

# MasterSheet

019 0024  
Revision 08/04/20



Complete Car Audio  
Installation Instructions  
**CRUTCHFIELD®**

2015-  
Ford F-150  
2017-  
Ford Super Duty Pickups



## IMPORTANT

Before starting, compare items on your invoice with items received. Carefully check through packaging material. If any item is missing, please call **Crutchfield Technical Support** at **1-800-955-9094**.

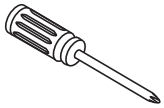

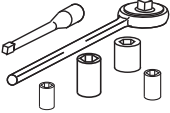
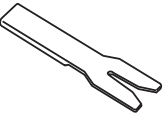
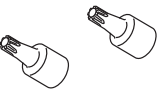

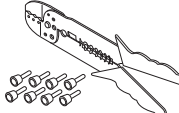
Although reasonable attempts are made to verify the accuracy of the information contained in this MasterSheet, it is presented without warranties or guarantees of any type due to the constantly changing nature of this type of information and running changes in vehicle production. Any person or entity using this information does so at his or its own risk. If you find our instructions are different from your vehicle, or if you have questions, do not continue with your installation. Contact our toll-free technical support for assistance.

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14	Rear Wall Subwoofer (Super Crew)			✓	✓	✓			✓			✓	
15	Wire Splicing Guide												✓
		Phillips Screwdriver	Small Flat Blade Screwdriver	Deep 1/2"	7mm	8mm	10mm	Panel Tool	T20	T50	Drill & 1/8" Bit	Wire Strippers & Crimp Caps	
				Socket, Ratchet & Extension					Torx Driver				
													

## Tools Required ▶

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**IMPORTANT:** Disconnect negative battery cable before all operations in order to avoid an electrical short or accidental airbag deployment.

**Note:** At this time, no aftermarket antenna is available from Crutchfield. A replacement antenna may be purchased from a local dealership.

# Factory Radio Removal -- All Radios

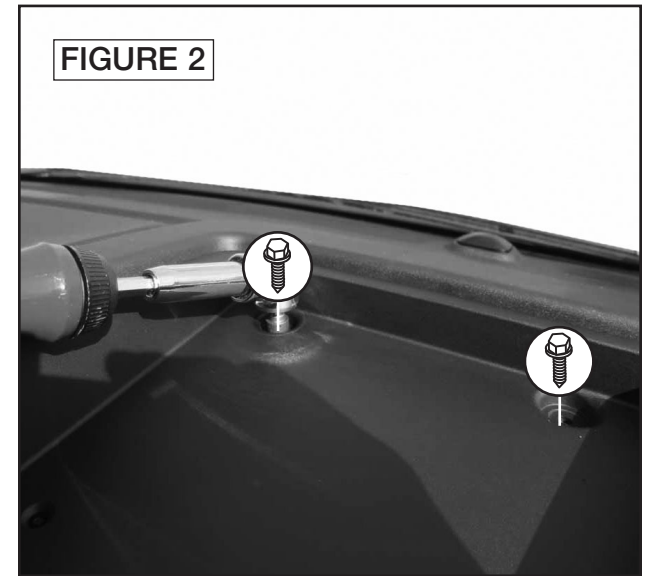
*Radio replacement is not recommended at this time for 2018-up models equipped with 8" LCD screens and factory amplifier. Replacement is also not recommended for all 2020 models with 8" LCD screens.*

1. Before proceeding, remove media from factory unit if present.
2. Set parking brake and disconnect negative battery cable to prevent any electrical short.
- 3a. *Vehicles without a center speaker:*  
Pull up rubber mat inside top dash tray. Remove two (2) exposed 7mm screws (Figures 1 & 2).
- 3b. *Vehicles with a center speaker:*  
Pry up center dash grille to release four (4) clips and remove grille. Remove two (2) 7mm screws exposed by removal of grille (Figures 3 & 4).

*Continued on the next page.*

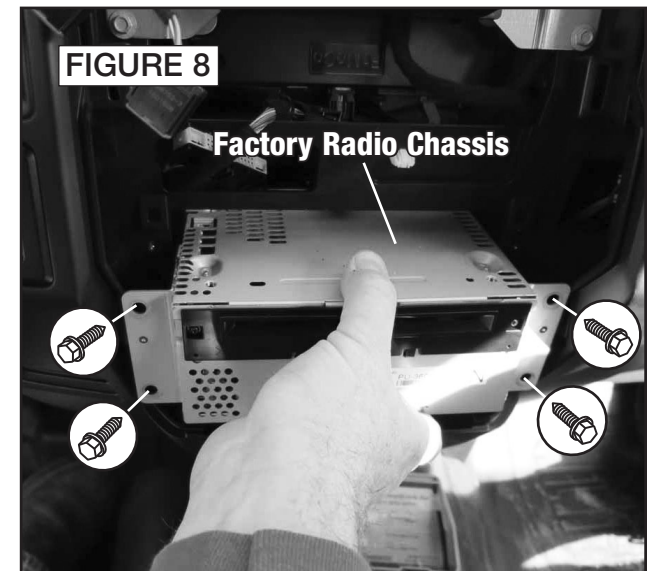
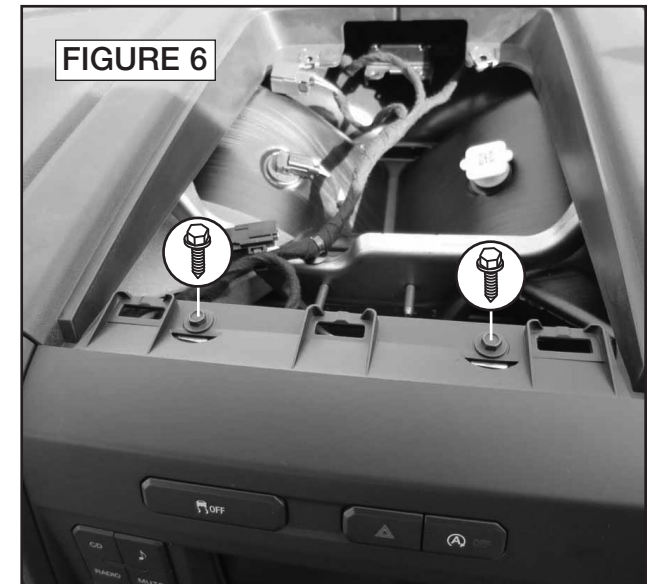
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# Factory Radio Removal -- All Radios (continued)

4. Pry up rear edge of top dash tray to release three (3) clips. Disconnect wiring harness and remove tray. Remove two (2) 7mm screws exposed by removal of tray (Figures 5 & 6).
5. Pry out receiver/climate control panel to release eight (8) clips. Disconnect wiring harnesses and remove panel (Figure 7).
6. Remove four (4) 7mm screws securing factory radio chassis. Disconnect and remove chassis (Figure 8).



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# OEM Integration

*This page addresses integrating aftermarket accessories such as Bluetooth® Adaptors, Auxiliary Input Adaptors, iPod® Adaptors, etc., with a factory radio system.*

1. Check instructions supplied with device for location to connect device as radio removal may not be necessary. If necessary, remove factory radio following instructions on the previous pages.
2. Follow instructions supplied with the accessory device.
3. Connect optional adaptor to input as shown.
4. **IMPORTANT:** Reconnect all wiring harnesses including airbag harness, then reconnect battery. Test operation of adaptor and reassemble dash by reversing disassembly steps.





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# Receiver Installation

## NOTES:

*Please read first*

- Check to make sure the Crutchfield receiver wiring adaptor plugs into the vehicle receiver harness. If the Crutchfield adaptor is incorrect, please call our **Technical Support Department at 1-800-955-9094.**

*A Standard DIN unit is shown. A Double-DIN receiver may also be installed following these same steps.*

1. Prepare receiver assembly and make wiring connections following instructions supplied with the dash and wiring kit.
2. Hold receiver assembly near dash. Make the following connections (if applicable) and check that they are secure:
  - receiver wiring adaptor or interface
  - antenna lead (using adaptor if necessary)
  - Bluetooth® microphone
  - RCA cables
  - climate control harnesses
  - airbag harnesses
  - power outlet harnesses
  - other accessory devices
3. Secure assembly to dash with screws previously removed, then reconnect battery and test operation of all the following functions (if applicable):
  - receiver power
  - AM/FM reception
  - sound from all speakers
  - Bluetooth® operations
  - other accessory devices
4. Reassemble dash by reversing disassembly steps.



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# Front Pillar Speakers



## IMPORTANT

No speaker wiring adaptor is available at this time from Crutchfield for this speaker location. It will be necessary to splice wires in order to install an aftermarket speaker.

No speaker adaptor bracket is available at this time for this location. A mounting bracket must be fabricated in order to install an aftermarket speaker.

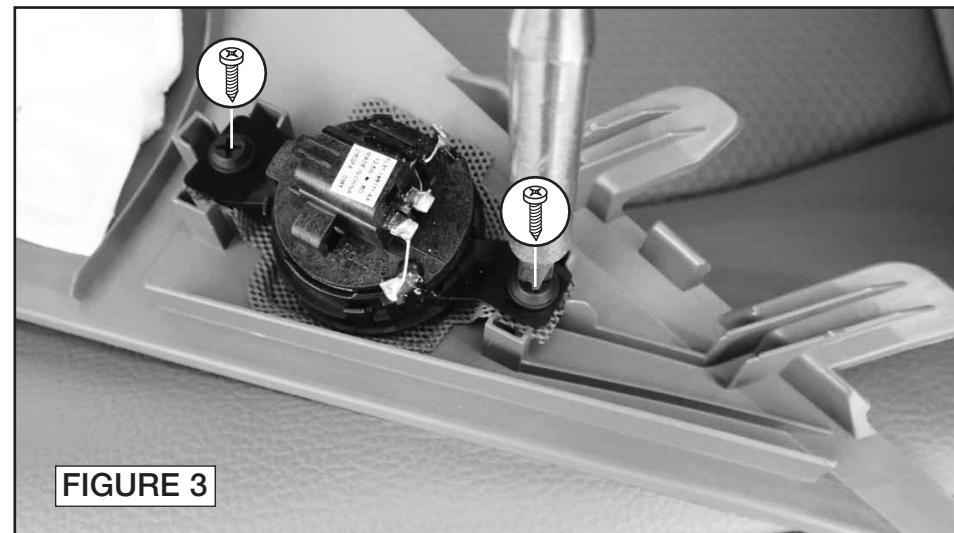
It is possible that the replacement speakers do not have screws supplied. It may be necessary to acquire mounting hardware.

1. Pry open two (2) screw covers in pillar trimpanel and remove one (1) exposed 10mm screw at each location (Figure 1).
2. Pull out pillar trimpanel and disconnect wiring harness. Lift trimpanel to remove (Figure 2).
3. Remove two (2) Phillips screws securing speaker and remove speaker (Figure 3).
4. Fabricate a speaker mounting bracket and secure new speaker to bracket.
5. Make wiring connections following instructions on page 15. Return to this page to complete installation.
6. Secure speaker/bracket assembly to location.
7. Test speaker operation and reassemble by reversing disassembly steps.

## NOTES:

### Please read first

- Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.



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# Center Dash Speaker



## IMPORTANT

No speaker wiring adaptor is available at this time from Crutchfield for this speaker location. It will be necessary to splice wires in order to install an aftermarket speaker.

1. Pry up center dash grille to release four (4) clips and remove grille (Figure 1).
2. Remove two (2) Torx T20 screws securing speaker. Pull out speaker, disconnect and remove (Figure 2).
3. Make wiring connections following instructions on page 15. Return to this page to complete installation.
4. Secure speaker to location with screws previously removed.
5. Test speaker operation and reinstall speaker grille.

## NOTES:

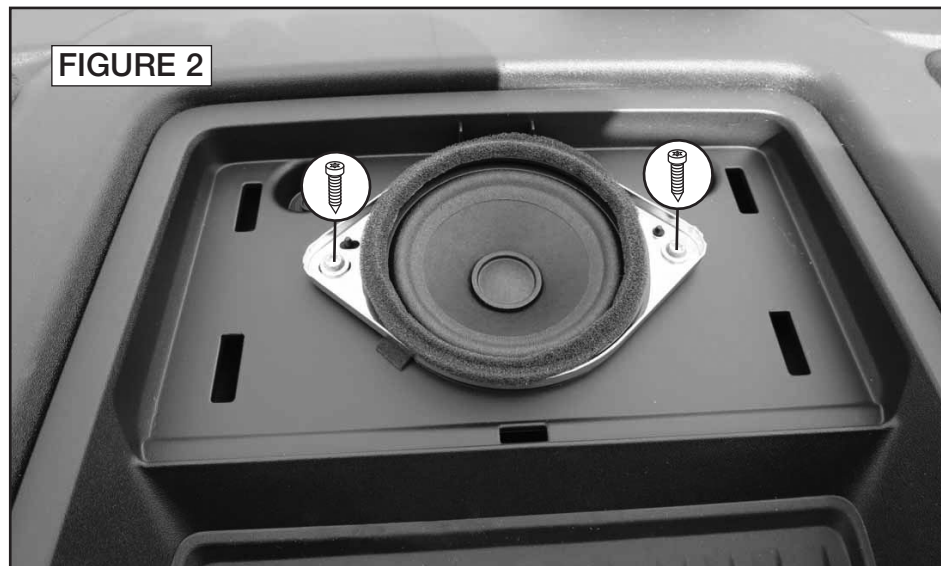
### Please read first

- Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.

FIGURE 1



FIGURE 2



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# Front Door Speakers

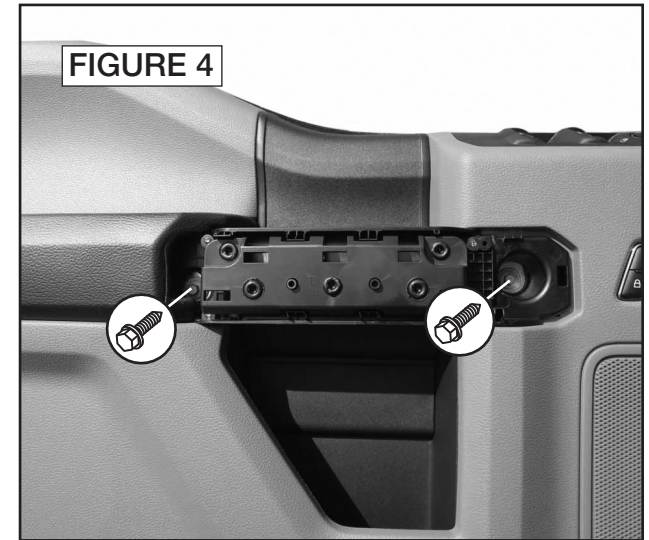
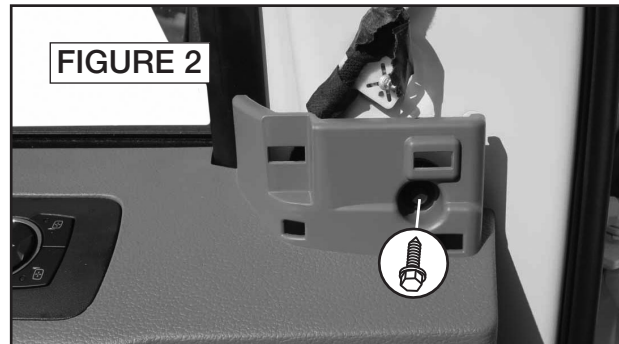
## NOTES:

### Please read first

- Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.

1. Starting at the top edge, pry off “sail” panel to release four (4) clips and remove (Figure 1).
2. Remove one (1) 7mm screw exposed by removal of “sail” panel (Figure 2).
3. Starting at the lower front edge, pry off door pull outer cover to release six (6) clips and remove outer cover (Figure 3).
4. Remove two (2) 7mm screws exposed by removal of door pull outer cover (Figure 4).
5. Starting at the top edge, pry off screw cover under door pull to release two (2) clips. Remove two (2) exposed 7mm screws (Figure 5).

Continued on the next page.



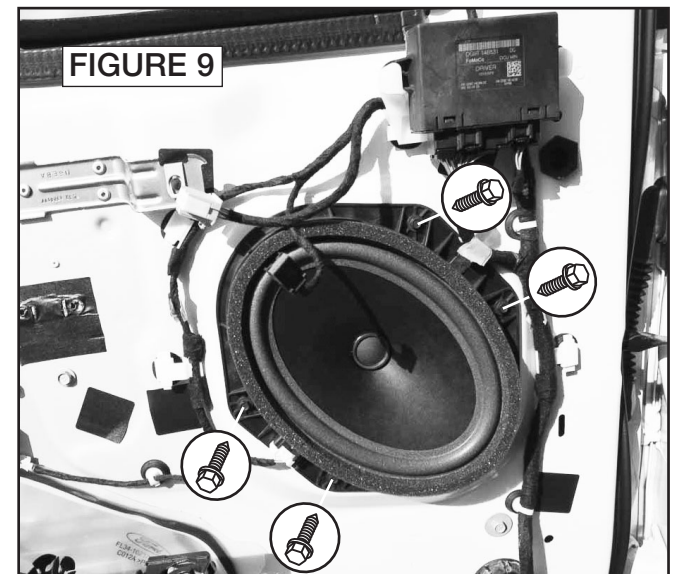
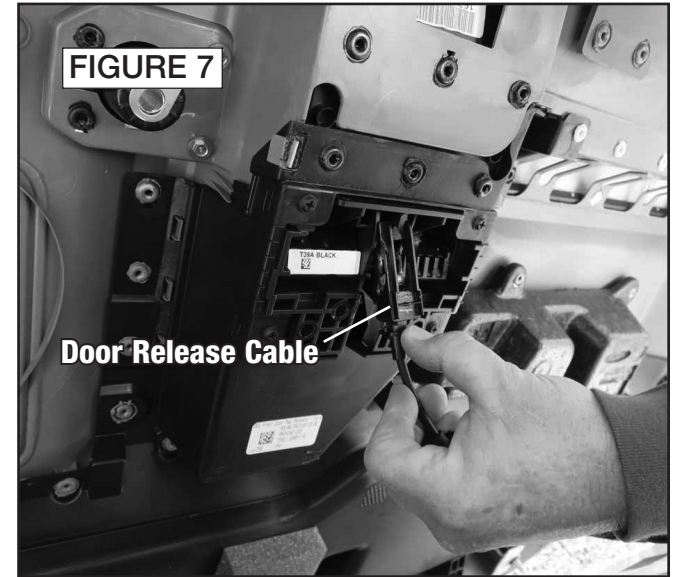
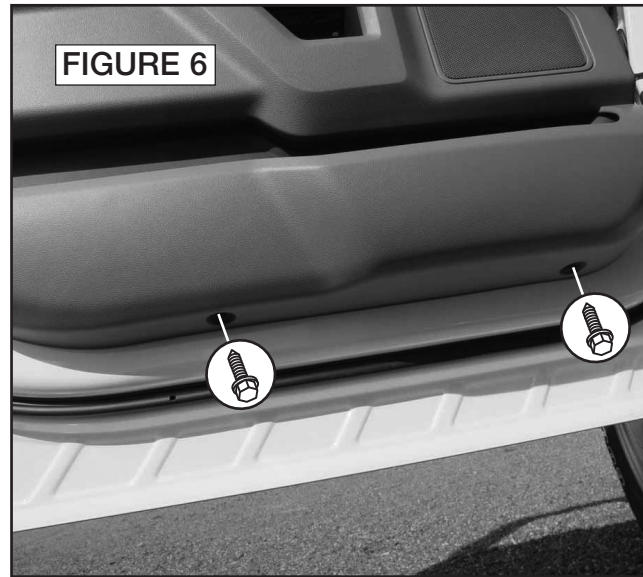
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# Front Door Speakers (continued)

6. Remove two (2) 7mm screws along bottom edge of door panel (Figure 6).
7. Pry out sides and bottom of door panel to release six (6) clips. Disconnect wiring harnesses and door release cable. Remove panel (Figures 7 & 8).
8. Remove four (4) 7mm screws securing speaker. Pull out speaker, disconnect and remove (Figure 9).
9. Secure new speaker to adaptor bracket.
10. Connect speaker wiring adaptor of replacement speaker to vehicle speaker harness. Secure speaker/bracket assembly to location with screws previously removed.
11. Test speaker operation and reassemble door panel by reversing disassembly steps.



## SAFETY CHECK

- Check that wires do not interfere with window operation.
- Test door lock and release operation.



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# Rear Door Speakers -- Super Cab

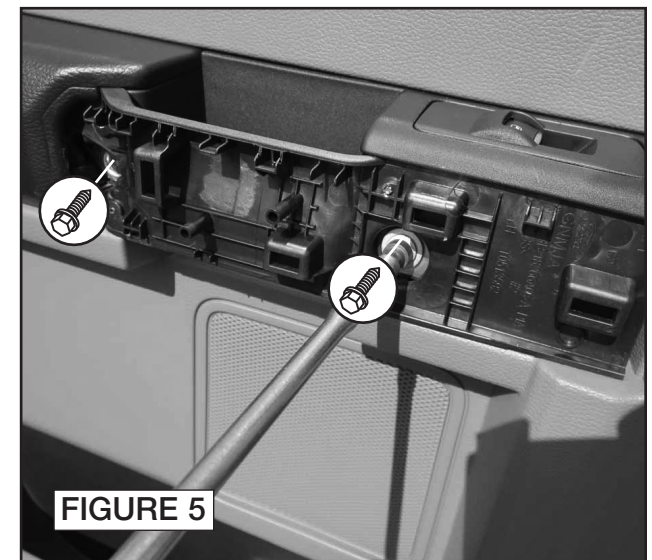
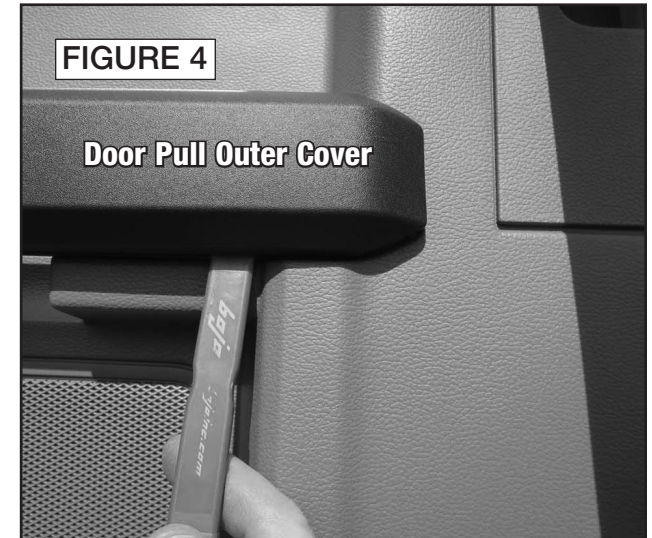
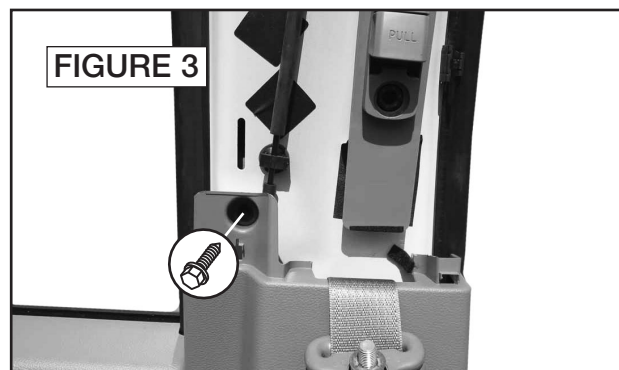
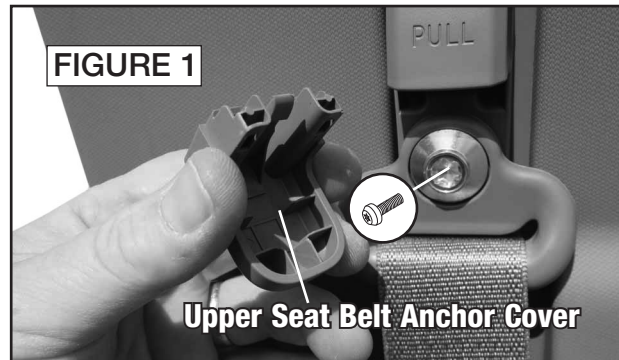
## NOTES:

### Please read first

- Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.

1. Pry off upper seat belt anchor cover and remove one (1) Torx T50 bolt from anchor. Allow seat belt to hang (Figure 1).
2. Starting at the top edge, pry off upper seat belt trimpanel to release three (3) clips and remove trimpanel (Figure 2).
3. Remove one (1) 7mm screw exposed by removal of upper seat belt trimpanel (Figure 3).
4. Starting at the front edge, pry off door pull outer cover to release four (4) clips and remove cover (Figure 4).
5. Remove two (2) 7mm screws exposed by removal of door pull outer cover (Figure 5).

Continued on the next page.



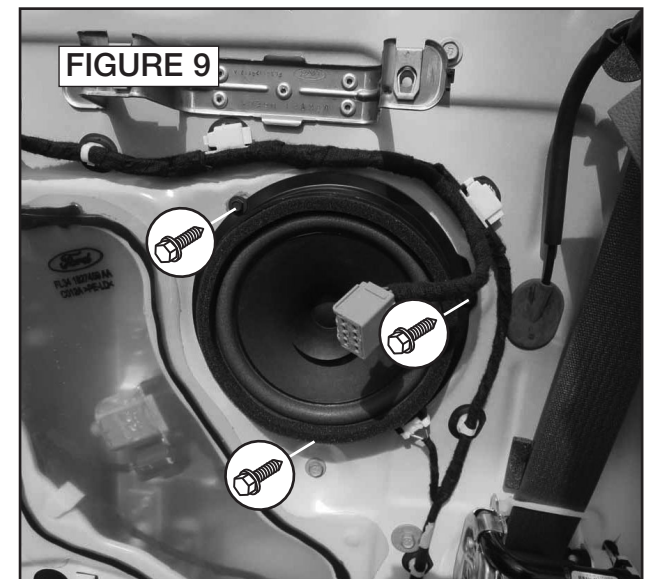
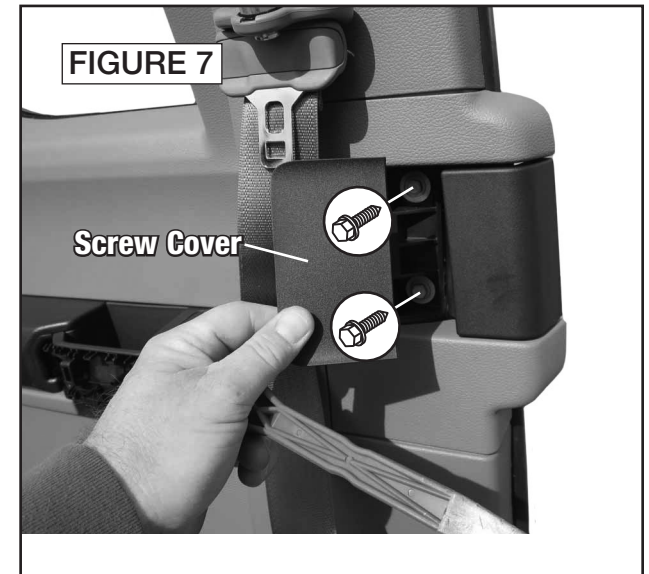
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# Rear Door Speakers -- Super Cab (continued)

6. Remove two (2) 7mm screws along bottom edge of door panel (Figure 6).
7. Pry off screw cover behind door release and remove two (2) 10mm screws (Figure 7).
8. Pry out sides and bottom of door panel to release seven (7) clips. Remove door panel (Figure 8).
9. Remove three (3) 7mm screws securing speaker. Disconnect wiring harness and remove speaker (Figure 9).
10. Secure new speaker to adaptor bracket.
11. Connect speaker wiring adaptor of replacement speaker to vehicle speaker harness. Secure speaker/bracket assembly to location.
12. Test speaker operation and reassemble door panel by reversing disassembly steps.



## SAFETY CHECK

- Make sure seat belts are secured to manufacturer's specifications.



## SAFETY CHECK

- Check that wires do not interfere with window operation.
- Test door lock and release operation.



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# Rear Door Speakers -- Super Crew

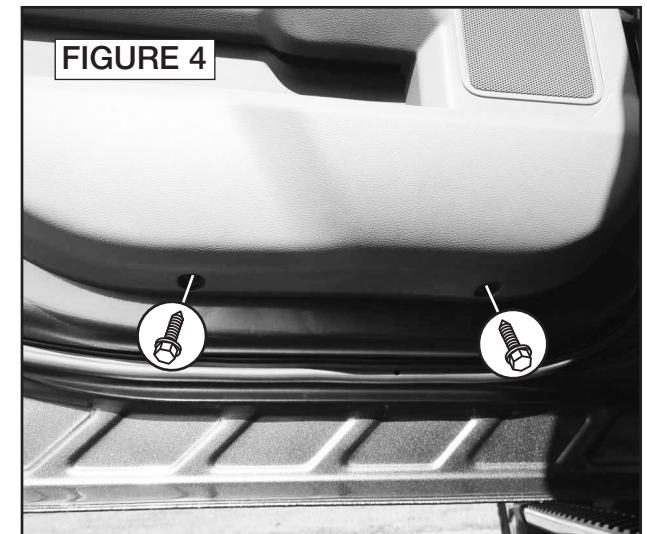
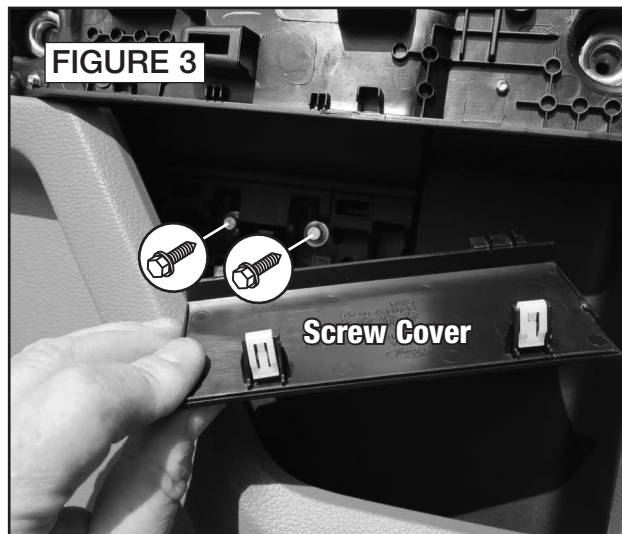
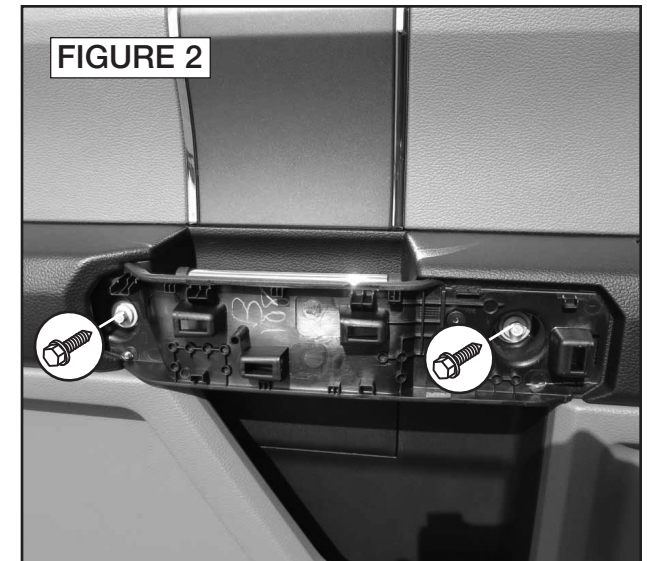
## NOTES:

### *Please read first*

- Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.

1. Starting at the lower front edge, pry off door pull outer cover to release four (4) clips and remove cover (Figure 1).
2. Remove two (2) 7mm screws exposed by removal of door pull outer cover (Figure 2).
3. Starting at the top edge, pry off screw cover below door pull to release two (2) clips, then remove two (2) exposed 7mm screws (Figure 3).
4. Remove two (2) 7mm screws along the bottom edge of door panel (Figure 4).

*Continued on the next page.*



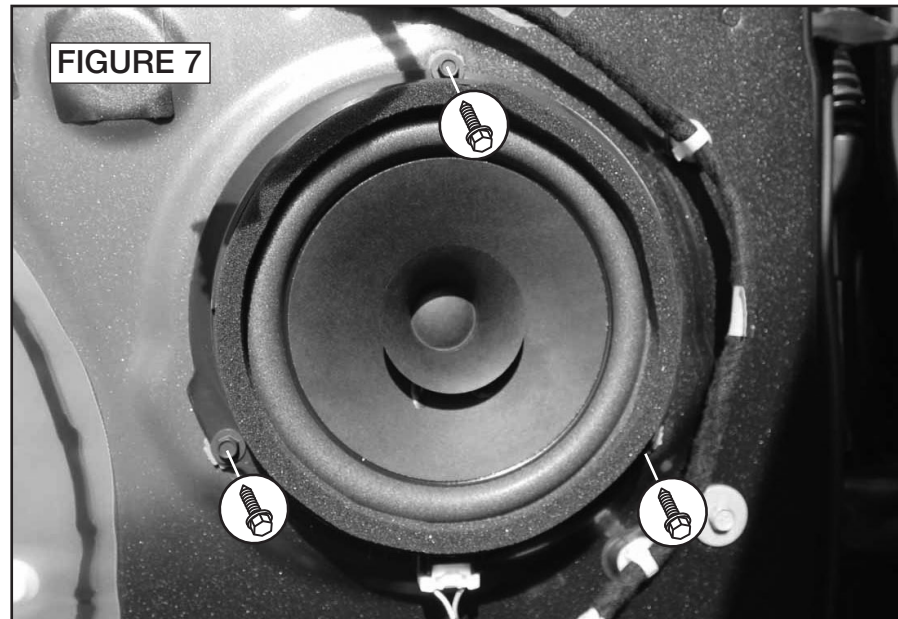
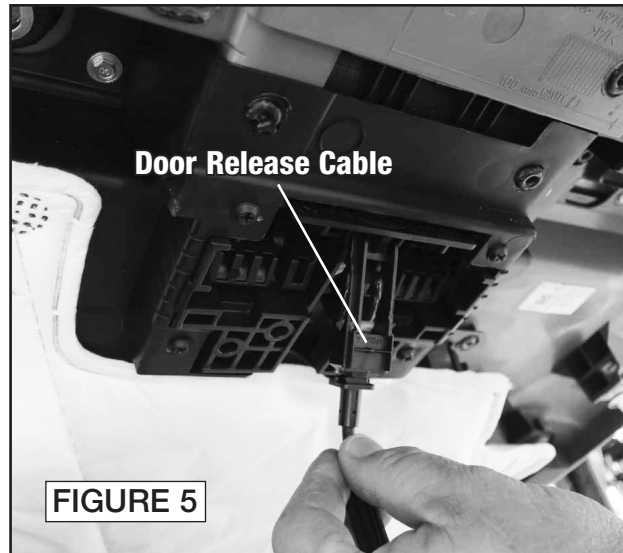
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## Rear Door Speakers -- Super Crew (continued)

5. Pry out sides and bottom of door panel to release six (6) clips. Disconnect wiring harnesses and door release cable. Remove door panel (Figures 5 & 6).
6. Remove three (3) 7mm screws securing speaker. Disconnect wiring harness and remove speaker (Figure 7).
7. Secure new speaker to adaptor bracket.
8. Connect speaker wiring adaptor of replacement speaker to vehicle speaker harness. Secure speaker/bracket assembly to location.
9. Test speaker operation and reassemble door panel by reversing disassembly steps.



### SAFETY CHECK

- Check that wires do not interfere with window operation.
- Test door lock and release operation.



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# Rear Wall Subwoofer -- Super Crew

## NOTES:

### Please read first

- Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.



### IMPORTANT

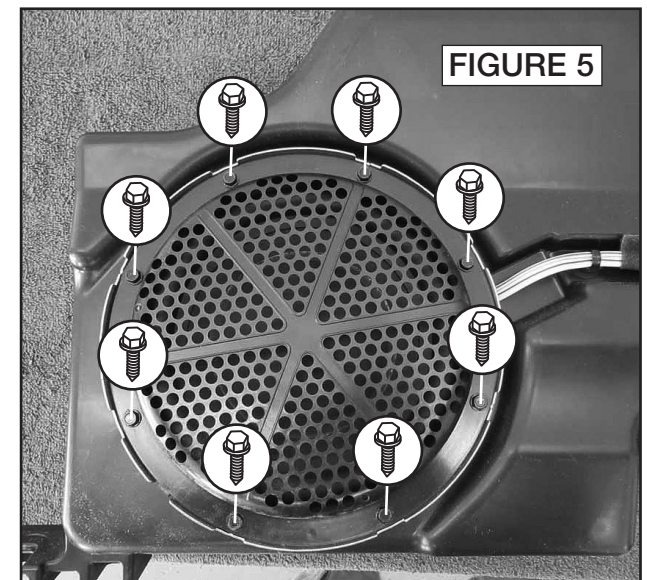
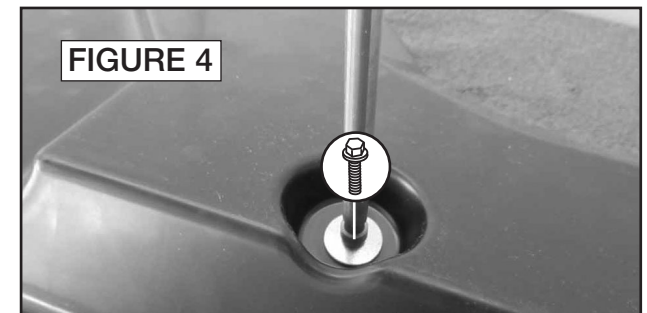
It is possible that the replacement speaker does not have screws supplied. It may be necessary to acquire mounting hardware.

1. Fold down seat back cushion.
2. Remove one (1) 1/2" bolt and two (2) 1/2" nuts securing subwoofer enclosure to back wall. Disconnect subwoofer enclosure and remove (Figures 1-3).
3. Remove one (1) 8mm screw from rear of enclosure and eight (8) 7mm screws from front of enclosure securing subwoofer. Pull out subwoofer, disconnect and remove (Figures 4 & 5).
4. Place new speaker in enclosure and mark new mounting holes. Remove speaker and drill holes with a 1/8" bit.
5. Connect vehicle speaker wiring to new speaker. Secure subwoofer to enclosure, then secure enclosure to location and reconnect enclosure.
6. Test speaker operation and reassemble by reversing disassembly steps.



### CAUTION

Always be careful when drilling or cutting in a vehicle. **WEAR EYE PROTECTION.** Be aware of things such as wiring, windows, fuel lines and safety devices. Check depth and location to avoid damage to vehicle appearance.



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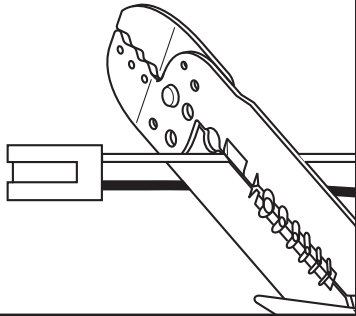
# Wire Splicing Guide

These methods can be used to make wiring connections if no receiver or speaker wiring adaptor is available. Wire color information (if available) can be found on the next page.

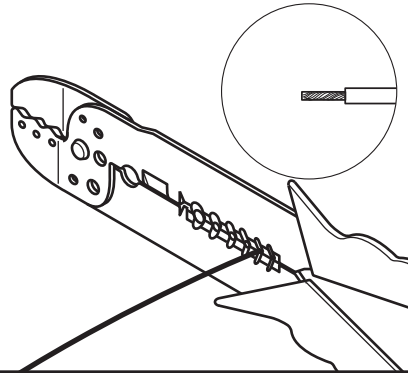
## CRIMP METHOD

Factory harness is removed. Save harness if it is to be reconnected in the future by this method.

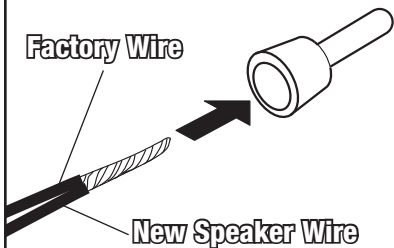
1. Cut factory wires behind factory speaker harness.



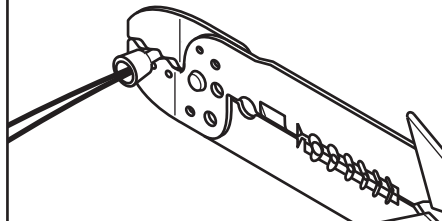
2. Strip end of each wire back 1/2".



3. Twist each positive pair of wires together and insert in crimp cap. Repeat step for negative wires.



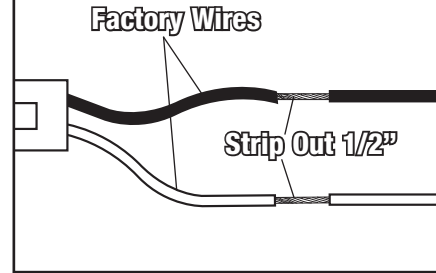
4. Squeeze middle of cap for tight connection.
5. Connect new wires to speaker with spade connectors.



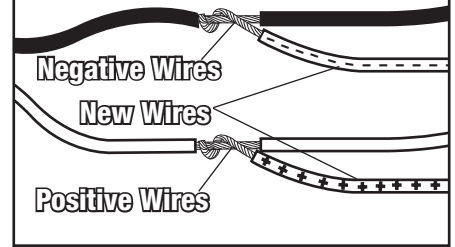
## SOLDER METHOD

New speaker wires are spliced into factory wires behind harness.

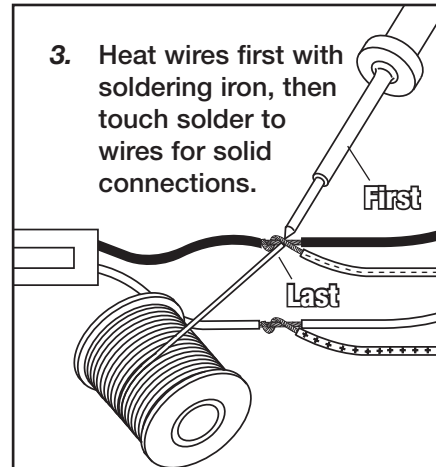
1. Carefully strip out a 1/2" section on each factory speaker wire behind the factory speaker harness.



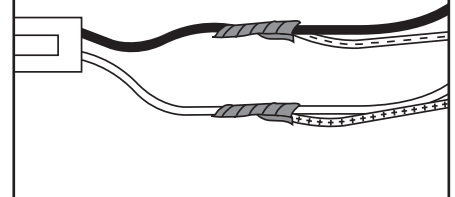
2. Twist wires from new speaker to stripped sections of factory wires as shown making sure polarity is correct.



3. Heat wires first with soldering iron, then touch solder to wires for solid connections.



4. Wrap wiring connections with electrical tape.
5. Connect new wires to speaker with spade connectors.



# Wire Splicing Guide (continued)

*NOTE: In most cases a speaker wiring adaptor is available from Crutchfield and splicing will not be necessary. If no adaptor is available, use this chart as a guide to match and splice wires.*

Wire Location	Wire Color
Left front door speaker	positive (+): white or white/blue, negative (-): brown or white/brown
Right front door speaker	positive (+): white/violet or violet, negative (-): white/orange, brown or orange
Left front pillar tweeter	positive (+): green/orange or white, negative (-): gray/orange or white/brown
Right front pillar tweeter	positive (+): violet/orange, negative (-): yellow/orange
Center dash speaker	positive (+): green, negative (-): gray/yellow
Left rear door speaker	positive (+): white/green or green, negative (-): brown/yellow or brown
Right rear door speaker	positive (+): brown/white or white, negative (-): brown/blue or blue
Rear wall subwoofer voice coil #1	positive (+): white, negative (-): white/blue
Rear wall subwoofer voice coil #2	positive (+): white/gray, negative (-): white/black
Vehicle speed sense <sup>1</sup> (F-150)	PCM <sup>2</sup> , 95-pin plug, pin 12 (EcoBoost) or pin 26 (Ti-VCT) - yellow/orange
Vehicle speed sense <sup>1</sup> (F-250/F-350)	Customer Access Harness above passenger's kick panel, taped to harness - violet/orange
Reverse (+) <sup>1</sup>	driver's kick panel or BCM <sup>3</sup> , 36-pin plug (C), pin 11 - green/brown
Parking brake <sup>1</sup>	parking brake switch or BCM <sup>3</sup> , 52-pin plug (E), pin 47 - white/violet
Foot brake <sup>1</sup>	brake switch or BCM <sup>3</sup> , 22-pin plug (A), pin 1 - violet/white
<b>NOTES:</b>	
<ul style="list-style-type: none"> <li>• If equipped with a factory amplifier, the amplifier will be located on the driver's side rear cabin wall.</li> <li>• <sup>1</sup>These wires and functions may also be generated by the OEM integration interface used when replacing the radio.</li> <li>• <sup>2</sup>PCM (Power Control Module) is located on the passenger's side firewall.</li> <li>• <sup>3</sup>BCM (Body Control Module) is located in the passenger's side kick panel.</li> </ul>	

