

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	1. REVISED MASTER FORM (71F12-2) 2. REVISED GRIP LENGTH(2nd DASH No.) TO 3 DIGITS	11-21-08	V. PILLAI
B	REVISED MASTER FORM (71F32)	03-30-08	V. PILLAI

WHEN REQUIRED,
DRILL 4 "N" DIA. HOLES
EQUALLY SPACED,
MANDATORY TO CSK HOLES

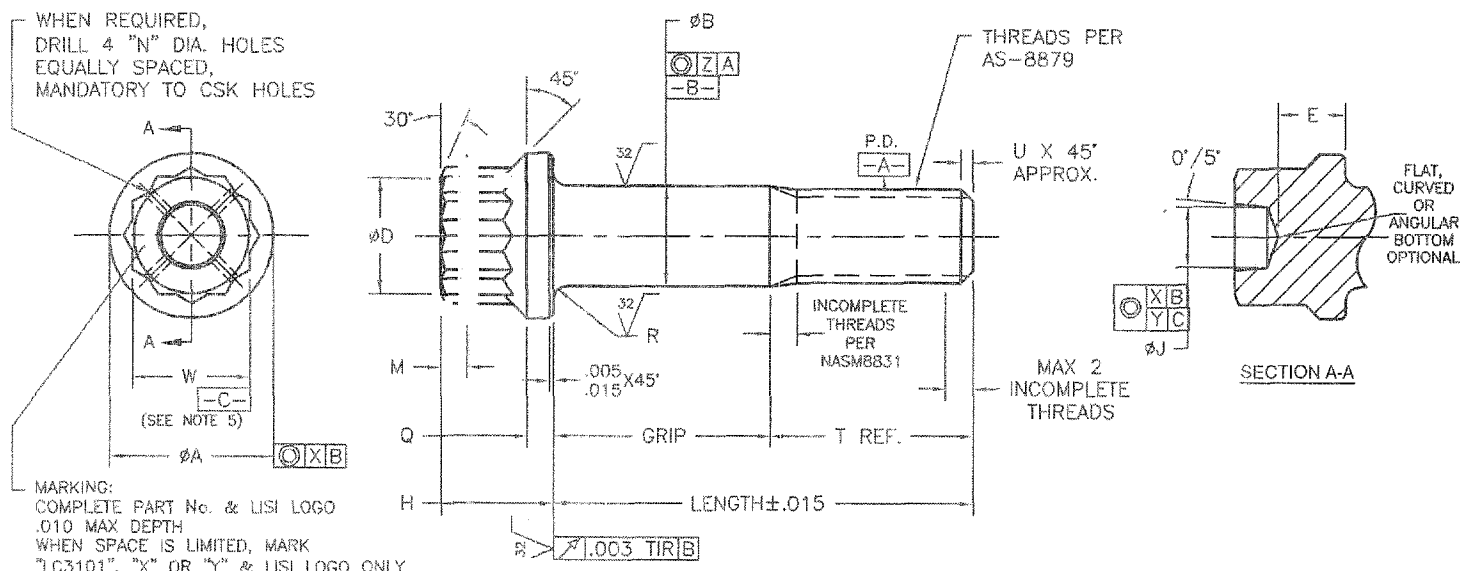


TABLE 1

FIRST DASH NO	THREAD SIZE: UNJF-3A	Ø A ±.005	Ø B		Ø D MIN MAX	E MIN	H	Ø J +.010 -.030	M	N DIA. ±.005
			(.0156) CODE X	(.0312) CODE Y						
-03	.1900-32	.345	.2016 .2026	.2172 .2182	.235 .250	.092	.265	.125	.062	.037
-04	.2500-28	.433	.2641 .2651	.2797 .2807	.297 .312	.135	.300	.180		
-05	.3125-24	.526	.3266 .3276	.3422 .3432	.360 .375	.162	.348	.215		
-06	.3750-24	.644	.3891 .3901	.4047 .4057	.422 .437	.197	.388	.260	.070	
-07	.4375-20	.745	.4516 .4526	.4672 .4682	.485 .500	.228	.435	.320		
-08	.5000-20	.823	.5141 .5151	.5297 .5307	.547 .562	.254	.504	.380		
-09	.5625-18	.933	.5761 .5771	.5917 .5927	.610 .625	.287	.557	.440	.094	
-10	.6250-18	1.045	.6386 .6396	.6542 .6552	.672 .687	.327	.618	.500		.055
-12	.7500-16	1.225	.7636 .7646	.7792 .7802	.797 .812	.380	.711	.570		
-14	.8750-14	1.433	.8886 .8896	.9042 .9052	.922 .937	.438	.808	.650		
-16	1.0000-12	1.620	1.0136 1.0146	1.0292 1.0302	1.047 1.062	.493	.923	.740	.125	
-18	1.1250-12	1.870	1.1381 1.1396	1.1537 1.1552	1.235 1.250	.556	1.051	.840		
-20	1.2500-12	2.120	1.2631 1.2646	1.2787 1.2802	1.297 1.312	.636	1.155	.950		
-22	1.3750-12	2.308	1.3881 1.3896	1.4037 1.4052	1.422 1.437	.698	1.266	1.070	.188	
-24	1.5000-12	2.495	1.5131 1.5146	1.5287 1.5302	1.610 1.625	.750	1.434	1.200		

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Approval of this drawing is obtained in customer
B standard document.

DRAWN BY: *RF RQ*
VERIFIED BY: *RF RQ*
REVIEW BY SALE: *RF RQ*
SCALE: NONE
DATE: 12/12/2005
DIMENSIONING AND TOLERANCING IN
ACCORDANCE WITH ASME Y14.5M-1994

LISI CANADA CAGE CODE: L4528

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS: INCH [mm]
SURFACE ROUGHNESS: .125 MICRONS [1.6]
TOLERANCE: XX = ±.010
XXX = ±.005
ANGLES: ±2°
BREAK ALL SHARP EDGES: .005/.015

DRAWING TITLE:

BOLT, 12-POINT HEAD,
STEEL, OVERSIZED SHANK,
180 KSI MIN. TENSILE STRENGTH

DRAWING NUMBER:

LC3101

REV.

B

SHEET 1 OF 2

TABLE 1 CONTINUED

FIRST DASH NO	Q	H M S	U ±.016	T REF.	W NOM. SIZE	COCENTRICITY			ULT. TENSILE (LB MIN)
						X	Y	Z	
-03	.055	.031 .041	.031	.420	.2500	.004	.003	.0045	3910
-04	.069			.492	.3125	.005	.004		6980
-05	.082			.579	.3750	.006	.005		11100
-06	.091	.047 .057	.047	.625	.4375	.008	.006	.0060	17100
-07	.099			.721	.5000	.009	.008		23200
-08	.123			.768	.5625	.010	.008		30900
-09	.133	.063 .073	.062	.852	.6250	.011	.009	.0090	39200
-10	.150			.899	.6875	.012	.010		49000
-12	.178			1.036	.8125	.015	.012		71100
-14	.198	.077 .089	.078	1.244	.9375	.018	.014	.0120	97100
-16	.222			1.479	1.0625	.020	.016		126000
-18	.258			1.650	1.2500	.022	.019		162000
-20	.269	.094	.094	1.760	1.3125	.025	.021	.0120	202000
-22	.274			1.885	1.4375	.028	.023		247000
-24	.335			2.010	1.6250	.030	.025		296000

NOTES:

- 1) MATERIAL: 4140 PER AMS-S-5626 OR 4340 PER AMS-S-5000 OR 8740 PER AMS-S-6049.
- 2) PROCUREMENT SPECIFICATION: NASM8831 EXCEPT AS NOTED HEREIN.
- 3) PLATING: CADMIUM PLATE IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 2.
- 4) DIMENSIONS APPLY AFTER PLATING.
- 5) WRENCHING ELEMENT (W) SHALL BE IN ACCORDANCE WITH AS870.
- 6) DIMENSIONS IDENTIFIED WITH "REF" ARE FOR INFORMATION PURPOSES ONLY, NOT AN INSPECTION REQUIREMENT.
- 7) ADD LETTER H BEFORE FIRST DASH NO. TO DESIGNATE DRILLED HEAD.
- 8) FIRST DASH NUMBERS DESIGNATE DIAMETER IN SIXTEENTHS, SECOND DASH NUMBERS DESIGNATE GRIP LENGTH IN SIXTEENTHS, TOTAL LENGTH EQUALS GRIP PLUS "T", LAST LETTER TO DESIGNATE SHANK DIAMETER CODE.
- 9) USE WHOLE DASH NUMBERS ONLY
- 10) PART NUMBER EXAMPLE : LC3101 H 8 - 012X = .5000-20 BOLT, DRILLED HEAD, .750 GRIP LENGTH, X SIZE DIA. B.

OVERSIZE CODE (X = .0156 OVERSIZE, Y = .0312 OVERSIZE)
SECOND DASH NUMBER: GRIP LENGTH IN 1/16"
FIRST DASH NUMBER: BASIC DIAMETER IN 1/16"
DRILLED CONFIGURATION (- = UNDRILLED, H = DRILLED)
BASIC PART NUMBER

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Approval of this drawing is obtained in customer
B standard document.

DRAWN BY: <i>R.G.</i>		LISI CANADA CAGE CODE: L4528		DRAWING TITLE:		DRAWING NUMBER:	
VERIFIED BY: <i>[Signature]</i>		UNLESS OTHERWISE SPECIFIED:		BOLT, 12-POINT HEAD, STEEL, OVERSIZED SHANK, 180 KSI MIN. TENSILE STRENGTH		LC3101 REV. B	
REVIEW BY SALES: <i>[Signature]</i>		DIMENSIONS: INCH [mm]					
SCALE: NONE DATE: 12/12/2005		SURFACE ROUGHNESS: 125 MICRONS [1.6]					
DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5M-1994		TOLERANCE: .XX = ±.010 .XXX = ±.005 ANGLES: ± 2° BREAK ALL SHARP EDGES: .005/.015				SHEET 2 OF 2	