

# PARKER FLY TREMOLO

## *A detailed, step-by-step guide to setup the Fly Tremolo in its three operating modes*

*A guide by Marco Pregolato, proud owner of a beautiful 2008 Pearl White Fly Mojo and a 1995 Majik Blue Fly Deluxe*

<http://pregnosplatter.altervista.org/>

### 1. INTRODUCTION

On the Parker forum, questions regarding the bridge setup are not rare. This guide is intended to help the newcomer and non-expert Fly guitarist to learn, step-by-step, to correctly set up the bridge. The Patented Parker Fly Tremolo features three mode of operations, to satisfy every guitarist's needs: Bend Down only, Fixed and Floating mode. In this walkthrough, every mode will be explained in depth, with the addition of helpful pictures of the key points. It is very easy to adjust your Fly guitar once the working principles are understood.

### 2. THE 3 OPERATING MODES OF THE BRIDGE

- **BEND DOWN ONLY**

In this mode, the bridge behaves the same as a vintage, fulcrum, "Strat-style" non-locking tremolo. In practice, the bar can only be lowered but not raised. The ideal for the player who plays classic/vintage rock or pop and only desires subtle vibrato use.

- **FIXED**

A pseudo-fixed bridge. You can leave the trem bar in your case and forget about it. The bridge will behave pretty close to a fixed bridge. For players who don't like or don't need the vibrato.

- **FLOATING (or BALANCED)**

In the third mode, the bar can be both raised or lowered. For players who want to unleash the fury of dive-bombing and flutter tricks, with smooth-silk feeling and without the typical hassles of locking tremolos.

### 3. THE STEP-STOP AND THE BALANCE WHEEL

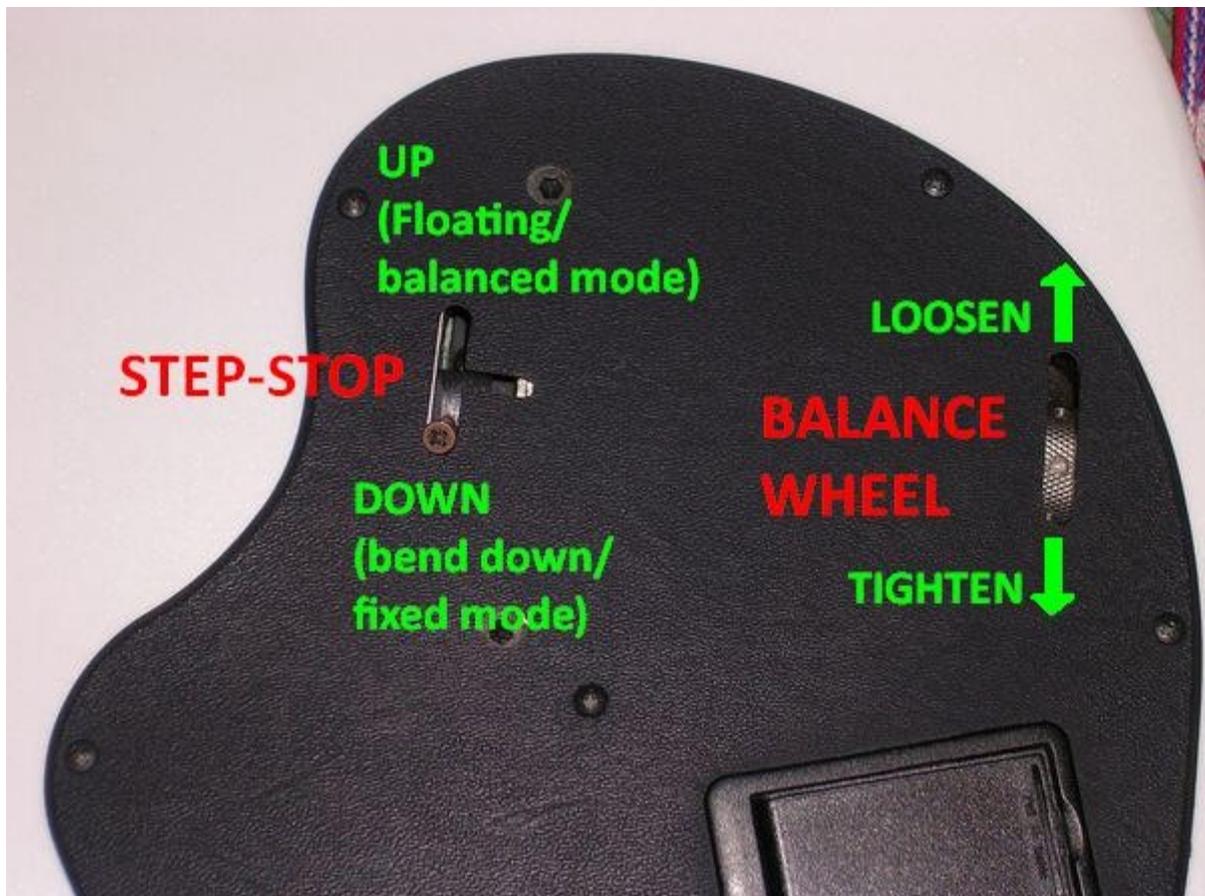
The set up procedure is identical for both refined and non-refined Flys. The only difference is the location of the **Step-Stop** lever and the **Balance Wheel**, the two tools necessary for the set up.

In non-refined Flys, they can be adjusted by hand, while in refined Flys the metal rod, included with your guitar, is needed.

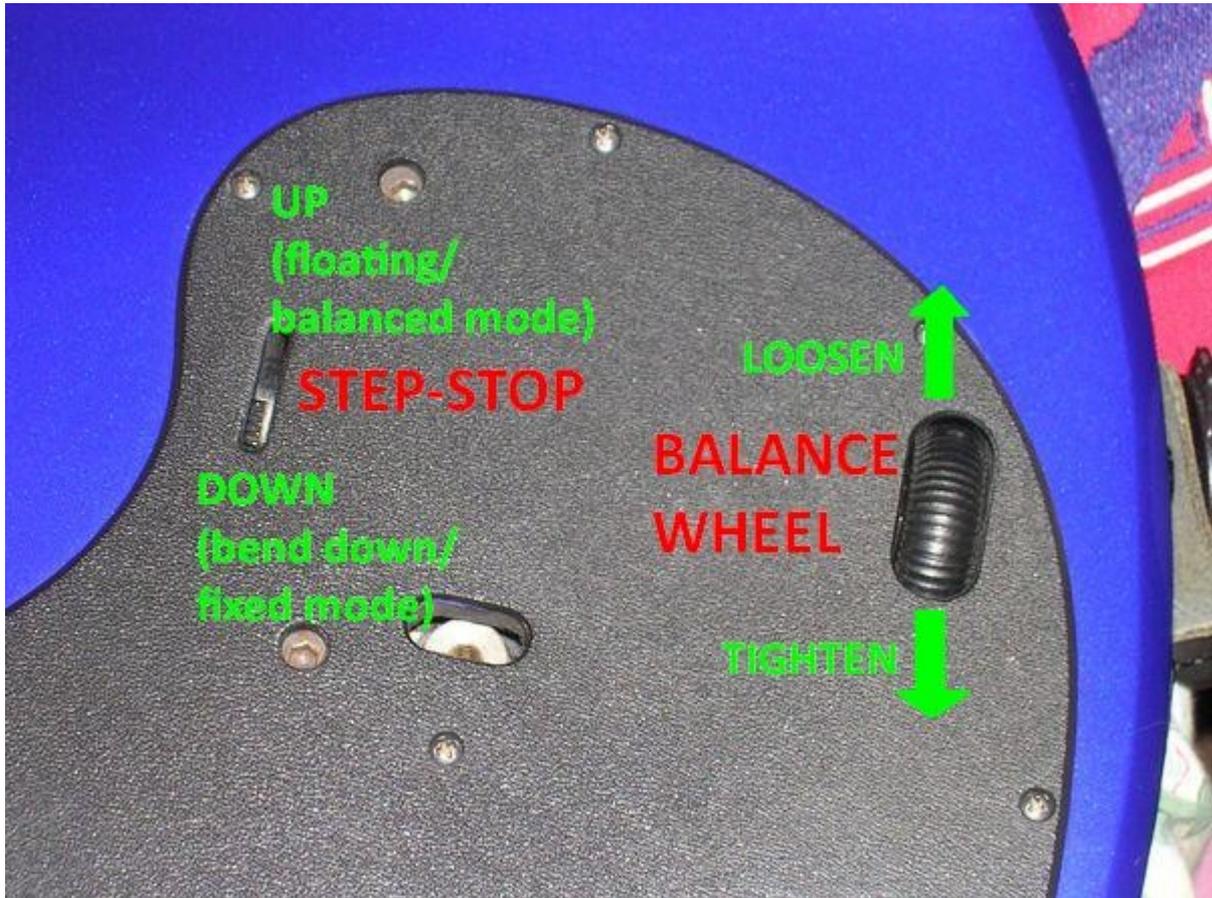
Here is shown the location of the Step-Stop and Balance Wheel in the two types of Fly:



*Locating the Step-Stop and Balance wheel on a Refined Fly (LEFT) and a Non-Refined one (RIGHT)*



*Adjustments on a Refined Fly*



*Adjustments on a Non-Refined Fly*

It is also shown how to move the Step-Stop and the Balanced Wheel into desired position, without ambiguity.

### **A BIT OF VOCABULARY...**

The expressions “Step-Stop in DOWN position” and “in FIXED or BEND/DOWN mode” are **equivalent**.

The expressions “Step-Stop in UP position” and “in FLOATING or BALANCED mode” are **equivalent**.

## **4. THE PROCEDURE**

The set up procedure for all the 3 modes will be fully explained now.

Before starting, ensure that your guitar has the correct spring for the string gauge used (e.g. a 9 spring for 9-42 strings, or a 10 spring for 10-46 strings etc....), and that truss rod, action and intonation of the guitar are correctly set. Refer to the Parker manual for further details.

Additionally, the nut has to be filed by a luthier for the gauge of strings you're using (or strings will bind and get out of tune), the spring must match the gauge of strings (a 9 spring for .09 strings, a 10 spring for .10, etc...), the bridge must be setup to work in Balanced mode with the correct amount of Balance Wheel tension. Refer to the Parker Manual for this.

In case they are a bit rough, I suggest having the saddles checked too by the luthier, at the same of time in which he files the nut.

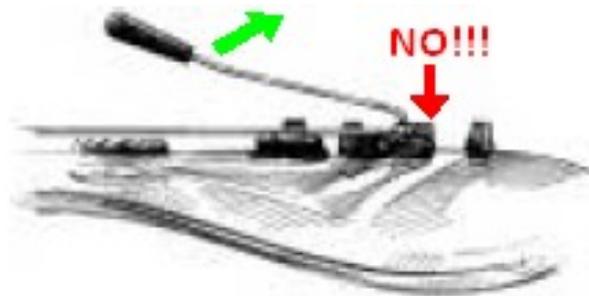
I recommend the use of some lubricant in the nut grooves and on the saddles contact point with the strings to reduce friction. Nut Sauce, Graphitall, graphite... all will do the work. I use string lubricant as well, as I have noticed that it helps.

You should examine all the pivot and contact points for friction modifying problems such as burrs, corrosion, wear marks and rough bearings.

**First**, no matter what mode is preferred, move the Step-Stop DOWN and tune the guitar to pitch. **Always tune the guitar with the Step-Stop in the DOWN position. NEVER, NEVER, NEVER** even attempt to tune with the Step-Stop UP!!!

## BEND DOWN ONLY

1. As said, tune the guitar with the Step-Stop DOWN.
2. Keep the Step-Stop in the DOWN position. Insert the tremolo bar in its socket. Try to pull up (raise) the bar.



*BEND DOWN ONLY: if you raise the bar, the bridge shouldn't move!*

3. If the bridge raises, you have to TIGHTEN the Balance Wheel. Tighten it to the point the bridge no longer moves at all, if you attempt to raise the bar (i.e. stays put). It should normally move if you dive the bar instead.
4. After you've tightened the wheel, you may need to tune the guitar again. Do it as necessary.
5. If the bridge still moves if you attempt to raise the bar, tighten the Balance Wheel a bit more (i.e. repeat step 3 and 4).
6. If the bridge no longer moves if you raise the bar, try to play a string open, and together bend another string. If the open string doesn't change pitch, the Balance Wheel is overtightened. LOOSEN it a bit, to the point an open string changes pitch if you bend another string.

7. As a final suggestion, you can tighten the Wheel a bit for a stiffer feel of the vibrato.

## **FIXED**

1. Follow the steps 1 – 5 of the “Bend down only” mode.
2. If the bridge no longer moves if you raise the bar, try to play a string open, and together bend another string. If the open string changes pitch, the Balance Wheel is not tight enough. **TIGHTEN** it a bit, to the point an open string doesn't change pitch if you bend another string (exactly the opposite of step 6 in “Bend down only” mode).
3. If it's planned to use a Fixed bridge for a prolonged period of time or permanently, it is strongly recommended to employ a heavier spring (e.g. a 10 spring for 9-42 strings) or block the tremolo with a wood block in the tremolo cavity, in replacement to the spring.

## **FLOATING (or BALANCED)**

1. Follow the steps 1 – 6 of the “Bend down only” mode.
2. Now turn the Step-Stop UP.
3. The tuning may be sharp now. DO NOT TOUCH THE TUNERS for any reason when the Step-Stop is up NEVER! If the guitar is sharp, **LOOSEN** the Balance Wheel gradually, until the tuning come back to pitch.
4. Now switch the Step-Stop back to the DOWN position. Check tuning, and adjust it with the tuners if needed.
5. Repeat steps 2, 3 and 4, until the guitar stays in perfect tune while moving the Step-Stop from one position to the other.
6. When it does, move the Step-Stop to the UP position. Try to **TIGHTEN** the wheel a tiny bit. If the guitar gets a bit sharp, **LOOSEN** it back, otherwise tighten it to the point it does get sharp a bit and then loosen it a bit back. The key is to find the perfect floating point. This is done by setting enough tension without throwing the guitar sharp
7. At this point, the Balance Wheel is set up at the correct tension. To ensure that the guitar stays in perfect tune even with insane tremolo abuse, refer to the next paragraph.

## **5. HOW TO MAKE THE TREMOLO STAY IN PERFECT TUNE IN FLOATING MODE**

*(coming from the previous guide of August 2009)*

First, ensure to have the Balance Wheel set at the correct tension (the above procedure for Floating mode). It is very important, otherwise the following steps won't work.

## STEP 1 – Strings stretch and contact points

First, ensure that the Step-Stop is in DOWN position.

Second stretch every string for all its length. Repeat if necessary, especially with new strings. It is very important to have properly stretched strings, or they won't hold tune.

Then, only if the strings are new (it is otherwise unnecessary), enhance the strings contact points, pressing them with fingers at the tuners to sweeten their ingress angle, and doing the same around the nut grooves and before the saddles to favor the contact points with these 2 elements.

## STEP 2 – Tuning helping with the bar

With the Step-Stop still in the FIXED position, tune the guitar in this particular way. That is, tune each string singularly as you would normally, BUT, every time the strings is at pitch, do a quick, full-range dive with the bar. Check if the string is still in tune, if they are not, tune up and whammy again. Repeat the process for all the strings, until they all stay in perfect tune after a quick bar dip.

## STEP 3 – Move the Step-Stop and check

Now it's time to move the Step-Stop to BALANCED mode. Should the strings get out of tune after you moved the Step-Stop, adjust the tension with the Balanced wheel. Loosen it if the strings are sharp, and tighten it if they are flat, until you find them back into perfect tune. DO NOT touch the tuners!

Now, do a quick full-range whammy. Should the strings get out of tune, adjust the tension with the Balanced wheel in the same way. Again, DO NOT touch the tuners!

As a check, you may switch back to Fixed mode, and then back again to Balanced, and see if the strings stay in tune with a quick dive-bomb. If not, repeat the sequence described above.

## DONE! Welcome to the Fly world :)

By now, your guitar will stay in tune no matter what. Should it get very slightly out of tune, do a quick bar dive, and it will come back in perfect tune. Enjoy!

*A small additional note (by Drew Lankford):*

The tremolo should not move once the Step-stop is removed. I mean, when you remove the tremolo stop, the tremolo shouldn't move. It should remain perfectly flat. If it moves, the tremolo's spring balance wheel should be adjusted.

## 6. RECAP & CONCLUSION

With this guide, the whole procedure for setting up a Parker Fly bridge, in any mode, has been fully explained. The Fly Trem is very flexible, to accommodate any guitarist's need.

For any mistake, improvements, suggestions, comments, questions.... feel free to post and reach me and other expert users in the Parker forum (my nickname is “*wkcchampion*”).

I hope that you enjoy my effort.

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*Special thanks to Simon Lock, Alex Ortner and Drew Lankford for their assistance and supervision.*