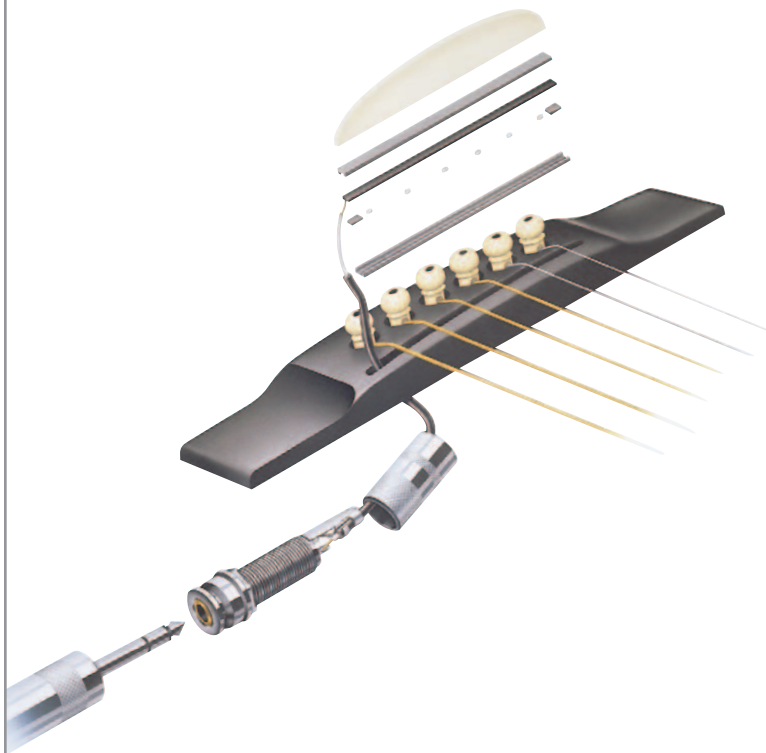


**Installation Instructions**

# ***Martin Second Generation Thinline 332<sup>®</sup>***

**Acoustic Sound Reinforcement System**



**Martin & Co.**  
EST. 1833  
martinguitar.com

### Parts List

- (1) Martin Second Generation Thinline Pickup
- (1) Small Hex Nut 1/2"
- (1) Large Hex Nut 9/16"
- (1) 1/4" Stereo End Pin Jack
- (1) Knurled Shield Cap
- (1) Serrated Lock Washer
- (1) Dress Washer (Thin)
- (1) Dress Washer (Thick)
- (1) Threaded Strap Attachment

*All specifications subject to change without notice.*

### Tools

- Plunge Router with 3/32" (2.4mm) cutter
- Caliper
- 400 Grit Sandpaper or Scrapper
- Soldering Iron (30 watt max)
- Rosin Core Solder
- Wire Strippers
- 1/2" Open End Wrench
- 3/32" (2mm) Allen Wrench
- 15/32" (11.9mm) Tapered Reamer
- Variable Speed Drill
- X-Acto® Saw
- Center Punch
- 1/8" (3.15mm) Twist Drill
- 15/32" (11.9mm) Spade Drill Bit

## INTRODUCTION

**The Martin Thinline 332®** is string-sensitive, piezo-ceramic under-saddle pickups. It senses individual string vibrations via six fully-shielded piezo elements. The pickup includes a Fishman designed Switchjack™ endpin jack and can be used without a preamp. The Thinline 332 system delivers a natural, acoustic sound with plenty of attack for percussive playing styles.

**PART I –INSTALLING THE PICKUP**

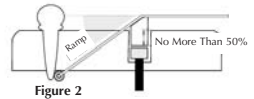
**INSTALLATION BY A QUALIFIED PROFESSIONAL REPAIRMAN IS STRONGLY RECOMMENDED. C. F. MARTIN & CO., INC. WILL NOT BE RESPONSIBLE FOR ANY DAMAGES THAT MAY RESULT FROM IMPROPER INSTALLATION.**

**Mechanical Factors Affecting Pickup Performance**

Before you install the pickup, make sure the bridge and saddle are within our recommended "safe zone" of usable parameters.

**Break Angle**

For the pickup to perform optimally, there should be a 20° (minimum) string break angle across the back of the saddle. An adequate break angle can often be realized by "ramping" the string slots. In extreme cases, where the break angle is much less than 20° and the saddle is so low that it is nearly flush to the top of the bridge, the instrument probably requires a neck reset. In these cases, resetting the neck to a higher angle will restore the saddle height and the string break angle required for good pickup performance.

**50/50 Rule**

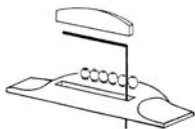
We have found that there is a critical relationship between the overall saddle height and the bridge slot depth. For adequate mechanical coupling and pickup balance, we recommend that the saddle slot depth (with pickup installed) measures no more than 50% of the total height of the saddle (see figure 2). If the slot measures more than 50% of the total height of the saddle, balance and/or output level of the pickup may suffer. In these cases, add a hardwood shim under the pickup. To determine the shim's thickness, subtract 1/2 of the total saddle height from the slot depth. Then remove an equal amount of material from the bottom of the saddle.

**Exception to the 50/50 rule:**

Many Martin guitars will have adequate down-bearing on the saddle, even when there is less than 50% of the saddle height appearing above the slot. This is due to the close proximity of the bridge pins to the saddle slot. These guitars will generally perform very well and you may disregard the 50/50 rule.

**Prepare the Saddle Slot**

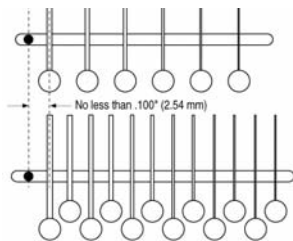
A large percentage of string balance problems with undersaddle pickups can be traced to an unevenly cut or warped saddle slot. Irregularities on the bottom or sides of the slot can often prevent the saddle from uniformly pressurizing the pickup. For this reason, we strongly recommend that before you install any undersaddle pickup, re-mill an existing slot with a plunge router, jugged up in an appropriate slot cutting fixture.



1. Rout a .094" (2.38 mm) wide slot.
2. Be certain that the bottom of the slot is flat. Deepen an existing slot only enough to obtain a clean, flat surface.

**Locate the Wire Hole**

1. Locate the center of the wire hole no less than .234" (5.9 mm) from the closest string.
2. Mark the location where the wire will enter the saddle slot. Center the mark between the walls (width) of the slot.
3. Drill a .094" hole.
4. Clear wood chips and foreign materials from the saddle slot.
5. Carefully insert (do not bend) the pickup. The fit must be loose in the slot, without binding on the sides or the ends of the pickup. If the ends of the pick-up come in contact with the saddle slot, pickup failure could result.



## Prepare the Saddle

We highly recommend the use of a genuine Martin Micarta™ saddle.

1. Prepare a .094" or 2.38mm wide saddle. For adequate pickup performance, the bottom and sides of the saddle must be absolutely FLAT.
2. Remove only enough material from the width of the saddle to provide a sliding fit in the slot. To test the fit, the saddle should slide easily in the slot, but should not fall out when overturned. To maintain your current action, the new saddle must be .048" shorter in height than your current saddle.

## PART II – INSTALLING THE ENDPIN JACK

### Stereo Switching Endpin Jack

Our new SWITCHJACK™ T•R•S•S (Tip/Ring/Sleeve/Switch) Stereo Switching Endpin Jack allows simultaneous stereo operation and battery switching. This new configuration now simplifies stereo wiring with many pickup combinations that were previously incompatible.

- Fishman-designed, industry standard endpin jack.
- New internal contact geometry for reliable, noiseless operation and better plug retention.

### PREPARE THE ENDPIN HOLE FOR THE JACK

There are two ways to widen the endpin hole to accept the stereo endpin jack.

#### Slow and Safe

If you have the time, this is the preferred method. Remove the endpin and widen the hole to size with a  $1^{5/32}$ " (11.9 mm) Two-step endpin jack reamer may be obtained in the U. S. and Canada through Stuart MacDonald at 1-800-848-2273 Part#4323

#### OR ...Quick & Clean

The objective here is to quickly drill out the endpin jack hole, with the endpin or other suitable plug in place. You may remove a loose endpin and refasten it in the endblock with cyanoacrylate glue before starting the procedure.

## Thinline 332®

**Note:** We do not recommend this method for instruments with brittle ornamental veneers (ex: abalone) around the endblock.

### Quick & Clean *(continued)*

1. Apply masking tape around the endblock area to protect the instrument.
2. Locate an X-Acto® saw blade 1/16" (1.6mm) away from the body and saw off the endpin.
3. Centerpunch a guide hole in the center of the trimmed endpin.
4. Drill a 1/8" (3.2mm) pilot hole through the endpin.
5. Line up a 15/32" (11.9mm) Spade bit in the pilot hole and begin drilling. Maintain a perpendicular plunge in relation to the instrument. Use steady (but not heavy) pressure, especially as the drill exits inside the guitar.
6. To avoid damage to the instrument, let the drill come to a complete stop before removing it from the hole.
7. Remove masking tape immediately to avoid damaging finish.

## PART III – WIRING THE ENDPIN JACK

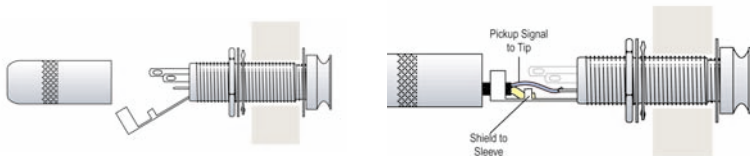
### Wiring

To gain better access to the Tip, Ring and Switch terminals, gently bend back the Strain Relief/Sleeve tab, before you begin to solder.

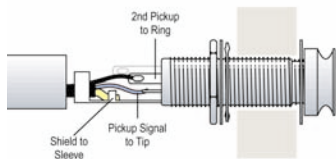
Protect the guitar top from solder or rosin splatter by using a sheet of cardboard or canvas as a work surface above your guitar.

There are three possible ways to wire the stereo switching endpin jack to the Thinline 332®.

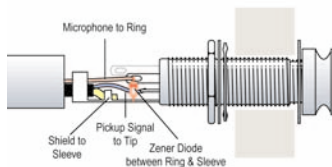
### Mono Wiring to the Thinline 332®



### Optional Stereo Wiring

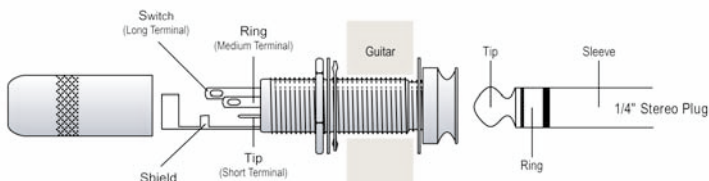


Thinline 332® and a Second Pickup



Thinline 332® and a Microphone

## ENDPIN JACK PARTS IDENTIFICATION GUIDE



## RELATED ACCESSORIES

### Martin Thinline Active Jack™ Preamp "Retrofit"

(Upgrades Thinline 332® to a 332+Plus™)

Martin Item #24AAAJ

### Martin/Fishman Pro-EQII®

("Outboard" Equalizer Unit)

Martin Item #24PROEQ2

### Martin Porta-Con® Acoustic Preamp

(For External Uninstalled Use)

Martin Item #24CEPQ2

Available Through Your Local Martin Dealership

## LIMITED WARRANTY

The Martin Second Generation Thinline 332® Pickup is designed and manufactured by Fishman Transducers Inc. to the exact specifications of C. F. Martin & Co., Inc. and is subjected to 100% testing in an acoustic guitar environment. Should you experience any difficulty, contact C. F. Martin & Co., Inc. for assistance. These devices are warranted to function properly for a period of 90 days from the date of purchase. If this pickup fails to function properly within the warranty period, free repair, and the option of replacement or refund in the event that C. F. Martin & Co., Inc. is unable to facilitate repair, are C. F. Martin & Co.'s only obligations. This warranty does not cover any consequential damages, damage to the instrument, or to the pickup due to misuse, mishandling (i.e. bending, twisting or unauthorized modification), incorrect installation, accident, or neglect. C. F. Martin & Co., Inc. retains the right to make such determination on the basis of a factory inspection. Products shipped to C. F. Martin & Co., Inc. must be shipped prepaid. This warranty remains valid only if repairs are facilitated by C. F. Martin & Co., Inc.. This warranty gives specific legal rights that vary from state to state. It is suggested that you retain the dealer's bill of sale as evidence of date of purchase. Thinline® Pickups are covered by the following U. S. Patents: 4,727,634; 4,774,867; 4,944,209 & 5,029,375. Additional U.S. and foreign patents are pending.

**Please read the instructions carefully.  
For technical assistance, contact C. F. Martin & Co.  
customer service at 1 (800) 633-2060.**

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All specifications subject to change without notice.

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