Unmating the Connector

1. To un-mate the harness connector from the controller, push the CPA (Connector Postion Assurance) away from the wire bundle. Depress the primary latch on the top of the harness connector so the lever arm releases. **Reference Figure 1**.

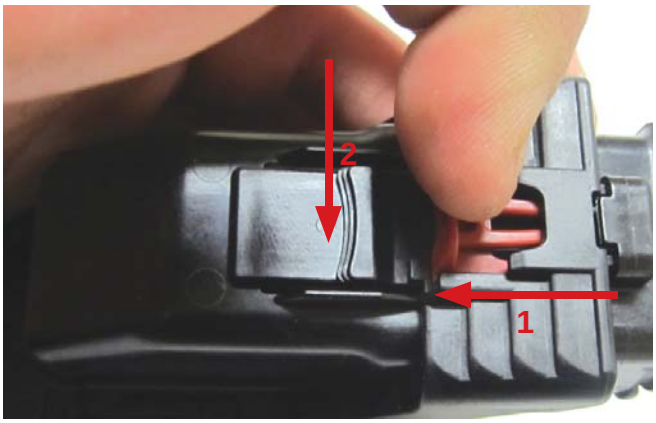


Figure 1

2. Push the top of the lever arm away from the wire bundle using the palm of your hand until the connector lifts into pre-lock position. **Reference Figure 2**.

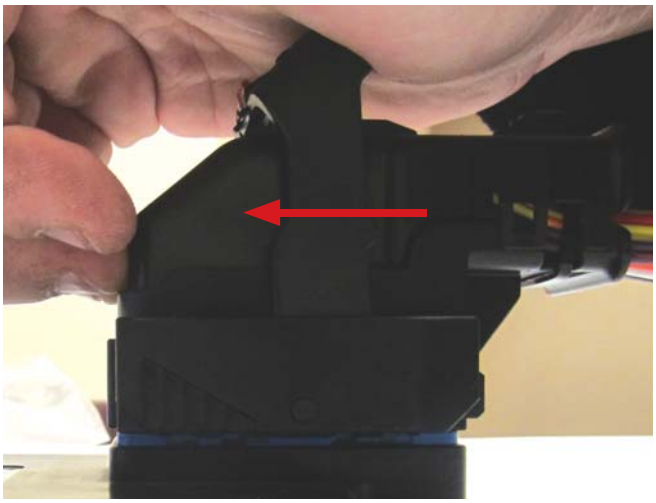


Figure 2

3. While pushing forward on the lever, grip the back of the harness and pull upwards and away from the module. **Reference Figure 3**.

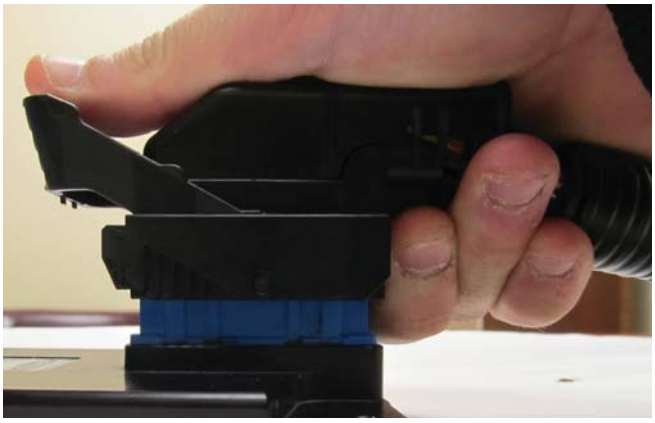


Figure 3

Depinning/Pinning Connector

1. Unlatch the dress cover latch features on each side of the dress cover guide. A small screwdriver or similar tool can be used to release the latches. **Reference Figure 1**.

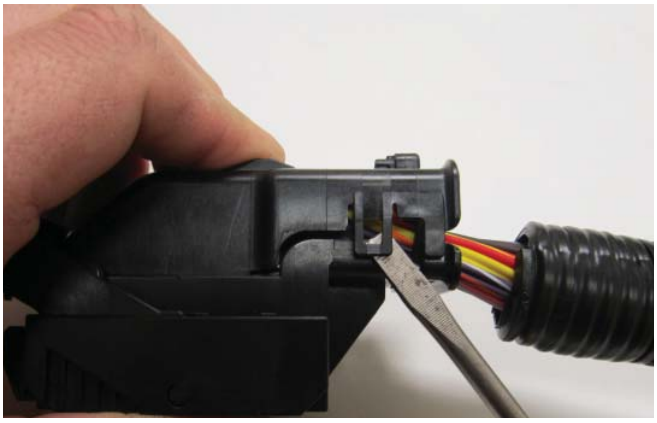


Figure 1

2. With the dress cover latch features unlatched, insert your finger into dress cover and pull up and away from the wire bundle. The dress cover can now be completely removed. **Reference Figure 2**.

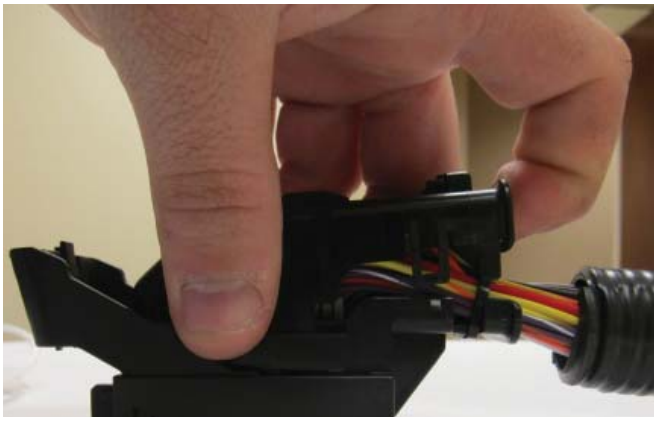


Figure 2

3. The zip-tie can now be removed from the wire bundle for easier access to the wire to be serviced. **Reference Figure 3**.

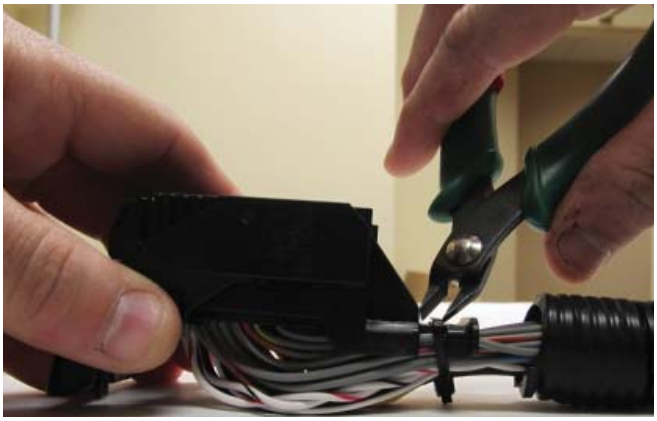
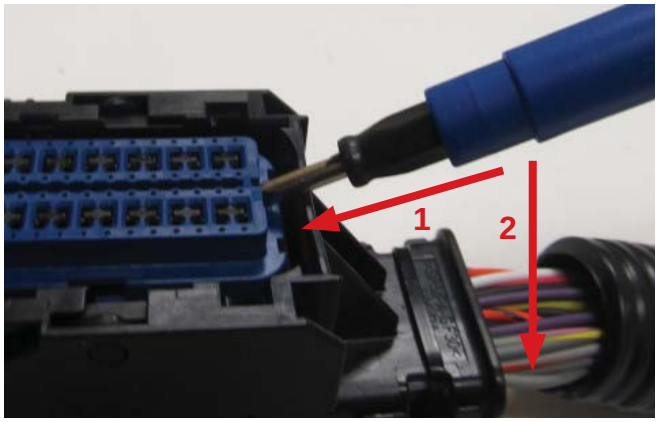


Figure 3

NOTE: Be careful not to damage/cut any wires in the process.

4. Insert a small flat blade screwdriver into the TPA service hole and pry up. Repeat for the opposite side. At this point the TPA should be at its pre-lock position. **Reference Figure 4**.



NOTE: TPA should never be removed from the connector.

Figure 4

5. Ensure TPA is in pre-locked position and remove. **Reference Figure 5.**

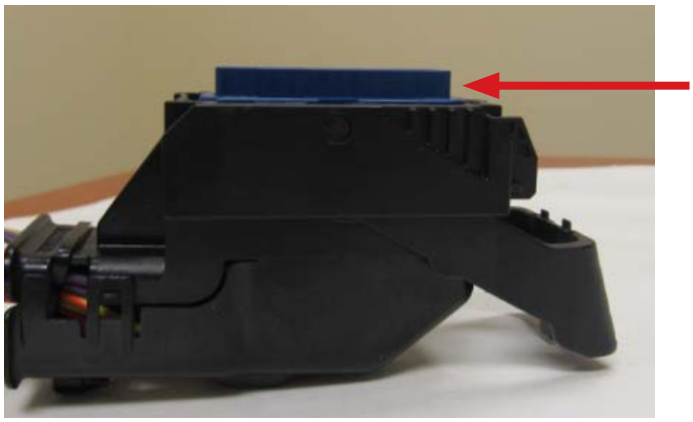


Figure 5

6. Insert tip of the 0.64mm service tool (Molex part no. 63813-1400 or alternate GM part no. J-38125-213) into the terminal service hole adjacent to the terminal to be serviced. After first pushing the wire/terminal forward, use your index finger to push the service tool until a large amount of resistance is felt. This wedges the service tool between the terminal and the lock finger, therefore deflecting the lock finger. **Reference Figure 6**.

Figure 6

7. **Figure 7a** shows proper insertion of the service tool. Avoid inserting the service tool into the terminal opening (**Figure 7b**) as this may damage the terminal.

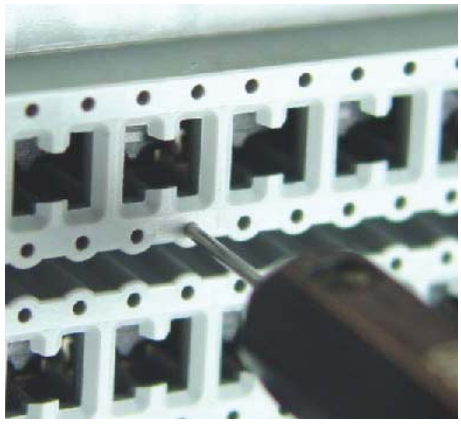


Figure 7a

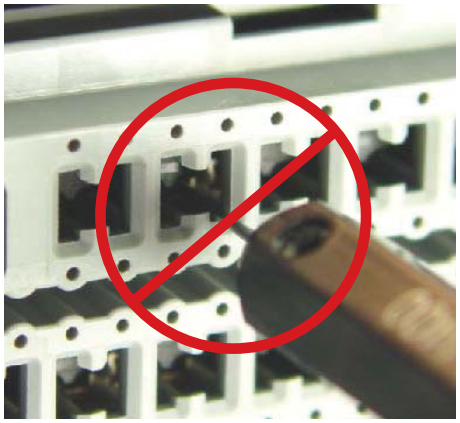


Figure 7b

8. Once the terminal lock finger has been disengaged, transfer middle finger and thumb to connector housing, while maintaining the index finger pressure on the the tool. Pull on the wire to remove the terminal. **Reference Figure 8**.

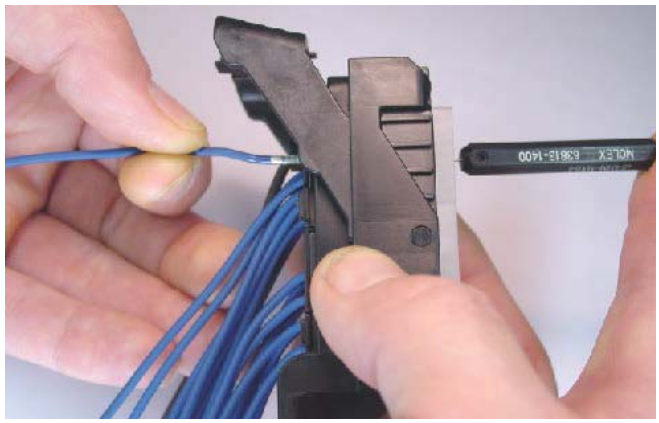


Figure 8

NOTE: Using excessive force can damage the lock finger.

Depinning/Pinning Connector (Alternative Method)

This section is an alternative if you do not possess the Molex service tool. Complete steps 1-5 before beginning the alternative method.

1. Lift the terminal lock and locate the pin you wish to remove. Carefully disengage the terminal lock finger. **Reference Figure 1**.

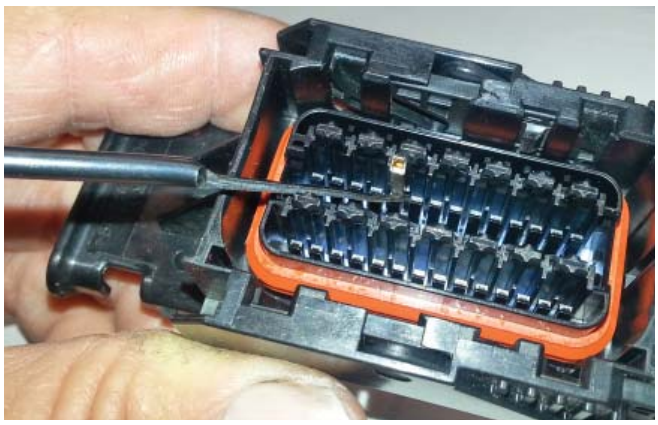
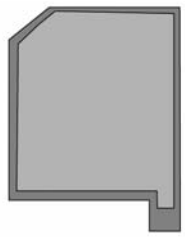


Figure 1

2. Press the pin to the back of the connector. Once the pin is no longer latched it can be removed from the connector. **Reference Figure 2**.

Figure 2

For terminal installation, **Reference Figure 3**.



0.64mm Orientation

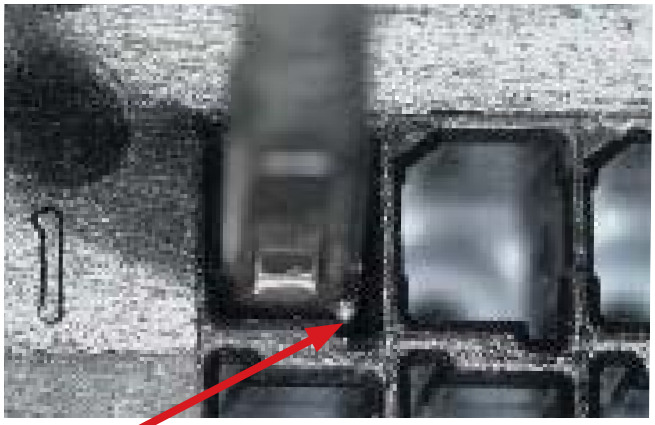


Figure 3

Orientation Tab

Align terminal orientation tab with slot in grommet cap opening to install the terminal.

Mating the Connector

1. Correctly orient the harness connector (align keying features) onto the controller connector. Grip the top of the harness connector and evenly push the connector downward until the lever moves slightly forward. **Reference Figure 1**.

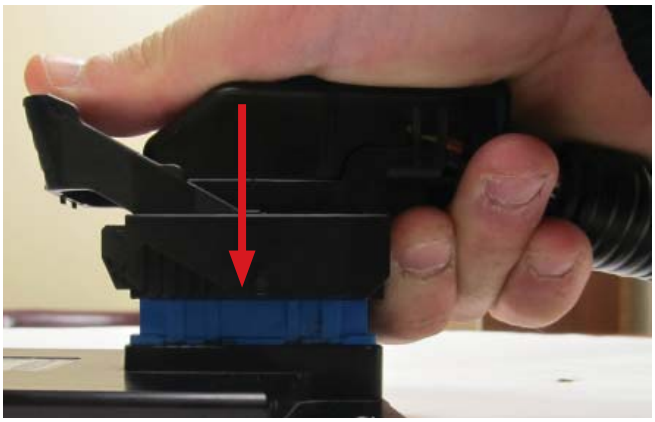


Figure 1

NOTE: Installing the harness connector at an extreme angle may result in seal “scrooping” creating an environment for fluid ingress. Damage to the header or connector is possible if excessive force is used.

2. To begin mating the harness connector to the controller, place the palm of your hand on the face of the lever. Push back the connector lever towards the wire bundle to engage the harness connector to the controller header. Mating force should be smooth and continuous, If not remove the connector and repeat. **Reference Figure 2**

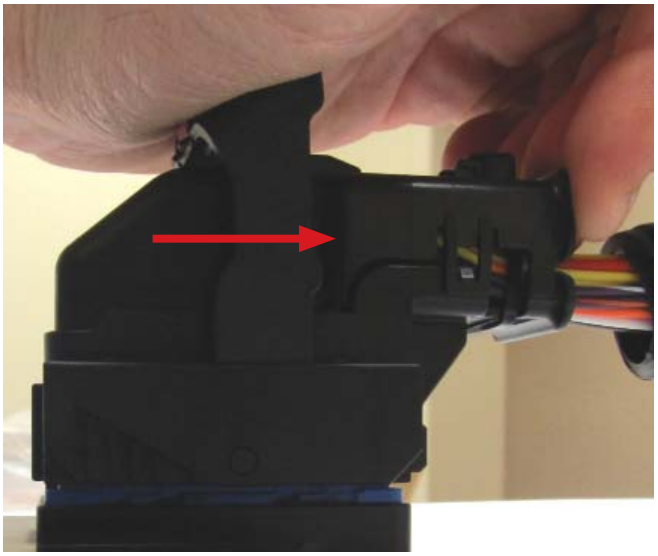


Figure 2

3. Continue to rotate the lever until you hear the primary latch click into the final lock over dress primary cover primary latch. **Reference Figure 3**.

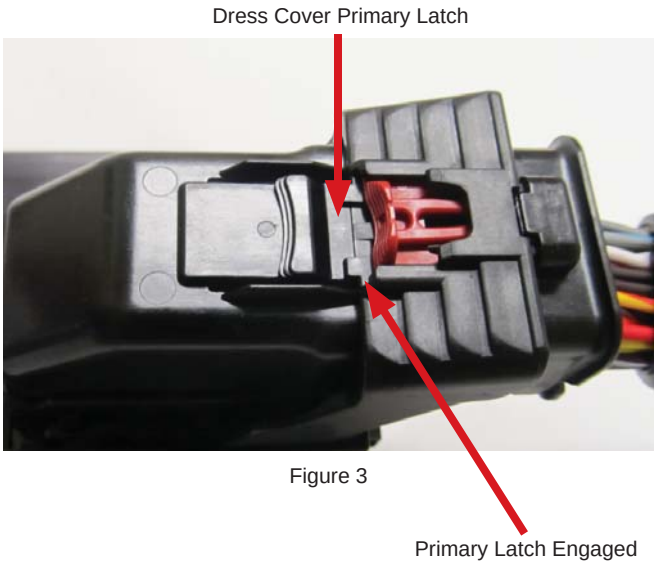


Figure 3

4. With the connector lever arm in its latched position, the CPA (Connector Position Assurance) can now be engaged. Push the CPA toward the wire bundle. until it clicks into its final locked position. **Reference Figure 4**.

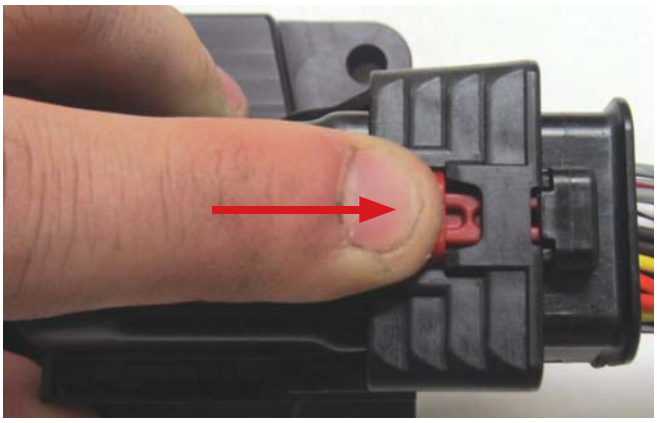


Figure 4