

B1/4-FL Fretless Bass 33.3 in polished maple & padouk

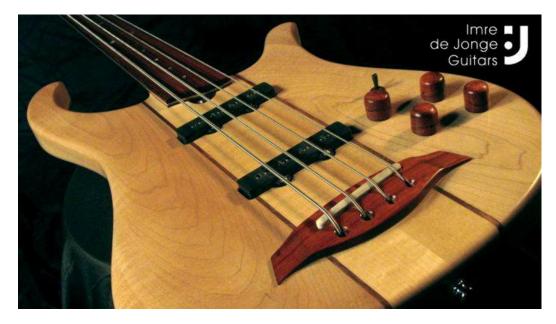


My first finish-free guitar...

bare highly polished wood is the smoothest, silkiest, slickest thing l've ever touched. Nothing slows your skin down as you slide over this surface.

> (guitar pictured is #45)

> > Feel your wood!!



This is my standard bass shape (B1) in a 4-string fretless version. It's very simple, without bells or whistles; 2 standard J pickups, a mini 3-way selector switch, 2 volume, 2 tone; all passive.



Mother-of-pearl logo inlay. Schaller tuners.

Because there's no finish to protect my usual india ink signature, I did it with a router, and filled it with padoukdusted epoxy.





Price: \$2,400 Cdn.

This particular guitar is currently available for sale at <u>Remenyi House of Music</u> in Toronto.

SPECIFICATIONS:

| Neck : 2-pce full length maple scarf head angle joint. | Body: 2 pce maple |
|---|--|
| Neck width @ nut: 42.5 mm Thickness: 23 mm Bridge: padouk | Scale length: 33.3 inches |
| String spread at bridge: 56 mm | Nut & Saddle: Deer antler |
| Fingerboard: padouk-maple-padouk with rosewood binding, pearl edge & face dots, cherry veneer edge fret markers | String anchor: 5 mm grounded aluminum block with 7 mm padouk overlay. |

Tuning machines: Schaller

Strings: D'Addario half-round reg. light

Strap studs: Schaller straplocks

Shielding: full; aluminum, galvanized steel, or copper sheet on mounting deck, foil adhesive tape on side walls.

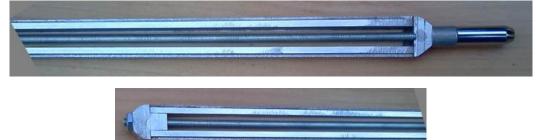
Truss rod: full length of my own design and construction; adjusts at the body to keep the nape at the head as strong as possible. This design uses a flat 3/4" wide x 1/8" thick aluminum U-channel double side-walled for rigidity, and is tensioned into a bend by a 3/16" steel rod running through it, anchored at the string nut and tightened with a Strat bullet nut in the heel. The entire assembly is silicone-filled to eliminate rattle or vibration.

Cover plate: maple laminated to sheet copper/aluminum/galvanized steel

Jack: barrel type; bolt-in

Electonic controls: 2 volume, 2 tone, 3-pos. pickup selector mini switch. All pots are linear taper

This is the truss rod I made for this bass. Note the two1/8" sidewall reinforcements, and the solid pressure blocks capping each end.





The laminated deer antler nut is held on by one screw for easy fingerboard servicing.



Instead of idividual ferrules, the strings need a common metal retainer to be grounded, since the bridge and saddle are non-conductive. The ground lead is soldered to a copper underlay; the 5mm aluminum string anchor plate is overlaid by a 7mm thick padouk cover.

The knobs are held on by set screws threaded directly through the wood, without metal inserts. This holds well, but don't over-tighten the screws or you may strip the thread; finger tight is fine.





The truss rod adjusts at the end of the fingerboard with an alan wrench. There should be just a slight (SLIGHT!) upward swoop to the fingerboard when sighted along its length.



The thick deer-antler saddle can only be adjusted by grinding the bottom down to lower or inserting a shim to raise.

General Care & Feeding

1. Keep your left-hand fingernails SHORT. Just file them right DOWN.

2. NEVER lean a guitar on the back of its neck!! This will cause dents & dings that will spoil the neck. ALWAYS lean a guitar on its strings!!! They protect everything.

3. Before doing any work to the guitar, prepare your work table with a soft , clean cover (like a blanket) that won't scratch, and keep it scrupulously clean.

Finish

There is no finish on this bass; not even oil. No maintenace is required, other than occasional re-polishing areas that become dull. To brighten up the wood, all that is required is to buff it with very fine sandpaper (800 grit or finer) and / or very fine steel wool (000), followed by some buffing with polishing compound on a cloth. Minor scratches & nicks can be smoothed out this way, and restored to a nice shine. For the polishing compound I reccomend Turtle Wax , which is available in most hardware/automotive stores.

You can add any good quality wood wax or oil if you wish, but I personally don't recommend it on the back of the neck or fingerboard, since materials like that can become gummy with play and slow down the neck speed and possibly get onto the strings. If the back of the neck gets a little gummy or dirty, buff it lengthwise with fine steel wool. You can follow that with rubbing compound if you want, but I find steel wool leaves it slightly faster. (but not as glossy)

Bear in mind that the colour of the instrument will darken over time, as the wood builds a patina from exposure to light and air. This happens with a finish too, but it will be more pronounced and rapid without one. The maple will yellow with age, and any repairs done to damage will appear lighter. The padauk is quite bright reddish orange when cut but darkens deeply over time. You may notice that already the fingerboard is darker than the bridge; this is due to the fingerboard being cut



The orange "rubbing compound" is their course, fast compound, and the white "polishing compound" is much finer, for a higher gloss. The orange compound is adequate to restore the shine on this bass. It contains oil, and that penetrates the wood somewhat. **CAUTION**: don't let the bass rest on crumbs of this stuff, or let crumbs lie on it. It will cause an oil-stain spot that's virtually PERMANANT, and impossible to blend out. ALWAYS CHECK for wayward crumbs before you put the bass down! (I'm serious!)

On the non-porous MAPLE body & neck. the compound can be applied wet or dry from a clean cloth, but don't let wet compound stagnate on the bass... keep it moving & spreading. Spread some compound on the cloth and buff the wood as the compound dries until you've removed all the compound from the surface and it and it much longer ago than the bridge, and a bit surprisingly, not all of its patina sanded out.

begins to shine. Finish with plain cloth. Dried compound worked into your cloth is a great quick buff-up tool, and I like to keep this in my guitar case. They last virtually forever, occasionally I top them up with a little fresh compound.



CAUTION

Padauk is an extremely POROUS wood, as you can see by the picture at left. Anything you rub on the surface will get into the pores, and it's pretty hard to get it out! The course red compound isn't as bright against the padauk, but the white stuff is dangerous. The picture shows what happens when you polish this with inadequately STAINED compound. The goal isn't really to match the wood colour, but just to make the pores DARK, and unobtrusive. Black will do just fine, so if you polish the padauk with compound, blacken it first

I tried india ink stirred into the compound, but after a while it seemed to lose its colour, and the white of the Turtle Wax again dominated. All black ink is actually extremely dark red, so it's not true, permanant black. The best thing to use would be black paint pigment (from any paint dept.) or VERY finely ground charcoal. Mix it thoroughly through some compound until it is BLACK, through & through. If it becomes too thick to mix easily, add a little water.

Neck & adjustment

Due to its lack of finish, this bass may be slightly more reactive to humidity changes. Padauk is an extremely stable wood, reacting or warping very little with humidity change, but maple not so much. I would expect in high humidity the maple will expand more than the padauk, which would bend the neck forward, and in low humidity exactly the opposite. These effects are likely to be miniscule, but both can be corrected by adjusting the truss rod. Tighten it to straighten out or bow the neck backward; (against the string tension) loosen it to allow the strings to pull the neck forward (with the tension). You can sight down the neck to guage its straightness (do this from both ends) and adjust the rod so there's the subtlest of forward bow. Ultimately, how the bass plays and sounds will determine the best adjustment, and some trial & error is involved. It's not necessary to loosen the strings. DON'T over-tighten the truss rod; when turning the nut becomes difficult, you're nearing the limit.

BEST THING is not to let the bass dry out too much. Dryness causes wood to shrink, and that can cause cracking, as the wood literally pulls itself apart. Wetness causes swelling, but that doesn't pose nearly the danger, since it won't cause cracking. Below a relative humidity of 30% there is a risk, and keeping a

Fingerboard

The bass is strung with D'Addario half-round strings, for smoother quieter slides and longer fingerboard wear. If you choose round-wound strings, the windings will wear into the fingerboard much more, and more frequent sandings will be required. This should be preferably done by a competent luthier or service person, or better yet, me. It's not rocket science, but any sanding on that should only be done with a long, dead-straight hard block, and I would not start courser than 320 grit, depending on how deep the wear is. The thing about sanding is, if you start too course, you spend a lot more time sanding out those marks as you grade up. If you start at a higher grit, it takes longer to sand out the wear, but you're not left with any deep scratches from course papers... you're done, and ready to polish. When I dress frets or a fretless board I prefer to start around 400-600 grit, and finish with 800 or 1000.

I sand a slight down-slope in the 2nd octave, mainly on the bass side, to accomodate the string movement at lower positions; this should be maintained

moisturizer in the case or a humidifier in the room is necessary, same as you would treat an acoustic guitar.

Average median humidity is 50%, and that is the ideal, and the conditions under which my guitars are built.

Electronics

The electronics are entirely passive; no battery is required. Each pickup is on its own volume & tone control; there is no overall (master) volume control.

Over time the controls ("pots"short for potentiometers) may become somewhat noisy as the resistive element wears or becomes dirty. My favorite thing for cleaning electronic cpmtrp;s is WD40, but there are other specialized materials for this also. To get it into the pots, you'll have to remove the back cover. With a straw nozzle bent, spray a small amount into the opening (behind the contacts) and turn the pot back and forth. If a cleaning like this doesn't solve the problem, the pots may need to be replaced.

I used 250K LINEAR TAPER pots for the volumes, and 500K for the tones. My preference is always linear 'B' taper, rather than "audio" or 'A' taper, which have an exponential rather than a consistent effect as they're turned. This is a preference; any suitable 250K to 1 MEG pots will do.

If the selector switch becomes noisy or sloppy, it will have to be replaced. These things don't last forever, and really aren't serviceable.

If any components become loose, please use a socket wrench to tighten them, to avoid marring the surrounding wood. For the pots you'll need to remove the knobs, and open the cavity so you can hold them in position as you tighten the nut. If you don't hold them, they can rotate and either contact something they shouldn't, or strain one of the connections. Tightening the nut on the mini switch is tricky; again, a LONG socket is needed to do it safely. IF you need to use pliers for this, put tape on the jaws facing the guitar so the inevitable slip won't be a disaster. Hold the switch body to prevent it from turning too much, and to leave it at the angle you prefer.

When replacing the knobs you'll need to fudge the knob on the pot shafts until they tighten at the right height and rotate evenly. DON'T OVER-TIGHTEN THE SET SCREWS!

If you need to replace a knob, just <u>email me</u> and I'll send you a new one for free.





If the bass ever becomes prone to humming when your fingers are removed from the strings, the ground connection to the strings may have become faulty. This connection is through a piece of copper foil pinned underneath the string anchor. If, with an ohmmeter or other tester it shows to have a good connection between the strings and any other part of the ground circuit, (pot bodies, jack body, or shielding foil & plate) then the problem isn't the bass. You may have some building ground faults, which can often be improved by by-passing the ground pin on the power plug. If the tester shows no connection between the strings and ground, check the wire coming from the bridge and make sure it's securely connected. If so, you'll need to check the other end. Remove the string anchor cover (1 screw) and loosen the strings until you can lift the anchor plate up and inspect the groundconnector underneath. If undamaged, simply re-positioning it may solve the problem. If the foil has separated from the wire it's soldered to, it will need to be re-soldered.



Pickups: The pickups are screwed down into their sockets over a foam rubber cushion. This works as a spring to allow the pickup to sit securely at any height. To vary the angle of the pickup, just loosen or tighten the screws. I found (this is true of basses in general) that the treble strings were more pronounced thatn the bass side, so an angling down away from the treble side is desireable.

The pickups supplied are standard GFS J-bass copies; single coil. Because single coil pickups are prone to picking up interference in a myriad of forms, the bass will be noisier in some locations than others. They're quite directional, though, and I find turning my position even a little can make a big difference. Many companies now make that form factor in a humbucking configuration, should you find interference levels to be unacceptable where you are.

OPTIONAL

There is ample room under the antler saddle for an acoustic piezo pickup, and room in the control cavity for extra controls or pre-amp.

Tuners: These are sealed tuners that require little to no maintenance. Occasionally the button tension will work loose. Just tighten the screws that hold the buttions on, but not too much; you'll find the tuner stiff to operate if you do. Every year or so a few drops of light oil can be applied to the bass of the string shafts to keep the gears lubricated.

Always tune AGAINST the string tension, in other words, UP, never down. If your string goes sharp you have to start over from flat! This is true of all instruments with geared tuners, because there is a slight amount of play between the gears that the strings will pull out if the grears aren't engaged against the tension, and your string will slip down. Most people who complain their guitars won't stay in tune simply don't tune correctly. That's about all there is to it! Following the guidlines above will give you years of trouble-free music from this bass. I hope you enjoy it and that maybe it even inspires your playing!

See more in-progress shots <u>here.</u>

Also in the Facebook galleries here & here.

main guitar page



Imre de Jonge Guitars

Photography & website by Imre de Jonge