

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and tolerances. The part has a total length of 76, a width of 48, and a height of 25. It features a central slot with a width of 15 and a depth of 7. The drawing includes various tolerances and chamfers.

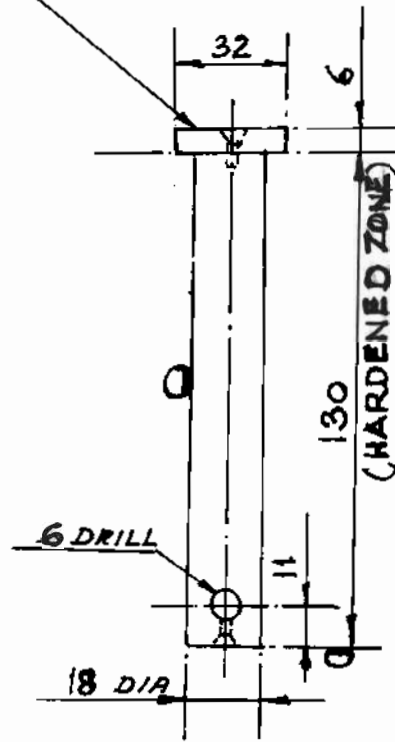
Dimensions and Tolerances:

- Overall Length: 76
- Overall Width: 48
- Overall Height: 25
- Slot Width: 15
- Slot Depth: 7
- Top Flange Width: 6
- Top Flange Thickness: 0.2 (+0.2 / -0.05)
- Bottom Flange Width: 2
- Bottom Flange Thickness: 0.2 (+0.2 / -0.05)
- Chamfer: 2x45°
- Radius: 2R

NOTE:- 1. MAKER'S NAME (IN SHORT) MONTH AND YEAR OF
① MANUFACTURE TO BE PUNCHED AT THE LOCATION
INDICATED BY STARMARK.

[illegible]

FIRME NAME MONTH YEAR
BY ETCHING



NOTE:-

1. DEPTH OF CASE - 1mm.
2. HARDNESS 58 ± 2 HRC.

		P 232 446		FRICTION ARM PIN		8	STEEL	IS: 1873 CL. 1			
		निर्देश संख्या REF. NO.		अंग आरेखण संख्या PART DRG. NO.		वर्णन DESCRIPTION		संख्या / रेलवे NO. / LOCO	पदार्थ MATL	विवरण SPECN	संख्या NO.
		अधिकृत DGM		आरेखण संदर्भ							
		जांचा O-D		06/1/19/108 REF. 37							
		अधिकृत SUPDT.									
		समीक्षा व.अ. (म.वि.) REVIEWED SE (M/E)									
		अनुमोदित (अ.वि.) APPROVED उ.प. वि.अ. DYCEE									
		दिनांक DATE		12-6-02							
		मैलिक अनुपात SCALE									
		संदर्भ/REF.									
		वर्णन DESCRIPTION									
		पदार्थ GRADE									
		संख्या N1									
		संख्या N2									
		संख्या N3									
		संख्या N4									
		संख्या N5									
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		संख्या N99									
		संख्या N100									



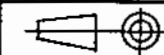
चित्तारंजन रेलइंजन
कारखाना

CHITTARANJAN LOCOMOTIVE WORKS

संस्करण
C A D NO.

प्रयोग में
USED FOR
LOCOS

WAG/7

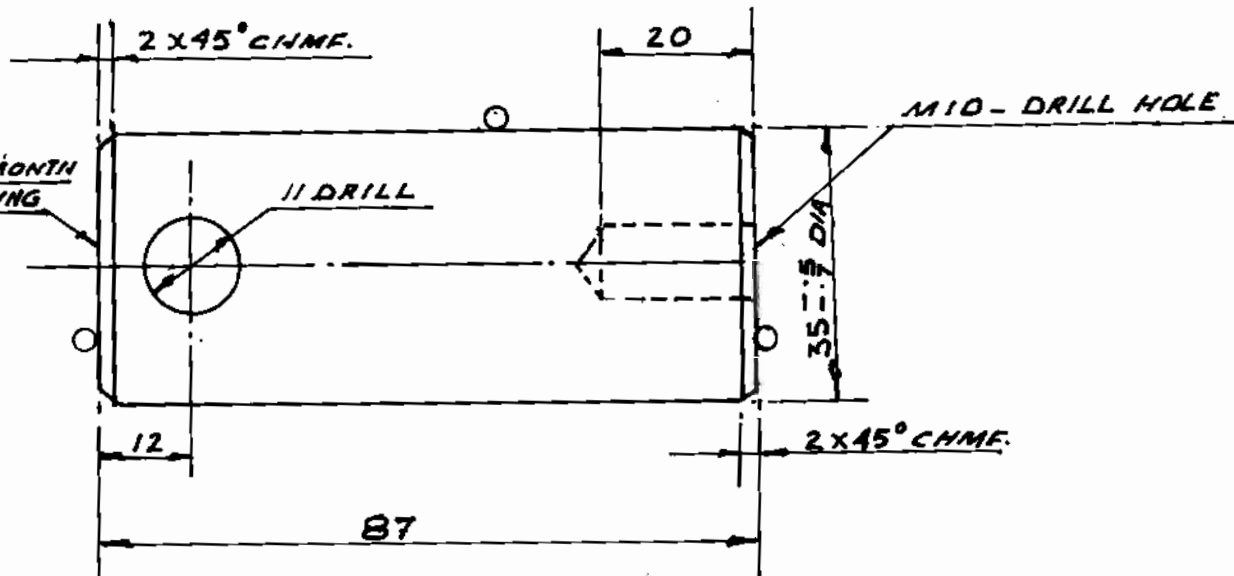


1ST. ANGLE
PROJECTION

आरेखण संख्या
DRAWING NO.

06/4/19/126

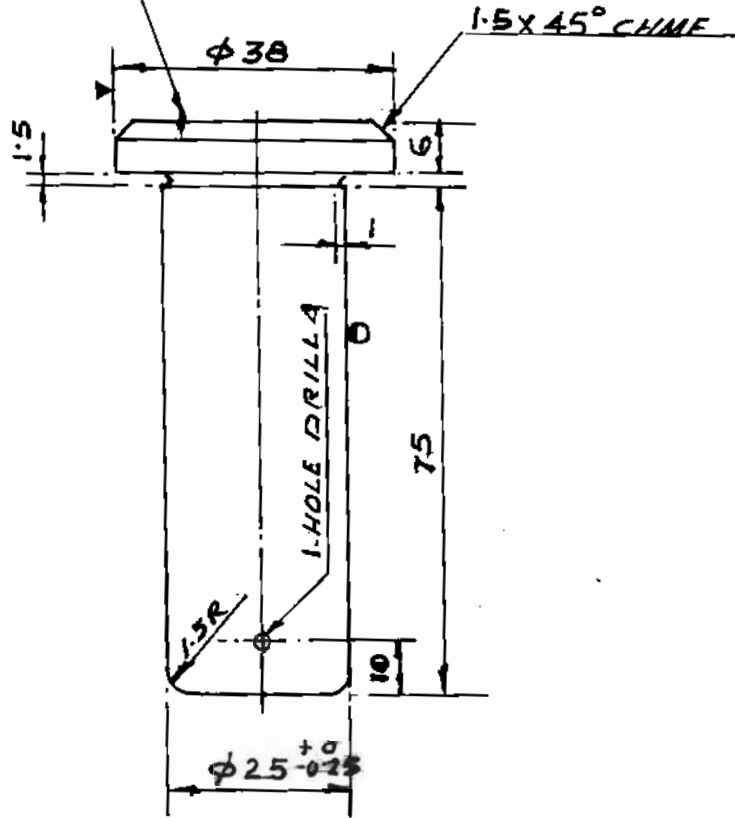
FIRM'S NAME, MONTH
2 YEAR BY ETCHING




P 238 449		HANGER PIN		16	MS STEEL	IRS- R-65	
निर्देश संख्या REF. NO.		अंग आरेखण संख्या PART ORG. NO.		वर्णन DESCRIPTION		संख्या / रेलवेजन NO. / LOCO	पदार्थ MATL
अधिकृत DGN		A.K. JAIN		आरेखण संदर्भ 06/11/19/108 REF-40		विशिष्ट SPECN	
जांचा C/O		अर्थसिद्धि SUPDT.		समीक्षित र.अ. (का/वि) REVIEWED SE (M/E)		C&D NO.	
समीक्षित र.अ. (का/वि) REVIEWED SE (M/E)		अनुमोदित (अ.वि.) APPROVED उ.मु. वि.अ. DYCEE		HANGER PIN		चिह्न संकेत SYMBOL	
दिनांक DATE		15-6-02		संस्वर क. C A D NO.		प्रयोग में USED FOR LOCOS	
रेलिक अनुपात SCALE				WAG/7		1ST. ANGLE PROJECTION	
संदर्भ/REF.				आरेखण संख्या DRAWING NO. 06/4/19/127			

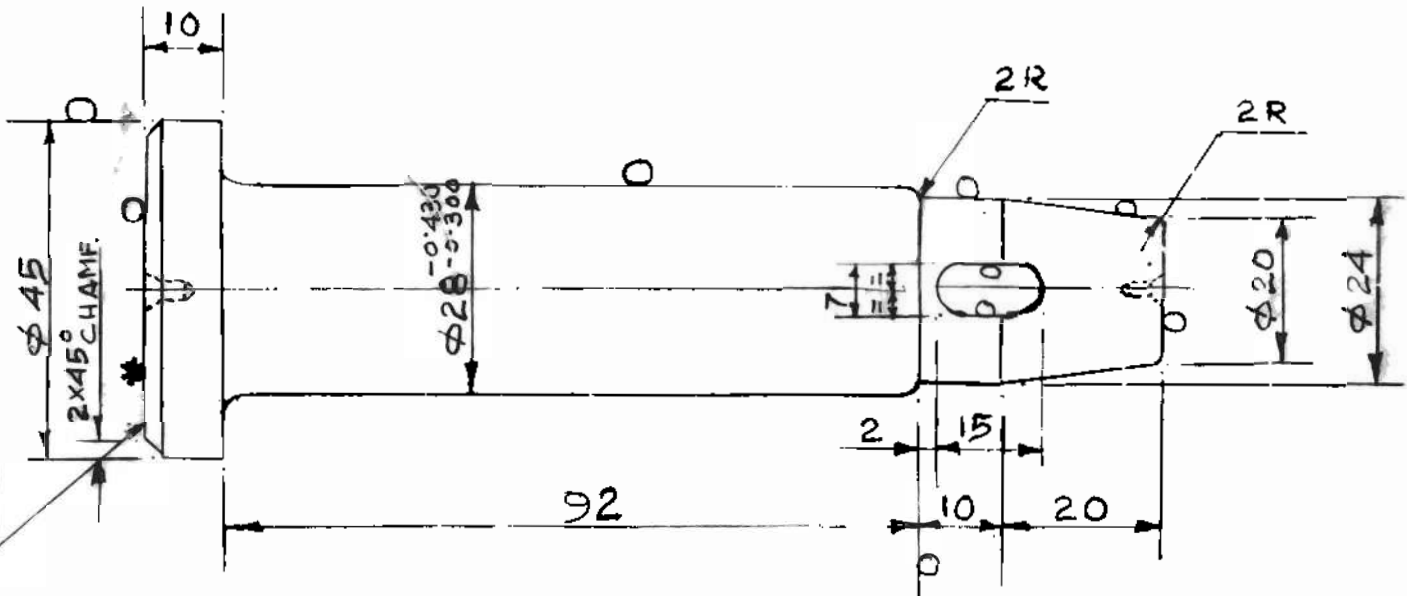
[illegible]

FIRM'S NAME, MONTH & YEAR
BY ETCHING




P 459		BRAKE CYLINDER PIN		8	STEEL	IRS-65	
निर्देश संख्या REF. NO.	अंग आरेखण संख्या PART DRG. NO.	वर्णन DESCRIPTION	संख्या / रेलवे नं. / LOCO	पदार्थ MATL	विशिष्ट SPECN	CAD NO.	
अधिकृत DGN	A.K. JHA	आरेखण संदर्भ 06/11/19/108 REF. 50	 चित्तारंजन रेलवे कारखाना CHITTARANJAN LOCOMOTIVE WORKS				
जांच C/D			संस्करण क. C A D NO.				
अभिक SUPDT.			प्रयोग में USED FOR LOCOS				
समीक्षित व.अ. (व.वि.) REVIEWED SE (M/E)			1ST. ANGLE PROJECTION				
अनुमोदित (व.वि.) APPROVED उ.प. वि.अ. DYCEE			आरेखण संख्या DRAWING NO. 06/4/19/130				
दिनांक DATE	1-6-02						
रेखण अनुपात SCALE							
संदर्भ/REF.							
वर्णन DESCRIPTION							
प्राधिकार AUTHY							
परिचय संख्या ALT. NO.							
अनिर्दिष्ट रंग - रंग मा. मा. 2102 के अनुसार UNSPECIFIED SURFACE ROUGHNESS VALUE TO IS : 3073							
पदार्थ GRADE NUMBER							
संख्या N1 N2 N3 N4 N5 N6 N7 N8 N9 N10 N11 N12							
संख्या 025 0.01 0.2 0.4 0.8 1.6 3.2 6.3 12.5 25 50							
संख्या 1 2 3 4 5 6 7 8 9 10 11 12							

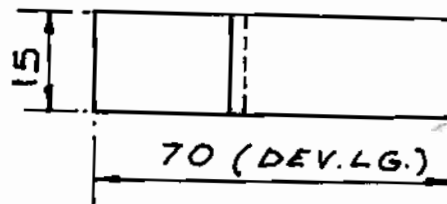
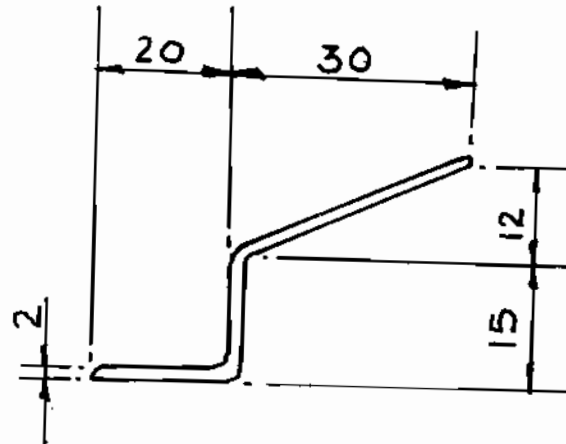
FIRM'S NAME MONTH YEAR
BY ETCHING



NOTE :- 1. MAKERS NAME, (IN SHORT) MONTH AND YEAR
OF MANUFACTURE TO BE PUNCHED AT THE
LOCATION BY STAR MARK.

①

P 232 356		HANGER LEVER PIN		8	Mn. STEEL IRS: R-65	
निर्देश संख्या REF. NO.	अंग आरेखण संख्या PART DRG. NO.	वर्णन DESCRIPTION	संख्या / रेलइंजन NO./ LOCO	पदार्थ MATL	निर्दिष्ट SPECN	C&D NO
अधिकृतित DSN	अंग आरेखण संख्या PART DRG. NO.	आरेखण संदर्भ 06/1/19/108, REF. 7	 चित्तारंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS			
अंग आरेखण संख्या PART DRG. NO.	अंग आरेखण संख्या PART DRG. NO.	आरेखण संदर्भ 06/1/19/108, REF. 7	संस्वर क. C A D NO.			
अंग आरेखण संख्या PART DRG. NO.	अंग आरेखण संख्या PART DRG. NO.	आरेखण संदर्भ 06/1/19/108, REF. 7	प्रयोग में USED FOR LOCOS			
अंग आरेखण संख्या PART DRG. NO.	अंग आरेखण संख्या PART DRG. NO.	आरेखण संदर्भ 06/1/19/108, REF. 7	1ST. ANGLE PROJECTION			
अंग आरेखण संख्या PART DRG. NO.	अंग आरेखण संख्या PART DRG. NO.	आरेखण संदर्भ 06/1/19/108, REF. 7	आरेखण संख्या DRAWING NO. 06/4/19/136			

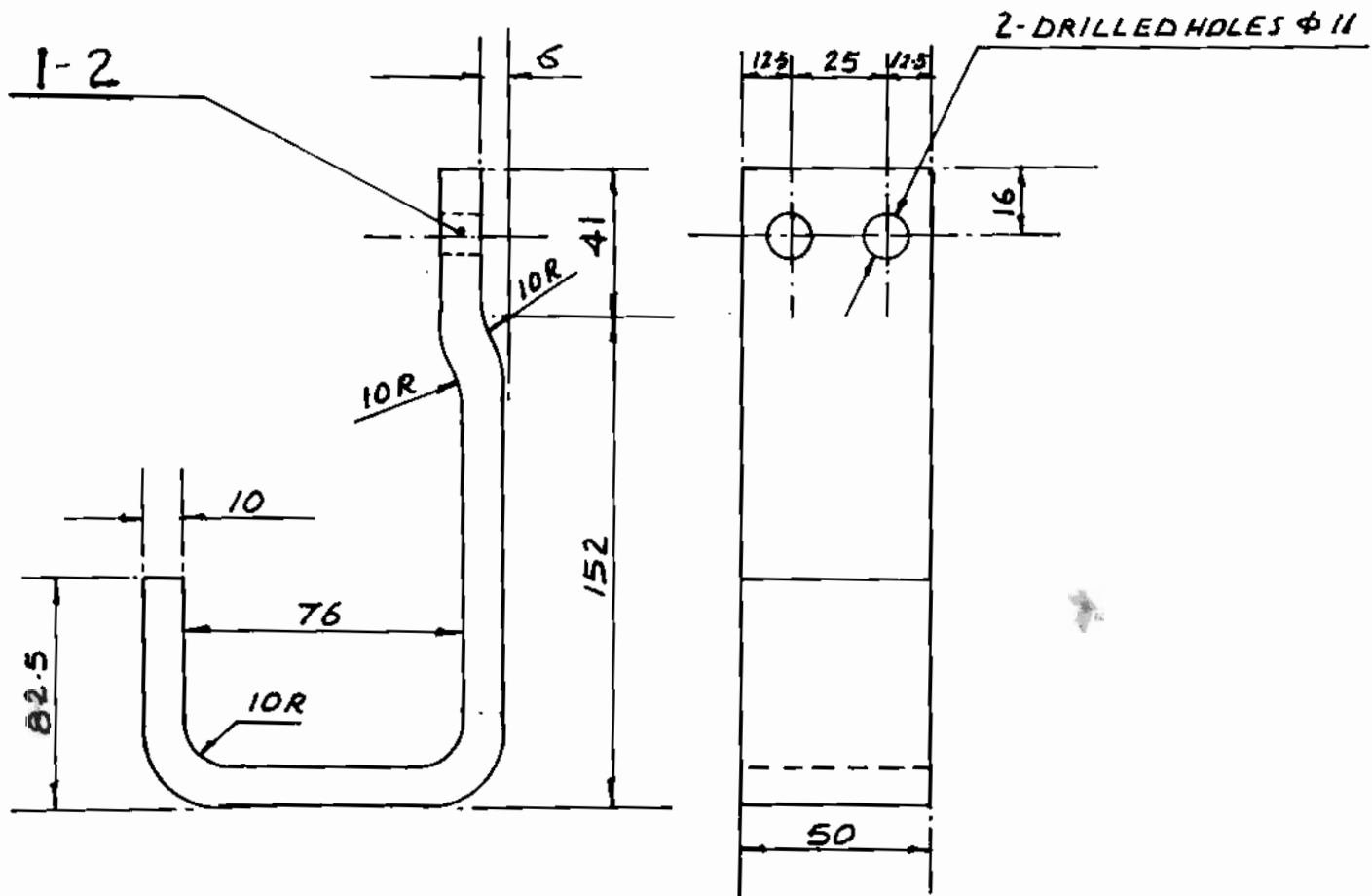


		235 P 467		LOCKING PLATE 70 X 30 X 2 THK.		16	STEEL	IRS: M-41								
		C&D NO.		वर्णन DESCRIPTION		संख्या / रेलवेजिन NO./ LOCO	मदार्थ MATL	विवरण SPECN	C&D NO.							
		अभिकल्पित DGN		A-K-JHA		आरेखण संदर्भ 06/11/19/108 REF-58										
		जांचा C/O		अर्थसिद्धि SUPDT.		चिह्न 06/11/19/108 REF-58										
		समीक्षित व.अ. (अ.वि.) REVIEWED SE (M/E)		अनुमोदित (अ.वि.) APPROVED उ.म. वि.अ. DYCEE		संख्या क. C A D NO.										
		दिनांक DATE		13-6-52		प्रयोग में USED FOR LOCOS										
		रेलिक अनुपात SCALE				1ST. ANGLE PROJECTION										
		संदर्भ/REF.				आरेखण संख्या DRAWING NO. 06/4/19/145										
परिवर्तन संख्या ALT. NO.	अतिरिक्त संख्या 2102 के अनुसार	अनिर्दिष्ट सतह - सीमा भा. मा. 2102 के अनुसार	सतह-सतह का मान भा. मा. 3073 के अनुसार	पृष्ठ GRADE NUMBER	सं. 1 N1 0.25	सं. 2 N2 0.05	सं. 3 N3 0.1	सं. 4 N4 0.2	सं. 5 N5 0.4	सं. 6 N6 0.8	सं. 7 N7 1.6	सं. 8 N8 3.2	सं. 9 N9 6.3	सं. 10 N10 12.5	सं. 11 N11 25	सं. 12 N12 50
		प्रकार AUTHY		वर्णन DESCRIPTION												
		निर्देश संख्या REF. NO.		C&D NO.												




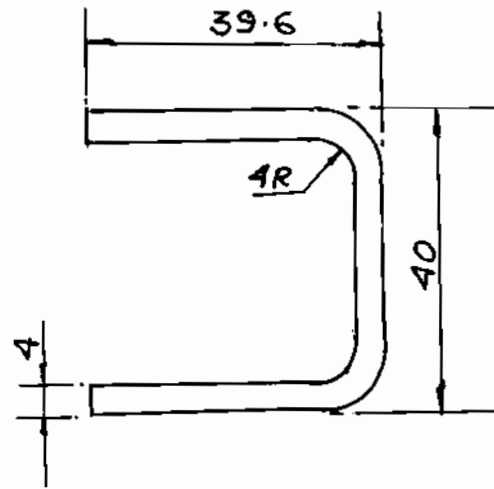
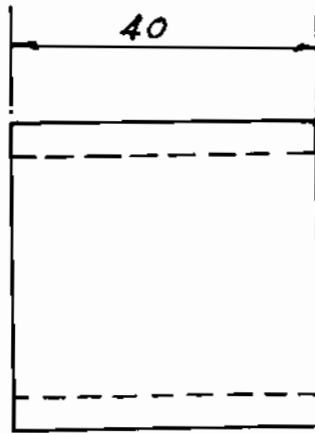
चित्तारंजन रेलइंजन
कारखाना

CHITTARANJAN LOCOMOTIVE WORKS




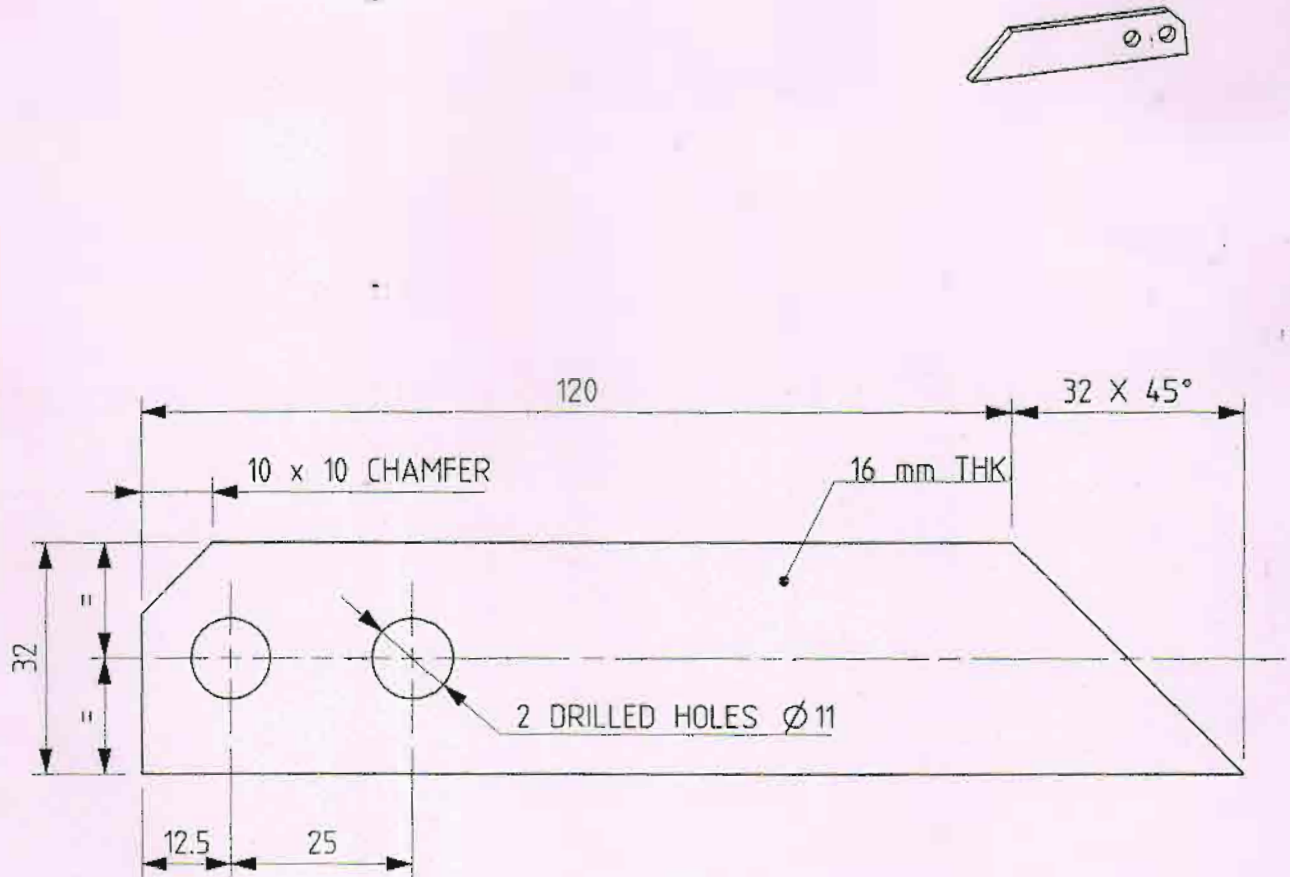
DEV. LENGTH-355

		2	423	SAFETY BRACKET	8	STEEL	IS:2062 GR-C	
		1	386	SAFETY BRACKET	8	STEEL	IS:2062 GR-C	
	वर्णन DESCRIPTION	निर्देश संख्या REF. NO.	अंग आरेख संख्या PART ORG. NO.	वर्णन DESCRIPTION	संख्या/ रेलवे नं. NO./ LOCO	पदार्थ MATL	विशिष्ट SPECN	C&D NO.
		अधिकृत DGN	A-K-JHA	आरेख संदर्भ 106/3/19/139 REF-8	 चित्तारंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS			
		जांचा CHD		206/3/19/142 REF-5				
		अधीक्षक SUPOT.						
	वर्णन DESCRIPTION	समीक्षित र. अ. (या/वि) REVIEWED SE (M/E)			संख्या क. C A D NO.			
		अनुमोदित (अ.वि.) APPROVED उ.प्र. वि.अ. DYCEE						
		दिनांक DATE	11-6-02		प्रयोग में USED FOR LOCOS WAG/7			
		रेखक अनुपात SCALE						
	वर्णन DESCRIPTION	संदर्भ/REF.			आरेख संख्या DRAWING NO. 06/4/19/154			
		परिचय ALT. NO.			1ST. ANGLE PROJECTION			
		संख्या ALT. NO.						



DEV. LENGTH-106

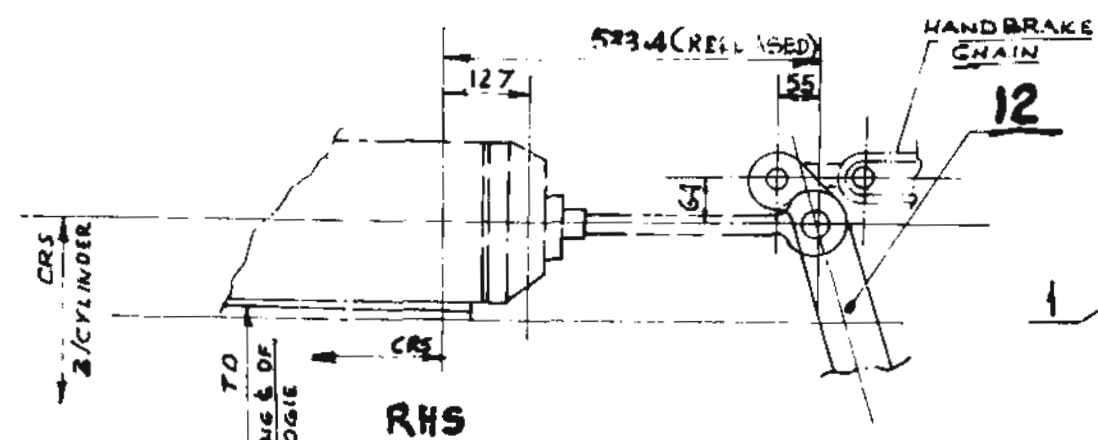
		P-232 984		SUPPORT		8	STEEL	IRS: M-41					
		निर्देश संख्या REF. NO.	अंग आरेखण संख्या PART DRG. NO.	वर्णन DESCRIPTION		संख्या / लट्टिजना NO. / LOCO	पदार्थ MATL	विशिष्टि SPECN	C&D NO.				
		अधिक लिपि DGN	A-K-JHA	आरेखण संदर्भ 06/3/19/139 REF-6		 चितारंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS							
		जांचा CHD								संस्वर क. C A D NO.			
		अर्थसिक्त SUPDT.								प्रयोग में USED FOR LOCOS			
		समीक्षित र.अ. (य./वि.) REVIEWED SE (M/E)				WAG/7							
		अनुमोदित (अ.वि.) APPROVED उ.पु. वि.अ. DYCEE				1ST. ANGLE PROJECTION							
		दिनांक DATE	12-6-02			आरेखण संख्या DRAWING NO. 06/4/19/155							
		रेखिक अनुपात SCALE											
		संदर्भ/REF.											
परिवर्तन संख्या ALT. NO.	प्रतिकार AUTHY	वर्णन DESCRIPTION	परीक्षा GRADE NUMBER	सतह-रफता क्रा मान प्र.मा 3073 के अनुसार SURFACE ROUGHNESS VALUE TO IS : 3073	सिंह SYMBOL								
अनिष्टित लक्ष -सीमा प्र.मा 2102 के अनुसार UNSPECIFIED TOLERANCE TO IS : 2102													



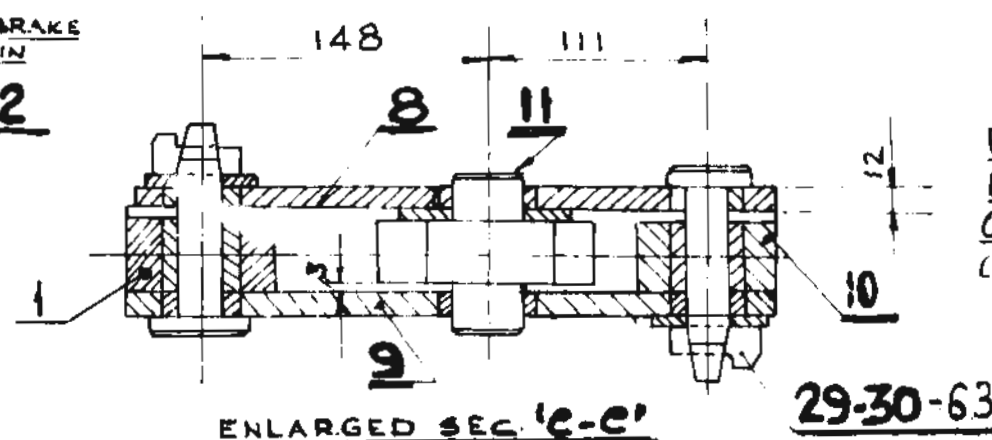
NOTE:

1. REFERENCE ASSEMBLY DRAWING 1209-01.316-102 (HANGER LEVER CENTRE R.H) & 1209-01.316-094 (HANGER LEVER CENTRE L.H). (REF NO. 06/03/19/139)
2. REFERENCE ASSEMBLY DRAWING 1209-01.316-093 (CYLINDER LEVER ASSLY R.H) & 1209-01.316-088 (CYLINDER LEVER ASSLY L.H). (REF NO. 06/03/19/142)
3. QUANTITY PER LOCO-16

परिवर्तन संख्या ALT NO.		प्रधिकार AUTHY		वर्णन DESCRIPTION		रिचिक्ड डेटा DATED INITIAL		अधिकृत DGN		जॉयंट CHD		चितरंजन रेलइंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS, INDIA	
पदार्थ MATERIAL		प्रकार SPEC		वर्णन DESCRIPTION		अनुमोदित APPROVED BY		दिनांक DATE		रेखिक अनुपात SCALE		आरेखण संख्या DRAWING NO.	
STEEL		प्रति सार कि. ग्र. WT. EACH IN KG		SAFETY BRACKET BAR		19-03-20		1:1		06/14/19/153		1209-01.416-090	
परिवर्तन संख्या ALTERATION NO.		पर्य SHEET		परिवर्तन संख्या ALTERATION NO.		पर्य SHEET		परिवर्तन संख्या ALTERATION NO.		पर्य SHEET		परिवर्तन संख्या ALTERATION NO.	
0		1 OF 1		0		1 OF 1		0		1 OF 1		A4	

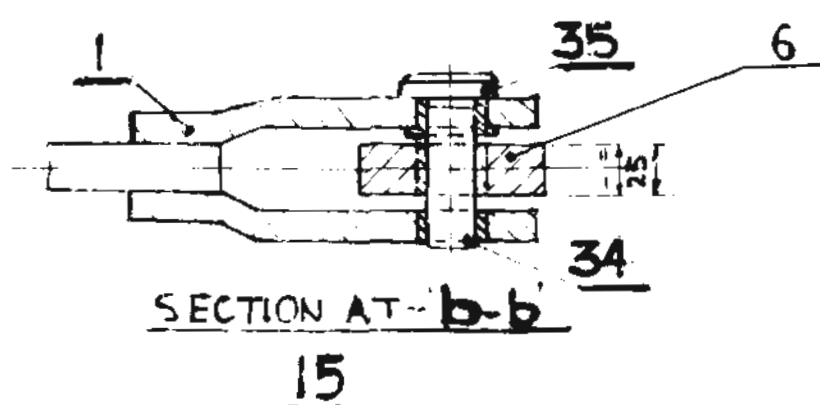
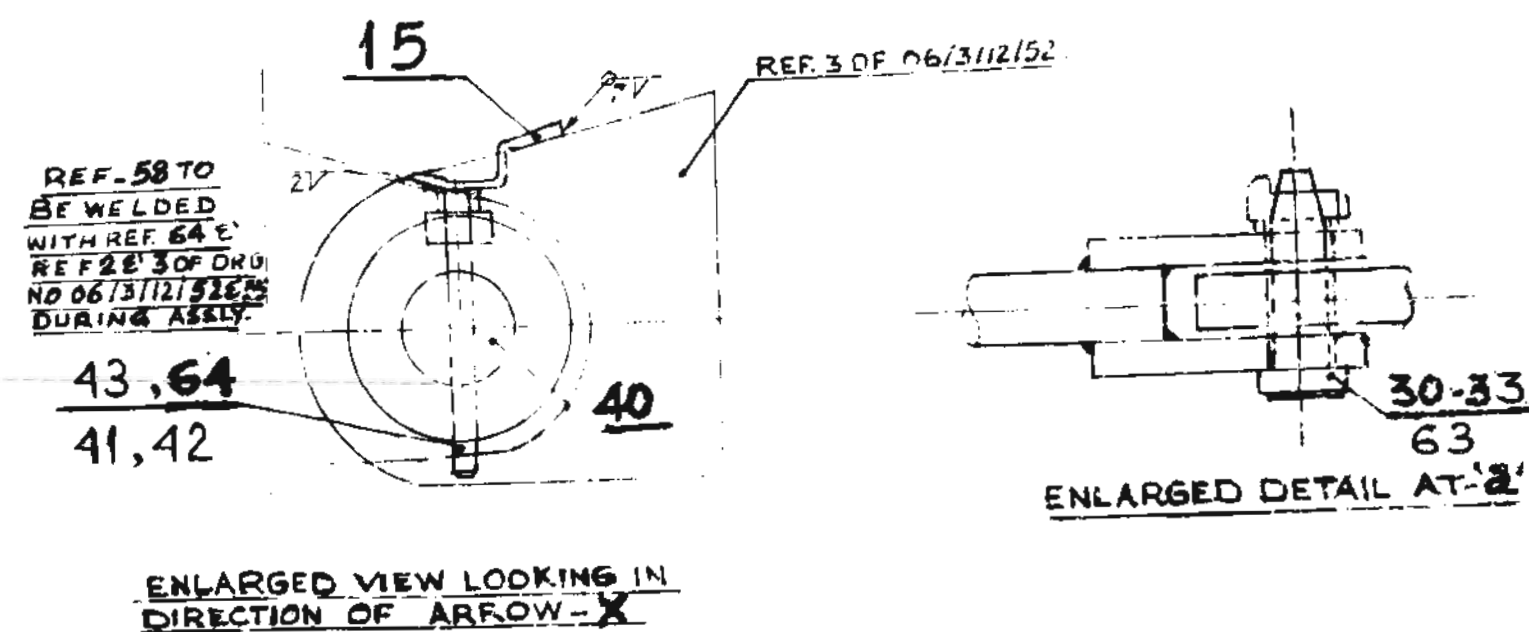
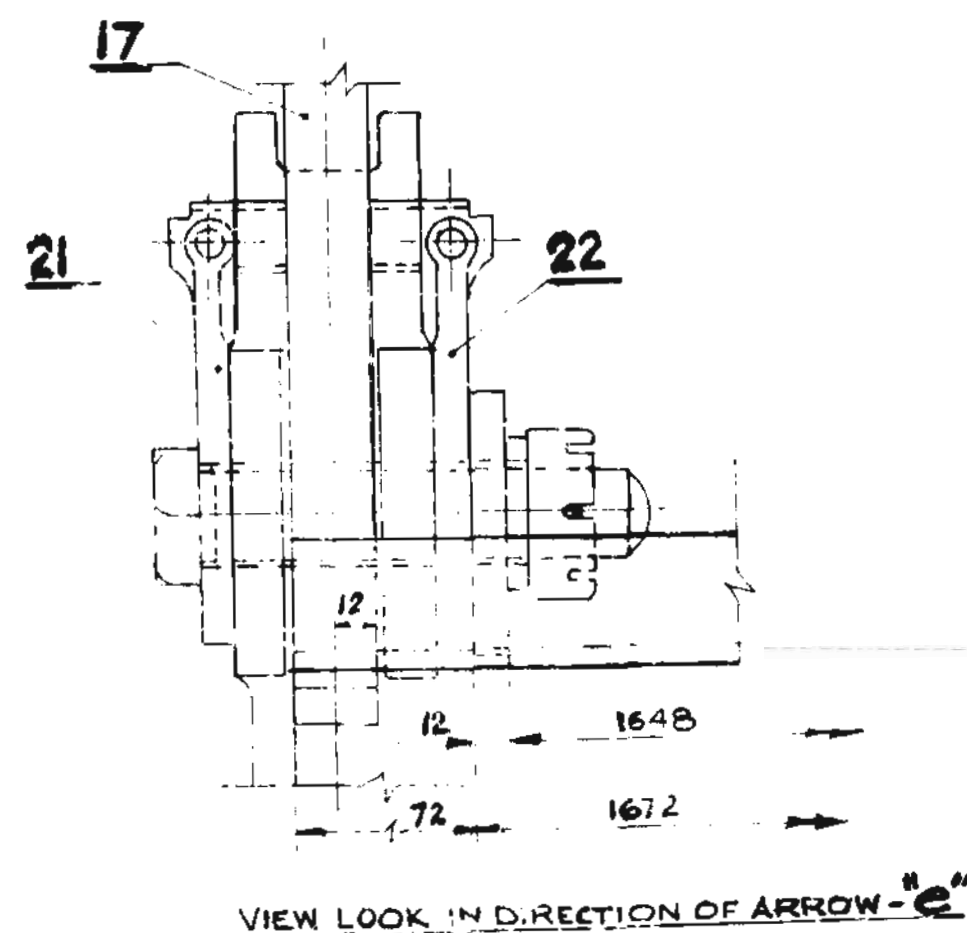
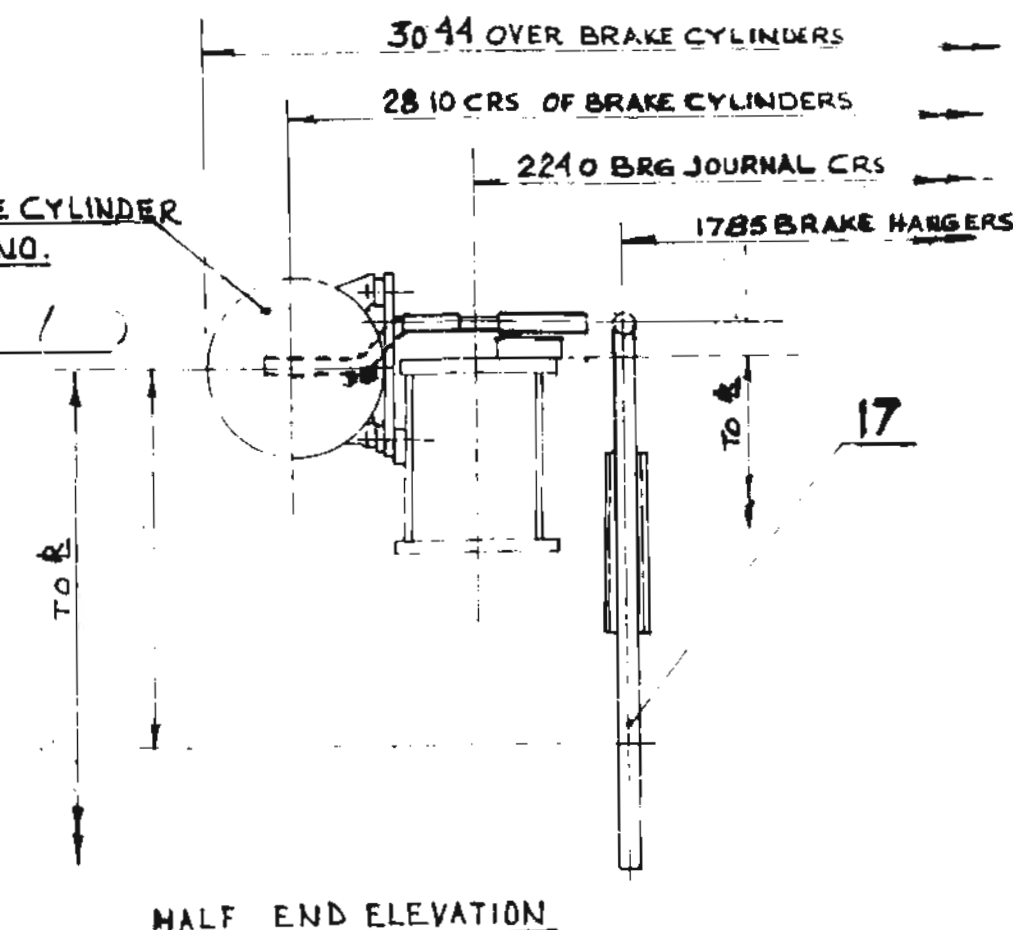


FITMENT DETAILS SHOWING HAND BRAKE LEVER

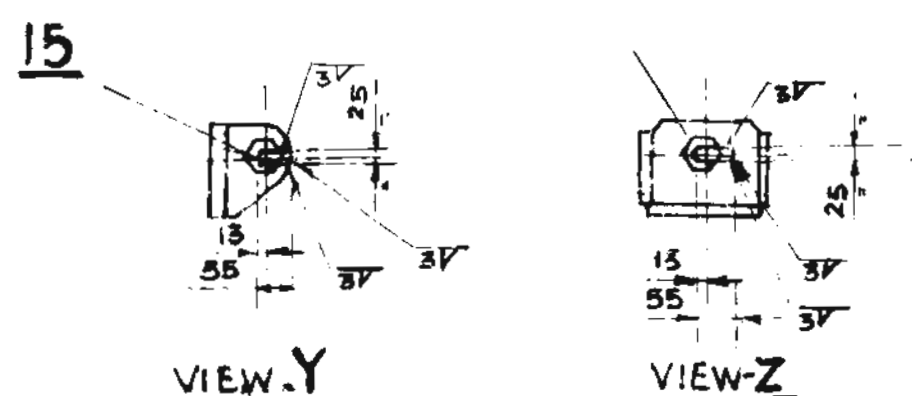


FOR BRAKE CYLINDER
REFER DRG. NO.
01/3/19/56.
(C&D NO.)

29-30-63



NOTE:-
1. FOR ARGT. DRG. & MATERIAL
SCHEDULE REFER TO DRG. NO.
1209-01-116-059

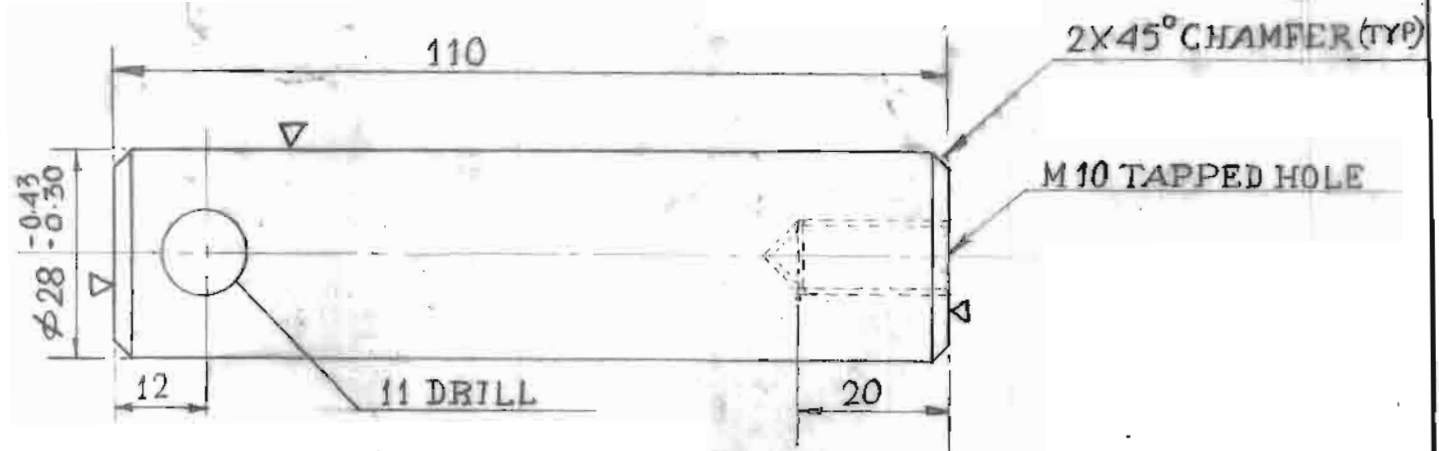


ALT NO	AUTHY	DESCRIPTION	DATE D.	SME/D

CODE NUMBER	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12

REF NO	CED NO	PART DRG NO	DESCRIPTION	QTY/ LOCC	MATL SPECN	WT. EACH
DRAWN	B. HAERA		REF. DRG. NO.			
CHECKED			1209-01-116-059			
SUPDT.						
AME(D)						
DYCEB(D)						
DATE	27-2-2010					
SCALE	N T S					
APPROVAL						

BRAKEGEAR	WAP-7
ARRGT. & DETAILS	USED FOR LOCOS
SECTIONS	DRAWING NO.
	1209-01-216-060

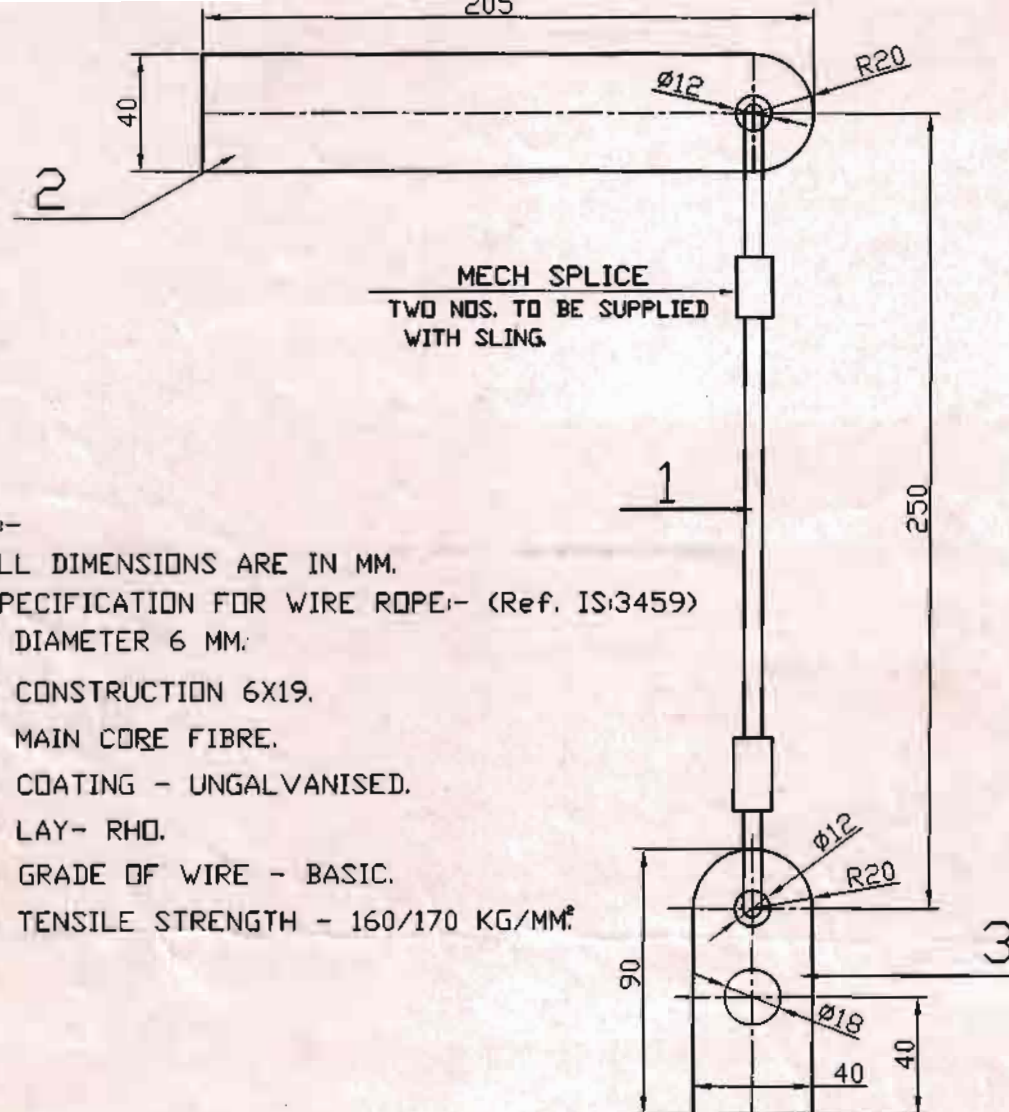


*** MATERIAL FOR PIN :-**

STEEL TO IS: 1875 CLASS-IV INDUCTION HEATED AND QUENCH TO OBTAIN A UNIFORM SURFACE HARDNESS OF ROCKWELL "C" 58 (MINIMUM). AFTER GRINDING THE EFFECTIVE CASE DEPTH MEASURED PERPENDICULARLY FROM FINISHED SURFACE TO POINT OF HRC 50 SHALL BE MINIMUM 2.54 mm AND MAXIMUM 3.8 mm.

THE EXTREMITY OF PIN BODY END (PLAIN OR SHOULDERED PINS) SHOULD NOT HAVE ANY DISCONTINUITY. NO DISCONTINUITY ALLOWED WITHIN 3 mm (PREFERABLY WITHIN 6 mm) OF TRANSVERSE HOLE OR GROOVE OF PINS.

परिचालन संख्या ALT. NO.	परिष्कार AUTHY	वर्णन DESCRIPTION	दिनांकित आदेश DATED INITIAL	संख्या NO/LOC	प्रयोग में USED FOR LOCOS:-	आरेखन संख्या DRAWING NO.
सतह रूखा का मान या 3073 के अनुसार SURFACE ROUGHNESS VALUE TO IS: 3073	परीक्षा GRADE NUMBER R _a μm	स1 स2 स3 स4 स5 स6 स7 स8 स9 स10 स11 स12 N1 N2 N3 N4 N5 N6 N7 N8 N9 N10 N11 N12 00250.050 0.10 0.20 0.40 0.8 1.6 3.2 6.3 12.5 25 50	2	HANGER LEVER PIN (CENTRE) 4 *	चित्ररंजन रेल इंजन कारखाना CHITTARANJAN LOCOMOTIVE WORKS	1209-01-416-061
निर्देश संख्या REF NO	नियंत्रण विवरण संख्या C & O NO.	वर्णन DESCRIPTION	संख्या NO/LOC	प्रयोग में USED FOR LOCOS:-	आरेखन संख्या DRAWING NO.	
आरेखित DRAWN	जांचा CHECKED	संदर्भ DRG NO. SKVL 585 SHEET 2 REF 37 REF ASSLY DRG. NO. 1209-01-116-059 REF 67		प्रयोग में USED FOR LOCOS:-	आरेखन संख्या DRAWING NO.	
अधीक्षक SUPT	उपसु वि.अ. (अभि) DY. CEE(D)	HANGER LEVER PIN (CENTRE)		प्रयोग में USED FOR LOCOS:-	आरेखन संख्या DRAWING NO.	
दिनांक DATE	27-7-10			प्रयोग में USED FOR LOCOS:-	आरेखन संख्या DRAWING NO.	
रैखिक अनुपात SCALE - NTS				प्रयोग में USED FOR LOCOS:-	आरेखन संख्या DRAWING NO.	



	3		PLATE 12 MM THK.	12	STEEL	IS:2062 GR.C	
	2		PLATE 12 MM THK.	12	STEEL	IS:2062 GR.C	
	1		SLING STEEL WIRE ROPE 6MM DIA 6X19 CONSTRUCTION	12	STEEL	NOTE-2	
	0		SAFETY SILING	12			
	REF. NO.	PART DRG. NO.	DESCRIPTION	NO/ LOCO	MATL.	SPECN.	WT. EACH IN KG.
	DRAWN	<i>Prerna</i>	REF ASSLY DRG. NO: 1209-01.116-059 ALT 1. REF. NO. 53.	CHITTARANJAN LOCOMOTIVE WORKS			
	CHECKED	<i>G. Singh</i>		ELDO(M)			
	SSE	<i>P. Singh</i>		USED FOR LOCOS			
	AME/D	<i>P. Singh</i>	<u>SAFETY</u> <u>SLING</u> <u>ASSLY.</u>	WAP-7			
	DY.CEE D-II	<i>10.03.12</i>					
	DATE: 01-3-12	DRAWING NO.					
	N.T.S.	1209-01.416-065					
	REF.DEE/RS/GZB/DRG. NO	ALT.					
160/MECH/PART/80							

I.R. PART NO:	RLY: NO:
---------------	----------

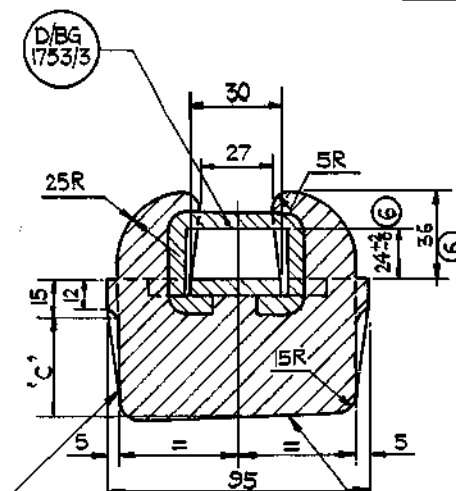
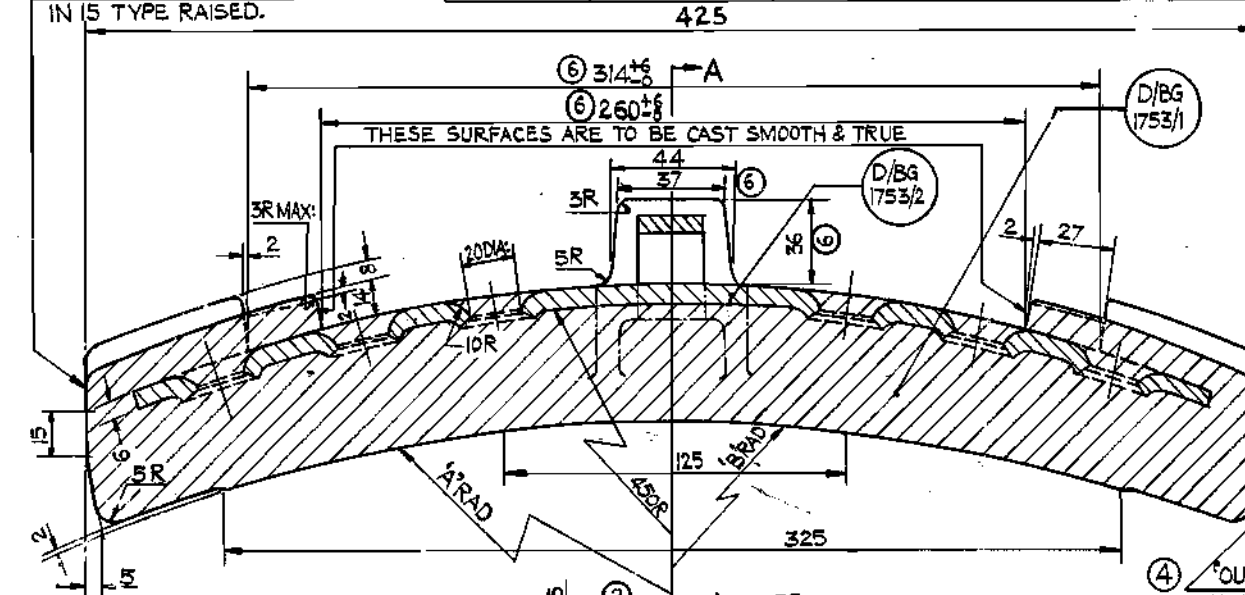
RLY NO:	REF NO:	DESCRIPTION	MTL:	SPEC NO:	NO. UNIT	RLY NO:	P.R. PART NO:	'A'	'B'	'C'	REMARKS
	D/BG-1753/1	BODY	CLIP-20	1.5: 2.0 @	1		D/BG-1753	545	485	35	NOM: SIZE
	D/BG-1753/2	PLATE FOR BRAKE SHOE	STEEL	1.5: 1977@@	1		D/BG-1753/X2	525	4.65	55	STEP SIZE FOR WHEEL DIA 1050
	D/BG-1753/3	CLIP FOR KEY	"	" @@	1						NOTE:-

CAST HERE PART NO:
IN 15 TYPE RAISED.

425

NOTE:-

1. D/BG-607 MAY BE USED IN LIEU OF ITEM D/BG-1753/3.
2. DIMENSIONS MARKED * ARE TO BE MEASURED ON PLATE.
3. D/BG-1753/1 TO BE CAST WITH D/BG-1753/2 AND D/BG-1753/3.

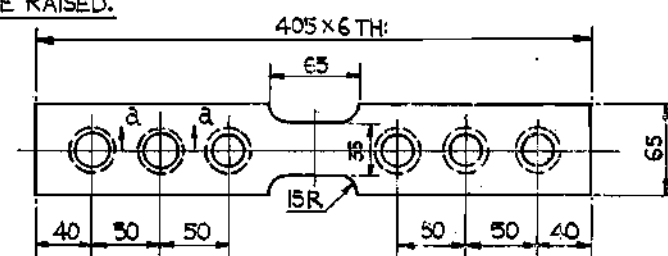
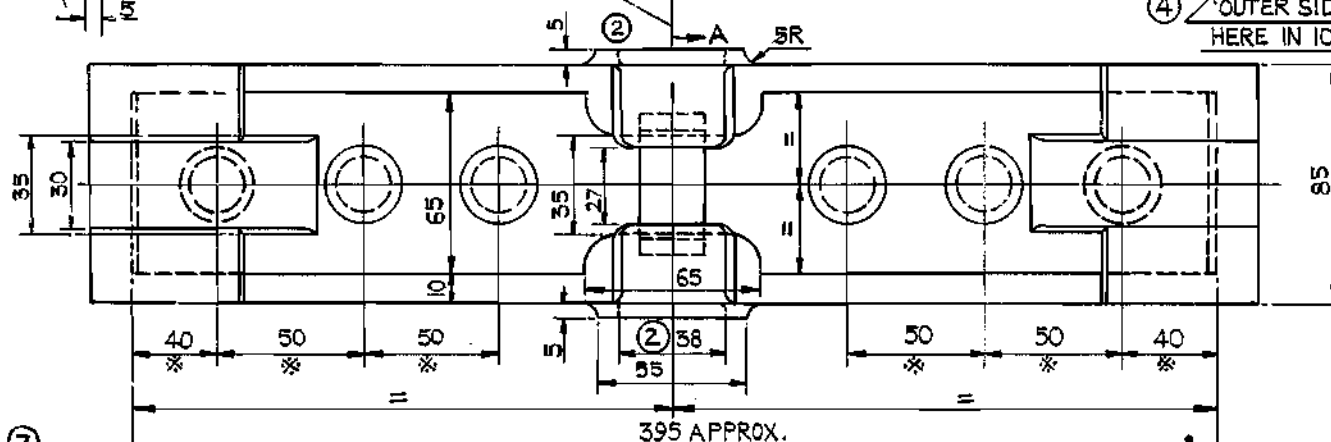
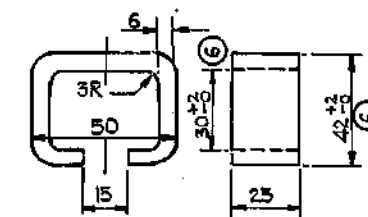


SECTION AT 'A'-A'

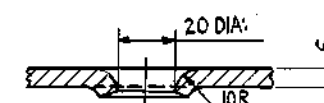
INCLINE 1 IN 20

D/BG-1753/3

'OUTER SIDE' TO BE CAST
HERE IN 10 TYPE RAISED.



D/BG-1753/2



SECTION-'a-a'

⑦ _____ 395 APP
 @ "PHOSPHORIC IRON TO RDSO SPECN.NO.ME'C/MTD/101/94
 BRINELL HARDNESS:210-250"
 @@ STEEL TO IS: 2062 Gr.'A'.

ALL DIMENSIONS IN MILLIMETRES
UNLESS OTHERWISE STATED.

DATE	TIME	DRAWN	BY	CHECKED	APPROVED	@ "PHOSPHORIC IRON TO RDSO SPECN. NO. ME/C/MTD/101/94 BRINELL HARDNESS: 210-250" @@ STEEL TO IS: 2062 Gr. 'A'.									
						ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.									
SURFACE ROUGHNESS VALUE TO IS: 3073						①									
GRADE NUMBER R.A. µm						N1 N2 N3 N4 N5 N6 0.25 0.05 0.1 0.2 0.4 0.8		CLASS LOCOS		WDM2, WDM4 WDS5, WCG2		MTL: SPEC. NO:		SEE TABLE	
SYMBOL						VVVV VVV		SIZE				TREAT:			
GRADE NUMBER R.A. µm						N7 N8 N9 N10 N11 N12 1.6 3.2 6.3 12.5 25 50		FORM				WEIGHT			
SYMBOL						V V		RLY: PATT:				SCALE: 1:2 DO NOT SCALE			
RAILWAYS CONCERNED TO FILL								REF: DRG:		R.D.S.O. SK. DL-317 & DRG. NO. TPL-0202					
DATE						16.12.88		⑦		L2-765		MTL. REVISED & CLASS OF LOCOS. ADDED.		WDM4 WDS5 WDM4 WDM2, WCG2	
16.12.88						21.9.88		⑥		IL/PDS/DL/ ALT: 89/1 (SU/LBG.F.N-9)		DIMS: 314±8, 260±8, 37, 36, 24±8, 36 & 42±8 WERE 314, 260, 38, 30, 39, 30 & 37. 30±8 ADDED. (J.S. NO: 1540/L(M))		WHERE USED FOR LOCOS.	
10.2.77						⑤		IL/PDS/DL/ ALT: 77/1		GR: 20 WAS GR: 15 (J.S. NO: 1360/L(M))		Sd/-		NO. 1000	
6.12.76						④		IL/PDS/DL/ ALT: 76/7		NOTE ADDED. BHN 180-200 DELETED & INCLINATION 1 IN 20 ADDED. (J.S. NO: 1352/L(M))		Sd/-		CORRES: RLY: NO:	
4.9.76						③		IL/PDS/DL/ ALT: 76/4		WDM4, WDM4, LOCOS WITH NOS: READ: ADDED. (J.S. NO: 132/L(M))		Sd/-		NO:	
19.7.76						②		IL/PDS/DL/ ALT: 76/3		DELETED. (J.S. NO: 1304/L(M))		Sd/-		D/BG-1753	
14.4.75						①		IL/PDS/DL/ ALT: 75/3		WCG2 LOCO ADDED. (J.S. NO: 20/D(M))		Sd/-		D/BG-1753/X2	
DATE						16.12.88		AUTHY:		DESCRIPTION		CKR:		I. R. PART NO:	
BRAKE SHOE															

BRAKE SHOE

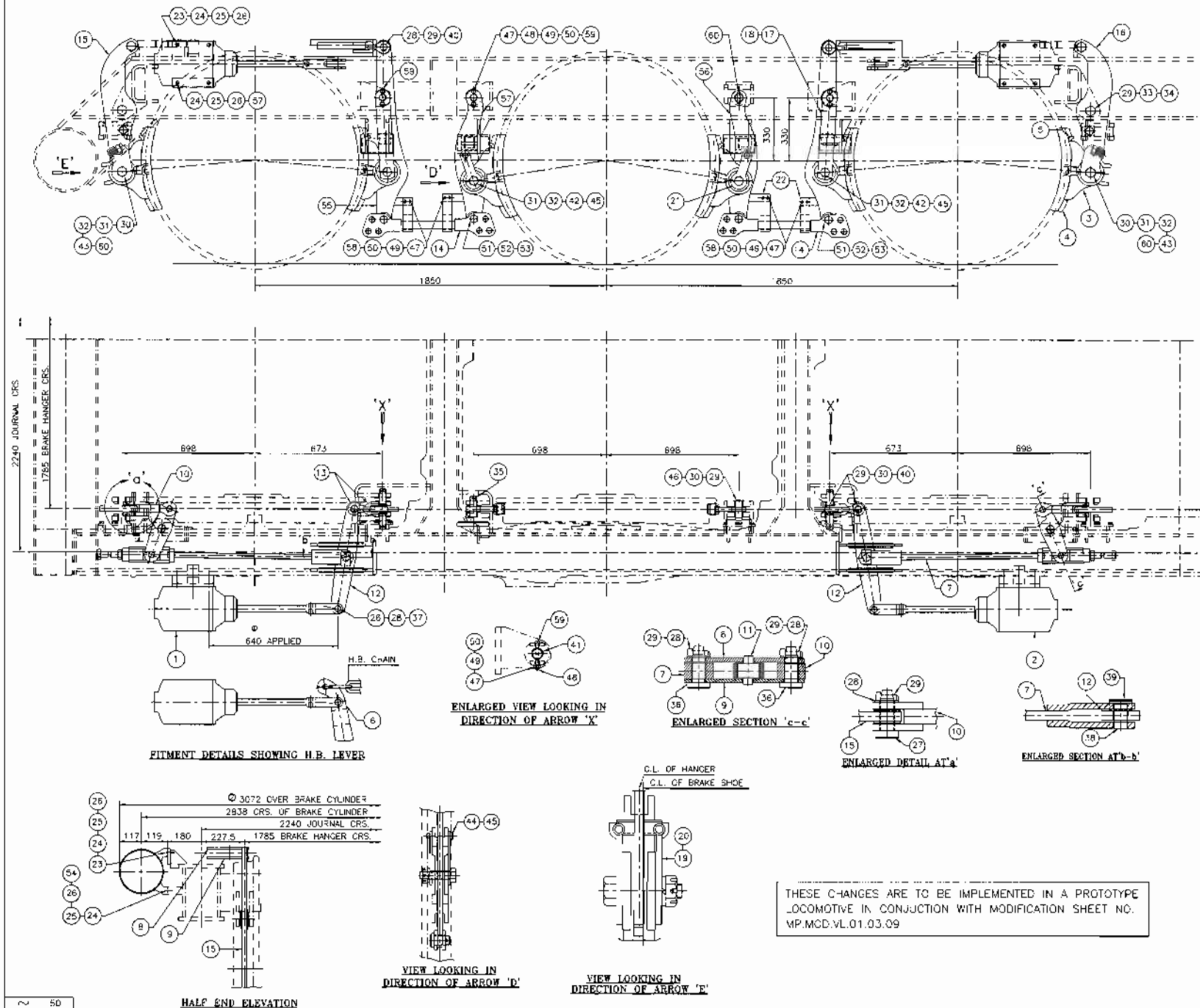
D/BG-1753
D/BG-1753/X2

I. R. PART NO:

TRUE COPY

NOTE:-

1. FOR BOGIE FRAME ARRANGEMENT REFER DRG.NO. SK.VL-582.
2. FOR BRAKE RIGGING DETAILS REFER DRG.NO. SK.VL-585 SHEET 1 OF 3, 2 OF 3 AND 3 OF 3.
3. BRAKE EQUALISER ASSEMBLY (-AND BRAKE) REF. NO.6 TO BE USED WHERE THE -AND BRAKE EQUIPMENT PROVIDED.



67	LOCKING PLATE	6	SK.VL-585 REF. 45 Sheet-3
59	STOPPER FOR PIN	10	SK.VL-585 REF. 45 Sheet-3
58	BOLT HEX. M12x50 LONG	6	STEEL TO IS: 1363
57	-ANGER LEVER CENTRE (L.H.)	2	SK.VL-585 REF. 5 Sheet-1
56	-ANGER LEVER CENTRE (R.H.)	2	SK.VL-585 REF. 5 Sheet-1
55	CYLINDER LEVER ASSEMBLY	2	SK.VL-585 REF. 5 Sheet-1
54	STUD M'6x65-PB.B	8	STEEL TO IS: 1882
53	SPLIT COTTER PIN 6x3x35 LG.	8	STEEL TO IS: 549
52	MACHINED WASHER 430	8	STEEL TO IS: 2016
51	SLACK ADJUSTER PIN	8	SK.VL-585 REF. 19 Sheet-2
50	SPRING WASHER B10	26	STEEL TO IS: 3063
49	SLOTTED NUT HEX. M12	26	STEEL TO IS: 2232
48	BOLT HEX: 4Dx10x100 LG x30 HD	10	STEEL TO IS: 1363
47	SPLIT COTTER PIN 6x2.5x32 LONG	26	STEEL TO IS: 549
46	HANGER LEVER PIN	2	SK.VL-585 REF. 14 Sheet-2
45	SPLIT COTTER PIN 6x3x35 LG.	4	STEEL TO IS: 549
44	FRICION ARM PIN	4	SK.VL-585 REF. 27 Sheet-2
43	SPLIT COTTER PIN 6x3x80 LG.	12	STEEL TO IS: 549
42	BRAKE HEAD BOLT	8	SK.VL-585 REF. 19 Sheet-2
41	HANGER PIN	8	SK.VL-585 REF. 30 Sheet-2
40	CLEVIS PIN	8	SK.VL-585 REF. 16 Sheet-2
39	EQUALIZER PIN KEEPER	4	SK.VL-585 REF. 41 Sheet-2
38	EQUALIZER PIN	4	SK.VL-585 REF. 31 Sheet-2
37	BRAKE CYLINDER PIN	4	SK.VL-585 REF. 35 Sheet-2
36	EQUALIZER PIN	8	SK.VL-585 REF. 33 Sheet-2
35	HANGER LEVER PIN	2	SK.VL-585 REF. 37 Sheet-2
34	MACHINED WASHER 436	4	STEEL TO IS: 2016
33	LEVER FULCRUM PIN	4	SK.VL-585 REF. 28 Sheet-2
32	SPRING WASHER 336	12	STEEL TO IS: 3063
31	CASTLE NUT M36	12	STEEL TO IS: 2232
30	BRAKE HEAD BOLT (END LEVER)	4	SK.VL-585 REF. 40 Sheet-2
29	FLAT SPLIT COTTER 6x10x60 LG.	24	STEEL TO IS: 2638
28	PLAIN WASHER 428	28	STEEL TO IS: 2016
27	HANGER LEVER PIN (END LEVER)	4	SK.VL-585 REF. 33 Sheet-2
26	SPLIT COTTER PIN 6x3.2x40 LONG	20	STEEL TO IS: 549
25	SPRING WASHER 336	16	STEEL TO IS: 3063
24	HEX: SLOTTED NUT M18	16	STEEL TO IS: 2232
23	BOLT HEX: 4D: M16x65 LONG	8	STEEL TO IS: 1363
22	SAFETY BRACKET	8	SK.VL-585 REF. 41 Sheet-2
21	FRICION ARM MIDDLE LEVER	8	SK.VL-585 REF. 26 Sheet-3
20	FRICION ARM SPRING	8	SK.VL-585 REF. 25 Sheet-2
19	FRICION ARM	8	SK.VL-585 REF. 12/14 Sheet-2
18	HANGER (OUTSIDE)	4	SK.VL-585 REF. 15 Sheet-1
17	HANGER (INSIDE)	4	SK.VL-585 REF. 17 Sheet-1
16	HANGER LEVER END	4	SK.VL-585 REF. 7 Sheet-1
15	HANGER LEVER END	4	SK.VL-585 REF. 8 Sheet-1
14	SLACK ADJUSTER ASSLY BOTTOM	4	SK.VL-585 REF. 43 Sheet-3
13	CLEVIS	8	SK.VL-585 REF. 22 Sheet-2
12	BRAKE EQUALISER ASSEMBLY	3	SK.VL-585 REF. 1 Sheet-1
11	CHUNION	4	SK.VL-585 REF. 35 Sheet-2
10	EQUALISER LINKAGE	4	SK.VL-585 REF. 21 Sheet-2
9	BRAKE EQUALISER (BOTTOM)	4	SK.VL-585 REF. 4 Sheet-1
8	BRAKE EQUALISER (TOP)	4	SK.VL-585 REF. 3 Sheet-1
7	SLACK ADJUSTER ASSLY (TOP)	4	SK.VL-585 REF. 41 Sheet-2
6	BRAKE EQUALISER ASSLY (H/BRAKE)	1	SK.VL-585 REF. 2 Sheet-1
5	BRAKE SHOE KEY	12	SK.VL- 383
4	BRAKE SHOE	12	D/BG-1753
3	BRAKE HEAD	12	SK.VL-382
2	BRAKE CY. COMP. WITH PUSH ROD (L.H.)	2	DLW's NO.TPL-0141
1	BRAKE CYL COMP WITH PUSH ROD (R.H.)	2	DLW's NO.TPL-0141

THESE C-CHANGES ARE TO BE IMPLEMENTED IN A PROTOTYPE LOCOMOTIVE IN CONJUNCTION WITH MODIFICATION SHEET NO. VP.MCD.VL.01.03.09

DRN BY: *[Signature]*
 CRD BY: S4/-
 APPROVED BY: *[Signature]*
 NARES - KUMAR
 CIR/VSD
 DATE: JAN '09

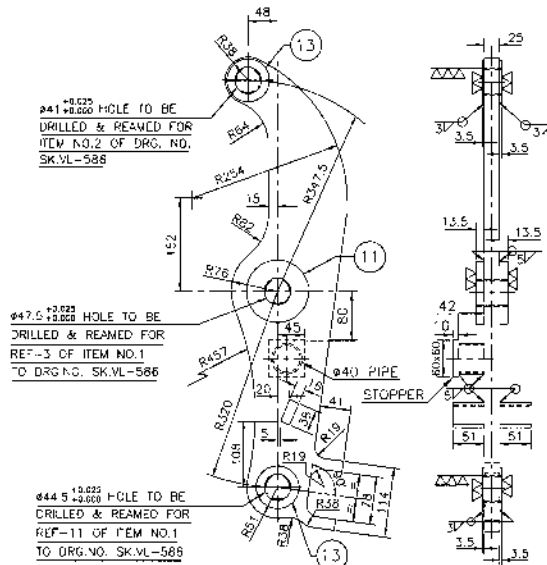
~	50
▽	25
▽▽	6.3
▽▽▽	0.8
▽▽▽▽	0.1
Raum	TOLERANCES ON UNTOLERANCED
SYMBOL (Max.)	DIMENS DWS TO IS:2102 (MED.)

ALL DIMENSIONS ARE IN mm

②	3	INDICATES 307.251 & 150 WERE 304.2510 & 150 REF. OF TON M1 21 AND 45 WERE CHANGED.	NOG-812	1 JULY 11	SCALE: 1:10,10TS	REF. NO.	FIRST ISSUED
①		DIMENSION 640 WAS 680	NOG-808	54/ 26.07.08	INDIAN RLYS	DRG. NO.	SUPERSEDES
ALT	NO. OF PLACES	DESCRIPTION	ALT. NO.	SIGN.	DATE	RDSO(WP)	SUPERSEDED BY

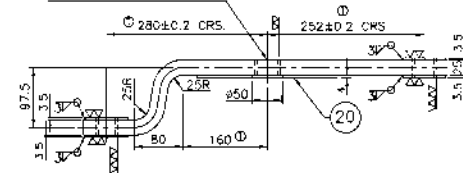
WAP7 LOCO BRAKE RIGGING ARRANGEMENT

SK.VL-584



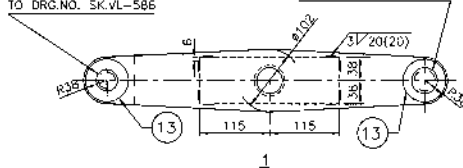
7-AS DRAWN(RH)
8-OPPOSITE(LH)

#41 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-9 OF ITEM NO.1 TO DRG. NO. SK.VL-586

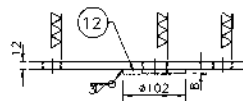


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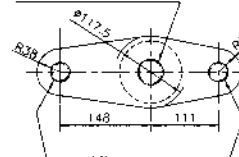
#38 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-12 OF ITEM NO.1 TO DRG. NO. SK.VL-586



1

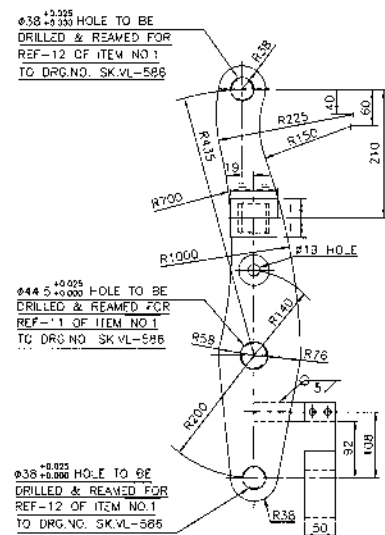


#54 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-5 OF ITEM NO.1 TO DRG. NO. SK.VL-586

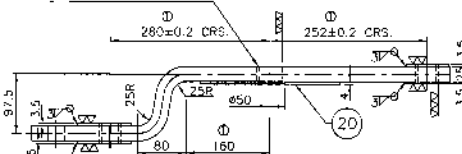


#41 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-1 OF ITEM NO.1 TO DRG. NO. SK.VL-586

3

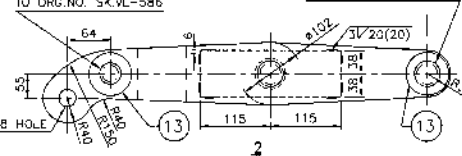


#41 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-9 OF ITEM NO.1 TO DRG. NO. SK.VL-586

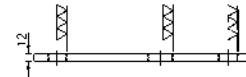


#35 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-10 OF ITEM NO.1 TO DRG. NO. SK.VL-586

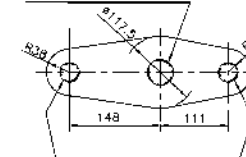
#38 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-12 OF ITEM NO.1 TO DRG. NO. SK.VL-586



2

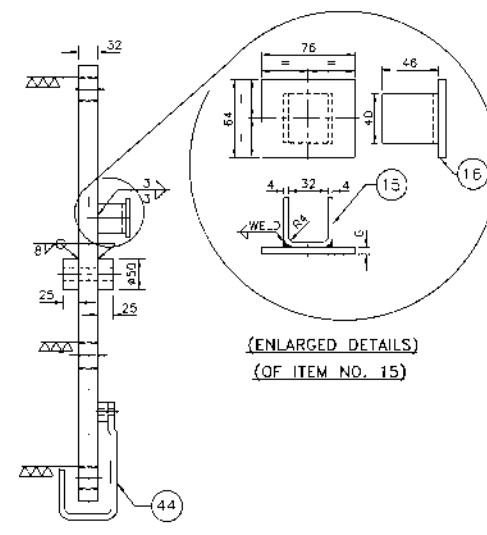


#54 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-4 OF ITEM NO.1 TO DRG. NO. SK.VL-586



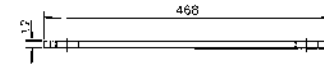
#41 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-1 OF ITEM NO.1 TO DRG. NO. SK.VL-586

4



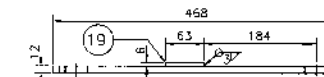
#44 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-7 OF ITEM NO.1 TO DRG. NO. SK.VL-586

#44 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-6 OF ITEM NO.1 TO DRG. NO. SK.VL-586

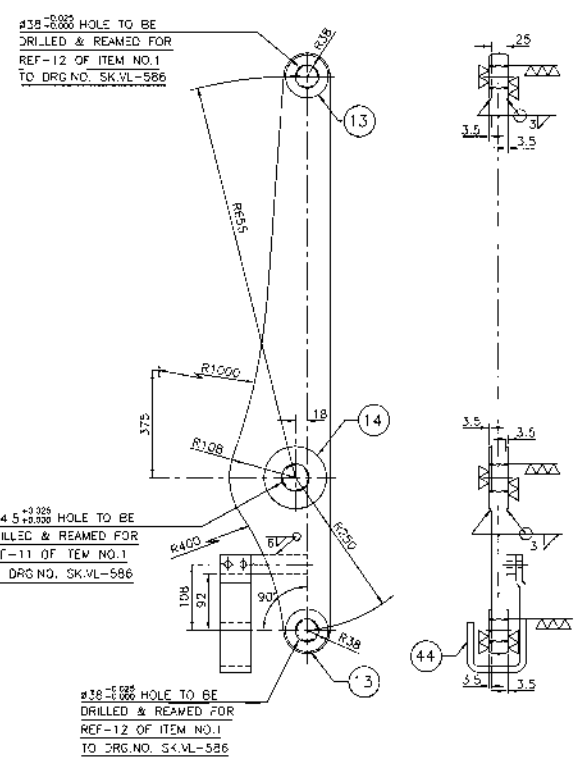


#44 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-7 OF ITEM NO.1 TO DRG. NO. SK.VL-586

#44 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-6 OF ITEM NO.1 TO DRG. NO. SK.VL-586



THESE CHANGES ARE TO BE IMPLEMENTED IN A PROTOTYPE LOCOMOTIVE IN CONJUNCTION WITH MODIFICATION SHEET No. MP.MOD.VL.01.03.09



#44.5 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-11 OF ITEM NO.1 TO DRG. NO. SK.VL-586

#38 ±0.025 HOLE TO BE DRILLED & REAMED FOR REF-12 OF ITEM NO.1 TO DRG. NO. SK.VL-586

9-AS DRAWN(RH)
10-OPPOSITE(LH)

NOTE:-

1. FOR BRAKE RIGGING ARRANGEMENT REFER DRG NO. SK.VL-584.
2. FOR BRAKE RIGGING DETAILS REFER DRG NO. SK.VL-585 SHEET 2 OF 3 AND 3 OF 3.
3. FOR BRAKE RIGGING BUSHES REFER DRG NO. SK.VL-586.

NO.	DESCRIPTION	QTY	UNIT	MATERIAL
20	WEAR PLATE	4	PCS	SPRING STEEL RS M-11
19	WEAR PLATE	4	PCS	SPRING STEEL RS M-11
18	HANGER INSIDE	4	PCS	STEEL IS-2062 Gr.C
17	HANGER INSIDE	4	PCS	STEEL IS-2062 Gr.C
16	WEAR PLATE	4	PCS	STEEL IS-2062 Gr.C
15	SUPPORT	4	PCS	STEEL IS-1079
14	BOSS #102x4 THICK	12	PCS	STEEL IS-1079
13	BOSS #70x4 THICK	32	PCS	STEEL IS-1079
12	BOSS #102x10 THICK	4	PCS	STEEL IS-2062 Gr.C
11	BOSS #102x16 THICK	8	PCS	STEEL IS-2062 Gr.C
10	CYLINDER LEVER ASSEMBLY (LH)	2	PCS	STEEL IS-2062 Gr.C
9	CYLINDER LEVER ASSEMBLY (RH)	2	PCS	STEEL IS-2062 Gr.C
8	HANGER LEVER END (LH)	2	PCS	STEEL IS-2062 Gr.C
7	HANGER LEVER END (RH)	2	PCS	STEEL IS-2062 Gr.C
6	HANGER LEVER CENTRE (LH)	2	PCS	STEEL IS-2062 Gr.C
5	HANGER LEVER CENTRE (RH)	2	PCS	STEEL IS-2062 Gr.C
4	BRAKE EQUALISER (BOTTOM)	4	PCS	STEEL IS-2062 Gr.C
3	BRAKE EQUALISER (TOP)	4	PCS	STEEL IS-2062 Gr.C
2	BRAKE EQUALISER ASSY (H.Brake)	1	PCS	STEEL IS-2062 Gr.C
1	BRAKE EQUALISER ASSEMBLY	3	PCS	STEEL IS-2062 Gr.C

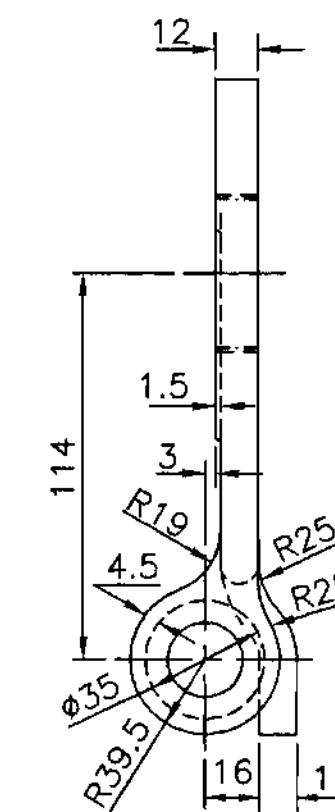
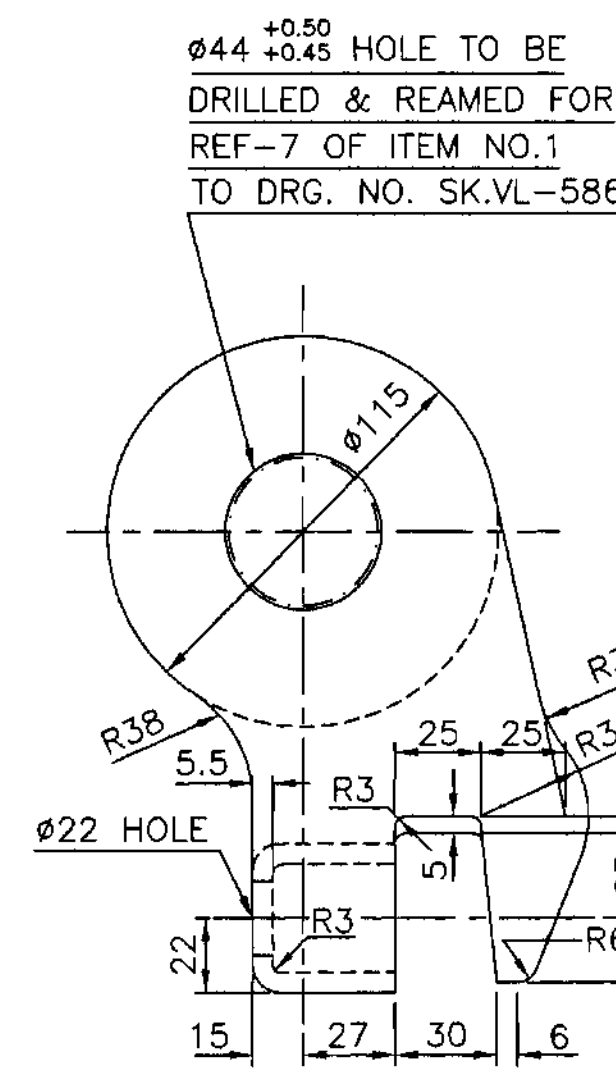
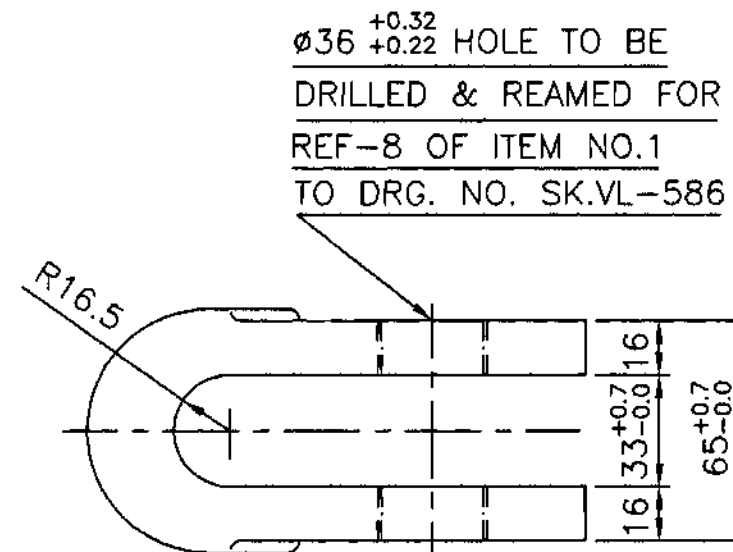
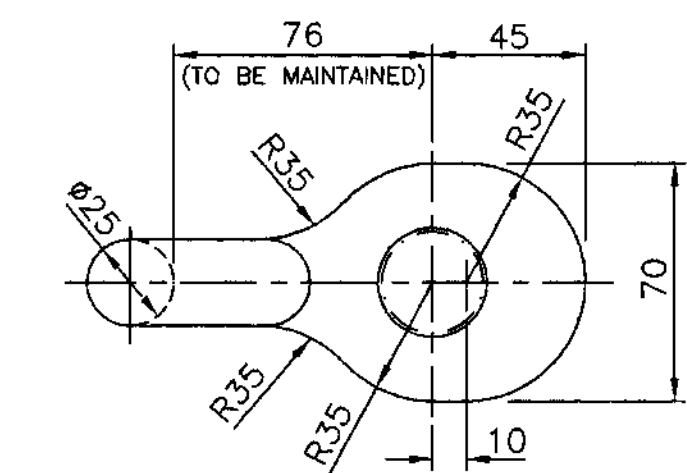
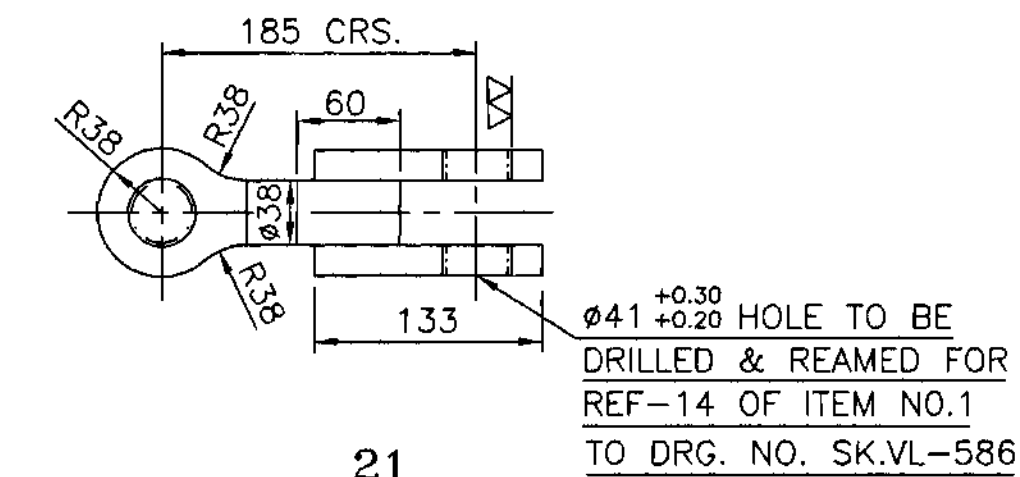
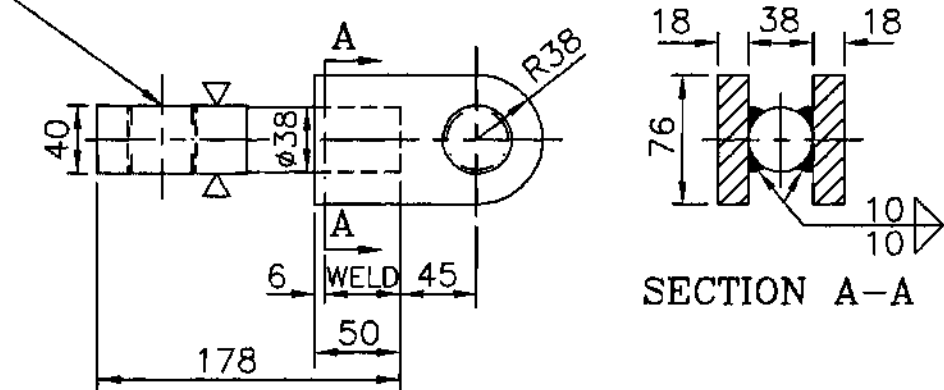
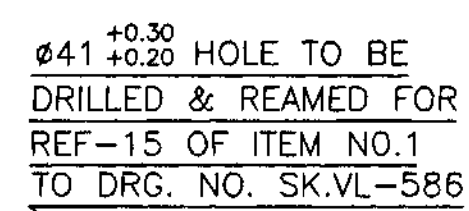
REF. I.R. NO. PART NO.	DESCRIPTION	NO. BOGE	WT(Kg) EACH	MATL: & SPEC:
WAP7 LOCOS	BRAKE RIGGING DETAILS			
SCALE: 1:2.25	REF:			
INDIAN RLYS RDSO(VDYN)	DRG. SK.VL-585			

ALT. NO. OF PLACES	REF. NO.	DESCRIPTION	ALT. NO.	SIGN.	DATE
6		DIMENSIONS 250, 252 & 160 WERE 252, 257 & 137	VDG-913		JULY 11

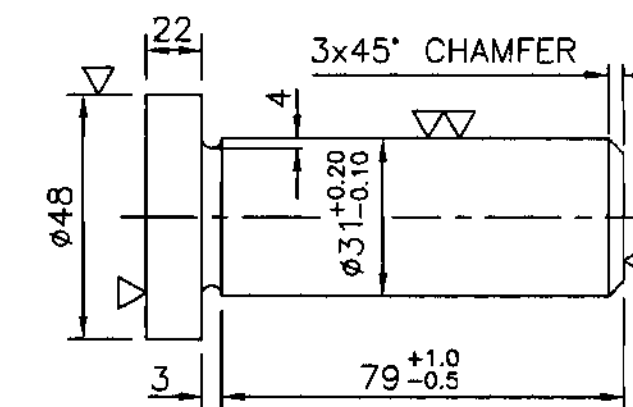
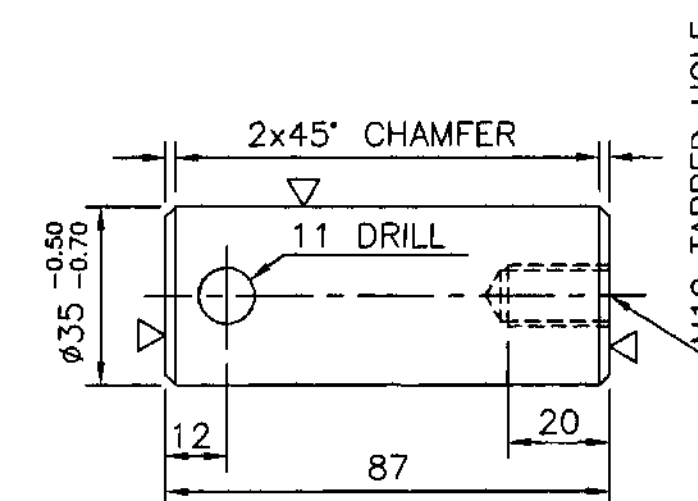
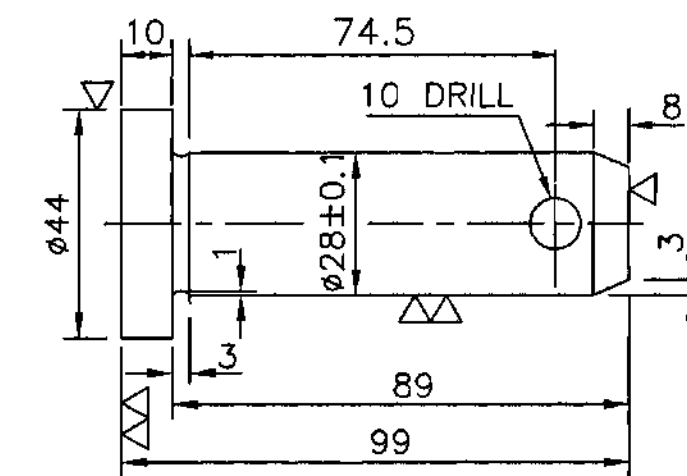
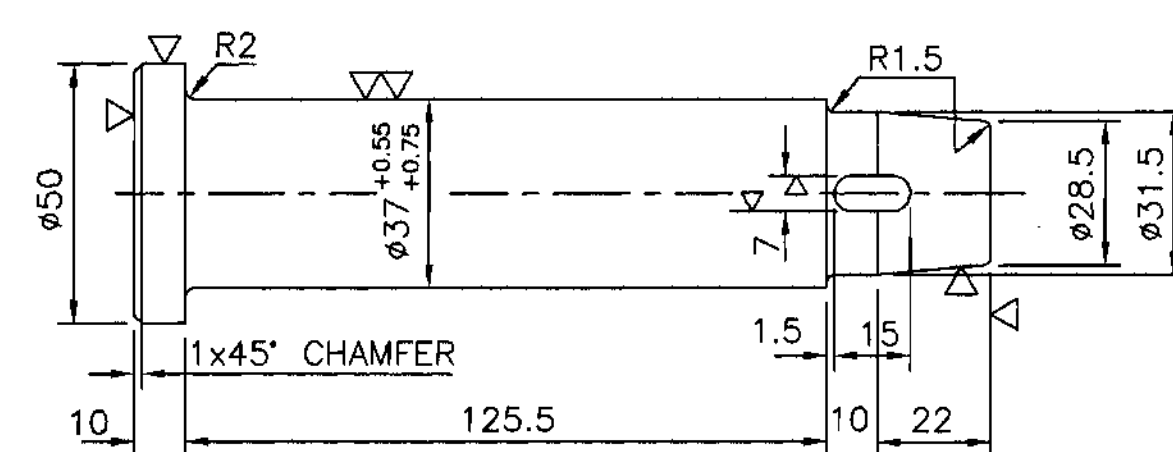
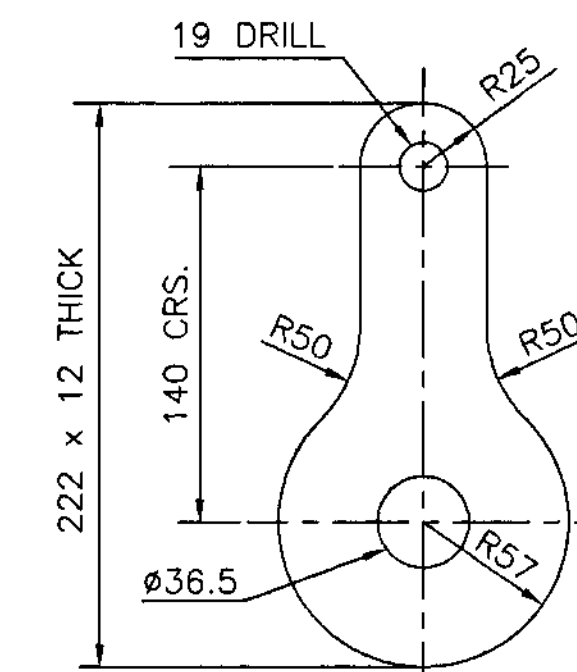
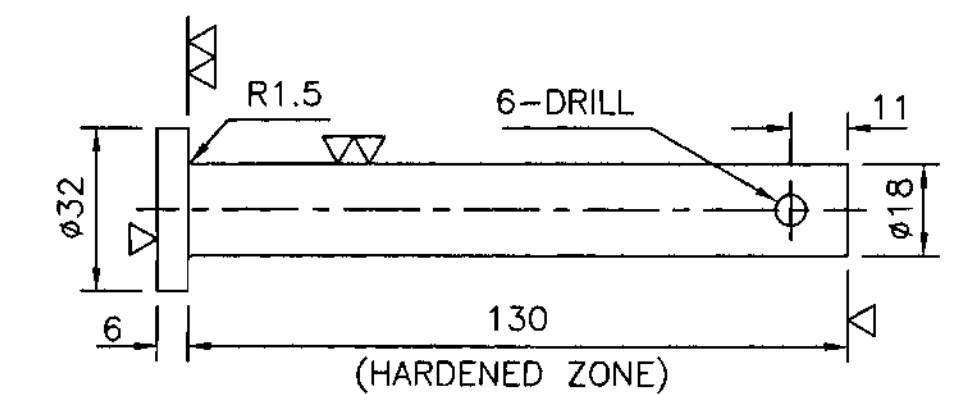
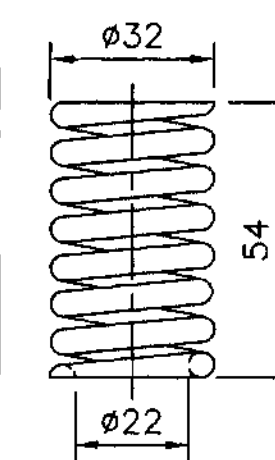
DRN BY: *Arundh*
CKD BY:
APPROVED BY:
DIR/VOG
DATE: JAN. 09

SYMBOL	DESCRIPTION
~	50
▽	25
▽▽	6.3
▽▽▽	0.8
▽▽▽▽	0.1
Round	SURFACE ROUGHNESS TO IS-3073
Max.	WELDING SYMBOLS TO IS-813
	TOLERANCES ON UN-COLERANCED DIMENSIONS TO IS-2102(MEDIUM)

ALL DIMENSIONS ARE IN mm

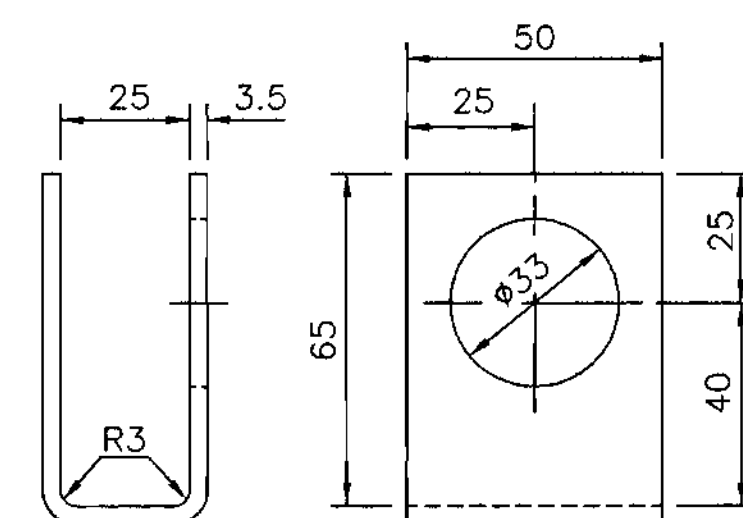
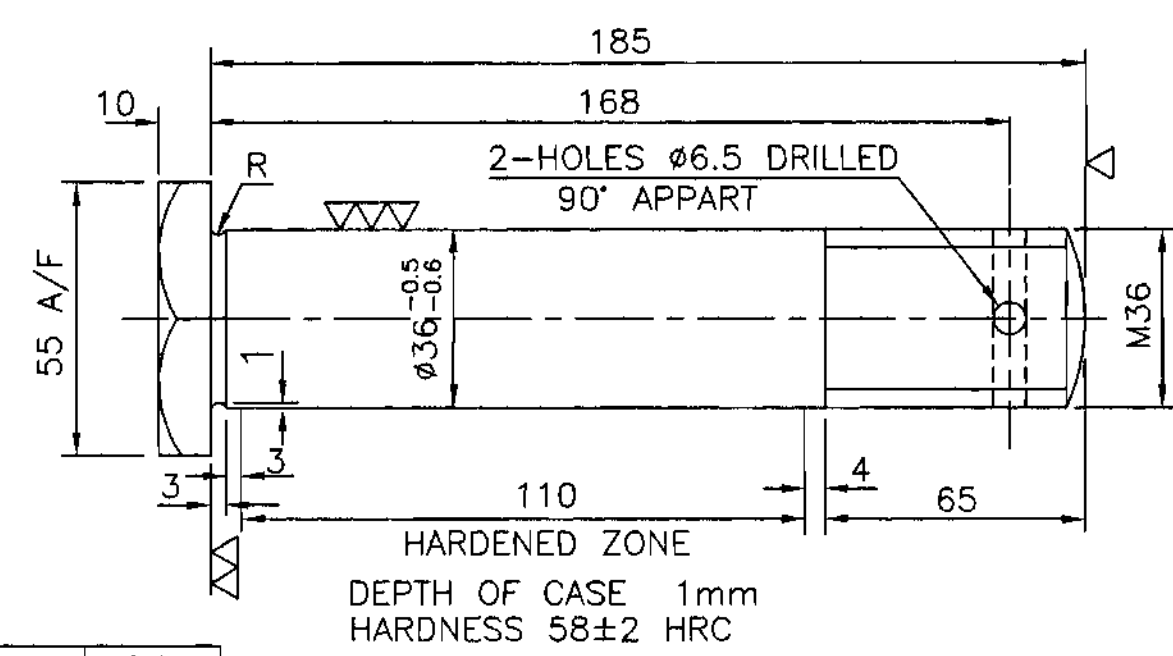
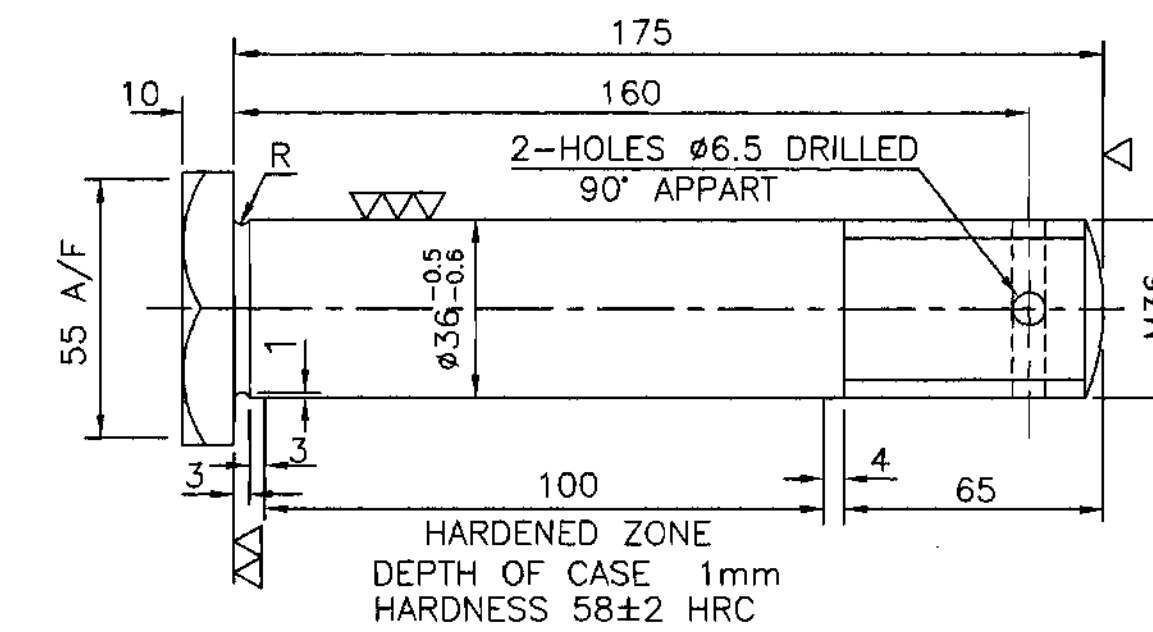
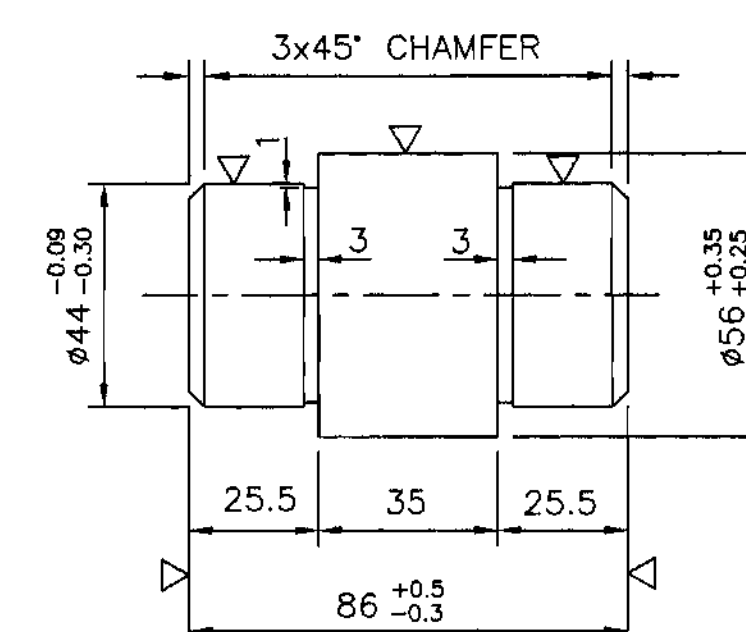
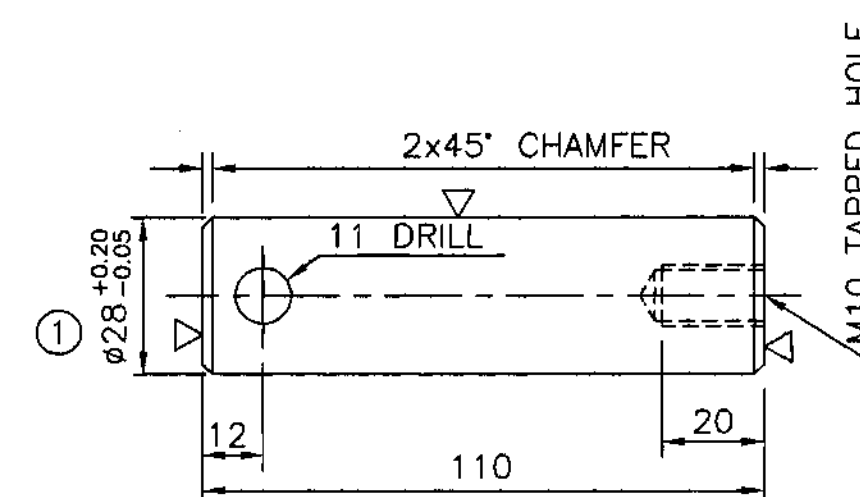
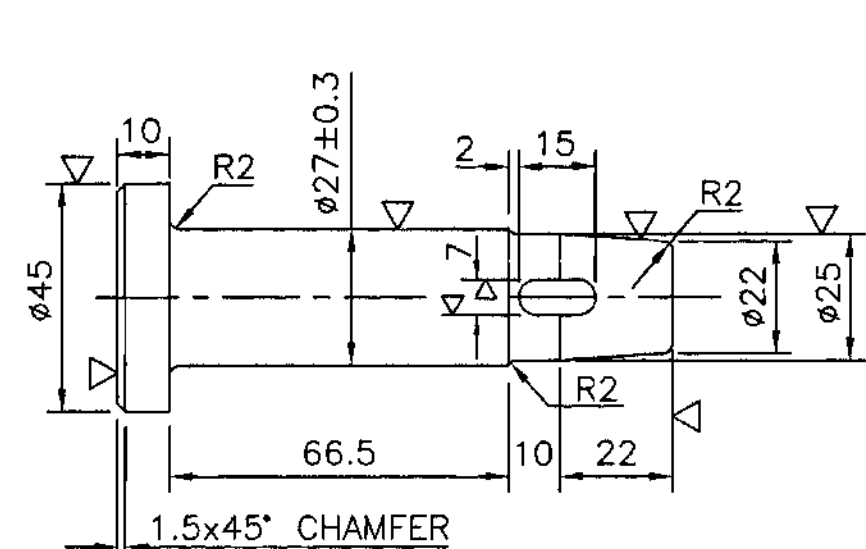
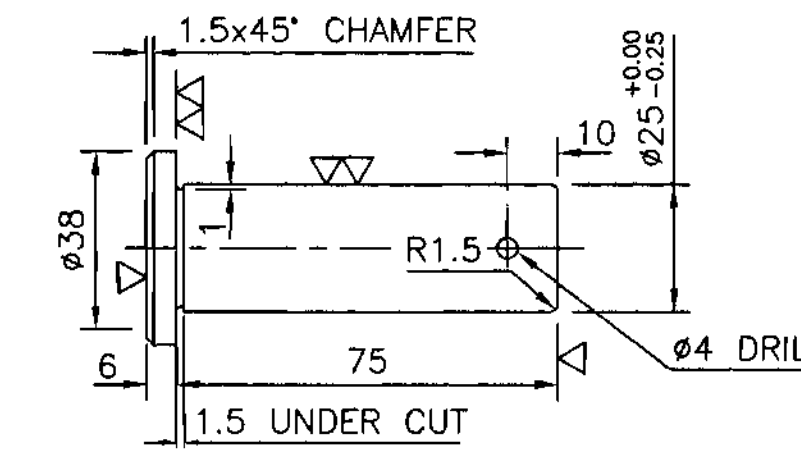
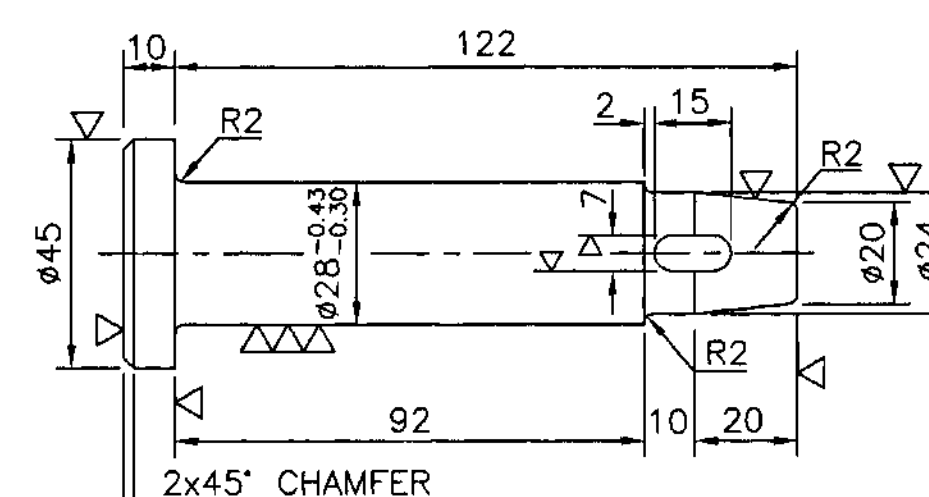
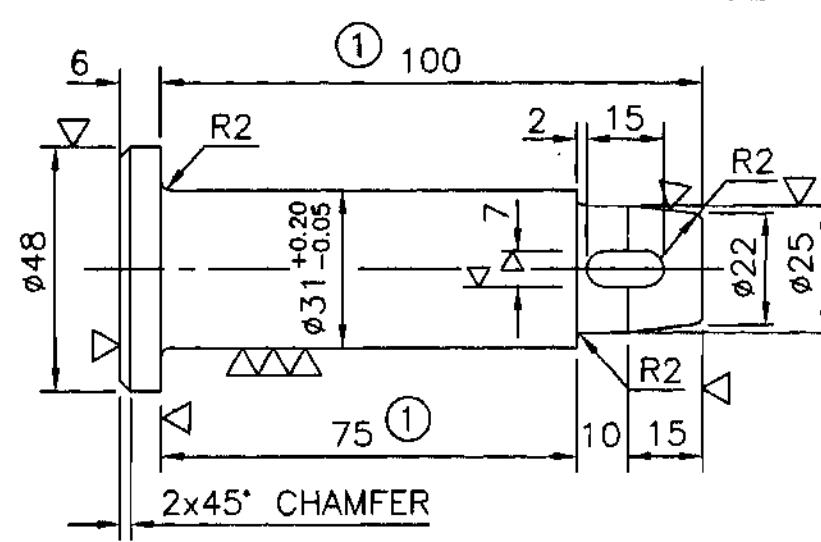
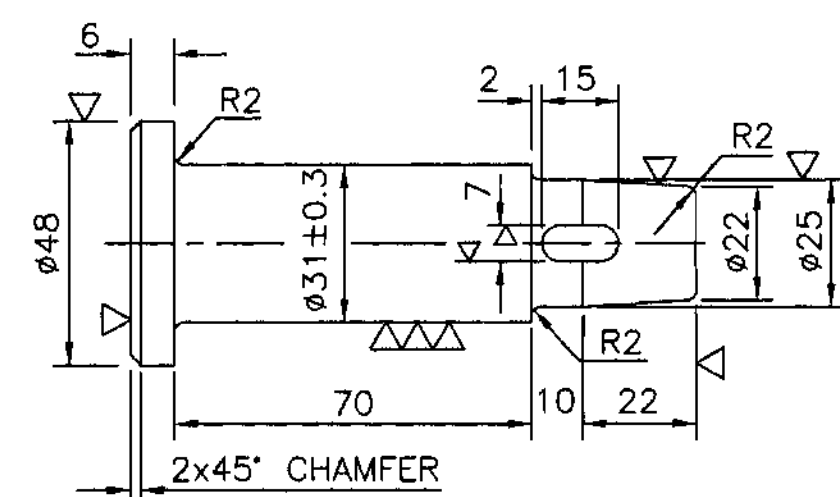


SPRING DATA	
WIRE DIA	5mm
NO. OF USE FULL TURNS	6
SOLID HEIGHT	35mm
HOME LOAD	89 kg
R.H. WOUND SPRING	



NOTE:-


1. FOR BRAKE RIGGING ARRANGEMENT REFER DRG NO. SK.VL-584.
2. FOR BRAKE RIGGING DETAILS REFER DRG NO. SK.VL-585 SHEET 1 OF 3 AND 3 OF 3.
3. FOR BRAKE RIGGING BUSHES REFER DRG NO. SK.VL-586.
- ② 4. MATERIAL FOR PIN:-
11% TO 14% MANGANESE STEEL TO IRS:R65 (LATEST REVISION)



THESE CHANGES ARE TO BE IMPLEMENTED IN A PROTOTYPE
LOCOMOTIVE IN CONJUNCTION WITH MODIFICATION SHEET No.
MP.MOD.VL.01.03.09

41	EQUALISER PIN KEEPER	4	STEEL IS:1079
40	BRAKE HEAD BOLT END LEVER	4	STEEL IS:1875 CL.1
39	BRAKE HEAD BOLT	8	STEEL IS:1875 CL.1
38	TRUNNION	4	Mn.ST: IRS: R-65
37	HANGER LEVER PIN (CENTER)	2	SEE NOTE-4
36	CLEVIS PIN	8	SEE NOTE-4
35	BRAKE CYLINDER PIN	4	SEE NOTE-4
34	HANGER LEVER PIN (CENTER)	2	SEE NOTE-4
33	HANGER LEVER PIN (END)	4	SEE NOTE-4
32	EQUALISER PIN	8	SEE NOTE-4
31	EQUALISER PIN (MIDDLE)	4	SEE NOTE-4
30	HANGEER PIN	8	SEE NOTE-4
29	SLACK ADJUSTER PIN (BOTTOM)	8	SEE NOTE-4
28	LEVER FULCRUM PIN	4	SEE NOTE-4
27	FRICTION ARM PIN	4	SEE NOTE-4
26	FRICTION ARM MIDDLE LEVER	8	STEEL IS:2062 Gr.C
25	FRICTION ARM SPRING	8	STEEL BS EN 10270
24	FRICTION ARM (LH)	4	MALLEABLE CAST IRON IS: 2108 Gr.A
23	FRICTION ARM (RH)	4	MALLEABLE CAST IRON IS: 2108 Gr.A
22	CLEVIS	8	STEEL IS:1875 CL.2
21	EQUALISER LINKAGE	4	STEEL IS:2062 Gr.C

②	1		NOTE NO. 4 REVISED	VDG-930	Kellogg	JAN 1
①	5		DIMENSIONS Ø28,100 & 75 WERE Ø31,108 & 83. NO./BOLG OF ITEM NO.33 & 34 INTERCHANGED.	VDG-914	Sd/- A. PAL	JULY 1
ALT.	NO. OF PLACES	REF.NO.	DESCRIPTION	ALT. NOTE NO.	SIGN.	DATE

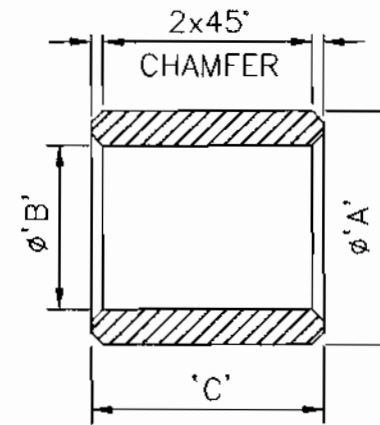
2	SCALE=1:6.75		REF:	FIRST ISSUED
11	INDIAN RLYS	DRG.	SK.VL-585	SUPERSEDES
E	RDSO(VD _{dyn} .)	NO.		SUPERSEDED BY

DRN BY	<i>Asutosh</i>
CKD BY	
APPROVED BY	
sd/-	
DIR/VDG	
DATE	JAN '09

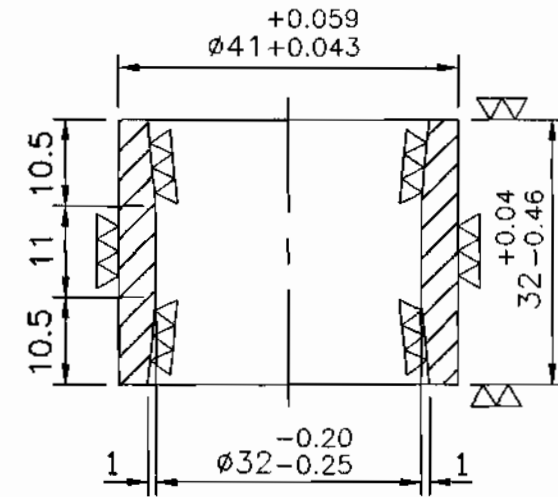
HARDNESS 58±2 HRC	
~	50
▽	25
▽▽	6.3
▽▽▽	0.8
▽▽▽▽	0.1
SURFACE	*SURFACE ROUGHNESS TO IS:3073
TOLERANCES	TOLERANCES ON UNTOLERANCED
(Max.)*	DIMENSIONS TO IS:2102(MEDIUM)
ALL DIMENSIONS ARE IN mm	

TABLE FOR ITEM NO.1

REF: No.	DESCRIPTION	QTY./ BOGIE	DIMENSIONS(mm)		
			ø'A'	ø'B'	'C'
1.	BUSH	16	41 $\begin{smallmatrix} +0.45 \\ +0.40 \end{smallmatrix}$	32 $\begin{smallmatrix} -0.20 \\ -0.25 \end{smallmatrix}$	12
2.	BUSH	8	41 $\begin{smallmatrix} +0.059 \\ +0.043 \end{smallmatrix}$	32 $\begin{smallmatrix} -0.20 \\ -0.25 \end{smallmatrix}$	16
3.	BUSH	4	47 $\begin{smallmatrix} +0.559 \\ +0.543 \end{smallmatrix}$	38 $\begin{smallmatrix} +0.15 \\ +0.10 \end{smallmatrix}$	51
4.	BUSH	4	54 $\begin{smallmatrix} +0.15 \\ +0.10 \end{smallmatrix}$	44 $\begin{smallmatrix} +0.50 \\ +0.45 \end{smallmatrix}$	12
5.	BUSH	4	54 $\begin{smallmatrix} +0.15 \\ +0.10 \end{smallmatrix}$	44 $\begin{smallmatrix} +0.50 \\ +0.45 \end{smallmatrix}$	20
6.	BUSH	8	44 $\begin{smallmatrix} +0.63 \\ +0.57 \end{smallmatrix}$	35 $\begin{smallmatrix} +0.05 \\ +0.10 \end{smallmatrix}$	12
7.	BUSH	16	44 $\begin{smallmatrix} +0.63 \\ +0.57 \end{smallmatrix}$	36 $\begin{smallmatrix} +0.15 \\ +0.09 \end{smallmatrix}$	12
8.	BUSH	16	36 $\begin{smallmatrix} +0.45 \\ +0.40 \end{smallmatrix}$	27 $\begin{smallmatrix} +0.45 \\ +0.50 \end{smallmatrix}$	16
9.	BUSH	4	41 $\begin{smallmatrix} +0.11 \\ +0.08 \end{smallmatrix}$	32 $\begin{smallmatrix} +0.04 \\ +0.00 \end{smallmatrix}$	25
10.	BUSH	4	35 $\begin{smallmatrix} +0.059 \\ +0.043 \end{smallmatrix}$	25 $\begin{smallmatrix} +0.40 \\ +0.45 \end{smallmatrix}$	31.75
11.	BUSH	12	44 $\begin{smallmatrix} +0.559 \\ +0.543 \end{smallmatrix}$	36 $\begin{smallmatrix} +0.15 \\ +0.09 \end{smallmatrix}$	31.75
12.	BUSH	20	38 $\begin{smallmatrix} +0.059 \\ +0.043 \end{smallmatrix}$	28 $\begin{smallmatrix} +0.60 \\ +0.50 \end{smallmatrix}$	31.75
13.	BUSH	64	38 $\begin{smallmatrix} +0.28 \\ +0.23 \end{smallmatrix}$	28 $\begin{smallmatrix} +0.60 \\ +0.50 \end{smallmatrix}$	16
14.	BUSH	8	41 $\begin{smallmatrix} +0.45 \\ +0.40 \end{smallmatrix}$	32 $\begin{smallmatrix} -0.20 \\ -0.25 \end{smallmatrix}$	18
15.	BUSH	4	41 $\begin{smallmatrix} +0.45 \\ +0.40 \end{smallmatrix}$	32 $\begin{smallmatrix} -0.20 \\ -0.25 \end{smallmatrix}$	40
16.	BUSH	4	41 $\begin{smallmatrix} +0.45 \\ +0.40 \end{smallmatrix}$	32 $\begin{smallmatrix} -0.20 \\ -0.25 \end{smallmatrix}$	45



1



2

(QTY/BOGIE = 4Nos.)

NOTE:-

1. MATERIAL FOR BUSH:-

STEEL TO IS:1875 CLASS-I. THE BUSHING SHALL BE CARBURRISED QUENCHED AND TEMPERED AT 177°C. THE SURFACE HARDNESS AFTER GRINDING SHALL BE ROCKWELL "C" 58 (MINIMUM). THE EFFECTIVE CASE DEPTH AFTER GRINDING SHALL BE:-

NOMINAL WALL THICKNESS	EFFECTIVE CASE DEPTH
3.175 mm TO THICKNESS LESS THAN 4.76 mm.	0.76 mm TO 1.02 mm
4.76 mm AND ABOVE	1.02 mm TO 1.27 mm

2. FOR BRAKE GEAR ARRANGEMENT REFER DRG.NO. SK.VL-584.

3. FOR BRAKE GEAR DETAILS REFER DRG.NO. SK.VL-585 SHEET 1 OF 3, 2 OF 3 AND 3 OF 3.

THESE CHANGES ARE TO BE IMPLEMENTED IN A PROTOTYPE LOCOMOTIVE IN CONJUNCTION WITH MODIFICATION SHEET No. MP.MOD.VL.01.03.09

2.		SPECIAL BUSH	--		SEE NOTE 1
1.		BUSH	--		SEE NOTE 1
ITEM NO.	I.R. PART NO.	DESCRIPTION	NO. BOGIE	WT(Kg) EACH	MATL: & SPEC:
APPLICABLE FOR WAP7 LOCOS.		BRAKE RIGGING BUSHES			
SCALE		REF:		FIRST ISSUED	
INDIAN RLYS. R D S O (VDG)		DRG. NO. SK.VL-586		SUPERSEDES	
				SUPERSEDED BY	

~	50
▽	25
▽▽	6.3
▽▽▽	0.8
▽▽▽▽	0.1
SYMBOLS	Raum (MAX.)*

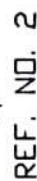
*SURFACE ROUGHNESS TO IS:3073
WELDING SYMBOLS TO IS:813
TOLERANCES ON UNTOLERANCED DIMENSIONS TO IS:2102(MEDIUM)

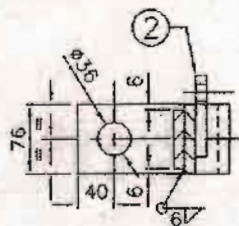
ALL DIMENSIONS ARE IN mm



ALT.	NO.OF PLACES	REF. NO.	DESCRIPTION	ALT.NO. NO.	SIGN.	DATE

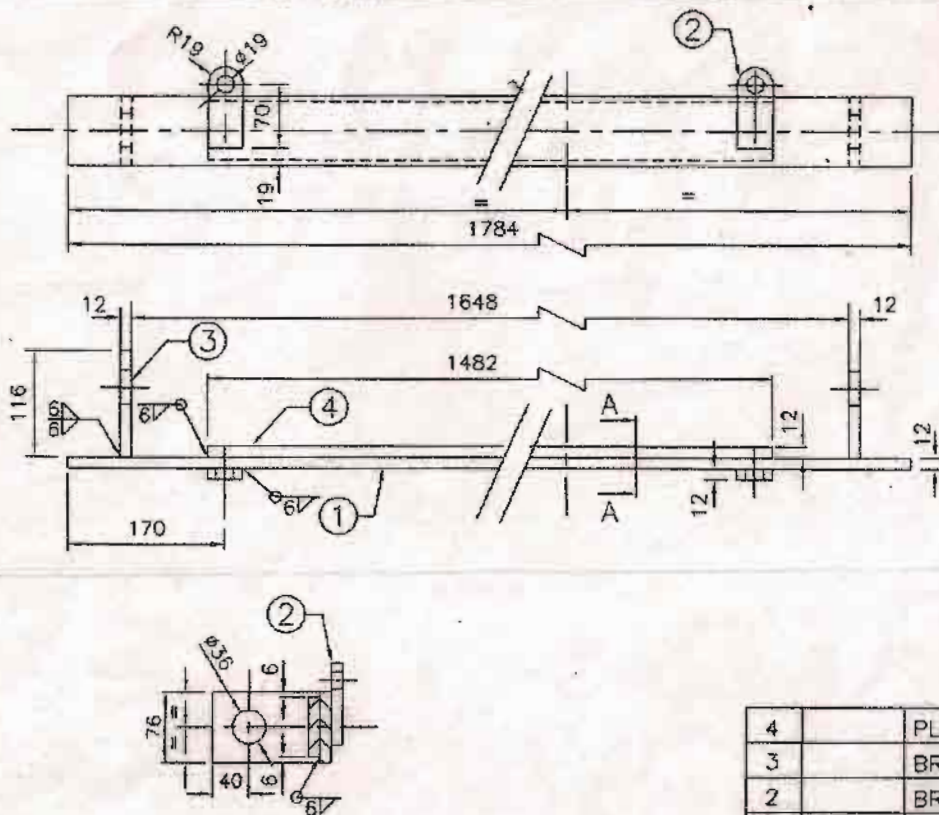
DRN BY: *[Signature]*
CKD BY: *[Signature]*
APPROVED BY: *[Signature]*
DATE: JAN. 09

Backup head - 80







4		PLATE	1	ST:IS:2062Gr.C
3		BRACKET	2	ST:IS:2062Gr.C
2		BRACKET	2	ST:IS:2062Gr.C
1		PLATE	1	ST:IS:2062Gr.C
REF. NO.	I.R. PART NO.	DESCRIPTION	NO./WT(Kg.) ASSEMBLY EACH	MATL:SPEC./ REF.DRG.NO.
REF.		 SCALE: NTS	APPROVED BY  06/01 FOR DC	
TIE BAR ASSEMBLY				FIRST ISSUED
FOR WAP7 WITH MODIFIED BRAKE RIGGING				SUPERCEDES
RDSO ELECT. DTE SKEL-4876				SUPERCEDED



SECTION AA

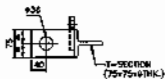
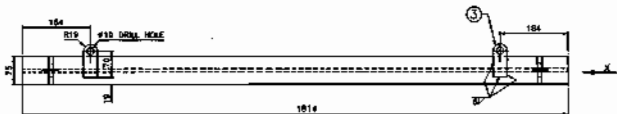
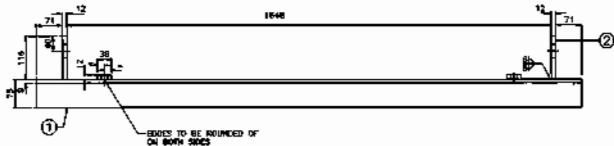
NOTE:

- (I) ALL DIMENSION ARE IN MILIMETERS
EXCEPT MENTIONED OTHERWISE.
(II) TIE BAR FOR AXLE NO. 2, 5 (CAB SIDE).

4		PLATE	1		ST:IS:2062Gr.C
3		BRACKET	2		ST:IS:2062Gr.C
2		BRACKET	2		ST:IS:2062Gr.C
1		PLATE	1		ST:IS:2062Gr.C
REF. NO.	I.R. PART NO.	DESCRIPTION	NO. / WT(Kg.) ASSLY EACH	MATL. SPEC. REF. DRG. NO.	
REF.			SCALE: NTS	APPROVED BY 	FOR DG
TIE BAR ASSEMBLY					FIRST ISSUED
FOR WAP7 WITH MODIFIED BRAKE RIGGING					SUPERCEEDS
RDSO ELECT. DTE SKEL-4877					SUPERCEDED

STATUS	ALT.	REF.NO.	DESCRIPTION	APPD BY	DATE

DT	06-01-2012
D	<i>Br</i>
C	<i>Black</i>



VIEW LOOKING DIRECTION-X

HAND COPY

1	50
2	25
3	6.2
4	6.2
5	6.1
6	6.1
7	6.1
8	6.1
9	6.1
10	6.1
11	6.1
12	6.1
13	6.1
14	6.1
15	6.1
16	6.1
17	6.1
18	6.1
19	6.1
20	6.1
21	6.1
22	6.1
23	6.1
24	6.1
25	6.1
26	6.1
27	6.1
28	6.1
29	6.1
30	6.1
31	6.1
32	6.1
33	6.1
34	6.1
35	6.1
36	6.1
37	6.1
38	6.1
39	6.1
40	6.1
41	6.1
42	6.1
43	6.1
44	6.1
45	6.1
46	6.1
47	6.1
48	6.1
49	6.1
50	6.1

STANDARD REQUIREMENTS TO BE USED
 ALL DIMENSIONS ARE IN INCHES

ALL DIMENSIONS ARE IN INCHES

REV	DESCRIPTION	DATE	BY	CHK
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3	REVISION	4	REVISION
5	REVISION	6	REVISION
7	REVISION	8	REVISION
9	REVISION	10	REVISION
11	REVISION	12	REVISION
13	REVISION	14	REVISION
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91	REVISION	92	REVISION
93	REVISION	94	REVISION
95	REVISION	96	REVISION
97	REVISION	98	REVISION
99	REVISION	100	REVISION

DESCRIPTION: TIE BAR ASSEMBLY

DATE: 10/10/80

BY: [Signature]

CHK: [Signature]

APP: [Signature]

REV. NO. SKVL-186

REV. NO. SKVL-186