

# Strat Tips

from [Stratocaster Appreciation Page](#)

## Pickup Height

The strat is notoriously temperamental with regard to pickup height settings. If set too far from the strings, the sound will be weak and the buzz intolerably loud. If set too close to the strings, the magnetic pole-pieces will interfere with the vibration of higher notes, causing a distortion of pitch. In addition, many people underestimate the influence which pickup height and balance has on your tone. I have developed the following procedure for the correct adjustment of strat pickup heights (this is intended for traditional alnico magnet pickups-other types can usually be set closer to the strings)

1. Set the bridge pickup 3 to 2.5 mm's from the pole piece to the bottom of the string on BOTH the bass and treble sides of the pickup. (Some people like to slant the pickup so that the treble side is much closer to the strings, but if you want your head to remain ON your shoulders, I advise against it) Now play some chords across all six strings on various places on the neck. Listen carefully to the balance between the bass and treble strings. If the bass strings are noticeably louder than the treble or vice-versa, raise or lower the appropriate side until a nice balance between high and low strings is achieved.

2. Now that the bridge pickup is set, its time to deal with the middle pickup. Compare the output of the middle pickup with that of the bridge and raise or lower it until the output is the same. Again adjust the pickup until a balance between the high and low strings is achieved.

3. Now the neck pickup. Much the same as points 1 and 2-get the output the same as the middle pickup, can adjust for correct string balance.

Hopefully you will now have all the expected strat sounds at your disposal. Also, if you want to increase the 'quackiness' of the in-between tones AND/OR you rarely use the middle pickup, screw it down low and you will achieve the desired effect. Tremolo setup-floating or clamped?

**FLOATING:** I'd Just like to say before this section, that you should BEWARE when messing with the tremolo set-up on a strat. Despite what I say below, NOT all strats will benefit from having the tremolo set flat to the body. In fact, this can actually make the tone rather harsh and tinny on some strats. It has a lot to do with the way that the tremolo cavity adds a certain resonance to the tone, and the trem set to float can enhance this effect, giving a springier, more lively tone. Adding springs and clamping down the trem can in some cases kill this. This seems to vary widely from one strat to another, so some may be fine with either trem set-up,

others might suffer if you alter the set-up. The chances are that your strat's tremolo is already set this way, so as to offer both up and down pitch-control. If it is not, you can set it to do so like this:

1. Carefully remove the tremolo backplate on the back of your strat.
2. Observe how many springs are installed in the cavity-if there are 5, remove the 2nd and 4th ones, if there are less than 3, don't remove any more. Now tune to pitch and check if your tremolo now floats. If so, go to point 3. If not, you will now need to adjust the tremolo claw-that thing which the wire is soldered onto. Turn the screws which go into the body of the guitar counter-clockwise until the claw has moved out a few mm's. Now tune to pitch and check if the trem is now floating. If it is not, just continue adjusting until it does, making sure you are tuned to pitch.
3. When at last your trem is floating, you need to set the tip up angle-the distance between the end of the tremolo and the top side of the body. The gap should be around 3mm. To set this, adjust the tremolo law, tightening the screws if the gap is more than 3mm, loosening them if its less than 3mm.
4. Now replace the backplate, tune to pitch and enjoy your new-found pitch shifting abilites.

**CLAMPED:** This is advisable if you don't use or like the trem as it will give you a bit more sustain and the ability to bend strings without the other ones dropping in pitch.

1. Remove the backplate and observe how many springs are installed in the cavity. If there are 3 or less, add more until all 5 are installed AND/OR Turn the tremolo claw screw clockwise until the trem sits flat to the body at concert pitch. Personally I prefer the adding-springs method, as you only have to remove them again if you want to have a floating trem.
2. Now replace the backplate and enjoy that tad more depth and sustain.

### **Tremolo tuning tips**

There are many supposed 'methods' to stop the standard strat trem from going out of tune, but in my experince the following things are very helpful. First of all, make sure that the nut is well cut and clean. Next check that the string tree(s) behind the nut are not set too low, thus giving a severe break angle behind the nut. If they are raised so that the break angle is quite gradual, then the tuning

will be less likely to go out when you use the trem. One last thing, which has always worked for me, although I don't really know why, is the set-up of the springs in the tremolo cavity. Take a look at the diagram to see what I mean. Using 'my set-up' where you attach the springs to the inside 3 notches on the tremolo claw seems to improve the tuning.

### **Counteracting that Annoying Buzz**

You can reduce the buzz that single coil pickups are prone to by screening the internal cavities with adhesive backed aluminium tape. I have not done this myself, but if you have the confidence and soldering skills, you could give it a shot.

1. You need to remove the scratchplate and position it so that you can work at the cavity easily.
2. Now cut the aluminium tape into sections that will cover the entire surfaces of the cavity, making sure there are no gaps left anywhere, and that all separate pieces of tape overlap.
3. Earth it all by placing a few centimetres of bare wire underneath a section of tape and covering it FIRMLY for a good connection. Solder the wire from the tape to a pot to complete the circuit. A longer piece of wire is best so that you don't have to desolder it if you remove the scratchplate. The noise should now be significantly reduced, making your strat much more suitable for high-gain applications.

### **Why can't I get a really heavy distortion sound?**

Speaking of high gain applications, I have found many people go out and buy a strat, or a strat type guitar and a distortion pedal, then go home and wonder why they cannot achieve a really cool and heavy sounding distortion such as Nirvana or the Smashing Pumpkins. I believe (many may disagree) that the most important factor in achieving a heavy distortion is the pickup output. Of course a good pedal or amp will aid this process, but it eventually comes down to needing a hot pickup to drive distortion. Hot rail type pickups are good because they fit into the standard stratocaster routing, and don't tend to get boomy like some full size humbuckers can. Below is the Seymour Duncan diagram for wiring one of their hot rails pickups in plain full humbucking mode.

Kent Armstrong hot rails can be wired as follows: There should be five wires- red, green, black and white and a thick unshielded earth wire. To wire it up as a full output humbucker and nothing else you should do as follows: Solder together the black and white wires and insulate them. Solder both the thick earth wire and the green wire to the volume pot (ground) finally, solder the red wire to the selector switch.

I can't speak for any other brands, and I am not going to get into the complications of coil tapping or anything else. If you want to try this stuff get in touch with somebody who knows about pickups. This is a good mod if you want to get a really hot overdrive. It does eliminate the bridge/middle sound however, but you can't have everything without doing some more extensive wiring. Consider this if you have ever wondered how Kurt Cobain got a really heavy distortion from Fenders. I think that this mod on a good Strat is far better than the Jagstang model or the like. The Strat, unlike some more eccentric Fender designs has decent sustain and is well designed. I am not putting down Jaguars, Mustangs etc. I'd own them all if I could, but the Strat is just a foolproof design.

### **Help!!! My Strat isn't working any more!**

If you are unfortunate enough to find that one day your Strat just is not working any more, and the problem is a loose connection or wiring fault, then it is often useful to have a reference source showing how a Strat should be wired. Here is the Seyour Duncan diagram for the 'standard' way to wire a strat, that is with 3 single coil pickups, switch, volume pot and tone pot for neck and middle pickups. If your wiring set-up is at all different from this, then the diagram may well be of little use.

Always remember that there are many things that can go wrong apart from simply a wire coming loose. In cases like this, where all the connections are correct, you are always better to take the guitar to a good tech, who will be able to tell you what exactly is wrong.