

RATIONALE

AS22520/34 PERMITS THE CANCELLATION AND SUPERSESSION OF MIL-C-22520/34 WITH THIS DOCUMENT. IT INCLUDES ENGINEERING POSITION LETTERS, MILITARY SPECIFICATION AMENDMENTS, AND MINOR TECHNICAL CHANGES REQUIRED TO REFLECT THE APPROVED QUALIFIED TOOLS. GOVERNMENT DOCUMENTATION REFERENCES CHANGES ARE REMOVED AND INDEX ADDED AS TABLE 1.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS22520.

AS22520/34

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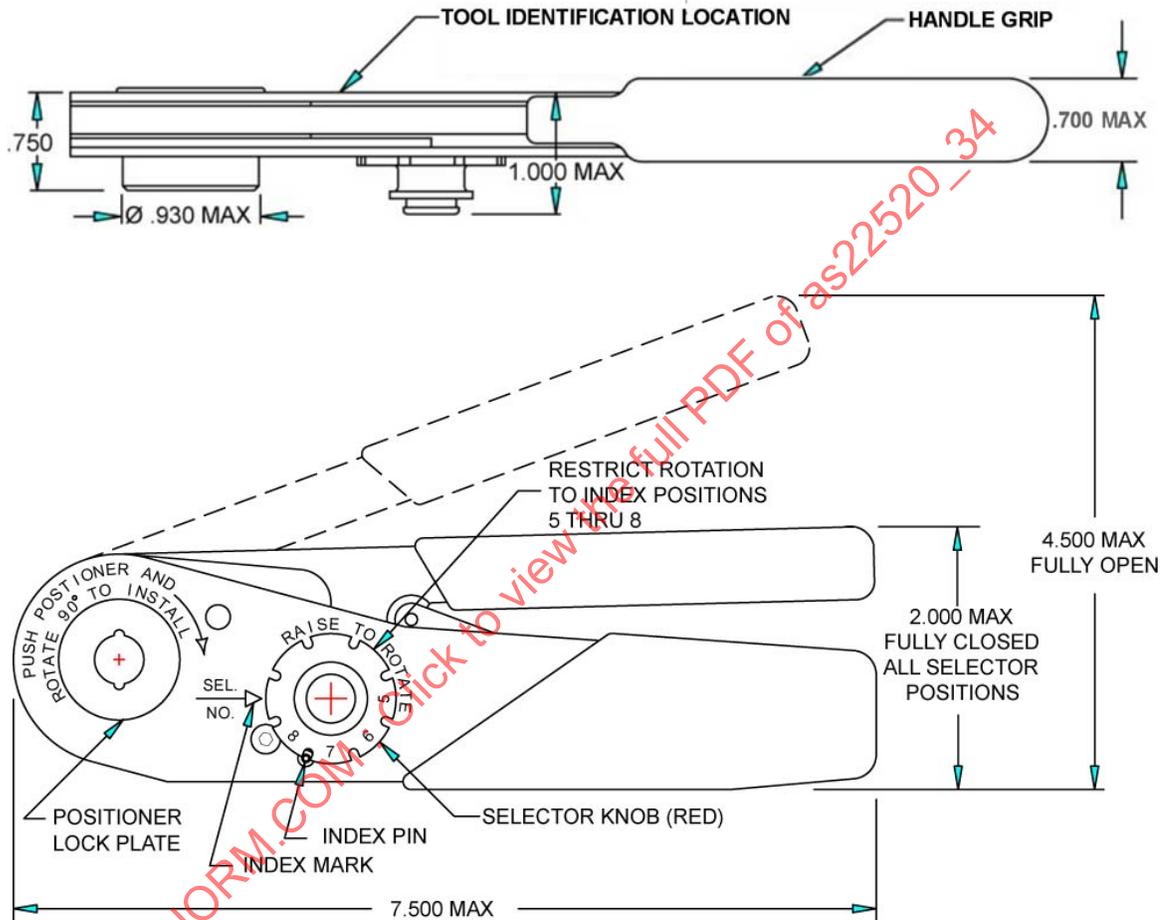
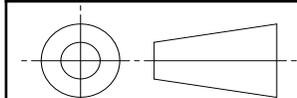


FIGURE 1 - M22520/34-01 TOOL

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THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE8-C2

PROCUREMENT SPECIFICATION: AS22520

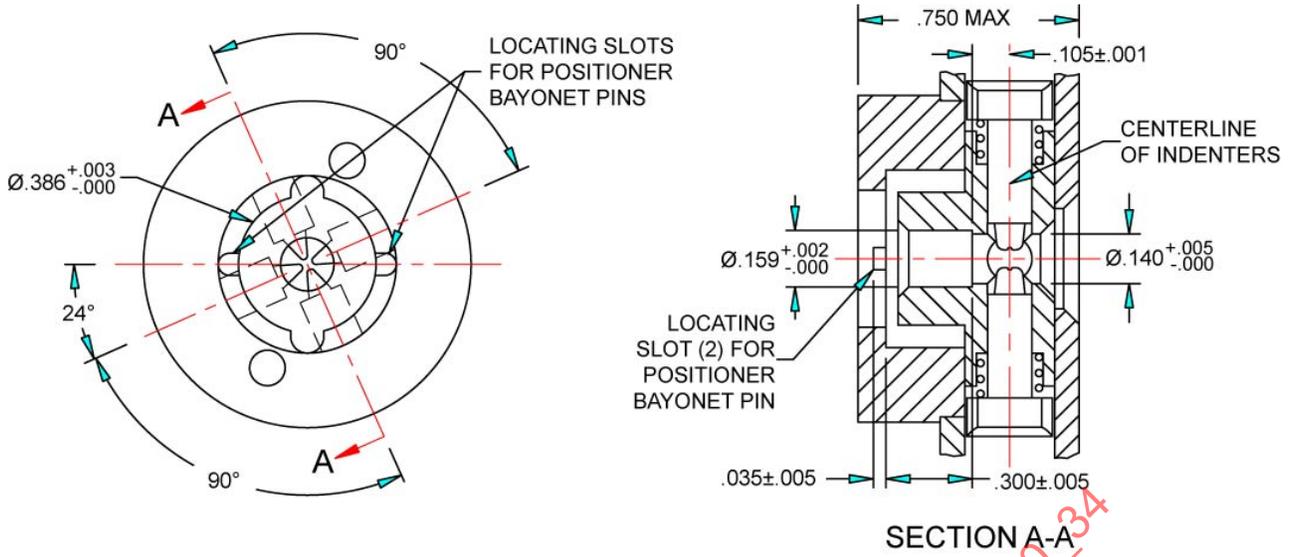


AEROSPACE STANDARD

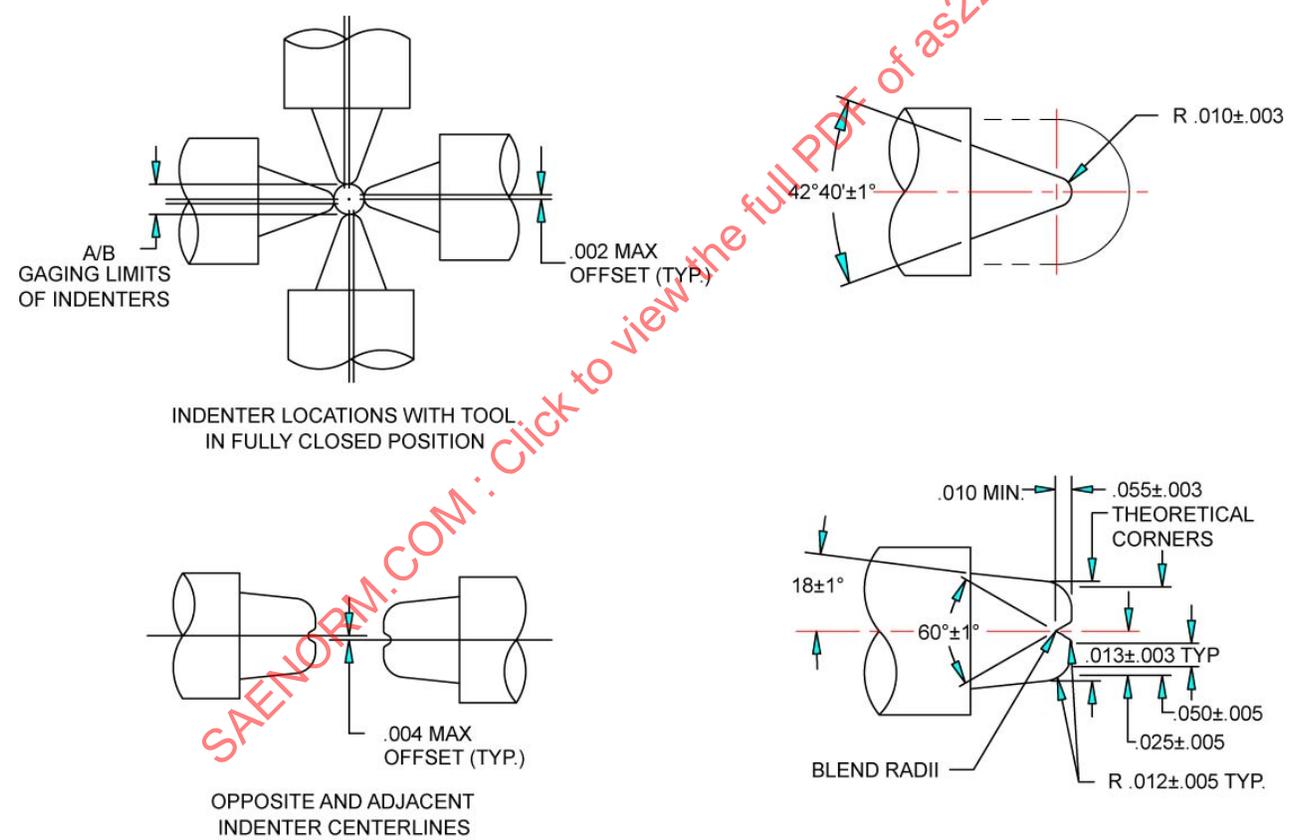
CRIMPING TOOLS, TYPE 1, TERMINAL, HAND, WIRE TERMINATION, FOR CRIMP TYPE REMOVABLE CONTACTS FOR MIL-DTL-28840 CONNECTORS

AS22520/34
SHEET 1 OF 7

ISSUED 2015-06



M22520/34-01 POSITIONER LOCK PLATE (RETAINER RING) DETAILS



M22520/34-01 INDENTER DETAILS

FIGURE 1 - M22520/34-01 TOOL (CONTINUED)

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TABLE 1 - BASIC TOOL MARKINGS

BASIC TOOL PART NO.	BODY COLOR	HANDLE GRIP COLOR	FOR INSPECTION GAGING USE
M22520/34-01	BLACK 1/	BLACK	M22520/35 AT SELECTOR 6

1/ COLOR OPTIONAL, EXCEPT "BLUE" IS NOT PERMITTED.

TABLE 2 - INDENTER GAGE LIMITS

M22520/35 GAGING LIMITS OF INDENTERS		
SELECTOR NUMBER	INSPECTION GAGE DIAMETERS (INCHES)	
	Ø GO POSITION A ±.0001	Ø NO-GO POSITION B ±.0001
5	.0260	.0310
6	.0300	.0350
7	.0340	.0390
8	.0390	.0440

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS22520.

1. CONFIGURATION:

TOOL AND POSITIONER SHALL BE IN ACCORDANCE WITH FIGURES 1 AND 2. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND TOLERANCES ARE DECIMALS ±.010 AND ANGLES ±1/2°. OUTLINE CONFIGURATION IS OPTIONAL WITHIN MAXIMUM DIMENSIONS SHOWN. BREAK ALL SHARP EDGES TO .005 RADIUS MAXIMUM. SURFACE TEXTURE SHALL BE 63 MICRINCHES RMS ALL OVER IN ACCORDANCE WITH ASME B46.1.

2. IDENTIFICATION MARKING AND COLOR:

TOOL IDENTIFICATION LOCATION SHALL BE AS SHOWN IN FIGURE 1 AND SHALL BE MARKED IN ACCORDANCE WITH MIL-STD-130, STAMP (LETTERING HEIGHT IS .093 MINIMUM WITH WHITE FILL) OR LASER MARKED. TOOL IDENTIFICATION SHALL INCLUDE MANUFACTURER'S NAME OR SYMBOL AND PART NUMBER, THE TOOL PART NUMBER M22520/34-01, AND THE INSPECTION GAGE PART NUMBER M22520/35. ADDITIONAL TOOL MARKING SHALL BE AS SHOWN IN FIGURE 1. TOOL COLOR SHALL BE AS SPECIFIED IN TABLE 2.

THE POSITIONER SHALL BE MARKED AS SHOWN IN FIGURE 2. PERMANENT MARKING SHALL BE IN ACCORDANCE WITH MIL-STD-130, STAMP (LETTERING HEIGHT IS .093 MINIMUM WITH WHITE FILL) OR LASER MARKED. POSITIONER COLOR SHALL BE BLACK. OTHER UNSPECIFIED LABELS ARE PERMISSIBLE ON TOOL FRAME AND POSITIONER. THE DATA PLATE LABEL SHALL BE CLEARLY MARKED AS SHOWN IN FIGURE 2. ALL LABELS SHALL HAVE BLACK LETTERS PRINTED ON A CONTRASTING BACKGROUND. LABELS SHALL STILL BE ATTACHED AND LEGIBLE AFTER ALL AS22520 REQUIREMENTS.

OTHER UNSPECIFIED LABELS ARE PERMISSIBLE ON TOOL BODY AND POSITIONER. ALL LABELS SHALL STILL BE ATTACHED AND LEGIBLE AFTER ALL AS22520 REQUIREMENTS.

3. MATERIALS:

UNLESS OTHERWISE SPECIFIED, MATERIAL SHALL BE IN ACCORDANCE WITH AS22520. SURFACE TEXTURE SHALL BE 63 RMS OVERALL IN ACCORDANCE WITH ASME B46.1. TOOL BODY AND INDENTER MATERIAL SHALL BE OIL HARDEN TOOL STEEL. THE INDENTER MATERIAL SHALL BE HARDENED TO ROCKWELL "C" 56-60. LOCK PLATE (RETAINER RING) SHALL BE STAINLESS STEEL PER AMS-QQ-S-763, CLASS 304.

POSITIONER BODY MATERIAL SHALL BE ALUMINUM AMS- QQ-A-225/6. LOCATOR SHALL BE STAINLESS STEEL PER AMS-QQ-S-763, CLASS 304.

HANDLE GRIP CUSHION SHALL BE PLASTIC MATERIAL.

4. WEIGHT:

WEIGHT OF TOOL FRAME WITHOUT POSITIONER SHALL NOT EXCEED 1 POUND AND THE POSITIONER SHALL NOT EXCEED .75 OUNCES.

5. TOOL HIGH COMPRESSION FORCE:

THE COMPRESSION FORCE REQUIRED TO ACHIEVE SATISFACTORY CRIMPS SHALL NOT EXCEED 45 POUNDS WHICH IS APPLICABLE FOR THE M39029/83-508 OR /84-507 CONTACT CRIMPED ON A SIZE 20 GAGE WIRE.

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6. TOOL FRAME INDENTER GAGE LIMITS:

INDENTER GO AND NO-GO INSPECTION GAGE LIMITS ARE DEFINED IN TABLE 3 (SEE APPLICATION NOTES).

7. POSITIONER LOCK PLATE AND LOCATOR:

THE POSITIONER LOCK PLATE SHALL PROVIDE POSITIVE DETENT FOR BAYONET LOCK PINS, AND A MEANS OF SECURING THE POSITIONER SO THAT IT CANNOT BE REMOVED WITHOUT REMOVING A LOCKING PIN OR WIRE. POSITIONER LOCATOR SHALL BE SPRING LOADED. SPRING SHALL DEPRESS .031 INCHES MINIMUM WITH A FORCE OF 2 POUNDS ± 1 POUND.

8. CYCLE CONTROL RATCHET:

THE TOOL SHALL BE MADE WITH A TAMPER-PROOF RATCHET WHICH LIMITS THE MOVEMENT OF THE TOOL HANDLE IN BOTH DIRECTIONS, AND ASSURES A COMPLETE CLOSURE OF THE TOOL HANDLE PRIOR TO RELEASE.

9. PART NUMBER STRUCTURE:



APPLICATION NOTES:

- FOR APPLICABLE CONTACTS FOR THE POSITIONER SEE TABLE 3.

TABLE 3 - TOOL/CONTACT CRIMP APPLICATIONS

CRIMP TOOL FRAME M22520/34-01 (PAGE 1 - 2)		
CONTACT DETAIL SPECIFICATION NUMBERS	REQUIRED POSITIONER	POSITIONER DESCRIPTION LOCATION (SHEET NUMBER)
AS39029/83 & /84	M22520/34-02	6 - 7

- UNLESS OTHERWISE SPECIFIED, FOR TOOL APPLICATIONS INSPECTION GAGING IS RECOMMENDED TO BE PERFORMED WITH THE GAGE SPECIFIED IN TABLE 2 ON TOOL SELECTOR NUMBER 6. OTHER GAGES IN ACCORDANCE WITH TABLE 3 WOULD BE REQUIRED FOR OTHER SELECTOR SETTINGS.
- AS22520/34 CONFIGURATION IS FOR HAND CRIMPING ONLY.

NOTICE

USE OF HAND CRIMPING TOOLS COVERED BY THIS SPECIFICATION AS A COMPONENT IN ANY POWERED "PRESS" MAY VIOLATE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS CFR 1910.211.

- THE SPECIFIED CONTACTS SHALL BE CRIMPED WITH THE POSITIONER AT BASIC TOOL SETTINGS SHOWN IN TABLE 4.

TABLE 4 - CONTACTS, POSITIONER, AND BASIC TOOL SELECTIONS

PART NUMBER		WIRE SIZE	CRIMPING TOOL DIAL SELECTION NO.	CONTACTS ACCOMMODATED
BASIC TOOL	POSITIONER			
M22520/34-01 1/	M22520/34-02	20	5	M39029/83-508 M39029/84-509
		22	8	M39029/83-450 M39029/84-452
		24	7	
		26	6	
		28	6	M39029/83-451
30	M39029/84-453			

1/ USE M22520/35 INSPECTION GAGE AT SELECTOR SETTING NUMBER 6 FOR TOOL INSPECTION.

SUPERSESION INFORMATION:

1. AS22520/34 SUPERSEDES MIL-C-22520/34. PART NUMBERS REMAIN UNCHANGED.

SPECIFICATION NOTES:

1. A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

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