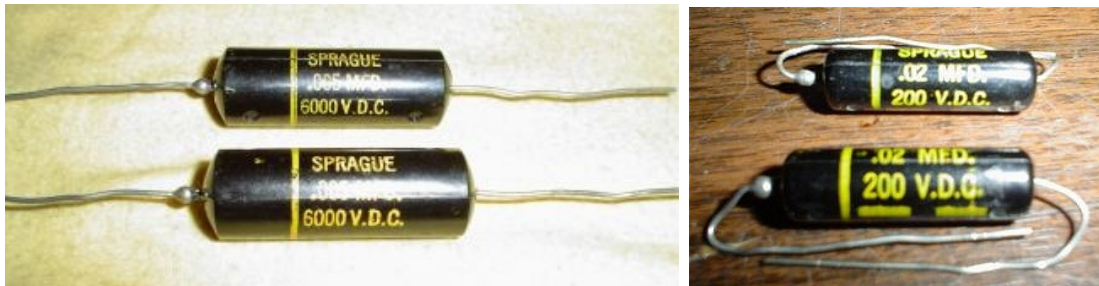


Capacitors inside guitars

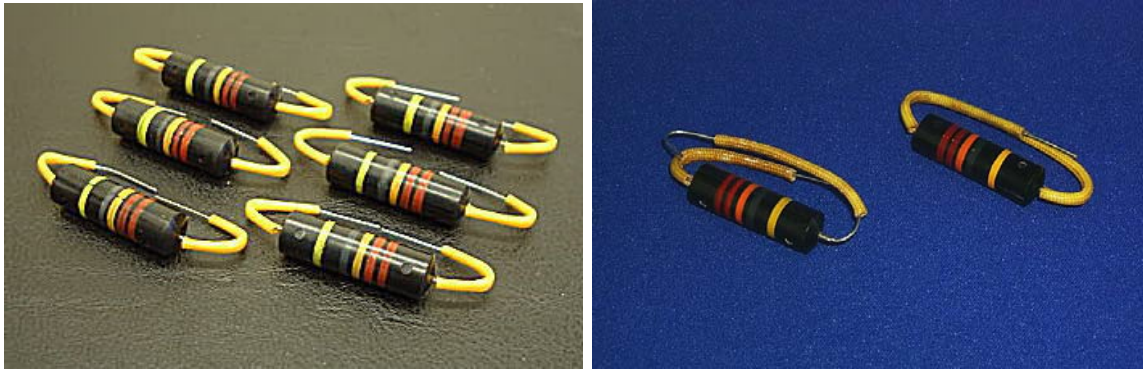
There is a lot of discussion about old caps and the influence they have on the overall sound of a guitar. I spent countless hours with this subject and I tried almost every available cap and compared them to each other, so I think it's time to share all those information with you. To start I would like to show you some of the most discussed cap types so that you know what all the talk is about.

Sprague "Black Beauties"



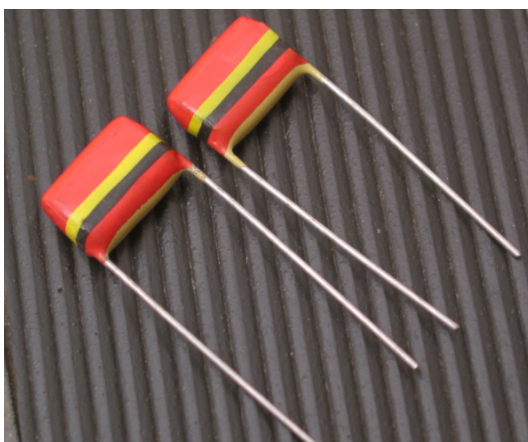
Those are for sure the most discussed caps with an almost magical touch on them. They are usually from the late 50's and can be found in a lot of guitars from that era but they are famous for the apperance in the 58 and 59 (Burst) Les Pauls and some say that they are responsible for the magic tone of that guitars. The "Black Beauties" can be found with red and yellow imprinting and the 400 and 600 volt types are the ones you can often find inside guitars from that time.

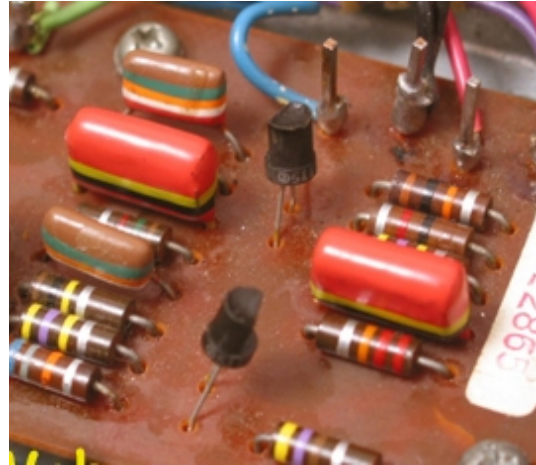
"Bumblebee" caps



The bumblebee caps are very similar to the Black Beauties and I guess it's easy to see where the nickname is coming from ; -) You can also find this caps inside the late 50's Les Paul guitars as well as inside other guitars from that era.

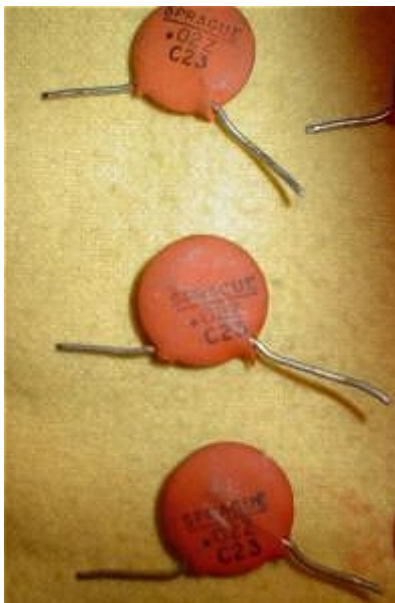
"Tropical Fish" caps





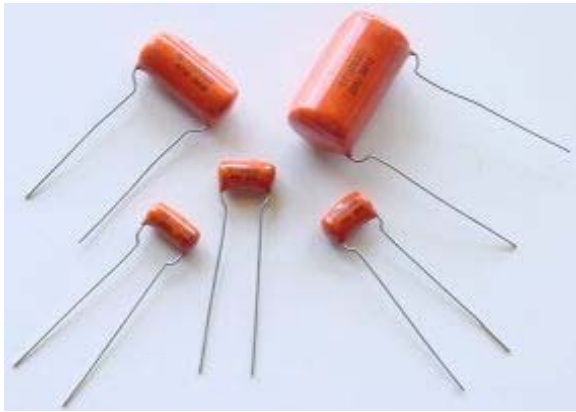
This caps are called "tropical fish" because of the colored stripes that really look a little bit like a tropical fish. The "tropical fish" term is often mixed up with the "bumblebee" caps but this is simply wrong. You can find the tropical fish caps mostly inside old vintage stompboxes, wah pedals, amps ... but also inside guitars.

"Flat Disc" (ceramic) caps



This are the old ceramic disk caps from Sprague or Erie, you can find in almost every vintage Fender guitar. You can also find them inside old stompboxes and amps. They sound very different from modern ceramic caps.

Sprague "Orange Drop" caps



These caps are still available today from Sprague/Vishay and can be found in some high-quality guitars like the PRS models. You can find old Sprague orange drops in a lot of old Fender guitars and as the hi-cut cap in almost all vintage Telecasters. The higher voltage values can also be found inside high-quality amps.

Silver Mica caps



Those caps have a typical "hump" in the middle of the body and can be found inside high-quality amps and stompboxes. They can also be used as a hi-cut cap on the volume pot and if you can find the correct value as a cap for the tone control. Higher values are often hard to find and very expensive.

Oil-Paper caps (Jensen)



This caps from Jensen can be found in high-end HIFI gear, as well as high-quality guitar amps. They are VERY expensive but a lot of guys swear on them. You can use them inside guitars if you have enough space for them.

So what is all this talk about !?!



To cut a long story short ... **YES !!!**

Caps sound very different and they really affect the overall tone of the guitar, even with the tone pot fully openend. They are still in the circuit and you can hear the differences very easy. There is no right or wrong and no good and bad, as always this is simply a matter of individual taste. My suggestion is to try different caps and see what you like best. I always take the certain guitar and solder two long wires with alligator clips at one end where the tone cap should be. Now you have the possibility to change the caps very easy and A/B them within almost no time. Try a lot of caps and see what will taylor your needs. I always ended up with different caps for certain guitars, so I think it´s the combination of the guitar with it´s electronics and pickups, the cable, the pedalboard and the amp. Don´t be afraid to try cheap or historically incorrect caps with incorrect values, I never use the factory stock values, for me they are way to much and I use values from 3300 up to 6800pF which makes the tone control much more useable.

If you want good and cheap substitutes for the Black Beauties and Bumblebees caps, they are

available at the singlecoil-webshop (www.singlecoil.com/shop.html)