1987 thru 1994

INSTALL DOCTOR www.installdr.com

Cover

**Page** 

THE

**Before** Remove You Begin & Install

Other Documents Available For This Vehicle:

Wire Mount **New Radio New Radio** 

**Radio Replacement** Document #: 648005

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that page

#### **Factory Radio**

Double 'DIN' radio



Single 'DIN' radio with pocket below radio

## **Adobe Acrobat Reader Printing Tips:** 1) Select "FILE" then "PRINT" and select your printer. 2) In the print options box do the following:

Do documents available at this time

- 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**

12/99 **Document Creation** 

#### **New Radio**

with pocket below radio



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Wire New Radio Mount New Radio

Radio Replacement
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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
Snap on wire harness adapter	Mitsubishi 2 pc wire harness

#### Optional parts for this install

\*\* Please read the instructions regarding the options available for this particular vehicle

## ► Tools Needed To Complete This Install



Hand tools needed to remove radio







Accessory tools needed to test and wire the new radio

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



#### **TOOL TIPS:**

Small Battery: use a battery to test speaker wires. Touching the (+) positive and (-) negative baterry 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.

## ► 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

**Basics** 

**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 optional snap on wire harness	999008
Wiring your new radio using a wire harness	999009
Testing wires when installing a new radio	999013

All Information, Including Photos And Illustrations, In These Pages Is Believed To Be Correct And Reliable. The Information Contained In These Pages Is Given As General Information For The Installation Of Audio, Video, Security, Communications, And Other Accessory Products Into Mobile And/Or Vehicle Applications. The Install Doctor, Any Subsidiaries Or Divisions Thereof, Or Any Member Of These Companies Shall Not Be Held Liable For Any Damages And/Or Injuries Resulting From The Use Of Information Contained In These Pages. All Information Contained In These Pages Should Be Checked And Verified With Appropriate Test Equipment To Assure The Safety And Proper Operation Of Equipment Installed And The Vehicle Itself. Careful Attention Should Be Given To All Electronic/Electric Circuits. High Voltages And Currents Can Cause Bodily Injury, Skin Damage, And Even Death. Installs Are Taken At The Risk Of Each Installer, And/Or Individual.

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**Before** 

Remove & Install

Wire **New Radio** 

Mount New Radio

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Installation Note: This vehicle is designed with 2 different radio styles. Each radio design requires a completely different method of installation for a new replacement radio. The most important thing to understand is the difference between the plastic dash panel that surrounds the 2 different radio styles. This plastic dash panel actually dictates how you install your new replacement radio. Read below to find out why.

Radio style 1: Single 'DIN' radio with pocket/tray below the radio. This radio is mounted to the metal frame of the dash behind the plastic dash panel. The pocket under the radio is actually attached to the plastic dash panel surrounding the radio. It is important to understand that the pocket is not attached to the radio. Because of this, the plastic dash panel has 2 openings. A plastic bar in the middle of the dash panel separates the 2 openings. The result are 2 rectangles of exactly the same size in the plastic dash panel: the upper hole for the face of the radio to protrude through, the lower hole has a pocket attached on the rear side of the plastic dash panel (or in rare cases, as shown in the photo below left, the pocket may be removed and an optional cassette player may be installed in the lower opening). This dash style is the most common radio style for this vehicle and is also the easiest of the two dash styles to install a new radio.

Radio style 2: Double 'DIN' radio with an equalizer built into the radio. This radio is also mounted to the metal frame of the dash behind the plastic dash panel. Because there is no pocket below the radio, the plastic dash panel surrounding the radio has 1 single square hole in the panel. This poses problems when installing a new radio. At the time this document was written, there is no know radio installation kit The Install Doctor would recommend to mount and install a new radio and which covers the rest of the square opening since the new replacement radio is shorter in height than the factory radio just removed. However, The Install Doctor STRONGLY recommends that the owner of the vehicle with this style of dash convert over to the dash panel with 2 openings. The Install Doctor, after years of experience, believes this is by far the best method to install a new radio. This information is detailed further in the "Mount New Radio" section at the end of these instructions.

The Install Doctor will show you how to install a new replacement radio for both radio styles listed above.





Single 'DIN" style of radio (Normally the lower rectangular opening would have a pocket but this example shows the optional cassette player below radio in the place of the pocket)





Double 'DIN' style of radio that fits the dash panel shown above.

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Cover Page Before You Begin Remove & Install

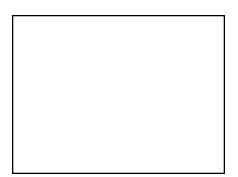
Wire New Radio Mount New Radio

Radio Replacement
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## ▶ Remove Factory Radio

### Single 'DIN' radio style



#### Double 'DIN' radio style



#### STEP 1:

With your hands, pull off the plastic dash panel surrounding the radio. The radio is secured to the dash by metal brackets attached to the side of the radio which are screwed into the metal frame of the dash. Locate and remove four (4) phillips screws that secure the metal brackets attached to the radio to the metal frame of the dash.



#### STEP 2:

Pull the radio out of the dash. Unplug the black cable from the rear of the radio. Unplug 2 plastic wire harness connectors from the rear of the radio.

The radio can now be completely pulled out of the dash.

▶ Wiring The New Radio

Move to: Wire New Radio Section

**►** Mounting The Radio

Move to: Mounting New Radio Section

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## Completing The Radio Installation

# If you choose to mount your new radio to the metal brackets that were originally attached to the factory radio



#### STEP 1:

Remove the original factory radio. In the same location in the brackets, mount the new replacement radio. (The new radio should be packaged with screws which allow you to mount that radio to brackets)

#### NOTE:

If you choose this method, you must have both of the following:

 You must have a dash panel surrounding the radio which has 2 rectangular openings.
 you must either have a pocket already attached to the lower opening in the dash panel, or you must purchase this pocket from a local dealership.

#### STEP 2:

Reinsert the new radio back into the dash opening. Plug the black 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 for the new radio.

Secure the metal brackets you attached to the side of the new radio with the same phillips screws that had secured the original radio

## If you choose to slide your new radio in through the front of the dash panel



#### STEP 1:

Reattach the plastic dash panel to the opening in the dash.

#### STEP 2:

Slide the new radios mounting "sleeve" or "cage" into the top opening in the dash panel. (this information is shown in more detail in the "Mount New Radio" section at the end of this document)

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 for the new radio.

Slide the new radio into its mounting "sleeve" or cage"

Step By Step Wiring

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Click on a link tab to jump to that page

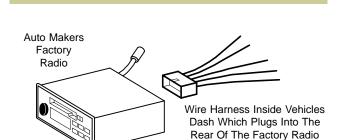
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Before Remove You Begin & Install Wire New Radio Mount New Radio

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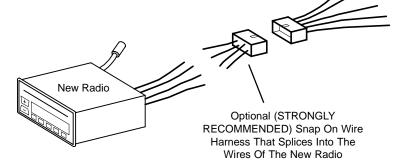
Page 1 of 2



(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)

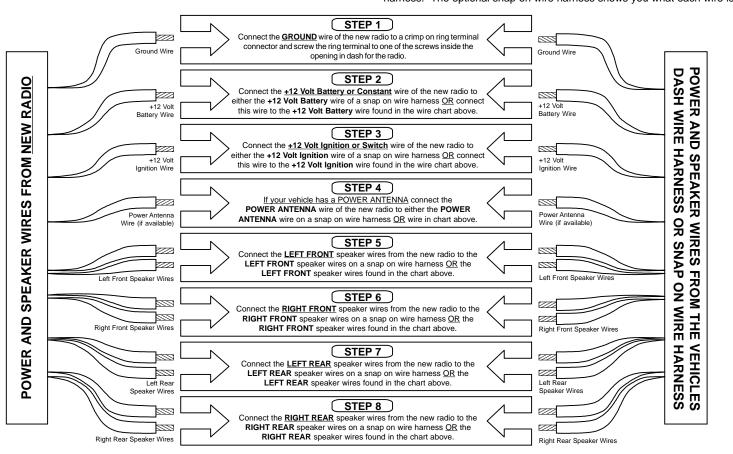
#### Supplemental information if you need help

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 shows you what each wire is.



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Cover Before Page You Begin Remove Wire New Radio

Mount New Radio

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### ► Radio Wire & Color Code Information

Page 2 of 2

Factory in-dash wire harness (this vehicle has a 2 pc harness) that snaps into the factory radio



Pin	What It Is	Eclipse / Talon / Laser In Dash Wire Color	Typical New Radio Equivalent Wire Color		
Α	Right Front Speaker (+)	Two White w/ Red Stripe	Gray		
В	Right Rear Speaker (+)	Yellow w/ Red Stripe	Purple		
С		Do Not Use			
D	Left Front Speaker (+)	Two White w/ Blue Stripe	White		
E	Left Rear Speaker (+)	Yellow w/ Blue Stripe	Green		
F	Light Dimmer Wire				
G	Headlight Illuminiation				
Н	+12 Volt Battery Wire	Red w/ Black Stripe	Yellow		
I	+12 Volt Ignition Wire	Blue	Red		
J	Left Rear Speaker (-)	Gray w/ Blue Stripe	Green w/ Black Stripe		
K	Right Rear Speaker (-)	Gray w/ Red Stripe	Purple w/ Black Stripe		
L	Power Antenna Turn On		Blue		
М	Left Front Speaker (-)	Two Black w/ Blue Stripe	White w/ Black Stripe		
N	Right Front Speaker (-)	Two Black w/ Black Stripe	Gray w/ Black Stripe		
NOTE: this vehicle does not have a (-) Ground Wire attached to either connector. The					
radio grounds when the metal brackets attached to the radio screw into the metal dash					
or the ground wire from the new radio is screwed into metal of the vehicles dash.					

Click on a link tab to jump to

Cover Before You Begin

Remove & Install Wire New Radio Mount New Radio

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## ► Mounting A Radio (Page 1 of 2)



If you choose to "ISO" mount your radio, three things must exist:

- 1) The radio must be a 'DIN' style rectangular radio
- The 'DIN' radio must have mounting holes predrilled into each side of the radio to allow the radio to be screwed into the metal brackets originally attached to the auto makers radio.
- 3) The radio should have a removable trim ring surrounding the face of the radio

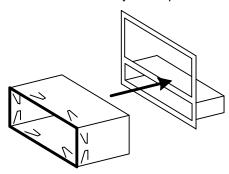
All information needed to complete the mounting of the new radio to the installation kit or to 'ISO' mount the radio is included on this sheet. If you need additional help, please consult the following tech documents:

Document Title	Document #	
Single 'DIN' vs. Double 'DIN' Radios	999006	
Radio security	999010	

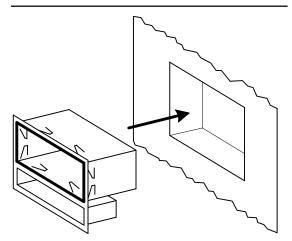
#### Here are options The Install Doctor recommends when mounting and installing a new radio into this vehicle.

#### Single 'DIN' radios

Keeping the pocket below the radio and mounting the new radio directly to the plastic dash panel.



Slide the new radios 'DIN' cage into the plastic dash panel. Bend the tabs on the 'DIN' cage behind the opening of the dash panel to secure the cage to the panel.



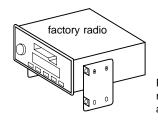
Push the plastic dash panel into the opening in the dash until the dash panel snaps into place. Slide the radio into the cage.

This is probably the most used method for mounting a new radio to this vehicle. But, there are drawbacks you need to know about:

- The radio can be stolen simply by unsnapping the plastic dash panel.
- The radio is only as stable as the 'DIN' cage is mounted to the plastic dash panel. The rear and sides of the radio are unsupported

## Single 'DIN' radios ('ISO' mounting the radio behind the dash panel

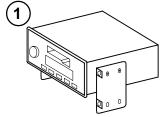
Keeping the pocket below the radio but mounting the radio to the metal brackets that were originally attached to the auto makers factory radio.



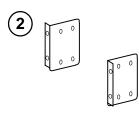
Remove auto makers factory radio from the metal brackets and insert the new radio



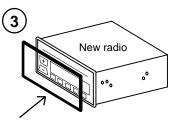
On the side of the new 'DIN' radio should be predrilled holes to allow you to screw the new radio into the brackets. Most car radio manufacturers design their radios with many holes on the side of the radio so the radio can be mounted to many different kinds of bracket/pocket configurations. If you are going to mount your radio in this manner, you will probably have to remove the radios face trim ring around the face of the radio. This trim ring will most likely prevent the vehicles dash panel from securing properly back onto the dash.



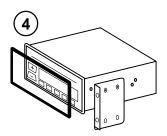
Auto makers radio attached to the metal mounting brackets



Metal brackets with radio removed. Line up holes on side of new radio.



New radios removable trim ring surrounds the face of the radio



New radio attached to the auto makers metal mounting brackets

Eclipse - Mitsubishi Lazer - Plymouth

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Cover **Before Page** You Begin Remove & Install

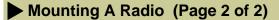
Wire **New Radio** 

Mount **New Radio** 

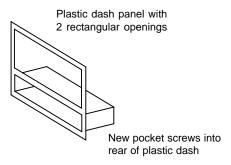
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Eagle - Talon

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Purchase the plastic dash panel with 2 rectangular openings and add a pocket below the radio:



Turn to previous page and choose which method to mount the new radio to the dash

The Install Doctor **STRONGLY recommends** converting the dash panel with a single square opening over to a dash panel with 2 rectangular openings. This allows you to add the pocket below the radio, converting your dash to the Single 'DIN' style dash. There are other methods professional installers use to install radios in this vehicle, but this method of installation looks much better than adding a radio installation kit.

In order to do this, you will need to purchase a new dash panel and new pocket from either a Mitsubishi or Plymouth automobile dealership. (The cost of these 2 items is similar in cost to buying a radio installation kit. The cost of these two will be a little more, but The Install Doctor recommends this as the best option if you have a Double 'DIN' radio.)

Note / Tip: all parts are identical to each other. You may purchase these parts from either a Mitsubishi dealership or a Chrysler/Plymouth/Eagle dealership. BUT, the pricing is different between the automakers. If you have decided to purchases these items, The Install Doctor STRONGLY recommends calling a Mitsubishi dealership and a Chrysler/Plymouth or Eagle dealership and comparing current pricing between the automakers.

## Double rectangle plastic dash panel:



Chrysler/Plymouth part number:

MB522-080

Computer Description "Panel, Radio"

Mitsubishi part number:

MB522-080

"Radio Panel"

## Pocket below the radio:

**Chrysler/Plymouth part number:** MB522-082

Computer Description "Accessory Box"

Mitsubishi part number:

"Stereo Box" MB522-082