

## II.2. The Bridge

### II.2.A Making a Bridge

To measure for the position of the *bridge*, take a millimeter tape measure and measure 325mm from the edge of the nut to the top of the belly (figure 38). With a white oil pastel marker, draw a line at the 325mm mark—this is where the bridge should be positioned.

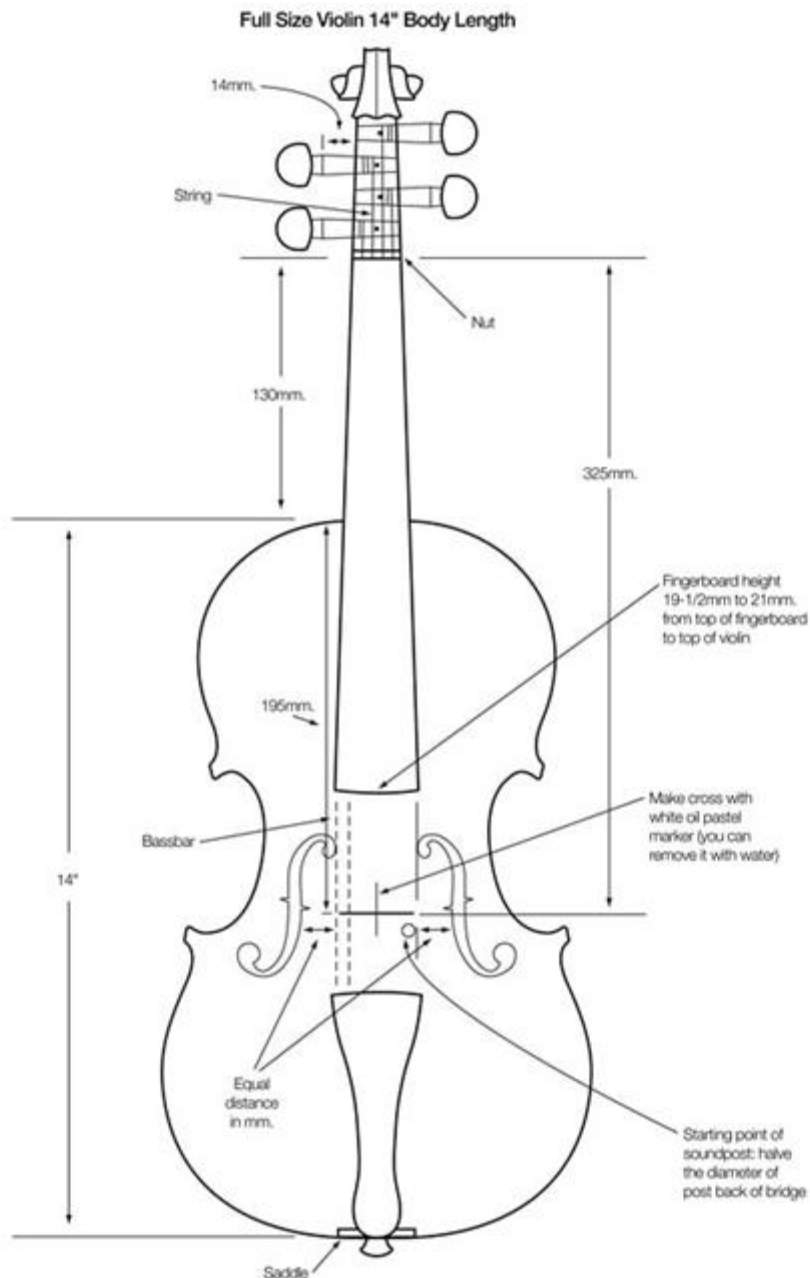


Fig. 38 – Measuring for the bridge position

# CONTENTS

Introduction	4
<b>I. BOW REHAIRING</b>	<b>5</b>
1. Removing the Wedges	5
2. Cleaning and Polishing the Parts	6
3. Preparing the Bulk Horsehair	7
4. Measuring the Hank with the Feeler Gauge	7
5. Tying the Hair Hank for the Frog	7
6. Inserting the Tied End in the Cavity	9
7. Making the Frog Wedge	10
8. Inserting the Slide	10
9. Installing the Ring	11
10. Making the Ring Wedge	11
11. Cutting the Rough Length of Hair	12
12. Wetting and Combing the Hair	13
13. Measuring the Exact Hair Length	13
14. Wetting and Combing the Hair Again	14
15. Tying the Hair with Wire	14
16. Inserting the Hair into the Tip	16
17. Making the Tip Wedge	17
18. Heating and Rosining the Hair	18
19. Bow Lengths	19
<b>II. INSTRUMENT REPAIR AND RESTORATION</b>	<b>20</b>
1. The Nut	21
A. Correcting the Old Nut	21
B. Filling the Nut Grooves	21
C. Spacing and Cutting the Nut Grooves	21
D. Making a New Nut	22
2. The Bridge	23
A. Making a Bridge	23
B. Cutting the Bridge Feet	24
C. Measuring the Rough String Height and Spacing for the Bridge	24
D. Getting Accurate Heights on the Nut and Bridge	26
E. Measuring the String Height for the E String	26
F. Measuring the String Height for the G String	27
G. Measuring the String Heights for the A and D Strings	27
H. Bridge Curve Template	27
I. Thinning Down the Bridge	28

# VIOLIN

## REPAIR GUIDE

Illustrated Step-by-Step Instructions  
for Bow Rehairing, Repair and Restoration  
of the Violin, Viola, Cello and String Bass

MORE THAN 100 DETAILED ILLUSTRATIONS!

U.S. \$9.95



HL00331150



HAL•LEONARD®

ISBN 0-634-07031-2



9 780634 070310

J. Bridge String Spacing	28
K. Making Cuts to the Bridge	28
L. Installing the Parchment	28
<b>3. The Pegs</b>	<b>30</b>
A. Reaming the Peg Holes	30
B. Adjusting the Peg Shaper	32
C. Cutting the Pegs with a Shaper	32
D. Sanding the Pegs	32
E. Lubricating the Pegs	32
F. Drilling the Holes and Cutting the Ends	32
<b>4. The Soundpost</b>	<b>33</b>
A. Making the Soundpost	33
B. Measuring the Starting Point of Post on Top	34
C. Measuring the Starting Point of Post on Back	34
D. Making the Angle to the Bottom End of Post on Back of Violin	35
E. Making the Angle to the Top End of Post on Top of Violin and Measuring the Exact Length of the Soundpost	35
F. Inserting the Soundpost in the Violin	35
<b>5. The Saddle</b>	<b>37</b>
Making a Saddle	
<b>6. Gluing, Refinishing, and Resetting</b>	<b>38</b>
A. Making the Glue Pot and Hide Glue	38
B. Gluing the Fingerboard	39
C. Refinishing the Neck	41
D. Gluing the Seams	42
E. Straightening the Fingerboard	43
F. Removing the Neck from the Dovetail Joint	44
G. Resetting the Neck	44
H. Gluing the Neck into the Dovetail Joint	47
<b>Appendices</b>	
A. Standard Violin Measurements	49
B. Standard Viola Measurements	50
C. Standard Cello Measurements	51
D. Tools, Instruments, and Materials	52
<b>Glossary</b>	<b>60</b>