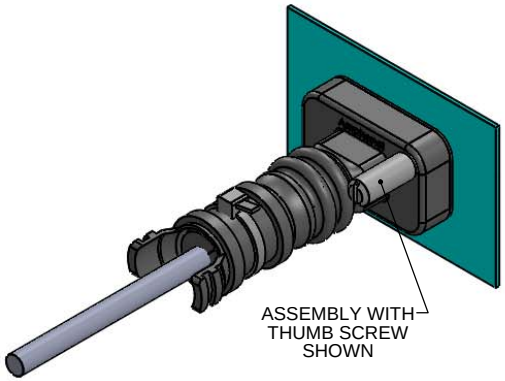
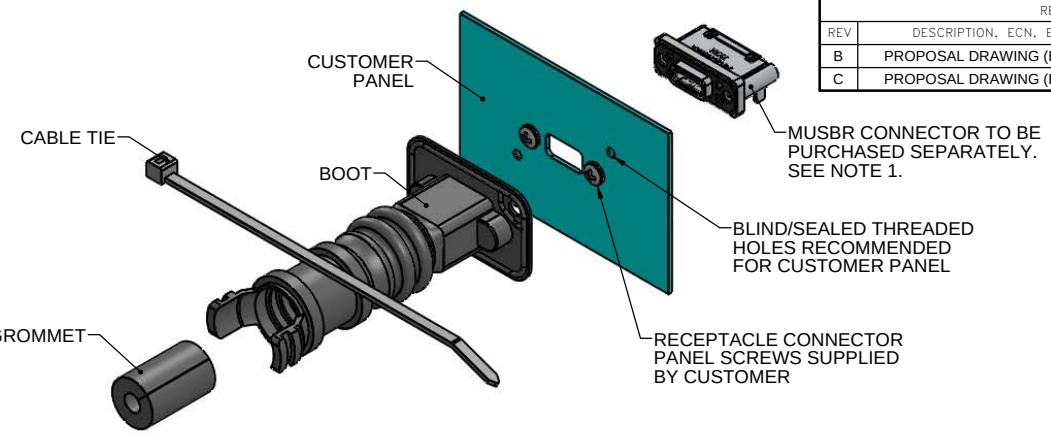
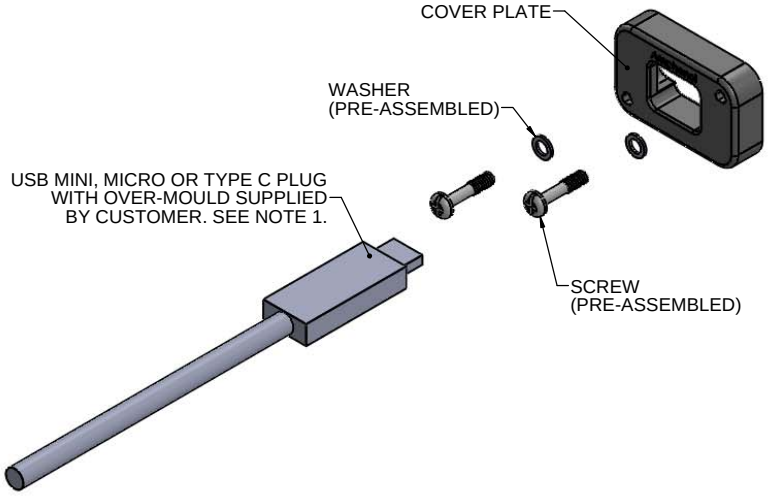
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REV	DESCRIPTION, ECN, EAR NO.	DATE	APP'D
B	PROPOSAL DRAWING (EAR 14578)	JUL27/17	K.L.
C	PROPOSAL DRAWING (EAR 14578)	OCT19/18	K.L.







NOTES

1. THIS HOOD IS SUITABLE FOR USE WITH AMPHENOL RUGGED USB RECEPTACLES - AMPHENOL SERIES MUSB-B & MUSBR-B (TYPE MINI-B 2.0), MUSB-E & MUSBR-E (TYPE MINI-AB 2.0), MUSB-K (TYPE MICRO-AB) AND MUSBR-M (TYPE C).
2. KIT CONTAINS ONE BOOT, ONE COVER PLATE, UP TO TWO SPLIT GROMMETS, ONE CABLE TIE, TWO SCREWS & TWO WASHERS. SCREWS & WASHERS ARE SUPPLIED PRE-ASSEMBLED TO THE COVER PLATE. SCREWS WILL FLOAT & BE CAPTURED BY THE COVER PLATE TO MINIMIZE LOSS OF PARTS DURING USE.
3. THE HOOD CAN BE FIELD OR FACTORY ASSEMBLED OVER EXISTING STANDARD USB PLUGS THAT ARE ALREADY TERMINATED TO A CABLE. SEE DRAWING SHEET 3 FOR A SUGGESTED ASSEMBLY PROCEDURE. FOR IMPROVED SEALING PERFORMANCE, THE USE OF A CABLE TIE GUN TO TIGHTEN THE CABLE TIE IS RECOMMENDED (EXAMPLE: PALADIN TOOLS CABLE TIE GUN P/N 1828.1 WITH SETTING 1). THE ASSEMBLY PROCEDURE CAN BE ALTERED TO SUIT CUSTOMER PREFERENCES OR REQUIREMENTS.
4. CUSTOMER PANEL REQUIRES TWO ADDITIONAL MOUNTING HOLES. THESE HOLES ARE RECOMMENDED TO BE BLIND/SEALED HOLES SO THAT ENCLOSURE REMAINS SEALED. IN UNMATED CONDITION, RECEPTACLE MAINTAINS ENCLOSURE SEAL. IN MATED CONDITION, BOOT ASSEMBLY ENSURES SEAL OF MATING INTERFACE AREA. IF BLIND/SEALED HOLES ARE NOT POSSIBLE, PENN ENGINEERING HAS A LINE OF BLIND THREADED FASTENERS THAT MAY BE SUITABLE.
5. BOOT ACCORDION SECTION ALLOWS FLEXIBILITY FOR CABLE TIE LOCATION LENGTHWISE ALONG THE CABLE. THIS MAY BE NECESSARY TO SUIT EXTRA LONG PLUGS, TO AVOID FERRITES MOULDED INTO THE CABLE OR IF A MATING RECEPTACLE & PANEL ARE NOT AVAILABLE DURING BOOT ASSEMBLY.
6. FLEXIBILITY OF BOOT PERMITS PLUG/RECEPTACLE INTERFACE TO BE UNMATED & RE-MATED WITHOUT DIS-ASSEMBLY OR LOOSENING OF THE COVER PLATE SCREWS. THIS FEATURE SIMPLIFIES EQUIPMENT TEST & DIAGNOSTICS IN FIELD SERVICE APPLICATIONS.
7. MATERIAL: ALL MATERIALS ARE RoHS COMPLIANT PER EU DIRECTIVE 2011/65/EU & AMENDMENTS
   - BOOT: FLEXIBLE RUBBER, BLACK & TRANSLUCENT OPTIONS
   - COVER PLATE: THERMOPLASTIC NYLON, GLASS REINFORCED, BLACK
   - HARDWARE: STAINLESS STEEL
   - CABLE TIE: NYLON, BLACK
   - GROMMET: SILICONE RUBBER, BLACK
8. GROMMET CODE 21 (4.50 [.177] I.D.) IS SUITABLE FOR CABLES UP TO 4.50 [.177] OUTSIDE JACKET DIAMETER. GROMMET CODE 31 (6.40 [.252] I.D.) IS SUITABLE FOR CABLES BETWEEN 4.50 [.177] & 6.50 [.256] OUTSIDE JACKET DIAMETER. LARGER DIAMETER CABLES DO NOT REQUIRE A GROMMET.
9. TO ORDER CABLE TIES SEPARATELY, SPECIFY P/N MUSBR-2AHD-501BP.
10. OPERATING TEMPERATURE -55°C TO +105°C.

ORDERING CODE: **MUSBR - BHD4 - X X1 XX**

SERIES, RUGGED USB

HOOD, BOOT STYLE

SCREW, THREAD & BOOT OPTIONS
2 = SCREW - #4-40 UNC THREAD, BLACK BOOT
3 = THUMB SCREW - #4-40 UNC THREAD, BLACK BOOT
7 = SCREW - #4-40 UNC THREAD, TRANSLUCENT BOOT
8 = THUMB SCREW - #4-40 UNC THREAD, TRANSLUCENT BOOT
L = SCREW - M3 x 0.5 THREAD, BLACK BOOT
M = THUMB SCREW - M3 x 0.5 THREAD, BLACK BOOT
S = SCREW - M3 x 0.5 THREAD, TRANSLUCENT BOOT
T = THUMB SCREW - M3 x 0.5 THREAD, TRANSLUCENT BOOT

GROMMET OPTION
01 = NO GROMMET
21 = 4.50 [.177] INSIDE DIAMETER GROMMET
31 = 6.40 [.252] INSIDE DIAMETER GROMMET
41 = WITH BOTH 4.50 [.177] & 6.40 [.252] GROMMETS

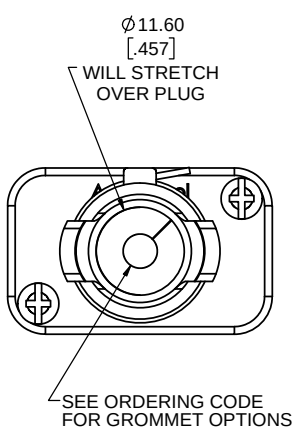
PACKAGING OPTIONS
BP = BULK PACKED, COMPONENTS BAGGED SEPARATELY IN CARTON
SK = SINGLE KIT, COMPONENTS FOR EACH HOOD IN SINGLE BAG

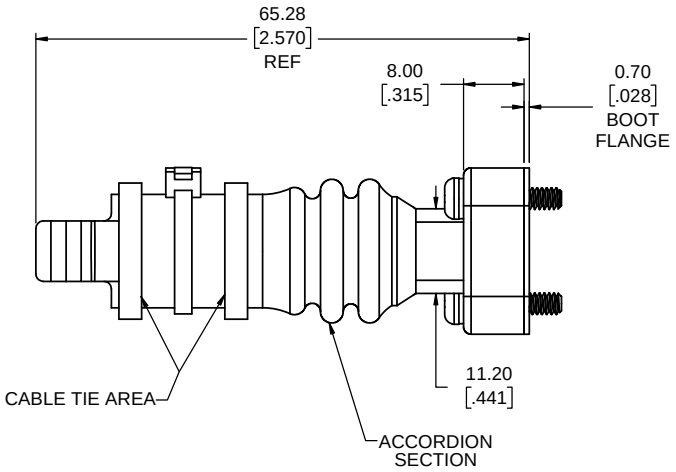
STANDARD PART NUMBER - MUSBR-BHD4-241SK FOR STOCK IN DISTRIBUTION
CONSULT WITH AMPHENOL CANADA FOR OTHER OPTIONS OR SPECIAL REQUESTS.

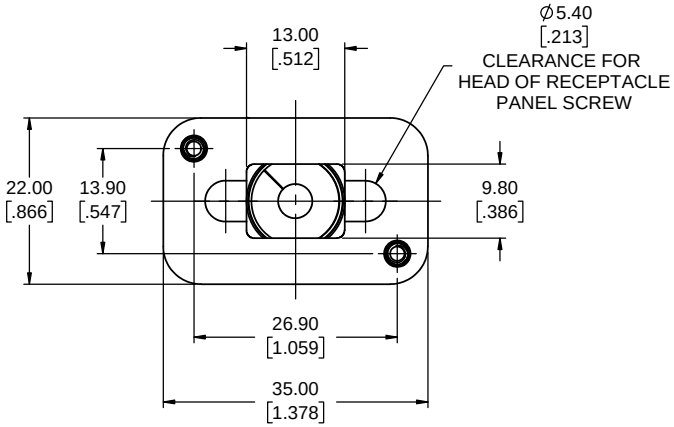
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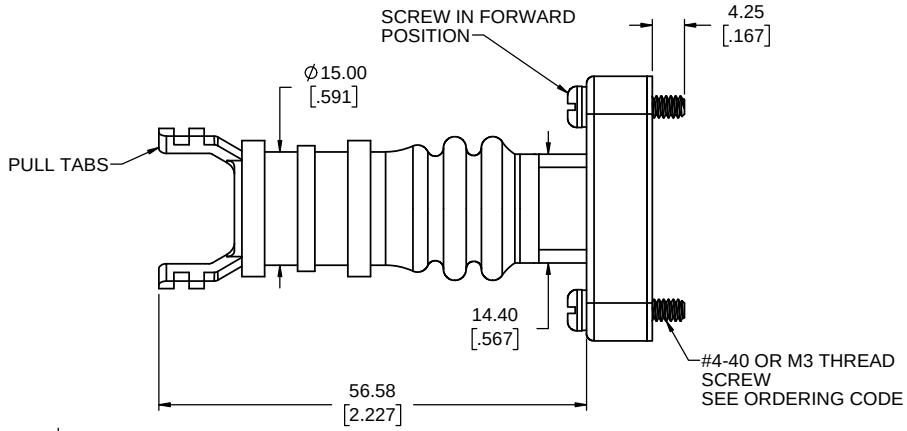
UNLESS SPECIFIED OTHERWISE	DRAWN B.COPPING	JUL19/17	**Amphenol Canada Corp.** Commercial Products
PRIMARY UNITS MILLIMETERS	CHECKED K.LAMBIE	JUL19/17	MUSBR HOOD FOR USB MINI / MICRO / TYPE C PLUGS, BOOT STYLE DESIGN, FOR SEALING MATING INTERFACE, RoHS COMPLIANT
SECONDARY INCHES	M.E. APP'D		
REFERENCE IN PARENTHESES	Q.A. APP'D		
GENERAL TOLERANCES	DWG APPR.		
1 DECIMAL PLACE	ENG. REL. NO. EAR 14578		DWG. NO. P-MUSBR-BHD4-XX1XX REV C
2 DECIMAL PLACES	REF.		
3 DECIMAL PLACES	THIRD ANGLE PROJECTION	DO NOT SCALE DRAWING	CODE ID NO. 03554 DWG SIZE: X SCALE: 2:1 SHEET 1 OF 3
ANGULAR DEGREES			

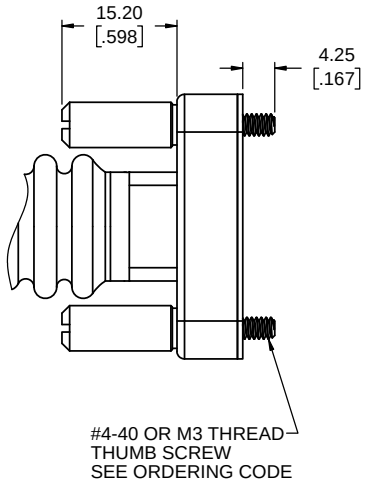
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REV	DESCRIPTION, ECN, EAR NO.	DATE	APP'D
B	PROPOSAL DRAWING (EAR 14578)	JUL27/17	K.L.
C	PROPOSAL DRAWING (EAR 14578)	OCT19/18	K.L.



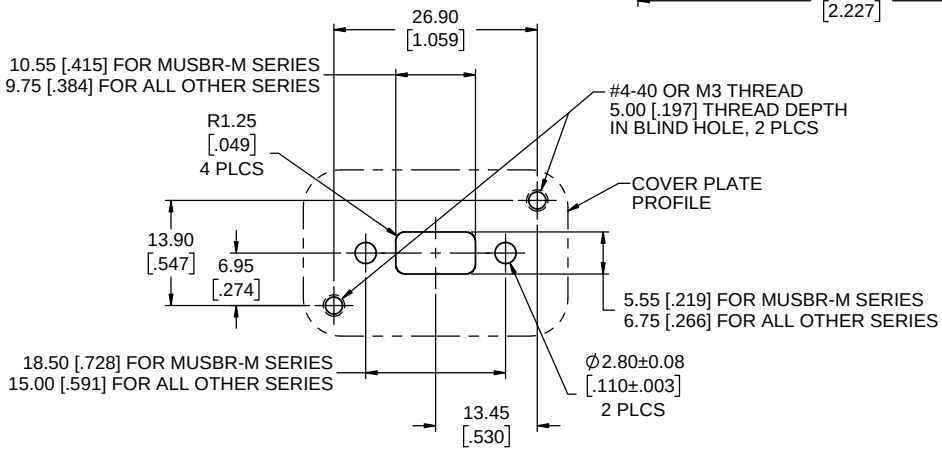








VIEW WITH THUMB SCREWS SHOWN



RECOMMENDED PANEL CUTOUT
OUTSIDE PANEL VIEW

AMPHENOL CANADA CORP RoHS COMPLIANT 2011/65/EU RECAST

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2 DECIMAL PLACES	REF.		
3 DECIMAL PLACES	THIRD ANGLE PROJECTION	DO NOT SCALE DRAWING	
ANGULAR DEGREES			

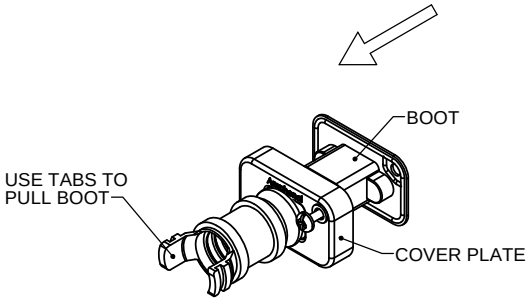
Amphenol Canada Corp.
Commercial Products

MUSBR HOOD FOR USB MINI / MICRO / TYPE C PLUGS, BOOT STYLE DESIGN, FOR SEALING MATING INTERFACE, RoHS COMPLIANT

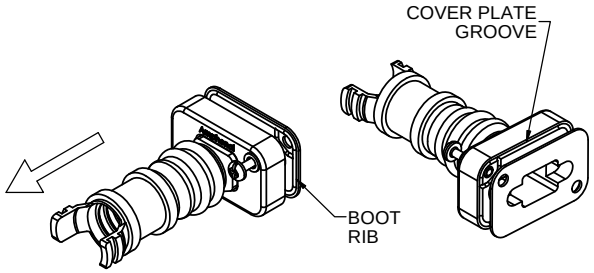
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P-MUSBR-BHD4-XX1XX	C

CODE ID NO. 03554 | DWG SIZE: X | SCALE: 2:1 | SHEET 2 OF 3

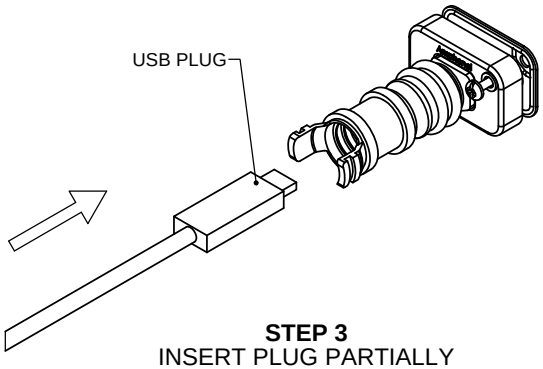
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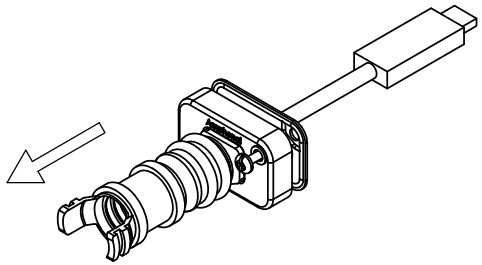
STEP 1
PULL BOOT THROUGH COVER PLATE.



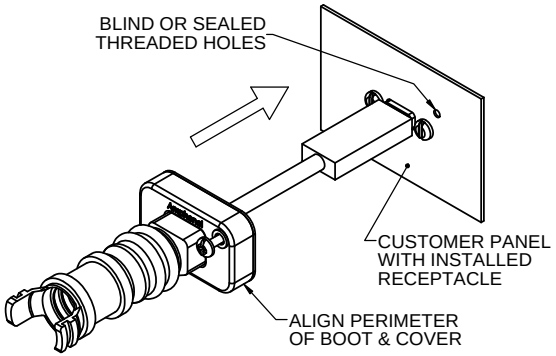
STEP 2
CONTINUE TO PULL BOOT UNTIL BOOT FLANGE ALMOST TOUCHES COVER PLATE.



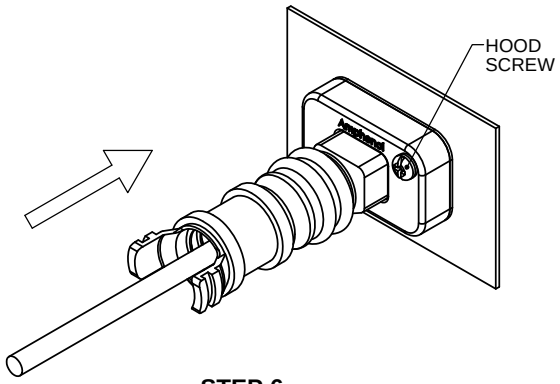
STEP 3
INSERT PLUG PARTIALLY INTO THE BOOT.



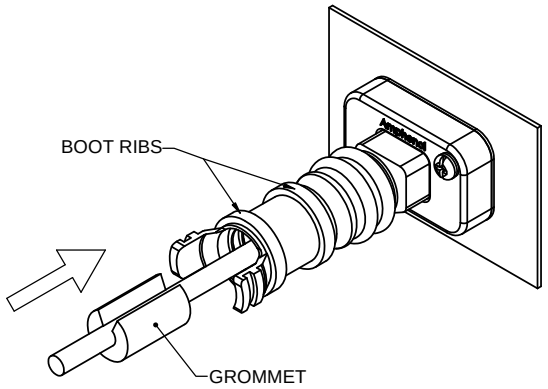
STEP 4
USE PULL TABS TO PULL BOOT OVER PLUG.



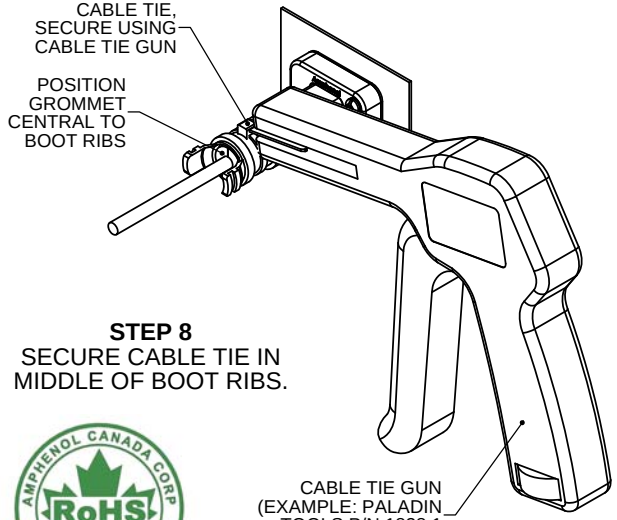
STEP 5
MATE PLUG INTO RECEPTACLE.



STEP 6
SLIDE HOOD UP TO PANEL & SECURE HOOD SCREWS



STEP 7
OPEN GROMMET ALONG SPLIT LINE, PLACE OVER PLUG CABLE & SLIDE INTO POSITION BETWEEN BOOT RIBS



STEP 8
SECURE CABLE TIE IN MIDDLE OF BOOT RIBS.

AMPHENOL CANADA CORP RoHS COMPLIANT 2011/65/EU RECAST

FIELD ASSEMBLY PROCEDURE

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DWG. NO.	REV
P-MUSBR-BHD4-XX1XX	C

CODE ID NO. 03554 | DWG SIZE: X | SCALE: 2:1 | SHEET 3 OF 3