

Installation Instruction

BEGADI FNS CNC HopUp Unit for Begadi Sport MK16 S-AEG

(Cyma MK16, FN SCAR-L, Cybergun)

Parts included:

- 1x CNC HopUp Unit made of 7075 aluminum _
- 1x adjustment wheel made of 7075 aluminum with position indication (pre-assembled) _
- 2x C-Clip for AEG and Hybrid barrels
- 1x HopUp Arm (lever) on 7075 aluminum _
- 2x compression spring for HopUp arm _
- 1x brass screw for HopUp Arm _
- 1x brass ring for centering the barrel _
- 1x spring for brass ring (running spring) _
- 1x O-ring for brass ring _
- 1x O-ring ½ as a replacement for the dial -
- 1x Tensioner for 5mm HopUp systems _
- 1x Tensioner for 7mm HopUp systems _
- 1x adapter for normal rubber tensioners _
- 2x insole rubbers for tensioners hard (red) _
- 2x insole rubbers for tensioners soft (black) _









Compatible Nozzles:

The HopUp Unit can be used with a 21.50mm (original) to 21.75mm nozzle.



Loosen the two screws inside the magazine well and push the original hop-up unit forward to the muzzle.



(2)

(1)

Metal Version:

Remove the 6 lateral (3x left + 3x right) Torx screws on the receiver to loosen the outer barrel.

ABS Version:

Remove the 4 side screws (2x left + 2x right) on the receiver.



(3)

Now fold in the stock and first remove the middle Allen screw which fixes the spring guide inside. Once this is loosened, the cover plate can also be removed using the three Phillips screws. This will help you to separate the receiver later, as the cables can be pulled inwards.



(4)

In the next step, the lower receiver is separated from the upper one, for this the PIN must be pressed out.



(5)

Now you can fold down the lower receiver and at the same time push the outer barrel forward together with the lower rail. If this jams something, it helps to slightly loosen the screws marked in orange.



Die originale HopUp Unit zusammen mit dem Innerbarrel kann nun entnommen und demontiert werden.





Now it is time to configure your new HopUp Unit..

- Do you want exchange the HopUp rubber (Bucking) (2), then now install it on the barrel (1) or keep the one already installed.
- - -Slide the barrel (1) with the rubber installed (2) from the front into the HopUp Unit (3), be careful not to twist the barrel with the rubber, otherwise their BBs will get a left or right deflection.
- When the barrel is properly installed, it will be with one of the two clips (4) secured. This step must also be done carefully, otherwise the clip will not snap into the barrel
- -Next, slide the brass ring (5) from the front over the barrel until it is fully seated in the unit. The enclosed O-ring follows (6) which holds the brass ring in place and the barrel spring (7). Depending on the manufacturer of the magazine
- (e.g. Lonex) it may be necessary to install a second spring over the barrel. This ensures that the HopUp Unit is always pressed completely against the gearbox. (SKU: 25620002). This is not necessary with the original magazines.
- Now select one of the enclosed aluminum tensioners (8) which is suitable for your hop-up rubber and preferred ball weight. The scope of delivery includes a 7mm version, which is only compatible with 7mm tuning barrels. A 5mm version, this is used on all regular HopUp rubbers and barrels. Or the third version, which can be combined with a rubber tensioner.
- Once you have made your selection, use one of the 4 rubber bands supplied and install it in the bore of the tensioner. We deliver here **2x black (soft version)** and **2x red (hard version)**. We always recommend installing the soft version first. The red is harder and is only suitable for very heavy BBs, otherwise the BBs tend to over-hop. Once the rubber is installed, the tensioner can be inserted into the unit. (Pay attention to the correct alignment with the 5mm version see picture).
- In the last step, the HopUp Arm (10) is installed together with one of the enclosed springs (9). Place the spring in the hole provided and fix it with a drop of glue or grease if necessary. Now put the hop-up arm into the unit from above, making sure that the arm is correctly installed in the adjustment wheel (the hop-up arm must run in the groove provided). Now fix the arm with the enclosed brass screw which is inserted from the left.



(9) – Optional

If you plan to dismantle your weapon more often, the two plastic holders on the lower receiver can be shortened by 1mm. This makes it possible to push our FNS Unit further forward using the spring. It is still possible to install the original unit.



(10)

The outer barrel together with the hop-up unit and the inner barrel can now be installed and screwed back into the upper receiver.

In order to be able to install the lower receiver, the adjustment wheel of the HopUp Unit must be in the open position. Now push the unit forwards and at the same time lower the receiver so that the nozzle can reach into the unit.



(11)

After all parts have been reinstalled, check whether the unit is completely in contact with the gearbox. If this is not the case, push the unit backwards a little.

(May occur if step 9 is not implemented)



Troubleshooting:

- After the installation I don't get any energy, I have feeding problems or the BBs fall on the ground after a few meters.
- This is usually due to a poorly fitting magazine. The magazine well of the MK16 is slightly more sensitive compared to M4 models.
 So if the output of the BBs does not match the originals exactly, the HopUp Unit can be pushed away from the gearbox by approx.
 0.3mm and no longer seals to the nozzle. We just noticed this with Lonex MidCap Magazines. If this is also the case with your magazine, we recommend installing another barrel spring: Art. 25620002. The two springs create a higher pressure to press the unit against the gearbox. A 21.75mm nozzle can also be used to compensate for the tolerances of the individual manufacturers.
- When I turn the dial to a certain position, it gets stuck but the BB doesn't hop.
- Pay attention to the correct use and installation direction of the aluminum tensioners. The 7mm version can only be used with appropriate barrels such as PPS FX7, DaVinci Akaishi 70. The 5mm version must be installed with the long side pointing backwards:

