

INCH- POUND

MIL-S-24149/4C(SH)

27 March 1989

SUPERSEDING

MIL-S-24149/4B

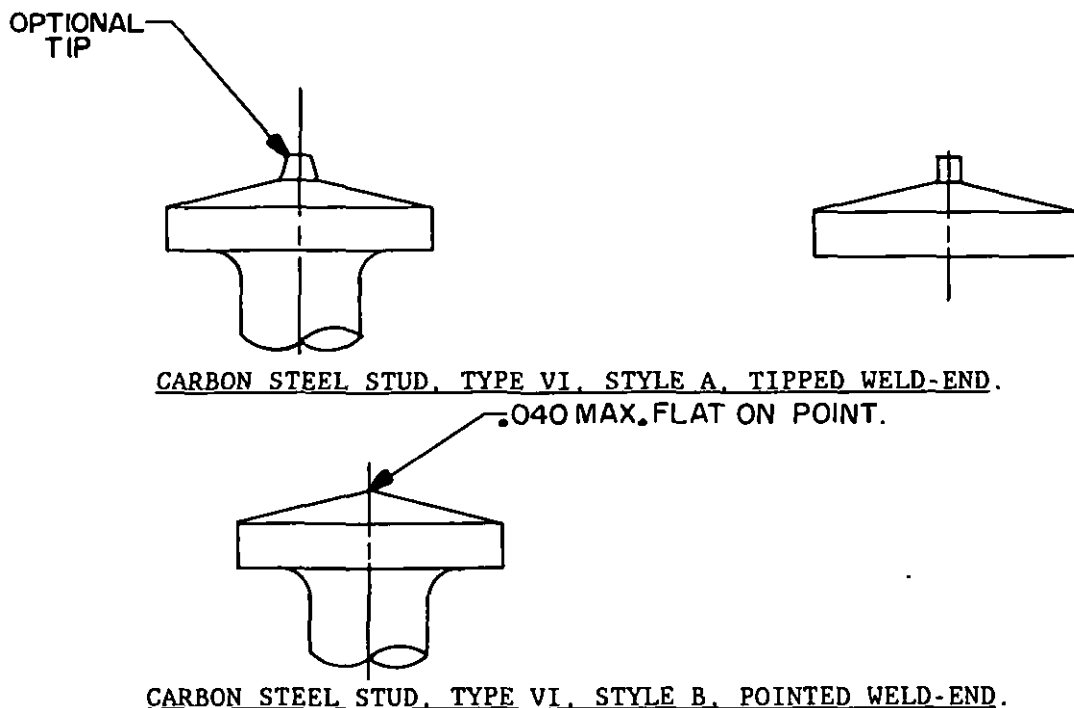
1 June 1981

MILITARY SPECIFICATION SHEET

STUDS, WELDING,
 TYPE VI, CLASS 1,2,3, CARBON STEEL, FOR STORED ENERGY
 (CAPACITOR DISCHARGE) ARC WELDING

This specification sheet is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation: MIL-S-24149(SH).



NOTE:

1. The choice of weld-end style shall be based on the type of stored energy welding equipment to be used.

SH 11912

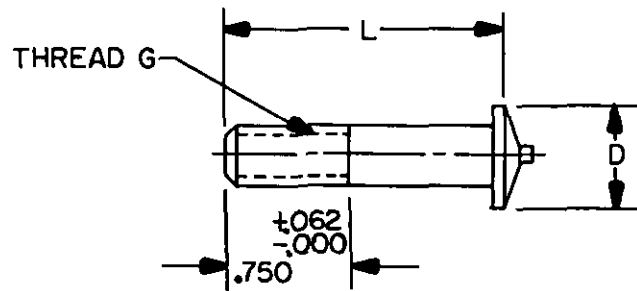
FIGURE 1. Optional weld-end styles.

AMSC N/A

FSC 5307

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-S-24149/4C(SH)



SH 11913

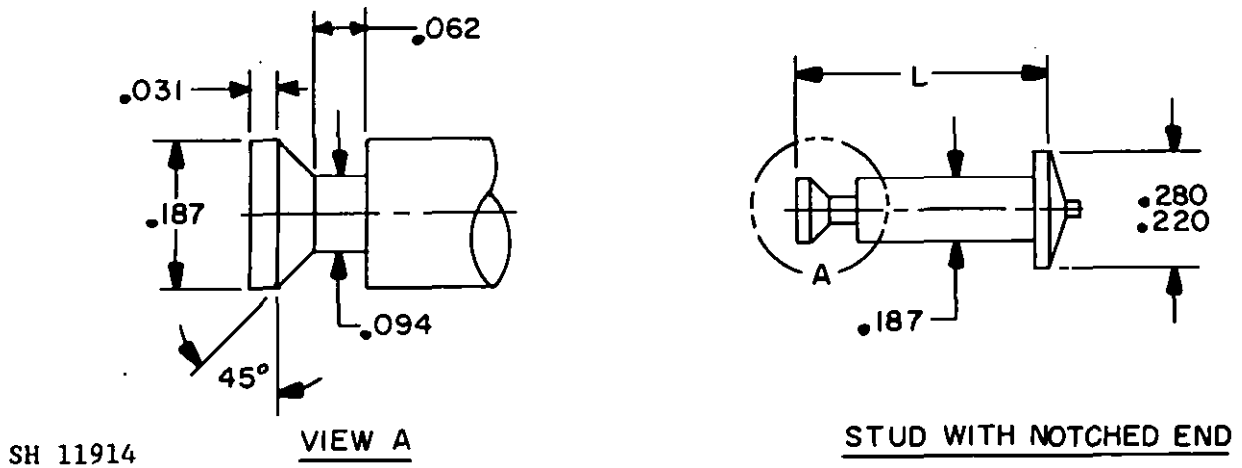
FIGURE 2. Type VI, class 1, stud with threaded section.TABLE I. Configuration part numbers.

G	D	L ± 0.031	M24149/4 dash no.
0.1900-32UNF-2A	0.280	1.250	-1
		1.375	-2
		1.500	-3
		1.625	-4
		1.750	-5
		1.875	-6
	0.220	2.000	-7
		2.250	-8
		2.500	-9
		2.750	-10
		3.000	-11
		3.250	-12
		3.500	-13
0.2500-20UNC-2A	0.340	1.250	-14
		1.375	-15
		1.500	-16
	0.280	1.625	-17
		1.750	-18
		1.875	-19
		2.000	-20
		2.250	-21
		2.500	-22
		2.750	-23
		3.000	-24
		3.250	-25
		3.500	-26

NOTE:

1. Dimensions are in inches. Unless otherwise specified, tolerance: decimals plus or minus 0.015.

MIL-S-24149/4C(SH)

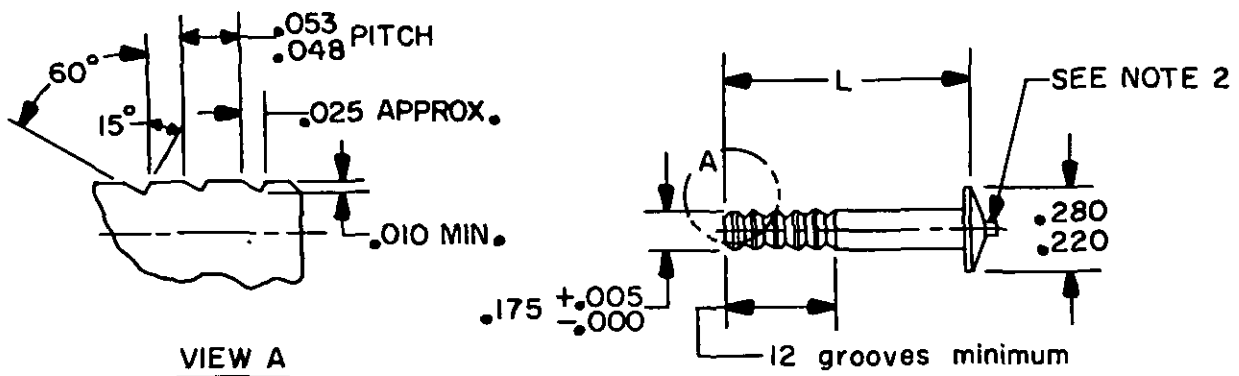
FIGURE 3. Type VI, class 2, stud with notched end.TABLE II. Length part numbers.

L +0.031	M24149/4 dash no.
0.625	-101
.750	-102
.875	-103
1.000	-104
1.125	-105
1.250	-106
1.375	-107
1.500	-108
1.625	-109
1.750	-110
1.875	-111
2.000	-112
2.250	-113
2.500	-114
2.750	-115
3.000	-116

NOTE:

1. Dimensions are in inches. Unless otherwise specified, tolerances: decimals plus or minus 0.015, angles plus or minus 2 degrees.

MIL-S-24149/4C(SH)



SH 11915

FIGURE 4. Type VI, class 3, stud with grooves (annular rings).TABLE III. Length part numbers.

L +0.031	M24149/4 dash no.
.625	-201
.750	-202
.875	-203
1.000	-204
1.125	-205
1.250	-206
1.375	-207
1.500	-208
1.625	-209
1.750	-210
1.875	-211
2.000	-212
2.250	-213
2.500	-214
2.750	-215
3.000	-216

NOTE:

1. Dimensions are in inches. Unless otherwise specified, tolerances: decimals plus or minus 0.015, angles plus or minus 1 degree.

MIL-S-24149/4C(SH)

REQUIREMENTS:

1. Material - carbon steel.
2. Tensile strength - 50,000 lb/in², minimum.
3. Chemical composition - Studs shall be of the chemical composition indicated in table IV.

TABLE IV. Chemical composition. 1/

Carbon	Manganese	Phosphorus	Sulfur	Iron
0.23	0.90	0.040	0.050	Remainder

- 1/ The chemical compositions listed are standard AISI heat analysis and AISI product tolerances shall apply. Unless otherwise specified, values are maximum percentages (AISI alloys 1008-1022 are acceptable).
4. Protective coating - When zinc coating is specified, it shall not be within 0.062 inch from the weld-end.
 5. Part number - The part number consists of the prefix letter "M" and the specification sheet number plus the applicable dash number.

Add "Z" as suffix to "Dash" number for zinc coating.
Add "C" as suffix to "Dash" number for flash copper plating.

Examples:

- M24149/4-7Z - Type VI, class 1 welding stud, 0.1900-32 UNF-2A thread 2.000 inch length, tipped weld-end, zinc coated.
M24149/4-112Z - Type VI, class 2 welding stud, 0.187 inch diameter, 2.000 inch length, zinc coated.

NOTE:

1. Changes from previous issue - Revision letters are not used to denote changes due to the extensiveness of the changes.

Preparing activity:
Navy - SH
(Project 5307-N027)