



FERNANDES

G U I T A R S

SINCE 1969

OWNERS MANUAL and WARRANTY

FERNANDES

G U I T A R S

FERNANDES GUITARS SINCE 1969

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Thank you for choosing Fernandes,

To uphold our ongoing commitment to customer satisfaction and high quality products, we need to hear from you, our valued customer. By completing and returning the warranty registration card, you will be able to receive updates on Fernandes products. This information will also help us develop new products that best meet your needs and interests. Thank you!

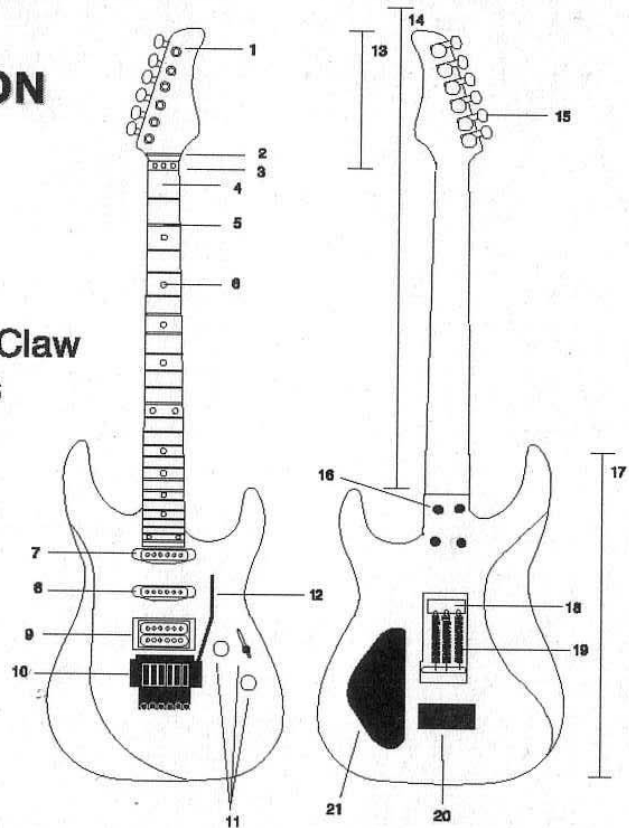
All fine instruments require periodic care and maintenance. Your new guitar or bass is built to last a lifetime. A few simple maintenance procedures will help you keep your instrument playing like new.

We strongly recommend the purchase and use of a Fernandes soft or hardshell case. Fernandes cases offer the best possible protection against damage.

Always store the instrument at room temperature. Avoid any excessively hot or cold, damp or dry conditions. Keep your instrument tuned to pitch under normal playing and storage situations. When traveling by air or if the instrument is to be stored for a long period of time, reduce the string tension slightly, one or two turns of each tuning key will be adequate.

GUITAR PARTS IDENTIFICATION

- | | |
|----------------------|-------------------------|
| 1. Tuning Post | 14. Neck |
| 2. String Tree | 15. Tuning Keys |
| 3. Nut | 16. Neck Bolts |
| 4. Fingerboard | 17. Body |
| 5. Frets | 18. Tremolo Spring Claw |
| 6. Position Markers | 19. Tremolo Springs |
| 7. Neck Pickup | 20. Battery Box |
| 8. Middle Pickup | 21. Control Cavity |
| 9. Bridge Pickup | |
| 10. Bridge (Tremolo) | |
| 11. Controls | |
| 12. Tremolo Arm | |
| 13. Headstock | |



General Maintenance

Fingerboard:

During use, the fingerboard may become wet with sweat. Eventually, this may cause the fingerboard to rot, crack, or become moldy. To prevent build up and as a good maintenance routine, use a dry cloth to wipe the fingerboard and strings clean after each use of the instrument.

Body finish:

The finish may become sticky from sweat and dirt in areas where you rest your arm or picking hand. Clean off any dirt or residue with a dry, soft piece of cloth using a circular pattern. If there is a heavy build up, try dampening the cloth in warm water or guitar polish. Never use solvents or abrasive cleaners.

Metallic parts:

Clean off any dirt or residue with a dry, soft piece of cloth. Sweat in particular, must be completely wiped off to prevent rusting. As a good maintenance routine, thoroughly clean and lubricate these parts when you change strings.

TUNING

Tuning of the instrument is adjusted by turning the tuning keys. On instruments with locking tremolos the locking nut must be loosened using the included hex key before the tuning keys can be turned, fine tuning is adjusted by using the fine tuners on the bridge. Counterclockwise rotation of the tuning keys raises the pitch of the strings. Clockwise rotation of the tuning keys lowers the pitch of the strings. Tune the strings starting with the lowest string. After each string has been tuned to pitch go back and recheck the tuning on all the strings. Tuning the remaining strings may be affected by tuning of the previously tuned strings making it necessary to recheck the tuning of all the strings twice. New strings tend to stretch and detune. Stretch the strings after the initial tuning by bending notes and playing aggressively. After you have thoroughly stretched the strings repeat the tuning process.

There are two methods of tuning a guitar or bass.

1. Tuning with an Electronic Tuner

The use of a tuning meter allows you to tune each string visually. Connect one end of the instrument cable to the jack of the instrument, and the other end to the tuning meter.

GUITAR TUNING

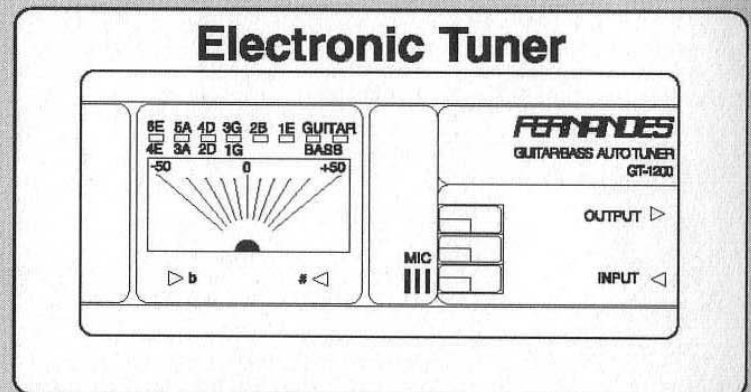
Tune the open strings one at a time, starting with the low E string then tune the A, D, G, B, and E strings.

BASS TUNING

Tune the open strings one at a time starting with the low E string then tune the A, D, and G strings.

5 STRING BASS

Tune the strings one at a time starting with the low B string then tune the E, A, D and G strings.



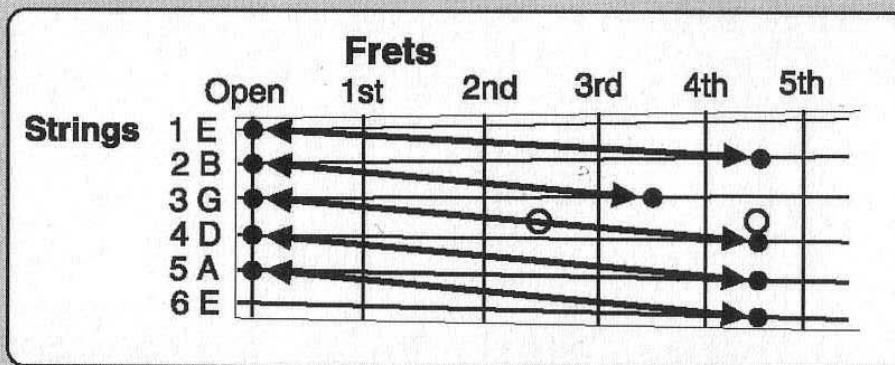
Note: Guitar and bass strings are called the 1st, 2nd, etc., starting with the lightest string.

2. Tuning Manually

Use a standard fixed pitch, such as "A=440", as the reference in tuning the other strings.

GUITAR TUNING

- (1) Tune the open 5th string note, to A=440, with a tuning fork, piano or tuner.
- (2) Tune the 5th fret note on the 6th string to match the tuning of the open 5th string note.
- (3) Tune the open 4th string note to match the tuning of the 5th fret note on the 5th string.
- (4) Tune the open 3rd string note to match the tuning of the 5th fret note on the 5th string.
- (5) Tune the open 2nd string note to match the tuning of the 4th fret note on the 3rd string.
- (6) Tune the open 1st string note to match the tuning of the 5th fret note on the 2nd string.



BASS TUNING

- (1) Tune the open 3rd string note to A=440 with a tuning fork, piano or tuner.
- (2) Tune the 5th fret note on the 4th string to match the tuning of the open 3rd string note.
- (3) **For 5 string basses:** Tune the 5th fret note on the 5th string to match the tuning of the open 4th string note.
- (4) Tune the open 2nd string note to match the tuning of the 5th fret note on the 3rd string.
- (5) Tune the open 1st string note to match the tuning of the 5th fret note on the 2nd string.



STRINGS

We recommend frequent string changes for optimum sound and performance. A rule of thumb in determining when to replace the strings are when the sound becomes dull and lifeless, or when the strings become rusty. Do not replace individual strings, replace the entire set. Old and new strings not only sound different from each other, but may cause faulty intonation that makes correct tuning difficult.

NOTE: Changing to a different gauge of strings will result in the need for truss rod, tremolo, action, or intonation adjustment.

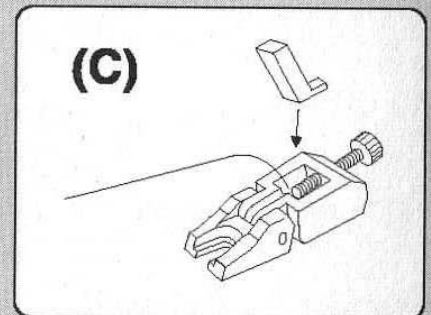
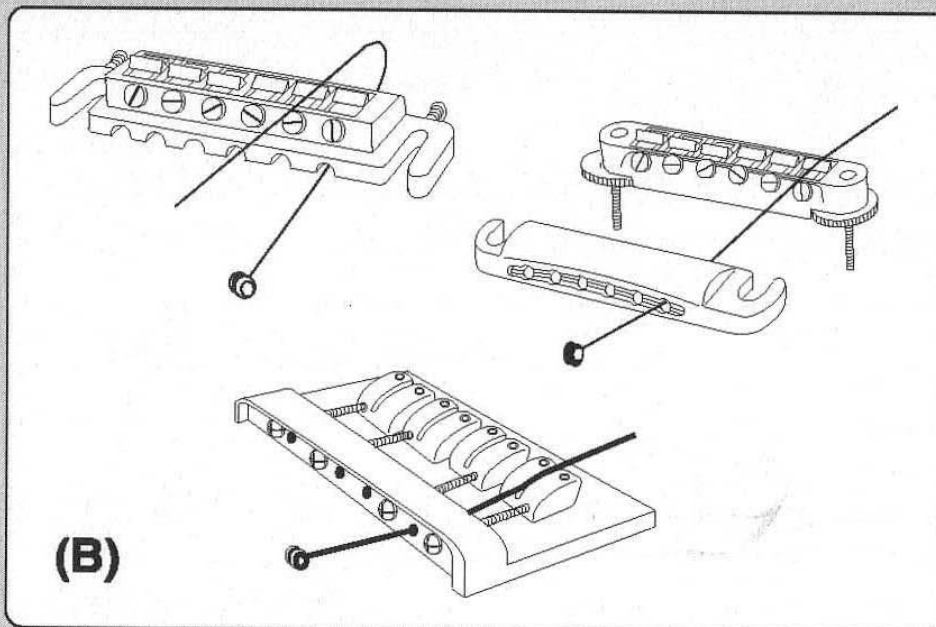
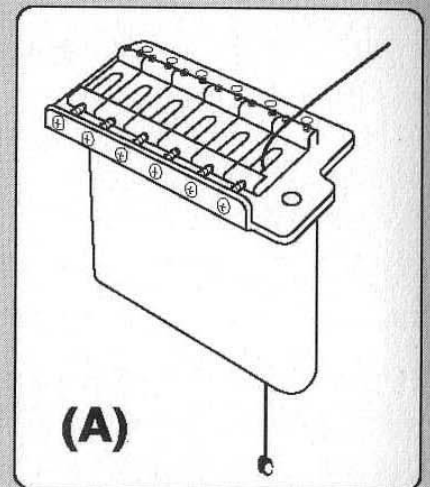
How to Replace Strings

1. First, secure the ball end of the string to the bridge. There are several methods, depending on the type of bridge.

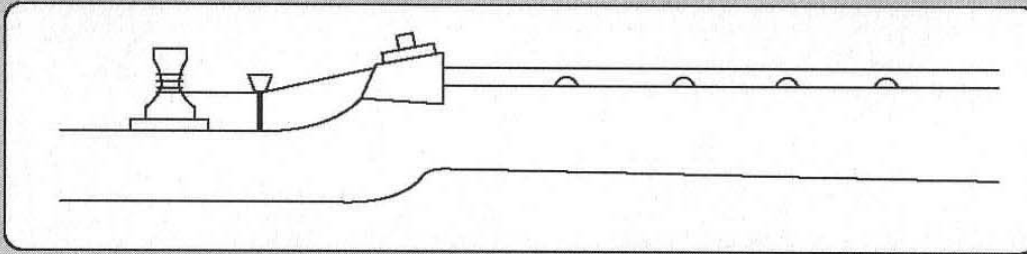
(A) The string is thread through the back of the body.

(B) The string is thread through the back of the tailpiece or bridge.

(C) Locking Tremolos: Remove the ball ends with wire cutters, then insert the string into the gap at the front of the string tightening block and anchor the strings by tightening the locking screws.



2. After anchoring the string, pass it over the nut, under the string tree, and through the hole in the tuning post at the headstock. Wind the string to pitch using the tuning key. As a general rule, wind two or three inches of string onto the tuning post.



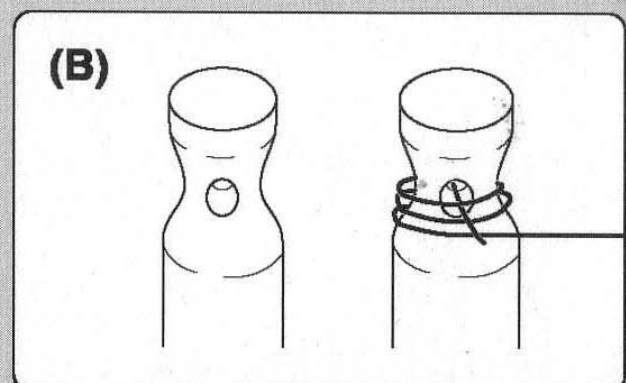
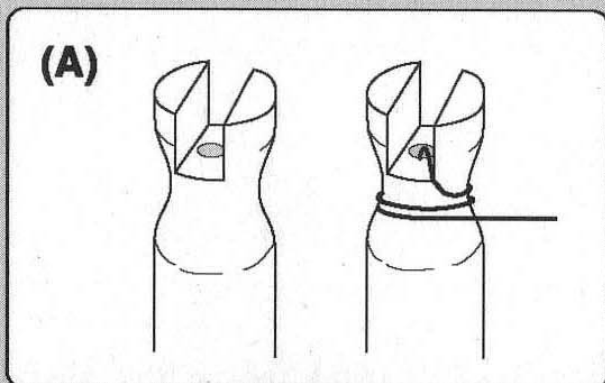
Note: For guitars with a locking nut; passing strings over the nut is made easier by removing the locking screw and clamp and then replacing them when the strings are installed.

Tuning Keys

Tuning keys come with two types of tuning posts, each with a different method of securing the string.

(A) Pull the string past the tuning post you intend to use and cut it 2 1/4" inches past the post and stick the string down the slot in the post. Bend the string against the post and wind the string downward without overlapping the windings.

(B) Pass the string through the hole in the tuning post and leave 2 1/2" inches of slack. Bend the string against the post and wind the string downward without overlapping turns. Cut off the excess string.



Note: For guitars with 3-on a side-style headstock and basses with 2-on a side-style headstock, wind the bass side tuners counterclockwise to tighten, and the treble side tuners clockwise to tighten.

FERNANDES SUSTAINER

Regardless of fret position or guitar location, the Sustainer system will create completely controllable sustain and feedback in a bedroom, recording studio, night club, or outdoor arena. There is no longer the need for excessive volume from an amplifier to create endless sustain and/or feedback. To hear the Fernandes Sustainer and to learn more about it go to our web site www.fernandesguitars.com

(1) SUSTAINER On/Off Switch

The "On" position activates the Sustainer circuit and automatically selects the rear pickup. The "Off" position deactivates the Sustainer circuit and allows the Sustainer Driver to function as a neck pickup.

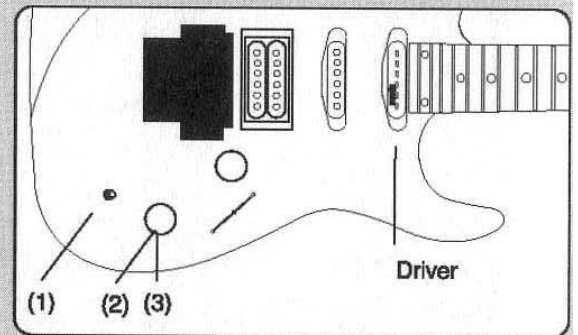
(2) SUSTAINER Mode Selector

Some models will have a push/pull or push/push pot, others will have a switch.

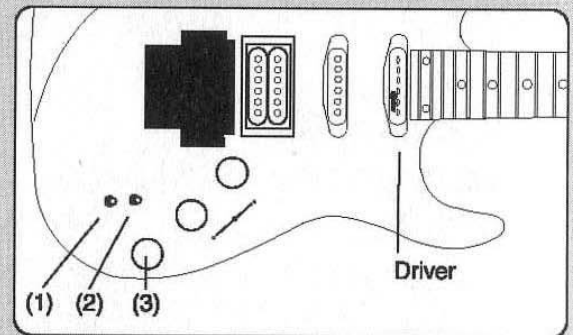
Standard: This mode sustains the fundamental pitch or pitches. Ideal for clean tone settings, chordal playing and/or for increased sustain when playing normal parts.

Harmonic: This mode creates various harmonics of the note being sustained. Great for soloing and creating the effect of feedback.

Mix: On some models, this mode allows mixed combinations of the standard and harmonic mode.



Type A



Type B

(3) Sustainer Intensity Control

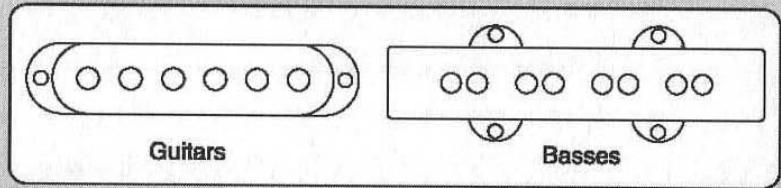
Controls the intensity of the sustain effect. When the intensity knob is at "0" there is no sustain - equivalent to the "Off" position of the Sustainer On/Off switch. At "10" the sustain effect is at its maximum, with the fastest attack and longest sustain.

Note: As a rule of thumb, adjust both the Sustainer Driver and the bridge pickup heights to within 3/32" under the 1st and 6th strings, when the string is fretted at the last fret. The closer the clearance, the stronger the strength of the sustain effect.

PICKUP ADJUSTMENT

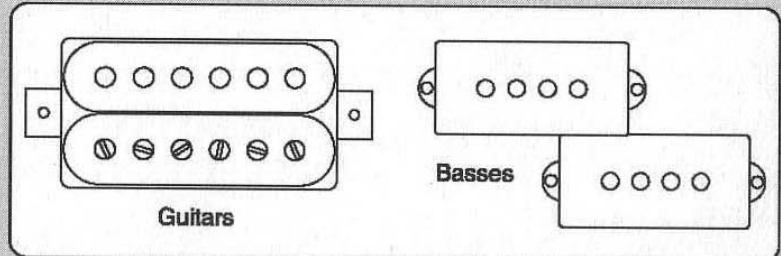
Single-coil Pickups

Single-coil pickups produce a lower output compared to a humbucker, but have a brighter, clearer tone.



Humbucking Pickups

Humbucking pickups offer more power and a fuller sound compared to a single-coil pickup. Noise is reduced by the hum-canceling feature.

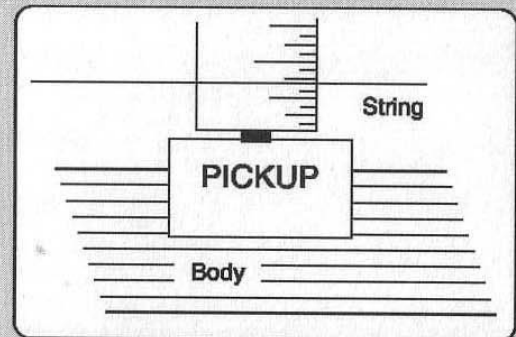


Pickup Height

The height of each pickup on a guitar or bass is adjustable. The height of the pickup affects its output. The higher the pickup, the louder the sound, and vice versa. However, if the pickup is too close, the pickup magnet will attract the strings, inhibiting their vibration and sustain. If the pickup is too far from the strings, the symptoms will include loss of power, poor sustain and weak sound.

Adjustment Guidelines

Adjust the overall height using the screws located at either side of the pickup. Fret the last fret of each string, the polepieces should be about $1/16''$ to $1/8''$ from the strings. A $1/16''$ separation tends to give a higher output and more distortion. A distance of $3/32''$ to $5/32''$ provides less power and a clearer tone. On some pickups, individual polepiece heights may be adjusted to achieve a better overall balance. Try various settings to create your own desired sound.



Note: Since the bass string has more power, you may wish to set the bass string side of the pickup somewhat lower than the treble string side. Also, when there are two or more pickups, the neck pickup may be set lower than the bridge and middle pickup to obtain a better balance between each pickup.

CONTROLS

To help fine tune the sound of the instrument, guitars and basses are equipped with several different control knobs.

Knobs

(A) Volume

Controls the output volume of the instrument. Some models may have two volume knobs, the two volume knobs control the output of each individual pickup.

(B) Tone

Modifies the tonal characteristics by gradually eliminating higher frequencies when rotating the knob counterclockwise. Some models may have two tone knobs that control the tone of each individual pickup.

(C) Treble

Boosts or cuts the higher frequencies, similar to an equalizer. The center click is a 0 setting with no boost or cut.

(D) Bass

Boosts or cuts the lower frequencies, similar to an equalizer. The center click is a 0 setting with no boost or cut.

(E) Blend

Balances the output of each individual pickup. The center click is both the bridge and neck pickup at equal volume. Rotate the knob clockwise to cut the output of the neck pickup, or counterclockwise to cut the output of the bridge pickup.

(F) Mode Selector

Push / push or push / pull pot. Allows the selection of Standard or Harmonic modes on guitars equipped with a Sustainer system.

(G) Sustainer Intensity

Increases or decreases the intensity the Sustainer drives the strings with.

(H) 5-Way

Selects the neck only, neck and middle together, middle only, middle and bridge together, or bridge pickup only.

(I) 3-Way/toggle

Selects the neck only, neck and bridge together, or bridge pickup only.

Mini Switches

(J) On/Off

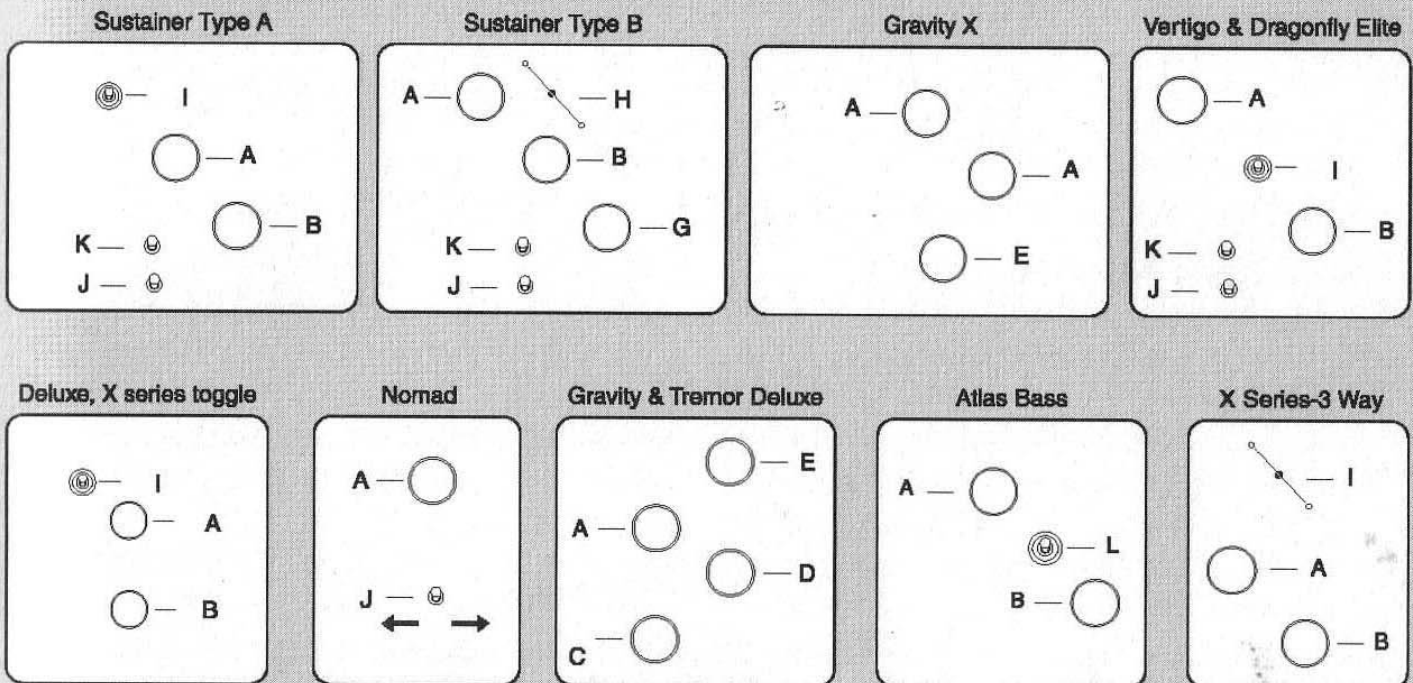
Activates or deactivates the Sustainer circuit on guitars equipped with a Sustainer system. Activates or deactivates the built-in amplifier and speaker on the Nomad series.

(K) Mode Selector

Allows the selection of Standard, Harmonic or Mix modes on guitars equipped with a Sustainer system.

(L) Series/Split/Parallel

Switches between series, split and parallel pickup functions.



Nomad Deluxe: See Nomad Deluxe Owners Manual.

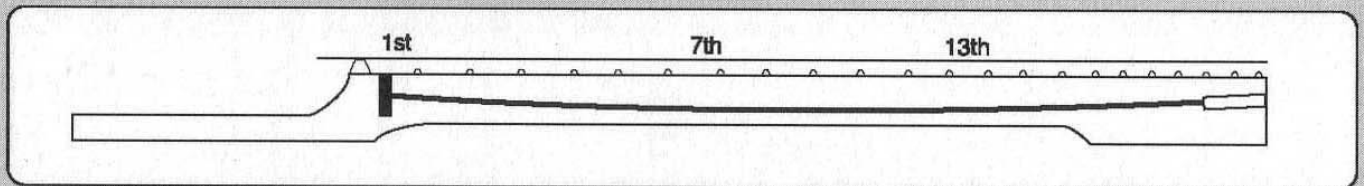
If the gain decreases, or the sound becomes distorted, the battery must be replaced.

Note: The power is turned on simply by inserting the cord into the guitar, the cord should be disconnected if the instrument is not being used.

NECK ADJUSTMENT

From time to time an instrument's truss rod will need adjustment because of changes in humidity or changes in climactic conditions. A change in string gauge will also require a truss rod adjustment. The curvature of the neck should be slightly concave. The degree of bow will vary according to personal taste. The neck may be adjusted by following the truss rod adjustment procedure below.

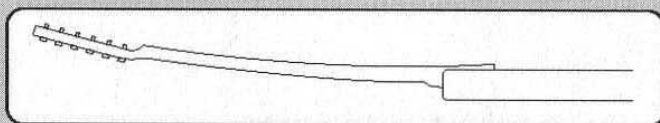
Note: This adjustment should be performed periodically and only by a qualified repair person. Over adjustment can result in damage to the instrument that will not be covered under the warranty.



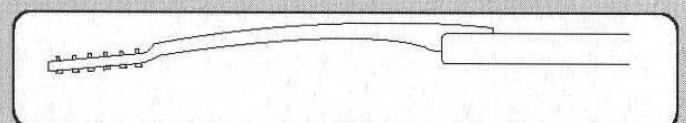
How to Check the Neck Bow

Hold the tuned instrument in the playing position and check the low E and high E strings using the following procedure:

With the index finger of the fretting hand, press the 1st fret; with the thumb of the picking hand, press the 13th fret. The distance between the top of the 7th fret and the bottom of the string should be about the thickness of a business card. To help see the clearance: while still depressing the string with both hands lightly tap the string at the 7th fret with the index finger of your picking hand. If the clearance is more than a business card the neck has forward bow, the truss rod needs to be tightened. If the clearance is less than a business card the neck has back bow, the truss rod needs to be loosened.



FORWARD BOW



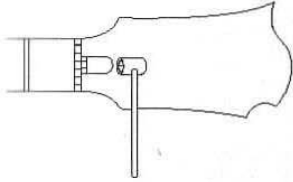
BACK BOW

NECK ADJUSTMENT

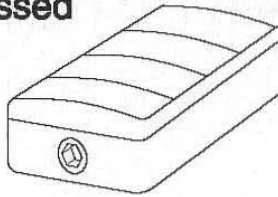
Location of the Truss rod Adjustment Nut

The truss rod is either located at:

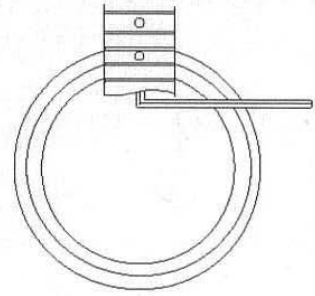
(A) At the headstock



(B) Recessed into the body at the end of the fingerboard

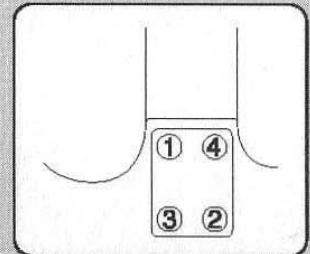


(C) Under the end of the fingerboard on acoustic guitars, accessible through the soundhole



(A) You may need to remove the cover to adjust the nut.

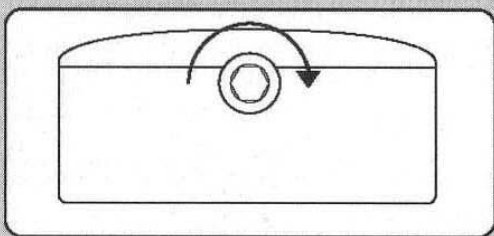
(B) You may need to remove the neck first, before adjusting the nut. The neck is removable after slackening the strings. Loosen the screws slightly, one at a time, in the sequence shown. To reassemble the neck, tighten the screws in the reverse sequence.



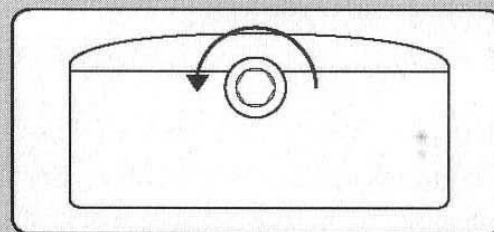
How to Adjust the Truss Rod

Caution: Truss rod adjustments should be performed by a qualified repair person. Over adjustment can result in damage to the instrument that will not be covered under the warranty.

Clockwise rotation of the nut straightens and tightens the rod, correcting for too much forward bow. Counterclockwise rotation of the nut loosens the rod, and corrects for too much back bow. Make any adjustments gradually. Adjust the truss rod in 1/4 turn increments rechecking the neck bow after each adjustment.



Clockwise



Counterclockwise

Note: Use the appropriate accessory wrench (hex key or pipe wrench) or a screwdriver (not included) to turn the adjustment nut. Use a pipe or hex-key wrench for an adjustment nut at the headstock, and a hex-key wrench or screwdriver for adjustment nut at the end of the neck.

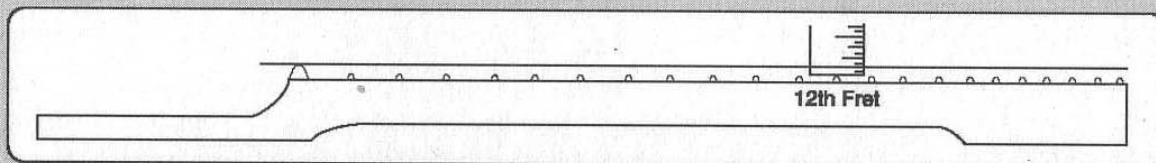
ACTION ADJUSTMENT

Setting the action of an instrument varies to a degree with each player. If the action is too high, fingering will be difficult; too low a setting will cause fret buzz. The action can be adjusted by raising or lowering the bridge saddles or studs.

Note: Make sure the truss rod is properly adjusted before adjusting the action.

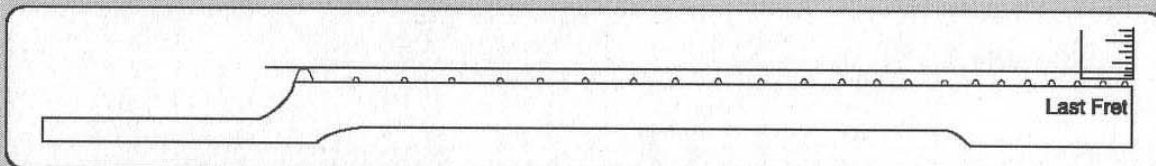
Guitar

Set one end of a ruler on top of the 12th fret with the flat side of the ruler against the string and measure the space between the top of the last fret and bottom of each string. The low E, A, & D strings should be $2/32''$ to $3/32''$ and the G, B, & high E strings should be $2/32''$ to $5/64''$

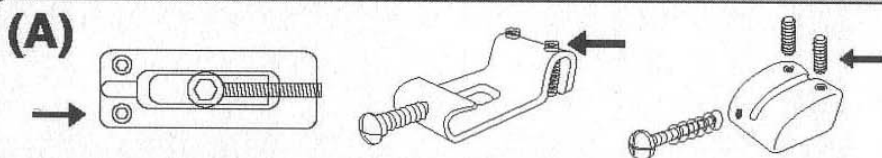


Bass

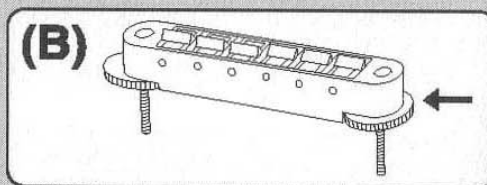
Set one end of a ruler on top of the last fret with the flat side of the ruler against the string and measure the space between the top of the last fret and bottom of each string. The low B & E strings should be $3/32''$ to $2/16''$, the A & D strings should be $3/32''$ to $7/64''$ and the G & C strings should be $5/64''$ to $7/64''$.



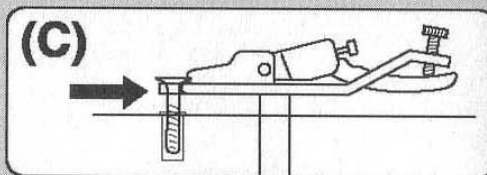
(A) The saddles these bridges are provided with two adjustment screws each. Rotate the screw clockwise to raise the action, or counterclockwise to lower it



(B) Rotating the thumbscrews at each end of the bridge changes the action. Rotate them clockwise to lower the action, and counterclockwise to raise it.



(C) Turning the two stud screws at the front of the bridge adjusts the action. Turn them clockwise to lower the action, and counterclockwise to raise it.



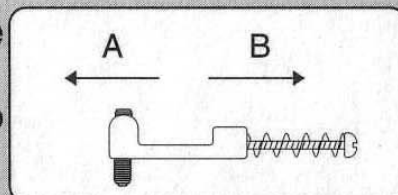
INTONATION ADJUSTMENT

Intonation adjustment is necessary when string gauges are changed or the action is altered. If the intonation is not correct, fretted notes will be slightly out of tune even if the open strings are in tune.

To Check the Intonation

Use an electronic tuner and tune the instrument to standard pitch. Play an open string and then compare it to the fretted note at the 12th fret. These notes should read the same on the tuner.

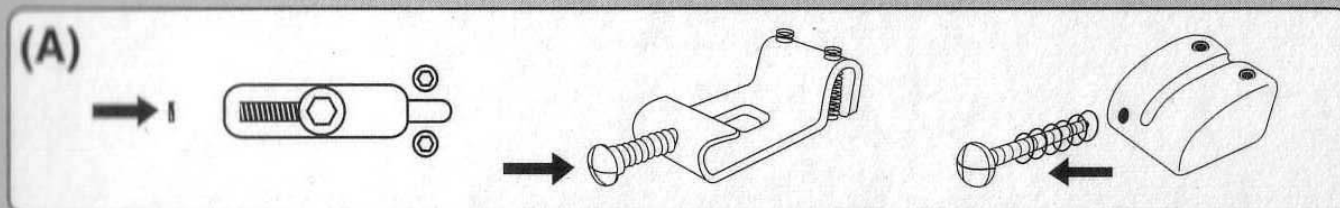
- If the fretted note at the 12th fret is flat compared to the open note, move the saddle forward. (Direction "A")
- If the fretted note at the 12th fret is sharp compared to the open note, move the saddle backward. (Direction "B")



Note: For an accurate reading, be sure to re-tune to pitch after each adjustment to the saddle.

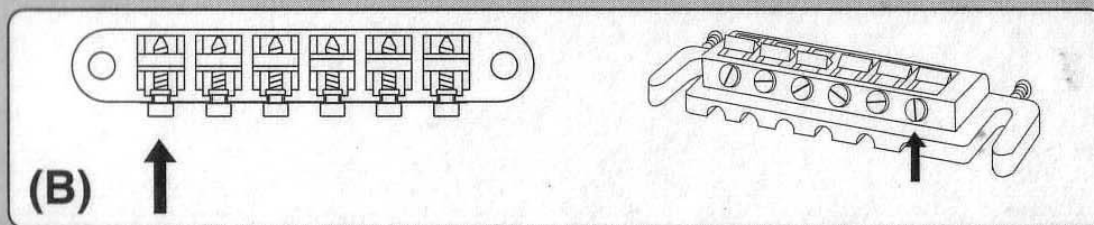
Standard tremolo or hardtail bridges:

(A) Each saddle has an adjustment screw behind the bridge plate. Rotate the screw clockwise to pull the saddle backward, or counterclockwise to push it forward.



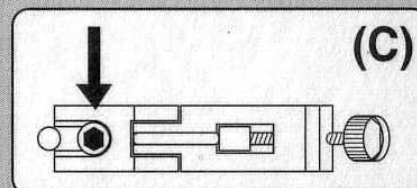
Tune O matic or stop tailpiece bridges:

(B) There is an adjustment screw on one side of the bridge for each of the saddles. Rotate the screw clockwise to pull the saddle backward, or counterclockwise to push it forward.



Locking tremolos:

(C) Each saddle has a locking adjustment screw. Loosen it slightly and move the saddle backward or forward. After the adjustment, retighten the locking screw.



LIMITED LIFETIME WARRANTY

To validate the limited *LIFETIME WARRANTY*, the Warranty Registration Card must be completed and returned to Fernandes Guitars International, Inc. within ten days of purchase.

Fernandes instruments are warranted against defects in materials and workmanship for the lifetime of the instrument. While under warranty, all replacement parts and labor will be provided without charge. This warranty is to the original purchaser and may not be transferred.

Should your instrument require service, you must contact the Fernandes dealer you purchased your instrument from. The Fernandes dealer will determine if the instrument can be repaired at their location or if the instrument needs to be returned to Fernandes. The dealer must contact Fernandes for a return authorization number. Next, securely pack your instrument along with a copy of the original sales receipt and then write the Return Authorization number on the outside of the shipping carton. All transportation charges are the responsibility of the purchaser.

This warranty does not cover damage caused by misuse, accident, neglect or normal wear and tear. Nor does this warranty apply to the battery box, or damage to the instrument's wood and/or finish due to the natural properties of wood or climactic changes. Determination of all such damage shall be by Fernandes Guitars International, Inc.

Fernandes Guitars International, Inc. reserves the right to repair or replace defective instruments. In the event a duplicate part or instrument is no longer available, Fernandes Guitars International, Inc. will replace the part or instrument with one of equal, or greater value. Fernandes Guitars International, Inc. is not responsible for any incidental or consequential damages resulting from any defect or failure of the instrument, other than the repair or replacement of the instrument under the terms of this warranty. This warranty gives the purchaser specific legal rights, which vary from state to state, and is in lieu of any and all other warranties or agreements either expressed or implied, except as may otherwise be required by law.



Set Up In The **U.S.A.** by _____

FERNANDES
G U I T A R S

11044 Weddington St., Suite 13

N, Hollywood, CA 91601

Phone: (818)487-1940 Fax: (818)760-0937

Web: www.fernandesguitars.com

e-mail: info@fernandesguitars.com

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