



Guitar Pickup Troubleshooting Tips – Passive type pickups only.

| Problem | Possible Cause(s) | Remedy |
|---|---|--|
| No Output | <p>Short to ground at pots, switch, or output jack</p> <p>Open connection or cold solder joint in wiring</p> <p>Broken wires in pickup or cable</p> | <p>Visually check for shorts and correct. If you have an ohmmeter, check resistance across the connections going to the output jack with switch in different positions, and volume all the way up. You should get a reading approximately the resistance of the pickup. If you get a zero reading in any position, then there is a short. If the reading is infinite then there is an open circuit. Shorts can sometimes happen if components move when pickguard is installed.</p> <p>Reheat any solder joints that look crystalized at switch, pots and jack. Or try hooking a jumper clip from the hot output of a pickup straight to the wire going to the hot side of the output jack. If you get a sound, then there is an open connection somewhere in the wiring. Move the jumper back to each connection until the sound stops and you have found the open connection.</p> <p>Swap pickup, if problem goes away the pickup needs repairs.</p> |
| Weak output, with hollow sound in certain switch positions | Pickups wired out of phase | Swap hot and ground leads on one pickup. If there are three pickups it is better to do this on the bridge or neck pickup instead of the middle so the other one won't get the same problem. Strat pickups have had different magnet polarities at various times, even within the same brand. Phase can also be changed by reversing the magnet polarity, but I don't advise trying this at home. |
| High pitched squeal all the time, even when not playing the guitar. | Wires swapped at output jack | Reverse hot and ground leads at output jack. |
| Buzz, hiss, etc. | Bad ground or shielding – can be in the guitar or the amp. | <p>First try unplugging the guitar cable but leave the amp alone. If the noise stops it's in the guitar. If it doesn't it is in the amp or pedals.</p> <p>Rather than go through all the possibilities, here is a link to a good troubleshooting guide for these kinds of issues. http://www.guitarnuts.com/technical/electrical/trouble/index.php</p> |
| Very weak or no output | Magnets demagnetized | Rare but can happen. Touch the poles with a screwdriver, if there is no resistance to pulling it away, the magnets may have lost their charge. For example by contact with another pickup or a speaker magnet. Check dc resistance, if ohms are OK the pickup can be repaired by recharging the magnets. |
| DC Resistance Low to specs, pickup works ok | Possible internal short in pickup coil. Also possible the wire used was larger than average specs. | Pickup with an internal short in the coil can still be used as long as the output is ok and not intermittent. May not be reliable though. If the resistance is not too far off specs (say <1k,) it could simply be due to the wire that was used happened to be on the large side of the diameter spec and the pickup is fine. To check for a short to magnets in single coils measure the resistance from each lead to the magnets. If there is any reading except zero there is a short. Pickup should be rewound or replaced. |



| Problem | Possible Cause(s) | Remedy |
|---|--|--|
| Pickup changed- now too bright or no tone control | Tone capacitor bad or the wrong value | Tone capacitors seldom fail, but can be damaged due to heat of soldering, and some do fail in service. Try changing the capacitor(s). The larger the capacitor value, the darker the tone. |
| | | |
| | | |
| | | |
| | | |
| Problem | Possible Cause(s) | Remedy |

[Return to home page](#)

© Copyright 2011, Sonny Walton All rights reserved.

Terms of Use:

This pdf file can be downloaded and used for any noncommercial purpose as long as the reference to http://sonnywalton.com/Home_Page.php , all credits are included and copyright notice is retained.