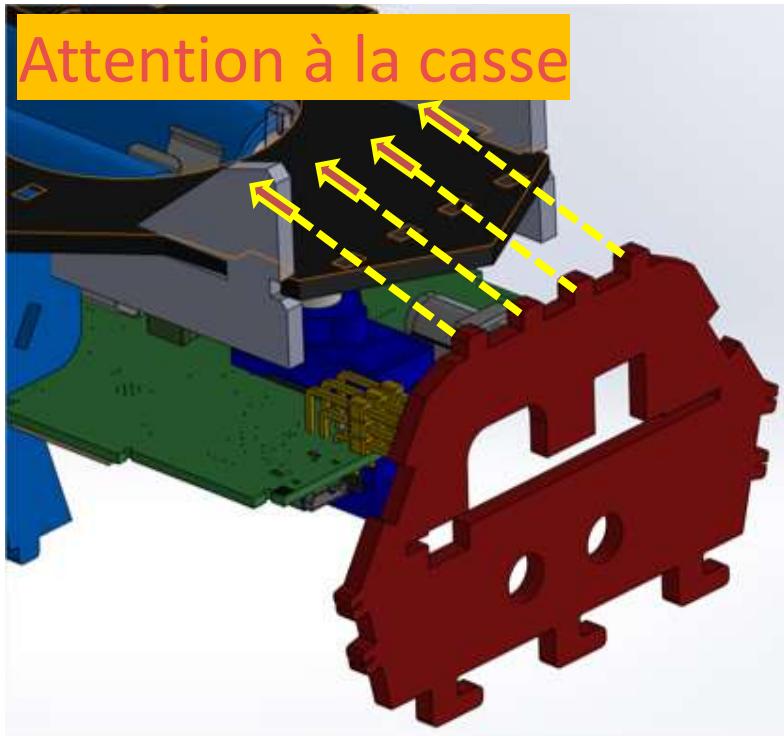


3



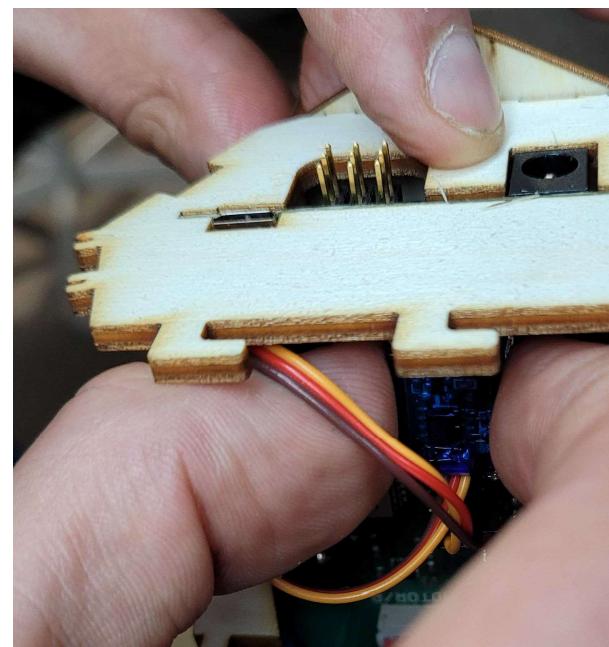
1

Insérer les dents  
en force



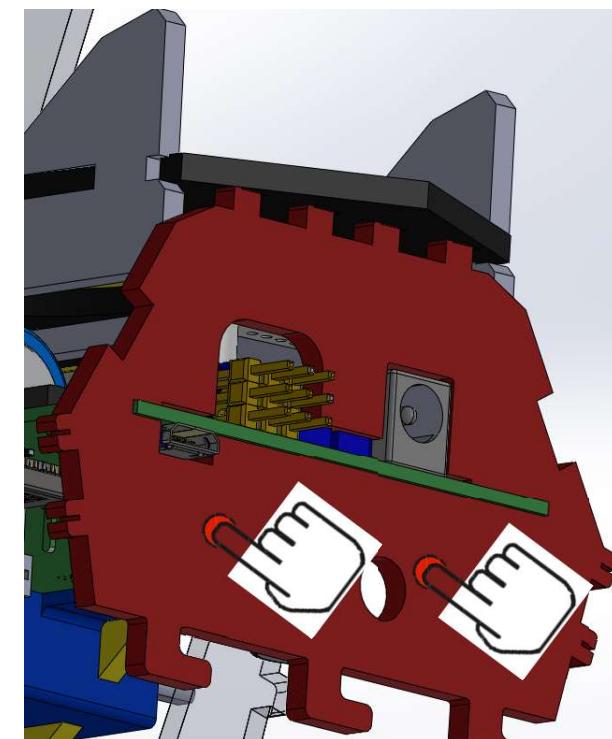
2

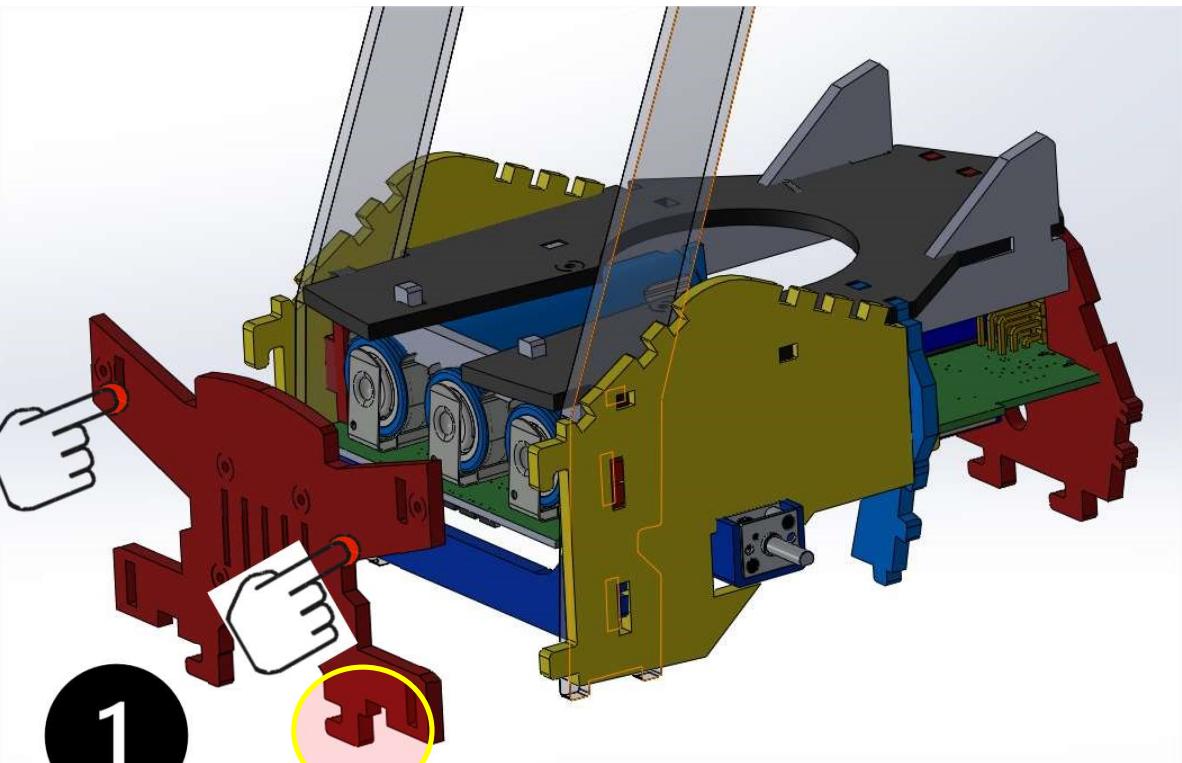
maintenir le  
servomoteur BLEU  
vers le bas et insérer  
la partie ROUGE



3

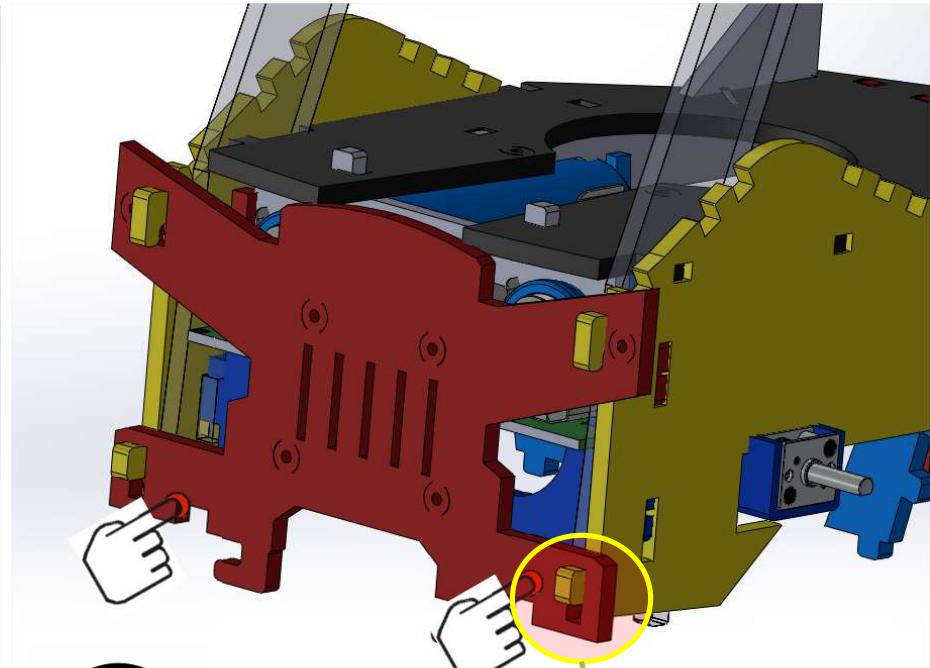
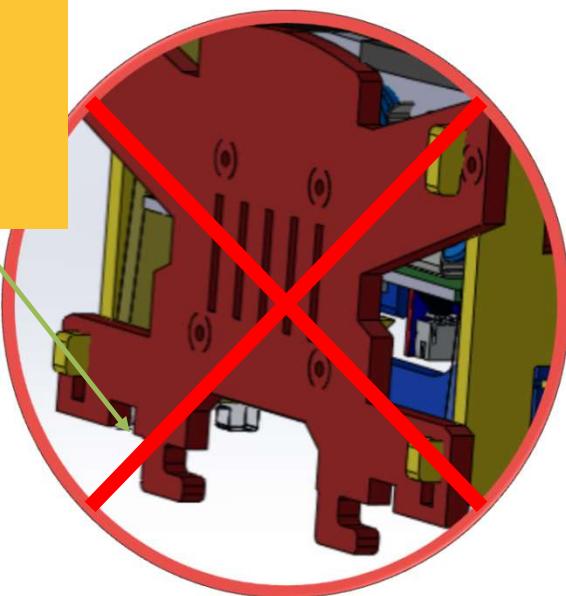
Puis faire pivoter la  
pièce rouge puis





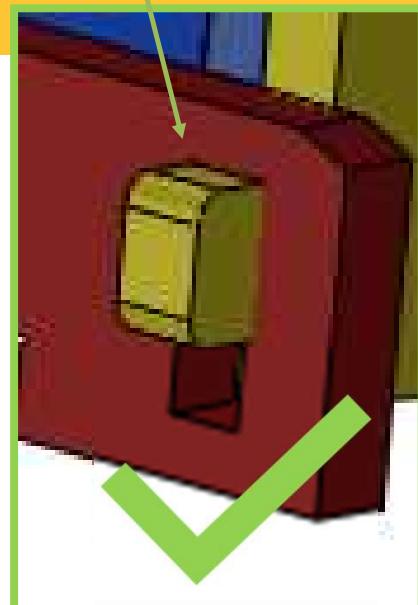
1

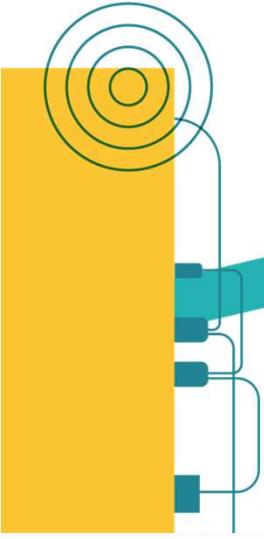
Attention les pieds doivent être vers la gauche et non vers la droite :



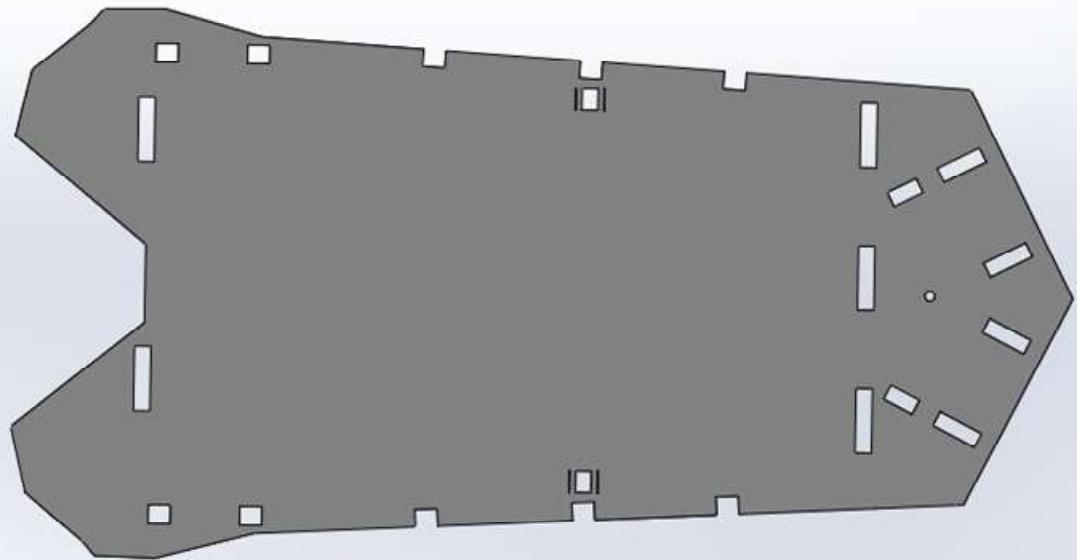
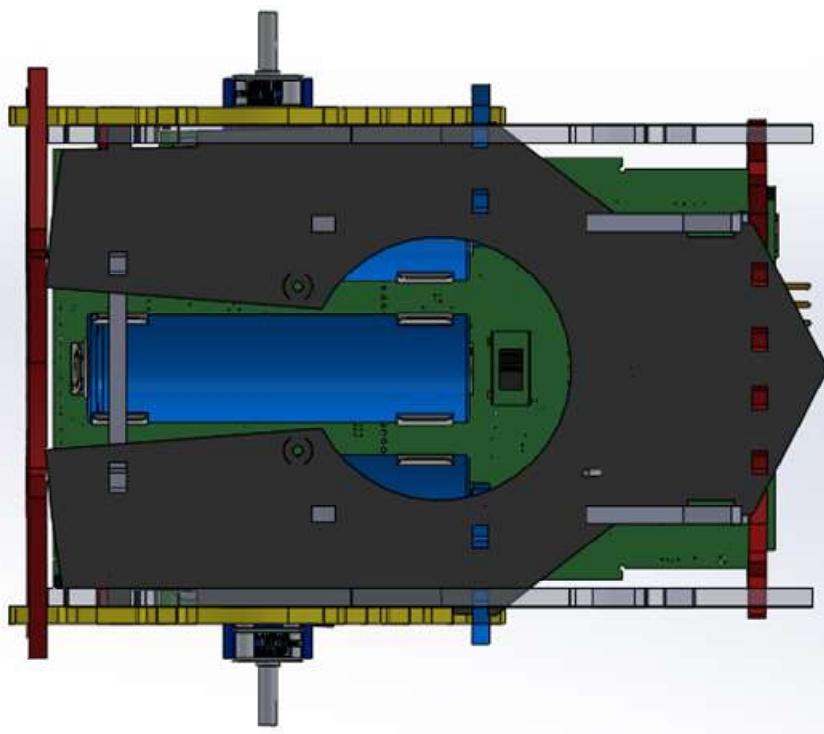
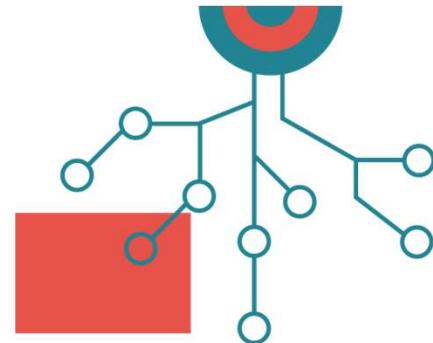
2

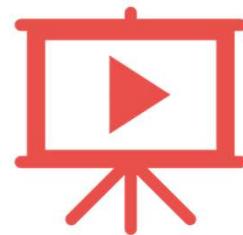
La pièce ROUGE doit être le plus basse possible vis à vis à la pièce JAUNE





# ASSEMBLAGE du CHASSIS

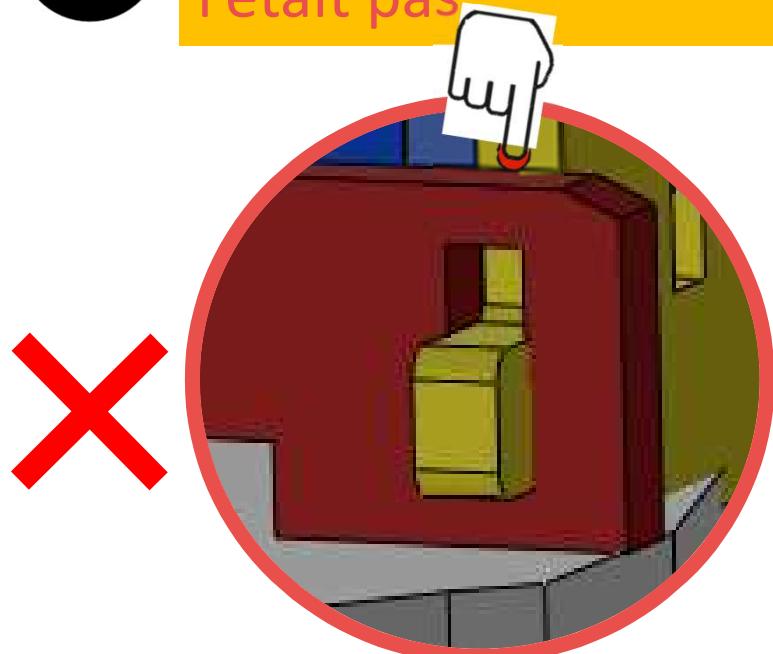




VIDEO à regarder avant de suivre les prochaines étapes

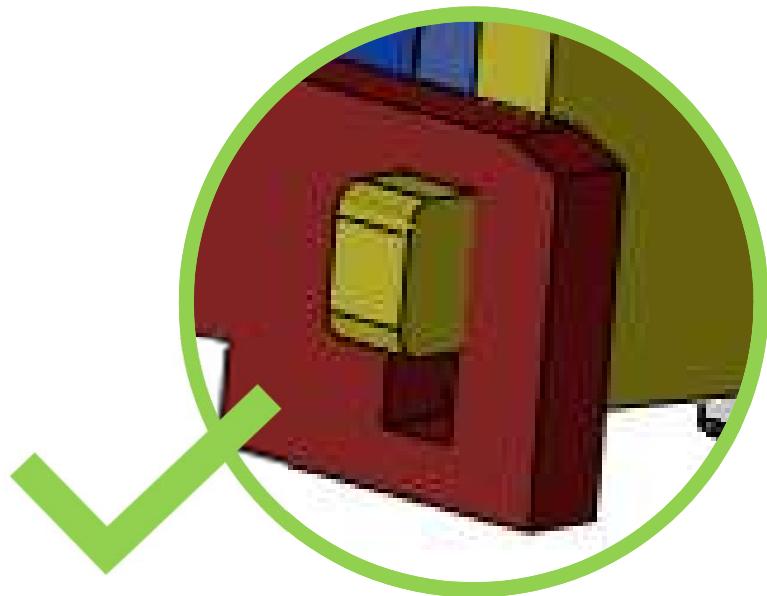
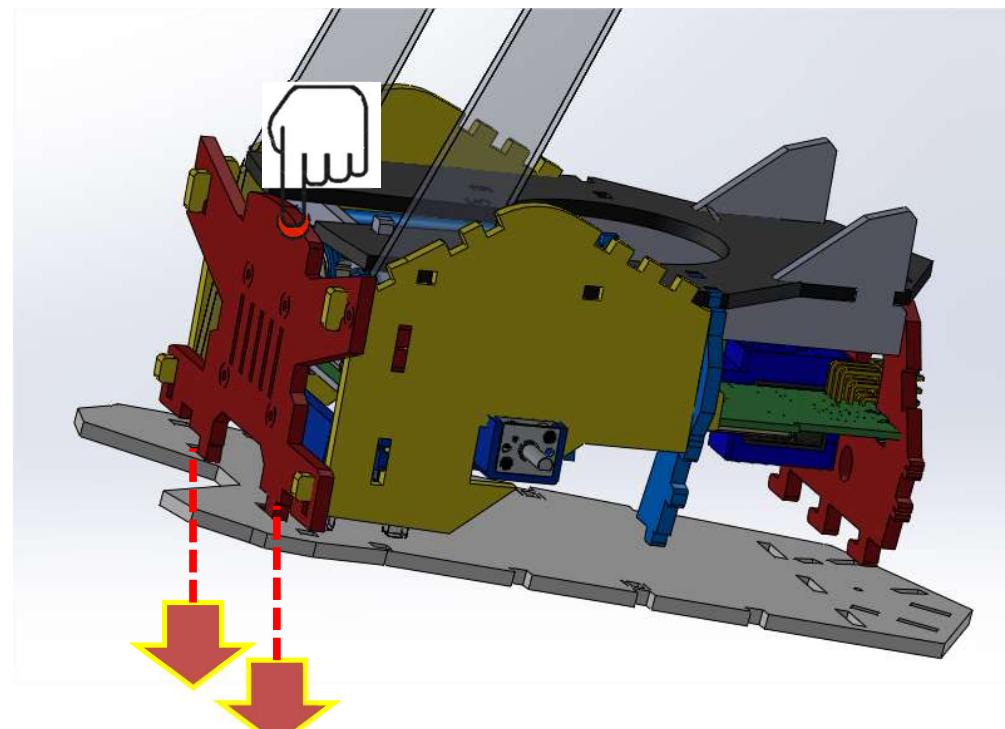
1

Rabaisser le X si il ne  
l'était pas

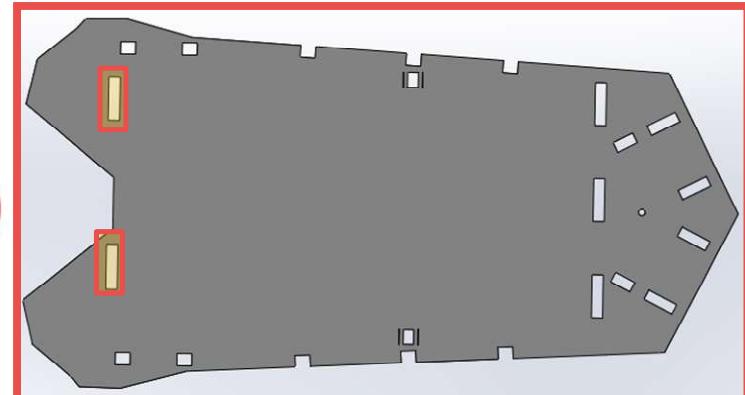


2

Insérer les PIEDS de la pièce  
ROUGE dans la pièce GRISE

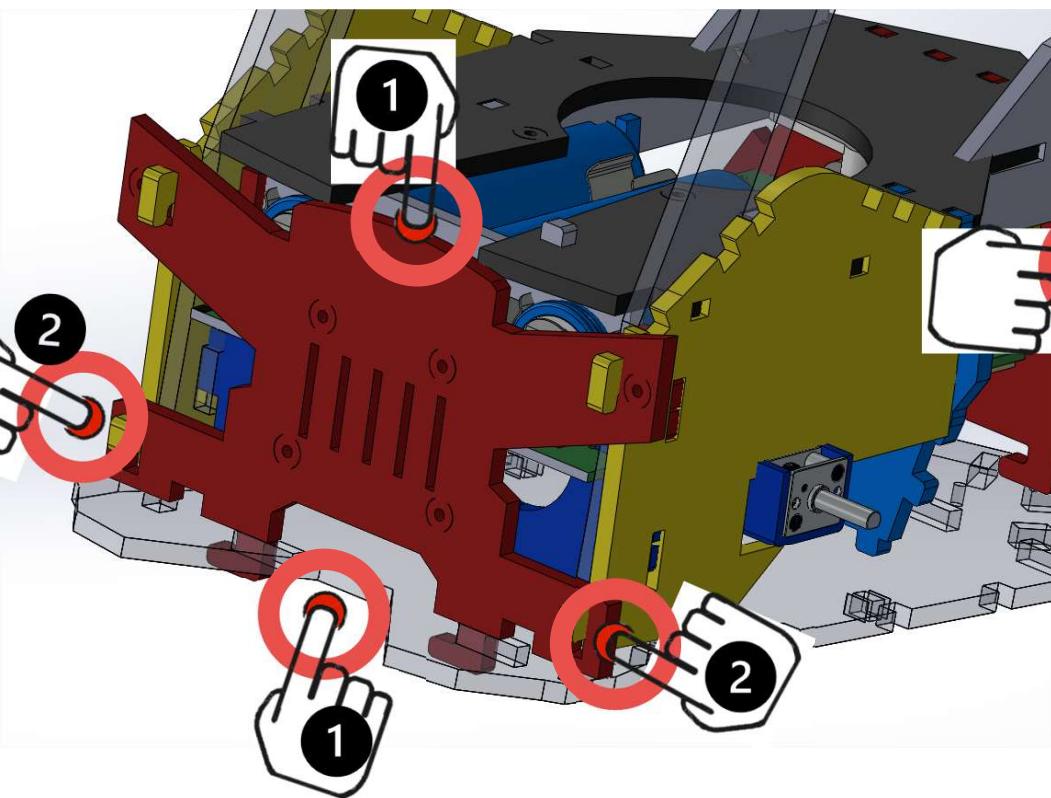


Attention sens plaque

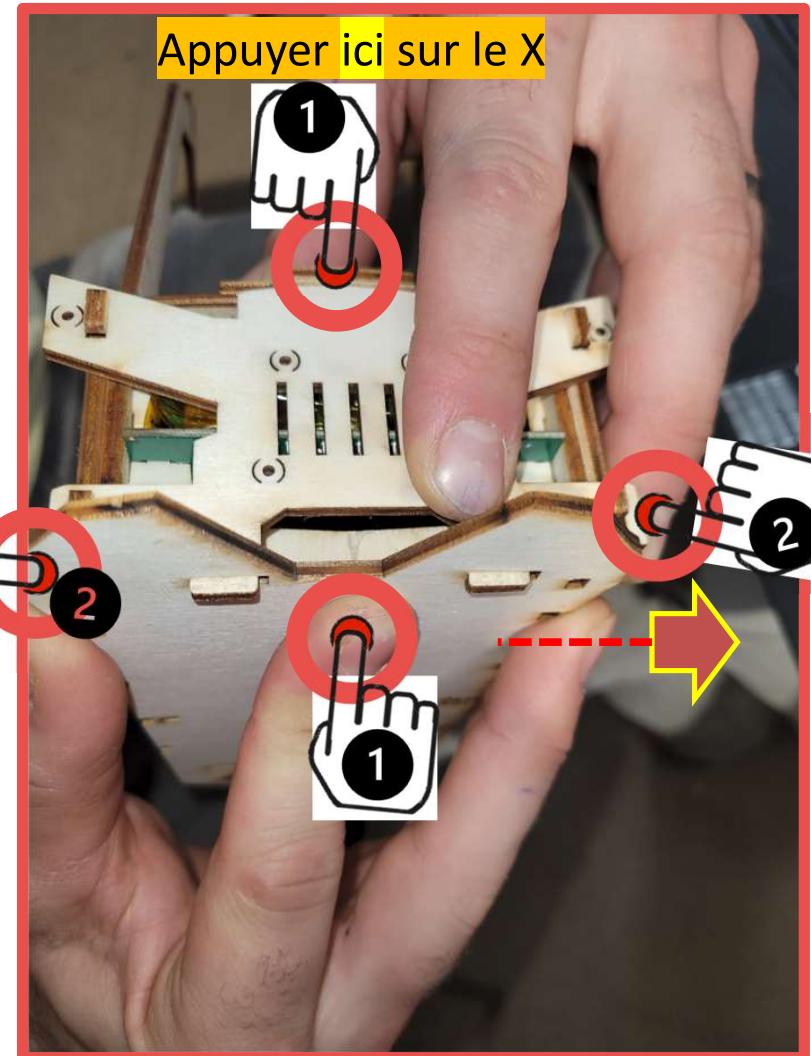


Maintenir la pression 1

et PINCER le châssis vers la droite 2

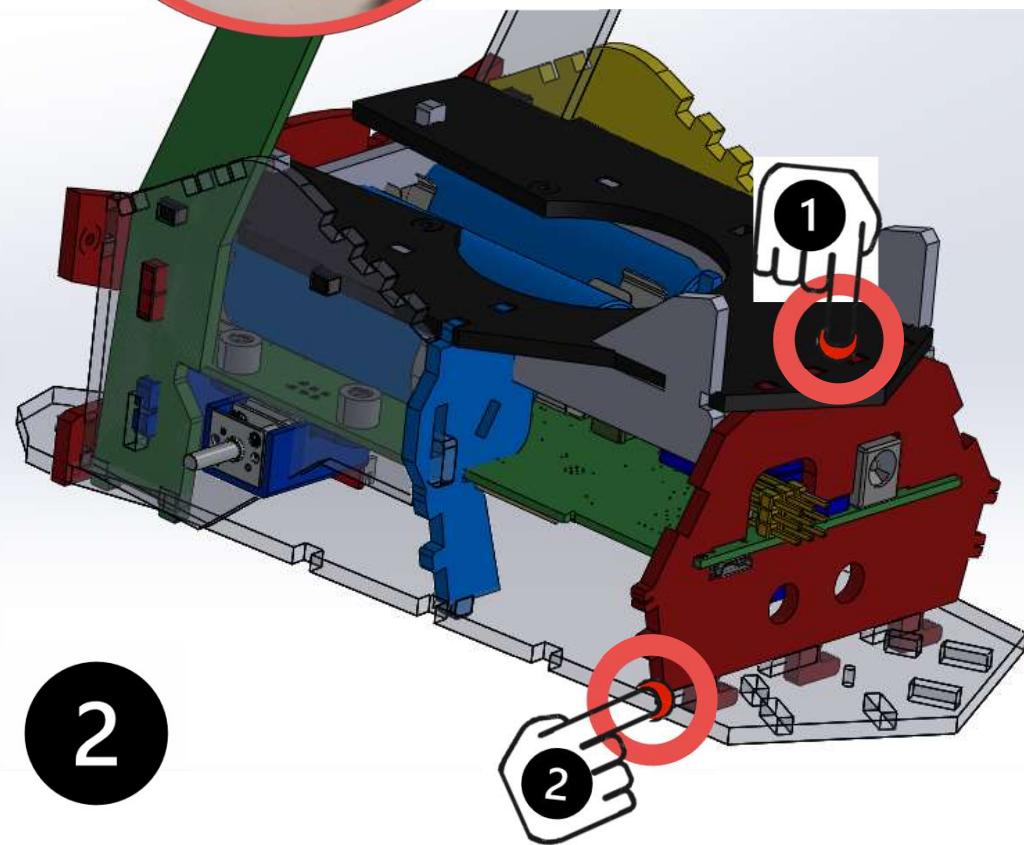
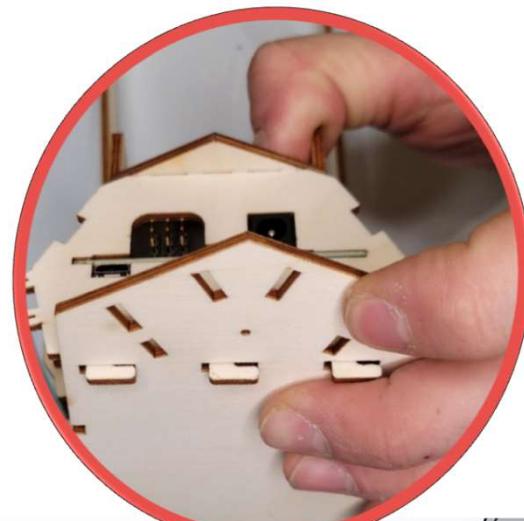
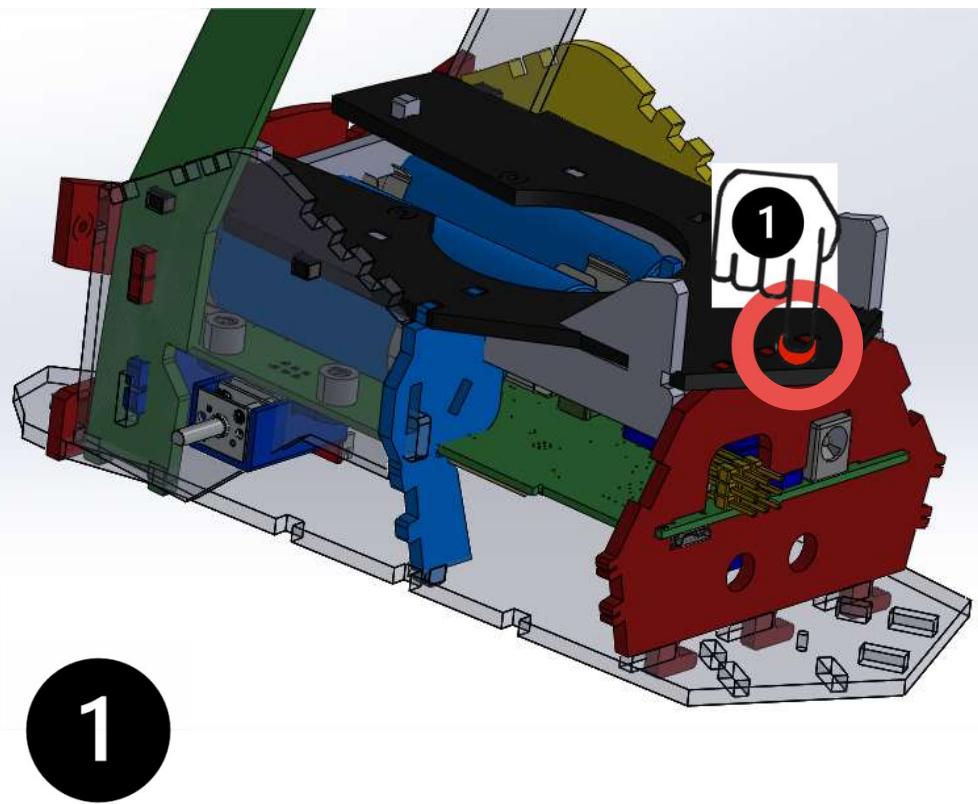


Appuyer ici sur le X



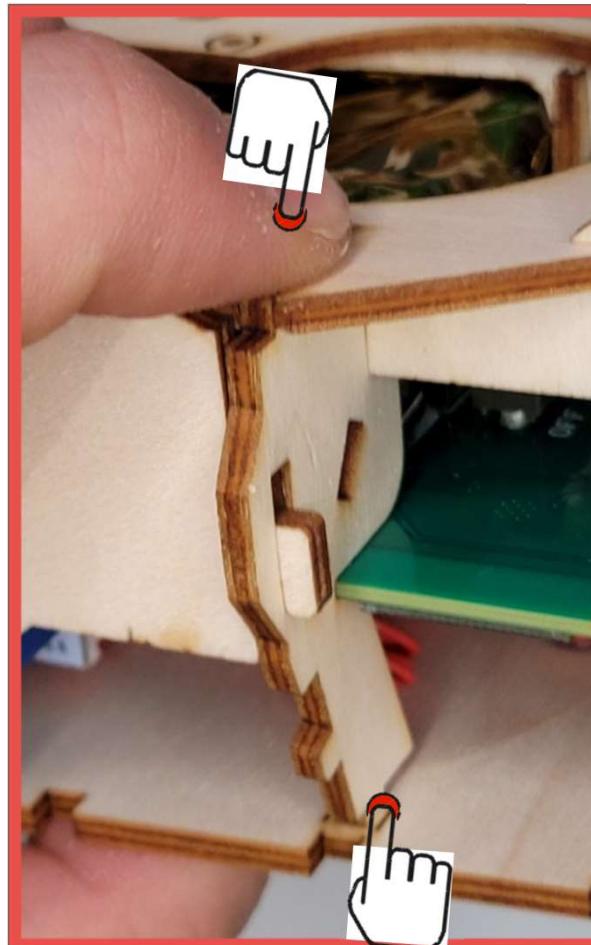
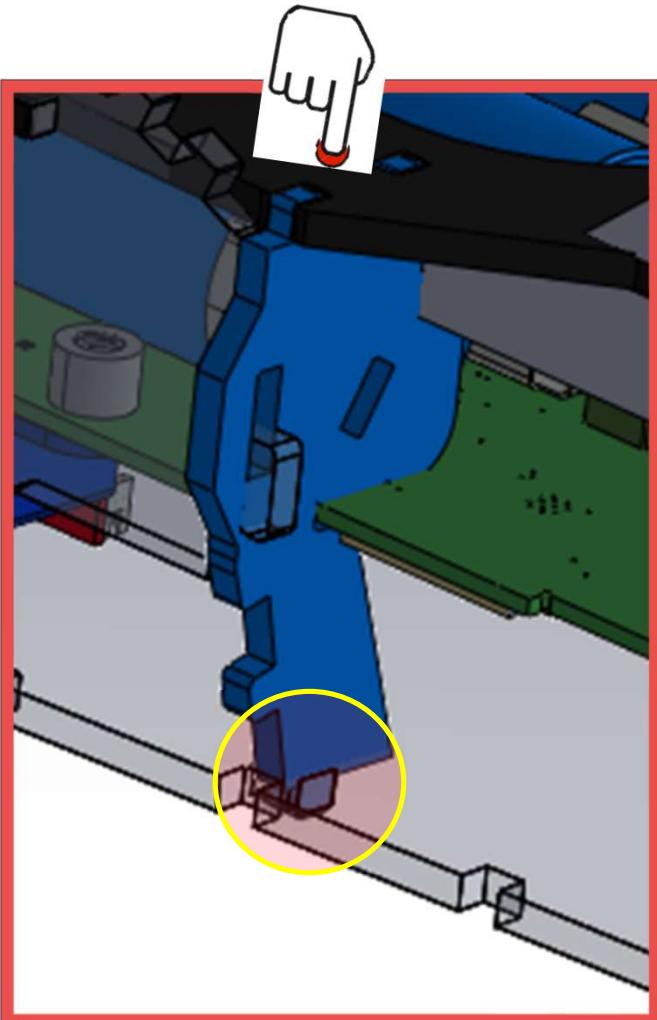
Maintenir la pression 1

et pousser le châssis vers la gauche 2

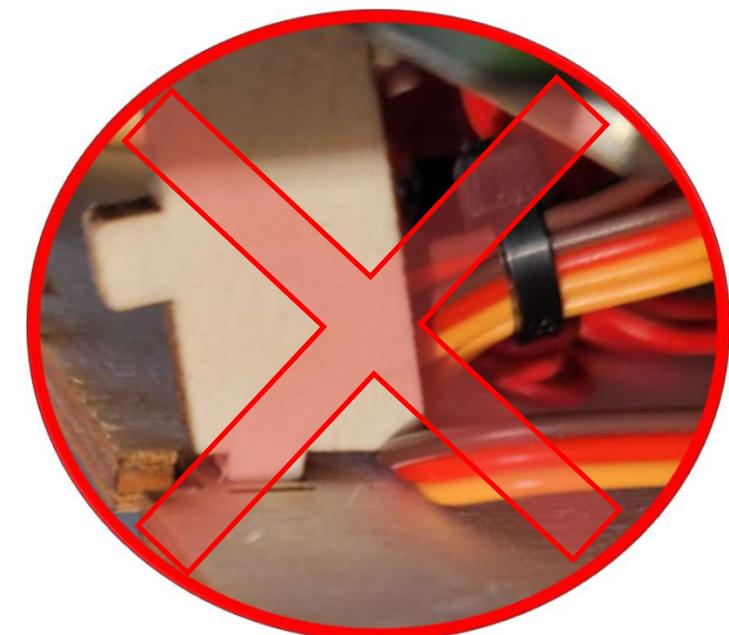


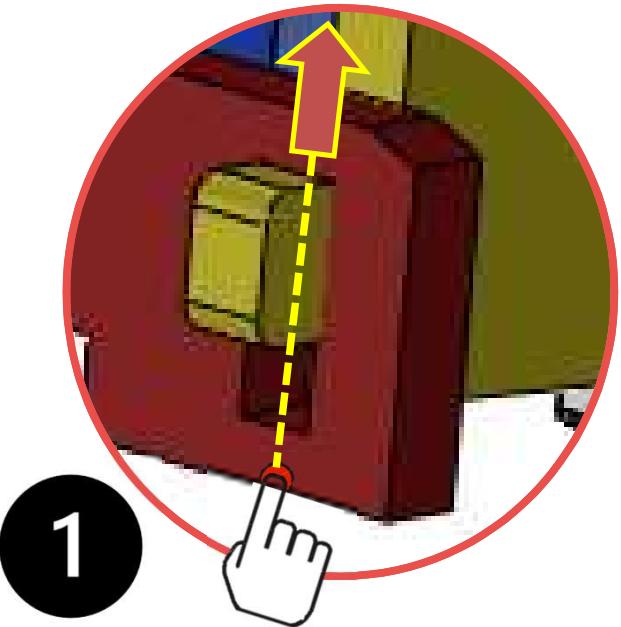
1

Forcer les inserts BLEUE dans le châssis GRIS



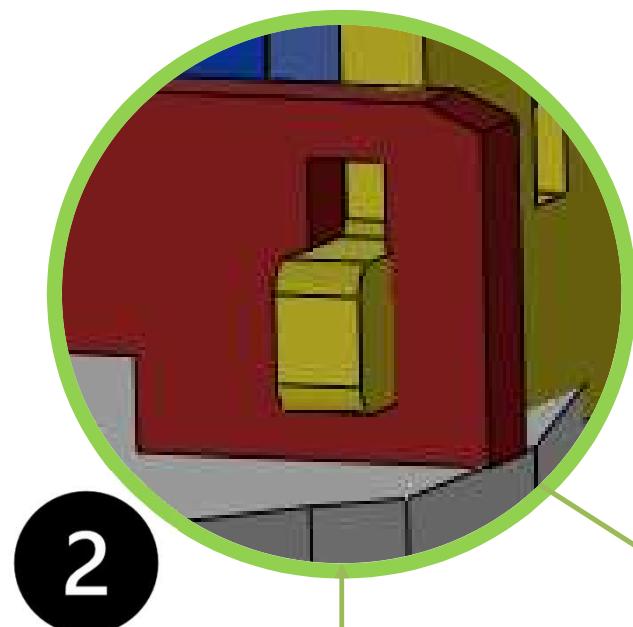
Ne pas insérer  
une pièce sur  
les câbles



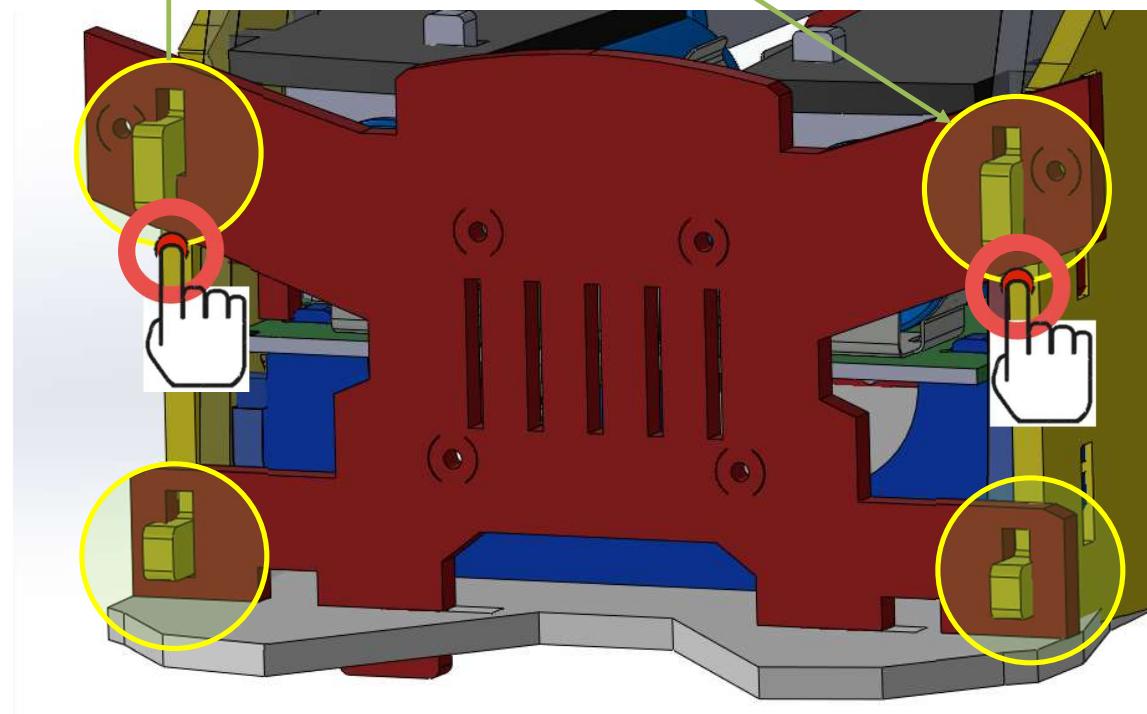


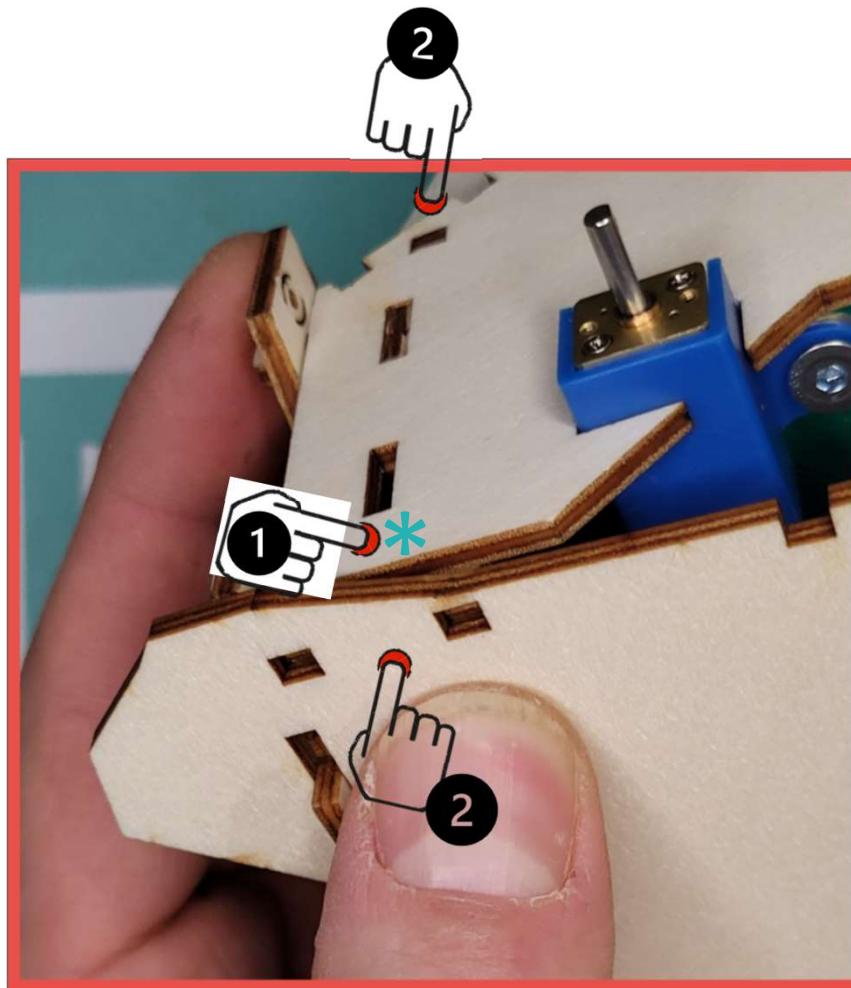
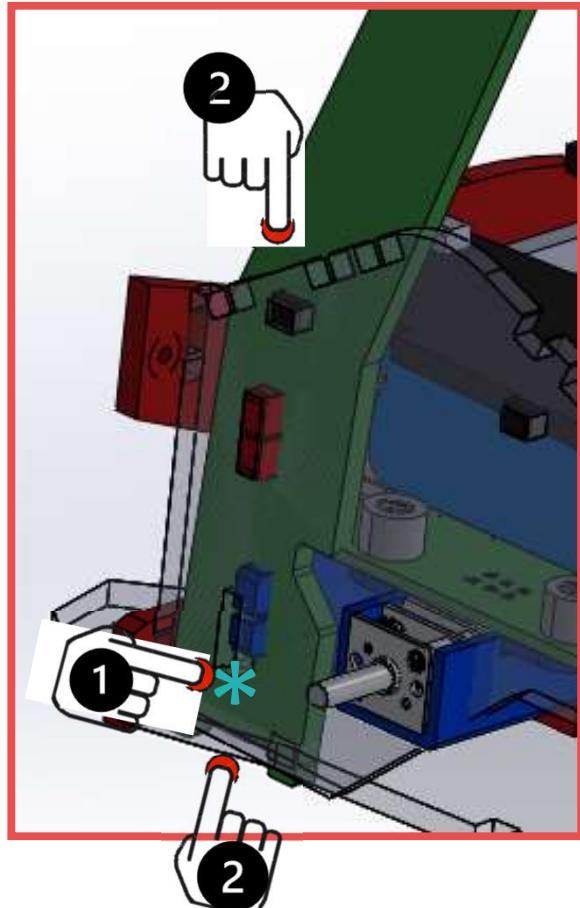
1

Faire glisser le X  
vers le haut



2





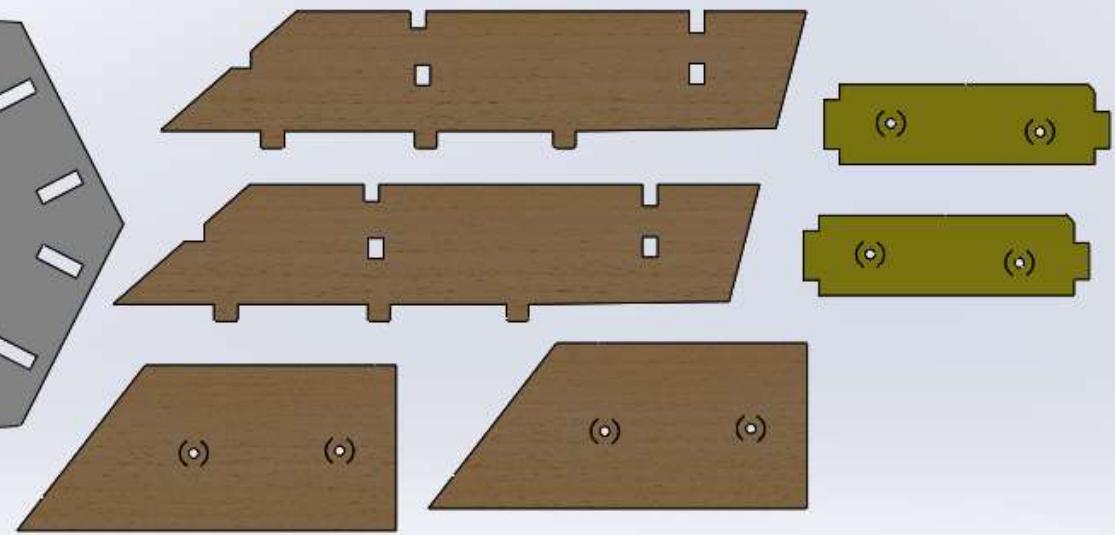
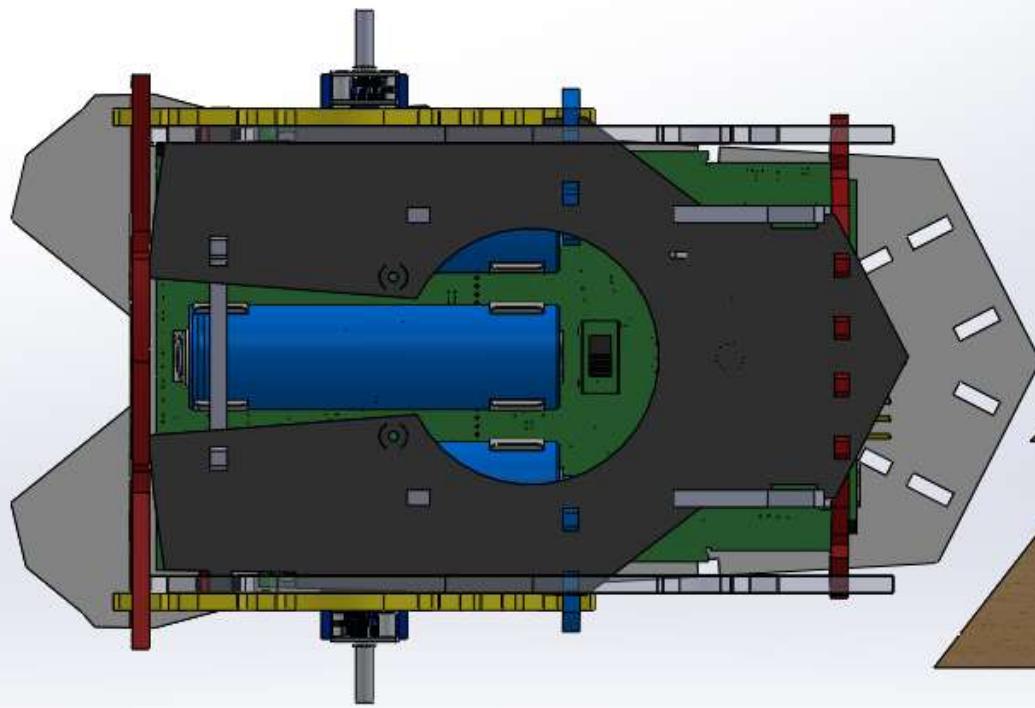
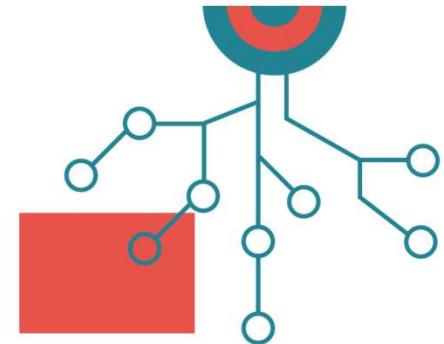
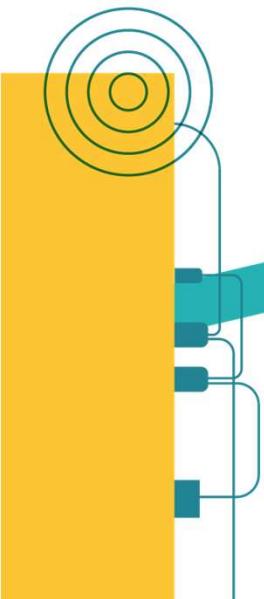
- 1 Appuyer ici \* sur la pièce verte jusqu'à ce que les pieds arrivent à bien rentrer dans le châssis
- 2 Coincer les pieds verts dans le châssis gris

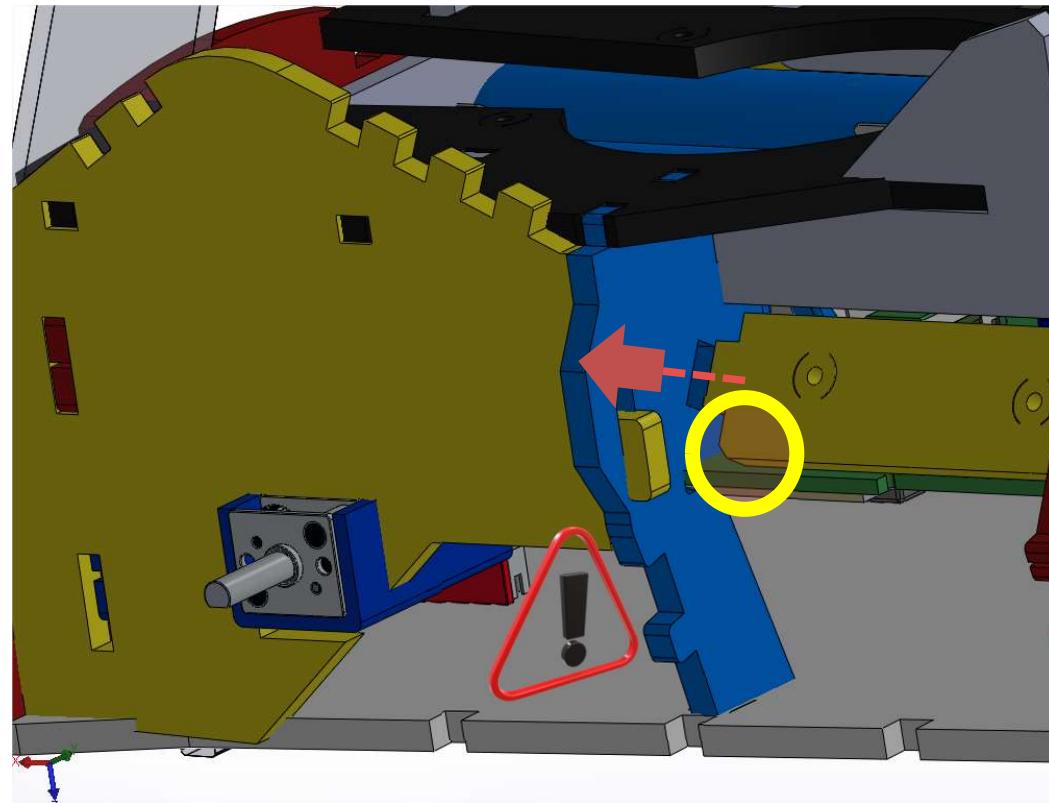
# APPELEZ- NOUS

pour que l'on  
valide votre  
montage avant  
de continuer !!



# ASSEMBLAGE des CAPOTS

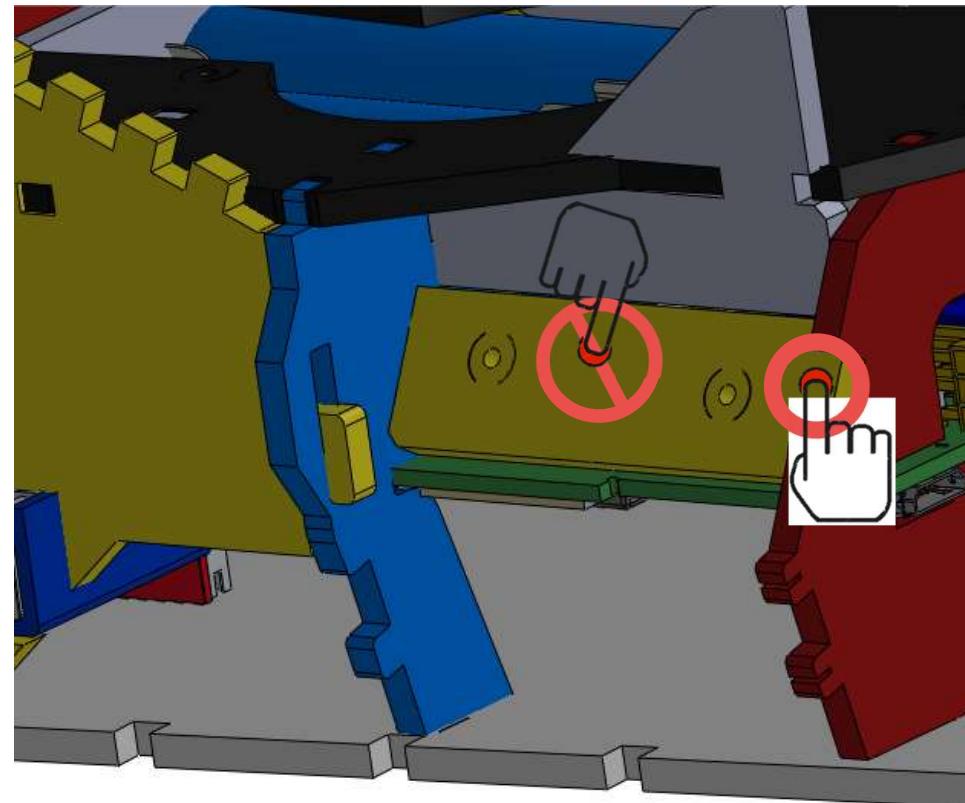




1

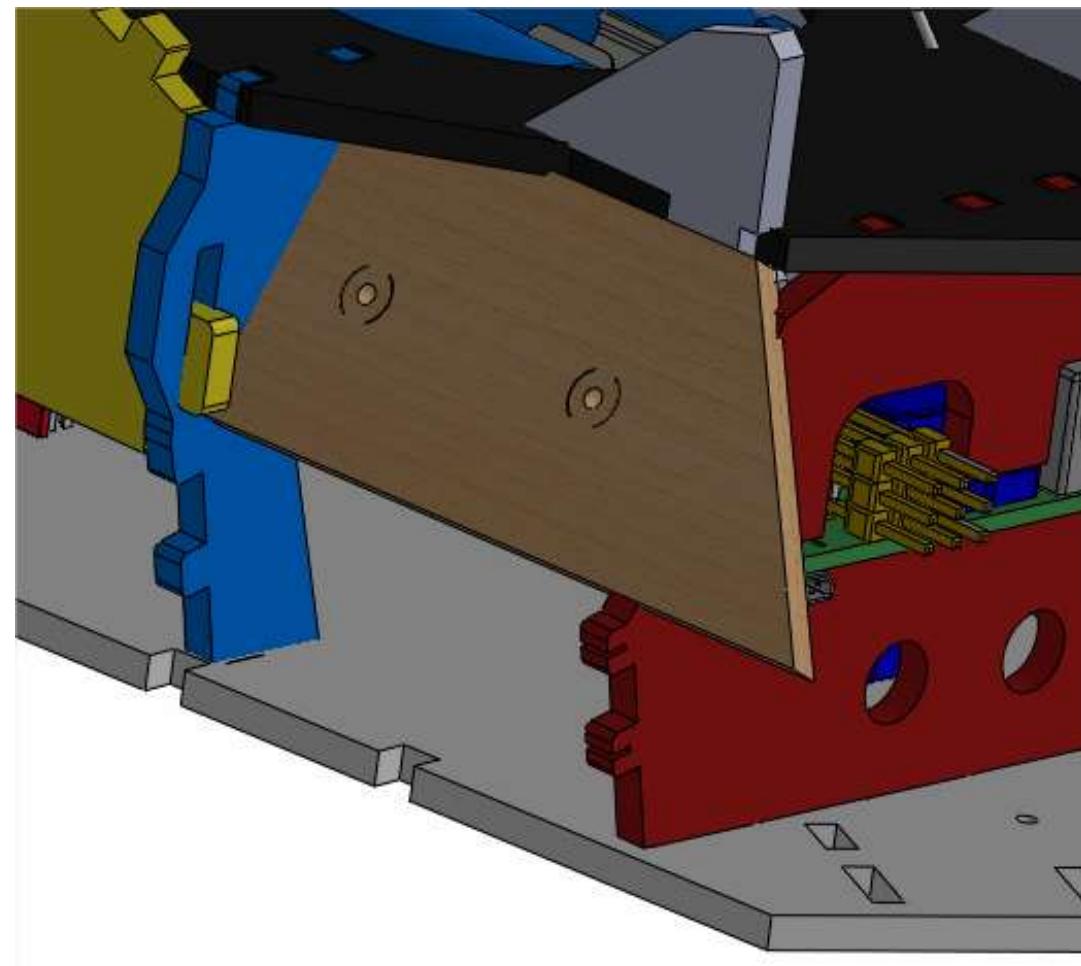
Insérer la pièce jaune dans la pièce bleue.

Attention sens du détrompeur (chanfrein)



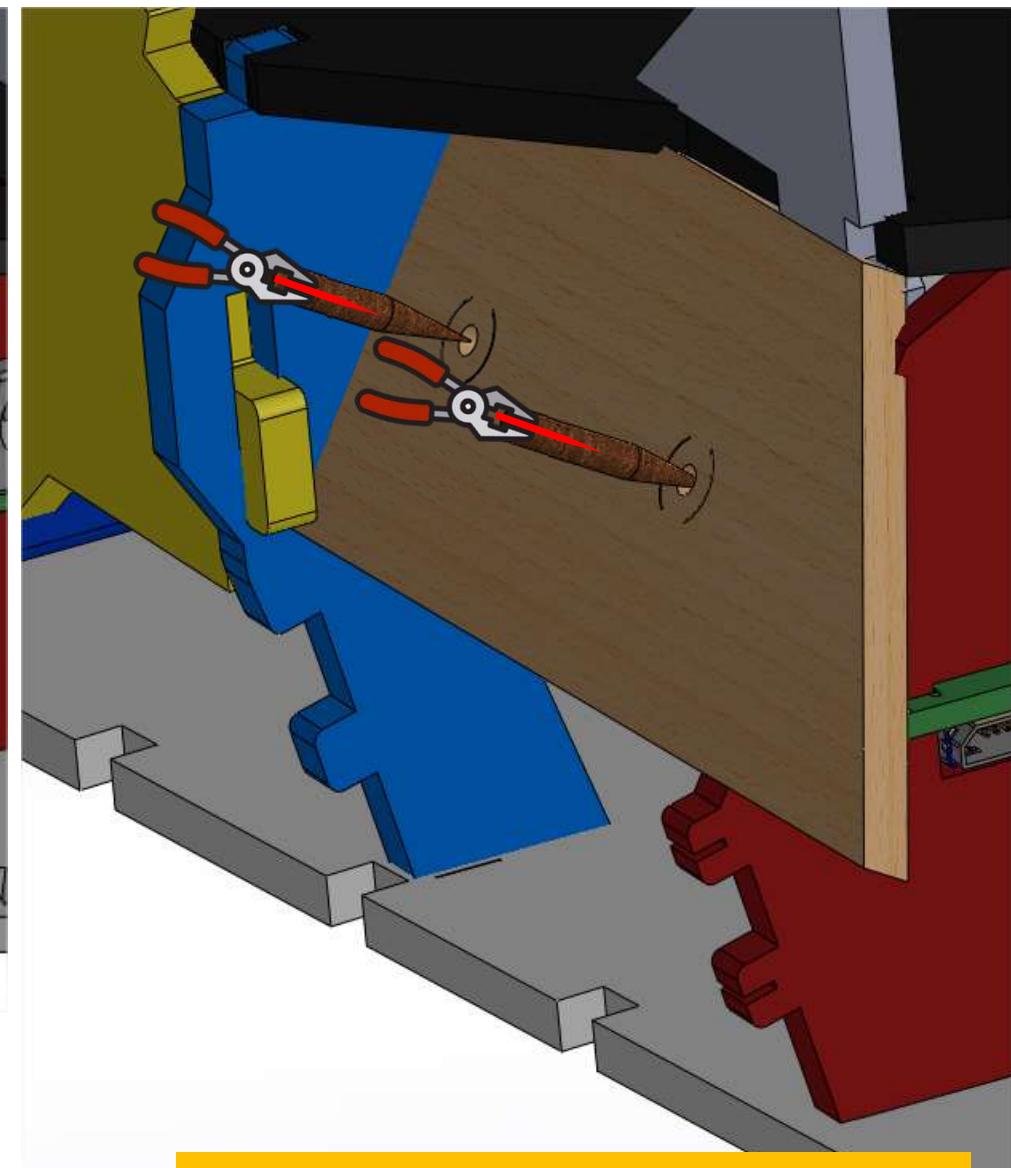
2

Insérer en force en appuyant ici



1

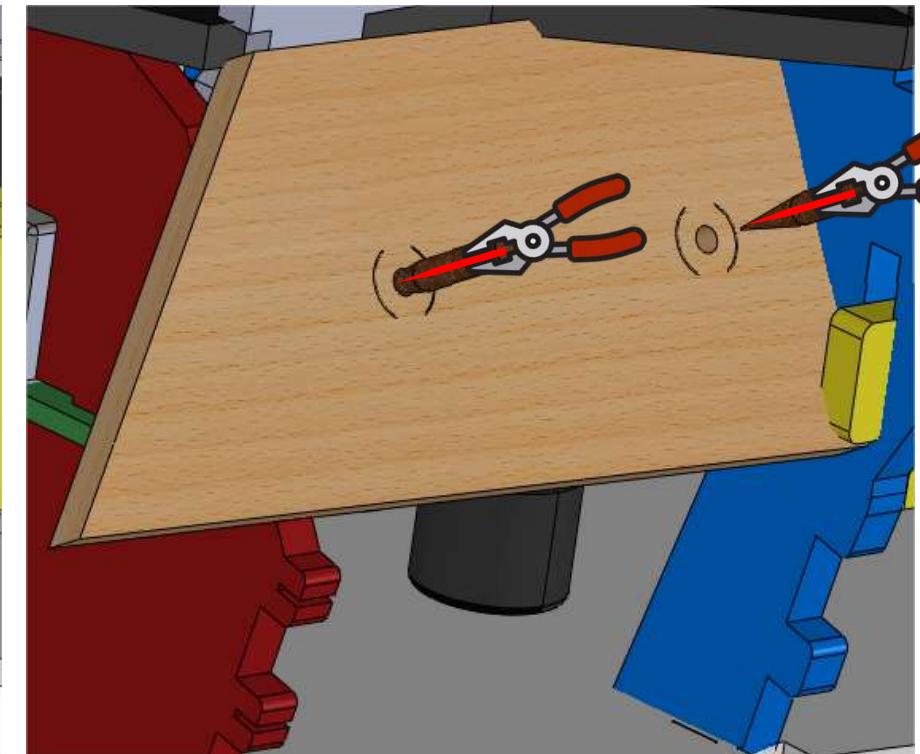
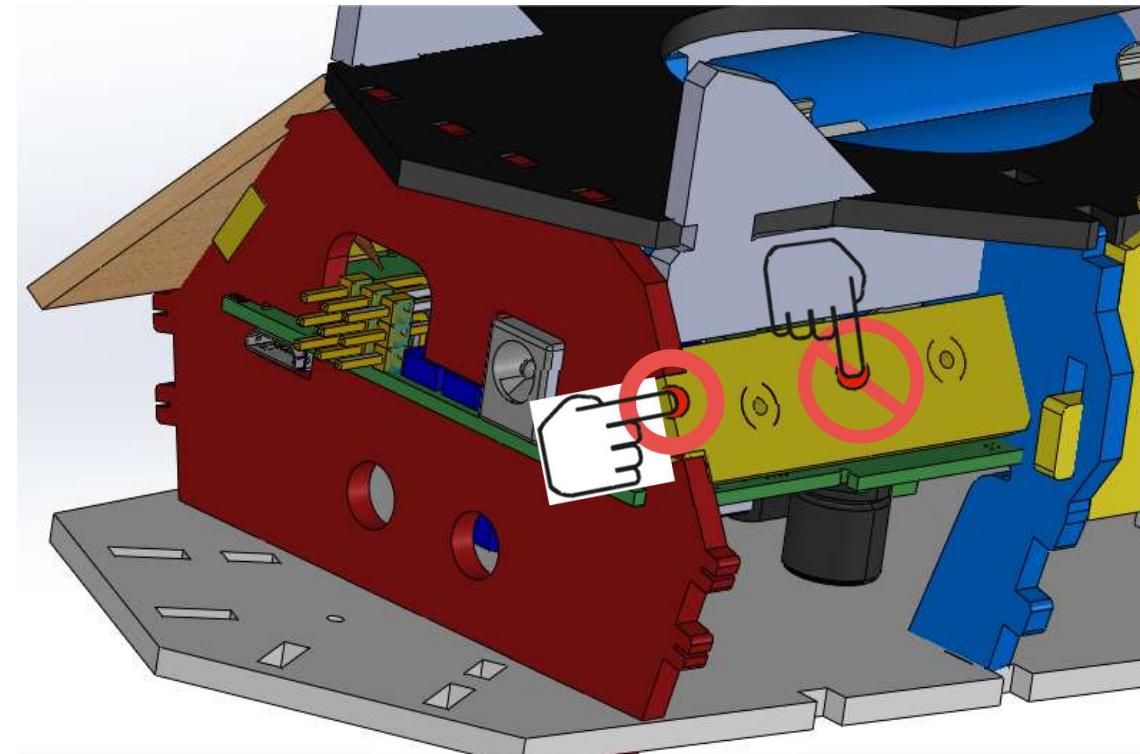
Positionner le capot



2

Insérer en force à la pince un 1<sup>er</sup> cure-dent jusqu'à la carte et le couper puis un 2ième cure dents

# Idem de l'autre côté



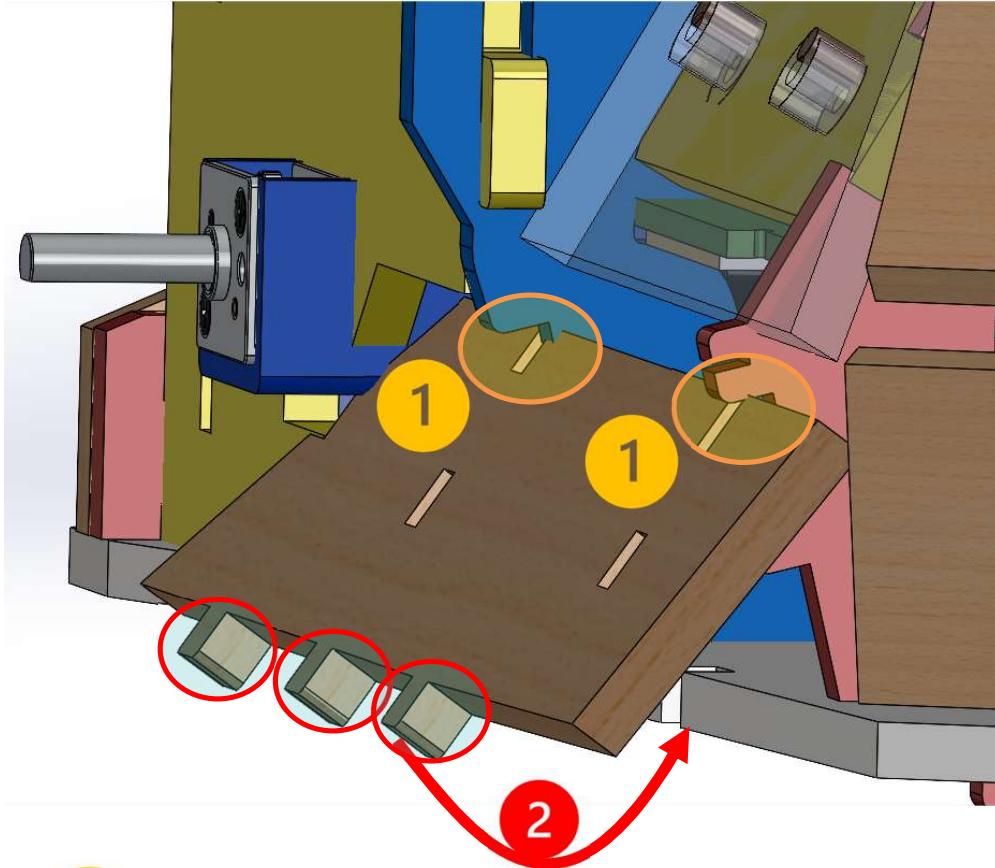
1

Positionner le support

2

Positionner le capot et  
ajouter les 2 cures-dents

# Commencer par le côté gauche

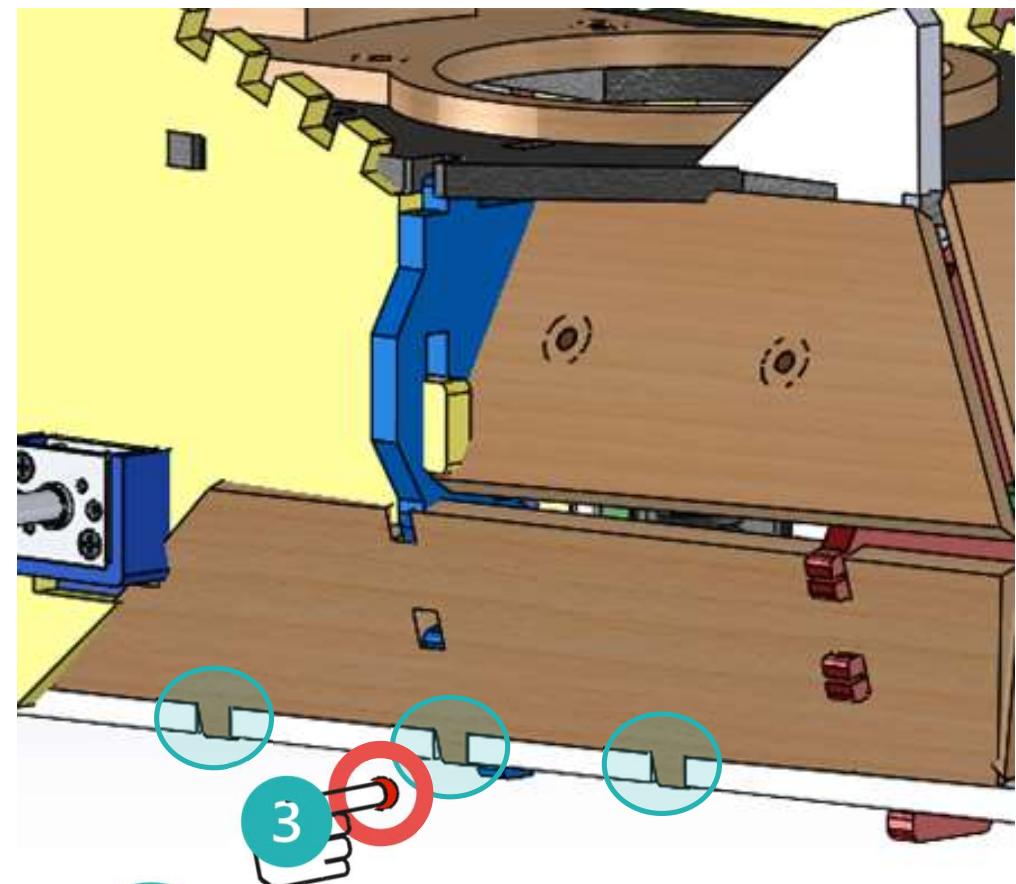


1

Mettre d'abord les inserts

2

puis faire pivoter et enfoncer les



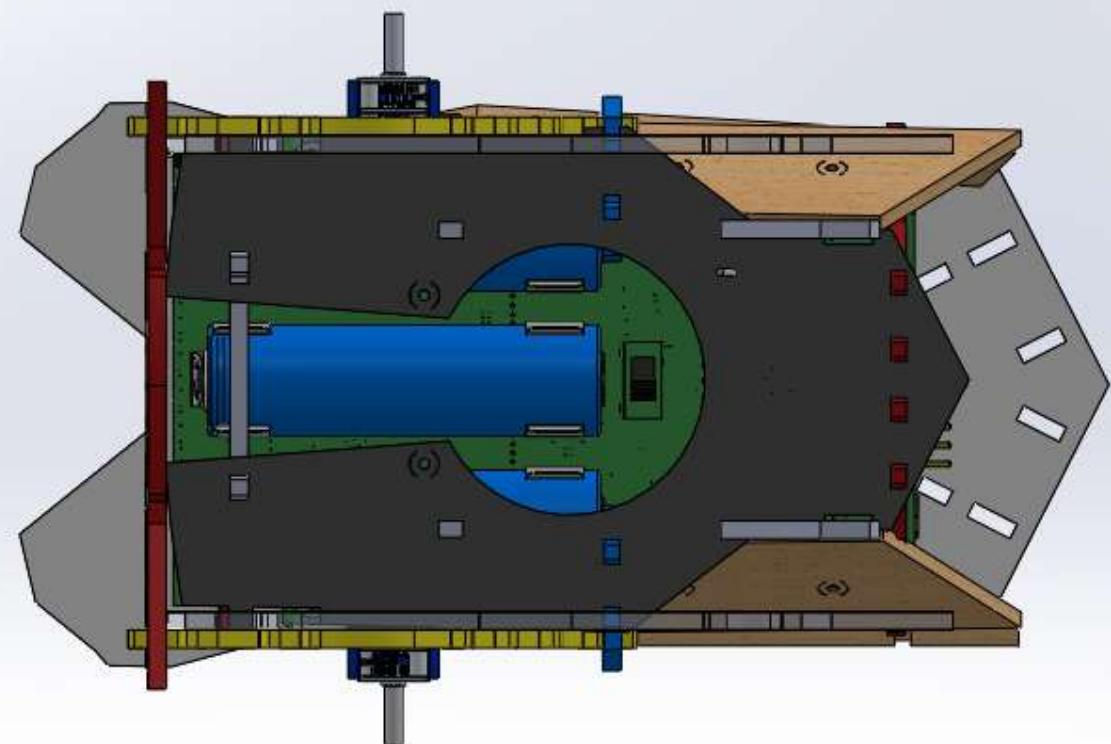
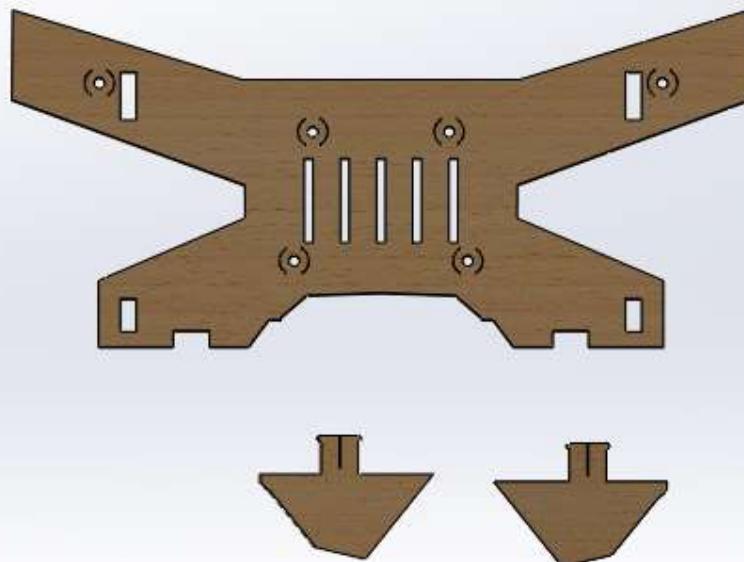
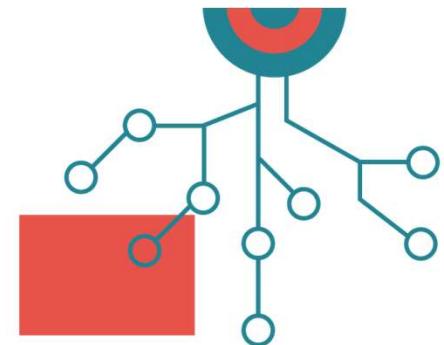
3

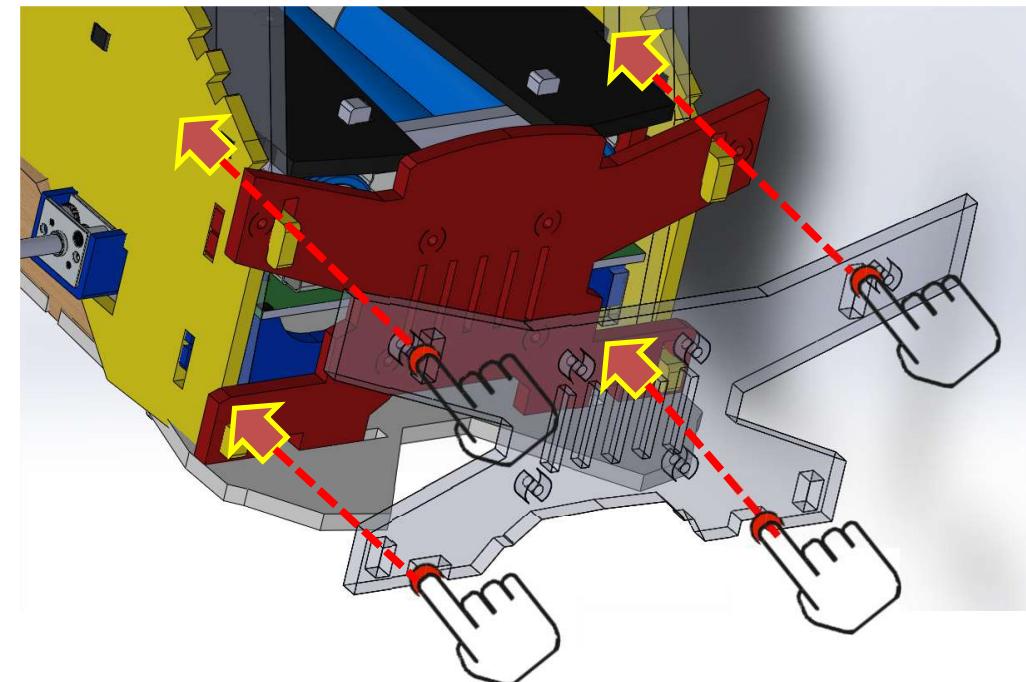
Forcer sur les 3 inserts dans le châssis

4

Idem de l'autre côté

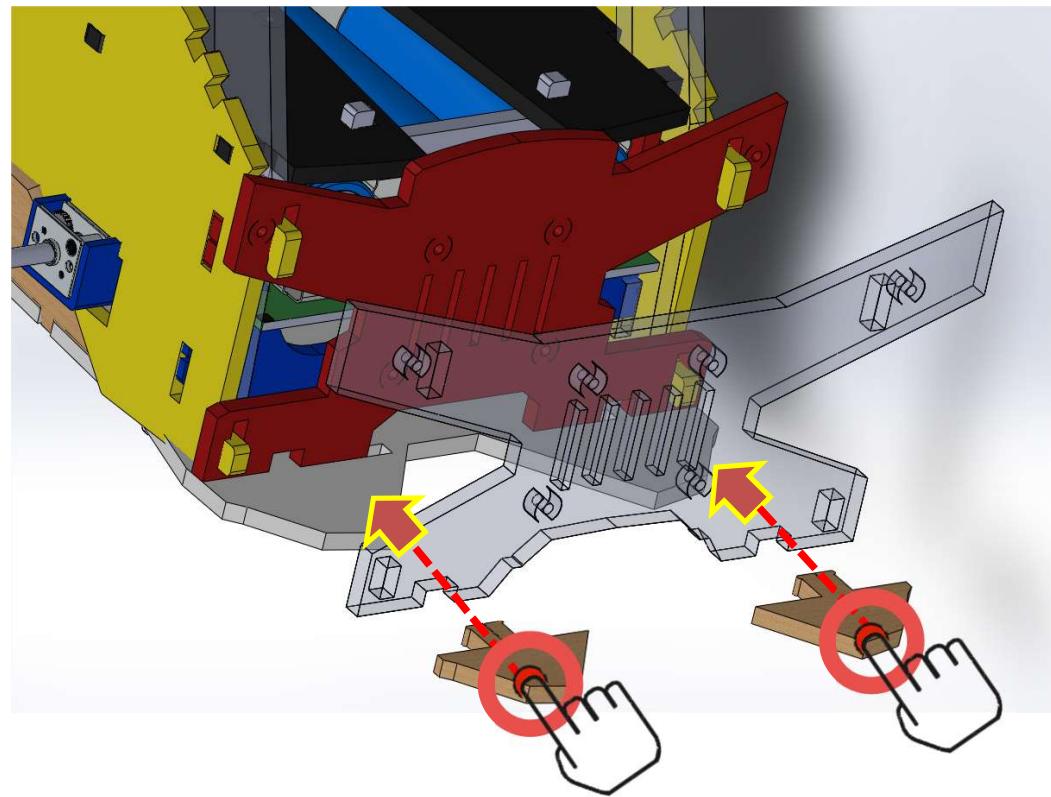
# ASSEMBLAGE du **X AVANT**





1

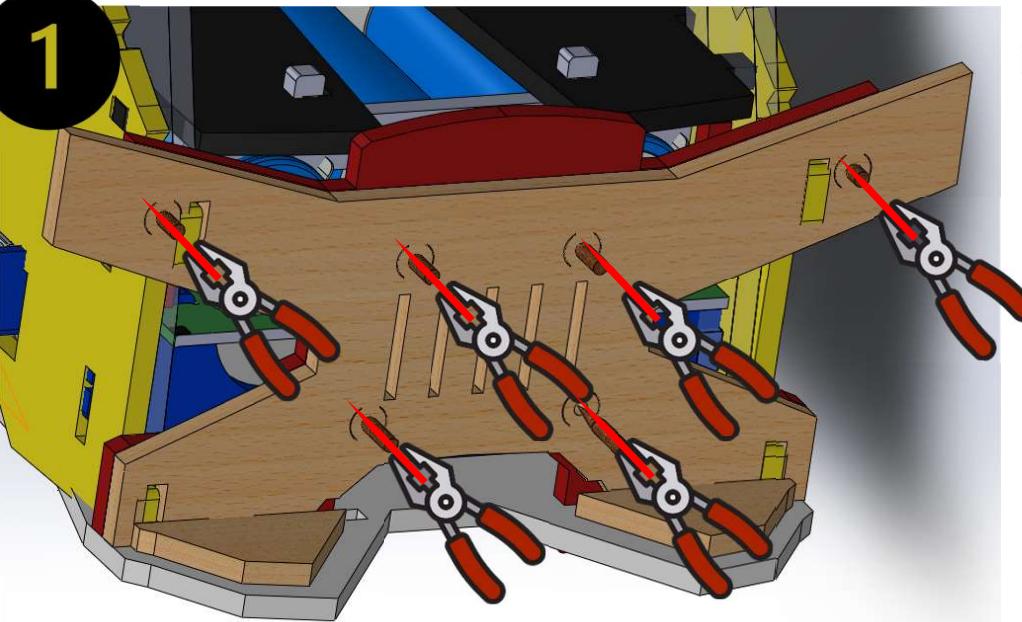
Mettre le deuxième X avant



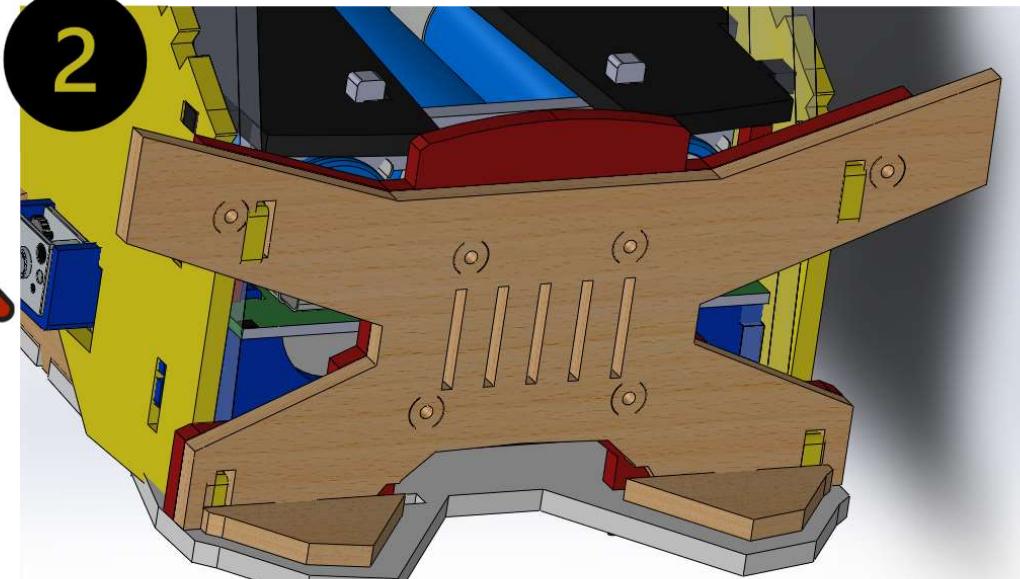
2

Mettre les pieds avant, en force

1



2

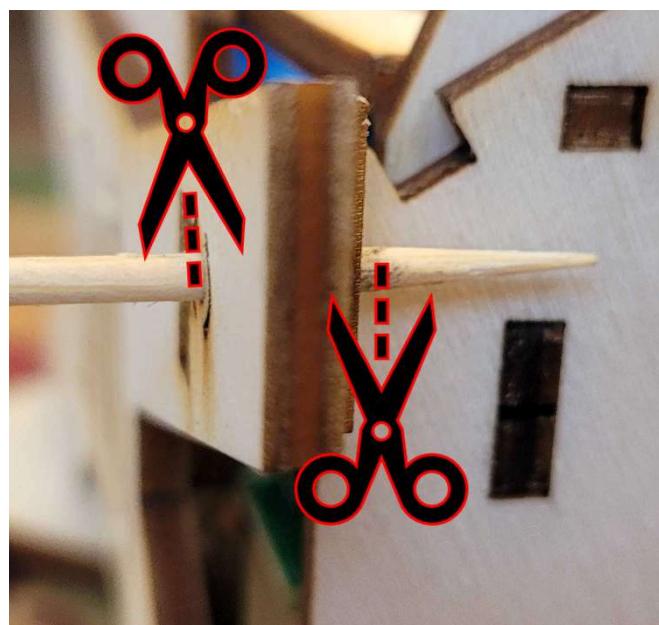


Insérer 6 cure dents à fond

(aucun risque de sécurité, ne vous en faites pas!)

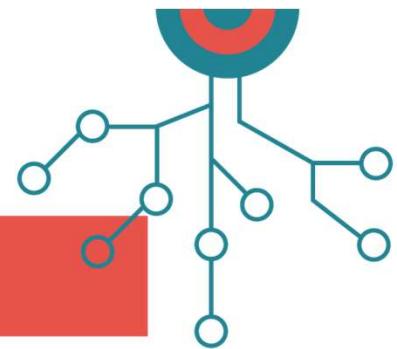
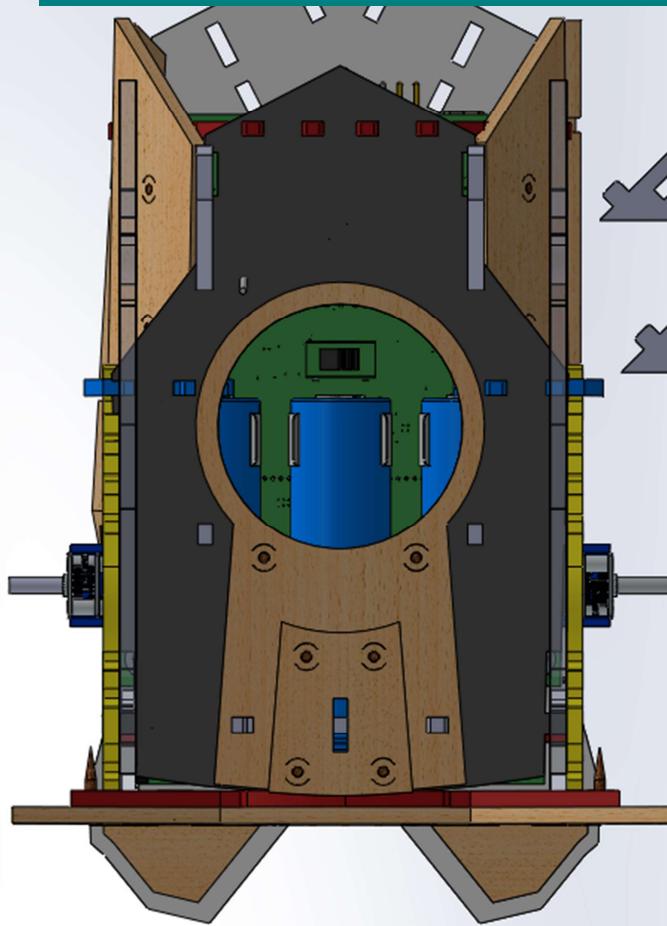
et coupez à raz

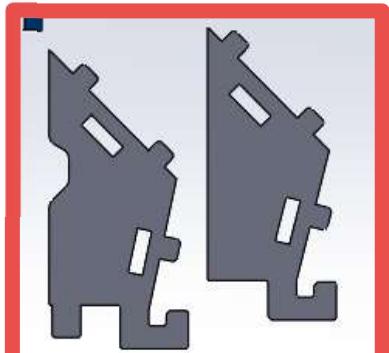
3



Couper les 2 cure dents de part et d'autre

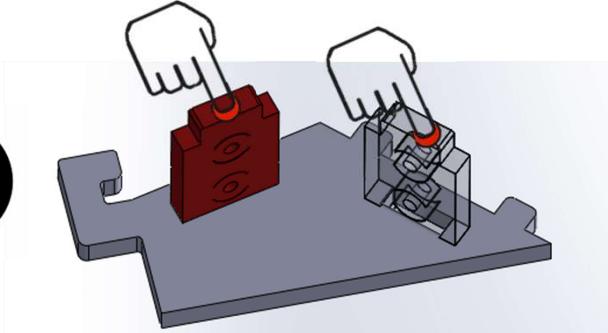
# ASSEMBLAGE DU NEZ ARRIERE



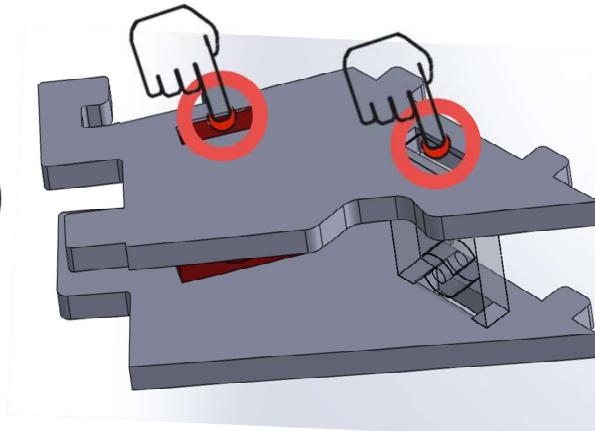


/!\ 2 pièces différentes

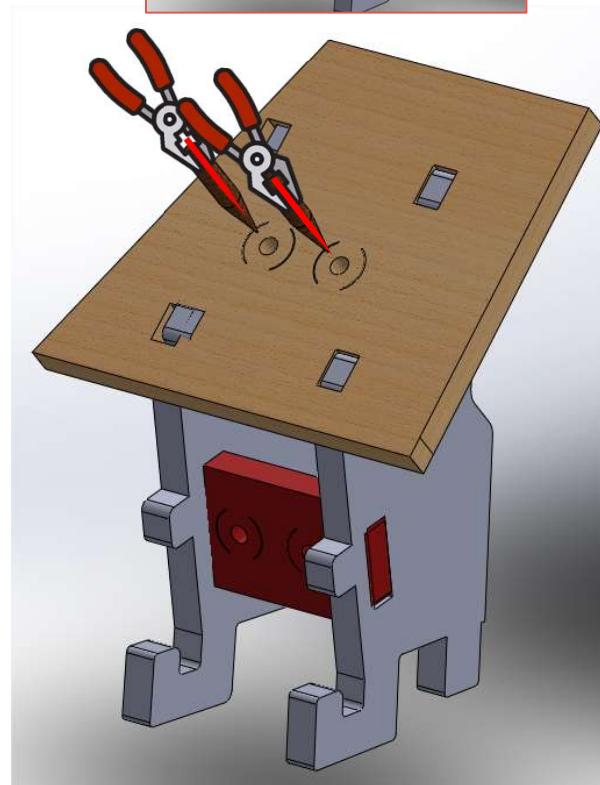
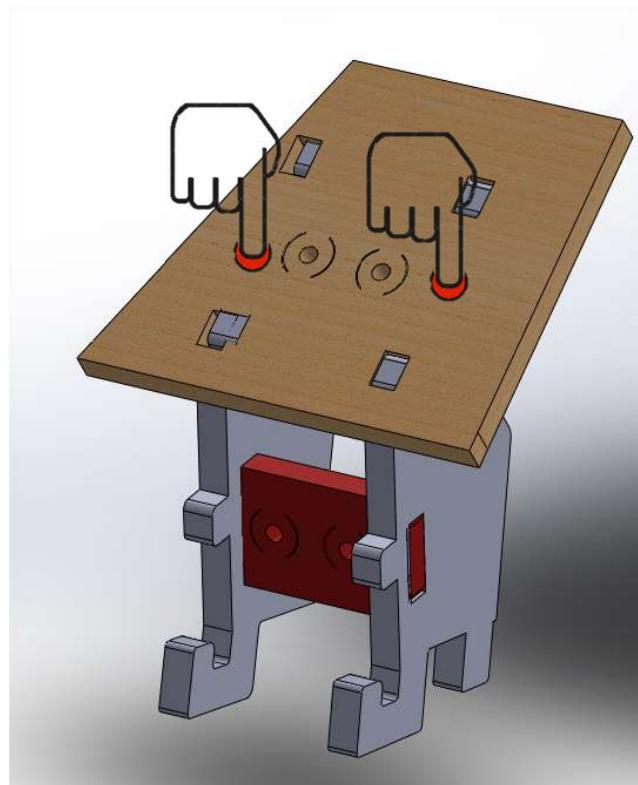
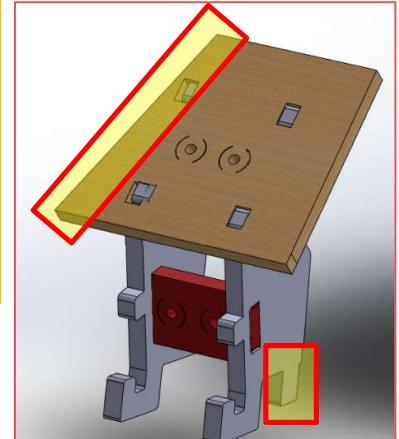
1



2



Attention au sens  
du capot :  
pied à l'opposé de  
la pente



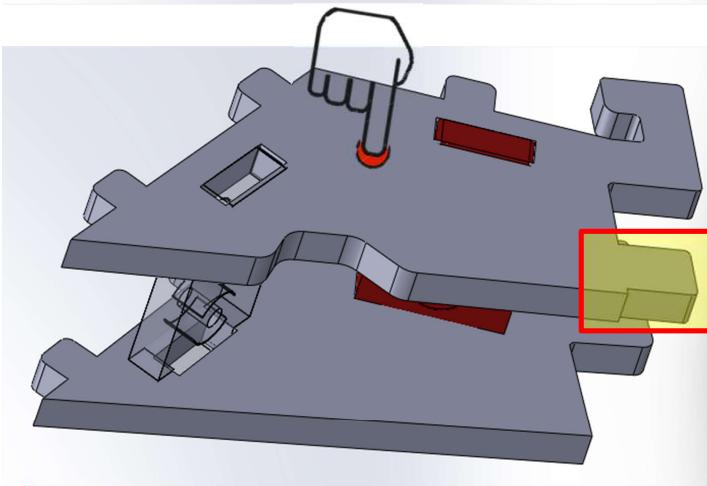
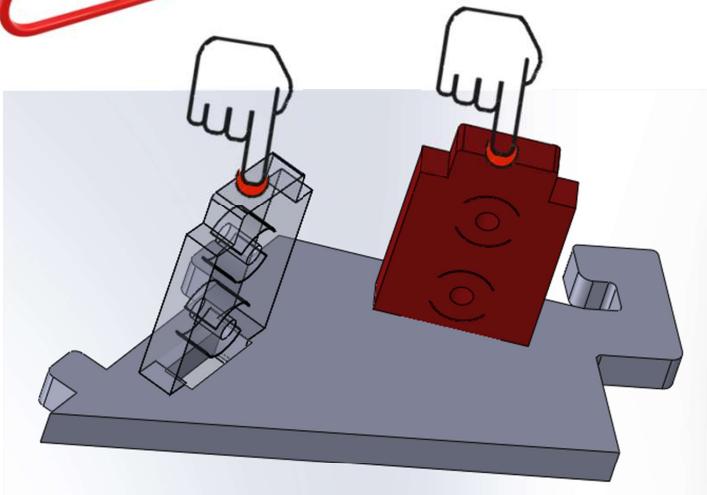
poser à plat et enfoncer

3

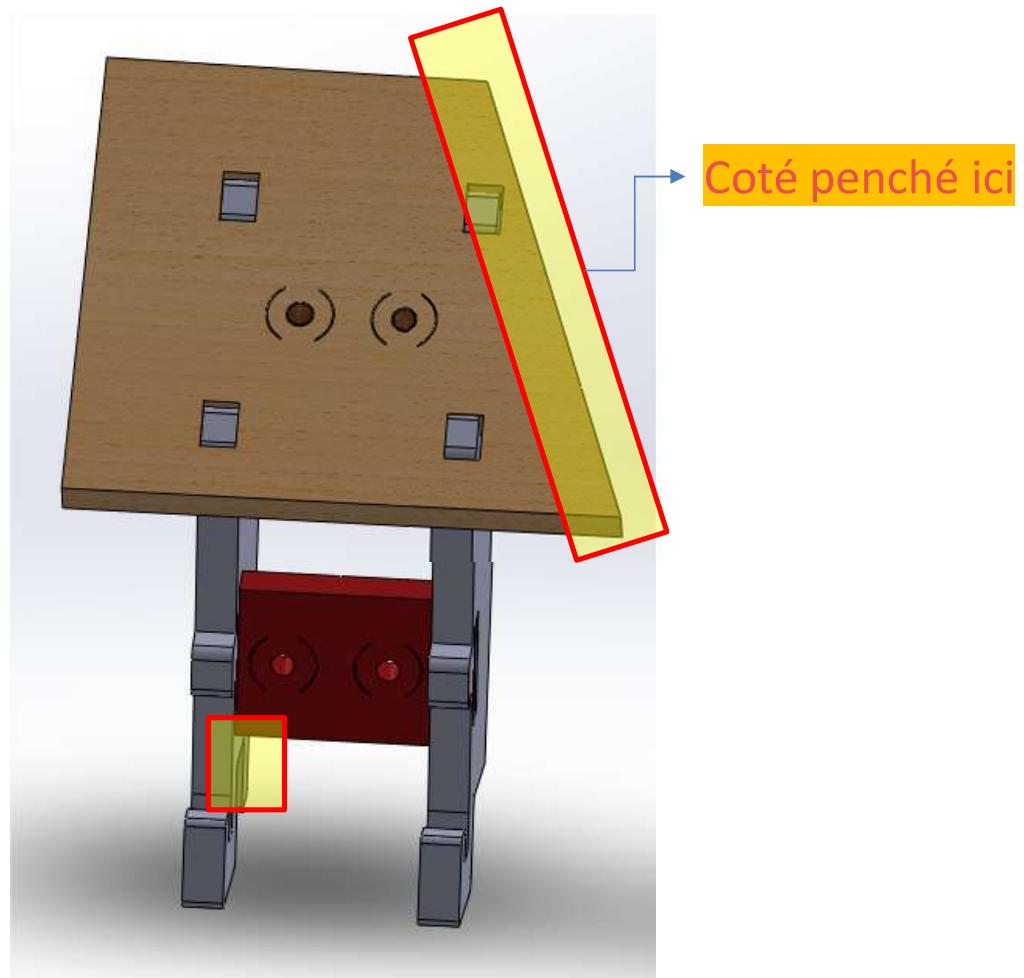
4

insérer et couper 2  
cure-dents

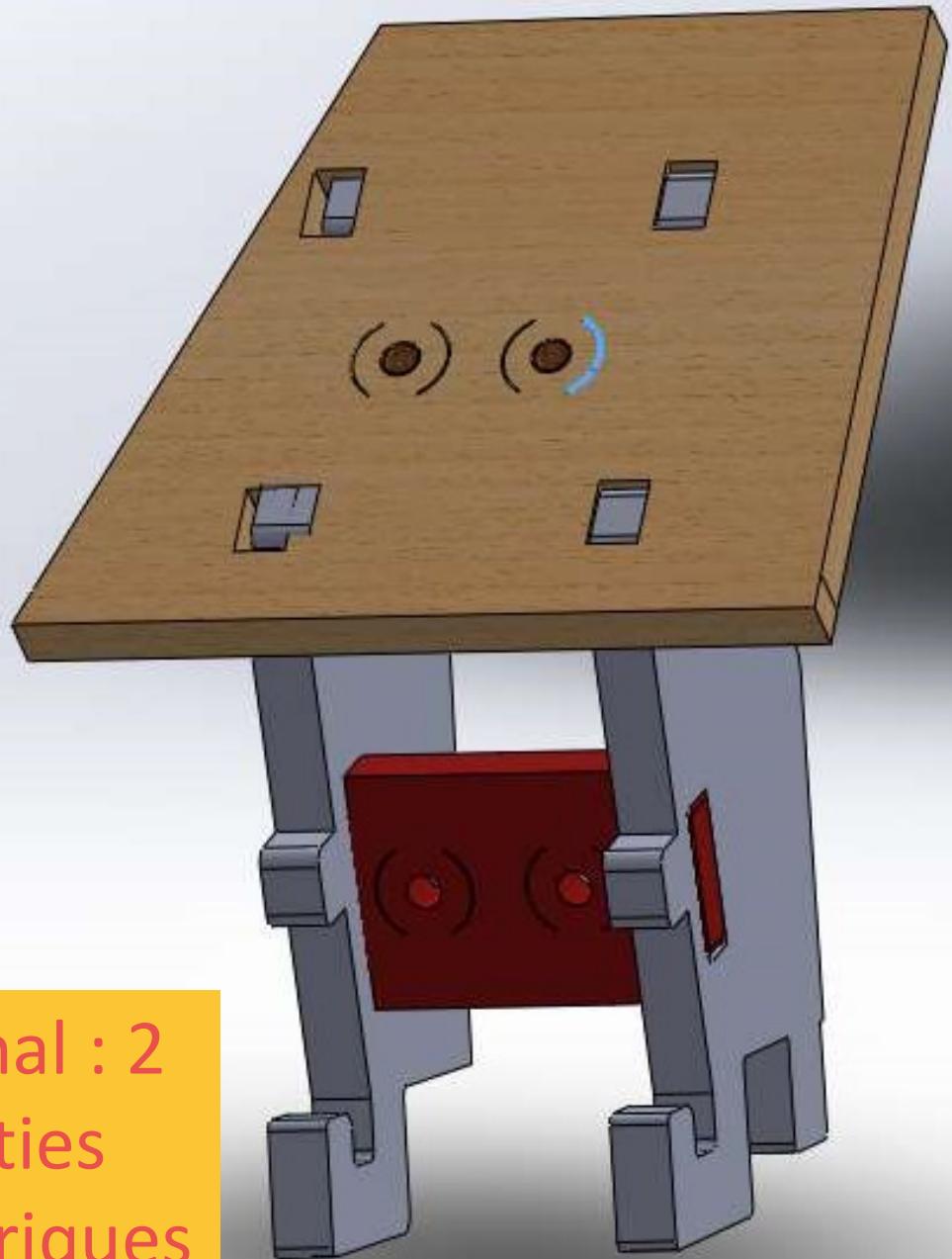
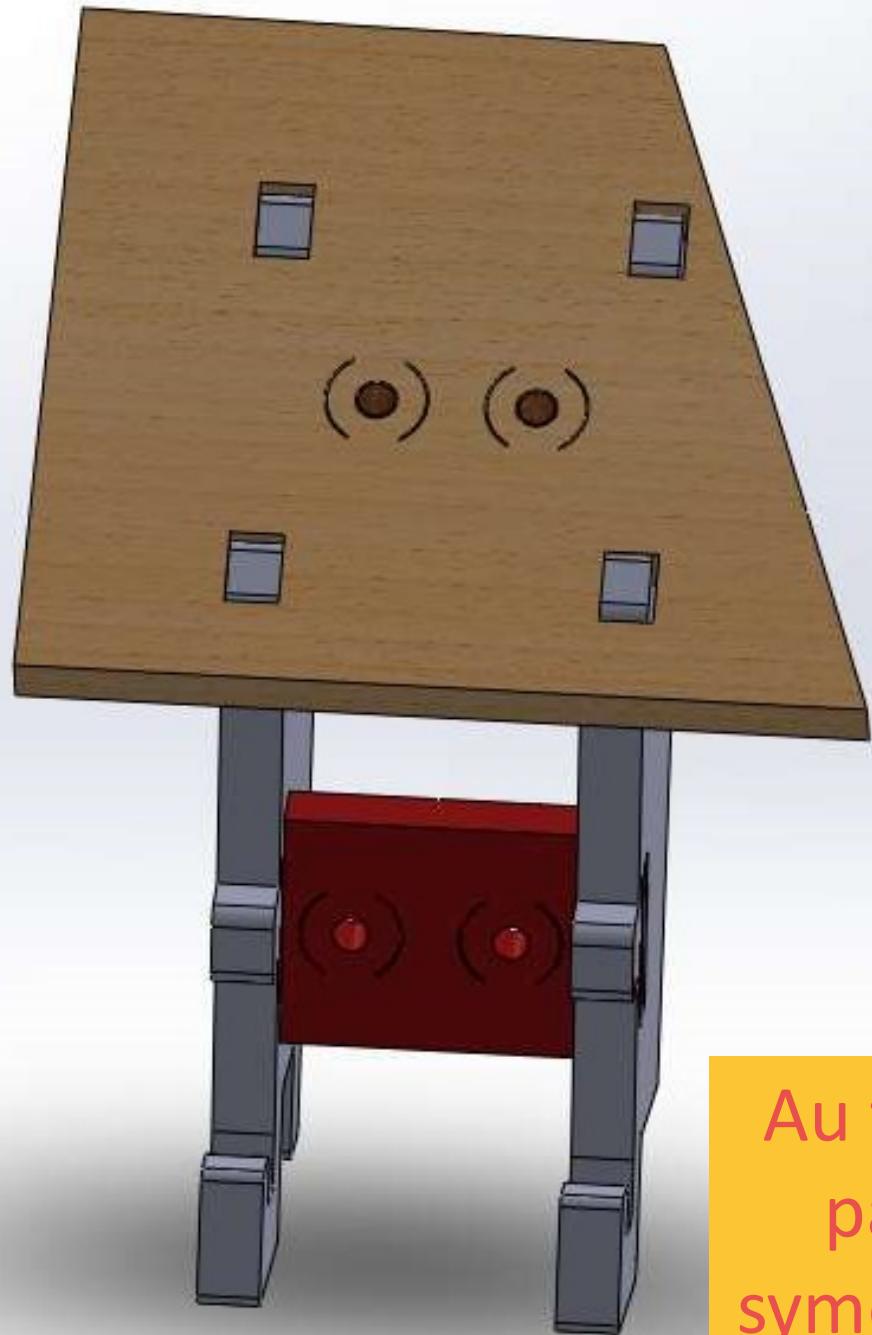
Idem de l'autre côté, en symétrique.  
Mais attention au sens du capot



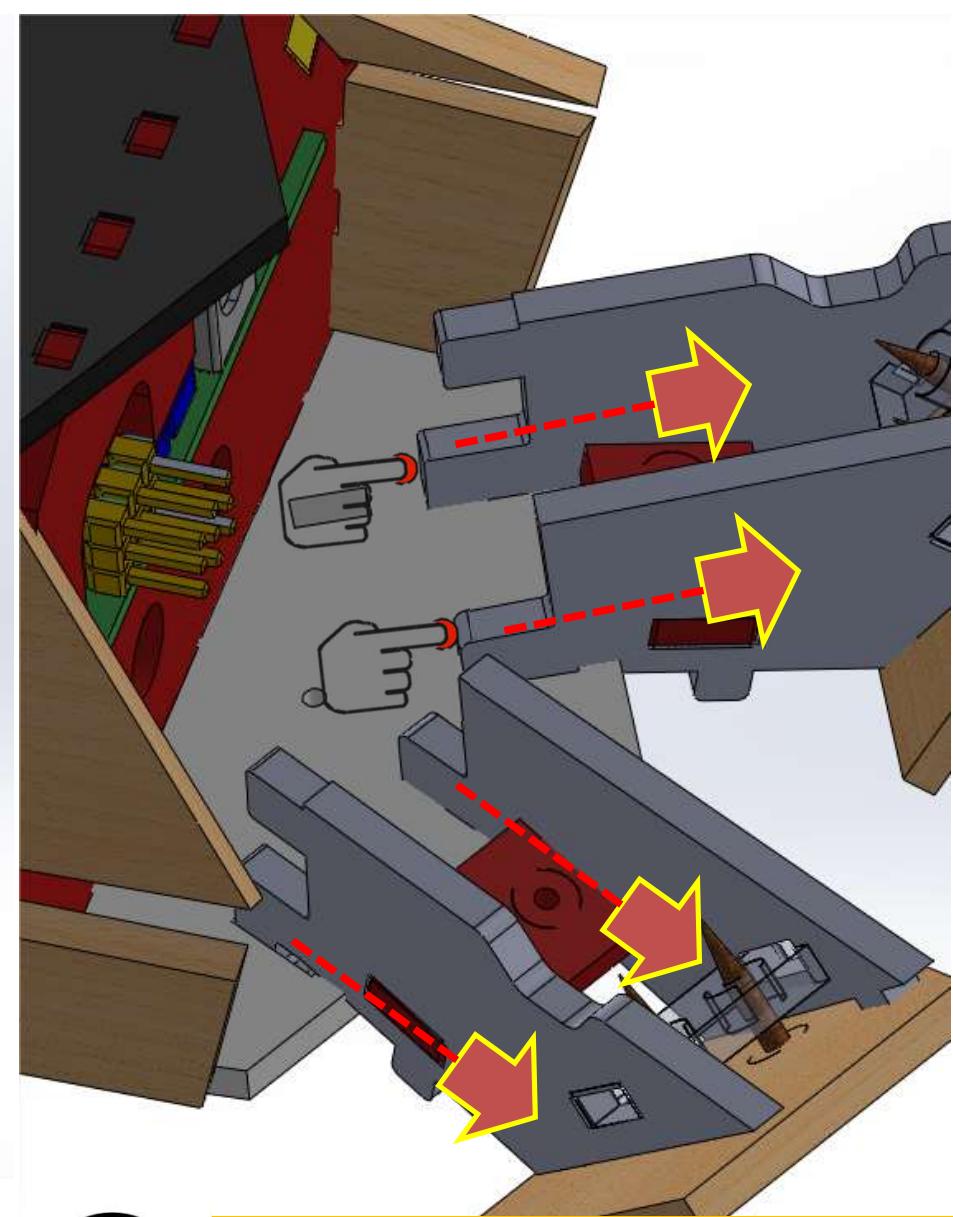
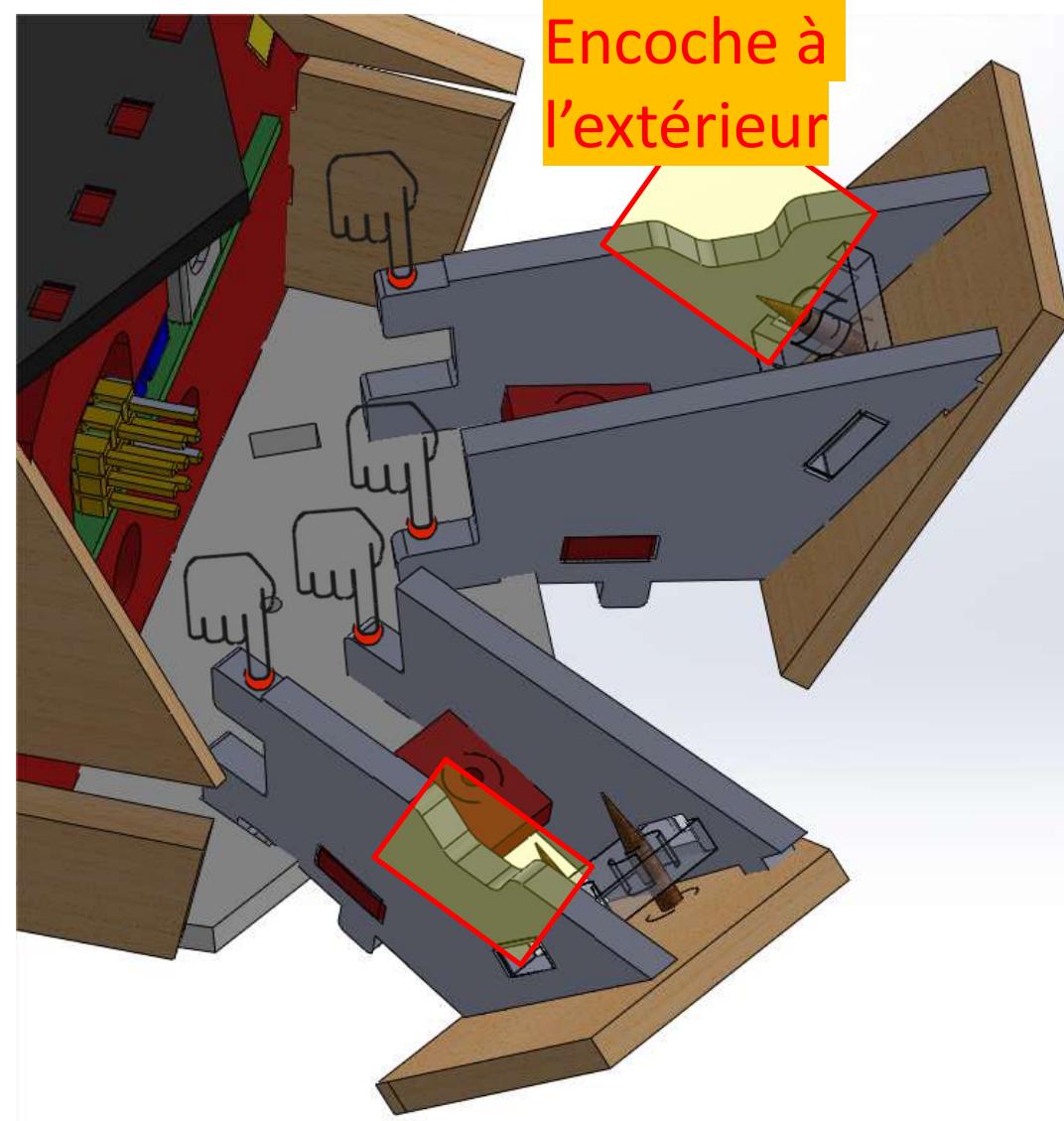
poser à plat et enfoncer



+ insérer puis couper 2 cure-dents



Au final : 2  
parties  
symétriques



1

Insérer parallèle au sol  
Jusqu'au bout

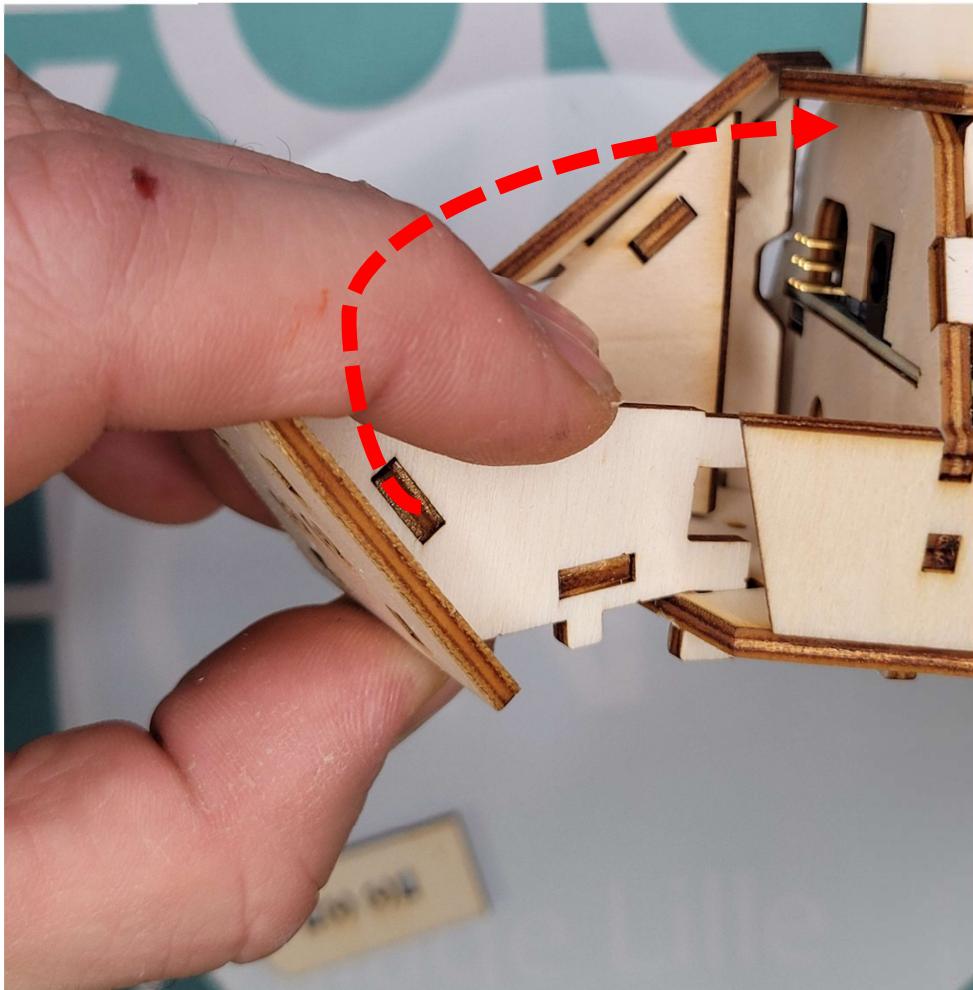


2

puis faire glisser au  
max

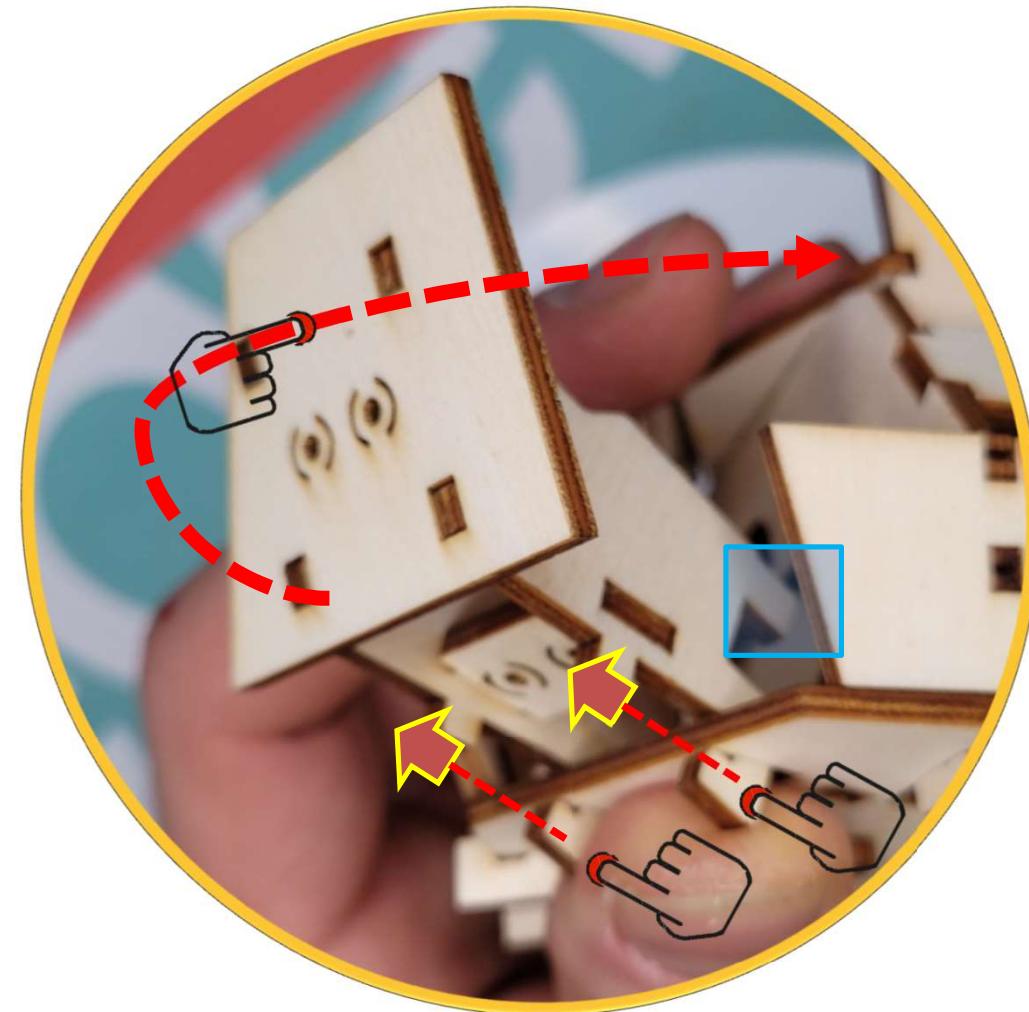
1

faire pivoter de 90° vers le haut  
délicatement sans forcer



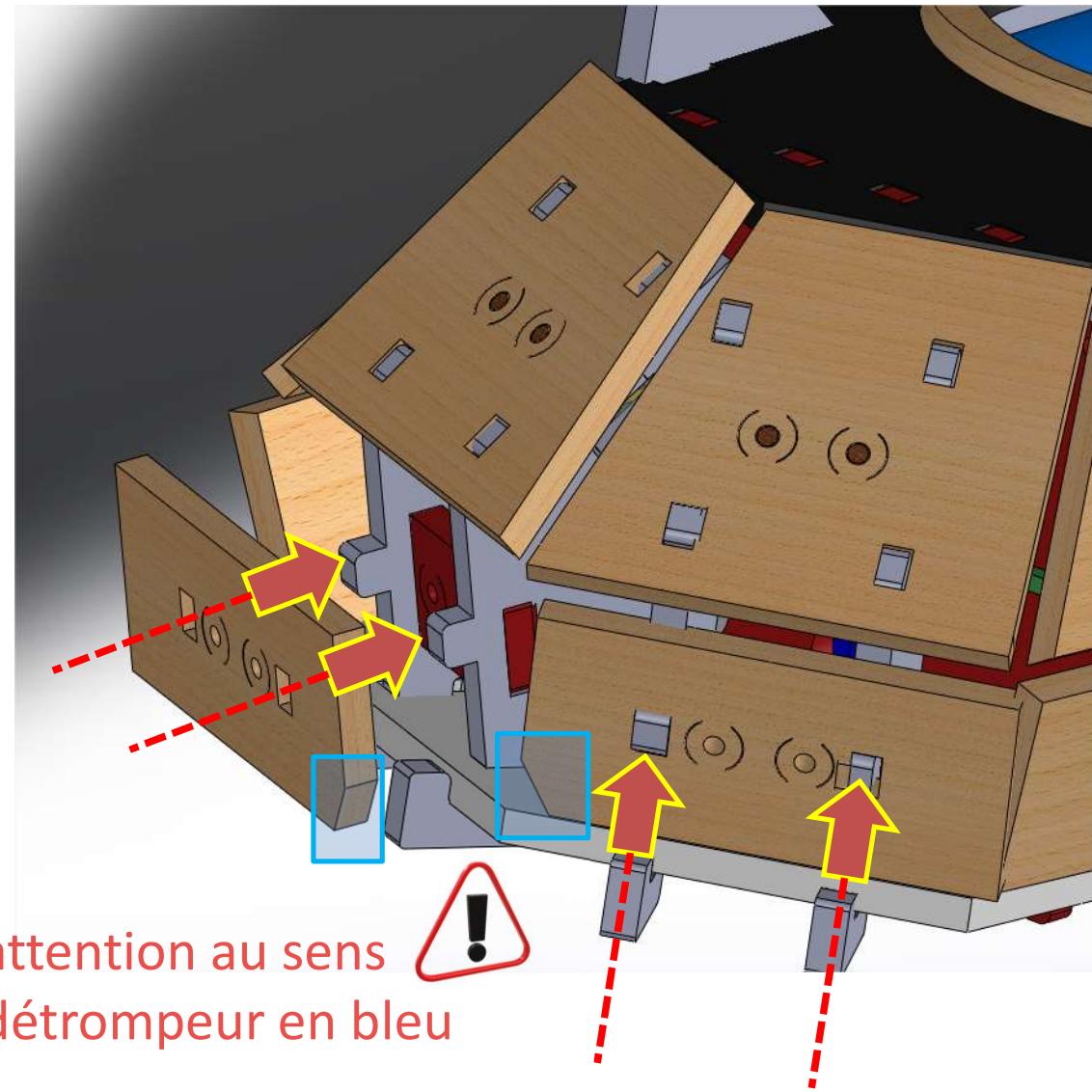
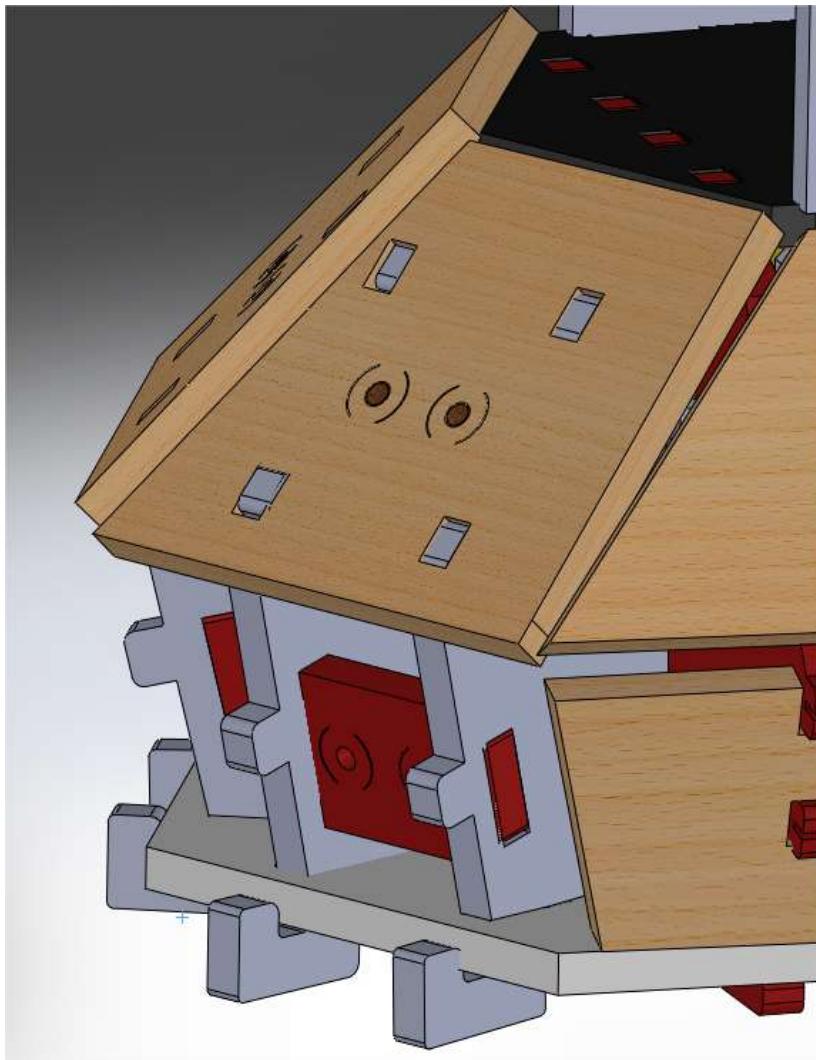
2

jusqu'à faire rentrer le pied (carré bleu) dans le châssis



1

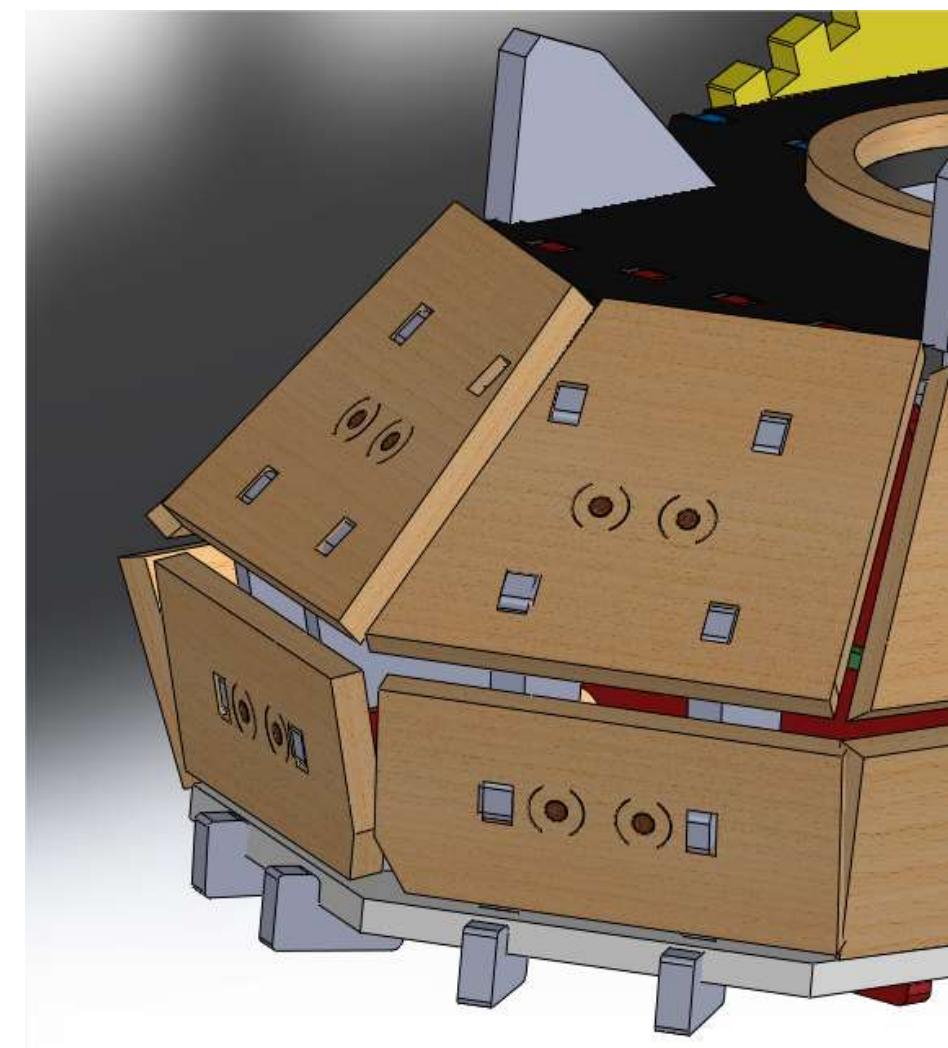
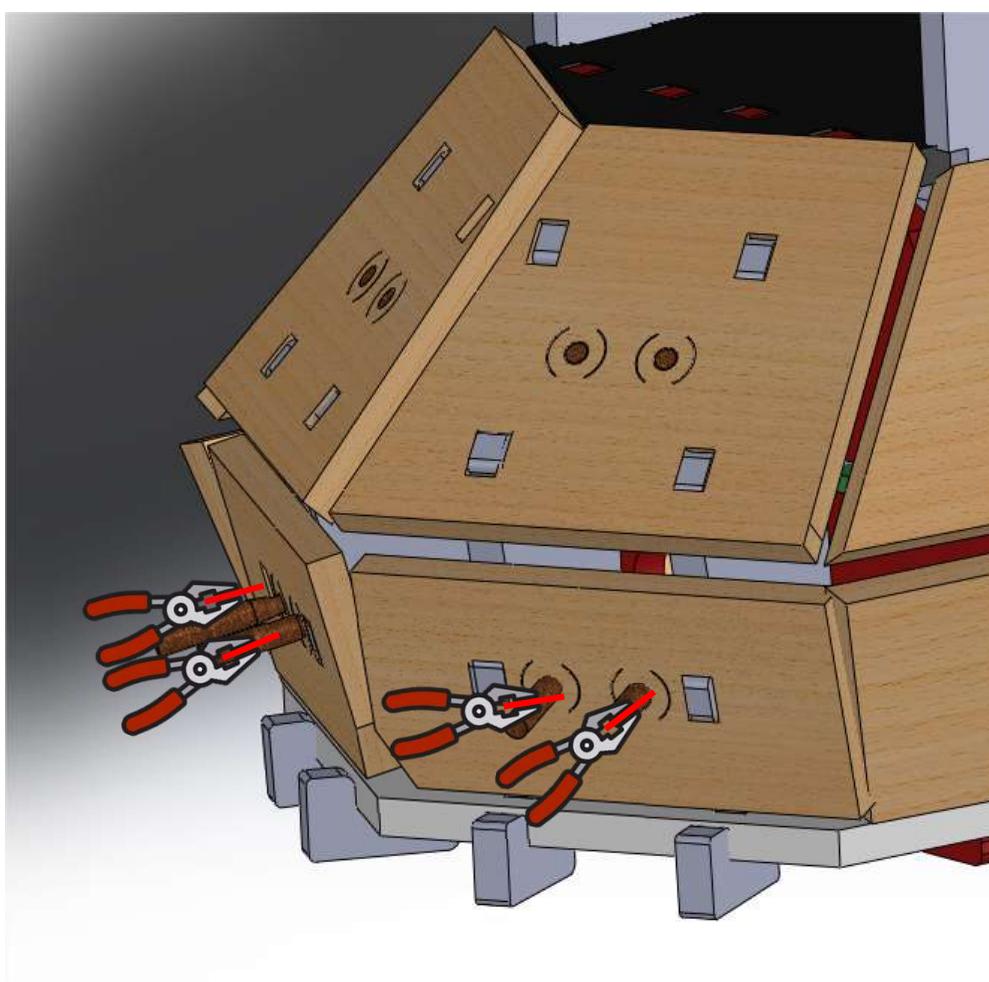
## Ajouter les capots



attention au sens  
détrompeur en bleu

3

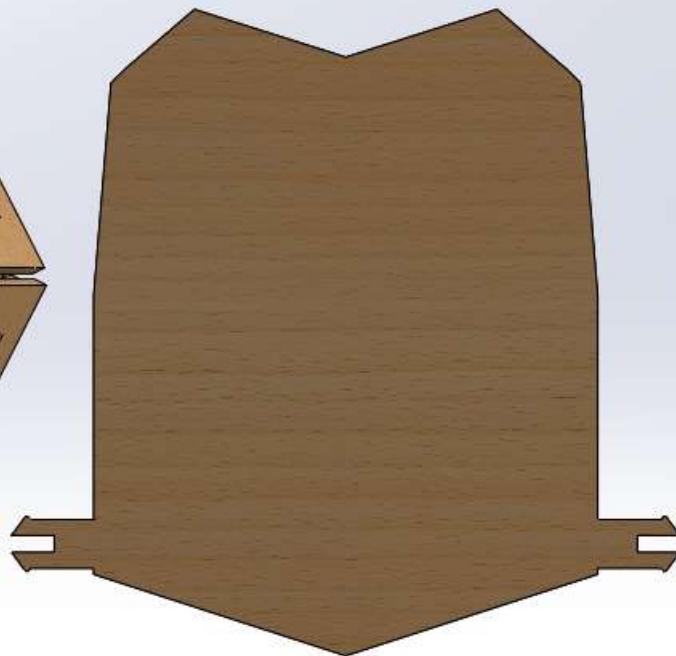
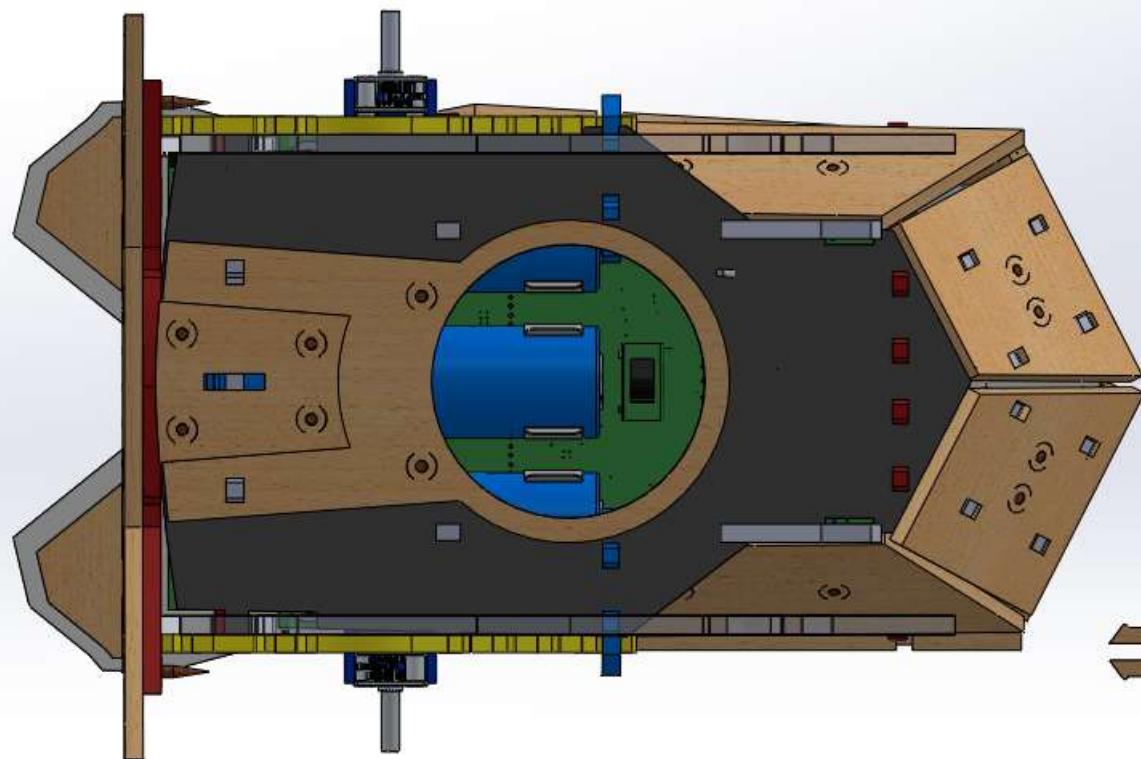
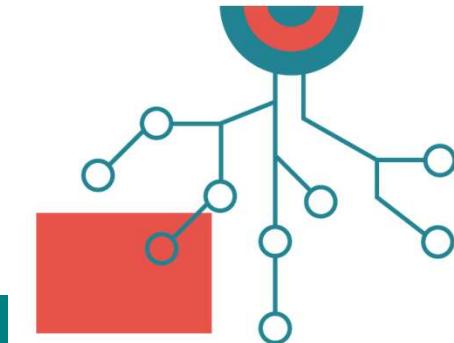
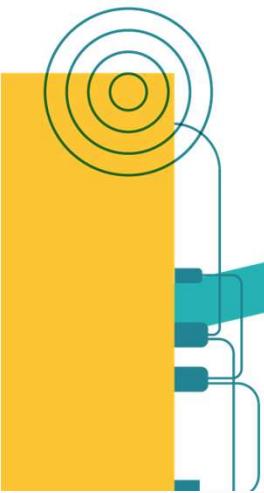
Insérer 4 cure dents à l'aide de la pince en force, un peu de biais



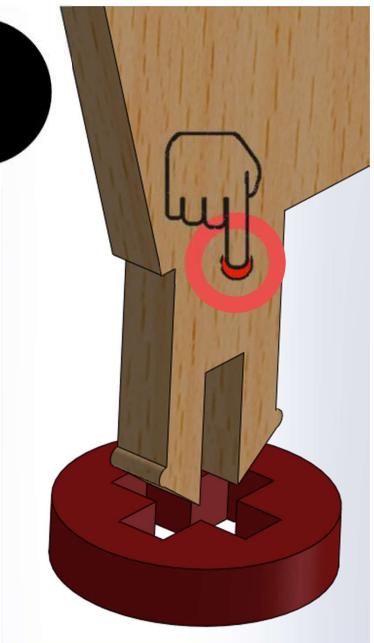
# ASSEMBLAGE

## DU

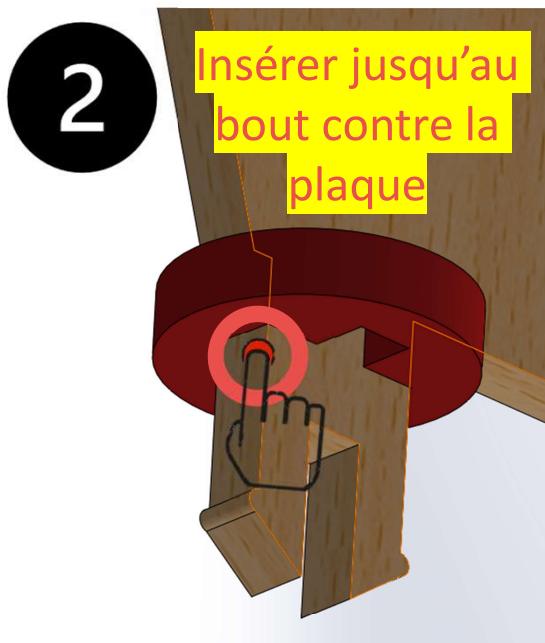
# PORTE TAG



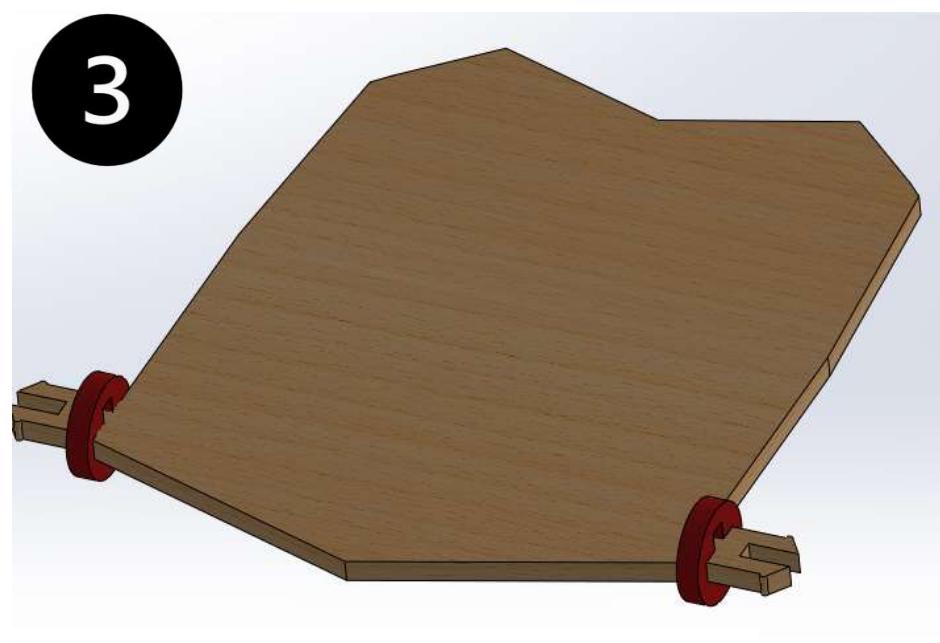
1



2



3



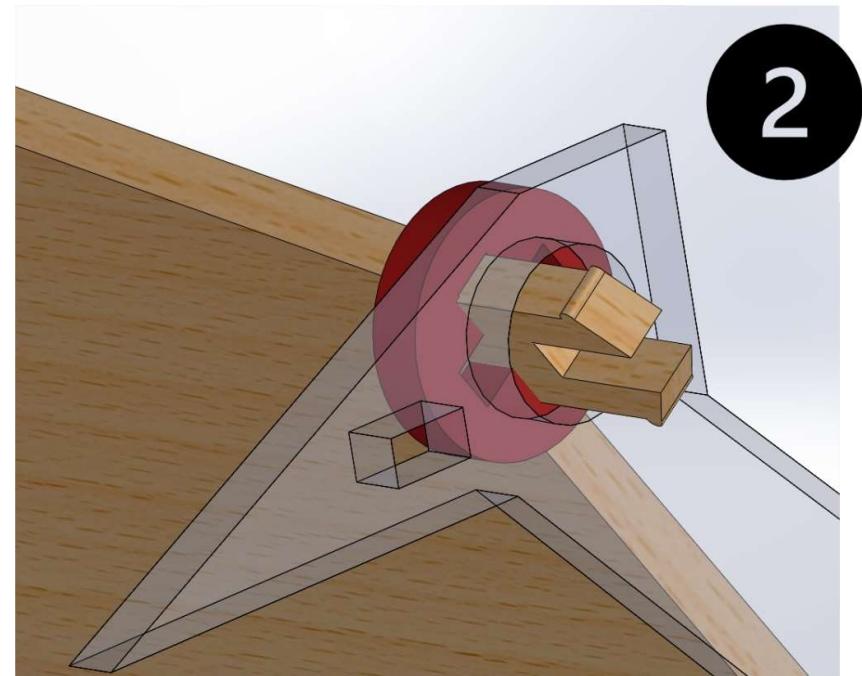
poser à plat et enfoncer

Faire la même chose de l'autre côté

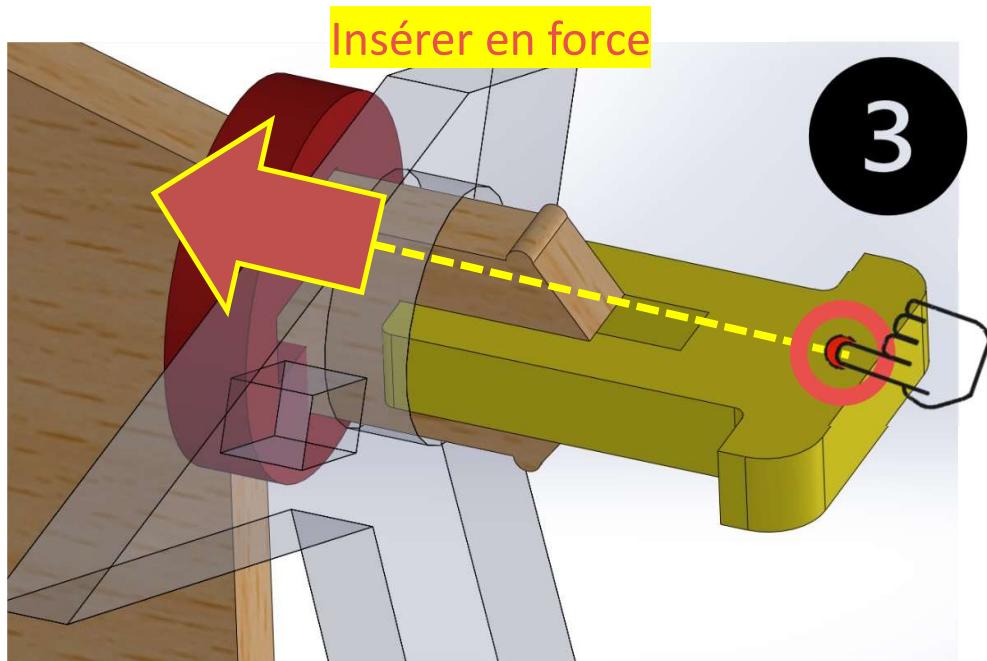
1



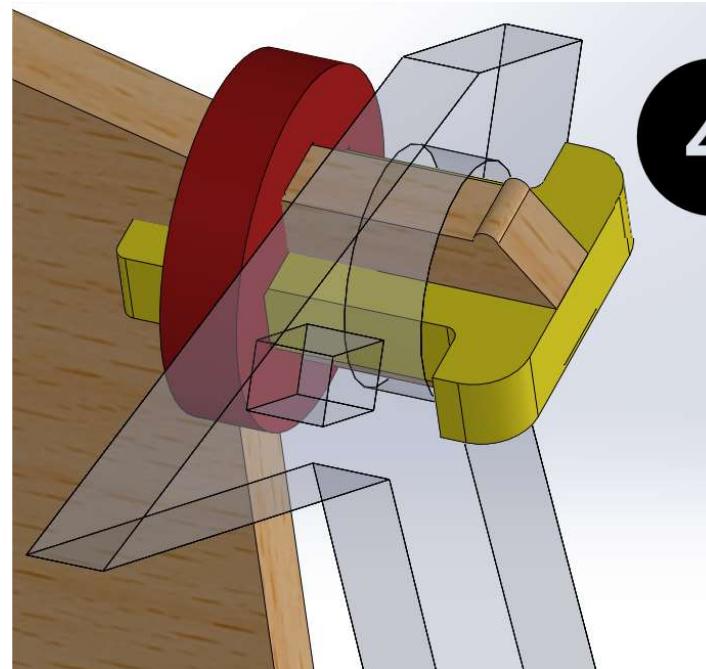
2



3



4

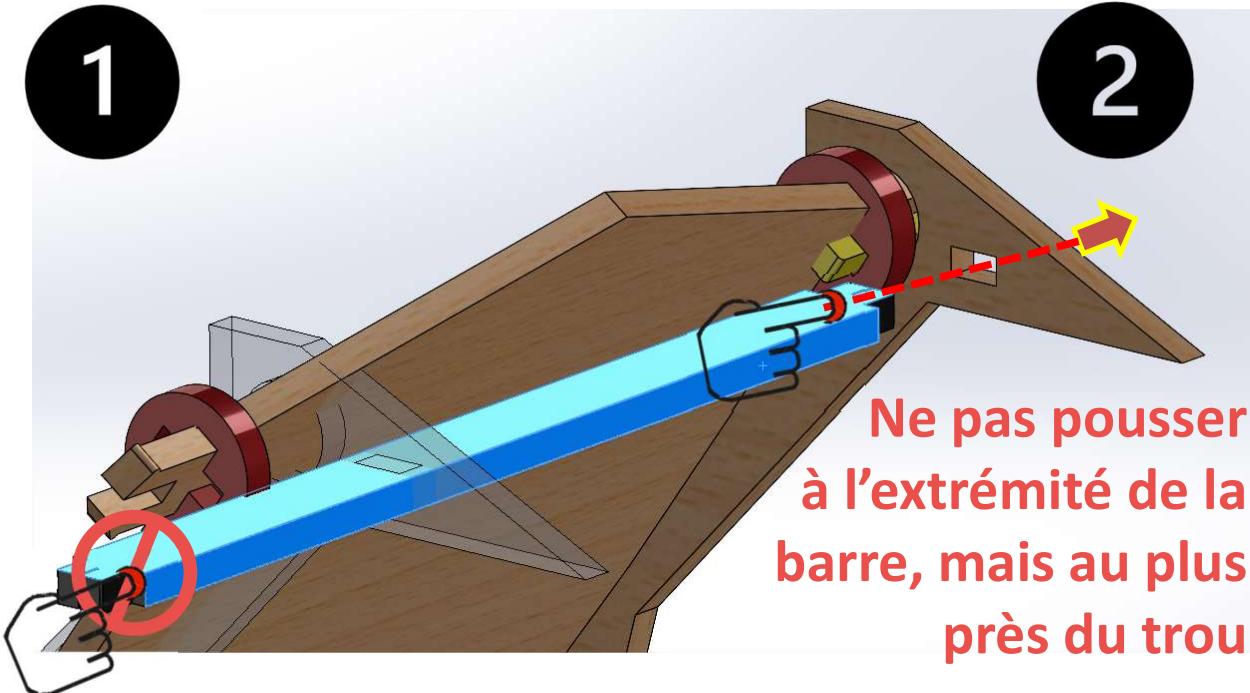


+ faire idem de l'autre côté

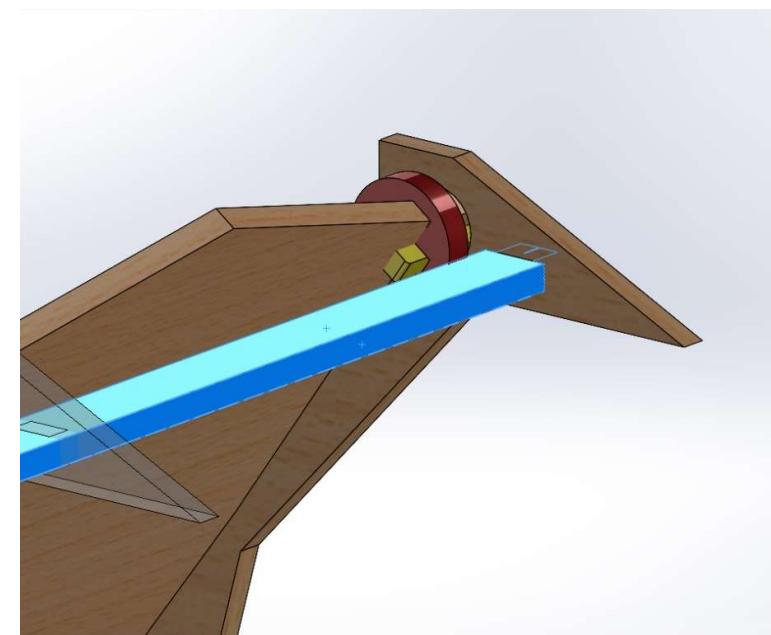


# Appuyer en force progressivement !

1



2



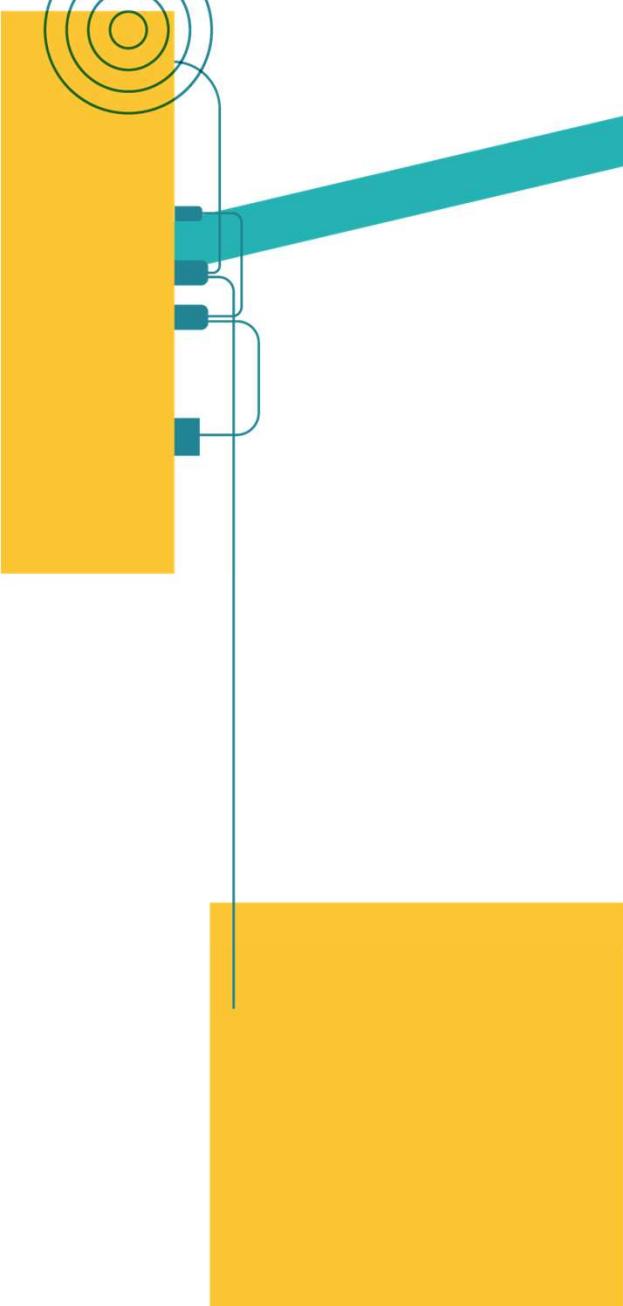
3

Faire la même chose de l'autre côté

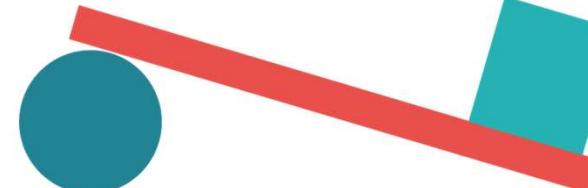
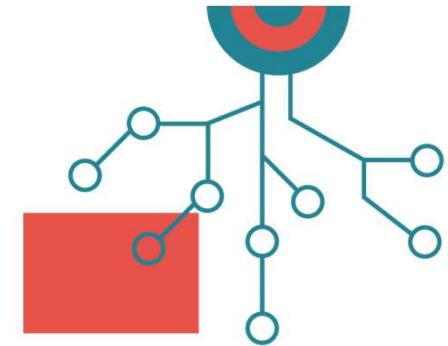
# APPELEZ- NOUS

pour que l'on  
valide votre  
montage avant  
de continuer !!





# ASSEMBLAGE DES ROUES



# AIDE POUR LA SUITE

**1 :** Mettre le robot sur le coté, posé sur 2 pneus pour ne pas exercer de pression sur l'axe du moteur



**2.A**



**2.B**

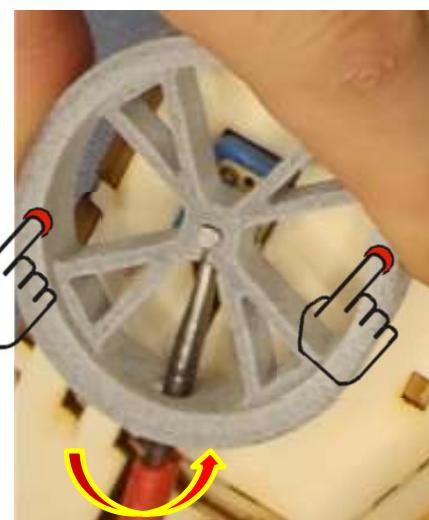


**2.A :** Positionner la jante avec la partie bombée vers le coté moteur  
+

**2. B :** Positionner le méplat de la jante en face du méplat de l'axe du moteur



**3 :** Insérer le tournevis jusqu'à la fente puis le tourner pour effectuer une torsion.



**4 :** tout en continuant **3**, insérer le trou de la jante dans l'arbre du moteur, jusqu'à ce que l'axe du moteur ressorte légèrement.

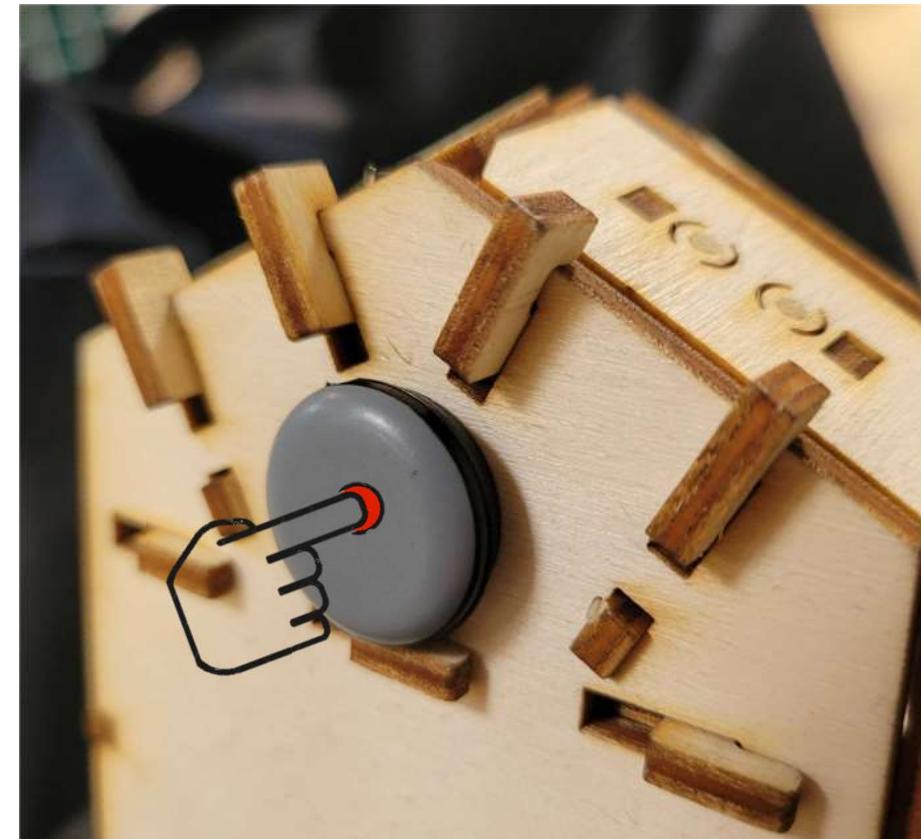
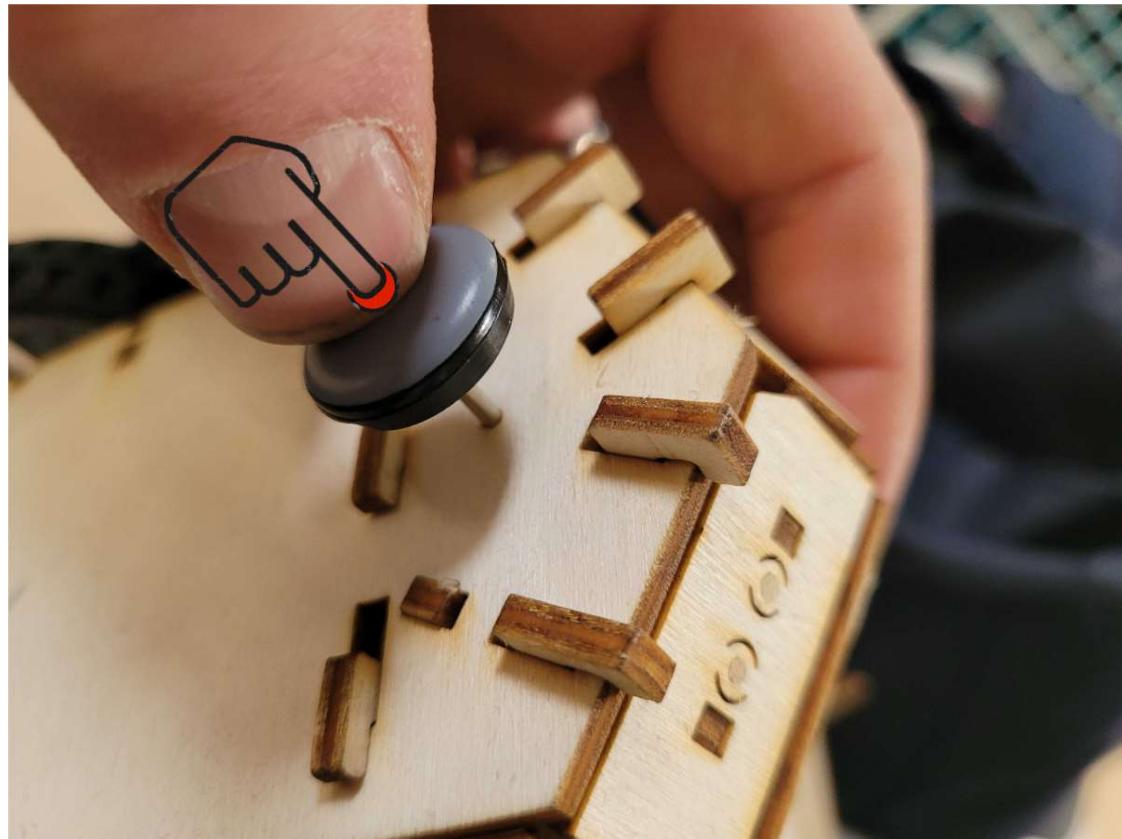


**5 :** Monter le pneu Autour de la jante

**6 :** Idem pour la seconde roue

Faites attention à ne pas avoir de zones du pneu mal insérée

# Ajouter le PATIN arrière

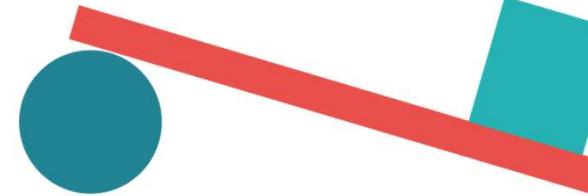
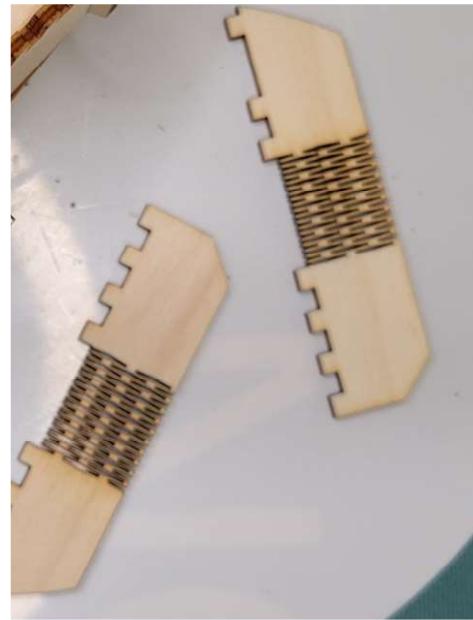
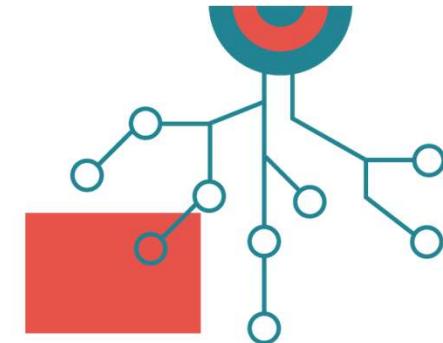




**ASSEMBLAGE**

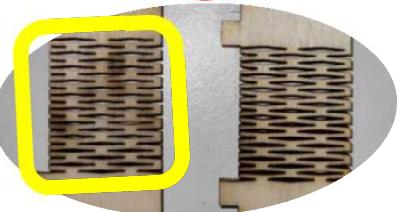
DU

**GARDE-BOUE**





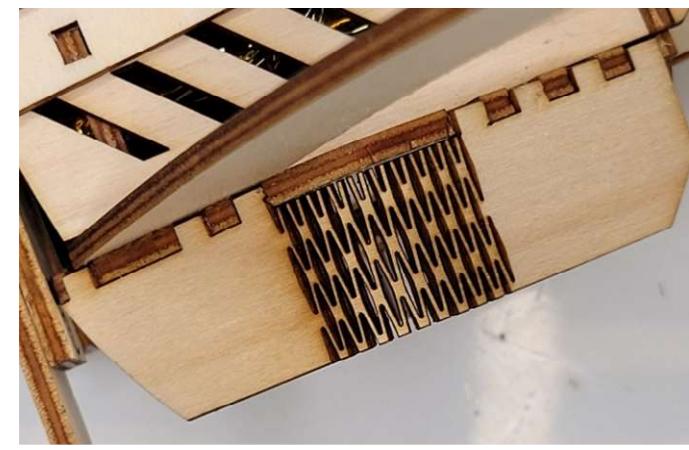
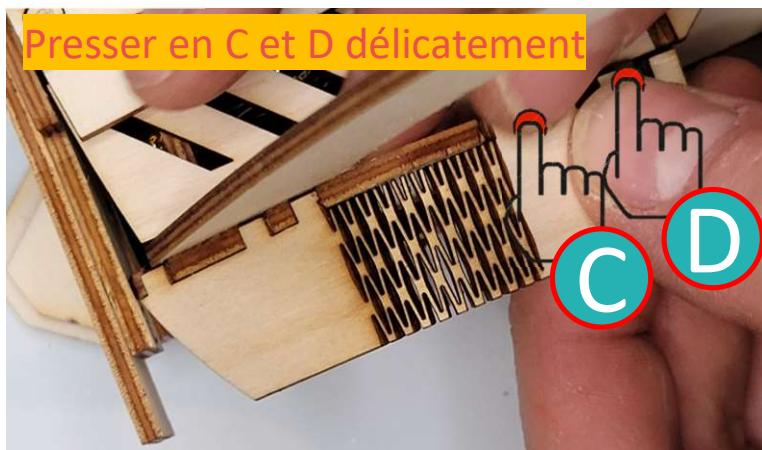
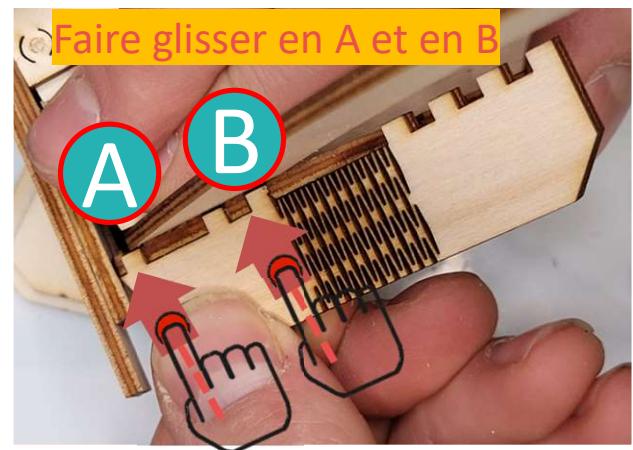
# Attention fragile



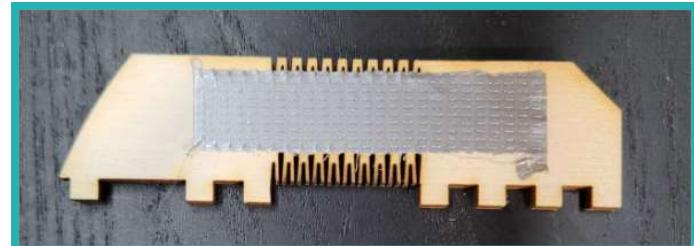
1

2

3

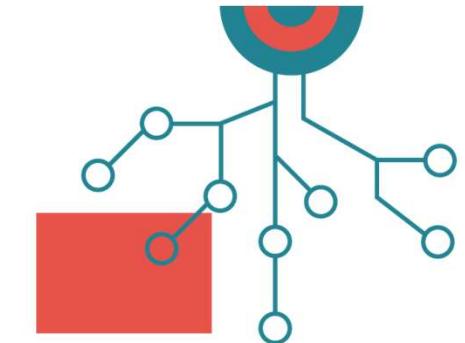
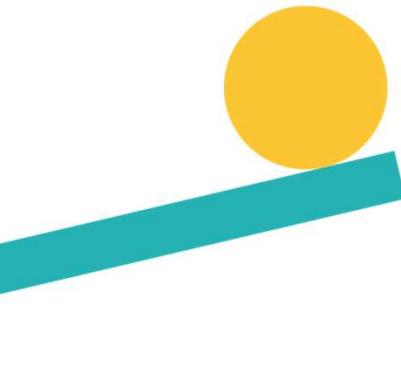
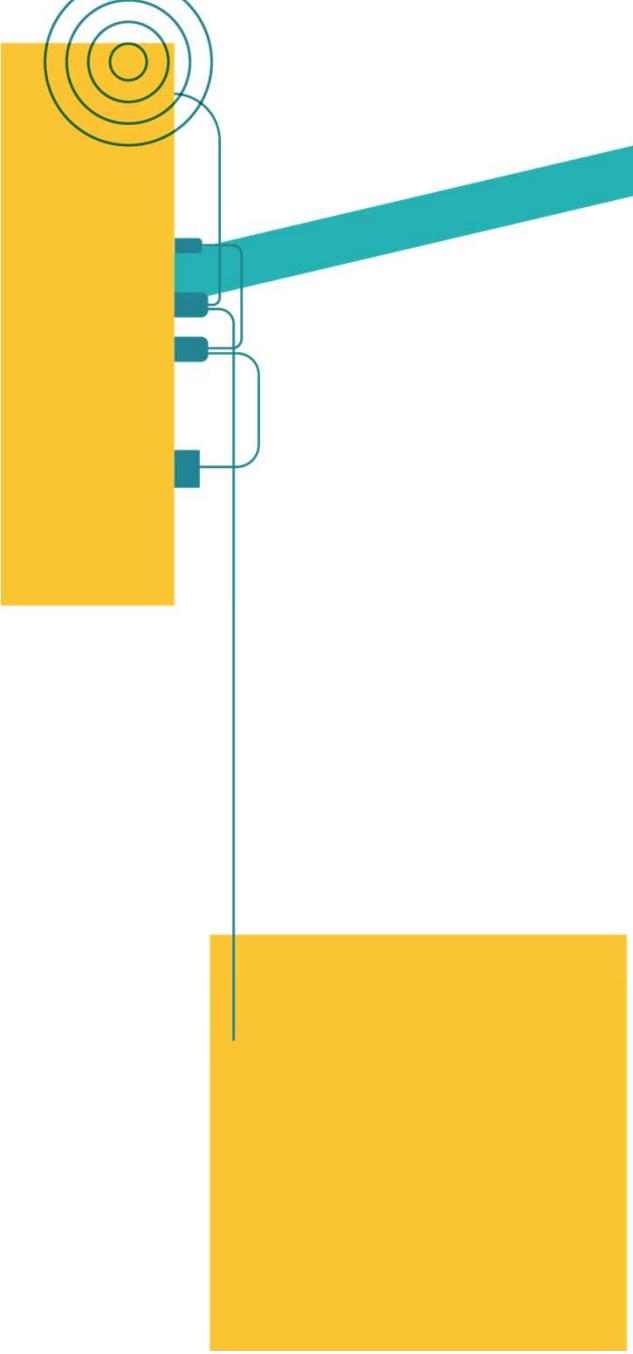


Ces pièces cassent facilement. Ajouter un morceau de scotch pour le rendre plus solide avant de plier !



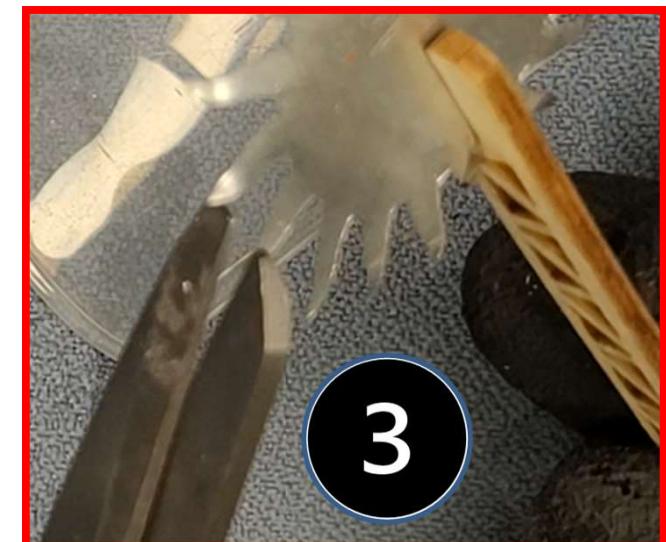
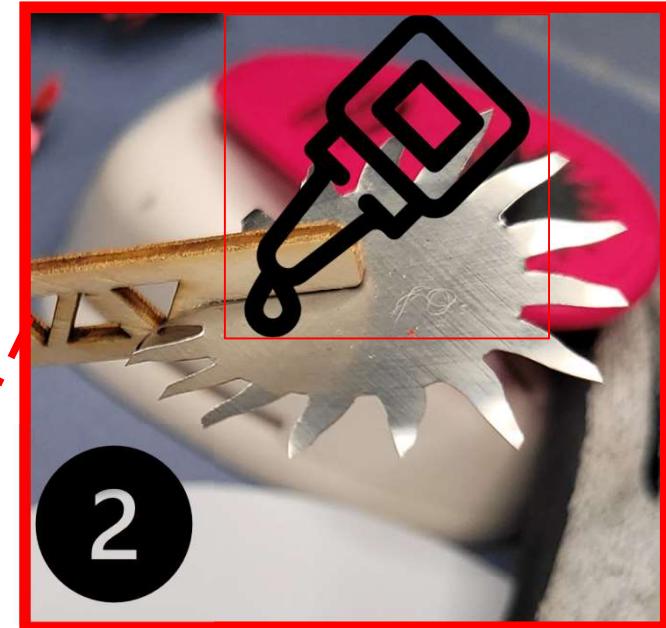
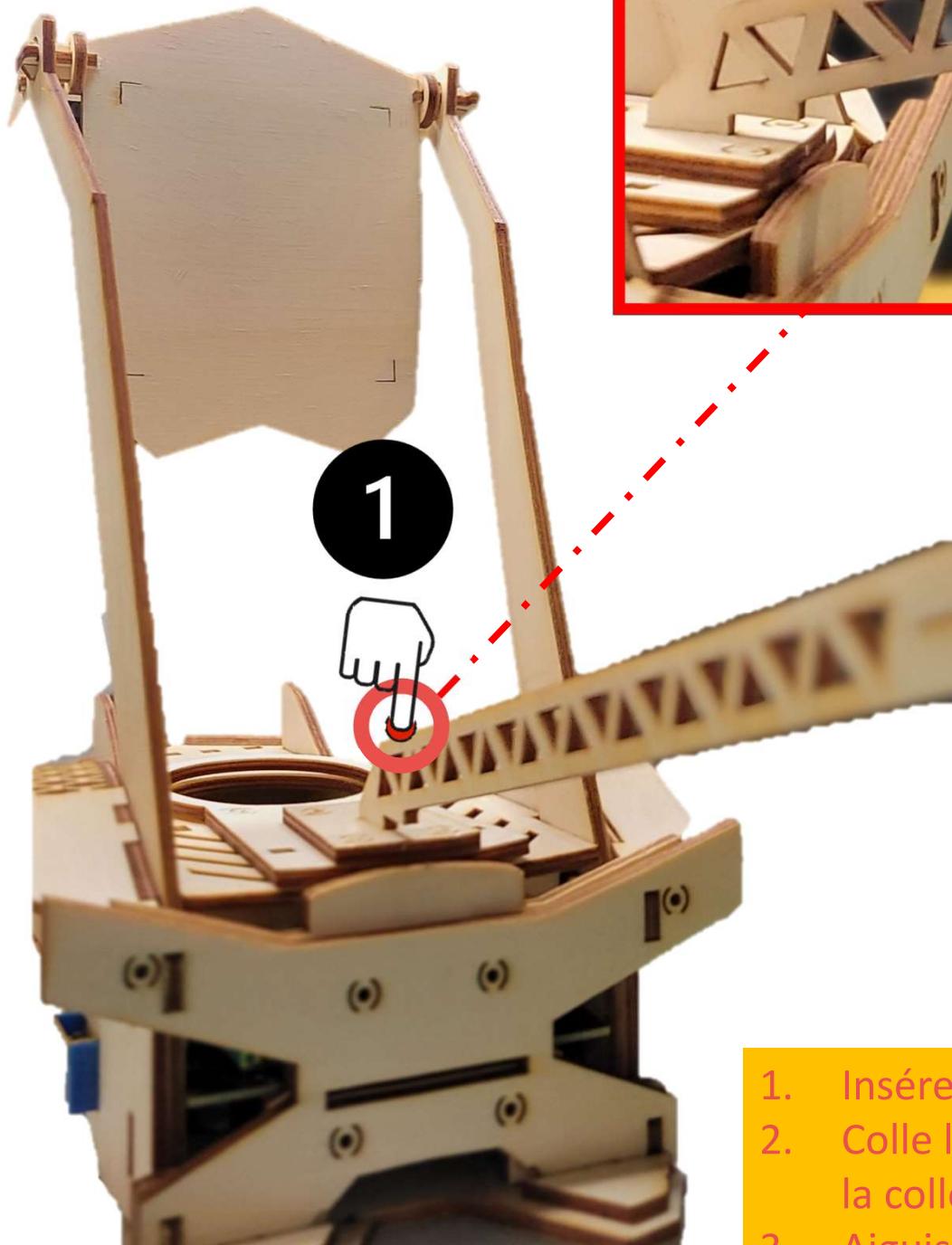
4

+ Idem pour l'autre garde-boue

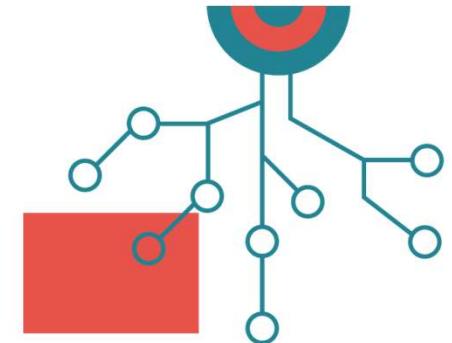


# ASSEMBLAGE DE L'ARME





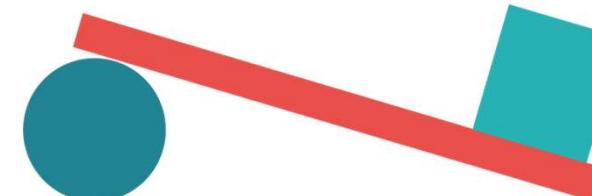
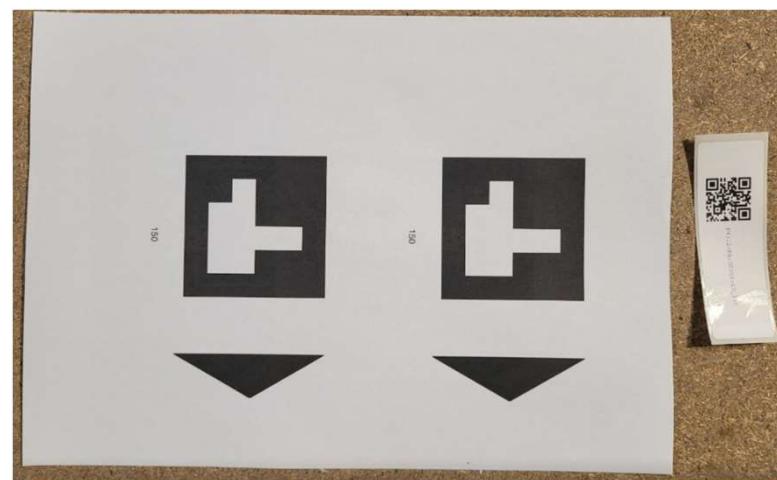
1. Insérer l'arme en force
2. Colle le métal au bout de l'arme en bois, avec la colle rapide
3. Aligner les pointes à l'aide d'un ciseau



# ASSEMBLAGE

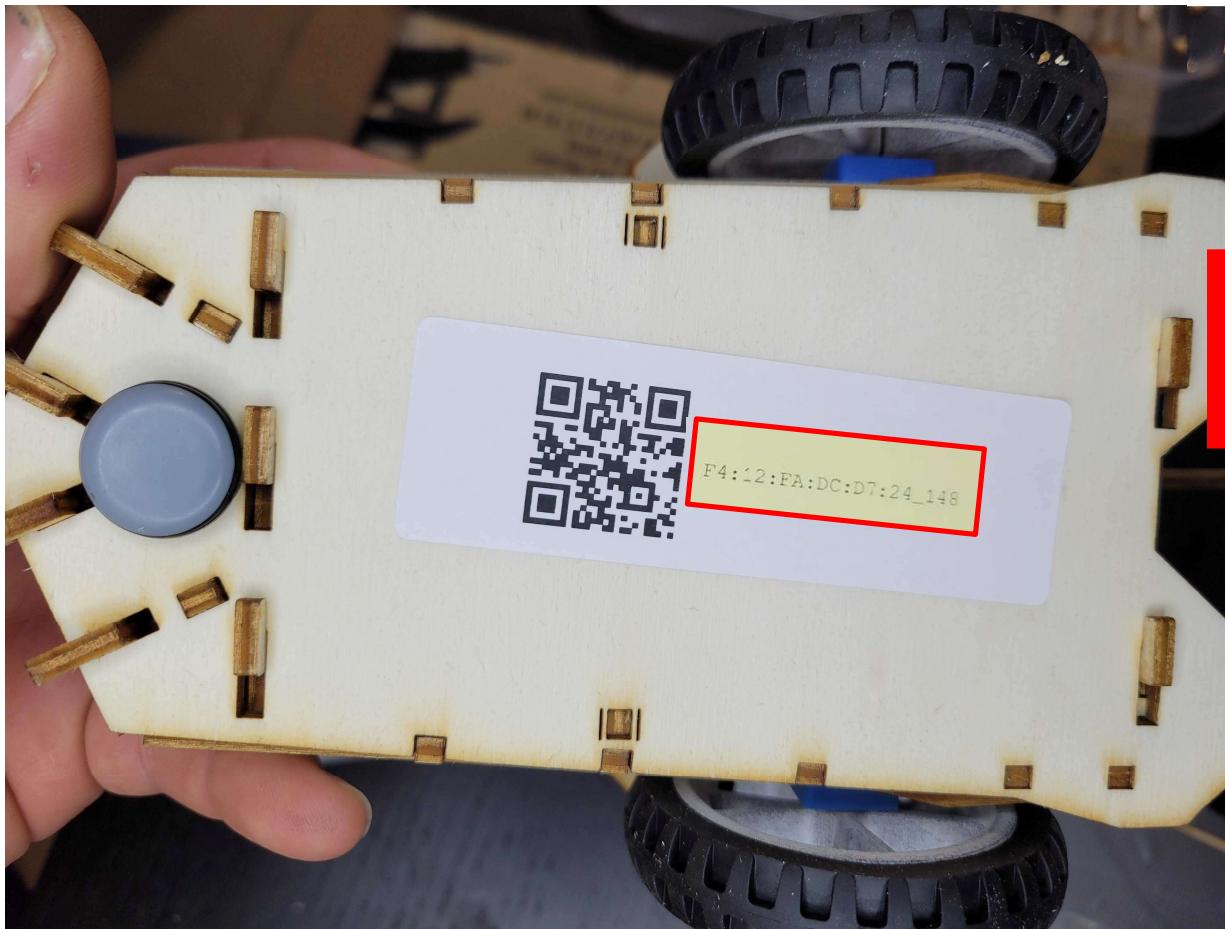
## DES

# TAG + QR CODE

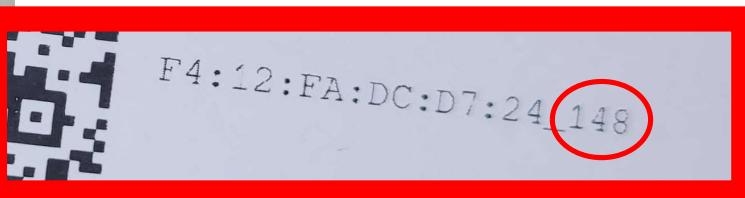


# COLLER LE MAC STICKER

SOUS LE ROBOT



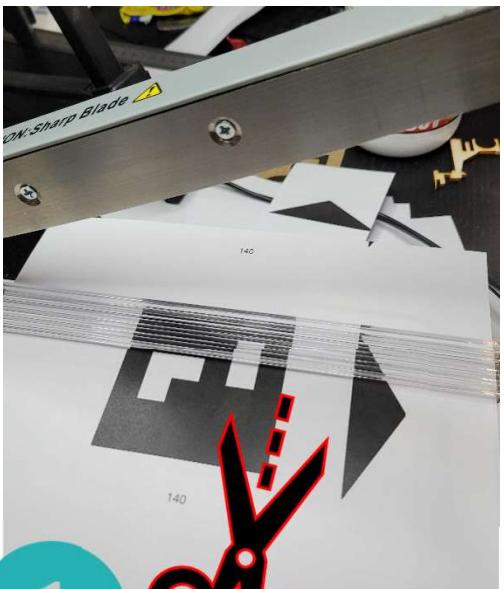
vérifier que l'ID  
du robot  
corresponde au  
numéro sur l'A4



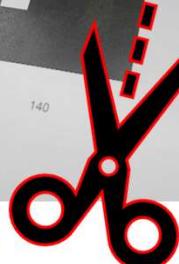
Ici : ID = 148



# PREPARER L'ARUCOTAG



1

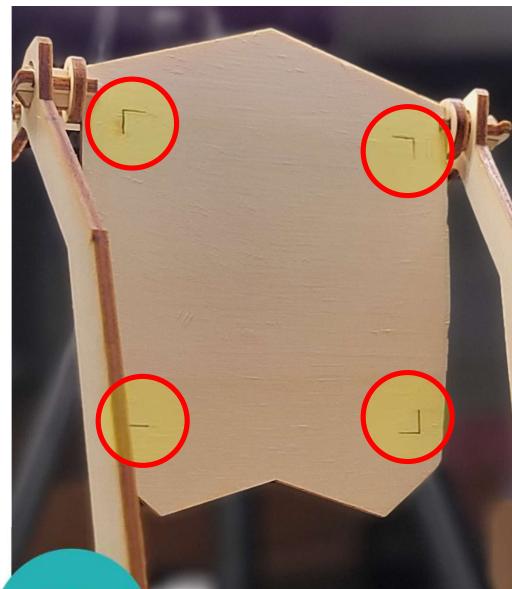


Utilisez les ciseaux ou le massicot pour couper le tag de précisément sur le contour noir



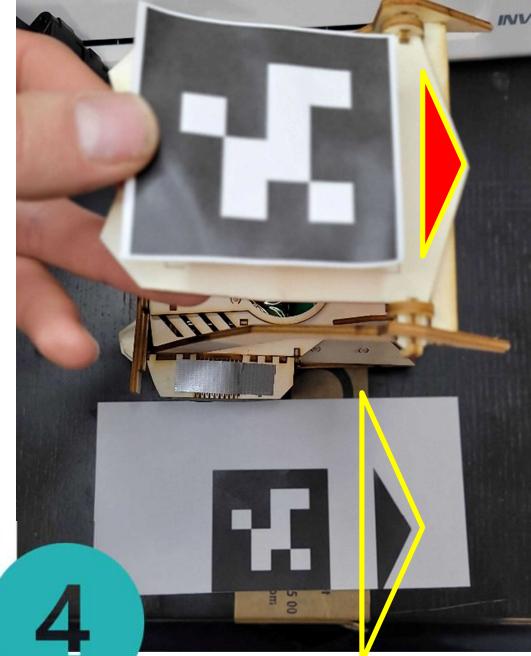
2

Mettre de la colle UHT sur le TAG découpé



3

Coller l'ARUCOTAG au niveau des corners sur le dessus de la planchette.



4

/!\ à l'orientation du TAG à respecter, indiqué par la flèche sur le A4

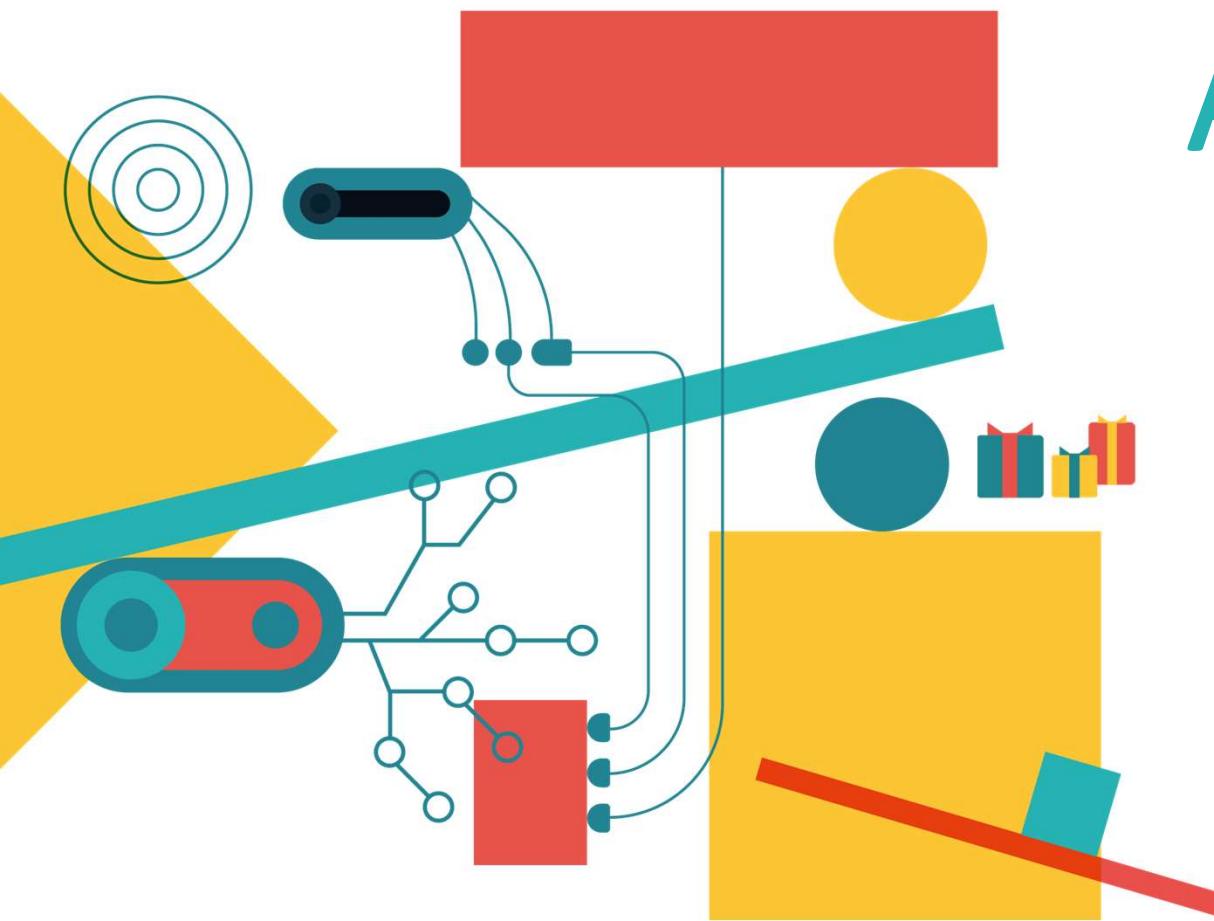


# Rangement et Nettoyage

*Mettre toutes les pièces restantes dans la boite en carton,  
sans le plastique !!*



<Bravo>



APPELEZ-  
NOUS



pour que l'on valide votre montage!!