

WIRE TERMINAL SUPPLIES and REPAIR PROCEDURES

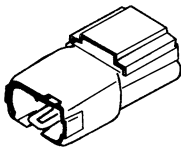
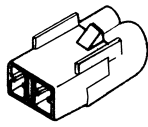
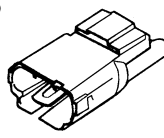
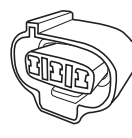
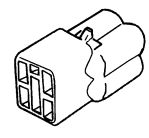
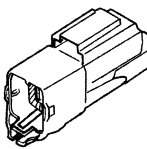
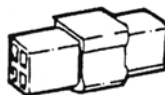
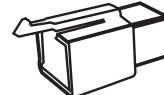
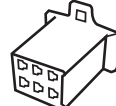
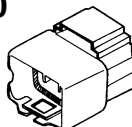


This bulletin supersedes STN #11 dated November, 2016


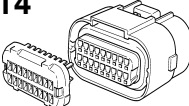

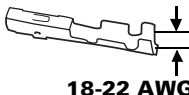
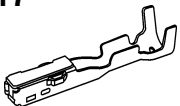

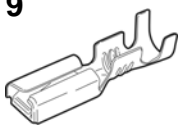
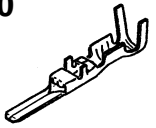
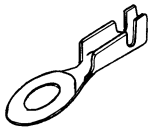



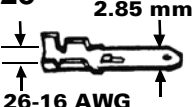
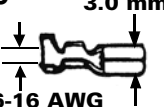
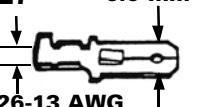
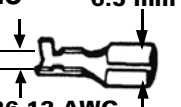
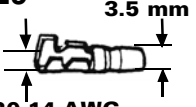
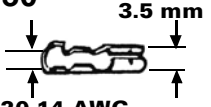
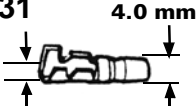
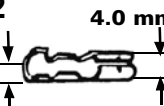
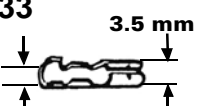

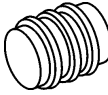


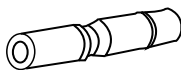



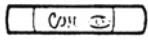


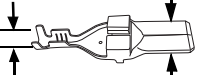
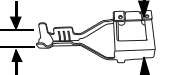
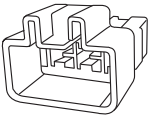
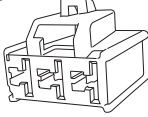
CONTENTS

- **CONNECTORS, TERMINALS, and SEALS on page 1** is a catalog of parts that allow for the repair of most Honda motorcycle wire harnesses and connectors.
- **TERMINAL REPAIR TOOLS AND EQUIPMENT on page 4** is a catalog of tools and supplies for repairing wire harnesses and connectors.
- **REPAIR PROCEDURE PRECAUTIONS on page 5** includes general procedures to follow before making wiring repairs.
- **CHECKING FOR POORLY FITTING TERMINALS on page 6** shows the proper use of terminal pin fit tools.
- **SECONDARY LOCK REMOVAL on page 7** shows how to prepare a connector for terminal removal/repair/installation.
- **TERMINAL REMOVAL on page 7** shows the correct tools and procedures for removing terminals from connectors.
- **INSTALLING NEW TERMINALS on page 9** shows the correct tools and procedures for stripping wires and installing new terminals.
- **REPAIRING A DAMAGED WIRE WITH A SPLICE on page 11** shows the correct tools, parts, and procedures for repairing damaged wires.

CONNECTORS, TERMINALS, and SEALS

The individual wire terminal supplies and tools shown below are available from the Parts Division. Order through normal parts ordering procedures using the part numbers listed. The terminal pin storage box (#4 on page 3) is designed to store individual connectors, terminals, and tools.

07VPZ-002040A 1  2-Pin Connector, male terminals Use with: 19, 34, 35	07VPZ-002010A 2  2-Pin Connector, female terminals (replacement for blue, red, green connector) Use with: 18, 34, 35	07VPZ-002060A 3  3-Pin Connector, male terminals (replacement for green connector) Use with: 19, 34, 35	070MZ-002A700 4  3-Pin Connector, female terminals Use with: 17, 37	07VPZ-002020A 5  4-Pin Connector, female terminals Use with: 18, 34, 35	07VPZ-002030A 6  4-Pin Connector, male terminals Use with: 20, 34, 35
07692-0011300 7  4-Pin Connector Assy., Use with: 25, 26	070MZ-0020500 8  6-Pin Connector, male terminals Use with: 25	070MZ-0020400 9  6-Pin Connector, female terminals Use with: 19	07VPZ-002050A 10  6-Pin Connector, male terminals Use with: 19, 35, 36	07692-0011200 11  Large 6-Pin Connector Assy. Use with: 27, 28	070MZ-0020700 12  9-Pin Connector, male terminals Use with: 25

070MZ-0020600 13  9-Pin Connector, female terminals Use with: 19	070MZ-MCAA300 14  18-Pin Connector, female terminals Use with: 15	070MZ-MCAA201 15  NEW Terminal w/pigtail Use with: 14	07JAZ-001360A 16  18-22 AWG Female terminal Use with: See Parts Information	070MZ-002A800 17  Female terminal Use with: 4, 37	07JAZ-001090A 18  26-16 AWG Female terminal Use with: 2, 5, 34
07JAZ-001070A 19  Female Terminal Use with: 9, 13	07JAZ-001080A 20  Male Terminal Use with: 1, 3, 6, 34, 35, 36	07VPZ-001020A 21  6 mm ring terminal	07VPZ-001060A 22  5 mm ring terminal	07692-0011100 23  Small spade terminal	07692-0010700 24  Large spade terminal
07692-0010500 25  2.85 mm 26-16 AWG Male terminal, 2.85 mm Use with: 7, 8	07692-0010600 26  3.0 mm 26-16 AWG Female terminal, 3.0 mm Use with: 7, 9	07692-0010900 27  6.0 mm 26-13 AWG Male terminal, 6.0 mm Use with: 11	07692-0011000 28  6.5 mm 26-13 AWG Female terminal, 6.5 mm Use with: 11	070MZ-0020100 29  3.5 mm 20-14 AWG Male terminal, 3.5 mm Use with: 30, 39, 41	070MZ-0020300 30  3.5 mm 20-14 AWG Female terminal, 3.5 mm Use with: 29, 38, 40
07692-0010100 31  4.0 mm 26-14 AWG Male terminal, 4.0 mm Use with: 32, 39, 41	07692-0010200 32  4.0 mm 26-14 AWG Female terminal, 4.0 mm Use with: 31, 38, 40	070MZ-0020200 33  3.5 mm 22-20 AWG Female terminal, 3.5 mm (small wire) Use with: 30, 38, 40	07JAZ-001100A 34  Wire seal Use with: 1, 2, 3, 5, 6, 18, 20	07VPZ-003030A 35  Plug Use with: 1, 2, 3, 5, 6, 10	07VPZ-003020A 36  Wire seal Use with: 10, 18, 20
070MZ-002A900 37  Wire seal Use with: 4	32826-SA5-300 38  Female Boot, black rubber Use with: 30, 32, 33	32825-SA5-300 39  Male Boot, black rubber Use with: 29, 31	07692-0010400 40  Female boot, clear rubber Use with: 30, 32, 33	07692-0010300 41  Male boot, clear rubber Use with: 29, 31	07692-0010800 42  Butt splice, 18 AWG - crimp style
07AMZ-MCAA200 43  20-16 AWG Solder splice, 20-16 AWG (Red)	07AMZ-MCAA300 44  14-12 AWG Solder splice, 14-12 AWG (Blue)	070MZ-MELA300 45  6.5 mm 20-16 AWG Male terminal, 8 mm Use with: 47	070MZ-MELA400 46  9.2 mm 20-16 AWG Female terminal, 9.2 mm Use with: 48	070MZ-MELA100 47  3-pin Connector, male terminals Use with: 45	070MZ-MELA200 48  3-pin Connector, female terminals Use with: 46

Refer to the part number listed on the plastic divider in the storage box when ordering replacement connectors or terminals. Connectors do not include terminals, replacement terminals are available through the Parts Division using normal parts ordering procedures.

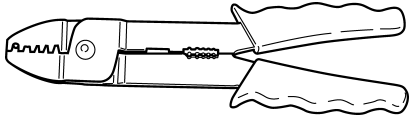

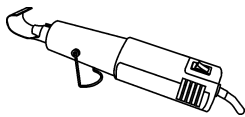

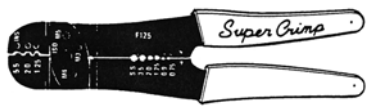

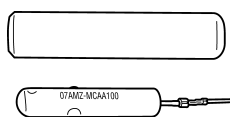
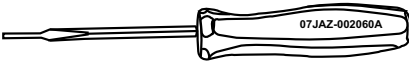
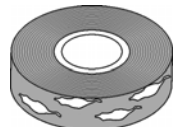


PARTS INFORMATION

Ref	Description	Qty†	Part Number	Use With	Application
1	2-Pin connector	1	07VPZ-002040A	20, 34, 35	
2	2-Pin connector	1	07VPZ-002010A	18, 34, 35	
3	3-Pin connector	1	07VPZ-002060A	19, 34, 35	
4	3-Pin connector	1	070MZ-002A700	17, 37	Shift angle sensor
5	4-Pin connector	1	07VPZ-002020A	18, 35, 36	
6	4-Pin connector	1	07VPZ-002030A	20, 34, 35	
7	4-Pin connector assembly*	1	07692-0011300	25, 26	
8	6-Pin connector	1	070MZ-0020500	25	ST1300P
9	6-Pin connector	1	070MZ-0020400	19	ST1300P
10	6-Pin connector	1	07VPZ-002050A	20, 35, 36	
11	6-Pin connector assembly*	1	07692-0011200	27, 28	ACG-to-regulator/rectifier
12	9-Pin connector	1	070MZ-0020700	25	ST1300P
13	9-Pin connector	1	070MZ-0020600	19	ST1300P
14	18-Pin connector	1	070MZ-MCAA300	15	GL1800, Seat heater control unit connector
15	Terminal w/pigtail NEW	10	070MZ-MCAA201	14	GL1800, Seat heater control unit connector
16	Female terminal	25	07JAZ-001360A	—	GL1800, ECM connector
17	Female terminal	25	070MZ-002A800	4, 37	Shift angle sensor
18	Female terminal	25	07JAZ-001090A	2, 5, 34	
19	Female terminal	25	07JAZ-001070A		ST1300
20	Male terminal	25	07JAZ-001080A	1, 3, 6, 34, 35, 36	
21	6 mm Ring terminal	25	07VPZ-001020A	—	
22	5 mm Ring terminal	25	07VPZ-001060A	—	
23	Small spade terminal*	100	07692-0011100	—	
24	Large spade terminal*	100	07692-0010700		
25	Male terminal, 2.85 mm*	100	07692-0010500	7, 8	
26	Female terminal, 3.0 mm*	100	07692-0010600	7, 9	
27	Male terminal, 6.0 mm*	100	07692-0010900	11	
28	Female terminal, 6.5 mm*	100	07692-0011000	11	
29	Male terminal, 3.5 mm*	25	070MZ-0020100	30, 39, 41	
30	Female terminal, 3.5 mm*	25	070MZ-0020300	29, 38, 40	
31	Male terminal, 4.0 mm*	100	07692-0010100	32, 39, 41	
32	Female terminal, 4.0 mm*	100	07692-0010200	31, 38, 40	
33	Female terminal, 3.5 mm (small wire)*	25	070MZ-0020200	30, 38, 40	
34	Wire seal	25	07JAZ-001100A	1, 2, 3, 5, 6, 18, 20	
35	Connector plug	25	07VPZ-003030A	1, 2, 3, 5, 6, 10	
36	Wire seal	25	07VPZ-003020A	10, 18, 20	
37	Wire seal	25	070MZ-002A900	4	
38	Female boot, black rubber	25	32826-SA5-300	30, 32, 33	
39	Male boot, black rubber	25	32825-SA5-300	29, 31	
40	Female boot, clear rubber*	100	07692-0010400	30, 32, 33	
41	Male boot, clear rubber*	100	07692-0010300	29, 31	
42	Butt splice, 18 AWG - crimp type*	100	07692-0010800	—	
43	Solder splice, 20-16 AWG (Red)	25	07AMZ-MCAA200	—	
44	Solder splice, 14-12 AWG (Blue)	25	07AMZ-MCAA300	—	
45	Male terminal, 8 mm	25	070MZ-MELA300	47	CBR1000RR, alternator
46	Female terminal, 9.2 mm	25	070MZ-MELA400	48	CBR1000RR, alternator
47	3-pin Connector, male terminals	1	070MZ-MELA100	45	CBR1000RR, alternator
48	3-pin Connector, female terminals	1	070MZ-MELA200	46	CBR1000RR, alternator

† The quantity (Qty) listed in the table is the number of pieces included when ordering one (1) of the part number.

* These parts are included in Terminal Pin Kit (KL-10-1B on page 4). It can be ordered through the Honda Tool and Equipment Program at (888) 424-6857.

TERMINAL REPAIR TOOLS AND EQUIPMENT

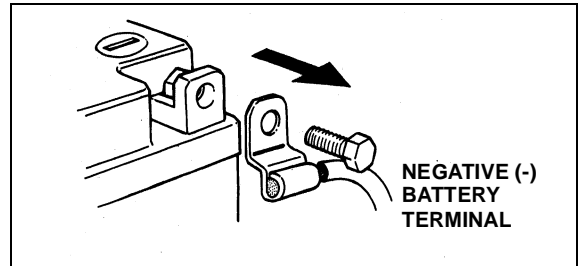
KL10-24A 1  Terminal pin crimper/wire stripper (FRH-07), Required for GL1800 seat heater terminals	07XMJ-001000A 2  Terminal inspection tool set	07NGZ-001020A 3  Heat gun (with shield)	07AGG-001A000 4  Terminal pin storage box (2 required)
07JAZ-001020A 5  Terminal pin crimper/wire stripper (first generation)	07JAZ-002050A 6  Terminal pin tool E	07AMZ-MCAA100 7  Terminal inspection tool, GL1800 seat heater control unit connector terminals	
07JAZ-002060A 8  Terminal pin tool F	4019-2317 9  Rodent deterrent tape	4100-0002 10  Harness wrapping tape	KL-10-1B 11  Terminal pin kit (Yellow box)

TERMINAL REPAIR TOOLS AND EQUIPMENT					
Ref	Description	Qty†	Part Number	Use With	Application
1	Terminal pin crimper/wire stripper (FRH-07 - second generation type)*	1	KL10-24A	—	Required for GL1800 seat heater control unit connector terminals
2	Terminal Inspection Tool	1	07XMJ-001000A	—	Female terminal inspection
3	Heat Gun (with shield)	1	07NGZ-001020A	—	Heat shrink tubing, splices
4	Terminal Pin Storage Box	1	07AGG-001A000	—	Organizer for connectors, terminals, seals, tools
5	Terminal pin crimper/wire stripper (first generation type)	1	07JAZ-001020A	—	
6	Terminal Pin Tool E	1	07JAZ-002050A	—	Terminal pin removal
7	Terminal inspection tool	1	07AMZ-MCAA100	—	GL1800 seat heater control unit connector terminals
8	Terminal Pin Tool F	1	07JAZ-002060A	—	Terminal pin removal
9	Rodent Deterrent Tape	1	4019-2317	—	Use to wrap rodent damaged harnesses after repairs.
10	Harness wrapping tape (black)	1	4100-0002	—	Use to wrap harnesses after repairs.
11	Terminal pin kit (Yellow box)*	1	KL-10-1B	—	Repairing older models
† The quantity (Qty) listed in the table is the number of pieces included when ordering one (1) of the part number.					

* These tools are included in Terminal Pin Kit (T/N KL-10-1B). It can be ordered through the Honda Tool and Equipment Program at (888) 424-6857. Terminals and connectors in this kit can be replenished through normal parts ordering procedures.

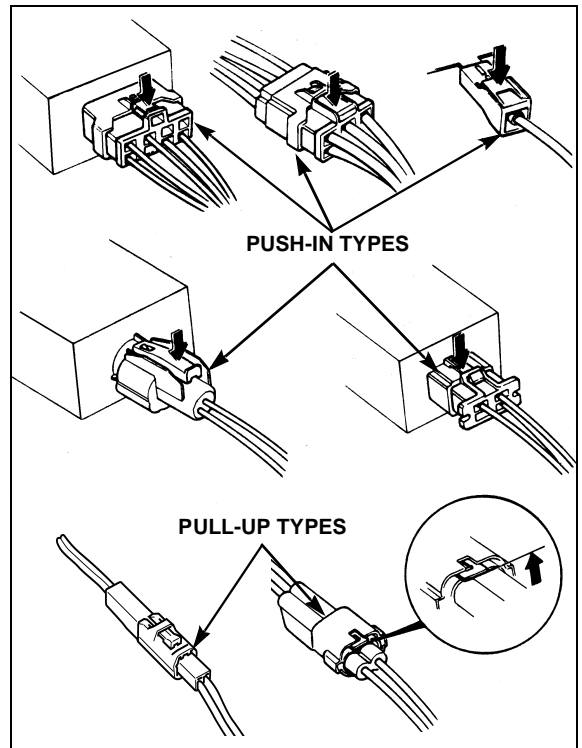
REPAIR PROCEDURE PRECAUTIONS

1. Before beginning any work, be sure to disconnect the negative (-) battery terminal first.



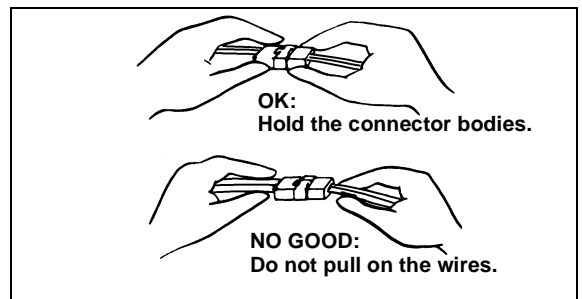
2. There are two types of connector locks; push-in and pull-up.

Determine whether the connector is a push-in or pull-up type. Release the connector locks carefully



3. Hold the connector bodies, not the wires, push them together, unlock, and then pull apart evenly.

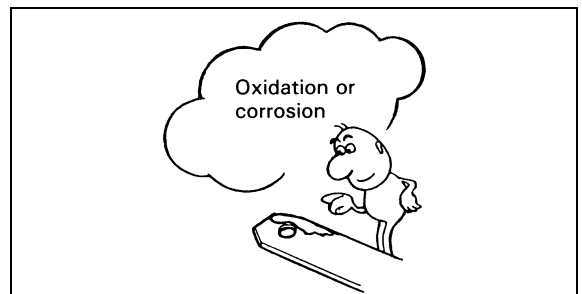
Do not pull on wire harnesses.



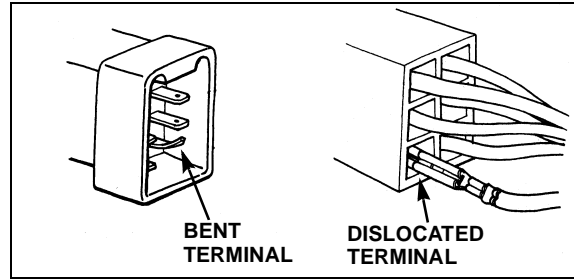
4. Inspect terminals for oxidation or corrosion. Clean or replace terminals as necessary

Carefully inspect all terminals of mating wire harnesses and electrical components for oxidation or corrosion. Clean or replace as necessary.

If widespread corrosion is discovered, it may be necessary to replace the wire harness.



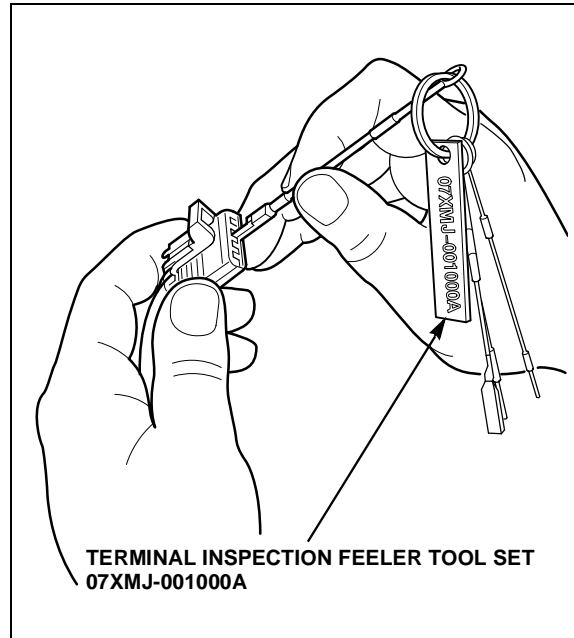
5. Before reconnecting connectors, check them carefully to make sure their terminals are not bent or dislocated.
6. Reconnect the connectors, making sure the locks are completely and securely fastened.



CHECKING FOR POORLY FITTING TERMINALS

Loose terminal fit can cause intermittent problems in electrical circuits. By using the Terminal Inspection Feeler Tool Set (T/N 07XMJ-001000A), the terminal fit between two matching connectors can be inspected without removing the terminals from the connector body.

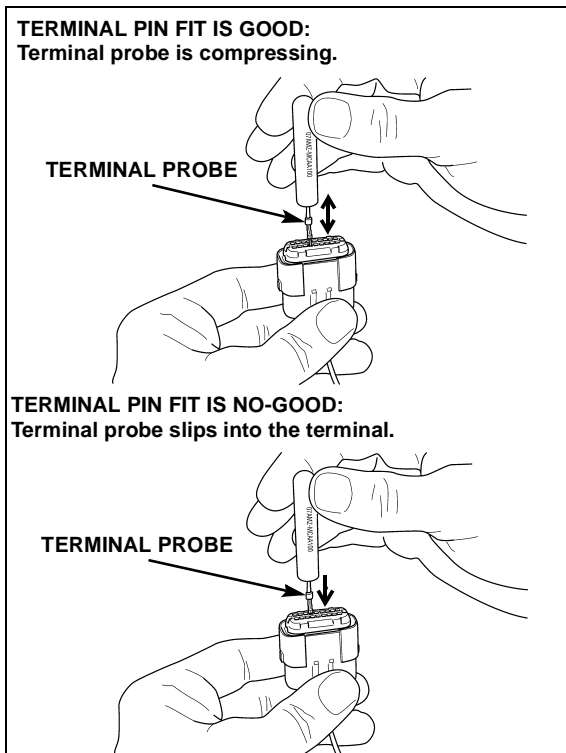
1. Find the terminal tool that best matches the male terminal in the mating connector.
2. Insert the terminal tool into the female terminal, and then remove the terminal tool. There should be some drag on the tool as it is removed.
 - Make sure you do not select a terminal tool that is larger than the example male terminal because it will spread the female terminal and cause a loose fit.
3. Compare the drag to the other terminals in the connector. If the drag is less, replace the terminal with the appropriate replacement terminal from the terminal selection tables on pages 1 through 3.



GL1800 SEAT HEATER CONTROL TERMINALS

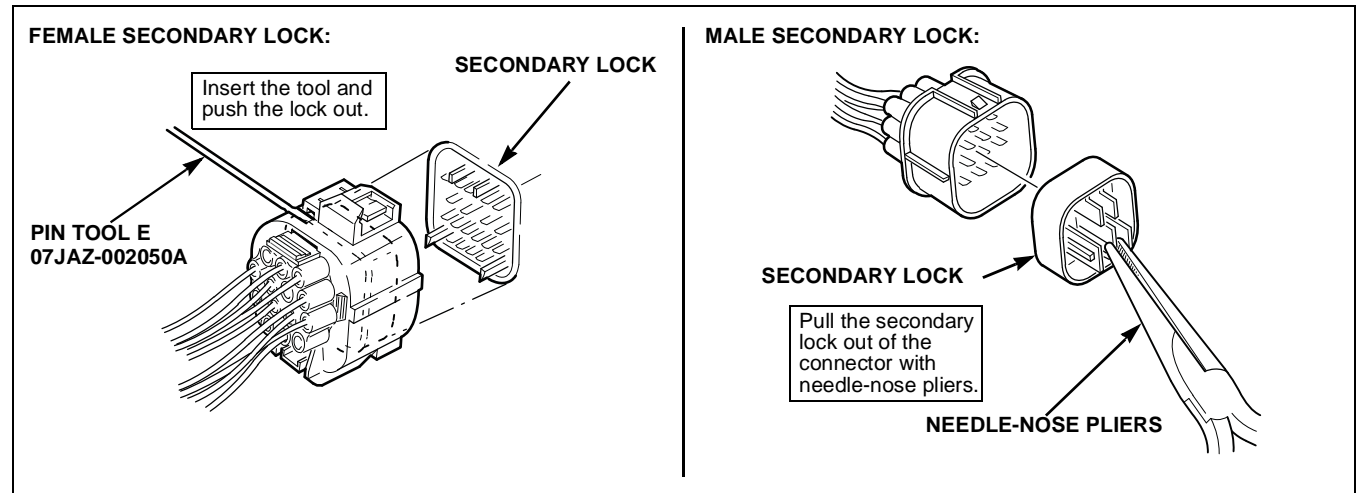
Loose terminal fit can cause intermittent problems in the seat and grip heater systems. By using the Terminal Inspection Tool (T/N 07AMZ-MCAA100), the terminal fit between the connector and control unit can be inspected without removing the terminals from the connector body.

1. Push on the end of the terminal probe with your finger and note that it is compressible; it is spring-loaded against the tool body.
2. Carefully insert the probe into the terminal and note if it begins to compress into the tool body. *Do not force the probe into the terminal beyond initial spring compression, otherwise the terminal will be damaged.*
 - If the probe compresses, the pin fit is correct and the terminal is GOOD.
 - If the probe slips into the female terminal before compressing, the pin fit is loose and the terminal is NO-GOOD. Replace the terminal with P/N 070MZ-MCAA201 (terminal w/pigtail) and splice it into line.
3. Check all the terminals in the connector as described above and replace any loose terminals as necessary.

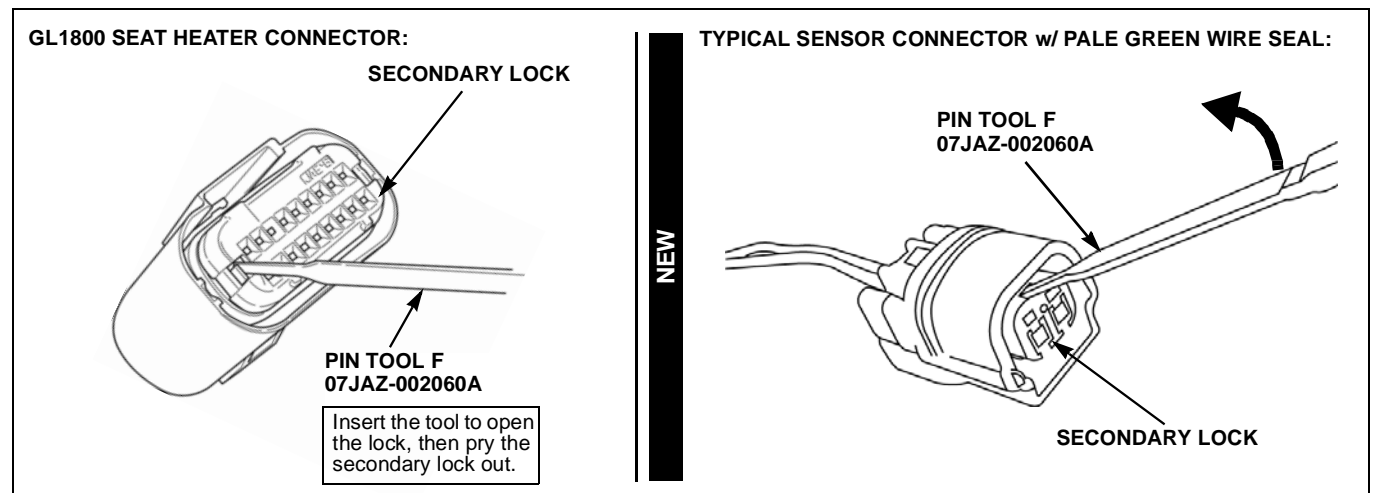


SECONDARY LOCK REMOVAL

ARX1200/1500 TYPE

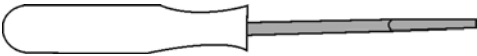

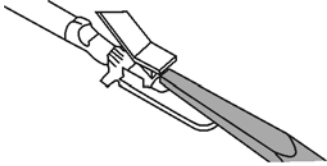
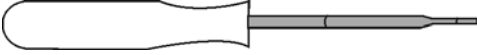




M/C, TRX, SxS, SCOOTER TYPE



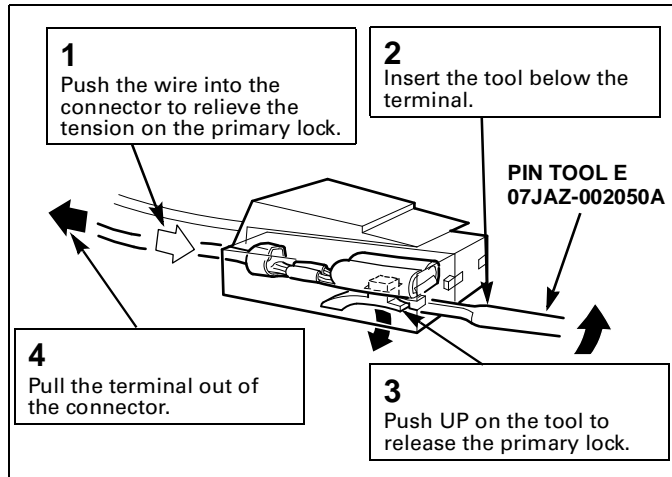
TERMINAL REMOVAL

Use the appropriate pin tool to remove terminals from connectors. See page 8 for more examples.

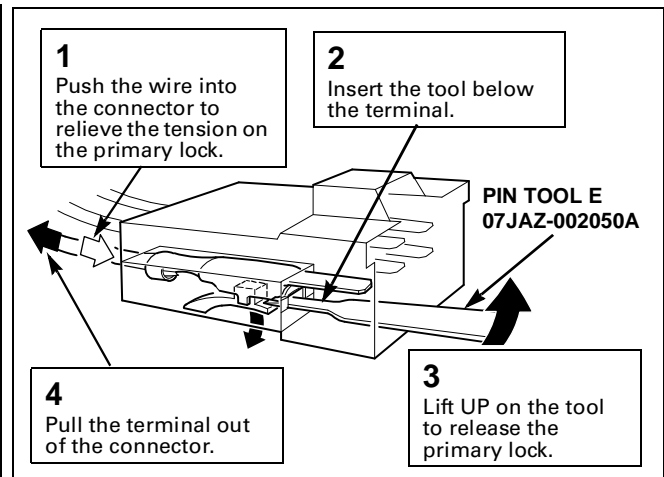
PIN TOOL	TERMINAL TYPE	EXAMPLE
Terminal Pin Tool E  P/N 07JAZ-002050A	Large Terminals 	
Terminal Pin Tool F  P/N 07JAZ-002060A	Small Terminals 	

TERMINAL REMOVAL EXAMPLES

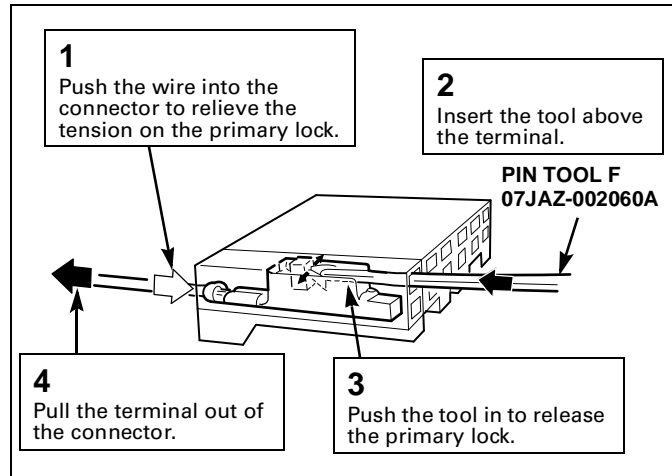
EXAMPLE 1



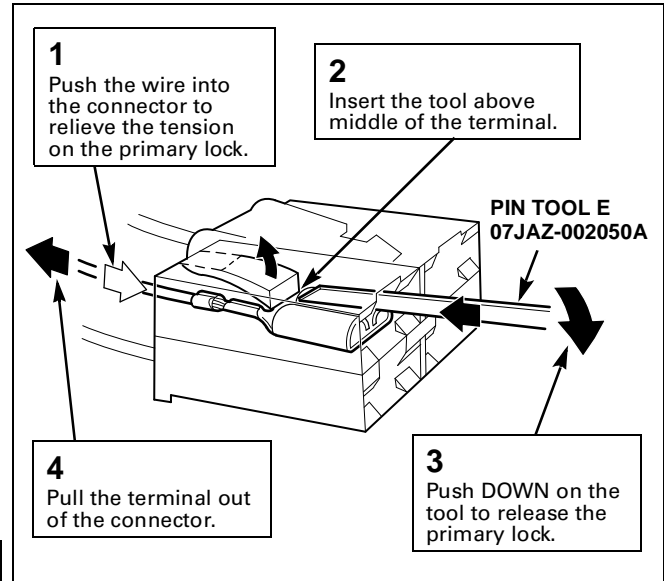
EXAMPLE 4



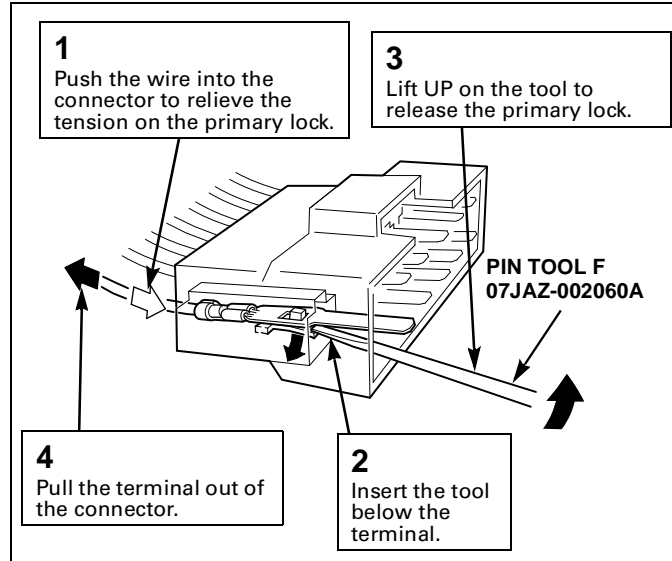
EXAMPLE 2



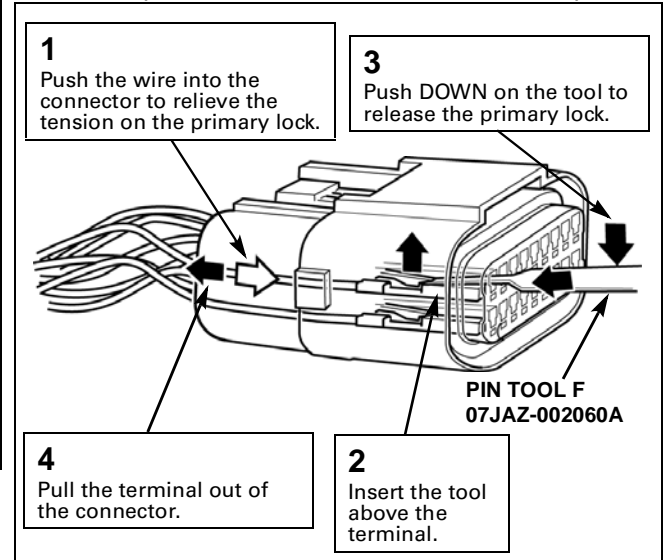
EXAMPLE 5



EXAMPLE 3

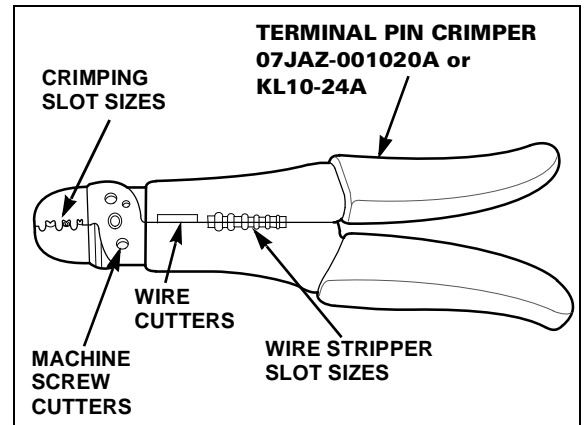


EXAMPLE 6 (GL1800 seat heater control unit connector)



INSTALLING NEW TERMINALS

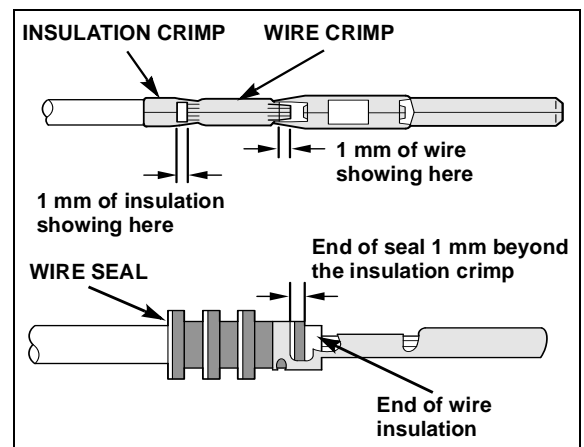
1. Select the new terminal from the repair kit that matches the old one. Ensure the replacement terminal's wire size range matches the application.
2. Depending on the size of the wire you are repairing, use the proper wire stripper slot and crimping slot in the crimping tool.



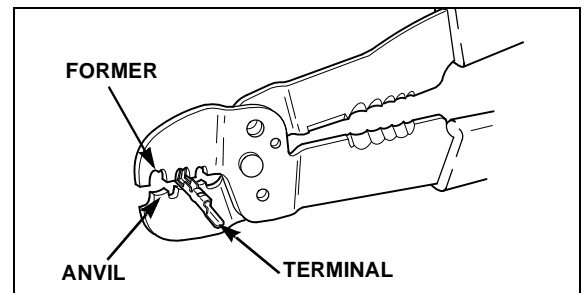
3. Strip the insulation off the end of the wire so the wire fits in the new terminal as shown. If the wire has a wire seal, replace it with a new one.

After stripping the end of the wire, make sure you did not cut any wire strands. If you did, cut the wire off even with the insulation, and strip it again.

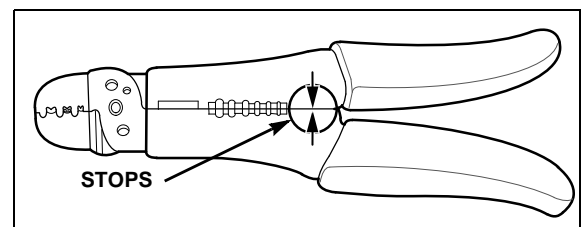
Install the wire seal (if necessary) before crimping the terminal.



4. Position the terminal in the crimping tool slot with the solid portion of the terminal toward the anvil and the open section toward the former.
5. Insert the wire in the terminal to the position shown in step 3.

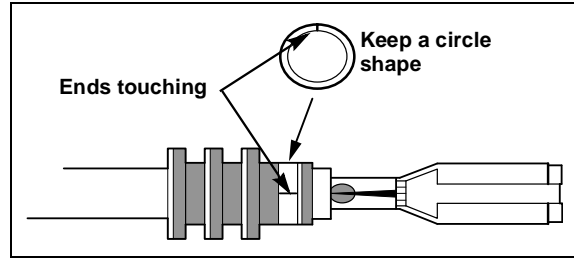


6. Squeeze the tool with both hands until the stops make contact.

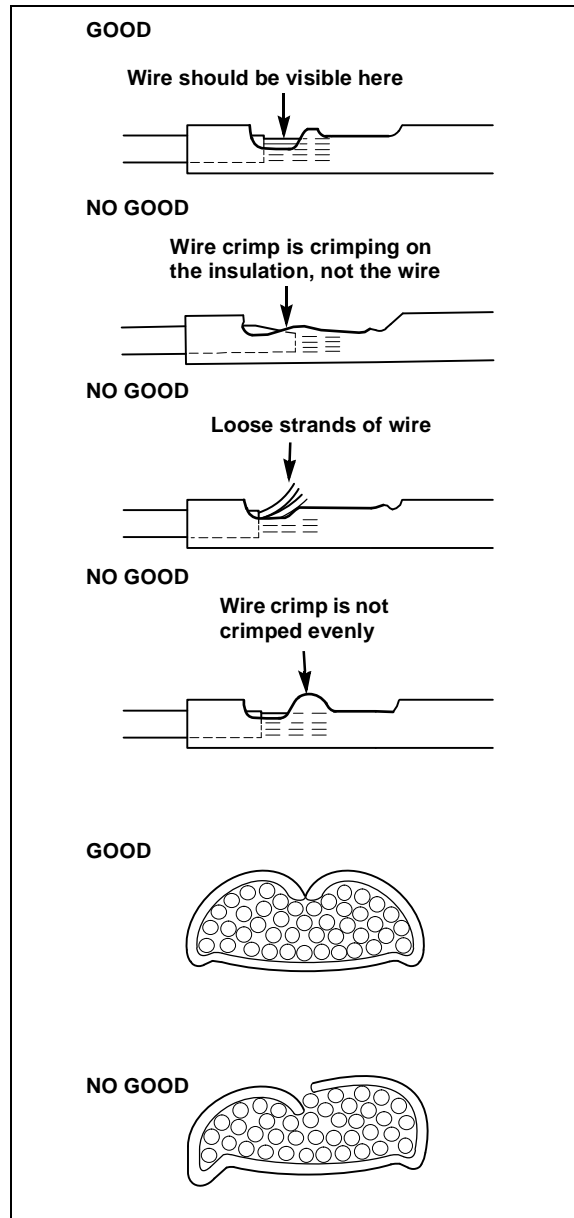


7. Crimp the insulation.

- If a wire seal is not used: Using the next larger size crimp slot, position the crimping tool over the insulation crimp section of the terminal. Squeeze the tool with both hands until the stops make contact.
- If a wire seal is used: position the insulation crimp in the 5.5 crimping slot, then carefully squeeze the crimp closed until its ends are touching and making a full-circle shape.



8. Inspect the quality of the terminal crimp. If it has any of the NO GOOD crimps as shown, cut it off and start over.



9. Insert the terminal into the connector. Make sure the wire seals are pushed all the way into the connector. Lightly pull on the wires to make sure the terminal is locked into place.

10. If applicable, close or insert the secondary terminal lock and reconnect the connector.

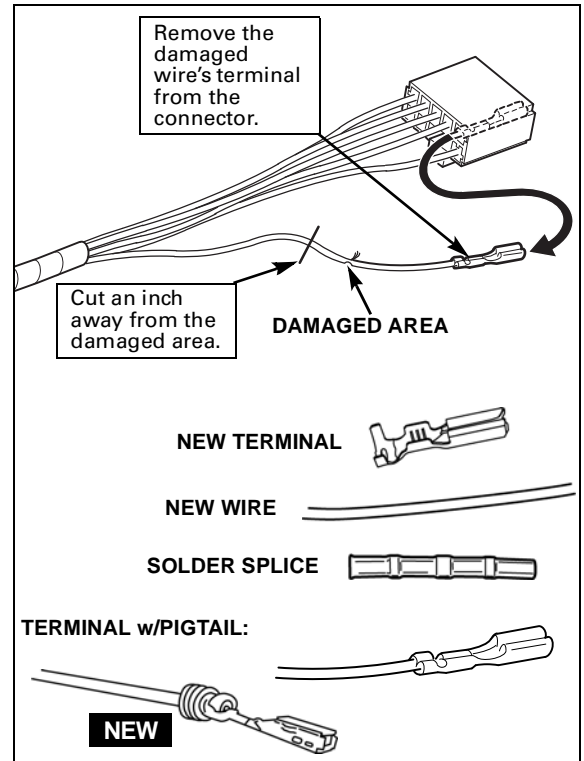
REPAIRING A DAMAGED WIRE WITH A SPLICE

This procedure describes how to repair a damaged wire. There may be circumstances where the repair would leave the wire too short and make the repair likely to be strained and fail. If this is the case, it will be necessary to remove the damaged wire's terminal from its connector, add a length of the same gauge wire to a new terminal (or use a pre-assembled terminal w/pigtail), and splice it back in.

1. Remove the damaged or faulty wire's terminal from the connector using the proper removal tool (page 7).
2. Cut off the wire about an inch back from the damaged or faulty area in the wire.
3. Select a terminal (or terminal w/pigtail) of the same kind and wire of the same gauge as those to be replaced.
4. Select the smallest solder splice (red or blue) that will fit onto the stripped end of the original wire.

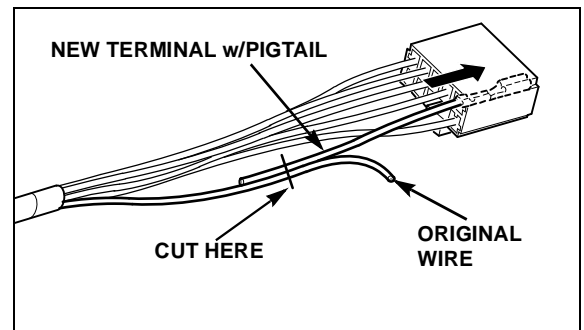
DESCRIPTION	PART NUMBER
Solder splice, 20 - 16 AWG (Red)	07AMZ-MCAA200
Solder splice, 14 - 12 AWG (Blue)	07AMZ-MCAA300
Terminal w/Pigtail (GL1800 seat heater connector)	070MZ-MCAA201
Terminal & pale green wire seal w/pigtail (Typical sensor connector)	04320-SAA-A00

5. Crimp the new terminal on the new piece of wire (page 9), creating a new pigtail.



6. Insert the new terminal w/pigtail into the connector cavity; push it in until it locks in place.
7. Lay the new wire and the original wire side-by-side, and cut off both ends at once.

If you are making more than one splice, do not cut each pigtail at the same location; the resulting "lump" of splice connectors will interfere with rewrapping the harness. Instead, cut the first pigtail close enough to the terminal so you will have room to make each remaining cut about 20 mm (3/4 inch) farther down on the next pigtail.



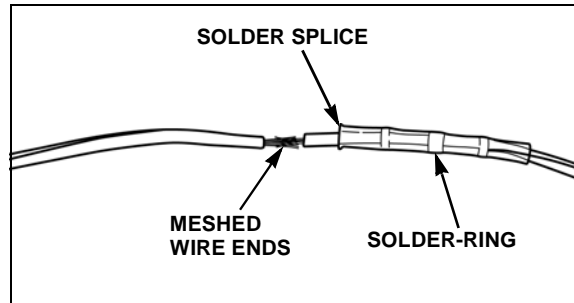
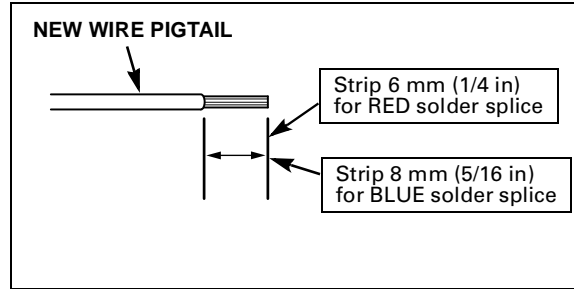
8. If you are using a red solder splice, strip about 6 mm (1/4 inch) of insulation off the ends of both wires. If you are using a blue solder splice, strip off about 8 mm (5/16 inch) of insulation.

If you are not sure of the wire size, start with a large enough hole on the stripper that will not nick or cut off any strands of wires.

If you nick or cut off any strands of wire, try again with the next larger size hole on the stripper.

9. Slip the solder splice over one wire and then mesh the stripped ends of the two wires together as shown.

Pull the solder splice over the meshed wire ends until the solder-ring covers the meshed wires.



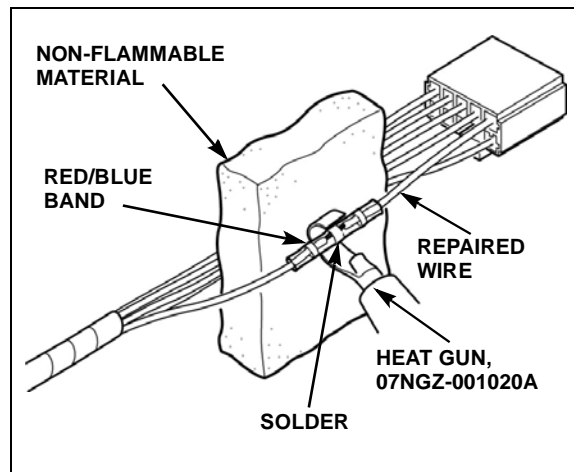
10. Separate the other wires in the harness from the wire to be repaired, and shield them with non-flammable material.

11. Using a heat gun, start at the middle of the solder splice and apply heat evenly by rotating the curved heat spreader around the center of the solder splice. Soldering is complete when the solder turns shiny and melts into the wires.

Be careful when working with the high heat produced by the heat gun.

12. After the soldering is complete, apply heat to the red/blue bands to shrink and seal the splice cover to the wires.

13. After splicing, pull on the wires in the opposite directions to make sure they are securely connected.



RODENT-DETERRENT TAPE

Honda has a rodent-deterrent tape available:
P/N 4019-2317.

If you're repairing or replacing a harness that has been chewed by rodents, wrap rodent deterrent tape around the area when you're done to help reduce any future problems.

When wrapping the harness, use the half-wrapping method; where each time you wrap the tape around the harness, overlap the previous layer by half the width of the tape.

