

## Notification

### ground handling

**RECOMMENDED**

#### Symbols:

Please pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ **WARNING:** Identifies an instruction, which if not followed, may cause serious injury or even death.
- **CAUTION:** Denotes an instruction which if not followed, may severely damage the aircraft or could lead to suspension of warranty.
- ◆ **NOTE:** Information useful for better handling.

## 1. General

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<u>Release date:</u>	26. February 2018
<u>Date of effect:</u>	26. February 2018
<u>Compliance:</u>	no compliance required, additional information only
<u>Release Number:</u>	NOT-018-ground handling
<u>Superseded notice:</u>	NOT-005-tir-down-correctly and NOT-006-claning-conserving
<u>Models affected:</u>	G3, G3/600 and GX, certified as US-LSA or EASA-PtF
<u>Affected S/N:</u>	all aircraft
<u>Reason:</u>	advice for correct ground handling

## Notification

### 2. Information

The REMOS aircraft are certified in the Light Sport Aircraft category. By this, these aircraft are very light compared to conventional aircraft and therefore need special care during ground handling

This notification shall give additional information beyond the pilot operating handbook.

### 3. Towing

Aircraft towing is described in the POH section 8 as follows (quotation):

Due to the low weight of the REMOS Aircraft, it is very easy to move the aircraft by hand on the ground. That's why there is no special equipment for towing provided. Do not attempt under any circumstances to tow the aircraft by attaching any kind of towing equipment to the nose wheel!

Grab the aircraft at the propeller roots just outside the spinner to pull it forward. For pushing the aircraft backward, it is recommended to push at the root of the horizontal tail. Pushing backward is also permitted at the strut. If this is done with open doors, one can grab the rudder pedal to steer backward.

Never attempt to push the aircraft by holding onto the dorsal fin (REMOS GX).

### 4. Tie Down

Instructions for tie down are given in the POH of the REMOS GX, section 8. To tie down the aircraft follow the POH or the instructions below. In additions, secure the control stick by use of the safety belt to prevent the control surfaces from being slammed from stop to stop by the wind.

<b>◆ NOTE</b>	The maximum wind velocity to leave a tied down aircraft in the open is 38 kts.
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#### 4.1 Wing Tie Down

The G3 does not provide any special rings to tie down. The upper attachment of the strut to the wing is designed to be strong enough to take up all loads when tying down. Wrap a rope around the upper attachment of the wing strut.

In case of the GX a special tie down ring is installed at the strut. Later versions of the GX are equipped with a thread in the outer portion of the wing, rings are provided to be screwed into these threads. Apply a rope to the upper end of the struts or to the rings. You may even use a chain when using the rings.

Apply the lower end to a fixation point on the ground. Use tires filled with concrete, rings in the apron or at least solid anchors. Take care for correct angles of the ropes or chains. They shall point vertically downward from the wing to the ground, an angle of not more than 20deg outward is recommended. Never tolerate the strings to point inward. Make sure the rope is straight, tight and without slack.

## Notification



## Notification

### 4.2 Propeller Tie Down

Wrap a rope around the propeller spacer, just in the gap between cowling and spinner. Apply the lower end to a fixation point on the ground. Use tires filled with concrete, rings in the apron or at least solid anchors. Take care for correct angles of the ropes or chains. They shall point vertically downward from the nose to the ground; an angle forward of not more than 20deg is recommended. Never wrap the rope around the propeller spinner in order to avoid damages and scratches.

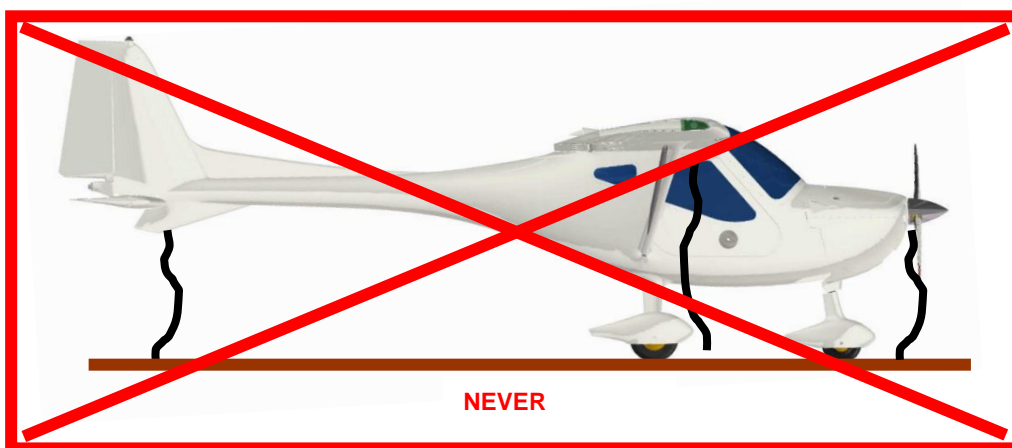


## Notification

### 4.3 Tail Tie Down

The GX is equipped with a tie-down point in the tail skid. Apply the upper end of a rope to that tie-down and the lower end to a fixation point on the ground. Use tires filled with concrete, rings in the apron or at least solid anchors. Take care for correct angles of the ropes or chains. They shall point vertically downward from the tail to the ground, an angle backward of not more than 20deg is recommended.

The G3 does not provide a tie-down ring on the tail. Wrap a rope around the rear fuselage and pull it tight, so it cannot slide forward in gusty winds.



The REMOS GXIS cannot be tied down on the propeller. This rope can be omitted.

## Notification

### 5. Rigging and Folding

#### 5.1 Rigging a Folded Aircraft

Rigging and Folding the wings of the aircraft is described in the POH section 8 as follows (quotation):

The REMOS GX is manufactured to the highest quality standards. All components are very precise and provide the maximum aerodynamic quality. It is therefore strongly recommended that you be very careful when assembling or disassembling components such as the wings, stabilizer and other parts. The following instructions will provide you with all the necessary information.

#### NOTE

Folding or unfolding the wings and attaching or detaching the horizontal tail is a two person procedure. Do not to try this alone. Severe damage to the aircraft may result.

##### 5.1.1 tools and equipment

- bolt release tool (provided with the aircraft)
- screwdriver (Philips head)
- grease for bolts

##### 5.1.2 connecting folded wings to the fuselage

1. Withdraw the main wing securing bolt from the wing and place it nearby. Ensure that the bolt stays clean until remounted.
2. Remove the wing support aid bracket while a second person supports the wing at the wing tip.
3. Now the second person at the wing tip moves the wing slowly forward while ensuring that the wing does not spin around its axis. The weight of the wing is supported by its strut, therefore, the wing must never be lifted or pushed down from the top.
4. When the wing has reached its maximum forward position, the person at the fuselage position must rotate the wing to align both connection latches. Care must be taken that the surface of the wing is not damaged by the fuselage connecting latches.
5. When the connecting latches between the fuselage and wing are aligned, the wing must be lifted by the person at the wing tip. The person at the fuselage must ensure that the flap drive connection fits correctly into the bushing on the fuselage.
6. If all latches have engaged and the wing fits properly to the fuselage, the main bolt can be pushed into its support tube. To install the main bolt correctly, please use the special installation tool which comes with the aircraft. Now secure the bolt with the securing pin. The person at the wing tip can now release the pressure supporting the wing tip.

7. Inside the cabin, the pushrod quick fasteners MUST properly be connected and secured.

**Insecure connection, improper operation of control surfaces or insecurely locked fasteners will lead to loss of control of the aircraft!! When in doubt contact your local REMOS dealer or service center.**

8. Proceed in the same order with the second wing.

## Notification

### 5.1.3 installing the horizontal tail

1. Hold the horizontal tail in place so that the bushings in the fuselage match up with those in the horizontal tail.
2. Apply the attachment bolts from left to right into their bushings. The forward bolt is marked by a "V", the rearward bolt by "H".
3. Align the hole of the attachment bolt with the one in the right bushing and secure the bolts with Fokker needles.
4. Connect the cable plug for the electric trim actuator

5. The pushrod quick fastener **MUST** be connected properly and secured.

**Insecure connection, improper operation of control surfaces or insecurely locked fasteners will lead to loss of control of the aircraft!! When in doubt contact your local REMOS dealer or service center.**

6. Attach the tail cover and secure it with the screws provided. Connect the electric jack for the taillight.

**After rigging the aircraft perform a thorough preflight check.**

REMOS Service Center West out of Baesweiler, Germany, has prepared a great video showing how to fold an aircraft and fix it properly on a trailer, have a look here: <https://youtu.be/u6A83Zz6Nbl> (in German)

**▲ WARNING**

Insecure connection, improper operation of control surfaces or insecurely locked fasteners will lead to loss of control of the aircraft!! When in doubt contact your local REMOS dealer or service center.

### 5.2 Folding a Rigged Aircraft

To disassemble the aircraft, perform the above described procedures in reverse order.



## Notification

### 6. Folding Wing Support

The folding wing support come in a bag and consists of:

- strut for left wing root fixation
- strut for right wing root fixation
- strut for fixing left wing on fuselage
- strut for fixing right wing on fuselage
- fuselage bracket inside transportation bag

slide bracket into transportation bag





## Notification

wrap bag with bracket around fuselage at the front end of the ventral strake and fix it with straps



## Notification

put front strut into the slot of the main wing brackets and slide in main wing bolt



put the clamp on the lower end of the strut



repeat on the other wing

## Notification

now take the rear strut and attach it to the upper end of the strut



put the strut on the thread of the bracket you already attached on the fuselage, spin on nut



The aircraft will now sit on its tail skid. Take care not to poke the wingtips into the rudder.

For road transportation you need additional fixations!!!



## Notification

### 7. Road Transportation

Although it might seem possible, it is in fact not enough to use the wing folding supports alone for road transportation. Those tools are made for stowing the aircraft on ground only.

When the aircraft shall be transported on the road, keep in mind that following items are important:

1. the fuselage must be fixed to the trailer IMMOVABLE in any direction
2. the attitude on the trailer does not matter, but tail down has shown to be practical
3. fix the tail rigidly to the trailer using the hole in the tailskid
4. support the nose landing gear, you may depress the suspension about 1 inch
5. strap down the main wheels on the trailer, take off the wheel pants for doing so
6. support the wingtips, so that there is no load on the folding hinges

REMOSS Service Center West out of Baesweiler, Germany, has prepared a great video showing how to fold an aircraft and fix it properly on a trailer, have a look here: <https://youtu.be/u6A83Zz6Nbl> (in German)

## Notification

### 8. Cleaning and Conserving

Field experience revealed that a lot of customers are not familiar with correct cleaning and conserving methods. Also, a lot of customers are not aware of the fact that correct, regular and thorough cleaning and conserving of the airplane prevents severe damages like heavy corrosion or mildew. Damages like this take a longer time to build up. The repair is not only expensive and time consuming, but also causes the aircraft to be inoperative. This notification shall give advice how to prevent such events by proper cleaning and conserving.

<b>CAUTION</b>	Corrosion, mildew, malfunction or excessive wear due to improper cleaning and conserving do not fall under warranty. Warranty claims will be rejected in these cases.
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Every aircraft needs special care. An aircraft shall be washed, rinsed and conserved on a regular basis, best is at least once per month. This is especially the case for aircraft that are exposed to a corrosive environment, these aircraft need special care. Environment that support corrosion is found at the coast, in landscapes that suffer from a lot of rain or in areas with humid and warm air.

Leaving the aircraft in the open and not in a hangar is permitted, although not recommended. If the aircraft is permanently parked in the open it is recommended to use adequate covers. REMOS can provide a variety of covers from sun-light protection up to hail-proof all weather aircraft covers. Only use covers that are vented to avoid condensing water underneath.

The cabin of an LSA is not watertight. Leaving the aircraft unprotected in the open can cause water condensing in the cabin or dropping inside. If the cabin is not dried, water will rest in the cabin, causing corrosion in the inside or even mildew.

<b>CAUTION</b>	If the aircraft is left in the open, the customer must take care that the aircraft is not contaminated with spray, jet blast, de-icing fluids, etc. as this causes heavy corrosion.
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<b>CAUTION</b>	Aircraft left in the open must be protected against water entering the cabin. The inside of the cabin must be kept dry. Once the cabin gets wet, it must be dried immediately to prevent mildew or severe corrosion in the inside which will cause damage to metallic parts, the electric system and avionics.
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## Notification

### 8. Cleaning and Conserving

#### 8.1 Windshield and Windows

Windows should be cleaned carefully with plenty of fresh water and a mild detergent, using the palm of the hand to feel and dislodge any caked dirt or mud. A sponge, soft cloth, or chamois may be used, but only as a means of carrying water to the acrylic. Rinse thoroughly, and then dry with a clean moist chamois. Do not rub the acrylic with a dry cloth as this builds up an electrostatic charge which attracts dust. Oil and grease may be removed by rubbing lightly with a soft cloth moistened with a suitable cleaner.

<b>CAUTION</b>	When cleaning the windshields, do NOT use gasoline, alcohol, benzene, acetone, carbon tetrachloride, fire extinguisher fluid, deicer fluid, lacquer thinner, or glass window cleaning spray. These solvents will soften and craze the acrylic windows.
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<b>CAUTION</b>	Before using any cleaner, read the instructions on the container and test it on an inconspicuous place in the fabric to be cleaned.
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After washing, the acrylic windshield and windows should be cleaned with an aircraft windshield cleaner. Apply the cleaner with soft cloths and rub with moderate pressure. Allow the cleaner to dry, then wipe it off with soft flannel cloths. A thin, even coat of special acrylic window polish will fill-in minor scratches and help prevent further scratching. Do not use a canvas cover on the windshield or windows unless freezing rain or sleet is anticipated since the cover may scratch the acrylic surface.

<b>CAUTION</b>	Do not use any lacquer polish like carnauba wax on the acrylic windows.
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#### 8.2 Plastic Trim

The instrument panel, plastic trim and control knobs need only to be wiped with a damp cloth. Oil and grease on the control sticks and control knobs can be removed with a cloth moistened with a suitable cleaner. Volatile solvents must never be used since they soften and craze the plastic.

#### 8.3 Painted Surfaces

The painted exterior surfaces of the aircraft, under normal conditions, require a minimum of polishing and buffing. Approximately two weeks are required for acrylic paint to cure completely; in most cases, the curing period will have been completed prior to delivery of the aircraft. In the event that polishing or buffing is required within the curing period, it is recommended that the work is done by an experienced painter. Generally, the painted surfaces can be kept bright by washing with water and mild soap, followed by a rinse with water and dried with cloths or chamois. Harsh or abrasive soaps or detergents which could cause scratches should never be used. After the curing period, the aircraft may be waxed with a good automotive



## Notification

wax. A heavier coating of wax on the leading edge of the wing and tail and on the engine nose cap will help reduce the abrasion encountered in these areas.

### 8.4 Aluminum Surfaces

The aluminum surfaces of some parts require a minimum of care due to their anodized coating, but should never be neglected. Many good aluminum cleaners are available from commercial suppliers of aircraft products. Household type detergent soap powders are effective cleaners, but should only be used very cautiously since some of them are strongly alkaline and will cause damage.

**◆ NOTE**

It is highly recommended to conserve aluminum surfaces after cleaning with a suitable wax or spray oil or at least once per month.

### 8.5 Zinc Coated Surfaces

Zinc coated surfaces of some parts require some care, especially in a corrosive environment. Clean these surfaces thoroughly at least on a monthly basis with a suitable cleaner.

**◆ NOTE**

It is highly recommended to conserve zinc coated surfaces after cleaning with a suitable wax or spray oil or at least once per month.

### 8.6 Upholstery and Interior

Keeping the upholstery and interior clean prolongs upholstery fabric and interior trim life. To clean the interior, brush or vacuum clean the upholstery and carpet to remove dust and dirt. Then clean upholstery with a sponge moistened with fresh water, wipe plastic trim with a damp cloth. Oil spots and stains may be cleaned with household spot removers, used sparingly.

**■ CAUTION**

Before using any cleaner, read the instructions on the container and test it on an inconspicuous place in the fabric to be cleaned. Never saturate the fabric with volatile solvent; it may damage the padding and backing material. Scrape sticky material from the fabric with a dull knife, then spot clean the area.

## Notification

### 8.7 Engine and Engine Compartment

The engine should be kept clean since dirty cooling fins may support overheating of the engine. Also, cleaning is essential to minimize any danger of fire and provide for easier inspection of components. The entire engine cowling may be removed to facilitate engine and interior cowl cleaning. Wash down the engine and components with a suitable cleaner, and then dry thoroughly with compressed air.

<b>■ CAUTION</b>	Particular care should be given to electrical equipment before cleaning. Solvent should not be allowed to enter magnetos, starter, alternator, voltage regulator and the like. Hence, these components should be protected before saturating the engine with solvent. Any fuel, oil and air openings should be covered before washing the engine with solvent. Caustic cleaning solutions should not be used. After cleaning engine re-lubricate all control arms and moving parts.
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### 8.8 Propeller

Wash hub and blades with a soft cloth and suitable cleaning solvent, then dry thoroughly with compressed air. It is recommended to take off the spinner on a 100h maintenance event or during the annual condition inspection for cleaning and conserving the hub. The hub of the Sensenich or Neuform propeller are made of anodized aluminum, Tonini or Woodcomp prop feature a zinc coated pressure plate.

<b>■ CAUTION</b>	Do not use gasoline, alcohol, benzene, acetone, or lacquer thinner. These solvents will soften and damage the lacquer finish.
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### 8.9 Wheels

The wheels, brake disks and rims should be washed periodically and examined for corrosion, cracks and dents in the wheel halves or hubs. If defects are found, remove and repair them. Discard cracked wheel halves of hubs and install new parts.

<b>▲ WARNING</b>	Never lubricate brake disk and brake pads!
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### 8.10 Wing Strut

The attachments of the wing strut shall be washed, cleaned and conserved on a regular basis. Wash the attachments with a soft cloth and suitable cleaning solvent, then dry thoroughly with compressed air.

<b>◆ NOTE</b>	It is highly recommended to conserve the strut attachments after cleaning with a suitable wax or spray oil or at least once per month.
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## Notification

### 8.11 Polishing

For polishing you can use almost any car polish but be sure that no silicone is used in that product.

### 8.12 Control System

The control system of aileron and elevator features pushrods, the rudder is linked by wires. Pushrods, bell cranks and clevises are almost maintenance free. It is recommended to clean all articulations with a suitable spray cleaner and conserve them afterwards with a suitable wax or spray oil in combination with a 100h maintenance event or during the annual condition inspection. The same applies to the quick connectors.

To prevent corrosion on the control wires of the rudder, especially on the attachment to the rudder itself, clean them with a suitable spray cleaner and conserve them afterwards with a suitable wax, spray oil or grease in combination with a 100h maintenance event or during the annual condition inspection.

**REMOS wishes you safe and fun flights!  
Always check your aircraft before you fly!**