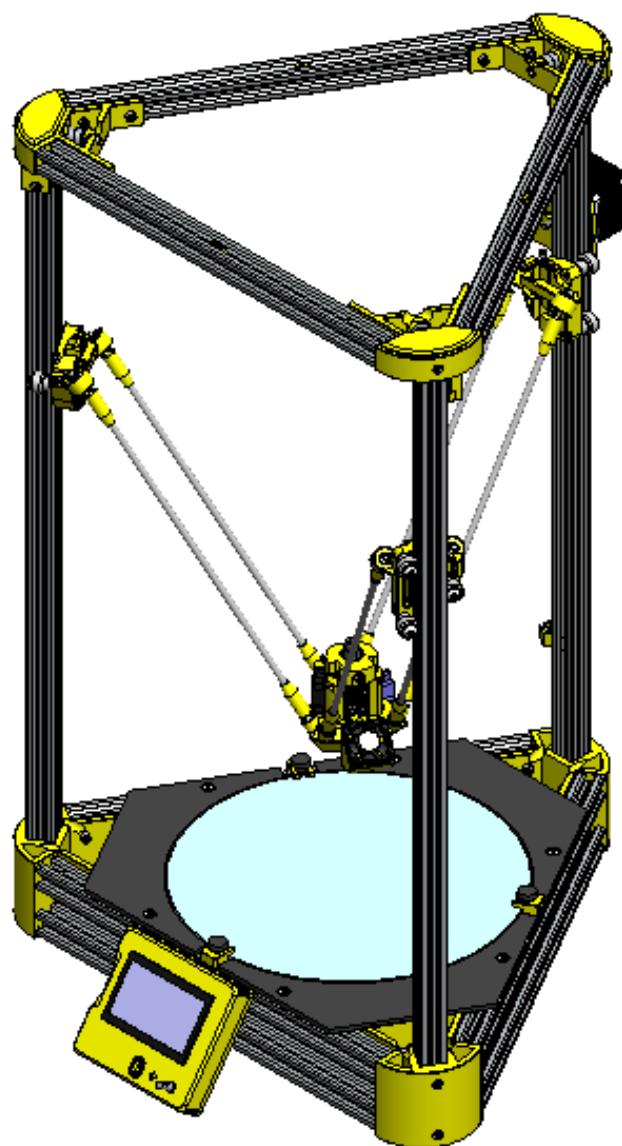
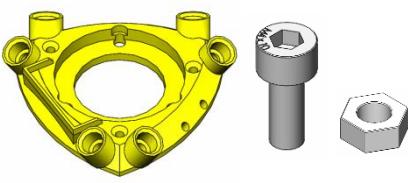
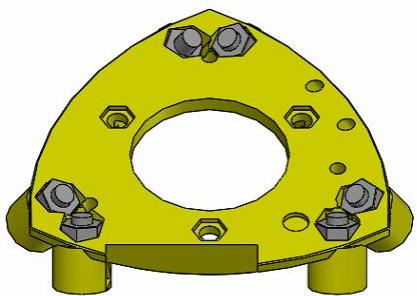
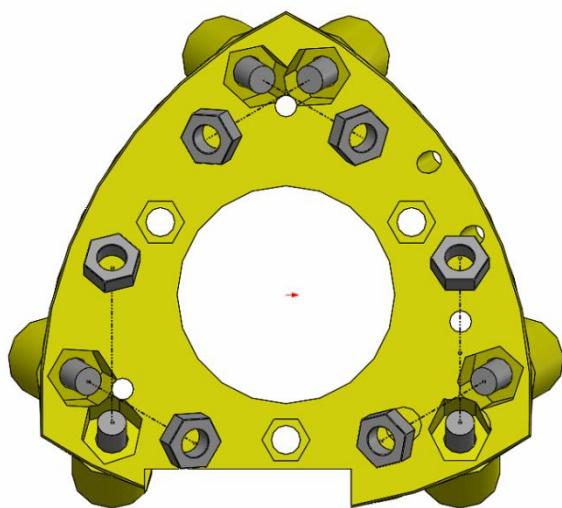
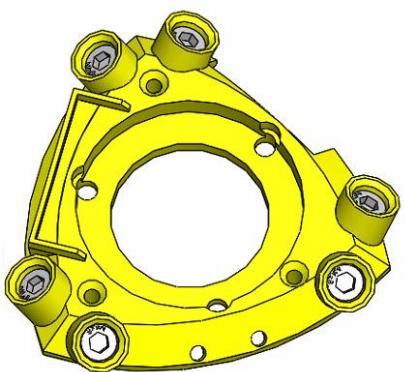
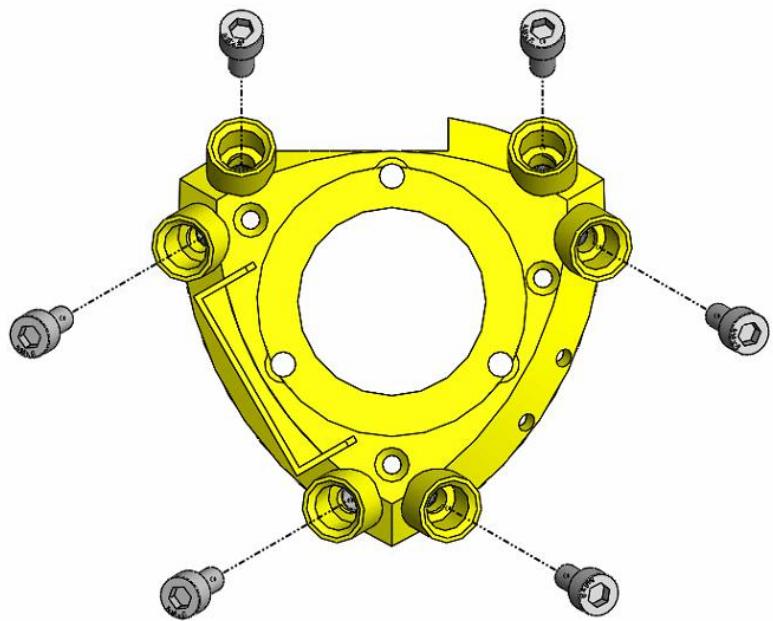


# DELTA BLACK

## MANUAL DE MONTAJE



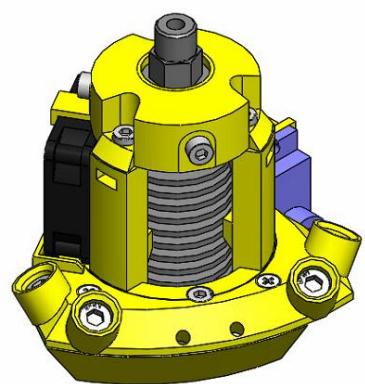
# Montaje delta HOT-END



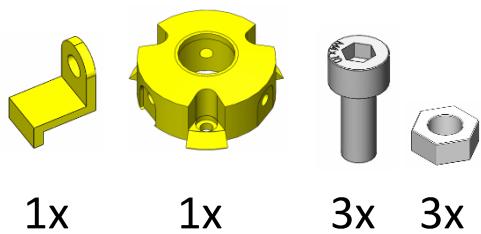
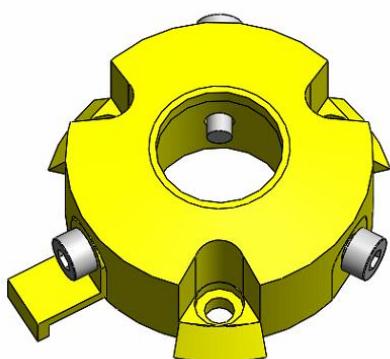
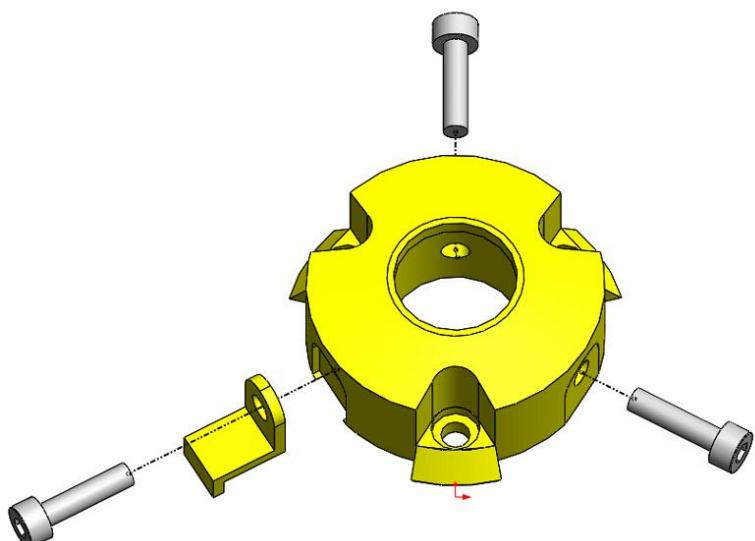
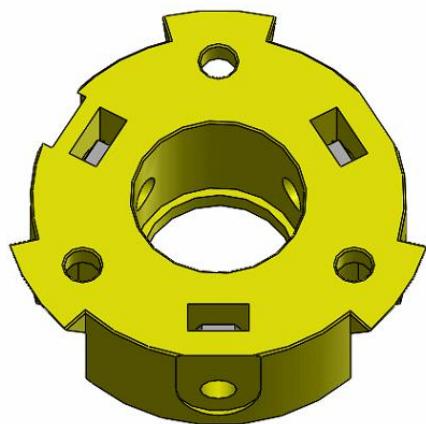
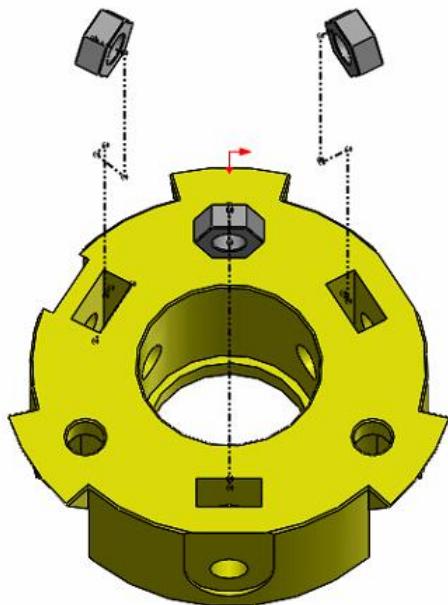
1x

6x 6x

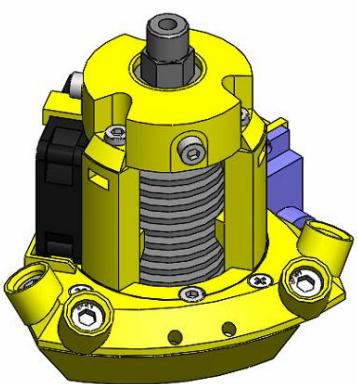
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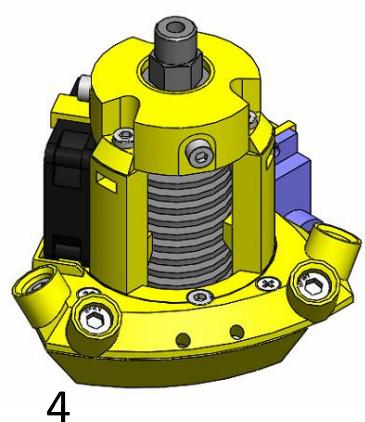
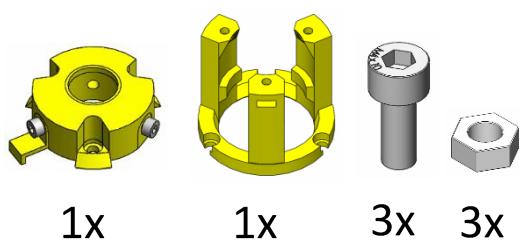
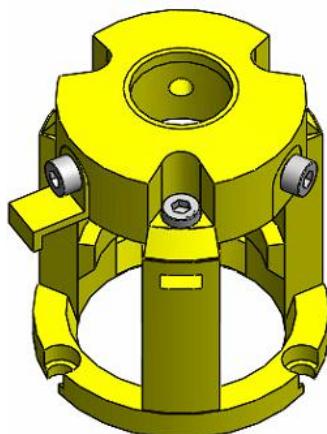
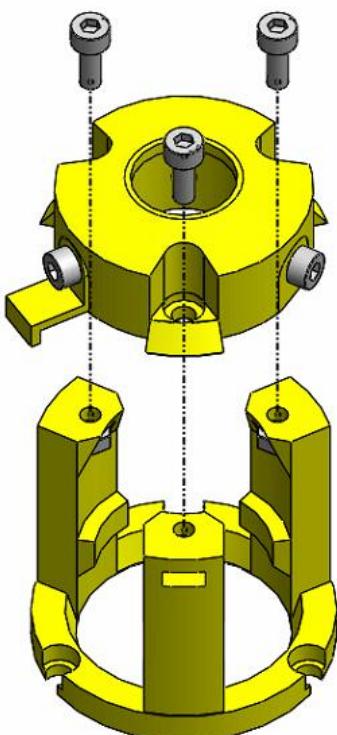
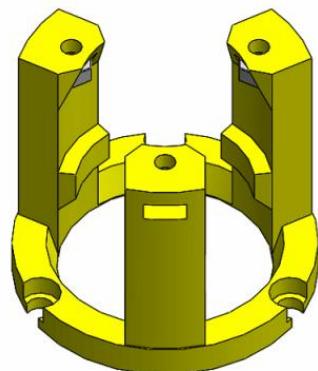
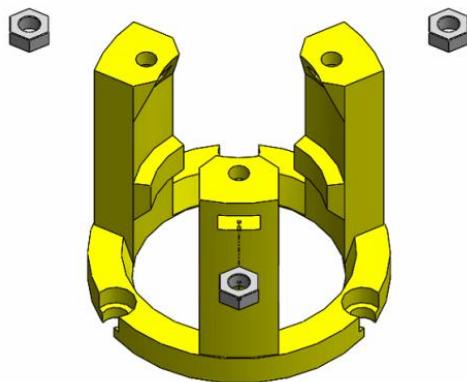
# Montaje HOT-END nivel 1



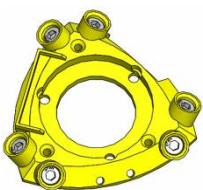
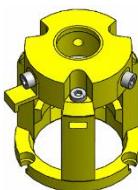
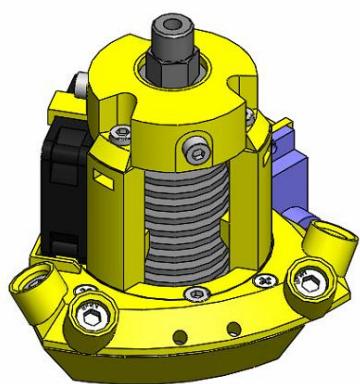
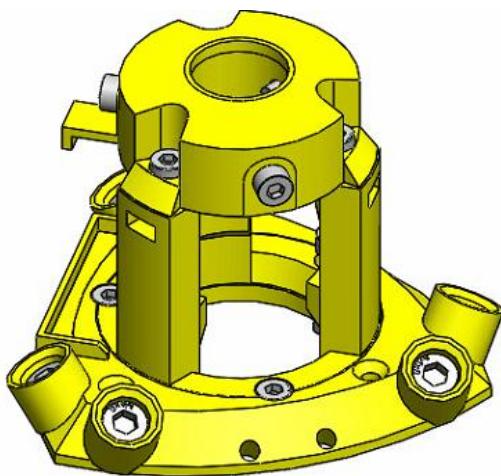
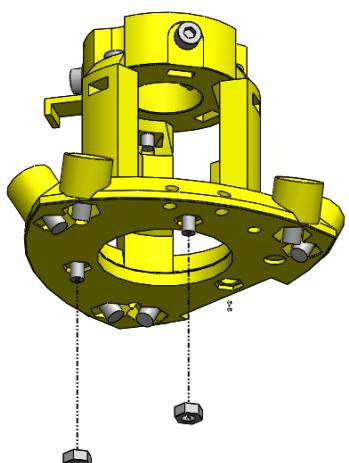
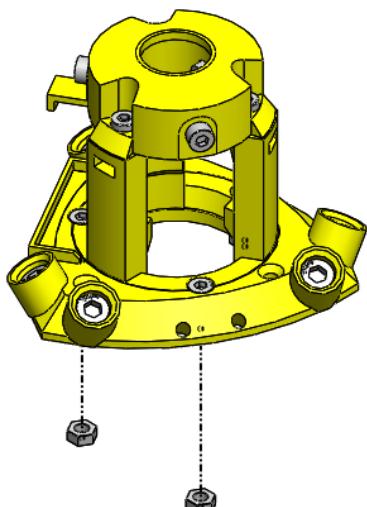
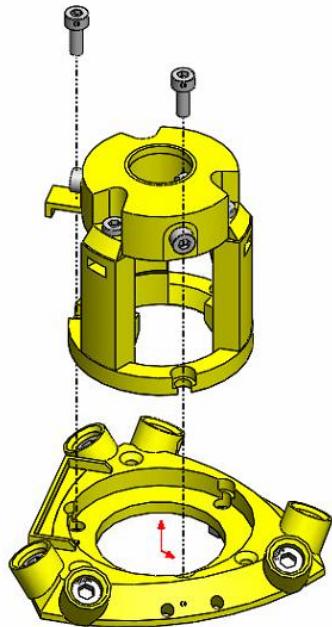
3



## Montaje HOT-END nivel 2



# Montaje HOT-END nivel 3



1x

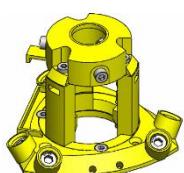
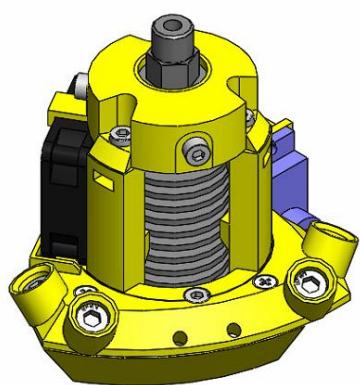
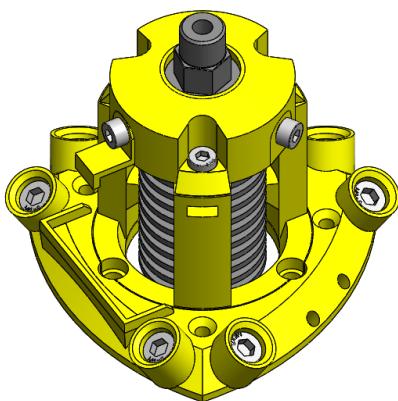
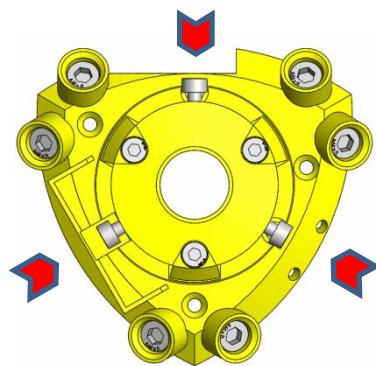
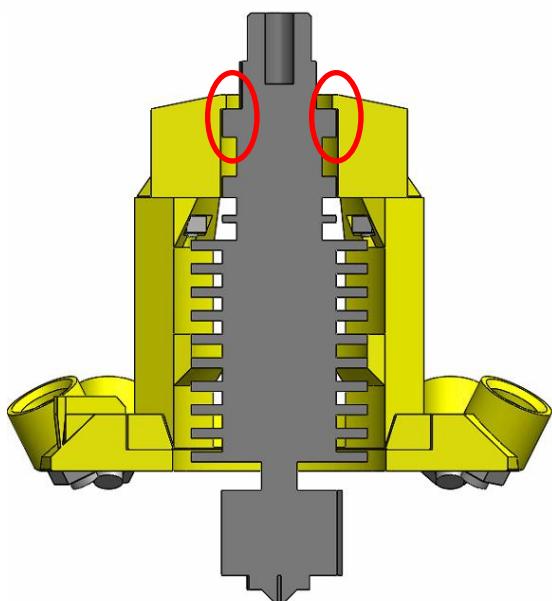
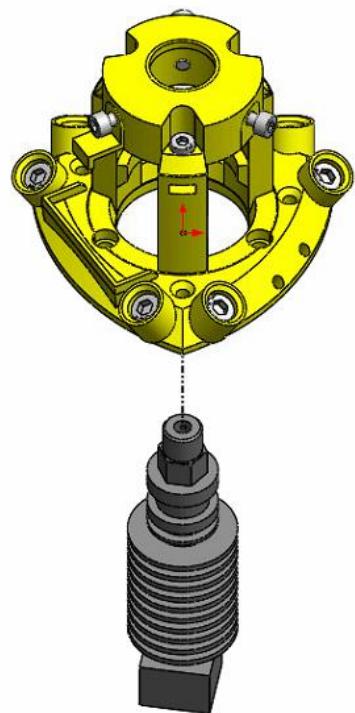
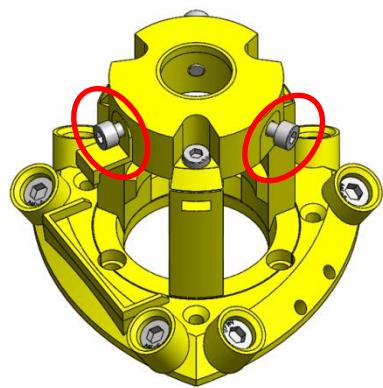
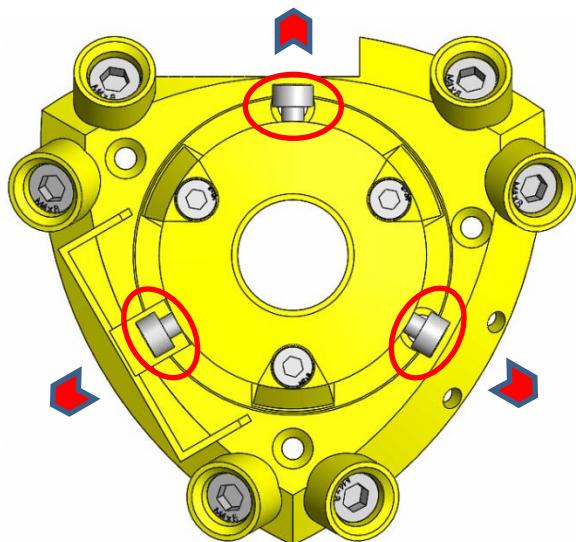
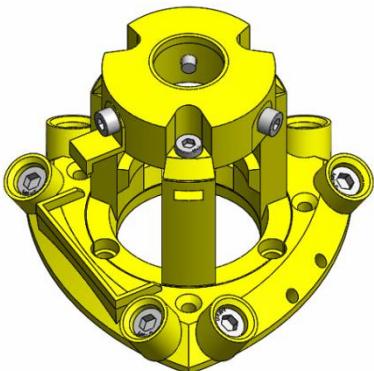
1x

2x

2x

5

# Montaje HOT-END

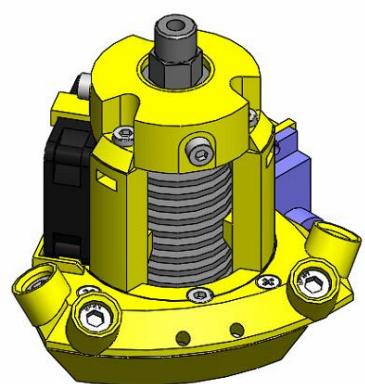
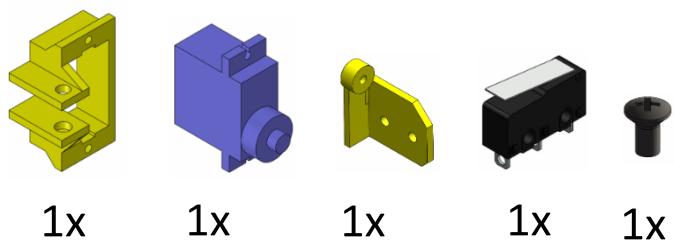
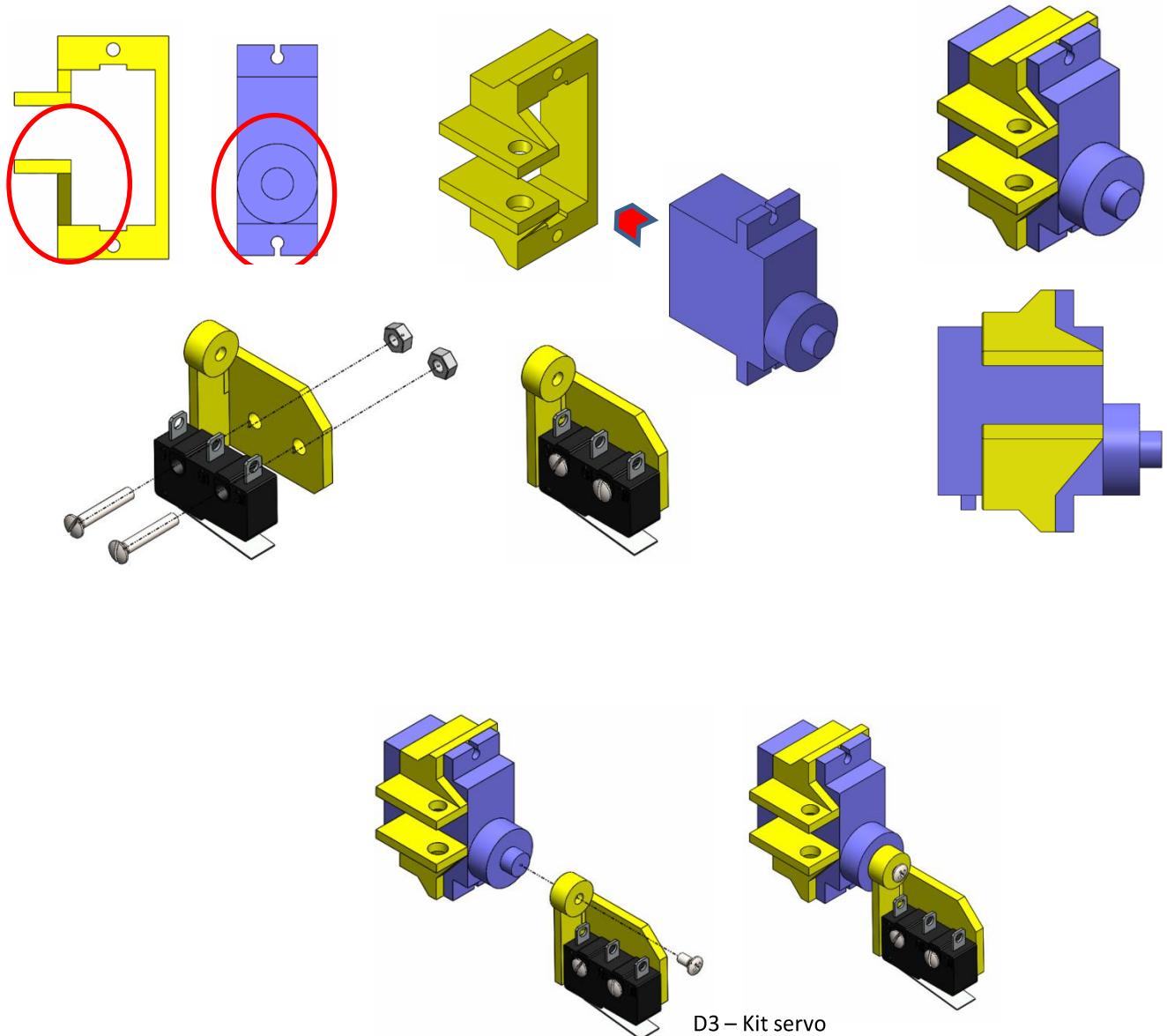


1x

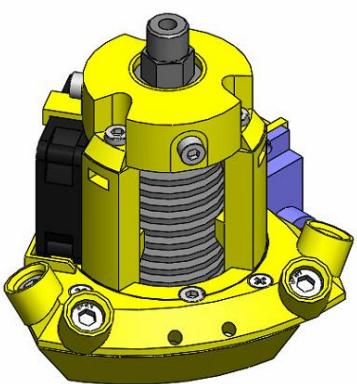
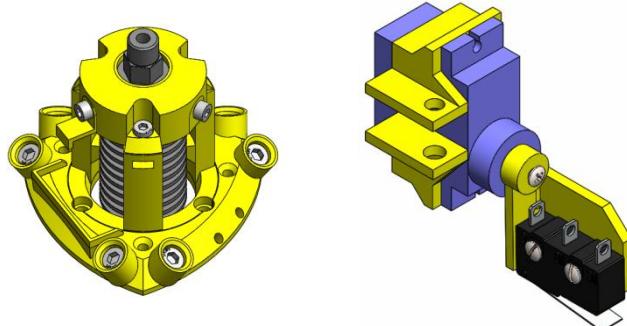
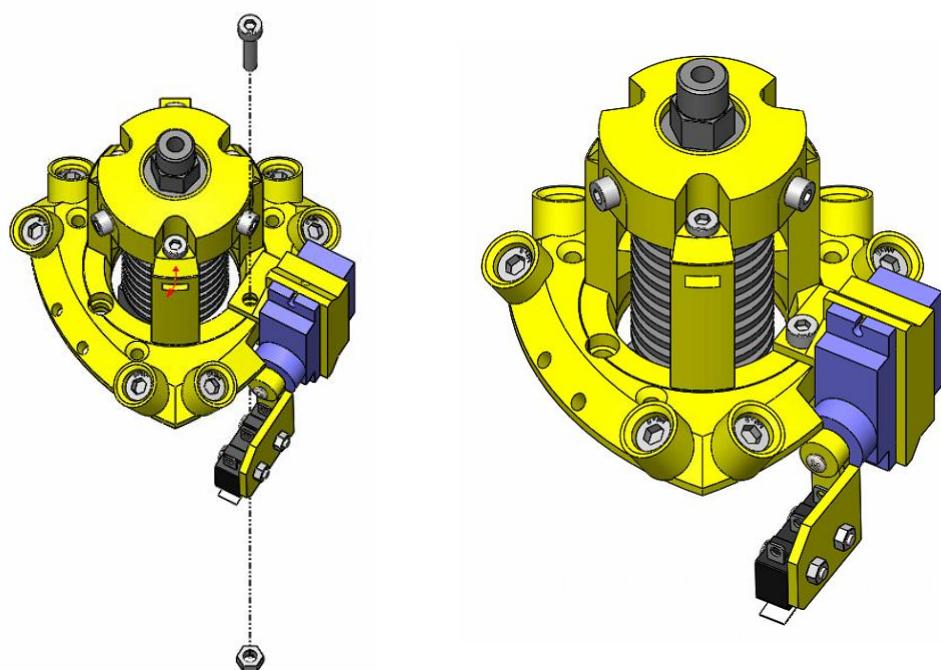
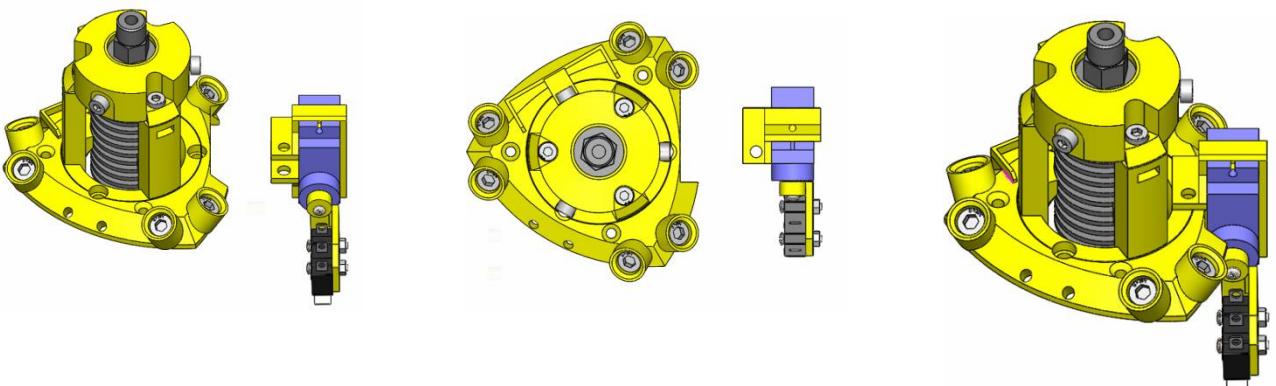
1x

6

# Montaje BED-LEVELING

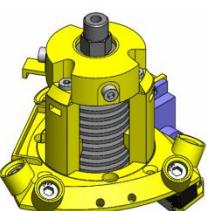
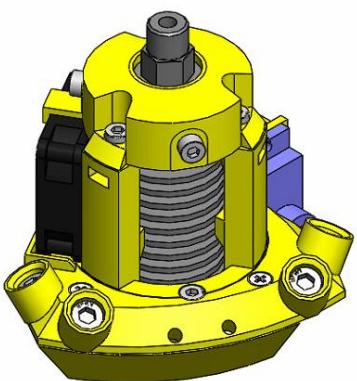
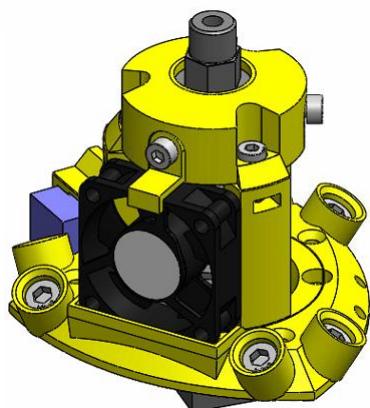
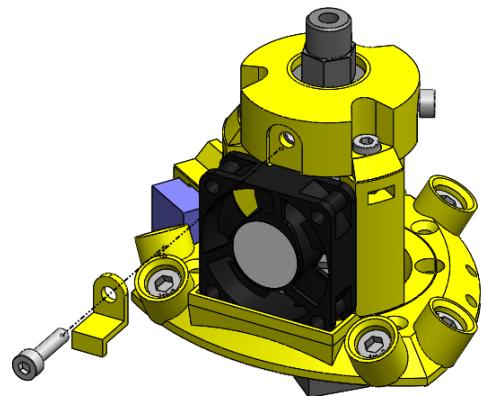
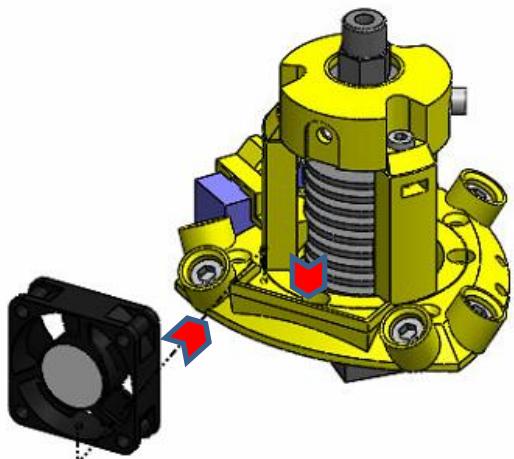
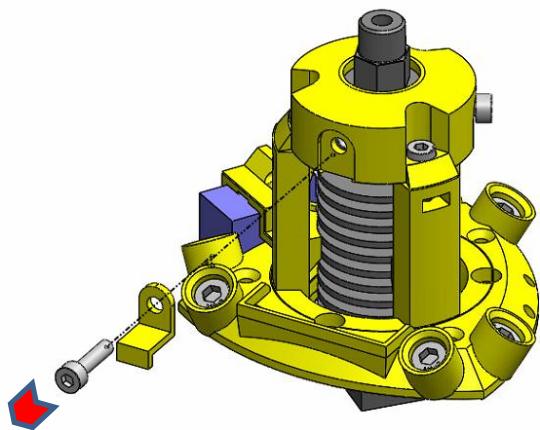
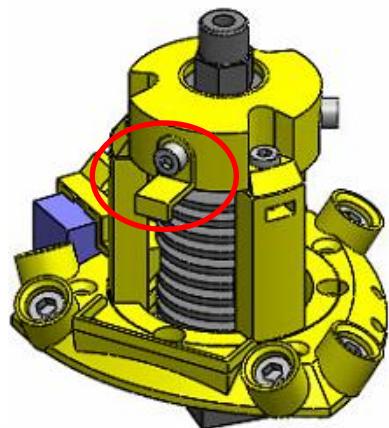


# Montaje BED-LEVELING



1x 1x

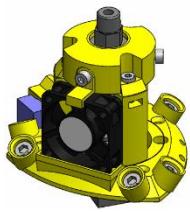
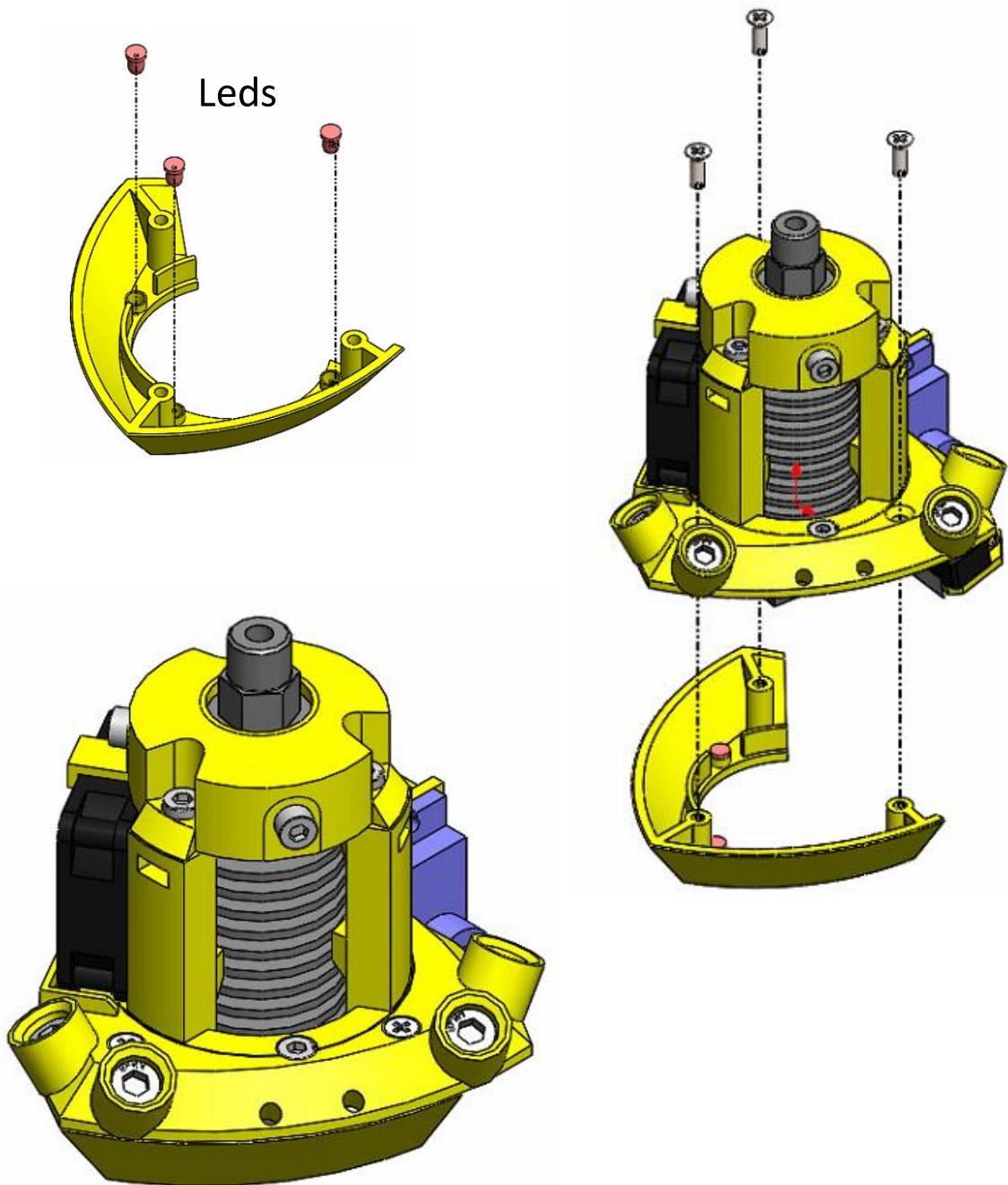
## Montaje ventilador HOT-END



1x

1x

## Montaje LEDs (Opcional) + Embellecedor



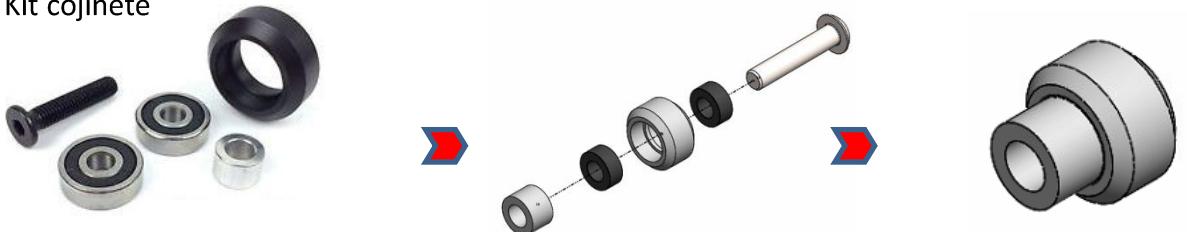
1x

3x

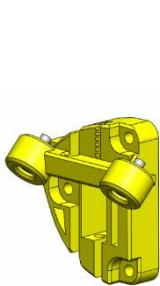
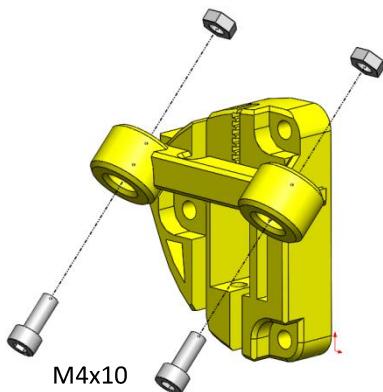
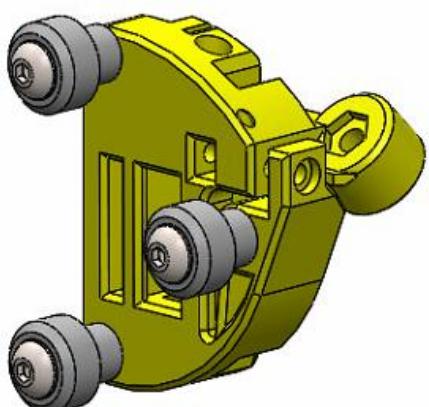
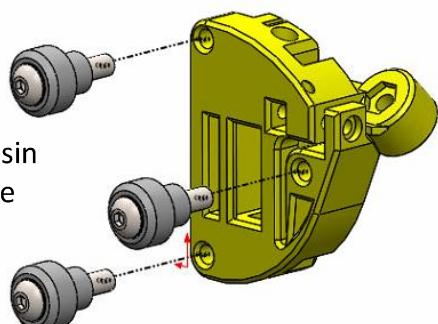
3x

# Montaje Patines

Kit cojinete



Ajustar tornillos sin  
bloquear cojinete



1x



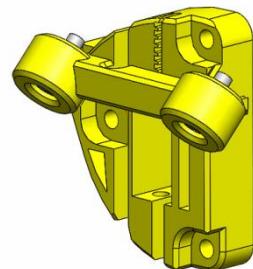
1x



2x



2x



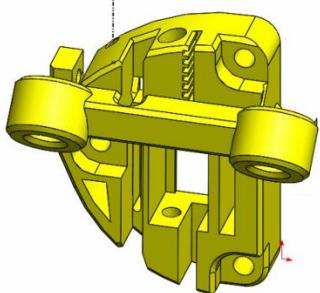
x3

11

M3x8



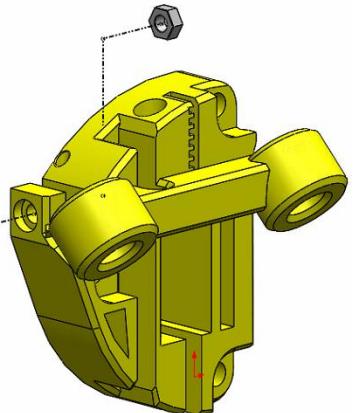
Ajusta home ejes



Ajusta cojinete guía

M3x25

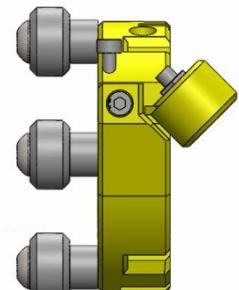
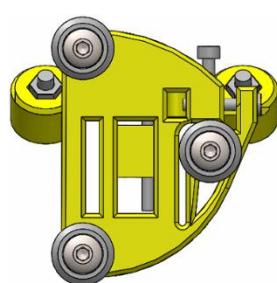
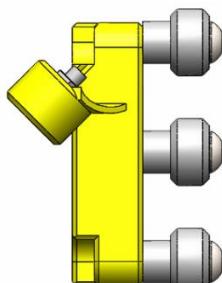
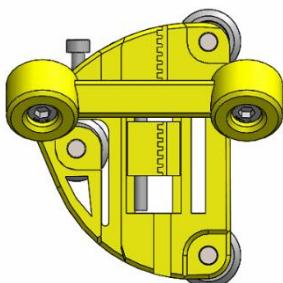
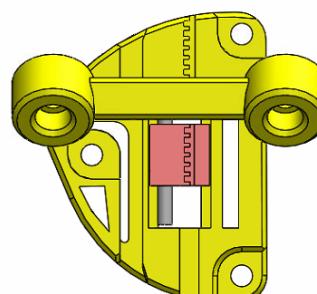
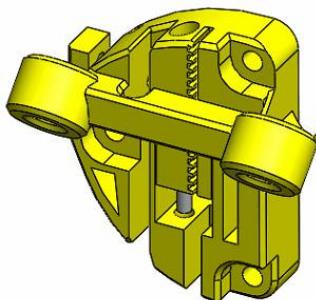
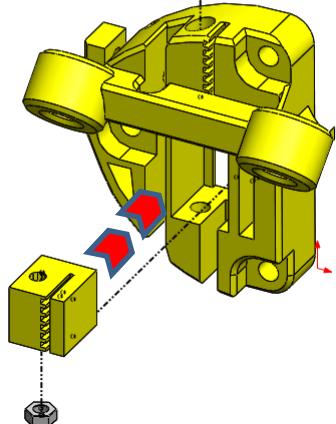
No atornillar el tornillo hasta el  
montaje del patinete en la v-slot



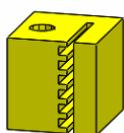
M3x25



Ajusta tensión correa ejes



x3



1x



2x



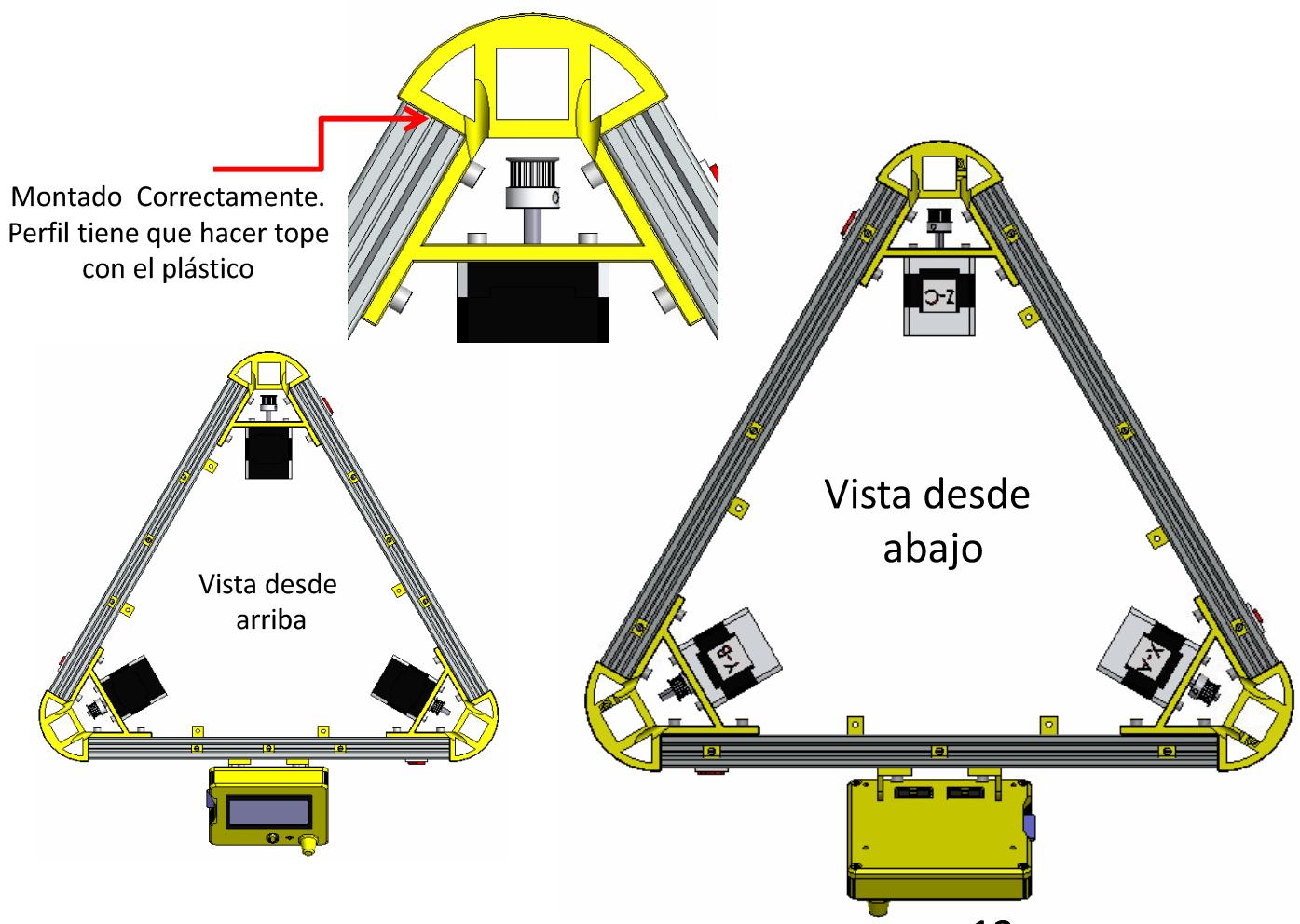
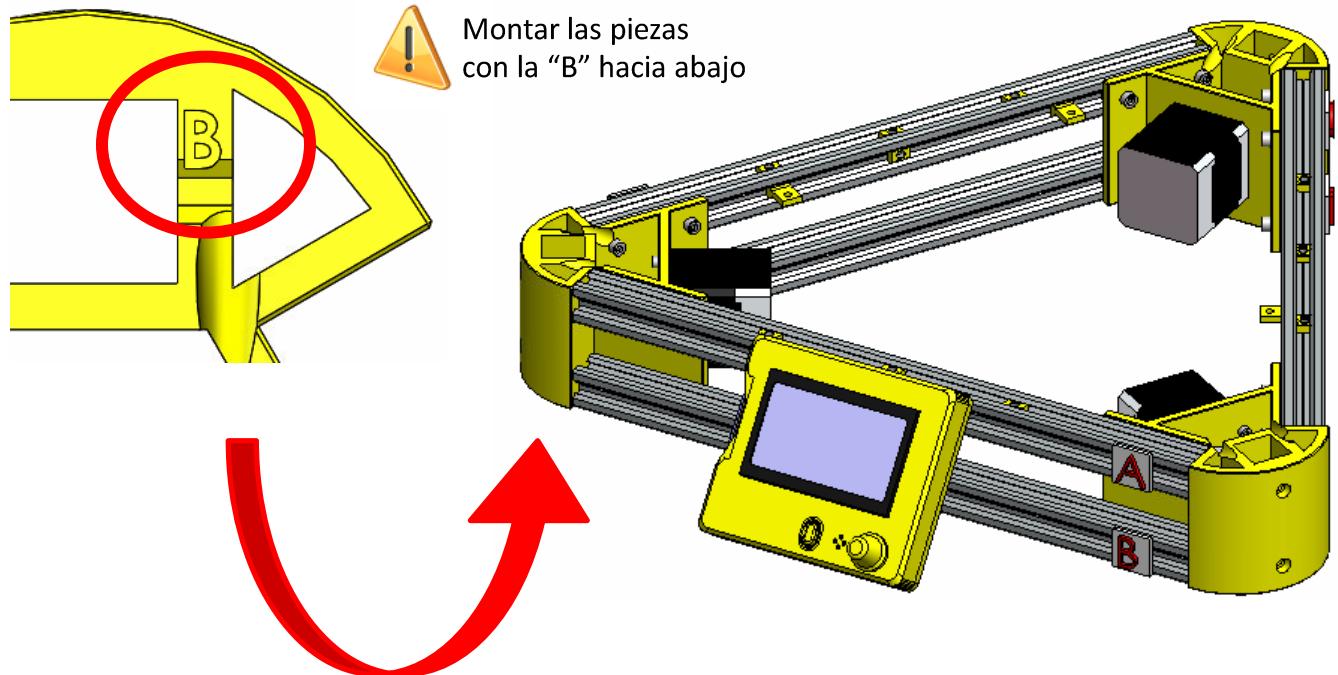
1x



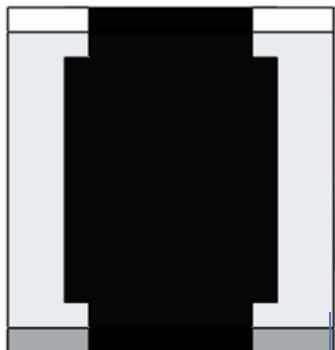
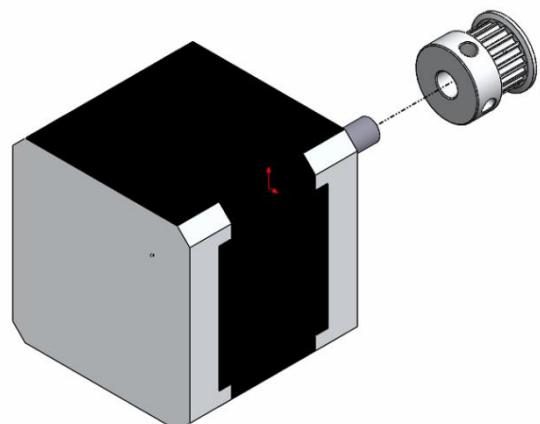
2x

12

## Organización piezas Estructura inferior



# Montaje motores ejes inferiores

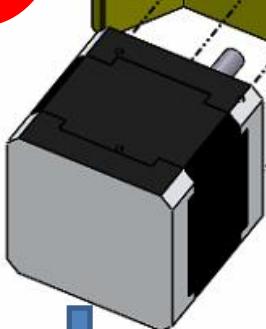
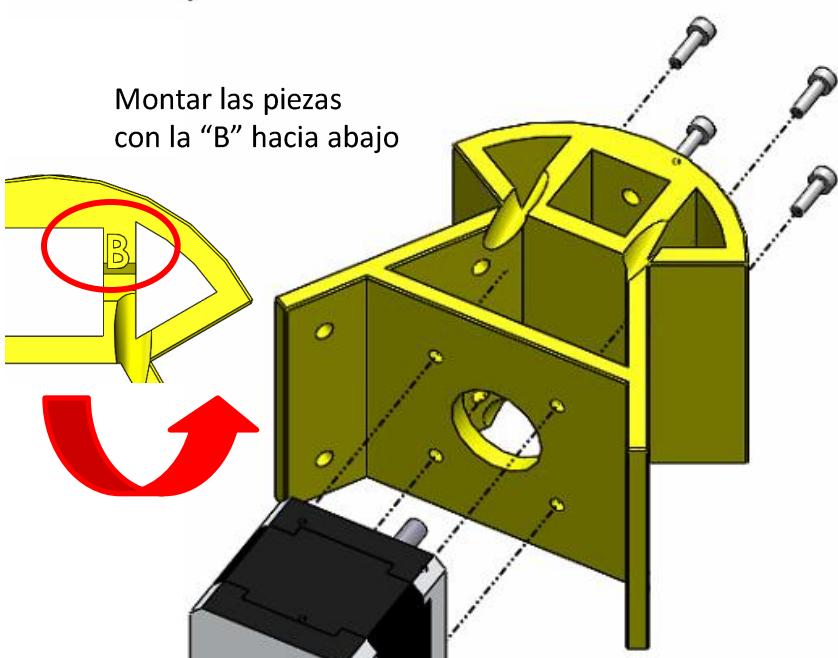


Apretar fuerte los tornillos de fijación

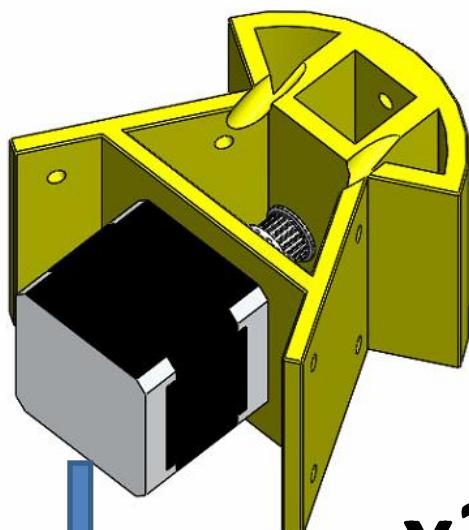


13 mm

Montar las piezas con la "B" hacia abajo

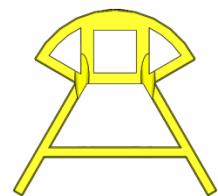


Salida hilos por abajo



x3

Salida hilos por abajo



1x



1x



1x

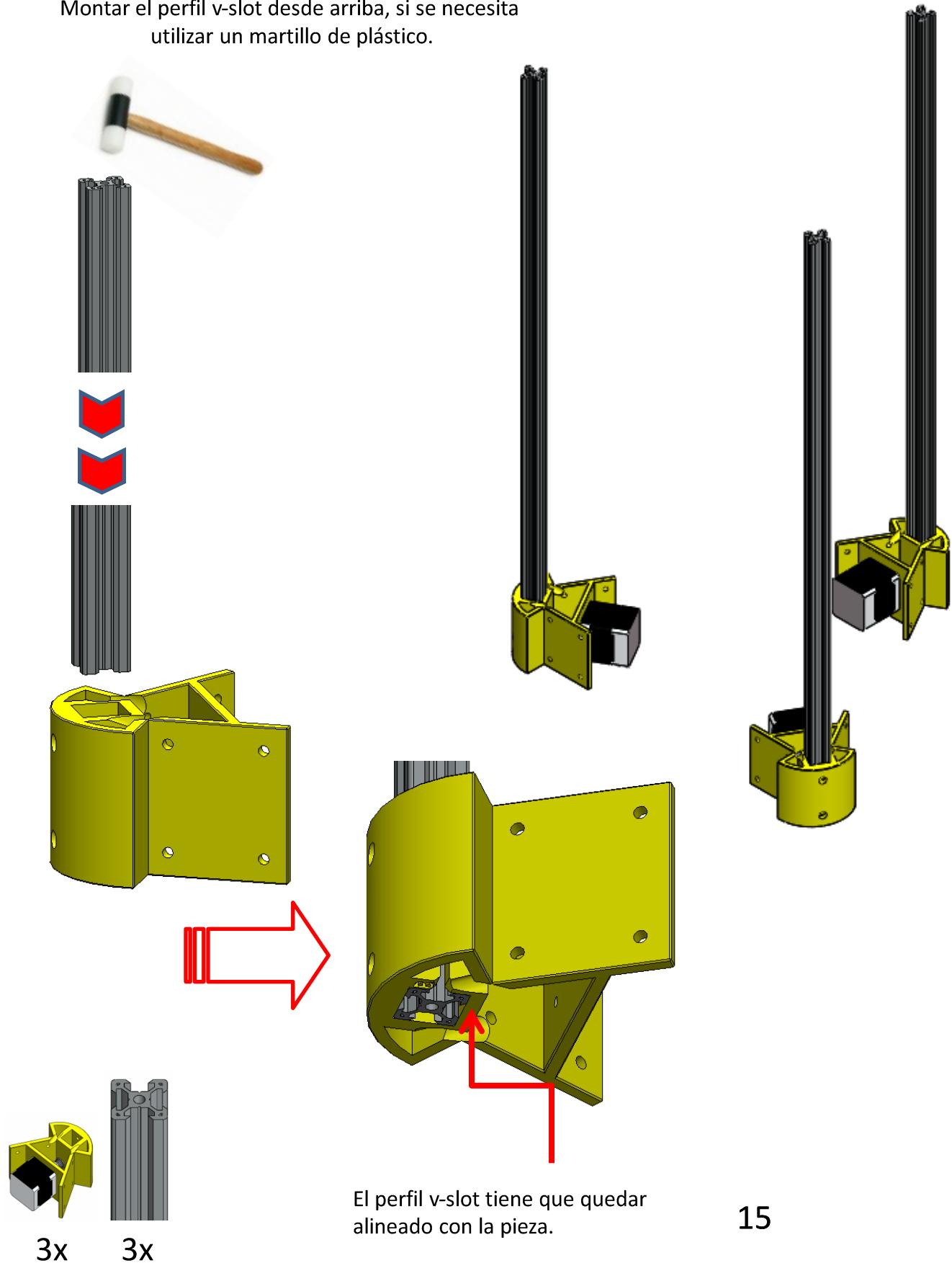


4x

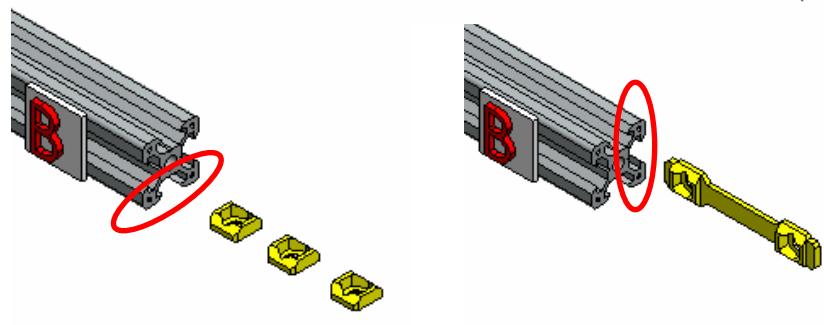
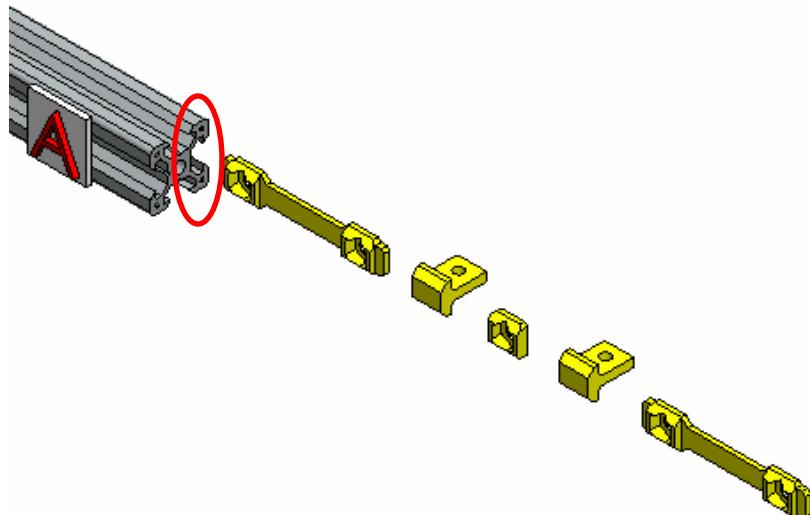
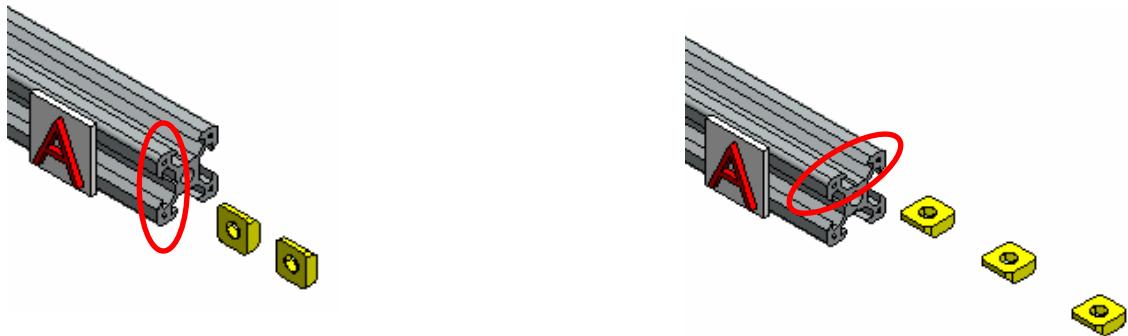
14

# Montaje perfiles v-slots (Columnas)

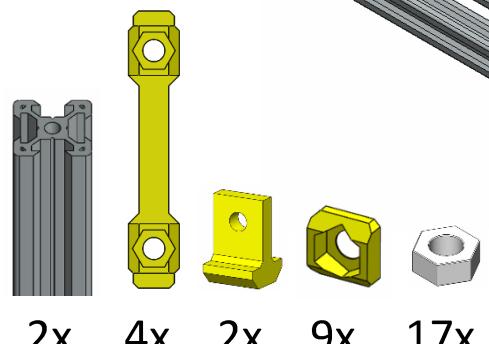
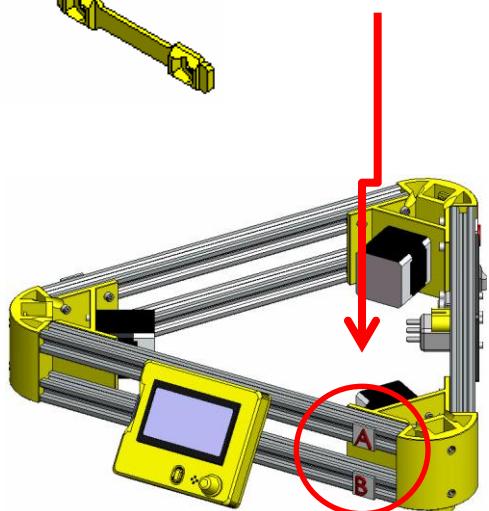
Montar el perfil v-slot desde arriba, si se necesita utilizar un martillo de plástico.



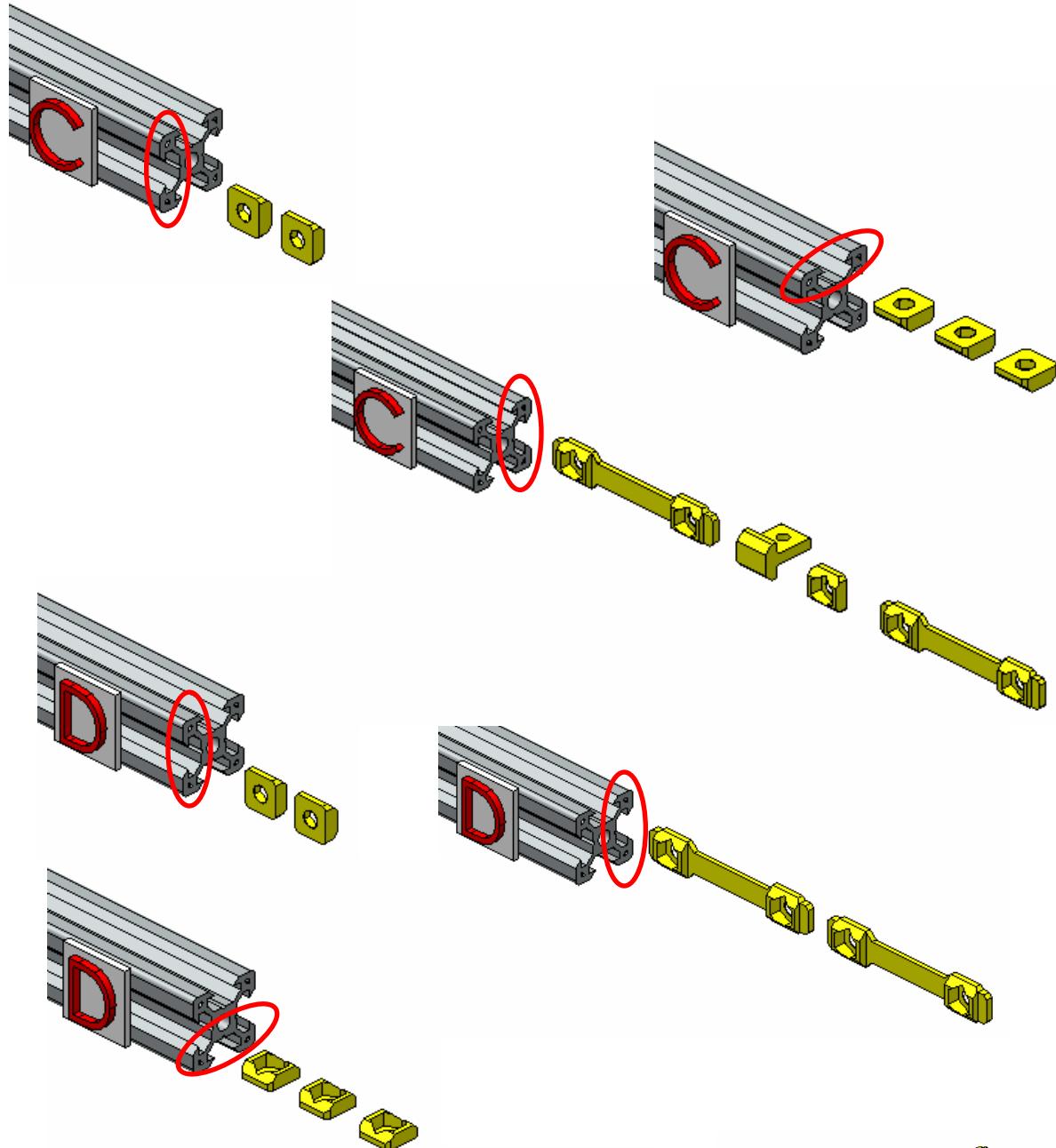
## Montaje frontal impresora – vista LCD



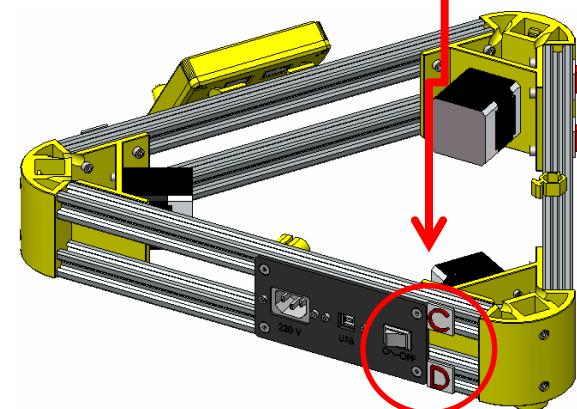
Letras de referencia



## Montaje lateral impresora – vista panel alimentación



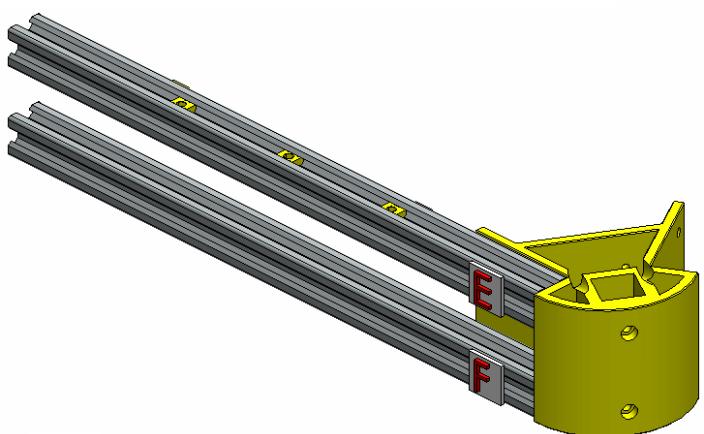
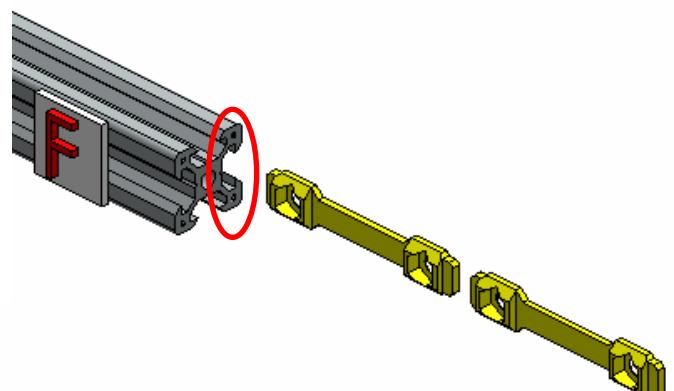
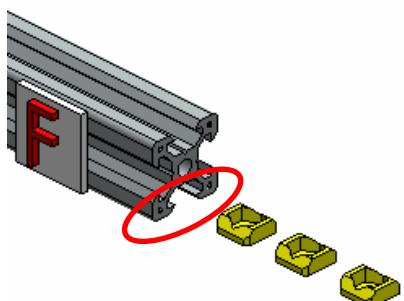
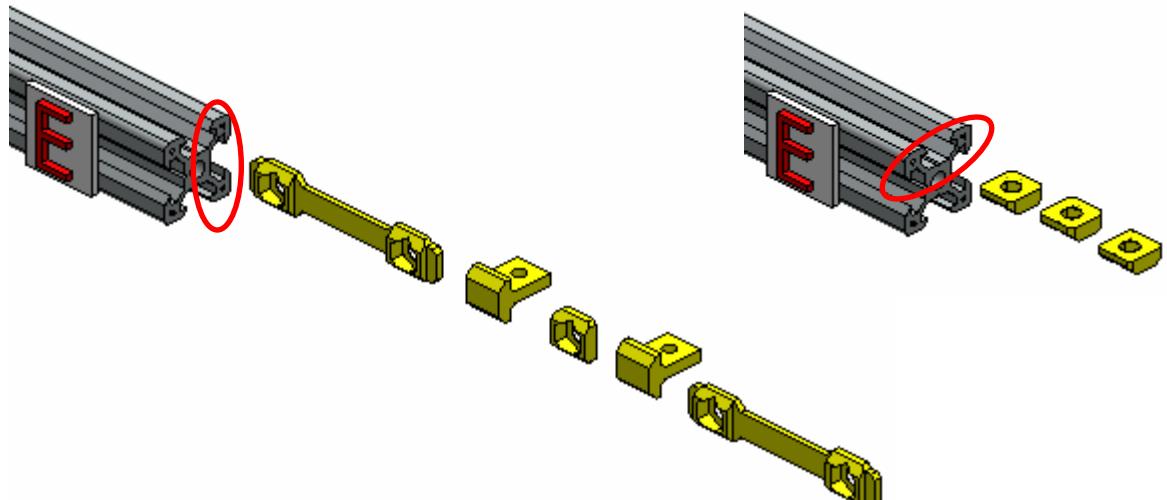
Fijarse con  
las letras



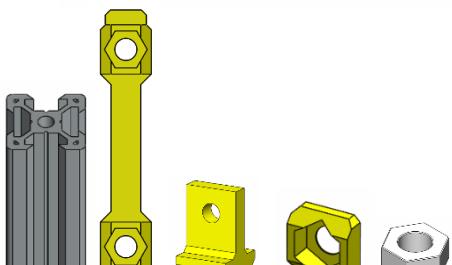
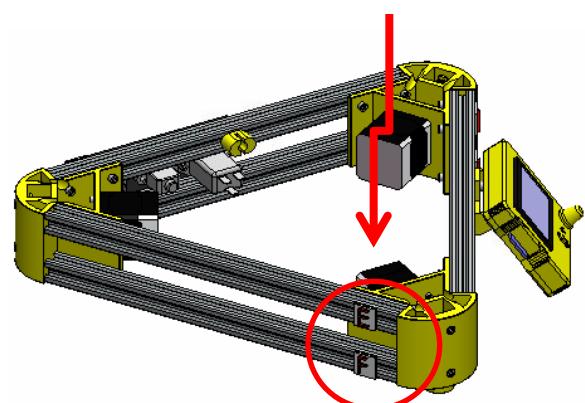
17

2x 4x 1x 11x 19x

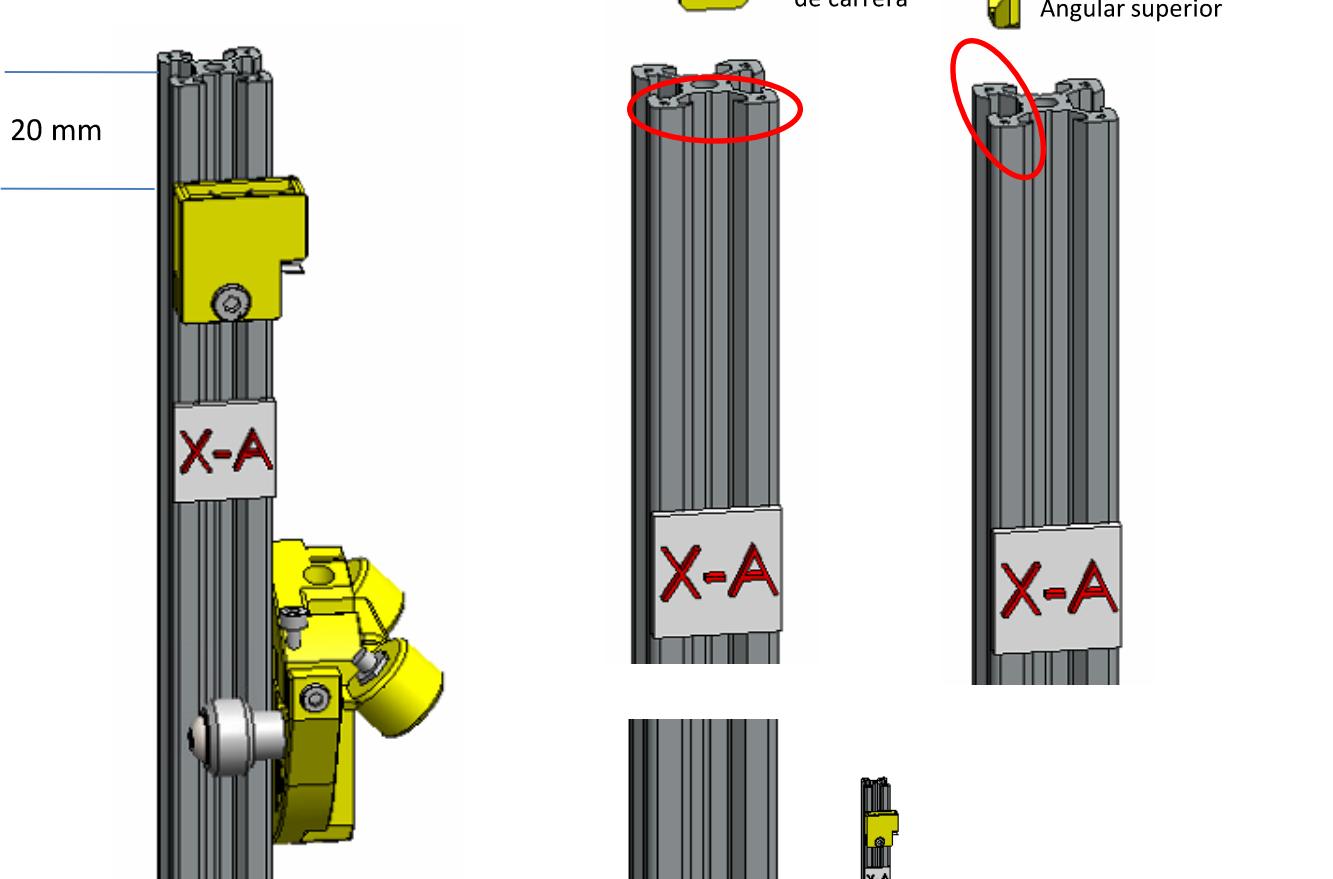
## Montaje lateral impresora – vista sin objetos



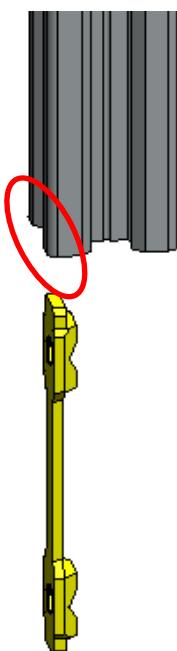
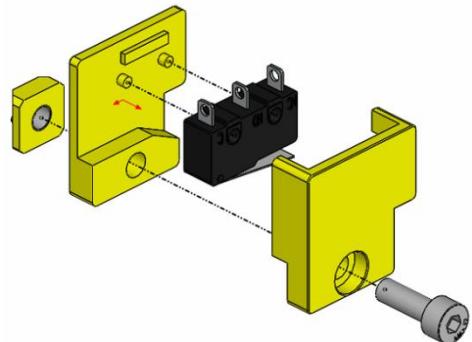
Fijarse con  
las letras



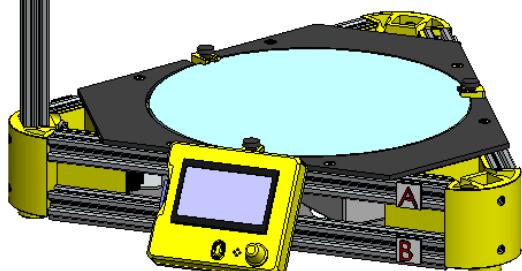
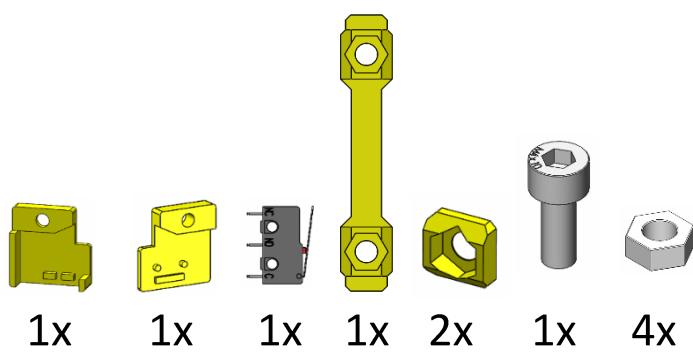
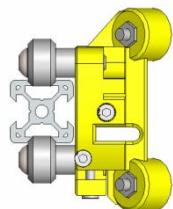
# Montaje Columna X-A



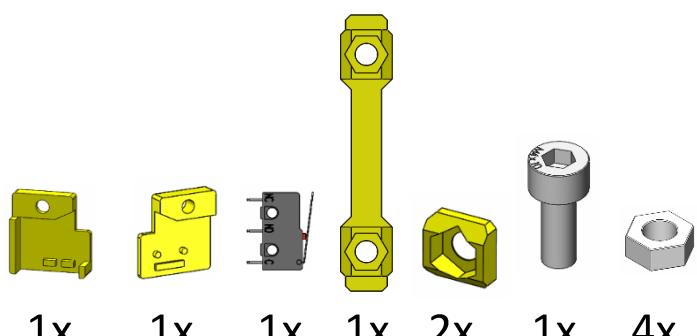
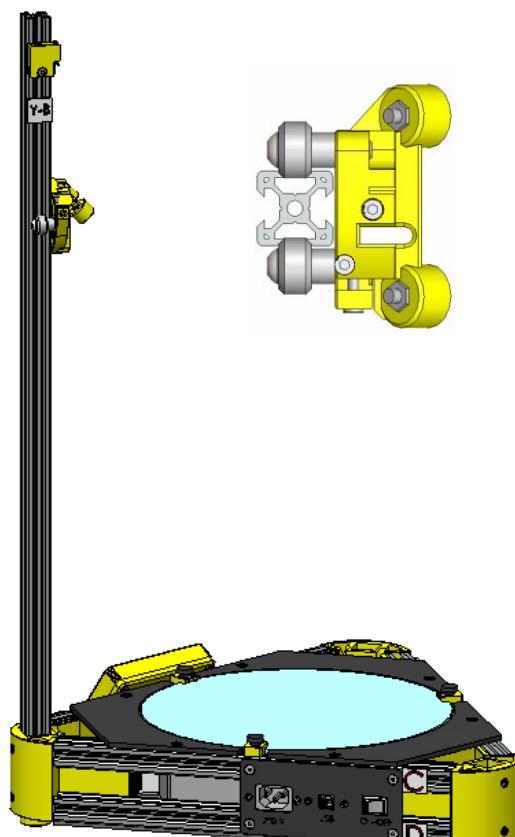
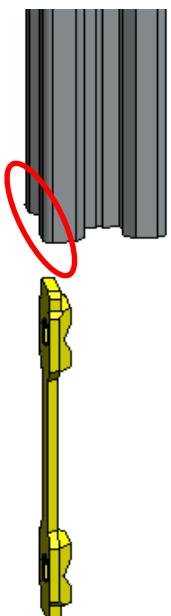
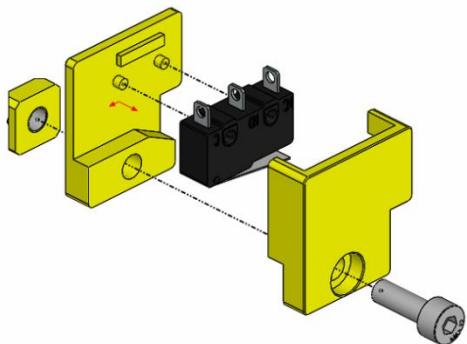
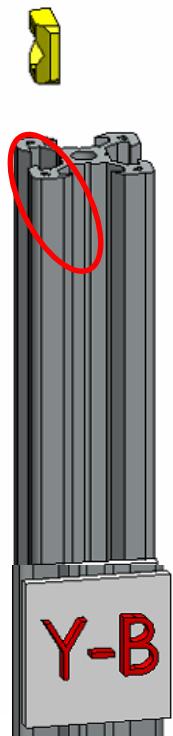
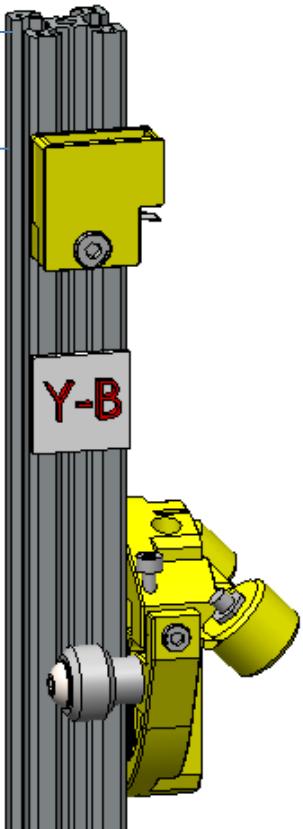
Montaje final de carrera



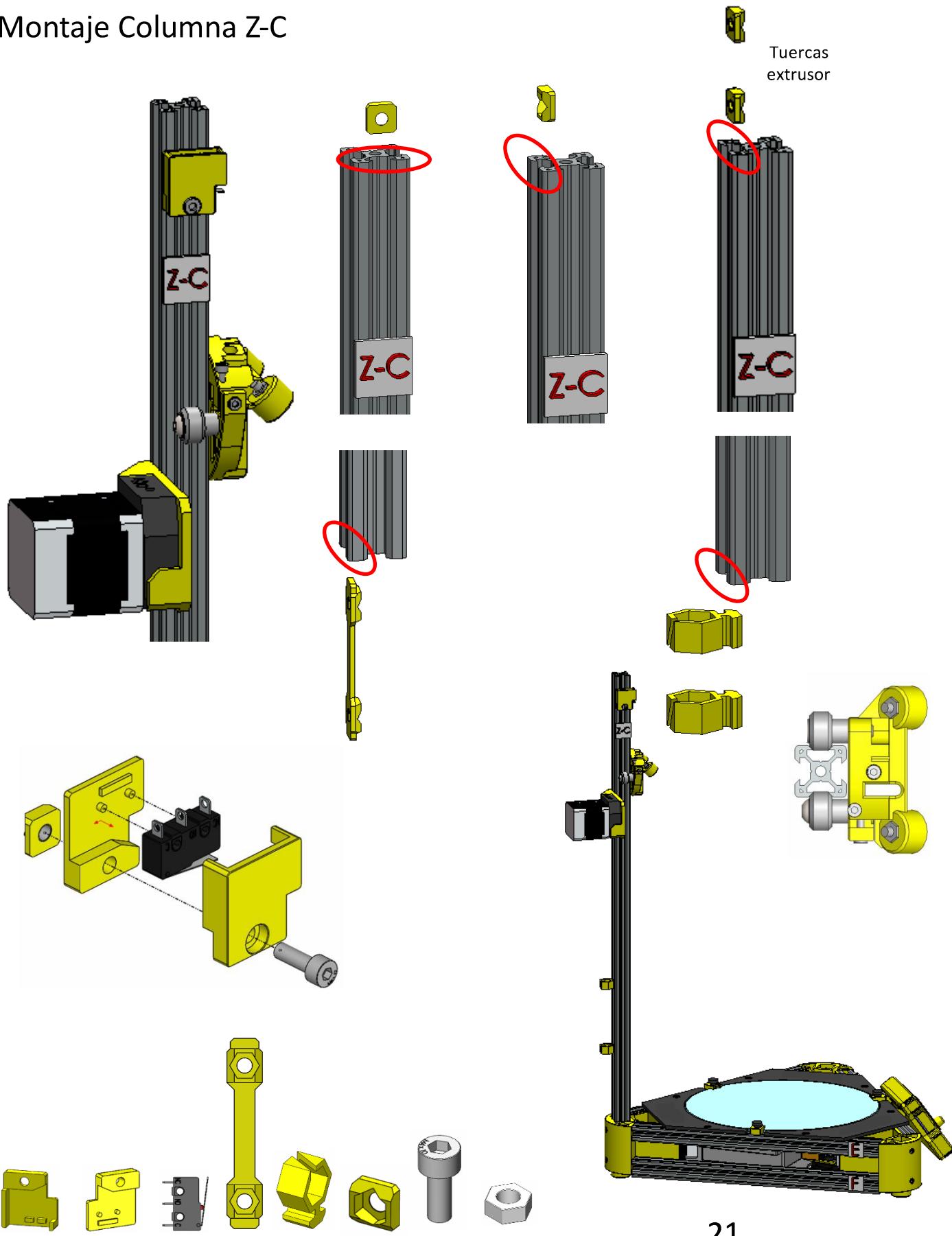
Insertar patinete eje



# Montaje Columna Y-B



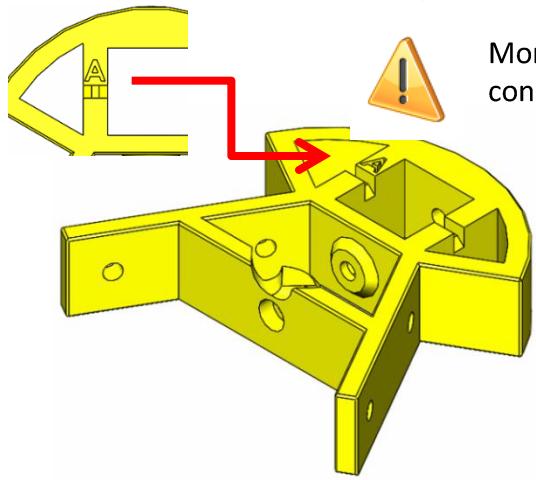
# Montaje Columna Z-C



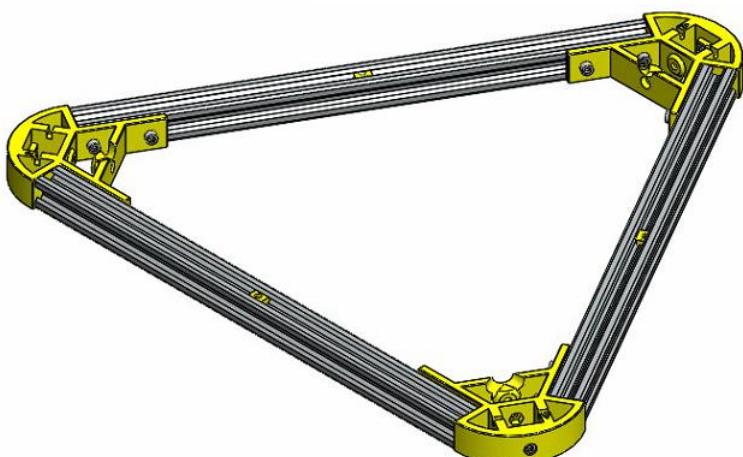
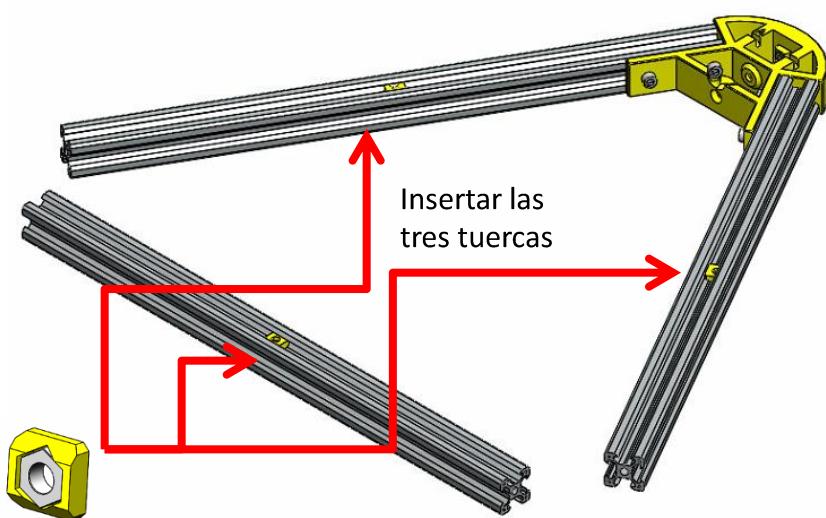
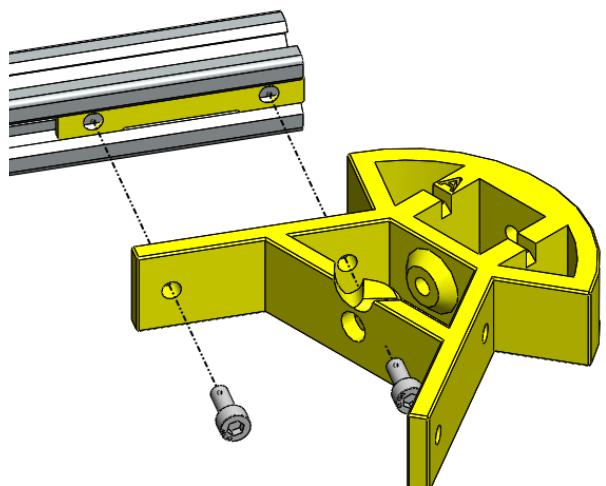
## Tuercas extrusor

21

## Montaje Estructura superior

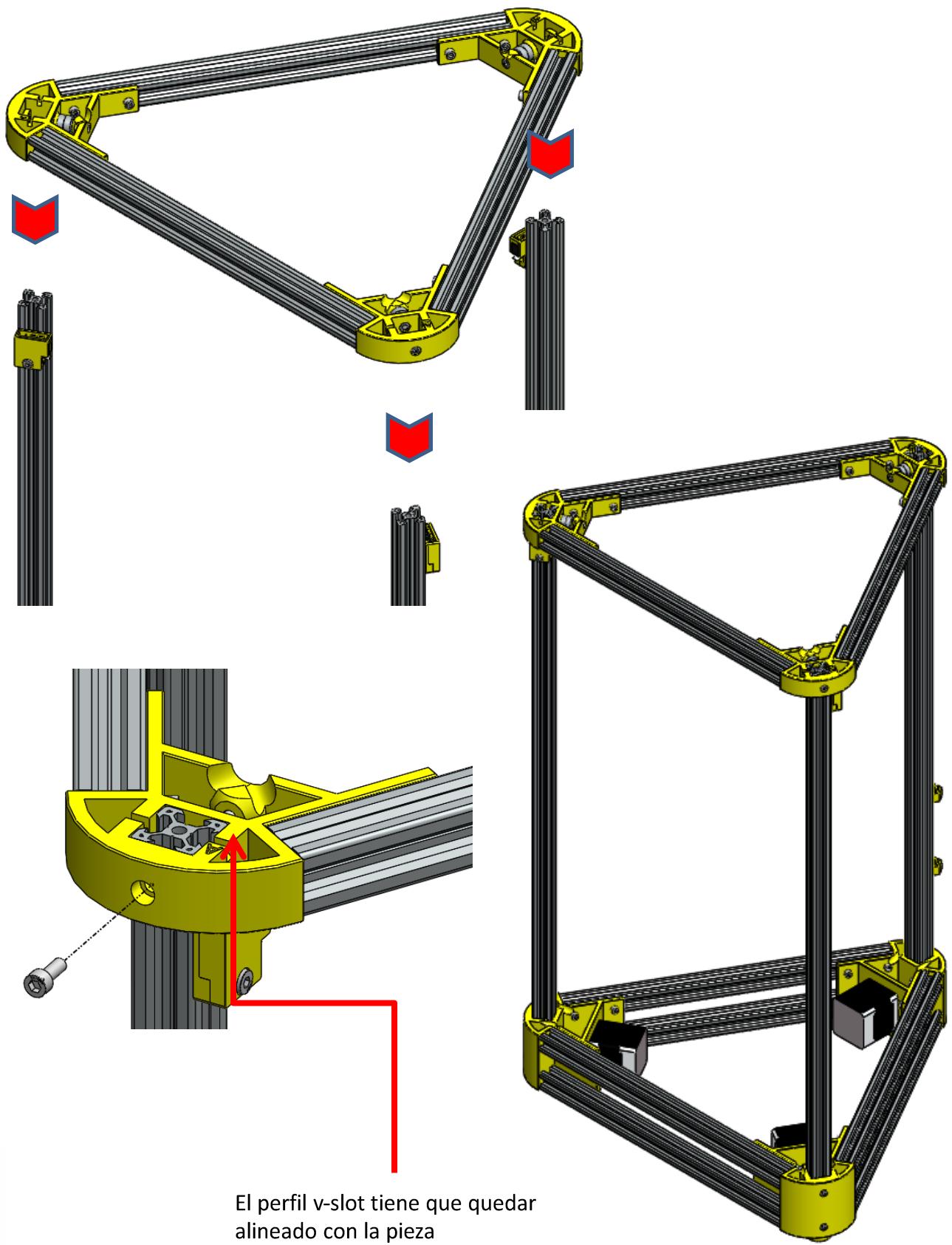


Montar los angulares con la "A" hacia arriba

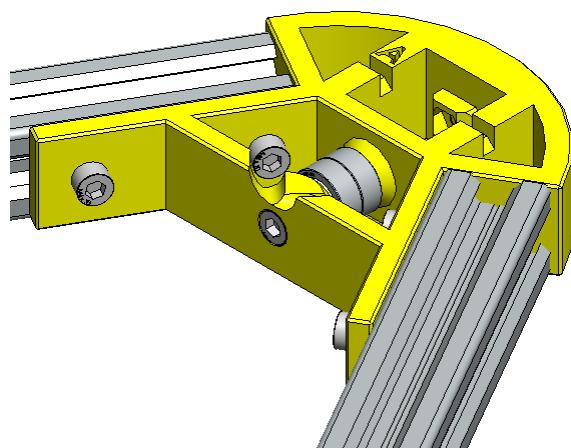
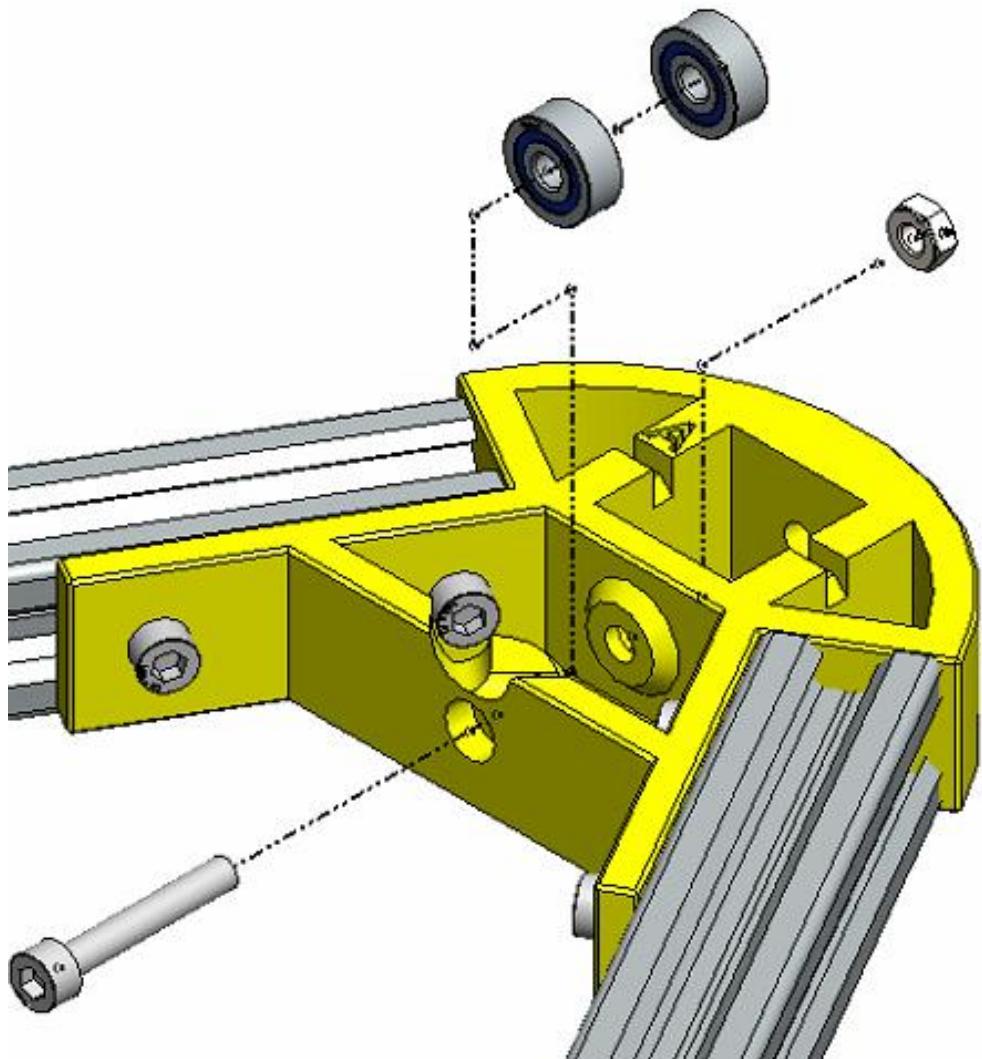


3x 3x 3x 6x 12x 15x

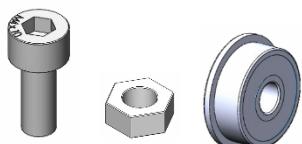
## Acoplamiento estructura superior e inferior



## Montaje cojinetes correa



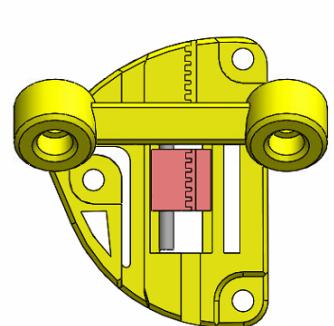
**x3**



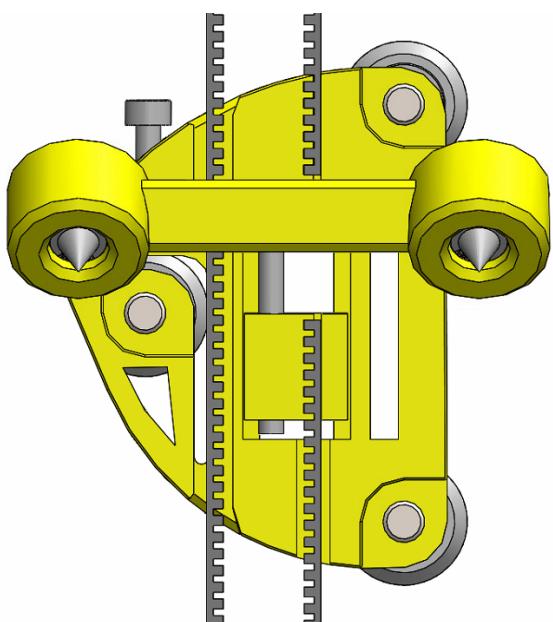
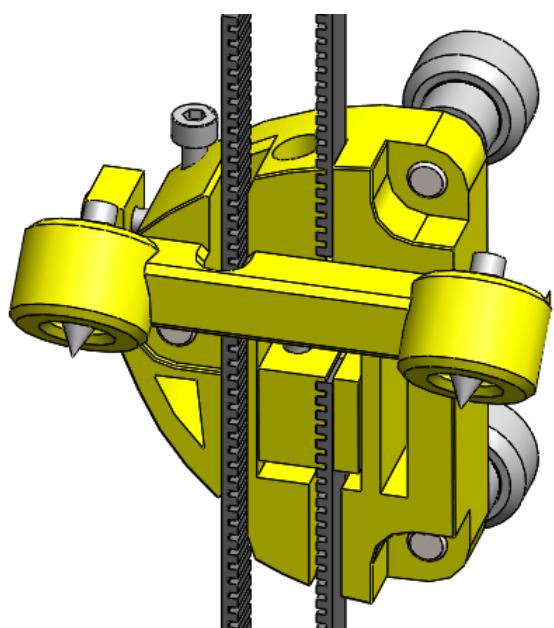
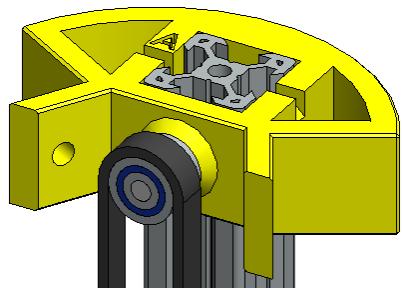
1x    1x    2x

**24**

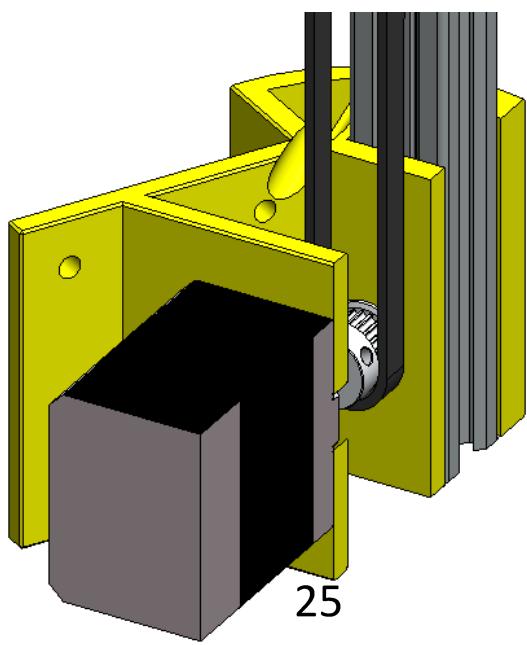
# Montaje correa



Ajustar la pieza en rojo  
para tensar la correa

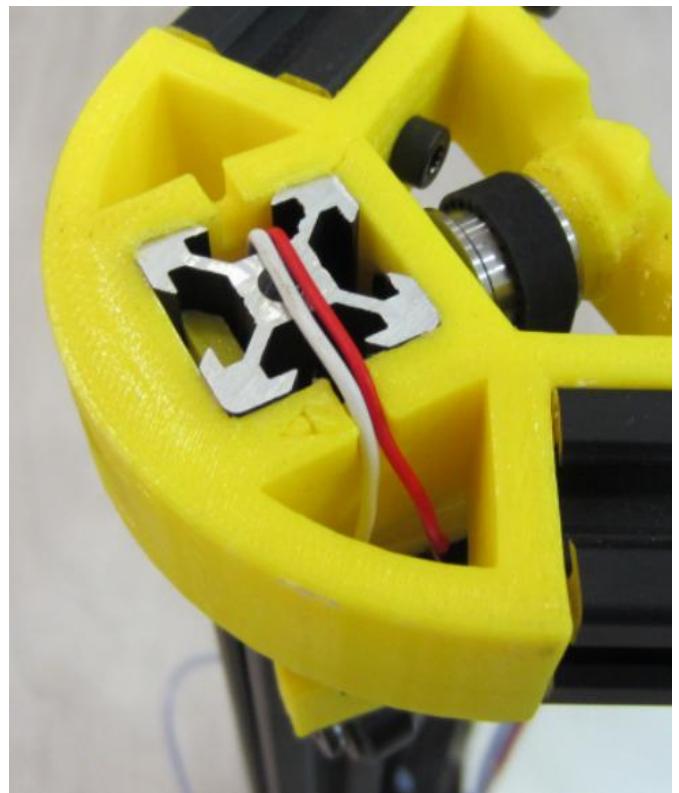
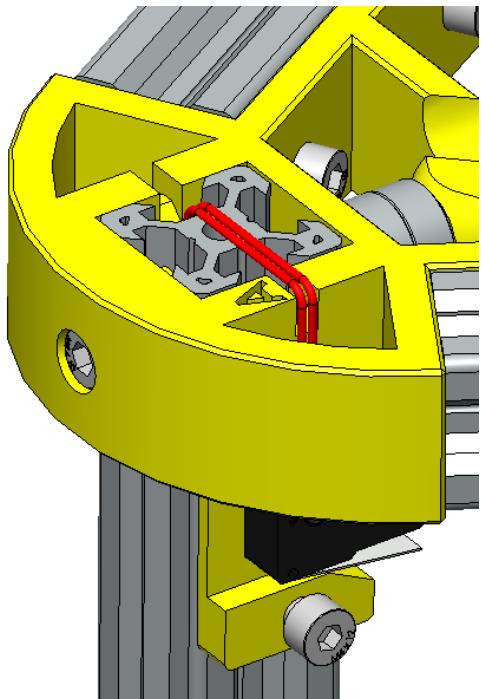


1x

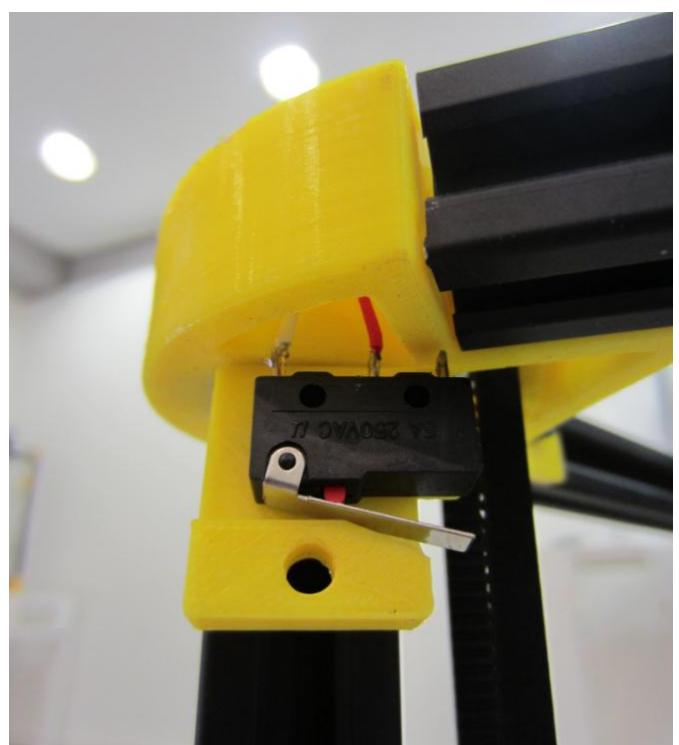


25

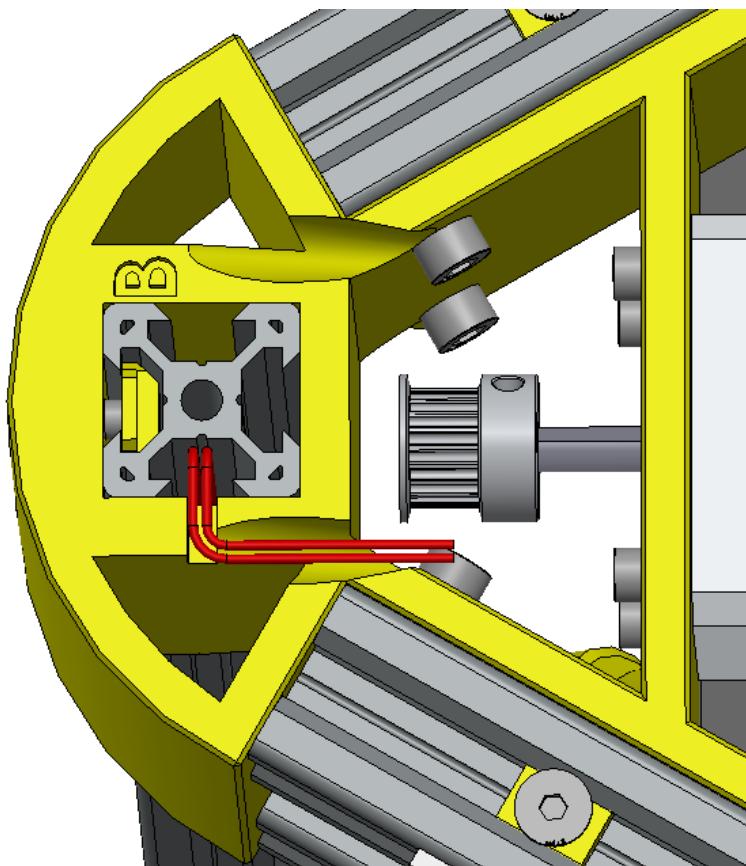
## Montaje cables final de carrera (parte superior)



Dejar pasar los hilos  
como en la foto



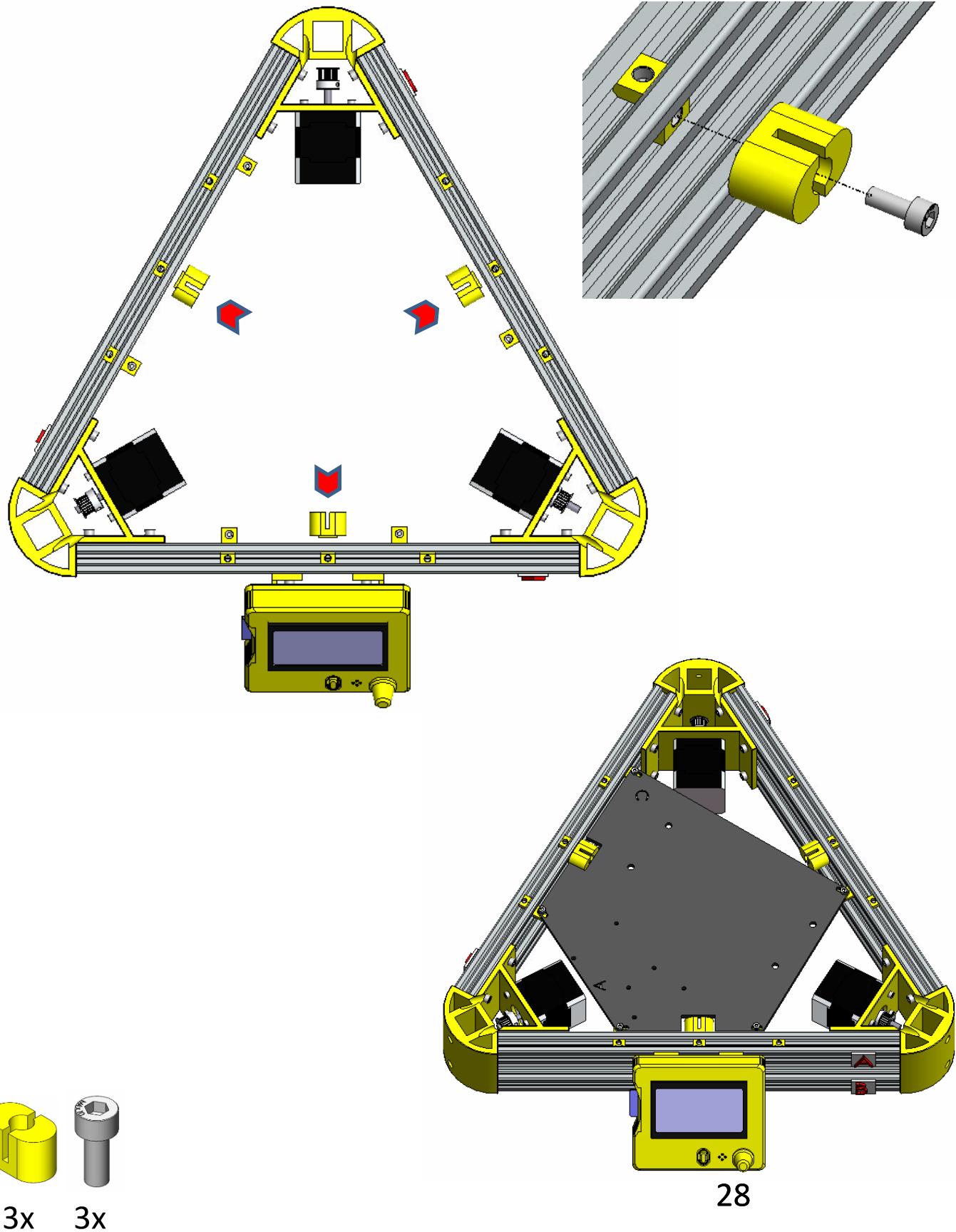
## Montaje cables final de carrera (parte inferior)



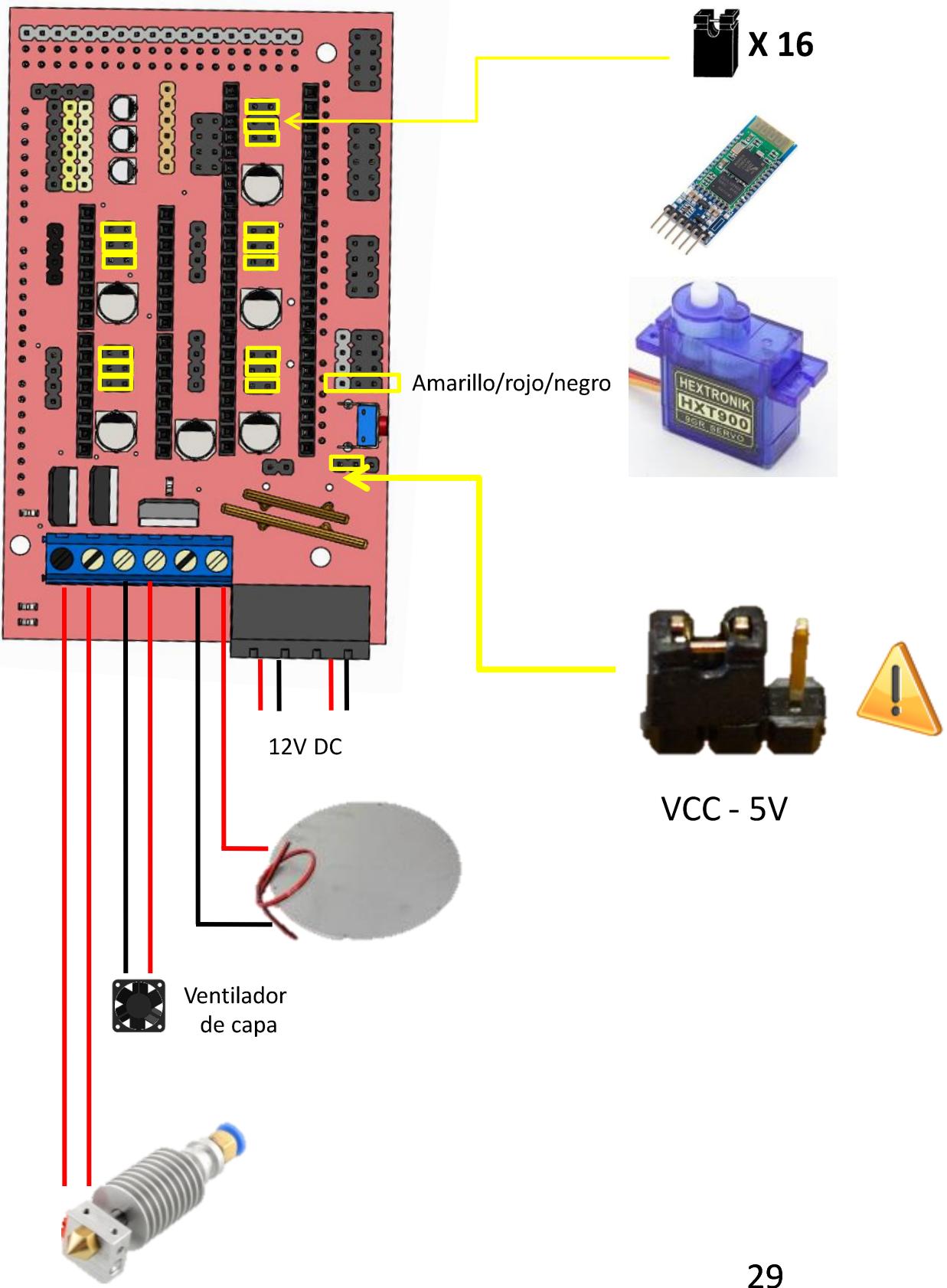
Dejar pasar los hilos  
como en la foto



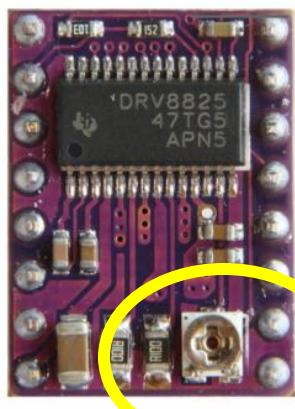
## Montaje soportes base caliente



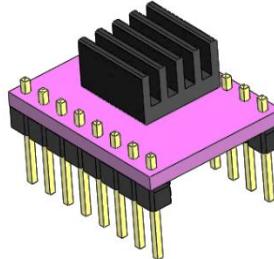
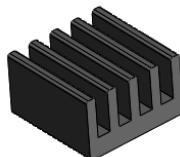
# Conexión RAMPS 1.4



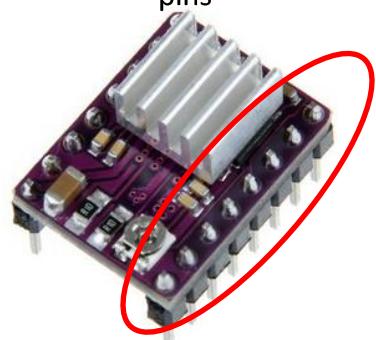
# Montaje drivers motores



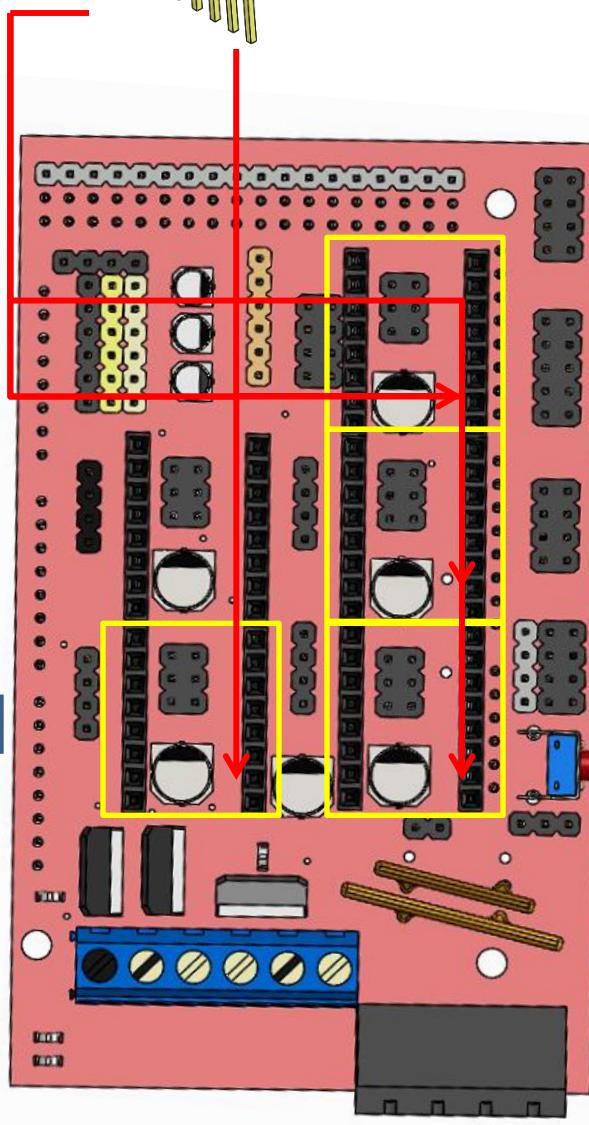
X 4



Montar disipador sin crear  
cortocircuito con los  
pins



Sentido correcto  
del DRV

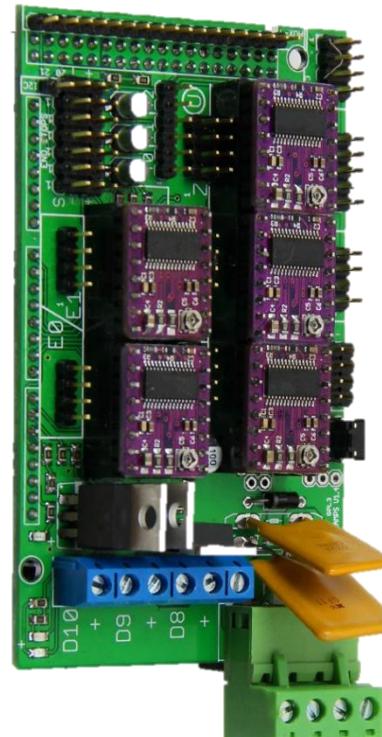


Salida cables  
motor extrusor

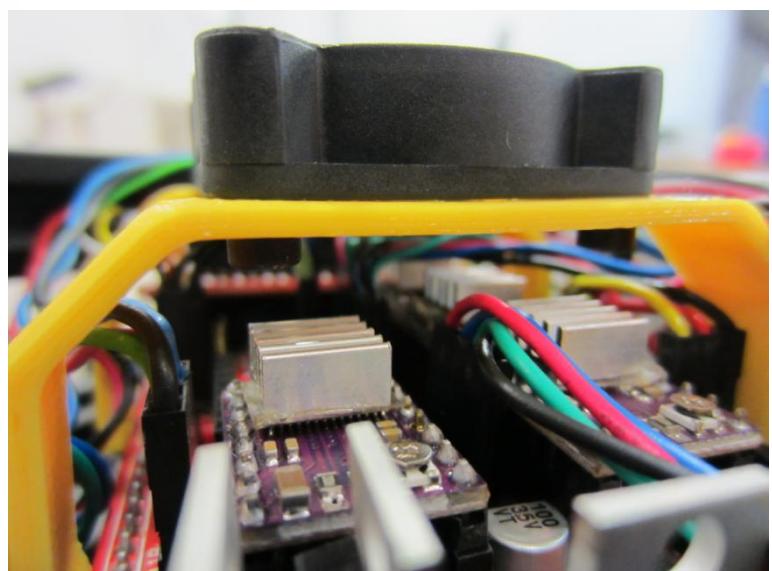
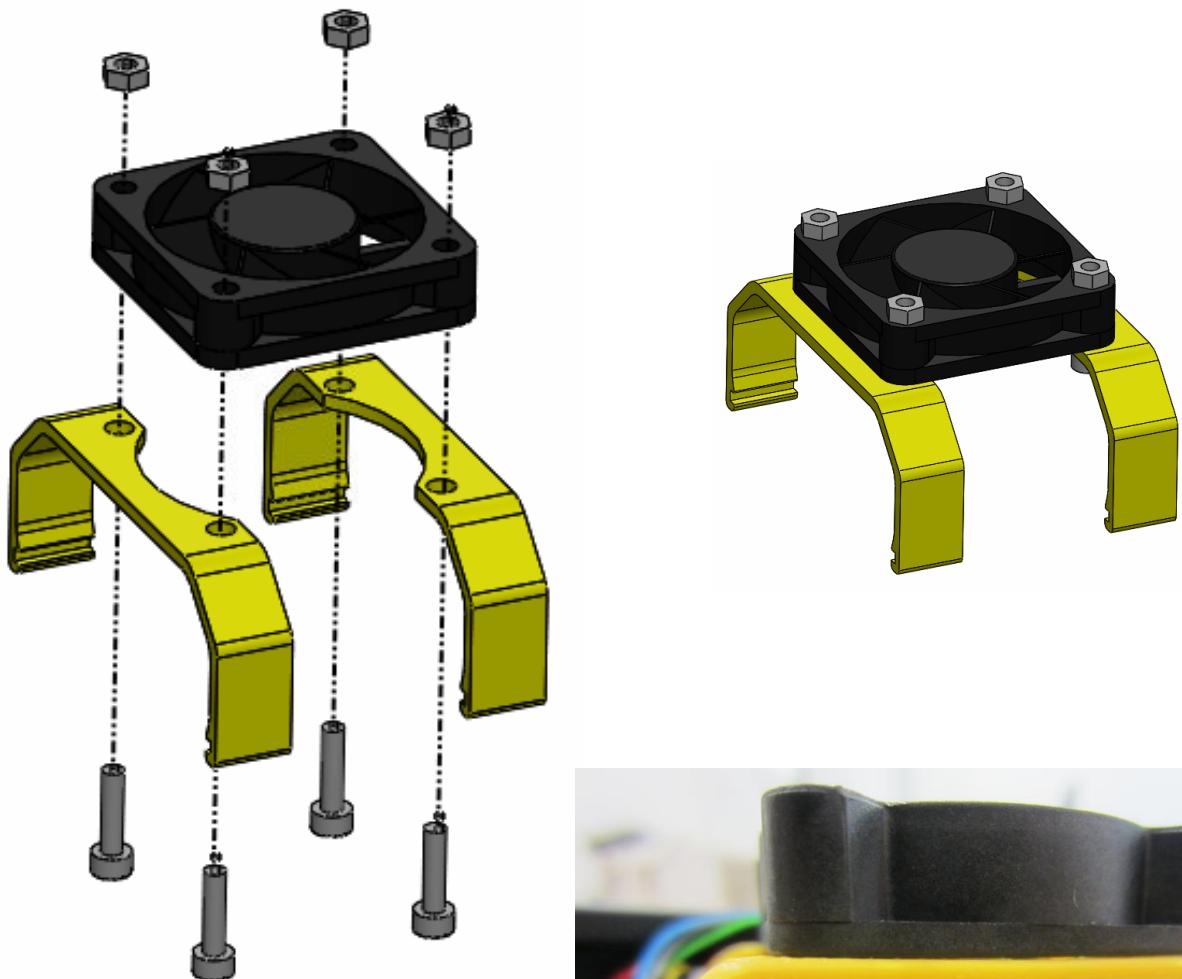
X-A

Y-B

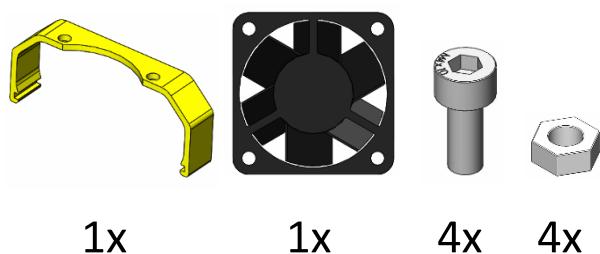
Z-C



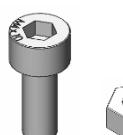
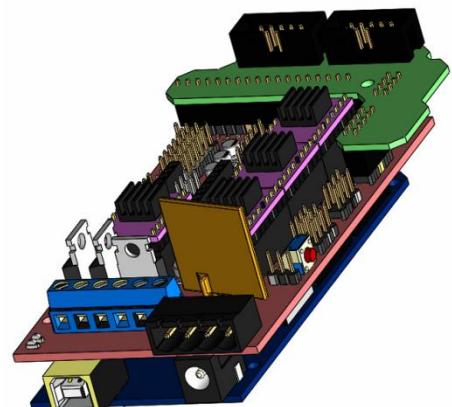
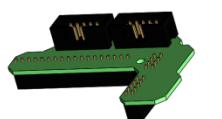
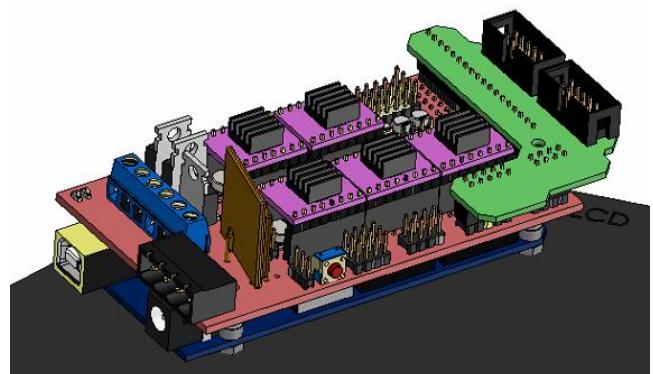
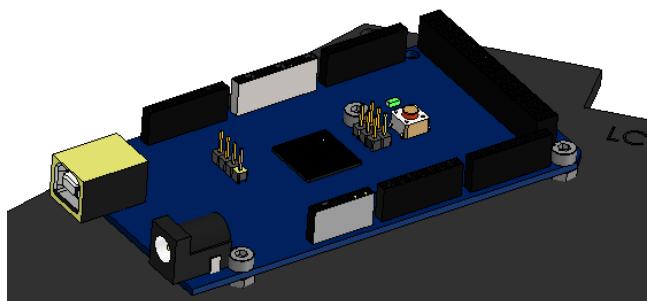
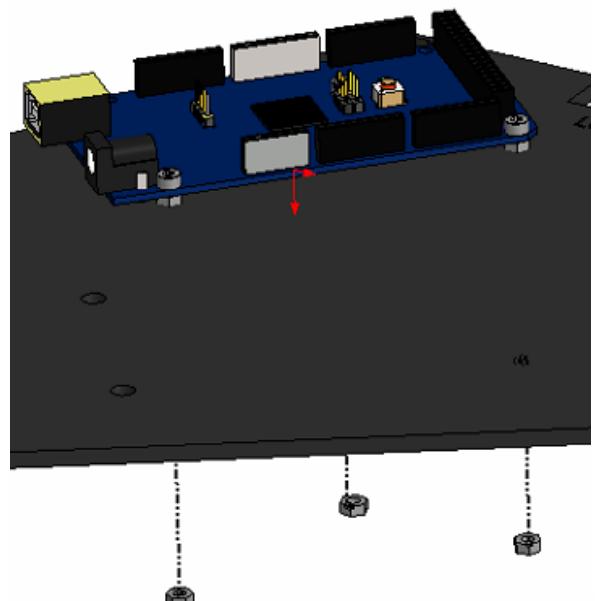
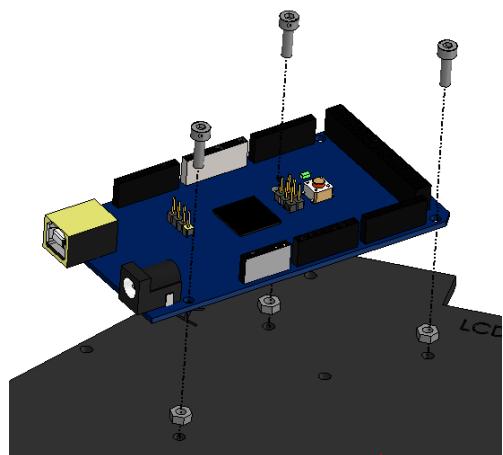
## Montaje ventilador RAMPS 1.4



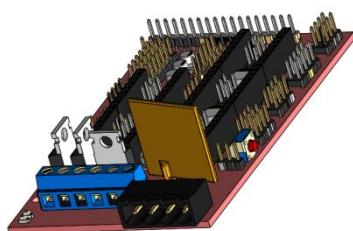
Montado correctamente para enfriar los drivers



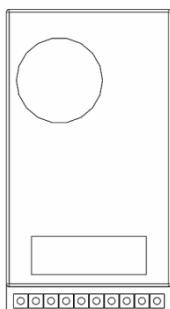
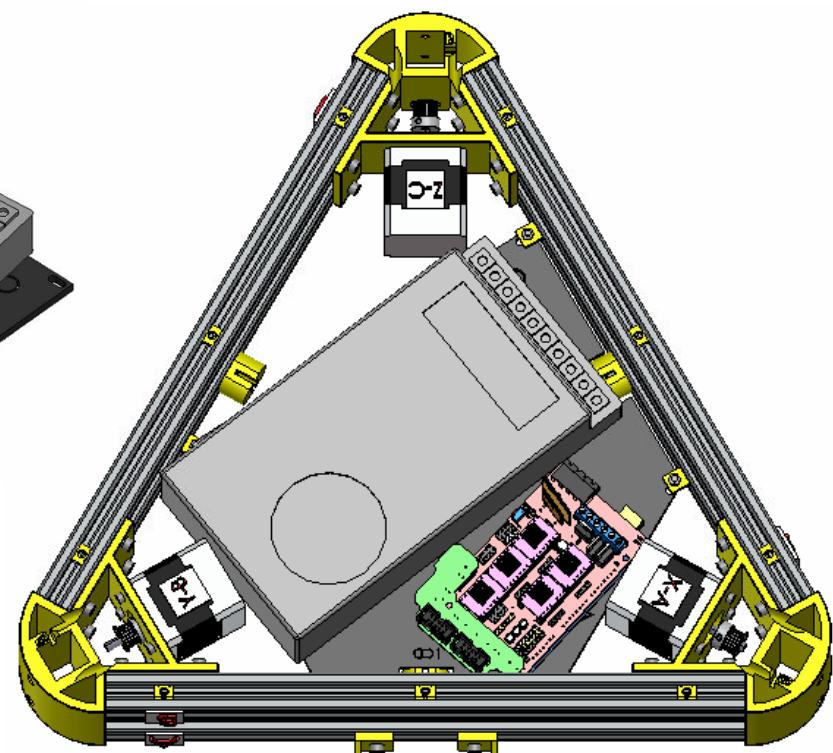
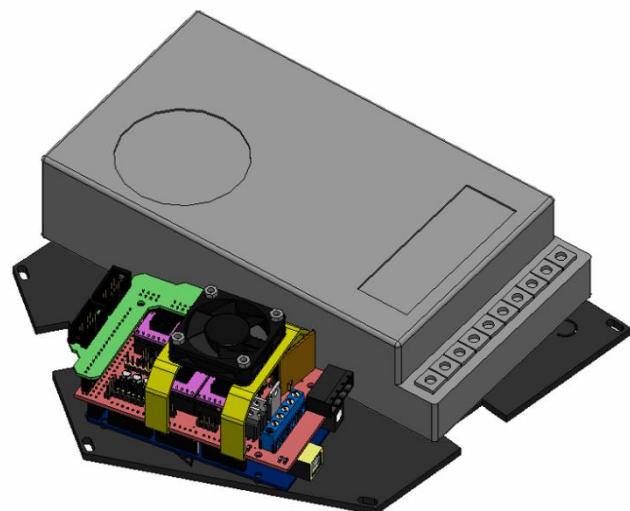
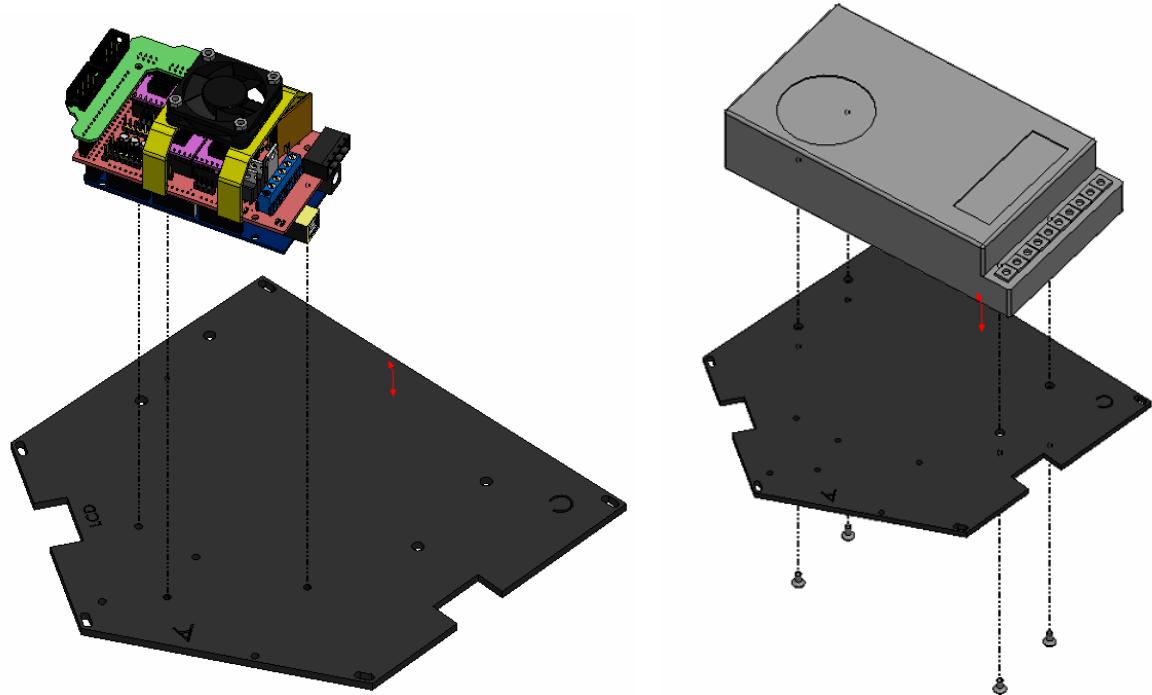
## Montaje Arduino + RAMPS 1.4



3x 6x



# Montaje conjunto Arduino + fuente alimentación



1x

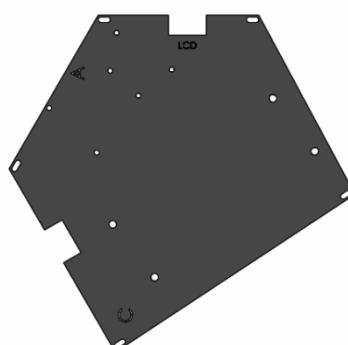
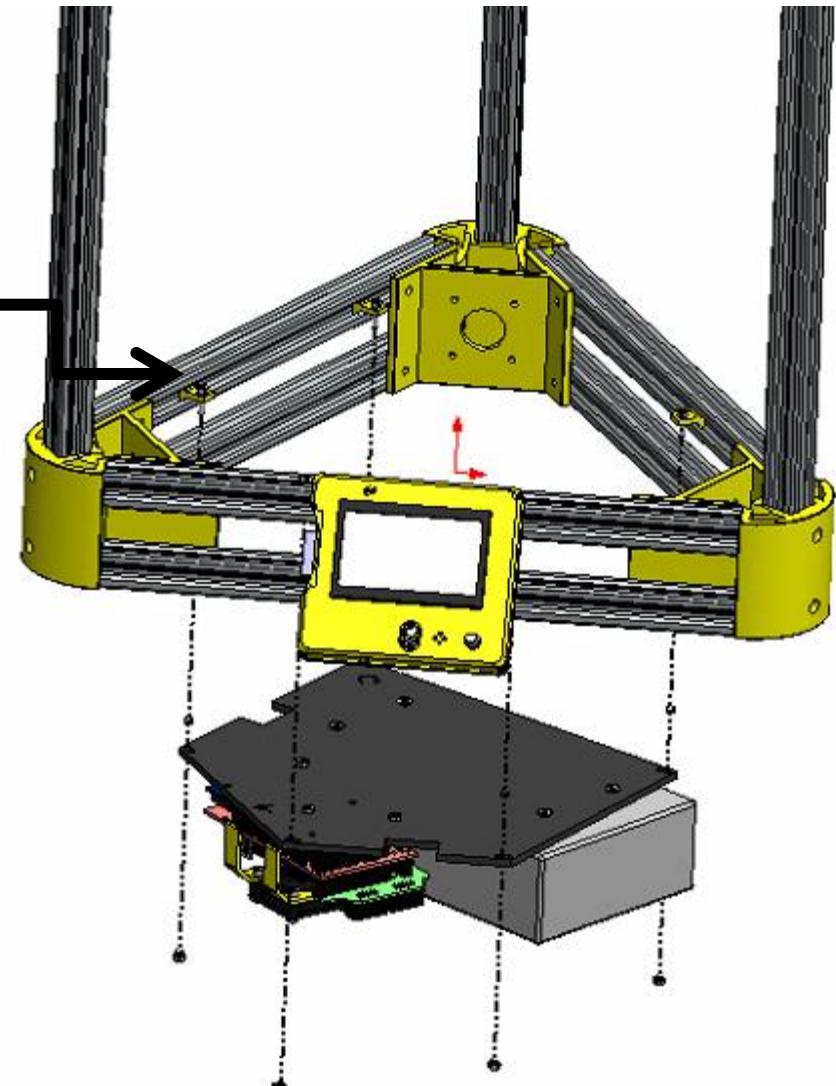
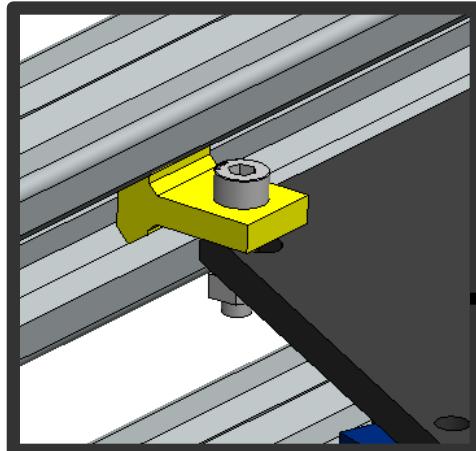
1x

3x

3x

4x

## Montaje soporte kit Arduino + fuente



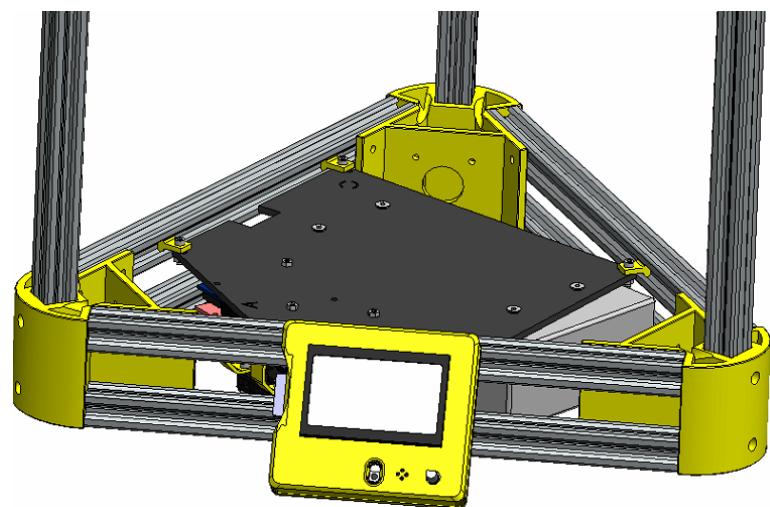
1x



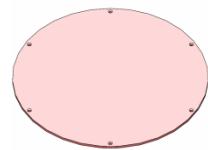
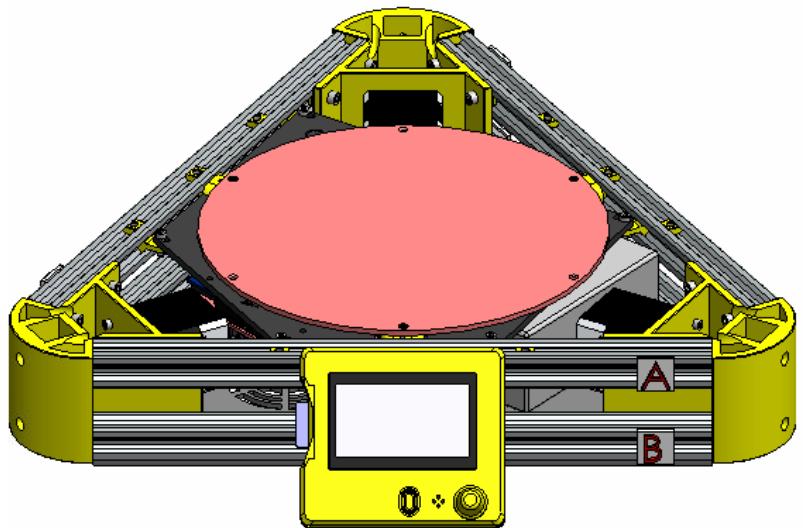
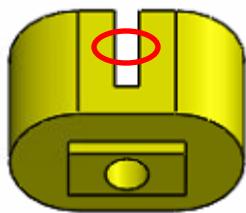
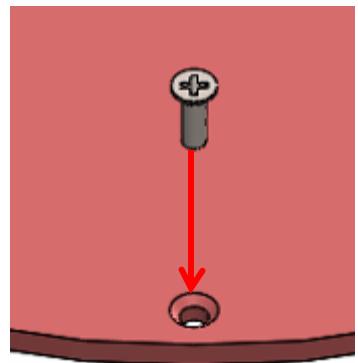
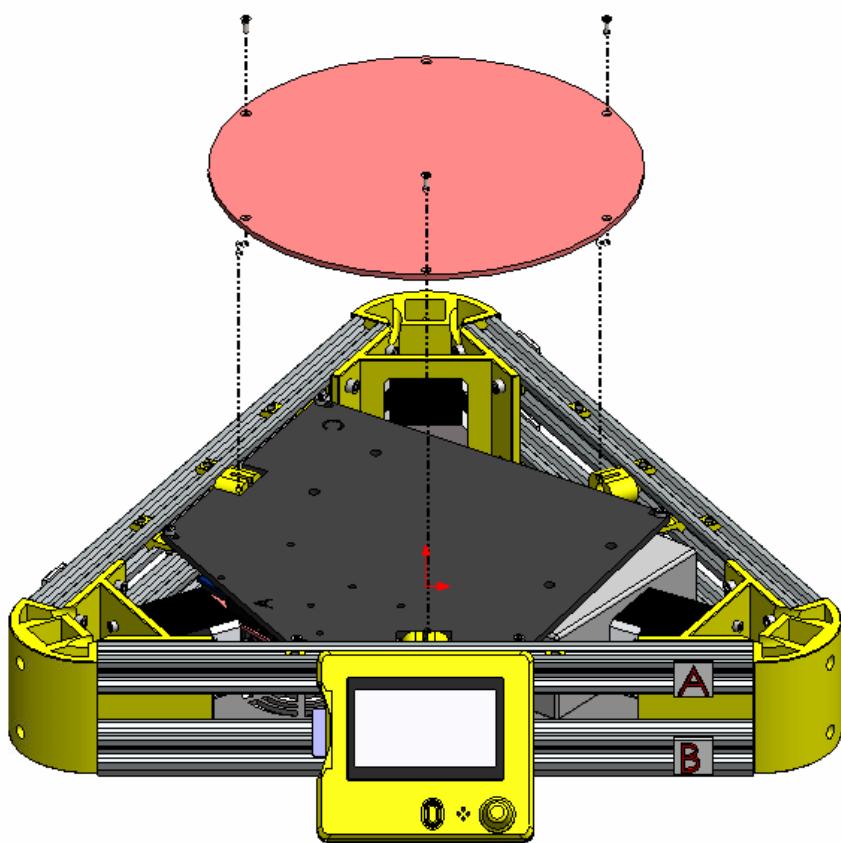
5x



5x



## Montaje base caliente – cara aluminio arriba

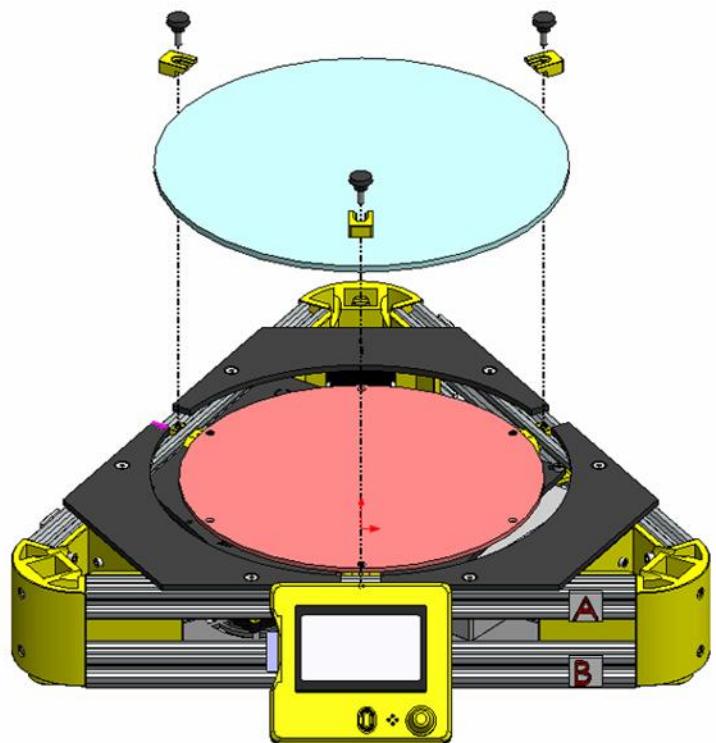
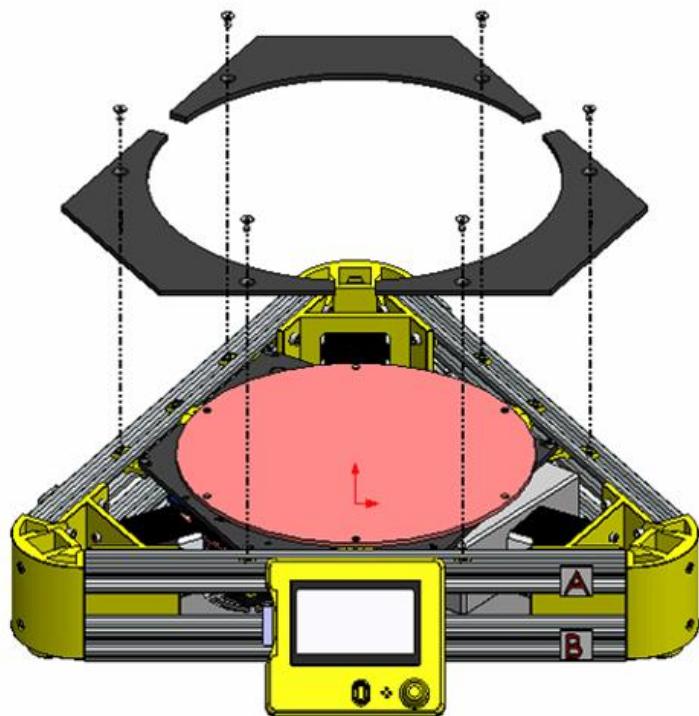


1x

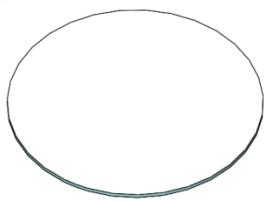


3x

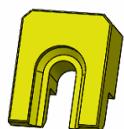
## Montaje cristal y embellecedores



3x



1x

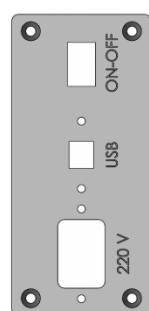
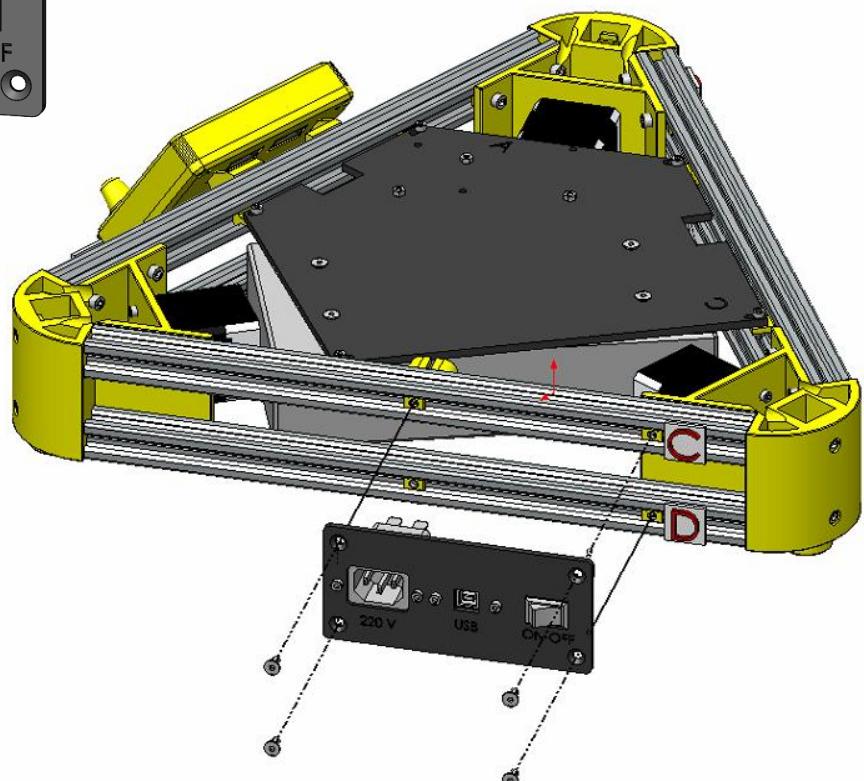
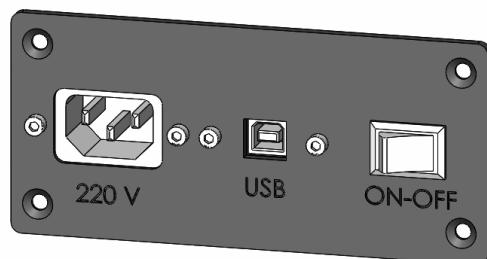
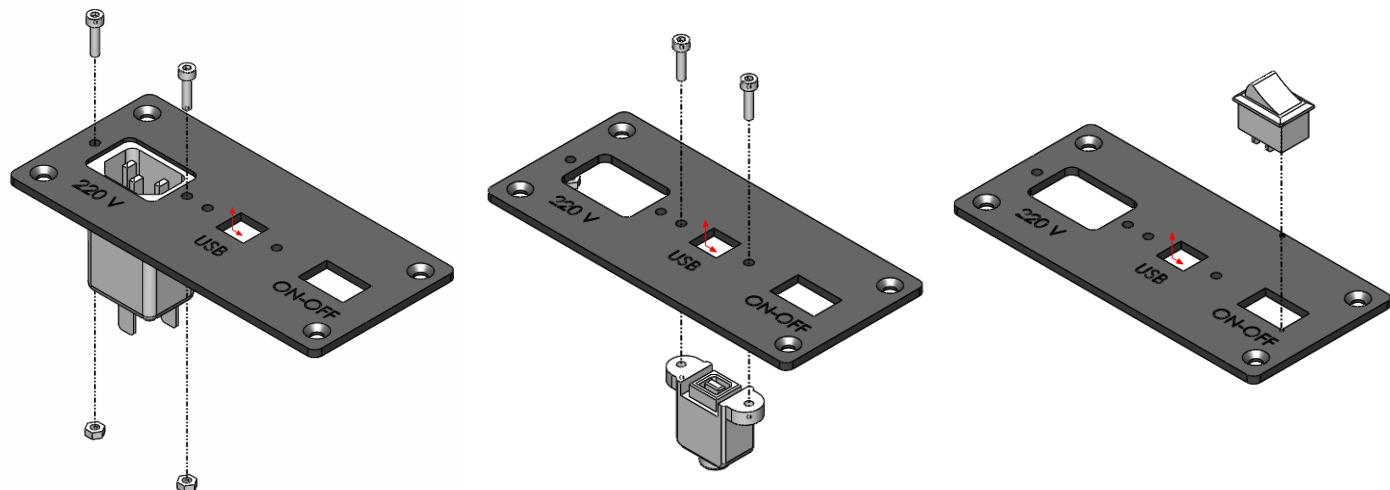


3x



3x

## Montaje panel alimentación



1x

1x

1x

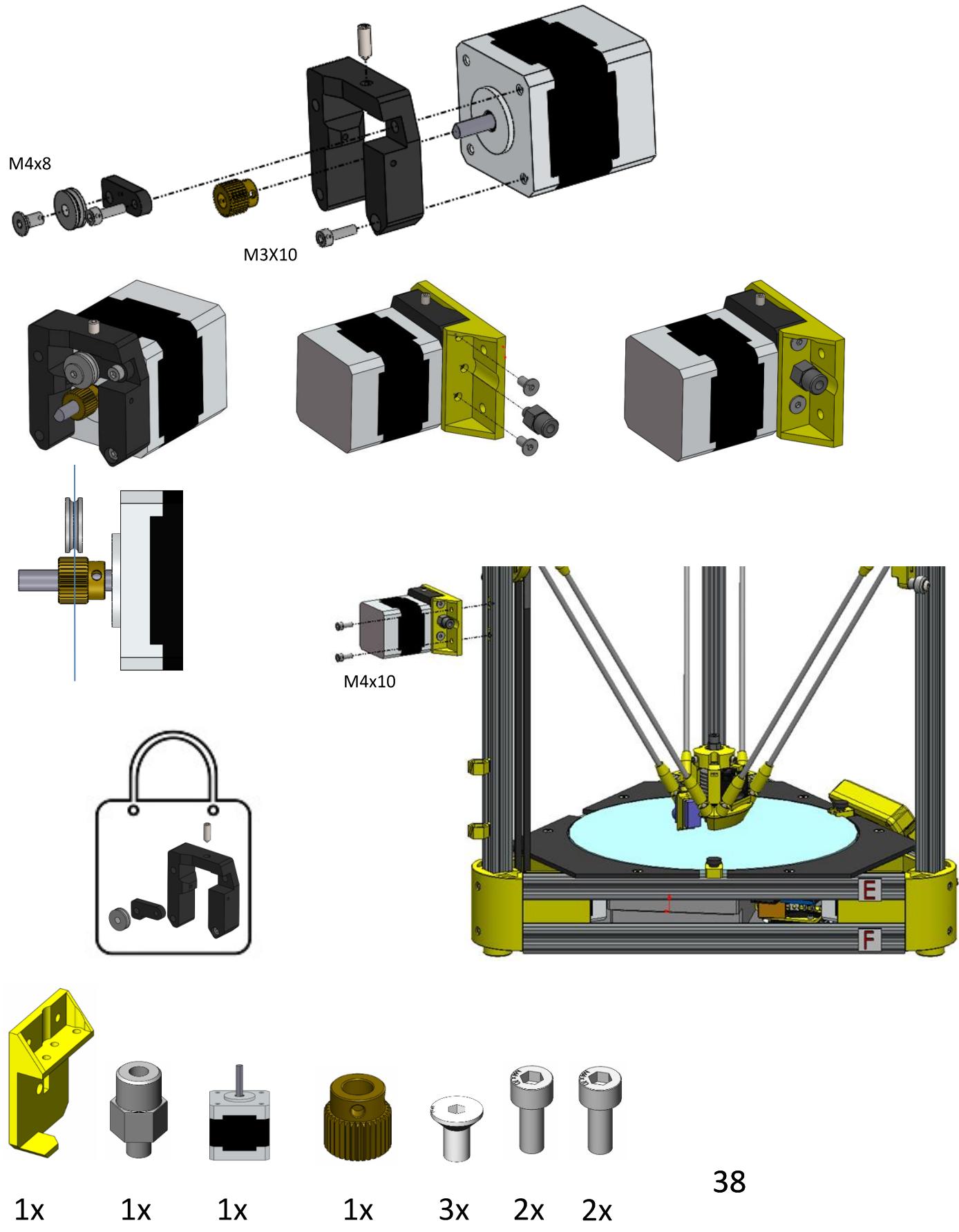
1x

4x

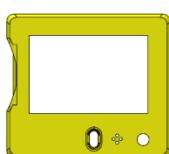
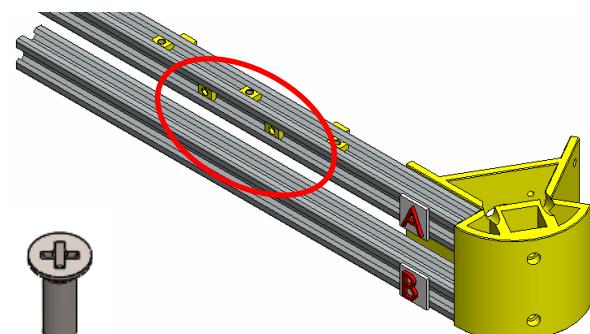
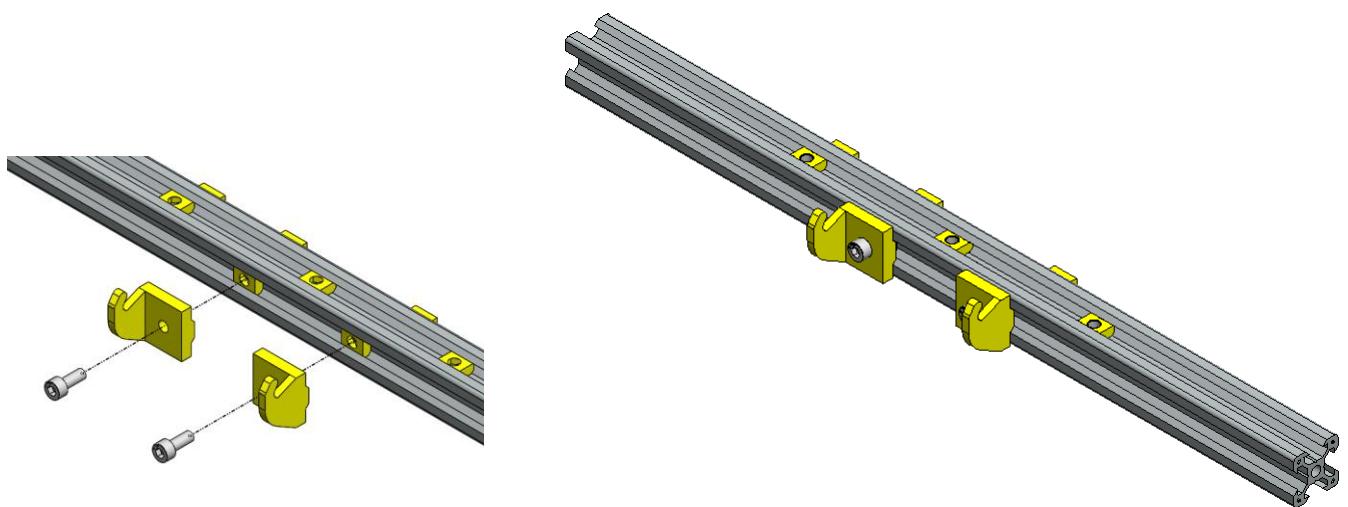
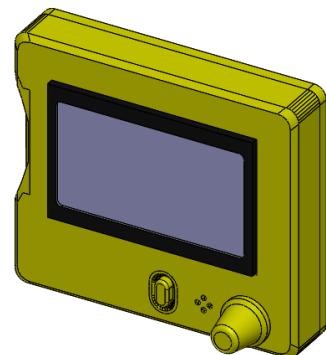
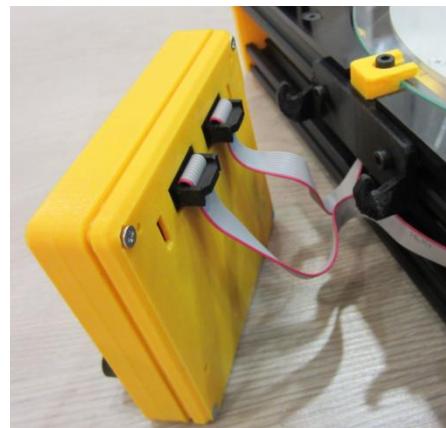
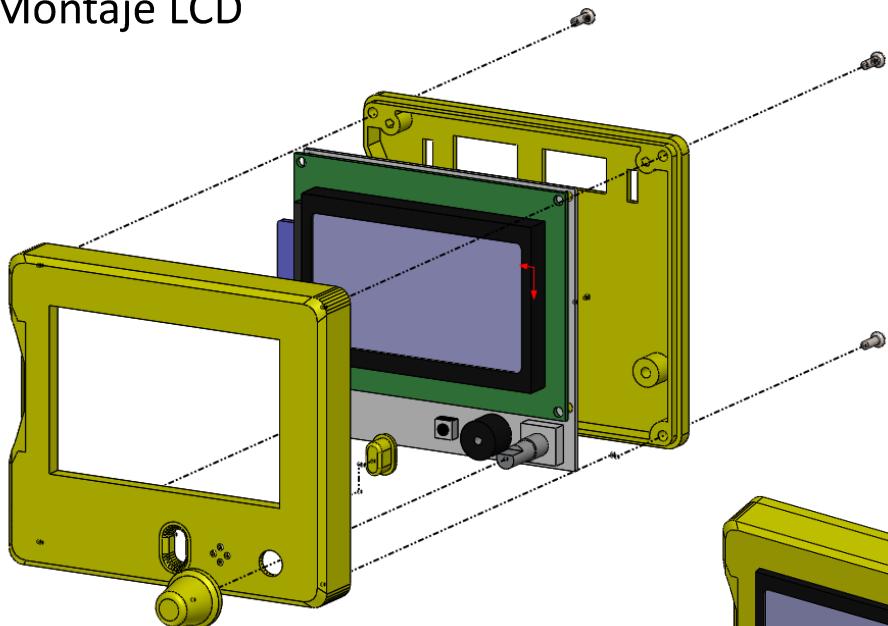
2x

4x

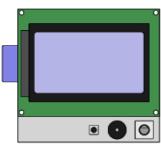
# Montaje motor extrusor



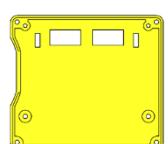
## Montaje LCD



1x



3x



6x



6x

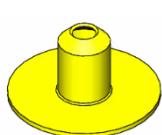
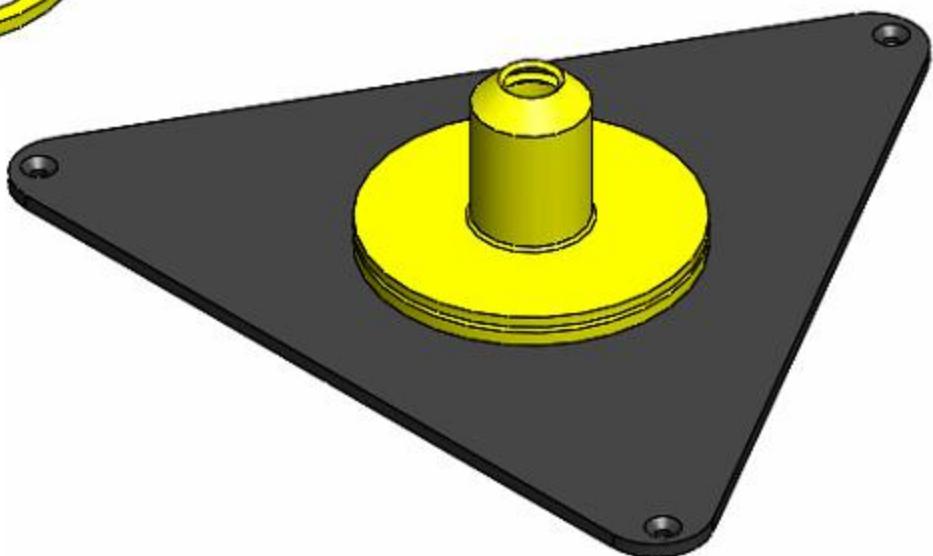
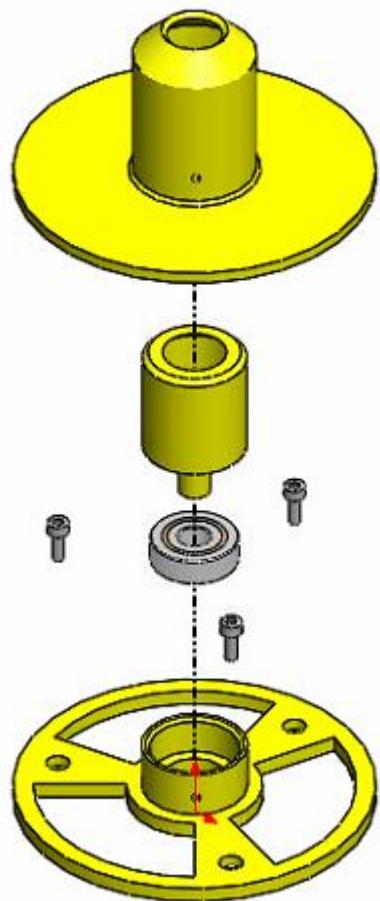


1x



4x

## Montaje soporte rollo



1x



1x



1x



1x



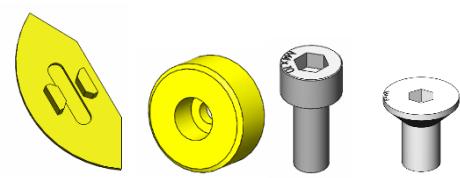
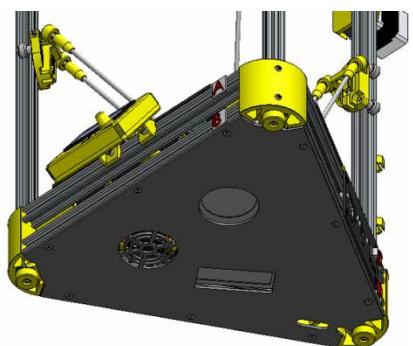
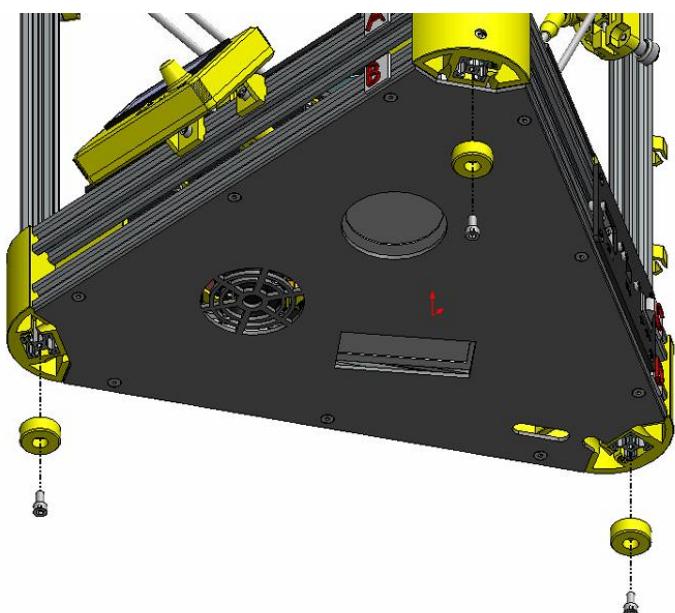
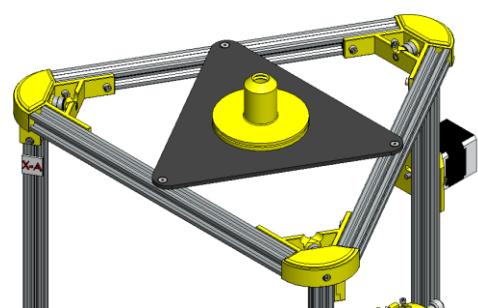
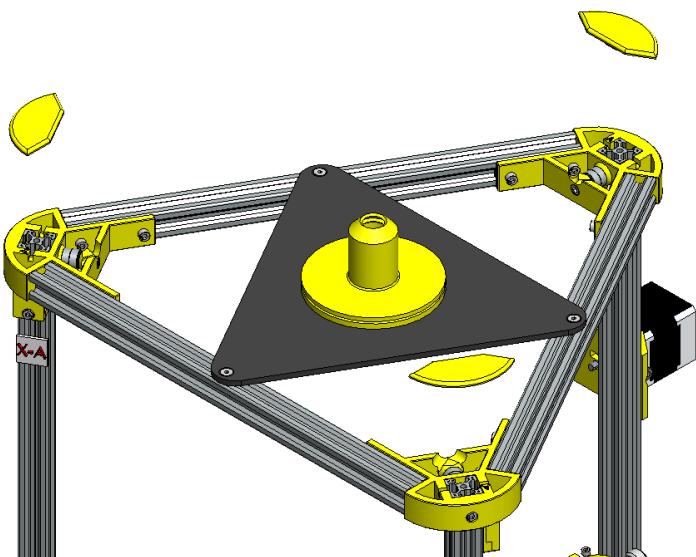
3x



3x

40

# Montaje embellecedor delta superior e inferior



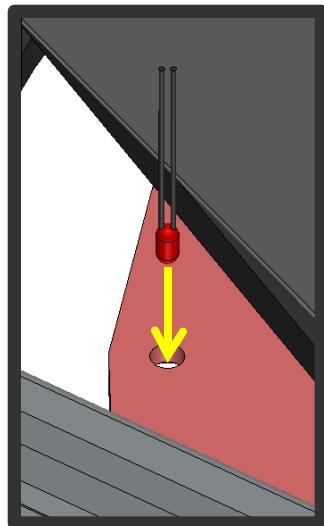
3x

3x

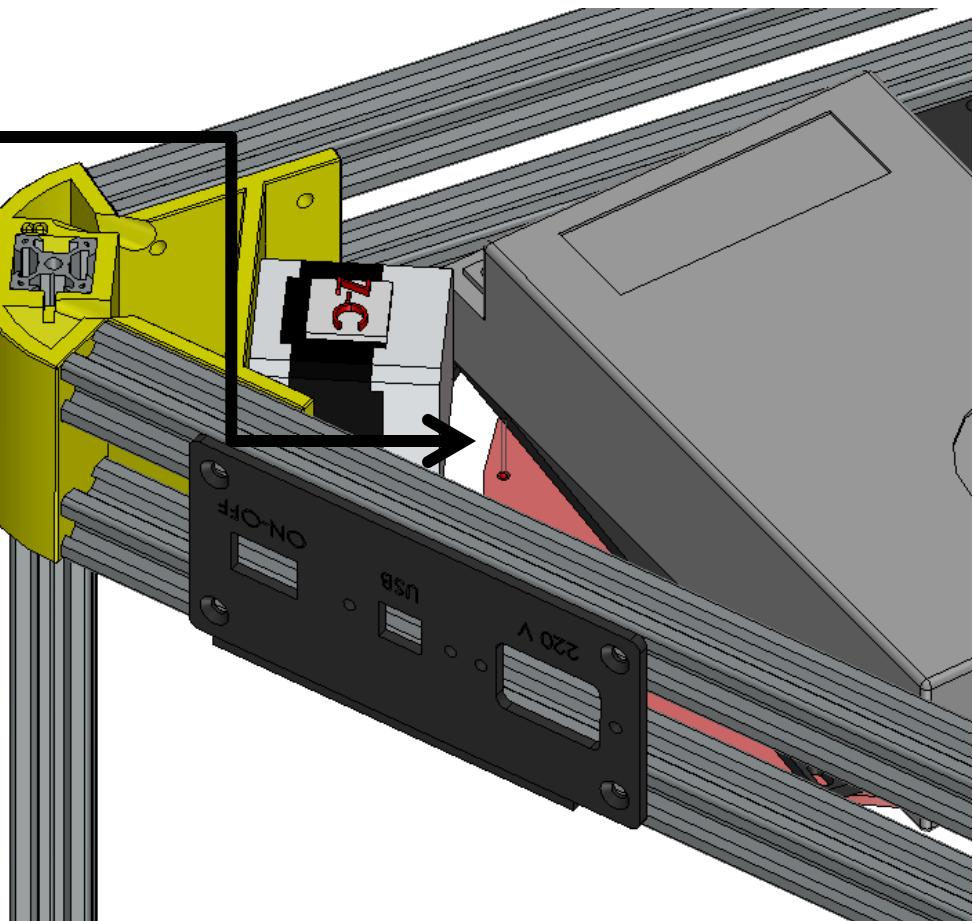
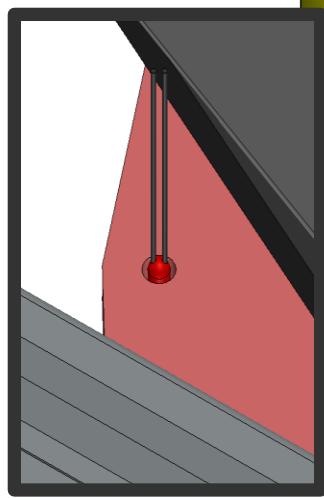
3x

3x

# Montaje termistor

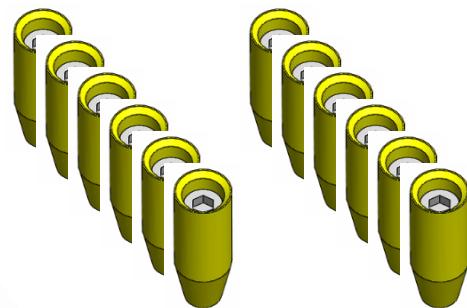
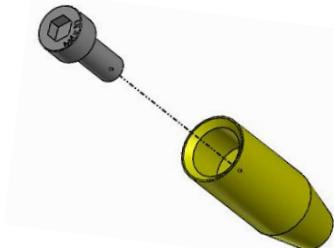


Hundir el termistor en la pasta térmica y bloquearlo que no se salga.



1x

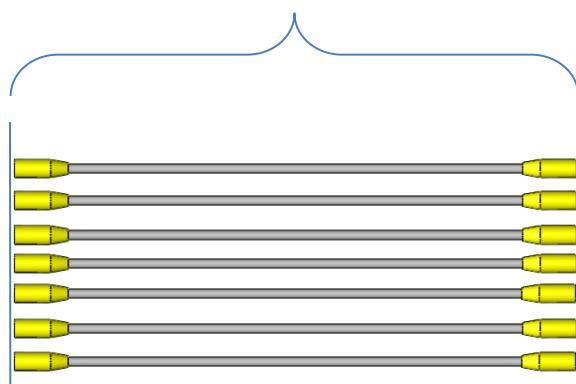
## Montaje varillas



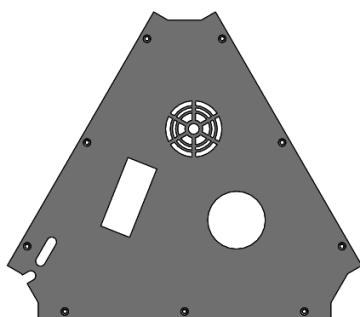
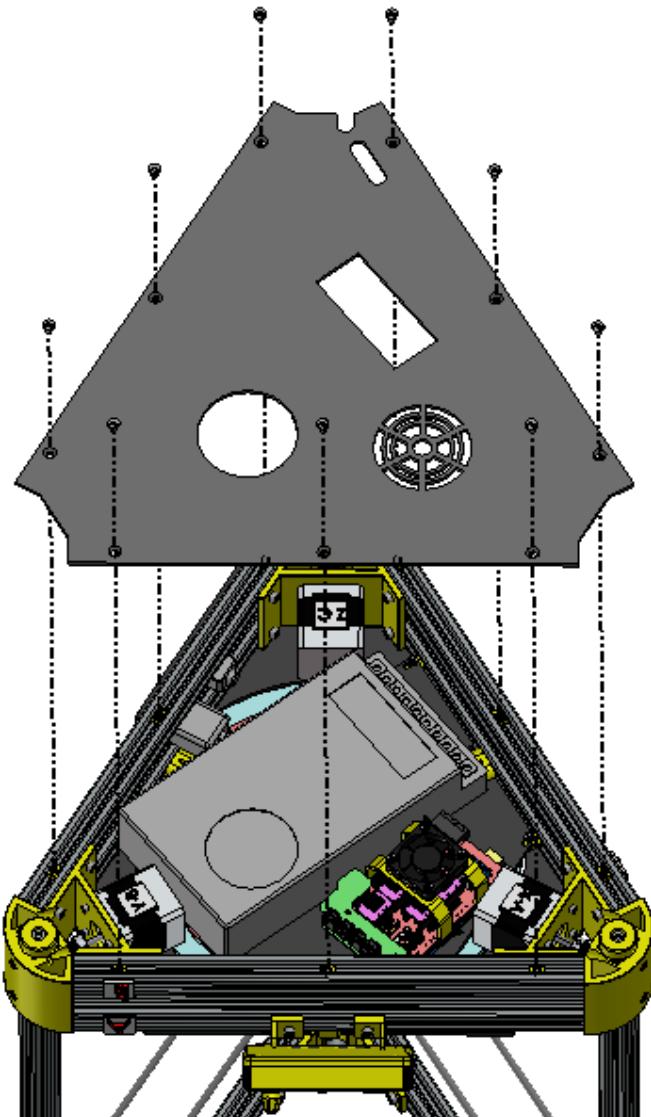
1x    2x    2x



Las varillas tiene que ser  
todas iguales en longitud



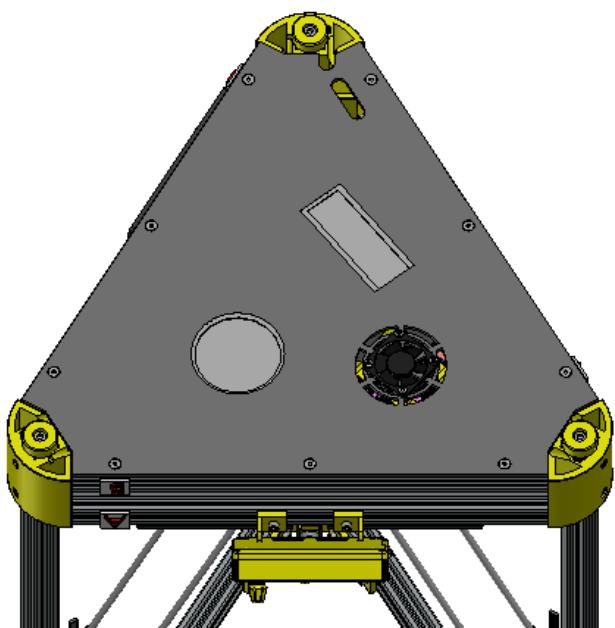
## Montaje tapa base impresora



1x



9x



44