

TOBIAS GUITARS OWNERS MANUAL

FOR MODELS

Killer 'B', Basic, Classic and Signature

Congratulations on your new Tobias bass purchase. All of us at Tobias Guitars take great pride in the instruments we produce in our Nashville factory. We would like to thank you for choosing Tobias and know that your instrument will provide you with years of satisfaction.

Please take a few minutes to read through this owner's manual so that you can fully familiarize yourself with your Tobias instrument.

General Information

We at Tobias Guitars have worked hard over the years establishing a reputation of being one of the world's premier bass manufacturers, painstakingly hand crafting our instruments with only the finest materials while paying meticulous attention to detail. Although each Tobias bass is unique, your Tobias bass comes complete with a long list of standard features that have helped make it the instrument of choice by many of today's top bassists.

Neck: Your bass features a slim, asymmetrically designed neck shaped to fit the contours of the human hand which helps to eliminate muscle fatigue. The fingerboard is made of Pau Ferro, a member of the rosewood family. This is a wood that we have found to have excellent sonic properties. Tobias uses 24 medium-large frets for maximum playability with a guaranteed action of not higher than 3/32" at the 24th fret. A deep cutaway neck/body joint for full access to all 24 frets in natural playing position is incorporated into all our neck-thru models.

Body: Your Tobias bass body is offset to provide easy reach to both extremes of the neck while contoured to give a smooth, comfortable fit. Perfectly balanced to provide comfort for extended periods of playing with no hard edges to hamper your concentration.

Other Features:

- Neck-thru design for greater strength and sonic quality (Except Killer "B").
- Angled headstock with volute for added strength at the crucial headstock/neck joint.
- Dual truss rods for maximum adjustment capabilities.
- Instrument controls that are accessible without being in the way.
- Custom Bartolini pickups and electronics.
- Fully copper shielded control cavity.
- Use of natural wood truss rod and control cavity plates on our Classic and Signature models.
- Custom Tobias bridge and tuning gears.
- Hand rubbed (satin oil) finish or polyurethane finish.
- Hand inlaid mother of pearl Tobias logo.
- Straplock strap buttons (strap end not included).
- Custom plush lined hardshell case.

TECHNICAL INFORMATION

Fingerboard width at nut:	1 11/16"	4 string
	1 7/8"	5 string
	2 1/16"	6 string
Fingerboard width at 24th fret:	2 7/16"	4 string
	2 7/8"	5 string
	3 9/32"	6 string
Scale Length:	34"	
Total Length:	44"	
Fingerboard Radius:	15"	
*Weight:	7 lb. 20 oz	4 string
	8 lb. 12 oz	5 string
	9 lb. 2 oz	6 string

* Your actual instrument weight will vary depending upon selection of woods used in combination.

Electronics: 2 split humbucking pickups with 3 electronic modules: dual buffer, tone control and spectrum shaping. The pickups and electronics on these instruments are custom made by Bartolini. They are designed for use with a single 9v battery.

Preamp specifications

Volume - Full on in the clockwise position, full off in the counterclockwise position.

Pan Pot - Selects how much signal from each pickup will be sent to the preamplifier (also known as a blend control). When in the fully clockwise position, the preamp receives signal from the neck pickup only (no bridge pickup output). Equal blend of both is achieved when in the center (dented) position and full bridge pickup (neck pickup off) when in the counterclockwise position and any combination in-between.

Bypass Switch - The bypass switch is a two position mini-toggle located on the face of the instrument next to the Pan Pot. **Up:** the tone control and spectrum shaping modules are bypassed (Treble, Mid and Bass controls do not function). The dual buffer module remains inactive and provides a low impedance, very low noise signal which is not equalized and comes directly from the pickups. This is very useful as an alternative tone quality in performance or as direct input during recording. **Down:** the Treble, Mid and Bass controls are functional. The tone control and spectrum shaping modules are active.

Treble Control - This control provides up to +12dB of boost with a "center frequency" of 5KHz. The amount of cut provided by this control varies with the setting of the Mid control. When the Mid control is at the detent (click), the cut is -2dB. When the Mid control is at minimum (counterclockwise), the cut is -12dB.

Mid Control - **Boost:** from the detent (click) to maximum (clockwise), the Mid control boosts low mids near 500Hz as well as high treble from 2KHz to 15KHz. This spectrum shaping enhances the instrument's ability to "cut through" complex mixes. **Cut:** from the detent to minimum the Mid control cuts low mids at 500Hz up to -14dB.

Bass Control - This control provides up to +12dB of boost with a "center frequency" of 50Hz. The amount of cut provided by this control varies with the setting of the Mid control. When the Mid control is at the detent (click), the cut is -2dB. When the Mid control is at minimum (counterclockwise), the cut is -12dB.

Battery Life - More than 4 months of battery life under average playing conditions. Total battery current is 1.2 milliamps (quiescent), yielding approximately 400 hours of continuous operation from an alkaline battery.

The instrument electronics are activated when a standard 1/4" guitar cable is plugged into the instrument. Therefore, we recommend that you unplug your instrument when you are not playing it to preserve your battery. We strongly recommend that you **do not** use external power supplies or attempt to put 2 batteries in this instrument (18 volt operation). This will damage the electronics and void the warranty.

=====

Tuning Gears - Tobias custom gears with 20:1 tuning ratio.

Bridge - Tobias custom bridge made from die cast aluminum with brass saddles

Strap Buttons - Straplock® strap system (strap attachment not included).

Nut - Corain

Strings - High quality Tobias bass strings.

=====

Care of Your Hand Rubbed Finish

We have found that in applying a hand rubbed oil finish to our basses, the natural wood tones of the instrument are clearer and more defined thus giving each individual instrument more of its own tonal character.

Your hand rubbed finish should require minimal care. When you have finished playing, you should wipe down your instrument entirely with a clean soft cloth. At regular intervals, it is a good idea to re-moisturize your bass with a high quality lemon oil furniture moisturizer. This should be an oil, not a spray and should be applied over the entire instrument. Allow to soak for approximately 1 minute and then wipe off excess with a clean soft cloth. In the event there is dirt or any other residue that you are unable to wipe off your bass, you may try rubbing the area gently with a pad of extra fine (#000) steel wool until the dirt is removed. Be careful not to rub too hard or too long or you could remove some of the satin finish. After using steel wool, apply lemon oil to the area as previously described.

Care of Your Polyurethane Finish

Your instrument has a polyester/urethane finish that is both durable and weather resistant. Nevertheless, it needs care. Automotive grade waxes will protect, clean and shine it. Between waxing, the instrument should be wiped with a dry, soft cloth.

Care of Your Strings

String life may be greatly extended by frequent cleaning and wiping after use. Dirt and perspiration tend to build up on the underside of the strings, so it is often necessary to slide a rag between the strings and the fingerboard. Dirt laden strings cause tuning and intonation problems as well as rust and corrosion. For best performance, strings should be changed approximately once a month or every twenty-four hours of playing. Some players may find that they prefer to change strings more often.

Care of Your Hardware

Your Tobias bridge may, at-times, appear dull. To clean, use a soft cloth and lightly buff the bridge and saddles with a hard surface cleaner or compound such as an automotive grade wax. Allow to dry for one minute and wipe off. Care of your tuning gears should be easier and should require only wiping with a clean cloth. We do not recommend use of a cleaner on the tuning gears as some cleaners may damage the finish.

Truss (Torsion) Rod Adjustments

Your instrument has been carefully adjusted for accurate intonation and playing ease at the Tobias factory. However, your playing style or playing requirements may necessitate additional adjustments at some time in the future. These adjustments should be made by your Tobias dealer. However, with a little care and by adhering closely to the following instructions, you may attempt these adjustments yourself.

Caution: Please read and understand the instructions thoroughly before attempting any adjustments.

Adjusting Torsion Rods - To set the "straightness" or "relief" of the neck, the torsion rod wrench provided must be used.

1. Tune the instrument to standard (A-440) pitch.
2. Check for clearance between the strings and the last fret. **IMPORTANT:** Use an accurate ruler or similar gauge for this measurement.
3. This clearance should be no less than $1/32$ " and no more than $3/32$ " at the 24th fret.
4. Check for clearance between the strings and the 12th fret.
5. This clearance should be no less than $1/16$ " and no more than $5/32$ " at the 12th fret.
6. To increase clearance, loosen (counterclockwise) torsion rod nut. To decrease clearance, tighten (clockwise) the torsion rod nut. The torsion rod nut is located underneath the cover plate at the end of the fingerboard.

Caution: It is not usually necessary to rotate the torsion rod nut more than one full turn in either direction. One-quarter to one-half turn is normally sufficient to make most adjustments. Excessive rotation may cause damage to the neck and torsion rod. If excessive force is necessary to rotate the torsion rod nut, you should consult your Tobias dealer or the Tobias factory before any further adjustment is made.

7. Repeat steps 1 through 6 until proper clearance has been reached.

String Height Adjustment

String height should be adjusted to fit your own particular playing style. It should be noted that setting the string height too low will result in excessive string buzz and rattle, especially with a "heavy" playing technique. Excessively high action will result in intonation problems and decreased playability.

Saddle Height Adjustment

The individual bridge saddles work to determine the overall string height. Individual saddles can be adjusted to "follow" the curvature (15" radius) of the neck to maximize string/fret distance. Use supplied Allen wrench to make the adjustment for each string. **NOTE:** This adjustment requires accurate gauges to measure proper string/fret distances and the proper radius (curvature) between the neck and strings. If you are unfamiliar with this type of adjustment, we recommend that this setting be performed by qualified personnel at your authorized Tobias dealer.

Intonation

Accurate string intonation settings ensure that your instrument will play in tune at any point on the neck. Although "perfect intonation" is a physical impossibility with a fretted instrument, the correct settings with the bridge and saddle combinations of the instrument will maximize the accuracy of individual notes up and down the neck.

Intonation is set by comparing the pitch of an open string to the pitch of the same string when it is played one octave higher at the 12th fret. The actual "vibrating length" of that string is varied until the notes are both at the right pitch. The "vibrating length" of the string is altered by adjusting the individual bridge saddles either forward or backward, depending on whether the fretted note is sharper or flatter in pitch than the open note. If the fretted note is sharper than the open note, the vibrating length of the string must be increased; move the bridge saddle to the rear, away from the pickup. If the fretted note is flat, the vibrating length must be shortened; move the bridge saddle forward, toward the pickup to shorten the length.

Note: It is often difficult for the untrained ear to determine when the open note and the fretted note are at precisely the same pitch (exactly one octave apart). Tobias Guitars recommends the use of a high quality digital tuner for this purpose.

Setting Intonation

All adjustments interact closely with string intonation. These adjustments must be completed before any attempt is made to set string intonation at the bridge.

1. Ensure that the torsion rod and bridge height adjustments have been made and are accurate.
2. Tune the instrument to standard (A-440) pitch.
3. Hold the instrument in a normal playing position. Do not exert any undue pressure on the neck as it will affect intonation settings.
4. Play the first string open and compare it to the pitch of the same string when it is played at the 12th fret. These notes should be the same.
5. Using a small Phillips screwdriver, adjust the length of the first strings saddle so that the open (or harmonic) note and the fretted note are the same. This adjustment is made at the end of the bridge to the right of the string retaining groove.

IMPORTANT NOTE: It will often be necessary to re-tune the open string to standard pitch after the bridge saddle position is altered.

6. Repeat steps 4 and 5 for the remainder of your strings.

7. Repeat steps 1 through 6 as necessary until intonation of all strings is accurately adjusted.

IMPORTANT NOTE: It is important that your instrument be protected from any extremes or sudden changes in either temperature or humidity. The instrument should be stored in its case whenever it is not in use.

Battery Replacement

The Bartolini preamplifier is powered by a 9 volt transistor radio battery (included) which is located within the control cavity on the back of your bass. NOTE: Alkaline batteries are recommended for reliability and longest battery life. Low battery voltage will be indicated by fuzzy or distorted sound, especially with higher tone and volume settings. It is recommended the battery be changed every 60 hours of use, or every 3 months, to help ensure a battery doesn't leak and damage the instrument. NOTE: Tobias Guitars assumes no responsibility for damage resulting from a leaking or defective battery. Power is supplied to the preamp when a standard (mono) guitar cable is plugged into the bass. It is recommended that the cable first be plugged into the bass then into the bass amplifier input. To ensure longest battery life, be sure to unplug the cable from your bass when not in use.

=====

In most cases, following these guidelines will provide you with all the information you will need to enjoy a lifetime of trouble-free playing. If ever you feel that your Tobias bass is not performing to your satisfaction, please contact your local Tobias dealer or call us here at the factory between 8:30 am and 4:30 pm Monday - Friday CST. We will be glad to assist you in any way we can.

Specific Information About Your Tobias Bass

Since each Tobias instrument is unique, possessing its own voice and character and hand carved to its fullest potential, we have provided the following information that distinguishes your particular instrument.

Model K55Am Serial# 2981
Date of Manufacture 7-1-95 Neck Woods Maple/Purple Heart
Body Woods Ash
Finish T. Amber Strings 845 — 130
Other Information/Custom Features _____

Quality Inspected By F. Jones

=====

Please see the enclosed warranty card for details on coverage and obtaining warranty service. For your protection, it is recommended that you mail in your warranty card immediately upon purchase of your bass.