

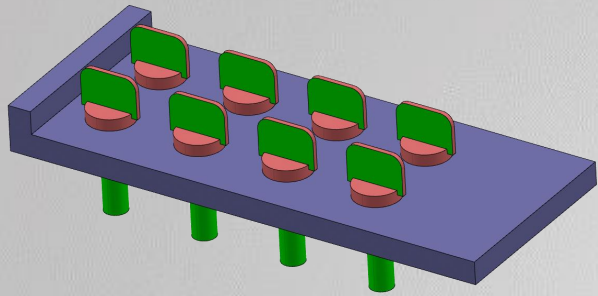
# P09 Assembly Pattern



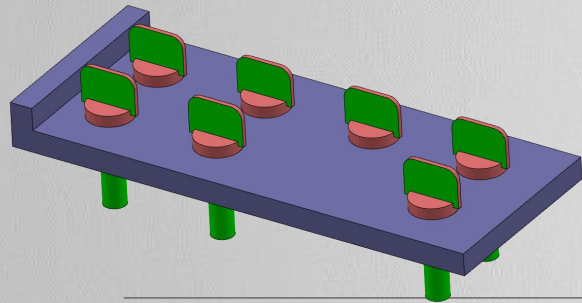
Open: P09-Assembly Pattern demo



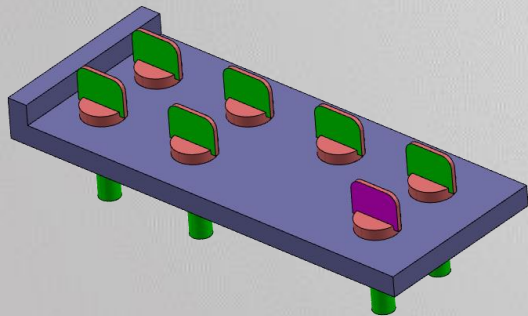
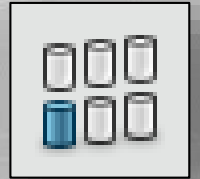
# Theory



1. Put peg in the correct hole  
(we will use constraints)
2. Make an assembly pattern.



- 3a. Modify the base plate Pattern a little
- 3b. Update the assembly pattern



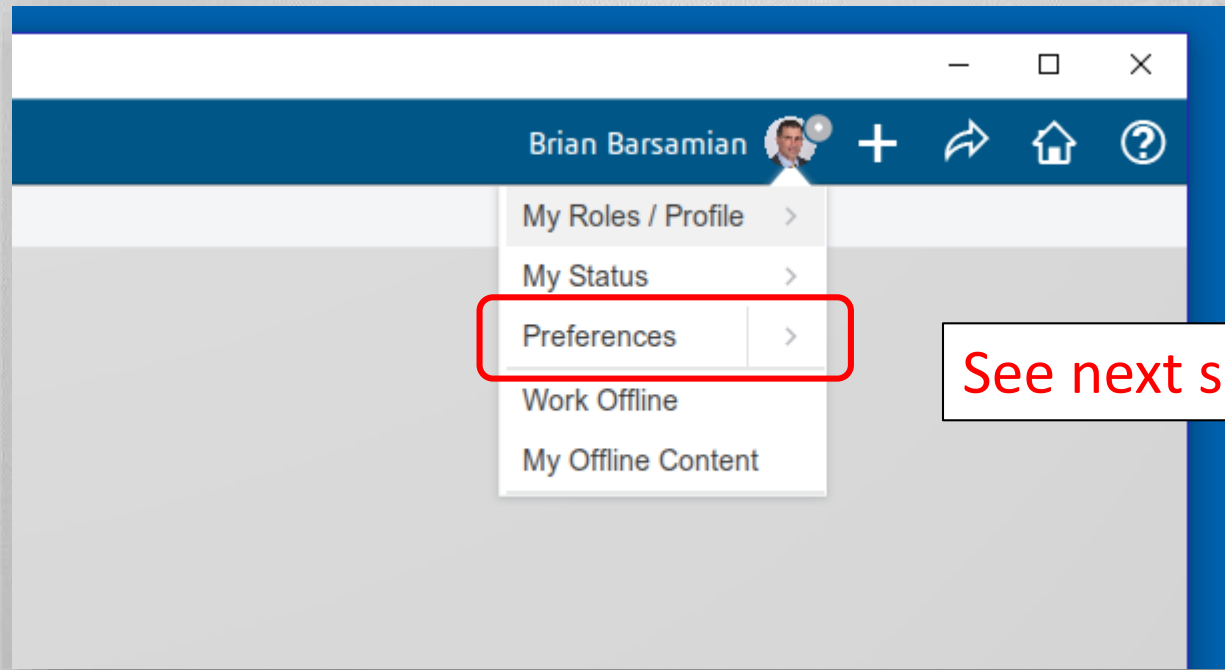
- 4a. Modify the Assembly pattern to remove a peg.  
(the part pattern will stay the same)
- 4b. Put in another peg into the vacant hole



# Preferences

## External Links

- Assembly Patterns create external links.  
Make sure your options for external links are set properly



See next slide for details

# Preferences: Keep External Links

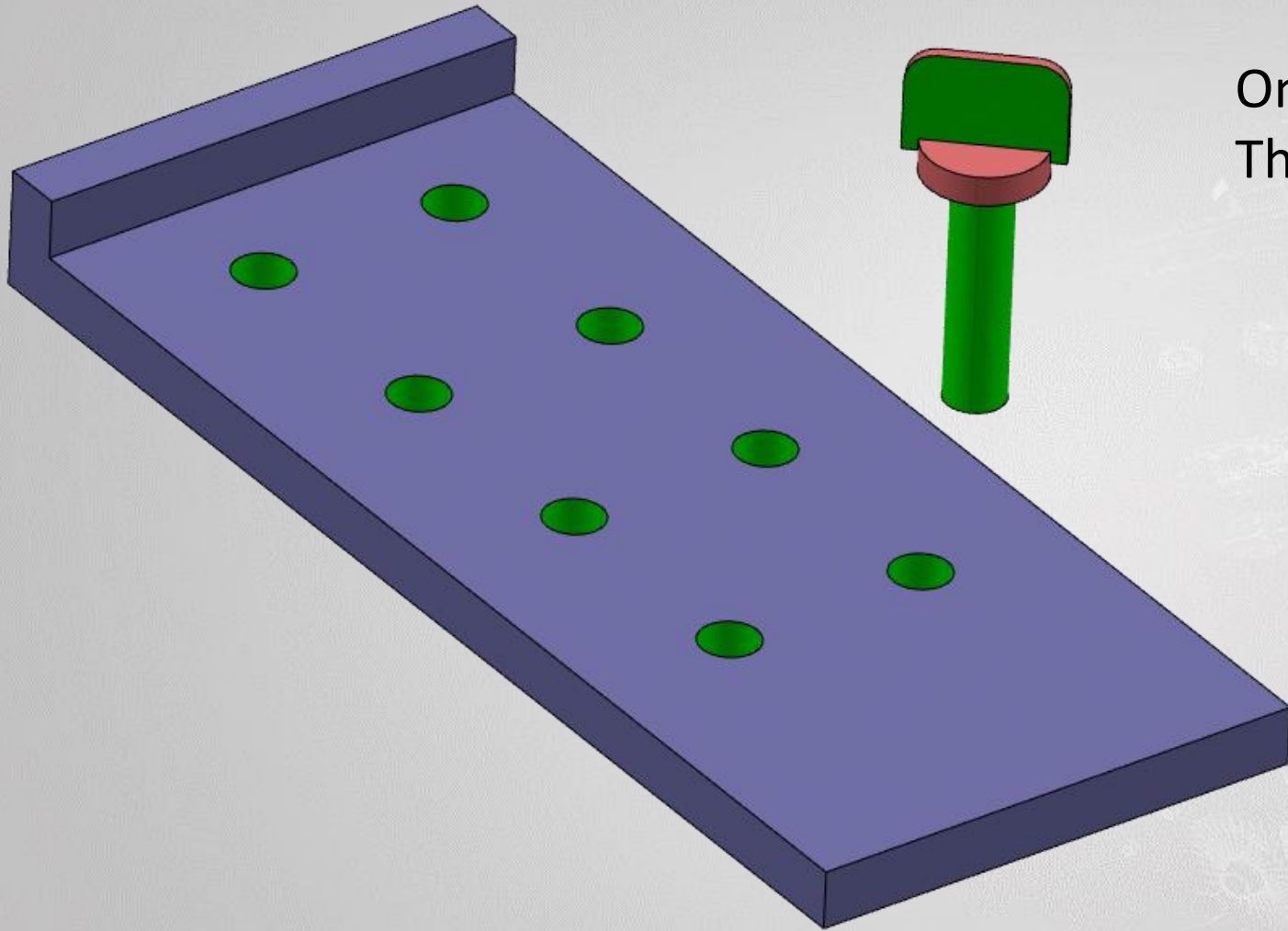
Infrastructure / 3D Shape Infrastructure / General

The image shows a screenshot of the 'Preferences' dialog box in a CAD application. The '3D Shape Infrastructure' section is selected in the left-hand tree. The 'General' tab is active, and the 'External References' section is expanded. Three specific settings are highlighted with callouts:

- ON**: 'Keep link with selected object' (checked checkbox)
- ON**: 'Confirm when creating a link with selected object' (checked checkbox)
- OFF**: 'Restrict external selection with link to published elements' (unchecked checkbox)

A red arrow points from the text 'Infrastructure / 3D Shape Infrastructure / General' to the '3D Shape Infrastructure' folder in the tree. A large black oval highlights the 'External References' section of the dialog box.

# Find the hole?

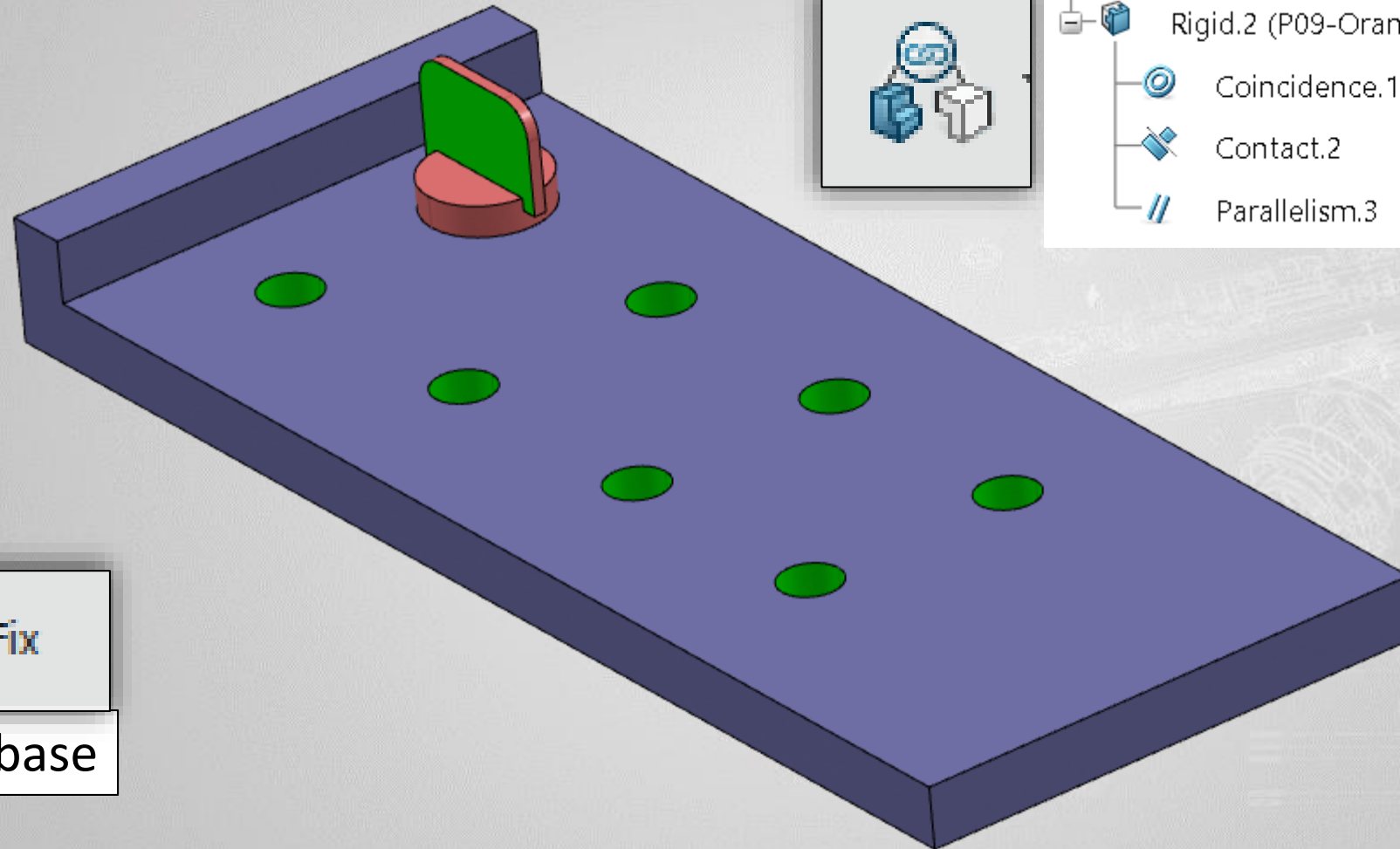


One of these holes is the “hole”  
The rest are the “pattern”.

Peg must go in the “hole”.

Open: P09-Assembly Pattern demo

# Add constraints.



Constrain the Peg in the hole.



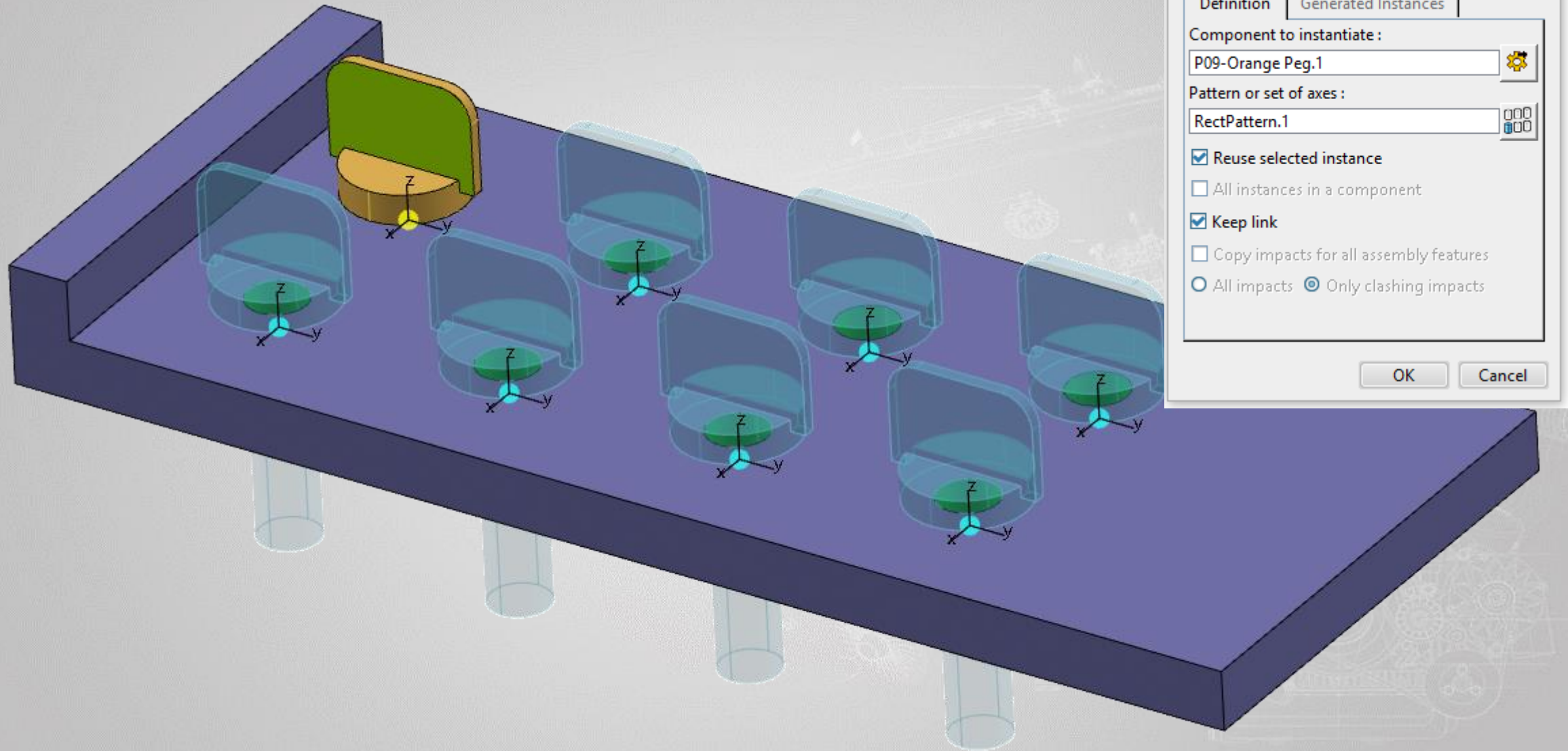
- Rigid.2 (P09-Orange Peg.1 <-> P09-Base Plate.1)
  - Coincidence.1
  - Contact.2
  - Parallelism.3



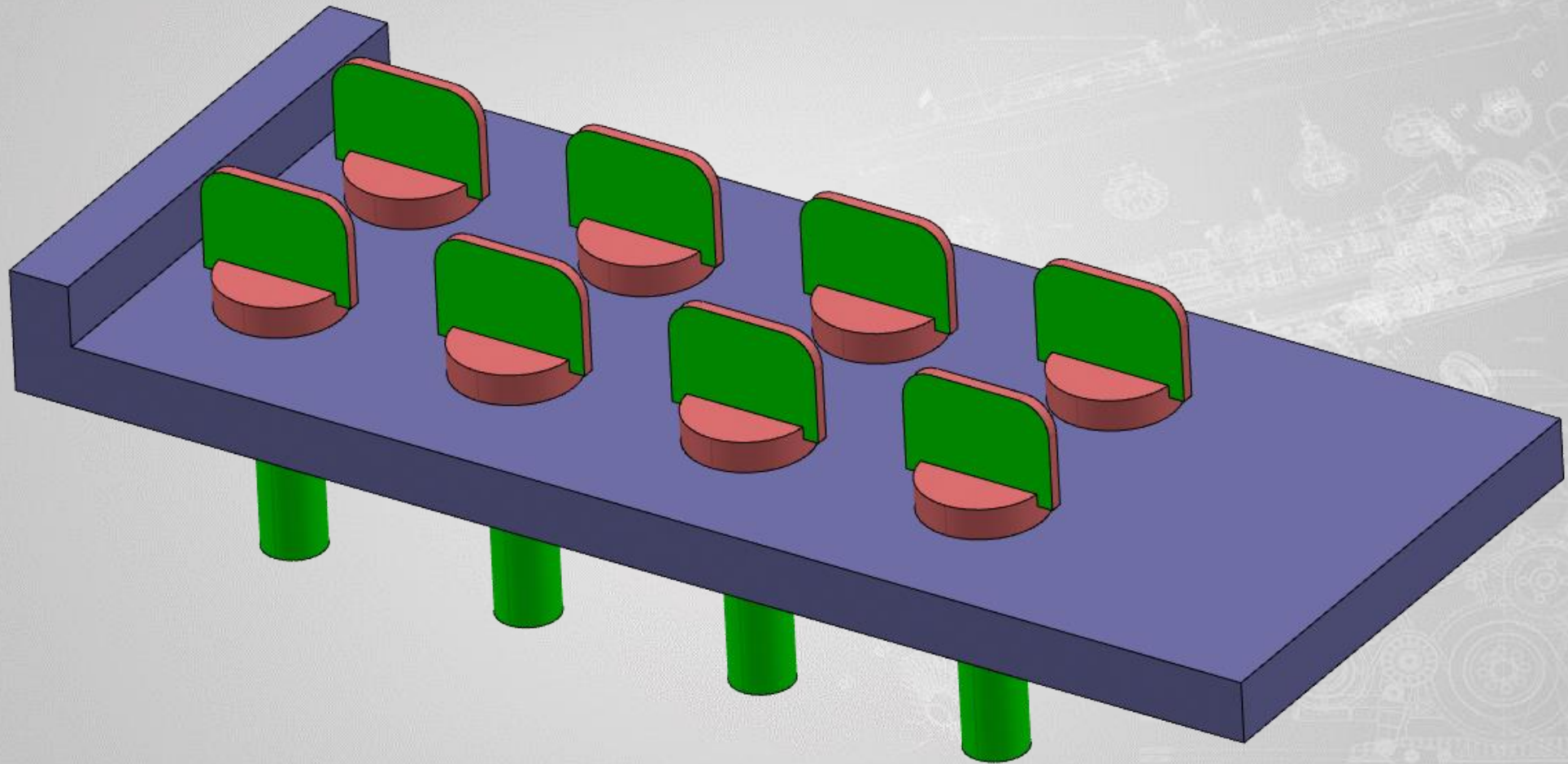
Fix

Fix the base

# Assembly Pattern



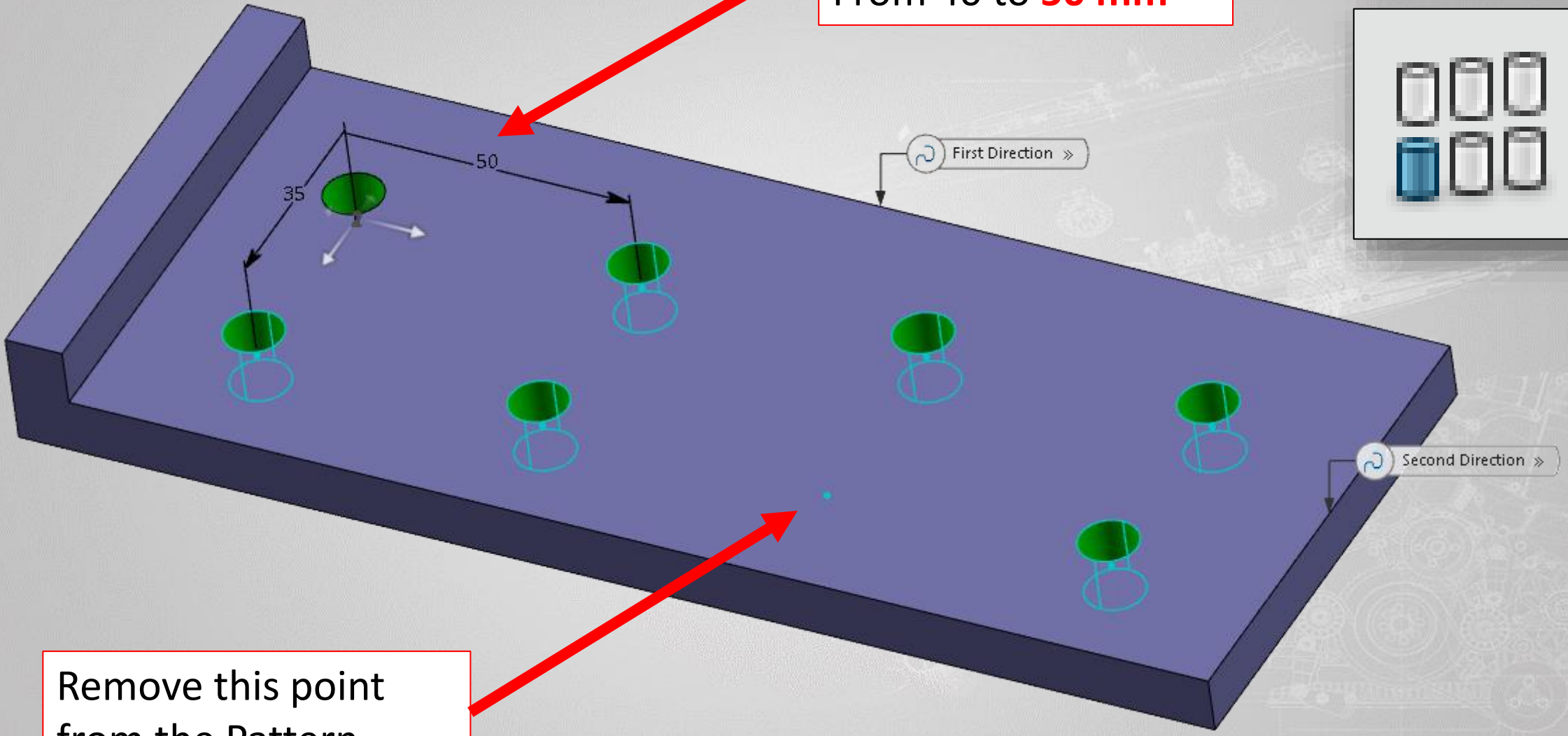
Looks great





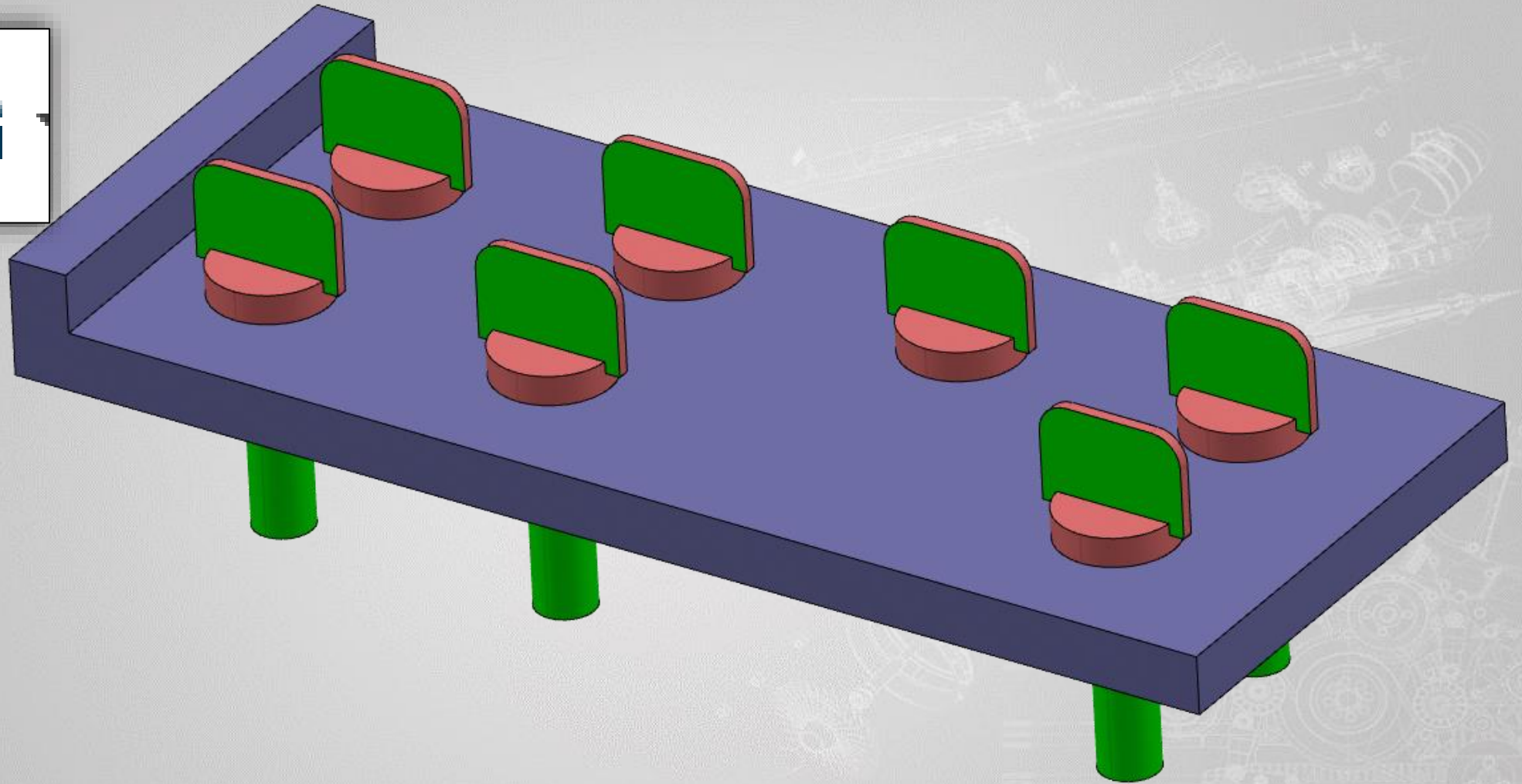
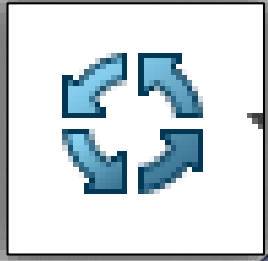
# Change your parts Pattern

Change this distance  
From 40 to **50 mm**

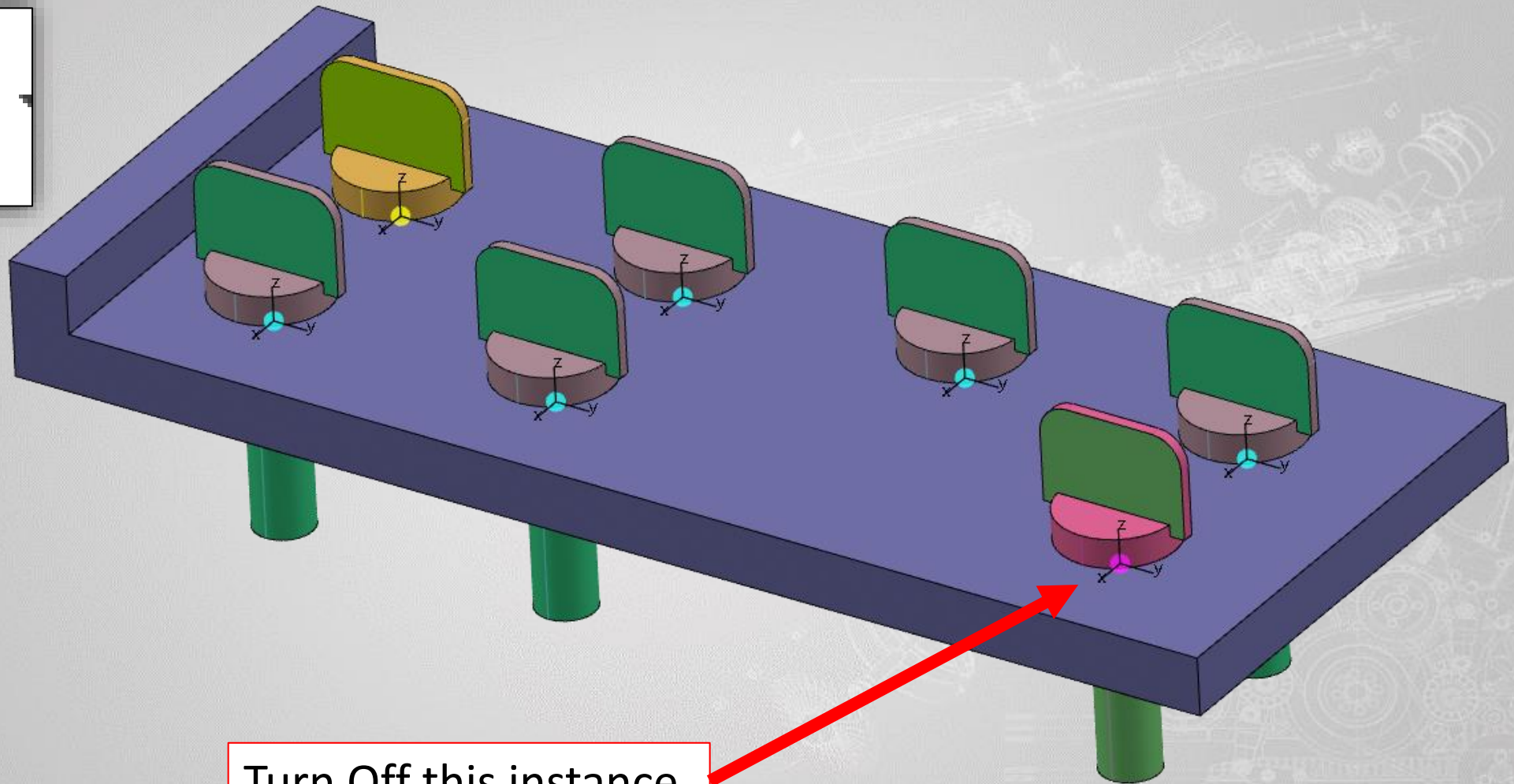
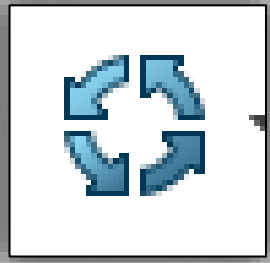


Remove this point  
from the Pattern

# Update your assembly

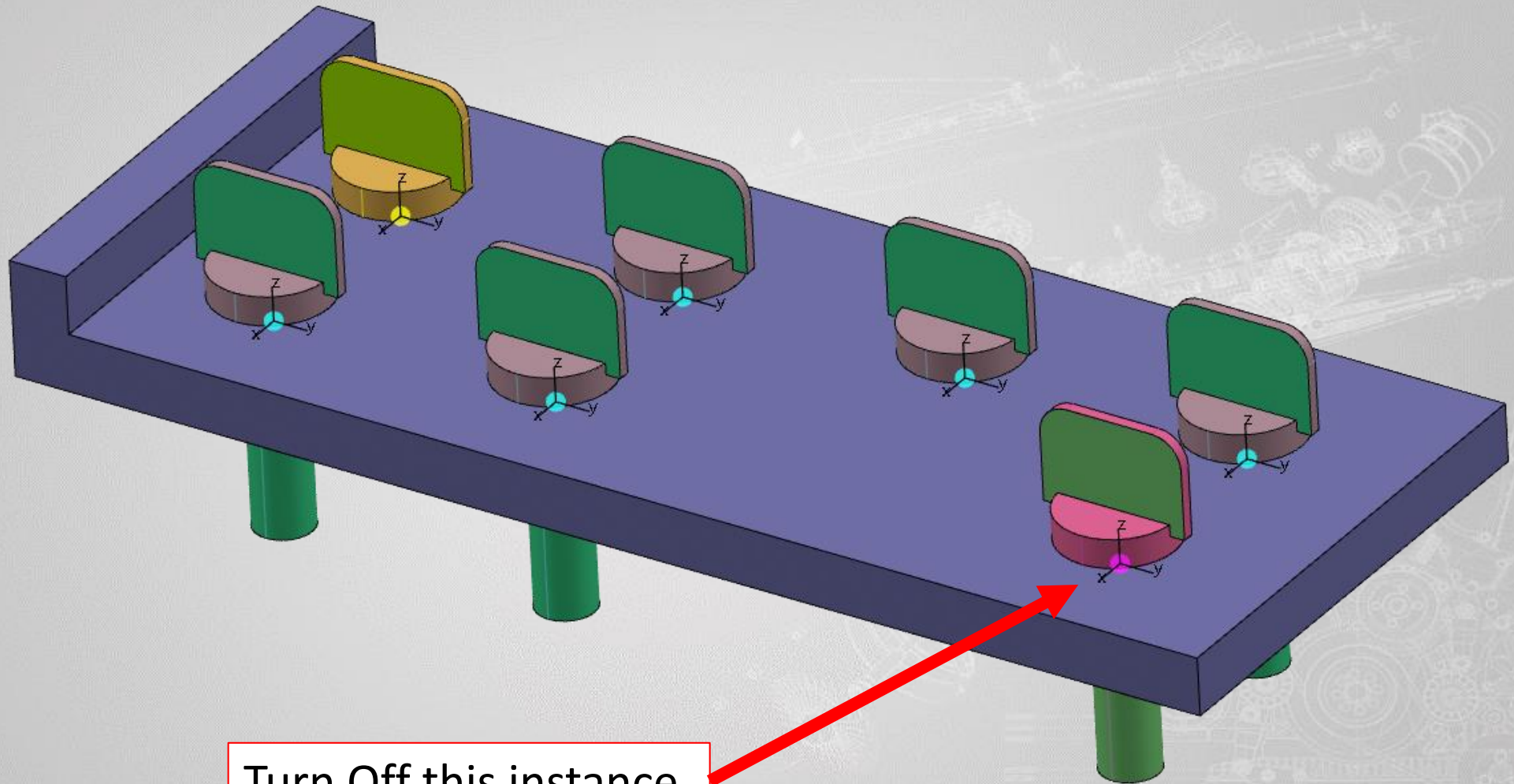


# Deactivate a Pattern instance



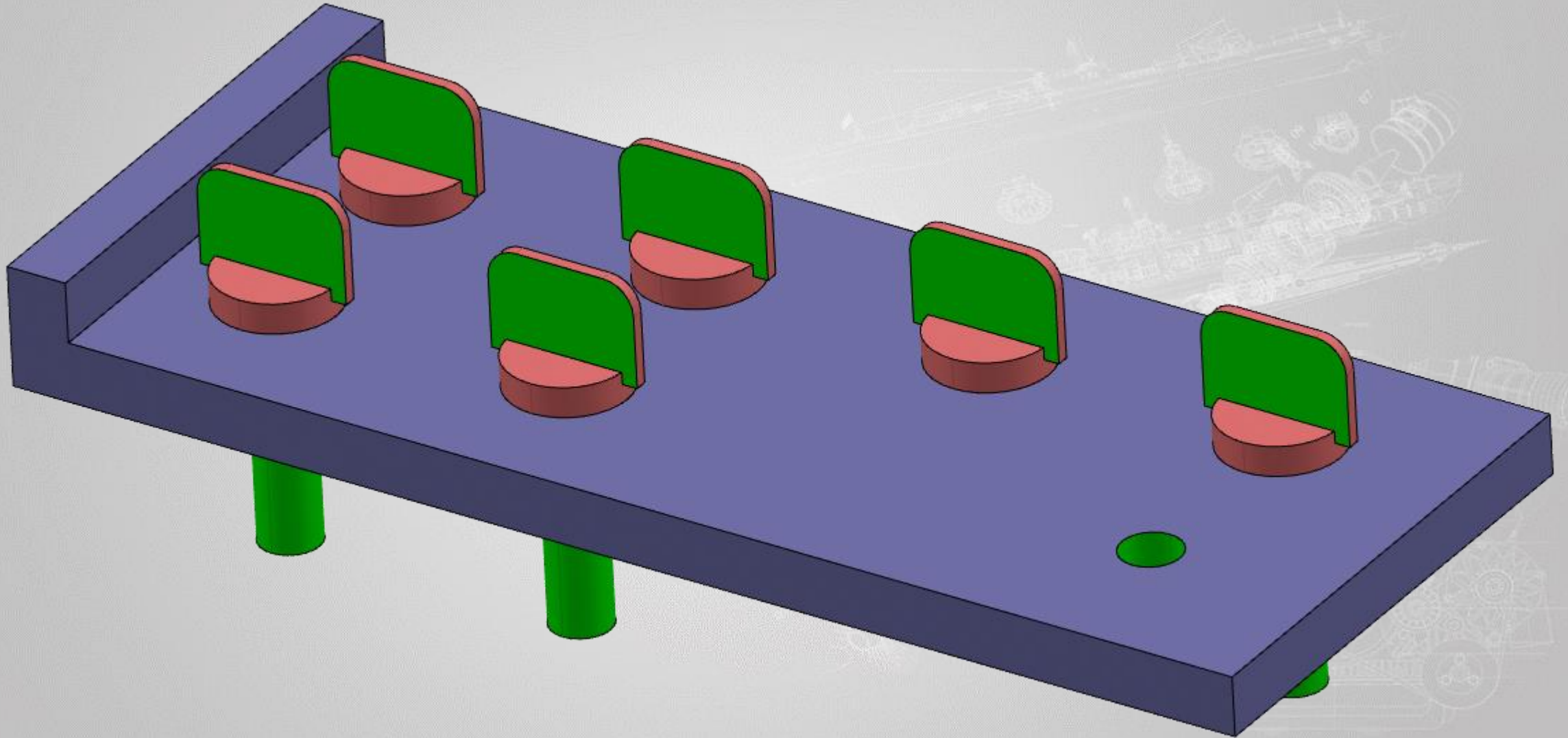
Turn Off this instance

# Deactivate a Pattern instance

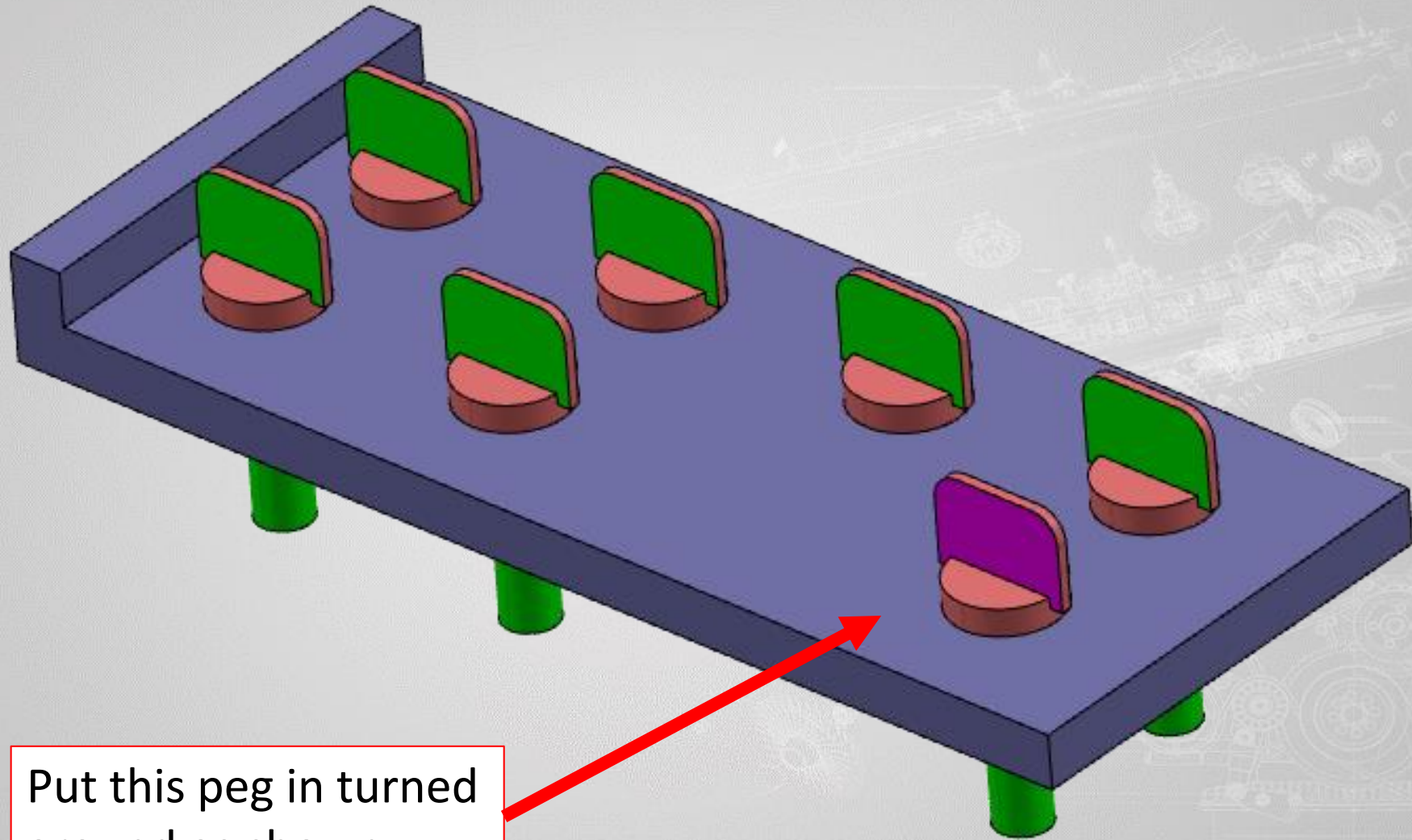


Turn Off this instance

Looks good



# Insert another Peg



Put this peg in turned around as shown

The End

