## **GUITAR ANATOMY GLOSSARY**

**abalone**: an iridescent lining found in the inner shell of the abalone mollusk that is often used alongside mother of pearl; commonly used as an inlay material.

**action**: the distance between the strings and the fretboard; the open space between strings and frets.

**back**: the part of the guitar body held against the player's chest; it is reflective and resonant, and usually made of a hardwood.

**backstrip**: a decorative inlay that runs the length of the center back of a stringed instrument.

**binding**: the inlaid corner trim at the very edges of an instrument's body or neck, used to provide aesthetic appeal, seal open wood and to protect the edge of the face and back, as well as the glue joint.

**bout**: the upper or lower outside curve of a guitar or other instrument body.

**body**: an acoustic guitar body; the sound-producing chamber to which the neck and bridge are attached.

**body depth:** the measurement of the guitar body at the headblock and tailblock after the top and back have been assembled to the rim.

**bracing**: the bracing on the inside of the instrument that supports the top and back to prevent warping and breaking, and creates and controls the voice of the guitar. The back of the instrument is braced to help distribute the force exerted by the neck on the body, to reflect sound from the top and act sympathetically to the vibrations of the top.

**bracing, profile**: the contour of the brace, which is designed to control strength and tone.

**bracing, scalloped**: used to describe the crests and troughs of the braces where mass has been removed to accentuate certain nodes.

**bracing, X-brace**: the major braces in a steel-string guitar top that cross to form the letter X.

**bracing, forward-X**: a traditional X-brace pattern on the guitar's top that has been shifted forward to tune the voicing of a particular instrument.

**bracing**, **transverse**: any top or back brace that runs perpendicular to the centerline of an instrument.

break angle: the angle of a string as it passes over a bridge, saddle, or nut.

**bridge**: an anchor point for the strings to connect to the top of the instrument.

**bridge pins**: little tapered pegs made of plastic, wood, bone, ivory or other hard, tough material, used to anchor the strings in the bridge.

**bridge plate**: the reinforcement plate that rests under the guitar top directly beneath the bridge.

**strap button**: a button on which to attach a strap.

**compensation**: moving the bridge or cutting the saddle to achieve desired vibrating string lengths. Many fretted instruments need to have the vibrating string length adjusted so they will play more correctly in tune. This can be accomplished by compensating the bridge.

**condenser (mic)**: a microphone that functions by transducing vibrations in the air via changing capacitance and voltage, rather than by moving parts.

**cutaway**: the section of an instrument body that is "cut away" to enable the player to more easily access higher frets over the body.

**density**: weight per defined volume of material.

**endpin**: the little button at the end of an instrument that holds the strap.

**endpin jack**: an electrical connector that doubles as a strap holder at the bottom of a guitar or other instrument; sometimes called a "strap jack."

**electronics (package)**: a unit that allows for amplification of a particular instrument; generally consists of a pickup, preamp, power source, and an endpin jack.

**face**: the part of the guitar facing away from the player that holds the bridge, controls the tone, and supports the tension of the strings; usually a soft wood.

**fall away**: the lengthwise profile of the fingerboard from the 12th fret toward the bridge that allows for free vibration of the strings without string buzz.

**fingerboard**: the unfretted surface of a fretless instrument; for example, a fretless bass or violin would have a fingerboard, and not a fretboard.

**fretboard**: the front surface of the neck which holds the frets, to which the string is pressed to form different notes.

**frets**: the little metal bars that cross the fingerboard. The string is pressed downward until it touches a fret, effectively shortening the vibrating length of the string and producing the different notes.

**fret marker**: the inlaid position markers on the face of the fretboard that show where the player is in reference to the scale length.

**fret tang**: the underside of a fret that is seated in the fret slot.

**headblock**: the internal structural support block to which the top, back, sides (rims) and neck are joined in the build construct of a guitar body; it is opposite the tailblock.

**headstock**: the end of the neck that holds the tuners; sometimes called "peghead" or "head."

**headstock veneer**: the laminate covering that is affixed to the peghead. It generally offers an aesthetic match to the fingerboard and bridge, as well as a support for the tension of the strings on the peghead.

**heel**: the portion of an instrument's neck that joins the neck and body.

**heel cap**: a decorative lamination at the end of the heel of an instrument's neck.

**herringbone**: an arrangement of parallelograms used as a decorative perfling element with a resemblance to the skeleton of a fish such as a herring.

ivoroid: imitation ivory used as binding on stringed instruments.

**inlay**: decorative materials set into a corresponding cavity in the wooden surface of an instrument

**kerfing**: strip lining used to affix the top and back to the sides at the body interior and which is made from wood that features saw cuts for easy bending.

**loop-end string**: a string with a loop for hooking onto a tailpiece, as on a mandolin.

**magnetic pickup**: a sound transducer comprised of a copper wire that is wrapped around a magnet.

**mitered purfling**: purfling lines that meet at an angle in the corners.

**mother-of-pearl (MOP)**: the natural iridescent inlay material that comes from a variety of mollusk shells.

**nut**: the piece the strings cross over at the peghead end of the instrument; holds the strings in position, and defines the end of the vibrating length of the strings at the end opposite the saddle.

peghead: see headstock.

**pick guard**: plate made of plastic or other material that protects an instrument top from scratches.

**pickup**: a device, or transducer, mounted on an instrument which allows the sound to be amplified.

**pin bridge**: the standard steel-string guitar bridge, which anchors the strings to the top of the guitar by means of bridge pins.

**pinless bridge**: a guitar bridge made without pins where the strings simply thread in from the back edge.

**preamp**: generally an electronic device mounted inside or on a guitar, which converts a pickup's frequency response and impedance before it is sent to the amplifier.

**purfling**: decorative inlay around an instrument just inside the binding, used to provide an aesthetic appeal and seal open wood; may be fancy, using abalone or other exotic materials, or plain, made of plastic or wood.

**pyramid bridge**: bridges that have decorative pyramid shapes carved at the ends.

**radius:** thee radius is the convex curvature on the face of the fretboard; may also refer to the convex shape found on the top and back of flat-top guitars.

**relief**: the slight curvature in a stringed-instrument neck that allows the strings to vibrate without hitting the frets; the opposite of this curvature is often referred to as back bow.

**ribs**: an old-school term for the sides of the body of a stringed instrument. Guitar sides are usually called "sides;" violin and cello sides are usually called by the older term, "ribs."

**rosette**: the decorative inlay around the circular or oval sound hole. Classical guitars usually have complex wood marquetry rosettes, while steel string guitars, until recently, tended toward very simple ring patterns.

**saddle**: on fretted instruments, the saddle is the part of the bridge, commonly made of bone, fossilized ivory or synthetic materials, over which the string passes and which defines the end of the vibrating string and scale length.

**neck stringer**: an inlay, or lamination, down the center of the neck of an acoustic instrument.

**scale length**: the calculated length by which frets are positioned, measured from the leading edge of the nut to the center of the 12th fret, multiplied by two. (The octave is at the middle of the scale length.) This produces the calculated length by which frets are positioned. The actual vibrating length is slightly longer, due to compensation, and is referred to as the compensated string length.

**tailpiece**: the string anchor at the end of a fretted instrument with a moveable bridge; commonly seen on archtop guitars and bowed instruments.

top: see face.

**transducer**: any device that converts the vibration of a guitar into sound waves, whether magnetic, piezo, or microphone, although it often simply refers to piezo transducers.

**truss rod**: an adjustable tensioning device within the neck that compensates for string tension and allows controlled straightening or relief in an instrument neck.

**truss rod cover**: a decorative plate, usually screwed to the peghead, which covers the truss rod adjusting nut.

**tuning machines**: the geared devices that allow for tensioning the strings and keeping instruments in tune; generally categorized by a gear ratio.

**under saddle**: the point at which many piezoelectric pickups are placed.

**volute**: a raised curving area carved in the back of an instrument neck at the base of the peghead; it strengthens or stiffens the potentially weak area where the neck and peghead meet.

waist: the narrow part of a guitar or other instrument body.

winged bridge: the original Breedlove asymmetrical bridge.