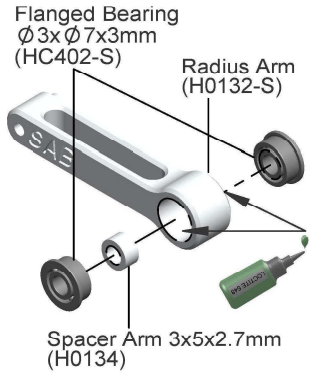
Head HPS - Goblin700

SAB Heli Division

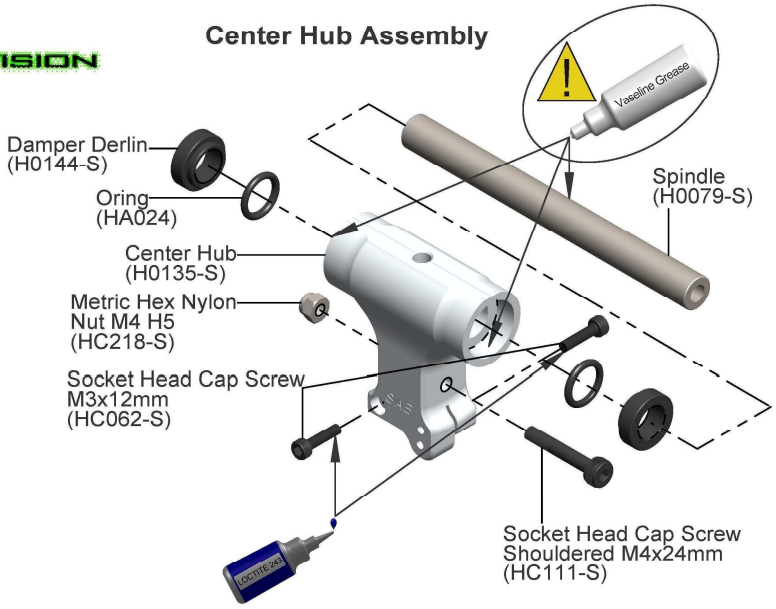
Foam, Bag1, Bag3, Bag4

Uniball Radius Arm x 2 Assembly

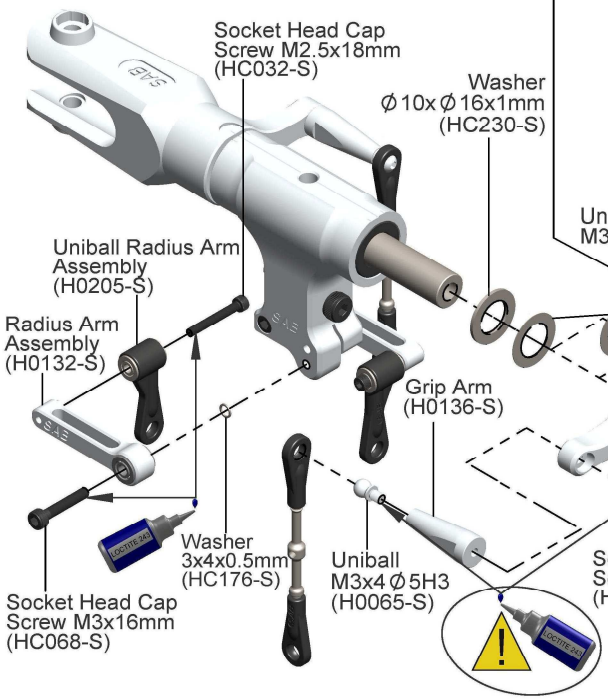
Radius Arm x 2 Assembly



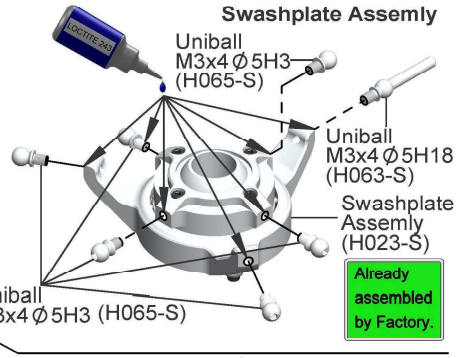
Center Hub Assembly



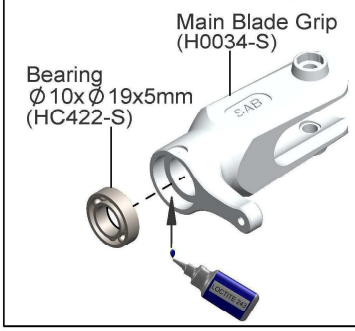
Foam, Bag1, Bag2, Bag3, Bag4



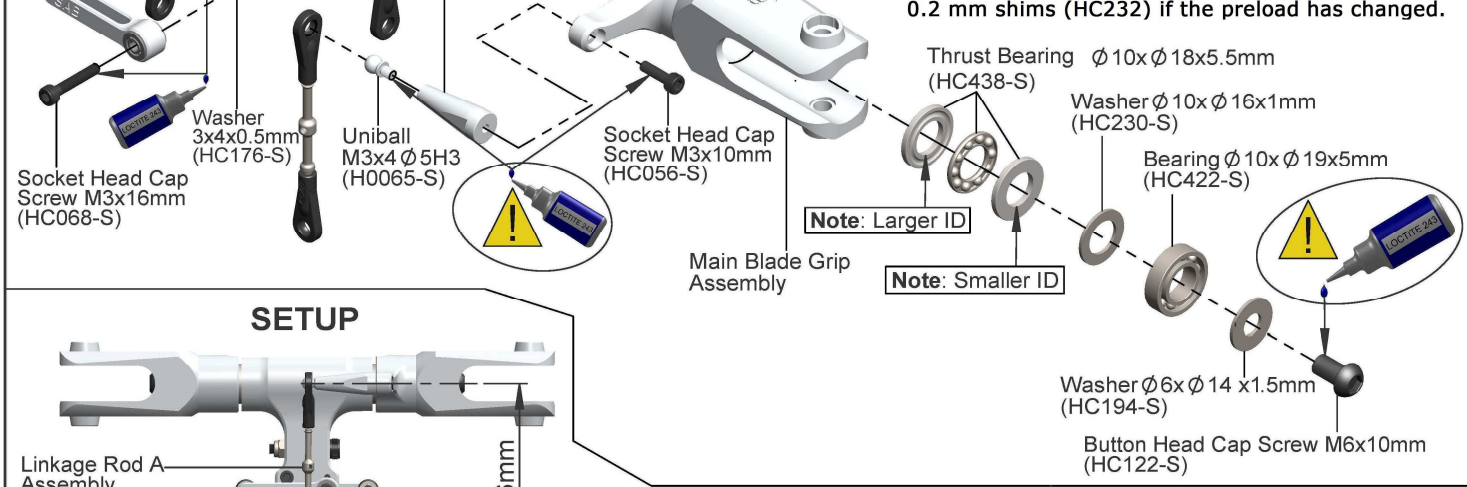
Swashplate Assembly



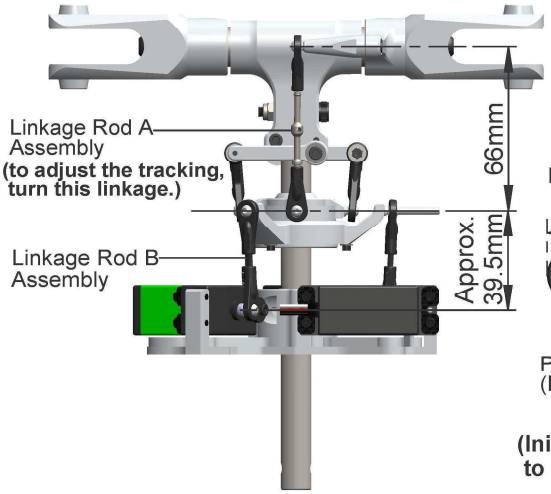
Main Blade Grip Assembly x2



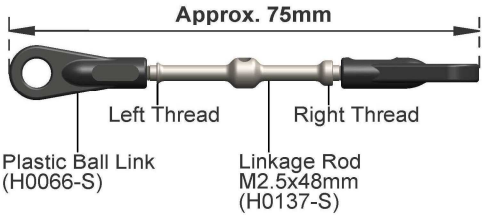
(HC232-S) The HPS head should be assembled with one, 1 mm shim (HC230) and one, 0.2 mm shim (HC232) on each side. If the blade grips are too tight, you can remove the 0.2 mm shim (HC232) from each side. After approximately 10/20 flights, please check the preload, you can add one or two 0.2 mm shims (HC232) if the preload has changed.



SETUP

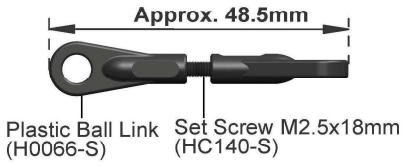


Linkage Rod A Assembly x2



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

Linkage Rod B Assembly x3



(Initial length for the rods from the servos to the swash plate.)

SAB Heli Division

Spare Parts

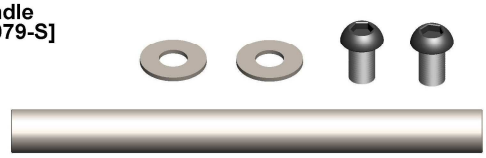
Swashplate [H0023-S]

- 1 x Swashplate Assembly.
- 2 x Bearings 30xØ37x4mm.
- 6 x Uniballs M3x4Ø5 H3.
- 1 x Uniball M3x4Ø5 H18.
- 3 x Socket Head Cap Screws M2x5mm.
- 4 x Socket Head Cap Screws M2x8mm.

Blade Grip [H0034-S]

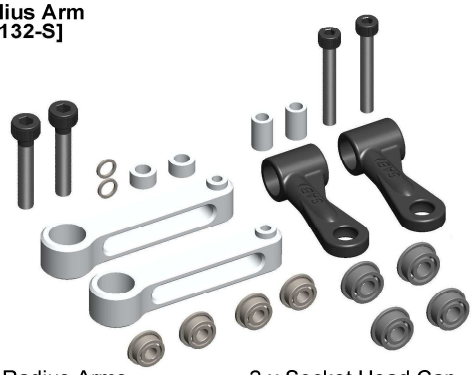
- 1 x Blade Grip.
- 2 x Bush Blade Grips.

Spindle [H0079-S]



- 1 x Spindle.
- 2 x Button Head Cap Screws M6x10mm.
- 2 x Washers Ø6xØ14x1mm.

Radius Arm [H0132-S]

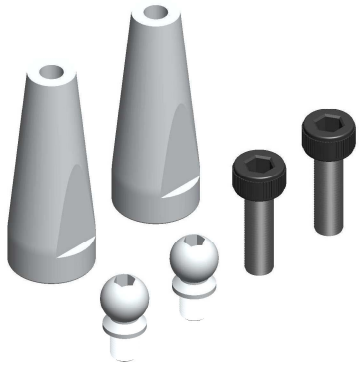


-2 x Radius Arms.
-2 x Spacer Arm ØØ3xØ5x2.7mm.
-2 x Spacer Arm ØØ2.5xØ4x6.3mm.
-2 x Uniball Radius Arms.
-2 x Socket Head Cap Screws M3x16mm.
-2 x Socket Head Cap Screws M2.5x18mm.
-2 x Washers ØØ3xØ4x0.5mm.
- 4 x Flanged Bearings Ø2.5xØ6x2.5mm.
- 4 x Flanged Bearings ØØ3xØ7x3mm.

Center Hub [H0135-S]

-1 x Center Hub.
-2 x Socket Head Cap Screws M3x12mm.
-1 x Socket Head Cap Screw Shouldered M4x24mm.
-1 x Metric Hex Nylon Nut M4 H5.

Blade Grip Arm [H0136-S]



-2 x Blade Grip Arms.
-2 x Uniballs M3x4 Ø5H3.
-2 x Socket Head Cap Screws M3x10mm.

Linkage [H0137-S]

-2 x Linkages M2.5x48mm.
-4 x Plastic Ball Links.

Damper Derlin [H0144-S]

-2 x Damper Derlin.
-2 x Washers Ø10xØ16x1mm.
-4 x Washers Ø10xØ16x0.2mm.
-4 x Orings 3050.

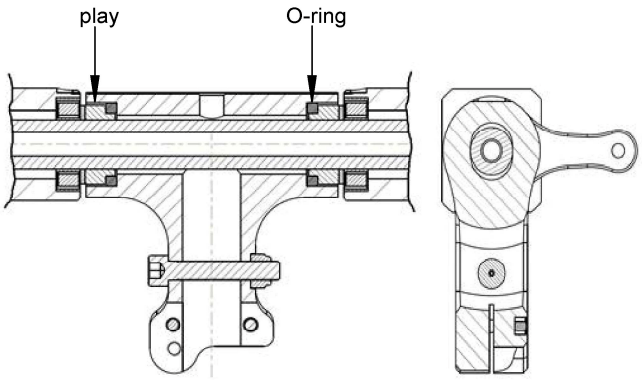
About HPS

HPS stands for "High Precision System". This head has been developed in order to increase the usable rotor RPM range without having to change the rigidity of the dampening system.
The new head is developed specially to limit the teetering effect of the spindle by means of dampening achieved by a special technopolymer material.
The maximum teetering amount can be adjusted based on the amount of play shown in figure "A" of the drawing. The O-ring is necessary to create a radial and axial preload.
The preload can be kept relatively low, thanks to the mechanical locking properties of the technopolymer dampeners.
With this solution, finding the correct preload is less complex.
This solution is safer because there is a physical "stop" of the teetering effect with the technopolymer dampers, also with low axial preload.
The change of preload will serve exclusively to customize the response of the model.

Furthermore, the spindle can only move vertically thanks to the elongated hole shown in section "B" of the drawing.
This solution allows an optimal control of the geometry even when large amounts of torque are introduced into the system.

The head is very accurate and reliable.

Figure A **Section B**



Recommendations

- These parts should be used only with models SAB Goblin
- Please follow all the instructions shown in the Goblin main manual. In this manual please read Chapther 2, Important notes
- Use Loctite on all threads.
- Put a small amount of grease inside the hub and the O-Ring.
- Check for axial play of the spindle at least after the first flights.
- Firmly tighten the blades before flight.