

## GENERAL INFORMATION

This manual provides instruction in the following repairs:

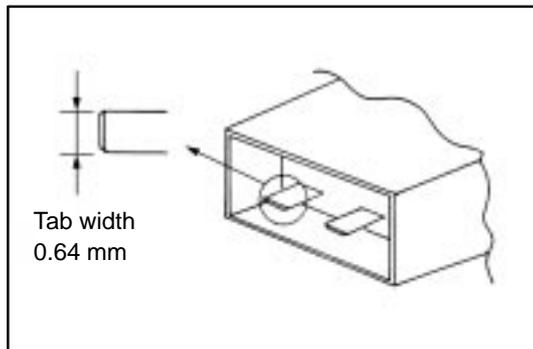
- How to Inspect for System Inspection
- Circuit Protection
- Terminal and Connector Repair Procedure

### NOTICE:

When inspecting or repairing the SRS AIRBAG, be sure to carefully read the precautionary instructions and procedure in the Repair Manual for the applicable model.

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After any electrical repair is made, always test the circuit by operating the devices in the circuit. This confirms not only that the repair is correct, but also that the cause of the complaint was correctly identified.



### Terminal type number name

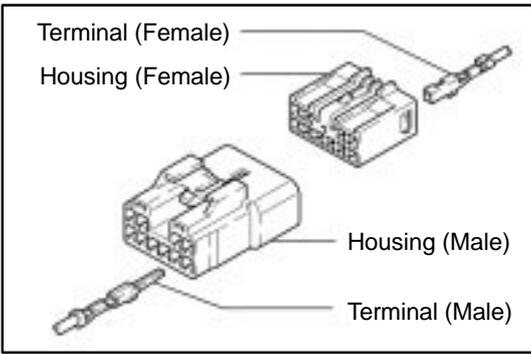
The terminal type number naming system has changed: the metric system will be used in place of the inch system. To be more specific, male tab width "in millimeters" will be used as terminal type number from now on — in place of male tab width in inches which has been in use so far.

Below is a table of comparison:

Old terminal type No. (inch)		New terminal type No. (mm)
025	→	0.64
040 (II, III, IV)	→	1.0 (II, III, IV)
050	→	1.3
070 (II)	→	1.8 (II)
090 (II)	→	2.3 (II)
187	→	4.8
250 (II)	→	6.3 (II)
305	→	7.7
312	→	8.0
375	→	9.5

For those connectors which are not shown above, the terminal type numbers remain unchanged.

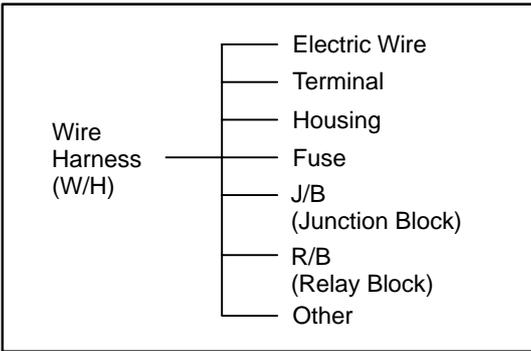
**INTRODUCTION-GENERAL INFORMATION**



**What is Wire Harness?**

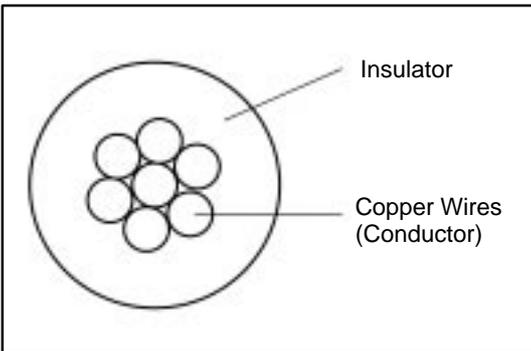
The wire harness (W/H) is systems of electric wires for automobiles to connect all the electronics parts in automobile electrically and work them. As more electronics parts are introduced in automobiles recently, the electric wires used for the wire harness are increasing in number and the structure is becoming more complicated. As a result of that, there are hundreds of connectors, which is the parts which connects wires mechanically and electrically, in one vehicle. Therefore, numbers of the connector terminal (Terminal) or the connector housing (Housing) are designed to meet many kinds of uses of circuits. Various components have been improved to ensure the product reliability or realize a wider space in the vehicles.

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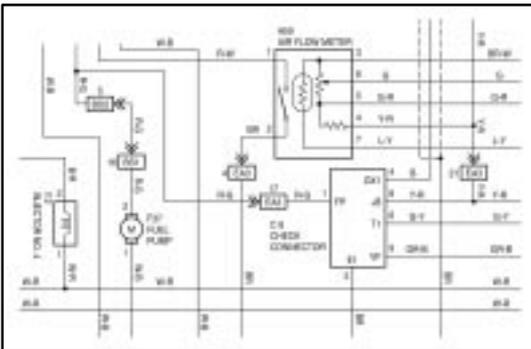
**Wire Harness Components**

Wire harness mainly consists of wires, terminals, or housings. There are various components are designed for many parts of vehicles, such as one with high heat-resistance, water-resistance, or bending ability, ones have different current capacities, or ones are hardly influenced by electromagnetic noise.



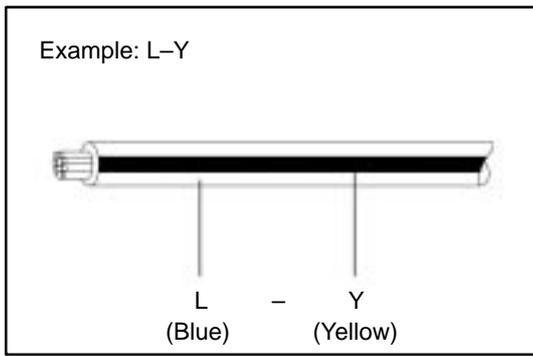
**Electric Wire**

The electric wires used for the wire harness consists of the conductor made from numbers of twisted mild copper wire with a diameter of less than 0.5 mm and the insulator surrounding the conductor. The insulator is generally made from vinyl chloride and covers the conductor with even thickness. The insulators are color-coded in order to distinguish each wire. The base colors or the stripe patterns is used to make difference between insulators. Each color of wires is indicated by the abbreviation in the repair manual and the electrical wiring diagram.



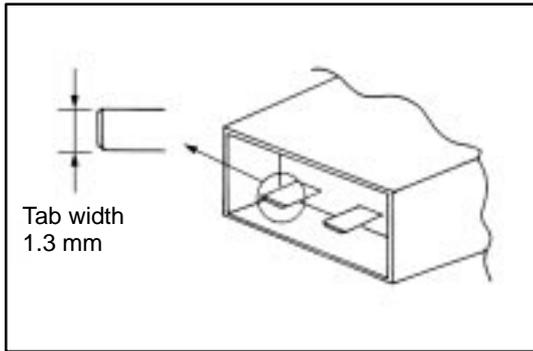
B = Black	W = White
L = Blue	BR = Brown
V = Violet	SB = Sky Blue
R = Red	G = Green
P = Pink	LG = Light Green
Y = Yellow	GR = Gray
O = Orange	

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The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

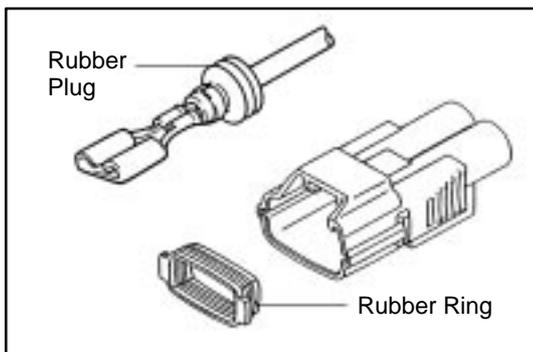
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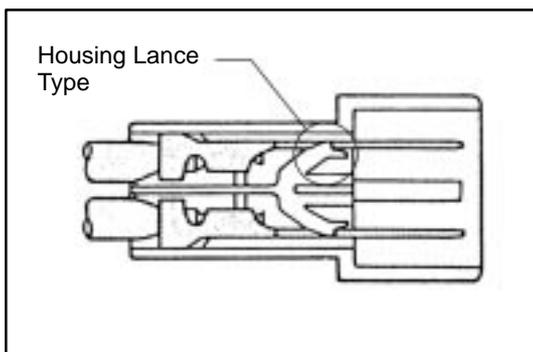
Terminal and housing

Terminal connects wires and housing insulates connecting parts.

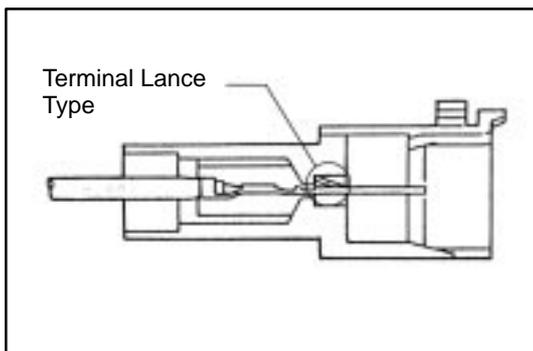
There are the male terminal and the female terminal. The types of terminals are decided by tab width of male terminal. And the terminal with the rubber plug or the rubber ring is used in the part, such as the engine compartment, which become wet. For the circuit with slight current at EFI system or ABS system, the gold-plated terminal is introduced for ensuring reliabilities.



As the number of the circuit is increasing recently, there are new types of parts introduced. For example, there is the hybrid type housing, which is a combination of terminals with different tab width, such as the power source terminal or the signal terminal. Also, new type of connector such as the double lock housing, which is designed with the retainer in addition to the lance to prevent terminal from slipping off, is available. The new type of connectors are produced to realize higher product reliabilities and utilized widely recently. The major characteristics of these new connectors are shown in the table 1.

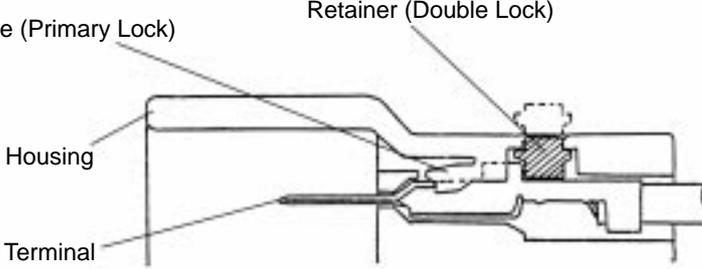
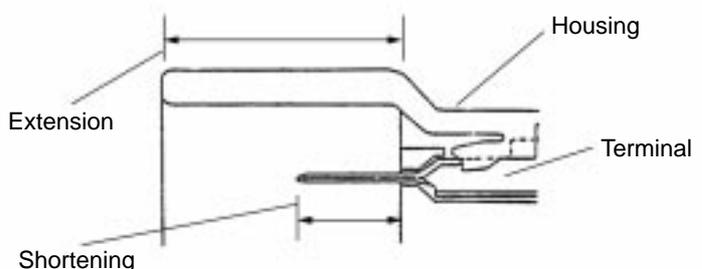
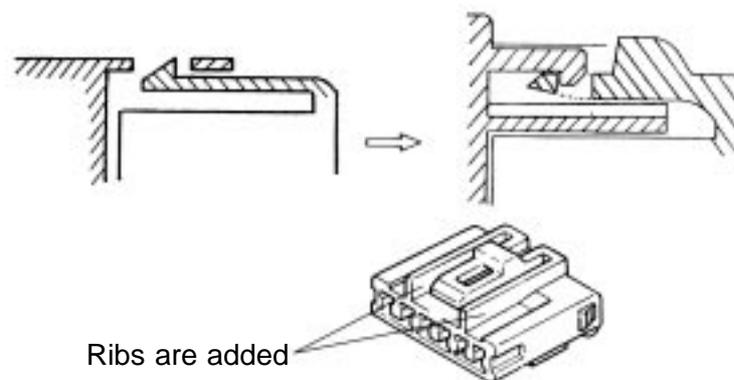


There are two types of lances: housing lance, which is inside the housing and terminal lance, which is inside the terminal.



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**Table 1 : Characteristics of the new types of connector (Improvement)**

Characteristics (Improvement)	Note
<p>1. Double Lock</p> <p>Lance (Primary Lock)      Retainer (Double Lock)</p> 	<p>If terminal is not inserted to housing correctly, the retainer does not fit.</p>
<p>2. Extension of Housing</p> 	<p>This is to prevent deformation of the terminal when it is inserted diagonally.</p>
<p>3. Change of Contact Structure and Introduction of Box-Shaped Structure</p> 	<p>Expansion of contact section Stabilization of contact pressure</p>
<p>4. Change of Locking Shape</p>  <p>Ribs are added</p>	<p>This improves the close fit of locking and you can hear the click sound and feel that the connector is completely installed.</p>

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