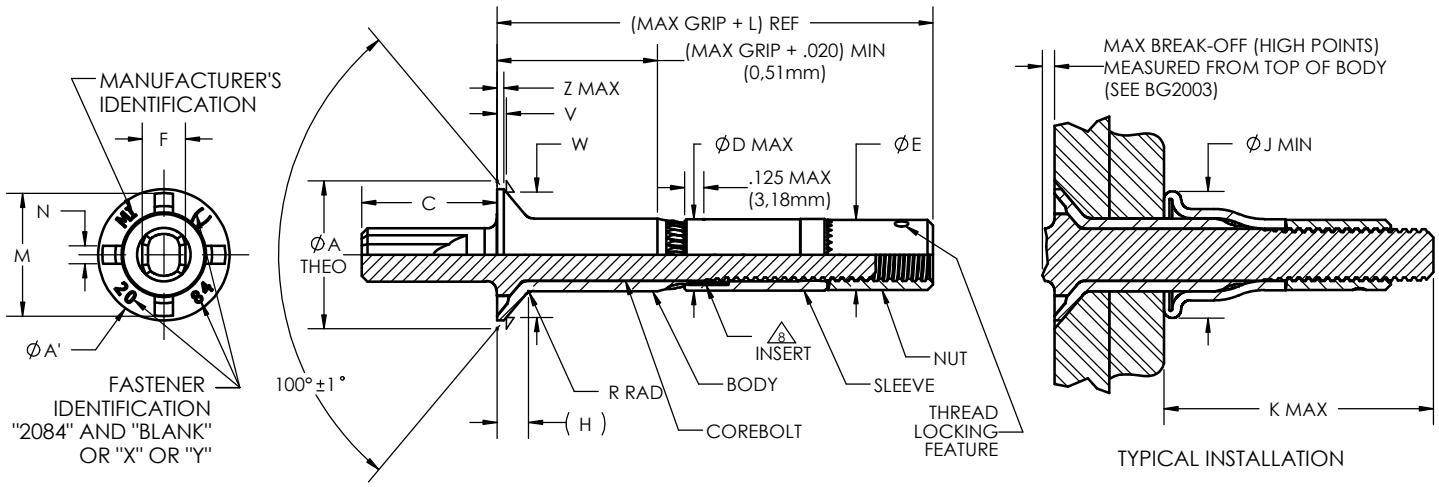
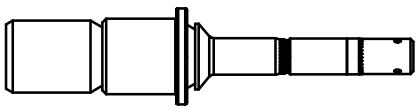


TYPICAL INSTALLATION

PART NUMBER	NOM DIA	A DIA THEO.	A' DIA MIN.	C REF	D DIA	E DIA MAX	F FLATS	H REF	J DIA MIN	K MAX	L REF	M	N	R MAX	V GAGE PROT	W GAGE DIA	Z MAX
	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH
BG2084( )-05-( )	5/32	.292 .286	.263	1/4	.1635 .1625	.1615	.084 .082	.057	.250	.670	.735	.256 .246	.037 .034	.025	.0385 .0353	.1992 .1990	.010
BG2084( )-06-( )	3/16	.357 .351	.327	5/16	.1895 .1885	.1875	.112 .109	.071	.290	.750	.800	.315 .305	.047 .044	.030	.0474 .0432	.2440 .2438	.015
BG2084( )-06-( )X	13/64				.2026 .2016	.1995		.067	.300								
BG2084( )-06-( )Y	7/32				.2182 .2172	.2150		.060	.320		.850						
BG2084( )-08-( )	1/4	.480 .472	.442		.2495 .2485	.2470	.135 .131	.098	.380	.800	.950	.405 .395	.055 .050		.0458 .0408	.3731 .3729	
BG2084( )-08-( )X	17/64				.2651 .2641	.2620		.090	.400								
BG2084( )-08-( )Y	9/32				.2807 .2797	.2775		.083	.415	.850	1.025	.420 .410					
BG2084( )-10-( )	5/16	.568 .562	.522	3/8	.3120 .3110	.3090	.152 .149	.109	.475	.950	1.000	.460 .450	.068 .063	.040	.0582 .0524	.4320 .4318	
BG2084( )-10-( )X	21/64				.3276 .3266	.3245		.101	.495			.480 .470					
BG2084( )-10-( )Y	11/32				.3432 .3422	.3400		.094	.515		1.075						
BG2084( )-12-( )	3/8	.698 .692	.642	7/16	.3745 .3735	.3715	.184 .181	.135	.560	1.100	1.200	.560 .550	.082 .077		.0654 .0589	.5451 .5449	
BG2084( )-12-( )X	25/64				.3901 .3891	.3870		.128	.580			.575 .565					
BG2084( )-12-( )Y	13/32				.4057 .4047	.4025		.121	.600		1.275						
BG2084( )-14-( )	7/16	.804 .797	.750		.4370 .4360	.4335	.220 .217	.155	.655	1.250	1.410	.640 .630	.094 .089	.050	.0635 .0573	.6582 .6580	.022
BG2084( )-16-( )	1/2	.917 .910	.850	1/2	.4995 .4985	.4955	.256 .253	.175	.750	1.350	1.530	.740 .730	.106 .101		.1105 .1043		

PART NUMBER	MIN AVAILABLE GRIP DASH NO.	RECOMMENDED HOLE SIZE FOR: 5 CLEARANCE INSTALLATION	RECOMMENDED HOLE SIZE FOR: 5 INTERFERENCE INSTALLATION	PREVAILING TORQUE (IN-LBS)	DOUBLE SHEAR (LBS)	TENSILE STRENGTH (LBS)	BREAK-OFF LIMITS MAX
		INCH	INCH	(IN-LBS) MIN	(LBS) MIN	(LBS) MIN	INCH
BG2084( )-05-( )	-02.5	.167 .165	.1635 .1622	2	4010	1350	.015
BG2084( )-06-( )	-03	.192 .190	.1890 .1875	4	5380	1600	
BG2084( )-06-( )X		.205 .203	.2015 .1997		6130		
BG2084( )-06-( )Y		.2205 .2185	.2171 .2152		7100		
BG2084( )-08-( )		.252 .250	.2489 .2472	6	9300	3000	.020
BG2084( )-08-( )X		.268 .266	.2640 .2622		10500		
BG2084( )-08-( )Y		.2835 .2815	.2796 .2777		11800		
BG2084( )-10-( )		.315 .313	.3110 .3092	8	14600	5000	
BG2084( )-10-( )X		.3305 .3285	.3265 .3247		16000		
BG2084( )-10-( )Y		.346 .344	.3421 .3402		17600		
BG2084( )-12-( )	-04	.377 .375	.3735 .3717	10	21000	7000	
BG2084( )-12-( )X		.393 .391	.3891 .3872		22700		
BG2084( )-12-( )Y		.409 .407	.4047 .4027		24600		
BG2084( )-14-( )		.440 .438	.4360 .4340		28500	9500	
BG2084( )-16-( )		.502 .500	.4985 .4965	12	37000	12500	



EXAMPLE: BG2084B-08-09XA

SUFFIX "A" INDEX FOR AUTOMATIC INSTALLATION

EXAMPLE OF PART NUMBER:

BG2084 ( ) - 08 - 09 ( )

- DESIGNATION: " " = NOMINAL DIA, "X" = 1/64" OVERSIZE, "Y" = 1/32" OVERSIZE
- DESIGNATES MAX GRIP IN 1/16" INCREMENTS
- DESIGNATES BASIC DIMENSIONS
- DESIGNATES SPECIAL CODE
- DESIGNATES BASIC PART NUMBER

U.S. PATENT NO.: 5,498,110; 5,634,751 AND FOREIGN PATENTS PENDING

MONOGRAM AEROSPACE FASTENERS
a TriMas company
3423 SOUTH GARFIELD AVENUE
COMMERCE, CALIFORNIA 90040
(323) 722-4760 FAX (323) 727-1029

TITLE:

OSI BOLT ™
100° FLUSH (MS20426) SHEAR HEAD
CLOSE TOLERANCE SHANK
TITANIUM, 95 KSI SHEAR STRENGTH
1/16" GRIP VARIATION

DRAWING NO: BG2084( )-( )( )-( )( )

DRAWN BY: G.MARTINEZ | DRAWN DATE: 06-29-13

APPROVED BY: | CHECKED DATE:

MONOGRAM CAGE CODE: 98524

DCN NO: 15-0258 | REV: AD

DCN DATE: 06/25/15

PART NUMBER	COMPONENTS							
	BODY		SLEEVE		NUT		COREBOLT	
	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH
BG2084A-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	ALUMINUM PIGMENTED COAT PER BMS-10-85 TYPE I, CL A	304 SS PER AMS5639 FULLY ANNEALED	PASSIVATE PER AMS-QQ-P-35	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084B-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	PHOSPHATE FLUORIDE PER BAC5861	304 SS PER AMS5639 FULLY ANNEALED	PASSIVATE PER AMS-QQ-P-35	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084C-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	PHOSPHATE FLUORIDE PER BAC5861	304 SS PER AMS5639 FULLY ANNEALED	ALUMINUM PIGMENTED COAT PER BMS-10-85 TYPE I, CL A,OR HI-KOTE PER NAS4006	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084D-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	ALUMINUM PIGMENTED COAT PER BMS-10-85 TYPE I, CL A	304 SS PER AMS5639 FULLY ANNEALED	ALUMINUM PIGMENTED COAT PER BMS-10-85 TYPE I, CL A,OR HI-KOTE PER NAS4006	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084E-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	ALUMINUM PIGMENTED COAT PER BMS-10-85 TYPE I, CL A	304 SS PER AMS5639 FULLY ANNEALED	IVD ALUM. COAT PER MIL-DTL-83488 CL 3, TYPE II	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084EE-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	ALUMINUM COAT HI-KOTE PER NAS4006	304 SS PER AMS5639 FULLY ANNEALED	IVD ALUM. COAT PER MIL-DTL-83488 CL 3, TYPE II	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER PS741	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084F-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	ANODIZE PER ISO 8080-1985	304 SS PER AMS5639 FULLY ANNEALED	PASSIVATE PER AMS-QQ-P-35	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084G-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	ALUMINUM COAT HI-KOTE PER NAS4006	304 SS PER AMS5639 FULLY ANNEALED	ALUMINUM COAT HI-KOTE PER NAS4006	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	PHOSPHATE FLUORIDE PER BAC5861	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084H-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE	304 SS PER AMS5639 FULLY ANNEALED	ALUMINUM PIGMENTED COAT PER BMS-10-85 TYPE I, CL A	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	NONE 9	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084HH-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE	304 SS PER AMS5639 FULLY ANNEALED	ALUMINUM COAT HI-KOTE PER NAS4006	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	ALUMINUM COAT HI-KOTE PER NAS4006	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE
BG2084J-( )-( )( )	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED AS REQ'D FOR PERFORMANCE	IVD ALUM. COAT PER MIL-DTL-83488 CL 3, TYPE II	304 SS PER AMS5639 FULLY ANNEALED	IVD ALUM. COAT PER MIL-DTL-83488 CL 3, TYPE II	6Al-4V Ti PER AMS4967 OR AMS4928 HEAT TREATED TO 160 KSI MIN, TENSILE	NONE 9	6Al-6V-2Sn Ti PER AMS4971 HEAT TREATED AS REQ'D FOR PERFORMANCE	NONE

INSTALLATION SPECIFICATION: BG 2003
PRODUCREMENT SPECIFICATION: BG 2000

GENERAL NOTES:

1. LUBRICANT: SOLID FILM LUBRICANT PER AS5272, TYPE I AND/OR PARAFFIN WAX OR CETYL ALCOHOL AS REQUIRED FOR PERFORMANCE. AS5272 THICKNESS AND PAINT ADHESION REQUIREMENTS DO NOT APPLY. SOLID FILM LUBRICANT NOT ALLOWED ON COREBOLT HEAD AND BODY HEAD SURFACES. SLIGHT OVERSPRAY INTO RECESS IS ACCEPTABLE. FULL COVERAGE OF SOLID FILM LUBRICANT ON EXTERIOR OF BODY SHANK IS REQUIRED FOR NON-ALUM COATED BODY.
2. LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT.
3. SEE BG2003 FOR INSTALLATION AND REMOVAL INFORMATION.
4. GRIP LENGTHS NOT LISTED MAY BE AVAILABLE UPON REQUEST.
5. INSTALLATION HOLE SHALL BE RADIUSED TO CLEAR HEAD TO SHANK RADIUS.
6. ALL DIMENSIONS TO BE MET AFTER FINISH AND BEFORE LUBRICATION.
7. CONICAL SURFACE OF HEAD SHALL BE CONCENTRIC TO SHANK DIAMETER WITHIN .005 T.I.R.
8. INSERT FABRICATED FROM ACETAL PLASTIC PER ASTM-D-4181.
9. ASSEMBLIES HAVING THE NUT COMPONENT MANUFACTURED BEFORE 02-23-12 SHALL NOT BE REJECTED FOR ALUM COAT FINISH AND CAN BE USED UNTIL STOCK DEPLETION.

4 2ND DASH NO.	GRIP RANGE (INCHES)		GRIP RANGE (mm)	
	MIN GRIP	MAX GRIP	MIN GRIP	MAX GRIP
-02	.093	.125	2,36	3,18
-02.5	.092	.156	2,34	3,96
-03	.126	.187	3,20	4,75
-04	.188	.250	4,78	6,35
-05	.251	.312	6,38	7,92
-06	.313	.375	7,95	9,53
-07	.376	.437	9,55	11,10
-08	.438	.500	11,13	12,70
-09	.501	.562	12,73	14,27
-10	.563	.625	14,30	15,88
-11	.626	.687	15,90	17,45
-12	.688	.750	17,48	19,05
-13	.751	.812	19,08	20,62
-14	.813	.875	20,65	22,23
-15	.876	.937	22,25	23,80
-16	.938	1.000	23,83	25,40
-17	1.001	1.062	25,43	26,97
-18	1.063	1.125	27,00	28,58
-19	1.126	1.187	28,60	30,15
-20	1.188	1.250	30,18	31,75
-21	1.251	1.312	31,78	33,32
-22	1.313	1.375	33,35	34,93
-23	1.376	1.437	34,5	36,50
-24	1.438	1.500	36,53	38,10
-25	1.501	1.562	38,13	39,67
-26	1.563	1.625	39,70	41,28
-27	1.626	1.687	41,30	42,85
-28	1.688	1.750	42,88	44,45
-29	1.751	1.812	44,48	46,02
-30	1.813	1.875	46,05	47,63
-31	1.876	1.937	47,65	49,20
-32	1.938	2.000	49,23	50,80

U.S. PATENT NO.: 5,498,110; 5,634,751 AND FOREIGN PATENTS PENDING

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OSI BOLT ™
100° FLUSH (MS20426) SHEAR HEAD
CLOSE TOLERANCE SHANK
TITANIUM, 95 KSI SHEAR STRENGTH
1/16" GRIP VARIATION

DRAWING NO: BG2084( )-( )-( )( )

DRAWN BY: G.MARTINEZ | DRAWN DATE: 06-29-13
APPROVED BY: | CHECKED DATE:

MONOGRAM CAGE CODE: 98524
DCN NO: 15-0258
DCN DATE: 06/25/15
REV: AD