# Your Ultimate Source for OEM Repair Manuals

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## 1976 MAZDA RX-3 OEM Service and Repair Workshop Manual

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Sample

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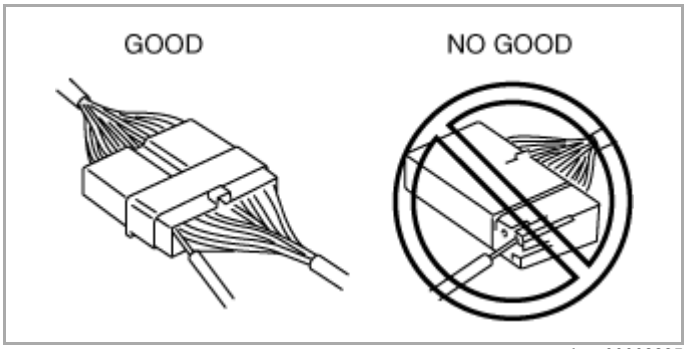

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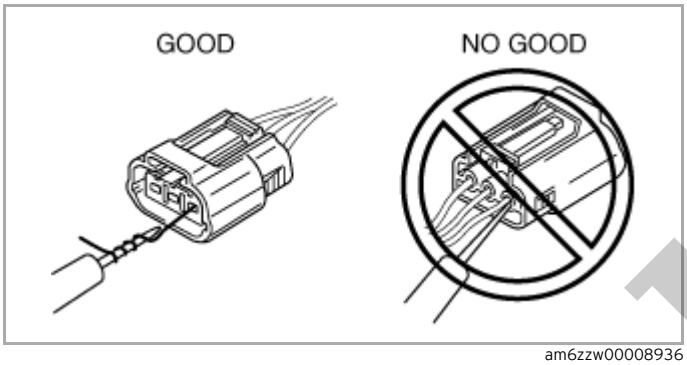
• Inspect the terminals of waterproof connectors from the connector side since they cannot be accessed from the wiring harness side.



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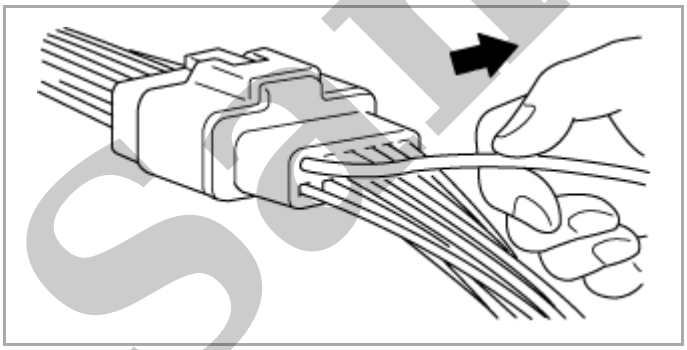
## Terminals

### Inspection

• Pull lightly on individual wires to verify that they are secured in the terminal.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### Replacement

• Use the appropriate tools to remove a terminal as shown. When installing a terminal, be sure to insert it until it locks securely.
• Insert a thin piece of metal from the terminal side of the connector and with the terminal locking tab pressed down, pull the terminal out from the connector.

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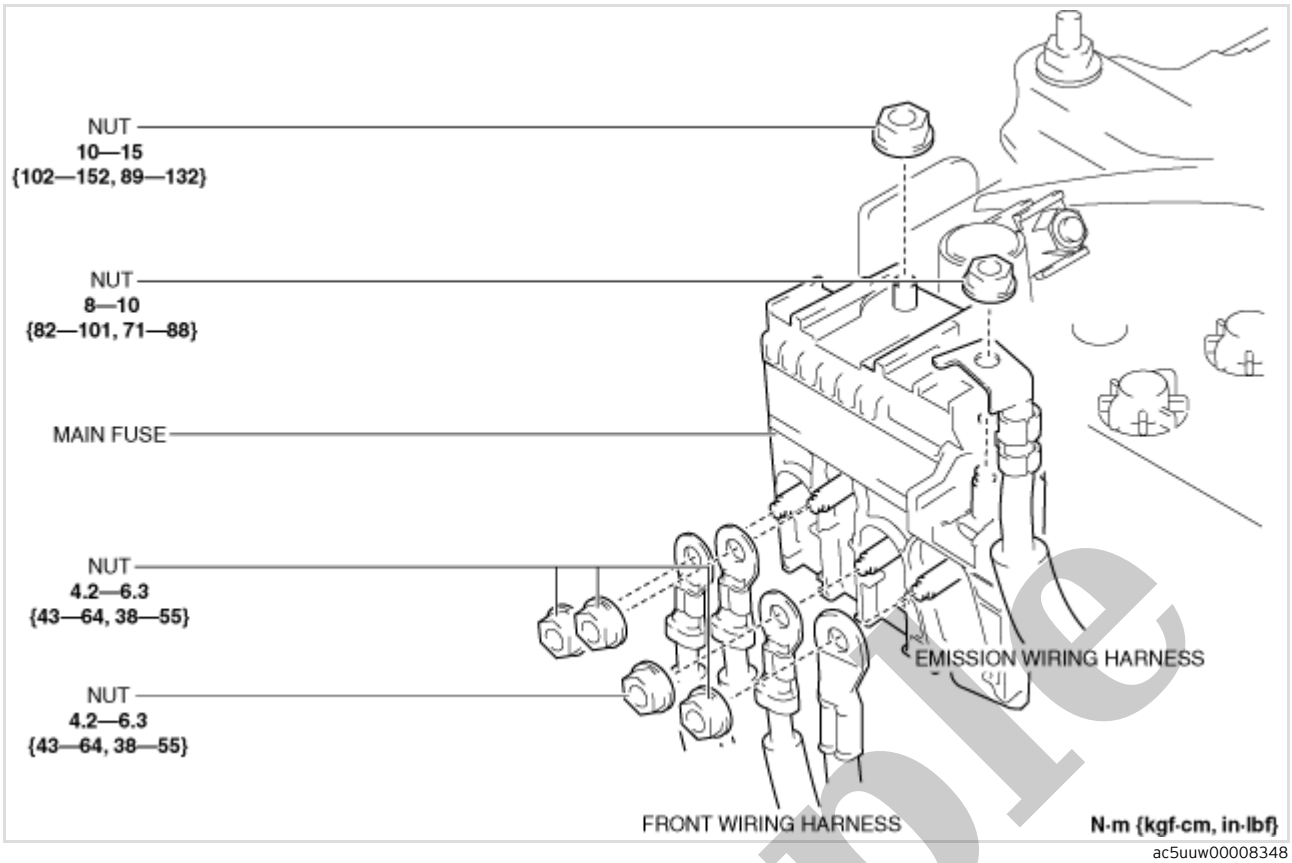

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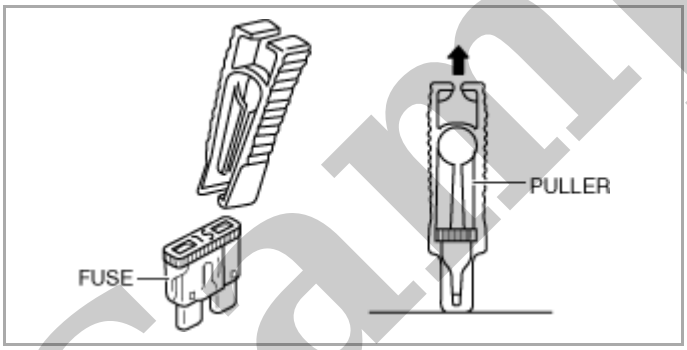
• When replacing a pullout fuse, use the fuse puller.



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## Viewing Orientation for Connectors

• The viewing orientation for connectors is indicated with a symbol.
• The figures showing the viewing orientation are the same as those used in Wiring Diagrams.
• The viewing orientations are shown in the following three ways.

### Part-side connector

• The viewing orientation for part-side connectors is from the terminal side.

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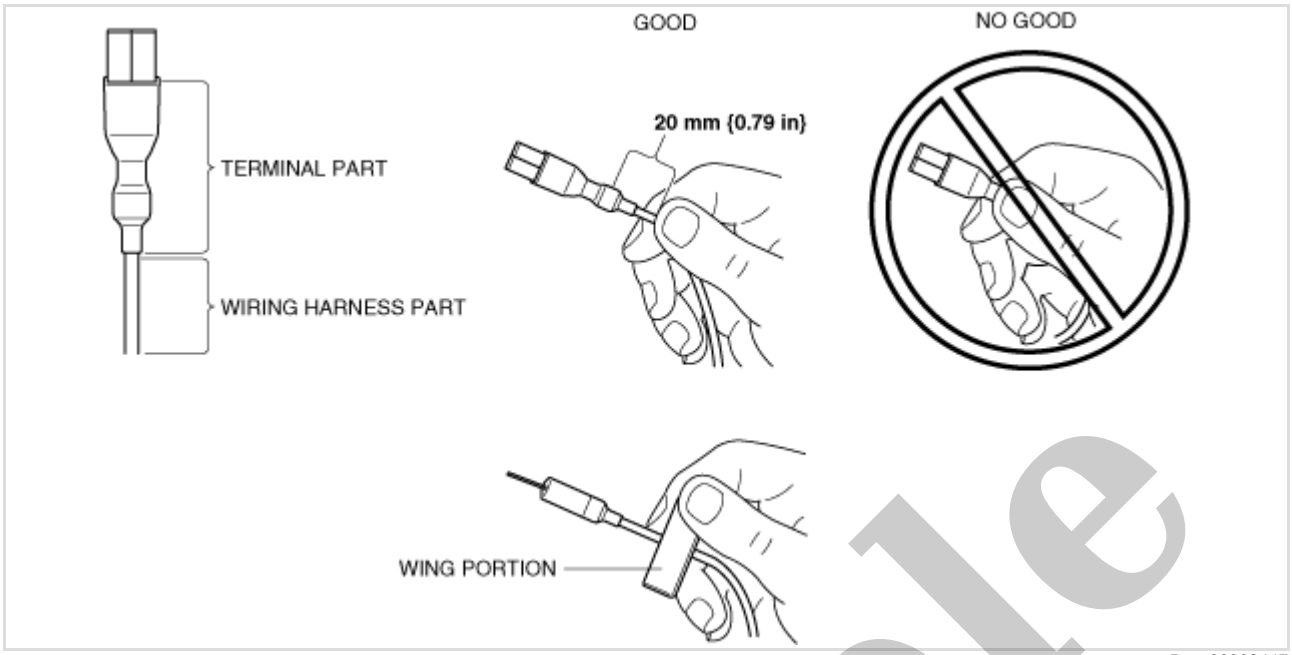
• Slowly insert the tool into the female terminal, and keep the tool in line with the terminal wherever possible.
• If the tool is inserted at an angle or wiggled into the female terminal, the terminal may be damaged.
• Hold the wing portion of the tool with your fingers (if applicable), or the wiring harness, approximately 20 mm {0.79 in} away from the terminal portion of the tool. If the tool is inserted by holding the terminal portion of the tool, deformation of the female terminal opening can occur due to excessive force.



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5.Insert the tool into the female terminal, then slowly pull it out.

• The inspection is completed if it can be determined that the terminal connection is good based on how firmly the tool can be inserted and removed.

Note

• Terminal size L is the largest size terminal tool. It may be difficult to insert it into a female terminal when holding the wiring harness due to excessive resistance. If it appears that the tool may be difficult to insert, confirm that the female terminal is in good condition, prior to inserting the tool.

— If the tool cannot be inserted or removed firmly and the condition of the female terminal cannot be determined, go to the next step.

Caution

• If the condition of the female terminal cannot be clearly determined, find the same size and surface treatment of the terminal in a different location to compare the connection firmness. Confirm the terminal location by referring to the wiring diagram.

6.Compare the connection firmness by inserting the tool into an identical terminal (same size and surface treatment) in the same connector.

• If the connection is not correct, replace the wiring harness or connectors including the malfunctioning terminal. (Refer to the repair connector replacement procedure.)

## Electrical Troubleshooting Tools

### Jumper wire

Sample

• The ground connection is extremely important for normal electrical circuit operation, therefore, inspect and disconnect/reconnect the ground connection according to the following guidelines.

— Remove the bolt or screw of the ground to inspect for dirt or rust.
— If there is any dirt or rust, clean it.
— Securely tighten the bolt or screw to the specified tightening torque.
— Verify that parts do not interfere with the ground circuit.

Sample

# TOWING

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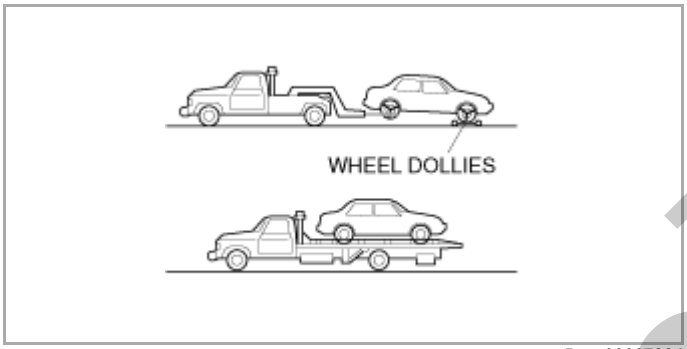
## Towing Description

• Proper lifting and towing are necessary to prevent damage to the vehicle. Particularly when towing an AWD vehicle, where all the wheels are connected to the drive train, proper transporting of the vehicle is absolutely essential to avoid damaging the drive system. Government and local laws must be followed.

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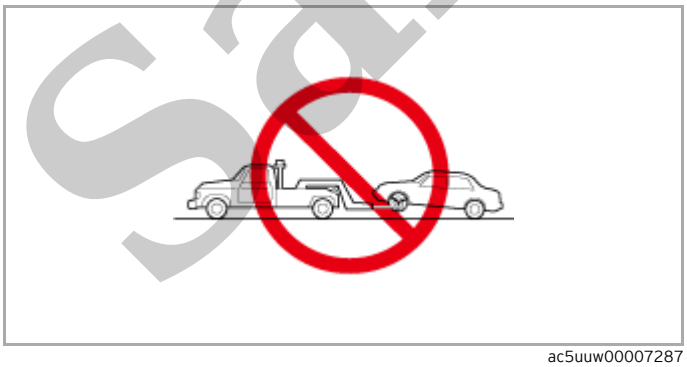
• A towed 2WD vehicle should have its drive wheels (front wheels) off the ground. If excessive damage or other conditions prevent this use wheel dollies.
• When towing a 2WD vehicle with the rear wheels on the ground, release the parking brake.
• A towed AWD vehicle must have all its wheels off the ground.

**Warning**

**• Always tow an AWD vehicle with all four wheels off the ground. Towing an AWD vehicle with either the front or rear wheels on the ground is dangerous as the drive train could be damaged, or the vehicle could trail away from the tow truck and cause an accident. If the drive train has been damaged, transport the vehicle on a flatbed truck.**



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**Caution**

**• Do not tow the vehicle pointed backward with driving wheels on the ground. This may cause internal damage to the transaxle.**

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Sample

# JACKING POSITIONS, VEHICLE LIFT (2 SUPPORTS) AND SAFETY STAND (RIGID RACK) POSITIONS

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## Jacking Positions

Warning

• Improperly jacking a vehicle is dangerous. The vehicle can slip off the jack and cause serious injury. Use only the correct front and rear jacking points and block the wheels.
• When jacking up a vehicle using a garage jack, park the vehicle on a flat and hard floor surface. If the vehicle is jacked up on an inclined or soft floor surface, the vehicle may become unstable and slip off the jack resulting in serious injury.
• When jacking up a vehicle using a garage jack, perform the work on a flat floor surface. If the vehicle is jacked up on an uneven floor surface, the garage jack does not move smoothly and the vehicle may slip off the jack resulting in serious injury.

Caution

• Before jacking up the vehicle using a garage jack, verify the following and if there is any problem, do not use the garage jack to jack up the vehicle.

  — Verify that the garage jack moves smoothly on the floor surface.
  — Verify that the jack up position is free of damage.
• Before jacking up the vehicle, remove any cargo and empty the vehicle.
• Set wheel blocks on the tires opposite to the side being jacked up to prevent the vehicle from moving accidentally while jacking it up.
• Use safety stands (rigid racks) to support the vehicle after jacking it up.

Note

• To prevent obstruction between the jack body and front bumper when the jack body is inserted, use a low-floor type jack.

Sample

# SERVICE CAUTIONS FOR VEHICLES WITH TELEMATICS COMMUNICATION SYSTEM

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Note

• For vehicles on which the following icon is displayed, it indicates that the telematics communication system service is not contracted.

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• For vehicles on which the TCU icon is not displayed, it indicates that the telematics communication system is not equipped.

## Connected Vehicle Maintenance Mode

Warning

• When receiving a vehicle from a customer and performing overhaul servicing or repeatability test, be sure to set connected vehicle maintenance mode before carrying out the work.

• The connected vehicle maintenance mode is for restricting the functions of the MyMazda App. Switching to connected vehicle maintenance mode prevents the customer from being notified of the vehicle condition while it is being serviced or the customer making a remote operation (such as engine starting) while the vehicle is being serviced.
• When returning the vehicle to the customer, always verify that connected vehicle maintenance mode was canceled.

### Switching to Connected Vehicle Maintenance Mode

1.Switch the ignition ON (engine off or on).

2.After verifying that the Mazda Connect home screen launched, press the following buttons simultaneously for 3 s or more while pressing the volume knob on the commander switch.

• FAVORITES button
• AUDIO button

Sample

# REPAIR CONNECTOR REPLACEMENT/WIRING HARNESS CONNECTION

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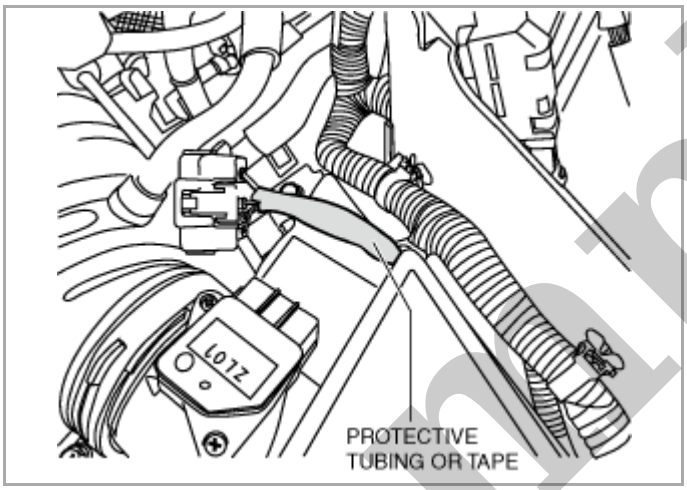
## Repair Connector Replacement

### Vehicle-side Connector Cutting

1.If tubing or electrical tape is used to protect the connector wiring harness, cut into it being careful not cut or damage the wiring, and expose approx. 200 mm {7.84 in} of the wiring from the connector.

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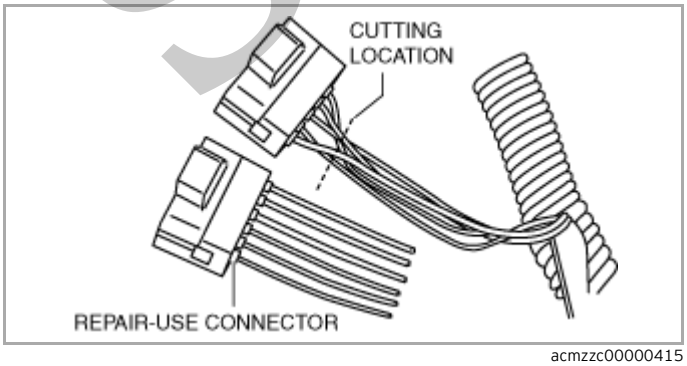
2.Cut the wiring harness once at the position near the connector so as to leave a long length of wiring harness on the vehicle side, align the length with the repair-use connector wiring harness, and then recut at the wiring harness on the vehicle side or the repair-use connector wiring harness at the appropriate position.

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**Caution**

**• When repairing a CAN-related wiring harness, cut the wiring harness in a range within 80 mm {3.1 in} from the connector area shown in the figure.**

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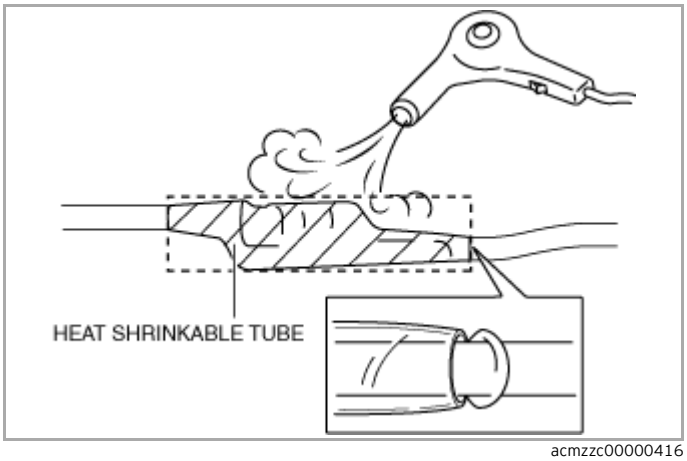

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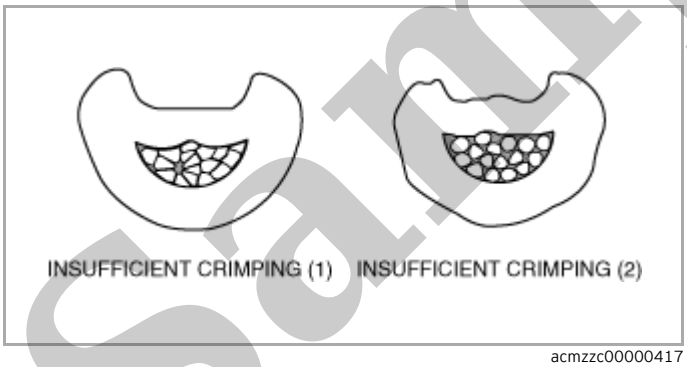
Caution

• Completely shrink the heat-shrinkable tubing to the wiring harness leaving no gaps.
• Perform the work being careful not to melt the insulation of the wiring harness due to excessive heat.

## Connection Procedure Using Crimp Terminal

Caution

• Always use the special service tool (49JP 03 001) when performing this procedure. If a similar tool other than the special service tool is used, the possibility of a poor connection occurring due to insufficient crimping is high even though it may appear that the crimping was done successfully.



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• Due to the possibility of open circuit or poor contact in the wiring harness, use the specified crimp terminal when repairing the aluminum wiring.

Note

• Aluminum wiring and copper wiring can be connected using the specified crimp terminal.

1.Select the appropriate crimp terminal and the crimping area of the special service tool according to the thickness of the wiring harness to be repaired.

| Part number | Compatible wiring size ($mm^2$) | | Crimping area of special service tool |
|---|---|---|---|
| T1X1-67TLZ | Copper wiring | 0.5–0.75 | 1.25 |
| | Aluminum wiring | 0.75 | |
| T1X2-67TLZ | Copper wiring | 1.25–2.0 | 2 |
| | Aluminum wiring | 1.25–2.5 | |

Sample