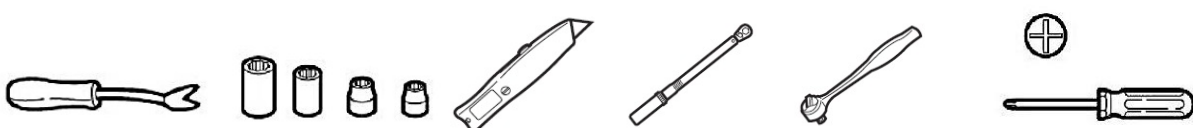
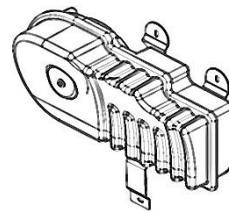
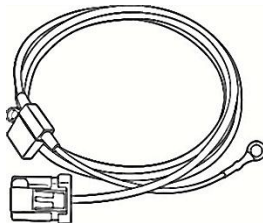

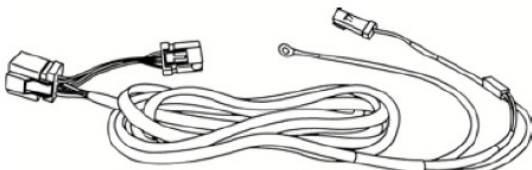
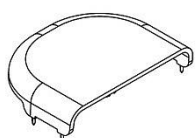






Tools Required					
					
A			B		
C	 3X		D		
E	 2X		F	 6X	
G	 3X		H		
I					

Subwoofer Power Wire Routing – All Vehicles



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, 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 cover to the Power Distribution Box (PDB) and remove the PDB battery cable nut.

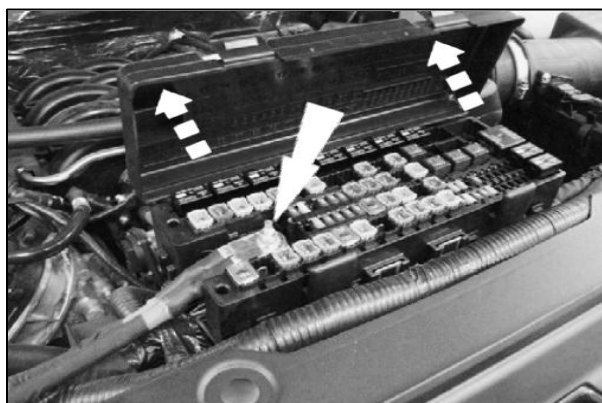
2. Connect the ring terminal of the subwoofer power harness to the PDB battery cable stud and reinstall the PDB battery cable nut.



WARNING:

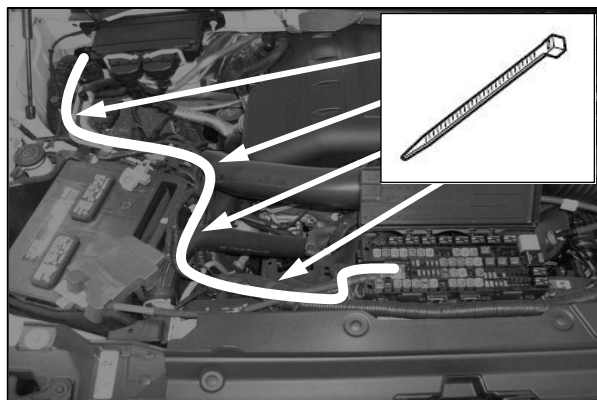
It is critical that the PDB battery cable nut be tightened to the correct torque specification.

- Install the nut and tighten to 9Nm (80 lb-in).



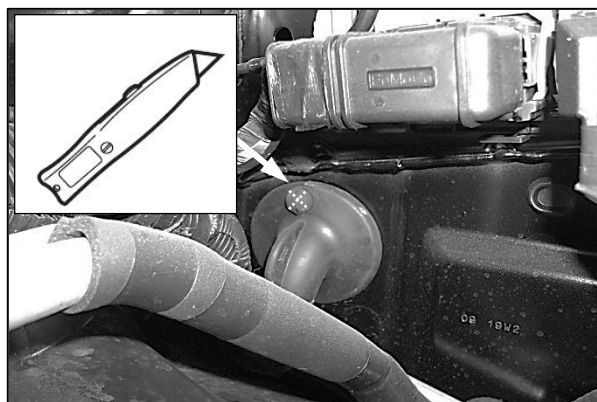
3. Route the subwoofer power harness from the PDB along the vehicle electrical harness and toward the rubber grommet in the metal dash panel on the passenger's side.

- Use supplied wire ties to secure the harnesses to the vehicle harness.



4. Make an "X" shaped incision the grommet at the point indicated.

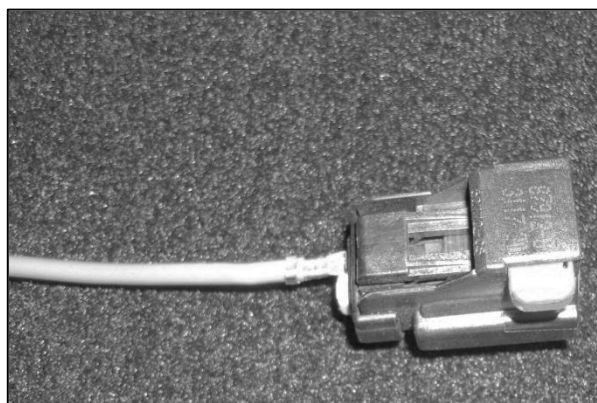
5. Pass the subwoofer power harness into the cabin through the incision in the grommet.



6. Insert the subwoofer power harness 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.

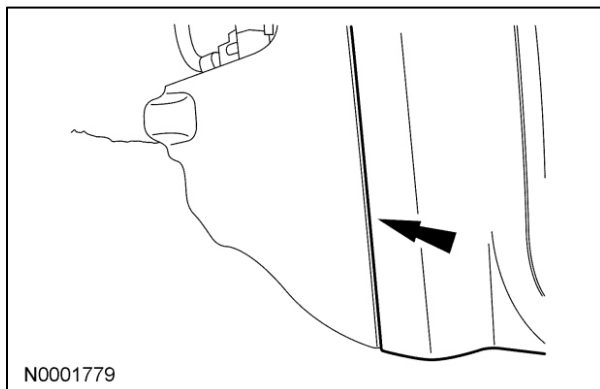


Cowl Side Trim Panel Removal

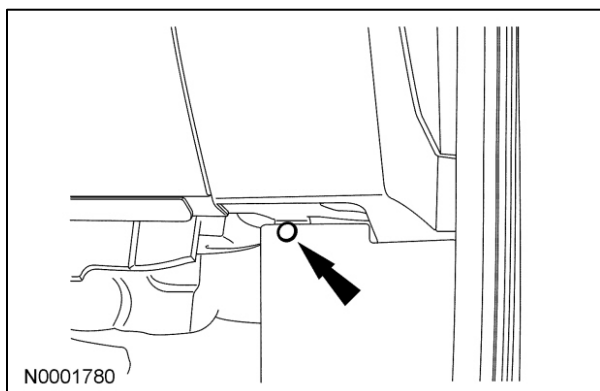
7. Pull upward to release the scuff plate clips and remove the front door scuff plate.

- Detach the scuff plate from the weatherstrip.

8. Remove the fuse panel access door.



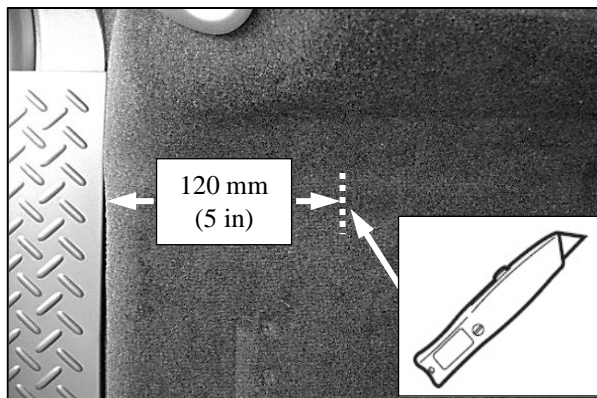
9. Remove the pin-type retainer from the cowl trim panel.



10. Remove the cowl trim panel.

Subwoofer Body Harness Routing

11. Measure 120mm (5 in) from the edge of the RH rear scuff plate and make a 50mm (2 in) incision



12. Pull upward to release the scuff plate clips and remove the RH rear door scuff plate.

- Detach the scuff plate from the weatherstrip.

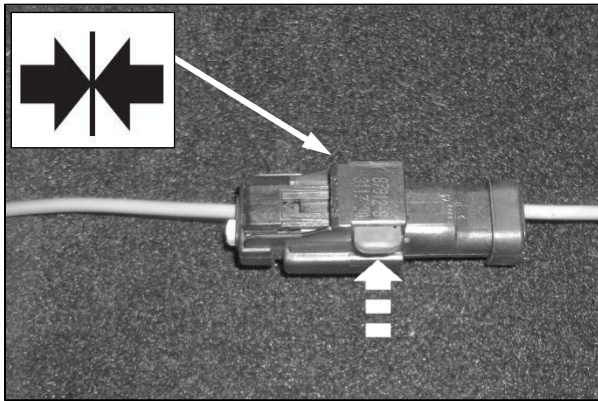
13. Route the subwoofer harness along the factory electrical harness. Route under carpet and through the incision in the carpet.

- Pull the B pillar cover and rubber molding away far enough to allow the subwoofer body harness connector to pass.
- Use supplied wire ties to secure the harness to the vehicle harness.



14. Connect the subwoofer body harness (D) to the subwoofer power harness (B).

- Slide red connector lock to lock connectors.



Subwoofer Body Harness Ground Connection

15. Remove the ground bolt below the glove compartment and connect the ground wire ring terminal of the subwoofer body harness to the ground bolt.

- Install the ground bolt and tighten to 9Nm (80 lb-in).



Subwoofer Signal Input Connection

16. Find the harness indicated in the RH kick panel. 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.

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

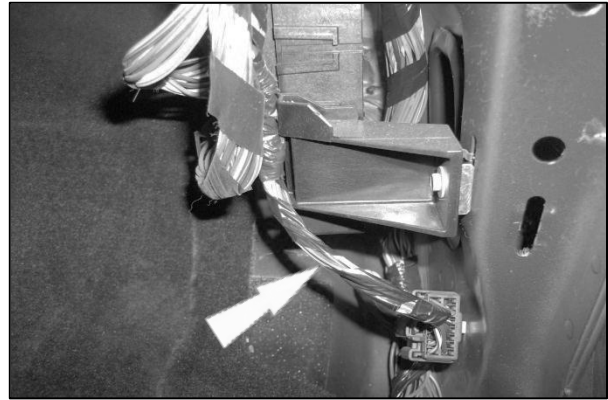
18. Connect the white 2-way adaptor harness (I) to the 2-way input connector of the subwoofer body harness (D).

NOTE:

Refer to applicable wiring diagram for circuit information.

NOTE:

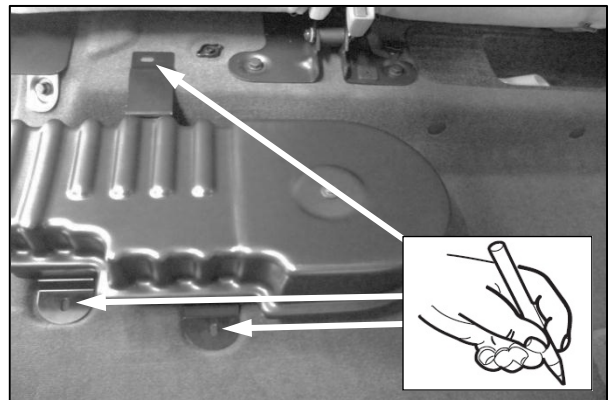
For proper wire splicing techniques, [click here](#).



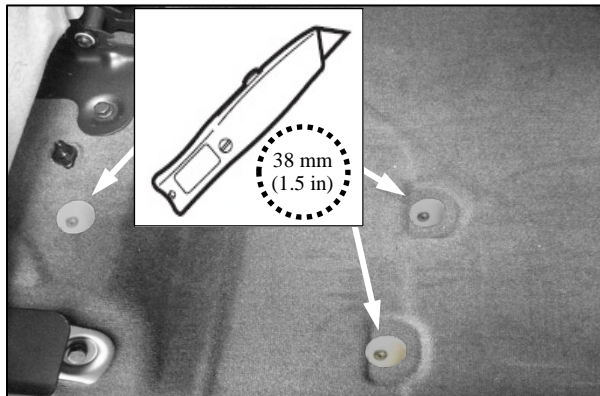
Subwoofer Cabinet Installation

19. Set the enclosure in place and mark the three mounting holes.

- Make sure the enclosure is pushed firmly rearward against the hump in the floor pan. Center the two front mounting brackets in the recessed areas.



20. Using a razor knife, cut 38 mm (1.5 in) diameter hole in the carpet around each of the marks.

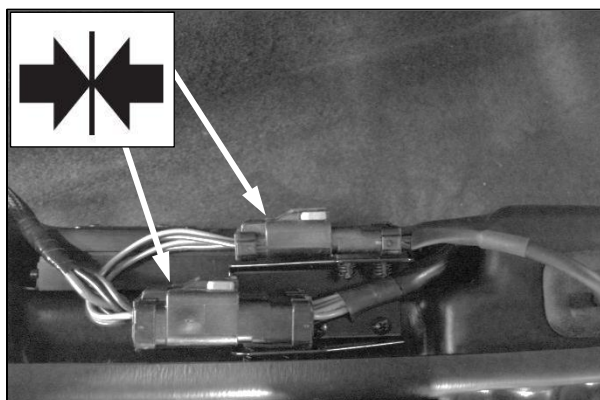


21. Install one of the supplied nut-inserts into each hole using the appropriate installation tool.



22. Connect the two subwoofer body harness connectors to the subwoofer connectors.

- Slide red connector locks to lock connectors.



23. Bolt subwoofer in place using the three supplied bolts.

- Tighten to 9Nm (80 lb-in).
- Install the supplied bolt covers (J).

Install Trim Panels

24. Reverse steps to reinstall all previously removed parts.

- Refer to torque specification table.

Install System Fuse

25. Install the supplied fuse into the power harness fuse holder.

Audio Control Module (ACM) Self-Diagnostic Mode

NOTE:

If the Audio Front Control Module (ACM), FCDIM (if equipped), FCIM, or FDIM (if equipped) are inoperative (blank or do not power on), obtain the ACM part number by referencing the label attached to the Audio Front Control Module (ACM) chassis.

26. Turn the ACM on.

27. Operate the audio system in radio tuner AM/FM mode.

28. Press and hold the eject button, and within 1 second, press the seek up button. If supported, the speaker walk around test will begin, and the display will indicate each speaker as it is tested.

NOTE:

AHU Diagnostics refers to the Audio Front Control Module (ACM), EFP Diagnostics refers to the FCIM, and MFD Diagnostics (if supported) refers to the FCDIM (if equipped).

29. To exit the self-diagnostic mode, turn the Audio Front Control Module (ACM) off, or select "Exit Diagnostics."

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:

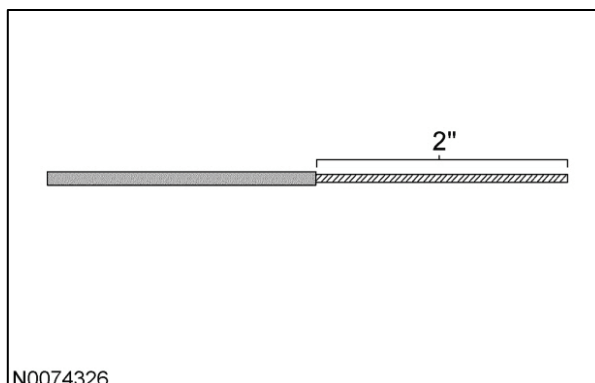
Review splicing procedures prior to performing any cutting/soldering/splicing.

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

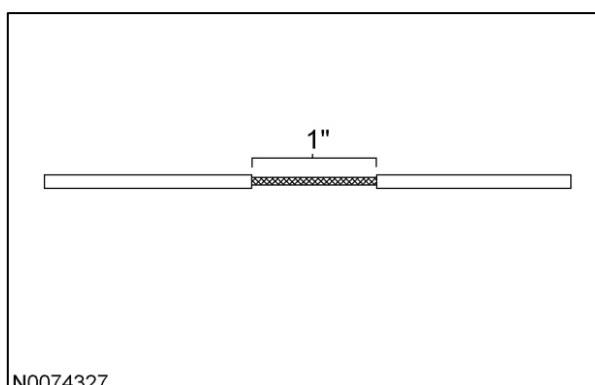
NOTE:

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

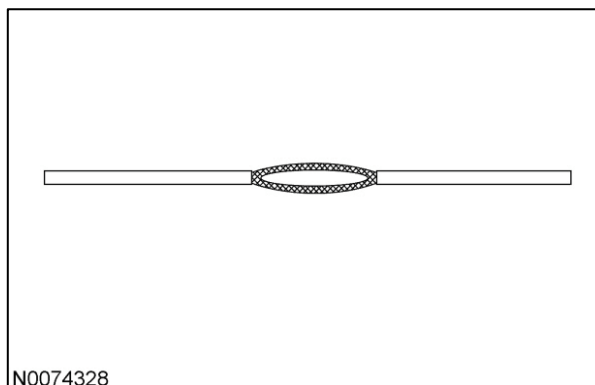
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



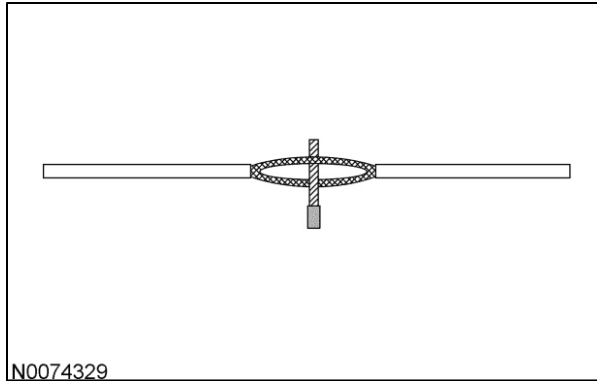
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



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:**

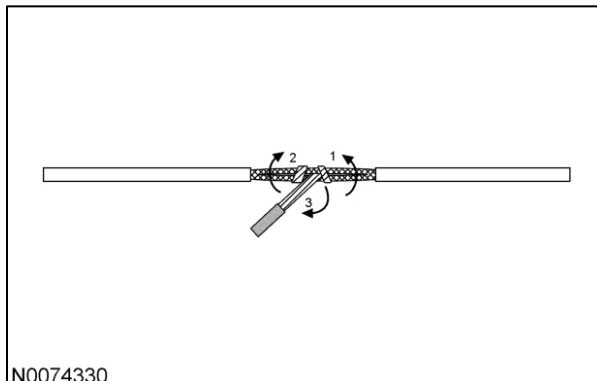
Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

NOTE:

Wait for solder to cool before moving wires.

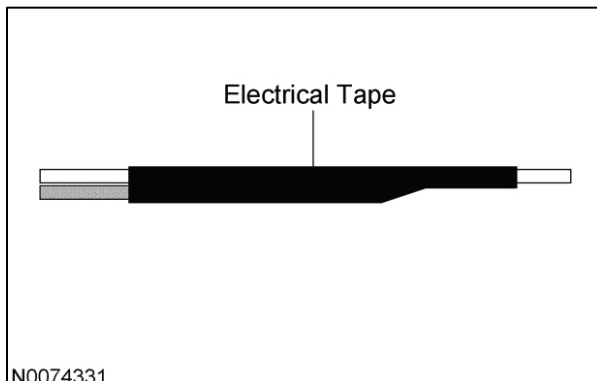
5. Wrap the new wire around one side of the split strands, then wrap it around the other side.

- 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".

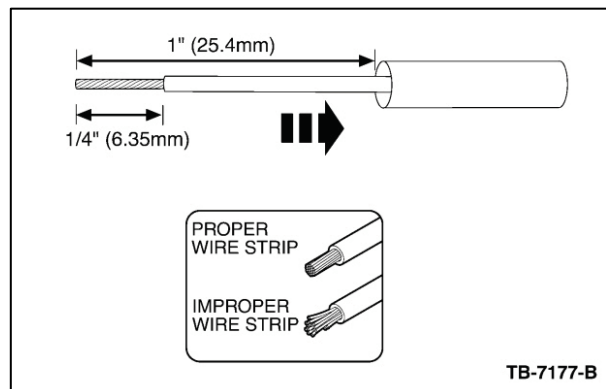
NOTE:

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

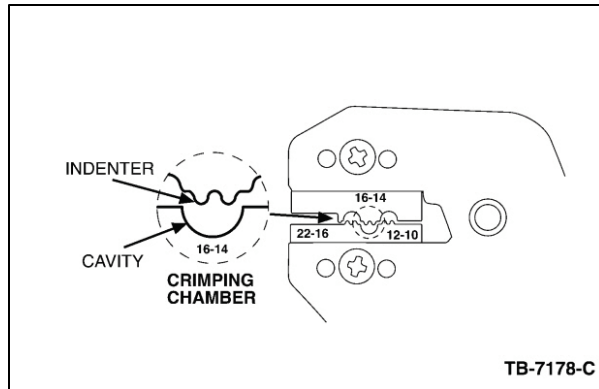
7. NOTE:

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.

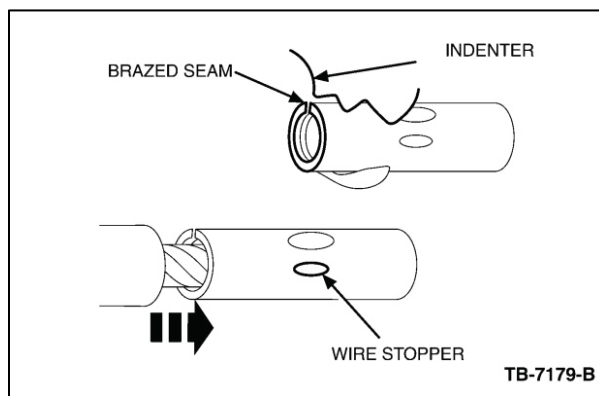
Strip 1 1/4" (6.35 mm) of insulation from pigtail wire end once the wire lengths are sized so repairs can be staggered. Take care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off. If more than one (1) strand is cut off during 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.

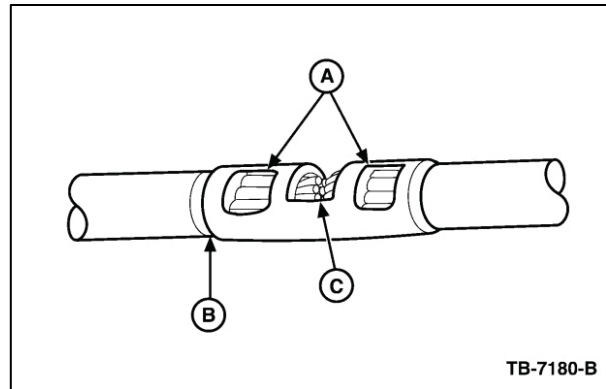


9. Center one (1) end of the butt splice on the appropriate crimping chamber. If visible, be sure to place the brazed seam of the butt splice toward the indenter. Hold the butt splice in place and squeeze the tool handles together until the ratchet engages sufficiently to hold the butt splice in position (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).

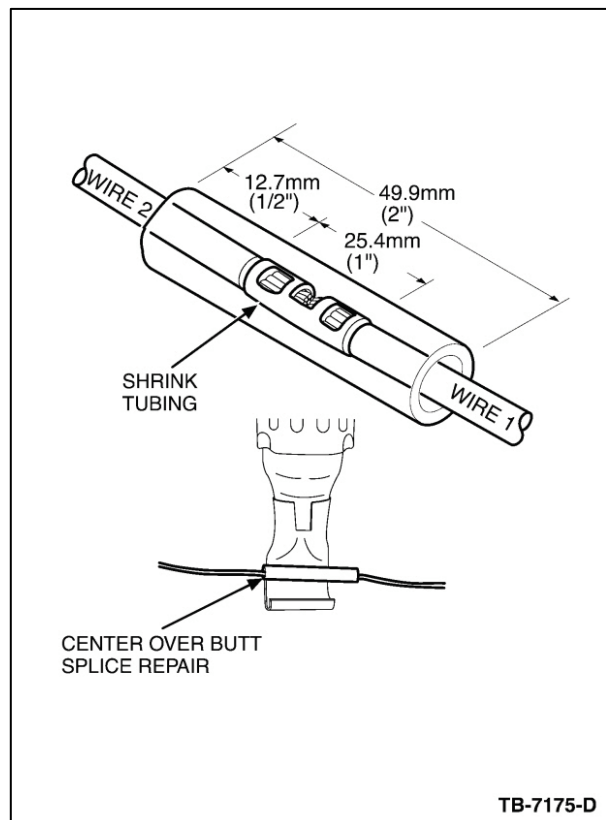


11. NOTE:
Overlap heat shrink tubing on both wires.

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.

Wire Gauge Size		10	12	14	16	18	20	22	24	<div> <input type="checkbox"/> Pigtail Only <input type="checkbox"/> Both Pigtail and Wire Harness <input type="checkbox"/> Wire Harness Only </div>
Butt Splice as stamped	22-18		1/4" strip, cut 9 strands	1/4" strip, cut 2 strands	1/4" strip, no fold	1/4" strip, no fold	1/4" strip, no fold	5/8" strip, fold 2x dia.	1" strip, fold 3x dia.	
	16-14	1/4" strip, cut 7 strands	1/4" strip, no fold	1/4" strip, no fold	1/4" strip, no fold	5/8" strip, fold 2x dia.	1" strip, fold 3x dia.	1 1/4" strip, fold 4x dia.		
	12-10	1/4" strip, no fold	1/4" strip, no fold	5/8" strip, fold 2x dia.	1" strip, fold 3x dia.	1 1/4" strip, fold 4x dia.				

2X CROSS SECTION

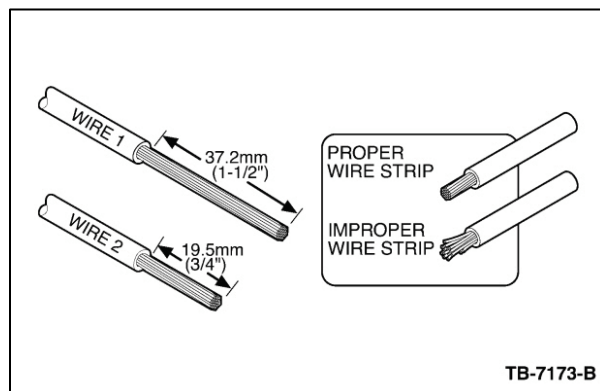
3X CROSS SECTION

4X CROSS SECTION

TB-7176 -C

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

12. Strip 1 1/2" (37.2 mm) of insulation from Wire #1 and 3/4" (19.5mm) 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.

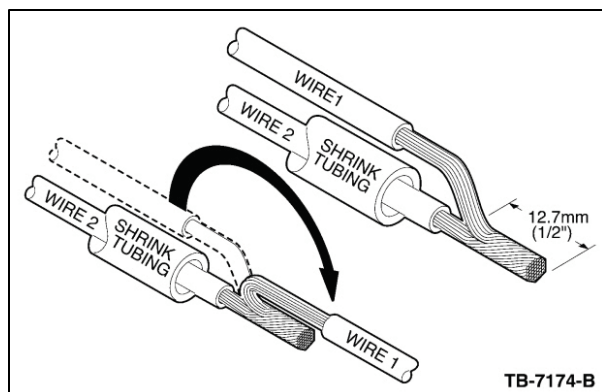
NOTE:

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

NOTE:

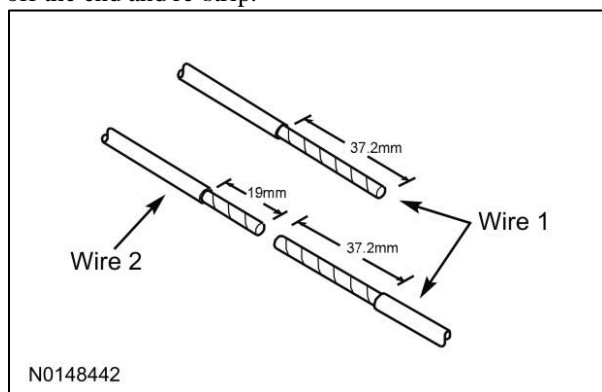
The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

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

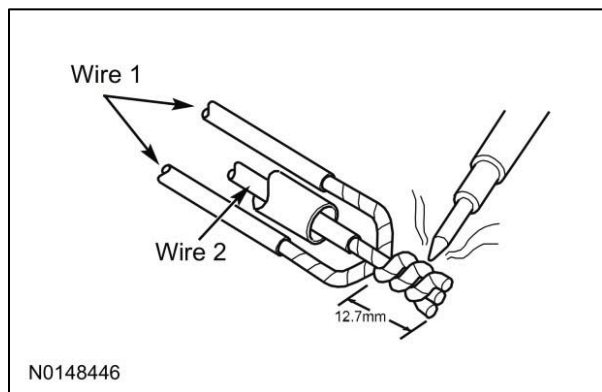
14. Strip 1 1/2" (37.2 mm) of insulation from both sides of Wire #1 and 3/4" (19 mm) of insulation from Wire #2, taking care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off during stripping. Cut off the end and re-strip.



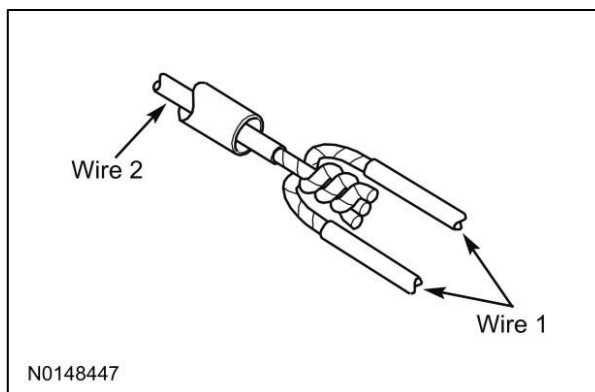
15. NOTE:

Wait for solder to cool before moving wires.

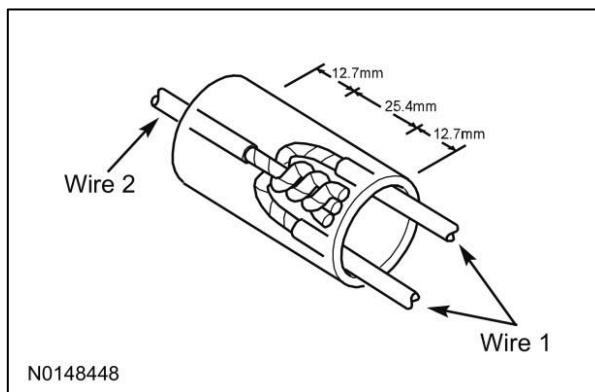
Apply heat shrink tubing to Wire #2. Twist both ends of Wire #1 around Wire #2. Solder wires together.



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.

