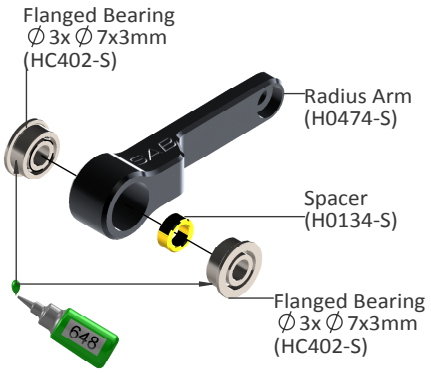
HPS3 ROTOR HEAD
[H0489-K Goblin 500, H0490-K Goblin 570]

H0489M_Rev01

Please read this user manual carefully, it contains instructions for the correct assembly of the KIT.
Please refer to the website www.goblin-helicopter.com for updates and other important information. Thanks You.

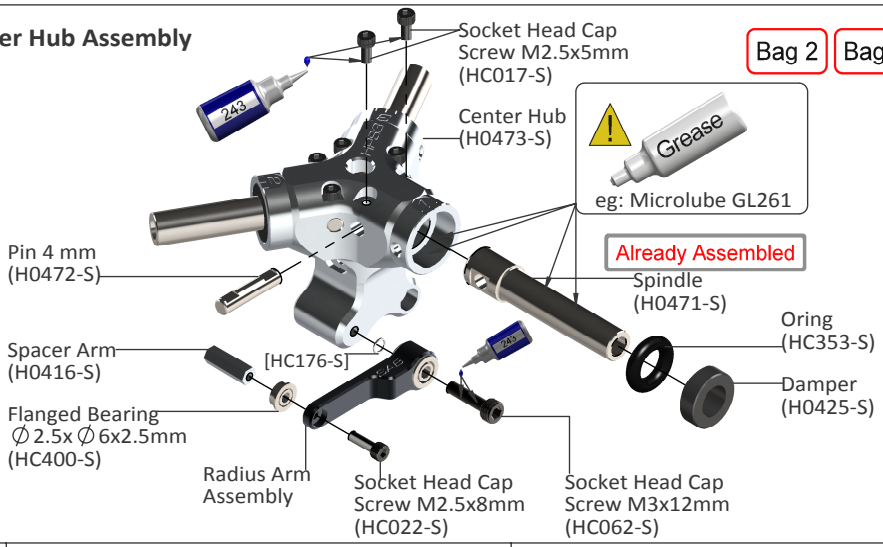
Radius Arm Assembly ... x 2

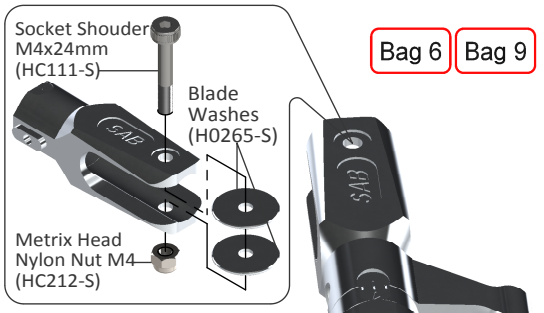
Bag 1



Center Hub Assembly

Bag 2 Bag 3

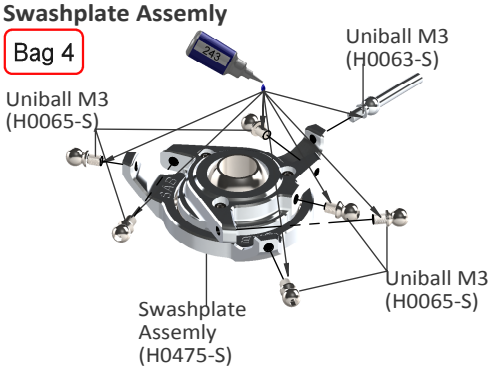




Bag 6 Bag 9

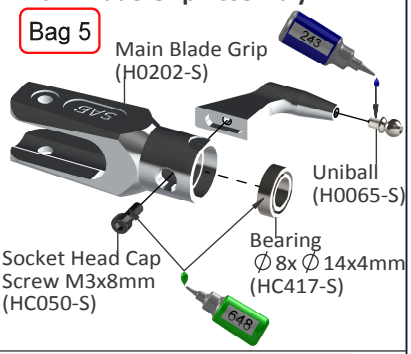
Swashplate Assemly

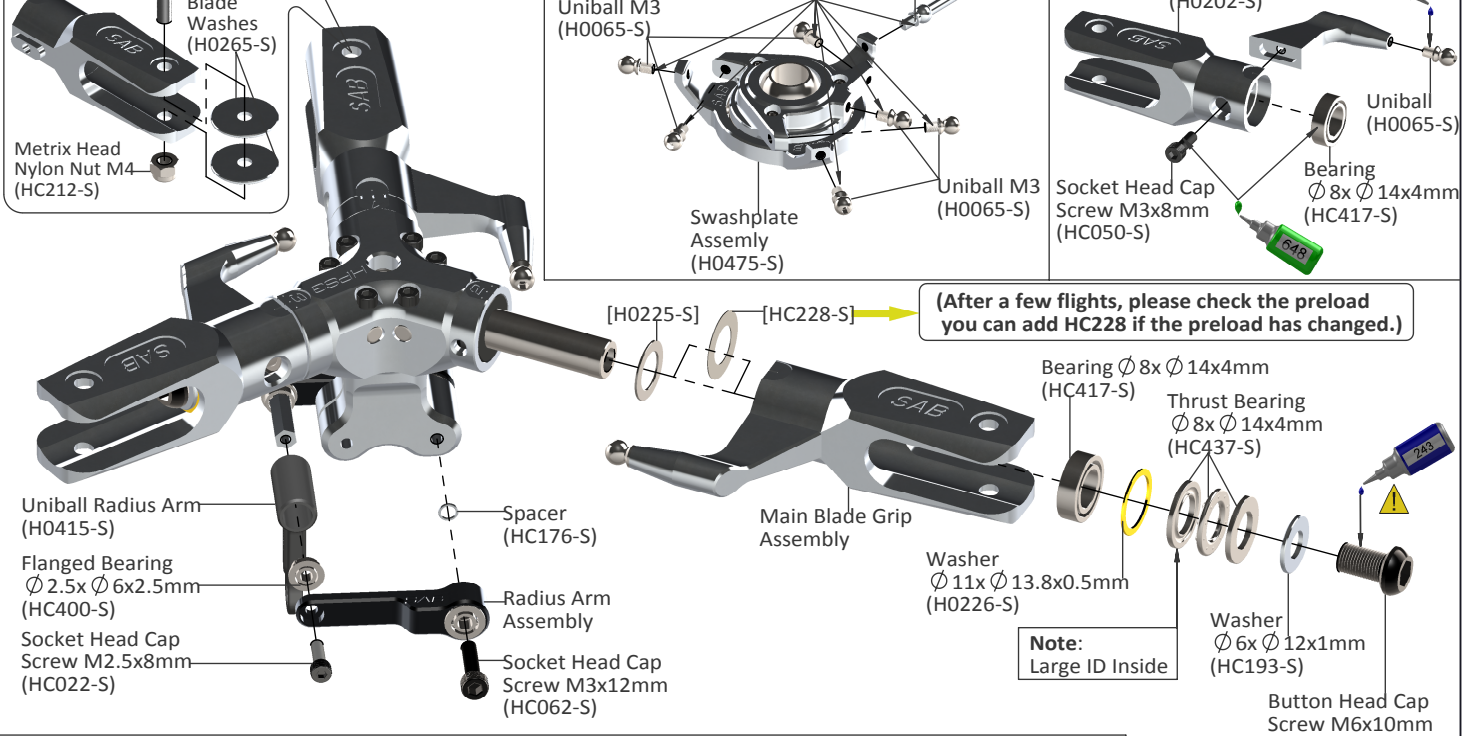
Bag 4



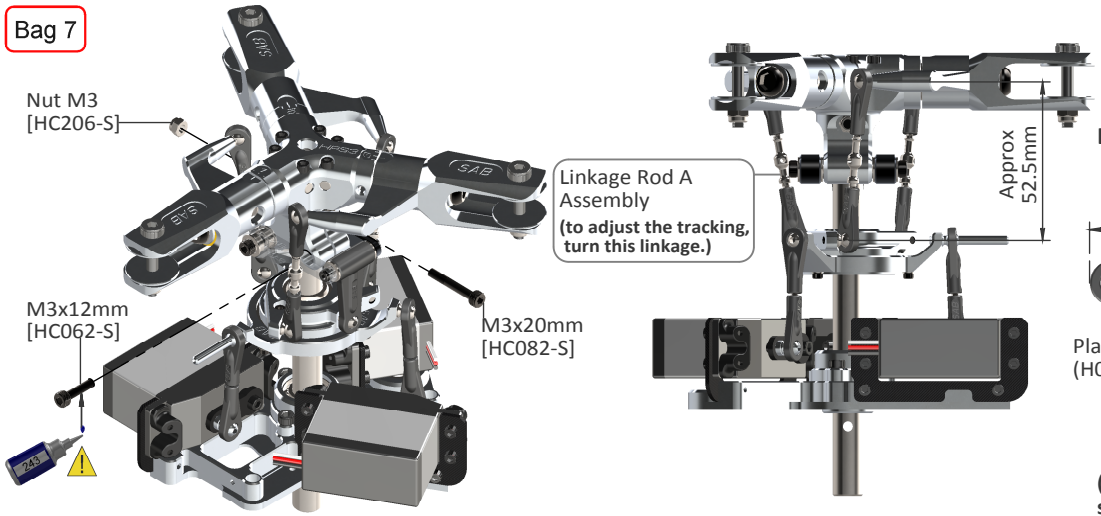
Main Blade Grip Assembly x2

Bag 5





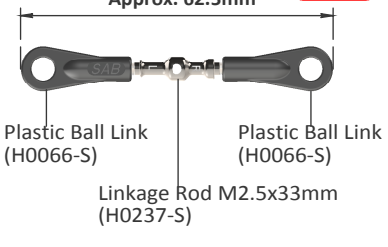
Bag 7



Note: Please add thread locker to the M6x10 screws

Linkage Rod A Assembly x3

Bag 8



(Initial length for the rods from the swashplate to the Blade Grip.)

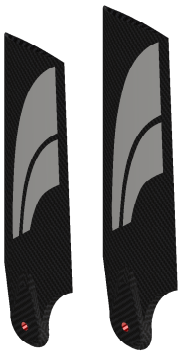
SAB HELI DIVISION

ABOUT HPS3

For safety reasons we suggest to not exceed.

2500 rpm Goblin 500
2400 rpm Goblin 570

In the KIT, you will find a bigger tail blades. This size is optimazed for to counteract the additional torque in troduced by 3rd rotor blade.



Goblin 500 = Tail Blade BW5095

Goblin 570 = Tail Blade BW5104

RECOMMENDATIONS

These parts should be used only with models SAB Goblin.

· Goblin 500 (recommended blades SAB 3BL465, max 500 mm)

· Goblin 570 (recommended blades SAB 3BL540, max 550 mm)

- 3 blades rotor head requires a much lower cyclic gain on flybarless systems.
  We recommend that you set your gain at least 30% lower than the gain you normally use on your 2 blade rotor head helicopters.
  You can start increasing the gain after you complete your first flight.
  Running too high of a gain can induce a violent oscillation that can potentially cause damage to your helicopter in flight.

- Please follow all the instructions shown in the Goblin main manual.
  In this manual please read Chapter 2, Important notes

- Use Loctite on all threads.
- Put a small amount of grease inside the hub and the O-Ring.

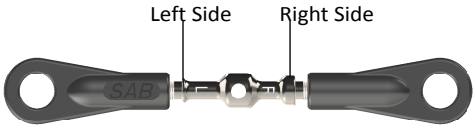
- Check the spindle for axial play at least after the first few flights and add shims as necessary, slight axial preload is optimal.The blade grips must move freely, but they should not move just under their own weight.

- Firmly tighten the blades before flight.

TIPS:

* To remove the dampeners, you can use a flathead screwdriver through the hole as shown.

* Clock-wise, counter clock-wise thread
* By turning the linkages you can adjust tracking.

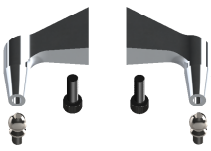


SPARE PARTS

Blade Grip [H0202-S]

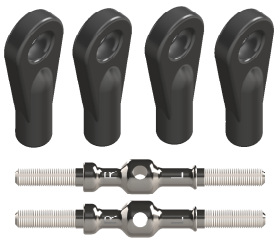
- 2 x Main Blade Grip.
- 2 x Thrust Bearing ∅8x∅14x4mm.
- 4 x Bearing ∅8x∅14x4mm.
- 2 x Washer ∅11x∅13.8x0.5mm.

Blade Grip Arm [H0203-S]



- 2 x Blade Grip Arm.
- 2 x Socket Head Cap Screw M3x8mm.
- 2 x Uniball M3.

Linkage [H0237-S]



- 2 x Linkages M2.5x33mm.
- 4 x Plastic Ball Links.

Damper Derlin [H0425-S]

- 2 x H0425.
- 2 x Orings.
- 4 x Steel Shims Ø8xØ14x0,2mm.

Spindle Shaft [H0471-S]

- 2 x Spindle Shaft.
- 2 x Pin 4mm.
- 4 x Socket Head Cap M2x5mm.
- 2 x Socket Head Cap M6x10mm.
- 2 x Washer Ø8xØ10.2x0.5mm.

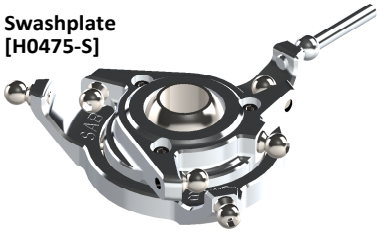
Center Hub [H0473-S]

- 1 x Center Hub.
- 1 x Socket Head Cap Screws M3x12mm.
- 1 x Socket Head Cap Screw Shouldered M3x20mm.
- 1 x Metric Hex Nylon Nut M3.

Radius Arm [H0474-S]

- 2 x Radius Arms.
- 2 x Spacer Arm
- 1 x Spacer Hex.
- 1 x Uniball Radius Arms.
- 2 x Socket Head Cap Screws M3x12mm.
- 2 x Socket Head Cap Screws M2.5x8mm.
- 2 x Flanged Bearings ∅2.5x∅6x2.5mm.
- 4 x Flanged Bearings ∅3x∅7x3mm.

Swashplate [H0475-S]



- 1 x Swashplate Assembly.
- 1 x Bearings 30x∅37x4mm.
- 6 x Uniballs M3x4∅5 H3.
- 1 x Uniball M3x4∅5 H18.
- 7 x Socket Head Cap Screws M2x5mm.
- 3 x Swasher ∅2x∅5x0.5mm