PHILIP

EX FACTOR™ / FACTOR™ BASSES

KUBICKI
This Manual applies to the following basses:

Factor Basses
  Factor 4, 19-9400
  Fretless Factor 4, 19-9408
Ex Factor Basses
  Ex Factor 4 Extended, 19-9800
  Fretless Ex Factor 4 Extended, 19-9808
Thank You . . .

We are pleased that you have selected one of our fine quality Kubicki basses. This instrument combines the highest quality components with the finest workmanship and is warranted to give you complete satisfaction.

Your new bass contains many features developed by our engineering staff. As a result, you are assured of receiving an instrument of superior quality, lasting beauty and exceptional playability.

We urge you to take the time to read this manual and familiarize yourself with the many new features and capabilities of this instrument.
OPERATING STRING CLASP

String Clasp Lever Arm

INSTRUMENT MAINTENANCE

Ratchet Spring Head
Bridge Saddle Screw
Tuning Knob
Bridge Slider Lock Screw
String Wheel
VOLUME CONTROL
The Volume control allows you to control the volume level at the instrument.

PAN CONTROL
The Pan control allows you to balance the level of the two pickups.

In the center detent position, the pickups are approximately equal in volume. Rotating the control counterclockwise raises the level of the bridge pickup, while lowering the level of the neck pickup, for a sharper, brighter tone. With the knob in the full counterclockwise position, the neck pickup is all the way off.

Rotating the knob clockwise has the opposite effect—the neck pickup volume is raised, while the bridge pickup volume is lowered, for a warmer, fatter tone.

PICKUPS
The special "Hi-Low™ hum cancelling pickups on your Kubicki bass work as either high or low impedance pickups, depending on how the active electronics controls are set.

They are also fully adjustable for height.

ACTIVE ELECTRONICS
Your Kubicki bass is equipped with hybrid passive and active circuitry. Choosing between passive and active modes will depend on the tonal requirements of the tone or gig you are playing. Each mode has its own distinctive tonal characteristics, which is why the selection is made available.

For equalization the signal can be boosted to 17dB in the active modes by the battery powered solid state electronics.

TONE CONTROLS
The two center stacked knobs are tone controls. Their functions depend on the selector switch setting.

When the selector switch is in one of the two active settings, the upper knob can be used to boost or cut treble frequencies by up to ±14dB at 6kHz, while the lower knob can be used to boost or cut bass frequencies by up to ±15dB at 40Hz. For both controls, the center position is flat; rotating the knobs counterclockwise cuts frequencies and rotating them clockwise boost frequencies.

When the selector switch is in the passive setting, the upper knob has no function, and the lower knob functions as a standard passive tone control.

ROTARY SWITCH
The active electronics are controlled by the rotary switch, which has 4 positions:

1) Standby (full clockwise position) - All controls are completely off. This position is handy for changing strings or in other situations where you want no output. (This position does not disconnect the battery.)

2) Active, with Presetable Mid Boost - The bass and treble tone controls are active. There is also a presetable amount of boost added to the midrange frequencies. Your bass was factory preset for maximum midrange boost. To adjust the amount of mid boost, remove the back cover plate with a small Phillips screwdriver and adjust the miniature potentiometer, R19, with an appropriate screwdriver. The amount of mid boost can be adjusted from approximately 1dB to 8dB. Maximum mid boost occurs at full clockwise rotation. Be careful not to adjust the potentiometer beyond its natural rotational limits.
3) **Active, Flat** - The bass and treble tone controls are active.
4) **Passive** (full counterclockwise position) - The lower tone control knob (bass) acts as a standard tone control—brightest in full clockwise position, with the highs rolling off as you rotate the knob counterclockwise.

**BATTERY**

Although the passive circuit will operate without a battery, the active circuit will function for approximately 1,000 hours on one 9V alkaline battery. You’ll know it’s time to change the battery when the signal gradually fades and becomes distorted. Since the battery is connected to the circuit only when a cord is plugged into the jack, you can obtain maximum battery life by unplugging the cord from your bass when you’re through using it.

When replacing the battery be sure to unplug the cable connected to your bass’s phone jack. This will guarantee protection from an accidental battery polarity reversal during installation which could destroy your preamp’s integrated circuit.

To replace the batteries remove the back cover plate with a small Phillips screwdriver. Be careful not to pull the wires from the circuit board, and be sure to replace the foam padding to hold the batteries in place. Rather than take chances, buy good quality batteries and wrap them with masking tape to prevent their casting from making contact with the shielding in the control cavity.

**ADJUSTABLE BRIDGES**

The bridge on your Kubicki bass is fully adjustable for individual string height and intonation (covered later in sections 3, Set Bridge Height, and 5, Adjust Intonation, of this manual).

**String Unloading**

Place your bass on a clean flat surface. Turn the tuning knob counterclockwise until the ratchet spring is fully extended (roughly 1/2” should be showing). The knob will turn relatively easily up to this point. DO NOT force it any further.

Holding the string firmly with one hand, press the ratchet spring forward (towards the pickups) with the thumb of your other hand until the string springs free. Pull the string out of the hole in the string wheel.

**String Loading**

Turn the string wheel until the hole in the wheel is on top. Push the non-ball end of the string into the hole as far as possible, then bend the string towards the neck, so it “kinks” right near the string wheel.

Place the ball end in the headstock ferrule. Keeping tension on the string with one hand (to prevent the ball end from popping out of the headstock ferrule), wind the top of the string wheel towards the tuning knobs with the thumb of your other hand. (String should not be place in saddle yet.)

Tighten the string wheel as tight as possible with your thumb (“fingertight”), then lift the string into the saddle post slot. Finally, tune to pitch with the tuning knob.

**STRING CLASP**

The Ex Factor basses feature an "E to D" string clasp, which allows you to extend the E string to a D without retuning (or even stopping your playing).

**Engaging the String Clasp (Normal "E" tuning)**

To go from D to E tuning, place your left hand in a normal playing position near the headstock. With your fingers, pull the E string towards the G string and hold
it there. Place your thumb on the back of the string clasp lever arm, push it up until it stops, and hold it there. Release your fingers, allowing the E string to slide back into its normal position. Then release the string clasp lever arm, which should now be pressing down on the E string. You are in "normal" or "E" tuning.

Disengaging the String Clasp ("D" tuning)
To go from E to D tuning, place your hand in a normal playing position near the headstock. Place your thumb on the back of the string clasp lever arm, push it up until it stops, and hold it there. With your fingers, pull the E string towards the G string and hold it there. Release the string clasp lever arm, which will recess down into the neck. Then release your fingers, allowing the E string to slide back into its normal position—over the string clasp lever arm. You are now in "extended" or "D" tuning.

TRUSS ROD
Each Kubicki bass is carefully adjusted at the factory. The truss rod and string height are set for optimum action and playability with medium gauge strings.

Under normal tension, the neck should have a slight concave curvature. By creating a counteracting force, the truss rod prevents the neck from bending excessively under the stress placed on it by the strings.

If you need to adjust the neck, see section 2, Adjust Neck Curvature, later in this manual.

TRUSS ROD, ACTION, AND INTONATION ADJUSTMENTS
You may need to adjust your Kubicki bass because of travel effects, climatic conditions, a change in your string gauges, or to accommodate your playing style. The following procedure outlines the standards set at the factory.

To make these adjustments, you will need the following equipment:

1 - 5/32" Allen wrench
1 - 5/16" End wrench
1 - Phillips #2 screwdriver
1 - Capo
1 - Mechanic's feeler gauge
1 - 6" (15.2 cm) Mechanic's ruler

Caution: It is important to do these interdependent adjustments in the order presented. Failure to follow the proper sequence may produce undesirable results.

1. Tuning
Tune the instrument to standard pitch.

2. Adjust Neck Curvature (Truss Rod)
Each Kubicki bass is carefully adjusted at the factory. The truss rod and string height are set for optimum action and playability with medium gauge strings.

Under normal tension, the neck should have a slight concave curvature. By creating a counteracting force, the truss rod prevents the neck from bending excessively under the stress placed on it by the strings. The tension on the rod is adjustable so the correct curvature can be achieved by regulating the neck's resistance to string tension.

To check the truss rod setting, tune the bass to playing pitch. Install a capo at the first fret, and depress the 4th string at the fret where the neck joins the body. Using a feeler gauge, check the gap between the bottom of the 4th string and the
top of the 8th fret. The recommended string clearance is approximately 1/32" (.03125) to 1/16" (.0625), or .79375mm to 1.5875mm.

The truss rod is adjusted at the tip of the headstock with a Phillips screwdriver. Remember, when performing any adjustments you should constantly check the gap between the string and the last fret with a feeler gauge.

If the neck is too concave (the strings are too far away from the fretboard), turn the screwdriver clockwise. If it is too straight or convex, turn the screwdriver counterclockwise.

Caution: DO NOT continue adjusting: 1) If extreme resistance is felt while adjusting in either direction, or 2) If the neck has a convex bow that remains when the truss rod nut is loosened. Take the instrument to the nearest Authorized Dealer or Service Center for inspection.

Note: The truss rod should not be left loose, but should be tightened by at least a quarter turn.

3. Set Bridge Height
The recommended string clearance at the fret where the neck joins the body (measured by the distance between the bottom of the string and the top of the fret) is:

- 4th string  - 5/32" (3.96mm)
- 3rd string  - 9/64" (3.57mm)
- 2nd string  - 9/64" (3.57mm)
- 1st string  - 1/8" (3.17mm)

Each bridge saddle may be individually adjusted to the desired height by carefully turning the bridge-saddles in half turn increments with a wrench. Counterclockwise motion raises the saddle and clockwise motion lowers it. Use the mechanic's feeler gauge to test your settings against the above standards. The instrument should be adjusted so that it provides comfortable playability, free of rattle. The optimum height adjustment varies from player to player due to differences in technique and playing styles. The recommended settings in this booklet have proven to be ideal for most players.

4. Set Pickup Height
The pickups on your Kubicki bass are height adjustable. This allows you to balance the overall volume between one pickup assembly and the other. Adjustments are made by turning the Pickup Adjustment Screws located at either end of the pickups.

The recommended string clearance (3/32") is measured (using a 6" [15.2 cm] mechanic's ruler) between the pickup and the bottom of each string when pressed at the last fret.

Note: Pickups set too close to the strings can cause false tones and loss of sustain.

5. Adjust Intonation
The bridge allows length adjustment of each string to ensure proper intonation. For optimum results, these adjustments should be made when the strings are in new condition.

Tune the bass. Set the pan control so the neck pickup is all the way on, and the tone and volume controls at the maximum settings. Check the intonation of each string with an electronic tuner by playing the open string harmonic at the
12th fret and comparing this note with the note produced by fretting the string at the 12th fret. The pitch should be the same, + or - 1 cent (1/100th of a semitone). If the fretted note is sharp, the string must be lengthened by moving the bridge slider back. This is done by turning the bridge slider lock screw clockwise to loosen the bridge slider, and then sliding the saddle. If the fretted note is flat, the string must be shortened by moving the slider forward. After each adjustment, retune and repeat the test and adjustments until the harmonic and the fretted note both produce the same pitch.

**CARE OF YOUR BASS**

Your new Kubicki bass is precision made to give you many years of satisfaction. A few simple maintenance procedures will help you keep your instrument playing like new.

After you have finished playing, thoroughly wipe the entire instrument, including the strings, with a clean, soft cloth. Regular cleaning with Fender Polish is recommended.

Avoid exposing the bass to any chemical or substance that might mar the finish, or to direct sunlight or other source of excessive heat, humidity or shock.

**Caution:** It is important to avoid sudden changes in temperature, since this causes the wood to expand at a different rate than the finish, which may result in damage to the finish. While this condition does not affect the tone, it does affect the appearance.

Let the instrument warm up in its own case. Then open the case slowly, allowing warm air to enter gradually. After the instrument is removed, leave the case open so it too can warm up thoroughly.

String tension should be reduced during shipping to avoid possible damage. Dirty, corroded or worn strings cause loss of sustain, loss of treble frequencies, and faulty intonation. Fresh strings add to the enjoyment and tonal quality of your bass. Change them often, using Kubicki strings.

If your bass needs repair work, refer all such work to your Authorized Dealer whose trained personnel and complete service facilities will assure your satisfaction.
This limited warranty against defects in material and workmanship applies only to the original retail purchase. IMPORTANT: PLEASE RETAIN YOUR SALES RECEIPT, AS IT IS YOUR PROOF OF PURCHASE COVERING YOUR ONE YEAR LIMITED WARRANTY.

Defective parts will be repaired or replaced without charge if the product is returned to any Authorized Dealer or Service Center. Any service performed by other than an Authorized Dealer or Service Center is not reimbursable under the warranty. Transportation costs are not included in this warranty.

This warranty becomes void if the serial number is defaced or removed, or the product has been damaged by alteration, misuse, accident, or neglect; or the product has been serviced by other than an Authorized Dealer or Service Center. The company assumes no liability for property damage of any sort which may result from the failure of this product. Any warranties implied by law are limited to the duration of this express limited warranty.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you also have other rights which vary from state to state.

Have service performed by any Authorized Dealer or contact:

Customer Relations
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