



# APPLICATION SPECIFICATION

## MX150 TWIST LOCK SYSTEM

**1.0 SCOPE** THIS PROCEDURE APPLIES TO ALL PART NUMBERS IN THE 34840 SERIES

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## **2.0 PRODUCT DESCRIPTION**

This Product Specification covers the 3.50 mm (0.138 inch) centerline (pitch) dual row sealed. terminated with 0.5mm to 1.5mm AWG wire. Designed to mate with 33472 receptacle series terminated with series 33012 receptacle terminals, and 33000 blade terminals.



**NOTES:**

**3.0 REFERENCE DOCUMENTS**, SD-34840-001, AS-33742-100, PS-34840-001, PK-31301-615, PS-33472-100

### Mating surface requirements

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<b>DOCUMENT NUMBER:</b> <b>AS-34840-001</b>		<b>CREATED / REVISED BY:</b> <b>Chris Taylor</b>	<b>CHECKED BY:</b> <b>Vijy Koshy</b>	<b>APPROVED BY:</b> <b>Scott Reynolds</b>



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## 4.0 PROCEDURE

### A. Mounting the twist lock to the bulkhead

Note and align connector with keyway features. Mate connector straight to interface, not at an angle. Hold connector firmly in place against twist lock bulkhead. Once key features are aligned, twist in a clockwise direction to fully lock the header into place indicated by an audible “click”. Once seated this interface is not serviceable, and designed for one mate.

Step 1



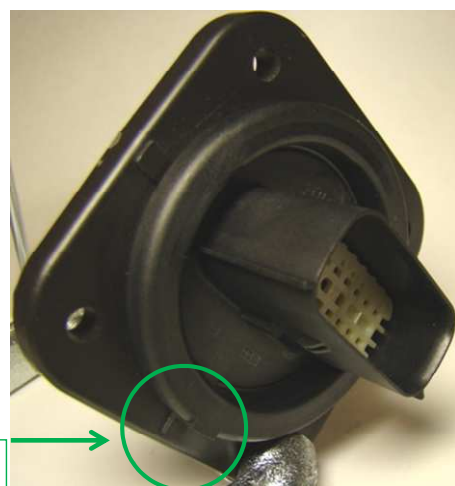
Step 2



Step 3



Step 4



Indicates a locked position

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## : Connector Assembly

B. "As Shipped" connector position

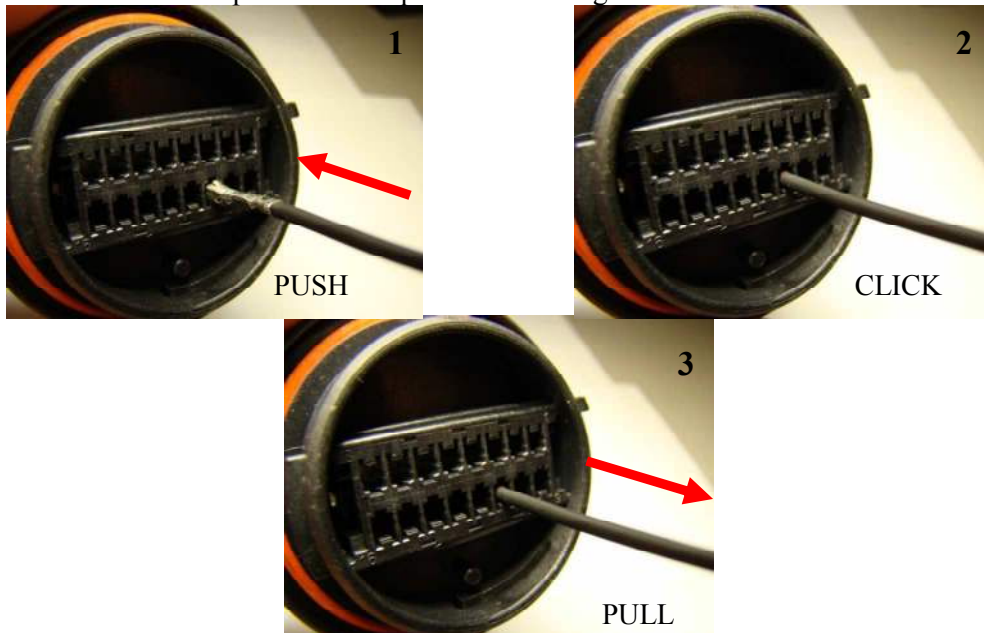
TPA shown in "as shipped" condition. The TPA should remain in the pre-lock position until all circuits are loaded. If during shipping the TPA becomes seated, follow the service instructions to move the TPA back to pre-lock prior to installing terminals.



The TPA should never be removed from the connector!

C. Terminal Installation:

With TPA still in pre-lock position, orient terminal to rear of connector. Grip the wire no less than 1.25 inches from the terminal insulation crimp and insert through appropriate circuit opening. If resistance is encountered, retract the terminal and adjust the angle of insertion. Continue inserting the terminal until it stops and locks up on the lock finger with an audible click.



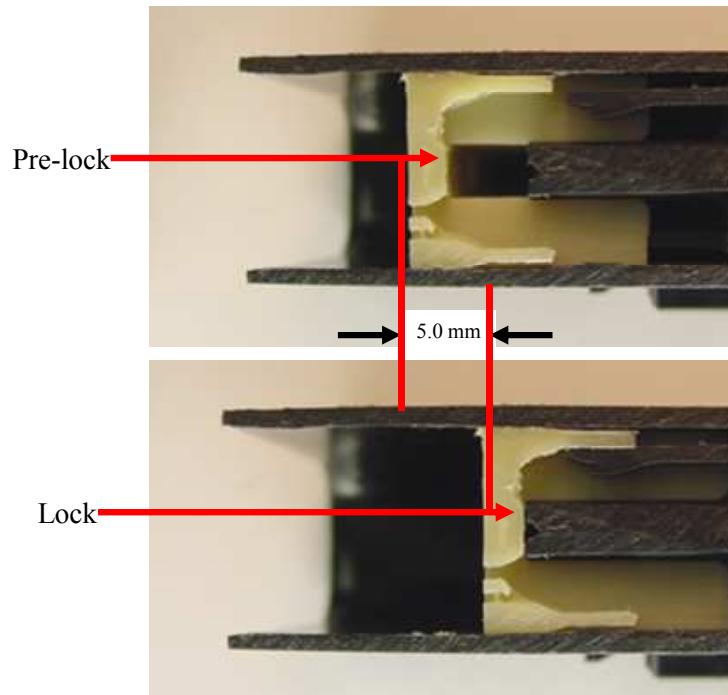
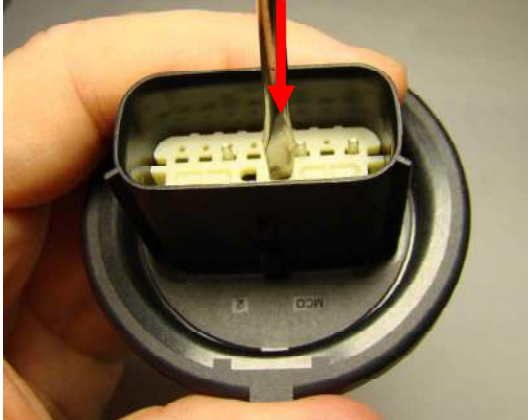
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## D. Seating the TPA

With the Receptacle terminals fully installed, the TPA can be seated into its final lock position by applying an even force to the TPA surface until it comes to a stop, with an audible click. **The TPA should never be fully removed !**



Cross section of TPA in pre/ lock

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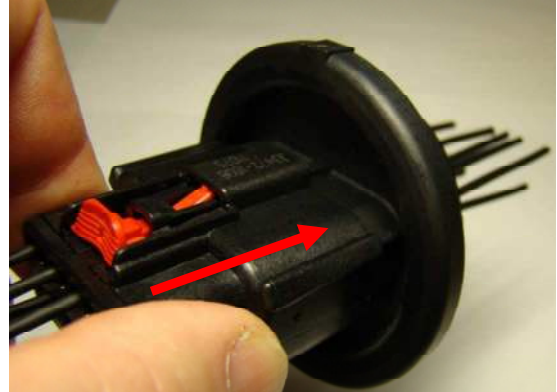


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## E. Connector Mating

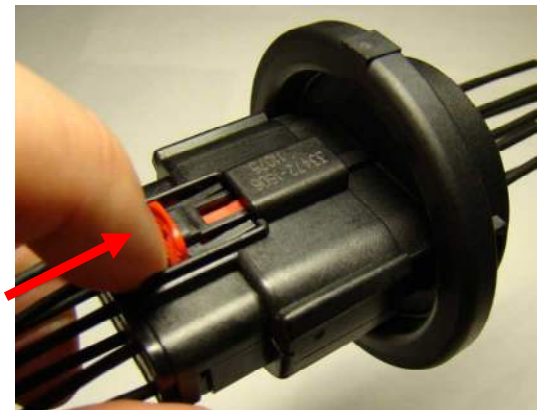
Note and align connector keying features, from connector to header.

Begin mating procedure by sliding the connector and header together, press firmly until you hear an audible click



### E. Connector Mating (CPA option shown)

Once together the final step will be locking the CPA. Simply press the center of the CPA, until you see/feel positive engagement.



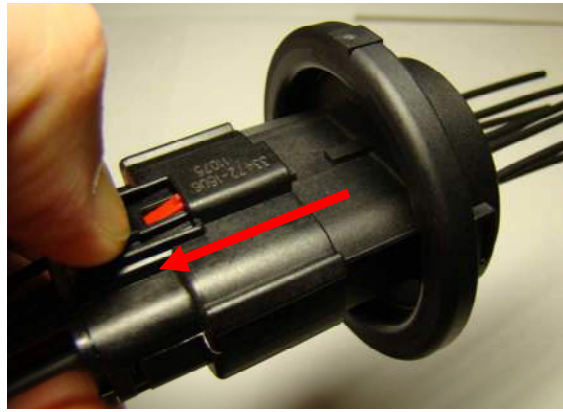
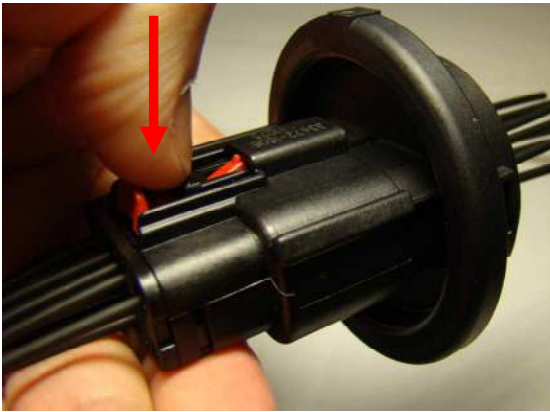
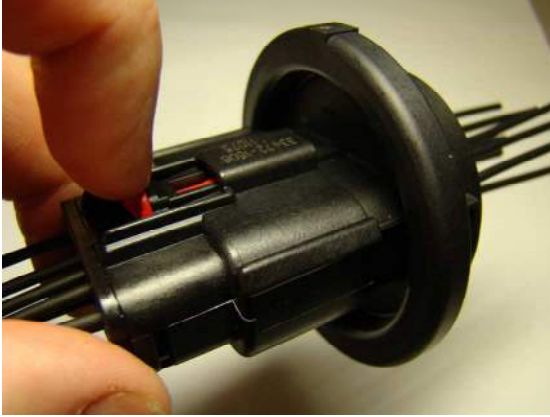
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## F. Un-mate procedure (servicing)

To un-mate the connectors, pull back on the CPA(step1). Push connector together to unload the latch system. Then depress the latch with your thumb, Continue to depress the latch, and gently pull apart connector assemblies(step2).



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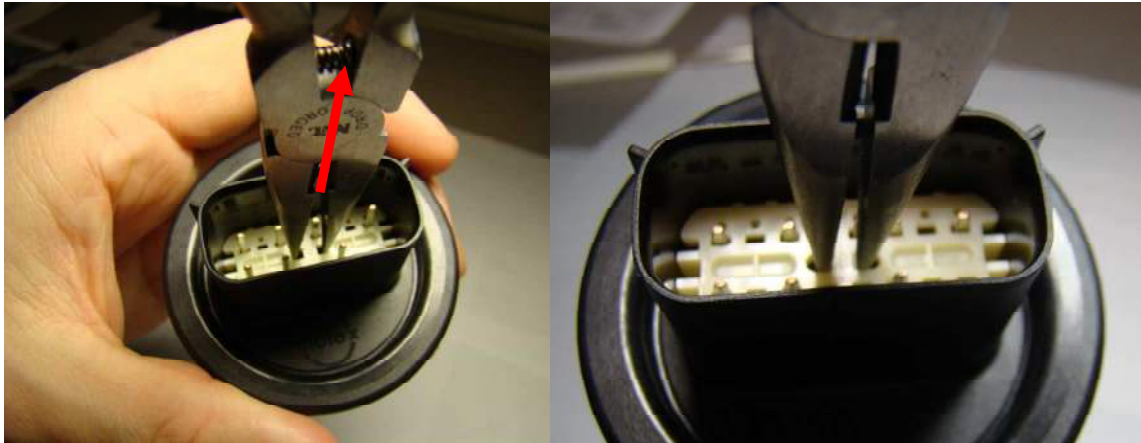
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## G. TPA servicing

Step 1: Insert a small pair of pliers into the designated pry point

Step 2: Gently pull out on the TPA until it reaches pre-lock position (see sheet 4)

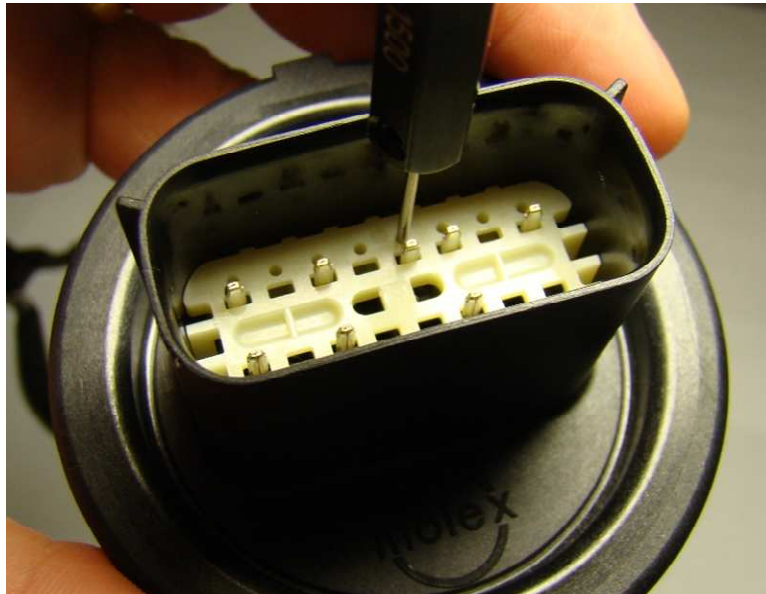
**The TPA should never be fully removed from the connector housing! Excessive force may damage the TPA!**



## H. Terminal removal

Insert the designated service tool 63813-1500 into the terminal service opening. Push down to release terminal locking finger.

**Do not use excessive force; excessive force can damage the lock finger!**



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## I. Terminal removal (continued)

Step 3: Once the Lock finger is disengaged, gently pull on the wire to release the terminal.

If the terminal resists, the service tool may not be fully engaged. Push the service tool further into the service Opening to ensure that it has fully disengaged the locking finger.

**Do not insert the service tool into the terminal opening!**

**Do not use excessive force; excessive force can damage the lock finger!**



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