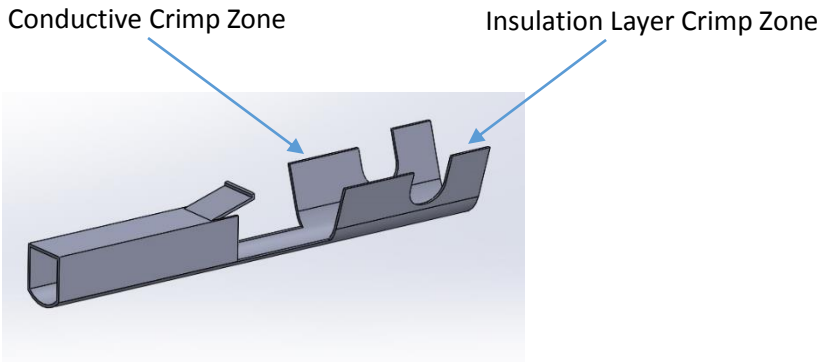
Engineering^3 - Crimping Molex Connectors

Molex Crimp Connectors

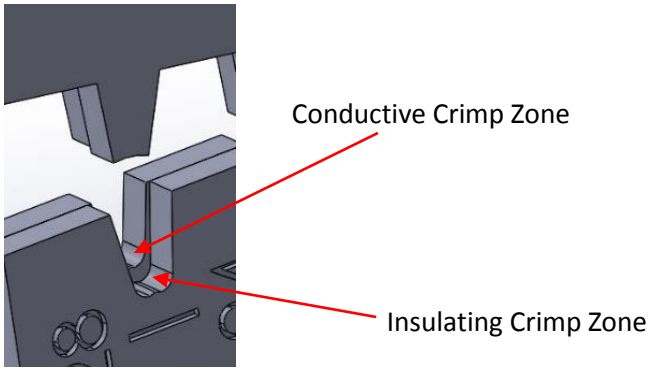
Connectors are attached to wires so they can be “plugged” together with other wires or devices. Attaching connectors to wires takes on many forms and one method is to squeeze or “crimp” the connectors to the wires.



Molex Crimp Connectors are designed to attach to the exposed insulating core of insulated wiring. These connectors have both a conductive crimp zone and an insulation layer crimp zone. The insulation layer crimp zone attaches the connector to the insulation layer of the wire to prevent the conductive core from being stressed and breaking.

Crimping Tools for Molex Connectors

Crimping tools have preset crimp diameters so when used correctly the appropriate pressure is used to attach the connector without stressing it or the wire to a breaking point.

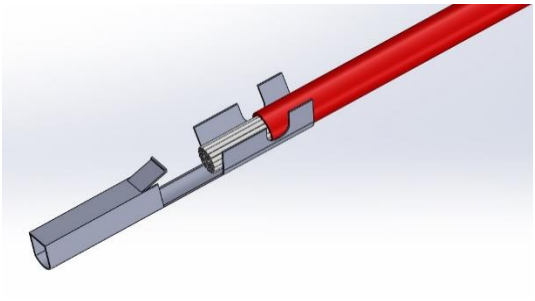


The jaws of crimping tools are designed with different crimp zones to accommodate the different crimp diameters of both the conductive and insulation crimp zones. It is critical that the connectors are set properly within the tool such that the conductive and insulating crimp zones of the connector align with the conductive and insulating crimp zones of the tool jaws to achieve a proper crimp.

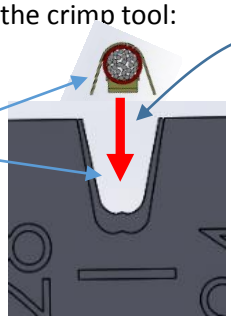
How to Crimp

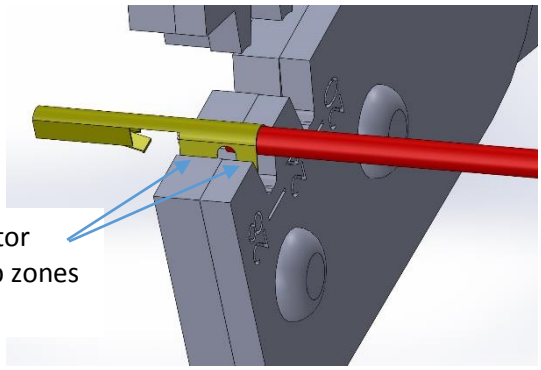
Place the connector onto a properly stripped wire with the crimp zones properly aligned to the conductive and insulating sections of the stripped wire end.

* If the connector will not hold onto the wire independently it may be necessary to slightly pre-crimp the insulating crimp zone tongs (squeeze the tongs together a bit with either the crimp tool, pliers or your fingers) until the connector will remain holding onto the wire.



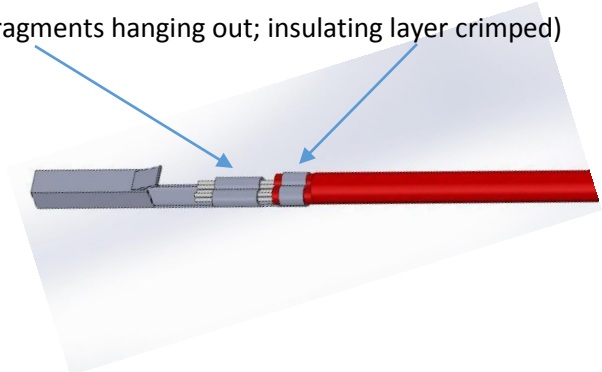
Insert wire/connector assembly into the crimp tool:





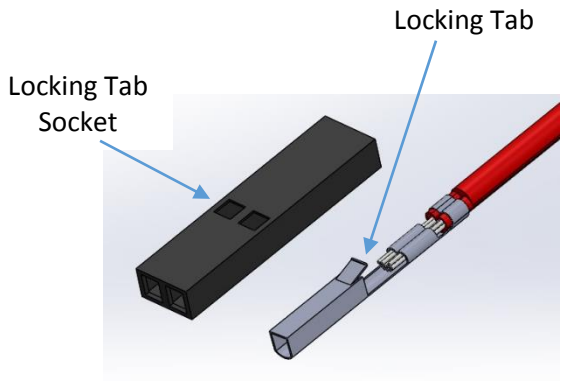
Close the tool with proper force to crimp the connector to the wire.

A Properly Crimped Wire (No wire fragments hanging out; insulating layer crimped)



Molex Connector Housings

After connectors are crimped to the wires they are often set into connector housings. The connector has a locking tab and housing a socket used together to secure the connector into the housing.



The locking tab on the connector must be aligned with the socket on the housing so the two snap together when the connecter is pushed into the housing.