

PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. Hand tools are intended for occasional use and low volume applications. A wide selection of powered application equipment for extended-use, production operations is available.

1. INTRODUCTION

This Instruction Sheet describes the use of MCON 1.2 CB Extraction Tool (PN 2844610-1). This tool is designed to simultaneously remove two MCON 1.2 CB contacts (1670144-[]) or two MCON 1.2 TAB CB contacts (1718350-[]) from MCON 1.2 CB Plug Assembly (2292906-[]) or MCON 1.2 CB Inline Cap Assembly (2292937-[]).

Read these instructions thoroughly before attempting to remove any contacts.



NOTE

All dimensions are in millimeters followed by [inches] in brackets. Figures and illustrations are for reference only and are not drawn to scale.

2. DESCRIPTION

This is a hand tool with a machined tip and rubber grip.

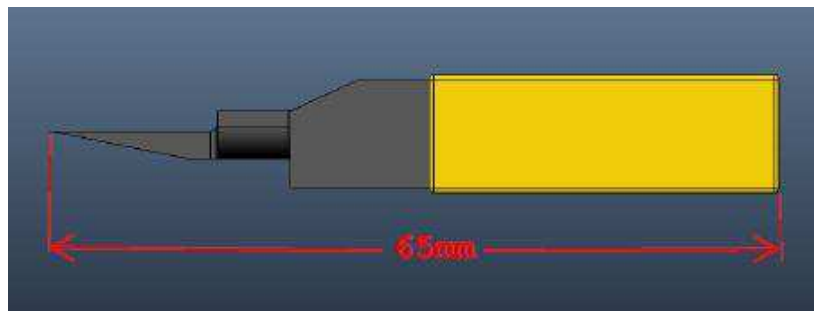
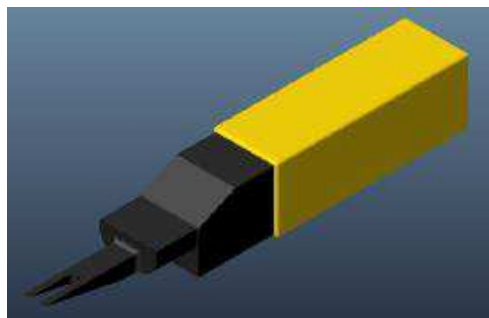


Figure 1

3. EXTRACTION PROCEDURE

3.1. Plug Assembly; PN 2292906-[X]

A. Unmating

1. If a plug (female) and cap (male) connector are mated; they must be unmated before the terminals can be removed, as follows:
 - a. Pull back on the Connector Position Assurance (CPA) Lock (if used). Reference Figure 2.

- b. While depressing the Connector Latch, gently pull the mated Plug and Cap connectors apart.

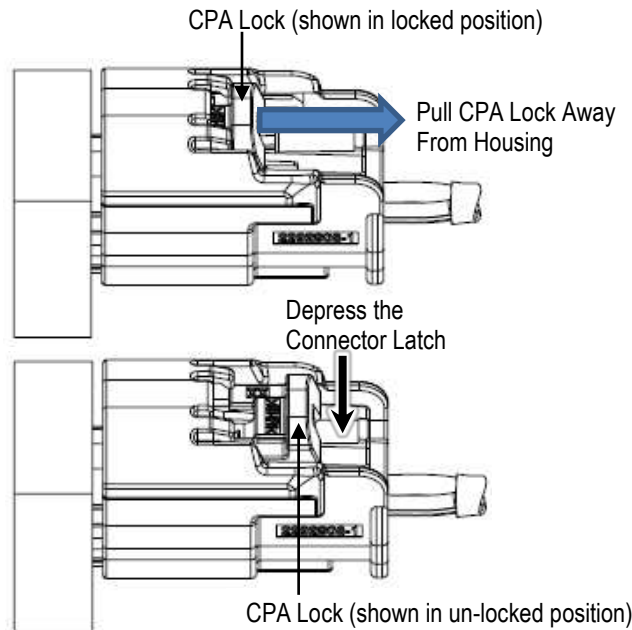


Figure 2

B. Removal of Terminals

1. Move the Independent Secondary Lock (ISL) from the “locked” position to the “open” position, as follows:
 - a. Insert the tip of a small straight-blade screwdriver into the opening of the ISL. Gently move the handle of the screwdriver downward until the ISL is pried upward and free from the inside of the housing (see Figure 3). The ISL will move upward approximately 1.5 mm so that it is flush with the inside of the outer housing (see Figure 3 Detail). This is the “open” position and the ISL must be in this position before removing the terminals from the connector.

i **NOTE**
The ISL is latched to the inner housing on both sides and it is possible to unlatch one side without the other. Ensure that both sides of the ISL are opened. The ISL should not appear tilted in the “open position”.

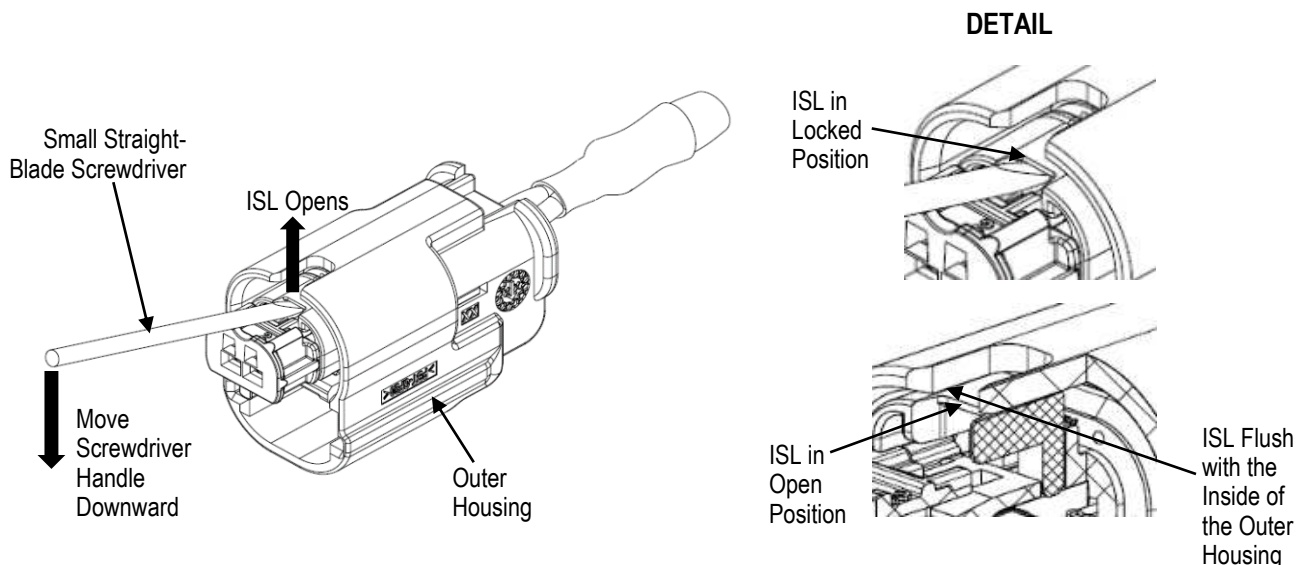


Figure 3

2. With the ISL in the open position, grasp both wires and gently pull while pushing on the back of the housing (maintain continuous tension on the wires).
3. Insert the tips of Extraction Tool (PN 2844610-1) into the release windows (see Figure 4) and direct them between the Terminal Locking Features and the Terminal Retention Latches. **The flat side of the extraction tool faces the terminal** (see Figure 5 DETAIL).

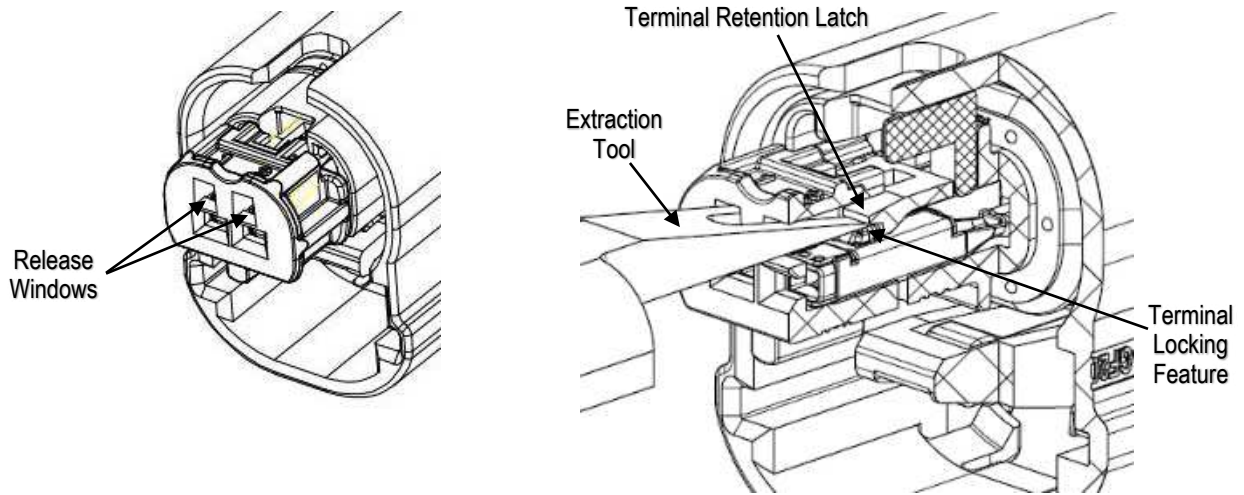


Figure 4

- a. With the extraction tool in the proper location, gently push down on the tool handle until the Terminal Retention Latches are pried upward (see Figure 5). Continue to pull gently on the wires to completely remove the wire assembly from the connector housing (see Figure 6).



CAUTION

To avoid damage to the Terminal Retention Latch, do not flex the latch more than necessary.



NOTE

When removing terminals crimped to twisted pair wire, pull both wires simultaneously to remove both terminals together.

DETAIL

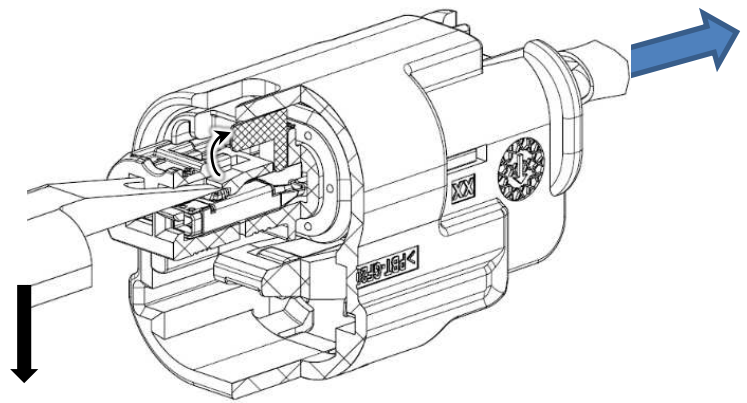
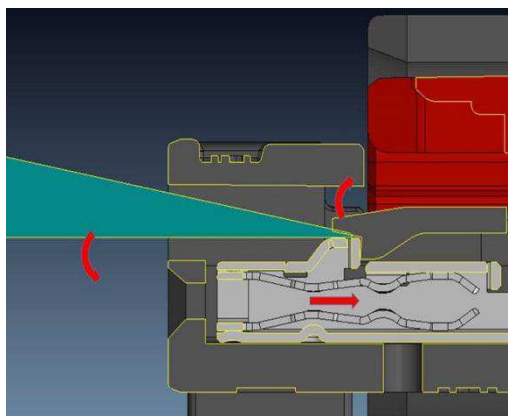


Figure 5

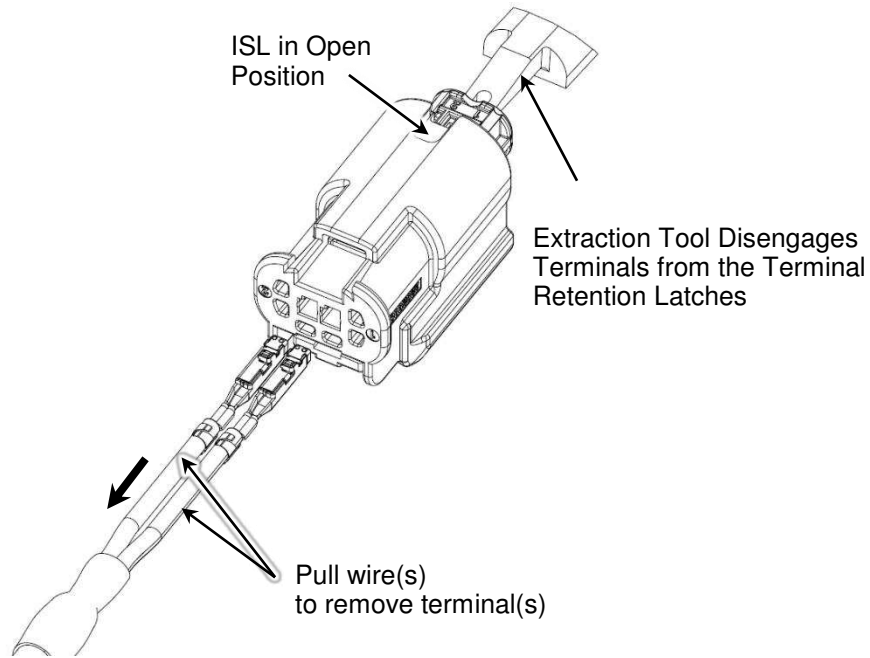


Figure 6

3.2. Inline Cap Assembly; PN 2292937-[X]

A. Unmating

Refer to Instruction Sheet 408-32254 (included with the plug connector) for the unmating procedure.

B. Removal of the Mounting Clip (Dismount)

1. Insert the tip of a small straight-blade screwdriver between the Mounting Clip and the Latch of the Mounting Clip Holder (see Figure 7).
2. Gently move the screwdriver handle downward until the latches disengage, then slide the Mounting Clip toward the wire end of the connector until it is free of the Mounting Clip Holder.

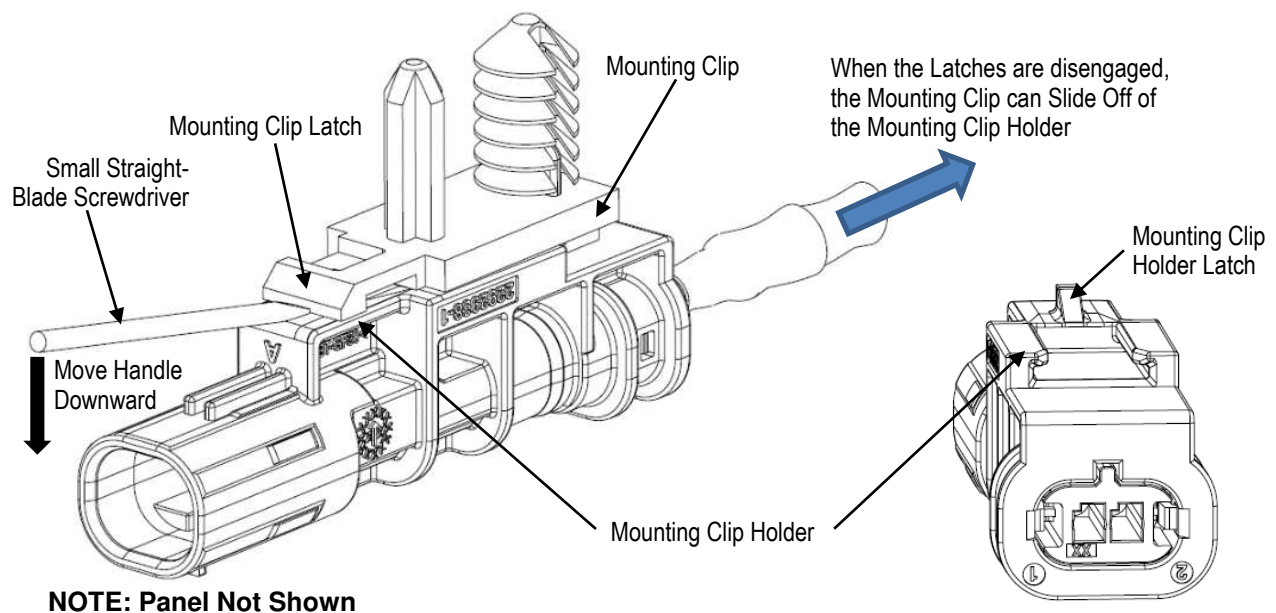
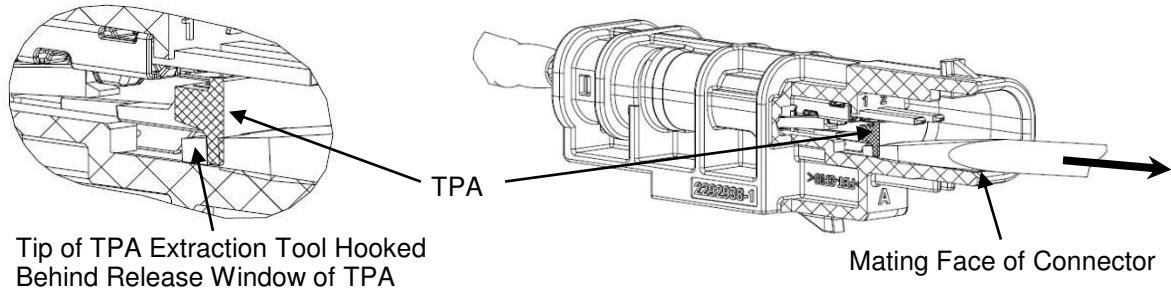


Figure 7

C. Removal of Terminals

1. Insert the tip of TPA Extraction Tool (PN 776441-1)¹ into the mating face of the connector, and hook it behind the release window of the Terminal Position Assurance (TPA) feature (see Figure 8). Then, pull the TPA straight out of the connector. **Care must be taken to retain the TPA and observe the orientation of the TPA for re-insertion.**



NOTE: Cross-Section of Connector Shown for Clarity

Figure 8

2. With the TPA removed, pull gently on the wires while pushing on the back of the housing. **This will set the Terminal Locking Feature against the Terminal Retention Latch** (maintain continuous tension on the wires).
 - a. Insert the tips of Extraction Tool (PN 2844610-1) into the mating face of the connector. Align the bottom surface of the tool with the inside of the shroud. **The tool will bottom against the front face of the connector when fully inserted** (see Figure 9).



NOTE

When the removal tool is properly located, the sharp tip will be between the Terminal Locking Features and the Terminal Retention Latches).

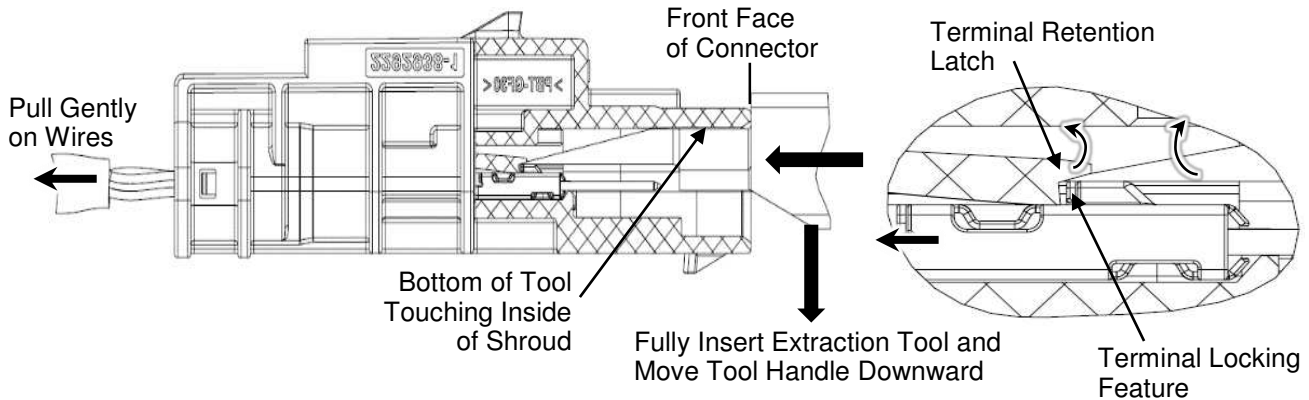


Figure 9

- b. When the extraction tool is properly located, gently move the tool handle downward until the Terminal Retention Latches are pried upward. Continue to pull gently on the wires to completely remove the wire assembly from the connector housing (see Figure 10).

CAUTION

To avoid damage to the Terminal Retention Latch, do not flex the latch further than necessary.



NOTE

When removing terminals crimped to twisted pair wire, pull both wires simultaneously to remove both terminals together.

¹ or similar hook tool

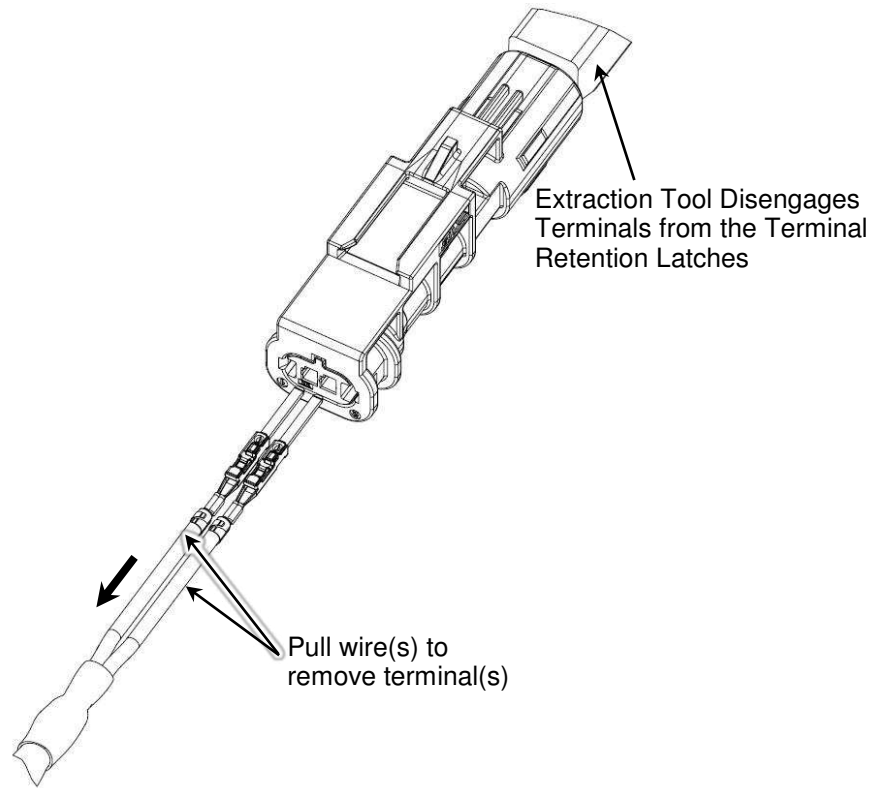


Figure 10

4. TOOL INSPECTION / MAINTENANCE

It is recommended to inspect each tool upon arrival (to verify it has not been damaged in transit), and, at regularly scheduled intervals (to verify it remains functional).

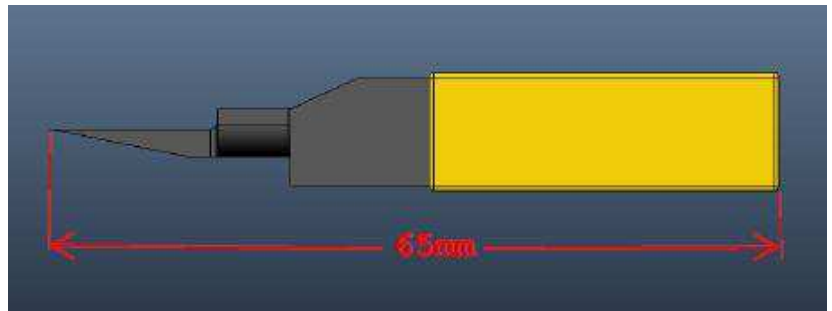
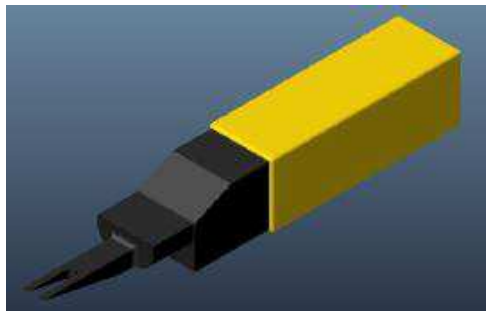


Figure 11

5. REVISION SUMMARY

Initial release of document.