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SAMPLE
REF. DRG NO.

SIGN & DATE

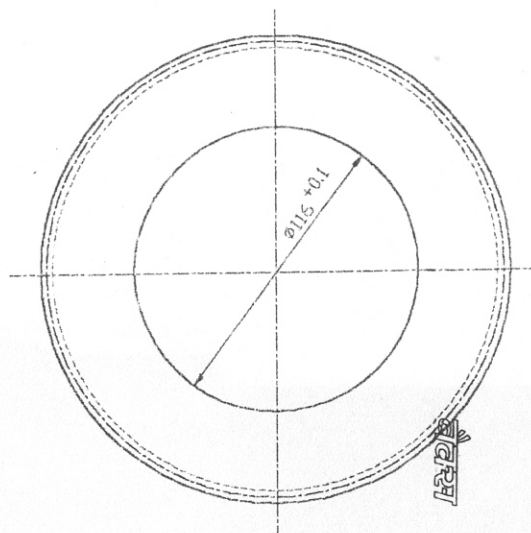
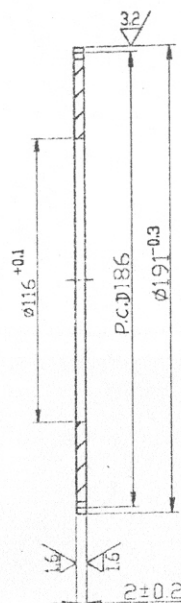
INVENTORY NO.

FIRST ANGLE PROJECTION DIMENSIONS ARE IN mm)

FORM: DG-38(B)

DRAWING NO.

63/ THE REST



1. BLUNT ALL SHARP EDGES
2. DEVIATION IN THICKNESS AT FIVE POINT SHOULD NOT EXCEED 0.02 mm
3. CASE CARBURISING TO A DEPTH OF 0.4 - TO 0.5 ATTAIN A HARDNESS OF HRC 52-56
4. ALLOWABLE 0.1 mm FOR WARP
5. FLATNESS OF FACES : MORE THAN 90 % SURFACE AREA ON BOTH SIDE OF PLATE SHOULD TOUCH THE MARKING PLATE

MAT.- 16N80Cr60

GRADE OF UNTOL. DIM.:-		CBOM NO.		STATUS OF DRG.		TYPE OF PRODUCT OR NAME OF CUSTOMER/ PROJECT			
M/CG- Y/C/M/F AA 0230208		AGREED DEPT.		NAME SIGN DATE		DOUBLE COLUMN V. BORING M/C			
WELDING-A/B/C/D-AA621104						NAME OF CUSTOMER/ PROJECT			
GAS CUTTING-T3/AA0621101						BHARAT HEAVY ELECTRICALS LTD. HARDWAR			
REV. DATE ALTERED CHECKED		REV. DATE ALTERED CHECKED		DEPT. WEX		SCALE 1:2		WEIGHT(Kg.)	
				CODE/DESIGN		REF. TO ASSY. DRG.		ITEM NO. NO. OF ITEMS	
				TITLE		DRAWING NO.		NO. OF SHEETS	
				OUTER CLUTCH PLATE		1M557/553-SP-12 00		SHEET NO. 01 NO. OF SHEETS 01	
								SIZE A3	

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SAMPLE
REF. DRG NO.

SIGN & DATE

04-05-010/34
INVENTORY NO.

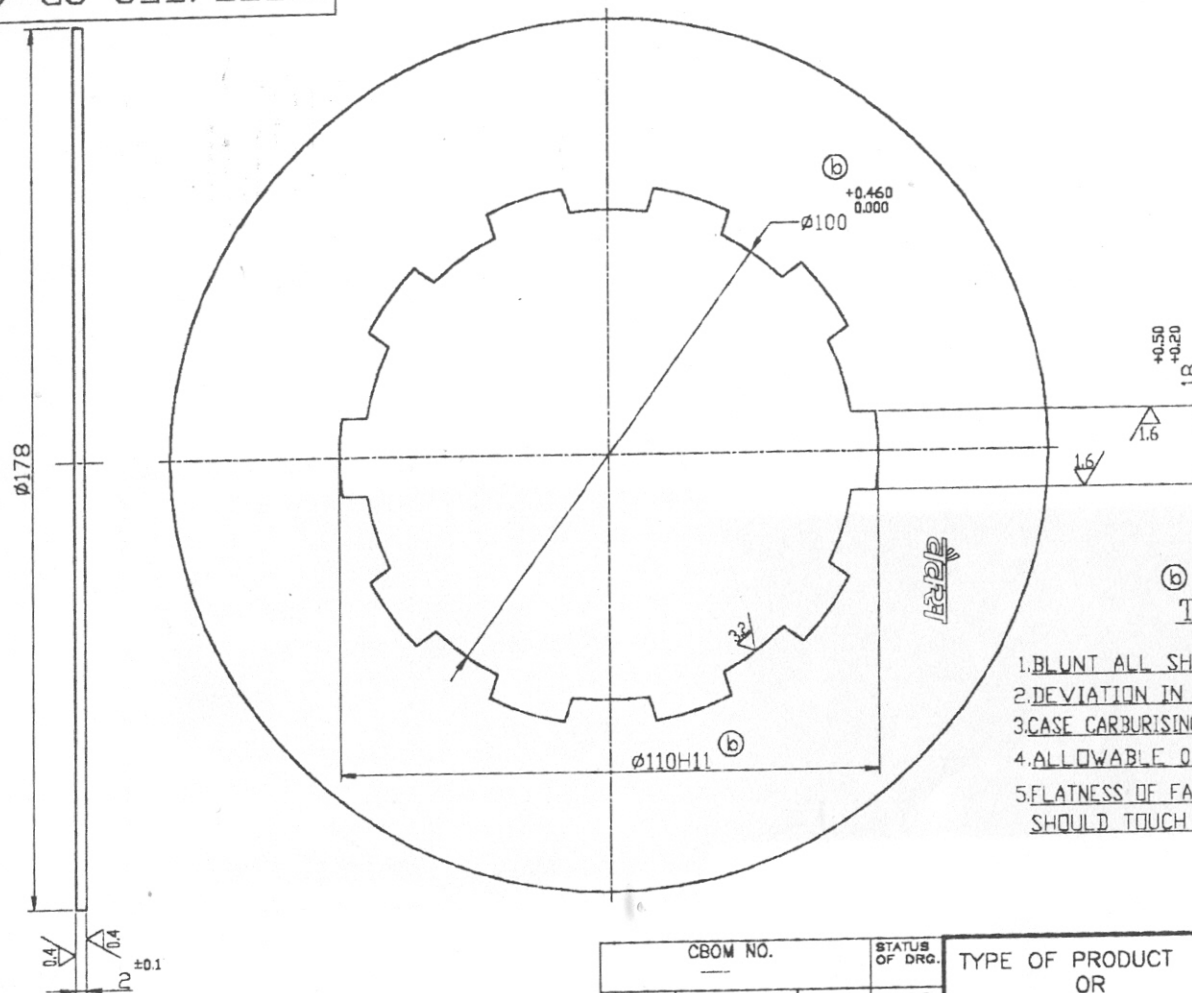
FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

FORM: 66-56(B)

✓ THE REST

1M557/553-SP-47



⑥ TECHNICAL REQUIREMENTS

1. BLUNT ALL SHARP EDGES
2. DEVIATION IN THICKNESS AT FIVE POINTS SHOULD NOT EXCEED 0.02 mm
3. CASE CARBURISING TO A DEPTH OF 0.4-0.5 TO ATTAIN A HARDNESS OF HRC. 52-56
4. ALLOWABLE 0.1 mm FOR WARP
5. FLATNESS OF FACES MORE THAN 90 % SURFACE AREA ON BOTH SIDE OF PLATE SHOULD TOUCH THE MARKING PLATE.

⑦ MAT.- 16Ni80Cr60

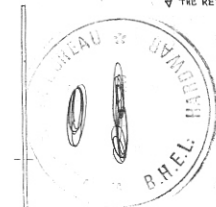
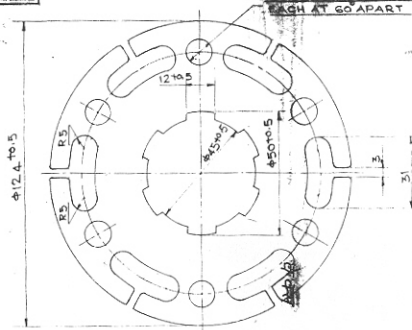
GRADE OF UNTOL. DIM.:-				CBOM NO.		STATUS OF DRG.		TYPE OF PRODUCT OR NAME OF CUSTOMER/ PROJECT					
M/CG- X/Q/M/F AA 0230208				AGREED DEPT.		NAME		SIGN		DATE		NO. OF VAR.	
WELDING-A/B/C/D-AA621104													
GAS CUTTING-T3'AA0621101													
REV.		DATE		ALTERED		REV.		DATE		ALTERED		NO. OF ITEMS	
				CHECKED						CHECKED			
						01 25-09-96 ①							
						02 04-05-04 ②							
								DEPT. WEX		SCALE 1:1		WEIGHT(Kg.) 0.25	
								CODE DESIGN		REF. TO ASSY. DRG.		ITEM NO.	
								TITLE		DRAWING NO.		NO. OF SHEETS	
								INNER FRICTION DISC		1M557/553-SP-47		01	
								(SPEED BOX)		SHEET NO. 01		NO. OF SHEETS 01	

SIZE A3

FIRST PART OF THE PART (ALL DIMENSIONS ARE IN MM)

1M553/557-SP-193

1. HOLE $\phi 10$ AT P.C.D. 93
EACH AT GOAPART



63/ THE REST

② CASE CARBIDISING TO A DEPTH
OF 0.25-0.40. HARDENED TO HRC
45-48. HARDENED AND
TEMPERED TO HRC 42-45

③ C-80
MATERIAL - 16NiCr5

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SAMPLE
REF. DRG. No.

8-10-01/34
SIGN & DATE

VAR 00	REMARKS	ITEM No.	DESCRIPTION	DRAWING No.	UNIT WEIGHT
02		15/22	27	28	29
30		31	32	33	34

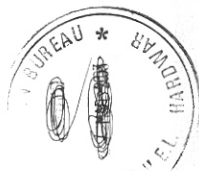
GMS No./GR. SP. No.		STATUS OF DRG		TYPE OF PRODUCT OR		V. BORING M/C		PLAN - 6-130	
NAME		SIGN		NAME OF CUSTOMER/PROJECT		DATE		DATE	
APPROVED		APPROVED		BHARAT HEAVY ELECTRICALS LTD.		NAME		SIGN	
NAME		SIGN		HARDWARE		NAME		SIGN	
DATE		DATE		SCALE		WEIGHT (KG)		REF. TO ASSY. DRG.	
REV		DATE		DEPT. WEX		SCALE		WEIGHT (KG)	
1		20.9.94		CHECKED, SIK. A. GANAI		1:1		SAMPLE	
③ MATERIAL CHANGED				TITLE: INNER CLUTCH PLATE (RED GEAR BOX)		DRAWING No. 1M553/557-SP-193		SHEET No. 1	
						CARD CODE		No. OF SHEETS	

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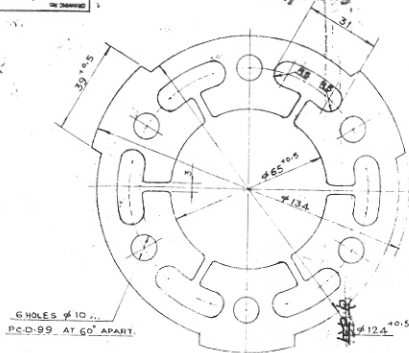
ON 26/04/2015

6.3 /
✓ THE REST.



② CASE CARBURISING TO A DEPTH OF 0.2 mm & HARDENED TO HRC 45-46: HARDENED & TEMPERED TO HRC 42-43

© C-80
MATERIAL: 16NiAGEK60



6 HOLES $\phi 10$ A.
P.C.D. 99 AT 60° APART.

VAR OO		ITEM No.	DESCRIPTION	STD	DRAWING No.	MATERIAL CODE		UNIT	UNIT WEIGHT
53	54 55	73 72 71 70		58 59 60		29 31	30	56	65 66
CARO TYPE-3		26				VAR	MATERIAL SPEC	28	71 72
CARO TYPE-1		28				32 33 34	35	24 25	67 68

GMS No./GR. SP. No.		25		CARD TYPE-1		28		CARD TYPE-2	
STA OF DRG		TYPE OF PRODUCT OR V.BORING M/C							
AGREED DEPT		NAME		SIGN		DATE		PLAN - C-13B	
		NAME OF CUSTOMER/PROJECT							
		BHARAT HEAVY ELECTRICALS LTD.				NAME		SIGN	
		HARDWAR				CHN		DATE	
		DRAWING				S.K.A.		14.1.83	
		APPO				S.C.S.		14.1.83	
REV		DATE		ALTERED		REF. TO ASSY. DRG.		ITEM	
01		2.9.96		CHECKED S.K.A. GARNAL		S.P.T.E.		No.	
ZONE		@		MATERIAL CHANGED					
		15.05.96							
		TITLE:		OUTER CLUTCH PLATE (FEED GEAR BOX)		DRAWING No.		15553/557-SP-194	
						SHEET No. 01		No. OF SHEETS	

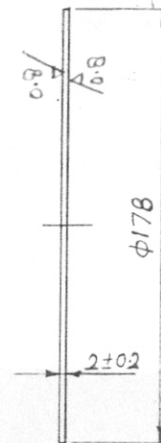
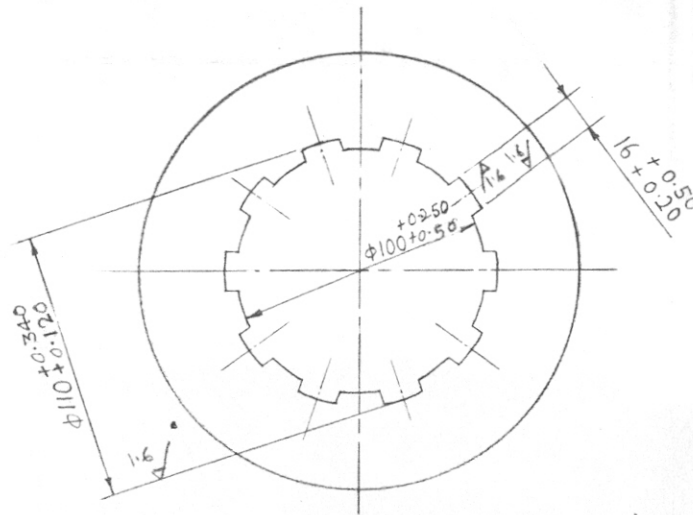
FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

FORM DG-38(B)

DRAWING NO.
1531/1541-SP-42

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3.2 / THE REST

1. BOTH SIDE OF THE DISC SHOULD BE GROUND/LAPPED TO ATTAIN A SURFACE FINISH OF 0.8.
2. BOTH SIDE SHOULD BE CLEANED & FREE FROM BURRS, DENTS ETC.
3. DEVIATION IN THICKNESS SHOULD NOT EXCEED 0.02MM.
4. CASE CARBURISING TO A DEPTH 0.4MM - HARDENED & TEMPERED TO HRC 48-50.

VAR. 00	REMARKS	ITEM NO.	DESCRIPTION	STD	DRAWING NO.	16 N180 CY 60	UNIT WEIGHT
59	64 65	75 25 27 29	58 59 60	77	29 31	MATERIAL CODE	58 65 66
32	33 46	54 55 56 57 66	71 72	28	32 33 46	MATERIAL SPECN.	54 55 56 57 66

CARD TYPE 3

CARD TYPE-1

CARD TYPE-2

GMS NO./GR. SP. NO.		STATUS OF DRG		TYPE OF PRODUCT		PLAN NO.	
M/CG-2/M/F AA 0230208				M/C-SINGLE COLUMN V-BORING			
WELDING - A/B/C/D AA 0621104				OR		BLOCK-	
GAS CUTTING - T3 AA 0621101				NAME OF CUSTOMER / PROJECT			
REV DATE ALTERED CHECKED		REV DATE ALTERED CHECKED		DEPT. WEX		WEIGHT (kg)	
				CODE DESIGN			
				TITLE		DRAWING NO.	
				INNER DISC		1531/1541-SP-42 100	
				SHEET NO. 0		NO. OF SHEETS 0	

BHARAT HEAVY ELECTRICALS LTD.
HARDWAR.

NAME	SIGN	DATE	NO. OF VAR.
RAJESH	DR	3/7/96	73 74
AGARWAL	DR	1/9/96	75 77

REF. TO ASSY. DRG.	ITEM NO.	NO. OF ITEMS
		75 77

DRAWING NO.	1531/1541-SP-42	100
SHEET NO. 0	NO. OF SHEETS 0	

RE-DRAWN ✓

SIZE A-3

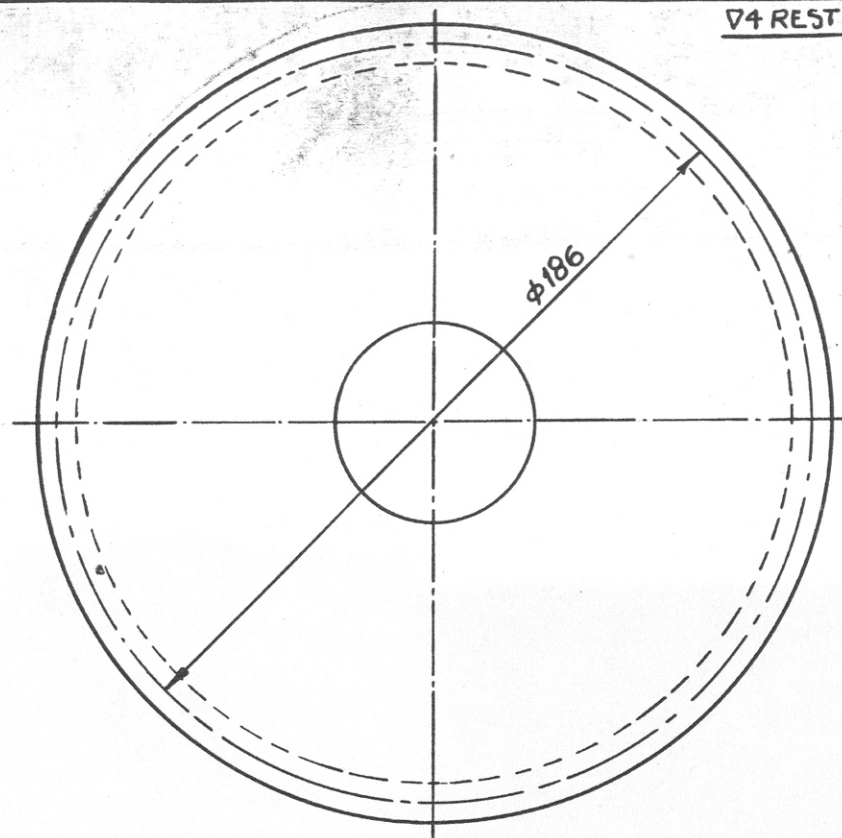
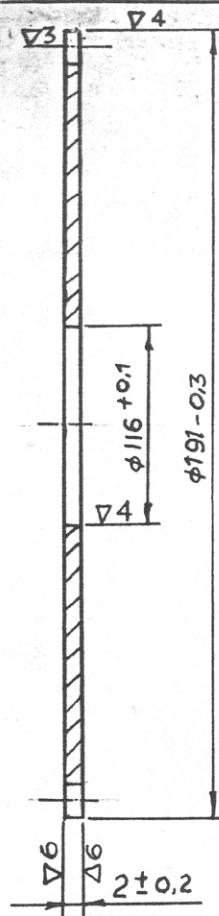
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57

74-2-012



V4 REST

MODULE	3
NO. OF TEETH	62
PRESSURE ANGLE	20°
LENGTH OF COMMON NORMAL	69.05 ± 0.190
MATING WITH PART NO.	54102245 54102266

- 1- THICKNESS TO BE CHECKED AT 5 PLACES AND NOT TO EXCEED 0.02 mm.
- 2- BENDING NOT MORE THAN 0.1 mm.
- 3- BLUNT ALL SHARP CORNERS.
- 4- CASE CARBURISE TO A DEPTH OF 0.4 TO 0.5 mm.
- 5- TEETH TO BE INDUCTION HARDENED TO HRC 50 ÷ 55.

GRADE CF UNTOL. DIM
M/C G.G. M.F. AA-0230208

REV.

00

CODE NO. —				PART NO. —			
				V. T. AND BORING M/C		54102267	
				<u>DISC-OUTER</u> (SPEED-BOX)		1531, 1541 - SP-106	
DRN.	BADONI	CPADANI	13-2-74			WEIGHT	SCALE
CHD.	VKGUPTA	Pu	13-2-74			—	N.T.S.
A.E.E.	GCSINGHAL	GE	13.2.74				
E.E.	RKGUPTA	RKGUPTA	13.2.74				
				ST. 20 X / 13 Ni3020		HEEP	
						WEX	