V3.4

DWG NO.	SH	REV
F83768	1	J

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
- -	J	REDRAWN WITH CHANGES INC CR 38305 RRP	04-20-2021	BMG

NOTES: UNLESS OTHERWISE SPECIFIED

1. FRANGIBOLT WASHERS TO BE USED FOR THERMAL ISOLATION OF FRANGIBOLT ACTUATORS. RECOMMENDED WASHER USE IN A TYPICAL FRANGIBOLT INSTALLATION SHOWN BELOW.

2. MATERIAL (-T__ SUFFIX):

   Ti 6Al-4V IAW AMS-T-9046 AB-1 (SHEET, STRIP, PLATE), AMS-4911 (SHEET, STRIP, PLATE), AMS-4965 (BAR), OR AMS-4928 (BAR AND DIE FORGING).

   TITANIUM ANODIZED IN ACCORDANCE WITH TABLE I COLOR COLUMN IAW DANCO DPP-5358, TIODIZE TYPE III, OR EQUIVALENT.

3. MATERIAL (-G__ SUFFIX):

   G10/FR4 IAW MIL-I-24768/27 (SHEET STOCK).

   RECOMMENDED FOR USE ON No. 4 SIZE FRANGIBOLT ONLY WHERE ACTUATION IS REQUIRED FROM LOW POWER / LOW TEMPERATURE CONDITION.

   USE OF G10 WASHER HAS BEEN SHOWN TO MINIMIZE HEAT LOSS AND IMPROVE FUNCTION TIME BY UP TO 30%.

4. TOLERANCE SHALL BE:
   .XXX ± .010

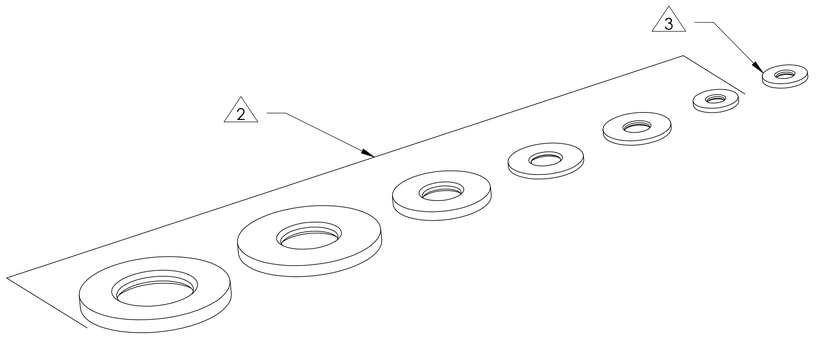
5. APPLICABLE STANDARDS/SPECIFICATIONS:
   A. ASME Y14.100-2004
   B. ASME Y14.5M-1994

6. WORKMANSHIP REQUIREMENTS:
   A. FINISHED PART SHALL BE CLEAN AND FREE FROM RESIDUES, OILS, GREASE AND OTHER CONTAMINANTS / FOREIGN ELEMENTS.

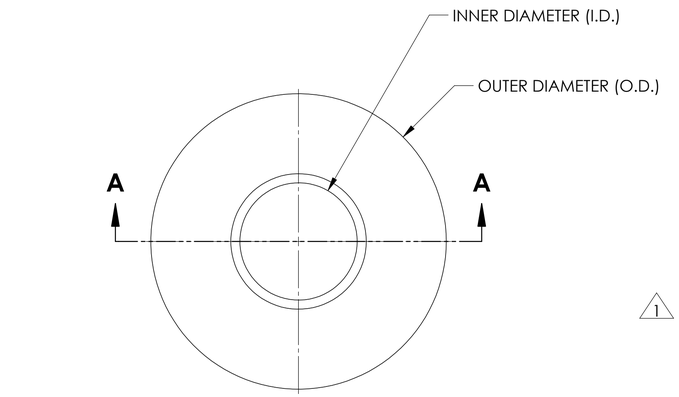
CLASSIFICATION OF CHARACTERISTICS (DOD-STD-2101)
CRITICAL - 0
MAJOR - 0
MINOR - ALL OTHER CHARACTERISTICS

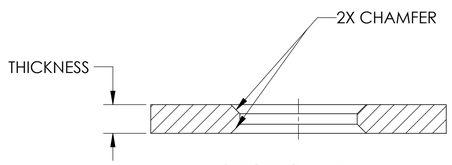
TABLE I

PART NUMBER	SIZE	MAX BOLT DIA.	O.D.	O.D. TOL.	I.D.	I.D. TOL.	CHAMFER	CHAMFER TOL.	THICKNESS	THICKNESS TOL.	COLOR
F83768-G1	#4	.112"	∅.300"	±.005"	∅.116"	+.003" / -.000"	.005"	+.005" / -.000"	.032"	±.003"	NATURAL
F83768-T1	#4	.112"	∅.250"	±.005"	∅.116"	+.003" / -.000"	.005"	+.005" / -.000"	.032"	±.003"	PURPLE
F83768-T2	#8	.164"	∅.450"	±.005"	∅.168"	+.005" / -.000"	.010"	+.005" / -.000"	.032"	±.005"	TEAL GREEN
F83768-T3	#10	.190"	∅.500"	±.005"	∅.195"	+.005" / -.000"	.015"	+.005" / -.000"	.050"	±.005"	DARK BLUE
F83768-T4	1/4"	.250"	∅.650"	±.005"	∅.258"	+.005" / -.000"	.020"	+.005" / -.000"	.063"	±.005"	GREEN / GOLD
F83768-T5	3/8"	.375"	∅.950"	±.005"	∅.381"	+.005" / -.000"	.025"	+.005" / -.005"	.080"	±.005"	MAGENTA
F83768-T6	1/2"	.500"	∅1.000"	±.005"	∅.510"	+.005" / -.000"	.030"	+.005" / -.005"	.094"	±.005"	DARK GREY

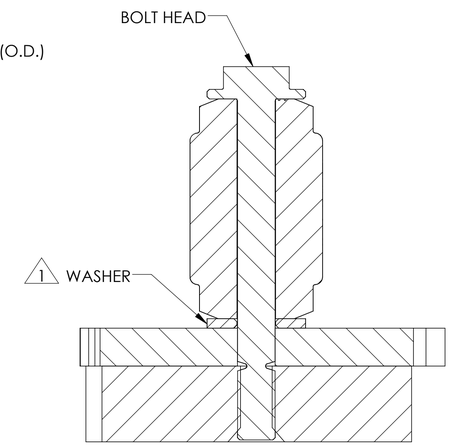


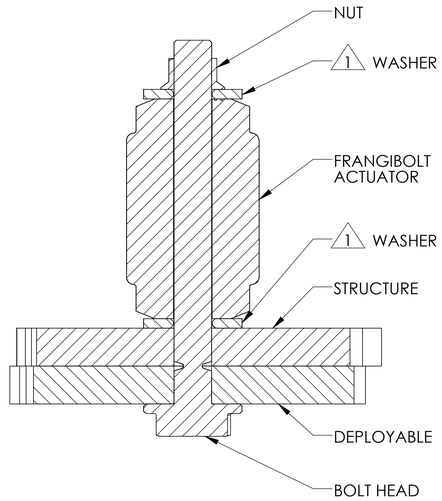
INFORMATION COPY
WILL NOT BE UPDATED





SECTION A-A





TYPICAL FRANGIBOLT INSTALLATIONS
(FOR REFERENCE ONLY)

PART NO. SEE TABLE I

THIS DOCUMENT IS THE PROPERTY OF ENSIGN-BICKFORD AEROSPACE & DEFENSE COMPANY AND SHALL NOT BE DISCLOSED, REPRODUCED IN WHOLE OR IN PART, OR USED FOR ANYONE OTHER THAN ENSIGN - BICKFORD AEROSPACE & DEFENSE COMPANY, WITHOUT ITS PRIOR WRITTEN CONSENT. THIS RESTRICTION DOES NOT APPLY TO OR PURPORT TO LIMIT THE RIGHT TO USE INFORMATION OBTAINED LAWFULLY FROM SOURCES OTHER THAN ENSIGN - BICKFORD AEROSPACE & DEFENSE COMPANY.

INFORMATION SUBJECT TO EXPORT CONTROL LAWS

THIS DOCUMENT CONTAINS TECHNICAL DATA WHOSE EXPORT IS RESTRICTED BY THE ARMS EXPORT REGULATIONS, AS MANDATED BY THE EXPORT ADMINISTRATION ACT OF 1979, AS AMENDED, (50 U.S.C. APP. 2401, et seq.). GOVERNMENT AUTHORIZATION IS REQUIRED PRIOR TO EXPORT, REEXPORT, DISCLOSE OR TRANSFER TO A FOREIGN PERSON(s). DIVERSION CONTRARY TO THE U.S. LAWS IS PROHIBITED. VIOLATIONS OF THE EXPORT ADMINISTRATION REGULATIONS (EAR) ARE SUBJECT TO SEVERE CIVIL AND / OR CRIMINAL PENALTIES.

THIRD ANGLE PROJECTION

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
ANGLES ± 1°
1 PLACE DECIMAL ± .1
2 PLACE DECIMAL ± .01
~~3 PLACE DECIMAL ± .005~~
DO NOT SCALE DRAWING
MATERIAL: 2 3
FINISH:

CONTRACT NO.	
CONTRACTOR	
DRAWN BY NPASTOR	DATE 02-26-2014
CHECKER BMG	DATE 04-20-2021
ENGINEER EML	APPROVED RAC
APPROVED EML	APPROVED
DESIGN ACTIVITY APPROVAL	

EBAD Ensign-Bickford Aerospace & Defense

FRANGIBOLT WASHER ICD

SIZE	CAGE CODE	DWG NO.	REV
D	96336	F83768	J
SCALE 2:1		SHEET 1 OF 1	