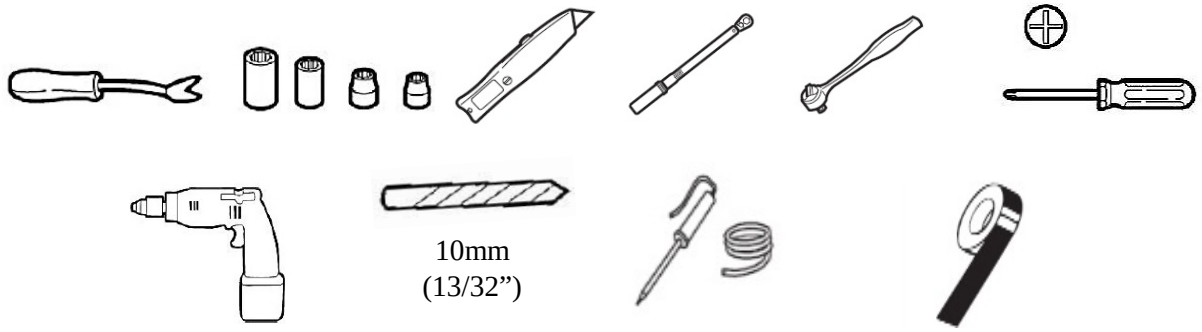
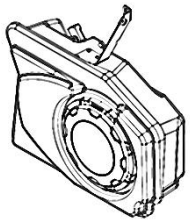
Tools Required

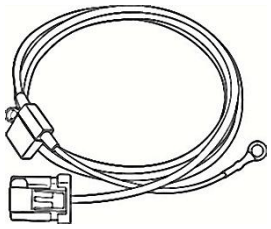


10mm
(13/32”)

A



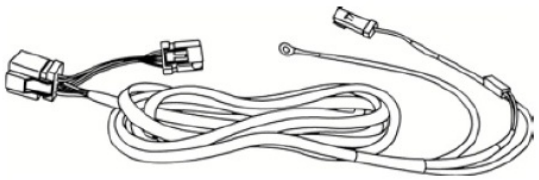
B



C

1X

D



E

6X

F

1X

G

H

Subwoofer Power Wire Routing

⚠ **WARNING:**
Battery cable stud is connected directly to the battery. Use caution to avoid allowing tools to touch chassis.

NOTE:
Before routing the subwoofer power harness (B), you must first cut the plastic tie that is securing the connector body to the harness. Save the connector body for installation after the harness is routed into the cabin of the vehicle.

1. Open the High Current Battery Junction Block cover.

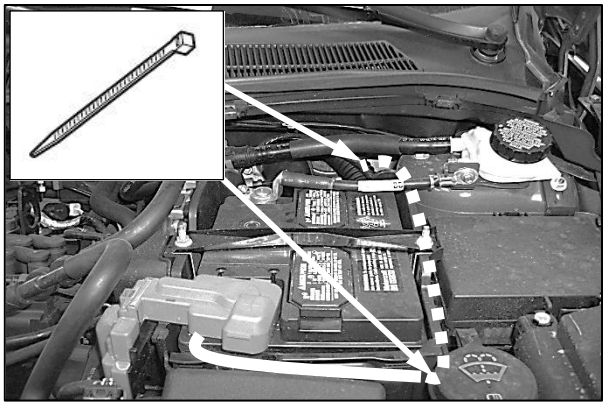
2. Connect the ring terminal of the subwoofer power harness (B) to the High Current Battery Junction Box-to-Battery Positive Terminal Nut. See figure to ensure proper location.

⚠ **WARNING:**
It is critical that the junction box-to-battery terminal nut be tightened to the correct torque specification.

•Install the nut and tighten to 10Nm (89 lb-in).

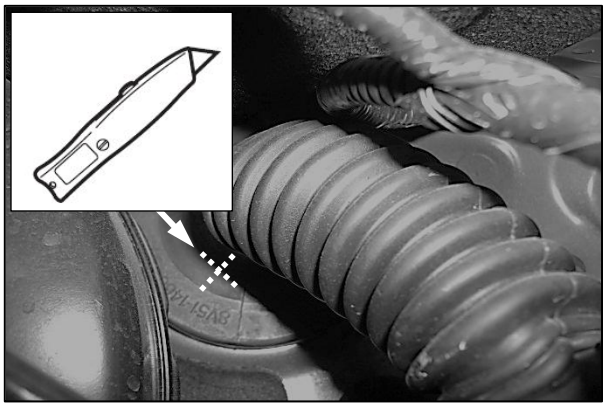
3. Route the subwoofer power harness (B) from the battery terminal down the side of the battery tray along the vehicle electrical harness and toward the rubber grommet in the metal dash panel on the driver's side

•Use supplied wire ties (E) to secure the subwoofer power harness (B) to the vehicle harness.



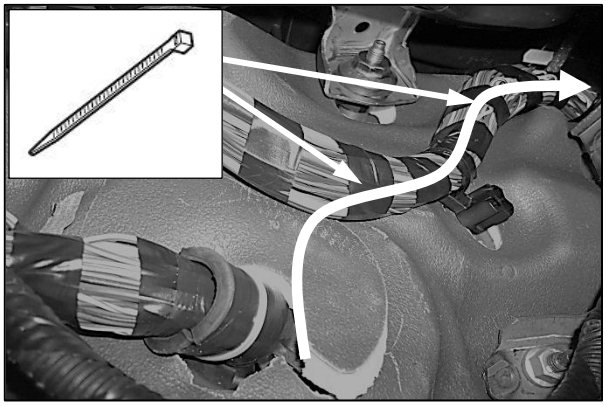
4. Make an "X" shaped incision the grommet at the point indicated. A cut must be made from the engine compartment side of the grommet and from the cabin side of the grommet because the grommet is double-walled.

5. Pass the subwoofer power harness (B) into the cabin through the incisions in the grommet.



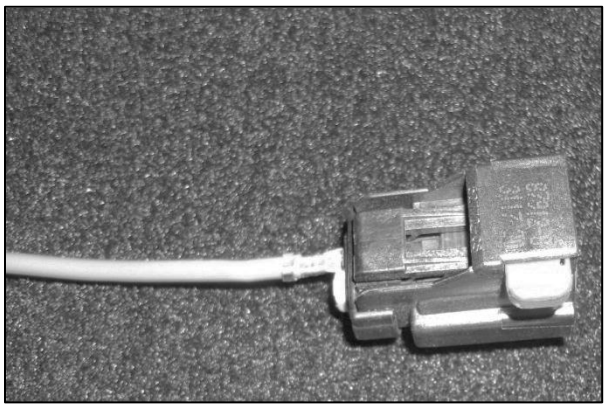
6. Route the subwoofer power harness (B) from the driver's side to the passenger's side along the vehicle harness.

•Use supplied wire ties (E) to secure the subwoofer power harness (B) to the vehicle harness.



7. Insert the subwoofer power harness (B) terminals into the connector body.

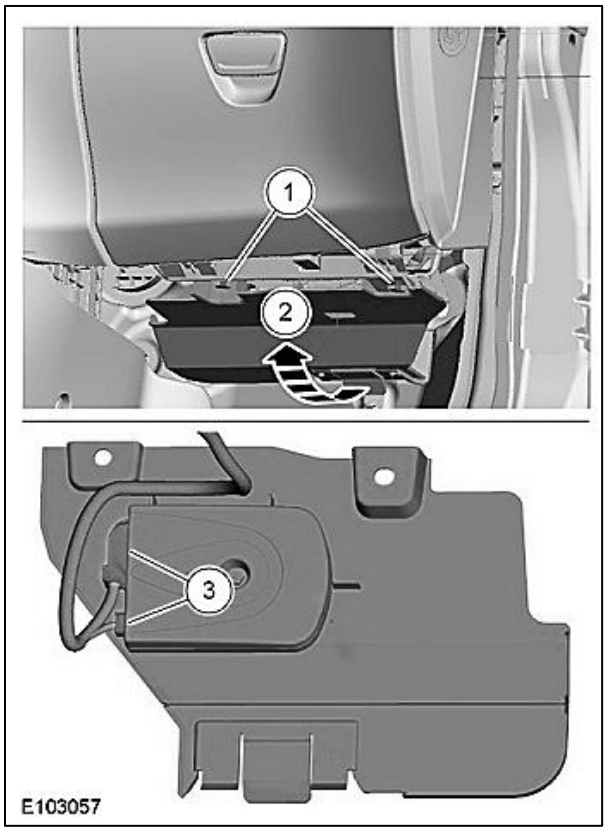
NOTICE:
The black two pin connector has a block-out plug installed to insure the terminal is inserted in the correct cavity.



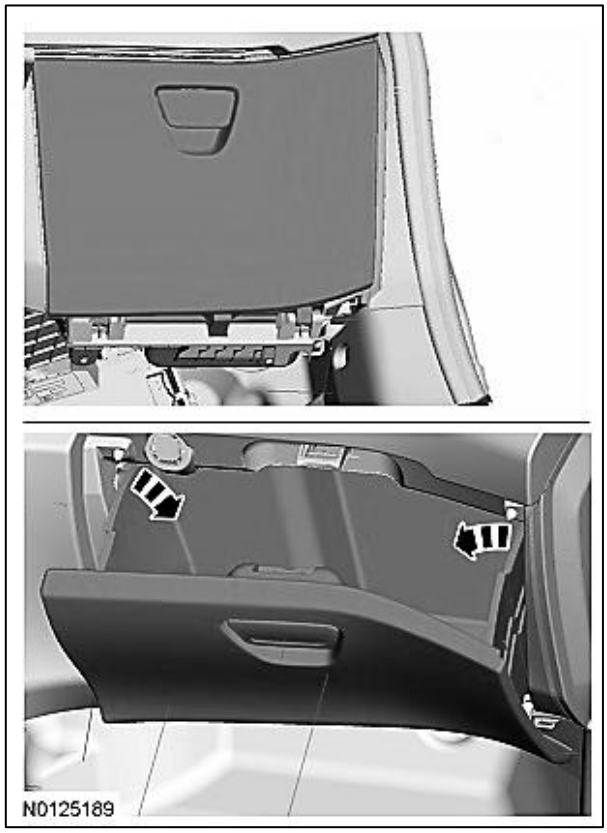
Subwoofer Body Harness Routing

8. Remove the 2 push pins and remove the hush panel from the lower right side of the instrument panel.

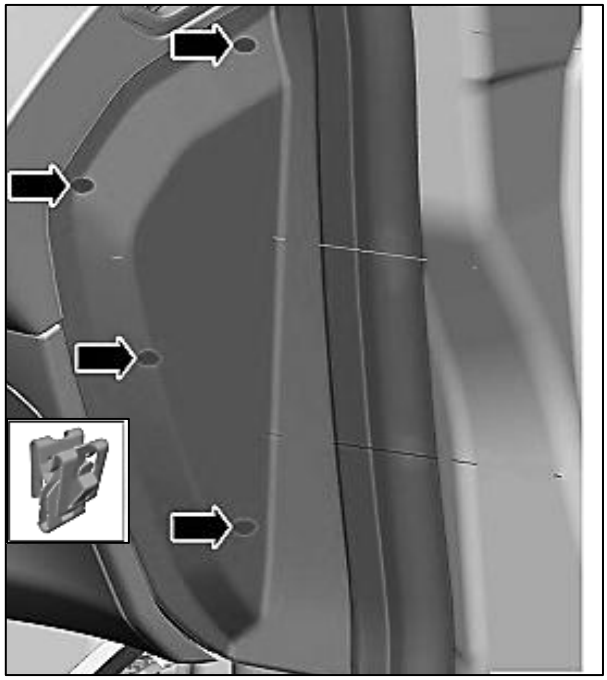
- Disconnect the electrical connector - if equipped.



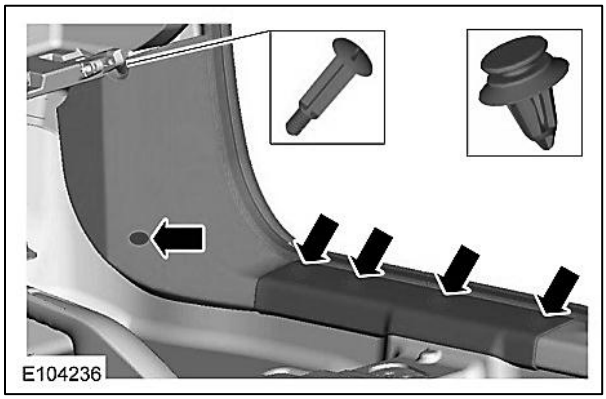
9. Remove the glove compartment.



10. Remove the RH instrument panel side cover.



11. Remove the RH front scuff plate and the RH cowl side trim panel.



12. Pull the rear scuff plate trim panel upwards to release the pushpins.

13. Position the front and rear weatherstrips aside. Position the seats in the full forward position.

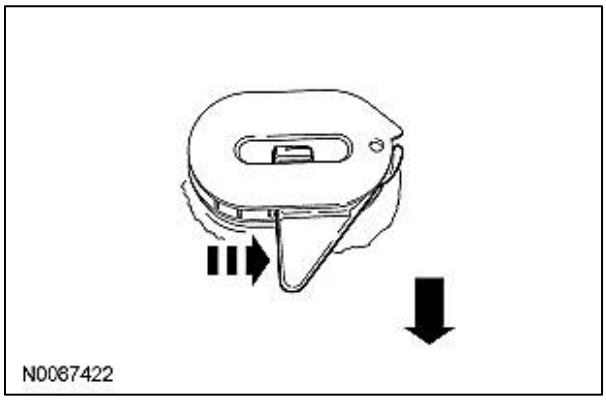
14. Gently pull the B-pillar lower trim panel toward the center of the vehicle to release the 2 B-pillar lower trim panel retaining clips.

NOTICE:
To avoid damage to the B-pillar lower trim panel, remove any retaining clips from the body and attach them to the B-pillar lower trim panel before installing.

15. Remove the B-pillar lower trim panel.

Rear Seat Cushion Removal

16. From under the front of the cushion assembly, push the 2 seat cushion anchor latch release levers toward the driver side, while lifting up to disengage the front of the cushion assembly.



17. Remove the cushion assembly in the following sequence.

1. Push the cushion back as far as possible.

2. Lift up and pull forward at the rear outboard ends of the cushion, disengaging the wires from the retainer hooks.

•Remove the cushion.

18. Remove the RH parcel shelf upper trim panels.

• Gently pull the parcel shelf upper trim panel toward the center of the vehicle to release the 4 parcel shelf upper trim panel retaining clips.

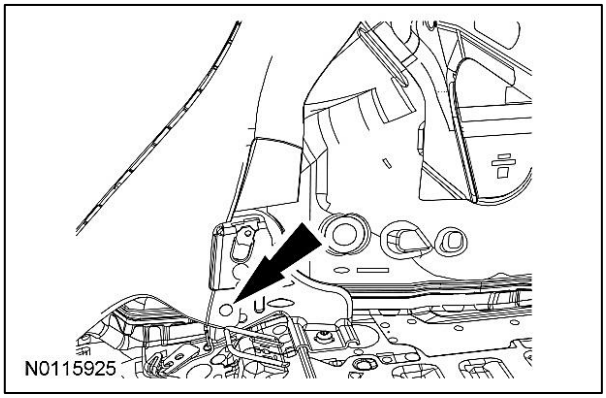
• Pull the RH safety belts through the parcel shelf upper trim panel openings.

• Remove the parcel shelf upper trim panel.

19. Position the rear door opening weatherstrip aside.

20. Remove the C-pillar lower trim panel pushpin.

• Lower the rear seat back as necessary for access to pushpin.

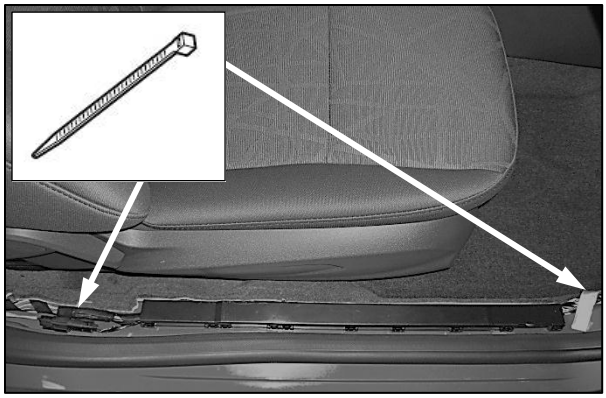


21. Gently pull the C-pillar lower trim panel toward the center of the vehicle to release the 4 C-pillar upper retaining clips and remove the C-pillar lower trim panel.

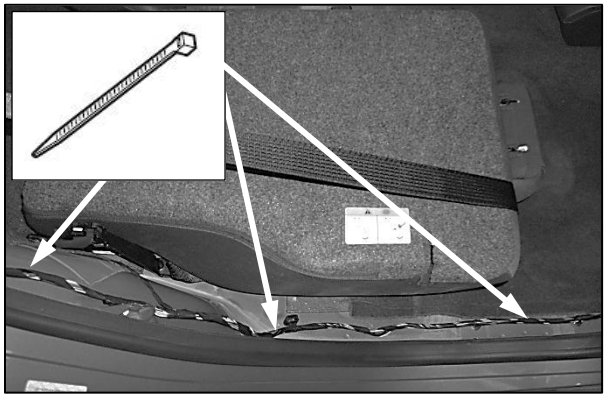
22. Route the subwoofer body harness (D) along the factory electrical harness. The input connector of the subwoofer body harness (D) needs to be able to reach the area behind the glove compartment.

• Open the plastic harness protector along the front door opening and route harness inside.

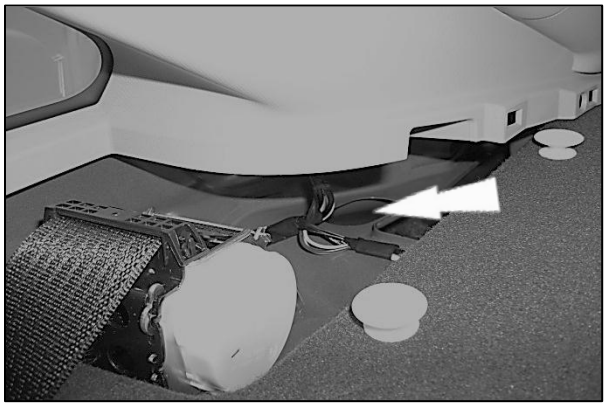
• Use supplied wire ties (E) to secure the subwoofer body harness (D) to the vehicle harness.



23. Continue routing the subwoofer body harness (D) along the factory electrical harness in the rear door opening and up to the rear parcel shelf.

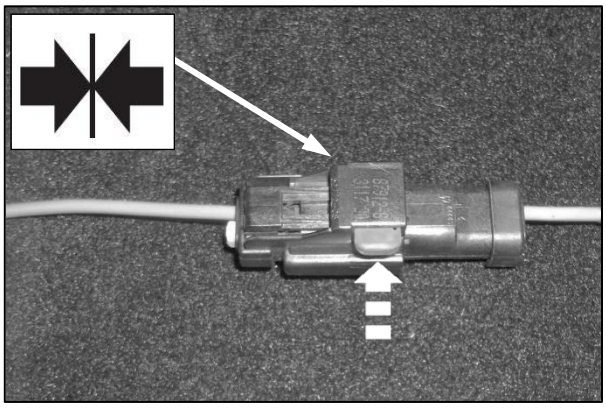


24. Route the subwoofer body harness (D) into the trunk through the oblong hole in the rear parcel shelf metal panel.



25. Connect the subwoofer body harness (D) to the subwoofer power harness (B) in the RH lower instrument panel area.

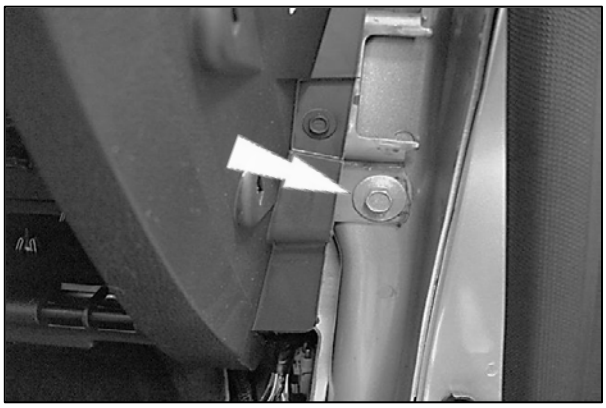
•Slide red connector lock to lock connectors.



Subwoofer Body Harness Ground Connection

26. Remove the lower RH instrument panel bolt and connect the subwoofer body harness (D) ground wire ring terminal.

•Install the RH instrument panel bolt and tighten to 25Nm (18 lb.ft.).



Subwoofer Signal Input Connection

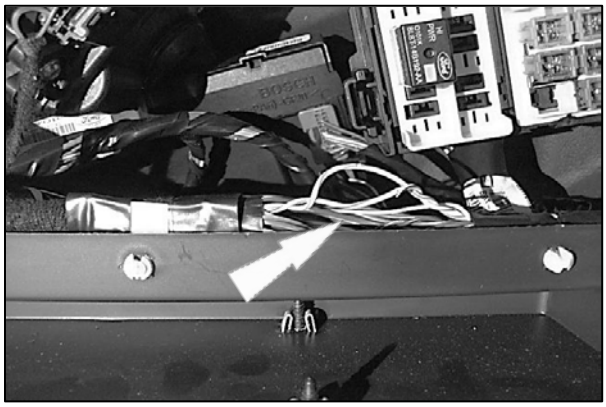
27. Find the harness indicated in glove compartment opening. Using a razor knife carefully cut through the sheathing of the harness indicated to find the twisted pair of wires that are white with a violet stripe and white with an orange stripe.

28. Connect the green wire of the 2-way adaptor harness (H) to the white/violet vehicle wire. Connect the brown wire of the 2-way adaptor harness (H) to the white/orange vehicle wire.

29. Connect the white 2-way adaptor harness (H) to the 2-way input connector of the subwoofer body harness (D).

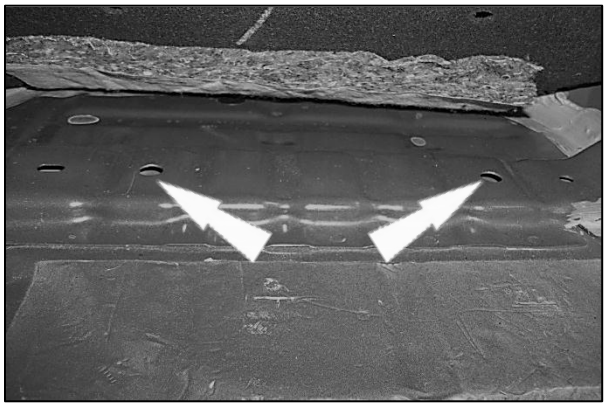
NOTE:
Refer to applicable wiring diagram for circuit information.

NOTE:
For proper wire splicing techniques, click here.

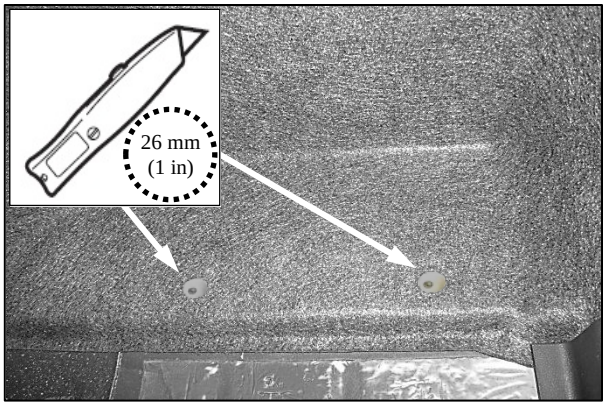


Subwoofer Cabinet Installation

30. Lift up the bottom edge of the RH quarter panel carpet trim panel and identify the two round 12 mm (15/32 in.) holes in the metal trunk pan



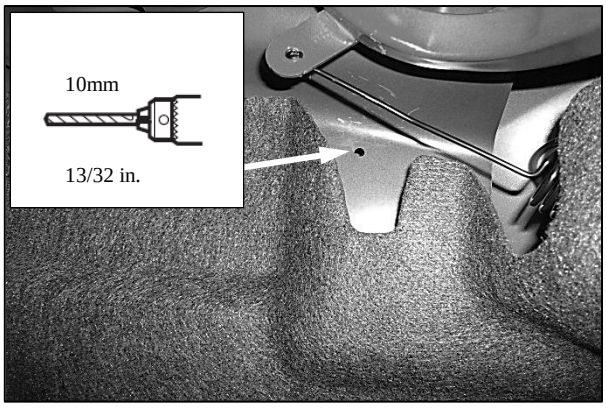
31. Cut a 26mm (1 in.) diameter circle in the RH quarter panel carpet trim panel directly above each hole.



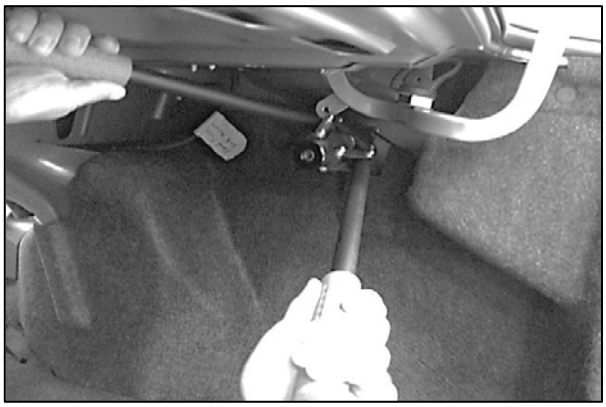
32. Find the hole in RH quarter panel metal sub-frame and enlarge the hole to 10mm (13/32 in.)

- Use a drill stop set to 19mm (3/4 in.)

NOTE:
Vehicles with optional power moonroof option utilize this hole to secure the moonroof drain hose. Pull hose retainer from original hole and reinstall into provision located on the subwoofer enclosure (A) upper bracket once subwoofer enclosure (A) is installed.



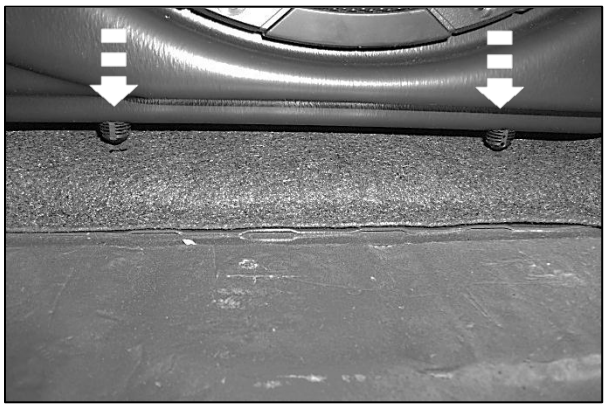
33. Install the supplied nut-insert (C) into the hole using the appropriate installation tool.



34. Connect the two subwoofer body harness (D) connectors to the subwoofer connectors.

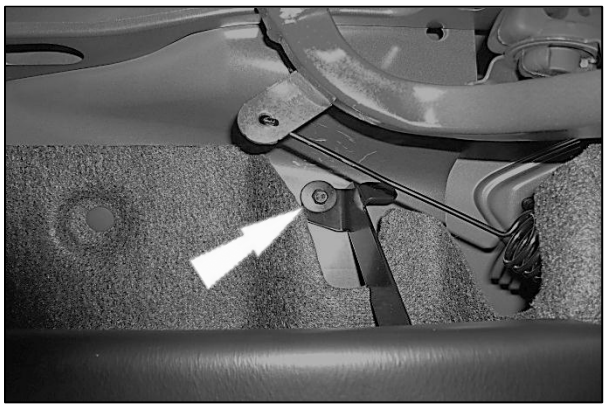
•Slide red connector locks to lock connectors.

35. Position the subwoofer enclosure (A) into place by first maneuvering the subwoofer enclosure (A) top bracket behind the trunk lid hinge spring and then lining up the two plastic pins in the bottom of the subwoofer enclosure (A) with the two holes in the metal trunk pan. Press down firmly on the subwoofer enclosure (A) to seat the pins into the holes.



36. Line up the subwoofer enclosure (A) upper bracket with the nut-insert and install the supplied bolt (F).

•Tighten to 9Nm (80 lb-in).



Install Trim Panels

37. Reverse steps to reinstall all previously removed parts.

Install System Fuse

38. Install the supplied fuse (G) into the subwoofer power harness (B) fuse holder.

Verify Subwoofer Operation

39. While using a program source which has Bass content, use the radio sound button to select Bass level adjustment. Change the Bass setting throughout its range and listen for an increase/decrease in Bass output from the subwoofer. Also, adjusting the Balance adjustment to the left or the Fade adjustment to the rear will decrease Bass output from the subwoofer

Trouble Shooting Guide		
Symptom	Possible Cause	Solution
No Subwoofer Output	Fuse not installed in inline fuse holder	Install fuse into fuse holder. (Refer to instructions)
	Low battery voltage	Recharge the battery. (Refer to Vehicle Owner's Manual)
	Ground wire not grounded properly	Check ground wire with ohm meter to insure a positive ground.
	Balance or Fader controls not set to neutral position	Set balance and fader controls to center settings.
	No low frequency information in music	Test system with several samples of music.
	Subwoofer body harness not properly connected.	Check subwoofer body harness signal input and power input connectors to ensure all connectors are completely engaged.

Splicing Procedures

NOTE:
Refer to applicable wiring diagrams for circuit information.

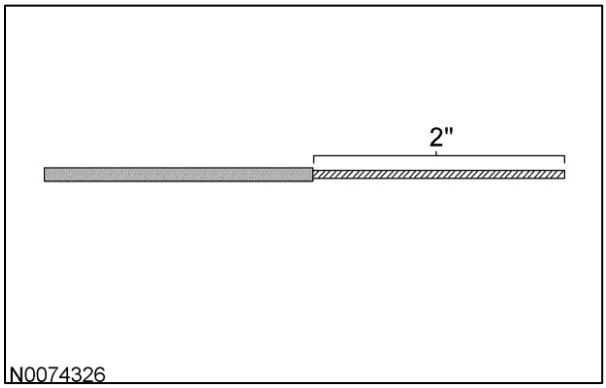
NOTE:
This procedure contains multiple splicing techniques.

NOTE:
Review splicing procedures prior to performing any cutting/soldering/splicing.

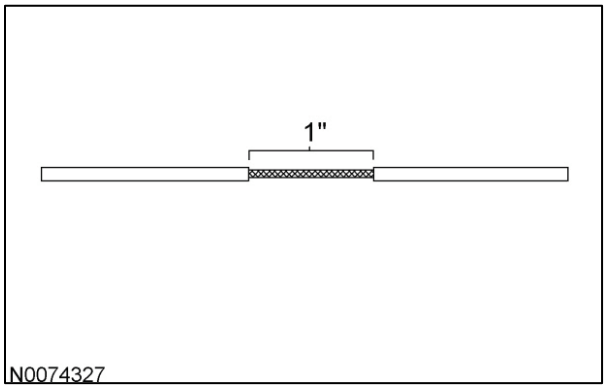
2-Wire Solder "Center Splice" With No Wire Cutting

NOTE:
Follow this procedure when a wire can be spliced without cutting the wire in half.

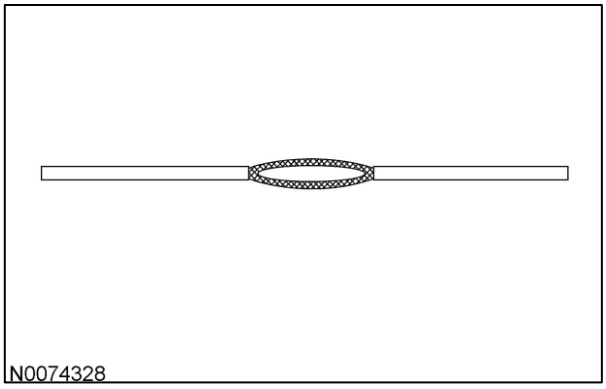
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



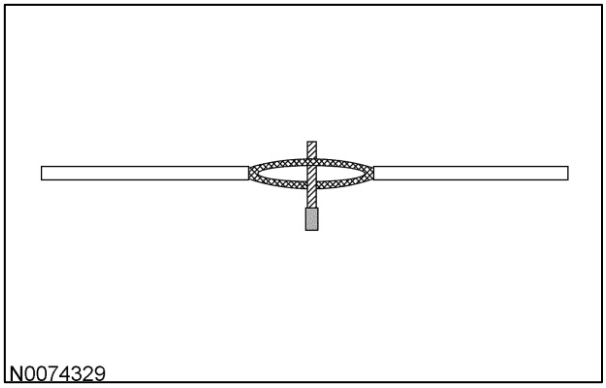
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



3. On the vehicle wire to be spliced into, separate the strands to allow the new wire to be placed.



4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.

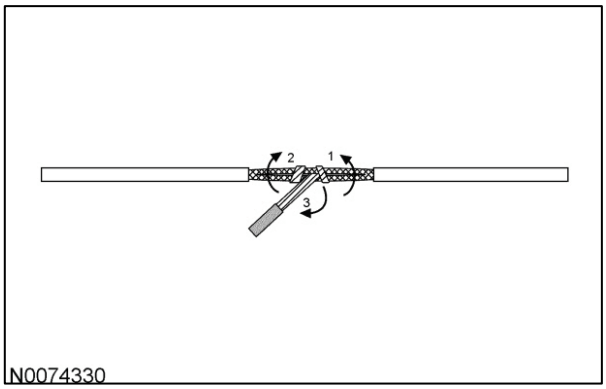


NOTE:
Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

NOTE:
Wait for solder to cool before moving wires.

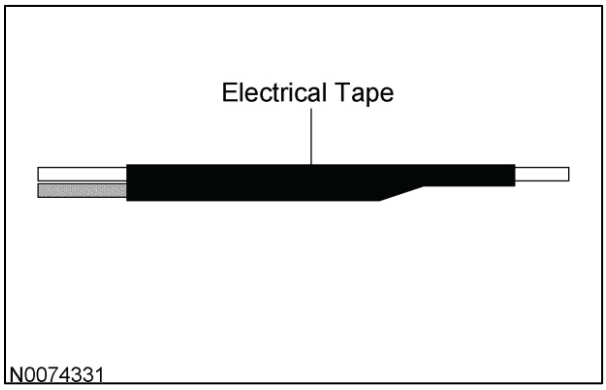
5. Wrap the new wire around one side of the split strands, then wrap it around the other side.

- Solder the connections



6. Wrap the connection with electrical tape so the tape covers the wires approximately two inches on either side of the connection.

- Tape the wires together as shown in the illustration.



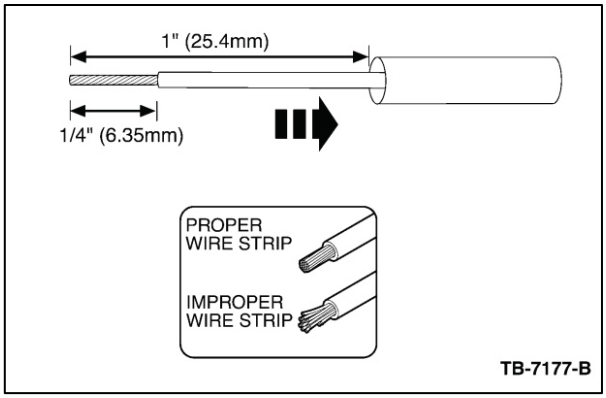
2-Wire Solder Splice/Ratcheting Crimp Tool Splice Procedure

NOTE:
For 10-14 AWG Use the following "Ratcheting Crimp Tool Splice Procedure".

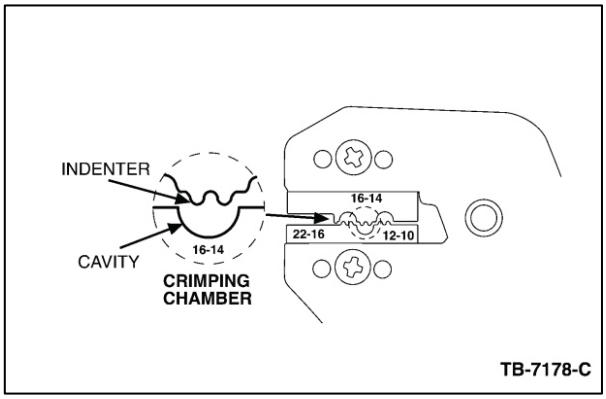
NOTE:
For splicing procedure use wire splice tool kit (164-R5903).

7. NOTE:
The strip length will vary depending on the butt splice and wire in harness. Longer strip lengths are required when the wire needs to be folded to mate with the butt splice. Refer to chart for strip lengths and folding techniques.

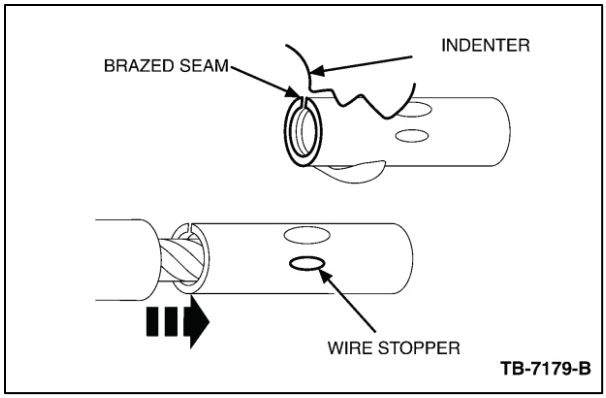
Strip 114" (6.35 mm) of insulation from pigtail wire end once the wire lengths are sized so repairs can be staggered. Take care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off. If more than one (1) strand is cut off during stripping, cut off the end and re-strip. Slide heat shrink tubing onto one (1) of the wire ends to be crimped, must be at least 1" (25.4mm) away from the stripped end.



8. Identify the appropriate crimping chamber of the Rotunda 164-R5901 Pro-Crimper (or equivalent) by matching the wire size on the dies with the wire size stamped on the butt splice. Hold the crimping tool so the identified wire sizes are facing you. Squeeze tool handles together until the ratchet releases, then allow the jaws of the tool to open fully.

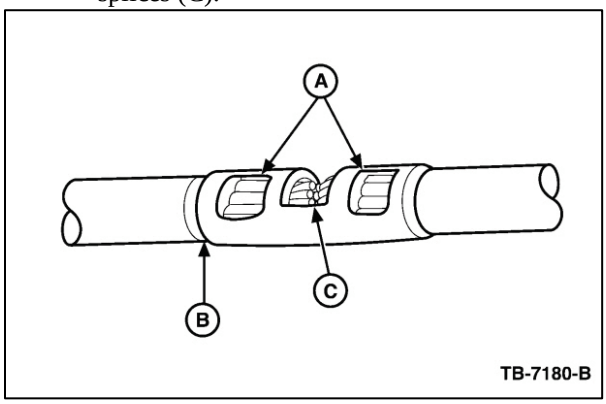


9. Center one (1) end of the butt splice on the appropriate crimping chamber. If visible, be sure to place the brazed seam of the butt splice toward the indenter. Hold the butt splice in place and squeeze the tool handles together until the ratchet engages sufficiently to hold the butt splice in position (typically one (1) or two (2) clicks). DO NOT deform the butt splice. Insert stripped wire into the butt splice, making sure the insulation on wire does not enter the butt splice.



10. Holding the wire in place, squeeze tool handles together until ratchet releases. Allow tool handles to open, then remove crimped butt splice. To crimp the other half of the splice, reposition the un-crimped wire barrel in the same crimping chamber, and repeat the crimping procedure. If splice cannot be turned for crimping the other half, turn the tool around.
Check for acceptable crimp.

- Crimp should be centered on each end of the butt splice. It is acceptable for crimp to be slightly off center, but not off the end of the butt splice (A).
- Wire insulation does not enter butt splice. Wire is flush with or extends slightly beyond end of butt splice (B).
- Wire is visible through inspection hole of splices (C).

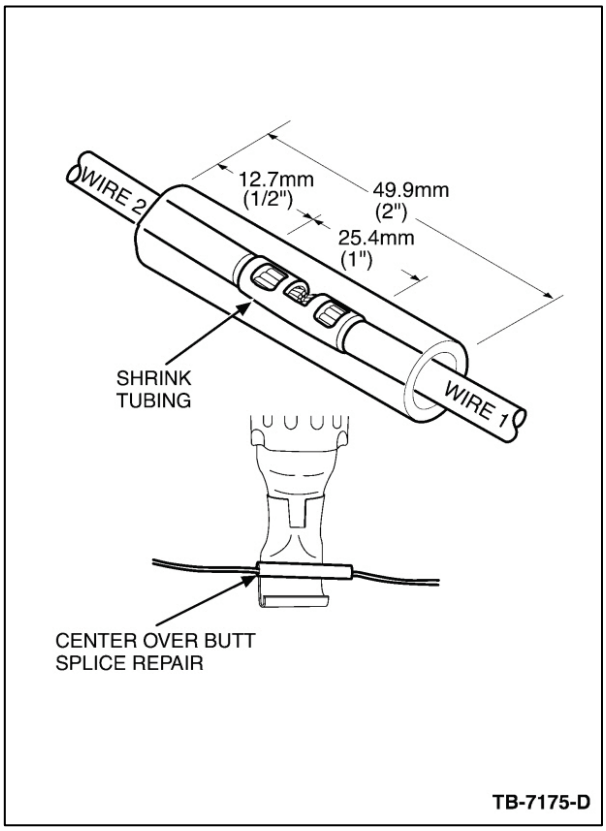


11. **NOTE:**
Overlap heat shrink tubing on both wires.

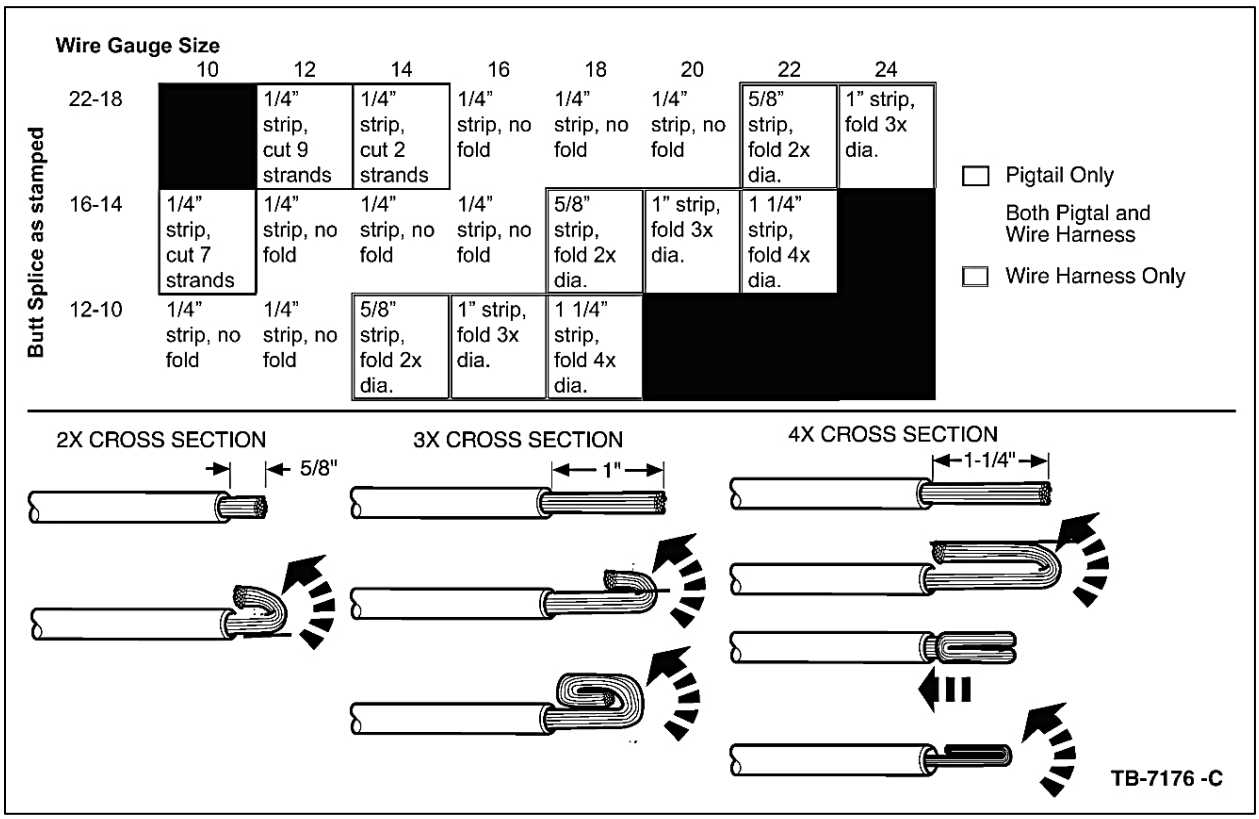
NOTE:
The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

NOTE:
Durability of a heat shrink tubing splice is dependent on the hot melt that will appear from both ends of the tube.

Evenly position heat shrink tubing over wire repair. Use a shielded heat gun to heat the entire length of the heat shrink tubing until the hot melt appears from both ends of the tubing.

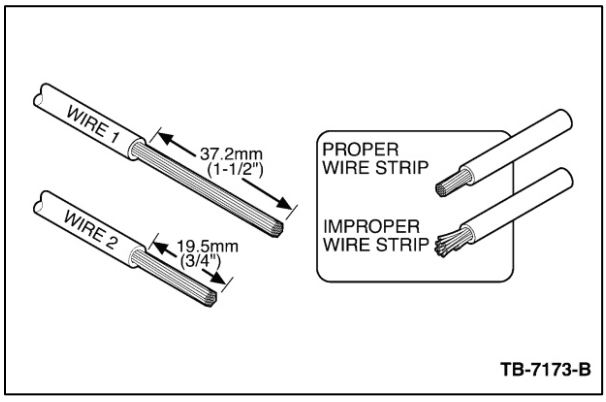


Wire Stripping Lengths and Application Techniques.



For 16-22 AWG wire use either the above "Ratcheting Crimp Procedure" or the following "2 Wire Solder Splice Procedure".

12. Strip I I/2" (37.2 mm) of insulation from Wire #I and 3/4" (I9.Smm) of insulation from Wire #2, taking care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off during stripping. Cut off the end and re-strip.



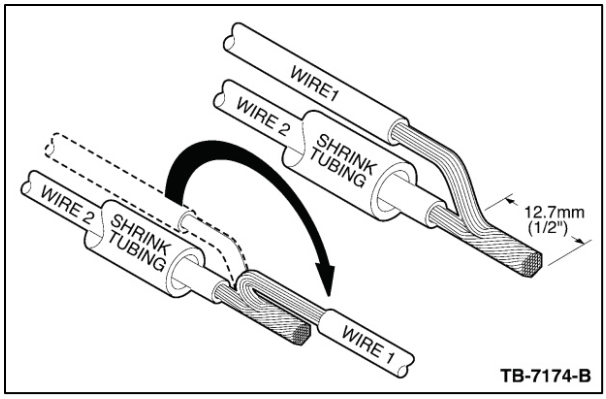
13. **NOTE:**
Use rosin core mildly activated (RMS) solder. do not use acid core solder for wire repair.

NOTE:
Overlap tubing on both wires and wait for solder to cool before moving the wires.

NOTE:
Durability of a heat shrink tubing splice is dependent on the hot melt that will appear from both ends of the tube.

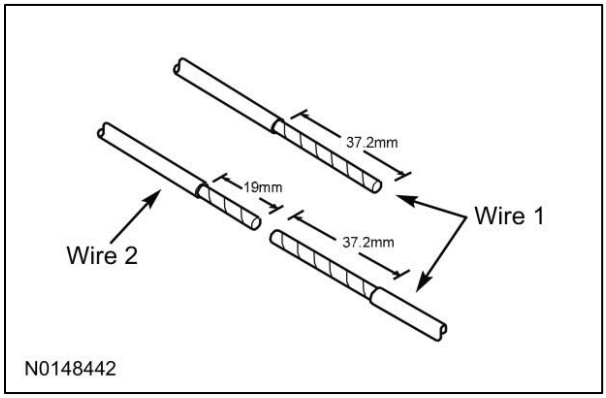
NOTE:
The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

Install heat shrink tubing at least 1" (26 mm) away from one of the stripped ends being spliced. Twist the wires together. Solder wires together. Bend Wire #1 back in a straight line for sealing. Inspect solder joint bond. Evenly position heat shrink tubing over wire repair. Use a shielded heat gun to heat the entire length of the heat shrink tubing until the hot melt appears from both ends of the tubing.



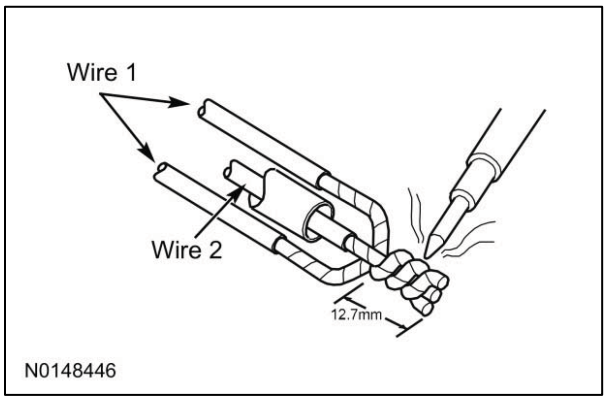
3-Wire Solder Splice Procedure

14. Strip 1 1/2" (37.2 mm) of insulation from both sides of Wire #1 and 3/4" (19 mm) of insulation from Wire #2, taking care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off during stripping. Cut off the end and re-strip.

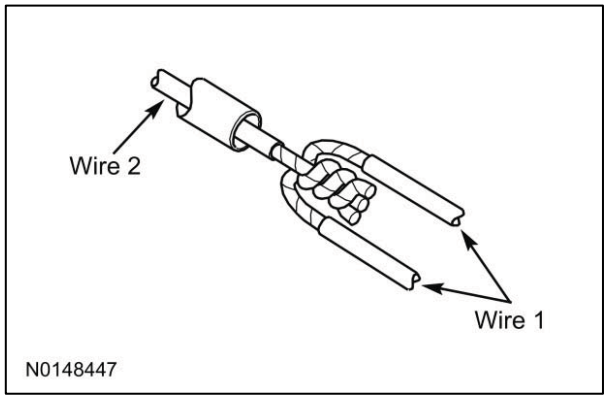


15. **NOTE:**
Wait for solder to cool before moving wires.

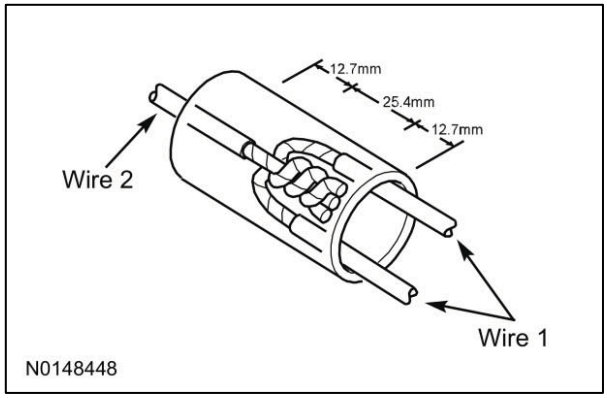
Apply heat shrink tubing to Wire #2. Twist both ends of Wire #1 around Wire #2. Solder wires together.



16. Bend Wire #1 back over the twisted wires for sealing. Inspect solder joint bond.



17. Evenly position heat shrink tubing over wire repair.



18. **NOTE:**
Durability of a heat shrink tubing splice is dependent on the hot melt that will appear from both ends of the tube.

NOTE:
The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

Use a shielded heat gun to heat the entire length of the heat shrink tubing until the hot melt appears from both ends of the tubing.