

# OWNER'S MANUAL

For Fender Bass Guitars



# LANGUAGES

Si necesita acceder a los manuales de instrucciones de las guitarras en Español, visite nuestra página web http://www.fender.com/support

Vous trouverez le mode d'emploi des guitares Fender® en français sur le site Internet http://www.fender.com/support

Il manuale d'uso delle Chitarre Fender in Italiano disponibile nel nostro sito web http://www.fender.com/support Das Fender Bedienungshandbuch für Gitarren in Deutsch, finden Sie auf unserer Website http://www.fender.com/support

Se desejar ler o manual do proprietário Fender para guitarras em português, por favor, visite nosso website em http://www.fender.com/support

日本語のギター用 Fender オーナーズ・マニ ュアルは、弊社のウェブサイト http://www.fender.com/support をご参照ください。



# CONGRATULATIONS

... On your new Fender<sup>®</sup> electric instrument. You're now part of a worldwide family of Fender musicians inspired by an expansive musical future and connected to more than half a century of heritage. The sound of Fender is heard everywhere. It's the culmination of musical expression that drives the sound of modern music. You can now contribute your sound with unlimited musical imagination and creativity. Pick up your instrument and let it take you where you want to go. Connect with us and other Fender players worldwide by becoming part of the Fender online community. Create your own profile and receive updates on music news, new products, events, promotions and more. Visit www.fender.com for more information.

Thank you, and enjoy your new Fender instrument!





# SINCE 1946...

Your new Fender<sup>®</sup> bass guitar holds more than half a century of musical history.

Fender was founded in 1946 by Clarence Leonidas "Leo" Fender, a Southern California inventor and businessman with a talent and passion for electronics. He started the company in his small radio repair shop in Fullerton, Calif., building solid amplifiers and lap steel guitars that were popular with Western swing bands of the era. A decade later, these modest and earnest beginnings would lead to an explosive intersection with the birth of rock 'n' roll and the first of several Fender "golden ages."

With a tireless and constant commitment to improved sound and design fueled by direct and immediate feedback from professional and influential musicians of the time, Leo and his staff soon embarked on an extraordinary creative streak that began in early 1951 with the world's first solid-body Spanish-style electric guitar, the Telecaster® (and its single-pickup version, the Esquire®). Later that year, Fender introduced the world's first commercially successful solid-body electric bass guitar, the Precision Bass®, soon followed by its companion Bassman® amp. The Twin Amp® appeared in 1952 as the first model in one of the world's most acclaimed and enduring guitar amp families.

Fender unveiled perhaps the most popular and influential electric guitar ever—the Stratocaster®—in 1954. Within a decade, some of rock's greatest artists would start wringing unbelievable sounds from the instrument sounds never envisioned by Fender designers, or anyone else for that matter. Other classics followed—the Jazzmaster<sup>®</sup> guitar (1958), the Jazz Bass<sup>®</sup> (1960) the Jaguar® guitar (1962), and more great amps. By the time it was sold to CBS in 1965, Fender had grown from a fledgling California guitar maker to an industry leader with a stable of acclaimed instruments and amplifiers that revolutionized and profoundly transformed music worldwide. After the CBS years, the modern-era Fender emerged in the mid 1980s to become the iconic brand it is today, with worldwide influence on music and popular culture.

Just as it was when it began, Fender continues to be driven by continuous innovation, passion for music and a commitment to constant input from musicians like you. Thank you for becoming part of this history, and enjoy your new Fender instrument.



## OVER 60 Y RS OF INNOVATION



# FEATURES, CONTROLS, AND SPECS







For details on the features and specifications of your bass guitar model, visit the Products section of www.fender.com, where each individual bass guitar listing has a Specs link that provides complete and comprehensive information.

For wiring diagrams, switch/control function diagrams and parts lists for your specific model, visit the Knowledge Base in the Support section of www.fender.com, where the Service Diagrams link presents detailed information on more than 250 Fender instrument models.

For additional support, please contact us directly by mail, e-mail or telephone at:

#### **Attn: Consumer Relations**

Fender Musical Instruments Corp. Global Headquarters 17600 N. Perimeter Drive, Suite 100 Scottsdale, AZ 85255 (480) 596-7195 consumerrelations@fender.com





### FACTORY SPECS AND SET UP

Your bass guitar is solidly built with the best materials and craftsmanship. As part of its final assembly, we've hand-adjusted it and set it up to Fender® factory specs, which give you the best possible playing action.

Like all instruments made of wood, your bass may have experienced moderate changes brought about by exposure to different temperatures and humidity levels. This happens naturally with time and with changes in your instrument's geographic location.

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The exact condition of the playing action can be affected by:

- Amount of time between final assembly and shipping from Fender.
- Amount of time between shipping from Fender and arrival at shipping destination.
- Method of shipment—e.g., trucking, shipping, airfreight, etc.
- Climate conditions during transportation.
- Climate conditions at shipping destination.
- Climate conditions at dealer before purchase.

## TAKE NOTE

When you first get your bass guitar, don't be alarmed if the playing action is no longer set to exact factory specs. It is natural for an instrument's setup to change due to the factors just listed. Your bass is designed to include many adjustment points that allow you to compensate for changes that might have taken place after final assembly but before you received it, or to simply customize the instrument to fit your personal preferred playing style. If the action is higher or lower than you prefer, for example, this manual describes how to set up, adjust and maintain your bass so that its playing condition is optimal for you. Of course, if you'd rather not adjust it yourself, you can always take your bass to an Authorized Fender Service Center for help.

Initial standard setup and adjustment of an instrument and its parts at time of purchase are considered normal dealer product preparation and are not covered by the Fender warranty. On receipt and acceptance of the instrument, the consumer assumes all responsibility for setup, adjustment and maintenance.





1. STRAP BUTTON 2. BRIDGE 3. BRIDGE SADDLES 4. INPUT JACK 5. TONE CONTROL 6. VOLUME CONTROL 7. PICK GUARD 8. PICKUP 9. LOWER BOUT 10. UPPER BOUT 11. FINGERBOARD 12. STRAP BUTTON 13. 12TH FRET MARKER 14. FRETBOARD 15. NUT 16. MACHINE HEAD 17. STRING TREE 18. TUNING KNOB 19. HEADSTOCK



## **BASS GUITAR SET-UP**

To put your bass guitar in top playing shape, follow the five steps presented here. First, you'll need the right tools:

- Electronic tuner
- Wire cutters
- Capo
- Set of automotive feeler gauges (.002" .025")
- 6" ruler (with 1/32" and 1/64" increments)
- Large Phillips screwdriver (Vintage Series basses), or the hex truss rod adjustment wrench that accompanied your bass (modern basses)
- Mini flat-head screwdriver (Vintage Series basses), or the hex saddle height adjustment wrench that accompanied your bass (modern basses)

If you're playing a 4-string bass, tune the open strings to E, A, D, G

#### TUNING

If you don't own an electronic tuner, you may want to purchase one. It will simplify many of the following procedures. If you already have one, just plug in and turn the bass's volume control all the way up. Pluck either an open string or the 12th fret harmonic\*, to produce the clearest tone for the tuner. (\*A harmonic is a "chime-like" tone that is produced by lightly touching the exact mid point of the string at the twelfth fret with your finger tip, and plucking the string with the other hand.)

Note: If you press the string too hard, it will choke the string and mute the sound. With a little practice though, you'll develop the light touch needed to make the harmonic ring out.



# **1. CHANGE STRINGS**

A fresh set of strings can breathe new life into your bass, and something as simple as how you wind the strings onto the tuning machine posts when changing your strings, will determine tuning stability and string tension. It's also a good idea to stretch your strings a little as you tune to make sure that each string is seated well and snugged down on the tuning machine post. This will save you some tuning frustration down the road. Just grab the string in the middle, lightly tug it up and down to remove slack, and then retune. (See your Fender<sup>®</sup> Dealer to obtain replacement Fender bass strings.)

First start by pulling each string through the bridge, over the nut and past the corresponding tuning machine post, with enough extra length to allow a minimum of three winds around it. Mark that point on the string. With wire cutters, crimp the string over at a 45-degree angle one inch before the mark, then clip off the excess at the mark, (Figure A). Next, place the end of the string all the way down in the hole in the center of the tuning machine post and bend the string over in the slot. Wind the tuning key to tighten the string to pitch while holding the loose end of the string in place with your other hand, (Figure B).

Make sure that the string does not overlap itself and is wound from the top down to the base of the tuning machine shaft, to insure the string is seated properly on the nut with the most acute break angle possible, (Figure C).



Figure B



Figure C



### 2. CHANGE BATTERIES

Fender® offers basses with passive electronics (no batteries) and basses with active (battery-powered) preamps. Depending on the instrument, your active bass may have either a 9-volt (one-battery) system, or an 18-volt (two-battery) system. Visit the Knowledge Base in the Support section of www.fender.com, where the service diagrams link presents detailed information on more than 250 Fender instrument models.

Typical battery life for both systems is approximately 600 hours of playing time. All Fender basses with active preamps are equipped with switching jacks that engage the battery when a cable is plugged into the jack. To maximize battery life, unplug your cable from the bass when not playing the instrument. As batteries lose power, the voltage supplied to the preamp will drop, resulting in distortion and unwanted noise that indicate that the batteries must be changed (note that active basses without an active/passive switch will not operate in passive mode when the batteries are dead). For basses with two-battery 18-volt preamps, always replace both batteries at the same time, as mismatched voltages may adversely affect the performance of the preamp. It is a good idea to use the same brand of battery consistently.



# 3. TRUSS ROD ADJUSTMENTS

The truss rod is the ingenious unseen device inside the neck that counteracts the bending force caused by string tension. An ideally adjusted neck will have a moderate amount of relief (curvature) in it to accommodate the vibrating strings. The factory specification for neck relief on Fender® bass guitars is between .012" and .014", measured between the bottom of the string and the top of the fret, at the 7th fret.

To adjust the truss rod, fasten a capo to the first fret. If you are adjusting a four-string bass, fret the "E" string at the last fret; if you are adjusting a five- or six-string bass, fret the "B" string at the last fret). Then measure from the bottom of the string to the top of the 7th fret using the feeler gauge—the gap should be between .012" and .014". When you view the neck by sighting down it from the body end toward the headstock, you can see whether the neck is straight or bowed.

If the truss rod needs adjustment, detune the strings first to relieve neck tension, and remember to retune to pitch before measuring again. To adjust the truss rod, use either a large Phillips or flathead screwdriver (for most vintage style basses), or the hex wrench supplied with your bass (for modern basses). Note that for vintage-style basses with the truss rod adjustment at the neck heel, you must remove the strings and loosen the neck mounting screws and/or remove the pickquard to gain access to the truss rod adjustment nut. If the neck curvature is too concave, turn the truss rod adjustment nut clockwise. If the neck curvature is too convex, turn the truss rod adjustment nut counterclockwise. Check your tuning; then check the gap again with the feeler gauge. If you meet excessive truss rod resistance or if you're not comfortable adjusting it yourself, you can always take your guitar to your Authorized Fender Service Center.





# 4. STRING HEIGHT

String height is more about personal preference and playing style than a pre-determined spec. Check your tuning first, then use a 6" ruler to measure the distance between the bottom of each string and the top of the 17th fret. That distance should be approximately 6/64", which is Fender's recommended spec on both the bass and treble sides. Adjust each bridge saddle accordingly, and keep in mind that string height can be set to whatever feels right for you.



### PICKUP HEIGHT ADJUSTMENT CHART

Pickup Type	Bass Side	Treble Side
Vintage Style Precision Bass <sup>®</sup>	8/64"	6/64"
Vintage Style Jazz Bass <sup>®</sup>	8/64"	6/64"
Standard Jazz Bass	7/64"	5/64"
Standard Precision Bass	7/64"	5/64"
American Standard Jazz Bass	7/64"	5/64"
American Standard Precision Bass	7/64"	5/64"
Vintage Noiseless™ Jazz Bass	8/64"	6/64"
N3 Noiseless Jazz Bass	8/64"	6/64"
Special Design Humbucking	7/64"	5/64"





# 5. SET INTONATION

You can easily set your bass guitar's basic intonation. Plug into your tuner and tune a string to pitch using the 12th-fret harmonic. Then fret the string at the 12th fret and compare that pitch to the 12th-fret harmonic pitch. If the pitch of the harmonic and the pitch of the fretted note agree, the string is properly intonated and no adjustment is necessary. If the two pitches disagree, an adjustment must be made, using either a Phillips screwdriver or a hex wrench, depending on the bridge type.

If the fretted note is sharper (higher in pitch relative to the harmonic), the string must be lengthened until both pitches agree. To do this, turn the saddle length adjustment screw clockwise, moving the saddle toward the back of the bridge, until the harmonic and the fretted pitches read the same. It's a good idea to stretch and re-tune the string during the adjustment, as the movement of the saddle will affect the pitch. If the fretted note is flatter, (lower in pitch relative to the harmonic), the string must be shortened until both pitches agree. To do this, turn the saddle length adjustment screw counterclockwise, moving the saddle forward, until the harmonic and the fretted pitches read the same. Remember to stretch and re-tune the string.



# CARE AND MAINTENANCE

Your Fender<sup>®</sup> bass guitar is precisely crafted to give you years of satisfaction and enjoyment. Occasional routine maintenance will go a long way toward keeping it looking, sounding and playing great for many years. Several helpful tips are listed here:

Keep it clean. Dirt, dust, sweat, skin oil, smoke and other pollutants can prematurely age your bass's finish and hardware. Wipe the strings, neck and bridge often with a lint-free cloth regularly. Use Fender-approved polish on the finished surfaces, and wipe metal parts clean with a soft, dry polishing cloth (visit the Accessories section of fender.com for recommendations).

**Oil the fingerboard.** The natural oils in unfinished rosewood, ebony and pau ferro fingerboards can dry out. Keep these fingerboards beautiful by periodically hydrating them with lemon oil, boiled linseed oil or other non silicone-based

wood/furniture oil. Apply with a lint-free cloth, rub in, let soak, wipe off excess and let dry. And remember—no oil on finished surfaces (including maple fingerboards).

**Tighten the strap buttons.** They do loosen sometimes. Use a standard Phillips head screwdriver to periodically check and tighten strap buttons.

Set up and adjust. Familiarize yourself with the setup and adjustment procedures in this manual and on www.fender.com, or visit your Authorized Fender Service Center for routine seasonal adjustments.

#### Avoid climate extremes whenever

**possible.** Extremes in temperature and humidity can damage your bass. If such exposure can't be helped, however, loosen the strings to minimize damage, and let a cold instrument warm up gradually before opening its case to avoid finish checking.

Lacquer finishes. Lacquer is a natural wood finish long used on fine furniture and musical instruments. If your bass has a lacquer finish, do read the "Lacquer Finishes: Precautions and Care" card that came with it. Try not to expose lacquer finishes for very long to plastics, synthetics and surgical rubber tubing (it's used on some guitar stands and straps), all of which react adversely with lacquer and can mar the finish. Also note that checking, shrinkage and discoloration are all natural elements of the aging process of lacquer finishes. The lacquer finish on your bass will take on its own distinctive appearance over time from this type of wear, and though preferred by some, it is not covered under the Fender warranty.

Fender<sup>®</sup>, Bassman<sup>®</sup>, Twin Reverb<sup>®</sup>, Super-Sonic<sup>®</sup>, G-DEC<sup>®</sup>, Stratocaster<sup>®</sup>, Strat<sup>®</sup>, Telecaster<sup>®</sup>, Tele<sup>®</sup>, Jaguar<sup>®</sup>, Jazzmaster<sup>®</sup>, Mustang<sup>®</sup>, Precision Bass<sup>®</sup>, P Bass<sup>®</sup>, Jazz Bass<sup>®</sup>, J Bass<sup>®</sup> and the distinctive headstock designs commonly found on these guitars are U.S. registered trademarks of Fender Musical Instruments Corporation. All rights reserved.

IMPORTADO POR: Instrumentos Musicales Fender S.A. de C.V., Calle Huerta # 132, Col. Carlos Pacheco, C.P. 228890, Ensenada, Baja California, Mexico. RFC: IMF870506R5A Hecho en Mexico. Servicio de Cliente: 001-8665045875

NOTICE REGARDING USE OF HISTORIC PATENT NUMBERS/MARKINGS: FENDER® is proud to offer some of the most iconic musical instruments and amplifiers of the past 60 years. Some FENDER products are intentional recreations or reissues of vintage guitars and amplifiers, and may therefore incorporate markings or text associated with original patents that have since expired. Specific examples of such models include patent numbers on the tremolo plates and decals of the JAGUAR® and JAZZMASTER® guitars, "Pat Pending" on some vintage TELECASTER® guitar bridge plates, and "Design and Circuits Patented" language on the control panels of certain model amplifiers in FENDER Vintage Modified, Vintage Reissue and Custom lines. Such markings are included only for the sake of historical accuracy, and are not intended to denote or imply live patents or ongoing patent protection.

### SERVICE

For service in the United States and Canada, please contact an Authorized Fender Service Center, which you can find by calling the Fender Consumer Relations Department (480) 596-7195 or using the Service and Repairs link on the Support section of fender.com.

For service outside the United States and Canada, please contact your authorized dealer or the Fender distributor in your country or region. There is a helpful list of international distributors online at fender.com/distributors.

# MODIFIED ACTIVE GUITAR WARNING

#### WARNING - To maintain product safety:

Batteries and/or the product in which they are installed, shall not be exposed to excessive heat such as sunshine, fire, or the like.

- D0 N0T replace batteries with rechargeable types of any kind.
- Replace only with same or equivalent PP3, 9V type battery.
- There may be a danger of fire or explosion if the battery is incorrectly connected/replaced.

## Replace the Batteries as soon as they are drained and the power indicator is no longer lit.



#### ALWAYS UNPLUG YOUR GUITAR WHEN NOT PLAYING FOR BEST BATTERY LIFE

If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions.

- Incorrect handling of batteries can cause leakage, overheating, fire, or explosion.
- Batteries must never be heated, taken apart, or thrown in water.
- Make sure you observe the correct polarity when installing the batteries.
- Avoid using new batteries mixed with used ones. In addition, avoid mixing different types of batteries.
- Remove the batteries whenever the unit is to remain unused fir ab extended period of time.
- If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin.
- Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.

 Never keep batteries together with metallic object such as ballpoints, necklaces, hairpins, etc.

#### USING THE UNIT SAFELY

- Use a reasonable amount of care when using the unit's knobs and other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes.
- Do not allow any objects (e.g., flammable materials, coins, pins); or liquids of any kind (water, soft-drinks, etc.) to penetrate the unit.







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