

DSC512 SH 1

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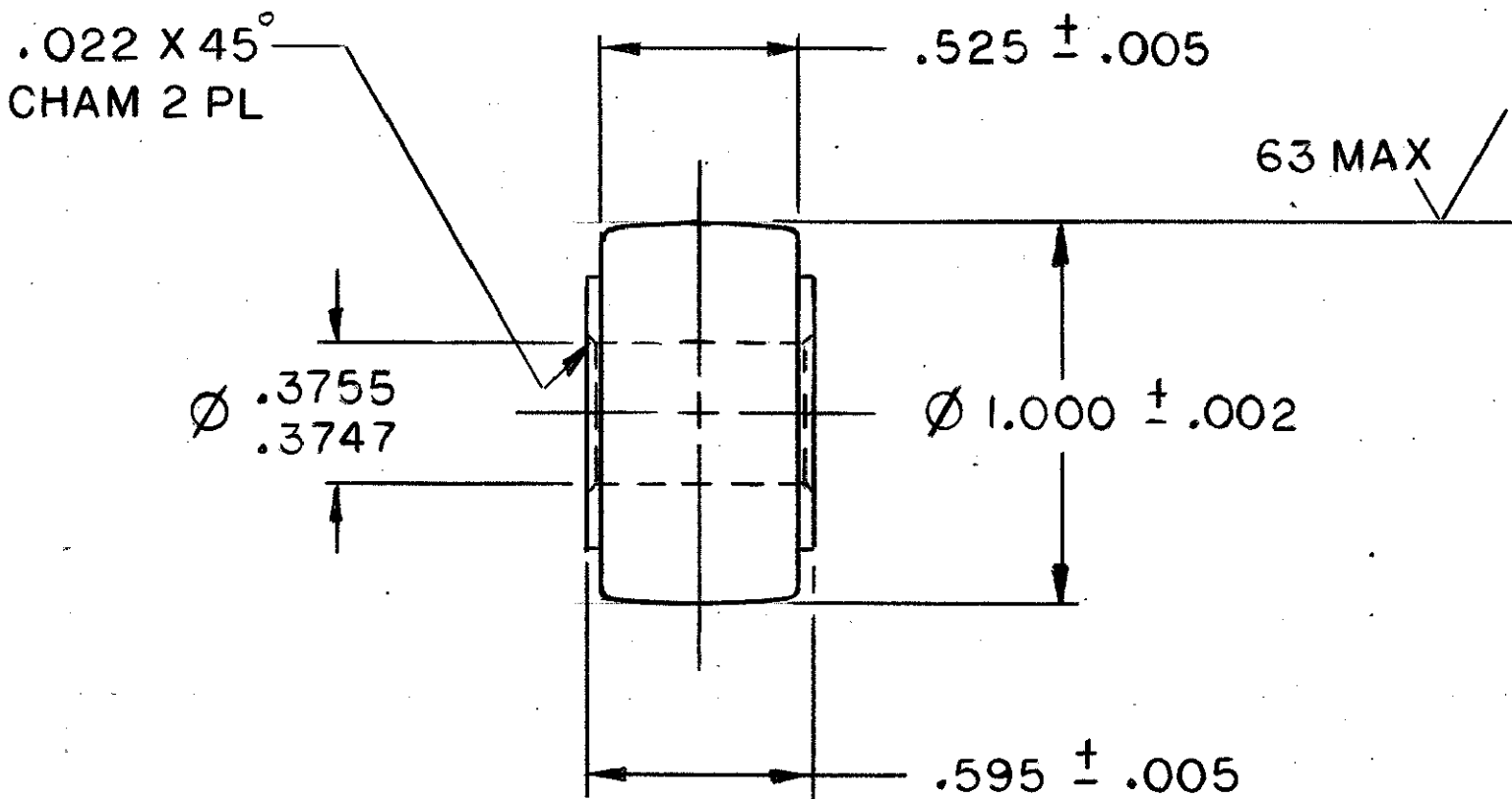
REPORT ALL DRAWING ERRORS TO
ENGINEERING

REVISIONS

REVISION	ITEM NO.	ZONE	DESCRIPTION	ENG. AUTH.	VA. OPS.	DATE	DRAWN	CHECKED	STRESS	APPROVED
1			PRELIMINARY - FOR TRIAL INSTALLATION OF MOD 8/2508.							

NOTES

- THIS DRAWING SHOWS A BEARING - ROLLER DESIGNED FOR USE SPECIFICALLY AS THE 'SIDE LOAD ROLLER' FOR FLAP TRACK # 5 OF THE DASH 8 AIRCRAFT.
- MATERIAL
OUTER RACE - CRES CUSTOM 455 PER AMS 5617
HEAT TREAT CONDITION H1000.
INNER RACE AND END PLATES -
CRES PH 13-8 MO PER AMS 5629
HEAT TREAT CONDITION H 1000.
SEALS - DELRIN AF 113 OR EQUIVALENT.
- LOAD RATINGS
NOMINAL RADIAL CAPACITY .17 IN² X 10,000 PSI = 1700 LB
NOMINAL AXIAL CAPACITY .10 IN² X 5,000 PSI = 500 LB
SEE SHEET 2 FOR CAPACITY AS A TRACK ROLLER.
- LIFE TESTING
THE BEARING SHALL REMAIN SERVICEABLE WITH NO LINER WEAR THROUGH AFTER A ROLLING TEST AS FOLLOWS.
RADIAL LOAD 300 LB
STROKE 12 INCHES
30,000 CYCLES
- ENVIRONMENT
DESERT SAND.
TEMPERATURE - 65° F TO 160° F.
- FEATURES
MAXIMUM RADIAL PLAY .003.
AXIAL FLOAT .008 MAX
THE OUTER RACE MUST BE FREE TO ROTATE WHILE THE INNER RACE IS HELD FINGER TIGHT (2 INCH LB MAX)
- SEE SHEET 2 FOR EXTERNAL PROFILE AND FOR INSTALLATION DETAIL.



PART N° DSC 512 - I	
APPROVED VENDOR	VENDOR PART NUMBER

QUANTITY REQ. PER				ZONE	CODE	PART NO.	DESCRIPTION	MATERIAL	MATL. SPEC	FINAL TREAT	PROT. FINISH
							BILL OF MATERIAL				
							DO NOT SCALE DWG				
							REQUIREMENTS-UNLESS OTHERWISE SPECIFIED				
							GENERAL LIMITS				
							1. DIM ARE IN INCHES 2. SURFACE ROUGHNESS 125-✓ MAX 3. REMOVE SHARP EDGES 0.15 MACHINE PARTS 4. EDGE FINISHING OF PARTS IN ACCORDANCE WITH P.P.S. 27.02 5. THREADS IN ACCORDANCE WITH MIL-S-7742				
							1. DECIMALS 1 PLACE 2. ± .03 3. ± .010 2. DIMENSIONS & TOLERANCES APPLY AFTER PLATING 3. ANGULAR TOLERANCE FOR MACHINED PARTS 40° 30' 4. FOR ADDITIONAL TOLERANCES SEE 0850				
							PRODUCTION PROCESS STANDARDS (P.P.S.) AND OTHER STANDARDS LISTED ON DWG. IN ADDITION TO THOSE STANDARDS CALLED UP IN THE FIELD OF THIS DRAWING SHALL FORM PART OF THIS DRAWING FOR ALL MANUFACTURING AND QUALITY REQUIREMENTS.				
							ENG. AUTH. CSI 82604 DRAWN D.W.S. 18 Dec 95 CHECKED BRIGGS 6 JAN 96 APPROVED C. V. RUS 22 APR 96 STRESS L. SALINAS 19 FEB 96 MAT. TECH. L. SALINAS 19 FEB 96 ENG. RELEASE D. BETHUNE 26 JAN 96 TECH. DES. - - VA. OPS. BR000 6/3/96				
							DE HAVILLAND PRODUCTION PROCESS SPECN.				
							DWG. SIZE D CODE IDENT. NO. 71867 DRAWING NO. DSC 512 SCALE 2/1 WGT. CALC. ACTUAL SHT. 1 OF 2				
							DRAWING TITLE BEARING, SEALED, SELF LUBRICATING SIDE ROLLER # 5 CARRIAGE OUTBOARD FLAPS				
							DE HAVILLAND Inc. Downsview, Ontario, Canada				
							REVISIONS				
							REV. -				

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DSC 512 SH2

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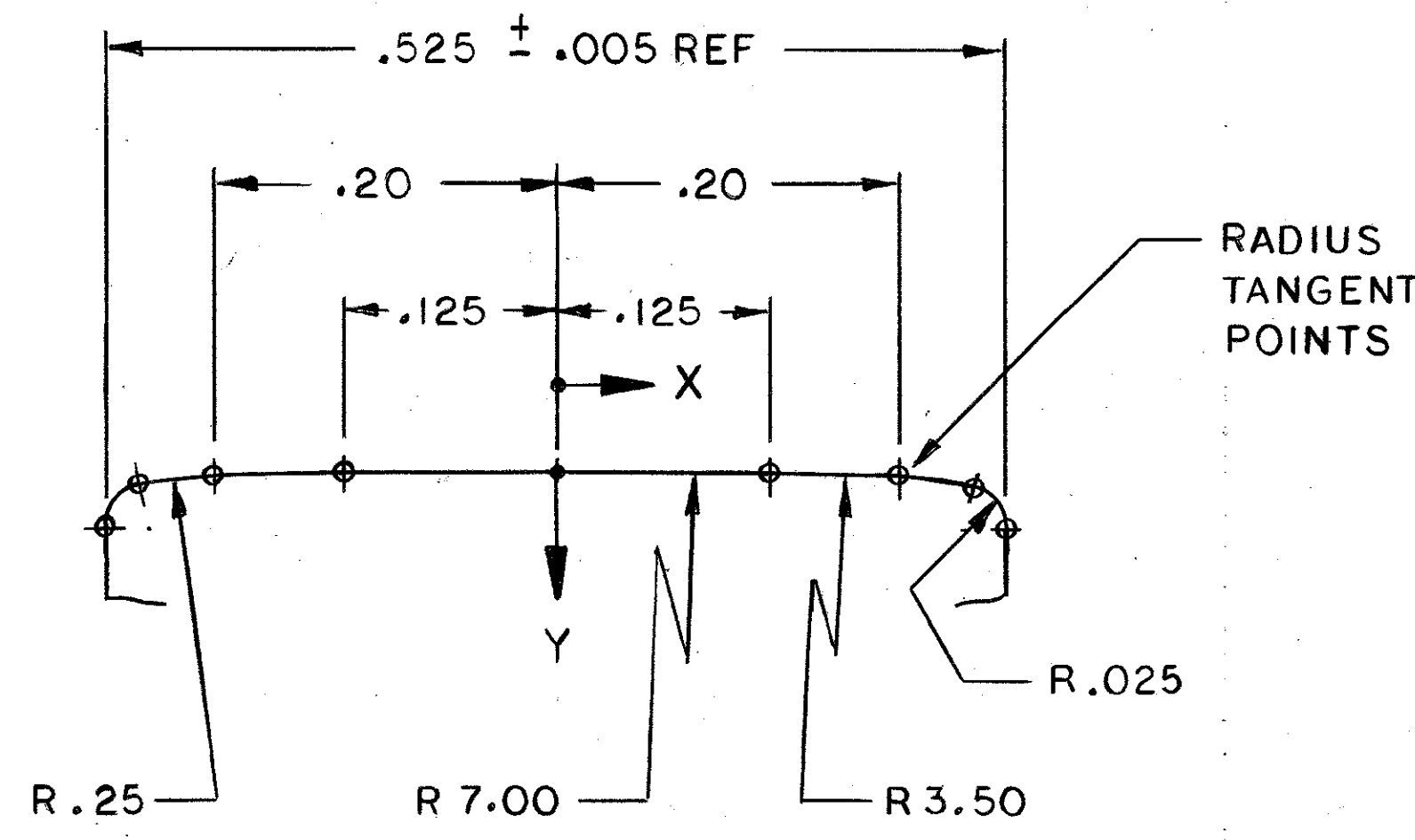
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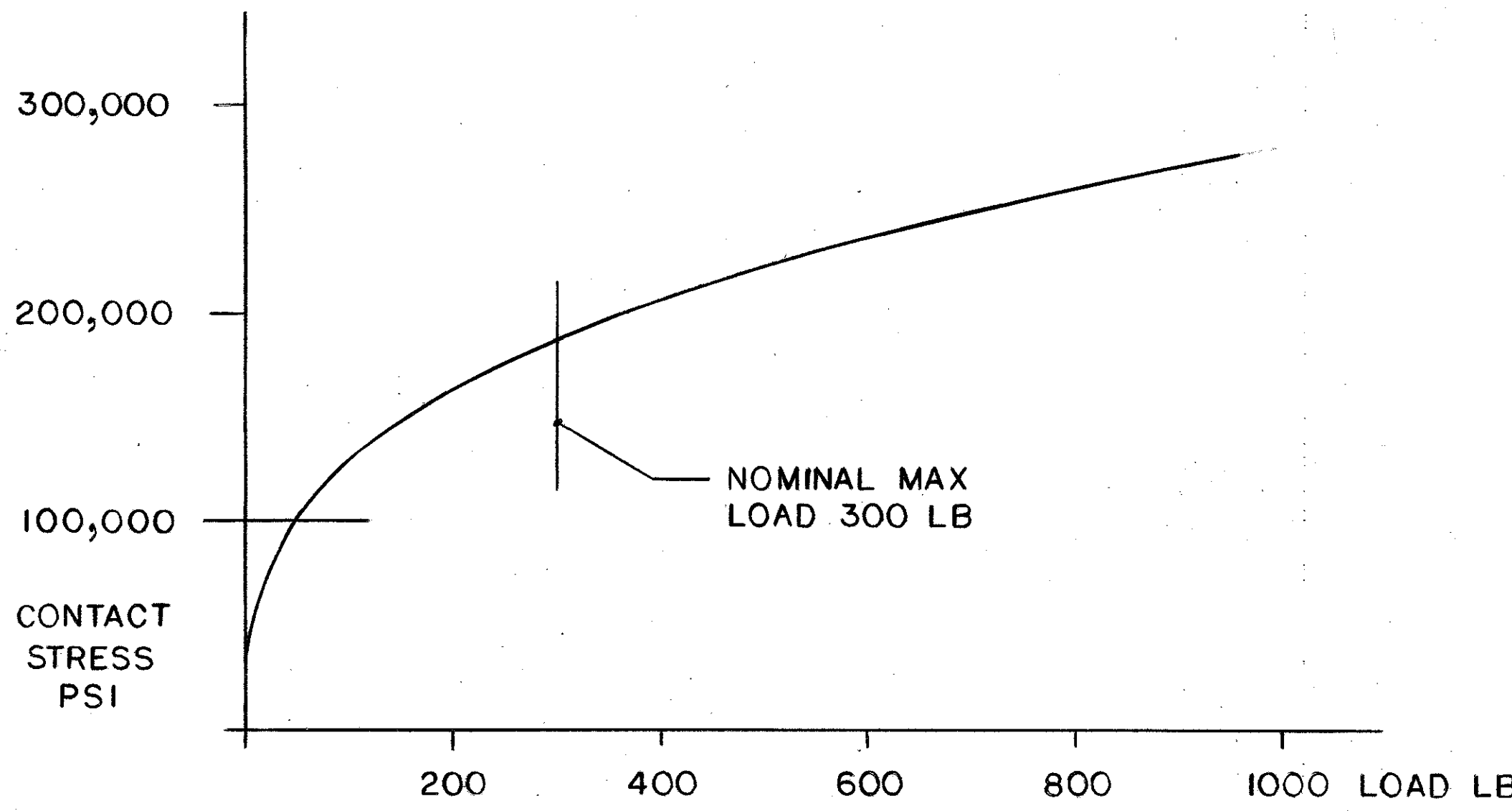
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REVISION	ITEM NO.	ZONE	DESCRIPTION				ENG. AUTH.	VA. OPS.	ENG. RELEASE
1			PRELIMINARY - FOR TRIAL INSTALLATION OF MOD 8/2508						

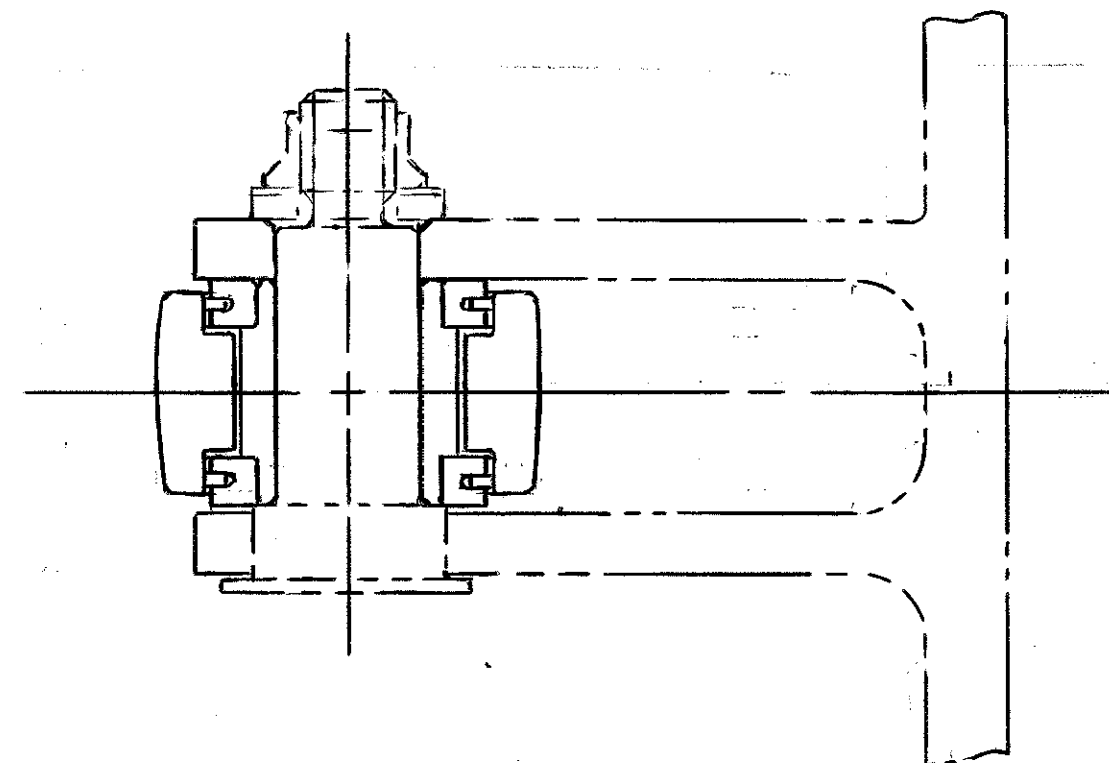


PROFILE - OUTER RACE
THE PROFILE DIMENSIONS SHOWN
ARE NOMINAL. NO TOLERANCES ARE IMPLIED.
THE RADII CENTRES TABULATED BELOW MAY
BE USED FOR N.C PROGRAMMING.

RADIUS	CENTRES	
	± X	Y
7.000	0.0000	7.00000
3.500	.0625	3.50056
.250	.1902	.25307
.025	.2375	.03310



ROLLER - TRACK CONTACT STRESS (HERTZIAN STRESS)
TRACK MATERIAL 300M STEEL PER AMS 6419 HEAT TREAT
280 KSI TO 305 KSI. TRACK IS NICKEL/ BORON COATED.
ALLOWABLE CONTACT STRESS FOR TRACK 504,000 PSI.
ALLOWABLE CONTACT STRESS FOR CUSTOM 455 OUTER RACE 292,500 PSI.
NOMINAL LIMIT STRESS FOR ROLLING CONTACT 250,000 PSI.



INSTALLATION # 5 SIDE LOAD ROLLER (REF ONLY)

THE BEARING/ROLLER IS INSTALLED INTO A FORKED FITTING
WITH A PIN RETAINER HAVING A MOUNTING DIA OF .3735 - .3745
AND A CLAMPING DIA OF .5006 - .5113. THE PIN MATERIAL
IS STEEL 4130 WITH CADMIUM PLATE ALL OVER. THE FITTING
MATERIAL IS 7075 PROTECTED BY ANODIZING PLUS PRIMER.
THE JAW WIDTH IS .600 - .610.

THE BEARING DESIGN SHOWN IS GENERIC AND THE PICTORIAL
VIEW IS INTENDED TO HIGHLIGHT MOUNTING DETAILS WHICH
MAY AFFECT THE INDIVIDUAL DESIGNS OF THE SUPPLIERS.

CERTAIN FEATURES OF THE BEARING AS SHOWN OR DESCRIBED
MAY BE SUBJECT TO PATENT PROTECTION BY THE VENDORS.

de Havilland Inc. Downsview, Ontario, Canada	ENG. AUTH.		CSI B2604
	DRAWN		D.W.S 18 Dec 95
	CHECKED		Proctor 7/2/96
	APPROVED		C. W. L. S. 22/4/96
	STRESS		V. Abramov 19/2/96
SEE SHEET 1 OF DWG FOR BILL OF MATERIAL AND EFFECTIVITY.	MAT. TECH.		L. SALINAS 21 FEB. 96
	ENG. RELEASE		D. BETHUNE 30/05/01
	TECH. DES.		-
	VA. OPS.		OBH 6/3/96
	DWG SIZE		D 71867
SCALE		DWG. NO.	DSC 512
10/1 & 2/1		WGT. CALC.	ACTUAL
		SHT.	2 OF 2

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