REV.

AS85643/2

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CUSTODIAN: EG-1/EG-1B

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

BIT, SCREWDRIVER, PHILLIPS, RIBBED, CRUCIFORM, LONG SHANK, EXTERNAL HEXAGON SHANK, POWER DRIVEN AS85643/2

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THE COMPLETE REQUIREMENTS FOR ACQUIRING THE BITS DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF MIL-B-85643.

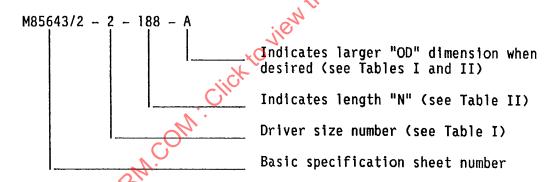
1. REQUIREMENTS:

- 1.1 MATERIAL: UNS T41901 (AISI S-1) OR UNS T41902 (AISI S-2) TOOL STEEL IN ACCORDANCE WITH QQ-T-570, TYPE S1 OR S2.
- 1.2 DIMENSIONS AND CONFIGURATION:

BIT AND RETAINING GROOVE: IN ACCORDANCE WITH FIGURE 1 AND TABLE I. LENGTH IN ACCORDANCE WITH TABLE II.

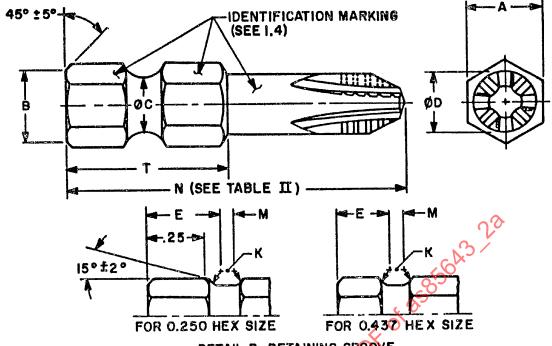
DRIVER POINT: IN ACCORDANCE WITH FIGURE 1, FIGURE 2 AND TABLE III.

- 1.2.1 CRUCIFORM DRIVER BIT GAGE: IN ACCORDANCE WITH FIGURE 3 AND TABLE IV.
- 1.3 HARDNESS: ROCKWELL 58 TO 62 HRC.
- 1.4 IDENTIFICATION: STAMP MILITARY PART NUMBER (SEE 1.8) AND MANUFACTURER'S NAME, TRADEMARK OR SYMBOLS.
- 1.5 TEST RECESS: THE TEST RECESS CONFIGURATION AND DIMENSIONS SHALL CONFORM TO FIGURE 4 AND TABLE V.
- 1.6 MINIMUM ULTIMATE TORQUE LOADS: IN ACCORDANCE WITH TABLE I AND MIL-B-85643.
- 1.7 TORQUE FATIGUE LOADS: IN ACCORDANCE WITH TABLE AND MIL-B-85643.
- 1.8 EXAMPLE OF MILITARY PART NUMBER.



1.9 ACR AND PHILLIPS ARE REGISTERED TRADEMARKS OF PHILLIPS SCREW COMPANY. PATENT 4,187,892 EXPIRES 12 FEBRUARY 1997. THE GOVERNMENT DOES NOT HAVE A ROYALTY-FREE LICENSE.





DETAIL B-RETAINING GROOVE

FIGURE 1. BIT.

TABLE I. BIT SIZES AND DIMENSIONS.

DRIVER SIZE NUMBER	A HEX SIZE +.000 004	OB REF	0C +.010	ØD SHANK DIA	E + 020	K RAD	M +.020	Т	MIN ULT TORQUE (LBF-IN.)	FATIGUE TORQUE (LBF-IN.)
02				.185 180				1.375 .625		
02A	.250	.203	.188	.247 .242	.375	.094	.062		90	45
03	.437	.391	.344	.434 .429	.250	.109	.047	1.375 1.000	325	160

Dimensions are in inches.



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TABLE II. OVERALL LENGTH AND DASH NUMBER.

Driver Size Number	Recess Size	Screw Dia Size Range for Recess Size Ref.	A Hex Size Ref.	OD Shank Dia Ref.	Dash N	N+ 2.75 umber Ind Bit Lengt	3.50 dicating	6.00 Driver	Shank Dia
02				.185	2188	2275	2350	2600	Std
02A	2	#6, #8, #10	.250	.247	2188A	2275A	2350A	2600A	Large
03	3	1/4	.437	.434	3188	3275	3350	3600	Std

All dimensions in inches.

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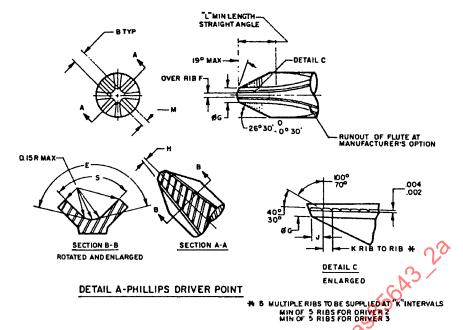


FIGURE 2. DRIVER POINT.

TABLE III. PHILLIPS DRIVER POINT DIMENSIONS FOR RIBBED CRUCIFORM CONFIGURATION.

	Driver Size	2 (1)	3
	B <u>+</u> .0010	0606	.0983
	E +0°30'	.023025	146°0'
	F Over Rib	.023025	.029031
	6 ±.001	•090	.150
	H 0	5°45'	5°45'
	J Max	.032	. 045
SALIN	К	.015022	.015022
	L Min	.188	.281
	M <u>+</u> .001	.0434	.0826
	S +0°30' 0	92°0'	92°0'

All dimensions in inches.

	AEROSPACE STANDARD	100504040	REV.
INTERNATIONAL.	BIT, SCREWDRIVER, PHILLIPS, RIBBED, CRUCIFORM, LONG SHANK, EXTERNAL HEXAGON SHANK, POWER DRIVEN	AS85643/2 SHEET 5 OF 7	A