

# Seymour Duncan®

## TUBES

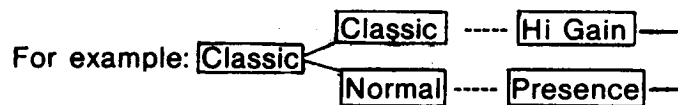
Just like all other parts in the Convertible amps, the tubes were selected for providing the most musical tones. Tubes can be temperamental, but there are things that can be done to avoid problems.

### Module Preamp Tubes

The 12AX7 Tungstram tubes will give you the least amount of noise and the sweetest tone. However, they develop a microphonic ringing when subjected to a lot of bumps from traveling.

Typically, microphonics are most sensitive from the input module (the module that's shared by both channels). Here are some ways to eliminate microphonics.

1. You can swap the tube from another preamp module with the input module.
2. If you are using two identical modules and one of them is the input module, just switch the position of the two modules.



Just take the two "Classic" modules and switch their positions. If the second "Classic" module's tube does not have microphonics you've solved the problem.

3. Polish 12AX7 tubes are constructed differently than the Tungstrams. Although Polish tubes are noisier and harder sounding, they are less subject to microphonics. Radio Shack and other companies offer Polish tubes. "Made in Poland" is stamped directly on those tubes so you can be sure where they come from.
4. Try using an FET or IC module in the input. Because neither of these are tube designs, you'll get no microphonics. For a warmer tube sound, use an FET module in the input stage. If you're after a harder solid-state sound, use an IC module in the input stage.

If you're involved in a touring schedule and you want to avoid tube related problems, bring some extra tubes with you for all your equipment.

## SPARE TUBE

There is a spare 12AU7 tube mounted inside your Convertible amp. This is a stock replacement tube for the Cascode module.

We also discovered an interesting sound when replacing the standard 12AX7 tube in the Classic module with a 12AU7 tube. If you use a Classic module in the input stage (first position), try using the 12AU7 tube there. You'll notice a little less output volume, but it will also allow you to get a louder, clearer rhythm. Try this setup:



If you play a guitar with a high output humbucker pickup and you're having problems with a loud, clean rhythm, this could easily provide the sound you're after.