
Subject: Maintaining The Speaker In Good Shape
Posted by [Malfoy](#) on Mon, 12 Nov 2018 08:32:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

I've read the topics here in which the speakers had problems. How do we maintain our sound system in good shape? What are the main culprits in damaging the speakers?

Subject: Re: Maintaining The Speaker In Good Shape
Posted by [Wayne Parham](#) on Mon, 12 Nov 2018 15:27:08 GMT
[View Forum Message](#) <> [Reply to Message](#)

Excessive moisture and direct sunlight are the two biggest problems for speakers, except of course over-driving them in some way. As long as you don't push 'em too hard they'll last decades provided you take care of them.

Also, don't store them in a position where the cone faces up or down. The cones can sag after several years, especially subwoofers.

Subject: Re: Maintaining The Speaker In Good Shape
Posted by [Jazzy](#) on Thu, 15 Nov 2018 14:41:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

I didn't know that there are people who positioned the speaker cones facing up or down. How do we know when we are over-driving the speakers already?

Subject: Re: Maintaining The Speaker In Good Shape
Posted by [Wayne Parham](#) on Thu, 15 Nov 2018 14:54:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

When you over-drive a speaker, it usually starts sounding very distorted.

As for the cone-up or cone-down thing, I was mostly talking about storage. If you lay speakers on their backs (cones facing up) and store them for a few years, you may find the suspension has sagged over time.

I have seen some subwoofer cabinets designed to face the woofer down though. It's an interesting design, and makes the woofer cone "invisible." But the disadvantage is that the cone weight will tend to shift it downwards, which will only get worse over time.

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Malfoy](#) on Fri, 16 Nov 2018 08:28:31 GMT

[View Forum Message](#) <> [Reply to Message](#)

The face down subwoofer storage sounds interesting. Do you mean to say that using the speaker is better than storing it because the dormancy will make the cones sag?

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Wayne Parham](#) on Fri, 16 Nov 2018 16:36:08 GMT

[View Forum Message](#) <> [Reply to Message](#)

Positioning a driver "face-up" or "face-down" can make the suspension sag over time, especially subwoofers with heavy cones and loose suspensions.

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Junior](#) on Tue, 20 Nov 2018 14:13:22 GMT

[View Forum Message](#) <> [Reply to Message](#)

I've noticed several old speakers having their dust covers pushed-in. What may have caused this from happening? Does it even affect the speaker output quality when the dust covers were pushed-in?

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Wayne Parham](#) on Tue, 20 Nov 2018 14:29:34 GMT

[View Forum Message](#) <> [Reply to Message](#)

Curious fingers are usually the cause of dented voice coil covers. Something or someone has pushed them in. They do contribute to the sound in most speakers, but not subwoofers. Subs usually have a cap that's harder to dent too.

Fortunately, it's usually an inexpensive and easy fix. Take your dented speakers to a speaker repair shop and they'll replace those dented caps.

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Malfoy](#) on Wed, 21 Nov 2018 00:31:06 GMT

[View Forum Message](#) <> [Reply to Message](#)

Wayne Parham wrote on Fri, 16 November 2018 10:36

Positioning a driver "face-up" or "face-down" can make the suspension sag over time, especially subwoofers with heavy cones and loose suspensions.

Will this happen to the subwoofer even when it is used regularly and used in a normal position? How about when it is used regularly and the positioning is not correct, what will happen to the subwoofer?

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Wayne Parham](#) on Wed, 21 Nov 2018 14:12:57 GMT

[View Forum Message](#) <> [Reply to Message](#)

If the cone is "face down" then it will sag over time, even if used regularly. If the cone faces forward, the suspension will not sag and the driver will last much longer.

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Jazzy](#) on Tue, 05 Feb 2019 03:51:07 GMT

[View Forum Message](#) <> [Reply to Message](#)

Wayne Parham wrote on Thu, 15 November 2018 08:54

I have seen some subwoofer cabinets designed to face the woofer down though. It's an interesting design, and makes the woofer cone "invisible." But the disadvantage is that the cone weight will tend to shift it downwards, which will only get worse over time.

Speaking of subwoofer facing up or down, I've seen a few subwoofer setups in a vehicle where the subwoofer was facing up. As you mentioned that this type of setup will get worse over time, but are there subwoofers that are made to face upwards?

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Wayne Parham](#) on Tue, 05 Feb 2019 15:26:50 GMT

[View Forum Message](#) <> [Reply to Message](#)

The only way a speaker can be made to tolerate facing upwards or downwards is to make it have a suspension that takes much more force to overcome than the force due to gravity on the cone.

The trouble is, that is exactly the opposite of what a subwoofer generally is. Subwoofers usually have heavy cones and soft suspensions. Those qualities give low resonant frequencies and generally lend themselves to low-frequency characteristics.

However, another thing that lends itself to low-frequency characteristics is having a large cabinet.

Conveniently, a car trunk is a pretty large cabinet, especially for a relatively small woofer. So a woofer can be used that has a more rigid suspension and still hit the low notes.

Car speakers have other hazards that they must endure - not the least of which is sunlight. The sun will bleach the cones and disintegrate rubber surrounds. They are exposed to temperature extremes, often from well below freezing to over 150° Fahrenheit, sitting parked in the sun. Humidity ranges from 0 to 100%. So they're frozen, cooked, dried and soaked.

Subject: Re: Maintaining The Speaker In Good Shape

Posted by [Jazzy](#) on Thu, 07 Feb 2019 01:56:27 GMT

[View Forum Message](#) <> [Reply to Message](#)

Wayne Parham wrote on Tue, 05 February 2019 09:26

So they're frozen, cooked, dried and soaked.

That is a nasty way of damaging the subwoofer. Those car subwoofers must have very good resistance with temperature and humidity rapid changes. Even then, I would also think that it is still susceptible to damage no matter how good the subwoofer is. It's just a matter of time before it gets damaged.
