



Installation & Assembly Manual

THIS MANUAL COVERS ALL RETRORADIO MODELS
AND THE FOLLOWING SPECIALTY FACE RADIOS:

RetroRadio[®] **APACHE** *DENVER*

FOR THE FOLLOWING SPECIALTY FACE RADIOS

PLEASE REFER TO THE QUICK START GUIDE THAT CAME WITH YOUR RADIO FACE
FOR COMPLETE INSTRUCTIONS NOT INCLUDED IN THIS MANUAL

Dallas Daytona Detroit

Huntington Monterey Newport New York

Santa Cruz **WONDER BAR^I** **WONDER BAR^{III}** *Redondo^{RS} Redondo^{RT}*

RetroSound[®]

MODERN SOUND FOR YOUR CLASSIC

What's in the box

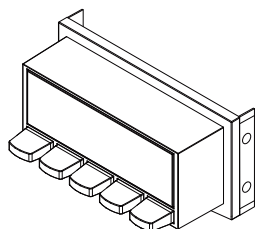
Thank you for purchasing a RetroSound® radio. RetroSound® radios combine classic styling with the advanced features you expect from a modern car stereo. Your RetroSound® radio consists of two main parts: the Radio Face and the Radio Motor.

This guide is intended to cover most modular radios with independent control shafts. The model in this guide is a representation of a typical RetroRadio Installation.

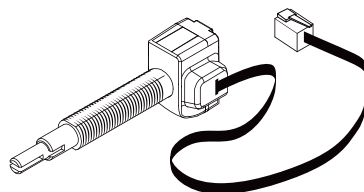
Please refer to the DIN Solutions Installation manual for All DIN Solutions Models.

PLEASE REFER TO THE QUICK START GUIDE THAT WAS INCLUDED WITH YOUR RADIO FACE FOR MODEL SPECIFIC INSTALLATION STEPS.

Radio Face Box Contents



A Radio Face x(1)



B Control Shafts x(2)

Radio Face will vary depending on product purchased.



C Shaft Nuts x(6)



D Shaft Washers x(8)



E Small Screws x(4)

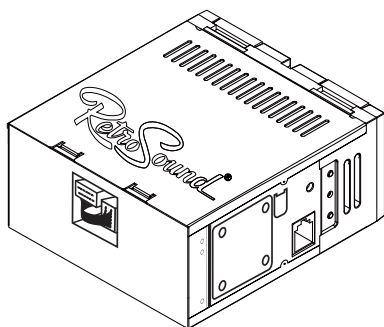
NOTE: All hardware will not be required for every installation. Extra items are included to help you get the right fit for your vehicle.

The information enclosed in this user's manual is to be used as a guide to assist you in the assembly and installation of your radio. This guide does not cover every installation possibility, every vehicle, or every aspect of the installation process.

Retro Manufacturing, LLC or its subsidiaries assume no responsibility for any installation. This manual may be updated from time to time.

Please check our website for the latest updates

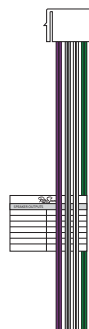
Radio Motor Box Contents



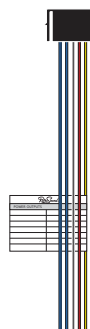
F Radio Motor x(1)



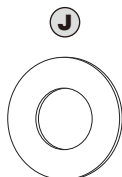
G Main Wiring Harness x(1)



H Speaker Harness x(1)



I Power Harness x(1)



J Large Washerx(8)



K InfiniMount Screws x(10)



L 6mm Nut x(4)



O Dual Thread Bolt x(1)



P 10 mm Self Tapping Screw x(1)



Q Lock Washer x(3)



R Self Tapping Screw x(1)



S 7 mm Nut x(1)



T Rubber Stopper x(1)

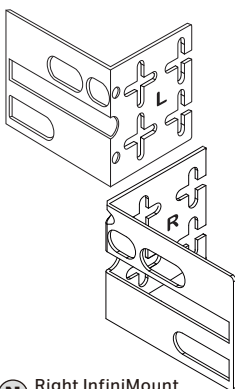


U Back-strap x(1)



V Bluetooth Mic x(1)

M Left InfiniMount Bracket x(1)



N Right InfiniMount Bracket x(1)



X Cupped Plastic Spacer x(2)



W Large Plastic Spacer x(2)

PRECAUTIONS

PLEASE OBSERVE THESE PRECAUTIONS WHEN INSTALLING AND USING THIS UNIT:

This user's manual does not cover all possible installation scenarios. Please be sure to follow the instructions carefully while attempting installation. If you feel you cannot install this unit yourself, consult with a local car audio professional.

Retro Manufacturing, LLC is not liable for any problems resulting from improper installation of the unit.

If you have questions about installing your radio, contact us at:
tech@retromanufacturing.com or by calling **888.325.1555**.

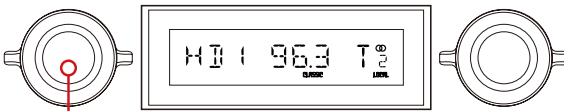
- If the unit does not turn on, check all wiring first. Then check the fuse in your vehicle's fuse panel and the fuse at the unit's wiring harness. If either fuse has failed, eliminate the cause of the failure, and replace the fuse with one prescribed for this unit.
- Do not disassemble or modify the unit or attempt to repair it yourself. If the unit needs to be repaired, consult your dealer or Retro Manufacturing, LLC.
- This unit is not designed for a marine environment. Please do not use the unit where it will be exposed to moisture or excessive dust. Exposure to moisture will damage the unit and void your warranty.
- Use caution when routing wiring and cables to prevent them from being caught in the vehicle chassis, or damaged by screws or moving parts, such as seat rails.
- Cutting the main wiring harness, antenna lead, USB or auxiliary cables **will void the warranty** of your radio.
- If mounting the Radio Face or Radio Motor remotely, use extreme caution not to damage these units' internal parts when choosing brackets and screws.
- Never install the unit in a location where it interferes with your field of vision.
- Use the supplied metal backstrap to secure the rear of the unit. Failure to secure the back of the unit will damage the shafts and **will void the warranty**.
- Never splice into the power lead to supply other equipment with power.
- After installation and wiring, always check the normal operation of other electrical equipment.
- Make sure that no wires interfere with driving or getting in and out of the vehicle. Insulate all exposed wires to prevent short-circuiting or electric shock.
- Keep the volume of your radio at a level that allows you to hear outside noises, such as emergency sirens and train crossing warnings. Prolonged exposure to high volume levels may also result in hearing loss.
- This unit is designed for operation with a negative ground 12-volt DC battery system. Do not operate this unit with other battery systems, especially an 18-volt or 24-volt DC or a positive ground system. If you have a 6-volt system, you need to either convert to 12-volt DC or purchase a separate inverter that would increase the voltage to 12-volts. NOTE: The inverter needs to be rated at 10 amps or higher for the radio to operate properly.

Special Instructions for Select Specialized Radios
Apache - Redondo RT

- Turn off the ignition and wait 30 seconds.
- Turn the ignition on.
- Once the radio displays "RETROSOUND" on the screen, press and hold the radio's power button for approximately 15 seconds to reboot and enter SEL PANEL mode. The screen will display "SEL PANEL" when successful.
- Release the power button.
- Press and release the power button repeatedly until your desired Panel/Display type is shown on the screen. The selected display type will flash five times and then the screen will turn off.
- Press the power button once more to turn the radio back on. The radio is now in the selected Panel/Display mode chosen and is ready to use.

(See below for your face type Power on)

APACHE



Press and hold the Left Front Knob

Redondo_{RT}

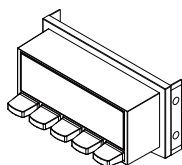


Press and hold the Left-Inside Thumb-Roller

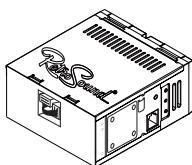
For models not listed, please refer to the models Quick Start guide for more information.

Radio Face Assembly

Parts Needed | Steps 1&2



A Radio Face x(1)



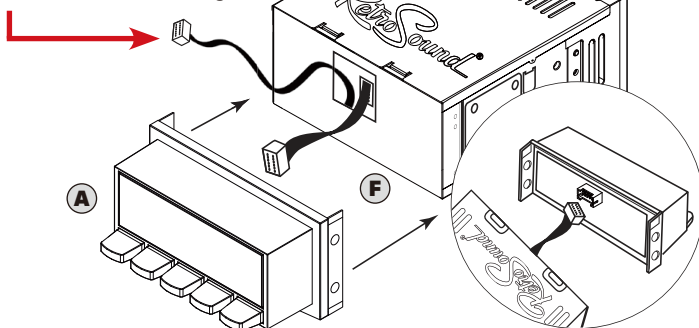
F Radio Motor x(1)



E Small Screws x(4)

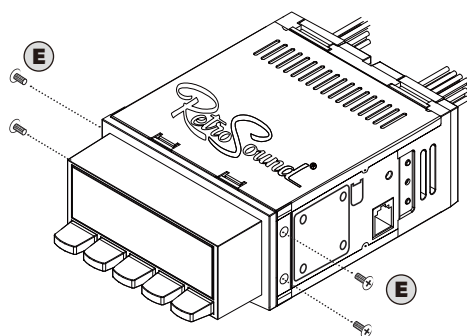
Step #1 Connect ribbon cable to the Radio Face.

This radio motor is equipped with a second ribbon cable, this cable is only used for DIN Solutions Radios and will not be used for this assembly. Tuck back into the motor housing.



Plug the ribbon cable from the Radio Motor(**F**) into the Radio Face(**A**). The ribbon cable is attached to the Radio Motor in the square opening on the front of the Radio Motor. Plug the loose end into the Radio Face making sure the other end is plugged into the Radio Motor securely.

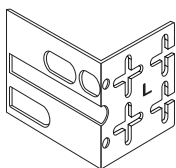
Step #2 Attach the Radio Face.



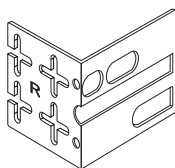
Before attaching the Radio Face ensure the RetroSound® logo on the Radio Motor is facing upwards. Attach the Radio Face to the Radio Motor with the four Small Screws(**E**), located in the orange bag included in the radio face box .

Radio Face Assembly

Parts Needed | Step 3



M Left InfiniMount Bracket x(1)

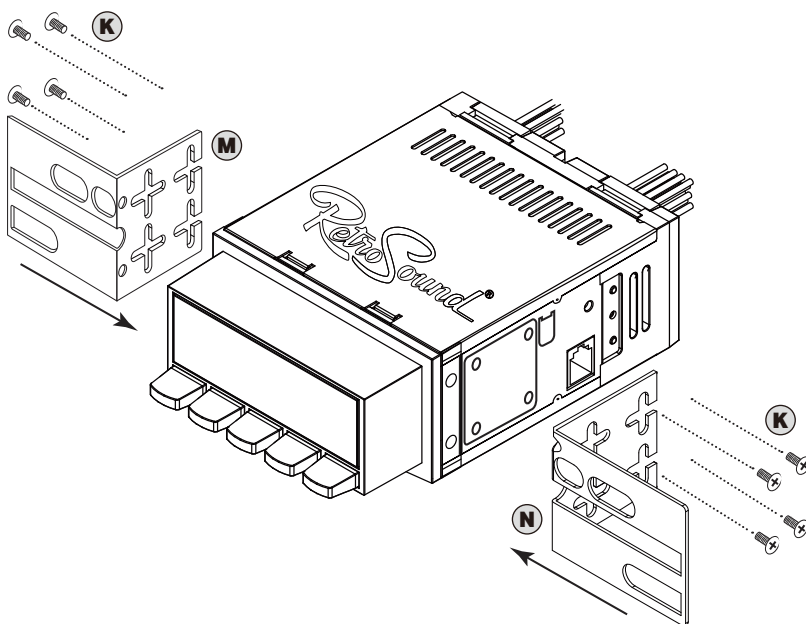


N Right InfiniMount Bracket x(1)



K InfiniMount Screws x(8)

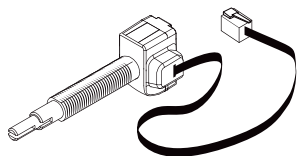
Step #3 Attach the InfiniMount Brackets.



Attach both InfiniMount Brackets (**M,N**) to Radio Motor using the supplied InfiniMount Screws (**K**) (the brackets are marked with an "L" for left and an "R" for right). Make sure the RetroSound® logo on the Radio Motor is facing upwards. Before tightening the screws, you may also move the brackets forward, backward, up, or down as needed. The InfiniMount Brackets may be rotated, cut, or bent to achieve the perfect fit. A minimum of two screws must be used on each bracket to secure them correctly.

Installing the Control Shafts

Parts Needed | Steps 4&5



B Control Shafts x(2)

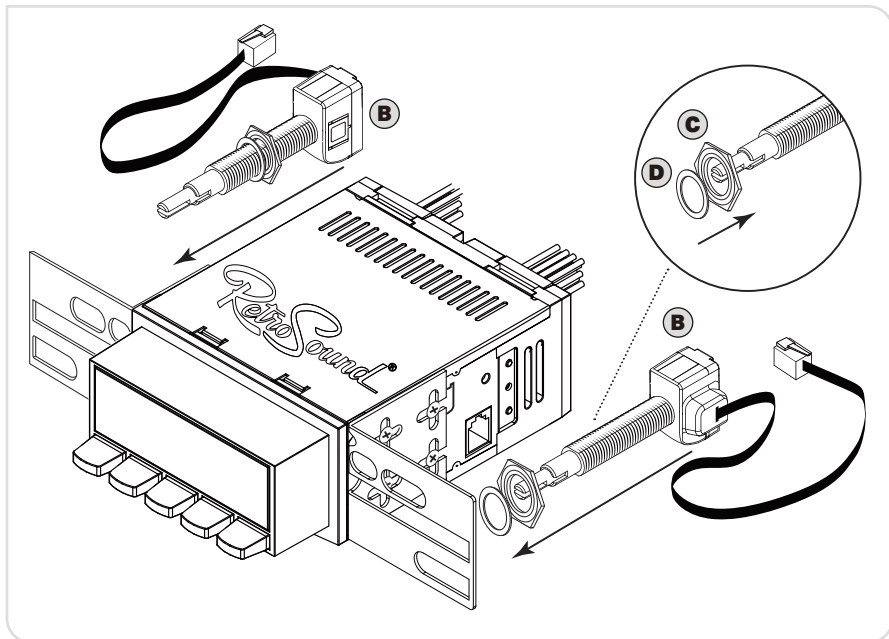


C Shaft Nuts x(4)



D Shaft Washers x(4)

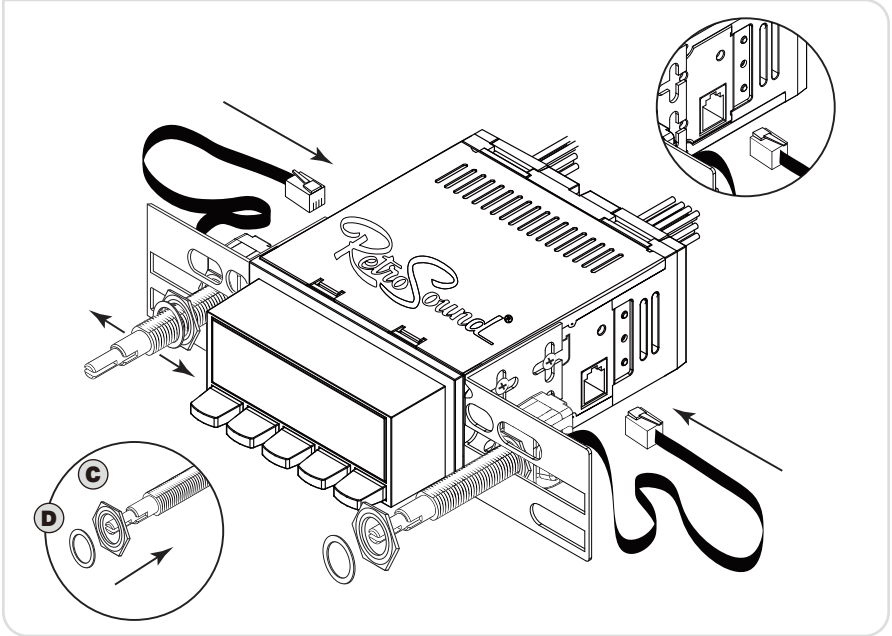
Step #4 Measure & Set Shaft Width



Measure vehicle dash for proper width (shaft hole center to center) and offset of the shafts (some vehicle shaft locations may be offset from the radio display). Match the shaft locations from your dash to the proper InfiniMount Bracket location. Place a Shaft Nut(C) and Shaft Washer(D) on each shaft about halfway down; the Shaft Nuts will be adjusted in the next step to set the proper depth.

Installing the Control Shafts

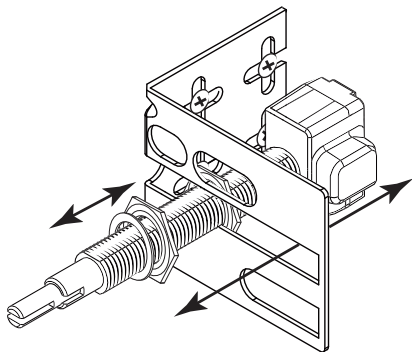
Step #5 Set Control Shaft Depth



Insert the Control Shafts into InfiniMount Brackets, add a Shaft Nut(**C**), and Shaft Washer(**D**) to each shaft. To start, bring the shafts forward until the brass portion is about a quarter-inch past the display face. Adjust the depth of the shafts as needed by moving the shaft nuts forward or backward. Once you ensure the shafts are at the proper width and depth, snug down the shaft nuts to finger tight (**DO NOT OVERTIGHTEN**). With the shafts securely in place, plug the shaft cables into the Radio Motor.

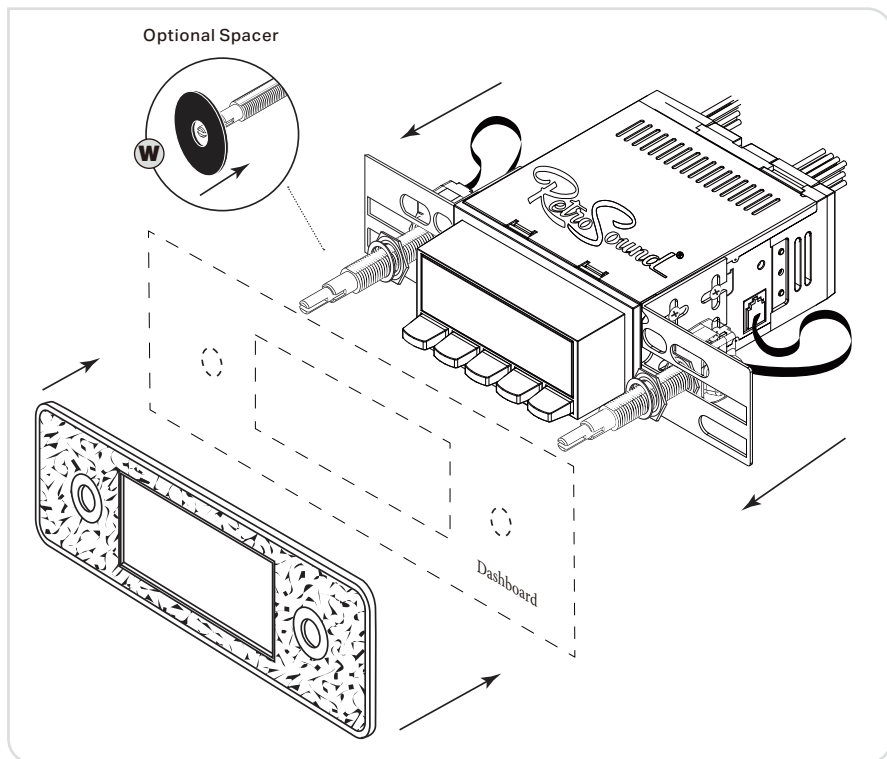
Adjusting Control Shaft Depth

The Control Shafts may need to be adjusted forwards or backwards throughout the installation process to achieve the perfect depth.



Using a Faceplate

Optional: Install the Faceplate

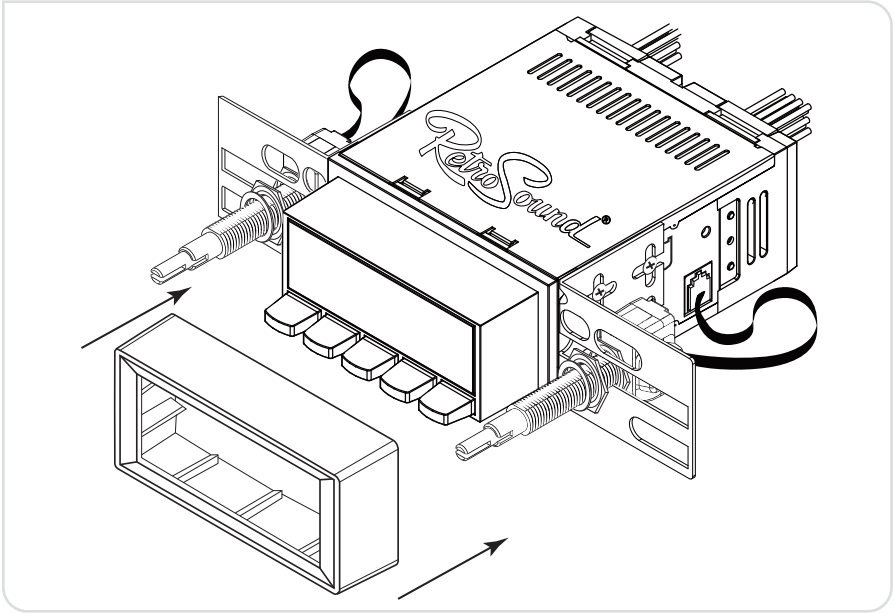


If you are using a Faceplate, slide the radio into the opening from behind the dash **BEFORE** adding the Faceplate. To achieve a proper fit, you may need to use the Large Plastic Spacers(W). If using the spacers, place them on the shafts behind the dash. Align the Faceplate over the shafts from the front of the dash. The Radio Face should align flush with the Faceplate, and the shafts should only protrude about a quarter inch past the Radio Face. If the fit does not look correct for your particular installation, revisit **Step #5** to adjust the shaft depth as necessary.

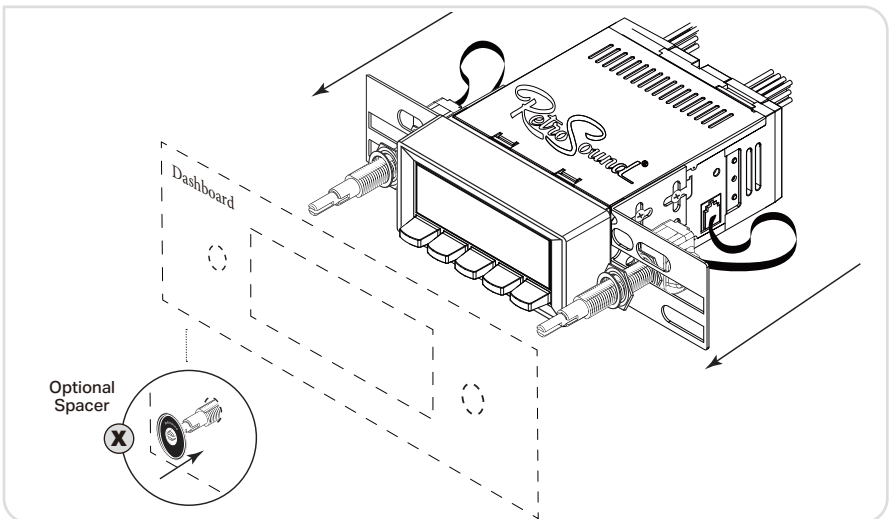
IMPORTANT STEP: Attach the Backstrap!

Before completing the installation with the final nuts and washers, it is **IMPORTANT** that you secure the unit to your vehicle using the supplied Backstrap to support the unit's weight properly. Failure to attach the Backstrap will damage the Control Shafts and void your warranty. (See the instructions on page 13)

Optional: Install the Bezel

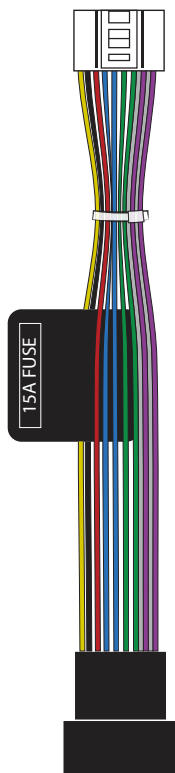


If you are using a Bezel, slide the Bezel over the Radio Face **BEFORE** inserting the assembled radio into the dash. To achieve a proper fit, you may need to use the Cupped Plastic Spacers(**X**) in front of the dash, before the final nuts and washers are applied. If the fit does not look correct for your particular installation, revisit **Step #5** to adjust the shaft depth as necessary.

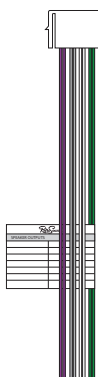


Wiring the Radio

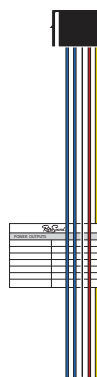
Parts Needed | Step 6



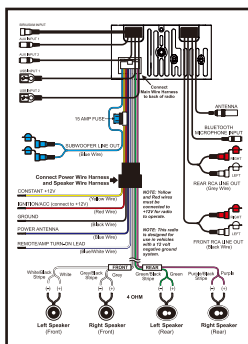
(G) Main Wiring Harness x(1)



(H) Speaker Harness x(1)



(I) Power Harness x(1)



Your connections will vary depending on the unit purchased. Refer to the wiring diagram included in your Radio Motor box for specific connections.








Step #6 Connect the Wiring Harness

Locate the three wiring harnesses: Main Wiring Harness**(G)**, Speaker Harness**(H)**, and Power Harness**(I)** from your Radio Motor box. Using the Power Harness and Speaker Harness, connect the bare wire ends of your power and speaker wires to the appropriate power and speaker locations in your vehicle (see wiring diagram included in your Radio Motor box). Then connect the Main Wiring Harness to the back of the Radio Motor. Do not connect the Speaker and Power Harnesses to the Main Wiring Harness until Step #7.

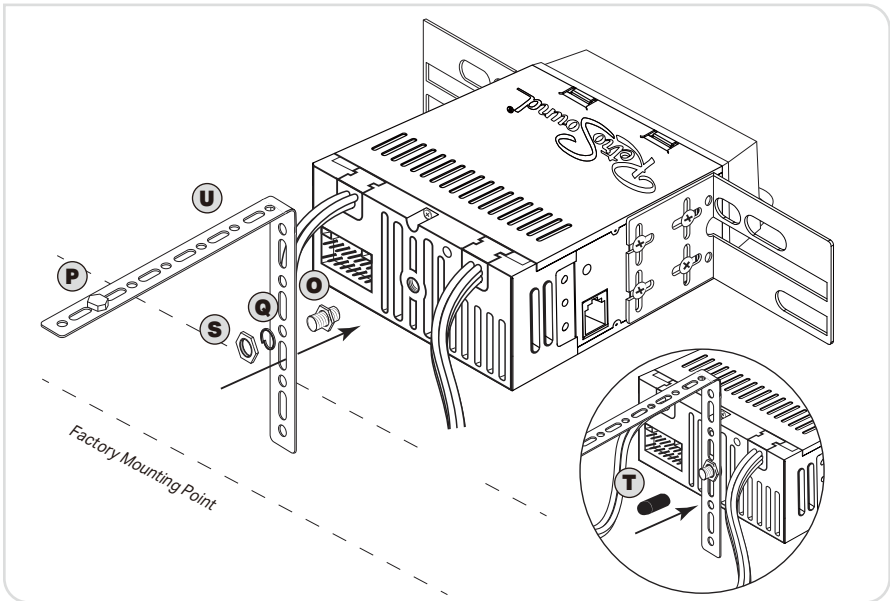
If you find this step too difficult, consult with a local audio installation professional, or contact us at tech@retromanufacturing.com for assistance.

Attaching the Backstrap

Parts Needed | Step 7

U  Backstrap x(1)	O  Dual Thread Bolt x(1)	Q  Lock Washer x(1)	P  10 mm Self Tapping Screw x(1)	R  Self Tapping Screw x(1)
	S  7 mm NUT x(1)			T  Rubber Stopper x(1)

Step #7 Attach the Backstrap



Before attaching the backstrap, connect both the Speaker Harness(**H**) and Power Harness(**I**) to the female plug of the Main Wiring Harness(**G**). If you are using the Bluetooth Mic(**V**), USB extensions, or any AUX devices, connect them at this time and route the cables to their proper locations. Next, you will need to secure the back of the radio using the supplied Backstrap(**U**) and mounting hardware.

The backstrap mounts to the threads on the back of the Radio Motor using the Dual Thread Bolt(**O**), Lock Washer(**Q**), and 7 mm Nut(**S**) and can be bent or adjusted to align with the mounting point of the original factory radio behind the dash. The Rubber Stopper(**T**) can be added if needed to cover the Dual Thread Bolt. Secure the other end of the backstrap to the factory mounting point on your vehicle using the 10 mm Self Tapping Screw(**P**) or the Self Tapping Screw(**R**).

Completing the Installation

Parts Needed | Step 8



C Shaft Nuts x(2)



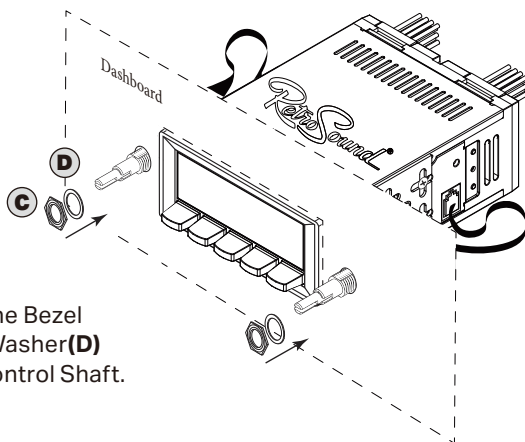
D Shaft Washers x(2)

This STEP may not be needed for all models covered.

Step #8 Complete the Installation

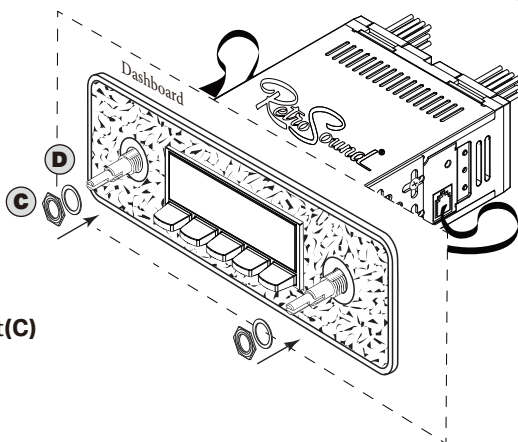
Bezel:

Once the radio is supported from the rear and set into the dash with the Bezel installed, add a final Shaft Washer(**D**) and Shaft Nut(**C**) to each Control Shaft.



Faceplate:

Once the radio is supported from the rear and set into the dash, add your Faceplate and a final Shaft Washer(**D**) and Shaft Nut(**C**) to each Control Shaft.



To complete the installation of your radio, add the rear and front knobs to both Control Shafts.

Troubleshooting

Problem	Possible Cause	Action to Solve Problem
Radio will not turn on (no lights, no sound)	Constant +12V (yellow) wire not connected or incorrect voltage	Check all connections are connected proper voltage with a volt meter. Voltage range: 12-15 volts
	+12V ignition/ accessory (red) wire not connected or incorrect voltage	Check +12V accessory (red) wire connection
	Ground (black) wire not connected	Check ground connection
	Fuse on constant +12V (yellow) wire is blown	Replace blown fuse
No sound heard from unit but unit lights up	Volume turned all the way down	Increase radio volume
	Internal amp in protection mode	Check speaker leads for any grounded or shorted wires
	Wrong source mode selected	Make sure the unit is in the desired source mode (RA-DIO,AUX)
Unit blows fuses	Possible short in wiring or incorrect fuse used	Make sure only fuses with correct 15 amp ratings are used and check all wiring connections for possible short
	Battery hooked up backwards	Make sure battery is properly connected

For replacement parts, visit our website at:

www.retromanufacturing.com

Contact us by calling **888.325.1555**

or send an email to **tech@retromanufacturing.com**.

(see "What's in the Box" on pages 2-3 to confirm the part(s) needed).



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www.retromanufacturing.com