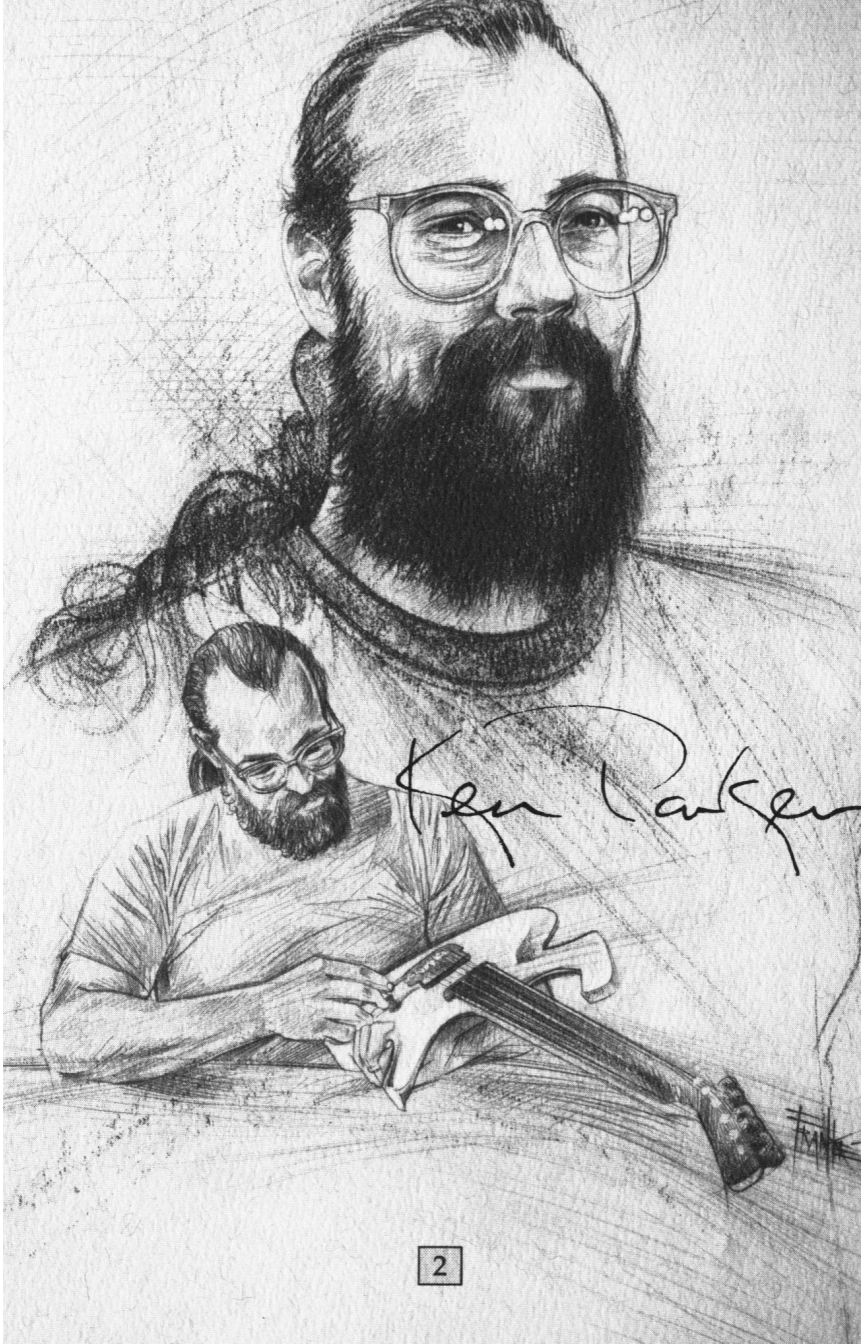


Parker
GUITARS
HANDBOOK

Illustrator, Phil Franké
Layout and Design, Karen Lee

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Ken Parker

Dear Fellow Guitar Enthusiast:

Back in 1973 my brother Alan had outgrown his short scale beginner bass. I had been studying furniture-making as an elective course at college, so building an electric bass seemed like a pretty simple project. Researching and planning a new instrument, I became fascinated with the union of strings and wood – the proportions, balance, look, feel and tone. Alan and I were both happy with the bass and I never really looked back. For twenty years I've been exploring the simple project I'd started at school and it's just as challenging and fun as it ever was. I've built arch-tops, solid bodies, 4-, 5- and 6-string basses, electric violins, cellos and harps. Trying to solve physical problems and expand the abilities of the instruments, I've explored non-traditional materials, studied traditional techniques, sculpted surfaces, and designed and made new hardware. Boats, cars, airplanes and sporting equipment provided inspiration.

Increasingly, I saw the guitars available to modern musicians as clumsy, limiting and gimmicky. I began to envision advances in form and function. A superlative instrument must be beautiful, balanced, powerful, accurate, versatile, durable and comfortable – a great tool which, at its best, inspires musicians to greatness, but at least doesn't get in their way! Clearly, the evolution of musical instruments is an evolving art form as complex and rewarding as music itself.

After teaming up with Larry Fishman in 1982 I knew that my new guitars would also have a unique amplified voice. Since then we've worked together to develop and refine The Fly Guitar into the tool you're now experiencing. Larry and I work with a dedicated group of artisans – among the world's best instrument makers.

Your input will continue to guide and inspire us as we develop new instruments with new capabilities in the years to come. Meanwhile, we expect you'll enjoy many years of faithful service from your Fly.

Thanks for your support. Play from your heart!

Evolution of the Parker Fly

For forty-five years, guitar builders and technicians have re-combined the features of available instruments in countless ways, trying to serve the changing needs of guitarists. The uses and limitations of the new combinations have been fully explored by now.

As different as they seem, solid-body and hollow-body guitars both create sound the same way. Both guitars are mechanical devices made of wood and other materials, designed to respond to a string's vibration. The only real difference is the mode of amplification. One uses pickups, circuitry and speakers; the other uses a wooden membrane to move the air.

The character of both acoustic and electric guitars is determined by their materials and proportions.

Knowing this, we set out to create the most versatile, responsive and dependable instrument possible. In the end, what emerged was the unique instrument that you now own. Our search has led us down many new paths in hopes of achieving a harmonious balance between the magic soulfulness of wood – which can suffer from problems such as warping and cracking – and more stable modern materials – which typically sound cold and clinical. Think of our lightweight tonewood and exoskeleton of high-modulus carbon and glass fiber as a new kind of wood. This patented structure allows us to sculpt a beautiful, lightweight guitar, optimized for its ability to respond to the strings' vibrations.

We have developed other innovative features as well. Our patented stainless steel no-tang frets bonded to a laminated fingerboard greatly increase fret life. There is also a new lightweight truss rod made of tool-steel, and a flat-spring vibrato system designed to work with the Fly's built-in Piezoelectric bridge pickups.

Finally, we've built a new facility and filled it with custom tooling to support the manufacture of these new components and instruments. We're using the latest computer-aided manufacturing equipment combined with an especially high proportion of hand work. We're building these instruments to tolerances never before held in our industry. Isn't it great that all of our attempts to make every instrument exactly the same result in guitars that each have their own personality and character?



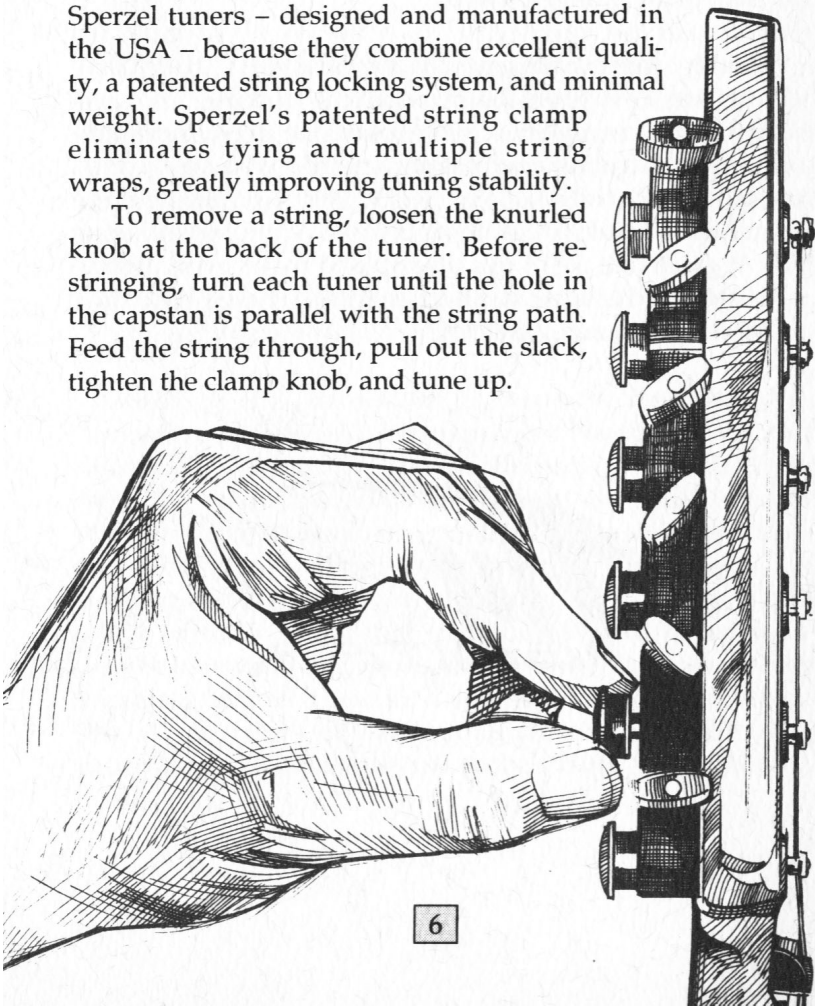
Features, Maintenance and Adjustments

As with all fine musical instruments, a little care and maintenance go a long way toward preserving your investment.

Tuning Machines

Virtually the only part of your Fly guitar that isn't made by or especially for us are the tuners. We proudly use Sperzel tuners – designed and manufactured in the USA – because they combine excellent quality, a patented string locking system, and minimal weight. Sperzel's patented string clamp eliminates tying and multiple string wraps, greatly improving tuning stability.

To remove a string, loosen the knurled knob at the back of the tuner. Before re-stringing, turn each tuner until the hole in the capstan is parallel with the string path. Feed the string through, pull out the slack, tighten the clamp knob, and tune up.



Action

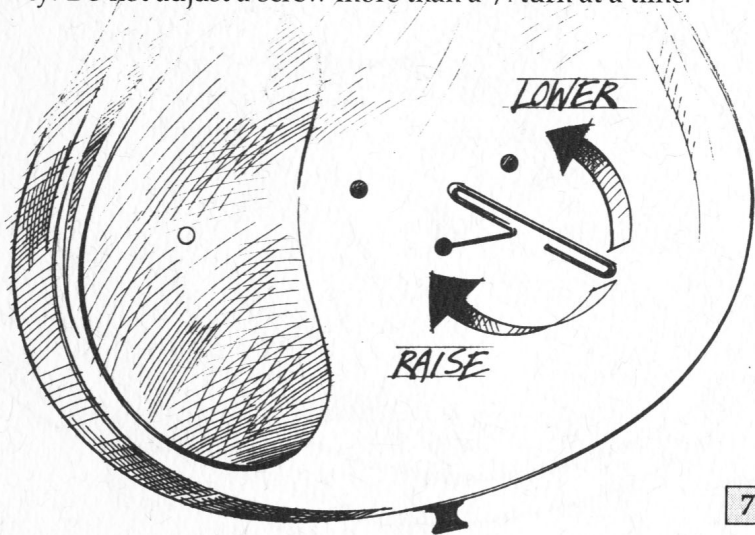
Your Fly has been shipped with D'Addario .009 > .042 strings adjusted to a very low action of .070 on the bass side and .050 on the treble side, measured at the twelfth fret.

If you lower your action even further, be aware that some buzzing may occur.

The Fly's bridge is designed and made exclusively by Parker. The radius of the bridge exactly matches that of the neck. Therefore the Fly doesn't require the individual height adjustment devices that detract from tone and sustain.

Fly Deluxe

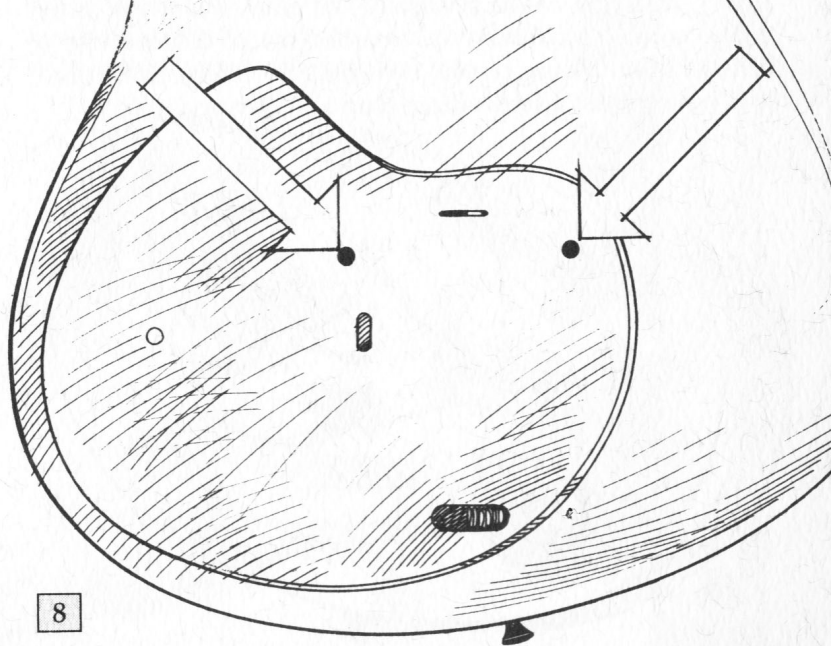
Action is set with three screws from the back of the guitar. Using the T-handled $\frac{3}{32}$ Allen wrench supplied with your guitar, turn the screws clockwise to raise the bridge and counterclockwise to lower it. Since these screws also adjust the angle of the bridge to the guitar, to make more than a small adjustment you must adjust all three screws a little at a time, being careful not to tilt the bridge in its cavity. Do not adjust a screw more than a $\frac{1}{4}$ turn at a time.



Fly Deluxe Vibrato

Action is set with two screws from the back of the guitar. Using the L-shaped $\frac{5}{32}$ Allen wrench supplied with your guitar, turn the screws clockwise to lower the bridge, and counterclockwise to raise it. If you're changing the action a lot, it's good practice to alternate between the two screws, making no more than a $\frac{1}{4}$ turn at a time.

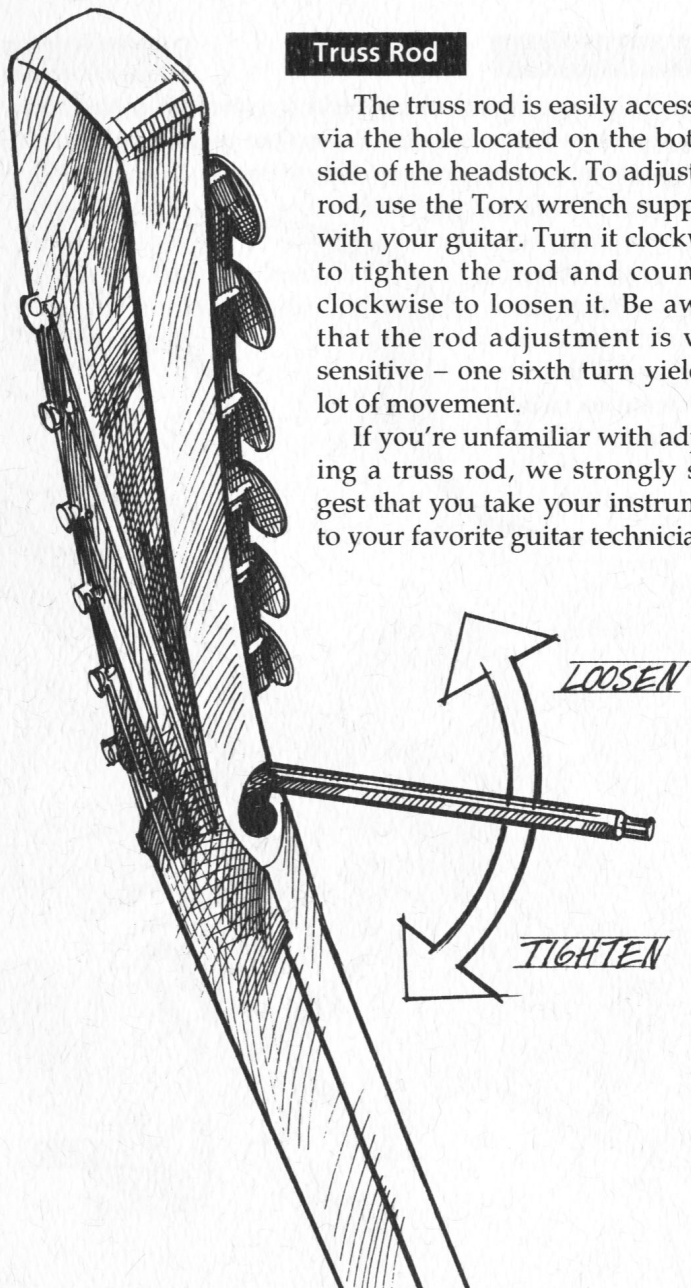
If you're unfamiliar with adjusting action, we strongly suggest that you take your instrument to your favorite guitar technician.



Truss Rod

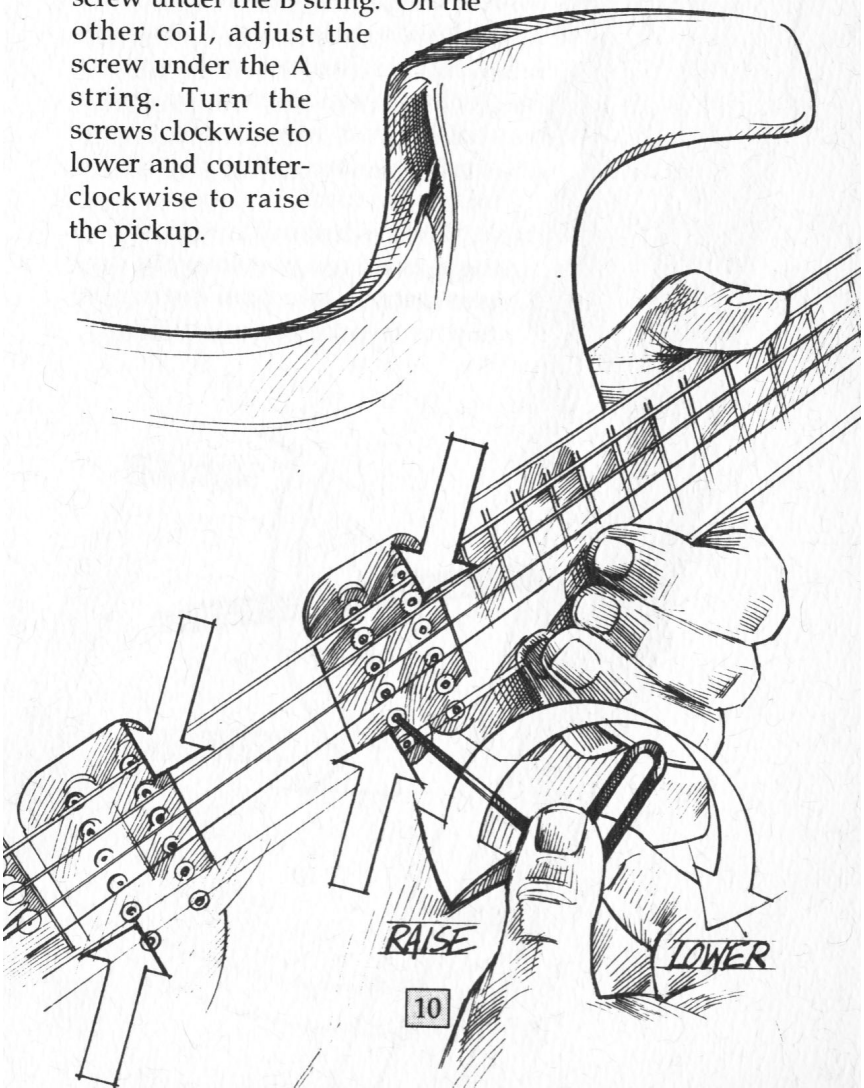
The truss rod is easily accessible via the hole located on the bottom side of the headstock. To adjust the rod, use the Torx wrench supplied with your guitar. Turn it clockwise to tighten the rod and counter-clockwise to loosen it. Be aware that the rod adjustment is very sensitive – one sixth turn yields a lot of movement.

If you're unfamiliar with adjusting a truss rod, we strongly suggest that you take your instrument to your favorite guitar technician.



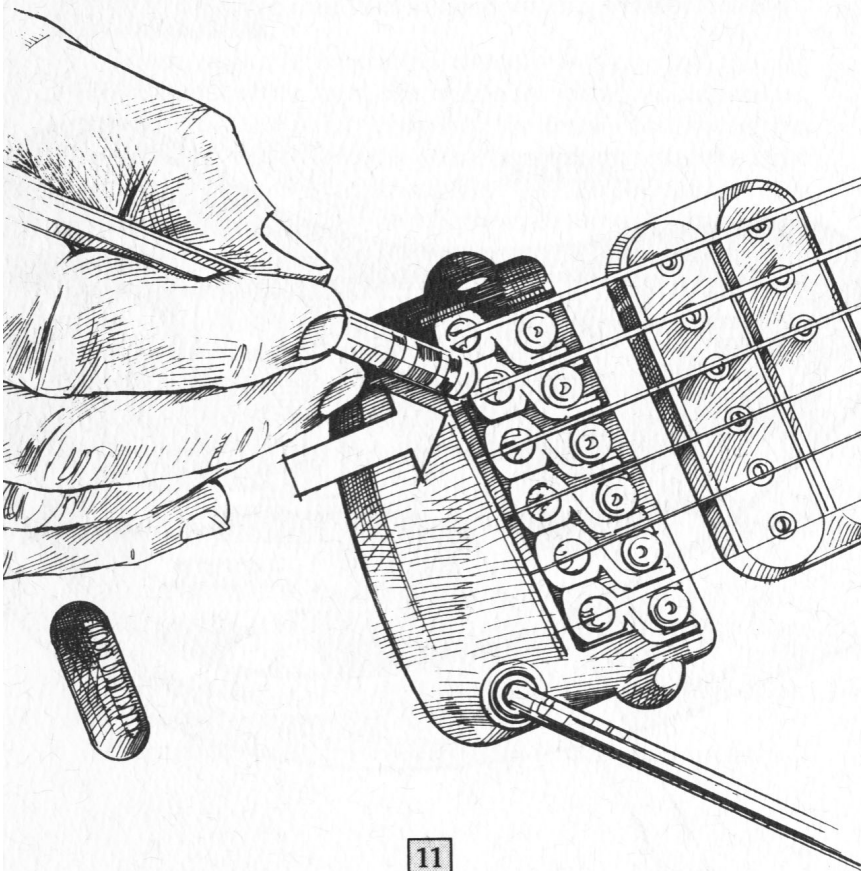
Adjusting Pickups

Each DiMarzio humbucking pickup is secured to the body by two screws. These screws also adjust pickup height. On the coil closer to the bridge, adjust the screw under the B string. On the other coil, adjust the screw under the A string. Turn the screws clockwise to lower and counter-clockwise to raise the pickup.



Intonation

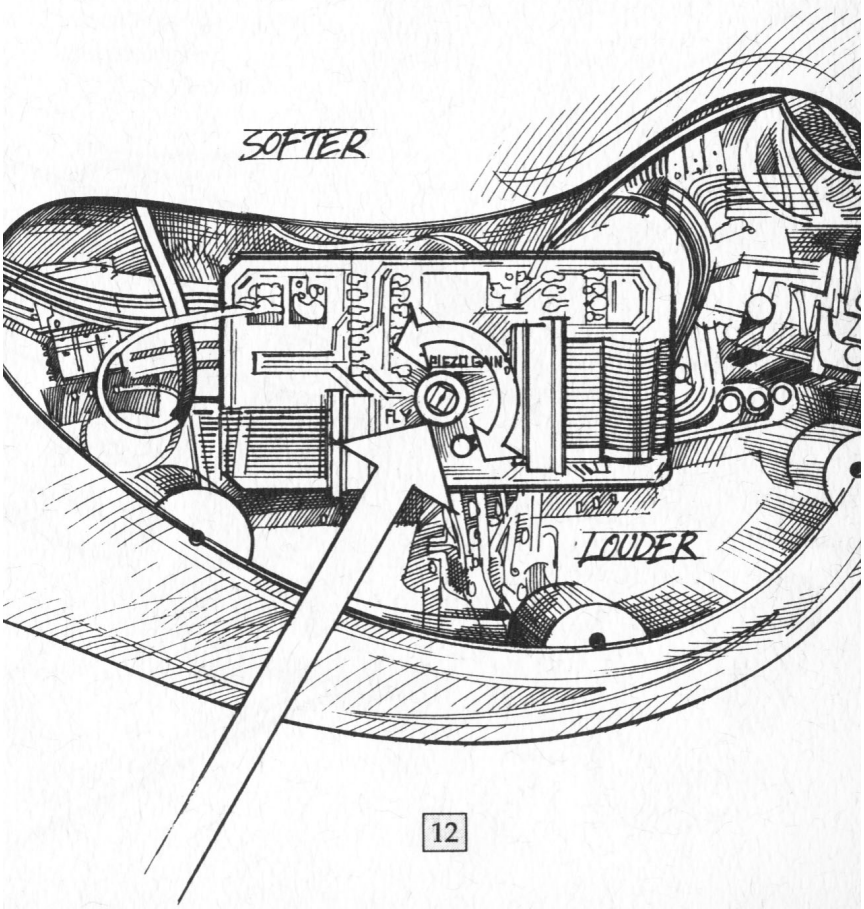
To set the string length or intonation, loosen the screw that clamps the bridge saddle in place with the supplied T-handled $\frac{3}{32}$ allen wrench. If the string plays sharp, slide the saddle back to make the string longer. If it plays flat, slide it forward. Re-tighten the saddle screw. The Piezoelectric elements in the bridge are delicate, so be careful. The eraser end of a pencil is a safe tool for sliding the saddles.



Piezo Balance Control

Your guitar is equipped with a Piezo Balance Control. We set this control at the factory so that the full volume outputs of the Piezo and magnetic systems are equal. Since string gauges and pickup height affect the output of the magnetic pickups, you may want to change the relative levels of the two systems by adjusting the Piezo gain.

To do this, remove the control cover, and adjust the small, white knob mounted on the circuit board. This trim pot controls the gain (output) of the Piezo pickup.



Piezo Frequency Response

The Piezo system has a far greater treble response than normal magnetic pickups. Some amps will have no trouble with the additional high frequency output, but others will distort. If you are getting distortion, you may want to decrease the gain of the Piezo pickup. The way to do this is to lower the Piezo volume and/or roll off some of the treble on either the amp or the guitar.

Control Cover

When replacing the control cover, make sure that the red LED battery status light fits inside the clear plastic lens on the control cover. Before replacing the screws that secure the cover, insert a cord into the guitar's jack to activate the light so that you can check its visibility. On vibrato guitars, also insure that the step-stop switch protrudes through its slot.

Cleaning and Polishing

If you're just trying to remove fingerprints or dust, use a soft guitar-polishing cloth. To remove fine scratches or clean heavy dirt, use a non-abrasive guitar polish and follow the manufacturer's directions. Please use products designed only for guitars, as some polishes contain abrasives that can scratch the finish.

Frets

Our patented fret and fretboard system consists of hardened stainless steel frets bonded to a glass and carbon fiber fretboard.

The frets may only be serviced at the Parker factory or by a factory authorized repair facility.

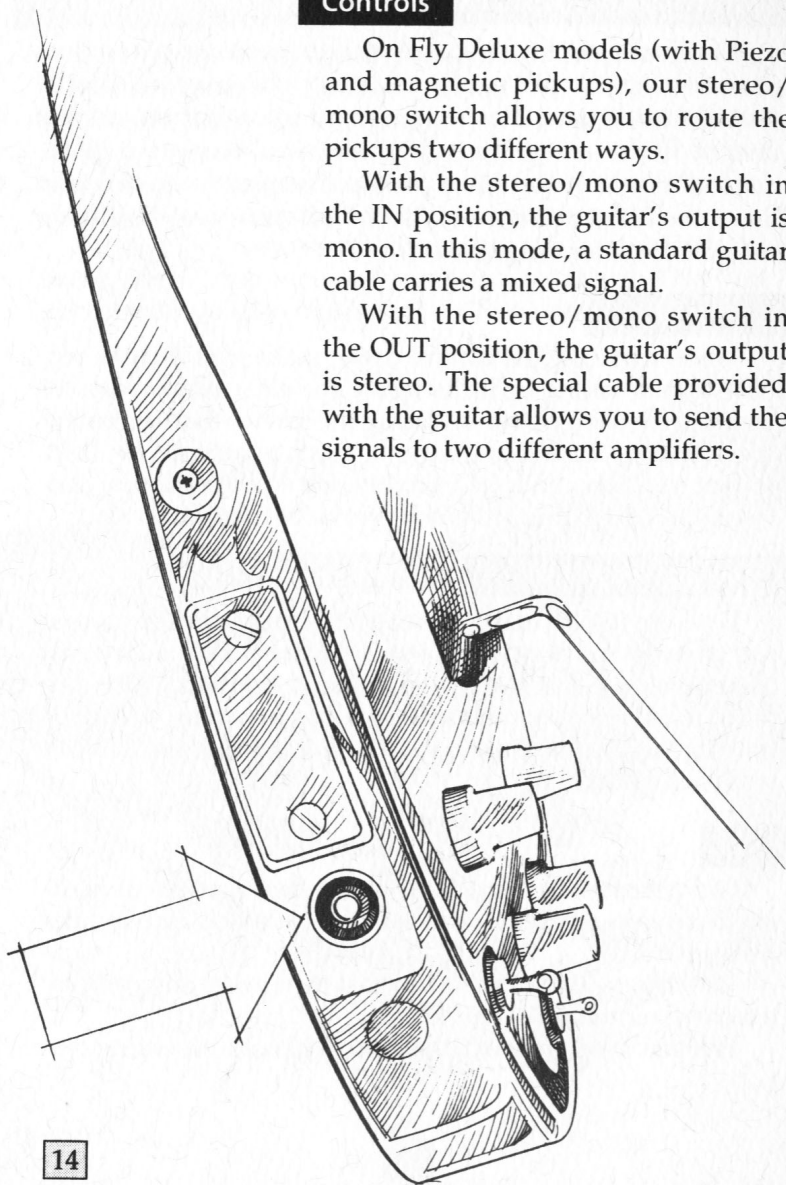
Fret service performed otherwise will void the warranty.

Controls

On Fly Deluxe models (with Piezo and magnetic pickups), our stereo/mono switch allows you to route the pickups two different ways.

With the stereo/mono switch in the IN position, the guitar's output is mono. In this mode, a standard guitar cable carries a mixed signal.

With the stereo/mono switch in the OUT position, the guitar's output is stereo. The special cable provided with the guitar allows you to send the signals to two different amplifiers.



The overall volume is controlled by the Master Volume (1).
The magnetic volume and tone are controlled by (2 & 3) and
the Piezo volume and tone are controlled by (4 & 5).

I. MAGNETIC PICKUP SELECTION

A = Bridge full humbucker

B = Neck full humbucker

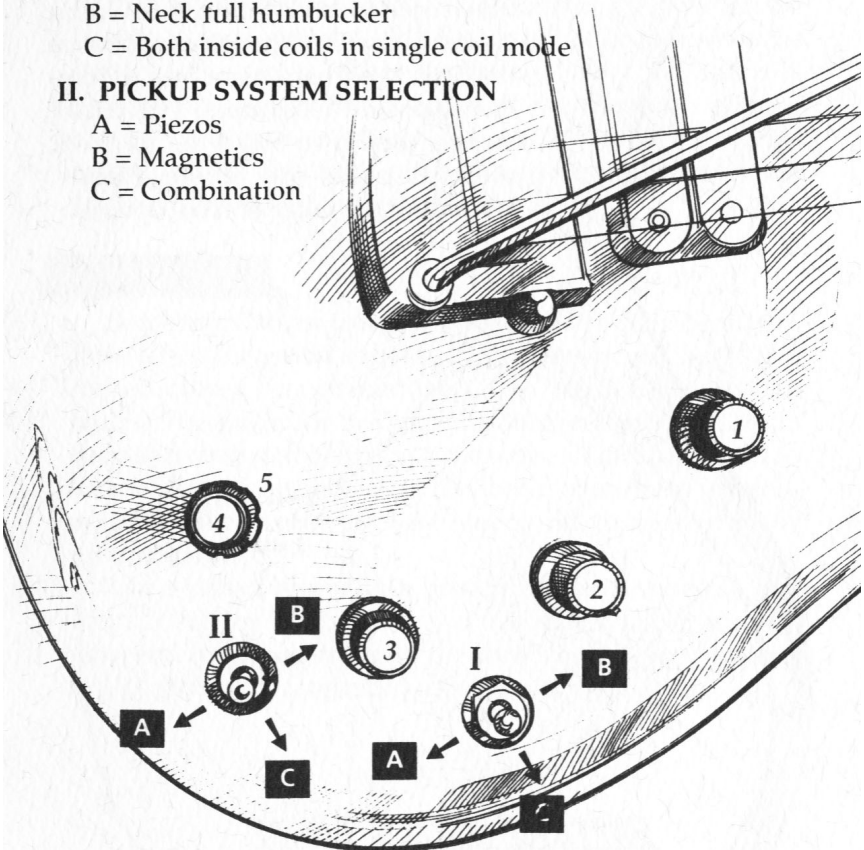
C = Both inside coils in single coil mode

II. PICKUP SYSTEM SELECTION

A = Piezos

B = Magnetics

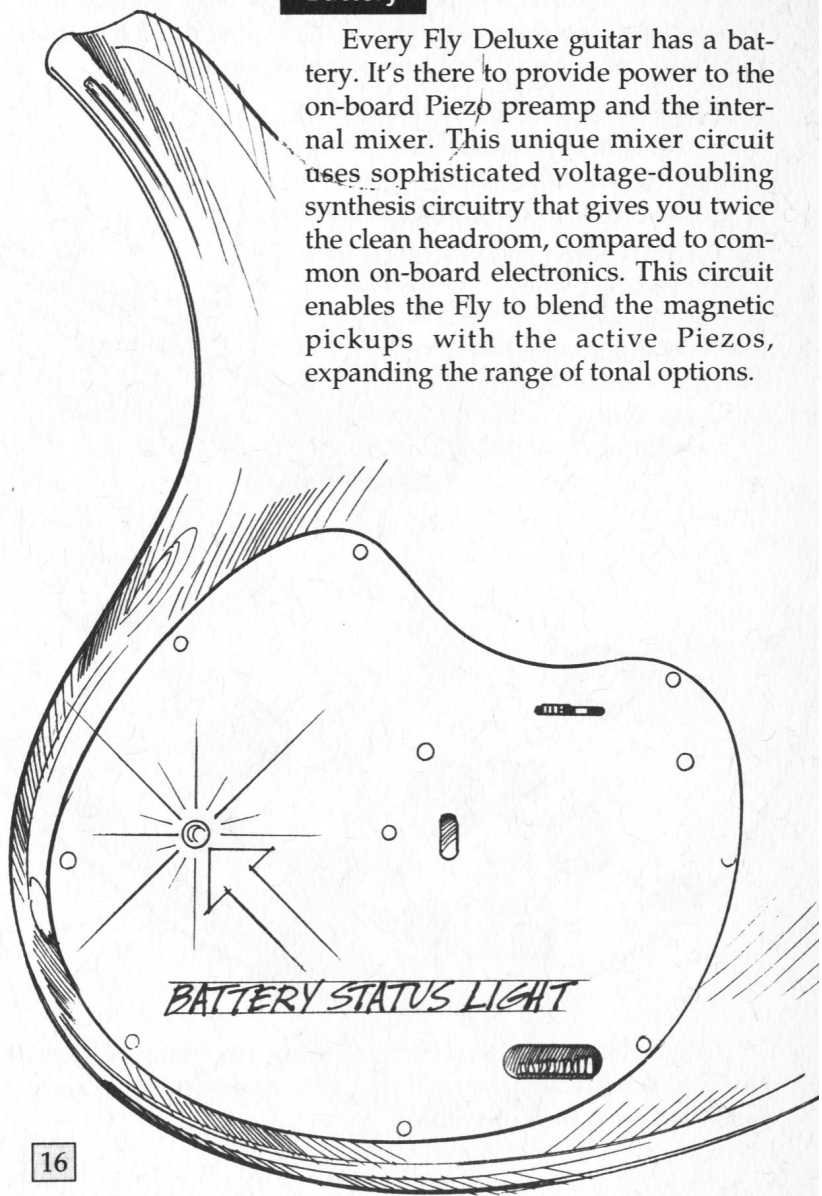
C = Combination



To get the most acoustic sound from the Piezo pickups,
use a hi-fidelity system such as a PA, acoustic guitar amp,
keyboard amp, or home stereo.

Battery

Every Fly Deluxe guitar has a battery. It's there to provide power to the on-board Piezo preamp and the internal mixer. This unique mixer circuit uses sophisticated voltage-doubling synthesis circuitry that gives you twice the clean headroom, compared to common on-board electronics. This circuit enables the Fly to blend the magnetic pickups with the active Piezos, expanding the range of tonal options.



The battery has a useful life of approximately 100 hours. It's turned on when a cable is plugged into the guitar. To extend battery life, please remember to remove the plug when you're not playing your guitar.

The battery status light is on the control cover. When the battery is good, this red LED flashes for an instant when the guitar is plugged in. When the battery is low, the light will glow continuously while plugged in. You then have approximately two hours of battery power left. Finally, a distorted output signal or a high-pitched whistle will serve as an audio reminder that the battery is dead.

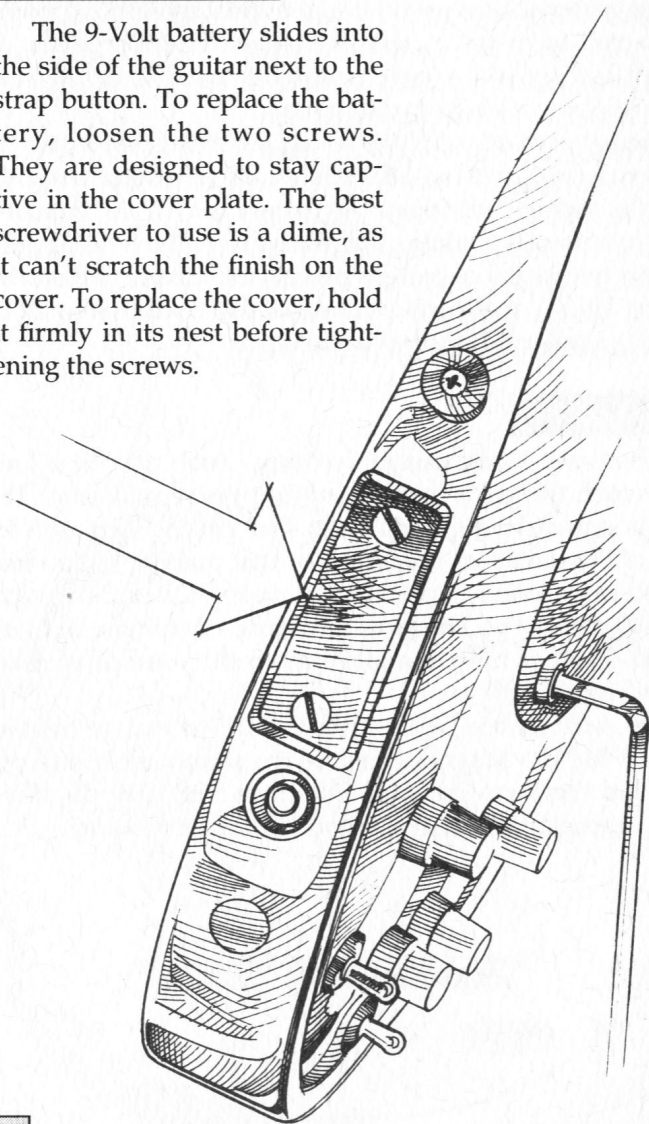
Ground Loops

Sometimes when using two amps, there may be a loud hum when the guitar is plugged into the second amp. This hum is caused by a ground loop. This ground loop isn't the fault of the guitar (or the amps for that matter), but a result of well-intentioned electrical safety codes. Ground loops can lurk wherever two pieces of electronic equipment are connected. There is only one safe way to rid yourself of pesky ground loops:

Use a direct box with a ground lift to isolate the two amps. Plug the Magnetic end of the stereo cable into one amp and the Piezo end into the direct box. Plug the direct box's output into a balanced input on the second amp.

Battery Compartment

The 9-Volt battery slides into the side of the guitar next to the strap button. To replace the battery, loosen the two screws. They are designed to stay captive in the cover plate. The best screwdriver to use is a dime, as it can't scratch the finish on the cover. To replace the cover, hold it firmly in its nest before tightening the screws.



Vibrato Guitars

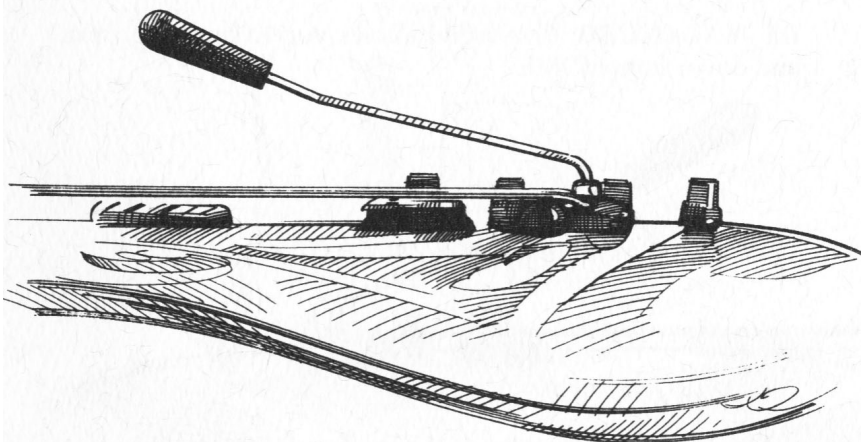
Our simple, straightforward vibrato system offers all the options and flexibility a guitarist could want. Two controls are used to select from three modes of operation. No tools are needed to select or fine tune the bridge modes.

All of these modes share a common bridge position—we'll call this HOME.

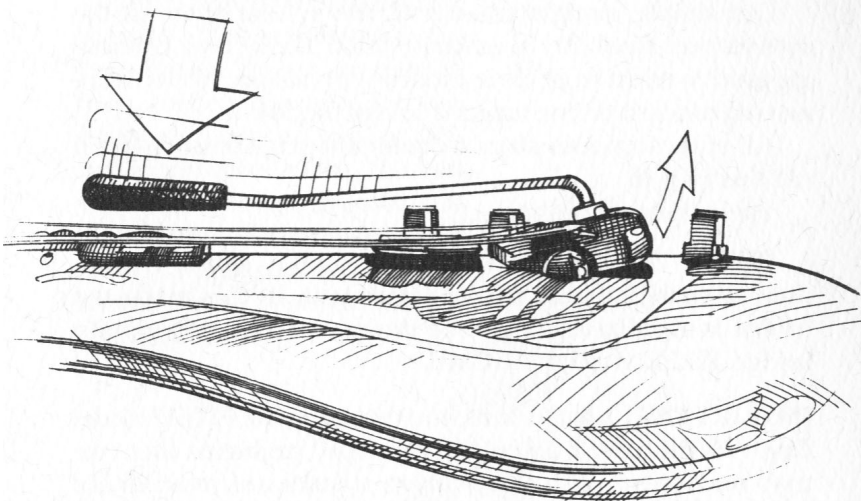
These three modes are:

I. FIXED: This mode is selected for tuning, setting intonation, re-stringing and action adjustment. In this mode the bridge is stabilized and can be thought of as a non-vibrato bridge. FIXED is always HOME.

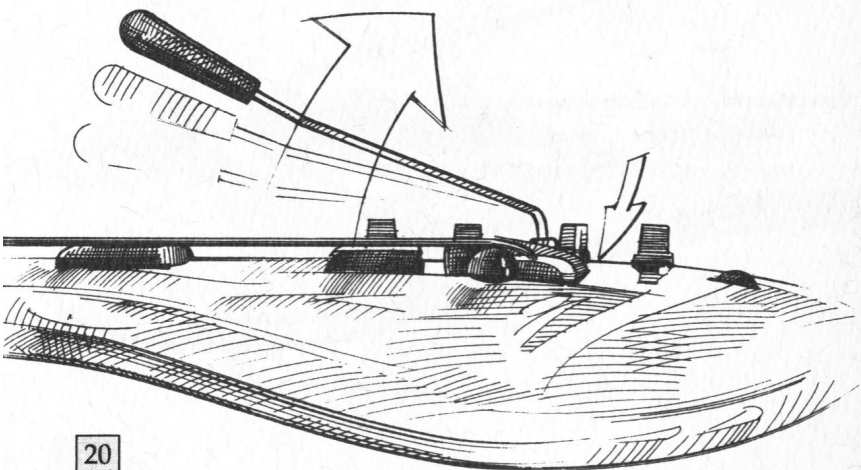
IMPORTANT! Always tune your guitar in the FIXED mode. Don't EVER tune it anywhere else. Any problems that you may encounter with this vibrato system are most likely caused by tuning the guitar when the bridge is not HOME.



II. BEND DOWN: In this mode the vibrato bends down from and returns to HOME.



III. BALANCED: This mode allows you to bend up from and down from HOME.

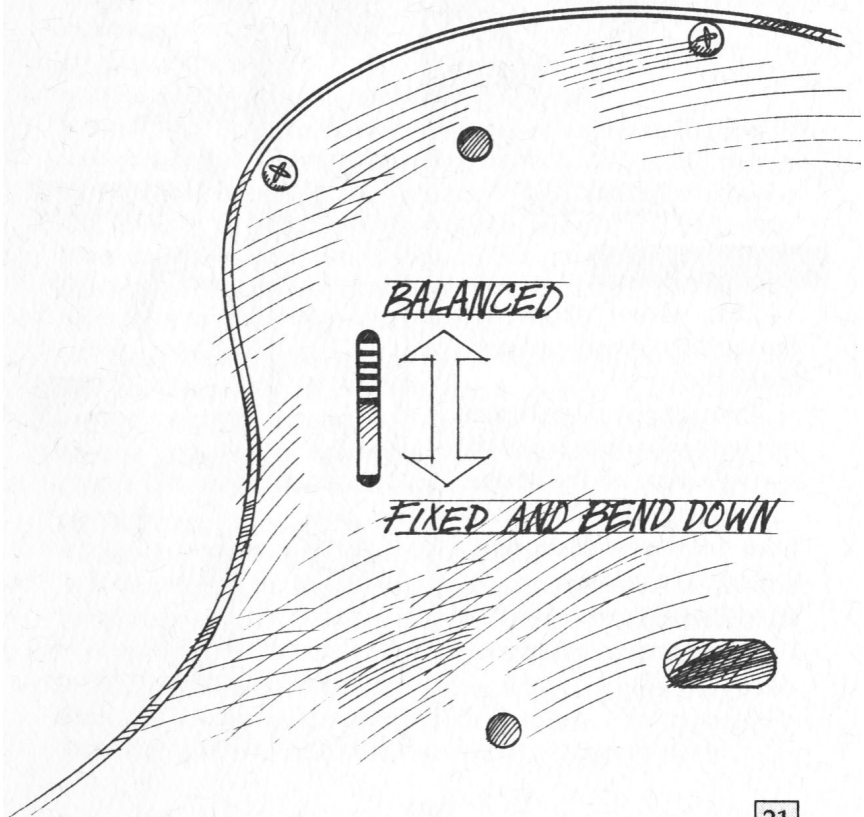


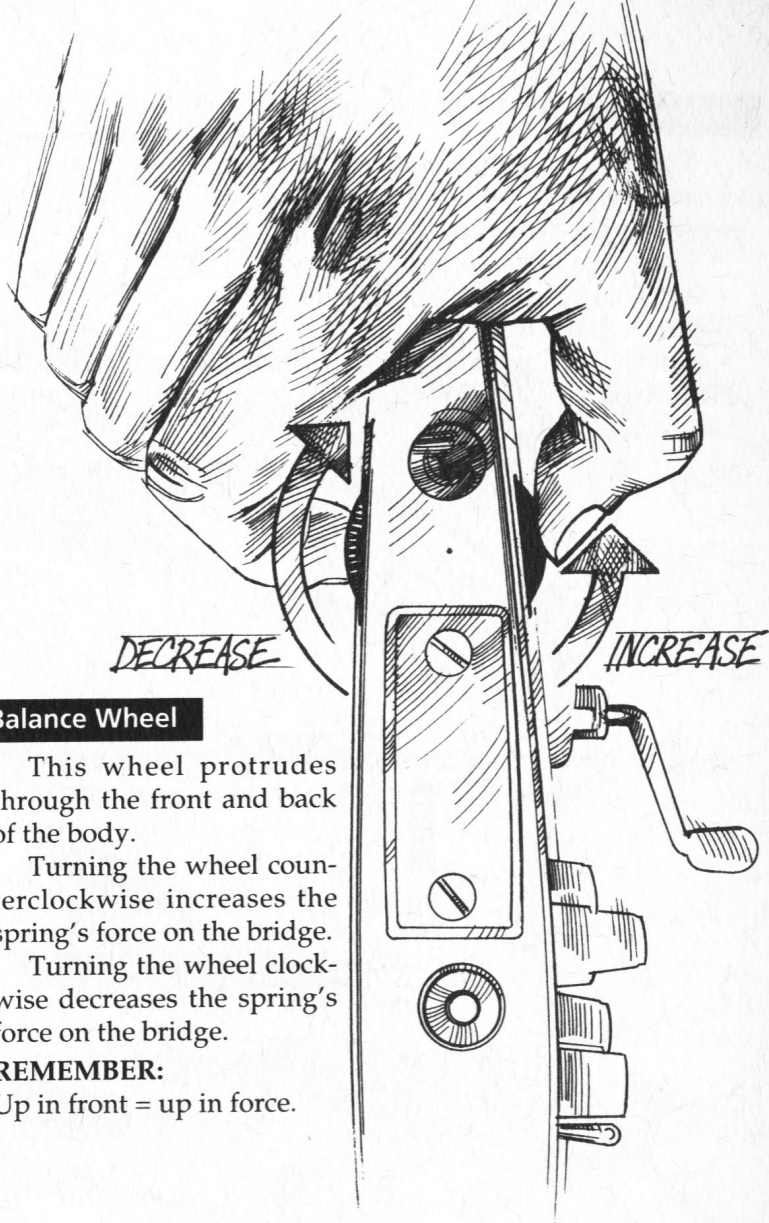
Step-stop

This two-position slide switch is located between the height adjustment screws on the back cover plate.

These two positions are:

- **UP:** This position is selected for the **BALANCED** mode only.
- **DOWN:** This position is used for the **FIXED** and **BEND DOWN** modes.





Balance Wheel

This wheel protrudes through the front and back of the body.

Turning the wheel counterclockwise increases the spring's force on the bridge.

Turning the wheel clockwise decreases the spring's force on the bridge.

REMEMBER:

Up in front = up in force.

Operation

I. FIXED:

- Place the Step-stop in the DOWN position.
- Rotate the Balance Wheel counterclockwise until the bridge cannot bend up.

The guitar is now stabilized for tuning, setting intonation, re-stringing and action adjustment.

For string bending: In this mode the guitar can be thought of as a fixed-bridge instrument. This mode allows you to bend a string while other strings are sounded and not change their pitch. If the other strings do go flat while bending, increase the spring force.

II. BEND DOWN:

- Place the Step-stop in the DOWN position.
- Rotate the Balance Wheel clockwise to decrease the spring force while listening for a change in pitch. When the strings start to go flat, rotate the Balance Wheel counterclockwise just enough to lightly seat the bridge against the Step-stop. Now the bridge will return HOME but cannot be bent up. In this mode, the user can also adjust the Vibrato Bar resistance from light to heavy with the Balance Wheel.

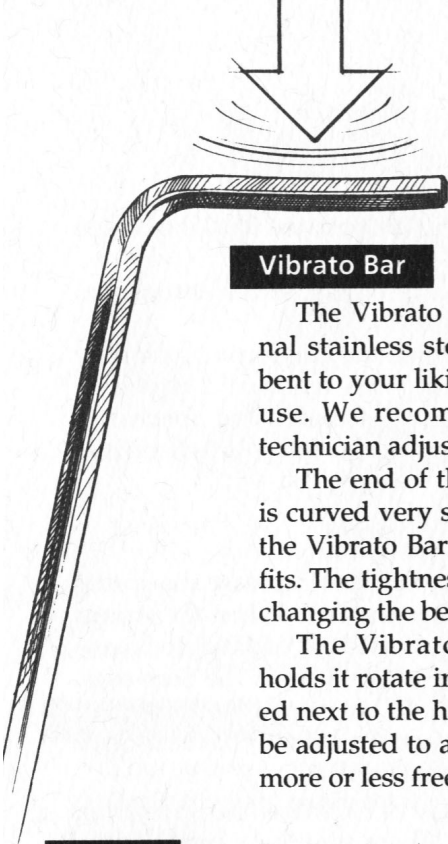
NOTE: If the bridge is set just flat of HOME while up to pitch and the Step-stop is DOWN, there may be a buzz as the bridge vibrates against the Step-stop when played. If this annoys you, simply rotate the wheel up slightly to bring the bridge into contact with the Step-stop.

III. BALANCED:

- Place the Step-stop in the UP position.

If this moves the bridge away from HOME (sharp), re-tune the guitar with the Balance Wheel. Simply rotate the Balance Wheel clockwise to restore the balance at the correct pitch.

NOTE: If you should break a string when playing the guitar with the bridge in the BALANCED mode, just switch the Step-stop down to restore the surviving strings to pitch.



Vibrato Bar

The Vibrato Bar is made from $\frac{3}{16}$ hexagonal stainless steel. This special alloy can be bent to your liking and will retain its shape in use. We recommend that you let a guitar technician adjust the shape of the Vibrato Bar.

The end of the bar that fits into the bridge is curved very slightly. The deeper you insert the Vibrato Bar into the bridge, the tighter it fits. The tightness of this fit can be adjusted by changing the bend very slightly.

The Vibrato Bar and the bushing that holds it rotate in the bridge. A set screw located next to the high E string in the bridge may be adjusted to allow the Vibrato Bar to rotate more or less freely.

Spring

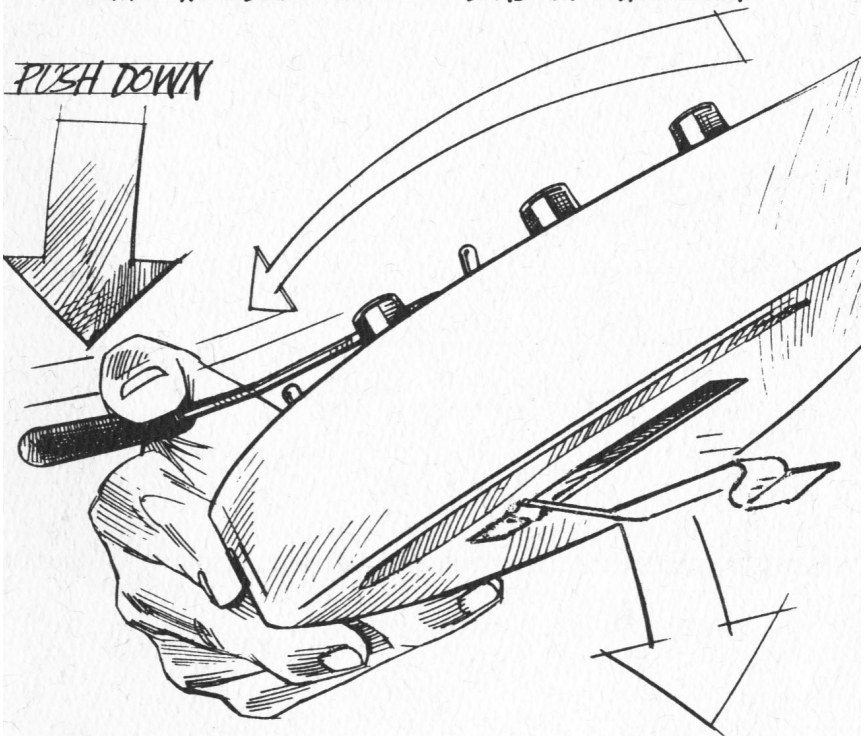
Instead of the customary coiled springs in the back, the Fly's vibrato uses a unique flat spring that remains silent while compressing and expanding, and is compact enough to fit into the Fly's thin body.

Each Fly vibrato guitar is supplied with two springs. The installed spring is correct for the .009 > .042 D'Addarios that the Fly is shipped with. The other spring is correct for .010s. If you wish to use .008s, .011s or .012s, call 516-333-USER during business hours (Eastern Time) and we will ship you the correct spring free of charge.

CHANGING SPRINGS:

- Remove the control cover.
- Loosen the Balance Wheel (down, clockwise) all the way.
- Select the UP position for the Step-stop.
- Swing the bar over the end of the body and push down as shown until the spring falls out.

SWING THE BAR OVER THE END OF THE BODY



- Insert the new spring by placing either end of the spring into the groove near the Balance Wheel.
- Insert the other side of the spring into one the three grooves near the bridge.

WHICH GROOVE?

The guitars leave the factory set up for normal operation with the spring in the groove closest to the back of the guitar. This groove is best for extreme Vibrato Bar technique.

The second and third grooves will give a lighter Vibrato Bar feel but reduce clearance for the spring inside the body. These grooves may work best for more subtle Vibrato Bar use.

IMPORTANT NOTE: Choose the groove that's right for you.

