

## Factory Radio



## Other Documents Available For This Vehicle:

No documents available at this time

## New Radio

with dash radio installation kit



## Adobe Acrobat Reader Printing Tips:

- 1) Select "**FILE**" then "**PRINT**" and select your printer.
- 2) In the print options box do the following:
  - A) Locate check box "**Shrink to Fit**". Place check in box.
  - B) Locate box "**Print Quality**". Select highest print dpi allowed by printer.
  - C) If print quality listed is not as high as that printers normal quality, press the "**SETUP..**" button. In the next screen, press the "**PROPERTIES**" button and set the printers print quality to the highest print dpi allowed.

## Document Revision History

09/99 Document Creation  
01/2000 Wiring Updated

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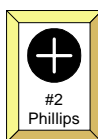
### Overview Of This Radio Install

Step	What Section To Go To
Remove old radio from dash	Remove & Install
Wire the new radio	Wire New Radio
Mount the new radio	Mount New Radio
Finishing the installation	Remove & Install

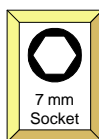
### Parts Needed For This Radio Install

Parts REQUIRED for the install	Description
Dash installation kit	Multi purpose General Motors
Snap on in dash wire harness	General Motors 1978 - 1988
You will need one antenna extension cable. Typical lengths: 6", 1 ft, 3 ft	
4 small washers	

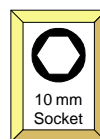
### Tools Needed To Complete This Install



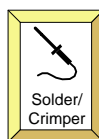
#2  
Phillips



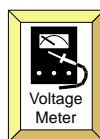
7 mm  
Socket



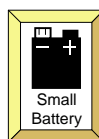
10 mm  
Socket



Solder/  
Crimper



Voltage  
Meter



Small  
Battery

Hand tools needed  
to remove radio

Accessory tools needed to test and  
wire the new radio

#### ! TOOL TIPS:

**Small Battery:** use a battery to test speaker wires. Touching the (+) positive and (-) negative battery leads to a pair of speaker will cause the speaker to make a "Pop" sound indicating that pair of wires goes to that speaker.  
**Voltage Meter:** Always check +12 Volt power wires for voltage before making wire connections. These wires will fluctuate between 10 and 14 Volts.  
**Solder Iron or Crimp Tool:** make wire to wire connections using either a solder iron and electrical tape, OR plastic crimp terminals found at most hardware or auto parts stores.

**PLUS: Wire ties or electrical tape:** to neatly bundle and organize your wires for a professional appearance.

### Installation Difficulty Ratings

**Easy.** No advanced skills or specialty tools needed.

**Basics.** Simple tools required. Installs quickly.

**Intermediate.** Requires knowledge of tools, or disassembly of panels.

**Advanced.** Requires advanced tools, or extra time.

**Difficult.** Involves modifying or cutting of the installation area. Advanced tools and/or skills required. Best if performed by experienced installers.

#### Do It Yourselfers

Advanced

#### Professional Installer

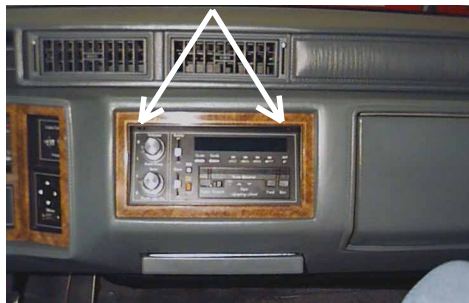
Basics

### Support Information If You Need Help

Supplemental information if you need help

Document Title	Document #
Basic DC electronics for automotive applications	999001
Wire splicing: soldering vs. crimping	999004
Why use radio installation kits	999005
Mounting your radio to an installation kit	999007
Why use an OEM snap on wire harness	999008
Wiring your new radio using a wire harness	999009
Testing wires when installing a new radio	999013

## ► Remove Factory Radio



### STEP 1:

Locate and remove two (2) **Phillips screws** that secure the top of the plastic panel that surrounds the radio. The plastic dash panel will pull off once the screws are removed as shown in the photo above.



### STEP 2:

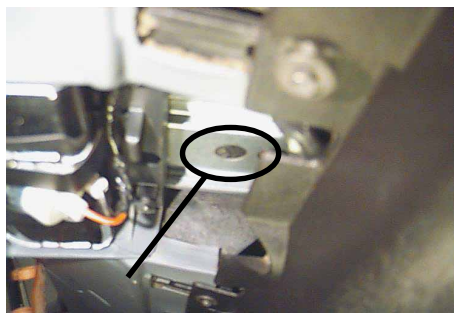
The front of the radio is held in with two (2) **7mm bolt screws** at the top of the radio. Remove the 2 bolt screws.



### STEP 3:

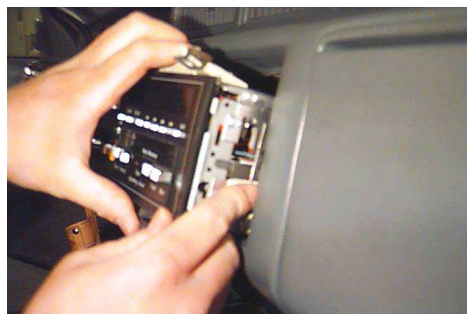
There is a hidden radio that secures the rear of the radio and is located under the radio.

Pull the ashtray to its extended position. You will need to lay on your back or side and look behind the ashtray, up to the bottom of the radio.



### STEP 4:

Once the ashtray has been pulled to its extended position, you should be able to locate and remove one (1) 7mm bolt screw as seen in the photo above.



### STEP 5:

Once all screws have been removed, the radio can then be removed. Pull firmly on the radio to remove it from the dash. The radio will most likely resist pulling from the dash. The antenna cable which plugs into the rear of the radio is very short and gives the radio resistance when trying to pull the radio out of the dash. Continue to pull firmly and the antenna cable will unplug itself as the radio is pulled from the dash.



### STEP 6:

Unplug (1) blue, (1) white, and (1) black wire harness connector(s) from the rear of the radio. There will also be wires extending from the rear of the radio with a plastic connector attached to the wires about 4 inches from the rear of the radio. Unplug this small connector.

The radio can now be completely removed from the dash. Set it aside.

You will need to remove the plastic brackets attached to the top and bottom of the GM radio. This will be shown in detail in the "**Mount New Radio**" section.

## ► Wiring The New Radio

Move to: **Wire New Radio** Section

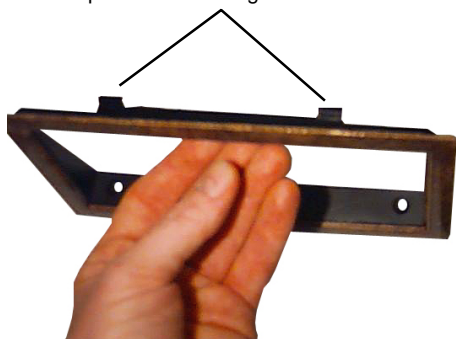
The Install Doctor **STRONGLY** recommends using an optional snap on wire harness when installing your new radio.

General Motors uses a 4 piece wire harness connectors to connect to the radios in their vehicles. 3 large connectors( 1 blue, 1 black, 1 white) and one small connector. However, this one small connector varies on some GM vehicles. Most GM vehicles use a 2 wire connector, while some use a 3 wire connector. All optional snap on wire harnesses The Install Doctor has used only include a connector to plug into the 2 wire connector, and not the 3 wire connector.

This vehicle uses the 3 wire connector. When using a snap on wire harness for this vehicle, you will have to splice directly to one of the wires attached to the 3 wire connector since there is no connector included in the package of the optional GM snap on wire harness.

The Install Doctor shows you how to do this, with photos, in the **“Wire New Radio”** section.

Snaps on the bottom of the plastic panel surrounding the radio



## ► Mounting The Radio To A Kit

Move to: **Mounting New Radio** Section

The Install Doctor recommends removing the plastic brackets attached to the Cadillac radio and mounting these brackets directly to the radio installation kit.

This radio mounts differently in this particular vehicle than in other General Motors vehicles. This GM radio is secured with 2 screws to the dash by the plastic bracket attached to the top of the radio. The bottom bracket attached to the radio is not mounted to the dash with screws but instead touches the bottom of the rectangular opening in the dash, preventing the radio from rocking.

Because of this odd design that General Motors has used for this vehicle, the **BEST** method for mounting a new radio is to use the plastic brackets that were attached to the GM radio. You will need a radio dash installation kit to mount the new radio, but no kit The Install Doctor has used for this vehicle mounts properly unless the plastic brackets attached to GM radio are secured to the radio installation kit.

Another important reason to use the plastic brackets attached to the radio installation kit is that the plastic panel surrounding the radio actually has snaps on the bottom rear of the panel that snaps into the bottom plastic bracket attached to the radio installation kit, securing the bottom of the plastic panel in place.

There is **ONE IMPORTANT MODIFICATION** that you need to perform when mounting the lower plastic bracket to the radio installation kit. Radio installation kits are about 1/8 inch shorter in height than the GM radio installed in this vehicle. This normally does not matter, but because the plastic dash panel surrounding the radio snaps into the lower bracket attached to the radio installation kit, the lower bracket must be lowered the 1/8" difference. To do this, you will need to add 2 washers between the bottom of the radio installation kit, and the lower plastic bracket to be attached to the bottom of the installation kit.

This is shown in detail in the **“Mounting New Radio”** section. Without this modification, the plastic panel surrounding the radio will not snap properly into the lower bracket.

## ▶ Completing The Radio Installation



### STEP 1:

**\*\* You will need to add an antenna extension cable to the antenna cable inside the opening in the dash. Most likely, there is not enough cable to properly plug into the rear of the new radio. (6 inch, or 1 foot extension is best)**

Plug the black antenna cable into the rear of the new radio. Make sure all wire connections to the new radio have been completed and plug in any connectors into the rear of the new radio.

Slide the radio and kit into the opening in the dash. Secure the top mounting bracket attached to the installation kit with the same two (2) 7mm bolt screws that originally held in the original GM factory radio.



### STEP 2:

It is now time to test how the plastic dash panel surrounding the radio fits back onto the dash.

This is the step you will be able to tell if the modifications to the bottom plastic bracket worked.

First, slide the top of the plastic dash panel into the dash. Then see if the bottom of the plastic dash panel actually snaps into bottom plastic bracket attached to the radio installation kit.

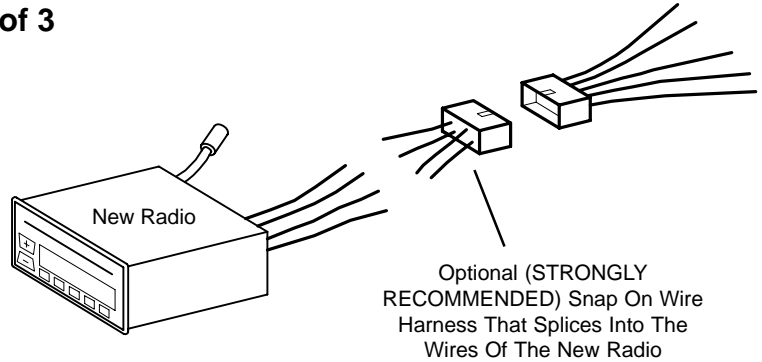
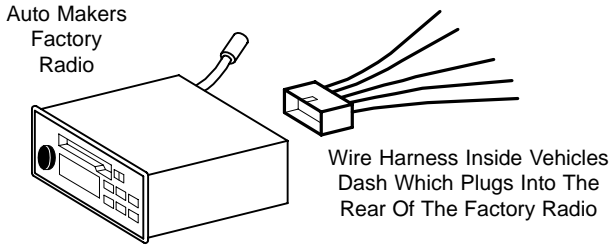
If you did NOT use washers to space the lower bracket 1/8" from the bottom of the kit, the snaps on the lower part of the plastic dash panel will not snap into the lower bracket attached to the radio installation kit. If the bracket is properly spaced from the bottom of the radio installation kit, the bottom of the plastic dash panel should snap properly into the dash.

Continue to work with the plastic dash panel until it properly snaps into place. When it does, secure the top of the dash with the 2 phillips screws that had originally secured it.

**The installation is now complete.**

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► **Step By Step Wiring**



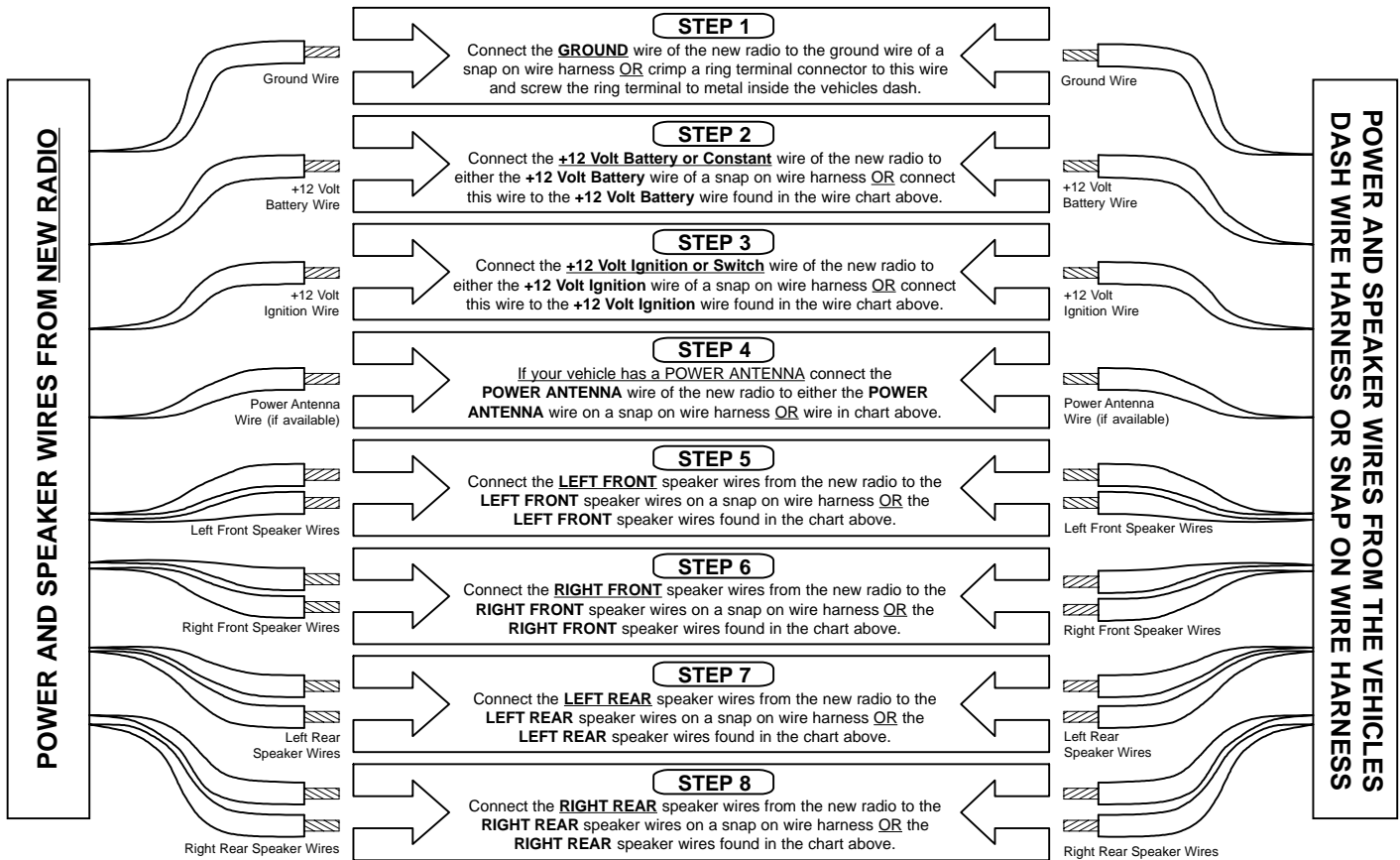
(Note: the radio shown is for display purposes and may not be similar in size or dimensions than the auto makers factory radio in your vehicle)

Supplemental information if you need help

Document Title	Document #
Testing wires when installing a new radio	999013
Why use an OEM snap on wire harness	999008
Wiring your new radio using a wire harness	999009
Wire splicing: soldering vs. crimping	999004

**Wiring Instructions:**

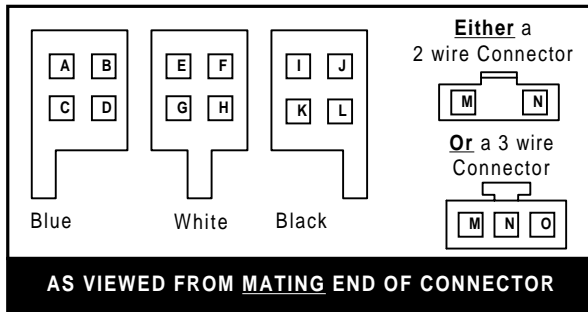
The power and speaker wires needed to connect the new radio are attached to the connector of the wire harness located inside the vehicles dash. The Install Doctor **STRONGLY** recommends using an optional snap on wire harness that is specifically designed to snap into the vehicles dash wire harness connector. This will keep you from cutting the vehicles wires. This optional snap on wire harness will have wires on the opposite side of the connector that will allow you to splice these wires to the new radios wires. The only other option is to cut off the vehicles dash wire harness connector and splice the new radios wires directly to these wires. The optional snap on wire harness takes all the guess work out of trying to figure out what each wire is in the vehicles dash wire harness. The optional snap on wire harness tell you what each wire is.



▶ Radio Wire & Color Code Information

## 1985 to 1989 GM Radio Wire Harness

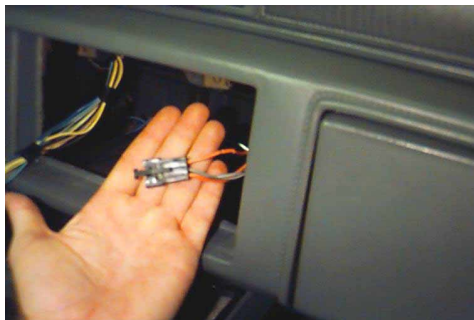
Factory in-dash wire harness that snaps into the factory radio



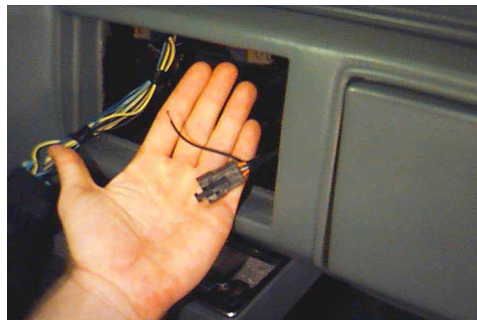
Most likely, if you use an optional snap on wire harness adapter to help you wire the new radio, the snap on wire harness adapter will include the 2 wire connector in its package, NOT the 3 wire connector.

However, this vehicle uses the 3 wire connector. One of these wires, the **Orange wire**, is the (+) 12 Volt Battery wire and you will need to make a connection to this wire for the new radio to work. Please see the photos below on how to connect to this wire.

Pin	What It Is	Typical GM Factory In Dash Wire Color	Typical New Radio Equivalent Wire Color
A	Right Rear Spkr (-)	Light Blue	Purple w/ Black Stripe
B	Left Rear Spkr (-)	Yellow	Green w/ Black Stripe
C	Right Rear Spkr (+)	Dark Blue	Purple
D	Left Rear Spkr (+)	Brown	Green
E	Left Front Spkr (+)	Tan	White
F	Right Front Spkr (+)	Light Green	Gray
G	Left Front Spkr (-)	Light Gray	White w/ Black Stripe
H	Right Front Spkr (-)	Dark Green	Gray w/ Black Stripe
I	Power Antenna Turn On	Pink (if available)	Blue
J	+12 Volt Ignition Wire	Yellow	Red
K	Headlight Dimmer Wire	Gray	Orange (if available)
L	Ground Wire	Black	Black
M	+12 Volt Battery Wire	Orange	Yellow
N		<b>Do Not Use</b>	



The photo shows the small 3 wire connector. You will need to splice to the ORANGE wire of this connector for you (+) 12 Volt Battery wire.

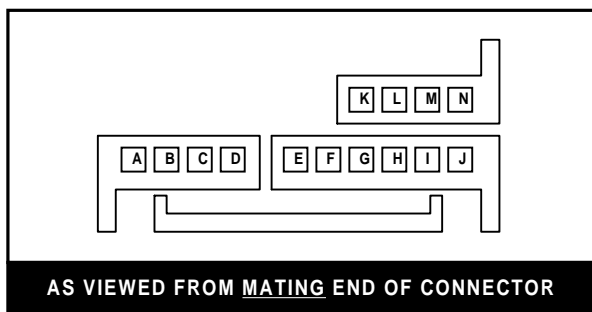


In the photo above, The Install Doctor has splice a small wire directly to the orange wire then covered the splice with electrical tape. Now you have a wire that you can splice the new radio (+) 12 Volt Battery wire to.

▶ Radio Wire & Color Code Information Page 3 of 3

## 1989 And Newer GM Radio Wire Harness

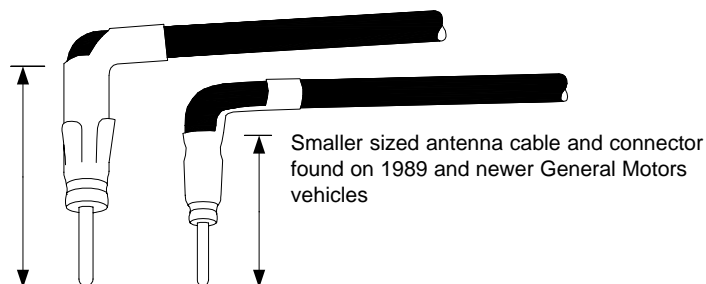
Factory in-dash wire harness that snaps into the factory radio



Pin	What It Is	Typical GM Factory In Dash Wire Color	Typical New Radio Equivalent Wire Color
A	Left Front Spkr (-)	Light Gray	White w/ Black Stripe
B	Left Front Spkr (+)	Tan	White
C	Right Front Spkr (-)	Light Green	Gray w/ Black Stripe
D	Right Front Spkr (+)	Dark Green	Gray
E	Ground Wire	Black	Black
F	Not Used		
G	Headlight Dimmer Wire	Gray	Orange (if available)
H	Power Antenna Turn On	Pink (if available)	Blue
I	+12 Volt Ignition Wire	Yellow	Red
J	+12 Volt Battery Wire	Orange	Yellow
K	Right Rear Spkr (-)	Light Blue	Purple w/ Black Stripe
L	Right Rear Spkr (+)	Dark Blue	Purple
M	Left Rear Spkr (-)	Yellow	Green w/ Black Stripe
N	Left Rear Spkr (+)	Brown	Green

General Motors vehicles manufactured after 1989 have a smaller antenna connector than standard antenna cables. When you install a new radio, this smaller GM antenna cable will not fit properly into the antenna plug on the new radio. You will need an adapter called a **GM antenna adapter** to convert this smaller sized GM antenna cable over to the standard size antenna needed for the new radio.

Standard sized antenna cable and connector





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## ▶ Mounting A Radio To A Dash Kit

### NOTE:

**Before you begin:** The radio installation kit needed for this vehicle is shown below in pictorial form. There are many manufacturers of General Motors dash installation kits available. Each manufacturer produces slightly different variations of the same kit. But for our purposes, there are (2) two different styles of kits for all General Motors vehicles. Why two styles? The reason is that General Motors uses an abnormal size radio in their vehicles. New replacement radios are thinner but deeper, whereas General Motors radios are taller but less deep. This causes a problem with installing the new replacement radio. The new radio might be too deep to fit in the dash. Thus, kit manufacturers produce kits for General Motors vehicles that extend the front face out of the dash to allow new radios to fit. One style is a one piece design where the extension depth is not adjustable. The second style allows the installer to adjust the depth by using snaps built into the kit. The Install Doctor recommends a one piece design for many reasons.

All information needed to complete the mounting of the new radio to the installation kit is included on this sheet. If you need additional help, please consult the following tech documents:

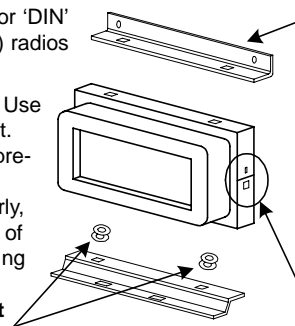
Document Title	Document #
Why use radio installation kits	999005
Mounting your radio to an installation kit	999007
Radio security	999010

### For best results, use the brackets that were attached to the original General Motors radio by mounting them onto the installation kit.

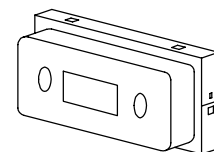
Unbolt the mounting brackets from the General Motors radio. One bracket from the top, one bracket from the bottom. The new installation kit should be packaged with (4) nuts and bolts. Use these nuts and bolts to secure the brackets from the General Motors radio to the installation kit. This kit is designed to mount these brackets to the kit. The manufacturers of these kits have pre-drilled holes into the kits to allow direct mounting of these brackets. Make sure to align the brackets the same as they were mounted to the General Motors radio. To orient the kit properly, we need to find which side of the kit is the top and which side is the bottom. Look at the sides of the kit. Notice two screw holes. Notice one hole is bigger than the other. The proper positioning of the kit requires that the larger hole be BELOW the center of the kit. See drawing to right.

**\*\* For this vehicle, add 2 washers for each bolt between the bottom of the installation kit and the bottom plastic bracket before attaching the bracket to the installation kit.**

General Motors  
installation dash kit for 'DIN'  
(rectangular body style) radios



Bracket(s) that were  
attached to original  
GM radio

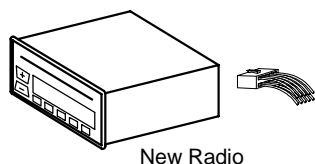
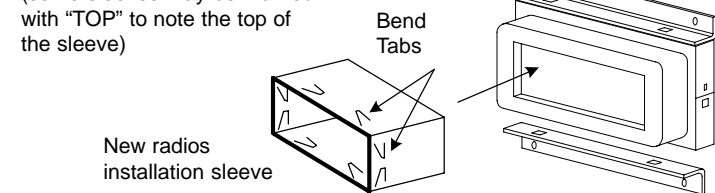


General Motors  
installation dash kit  
for shafted style radios

## What you need to mount your radio

### 'DIN' Radios (Rectangular Body Style)

Slide the radios installation sleeve into the mounting kit. (some sleeves may be marked with "TOP" to note the top of the sleeve)

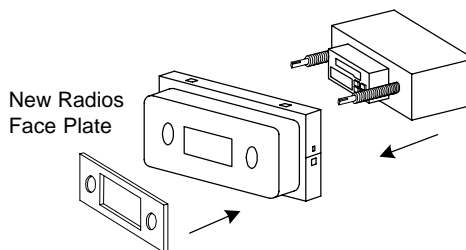


New Radio

Once the radios installation sleeve is completely slid into the kit, bend out the tabs on the installation sleeve behind the rear surface of the installation kit. The radios installation sleeve is secured to the installation kit by "sandwiching" the installation kit between the front lip and the bent tabs of the radios installation sleeve.

**Radio slides into sleeve after sleeve is mounted to the installation kit**

### Shafted Radios



New Radios  
Face Plate

Slide the radio through the backside of the installation kit. Slide the radios front face plate onto the front surface of the installation kit. Notice how much of the radios shafts are protruding past the front of the kit. You will need to remove the excess by adjusting the

depth of the new radios shaft spin nuts. Pull the radio out of the installation kit and spin on the nuts that are included with the radio. Slide the radio back into the installation kit. Adjust the nuts by spinning them forward or back to adjust the depth that the new radios shafts protrude out the front of the kit. To assure a "flush" and professional appearance, make sure that the new radios front face plate is flush with the new radios display box that is visible through the opening of the installation kit. Complete the installation by securing the front face plate with the remaining nuts provided with the new radio. The new radio is secured to the installation kit by "sandwiching" the installation kit between the new radios front face plate and the nuts spun onto the shafts of the radio behind the installation kit.



### CAUTION:

Do not overtighten the spin nuts securing the front face plate. Tighten to secure the radio without cracking the plastic.



### TIP:

If your radio manufacturer provides 6 spin nuts, use 4 to secure the radio to the installation kit and 2 to secure the front face plate.