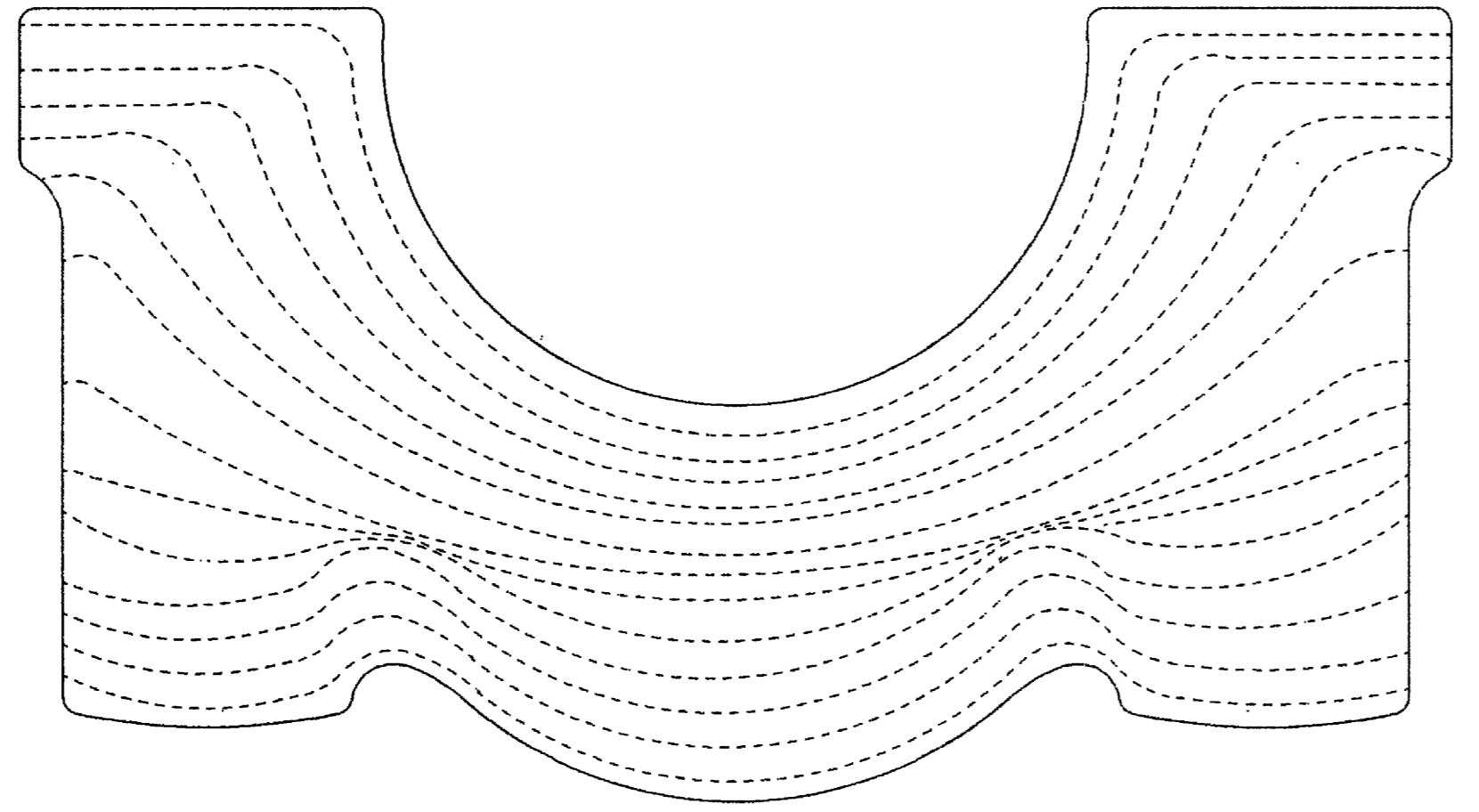
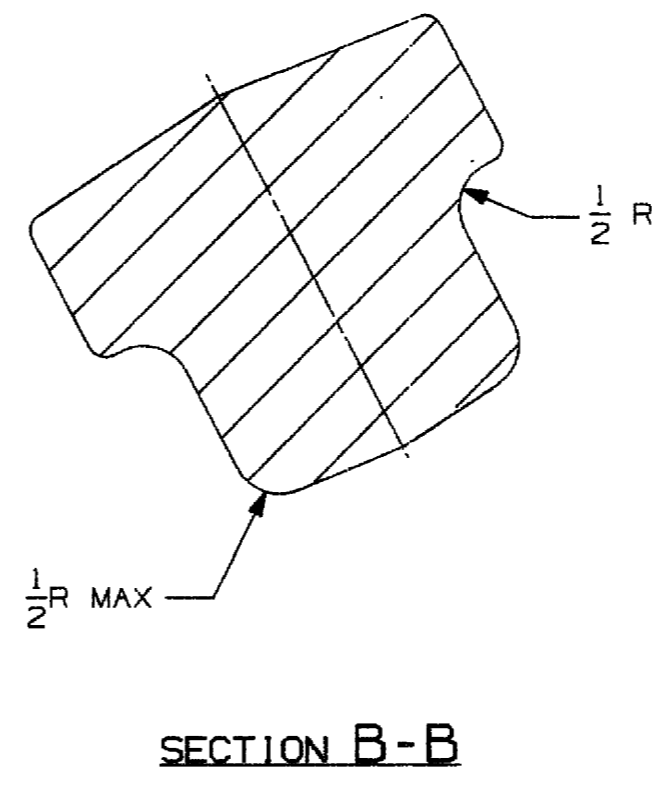
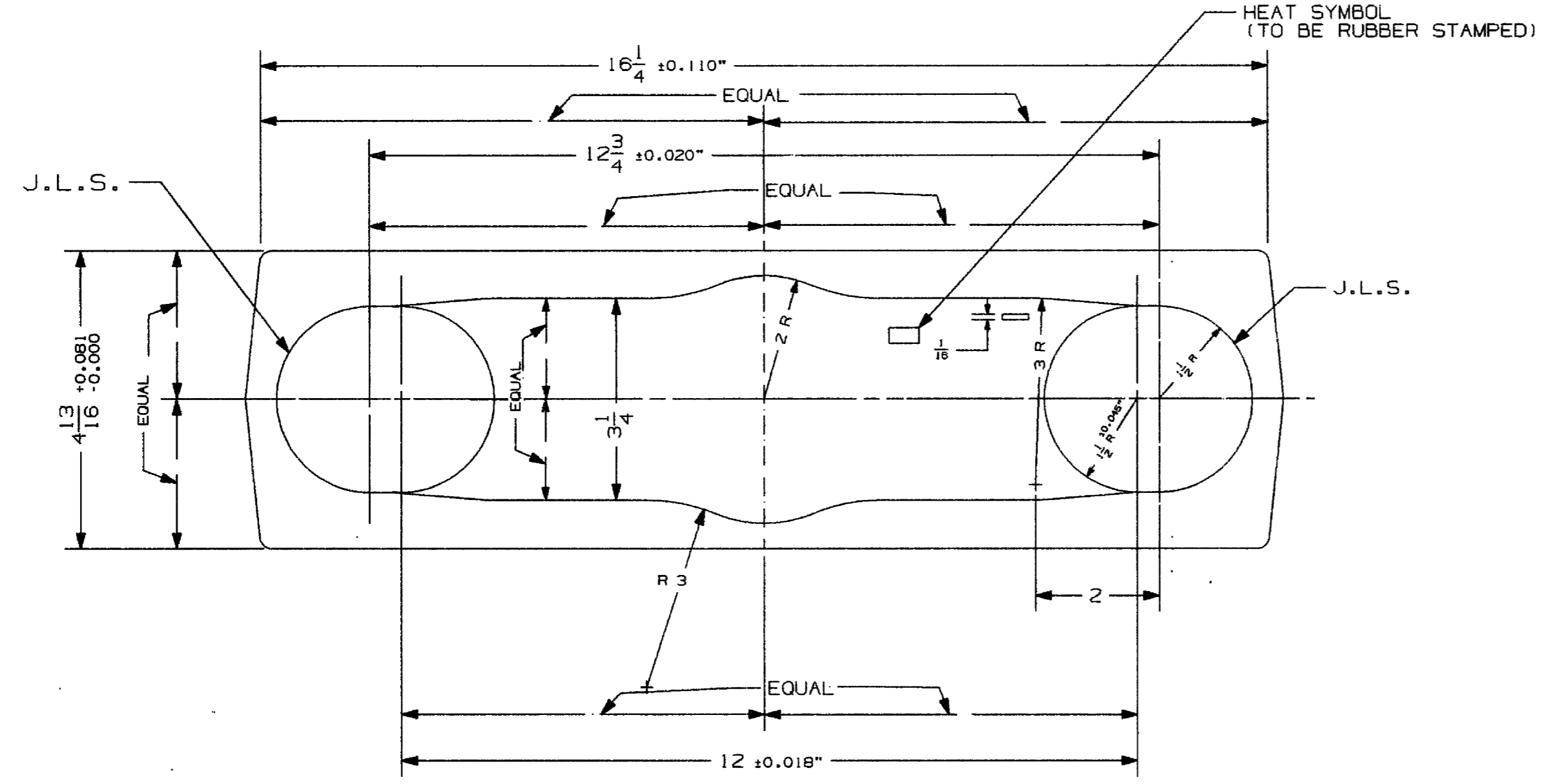
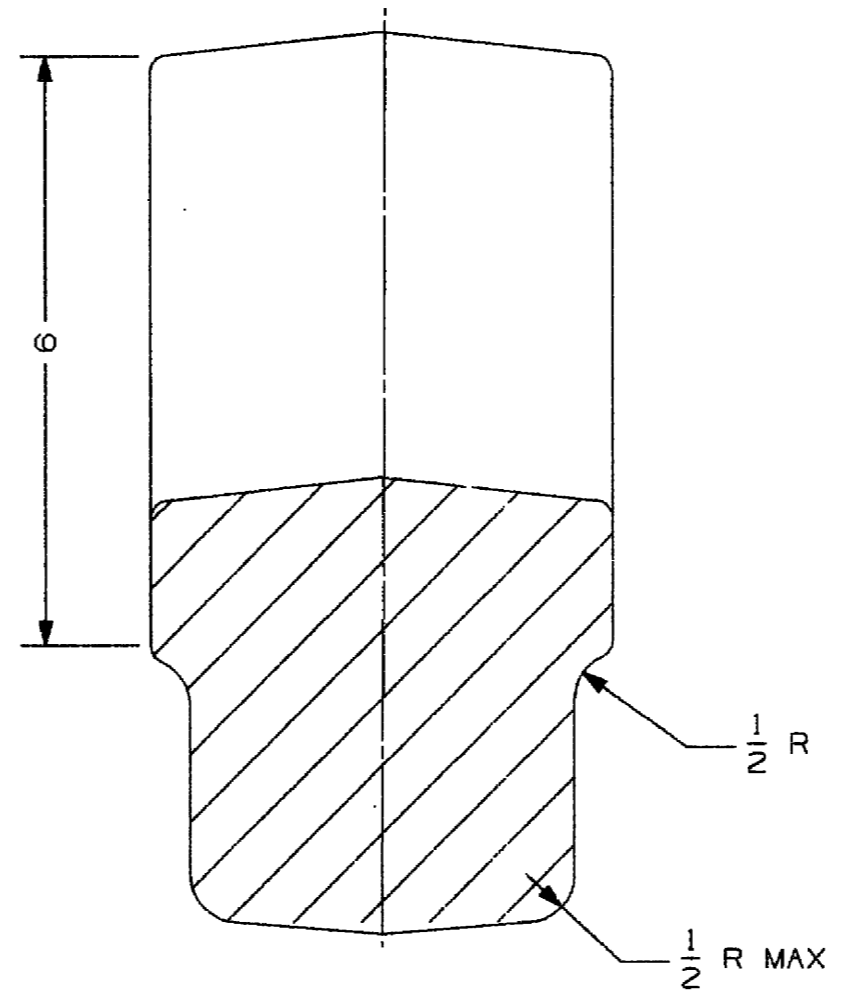
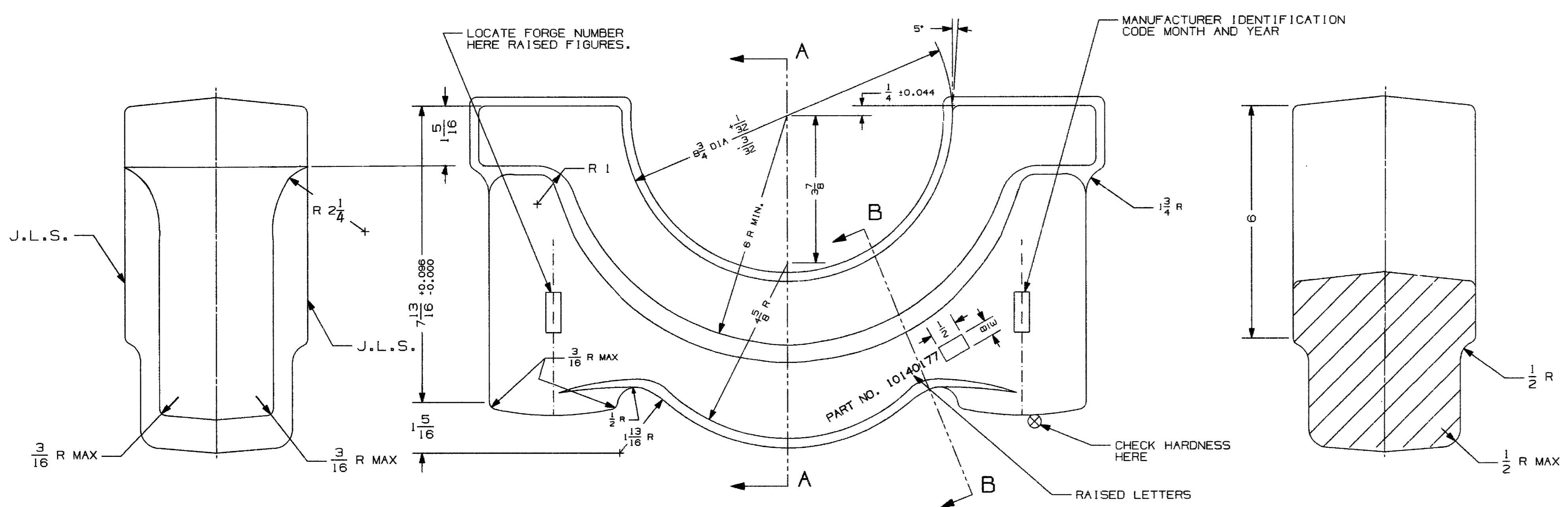


WT. FORGED (APPROX.)	FORGE NO.	ALT. NO.	ALTERATION	VERIFIED BY SSE/D	INITIAL
50-0 Kg.	1614-5705	Z	ADDED "A" & MACH. DWG. TO TABLE, LINE 2 ADDED		sd/07.24.52
		Y	REMOVED "A" & MACH. DWG. FROM TABLE, REMOVED LINE 2.		sd/06.23.53
		X	$\frac{5}{8}$ " WAS $\frac{7}{8}$ "		sd/02.2.2.55
		W	$\frac{13}{16}$ " WAS $\frac{25}{16}$ " R, ADDED $\frac{1}{2}$ ", ADDED $8"$ & $12"$ $\frac{1}{2}$ " R WAS $3"$ DIA, ADDED $\frac{1}{2}$ " R, $\frac{5}{8}$ " WAS $\frac{1}{2}$ " R, REMOVED $\frac{1}{4}$ "		sd/02.2.25.55
		V	$\frac{11}{16}$ " WAS $\frac{5}{8}$ ", $\frac{211}{32}$ " WAS $\frac{25}{16}$ "		sd/06.4.58
		VD	REVISED AND REDRAWN R.C.M. 188		sd/02.21.6.85
		VDA	ADDED LOCATION FOR HARDNESS CHECK. (NO NOTICE)		sd/02.8.5.71
		VDB	ADDED MAGNAFLUX INSPECTION STD. 31P5674, (DLW/DEV/98/76)		sd/02.14.10.73
		VDC	DIM. $\frac{43}{16}$ WAS $\frac{41}{16}$ (NO NOTICE), (REF. C.I.O.'S LETTER NO. RI/W 20/VOL. 11 DE. 28.6.75)		sd/02.9.7.75
		VDD	ADDED MANUFACTURER IDENTIFICATION CODE MONTH AND YEAR		sd/02.1.6.83
		Q	DIM. 8R MIN. WAS $\frac{7}{16}$ R MIN. C.N. No. CDE/ENG/12CYL/18CYL/2003/01 DE. 01.01.2003		sd/02.18/1/03
		b	DRAWING REVISED AND REDRAWN. C.N. No. CDE/ENG/16CYL/12CYL/2003/02. Dt. 30.05.03		
		c	NOTE NO. 3 REVISED.		
		d	NOTE: 9 ADDED. REF: CDE/ENG/16CYL/12CYL/2007/020, dt. 19.12.07		



**1. DIMENSIONS AND TOLERANCES :-** (WHEREVER NOT SPECIFIED)

- (i) DRAFT ANGLES : 0° TO 8° WHEREVER NOT SPECIFIED, WHEREVER SPECIFIED, THE SPECIFIED VALUE SHALL BE TAKEN AS MAXIMUM.
- (ii) CORNER & FILLET RAD : THESE SHALL BE KEPT AT A MAXIMUM OF  $\frac{1}{4}$ " UNLESS OTHERWISE SPECIFIED
- (iii) THICKNESS TOLERANCE :----- +0.081"
- (iv) LENGTH AND WIDTH : SHRINKAGE :----- ±0.0015"/INCH. DIE WEAR :----- ±0.084"
- (v) FLAT WITHIN :----- 0.010"
- (vi) FLASH EXTENSION :-----  $\frac{1}{8}$ " MAX
- (vii) MISMATCH TOLERANCE :----- 0.040"
- (viii) FLASH THICKNESS :-----  $\frac{3}{8}$ " TO  $\frac{3}{4}$ "
- (ix) ALL DIMENSIONS TAKEN TO THE POINT OF INTERSECTION THUS :
- (x) THE TOLERANCES MENTIONED INDICATE THE MARGIN FOR VARIOUS DIMENSIONS BUT CONTROL SHOULD BE EXERCISED TO ENSURE THAT THE FORGINGS WILL MACHINE TO FINISH DIMENSIONS MENTIONED IN THE MACHINING PART NO. 10141170 & 10142034.

**2. JIG LOCATING SURFACES :-**

JIG LOCATING SURFACES MARKED "JLS" TO BE FORGED SMOOTH TRUE AND DIMENSIONALLY CLOSE.

**3. MATERIAL SPECIFICATIONS :-**

FULLY SILICON KILLED, FINE GRAINED, OPEN HEARTH, FORGING QUALITY STEEL AS PER DLW SPEC. No. D81340.

**4. MATERIAL TREATMENT OF ROUGH FORGING :-**

NORMALISE QUENCH AND TEMPER TO THE PHYSICALS FURNISHED IN THE DLW STANDARD SHEET No. DB134006 SHOT BLAST AND COAT WITH SUITABLE RUST PREVENTIVE.

**5. FORGING STANDARDS :-**

AS PER D.L.W. STANDARD SHEET INDEX No. FG.S.0010.

**6. TESTS :-**

CHEMISTRY, TENSILE, BRINELL, MICROSCOPIC AND MAGNAFLUX AFTER PICKLING (MAGNAFLUX INSPECTION STD. 31P5674)

**7. GRAIN FLOW :-**

GRAIN FLOW AS SHOWN.

**8. OTHER CONDITIONS :-**

ALL OTHER CONDITIONS NOT SPECIFICALLY MENTIONED HEREIN SHALL CONFORM TO OUR DRAWINGS, Q2P1800 SHEET No. F, MATERIAL STANDARDS AND FORGING STANDARDS F.G.S.0010.

3. M.B. CAP (MECH) WITHOUT SERRATION AND SHELL LOCK OUTLET TO PART NO. 10141996.

FOR MACHINING DWG. SEE :- DWG. NO. 14A72150-4

TENTATIVE DRAWING

THIS DRAWING IS A PROPERTY OF DLW/INDIAN RAILWAYS AND ANY UNAUTHORISED USE OF THE DRAWING WILL BE CONSIDERED ILLEGAL AND DLW/INDIAN RAILWAYS WILL HAVE RIGHT TO INITIATE LEGAL PROCEEDINGS AGAINST THE DEFAULTERS.

ALL DIMS. ARE IN INCHES OTHERWISE NOTED.  
IF TOLERANCES NOT STATED FRACTIONAL MACHINING DIMENSIONS ALLOW ±0.010.  
DO NOT SCALE THE PRINT.  
ISSUING AUTHORITY : SSE/RECORDS

APPROVED BY	DE/DEV	10142034
		10142034
		ASSEMBLY PART NO.

NO. OF	DESCRIPTION & DIMENSION	ITEM	PART NO.	DRAWING No.	MATERIAL	SPECIFICATION
1	GROUP: ENGINE				STL.FORGE	DB1340
SUPERSEDED BY				SUPERSEDES - ALT. 'a'		
MAIN BEARING CAP (INTER) DROP FORGING				SCALE	VERIFIED BY SSE/D	
12 CYL. VEE ENGINE				PROJECTION	CHD.	As per 3.5.03
16 CYL. VEE ENGINE				DRN.	DRN.	3.5.03
DIESEL LOCOMOTIVE WORKS VARANASI				ALT.	b	
PART NO. 10140177				DRG. NO: 14B72044		