

NOTICE
OF
CHANGE

INCH POUND

MIL-STD-333B
NOTICE 3
5 February 1996

MILITARY STANDARD
FUZE, PROJECTILE AND ACCESSORY
CONTOURS FOR LARGE CALIBER ARMAMENTS

TO ALL HOLDERS OF MIL-STD-333B:

1. THE FOLLOWING PAGES OF MIL-STD-333B HAVE BEEN REVISED AND SUPERSEDED WITH THE PAGES LISTED:

<u>NEW</u> <u>PAGE</u>	<u>DATE</u>	<u>SUPERSEDED</u> <u>PAGE</u>	<u>DATE</u>
iii	1 MAY 1989	iii	PRINTED WITHOUT CHANGE
iv	5 FEBRUARY 1996	iv	1 MAY 1989
1	5 JUNE 1995	1	REPRINTED WITHOUT CHANGE
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8	5 FEBRUARY 1996	8	1 MAY 1989

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.
3. Holders of MIL-STD-333B will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publications. Each notice is to be retained by stocking points until the Military Standard is completely revised or canceled.
4. Vertical lines are used in this Notice to denote changes (additions, modifications, corrections, deletions) from the basic standard. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the basic standard.

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1. SCOPE

- 1.1 Scope. This standard establishes standard designs for projectile nose fuze threads, fuze contours, and projectile cavities for gun projectiles, 75mm and larger in caliber and mortar projectiles 60mm and larger, to insure physical interchangeability, and that for a given projectile family (artillery bursting oriented, artillery cargo oriented, etc.) no special aiming corrections are required when firing any fuze type (PD, MT, PROX, etc.) for which the projectile is intended.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

- 2.1.1 Specifications, standards, handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issue of these documents are those listed in the issue of the Department of Defense Index of Specification and Standard (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

STANDARDS

MILITARY

MIL-STD-444

Nomenclature and Definitions in the
Ammunition Area

(unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the naval Publications and Forms Center, (ATTN: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

- 2.2 Non-Government publications. The following document forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the

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solicitation. Unless otherwise specified, the issues of the documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ASME Y14.5M-82 - Dimensioning and Tolerancing

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, NY 10018-3308).

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

- 2.3 Order of Precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. DEFINITIONS

- 3.1 Definitions. The definitions of the various types and components of ammunition shall be those established by MIL-STD-444.

- 3.2 Abbreviations. The following abbreviations apply:

a.	APERS	-	Anti-Personnel
b.	CS	-	Chemical Fillet (Tear Gas)
c.	CP	-	Concrete Piercing
d.	DPICM	-	Dual Purpose Improved Conventional Munition
e.	ET	-	Electronic Time
f.	HE	-	High Explosive
g.	ICM	-	Improved Conventional Munition
h.	ILLUM	-	Illuminating
i.	MT	-	Mechanical Time
j.	MTSQ	-	Mechanical Time Superquick
k.	NSB	-	Near Surface Burst
l.	PD	-	Point Detonating
m.	PD/DLY	-	Point Detonating/Delay
n.	PROX	-	Proximity
o.	WP	-	White Phosphorus (Smoke)
p.	MO	-	Multi-Option.
q.	RP	-	Red Phosphorus (Smoke)

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4. GENERAL REQUIREMENTS

This section is not applicable to this standard.

5. DETAILED REQUIREMENTS

- 5.1 Design. Fuzes shall be designed to insure physical interchangeable and that for a given projectile family (artillery bursting oriented, artillery cargo oriented, etc.) no special aiming corrections are required when firing any fuze type (PD, MT, PROX, etc.) intended for use on the projectile.
- 5.2 Dimensions. Dimensions of contact surfaces, intrusion, projectile cavity, maximum length, thread size and wrench and setting slots (if required) of all projectile fuzes and accessory contours shall be in accordance with those in the figures contained herein. All other dimensions on the figures are for information only. Dimensions are in millimeters with the exception of thread designations which are in English units.
- 5.3 Figures and tables. ASME Y14.5M shall apply to figures and tables herein. Figures shall not be scaled.
- 5.4 Fuze selection guide. Table I offers guidance in the selection of fuze types for the various projectile configurations:

TABLE I. Fuze Selection Guide

FUZE	SHELL	STANDARD CONTOUR FIGURE			
		ARTILLERY (NOTE 1,3)	81 MM MORTAR	60MM MORTAR	120MM MORTAR
PD or PD/DLY	HE	1, 9	5	5	5
	WP (NOTE 2)	1, 2	5	5	5
TIME	ILLUM, CS	1, 2	8	5, 6, 7	5
	APERS	4	-	-	-
	HE	1, 9	5	5	5
	WP (NOTE 2)	1, 2	-	-	-
	PR	-	8	-	-
	ICM/DPICM	1, 3	-	-	-
PROX	HE	1, 9	5	5	5
	WP	-	-	-	5
MO	HE	1, 9	5	5	5

NOTES:

1. Contour figures are those designs required for all new developments of nose fuzes for mortar and artillery ammunitions.
2. The need for a booster depends on the caliber of the WP projectile.
3. 4.2-inch mortar ammunition currently uses artillery fuzes.

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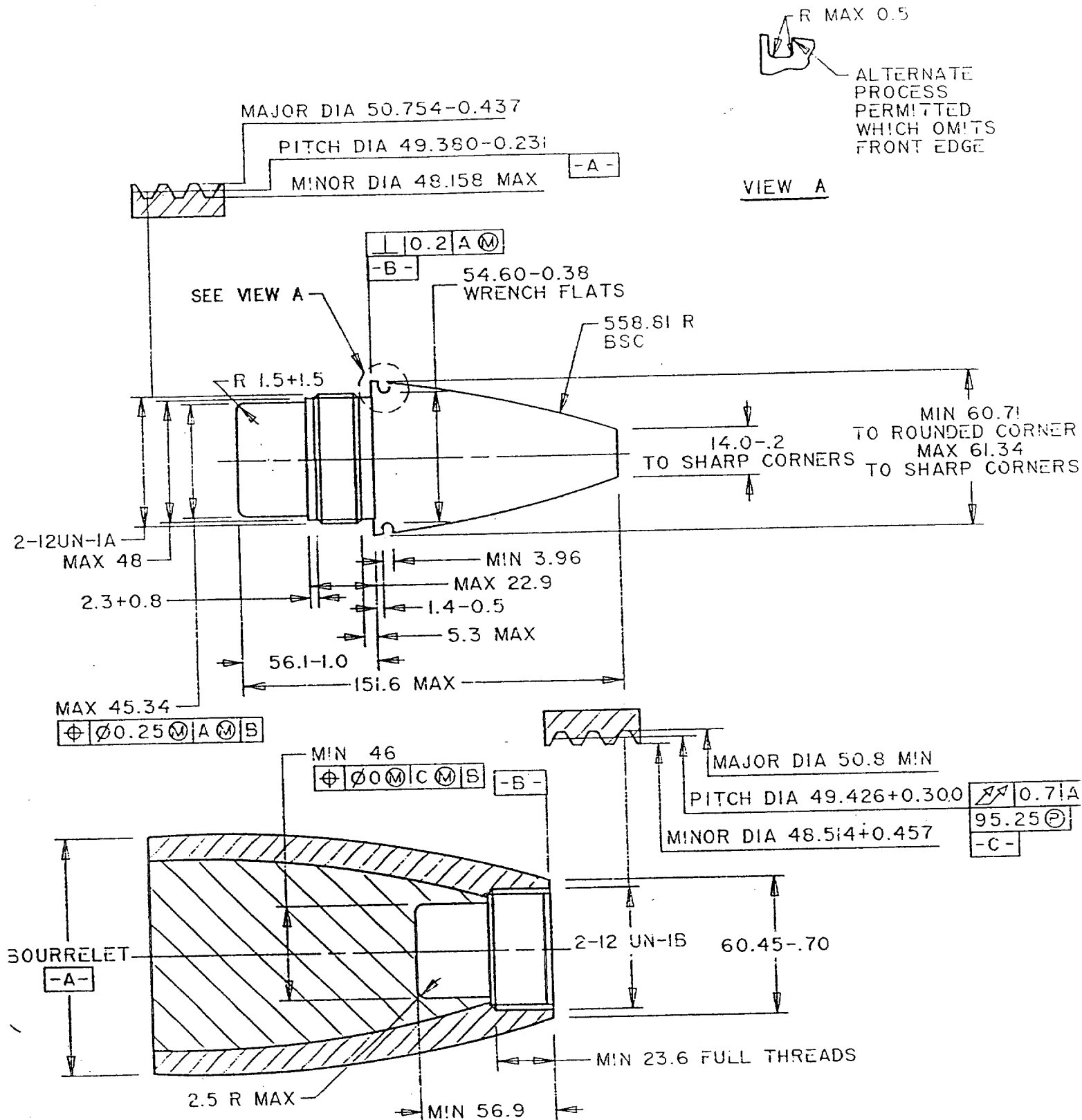
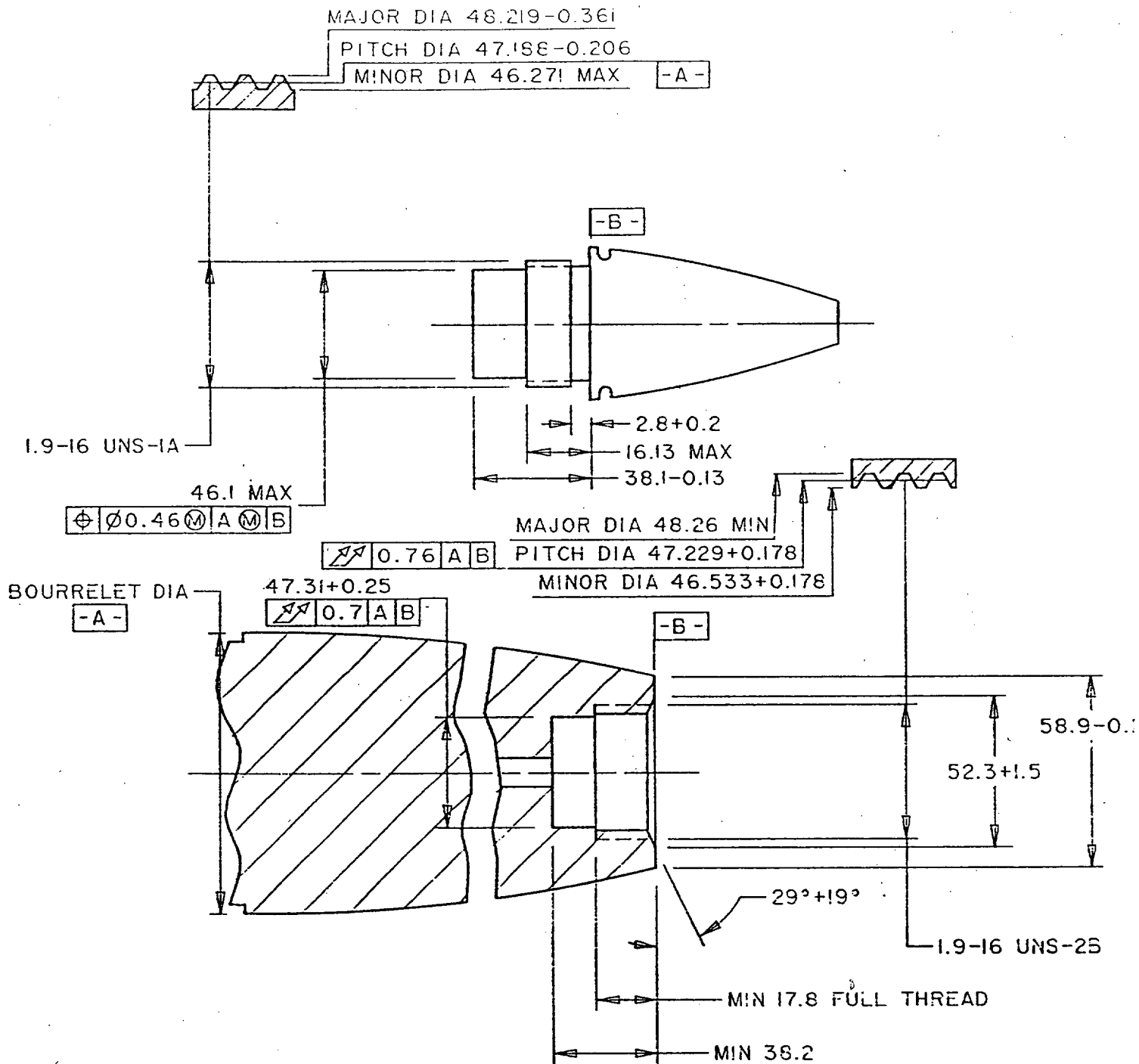


FIGURE 1

STANDARD CONTOUR FOR 2-INCH NOSE FUZES WITH BOOSTER AND MATCHING CAVITY FOR ARTILLERY AND MORTAR HE/WP PROJECTILES (SPIN AND FIN STABILIZED).

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NOTES:

- 1-FOR OTHER DIMENSIONS SEE FIGURE 1.
- 2-FUZE IS USED WITH MUZZLE ACTION FUZE SETTING ON ARTILLERY, TANK, AND RECOILLESS RIFLE PROJECTILES.

FIGURE 4

STANDARD CONTOUR FOR 1.9-INCH APERS NOSE FUZES AND MATCHING CAVITY FOR ARTILLERY, TANK, AND RECOILLESS RIFLE PROJECTILES. (SPIN STABILIZED)

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THE ONLY DIFFERENCE BETWEEN THE TWO FUZES ON THIS SHEET IS THE OGIVE CONTOUR.*

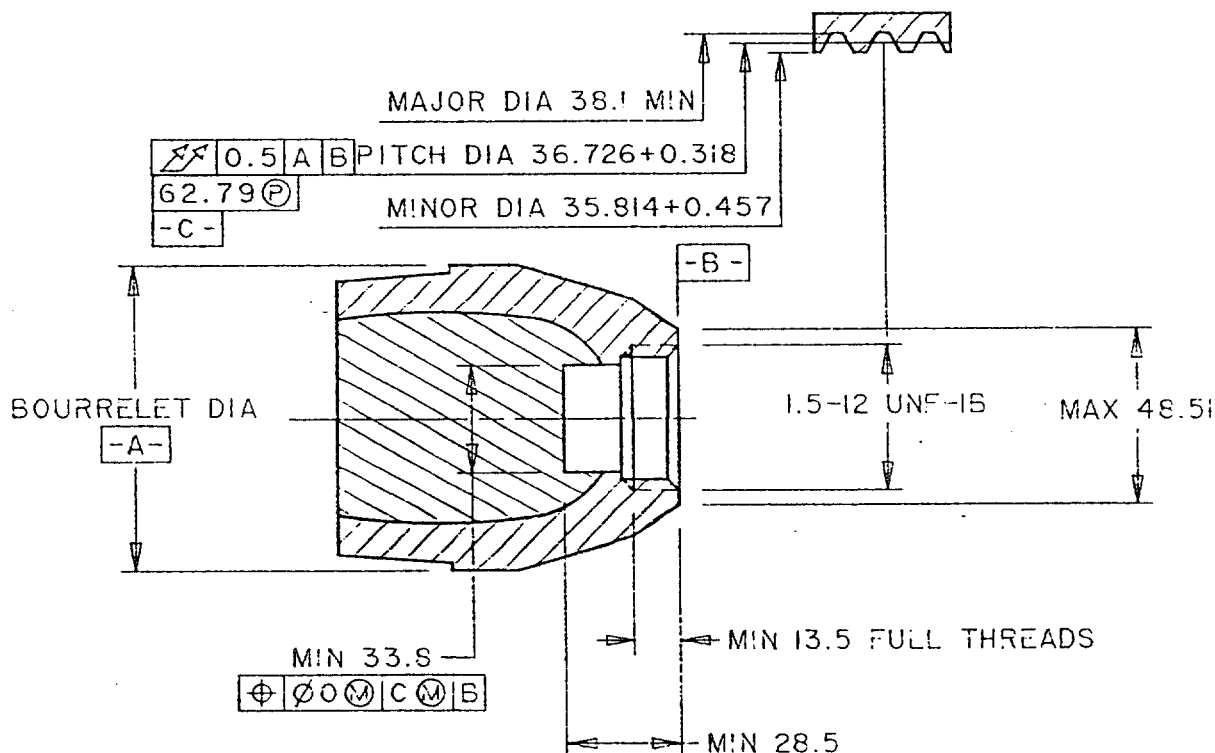
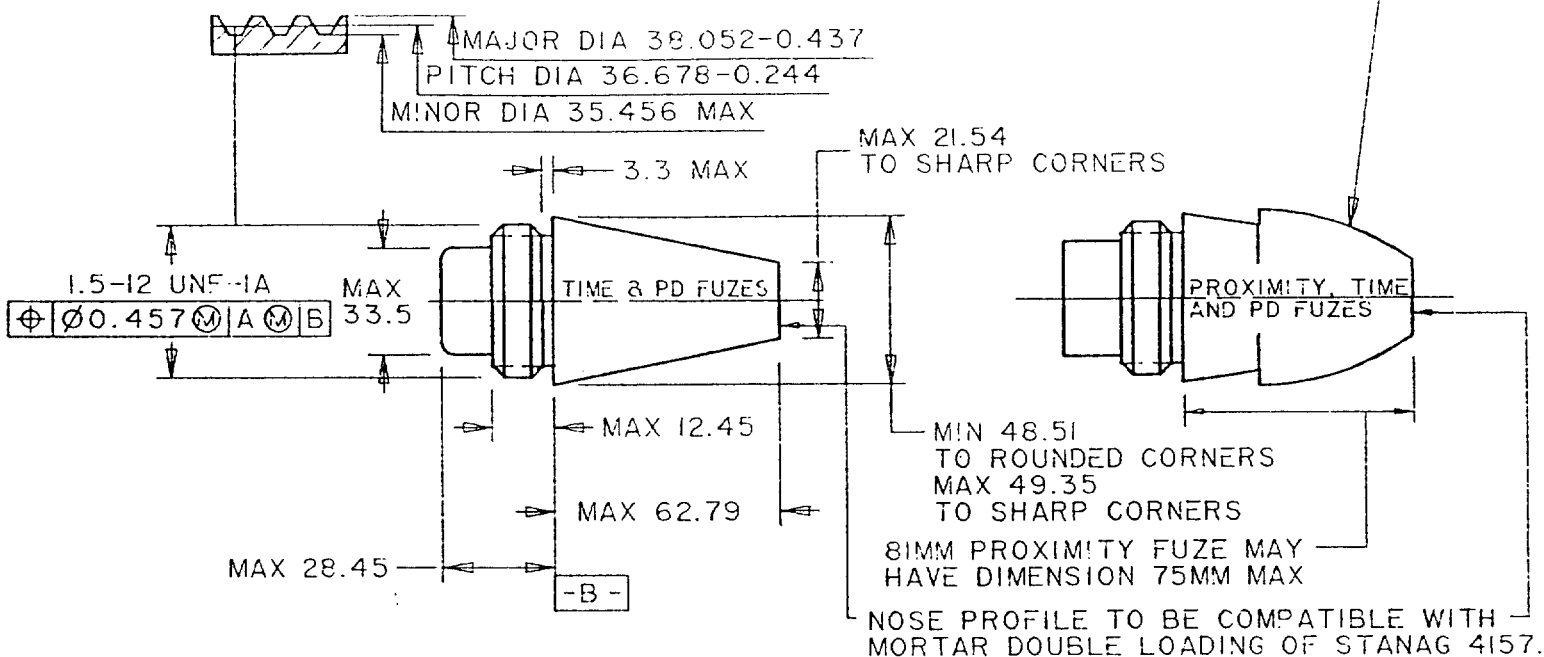


FIGURE 5

STANDARD CONTOUR FOR 1.5-INCH PROXIMITY, TIME, AND POINT DETONATING FUZES WITH BOOSTER AND MATCHING CAVITY FOR 60MM, 81MM AND 120MM MORTAR HE, WP AND ILLUMINATING PROJECTILES (FIN STABILIZED).

* THIS CONTOUR MUST BE USED IF THE FUZE IS A MEMBER OF A PROXIMITY FUZE FAMILY.