# **MasterSheet**



2006-'15 Mazda MX5



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.** 

Inside...

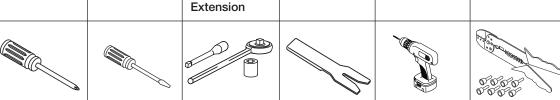
Although reasonable attempts are made to verify the accuracy of the information contained in this MasterSheet, it is presented without warranties or guarantees of any type due to the constantly changing nature of this type of information and running changes in vehicle production. Any person or entity 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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Phillips Small Flat Blade Screwdriver Screwdriver Ratchet & Panel Tool Drill & 1/8" Bit Wire Strip & Crimp C	10-12	Console Rear Speakers	<b>~</b>	<b>&gt;</b>		<b>✓</b>		
Screwdriver Screwdriver Ratchet & & Crimp C	13	Wire Splicing Guide						<b>~</b>
					Ratchet &	Panel Tool	Drill & 1/8" Bit	Wire Stripper & Crimp Caps

# **Tools Required** >





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

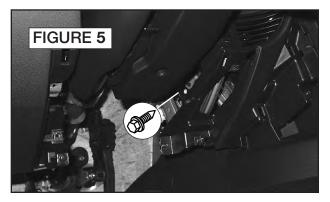
**Note**: At this time, no aftermarket antenna is available from Crutchfield. A replacement antenna may be purchased from a local dealership.

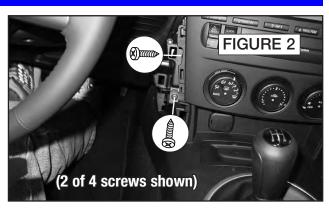
# Factory Radio Removal -- 2006-'08

- 1. Before proceeding, remove media from factory unit if present.
- 2. Set parking brake and disconnect negative battery cable to prevent any electrical short.
- 3. Pry out both receiver side panels (Figure 1).
- 4. Remove four (4) Phillips screws (two on each side) from radio assembly exposed by removal of side panels (Figure 2).
- 5. Pry off driver's knee panel (Figure 3).
- Remove four (4) Phillips screws securing metal reinforcement brace to dash and remove brace (Figure 4).
- 7. Remove one (1) 10mm bolt from driver's side of radio (Figure 5).
- 8. Pull out radio/climate control assembly, disconnect and remove (Figure 6).

















# Factory Radio Removal -- 2009-'15

- 1. Before proceeding, remove media from factory unit if present.
- 2. Set parking brake and disconnect negative battery cable to prevent any electrical short.
- Pry up console rear trim cover to release clips and remove trimpanel (Figure 1).
   Note: Clips are very tight.
- 4. Slide cupholder cover forward and remove two (2) Phillips screws (Figure 2).
- Slide cupholder cover toward rear of vehicle. Remove cupholder divider and rubber mat, then remove one (1) exposed Phillips screw (Figures 3 & 4).
- 6. Pry up power window switch to release clips. Disconnect wiring harnesses and remove switch (Figure 5).
- 7. Unscrew gear shift knob to remove (Figure 6).

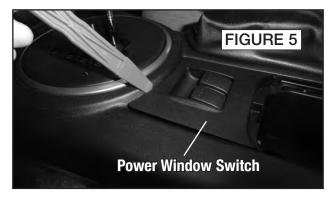
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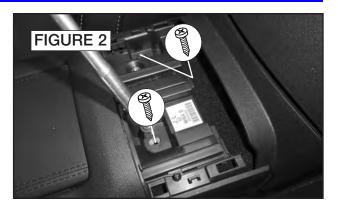














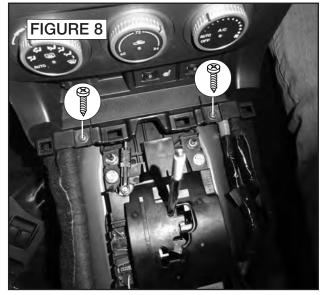


# Factory Radio Removal -- 2009-'15 (continued)

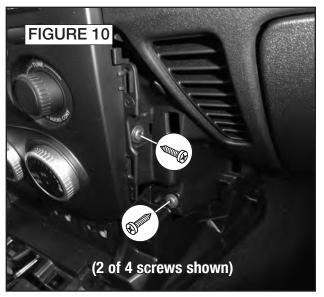
- 8. Lift main console trimpanel and carefully work over parking brake handle to remove (Figure 7).
- 9. Remove two (2) Phillips screws exposed by removal of main console trimpanel (Figure 8).
- 10. Pull both receiver side panels toward rear of vehicle to release clips and remove (Figure 9).
- Remove four (4) Phillips screws (two on each side) from radio assembly exposed by removal of side panels (Figure 10).

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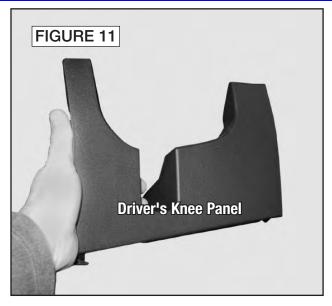


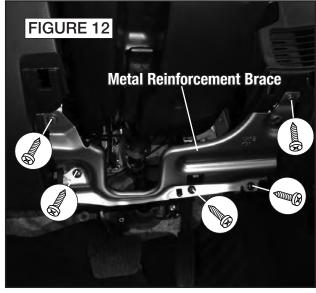


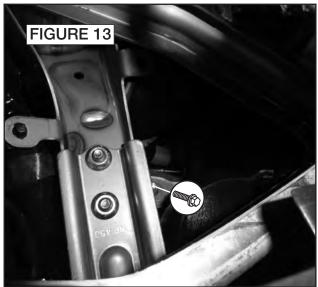


# Factory Radio Removal -- 2009-'15 (continued)

- 12. Starting at the top edge, pry down driver's knee panel to release clips and remove knee panel (Figure 11).
- 13. Remove five (5) Phillips screws securing metal reinforcement brace to dash and remove brace (Figure 12).
- 14. Remove one (1) 10mm bolt on driver's side of radio (Figure 13).
- Pull out factory radio/climate control assembly, disconnect and remove (Figure 14).













### 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.

# **Receiver Installation -- All Models**



### **IMPORTANT**

Factory-equipped AUX input, bluetooth and satellite radio will be lost if the factory radio is replaced.

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

- Secure receiver to mounting bracket following instructions supplied with the dash kit.
- Make wiring connections following instructions supplied with the receiver wiring adaptor.
- 3. Hold receiver assembly near dash. Connect receiver wiring adaptor to vehicle harness. Plug antenna lead into rear of receiver. Note: If antenna lead does not fully reach, loosen cable where it is taped to the rear of the dash cavity. Plug in any other accessories to be used with the receiver.
- 4. Slide assembly into dash and secure with screws previously removed.
- **5.** Test operation and reassemble dash by reversing disassembly steps.







# **Center Dash Speaker**

### Please read first

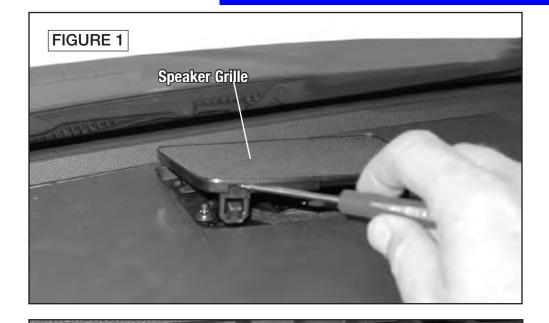
• Instructions show factory size speakers or speakers with adaptor brackets only. Cutting or fabrication (not shown) will be required for other speaker sizes.



### **IMPORTANT**

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 speaker grille straight up to release four (4) clips and remove (Figure 1).
- 2. Remove two (2) Phillips screws securing speaker to dash. Disconnect wiring harness and remove (Figure 2).
- Make wiring connections following instructions on page13. Return to this page to complete installation.
- 4. Secure speaker to dash with screws previously removed.
- 5. Test speaker operation and reinstall speaker grille.









# **Door Speakers**

### 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**

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

No speaker adaptor bracket is available at this time from Crutchfield for the tweeter location. It will be necessary to fabricate a mounting bracket 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 off screw cover in door release trim. Remove one (1) exposed Phillips screw (Figures 1 & 2).

#### 2a. 2006-'08 Vehicles:

Pry off screw cover at top of door pull and remove one (1) exposed Phillips screw (Figure 3).

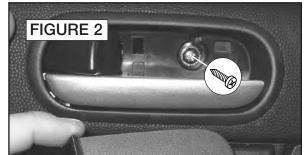
#### 2b. 2009-115 Vehicles:

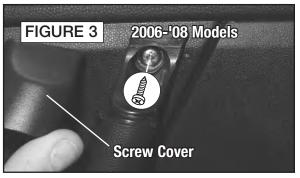
Starting at the bottom edge, pry off door pull outer cover to release clips and remove. Remove one (1) exposed Phillips screw (Figure 4).

- Remove one (1) Phillips screw from cupholder (Figure 5).
- 4. Pry around sides and bottom of door panel to release eight (8) clips. Lift door panel, disconnect wiring harnesses, door lock and release cables. Remove door panel (Figure 6 - this page, Figures 7 & 8 - next page).

Continued on the next page.















**1-800-955-9094** TECHNICAL SUPPORT



# **Door Speakers** (continued)

#### 5. Tweeter Removal & Installation:

- Remove two (2) Phillips screws securing tweeter. Pull out speaker, disconnect and remove (Figure 9).
- Fabricate a speaker mounting bracket and secure speaker to bracket.
- Make wiring connections following instructions on page 13. Return to this page to complete installation.
- Secure speaker/bracket assembly with screws previously removed.
- Test speaker operation.

#### 6. Woofer Removal & Installation:

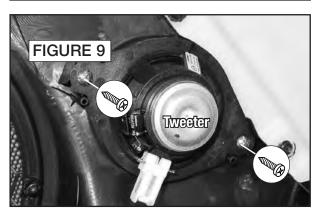
- Remove four (4) Phillips screws securing woofer. Pull out speaker, disconnect and remove (Figures 10 & 11).
- If vehicle is Bose-equipped:
   Place new speaker in location and mark new mounting holes. Remove speaker and drill holes with a 1/8" bit.
- Connect speaker wiring adaptor of replacement speaker to vehicle speaker harness. Secure speaker with screws previously removed.
- Test speaker operation and reassemble door panel by reversing disassembly steps.





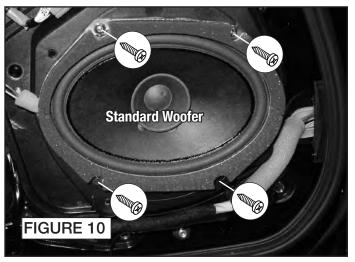


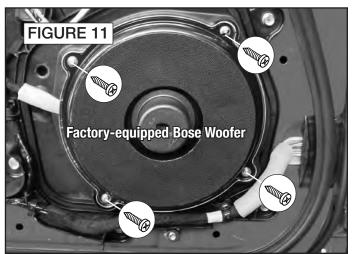






- Check that wires do not interfere with window operation.
- Test door lock and release operation.







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

# **Console Rear Speakers**

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### **IMPORTANT**

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

#### Start on the driver's side to perform steps 1-7.

- 1. Pull off front cover of rollover bar (Figure 1).
- 2. Pry out one (1) pushpin retaining clip on front edge of rear wall end by prying out center pin, then prying out clip (Figure 2).
- 3. Pry out inner edge of seat belt trim, then pull up to release. Work seat belt through slot and remove trim (Figure 3).
- Pull up scuff plate to release clips and remove (Figure 4).
- 5. Pry out six (6) pushpin retaining clips behind seat by prying out center pin, then prying out clip (Figures 5 & 6). Note: Three (3) clips are in the rear wall end trim and three (3) are in the rear wall panel.

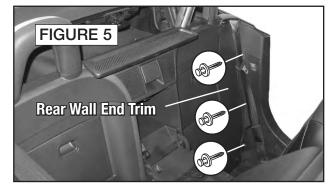
### Continued on the next page.











### 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.







# **Console Rear Speakers** (continued)

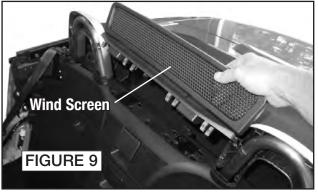
- **6.** Pull rear wall end panel toward front of vehicle to release clips and remove (Figure 7).
- 7. Pry out one (1) clip exposed by removal of rear wall end panel by prying out center pin, then prying out clip (Figure 8).
- Repeat steps 1-7 for the opposite side of vehicle.
- 9. Pry up wind screen to release clips and remove (Figure 9).
- 10. Pull out roof release lever cover to remove cover (Figure 10).
- Pry up console rear trim cover to release clips and remove (Figure 11). Note: Clips are very tight.
- Remove two (2) Phillips screws exposed by removal of console rear trim cover (Figures 12 & 13).

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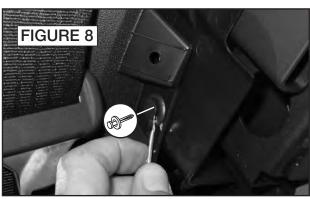
















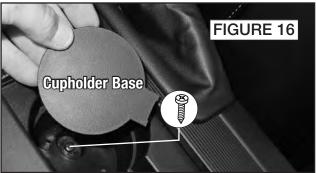


# **Console Rear Speakers** (continued)

- 13. Pry up coin tray to release clips and remove. Remove two (2) exposed Phillips screws (Figures 14 & 15).
- 14. Pry up front cupholder base to release clips and remove. Remove one (1) exposed Phillips screw (Figure 16).
- 15. Unscrew gear shift knob to remove.
- 16. Pry up console panel to release clips. Disconnect power window wiring harness, then remove console panel (Figure 17).
- 17. Pry around all edges of back wall trimpanel to release clips and remove panel (Figure 18).
- 18. Remove two (2) Phillips screws securing speaker. Pull out speaker, disconnect and remove (Figure 19).
- 19. Make wiring connections following instructions on page 13. Return to this page to complete installation.
- 20. Secure speaker to location with screws previously removed.
- 21. Test speaker operation and reassemble rear of vehicle by reversing disassembly steps.













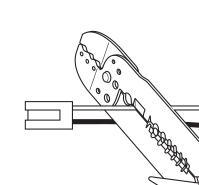
# **Wire Splicing Guide**

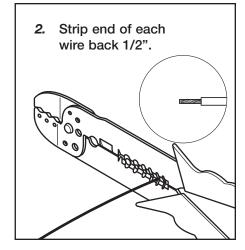
These methods can be used to make wiring connections if no receiver or speaker wiring adaptor is available. Wire color information (if available) can be found on the next page.

### **CRIMP METHOD**

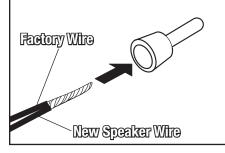
Factory harness is removed. Save harness if it is to be reconnected in the future by this method.

1. Cut factory wires behind factory speaker harness.

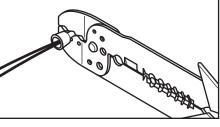




 Twist each positive pair of wires together and insert in crimp cap. Repeat step for negative wires.



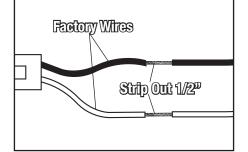
- Squeeze middle of cap for tight connection.
- Connect new wires to speaker with spade connectors.



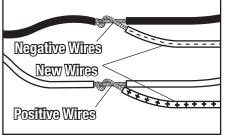
### **SOLDER METHOD**

New speaker wires are spliced into factory wires behind harness.

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



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.
- 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
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Left front speaker/tweeter (2006-2008)	positive (+): red or red/green, negative (-): green or green/red
Left front speaker/tweeter (2009-2015)	positive (+): red, red/green or red/yellow
	negative (-): green, white, black/red or black/orange
Right front speaker/tweeter (2006-2008)	positive (+): white/black or white/blue, negative (-): yellow/red or yellow/black
Right front speaker/tweeter (2009-2015)	positive (+): white/black, green or violet/white
	negative (-): yellow/red, black, yellow/black or black/white
Center dash speaker	positive (+): blue/black, negative (-): green/yellow
Left rear console speaker (2006-2008)	positive (+): blue/red or violet, negative (-): blue/orange or pink
Left rear console speaker (2009-2015)	positive (+): blue/orange, blue/yellow or violet, negative (-): blue/red, yellow or pink
Right rear console speaker (2006-2008)	positive (+): blue/black or violet, negative (-): blue/white or pink
Right rear console speaker (2009-2015)	positive (+): blue/white, green/orange or violet
	negative (-): blue/black, green/black or pink
Vehicle speed sense <sup>1</sup>	radio, white 24-pin plug, pin 17 (only present in some models) - white or white/blue
Reverse (+) <sup>1</sup>	junction connector in the driver's kick panel, white 54-pin plug, pin 22 or 33 - red/yellow
Parking brake <sup>1</sup>	junction connector to right of the steering column, white 54-pin plug, pin 10 - gray
Foot brake <sup>1</sup>	junction connector in driver's kick panel, white 54-pin plug, pin 24 or 25 - black/yellow

### **NOTES:**

- If equipped with a factory amplifier, the amplifier will be located behind the passenger's seat, below the rear tray. Access requires removal of the back wall trimpanel, panel can be removed following steps 1-17 under "Console rear speakers" removal instructions starting on page 10 of this MasterSheet.
- <sup>1</sup>These wires and functions may also be generated by the OEM integration interface used when replacing the radio.