

## Hum Balance Control Method Pros & Cons

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The hum balance control (a grounded pot connected between the two heater filaments), found on many later silverface amps gives you the ability to find the "sweet spot" between the heater filaments for the least amount of hum.

Although using an existing heater winding center tap or the twin 100 ohm resistor method theoretically gives you a precise center tap ground, this method doesn't always have the ability to balance ancillary parts of the amp that may be causing slight phase differences between the heater filaments, which in turn cause increased hum.

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General consensus is that the 100 Ohm pot method does allow you to find the so called "sweet spot", which all amps have, but it's usually a very subtle difference.

An additional consideration for using the twin 100 ohm resistor in an older Fender amps where the the heater line center tap has been lifted, is that in case of a heater/cathode short in the output network, which could burn the ct winding on a transformer, this method instead would cause such a short to just burn the [½ watt] resistors. (A lot cheaper than burning up the transformer winding).