

# SPECIFICATIONS

**MECHANICAL:**  
 SHOCK: MIL-STD 202 METHOD 213B, COND. K.  
 VIBRATION: MIL-STD 202 METHOD 201  
 LIFE: 300 INSERTION/WITHDRAWAL CYCLES (MINIMUM)

**ELECTRICAL**  
 DIELECTRIC WITHSTANDING VOLTAGE: 1,000 VAC  
 INSULATION RESISTANCE: 100 MEGOHMS (MIN) AT 77°F  
 CONTACT RESISTANCE: 5.0 MILLOHMS MAX.  
 CURRENT RATING: 7.5 AMPS (#20 CONTACT)  
 6.5 AMPS (7 & 8 PIN #20 CONTACT)  
 13.0 AMPS (#16 CONTACT)

**ENVIRONMENTAL**  
 TEMPERATURE LIMITS: -40°C TO +65°C (NON-OPERATING)  
 MOISTURE RESISTANCE: MIL-STD 202 METHOD 106F  
 INSULATION RESISTANCE: MIL-STD 202 METHOD 302, COND. B  
 THERMAL SHOCK: MIL-STD 202 METHOD 107G  
 SALT SPRAY: MIL-STD 202 METHOD 101D, COND. B  
 WATER TIGHTNESS TEST: U.S. COAST GUARD CFR 46 PART 110.20

**MATERIALS:**  
 PANEL CONNECTOR SHELL, CONTACT LOCKING DISC:  
 THERMOPLASTIC POLYMER GLASS FIBER, FLAME RETARDANT

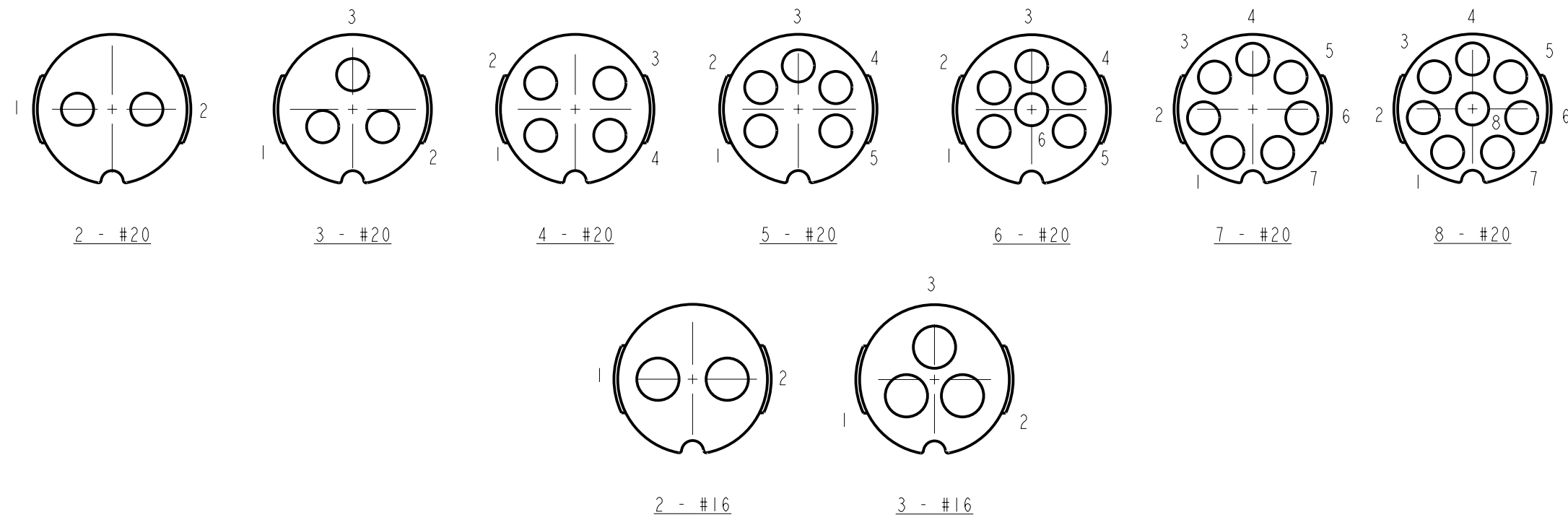
CONNECTOR SHELL INTERIOR:  
 THERMOPLASTIC RUBBER

CONTACTS: COPPER BASE ALLOY GOLD-PLATED  
 OVER NICKEL UNDERPLATE

HEX NUT: THERMOPLASTIC

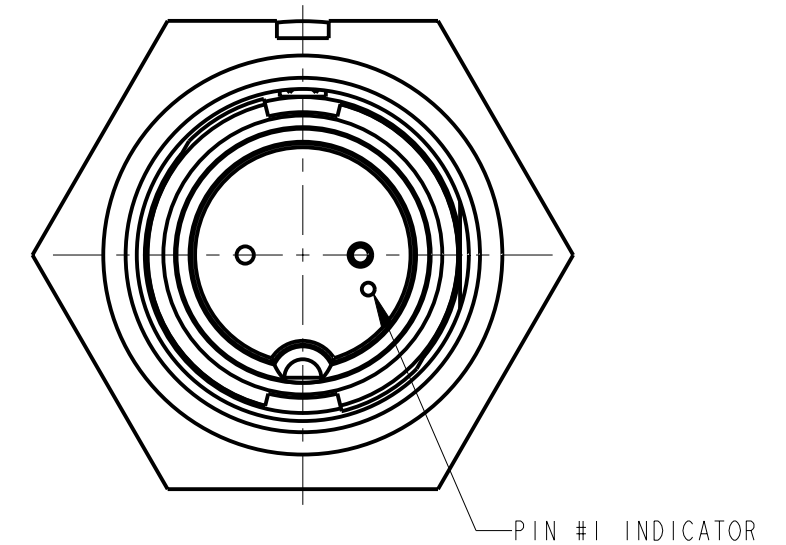
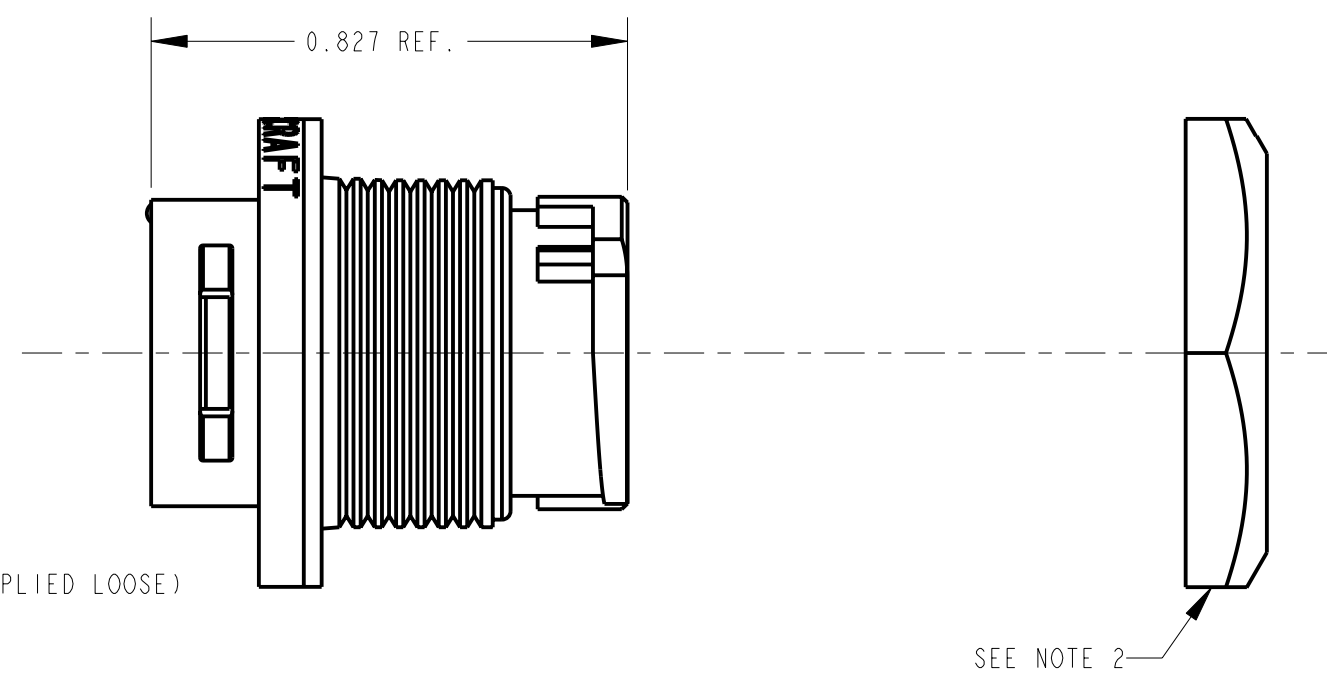
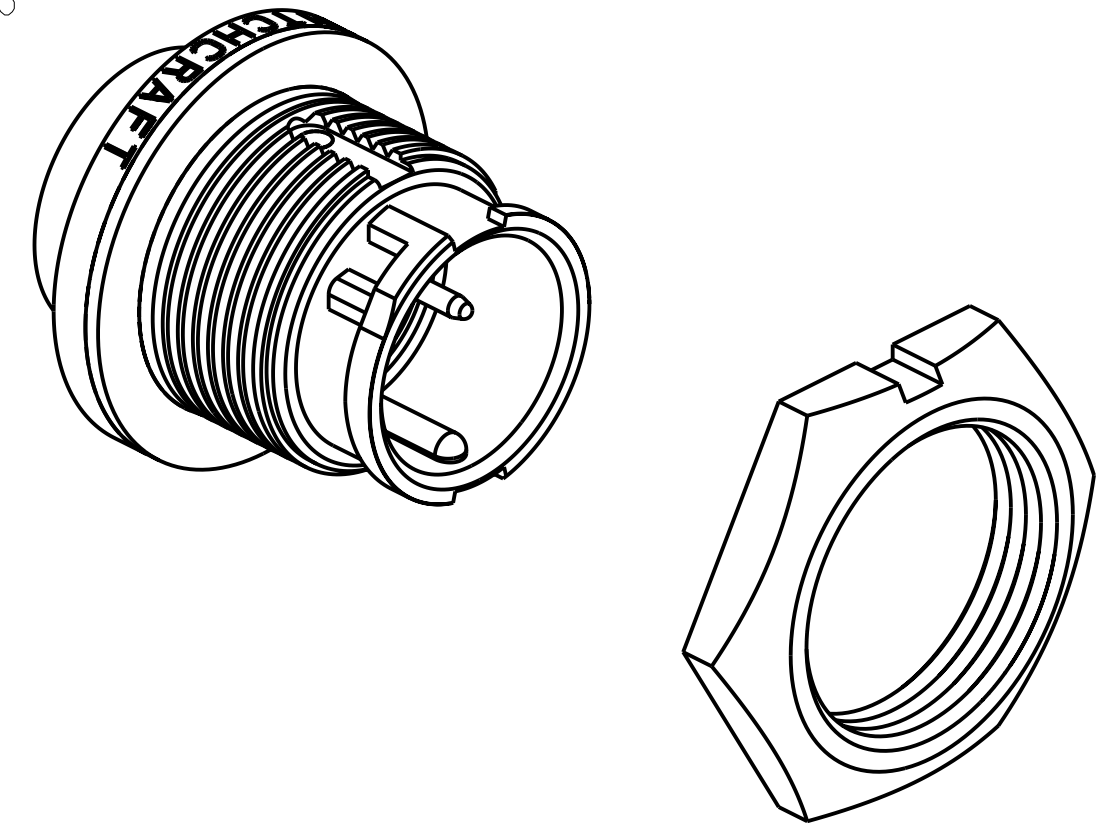
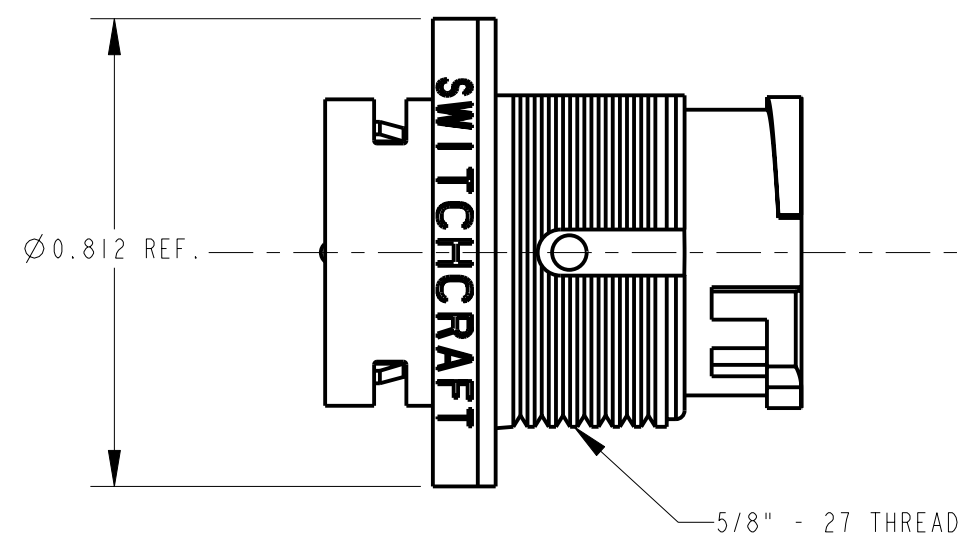
**NOTES:**

- HEX NUT TORQUE:  
 8 TO 10 INCH-LBS. OF TORQUE  
 (MUST NOT EXCEED 10 INCH-LBS.)
- HEX NUT SHIPPED UNASSEMBLED.
- CONTACTS SUPPLIED LOOSE.

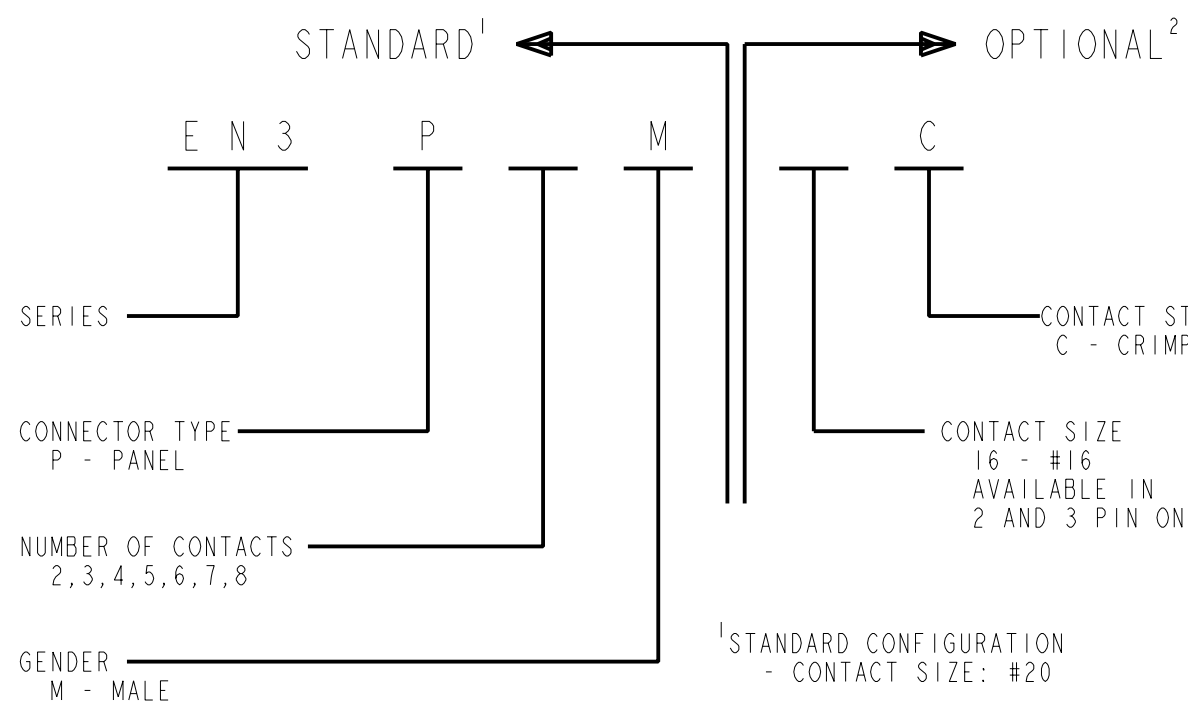


## CONTACT ARRANGEMENT

SHOWN ARE REAR VIEWS OF  
 MALE PANEL CONNECTORS



CUSTOMER DRAWING



- <sup>1</sup>STANDARD CONFIGURATION  
 - CONTACT SIZE: #20  
 - CONTACT STYLE: SOLDER CUP  
 - CONTACT PLATING: GOLD  
 - PACKAGED IN BULK
- <sup>2</sup>OPTIONAL CONFIGURATION  
 - LEAVE BLANK FOR STANDARD CONFIGURATION

REV	ECO NUMBER	DATE	BY	APVD
E	24661	3-4-04	JL	EB
D	23595	2-6-01	JL	DK
C	22232	4-29-98	SG	RB
B	ECO #21461	11-11-96	MM	FL
A	RELEASE TO MFG ECO #20698	4-4-96	CCB	RB

★ STAR SYMBOL DENOTES CRITICAL DIMENSION

UNLESS OTHERWISE SPECIFIED

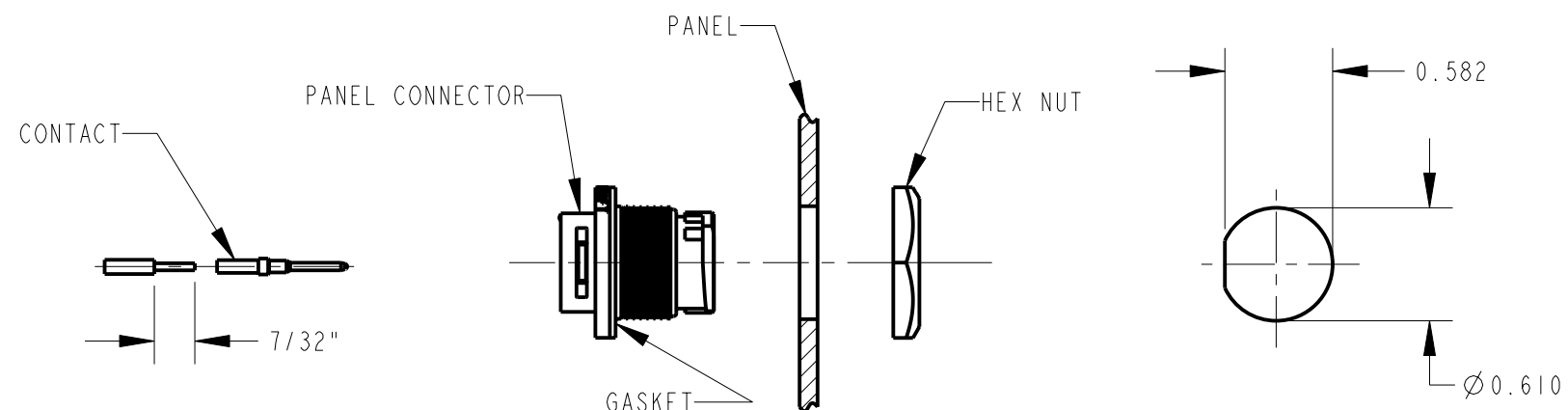
- ALL DIMENSIONS IN INCHES  
 - TWO PLACE DECIMALS ±0.01  
 - THREE PLACE DECIMALS ±0.005  
 - ANGLES ±1°  
 - ALL DIA. CONCENTRIC WITHIN 0.005 T.I.R.
- FEATURES ON THE SAME CENTERLINE  
 MUST BE ALIGNED WITHIN ±0.002
- REMOVE ALL BURRS

DO NOT SCALE DRAWING

THIS DRAWING DESCRIBES A DESIGN CONSIDERED PROPRIETARY IN NATURE, DEVELOPED AND MANUFACTURED BY SWITCHCRAFT INC. AND IS RELEASED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.				
SIZE	WIDTH	MULT	LBS/M	TEMPER
FINISH		MATERIAL		
SPEC No.		SPEC No.		
FIRST USED ON		SCALE		
		3:1		
DATE DRAWN	BY	CHKD	APVD	
11-22-95	SG	11-22-95	RB	
NAME			PART No.	REV
MALE PANEL CONNECTOR			EN3P_M_C	E



SWITCHCRAFT PANEL CONNECTOR ASSEMBLY INSTRUCTIONS



NOTE: STRIP CABLE AS SHOWN AND CRIMP WIRE TO CONTACT BEFORE INSERTING TO CONNECTOR

RECOMMENDED PANEL CUT-OUT

EN3 CRIMP TOOL

SWITCHCRAFT PART NUMBER	DESCRIPTION	CONTACT SIZE	MANUFACTURER PART NUMBER	MILITARY PART NUMBER
EN3CR	CRIMP HAND TOOL FRAME	#20, #16	DMC MH860	M22520/7-01
EN3CRAUTO	POWER CRIMP TOOL	#20, #16	DMC WA22P	
EN3POS20	POSITIONER	#20	DMC 86-15	M22520/7-02
EN3POS16	POSITIONER	#16	DMC 86-3	M22520/7-04

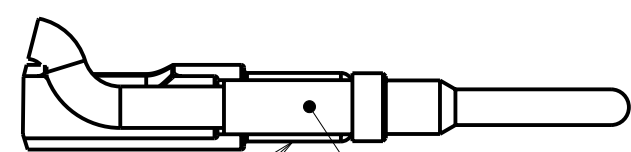
CONTACT PART NO.	CONTACT SIZE	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	WIRE GAUGE RANGE	INSERTION/EXTRACTION HAND TOOL
EN3CC20M	#20	0.209	0.047	0.069	0.041	#20-22-24	EN3INS20
EN3CC16M	#16	0.218	0.067	0.095	0.062	#16-18-20	EN3IN16

RECOMMENDED STRIP LENGTH: 0.218

ALL DIMENSIONS ARE REFERENCE UNLESS OTHERWISE SPECIFIED

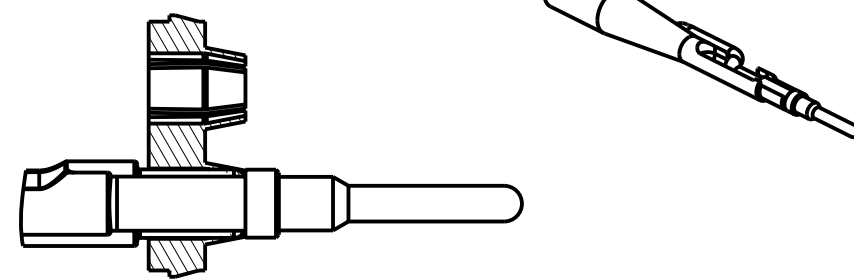
CONTACT INSERTION INSTRUCTIONS

HOUSING NOT SHOWN



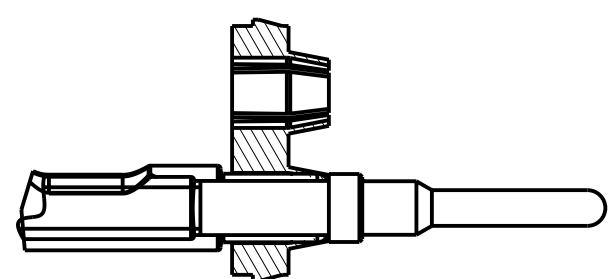
HAND TOOL CONTACT

PLACE CRIMP CONTACT AND CONDUCTOR ONTO HAND TOOL.

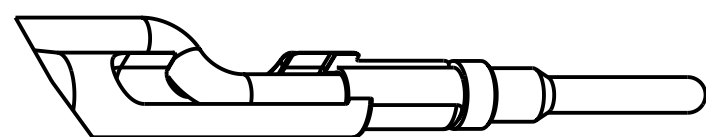


INSERT TOOL INTO HOUSING UNTIL IT BOTTOMS ONTO DISC.

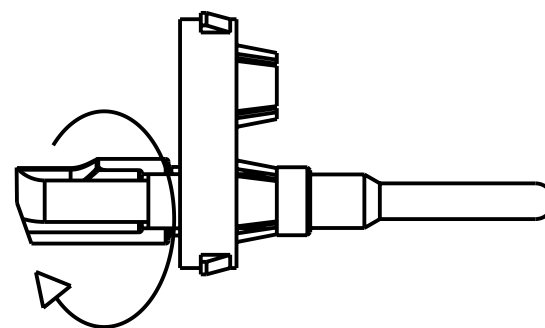
CONTACT EXTRACTION INSTRUCTIONS



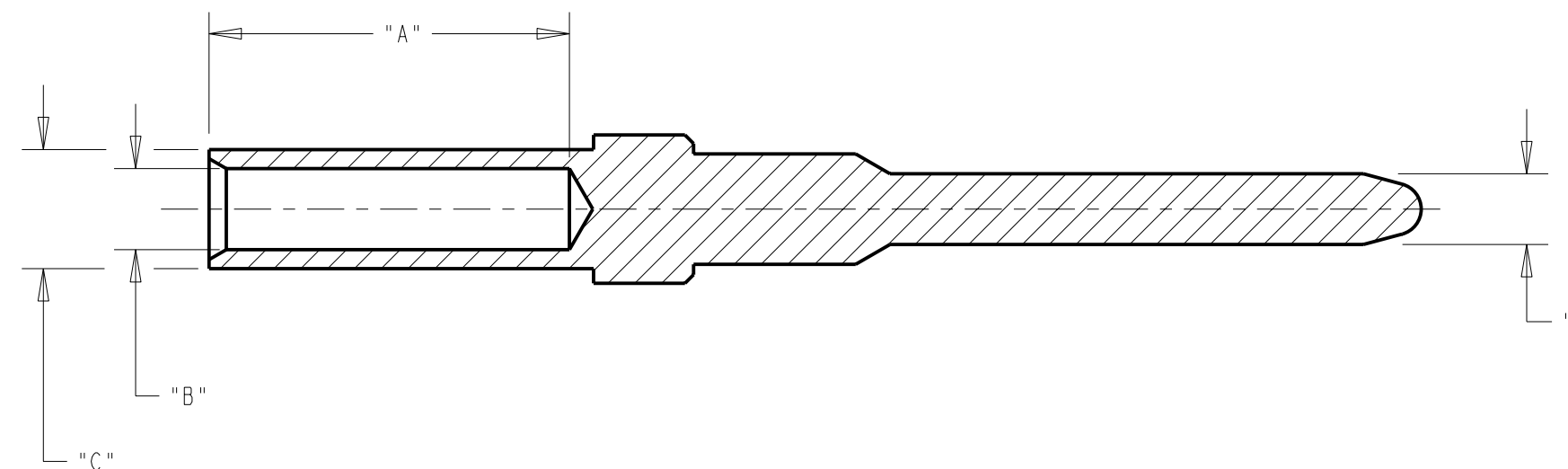
INSERT TOOL INTO HOUSING UNTIL IT BOTTOMS ONTO DISC.



PLACE CONDUCTOR INTO SLOT ON HAND TOOL AS SHOWN.



ROTATE HAND TOOL CLOCKWISE AND REMOVE FROM HOUSING.



CUSTOMER DRAWING

SCALE 3:1	<b>Switchcraft®</b>	
DATE DRAWN 15-Apr-96		
DRAWN BY CCB	PART No. EN3P_M_C	REV E