

Indian Institute of Information Technology

Design and Manufacturing

Kancheepuram, Chennai, Tamil Nadu



Production Drawing And Manufacturing

MEC224A

Done By-

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Topic : Project Catia

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Indian Institute of Information Technology Design and Manufacturing
Kancheepuram, Chennai, Tamil Nadu

PRODUCT - (Product224102_MSM19B038_PROJECT_CARJACK)



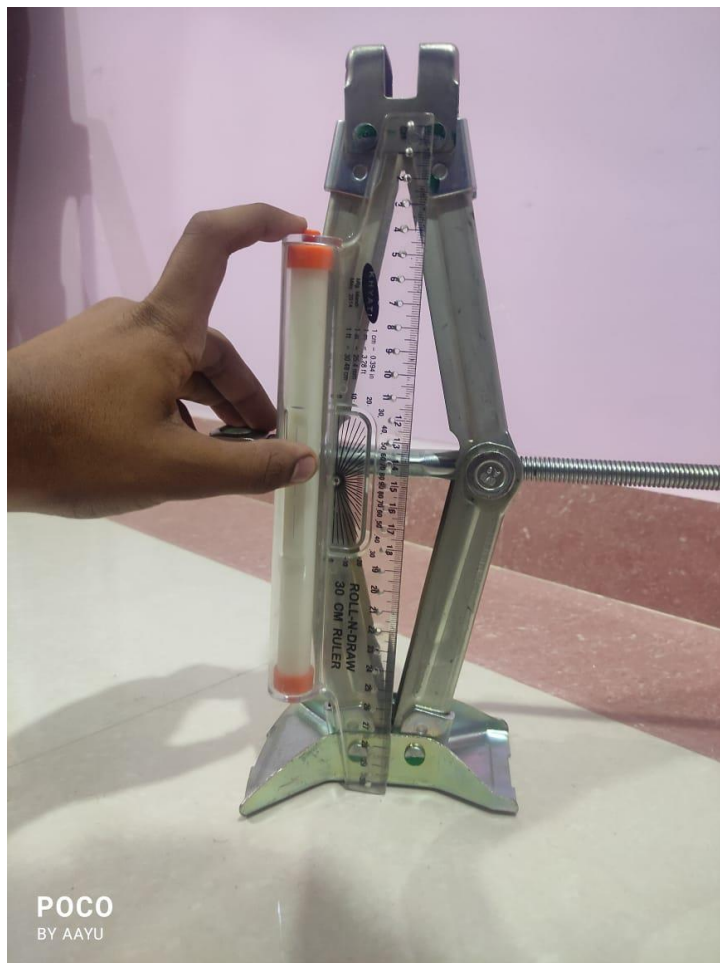
[CAR JACK](#)

MANUFACTURING DETAILS-

Brand	• CarReflection
Model Number	• SK123
Type	• Scissor
Lifting Capacity	• 950 kg
Minimum Height	• 11 cm
Maximum Height	• 33 cm
Operating Voltage	• NA
Operating Current	• NA
Rated Power	• NA
Body Material	• Iron

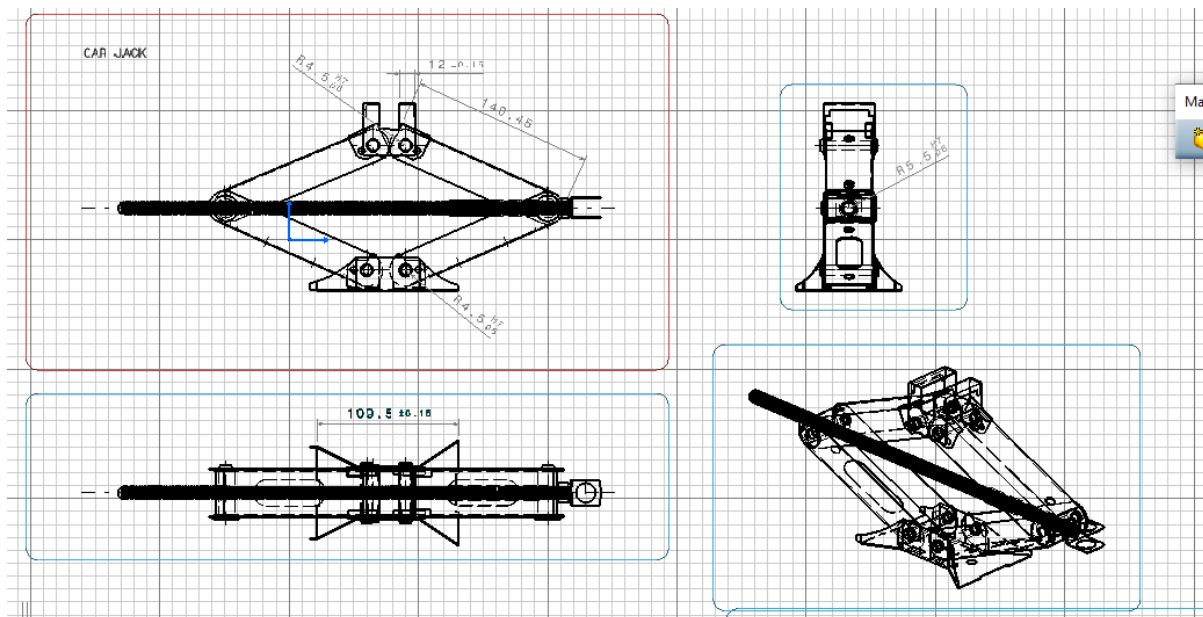


HEIGHT MAX-33CM

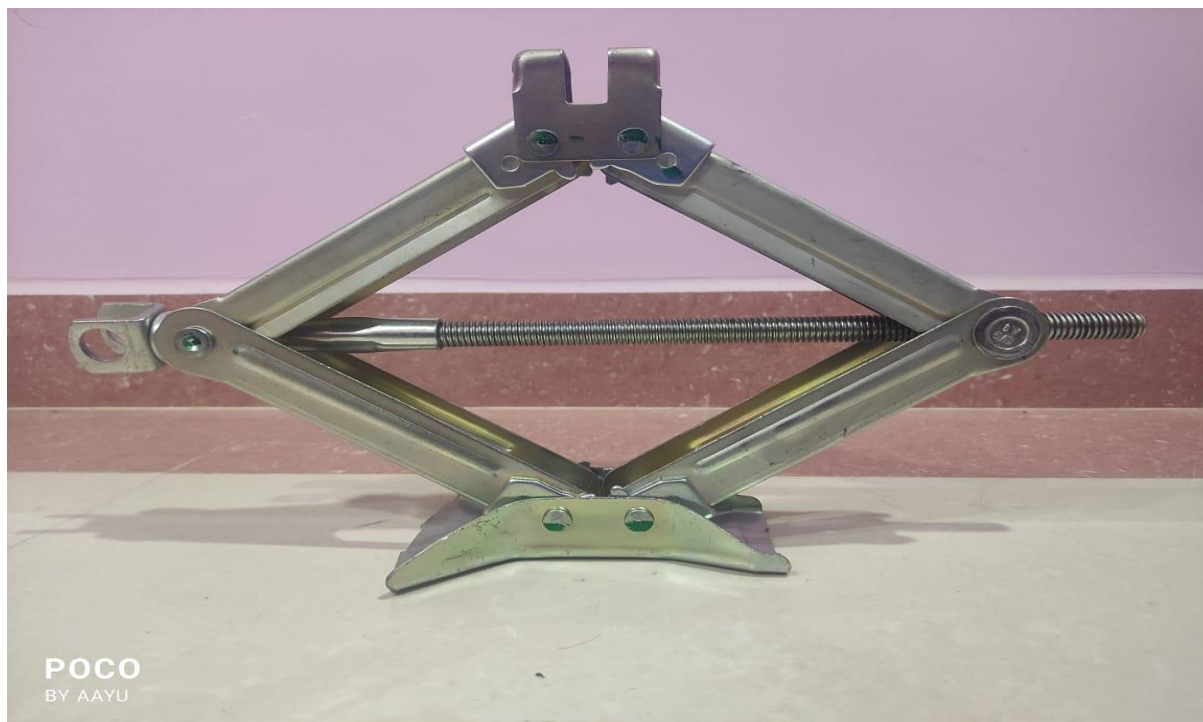


HEIGHT MIN-11CM





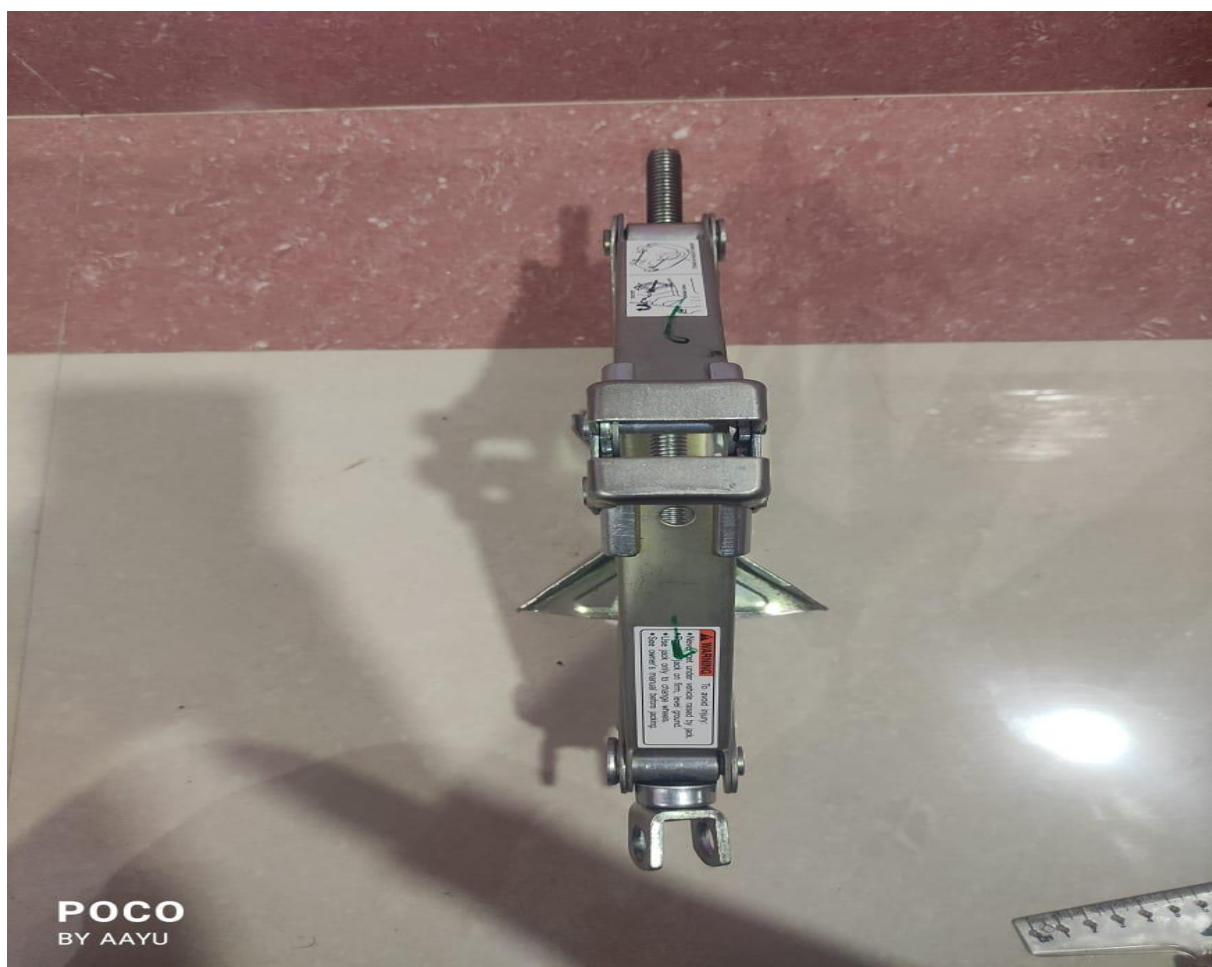
Three views of product



Front view



Side view

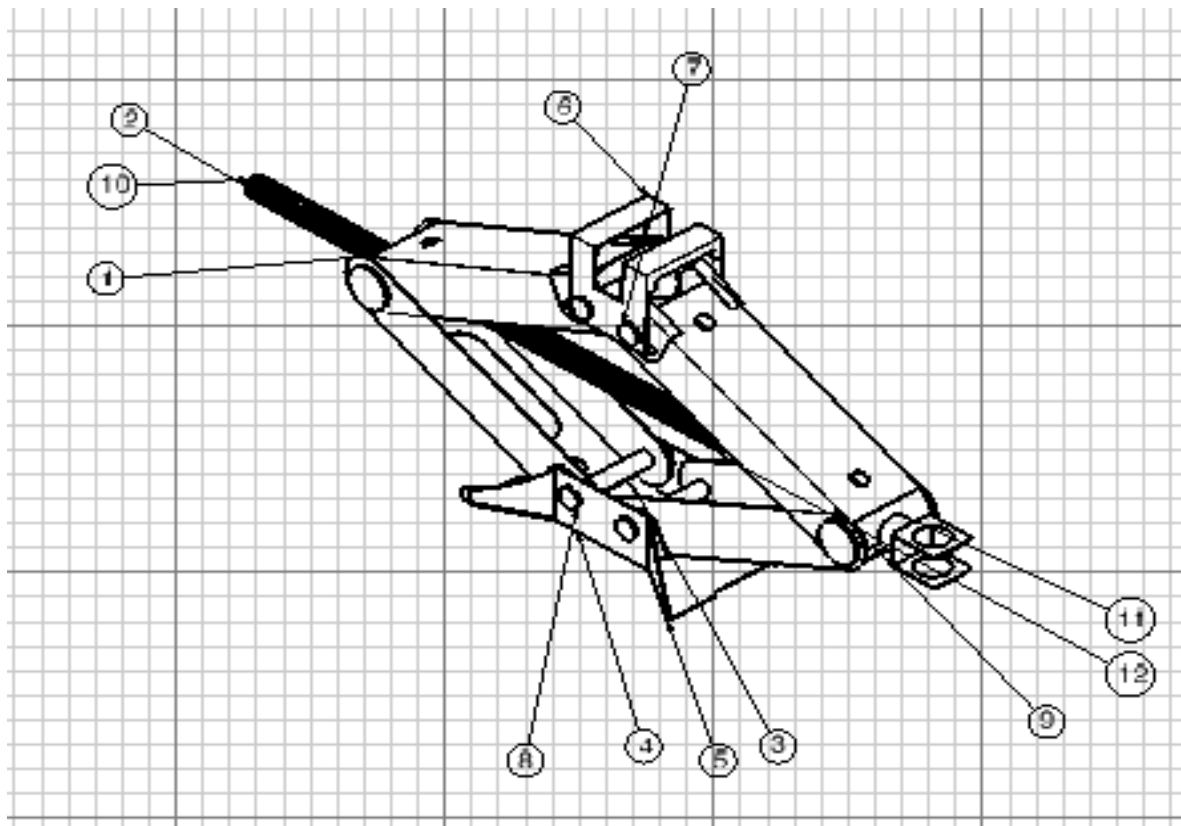


Top view

Application of the car jack-

1. A jack is a mechanical lifting device used to apply great forces or lift heavy loads. The most common form is a car jack, floor jack or garage jack
2. Car jack is mainly used for lifting heavy vehicles so that maintenance can be performed.
3. It is highly used in automobiles.

Bill of material

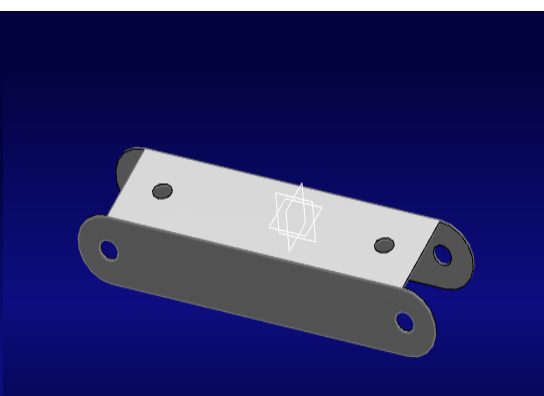
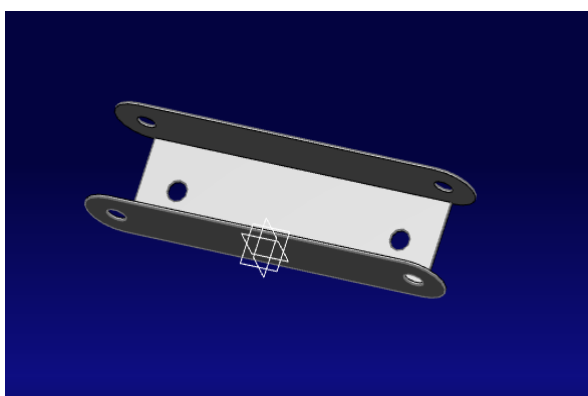
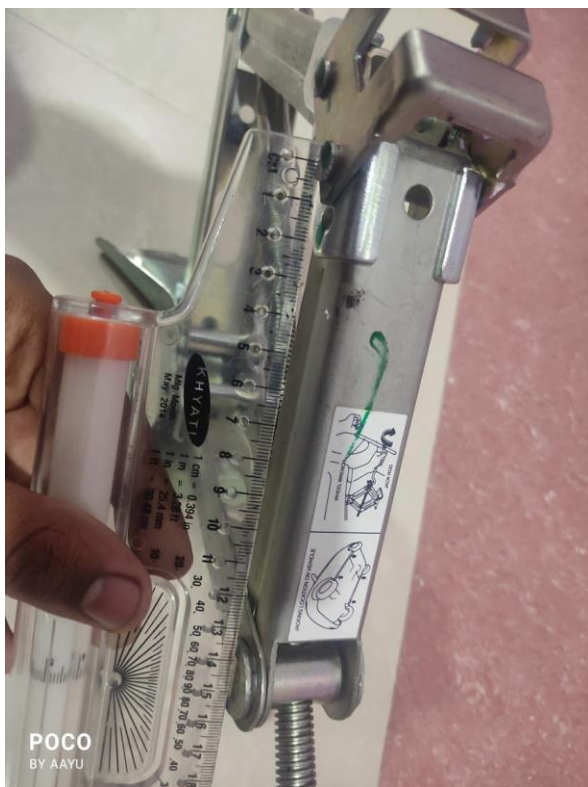


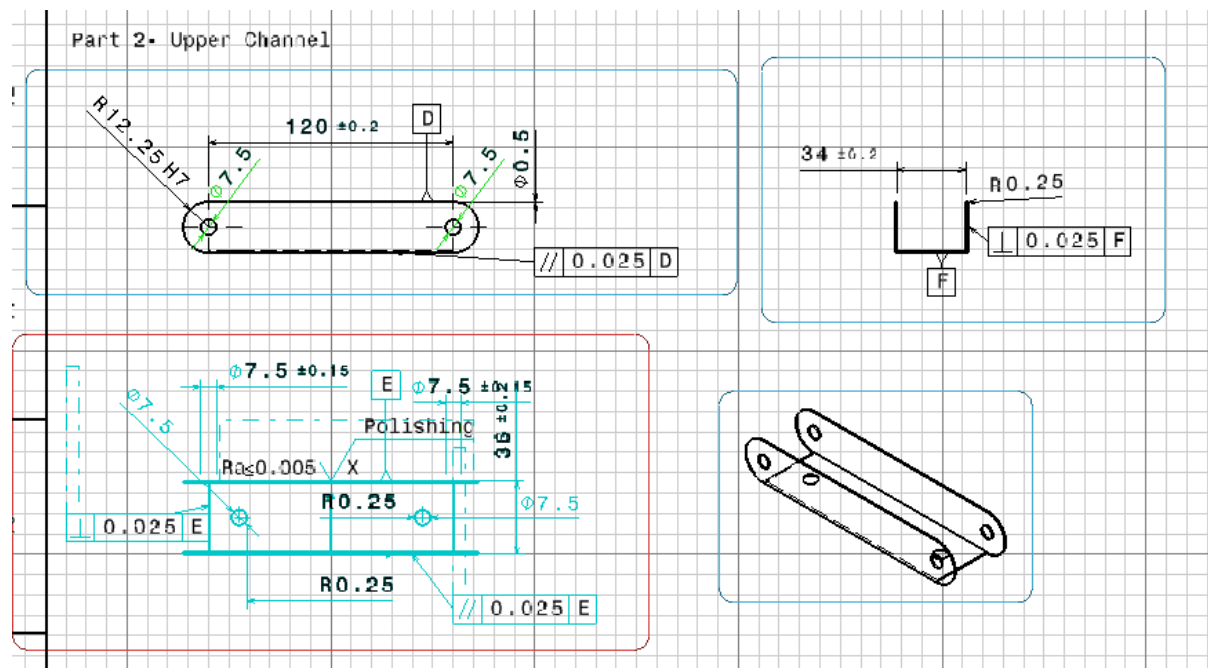
Item No.	Quantity	Name	Description	Material	Weight
1	2	Lower_Channel	-	-	-
2	2	Upper_Channel	-	-	-
3	4	Support1	-	-	-
4	4	Support2	-	-	-
5	1	Base	-	-	-
6	1	Head	-	-	-
7	2	Rivet1	-	-	-
8	2	Rivet2	-	-	-
9	2	Screw_Connection	-	-	-
10	1	Lead_Screw	-	-	-
11	1	Lead_Screw_support	-	-	-
12	1	Cylindrical_holder	-	-	-

My project is of making Car jack in Catia. It consist of 12 parts.

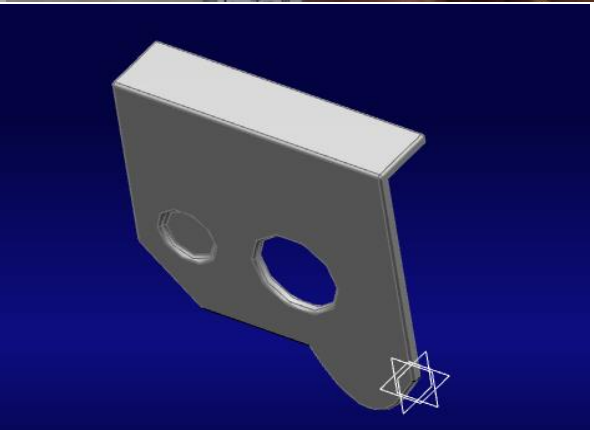
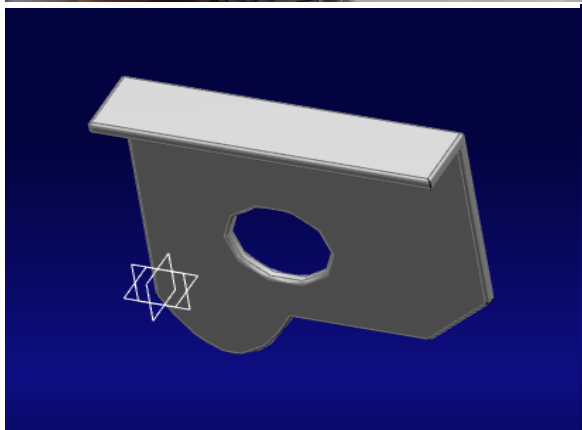
Part 1- Lower Channel (3DPart223343_MSM19B038_PROJECT_LOWER CHANNEL)

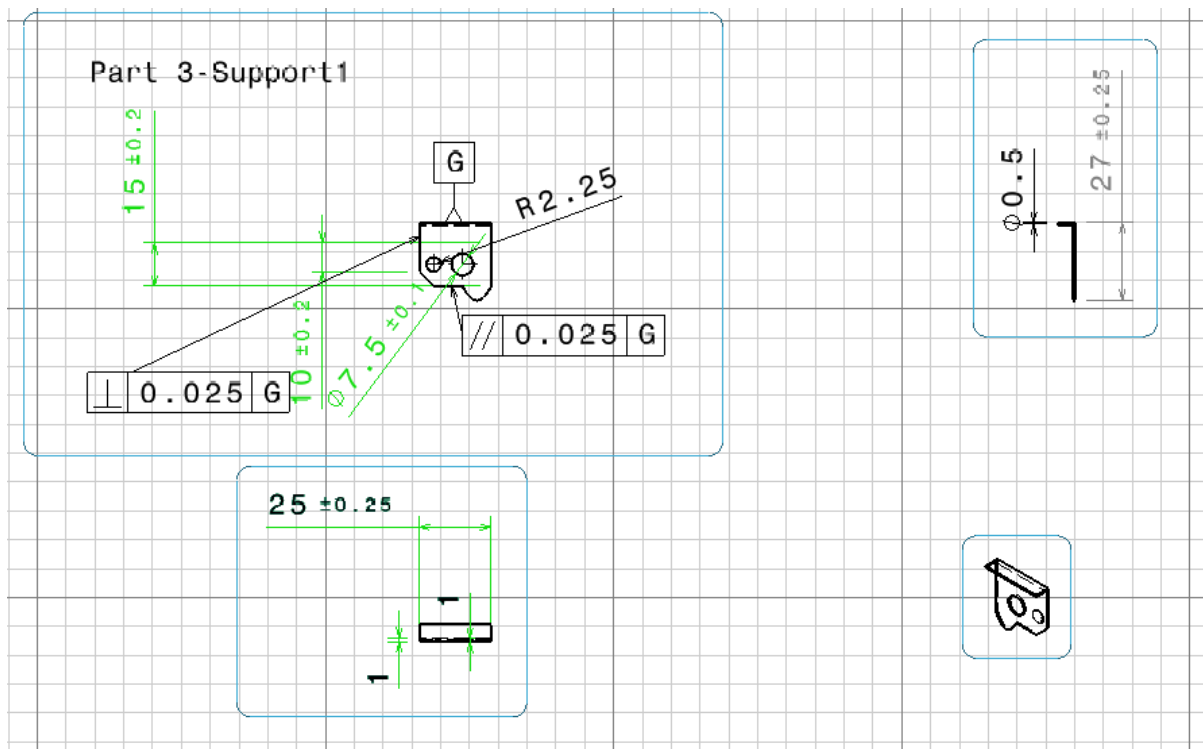




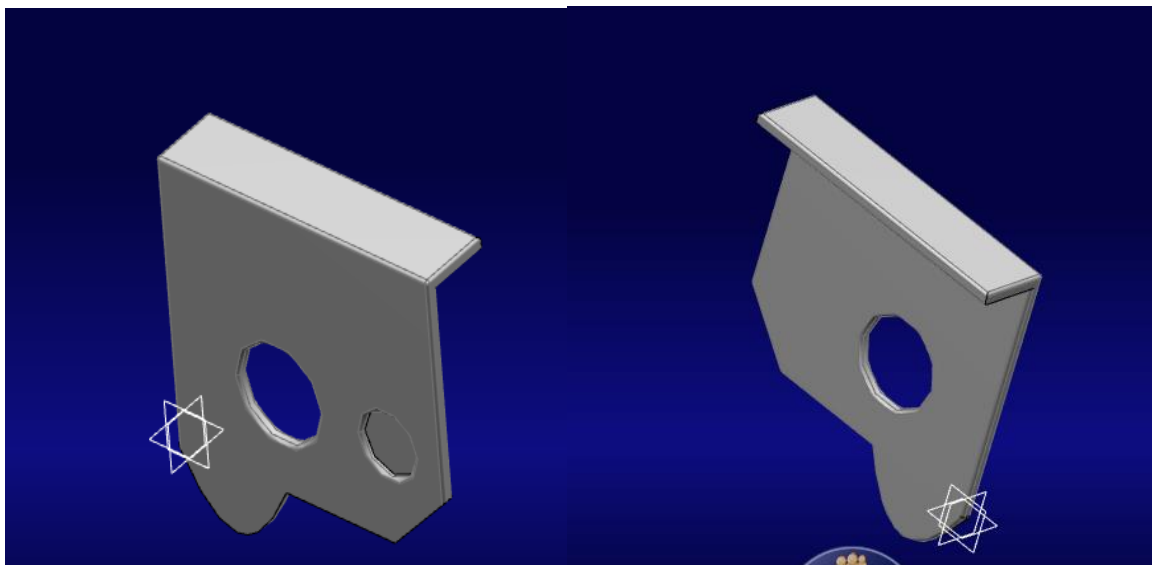


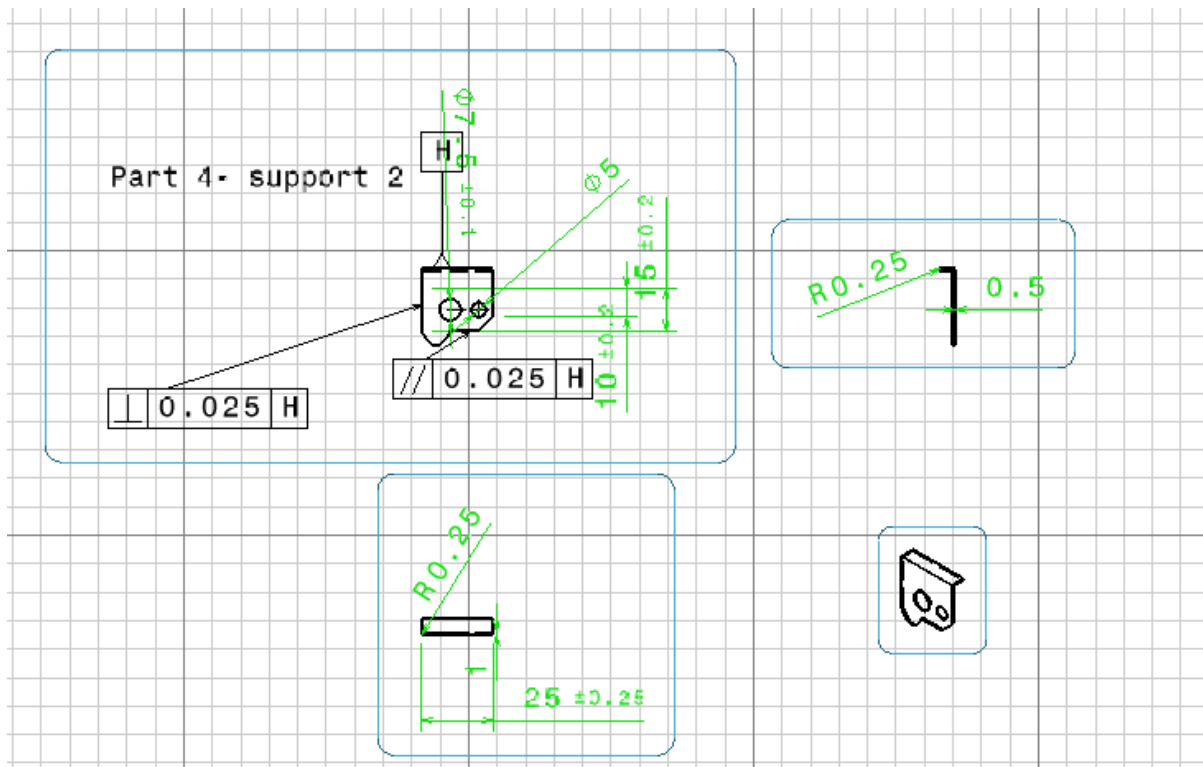
Part 3 – Support1(3DPart223603_MSM19B038_PROJECT_SUPPORT 1)



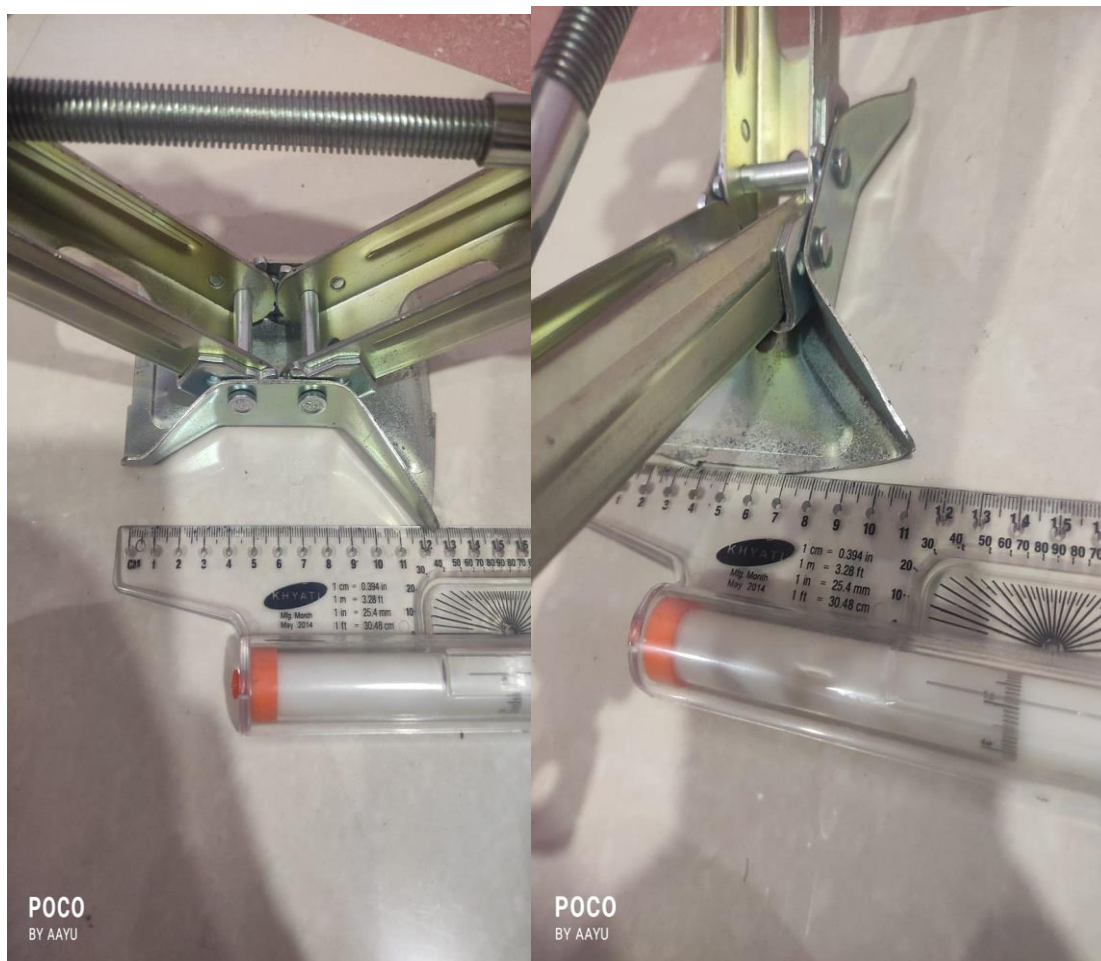


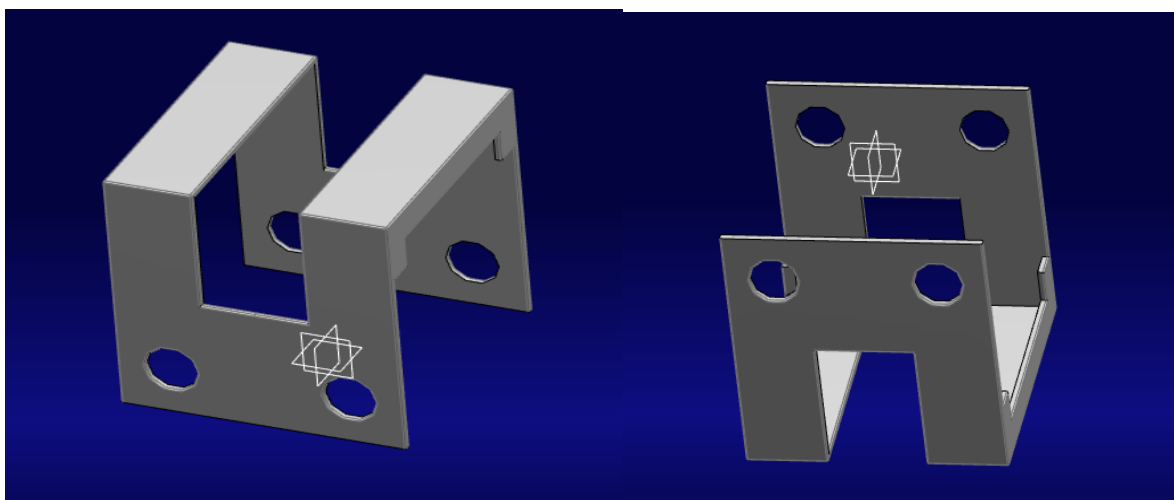
Part 4 – Support2(3DPart223604_MSM19B038_PROJECT_SUPPORT2)

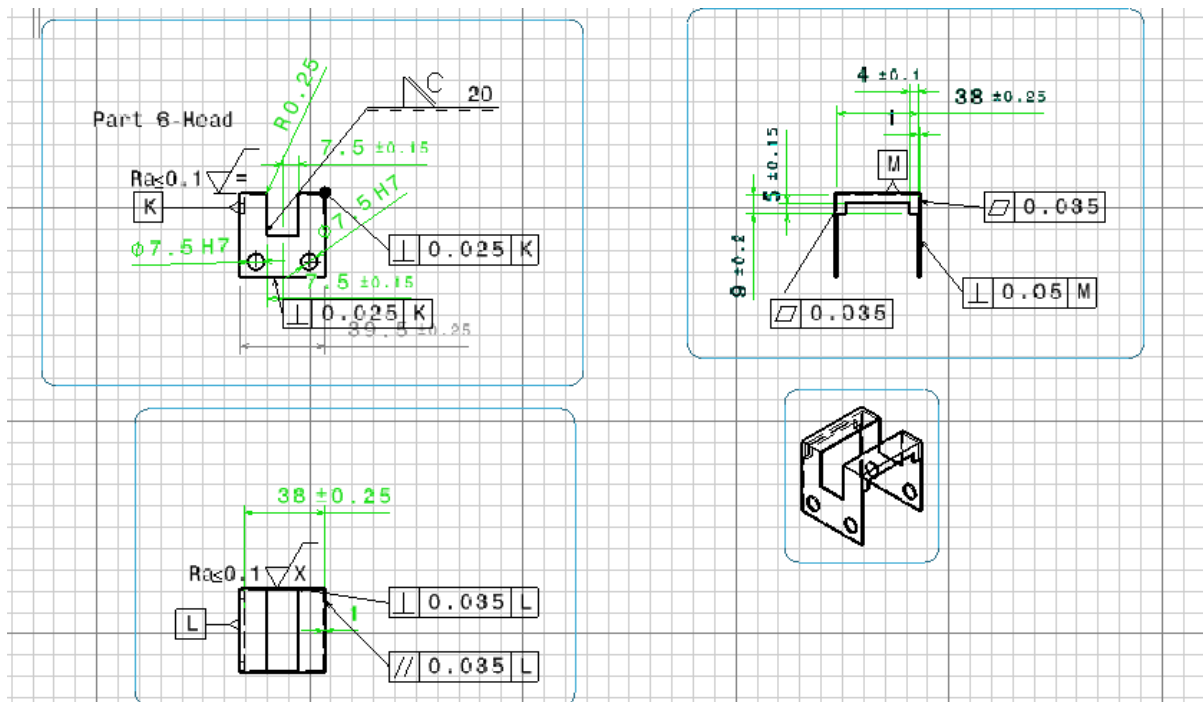




Part 5- Base(3DPart223341_MSM19B038_PROJECT_BASE)

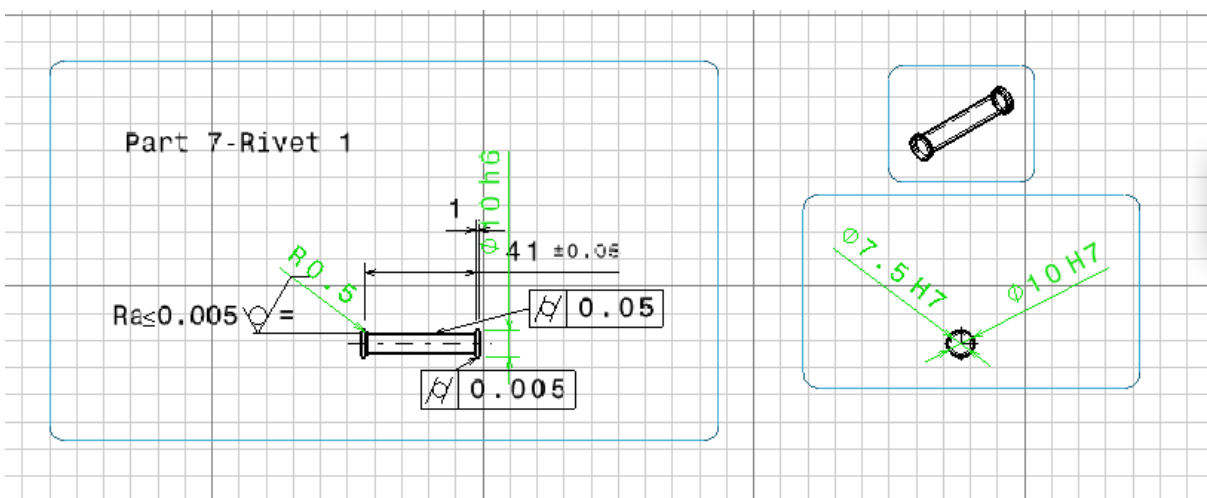
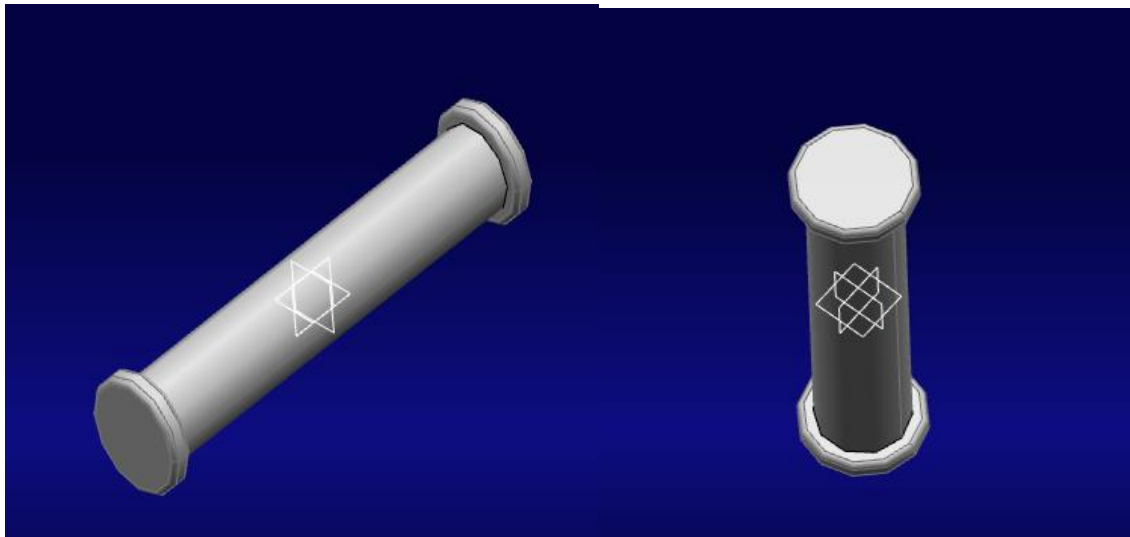




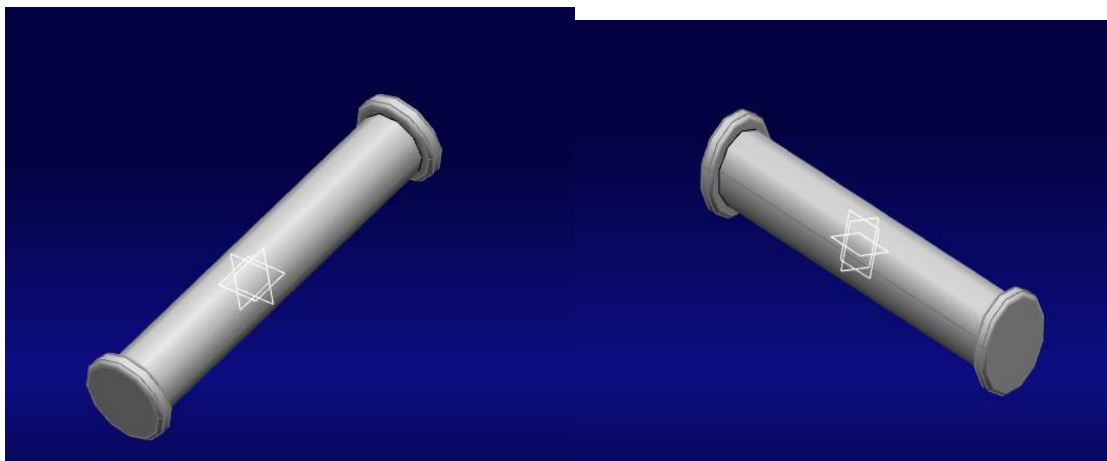


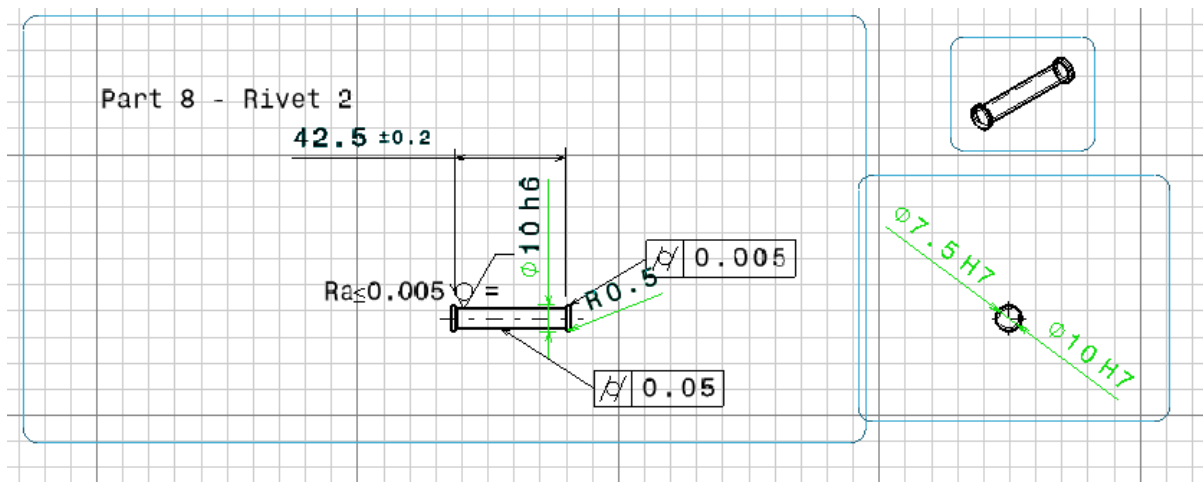
Part 7-Rivet 1(3DPart225943_MSM19B038__PROJECT_Rivet1)



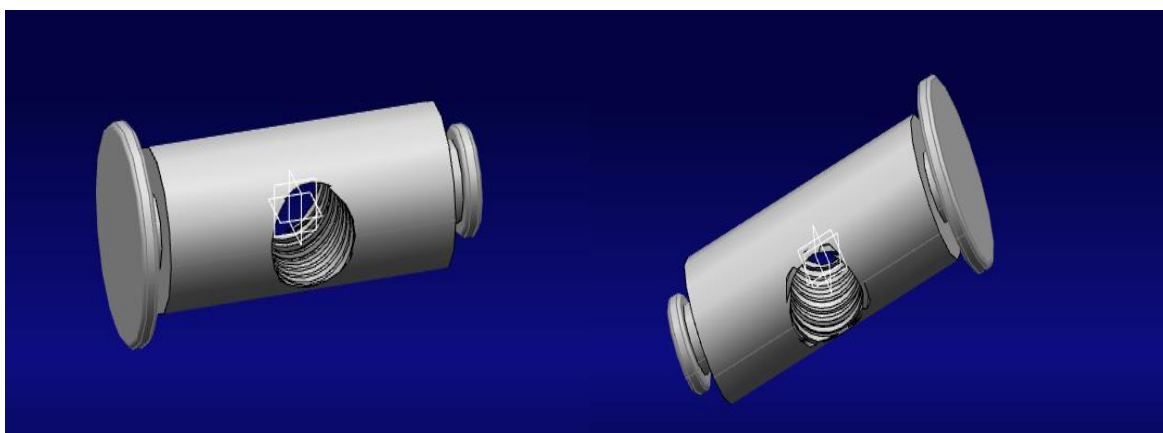


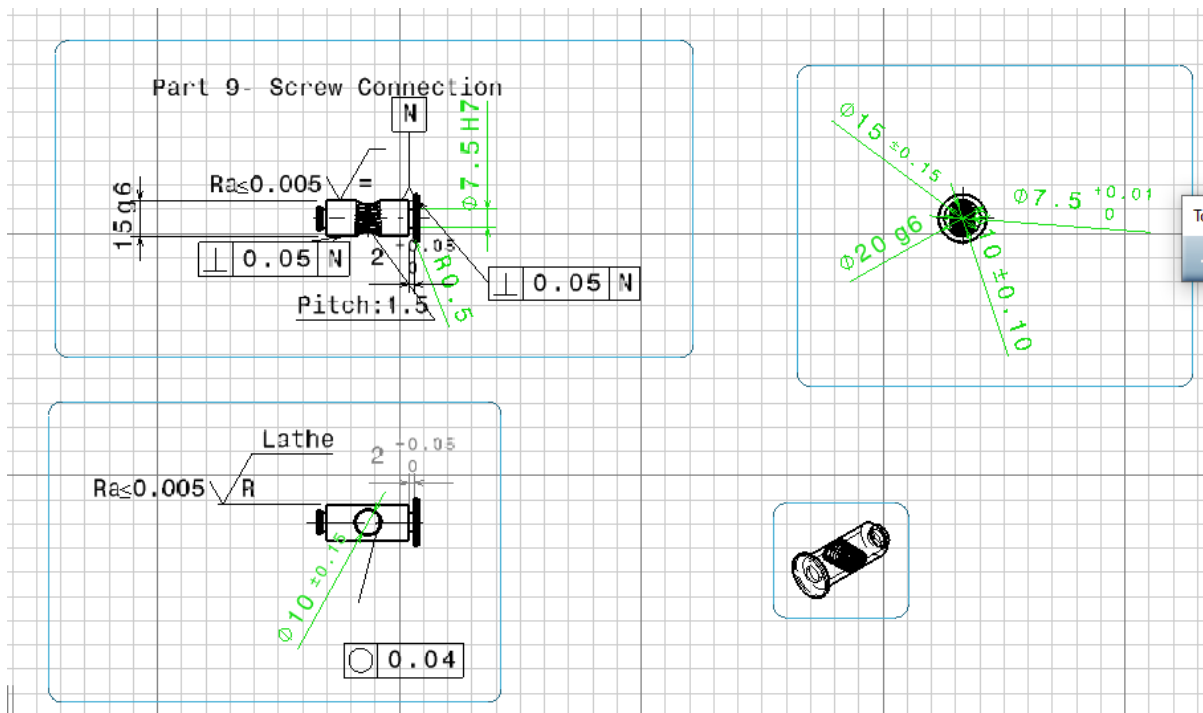
Part 8 – Rivet 2(3DPart225944_MSM19B038_PROJECT_Rivet2)





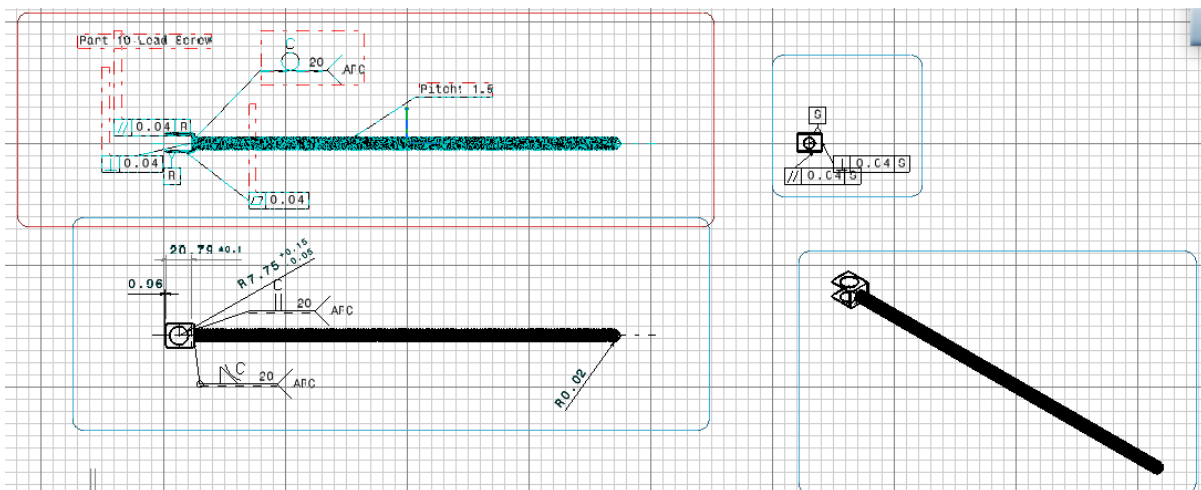
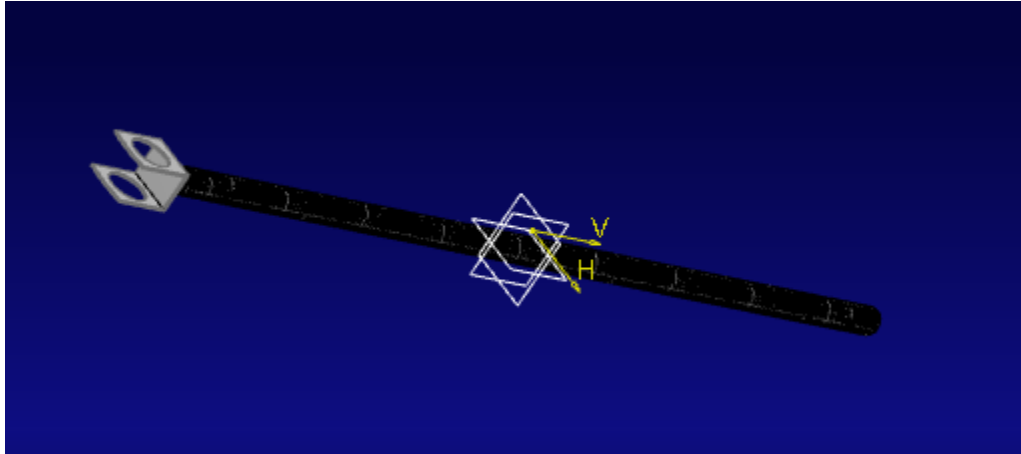
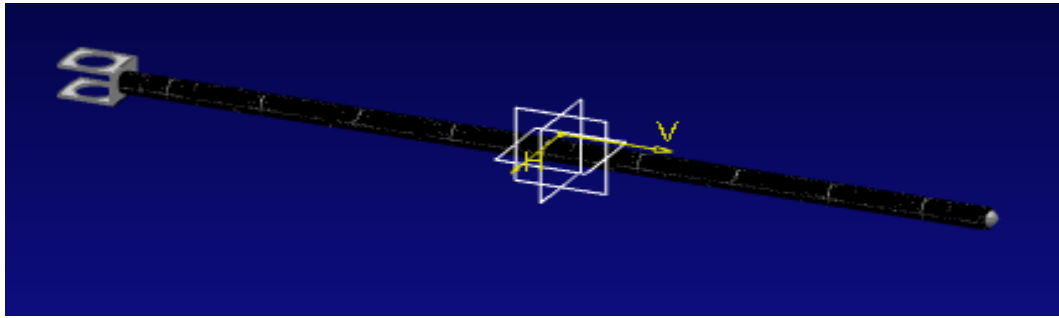
Part 9- Screw connection (3DPart225942_MSM19B038_PROJECT_Screw_connection)



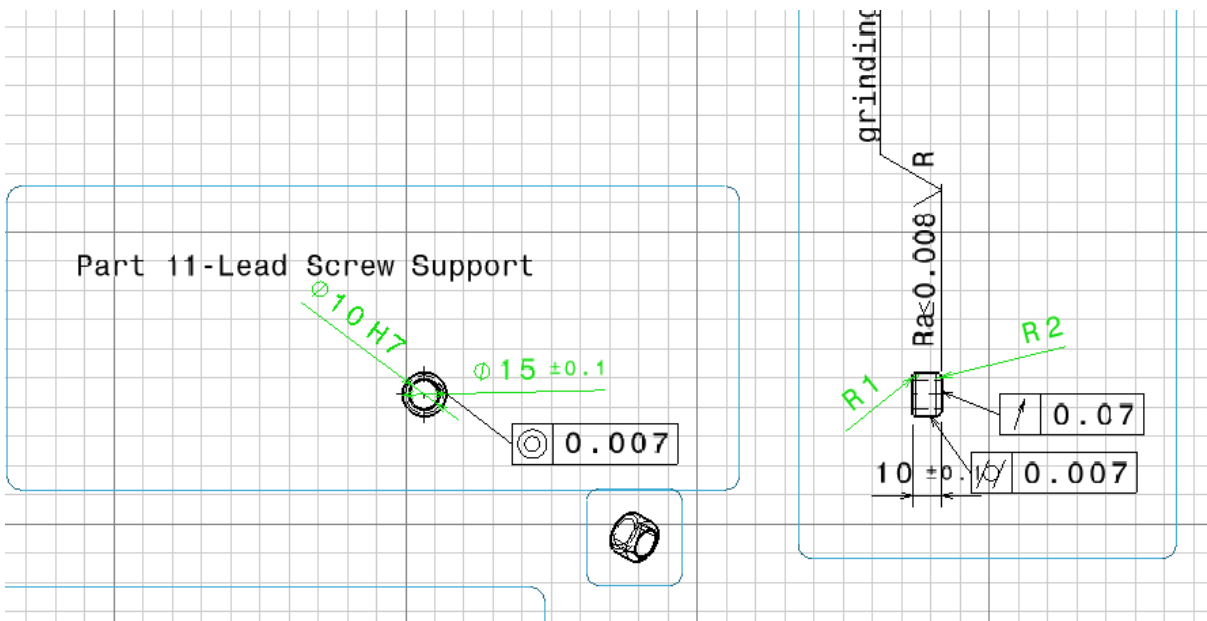
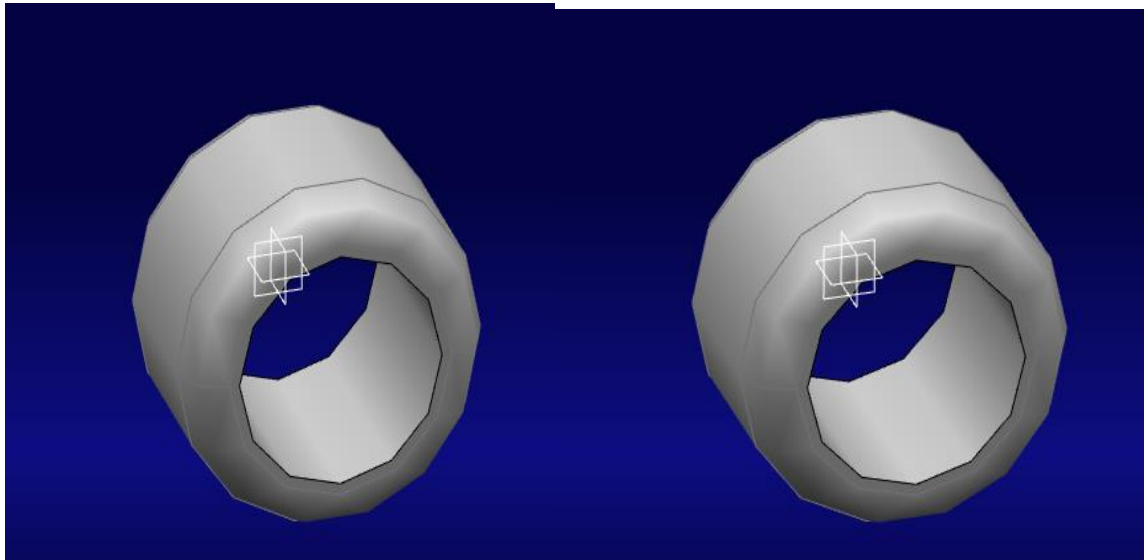


Part 10-Lead Screw (3DPart225982_MSM19b038_PROJECT_ lead screw)

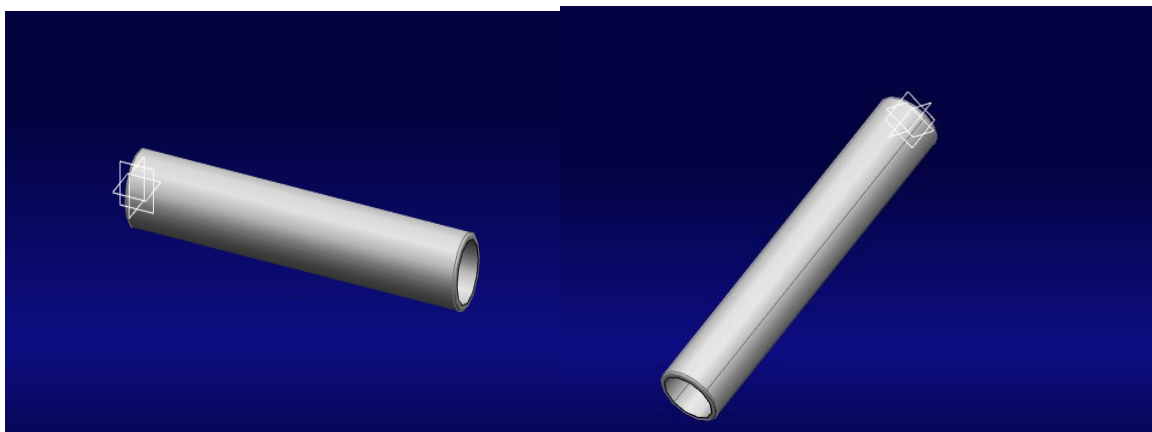
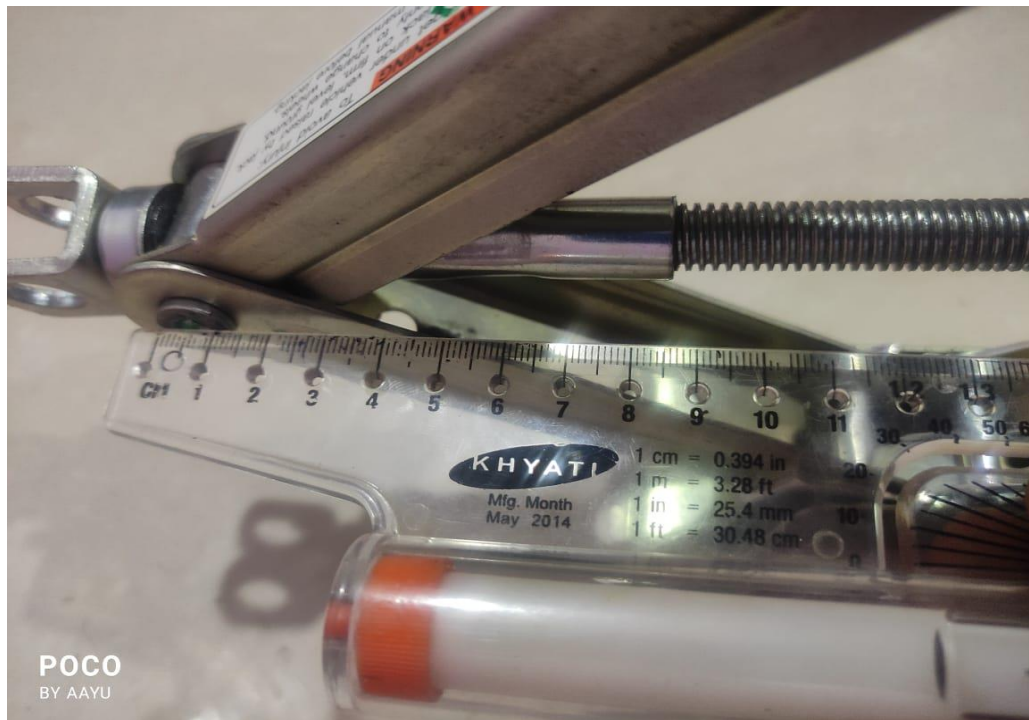


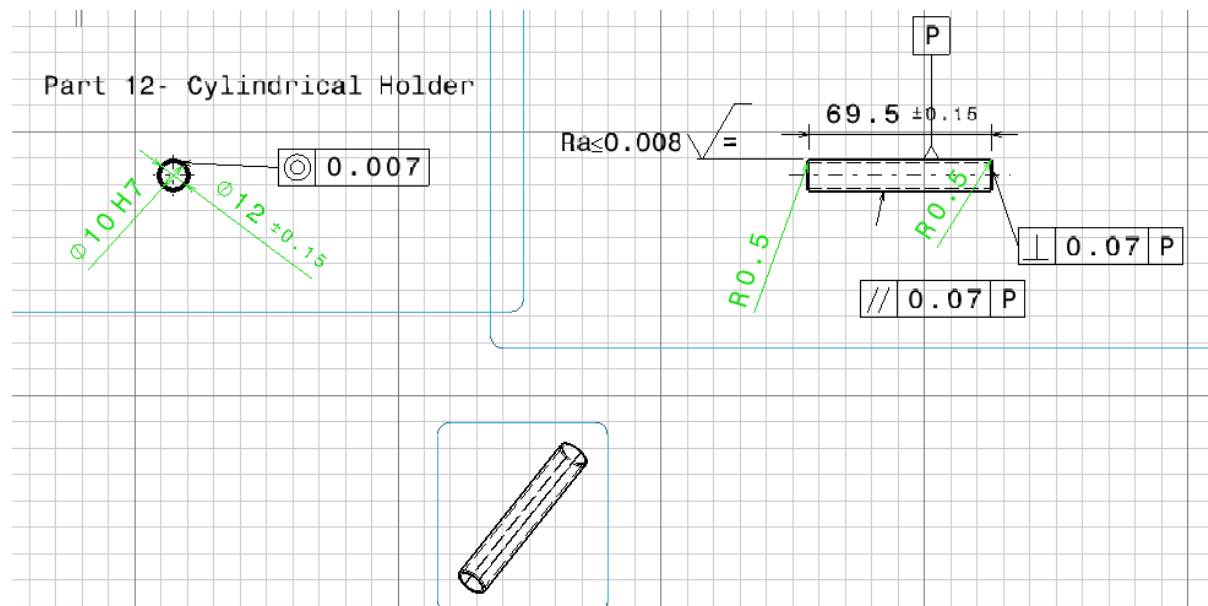


Part 11- Lead screw support (3DPart225983_MSM19B038_PROJECT_LEaDSCREW support)

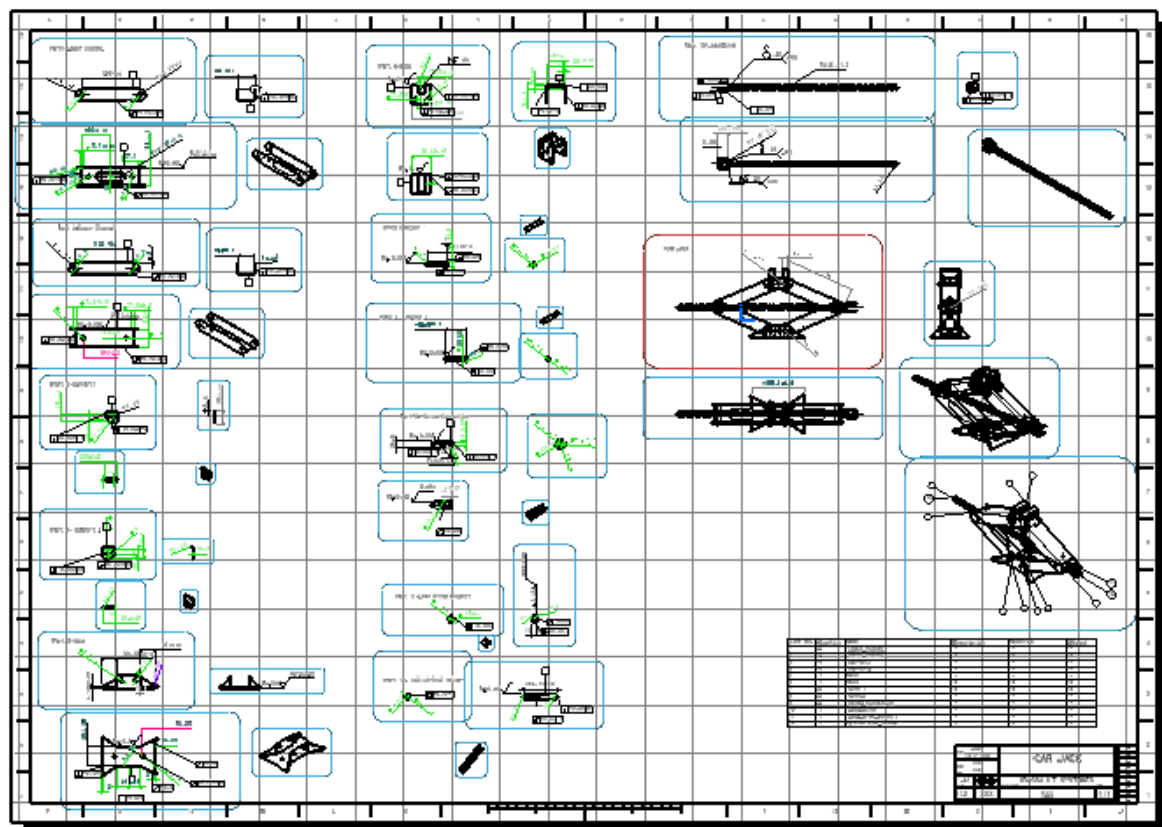


Part 12- cylindrical holder (3DPart225984_MSM19B038_PROJECT_Cylindrical holder)





Process sheet(drawing225765_MSM19B038_PROJECT_PRODUCTION)



Final production drawing of Car jack

Reference - product- https://www.flipkart.com/carreflection-sk123-scissor/p/itmehbpn3yusrhr3?pid=VHJEHBPM5GHCRMW&lid=LSTVHJEHBPM5GHCRMWHC1PYT&marketplace=FLIPKART&srno=s_1_7&otracker=search&otracker1=search&fm=SEARCH&iid=70704037-8fb3-4e99-bc4b-7524b72b4f65.VHJEHBPM5GHCRMW.SEARCH&ppt=sp&ppn=sp&ssid=uh3ra27mhc0000001605413987189&qH=a5de8dabea9a808d