

Bass Tweaks: Calling Dr. Feelgood



TECH TIPS

BY JACK SCHWARTZ

DIAGNOSIS (ROUGH INTONATION)

Fender Guitar Product Specialist **Jack Schwarz** hosts in-store clinics worldwide, demonstrating or working on Fender and Guild guitars. A guitarist since age 10, he enjoys teaching people how to get the best possible performance from their guitars.

YOUR FIRST AID KIT SHOULD INCLUDE:

- ✓ 6" machinist's rule
- ✓ Polish and cloth
- ✓ Tape measure
- ✓ Phillips screwdriver
- ✓ Electric guitar capo
- ✓ Electronic tuner
- ✓ Set of automotive feeler gauges (.002-.025)
- ✓ Wire cutters
- ✓ Truss Rod Allen Wrench (size varies by model)
- ✓ Bridge Saddle Allen Wrench (size varies by model)



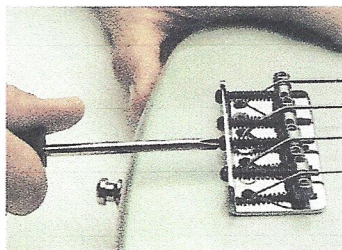
Whether from intense playing, traveling or just a change in weather, sometimes your bass needs some minor surgery to get it back in shape. Here's the prescription for making your bass feel great.

STRUNG OUT? (GET WIRED)

Your strings can breathe life into your bass...or not. In fact, friends, *the tone starts here!* (Hint, hint)

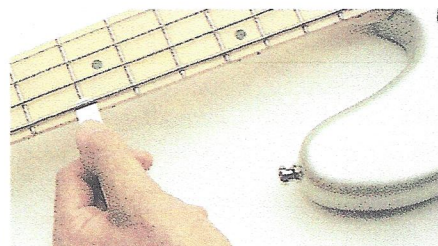
One string at a time, carefully cut each new string to length, allowing for two or three neat winds around the post and avoiding overlaps. After the whole set is changed and tuned, give each string a few tugs—re-tuning as you go.

Double the measurement from inside the nut to the center of the 12th fretwire. Adjust the 1st-string bridge saddle to this length, measuring from inside the nut to where the string contacts the saddle. Move the 2nd-string saddle back from the first's by a distance equal to the 2nd-string's gauge. (If the gauge is .060", move the saddle back .060".) Move the 3rd- and 4th- (and 5th-, if appropriate) string saddles back using the same method.



SET THE BONE (TRUSS-ROD)

Check your tuning. With a capo at the 1st fret, depress the 4th-string at the last fret. Now, with a feeler gauge, check the gap between the bottom of the string and the top of the 8th fret—it should be approximately .015".



Adjustment at headstock (Allen wrench): If neck is too concave, turn truss-rod nut counter-clockwise. Too convex—turn clockwise.

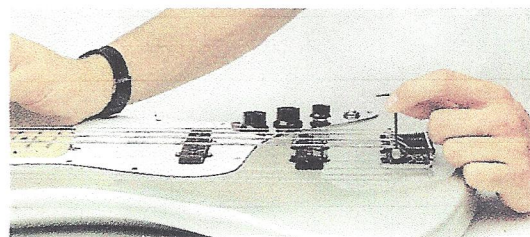
Adjustment at neck joint (Phillips screwdriver): If neck is too concave, turn truss-rod nut clock-wise. Too convex—turn counter-clockwise.

Check your tuning, then check the gap

with the feeler gauge. Note: With truss rod adjustments, if you feel excessive resistance (or you're just not comfortable performing this adjustment) take your bass to an authorized Fender service center.

START THERAPY (ACTION)

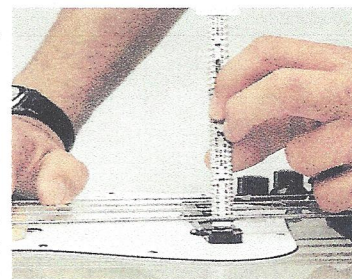
Check tuning. Using the 6" machinist's rule, measure the distance between the bottom of the strings and top of the 17th fret. Adjust the bridge saddles



until the string-to-fret measurement equals 6/64", then re-tune. Experiment with the height until the desired sound and feel is achieved. (Note: Players with a light touch can get away with lower action, others need higher action to avoid rattles.)

CHECK THE EARS (PICKUPS)

Setting pickups too high can cause a number of weirdnesses. Depress strings at last fret. Using a 6" ruler measure the distance from the bottom of the 1st and 4th strings to top of the pole piece. Rule of thumb: the distance should be greatest at the 4th string neck pickup and closest at the 1st string bridge position. 8/64" is a good starting measurement. The distance will vary according to the amount of magnetic pull of the pickup.



STITCH 'EM UP (FINAL INTONATION)

Tune again. Now, with the pickup selector in the middle and volume and tone controls to the max, Compare each string's 12th fret harmonic to fretted note. If it's sharp, adjust the saddle away from neck. If flat, adjust the saddle toward neck. Take your time. Retune, play and make additional adjustments as needed.

POST OP

Remember to wipe your strings, neck, and bridge with a lint-free cloth after playing. And avoid putting your bass anyplace you wouldn't be comfortable—anyplace too hot, cold, humid or dry.