

# Tech Sheet: Grumman Goose G21 Amphibian

(grumman-G21.pdf)



Grumman G44 Widgeon Canopy/Nose Cover

## Section 1: Canopy/Cockpit/Fuselage Covers

The **Grumman Goose G21 Amphibian Cockpit/Nose Cover** helps reduce damage to the upholstery and avionics caused by excessive heat and can eliminate problems caused by leaking door and window seals. They keep the windshield and window surfaces clean and help prevent vandalism and theft.

The **Cockpit/Nose Cover** is designed to cover the windshield and side windows of the cockpit. Attachment buckles are made of nonmetal *Delrin*, designed for rugged outdoor use. The windshield cover comes with a duffle bag. The N-number can be imprinted onto the cover for an extra charge. The windshield cover is trimmed in the colors of the aircraft.

This cover type is made from Silver Acrylic Sunbrella canvas and is 100% lined with a soft and smooth microfiber. Bruce's Custom Covers developed this material combination especially for aircraft protection. The outer material is medium weight and treated for water resistance, UV resistance and anti-static buildup. The inner lining is a very soft and smooth microfiber to prevent scratching. The material is very reflective, and tests show that the cabin interior temperature can be reduced to near-ambient temperature on the hottest of days. It is water, ice and snow repellent, yet breathable to allow moisture to escape from between the cover and the aircraft surface.



Grumman Widgeon Cockpit/Nose Cover, tie-down cleat detail



Grumman G44 Widgeon Canopy/Nose Cover

Description	Part Number	Price
COCKPIT/BOW COVER	<b>G21-010</b>	<b>\$660.00</b>

## Section 2: Engine/Prop Covers

The **Grumman Goose G21 Amphibian Propeller Cover** is a one-piece design that form fits to the blades and spinner. The prop cover slips over the blades and spinner and is attached by a plastic all-weather zipper on the bottom of the blades. Propeller covers can be made for multiple numbers of blades, and for wooden, composite or metal props. The Propeller Cover is normally made from Acrylic *Sunbrella* or Solution-Dyed Polyester and is lined 100% with a soft and smooth microfiber. **Insulated Propeller Covers** works well in cold climates to help with engine preheating. These insulated versions are made with a thicker, quilted, water-repellent, and breathable material.

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Description	Part Number	Price
PROPELLOR/SPINNER COVERS, 3 Blade (set of 2)	<b>G21-120</b>	<b>\$495.00</b>

## Section 3: Plugs & Protection

**Grumman Goose G21 Amphibian Pitot Tube Covers**, NOT HEAT RESISTANT TYPE, are made of Naugahyde vinyl, and are designed to cover the entire pitot assembly. Slipping over the tube, the cover tightens around the base with a Velcro strap detail. A "Remove Before Flight" streamer is attached to the cover. **Heat Resistant Pitot Covers** are an upgrade to this design, and help prevent the pitot cover from melting onto the tube if the pitot heat is accidentally turned on while installed. If you want the set tethered together, please let us know.

Description	Part Number	Price
PITOT COVERS, shark fin type, w/telescoping handle (set of 2)	<b>G21-500</b>	<b>\$210.00</b>

## Section 4: Wing/Tail/Empenage Covers

**Horizontal Stabilizer Covers** are a perfect solution to protect your paint from sun damage and prevent frost, snow, ice buildup, and corrosion. They are made from Solution-Dyed Polyester or Acrylic *Sunbrella*. They cover the entire upper surface of the stabilizers and overlap around the leading and trailing edges as well as the wing tip. The covers secure under each stabilizer with adjustable straps. In some instances, cut-outs are made in the trailing edge of the wing covers to accommodate for static wicks. **Horizontal Stabilizer Covers** for winter use or long-term all year use are usually available, and are normally made from Solution-Dyed Polyester or Acrylic *Sunbrella*. A Hail Protection version can be made which incorporates dense closed cell foam into the entire upper surface of the wing covers to help prevent hail damage. Although these covers are bulky, they do help protect your wing and control surfaces against small to medium-size hail.

**ALL-YEAR USE MATERIAL** - Made with Silver Acrylic *Sunbrella* canvas, the all-year use material is the best option for sun protection and cover longevity. This heavier more durable material is intended for all weather conditions, such as rain and snow or lots of sun.

**WINTER USE MATERIAL** - Made with Solution-Dyed Polyester fabric, this option is intended for seasonal use to aid in deicing, rain mitigation, or for occasional travel. The material is lighter and more compact, but more susceptible to UV damage and may have a shorter useful life if used continuously outside than the all-year use material.

The **Grumman Goose G21 Amphibian Wing Covers** are a perfect solution to protect your paint from sun damage and prevent winter frost, snow, ice buildup, and corrosion. They are made from Solution-Dyed Polyester or Acrylic *Sunbrella* and form-fit to slip around each wing tip, cover the entire upper surface of the wing and wrap around the leading and trailing edges. The covers secure under the wing with adjustable straps from the trailing edge to the leading edge. The wing covers can also attach to each other with adjustable straps at the leading and trailing edges of the wing under the belly of the plane. In some instances, cut-outs are made in the trailing edge of the wing covers to accommodate static wicks. We have the ability to also accommodate wing tip modifications, such as STOL kits, droop tips, and vortex generators. Wing covers are labeled LEFT and RIGHT for your convenience. Wing Covers are available for winter use or long-term, all-year use. A Hail Protection version can be made which incorporates very dense closed cell foam into the entire upper surface of the wing covers to help prevent hail damage. Although these covers are bulky, they do help protect your wing and control surfaces against small to medium-size hail.

**ALL-YEAR USE MATERIAL** - Made with Silver Acrylic *Sunbrella* canvas, the all-year use material is the best option for sun protection and cover longevity. This heavier more durable material is intended for all weather conditions, such as rain and snow or lots of sun.

**WINTER USE MATERIAL** - Made with Solution-Dyed Polyester fabric, this option is intended for seasonal use to aid in deicing, rain mitigation, or for occasional travel. The material is lighter and more compact, but more susceptible to UV damage and may have a shorter useful life if used continuously outside than the all-year use material.

Description	Part Number	Price
WING COVERS, WINTER USE (set of 2)	G21-200	\$2170.00
WING COVERS, ALL YEAR USE (set of 2)	G21-205	\$2820.00
HORIZONTAL STABILIZER COVERS, WINTER USE (set of 2)	G21-300	\$630.00
HORIZONTAL STABILIZER COVERS, ALL YEAR USE (set of 2)	G21-305	\$815.00

Section 5: HeatShields & Sun Reflectors

**Cockpit Heatshields** are interior sunshades for the aircraft's cockpit. The product is a unique composite of closed-cell foam with a silver mylar finish. The semi-rigid design is stiff enough to stand inside the window framing. The set folds up flat and is easily stored in the included storage sleeve. Some designs may require velcro and suction cups. A Heatshield is an excellent short-term remedy for cockpit overheating, but an external fabric cover is more effective for long-term protection.

**Windshield Heatshields** are interior sunshades for an aircraft's front windshield. The product is a unique composite of closed-cell foam with a silver mylar finish. The semi-rigid design is stiff enough to stand along the inside of the windshield using sun visors or window framing. It folds up flat and easily stores in the included storage sleeve. Some designs may require velcro and suction cups or split right and left sides. A Heatshield is an excellent short-term remedy for cockpit overheating. An external fabric cover is far more effective and practical for long-term protection.



Grumman Widgeon Cockpit/Nose Cover, tie-down cleat detail



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Description	Part Number	Price
WINDSHIELD HEATSHIELD	<b>G21-900</b>	<b>\$185.00</b>
COCKPIT HEATSHIELD SET (set of 3)	<b>G21-910</b>	<b>\$290.00</b>

#### Section 7: Light Weight Products: Travel Covers and FlyAway Covers

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Cockpit covers are designed to cover the windshield and side windows of the cockpit. Attachment buckles are made of nonmetal *Delrin*, designed for rugged outdoor use. The windshield cover comes with a duffle bag. The N-number can be imprinted onto the cover for an extra charge. The windshield cover is trimmed in the colors of the aircraft.

This cover type is made from Silver Acrylic Sunbrella canvas and is 100% lined with a soft and smooth microfiber. Bruce's Custom Covers developed this material combination especially for aircraft protection. The outer material is medium weight and treated for water resistance, UV resistance and anti-static buildup. The inner lining is a very soft and smooth microfiber to prevent scratching. The material is very reflective, and tests show that the cabin interior temperature can be reduced to near-ambient temperature on the hottest of days. It is water, ice and snow repellent, yet breathable to allow moisture to escape from between the cover and the aircraft surface.

Description	Part Number	Price
TRAVEL COVER, Light Weight Travel Cockpit/Bow Cover	<b>G21-800</b>	<b>\$530.00</b>

**Prices subject to change. Other Covers and Design Alterations: Prices on request.**

**Prices are FOB Morgan Hill, CA. Sales tax on orders shipped to California addresses. Orders take approximately 3 weeks to complete. For domestic orders we normally ship by UPS ground service. Next day shipping and air parcel post is available on request. We can take payment by Visa, Mastercard, American Express, or Discover.**

**Bruce's Custom Covers offers protective covers and plugs for virtually every type of airplane, jet and helicopter. If you have questions about our products please call any time TOLL FREE: 800/777-6405, or FAX: 408/738-2729.**



**Instructions:** Measure to the nearest 1/8" and only fill in what applies. You may email, fax or phone in the measurements.

Aircraft Reg / Tail Number: \_\_\_\_\_ Aircraft Type: \_\_\_\_\_ Year: \_\_\_\_\_

Name: \_\_\_\_\_ Phone & Email: \_\_\_\_\_

### Propellor Measurements

Please check one:

2 - Blade

3 - Blade

4 - Blade

- |          |                                     |  |
|----------|-------------------------------------|--|
| <b>A</b> | Measure along surface of cone       |  |
| <b>B</b> | Measure "straight line" base to tip |  |
| <b>C</b> | Base to top of blade root opening   |  |
| <b>D</b> | Provide diameter or circumference   |  |
| <b>E</b> | Provide diameter or circumference   |  |
| <b>F</b> | Blade root to prop tip              |  |
| <b>G</b> | Trailing edge to leading edge       |  |
| <b>H</b> | Trailing edge to leading edge       |  |
| <b>J</b> | Trailing edge to leading edge       |  |



## Aircraft Cover Ordering Form

<b>Customer Info</b>	Name _____
	Shipping Address _____ _____
	Phone & Email _____
<b>Payment</b>	Credit Card Number <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Exp. Date <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> V-Code* <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <small>*Visa, Mastercard, Discover: last 3 numbers on back of card, right of signature. Amex: 4 smaller numbers printed on face of card.</small>
<b>A/C Info</b>	Reg / Tail Number: _____ Aircraft Type: _____ Year: _____
	Colors / Paint Scheme (be specific): _____

### Please specify below the items you would like to order.

See technical sheet or visit our website for part numbers (or just fill in the description)

1	Part Number	Quant	Description	Price
2				
3				
4				
5				
6				
7				
8				
9				
10				
				<b>TOTAL</b>

#### Optional Items (check the box of the item you want)

- ☐ Imprint aircraft registration number onto both sides of canopy cover.....\$30.00
- ☐ Imprint aircraft registration number onto Jet intake covers.....\$50.00