



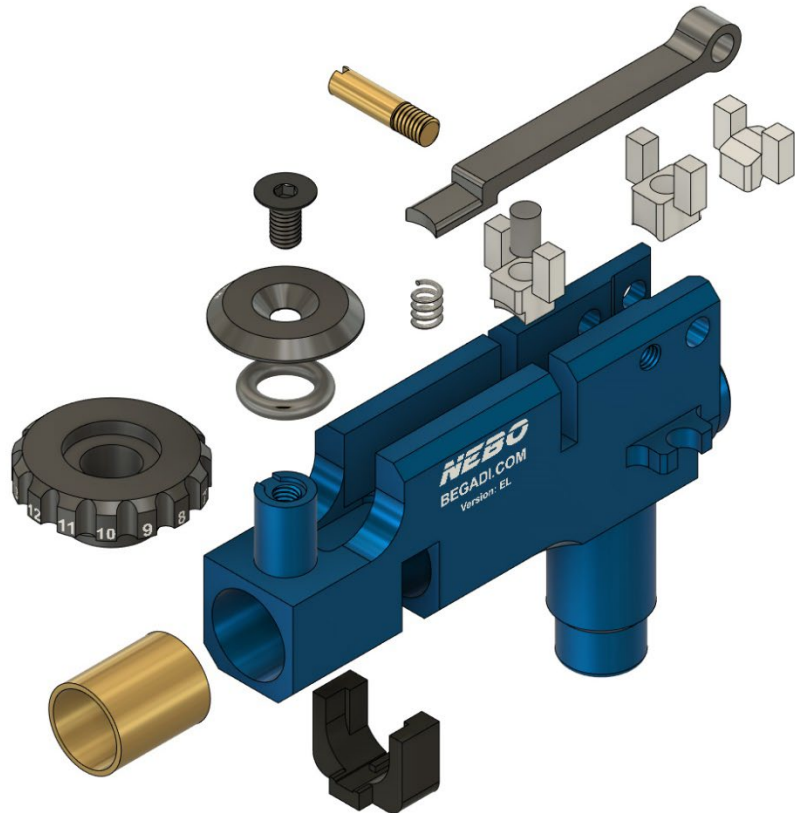
## **Begadi PRO NEBO AK HopUp Unit (EL Version)**

Compatible with: E&L, ARCTURUS

This HopUp Unit is a CNC manufactured rotary for AKs from Cyma (Begadi Sport), Arcturus, LCT and LONEX. The newly developed system makes it possible to set the hop-up effect much more precisely. In connection with a Begadi PRO HopUp rubber leads to more range and a smaller spreading circle. The inner diameter is exactly right for our HopUp rubbers in order to be able to guarantee a constant energy release.

### **Included Parts:**

- 1x CNC HopUp Unit made of 7075 aluminium
- 1x dial made of 7075 aluminium with position indication
- 1x cover plate for dial
- 1x countersunk screw for dial
- 2x C-Clip for AEG and Hybrid barrels
- 1x HopUp Arm (lever) on 7075 aluminium
- 2x compression spring for HopUp arm
- 1x brass screw for HopUp Arm
- 1x brass ring for centering the barrel
- 2x O-ring for dial
- 1x tensioner for 5mm HopUp systems
- 1x tensioner for 7mm HopUp systems
- 1x adapter for rubber tensioner
- 2x bucking for tensioners - hard (red)
- 2x bucking for tensioners - soft (black)



### **Compatible Nozzle:**

- The HopUp Unit can be used with the standard E&L AK Nozzle (20.60mm).
- If you use this unit in an Arcturus AK, a nozzle with 19.70 - 20.00mm is required.
- Would you like use high-quality nozzles, we recommend the **Begadi PRO nozzles made of aluminium with two O-rings.**



### **Manufacturing and Tolerances:**

- The components of this HopUp Unit are completely CNC manufactured, this also applies to the enclosed C-Clips.
- The tolerances are +/- 0.05mm and are automatically checked by a laser after production.
- Unsuitable parts are sorted out directly and do not find their way into the packaging.
- This HopUp Unit was designed in Germany, the design and function is protected.
- If you have any further questions or need help, our support team will be happy to assist you at [support@begadi.com](mailto:support@begadi.com).

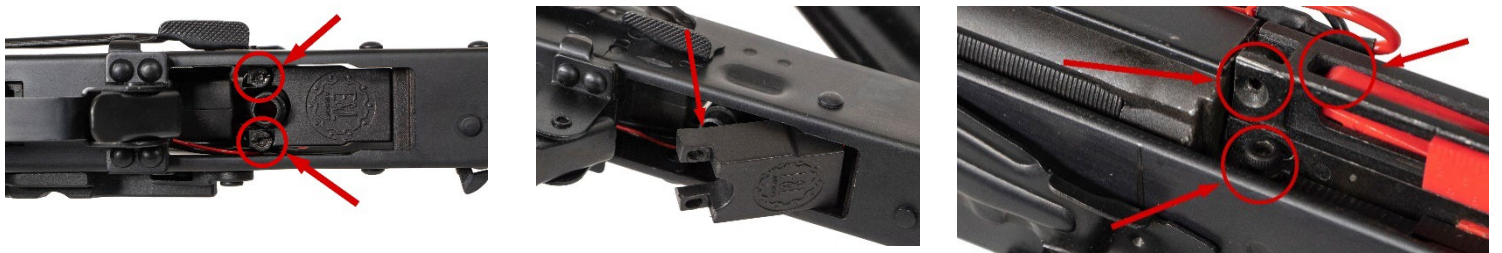
**Installation on E&L AK Serie:****(1):**

Remove or flip open the upper case to reveal the spring along with the shaft. Now pull the component completely backwards with the charging lever in order to be able to remove it upwards.

**(2):**

Now separate the original HopUp Unit from the Outer Barrel and the Gearbox. To do this, two nuts in the magazine shaft must first be removed together with the plastic stop for the magazine.

In the next step, loosen the connecting screw at the front upper position of the gearbox together with the two screws marked on the side.

**(3):**

In the next step, the upper and lower handguard must be removed. If you have a model with a cleaning rod under the barrel, this must also be removed by unscrewing the flash hider.

To remove the upper handguard, rotate the side lever up. If you have a 74 UN as an example, only the housing cover has to be opened. The handguard can now be removed upwards.

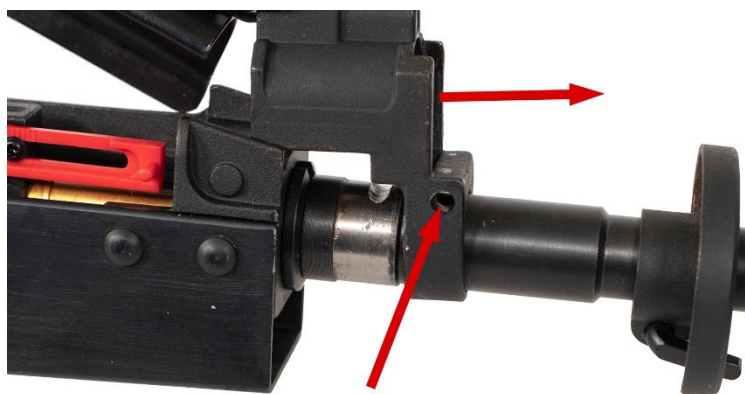
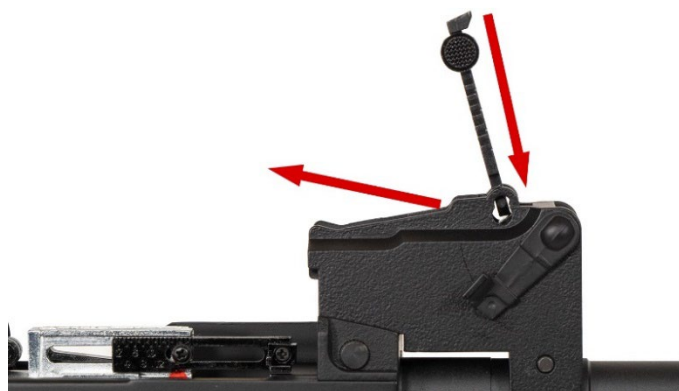
In order to release the lower handguard, the internal lever must be turned. Now push the handguard forward and then lower it down.





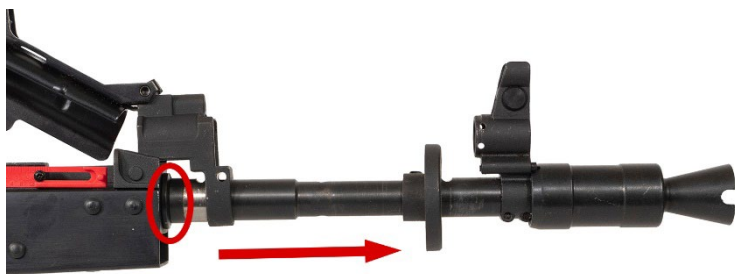
(4):

Remove the outer barrel and rear sight (if necessary). In order to be able to separate the outer barrel from the housing, the internal set screws must be loosened. This is not easily possible with all AK variants. If you cannot reach this screws (AKM, AK74N AKS), removing the rear sight will help. To do this, proceed as follows: Fold the rear sight up as shown in the picture. Now use a screwdriver to press the spring plate underneath with a lot of force. Now the rear sight can be removed to the rear and the passage to the set screw is open. Owners of an AK74 UN loosen the bolt at the marked position to be able to pull the upper part forward.

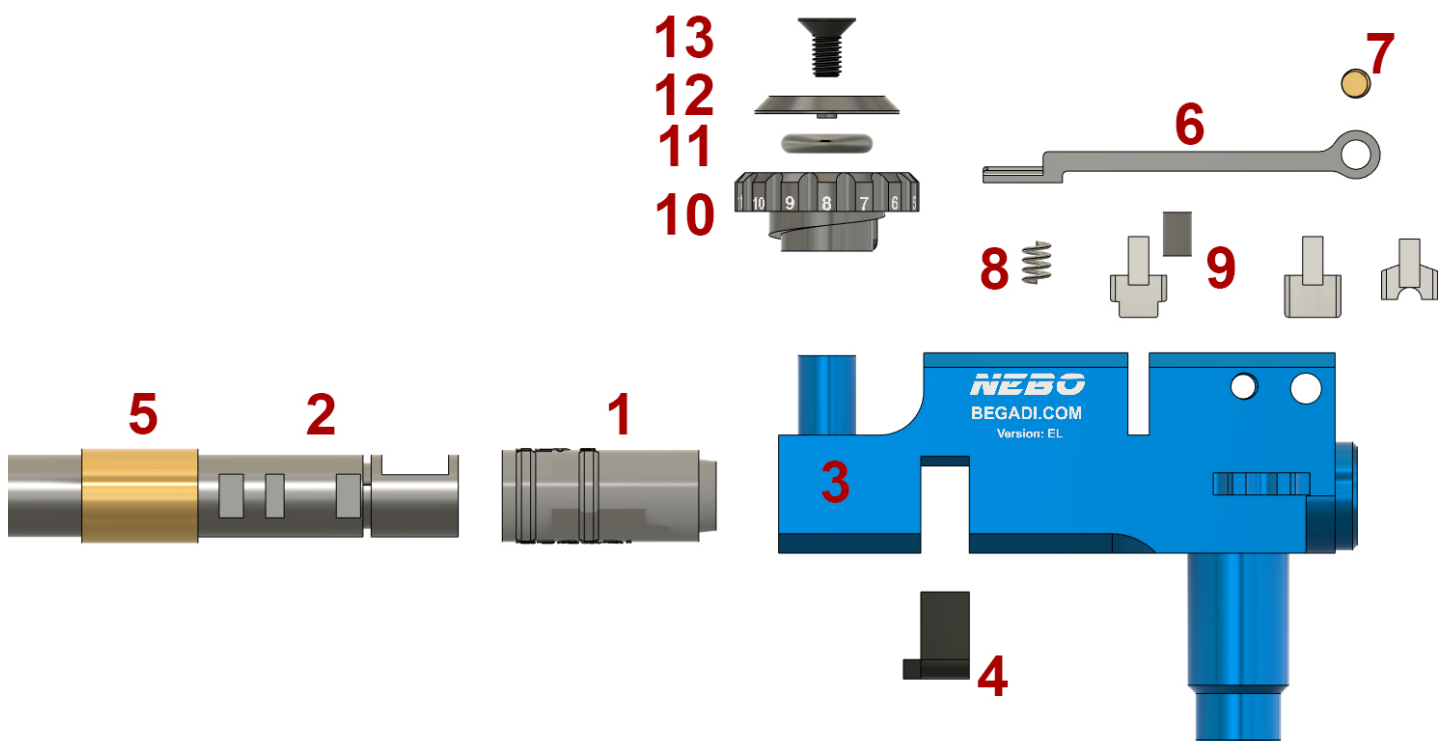


Once you have loosened the marked screws, the outer barrel can be pulled out of the housing towards the front.

The original HopUp Unit together with the inner barrel can now be removed from the housing at an angle and dismantled.



If you want to keep the original inner barrel, remove the front plastic clip downwards. The barrel can now be pulled out of the unit.



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

- If you would like to replace the hop-up rubber (bucking) (1), install it on the barrel (2) or keep the one that is already installed.
- Now slide the barrel (2) with the rubber (1) installed from the front into the HopUp Unit (3), be careful not to twist the barrel with the rubber, otherwise your BBs will twist to the left or right. At this point, some silicone grease can be applied to the rubber to ease assembly.
- If the barrel is properly installed, it is secured with one of the two clips (4). This step must also be done with precision, otherwise the clip will not snap into the barrel. Push the barrel back a little until you hear a click.
- Next, slide the brass ring (5) over the barrel from the front until it is fully seated in the unit.
- Now choose one of the enclosed aluminum tensioners (9), 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, which is used with all regular HopUp

Rubbers and barrels used. Or the third version, which can be combined with a rubber tensioner (3mm diameter).

- 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.
- In the next step, the HopUp Arm (6) is installed together with one of the enclosed springs (8). Place the spring in the hole provided and fix it with a drop of grease if necessary. Now put the HopUp Arm into the unit from above. Now fix the arm with the enclosed brass screw (7), which is inserted from the right.
- If the hop-up arm is installed together with the spring, the adjustment wheel (10) can be placed on the guide. We recommend applying some silicone grease to the guide. Now use one of the enclosed O-rings (11) and also moisten it with a little silicone grease. This can now be inserted into the dial from above.
- To fix the wheel, use the cover (12) together with the screw (13). It is essential to ensure that the tongue and groove system of the cover is correctly aligned. Otherwise, it will rotate together with the dial and loosen the screw.

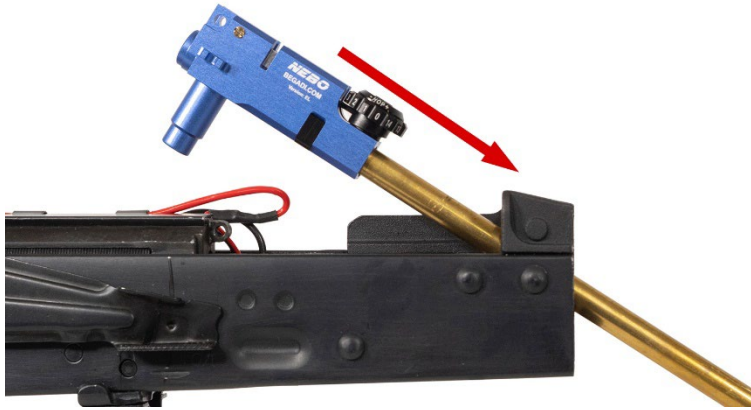




Once you have assembled the HopUp Unit together with the Inner Barrel, the installation can take place:

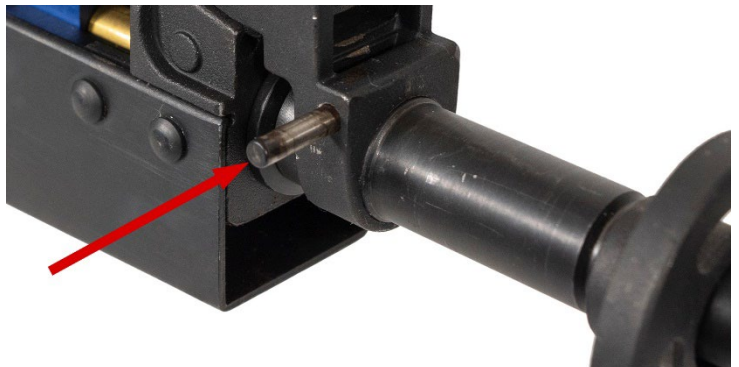
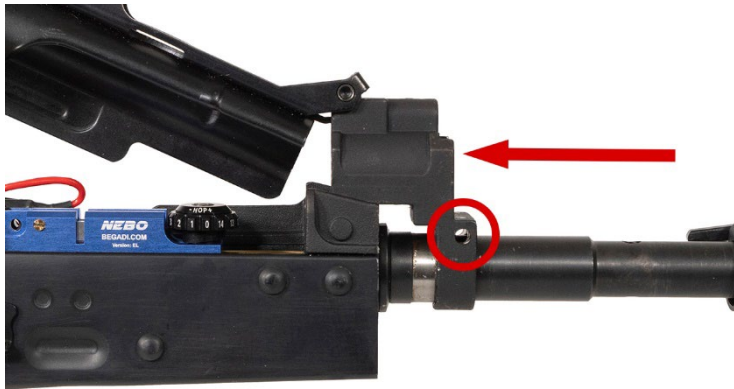
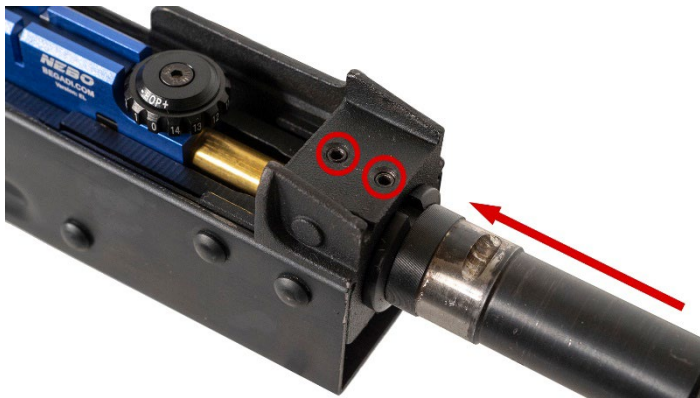
(1)

Install the new system in the case and slide the HopUp Unit over the Nozzle.



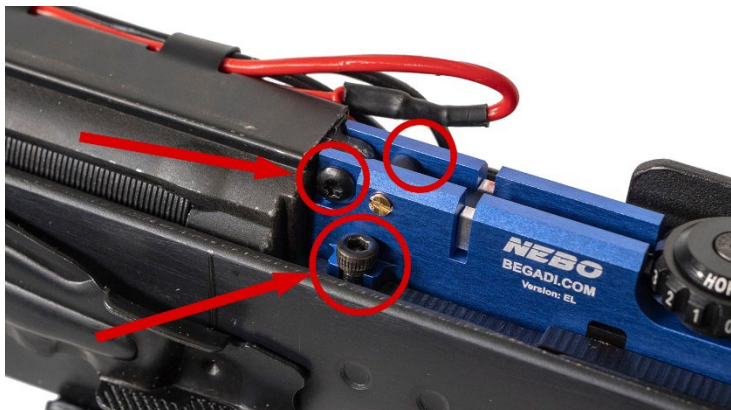
(2)

The outer barrel can now be installed again from the front, align it straight and push it completely into the housing. Make sure the holes in the HopUp Unit line up with those in the Outer Barrel. If the outer is correctly aligned, the internal grub screws can be fixed. AK74 UN owners now install the upper case and secure it with the marked bolt. The rear sight together with the spring plate can now be installed again on an AKM, AK74N and AKS.



(3)

The HopUp Unit can now be screwed to the outer barrel and the gearbox, and the stop for the magazine is also screwed from below.





(4)

First attach the lower and then the upper handguard. Secure both parts with the levers provided.

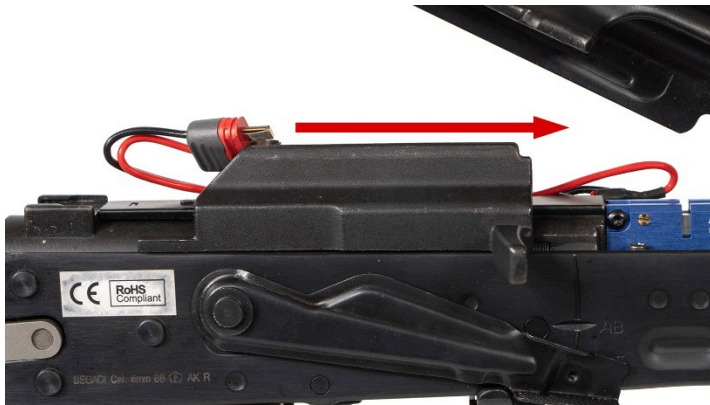
If your version has a cleaning rod, this can also be inserted and fixed.



(5):

Insert the component with the charging lever into the housing from behind and push it completely forward.

In the last step, the spring is mounted together with the rod and the housing is closed.



Your new HopUp system is now successfully installed. You can now increase or decrease the hop-up effect using the adjustment wheel.

**Tip:** If you have an AK version with a long guide rod, it can be shortened. This makes it easier to adjust from the side.

If a new HopUp rubber was installed, it should be shot in with 200 - 300 shots.

