

2P Mini Fuse Box

2P Mini Fuse Box

- GENERAL PARTS, NOT RESTRICTED -



| | | | | |
|-----|--|-----------|-------------|---------------|
| A1 | Removed the In-Active part No and Added the Mounting Clips | 02OCT2023 | Manjunath K | Danappa Hugar |
| A | New Release | 30OCT2015 | Kunal G | Rajesh Koti |
| LTR | Revision Record | Date | DWN | APVD |

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1. GENERAL

1.1 Purpose

This specification describes the guidelines which have to be followed during:

- a) Assembly of the Receptacle terminal into the housing.
- b) Extraction of receptacle terminal from housing with proper extraction tool.
- c) Insertion and Extraction of seal
- d) Mounting and Un-mounting of cover
- e) Mounting and Un-mounting of fuse box assembly

1.2 Customer Drawings

This application specification is based on the latest valid customer drawing as per below table.

| Item No. | Part No. | Description |
|----------|----------------------|--|
| 1 | 2066046-3/-4 | 2 Pos Minifuse Box Housing |
| 2 | 1-2066502-1/-2/-3/-4 | Cover, 2 Pos Minifuse box Housing |
| 3 | 1355036 | AMP MCP 2.8 Flat Type Receptacle (Group Drawing) |

Table 1

| Part Description | Part No | Applicable Terminal Part No | Terminal Description | Applicable wire seal | Terminal Application spec. | Applicable Mounting Clip. |
|------------------|-----------|-----------------------------|----------------------------------|----------------------|----------------------------|--|
| 2P Minifuse Box | 2066046-4 | 968882 968855 968857 | AMP MCP 2.8 Flat Type Receptacle | 828904 828905 | 114-18148 | 1027-003-1200 1011-026-0205 1011-030-0205 1011-310-0205 |

Table 2

1.3 Product Specification

This application specification is valid for the products specified in the product specification 108-72108. The product specification contains information about technical details and performances.

1.4 Note

Some of the named components within this specification are not scope of supply. These component include fuses, fuse puller & sheet metal bracket used for mounting. The harness maker can separately order fuses, fuse puller and should manufacture the sheet metal mounting bracket based on the bracket dimensions.

All work on terminals must be accomplished considering the appropriate processing specifications of the respective terminals.

If terminals are to be replaced, it is necessary that neither the contacts nor the cavity are damaged during this process. Use TE recommended extraction tool wherever specified. Defective parts must be replaced.

All parts must be processed at ambient temperature.

The harness or the cable itself must be affixed to protect the assembly and contacts against additional force.

2. PRODUCT DESCRIPTION

2P Mini Fuse box consist of a sealed housing which can be assembled with AMP MCP 2.8 sealed contacts.

The sealed housing can hold 2 Active fuses + 2 Spare fuses as per requirement.

It is coupled with a top cover which seals the fuses to avoid water ingress inside the housing.

Snap mounting arrangement has been provided on the housing to ensure that the fuse box remains intact in its position during vehicle operation.

3. 2P MINIFUSE BOX

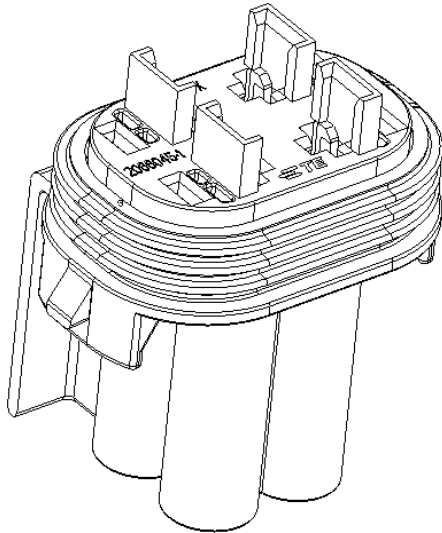


Figure.1
2P Housing Assembly

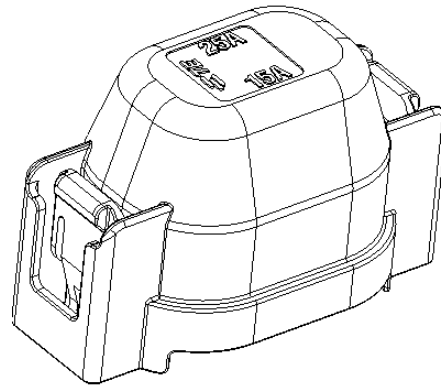


Figure.2
Cover

3.1 Terminal Insertion

AMP MCP 2.8 Flat Type Receptacle (TE P/N 968882 or 55/57)

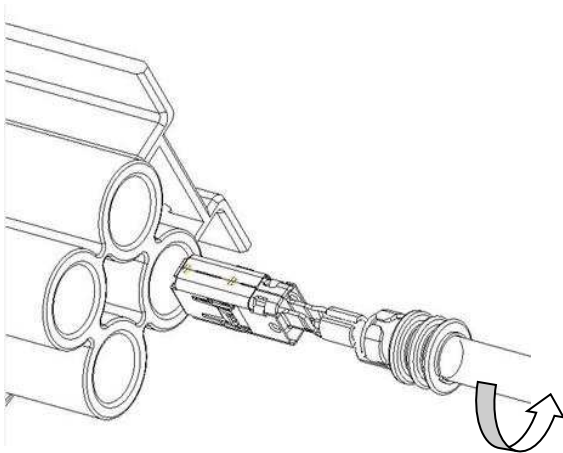


Figure.3

Orient the terminal as shown in figure 3 and insert it in the housing cavity. The terminal locks with a click sound.

Contact Orientation 180° Tunable

3.2 Seal Insertion - 2 Way 8mm NGI Interfacial Seal (TE P/N: 1544767-1)

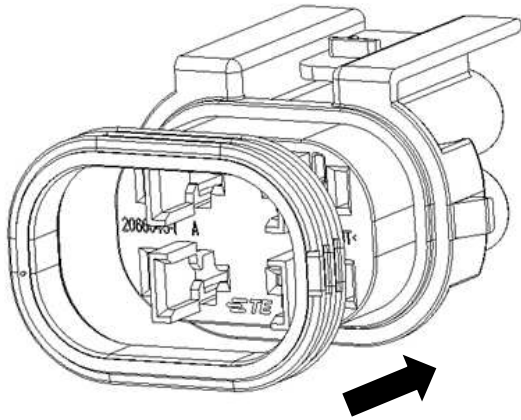


Figure 4

Orient the seal as shown in Figure 4 and push the seal up to the end position as shown.

Note: Do not use any sharp tool for inserting the seal. It may damage the seal or sealing area.

3.3 Mini Fuse Insertion

3.3.1 Mini Fuse Insertion – Active

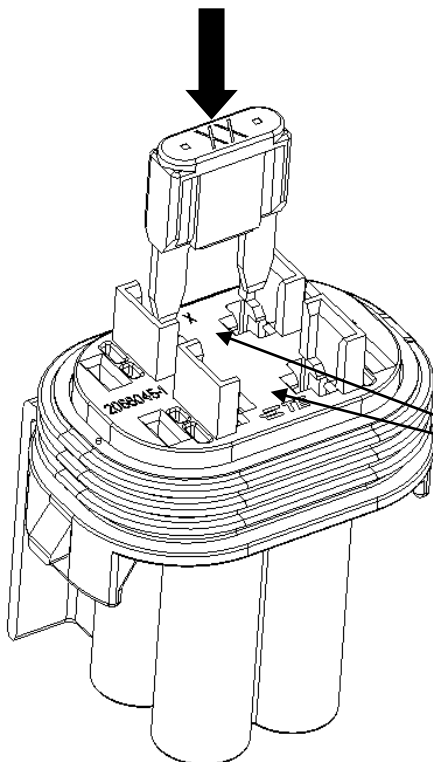


Figure 5

Orient the Fuse as shown in Figure 5 and push the Fuse in the shown direction.

Indicated positions holds the active fuse.

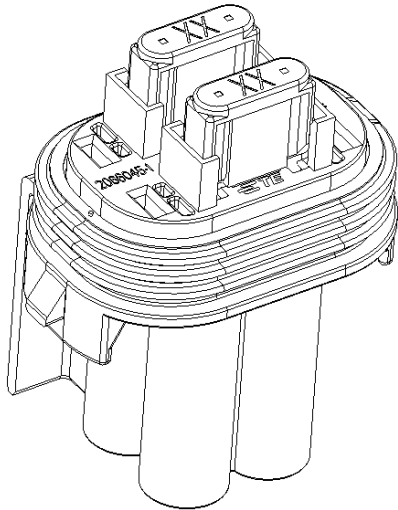


Figure 6

After inserting both active fuses final assembly will look as shown in figure 6.

3.3.2 Mini Fuse Insertion – Spare

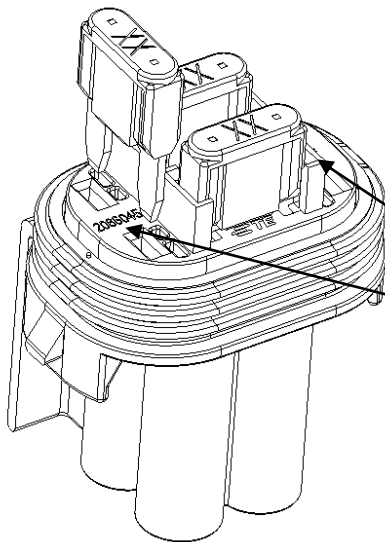


Figure 7

Orient the Fuse as shown in Figure 7 and push the Fuse up to the end position as shown.

Indicated positions holds the spare fuses.

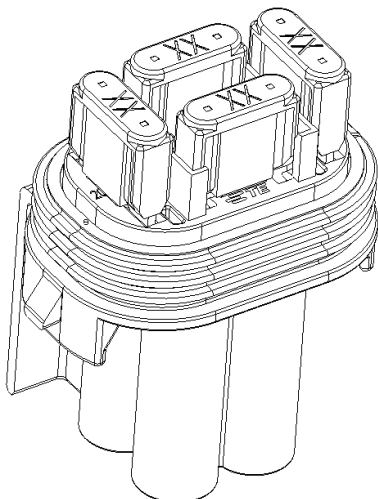


Figure 8

After inserting both Active & Spare fuses, final assembly will look as shown in figure 8.

Note: Fuses to be purchased separately by the customer.

3.4 Mini Fuse Removal

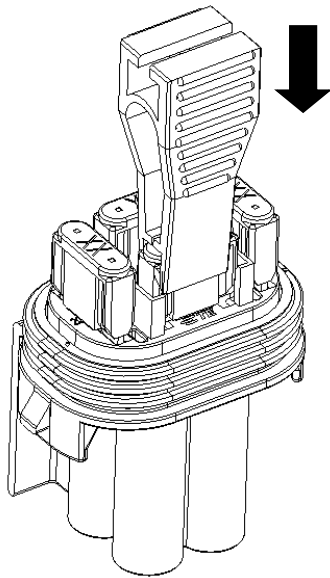


Figure 9

For replacement of faulty fuses it is recommended to use a fuse puller. To replace a fuse, insert the fuse puller on the fuse as shown in figure 9.

Note: Fuse puller is not a part fuse box kit.

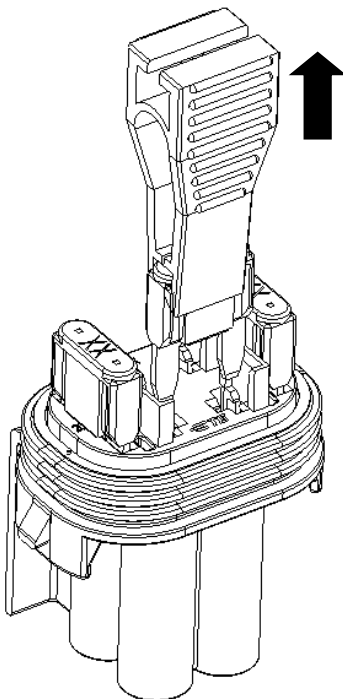


Figure 10

Pull the fuse puller in the upward direction to disengage the fuse from the terminals as shown in figure 10. Replace the faulty fuse with a new one from the spare fuses.

3.5 Cover Mounting

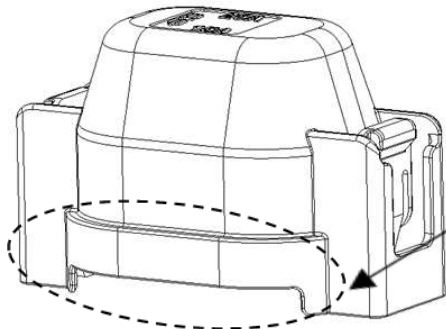


Figure 11

Poka-Yoke designed on cover will not allow the insertion of the cover in reverse direction. See Figure 11.

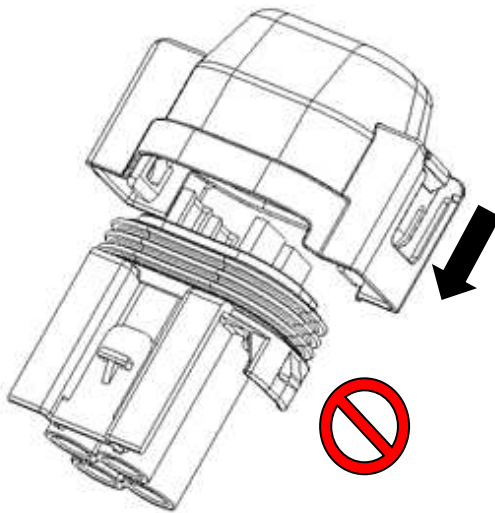


Figure 12

Figure 12 shows wrong orientation of cover during assembly.

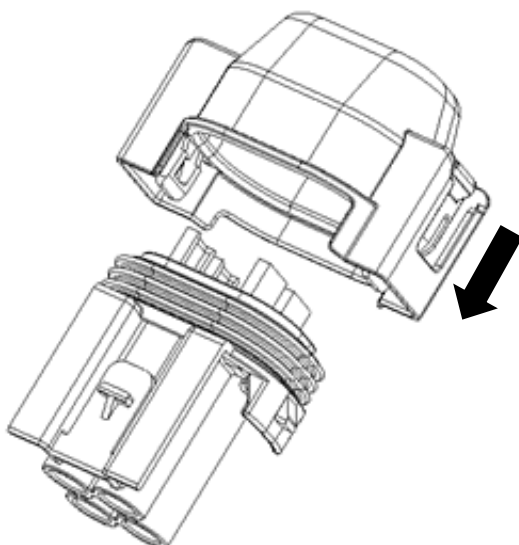


Figure 13

Figure 13 shows correct orientation of cover during assembly. In this orientation, push the cover up to end position until the Cover locks with a click sound.

*Ensure both snaps are locked. See Fig. 14.

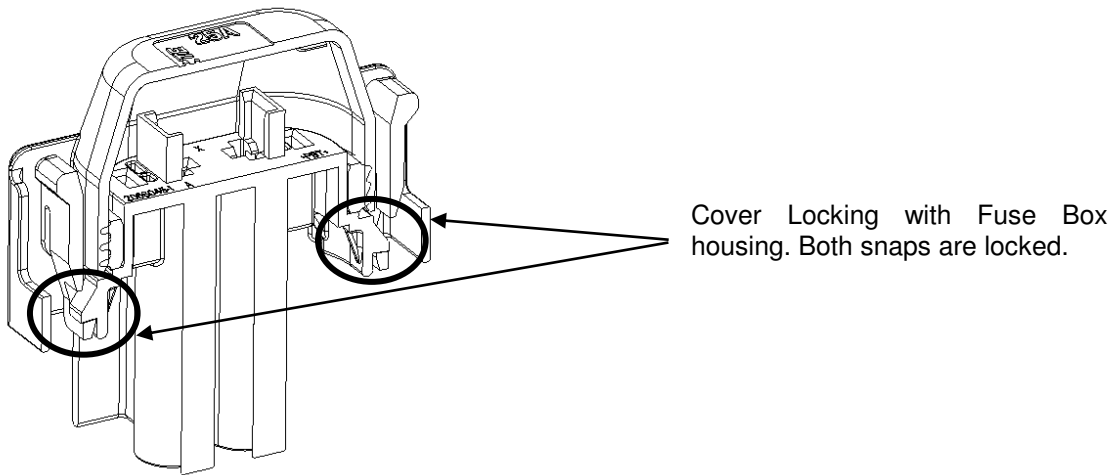
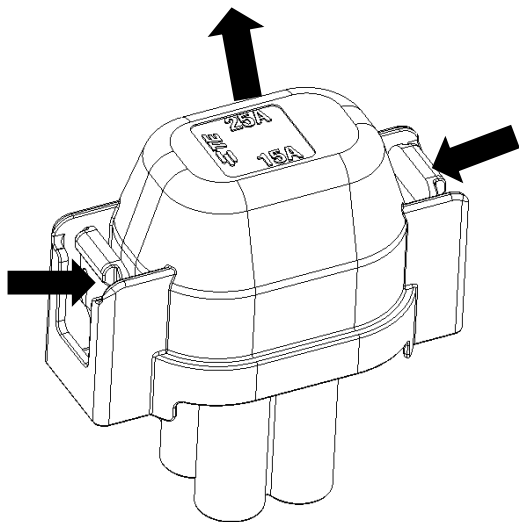


Figure 14

3.6 Cover Un-Mounting



Press both the cover snap locks simultaneously as shown in figure 15 and pull the cover in the upward direction to release it completely.

Figure 15

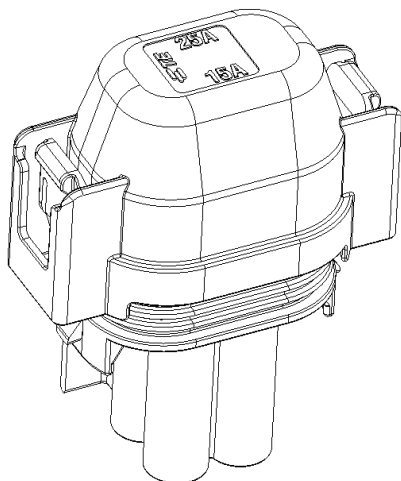


Figure 16 shows cover released completely.

Figure 16

3.7 Terminal Extraction

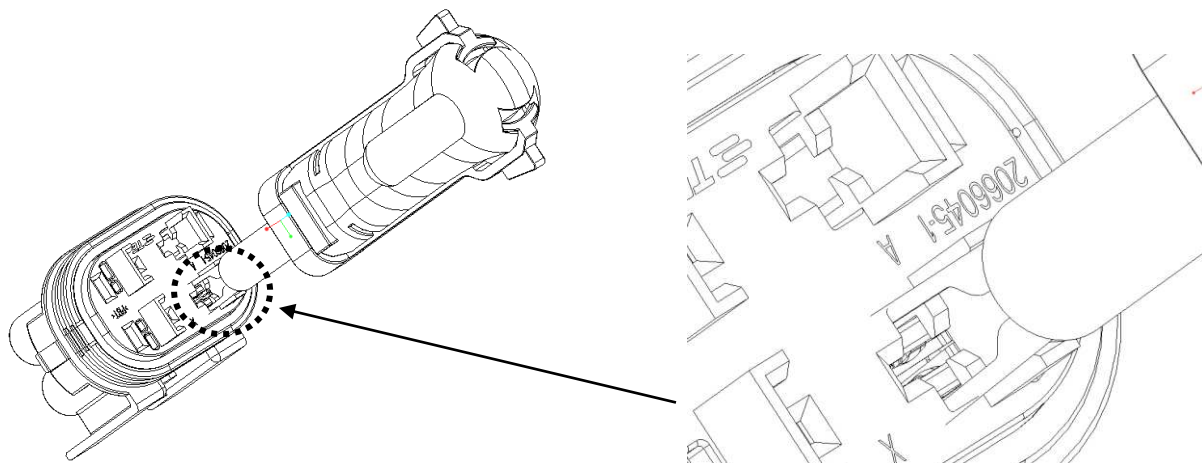


Figure 17

For replacement of fuse box contacts, it is highly recommended to use extraction tool P/N: 1579007-1 to avoid damage to terminal or the housing cavity. Insert the extraction tool in the housing cavity as shown in figure 17. Below figures show sectional view of the extraction tool & housing cavity indicating removal process.

Figure 18 – Extraction tool entering the terminal cavity.

Figure 19 – Extraction tool fully engaged and terminal latch closed for removal.

Figure 20 – Pull the contact in the downward direction. It releases from the housing cavity as seen in figure.

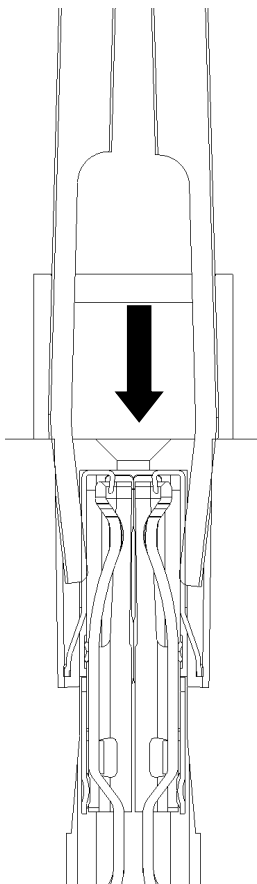


Figure 18

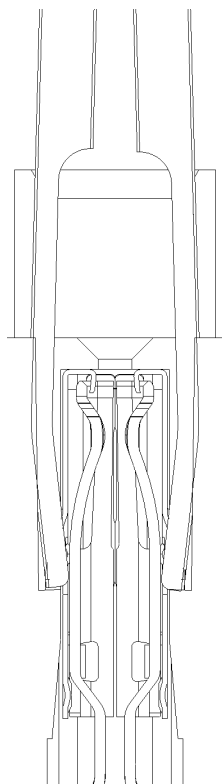


Figure 19

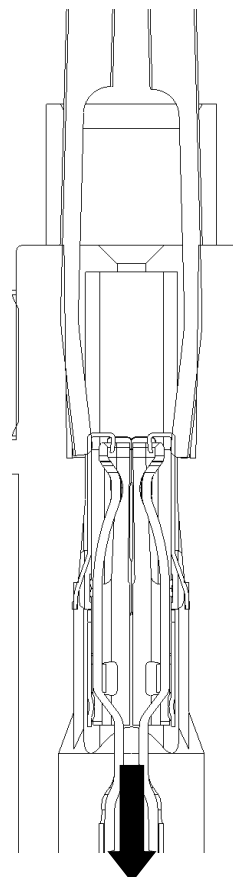


Figure 20

3.8 Seal Extraction

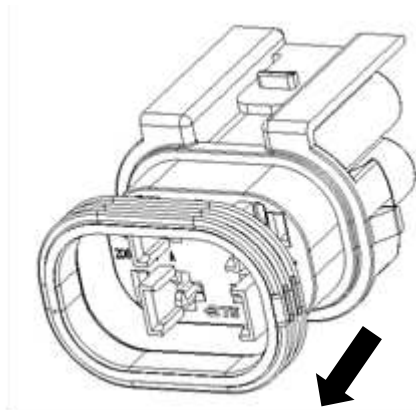


Figure 21

To remove the seal, pull it in the normal direction as shown in figure 21.

Note: Do not use any sharp tool for removing the seal. It may damage the seal or sealing area.

3.9 Fuse Box Mounting

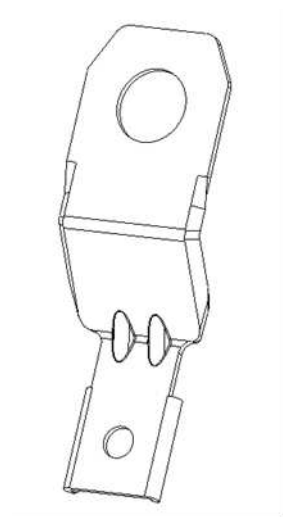


Figure 22
Sheet Metal Bracket

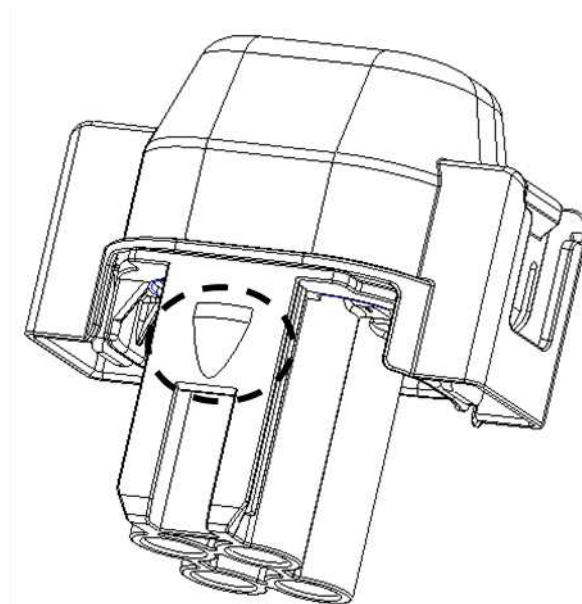
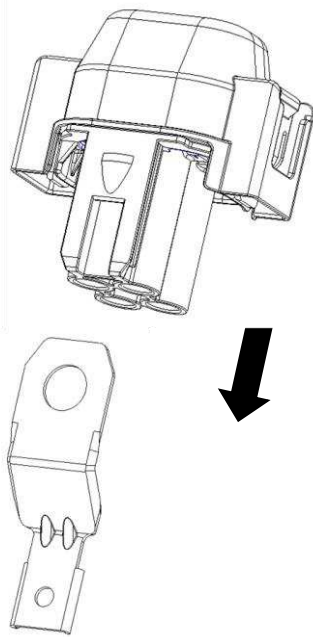


Figure 23
Fuse Box Snap Lock



Insert the fuse box housing on the sheet metal bracket as shown in figure 24. The bracket is fixed on the vehicle body.

Figure 24

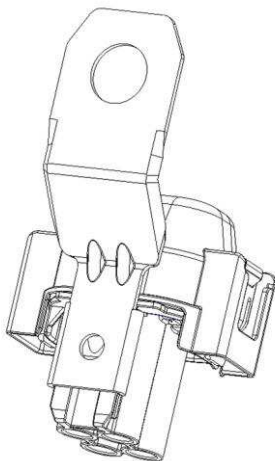
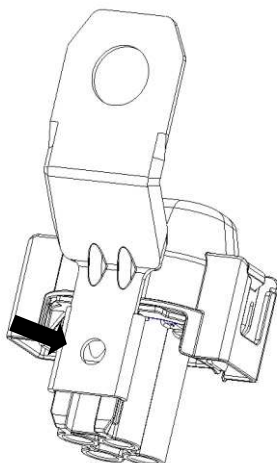


Figure 25 shows the fuse fox mounted on the sheet metal bracket.

Figure 25

3.10 Fuse Box Un-mounting



Press the snap lock as shown in figure 26 and pull the fuse box in the upward direction to un-mount it completely.

Figure 26