Neck Reset Procedure

(After all other structural work has been done)
In short: Straight edge should project to top of bridge + Top Deflection amount.

1- String instrument to pitch (use the same string gauge that will be used on instrument).
2- Adjust neck as straight as possible (remove any relief).
3- Place straight edge on the middle of the fretboard so the end butts up against middle/highest point of bridge.
4- Measure difference from top of bridge (assuming bridge is of good height) to bottom of straight edge. Note this amount (**A**)
   4b- Also note the distance from *surface of the instrument top to bottom of straight edge.*

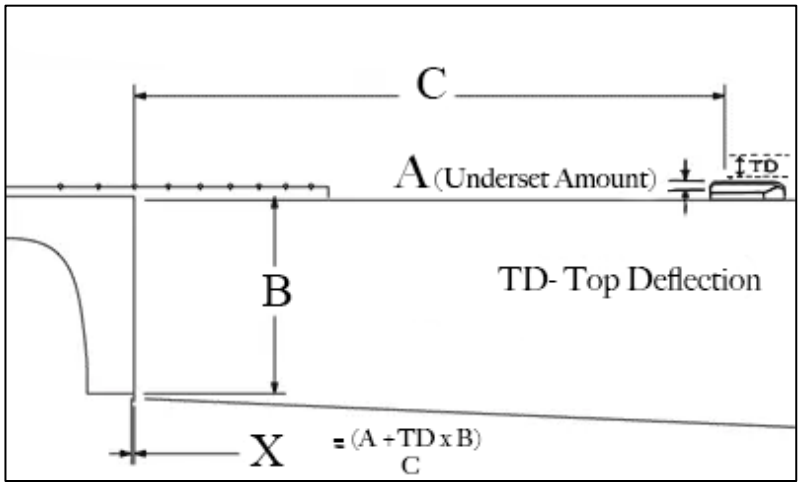
5- Relax strings and again measure distance from *surface of the instrument top to bottom of straight edge.* This measurement difference is the Top Deflection **TD** and should be added to **A** to get the most accurate final reck reset result. *It is not essential to add the TD amount in the formula as it can be taken into account on top of the formula total.*

For a vintage guitar with no truss rod, note the neck relief Before/After string tension for future reference (compression fretting maybe needed). Rest the straight edge on the 7th fret (effectively halving the amount of relief being measured, simulating a straighter neck). A heat treatment of the neck may be is a reasonable first temporary measure before setting the neck before employing more permanent solutions such as sanding, compression fretting etc, which should be *done* after a neck reset.

A = Underset amount- (Difference between top of bridge & bottom of straight edge.)
B = Length from heel cap to *bottom* of fingerboard.
C = Length from body join fret to center of saddle slot.
TD= Top deflection- How much the top rises *under string tension*.
X = ***Amount of material to be removed from bottom of heel.***

E.G
A = 0.175 (thousands of an inch)
B = 3.5
C = 12
TD = 0.015

0.175 + .015 =
0.190 x 3.5 ÷ 12 =
0.055" to be removed from heel
(Total is 0.051" if TD is not considered)



$$X = \frac{(A + TD) \times B}{C}$$

X =
Amount to remove from bottom of heel, tapering to nothing at the top.