

# Guitar Technical Services

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TM

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## TUNING DIFFICULTIES

These often occur and can be due to a number and combination of reasons:

**Not changing the strings regularly.** As strings get older the intonation will become flattened in pitch. Don't alter the set-up - buy some new strings! With regular playing the strings will last between 1 and 3 months - professional players often use 1 set per gig. The strings should be changed regularly - if you play for several hours each day then strings should be changed every 3 to 7 days! Strings can deteriorate more quickly than normal due to any combination of hard strumming, vibrato, tremolo use and alkali-salts/electrolytic effect from perspiration off the hands. Each person has a different rate of perspiration - some players lose such large amounts of sweat through their hands that the tone and brilliance of the strings can be lost in one night's playing!

**Excessive finger pressure on the string.** Use only the amount of pressure needed to sound the note cleanly off the fret. If more pressure is applied, premature fret and fingerboard wear occur, together with RAISING the pitch of the fretted note.

**Poor attachment of strings to machine heads.** Use at least 3 turns on non-locking types (if the string lock method is not used).

**Tuning the string down to find the correct note.** WRONG ! Always tune up to meet the correct note because of lash in the gears of the machine heads.

**Over tightening/overstretching.** The string can be overstretched to the point where it is damaged i.e. the outer wrap becomes loose. However, pre-stretching strings when fitting them is very important for stability and will not damage the string when done correctly - see separate, general instructions for **Fitting New Strings** written as **Standard\_Guitar\_Restring.pdf**. Avoid excessive use of tremolo if fitted.

**Incorrect intonation.** The saddle is in wrong place or too high. This needs to be rectified by a qualified guitar technician. Acoustic guitar intonation is set by the manufacturer. It is possible for the bridge plate to be incorrectly positioned on the body top or the action to be too high.

**Sensitive neck.** Some instrument necks are acutely affected by variations in temperature so that the strings are too low in cold atmospheres and the action is higher in warm surroundings. There is no long term or permanent solution - live with it, only play in stable/average temperatures or change the guitar.

**Wrong frame of mind / tone deaf.** Happens to us all once in a lifetime - take the day off!

**String caught up by friction at the nut (string holder) or bridge.** Lubricate with graphite or Teflon Oil at all points where the string touches except string locks and clamps.

**Neck to body loose.** Neck bolts may have become loose - tighten them up. If you can't tighten them they may have ripped threads - seek help from a qualified guitar technician,.

**SINGLE COIL pickups may be too close to the strings (electric guitars only).** Pick-up magnets can pull on the string leading to a false reading/note. Reduce the height of the pickup. Always use NECK pickup on full volume to tune the guitar and check intonation.

**Nylon strung Spanish/Classical Guitars.** These may take a week or more to settle down after changing the strings. This is mainly caused by the nylon strings slipping on the machine heads, especially the treble strings. All nylon strings should be double locked onto the machine head post - see separate instructions for **Fitting New Strings** written as **Classical\_Spanish\_Restring.pdf**