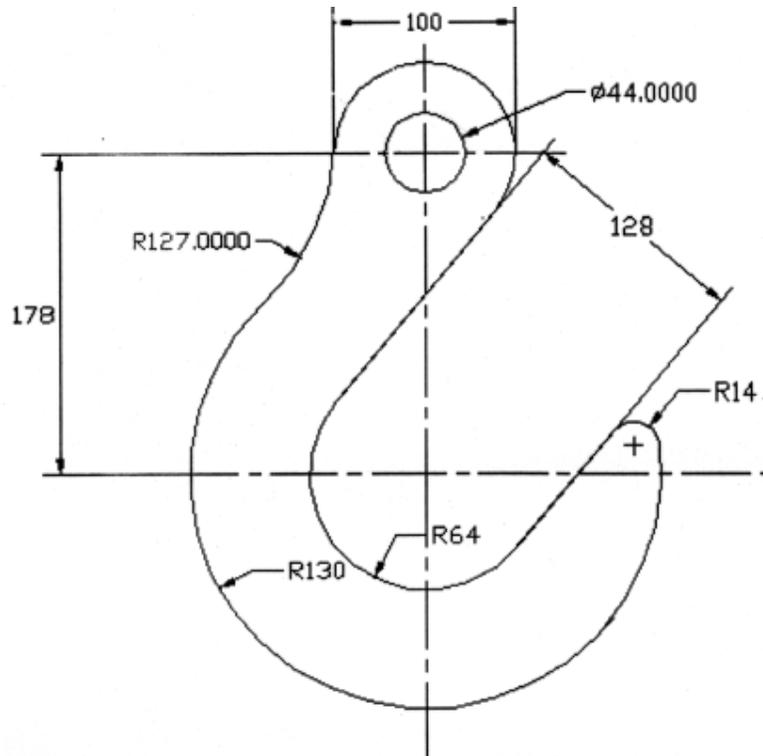
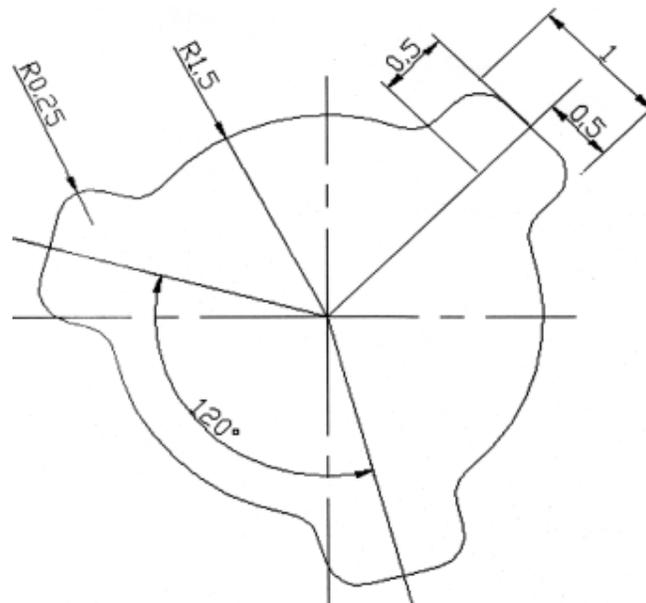


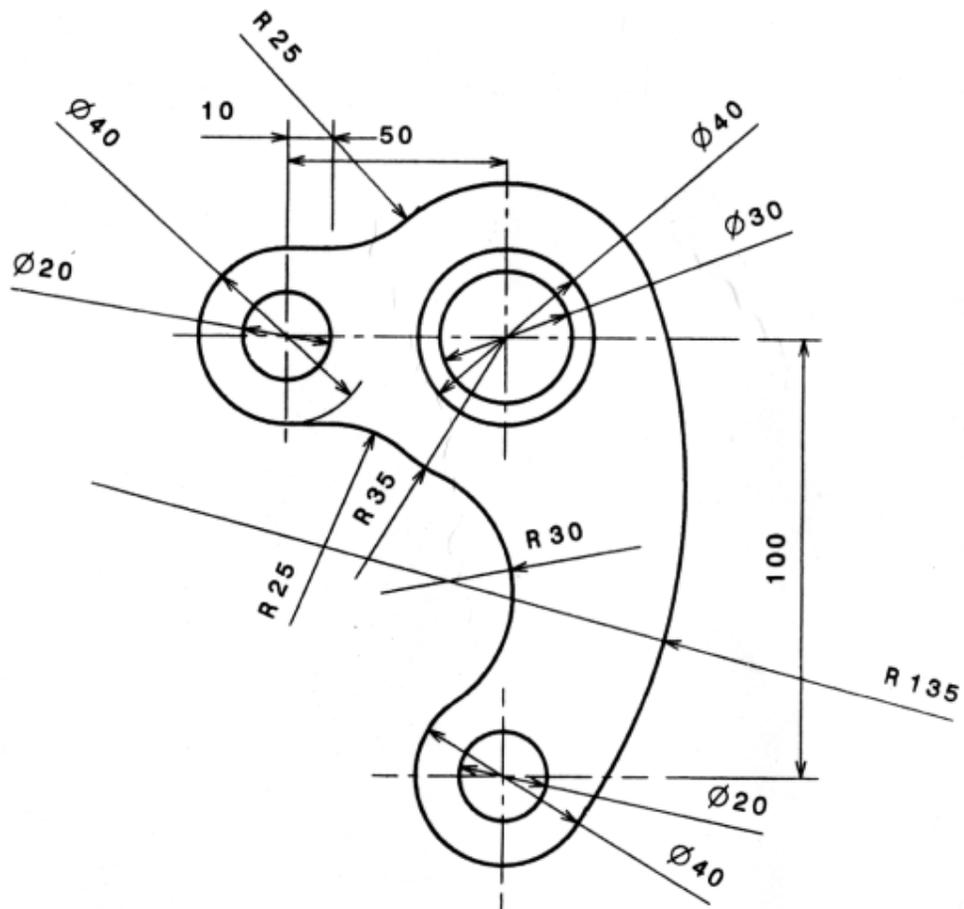
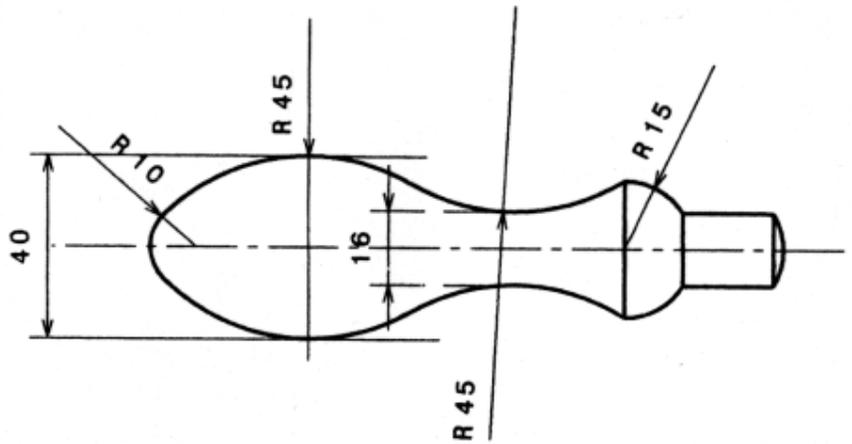


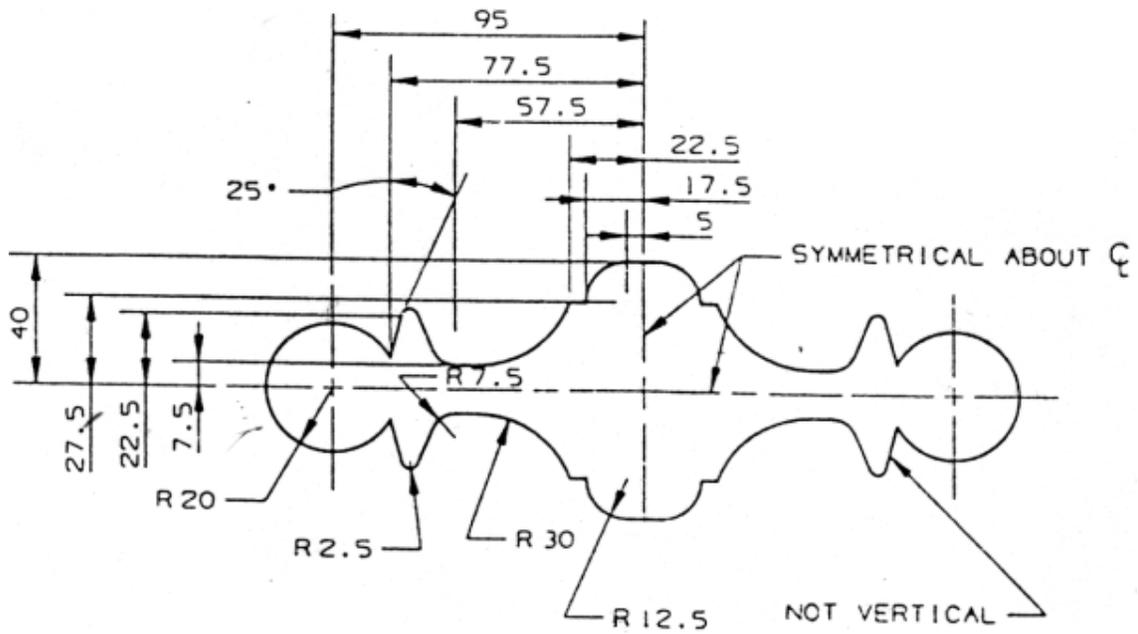
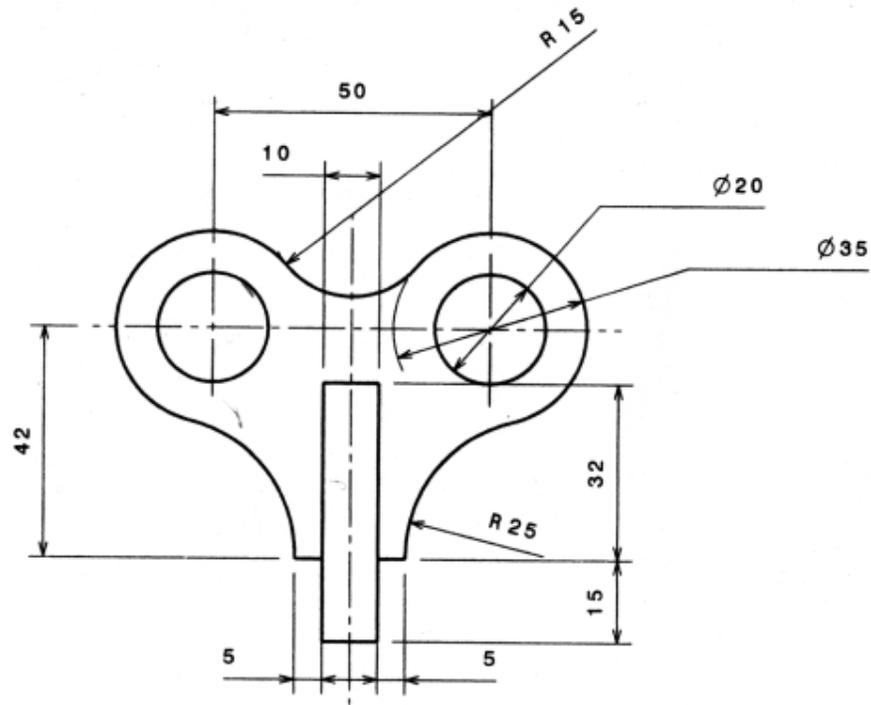
Sketcher

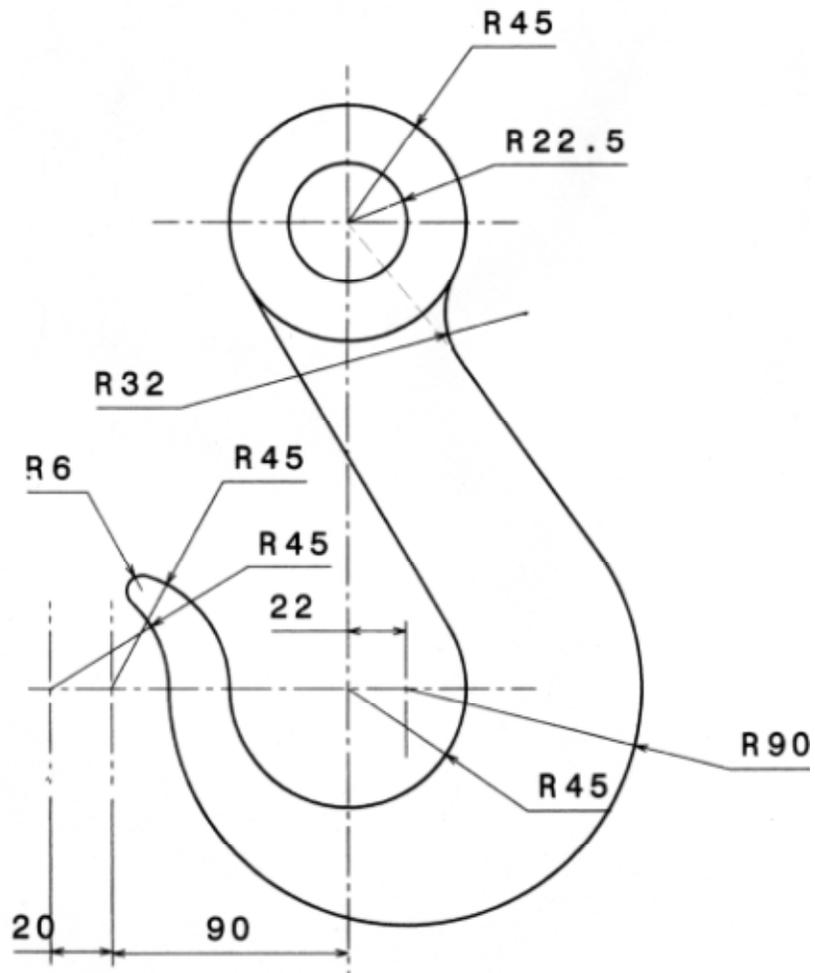


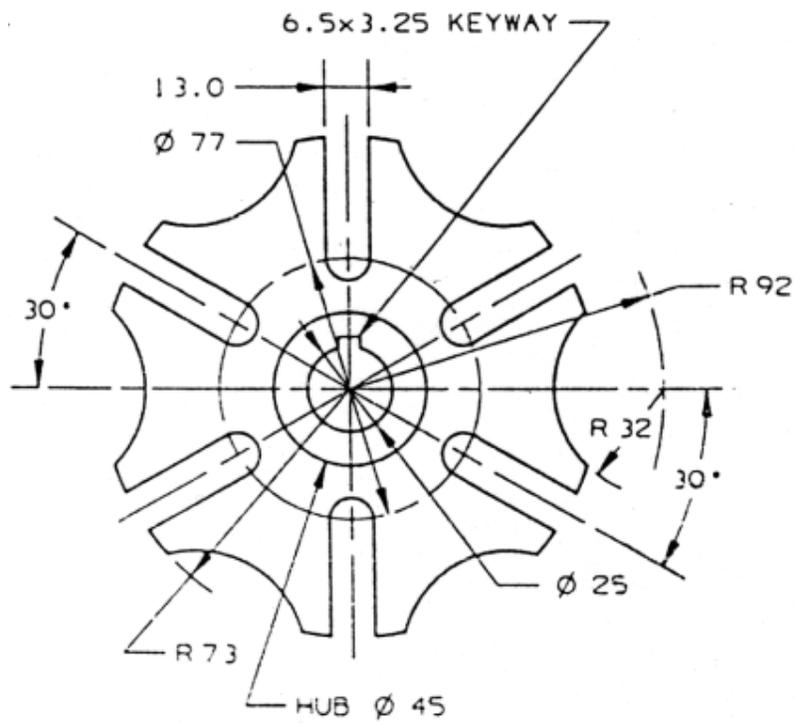
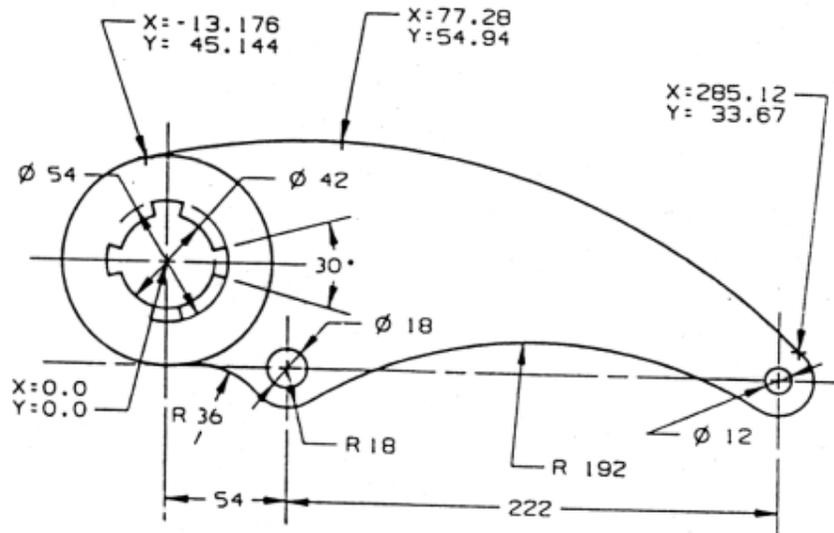
Foundry hook

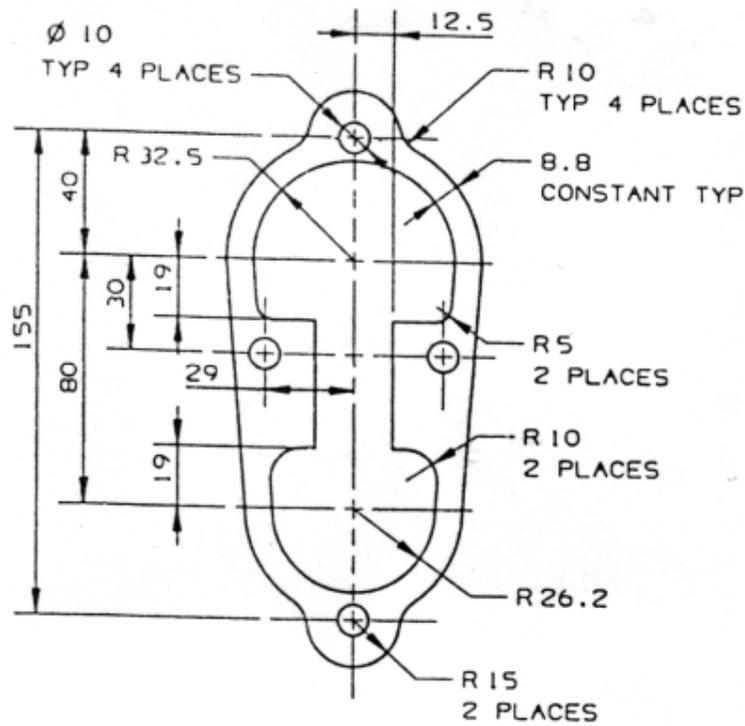
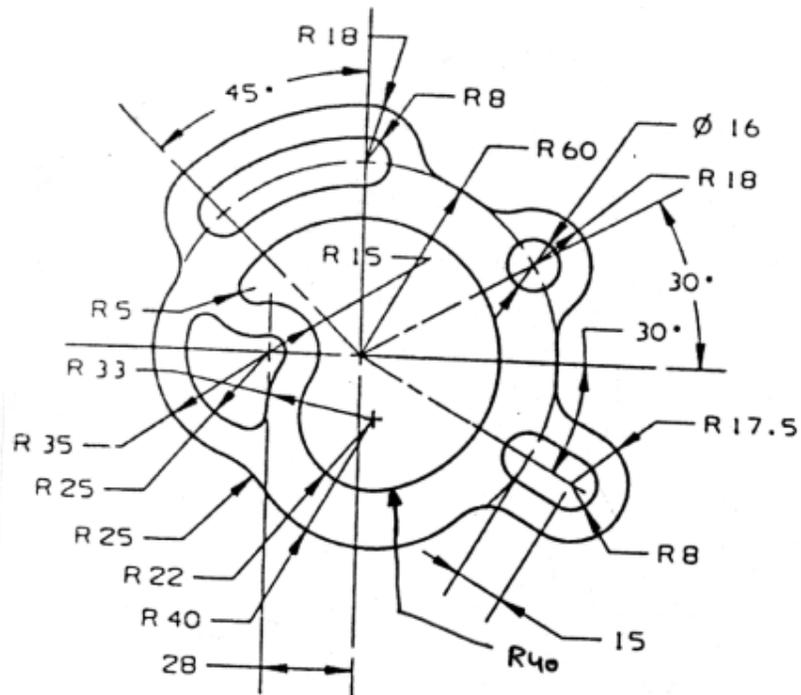


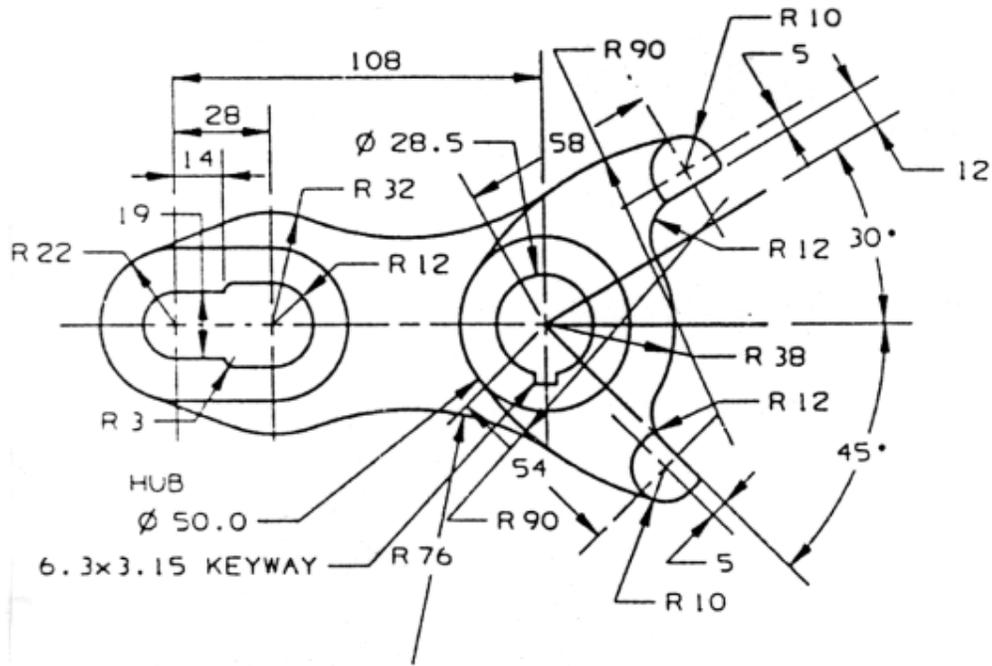




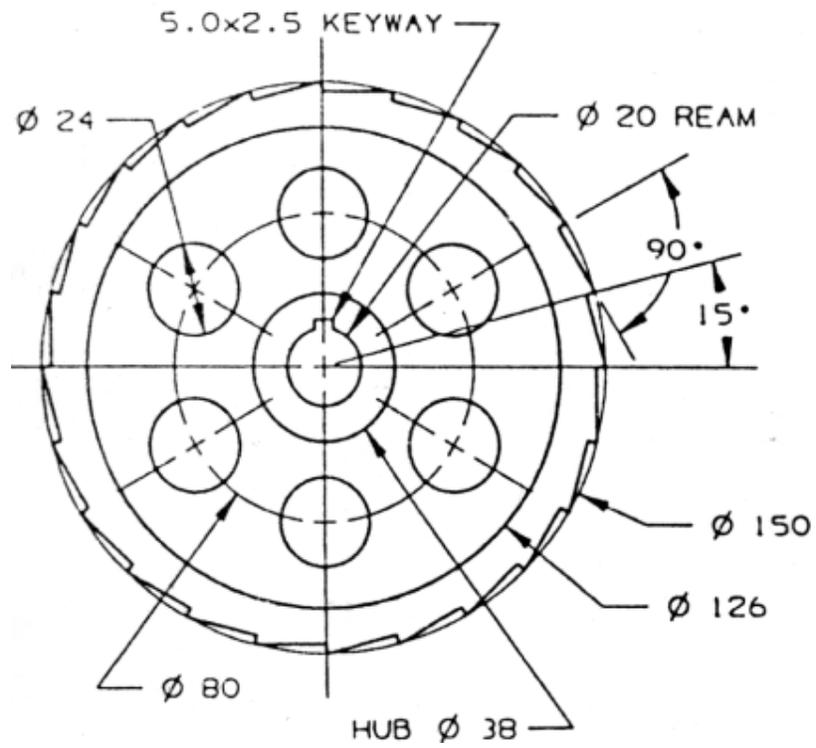


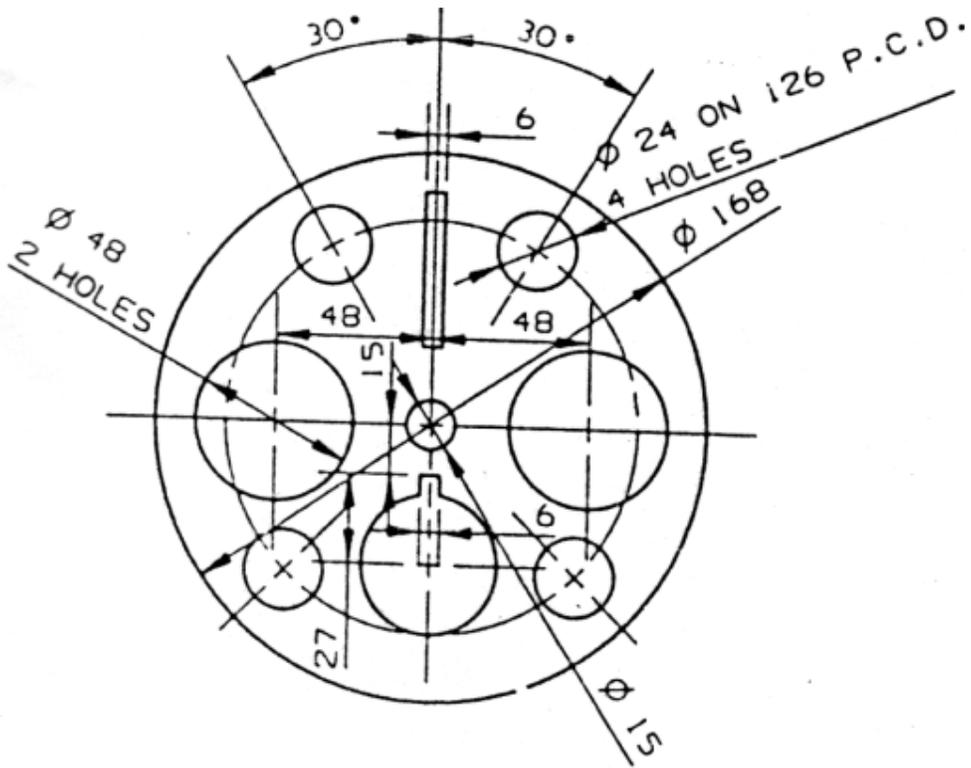


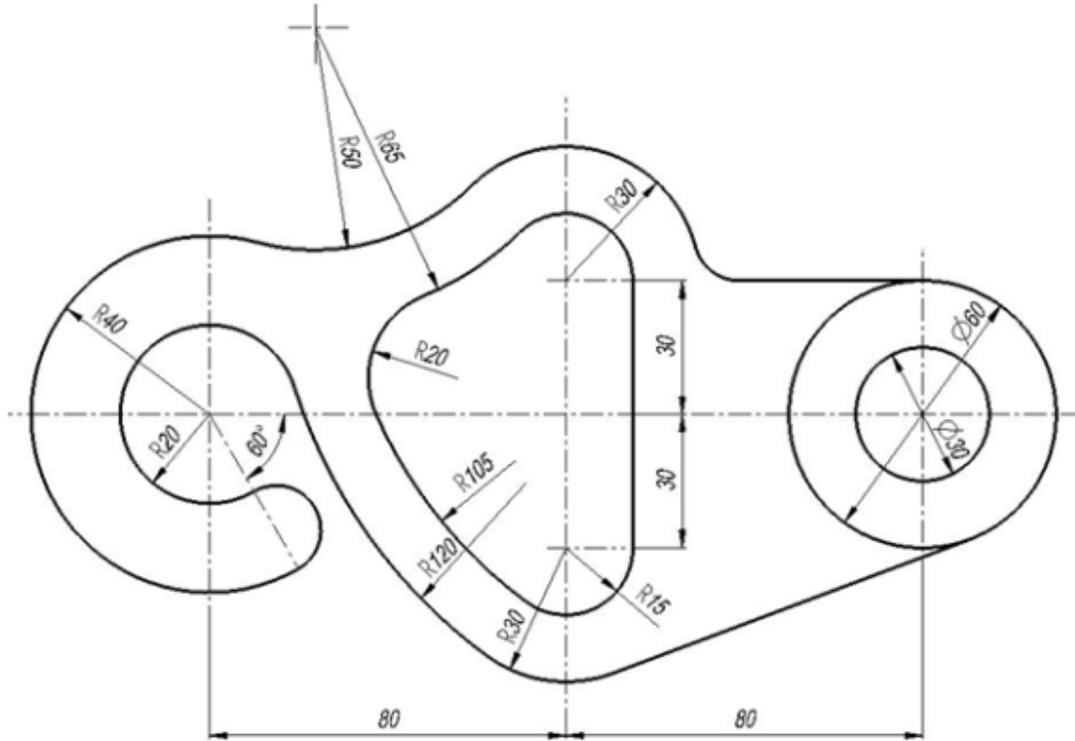




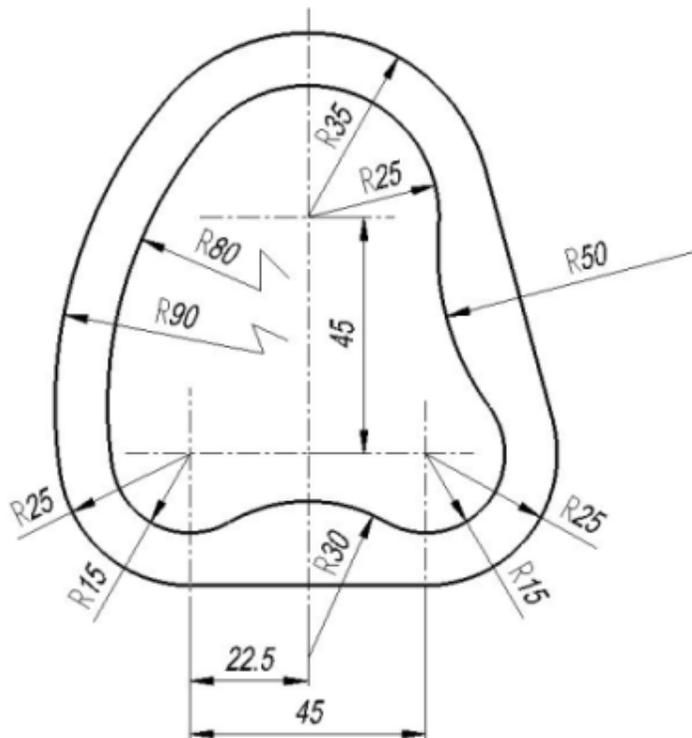


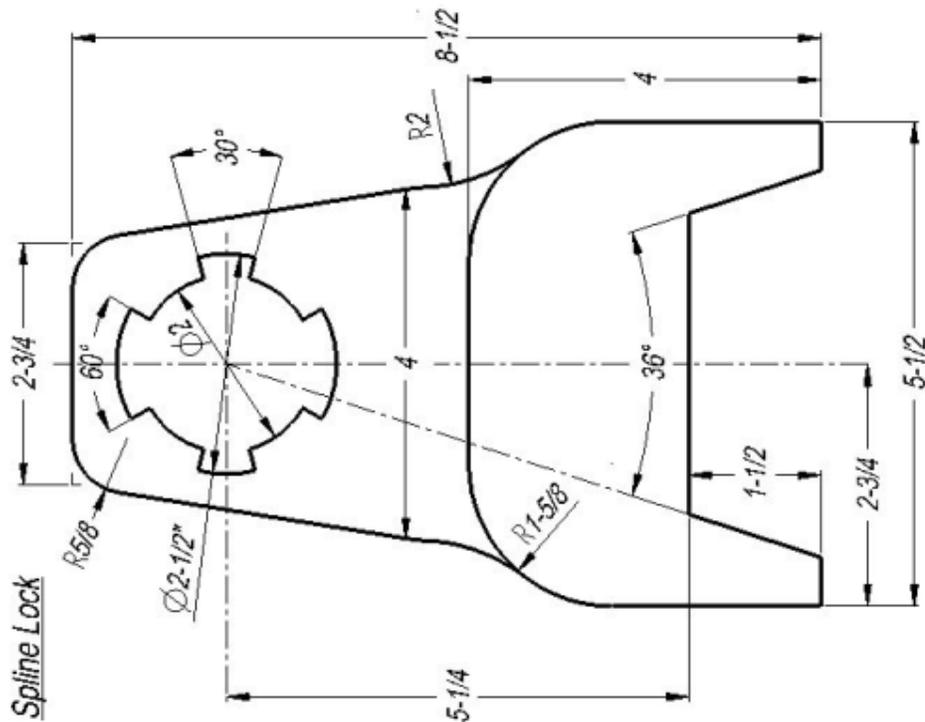
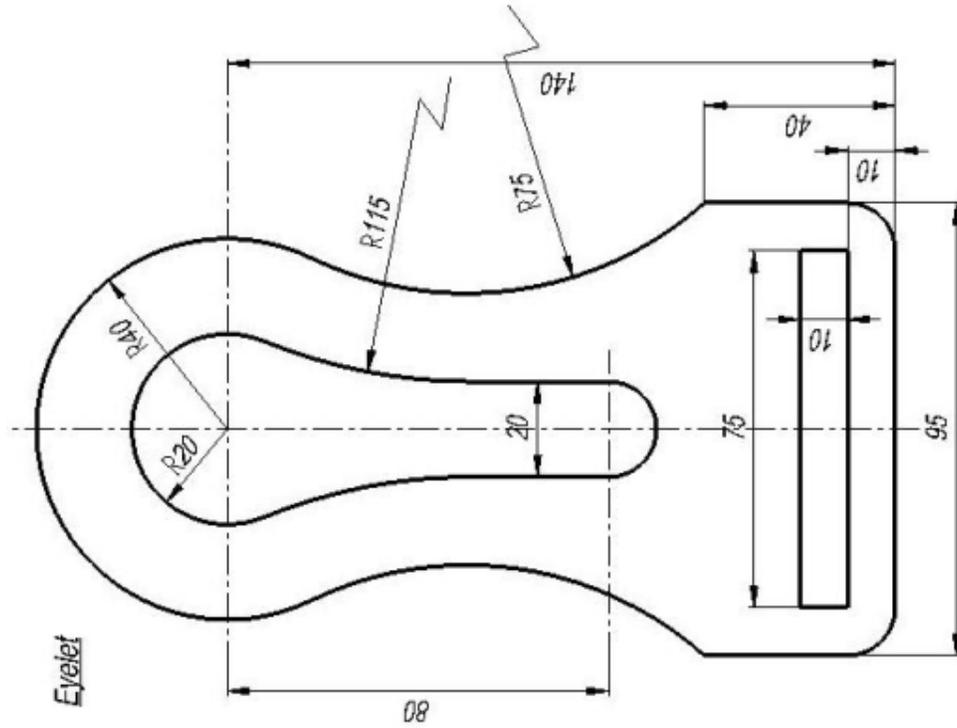




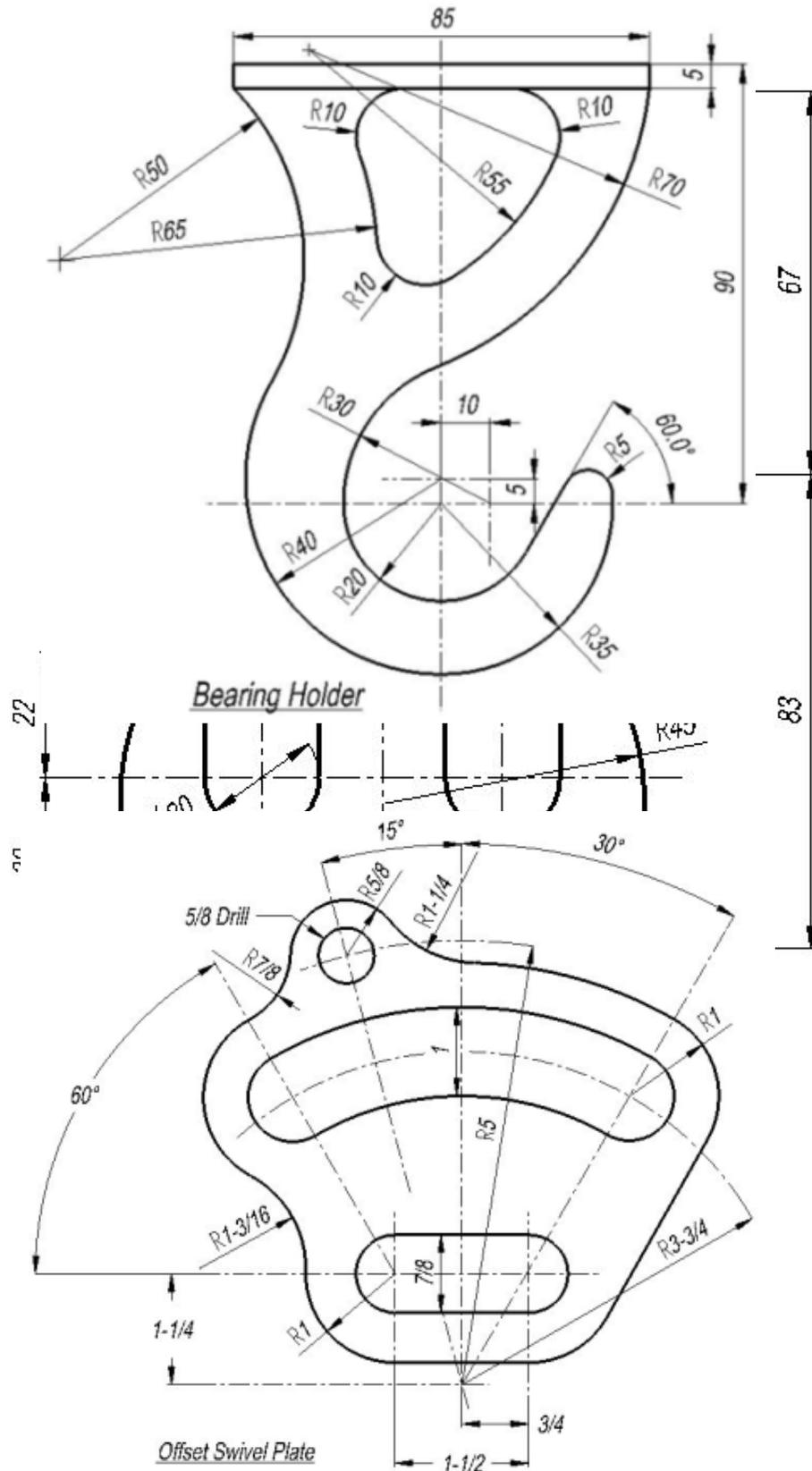


Locking Device



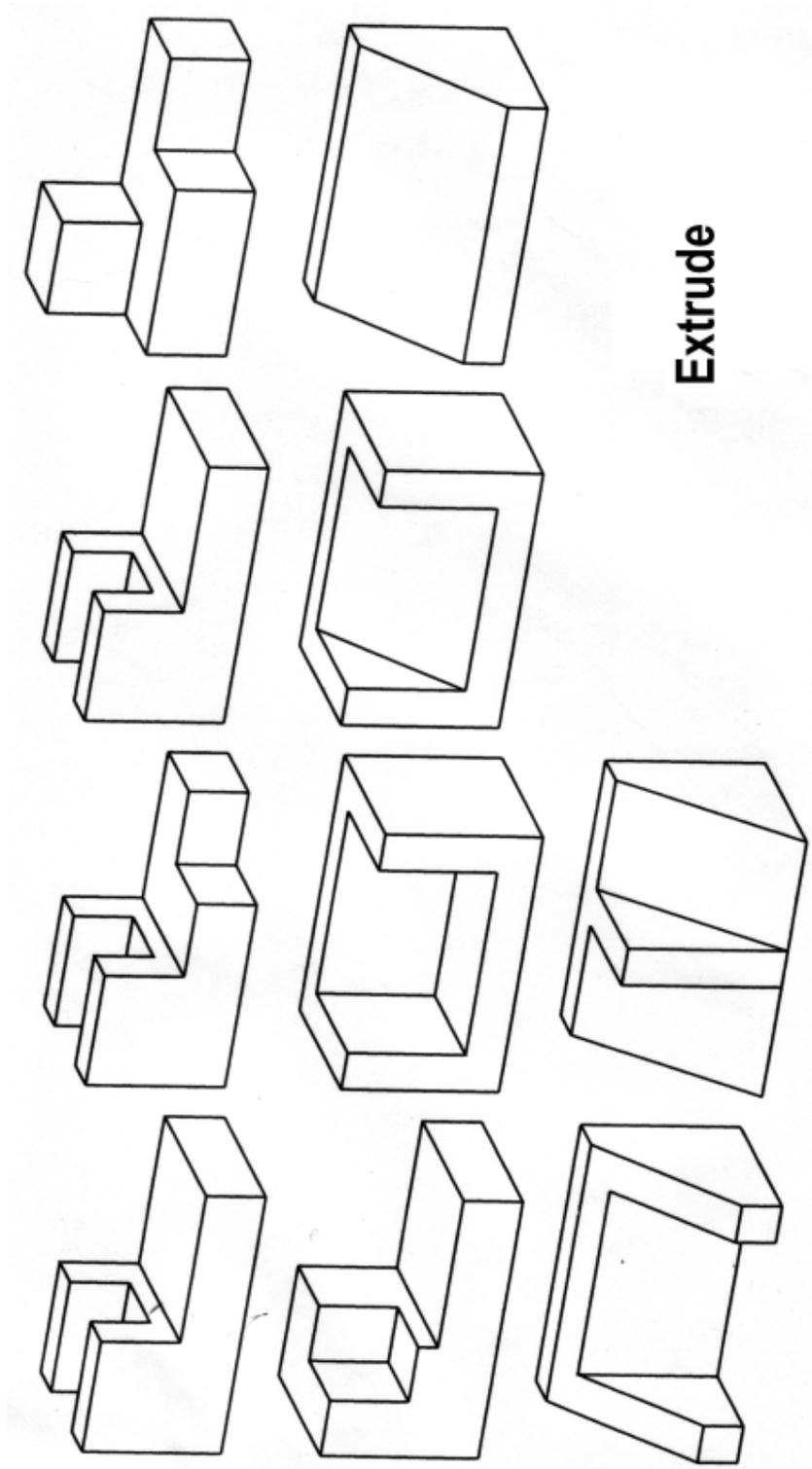






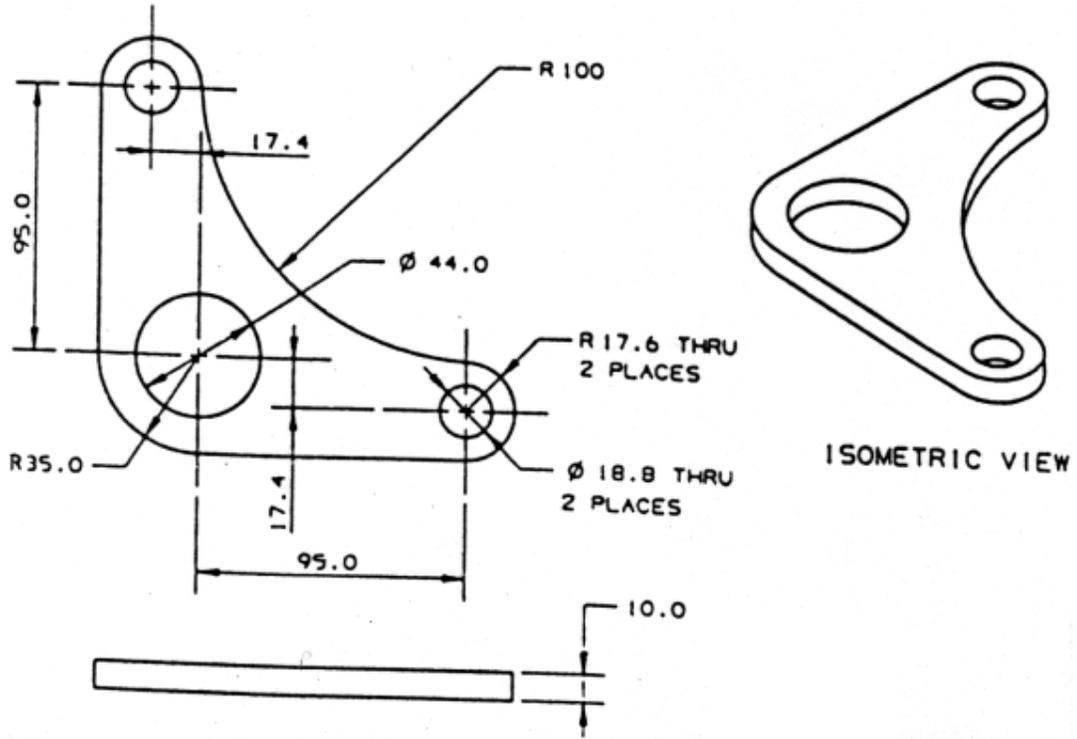


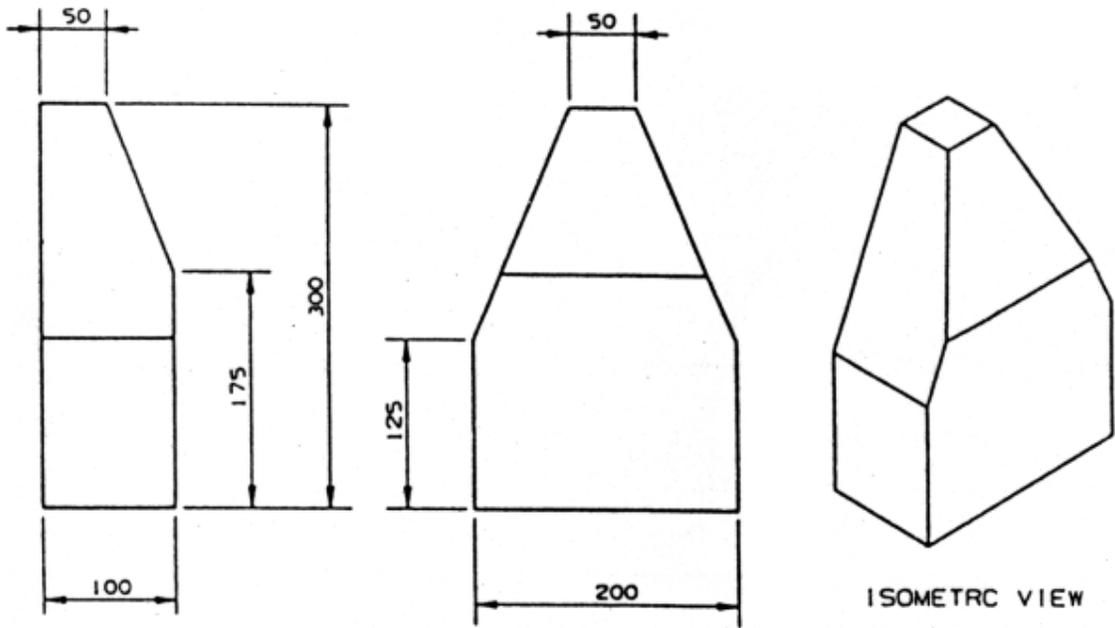
Part Modeling

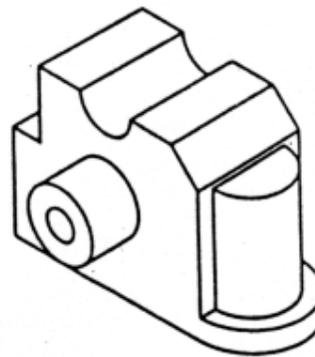
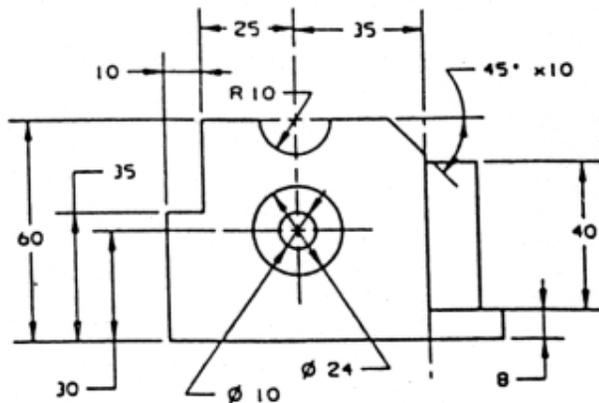
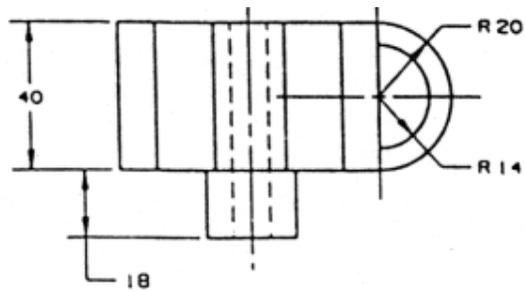
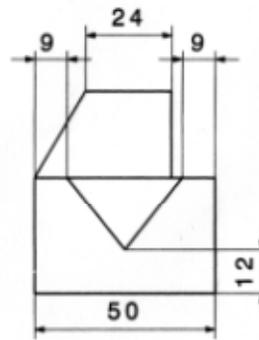
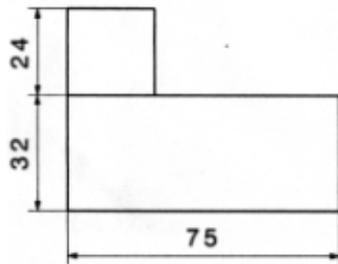
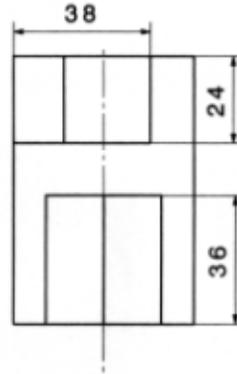
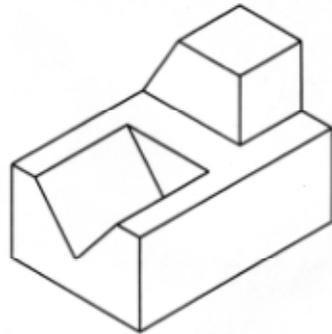


Extrude

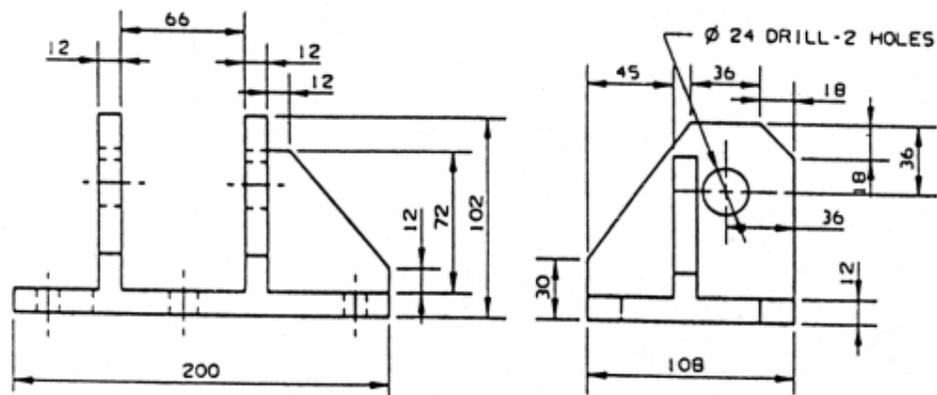
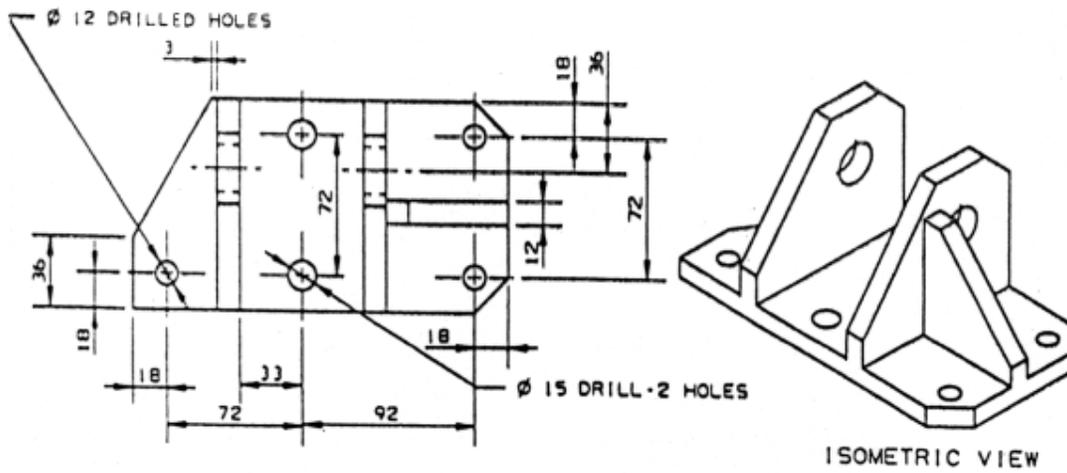
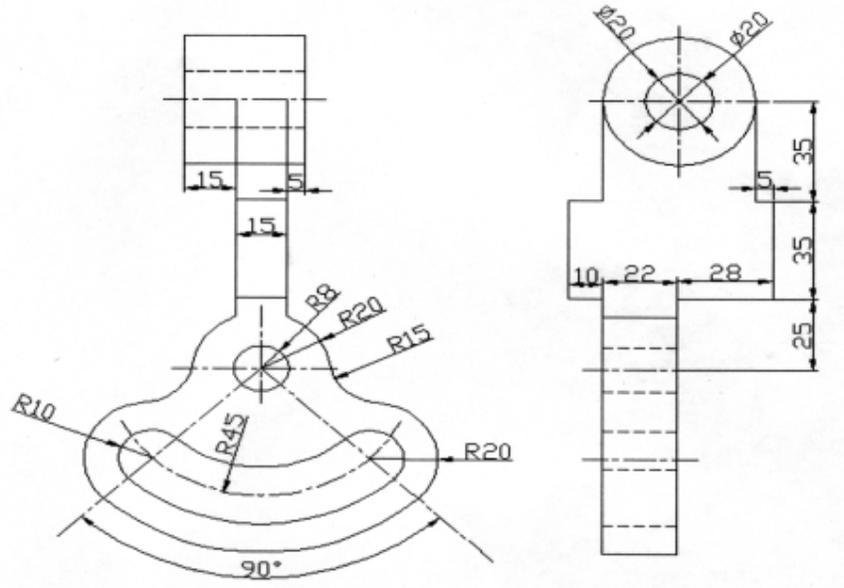


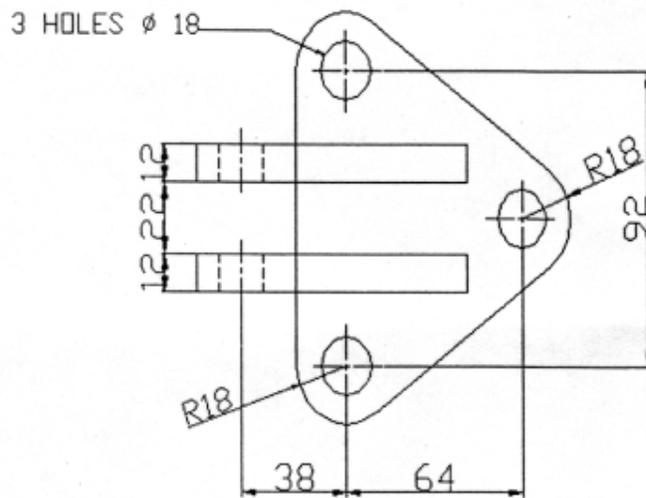
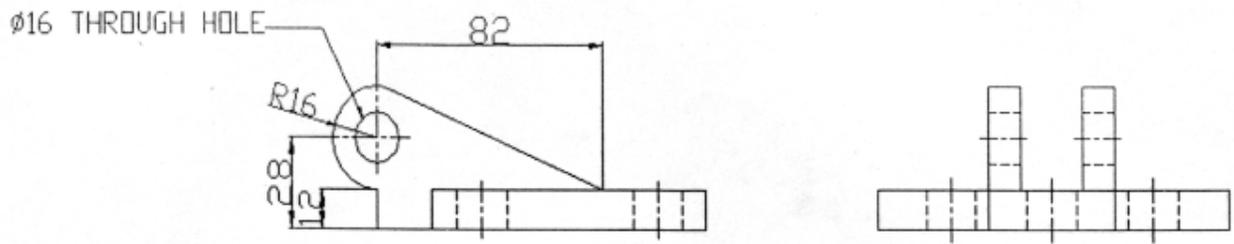
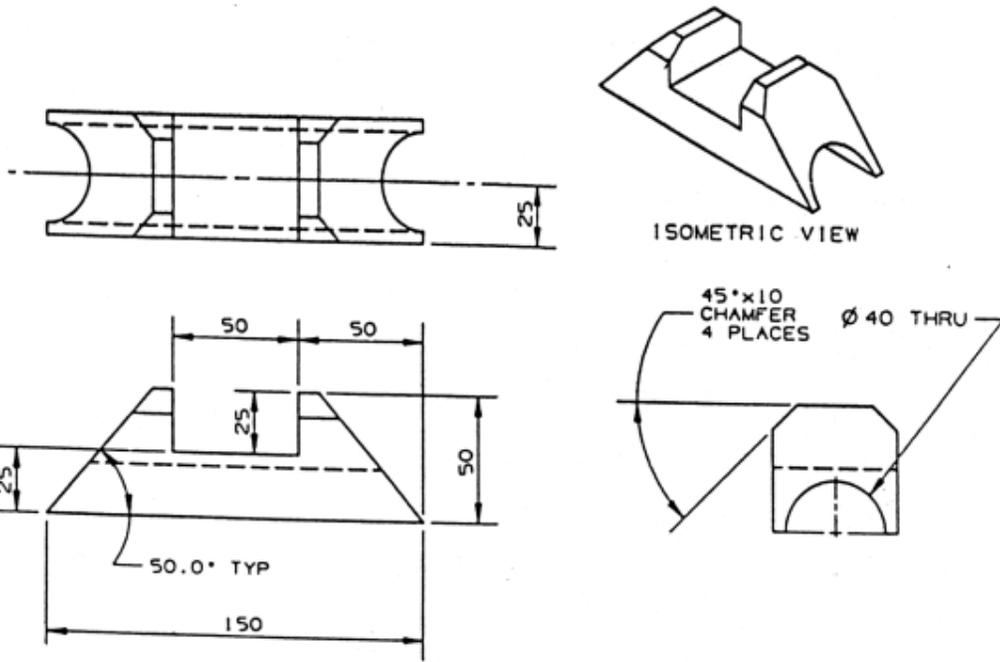


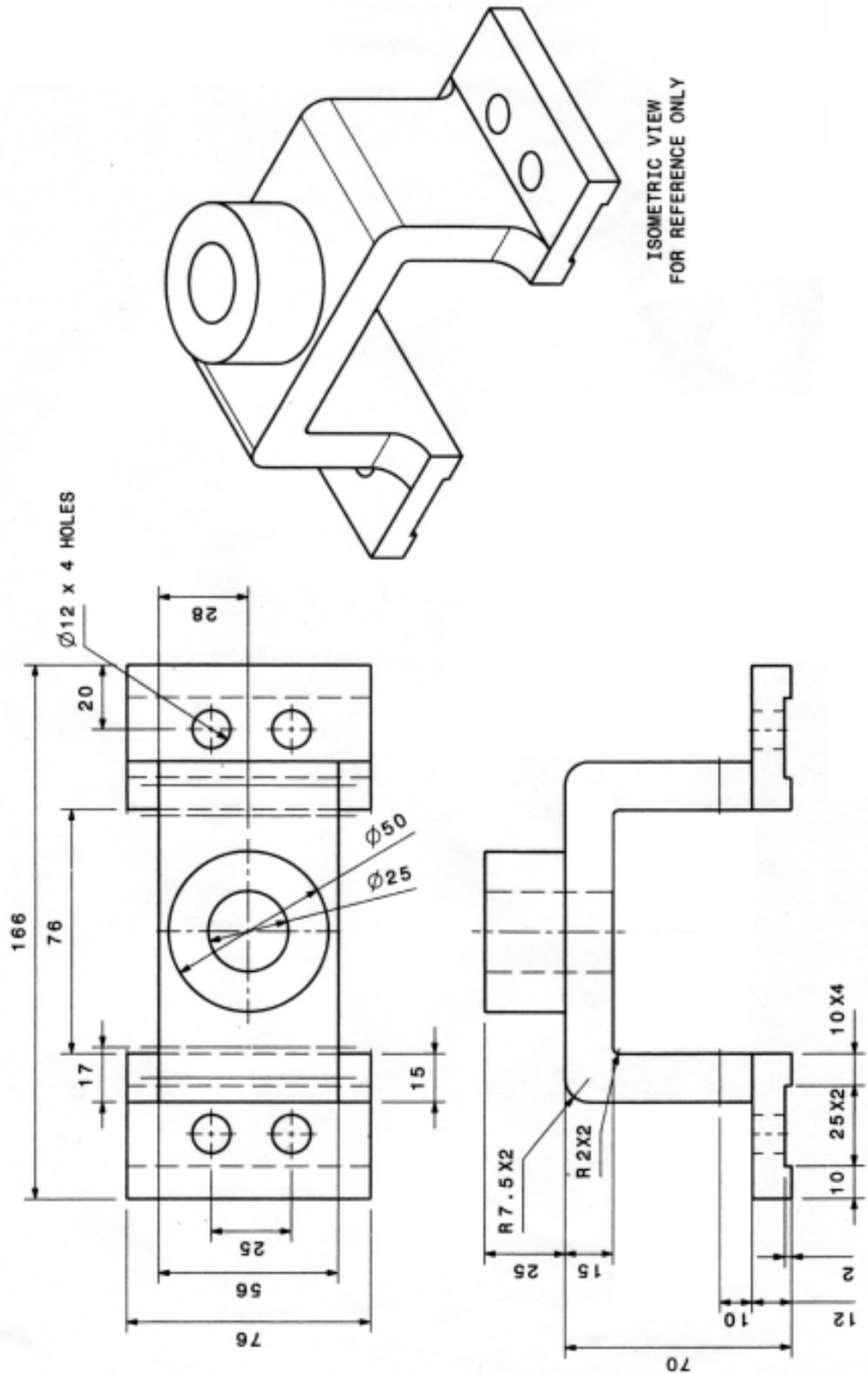




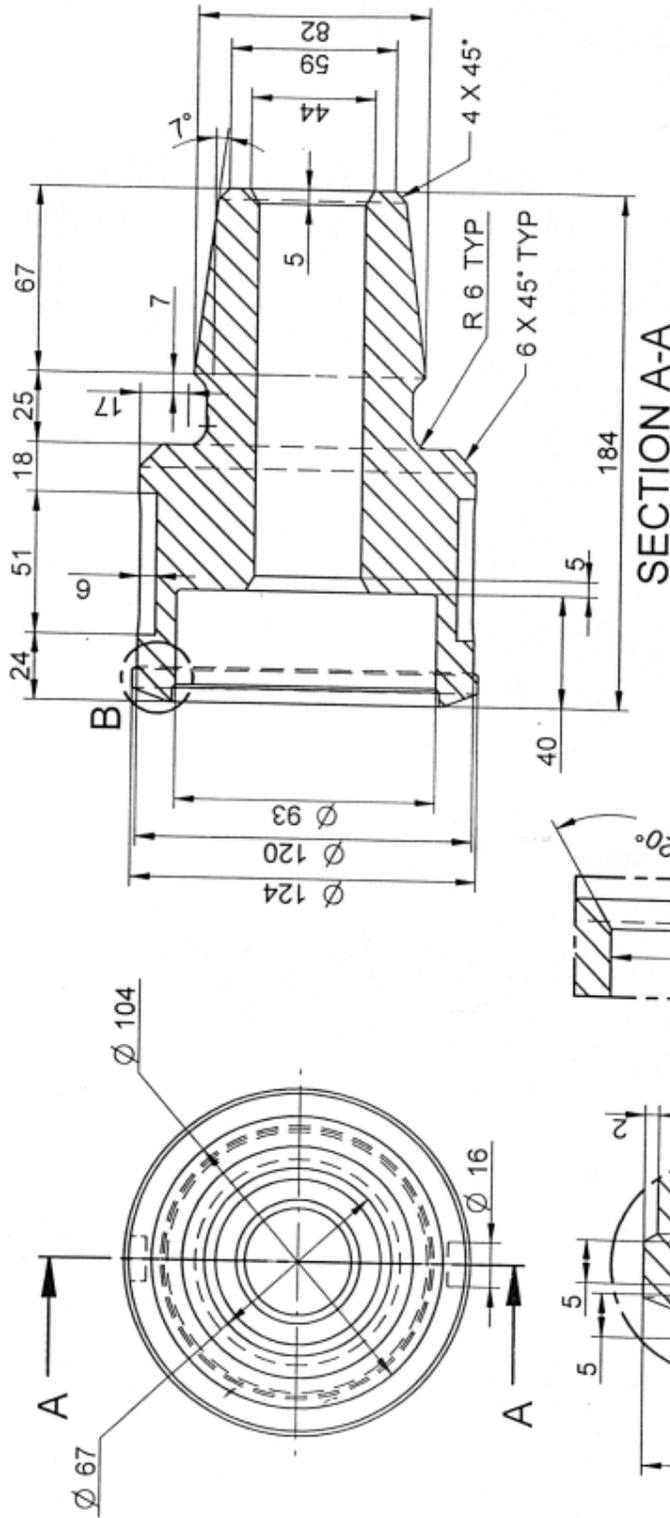
ISOMETRIC VIEW







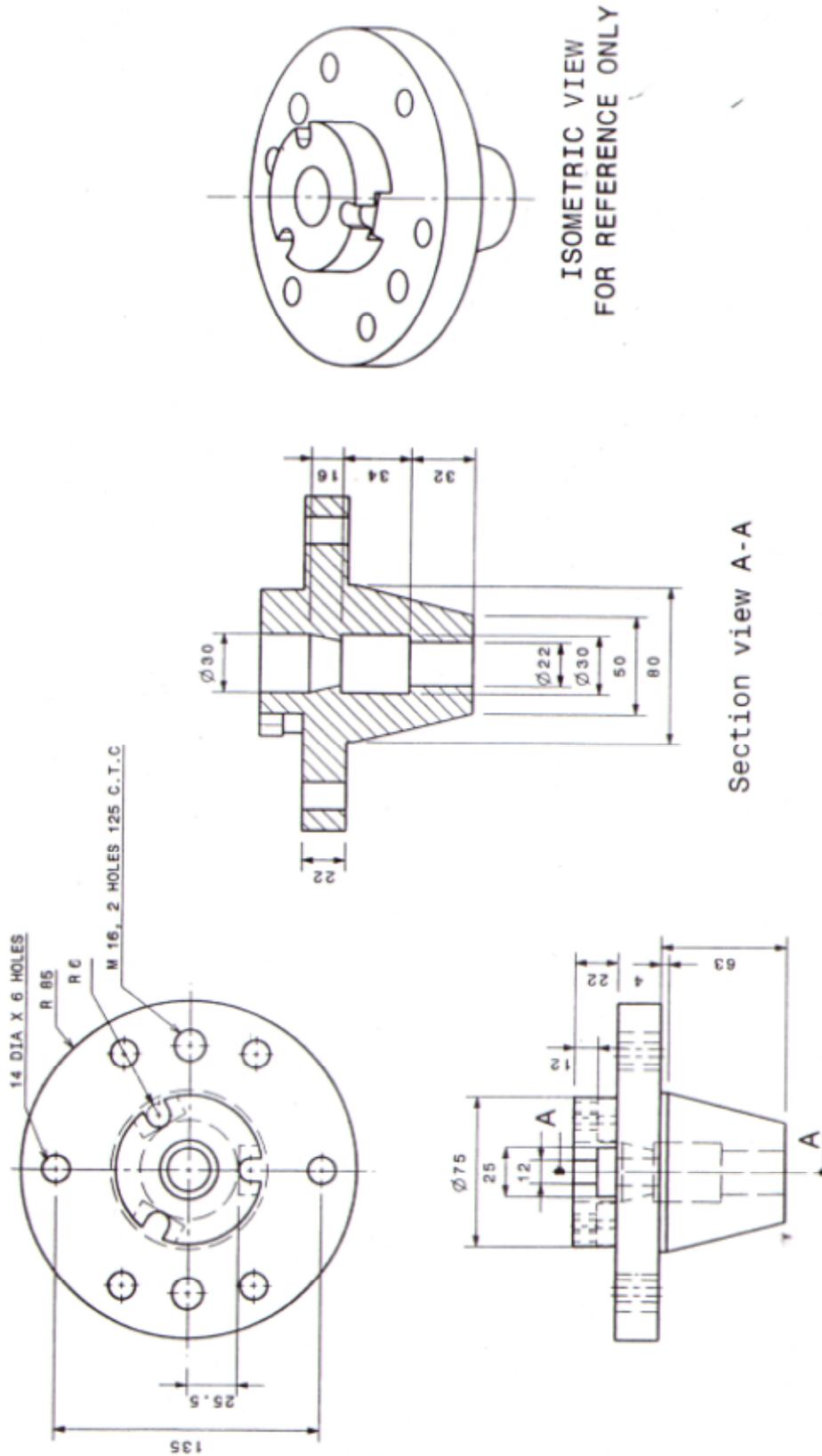




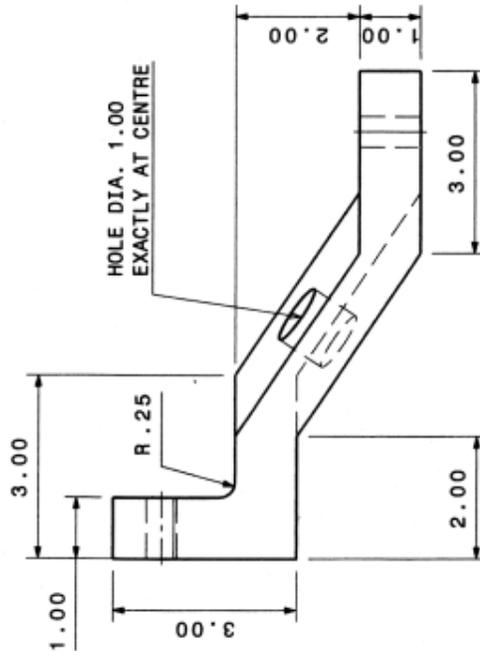
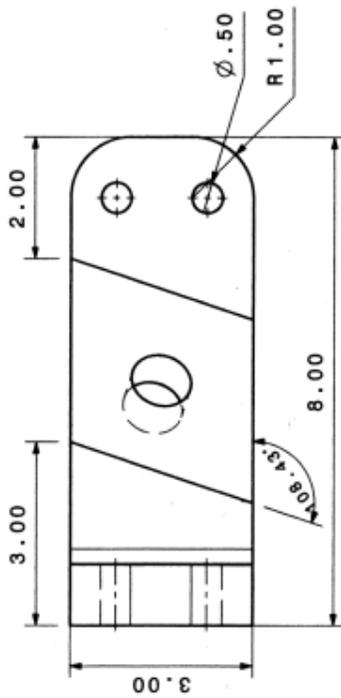
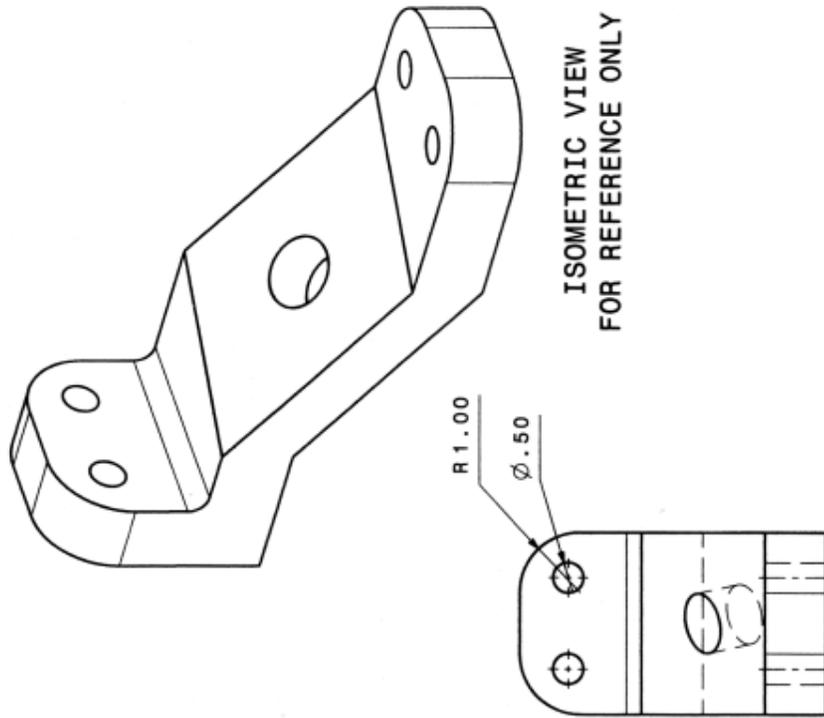
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.
 IF IN DOUBT ASK THE CONCERNED FACULTY

NAME	DATE
MUDASSIR	28/09/05
CHECKED BY	05/10/05
SANDEEP	TITLE : SHANK
SCALE : 1 : 2	DWG NO : IPWFLT04L03
	MATERIAL : C.I
	REV : 1
	SHEET NO : 1 OF 1

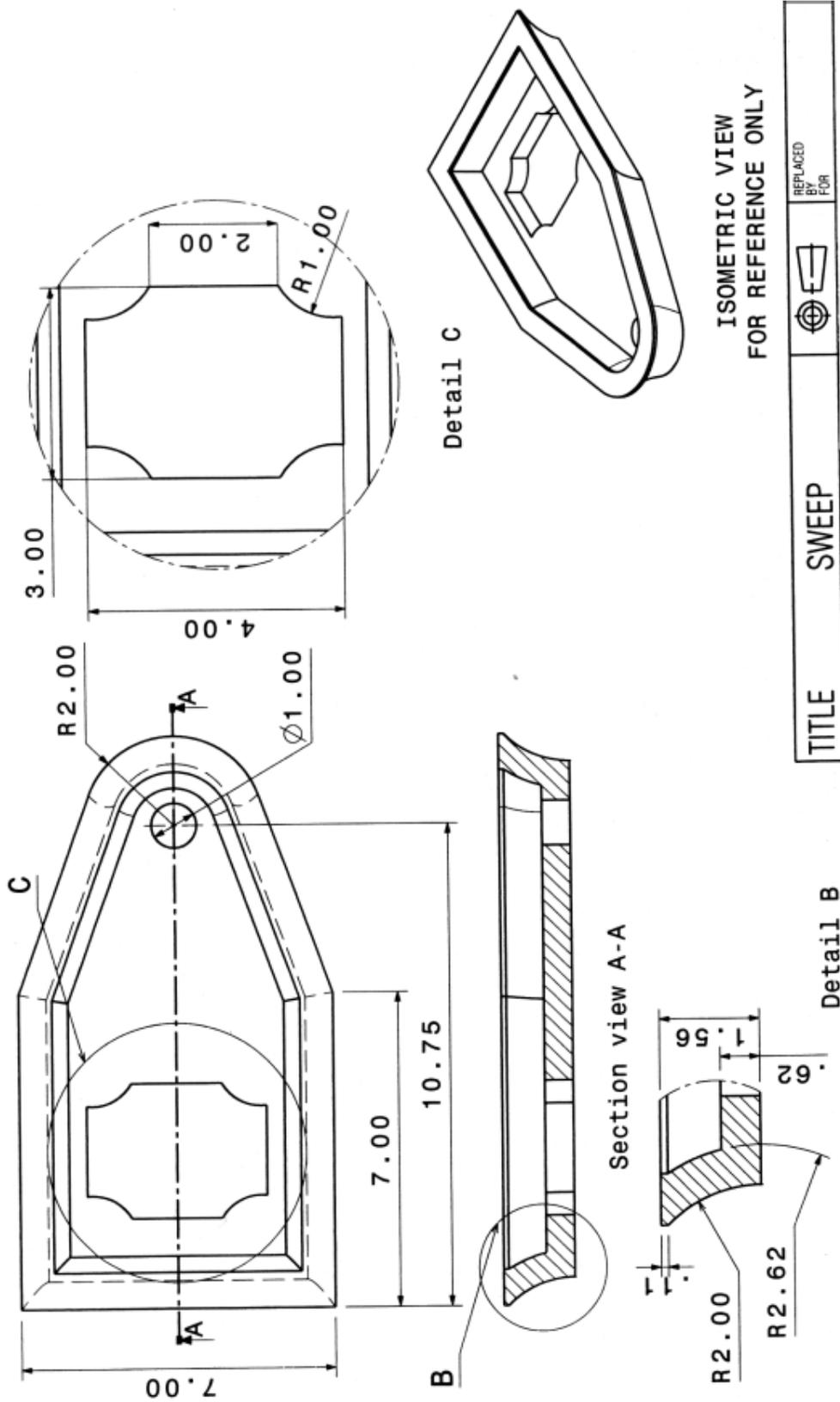


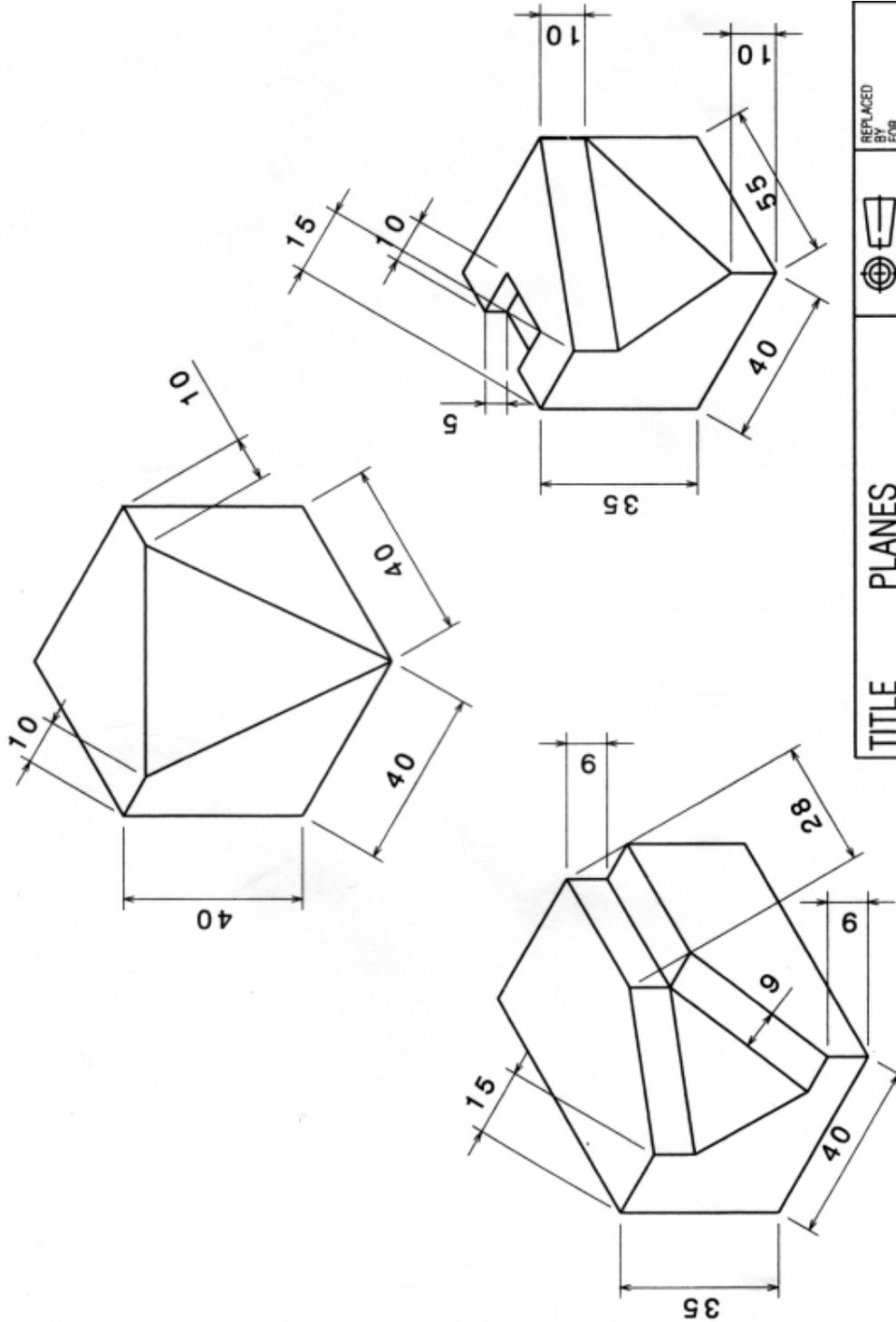






TITLE	Sweep	REPLACED BY	FOR
-------	-------	-------------	-----

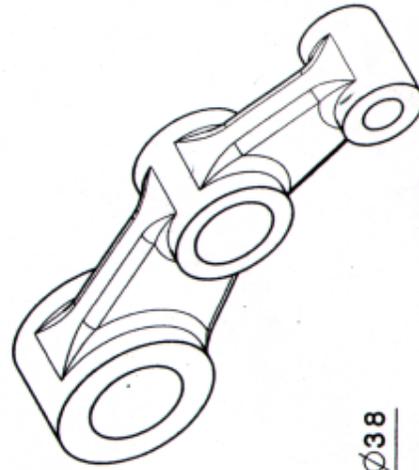
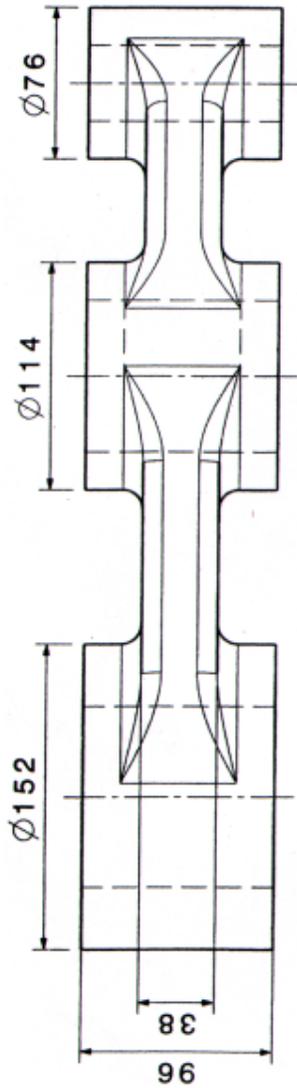




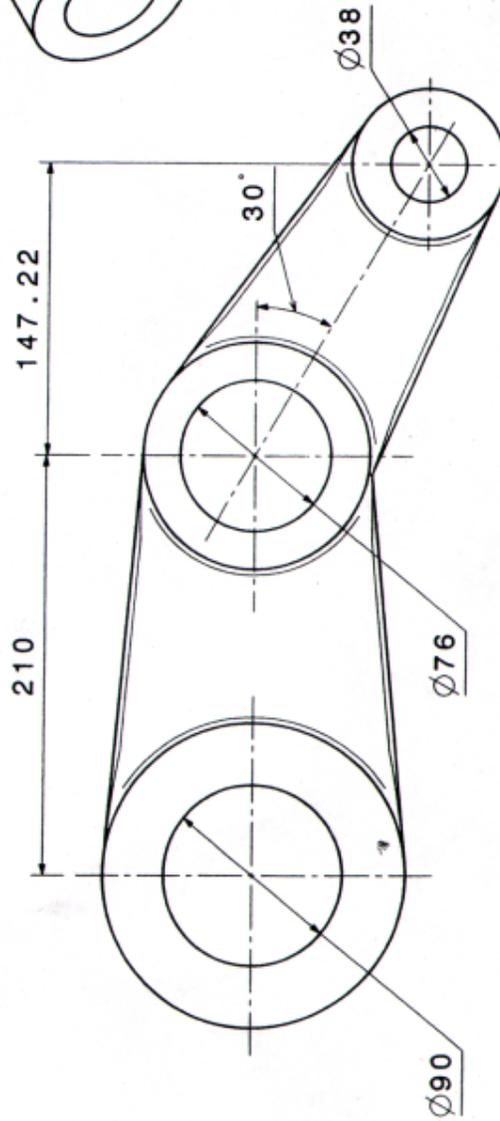
REPLACED BY FOR
TITLE PLANES

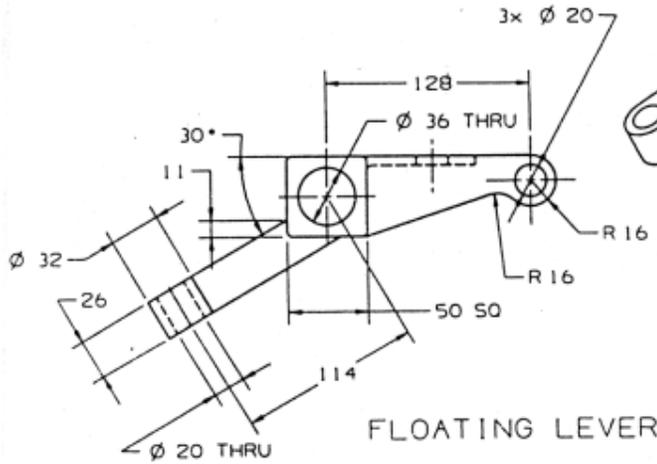
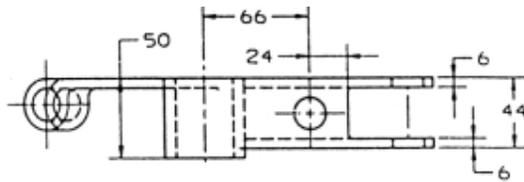


FILLETS AND ROUNDS R 10



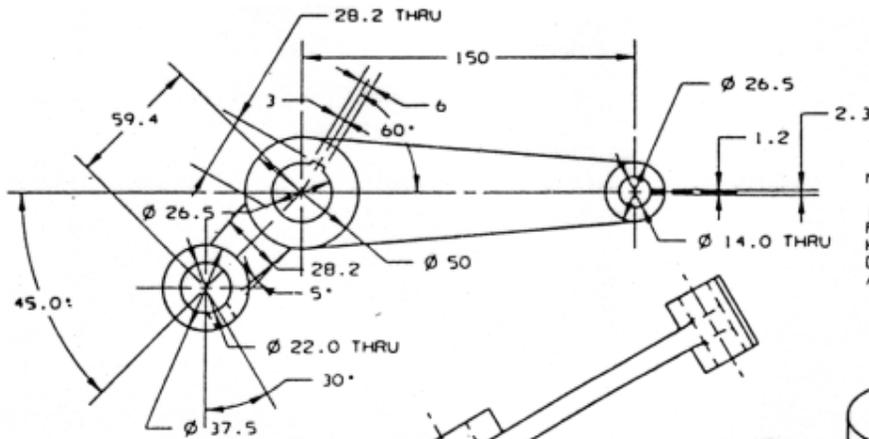
ISOMETRIC VIEW
 FOR REFERENCE ONLY





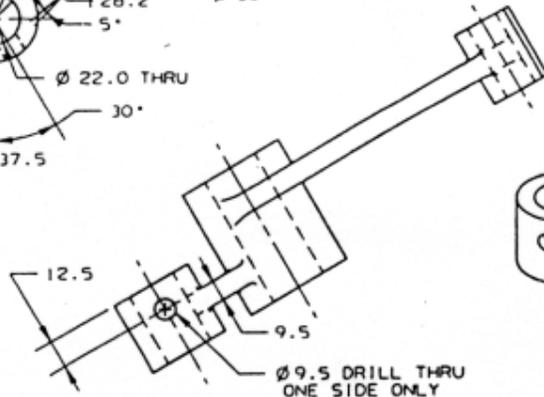
PICTORIAL VIEW

FLOATING LEVER

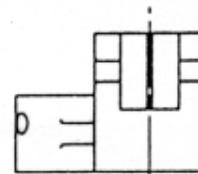
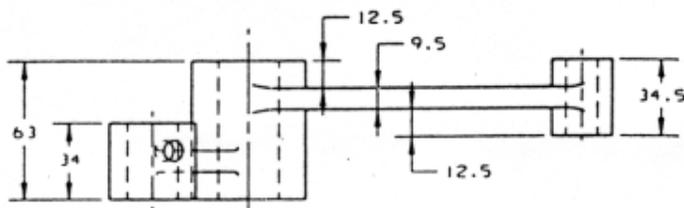


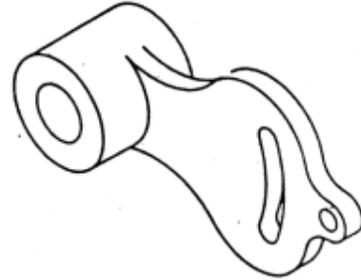
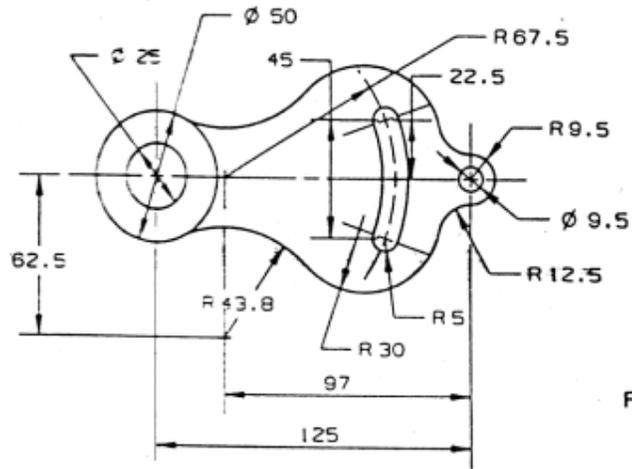
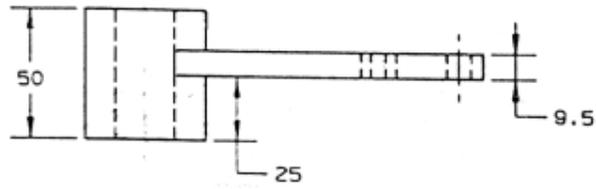
NOTES:

- 1 REQUIRED
- FILLETS R3 - ROUNDS R1.5
- HEATTREAT-CARBURIZE AND HARDEN
- DRAFT 5°
- ALLOW 2.5 STOCK FOR FINISH
- CASTING TO BE CLEAN AND FREE FROM IMPERFECTIONS



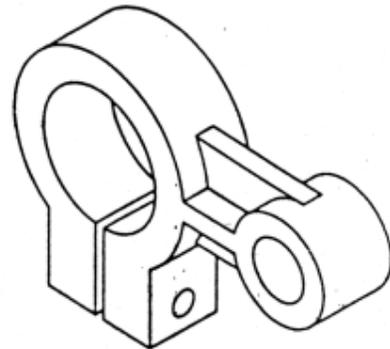
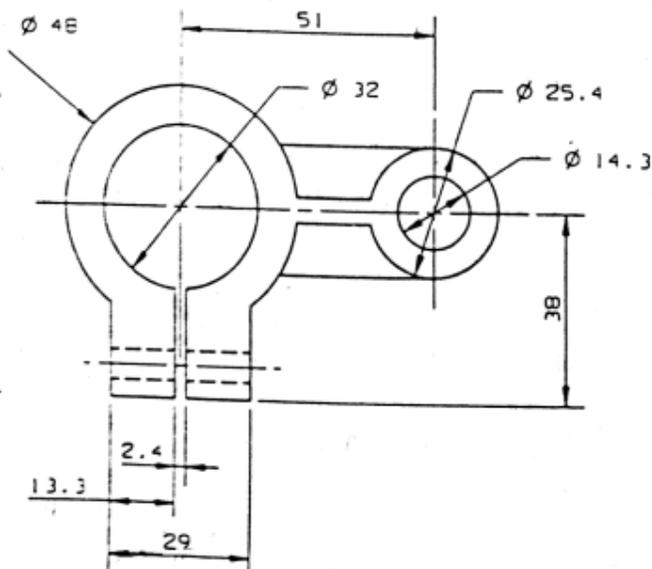
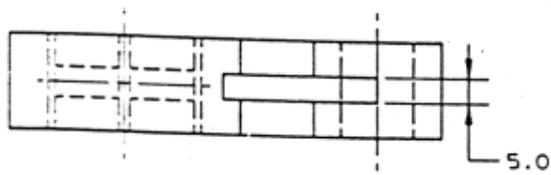
ISOMETRIC VIEW



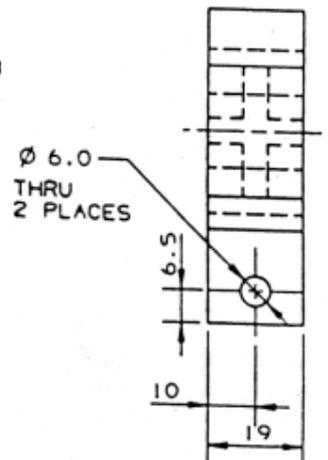


ISOMETRIC VIEW

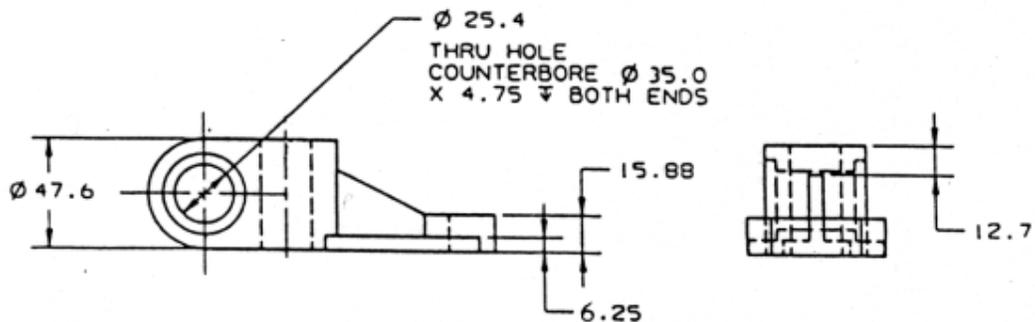
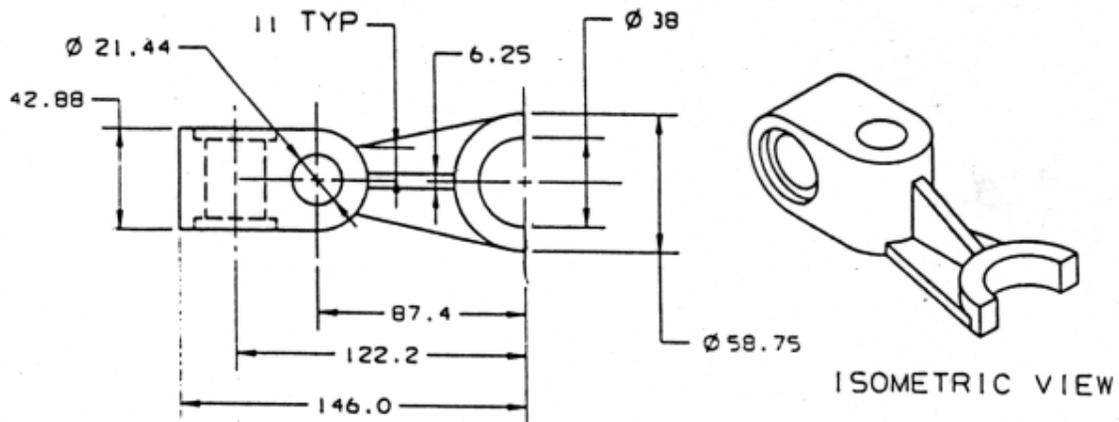
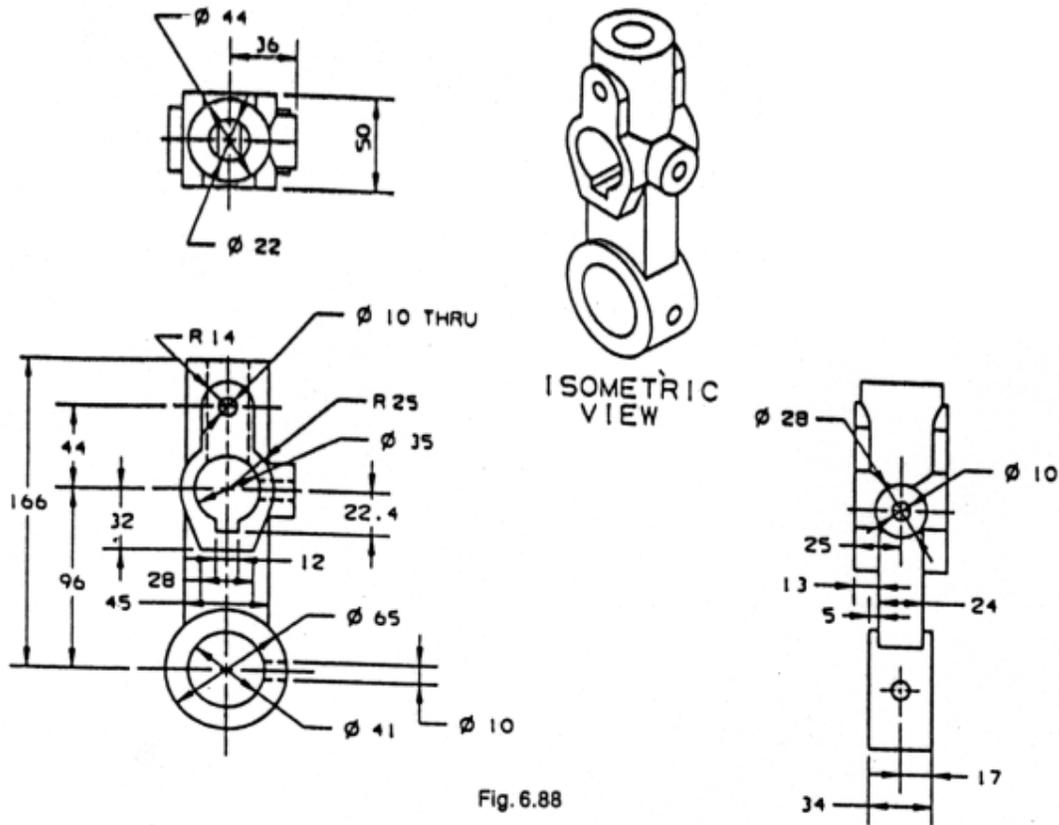
Fig 8.26

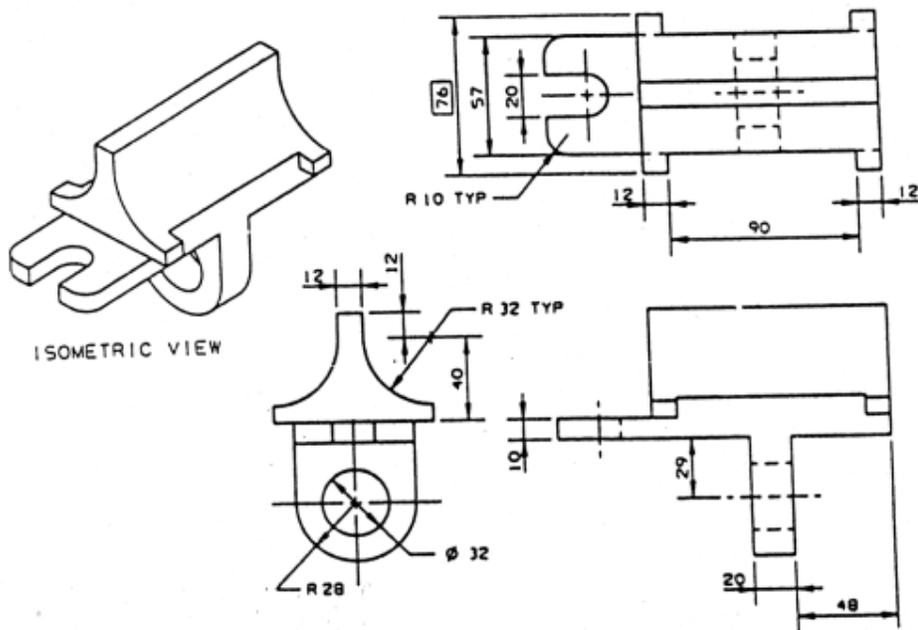
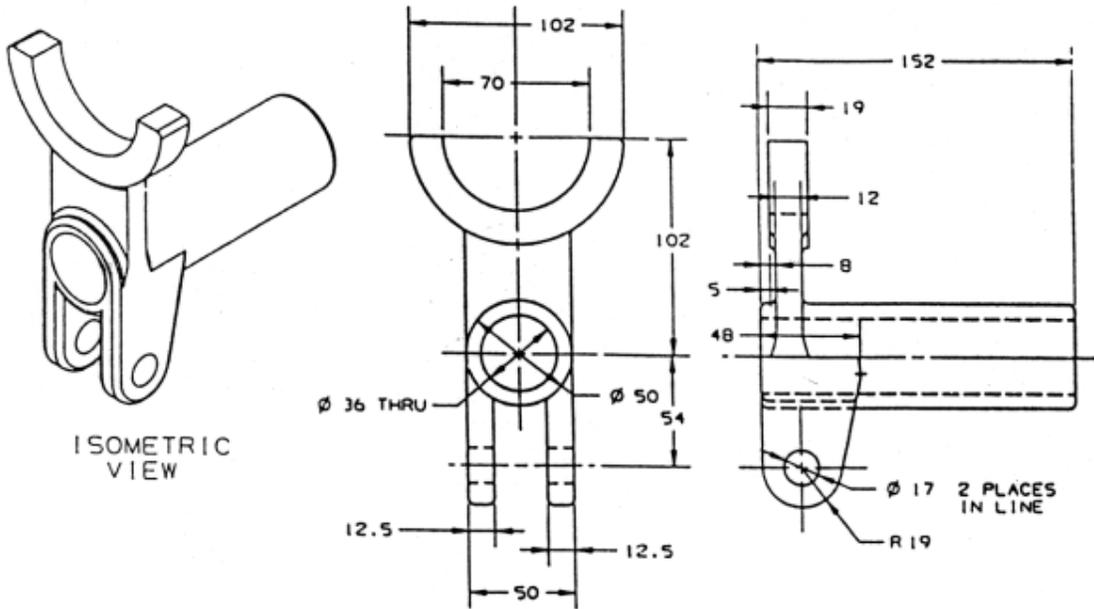


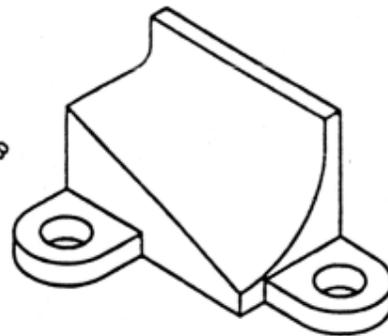
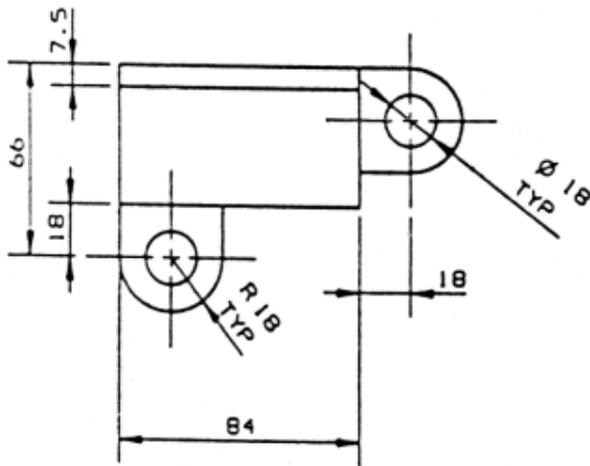
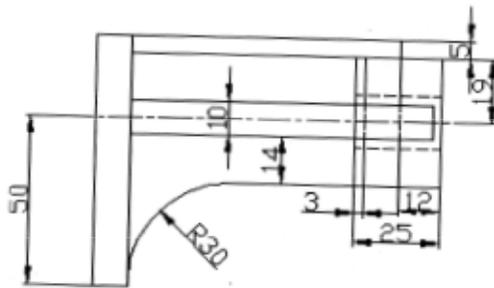
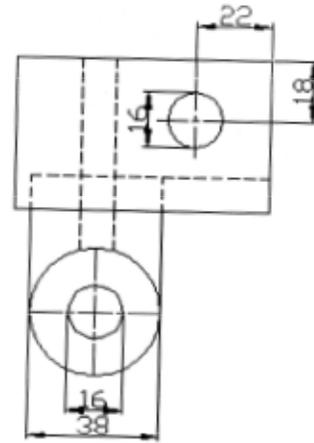
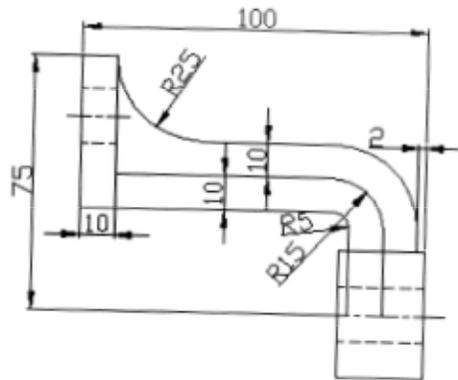
ISOMETRIC VIEW



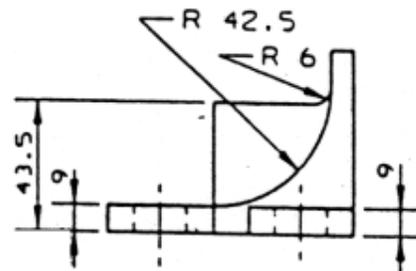
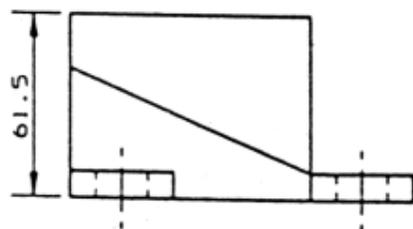




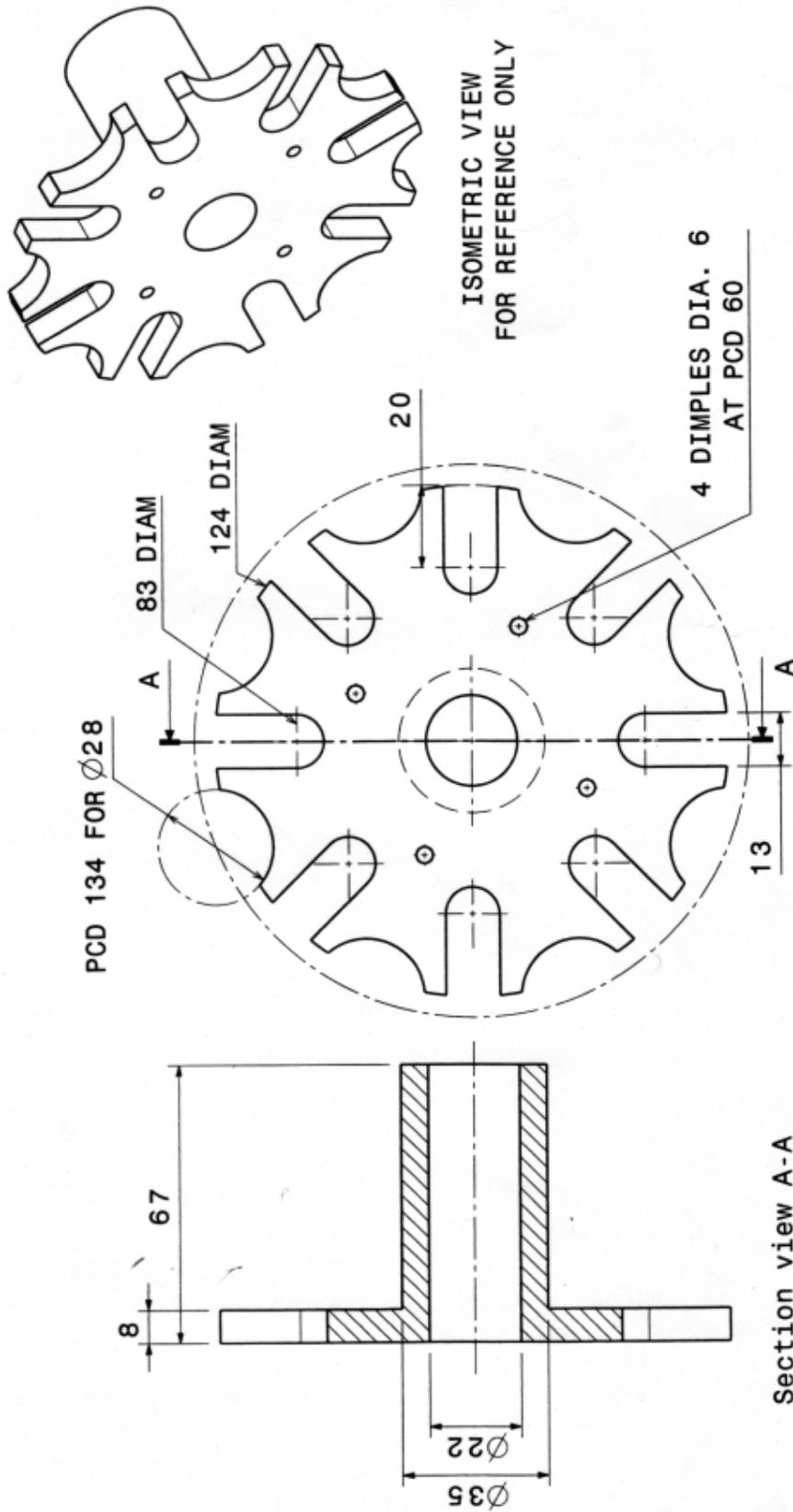




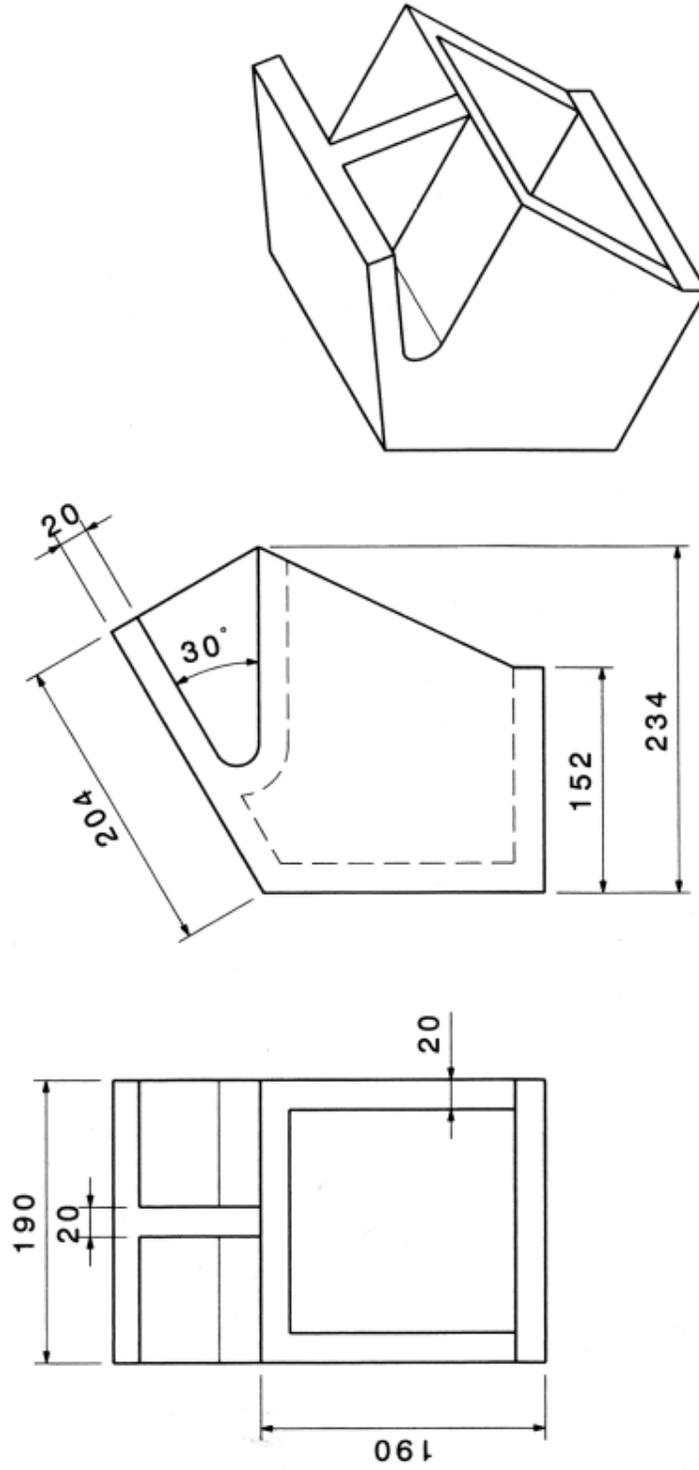
ISOMETRIC VIEW







REPLACED BY FOR	
TITLE	PATTERN



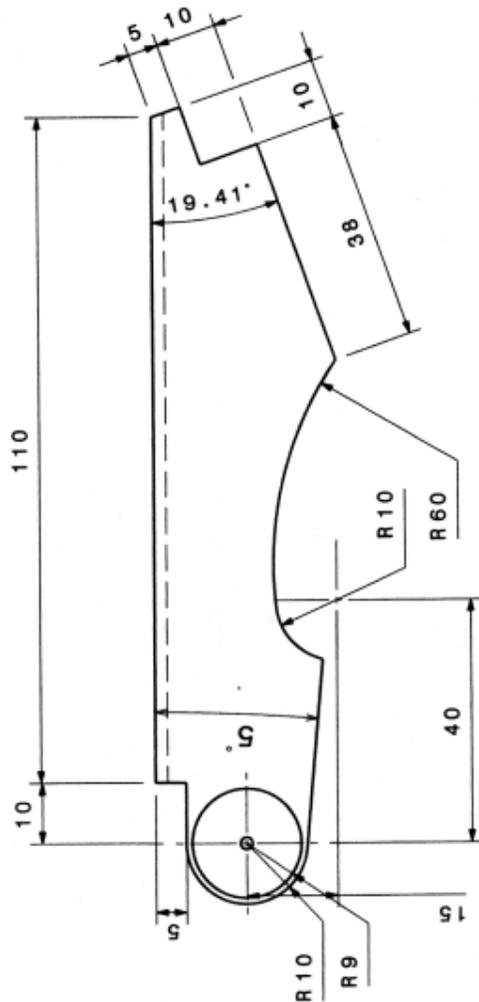
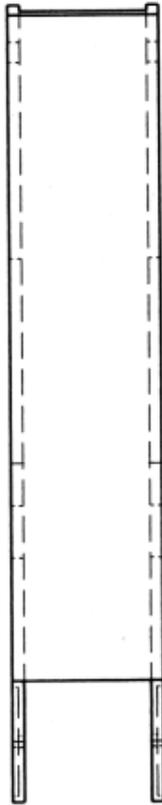
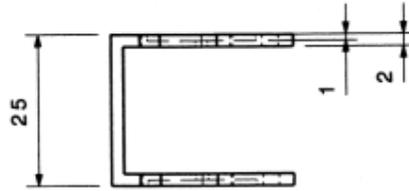
ISOMETRIC VIEW
 FOR REFERENCE ONLY

TITLE	Shell	REPLACED BY FOR
-------	-------	-----------------

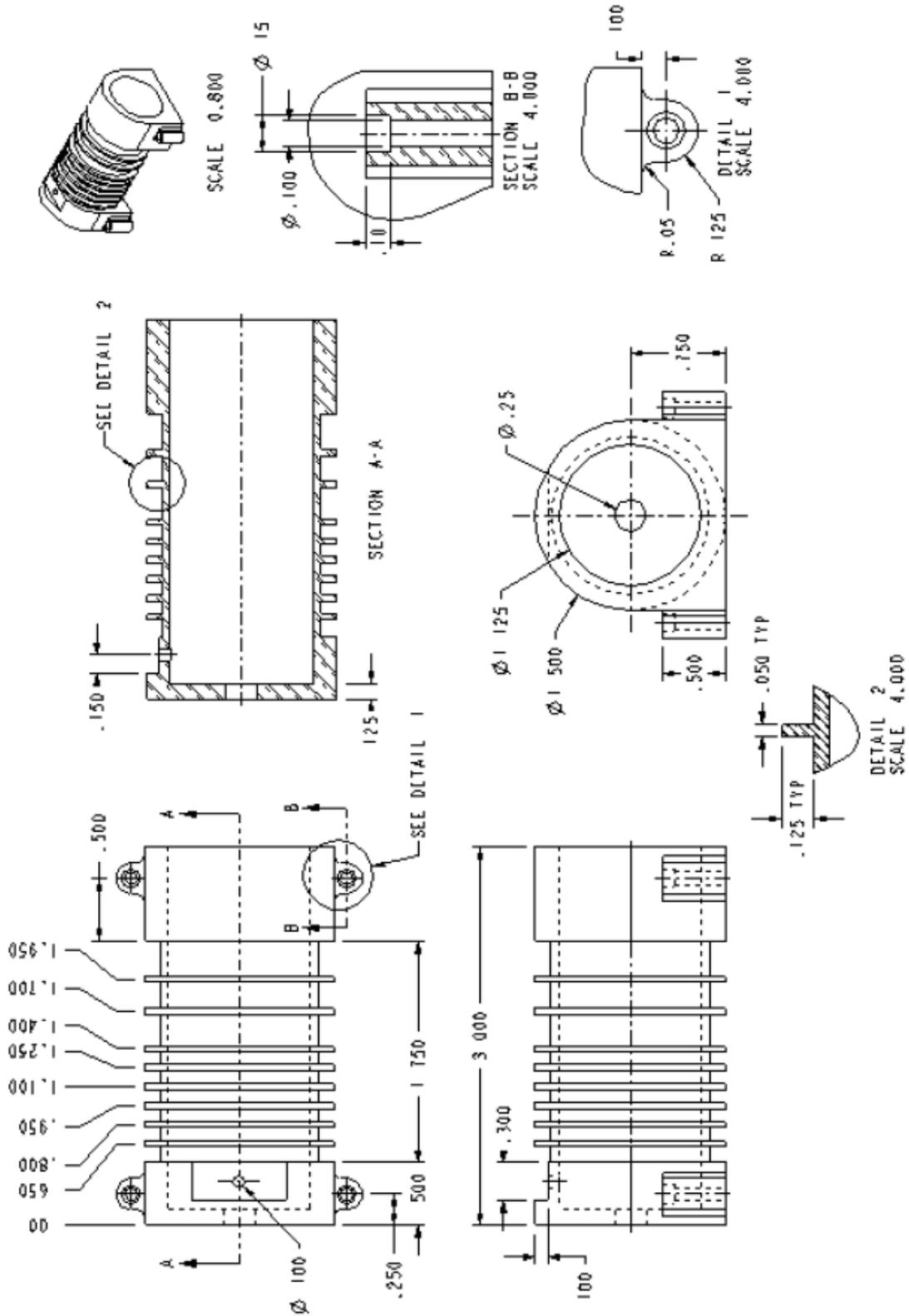


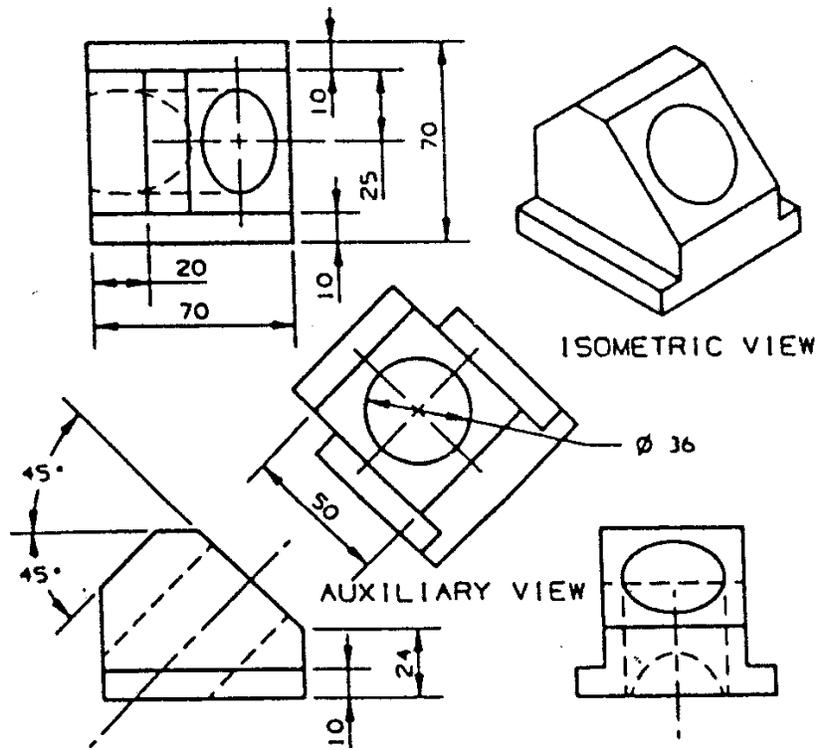


ISOMETRIC VIEW
 FOR REFERENCE ONLY



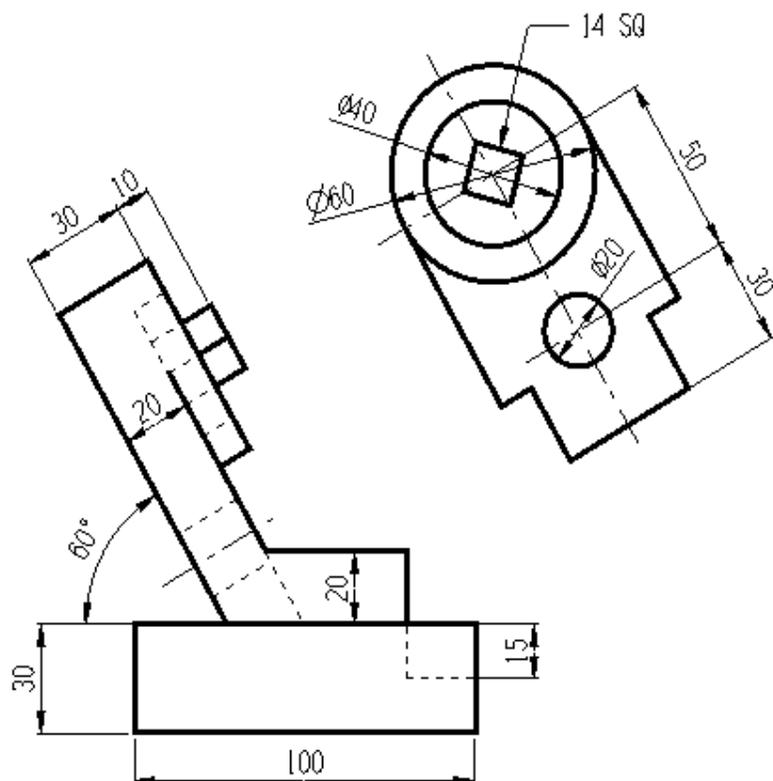
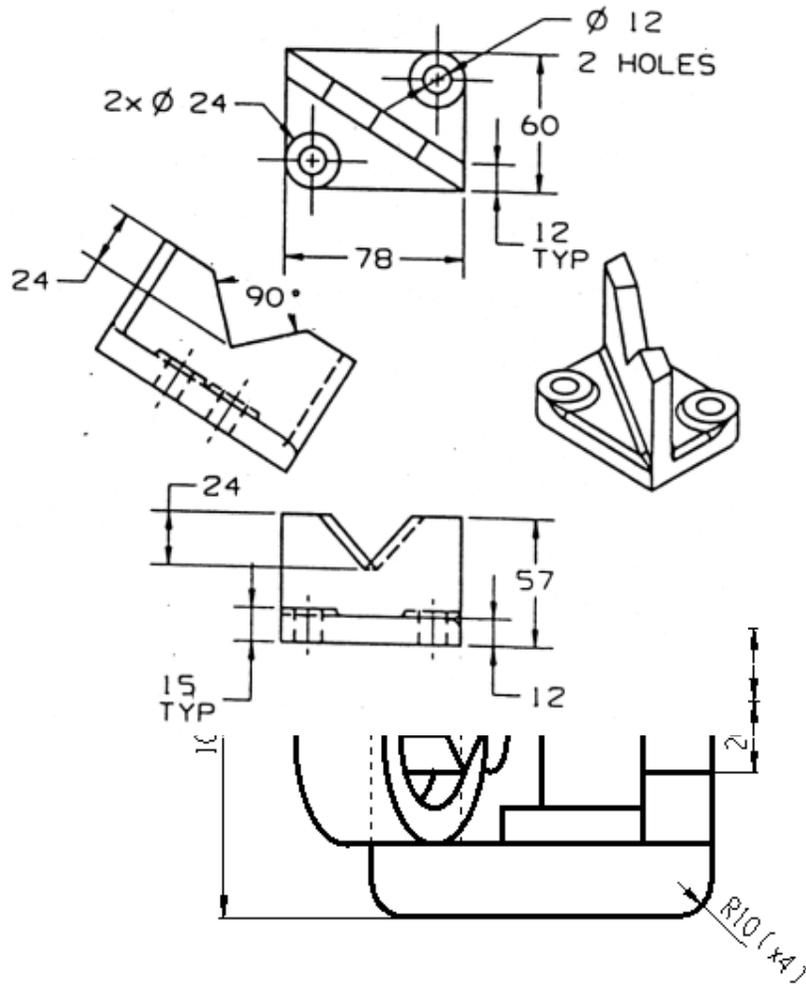
TITLE	SHELL
	REPLACED BY FOR

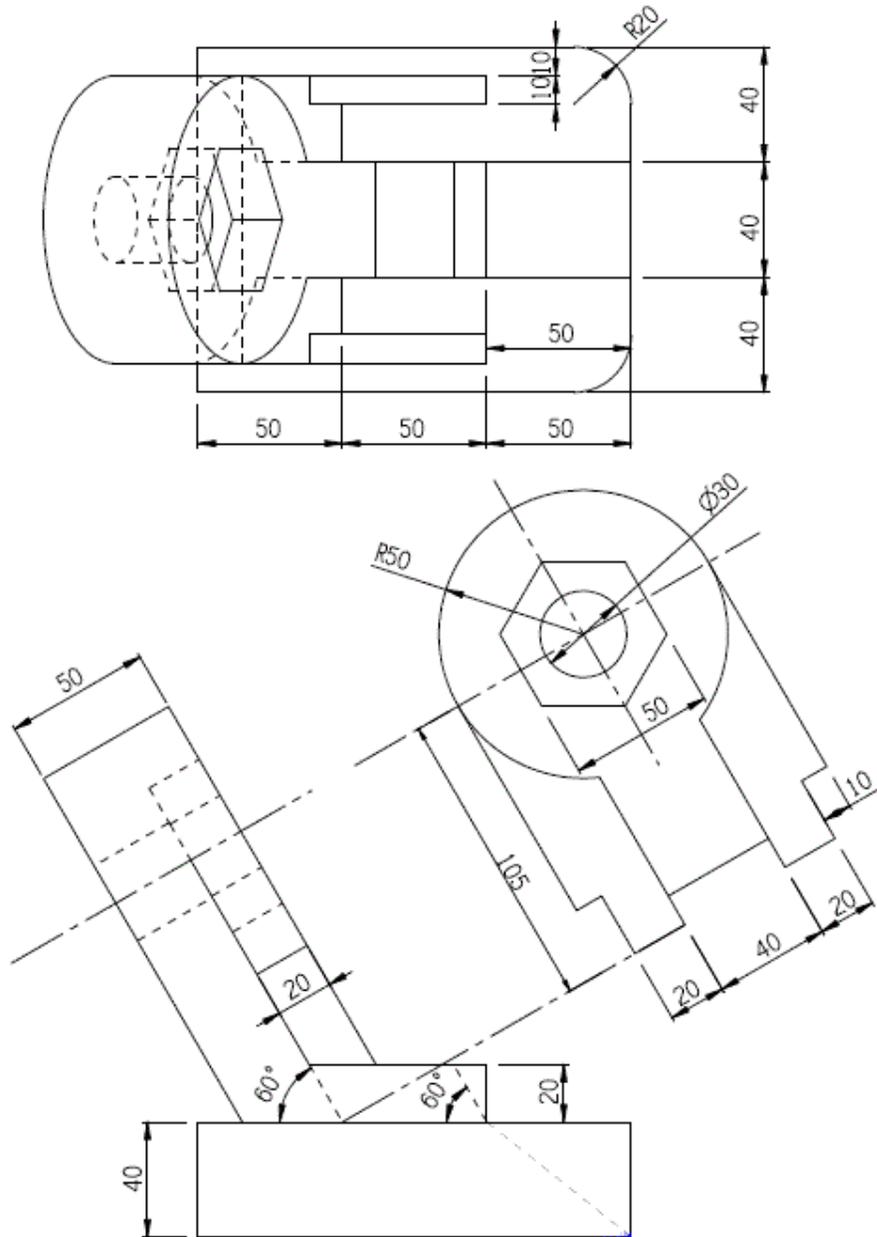


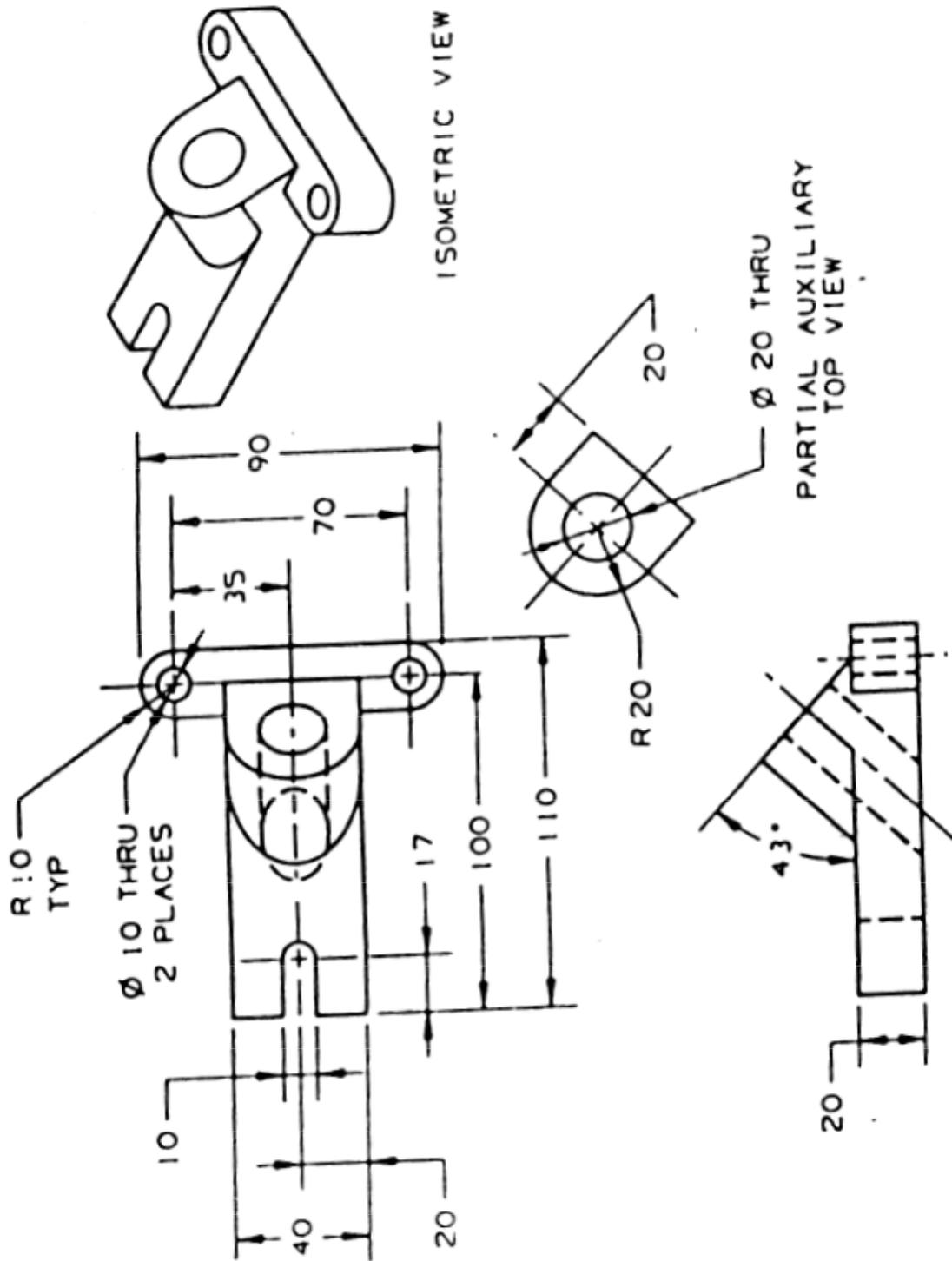


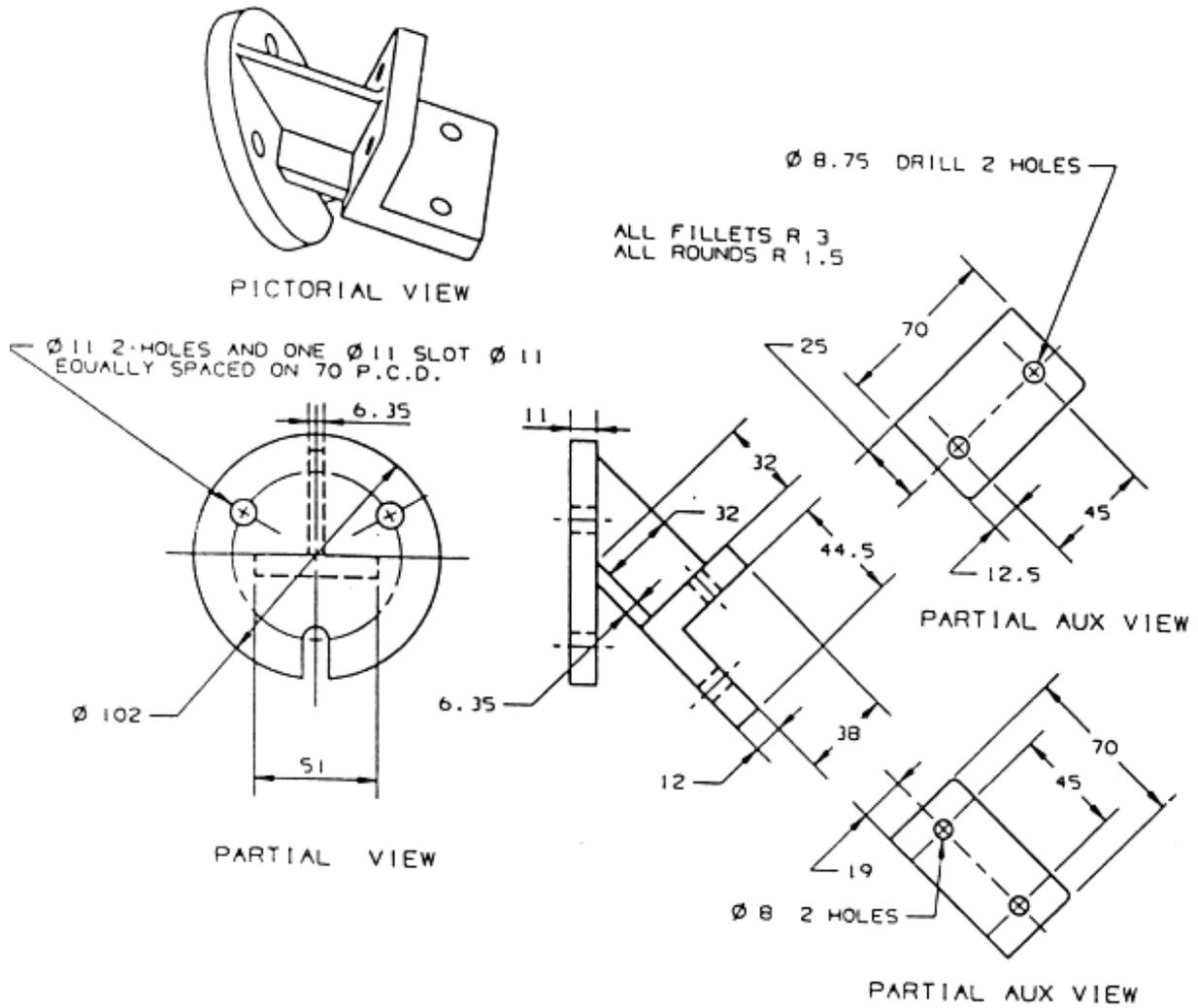
IFS ACADEMY

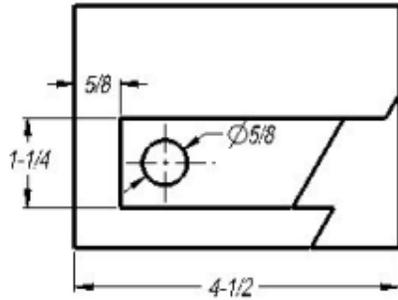
Training for the Future!
CAD Workshop Manual Ver. 1.2



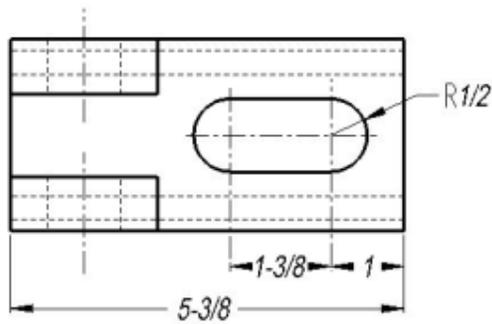
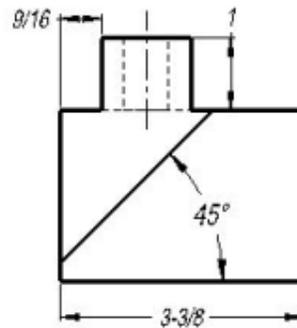
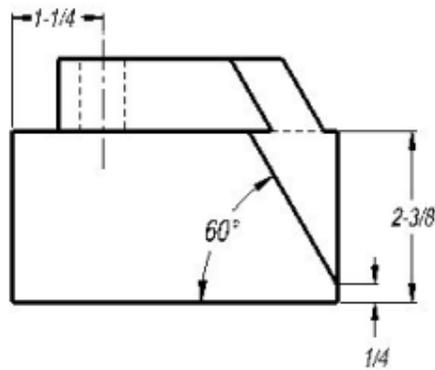




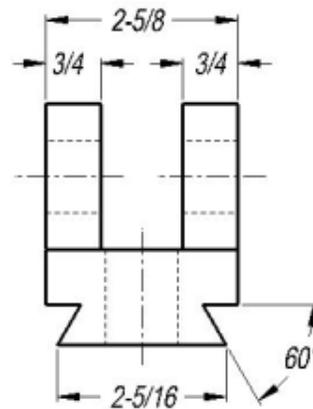
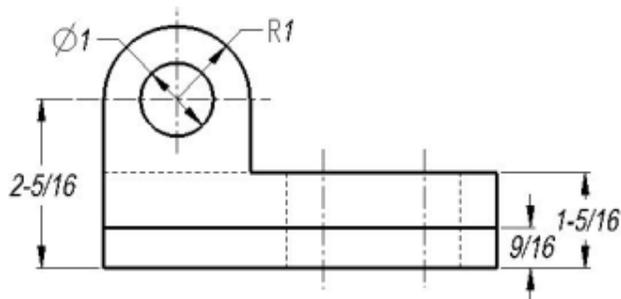


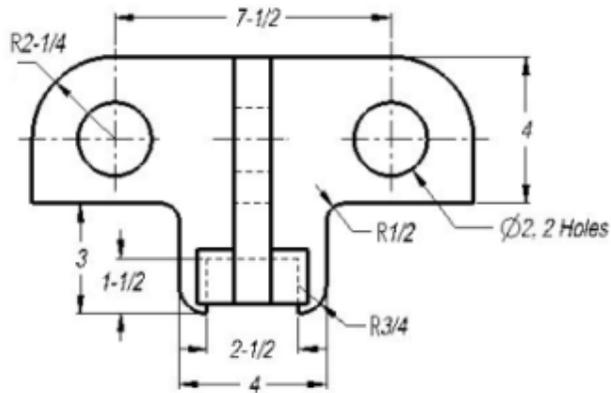


Wedge Block

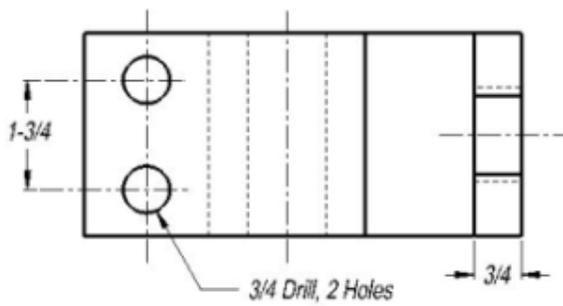
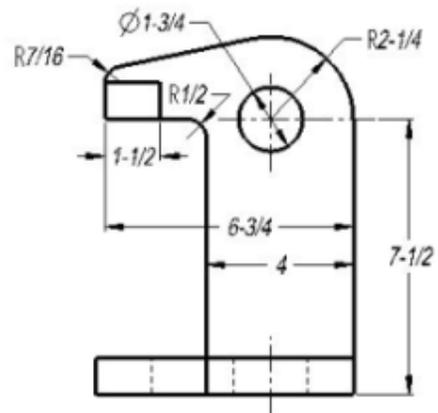
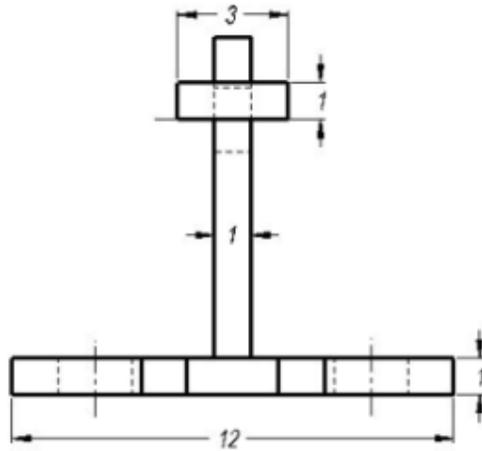


Dovetail Bracket

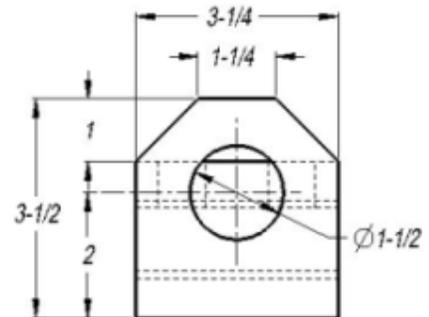
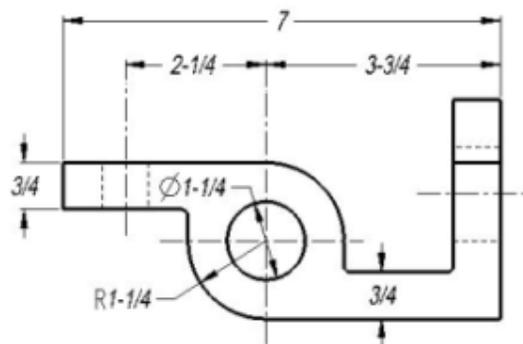


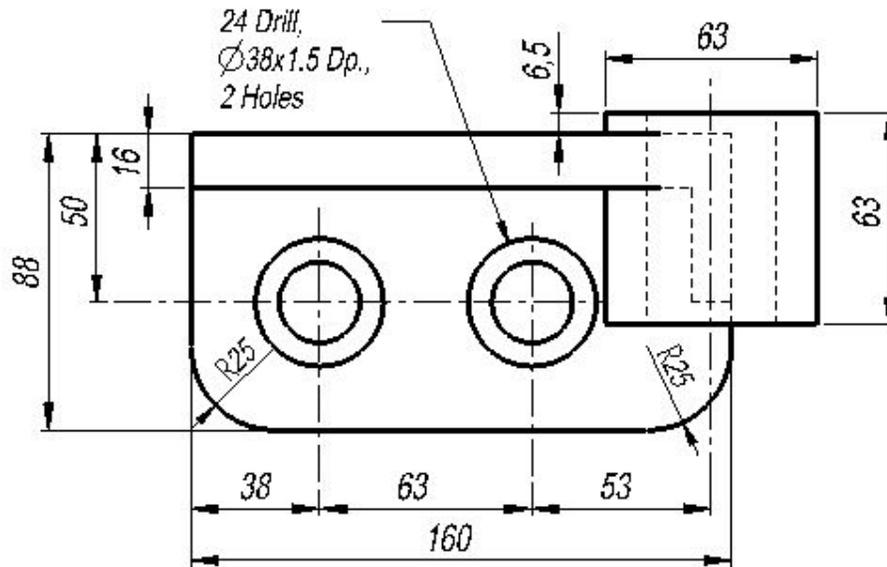


Slide Stop

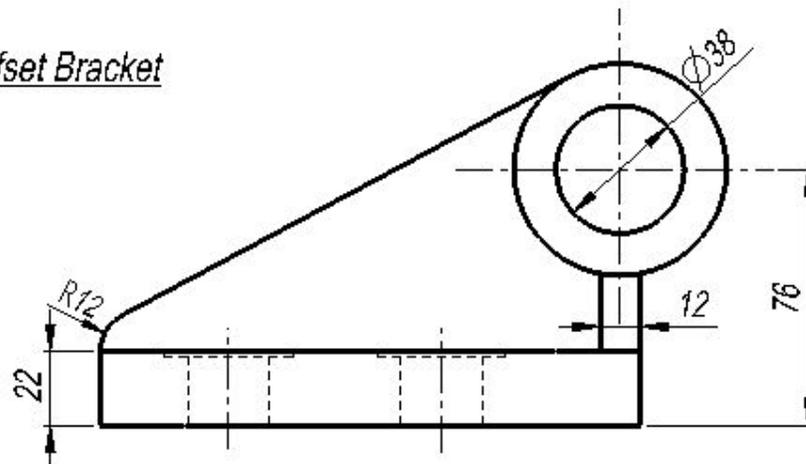


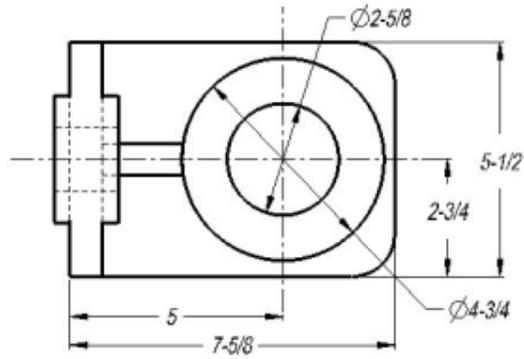
Bracket



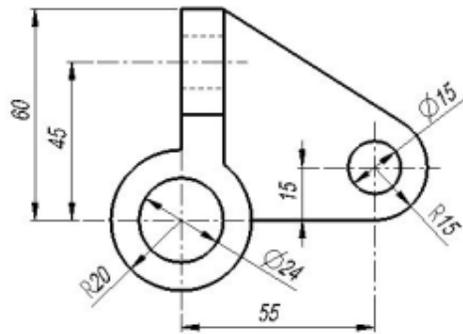
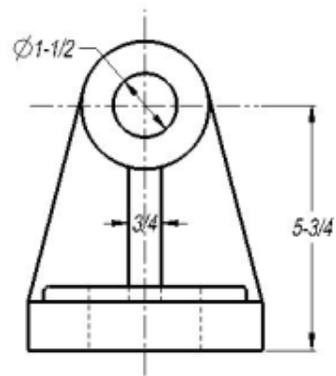
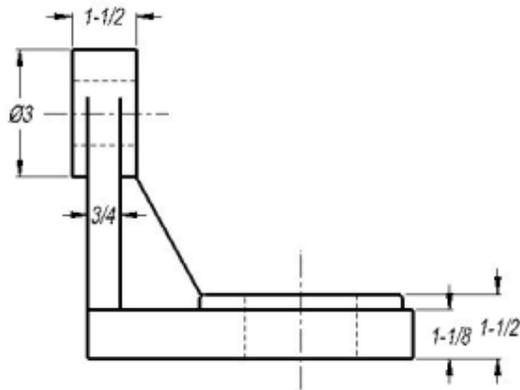


Offset Bracket

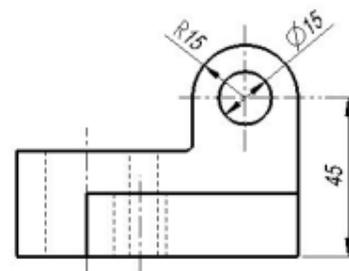
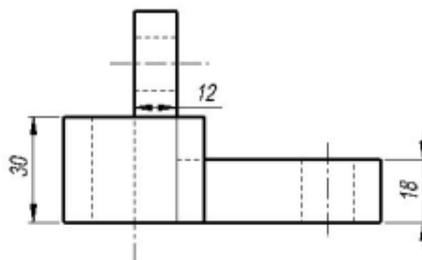


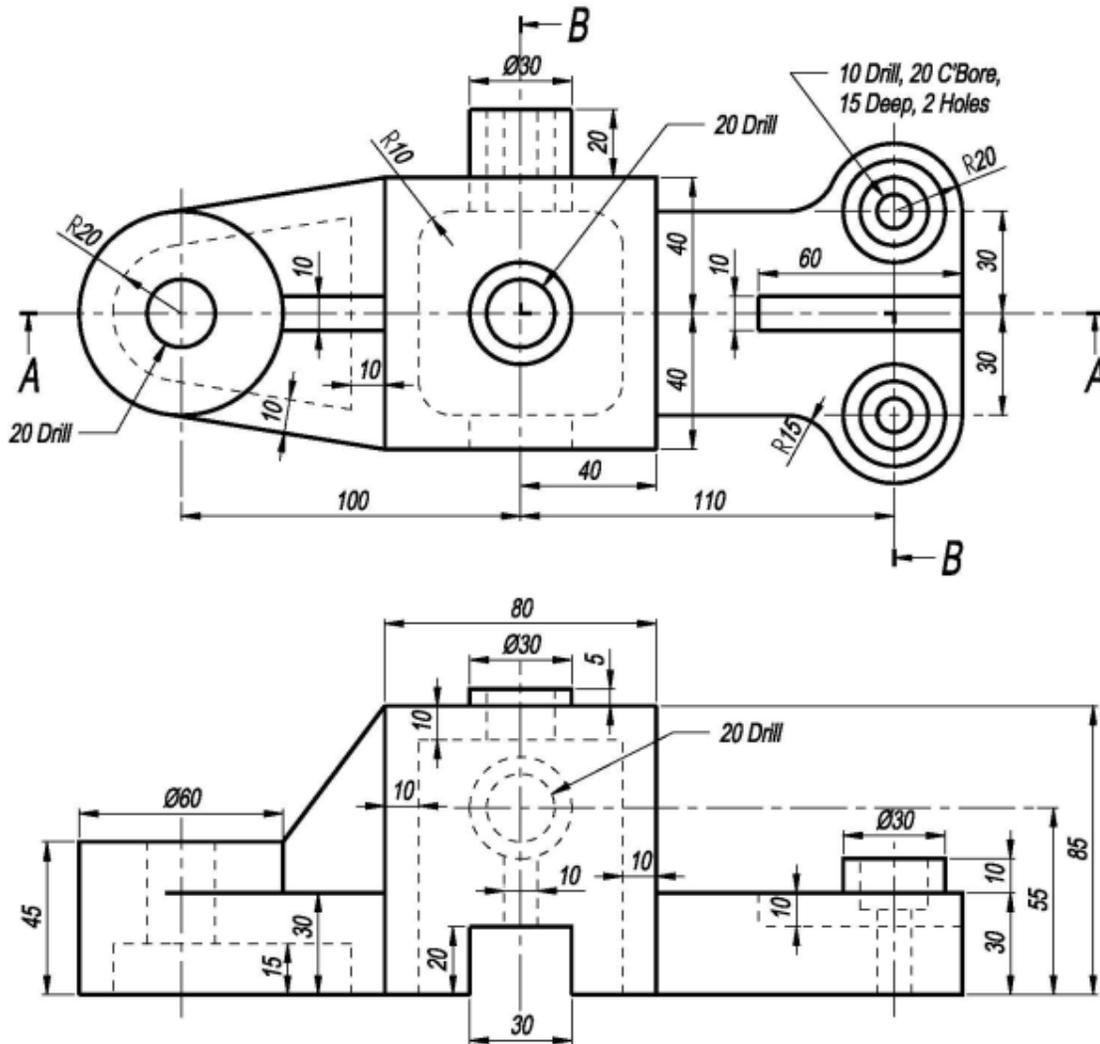


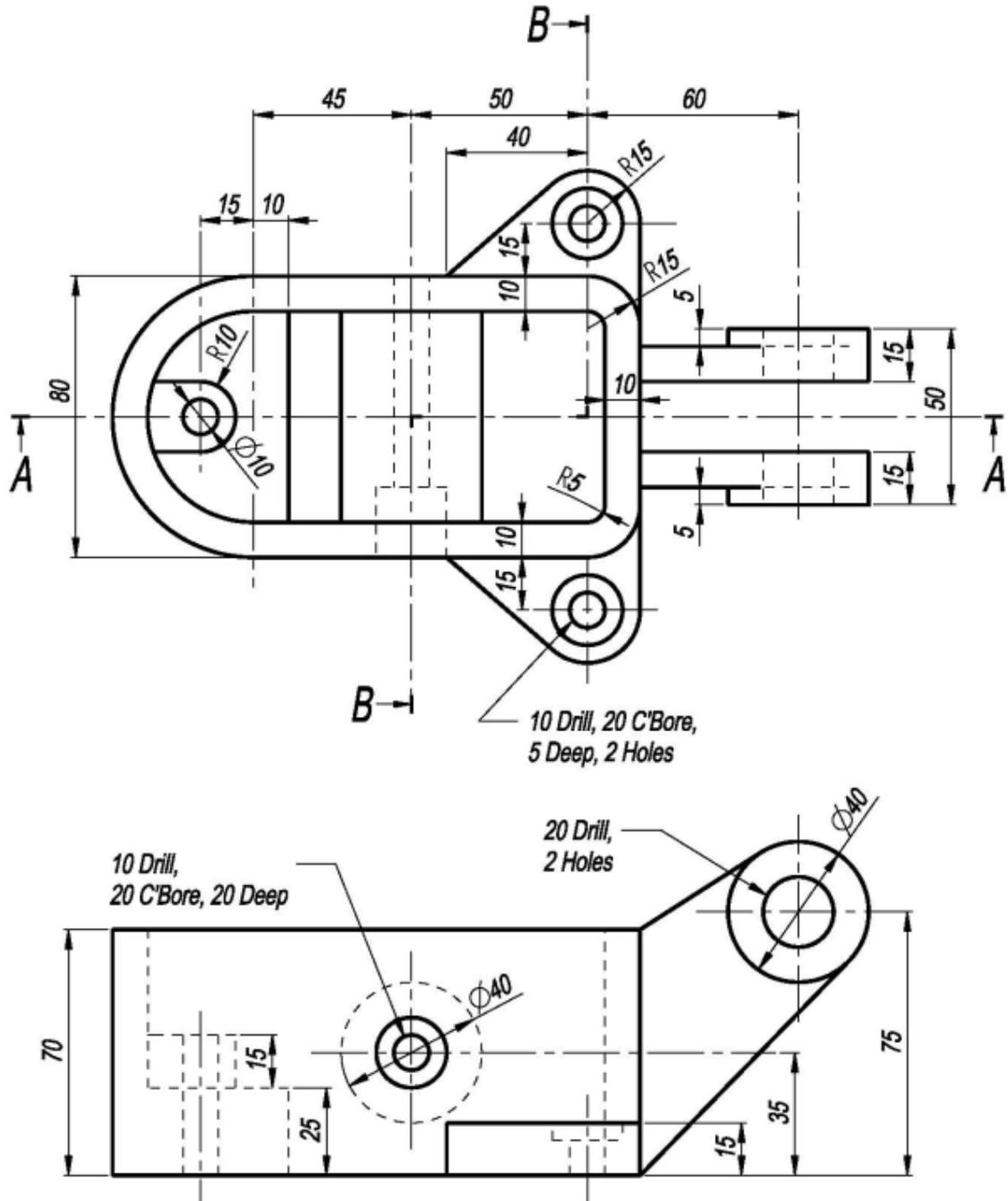
Cradle Bracket

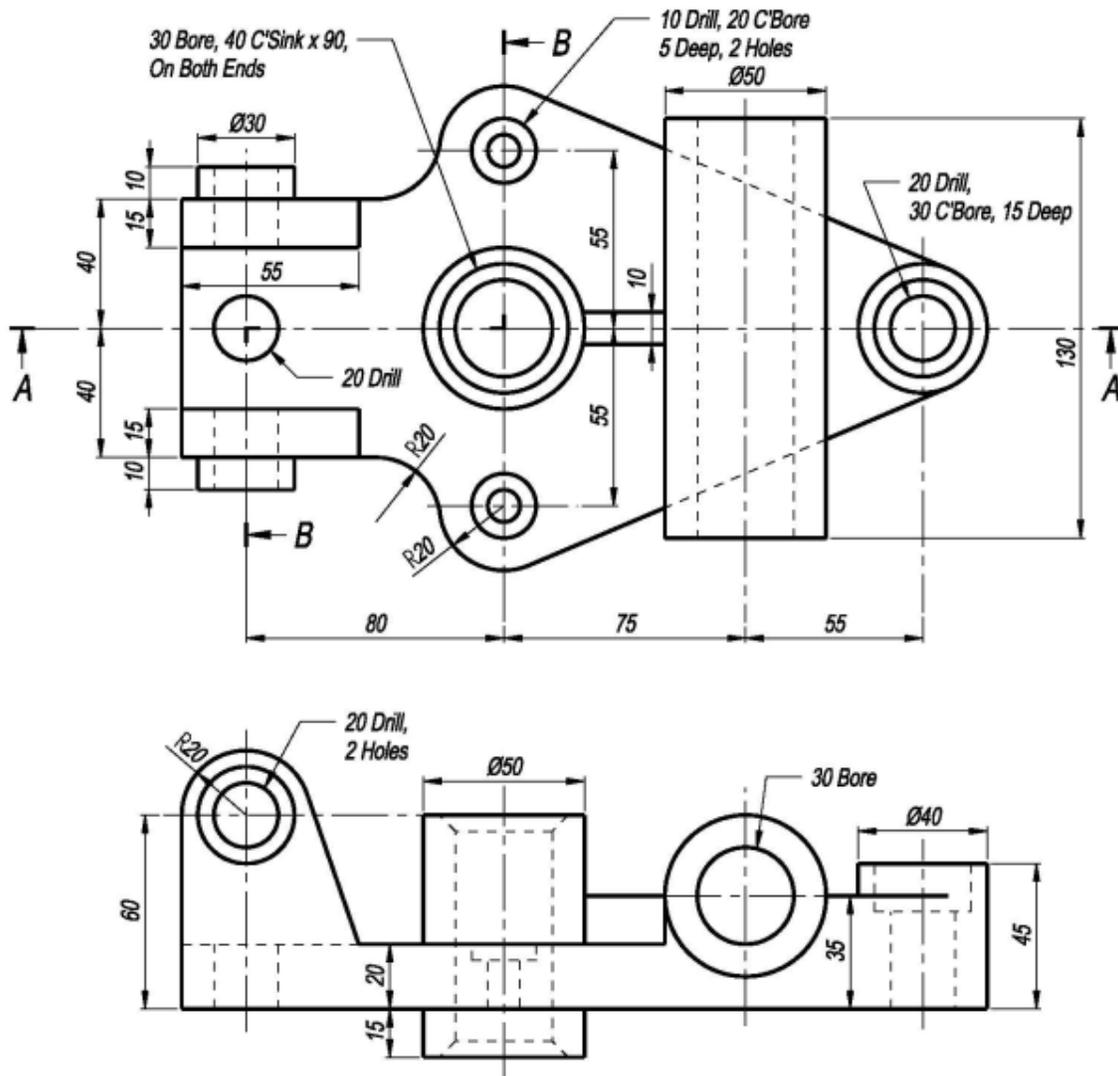


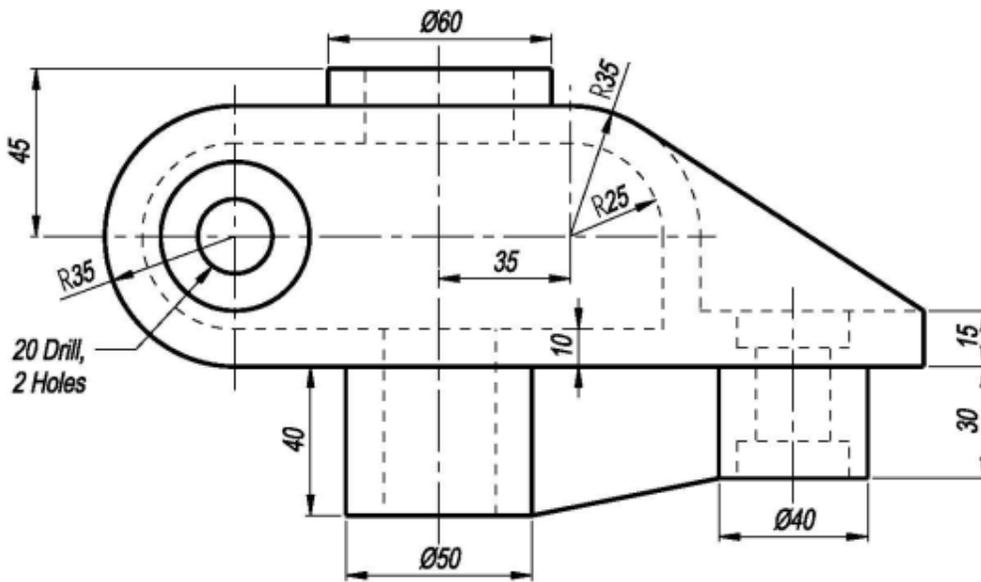
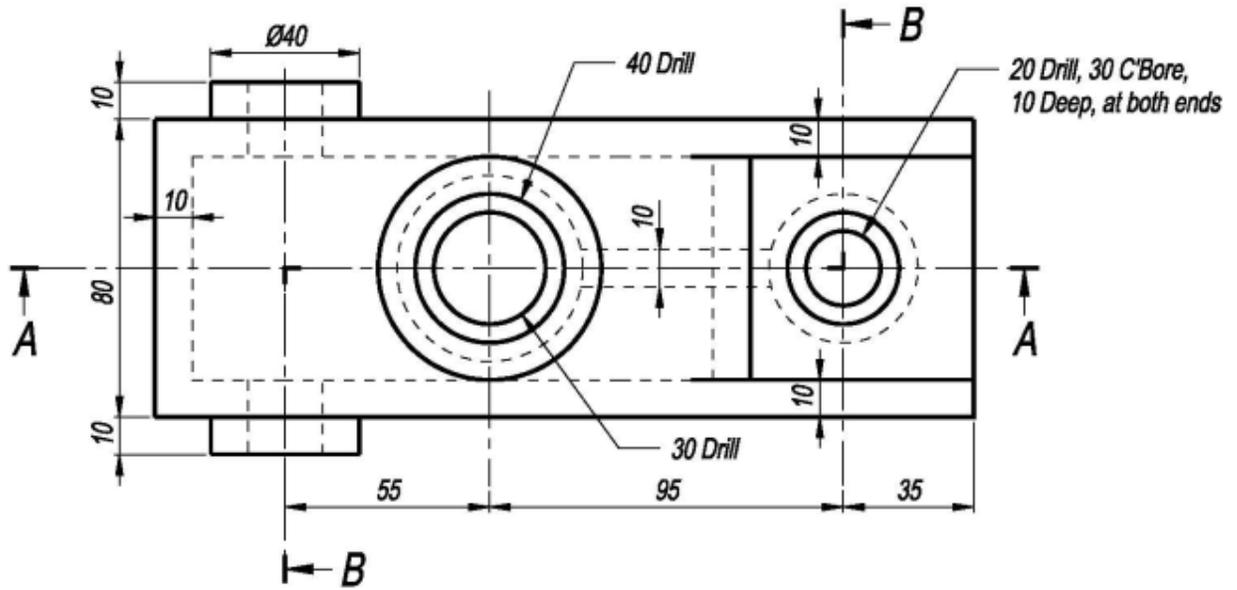
Cable Clip

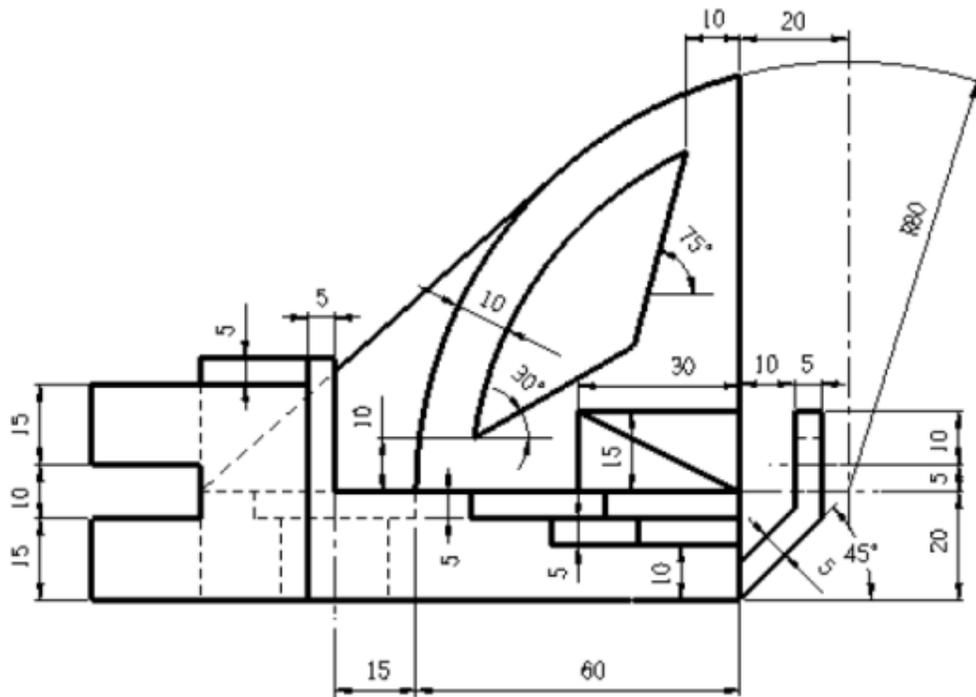
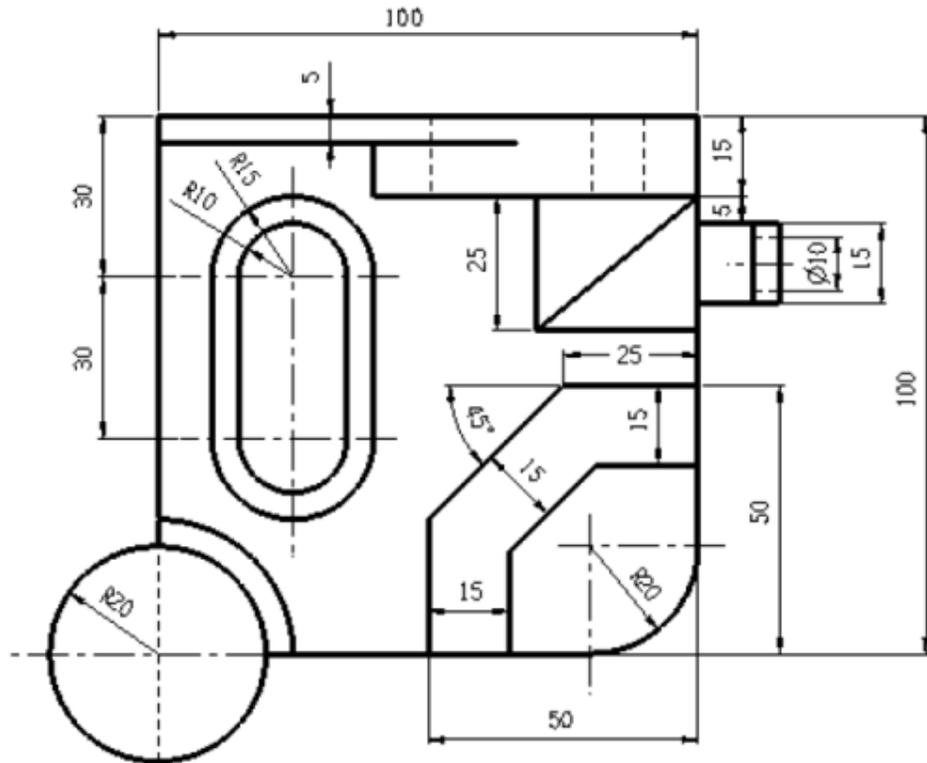


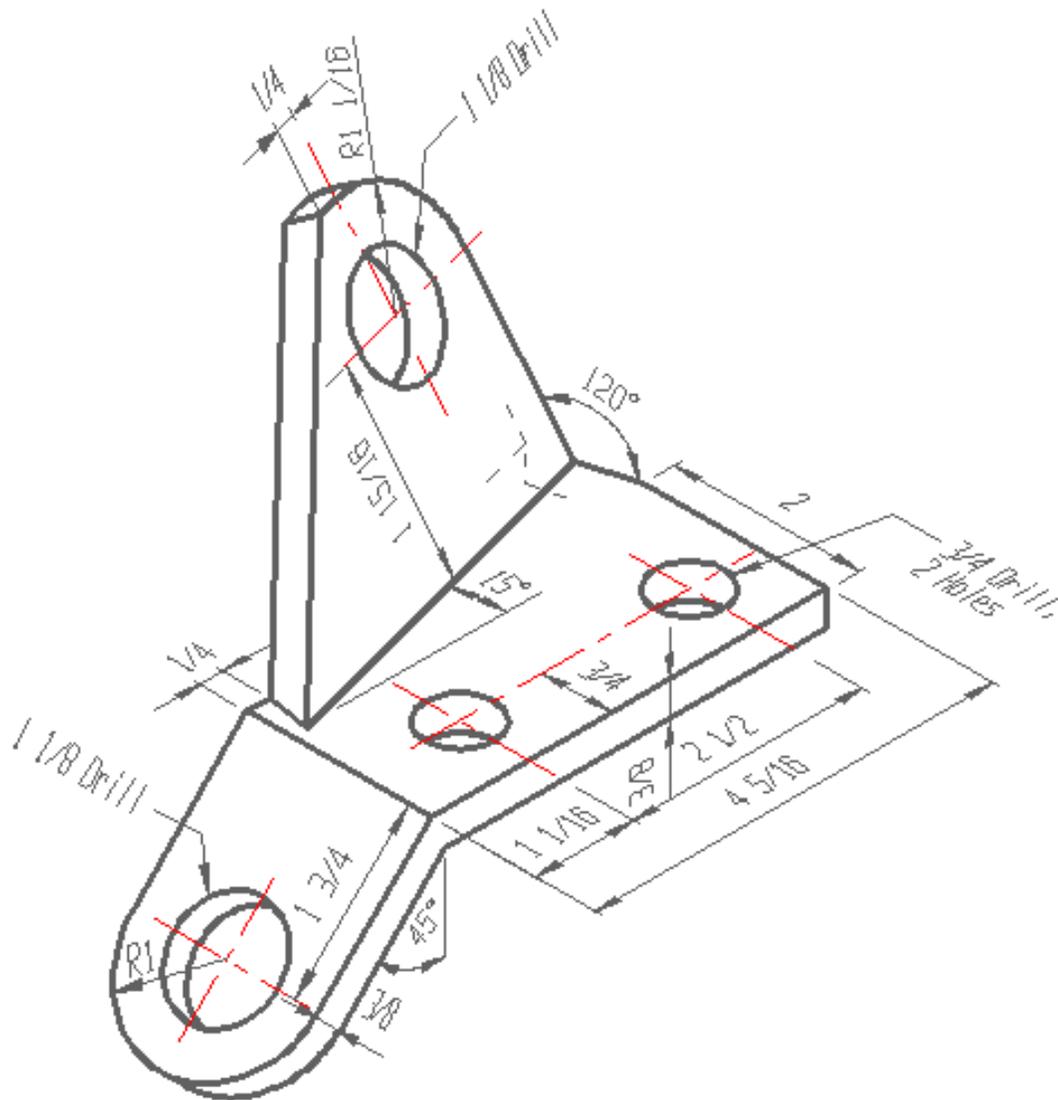


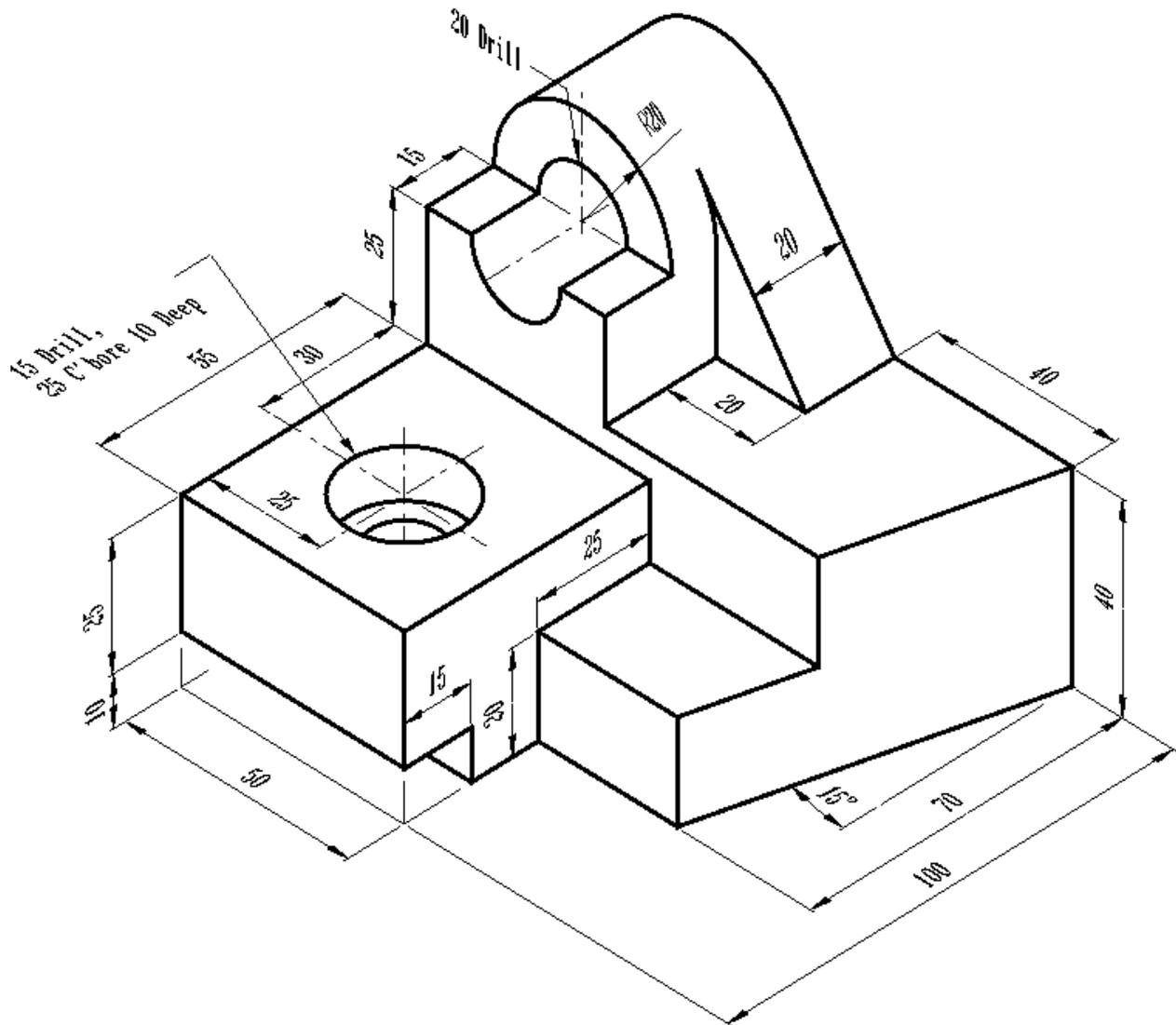


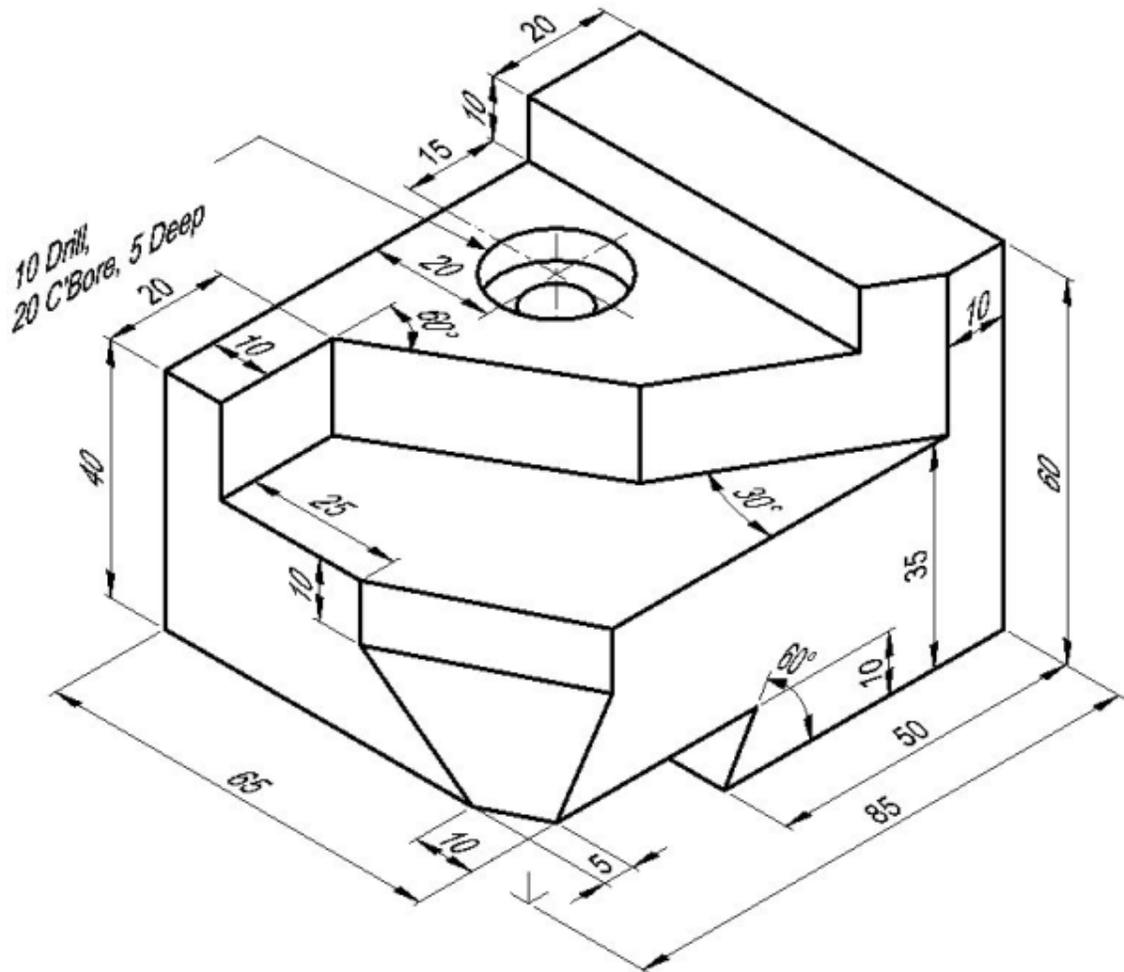


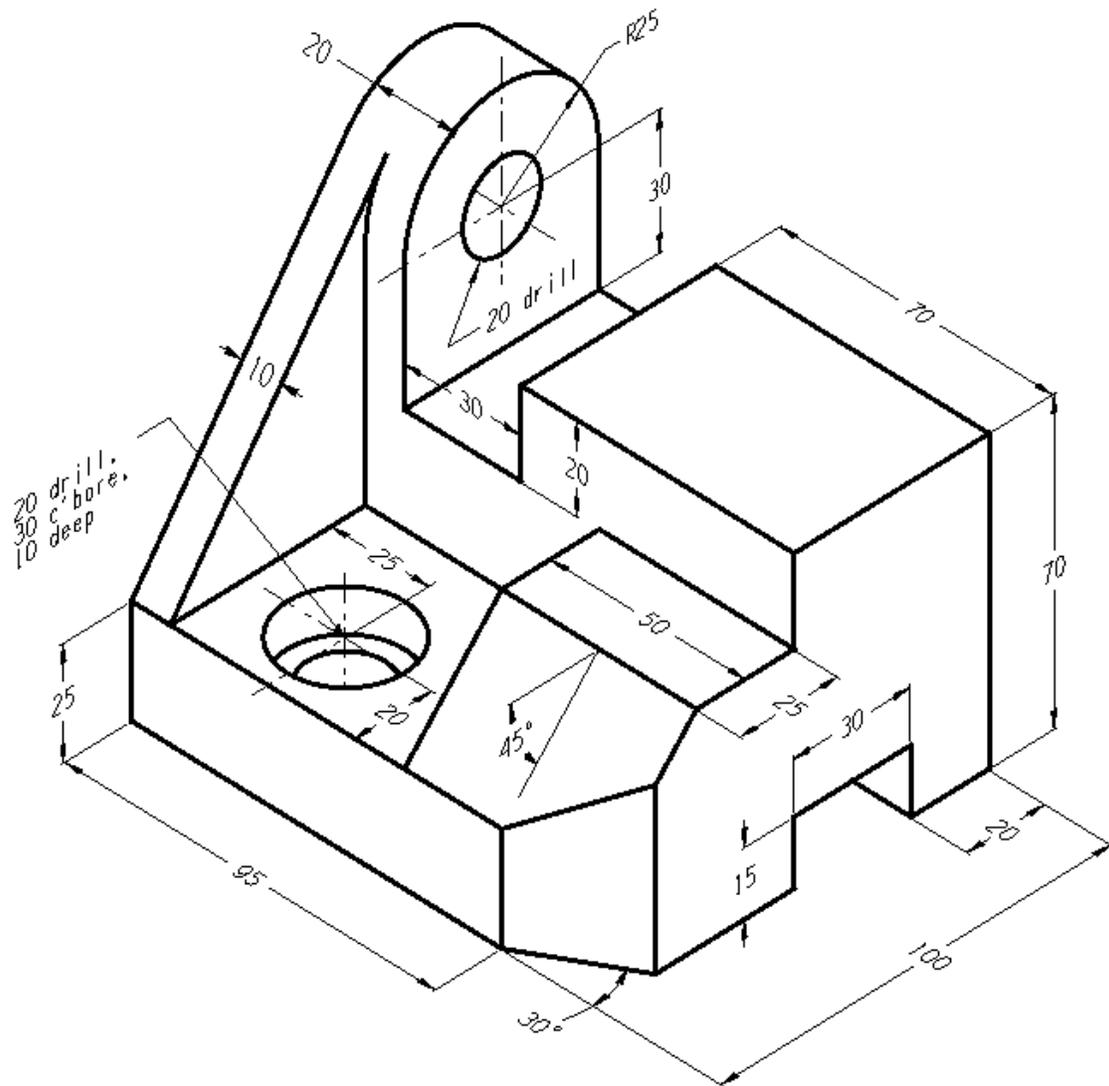


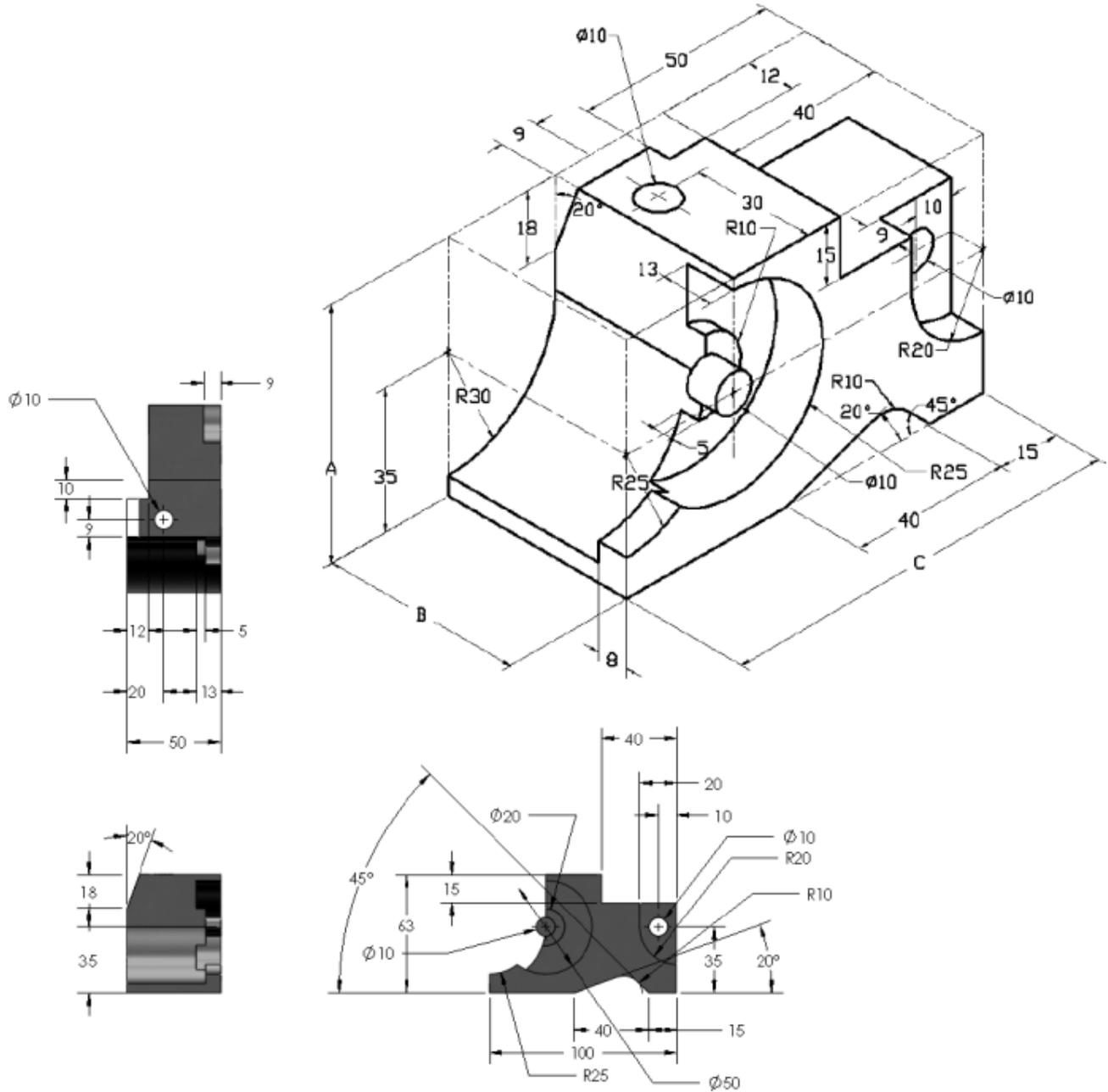


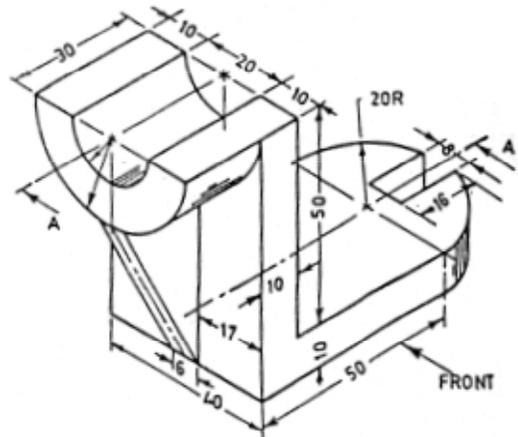
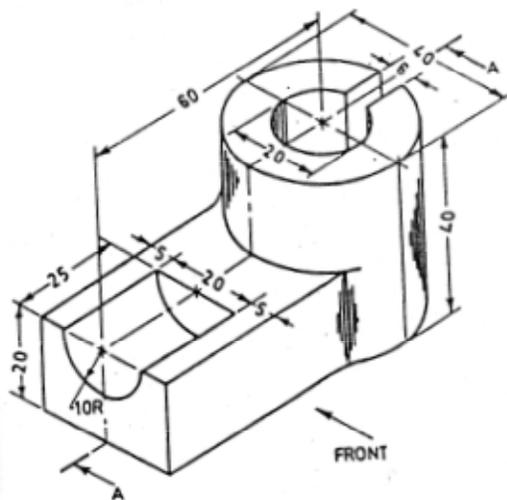
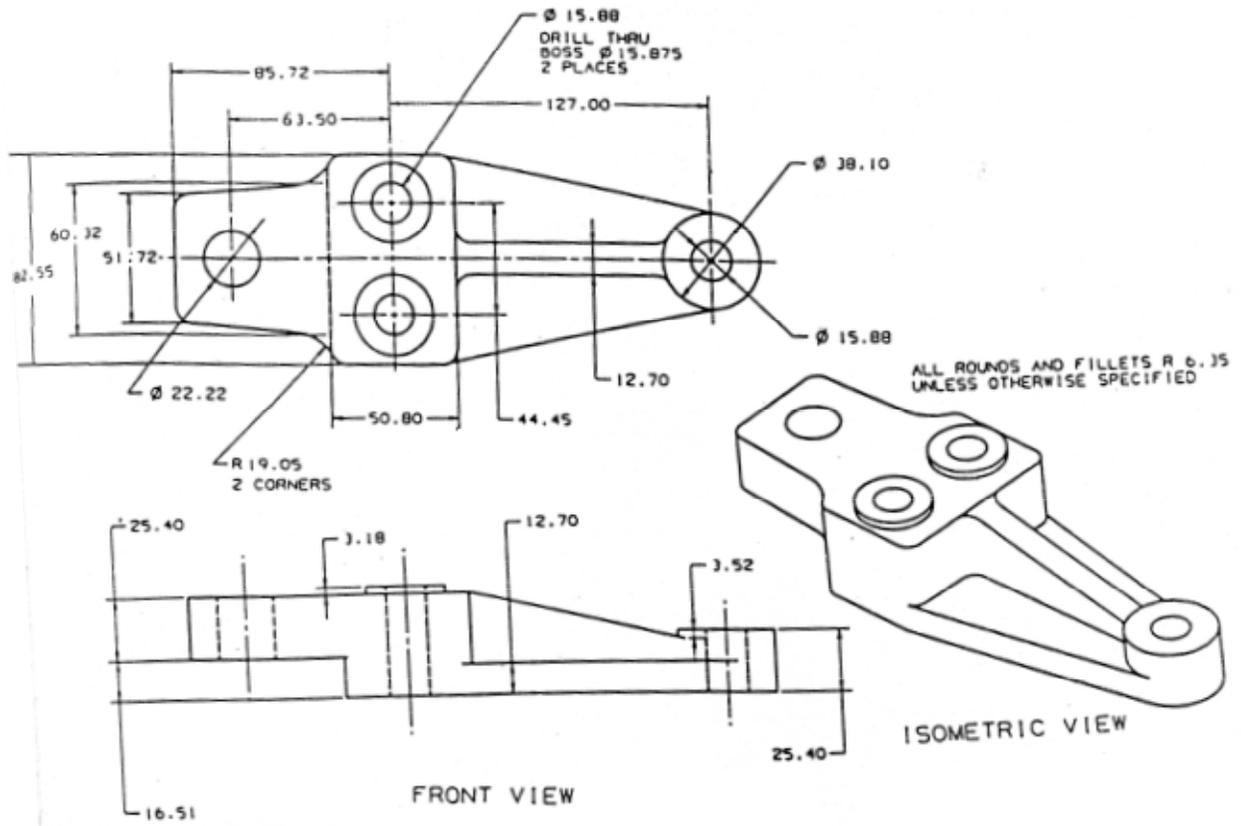




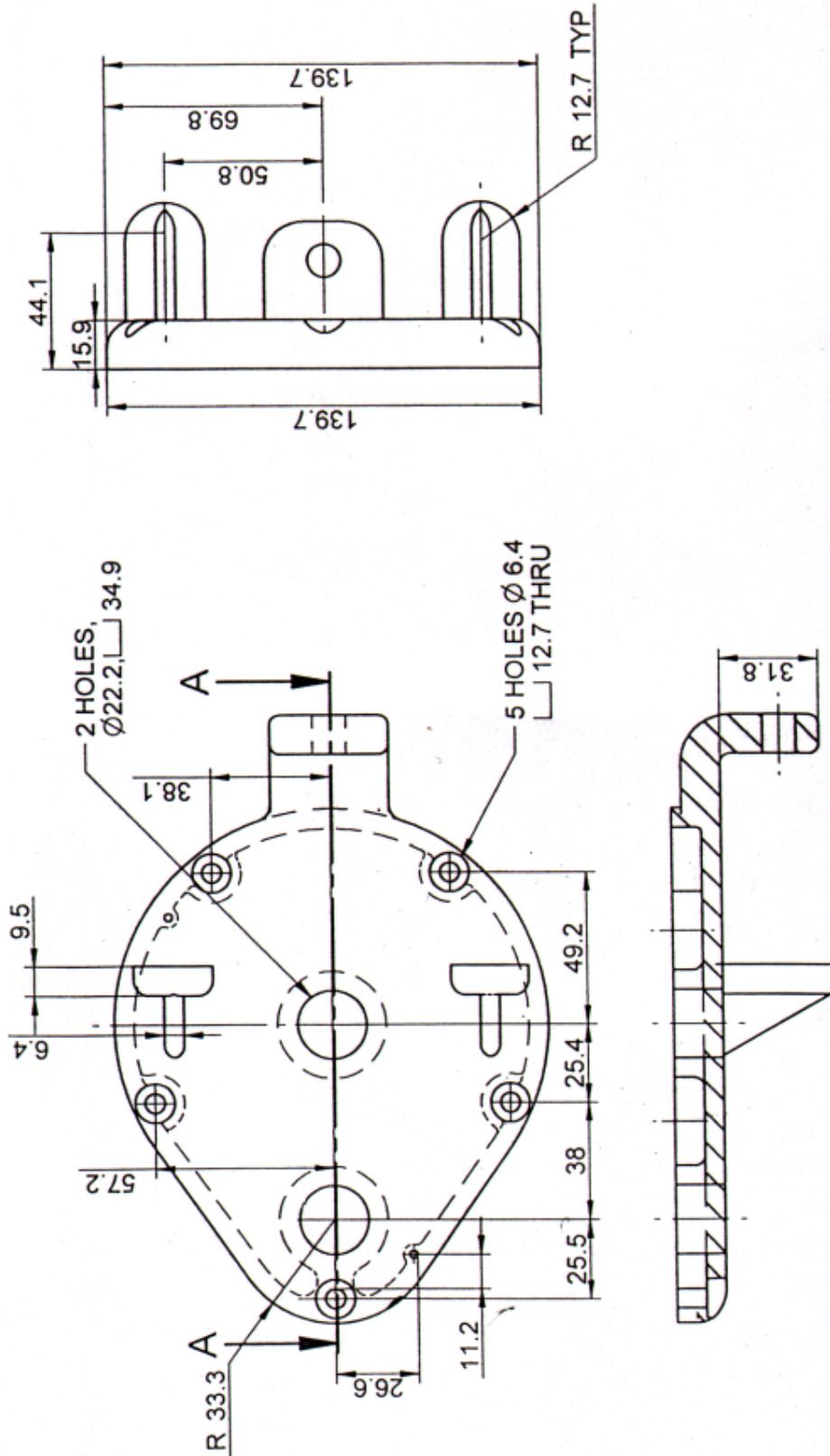




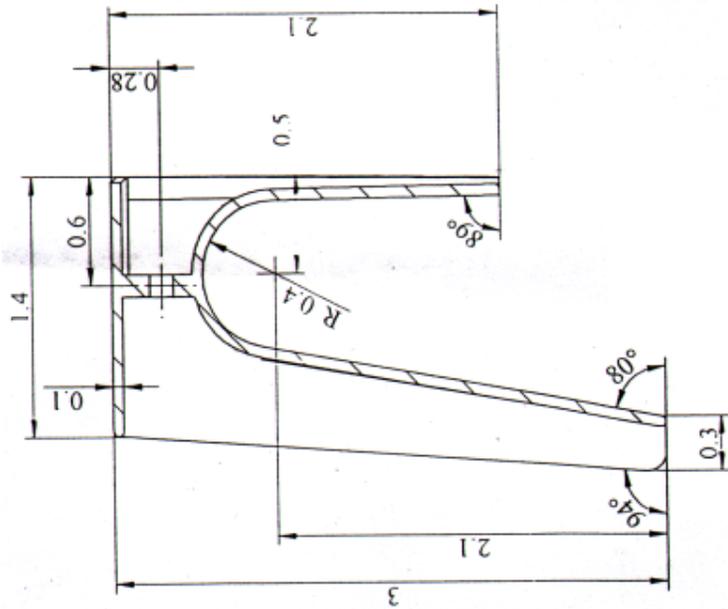








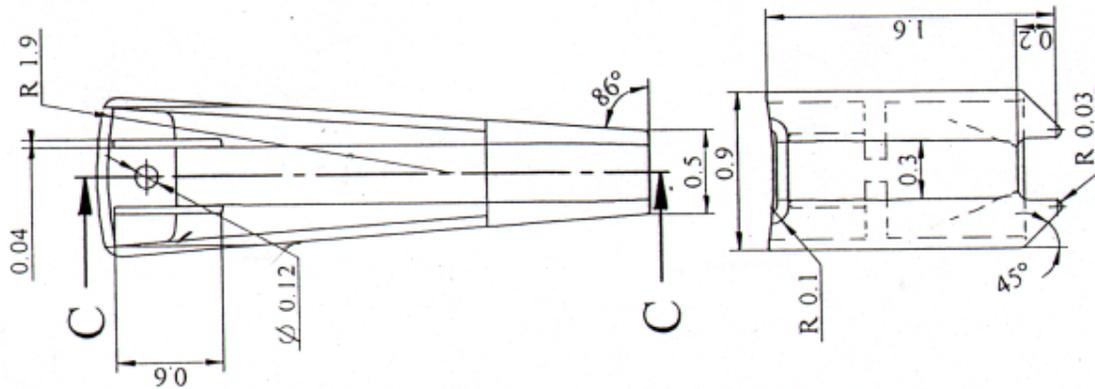


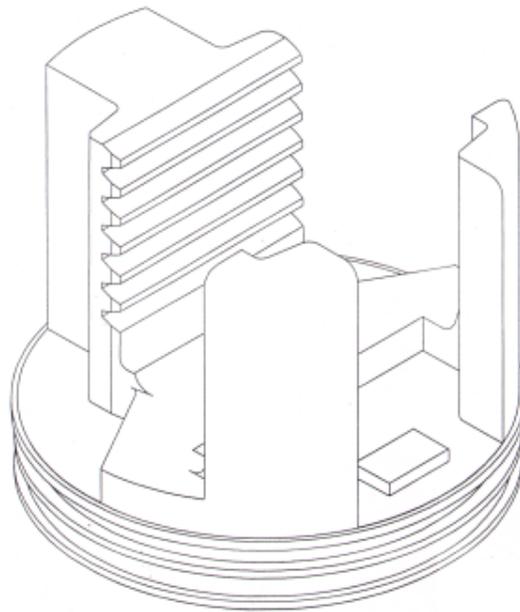
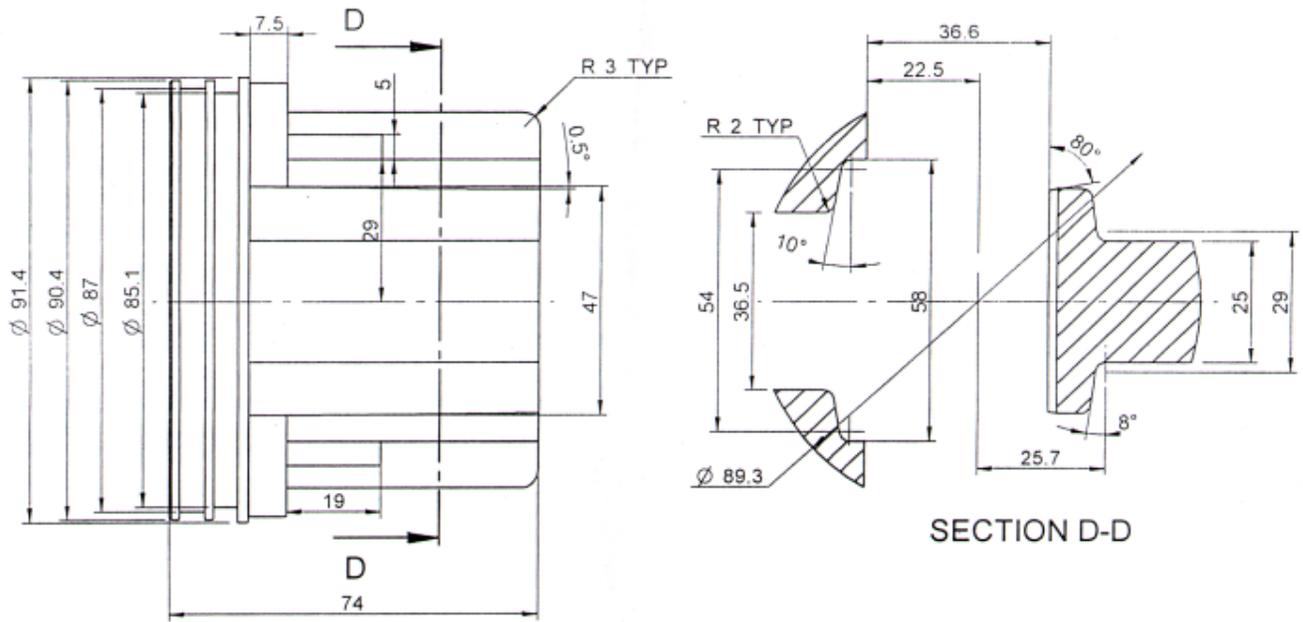


SECTION C-C

ALL UNMENTIONED FILLETS R= 0.1 INCH
 UNLESS OTHERWISE SPECIFIED DIMENSION
 IF IN DOUBT ASK THE CONCERNED FACULTY

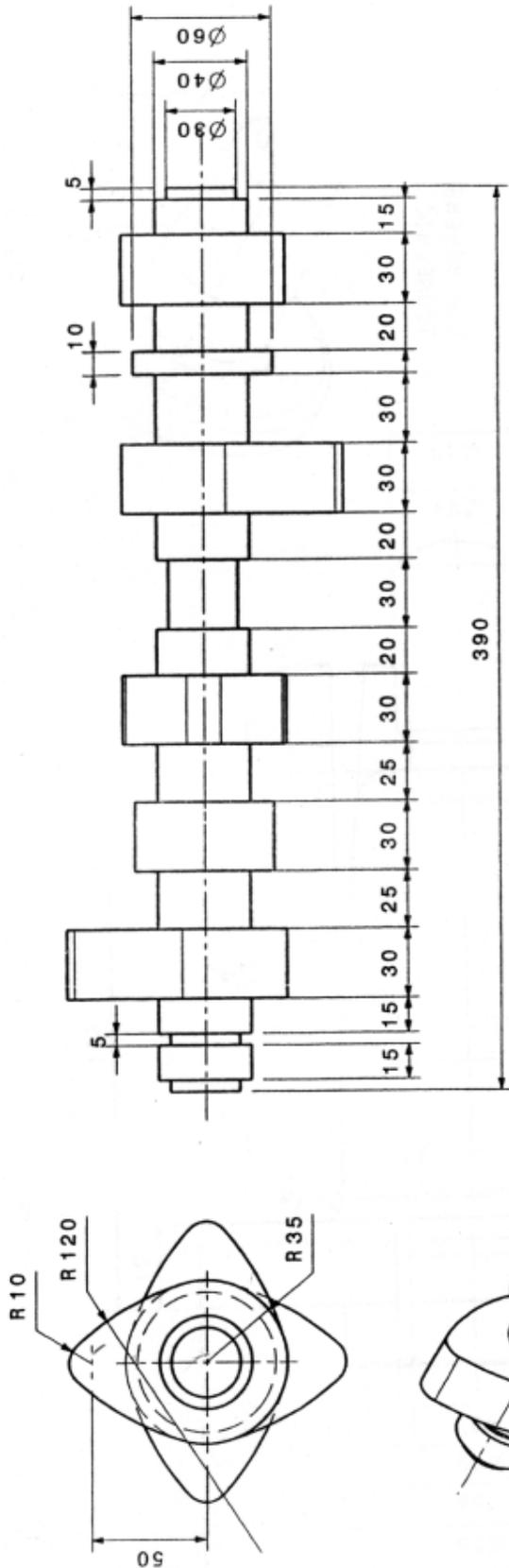
NAME	DATE
DRAWN BY MUDASSIR	03/09/05
CHECKED BY SANDEEP	08/10/05
SCALE: 1 : 2	



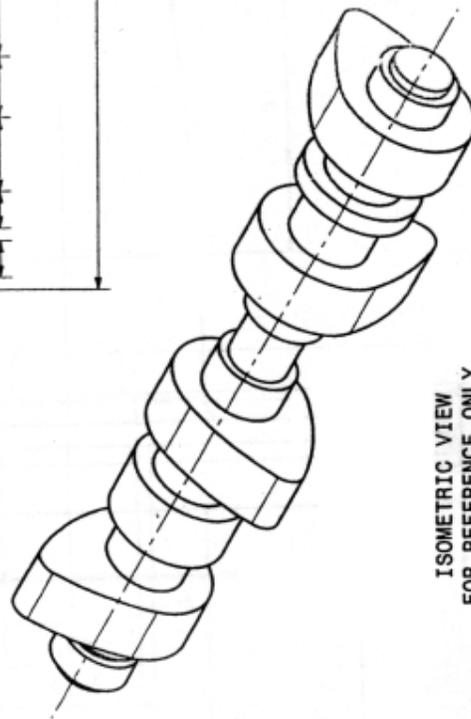


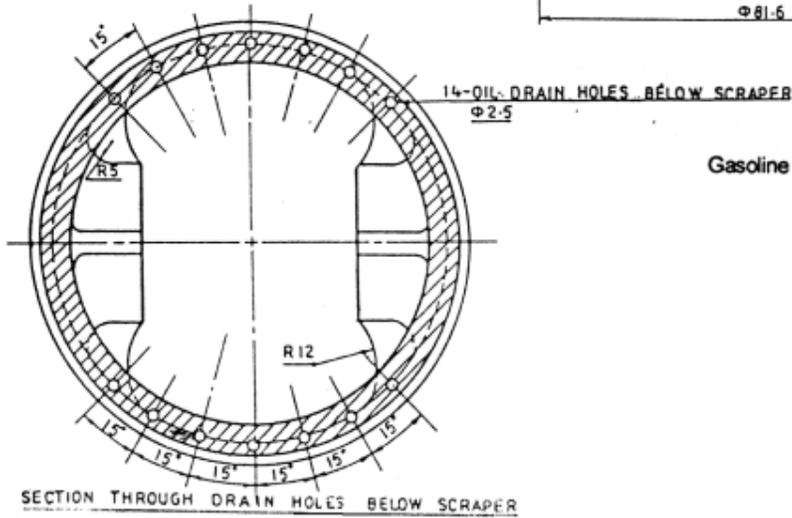
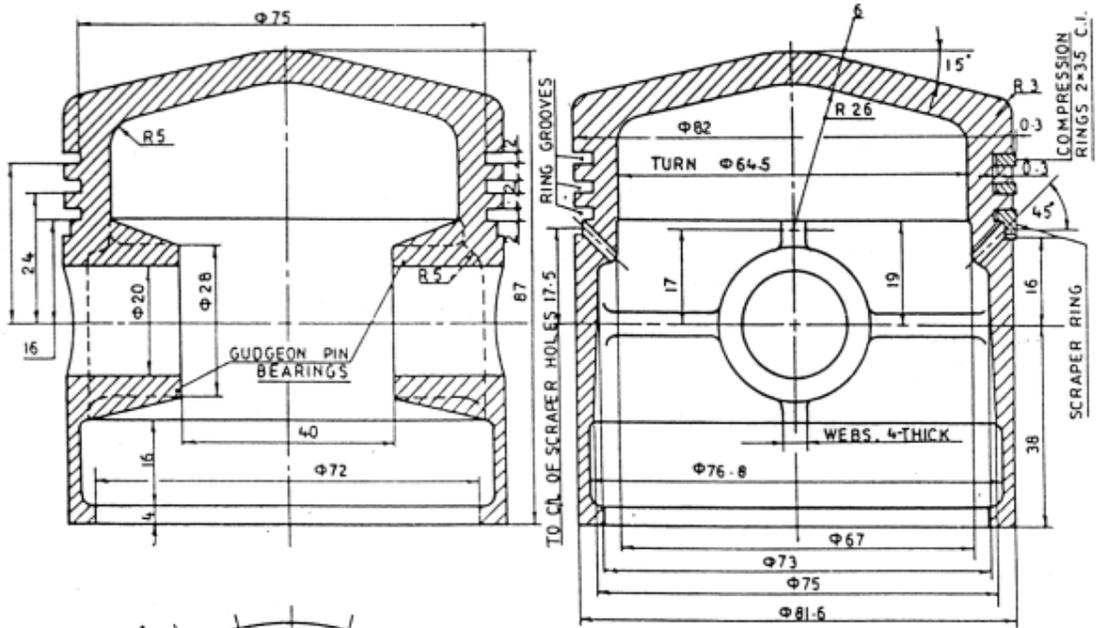
ISOMETRIC VIEW





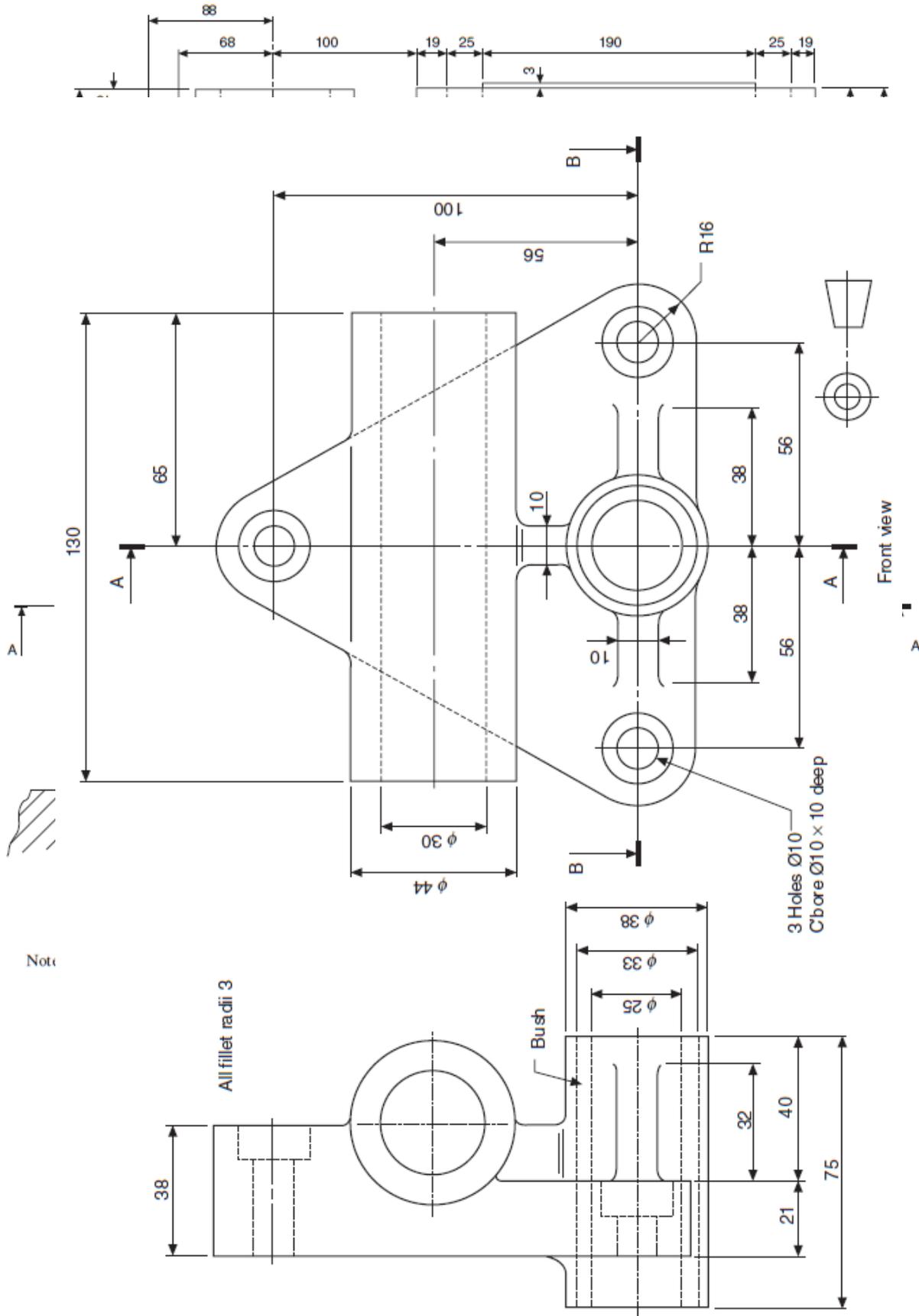
CAMSHAFT

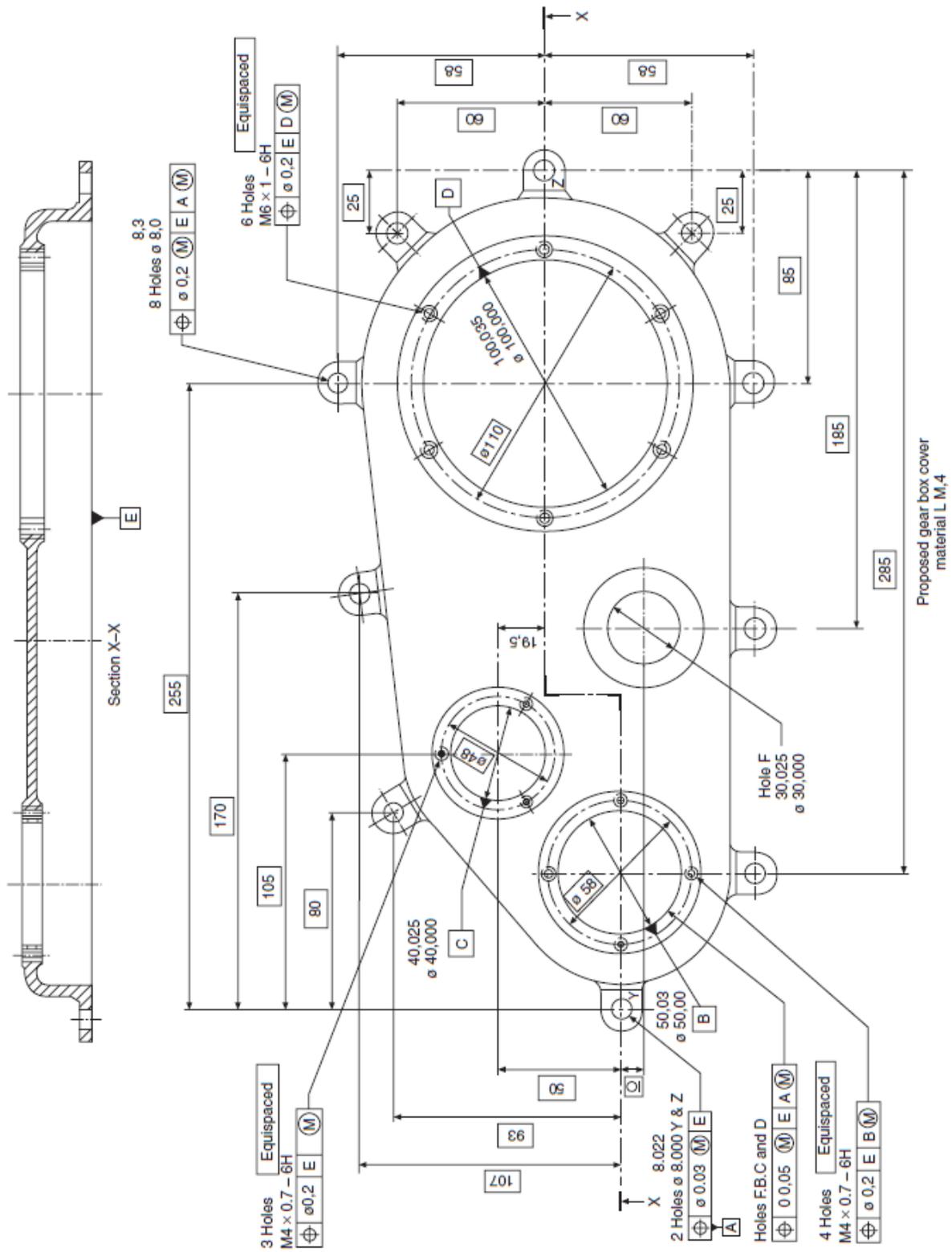




Gasoline Engine Piston



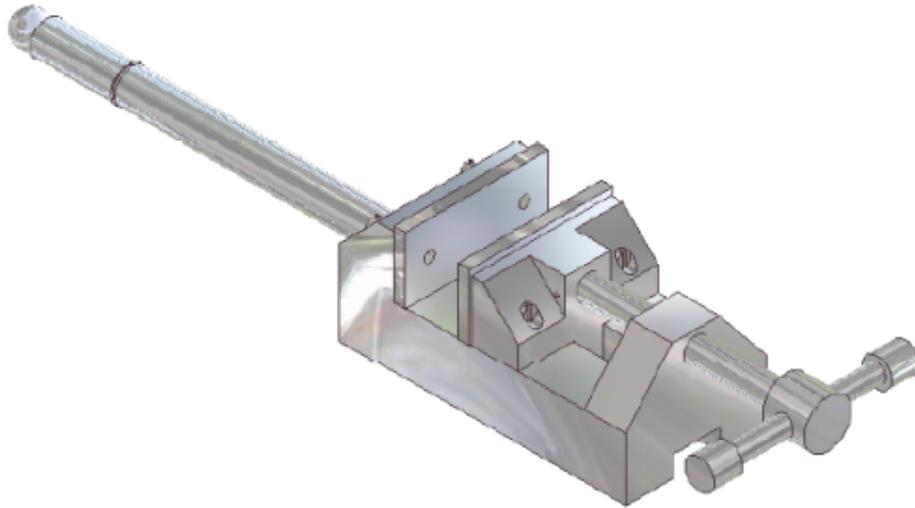




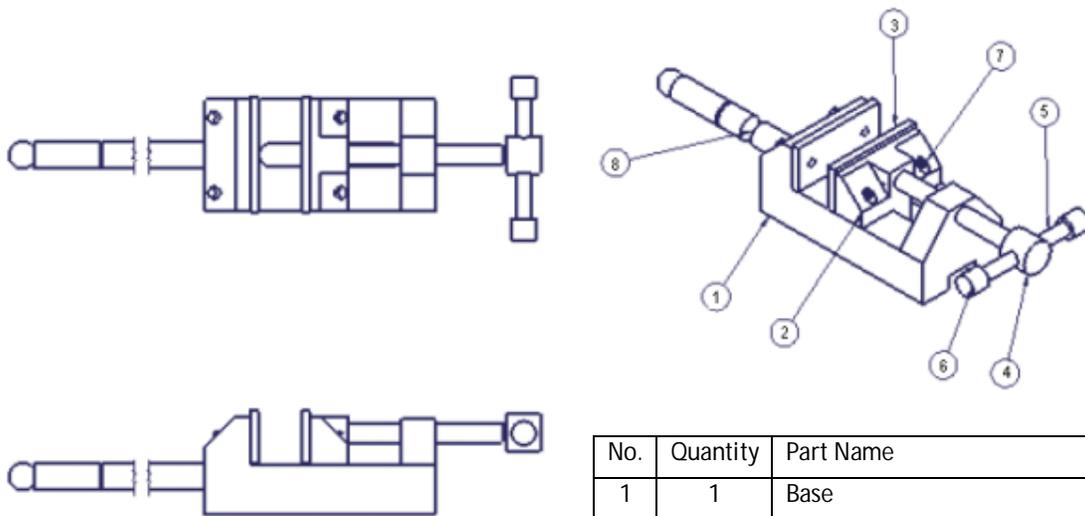


Assembly

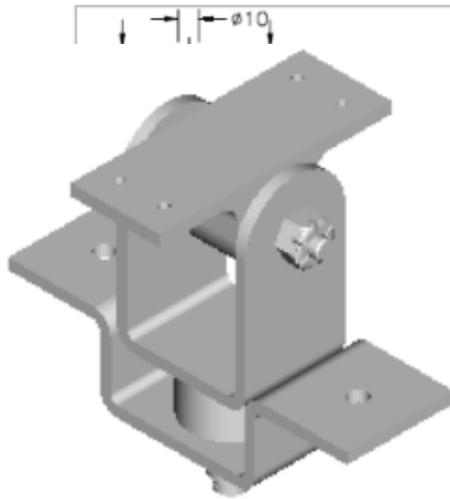




Drill Press Vice assembly



No.	Quantity	Part Name
1	1	Base
2	1	Movable jaw
3	2	Jaw face
4	1	Clamp screw
5	1	Clamp screw Handle
6	2	Handle stop
7	2	Cap screw
8	1	Safety handle



The Shock assembly

ITEM	QTY.	NAME	MATERIAL
1	1	BRACKET	STEEL
2	1	U-SUPPORT	STEEL
3	1	PIVOT	STEEL
4	2	BUSHING	BRONZE
5	1	SELF LOCKING NUT	0.625-11UNC
6	1	WASHER	USER DEFINED
7	1	HEXAGONAL BOLT	STEEL
8	1	CASTLE NUT	STEEL

Cap

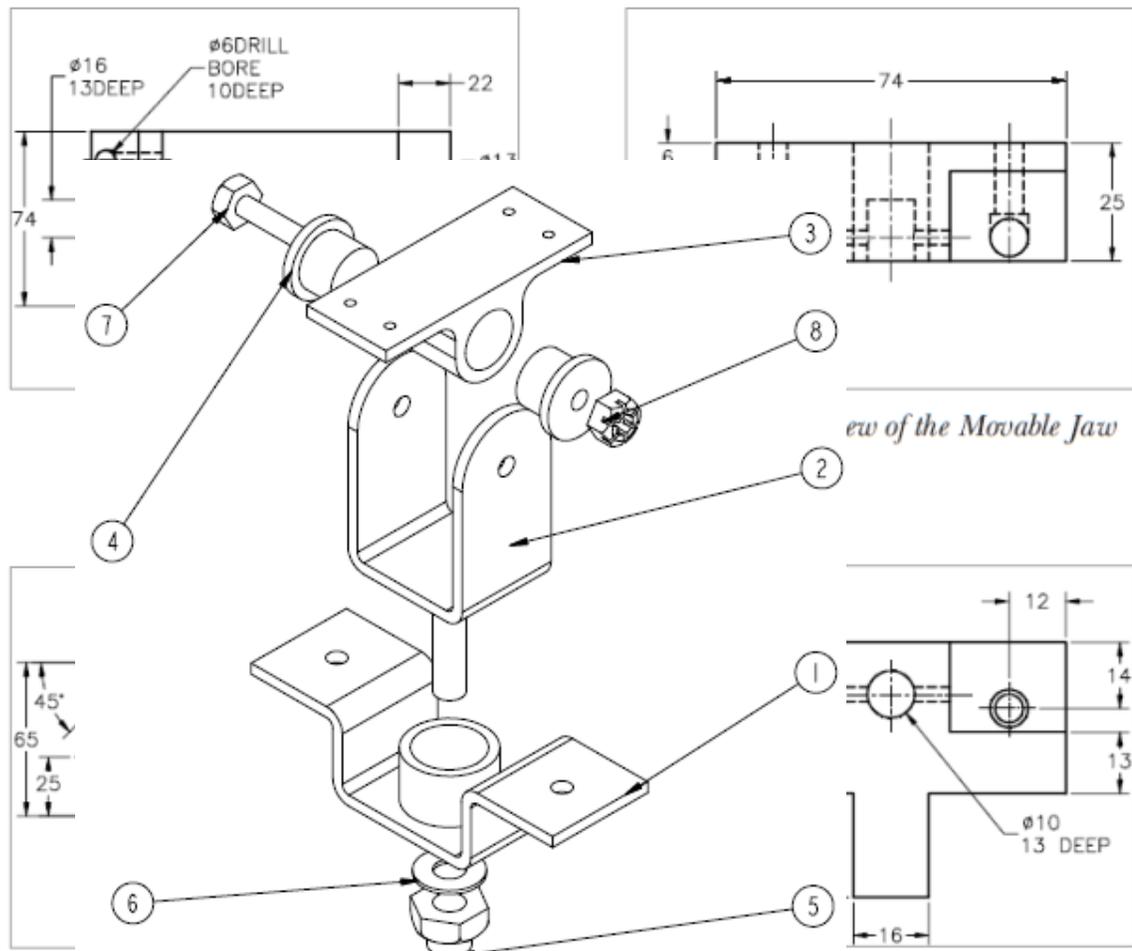
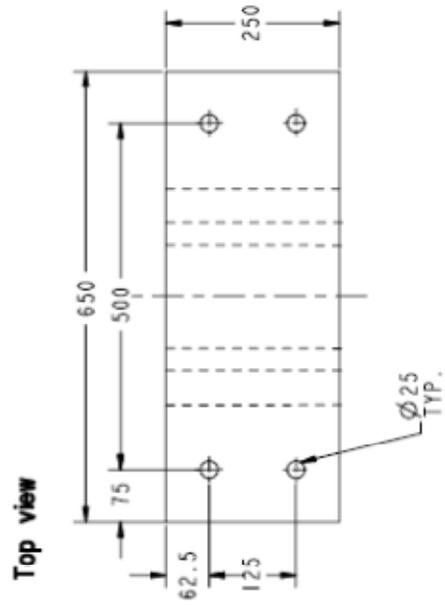


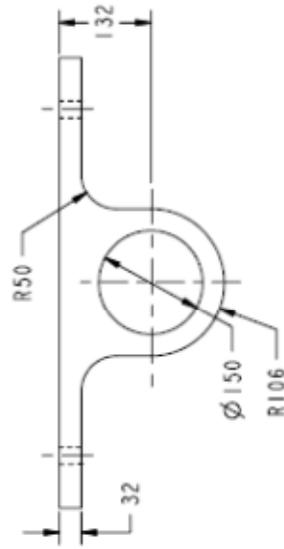
Figure 7 Front view of the Base

Figure 8 Front view of the Movable Jaw

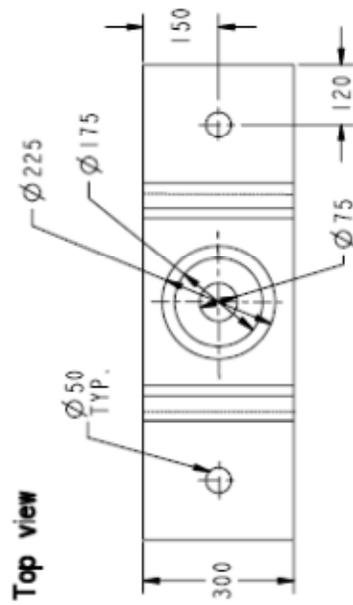
Pivot



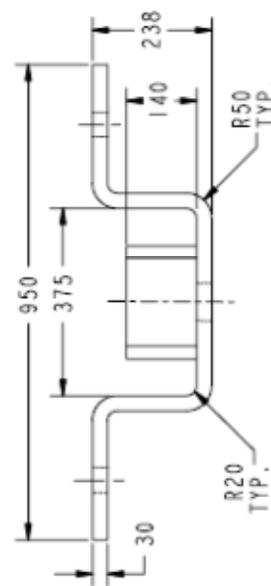
Front view



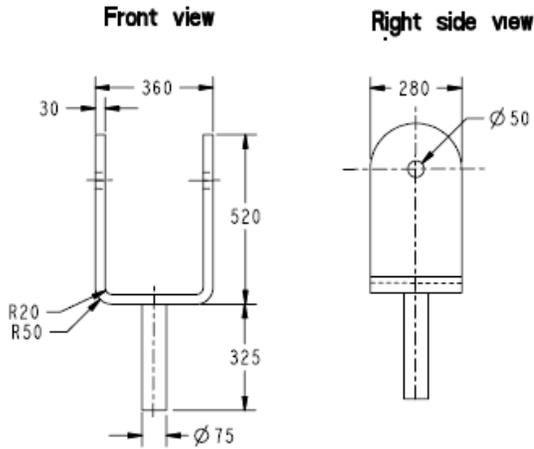
Bracket



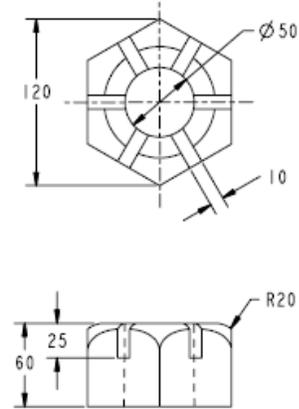
Front view



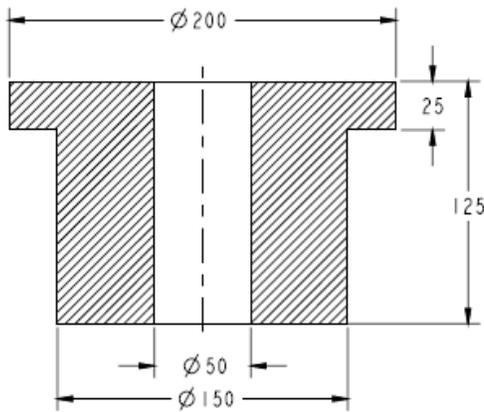
U-Support



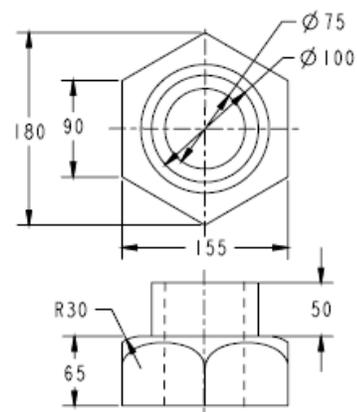
Castle nut



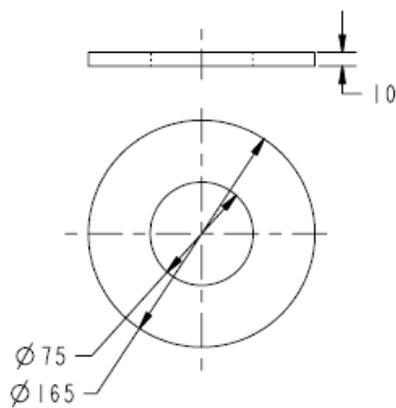
Bushing



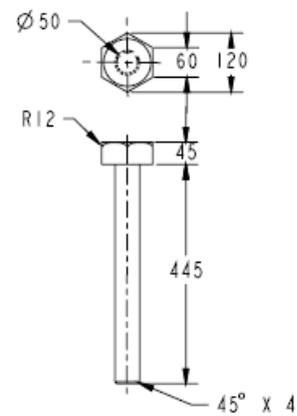
Self-locking nut

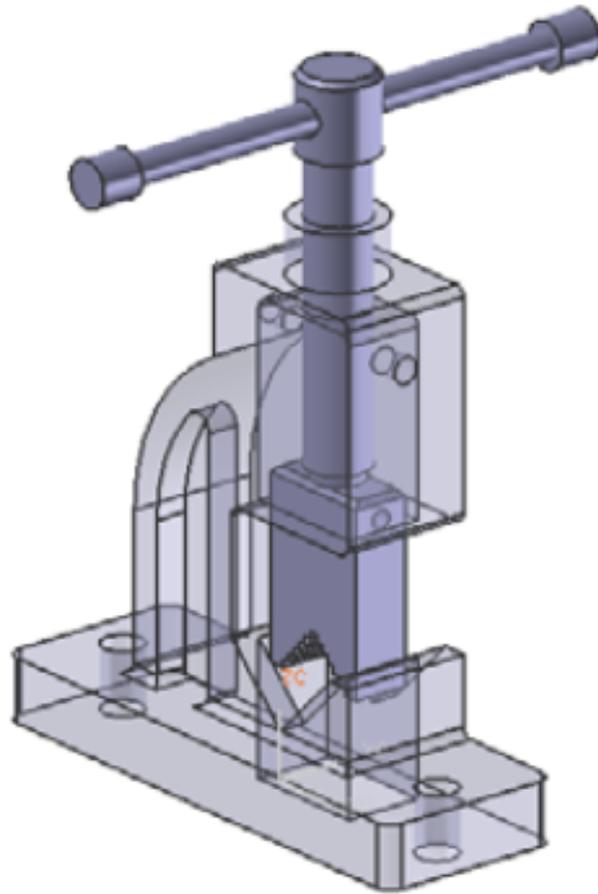


Washer



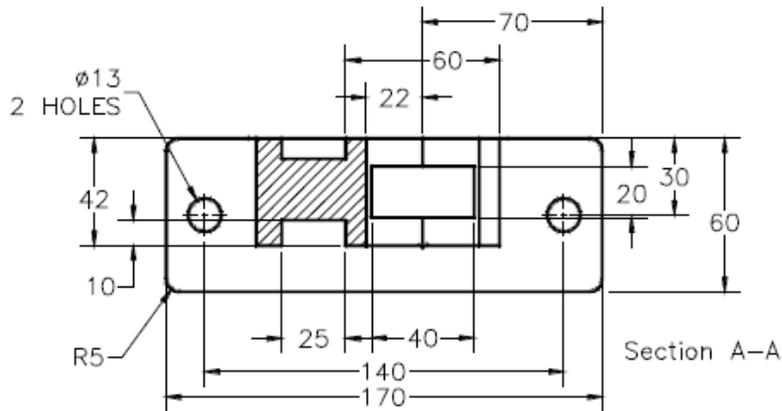
Hexagonal bolt





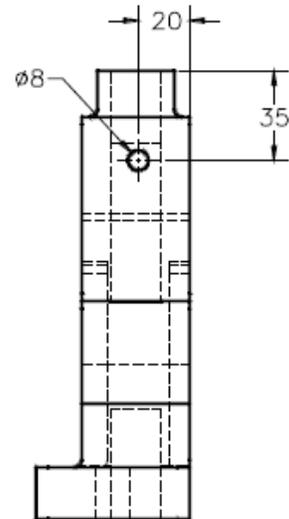
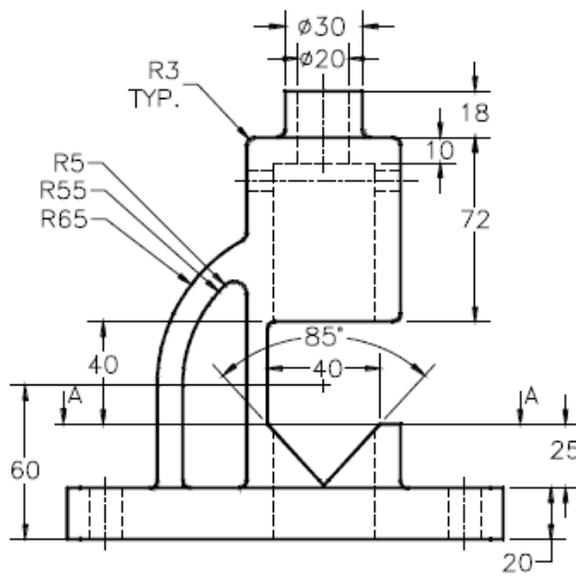
The Pipe Vice assembly

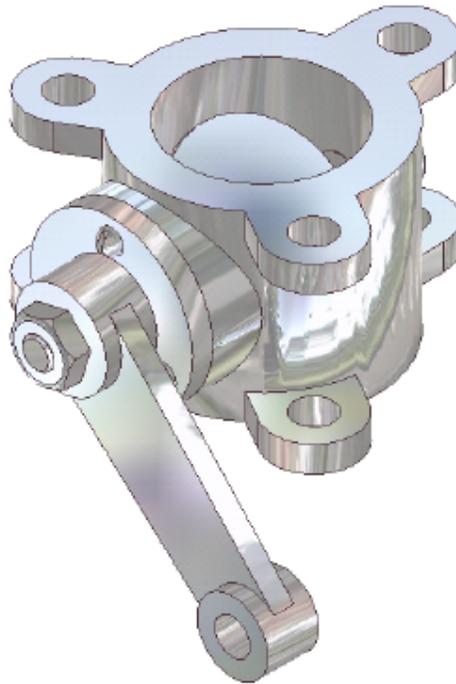
Quantity	Part Name
1	Base
1	Screw
1	Handle
1	Movable jaw
2	Handle screw



Base

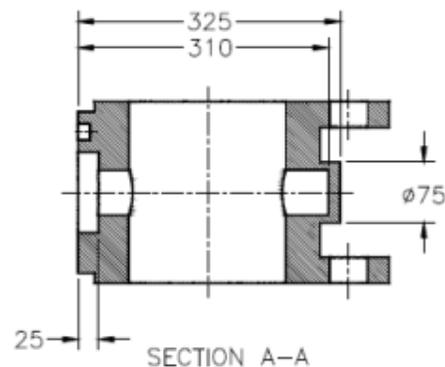
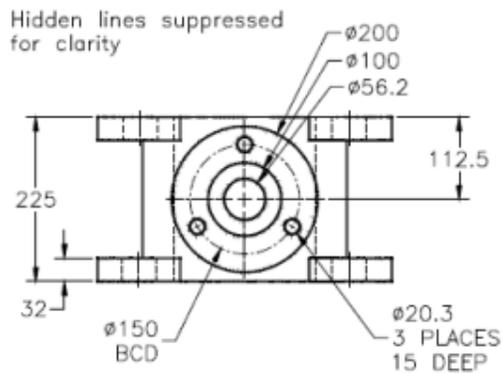
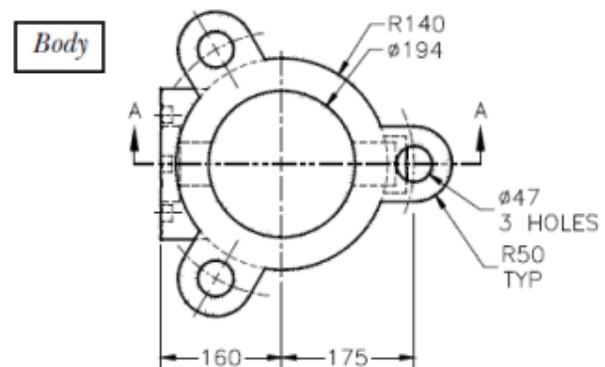
Fillet radius = 3mm,
 unless specified

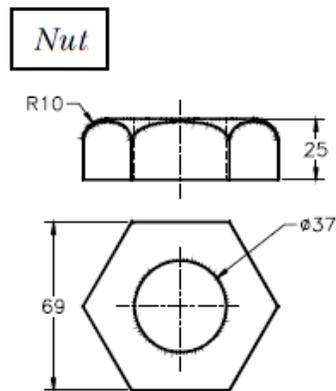
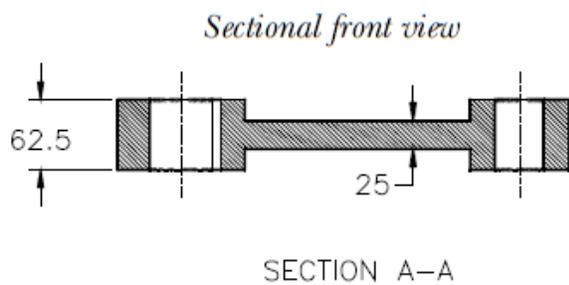
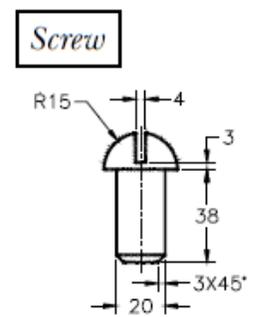
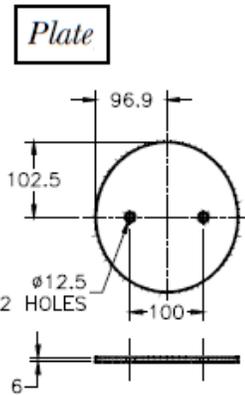
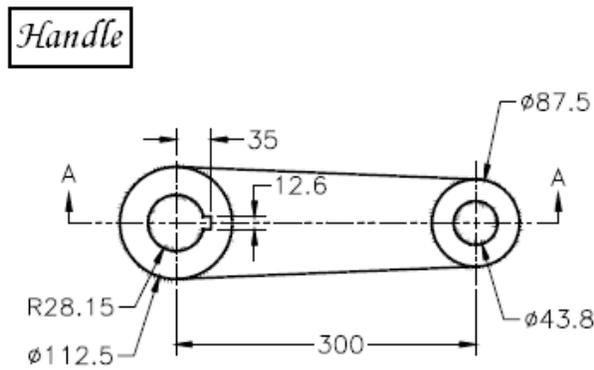
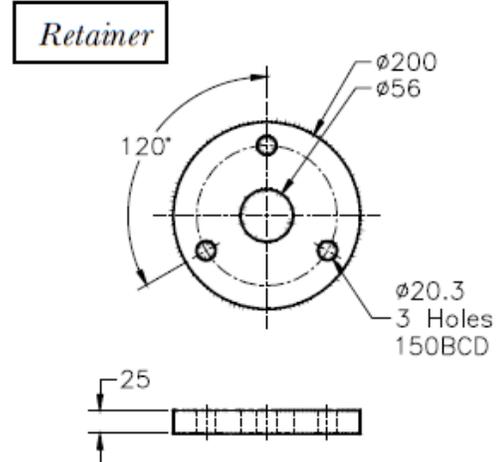
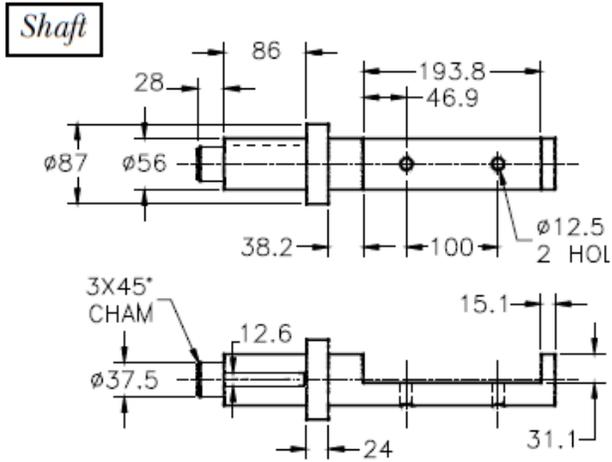




The Butterfly Valve assembly

Quantity	Part Name
1	Body
1	Shaft
1	Retainer
1	Handle
1	Valve Plate
3	Screw
1	Nut

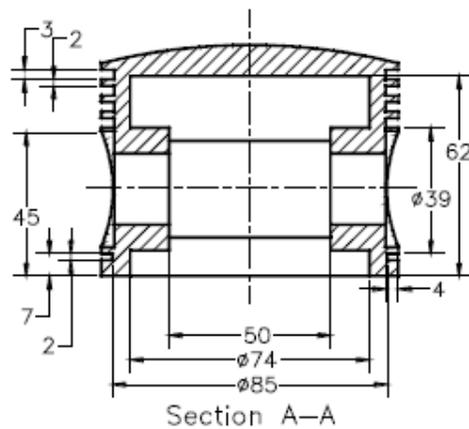
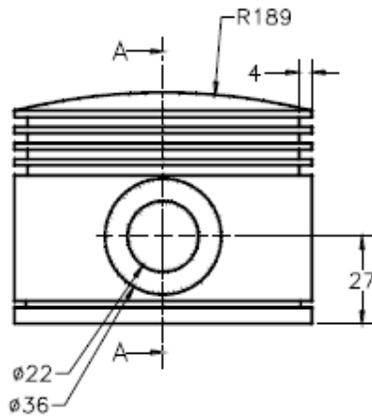
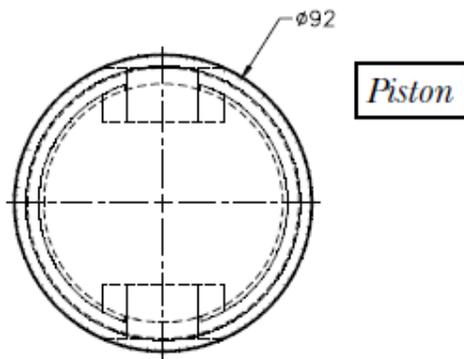


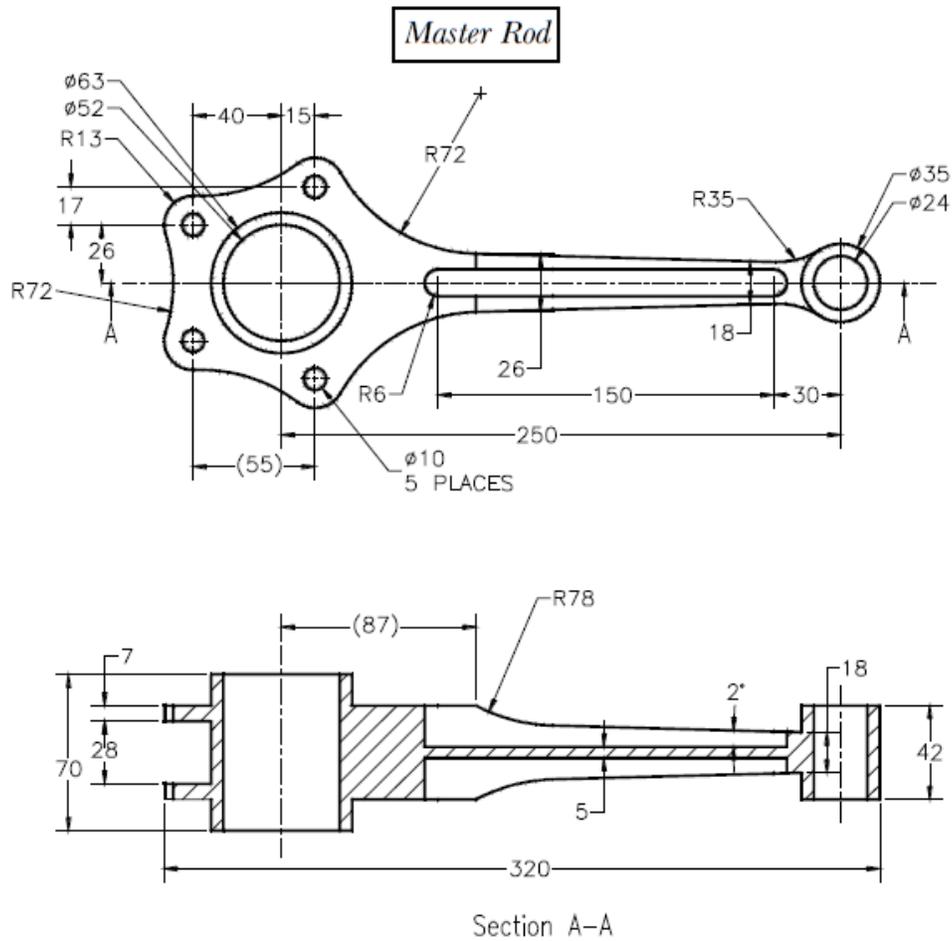
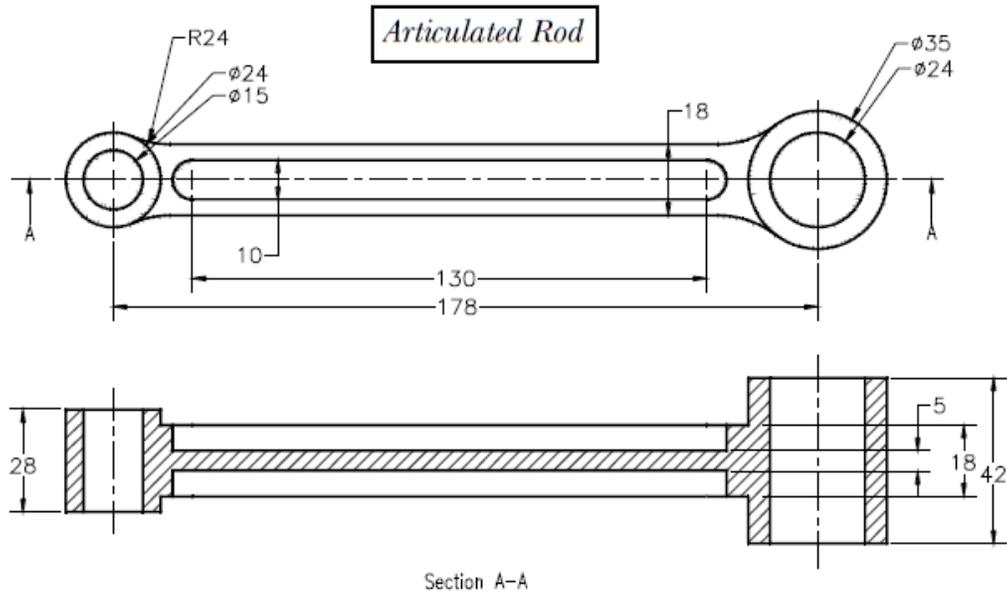




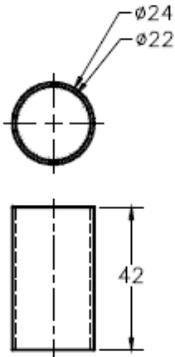
The exploded view of the Radial Engine assembly

Quantity	Part Name
5	Piston
4	Articulated Rod
1	Master Rod
1	Master Rod Bearing
4	Link Pin
20	Piston Ring
5	Piston Pin
4	Rod Bush Lower
5	Rod Bush Upper

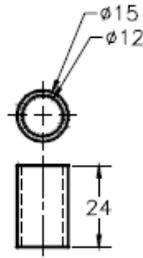




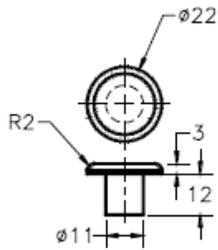
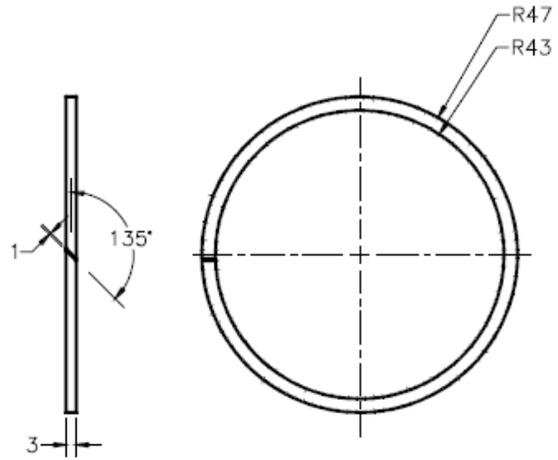
Rod Bush Upper



Rod Bush Lower

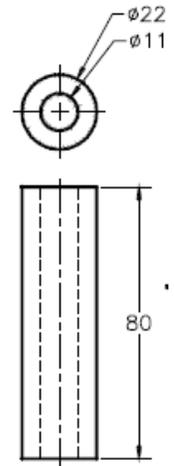


Piston Rings

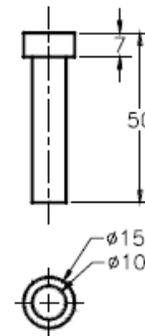


Piston Pin Plug

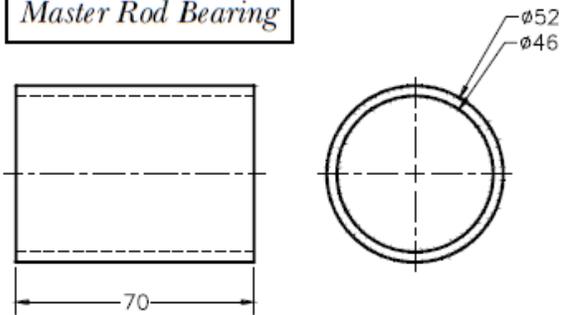
Piston Pin

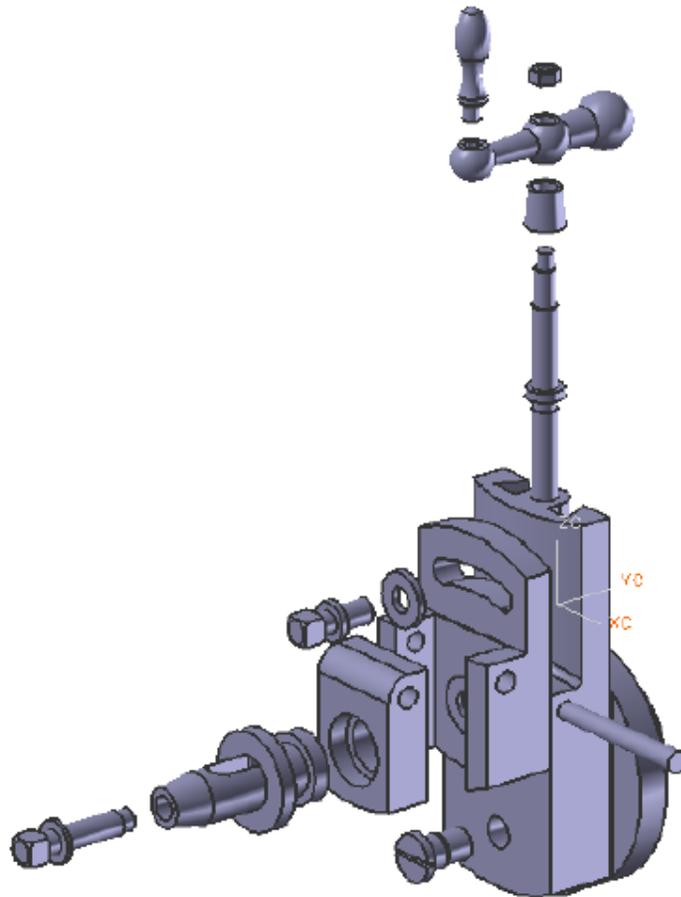


Link Pin



Master Rod Bearing

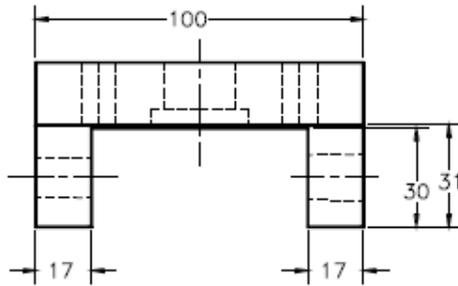




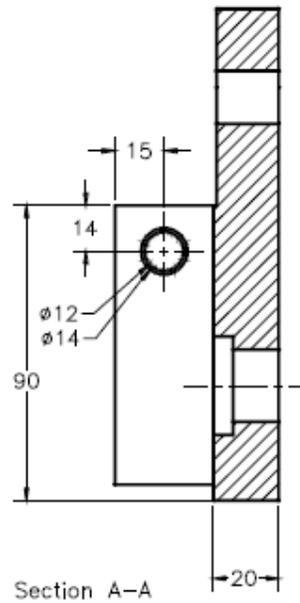
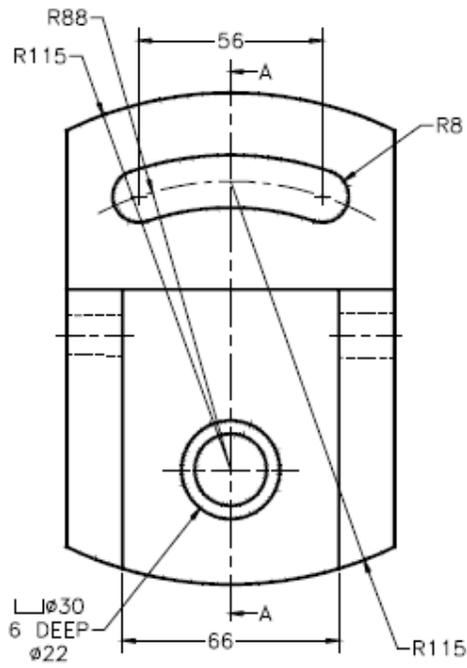
The exploded view of the Shaper Tool Head assembly

Quantity	Part Name
1	Swivel Plate
1	Back Plate
1	Vertical Slide
1	Screw Bar
1	Clamping Screw
1	Tool Fixing Screw
1	Spacer Bush
1	Handle
1	Pivot Pin
1	Nut M-10
1	Handle Bar
1	Tool Holder
1	Drag Plate
1	Swivel Screw Pin

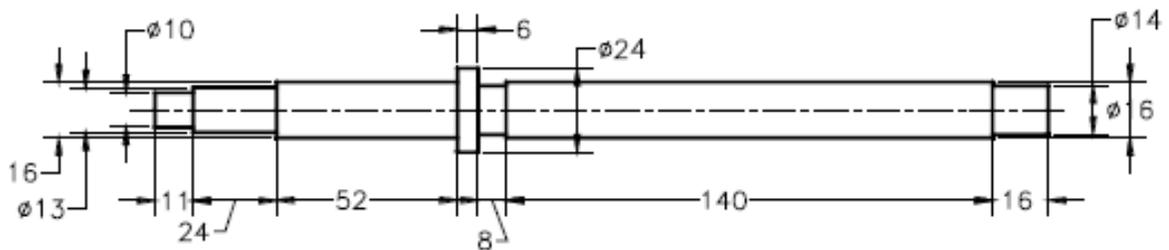
1	Washer
1	Small Washer

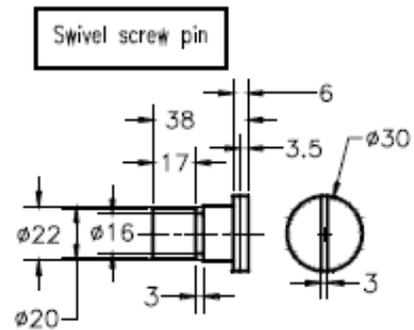
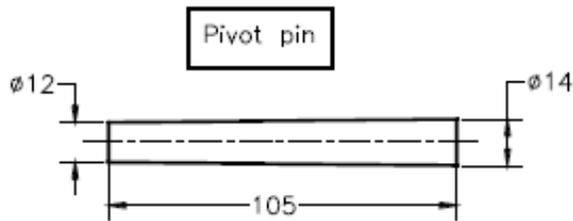
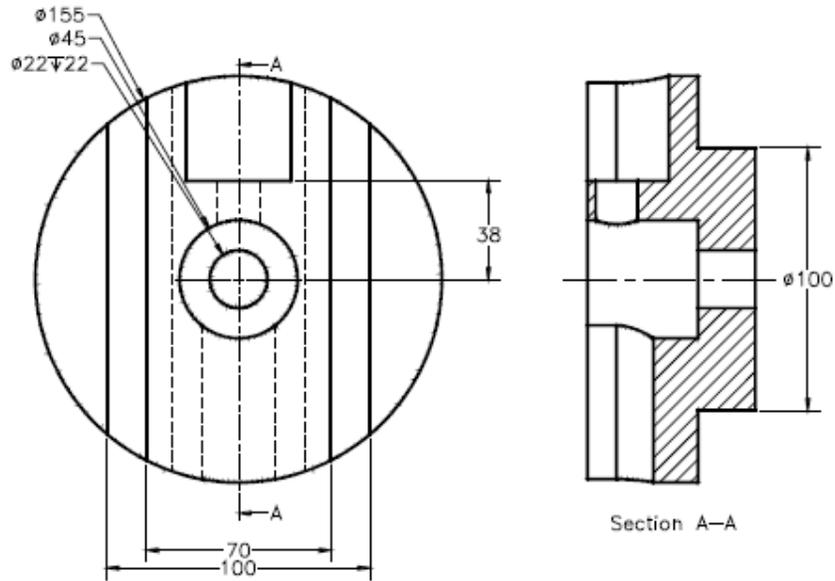
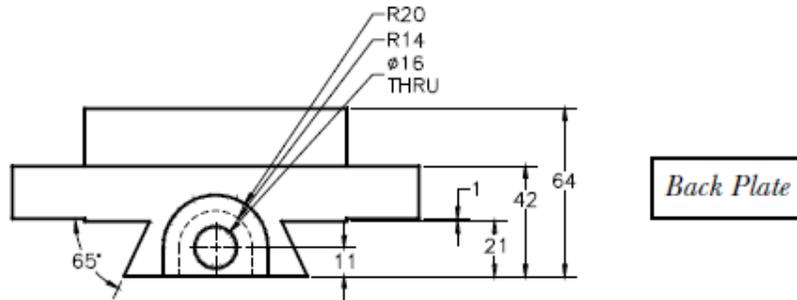


Swivel Plate

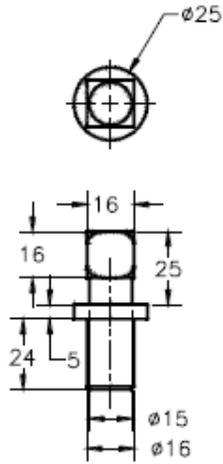


Screw bar

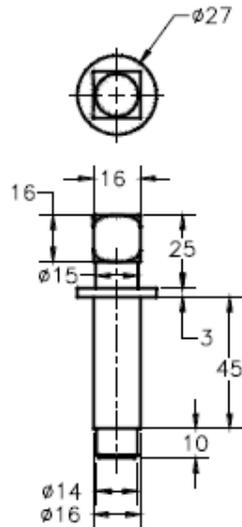




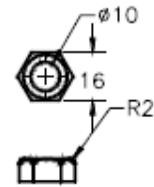
Clamping screw



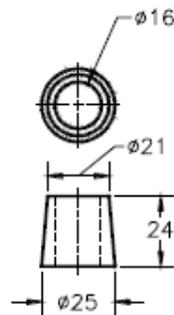
Tool fixing screw



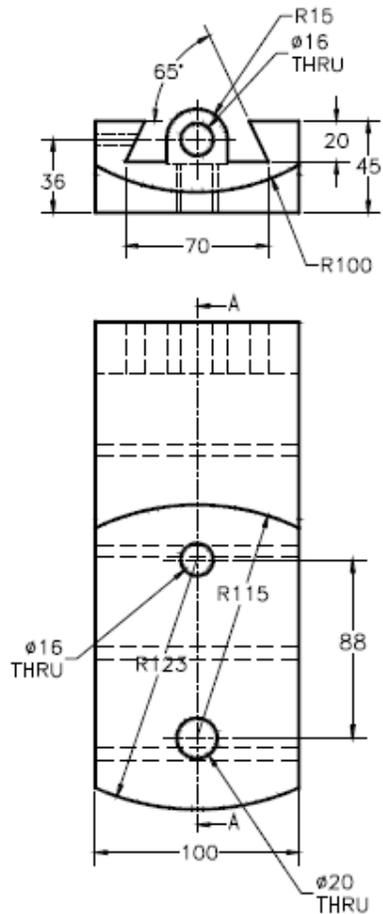
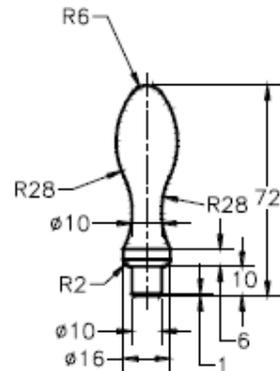
Nut M10



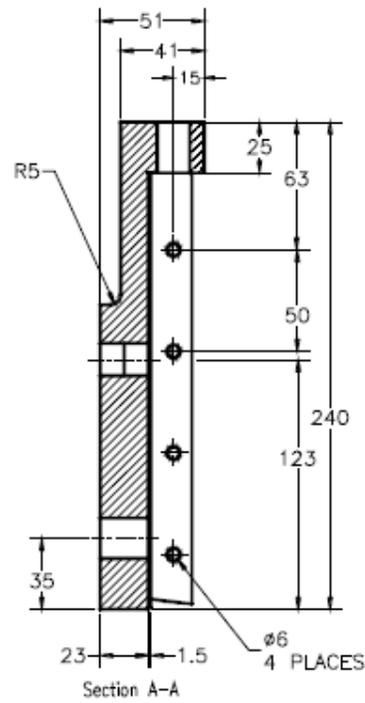
Spacer bush

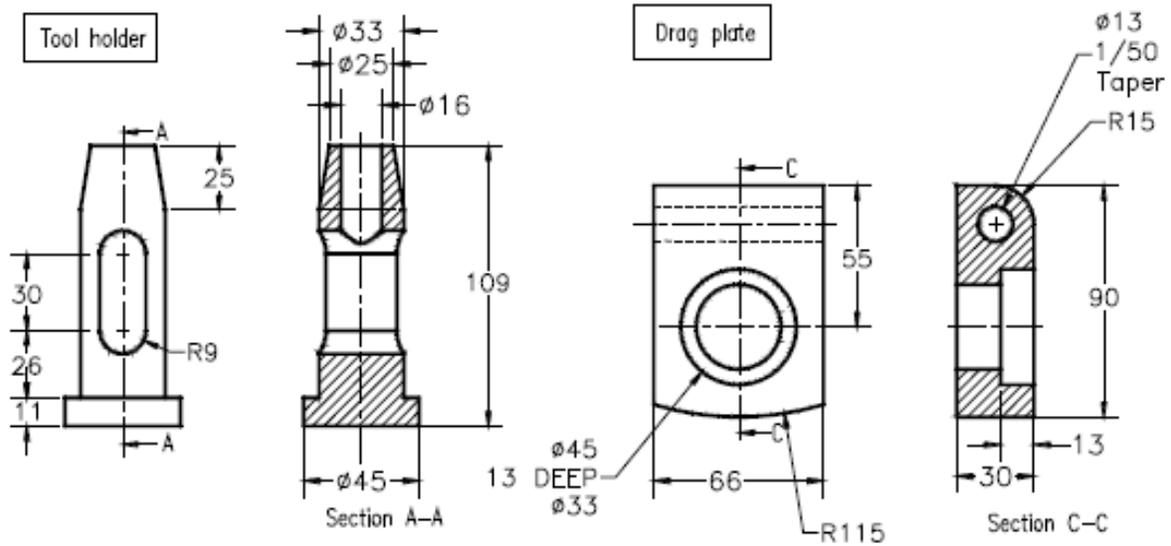
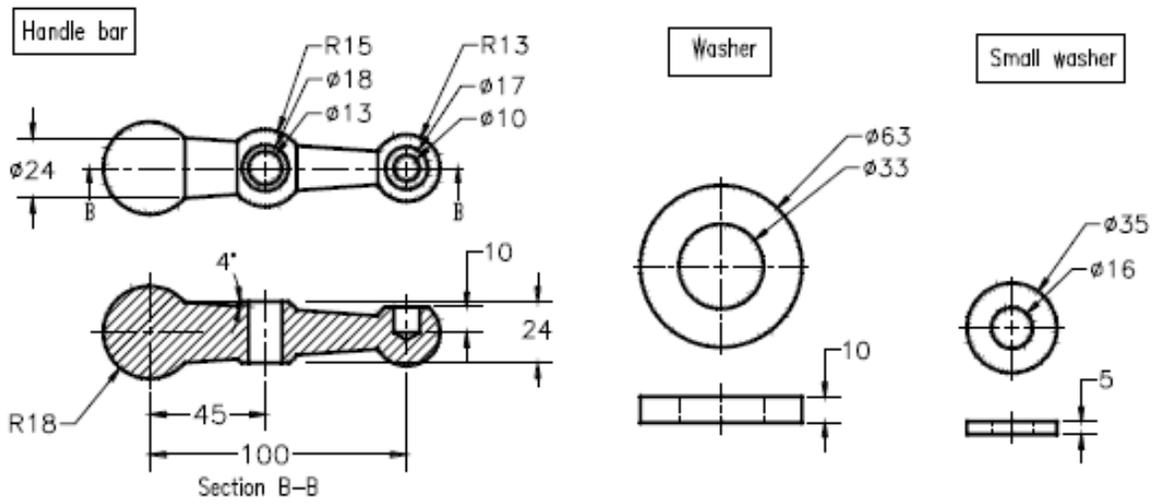


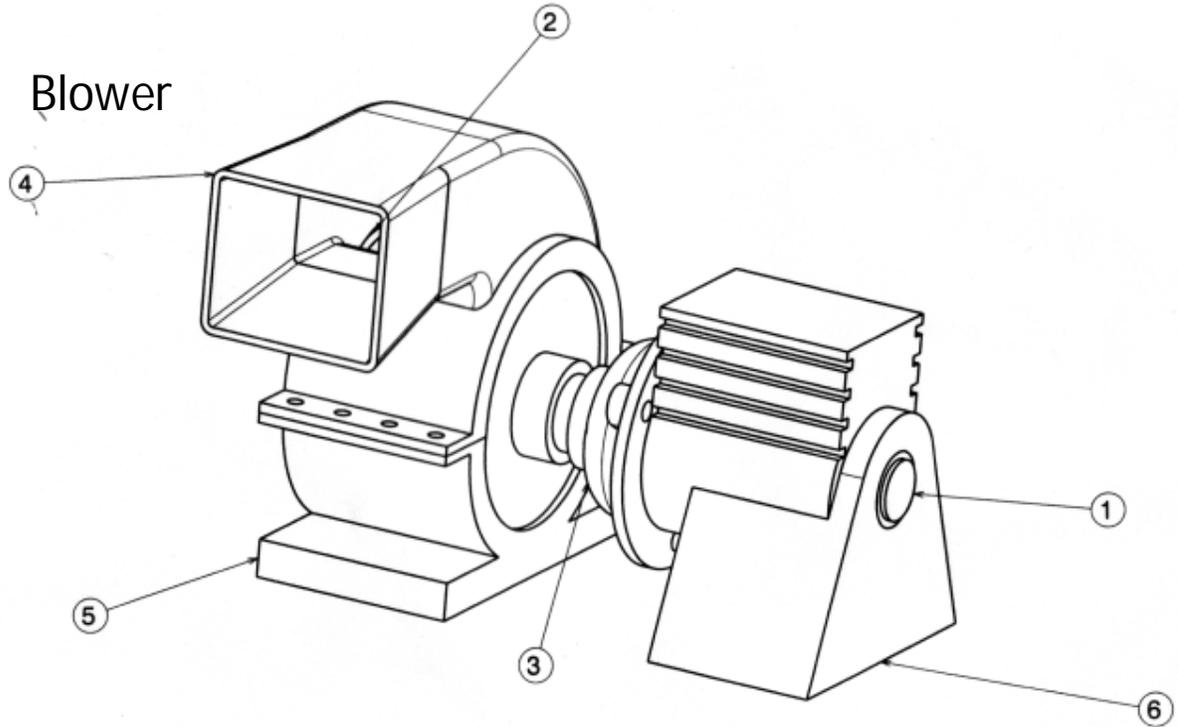
Handle



Vertical Slide



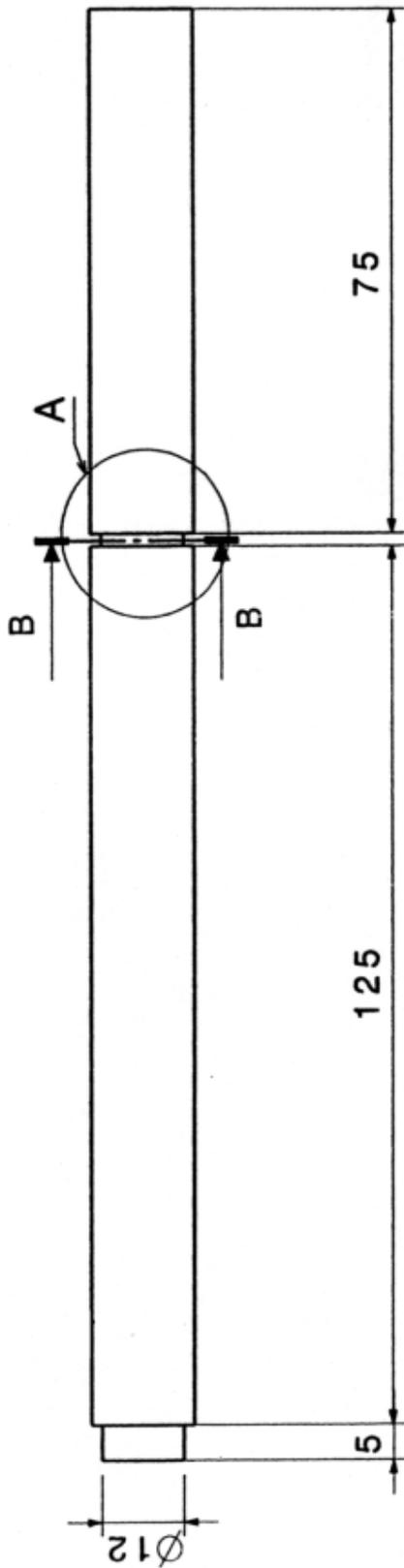




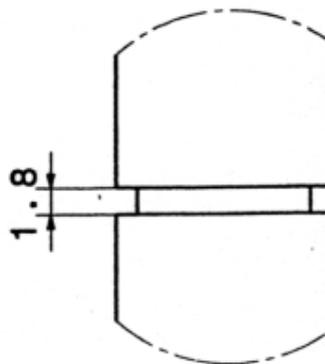
Assembly

Quantity	Part Name
1	Blower Lower Housing
1	Blower Upper Housing
1	Blower
1	Motor
1	Motor Cover
1	Shaft





Section view B-B

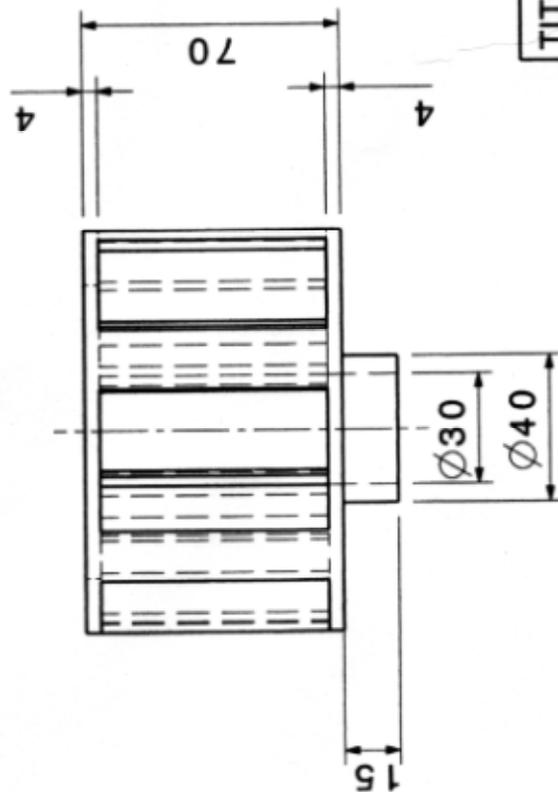
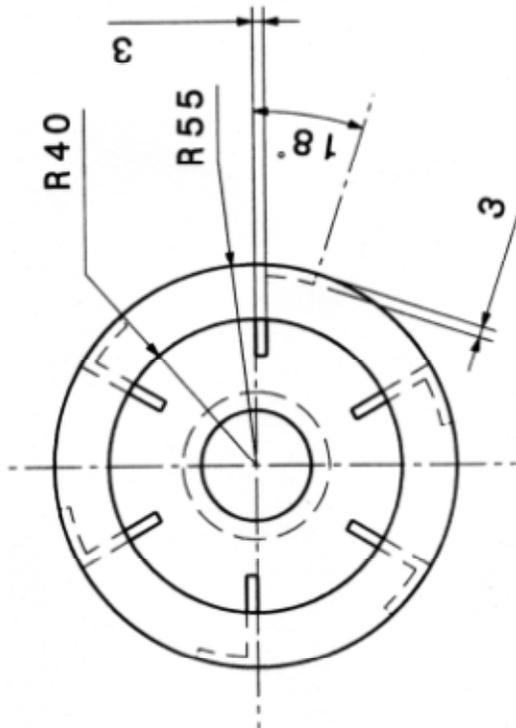


Detail A
 Scale: 2:1

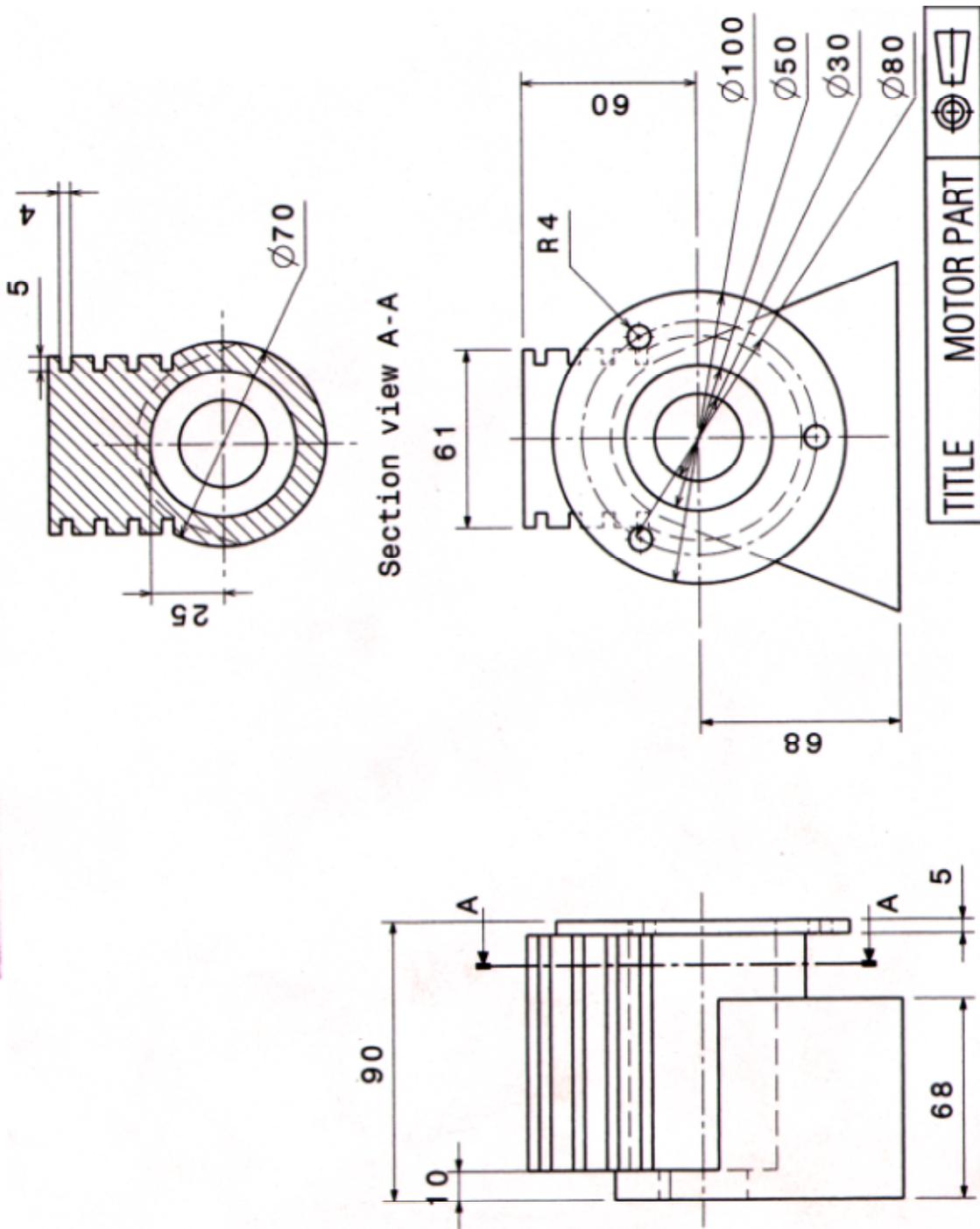
TITLE	SHAFT		REPLACED BY FOR
-------	-------	---	-----------------

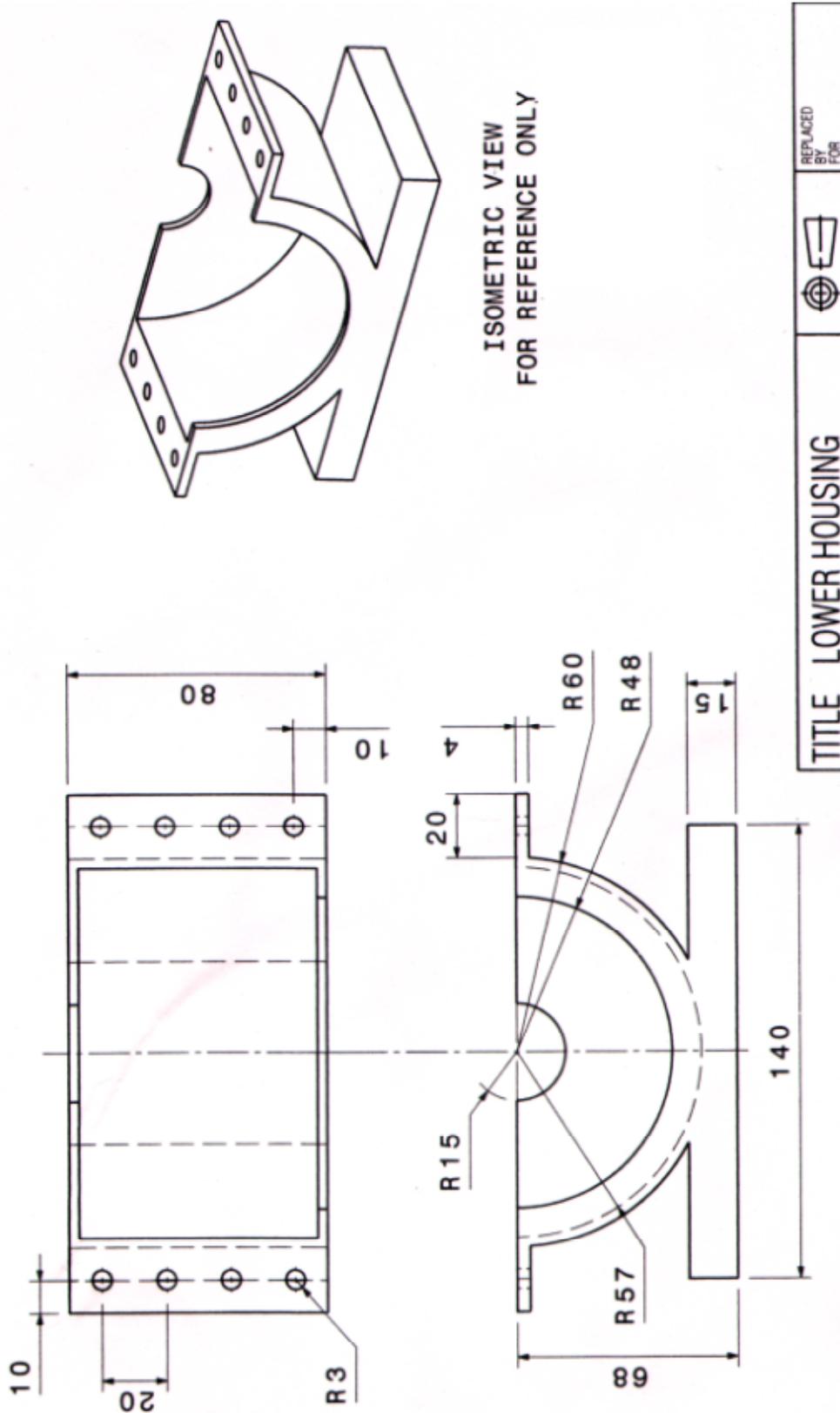


ISOMETRIC VIEW
 FOR REFERENCE ONLY



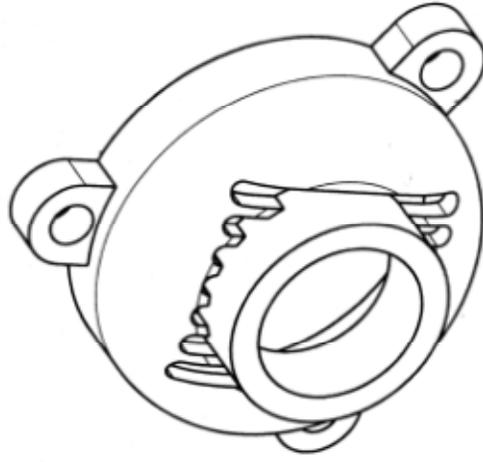
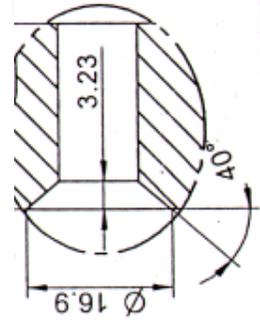
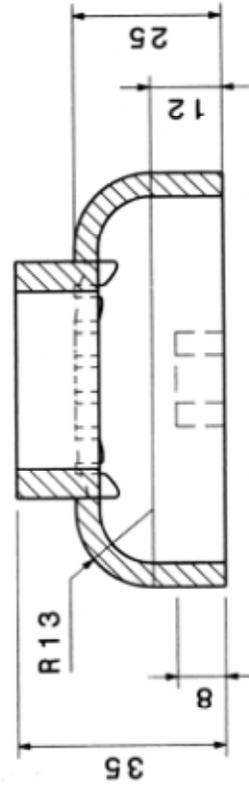
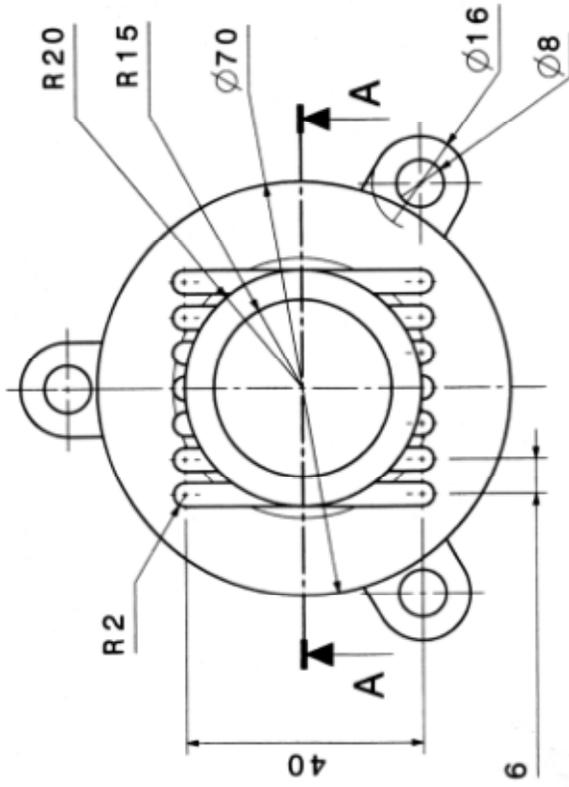
TITLE	BLOWER	REPLACED BY	FOR
-------	--------	-------------	-----



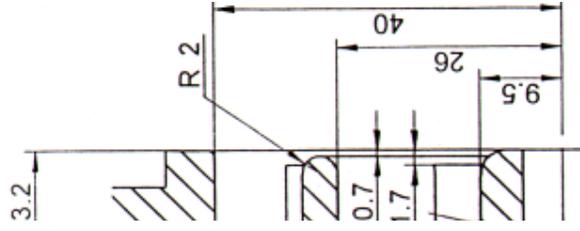


ISOMETRIC VIEW
 FOR REFERENCE ONLY

TITLE LOWER HOUSING		REPLACED BY FOR
---------------------	---	-----------------



ISOMETRIC VIEW
FOR REFERENCE ONLY



Section view A-A

TITLE MOTOR COVER

REPLACED BY FOR

1/1 B

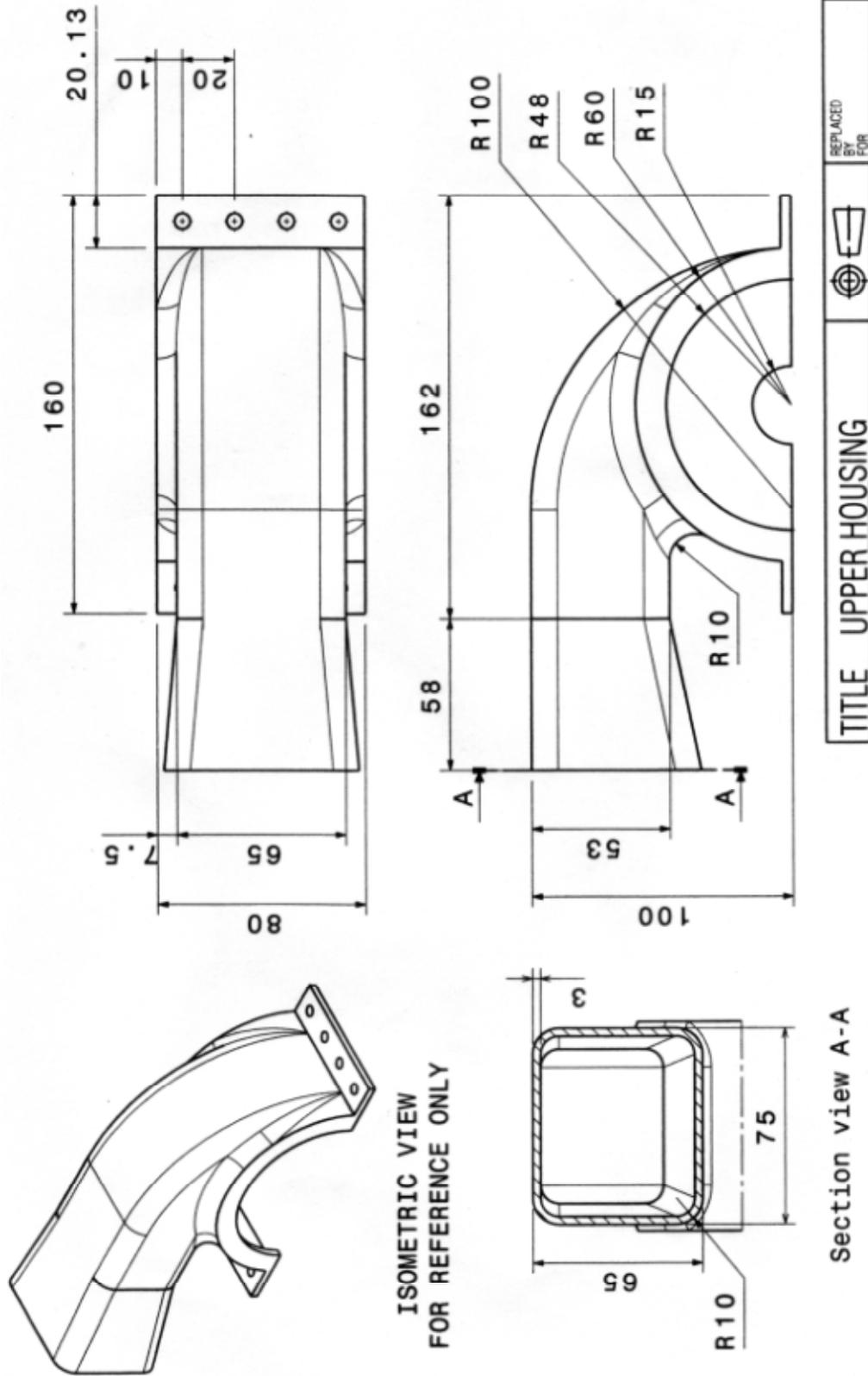
:1

FOR ALL UNSPECIFIED FILLETS, R = 3mm
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.
IF IN DOUBT ASK THE CONCERNED FACULTY

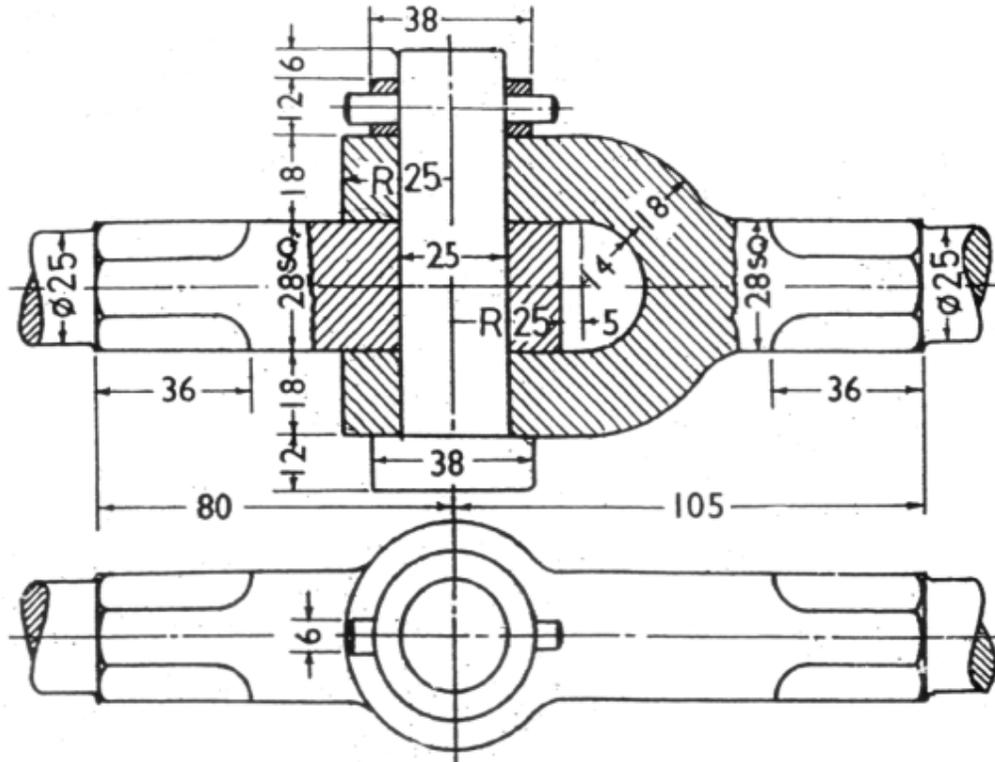
NAME	DATE
DRAWN BY MUDASSIR	01/09/05
CHECKED BY SANDEEP	05/10/05
SCALE:- 10 : 9	
TITLE : PACKING COVER	REV : 1
DWG NO : IPWFLT11L02	SHEET NO: 1 OF 1
MATERIAL : M S	

DETAIL C
1.5:1

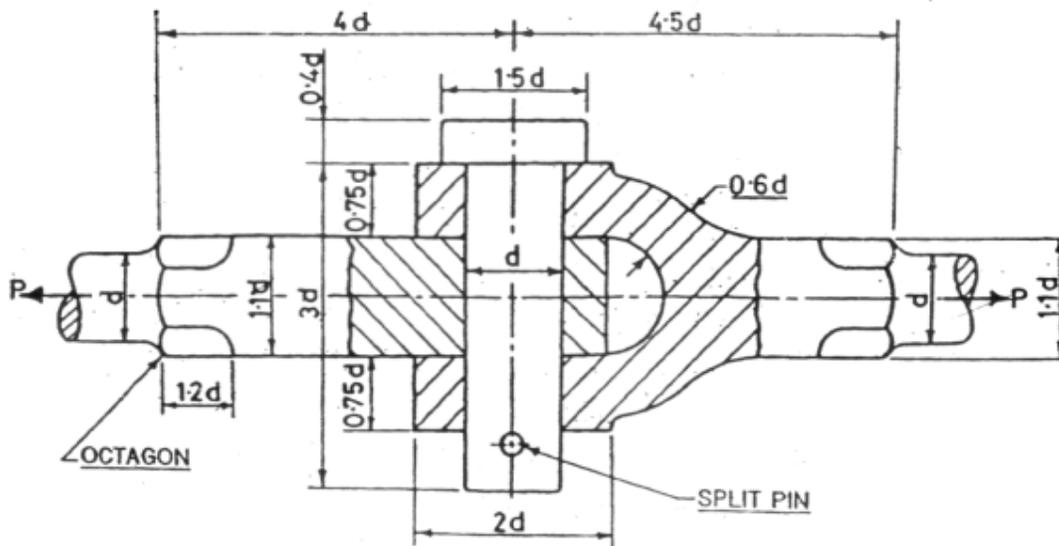








Pin-joint or Knuckle joint

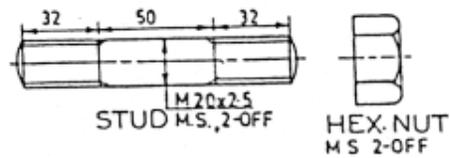
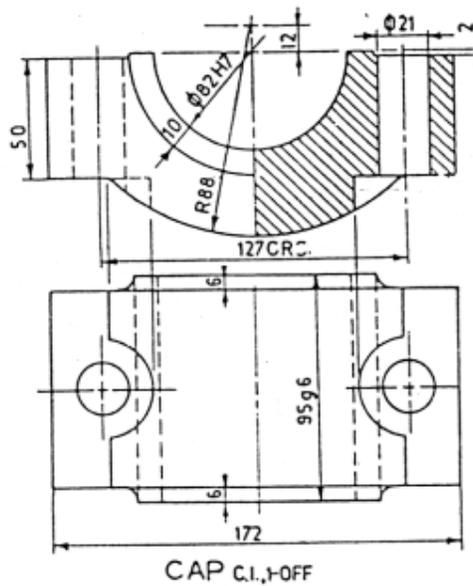
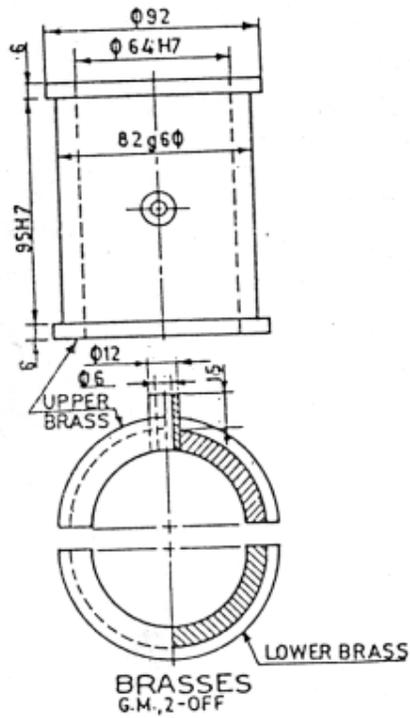
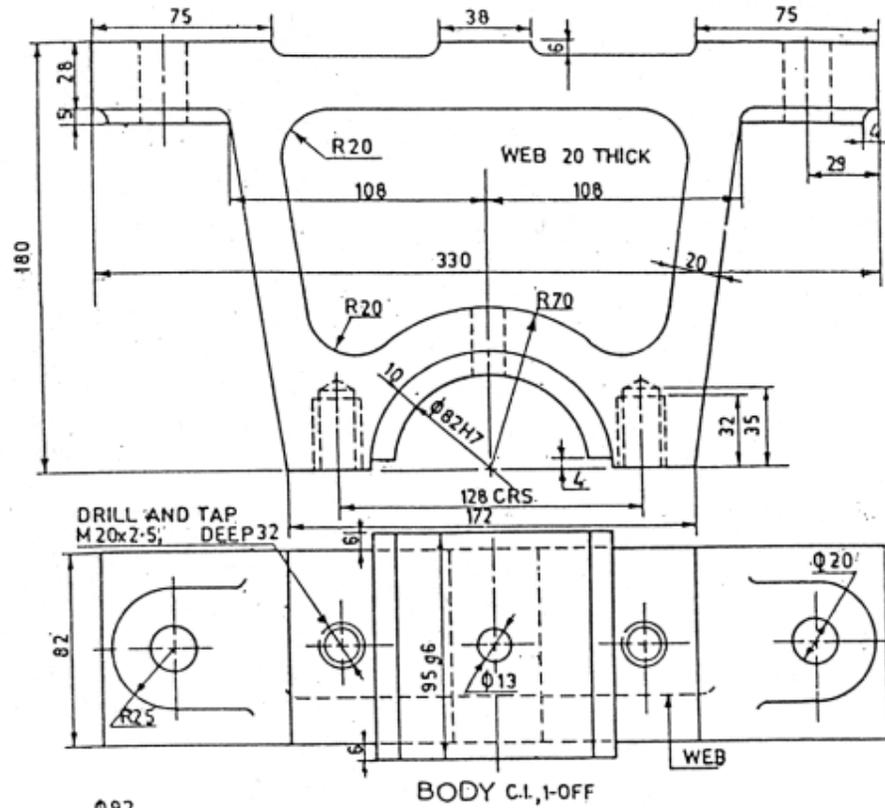


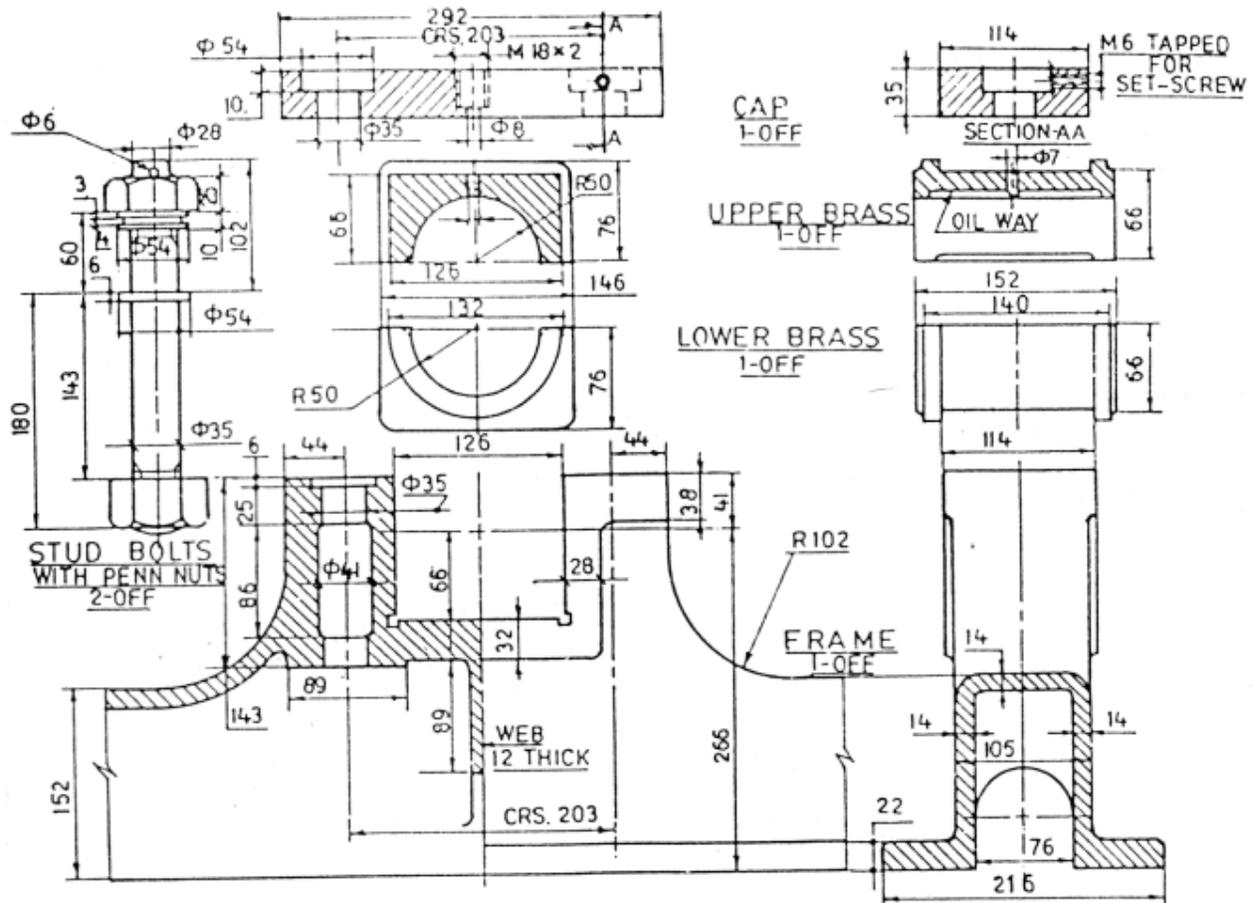
Pin-joint or Knuckle joint











Details of Marine Engine Shaft Bearing

