

Protection of the Vehicle

Always be sure to cover fenders, seats, and floor areas prior to beginning work.



- The support rod must be inserted into the hole near the edge of the hood whenever you inspect the engine compartment to prevent the hood from falling and causing possible injury.
- Make sure that the support rod has been released prior to closing the hood. Always make sure the hood is firmly latched before driving the vehicle.

Preparation of Tools and Measuring Equipment

Make sure that all necessary tools and measuring equipment are available prior to beginning work.

Special Tools

Use special tools when they are required.



Disassembly

If the disassembly procedure is so complex that it requires many parts to be disassembled, all parts should be disassembled in a way that will not affect their performance or external appearance.

1) Inspection of parts

Each part, when removed, should be carefully inspected for malfunction, deformation, damage, and other problems.

2)Arrangement of parts

All disassembled parts should be carefully arranged for effective reassembly.

Be sure to separate and distinguish the parts to be replaced from those that will be used again.



3)Cleaning parts for reuse

All parts to be used again should be carefully and thoroughly cleaned in an appropriate method.

Parts

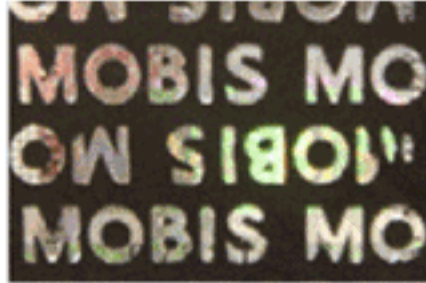
When replacing parts, use HYUNDAI genuine parts.



Genuine Parts



Attachment State



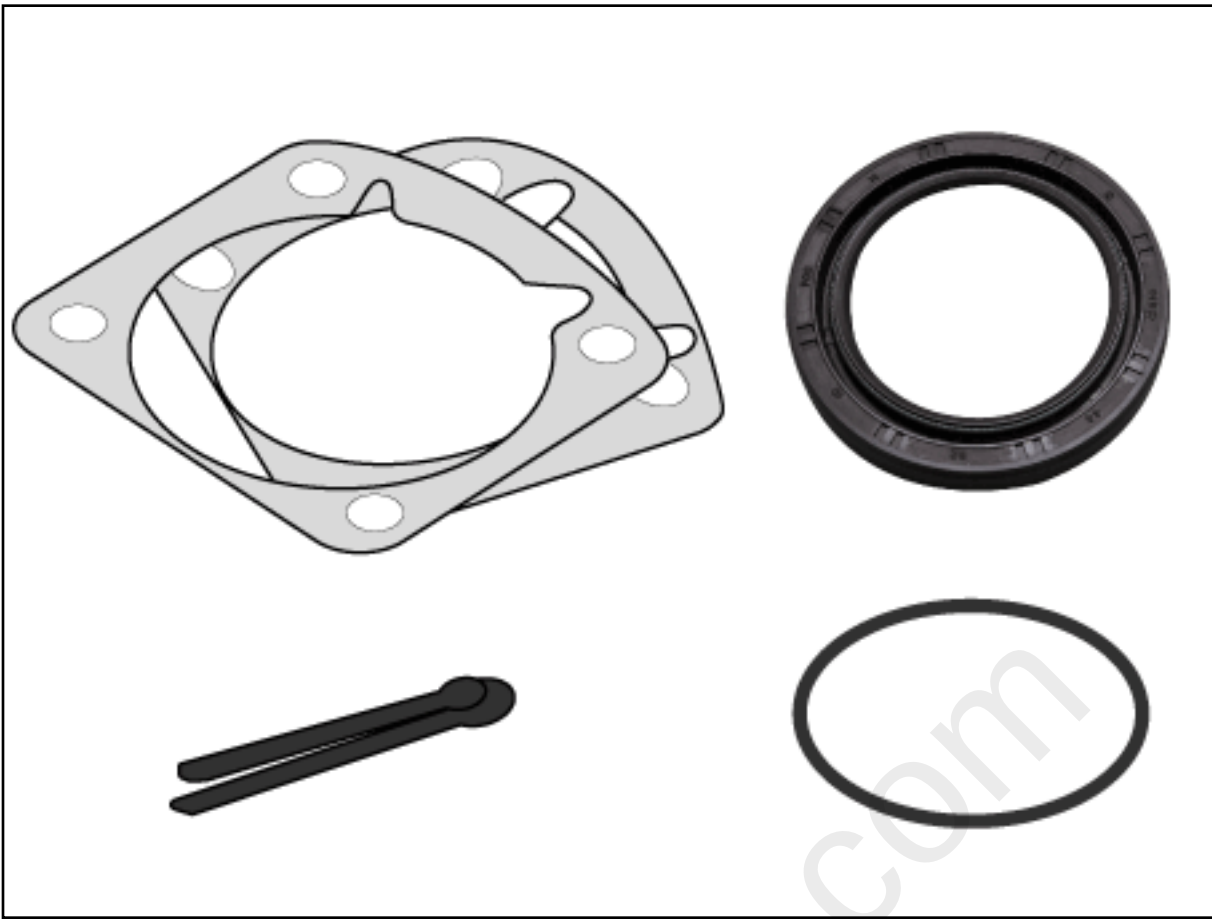
desorption state

Replacement

Standard values, such as torques and certain adjustments, must be strictly observed in the reassembly of all parts.

If removed, the following parts should always be replaced with new ones.

- 1) Oil seals
- 2) Gaskets
- 3) O-rings
- 4) Lock washers
- 5) Cotter pins (split pins)
- 6) Plastic nuts

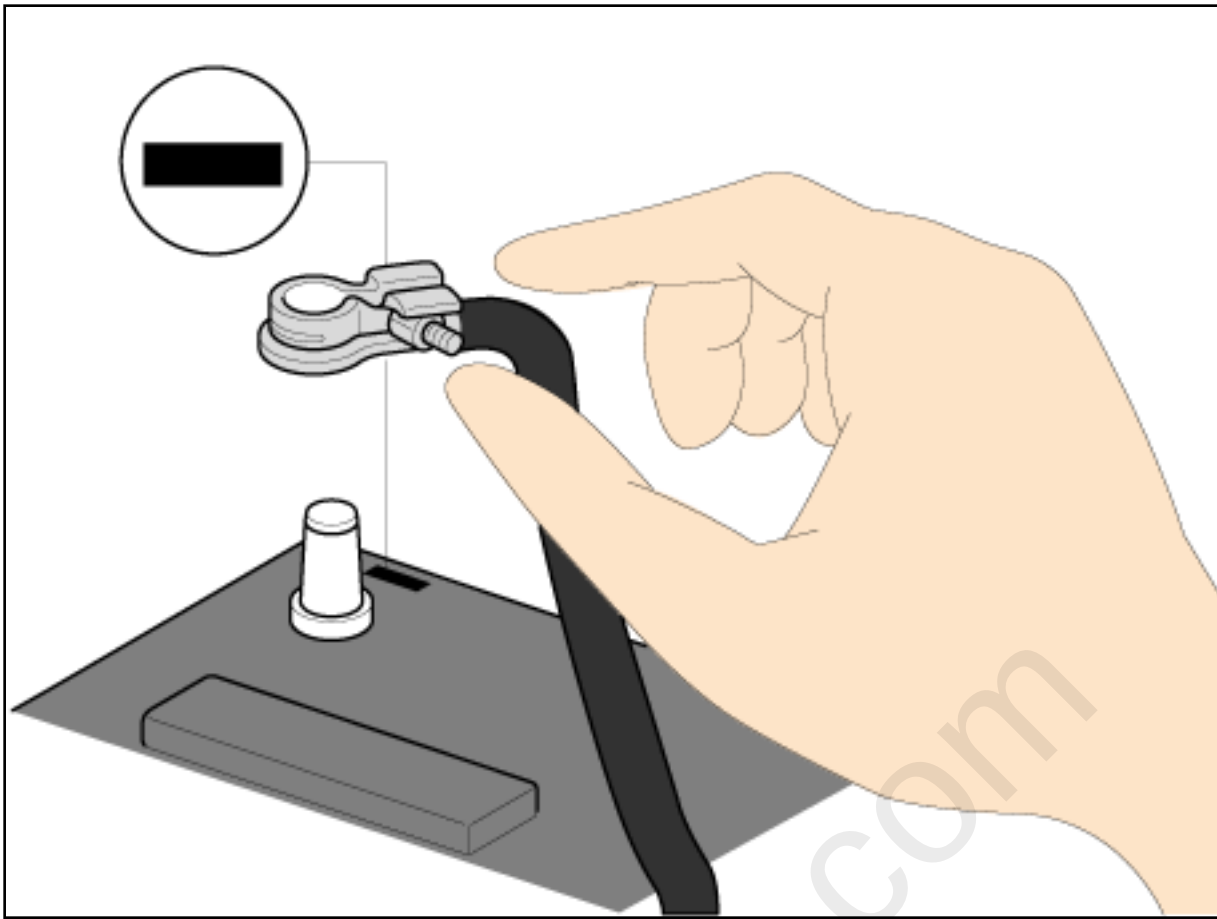


Adjustment

Use gauges and testers to adjust correctly the parts to standard values.

Electrical System

1. Be sure to disconnect the battery cable from the negative (-) terminal of the battery.
2. Never pull on the wires when disconnecting connectors.
3. Locking connectors will click when the connector is secure.
4. Handle sensors and relays carefully. Be careful not to drop them against other parts.



Rubber Parts and Tubes

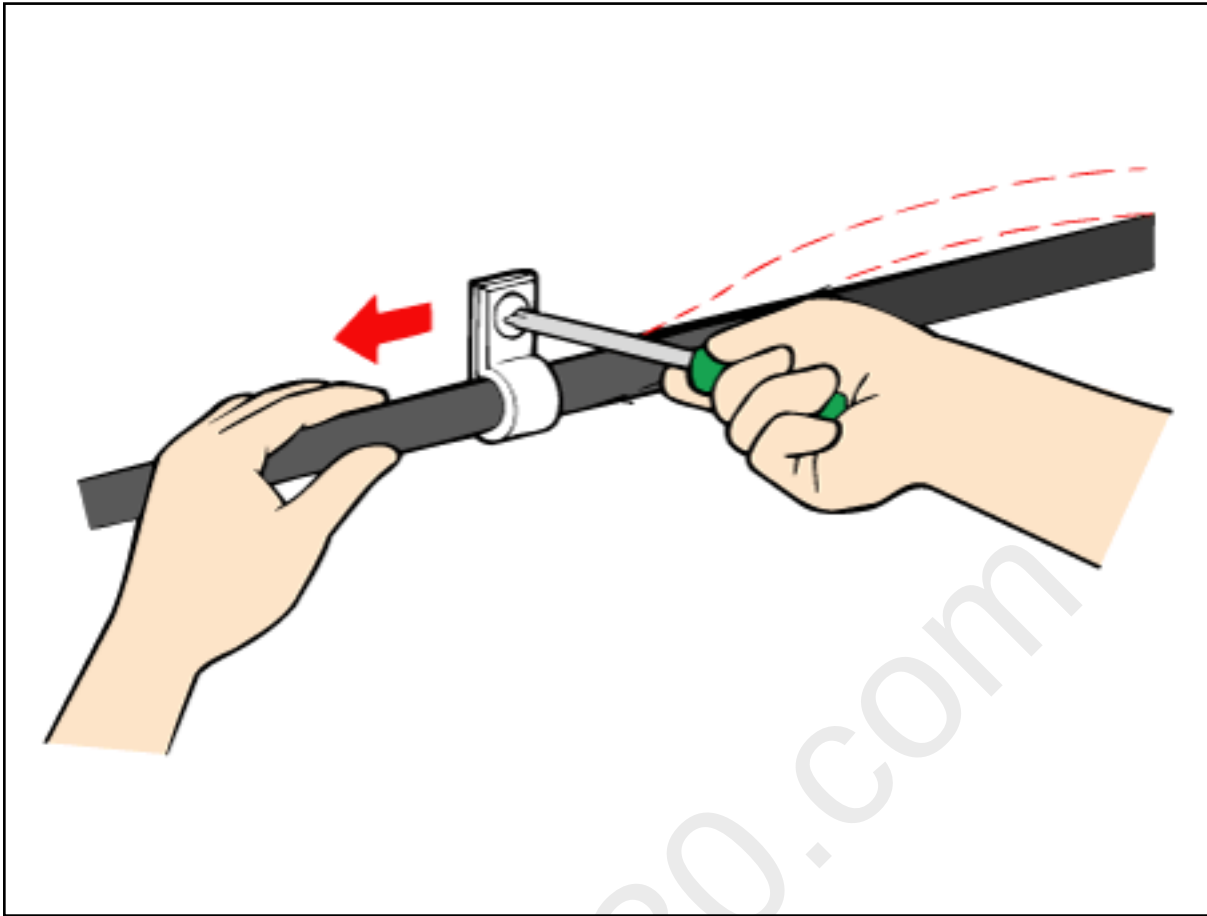
Always prevent gasoline or oil from contacting the rubber parts or tubes.



Checking Cables and Wires

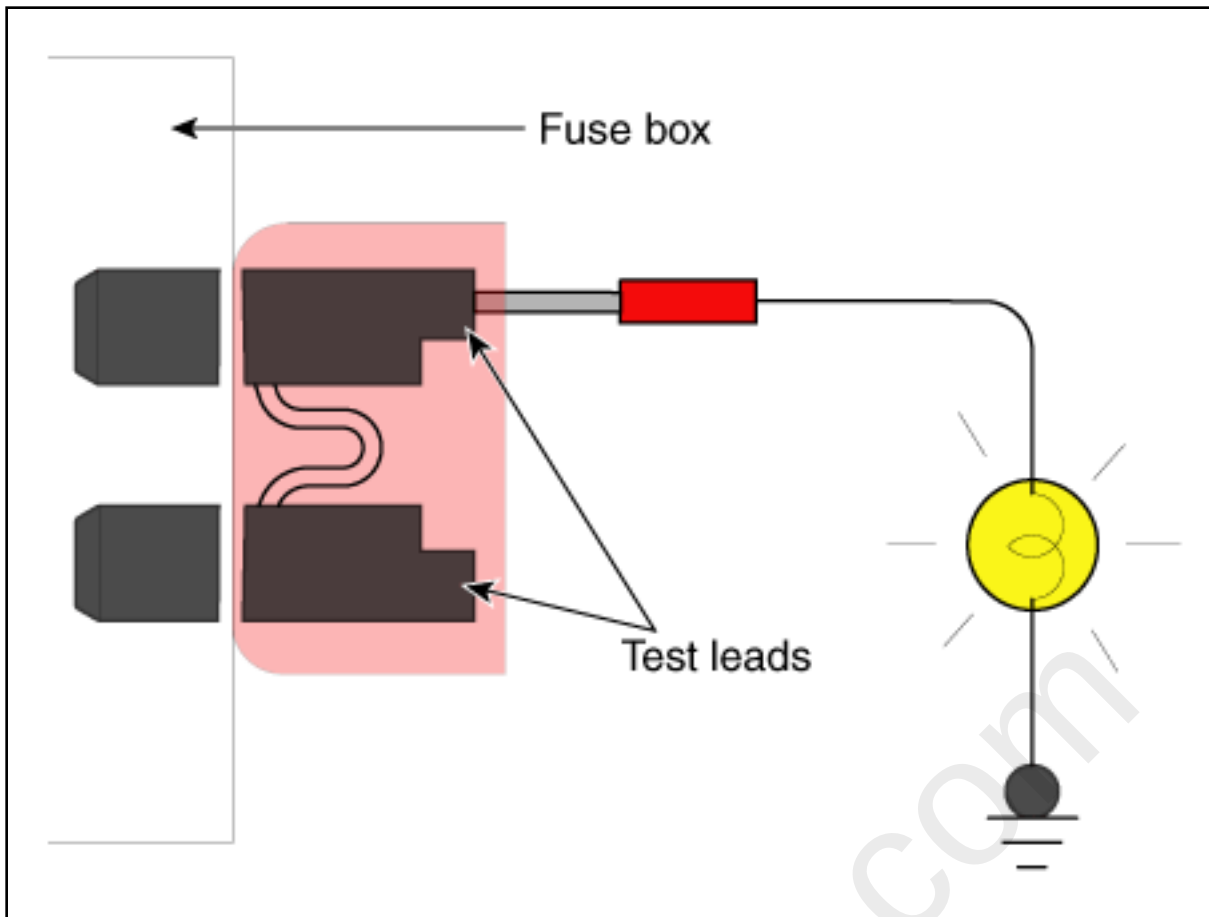
1. Check the terminal for tightness.
2. Check terminals and wires for corrosion from battery electrolyte, etc.
3. Check terminals and wires for open circuits.
4. Check wire insulation and coating for damage, cracks and degrading.
5. Check whether the conductive parts of terminals contact other metallic parts (vehicle body and other parts).
6. Check whether there is complete continuity between the attaching bolt(s) of the grounded parts and the vehicle's body.
7. Check for incorrect wiring.
8. Check the wiring is clamped to prevent contact with sharp corners of the vehicle body, or hot parts (exhaust manifold, pipe, etc.)
9. Check that the wiring is clamped firmly to provide enough clearance from the fan pulley, fan belt and other rotating or moving parts.

10. Check that the wiring has a little space so that it can vibrate between the fixed (the vehicle body) and moving parts (wirings, engine, etc.)



Checking Fuses

A blade-type fuse has test taps which enable checking the fuse without removing the fuse from the fuse box. The fuse is in good state if the test lamp lights up when one lead is connected to the test taps (one at a time) and the other lead is grounded. (Turn the ignition switch so that the fuse circuit becomes operative)

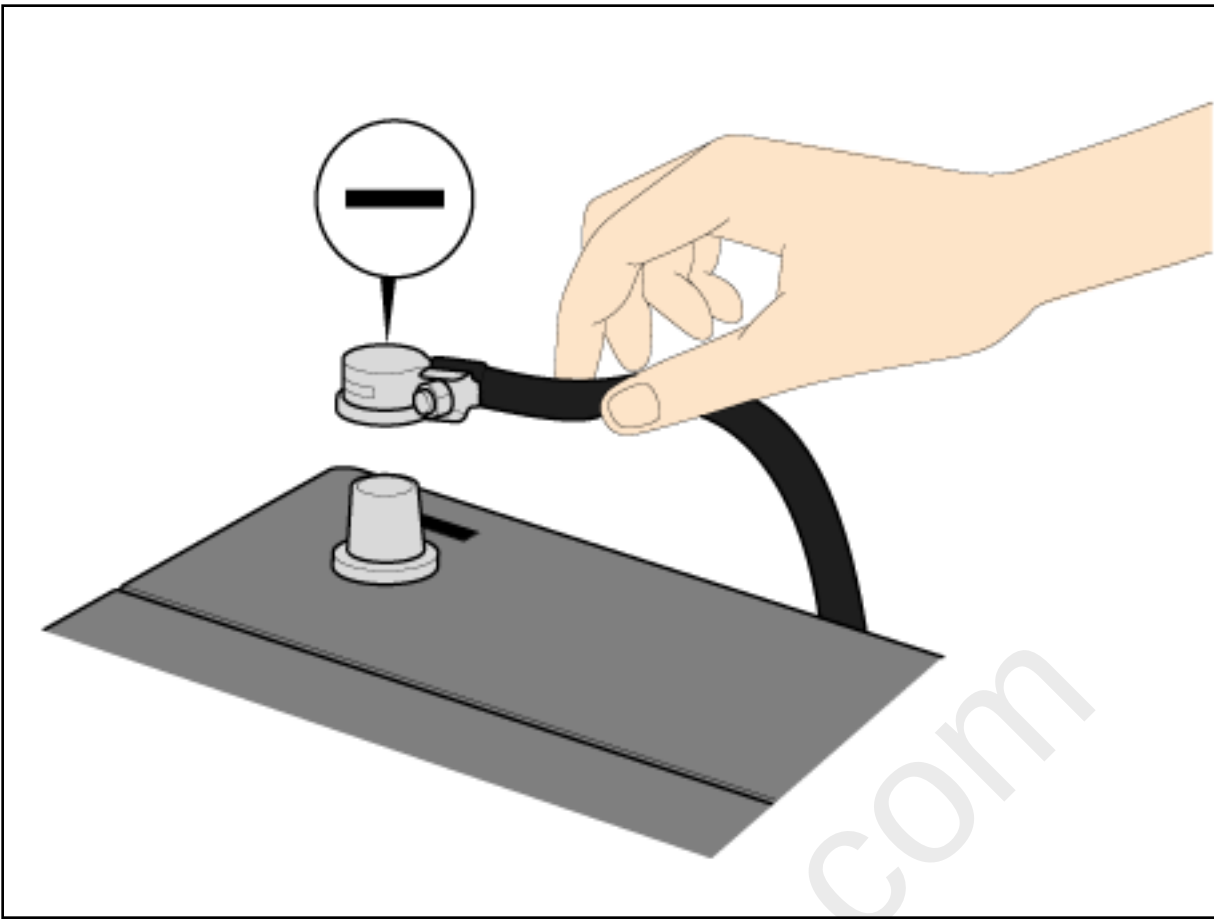


Servicing the Electrical System

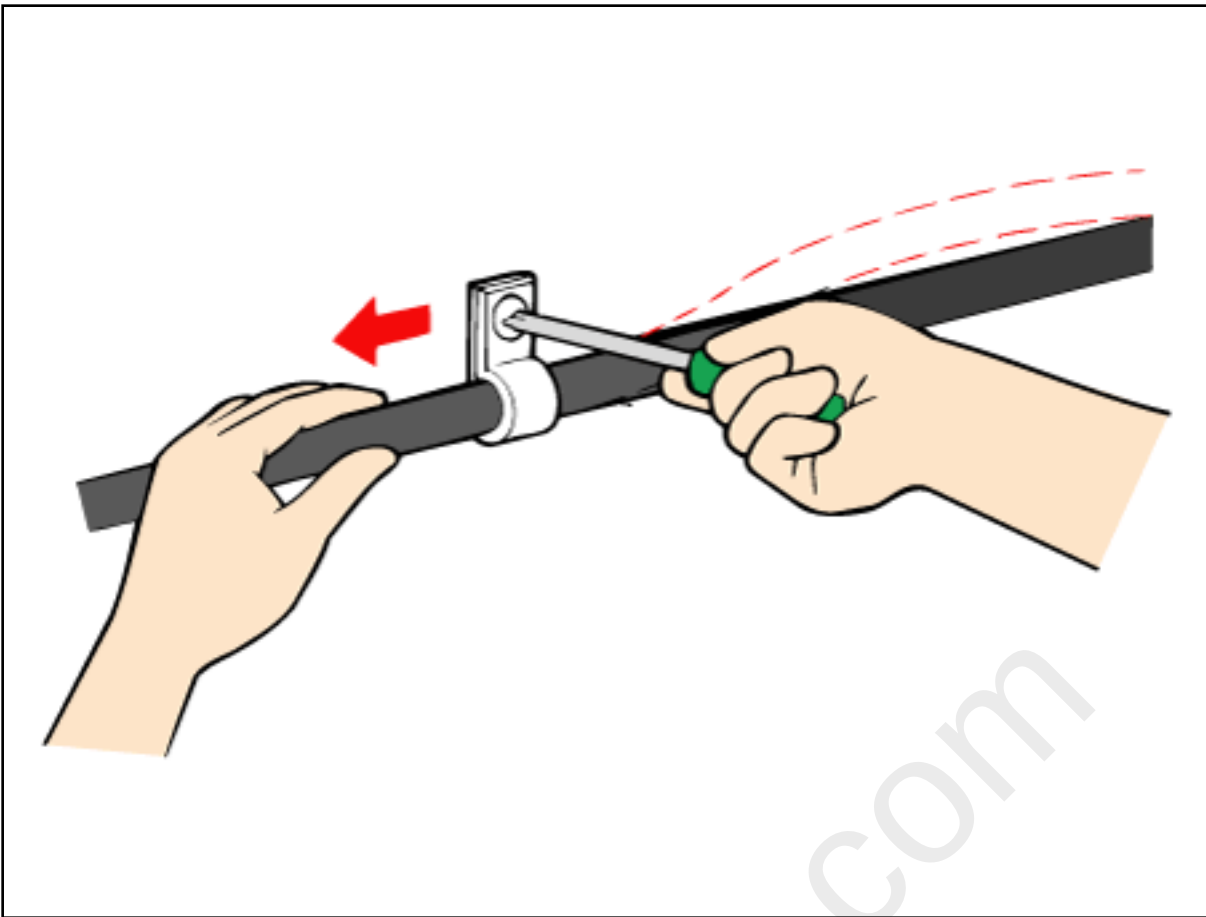
1. Prior to servicing the electrical system, make sure to turn off the ignition switch and disconnect the battery ground cable.



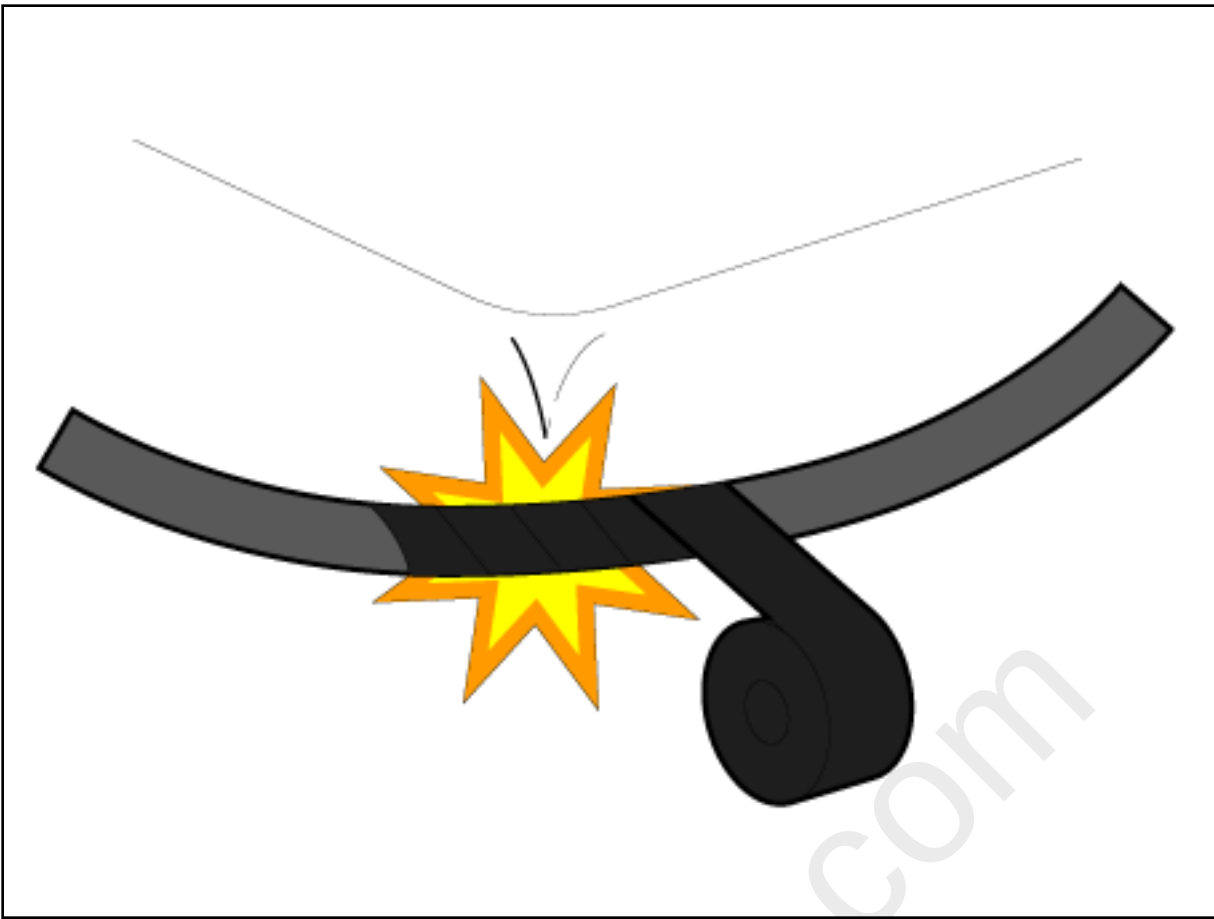
- In the course of MFI or ELC system diagnosis, when the battery cable is removed, any diagnostic trouble code retained by the computer will be cleared. There fore, if necessary, record the diagnostic data before removing the battery cable.



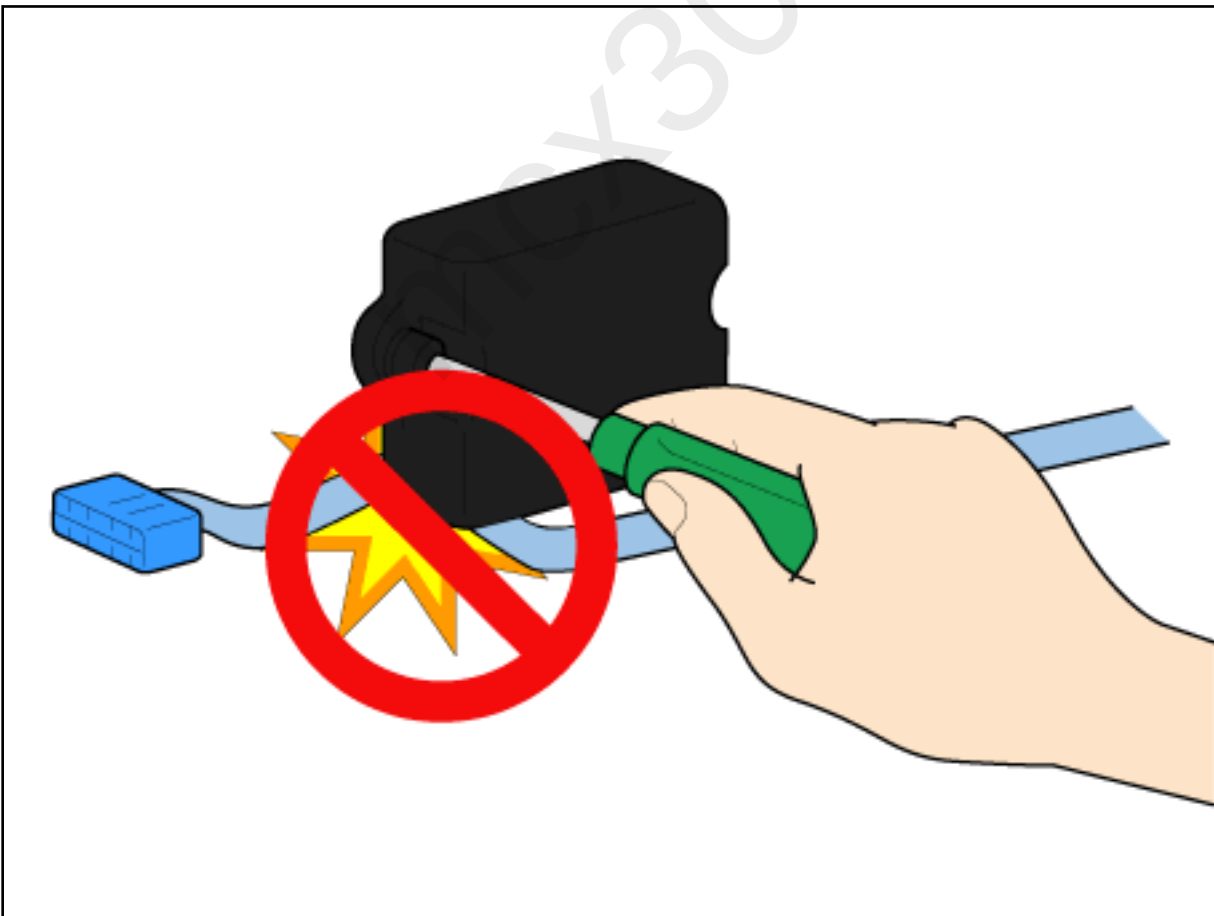
2. Fix the wiring harnesses with clamps so that there is no slack wiring. However, for any harness which passes the engine or other vibrating parts of the vehicle, allow some slack within a range that does not allow the engine vibrations to cause the harness to come into contact with any of the surrounding parts and then secure the harness by using a clamp.



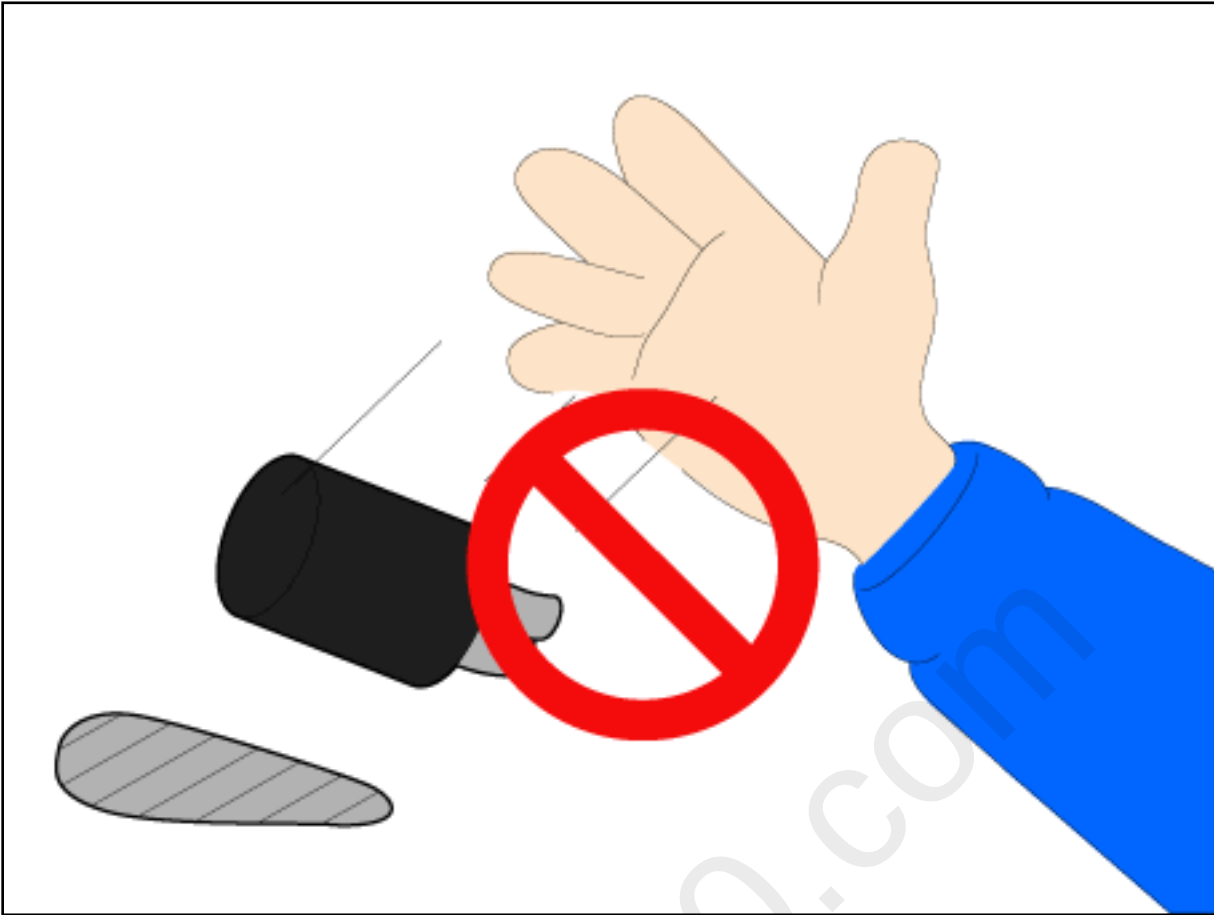
3. If any section of a wiring harness interferes with the edge of a part, or a corner, wrap the section of the harness with tape or something similar in order to protect it from damage.



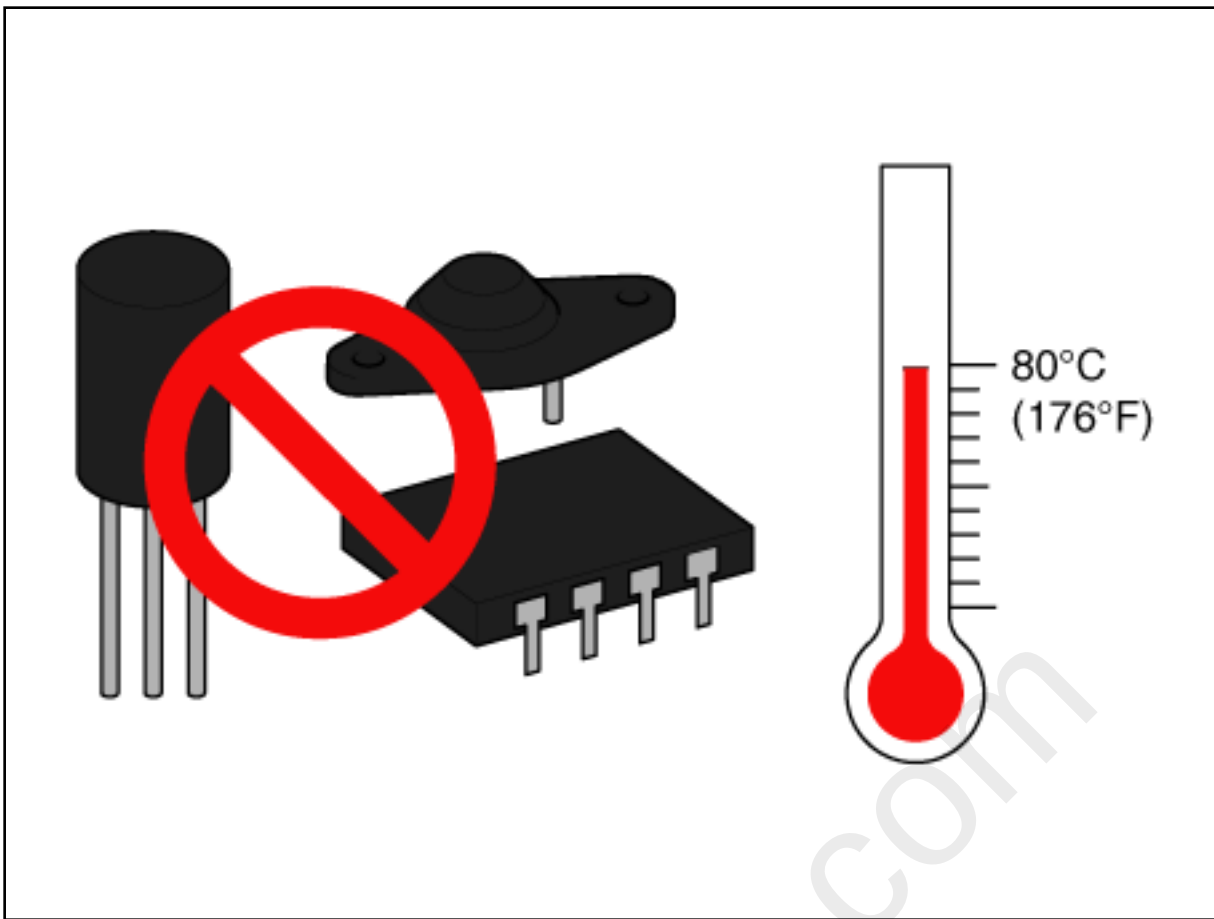
4. When installing any parts, be careful not to pinch or damage any of the wiring harness.



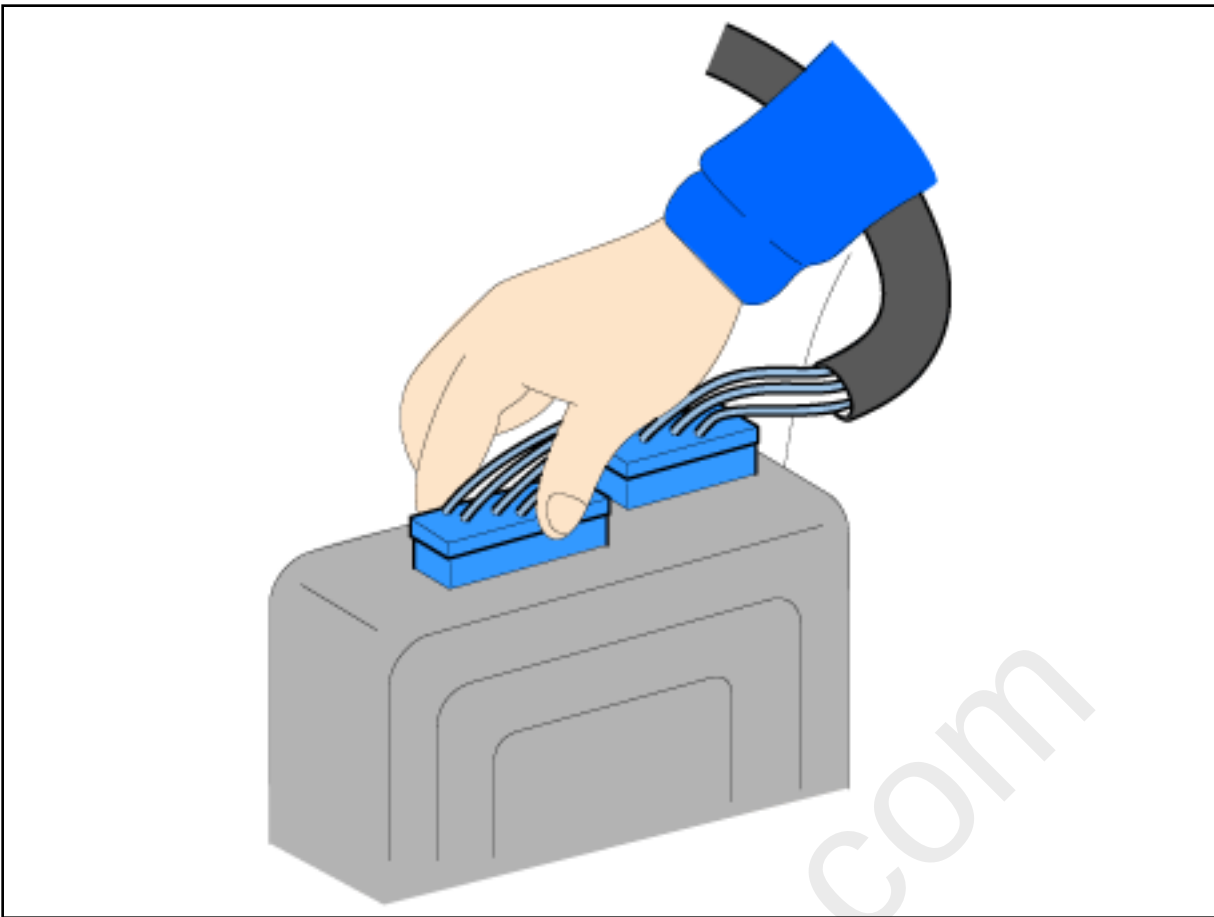
5. Never throw relays, sensors or electrical parts, or expose them to strong shock.



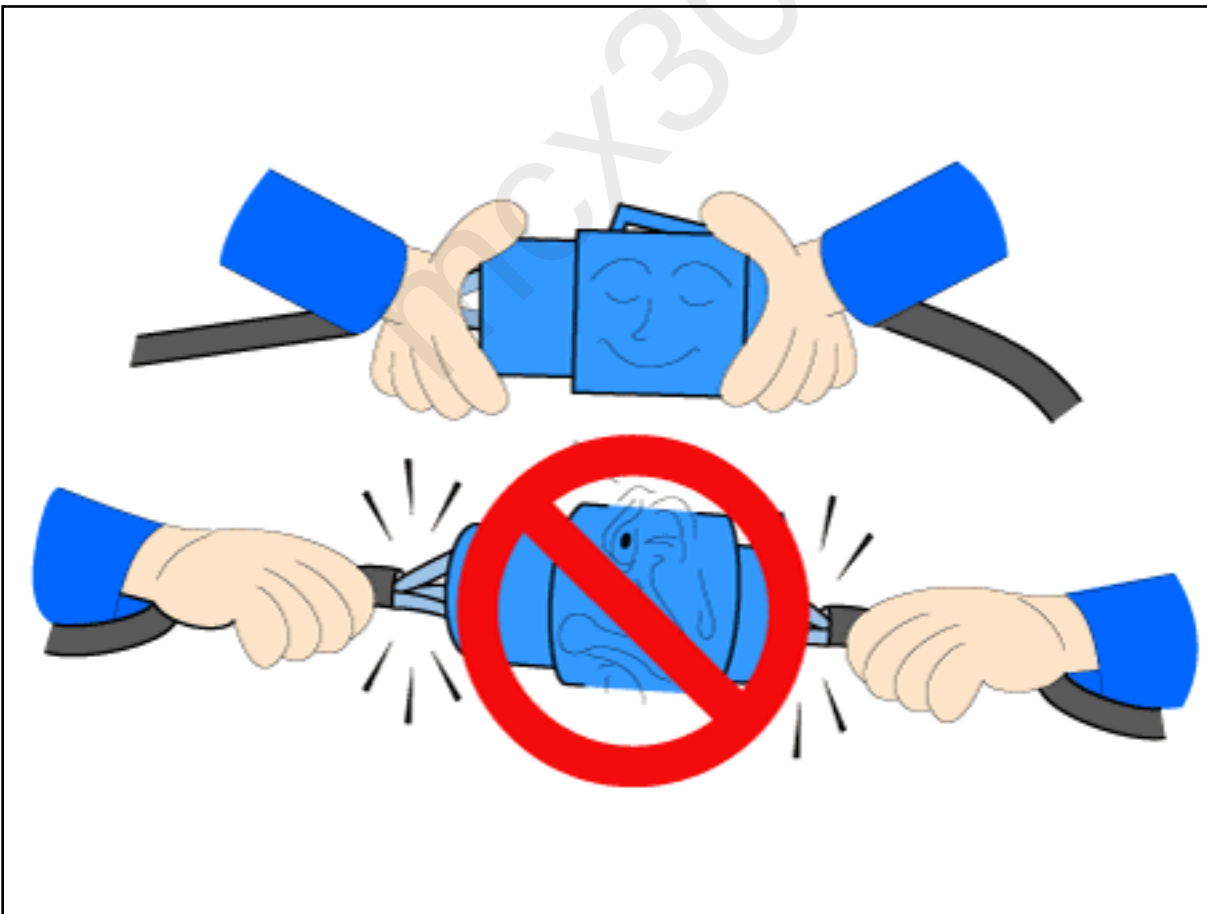
6. The electronic parts used in the computer, relays, etc. are easily damaged by heat. If there is a need for service operations that may cause the temperature to exceed 80°C (176°F), remove the electronic parts beforehand.



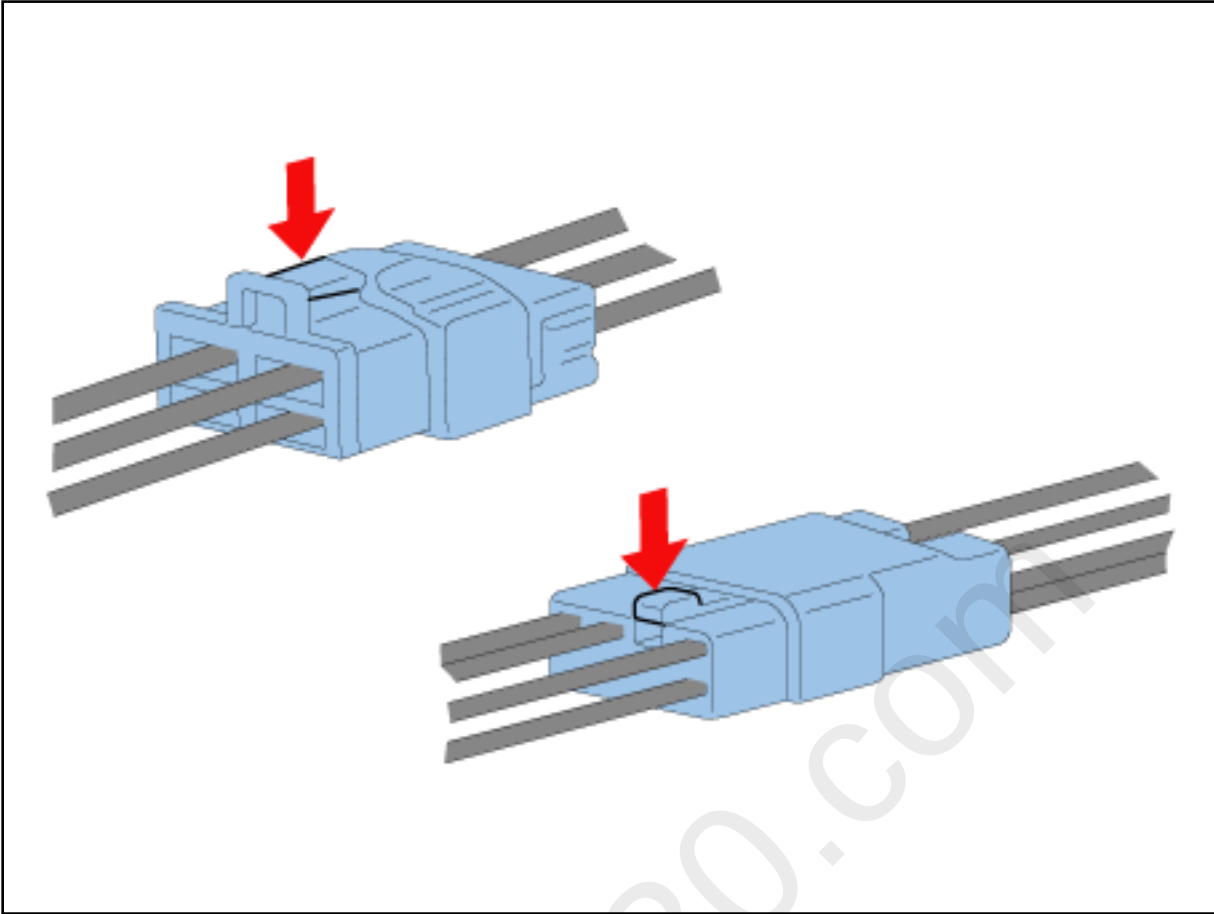
7. Loose connectors may cause malfunction. Make sure that the connectors are always securely fastened.



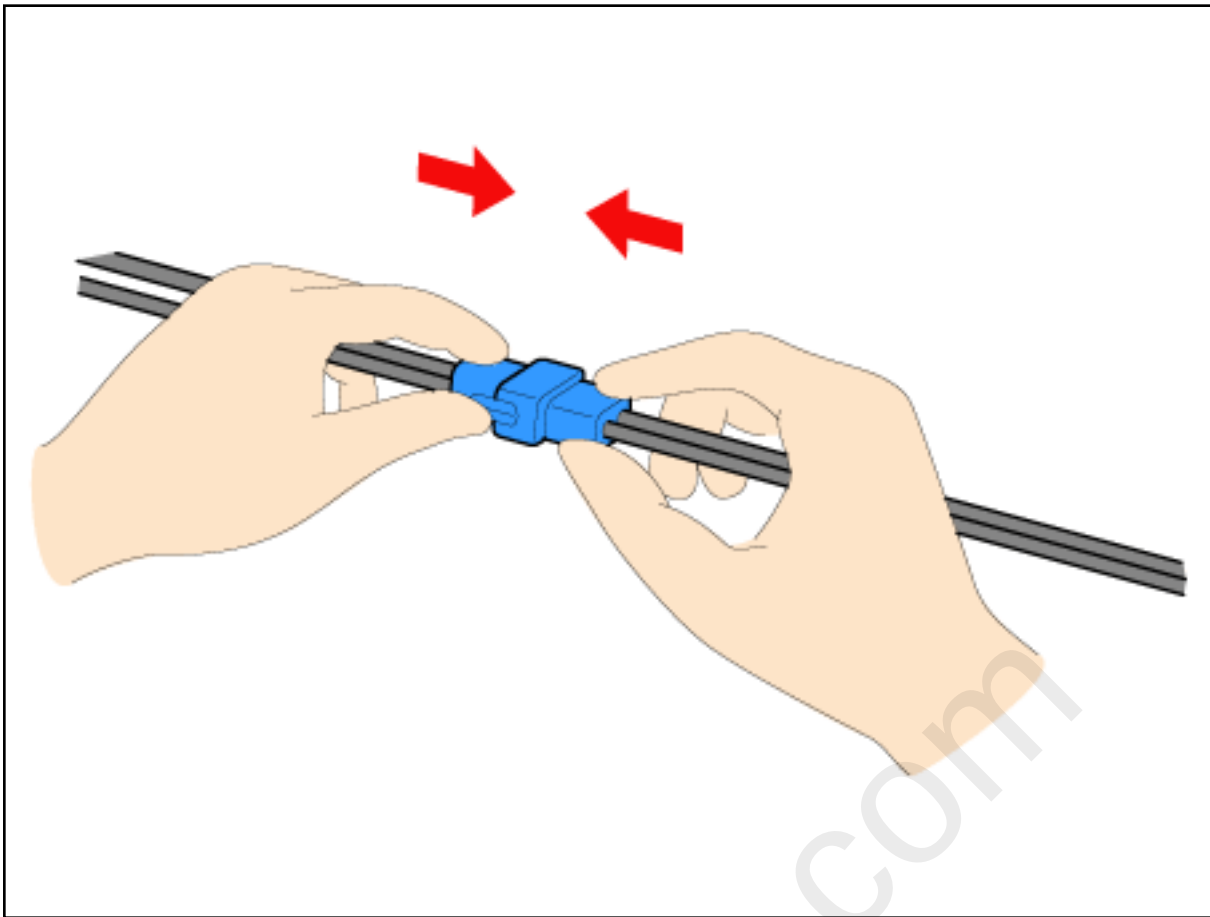
8. When disconnecting a connector, be sure to grip only the connector, not the wires.



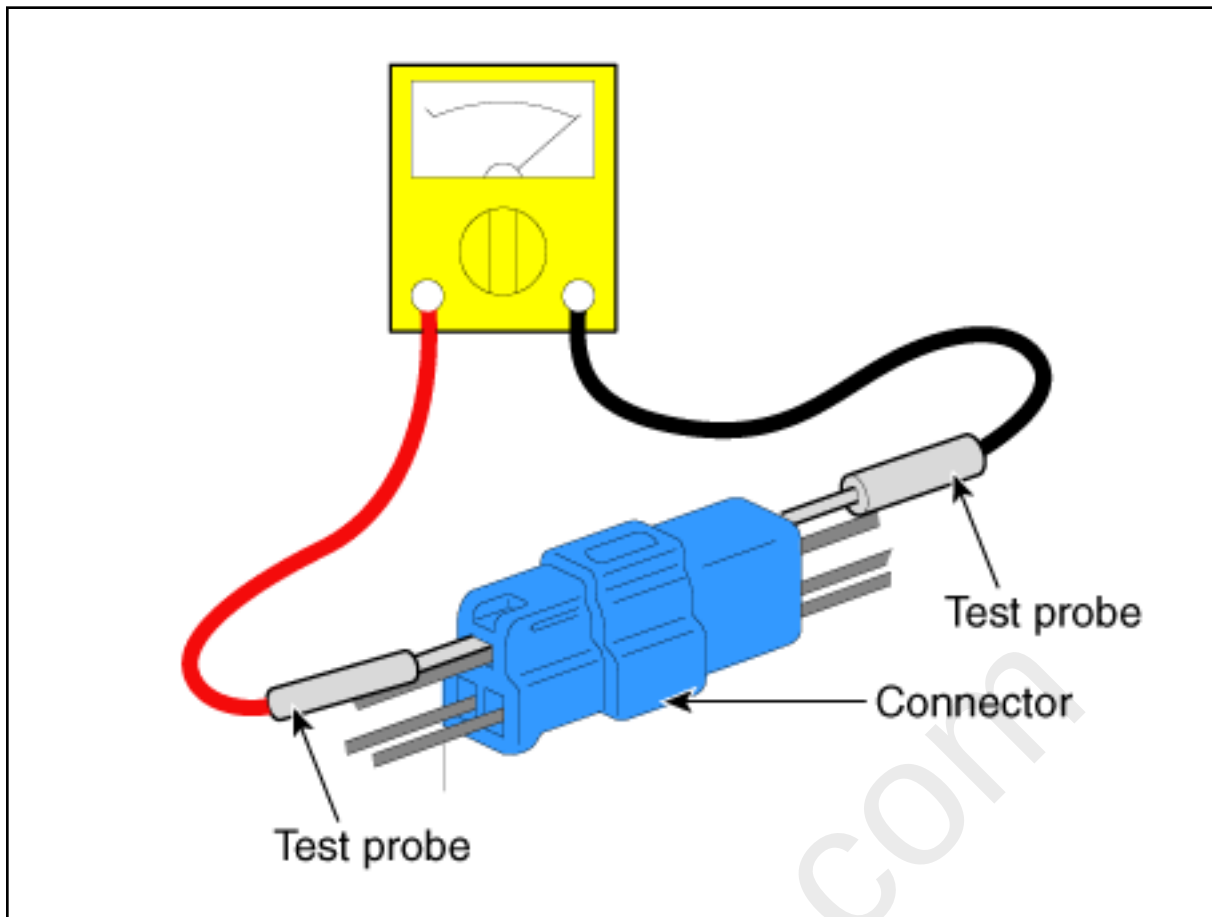
9. Disconnect connectors which have catches by pressing in the direction of the arrows shown in the illustration.



10. Connect connectors which have catches by inserting the connectors until they make a clicking sound.



11. When using a circuit tester to check continuity or voltage on connector terminals, insert the test probe into the harness side. If the connector is a sealed connector, insert the test probe through the hole in the rubber cap until the probe contacts the terminal, being careful not to damage the insulation of the wires.



12. To avoid overloading the wiring, take into consideration the electrical current load of the optional equipment when determining the appropriate wire size.

Recommended size	SAE gauge No	Permissible current	
		In engine compartment	Other areas
0.3mm ²	AWG 22	-	5A
0.5mm ²	AWG 20	7A	13A
0.85mm ²	AWG 18	9A	17A
1.25mm ²	AWG 16	12A	22A
2.0mm ²	AWG 14	16A	30A
3.0mm ²	AWG 12	21A	40A

5.0mm ²	AWG 10	31A	54A
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Precautions for Catalytic Converter



•If a large amount of unburned gasoline flows into the converter, it may overheat and create a fire hazard. To prevent this, observe the following precautions and explain them to customers.

1. Use only unleaded gasoline.
2. Do not run the engine while the car is at rest for a long time. Avoid running the engine at fast idle for more than 10minutes and at idle speed for more than 20 minutes.
3. Do not measure engine compression for an extended time. Engine compression tests must be made as rapidly as possible. Remove the fuel pump relay before performing a compression test.
4. Do not dispose of used catalytic converter together with parts contaminated with gasoline or oil.

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