



Precision Fretwork

A word about fret work...

Frets are the foundation of every fretted instrument. Therefore a setup is only as good as frets allow. Typically guitar repair shops perform fret work using traditional methods. The strings are removed releasing all tension from the neck. The truss rod is then loosened in an attempt to adjust the neck. With a loose truss rod however, the non-tensioned neck takes on a different contour than a neck adjusted with string tension. Furthermore there is no solid foundation to perform fret work since the guitar neck flexes throughout the process, causing variations in the fret heights. The result is increased fret buzz and a compromised setup. The only resolve is to increase string height and neck relief; raising the overall action. Although this method has produced fairly acceptable results in the past, it unfortunately is hit or miss and results in a less than optimal fret job.

D'Angelo Guitars' Method

For any type of fretwork the guitar neck needs first to be optimally adjusted, but it must be adjusted under normal string tension, in the playing position. This is the ultimate position for the guitar neck during fret work, Period! Attempting to adjust a guitar neck into a similar position without string tension may come close, but it will not cause the neck to take on the exact same contour. It is not, and cannot be the same. The key is to simulate string tension with the strings removed prior to performing any type of fret work. Once this is achieved the entire length of the neck is supported to maintain this position from start to finish. It makes perfect sense to perform all fret work in this manner to produce optimal results. Phil achieves this with a device he's built and calls the "Guitar Stretcher."



The "Guitar Stretcher" allows the exact position of the optimally adjusted guitar neck to be recorded in the playing position using precision dial indicators. Once the strings are removed the "Guitar Stretcher" makes it possible to return the guitar neck exactly where it was previously recorded by recreating that exact string tension. Supporting the entire length of the guitar neck prevents it from any movement and firmly maintains its position as the work is carried out. This process is especially important for complete guitar refrets

as it eliminates guesswork concerning fret compression, an aspect of refrets often neglected by repairmen unfamiliar with the concept. (Fret Compression is the stiffening of the neck that occurs during fret installation. Fret compression has a direct affect on the effectiveness of a truss rod as well as sustain).

This method has been the secret weapon of top luthiers around the world known for extraordinary fret work. It undoubtedly sets the foundation for a great guitar setup, which will set your guitar apart from the rest. It is a must for achieving low action and minimal string buzz with virtually no neck relief. Yes, a near perfectly straight neck. A little O.C.D.? Maybe. So you may as well know that at this stage of the process, each individual fret height is examined and fine-tuned if necessary. The job is concluded with perfectly crowned frets that undergo seven different stages of polishing to a mirror shine for clean tone and precise intonation. You may expect to pay more for this service, however, the costs are amazingly comparable within the industry. A better fret job for a better price. What are you waiting for?

"I look forward to seeing you and your guitars soon!"

Phil D'Angelo