

Student Projects

Student Project 1

Create different components of the Double Bearing assembly and then assemble them, as shown in Figure 1. Figure 2 shows the exploded view of the assembly. The dimensions of various components are given in Figures 3 through 5.

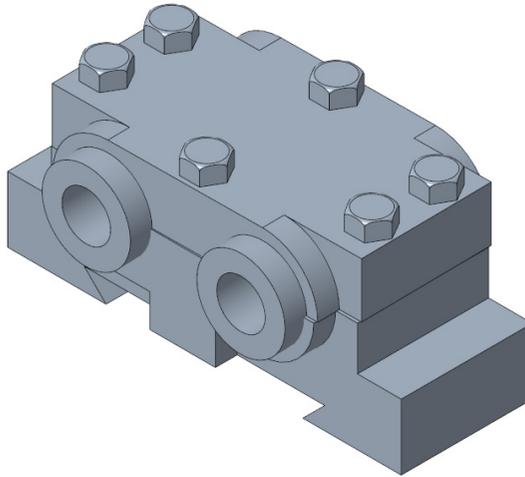


Figure 1 Double Bearing assembly

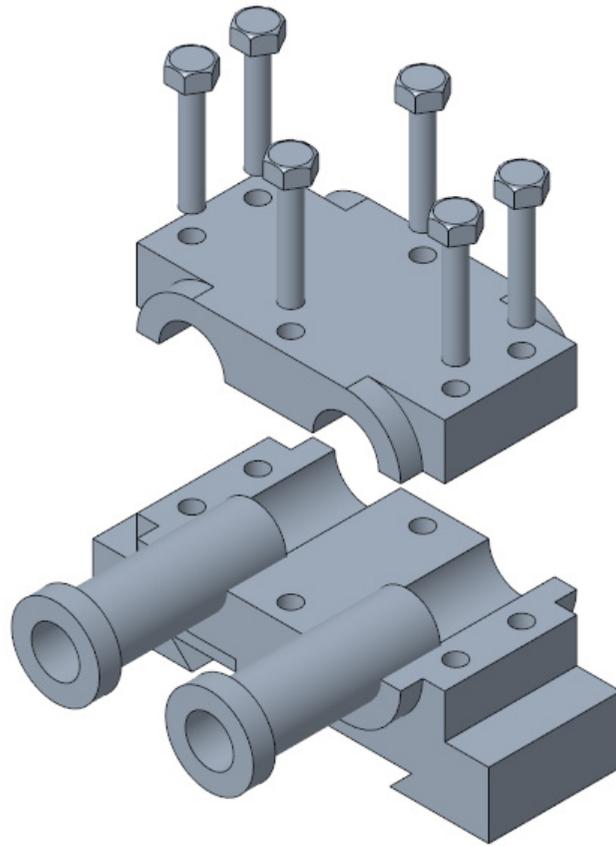


Figure 2 Exploded view of the Double Bearing assembly

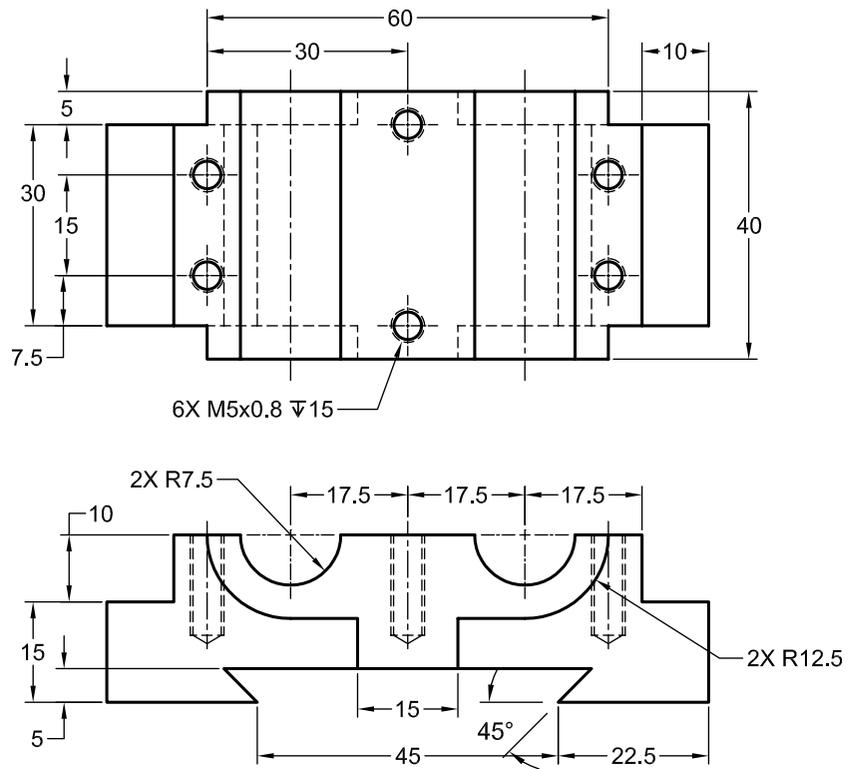


Figure 3 Top and Front views of the Base

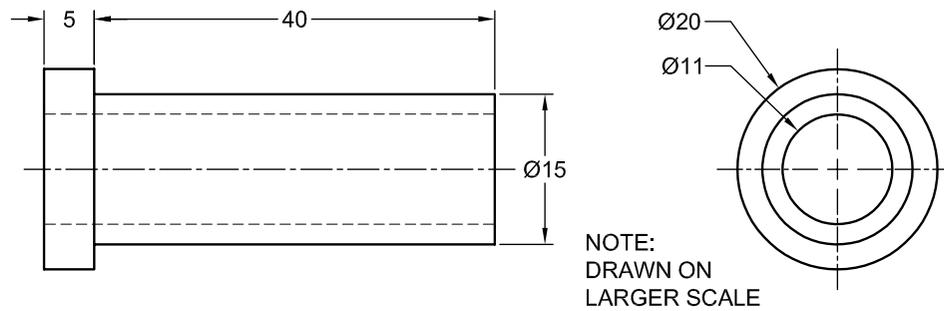


Figure 5 Front and top views of Bush

Student Project 2

Create all components of the Wheel Support assembly and then assemble them, as shown in Figure 6. The exploded view of the assembly is shown in Figure 7. The dimension of the components are shown in Figures 8 through 11.

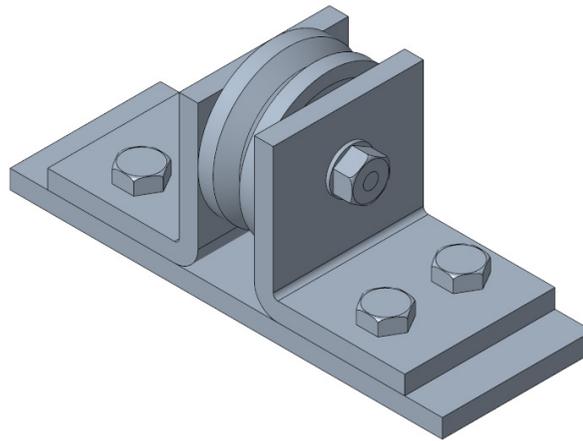


Figure 6 Wheel Support assembly

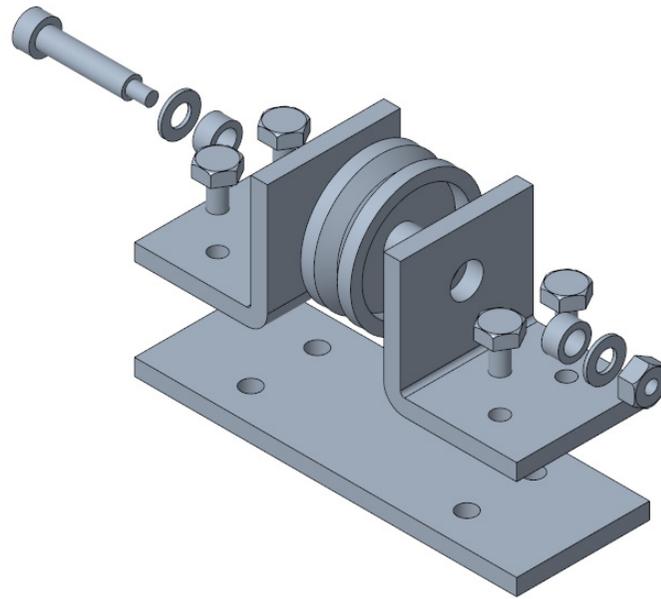


Figure 7 Exploded view of the Wheel Support assembly

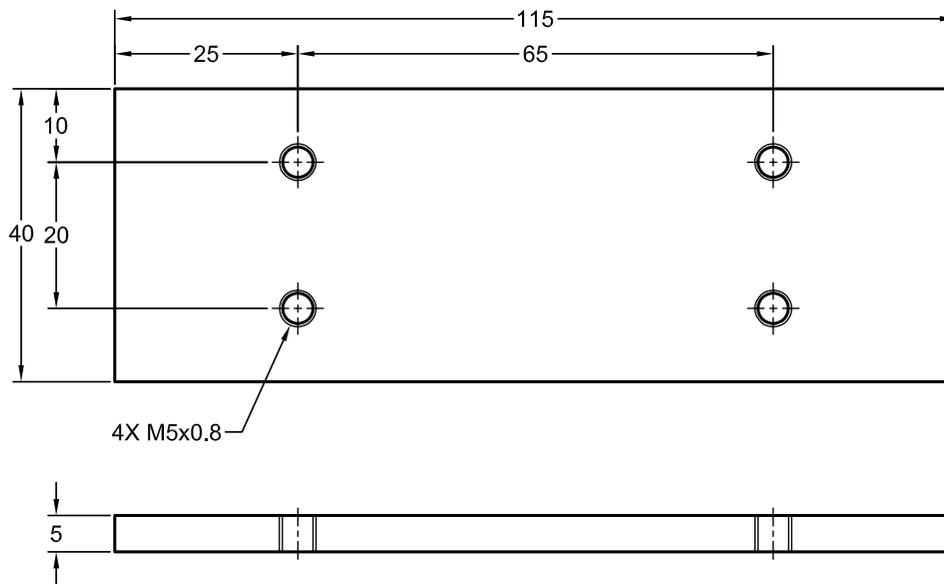


Figure 8 Front and top views of the Base

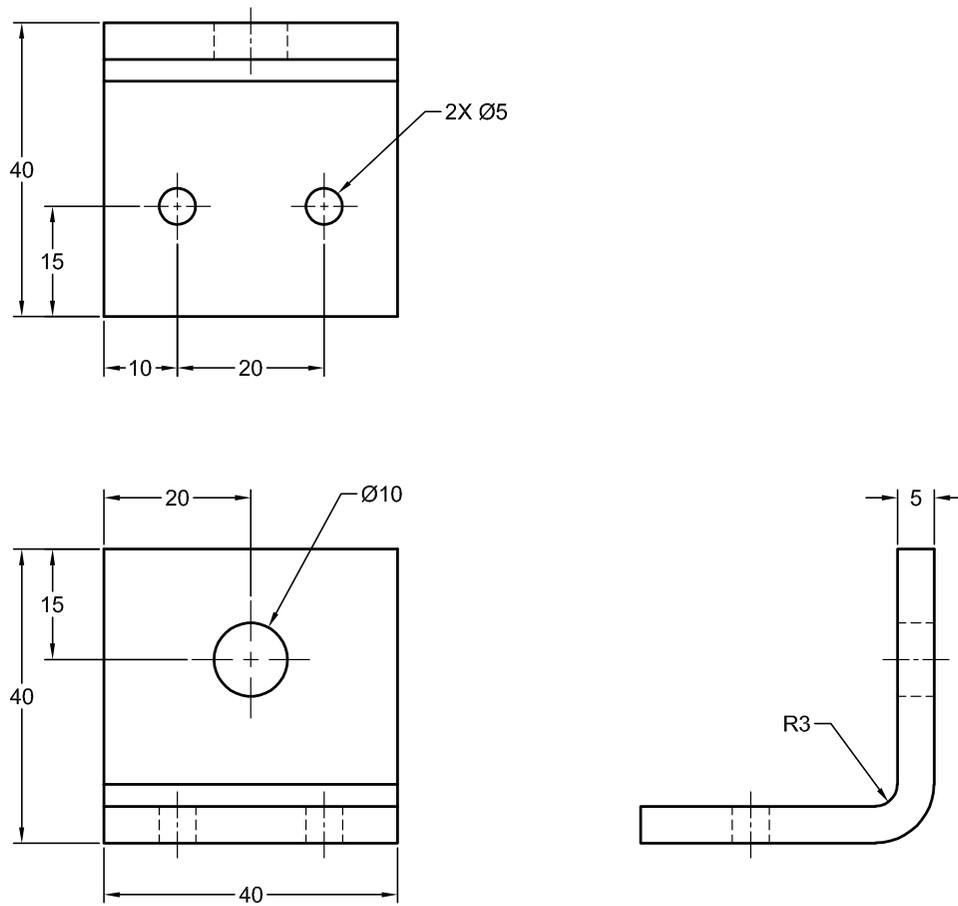


Figure 9 Top, front and right views of the Support

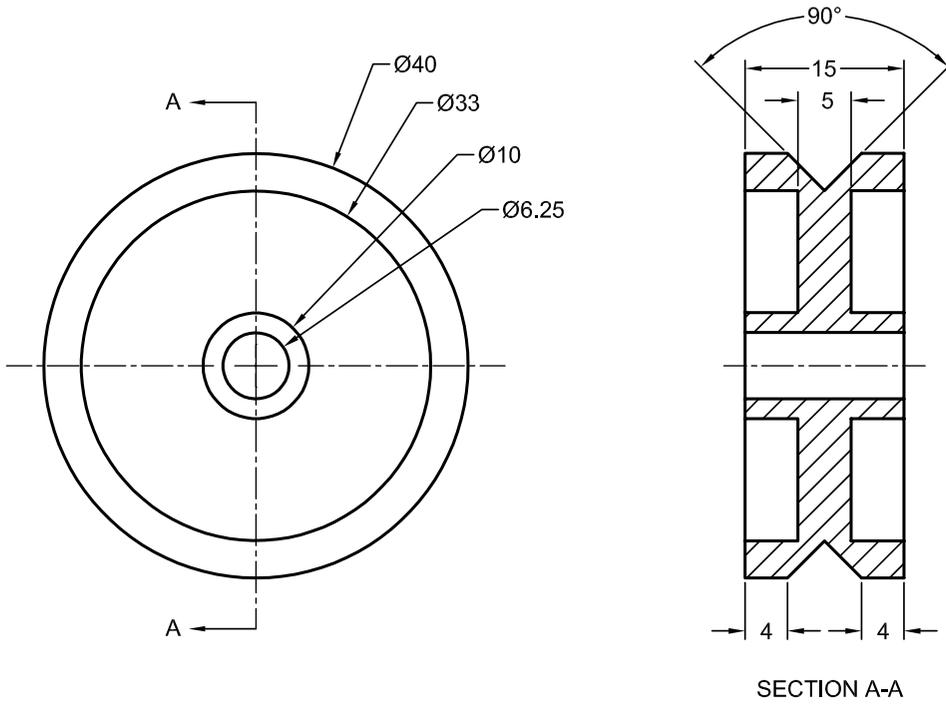


Figure 10 Front view and sectioned side view of the wheel

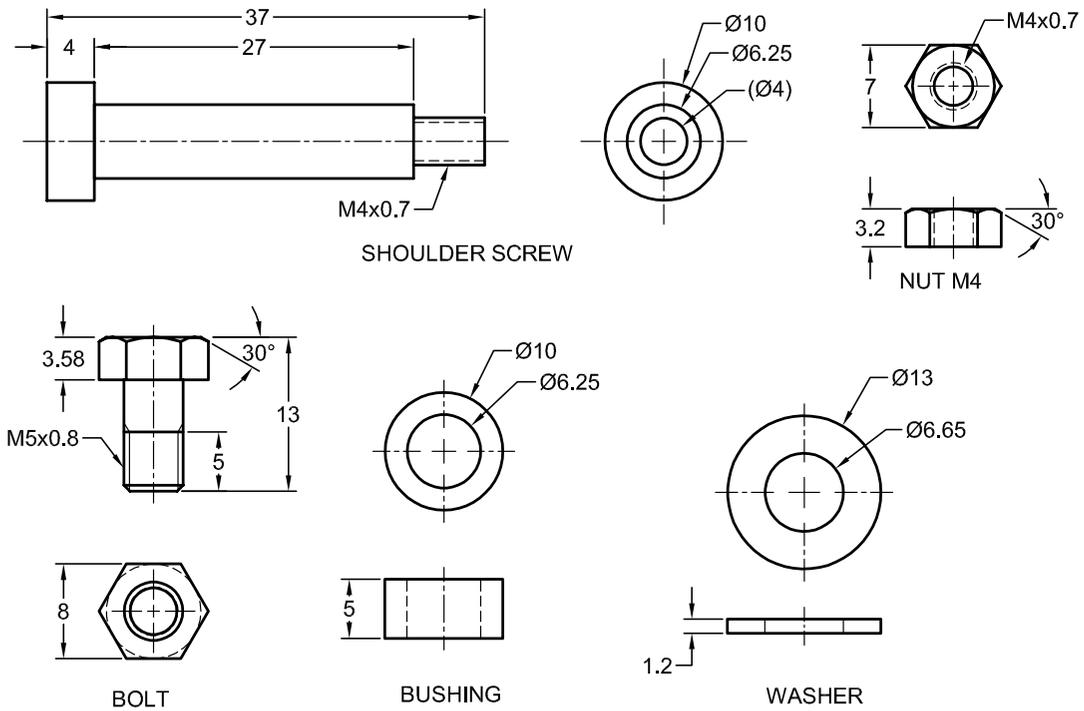


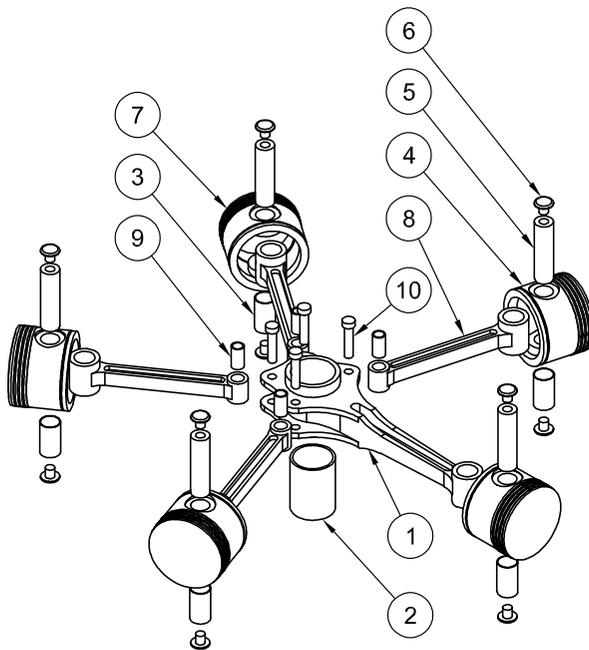
Figure 11 Dimensions of the Shoulder Screw, Bolt, Nut, Bushing, and Washer

Student Project 3

Create the assembly of the Radial Engine shown in Figure 12. The assembly in the exploded state is shown in Figure 13. The dimensions of various parts of this assembly model are given in Figures 14 through 18.



Figure 12 The Radial Engine assembly



ITEM NO.	PART NO.	QTY.
1	Master Rod	1
2	Master Rod Bearing	1
3	Rod Bush Upper	5
4	Piston	5
5	Piston Pin	5
6	Piston Pin Plug	10
7	Piston Ring	20
8	Articulated Rod	4
9	Rod Bush Lower	4
10	Link Pin	4

Figure 13 Exploded state of the Radial Engine assembly

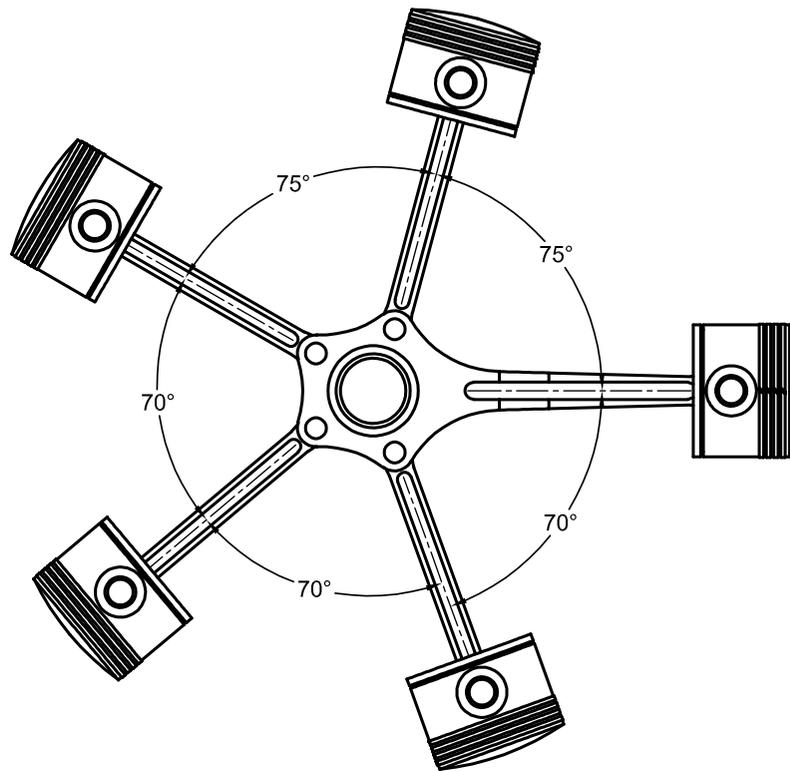


Figure 14 Positioning of the articulated Rods

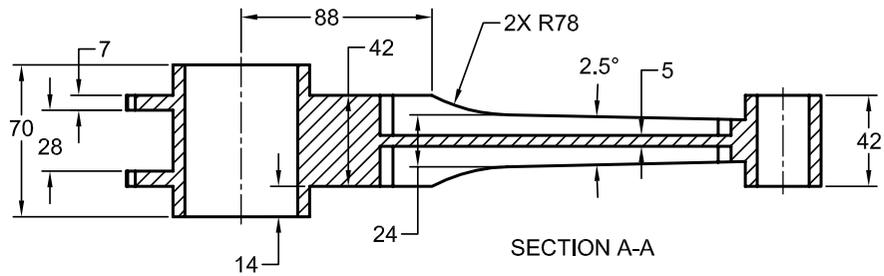
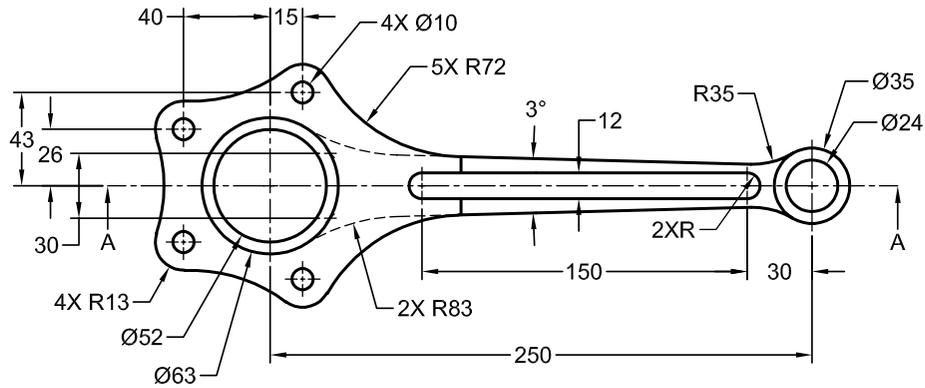
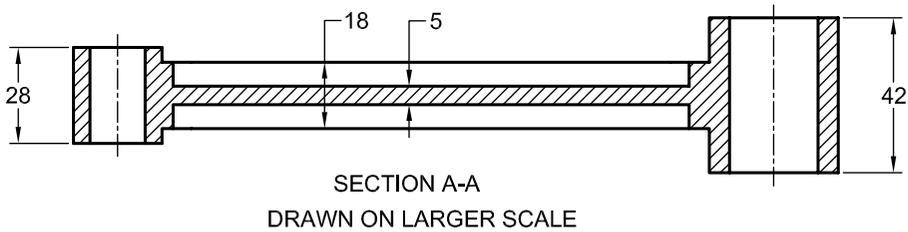
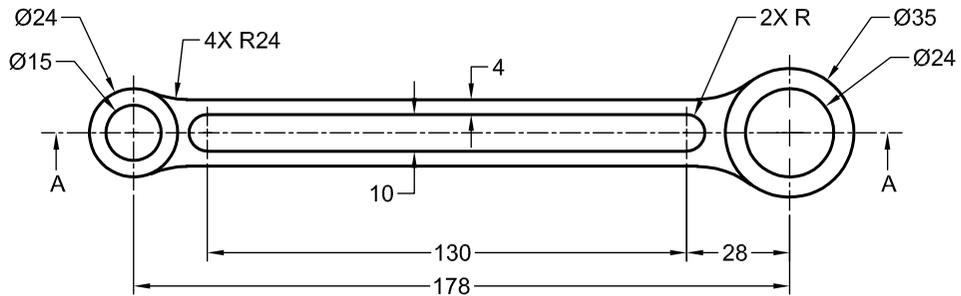


Figure 15 Orthographic views and dimensions of the Master Rod



SECTION A-A
DRAWN ON LARGER SCALE

Figure 16 Orthographic views and dimensions of the Articulated Rod

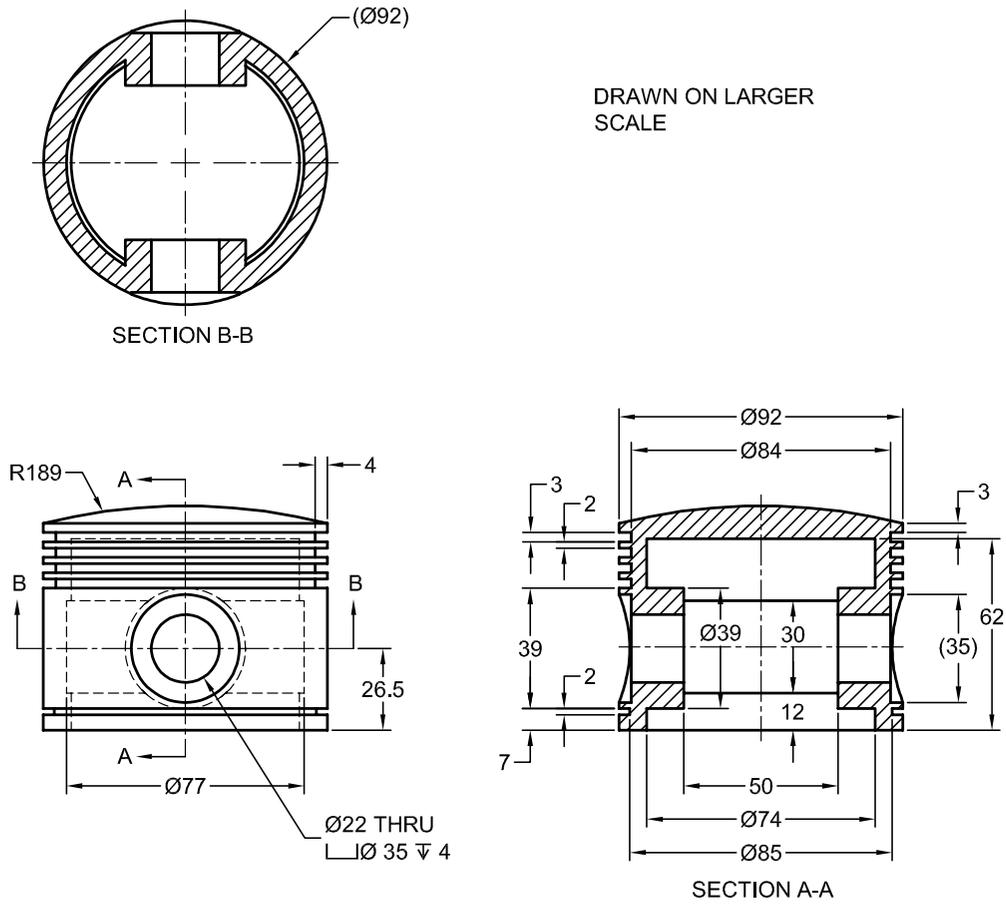


Figure 17 Orthographic views and dimensions of the Piston

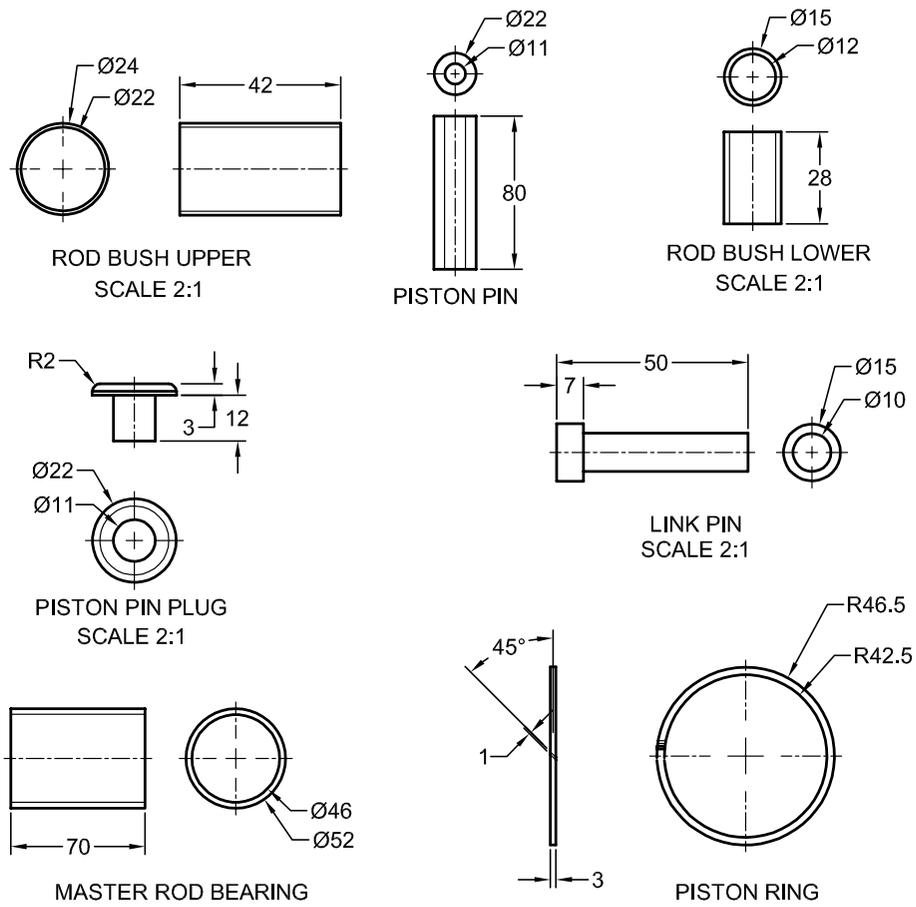


Figure 18 Views and dimensions of the other components

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