



CIRCULAR LETTER No. 22
SERVICE BULLETIN No. 05
to all distributors

**Checking and/or replacing flaps handle
part(s) for Sinus/Virus aircraft family**

MANDATORY

Please pay attention to the following safety definitions used in this service bulletin:

WARNING! Disregarding the following instruction leads to severe deterioration of flight safety and hazardous situations, including such resulting in serious injury and loss of life.

CAUTION! Disregarding the following instruction leads to serious deterioration of flight safety, may cause serious damage to the aircraft and suspend warranty.

Aircraft affected: SN.151 to SN.170
except: SN.168 and SN.169

Distributors are to translate this service bulletin into their native language and forward it to all concerned owners in your area immediately.

Also, distributors must inform Pipistrel d.o.o. which concerned owners were informed about the content of this service bulletin by e-mail (pipistrel@siol.net) or FAX: +386 5 3661 263 as soon as possible.

Please see following page(s) for further details.

Eventual flaps handle malfunction – possible failure to lock in position

Problem description

On a Virus 912 aircraft a malfunction in flap handle operation was observed and reported. Please note that all models of Sinus Ultralight Motorglider may also be affected due to the same construction of the flaps mechanism and drive.

Upon pushing the knob on the flaps handle and moving the handle to the selected position, the knob appeared stuck in the recessed (pushed) position and refused to pop-out again. The result was a failure to lock-up flaps in ANY of the four positions. The flaps handle was therefore not secured and hanging freely.

Upon immediate examination it was determined that the problem lies in the inner mechanism of the flap handle rather than the knob itself.

Inside the main metal tube of the flaps handle, there is a sliding guide-rail barrel which also holds the lock-up pin. This guide-rail barrel is made of plastic to ensure proper mechanism smoothness.

It appears that during high OATs (Outside Air Temperatures) the main metal tube of the flaps handle shrinks along its inner diameter, thus pressing onto the plastic guide-rail and blocking it completely.

Please note it was not possible to return the flaps handle knob into its initial position by using hand and/or fingers only.

WARNING! The malfunction of the flaps handle may cause partial or complete loss of control over aircraft in certain stages of flight! Do not, under any circumstances, attempt to fly the aircraft before this problem has been rectified!

Affected units

Although we did our utmost to identify the Serial number (SN) of eventually affected aircraft there may still be exceptions.

To verify whether your aircraft is affected by this problem, simply leave it in the sun for about an hour and then try to operate the flaps. If the operation is undisrupted, your aircraft is most definitely not affected.

Solution

You will need to partially disassemble the flaps handle. This is a simple task and does not require special tools or knowledge. Ultimately, the plastic guide-rail barrel will be replaced with a new one.

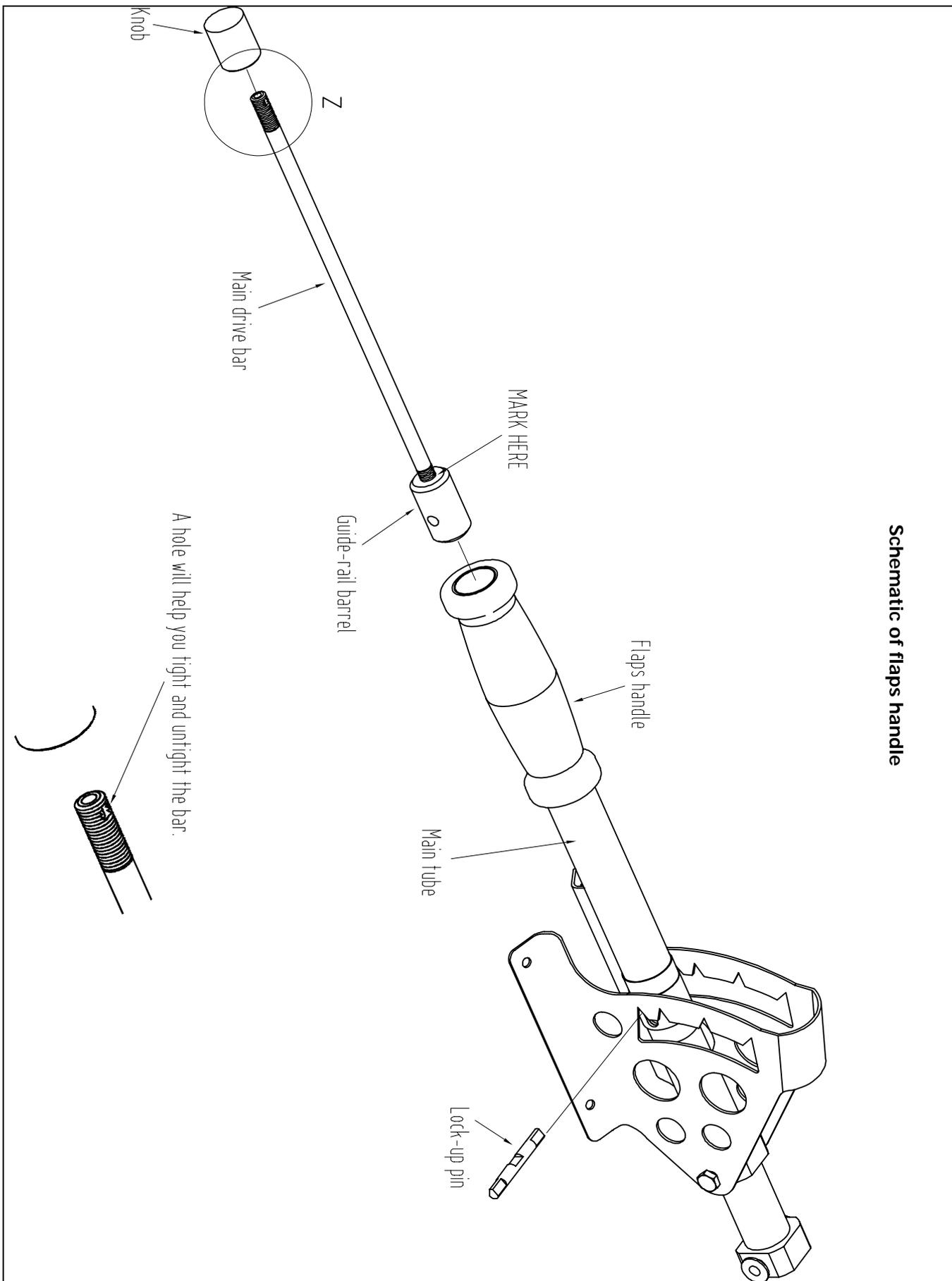
Please follow the procedure below:

1. Unscrew and remove the casing of the flaps handle.
2. Grab the knob on the flaps handle with your fingers and unscrew it.
3. Unfasten the revealed metal drive bar only so much that it moves out by 8-10 mm (not completely!) - this will release pressure on the lock-up pin.
4. While applying pressure on the metal drive bar, grab the lock-up pin at the base of the handle with a pair of pincers and remove it completely.
5. Grasp the metal drive bar and remove it from the main flaps handle tube completely. Be careful not to lose any parts as there is a spring under pressure behind the metal bar.
6. Now you will see the plastic barrel at the other end of the metal drive bar. First mark the position of the plastic barrel with a marker-pen (this is important for reassembly) and then unscrew and remove the barrel.
7. Replace the barrel with the newly-supplied part and screw it exactly to the position you have marked previously.
8. Re-insert the metal drive bar into the main tube. Note that the holes in the new barrel must be in horizontal position.
9. While applying pressure on the metal bar re-insert the lock-up pin to its previous position. Make sure the pin has been inserted correctly (exactly in the middle of the main tube).
10. Fasten the metal drive bar until you can feel strong resistance (you can use a nail or similar pin which you insert into the hole at the end of the metal drive rod to increase torque).
11. Screw the knob back onto the end of the metal drive rod.

This procedure will take you about 10 minutes. Please take advantage of the schematic on the next page for easier parts' and procedure recognition.

WARNING! The malfunction of the flaps handle may cause partial or complete loss of control over aircraft in certain stages of flight! Do not, under any circumstances, attempt to fly the aircraft before this problem has been rectified!

Schematic of flaps handle



Distributors

As a distributor you are to collect orders for replacement guide-rail barrels. Forward the exact number of replacement guide-rail barrels you need to Pipistrel d.o.o. Ajdovscina as soon as possible.

The replacement guide-rail barrels will be shipped to you free of charge for further distribution to customers.

Pipistrel d.o.o.
Ivo Boscarol, GM

THIS IS THE END OF THE SERVICE BULLETIN.
Please confirm reception by e-mail: pipistrel@siol.net