ELECT-03, Stereo - Head Unit and Speaker Replacement Guide

Head Units

Replacing the stereo head unit in a 944 is fairly straight forward. Any standard DIN head unit will fit. However, there are some minor issues which must be considered.

When you remove the factory head unit, you will likely have to install a mounting frame for the new head unit. If you have purchased a new head unit the mounting frame will be included. However, if you are buying a used head unit, make sure the seller includes the mounting frame as well (if required).

If you are installing sub-woofers, or plan to install subwoofers in the future, make sure the new head unit has "sub-woofer out" or "rear speaker out" connections. Normally, units with "sub-woofer out" connections will also have a sub-woofer volume adjust as well. However, you may want to ask that question when purchasing the unit. Sub-woofer volume adjust on the head unit is a very nice feature because it allows you adjust everything at the head unit when balancing the sound. If you don't have sub-woofer controls, you end up having to tweak the gain on the sub-woofer amp to balance the sound. This is definitely a plus if the sub amp must be placed in a location that is difficult to access.

All 944s which employ windshield antennas also use an antenna amplifier. The antenna amplifier is powered from a lead which goes from the head unit to a wire that ties in with the antenna lead. The problem is that there are actually two leads which come from the head unit (both red with white stripes) which feed into the wiring harness and come back out of the harness to a single black lead. The single black lead ties in with the antenna lead. Consequently, when you install the new head unit, you'll need to run a power lead off the head unit to the black amplifier lead or to the two red wires with white stripes going to the black amplifier lead.

Newer 944s (1985.5 and newer) with 4-speaker systems use a front-to-rear fader control for the speakers (mounted on the center console). So, there are left and right channel feeds going from the head unit to the fader. Coming out of the fader are leads for each of the 4 speakers. If your head unit has a two-channel output, you'll connect to the to leads going to the fader just like the factory unit. If you have a head unit with a four-channel output, I prefer to bypass the fader and connect to the speaker leads coming out of the fader. This allows you full use of the fader controls on the head unit. If you bypass the factory fader switch, you may abandon it in place or you may remove the fader and obtain a blank switch cover to go in it's place.

Speakers

Our discussion here will focus on 944s with 4-speaker systems. I haven't talked to a lot of folks who have done replacements on the 10-speaker system so, there just isn't a lot of information available at this point.

There are two distinct challenges when replacing the speakers in a 4-speaker 944 system fitment of the front speakers and access to the rear speakers. For the front speakers, there are a number of issues with regards to finding a speaker that fits. Both front and rear speakers are 4x6 Euro cut speakers. A 4x6 American cut speaker can be used as well. However, for the front speakers, the mounting plate for the American cut speaker must be trimmed or the bottom of the door panel must be loosened to allow the edges of the mounting plate to slide under the panel. Personally, I have the 4x6 American cut speakers and didn't find it too inconvenient to loosen the bottom of the door panel for the installation. Also, you must use a speaker with a thin mounting plate. A speaker with a thick mounting plate will prevent the factory grill from sitting flush with the door panel.

The next fitment issue for the front speakers is depth. The door window channel runs directly behind the door speaker. The factory speakers use a 1/4" spacer. If you reuse the speakers, you can get about 1-3/4" clearance. Even that limits your choices with regards to speakers. If you go with a deeper speaker, you will have to use a thicker spacer is which case the factory speaker grills will not sit flush anymore. Aftermarket grills are available but, they are hard to come by. American International (AI) is one of the few places I've found that offers 4x6 grills. If you have a decent car audio shop in your area, they should be able to locate aftermarket grills for you. Also, you can't use a grill that protrudes from the surface of the door panel more than 1/2" or it will contact the side of the dash with the door closed. If you want to use the factory grills (as I did), you also have to make sure that the replacement speakers do not have any parts/components that are raised above the surface of the speaker more than about 1/4". Otherwise, the grills will not sit flush with the door panel.

The last issue with front speaker fitment is the size of the speaker frame. For virtually all the aftermarket speakers I tried (and I trial fitted a lot of speakers), the oval part of the speaker frame was slightly larger than the oval cutout in the door panel. This will prevent the speaker from sitting flush against the door panel. Consequently, the factory grill will not sit flush either. I eventually had to go with the speaker that was the best fit and enlarge the opening in the door panel slightly to allow a perfect fit. I did this by taking a small hammer and tapping on the sides of the opening to flatten the lip on the opening slightly. When you are trying to decide on a front speaker, I recommend removing one of the door speakers and then drive to a local stereo/sound and ask them to allow you to trial fit different 4x6 speakers until you find one that fits properly. I have read reports from other 944 owners of speakers which fit well without any modifications. Below is a list of 4x6 speakers used by other 944 owners, with comments on fitment and sound quality. The list was provided to Rennlist by Menelaos Karamichalis. Thanks Menelaos.

944 Speakers (4x6)			
Speaker	Application	Comments	
Eclipse	Front	Requires slight modification of door opening for proper fit. Great sound. Worth the time it takes to modify speaker opening. Can use factory grills.	
Rockford Fosgate HPC1246	Rear	Will not fit front due to depth and size of magnet. Perfect fit in rear. Great sound.	
Alpine SXE-4625S	Front/Rear	Good sound. Perfect fit in both front and rear.	
Alpine SPS-460A, 2- Way	Front	Great Sound. Fit perfectly in door. Can use factory grills.	
Clarion SRC-4652 ProAudio	Front	Good fit.	
Infinity Kappa 462CF	Front	Does not fit flush with door due to thick mounting plate.	
Kenwood KFC4675	Front	Questionable fit.	
Kenwood KFC4625C	Front	Slight gap between grill and door panel.	
Nakamichi SP-100	Front	Fit doors with factory grills.	
Radio Shack 4x6 Three- Way	Front	Fit with no modifications	
Pioneer TS-A4605	Rear	No Comments	
Pioneer TS-A4612	Front	Fit but sound quality no better than factory speakers.	
Pioneer TS-G4611	Front	Fit but factory grill does not sit flush.	
Pioneer TS-4615	N/A	Magnet too deep for front. However, might be used in rear.	

944 Speakers (4x6)		
Speaker	Application	Comments
Polk Audio DB4620	Front	Some modification to the plate of the speaker to fit the factory grill. Very good sound.
Polk Audio EX462A	N/A	Magnet too deep for front. However, probably useable for rear speakers.
Sony XS-4621	Front	Speaker opening must be modified due to width of frame on the speakers. Factory grills do not sit flush. Good sound.

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