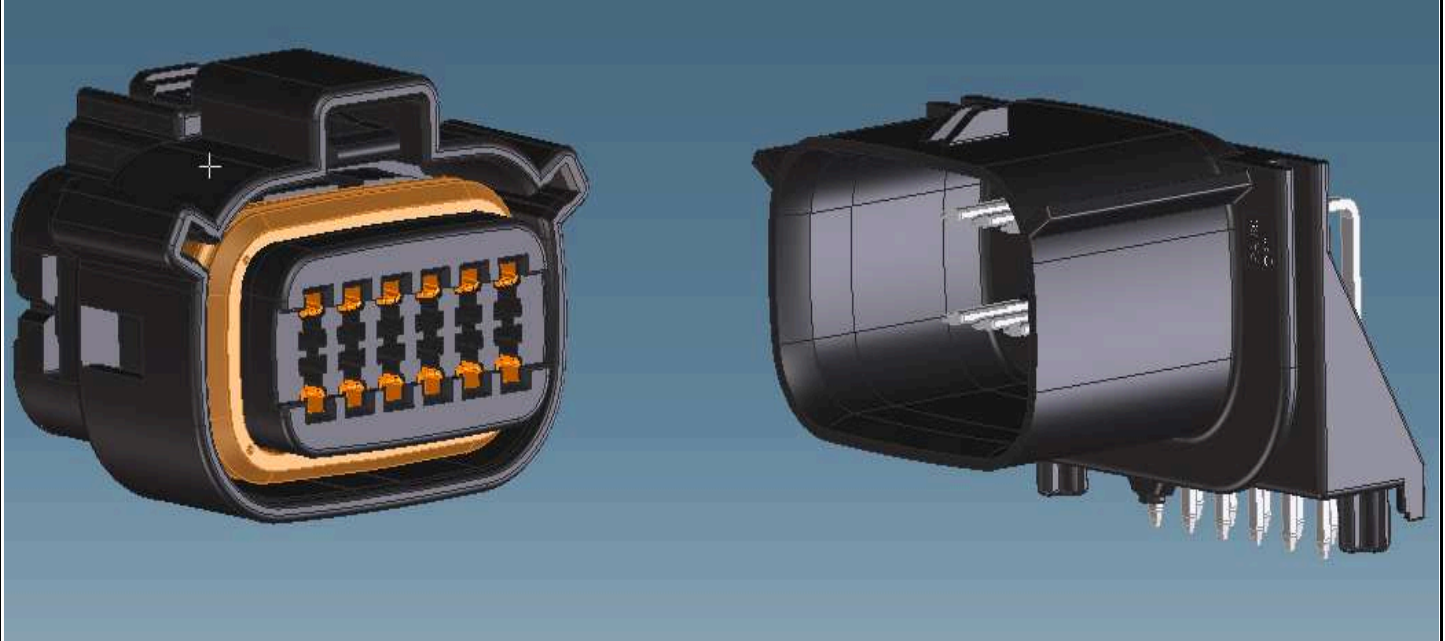


MX120G SEALED CONNECTOR SYSTEM

WTB CONNECTOR SYSTEM



WTW CONNECTOR SYSTEM



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		1 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Table of contents

- **Section 1: Product Introduction**
- **Section 2: Product Summary**
- **Section 3: Crimping**
- **Section 4: Receptacle Assembly**
- **Section 5: Male Connector Assembly**
- **Section 6: WTB Connector Mating System**
- **Section 7: WTW Connector Mating System**
- **Section 8: Service Instructions**
- **Section 9: Packaging**

C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			2 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Section 1: Product Introduction

This instructions manual contains the different product families and the respective series numbers.

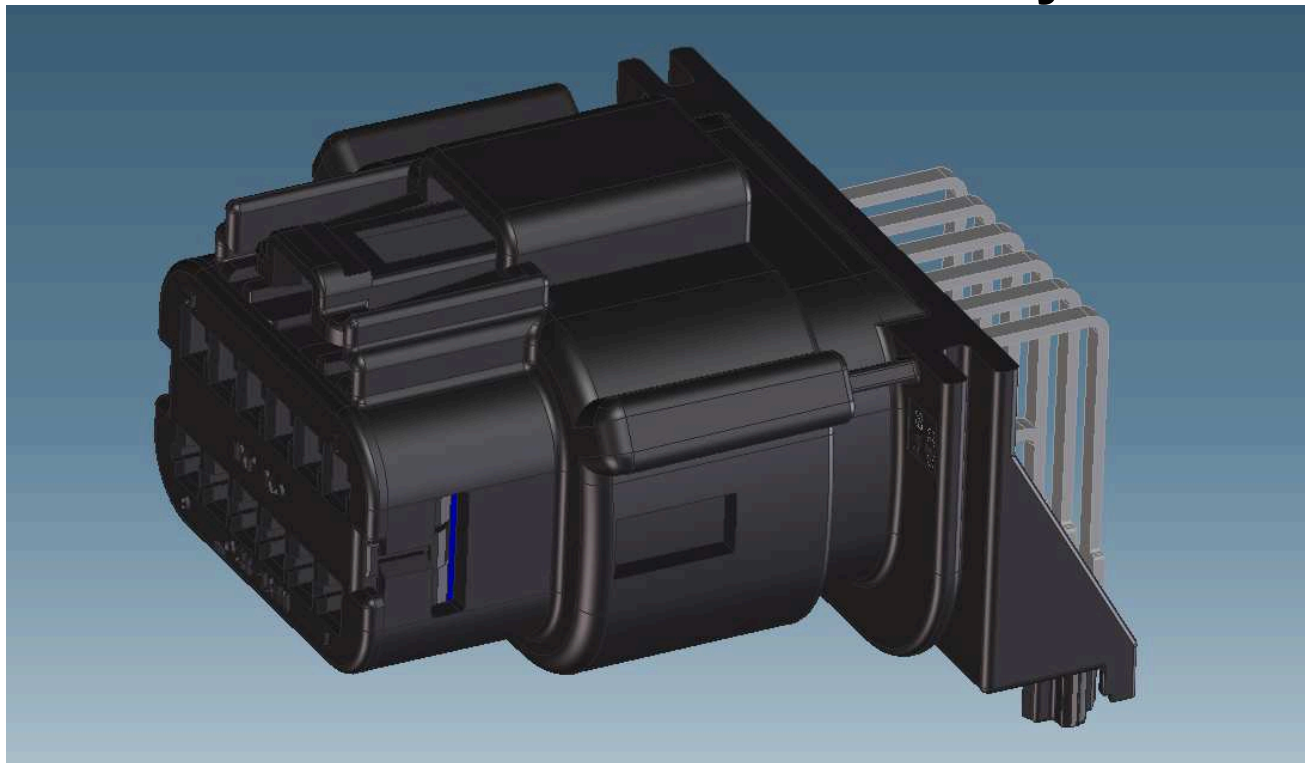
Product family	Type	Series#
Wire to Board	3.2/3.5 Dual row Header Assembly	36783
	3.2/3.2 Dual row Header Assembly	36806
	Dual row Receptacle Assembly	36792
	Single Row Header Assembly	36808
	Single Row Receptacle Assembly	36807
Wire to Wire	Dual row connector Assembly	36791
	Dual row Receptacle Assembly	36792
	Single row connector Assembly	36809
	Single Row Receptacle Assembly	36807
Cavity Plug	Receptacle Cavity Plug	36804
	Connector Cavity Plug	36805

C	EC No: I2013-0008	MX120G Application Specification	SHEET No.
	DATE: 2012/07/18		3 of 50

DOCUMENT NUMBER: AS-36783-001	CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
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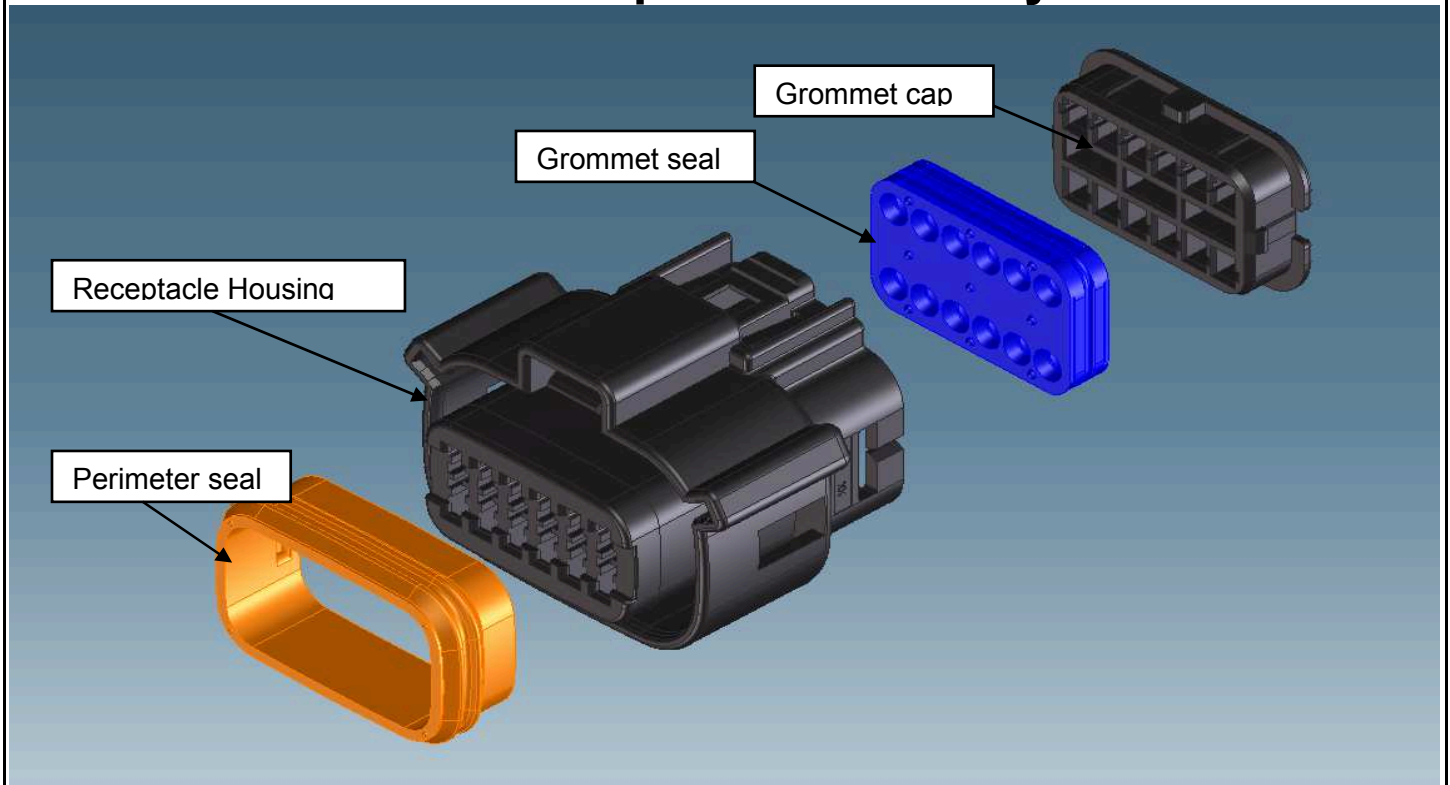
Section 2: Product Summary

A. Dual row WTB Connector system



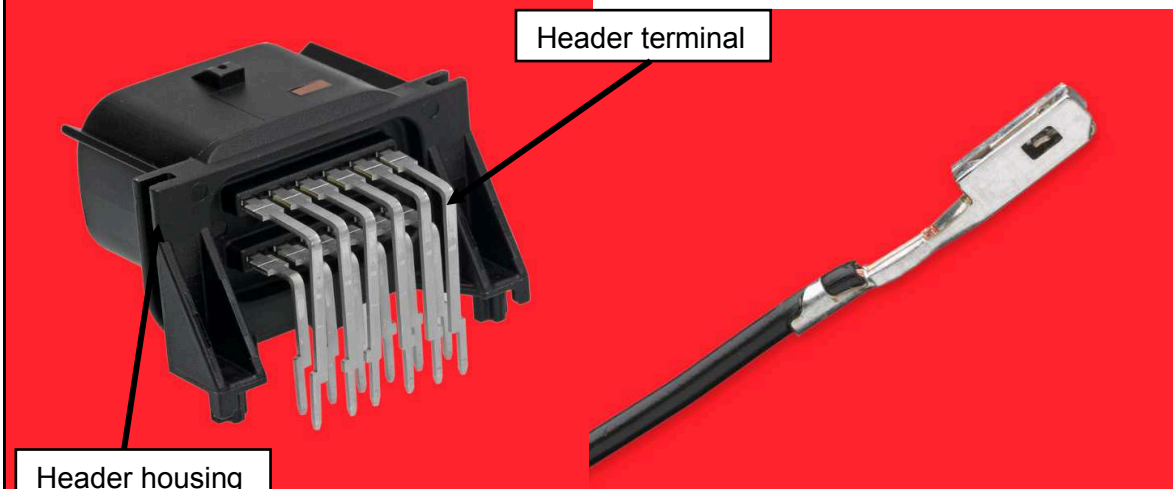
C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			4 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
<small>TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC</small>				

1. Receptacle Assembly



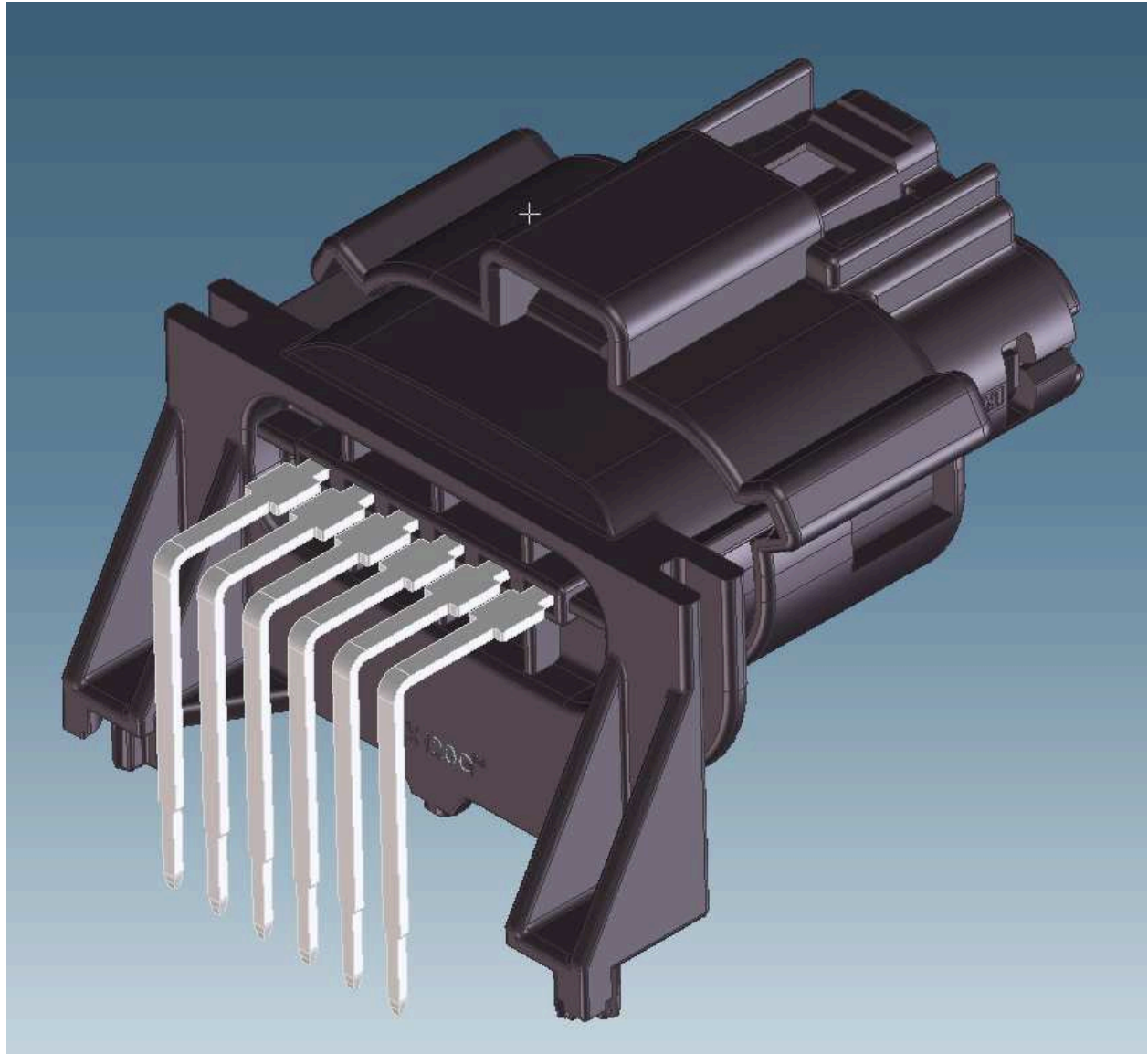
2. Header Assembly

3. Receptacle Terminal



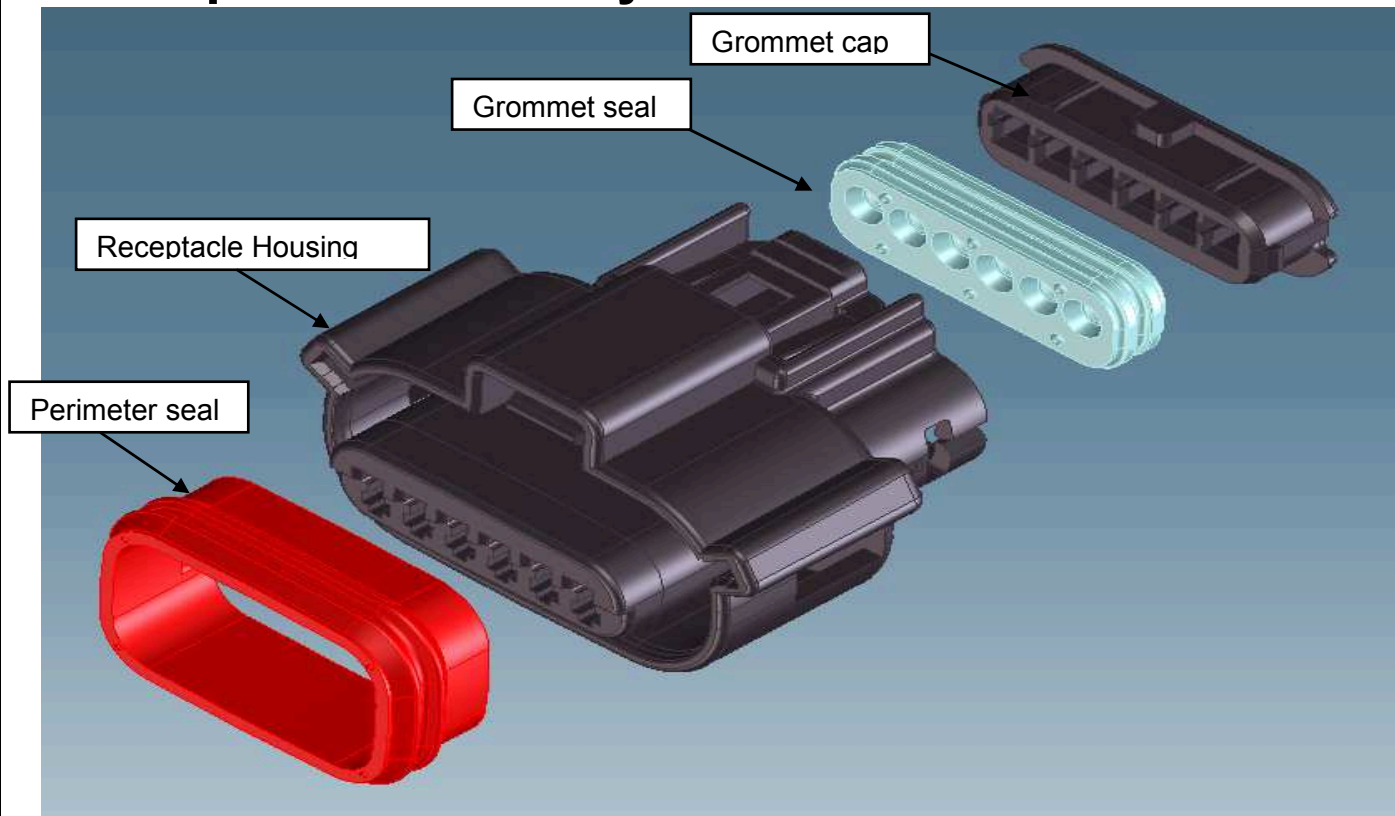
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	DATE: 2012/07/18			5 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
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B. Single row WTB Connector system

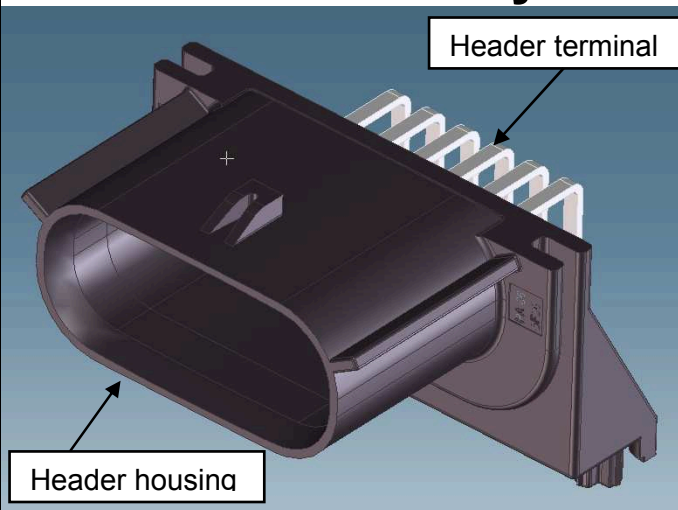


C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		6 of 50
<u>DOCUMENT NUMBER:</u> AS-36783-001		<u>CREATED / REVISED BY:</u> Ishwar G	<u>CHECKED BY:</u> Ishwar G	<u>APPROVED BY:</u> Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

1. Receptacle Assembly

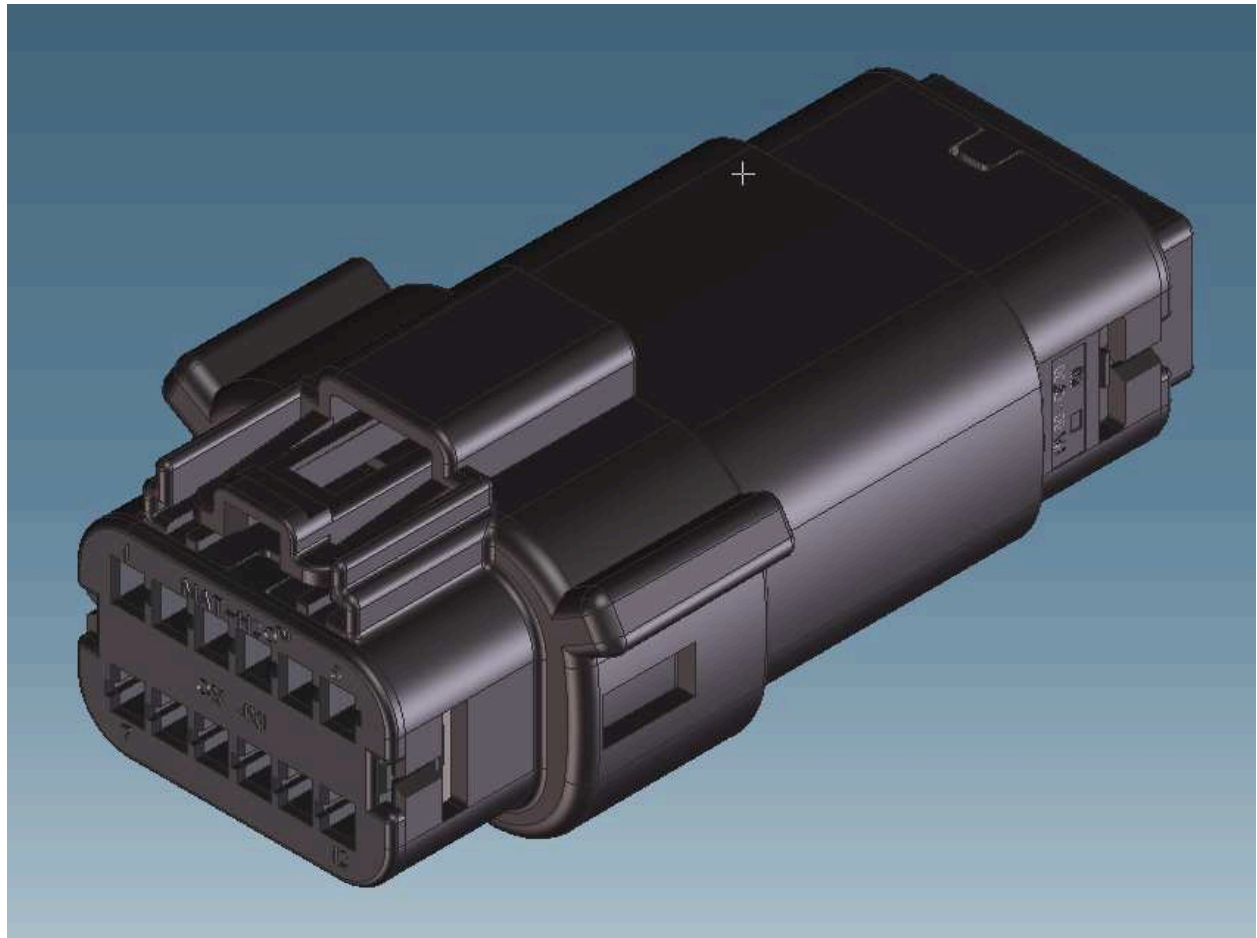


2. Header Assembly



C	EC No: I2013-0008	MX120G Application Specification		SHEET No.	
	DATE: 2012/07/18			7 of 50	
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad	
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC					

C. Dual row WTW Connector system



1. Receptacle Assembly

Grommet cap

Grommet seal

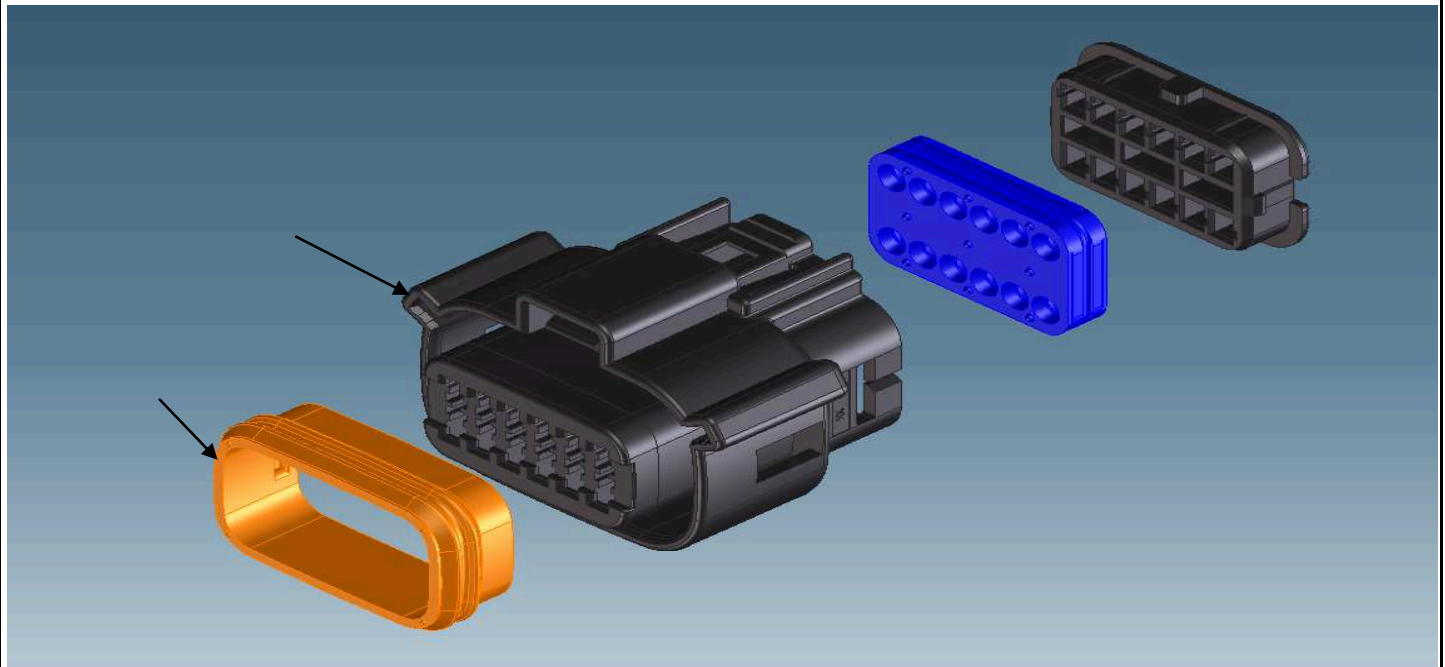
MX120G

Application Specification

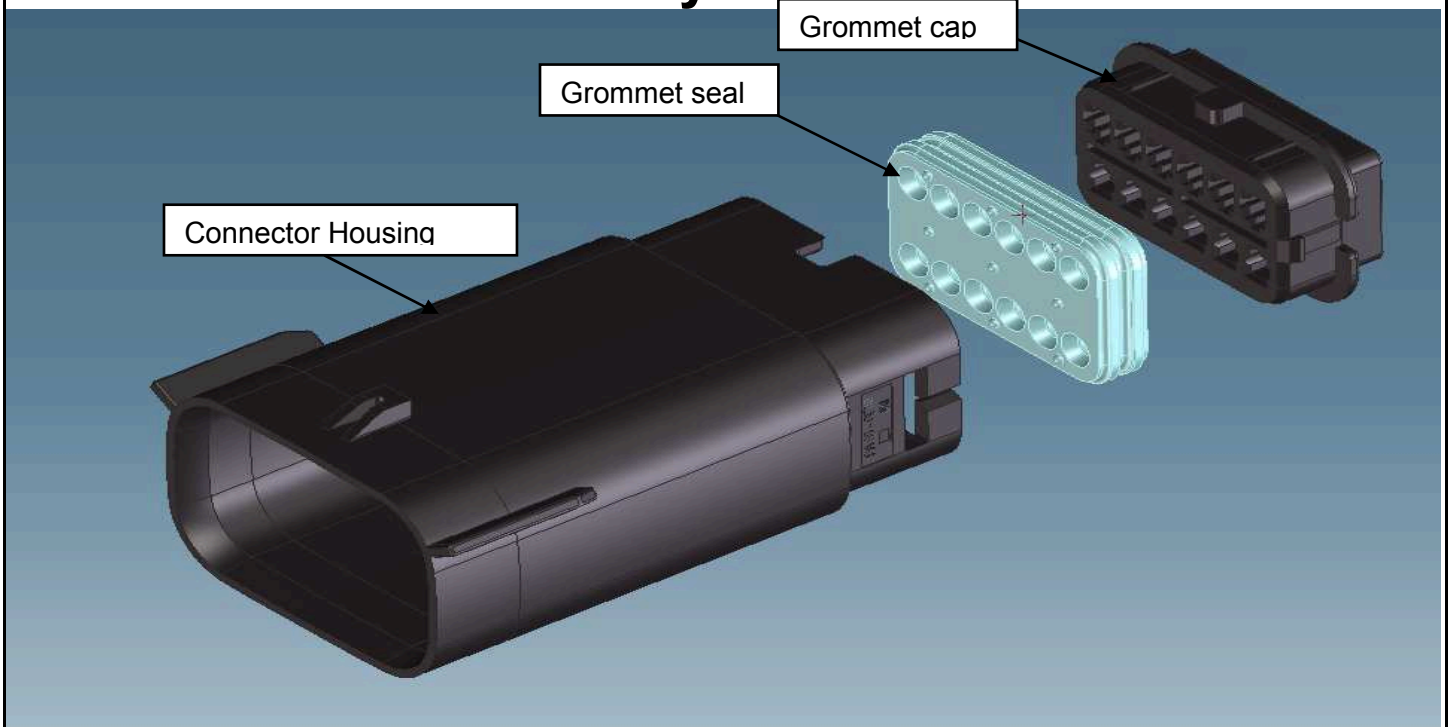
SHEET No.

8 of 50

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	DATE: 2012/07/18				8 of 50
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	AS-36783-001	Ishwar G	Ishwar G	Kprasad	
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC					

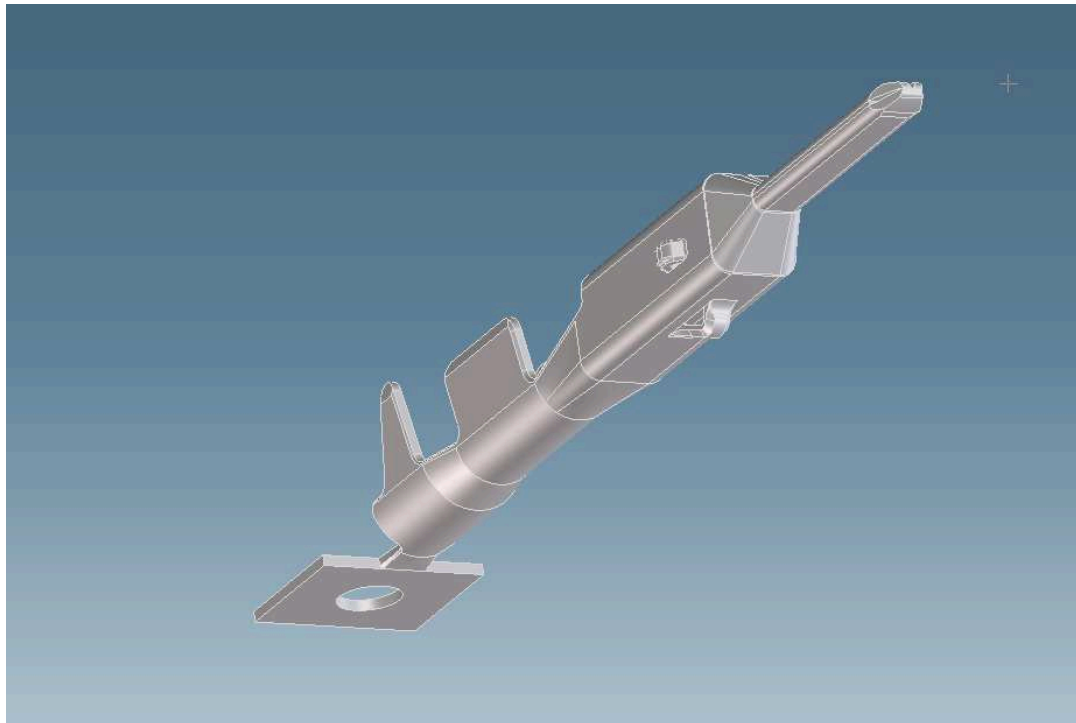
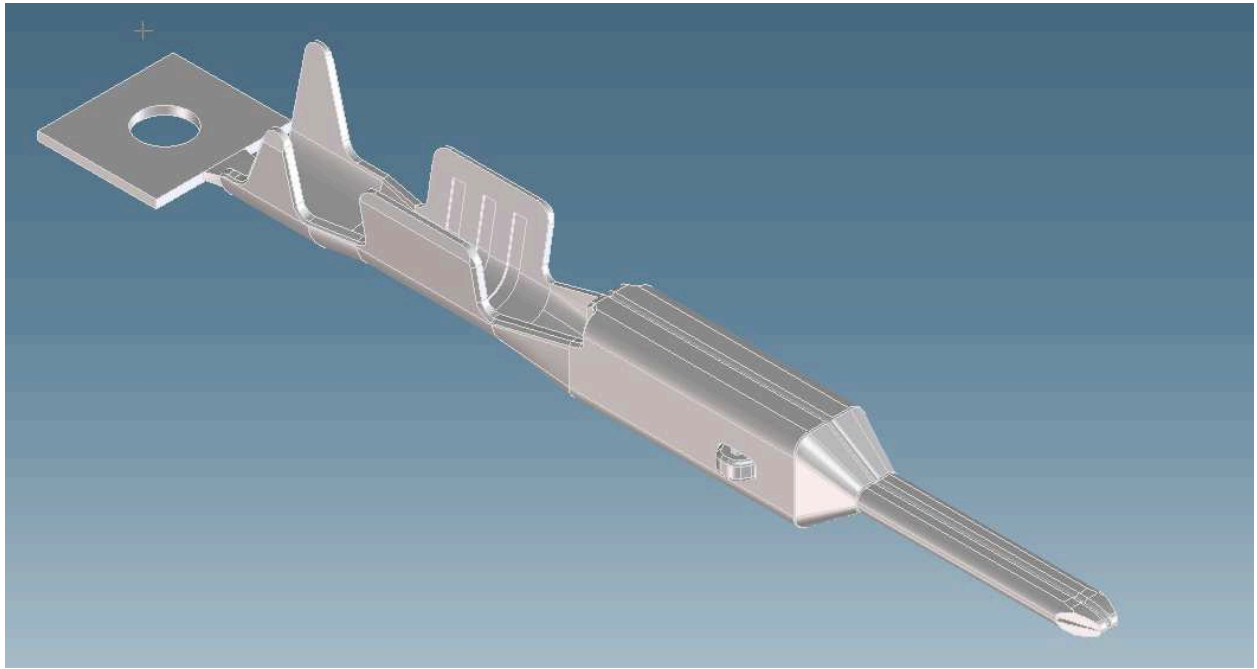


2. Connector Assembly



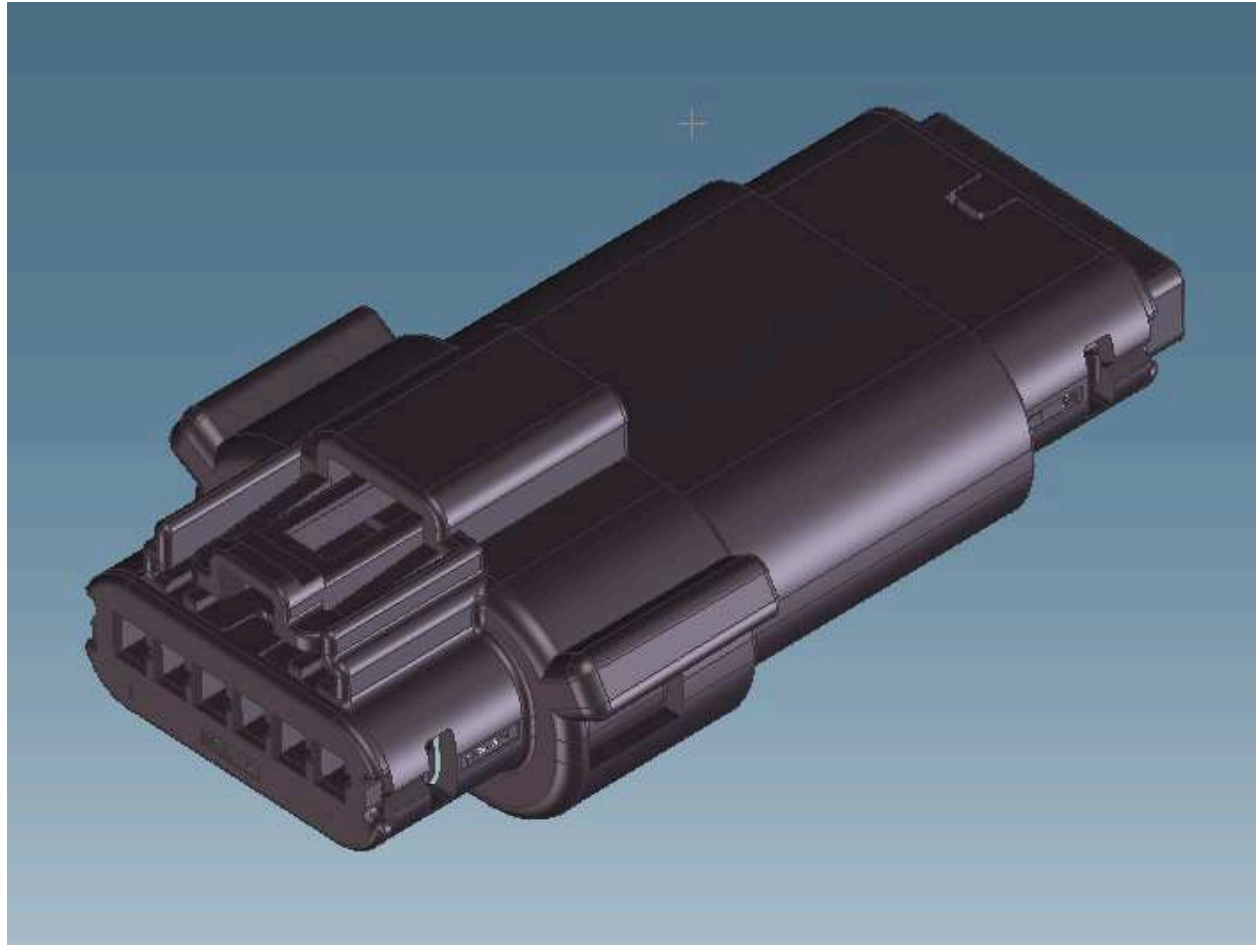
3. Connector Male terminal

C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		9 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				



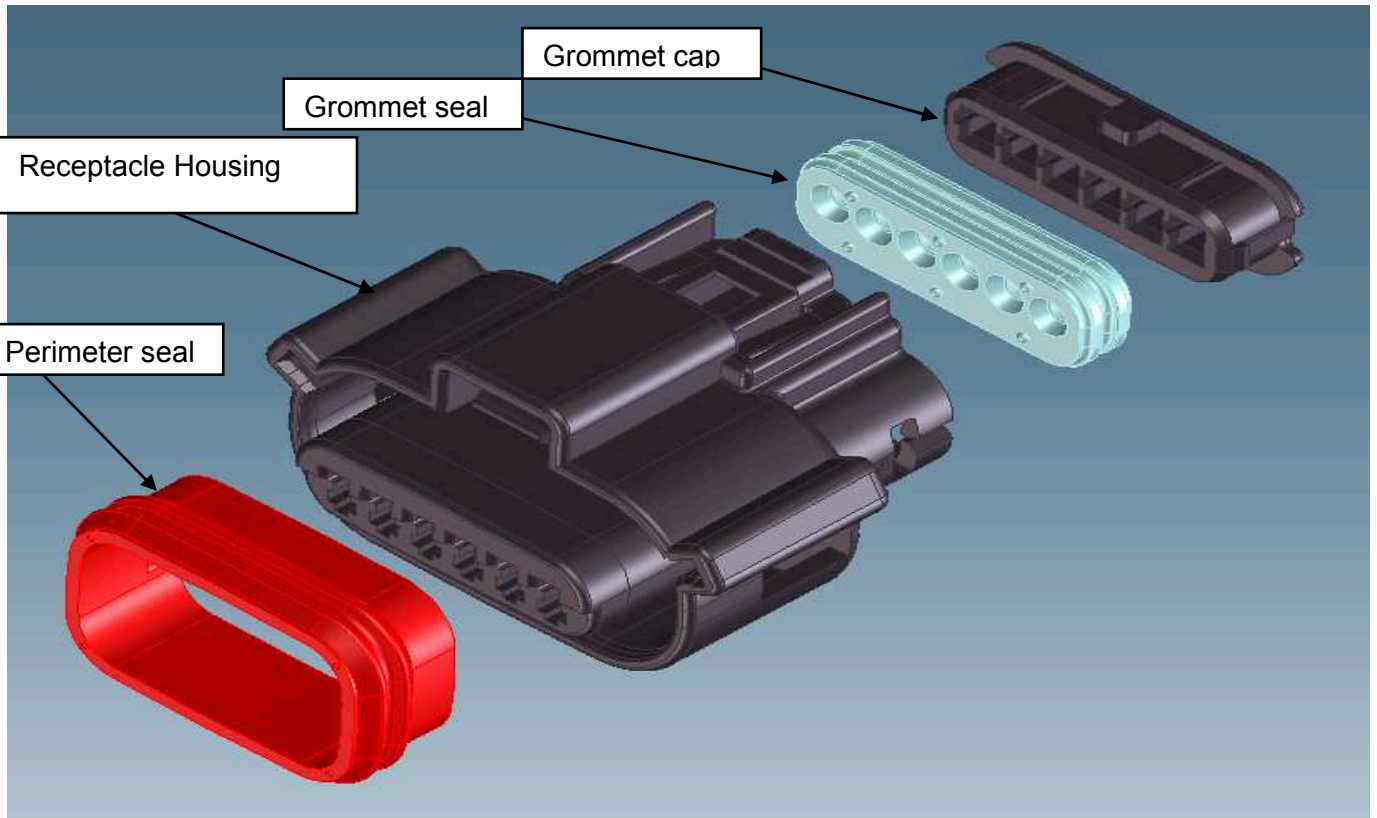
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	DATE: 2012/07/18	Application Specification		10 of 50
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AS-36783-001		Ishwar G	Ishwar G	Kprasad
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C. Single Row WTW Connector system

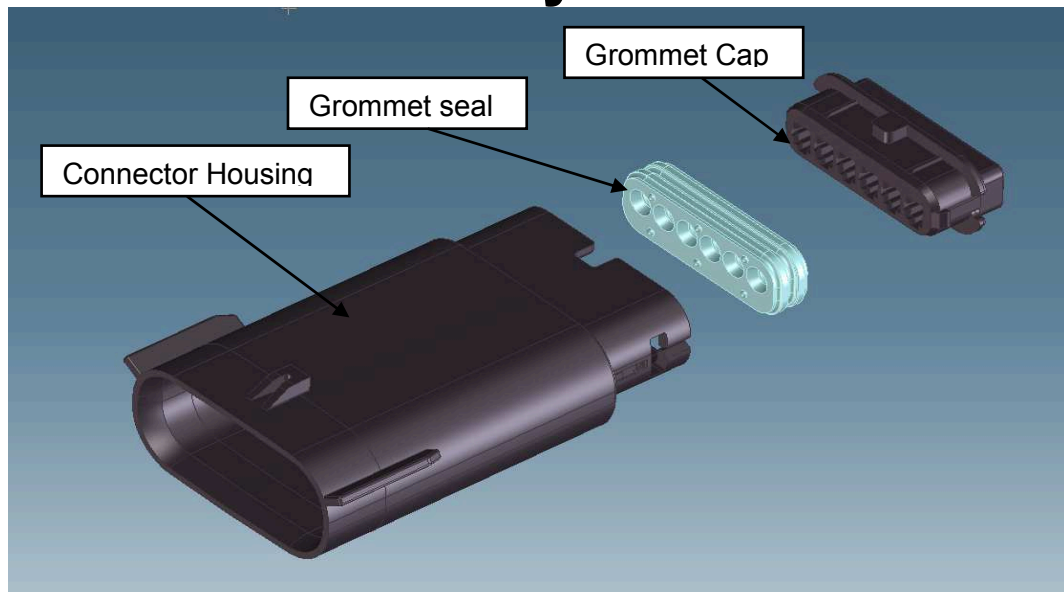


1. Receptacle Assembly

C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		11 of 50
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AS-36783-001		Ishwar G	Ishwar G	Kprasad
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2. Connector Assembly



Section 3: Crimping

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		12 of 50
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:	
AS-36783-001	Ishwar G	Ishwar G	Kprasad	
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

1.0 SCOPE

This specification details the crimping information and common practices of general crimps for MX120G Terminals per sales drawing SD-36799-001 and SD-36790-001. Please refer to the sales drawing for additional part information. The information in this document is for reference and benchmark purposes only. The user is responsible for validating crimp performance based on tooling, equipment and wire that is being used.

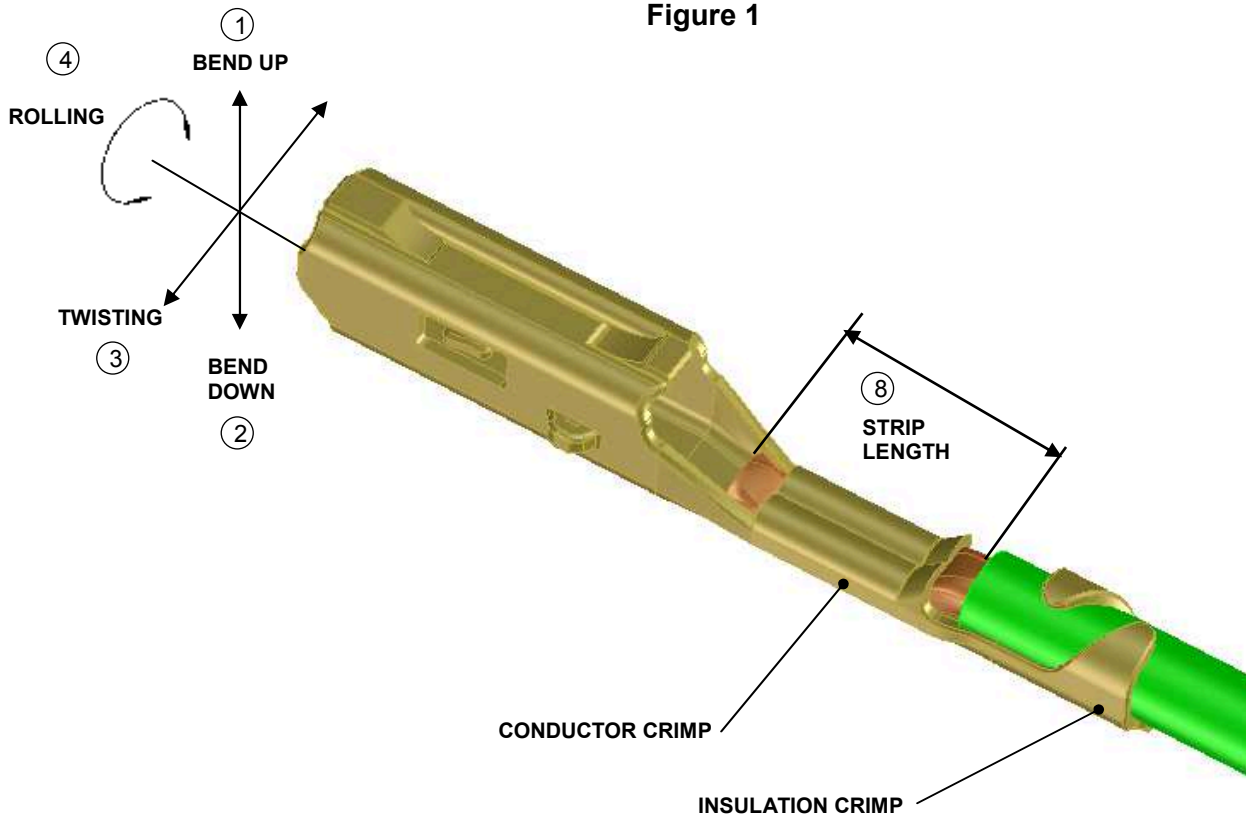
All measurements are in millimeters unless otherwise specified.

Terminals shown in this document are generic representations. They are not intended to be an image of any terminal listed in the scope.

2.0 PRODUCT DESCRIPTION

DEFINITION OF TERMS:

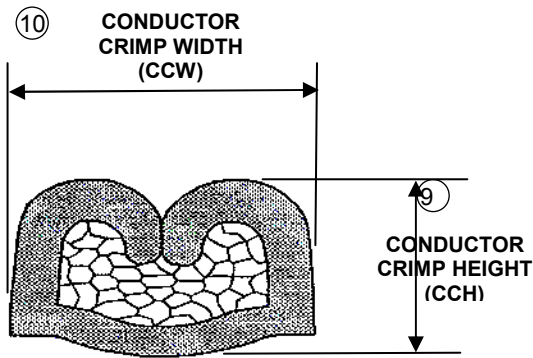
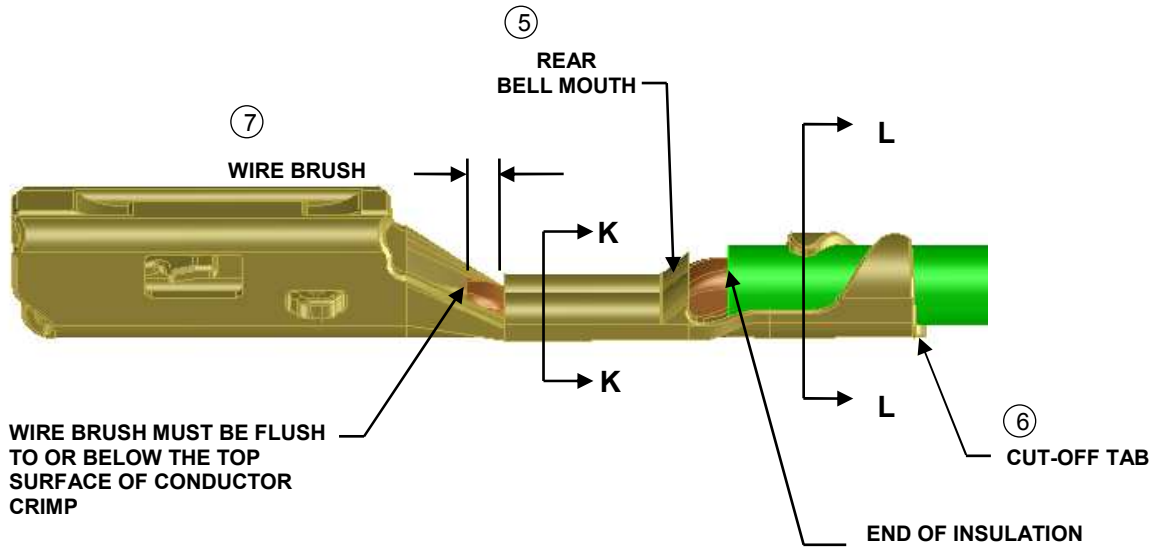
Figure 1



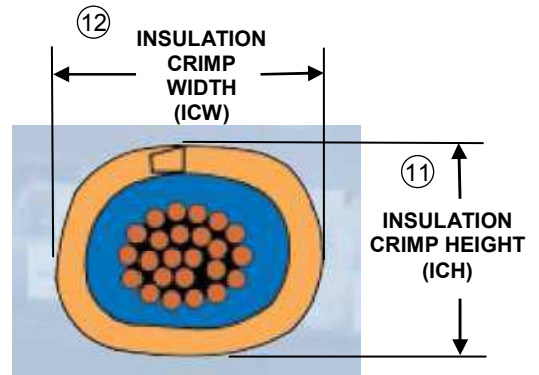
DEFINITIONS OF TERMS (CONT.):

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		13 of 50
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:	
AS-36783-001	Ishwar G	Ishwar G	Kprasad	

Figure 2



Section K-K
Crimp Shape 'B'



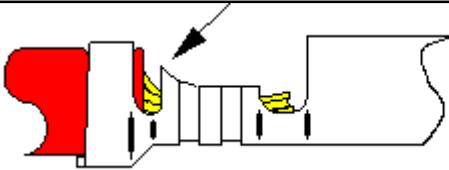
Section L-L
Crimp Shape - Overlap

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		14 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

BELLMOUTH (FLARE) ⑤

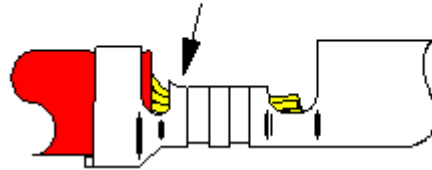
The flare that is formed on the edge of the conductor crimp acts as a funnel for the wire strands. This funnel reduces the possibility that a sharp edge on the conductor crimp will cut or nick the wire strands. See Table 3 for bell mouth specifications.

REDUCED CRIMP AREA, LOWER PULL FORCES



Bad Crimp

Bellmouth Approx. 2X Material Thickness



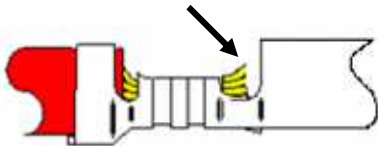
Good Crimp

Figure 3

CONDUCTOR BRUSH ⑦

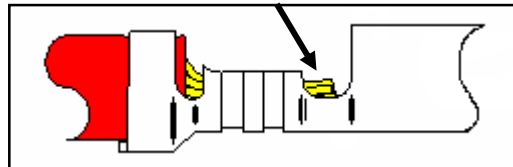
The conductor brush is made up of the wire strands that extend past the conductor crimp on the contact side of the terminal. This helps ensure that mechanical compression occurs over the full length of the conductor crimp. The conductor brush should not extend into the contact area or above the conductor crimp/transition wall height (whichever is tallest). CAUTION: Excessive conductor brush extended above the transition/crimp area can cause terminal retention issues inside plastic cavity and potentially tear/damage matte seals.

EXCESSIVE CONDUCTOR BRUSH



Bad Crimp

CONDUCTOR BRUSH FLUSH OR BELOW CRIMP



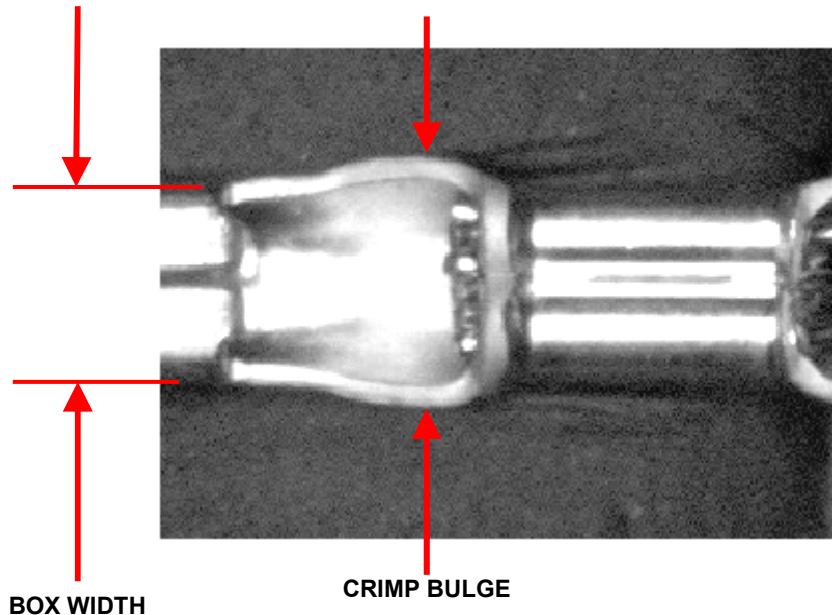
Good Crimp

Figure 4

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		15 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

CRIMP BULGE

Caution needs to be taken with the crimp tooling to prevent a bulge exceeding the overall width of the terminal.



Above picture shows crimp bulge exceed box width.

Figure 5

CONDUCTOR CRIMP HEIGHT (CCH) ⑨

The conductor crimp height is measured from the top surface of the formed crimp to the bottom most radial surface. Do not include the extrusion points in this measurement. Measuring crimp height is a quick, non-destructive way to help ensure the correct metallurgical compression of a terminal around the wire's conductor and is an excellent attribute for process control. The crimp height specification is typically set as a balance between electrical and mechanical performance over the complete range of wire stranding and coatings, and terminal materials and plating. Although it is possible to optimize a crimp height to individual wire strands and terminal plating, one crimp height specification is normally created. See Section 3.0, Table 2 for crimp height specifications.

CUT-OFF TAB LENGTH ⑥

This is the material that protrudes outside the insulation crimp after the terminal is separated from the carrier strip. A cut-off tab that is too long may expose a terminal outside the housing, it may fail electrical spacing requirements. In most situations, a tool is setup to provide a cut-off tab that shall not exceed as specified in the table 3. No burrs are allowed on the cut-off tab to avoid damage to matte seals.

C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		16 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

EXTRUSIONS (ANVIL FLASH/BURR) ⑬

These are the small flares that form on the bottom of the conductor crimp resulting from the clearance between the punch and anvil tooling. If the anvil is worn or the terminal is over-crimped, excessive extrusion would be seen.

An uneven extrusion may also be seen if the punch and anvil are misaligned, or if the feed is misadjusted or if there is insufficient or excessive terminal drag. Caution: Anvil Flash has the potential to damage matte seals and should be maintained within specifications (see Figure 6 and Table 3).

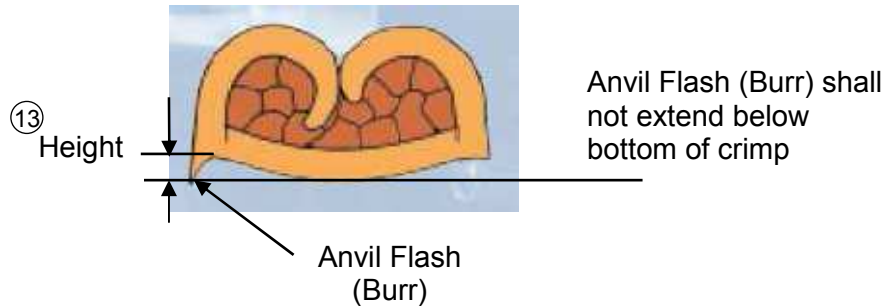


Figure 6

INSULATION CRIMP HEIGHT (ICH) ⑪

Insulation crimp heights are specified in section 3.0, Table 2. MX120G terminals are designed to accommodate multiple wire sizes. Although within the terminal range, an insulation grip may not completely surround the wire, an acceptable insulation crimp will still be provided.

The insulation crimp should be visually evaluated to confirm it provides adequate compression on the wire. It should also be evaluated by sectioning through the center of the crimped insulation grip. The grip should compress the insulation but not pierce it or otherwise damage the integrity of the insulation. The grip should not contact the conductors under any circumstance. Mechanically, the insulation grip should withstand repeated flexing of the wire as shown in Figure 7 without pulling out of the grip. The wire is flexed 5 times each in two perpendicular planes in the following sequence: b to a, a to b, b to c, c to b, then repeat.

Once the optimum setting for an insulation crimp height is determined, it is important to document it. The operator can then check it as part of the setup procedure

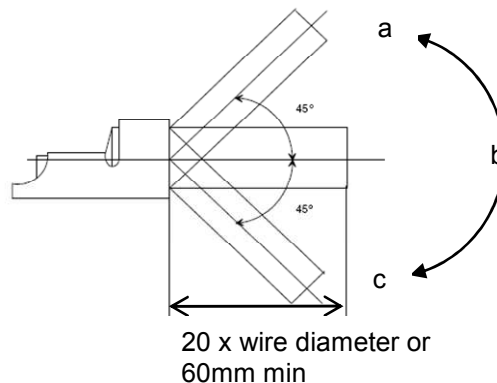


Figure 7

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		17 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

INSULATION TRANSITION ^⑰

This is the location of the insulation in relation to the transition area between the conductor and insulation crimps. Equal amounts of the conductor strands and insulation need to be visible in the transition area. The insulation position ensures that the insulation is crimped along the full length of the insulation crimp, and that no insulation material is crimped under the conductor crimp. The insulation position is set by the wire stop and strip length for bench applications. For automatic wire processing applications the insulation position is set by the in/out press adjustment. (See figure 9).

STRIP LENGTH ^⑧

The strip length is the length of the exposed conductor strands after the insulation is removed. The strip length in conjunction with the end-of-insulation position will affect the brush length extension past the conductor crimp. (See figure 1).

CRIMP GAP ^⑮

Crimp gap is the crimped offset between the ends of core wings. Maximum Gap must not exceed 0.25mm otherwise crimp does not meet standards. (See Figure 8 and Table 3).

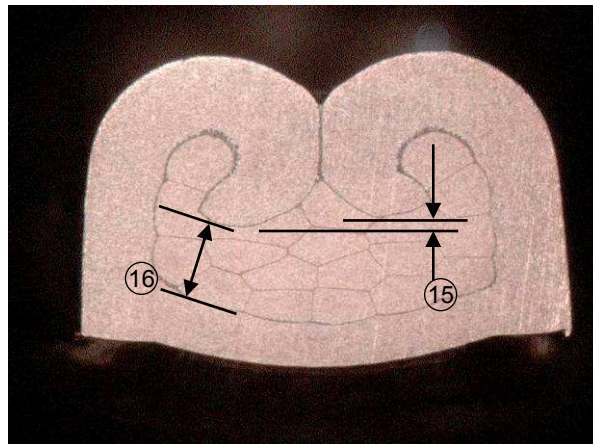


Figure 8

SPACE BETWEEN WING TIPS AND CRIMP BOTTOM ^⑯

The space between the crimp wing tips and the bottom of the crimp is designed to assure no contact between wing tips and the crimp bottom. The standard space for the MX120G terminals is 0.125mm MIN. (See Figure 8 and Table 3).

C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		18 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

GRIP INSULATION STEP^⑭

The grip insulation step is the designed offset between the conductor grip and the insulation grip. (See Figure 9 and Table 3).

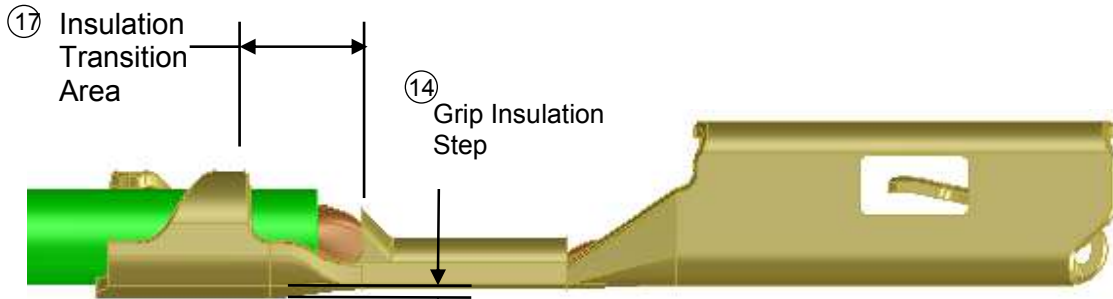


Figure 9

3.0 PRODUCT SPECIFICATIONS

Table 1

Part Numbers	Wire Size mm ²	Pull Out Force (N) MIN	Insulation Diameter Range (mm)	Strip Length (mm)
36799-0002	0.35	60	1.4 – 1.7	4.5 – 5
36790-0002	0.5	80		
36799-0001	0.75	115	1.6 – 2.2	4.5 – 5
36790-0001	1	120		

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		19 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Table 2

Part Numbers	Wire Size (Conductor Cross Section area)	Conductor Barrel		Insulation Barrel	
		CCH	CCW	ICH MAX	ICW MAX
36799-0002 36790-0002	0.35	1.00±0.05	(1.6)	1.8	1.95
	0.5	1.00±0.05	(1.6)	2.1	1.95
36799-0001 36790-0001	0.75	1.15±0.05	(1.6)	2.35	2.30
	1	1.10±0.05	(2.05)	2.55	2.30

Table 3

Specifications		
Balloon #	Feature	Requirement
1	Bend Up	1.5° MAX
2	Bend Down	1.5° MAX
3	Twisting	4° MAX
4	Rolling	6° MAX
5	Rear Bell Mouth	0.25 - 0.50
6	Cut-off tab length	0.30 MAX (no burrs)
7	Wire brush	0.2 - 1.2 Not to extend above conductor crimp/transition height
8	Wire strip length	4.5 – 5.5 (Ref)
9	Conductor Crimp Height	See Table 2
10	Conductor Crimp Width	See Table 2
11	Insulation Crimp Height	See Table 2
12	Insulation Crimp Width	See Table 2
13	Conductor Anvil Flash	See Figure 6
14	Grip Insulation Step	0.15
15	Crimp Gap	0.25 MAX
16	Space Between Wing Tip and Crimp Bottom	0.125 MIN

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		20 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad

4.0 REFERENCE DOCUMENTS

Reference documentation for general practices is located on the website per the below links:

1. Molex Quality Crimping Handbook http://www.molex.com/images/products/apptool/qual_crimp.pdf
2. Molex-Recognizing Good Crimps <http://www.molex.com>, search for Application Tooling -Reference Tech Library for Good Crimps

5.0 PROCEDURE

5.1 GENERAL MEASUREMENT AND EVALUATION REQUIREMENTS

Crimp Height Measurement (Extrusion Evaluation)

1. Complete tool set-up procedure.
2. Crimp a minimum of 5 samples.
3. Place the flat blade of the crimp micrometer (Figure 10) across the center of the dual radii of the conductor crimp. Do not take the measurement near the conductor bell mouth.
4. Rotate the micrometer dial until the point contacts the bottom most radial surface. If using a caliper, be certain not to measure the extrusion points (anvil flash) of the crimp.
5. To check for extrusion (anvil flash) use a digimatic caliper (Figure 11) to measure the crimp height. If the caliper measurement is greater than the crimp micrometer measurement the extrusion is not acceptable.

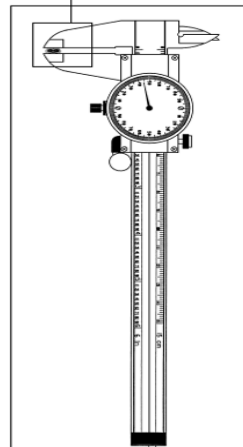
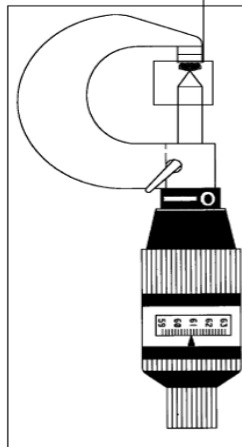
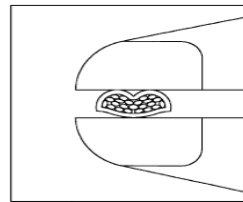
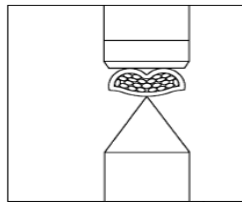


Figure 10

Figure 11

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		21 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

6.0 CRIMP TOOLING GEOMETRY

The crimp tooling information shown below is based on the tooling that Molex used to meet crimp performance and to establish recommended crimp height and widths listed table 2.

Table 4 (see Figure 12 for Geometry)

Part Numbers	Wire Application		Wire Specification	Conductor Punch			
	Grip	Metric Wire size		A	B	C	D
36799-0002 36790-0002	S	0.35 – 0.5	0.35 0.5	0.4	1.6	0.8	0.4
36799-0001 36790-0001	M	0.75 -1.00	0.75 1	0.43 0.55	1.6 2.05	0.74 0.95	0.37 0.475

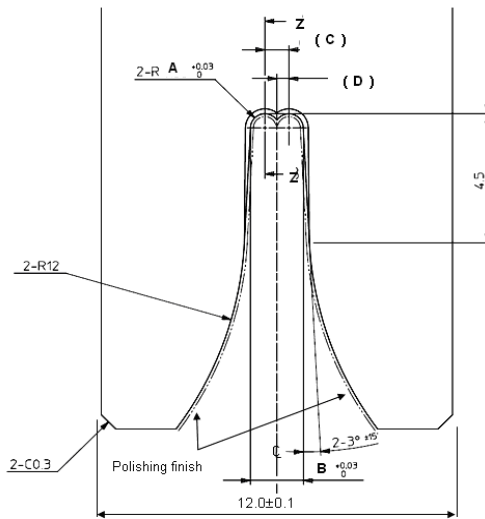


Figure 12

C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			22 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Table 5 (see Figure 13 for Geometry)

Part Numbers	Wire Application		Wire Specification	Insulation Punch					
	Grip	Metric Wire size		E	F	G	H	J	K
36799-0002 36790-0002	S	0.35-0.5	0.35	1.8	0.9	2.6	2.6	0.85	6.5
			0.5						
36799-0001 36790-0001	M	0.75-1.00	0.75	2.3	1.15	3.2	3.2	0.94	6.8
			1						

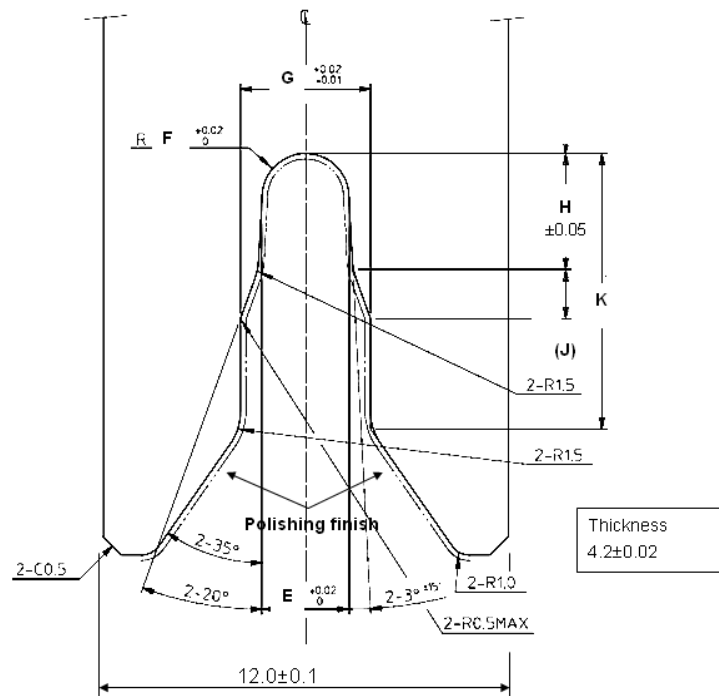
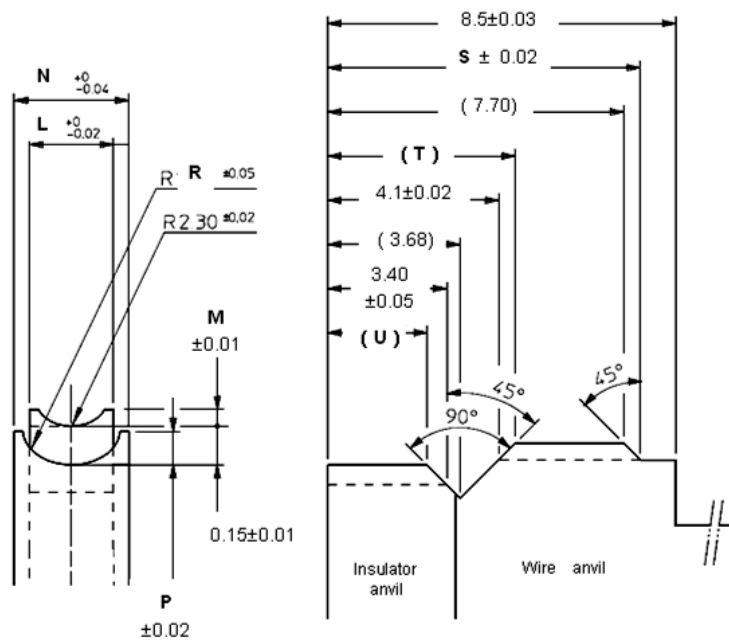


Figure 13

C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			23 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Table 6 (see Figure 14 for Geometry)

Part Numbers	Wire Application		Wire Specification	Anvils							
	Grip	Metric Wire size		L	M	N	P	R	S	T	U
36799-0002 36790-0002	S	0.35-0.5	0.35	1.6	0.08	1.8	0.22	1.2	7.78	4.18	3.18
			0.5								
36799-0001 36790-0001	M	0.75-1.00	0.75	1.6	0.08	2.3	0.34	1.4	7.78	4.18	3.06
			1	2.05	0.15	2.3	0.34	1.4	7.85	4.25	3.06



Note: Dimensions L-R must be maintained. Dimensions S, T and U are to be determined by tool supplier.

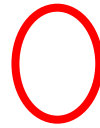
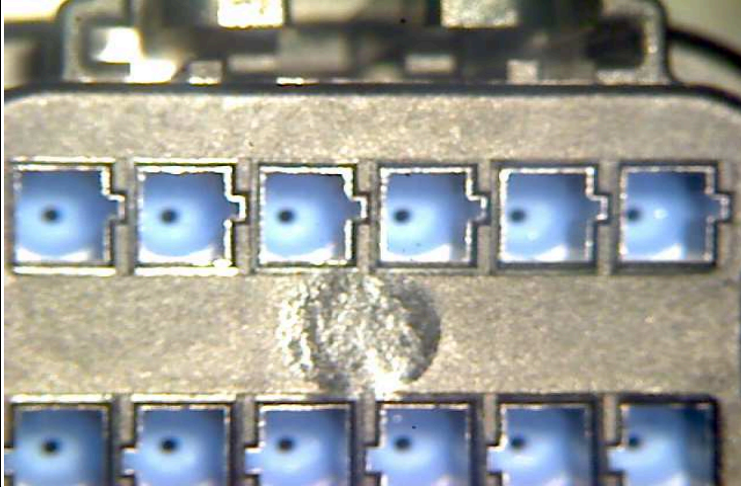
Figure 14

C	EC No: I2013-0008	MX120G Application Specification	SHEET No.
	DATE: 2012/07/18		24 of 50
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
AS-36783-001	Ishwar G	Ishwar G	Kprasad

Section 4: Receptacle Assembly

A. Female Terminal Installation

- 1) Rear view of the receptacle assembly - Please note the fool proof slot on grommet cap where terminal formed projection should align.



- 2) Place the receptacle housing on the flat surface and hold by left hand as shown below.



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		25 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

3) Hold receptacle terminal in vertical position with right hand. (Please refer point # 1 for fool proof insertion) Hold the terminal at a distance of 20 mm from insulation crimped area.



4) Insert the terminal gently into the housing as shown below.



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		26 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

5) Press the terminal into the slot till the terminal fits into its position in the housing (press till you hear "CLICK" sound)

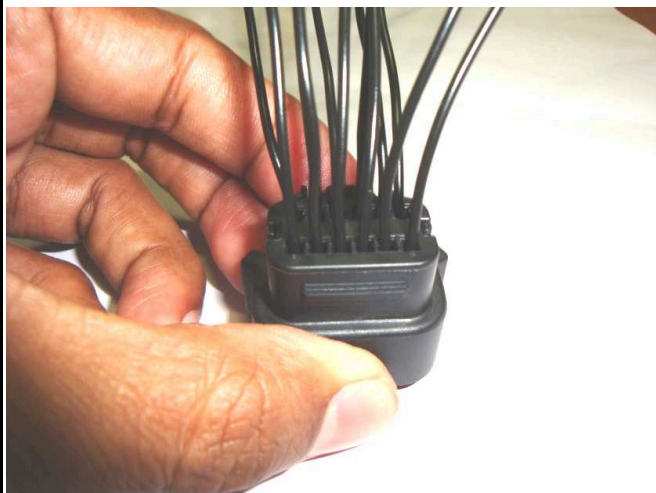


6) Insert terminals in 1st row (Ckt #'s 1 to 6) and start inserting in 2nd row like shown below for ckt #'s 7 to 12



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		27 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

7) Complete the insertion for all circuits



B. Receptacle Cavity Plug Installation

1) Hold Cavityplug in vertical position with right hand & align the foolproof projection of cavity plug into the fool proof slot as shown in point# 1 in the receptacle assembly



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		28 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

2) Insert the cavity plug gently into the housing as shown below



3) Press the cavity plug into the slot till the plug fits into its position in the receptacle housing (press till you hear "CLICK" sound)



C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			29 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
<small>TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC</small>				

- 4) Below image shows that the cavity plug insertion completion & this procedure to be followed wherever void positions are identified.

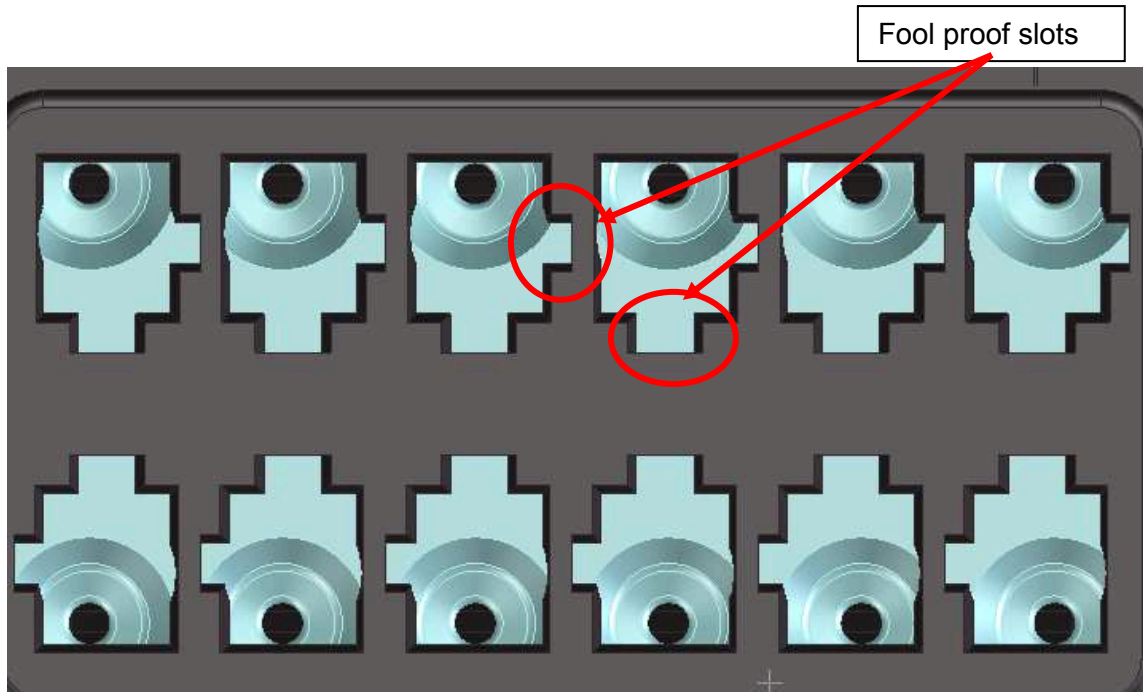


C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			30 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
<small>TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC</small>				

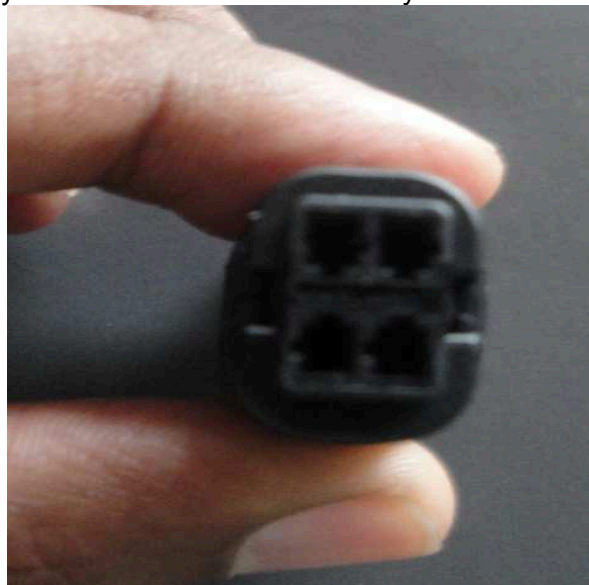
Section 5: Male Connector Assembly

A. Male Terminal Installation

1). Rear view of the male connector assembly - Please note the fool proof slots on grommet cap whereterminal formed projection should align.



2) Place the connector assembly on the flat surface and hold by left hand as shown below.



C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		31 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

- 3) Hold connector male terminal in vertical position with right hand. (Please refer point # 1 for fool proof insertion) Hold the terminal at a distance of 20 mm from insulation crimped area.



- 4) Insert the terminal gently into the housing as shown below.



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		32 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

5) Press the terminal into the slot till the terminal fits into its position in the housing (press till you hear "CLICK" sound)



6). Insert terminals in 1st row and start inserting in 2nd row as shown below



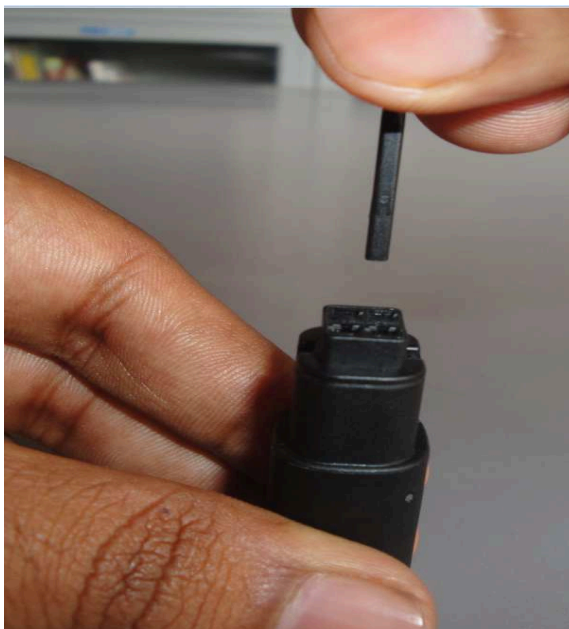
C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		33 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

7) Complete the insertion for all circuits.



B. Connector cavity Plug Installation

- 1) Hold Cavity plug in vertical position with right hand & align the foolproof projection of cavity plug into the fool proof slot as shown in point# 1 in the connector assembly



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		34 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

2). Insert the cavity plug gently into the housing as shown below



3) Press the cavity plug into the slot till the plug fits into its position in the receptacle housing (press till you hear "CLICK" sound)



C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			35 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
<small>TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC</small>				

- 4) Below image shows that the cavity plug insertion completion & this procedure to be followed wherever void positions are identified.



C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			36 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
<small>TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC</small>				

Section 6: WTB Connector mating System

- 1) Hold the header (mounted in control unit) and receptacle as shown in Fig.1. Align connector keying features, from receptacle connector to header, Begin mating process along the same axis by sliding the two connectors together.

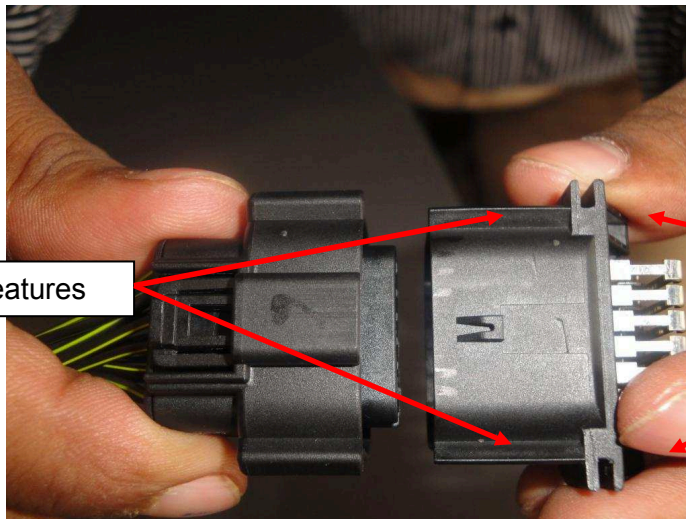


Fig 1

- 2) Press the receptacle to the header till the latch locks (observe for “CLICK” sound)

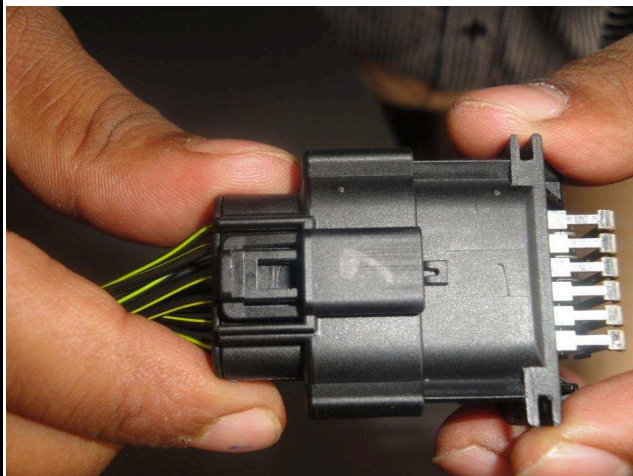
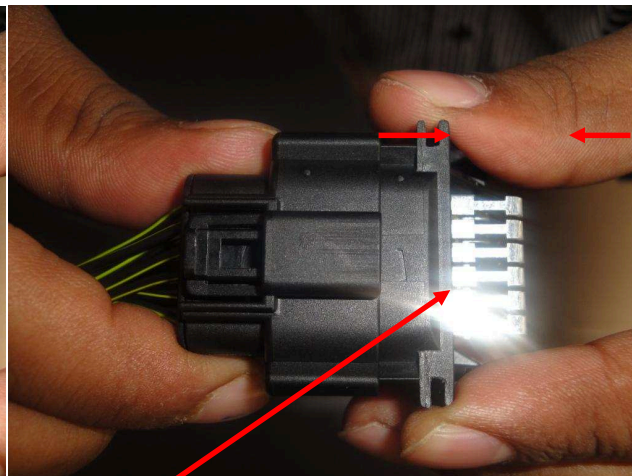


Fig 2



Latch

Fig 3

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		37 of 50
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:	
AS-36783-001	Ishwar G	Ishwar G	Kprasad	
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Section 7: WTW Connector mating System

- 1) Hold the male connector assembly and receptacle assembly as shown in Fig.1. Align connector system keying features and begin mating process along the same axis by sliding the two connectors together.

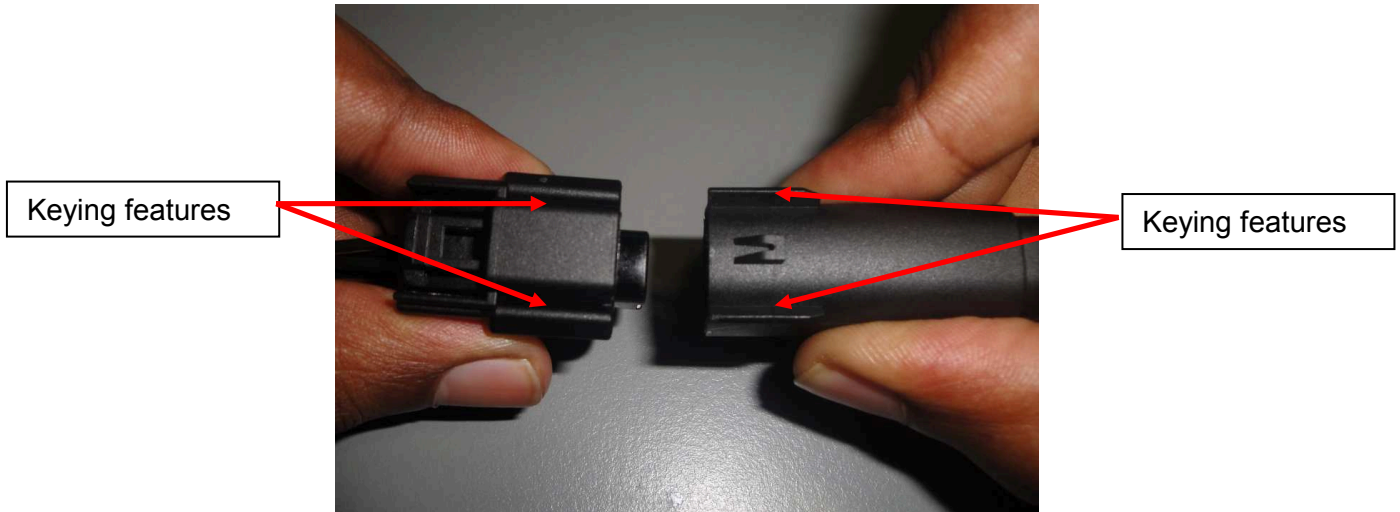


Fig 1

- 2) Press the receptacle to the header till the latch locks (observe for "CLICK" sound)

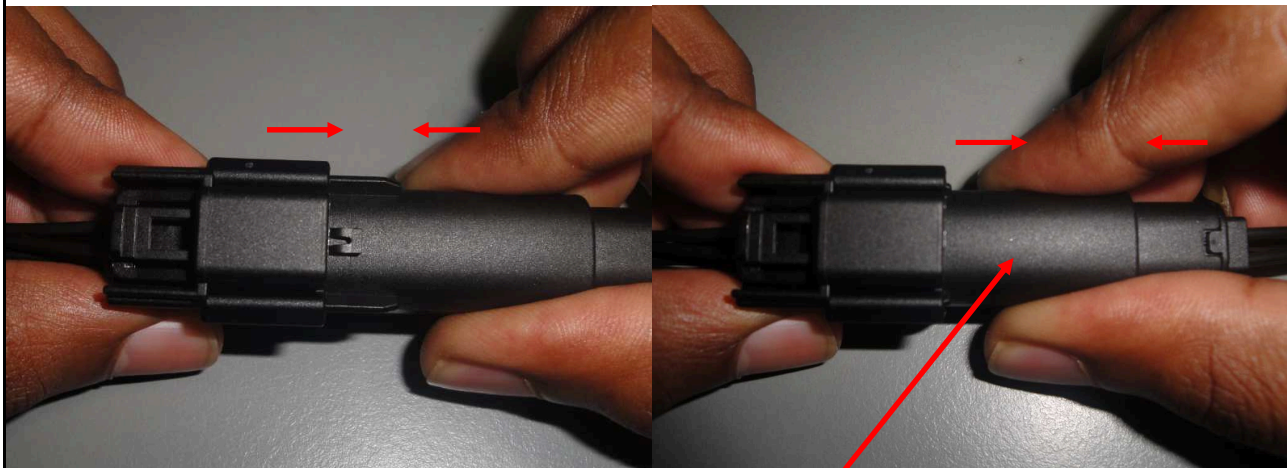


Fig 2

Latch

Fig 3

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		38 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Section 8: Service instructions

A. WTB system Un-mate procedure

1) Hold the connectors as shown in Fig 1. (header will be in control unit)

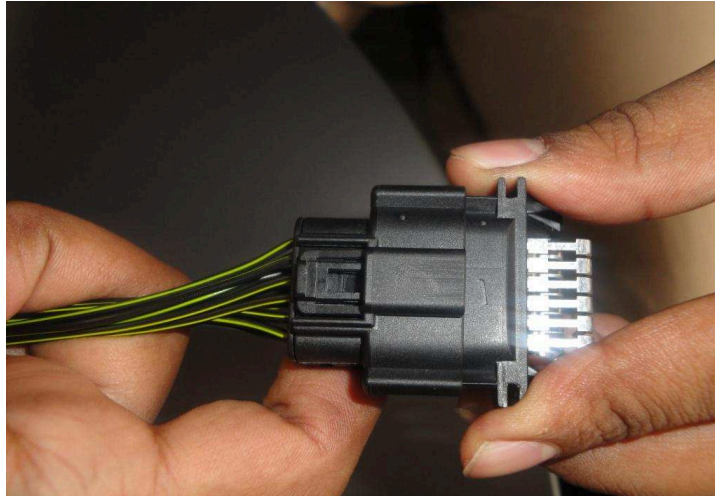


FIG. 1

2) Press the latch lever to disengage the latch and pull the receptacle as shown in Fig.2 & 3

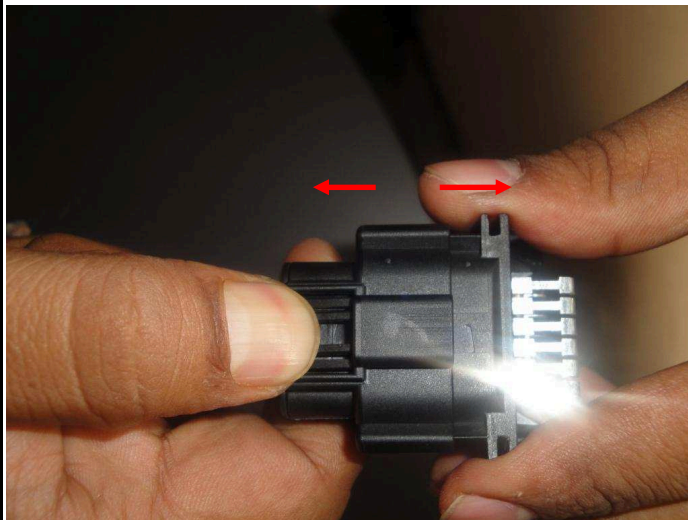


FIG. 2

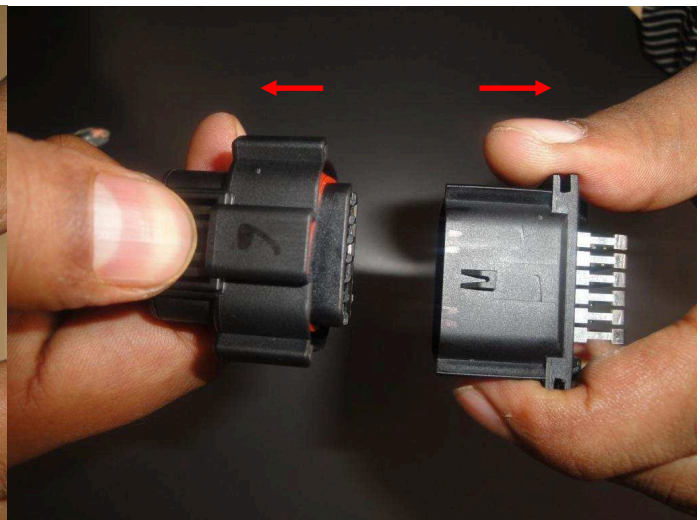


FIG. 3

C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		39 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

B.WTW system Un-mate procedure

- 1) Hold the connectors as shown in Fig 4.

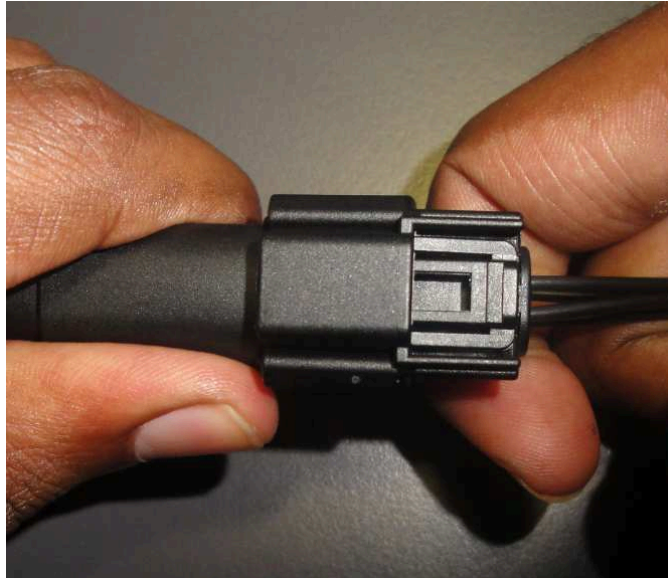


FIG. 4

- 2) Press the latch lever to disengage the latch and pull the receptacle assembly as shown in Fig.5&6

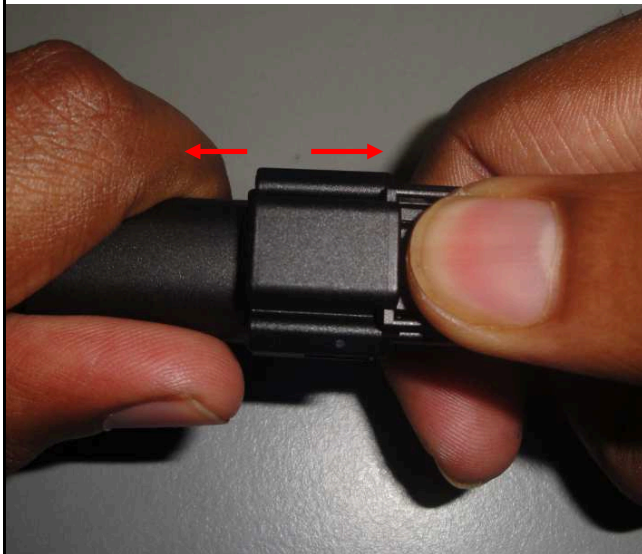


FIG. 5

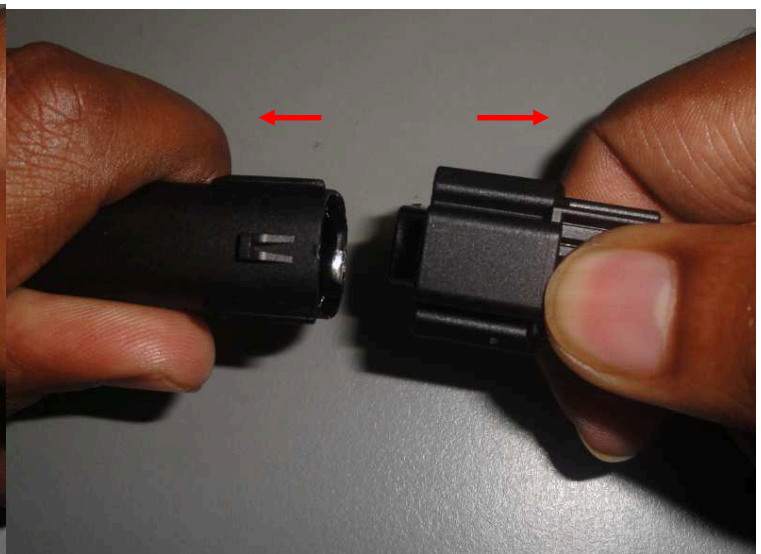


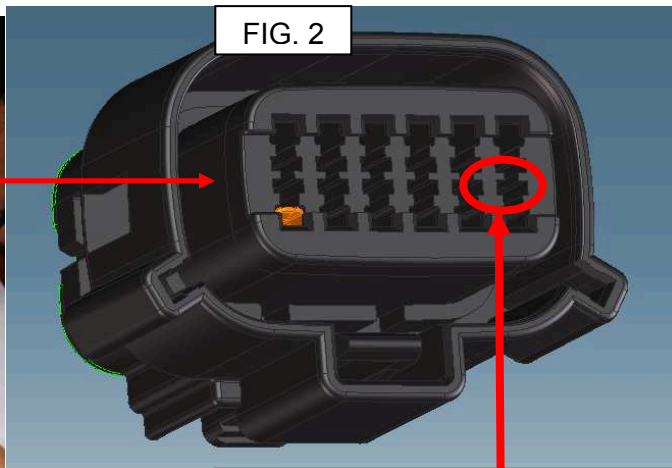
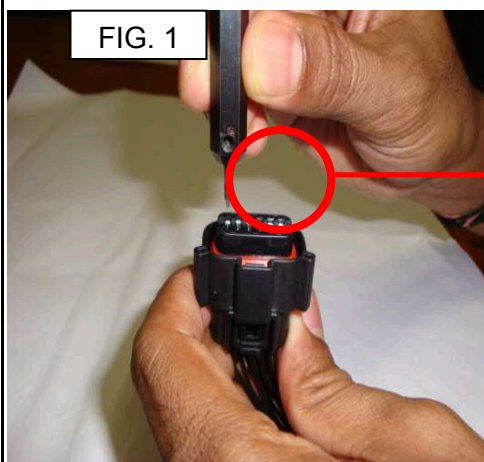
FIG. 6

C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		40 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

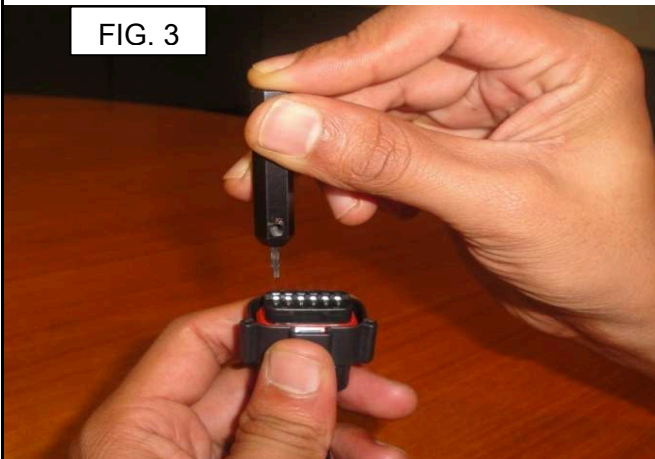
C. Female Terminal removal

- Using the extractor tool # 368380001, insert the tip into the terminal service hole adjacent to the terminal to be serviced. Refer figures 1 to 4 below

Do not apply any lateral force, this may damage the tool, or the locking finger!
Do not use excessive force, excessive force can damage the lock finger!
Do not insert the service tool at an angle, this may cause damage to the terminal!



Extractor tool to be inserted in this profile



C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		41 of 50
DOCUMENT NUMBER: AS-36783-001		CREATED / REVISED BY: Ishwar G	CHECKED BY: Ishwar G	APPROVED BY: Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

- 2) Push extractor tool straight down gently and apply pressure to release locking finger. This motion will release the locking finger. Pull the terminal gently by supporting the finger at the bottom face of receptacle as shown in fig 5.



- 3) Hold the finger at that position & pull gently until the box profile of the terminal protrudes from connector bottom face.



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		42 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

- 4) Post which terminal shall be pulled as shown in below figure7.This procedure is applicable for terminals in row 2 (2nd row from latch)



- 5) Rotate connector assembly by 180 degree to service the terminals in row 1. Above procedure (steps 1 to 4) to be followed.(Refer below figures 8 to 12)



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		43 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				



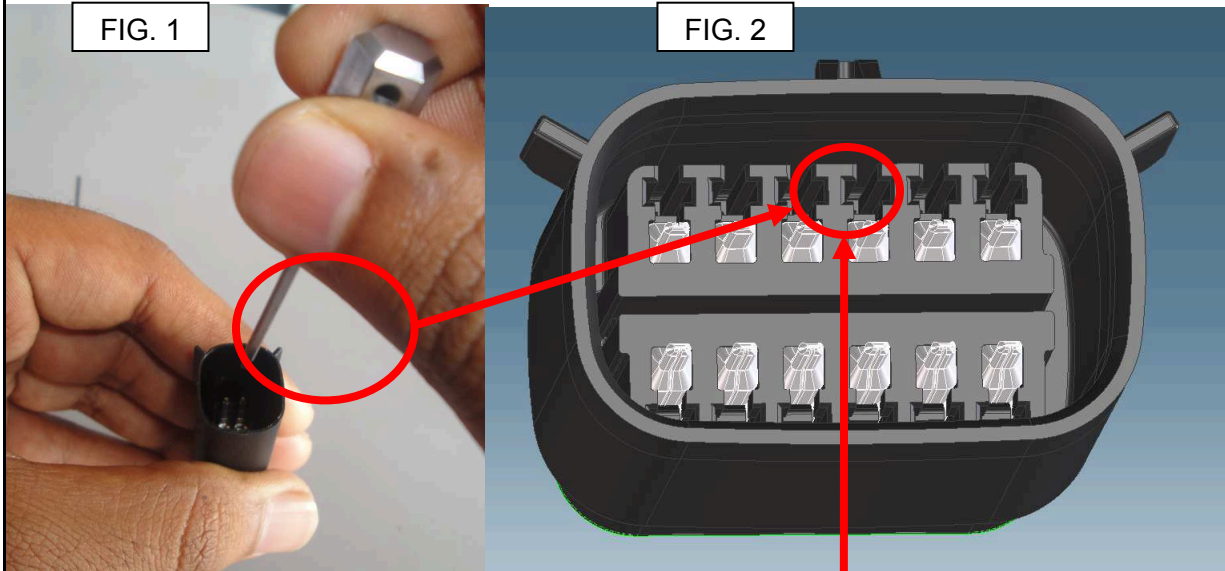
C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		44 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				



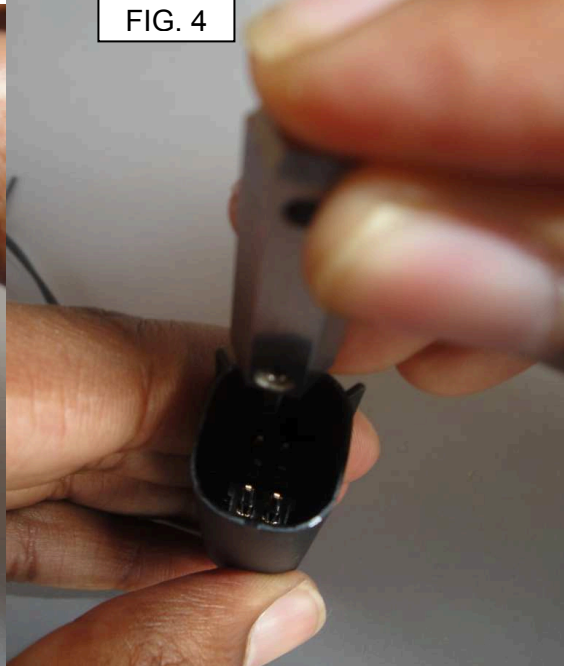
C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		45 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

D. Male Terminal removal

- Using the extractor tool # 368380002, insert the tip into the terminal service hole adjacent to the terminal to be serviced. Refer figures 1 to 4 below



Extractor tool to be inserted in this profile



C	EC No: I2013-0008	MX120G Application Specification		SHEET No.
	DATE: 2012/07/18			46 of 50
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:	
AS-36783-001	Ishwar G	Ishwar G	Kprasad	
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

- 2) Push extractor tool straight down gently and apply pressure to release locking finger. This motion will release the locking finger. Pull the terminal gently by supporting the finger at the bottom face of connector as shown in fig 5.



- 3) Hold the finger at that position & pull gently until the box profile of the terminal protrudes from connector bottom face.



C	EC No: I2013-0008	MX120G		SHEET No.
	DATE: 2012/07/18	Application Specification		47 of 50
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

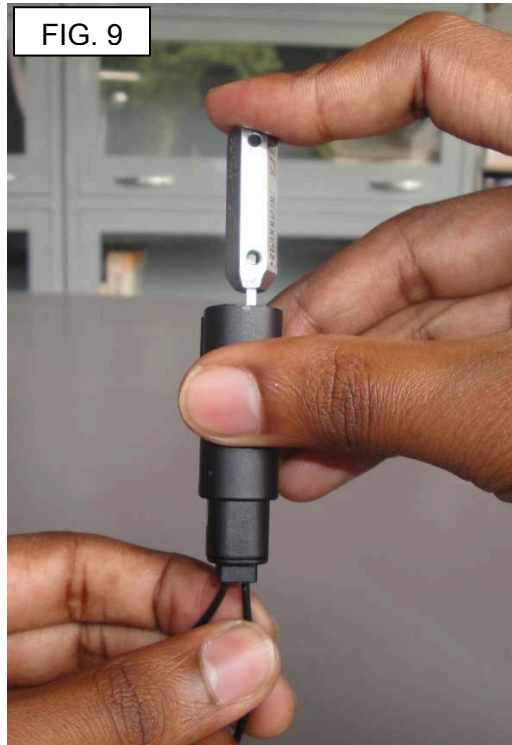
- 4) Post which terminal shall be pulled as shown in below figure 7. This procedure is applicable for terminals in row 2 (2nd row from latch)



- 5) Rotate connector assembly by 180 degree to service the terminals in row 1. Above procedure (steps 1 to 4) to be followed.(Refer below figures 8 to 10)



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		48 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				



C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		49 of 50
<u>DOCUMENT NUMBER:</u>		<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
AS-36783-001		Ishwar G	Ishwar G	Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				

Section9: Packaging

P
R
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Y



CELL PACK FOR RECEPTACLE AND MALE CONNECTOR ASSEMBLY



CELL PACK FOR HEADER ASSEMBLY



REEL PACK FOR MALE AND FEMALE TERMINALS

BULK PACK FOR CAVITY PLUGS

C	EC No: I2013-0008	MX120G		<u>SHEET No.</u>
	DATE: 2012/07/18	Application Specification		50 of 50
<u>DOCUMENT NUMBER:</u> AS-36783-001		<u>CREATED / REVISED BY:</u> Ishwar G	<u>CHECKED BY:</u> Ishwar G	<u>APPROVED BY:</u> Kprasad
TEMPLATE FILENAME: CRIMP_SPEC[SIZE_A](V.1).DOC				