

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

AS22520/45

FEDERAL SUPPLY CLASS
5120

RATIONALE

AS22520/45 IS ISSUED TO ELIMINATE MANUFACTURERS PROPRIETARY TOOL PART NUMBERS WHICH ARE CURRENTLY LISTED IN SEVERAL AS39029 DETAIL SPECIFICATIONS.

NOTICE

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

TABLE 1 - TOOL/CONTACT CRIMP APPLICATIONS

CRIMP TOOL FRAME M22520/45-01 (SHEETS 1 AND 2)		
CONTACT DETAIL SPECIFICATION NUMBER	REQUIRED POSITIONER	POSITIONER DESCRIPTION LOCATION (SHEET NUMBERS)
M39029/56, /58, /117, /118, /121, /123	FIXED	2

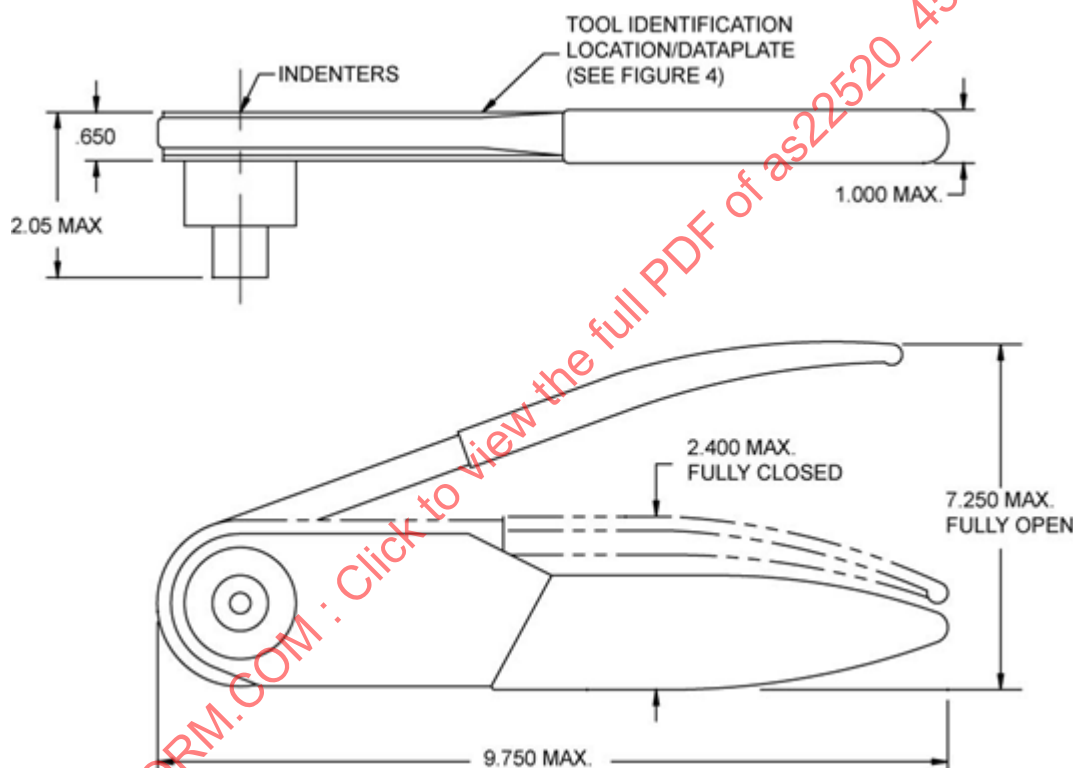
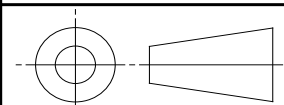


FIGURE 1 - TOOL BODY DETAILS

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS22520/45>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C2

PROCUREMENT SPECIFICATION: AS22520



AEROSPACE STANDARD

CRIMPING TOOLS, TYPE I, HAND, WIRE,
TERMINATION FOR WIRE BARREL
SIZE 10 POWER CONTACTS

AS22520/45
SHEET 1 OF 5

Copyright 2014 SAE International
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Fax: 724-776-0790

Tel: +1 724-776-4970 (outside USA)
Email: CustomerService@sae.org

SAE WEB ADDRESS: <http://www.sae.org>

ISSUED 2014-11

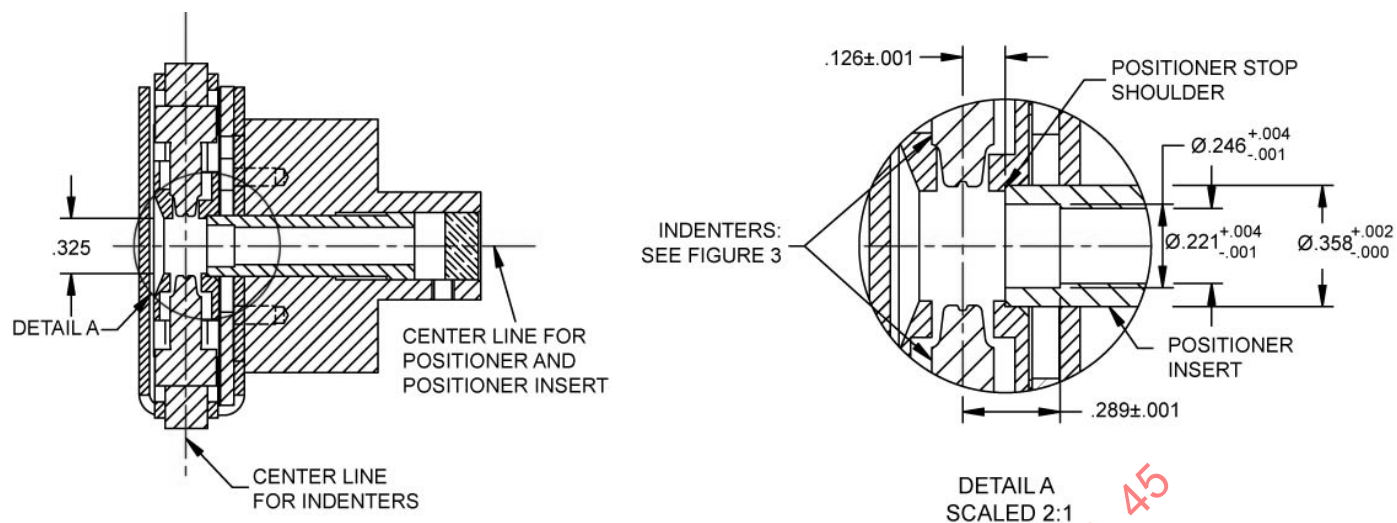
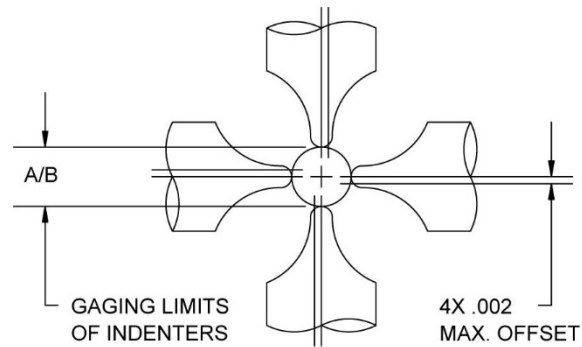


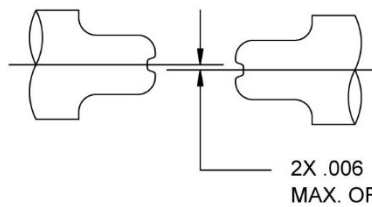
FIGURE 2 - POSITIONER AND INDENTER VIEW

SAENORM.COM : Click to view the full PDF of as22520_45

	AEROSPACE STANDARD CRIMPING TOOLS, TYPE I, HAND, WIRE, TERMINATION FOR WIRE BARREL SIZE 10 POWER CONTACTS	AS22520/45 SHEET 2 OF 5	
---	---	-----------------------------------	--



INDENTER LOCATIONS WITH TOOL
IN FULLY CLOSED POSITION



OPPOSITE AND ADJACENT
INDENTER CENTERLINES

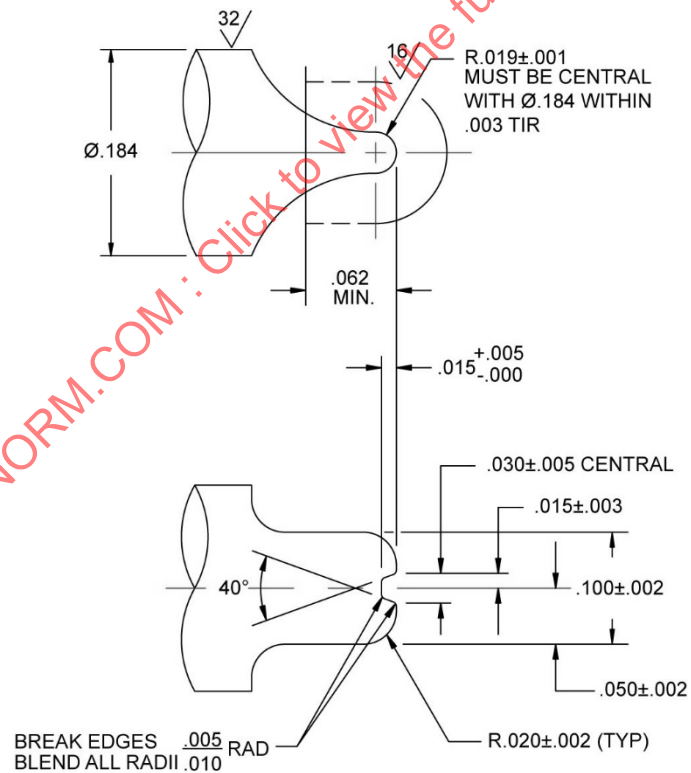


FIGURE 3 - INDENTER DETAILS

TABLE 2 - BASIC TOOL MARKINGS

PART NO.	TOOL BODY COLOR (SURFACE FINISH)	HANDLE GRIP COLOR	FOR INSPECTION GAGING USE
M22520/45-01	BLUE 1/	BLUE	M22520/3-16

1/ COLOR IS OPTIONAL

TABLE 3 - INDENTER INSPECTION GAGE LIMITS

GAGING LIMITS OF INDENTERS	
INSPECTION GAGE	
Ø GO A + .0001	Ø NO-GO B + .0001
.0730	.0780

MANUFACTURER'S NAME & P/N Crimp Tool Part No. M22520/45-01			
Gage	Go.073	No-Go.078	WIRE
Inspection Gage M22520/3-16			10-12
Contacts: M39029/56-353 & 527 M39029/58-365 & 528 M39029/117-635 & 647 M39029/118-641 & 653 M39029/121-674 M39029/122-683 RECOMMENDED TO USE MS3348-10, 12 CRIMP BUSHING W/ SIZE 12 WIRE (SEE AS39029/112)			

FIGURE 4 - DATAPLATE MARKING

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

- DIMENSIONS: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES, TOLERANCES (DECIMALS ± 0.010 , ANGLES $\pm 1/2^\circ$). OUTLINE CONFIGURATION OPTIONAL WITHIN MAXIMUM DIMENSIONS SHOWN IN FIGURES 1 THRU 3.
- MARKING: IDENTIFICATION AND COLOR SHALL BE IN ACCORDANCE WITH TABLE 2 AND FIGURE 4. THE MARKING SHALL BE IN ACCORDANCE MIL-STD-130, STAMP AND WHITE FILL OR LASER MARKED. UNLESS OTHERWISE SPECIFIED LETTERING HEIGHT IS .093 MIN. PART NUMBER AND COLOR SHALL BE AS SPECIFIED. LABEL PRINTING SHALL BE BLACK LETTERING ON CONTRASTING BACKGROUND.
- MATERIALS: UNLESS OTHERWISE SPECIFIED, MATERIAL IS IN ACCORDANCE WITH M22520. SURFACE TEXTURE SHALL BE 63 RMS OVER ALL IN ACCORDANCE WITH ASME B46 1-2009 (AMERICAN NATIONAL STANDARDS INSTITUTE). INDENTER MATERIAL SHALL BE TOOL STEEL, HARDENED TO ROCKWELL "C" 58-60.
- WEIGHT: WEIGHT OF TOOL SHALL NOT EXCEED 1.5 POUNDS.
- TOOL COMPRESSION FORCE: THE COMPRESSION FORCE REQUIRED TO MAKE SATISFACTORY CRIMPS SHALL NOT EXCEED 120 POUNDS WHICH IS APPLICABLE FOR THE M39029/56-527 OR M39029/58-528 CONTACT CRIMPED ON A SIZE 10 WIRE.
- TOOL FRAME INDENTER GAGE LIMITS: INDENTER GAGE LIMITS ARE DEFINED IN TABLE 3.

APPLICATION NOTES:

- THIS IS A DEDICATED TOOL FOR SIZE 10 POWER CONTACTS CONFORMING TO AS39029 AND DESIGNED TO BE USED WITH MIL-DTL-38999 CONNECTORS.
- POSITIONER IS NOT REPLACEABLE AND ADDITIONAL POSITIONER OR TURRET HEAD IS NOT REQUIRED.

	AEROSPACE STANDARD	AS22520/45 SHEET 4 OF 5	
	CRIMPING TOOLS, TYPE I, HAND, WIRE, TERMINATION FOR WIRE BARREL SIZE 10 POWER CONTACTS		