

Fine Sound Other than a Good Exhaust Note



Over the 45 years and thousands of miles I have experienced my '64 Austin Healey 3000 Mark 3, On long drives I have often wanted to hear something more than the fine sound emitted from the exhaust. I have kept the Healey as close to original as possible, however, when contemplating a modification, I have kept 3 prime directives in mind:

1. All changes must be easily and completely reversible.
2. All modifications must look as close to belonging as possible.
3. All alterations must be purposeful and improve safety, reliability, or enjoyment without changing the unique driving experience of the original vehicle.

Keeping these guidelines in mind, the following installation of a modern sound system was made.

Even though the Healey had been previously converted to negative ground, the choice of available radios capable of fitting into an unmodified BJ8 console were extremely limited in both look and function. One afternoon when running an errand in my Acura, I looked down and noted the installed Bose unit. At that moment, I decided that if I am going through the effort of installing a new system in the Healey, I want good AM/FM quality along with CD and Tape. Also, such additional features as iPod and XM connections should also be an option.



After reviewing a number of possibilities, the second generation Acura TL Bose system was chosen. To install the Bose system, head unit, active equalizer/preamp, and front speakers (amp

and subwoofer will be discussed later), a replicated console was fabricated to allow for the additional width (approximately 1") and angle needed to seat the head unit and clear the heater box. Extreme care was taken to keep the console's image as close to original as possible.



Side panels were constructed to house the Infinity component mid-range speakers and separate mounts were created to support the tweeters at both ends of the dash.

All components were installed and wired (head unit, mid-range and tweeter speakers) to the Bose equalizer/preamp which actively separates the major base and high notes from mid-range sounds. In order to deliver full base, and because of a lack of cabin space, the 9" subwoofer and amplifier were relegated to the boot (trunk area). Although a convenient amplifier mount was found under the battery, it was both difficult and space-constrained to build and mount an appropriately sized woofer enclosure in the boot. As an alternative, and although compromising sound quality and volume due to undersized voice-coil enclosure space, a round 14" speaker-mounting platform was created and hot-glue installed (easy removal if spare is needed) inside the spare wire wheel. This approach allowed the use of the wheel rim and tire to serve as the necessary sealed enclosure required for the subwoofer to function properly.



Though the installation of a boot-located wire-wheel based subwoofer places limits on sound quality and volume, especially when underway, it does provide sufficient base satisfaction for most and does not eliminate any scarce storage space.



To guaranty electrical protection of the sound components, in-line fuses were installed on all power sources and a common ground was maintained for all components. Additionally, constant power and switched power sources were provided to the head unit to maintain the security facility inherent within the Bose system. Re-entry of the radio's security code is only required when power is cut via the master battery switch.

The installation of the Bose Sound System has come to be one of the most satisfying modification I have made. Relatively inexpensive, most components were used and purchased through eBay.

Presently, after much research and learning, I would recommend that those interested in improving the sound system in their cars first determine what they want out of the system and what skills they can bring to bare. Further, a list of prime directives governing the limitations you would impose on modifications should also be considered. Following those determinations, there are many alternatives out there and, given your own known objectives, go for it.....

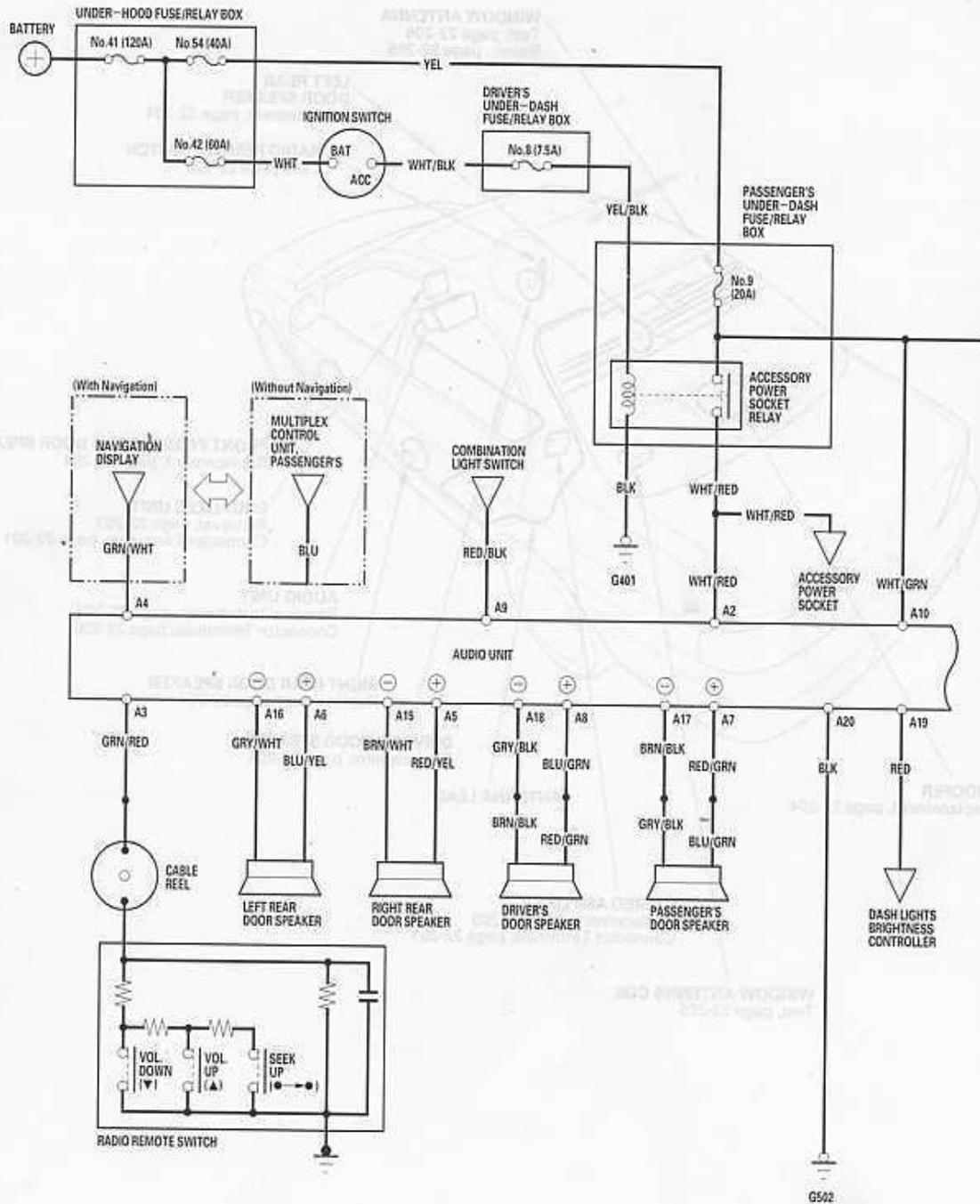
Raymond A. Carbone

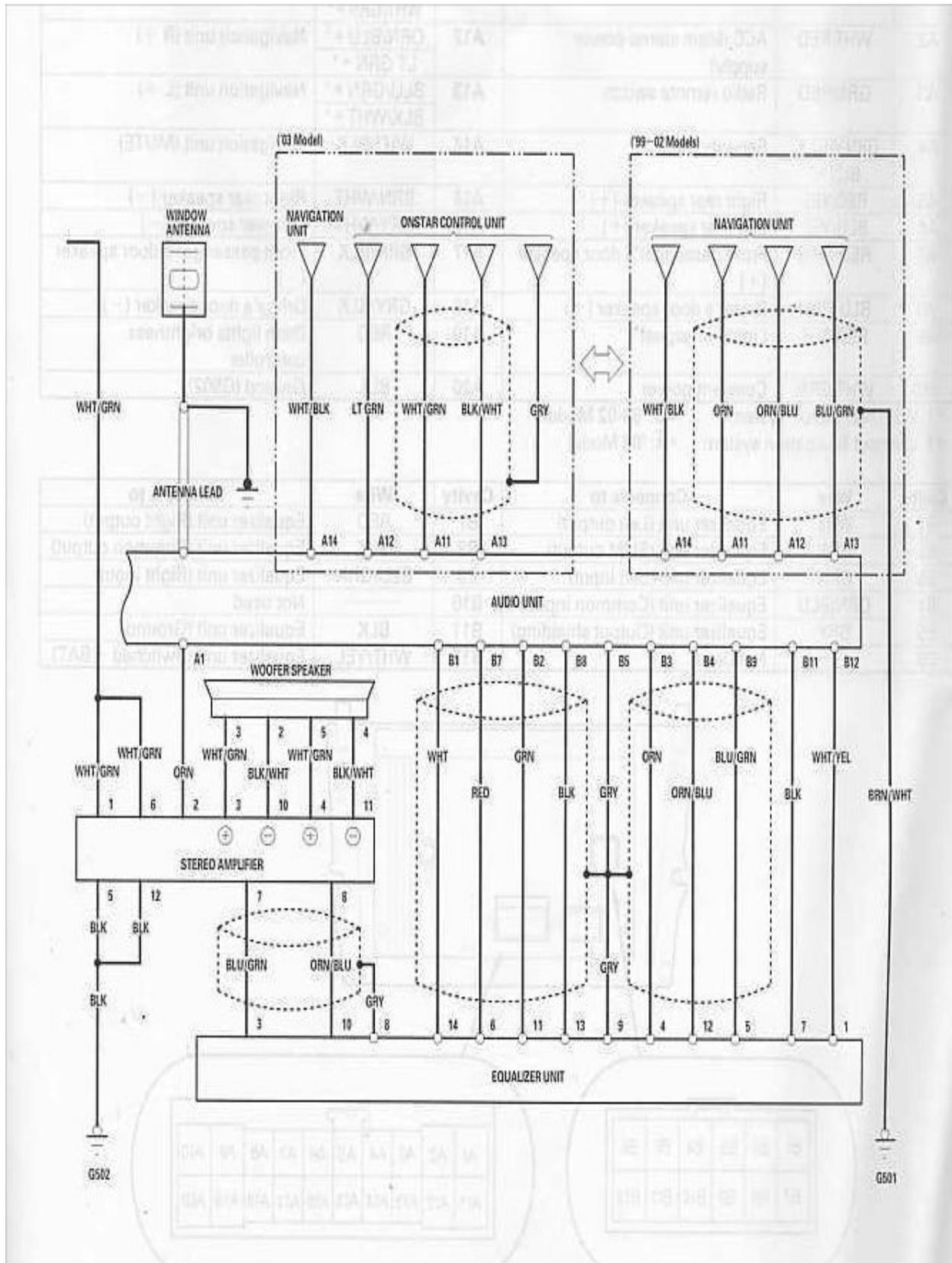
1964 Austin Healey 3000 Mk3 Phase 1

1979 Triumph TR7

Stereo Sound System

Circuit Diagram





Stereo Sound System

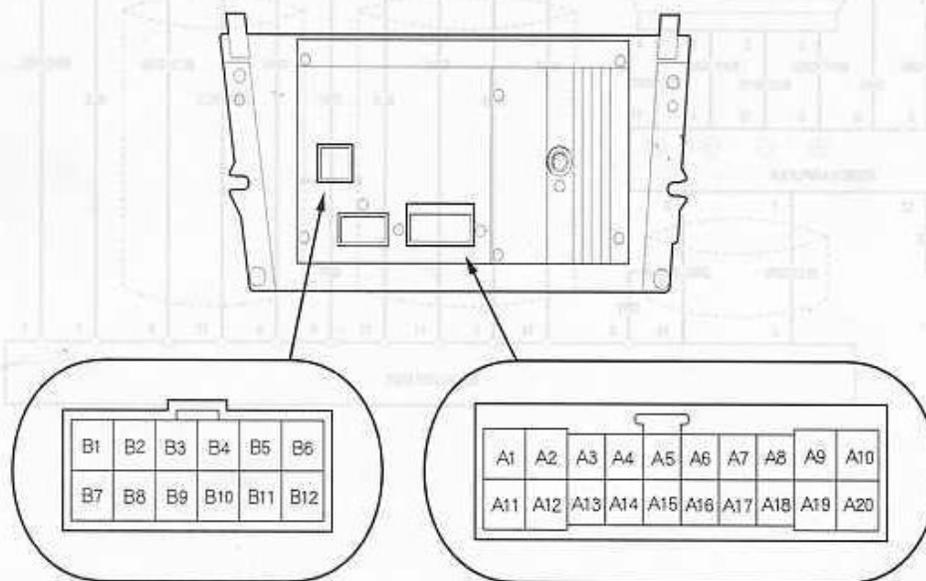
Audio Unit Connector Replacement

When replacing an audio unit connector, match the wires to the cavities as listed in the following table. Cavities 11, 12, 13 and 14 of the connector A are used for the navigation system or onstar system.

Cavity	Wire	Connects to	Cavity	Wire	Connects to
A1	ORN	Radio switched power	A11	ORN * ³ WHT/GRN * ⁴	Navigation unit (COM)
A2	WHT/RED	ACC (Main stereo power supply)	A12	ORN/BLU * ³ LT GRN * ⁴	Navigation unit (R +)
A3	GRN/RED	Radio remote switch	A13	BLU/GRN * ³ BLK/WHT * ⁴	Navigation unit (L +)
A4	GRN/WHT * ¹ BLU * ²	Security input	A14	WHT/BLK	Navigation unit (MUTE)
A5	RED/YEL	Right rear speaker (+)	A15	BRN/WHT	Right rear speaker (-)
A6	BLU/YEL	Left rear speaker (+)	A16	GRY/WHT	Left rear speaker (-)
A7	RED/GRN	Front passenger's door speaker (+)	A17	BRN/BLK	Front passenger's door speaker (-)
A8	BLU/GRN	Driver's door speaker (+)	A18	GRY/BLK	Driver's door speaker (-)
A9	RED/BLK	Lights-on signal	A19	RED	Dash lights brightness controller
A10	WHT/GRN	Constant power	A20	BLK	Ground (G502)

* 1: With Navigation system * 3: '99-02 Models
* 2: Without Navigation system * 4: '03 Model

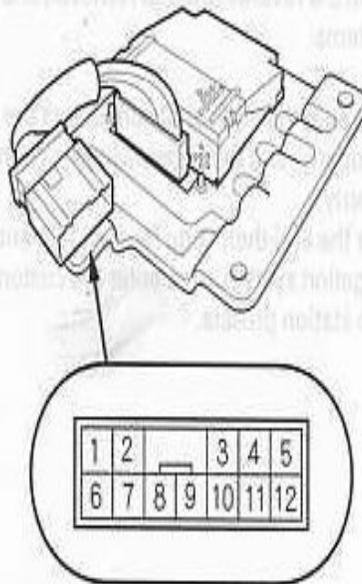
Cavity	Wire	Connects to	Cavity	Wire	Connects to
B1	WHT	Equalizer unit (Left output)	B7	RED	Equalizer unit (Right output)
B2	GRN	Equalizer unit (SUM output)	B8	BLK	Equalizer unit (Common output)
B3	ORN	Equalizer unit (Left input)	B9	BLU/GRN	Equalizer unit (Right input)
B4	ORN/BLU	Equalizer unit (Common input)	B10	---	Not used
B5	GRY	Equalizer unit (Output shielding)	B11	BLK	Equalizer unit (Ground)
B6	---	Not used	B12	WHT/YEL	Equalizer unit (Switched + BAT)



Stereo Amplifier Connector and Equalizer Unit Connector Replacement

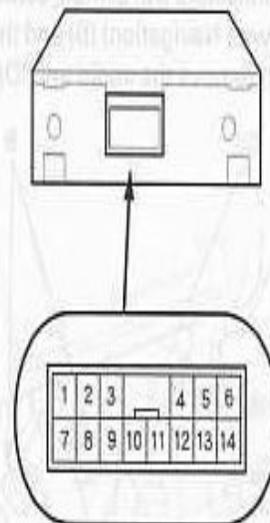
When replacing a stereo amplifier connector, match the wires to the cavities as listed in the following table. Cavity 9 is not used.

Cavity	Wire	Connects to
1	WHT/GRN	Constant power
2	ORN	Radio-switched power
3	WHT/GRN	Woofer speaker (+)
4	WHT/GRN	Woofer speaker (+)
5	BLK	Ground (G581)
6	WHT/GRN	Constant power
7	BLU/GRN	Equalizer unit (BASS +)
8	ORN/BLU	Equalizer unit (BASS -)
9	—	Not used
10	BLK/WHT	Woofer speaker (-)
11	BLK/WHT	Woofer speaker (-)
12	BLK	Ground (G581)



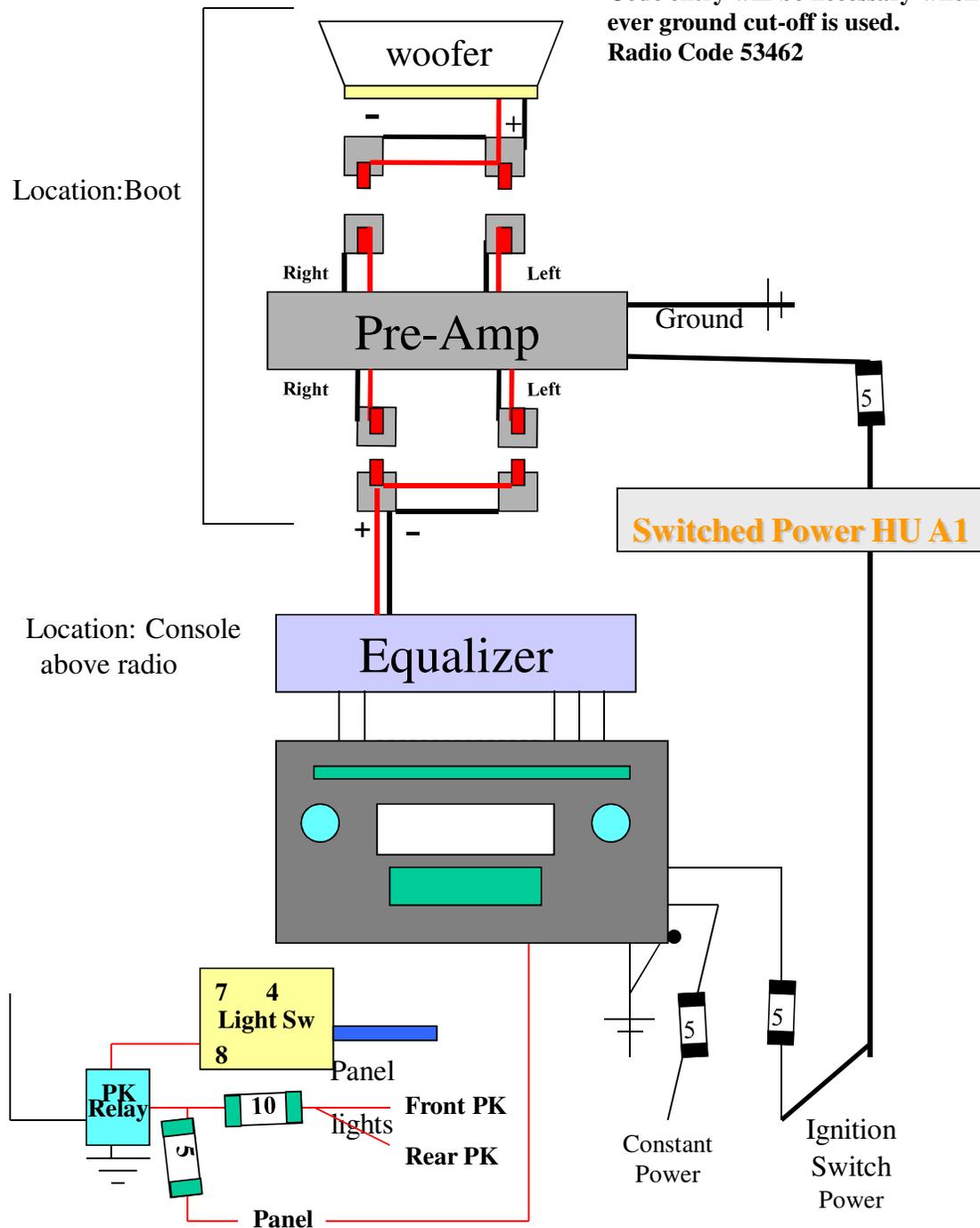
When replacing an equalizer unit connector, match the wires to the cavities as listed in the following table. Cavity 2 is not used.

Cavity	Wire	Connects to
1	WHT/YEL	Audio unit (Switched +BAT)
2	—	Not used
3	BLU/GRN	Stereo amplifier (BASS +)
4	ORN	Audio unit (Left output)
5	BLU/GRN	Audio unit (Right output)
6	RED	Audio unit (Right input)
7	BLK	Audio unit (Ground)
8	GRY	Stereo amplifier (BASS shielding)
9	GRY	Audio unit (Output shielding)
10	ORN/BLU	Stereo amplifier (BASS -)
11	GRN	Audio unit (SUM input)
12	ORN/BLU	Audio unit (Common output)
13	BLK	Audio unit (Common input)
14	WHT	Audio unit (Left input)



BJ8 99 Acura TL Radio Installation (AM/FM, CD, Tape, Security) 51/4 Infinity Component Speakers

Note: Radio connected to Direct power and car ground.
Code entry will be necessary when ever ground cut-off is used.
Radio Code 53462



Equalizer ByPass

There are 2 wiring harnesses going into the back of the HU. The smaller, black harness has the EQ ins/outs. 12 pins altogether. You need to connect pins 1 (white) and 3 (orange) together, and pins 7 (Red) and 9 (Blue/Green) together. 1/7 are the sends to the EQ, 3/9 are the returns. Doing this bypass still leaves the Sum-out going to the Bose EQ, so it can send that signal to the sub amp behind the rear seat.