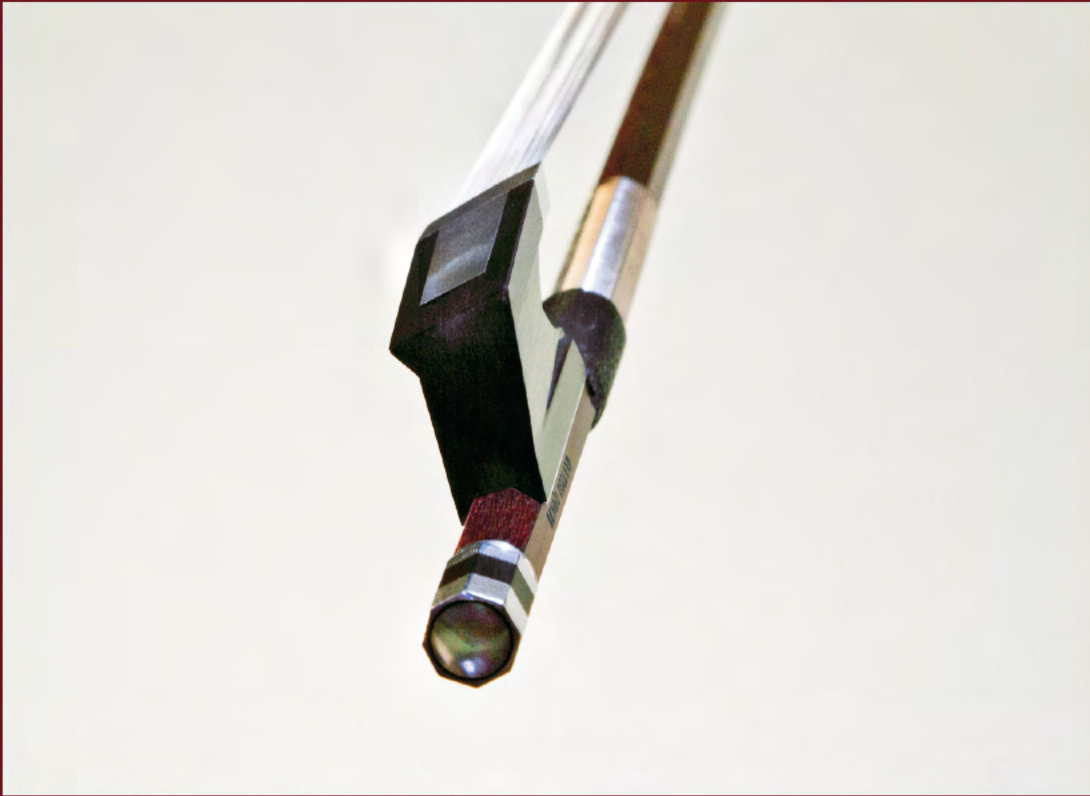


# Galliane™



Technical Guidelines



[galliane.com](http://galliane.com)

The Galliane™ concept is simple: the hair sits at an angle at the frog.

*Galliane* represents one of the most fundamental evolutions in the classical bow. For the first time, the bow frog is designed for the string instrument playing technique and the musician's natural arm movement.

*Galliane* exists in different designs. All of them present a 15° angle at their base and have identical specifications. This document applies to all models.

These frogs can be fitted to any violin, viola, cello and double bass bow, modern or historical.

Galliane™ was created by Benoît Rolland, Master Bowmaker (patents pending). All models are made by Walter Paulus GmbH, manufacturers of fine bow parts in Germany since four generations, and are available through violin and bow makers.

More information on [galliane.com](http://galliane.com)

## Technical Guidelines for Galliane™

DESCRIPTION .....	2
FITTING GALLIANE .....	3
Fitting the frog .....	3
Button - Screw - Eyelet .....	4
Adjustment & Finish .....	4
REHAIRING GALLIANE .....	4
ORNAMENTATION .....	5
CONTACT .....	5

## DESCRIPTION

The materials and parts that are used for Galliane™ are identical to the materials used in traditional ebony frogs: ebony, silver ferrule, heel composed of two beveled pieces, pearl or silver slide lining; the channel, the mortice and the three-facet underside are standard (Fig.1). The difference between the geometrical ferrule and a standard round ferrule is aesthetic, not functional.

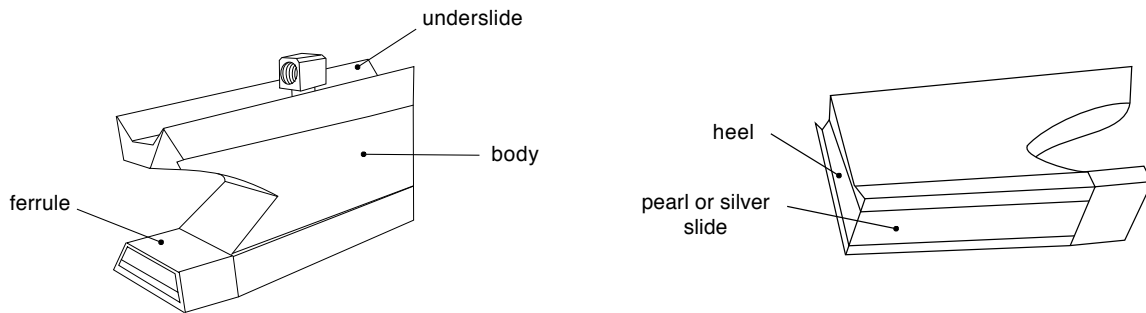


Fig. 1

The main feature that distinguishes the *Galliane* frog from traditional frogs is the 15° angle of the base. This offers many advantages to string musicians, and does not require any change to their playing technique. On cello and double bass frogs, the angle is inverted (Fig. 2).

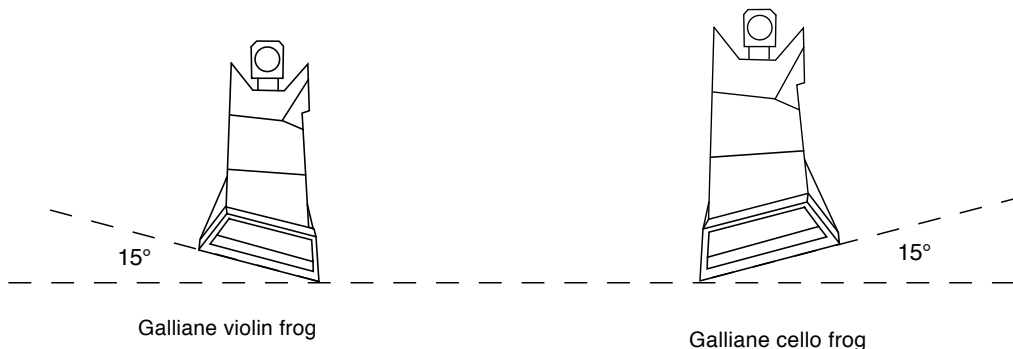


Fig. 2

This angle at the base of the frog substantially influences the aesthetics. The *Galliane* design proposes new lines that allow this technical evolution, but preserves the tradition of elegance that characterizes the bow. The clean lines of each model, avant-gardist in *Galliane* (with a geometric ferrule), smooth and rounded in *Galliane 441* (with round ferrule), are designed to harmoniously accompany most styles of bows.

The *Galliane* frog is adjusted to the bow stick like any traditional frog. Its weight is similar to that of traditional frogs. The new frog does not alter the balance of the bow in any respect. A bow fitted with *Galliane* is rehired like any conventional bow.

## FITTING GALLIANE™

*Galliane* frogs are supplied without metallic underslides, so you can adjust them to any bow stick whose handle is octagonal. Some bows have Vuillaume or Hill type handles: Walter Paulus GmbH Company can provide *Galliane* frogs with underslides matching either one of these models. In addition, the absence of metallic underslide prevents corrosion which occurs when perspiration builds up between the underslide and the stick, this both with *Galliane* or traditional frogs. However, if you wish to mount *Galliane* with a metallic underslide on your new bow, please send its specifications to Walter Paulus GmbH.

**When fitting *Galliane* to your bow, all adjustments must be done entirely on the frog, without modification to the stick: thus, the integrity of the bow is preserved.**

It is recommended that you purchase any *Galliane* frog complete with matching button, screw and eyelet. This will allow to keep together, and to preserve the original frog and button. Fitting the frog is a precision work that should be performed by a professional bowmaker.

Find below the main steps for the fitting procedure:

### 1 FITTING THE FROG

- Present the frog to the bow handle.
- Align the center facet of the underslide to the middle facet of the stick; observe and note the differences between the underslide facets angles and the stick facets angles (Fig.3).

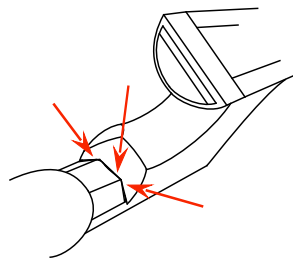
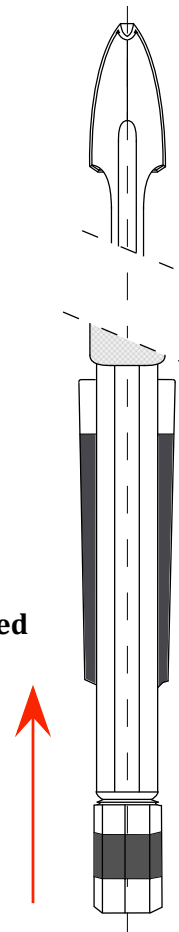


Fig. 3

- Perform the work of adjusting the underslide to the stick, and fit the frog.

**Always keep in mind that the ferrule must be perfectly centered and aligned with the axis of the bow, taking the head as a reference point (Fig. 4).**

Fig. 4



- The fitting is complete when the underslide fits the stick perfectly, and the frog is correctly centered (Fig. 5).

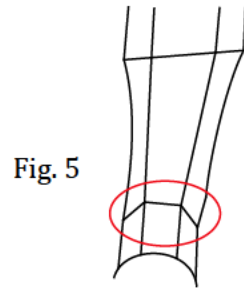


Fig. 5

## 2 BUTTON - SCREW - EYELET

- Drill the eyelet hole on the frog.  
- Adjust the new set of button, screw and eyelet purchased with a *Galliane* frog, to the handle of the bow (Fig.6).

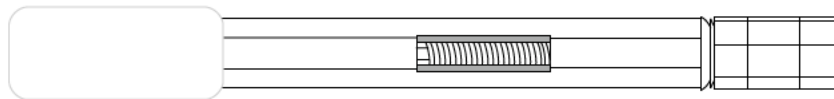


Fig.6

## 3 ADJUSTMENT & FINISH

- Install the frog complete with eyelet on the stick, then adjust the rotation of the button so that the hair tension is easy to adjust, while keeping a good stability of the frog.  
- If necessary, match the width of the frog underslide to the width of the stick. It is advisable to slightly flatten the top of the two side facets of the underslide, so as to avoid the fragility of sharp edges.  
- Proceed with finishing and polishing the frog.

## **REHAIRING GALLIANE™**

The inside of a *Galliane* frog presents the same characteristics as a traditional frog: the channel and mortice are both cut and positioned similarly to conventional frogs (Fig. 7).

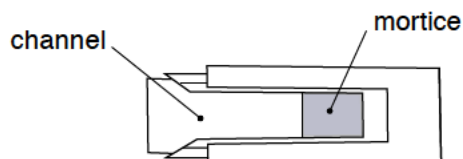


Fig. 7

The 15° angle does not change the position of the hair ribbon inside the frog. Plug and wedge should be cut and adjusted according to the usual procedure and standards. If the mortice seems too straight, you may carve it carefully. If you choose to widen the mortice and channel, pay attention to keep enough thickness on both sides of the frog: you must take into account the 15° inclination.

If you position the wedge before combing the hair, the tilted hair ribbon will probably surprise you at first. This should not affect your own rehair method: comb the hair as usual and cut it to the length you normally work with.

Note:

It is imperative that the tension of the hair ribbon be uniform across its width. A hair ribbon with more tension on one side than on the other affects the straightness of the stick. This applies to both traditional bows and bows fitted with a *Galliane* frog (Fig. 8).

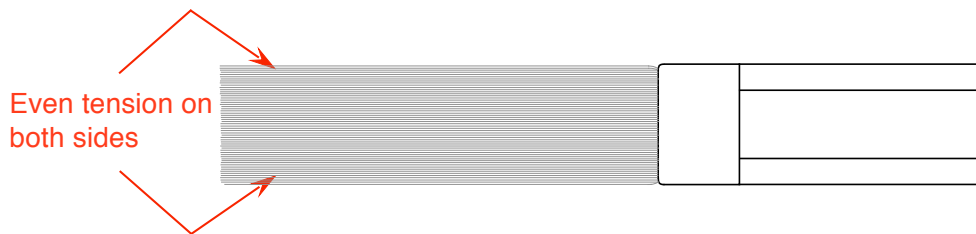


Fig. 8

## ORNAMENTATION

If you want to customize Galliane™ frogs, you can insert any motif of your choice, taking care of maintaining the correct thickness on both sides of the frog.

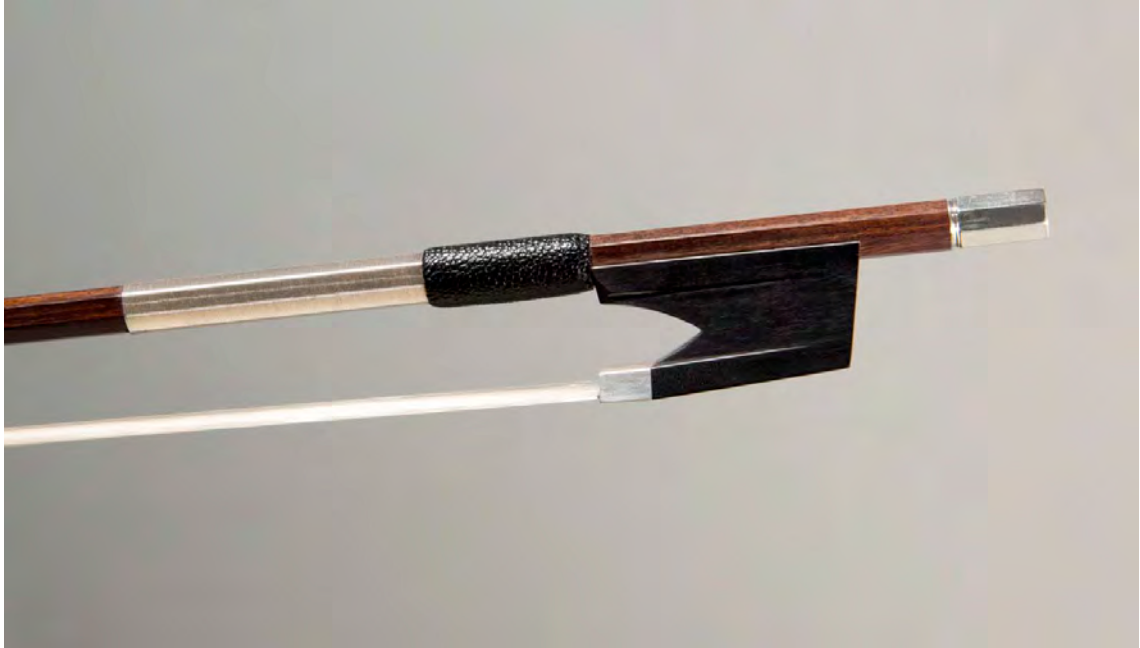
Walter Paulus GmbH is able to produce and inlay most ornaments, within technical constraints. Draw your motif, and send it to the Company (by regular mail, email, PDF etc.).

\* \* \*

Walter Paulus GmbH

Lohmühlweg 5  
91341 Röttenbach  
Germany

Telephone: +49 (0)9195 2411  
info@paulus-bowparts.de  
paulus-bowparts.de



Galliane™



Galliane 441™

Please visit [galliane.com](http://galliane.com) for current models.