

Fender®

OWNER'S MANUAL

For Fender 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® 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](http://www.fender.com) for more information.

Thank you, and enjoy your new Fender instrument!



# FENDER ELECTRIC INSTRUMENT CO.

GUITARS

AMPLIFIERS





## SINCE 1946...

Your new Fender® 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® guitar (1958), the Jazz Bass® (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 YEARS OF INNOVATION

1946 FENDER<sup>®</sup> MANUFACTURING COMPANY. EST.



1951 TELECASTER<sup>®</sup> GUITAR EST.



1951 PRECISION BASS<sup>®</sup> EST.



1952 BASSMAN<sup>®</sup>  
AMPLIFIER EST.



1954 STRATOCASTER<sup>®</sup>  
GUITAR EST.



1958 JAZZMASTER<sup>®</sup> GUITAR EST.



1960 JAZZ BASS<sup>®</sup> EST.



1961 FENDER  
REVERB EST.



1962 JAGUAR<sup>®</sup> GUITAR EST.



1963 TWIN REVERB<sup>®</sup> AMPLIFIER EST.



1964 MUSTANG<sup>®</sup> GUITAR EST.

# GENERATIONS OF WORLD-CHANGING MUSIC

1968 TELECASTER® THINLINE GUITAR EST.



1985 AMERICAN STANDARD GUITARS EST.



1988 ERIC CLAPTON STRATOCASTER® EST.



1987 FENDER CUSTOM SHOP EST.



1997 HOT ROD AMPLIFIERS EST.



1998 MARCUS MILLER JAZZ BASS EST.



2005 SUPER-SONIC® AMPLIFIERS EST.



2011 KURT COBAIN JAGUAR EST.



2005 G-DEC® AMPLIFIERS EST.



2012 FENDER SELECT GUITARS EST.



## FEATURES, CONTROLS, AND SPECS





For details on the features and specifications of your bass guitar model, visit the Products section of [fender.com](http://fender.com), where each individual 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 [fender.com](http://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](mailto:consumerrelations@fender.com)

# FACTORY SPECS AND SET UP

Your 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 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.

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

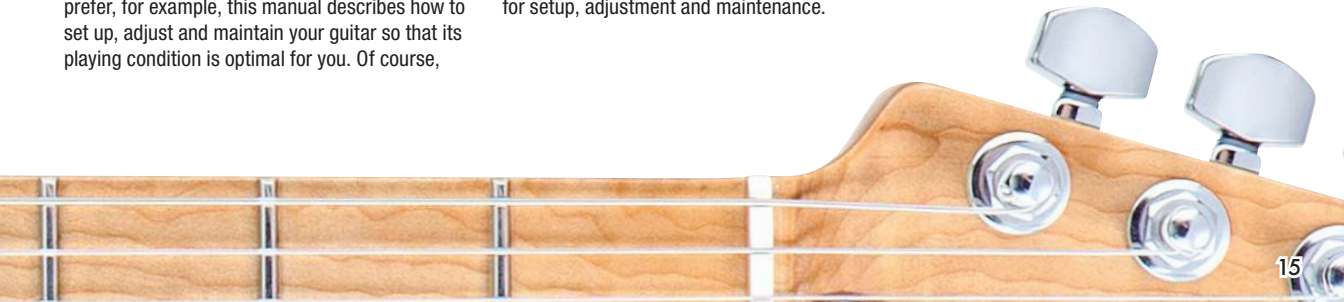
- Amount of time between final assembly and shipping from Fender.
- Amount of time between shipping from Fender and arrival at shipping destination.
- Method of shipment—e.g., trucking, shipping, airfreight, etc.
- Climate conditions during transportation.
- Climate conditions at shipping destination.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

## TAKE NOTE

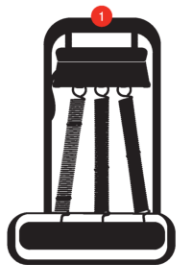
When you first get your guitar, don't be alarmed if the playing action is no longer set to exact factory specs. It is natural for a guitar's setup to change due to the factors just listed. Your guitar is designed to include many adjustment points that allow you to compensate for changes that might have 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 guitar so that its playing condition is optimal for you. Of course,

if you'd rather not adjust it yourself, you can always take your guitar 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.



# ANATOMY



ON BACK OF GUITAR







1. TREMELO CAVITY
2. STRAP BUTTON
3. BODY
4. OUTPUT JACK
5. BRIDGE
6. BRIDGE SADDLE
7. TONE CONTROL
8. VOLUME
9. PICKUP SELECTOR
10. TREMELO BAR
11. PICK GUARD
12. PICKUP
13. LOWER BOUT
14. UPPER BOUT
15. STRAP BUTTON
16. 12 FRET MARKER
17. FRET
18. FRET BOARD
19. NUT
20. TRUSS ROD
21. STRING TREE
22. TUNING KEY
23. HEADSTOCK





# MODELS

20



ESQUIRE®



TELECASTER®



STRATOCASTER®



JAZZMASTER®



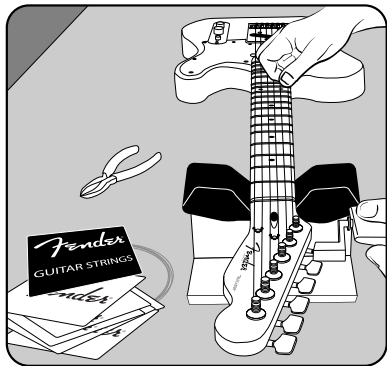
JAGUAR®



MUSTANG®

# ELECTRIC GUITAR SET-UP

*Note: The following factory specifications are median specs and are meant only as guidelines. They should not be taken as hard-and-fast rules. If you prefer slightly higher or lower action, adjust it as you like, but please be aware that higher action will make the instrument physically more difficult to play, while lower action may result in excessive fret buzz, depending on your technique or playing style.*



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

- Set of automotive feeler gauges (.002-.025)
- 6" ruler (with 1/64" increments) and tape measure
- Set of Allen wrenches
- Phillips head screwdriver
- Electronic tuner
- Wire cutters
- String winder
- Light machine oil (3-in-1, model train or gun oil)
- Polish and cloth
- Capo



## 1. CHANGING STRINGS

There is no better, faster or easier way to reinvigorate the sound of your guitar than simply changing the strings. It's easy to tell when strings are old, worn or dirty—they sound dull and lifeless, and they feel rough when you run your fingers along them. Changing strings isn't difficult, but there are several ways to do it depending on what Fender® guitar model you have.



Strings attach at the bridge and to the headstock at the tuning machines. Fender guitar models use a variety of bridges and tuning machines, and different instruments call for different string replacement instructions. Please note the way strings are installed on your guitar before changing the strings.

## 2. SETTING INTONATION

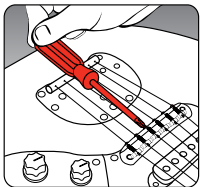
Whatever bridge type on your guitar, the main thing is to make sure there's sufficient string break angle (at least 30°) over the bridge saddles. Bridge adjustments such as string height and tremolo float are mostly up to personal preference.

Intonation, however, is a very precise series of measurements. Fear not, though—you can easily preset your guitar's basic intonation. With a tape measure, find the exact scale length of your guitar by measuring from the inside edge of the nut to the center of the 12th fret (the fret wire itself, not the fingerboard space). Double that measurement to determine the scale length of your guitar.

Adjust the first-string bridge saddle to this scale length, measuring from the inside of the nut to the center of the bridge saddle. Now

# TION

adjust the distance of the second-string saddle back from the first saddle, using the gauge of the second string as a measurement. For example, if the second string is .011" (0.3 mm), you would move the second-string saddle back .011" (0.3 mm) from the first saddle. Move the third saddle back from the second saddle using the gauge of the third string as a measurement. The fourth-string saddle should be set parallel with the second-string saddle. Proceed with the fifth and sixth saddles with the same method used for strings two and three.

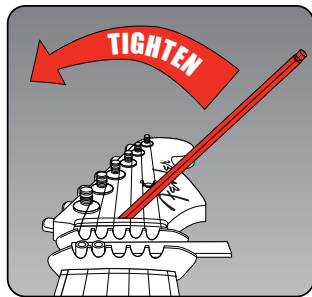


## 3. TRUSS ROD

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.

To adjust the truss rod, fasten a capo to the first fret; then fret the sixth string (low E) at the last fret. Then measure from the bottom of the string to the top of the 8th fret using the feeler gauge—the gap should be about .010". 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.

Fender guitars use two kinds of truss rod adjustment mechanisms. One is accessible at the headstock and is adjusted using an Allen wrench; the other is accessible at the neck



joint and is adjusted using a Phillips head screwdriver. For both types, here's what to do:

### Adjustment at headstock (Allen wrench):

If the neck curvature is too concave, (the guitar in playing position, looking up the neck towards the tuners) turn the truss rod adjustment nut counterclockwise. If

the neck curvature is too convex, turn the truss rod adjustment nut clockwise.

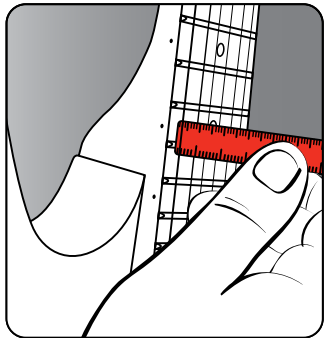
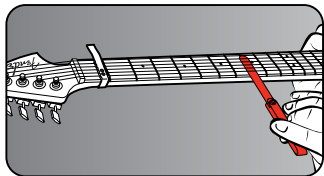
**Adjustment at neck joint (Phillips screwdriver):** If the neck curvature is too concave, turn the truss rod adjustment nut clockwise. If the neck curvature is too convex, turn the truss rod adjustment nut counterclockwise. Check your tuning; then check the gap again with the feeler gauge.

You can double-check your adjustments by sighting down the neck and by measuring the gap again to make sure it's around .010".

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  $4/64$ ", which is Fender's recommended spec, so adjust each bridge saddle accordingly (or the bridge height screws if the saddles are preset). About  $4/64$ " on the treble side is suggested, but string height can be set to whatever feels right for you.





## 5. PICKUP HEIGHT

Pickups that are set too high can cause many kinds of sonic variables. To set them correctly, fret all the strings at the last fret and use a 6" ruler to measure the distance from the bottom of the first (high E) and sixth (low E) strings to the top of their respective pole pieces. The optimal distances you want will vary depending on what pickups you have, so use the outside pickup mounting screws to adjust those distances according to this chart:

PICKUPS	BASS SIDE	TREBLE SIDE
Texas Special™	8/64" (3.6 mm)	6/64" (2.4 mm)
Vintage Style	6/64" (2.4mm)	5/64" (2 mm)
Noiseless™	8/64" (3.6 mm)	6/64" (2.4 mm)
Standard single-coil	5/64" (2mm)	4/64" (1.6 mm)
Humbucking	4/64" (1.6mm)	4/64" (1.6 mm)
Lace Sensor	to preference	to preference

These distances are generally greatest on the sixth string (low E) at the neck pickup position, and closest on the first string (high E) at the bridge pickup position. Adjust pickup height as preferred around the measurements indicated, with the pickup selector switch in the middle position and the volume and tone controls at their maximum settings.





# CARE AND MAINTENANCE

Your Fender® 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](http://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](http://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®, Bassman®, Twin Reverb®, Super-Sonic®, G-DEC®, Stratocaster®, Strat®, Telecaster®, Tele®, Jaguar®, Jazzmaster®, Mustang®, Precision Bass®, P Bass®, Jazz Bass®, J Bass® 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](https://www.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](https://www.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.

- DO NOT 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 for an 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.









Register your new Fender electric instrument at [www.fender.com/prodreg](http://www.fender.com/prodreg)