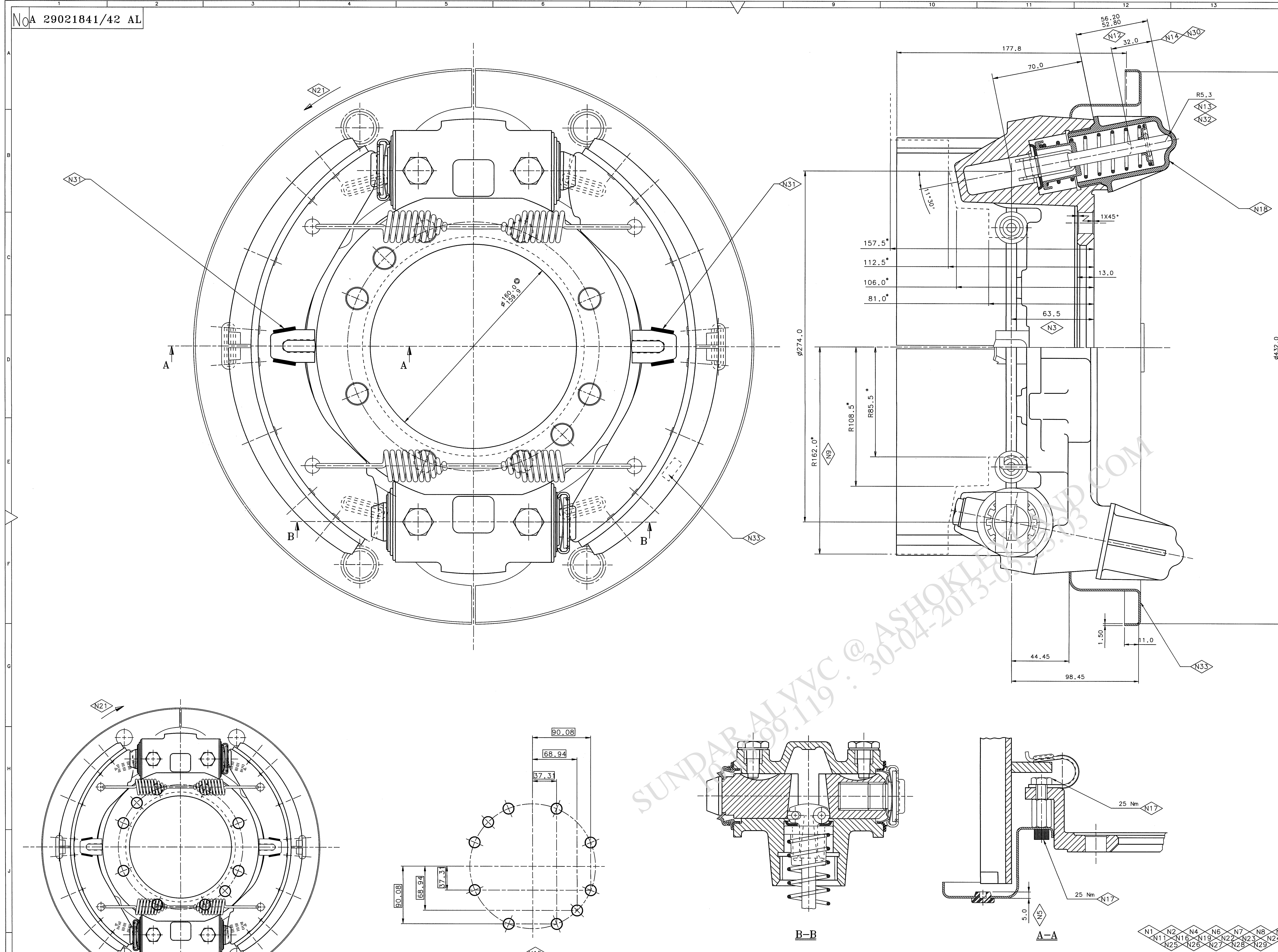


ASHOK LEYLAND LTD. TECHNICAL CENTRE, VELLITTOVAL CHAVADI
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- NOTES
- COMPUTER PRODUCED DRAWINGS MUST NOT BE CHANGED MANUALLY
- J13 N1 ALL DIMENSIONS IN mm. NON LIMITED DIMENSIONS FOR REFERENCE ONLY.
 - J13 N2 INSTALLATION NOTES
IT IS THE CUSTOMER'S RESPONSIBILITY TO INSTALL THE BRAKE AND TO ENSURE COMPATIBILITY OF THE BRAKE WITH THE REMAINDER OF THE VEHICLE BRAKING SYSTEM.
 - D11 N3 BRAKE OFFSET.
 - J13 N4 RECOMMENDED DRUM Ø381.63/381.50. SURFACE FINISH 2.51/1.52 µm.
 - J11 N5 CUSTOMER TO ENSURE ADEQUATE GROMMET TO DRUM CLEARANCE.
 - J13 N6 DRUM RUNOUT NOT TO EXCEED 0.1.
 - J13 N7 IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE ADEQUATE CLEARANCE EXISTS BETWEEN THE BRAKE ASSY AND SUSPENSION/CHASSIS COMPONENTS.
 - J13 N8 BRAKE AS RECEIVED FROM BRAKES INDIA IS SET TO Ø380.0/378.0.
 - E9 N9 DIMENSION UNDER THE SWEE PLATFORM INCLUSIVE OF RIVET WITH BRAKE SET AT Ø378.0
 - J13 N10 ON INSTALLATION AXLE SPIGOT DIAMETER MUST HAVE A REGISTER OF ATLEAST 50% OF TORQUE PLATE SPIGOT THICKNESS.
 - J13 N11 DIMENSIONS MARKED THIS * GIVE MAXIMUM SWEEP OUTLINE. ADEQUATE RUNNING CLEARANCES MUST BE MAINTAINED.
 - A12 N12 THIS DIMENSION APPLIES IN THE FREE CONDITION.
 - A13 N13 SPHERICAL RADIUS.
 - A12 N14 USEABLE STROKE.
- GENERAL NOTES
- K6 N15 MOUNTING HOLES-10 NOS Ø16.70/16.40 AS SHOWN.
 - J13 N16 LININGS MUST BE FREE FROM CONTAMINANTS INCLUDING GREASE AND OIL.
 - H12,J12 N17 TIGHTENING TORQUE
 - C13 N18 PROTECTIVE PLUG FOR STORAGE AND TRANSIT PURPOSES ONLY.
 - J13 N19 29021841, AS DRAWN L.H.
 - K1 N20 29021842, OPPOSITE HAND R.H.
 - M,01 N21 DIRECTION OF FORWARD ROTATION.
- SERVICE NOTES
- J13 N22 BRAKE TO BE SERVICED AND MAINTAINED IN LINE WITH B1 MAINTENANCE MANUAL.
 - J13 N23 SETTING OF THE BRAKE DIAMETER MUST BE ACHIEVED BY COLLAPSING BRAKE AND ADJUSTING OUT USING BOTH ADJUSTER SCREWS.
 - J13 N24 AFTER FITTING NEW SHOES OR AT ANY TIME WHEN THE SHOE TO DRUM CLEARANCE HAS BEEN MADE EXCESSIVE THE INDIVIDUAL SHOES MUST BE ADJUSTED TO WITHIN 0.75/0.50 OF THE DRUM. THIS CLEARANCE, MEASURED THROUGH L INING INSPECTION HOLES IN THE BRAKE SHIELD, MUST BE TAKEN AFTER THE BRAKE SHOE HAS BEEN CENTRALISED IN THE DRUM, BY APPLYING THE BRAKE WITH THE DRUM STATIONARY.
- PERFORMANCE NOTES
- J13 N25 FOR USE ON ROAD VEHICLES WHERE INSTALLATIONS ARE COVERED BY APPROPRIATE DATA SHEETS AS STATED ON B1 SALES QUOTATION. B1 WILL ONLY ACCEPT RESPONSIBILITY FOR INSTALLATIONS COVERED BY DATA SHEETS.
 - J13 N26 THE BRAKE IS DESIGNED TO OPERATE WITH A DRUM MADE FROM GREY IRON TO FG 200 D OR B TO IS 6331 OR IT'S EQUIVALENT. IT IS CUSTOMER'S RESPONSIBILITY TO ENSURE COMPATIBILITY WITH INSTALLATION.
 - J13 N27 THE BRAKE IS DESIGNED TO CATER FOR DRUM RECTIFICATION AND WEAR UPTO Ø383.0 MAX.
 - J13 N28 LININGS MUST NOT BE ALLOWED TO WEAR BELOW WEAR INDICATORS OTHERWISE RIVET HEADS WILL COME INTO CONTACT WITH DRUM.
 - J13 N29 MAXIMUM SHOE CENTRE TRAVEL IN AS ASSEMBLED CONDITION OF THE BRAKE IS 1.85. IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE COMPATIBILITY WITH INSTALLATION.
 - A13 N30 GUARANTEED WEDGE TRAVEL AVAILABLE FOR SHOE CENTRE MOVEMENT.
 - B1,B9 N31 PAINT MARK PROVIDED HERE TO SHOW THE RELATIVE POSITION OF SHOE AND TORQUE PLATE IT IS TO ENSURE PAINT MARKS ARE ALIGNED IN AXLE ASSY.
 - B13 N32 GRAPHITE GREASE TO BE APPLIED ON THE SPHERICAL SURFACE BEFORE ASSY. OF AIR CHAMBER.
 - G13 N33 LINING GRADE RANE RAF7 SHOULD BE STENCILED HERE.
 - N34 USEFUL LINING THICKNESS 10MM

REDRAWN: _____ RECHECKED: _____

DRAWN	K.KRIPESH	DATE	19.08.10
CHECKED		DATE	19.08.10
MAT. SCIENCE		DATE	
APPROVED		DATE	19.08.10

SCALE: DESIGN AUTHORITY

Brakes India Limited

TITLE: BRAKE ASSEMBLY

TYPE: Ø381.0X177.8 SAW -FRONT

No A 29021841/42 AL RAF7(BM)

Brakes India Limited
Chennai 600 050

SL.NO.	BI PART NO.	AL PART NO.	LINING GRADE	LINING SUPPLIER
01	A 29021842 AL (RH)	F3P16900	RANE RAF7 (BM)	RANE BRAKE LININGS LTD
	A 29021841 AL (LH)	F3P16800		

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GENERAL NOTES

- IS 10714 METHOD
- SI UNITS/TS 1-10-02
- SYMBOLS TO TS 1-10-05
- ABBREVIATIONS TO TS 1-10-01

NOTES APPLICABLE WERE CALLED FOR

- 1.50 METRIC THREADS TO IS 4218
2. DIMENSIONS APPLY AFTER CHEMICAL OR ELECTROPLATED FINISH
3. SURFACE FINISH TO TS 1-10-06
4. DATUM DIMENSIONS
5. Q INDICATES SIGNIFICANT CHARACTERISTICS
6. Q INDICATES CRITICAL CHARACTERISTICS

MATERIAL: -N.A.-

FORM: ASSEMBLY

FINISH: -N.A.-

HEAT TREATMENT: -N.A.-

29021841	F3P16800	Qty: -	Qty: -	
Supplier Part No	AL Part No	Sample	Pilot	Production

Q-CRITICAL Q-SAFETY Q-IMPORTANT. THIS DRG. CONTAINS SAFETY CHARACTERISTICS UNLESS OTHERWISE SPECIFIED

TOLERANCES REFER IS:2102 ; MEDIUM FOR MACHINING AND COARSE FOR FABRICATION

SURFACE PROTECTION FABRICATED COMPONENTS TO BE DEGREASED, DESCALED, APPLY ZINC PHOSPHATE, APPLY EPOXY PRIMER AND APPLY ENAMEL TO MEET 300 HRS OF SALT SPRAY LIFE WHEN TESTED AS PER ASTM B117 (UNDER PELLICULAR CORROSION -- 20hr. NO BLISTERING IS ALLOWED.) MACHINED SURFACE TO BE APPLIED WITH RUST PREVENTIVE OIL TO IS:1154

SURFACE FINISH AS PER IS:3073 (CLA VALUE)

METRIC SCREW THREADS SHALL CONFORM TO THE LIMITS AND TOLERANCES SPECIFIED IN THE CURRENT IS:4218 CLASS 6g EXTERNAL OR 6h INTERNAL.

SHARP EDGES TO BE REMOVED AND DIMENSIONS ARE IN MM DO NOT SCALE DRAWING

SPECIAL INSTRUCTIONS/NOTE:
THIS IS SIMILAR TO B2521406 BRAKE ASSY WITH MANUAL ADJUSTER EXCEPT THE LINING GRADE CHANGE ASBESTOS FREE LINERS RAF7 BM INTRODUCTION

CORROSION RESISTANCE TO MEET ALS 268.03 (CLASS C).

SL.No.	PART NO.	DESCRIPTION	MATERIAL	QTY.
BILL OF MATERIALS				
APPEARANCE ITEM	ER-DIN	DATE		
YES	NO	ER-DIN-0006233	10/12/2010	
FINISHED WEIGHT (APPROX)	REF. PT. NO.			
32Kg	S/A. PT. NO.			
SCALE	SUPERSEDES			
NTS	SPEC. NO.			

AL PLM VAULT

REVISION: R.1 DATE: 28/08/2011 STATUS: RELEASE

STAGE: III ER-DIN NO: ER-DIN007567 DATE: 28/10/2011

ALTERED BY: bala.murugan.alvise CHECKED BY: vedhanagan.s

MED APPROVAL: vishal.alvise APPROVED BY: ajs.alvise

DIGITALLY SIGNED - PHYSICAL SIGNATURE NOT REQUIRED

DRWN/ DATE	CHECKED/ DATE	MED APPROVAL/ DATE	APPROVED/ DATE	STDS APP/ DATE
MN 10.12.2010	SD 10.12.2010		AJS 10.12.2010	

MATERIAL: _____

HEAT TREATMENT: _____

REMARKS: DUO DUPLEX MANUAL ADJUSTER - STALLION

DESCRIPTION: Ø381.0 X 177.8 FRONT BIL BRAKE ASSY - RAF7 (BM)

PART NO. **F 3 P 1 6 8 0 0 #.1**

SHEET NO 1 OF 1 AO