

BENETEAU SA  
CUSTOMER SERVICE  
MARCH 18TH 1996

## **CORRECTION OF THE FREE MOTION ON A RUDDER WITH GRP SHAFT**

### **METHODOLOGY**

- 1- Take off the rudder and the bronze sleeve which is in the bottom of the rudder tube.
- 2- Adjust the bronze sleeve on the stainless sleeve of the rudder shaft. Once the sleeve is adjusted it should remain a small split in the sleeve (ie : 1 millimeter).
- 3- Surround the sleeve with ~~a clip~~<sup>TAPE</sup> and keep it closed (see drawing 2/2).
- 4- Surround the sleeve with a wide sticker on the side that will be first introduced (see drawing 2/2).
- 5- Apply polyurethane glue 5230 as it is shown on the drawing 2/2.
- 6- Fix the rudder and take the clip off at the very last moment.
- 7- Do not move the rudder and/or sleeve until the glue is completely dry.  
(24 to 48 hours depending on weather conditions).

RUDDER LOWER BEARING

CROQUIS 1/2

RUDER SCHAFT

RUDDER STOCK

Mèche de Safran

Fralta inox

STAINLESS STEEL  
SLEEVE FIXED  
TO RUDDER STOCK

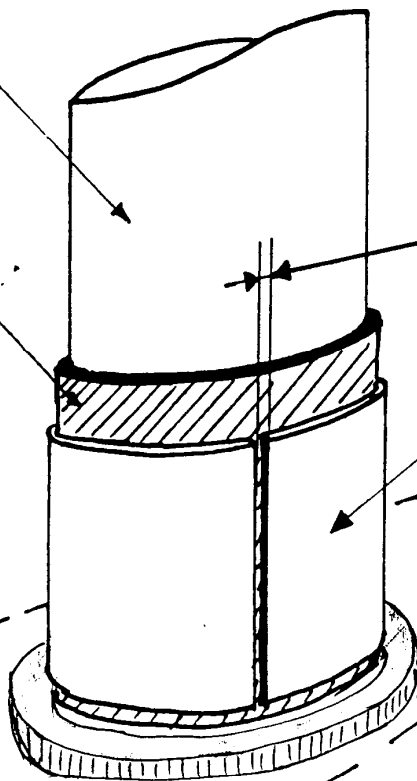
0,5mm maxi

bague fendue  
SPLIT SLEEVE

RONDELLE DE  
COMPENSATION

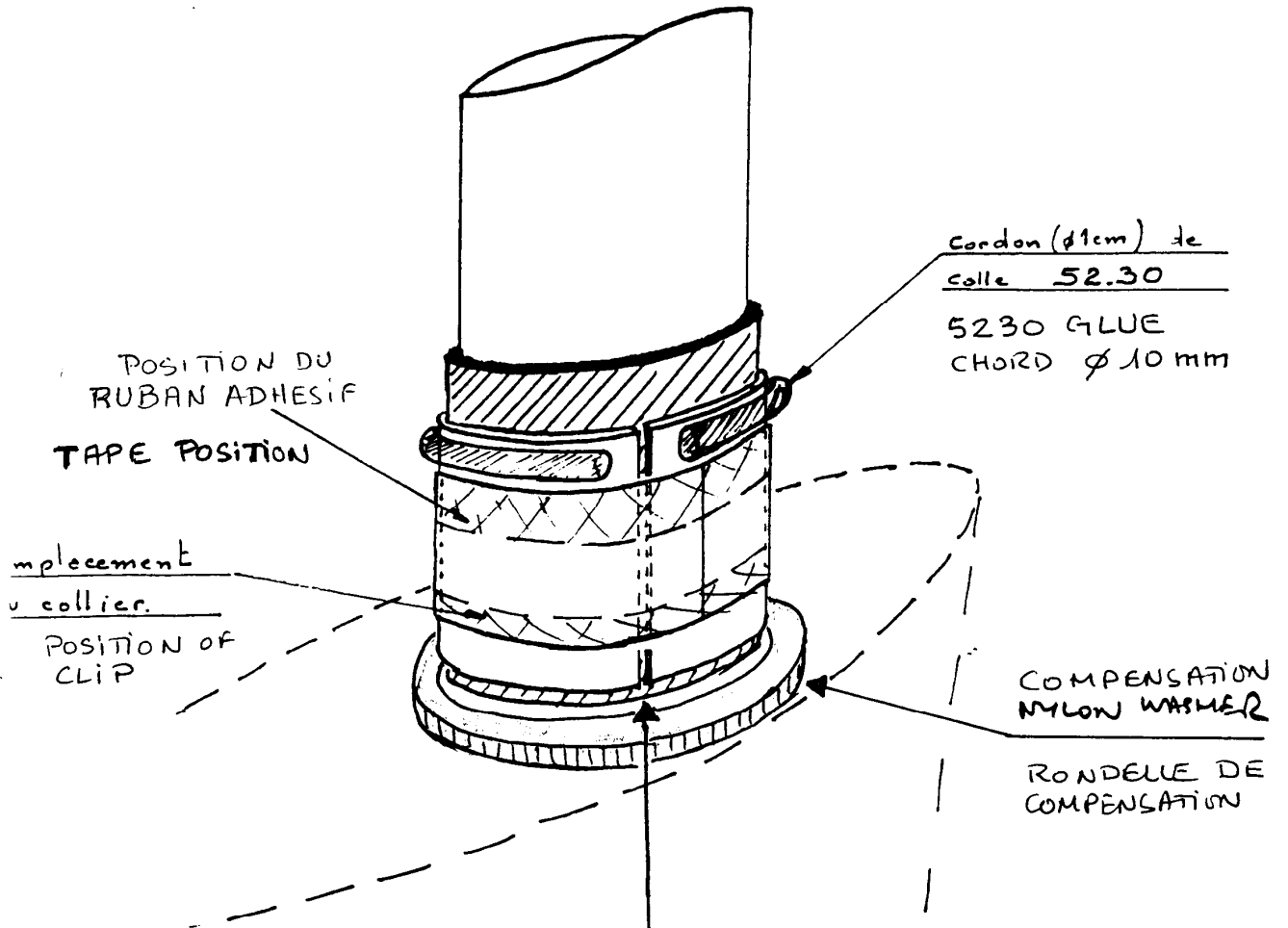
COMPENSATION  
NYLON WASHER

SAFRAN.  
RUDDER BLADE  
RUDER BLATT



RUDDER LOWER BEARING

CROQUIS 2/2



POSITION DU  
RUBAN ADHESIF  
TAPE POSITION

emplacement  
du collier.  
POSITION OF  
CLIP

Cordon (ø1cm) de  
colle 52.30  
5230 GLUE  
CORD Ø10 mm

COMPENSATION  
NYLON WASHER

RONDELLE DE  
COMPENSATION

JEU MINIMUM 1mm  
QUAND LE COLIER  
EST - SERRÉ

MINIMUM FREE MOTION  
IN PYDANE BRONZE SLEEVE  
1 MILLIMETER WHEN  
CLIP IS TIGHTENED